Identification of novel anti-ageing genes as drug targets using *Drosophila melanogaster* as a model

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Abstract

Ageing is a complex process shaped by genetic, environmental, and stochastic factors. It is one of the major causes of cancer, cardiovascular, and neurodegenerative diseases. Identifying the underlying mechanisms and the genes that contribute to longevity would alleviate the socio-economic burden of age-related diseases. This study focused on identifying novel anti-ageing genes and understanding their roles in lifespan and neuromuscular function using *Drosophila melanogaster* to use as potential drug targets.

A previous study in our lab generated long-lived strains (S1, S2) through artificial selection, achieving a 15% increase in lifespan compared to controls (C1, C2). RNASeq analysis of differentially expressed genes (DEGs) identified candidate anti-ageing genes requiring phenotypic testing and validation.

Using the GeneSwitch expression system, RNAi knockdown and overexpression of nine candidate genes were tested for effects on lifespan and negative geotaxis, a measure of neuromuscular function. However, no significant changes were observed, suggesting that the role of these genes in lifespan extension is not significant under the tested conditions.

Challenges included validating gene expression, fungal infections, and technical issues with the GeneSwitch system, such as leaky drivers and mosaic expression. The results emphasise the complexity of ageing and the interplay between genetic and environmental factors.

Future studies should focus on tissue-specific RNASeq and gene expression, expanded sample sizes, and multi-gene manipulations to explore synergistic effects. Combining transcriptomic, proteomic, and metabolomic analyses could provide deeper insights into ageing mechanisms. This study lays the groundwork for further exploration of genetic determinants of ageing and potential therapeutic strategies.

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Declaration

I declare that the work contained within this thesis is my own. It has not been previously submitted in any other form outside of this thesis. All work declared as my own was conducted as part of this degree.

Experimental Contributions

Data from Section 8.4 was collected by undergraduate project student Louie Doran under my supervision. Experiments in Troubleshooting (section 14) were performed by undergraduate project students Louie Doran, Trudy Tucker, and Ethan Newton under my supervision.

Abbreviations

Act-GS-255B – Actin GeneSwitch (255B)

Adk1 – Adenosine kinase 1

Adck1 – aarF domain containing kinase 1

AFLP – amplified fragment length polymorphism

attB – Attachment-B

attP – Attachment-P

Bdg – Bedraggled

Cas – CRISPR-associated

Cert – ceramide transfer protein

CPM – counts per million

crRNA – CRISPR RNA

dA – deoxyadenosine

Da-GS – Daughterless GeneSwitch

DEG – differential gene expression

Dob – doppelganger von brummer

dox – doxyxcline

dsRNA – double-stranded RNA

dTTP – deoxythymidine triphosphate

dyw – Daywake

EDA – exploratory data analysis

FDR – false discovery rate

Fdx2 – Ferredoxin 2

Fkh – Forkhead

GO – Gene Ontology

GOBP – Gene Ontology Biological Processes

Gpdh1 – Glycerol-3-phosphate-dehydrogenase

GSEA – gene set enrichment analysis

GWAS – Genome Wide Association Study

Hsp – Heat shock protein(s)

iDEP – integrated Differential Expression and Pathway analysis

IGF – Insulin-like growth factor

IIS – Insulin/insulin-like growth factor signalling

IVC – in vivo cloning

KEGG – Kyoto Encyclopedia of Genes and Genomes

LIC – ligation-independent cloning

MAPK – Mitogen-activated protein kinase

Mdy – midway

mRNA – messenger RNA

miRNA – microRNA

MTF-1 – Metal Response Element-Binding Transcription Factor-1

OTE – off-target effect

PBS – phosphate-buffered saline

PC1 – first principal component

PC2 – second principal component

PCA – principal component analysis

PNPLA2 – patatin-like phospholipase domain containing 2

PNPLA3 – patatin-like phospholipase domain containing 3

PNPLA5 – patatin-like phospholipase domain containing 5

RAPD – random amplified polymorphic DNA

RIN – RNA Integrity Number

RING – rapid iterative negative geotaxis

RISC – RNA-inducing silencing complex

RNAi – RNA Interference

RPKM – Reads Per Kilobase of transcript per Million mapped reads

RU486 - mifepristone

rTA – tetracycline transactivator

sgRNA – single-guide RNA

siRNA – short interfering RNA

SY – sugar-yeast medium

tc – tetracycline

tetO – tetracycline operator

tetR – tetracycline repressor protein

TOR – Target of Rapamycin

tracrRNA – trans-activating crRNA

tubGS – Tubulin GeneSwitch

UAS – upstream activating sequence(s)

UDG – uracil DNA glycosylase

VDRC – Vienna *Drosophila* Research Centre

wDah – white Dahomey

Wnt – Wingless/Integrated

1. Literature Review

The global landscape of human ageing presents a compelling scientific and societal challenge. According to the World Health Organization, the global population of individuals aged 60 years and older is expected to reach 2.1 billion by 2050, representing an increase from 962 million in 2017 (World Health Organisation, 2024). This demographic transformation is driven by declining fertility rates, improved healthcare, and increasing life expectancy.

Age-associated physiological deterioration increases the risk of cardiovascular disorders, cancer, neurodegenerative diseases, and diabetes. Although clinical interventions alleviate age-related morbidity, translational research into ageing, to understand the mechanisms that drive it, is critical.

Although many genes have been implicated to contribute to the ageing process, there is no single gene or gene set that is the primary genetic cause of ageing (Kenyon et al., 2010). Identifying more candidate genes would provide more drug targets for potential anti-ageing interventions.

1.1. What do we know about ageing?

In his book On the Origin of Species, Charles Darwin proposed theories of evolution and natural selection. However, this posed an important question – if evolution produced complex organisms that survived from birth to adulthood, with a high-functioning system, what ultimately pushes them to death? As a result, several theories of ageing were proposed, with the earliest in the late 19th century. Although more than 300 theories of ageing have been proposed (Medvedev, 1990), they can be broadly classified into a few categories (figure 1), with key theories discussed in this thesis, mainly due to their influence on biogerontology.

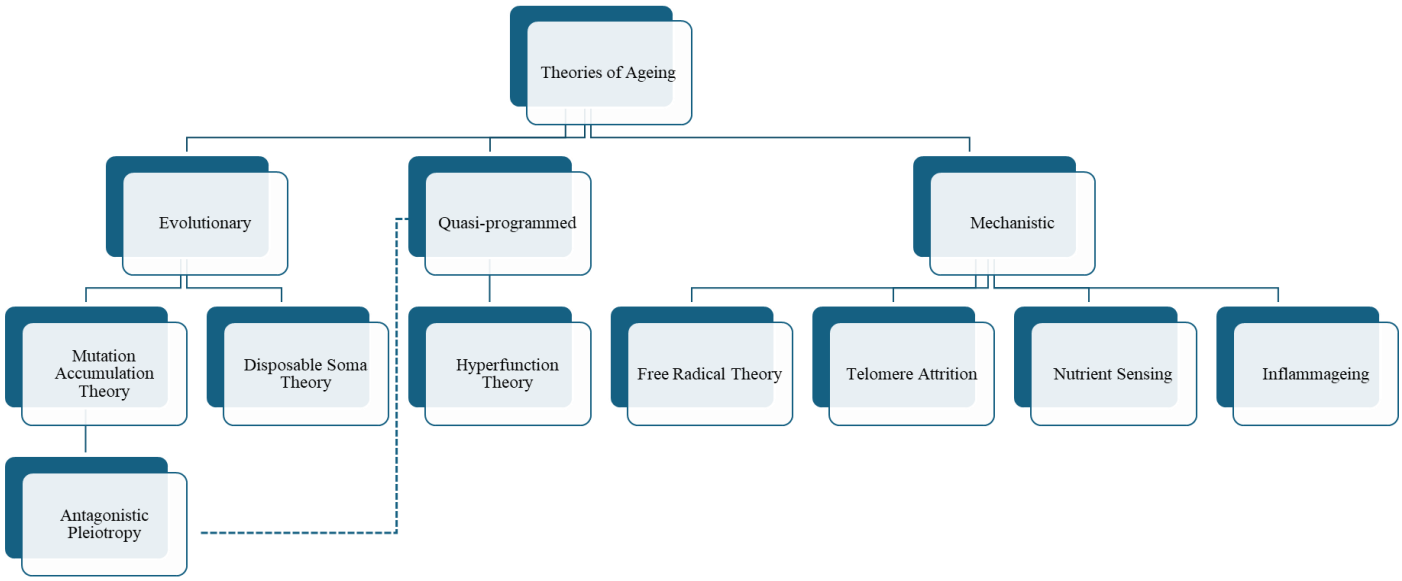


Figure 1 Although there are over 300 theories of ageing, some of the most prominent theories, mainly based on their influence on biogerontology, are mentioned here. Categorisation of the theories is not universally agreed upon, and the above figure is adapted for the thesis from multiple reviews cited in text

1.1.1. Evolutionary Theories of Ageing

Evolutionary theories of ageing and longevity attempt to explain the differences in ageing rates and lifespan across species through the interplay of mutation and natural selection (Gavrilov and Gavrilova, 2002).

1.1.1.1. Mutation Accumulation Theory

Extrinsic factors, such as infections and predation, reduce the genetic contribution of elderly organisms to the population. This diminishes selection pressure on older individuals, allowing deleterious mutations to accumulate by evading natural selection. The mutation accumulation theory posits that ageing results from the build-up of late-acting deleterious mutations (Medawar, 1952).

An example supporting this theory is the manifestation of late-onset genetic disorders like Huntington's disease, which often arise after reproductive age and thus escape strong selective pressure (Albin, 1993). The theory also suggests that protection from extrinsic mortality contributes to longevity. For instance, arboreal mammals generally outlive terrestrial ones due to reduced predation risks (Shattuck and Williams, 2010). Similarly, chemical defence mechanisms

increase lifespan in amphibians but not in snakes, as they serve defensive rather than offensive purposes in the former (Hossie et al., 2013).

However, the theory does not explain why specific ageing phenotypes occur or the mechanisms driving the ageing process. Although somatic mutations accumulate with age, the relatively modest burden and stochastic nature of these mutations suggest that mutation accumulation alone may not fully account for ageing (Chatsirisupachai and de Magalhães, 2024). In Alzheimer's disease neurons, somatic mutations were distributed randomly across the genome and did not overlap with known risk loci. These mutations might be secondary effects caused by the high accumulation of reactive oxygen species (ROS) in neurons from Alzheimer's patients (Miller et al., 2022).

1.1.1.2. Antagonistic Pleiotropy Theory

Antagonistic pleiotropy theory is a key evolutionary explanation for ageing. It suggests that genes beneficial in early life, but detrimental later, persist because their early advantages enhance reproductive success, outweighing post-reproductive harm (Williams, 1957). As natural selection weakens with age, these late-life effects are not effectively removed from the population. This theory predicts that species exposed to higher environmental risks, such as predation, may evolve to reproduce earlier, leading to faster ageing. In contrast, species with extended post-reproductive lifespans, such as humans, may evolve mechanisms to mitigate these late-life disadvantages.

Huntington's disease provides a notable example supporting this theory. The disease-causing alleles escape elimination through selection as they confer early-life fertility advantages (Carter and Nyugen, 2011). Another example involves fibroblasts. These cells produce growth factors, chemokines, and extracellular matrix, facilitating wound healing and tumour suppression (Kalluri and Zeisberg, 2006). However, senescent fibroblasts in humans promote tumour formation by inducing proliferation in malignant and pre-malignant cells in mice. This contrasts with their early-life role in tumour suppression, highlighting antagonistic pleiotropy in cellular senescence (Krtolica et al., 2001). Another widely observed trade-off supporting this theory is between reproduction and longevity. Studies in multiple organisms show that early reproduction often comes at the cost of reduced lifespan. Early-breeding North American red squirrels have lower survival rates compared to late breeders (Descamps et al., 2006).

However, the theory has limitations. It does not account for genes that are neutral or harmful throughout life, nor does it explain interspecies variation in ageing, particularly in species with

negligible senescence, such as turtles (da Silva et al., 2022). Additionally, some species show no trade-off between reproduction and longevity, particularly in captive mammals and birds (Ricklefs and Cadena, 2007). The interactions between environment, lifestyle, and genetic predispositions are also not fully addressed by this theory.

1.1.1.3. Disposable Soma Theory

Building on previous theories, it has been proposed that organisms allocate finite energy and nutrient resources between somatic maintenance and reproduction. Greater investment in somatic maintenance ensures long-term survival but reduces resources available for reproduction. Conversely, allocating fewer resources to repair and maintenance allows for increased growth and reproduction but leads to the accumulation of molecular damage, driving ageing. This damage includes telomere attrition, mitochondrial dysfunction, and protein aggregation, which impair cellular signalling, trigger inflammation, and induce senescence, resulting in physical decline (Kirkwood, 1977).

While the germline is preserved to ensure species survival, the soma is considered disposable after reproduction. Supporting this, a study on British aristocracy found that women with longer lifespans had fewer children, suggesting a trade-off between longevity and reproductive success (Westendorp and Kirkwood, 1998). However, this study has been criticised for limitations, including its focus on a population with reduced fecundity and an overrepresentation of childless women (Le Bourg, 2001). The theory also assumes strict trade-offs, which are not universal. For instance, baboons exhibit long lifespans despite high reproductive output (Rhine et al., 2000). Additionally, species like naked mole rats challenge the theory; despite producing similar levels of reactive oxygen species (ROS) as mice and lacking superior antioxidant systems, they are significantly longer-lived (Lewis et al., 2013). While the absence of trade-offs does not entirely disprove the theory, it highlights that not all predictions are consistently met (Le Bourg, 2001).

1.1.2. Mechanistic Theories of Ageing

Evolutionary theories attempt to explain why organisms age, while mechanistic theories focus on ageing-causing mechanisms. Mechanistic theories are further sub-categorised into program theories, damage theories and combined theories. According to programmed theories, ageing follows a genetic timetable that regulates its pace, while damage or error theories attribute ageing to the cumulative effects of environmental factors, leading to the accumulation of biological errors over time.

1.1.2.1. Free radical Theory

In the early 20th century, Raymond Pearl's rate of living theory proposed that lifespan is inversely related to metabolic rate and body size in mammals. Larger mammals generally live longer than smaller ones because smaller mammals, such as mice, typically have higher metabolic rates than larger mammals like elephants. These higher metabolic rates were thought to accelerate the accumulation of cellular damage. Environmental conditions that reduce the metabolic rate in *C. elegans* have been shown to extend lifespan, suggesting a positive correlation between metabolic stability and longevity (Van Voorhies and Ward, 1999; Olshansky and Rattan, 2009).

However, the rate of living theory does not account for outlier species with similar body sizes but vastly different lifespans. For example, a naked mole rat has an average lifespan of 30 years, while a similarly sized mouse lives only 3–4 years, and bats can live up to 37 years (Buffenstein, 2005; Hemann and Greider, 2000; Magalhães et al., 2007). The theory also fails to explain intraspecies variation, such as smaller dog breeds living longer than larger ones (Selman et al., 2013). While the rate of living theory does not fully explain the genetic, environmental, and evolutionary factors influencing ageing and has fallen out of favour, it laid the foundation for many subsequent theories exploring the relationship between metabolism and ageing.

According to the oxidative stress theory or free radical theory, metabolic by-products affect ageing. Metabolic reactions partially reduce oxygen metabolites into reactive oxygen species (ROS). Accumulation of ROS with age and/or increased metabolic activity leads to oxidative damage, imitating conditions caused by irradiation, resulting in mutations, cancer, and ageing (Harman, 1956). The theory predicts that lifespan correlates with the ability to neutralize ROS, with long-lived species having more effective antioxidant systems.

Overexpressing enzymes that reduce ROS production, like superoxide dismutase (SOD) and catalase, increased *Drosophila* lifespan by 30-40% and 65% in worms (Orr and Sohal, 1994; Parkes et al., 1998; Larsen, 1993; Kirkwood, 2012). However, knockout of glutathione peroxidase in mice does not alter mean survival when exposed to hyperoxia (Ho et al., 1997). SOD overexpression in *C. elegans* could increase lifespan by activating pro-longevity genes instead of removing oxygen radicals (Cabreiro et al., 2011). This questions the universality of this theory of ageing.

1.1.2.2. Telomere Attrition

The telomere attrition theory of ageing attributes ageing to the progressive shortening of telomeres. Telomeres, repetitive sequences at chromosome ends, prevent the loss of genetic information during cell division and protect chromosomes from degradation and erroneous recombination (Harley et al., 1990). Telomere shortening arises from end-replication errors by DNA polymerases during replication and is exacerbated by oxidative stress, inflammation, and environmental factors.

Critically shortened telomeres halt cell division and induce replicative senescence, contributing to organismal ageing. Senescent cells may adopt a senescence-associated secretory phenotype (SASP), which serves as a tumour-suppressive mechanism by preventing the proliferation of damaged cells. However, the accumulation of senescent cells and reduced regenerative capacity due to telomere attrition leads to tissue dysfunction and ageing-related decline. Telomere shortening is linked to weakened immune function, impaired wound healing, and increased susceptibility to age-related diseases (He and Sharpless, 2017).

Telomere length correlates with lifespan in many species. In mice, defective telomeres cause chromosomal abnormalities, premature ageing phenotypes, shortened lifespan, and increased cancer risk, while in aged baboons, skin fibroblasts show damaged telomeres (Sahin and DePinho, 2010; Herbig et al., 2006). However, telomere shortening is not universal across species. Mice lacking the telomerase gene display no ageing-related defects or reduced lifespans until three generations post-knockout (Blasco et al., 1997). Additionally, species with shorter telomeres may have similar lifespans as those with longer telomeres, as observed in rodents (Hemann and Greider, 2000). Humans have shorter telomeres but longer lifespans than rodents, suggesting that the rate of telomere shortening may be a better lifespan predictor than absolute telomere length (Whittemore et al., 2019). But multiple species need to be investigated to answer many other questions, and hence the theory is not a prevalent theory, although telomere attrition is considered an ageing biomarker (López-Otín et al., 2023).

1.1.3. Quasi-programmed Theories of Ageing

Quasi-programs are continued processes or hyperfunctional programs that haven’t been switched off upon completion (Blagosklonny, 2021).

1.1.3.1. *Hyperfunction theory*

The hyperfunction theory of ageing suggests that ageing results from the dysregulation of growth and developmental processes that persist beyond their intended timeframe, leading to the accumulation of damage and dysfunction (Blagosklonny, 2012). Processes such as growth and cell proliferation, which are tightly regulated during development to ensure proper tissue formation, may remain overactive later in life. This overstimulation, particularly of pathways like mTOR and IIS, accelerates organismal decline, promoting cellular damage, senescence, and cancer. For example, early-life treatment of mice with rapamycin, an mTOR inhibitor, delayed reproductive maturity and extended median lifespan by 10%. Similarly, in *Daphnia magna* (a planktonic crustacean), rapamycin treatment extended lifespan while reducing body size (Shindyapina et al., 2022).

1.1.4. Other recent ageing theories

1.1.4.1. *Epigenetics*

Epigenetic theories of ageing are modern theories of ageing propose that changes in epigenetic regulation significantly contribute to the ageing process. The *epigenetic clock theory* posits that DNA methylation patterns can accurately predict chronological and biological age (Li et al., 2022). The *information theory of ageing* suggests that the loss of epigenetic organisation, rather than genetic code changes, is a reversible driver of ageing (Yang et al., 2023). The *histone modification theory* highlights how alterations in histone modifications, such as acetylation and methylation, affect gene expression and contribute to ageing (Zhang et al., 2023). These epigenetic theories, along with others, provide a framework for understanding how environmental and lifestyle factors influence ageing beyond genetic predisposition. They also highlight potential targets for therapeutic interventions aimed at slowing or reversing the ageing process.

1.1.4.2. *Inflammageing*

Theories linking chronic, low-grade inflammation with ageing suggest that this persistent inflammatory state significantly contributes to the ageing process and age-related diseases (Franceschi et al., 2000). The *network theory of ageing* attributes ageing to a multifactorial mechanism involving defective mitochondria, aberrant proteins, free radicals, and impaired antioxidant enzymes (Kirkwood and Kowald, 1997). The *oxidation-inflammation theory* proposes that oxidative stress and inflammation are interconnected, jointly driving ageing (Miquel, 2009). Additionally, the *inflammatory clock of ageing* posits that biological age can be estimated by

measuring inflammatory mediators, such as the chemokine CXCL9, in the blood (Aranda et al., 2024). Together, these theories highlight the complex relationship between inflammation, physiological processes, and ageing, providing insights into potential therapeutic targets for promoting healthy ageing.

1.2. Gerontology

Lifespan is species-specific despite shared biochemistry, as demonstrated by the 30-year lifespan of naked mole rats compared to the 4-year lifespan of similarly sized mice, suggesting a genetic component (Munro et al., 2019). Gerontologists must account for both conserved lifespan-regulating mechanisms and variations in ageing processes across/within species. Practical factors like lab techniques, resources, expertise, and technology, along with study objectives, time constraints, and experimental design all influence the selection of experimental model.

1.2.1. How do we study ageing in humans?

Human ageing is characterized by a decline in physiological homeostasis, physical, and cognitive functions. As ageing correlates with increased disease susceptibility and mortality, geroscience aims to slow ageing by investigating its mechanisms. Centenarians (100+ years) and super-centenarians (110+ years) are of particular interest as they surpass typical mortality limits (Robine and Vaupel, 2002). Studying their phenotypes, compared to younger individuals, may deepen our understanding of human ageing, prompting studies on their health span (Zenin et al., 2019).

Whole genome analysis tests the correlation between phenotypes of interest and common SNP variants. Alleles associated with reduced lifespan should decline in older individuals, while alleles linked to longevity should increase. However, studying lifespan as a phenotype is challenging, as it requires data collected at life's end, but genotypes can only be taken from living individuals. This can be addressed by studying the lifespan of deceased parents from specific birth cohorts and using their progeny’s genotypes for association mapping. Such studies, however, demand large sample sizes for robust statistical associations (Pilling et al., 2016; Joshi et al., 2016). Human studies are limited by small sample size, high costs, and extensive investment of time and resources. It is further confounded by study dropouts, lifestyle factors, and ethical concerns (Melzer et al., 2020). This necessitates the use of model organisms to study ageing mechanisms.

1.2.2. The ideal model organism

No single organism serves as a perfect model due to inherent strengths and limitations. The choice of model organism depends on the specific requirements of the study. Vertebrates are advantageous for their physiological similarity to humans but are constrained by significant financial and ethical challenges. Conversely, invertebrates, despite their evolutionary divergence, provide valuable insights due to conserved genes and pathways. However, findings in invertebrates are not always directly translatable to humans. By leveraging their individual experimental advantages, invertebrates can form an effective discovery pipeline for identifying evolutionarily conserved lifespan-enhancing interventions, which can then be tested in longer-lived vertebrate systems (Piper and Partridge, 2018).

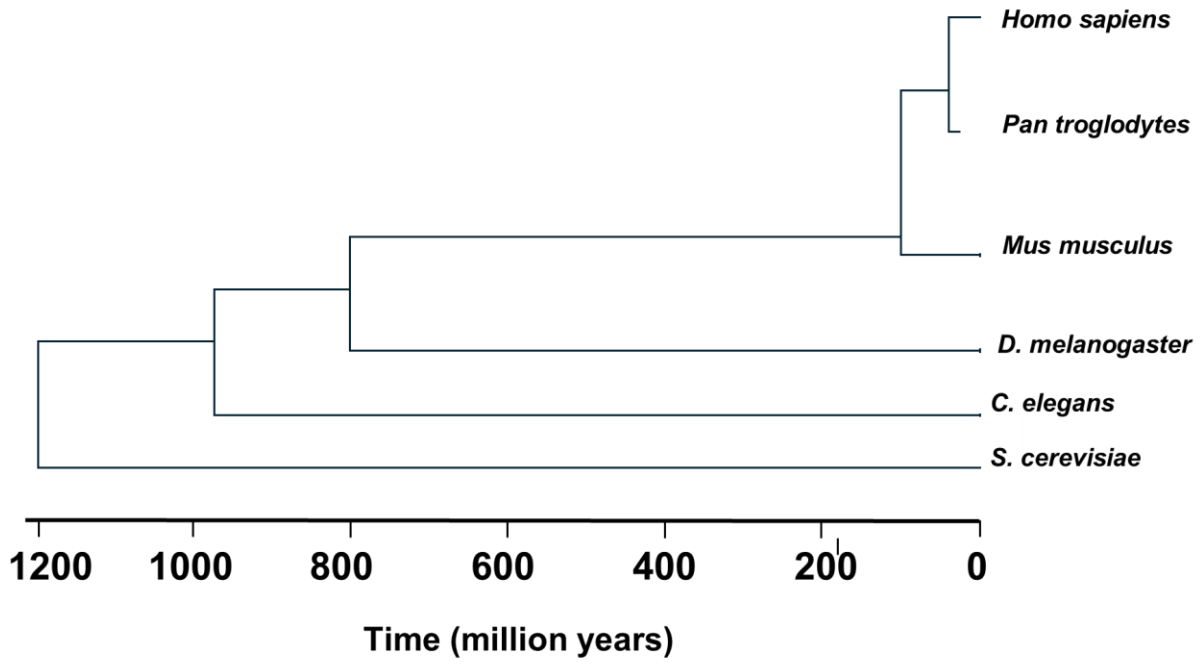


Figure 2 Phylogenetic tree of humans, and classic model organism used in ageing showing divergence of species over millions of years. Human-chimpanzee is a relatively recent divergence (around 30 million years) while human-fruit fly diverged more than 700 million years ago (Image generated based on information from Roede et al (2013))

1.2.2.1. In-vitro studies

Cell cultures allow in-vitro study of ageing pathways by manipulating gene expression, cellular mechanisms, and culture conditions (Phipps et al., 2007). Some of the most commonly used cells

- fibroblasts, induced pluripotent stem cells and their derivatives, and immune cells – are used to study ageing mechanisms, neurodegenerative diseases, cardiovascular diseases, and immunosenescence (Campisi, 2013; Pitrez et al., 2024). Fibroblasts were used to establish the Hayflick limit which demonstrated that cells have finite proliferation in culture (Hayflick, 1965). Senescent cells characterised by arrested growth, have a secretory phenotype called senescent-associated secretory phenotype (SASP) which could explain the role of cellular senescence in organismal ageing (Campisi et al., 2011). However, tissue and organ-level information is limited in cell culture studies. This can be addressed by using organoids, but the setup is more expensive (Hu et al., 2018). These techniques require specific technical expertise and are more labour-intensive.

1.2.2.2. Unicellular ageing model

1.2.2.2.1. Yeast (Saccharomyces cerevisiae and Saccharomyces pombe)

The budding yeast, Saccharomyces cerevisiae, has a short lifecycle (2 hours) and a fully sequenced genome, making it a good candidate for basic ageing studies. It allows high throughput studies like screening pharmacological compounds and offers both replicative and chronological lifespan models (Mirisola et al., 2014). Many ageing-associated pathways in humans are conserved in yeast. Unlike cell models, yeast is a complete organism offering a holistic image of ageing processes. However, like cell culture studies, yeast cannot provide information on tissue and organ ageing mechanisms (Zimmermann et al., 2018). However, initial studies in yeast can help develop intervention studies and design calorie restriction mimetics to be tested in higher organisms (Howitz et al., 2003).

1.2.2.3. Multicellular vertebrate ageing model

1.2.2.3.1. *Mus musculus* and *Rattus norvegicus*

Rodents are widely used in ageing studies, offering species with varying lifespans for comparative research. Mice (*Mus musculus*) and rats (*Rattus norvegicus*) have an average lifespan of 3 years and share physiological similarities with humans. Approximately 99% of mouse genes have human orthologues, and their well-characterized mutant and inbred strains enable protocol reproducibility and in-depth biological investigation (Vanhooren and Libert, 2013; Kõks et al., 2016; Taormina et al., 2019).

Many mice strains exhibit accelerated or delayed ageing and are responsive to caloric manipulation, making them suitable for survival, physiological, and behavioural studies (Taormina et al., 2019; Giacomello and Toniolo, 2021). However, their use is limited by higher maintenance costs, handling expertise, and ethical concerns, as well as differences in DNA repair, immune responses, and protein expression compared to humans.

Invertebrates, though physiologically distant from humans, are valuable models for longevity studies due to their ease of genetic manipulation, short lifespans, large sample sizes, and minimal ethical concerns.

1.2.2.4. Multicellular invertebrate ageing models

1.2.2.4.1. Caenorhabditis elegans

Since the early 21st century, the hermaphroditic nematode *Caenorhabditis elegans* has become a primary model for ageing studies due to its short lifespan (3 weeks), ease of handling, well-annotated genome, orthologous similarity to humans, and robust genetic tools (Mack et al., 2018).

Despite its simplicity (about 1000 cells), *C. elegans* possesses distinct tissues and organs. It was the first fully sequenced multicellular organism, with protein-coding genes sharing 40-80% similarity to humans (*C. elegans* Sequencing Consortium, 1998; Wheelan et al., 1999). Its extensive RNAi library enables screening for ageing genes, and its transparent body allows live imaging of age-related changes. *C. elegans* exhibits plasticity in ageing, with more than 10-fold increases in lifespan through various interventions (Kern et al., 2023). It also facilitates the study of tissue-specific age-related phenotypes and epigenetic regulation of ageing (Zhang et al., 2020). Studies in *C. elegans* pioneered the discovery of multiple ageing genes and pathways, including IIS and nutrient sensing pathways, epigenetic modifiers, and protein homeostasis decline with age (Denzel et al., 2019; Naranjo-Galindo et al., 2022). It also exhibits age-associated changes such as tissue degeneration, reduced movement, and reproductive cessation (Huang et al., 2004; Hughes et al., 2007). Additionally, the dauer larval stage, induced under unfavourable conditions, is resistant to stress and ageing, resuming normal development under ideal conditions (Riddle et al., 1981).

While studying the dauer stage has led to discoveries of key longevity pathways, its relevance to vertebrates remains limited. *C. elegans* does not have blood transport systems or blood-brain barrier, and equivalents to some human age-related conditions (McElwee et al., 2006).

Furthermore, studies on somatic stem cell biology, telomere attrition, immunosenescence, and the senescence-associated secretory phenotype (SASP) are constrained by the roundworm's simple body structure (Raices et al., 2005; Lans and Vermeulen, 2015).

1.2.2.4.2. *Drosophila melanogaster*

Drosophila melanogaster (fruit fly) is a widely used model organism for longevity studies, with an average lifespan of 70 days at 25°C (Piper and Partridge, 2018). Its well-defined life stages, fully sequenced genome, ease of maintenance, genetic manipulation, and access to stocks with altered gene profiles contribute to its popularity as a model (Helfand and Inouye, 2003; Tower, 2019).

Drosophila has structures analogous to mammalian organs. Biomarkers, such as advanced glycation end products and carbonylated proteins, show age-related changes in both flies and humans (Jacobson et al., 2010). Molecular ageing pathways in *Drosophila* are highly conserved (77%) in mammals, with 14,000 genes belonging to the same families as mammals, and 715 of the 929 human disease genes having *Drosophila* analogues, enabling functional analysis of human ageing orthologues. They also have complex organ systems analogous to human systems (Reiter et al., 2001; Geesaman, 2006; Pandey and Nichols, 2011). *Drosophila* models have been developed to study age-related processes, including stem cell decline, Alzheimer's disease, and cardiovascular deterioration. Their complex nervous system facilitates the behavioural assays to assess age-associated cognitive decline (Ding et al., 2022). Post-mitotic cells, a key focus in human ageing, are well-suited for study in *Drosophila*, which contains synchronously ageing cell populations (Arking and Buck, 1995; Helfand and Inouye, 2003). The extensive availability of mutant and transgenic strains, inducible gene expression systems, and RNAi libraries allow large-scale demographic screens in *Drosophila* (He and Jasper, 2014; Perkins et al., 2015).

Table 1 Most commonly used model organisms to study ageing, with their respective advantages and disadvantages

Model Organism	Lifespan	Number of protein coding genes	Advantages	Disadvantages
Yeast	1–2 weeks	~ 6000	Simple growth requirements, well annotated genome, rapid growth, ease of genetic manipulation, conserved ageing pathways (TOR) can be studied	Limited relevance to multicellular ageing and complex organismal processes
Caenorhabditis elegans	2-3 weeks	~19,000	Short lifespan, low research costs, conserved ageing pathways (IIS), ease of genetic manipulation, availability of transgenic and mutant libraries, high throughput screening, high fecundity, easy maintenance, transparent body that is ideal for imaging studies, strains can be frozen and revived for future use, minimal or no ethical concerns	Lack of specific organs and organ systems (vascular, endocrine) comparable to vertebrate models, lack of adult stem cells, not ideal for drug intervention studies, lack of adaptive immunity, limited physiological relevance to human ageing

Drosophila melanogaster	~3 months	~14,000	Short lifespan, low research costs, ease of genetic manipulation, availability of transgenic and mutant libraries, extensive genetic tools, high throughput screening, high fecundity, easy maintenance, minimal or no ethical concerns, presence of stem cells, wide range of tissue types, distinct developmental stages	Limited physiological relevance to human ageing, limited in modelling complex tissues like the liver or kidney
Rodents	2-3 years	~23,000	Relatively short-lived mammal, highly conserved genetic and proteomic profiles with humans, well-established transgenic and knockout technologies, disease investigative models, can be used for drug testing and screening, availability of many genetic and disease-model strains, can be used to study tissues and systems at a high	Requires ethical clearance and training to handle animals, high research costs, low throughput screening, time-consuming for lifespan studies

			physiological complexity	
Non-human primates	30-60 years	~20,000	Closely related to humans in physiology and genetics, models complex human ageing processes and diseases	High research costs, long developmental periods and lifespans, high ethical concerns, difficult to work with, small sample sizes
Humans	~80 years	~22,000	Highly relevant for understanding human ageing and improving health, availability of extensive medical records, epidemiological data, and longitudinal cohort studies for robust analysis of ageing trends and factors, studying complex traits across diverse phenotypes	High research costs, long developmental periods and lifespans, high ethical concerns, difficult to work with, small sample sizes, difficult to perform intervention studies, difficulty controlling environmental variables

1.3. Gerontogenes

Organismal wear-and-tear induces cellular and molecular damage, countered by DNA repair mechanisms. Inefficient repair pathways, often seen in ageing, result from mutations in genes involved in these processes. These genes, termed longevity assurance genes or gerontogenes, regulate stress response, antioxidative defense, repair, maintenance, and genetic information transfer, thus directly influencing lifespan (Rattan, 2006). Genes impact survival at older ages through longevity- or disease-associated pathways (Hjelmborg et al., 2006). With approximately 35% of human lifespan heritability attributed to genetics, understanding the genetic mechanisms of longevity is crucial for improving human lifespan and health span (van den Berg et al., 2019).

1.3.1. Searching for single gene mutations that cause longevity

Studies in model organisms have mapped highly conserved key genes and pathways regulating ageing. Using genetic approaches, lifespan-altering mutations and/or mechanisms can be identified without dependence on preconceived ageing models. By employing forward genetics approach, mutants with altered lifespan were screened to identify gerontogenes.

Studies in flies discovered mutant strains and X-ray-induced mutations with accelerated ageing compared to wild-type strains (Gould and Clark, 1977; Leffelaar and Grigliatti, 1983). Mutant worm strains with spontaneous dauer formations, defective chemotaxis, or paralysis had increased lifespan. However, this was attributed to calorie restriction, not a longevity-associated locus (Klass, 1983). Lifespan-extending mutations and mutant strains indicate genes and/or gene products that alter lifespan-limiting molecular and physiological processes.

The first well-characterised lifespan-extending genetic locus was *age-1*, in *C. elegans*. Mutation in *age-1* increased mean lifespan by 40-65% and maximum lifespan by 60-110%, at different temperatures, without affecting worm development or behaviour. The worms had reduced fertility without affecting the length of the reproductive period, which could contribute to the longevity phenotype (Friedman and Johnson, 1988). Mutations in genes responsible for dauer formation in worms, *daf-2* and *daf-16*, doubled the lifespan. However, other *daf* genes did not affect lifespan, suggesting that dauer formation and lifespan extension can be uncoupled (Kenyon et al., 1993). A key mediator in endocrine signalling, *daf-2* encodes an insulin receptor (Kimura et al., 1997). This redirected gerontogenes discovery studies to the insulin signalling pathways.

Mutations in the insulin-like receptor (*InR*) gene of *D. melanogaster*, homologous to mammalian insulin receptor and *daf-2* in *C. elegans*, induced developmental delays, dwarfism and female sterility, resembling the phenotypes of tyrosine kinase receptor loss (Chen et al., 1996). Mutations in *InR* extended adult lifespan (by 85% in females) but reverted to wild-type level when treated with a juvenile hormone analogue. Lifespan effects could be due to the deficiency of the juvenile hormone analogue resembling diapause/dauer-like conditions (Tatar et al., 2001). Mutations in the gene for an insulin receptor substrate in flies, *chico*, increased lifespan by 36-48%, and was not correlated with increased stress resistance, impaired oogenesis or dwarfism. This established that insulin/IGF signalling was evolutionarily conserved in regulating animal ageing (Clancy et al., 2001).

1.3.2. Searching for longevity/stress-resistance phenotypes and identifying genes responsible for them

Due to the conservation of genetic, molecular, and physiological pathways across organisms, specific pathways can be tested for their effect on lifespan and ageing. Prominent ageing theories link stress, insulin signalling and chromatin silencing with lifespan. Exploiting this relationship identified many gerontogenes.

1.3.2.1. Role of IIS/IGF Pathway in Ageing

The earliest longevity correlation determined that calorie restriction significantly increased mice lifespan (McCay et al., 1935). Dietary restriction (DR) could potentially redirect resources to somatic maintenance through various pathways (Holliday, 1989). The discovery of long-lived *daf-2* (an insulin receptor analogue) and *daf-16* (transcription factor homologous to forkhead transcription factor O) mutants implicated the insulin/IGF-1 signalling (IIS) pathway in influencing ageing (Kenyon et al., 1993). Slowing of ageing by mutations in *chico* (insulin/insulin-like growth factor) is dependent on nutrient content, i.e., they both occur by overlapping mechanisms, confirming the role of the IIS/IGF pathway in nutrient sensing and longevity (Clancy et al., 2002).

The IIS/IGF signalling pathway and its role in longevity are conserved across species. Mice with fat-specific insulin receptor knockout (FIRKO) had an 18% increase in mean lifespan (~134 days). They also had reduced fat mass and protection against age-related obesity and metabolic issues, despite normal food intake, suggesting that reduced fat mass, independent of caloric restriction, may enhance longevity through effects on insulin signalling (Bluher et al., 2003). *dFOXO*, a *Drosophila* analogue of *daf-16*, extends female lifespan by 20-50% and reduces fecundity by 50% when overexpressed in adult fat body (Giannakou et al., 2004). Increasing *dFOXO* in fat body of the brain decreases circulating insulin peptides, significantly delaying ageing (Hwangbo et al., 2004).

1.3.2.2. Heat Stress and Longevity

Heat shock proteins (*Hsp*) protect cells from a broad spectrum of damage, including heat (Lindquist, 1986). DR increased *Hsp* expression in mice, partly explaining the mechanism of DR action on longevity (Aly et al., 1994). Unrelated yeast strains with varied lifespans were mutagenised by exposure to starvation, heat shock and other stress assays. A genetic screen

identified mutations in 4 genes – *UTH*-1, *UTH*-2, *UTH*3, and *UTH*-4 - that increased lifespan by 20-55% in stress-resistant strains. *UTH*-2 is homologous to *SIR*4, a yeast-silencing gene. Mutations in *SIR*4 change its locus of activity, increasing lifespan by 30% (Kennedy et al., 1995).

As thermotolerance is closely associated with longer lifespans, screening for genetic mutations based on longevity-associated phenotypes is less time-consuming than testing the lifespan phenotype (Walker et al., 1998). Methuselah (*mth*), a gene coding for a family of G protein-coupled receptors, aids synaptic transmission in *Drosophila* larvae. Mutations in *mth* increased mean lifespan by 35% and increased resistance to starvation, high temperature, and dietary paraquat (Lin et al., 1998; Ja et al., 2009). Investigation of *Drosophila* enhancer-trap lines revealed two lines with 40-80% increased lifespan, without decreasing fertility/fecundity, neuromuscular activity, or behaviour. Analysis of the insertion site helped discover mutations in *Indy* (I'm not dead yet), a dicarboxylate in Kreb's cycle (Rogina et al., 2000).

1.3.2.3. Antioxidants and Ageing

Reactive oxidant species (ROS) are metabolic by-products of cellular processes, and their over-accumulation over time causes damage, leading to ageing (Harman, 1956; Sohal and Weindruch, 1996). Enzymes like superoxide dismutase and catalase protect cells against ROS activity. Overexpression of MnSOD and CuSOD increased mean lifespan by 16-33% in flies (Sun et al., 2002). However, oxidative stress does not correlate to longevity and heat stress is positively correlated with longevity in *C. elegans*, making a strong argument against oxidative stress as an important determinant of longevity (Benedetto et al., 2019).

1.3.2.4. Role of TOR (Target Of Rapamycin) in Longevity

Rapamycin, an immunosuppressant, arrests cell cycle growth in yeast. Mutations in the *TOR*1 and *TOR*2 (TOR – target of rapamycin) genes confer rapamycin resistance, and the genes are homologous to the human, fly and worm variants (Heitman et al., 1991; Brown et al., 1994; Oldham et al., 2000). TOR enzymes are checkpoint kinases in a growth-regulating nutrient-sensing signalling pathway (Fafournoux et al., 2000).

In *C. elegans*, downregulation of *TOR* by RNAi doubles the lifespan, independent of *daf-16* (Vellai et al., 2003). In flies, ubiquitous overexpression of the *dTOR* gene with a rapamycin-binding domain increased mean lifespan by 24% at 29°C. In DR conditions, inhibition of *TOR* did not extend lifespan, supporting the idea that *TOR* extends *Drosophila* lifespan by dietary

restriction (Kapahi et al., 2004). In human cells, senescence induced by DOX (doxorubicin), a DNA-damaging agent, was rescued by *TOR* inhibition (Demidenko and Blagosklonny, 2008).

Late-life feeding of rapamycin to mice increased their lifespan by 14% in females and 9% in males (Harrison et al., 2009), emphasising the importance of TOR pathway in regulating lifespan across species.

1.3.2.5. Protein repair and lifespan

Ubiquitous over-expression of protein carboxyl methyltransferase (PCMT), a repair protein, at 29°C, increased lifespan by 32-39% and enzyme activity by 3- to 7-fold. However, no lifespan extension occurred at 25°C, indicating a temperature-dependent impact on longevity, highlighting the role of protein repair in lifespan under certain environmental conditions (Chavous et al., 2001).

1.3.3. Genome-wide association studies (GWAS)

Genome-wide association studies (GWAS) identify genotype-phenotype associations by comparing whole genomes across individuals. GWAS is performed using whole genome sequencing or SNP arrays. Initially used to find polymorphisms linked to age-associated macular degeneration, GWAS has since uncovered genetic variants related to coronary artery disease, type 2 diabetes, and cancers (Klein et al., 2005; Nikpay et al., 2015; Mahajan et al., 2014; Sud et al., 2017).

Although expensive and explaining only a small fraction of heritability with limited effect sizes and challenging replication, larger sample sizes enhance loci discovery rates. Despite its cost, GWAS remains an unbiased approach for identifying loci of complex traits without requiring prior biological knowledge (Manolio et al., 2009; Visscher et al., 2012).

One of the earliest human GWAS studies identified a longevity locus on chromosome 4 (Puca et al., 2001). Subsequent GWAS studies identified allelic variants in *AKT1, FOXO* and *APOE* genes that are associated with human longevity (Lunetta et al., 2007; Pawlikowska et al., 2009; Nebel et al., 2011; Wright et al., 2019). The ε4 allele of *APOE*, which promotes premature atherosclerosis, is significantly less frequent in centenarians compared to controls, suggesting pleiotropic age-dependent effects on longevity (Schächter et al., 1994). GWAS studies on supercentenarians showed that age of onset and absence of diseases is homogenous, indicating common mechanisms across longevity phenotypes (Garagnani et al., 2013).

1.3.4. Selection for Longevity

Based on damage theories, ageing is the late-life expression of deleterious mutations with or without pleiotropic effects. Early selection experiments focussed on senescence and reproductive trade-offs.

Age at reproduction was considered a major factor affecting longevity, with progeny of young parents living longer than those with old parents in *Philodina citrina*, a parthenogenic rotifer (Lansing, 1947). Selecting for longevity is a more straightforward approach to identifying gerontogenes. Exploiting the longevity phenotype would reveal the genetic makeup of the long-lived organisms, and if they follow mutation accumulation or antagonistic pleiotropy model of ageing.

Eight generations of selection for increased longevity in *Drosophila melanogaster* had no selection response, although all lines exhibited a significant longevity increase between F2 and F4 generations. This increase was not due to genetic drift or environmental changes, nor was the lack of selection response caused by insufficient selection pressure, lack of genetic variability, measurement errors, or recurrent old-age reproduction (Lints et al., 1979).

Natural selection for late-age fitness in flies increased late-life fecundity, female longevity, and reproductive duration, while early fecundity and average egg-laying rate declined (Rose and Charlesworth, 1981; Rose, 1984). When selected for late reproduction, *Drosophila melanogaster* populations had significantly longer lifespans and delayed senescence, accompanied by reduced early fecundity, indicating pleiotropic genetic control of the ageing process (Luckinbill et al., 1984). Selection for age-at-reproduction could target increased late fecundity, which is dependent on selection for increased longevity (Clark, 1987). However, both studies did not control larval densities, potentially confounding the findings. High larval density cultures give rise to smaller adults with increased mean lifespans in flies (Shenoi et al., 2015), while in mice, crowding during early life increases mean and maximal lifespan, and increased insulin sensitivity with age (Sadagurski et al., 2014).

Selecting for longevity produced two lines, "young" and "old," derived from young and old adult flies. Virgin and mated flies from the old lines lived longer than those from the young lines, with the old lines showing higher later-life fecundity and fertility. This suggests a reproductive trade-off with longevity, potentially due to mutation accumulation or pleiotropic factors, excluding

early-life fecundity. However, a key limitation was the differences in reproductive history between the lines (Partridge and Fowler, 1992).

Addressing the limitations of the previous selection experiments, a familial method of selecting for longevity was developed, where sibling progeny of single-pair crosses were reared at different temperatures (Zwaan et al., 1995). Progeny preordained as parents for the next generation were maintained at 15°C, while their siblings were maintained at 29°C, effectively exploiting its poikilothermic nature, where low temperatures increase lifespan (David, 1988; Zwaan et al., 1992). Median lifespan of the flies at 29°C determined the parental strains for the next generation of selection. Six of the longest-lived and six of the shortest-lived strains were the "selected" strains, while six random families were chosen as controls. This was repeated for 6 generations, and both sexes were housed separately until mating, to avoid any confounding effects of reproduction.

In both sexes, selection for increased lifespan was significantly high and heritable, without relaxation of the selection response. Control lines, particularly females, had a significant decrease in lifespan. Adult body weight, viability, and starvation resistance were not significantly different between long-lived-selected and control strains. Short-lived selected strains were less successful than long-lived selected strains, however, recombining lines and easing selection pressure for two generations significantly improved their response. Familial selection is a successful alternative to selection for age at reproduction in selecting for longevity.

Only six families were selected per generation, resulting in severe inbreeding, and reduced effective population numbers. Any lifespan extension achieved at 29°C need not be representative of longevity at other temperatures. However, rearing them at 29°C determined the parental lines from the siblings at 15°C before senescence. A major advantage was the use of virgin flies, proving any observed longevity was unrelated to reproductive behaviour or physiology.

Despite these drawbacks, direct selection remains the only way to unambiguously select for longer life, without introducing bias into the evolutionary path taken, i.e. selecting on stress resistance may extend lifespan because of changes in stress resistance but selecting on lifespan makes it more likely that a novel or unexpected mechanism is responsible for any observed lifespan extension. While *Drosophila* lifespan can be genetically extended, uncoupling of decreased early fecundity to longer lifespan has been challenging. However, the familial method for lifespan extension avoids selecting for ageing-associated factors such as stress response or fecundity. It can also

identify novel drug targets as lifespan-extending mechanisms are not biased (Zwaan, Bijlsma and Hoekstra, 1995).

1.4. Project Overview

1.4.1. Study on selecting for longevity

An earlier study by Dr. Daniel Palmer in our laboratory (unpublished) hypothesised that a healthy lifespan can be inherited and manipulated in a population by artificial selection because lifespan is a heritable trait (Lindquist and Craig, 1998). Since lifespan has a genetic basis, the transcriptome of the longevity selected strains will differ from the controls (Carnes et al., 2015). Dr. Palmer's project aimed to generate long-lived *Drosophila* strains by artificial selection, and phenotypically compare the selected strains to controls, to identify correlated responses associated with longevity phenotype. Novel anti-ageing genes can be identified by transcriptomic analysis, for further drug-targeting studies.

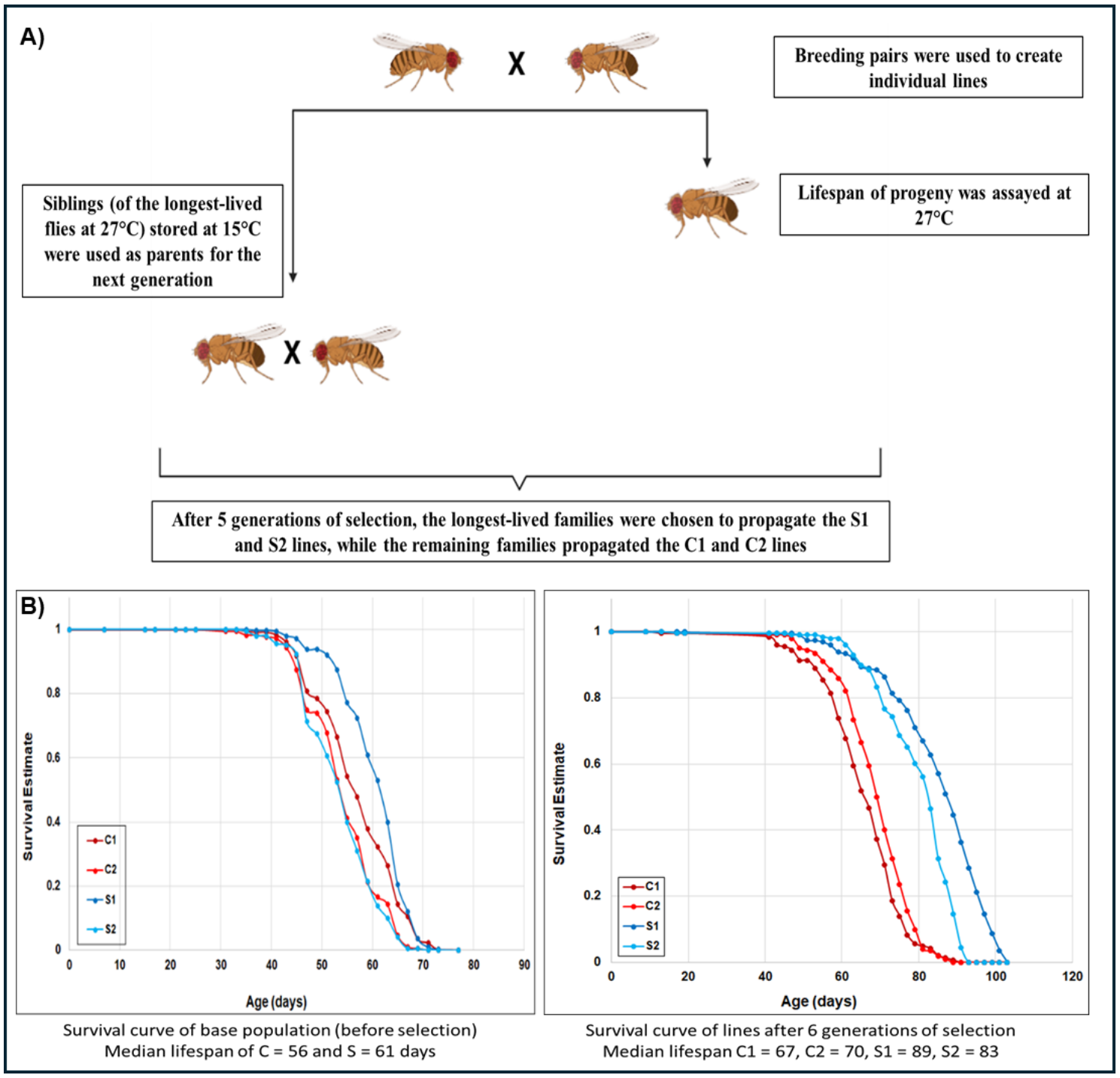


Figure 3 A) Wild-caught D. melanogaster was crossed into a single base population, after brief lab adaptation. From this population, 35 breeding pairs (1 male and 1 virgin female) created 35 individual families. The lifespan of these 35 families was assayed, with the longest-lived families chosen to propagate

the S1 and S2 lines, and the remaining families propagated the C1 and C2 lines; B) After 5 generations of selection, the selected lines showed a 14.5% increase in median lifespan

Recently caught wild-type *Drosophila melanogaster* were selected for longevity using a modified familial method of Zwaan et al (1995). Four lines were generated: two control (C1 and C2) and two longevity-selected lines (S1 and S2), with the selected lines showing a 14.5% increase in lifespan after 6 generations of selection. S1 consistently exhibited a longer lifespan than C1 and C2, while S2 showed greater longevity at 25°C but was less consistent at 27°C. Phenotypic comparisons between strains showed that survival under stress—such as starvation, desiccation, and heat stress—increased in the S lines.

This selection aimed to develop a model organism to study evolutionary pathways for longevity and identify ageing mechanisms as potential intervention targets. The objective was to create a custom model, loosely based on human centenarians, through artificial selection. The previous study was concluded with the RNASeq of the two control and two selected strains. Analysing RNASeq data could identify novel anti-ageing genes, which can be manipulated to test for effects on lifespan and health span, offering valuable insights into the modulation of developmental pathways observed in this study.

1.4.2. Objectives

Understanding the molecular events underlying normal ageing and age-related diseases could aid in developing strategies to mitigate their effects, ultimately improving health and extending human lifespan.

1.4.2.1. Analyse the RNASeq data to identify novel anti-ageing genes

This could reveal interesting pathways that might not have previously been implicated in ageing studies. The unbiased nature of the selection ensures that any genes that are differentially expressed between the control and long-lived selected strains are not due to trade-offs with other ageing-associated responses (Zwaan et al., 1995).

1.4.2.2. Test novel genes for effect on lifespan and health span

Potential anti-ageing genes shortlisted from the RNASeq can be manipulated by gene expression methods to study the effect on fly survival and fitness. The expression of the selected genes will resemble their expression profile from the RNASeq data to mimic the long-lived selected strains.

1.4.2.3. Prepare gene constructs to generate over-expression fly strains and test for effect on lifespan and health span

Limited availability of over-expresser *Drosophila* strains specific to this study necessitates the generation of the required strains in the lab. These cloned genes will be microinjected into *Drosophila* eggs, and their overexpression will be tested for effects on fly survival and health.

Chapter I – Analysing RNASeq Data

2. Introduction

2.1. Overview

The aim of evolutionary genetics is to discover the underlying mechanisms accounting for the genetic basis of phenotypic variation. It aims to identify phenotypic and genotypic changes, while understanding the effect evolutionary pressures have on them. Variation in gene expression patterns is key for evolution of morphological phenotypes (Stern and Orgogozo, 2008).

Characterising and comparing gene expression levels is the common method to study evolution of gene regulation. One method of studying phenotypic differentiation of traits is through experimental evolution. Using high-throughput -omics technologies, these populations can help identify genetic variants and gene expression level driving ageing mechanisms (Mallard et al., 2018). This framework can help identify genetic regions and uncover unexpected molecular mechanisms influencing ageing and related traits.

2.2. Pathways associated with ageing

Ageing affects all systems in the body and is associated with widespread changes in the transcriptome (Cellerino and Ori, 2017; Stoeger et al., 2022). While some ageing-related expression changes may be unique to individuals, core mechanisms are often conserved within a species or even across species. These changes can serve as biomarkers of biological age, offering a non-invasive method for assessing disease risks and supporting personalised care. They also facilitate research by enabling the normalisation of subjects by biological rather than chronological age, especially useful in human studies where ageing rates are highly variable.

Pathways involved in lipid and carbohydrate metabolism, stress response, DNA repair, immune response, and maintenance of cellular integrity contribute to the ageing phenotype in flies (Ma et al., 2018; Ogienko et al., 2022). Mitochondrial function, linked to oxidative stress and muscle health, declines with age (Zahn et al., 2006). Genes related to mitochondrial respiration, ATP synthesis, and the citric acid cycle also contribute to *Drosophila* ageing (McCarroll et al., 2004).

Stress resistance also plays a key role in ageing. Heat shock proteins (*Hsp*) are essential for cellular stress resistance and protein repair. In *Drosophila*, upregulation of *Hsp*70 extends lifespan following mild heat shock (Sarup et al., 2014).

Signalling pathways that are evolutionarily conserved across multiple ageing models, including IIS, TOR, NF-κB and JNK are critical for regulating stress and ageing-associated phenotypes. Activation of IIS and TOR pathways shortens *Drosophila* lifespan, while activation of JNK pathway increases lifespan by suppressing TOR activity (Clancy et al., 2001; Hwangbo et al., 2004; Kapahi et al., 2004; Gan et al., 2021). Violation of the NF-κB pathway results in a decrease in lifespan. The Imd sub-branch of the NF-κB pathway is constitutively ready for activation and both activating and repressing components of the IIS and the TOR pathways are constitutively expressed (Ogienko et al., 2022). Identifying novel genes associated in longevity-associated pathways and/or discovering new pathways can help further our understanding of the ageing phenotype, helping us design better interventions for improved life and health span.

2.3. Technological advancements in gene expression studies

The application of modern technologies to ageing research is invaluable in unravelling the complex genetic mechanisms behind longevity. Advances in genomic technologies have facilitated high-throughput studies of panomics (transcriptome, metabolome, epigenome) enabling the investigation of gene regulation evolution, genetic and epigenetic factors dictating expression levels and regulatory variation (Valdes et al., 2013).

2.3.1. Microarray

Microarray, or expression microarray, allows relative mRNA quantification of many genes simultaneously (Schena et al., 1995). Microarray analysis identified ageing-associated differentially expressed genes involved in inflammation and immune response, lysosome, collagen, energy metabolism, mitochondrial functions, apoptosis, and cell cycle (De Magalhães et al., 2009).

Microarray transcriptomics is useful for investigating the link between longevity and stress resistance, with longevity selected lines sharing many common expression changes with those selected for starvation and desiccation resistance (Sørensen et al., 2007).

2.3.2. Genome-wide association studies (GWAS) in *Drosophila*

Annotation of the genes identified through the *Drosophila* genome project enabled small-scale sequencing studies (Rogina et al., 2000). Wider sequencing studies have used whole genomes for associations between longevity and gene expression profiles, called Genome Wide Association Study (GWAS). GWAS identified pathways enriched for carbohydrate metabolism, proteolysis, apoptosis, and TOR regulation, although individual longevity-associated SNPs could not be detected due to low power (Ivanov et al., 2015).

2.3.3. RNA Sequencing (RNASeq)

Before next-generation sequencing technologies, DNA microarrays were the primary method for genome-wide measurement and comparison of gene expression levels. However, their application was limited to species with sequenced genomes, as microarray design relies on pre-existing genomic information.

RNASeq is a transcriptome profiling method that uses deep sequencing to measure and compare gene expression levels across species, even in the absence of complete genomic data. It offers more comprehensive expression level estimation than microarrays, can identify previously unannotated transcripts, and helps characterize genetic diversity in expressed genes. RNASeq is particularly beneficial for providing detailed and accurate insights into gene expression, offering greater flexibility and depth compared to older technologies like microarrays (Wang et al., 2009).

2.3.4. Enrichment Analysis

High throughput expression data is analysed using gene set enrichment analysis (GSEA). Gene set enrichment analysis (GSEA) focusses on gene sets that share biological function, chromosomal location, or regulation (Subramanian et al., 2005). GSEA eases the interpretation of a large-scale experiment by identifying pathways and processes, by focusing on gene sets instead of poorly annotated high-scoring genes. GSEA boosts the signal-to-noise ratio to detect modest changes in individual genes.

Gene networks are also increasingly used to determine gene hubs that regulate biological processes, investigate the relationships between genes and ageing-related diseases and the network topology features of ageing genes (Wang et al., 2009; Bell et al., 2009).

2.4. Conclusion

Expression analysis has long been a valuable method for studying ageing and longevity. Recent advances in transcriptomic technologies, particularly RNA-Seq, provide exciting opportunities to examine the ageing transcriptome in detail. Longevity selection experiments, which offer an unbiased approach to extending lifespan, are well-suited for RNA-Seq analysis. This method not only confirms known ageing mechanisms but also helps identify novel pathways and associations that may not be found in traditionally obtained longevity models.

2.4.1. Objective

The objective of this chapter is to analyse the RNASeq data to identify differentially expressed genes and pinpoint candidate genes for further investigation in lifespan and negative geotaxis studies.

3. Methods

3.1. Overview

I aimed to identify candidate anti-ageing genes through RNA sequencing and subsequent bioinformatic analysis, and the methods to achieve that are detailed here. RNA extracted from experimental samples was sequenced by Novogene. The resulting raw sequencing data was processed and analysed using the iDEP platform, focusing on differential gene expression (DEG) analysis to identify significantly expressed genes. Functional annotations of these genes were performed using KEGG (Kyoto Encyclopedia of Genes and Genomes) analysis to explore biological pathways and processes associated with ageing. From this analysis, a comprehensive list of candidate genes was generated. These genes were then filtered based on predefined parameters, yielding a selection of testable candidate genes with potential roles in delaying ageing and increasing lifespan. All work in sections 3.2 and 3.3 was done by Dr. Daniel Palmer as part of his PhD work.

3.2. Fly Rearing and Maintenance for RNA Sequencing

Flies were reared on standard food and rearing conditions (25°C, 70% relative humidity and 12/12 light/dark cycle). 3-day old mated male flies were sorted into 20 vials at a density of 20 flies per vial per line (two control lines – C1 and C2 and two selected lines – S1 and S2). Only five replicates per line, and 2 lines per treatment were maintained due to financial and technical constraints. Although the aim was to ensure differential expression was not restricted to one sex, the pilot study was performed with male flies only due to financial constraints, to prevent confounding results from reproductive trade-offs from female flies.

Flies were tipped to fresh vials every 2 days under light CO_2 anaesthesia, while scoring for death. At 25 days old, these flies were removed with an aspirator, 24 hours after the previous change, and snap-frozen in liquid nitrogen.

3.3. RNA Extraction, Cleaning and Quality Control

RNA was extracted from 20 male flies per sample using Norgen Total RNA Purification Kit, treated with DNase and cleaned with Norgen RNA Cleanup and Concentration Kit. This produced 70µl of a concentrated sample, from which 10µl was taken for quality control, and the remainder was immediately frozen at -80°C.

Samples were tested qualitatively and quantitatively using a Nanodrop spectrophotometer and were considered of sufficient quantity and purity if the concentration was above 20ng/µl and the 260/280 and 260/230 ratios were at least 2.0 and 1.8 respectively. The accepted samples were sent to Novogene, Cambridge for RNA-Seq. Samples were assessed for RNA integrity by determining the RNA Integrity Number (RIN) and values above 5.7 were considered qualified for library preparation. After sending the samples for sequencing, there was no more frozen RNA sample, preventing future repeats of RNASeq.

3.4. Library preparation for RNA-Seq

Library preparation was done for 20 samples overall - 5 samples per line, 2 lines per treatment (C1, C2, S1 and S2). RNASeq was done on Illumina NovaSeq X Plus Sequencing System which utilises a paired-end 150 bp sequencing strategy (short-reads). Data output was obtained as ≥ 20 million read pairs per sample.

3.5. Data analysis

RNASeq data was analysed by iDEP (integrated Differential Expression and Pathway analysis), a web-based tool that employs R/bioconductor packages to analyse RNA-seq data (Ge et al., 2018). For exploratory data analysis, principal component analysis (PCA) is performed, while DESeq2 package detects differentially expressed genes. Pathway analysis is done by GSEA (gene set enrichment analysis). Analysis started on iDEP 0.96 but eventually repeated on iDEP 2.0 upon software upgrade.

3.5.1. Data pre-process on iDEP

3.5.1.1. Filtering of counts data

Gene expression levels can vary between samples and those with low or no expression across samples need to be filtered out. CPMs are calculated by normalizing the read counts by the total counts per sample.

$$Counts\ per\ million\ (CPM) = \frac{Number\ of\ reads\ mapped\ to\ a\ gene\ x\ 10^6}{Total\ number\ of\ mapped\ reads}$$

Since the RNASeq resulted in 20 million reads (section 3.4), and the number of reads mapped to a gene was set to 3 (as suggested by Dr. Daniel Palmer), the analysis was fixed at 0.15 counts per million (CPM) in at least 6 libraries. The data is normalized by cpm function in edgeR and the number of samples above a minimum CPM is counted. Only genes with levels above 0.15 CPM in at least 6 libraries are retained. This filtering is automatically performed by iDEP based on user-defined parameters, using an ENSEMBL reference genome of *Drosophila* (Ensembl/String-db ID – dmelanogaster_gene_ensembl; taxonomy ID – 7227; Assembly ID - BDGP6.32). Filtering of data was performed by idep, however some filtering parameters were unclear. No other program was used to analyse RNASeq data.

3.5.2. Clustering

Heatmaps can give a holistic view of data due to hierarchical gene clustering based on their standard deviation across all samples (Ge et al., 2018). Data centering involves subtraction of average expression level of each gene, with the top 1000 genes clustered in the heatmap. Enrichment analysis is done by clustering genes into groups based on their expression pattern across all samples (k-means clustering).

3.5.3. Principal component analysis (PCA)

Principal component analysis (PCA) is a linear transformation of the data, with the first component pointing to the direction of the most variation among samples (Jolliffe and Cadima, 2016). This enables sample projection into two-dimensional space. A one-sample t-test on each gene set in the

biological processes branch of Gene Ontology (GO) gives adjusted p-values that rank the pathways for each of the first 5 principal components.

3.5.4. Differentially expressed genes (DEGs)

DESeq2 is employed to generate a list of differentially expressed genes across multiple sample comparisons with individual line comparisons, where I selected controls as the baseline and compared the expression of the selected strains versus the control strains (Love et al., 2014). Fold change filter was set to 1.15, with a 0.05 FDR (false discovery rate) cut-off. These parameters were selected to prevent the filtering out of critical DEGs like transcription factors which have lower levels of expression than other genes (Naqvi et al., 2023).

An ANOVA was performed on the list of differentially expressed genes with all the individual comparisons for each gene to obtain p-values. Genes with significant p-values across all 4 comparisons (S1-C1, S1-C2, S2-C1, and S2-C2) in the same direction were selected for further analysis. Gene information was annotated from FlyBase and genes that are only expressed in one sex, only in developmental stages, without a human homolog were filtered out.

3.5.5. Enrichment Analysis

Fold Enrichment is a measure of effect size and indicates how drastically genes of a certain pathway are overrepresented. Enrichment p-values are calculated based on one-sided hypergeometric test, which is then adjusted for multiple testing using the Benjamini-Hochberg procedure and converted to FDR (false discovery rate). The filtered genes are those that are passed a low filter in RNA-seq. Pathways are filtered based on an FDR cutoff (0.05). Gene sets for pathways are derived from KEGG and gene sets for biological process are derived from GOBP (Gene Ontology Biological Processes). Sample tree clustering uses genes with maximum expression level at the top 75% to transform and cluster data. Two pathways are connected if they share 30% or more genes.

4. Results

4.1. Overview

The objective for this chapter was to identify candidate anti-ageing genes through RNA sequencing and subsequent bioinformatic analysis. RNA extracted from experimental samples was sequenced by Novogene and the resulting raw sequencing data was processed and analysed using the iDEP platform. Differential gene expression (DEG) analysis identified significantly expressed genes, while functional annotations of these genes were performed using KEGG analysis to explore ageing-associated biological pathways and processes. This analysis generated a comprehensive list of candidate genes, which were further filtered based on predefined parameters, yielding a selection of testable candidate genes with potential roles in delaying ageing and increasing lifespan.

4.2. RNA Quality and Integrity

The samples were checked for concentration, purity, and integrity using a Nanodrop Spectrophotometer and Agilent 2100 bioanalyser. Four replicates of the control strain C1 had lower RNA integrity numbers than desirable for library preparation (table 2). Although the samples did not completely meet the requirements of library construction and sequencing, the library was constructed, as only samples below a RIN value of 4 were rejected. This could, however, compromise sequencing quality.

Table 2 RNA concentration and integrity as tested by Novogene before library preparation for RNA-Seq showed that some samples had lower RIN and hence, lower quality for RNASeq

Sample	Concentration (ng/ml)	RIN	Conclusion
C1.1	119	5.3	Unqualified RIN
C1.2	98	5.6	Unqualified RIN
C1.3	103	5.7	Unqualified RIN
C1.4	73	5.6	Unqualified RIN
C1.5	89	5.9	Pass
C2.1	44	6.7	Pass
C2.2	46	6.3	Pass
C2.3	45	6.1	Pass
C2.4	77	5.8	Pass
C2.5	41	6.3	Pass
S1.1	114	6.2	Pass
S1.2	121	6.2	Pass
S1.3	99	5.9	Pass
S1.4	95	6.2	Pass
S1.5	98	5.8	Pass
S2.1	105	6.1	Pass
S2.2	53	6.1	Pass
S2.3	97	6	Pass
S2.4	75	6	Pass
S2.5	59	6.4	Pass

4.3. Data pre-process

On obtaining the RNASeq data from Novogene, the data was processed and analysed using iDEP 2.2 software. Of the 17,562 genes in 20 samples, 14,771 genes passed the CPM filter (0.15 counts per million (CPM) in at least 6 samples). Bias in sequencing depth can be identified with the variation in library sizes (read counts data), as seen in samples C1.2, C2.3, C2.4 and S2.3, where

read counts are lower compared to the other samples (figure 3). However, this is not reflected by the RIN (table 2), so the results could be affected by factors other than RNA integrity.

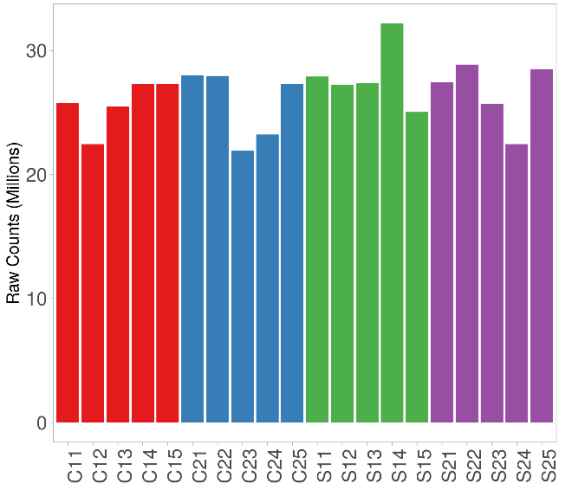


Figure 4 Diagnostic plot for total read counts per library across all 20 samples. C11-C15 are replicates of the C1 line, C21-25 of C2 line, S11-15 of S1 line, and S21-25 of S2 line, where C1 and C2 are control and S1 and S2 are selected strains

4.4. Exploratory Data Analysis (EDA)

In hierarchical clustering, genes are ranked based on standard deviation and the top 2000 genes are plotted. There is considerable difference between the expression profiles of C1 and C2, with the expression majorly being in diametrically opposite directions i.e., upregulated genes in C1 are downregulated in C2 (figure 5A). This pattern is also observed between S1 and S2, indicating that the variation between biological replicates and between technical replicates is significantly high. This is confirmed by the linkage analysis (figure 5B). A PCA plot of the first two components shows that there is a clear difference between the selected samples (S1 and S2) and C1 (figure 5C), along the first principal component (PC1) that explains 29.3% of the variance. PC1 ($p = 7.70 \times 10^{-13}$), PC2 ($p = 1.60 \times 10^{-13}$), and PC3 ($p = 4.01 \times 10^{-9}$) are significantly correlated with strain. However, C2 is different from C1, on PC1-PC2, and is more similar to the selected strains, as observed in the PCA and linkage analysis (figure 5B and C). However, when comparing PC1 to PC3, there is a better separation between the control and selected strains, which could explain the variance (PC3 variance is 8.7%) (figure 5C and D).

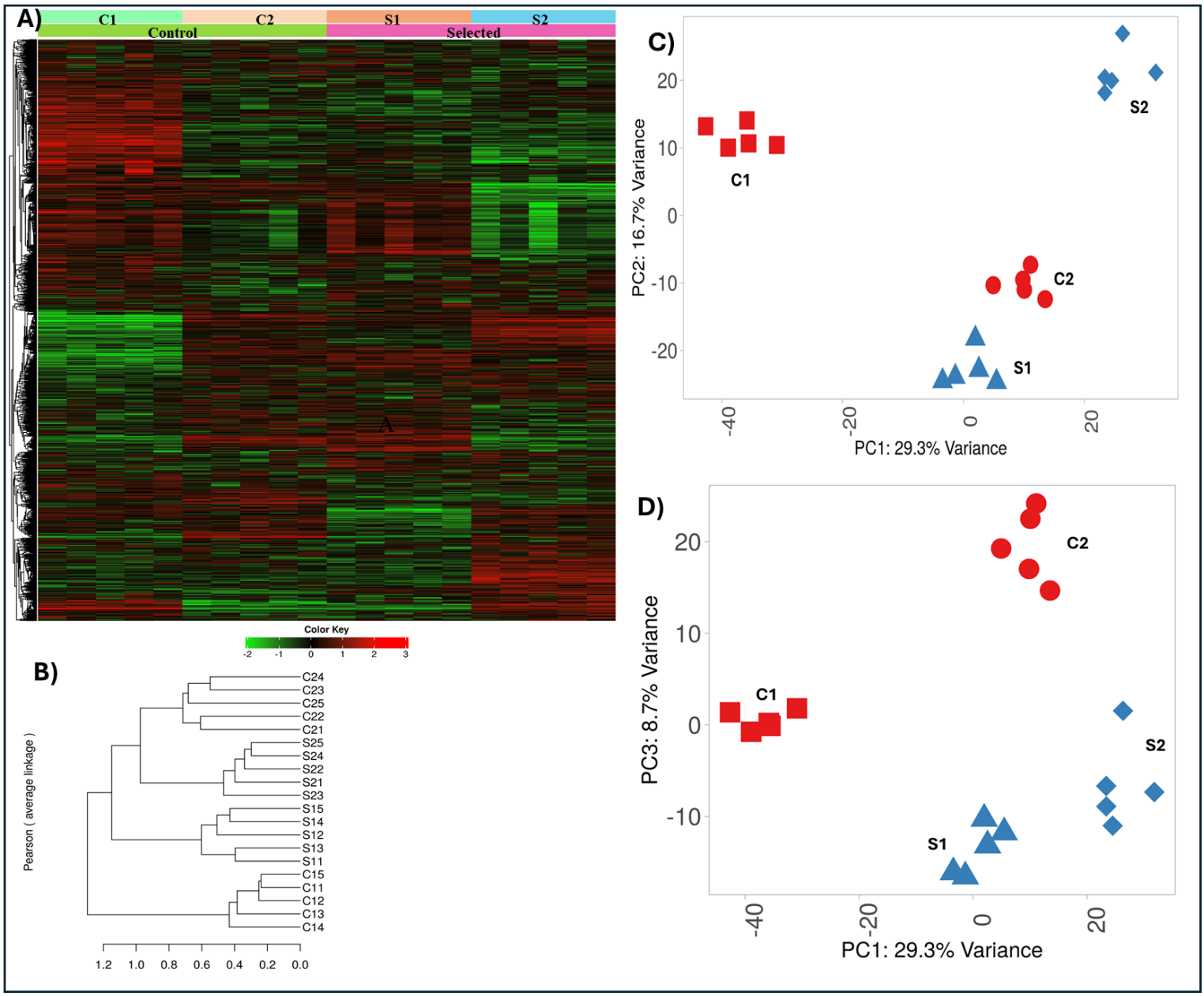


Figure 5 Hierarchical clustering (A) indicates substantial differences in expression profiles across samples, with high variation among biological replicates (C1-C2 and S1-S2). Linkage analysis (B) and PCA of PC1-PC2 (C) shows that the selected strains have high variance with C1, but C2 has less variance with the selected strains. PCA of PC1-PC3 (D) however shows a better segregation between the control and selected strains (image generated on iDEP 2.0)

4.5. Differentially expressed genes (DEGs)

The DESeq2 package identified differentially expressed genes across different comparisons using a threshold of false discovery rate (FDR) of 0.05 and fold-change >1.15, with the control strains as baseline. Although comparisons against both controls showed genes with high fold changes, most genes had expression changes between 0 and 2-fold (figure 6).

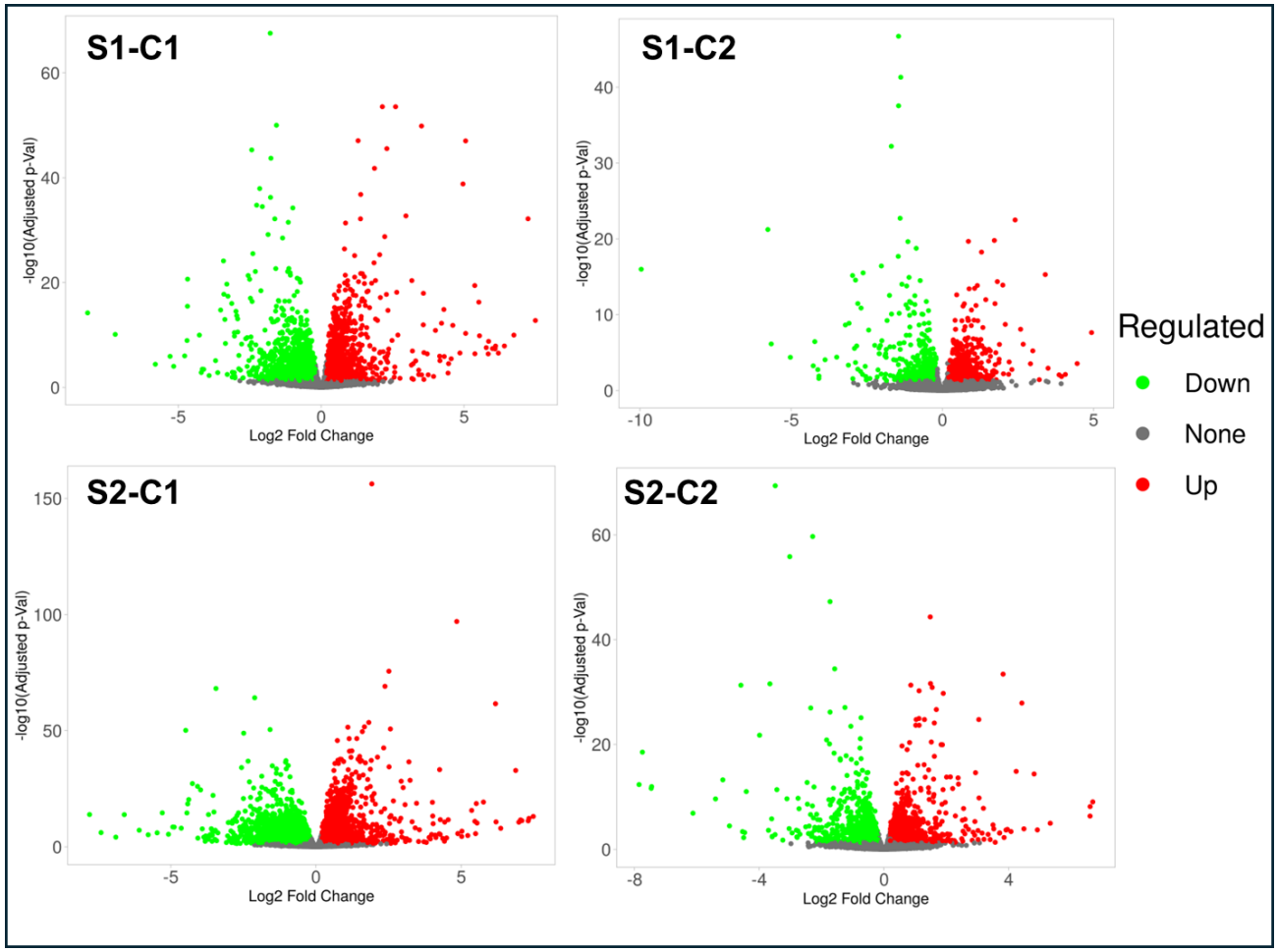


Figure 6 Volcano plots of all 4 comparisons showed low number of genes with very high fold-change in expression, with only C2 comparisons having genes with more than 8-fold expression change (image generated on iDEP 2.0)

With control strains as baseline, S1 and S2 have an overlap of 32 upregulated genes and 51 downregulated genes, while individual comparisons vary in the number of shared genes (figure 7).

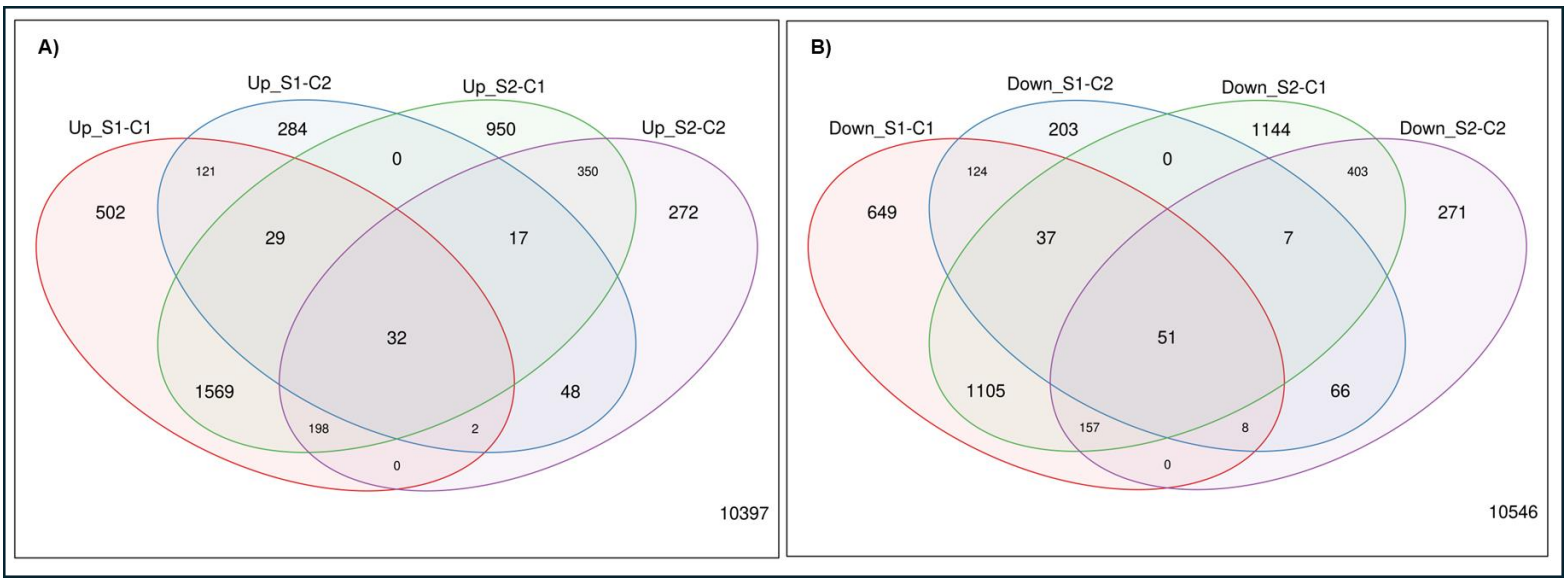


Figure 7 Differentially expressed genes with control as baseline A) upregulated genes B) downregulated genes across all comparisons (image generated on iDEP 2.0)

With C1 as the baseline, S1 has 2712 upregulated and 2462 downregulated genes, while S2 has 3377 upregulated and 3196 downregulated genes. With C2 as the baseline, S1 has 702 upregulated and 624 downregulated genes, while S2 has 1123 upregulated and 1195 downregulated genes (figure 8).

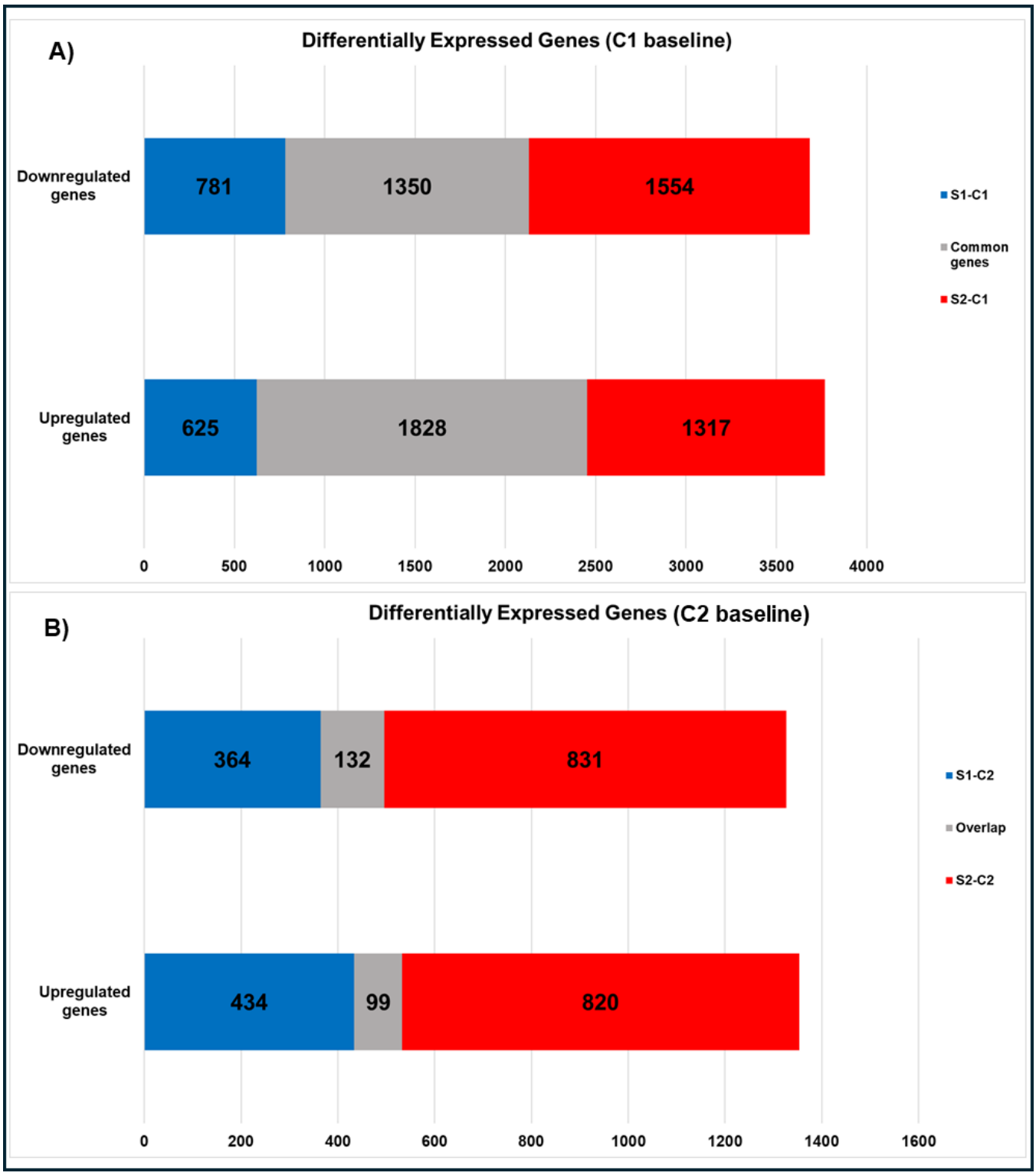


Figure 8 Differentially expressed genes obtained by DESeq2 package revealed a smaller set of genes common between S1 and S2 with C2 as baseline, than C1

The up and down-regulated genes were then subjected to enrichment analysis based on the hypergeometric distribution. Across all S vs C comparisons, upregulated genes are related to starch

and sucrose metabolism, purine metabolism, MAPK signalling, *Wnt* signalling, and lysine degradation. The downregulated genes are significantly enriched with DNA replication, nucleotide and base excision repair, ribosome biosynthesis, and drug metabolism genes.

The selected strains had more DEGs with C1, than with C2 (figure 9) with most genes in chromosomes 2 and 3, and the least in chromosome 4.

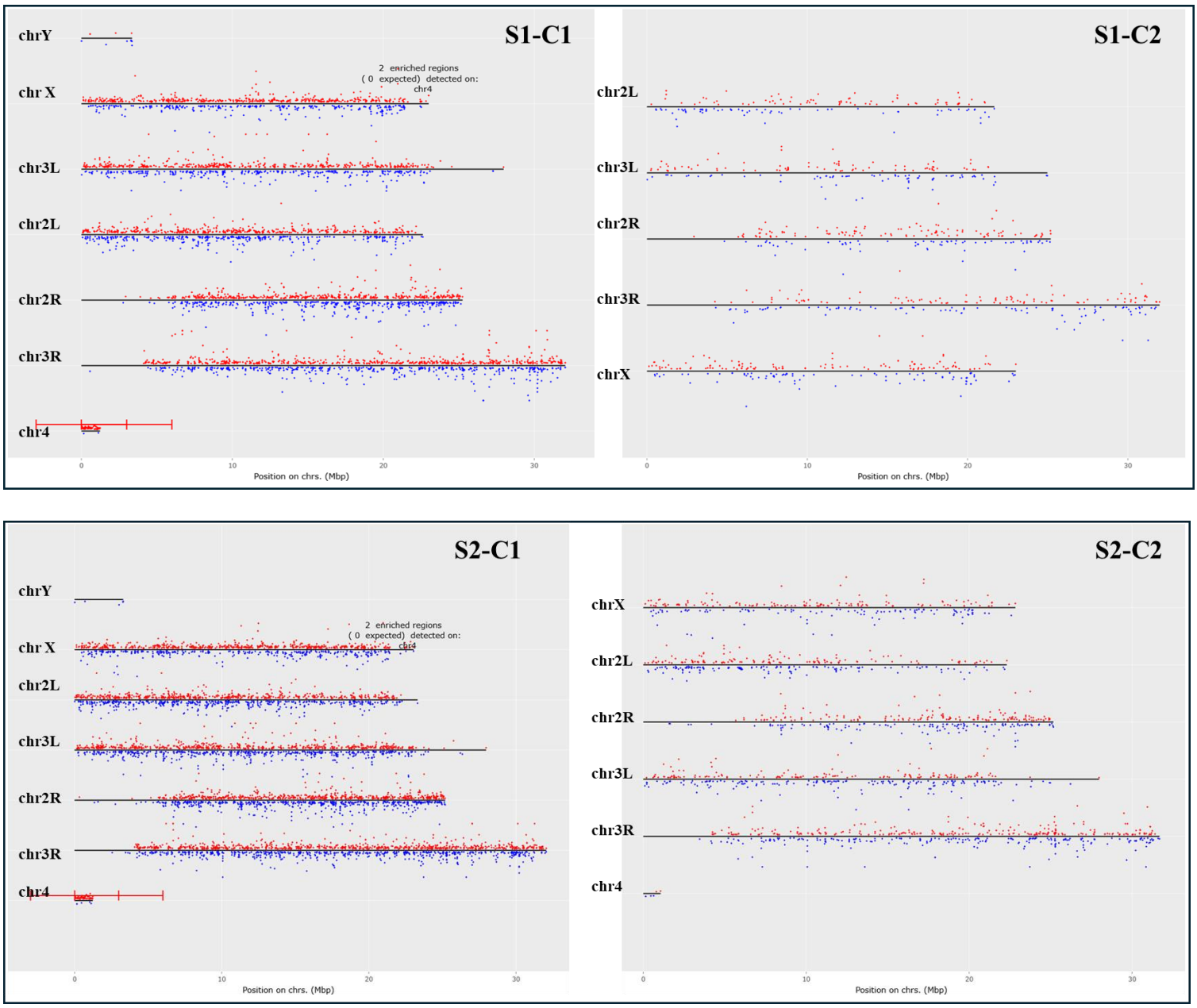


Figure 9 Chromosome plots of differentially expressed genes across all 4 comparisons (selected vs control strains) with the control strains as baseline (image generated on iDEP 2.0)

4.6. Enriched Pathways

Different pathways and GO biological processes were enriched and depleted in the two selected strains (S1 and S2) compared to the controls.

4.6.1. Gene Ontologies

The gene ontologies (GO) of the top 2000 genes that were significantly enriched across all comparisons were mostly biological functions belonging to the organism structural and nervous system development (terms given by iDEP), while the depleted GO biological functions belonged to translation and sensory perception (figure 10 and 11).

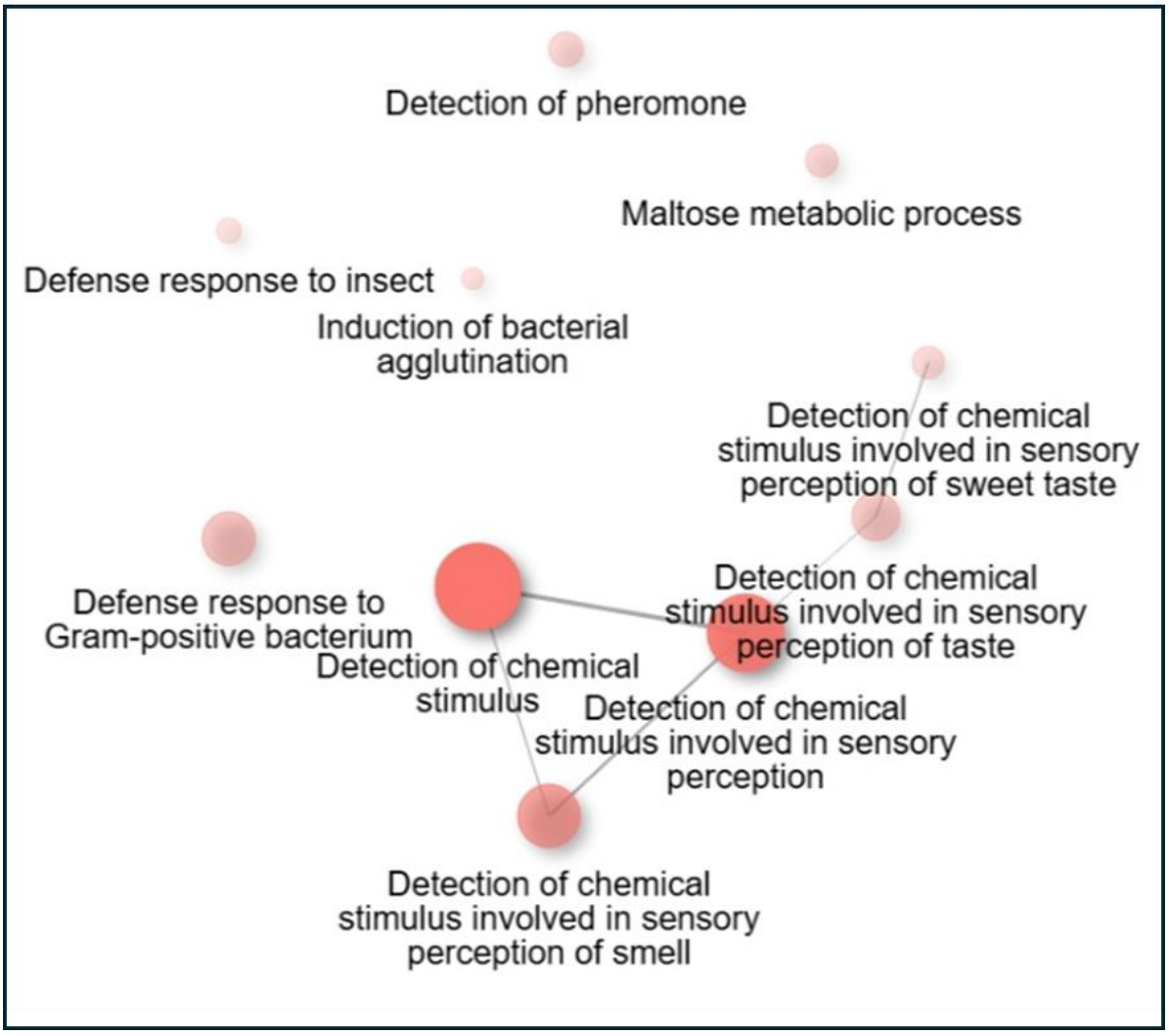
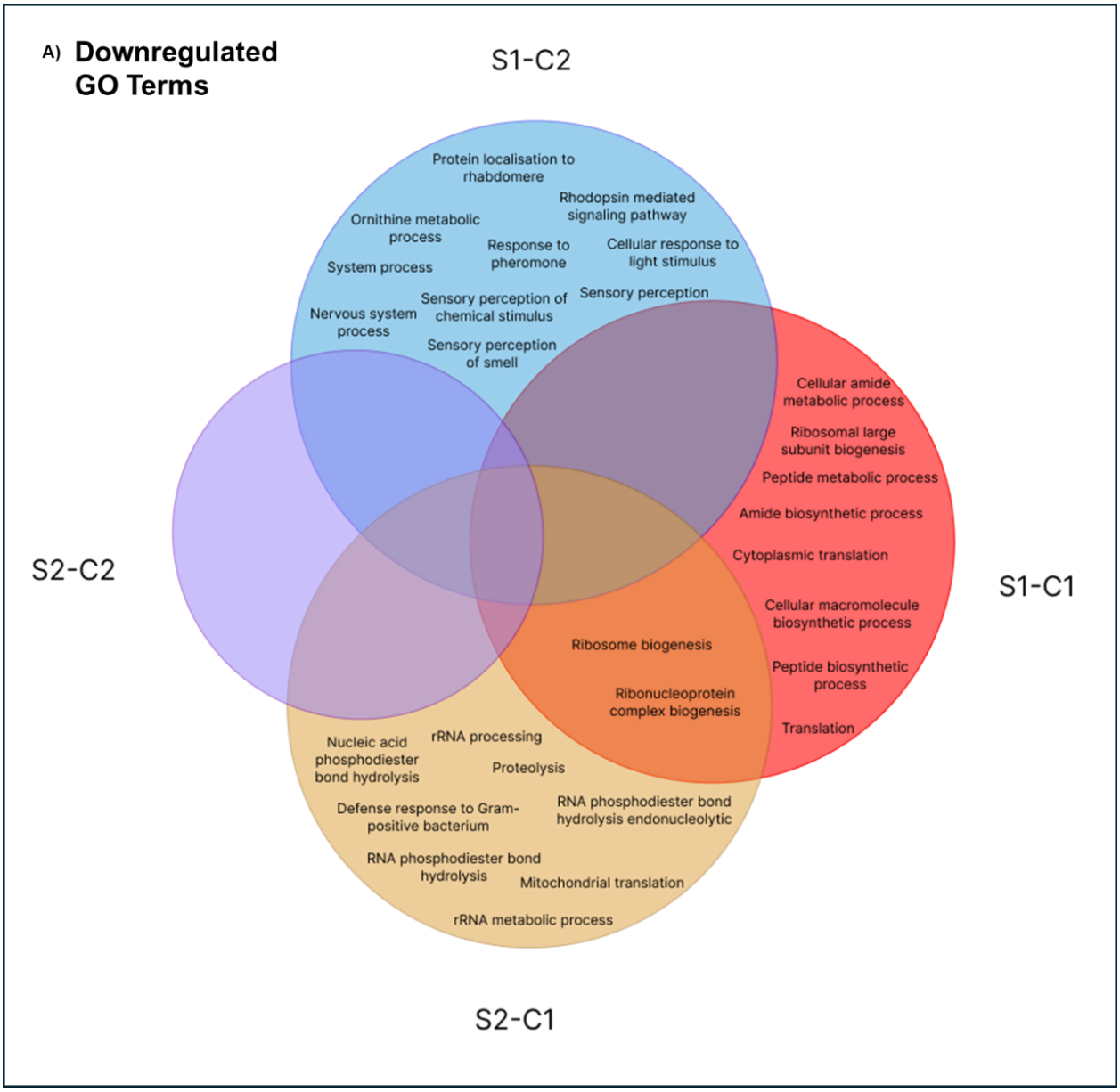


Figure 10 Gene Ontologies of the top 2000 genes in individual comparisons of Selected vs Control strains with an FDR cut-off of <0.03 (image generated on iDEP 2.0)


A) Downregulated GO Terms
S1-C2
Protein localisation to rhabdomere
Rhodopsin mediated signaling pathway
Ornithine metabolic process
Response to pheromone
Cellular response to light stimulus
System process
Sensory perception
Sensory perception of chemical stimulus
Nervous system process
Sensory perception of smell
S2-C2
S1-C1
Cellular amide metabolic process
Ribosomal large subunit biogenesis
Peptide metabolic process
Amide biosynthetic process
Cytoplasmic translation
Cellular macromolecule biosynthetic process
Ribosome biogenesis
Peptide biosynthetic process
Ribonucleoprotein complex biogenesis
Translation
Nucleic acid phosphodiester bond hydrolysis
rRNA processing
Proteolysis
Defense response to Gram-positive bacterium
RNA phosphodiester bond hydrolysis endonucleolytic
RNA phosphodiester bond hydrolysis
Mitochondrial translation
rRNA metabolic process
S2-C1

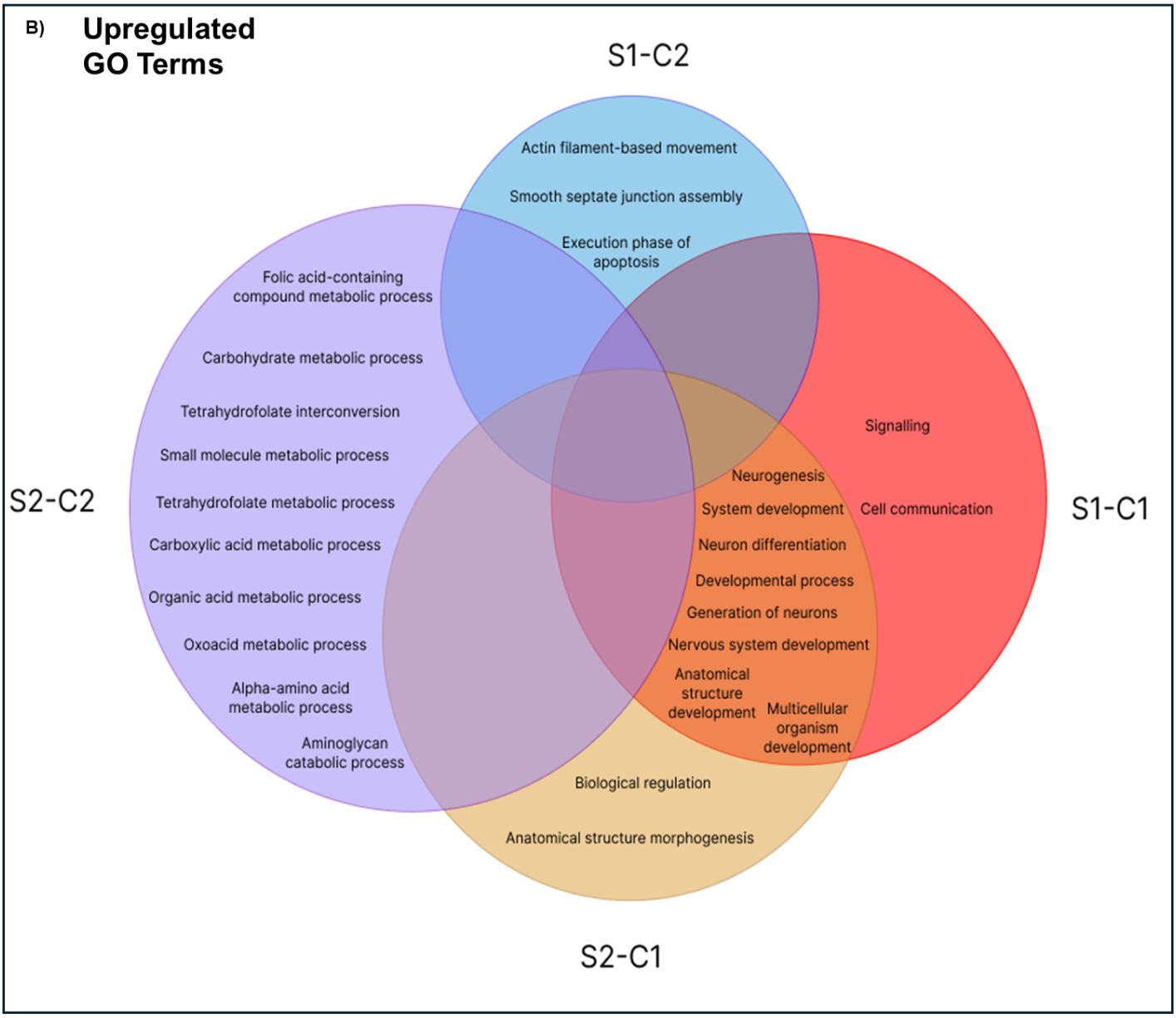


Figure 11 Gene Ontology terms of the top 2000 downregulated (A) and upregulated (B) genes across all 4 comparisons

4.6.2. Pathway Analysis

The KEGG pathways that were most enriched across all comparisons were circadian rhythm (fly), starch and sucrose metabolism, glycine serine and threonine metabolism, phosphatidylinositol signaling system, lysine degradation, purine metabolism and MAPK signaling pathway (fly). The KEGG pathways that were depleted across comparisons were DNA replication and repair,

ribosome biogenesis in eukaryotes, and drug metabolism (mediated by cytochrome P450) pathways (figure 12 and 13).

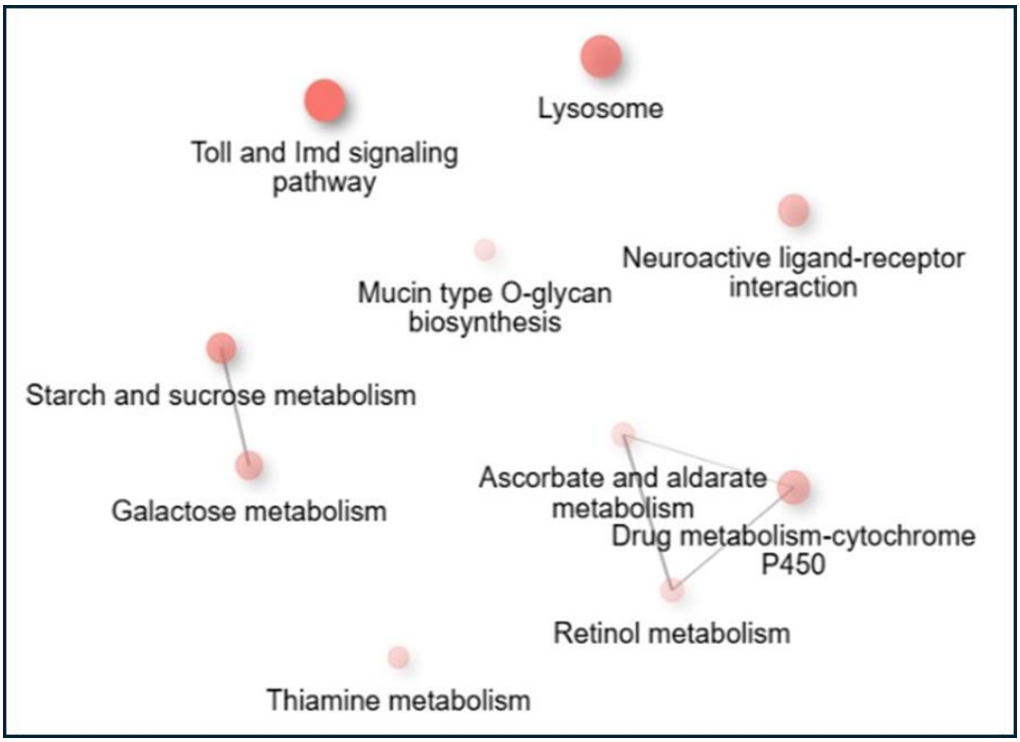
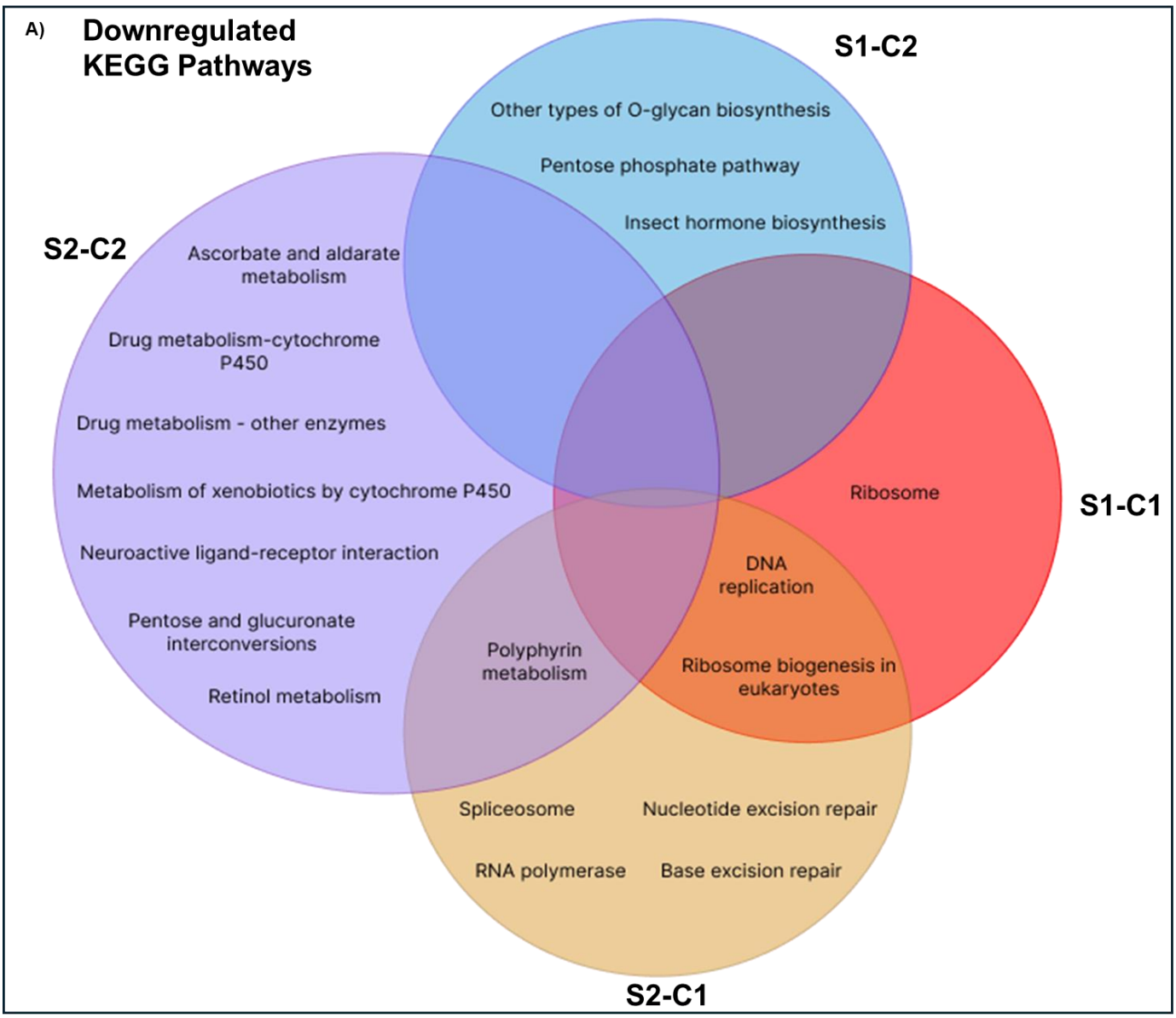


Figure 12 KEGG pathways of the top 2000 genes with an FDR cut off <0.03 in individual comparisons of Selected vs Control strains (image generated on iDEP 2.0)


A)
Downregulated
KEGG Pathways
S1-C2
Other types of O-glycan biosynthesis
Pentose phosphate pathway
Insect hormone biosynthesis
S2-C2
Ascorbate and aldarate metabolism
Drug metabolism-cytochrome P450
Drug metabolism - other enzymes
Metabolism of xenobiotics by cytochrome P450
Neuroactive ligand-receptor interaction
Pentose and glucuronate interconversions
Retinol metabolism
Ribosome
S1-C1
DNA replication
Polyphyrin metabolism
Ribosome biogenesis in eukaryotes
Spliceosome
Nucleotide excision repair
RNA polymerase
Base excision repair
S2-C1

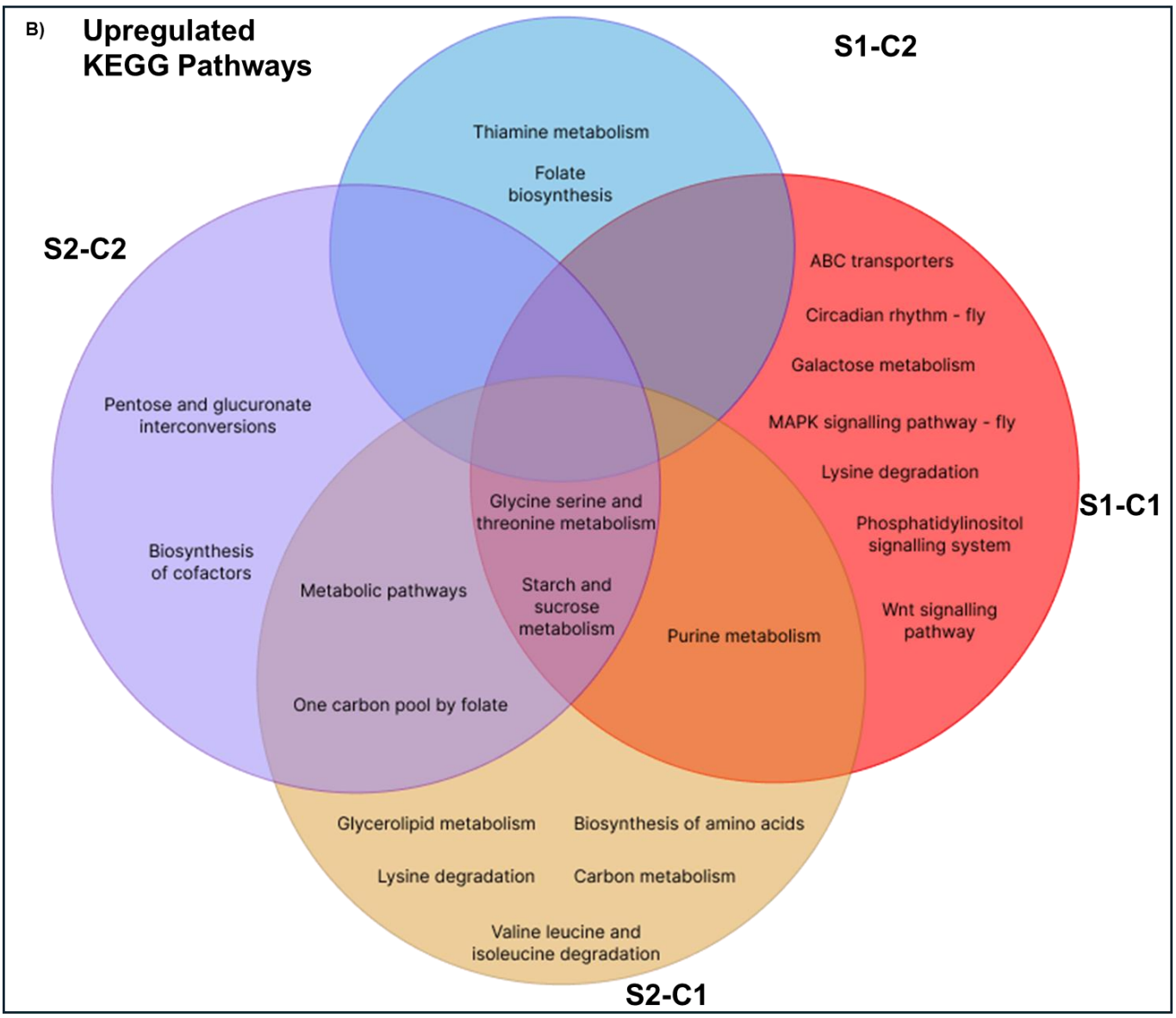


Figure 13 KEGG analysis of the top 2000 downregulated (A) and upregulated (B) pathways across all 4 comparisons

4.7. Candidate genes

Based on the DEGs obtained from the DESeq2 package, genes were filtered based on study parameters. Genes were selected for expression in both sexes, with known human orthologs, and based on the fold change in expression. We aimed for an unbiased selection of candidate genes and restricted our study to commercially available strains, due to time and financial constraints.

Table 3 Candidate genes filtered for the study, based on fold-change of expression in Selected strains (S1 and S2) compared to the controls, human orthologues, expression in both sexes, and throughout adulthood

FlyBase Gene ID ***Gene Name***	**Fold change**	**Function**	**Expression in the body**	**Expression levels in adulthood**	
				Male	**Female**
FBgn0030607 *doppelganger von brummer*	1.83	Triglyceride lipase activity, lipid homeostasis and triglyceride catabolic process	Organism	Low Expression	Medium Expression-Medium High Expression
FBgn0052191	1.69	Sulfuric ester hydrolase activity	Organism	Low Expression	Low Expression
FBgn0033999	1.55	Lipase activity, multicellular organism reproduction	Midgut	Medium High Expression-High Expression	Low Expression-High Expression
FBgn0036428 *Glycogen binding subunit 70E*	1.33	Glycogen binding activity and protein phosphatase 1 binding activity, behavioural response to ethanol and regulation of glycogen metabolic process	Blastoderm embryo, embryonic epidermis, extended germ band embryo, germ layer, and gut section	Medium High Expression	Medium High Expression
FBgn0031170 *ATP binding cassette subfamily A member 3*	1.24	ATPase-coupled transmembrane transporter activity and lipid transporter activity, lipid transport	Adult head and organism	Low Expression-Medium Expression	Low Expression-Medium Expression
FBgn0034381	1.23	L-amino acid transmembrane transporter activity, amino	Adult brain, adult gut, adult head, and	Low Expression	Very Low Expression-

Lithium-inducible SLC6 transporter		acid:sodium symporter activity, and neurotransmitter transmembrane transporter activity, response to lithium ion	adult ventral nervous system		Low Expression
FBgn0052549	1.23	5'-nucleotidase activity	Adult head, adult heart, embryonic/larval somatic muscle, presumptive embryonic/larval system, and yolk nucleus	Medium High Expression-High Expression	Medium High Expression-High Expression
FBgn0085478	1.22	Palmitoyltransferase activity, protein palmitoylation	Adult head and embryonic/larval central nervous system	Low Expression	Medium Expression
FBgn0030286 *GTPase activating protein and VPS9 domains 1*	1.19	GTPase activating protein binding activity and Rab guanyl-nucleotide exchange factor activity, regulation of Rab protein signal transduction and regulation of protein transport	Adult fat body and spermatozoon	Medium Expression	Medium High Expression
FBgn0035529 Ferredoxin 2	1.18	Electron transfer activity, positive regulation of ecdysteroid biosynthetic process	Adult heart, gut section, posterior endoderm, and presumptive embryonic/larval digestive system	Medium High Expression	Medium High Expression-High Expression
FBgn0260747 *Coiled-coil-helix-coiled-coil-helix*	1.18	Mitochondrion organization	Embryonic Malpighian tubule, Embryonic/larval	Very High Expression	High Expression-Very High Expression

domain containing 2			muscle system, gut section, and head		
FBgn0003748 *Trehalase*	1.16	Alpha, alpha-trehalase activity, neuronal stem cell population maintenance and trehalose catabolic process	Circulatory system, dorsal ectoderm, embryonic/larval muscle system, head, and presumptive embryonic/larval system	High Expression	High Expression
FBgn0031318	1.16	mRNA binding activity, mRNA splicing, via spliceosome	Embryonic brain, organism, and ventral nerve cord	Medium Expression	Medium Expression
FBgn0016984 *skittles*	1.14	1-phosphatidylinositol-4-phosphate 5-kinase activity involved in several processes, including basement membrane organization, germ cell development, and negative regulation of histone phosphorylation	Anterior ectoderm anlage, ectoderm, embryonic/larval gut, extended germ band embryo, and gonad	Medium Expression	Medium High Expression-High Expression
FBgn0003964 *ultraspiracle*	1.13	Nuclear receptor activity, protein heterodimerization activity, and transcription regulatory region sequence-specific DNA binding activity, DNA-binding transcription activator activity, RNA polymerase II-specific and ecdysone binding activity, border follicle cell migration, instar larval or pupal development, and nervous system development	Central nervous system, gut, imaginal disc, reproductive system, and ring gland	Medium Expression	Medium High Expression-High Expression
FBgn0001308 *Kinesin heavy chain*	1.11	Microtubule binding activity, microtubule motor activity, and tropomyosin binding activity.	Adult heart, glial cell, gonad, head,	Medium High Expression	High Expression

		Involved in several processes, including cytoskeleton organization, neuron differentiation, and oogenesis	and photoreceptor cell		
FBgn0039730	1.09	mRNA binding activity	Adult head and organism	Medium Expression	Medium Expression
FBgn0039585	0.43	Histone acetyltransferase activity (H4-K16 specific), histone binding activity, and transcription coregulator activity, negative regulation of transcription, DNA-templated and positive regulation of transcription by RNA polymerase II	Undetermined	Very Low Expression	Very Low Expression-Low Expression
FBgn0030332	0.48	17-beta-hydroxysteroid dehydrogenase (NADP+) activity, 17-beta-ketosteroid reductase activity, and 3-keto sterol reductase activity	Adult head, embryonic midgut chamber, and embryonic/larval midgut	Medium High Expression-High Expression	Medium Expression-High Expression
FBgn0027583	0.85	Oxidoreductase activity	Adult head	Medium Expression	Medium Expression-Medium High Expression
FBgn0030061	0.82	5S rRNA binding activity, rRNA processing and ribosomal large subunit assembly	Anterior endoderm, Anterior endoderm anlage, embryonic/larval muscle system, extended germ band embryo, and gut section	Low Expression-Medium Expression	Medium High Expression-High Expression
FBgn0029839	0.77	Undetermined	Adult head	Low Expression-	Very Low Expression-

				Medium Expression	Low Expression
FBgn0037298 *Saccheropin dehydrogenase 1*	0.79	Oxidoreductase activity, glycolipid biosynthetic process	Adult head, adult heart, and organism	High Expression-Very High Expression	High Expression
FBgn0035149 *Mediator complex subunit 30*	0.82	Transcription coregulator activity, positive regulation of transcription, DNA-templated	Undetermined	Medium Expression	Medium Expression
FBgn0000404 *Cyclin A*	0.80	Cyclin-dependent protein serine/threonine kinase regulator activity, asymmetric neuroblast division, regulation of mitotic cell cycle, and syncytial blastoderm mitotic cell cycle	Ectoderm, extended germ band embryo, gonad, presumptive embryonic/larval nervous system, and sensory nervous system primordium	Medium Expression	Very High Expression
FBgn0038964 *Nop56*	0.80	snoRNA binding activity	Undetermined	Medium Expression	Very High Expression
FBgn0029524	0.76	CD27 receptor binding activity, extrinsic apoptotic signalling pathway	Embryonic brain, Embryonic/larval nervous system, extended germ band embryo, and gonad	Very Low Expression	Very Low Expression
FBgn0032247	0.86	Aminopeptidase activity and metalloexopeptidase activity, proteolysis	Adult head	Low Expression	Low Expression

FBgn0039337 *Mediator complex subunit 28*	0.86	Transcription coregulator activity, regulation of transcription by RNA polymerase II	Eye, organism	Medium Expression	Medium Expression
FBgn0000092 *daywake*	0.19	Circadian rhythm, positive regulation of sleep/wake cycle, multicellular organism reproduction	Epidermis, eye	Very Low Expression-Medium High Expression	Very Low Expression-High Expression
FBgn0035039 *aarF domain containing kinase 1*	1.56	ATP binding activity and protein kinase activity, negative regulation of mitochondrial fusion, positive regulation of cristae formation, and protein phosphorylation	Adult fat body, adult head, and gut section	Medium Expression	Medium Expression
FBgn0004797 *midway*	1.46	Diacylglycerol O-acyltransferase activity, negative regulation of lipid storage and regulation of nurse cell apoptotic process	Adult head and embryonic/larval muscle system	Low Expression	Low Expression-Medium Expression
FBgn0036337 *Adenosine kinase 2*	1.28	Adenosine kinase activity, AMP biosynthetic process	Adult head, embryonic/larval midgut, embryonic/larval midgut primordium, and embryonic/larval muscle system	Medium Expression-Medium High Expression	Medium High Expression-High Expression
FBgn0040305 *Metal response element-binding*	1.26	DNA-binding transcription factor activity and transcription regulatory region sequence-specific DNA binding activity, several processes, including metal ion homeostasis,	Embryonic/larval garland cell, Embryonic/larval midgut, Embryonic/larval muscle system,	Low Expression	Medium Expression

Transcription Factor-1		response to copper ion, and stress response to cadmium ion	garland cell primordium, and presumptive Embryonic/larval digestive system		
FBgn0027569 *ceramide transfer protein*	1.18	Ceramide binding activity and ceramide transfer activity, ceramide transport and sphingolipid metabolic process	Organism	Medium Expression	Medium Expression
FBgn0035529 *Ferredoxin 2*	1.18	Electron transfer activity, positive regulation of ecdysteroid biosynthetic process	Adult heart, gut section, posterior endoderm, and presumptive embryonic/larval digestive system	Medium High Expression	Medium High Expression-High Expression
FBgn0038672	0.84	Regulation of phosphatidylinositol 3-kinase activity, wound healing, early endosome to late endosome transport	Undetermined	Medium Expression	Low Expression-Medium Expression
FBgn0034049 *bedraggled*	1.29	Neurotransmitter: sodium symporter activity, R3/R4 cell fate commitment, integral component of membrane and plasma membrane	Embryonic/larval central nervous system, imaginal disc, mesectoderm anlage, midline primordium, and photoreceptor cell	Medium Expression	Low Expression
FBgn0035082	0.77	Gamma-glutamylaminecyclotransferase activity	Embryonic midgut chamber and Embryonic/larval midgut	Medium Expression	Medium Expression-Medium High Expression

4.8. Summary

This chapter identified candidate anti-ageing genes from RNASeq analysis using iDEP bioanalysis software. Differential gene expression (DEG) analysis identified significantly expressed genes, while KEGG database performed functional annotations of these genes to identify longevity-associated biological pathways and processes. This comprehensive list of DEGs was filtered based on predefined parameters, yielding a selection of candidate genes, which will be tested in subsequent chapters for their effect on lifespan and neuromuscular function in flies (figure 14). Two of the genes tested in subsequent chapters are not part of the original candidate gene list due to a fold-change value over the threshold, and these were included due to an incorrect filtering of earlier data.

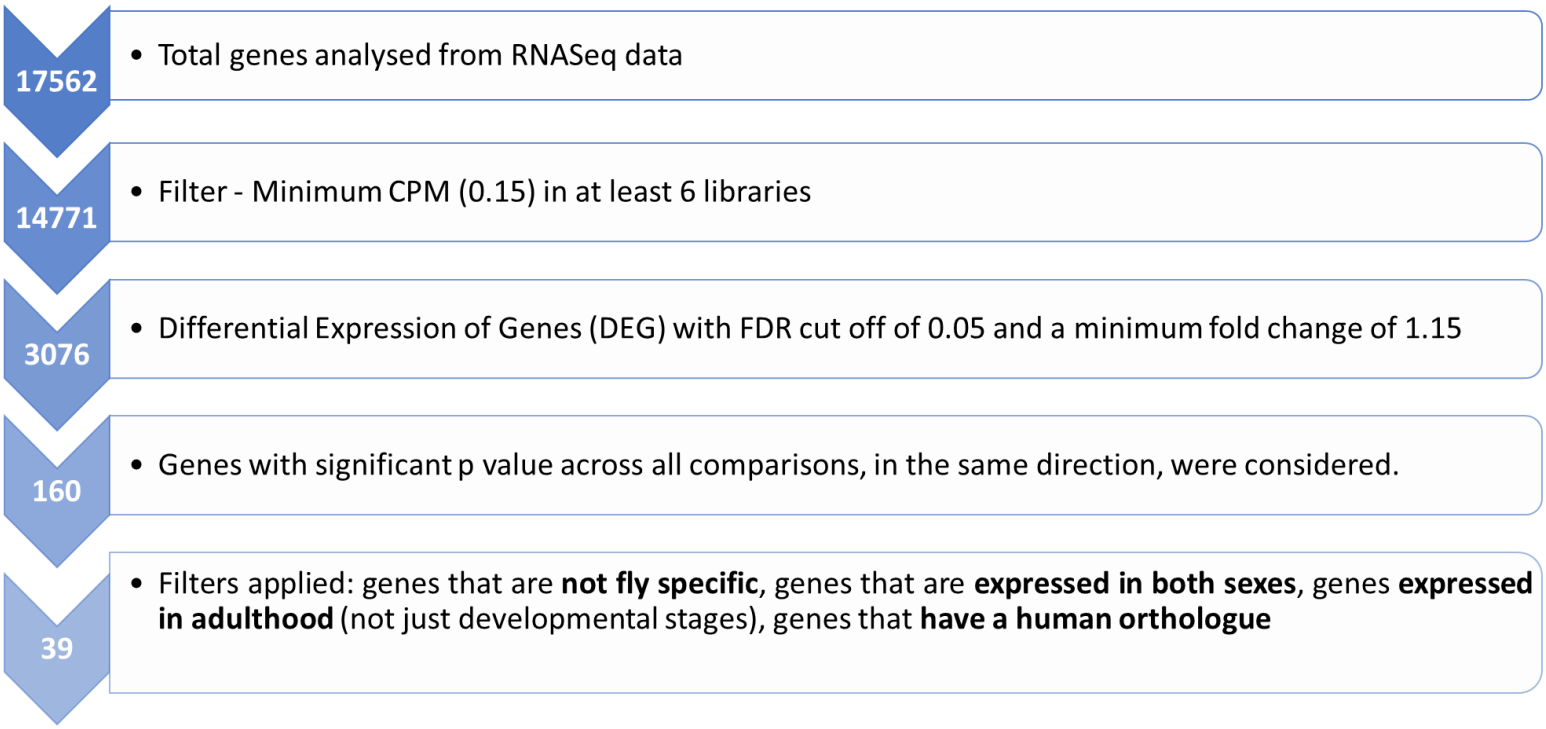


Figure 14 Overview of the filtering to obtain candidate genes to be tested for effect on lifespan and neuromuscular health in Drosophila

5. Discussions

5.1. Overview

This study identified a range of differentially expressed genes (DEGs) linked to key pathways, including metabolism, signalling, and cellular maintenance, which contribute to our understanding of the molecular mechanisms underpinning longevity. The observed divergence in gene expression between selected and control lines, along with the substantial within-group variability, highlights the complexity of adaptive responses to selection pressures. While RNASeq analysis has provided a robust foundation for identifying candidate genes, the functional roles of these genes in ageing and longevity remain largely unexplored.

5.2. RNA integrity affecting data quality

Gene expression analysis relies heavily on RNA quality and integrity. While most of our samples showed adequate RNA integrity for library preparation, four samples (replicates of C1) had poor RNA Integrity Numbers (RINs), which may have compromised the sequencing data (table 2). While RNA-Seq is capable of detecting genes even in degraded samples, the relative expression levels can be significantly affected by RNA degradation (Romero et al., 2014). Fortunately, this degradation can be partially mitigated by statistical methods, especially when sample RINs are roughly similar, though normalization is not always necessary in such cases.

For this study, I applied RPKM (Reads Per Kilobase of transcript per Million mapped reads) for library size normalization, which helps to correct technical biases in sequencing data. Ideally, RPKM provides a consistent measure of relative RNA concentration across samples; however, the variation in average RPKM values between samples limits its reliability for cross-sample RNA comparisons (Zhao et al., 2020). Nonetheless, since RPKM in this study was primarily used for library size normalization, and differential expression analysis (DEA) was performed using DESeq2 and edgeR (Robinson et al., 2010), the limitations of RPKM are less critical for the analysis of gene expression in this study.

The iDEP software utilizes the DESeq2 method, which employs a negative binomial model to address differences in count data. This approach links variance and mean through local regression, effectively modeling the null distribution. The negative binomial model is particularly suited for counts data with overdispersion, as it accommodates variance exceeding the mean. This method

ensures type-I error control, maintaining an acceptable false-positive rate while offering robust detection power, balancing sensitivity with specificity (Anders and Huber, 2010).

5.3. Variance between the control and selected strains

Hierarchical clustering and PCA of the control (C1, C2) and long-lived selected (S1, S2) strains revealed an unexpected similarity between C2 and S2, suggesting shared genetic variants or inadvertent selection pressure. PCA showed greater variance between C1 and C2 than C2 and the selected strains. This similarity may reflect common genetic variants or unintentional selection pressures. The high variance between S1 and S2 suggests distinct adaptive routes to longevity, aligning with evolutionary theory. These differences could arise from varying selection responses or genetic drift, similar to natural selection experiments, where multiple genetic pathways lead to convergent phenotypic outcomes (Barghi et al., 2019). However, using only two lines per regime limits the conclusions about the contributions of drift, selection pressures, or stochastic effects.

Incorporating more replicate lines would reduce noise, mitigate inbreeding depression, and provide better insight into different adaptive pathways (Rose, 1984; Partridge and Fowler, 1992; Harshman and Hoffman, 2000). Including more selection lines in future experiments would improve the power to detect consistent longevity effects while minimizing the influence of chance allele fixation (Wilson et al., 2013). Though the experimental design minimized inbreeding bottlenecks by using wild-caught flies, which provided higher initial genetic variation to offset diversity loss during selection, it could not eliminate them, potentially contributing to line-specific differences unrelated to selection. This preservation of genetic variation during evolution underscores the importance of maintaining diversity in experimental designs (Burke, 2012; Graves et al., 2017).

Repeating the experiment with at least five lines per regime and extending selection for two more generations after relaxation would minimize non-responding lines and better account for genetic drift. In males, about 61% of the genome changes expression with age (Carnes et al., 2015) and hence, conducting RNA-Seq at different life stages across all lines would capture transcriptomic changes over time. Although resource-intensive, integrating metabolomic and proteomic studies would significantly enhance our understanding of longevity mechanisms.

5.4. Statistical Design

Differentially expressed genes (DEGs) in this study were identified from individual line comparisons (e.g., S1 vs. C1, S2 vs. C1, S1 vs. C2, S2 vs. C2) using ANOVA. This approach captures line-specific gene expression changes but does not fully address variability or interactions across replicates. A two-factorial analysis, with "selection" (Control vs. Selected) as one factor and nested replicates (C1, C2, S1, S2) as a secondary term, could better account for such variability if within-group variance were minimal.

However, principal component analysis (PCA) revealed substantial differences between replicates (e.g., S1 vs. S2, C1 vs. C2), indicating significant within-group variability. This violates the homogeneity assumption required for nested ANOVA, reducing its accuracy. Collapsing replicates into broader categories (Control vs. Selected) simplifies analysis and enhances statistical power but risks overlooking line-specific DEGs, potentially masking biologically relevant effects unique to individual lines.

Nested ANOVA can account for hierarchical variability, but its statistical power depends on low within-group variance (Lark, 2011). High variance diminishes sensitivity, potentially reducing the number of detectable DEGs. For datasets with considerable within-group differences, individual pairwise comparisons or alternative models, such as mixed-effects models that explicitly accommodate within-group variability, may provide a better fit.

Thus, the choice of statistical model must align with the biological structure and variability of the data. Given the observed differences among replicates, alternative approaches beyond nested ANOVA should be considered to ensure robust and biologically meaningful interpretations.

5.5. Differentially expressed genes

There was an approximately even spread of over- and under-expressed genes across the genome in this study (table 2). This is interesting since historically most expression-based interventions and transgenics have relied more on gene knockdowns to extend lifespan, yet it appears here that upregulated genes are at least equally represented in longevity phenotypes. The only other RNA-Seq experiment performed on longevity selected flies also found an even split in over- and under-expressed genes (Carnes *et al.*, 2015), however this could be more of a technical artefact instead of having any biological significance. This could imply that there is no overarching trend in the data favouring gene regulation in either direction.

The most significantly enriched or depleted GO categories primarily relate to metabolism, signalling, and DNA replication and repair. Upregulated pathways include carbohydrate metabolism, *Wnt*, and MAPK signalling, while downregulated pathways involve DNA replication, repair, and ribosome biosynthesis (figure/table), consistent with prior longevity studies (Wilson et al., 2013). Interestingly, while downregulation of reproduction-related genes aligns with the disposable soma theory (Kirkwood, 1977), the suppression of DNA replication and repair mechanisms suggests alternative maintenance strategies may compensate for this loss in long-lived strains.

The hyperfunction theory postulates that ageing results from hyperfunction of signal transduction pathways (Blagosklonny, 2012). According to this theory, long-lived *Drosophila* should have reduced growth and development rate, like long-lived insulin mutants with growth defects (Clancy et al., 2001). For instance, the activation of p38 MAPK in long-lived strains aligns with its role in stress response and immune regulation, acts as a pro-longevity pathway (Vrailas-Mortimer et al., 2011). These findings suggest that longevity may be linked to shifts in energy metabolism and cellular maintenance pathways. The upregulation of growth-regulating pathways may reflect a context-dependent role where metabolic reprogramming supports longevity without triggering ageing-related pathologies. Interestingly, the downregulation of DNA replication, repair mechanisms, and ribosome biosynthesis, coupled with the upregulation of carbohydrate metabolism and key signalling pathways like *Wnt* and MAPK (identified in the long-lived strains, S1), aligns with previous studies on longevity (Han et al., 1998; Carnes et al., 2015; Fabian et al., 2021).

5.6. Genes of interest

The GO terms identified in this study encompassed a range of biological functions previously linked to ageing, including metabolism regulation, macromolecule biosynthesis, immune response, reproduction, and DNA repair and replication. Notably, many genes influenced developmental processes, such as nervous system development and function, which have not been traditionally associated with lifespan. This suggests that genes involved in early developmental processes may also contribute to the long-term maintenance of these structures in adulthood. Interestingly, about one-third of the candidate genes associated with delayed senescence lack known biological functions.

Ageing is not purely a stochastic process but regulated by a complex, interconnected signalling network. This network integrates ageing-regulatory stimuli like fertility, nutrient availability, and environmental stresses, into gene regulatory events. Transcription factors act as central nodes in this network, coordinating these regulatory processes. Gene Ontology (GO) analysis of the top 2000 differentially expressed genes (DEGs) in this study revealed significant enrichment in terms related to age-modulating pathways such as translation, nutrient sensing, and organism reproduction, highlighting the need for further investigation into these specific GO terms. Special focus should be given to downstream targets of transcription factors and other key regulators. Although transcription factors are primarily regulated post-transcriptionally, their downstream targets, even if individually insignificant, can collectively illuminate critical metabolic changes associated with ageing.

The candidate genes examined in this study are intriguing for their potential roles in longevity. To determine if previously known ageing genes were differentially expressed in this analysis, I compared the results to the GenAge data. Some exhibit effects that contrast with existing literature, highlighting possible novel mechanisms or context-specific influences on ageing. Others lack any established connection to ageing-related pathways, emphasizing their novelty in the ageing context and the need for further exploration to understand their contributions to lifespan regulation.

5.6.1. Pro-longevity Genes

5.6.1.1. Forkhead (fkh)

Forkhead (*fkh*, CG10002) encodes a winged-helix nuclear transcription factor crucial for salivary gland development. It mediates the anti-ageing effects of rapamycin and modulates intestinal insulin/insulin-like growth factor (IGF) signaling (IIS) through phosphorylation by AKT and Target of Rapamycin (TOR). Moderate intestinal *fkh* upregulation extends median lifespan by 14%, while strong induction shortens it. Gut-specific *fkh* upregulation enhances gut barrier function in aged flies and increases nutrient transporter expression, mirroring the effects of reduced IIS (Bolukbasi et al., 2017).

5.6.1.2. Metal Response Element-Binding Transcription Factor-1 (MTF-1)

Metal Response Element-Binding Transcription Factor-1 (*MTF-1*, CG3743) regulates trace metal homeostasis and detoxifies non-essential, toxic heavy metals. Variations in its DNA binding site influence metal-specific responses. *MTF-1* mutation reduces lifespan under disrupted metal homeostasis, while its overexpression extends lifespan on iron- or cadmium-supplemented media

but shortens it on zinc-supplemented media. Neuronal overexpression increases lifespan by 40% and protects against hyperoxia, highlighting the sensitivity of neural tissues to metal imbalance. This underscores the interplay between oxidative stress protection, metal toxicity, and their tissue-specific roles in ageing and lifespan regulation (Bahadorani et al., 2010).

5.6.1.3 aarF domain containing kinase 1 (Adck1)

The aarF domain containing kinase 1 (*Adck1*, CG3608) is responsible for mitochondrial function and cristae formation and regulates mitochondrial structural proteins. It could potentially be involved in tracheal development and larval molting through sterol modification and/or intracellular lipid trafficking (Wisidagama et al., 2019). Knockdown of *Adck1* in *Drosophila* (*dAdck1*) causes developmental defects, muscular abnormalities, increased ROS levels and apoptosis, and shortened lifespan, which can be rescued by ubiquitous overexpression of *Adck1* (Yoon et al., 2019).

5.6.2. Anti-longevity Genes

5.6.2.1. Glycerol-3-phosphate dehydrogenase 1 (Gpdh1)

Glycerol-3-phosphate dehydrogenase 1 (*Gpdh1*, CG9042) encodes a dehydrogenase that catalyzes the oxidation of glycerol-3-phosphate to dihydroxyacetone phosphate, playing key roles in triglyceride metabolism, hyperoxia response, and flight behavior (Merritt et al., 2006). *Gpdh1* supports mitochondrial energy production, triglyceride accumulation, and redox balance. Mutations in *Gpdh1* reduce its activity by 40%, extending lifespan by 20%, but also result in defects in larval development, lifespan, and fat storage (Talbert et al., 2015; Rai et al., 2022).

The gene is crucial for oogenesis and embryogenesis, with homozygous mutants showing distinct larval metabolic defects compared to F1 mutants, underscoring its significance in early development (Li et al., 2019).

5.6.3. Genes unexplored in the ageing context

5.6.3.1. Daywake (dyw)

Daywake (*dyw*, CG2650) is a circadian clock component or downstream effector that suppresses daytime sleep (siesta) under ambient temperatures, promoting extended daytime activity (Yang and Edery, 2019). Notably, *dyw* is found in the circulatory system but is absent in the brain, where wake-sleep centers reside. It regulates daytime sleep behavior in response to environmental

temperatures, contributing to heat avoidance mechanisms by minimizing heat exposure risks (Villegas et al., 2024).

5.6.3.2. CG2811

The gene annotation *CG2811*, a putative gamma-glutamylcyclotransferase, is involved in the fibrin degradation pathway and is orthologous to human *GGACT* (Oakley et al., 2010). However, its role in *Drosophila* and relevance to ageing studies remain unexplored.

5.6.3.3. CG6005

The gene annotation *CG26005* is involved in wound healing (Campos et al., 2010) and predicted to enable phosphatidylinositol 3-kinase regulator activity. It is orthologous to human WDR91 (WD repeat domain 91), but there have been no studies on this gene in any capacity.

5.6.3.4. Adenosine kinase 1 (Adk1)

Adenosine kinase 1 (*Adk*1, CG3809) is predicted to facilitate adenosine kinase activity, contributing to AMP biosynthesis and purine nucleobase metabolism. It is homologous to the human *ADK* gene, which is associated with hypermethioninemia caused by adenosine kinase deficiency.

5.6.3.5. Bedraggled (Bdg)

Bedraggled (*Bdg*, CG8291) encodes a putative transporter essential for the fate commitment of the R3/R4 photoreceptor pair and imaginal disc development. Ubiquitous overexpression of *Bdg* cDNA using actin- or hs-Gal4 is lethal, while *Bdg* mutant escapers display movement-related abnormalities, indicative of neurotransmission deficiencies, suggesting a potential role in neural communication or motor function (Rawls et al., 2007).

5.6.3.6. Ceramide transfer protein (Cert)

Ceramide transfer protein (*Cert*, CG7207) facilitates ceramide transport from the endoplasmic reticulum to the Golgi complex, essential for sphingolipid synthesis and maintenance. In *Drosophila melanogaster*, *Cert* mutants exhibit ~60% reduction in lifespan and over 70% decrease in ceramide phosphoethanolamine (the sphingomyelin analog in *Drosophila*) and ceramide levels. This deficit increases plasma membrane fluidity, heightening susceptibility to reactive oxygen species and oxidative damage to cellular proteins. As a result, mutants display reduced thermal tolerance, exacerbated with ageing, alongside metabolic disruptions, including decreased ATP and elevated glucose levels, indicative of premature ageing (Rao et al., 2007).

5.6.3.7. *Doppelganger von brummer (Dob)*

Doppelganger von brummer (*Dob*, CG5560) is predicted to enable triacylglycerol lipase activity, and involved in lipid homeostasis and triglyceride catabolic process (Dalton et al., 2010; Wat et al., 2020). It is orthologous to several human genes including PNPLA2 (patatin like phospholipase domain containing 2), PNPLA3 (patatin like phospholipase domain containing 3), and PNPLA5 (patatin like phospholipase domain containing 5), which are implicated in autosomal recessive congenital ichthyosis 10, coronary artery disease, liver disease (multiple), and type 2 diabetes mellitus.

5.6.3.8. *Ferredoxin 2 (Fdx2)*

Ferredoxin 2 (*Fdx*2, CG1319) encodes a protein involved in ecdysteroid biosynthesis regulation (Palandri et al., 2015) and is orthologous to human *FDX*1 (ferredoxin 1).

5.6.3.9. *Midway (Mdy)*

Midway (*Mdy*, CG31991) encodes an acyl coenzyme A: diacylglycerol acyltransferase that functions in the formation of triglycerides (Girard et al., 2021). Lack of *Mdy* leads to female sterility and impaired fat metabolism in larvae and adults. Expression of *midway* in insect cells changes acylglycerol lipid metabolism and disrupts normal egg chamber development in *Drosophila* (Buszczak et al., 2002).

5.7. Conclusion

The candidate genes identified in this study provide a promising resource for future functional validation, with many having human orthologs that could enhance our understanding of conserved ageing and longevity mechanisms. However, it is important to note that the differentially expressed genes (DEGs) are not necessarily causal for the observed longevity phenotypes. Identifying causal candidates is crucial to exploring their pleiotropic effects on fitness and understanding their persistence as segregating variants in natural populations, offering empirical examples of evolutionary theories on ageing.

The discrepancies between pro- and anti-longevity genes in existing literature and their altered expression in this study underscore the need for further investigation. It is important to determine if these expression changes shift their functional roles in ageing pathways. While most ageing-related genes have been studied in a tissue-specific context, testing their function under ubiquitous expression could reveal broader organismal impacts.

The influence of select DEGs on lifespan and locomotor function will be validated through targeted genetic interventions. By examining their effects on lifespan and negative geotaxis—two established proxies for ageing and health span—the RNASeq transcriptomic insights can relate to organismal phenotypes. This approach will help determine whether the DEGs play causal roles in modulating longevity or represent compensatory adaptations to selection.

Chapter II – Testing candidate genes for effect on lifespan and health

6. Introduction

6.1. Gene regulation in ageing studies using *Drosophila melanogaster*

Ageing is the progressive decline in biological function over time, ultimately leading to death. Survival studies on *Drosophila* populations provide valuable insights into ageing mechanisms and non-ageing related mortality through survival studies. Additionally, tracking physical activity (negative geotaxis, cardiac function, gut barrier function), behaviour (feeding, courtship, sleep patterns), and physiological changes (protein/lipid synthesis, metabolic rate) reveals age-associated functional decline. While lifespan is a reliable measure of ageing in *Drosophila*, pairing it with behavioural assays, such as negative geotaxis (a simple and non-destructive neuromuscular assay), allows assessment of both lifespan and health span. This is crucial for understanding the effects of lifespan-modifying interventions on health over time and for determining their role in demographic ageing.

In model organisms, gene effects on lifespan are often studied by inducing mutations through gene knockouts or strong overexpression, both of which can substantially impact lifespan. However, such mutations are unlikely to occur in natural populations, including humans (Ivanov et al., 2015). Gene knockdowns offer a more nuanced approach by tempering these large effects, better simulating natural allelic variation.

Gene manipulation in *Drosophila* employs traditional genetic screens, which introduce point mutations to reveal key transcription factors and signalling molecules. Enhancer-suppressor screens uncover genes that are partially disrupted by other mutations, while clonal screens use site-specific recombination to study phenotypes in cloned cells. Misexpression screens allow gain-of-function studies, providing insights that loss-of-function screens may miss (St Johnston, 2002).

Genomic manipulation in *Drosophila* advanced markedly in the 1980s, from using transposable element vectors to rescue mutants, to developing enhancer traps that mimic bacterial operon fusions, eliminating the need for specific mutant phenotypes. The era also saw the rise of insertional mutagenesis with transposable elements and site-specific recombination techniques, broadening the scope of genetic research (Rubin and Spradling, 1982; Kane and Gehring, 1987; Cooley et al., 1988; Golic and Lindquist, 1989).

6.1.1 RNA Interference (RNAi) mediated gene regulation

Introducing dsRNA into *Drosophila* cell lines is commonly used for studying signal transduction pathways (Clemens et al., 2000), with most research focusing on phenotypes associated with gene loss- of- function. To achieve this, dsRNA is either microinjected into embryos or generated in vivo. Injecting dsRNA into embryos degrades both maternal and zygotic mRNA, though the resulting phenotype varies in expression and severity. Effective phenotypic analysis requires control injections with non-homologous dsRNA and often fails to downregulate genes in later developmental stages (Misquitta & Paterson, 1999; Adams & Sekelsky, 2002).

Generating dsRNA in vivo allows gene knockouts by introducing an inverted repeat to form a double-stranded hairpin controlled by a *Drosophila* gene expression system. This versatile method can target any gene, allows spatiotemporal induction, and is effective for adult knockouts without causing permanent gene disruption (Kennerdell & Carthew, 2000; Piccin et al., 2001; Dietzl et al., 2007).

RNA interference (RNAi) is a potent gene-silencing technique regulated by sequence-specific short RNAs, such as short interfering RNA (siRNA) or microRNA (miRNA). Double-stranded RNA (dsRNA) introduced into the cell is cleaved into siRNA by the Dicer enzyme. The siRNA, in conjunction with the RNA-induced silencing complex (RISC), binds to the target mRNA. The RISC, containing argonaute proteins with endonuclease activity, cleaves the complementary mRNA, preventing protein translation. The specificity of siRNA-mRNA binding ensures gene-specific silencing (figure 15) (Fire et al., 1998; Kim and Rossi, 2008; Wu and Belasco, 2008).

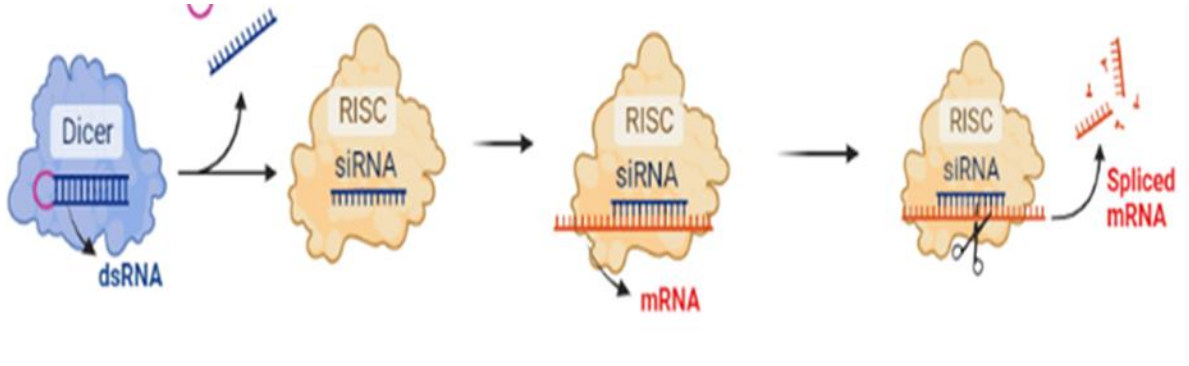


Figure 15 Gene knockdown involves a dicer molecule that attaches to the dsRNA and "dices" it to produce a siRNA; the siRNA induces gene knockdown by cleaving the mRNA (Image generated in Biorender)

While RNAi is primarily used for transgene downregulation, rare instances of upregulation have been reported (Vasudevan et al., 2007). RNAi uncovers gene signatures distinguishing healthy ageing from age-related decline, enabling novel therapeutic strategies. However, gene silencing efficiency varies across driver lines and genomic insertion sites (Piccin et al., 2001). Genome-wide RNAi screens and multi-omics approaches enhance insights into age-related gene interactions beyond traditional ageing research methods (Minois et al., 2010).

6.2 Gene expression systems in *Drosophila*

Ectopic gene expression is valuable for studying cell fate switches and gene roles in development. Early techniques used heat shock promoters, where gene expression was activated by heat-shocking transgenic animals (Struhl, 1985). While this method allowed inducible expression, it was ubiquitous and sometimes induced basal expression of endogenous genes instead of the transgene. Additionally, it lacked the spatial specificity provided by tissue-specific promoters, and repeated heat shock treatments made it challenging to distinguish primary from secondary gene expression responses (Gibson and Gehring, 1988).

An alternative approach involved using transcriptional regulatory sequences from defined promoters (Zuker et al., 1988). While tissue-specific promoters limited transcription to specific cell subsets, their limited availability and the toxic effects of certain gene products, which hinder the generation of stable transgenic lines, were significant limitations of this system.

6.2.1 UAS-GAL4 System

To address the limitations of early gene expression techniques, the UAS-GAL4 system was developed to generate tissue-specific ectopic expresser strains rapidly and is widely used for constitutive gene expression in *Drosophila melanogaster*. This approach uses two distinct transgenic lines—one containing the gene of interest (responder) and the other having the transcriptional activator (driver) (figure 16). Each parent is transcriptionally silent and viable, but their progeny expresses the gene of interest, making it convenient for misexpression studies. Crossing the transgene with different tissue-specific promoters produces various gene expression patterns (Brand and Perrimon, 1993).

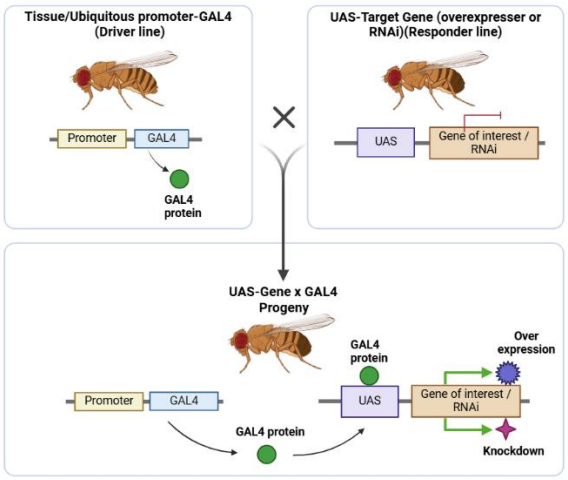


Figure 16 UAS-GAL4 gene expression system employs a driver that drives constitutive expression of the responder (UAS-gene of interest/RNAi) (image generated on Biorender)

This bipartite system includes a yeast transcription factor, GAL4, which is transcriptionally inactive in flies unless it binds to upstream activating sequences (UAS) (Fischer et al., 1988). GAL4 binding to UAS activates downstream gene transcription, making it possible to control gene expression in specific cells without damaging them. The system is predominantly used in genetic studies, such as neural development, behaviour, cell ablation, and disease modelling (Niemann and O'Kane, 1995; Zhou et al., 1997).

However, the UAS-GAL4 system has limitations, such as leaky expression, where there is background expression in the absence of GAL4 activation, which can lead to unintended gene activation in non-target cells. Moreover, GAL4-driven expression starts early in development due to lack of temporal control, which can be lethal. To counter this, the FLP-FRT system was

introduced, where the gene and promoter are separated to allow induced expression. However, this system favours expression in dividing cells, with varying levels of ectopic expression among organisms (Brand et al., 1994). Additionally, genetic background differences between strains can affect results, necessitating careful validation.

Since UAS-GAL4 lacks temporal control, the GAL80 repressor was introduced to inhibit GAL4-mediated transcription. GAL80 provides temporal control without affecting viability or fertility (Lee and Lou, 1999). The creation of temperature-sensitive GAL80 proteins enabled precise spatiotemporal control in the TARGET system (McGuire et al., 2003). At low temperatures (19°C), GAL80 represses transgene expression, but at higher temperatures (30°C), GAL80 is inactivated, allowing expression. This system is especially useful when early developmental expression is lethal, although temperature changes can affect viability and behaviour in ectothermic animals like *Drosophila* (Abram et al., 2017). Despite these challenges, the UAS-GAL4 system remains foundational to *Drosophila* research, with ongoing improvements extending its applicability across biological disciplines.

6.2.2 Tet-on/Tet-Off System

To overcome the temporal control limitations and provide chemical induction of the UAS-GAL4 system, the “Tet-on”/“Tet-off” method was developed, using regulatory proteins with a non-toxic effector. Transgene expression is controlled by the binding of the E. coli tetracycline repressor protein (tetR) or a mutant tetracycline transactivator (rTA) to the tetracycline operator (tetO) sequences in the presence of tetracycline (tc) or derivatives like doxycycline (dox) (Gossen et al., 1995; Bello et al., 1998). In the Tet-On system, tc/dox enables binding of rTA to tetO, activating transcription. In the Tet-Off system, tc/dox prevents tetR from binding to tetO, inhibiting transcription and repressing gene expression. This allows flexibility, with the rTA system better for occasional gene activation and tetR for occasional repression (Baron and Bujard, 2000).

Although promising, this system requires generating new tissue-specific tetR or rTA drivers and tetO responder lines in *Drosophila*. This issue was mitigated by using drivers for ubiquitous rTA expression in dox-inducible systems, with minimal background expression in non-induced conditions (Stebbins and Yin, 2001). However, doxycycline negatively affects cell viability, disrupts the gut microbiome, inhibits mitochondrial translation, delays growth, and increases mobility in worms and flies (Ermak et al., 2003; Moullan et al., 2015; Boynton et al., 2017).

6.2.3 GeneSwitch System

While the UAS-GAL4 system provides spatial control of gene expression, its lack of temporal control limits its utility, especially as early dominant transgene effects can hinder adult-stage genetic analysis. Despite modifications to UAS-GAL4 and Tet-on systems, these approaches remain cumbersome. To address this, an inducible system was developed using pre-characterized UAS-GAL4 lines, offering both spatial and temporal control (Osterwalder et al., 2001). This system relies on modified GAL4 proteins activated by steroid hormones or analogues. Specifically, yeast GAL4 is fused to a modified human progesterone receptor and human p65 to form the fusion protein "GeneSwitch" (figure 17). Upon binding to an anti-progestin, mifepristone (RU486), GeneSwitch activates the GAL4 promoter, inducing transgene expression (Burcin et al., 1999).

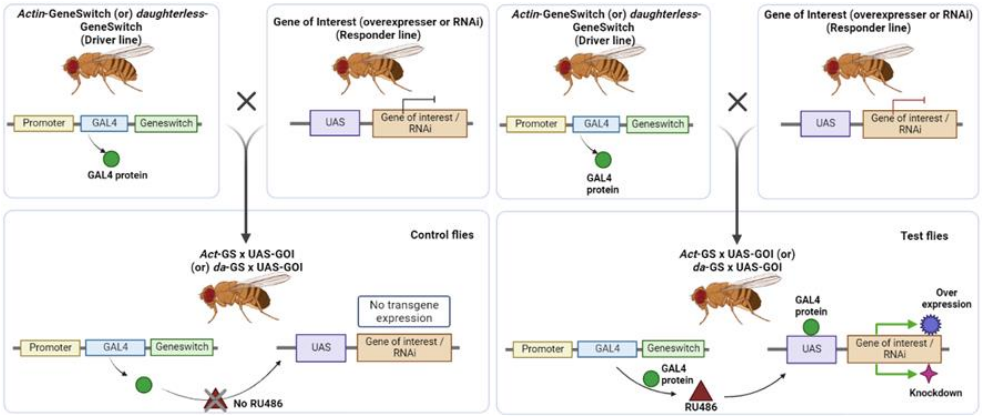


Figure 17 GeneSwitch gene expression system employs a driver (Actin- or daughterless-GeneSwitch) that drives expression of the responder (UAS-gene of interest/RNAi) in the presence of an inducer (RU486) (image generated on Biorender)

In this system, "driver" strains express the GeneSwitch transcription factor, while "responder" strains carry the UAS-transgene. The main advantage is that RU486 administration enables precise spatiotemporal control of transgene activation. Feeding RU486 to adults alone restricts UAS-transgene activation to adult stages, preventing unintended developmental effects. As experimental and control groups differ only by RU486 treatment, genetic background variation is minimised, making the system ideal for ageing studies (Wang et al., 1994; Burcin et al., 1998).

Despite its advantages, the GeneSwitch system has some limitations. The GeneSwitch-GAL4 protein exhibits "leaky" activity even in the absence of RU486, causing reporter protein expression

under uninduced conditions (Poirier et al., 2008). The level of transgene expression leakage depends on the driver and transgene, with strong drivers like tubulin-GeneSwitch (tubGS) showing no significant differences between induced and uninduced flies when testing RNAi transgenes (Scialo et al., 2016). RU486's impact on lifespan varies, with some studies reporting no significant effect (Ford et al., 2007), while others report lifespan reductions (Shen et al., 2009) or increases (Ren and Hughes, 2014). RU486 effects are also dose- and diet-dependent, as undernutrition reduces lifespan in low-nutrient conditions, but nutrient-rich diets not having a significant effect (Yamada et al., 2017).

6.3 Conclusion and Chapter objectives

In this chapter, the candidate genes will be evaluated by RNAi-mediated knockdown or overexpression with the GeneSwitch system for their potential role in regulating *Drosophila* lifespan, while neuromuscular health will be assessed by negative geotaxis.

7. Methods

7.1 Overview

This study investigates the role of candidate genes in influencing longevity and health in *Drosophila* by combining lifespan analysis with behavioural assays that evaluate neuromuscular function. Lifespan studies assess the impact of genetic modifications on overall survival, while behavioural assays provide insights into health-specific effects of these modifications.

Gene expression will be manipulated via RNA interference (RNAi) for gene knockdown or overexpression using the GeneSwitch system for precise temporal control, with transgenics selected to replicate their respective RNASeq gene expression profiles. qPCR will validate gene expression efficiency, facilitating the investigation of how changes in gene activity affect both lifespan and health span metrics.

The methods outlined are broadly applicable across experiments, with minor modifications as required. General methods are presented first, followed by experiment-specific adaptations.

7.2 Fly stocks

Flies were obtained from either Vienna *Drosophila* Research Centre (VDRC) or Bloomington *Drosophila* Stock Centre (BDSC), Indiana University, USA or FlyORF (Zurich). The following strains are assayed in this chapter for their role in regulating lifespan and health span in *Drosophila melanogaster*. Fly strains used to generate the GD strains is *w1118* (VDRC ID 60000), *y,w[1118];P{attP,y[+],w[3`]}* (VDRC ID 60100) for the KK strains, *ΦX-86Fb* for CG3743, and *w1118* for CG3608 (table 4). These were standard strains used by the transgenic providers and were not selected specifically by me.

Strain validation prior to experimental set up was based on phenotypic markers, with transgenic flies with red eyes indicating successful insertion of the UAS-transgene into the genome. Since all the strains exhibited red-eyes, downstream experiments were set up.

Table 4 Drosophila melanogaster strains were obtained either as RNAi or UAS-transgene based on their respective RNASeq profiles

Annotation Number	Fly Base Number	Library/ Construct ID	Name	Gene Abbreviation	Gene Function	Gene expression	Chromosome of insertion	Source
CG9042	FBgn0001128	KK/107796	Glycerol-3-phosphate-dehydrogenase	*Gpdh1*	Involved in triglyceride metabolism, response to hyperoxia and flight behaviour	RNAi Knockdown	2	VDRC
CG9042	FBgn0001128	GD/14102					3	
CG10002	FBgn0000659	GD/4661	Forkhead	*fkh*	Salivary gland formation, enables RNA polymerase II DNA-binding trans-factor activity	RNAi Knockdown	3	VDRC
CG2811	FBgn0035082	KK/101676	Gamma-glutamylamine cyclotransferase	*CG2811*	Predicted to enable gamma-glutamylaminecyclotransferase activity	RNAi Knockdown	2	VDRC
CG2650	FBgn0000092	KK/107026	Daywake	*dyw*	Circadian clock component that suppresses daytime sleep and allows longer	RNAi Knockdown	2	VDRC

					periods of daytime activity			
CG6005	FBgn0038672	KK/107310	No name. Orthologous to human WDR91.	*CG6005*	Wound healing Predicted - Regulation of PI Kinase activity.	RNAi Knockdown	2	VDRC
CG3743	FBgn0040305	P003100	Metal response element-binding Transcription Factor-1	*MTF-1*	Encodes a zinc finger protein that primarily controls the homeostasis of physiological trace metals	Over-expression	3	FlyORF
CG3608	FBgn0035039	84088	aarF domain containing kinase 1	*Adck1*	Responsible for mitochondrial cristae formation and mitochondrial function	Over-expression	2	BDSC

7.3 Backcrossing

To ensure a common genetic background across all strains, flies were backcrossed with the wild-type white Dahomey (wDah) strain (gift from Patridge lab). Originally collected in Dahomey and now widely used in laboratories, the wDah strain is characterized by its white eyes, distinguishing it from the typical, red-eyed phenotype (Grandison et al., 2009).

Backcrossing, a chromosome replacement technique, involves mating flies with one of their parents, producing progeny genetically closer to the recurrent parental strain. In this study, male flies carrying the transgene (donor parent) were crossed with virgin wDah females (recurrent parent). Eye colour differences served as a selection marker for progeny in subsequent

backcrossing generations. After several generations, isogenic strains were established, differing only in the transgenic region but otherwise genetically identical to the recurrent parent (Evangelou et al., 2019) (figure 18).

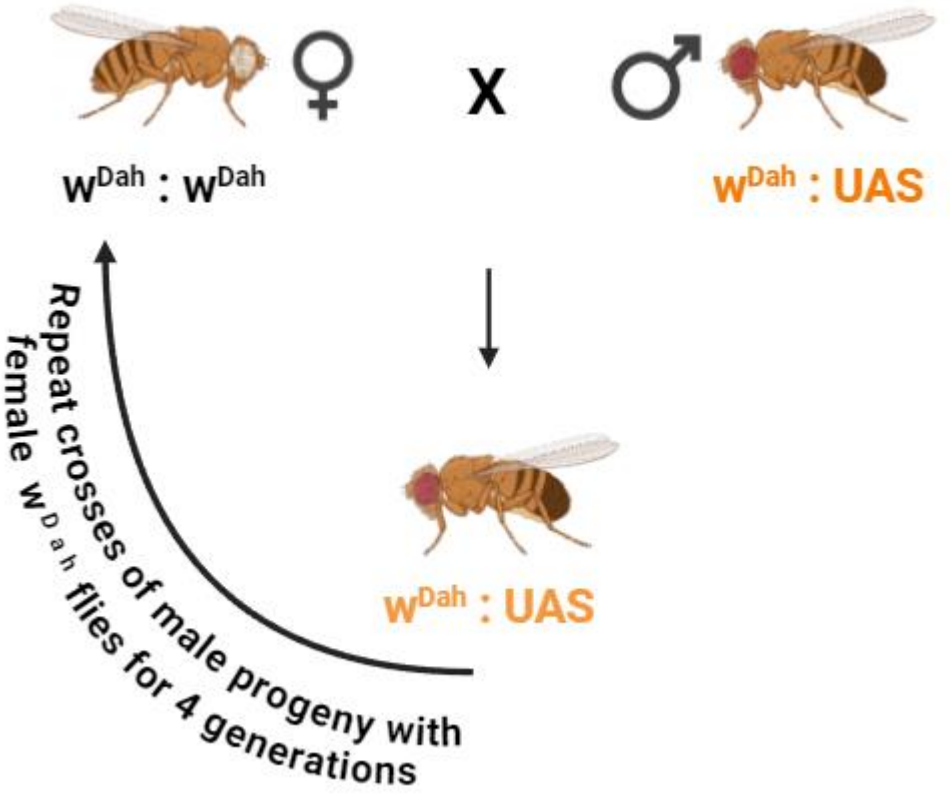


Figure 18 Backcrossing transgenic male flies with virgin wDah for 4 generations gives near-isogenic strains (image generated on Biorender)

7.4 Fly husbandry and maintenance

All flies were maintained on standard sugar-yeast food (appendix), and cultures incubated at 25°C, 70% relative humidity and 12-12 light-dark cycle (Piper and Patridge, 2016).

7.5 Embryo collection

Driver and responder strains are developed in fresh food bottles supplemented with live yeast granules for three days. As egg-laying peaks after 72 hours on nutrient-rich food, flies are in optimal condition for transfer to egg-laying cages at this stage (Piper and Partridge, 2016).

Fly egg-laying cages consist of acrylic cylinders with mesh on one end and a petri dish containing standard sugar-yeast medium on the other (figure 19). The petri dish is coated with yeast paste, and the setup is left undisturbed in the dark for 24 hours to encourage egg-laying.

After 24 hours, flies in the cages are lightly anesthetized to remove the egg-laying plate. Any unconsumed yeast paste is discarded, and the plate is covered with a thin layer of phosphate-buffered saline (PBS) to gently dislodge the eggs from the food using a paintbrush. The egg-PBS suspension is transferred to a 15 ml centrifuge tube, where the eggs are allowed to settle. Most of the supernatant PBS is discarded, and the eggs are washed with fresh PBS. After the final settling, a minimal amount of PBS is retained, just enough to cover the egg mass.

Approximately 35 µl of the egg suspension is transferred into a fresh bottle with sugar-yeast (SY) medium using a wide-mouthed pipette tip to ensure intact egg transfer. The process is repeated to collect as many eggs as needed. After 10 days, newly eclosed flies are transferred to fresh SY bottles and allowed to mate for three days. On the fourth day, all male flies are collected under CO_2 anesthesia and transferred to SY vials at a density of 20 flies per vial.

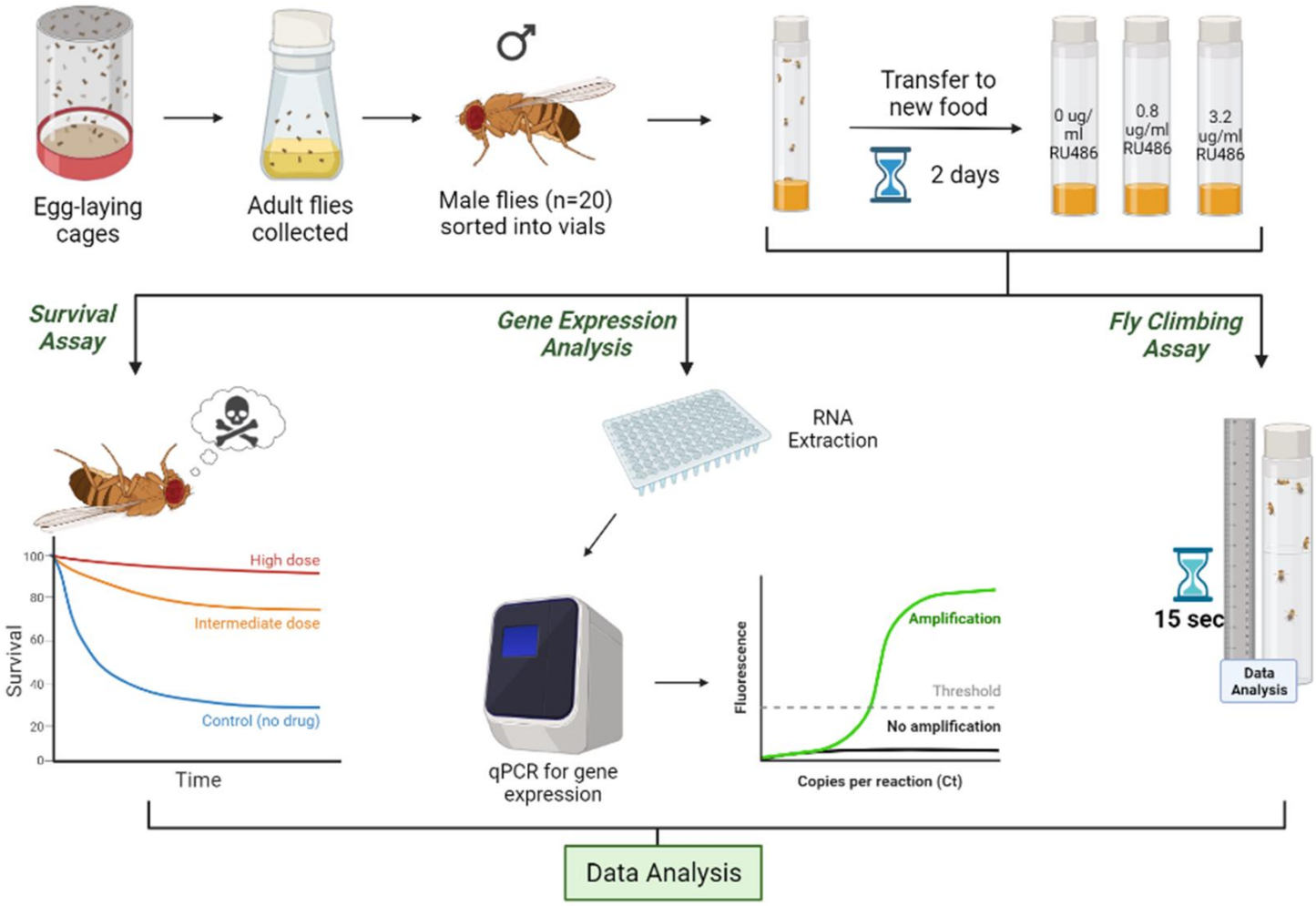


Figure 19 A generic overview of the experimental setup applicable for fly lifespan experiments in chapter 2 and 3. Experiment-specific alterations to protocol have been addressed in respective sections (image generated on Biorender)

7.6 Induction of the GeneSwitch System

For gene expression through GeneSwitch, 70 µl of mifepristone (RU486 dissolved in 100% ethanol) was added to the food vials in varying concentrations, and left to dry for a day, before transferring the flies into the vials. In the vials with 0 µg/ml concentration of the drug, 100% ethanol (diluent) was added, instead of the drug. This procedure was repeated for the entire length of the experimental set up.

7.7 Lifespan Setup

Lifespan set up adhered to the protocols suggested by (Landis et al., 2020). Male transgenic flies were crossed with virgin females of the driver possessing a GAL4 promoter that can activate the UAS-transgene or transgene-RNAi in the responder, and their progeny were used for the lifespan assay. To test the effects of mifepristone (RU486) independent to the responder, the progeny of wDah (without the UAS-component) crossed to the driver was used as a control strain. Flies were allowed to mate for 48 hours to help them acclimatize before embryo collection.

Every lifespan experiment (in chapter 2 and 3) was performed only once, due to time, logistical and financial constraints.

7.7.1 Lifespan Experiment 1

Two UAS-RNAi strains of Glycerol-3-phosphate-dehydrogenase (*Gpdh1*) gene - KK/107796 and GD/14102 (VDRC), were tested. The two strains differ from each other in the site of transgene insertion. GD strains are P-element based, with random insertion sites, while KK strains are φC31-based, with defined insertion sites.

To test gene expression, two doses of RU486 were used (112 µg/ml and 224 µg/ml), with vials without the drug (0 µg/ml) acting as a control. There were 3 genotypes and 3 doses of drug (RU486), resulting in 9 treatments. Controls (*daGS* x wDah progeny) had 6 replicates of 20 flies each per dose of treatment, while transgenic flies (*daGS* x *Gpdh1*-RNAi) had 7 replicates of 20 flies each per dose of treatment, with gene expression being induced from 11 days post-eclosion until end of fly lifespan.

7.7.2 Lifespan Experiment 2

Based on the results of the previous lifespan experiment, I wanted to test if the strength of the driver affects longevity or mobility. I tested *da-GS*, a weak GeneSwitch driver (Scialo et al., 2016) alongside a strong GeneSwitch driver, *Act-GS-255B* (Ford et al., 2007).

Four UAS-RNAi (VDRC) and one UAS-transgene overexpresser (FlyORF) strains were tested for effect on lifespan and negative geotaxis using two ubiquitous drivers – *da-GS* and *Act-GS-255B*. The genes that were knocked down were *dyw*-RNAi, *CG2811*-RNAi, *fkh*-RNAi, and *CG6005*-RNAi, while UAS-*MTF-1* was overexpressed, like their RNASeq expression profile.

To test gene expression, two doses of RU486 were used (56µg/ml and 224 µg/ml), with vials without the drug acting (0 µg/ml) as a control. There were 6 genotypes, 2 drivers and 3 doses of drug (RU486), resulting in 36 treatments, with 8 vials of 20 flies per treatment. Gene expression was induced from 9 days post-eclosion until end of fly lifespan.

7.7.3 Lifespan Experiment 3

Based on the results of the previous lifespan experiment, I used Act-GS-255B for all succeeding lifespan experiments.

One gene, UAS-*Adck1*, was overexpressed using the *Act-GS-255B* driver, to test its role in lifespan and mobility. In previous experiments, gene expression was induced at around 10 days of fly adulthood, until the end of its lifespan. I wanted to test if duration of and age at gene expression induction affected fly lifespan and climbing ability. So, I restricted RU486 dose to 224 µg/ml, while varying time points for gene expression. Expression was induced between 3 days and 25 days, 20 and 25 days, 3 days until death, 10 days until death, and 20 days until death. Time points centered around 25 days to mimic the fly age at RNASeq.

To test gene expression, only one dose of RU486 was used (224 µg/ml), and vials without the drug (0 µg/ml) were the control. There were 2 genotypes, 5 time points, and 2 drug doses (RU486), resulting in 20 treatments, with 8 vials of 20 flies per treatment.

7.8 Fly Tipping

Every two days, dead and censored flies were recorded, before transferring live flies to fresh food vials under light CO_2 anesthesia.

7.9 Negative Geotaxis

Negative geotaxis measures fly climbing height to assess age-related neuromuscular health using a modified rapid iterative negative geotaxis (RING) assay is used (Gargano et al., 2005). The negative geotaxis assay was performed to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to gene manipulation. This assay assesses the flies' natural tendency to move upward against gravity, which is a common behavioural response.

Flies are transferred without anesthesia into 1 cm wide polystyrene tubes placed in a wooden rack, with a sponge plug at the base. After a two-minute acclimatization, the rack is tapped on the table

to uniformly bring all flies to the base. Fly positions are recorded 15 seconds after they begin climbing. This assay is repeated at multiple time points across the lifespan to monitor any age-related decline.

7.9.1 Negative Geotaxis Experiment 1

Negative geotaxis assay for da-GS x wDah and da-GS x *Gpdh* flies was performed for 5 vials per treatment (20 flies per vial) with two readings (ages 24 and 33) during their lifespan.

7.9.2 Negative Geotaxis Experiment 2

Negative geotaxis assay for Act-GS-255B x wDah, da-GS x wDah, Act-GS-255B x *fkh*-RNAi, and da-GS x *fkh*-RNAi flies was performed for 5 vials per treatment (20 flies per vial) with four readings (ages 14, 26, 33 and 40) during their lifespan.

Negative geotaxis assay for Act-GS-255B x *dyw*-RNAi, da-GS x *dyw*-RNAi, Act-GS-255B x *CG2811*-RNAi, da-GS x *CG2811*-RNAi, Act-GS-255B x *CG6005*-RNAi, da-GS x *CG6005*-RNAi, Act-GS-255B x UAS-*MTF-1*, and da-GS x UAS-*MTF-1* flies was performed for 5 vials per treatment (20 flies per vial) with four readings (ages 16, 28, 35 and 42) during their lifespan.

7.9.3 Negative Geotaxis Experiment 3

Negative geotaxis assay for Act-GS-255B x UAS-*Adck1* and Act-GS-255B x wDah flies was performed for 5 vials per treatment (20 flies per vial) with five readings (ages 18, 23, 32, 39, and 46) during their lifespan.

7.10 Collecting flies for qPCR assays

To determine gene expression levels, RNA was extracted from 25-day-old flies and quantified using qPCR. Four random vials per treatment were selected and three male flies per vial were aspirated into Eppendorf tubes, snap-frozen in liquid nitrogen to preserve RNA integrity, and stored at -80°C until further processing.

7.11 RNA Extraction and cDNA synthesis

RNA from the frozen flies was extracted using Norgen Biotek total RNA purification kit. Bashing bead tubes were placed onto a cold box and 600µl of lysis buffer was added. Flies were tipped into these tubes and placed in the Ribolyser for two sets of 20 seconds each, at 6 metres/second to release cell contents. Samples were centrifuged at 12,000 x g for 2 minutes for all the cell debris

to settle. The lysate (approximately 600 µl) was transferred into RNase-free microcentrifuge tubes. 600 µl of 70% ethanol was added to each sample and vortexed. Samples were placed on ice between each of the following steps. Lysate (600 µl) was pipetted onto spin columns and spun at 12,000 x g for 1 minute for all lysate to pass through. This step was repeated after discarding the flow through. Wash buffer (400 µl) was added to each column and spun at 12,000 x g for 1 minute. Flow through was discarded and this step was repeated twice. A final spin was done for 2 minutes without the addition of the wash buffer. Columns were transferred to fresh tubes and 20 µl elution buffer was added to each tube. The samples were shaken for 15 minutes, spun at 2,000 x g for 2 minutes and at 14,000 x g for 1 minute. The samples were qualitatively and quantitatively analysed with a NanoDrop 2000. cDNA synthesis was done with Takara PrimeScript 1st strand cDNA synthesis kit.

7.12 Quantitative Analysis by qPCR

Primers for the qPCR reaction were designed using Primer3Plus software, ensuring a GC content of 40–60% and melting temperatures between 50–60°C. For the assay, samples were tested for both target and housekeeping genes, with housekeeping genes acting as internal controls to validate RNA expression and normalize data. Samples were loaded in triplicate onto a 96-well PCR plate, with water-only wells as negative controls. EF1-g-A (Elongation Factor 1-gamma) was used as a housekeeping gene for all experiments. Repeats of experiments 2 and 3 were performed with actin and rpl32 as housekeeping genes. All transgenes were analysed for expression via qPCR with 4 biological replicates and 3 technical replicates.

7.13 Data Analysis

7.13.1 Lifespan Data Analysis

Lifespan data were analyzed using survival analysis techniques within JMP v8 (SAS Institute). Kaplan-Meier survival curves were generated for each experimental group to visualize survival differences over time. Statistical comparisons between groups were made using the log-rank test to identify significant differences in survival distributions. Median and maximum lifespans were also calculated for each group, providing additional measures for comparative analysis. Statistical significance was set at $p < 0.05$.

7.13.2 Negative Geotaxis Data Analysis

Negative geotaxis data were analyzed with ANOVA to compare mean performance across groups, followed by least square means calculations to assess differences between specific groups. Statistical significance was determined at $p < 0.05$.

7.13.3 qPCR Data Analysis

Gene expression was analyzed using REST 2009 software, with a housekeeping gene serving as the reference for transgene expression quantification. Triplicate means were calculated for each sample, and an overall mean was determined across samples. The analysis followed the delta-delta-Ct method (relative expression method), assuming a reaction efficiency of 1. This method enabled relative quantification of gene expression by comparing Ct values between the transgene and the reference gene.

8 Results

8.1 Overview

This chapter investigated the influence of candidate genes on longevity and health in *Drosophila melanogaster* by combining lifespan studies with climbing assays to assess neuromuscular function. Lifespan analysis was essential to determine the effects of genetic modifications on survival, while behavioural assays provided insights into health-specific impacts. Gene expression was regulated using the GeneSwitch system, allowing precise temporal control, and gene expression efficiency was validated by qPCR, enabling detailed investigation into the effects of gene modulation on lifespan and health span metrics.

Three experiments were conducted, each testing different genes under different parameters. Lifespan data was analysed with JMP v8 (SAS Institute), generating Kaplan-Meier survival curves for each group to visualize survival differences. Log-rank tests assessed statistical significance in survival distributions, with median lifespans calculated for additional comparison. A significance level of $p < 0.05$ was used.

Negative geotaxis data were analysed using MANOVA with repeated measures, followed by least square means calculations to examine differences between specific groups over time. Least square means, less influenced by sample size than regular means, provided accurate comparisons across treatments to assess health and mobility in flies.

Gene expression was analysed with REST 2009 software, using a housekeeping gene as the reference for quantifying transgene expression. Triplicate means for each sample and an overall mean across samples were calculated. The delta-delta-Ct method (relative expression method) was applied, assuming a reaction efficiency of 1, to enable relative quantification by comparing Ct values between the transgene and the reference gene.

8.2 Experiment 1

The survival analysis was conducted to evaluate the effect of the knockdown of two strains of Glycerol-3-phosphate-dehydrogenase (*Gpdh1*) gene - GD/14102 and KK/107796 using RNAi on overall *Drosophila* survival and fly climbing height.

To test gene expression, two doses of RU486 were used 112 µg/ml and 224 µg/ml, with vials without the drug (0 µg/ml) acting as a genetic control. There were 3 genotypes and 3 doses of drug (RU486), resulting in 9 treatments. Gene expression was induced from 11 days post-eclosion until end of fly lifespan.

8.2.1 Knockdown of *Gpdh*1 does not extend lifespan

Two strains of UAS-*Gpdh1*-RNAi differing in the methods and chromosome of transgene insertion were tested with a da-GS driver for their effect on lifespan. While one strain (GD/14102) has no significant difference between the control and treated flies, one strain (KK/107796) had a detrimental effect on fly survival, with a higher RU486 dose (= stronger gene knockdown) significantly reducing lifespan (figure 20).

8.2.1.1 Knockdown of da-GS x Gpdh1-RNAi (GD/14102) had no significant effect on the overall survival

The log-rank test indicated no statistically significant difference in survival between the three groups ($p = 0.44$), suggesting that knockdown of the *Gpdh1* gene had no effect on the overall survival.

Flies treated with different doses of RU486 did not have any significant difference in the median overall survival. The median overall survival was 72 days across all treatments.

8.2.1.2 Knockdown of da-GS x Gpdh1-RNAi (KK/107796) reduced fly survival significantly over time

Knocking down the transgene significantly affected survival between the three groups ($p = 0.0026$), with the higher dose of RU486 reducing fly survival over time.

Flies treated with different doses of RU486 also had different median time of survival, with controls (0 µg/ml) having a median survival of 62 days while the treatments (112 µg/ml and 224 µg/ml) had shorter median times of 59 and 56 days respectively.

8.2.1.3 RU486 did not affect da-GS x wDah survival significantly

RU486 did not affect fly survival significantly ($p = 0.50$).

The median survival time was 62 days for the controls (0 µg/ml) and one treatment (112 µg/ml), and 61 days for the other treatment (224 µg/ml).

8.2.1.4 Median lifespans and rate of ageing were different between the strains

Although neither of the transgenic strains extended lifespan, they both had different patterns of survival over time, where knockdown of da-GS x *Gpdh*1-RNAi (GD/14102) between age 40 and 60 had higher survival estimate than the no-drug control at the same age. This pattern is not observed in da-GS x wDah, negating the possibility of RU486 contributing to the effect. It is also not seen in the da-GS x *Gpdh*1-RNAi (KK/107796) strain, suggesting that site of transgene insertion as a contributing factor.

It is also interesting to note that median survival times are similar between da-GS x *Gpdh*1-RNAi (KK/107796) and da-GS x wDah, with the highest median rate (62 days) seen in no-drug controls. However, da-GS x *Gpdh*1-RNAi (GD/14102) has a much higher median survival time, of 72 days.

The survival analysis indicates that there is no statistically significant difference in survival between control and test strains, i.e. knockdown of *Gpdh1* gene had no effect on the overall survival with the current experimental design.

8.2.2 Knockdown of *Gpdh*1 does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 24 and 33 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to knockdown of *Gpdh1* gene.

8.2.2.1 da-GS x Gpdh1-RNAi (GD/14102) and da-GS x wDah have a higher early climbing height and a greater decline in climbing height than da-GS x Gpdh1-RNAi (KK/107796)

On day 24, da-GS x *Gpdh*1-RNAi (GD/14102) and da-GS x wDah flies climbed significantly higher than da-GS x *Gpdh*1-RNAi (KK/107796). i.e., strain affects climbing height significantly over time ($p = 0.005$) irrespective of dose.

8.2.2.1.1 Dose of RU486 does not have a significant effect on climbing height

Dose of RU486 (figure 20) reduces mean height climbed significantly across all strains ($p = 0.03$), with the 224 µg/ml treatment showing most decline in da-GS x wDah and da-GS x *Gpdh*1-RNAi (KK/107796), while the 112 µg/ml declining most in da-GS x *Gpdh*1-RNAi (GD/14102). However, dose loses this significance over time ($p = 0.21$) and the treatments themselves have no significant effect on the climbing height over time ($p = 0.37$).

Between the two *Gpdh1* strains, da-GS x *Gpdh*1-RNAi (KK/107796) shows a greater decline over time across all treatments (67%, 71%, 85% reduction in height for 0 µg/ml, 112 µg/ml and 224 µg/ml respectively), compared to da-GS x *Gpdh*1-RNAi (GD/14102) (65%, 70%, 57% reduction in height for 0 µg/ml, 112 µg/ml and 224 µg/ml respectively). This suggests that da-GS x *Gpdh*1-RNAi (KK/107796) affects the motor function and coordination of *Drosophila melanogaster* more than da-GS x *Gpdh*1-RNAi (GD/14102).

While the decrease in negative geotaxis over time is expected, the results observed could be a result of generalised health decline than a specific effect of knockdown of the *Gpdh1* gene on motor function and tracking fly climbing heights for a longer period would determine the role of gene manipulation better.

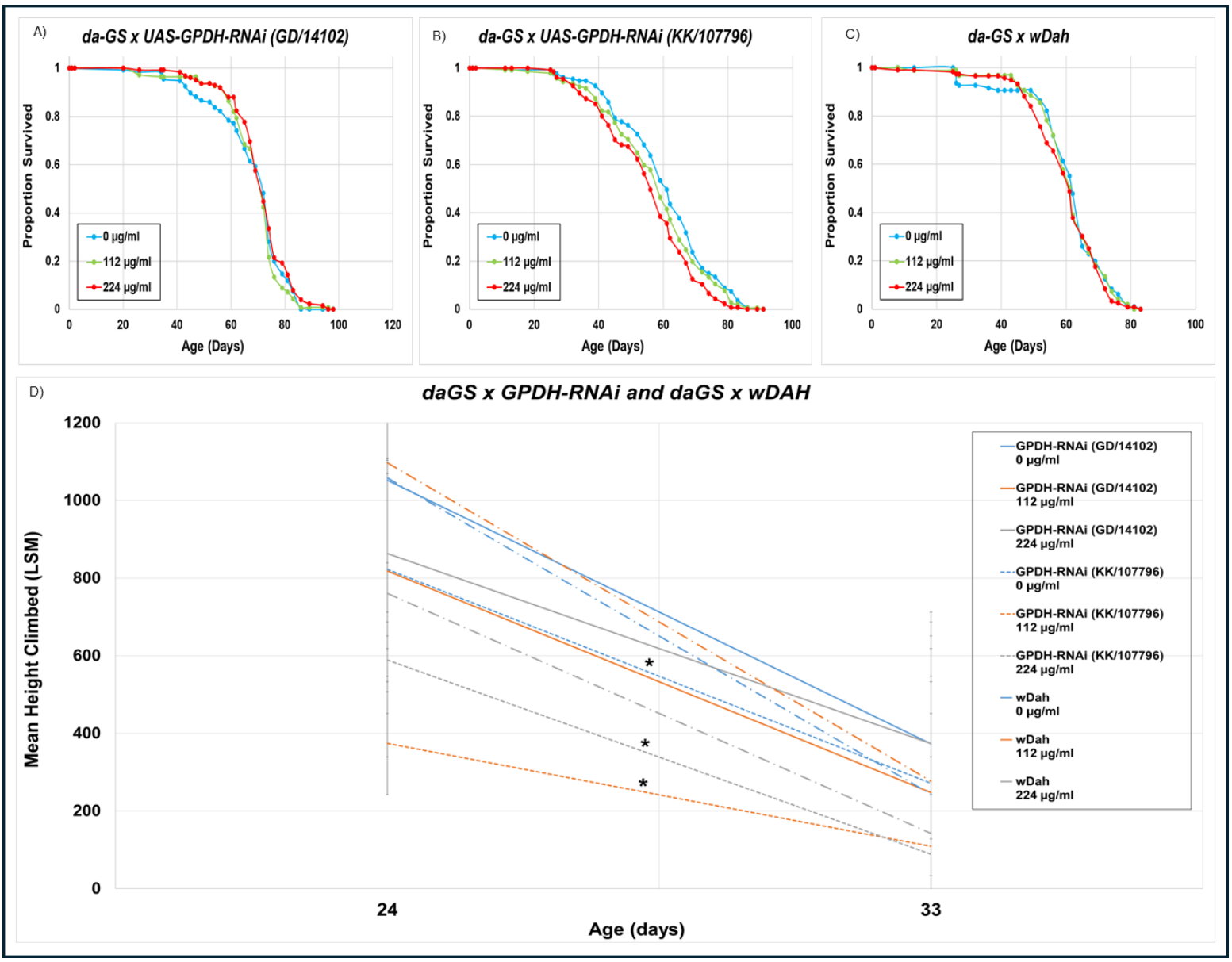


Figure 20 Kaplan-Meier curves show that knockdown of Gdph1 gene GD/14102 showed (KK/107796) does not affect survival (A/B/C) and mean climbing height (D) over time (LSM units are in image pixels)

8.2.3 da-GS downregulated *Gpdh1* expression by 56% in the GD/14102 strain and 47% in the KK/107796 strain

Knockdown of *Gpdh1* with the da-GS driver was significant for both strains, with a 44% expression in GD/14102 ($p = 0.016$) and 53% expression in KK/107796 ($p = 0.007$) (figure 21).

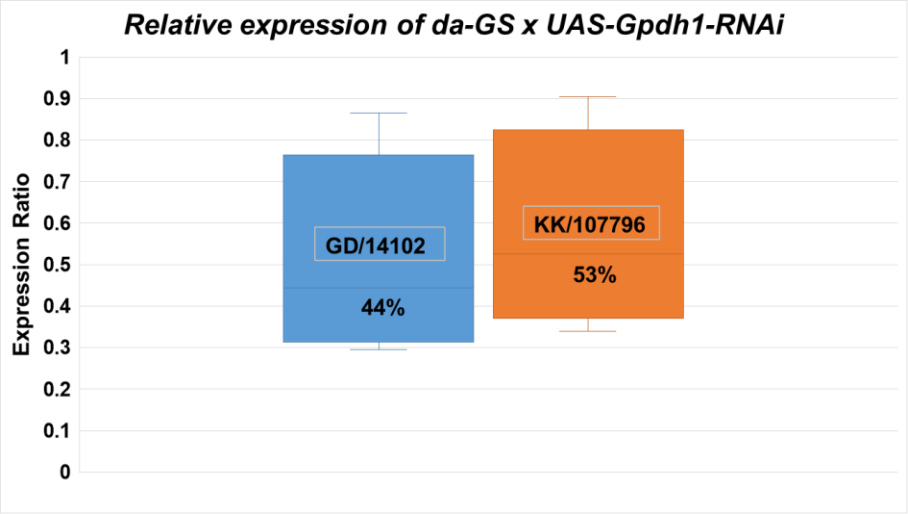


Figure 21 Relative expression of Gpdh1 gene with the da-GS driver was determined by the delta-delta-Ct method with EF1-g as a housekeeping gene

8.3 Experiment 2

Based on the results of the previous lifespan experiment, I wanted to test if the strength of the driver affects longevity or mobility. I tested *da-GS*, a weak GeneSwitch driver and *Act-GS-255B*, a strong GeneSwitch driver.

The survival analysis was conducted to evaluate the effect of knocking down four genes (*dyw*, *CG2811*, *fkh*, and *CG6005*) and overexpressing one gene (*MTF-1*) using two ubiquitous drivers – *da-GS* and *Act-GS-255B.*

To test gene expression, two doses of RU486 were used (56 µg/ml and 224 µg/ml), with vials without the drug acting (0 µg/ml) as a genetic control. There were 6 genotypes, 2 drivers and 3 doses of drug (RU486), resulting in 36 treatments. Gene expression was induced from 9 days post-eclosion until end of fly lifespan.

8.3.1 Knockdown of *fkh* does not extend lifespan

Knockdown of the *fkh* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in both Act-GS x UAS-*fkh*-RNAi ($p = 0.02$) and da-GS x UAS-*fkh*-RNAi ($p = 7.53 \times 10^{-6}$) (figure 22).

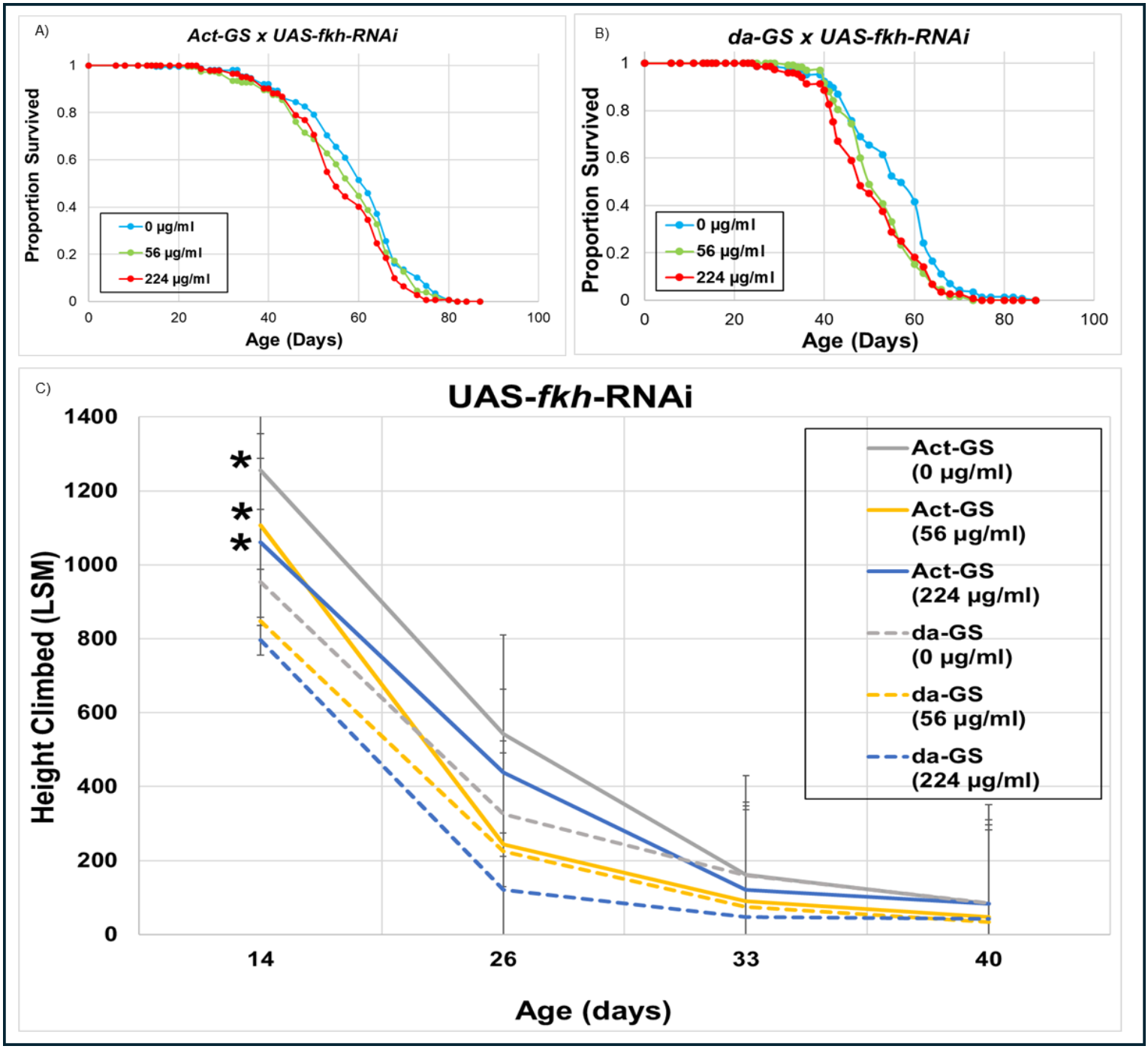


Figure 22 Kaplan-Meier curves show that survival (A/B) and mean climbing height (C) are not affected by knockdown of fkh. Flies with Actin-GeneSwitch driver climb significantly higher than the flies with daughterless-GeneSwitch driver (indicates significance) (LSM units are in image pixels)*

8.3.1.1 Knockdown of fkh with da-GS driver is more detrimental to survival than with Act-GS driver

Although treatments across both drivers were affected by the dose of RU486 used, treatments with da-GS had significantly lower survival estimates than those with Act-GS ($p = 0.03$). This could be attributed to the leakiness of the da-GS driver. This is also observed in the difference in median ages of treatments between the drivers (table 5).

8.3.1.2 Rate of ageing was different between the drivers

Although neither of the transgenic strains extended lifespan, they both had different patterns of survival over time, where da-GS x UAS-*fkh*-RNAi had a steeper decline in the rate of ageing between 40 and 60 days compared to its control, and even the treatments of the Act-GS x UAS-*fkh*-RNAi cross. However, this is not reflected in their median ages of survival, indicating that the populations were similar in terms of health. The survival analysis indicates that knockdown of *fkh* gene does not extend lifespan with the current experimental design.

Table 5 Median ages of survival for UAS-fkh-RNAi when crossed with Act-GS and da-GS

Driver	**Dose of RU486**	**Median Age**	**95% CI (LCI – UCI)**
Act-GS	0 µg/ml	62	60 - 64
Act-GS	56 µg/ml	60	55 - 62
Act-GS	224 µg/ml	55	53 - 60
da-GS	0 µg/ml	62	60 – 64
da-GS	56 µg/ml	55	55 – 57
da-GS	224 µg/ml	53	53 - 57

8.3.2 Knockdown of *fkh* does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 14, 26, 33 and 40 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to knockdown of *fkh* gene.

8.3.2.1 Act-GS x UAS-fkh-RNAi has a higher early climbing height and a greater decline in climbing height than da-GS x UAS-fkh-RNAi

On day 14, all Act-GS x UAS-*fkh*-RNAi flies climbed significantly higher than da-GS x UAS-*fkh*-RNAi flies ($p = 0.03$), with the drivers significantly affecting climbing height over time ($p = 0.01$), irrespective of dose.

8.3.2.1.1 Dose of RU486 does not have a significant effect on climbing height over time in UAS-*fkh* knockdown flies

Dose of RU486 (figure 22) reduces mean height climbed significantly across all treatments ($p = 0.02$), with the 56 µg/ml treatment showing most decline with both drivers. However, dose loses this significance over time ($p = 0.27$) and the treatments themselves have no significant effect on the climbing height over time ($p = 0.58$).

Both drivers show similar rate decline over time, but the Act-GS x UAS-*fkh*-RNAi flies have a slightly lower rate of decline with time across all treatments (93%, 96%, 92% reduction in height for 0 µg/ml, 56 µg/ml and 224 µg/ml respectively), compared to da-GS x UAS-*fkh*-RNAi (91%, 96%, 95% reduction in height for 0 µg/ml, 56 µg/ml and 224 µg/ml respectively). This suggests that da-GS affects the motor function and coordination in *fkh* knockdown flies more than Act-GS.

8.3.3 Knockdown of *CG2811* does not extend lifespan

Knockdown of the *CG2811* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in da-GS x UAS-*CG2811*-RNAi ($p = 0.03$), however it has no significant effect on survival in Act-GS x UAS-*CG2811*-RNAi ($p = 0.14$) (figure 23).

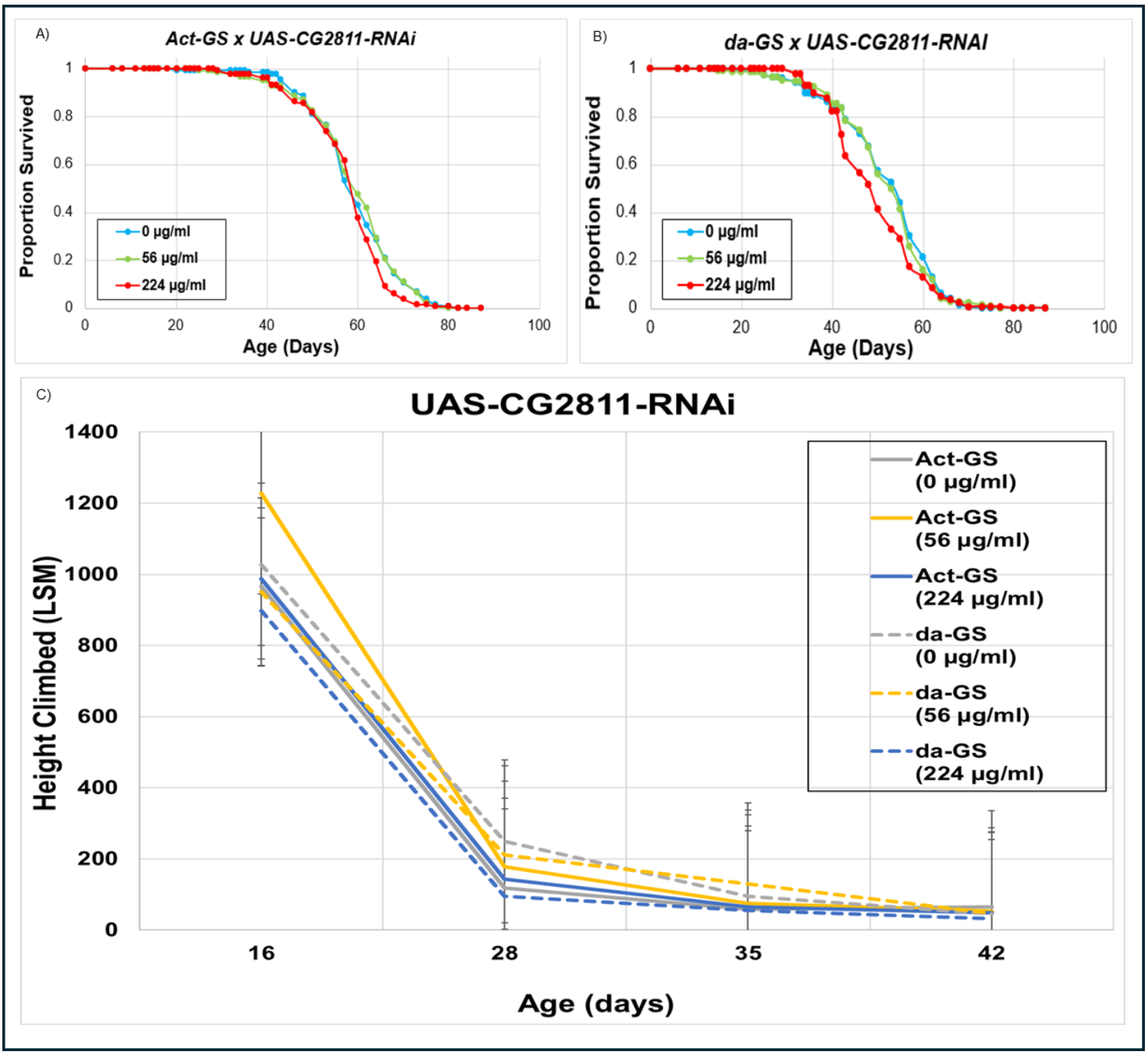


Figure 23 Kaplan-Meier curves show that survival (A/B) and mean climbing height (C) are not significantly affected by knockdown of CG2811 (LSM units are in image pixels)

8.3.3.1 Knockdown of CG2811 with da-GS driver is more detrimental to survival than with Act-GS driver

Treatments with da-GS had significantly lower survival estimates than those with Act-GS ($p = 1.04 \times 10^{-11}$), potentially due to the leakiness of the da-GS driver. This is also observed in the difference in median ages of treatments between the drivers (table 6).

8.3.3.2 *Median lifespans and rate of ageing were different between the drivers*

Although neither of the transgenic strains extended lifespan, they both had different patterns of survival over time, where da-GS x UAS-*CG2811*-RNAi had a steeper decline in the rate of ageing between 40 and 60 days compared to its control, and to the treatments of the Act-GS x UAS-*CG2811*-RNAi cross. This is reflected in their median ages of survival, indicating that the strength of the driver can influence median survival in fly populations. The survival analysis indicates that there is no statistically significant difference in survival between control and test strains, i.e. knockdown of *CG2811* gene does not extend lifespan with the current experimental design.

Table 6 Median ages of survival for UAS-CG2811-RNAi when crossed with Act-GS and da-GS

Driver	**Dose of RU486**	**Median Age**	**95% CI (LCI – UCI)**
Act-GS	0 µg/ml	60	57 – 62
Act-GS	56 µg/ml	60	57 – 62
Act-GS	224 µg/ml	60	57 - 62
da-GS	0 µg/ml	57	53 – 60
da-GS	56 µg/ml	55	53 – 57
da-GS	224 µg/ml	53	48 - 53

8.3.4 Knockdown of *CG2811* does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 16, 28, 35 and 42 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to knockdown of *CG2811* gene.

8.3.4.1 *Driver does not have a significant effect on climbing height of UAS-CG2811 knockdown flies*

Although da-GS x UAS-*CG2811*-RNAi flies have a higher climbing height than Act-GS x UAS-*CG2811*-RNAi flies, the difference is not significant on individual days ($p = 0.33$) and over time ($p = 0.55$).

8.3.4.2 Dose of RU486 does not have a significant effect on climbing height UAS-CG2811 knockdown flies

Dose of RU486 (figure 24) does not affect mean height climbed across treatments ($p = 0.28$), although the 56 µg/ml treatment has the most decline with both drivers. Over time, dose still does not affect climbing height significantly ($p = 0.95$) and the treatments also have no significant effect on the climbing height over time ($p = 0.75$).

This suggests that neither the drivers nor the dose of RU486 affect the motor function and coordination in *CG2811* knockdown flies.

8.3.5 Knockdown of *dyw* does not extend lifespan

Knockdown of the *dyw* gene does not significantly affect fly survival over time, with either driver - da-GS x UAS-*dyw*-RNAi ($p = 0.07$) and Act-GS x UAS-*dyw*-RNAi ($p = 0.10$) (figure 24).

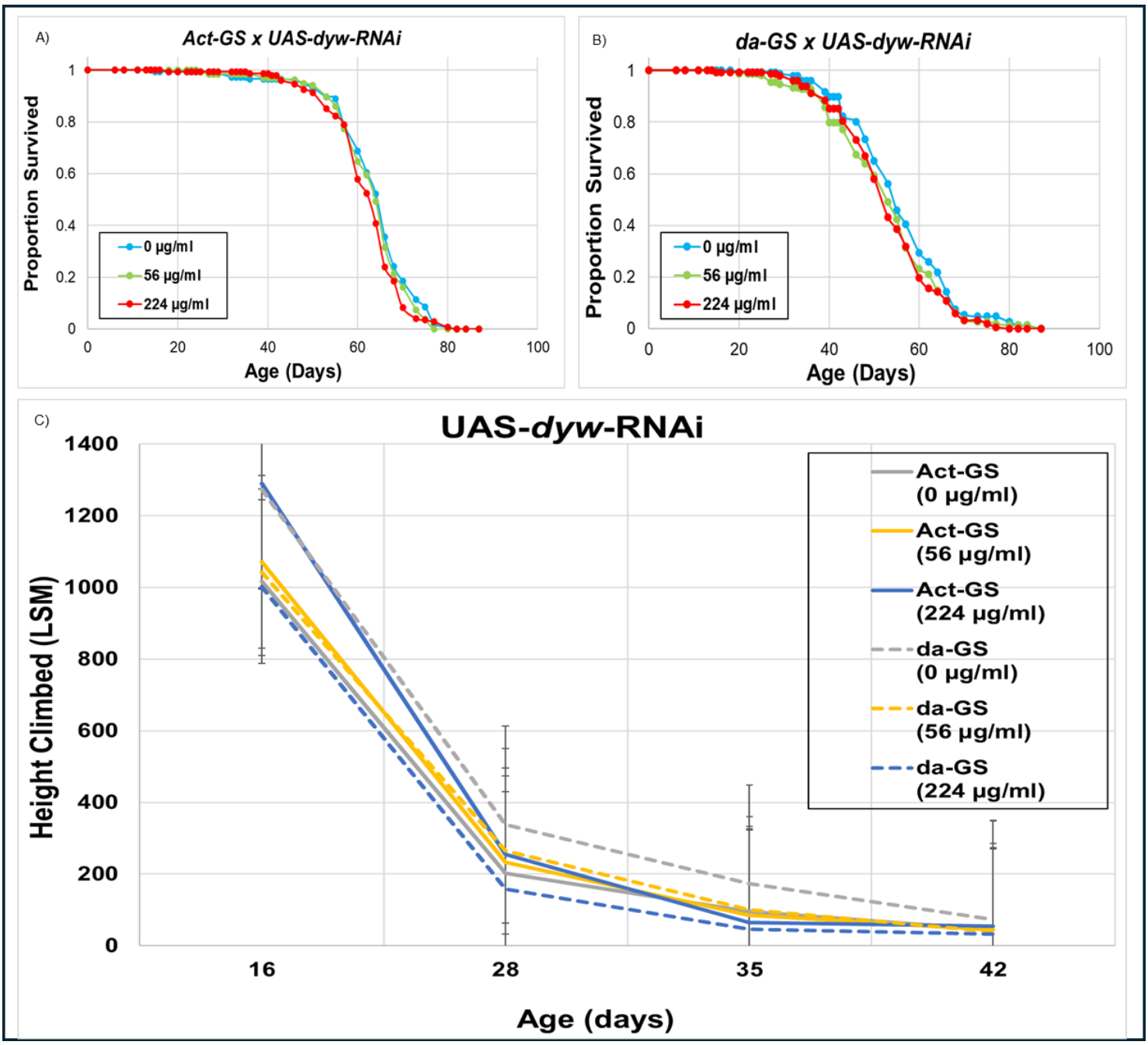


Figure 24 Kaplan-Meier curves show that survival (A/B) and mean climbing height (C) are not significantly affected by knockdown of dyw (LSM units are in image pixels)

8.3.5.1 Knockdown of dyw with da-GS driver is more detrimental to survival than with Act-GS driver

Treatments with da-GS had significantly lower survival estimates than those with Act-GS ($p = 1.96 \times 10^{-21}$), potentially due to the leakiness of the da-GS driver. This is also observed in the difference in median ages of treatments between the drivers (table 7).

8.3.5.2 *Median lifespans and rate of ageing were different between the drivers*

Although neither of the transgenic strains extended lifespan, they both had different patterns of survival over time. Onset of ageing occurs much later (after 45 days) in the Act-GS x UAS-*dyw*-RNAi strain but starts around 30 days for da-GS x UAS-*dyw*-RNAi. They also differ in the rate of decline, where da-GS x UAS-*dyw*-RNAi between age 40 and 60 had a steeper decline in the rate of ageing compared to its control, and to the treatments of the Act-GS x UAS-*dyw*-RNAi cross. This is reflected in their median ages of survival, indicating that the strength of the driver can influence median survival in fly populations. The survival analysis indicates that there is no statistically significant difference in survival between control and test strains, i.e. knockdown of *dyw* gene does not extend lifespan with the current experimental design.

Table 7 Median ages of survival for UAS-dyw-RNAi when crossed with Act-GS and da-GS

Driver	Dose of RU486	Median Age	95% CI (LCI – UCI)
Act-GS	0 µg/ml	66	64 – 66
Act-GS	56 µg/ml	64	64 – 66
Act-GS	224 µg/ml	64	60 - 64
da-GS	0 µg/ml	55	53 – 57
da-GS	56 µg/ml	53	53 – 57
da-GS	224 µg/ml	53	50 - 55

8.3.6 Knockdown of *dyw* does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 16, 28, 35 and 42 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to knockdown of *dyw* gene.

8.3.6.1 *Driver does not have a significant effect on climbing height in UAS-dyw knockdown flies*

Although da-GS x UAS-*dyw*-RNAi flies have a higher climbing height than Act-GS x UAS-*dyw*-RNAi flies, the difference is not significant on individual days ($p = 0.09$) and over time ($p = 0.65$).

8.3.6.2 Dose of RU486 does not have a significant effect on climbing height in UAS-dyw knockdown flies

Dose of RU486 (figure 24) does not affect mean height climbed across treatments ($p = 0.54$), with all treatments showing same rate of decline across Act-GS x UAS-*dyw*-RNAi while the 224 µg/ml shows the most decline over time. Over time, dose still does not affect climbing height significantly ($p = 0.96$) and the treatments also have no significant effect on the climbing height over time ($p = 0.56$).

This suggests that neither the drivers nor the dose of RU486 affect the motor function and coordination in *dyw* knockdown flies.

8.3.7 Knockdown of *CG6005* does not extend lifespan

Knockdown of the *CG6005* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in da-GS x UAS- *CG6005*-RNAi ($p = 1.1 \times 10^{-4}$), however it has no significant effect on survival in Act-GS x UAS- *CG6005*-RNAi ($p = 0.23$) (figure 25).

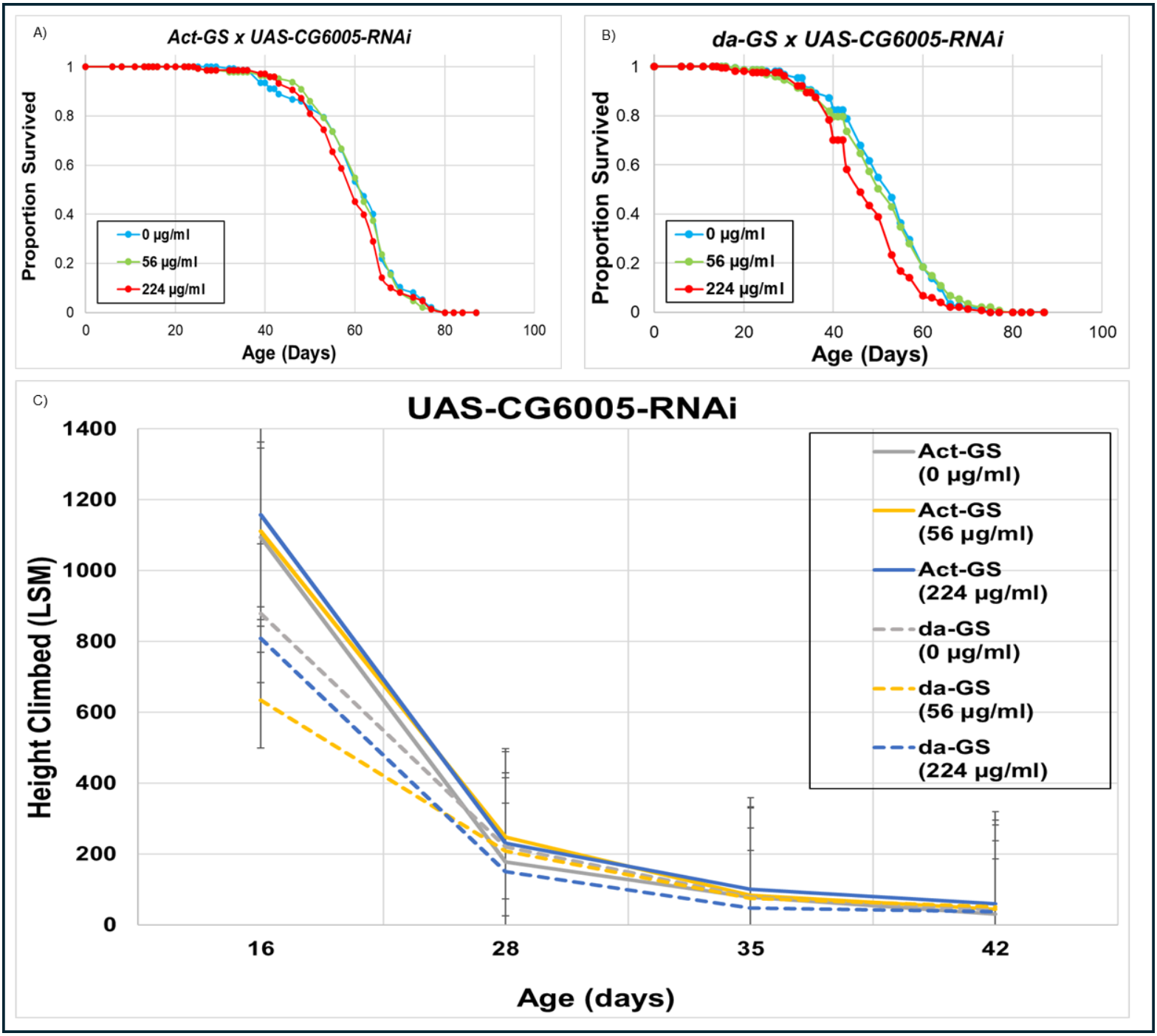


Figure 25 Kaplan-Meier curves show that (A/B) survival is significantly reduced in da-GS x UAS- CG6005-RNAi but not Act-GS x UAS- CG6005-RNAi; Mean climbing height (C) is not affected by knockdown of CG6005 (LSM units are in image pixels)

8.3.7.1 *Knockdown of CG6005 with da-GS driver is more detrimental to survival than with Act-GS driver*

Treatments with da-GS had significantly lower survival estimates than those with Act-GS ($p = 7.08 \times 10^{-33}$), potentially due to the leakiness of the da-GS driver. This is also observed in the difference in median ages of treatments between the drivers (table 8).

8.3.7.2 *Median lifespans and rate of ageing were different between the drivers*

Although neither of the transgenic strains extended lifespan, they both had different patterns of survival over time. Onset of ageing occurs much later (around 45 days) in the Act-GS x UAS-*CG6005*-RNAi strain but starts around 30 days for da-GS x UAS-*CG6005*-RNAi. They also differ in the rate of decline, where da-GS x UAS-*CG6005*-RNAi between 35 and 60 had a steeper decline in the rate of ageing compared to its control, and to the treatments of the Act-GS x UAS-*CG6005*-RNAi cross. The highest dose of da-GS x UAS-*CG6005*-RNAi achieves almost 95% mortality by 60 days, while the same treatment of Act-GS x UAS-*CG6005*-RNAi only reaches that after 75 days. This is also reflected in their median ages of survival, indicating that the strength of the driver can influence age at onset, median survival, and rate of decline in fly populations. The survival analysis indicates that knockdown of *CG6005* gene does not extend lifespan with the current experimental design.

Table 8 Median ages of survival for UAS-CG6005-RNAi when crossed with Act-GS and da-GS

Driver	Dose of RU486	Median Age	95% CI (LCI – UCI)
Act-GS	0 µg/ml	62	60 – 64
Act-GS	56 µg/ml	62	60 – 64
Act-GS	224 µg/ml	60	60 - 62
da-GS	0 µg/ml	53	50 – 55
da-GS	56 µg/ml	53	48 – 55
da-GS	224 µg/ml	46	43 - 50

8.3.8 Knockdown of *CG6005* does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 16, 28, 35 and 42 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to knockdown of *CG6005* gene.

8.3.8.1 *Driver does not have a significant effect on climbing height in UAS-CG6005 knockdown*

Although da-GS x UAS-*CG6005*-RNAi flies have a higher climbing height than Act-GS x UAS-*CG6005*-RNAi flies, the difference is not significant on individual days ($p = 0.41$) and over time ($p = 0.38$).

8.3.8.2 *Dose of RU486 does not have a significant effect on climbing height in UAS-CG6005 knockdown*

Dose of RU486 (figure 25) does not affect mean height climbed across treatments ($p = 0.84$), with the control (0 µg/ml) having a greater rate of decline than the other treatments across Act-GS x UAS-*CG6005*-RNAi while the 56 µg/ml treatment shows the least decline over time. Over time, dose still does not affect climbing height significantly ($p = 0.84$) and the treatments also have no significant effect on the climbing height over time ($p = 0.94$).

This suggests that neither the drivers nor the dose of RU486 affect the motor function and coordination in *CG6005* knockdown flies.

8.3.9 Overexpression *MTF*-1 does not extend lifespan

Overexpression of the *MTF-1* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in da-GS x UAS-*MTF-1* ($p = 0.01$), however it has no significant effect on survival in Act-GS x UAS-*MTF-1* ($p = 0.51$) (figure 26).

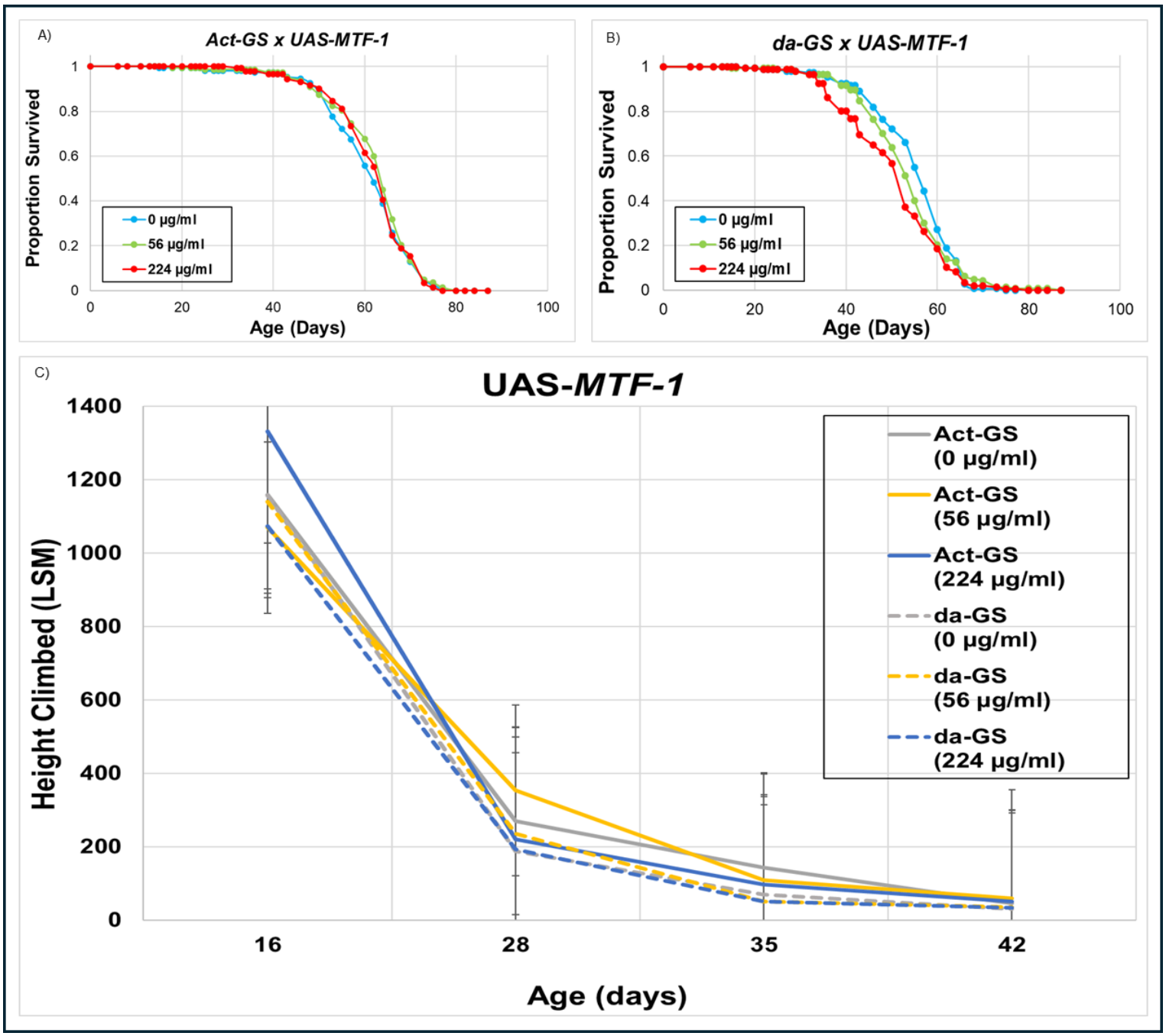


Figure 26 Kaplan-Meier curves show that survival (A/B) is significantly reduced in da-GS x UAS-MTF-1 but not Act-GS x UAS-MTF-1; Mean climbing height (C) is not significantly affected by overexpression of MTF-1 (LSM units are in image pixels)

8.3.9.1 *Overexpression of MTF-1 with da-GS driver is more detrimental to survival than with Act-GS driver*

Treatments with da-GS had significantly lower survival estimates than those with Act-GS ($p = 4.7 \times 10^{-30}$), potentially due to the leakiness of the da-GS driver. This is also observed in the difference in median ages of treatments between the drivers (table 9).

8.3.9.2 *Median lifespans and rate of ageing were different between the drivers*

Although neither of the transgenic strains extended lifespan, they both had different patterns of survival over time. Onset of ageing occurs much later (around 45 days) in the Act-GS x UAS-*MTF-1* strain but starts around 35 days for da-GS x UAS-*MTF-1*. They also differ in the rate of decline, where da-GS x UAS-*MTF-1* between 35 and 60 had a steeper decline in the rate of ageing compared to its control, and to the treatments of the Act-GS x UAS-*MTF-1* cross. The highest dose of da-GS x UAS-*MTF-1* achieves almost 90% mortality by 60 days, while all the treatments of Act-GS x UAS-*MTF-1* only reach that after 75 days. This is also reflected in their median ages of survival, indicating that the strength of the driver can influence age at onset, median survival, and rate of decline in fly populations. The survival analysis indicates that overexpression of *MTF-1* gene does not extend lifespan with the current experimental design.

Table 9 Median ages of survival for UAS-MTF-1 when crossed with Act-GS and da-GS

Driver	Dose of RU486	Median Age	95% CI (LCI – UCI)
Act-GS	0 µg/ml	62	60 – 64
Act-GS	56 µg/ml	64	64 – 66
Act-GS	224 µg/ml	64	62 - 64
da-GS	0 µg/ml	57	55 – 60
da-GS	56 µg/ml	55	53 – 55
da-GS	224 µg/ml	53	50 - 53

8.3.10 Overexpression of *MTF*-1 does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 16, 28, 35 and 42 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to overexpression of *MTF-1* gene.

8.3.10.1 Driver does not have a significant effect on climbing height in UAS-MTF1 overexpressed flies

Although Act-GS x UAS-*MTF*-1 flies have a slightly higher climbing height than da-GS x UAS-*MTF*-1 flies, the difference is not significant on individual days ($p = 0.20$) and over time ($p = 0.96$).

8.3.10.2 Dose of RU486 does not have a significant effect on climbing height in UAS-MTF1 overexpressed flies

Dose of RU486 (figure 26) does not affect mean height climbed across treatments ($p = 0.93$), with the 56 µg/ml treatment having the least rate of decline among the Act-GS x UAS-*MTF-1* treatments, while the rate of decline is same across Act-GS x UAS-*MTF-1* treatments. Over time, dose still does not affect climbing height significantly ($p = 0.46$) and the treatments also have no significant effect on the climbing height over time ($p = 0.65$).

This suggests that neither the drivers nor the dose of RU486 affect the motor function and coordination in *MTF-1* overexpresser flies.

8.3.11 Lifespans of Act-GS x wDah treatments have no significant differences but survival of da-GS x wDah treatments are dose-dependent

Treating flies with RU486 significantly decreased fly survival over time in da-GS x wDah with higher dose of RU486 being detrimental ($p = 0.01$), however it has no significant effect on survival in Act-GS x wDah ($p = 0.79$) (figure 27).

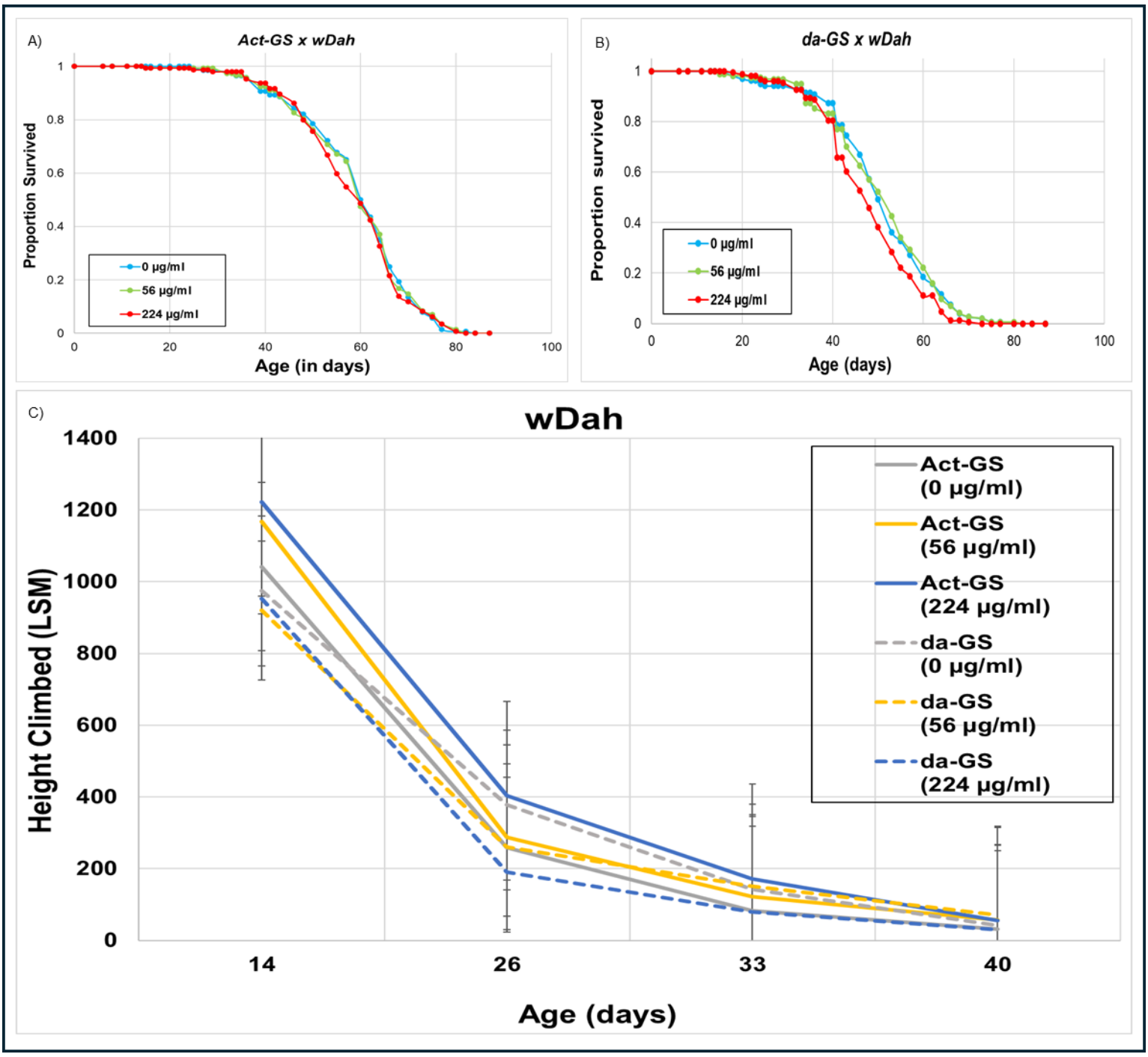


Figure 27 Kaplan-Meier curves show that survival (A/B) is significantly reduced in da-GS x wDah but not Act-GS x wDah; Mean climbing height (C) is not affected by treating Act-GS x wDah and da-GS x wDah with RU486 (LSM units are in image pixels)

8.3.11.1 *da-GS driver is more detrimental to survival than Act-GS driver, even without a transgene*

Treatments with da-GS had significantly lower survival estimates than those with Act-GS ($p = 6.85 \times 10^{-27}$), potentially due to the leakiness of the da-GS driver. This is also observed in the difference in median ages of treatments between the drivers (table 10).

8.3.11.2 *Median lifespans and rate of ageing were different between the drivers*

The drivers, despite lacking the transgene component, had different patterns of survival over time. Onset of ageing occurs around 40 days in the Act-GS x wDah strain but starts around 30 days for da-GS x wDah. They also differ in the rate of decline, where da-GS x wDah. between 40 and 60 days, had a steeper decline in the rate of ageing compared to its control, and to the treatments of Act-GS x wDah. The highest dose of da-GS x wDah achieves 90% mortality by 60 days, while all the treatments of Act-GS x wDah only reaches that after 75 days. The median ages are similar across all treatments of Act-GS x wDah, while they range from 48 to 50 days between the highest dose of RU486 and the control in da-GS x wDah, indicating that da-GS is leakier than Act-GS. This can influence age at onset, median survival, and rate of decline in fly populations.

Table 10 Median ages of survival for both drivers in the absence of a transgene

Driver	**Dose of RU486**	**Median Age**	**95% CI (LCI – UCI)**
Act-GS	0 µg/ml	62	60 – 64
Act-GS	56 µg/ml	60	60 – 64
Act-GS	224 µg/ml	60	57 - 64
da-GS	0 µg/ml	50	48 – 53
da-GS	56 µg/ml	53	48 – 55
da-GS	224 µg/ml	48	46 - 50

8.3.12 Act-GS x wDah and da-GS x wDah do not have significant differences in mean fly climbing height over time

The negative geotaxis assay was performed on days 14, 26, 33 and 40 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in the absence of any transgene, by crossing the drivers with the control strain, wDah.

8.3.12.1 Driver does not have a significant effect on climbing height

Although Act-GS x wDah flies climb slightly higher than da-GS x wDah flies, the difference is not significant on individual days ($p = 0.47$) and over time ($p = 0.39$).

8.3.12.2 Dose of RU486 does not have a significant effect on climbing height

Dose of RU486 (figure 27) does not affect mean height climbed across treatments ($p = 0.80$), with the 0 µg/ml treatment having the most rate of decline among the Act-GS x wDah flies, and the 224 µg/ml treatment having the most rate of decline among the da-GS x wDah flies. Over time, neither dose ($p = 0.79$) nor the treatments ($p = 0.24$) have a significant effect on the climbing height over time. This suggests that neither the drivers nor the dose of RU486 affects the motor function and coordination in flies in the absence of a transgene.

8.3.13 Expression Analysis via qPCR

All treatments in the experiment were tested for gene expression with qPCR assays. The EF1-g was used as a housekeeping gene, similar to experiment 1. However, inconsistent and uncharacteristically high Cq values for the housekeeping gene were recurring issues throughout multiple repeats of the qPCR assay. As flies are frozen at age 25, I had to replicate the lifespan setup until age 25 to obtain more RNA to continue the expression analysis. This was limited by fungal infection in flies soon after the lifespan experiment concluded. Decontaminating the stocks and the lab from fungus and fungal spores was challenging due to recurrent infections and I lost the UAS-*CG2811*-RNAi and UAS-*MTF-1* stocks to the fungus. Time and logistical constraints prevented expression analysis of the other strains, despite surviving the infections.

8.4 Experiment 3

Based on the results of the previous lifespan experiment, I determined that Act-GS-255B was the better driver for this experimental setup and was used as the driver for all succeeding lifespan experiments.

UAS-*Adck1* was overexpressed using the *Act-GS-255B* driver to test its role in lifespan and mobility. In previous experiments, gene expression was induced at around 10 days of fly adulthood, until the end of its lifespan. I wanted to test if duration of and age at gene expression induction affected fly lifespan and climbing ability. So, I restricted RU486 dose to 224 µg/ml, while varying time points for gene expression. Expression was induced between 3 days and 25 days, 20 and 25 days, 3 days until death, 10 days until death, and 20 days until death.

To test gene expression, only one dose of RU486 was used (224 µg/ml), with vials without the drug (0 µg/ml) were control. There were 2 genotypes, 5 time points, and 2 drug doses (RU486), resulting in 20 treatments.

8.4.1 Overexpression of *Adck*-1 does not extend lifespan

Overexpression of the *Adck-1* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in all treatments of Act-GS x UAS-*Adck*1 ($p = 4.03 \times 10^{-12}$) (figure 28).

8.4.1.1 Overexpression of Adck1 is detrimental to survival irrespective of duration of induction of gene expression

Age at induction and duration of gene expression did not significantly affect survival in most treatments. Induction between 20 and 25 days slightly increased the survival compared to the uninduced flies (figure 28). However, this difference was not significant to alter overall survival.

Inducing gene expression reduced survival significantly in most treatments, with "3 days - end of life" having the most reduction ($p = 3.52 \times 10^{-10}$). Survival of induced flies from "3 days - 25 days" ($p = 0.0095$) and "20 days - end of life" treatments were also significantly reduced ($p = 0.0077$) compared to the controls. Although the induced flies had reduced lifespan compared to the uninduced flies in the "10 days - end of life" treatment, it was not statistically significant ($p = 0.07$). This contrasts with the induced flies from the "20 days - 25 days" treatment, which had a longer lifespan but was not statistically significant ($p = 0.83$) (figure 28).

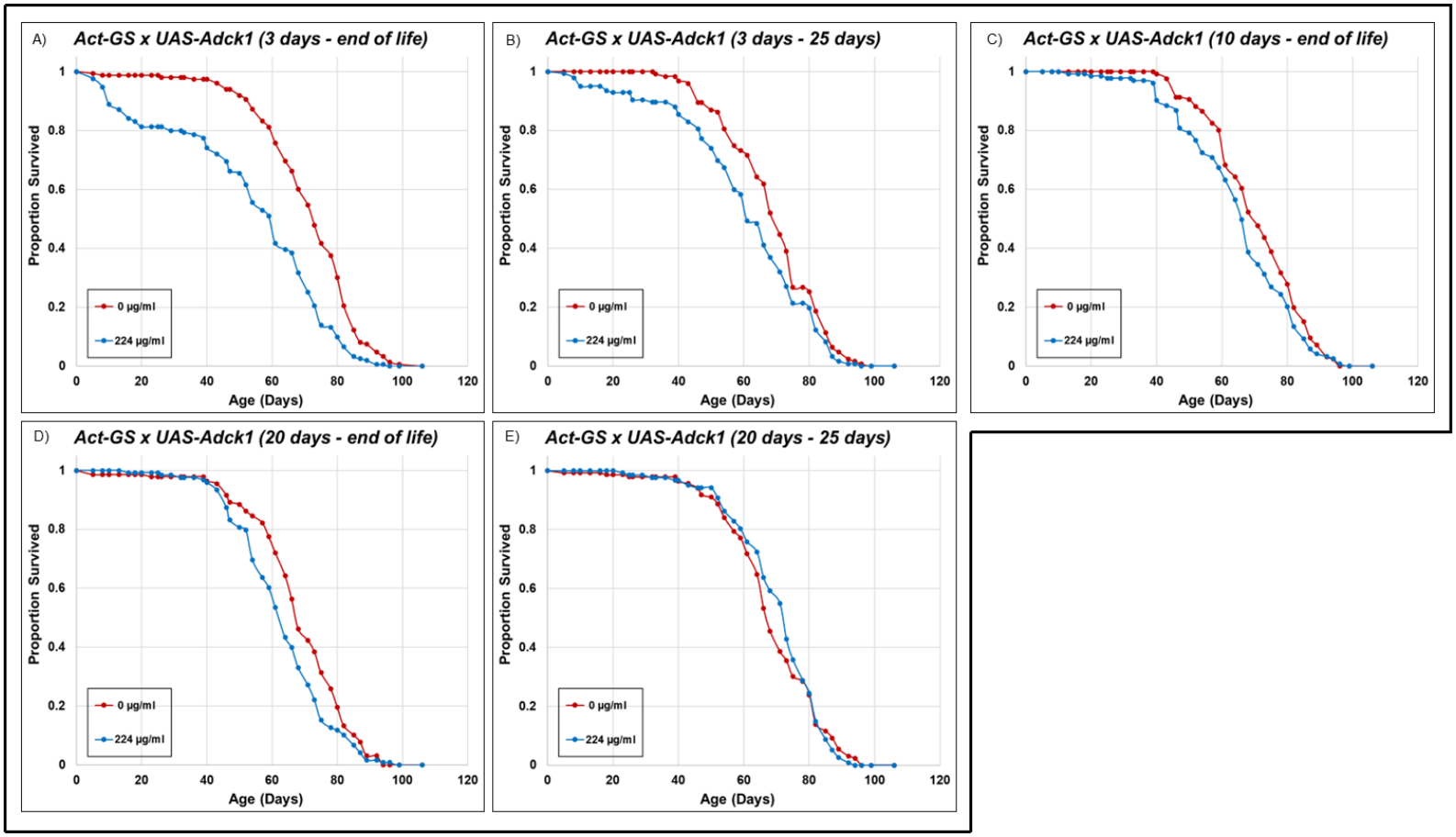


Figure 28 Kaplan-Meier curves show that survival (A/B/C/D/E) is significantly reduced with overexpression of Adck1, irrespective of duration of gene expression

8.4.1.2 Median lifespans and rate of ageing were dependent on age at and duration of overexpression

Although most of the induced treatments reduced lifespan, they all had different patterns of survival over time. Onset of ageing occurs very early (about 7 days) in the strains with early induction and longer duration (3 days - end of life) compared to 40 days for "10 days - end of life" and 44 days for "20 days - end of life", which were induced later, but remained induced throughout adult life. Inducing *Adck1* overexpression for a short period (20 days – 25 days) delayed the onset of ageing, with the induced having a more rounded rate of decline consistently. This is also reflected in their median ages of survival, indicating that the short-term overexpression of *Adck1* is slightly beneficial for the flies (table 10). However, due to lack of statistical significance, this could be a stochastic effect. The survival analysis indicates that overexpression of *Adck1* gene does not extend lifespan with the current experimental design.

Table 11 Median ages of survival for Act-GS x UAS-Adck1 when overexpressed at different ages for varying durations of adult lifespan

Time point	Dose of RU486	Median Age	95% CI (LCI – UCI)
3 days - 25 days	0 µg/ml	71	68 - 73
3 days - 25 days	224 µg/ml	61	59 - 66
3 days - end of life	0 µg/ml	73	71 - 75
3 days - end of life	224 µg/ml	61	54 - 61
10 days - end of life	0 µg/ml	71	68 - 75
10 days - end of life	224 µg/ml	66	64 - 68
20 days - 25 days	0 µg/ml	68	66 - 71
20 days - 25 days	224 µg/ml	73	68 - 75
20 days - end of life	0 µg/ml	68	66 - 73
20 days - end of life	224 µg/ml	64	61 - 66

8.4.2 RU486 treatment of Act-GS x wDah flies reduces survival

Treating Act-GS x wDah flies with RU486 significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in all treatments ($p = 1.10 \times 10^{-5}$) (figure 29).

8.4.2.1 RU486 is detrimental to survival irrespective of duration of exposure

Age at introduction and duration of RU486 exposure did not significantly affect survival in most treatments. RU486 treatment reduced survival significantly in most treatments, with "10 days - end of life" treatment having the most reduction ($p = 3.2 \times 10^{-5}$). Survival of induced flies from "3 days - 25 days" ($p = 0.01$), "20 days - 25 days" ($p = 0.01$) and "20 days - end of life" ($p = 0.02$) treatments were also significantly reduced compared to the controls. Although the induced flies in "3 days - end of life" treatment had reduced lifespan compared to the uninduced flies, it was not statistically significant ($p = 0.86$). The results of the "20 days - 25 days" treatment of *Adck1* overexpression (figure 28) was mostly a result of transgene overexpression and very little due to the lifespan altering effects of the RU486.

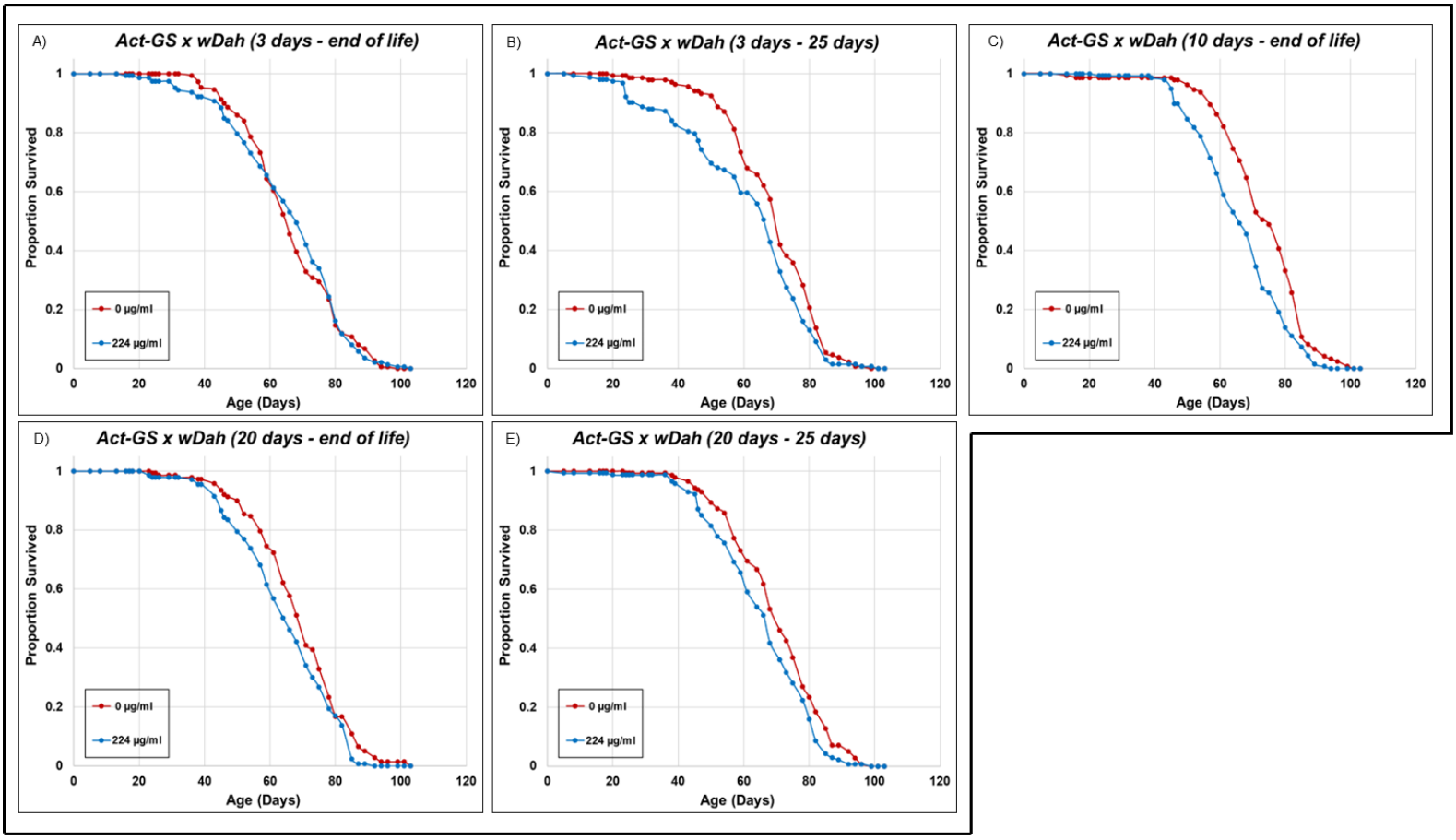


Figure 29 Kaplan-Meier curves show that survival (A/B/C/D/E) is significantly reduced when subjecting Act-GS x wDah to RU486 treatment during adult lifespan

8.4.2.2 Median lifespans and rate of ageing were dependent on age at and duration of overexpression

Most treatments have similar median ages and trends between control and RU486 treatments (table 12). Although most of the induced treatments reduced lifespan, they all had different patterns of survival over time. Apart from the early treatments (3 days - 25 days and 3 days - end of life), all RU486 treatments had a later age at onset (44 - 46 days). The early treatments had an earlier age at onset (22 – 24 days), indicating that early adulthood exposure to RU486 is detrimental to survival. However, despite the "3 days - end of life" treatment having the longest exposure to RU486, the "3 days - 25 days" treatment has a rapid decline, especially after 25 days, when exposure to RU486 would be at 0 µg/ml. Contrastingly, despite the long exposure, the "3 days - end of life" treatment has a short period (60 days – 80 days) where the RU486 treatment improves survival. However, due to lack of statistical significance, this could be a stochastic effect. The

survival analysis indicates that RU486 has age and duration dependent detrimental effects on fly survival, with the current experimental design.

Table 12 Median ages of survival for Act-GS x wDah when subjected to RU486 treatments at different ages for varying durations of adult lifespan

Time point	Dose of RU486	Median Age	95% CI (LCI – UCI)
3 days - 25 days	0 µg/ml	71	68 - 73
3 days - 25 days	224 µg/ml	68	64 - 71
3 days - end of life	0 µg/ml	66	64 - 68
3 days - end of life	224 µg/ml	68	64 - 73
10 days - end of life	0 µg/ml	75	71 - 78
10 days - end of life	224 µg/ml	66	64 - 71
20 days - 25 days	0 µg/ml	71	68 - 75
20 days - 25 days	224 µg/ml	68	64 - 68
20 days - end of life	0 µg/ml	71	66 - 71
20 days - end of life	224 µg/ml	66	61 - 71

8.4.3 Overexpression of *Adck*1 does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 18, 23, 32, 39 and 46 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to overexpression of *Adck1* gene.

8.4.3.1 Age at and duration of overexpression does not have a significant effect on climbing height

Although both "- end of life" treatments climb higher initially than their "- 25 days" counterparts (figure 30), it is not significantly different on any individual day ($p = 0.65$), or over time ($p = 0.59$).

8.4.3.2 Dose of RU486 does not have a significant effect on climbing height

All no-drug treatments climb higher than their respective RU486 treatments, but this is not statistically significant to affect mean height climbed on any of the individual days ($p = 0.06$), or

over time (p = 0.21). The treatments themselves also have no significant effect on the climbing height on any day (0.30) or over time (p = 0.78).

Neither the duration of overexpression of *Adck1* nor the dose of RU486 affects the motor function and coordination in flies within the scope of this experiment.

8.4.4 Act-GS x wDah has a significant effect in mean fly climbing height over time

The negative geotaxis assay was performed on days 18, 23, 32, 39 and 46 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in the absence of any transgene, by crossing the driver with the control strain, wDah. The flies were exposed to RU486 at the same age and duration as the Act-GS x UAS – *Adck*1 flies (figure 30).

8.4.4.1 Age at and duration of RU486 exposure does not have a significant effect on climbing height

Both "- 25 days" treatments climb higher or comparable to their "- end of life" counterparts and are not statistically different (p = 0.87). Over time, despite steeper declines in some treatments, they remain statistically non-significant (p = 0.54).

8.4.4.2 Dose of RU486 does not have a significant effect on climbing height

Most no-drug treatments climb higher than their respective RU486 treatments, but this difference is not statistically significant on individual days (p = 0.47). In almost all RU486 treatments, flies perform better than the uninduced controls at a later age. The exception to these observations is the "3 days – 25 days" treatment, where the RU486 treatment performs better early on, but the controls climb higher at later ages. This contributes to the lack of statistical significance of dose of RU486 on climbing height over time (p = 0.79).

However, the individual treatments themselves significantly affect mean height climbed over time (p = 0.03). The "20 - end of life" has the least decline in climbing height over time, with the older flies (39 days and 46 days) climbing higher than all their counterparts.

Although age at-, duration of- dose of RU486 do not affect mean fly climbing height over time, in the absence of a transgene, individual treatments could show stochastic effects. However, the parameters of the experiment do not affect the motor function and coordination in flies in the absence of a transgene.

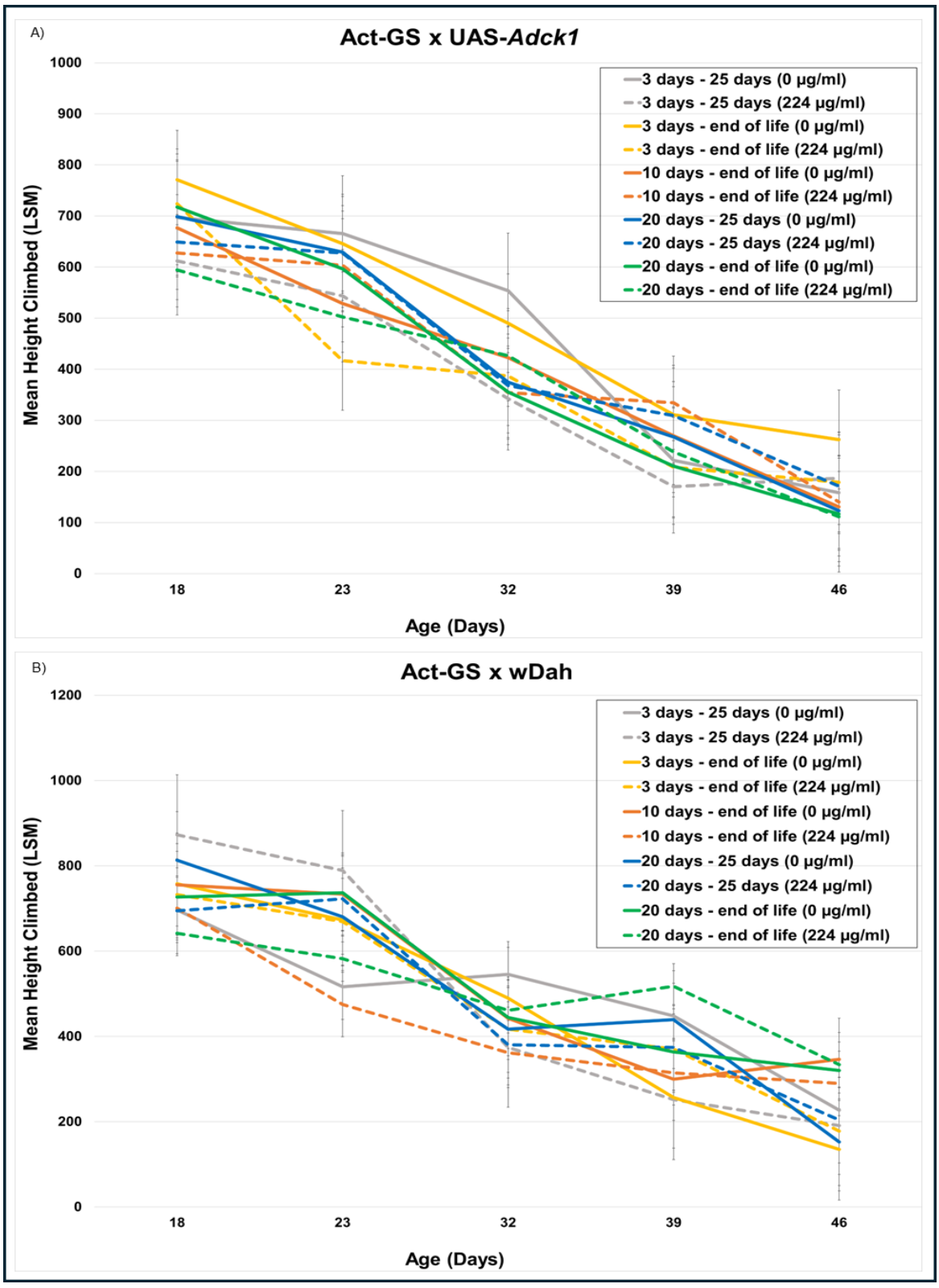


Figure 30 Induced and uninduced treatments of Act-GS x UAS-Adck1 (A) and Act-GS x wDah (B) treatments at different ages have no significant effect on mean climbing height (LSM units are in image pixels)

8.4.5 Expression Analysis via qPCR

All treatments in the experiment were tested for gene expression with qPCR assays. The EF1-g was used as a housekeeping gene, similar to experiment 1. However, inconsistent and uncharacteristically high Cq values for the housekeeping gene were recurring issues throughout multiple repeats of the qPCR assay. As flies are frozen at age 25, I had to replicate the lifespan setup until age 25 to obtain more RNA to continue the expression analysis. This was limited by fungal infection in flies soon after the lifespan experiment concluded. Decontaminating the stocks and the lab from fungus and fungal spores was challenging due to recurrent infections. However, the assays employing multiple housekeeping genes had inconsistent Cq values across the wells with transgene-specific primers, while the wells with housekeeping gene-specific primers had consistent Cq values, within the expected range.

8.5 Summary of Results

This chapter presents the findings from lifespan, negative geotaxis, and qPCR assays conducted on seven candidate genes in *Drosophila* to investigate their roles in longevity and neuromuscular health.

8.5.1 Lifespan Assays

Lifespan analyses revealed distinct effects of each gene on survival outcomes. None of the seven genes assayed extended lifespan compared to controls, with some detrimental to survival. The genes exhibited no statistically significant impact on lifespan, indicating that their expression does not influence overall survival under the conditions tested.

8.5.2 Negative Geotaxis Assays

Negative geotaxis assays were used to evaluate neuromuscular function, which is a proxy for health span. All genes demonstrated no significant effects on climbing ability i.e. there were no statistically significant alterations in neuromuscular performance.

8.5.3 qPCR Assays

qPCR analyses confirmed effective knockdown of *Gpdh1* gene in the transgenic lines, validating gene expression changes achieved through RNAi. This successful modulation of gene expression underpins the observed phenotypic changes in lifespan and geotaxis. However, for 6 of the 7 genes, inconsistent and uncharacteristically high Cq values for the housekeeping gene were recurring

issues throughout multiple repeats of the qPCR assay. Decontaminating flies suffering from fungal infection and time-constraints prevented repeats of qPCR assays.

Together, these results suggest that the 7 candidate genes tested in this chapter have limited or no impact under the study conditions. These findings provide insights into the genetic pathways influencing ageing and health span and identify potential targets for future functional studies.

9 Discussions

9.1 Overview

This chapter examined the role of candidate genes in influencing longevity and health in *Drosophila melanogaster* through survival and climbing assays. Gene expression was regulated using the GeneSwitch system, with qPCR measuring modulation of gene expression. The 7 candidate genes tested in this chapter have limited or no impact on fly survival or health under the study conditions.

9.1.1 Lifespan Assays

None of the seven genes assayed extended lifespan when their gene expression was altered compared to controls, with some detrimental to survival. The genes exhibited no statistically significant impact on lifespan, indicating that their expression does not influence overall survival under the conditions tested.

9.1.2 Negative Geotaxis Assays

Negative geotaxis assays were used to evaluate neuromuscular function, as a proxy for health span. All genes demonstrated no significant effects on climbing ability i.e. there were no statistically significant alterations in neuromuscular performance.

9.1.3 Quantification of expression

qPCR analyses confirmed effective knockdown of *Gpdh1* gene in the transgenic lines, validating gene expression changes achieved through RNAi. This successful modulation of gene expression underpins the observed phenotypic changes in lifespan and geotaxis. However, for 6 of the 7 genes, inconsistent and uncharacteristically high Cq values for the housekeeping gene recurred through multiple repeats of the qPCR assay. Decontaminating flies suffering from recurrent fungal infections, as well as time constraints, prevented successful repeats of qPCR assays.

9.2 The GeneSwitch expression system

The changes in gene expression with age raise the question of whether gene expression contributes to ageing or if ageing affects expression. A prior study in our laboratory (Chapter

1) explored ageing effects on gene expression. To determine whether gene expression modulation drives ageing, I manipulated gene expression during ageing to mimic RNASeq expression profiles and assessed the consequences. Altering gene expression during developmental stages impacts physiology and can result in differently assembled adults (Seroude, 2001), and since the aim of the project was to identify potential drug targets, I confined gene expression to adulthood using the GeneSwitch system.

9.2.1 Strain specificity

The GeneSwitch system provides robust spatiotemporal control of transgene expression. However, its effects can vary based on the stock, transgene, developmental stage, and tissue of expression. Mock UAS-RNAi transgenes can significantly reduce lifespan when fed RU486, and in the absence of a mock UAS-RNAi transgene, the presence of two copies of the driver further exacerbate lifespan reduction in some studies (Zappia et al., 2024). This was also seen in this study, where the driver-only controls had a reduced lifespan when fed RU486. The median ages of Act-GS x wDah and da-GS x wDah also varied between experiments. Differences between food ingredient batches, uncontrollable environmental factors like temperature, humidity, noise or air pressure can account for these differences, however, experimental conditions in the laboratory were strictly controlled for environmental factors. These within-strain lifespan variations under defined control conditions render the direct comparisons of absolute survival of treatment conditions imprecise and vulnerable to misinterpretation (Ziehm et al., 2013).

Sensitivity to RU486 is strain-specific, as strains differ in the time required to initiate a response and establish distinct expression patterns at varying inducer concentrations. Each GeneSwitch strain is unique, preventing the direct transposition of findings from one strain to another. These differences may arise from the influence of regulatory sequences near the GeneSwitch insertions (Poirier et al., 2008). An interaction between RU486 and certain genes is also possible (Scialo et al., 2016). To address these potential confounding effects, RU486 doses should be carefully optimised, and additional control groups, including those with mock UAS-RNAi transgenes, should be established. Solely comparing RU486-treated and untreated groups may be insufficient to account for these variables.

9.2.2 Dose of inducer (RU486)

The relationship between inducer concentration and transgene expression levels varies across strains and, in some cases, between sexes. The dosing method employed ensures the most consistent dose-response relationship across sexes. Factors such as RU486 concentration, age, and sex significantly influence the transgene expression (Poirier et al., 2008).

The highest dose in this study closely resembles the highest suggested dose (Ford et al., 2007), and in most cases, the dose of RU486 had no significant effect on fly survival or mean climbing height, by itself, in the absence of a transgene. This is consistent with observations in other studies, where mifepristone supplementation to fly food did not affect male fly survival (Landis et al., 2015; Yamada et al., 2017).

9.2.3 Effect of RU486 on food palatability

Laboratory diets significantly influence food palatability, with RU486 reducing food attractiveness due to its bitter taste, reducing food intake, especially in low-nutrient diets. Higher nutrient levels mitigate this aversion. Testing RU486 across varying concentrations and diets can establish the relationship between subtle feeding behaviour changes and lifespan (Yamada et al., 2017). RU486-specific effects can be estimated using heterozygous GeneSwitch- and UAS-only controls with matching genetic backgrounds, enabling accurate inferences about the induced transgene. In this study, the diet is high-nutrient, ruling out fly aversion to food. The driver-only (GeneSwitch- only) controls with white Dahomey backgrounds showed no effect of RU486 on survival or climbing height. Incorporating a UAS-only (transgene-only) control would have established the effect (or lack thereof) of RU486 on fly survival in this study.

9.2.4 Spatial induction of transgenes

Manipulating gene expression in specific tissues can significantly impact *Drosophila* lifespan, while similar manipulation in other tissues or the entire organism may yield no effect (Hwangbo et al., 2004). The effects of gene manipulation depend on both inducer concentration and the fly age, varying in a strain-specific manner. When transgene manipulation does not produce observable effects, it becomes challenging to discern whether the gene has no influence on

lifespan or is not expressed in the relevant cells. This limitation underscores the importance of careful tissue selection and optimisation of expression conditions in experimental designs.

In this study, I used only ubiquitously expressing drivers to mimic drug treatments (da-GS and Act-GS-255B), and none of the transgenes extended lifespan with either driver. For example, forkhead transcription factors of the FoxO subfamily regulate gene expression programs downstream of the insulin signaling network, and it is known that the action of *dFOXO* in the digestive system and neural/neuronal networks influences longevity. Forkhead (*fkh*), a gene from the same family (FoxA), could be tested by TIGS2 (digestive) or elaV-GS (pan-neural) drivers, alongside the ubiquitous Act-GS-255B and da-GS drivers. Although the selected genes exhibited ubiquitous expression profiles on FlyBase, regulating gene expression in tissues with high expression, using tissue-specific drivers, alongside ubiquitous expression could provide a clearer understanding of their roles.

9.2.5 Temporal induction of transgenes

The design of the GeneSwitch system results in transgene expression levels fluctuating over time. As flies age, their feeding rate diminishes, leading to a significant reduction in RU486 intake and consequently lowering transgene expression levels (Carey et al., 2006). Older tissues could also have lower transcriptional or translational capacity (Webster and Webster, 1979; Kim et al., 2023), which, coupled with reduced feeding, could naturally reduce gene induction in older flies, limiting the effectiveness of transgene expression.

Additionally, in some driver lines, the age at which RU486 treatment begins determines GeneSwitch activity, with later induction resulting in reduced expression levels (Giannakou et al., 2007). Early induction, when sustained for a long time, might make flies adapt or compensate for the transgene's activity. This is particularly harmful when coupled with leaky drivers, where higher baseline expression, combined with early induction, amplifies undesirable effects over time. Late induction might avoid any compensatory mechanisms, and disruption of any important early-life processes. However, due to a smaller window for transgene action, the effects might be weaker or statistically not significant. This can be observed in overexpression of *Adck1* gene (figure 28), where induction for a short time (between 20 and 25 days) increased survival of the induced treatment but was not statistically

significant. This could be because for leaky drivers like Act-GS, early induction might exacerbate baseline effects. Act-GS-255B driver, in the presence of RU486, reduces lifespan by up to 10%, in the absence of a transgene (Shen et al., 2009). Weak drivers like da-GS are better suited for early induction to ensure tight control.

9.2.6 Leakiness of the GeneSwitch system

Ensuring no gene expression occurs in the absence of an inducer is critical for ageing studies. Many GeneSwitch strains exhibit expression during development and/or adulthood, limiting their utility (Giannakou et al., 2004., Hwangbo et al., 2004). Such leakiness prevents the establishment of true non-expressing controls, reducing the number of genes that can be effectively identified or analysed using the system. When induced and leaky expression domains overlap, the system is applicable only under specific conditions: (1) when there is a linear relationship between gene expression levels and ageing effects (i.e., higher expression correlating with increased lifespan) or (2) when leaky expression remains below the threshold needed to produce an observable effect.

In this study, the survival curves of *MTF-1* are interesting despite the overexpression not having any significant effect on lifespan. Most of the Act-GS treatments (either with wDah responder alone or with transgenes) show no difference in the induced and uninduced treatments. However, the Act-GS x UAS-*MTF-1*-induced treatments have slightly lower mortality risk than the uninduced control, between 40 and 65 days. This could be due to *MTF-1* overexpression being potent enough to counteract the leaky expression of the system. This is also observed with the overexpression of *Adck1* gene (figure 28), where overexpression seems stronger than the leakiness of the Act-GS system and decreases the mortality risk of the induced treatments.

Strong drivers like *tub-GS* have high baseline expression levels, with about 95% knockdown in induced vs non-induced treatments, while weak drivers like da-GS have only 45% expression knockdown (Scialo et al., 2016). This is evident in the survival differences between the induced and uninduced treatments of all da-GS crosses (with wDah and transgenes), except da-GS x UAS-*dyw*-RNAi, where there is no difference between the induced and uninduced treatments. This could be because the da-GS driver does not induce gene knockdown as efficiently.

Leakiness during development poses a significant challenge, as ectopic expression can lead to lethality or alter adult responses, necessitating the exclusion of affected genes. This can be addressed by employing multiple drivers to test the same transgenes, comparing mRNA and protein expression profiles before and after inducing expression, between induced and uninduced treatments, and testing during developmental stages vs adulthood.

Alternate expression systems like the auxin-inducible gene expression system (AGES) can be employed to address the limitations of the GeneSwitch system. AGES depends on auxin for the degradation of ubquitously expressed GAL80, making it compatible with the existing GAL4 lines. It is soluble in water, non-lethal, induces uninhibited GAL4 expression and works in both larval and adult flies, making it an ideal alternative to the GeneSwitch system, for temporal control of gene expression (McClure et al., 2022).

9.3 RNAi-mediated knockdown

9.3.1 RNAi machinery

RNA interference (RNAi) silences gene expression through the post-transcriptional degradation of mRNA and is widely used for gene knockdown. As RNAi can be triggered by exogenous dsRNA, it has become indispensable for gene-function analysis (Hannon, 2002). However, RNAi induction can cause sequence-independent, detrimental effects in flies. Ubiquitous activation of RNAi machinery may negatively influence lifespan, masking beneficial effects of transgene knockdown. The ubiquitous expression of using Act-GS drivers in female flies shortened their lifespan by about 20 days and altered their response to dietary yeast concentration (Alic et al., 2012).

In RNAi screens, off-target effects (OTEs) complicate candidate gene identification. OTEs arise from the saturation of endogenous RNAi machinery by excessive siRNA or hybridisation of siRNA to unintended nucleic acids (Moffat et al., 2007). In this study, only the RNAi for *fkh* and *dyw* had off-targets, according to VDRC (Vienna *Drosophila* Resource Centre). However, as most of them have not been fully characterised or assayed, it is important to add controls to determine any potential off-target effects. To mitigate this, phenotypic effects should be confirmed using multiple non-overlapping siRNAs for each candidate gene, reducing the likelihood of false positives or negatives (Ma et al., 2006). In this study, comparing the KK

RNAi strains with the GD RNAi strains would give a clearer picture. While RNAi screens effectively identify potentially interesting genes, it is critical not to dismiss candidates prematurely based on limited study parameters.

9.3.2 Site of insertion of transgene

RNAi, while advantageous, presents challenges such as expression variability, incomplete knockdowns, and potential non-specificity of reagents. These issues can be addressed using multiple strains with varying transgene insertion types to compare effects across strains. Employing second-generation RNAi libraries with improved target specificity and genome coverage, alongside transgenic strains generated via site-specific integration, can further reduce variability and enhance knockdown reliability (Bischof et al., 2007; Boutros and Ahringer, 2008). Leakiness of constructs or position effect of insertion can interrupt or modify gene expression, leading to significant changes in median lifespan. This can be addressed by employing better controls to determine the effect of construct–genotype interactions on lifespan (Ziehm et al., 2013).

In this study, knockdown of *Gpdh1* had no significant impact on fly survival in either strain. However, increasing RU486 doses significantly reduced survival in *da-GS x KK/107796* treatments, while *da-GS x GD/14102* showed no significant differences between controls and test groups. This trend is reflected in median lifespans, with *da-GS x KK/107796* treatments exhibiting a 22% reduction compared to *da-GS x GD/14102*. Interestingly, *GD/14102* treatments were expected to show greater effects due to their higher knockdown efficiency (56% for the GD strain versus 47% for the KK strain) and random insertion sites. Based on the results from knocking down *Gpdh1*, it is reasonable to expect different results between the GD and KK strains of the other genes in this study too. As all the RNAi strains investigated (*fkh, dyw*, *CG2811* and *CG6005*) in this study are KK strains, comparing their survival pattern with those of the respective GD strains would aid in a better understanding of the role of transgene integration method on lifespan.

According to VDRC, (RNAi supplier), over 90% of the KK lines provide potent and gene-specific silencing when crossed to the ubiquitous driver *Act5C-GAL4*. However, the KK lines differ in the landing sites employed for transgene insertion. In 75% of the KK lines, the transgene is inserted in the 30B landing site, which does not have any effect on expression. But in the remaining 25% lines there are two landing sites – a 30B site and an unintentional 40D site, which causes non-

specific phenotypes and false positives/negatives with some Gal4 drivers (Green et al., 2014; Vissers et al., 2016). It is unknown if this effect is seen with GeneSwitch drivers, necessitating further investigation.

9.4 Overexpression using GeneSwitch system

The GeneSwitch system is promising for modulating lifespan through targeted gene overexpression. For instance, overexpression of *dGADD45* in the nervous system increased male lifespan by 77% (Plyusnina et al., 2011), while overexpression of wild-type *p53* reduced female lifespan by 16% but increased male lifespan by 6% (Waskar et al., 2009). These findings highlight the potential of Act-GS-255B to extend lifespan when paired with appropriate target genes. Conversely, overexpression of wild-type *Ras*, a human oncogene orthologue, reduced lifespan by 12% in both sexes, and overexpression of *wingless*, a human *Wnt* signalling protein orthologue, decreased lifespan by 42% in both males and females (Shen et al., 2009). Additionally, overexpression of *Sir2* in the fat body extended median lifespan by 10 days (Banerjee et al., 2012). These effects were often sex- or tissue-specific, underscoring the nuanced interactions between gene expression and lifespan modulation.

9.5 Correlation between negative geotaxis and lifespan

Negative geotaxis in *Drosophila* decreases with age due to reduced locomotion, as in humans (Laufer, 2005; Rhodenizer et al., 2008). Lifespan and locomotor senescence could be connected mechanistically in *Drosophila* (Gargano et al., 2005; Simon et al., 2006), however this is not an absolute connection, with locomotion remaining unaltered in long-lived flies and lifespan and health span could be served by common mechanisms in flies. The connection between life span and health span is not absolute, however, since at least some long-lived flies have unaltered locomotor senescence (Bhandari et al., 2007). This is similar to this study, where irrespective of the effect of transgene manipulation on lifespan, climbing behaviour remained unaffected. However, since negative geotaxis wasn't assayed in the previous study in our laboratory (which generated long-lived organisms by artificial selection), it would be premature to say that negative geotaxis and lifespan are mechanistically coupled in this study.

9.6 Quantitative expression analysis by qPCR

Selecting an appropriate reference gene is crucial, but no universal gene fits all conditions. In *Drosophila*, EF1gamma, an elongation factor, is stable across many conditions and highly expressed ubiquitously across tissue types, though it is less commonly used. Actin, Tubulin, and Rpl32 are popular (Ling and Salvaterra, 2011) but have limitations. Rpl32, a ribosomal protein, is unsuitable for stress assays, and Actin and Tubulin, both vital in determining cell shape and structure, are prone to variability and measurement errors due to varying expression profiles, requiring careful validation for each experiment (Ponton et al., 2011).

No gene is universally expressed in all cell types and conditions, so reference gene stability must be verified before each RT-qPCR experiment. Using a single reference gene can lead to inaccurate normalization, affecting statistical analysis. This can be seen in this study, where the qPCR assays of both experiments 2 and 3 had inconsistent and abnormally high Cq values for the reference gene, EF1g-A. High and inconsistent Cq values, like in this study, could be due to low expression of the EF1 reference gene under the experimental conditions. This could be addressed by employing multiple reference genes, and by determining their stability in this experiment, prior to the assay (Lu et al., 2018). However, low quality/quantity of RNA, including degradation or the presence of genomic contaminants, are also major contributors to high Cq values. Genomic DNA could be treated by DNase, however removing it is crucial for any downstream application. DNase step can be avoided if the primers are intron-spanning (Bustin, 2002). Since all the primers spanned an exon-exon boundary, they specifically targeted only mature mRNA and did not require DNase treatment. Although poor primer design could confound qPCR results, the primers were obtained from previously published studies and checked for any potential secondary structures. A major variation in qPCR results can result from the RNA isolation techniques. Reagent quality and shelf-life could have affected the quality and quantity of RNA obtained for these experiments. This could be addressed by alternative RNA isolation methods, like the Trizol method (Simms et al., 1993) and checking RNA purity and integrity on a bioanalyzer.

Alternative gene expression validation methods like western blotting or enzyme-linked immunosorbent assays (ELISA) can be used, to validate the qPCR results or as an alternative method of validation (Bischof et al, 2013).

9.7 Conclusion

This chapter examined the role of candidate genes in influencing longevity and health in *Drosophila melanogaster* through survival and climbing assays. The 7 candidate genes tested in this chapter had no statistically significant impact on fly survival or health under the study conditions. Although quantification of gene expression could have conclusively justified the effect of gene manipulation on lifespan and climbing behaviour, only 1 gene (*Gpdh1*) showed knockdown in qPCR, with the assay being inconclusive for all the other genes. Addressing the limitations of the study design and repeating the experiments, specifically the validation of gene expression could indicate the role of transgene regulation on *Drosophila* lifespan and health within the parameters of this experiment.

Chapter III – Cloning overexpresser strains and testing effects of gene expression on lifespan and behaviour

10 Introduction

Investigating the genetic basis of ageing and neuromuscular health in model organisms like *Drosophila melanogaster* has significantly advanced our understanding of lifespan regulation. In this chapter, I focus on elucidating the roles of specific *Drosophila* genes implicated in lifespan and health span by employing gene cloning and expression techniques. Using the pUASt-attB vector system, which integrates with the GeneSwitch expression system via φC31 integrase, precise and stable expression of target genes is achieved. This allows specific manipulation of gene activity, providing valuable insights into the functional impacts of these genes. This chapter focusses on the cloning of candidate genes and functional assessment of their effects on lifespan and negative geotaxis, following microinjection into fly embryos.

These experiments aim to uncover the genetic factors influencing ageing and locomotor functions, ultimately contributing to a deeper understanding of the molecular mechanisms underlying organismal health.

10.1 Gene function studies in *Drosophila melanogaster*

Ever since the generation of Dolly the sheep, cloning has been synonymous with the creation of a genetically identical individual from an existing individual. Cloning is based on the principle of embryonic nuclear transfer to create viable adult organisms. Nuclear transplantation is the basis of reproductive and therapeutic cloning. Therapeutic cloning is the generation of tailored tissues or organs for transplantation or medical research. Reproductive cloning is the generation of a live, viable organism possessing the complete genetic material of an existing animal. Plasmid cloning is commonly used to study gene structure, function and evolution, while contributing to genetic

and protein engineering. In *Drosophila*, clones are used to identify and/or study gene mutations and their effects on organismal physiology and epigenetic effects of gene regulation.

Cloning can be performed in vitro or in vivo, with techniques varying greatly depending on the experimental objectives. In vitro cloning involves the manipulation and transformation of either prokaryotic or eukaryotic DNA fragments into bacteria cells.

One of the earliest methods of cloning involved the usage of restriction enzymes. In this method, the donor plasmid (containing the gene of interest) and the recipient plasmid are digested with a pair of restriction endonucleases. The digests are joined together by ligase, and the ligated product is transformed into bacteria, confirming the presence and viability of the recombinant plasmid. Cloning by restriction endonucleases is widely used for its relative ease, cheap costs and lack of expertise required.

Biologically functional DNA fragments were first generated by cloning EcoRI plasmid digests *in vitro* by transforming *E. coli* (Cohen et al 1973). Recombinant plasmids containing prokaryotic and eukaryotic DNA undergo stable replication in *E. coli*, if both have cohesive ends (when digested by a restriction endonuclease) and the insertion site does not interfere with the expression of genes essential for its selection and replication (Morrow et al., 1974).

Despite its relatively easy technique, endonuclease-based cloning has its disadvantages. In addition to being time-consuming and labour intensive, restriction enzymes must be compatible with each other, must not have any restriction sites within the gene of interest, and must produce complementary, cohesive ends in both the donor and recipient plasmids. They can also leave sequence "scars" in the final products as they require the presence of specific sequences for identification and digestion (Watson and García-Nafría, 2019).

Some of the most popular methods currently are "homology-based" cloning, where homologous sequences are introduced, usually by PCR, at the terminus of the DNA fragments. The fragments are digested with enzymes that recognize the homologous sequences, with the fragments assembled by enzymatic action, prior to transformation into E. coli for plasmid propagation. Since the fragment assembly requires ligase, it is also called ligation-dependent cloning.

Most homology-based methods are sequence-independent, directional and scar-free, increasing flexibility on construct design.

10.2 Cloning methods

Selecting an appropriate cloning method depends on the purpose of cloning, vector type, and insert size. Directional cloning is preferred for applications requiring protein expression testing. DNA polymerases generate different fragment ends (sticky or blunt), which must match the vector's compatibility. Insert size also influences vector selection, with larger fragments often requiring cosmid or phage vectors. Additionally, the ability to screen for positive clones is advantageous (Guo and Bi, 2002).

PCR fragment cloning can be achieved using one of three common methods: ligation-dependent cloning or ligation-independent cloning, with both having commercial cloning kits. Among these, ligation-dependent cloning is the most widely used, further categorized into blunt-end cloning, sticky-end cloning, and T-A cloning.

10.2.1 Ligation-dependent cloning

10.2.1.1 Blunt-end cloning

Blunt-end cloning uses thermostable polymerases with proofreading activity to generate blunt-end PCR products. These products can be ligated to blunt-cut vectors but in random orientations, preventing directional cloning (Lohff and Cease, 1992). When polymerases like *Taq* are used, which produce 3′ overhangs, blunt-end cloning becomes impractical unless the products are treated with Klenow fragments to create blunt ends. This treatment improves ligation and cloning efficiency. Additionally, dephosphorylating vectors can prevent self-ligation. Although less efficient than sticky-end cloning, blunt-end cloning is straightforward, cost-effective, and particularly useful for site-directed mutagenesis. It does not require restriction sequences in PCR primers, offering advantages in certain applications.

10.2.1.2 Sticky-end cloning

Sticky-end cloning involves incorporating restriction sites into the 5′ ends of PCR primers, which are subsequently included in the amplified PCR products (Scharf et al., 1986). These PCR products are digested with restriction enzymes to produce sticky ends, which can be efficiently ligated to vectors cut with the same enzymes. Using different restriction sites on the primer pair facilitates directional cloning, significantly improving the method's efficiency.

While sticky-end cloning is advantageous for directional insertion, design personalisation and flexibility, it has limitations. Some restriction enzymes exhibit poor cleavage efficiency near the

5′ ends of PCR products, leading to unstable binding (Jung et al., 1990). This issue can be mitigated by adding extra nucleotides upstream of the restriction site, although excessive additions may reduce binding efficiency. If the insert contains internal restriction sites matching the enzymes used, it can complicate cloning, particularly when the insert sequence is unknown, as this may lead to unintended cuts and incomplete or incorrect constructs.

10.2.1.3 T-A cloning

T-A cloning uses Taq polymerase, a thermostable enzyme with terminal transferase activity that adds a deoxyadenosine (dA) to the 3′ ends of PCR products, creating single 3′ dA overhangs. These are directly ligated into T-vectors, which have complementary 3′ dT overhangs, facilitating a simple form of sticky-end cloning with single base overhangs. T-vectors are typically prepared by digesting plasmids with restriction enzymes like XcmI or by using Taq polymerase in the presence of dTTP (deoxythymidine triphosphate) to produce 3′ dT overhangs (Marchuk et al., 1991).

T-A cloning is straightforward, reliable, and widely applicable, particularly for cloning PCR products, RAPD (random amplified polymorphic DNA), AFLP (amplified fragment length polymorphism), and marker development. This versatility makes it popular for DNA fragment manipulation. While this method generally doesn't require post-PCR processing, purifying PCR products removes primer dimers that might compete for T-vector ligation.

However, its limitations include nondirectional cloning, requiring specialized T-vectors, and inconsistent efficiencies in Taq polymerase-mediated 3′ dA addition. Occasionally, other nucleotides (dG, dC, or dT) are added, influenced by the base composition at the 3′ ends of DNA fragments (Hu, 1993). Additionally, the 3′ dA overhangs on PCR products and the 3′ dT overhangs on T-vectors can degrade during storage, particularly at room temperature, potentially reducing cloning efficiency.

10.2.2 Ligation-independent cloning

Conventional cloning involves in vitro ligation of DNA fragments and vectors using DNA ligase to form phosphodiester bonds. In contrast, ligation-independent cloning (LIC) eliminates the need for ligase. LIC produces open circular recombinant DNA molecules with nicks, which can efficiently transform bacterial competent cells.

One in vivo cloning (IVC) method relies on homologous recombination between PCR products and linearized vector, within *E. coli* strains, though its applicability is limited by host strain compatibility (Oliner et al., 1993). Some LIC methods create sticky ends by using alternative DNA enzymes, with primers containing extended sequences, and is called enzymatic modification-mediated LIC. PCR-induced LIC directly fuses PCR products and plasmids in a PCR reaction without enzymatic modification.

10.2.2.1 Enzymatic modification-mediated ligation-independent cloning

In enzymatic modification-mediated cloning, specific sequences are added to the 5′ ends of PCR primers, enabling post-PCR treatments with enzymes like T4 DNA polymerase, exonuclease III, or uracil DNA glycosylase (UDG) to generate single-stranded sticky ends (Aslanidis et al., 1990; Hsiao, 1993; Smith et al., 1993). Directional cloning is achieved by designing primers with different sequences. These methods are efficient but require long primer sequences and post-PCR enzymatic treatments.

10.2.2.2 PCR-induced ligation-independent cloning

PCR techniques are highly effective for joining DNA fragments and vectors. In PCR-induced ligation-independent cloning (LIC), PCR is used to amplify both the insert and the vector. The amplified products are mixed, denatured, and annealed to generate recombinant DNA (Jones et al., 1990). Another approach involves primers with 5′-end sequences complementary to a linearized plasmid's ends, enabling a second PCR to produce nicked cyclic recombinant DNA (Shuldiner et al., 1990). These methods are efficient and rapid but require multiple primer pairs and PCR steps, adding complexity. They are particularly useful for site-directed mutagenesis and in vitro recombination.

LIC methods depend on primers with extended sequences to combine PCR products with vectors or generate sticky ends. However, the specialized primer design makes them unsuitable for cloning fragments derived from techniques like RAPD or AFLP.

10.3 Generating Drosophila melanogaster clones

Organismal cloning involves creating a genetically identical individual via nuclear transfer. It has been achieved in various species and is used for therapeutic cloning and producing transgenic animals. However, limited understanding of nuclear reprogramming often leads to developmental defects. Using embryonic nuclear transfer, viable *Drosophila* clones can identify gene mutations

or factors that promote complete nuclear reprogramming (Haigh et al., 2005). As nuclear reprogramming relies on conserved epigenetic processes like histone modification, this method offers a cost-effective approach to studying epigenetic effects in nuclear transplants.

A key goal in genomics is to identify and characterize genes involved in specific pathways or biological processes. Techniques like chemical mutagenesis screens and P-element-mediated germ-line transformation, particularly when combined with gene expression systems or used for insertional mutagenesis, are highly effective for identifying and studying relevant genes.

Genomic manipulation in *Drosophila* advanced markedly in the 1980s, from using transposable element vectors to rescue mutants, to developing enhancer traps that mimic bacterial operon fusions, eliminating the need for specific mutant phenotypes. The era also saw the rise of insertional mutagenesis with transposable elements and site-specific recombination techniques, broadening the scope of genetic research (Rubin and Spradling, 1982; Kane and Gehring, 1987; Cooley et al., 1988; Golic and Lindquist, 1989).

10.3.1 Transposon-mediated mutagenesis

The ease of genetic manipulation in *Drosophila* facilitates rapid analysis of mutant phenotypes. Transposons like P-elements and *piggyBacs* are mobilized DNA elements commonly used for insertional mutagenesis, gene tagging, gene disruption, chromosome engineering, and inducible gene expression in *Drosophila* (Rubin and Spradling, 1982; Ryder and Russel, 2003). With a fully annotated genome, precise transposon insertion sites can be identified, enabling targeted gene deletions for single-gene mutations.

P-elements are preferable since because over 60% of their insertions occur within 400 bp of transcription start sites, they can efficiently hop out of the genome, produce high-frequency precise and imprecise excisions, and can tag or mutate more than 80% of *D. melanogaster* genes (Bellen et al., 2004). However, P-elements display insertional preferences, with approximately one-third of insertions occurring outside hot or medium-hot spots (genes attracting multiple P-element insertions). To enhance gene coverage, *piggyBacs* are used due to their broader insertion profile, though their precise excision limits their utility for creating additional alleles of tagged genes (Thibault et al., 2004).

10.3.2 φC31-mediated transgenesis

While *P*-element mutagenesis is valuable for functional studies, the insertion site influences gene expression (Levis et al., 1985), highlighting the need for more site-specific genetic recombination methods. This led to the development of the Cre/*lox* and FLP/FRT systems. In these systems, *P*-elements insert two transgenes flanked by *loxP* and FRT sequences. Cre expression removes one transgene, while FLP removes the other, leaving the remaining transgene in the same chromosomal position. However, this setup allows analysis of only two transgenes, requiring new insertions for each transgene set at new locations (Siegal and Hartl, 1996).

In contrast, φC31-mediated transgenesis provides stable, site-specific integration by enabling recombination between an attachment-B site (*attB*) from *Streptomyces lividans* and an attachment-P site (*attP*) from φC31 bacteriophage, mediated by φC31 site-specific integrase (Thorpe et al., 1998). This recombination incorporates the phage genome and forms two hybrid sites, *attL* and *attR*, which integrase cannot target, making the integration irreversible.

In *Drosophila*, *att* sites are flanked by dominant selectable markers, such as eye colors, to trace integration sites. φC31 transgenesis is five times more efficient than transposon-based integration (Groth et a., 2004). Since plasmids integrate into a predetermined location (*attP*), effects of non-specific insertion are reduced, allowing for more consistent mutant comparisons and *in vivo* analysis of regulatory elements (Venken and Bellen, 2005).

10.3.3 CRISPR/CAS9 mediated gene regulation

CRISPRs (clustered regularly interspaced short palindromic repeats), discovered in *E. coli*, are DNA fragments derived from bacteriophages that provide immunity to bacteria and archaea through sequence-specific DNA cleavage with CRISPR-associated (Cas) proteins (Ishino et al., 1987; Bolotin et al., 2005). The CRISPR-Cas system has multiple classes based on interference mechanisms, with Class 1 (types I, III, IV) employing multi-Cas protein complexes, and Class 2 (types II, V, VI) using a single Cas protein for interference (Makarova et al., 2015).

The CRISPR-Cas9 system, commonly applied for genomic manipulation in *Drosophila*, is part of the Class 2 system, where the Cas9 protein controls interference and immunity. Cas9 activity is guided by two RNA molecules: CRISPR RNA (crRNA) and trans-activating crRNA (tracrRNA), complementary to each other (Deltcheva et al., 2011). crRNA contains sequences complementary to target DNA and recruits Cas9 to induce a double-strand DNA break upon recognition (Jinek et

al., 2012). In *Drosophila*, CRISPR generates heritable alleles by microinjecting embryos with the crRNA-tracrRNA complex, referred to as single-guide RNA (sgRNA) (Ren et al., 2013).

The CRISPR-Cas9 system has successfully induced double-strand breaks across various species, including human cells (Jinek et al., 2013), mice (Shen et al., 2013), and flies (Gratz et al., 2013). This versatility allows for large-scale functional assays like genome-wide knockout screens, studies on gene function, and therapeutic applications for genetic disorders and infectious diseases. Its design simplicity and efficiency make it highly attractive for genomic manipulation (Jinek et al., 2012; Hillary and Caesar, 2021).

However, CRISPR-Cas9 is prone to off-target mutations, leading to incomplete gene suppression and potential false positives. Although efficient, consistent results often require multiple sgRNAs. Furthermore, the difficulty in maintaining fly stocks without balancers can make it less desirable than other gene knockdown methods (Xu et al., 2015).

10.4 Conclusion and Chapter Objective

The chapter's objectives are to clone selected genes into the pUASt-attB vector, express these genes in *Drosophila* using the UAS/GAL4 system, evaluate the impact of gene expression on lifespan and negative geotaxis, and confirm gene expression levels through qPCR to validate knockdown or overexpression efficiency.

11 Methods

11.1 Overview

From the list of candidate genes, six upregulated genes unavailable as GeneSwitch overexpresser strains were cloned. Two of these, *Adk* and *Bdg*, were microinjected into *Drosophila* embryos and tested for their effects on lifespan and negative geotaxis upon overexpression to replicate their RNASeq expression profile.

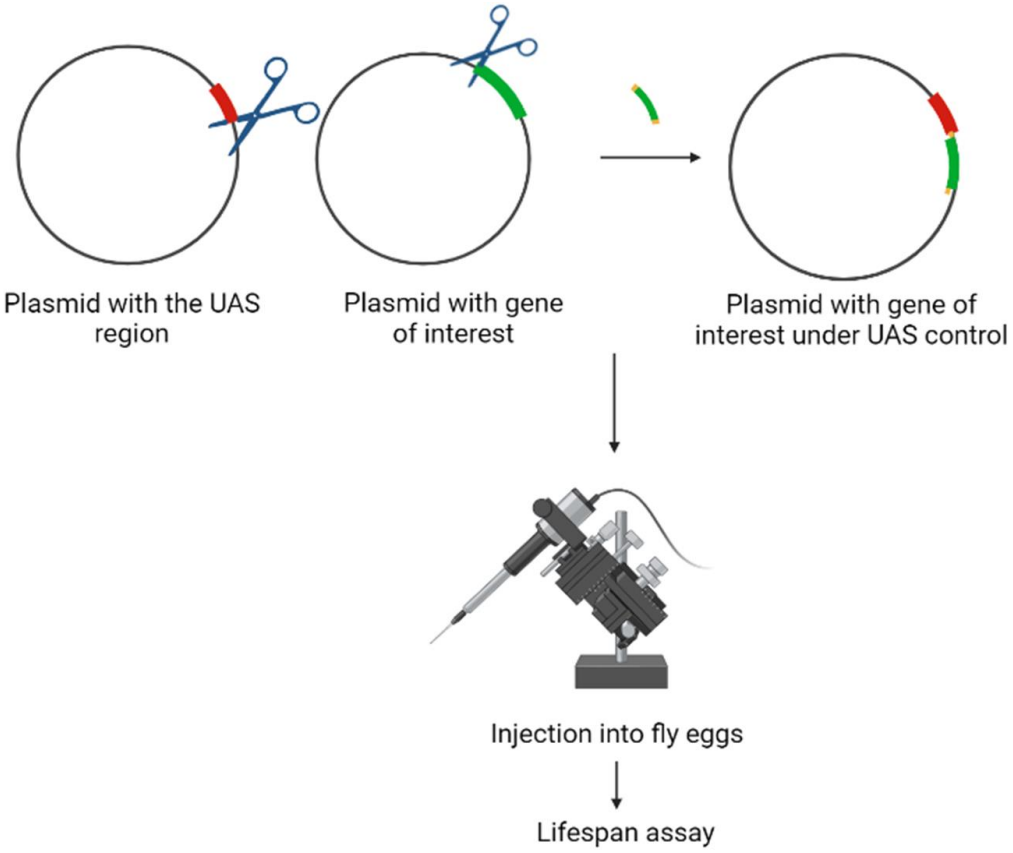


Figure 31 A generic overview of the cloning methodology followed in the current chapter, with details mentioned in-text. Lifespan and negative geotaxis assays conducted as represented diagrammatically in chapter 2 and detailed in-text in the current chapter

11.2 Processing clones from Whatman© FTA© Discs

The genes of interest (table 13) and the pUAST-attB vector (figure 32) were obtained as cDNA plasmid clones on Whatman© FTA© Discs (*Drosophila* Genomics Resource Centre, Indiana

University) and were processed based on the protocol supplied by *Drosophila* Genomics Resource Centre.

Table 13 Drosophila melanogaster genes were obtained as cDNA clones to generate overexpresser strains based on their respective RNASeq profiles

Annotation Number	**Fly Base Number**	**Library/ Construct ID**	**Name**	**Gene Abbreviation**
CG11255	FBgn0036337	LP07155	Adenosine Kinase 2	*Adk2*
CG8291	FBgn0034049	SD06851	Bedraggled	*Bdg*
CG7207	FBgn0027569	GH07688	Ceramide transfer protein	*Cert*
CG5560	FBgn0030607	LD21294	Doppelganger von brummer	*Dob*
CG1319	FBgn0035529	RE08888	Ferredoxin 2	*Fdx2*
CG31991	FBgn0004797	LD33852	Midway	*Mdy*

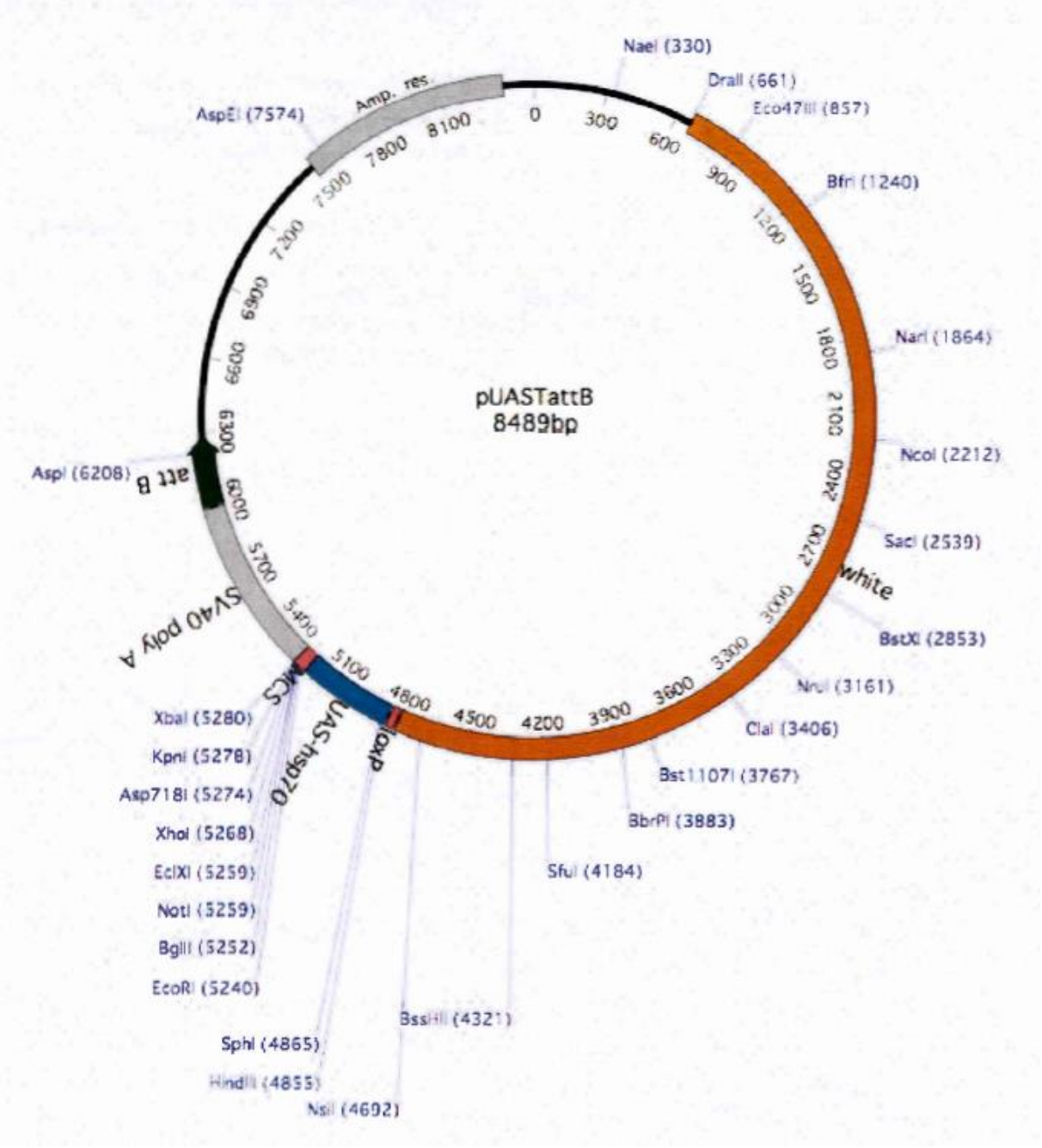


Figure 32 pUAST-attb plasmid (DGRC Stock 1419), donated by Bischof and Basler, has a multiple cloning site (MCS), with a loxP site and ampicillin as a resistance marker (Image courtesy – Bischof et al., 2007)

11.3 Plasmid miniprep

The extracted plasmid clones were miniprepped using Sigma Aldrich GenElute™ Plasmid MiniPrep Kit, following the supplier's protocol.

11.4 Insertion of restriction sites through PCR

Extracted plasmids were cloned using the ligation-based cloning protocol detailed in Thomas et al., 2012. To insert restriction sites and isolate the genes of interest in large quantities, a polymerase chain reaction was set up (table 14).

Table 14 PCR program for insertion of restriction sites into plasmid clones

Step	**Temperature**	**Time**
Heat Lid	98°C	-
Begin cycle		
Initial Denaturation	98°C	30 seconds
Denaturation	98°C	10 seconds
Annealing	55°C	1 minute
Extension	72°C	4 minutes
Repeat cycle 30 times		
Final Extension	72°C	10 minutes
Hold	4°C	-

11.4.1 Agarose Gel Electrophoresis

To evaluate the efficiency and accuracy of PCR, the samples are analysed through agarose gel electrophoresis. A 1% gel was prepared by dissolving 0.4 g agarose in 40 ml of 1X TBE Buffer and heating it in the microwave. The gel is allowed to cool before staining with 4 µl SYBR Gold gel stain. The gel with an appropriate comb is set in the tank, and once solidified, is covered with 1X TBE Buffer. Samples are mixed with loading dye, loaded in the wells, and run for 60 minutes at 90 volts. The gel is imaged with iBright.

11.5 Restriction Digestion

The gene of interest is isolated by restricting with appropriate restriction enzymes (table 15, 16). To generate complementary insert sites, the recipient plasmid vector is also restricted with the same enzymes.

Table 15 Different restriction enzymes were used for each gene, based on the insertion sites in each clone

Clone	Restriction Enzyme 1	Restriction Enzyme 2
Adk	XhoI	BgIII
Bdg		
Cert	EcoRI	XBaI
Dob		
Fdx		
Mdy		

Table 16 Restriction digest for the clones was incubated at 37°C for 2 hours

Component	Volume (1X)
MilliQ water	8 µl
CutSmart Buffer	2 µl
Template DNA (from above PCR reaction)	8 µl
Restriction enzyme 1	1 µl
Restriction enzyme 2	1 µl
Total	20 µl

11.5.1 Agarose Gel Electrophoresis

To evaluate the efficiency and accuracy of the digestion, samples are analysed through agarose gel electrophoresis.

11.6 Ligation

On successful restriction, the digests with complementary ends are ligated overnight, to generate a functional plasmid with the genes of interest downstream to the UAS region (table 17).

Table 17 Ligation reaction set up for all 6 clones

Component	**Volume (1X)**
Restriction digest of clone	5 µl
Restriction digest of vector (pUASt)	3 µl
Ligase Buffer	1 µl
Ligase	1 µl
Total	10 µl

11.6.1 Confirmation of ligation through restriction digestion and Agarose Gel Electrophoresis

To confirm ligation, ligated samples are digested with restriction enzymes; a 10 µl reaction is set up, instead of 20 µl. Samples are analysed through agarose gel electrophoresis.

11.7 Transformation

Following successful ligation, each vector-clone is transformed into One Shot™ Mach1™ T1 Phage-Resistant Chemically Competent *E. coli* cells, to validate the cells' ability to take up the ligated vector, while testing toxicity of the plasmid.

11.7.1 Colony PCR

To isolate colonies that contain the ligated plasmid, 0.1 µl of relevant antibiotic was added to 100 µl of LB media. A single colony from the transformed plate was mixed in the tube and incubated at 37°C for 2 hours. Samples are processed as above.

11.8 Plasmid Miniprep

Upon confirmation of successful ligation with colony PCR, plasmids were miniprepped using Sigma Aldrich GenElute™ Plasmid MiniPrep Kit.

11.9 Whole plasmid sequencing

To confirm the presence of the complete and intact gene within the plasmid, whole plasmid sequencing was performed by Macrogen Europe (Amsterdam). Qualitative and quantitative analysis of the samples were performed with a Nanodrop Spectrophotometer.

11.10 Microinjection into Drosophila melanogaster

Sequence-confirmed genes were sent to Cambridge Fly Institute, UK for microinjection into flies. Due to time constraints, only 2 genes – *Adk* and *Bdg* – were microinjected into *Drosophila*. The genes were inserted into fly strain w1118, Chromosome 3, with Sb (stubby) as the observable marker. These were standard strains used by the Cambridge Fly Institute, and were not selected specifically by me. Strain validation prior to experimental set up was based on phenotypic markers, with transgenic flies with stubby body indicating flies without the insertion of the UAS-transgene into the genome. Since none of the flies exhibited stubby bodies, insertion of UAS-transgene was concluded to be successful, and downstream experiments were set up.

11.11 Backcrossing

Due to time and logistical constraints, transgenic strains received from Cambridge were not backcrossed (unlike transgenic strains in Chapter 2) and were directly crossed with the driver flies for the experimental setup.

11.12 Fly husbandry and maintenance

All flies were maintained on standard sugar-yeast food, and cultures incubated at 25°C, 70% relative humidity and 12-12 light-dark cycle (chapter 2).

11.13 Embryo collection

Embryos of the driver (Act-GS) and responder (UAS-*Adk* and UAS-*Bdg*) strains were collected as detailed in chapter 2.

11.14 Induction of the GeneSwitch System

For gene expression through GeneSwitch, 70 µl of mifepristone (RU486 dissolved in 100% ethanol) was added to the food vials in varying concentrations, and left to dry for a day, before transferring the flies into the vials. In the vials with 0 µg/ml concentration of the drug, 100% ethanol (diluent) was added, instead of the drug. This procedure was repeated for the entire length of the experimental set up.

11.15 Lifespan Setup

Lifespan set up based on the protocol detailed in chapter 2. Both genes, UAS-*Adk* and UAS-*Bdg*, were overexpressed using the *Act-GS-255B* driver, to test their role in lifespan and mobility. Based on previous experiments, fly survival was not significantly different between gene expression throughout life and gene expression until 25 days (chapter 2 experiment 3 reference). I wanted to test if age at gene expression induction affected fly lifespan and climbing ability. I also tested different levels of expression with different doses of RU486 (0 µg/ml, 56 µg/ml, 112 µg/ml and 224 µg/ml). Expression was induced at 3 days, 8 days and 18 days, until death. Time points were selected based on fly adult developmental stages (early adulthood at 3 days, young adult at 8 days and early middle-age at 18 days). There were 2 genes, 3 time points, and 3 drug doses (RU486), and 1 no-drug control (0 µg/ml) resulting in 10 treatments per gene, with 8 vials of 20 flies per drug treatment and 10 vials of 20 flies for the controls.

11.16 Fly Tipping

Every two days, dead and censored flies were recorded, before transferring live flies to fresh food vials under light CO_2 anaesthesia.

11.17 Negative Geotaxis

The negative geotaxis assay was performed to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to gene manipulation. This assay assesses the flies' natural tendency to move upward against gravity, which is a common behavioural response. The experiment was carried out as elucidated in chapter 2.

Negative geotaxis assay for Act-GS-255B x UAS-*Adk* and Act-GS-255B x UAS-*Bdg* was performed for 5 vials per treatment (20 flies per vial) with eight readings (ages 6, 13, 20, 27, 34, 41, 48, and 55) during their lifespan.

11.18 Collecting flies for qPCR assays

To determine gene expression levels, RNA was extracted from 25-day-old flies and quantified using qPCR. Three random vials per treatment were selected and four male flies per vial were aspirated into Eppendorf tubes, snap-frozen in liquid nitrogen to preserve RNA integrity, and stored at -80°C until further processing.

11.19 RNA Extraction and cDNA synthesis

RNA was isolated from each tissue sample by Trizol extraction method. 1ml Trizol is added to Ribolyser tubes on ice. Frozen flies are transferred to Ribolyser tubes on ice and homogenised in Ribolyser at 6.5 rps for 20 seconds. After incubating tubes at room temperature for 5 minutes, 200 µl chloroform is added and tubes are shaken vigorously for 15 seconds. Tubes are incubated at room temperature for 3 minutes and centrifuged at 12,000 rpm for 15 minutes at 4°C. The aqueous layer is transferred to a new tube and 500 µl of isopropyl alcohol and 50 µl of 3M sodium acetate are added. The tubes are incubated at –80°C for 2 hours and centrifuged at 12,000 rpm for 15 minutes at 4°C. The supernatant is discarded, and the pellet is washed in 700 µl cold 70% Ethanol. The tubes are centrifuged at 10,000 rpm for 10 minutes at 4°C. The supernatant is discarded, and the above ethanol-wash is repeated twice. The tubes are air dried for 1 minute, resuspended in 20 µl DEPC water, and stored at -80°C until further processing.

11.20 Quantitative Analysis by qPCR

Primers for the qPCR reaction were designed using Primer3Plus software, ensuring a GC content of 40–60% and melting temperatures between 50–60°C. For the assay, samples were tested for both target and housekeeping genes, with housekeeping genes acting as internal controls to validate RNA expression and normalize data. Samples were loaded in triplicate onto a 96-well PCR plate, with water-only wells as negative controls. Actin and Rpl32 were used as housekeeping genes for both genes - *Adk* and *Bdg*, with 3 biological replicates and 3 technical replicates per gene.

11.21 Data Analysis

11.21.1 Lifespan Data Analysis

Lifespan data were analyzed using survival analysis techniques within JMP v8 (SAS Institute). Kaplan-Meier survival curves were generated for each experimental group to visualize survival differences over time. Statistical comparisons between groups were made using the log-rank test to identify significant differences in survival distributions. Median and maximum lifespans were also calculated for each group, providing additional measures for comparative analysis. Statistical significance was set at $p < 0.05$.

11.21.2 Negative Geotaxis Data Analysis

Negative geotaxis data were analyzed with ANOVA to compare mean performance across groups, followed by least square means calculations to assess differences between specific groups. Statistical significance was determined at $p < 0.05$.

11.21.3 qPCR Data Analysis

Gene expression was analyzed using REST 2009 software, with housekeeping genes serving as the reference for transgene expression quantification. Triplicate means were calculated for each sample, and an overall mean was determined across samples. The analysis followed the delta-delta-Ct method (relative expression method), assuming a reaction efficiency of 1. This method enabled relative quantification of gene expression by comparing Ct values between the transgene and the reference gene.

12 Results

12.1 Overview

From the list of candidate genes, six upregulated genes that were not commercially available as overexpresser GeneSwitch strains were cloned. Two genes, *Adk* and *Bdg*, were microinjected into *Drosophila* embryos and tested for effect on lifespan and negative geotaxis. The two genes had no significant effect on lifespan or climbing behaviour.

12.2 Cloning cDNA clones

Full length of the cDNA clones of *Adk*, *Bdg*, *Cert*, *Dob*, *Fdx2*, and *Mdy* were amplified with PCR with sequence specific primers (figures 33 and 34). The amplified fragments were further digested with compatible restriction enzymes and directionally cloned into the expression vector pUASt.

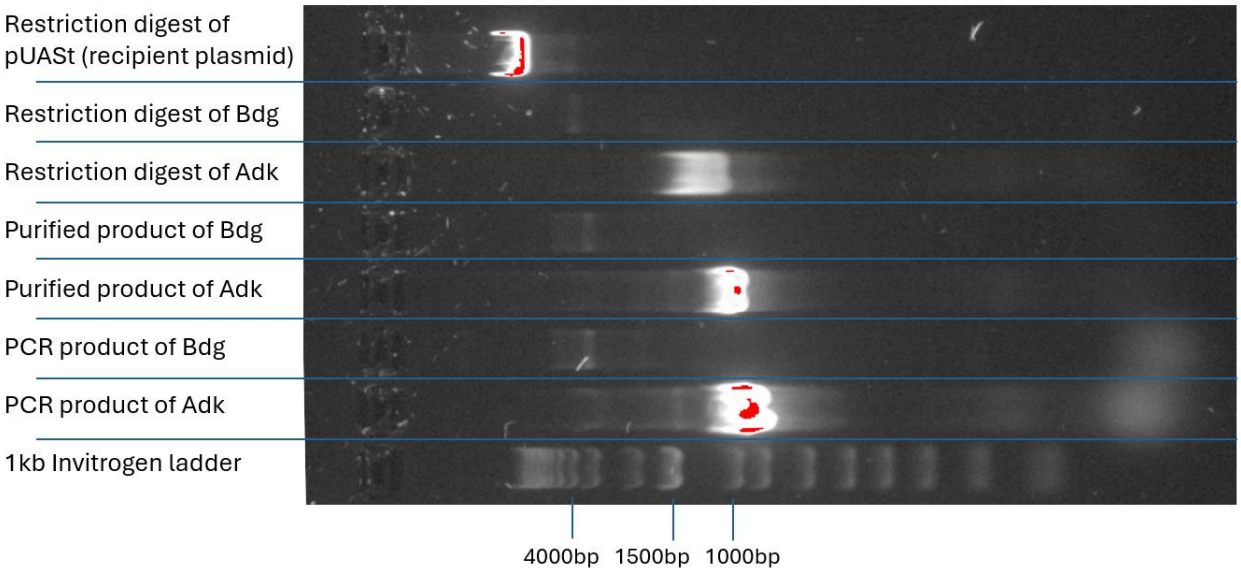


Figure 33 PCR products and restriction digests of Adk and Bdg on a 1% agarose gel. Expected size for Adk is 1356 bp and Bdg is 4937 bp

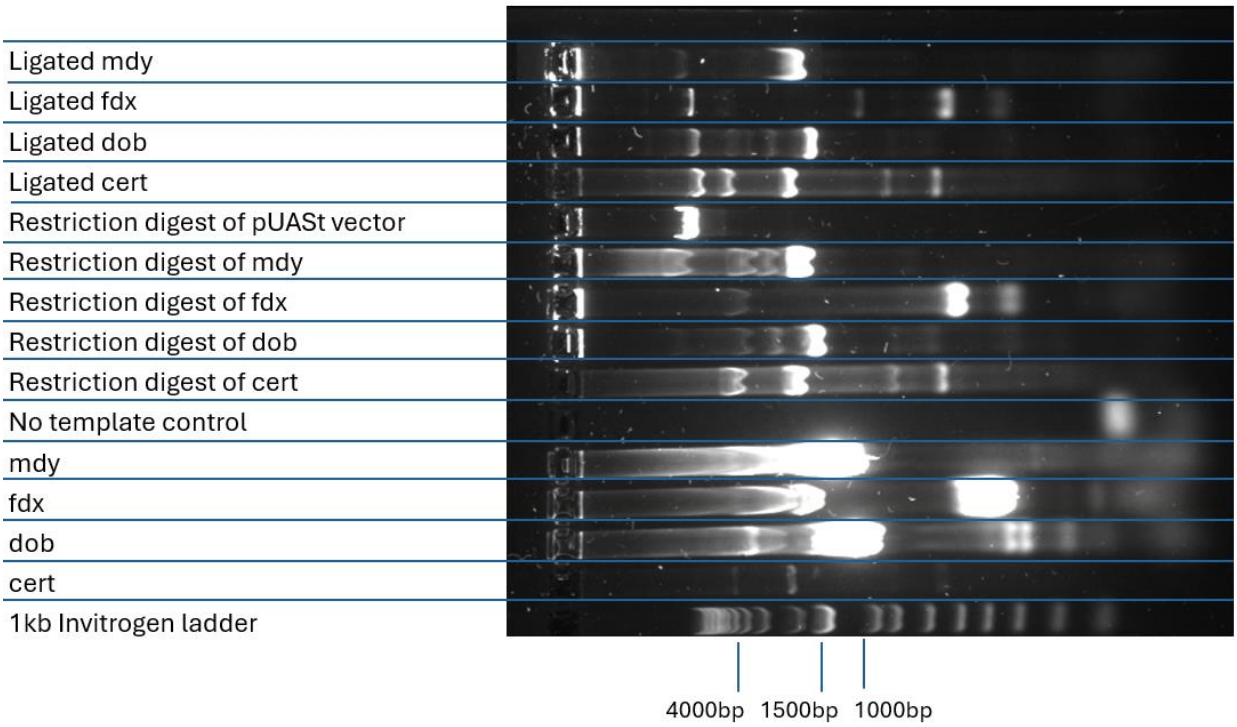


Figure 34 PCR products and restriction digests of Cert, Dob, Fdx2, and Mdy on a 1% agarose gel. Expected size for Cert is 2566 bp, Dob is 1845 bp, Fdx2 is 834 bp, and Mdy is 2074 bp

12.3 Microinjection

The successful cloning of *Adk* and *Bdg* was verified by sequencing (figure 345) and microinjected into *Drosophila* embryos at Cambridge Fly Institute, UK.

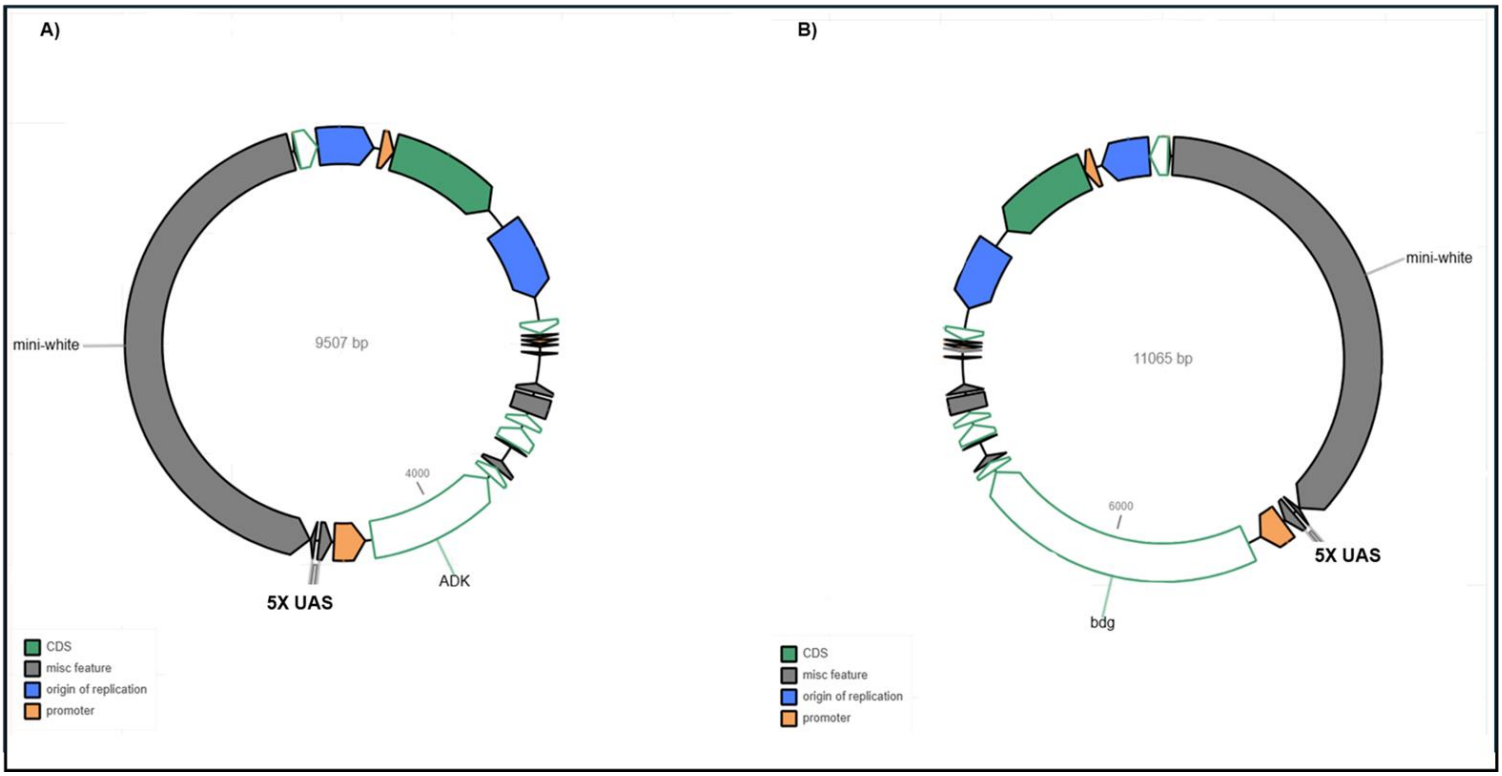


Figure 35 Plasmid maps of the successfully cloned Adk and Bdg genes into pUAST-attB were provided by Macrogen Europe along with the gene sequences

12.4 Lifespan experiment

Based on the results of the previous lifespan experiments, I used Act-GS-255B as a driver for overexpressing genes in this chapter.

UAS-*Adk* and UAS-*Bdg* were overexpressed using the *Act-GS-255B* driver to test their effect on lifespan and mobility, when induced at different ages, with different concentrations of inducers. I tested 3 doses of RU486 56 µg/ml, 112 µg/ml, 224 µg/ml, with vials without the drug (0 µg/ml) as control. Expression was induced at 3, 8 and 18 days, until death. There were 2 genotypes, 3 time points, and 4 drug doses (RU486), resulting in 20 treatments.

12.4.1 Lifespan Results of *Adk*

12.4.1.1 Overexpression of Adk does not extend lifespan

Overexpression of the *Adk* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in all treatments of Act-GS x UAS-*Adk* (figure 36).

12.4.1.2 Overexpression of Adk1 does not significantly affect survival irrespective of age at induction

Age at induction of gene expression did not significantly affect survival irrespective of the dose of RU486 (56 µg/ml p = 0.11, 112 µg/ml p = 0.70, 224 µg/ml p = 0.45).

Inducing gene expression did not affect survival significantly in all treatments. The induced flies had reduced lifespan compared to the uninduced flies in all treatments, irrespective of age at induction (3 days p = 0.002; 8 days p = 0.04; 18 days p = 0.42). However, dose of RU486 did not significantly affect lifespan in the induced treatments (3 days p = 0.23; 8 days p = 0.31; 18 days p = 0.94) (figure 36).

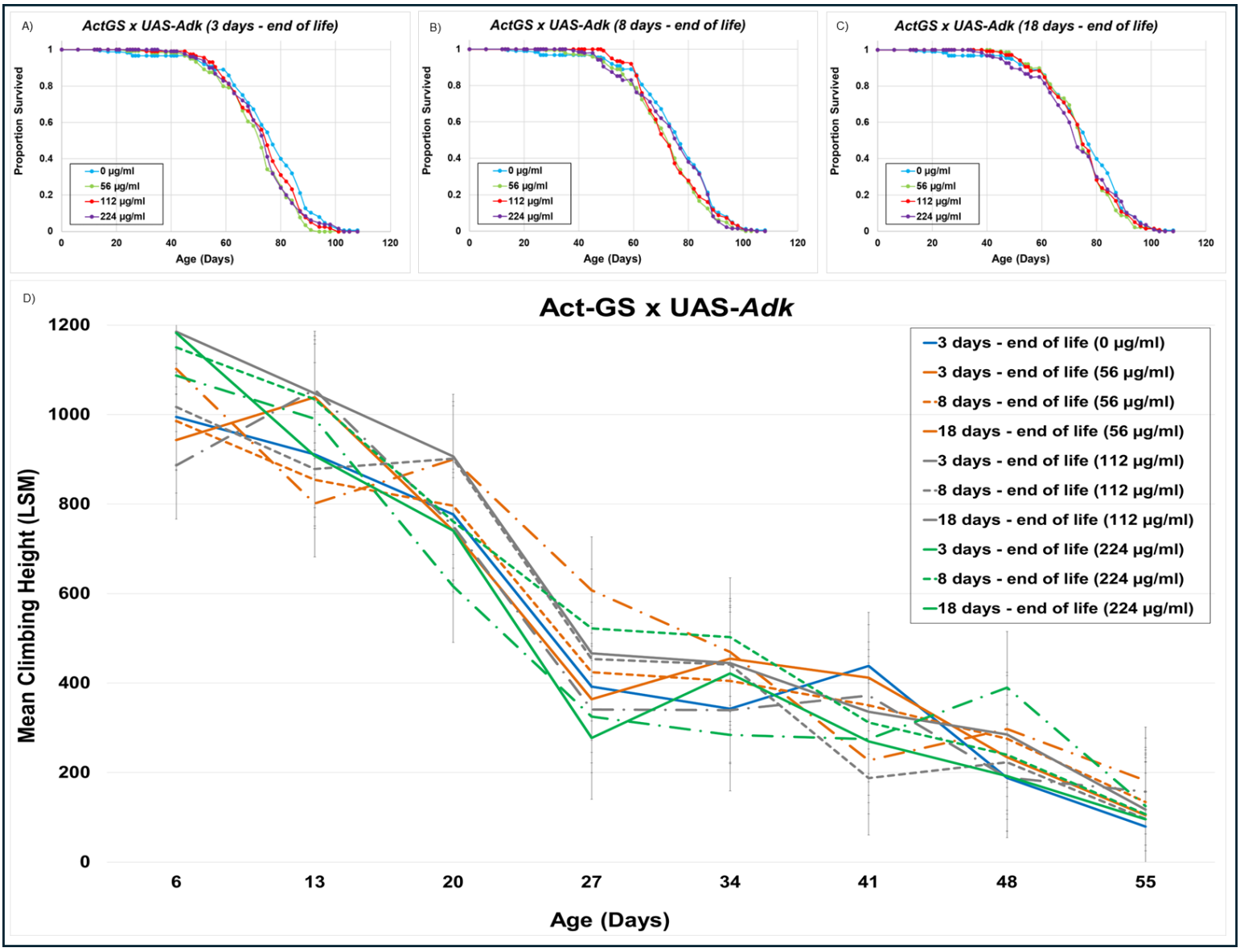


Figure 36 Kaplan-Meier curves show that survival (A/B/C) decreased with higher dose of RU486 but was not significantly affected by age at induction; Mean climbing height (D) is not affected by overexpression of UAS-Adk (LSM units are in image pixels)

12.4.1.3 Median lifespans and rate of ageing were not dependent on age at induction

All treatments, irrespective of induction, had similar patterns of survival over time. Onset of ageing occurs around 50 days across all treatments, with the treatments induced at 18 days only

having a slightly earlier onset, which is not statistically significant. This is also reflected in their median ages of survival, with all treatments having similar median lifespans, indicating that overexpression of *Adk* has no significant effect on flies (table 18). The survival analysis indicates that overexpression of *Adk* gene does not extend lifespan with the current experimental design.

Table 18 Median ages of survival for Act-GS x UAS-Adk when overexpressed at different ages of adult lifespan

Age at induction	Dose of RU486	Median Age	95% CI (LCI – UCI)
3 days	0 µg/ml	77	75 - 80
3 days	56 µg/ml	73	70 - 75
3 days	112 µg/ml	75	73 - 77
3 days	224 µg/ml	75	73 - 75
8 days	56 µg/ml	73	70 - 75
8 days	112 µg/ml	73	70 - 75
8 days	224 µg/ml	77	73 - 80
18 days	56 µg/ml	75	73 - 80
18 days	112 µg/ml	75	75 – 80
18 days	224 µg/ml	73	73 - 77

12.4.2 Negative Geotaxis of Adk

12.4.2.1 Overexpression of Adk does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 6, 13, 20, 27, 34, 41, 48 and 55 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to overexpression of *Adk* gene.

12.4.2.2 Age at induction does not have a significant effect on climbing height

Although all induced treatments have higher initial climbing height than the controls (figure 36), age at induction does not affect climbing height significantly ($p = 0.92$).

12.4.2.3 Dose of RU486 does not have a significant effect on climbing height

All no-drug treatments climb higher than their respective RU486 treatments, but this is not statistically significant to affect mean height climbed ($p = 0.44$). The treatments themselves also have no significant effect on the climbing height ($p = 0.81$).

Neither the age at induction of *Adk* nor the dose of RU486 affects the motor function and coordination in flies within the scope of this experiment.

12.4.3 Lifespan Results of *Bdg*

12.4.3.1 Overexpression of Bdg does not extend lifespan

Overexpression of the *Bdg* gene significantly decreased fly survival over time, with higher dose of RU486 being detrimental to survival in treatments induced at 3 days (figure 37).

12.4.3.2 Overexpression of Bdg is detrimental to survival when gene expression is induced in early adulthood

Age at induction of gene expression significantly affects lifespan, with earlier ages being detrimental to survival for 56 µg/ml and 112 µg/ml doses of RU486 (56 µg/ml $p = 0.70$, 112 µg/ml $p = 2 \times 10^{-4}$, 224 µg/ml $p = 3.59 \times 10^{-7}$).

Inducing gene expression reduced survival significantly in all treatments irrespective of age at induction (3 days $p = 1.12 \times 10^{-14}$; 8 days $p = 0.01$; 18 days $p = 9.43 \times 10^{-5}$) compared to the controls (figure 37).

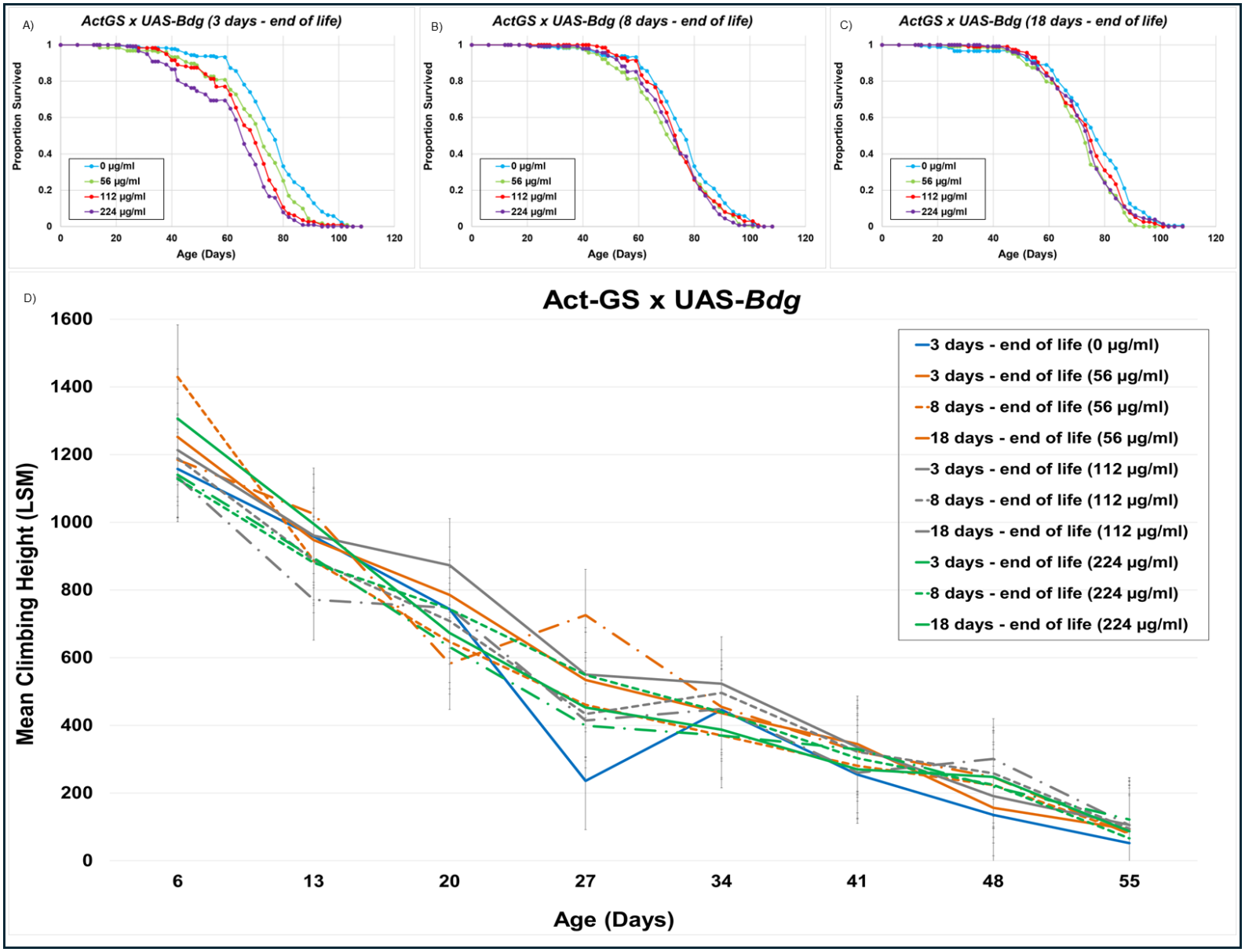


Figure 37 Kaplan-Meier curves show that survival (A/B/C) decreased with higher dose of RU486 and age at induction; Mean climbing height (D) is not affected by overexpression of UAS-Bdg (LSM units are in image pixels)

12.4.3.3 Median lifespans and rate of ageing were not affected by age at induction

Most treatments, irrespective of dose or age at induction, had similar patterns of survival over time. Onset of ageing occurs around 50 days across most treatments, with the treatments induced at 3 days having earlier onset of less than 40 days. This is also reflected in their median ages of survival, indicating that early adulthood induction of *Bdg* in flies has a significantly earlier onset

of ageing (table 19). The survival analysis indicates that overexpression of *Bdg* gene does not extend lifespan with the current experimental design.

Table 19 Median ages of survival for Act-GS x UAS-Bdg when overexpressed at different ages of adult lifespan

Age at induction	Dose of RU486	Median Age	95% CI (LCI – UCI)
3 days	0 µg/ml	77	75 - 80
3 days	56 µg/ml	73	70 - 75
3 days	112 µg/ml	70	66 - 73
3 days	224 µg/ml	66	63 - 68
8 days	56 µg/ml	73	68 - 75
8 days	112 µg/ml	75	73 - 75
8 days	224 µg/ml	73	70 - 75
18 days	56 µg/ml	73	70 - 75
18 days	112 µg/ml	75	73 – 77
18 days	224 µg/ml	73	68 - 73

12.4.4 Negative Geotaxis of Bdg

12.4.4.1 Overexpression of Bdg does not have a significant effect on mean fly climbing height over time

The negative geotaxis assay was performed on days 6, 13, 20, 27, 34, 41, 48 and 55 to evaluate the locomotor abilities and climbing behaviour of *Drosophila melanogaster* in response to overexpression of *Bdg* gene.

12.4.4.2 Age at induction does not have a significant effect on climbing height

Although all induced treatments have higher initial climbing height than the controls (figure 37), age at induction does not affect climbing height significantly ($p = 0.74$).

12.4.4.3 Dose of RU486 does not have a significant effect on climbing height

All no-drug treatments climb higher than their respective RU486 treatments, but this is not statistically significant to affect mean height ($p = 0.07$). The treatments themselves also have no significant effect on the climbing height ($p = 0.87$).

Neither the age at induction of *Bdg* nor the dose of RU486 affects the motor function and coordination in flies within the scope of this experiment.

12.5 Expression Analysis via qPCR

All treatments in the experiment were tested for gene expression with qPCR assays. Actin, EF1G-A and Rpl32 were used as housekeeping genes. The qPCR results showed no differential expression between the induced and uninduced treatments.

12.6 Summary of Results

This chapter presents the findings from lifespan, negative geotaxis, and qPCR assays conducted on seven candidate genes in *Drosophila* to investigate their roles in longevity and neuromuscular health.

12.6.1 Lifespan Assays

Lifespan analyses revealed distinct effects of each gene on survival outcomes. None of the seven genes assayed extended lifespan compared to controls, with some detrimental to survival. The genes exhibited no statistically significant impact on lifespan, indicating that their expression does not influence overall survival under the conditions tested.

12.6.2 Negative Geotaxis Assays

Negative geotaxis assays were used to evaluate neuromuscular function, which is a proxy for health span. All genes demonstrated no significant effects on climbing ability i.e. there were no statistically significant alterations in neuromuscular performance.

12.6.3 qPCR Assays

The qPCR results showed no differential expression between the induced and uninduced treatments.

13 Discussions

13.1 Overview

This chapter focused on testing candidate *Drosophila* genes for their roles in lifespan and neuromuscular function by cloning them into a UAS-plasmid, microinjecting them into fly embryos, and inducing their expression in adult flies using the GeneSwitch system. Out of six candidate genes, only two were successfully cloned and integrated. Despite inducing their expression, no significant differences in lifespan were observed between the induced and control flies for the two genes tested. However, the process of cloning these genes encountered methodological challenges that impacted transformation efficiency and may have influenced the results.

13.2 Ligation-Dependent Cloning: Methodology and Challenges

I employed ligation-dependent cloning, a traditional and widely used method for inserting PCR-amplified fragments into target vectors. This strategy relies on compatible ends between the vector and target sequence, typically created through restriction digestion. I used sticky-end cloning to ensure the directional insertion of the PCR-amplified gene of interest into the UAS plasmid vector, facilitating proper expression (Scharf et al., 1986). Restriction sites were added to the 5′ ends of PCR primers during amplification, enabling their incorporation into the PCR products. Subsequent digestion with restriction enzymes generated sticky ends, allowing precise ligation into the target vector.

Despite using sticky-end cloning, I encountered significant challenges. The amplified gene bands appeared slightly smaller than expected, suggesting potential issues such as incomplete PCR reactions or suboptimal primer design. Discrepancies in the PCR product sizes likely resulted from incomplete amplification or inefficiencies in primer design. These issues, combined with downstream problems like improper restriction site digestion and inefficient ligation, contributed to low transformation success rates.

Another issue encountered was vector self-circularization, which led to false positives in the form of vector-only colonies. This problem was likely caused by unintended end-microhomologies and carryover during vector preparation (Chayot et al., 2010). Although restriction enzyme

linearization was the primary method for vector preparation, PCR-mediated amplification was considered as a supplementary approach. However, this method carries risks such as increased errors and the generation of unwanted byproducts (Koskela and Frey, 2015).

The high rate of vector self-ligation and non-specific amplification pointed to inefficiencies in the ligation process or incomplete restriction site digestion, although the precise source of the problem could not be determined. Consequently, potential solutions—such as redesigning primers or optimizing enzymatic digestion—could not be implemented due to time constraints. This high rate of false positives necessitated extensive colony PCR screening, which was both time-consuming and labour-intensive, further highlighting the limitations and inefficiencies of traditional ligation-dependent cloning strategies.

The high rate of false positives observed during ligation-dependent cloning—likely stemming from vector self-circularization and incomplete digestion—reduced the number of transformants containing the desired insert, thereby lowering transformation efficiency. Inefficiencies in restriction site digestion and non-specific vector ligation likely compounded during transformation, leading to a significant number of false-positive transformants.

13.2.1 Transformation efficiency

The efficiency of transformation can significantly influence cloning outcomes, with the molar ratio of insert to vector being a critical factor. In this study, I employed a 5:1 ratio, as recommended by established protocols (Zhang et al., 2012; Kostylev et al., 2015).

Another key consideration in ligation-based cloning is plasmid stability during bacterial transformation. Bacterial recombinase enzymes, such as RecA, can promote unintended ligation or recombination events in vivo, potentially causing plasmid mutations or instability. To reduce these risks, recombination-deficient bacterial strains were used in this study, minimizing the likelihood of such errors during cloning (Watson and Garcia-Nafria, 2019).

To enhance PCR fidelity, high-fidelity polymerases like Phusion were used (Potapov and Ong, 2017). However, conflicting reports on Phusion's fidelity (Kinde et al., 2011; Hestand et al., 2016)

remain a concern, especially given that the enzyme in this study was produced in-house, introducing potential variability.

Transformation was conducted using chemically treated competent cells. This approach improves DNA uptake by forming channels during heat shock, potentially increasing transformation efficiency compared to electroporation (Chen et al., 2021). Despite these strategies, a high number of transformants lacking the desired insert indicated challenges in both vector preparation and the transformation protocol. These findings highlight the need to optimize transformation methods and implement strict quality control for successful cloning outcomes.

Despite employing chemically treated competent cells and optimizing the molar ratio of insert to vector, the inherent variability of PCR errors (and the variable fidelity of in-house Phusion) underscored the need for additional quality control in both PCR amplification and vector preparation. Transformation challenges further revealed that, even when adhering to standard protocols, variables such as enzymatic fidelity, recombination events, and the high background of vector self-ligation contribute to significant inefficiencies.

13.2.2 Alternative gene cloning methods

In this study, alternatives to traditional ligation-based cloning were not explored due to time and financial constraints. However, several advanced cloning technologies could streamline the process and address the challenges encountered.

13.2.2.1 Gibson Assembly

Gibson Assembly uses complementary 5’ overhangs on the vector and insert to enable seamless ligation through the combined activities of T5 exonuclease, DNA polymerase, and Taq ligase in a single reaction (Gibson et al., 2009). This method eliminates the need for restriction digestion and offers high efficiency and accuracy, reducing troubleshooting time and labour. However, the approach is costly, which can limit its accessibility.

13.2.2.2 Golden Gate Cloning

The Golden Gate method offers a solution to the issue of residual recombination site sequences that can lead to the addition of extraneous amino acids to expressed proteins (Engler et al., 2008). By using restriction enzymes that cut outside the recognition sequences, the fragment of interest

is precisely ligated into the final vector without retaining the original site in the ligated product. This one-pot reaction allows for directional and accurate assembly of multiple fragments. While it offers significant advantages for assembling complex constructs, this method requires pre-designed vectors with compatible restriction sites.

13.2.2.3 Homologous Recombination-Based Cloning

Commercial cloning kits such as In-Fusion (Clontech) and Gateway (Life Technologies) use homologous recombination mechanisms to facilitate efficient plasmid construction. The In-Fusion method employs “chew back and anneal” using 15-bp overhangs, allowing directionally targeted insertion of fragments into vectors. Similarly, the Gateway kit uses site-specific recombination to transfer genes to compatible vectors rapidly. While both methods are versatile and efficient, their high costs and dependency on proprietary reagents may be prohibitive, especially in resource-constrained settings (Chen et al., 2021). Furthermore, the Gateway kit is less suitable for assembling large DNA fragments due to same sequences at each recombination junction (Chao et al., 2015).

13.2.3 Potential for Application in *Drosophila* Research

Although these alternative methods were not applied in this study, they have been successfully used in *Drosophila* research for creating transgenes and expression systems. Their ability to reduce false positives, improve transformation efficiency, and bypass the limitations of traditional ligation strategies (such as incomplete restriction digestion and PCR errors) suggests their potential for use with pUAST vectors in *Drosophila* research.

13.3 Implications and Future Directions

The challenges observed—ranging from PCR inefficiencies and ligation-based obstacles to transformation instability—underscore the need for improved methodological strategies. Options include optimizing enzymatic protocols, incorporating advanced cloning methods, or implementing enhanced quality control measures. Transformation failures and the high false-positive rates from traditional ligation approaches highlight the importance of exploring strategies like Gibson Assembly, Golden Gate cloning, or recombination-based kits. These alternatives offer streamlined workflows, improved fidelity, and the potential to reduce systemic inefficiencies encountered in traditional approaches.

13.4 Factors affecting lifespan

Similar to the genes in chapter two, the two genes in this chapter (*Adk* and *Bdg*) were overexpressed to test their effect on lifespan and negative geotaxis. Factors affecting the GeneSwitch system (chapter 2) also affect the genes tested in the current chapter. Based on the results of chapter 2, the driver, dose of RU486 and age-at-overexpression were selected. Overexpressing genes using Act-GS-255B driver has successfully extended lifespans of multiple genes in *Drosophila*, however only a few studies were reproducible.

13.4.1 Genetic background

Natural variation in wild-type genetic backgrounds significantly influences complex traits such as physiology, longevity, and behavior, which, in turn, affect mutation penetrance and expression (Evangelou et al., 2019). Phenotypes emerge from an interplay between allele function, genetic background, and environmental factors. These background effects can profoundly shape conclusions about genetic contributions to biological processes and influence interpretations of genetic network topology (Chari and Dworkin, 2013).

Controlling the genetic background is crucial when testing transgenic strains, as it minimizes genetic variation and ensures that observed effects are attributable to the transgene rather than background variation. This is typically achieved by backcrossing transgenics with standard backgrounds such as *w[1118]* or white Dahomey (Landis et al., 2015). Unfortunately, due to time constraints, backcrossing was not performed for the genes tested in this chapter.

The absence of lifespan effects in flies overexpressing the tested genes could partially reflect the influence of uncontrolled genetic background variation. Without backcrossing the transgenic lines into a standard genetic background, phenotypic outcomes may be confounded by strain-specific genetic modifiers. These modifiers can mask or amplify the effects of the overexpressed genes, leading to inconsistent or muted phenotypic responses (Chari and Dworkin, 2013).

Uncontrolled genetic backgrounds are known to affect traits like longevity, behavior, and physiology, introducing heterogeneity in experimental outcomes. Gene-gene and gene-environment interactions introduce significant complexity to lifespan studies by creating confounding effects. Mutations with strong initial effects on lifespan, like in *Indy* gene, lose their significance when genetic background influences were minimized (Toivonen et al., 2007). This

underscores the potential for genetic background to obscure subtle or context-dependent phenotypic effects of transgenes.

Sensitivity to mutational perturbation and strain-specificity can result in both quantitative and qualitative differences in observed phenotypes. The genetic background influences the magnitude of interactions and can lead to sign epistasis, where the effect of a mutation changes direction (from deleterious to beneficial) depending on the context. This highlights the flexibility of genetic networks, suggesting that an allele's impact on fitness is not static and can shift as it enters a population (Chari and Dworkin, 2013).

13.5 Summary

This chapter used ligation-dependent cloning to generate transgenic *Drosophila* lines and test the effect of gene overexpression on fly lifespan and negative geotaxis. PCR inefficiencies, vector self-ligation, and transformation instability resulted in low cloning success rates, underscoring the need for advanced methods like Gibson Assembly or Golden Gate cloning to enhance efficiency.

Additionally, the lack of backcrossing transgenic lines into a standardized genetic background likely introduced variability, which may have obscured the effects of gene overexpression on lifespan. Natural genetic variation, known to influence complex traits like longevity and behaviour, can complicate phenotype interpretation and confound results.

These findings highlight the critical need for methodological rigour, including the adoption of modern cloning technologies and the use of standardized genetic backgrounds, to accurately investigate the functional roles of candidate genes in complex biological traits.

14 Troubleshooting

14.1 Infections in *Drosophila* cultures

At various time points during the project, the flies had poor health, a result of bacterial and repeated fungal infections. The poor conditions of the incubators where the fly stocks were maintained introduced bacterial and fungal infections into the fly cultures, despite the presence of anti-bacterial and antifungal agents in *Drosophila* food.

14.1.1 Bacterial infections

Fly cultures are vulnerable to bacterial contamination. While healthy stocks with large larval populations can typically withstand such effects, weak stocks or pair matings are more susceptible. Individual stocks can be treated with antibiotics for at least one generation, followed by subculturing on untreated medium. In our cultures, *Wolbachia*, a common *Drosophila* symbiont, may have acted as a mutualistic pathogen.

Wolbachia is a maternally transmitted gram-negative bacteria that infects many arthropod and nematode species. It is an endosymbiont that enhances survival and fecundity, confers antiviral protection by reducing viral loads and associated mortality in flies (Stevanovic et al., 2015). In *Drosophila melanogaster*, *Wolbachia* could be parasitic by inducing cytoplasmic incompatibility, parthenogenesis, manipulation of host reproduction, and tissue degeneration in the brain, retina, and muscles, leading to early death of adult flies (Min and Benzer, 1997; Dobson et al., 1999). Tetracycline treatment eliminates the bacteria, preventing degeneration and restoring normal lifespan (Min and Benzer, 1997). Although the driver lines used were *Wolbachia*-negative, potential cross-contamination with *Wolbachia*-positive strains could have introduced the parasite.

14.1.2 Fungal infections

Fungal infections adversely affect the health and behaviour of the flies in *Drosophila*, with some invading the nervous system to manipulate climbing behaviour in flies (Lemaitre and Hoffman, 2007; Elya et al., 2018).

14.2 Infection clearance

To combat bacterial and fungal infections, recommendations from the Bloomington *Drosophila* Stock Centre were implemented. Equipment sharing in the laboratory was minimised to limit

further spread. Laboratory benches, fly sorting pads, incubators, and fly handling equipment were cleaned thoroughly with disinfectants, 10% bleach, and 70% ethanol.

14.2.1 Bacterial Infection

Standard *Drosophila* SY (sugar-yeast) food recipe was supplemented with tetracycline (table 20) for 2 consecutive generations, followed by three generations of standard SY food (Ashburner, 1989).

Table 20 Recipe for fly food to treat bacterial infections. Tetracycline is dissolved in autoclaved milliQ water at a concentration of 15 mg/ml. Food is cooled to 40°C and tetracycline is added to obtain a final concentration of 0.03% Tetracycline.

Component	**Amount (per litre of water)**
Sugar	80 g
Yeast	80 g
Agar	16 g
Nipagin	30 ml
Propionic acid	5 ml
Tetracycline-HCl	20 ml

14.2.2 Fungal Infection

Since all fly stocks in the laboratory were infected, quarantining was not feasible. Shared equipment was cleaned with antifungal agents, such as methylparabens, and adult flies were transferred daily to fresh food for three generations to eliminate mould. Cultures were inspected daily for hyphae to monitor infection progress. The fly diet was switched from standard SY food to cornmeal-oatmeal food (table 21), as changing the food type has occasionally proven effective in reviving fly stocks in our laboratory.

Table 21 Recipe for fly food to treat fungal infections

Component	**Amount (per litre of water)**
Dextrose	50 g
Cornmeal	40 g
Oatmeal	25 g
Yeast	25 g
Agar	12 g
Nipagin	30 ml
Propionic acid	5 ml

Cultures were grown at reduced density to minimise moisture accumulation caused by overcrowding. Although fecundity was severely impacted in some stocks, financial constraints prevented sacrificing these stocks. While maintaining low humidity levels (40–50%) typically inhibits fungal growth, this was not possible due to a dysfunctional humidity sensor in the laboratory. Recurrent fungal infections arose from fungal spores in the incubators and reusable materials such as bottles, vials, and bungs, which retained spores despite repeated autoclaving. These spores reintroduced infections into stocks that had initially cleared fungal growth.

14.3 qPCR

14.3.1 Testing different primers and fly strains for EF1G reference gene expression

Due to inconsistent and unusually high Cq values for the reference gene (*EF1G*), repeat qPCRs were conducted with new primers. However, the inconsistency persisted, and repeated testing with multiple *EF1G* primer sets depleted the RNA samples from the lifespan experiments. As no additional frozen flies were available, further testing with my samples was not possible.

Undergraduate students Louie Doran and Ethan Newton later tested the *EF1G* reference gene in their experiments. Despite using entirely different primer sets, they also observed inconsistent and high Cq values. This suggests that another factor may have confounded the results.

14.3.2 Testing different sources for SYBR green dye

The SYBR green dye used for the qPCR assay was speculated as a potential source for confounding results. As a result, multiple sources for the dye were tested by an undergraduate project student, Trudy Tucker. The different manufacturers of SYBR Green tested were:

1. BioRad SsoAdvanced Universal SYBR Green Master Mix (2x)
2. Applied Biosciences SYBR green PCR Master Mix (Applied Biosystems, MA, USA)
3. PowerUp SYBR Green Master Mix (Applied Biosystems, MA, USA)

14.3.2.1 Bio-Rad SYBR green mastermix showed similar expression levels in samples with and without template DNA

Amplification in template samples were at similar or identical levels to no template controls (NTCs) (figure 38A), with both samples having identical melt peaks (figure 38B). This was initially thought to be contamination, but repeats using new reagents, including primers, produced the same results several times.

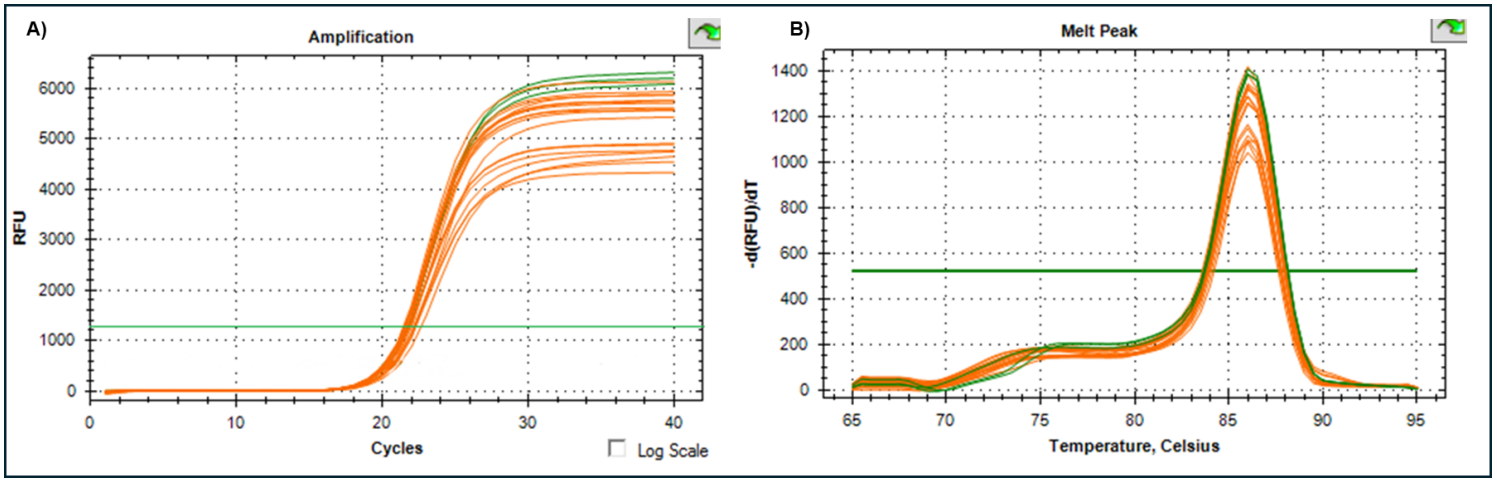


Figure 38 Representative qPCR amplification using gene-specific primers and BioRad SYBR green mastermix. NTCs are green curves. A) The horizontal line (green, ~1200 RFU) represents the signal threshold, indicating Cq values; B) Melt curves indicate similarity between template samples and no template controls

In one instance, although the NTCs did not show any amplification, only 50% of the template samples were amplified, indicating poor validity of results. Attempts to replicate these results with more consistency were similar to the amplification seen in figure 38.

14.3.2.2 Powerup Readymix was unable to amplify with the gene-specific primers

With gene-specific primers, both NTCs and template samples showed amplification with high Cqs (31-34 RFU) and without reaching the plateau phase (figure 39A). The melt curves were wide and showed two uneven peaks that varied between triplicates, indicating the presence of multiple amplicons (figure 39B). This was unlike the single, sharp melt peak observed using Bio-Rad SYBR green.

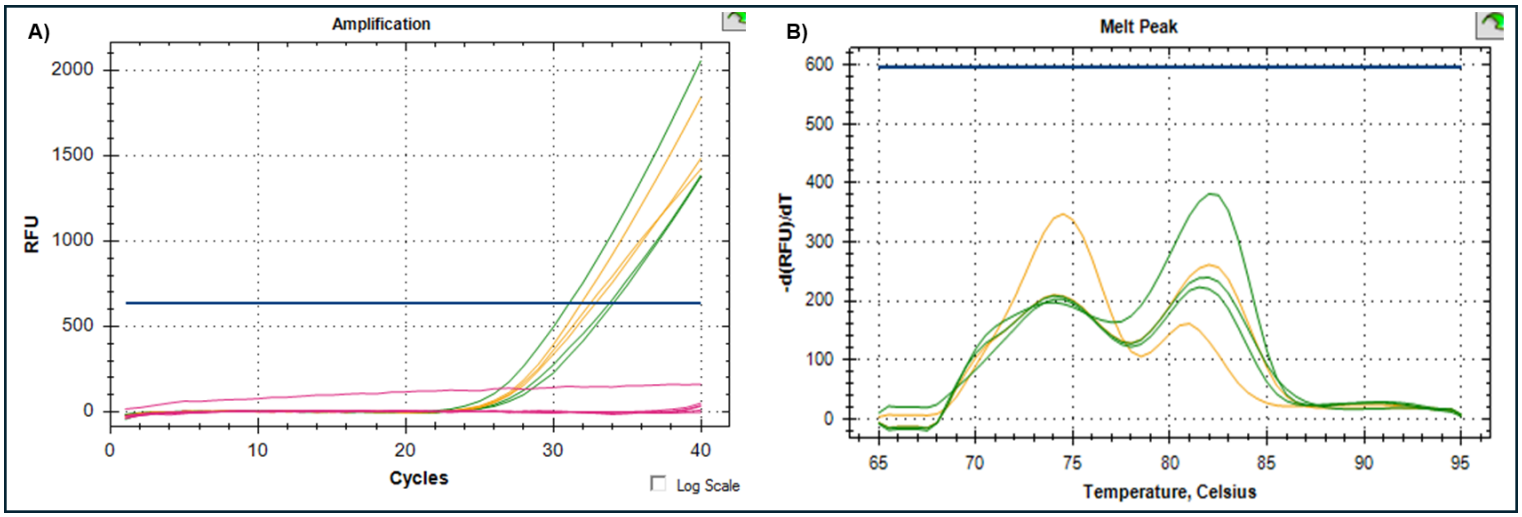


Figure 39 Representative qPCR amplification using gene-specific primers and PowerUp SYBR green mastermix. NTCs are green curves. A) The horizontal green line at ~650RFU represents the signal threshold, indicating Cq values; B) Melt curves showed uneven peaks indicating multiple amplicons

14.3.2.3 Bio-Rad SYBR green mastermix showed no amplification in any sample

qPCR amplification pattern had high Cq values (>35 RFU), without plateauing in any sample (figure 40A). With the melt curves, a prominent single peak at temperature lower than expected (73.5°C) was visible (figure 40B)

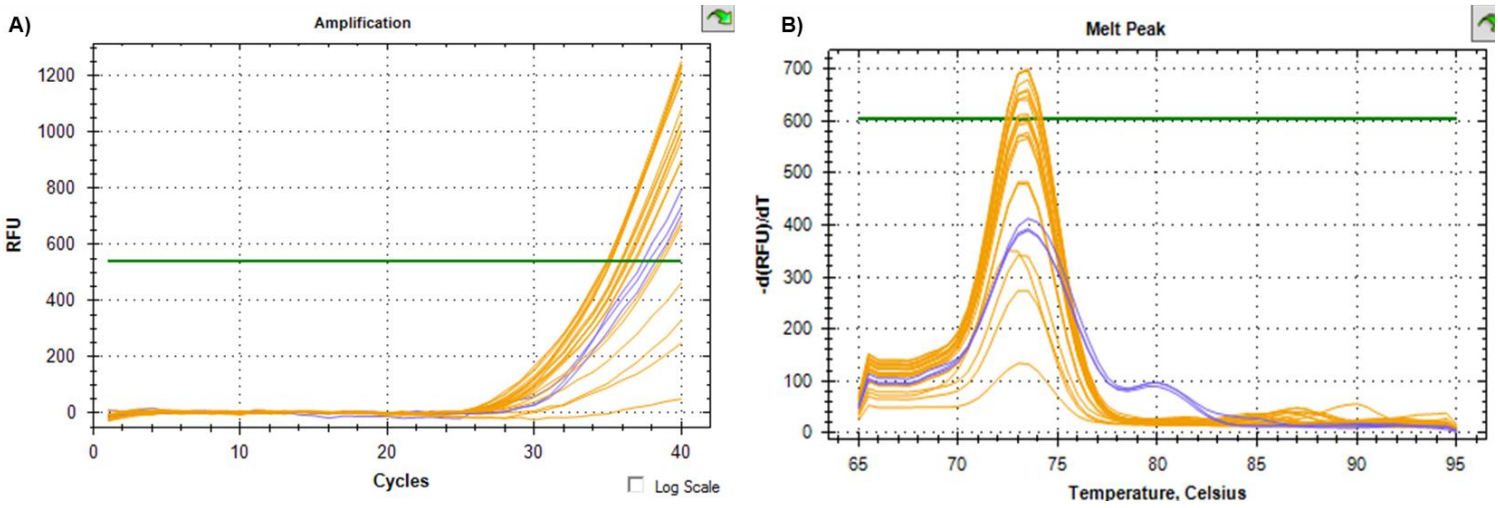


Figure 40 Representative qPCR amplification using gene-specific primers and Applied Biosciences SYBR green mastermix. NTCs are purple curves. A) The horizontal green line at ~550 RFU represents the signal threshold, indicating Cq values; B) Melt curves are at inconsistent across replicates and at lower-than-expected temperatures

14.4 Contributions to troubleshooting

All infection-based troubleshooting was done solely by me. Pilot studies of qPCR troubleshooting were performed by me with limited samples, while all extensive troubleshooting was done by undergraduate students Louie Doran, Trudy Tucker, and Ethan Newton while being supervised by me.

15 General Discussions

15.1 Overview

This thesis investigated potential novel anti-ageing genes using *Drosophila melanogaster* as a model, to better understand mechanisms involved in ageing. A previous study in our lab hypothesised that lifespan, a heritable trait, could be extended through artificial selection. The project successfully generated long-lived *Drosophila* strains (S1 and S2) and compared them phenotypically and transcriptomically to control strains (C1 and C2), uncovering enhanced stress responses in the selected lines, likely contributing to their extended lifespans. RNA sequencing identified transcriptomic differences associated with longevity, facilitating the discovery of novel anti-ageing genes with potential for drug development and lifespan modulation. I aimed to identify candidate anti-ageing genes, modify their expression and test for effects on lifespan and neuromuscular function.

In Chapter 1, RNA-Seq analysis revealed transcriptomic differences between long-lived (S1, S2) and control (C1, C2) lines, identifying candidate genes linked to stress response and metabolic pathways. Intriguingly, several candidates were novel, offering potential targets for future research. However, discrepancies arose, such as the downregulation of *Hsp27* in long-lived flies, despite its established pro-longevity effects in other studies (Wang et al., 2004). These contradictions may reflect genetic background differences or tissue-specific expression, highlighting the complexity of translating transcriptomic data into functional outcomes.

Chapters 2 and 3 tested the functional roles of these genes using the GeneSwitch system. Despite robust methodologies, neither RNAi knockdown nor overexpression altered lifespan or negative geotaxis significantly. Challenges in validating gene expression, compounded by environmental factors such as fungal infections, likely influenced these outcomes. Additionally, cloning and transgene generation faced technical limitations, with only two of the nine candidate genes successfully tested in overexpression studies.

While none of the tested genes showed significant effects on lifespan or neuromuscular function under the study parameters, this does not preclude their roles in longevity. Instead, the results underscore the importance of refining experimental approaches and exploring gene interactions to fully understand the genetic basis of ageing. This long-lived *Drosophila* model, analogous to

human centenarians, offers a valuable framework for investigating the mechanisms of ageing and potential therapeutic interventions.

15.2 Effect of heterogeneity on longevity

Ageing is very complicated, with different changes occurring simultaneously in different biological locations and levels. One of the central themes emerging from this work is the heterogeneity of ageing processes, both within and across populations. Genetic variation, environmental influences, and stochastic effects all contribute to lifespan diversity, as seen in the distinct mortality patterns of *Drosophila* strains. S1 consistently outlived S2, which displayed temperature-dependent lifespan variability.

Some of the genes investigated have expression profiles in longevity models contradictory to those in the RNASeq data. This discrepancy could be due to the roles have stage or tissue specific roles, experimental design including genetic and environmental conditions, pleiotropic nature of genes, or other compensatory mechanisms adopted to achieve longevity or mitigate ageing effects. The observed heterogeneity in ageing processes is intricately tied to genetic variation, which shapes individual lifespans through complex mechanisms.

15.2.1 Variation in populations

15.2.1.1 Heritability of lifespan

Heritability of lifespan accounts for about 30% of variance in fruit flies, with within-group heterogeneity causing departures from exponential Gompertz-like mortality. Even within a group of genetically identical individuals, there is high variation for age at death, partly due to environmental factors (Promislow et al., 1995). Lab-bred populations also exhibit non-heritable lifespan variations, with mortality rates following distinct phases as flies age. Early in life, mortality rates increase exponentially (Gompertzian patterns) but tend to decline among the longest-living individuals. However, lifespan variations during inbreeding may arise from residual genetic differences, as genetic variation can be reduced but not eliminated due to spontaneous mutations and chromosomal changes, such as mobile genetic elements (p-elements). Furthermore, mitochondrial DNA, which is more prone to replication errors, can introduce variation even in strains that are otherwise genetically identical in their nuclear chromosomes (Finch and Tanzi, 1997).

15.2.1.2 Genetic drift and population diversity

Evolutionary theories of ageing account for the maintenance of genetic variation for life span in natural populations. Deleterious mutations that escape natural selection at older ages are maintained in populations at low to intermediate frequencies by mutation–selection balance or early life benefits (Medawar, 1952; Williams, 1957; Kirkwood, 1977). Maintenance of genetic variation can also be due to genotype-by-environment interaction (GEI) or genotype-by-sex interaction (GSI), where variation is conditionally maintained at medium frequencies (Gillespie and Turelli, 1989; Zajitschek and Connallon, 2018). Initial genetic diversity of the population is critical for successful selection for increased lifespan, because the selection process goes through a phase of inbreeding depression (Luckinbill et al., 1984).

The RNASeq revealed substantial differences between S1 and S2, implying diverse evolutionary strategies for achieving longevity. These variations may result from distinct genetic responses to selective pressures or random genetic drift, resembling patterns seen in artificial selection studies where different genetic routes can converge on similar phenotypes (Barghi et al., 2019). However, the limited number of lines per selection regime constrains the ability to fully disentangle the roles of selection, drift, and stochastic variation.

15.2.1.3 Infinitesimal model

A polygenic trait produces a continuous phenotype in the population due to random sampling of alleles at each gene. However, if the trait depends on many genes, with each contributing little, selection has a negligible effect on the variance contributed by any individual locus. Currently, identifying rare variants of traits involve GWAS of genomic regions strongly associated with the trait and sequencing candidate genes in organisms with extreme phenotypes for the trait (Manolio et al., 2009).

Identification of sequence variants requires large sample sizes, especially for the identification of associations, rather than the variants themselves. Sample size is even more strongly affected by small odds ratios than by small minor allele frequencies, so low frequency and rare variants will need to have higher odds ratios to be detected (Manolio et al., 2009). Combining DEGs from the same pathway could yield gene-interaction-based lifespan extension like in *C. elegans*, where *daf-2* mutations depend on *daf-16* (Kenyon et al., 1993).

15.2.2 Environmental variation

Although genetic mutations influence lifespan, environmental factors such as diet, stress, larval density, and growth temperature can also shape life histories within a population. Evolutionary history and environmental conditions further affect gene expression variation. In this study, RNASeq was performed on young, healthy flies, suggesting that the observed variation may be driven by differences in physiology and metabolism. The RNASeq analysis was limited by a relatively small sample size, reducing statistical and predictive power. Additionally, profiling 25-day-old flies provides a snapshot of gene expression during early adulthood but may not capture the dynamic changes occurring throughout the lifespan (Ma et al., 2018).

15.2.2.1 Effect of diet

The previous study used a high sugar-cornmeal-yeast medium, while I employed the standard sugar-yeast medium. Although both diets are high-nutrient types, I used SY media as it is the most used medium in *Drosophila* experiments. However, even little changes to diet or suppliers could alter or even reverse dietary effects on lifespan (Bass et al., 2007). Both media give healthy lifespan curves in our lab, reducing any selection against overeating behaviour leading to lifespan extension.

15.2.2.2 Effect of fungus

A significant pathogen reducing *Drosophila* lifespan is entomogenous fungi, with some *Fusarium* species causing 100% mortality within 20 days (Nafis et al., 2024). In this study, fungal infections impacted the ability to conduct consistent qPCR analyses. Additionally, the microinjected flies arrived with fungal infections, potentially weakening them before the lifespan experiments. Time constraints precluded extensive fungal clearance, likely confounding results, though equal infection rates across groups mitigated this impact.

15.2.3 Genetic variation

15.2.3.1 Effect of sex

Sexual dimorphism is evident in longevity, with males and females exhibiting different genetic profiles, with studies identifying sex-specific longevity loci (Zeng et al., 2018). Studying the link between sex and ageing will lead to a more complete understanding of sexual strategies regulating ageing. Lifespan is extended in female mice with low IGF1 levels, with the converse observed in males (Yuan et al., 2020).

The effects of reproductive strategies on lifespan and ageing are not well understood (Bonduriansky et al., 2008). Male reproductive strategy involves male-specific hormone regulation, which may increase somatic wear-and-tear, reducing male life expectancy and potentially weakening selection on male lifespan and somatic maintenance. Insects have male-specific levels of juvenile hormone and insulin-like growth factors, that influence mortality and ageing (Tatar, 2004). Males may have a trade-off between viability for enhanced sexual performance, while investment in immunity and longevity may benefit females more (Rolff, 2002). Sexual selection does not always promote high metabolism-short life strategies in males and mortality rates are not always male-biased. In some seed beetle species, females have a higher initial mortality rate than males (Fox et al., 2003). Sexual competition also imposes strong selection on male condition and performance, potentially favouring alleles that positively affect lifespan and somatic maintenance (Lailvaux & Irschick, 2006).

15.2.3.2 Effect of strain and epigenetics

Lifespan variation is higher in wild-derived inbred strains compared to lab-bred inbred strains of mice, with extended lifespan in the wild-derived females (Yuan et al., 2020). Microarrays, instead of RNASeq, can also be used to study whole-organism changes in gene expression, rather than tissue-specific changes (Bordet et al., 2021). In this study, expression profiles of 2-day old female flies were compared to 45-day-old flies, because this age avoids the "pre-death phenotype". In contrast, this study only compares expression profiles at a single point in fly lifespan. RNASeq was restricted to flies aged 25 days, which has poor statistical power to establish causal roles of candidate genes. Background variation between different strains of *Drosophila* could also contribute to the differences in expression. The above study used w [1118] flies while this study used wild-type Lancaster strain, so it would be interesting to compare profiles across multiple RNASeq studies in flies. Future work could examine the effect of strain-specific backgrounds or alternate expression systems to determine the factors contributing to the observed results.

15.2.3.3 Effect of spatial expression

Since the RNASeq data was based on whole flies, signals could be diluted due to spatial heterogeneity of gene expression. Whole-body gene expression strategy (instead of a tissue-specific regulation) could also have masked some of true effects of candidate genes (Ma et al., 2018). Further validation will be needed to substantiate these findings. Tissue-specific gene expression, potentially masked by whole organism RNASeq, could be addressed by sequencing

specific tissues in flies, alongside whole organism RNASeq. Deep sequencing the flies will determine genetic sequence signatures of selection for longevity, enhancing the statistical power to identify reproducible patterns of longevity-related genetic changes while minimizing the influence of random fixation events (Wilson et al., 2013).

The interconnected nature of ageing-regulatory pathways makes it challenging to distinguish causes from consequences and assess the extent to which epigenetic alterations drive the ageing process (Yang et al., 2023). Epigenetic processes are important to this study, especially because the initial selection experiments were performed on flies from a strain completely different to the strains that were used in subsequent testing and validation experiments. Using different strains in selection experiments and validation is common in *Drosophila* research as it helps identify conserved ageing mechanisms across genetic backgrounds. But it also requires careful interpretation due to potential strain-specific effects (Halim et al., 2020).

15.3 Study conclusions and future work

15.3.1 Conclusions

This study tested 9 genes for effect on lifespan and negative geotaxis using the GeneSwitch system through knockdown or overexpression. None of the genes had any significant effect under the study conditions used, however, since their expression could not be validated by qPCR, it is unknown if the lack of effect was a true result or the lack of gene induction. This could also be because longevity is not the only trait driving differential gene expression.

The observed results can be explained as one or a combination of the below hypotheses:

1. The genes are not gerontogenes and have no role in longevity. Their expression profile in RNASeq was merely coincidental, and not causal to the longevity in the selected flies.
2. The genes are anti-ageing but with very small effect to have a significant effect in longevity studies. The effect might be noticeable in sensitive techniques like RNASeq, however it cannot be replicated in lifespan studies.
3. The genes do extend lifespan, but the effects are not observable within the study parameters. This could be due to the dose of inducer, time at start- or end of- expression, drivers employed, fly strains, or system of gene expression.
4. The genes are true gerontogenes, but function in tandem with other gerontogenes to achieve any observable lifespan extension

15.3.2 Future Work

15.3.2.1 Increased replicate lines

To address the limitations of this study, future experiments could incorporate several refinements. Expanding the number of replicate lines could decrease experimental variability, alleviate the effects of inbreeding depression, and provide more robust insights into the genetic underpinnings of longevity adaptations (Partridge and Fowler, 1992; Harshman and Hoffman, 2000). The study can be expanded to five control and selected strains, with both gene expression and behavioural changes measured throughout lifespan.

15.3.2.2 Polygenic trait manipulation

Ageing is a polygenic trait, and this idea is reinforced in the GO terms associated with the DEGs in this study. Thus, the single gene modification approach of identifying gerontogenes could be insufficient. The study would benefit from attempting polygenic crosses – crossing different strains with single-gene modifications – in narrowing down pathways and gene pools that would warrant further investigation (Melzer et al., 2020). Simultaneous manipulation of multiple pathway-adjacent genes may reveal synergistic effects on lifespan.

15.3.2.3 Increased focus on transcription factors

Transcription factors (TFs) generally have low expression levels, so even small changes in their expression can significantly impact biological processes (Naqvi et al., 2023). TF activity is regulated by factors beyond expression, including post-translational modifications, protein-protein interactions, and subcellular localization. Therefore, even modest expression changes can be biologically relevant (Zaborowski and Walther, 2020). TF expression levels are a key determinant of gene co-activity and expression variability, suggesting that small changes in TF expression can influence gene regulation (van Duin et al., 2023). Detection of subtle changes in TF expression is essential for understanding regulatory networks.

The interplay between the transcription machinery and the epigenome extends beyond transcriptional regulation to post-transcriptional processes, particularly mRNA splicing (Naftelberg et al., 2015). Alterations in mRNA splicing could represent an underexplored yet significant aspect of ageing regulation. Splicing factor SFA1 is required for lifespan extension by dietary restriction and by modulation of TORC1 pathways components in C. elegans (Heintz et al., 2017) supporting this concept.

15.3.2.4 Testing health span

Broader investigations into health span, encompassing cognitive, physical, and reproductive traits, could complement lifespan studies, offering a more holistic understanding of ageing. Integrating transcriptomic data with proteomic analyses could further elucidate the downstream effects of gene expression, bridging the gap between mRNA levels and functional outcomes. Factors affecting life and health spans need not be the same and could be working together to contribute to the longevity phenotype.

15.3.2.5 Altering study conditions

Additionally, testing genes under varied environmental and experimental conditions—such as alternate diets, developmental stages, tissue-specific expression versus ubiquitous expression, or inducer dosages—could provide insights into context-dependent gene functions. The GeneSwitch system also has technical limitations like leaky drivers, spatial expression mosaicism, threshold effects of essential genes, and off-target activity (Scialo et al., 2016). Addressing the technical challenges of the GeneSwitch system—such as optimizing inducer concentration and minimizing driver leakiness—would strengthen future studies. Incorporating alternative genetic tools, such as CRISPR-based activation systems, may offer greater precision in studying gene function.

Combining low statistical power with high false positives can produce significant lifespan-associated expression patterns. Our data may serve as a starting point for further experimental analysis of gene expression states and longevity interventions that mimic natural changes in lifespan.

15.4 Conclusion

This thesis aimed to identify novel anti-ageing genes in *Drosophila melanogaster* by leveraging transcriptomic data from artificially selected long-lived strains. Using a combination of bioinformatics, molecular genetics, and behavioural assays, I explored the genetic mechanisms underlying ageing and lifespan modulation, integrating forward and reverse genetics approaches to achieve this goal.

The findings reveal the intricate interplay of genetic, environmental, and methodological factors influencing longevity studies. While the candidate genes tested did not extend lifespan within the experimental parameters, their RNA-Seq profiles suggest potential roles in broader anti-ageing pathways, warranting further investigation. This work underscores the complexities of ageing

research and highlights the need for multifaceted approaches to unravel the genetic and environmental determinants of longevity. By refining methodologies and exploring gene-environment interactions, future studies can build on this foundation to uncover the genetic determinants of healthy ageing.

Appendix

Gene Ontologies of the top 2000 genes in individual comparisons of Selected vs Control strains

Expression	Number of Genes	Fold enrichment	Pathway	Comparison
Upregulated	653	1.453624	Multicellular organism development	S1 vs C1
Upregulated	384	1.717048	Nervous system development	S1 vs C1
Upregulated	582	1.499932	Cell communication	S1 vs C1
Upregulated	728	1.404866	Anatomical structure development	S1 vs C1
Upregulated	569	1.500234	Signaling	S1 vs C1
Upregulated	463	1.583329	System development	S1 vs C1
Upregulated	321	1.768825	Neurogenesis	S1 vs C1
Upregulated	755	1.371115	Developmental process	S1 vs C1
Upregulated	285	1.826653	Neuron differentiation	S1 vs C1
Upregulated	303	1.786303	Generation of neurons	S1 vs C1
Downregulated	87	4.536101	Cytoplasmic translation	S1 vs C1
Downregulated	143	2.399412	Translation	S1 vs C1
Downregulated	94	3.055482	Ribosome biogenesis	S1 vs C1
Downregulated	149	2.26082	Peptide biosynthetic process	S1 vs C1
Downregulated	161	2.040399	Peptide metabolic process	S1 vs C1
Downregulated	151	2.094781	Amide biosynthetic process	S1 vs C1
Downregulated	106	2.480376	Ribonucleoprotein complex biogenesis	S1 vs C1
Downregulated	165	1.910342	Cellular macromolecule biosynthetic process	S1 vs C1
Downregulated	170	1.87597	Cellular amide metabolic process	S1 vs C1
Downregulated	37	4.491294	Ribosomal large subunit biogenesis	S1 vs C1
Upregulated	8	6.03131	Actin filament-based movement	S1 vs C2
Upregulated	3	30.15655	Smooth septate junction assembly	S1 vs C2
Upregulated	7	6.809543	Execution phase of apoptosis	S1 vs C2

Downregulated	27	4.465543	Sensory perception of chemical stimulus	S1 vs C2
Downregulated	32	3.281347	Sensory perception	S1 vs C2
Downregulated	16	5.127105	Sensory perception of smell	S1 vs C2
Downregulated	35	2.300624	Nervous system process	S1 vs C2
Downregulated	37	2.055604	System process	S1 vs C2
Downregulated	6	7.425462	Response to pheromone	S1 vs C2
Downregulated	3	21.53384	Ornithine metabolic process	S1 vs C2
Downregulated	3	21.53384	Protein localization to rhabdomere	S1 vs C2
Downregulated	7	5.461481	Cellular response to light stimulus	S1 vs C2
Downregulated	5	8.156758	Rhodopsin mediated signaling pathway	S1 vs C2
Upregulated	612	1.603977	System development	S2 vs C1
Upregulated	495	1.696341	Nervous system development	S2 vs C1
Upregulated	946	1.399109	Anatomical structure development	S2 vs C1
Upregulated	989	1.376511	Developmental process	S2 vs C1
Upregulated	840	1.433094	Multicellular organism development	S2 vs C1
Upregulated	1475	1.241046	Biological regulation	S2 vs C1
Upregulated	600	1.558033	Anatomical structure morphogenesis	S2 vs C1
Upregulated	369	1.812567	Neuron differentiation	S2 vs C1
Upregulated	391	1.766631	Generation of neurons	S2 vs C1
Upregulated	411	1.735714	Neurogenesis	S2 vs C1
Downregulated	75	1.797348	Ribosome biogenesis	S2 vs C1
Downregulated	59	1.909183	Nucleic acid phosphodiester bond hydrolysis	S2 vs C1
Downregulated	32	2.510706	RNA phosphodiester bond hydrolysis endonucleolytic	S2 vs C1
Downregulated	94	1.621655	Ribonucleoprotein complex biogenesis	S2 vs C1
Downregulated	52	1.861453	rRNA processing	S2 vs C1
Downregulated	228	1.313764	Proteolysis	S2 vs C1
Downregulated	56	1.812106	rRNA metabolic process	S2 vs C1
Downregulated	40	2.045553	RNA phosphodiester bond hydrolysis	S2 vs C1
Downregulated	38	1.99676	Mitochondrial translation	S2 vs C1

Downregulated	21	2.559117	Defense response to Gram-positive bacterium	S2 vs C1
Upregulated	99	1.84985	Small molecule metabolic process	S2 vs C2
Upregulated	7	13.88088	Tetrahydrofolate metabolic process	S2 vs C2
Upregulated	42	2.337833	Carbohydrate metabolic process	S2 vs C2
Upregulated	23	3.31699	Alpha-amino acid metabolic process	S2 vs C2
Upregulated	5	15.86387	Tetrahydrofolate interconversion	S2 vs C2
Upregulated	11	5.453204	Aminoglycan catabolic process	S2 vs C2
Upregulated	50	1.978038	Organic acid metabolic process	S2 vs C2
Upregulated	7	9.253922	Folic acid-containing compound metabolic process	S2 vs C2
Upregulated	49	1.977937	Carboxylic acid metabolic process	S2 vs C2
Upregulated	49	1.962953	Oxoacid metabolic process	S2 vs C2

KEGG pathways of the top 2000 genes in individual comparisons of Selected vs Control strains

Expression	Number of Genes	Fold enrichment	Pathway	Comparison
Upregulated	17	3.361077	Starch and sucrose metabolism	S1 vs C1
Upregulated	29	2.023624	Purine metabolism	S1 vs C1
Upregulated	16	2.636139	ABC transporters	S1 vs C1
Upregulated	21	2.224242	Phosphatidylinositol signaling system	S1 vs C1
Upregulated	7	4.151919	Circadian rhythm-fly	S1 vs C1
Upregulated	28	1.825019	MAPK signaling pathway-fly	S1 vs C1
Upregulated	27	1.703675	*Wnt* signaling pathway	S1 vs C1
Upregulated	12	2.156841	Galactose metabolism	S1 vs C1
Upregulated	10	2.372525	Glycine serine and threonine metabolism	S1 vs C1
Upregulated	12	2.156841	Lysine degradation	S1 vs C1
Downregulated	84	4.684217	Ribosome	S1 vs C1
Downregulated	22	2.184745	Ribosome biogenesis in eukaryotes	S1 vs C1
Downregulated	11	2.491975	DNA replication	S1 vs C1
Upregulated	109	1.456111	Metabolic pathways	S2 vs C2
Upregulated	6	8.89697	One carbon pool by folate	S2 vs C2
Upregulated	8	4.745051	Glycine serine and threonine metabolism	S2 vs C2
Upregulated	9	2.839458	Pentose and glucuronate interconversions	S2 vs C2
Upregulated	7	3.459933	Starch and sucrose metabolism	S2 vs C2
Upregulated	17	1.939083	Biosynthesis of cofactors	S2 vs C2
Downregulated	15	3.306306	Drug metabolism-other enzymes	S2 vs C2
Downregulated	8	4.959459	Ascorbate and aldarate metabolism	S2 vs C2
Downregulated	9	4.250965	Porphyrin metabolism	S2 vs C2

Downregulated	11	3.463749	Drug metabolism-cytochrome P450	S2 vs C2
Downregulated	11	3.357173	Metabolism of xenobiotics by cytochrome P450	S2 vs C2
Downregulated	7	4.628829	Retinol metabolism	S2 vs C2
Downregulated	8	3.376653	Pentose and glucuronate interconversions	S2 vs C2
Downregulated	8	2.833977	Neuroactive ligand-receptor interaction	S2 vs C2
Upregulated	8	6.867836	Folate biosynthesis	S1 vs C2
Upregulated	5	10.30175	Thiamine metabolism	S1 vs C2
Downregulated	4	6.843823	Pentose phosphate pathway	S1 vs C2
Downregulated	5	5.22792	Other types of O-glycan biosynthesis	S1 vs C2
Downregulated	4	6.843823	Insect hormone biosynthesis	S1 vs C2
Upregulated	303	1.199773	Metabolic pathways	S2 vs C1
Upregulated	16	2.812934	Glycine serine and threonine metabolism	S2 vs C1
Upregulated	36	1.861501	Purine metabolism	S2 vs C1
Upregulated	17	2.490619	Starch and sucrose metabolism	S2 vs C1
Upregulated	29	1.96094	Biosynthesis of amino acids	S2 vs C1
Upregulated	17	2.264199	Lysine degradation	S2 vs C1
Upregulated	15	2.126714	Valine leucine and isoleucine degradation	S2 vs C1
Upregulated	18	1.977844	Glycerolipid metabolism	S2 vs C1
Upregulated	7	3.076647	One carbon pool by folate	S2 vs C1
Upregulated	40	1.51559	Carbon metabolism	S2 vs C1
Downregulated	16	2.844961	DNA replication	S2 vs C1
Downregulated	16	2.677611	Nucleotide excision repair	S2 vs C1
Downregulated	17	2.303064	Porphyrin metabolism	S2 vs C1
Downregulated	35	1.731716	Spliceosome	S2 vs C1

Downregulated	11	2.318117	RNA polymerase	S2 vs C1
Downregulated	22	1.714771	Ribosome biogenesis in eukaryotes	S2 vs C1
Downregulated	8	2.677611	Base excision repair	S2 vs C1

Candidate genes filtered for the study

FlyBase Gene ID	Gene Name	Fold change	Function	Expression in the body	Human orthologues	Human disease association	Expression levels in adulthood	
							Male	Female
FBgn0030607	doppelganger von brummer	1.83	Triglyceride lipase activity, lipid homeostasis and triglyceride catabolic process	Organism	PNPLA5 (patatin-like phospholipase domain containing 5), PNPLA1 (patatin-like phospholipase domain containing 1)	Neutral lipid storage disease with myopathy (NLSDM), autosomal recessive congenital ichthyosis 10	Low Expression	Medium Expression-Medium High Expression
FBgn0052191		1.69	Sulfuric ester hydrolase activity	Organism	Arylsulfatase family members (ARSB, ARSI, ARSJ, ARSA, ARSL)	Mucopolysaccharidosis VI, metachromatic leukodystrophy, X-linked chondrodysplasia punctata 1	Low Expression	Low Expression
FBgn0033999		1.55	Lipase activity, multicellular organism reproduction	Midgut	LIPA (lipase A, lysosomal acid type), LIPF (lipase F, gastric type), and LIPK (lipase family member K), LIPM, lipase family member M, LIPN, lipase family member N, LIPJ, lipase family member J	Wolman disease, autosomal recessive congenital ichthyosis 8, cholesterol ester storage disease, and lysosomal and lipase deficiency	Medium High Expression -High Expression	Low Expression-High Expression
FBgn0036428	Glycogen binding subunit 70E	1.33	Glycogen binding activity and protein phosphatase 1 binding activity, behavioural response to ethanol and regulation of glycogen metabolic process	Blastoderm embryo, embryonic epidermis, extended germ band embryo,	PPP1R3B (protein phosphatase 1 regulatory subunit 3B) and PPP1R3C (protein	To study alcohol use disorder, PPP1R3A (protein phosphatase 1 regulatory subunit 3A), diabetes mellitus type 2	Medium High Expression	Medium High Expression

				germ layer, and gut section	phosphatase 1 regulatory subunit 3C), PPP1R3D, protein phosphatase 1 regulatory subunit 3D, PPP1R3A, protein phosphatase 1 regulatory subunit 3A			
FBgn0031170	ATP binding cassette subfamily A member 3	1.24	ATPase-coupled transmembrane transporter activity and lipid transporter activity, lipid transport	Adult head and organism	ABCA3 (ATP binding cassette subfamily A member 3)	Pulmonary alveolar proteinosis, to study autism spectrum disorder	Low Expression -Medium Expression	Low Expression-Medium Expression
FBgn0034381	Lithium-inducible SLC6 transporter	1.23	L-amino acid transmembrane transporter activity, amino acid:sodium symporter activity, and neurotransmitter transmembrane transporter activity, response to lithium ion	Adult brain, adult gut, adult head, and adult ventral nervous system	SLC6A7, SLC6A9, SLC6A17, SLC6A1, SLC6A2, SLC6A3, SLC6A4, SLC6A5, SLC6A8	Glycine encephalopathy with normal serum glycine, mental retardation, autosomal recessive 48, (MRT48) myoclonic-atonic epilepsy (MAE) postural orthostatic tachycardia syndrome, parkinsonism-dystonia, infantile 1 (PKDYS 1), tobacco addiction, susceptibility to, anxiety obsessive-compulsive disorder (OCD), hyperekplexia 3, cerebral creatine deficiency syndrome 1 (CCDS1), creatine transporter deficiency	Low Expression	Very Low Expression-Low Expression
FBgn0052549		1.23	5'-nucleotidase activity	Adult head, adult heart, embryonic/larval somatic muscle, presumptive	NT5C2 (5'-nucleotidase, cytosolic II), NT5DC4, 5'-nucleotidase	Hereditary spastic paraplegia 45	Medium High Expression -High Expression	Medium High Expression-High Expression

				embryonic/larval system, and yolk nucleus	domain containing 4			
FBgn0085478		1.22	Palmitoyltransferase activity, protein palmitoylation	Adult head and embryonic/larval central nervous system	ZDHHC5 (zinc finger DHHC-type palmitoyltransferase 5) and ZDHHC8 (zinc finger DHHC-type palmitoyltransferase 8), ZDHHC9, zinc finger DHHC-type palmitoyltransferase 9	ZDHHC9 (zinc finger DHHC-type palmitoyltransferase 9), Syndromic X-linked intellectual disability Raymond type	Low Expression	Medium Expression
FBgn0030286	GTPase activating protein and VPS9 domains 1	1.19	GTPase activating protein binding activity and Rab guanyl-nucleotide exchange factor activity, regulation of Rab protein signal transduction and regulation of protein transport	Adult fat body and spermatozoon	GTPase activating protein and VPS9 domains 1 (GAPVD1)	To study nephrotic syndrome	Medium Expression	Medium High Expression
FBgn0035529	Ferredoxin 2	1.18	Electron transfer activity, positive regulation of ecdysteroid biosynthetic process	Adult heart, gut section, posterior endoderm, and presumptive embryonic/larval digestive system	Ferredoxin 1 (FDX1), Ferredoxin 2 (FDX2)	Mitochondrial myopathy, episodic, with or without optic atrophy and reversible Leukoencephalopathy (MEOAL)	Medium High Expression	Medium High Expression-High Expression
FBgn0260747	Coiled-coil-helix-coiled-coil-helix domain containing 2	1.18	Mitochondrion organization	Embryonic Malpighian tubule, Embryonic/larval muscle system, gut section, and head	CHCHD10 (coiled-coil-helix-coiled-coil-helix domain containing 10) and CHCHD2 (coiled-coil-helix-coiled-coil-helix domain containing 2)	Parkinson's disease 22 and frontotemporal dementia and/or amyotrophic lateral sclerosis-2, to study Parkinson's disease and Parkinson's disease 22	Very High Expression	High Expression-Very High Expression

FBgn0003748	Trehalase	1.16	Alpha, alpha-trehalase activity, neuronal stem cell population maintenance and trehalose catabolic process	Circulatory system, dorsal ectoderm, embryonic/larval muscle system, head, and presumptive embryonic/larval system	TREH (trehalase)	Trehalase deficiency	High Expression	High Expression
FBgn0031318		1.16	mRNA binding activity, mRNA splicing, via spliceosome	Embryonic brain, organism, and ventral nerve cord	RBM10 (RNA binding motif protein 10) and RBM5 (RNA binding motif protein 5), RBM6, RNA binding motif protein 6	RBM10 - TARP syndrome	Medium Expression	Medium Expression
FBgn0016984	skittles	1.14	1-phosphatidylinositol-4-phosphate 5-kinase activity involved in several processes, including basement membrane organization, germ cell development, and negative regulation of histone phosphorylation	Anterior ectoderm anlage, ectoderm, embryonic/larval gut, extended germ band embryo, and gonad	PIP5K1A (phosphatidylinositol-4-phosphate 5-kinase type 1 alpha)	PIP5K1A, phosphatidylinositol-4-phosphate 5-kinase type 1 alpha PIP5K1B, phosphatidylinositol-4-phosphate 5-kinase type 1 beta PIP5K1C, phosphatidylinositol-4-phosphate 5-kinase type 1 gamma - Lethal congenital contracture syndrome 3, LCCS3 PIPSL, PIP5K1A and PSMD4 like (pseudogene) PIP5KL1, phosphatidylinositol-4-phosphate 5-kinase like 1	Medium Expression	Medium High Expression-High Expression
FBgn0003964	ultraspiracle	1.13	Nuclear receptor activity, protein heterodimerization activity, and transcription regulatory	Central nervous system, gut, imaginal disc, reproductive	RXRA (retinoid X receptor alpha) and RXRG	Lung non-small cell carcinoma and pancreatic cancer	Medium Expression	Medium High Expression-High Expression

			region sequence-specific DNA binding activity, DNA-binding transcription activator activity, RNA polymerase II-specific and ecdysone binding activity, border follicle cell migration, instar larval or pupal development, and nervous system development	system, and ring gland	(retinoid X receptor gamma), RXRB, retinoid X receptor beta			
FBgn0001308	Kinesin heavy chain	1.11	Microtubule binding activity, microtubule motor activity, and tropomyosin binding activity. Involved in several processes, including cytoskeleton organization, neuron differentiation, and oogenesis	Adult heart, glial cell, gonad, head, and photoreceptor cell	KIF5B (kinesin family member 5B), KIF5A, kinesin family member 5A, KIF5C, kinesin family member 5C	Amyotrophic lateral sclerosis, autoimmune disease (multiple), complex cortical dysplasia with other brain malformations 2, hereditary spastic paraplegia 10, and prostate cancer, to study hereditary spastic paraplegia, motor neuron disease, neurodegenerative disease, and spinal muscular atrophy	Medium High Expression	High Expression
FBgn0039730		1.09	mRNA binding activity	Adult head and organism	RBM14 (RNA binding motif protein 14)	RBM4 (RNA binding motif protein 4)	Medium Expression	Medium Expression
FBgn0039585		0.43	Histone acetyltransferase activity (H4-K16 specific), histone binding activity, and transcription coregulator activity, negative regulation of transcription, DNA-templated and positive regulation of transcription by RNA polymerase II	Undetermined	KAT8 (lysine acetyltransferase 8)	Undetermined	Very Low Expression	Very Low Expression-Low Expression
FBgn0030332		0.48	17-beta-hydroxysteroid dehydrogenase (NADP+) activity, 17-beta-ketosteroid reductase activity, and 3-keto sterol reductase activity	Adult head, embryonic midgut chamber, and embryonic/larval midgut	DHRS11	Undetermined	Medium High Expression-High Expression	Medium Expression-High Expression

FBgn0027583		0.85	Oxidoreductase activity	Adult head	DHRS7B (dehydrogenase/reductase 7B), DHRS7C, RDH8	DHRS7B, dehydrogenase/reductase 7B, DHRS7C, dehydrogenase/reductase 7C, RDH8, retinol dehydrogenase 8	Medium Expression	Medium Expression-Medium High Expression
FBgn0030061		0.82	5S rRNA binding activity, rRNA processing and ribosomal large subunit assembly	Anterior endoderm, Anterior endoderm anlage, embryonic/larval muscle system, extended germ band embryo, and gut section	NOP53 (NOP53 ribosome biogenesis factor)	NOP53 (NOP53 ribosome biogenesis factor)	Low Expression-Medium Expression	Medium High Expression-High Expression
FBgn0029839		0.77	Undetermined	Adult head	Them6 (thioesterase superfamily member 6)	Them6 (thioesterase superfamily member 6)	Low Expression-Medium Expression	Very Low Expression-Low Expression
FBgn0037298	Saccheropin dehydrogenase 1	0.79	Oxidoreductase activity, glycolipid biosynthetic process	Adult head, adult heart, and organism	Human SCCPDH (saccharopine dehydrogenase (putative)		High Expression-Very High Expression Expression	High Expression
FBgn0035149	Mediator complex subunit 30	0.82	Transcription coregulator activity, positive regulation of transcription, DNA-templated	Undetermined	MED30 (mediator complex subunit 30)	MED30, mediator complex subunit 30	Medium Expression	Medium Expression
FBgn0000404	Cyclin A	0.80	Cyclin-dependent protein serine/threonine kinase regulator activity, asymmetric neuroblast division, regulation of mitotic cell cycle, and syncytial blastoderm mitotic cell cycle	Ectoderm, extended germ band embryo, gonad, presumptive embryonic/larval nervous system, and sensory nervous system primordium	CCNA2 (cyclin A2), CCNA1, cyclin A1, CCNB1, cyclin B1, CCNB2, cyclin B2, CCNB3, cyclin B3, CCNE2, cyclin E2	Prostate cancer	Medium Expression	Very High Expression
FBgn0038964	Nop56	0.80	snoRNA binding activity	Undetermined	NOP56	Spinocerebellar ataxia type 36	Medium Expression	Very High Expression
FBgn0029524		0.76	CD27 receptor binding activity, extrinsic	Embryonic brain, Embryonic/larv	SIVA1	SIVA1 (SIVA1 apoptosis inducing factor)	Very Low Expression	Very Low Expression

			apoptotic signalling pathway	al nervous system, extended germ band embryo, and gonad				
FBgn0032247		0.86	Aminopeptidase activity and metalloexopeptidase activity, proteolysis	Adult head	ME (methionyl aminopeptidase type 1D, mitochondrial), ME (tap1, methionyl aminopeptidase 1)	Undetermined	Low Expression	Low Expression
FBgn0039337	Mediator complex subunit 28	0.86	Transcription coregulator activity, regulation of transcription by RNA polymerase II	Eye, organism	Medium expressiond28 (mediator complex subunit 28)		Medium Expression	Medium Expression
FBgn0000092	daywake	0.19	Circadian rhythm, positive regulation of sleep/wake cycle, multicellular organism reproduction	Epidermis, eye	Undetermined	Undetermined	Very Low Expression-Medium High Expression	Very Low Expression-High Expression
FBgn0030607	doppelganger von brummer	1.83	Triglyceride lipase activity, lipid homeostasis and triglyceride catabolic process	Organism	PNPLA5 (patatin-like phospholipase domain containing 5), PNPLA1 (patatin-like phospholipase domain containing 1)	Neutral lipid storage disease with myopathy (NLSDM), autosomal recessive congenital ichthyosis 10	Low Expression	Medium Expression-Medium High Expression
FBgn0035039	aarF domain containing kinase 1	1.56	ATP binding activity and protein kinase activity, negative regulation of mitochondrial fusion, positive regulation of cristae formation, and protein phosphorylation	Adult fat body, adult head, and gut section	ADCK1 (aarf domain containing kinase 1)		Medium Expression	Medium Expression
FBgn0004797	midway	1.46	Diacylglycerol O-acyltransferase activity, negative regulation of lipid storage and regulation of nurse cell apoptotic process	Adult head and embryonic/larval muscle system	DGAT1 (diacylglycerol O-acyltransferase 1)	Cardiomyopathy and congenital diarrhoea 7 with exudative enteropathy	Low Expression	Low Expression-Medium Expression

FBgn0036337	Adenosine kinase 2	1.28	Adenosine kinase activity, AMP biosynthetic process	Adult head, embryonic/larval midgut, embryonic/larval midgut primordium, and embryonic/larval muscle system	ADK (adenosine kinase)	Implicated in hypermethioninemia due to adenosine kinase deficiency	Medium Expression-Medium High Expression	Medium High Expression-High Expression
FBgn0040305	Metal response element-binding Transcription Factor-1	1.26	DNA-binding transcription factor activity and transcription regulatory region sequence-specific DNA binding activity, several processes, including metal ion homeostasis, response to copper ion, and stress response to cadmium ion	Embryonic/larval garland cell, Embryonic/larval midgut, Embryonic/larval muscle system, garland cell primordium, and presumptive Embryonic/larval digestive system	MTF1 (metal regulatory transcription factor 1)		Low Expression	Medium Expression
FBgn0027569	ceramide transfer protein	1.18	Ceramide binding activity and ceramide transfer activity, ceramide transport and sphingolipid metabolic process	Organism	CERT1 (ceramide transporter 1)	Autosomal dominant non-syndromic intellectual disability 34	Medium Expression	Medium Expression
FBgn0035529	Ferredoxin 2	1.18	Electron transfer activity, positive regulation of ecdysteroid biosynthetic process	Adult heart, gut section, posterior endoderm, and presumptive embryonic/larval digestive system	FDX1 (ferredoxin 1), FDX2, ferredoxin 2	Mitochondrial myopathy, episodic, with or without optic atrophy and reversible, Leukoencephalopathy (MENOAL)	Medium High Expression	Medium High Expression-High Expression
FBgn0038672		0.84	Regulation of phosphatidylinositol 3-kinase activity, wound healing, early endosome to late endosome transport	Undetermined	WDR91 (WD repeat domain 91)	WDR91, WD repeat domain 91	Medium Expression	Low Expression-Medium Expression
FBgn0034049	bedraggled	1.29	Neurotransmitter: sodium symporter activity, R3/R4 cell fate commitment, integral	Embryonic/larval central nervous system, imaginal disc, mesectoderm	Undetermined	Undetermined	Medium Expression	Low Expression

			component of membrane and plasma membrane	anlage, midline primordium, and photoreceptor cell				
FBgn0035082		0.77	Gamma-glutamylaminecyclotransferase activity	Embryonic midgut chamber and Embryonic/larval midgut	GGACT (gamma-glutamylamine cyclotransferase)	GGACT (gamma-glutamylamine cyclotransferase)	Medium Expression	Medium Expression-Medium High Expression

Gene Sequences

Gene	ON Targets	OFF Targets	Sequence
CG2811	1	0	TTGTTGCTCGCGATCATAGTAGTCCGGGTAGTC TTCTAGTATGTCCAGTTTGGAGAGCATGGTCTC GTCCACTTCGTAGACTTCGCCTTCTATGTGGTT CCCCTCACCCGGGCGGGCGAGCAGAAATGGGA TGTTGTAGCGGGTTCCGACAACCAGGGGAAAC TTCGTTTCCGTTTTCCCCCTTCCAAGGAATCGG GCTTGGCCGTTCTCCTTTTTCGTCAGCCAGTGG TGATTGGGCTCACCGCGCTTCAACGTGCCATAC ACAAAGACCCTTGCCGCCATTCTCAGCTTTTCA GCCATTGCGCTTCCCGCCGCCAGGCTTATCAGT TTCAAGCGGTATCGTGCTATCAAATCCGACCT
CG6005	1	0	CTCCCAGAGAACTGGCTGTCTGGTCCTTGCGCC CCATCACAGGCGAGCTGCCCGATCCAATATTA CGGATTAACTGCTTAAGGCTGCGCGCCTGTGC GTCGCTGGCCTGGCTCACGCTGTTCGCCTCGGA AGCAATGATGCAGAAATCATCGACTATGTGTC CGGGAGGACTGATGTCGAAAGGCAGAATGTCG CTCAGGCTCTGCTGCTGGCGATACACGCTGCGT CTGCGGGCTCCATTGTCGACCCCACCGCCAAG TGAACTTCCGCTTGCGGCCGCAGTTCCTGATTG TTGCTGGGT
Daywake	1	1	CTTGGTGGCCGTCTTGTAGTCGGTGATGTTGAG ATAGGTGTGGCCATCGGAGCGCTTCACTGGCT CGGCGGTAATCCAAACCTTTGTGTGCACATCGT TCAACCGAATGGTCAGGTCGCCCTTGCTGACA ATGGGCAGGATGAGCAGCTTGCCGTCTACGTC GTACTTGGCCCGCACCTCCAGTTCCGGATTGTC CAAGAGCAGGGTCAGCTTGAGCGGCCTGGTGA GGTCCTTGGTGAATCCCTTCAGGCTCTTGACCA

			TCATCGAGTTGGCCAGATTGTAGAGCTTGGCA TCGCTCATGGTCAGTTTGAACTTTATCGACTCC GAGTGGC
*Gpdh*1 -GD(CG9042)	-1	0	CCGTGTTGATGGGCGCAAACCTGGCCAACGAG GTGGCTGAGGGCAACTTCTGCGAAACGACAAT CGGCTGCACGGACAAGAAGTATGGCAAGGTGC TGCGCGATCTCTTCCAGGCGAACCACTTCCGCG TGGTGGTCGTGGACGATGCTGATGCCGTGGAG GTTTGCGGTGCCCTCAAGAACATCGTGGCCTG CGGCGCTGGCTTTGTTGATGGCCTCAAGCTGG GCGACAACACCAAGGCGGCTGTCATCCGGCTG GGCCTCATGGAGATGATTCGCTTCGTGGACGT CTTCTATCCCGGAAGCAAGCTGTCCACCTTCTT CGAGAGCTGCG
*Gpdh*1 – KK (CG9042)			CAACTTCTGCGAAACGACAATCGGCTGCACGG ACAAGAAGTATGGCAAGGTGCTGCGCGATCTC TTCCAGGCGAACCACTTCCGCGTGGTGGTCGT GGACGATGCTGATGCCGTGGAGGTTTGCGGTG CCCTCAAGAACATCGTGGCCTGCGGCGCTGGC TTTGTTGATGGCCTCAAGCTGGGCGACAACAC CAAGGCGGCTGTCATCCGGCTGGGCCTCATGG AGATGATTCGCTTCGTGGACGTCTTCTATCCCG GAAGCAAGCTGTCCACCTTCTTCGAGA
forkhead	1	1	CCCCACCGCCCAGCAATAACAACCCGAATCCG ACGAGCAACGGCGGCAGCATGAGTCCCCTGGC TCGATCCGCCTACACAATGAACAGCATGGGCC TGCCGGTGGGTGGCATGTCATCGGTTTCCCCTC AGGCGGCGGCCACATTCAGCTCCAGCGTCCTG GACTCGGCGGCGGCGGTCGCCAGCATGAGCGC CAGCATGAGTGCCAGTATGAGCGCCAGCATGA ATGCCAGCATGAACGGCAGCATGGGTGCGGCG GCCATGAACTCAATGGGCGGCAACTGCATGAC

			CCCCAGCTCGATGAGCTACGCCAGCATGGGAT CACCGCTCGGGAACATGGGTGGCTGCATGGCC ATGTCGGCAGCGAGTATGTCGGCGGCGGGAT
MTF-1			ATGCGCACGCACACCCAGGAGCGGCCCTACAA ATGTCCGGAAGATGACTGCGGCAAAGCCTTCA CCGCCTCGCATCACCTGAAGACCCACCGAAGG ACACATACAGGCGAAAAGCCGTATCCCTGCCA GGAGGACAGCTGCCAAAAGTCGTTTAGCACAT CGCATAGTTTGAAATCCCACAAAAAGACTCAC CAGCGACAATTGCAAAACAAGGGTCGCAAGA AAAGGCCACTAAAGACGCAGCAGACCAAGTG CAGCGATCAGGAGCAGAAGGATCCACAGCAG GAGGAGCAAGAGGAAGAGGAGTTCATTAAAG AGGATCAACCCGAAATGACGTTGTTAAATCCA GGCAGTCACTGCTCCGAAACCACCAGCACGGA CAGCGGAGTGGTGCTGCAAACTCTCACGCCGC AGGATCACTTGTCCAATGTGTTTATCCTACAGG GCAACGAGCCTCTGATCCTTCCAGAAACATCA CAGGCTTACCAGCTCTCCTACGCCGCCGAGGA GGAAAGACCCAGTCCGTGGATTGACGCCGGCG TCCTTGTCTCTAAGCCCATCATTCCCATGGCTC CGCTGACGGATGCCTGCGTGGCCTTGCCCACC GAGATGCCCAGTTTCGTTAACCTGAAGCCCAC ATTCGGCAATGCAGTAAGCGGCAATATGGGGG ATCCGCAGCCGGAGACCATGGATGTGGATCCC ACAGTGGAAACCTCACTGCCCACGCCCACCTT GGAGTTGAATCAGCCAAATATCGAAGAGCTGC TCAAGCAGGACAGTTTCGAGAACGAGGAGGAC ATGGAAACGGAGTCGCTTCTAAATGACATCCT CATGACCATCGACAACAACAGTGCGCTGCTGC AGGCCACACTCCAGCAGGCCTCACAGGTGCCA AGCGATGCCTCCGGCTTGGTGGAACTGGACAT

			ACGGGACAACAAGCCGACTCTGAAGCAGATCA CAGCGGATGCGGGCATCTGCAATTGCACCAAC TGCAAGTGCGATCAGACAAAGAGCTGTCATGG GGGTGACTGTGGTGCTGCAGCTGCTCAACAGA CCACCAGGACTGGCGCACCCACAACAACAACA ACGACAACAACGATGAATTCCAGCGGTGGCAA ACGAATTTGCGGCAGCGTGGTGCCCACCAAAA AAGTGAGTAAACGCGAGACGGAAATGAACCA GAACATCGAGGATGTTGCTTTGCTGCTGCAAA ACCTTGCTTCCATGAGTAGCGGTGGCTCCTCCG GCGGTGGCGGCGGTTGCTGCGGCGGTGGTGCC GTCAAGCCAGCACCCTCAGGTGGTGGCTGCTG TGGAGAACCCAAAGCTCCGAAGCCCGTGAATG CCGGTTGTGGTTGTGCCCGCCCAAGTGCTCCGT CCTCTGGTGGTTGTTGCGGCAGTGGAGTTGCTT CTACTCCAAAACCAACTGGTGGTTGCTGTTCAG GCAACCAAAAGCCAGCTCCAACAGCTACCGCT GCCTCGTCACCCTCGTGTTGCTGCTCTGGCAAG GGCGAAGTCCAGGAGCCGCCGGTCATTAGCAG CGCTTCTTCAGCTCCCGCTGCCGCCGTCAAGGG CAACGCCTGCACATGCAAGAGTCCGGCTG AGGGCGTGGCCAACGGCTGCTGCGTAGTGATC TGCATTAAAACGCTGCAAGCTCTACGCAAAGT TCTGACGCGCCGGAATCTAAATCTAATGCTTTG TCCACAGCAGAAC

Fly food

Component	Amount (per litre of food)
Sugar	80 g
Yeast	80 g
Agar	36 g
Nipagin (dissolved in 100% ethanol)	30 ml
Propionic Acid	5 ml
Water	1000 ml

Lifespan Experimental designs

Lifespan experiment 1

Driver	Responder	Dose of RU486 (mg/ml)	Type of expression	Number of vials	Number of flies per vial
daGS	***Gpdh* (GD)**	0	RNAi	7	20
		1.6	RNAi	7	20
		3.2	RNAi	7	20
daGS	***Gpdh* (KK)**	0	RNAi	7	20
		1.6	RNAi	7	20
		3.2	RNAi	7	20
daGS	**wDah**	0	Control	5	20
		1.6	Control	5	
		3.2	Control	6	

Summary Statistics

Driver	Responder	Dose of RU486 (g/ml)	Time of induction (days)	Condition	Number of deaths	Number of censors	Number of scored animals	Median lifespan	Maximum lifespan	p log rank test
daGS	Gpdh (GD)	0	NA	Uninduced	135	2	137	72	86	0.44
daGS	Gpdh (GD)	112	NA	Induced	111	5	116	72	98	
daGS	Gpdh (GD)	224	NA	Induced	125	4	129	72	96	
daGS	Gpdh (KK)	0	NA	Uninduced	135	4	139	62	89	**0.0026**
daGS	Gpdh (KK)	112	NA	Induced	142	5	147	59	91	
daGS	Gpdh (KK)	224	NA	Induced	135	0	135	56	86	
daGS	wDah (backgound control)	0	NA	Uninduced	96	4	100	62	83	0.50
daGS	wDah (backgound control)	112	NA	Induced	97	2	99	62	81	
daGS	wDah (backgound control)	224	NA	Induced	119	2	121	61	83	

Lifespan Experiment 2

Driver/Responder	***Actin-GS***			***daughterless-GS***			
Dose of RU486 ->	**0 mg/ml**	**0.8 mg/l**	**3.2 mg/ml**	**0 mg/ml**	**0.8 mg/l**	**3.2 mg/ml**	**Total**
UAS-*forkhead*	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	6 treatments (48 vials)
UAS-*ggact*	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	6 treatments (48 vials)
UAS-*daywake*	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	6 treatments (48 vials)
UAS-*wdr91*	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	6 treatments (48 vials)
UAS-*MTF-1*	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	6 treatments (48 vials)
White Dahomey	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	8 vials x 20 flies	6 treatments (48 vials)

Summary Statistics

Driver	Responder	Dose of RU486 (g/ml)	Time of induction (days)	Condition	Number of deaths	Number of censors	Number of scored animals	Median lifespan	Maximum lifespan	p log rank test
ActGS	fkh	0	NA	Uninduced	148	14	162	62	82	
ActGS	fkh	56	NA	Induced	150	13	163	60	82	**0.02**
ActGS	fkh	224	NA	Induced	142	18	160	55	82	
daGS	fkh	0	NA	Uninduced	145	16	161	62	87	**7.53×10^{-6}**
daGS	fkh	56	NA	Induced	133	28	161	55	87	
daGS	fkh	224	NA	Induced	149	13	162	53	77	
ActGS	dyw	0	NA	Uninduced	143	17	160	66	84	
ActGS	dyw	56	NA	Induced	136	15	151	64	77	0.10
ActGS	dyw	224	NA	Induced	147	14	161	64	82	
daGS	dyw	0	NA	Uninduced	146	15	161	55	87	
daGS	dyw	56	NA	Induced	147	15	162	53	87	0.07
daGS	dyw	224	NA	Induced	148	14	162	53	87	
ActGS	CG2811	0	NA	Uninduced	130	22	152	60	82	
ActGS	CG2811	56	NA	Induced	137	17	154	60	80	0.14
ActGS	CG2811	224	NA	Induced	130	25	155	60	82	
daGS	CG2811	0	NA	Uninduced	145	18	163	57	82	
daGS	CG2811	56	NA	Induced	143	17	160	55	75	**0.03**
daGS	CG2811	224	NA	Induced	145	15	160	53	80	
ActGS	CG6005	0	NA	Uninduced	137	21	158	62	80	
ActGS	CG6005	56	NA	Induced	144	16	160	62	80	0.23
ActGS	CG6005	224	NA	Induced	148	14	162	60	80	

daGS	CG6005	0	NA	Uninduced	146	14	160	53	80	**$1.1x10^{-4}$**
daGS	CG6005	56	NA	Induced	147	13	160	53	75	
daGS	CG6005	224	NA	Induced	150	13	163	46	80	
ActGS	MTF1	0	NA	Uninduced	147	14	161	62	80	0.51
ActGS	MTF1	56	NA	Induced	142	18	160	64	80	
ActGS	MTF1	224	NA	Induced	143	16	159	64	77	
daGS	MTF1	0	NA	Uninduced	144	13	157	57	87	**0.01**
daGS	MTF1	56	NA	Induced	143	17	160	55	75	
daGS	MTF1	224	NA	Induced	145	15	160	53	87	
ActGS	wDah (background control)	0	NA	Uninduced	140	18	158	62	87	0.79
ActGS	wDah (background control)	56	NA	Induced	143	13	156	60	82	
ActGS	wDah (background control)	224	NA	Induced	144	18	162	60	82	
daGS	wDah (background control)	0	NA	Uninduced	147	13	160	50	82	**0.01**
daGS	wDah (background control)	56	NA	Induced	145	16	161	53	80	
daGS	wDah (background control)	224	NA	Induced	145	15	160	48	82	

Lifespan Experiment 3

Driver	**Responder**	**Dose of RU486**	**Time of gene induction – start (days in fly age)**	**Time of gene induction – stop (days in fly age)**	**Number of vials (flies per vial)**
ActGS	***Adck*1**	0	3	End of life	8 vials x 20 flies
		3.2	3	End of life	8 vials x 20 flies
		0	3	25	8 vials x 20 flies
		3.2	3	25	8 vials x 20 flies
		0	10	End of life	8 vials x 20 flies
		3.2	10	End of life	8 vials x 20 flies
		0	20	25	8 vials x 20 flies
		3.2	20	25	8 vials x 20 flies
		0	20	End of life	8 vials x 20 flies
		3.2	20	End of life	8 vials x 20 flies
ActGS	**wDah**	0	3	End of life	8 vials x 20 flies
		3.2	3	End of life	8 vials x 20 flies
		0	3	25	8 vials x 20 flies

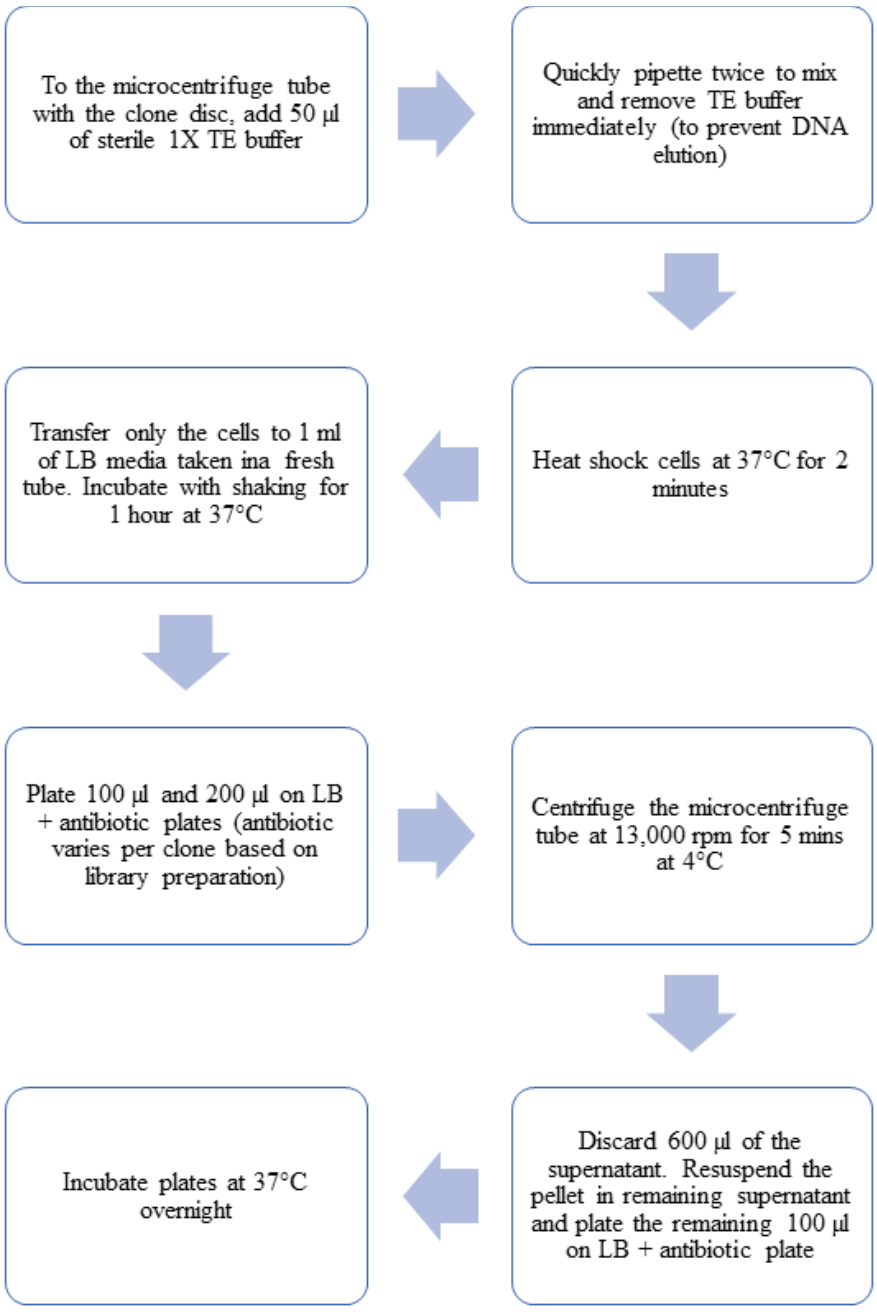
		3.2	3	25	8 vials x 20 flies
		0	10	End of life	8 vials x 20 flies
		3.2	10	End of life	8 vials x 20 flies
		0	20	25	8 vials x 20 flies
		3.2	20	25	8 vials x 20 flies
		0	20	End of life	8 vials x 20 flies
		3.2	20	End of life	8 vials x 20 flies

Summary Statistics

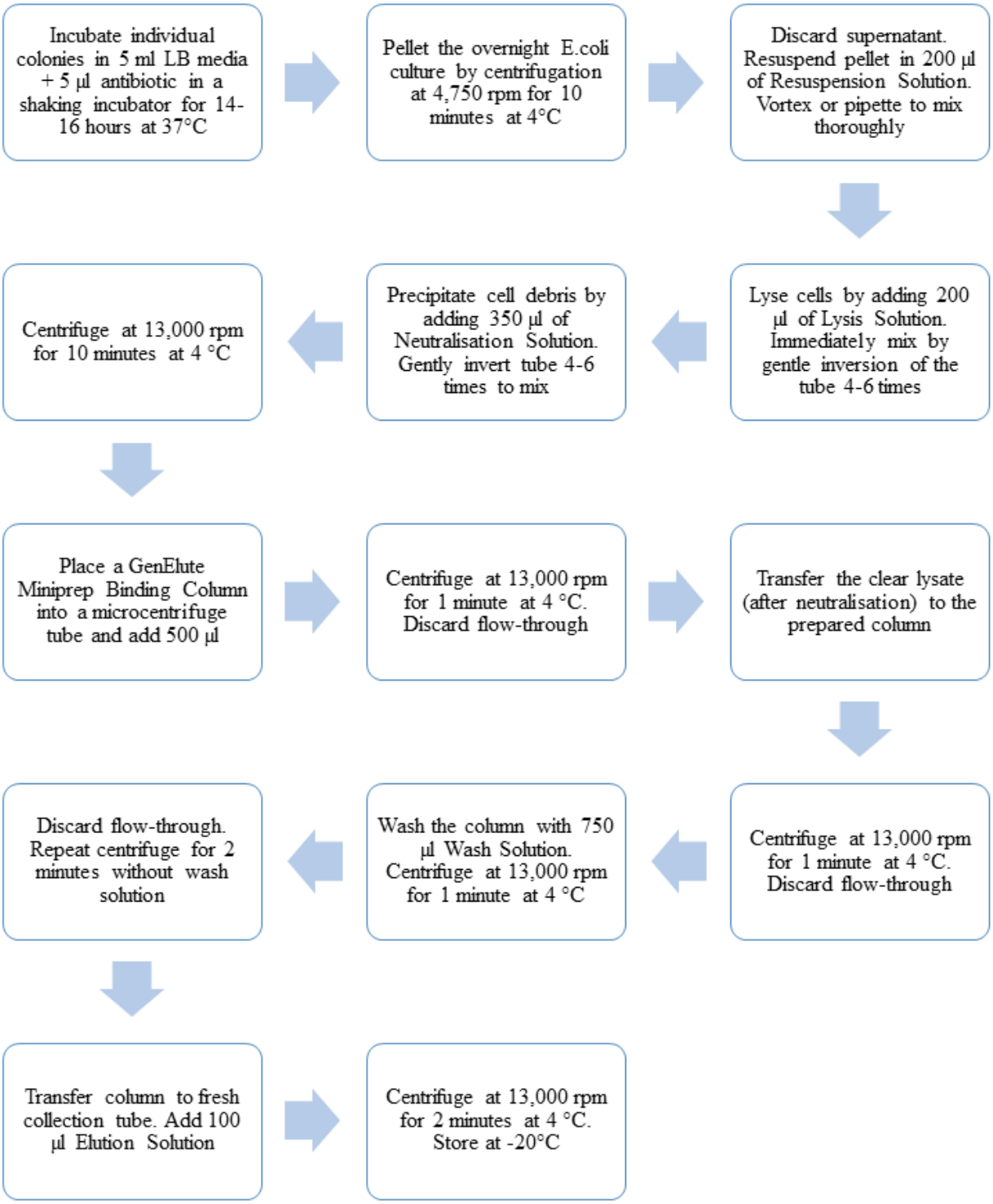
Driver	Responder	Dose of RU486 (g/ml)	Time of induction (days)	Condition	Number of deaths	Number of censors	Number of scored animals	Median lifespan	Maximum lifespan	p log rank test
ActGS	Adck1	0	3-end	Uninduced	145	16	161	73	106	**3.52×10^{-10}**
ActGS	Adck1	224	3-end	Induced	155	16	171	61	96	
ActGS	Adck1	0	3-25	Uninduced	123	16	139	71	99	**0.0095**
ActGS	Adck1	224	3-25	Induced	123	17	140	61	96	
ActGS	Adck1	0	10-end	Uninduced	126	14	140	71	96	0.07
ActGS	Adck1	224	10-end	Induced	119	15	134	71	99	
ActGS	Adck1	0	20-end	Uninduced	126	16	142	68	94	**0.0077**
ActGS	Adck1	224	20-end	Induced	118	19	137	64	99	
ActGS	Adck1	0	20-25	Uninduced	128	17	145	68	96	0.83
ActGS	Adck1	224	20-25	Induced	115	19	134	73	94	
ActGS	wDah (background control)	0	3-end	Uninduced	149	14	163	66	99	0.86
ActGS	wDah (background control)	224	3-end	Induced	136	18	154	68	103	
ActGS	wDah (background control)	0	3-25	Uninduced	131	19	150	71	99	**0.01**
ActGS	wDah (background control)	224	3-25	Induced	134	23	157	68	101	

ActGS	wDah (background control)	0	10-end	Uninduced	121	29	150	75	101	**3.2×10^{-5}**
ActGS	wDah (background control)	224	10-end	Induced	136	18	154	66	94	
ActGS	wDah (background control)	0	20-end	Uninduced	137	24	161	71	103	**0.02**
ActGS	wDah (background control)	224	20-end	Induced	124	21	145	66	92	
ActGS	wDah (background control)	0	20-25	Uninduced	141	15	156	71	99	**0.01**
ActGS	wDah (background control)	224	20-25	Induced	139	22	161	68	99	

Processing clones from Whatman© FTA© Discs



Plasmid miniprep



cDNA Synthesis

Reaction mixture for first strand cDNA synthesis was heated up to 65°C for 5 minutes, followed by immediate cooling

Component	**Volume (µl)**	**Concentration**
Oligodt Primer	1	50 pmol
dNTP mix	1	10 mM
Total RNA	8	Less than 5 µg
Total	**10**	

Reverse transcriptase

Reverse transcription mixture was incubated at 42°C for 30 minutes and 70°C for 15 minutes

Component	**Volume (µl)**
RNA/Primer mixture (from above step)	10
5X PrimeScript Buffer	4
PrimeScript ReverseTranscriptase	1
Water (RNase free)	5
Total	**20**

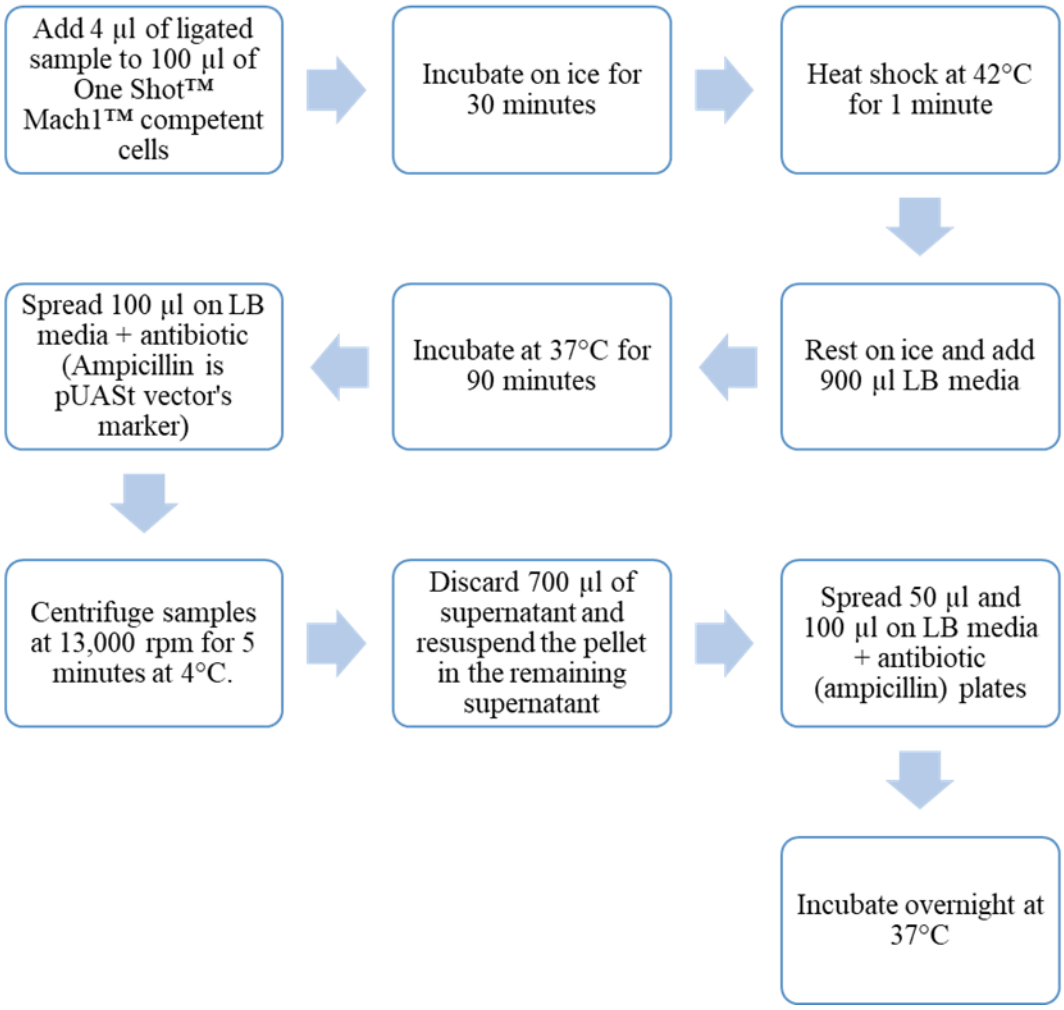
qPCR reaction mix

Component	**Volume (µl)**
Forward primer	1
Reverse primer	1
DNA template	1
SYBR green (SsoAdvance)	5
Distilled Water	2
Total	**10**

qPCR reaction program

Step	Temperature	Time
Pre-denaturation	95°C	30 seconds
Denaturation	95°C	5 seconds
Annealing and elongation + Plate read	57°C	20 seconds
Repeat steps 2 and 3 for 39 cycles		
Melt Curve + Plate Read	55°C to 95°C (2°C rise)	5 seconds

Transformation



Lifespan Set up – Chapter 3

Driver	**Responder**	**Dose of RU486**	**Time of gene induction – start (days in fly age)**	**Number of vials (n = 20 flies per vial)**
ActGS	***Adk***	0	3	10
		0.8	3	7
		1.6	3	7
		3.2	3	7
		0.8	8	8
		1.6	8	8
		3.2	8	8
		0.8	18	8
		1.6	18	8
		3.2	18	8
ActGS	***Bdg***	0	3	10
		0.8	3	7
		1.6	3	7
		3.2	3	7
		0.8	8	8
		1.6	8	8
		3.2	8	8
		0.8	18	8
		1.6	18	8
		3.2	18	8

Summary Statistics

Driver	Responder	Dose of RU486 (g/ml)	Time of induction (days)	Condition	Number of deaths	Number of censors	Number of scored animals	Median lifespan	Maximum lifespan	p log rank test
ActGS	Adk	0	3-end	Uninduced	165	29	194	77	108	
ActGS	Adk	56	3-end	Induced	118	19	137	73	94	**0.002**
ActGS	Adk	112	3-end	Induced	116	19	135	75	101	
ActGS	Adk	224	3-end	Induced	129	14	143	75	103	
ActGS	Adk	56	8-end	Induced	145	12	157	73	101	
ActGS	Adk	112	8-end	Induced	137	19	156	73	105	**0.04**
ActGS	Adk	224	8-end	Induced	134	21	155	77	105	
ActGS	Adk	56	18-end	Induced	138	15	153	75	105	
ActGS	Adk	112	18-end	Induced	138	16	154	75	105	0.42
ActGS	Adk	224	18-end	Induced	117	40	157	73	103	
ActGS	Bdg	0	3-end	Uninduced	172	24	196	77	105	
ActGS	Bdg	56	3-end	Induced	112	19	131	73	105	**1.12×10^{-14}**
ActGS	Bdg	112	3-end	Induced	114	19	133	70	103	
ActGS	Bdg	224	3-end	Induced	115	21	136	66	94	
ActGS	Bdg	56	8-end	Induced	138	19	157	73	101	
ActGS	Bdg	112	8-end	Induced	136	16	152	75	105	**0.01**
ActGS	Bdg	224	8-end	Induced	135	18	153	73	103	
ActGS	Bdg	56	18-end	Induced	132	23	155	73	98	

ActGS	Bdg	112	18-end	Induced	136	22	158	75	98	**9.43 x 10^{-5}**
ActGS	Bdg	224	18-end	Induced	138	15	153	73	101	

Differentially Expressed Genes across all 4 comparisons with their fold changes per comparison

Gene Symbol	Ensembl_ID	S1-C1 (log2 Fold Change)	S1-C2 (log2 Fold Change)	S2-C1 (log2 Fold Change)	S2-C2 (log2 Fold Change)
mt:lrRNA	FBGN0013686	-0.42146	-0.13489	-0.67103	-0.38447
Cyp4g1	FBGN0010019	0.349942	0.142925	0.513298	0.306281
mt:CoI	FBGN0013674	-0.08631	-0.06668	-0.47069	-0.45105
ninaE	FBGN0002940	0.382466	-0.06056	0.561445	0.118424
eEF1alpha1	FBGN0284245	0.087423	-0.15636	0.251635	0.007849
Ubi-p63E	FBGN0003943	0.189947	-0.1144	0.681064	0.376717
whe	FBGN0031176	-0.46358	0.751564	-0.53049	0.684662
mt:CoIII	FBGN0013676	0.037201	0.066779	-0.42487	-0.39529
CG16826	FBGN0032505	-0.65285	-0.26133	-0.68779	-0.29627
alphaTry	FBGN0003863	-0.12057	0.117803	-0.85363	-0.61526
CG18628	FBGN0036091	-0.01937	-0.1544	0.135298	0.000269
mt:Cyt-b	FBGN0013678	0.005445	0.010304	-0.14499	-0.14014
betaTry	FBGN0010357	-0.01885	0.375432	-1.37449	-0.9802
FASN1	FBGN0283427	0.724063	-0.09578	0.885529	0.065688
mt:CoII	FBGN0013675	-0.38757	-0.06862	-0.72748	-0.40854
Ebp	FBGN0004181	0.238678	0.069527	0.282025	0.112874
MtnA	FBGN0002868	-0.08038	-0.23738	0.200064	0.04307
lncRNA:CR42862	FBGN0262109	0.388297	0.079933	0.564538	0.256173
CG4836	FBGN0270925	0.097676	0.001528	0.086646	-0.0095
mt:ATPase6	FBGN0013672	-0.2745	-0.06174	-0.56133	-0.34857
Hsc70-4	FBGN0266599	0.168379	-0.14129	0.28923	-0.02044
eEF2	FBGN0000559	0.022412	-0.11816	0.204405	0.063834
apolpp	FBGN0087002	0.384437	-0.32769	1.0384	0.326274
CG17097	FBGN0265264	-0.07656	-0.3969	0.381189	0.060844
Arr2	FBGN0000121	0.133608	-0.24825	0.282256	-0.0996
Cyp6g1	FBGN0025454	-0.84027	-0.59223	-0.37144	-0.1234
Desat1	FBGN0086687	0.266398	0.020527	0.339005	0.093134
Lk6	FBGN0017581	0.358576	-0.0509	0.628274	0.218796
Ubi-p5E	FBGN0086558	-0.4911	0.048853	-0.21077	0.329183
CG1648	FBGN0033446	0.460661	0.044006	0.303425	-0.11323
CG34324	FBGN0085353	-0.26942	0.00011	0.103493	0.373027
Tps1	FBGN0027560	0.487079	-0.05954	0.553695	0.007077
RpL41	FBGN0066084	-0.3129	-0.03333	-0.35991	-0.08034
Mal-A1	FBGN0002570	0.806465	0.832305	-0.82028	-0.79444
Mhc	FBGN0264695	0.2768	-0.12844	0.417567	0.012327
Jon65Aiv	FBGN0250815	-0.18014	0.417202	-1.00787	-0.41053
Tsf1	FBGN0022355	-0.02213	0.261323	0.454398	0.737853
CG43897	FBGN0264489	0.189097	-0.0353	0.617359	0.392962
S-Lap1	FBGN0035915	-0.04049	-0.02311	-0.04271	-0.02532
CG2233	FBGN0029990	0.509617	0.430457	0.595015	0.515855
Jon65Aiii	FBGN0035665	-0.14928	0.523229	-1.283	-0.61048
sta	FBGN0003517	-0.23517	-0.09422	0.055813	0.196766
yip7	FBGN0040060	-0.33488	0.300164	-0.68044	-0.0454
RpS14a	FBGN0004403	-0.83506	-0.6415	-0.10286	0.090702
EbpIII	FBGN0011695	-0.51986	-0.04829	-0.30432	0.16725
RpS8	FBGN0039713	-0.08336	-0.08141	0.18033	0.182273
mt:ND5	FBGN0013684	-0.36366	-0.07248	-0.42489	-0.13371
RpL5	FBGN0064225	-0.22917	-0.06139	-0.13311	0.034667
loopin-1	FBGN0259795	-0.01	0.009309	-0.06941	-0.0501
RpL3	FBGN0020910	-0.16013	-0.06424	0.035307	0.131192
Act5C	FBGN0000042	0.012569	0.317946	-0.42242	-0.11705
CG13315	FBGN0040827	0.176156	-0.00439	0.142444	-0.0381
lcs	FBGN0028583	-0.38324	-0.10532	-0.20102	0.076911
Mur18B	FBGN0030999	0.271705	-0.00331	0.359814	0.084796
CG34220	FBGN0085249	0.120133	-0.03566	0.096264	-0.05953
RpL7A	FBGN0014026	-0.27111	-0.12238	-0.13577	0.012963
Arc1	FBGN0033926	-0.44909	-0.2272	-0.36666	-0.14477
FBGN0040813	FBGN0040813	0.327468	-0.27836	0.69258	0.086754
alphaTub84B	FBGN0003884	-0.22157	0.012138	-0.24474	-0.01104
CG18067	FBGN0034512	-0.71276	-0.1613	0.049138	0.600605
CG45080	FBGN0266455	-1.43814	0.466457	-2.56336	-0.65876
Pen	FBGN0267727	0.3416	-0.03449	0.364547	-0.01154
EbpII	FBGN0011694	0.193354	0.330337	0.042607	0.17959
RpL4	FBGN0003279	-0.18027	-0.12788	0.097316	0.149704
RpL27A	FBGN0285948	-0.2283	-0.12174	-0.01413	0.092433
RpLP1	FBGN0002593	-0.37278	-0.04227	-0.24647	0.084034
CG9029	FBGN0031746	-0.07278	-0.06632	-0.0029	0.003557

Arr1	FBGN0000120	0.149118	-0.13904	0.330536	0.042377
RpS6	FBGN0261592	-0.24736	-0.0305	-0.01014	0.206723
Msr-110	FBGN0015766	-0.11052	-0.06794	-0.0284	0.014176
Ald1	FBGN0000064	0.083909	-0.17001	0.351897	0.097979
RpL19	FBGN0285950	-0.27373	-0.04521	-0.12199	0.10653
RpS29	FBGN0261599	-0.51039	-0.02312	-0.45917	0.0281
RpLP2	FBGN0003274	-0.2263	-0.11011	-0.11784	-0.00165
mt:ND1	FBGN0013679	-0.12452	-0.13326	-0.25766	-0.2664
RpL23A	FBGN0026372	-0.11102	-0.05011	0.089014	0.149929
RpS15	FBGN0034138	-0.40307	-0.08543	-0.15742	0.160225
mt:ND4	FBGN0262952	-0.29409	-0.15268	-0.41181	-0.2704
RpL27	FBGN0039359	-0.16705	-0.06663	0.040869	0.141281
Met75Cb	FBGN0028415	-0.15192	-0.2443	-0.32426	-0.41665
Mst57Da	FBGN0011668	-0.14644	-0.17141	-0.02862	-0.05359
RpL8	FBGN0261602	-0.20121	-0.08516	0.057631	0.173678
Argk	FBGN0000116	0.133522	-0.11692	0.192453	-0.05799
SERCA	FBGN0263006	0.262813	-0.07877	0.363914	0.022333
Nc73EF	FBGN0010352	0.173304	-0.16673	0.545691	0.205653
Sarm	FBGN0262579	0.216316	-0.07438	0.480389	0.189696
RpS7	FBGN0039757	-0.22652	-0.10474	0.00815	0.129927
ACC	FBGN0033246	0.458642	-0.07849	0.76315	0.226017
RpS2	FBGN0004867	-0.24949	-0.07153	-0.02393	0.15403
Jon25Biii	FBGN0031653	-0.19292	-0.30286	1.548127	1.438193
CG13868	FBGN0034501	0.385419	0.164771	0.528144	0.307497
CG6409	FBGN0036106	-0.24986	0.043703	-0.2874	0.006163
S-Lap7	FBGN0033868	0.009823	0.002298	-0.01318	-0.0207
Alp4	FBGN0016123	0.816653	0.537787	0.031665	-0.2472
RpS18	FBGN0010411	-0.33795	-0.09047	-0.17704	0.070436
BG642312	FBGN0047334	-0.56414	-0.13567	-0.99402	-0.56555
RpL17	FBGN0029897	-0.26915	0.03844	-0.02723	0.280356
RpS4	FBGN0011284	-0.25562	-0.09104	-0.08743	0.077138
Atpalpha	FBGN0002921	0.311349	-0.07093	0.449054	0.066776
Act57B	FBGN0000044	-0.04848	-0.05787	-0.13603	-0.14541
CG14995	FBGN0035497	0.249235	-0.00773	0.302514	0.045545
eIF4A	FBGN0001942	0.059761	-0.13083	0.187339	-0.00325
RpL13	FBGN0011272	-0.32273	-0.08767	-0.09789	0.137169
sesB	FBGN0003360	0.161092	0.038927	0.117979	-0.00419
RpLP0	FBGN0000100	-0.25494	-0.10737	-0.06783	0.079742
RpS26	FBGN0261597	-0.1927	-0.02998	-0.02061	0.142107
blw	FBGN0011211	0.149405	-0.07182	0.300631	0.079404
Cpr	FBGN0015623	0.230263	0.151426	0.255238	0.176401
Mal-A6	FBGN0050360	0.633406	0.61418	-1.05701	-1.07624
RpL6	FBGN0039857	-0.28058	-0.09445	-0.05579	0.130342
Men	FBGN0002719	0.384382	-0.25742	0.841601	0.199797
RpL10	FBGN0024733	-0.22866	-0.02938	-0.09699	0.102296
Hsp83	FBGN0001233	0.060677	-0.12304	0.143443	-0.04028
Acp36DE	FBGN0011559	0.198096	-0.29267	0.428411	-0.06236
S-Lap4	FBGN0052064	-0.04595	-0.04677	-0.09538	-0.0962
CG12374	FBGN0033774	0.925094	0.591675	-2.42103	-2.75445
RpL35	FBGN0029785	-0.22542	-0.10231	-0.09226	0.03085
Met75Ca	FBGN0028416	-0.21159	-0.22876	-0.34607	-0.36325
CG17108	FBGN0032285	0.082929	-0.08652	0.450548	0.281099
Vha16-1	FBGN0262736	0.117346	0.195897	-0.0686	0.009955
Mf	FBGN0038294	0.217079	-0.09342	0.324247	0.01375
Oda	FBGN0014184	0.083535	0.040753	0.106506	0.063725
RpL7	FBGN0005593	-0.16876	-0.04615	-0.01117	0.111431
Obp56g	FBGN0034474	-0.35884	-0.12331	-0.31326	-0.07772
CG10077	FBGN0035720	0.314307	-0.03748	0.52224	0.170455
mAcon1	FBGN0010100	0.296928	-0.07155	0.4555	0.087017
CG6770	FBGN0032400	-0.14587	0.065856	-0.10367	0.108055
pAbp	FBGN0265297	0.120622	-0.08856	0.229309	0.020124
mfas	FBGN0260745	-0.30071	-0.10616	-0.07144	0.123114
RpS10b	FBGN0285947	-0.25793	-0.09402	-0.03126	0.132649
CG4716	FBGN0033820	0.085803	0.066356	0.736225	0.716778
CG10472	FBGN0035670	-0.01221	0.298975	-0.4454	-0.13422
CG31198	FBGN0051198	0.28945	0.530302	-0.53507	-0.29422
CG12861	FBGN0033953	0.332858	0.098317	0.32277	0.088229
ATPsynC	FBGN0039830	0.019414	-0.01201	0.072871	0.041444
CG17376	FBGN0042189	-0.84354	-0.17774	-0.21031	0.455494

RpL12	FBGN0034968	-0.29176	-0.06827	-0.09003	0.133456
RpS16	FBGN0034743	-0.27785	-0.07014	-0.07533	0.132372
RpL32	FBGN0002626	-0.25814	-0.0426	-0.08699	0.128547
eEF1gamma	FBGN0029176	0.064328	-0.08966	0.3669	0.212912
RpS25	FBGN0086472	-0.27427	-0.02257	-0.2012	0.050492
IA-2	FBGN0031294	0.392209	-0.03274	0.587811	0.16286
RpL28	FBGN0035422	-0.3094	-0.06499	-0.05867	0.185741
RpL26	FBGN0036825	-0.26358	-0.10152	-0.03257	0.129487
RpS23	FBGN0033912	-0.22834	-0.07049	-0.07475	0.083106
RpL11	FBGN0013325	-0.28921	-0.1136	0.055022	0.230625
RpS3A	FBGN0017545	-0.17165	-0.03901	-0.11752	0.015119
Sfp87B	FBGN0259975	0.15049	0.061078	0.060507	-0.02891
RpL18	FBGN0035753	-0.38346	-0.09386	-0.14239	0.147214
Obp99c	FBGN0039682	0.298988	-0.32876	0.82758	0.199834
RpL13A	FBGN0037351	-0.19902	-0.10289	0.060696	0.156823
CG18135	FBGN0036837	0.703432	0.106154	0.735672	0.138394
RpS27	FBGN0039300	-0.29521	-0.06029	0.015363	0.250277
S-Lap3	FBGN0045770	0.031293	-0.00016	0.01663	-0.01482
RpS27A	FBGN0003942	-0.29452	-0.06364	-0.14202	0.088861
Eno	FBGN0000579	0.207249	-0.14179	0.397171	0.048137
RpS30	FBGN0038834	-0.18638	-0.01426	-0.03475	0.137362
Cat	FBGN0000261	0.058839	-0.15265	0.420254	0.208767
Cyp6d5	FBGN0038194	-0.48328	0.188198	-1.36416	-0.69268
CG2127	FBGN0033286	0.071301	-0.02826	0.10228	0.002715
Amy-p	FBGN0000079	0.949395	0.572372	0.745128	0.368105
Aldh	FBGN0012036	0.331994	-0.02443	0.52679	0.170365
RpL24	FBGN0032518	-0.26411	-0.14097	0.00447	0.127608
Rack1	FBGN0020618	-0.23349	-0.08828	0.018637	0.163849
RpS21	FBGN0015521	-0.37524	-0.07613	-0.20462	0.094492
Zasp52	FBGN0265991	0.548288	0.001252	0.720786	0.173749
RpL10Ab	FBGN0036213	-0.31091	-0.04131	-0.1515	0.118094
CG10911	FBGN0034295	0.105147	0.852175	-0.95576	-0.20873
Syp	FBGN0038826	0.296576	-0.04464	0.371451	0.03023
ATPsynbeta	FBGN0010217	0.090938	-0.02243	0.060758	-0.05261
CG33340	FBGN0053340	-0.09391	-0.03356	-0.14856	-0.0882
CG34166	FBGN0085195	0.689015	-0.73743	2.517957	1.091507
RpS19a	FBGN0010412	-0.22735	-0.00086	-0.14362	0.082879
RpL31	FBGN0285949	-0.25701	-0.04767	-0.12673	0.082606
CG8997	FBGN0028920	-0.28195	-0.01766	-0.5433	-0.27901
RpS11	FBGN0033699	-0.27989	-0.06393	-0.13608	0.079871
RpS17	FBGN0005533	-0.36159	-0.05598	-0.19574	0.109873
S-Lap2	FBGN0052351	0.045645	0.008539	0.020073	-0.01703
RpL37a	FBGN0030616	-0.25234	-0.08551	-0.03218	0.134637
RpL9	FBGN0015756	-0.25353	-0.08404	-0.07821	0.091274
RpS3	FBGN0002622	-0.22806	-0.1493	-0.01686	0.061892
CG3168	FBGN0029896	0.615733	0.262322	0.193716	-0.1597
RpS12	FBGN0286213	-0.34577	-0.14563	-0.1518	0.048337
Mlc2	FBGN0002773	-0.07155	-0.02822	-0.09232	-0.04899
CG3906	FBGN0034871	-0.72329	-0.00489	-0.49814	0.220259
RpL18A	FBGN0010409	-0.23513	-0.08674	-0.05495	0.093439
CG31538	FBGN0051538	0.02691	-0.05331	0.084621	0.004404
CG12699	FBGN0046294	-0.08385	0.022855	-0.19401	-0.08731
Tctp	FBGN0037874	-0.00573	-0.06146	0.119889	0.064159
sls	FBGN0086906	0.152007	-0.04347	0.429375	0.233895
S-Lap8	FBGN0034132	-0.04903	-0.00354	-0.05602	-0.01052
RpL14	FBGN0017579	-0.25736	-0.08836	-0.04698	0.122026
RpL23	FBGN0010078	-0.21319	-0.04784	-0.02555	0.139806
CG9336	FBGN0032897	-0.49962	0.028321	-0.55189	-0.02396
RpS28b	FBGN0030136	-0.28775	-0.13834	-0.09462	0.054784
Jon99Cii	FBGN0003356	-0.00498	0.156853	-0.17826	-0.01642
betaTub85D	FBGN0003889	0.010661	-0.00369	-0.04754	-0.0619
CG7920	FBGN0039737	0.034987	-0.12561	0.376807	0.216215
salto	FBGN0061197	0.164963	-0.03114	0.205567	0.009463
exu	FBGN0000615	0.024754	-0.03159	0.132373	0.076032
RpL34b	FBGN0037686	-0.29602	-0.0807	-0.14098	0.074344
CG3213	FBGN0031545	0.146326	-0.06404	0.211556	0.001186
CG11892	FBGN0039313	0.848264	0.064533	-0.27955	-1.06328
ATPCL	FBGN0020236	0.520113	-0.10574	0.654367	0.02851
Ppi1	FBGN0051025	0.188639	-0.04823	0.311927	0.075058

CG8329	FBGN0036022	0.49668	0.417331	-0.35125	-0.4306
Acp32CD	FBGN0023415	-0.19378	-0.029	-0.29142	-0.12663
CG31872	FBGN0051872	-0.16729	-0.20073	-0.00941	-0.04285
Mst98Ca	FBGN0002865	-0.02952	0.083816	-0.2066	-0.09327
bt	FBGN0005666	0.377065	-0.03995	0.604561	0.18755
CG8701	FBGN0033287	-0.1379	-0.04004	-0.0763	0.021567
Mpcp2	FBGN0026409	-0.02665	-0.23894	0.332525	0.120242
Acp53C14a	FBGN0034152	-0.23232	0.059617	-0.37569	-0.08376
CycG	FBGN0039858	0.432602	0.011142	0.490972	0.069513
RpL37A	FBGN0261608	-0.37788	-0.06763	-0.11137	0.198875
PyK	FBGN0267385	0.052583	-0.17523	0.334494	0.106682
RpS13	FBGN0010265	-0.21152	-0.03904	-0.01738	0.155094
Cam	FBGN0000253	0.236153	0.032596	0.190072	-0.01348
Jon99Fii	FBGN0039777	-1.74682	-0.00396	-1.7432	-0.00034
CG10252	FBGN0039104	-0.22404	0.00465	-0.25414	-0.02545
RpL15	FBGN0028697	-0.20666	-0.06838	-0.02792	0.110354
Sap-r	FBGN0000416	0.051386	0.055203	0.102784	0.1066
Anp	FBGN0000094	0.050813	0.075386	-0.63513	-0.61056
Cyp6a2	FBGN0000473	-0.94294	0.36365	-1.57937	-0.27279
Acsl	FBGN0263120	0.519941	-0.03237	0.593369	0.041055
vir-1	FBGN0043841	-0.29382	-0.06574	-0.10324	0.124839
Idh	FBGN0001248	0.302838	-0.05038	0.6504	0.297187
Msp300	FBGN0261836	0.401167	-0.01238	0.594032	0.180485
LysD	FBGN0004427	1.08851	0.058481	0.385723	-0.64431
Muc68D	FBGN0036203	-0.14546	0.191033	-0.53052	-0.19403
CG7470	FBGN0037146	0.290033	-0.20598	0.342033	-0.15398
tobi	FBGN0261575	0.606551	0.166438	0.029878	-0.41024
Fer1HCH	FBGN0015222	0.066201	-0.08551	0.189756	0.038045
RpS5a	FBGN0002590	-0.19019	-0.11733	0.024433	0.097296
CG6910	FBGN0036262	0.153644	0.005427	1.068352	0.920135
CG32444	FBGN0043783	-0.35578	-1.37592	0.70842	-0.31173
Sfp60F	FBGN0259968	0.270167	0.35328	0.042645	0.125758
RpL40	FBGN0003941	-0.19635	-0.04397	-0.10017	0.052205
RpL36	FBGN0002579	-0.26168	-0.10135	-0.04662	0.113708
Hsp60C	FBGN0031728	-0.10223	-5.75E-05	-0.10388	-0.00171
14-3-3zeta	FBGN0004907	0.138899	-0.00538	0.133788	-0.01049
Rm62	FBGN0003261	0.134464	-0.06005	0.197905	0.003392
Jon99Fi	FBGN0039778	1.131557	0.790947	0.013062	-0.32755
CG31740	FBGN0051740	-0.22261	0.053605	-0.38692	-0.1107
BomBc2	FBGN0034331	-0.16122	-0.28543	0.873405	0.749187
CG5089	FBGN0034144	-0.00809	0.017897	-0.04587	-0.01988
RpL21	FBGN0032987	-0.13174	-0.02736	-0.02889	0.075486
FASN2	FBGN0042627	-0.02612	0.021696	0.270836	0.318652
CG31523	FBGN0051523	0.192439	0.073987	0.302773	0.184321
RpL22	FBGN0015288	-0.22428	-0.11295	0.124679	0.236006
CG3124	FBGN0034840	-0.03276	0.039337	-0.14255	-0.07046
FASN3	FBGN0287184	0.453737	-0.36826	1.381451	0.559452
Gpdh1	FBGN0001128	0.198361	0.098295	0.473641	0.373574
SdhA	FBGN0261439	0.21946	-0.04512	0.383542	0.118957
CG32436	FBGN0052436	0.195641	-0.00206	0.175517	-0.02219
Muc11A	FBGN0052656	0.481037	0.496635	-0.20253	-0.18694
RpS15Aa	FBGN0010198	-0.25822	-0.0598	-0.13605	0.062368
up	FBGN0004169	0.097366	0.007495	0.149424	0.059553
CG2765	FBGN0035087	0.04104	-0.00952	0.059615	0.009052
Acp53C14b	FBGN0034153	-0.02471	0.066725	-0.3039	-0.21246
CG4847	FBGN0034229	-0.46592	-0.04912	0.278404	0.695205
RpL36A	FBGN0031980	-0.25534	-0.04576	-0.12073	0.088847
Pgm1	FBGN0003076	0.285596	-0.34576	0.79378	0.16242
Jon99Ciii	FBGN0003357	0.107423	0.028037	0.250889	0.171503
Svil	FBGN0266696	0.235367	-0.04544	0.382081	0.101272
RpS20	FBGN0019936	-0.39524	-0.07992	-0.24592	0.0694
CG12860	FBGN0033954	-0.01822	-0.05487	-0.02131	-0.05796
UGP	FBGN0035978	0.504272	-0.06138	0.835292	0.269639
eEF1beta	FBGN0028737	-0.16584	-0.1814	0.289435	0.273876
RpL29	FBGN0016726	-0.30603	-0.01486	-0.17051	0.120656
AcCoAS	FBGN0012034	0.220847	0.019891	0.16229	-0.03867
CG5162	FBGN0030828	-0.11297	-0.2125	-0.13161	-0.23114
Unc-115a	FBGN0051352	-0.22495	-0.0431	0.121229	0.303073
CG5399	FBGN0038353	-0.15103	0.751263	-1.13564	-0.23334

Calr	FBGN0005585	-0.26957	-0.10566	-0.17794	-0.01403
CG32425	FBGN0052425	0.357856	0.006786	0.863475	0.512404
CG33470	FBGN0053470	-0.33592	0.016692	0.141913	0.494528
IMPPP	FBGN0283462	-0.33553	0.01901	0.140972	0.495516
w-cup	FBGN0032269	0.261516	0.01119	0.235049	-0.01528
CG7414	FBGN0037135	0.111487	-0.06345	0.163845	-0.01109
orb2	FBGN0264307	0.316049	-0.025	0.373864	0.032817
RpS14b	FBGN0004404	-0.07511	0.115065	-0.07432	0.115859
Act79B	FBGN0000045	0.386734	0.046671	0.210935	-0.12913
CG7953	FBGN0028533	-0.34434	-0.12726	-0.56668	-0.3496
Sodh-1	FBGN0024289	0.447627	-0.43917	1.819591	0.932792
Mal-A7	FBGN0033296	0.850379	0.82579	-0.71118	-0.73577
Cyt-b5-r	FBGN0000406	0.509861	0.009008	0.98887	0.488017
Idgf4	FBGN0026415	-0.37843	-0.14847	-0.00149	0.228463
Mal-A8	FBGN0033297	0.782555	0.778213	-1.61791	-1.62225
Sgp	FBGN0032055	0.533604	0.3186	0.271286	0.056282
Pdi	FBGN0286818	-0.07719	-0.16089	0.025792	-0.05791
Mst77F	FBGN0086915	-0.28117	-0.02983	-0.31747	-0.06613
CG16926	FBGN0040732	0.533828	-0.28152	0.518748	-0.2966
Spn77Bc	FBGN0036970	0.146671	-0.14642	0.322806	0.029717
Hsc70-3	FBGN0001218	0.076824	-0.09815	0.250473	0.075501
fest	FBGN0034435	0.341267	-0.02086	0.357017	-0.00511
CG6503	FBGN0040606	0.421615	-0.07325	0.798243	0.30338
Fer2LCH	FBGN0015221	-0.06085	-0.04031	0.063842	0.084388
CG16972	FBGN0032481	0.298451	-0.03187	0.303369	-0.02695
UQCR-C1	FBGN0038271	0.019167	-0.04864	0.043105	-0.0247
ctrip	FBGN0260794	0.618125	0.055791	0.483172	-0.07916
CG43147	FBGN0262623	-0.33808	-0.13631	-0.37838	-0.17661
CG8036	FBGN0037607	0.071941	-0.17254	0.093734	-0.15075
sm	FBGN0003435	0.221573	-0.0271	0.247671	-0.001
CG17571	FBGN0259998	-0.81629	-0.18635	-0.66735	-0.0374
CG8834	FBGN0033733	-0.35506	0.765348	-1.33596	-0.21555
Ggamma30A	FBGN0267252	-0.03838	-0.16124	0.11501	-0.00785
Cyp12d1-d	FBGN0053503	-0.62246	0.055264	-1.32074	-0.64302
CG3982	FBGN0035988	-0.00373	0.012449	0.007935	0.024113
Gpdh3	FBGN0263048	0.260156	0.007998	0.240949	-0.01121
CG16758	FBGN0035348	0.168645	-0.05236	0.532165	0.311157
CG17377	FBGN0031859	-0.00805	0.013289	-0.0368	-0.01546
ScsbetaA	FBGN0037643	0.108174	-0.12409	0.240833	0.008568
Xrp1	FBGN0261113	0.222395	0.080218	0.217487	0.07531
Zasp66	FBGN0035917	0.167614	0.033585	0.332701	0.198673
Acbp2	FBGN0010387	0.119099	-0.05829	0.236147	0.058759
trp	FBGN0003861	0.206404	-0.25691	0.329541	-0.13377
TER94	FBGN0286784	0.294944	-0.01462	0.28877	-0.02079
Cyt-b5	FBGN0264294	0.029935	-0.02578	0.188507	0.132788
CG4363	FBGN0034663	1.143088	0.87164	-0.75508	-1.02653
Est-6	FBGN0000592	-0.21012	-0.38786	-0.00169	-0.17943
Mal-B2	FBGN0032382	0.124338	-0.14801	1.570317	1.297972
Spn77Bb	FBGN0036969	-0.57005	-0.43154	-0.72438	-0.58587
Npc2g	FBGN0039800	0.322857	-0.36525	1.119744	0.431641
eIF4G2	FBGN0260634	0.467798	-0.05763	0.573593	0.048164
Vha55	FBGN0005671	0.139493	0.117045	0.095282	0.072835
CG14292	FBGN0038658	0.126332	0.209549	0.074613	0.15783
Acp53Ea	FBGN0015584	-0.27262	-0.03743	-0.44231	-0.20712
Lsd-1	FBGN0039114	0.982066	-0.07397	1.317932	0.261901
CG31988	FBGN0051988	0.009755	0.002263	-0.07853	-0.08602
Npl4	FBGN0039348	0.365031	0.079989	0.216233	-0.06881
shot	FBGN0013733	0.343507	-0.01961	0.523895	0.160779
eEF5	FBGN0285952	-0.18433	-0.06688	-0.08453	0.03292
RpL39	FBGN0023170	-0.34988	-0.04456	-0.16279	0.14253
ND-51	FBGN0031771	0.184304	-0.00088	0.347305	0.162125
CR10102	FBGN0033927	-0.32615	-0.23796	-0.27943	-0.19124
CG30008	FBGN0050008	0.00227	0.270352	-0.08319	0.184895
CG12163	FBGN0260462	-0.21947	-0.1534	0.352791	0.418854
mt:ND3	FBGN0013681	-0.20302	-0.19221	-0.08272	-0.07191
Karybeta3	FBGN0087013	0.268436	-0.07095	0.356488	0.017103
Vha68-2	FBGN0263598	0.11305	0.213837	-0.13232	-0.03153
RpL35A	FBGN0037328	-0.27414	-0.09666	-0.00577	0.171703
CG15043	FBGN0030929	0.319561	1.879509	-2.39812	-0.83817

CG43078	FBGN0262508	0.411343	-0.08827	0.514436	0.014824
Bace	FBGN0032049	0.171159	0.574409	-0.70964	-0.30639
CG9674	FBGN0036663	0.095441	0.136576	0.123424	0.164559
28SrRNA-Psi:CR45851	FBGN0267511	0.155239	0.276061	-0.06908	0.051739
RpS24	FBGN0261596	-0.30946	-0.12857	-0.12857	0.052322
lncRNA:roX1	FBGN0019661	0.265812	0.051127	0.227522	0.012837
Amy-d	FBGN0000078	1.56621	0.903873	1.552475	0.890137
lncRNA:CR31781	FBGN0051781	-0.33219	-0.04251	-0.3692	-0.07952
RpL30	FBGN0086710	-0.32573	-0.07982	-0.13927	0.106635
Xbp1	FBGN0021872	0.112205	-0.00651	0.213835	0.095117
IM33	FBGN0031561	-0.26399	-0.12273	0.363206	0.504473
Rh4	FBGN0003250	-0.01335	-0.10064	0.316485	0.229188
GlyP	FBGN0004507	0.303936	-0.18659	0.468123	-0.0224
wupA	FBGN0283471	0.072619	0.005507	0.100367	0.033255
UQCR-C2	FBGN0250814	-0.0138	-0.07573	0.156256	0.094322
awd	FBGN0000150	0.035798	-0.03311	0.171535	0.102625
Gel	FBGN0010225	0.34224	-0.10816	0.728506	0.278103
Idgf6	FBGN0013763	0.177826	-0.16243	0.461173	0.120912
Lsd-2	FBGN0030608	0.4045	0.095325	0.505394	0.196219
Prm	FBGN0003149	0.241641	-0.09595	0.401892	0.0643
CG46385	FBGN0286778	0.384081	-0.12482	0.61615	0.107247
Cyp1	FBGN0004432	0.036589	0.005306	-0.12409	-0.15537
Ssk	FBGN0036945	-0.01881	1.066932	-1.1976	-0.11186
RpL38	FBGN0040007	-0.27132	-0.01753	-0.29249	-0.03871
CG16904	FBGN0037763	0.478376	0.213992	0.274003	0.009619
Vha26	FBGN0283535	0.224345	0.128974	0.083522	-0.01185
CG17575	FBGN0250842	-0.28504	-0.1095	-0.31639	-0.14086
Act87E	FBGN0000046	0.285823	0.09919	0.194631	0.007998
CG17242	FBGN0250841	0.345975	-0.44404	0.717471	-0.07254
Droj2	FBGN0038145	0.046777	0.00857	-0.01265	-0.05085
CG5107	FBGN0039342	0.517325	-0.19923	-0.15144	-0.868
lncRNA:CR9284	FBGN0046297	0.075655	0.225289	-0.06203	0.087608
Gbs-70E	FBGN0036428	0.599033	0.158595	0.680225	0.239787
Dp1	FBGN0027835	0.404837	-0.11185	0.579957	0.063268
CG10513	FBGN0039311	0.020178	-0.39367	-0.15609	-0.56994
CG8343	FBGN0040502	0.120834	0.283156	-0.52361	-0.36129
Mst84Db	FBGN0004173	-0.36506	-0.07628	-0.34226	-0.05348
CG9297	FBGN0038181	0.156927	-0.1081	0.245805	-0.01922
GstD1	FBGN0001149	0.141101	-0.1316	0.43391	0.161212
CG3662	FBGN0031285	0.015891	0.031174	-0.06034	-0.04506
Vha13	FBGN0283536	-0.08251	0.108557	-0.22087	-0.02981
CG42369	FBGN0259715	0.569398	-0.47636	1.221124	0.175361
PCB	FBGN0027580	0.380752	-0.00108	0.401499	0.019671
CG31226	FBGN0051226	-0.18801	0.049516	-0.25618	-0.01866
yps	FBGN0022959	0.182395	-0.05228	0.257674	0.022995
CG15784	FBGN0029766	0.730587	0.387696	0.266127	-0.07676
CG34330	FBGN0085359	-0.08125	0.507392	-0.85073	-0.26209
porin	FBGN0004363	0.076251	0.021494	0.025867	-0.02889
betaTub56D	FBGN0284243	-0.20927	0.080653	-0.29548	-0.00555
Gp150	FBGN0013272	0.120523	0.120015	-0.01757	-0.01808
Not1	FBGN0085436	0.406067	-0.00195	0.513886	0.105874
Spn43Ab	FBGN0024293	0.448593	-0.20519	0.856512	0.202732
AOX1	FBGN0267408	0.183688	0.056756	-0.07258	-0.19951
Hsp60B	FBGN0011244	0.100397	0.040519	-0.00154	-0.06142
bol	FBGN0011206	0.25634	0.022122	0.25378	0.019562
CG10433	FBGN0034638	0.322107	0.087422	0.542758	0.308073
CG9016	FBGN0031751	0.117593	-0.00542	0.068286	-0.05473
CG13323	FBGN0033788	0.122052	0.863182	-1.2989	-0.55777
Sod1	FBGN0003462	-0.05045	-0.00404	0.061484	0.10789
RpS9	FBGN0010408	-0.39124	-0.10405	-0.06363	0.223561
Cyp6w1	FBGN0033065	-0.77207	-0.32384	0.089349	0.537582
CG13947	FBGN0031277	0.180699	-0.08696	1.219072	0.951409
ND-75	FBGN0017566	0.155908	-0.04172	0.262612	0.064985
Tsp29Fb	FBGN0032075	0.108534	0.25188	-0.31052	-0.16717
jar	FBGN0011225	0.248277	0.031165	0.371215	0.154103
CG1288	FBGN0250845	-0.13905	-0.52879	0.56934	0.1796
CG14629	FBGN0040398	0.536353	-0.39261	0.838147	-0.09082
Pfk	FBGN0003071	0.271352	-0.06047	0.404948	0.07313
Mst87F	FBGN0002862	-0.14116	0.003877	-0.21989	-0.07485

NAT1	FBGN0010488	0.378281	-0.03593	0.579971	0.16576
asRNA:CR44370	FBGN0265508	0.627314	0.167612	0.513041	0.053339
CG10514	FBGN0039312	0.710711	0.041276	-0.58268	-1.25211
14-3-3epsilon	FBGN0020238	0.156453	0.08943	0.082054	0.015031
Ag5r	FBGN0015010	-0.24086	0.19059	-0.96899	-0.53755
CG43101	FBGN0262547	-0.26509	-0.27164	-0.46823	-0.47479
lectin-46Ca	FBGN0040093	-0.15294	-0.05212	-0.08591	0.014915
bru1	FBGN0000114	0.157386	-0.02053	0.167156	-0.01076
chb	FBGN0021760	0.335012	-0.04419	0.384457	0.005258
CG10680	FBGN0032836	0.653459	0.005996	0.769875	0.122412
Taldo	FBGN0023477	0.006247	-0.24906	0.442102	0.186799
Mst57Dc	FBGN0011670	-0.10988	0.091595	-0.60564	-0.40417
Tm1	FBGN0003721	-0.02192	0.04533	-0.06239	0.004854
HDAC6	FBGN0026428	0.46583	-0.03845	0.737382	0.233106
Mdh1	FBGN0262782	0.018192	-0.17415	0.243156	0.050815
beta-Spec	FBGN0250788	0.299905	0.029467	0.360171	0.089733
twin	FBGN0011725	0.160496	-0.04942	0.09424	-0.11567
CG10407	FBGN0038395	0.104344	0.114612	0.082069	0.092337
Mdh2	FBGN0262559	0.062364	-0.03183	0.192551	0.098354
Jupiter	FBGN0051363	0.241644	0.021008	0.185184	-0.03545
Hrb27C	FBGN0004838	0.236919	-0.025	0.33791	0.075995
LpR2	FBGN0051092	0.332051	-0.14236	0.861428	0.38702
CG7910	FBGN0037547	0.146179	0.024464	0.203293	0.081578
CG9691	FBGN0030160	0.14778	-0.14442	0.600095	0.307897
CG7886	FBGN0038248	0.165982	-0.05315	0.234202	0.015073
cpx	FBGN0041605	0.4695	-0.0825	0.568515	0.016519
CG7916	FBGN0028534	0.294899	0.216571	0.015408	-0.06292
pug	FBGN0020385	0.396389	-0.10427	1.238046	0.737388
AdipoR	FBGN0038984	0.351606	-0.07348	0.503135	0.078052
CG18284	FBGN0043825	-0.25825	0.035208	-0.32077	-0.02731
ninaC	FBGN0002938	0.169514	-0.31733	0.31233	-0.17452
lectin-46Cb	FBGN0040092	-0.20267	-0.07949	-0.19222	-0.06904
bel	FBGN0263231	0.196473	-0.05401	0.275218	0.024734
CG14125	FBGN0036232	-0.16455	0.872794	-1.62464	-0.5873
trpl	FBGN0005614	0.304346	-0.09562	0.107229	-0.29273
Mur29B	FBGN0051901	-0.60936	0.810806	-1.67798	-0.25781
CLIP-190	FBGN0020503	0.078744	-0.03275	0.191081	0.079588
TTLL4B	FBGN0031574	0.208776	-0.02186	0.167616	-0.06302
CG10737	FBGN0034420	0.250079	-0.03879	0.467962	0.179089
DIP1	FBGN0024807	0.211778	0.091306	0.127602	0.007129
scpr-C	FBGN0037879	0.109695	0.065051	0.015695	-0.02895
Nacalpha	FBGN0086904	-0.07987	-0.05598	0.188262	0.212152
eEF1alpha2	FBGN0000557	0.219981	-0.25183	0.545605	0.073791
Thor	FBGN0261560	-0.14663	0.025743	-0.20272	-0.03035
CG10912	FBGN0034296	-0.70249	0.726561	-1.48194	-0.05289
CG31705	FBGN0028490	0.269477	-0.08312	0.652841	0.300241
CtsB1	FBGN0030521	-0.15412	0.077934	-0.07489	0.157164
kra	FBGN0250753	0.050185	-0.01316	0.049341	-0.01401
CG9512	FBGN0030593	0.422505	-0.07664	0.242304	-0.25684
Non1	FBGN0028473	-0.10404	-0.18974	0.194074	0.108369
Cp1	FBGN0013770	0.043996	0.021414	0.089844	0.067262
mtd	FBGN0013576	0.277345	0.004554	0.451249	0.178458
Acbp5	FBGN0035926	0.150178	0.454537	-0.51484	-0.21048
Pgi	FBGN0003074	0.080018	-0.06489	0.214665	0.069753
CG31343	FBGN0051343	0.3477	0.672308	-0.34284	-0.01823
CG13321	FBGN0033787	-0.02812	0.870604	-1.10346	-0.20474
Drs	FBGN0283461	-0.2835	0.791487	-1.59882	-0.52383
CG4691	FBGN0028870	-0.10129	-0.0487	-0.07655	-0.02396
unc-13	FBGN0025726	0.628381	0.223332	0.604236	0.199187
Rtnl1	FBGN0053113	0.178225	-0.01359	0.086459	-0.10536
CG3088	FBGN0036015	-0.00251	0.254075	-0.45336	-0.19678
Gapdh1	FBGN0001091	-0.12134	-0.13521	0.067644	0.05377
CG14718	FBGN0037939	0.136406	-0.0311	0.120284	-0.04722
ps	FBGN0261552	0.211702	0.013159	0.237531	0.038988
CG31029	FBGN0051029	0.075482	-0.04767	0.121392	-0.00176
Rbp9	FBGN0010263	0.117408	-0.2483	0.38965	0.023945
CG9920	FBGN0038200	-0.12341	-0.03061	-0.19999	-0.1072
Psa	FBGN0261243	0.281471	0.01332	0.280709	0.012559
DOR	FBGN0035542	0.196613	0.002639	0.315835	0.121861

CG8745	FBGN0036381	0.367256	0.584219	-0.34591	-0.12894
Usp47	FBGN0016756	0.141383	-0.02767	0.228338	0.059283
CG17633	FBGN0032144	0.010731	0.205369	-0.28579	-0.09115
Pebp1	FBGN0038973	-0.21276	0.878046	-1.32462	-0.23381
CG4538	FBGN0038745	0.248217	0.021357	0.309792	0.082932
alpha-Spec	FBGN0250789	0.30943	0.043031	0.434246	0.167846
CG15293	FBGN0028526	0.464162	-0.25137	0.964298	0.248768
ERp60	FBGN0033663	-0.06968	-0.06948	0.0578	0.058005
Gnmt	FBGN0038074	0.482709	-0.17535	1.484614	0.826551
CG30376	FBGN0050376	-0.05055	-0.0156	-0.1093	-0.07435
RFeSP	FBGN0021906	-0.03864	-0.03766	0.035033	0.036007
CG4546	FBGN0038373	-0.01153	-0.05528	0.036316	-0.00743
CG14355	FBGN0038208	0.097744	-0.0538	0.108974	-0.04257
Obp19d	FBGN0011280	-0.71522	-0.42992	-0.13882	0.146486
CG34168	FBGN0085197	-0.2432	0.000123	-0.25909	-0.01577
fiz	FBGN0030594	0.240414	-0.61487	1.191113	0.335825
CaMKI	FBGN0016126	0.429185	0.022458	0.561789	0.155063
Fas1	FBGN0285925	0.218386	-0.00338	0.368112	0.146343
CG15219	FBGN0040519	-0.14639	0.059692	-0.33595	-0.12987
Atg8a	FBGN0052672	0.122921	0.093268	0.129745	0.100093
CG34417	FBGN0085446	0.238392	0.161742	0.299809	0.223158
Gapdh2	FBGN0001092	-0.04115	-0.13023	0.120912	0.031833
zormin	FBGN0052311	0.349523	-0.04252	0.506969	0.114927
Obp51a	FBGN0043530	0.080978	-0.10415	0.182659	-0.00247
Paics	FBGN0020513	0.574584	0.116461	0.954618	0.496496
vsg	FBGN0045823	0.164675	0.04492	0.229726	0.109971
tud	FBGN0003891	0.224528	-0.08421	0.387639	0.078898
CG46059	FBGN0267726	-0.1771	0.020006	-0.31374	-0.11663
CG15635	FBGN0031617	0.089438	-0.09388	-0.29163	-0.47494
Hrb98DE	FBGN0001215	0.280226	0.077016	0.20412	0.00091
Mlp84B	FBGN0014863	0.092828	-0.1429	0.312229	0.076503
CG7720	FBGN0038652	0.545279	0.491126	-0.70494	-0.75909
GstS1	FBGN0010226	0.061582	0.069622	-0.07101	-0.06297
Unc-89	FBGN0053519	0.442679	-0.15115	0.794993	0.201164
kdn	FBGN0261955	0.148455	-0.10353	0.23856	-0.01343
Cul3	FBGN0261268	0.263808	-0.02403	0.256	-0.03184
Pof	FBGN0035047	0.058969	-0.0154	0.06531	-0.00906
Mst98Cb	FBGN0004171	-0.33372	-0.2641	0.078745	0.148362
chic	FBGN0000308	0.143517	0.072867	0.083856	0.013206
Myo61F	FBGN0010246	0.335817	0.75626	-0.68614	-0.2657
Tsp42Ea	FBGN0029508	-0.26353	0.041286	-0.33428	-0.02946
dj	FBGN0019828	-0.05952	-0.06041	0.121345	0.120455
bun	FBGN0259176	0.241923	-0.0376	0.399992	0.120471
Cyt-c1	FBGN0035600	0.086133	-0.02328	0.149882	0.040467
CG34212	FBGN0085241	-0.8968	-0.33517	-0.95019	-0.38856
CG10799	FBGN0033821	1.903112	0.366029	1.119665	-0.41742
COX4	FBGN0032833	-0.01944	-0.04473	0.054983	0.029693
Sfp26Ad	FBGN0261055	-0.12145	0.081031	-0.57813	-0.37565
Spn38F	FBGN0028986	-0.18949	-0.18192	-0.24479	-0.23721
Spn28F	FBGN0028987	-0.70527	-0.01314	0.054899	0.747032
Hsc70-5	FBGN0001220	0.104085	-0.01515	0.172779	0.053541
Yp3	FBGN0004047	0.053047	0.779548	-1.7479	-1.0214
CG15098	FBGN0034398	-0.08695	0.005782	0.000454	0.093185
CG31233	FBGN0051233	0.3546	0.591816	-0.43597	-0.19875
CG10869	FBGN0031347	-0.05797	-0.03725	-0.06362	-0.04291
cathD	FBGN0029093	0.001868	-0.0508	-0.01357	-0.06624
ref(2)P	FBGN0003231	0.103458	0.072497	0.099215	0.068254
CG1801	FBGN0031171	-0.4139	0.848546	-1.405	-0.14255
Tret1-1	FBGN0050035	0.260373	-0.01128	0.392389	0.120732
rhea	FBGN0260442	0.321203	-0.02756	0.41463	0.065868
Chchd2	FBGN0260747	0.117533	0.259093	0.218205	0.359765
Pino	FBGN0016926	0.094244	0.016847	0.072353	-0.00504
scrib	FBGN0263289	0.409232	-0.06398	0.664878	0.191661
CAP	FBGN0033504	0.23443	-0.08511	0.42835	0.108805
CG31948	FBGN0051948	0.22493	0.106139	0.247974	0.129183
su(w[a])	FBGN0003638	0.072147	0.002767	0.142124	0.072744
CG6283	FBGN0039474	3.5121	0.265931	4.847655	1.601487
Tm2	FBGN0004117	0.055186	-0.05372	0.176681	0.067777
poe	FBGN0011230	0.215532	0.014852	0.390444	0.189764

eff	FBGN0011217	0.252584	0.059332	0.216491	0.023238
Marf	FBGN0029870	0.27391	-0.01355	0.392897	0.105441
CG1979	FBGN0026563	0.277351	-0.00707	0.279637	-0.00478
Gdh	FBGN0001098	0.355681	-0.0597	0.155652	-0.25973
Lpin	FBGN0263593	0.187637	-0.02513	0.302628	0.08986
CG17646	FBGN0264494	0.423841	-0.07624	0.646099	0.146018
CG43755	FBGN0264086	0.014194	-0.05069	-0.00066	-0.06555
Sam-S	FBGN0005278	0.216313	-0.19634	0.65134	0.238686
Ufd4	FBGN0032208	0.228208	-0.01835	0.330815	0.084261
Hex-C	FBGN0001187	0.487432	-0.09791	0.695171	0.109828
pst	FBGN0035770	0.228911	0.089636	0.151429	0.012153
Rh3	FBGN0003249	0.433385	-0.16984	0.436378	-0.16685
nrv1	FBGN0015776	0.177185	0.011058	0.27797	0.111842
CG9254	FBGN0028513	0.058805	0.013072	-0.05939	-0.10512
Alp2	FBGN0283480	-0.31966	0.875367	-0.03695	1.158086
eIF1A	FBGN0026250	0.040997	0.046785	-0.03142	-0.02563
Nna1	FBGN0265726	0.25668	-0.01079	0.32107	0.053604
Gs2	FBGN0001145	-0.04778	-0.19128	0.037645	-0.10585
lost	FBGN0263594	0.05206	-0.0965	0.126771	-0.02179
Dup99B	FBGN0250832	-0.47698	-0.3014	-0.43718	-0.2616
MCPH1	FBGN0260959	0.371582	0.053705	0.333576	0.015699
SdhB	FBGN0014028	0.035638	-0.0379	0.196891	0.123351
Mp20	FBGN0002789	0.143931	-0.0959	0.176796	-0.06303
His3.3B	FBGN0004828	0.075891	0.098994	0.066609	0.089711
Prat2	FBGN0041194	1.145291	-0.00785	1.540558	0.387421
CG9932	FBGN0262160	0.594744	0.006069	0.88036	0.291685
tsr	FBGN0011726	-0.25184	0.206106	-0.58493	-0.12698
emp	FBGN0010435	-0.11816	0.026151	-0.06754	0.076767
CG42390	FBGN0259736	0.331568	0.012038	0.348489	0.028959
IscU	FBGN0037637	0.06294	0.166775	0.050684	0.154519
Mst84Dc	FBGN0004174	-0.21728	0.030739	-0.27288	-0.02487
COX5A	FBGN0019624	-0.02622	-0.02266	0.026244	0.029799
CG31883	FBGN0032122	-0.21704	-0.2777	0.05318	-0.00748
CG12239	FBGN0029810	0.202034	0.106794	0.065251	-0.02999
CG6262	FBGN0034121	0.12626	-0.00951	0.179246	0.043476
Treh	FBGN0003748	0.226358	0.086473	0.358972	0.219087
DppIII	FBGN0037580	0.240913	-0.00233	0.231958	-0.01129
Bacc	FBGN0031453	0.119148	-0.00699	0.203982	0.077848
Pmp70	FBGN0031069	0.288182	-0.0994	0.375455	-0.01212
Tpi	FBGN0086355	-0.0113	-0.02628	0.128976	0.114001
CG5506	FBGN0036766	-0.14301	0.657087	-0.97066	-0.17056
Mitofilin	FBGN0019960	0.13276	-0.07044	0.217483	0.014285
rin	FBGN0015778	0.264579	-0.00116	0.312388	0.046645
nSyb	FBGN0013342	0.25252	-0.20205	0.488014	0.033443
Pgm2a	FBGN0033377	0.041372	0.009727	0.01968	-0.01197
CG44774	FBGN0266000	0.229254	0.204681	-0.31399	-0.33856
gish	FBGN0250823	0.189617	0.069369	0.103207	-0.01704
ATPsynB	FBGN0019644	-0.17675	-0.08174	-0.07846	0.016552
CG8564	FBGN0035776	0.066713	0.015122	-0.06474	-0.11633
CG30015	FBGN0050015	0.262614	-0.05913	0.363645	0.0419
Gss2	FBGN0052495	0.039801	0.359146	-0.15795	0.161396
Gss1	FBGN0030882	0.040852	0.360873	-0.15942	0.160603
BomS2	FBGN0025583	-0.39965	0.042146	0.616135	1.057931
Obp99b	FBGN0039685	-1.06053	-0.58134	1.178126	1.657311
ocn	FBGN0041102	-0.04048	-0.08247	-0.09487	-0.13686
Got2	FBGN0001125	0.310923	0.028879	0.294553	0.012509
mib2	FBGN0086442	0.1704	0.037745	0.085003	-0.04765
mesh	FBGN0051004	0.198093	0.916989	-1.00391	-0.28502
CG42807	FBGN0261989	0.691898	1.204982	-0.7322	-0.21912
sqd	FBGN0263396	0.298593	0.043132	0.367387	0.111926
fus	FBGN0023441	0.48336	0.002416	0.767401	0.286457
ssp5	FBGN0037985	0.02995	-0.00052	-0.01886	-0.04933
Cyp12d1-p	FBGN0050489	-0.48339	-0.11775	-0.60194	-0.2363
CG9676	FBGN0030773	-0.12191	0.139313	-0.91847	-0.65725
Lamp1	FBGN0032949	0.051395	0.081969	-0.11493	-0.08436
UQCR-Q	FBGN0036728	-0.01457	0.075889	-0.18635	-0.09589
LpR1	FBGN0066101	0.512998	0.195694	0.56612	0.248816
vig	FBGN0024183	0.439537	-0.02373	0.531122	0.067858
CG5214	FBGN0037891	0.001788	-0.0217	0.01318	-0.0103

CG13124	FBGN0032156	-0.03624	-0.03952	0.140416	0.13714
CG10910	FBGN0034289	-0.43086	0.757183	-1.93154	-0.74349
Acp26Aa	FBGN0002855	-0.14676	-0.3177	0.310702	0.139759
Hsc70-2	FBGN0001217	0.197309	0.013204	0.143037	-0.04107
ATPsynO	FBGN0016691	0.029489	-0.07585	-0.01376	-0.1191
CG4928	FBGN0027556	0.337082	0.244072	-0.11662	-0.20963
CG5028	FBGN0039358	0.307195	-0.01675	0.492049	0.168108
par-1	FBGN0260934	0.354447	-0.02167	0.50052	0.124403
CG5065	FBGN0034145	0.447836	0.184449	0.172528	-0.09086
CG44085	FBGN0264894	0.244938	-0.15372	0.527048	0.128386
CG6230	FBGN0027582	0.371075	0.038592	0.296921	-0.03556
Alas	FBGN0020764	0.197215	0.016579	0.387562	0.206926
ND-49	FBGN0039909	0.259083	0.04223	0.303097	0.086243
tna	FBGN0026160	0.222674	0.007127	0.323358	0.107811
CG5762	FBGN0039190	-0.0349	-0.03436	-0.0154	-0.01485
Ggamma1	FBGN0004921	0.09152	0.024004	0.11373	0.046214
eIF3b	FBGN0034237	0.137281	-0.04486	0.2082	0.026059
Herc4	FBGN0035207	0.436478	0.209052	0.117823	-0.1096
Acp54A1	FBGN0083936	0.397682	-0.60663	-0.36768	-1.37199
Akap200	FBGN0027932	0.351824	0.077991	0.220699	-0.05313
TrpRS-m	FBGN0036763	0.093433	0.011472	0.04327	-0.03869
DptA	FBGN0004240	-2.0549	0.2289	-3.52189	-1.2381
CG6287	FBGN0032350	0.581279	-0.01341	0.613733	0.019048
VhaAC45	FBGN0262515	0.102709	0.169995	-0.04036	0.026921
vrs	FBGN0286507	-0.00666	0.007346	-0.02698	-0.01298
bic	FBGN0000181	-0.04833	-0.05335	0.068318	0.063301
Jabba	FBGN0259682	0.453803	-0.05493	0.294696	-0.21404
CG10477	FBGN0035661	-0.32114	0.286809	-0.26794	0.340008
CG10960	FBGN0036316	0.25017	0.132423	0.456617	0.338871
VhaSFD	FBGN0027779	0.139486	0.118739	-0.01002	-0.03077
orb	FBGN0004882	0.226412	-0.0389	0.219293	-0.04602
Pdhb	FBGN0039635	0.009049	0.016749	0.11421	0.12191
Dro	FBGN0010388	-2.27041	0.526273	-3.04068	-0.24399
CG2852	FBGN0034753	-0.04232	0.002056	-0.17349	-0.12911
Rho1	FBGN0014020	0.109589	0.124487	-0.01757	-0.00268
Actn	FBGN0000667	0.397499	-0.19877	0.555585	-0.04069
Obp56d	FBGN0034470	-0.31341	-0.40324	0.027232	-0.06259
Pect	FBGN0032482	0.160372	0.034565	0.073478	-0.05233
CG31468	FBGN0047351	-0.27132	-0.02488	-0.24026	0.006178
levy	FBGN0034877	-0.1062	-0.05265	-0.02275	0.030806
CG12057	FBGN0030098	0.526984	-0.21546	0.339278	-0.40317
toc	FBGN0015600	0.093962	-0.08274	0.180323	0.003622
His4r	FBGN0013981	-0.06134	-0.04694	-0.06095	-0.04656
CG1146	FBGN0035346	0.285539	-0.04749	0.128065	-0.20497
Cyp4e3	FBGN0015035	-0.30915	-0.91275	1.265608	0.662009
Aldh-III	FBGN0010548	0.08957	-0.22159	0.340114	0.028956
CG12116	FBGN0030041	0.322074	0.342291	-0.03766	-0.01744
Gp93	FBGN0039562	-0.03801	-0.20389	0.141279	-0.0246
CG7766	FBGN0030087	0.278892	0.015973	0.513778	0.250859
path	FBGN0036007	0.112374	-0.01285	0.295544	0.170317
kis	FBGN0266557	0.45908	-0.06401	0.762944	0.239849
Vha100-2	FBGN0028670	0.127616	0.233566	-0.09734	0.008615
Gdap2	FBGN0042135	0.251198	0.20837	0.01429	-0.02854
mask	FBGN0043884	0.366757	-0.08639	0.553243	0.100098
Argl	FBGN0032076	0.816402	-0.24733	1.923625	0.859893
AnxB9	FBGN0000083	-0.17397	0.138602	-0.39859	-0.08601
CG15096	FBGN0034394	0.453562	-0.14147	1.230674	0.635641
CNBP	FBGN0034802	0.042775	0.015378	0.092459	0.065062
LManII	FBGN0027611	0.348286	-0.02915	0.801908	0.424474
Baldspot	FBGN0260960	-0.26834	-0.11323	-0.31546	-0.16036
Chd64	FBGN0035499	-0.00211	0.190052	-0.41918	-0.22702
Ldsdh1	FBGN0029994	0.039907	-0.34648	0.200882	-0.1855
Acer	FBGN0016122	0.372849	-0.07217	0.432079	-0.01294
CG9314	FBGN0032061	0.037377	-0.00644	-0.00318	-0.04699
CG42825	FBGN0262007	-1.13404	1.150279	-2.26506	0.019264
Got1	FBGN0001124	0.197264	0.011315	0.248752	0.062802
Acp62F	FBGN0020509	-0.51628	-0.00687	-0.64238	-0.13296
CG45076	FBGN0266446	-0.07185	-0.03022	-0.03585	0.005776
Mst84Dd	FBGN0004175	-0.20086	-0.00967	-0.26871	-0.07752

msopa	FBGN0004414	-0.14213	0.131286	0.158519	0.431939
CG3308	FBGN0038877	0.349845	-0.09787	0.459749	0.012037
CG14926	FBGN0032360	-0.10129	0.012993	-0.11757	-0.00328
Scsalpha1	FBGN0004888	0.128069	-0.03263	0.277309	0.116612
AGO2	FBGN0087035	0.208645	0.020647	0.267332	0.079333
CG12091	FBGN0035228	0.224068	-0.04591	0.493241	0.223266
CG32473	FBGN0052473	0.15373	0.25723	-0.33408	-0.23058
CG4669	FBGN0035598	0.069779	-0.00387	-0.00039	-0.07404
Cnx99A	FBGN0015622	0.114648	-0.03077	0.21105	0.065628
kst	FBGN0004167	0.437935	0.213196	0.300633	0.075894
lncRNA:CR34335	FBGN0267910	-0.11916	-1.13851	-0.71026	-1.72961
gw	FBGN0051992	0.314053	-0.00794	0.412207	0.090215
PMCA	FBGN0259214	0.436126	0.032993	0.274038	-0.1291
Obp44a	FBGN0033268	-0.08523	-0.10681	0.115526	0.093949
CG31820	FBGN0051820	-0.05156	0.062907	-0.17137	-0.0569
Acp26Ab	FBGN0002856	-0.36744	-0.10873	-0.40567	-0.14697
Rexo5	FBGN0286051	0.095126	-0.00918	0.119384	0.015075
CG7131	FBGN0038598	0.098481	0.03435	0.181674	0.117542
Idh3b	FBGN0038922	0.087609	-0.0666	0.145062	-0.00914
Gpo1	FBGN0022160	0.429331	-0.00217	0.409475	-0.02202
Inos	FBGN0025885	0.201272	-0.01047	0.181969	-0.02977
CG42397	FBGN0259748	-0.11223	1.296795	-1.37336	0.035659
Lectin-galC1	FBGN0016675	1.385485	0.231374	1.59711	0.442999
lncRNA:CR32652	FBGN0052652	-0.0569	0.035089	-0.14012	-0.04813
Galk	FBGN0263199	0.670068	-0.08513	1.0353	0.2801
CG44250	FBGN0265185	-0.03452	0.61406	-0.92108	-0.2725
KrT95D	FBGN0020647	0.283819	0.014472	0.474485	0.205138
Moe	FBGN0011661	0.170162	0.046978	0.159925	0.036742
Npc2h	FBGN0039801	-0.06198	-0.86375	1.110703	0.308927
ND-39	FBGN0037001	-0.12625	-0.09141	-0.067	-0.03216
didum	FBGN0261397	0.189262	0.006558	0.190685	0.00798
CG5504	FBGN0002174	-0.26085	-0.4411	0.234612	0.05436
epsilonTry	FBGN0010425	-0.04348	0.55348	-1.30247	-0.7055
mlt	FBGN0265512	0.264501	-0.0351	0.413164	0.113561
mt:ND2	FBGN0013680	-0.40434	0.15098	-0.38691	0.168403
TTLL4A	FBGN0026147	0.189677	-0.04119	0.182752	-0.04812
CG17841	FBGN0028480	0.392152	-0.08324	0.39827	-0.07712
CG7834	FBGN0039697	0.023471	-0.14029	0.329471	0.165713
Cyt-c-p	FBGN0284248	0.053567	0.078076	-0.07585	-0.05135
Act42A	FBGN0000043	-0.05552	0.225088	-0.39612	-0.11551
CG13607	FBGN0039151	0.605494	-0.17101	0.803315	0.026813
CG15628	FBGN0031632	0.281782	-0.18124	0.431141	-0.03188
Ttd14	FBGN0284257	0.013696	-0.1561	0.218318	0.048526
CG8136	FBGN0037616	0.049282	0.026475	0.026218	0.003411
Pdha	FBGN0028325	0.260591	0.116028	0.223931	0.079368
capu	FBGN0000256	0.142282	-0.07539	0.275546	0.057877
Cyp312a1	FBGN0036778	0.099744	0.185527	0.031565	0.117348
CG2267	FBGN0039792	0.156591	-0.01573	0.033891	-0.13843
muc	FBGN0283658	0.064006	-0.01991	0.137521	0.053608
hydra	FBGN0031128	-0.08136	0.135942	-0.14126	0.076042
Bsg	FBGN0261822	0.406042	0.110566	0.297387	0.001911
scpr-A	FBGN0037889	0.072905	-0.28294	0.331586	-0.02426
CG5612	FBGN0039529	0.088672	-0.08395	0.072267	-0.10035
Cirl	FBGN0033313	0.188501	-0.06905	0.396444	0.138892
cmb	FBGN0036365	0.245999	0.014058	0.38116	0.149219
pyd	FBGN0262614	0.532931	-0.17234	0.871659	0.166389
ND-AGGG	FBGN0058002	0.130332	-0.32298	-0.02365	-0.47696
ens	FBGN0264693	0.342716	0.085621	0.3935	0.136404
CG32521	FBGN0052521	-0.14868	-0.18978	0.245062	0.20396
Ank	FBGN0011747	0.393686	0.073712	0.384583	0.064609
CG14540	FBGN0039398	0.207488	0.013653	0.110391	-0.08344
ATPsyngamma	FBGN0020235	-0.0134	-0.04856	0.034547	-0.00061
CG42688	FBGN0265263	-0.20256	0.065688	-0.39025	-0.122
larp	FBGN0261618	0.482188	-0.00886	0.765317	0.274272
SREBP	FBGN0261283	0.210253	0.074969	0.354795	0.219511
spidey	FBGN0029975	-0.03604	-0.0793	0.142978	0.099723
TotA	FBGN0028396	0.200811	1.062579	0.439265	1.301033
CG43349	FBGN0263081	0.956193	1.385616	-0.93592	-0.5065
Sar1	FBGN0038947	0.04043	0.096836	-0.02871	0.027693

Uba1	FBGN0023143	0.020339	-0.01192	0.07466	0.042399
pix	FBGN0086706	-0.02688	-0.16143	0.149932	0.015374
Strn-Mlck	FBGN0265045	0.22692	-0.03106	0.546265	0.288281
GstE12	FBGN0027590	0.024045	0.02823	0.037463	0.041648
Pink1	FBGN0029891	0.081131	-0.05356	0.23102	0.096328
CG30031	FBGN0050031	-1.71776	-0.6245	-0.87404	0.219216
BomS3	FBGN0040736	-0.54112	-0.15774	0.022683	0.406064
Hasp	FBGN0032797	0.128153	-0.06761	0.279873	0.08411
Mlc1	FBGN0002772	0.016016	-0.01938	0.201472	0.166072
Ank2	FBGN0261788	0.141344	-0.0774	0.353702	0.134954
mino	FBGN0027579	0.216807	-0.16864	0.58827	0.202826
ATPsynF	FBGN0035032	-0.07861	-0.06127	-0.12239	-0.10505
SNF4Agamma	FBGN0264357	0.312126	0.06258	0.317303	0.067757
Fatp1	FBGN0267828	0.287609	0.037168	0.430993	0.180552
CG10254	FBGN0027512	0.125384	0.037047	0.04086	-0.04748
gammaTry	FBGN0010359	-1.73288	-0.63164	-0.87984	0.221404
Chc	FBGN0000319	0.192904	0.057351	0.209771	0.074218
Tsp42Eb	FBGN0042086	0.464657	1.150804	-0.84089	-0.15474
smp-30	FBGN0038257	0.853255	0.160601	0.856266	0.163612
CG42235	FBGN0250757	0.243357	-0.00569	-0.18209	-0.43115
CG3517	FBGN0038706	-0.03293	0.065672	-0.10721	-0.00861
regucalcin	FBGN0030362	0.226145	0.023648	0.182379	-0.02012
whd	FBGN0261862	0.367195	0.078317	0.286446	-0.00243
CG1640	FBGN0030478	0.131779	-0.01876	0.173306	0.022766
mub	FBGN0262737	0.421886	-0.01281	0.547663	0.112967
Bruce	FBGN0266717	0.253089	0.00612	0.410328	0.163358
CG30160	FBGN0050160	0.463202	1.15276	-0.83473	-0.14517
l(2)efl	FBGN0011296	-0.10201	-0.19613	0.448647	0.354531
B52	FBGN0004587	0.107963	-0.03025	0.303152	0.16494
scpr-B	FBGN0037888	0.293287	0.280833	-0.15403	-0.16649
Hsp60A	FBGN0015245	-0.03362	-0.03997	-0.01513	-0.02148
CG3085	FBGN0034816	0.023396	-0.00191	-0.01685	-0.04216
CG6512	FBGN0036702	-0.0136	0.007212	0.046438	0.067255
Sirup	FBGN0031971	-0.93632	-0.09805	-0.34476	0.493511
cora	FBGN0010434	0.240913	-0.01019	0.365628	0.114524
CG3640	FBGN0035042	-0.37085	-0.07931	-0.3394	-0.04786
CG17450	FBGN0040028	0.041575	-0.10719	0.112503	-0.03626
lqf	FBGN0028582	0.282464	-0.0285	0.293169	-0.0178
Eglp4	FBGN0034885	0.243615	-0.21689	0.634999	0.174498
18SrRNA-Psi:CR41602	FBGN0085813	0.455374	0.243958	0.217914	0.006497
Pep	FBGN0004401	0.05378	-0.15518	0.205563	-0.00339
CG8526	FBGN0037759	0.001851	-0.01066	0.072037	0.059528
nrv2	FBGN0015777	-0.00174	-0.10468	0.239004	0.136067
Tsp42Ee	FBGN0029506	-0.20427	0.090568	-0.36434	-0.06949
CG30460	FBGN0050460	0.323147	-0.04363	0.317821	-0.04896
CG3902	FBGN0036824	-0.00609	0.031776	0.564187	0.602055
Vps13B	FBGN0039727	0.33001	-0.12105	0.490908	0.039846
Mal-B1	FBGN0032381	-0.69423	0.163798	-1.35099	-0.49296
nrv3	FBGN0032946	0.215171	-0.1025	0.265193	-0.05248
unc-104	FBGN0267002	0.186757	-0.10001	0.444668	0.157903
Usp7	FBGN0030366	0.292171	-0.01951	0.314525	0.002844
LysB	FBGN0004425	1.284038	0.115095	0.937478	-0.23146
CG5946	FBGN0036211	0.054007	-0.03194	0.229036	0.143085
ATPsynG	FBGN0010612	-0.16856	0.012218	-0.16007	0.020708
Srrm234	FBGN0035253	0.267012	0.037943	0.456333	0.227264
Rab3-GAP	FBGN0027505	-0.06062	-0.00626	-0.10103	-0.04668
AdSS	FBGN0027493	0.24173	0.185195	0.028168	-0.02837
BG642163	FBGN0083938	0.024484	-0.05406	0.08012	0.001578
Hsc70-1	FBGN0001216	0.190853	-0.08854	0.200801	-0.07859
CG11878	FBGN0039310	0.148281	0.478052	-0.48189	-0.15212
milt	FBGN0262872	0.235649	-0.00609	0.285992	0.044257
Prosalpha1	FBGN0263121	-0.22483	0.143021	-0.22417	0.143678
Acp33A	FBGN0267327	-0.05122	-0.13058	-0.13994	-0.21931
CG9568	FBGN0032087	0.468882	1.084993	-0.78997	-0.17386
norpA	FBGN0262738	0.081619	-0.24053	0.268157	-0.05399
CG30382	FBGN0050382	-0.22557	0.142674	-0.22585	0.142397
Trxr-1	FBGN0020653	-0.02389	0.11854	-0.06342	0.079018
eIF3c	FBGN0034258	0.097622	-0.1084	0.17557	-0.03045
CG6295	FBGN0039471	-0.11001	0.235113	-1.48672	-1.14159

CG11854	FBGN0039299	-0.87116	2.211104	-0.48275	2.599516
CG5790	FBGN0032677	0.165326	0.019427	0.126966	-0.01893
CG32820	FBGN0052820	0.040462	-0.10332	0.017971	-0.12581
CG30395	FBGN0050395	0.362021	-0.07193	0.489031	0.055083
CG34034	FBGN0054034	-0.21476	-0.00338	-0.20244	0.008939
sgg	FBGN0003371	0.472234	0.060749	0.693439	0.281954
CG32819	FBGN0052819	0.041714	-0.10156	0.0113	-0.13197
Gyg	FBGN0265191	0.553303	0.105736	0.574746	0.127179
BomS1	FBGN0034329	-1.39028	-0.18578	-0.99696	0.207538
CG9389	FBGN0037064	0.147258	-0.03221	0.202114	0.022647
CG8042	FBGN0027554	0.073285	-0.03176	0.127922	0.022878
Sap47	FBGN0013334	0.171004	-0.0921	0.386213	0.123104
GCS2alpha	FBGN0027588	0.143927	0.000565	0.172375	0.029014
lola	FBGN0283521	0.171795	-0.02216	0.269216	0.075259
Jafrac1	FBGN0040309	-0.36961	-0.06893	-0.1325	0.168188
CG18180	FBGN0036024	-0.23112	0.349338	-0.64268	-0.06222
CG33926	FBGN0053926	-1.42797	0.782415	-2.22847	-0.01808
CG18449	FBGN0033285	-0.03051	0.016533	-0.06221	-0.01517
tacc	FBGN0026620	0.379359	0.059695	0.44456	0.124896
bgm	FBGN0027348	0.436882	0.035173	1.142986	0.741276
CG9129	FBGN0035196	-0.01011	-0.02715	-0.16099	-0.17804
CG7430	FBGN0036762	0.017472	-0.04013	0.040223	-0.01738
Mical	FBGN0053208	0.329602	-0.04221	0.454733	0.082926
shi	FBGN0003392	0.205517	-0.04292	0.260645	0.012211
CG1213	FBGN0037387	-0.1549	0.307426	-0.11095	0.351376
aralar1	FBGN0028646	0.504314	-0.11555	0.692252	0.072389
Pfrx	FBGN0027621	0.362638	-0.10419	0.619457	0.152632
Slik	FBGN0035001	0.295998	-0.00976	0.468358	0.162599
GstT4	FBGN0030484	0.191101	0.015004	-0.08802	-0.26412
aqz	FBGN0286516	0.406662	0.20964	0.329196	0.132173
CG30430	FBGN0050430	-0.15182	0.049225	-0.28775	-0.08671
CG32549	FBGN0052549	0.461379	0.1536	0.446075	0.138297
Pdp1	FBGN0016694	0.383122	0.080207	0.338108	0.035193
zip	FBGN0265434	0.216064	0.162577	0.138113	0.084625
Pgd	FBGN0004654	-0.24775	0.082797	-0.40816	-0.07762
CG11911	FBGN0031249	-0.23695	0.265406	-1.45242	-0.95006
LysP	FBGN0004429	0.542808	0.990421	0.008441	0.456054
Pax	FBGN0041789	0.229725	-0.02128	0.137749	-0.11325
D2hgdh	FBGN0023507	-0.10185	0.06932	-0.13839	0.032782
CG17549	FBGN0032774	-0.06769	0.096166	0.074267	0.238119
sws	FBGN0003656	0.370828	-0.00504	0.49691	0.121041
CG1394	FBGN0030277	-0.15277	-0.00455	-0.14921	-0.00099
for	FBGN0000721	0.607876	0.064965	0.659874	0.116964
eIF4B	FBGN0020660	0.190755	0.087857	0.05779	-0.04511
Pka-C3	FBGN0000489	0.416332	-0.07251	0.376787	-0.11206
CG10365	FBGN0039109	0.090247	-0.02015	0.195433	0.085037
CG7695	FBGN0038631	-1.18335	0.033081	-1.24354	-0.02711
CG15109	FBGN0034416	-0.01251	-0.02724	-0.10767	-0.1224
NLaz	FBGN0053126	0.321742	0.219284	-0.17628	-0.27874
sinah	FBGN0259794	-0.08039	0.037023	-0.13196	-0.01454
Vha44	FBGN0262511	0.119798	0.145506	-0.02194	0.003766
kay	FBGN0001297	0.274301	0.00402	0.198581	-0.0717
TrxT	FBGN0029752	0.113152	0.077553	0.028908	-0.00669
ATP6AP2	FBGN0037671	-0.06315	0.123771	-0.26628	-0.07936
CG3739	FBGN0038702	-0.346	-0.28737	1.000458	1.059089
CG3164	FBGN0025683	0.466606	0.031599	0.417535	-0.01747
ssh	FBGN0029157	0.206397	-0.08471	0.343404	0.052299
CG1324	FBGN0031129	-0.09572	-0.00294	-0.07371	0.019062
Idgf3	FBGN0020414	-0.23668	0.177692	-0.32751	0.086855
CG8517	FBGN0034472	-0.12961	-0.00988	-0.20245	-0.08272
Apl	FBGN0042178	0.182534	-0.19974	0.349996	-0.03228
Lmpt	FBGN0261565	0.060283	0.039365	-0.02668	-0.0476
Idh3a	FBGN0027291	0.2328	0.040761	0.244576	0.052537
shep	FBGN0052423	0.261239	0.092818	0.239232	0.070812
TTLL3B	FBGN0031853	0.149647	-0.04022	0.214109	0.024243
Pdk	FBGN0017558	0.218458	-0.10471	0.534459	0.211288
CG42521	FBGN0260396	0.609162	0.027248	0.907696	0.325782
chp	FBGN0267435	0.358884	-0.25542	0.280612	-0.33369
Caper	FBGN0031883	0.316337	0.041507	0.411699	0.13687

ctp	FBGN0011760	-0.00964	-0.04109	-0.04101	-0.07246
eIF4G1	FBGN0023213	0.21054	0.060844	0.187765	0.03807
Mpcp1	FBGN0034497	0.115353	-0.17899	0.319915	0.025576
CG4572	FBGN0038738	0.210561	-0.09312	0.288698	-0.01499
CG9673	FBGN0030775	0.105982	0.52322	-0.71013	-0.29289
CG42782	FBGN0261853	0.026065	-0.59747	0.219728	-0.4038
CG6484	FBGN0034247	0.248947	0.377739	-0.72166	-0.59286
Jon66Ci	FBGN0035886	0.887215	2.588243	-2.37152	-0.6705
CG2269	FBGN0033484	0.376238	-0.06499	0.497171	0.05594
smash	FBGN0263346	0.309071	0.061569	0.416744	0.169242
Arf79F	FBGN0010348	0.096329	0.080944	0.04522	0.029835
Cyp12a4	FBGN0038681	0.520759	0.190851	0.75727	0.427362
CG32548	FBGN0052548	-0.14961	-0.10932	-0.00171	0.038582
CG9672	FBGN0030777	-0.36765	0.795948	-1.22839	-0.06479
tmod	FBGN0082582	0.498156	0.036445	0.526967	0.065255
ymp	FBGN0261287	0.073501	0.120381	-0.17205	-0.12517
VhaPPA1-1	FBGN0028662	0.010952	0.122932	-0.14156	-0.02958
CG4631	FBGN0032590	0.11209	-0.00797	0.061488	-0.05857
robl62A	FBGN0028567	0.092258	-0.02863	0.043339	-0.07755
Letm1	FBGN0284252	0.278377	0.036416	0.302696	0.060735
Hex-A	FBGN0001186	-0.01141	-0.0465	0.170086	0.134998
Glt	FBGN0001114	-0.05096	-0.30954	1.342374	1.083793
mil	FBGN0267366	0.052521	0.002282	-0.0355	-0.08574
spin	FBGN0086676	0.600245	0.004478	0.546102	-0.04967
heph	FBGN0011224	0.253217	0.038617	0.248122	0.033522
tim	FBGN0014396	0.821782	0.163575	0.311076	-0.34713
Larp4B	FBGN0035424	0.478752	0.014179	0.597789	0.133216
MSBP	FBGN0030703	-0.00682	-0.0203	0.091804	0.078318
lig	FBGN0020279	0.294347	-0.0844	0.500336	0.121592
DnaJ-H	FBGN0032474	-0.41305	-0.22242	-0.13916	0.051464
NKCC	FBGN0051547	-0.18569	0.113982	-0.35377	-0.05411
Sccpdh1	FBGN0037298	-0.51897	-0.45712	-0.22293	-0.16108
CG13309	FBGN0035933	0.545807	0.535478	-0.17823	-0.18856
deltaTry	FBGN0010358	-1.45539	-0.48948	-0.88777	0.078134
Diap1	FBGN0260635	0.085909	0.0037	0.035492	-0.04672
Smvt	FBGN0039873	0.432972	0.378796	0.055951	0.001774
CG18404	FBGN0039761	-0.3326	-0.12016	-0.81109	-0.59864
Duba	FBGN0036180	0.179793	-0.00746	0.222049	0.034797
CG31709	FBGN0051709	0.018725	0.007081	-0.041	-0.05264
Hacd1	FBGN0032394	0.049999	-0.05849	0.194076	0.085586
thetaTry	FBGN0011555	-0.48998	0.233655	-0.69695	0.026684
tral	FBGN0041775	0.279972	-0.0109	0.340751	0.049877
LUBEL	FBGN0031857	0.444183	-0.15063	1.170981	0.576165
ReepA	FBGN0261564	0.074394	-0.00329	0.2656	0.187919
Mlp60A	FBGN0259209	-0.01793	-0.10388	0.03966	-0.0463
Kcmf1	FBGN0037655	0.148955	-0.01518	0.234746	0.070614
sip2	FBGN0031878	0.068699	-0.00405	-0.10035	-0.17309
Picot	FBGN0024315	0.336541	0.34905	0.152558	0.165067
Cyp9f2	FBGN0038037	0.012275	0.171156	-0.25033	-0.09145
cype	FBGN0015031	-0.03521	-0.01713	-0.01945	-0.00137
CG3868	FBGN0036422	-0.7406	-0.12602	-0.58312	0.031462
CG13618	FBGN0039203	-0.45418	-0.09437	-0.4065	-0.04668
CG2930	FBGN0028491	-0.01753	0.105685	-0.41284	-0.28963
Ugt35B1	FBGN0026314	-0.06491	-0.04616	-0.63092	-0.61217
hfp	FBGN0028577	0.236999	0.040199	0.361766	0.164966
Sfp24Bb	FBGN0259952	0.015498	0.065566	0.019513	0.069581
Gld2	FBGN0038934	0.406104	-0.08383	0.480227	-0.00971
ATPsynCF6	FBGN0016119	-0.01263	-0.01409	-0.00916	-0.01062
COX6B	FBGN0031066	-0.08659	-0.03495	-0.00501	0.04663
CG7461	FBGN0034432	0.277684	-0.21753	0.110798	-0.38442
CG8565	FBGN0030697	0.107668	-0.03485	0.127073	-0.01544
CG3330	FBGN0039511	-0.02902	-0.01934	-0.02043	-0.01075
Ugt35C1	FBGN0040256	-0.08905	-0.05872	-1.00666	-0.97633
Porin2	FBGN0069354	0.053937	-0.02533	0.080293	0.001028
CG17470	FBGN0032869	-0.06566	0.009925	-0.19459	-0.119
POLDIP2	FBGN0037329	-0.0283	0.002268	0.001183	0.031754
CG15255	FBGN0028950	-0.26553	1.012344	-1.91147	-0.63359
Rpn6	FBGN0028689	0.143074	0.060319	0.101023	0.018268
CG18266	FBGN0031724	0.219014	0.01335	0.226455	0.020791

Drsl4	FBGN0052282	-0.45723	-0.31509	-1.01987	-0.87773
Ugt50B3	FBGN0050438	-0.14965	-0.14892	-0.11606	-0.11532
CG43340	FBGN0263077	0.24966	-0.17369	0.417736	-0.00561
Fum1	FBGN0286222	0.148115	-0.06508	0.125956	-0.08724
Pitslre	FBGN0016696	0.006693	0.004427	0.241705	0.239439
cnc	FBGN0262975	0.170021	-0.007	0.297684	0.120665
Stat92E	FBGN0016917	0.269116	0.103781	0.357306	0.191972
Mst57Db	FBGN0011669	-0.35225	-0.07634	-0.34717	-0.07126
Syt1	FBGN0004242	0.261434	-0.10941	0.579265	0.208418
CG2955	FBGN0031585	0.101762	-0.02826	0.091408	-0.03862
Gs1	FBGN0001142	0.316361	-0.04218	0.474752	0.11621
CG5177	FBGN0031908	0.330016	-0.14953	0.423512	-0.05603
COX7C	FBGN0040773	-0.15398	-0.04842	-0.15293	-0.04736
SPoCk	FBGN0052451	0.470049	-0.07219	0.405026	-0.13721
Past1	FBGN0016693	0.029688	0.077514	-0.14141	-0.09358
CG32445	FBGN0052445	-0.05573	-0.04611	0.037984	0.047609
CG1317	FBGN0035333	0.041305	0.012457	0.04893	0.020082
CG7542	FBGN0036738	0.576709	0.861776	-1.54148	-1.25641
RhoGEF3	FBGN0264707	0.202826	-0.0292	0.259428	0.027405
BomT3	FBGN0038930	-0.68769	-0.28496	0.327342	0.730067
Akr1B	FBGN0086254	0.189023	0.082412	0.193596	0.086984
Arts	FBGN0042177	0.321416	0.265201	0.066015	0.009801
Hpd	FBGN0036992	-0.27622	-0.03846	0.357717	0.595482
CG10841	FBGN0038163	0.094727	0.022009	-0.00365	-0.07637
MRP	FBGN0032456	0.297917	0.109981	0.343437	0.1555
CG13428	FBGN0034515	-0.71657	-0.51531	-0.3504	-0.14913
Stacl	FBGN0263980	0.473502	0.041778	0.721472	0.289748
Pdk1	FBGN0020386	0.027198	0.048747	-0.05386	-0.03231
CG7378	FBGN0030976	0.327013	-0.10307	0.506241	0.076161
atl	FBGN0039213	0.194407	-0.0502	0.274434	0.02983
cher	FBGN0014141	0.303196	0.019771	0.288831	0.005406
CG10650	FBGN0046302	-0.2021	0.479731	-0.98272	-0.30089
Gbp2	FBGN0034200	0.577972	-0.08138	0.856984	0.197634
AMPdeam	FBGN0052626	0.205668	0.136136	0.122738	0.053207
BI-1	FBGN0035871	-0.08245	-0.01584	-0.03518	0.031433
Pp1alpha-96A	FBGN0003134	0.365852	-0.05688	0.755818	0.33309
mEFTs	FBGN0032646	-0.07871	-0.02808	-0.03892	0.01171
ced-6	FBGN0029092	0.279647	-0.01973	0.274514	-0.02486
IM4	FBGN0040653	-0.39199	0.146146	0.129712	0.667845
spir	FBGN0003475	0.158639	-0.02817	0.186702	-0.00011
Gld	FBGN0001112	-0.06263	-0.4948	0.808802	0.376634
CG40472	FBGN0085736	0.02689	-0.30629	-0.13296	-0.46615
CG6168	FBGN0036154	-0.46323	0.017365	-0.81782	-0.33722
Mst84B	FBGN0037464	0.074757	0.051016	0.014834	-0.00891
COX5B	FBGN0031830	0.029476	-0.0072	0.05161	0.01493
Root	FBGN0039152	0.352487	-0.13504	0.279313	-0.20822
CG42268	FBGN0259163	0.402964	0.000967	0.548537	0.14654
CG11893	FBGN0039316	1.309685	0.373188	-1.34925	-2.28574
CG4000	FBGN0038820	0.284514	0.030133	-0.41373	-0.66811
cdc14	FBGN0031952	0.180681	-0.04828	0.235575	0.006611
fok	FBGN0263773	0.076292	0.206066	0.020564	0.150338
toe	FBGN0036285	0.020424	-0.39905	0.146268	-0.2732
hpRNA:CR18854	FBGN0285991	0.130705	-0.06004	0.268434	0.077692
CG44014	FBGN0264776	-0.20678	0.827723	-1.48701	-0.45251
Oatp30B	FBGN0032123	0.32464	-0.00928	0.413425	0.07951
CG4461	FBGN0035982	0.541451	0.017469	0.451242	-0.07274
SdhBL	FBGN0030975	-0.01759	-0.07008	0.032907	-0.01958
colt	FBGN0019830	0.071375	-0.16929	0.329197	0.088533
VhaAC39-1	FBGN0285910	-0.01458	0.197473	-0.27937	-0.06732
gpp	FBGN0264495	0.369092	-0.05283	0.432556	0.010638
Rab7	FBGN0015795	0.127247	0.133939	0.073779	0.080471
glob1	FBGN0027657	-0.36188	-0.3336	0.411568	0.439845
Slmap	FBGN0040011	0.162761	0.090323	0.017797	-0.05464
l(1)G0196	FBGN0027279	0.210699	-0.06819	0.362394	0.083508
CG42788	FBGN0261859	0.876718	0.067902	1.150859	0.342043
eIF3a	FBGN0037249	-0.07718	-0.01443	0.024779	0.087533
m-cup	FBGN0038488	0.198255	-0.00235	0.057984	-0.14262
Ant2	FBGN0025111	-0.3185	-0.03135	-0.32946	-0.04232
Gclc	FBGN0040319	0.44342	0.254316	0.122469	-0.06664

CG45050	FBGN0266410	0.216078	0.096357	0.221493	0.101771
Acp76A	FBGN0015586	0.342908	-0.02438	-0.07858	-0.44587
Gdi	FBGN0004868	0.062102	0.034111	0.074402	0.046411
CG14762	FBGN0033250	0.334138	-0.19422	0.756879	0.228518
CG44245	FBGN0265180	-0.03496	-0.06191	0.259698	0.232754
alphaTub84D	FBGN0003885	-0.05458	-0.01778	-0.06694	-0.03013
CG15347	FBGN0030040	-0.12482	0.529943	-0.93383	-0.27907
CG13492	FBGN0034662	0.152288	0.474521	-0.72439	-0.40216
CG46298	FBGN0283625	0.033859	0.067553	-0.05495	-0.02126
CG3609	FBGN0031418	0.151902	0.167957	0.33838	0.354435
Ggt-1	FBGN0030932	-0.17938	-0.04985	-0.07296	0.056566
MESK2	FBGN0043070	0.03691	0.027018	0.117237	0.107345
RyR	FBGN0011286	0.292237	-0.12488	0.536211	0.11909
Dip-B	FBGN0000454	0.165978	0.177875	-0.06056	-0.04866
Ubqn	FBGN0031057	0.116324	0.040556	0.134833	0.059065
CG3699	FBGN0040349	0.408982	0.410792	1.017428	1.019238
Kap-alpha3	FBGN0027338	0.169292	-0.01101	0.15927	-0.02103
Wdr62	FBGN0031374	0.223269	-0.04413	0.481081	0.213679
CG18662	FBGN0040963	-0.16847	0.047834	-0.31045	-0.09415
Ca-alpha1D	FBGN0001991	0.452132	-0.00098	0.534888	0.081779
CG6357	FBGN0033875	-0.20705	0.115798	-0.346	-0.02315
CG7220	FBGN0033544	0.006563	-0.00891	-0.09827	-0.11374
lncRNA:CR32658	FBGN0040859	-0.14955	-0.00504	-0.20954	-0.06503
tn	FBGN0265356	-0.08258	-0.26111	0.099898	-0.07863
CG31639	FBGN0051639	-0.16909	-0.04867	-0.23956	-0.11915
CG42393	FBGN0259739	0.002943	0.026853	-0.06268	-0.03877
ND-MLRQ	FBGN0052230	-0.07089	-0.03112	-0.0796	-0.03983
anne	FBGN0052000	0.275277	-0.1016	0.37431	-0.00257
arm	FBGN0000117	0.109251	0.010273	0.029822	-0.06916
Neb-cGP	FBGN0083167	-0.15286	0.006381	-0.12929	0.02995
dop	FBGN0267390	0.36837	-0.01299	0.501537	0.120178
LTV1	FBGN0027525	-0.21403	-0.1451	0.130519	0.199447
CG8708	FBGN0033271	-1.16459	-0.83892	0.33171	0.657382
mxt	FBGN0031637	0.117907	-0.04984	0.243672	0.07593
cnk	FBGN0286070	0.330312	0.066359	1.781994	1.518041
CG4375	FBGN0031295	-0.08891	-0.11991	-0.32162	-0.35262
ATP8A	FBGN0259221	0.135361	-0.04861	0.186456	0.002486
Acbp3	FBGN0250836	0.392955	0.644655	-0.52088	-0.26918
Gbs-76A	FBGN0036862	0.477919	-0.01766	0.453556	-0.04202
csw	FBGN0000382	0.376274	-0.04354	0.526416	0.1066
Mbs	FBGN0005536	0.242925	-0.02979	0.290625	0.017905
CG44008	FBGN0264750	0.017566	0.388201	-0.61666	-0.24603
AOX3	FBGN0038349	-0.04827	0.101002	-0.36364	-0.21437
Su(Tpl)	FBGN0014037	0.444765	-0.09852	0.590031	0.046744
CG42668	FBGN0261550	0.057727	-0.03435	0.13478	0.0427
GLS	FBGN0261625	0.077307	-0.04131	0.190142	0.071527
bb8	FBGN0039071	0.132022	0.018017	0.037234	-0.07677
slgA	FBGN0003423	0.168876	-0.08169	0.225114	-0.02546
CG43392	FBGN0263249	-0.36907	-0.08035	-0.45276	-0.16403
Ndae1	FBGN0259111	0.53463	0.086414	0.461364	0.013148
CG10859	FBGN0032520	-0.10382	-0.15233	-0.0887	-0.13721
Pgk	FBGN0250906	-0.11122	-0.11336	0.045837	0.043692
Drat	FBGN0033188	0.075407	0.016641	-0.01763	-0.07639
CG4218	FBGN0250844	-0.0561	0.014582	0.00491	0.07559
Calx	FBGN0013995	0.070746	-0.00746	0.056716	-0.02149
Pka-C1	FBGN0000273	0.371677	-0.04854	0.488298	0.068081
CG4377	FBGN0034664	0.52634	0.668687	-0.80633	-0.66398
l(2)01289	FBGN0010482	0.329447	0.028722	0.429924	0.129199
cnn	FBGN0013765	0.126925	-0.02083	0.192374	0.044618
FBGN0032276	FBGN0032276	-0.0105	-0.01258	-0.04256	-0.04464
CG34120	FBGN0083956	0.074935	-0.20242	0.260706	-0.01665
fon	FBGN0032773	-0.22186	-0.0569	0.243625	0.408582
Trc8	FBGN0039668	0.018063	-0.06808	0.184111	0.097972
CG15406	FBGN0031517	-0.0397	-0.20063	-0.2095	-0.37043
Vha36-1	FBGN0022097	-0.07528	0.118145	-0.25825	-0.06482
CG8086	FBGN0032010	0.107725	-0.06715	0.205716	0.030843
l(2)k09913	FBGN0021979	0.104283	-0.10773	0.13426	-0.07776
crc	FBGN0000370	0.294022	-0.11662	0.336574	-0.07406
CG5096	FBGN0032235	-0.12495	0.737068	-1.23459	-0.37257

yuri	FBGN0045842	0.186407	0.046199	0.091854	-0.04835
CG10734	FBGN0034082	0.04872	-0.00118	-0.08582	-0.13572
CG4577	FBGN0031306	0.057583	0.07031	0.0851	0.097827
alpha-Est7	FBGN0015575	0.198217	-0.35392	0.33374	-0.2184
qvr	FBGN0260499	0.401257	-0.03046	0.623227	0.191508
Gem4c	FBGN0052783	0.926206	0.645899	0.073089	-0.20722
grsm	FBGN0040493	0.177127	0.040206	0.156089	0.019169
Cals	FBGN0039928	0.288109	0.008644	0.272678	-0.00679
GstE9	FBGN0063491	0.257082	-0.17819	0.356561	-0.07871
fry	FBGN0016081	0.333133	0.086031	0.533087	0.285985
PNUTS	FBGN0053526	-0.02259	-0.05308	0.197078	0.166586
Doa	FBGN0265998	0.303332	0.009906	0.400919	0.107493
Mlf	FBGN0034051	0.229275	0.017917	0.198994	-0.01236
CG32119	FBGN0052119	0.004665	-0.02141	-0.07153	-0.0976
CG6145	FBGN0033853	0.245781	-0.03513	0.042951	-0.23796
aqrs	FBGN0039598	-0.56971	-0.02653	-0.52141	0.021762
CG17111	FBGN0039048	-0.505	-0.01883	-1.29692	-0.81074
mrj	FBGN0034091	0.18734	0.030329	0.133846	-0.02316
eIF4H2	FBGN0039797	0.092452	-0.10561	0.230436	0.032375
slo	FBGN0003429	0.544618	-0.02691	0.795975	0.22445
TTLL6B	FBGN0039501	0.137862	0.034366	0.121548	0.018051
Sdc	FBGN0010415	0.420108	0.043272	0.479172	0.102336
SdicC	FBGN0283434	-0.43197	-1.44878	0.360452	-0.65635
faf	FBGN0005632	0.357392	0.003087	0.469872	0.115567
dlg1	FBGN0001624	0.521458	-0.00975	0.557629	0.026418
Eb1	FBGN0027066	0.053826	0.010354	-0.02021	-0.06368
CG8043	FBGN0037610	-0.08888	0.002577	-0.15165	-0.0602
teq	FBGN0023479	0.1713	-0.07317	0.467242	0.222773
jbug	FBGN0028371	0.108513	-0.0338	0.229597	0.087282
CG32687	FBGN0052687	0.588695	-0.11535	0.721382	0.017339
futsch	FBGN0259108	0.589171	-0.05621	0.851268	0.205888
eIF5B	FBGN0026259	0.015049	-0.0808	0.08506	-0.01079
dpr17	FBGN0051361	0.069409	-0.05615	0.097171	-0.02838
mgl	FBGN0261260	0.340974	-0.06494	0.450342	0.044425
Galt	FBGN0263200	0.400779	-0.08451	0.629777	0.144484
f-cup	FBGN0028487	0.197951	0.043695	0.180826	0.026569
CG10576	FBGN0035630	0.02546	-0.01756	0.051055	0.008033
CG10560	FBGN0039325	-0.02076	-0.37166	1.167019	0.816118
CG9380	FBGN0035094	0.297791	0.596927	-0.69111	-0.39197
CG15306	FBGN0030191	0.088077	0.017182	-0.01363	-0.08452
Appl	FBGN0000108	0.255596	-0.20221	0.396787	-0.06102
CG15128	FBGN0034467	0.072317	0.004314	-0.07224	-0.14024
YME1L	FBGN0034792	0.060495	0.016144	0.016857	-0.02749
Paip2	FBGN0038100	0.079883	0.024093	0.084782	0.028992
Qsox1	FBGN0033814	-0.06262	0.03592	0.051686	0.150225
Tomosyn	FBGN0030412	0.339074	0.021198	0.611228	0.293353
Srpk79D	FBGN0025702	0.248814	-0.07354	0.391704	0.06935
Rab11	FBGN0015790	0.128462	0.055708	0.052893	-0.01986
hig	FBGN0010114	0.290012	0.017862	0.332844	0.060695
lva	FBGN0029688	0.169096	-0.08436	0.414689	0.161234
CG3345	FBGN0031240	0.108428	0.015385	0.05243	-0.04061
Mfe2	FBGN0030731	0.215758	0.021534	0.235318	0.041093
Tep4	FBGN0041180	-0.09396	0.085254	-0.00147	0.177744
CG11151	FBGN0030519	-0.03243	-0.05069	-0.041	-0.05926
Ran	FBGN0020255	-0.08467	0.068628	-0.24146	-0.08816
Cnot4	FBGN0051716	0.338808	-0.02197	0.432458	0.071682
CG13991	FBGN0031785	0.186732	-0.1104	0.304304	0.00717
RpL24-like	FBGN0037899	-0.24981	-0.0454	-0.02761	0.176796
CG5945	FBGN0032494	-0.27382	-0.28447	-0.20597	-0.21662
garz	FBGN0264560	0.147249	-0.07045	0.329271	0.11157
ms(3)76Cc	FBGN0036895	0.241312	-0.09601	0.332748	-0.00457
Spat	FBGN0014031	0.434448	-0.03393	0.751856	0.283479
Gpo3	FBGN0028848	-0.0158	0.017907	-0.03584	-0.00213
Gbeta76C	FBGN0004623	-0.18811	-0.45772	0.041899	-0.22771
CG34051	FBGN0054051	-0.39106	-0.16706	-0.24148	-0.01748
CG17378	FBGN0031858	0.727697	-0.07991	0.7214	-0.08621
Rpn13	FBGN0033886	-0.10066	0.055588	-0.1376	0.018646
COX7A	FBGN0040529	-0.18442	-0.02097	-0.10876	0.054686
Nmda1	FBGN0013305	0.141352	0.101626	0.131065	0.091338

CG9813	FBGN0038143	0.124678	-0.15809	0.276687	-0.00608
AttC	FBGN0041579	-1.02146	0.466239	-1.53482	-0.04712
Pi4KIIIalpha	FBGN0267350	0.401026	0.038493	0.505474	0.14294
eIF4E1	FBGN0015218	0.057776	0.052172	-0.04442	-0.05002
CG17896	FBGN0023537	0.147496	0.092838	0.153645	0.098987
CG7029	FBGN0039026	0.239067	-0.07284	0.292727	-0.01918
CG33523	FBGN0053523	-0.0556	0.018226	-0.09591	-0.02208
DptB	FBGN0034407	-1.90534	0.759185	-2.25426	0.410267
Imp	FBGN0285926	0.335247	0.015017	0.408523	0.088293
Cchl	FBGN0038925	-0.09691	0.068041	-0.21346	-0.04851
CG12983	FBGN0037040	0.228026	0.100359	0.110086	-0.01758
ms(3)76Ca	FBGN0036905	0.011305	0.007307	0.022916	0.018918
CG43679	FBGN0263762	-0.83644	-0.1938	-0.88324	-0.24061
ATPsynE	FBGN0038224	-0.03452	-0.01047	0.004992	0.029039
Damm	FBGN0033659	0.094337	1.282535	-2.11144	-0.92324
CG2918	FBGN0023529	0.085204	-0.10385	0.210537	0.021487
CG42529	FBGN0260434	0.011425	0.007698	0.0228	0.019074
Hn	FBGN0001208	0.213046	-0.08498	0.589404	0.291376
CG5273	FBGN0040382	-0.0442	-0.02771	0.189267	0.20576
hyd	FBGN0002431	0.319735	0.046437	0.362093	0.088795
Rpn2	FBGN0028692	0.076222	0.051845	0.012905	-0.01147
Pglym78	FBGN0014869	-0.05207	-0.16449	0.23902	0.126595
ND-23	FBGN0017567	0.014001	0.014117	0.076165	0.07628
SPARC	FBGN0026562	-0.00557	0.031557	0.34876	0.385885
jp	FBGN0032129	0.213775	-0.07644	0.379723	0.089508
CG14499	FBGN0034317	-2.15007	4.936458	-3.56612	3.520405
Spn75F	FBGN0052203	-0.34549	-0.01765	-0.584	-0.25616
CG32276	FBGN0047135	-0.23934	-0.04853	-0.25509	-0.06428
CG7084	FBGN0038938	0.10768	-0.1125	0.026878	-0.19331
Sin3A	FBGN0022764	0.382494	-0.03772	0.569043	0.148824
ATPsynD	FBGN0016120	-0.11318	-0.06419	0.045104	0.094095
CG42319	FBGN0259219	-0.40571	-0.60036	0.041701	-0.15295
Wbp2	FBGN0036318	-0.03536	0.088678	-0.14258	-0.01854
CG31522	FBGN0051522	0.0046	-0.0396	-0.09191	-0.13611
Tpr2	FBGN0032586	0.075917	0.055434	0.051506	0.031024
mts	FBGN0004177	0.116205	0.041846	0.113836	0.039477
eIF3m	FBGN0033902	-0.1166	-0.08573	-0.02785	0.003026
ALiX	FBGN0086346	0.083895	0.051411	-0.14254	-0.17502
PHGPx	FBGN0035438	-0.11722	-0.0467	0.015456	0.08597
Ance	FBGN0012037	0.073434	0.29841	-0.31085	-0.08587
CG32081	FBGN0052081	0.118866	-0.0034	-0.0841	-0.20636
Nop17l	FBGN0033224	0.238529	-0.06164	0.24365	-0.05652
CG10164	FBGN0039088	0.28157	-0.04062	0.26047	-0.06172
PAN3	FBGN0035397	0.335337	-0.03089	0.398842	0.032619
CG6652	FBGN0036687	-0.00434	-0.01395	-0.0244	-0.03401
Mlc-c	FBGN0004687	-0.01233	0.227787	-0.36499	-0.12487
Smg5	FBGN0019890	0.239076	-0.05269	0.406805	0.115039
Lst	FBGN0034140	0.558951	0.188916	0.246464	-0.12357
Rab5	FBGN0014010	0.04958	0.020516	0.077715	0.048651
Pp2A-29B	FBGN0260439	0.096545	0.051952	0.066995	0.022403
CG31106	FBGN0051106	0.733728	0.505742	-0.11905	-0.34703
CG9743	FBGN0039756	-0.10838	0.581258	-0.84459	-0.15495
Scp1	FBGN0020908	0.412198	0.275993	-0.19539	-0.3316
Nfs1	FBGN0032393	0.20572	0.240803	0.151804	0.186888
phu	FBGN0043791	0.223577	1.228467	0.156847	1.161737
Acp63F	FBGN0015585	-0.49837	-0.16705	-0.66637	-0.33505
endos	FBGN0061515	0.046825	-0.00315	0.088786	0.038809
CG32371	FBGN0052371	0.177537	0.006588	0.071108	-0.09984
CG31729	FBGN0051729	0.218034	0.012728	0.243664	0.038358
cib	FBGN0026084	-0.0335	0.340352	-0.42015	-0.04629
Indy	FBGN0036816	0.267095	0.087311	0.228354	0.04857
RpII215	FBGN0003277	1.37829	0.718415	0.36544	-0.29443
salt	FBGN0039872	0.189546	-0.0526	0.000593	-0.24155
CG32192	FBGN0052192	0.020759	0.012781	-0.09567	-0.10365
CG17472	FBGN0032868	0.180898	-0.028	0.029322	-0.17957
scyl	FBGN0041094	0.169946	-0.18172	0.287717	-0.06395
CG9934	FBGN0032467	0.2724	0.008394	0.207915	-0.05609
Npc2a	FBGN0031381	-0.51075	-0.04832	-0.65634	-0.19391
EMC1	FBGN0037530	0.162285	-0.00663	0.108328	-0.06059

Agpat3	FBGN0036623	0.014762	0.015209	-0.37178	-0.37133
CG9313	FBGN0034566	0.135104	-0.02018	0.025557	-0.12973
promL	FBGN0026189	0.147118	0.024644	0.130657	0.008182
CG30025	FBGN0050025	-1.40638	-0.40073	-0.92164	0.084003
CaMKII	FBGN0264607	0.209663	-0.02138	0.235869	0.00483
Gmap	FBGN0027287	0.008753	-0.15817	0.166582	-0.00034
CG4364	FBGN0032138	-0.29576	-0.12285	-0.07095	0.101959
CG1637	FBGN0030245	0.179477	0.149064	0.018643	-0.01177
mge	FBGN0035473	-0.00375	-0.04247	0.070358	0.031639
NUCB1	FBGN0052190	0.080969	-0.00797	0.043699	-0.04523
P5CDh1	FBGN0037138	0.134896	-0.11651	0.330486	0.079075
Ctr9	FBGN0035205	0.126558	0.242904	-0.29217	-0.17582
wal	FBGN0010516	-0.13999	-0.14507	0.084066	0.078977
Tsp2A	FBGN0024361	-0.15159	0.706755	-1.14276	-0.28441
CG5614	FBGN0038359	-0.05582	0.012364	-0.02792	0.040261
cdi	FBGN0004876	0.267176	0.032898	0.263732	0.029455
CG16772	FBGN0032835	-0.78993	-0.28468	-0.42004	0.085214
sphe	FBGN0030774	0.054486	0.817537	-1.04492	-0.28187
scu	FBGN0021765	0.094175	-0.17397	0.243784	-0.02436
COX8	FBGN0263911	-0.06402	-0.04128	-0.18644	-0.1637
CG3492	FBGN0035007	0.111837	0.091101	0.050556	0.029821
CG4666	FBGN0029838	0.267668	-0.28495	0.591462	0.038847
CG9861	FBGN0034844	-0.00865	0.007114	0.031535	0.047298
Pcyt1	FBGN0041342	0.140423	-0.01083	0.265815	0.114558
CG13337	FBGN0033863	0.028516	0.0619	-0.03602	-0.00264
TSG101	FBGN0036666	0.031303	0.047231	-0.01658	-0.00065
roh	FBGN0250838	-0.13219	-0.0121	-0.05506	0.065022
CG5402	FBGN0039521	-0.66312	-0.16936	-0.32445	0.169309
Vha100-1	FBGN0028671	0.204917	-0.04336	0.334755	0.086477
Fum3	FBGN0036162	-0.01009	0.057524	-0.07575	-0.00813
dom	FBGN0020306	0.31564	-0.01868	0.491456	0.157138
CG4653	FBGN0030776	0.106213	0.796055	-1.06766	-0.37782
ppk24	FBGN0039839	-2.40519	-9.96095	7.091175	-0.46459
CG3638	FBGN0261444	0.709767	-0.0119	1.113184	0.391517
Dys	FBGN0260003	0.301954	0.012287	0.328494	0.038827
CG7324	FBGN0037074	0.327798	0.095706	0.345968	0.113875
Fhos	FBGN0266084	0.406854	-0.15023	0.734907	0.177819
CG8560	FBGN0035781	0.150328	-0.17228	0.414654	0.092047
CG11426	FBGN0037166	-0.71485	-0.00907	-0.92148	-0.21571
Mst33A	FBGN0028412	0.206935	0.007623	0.099668	-0.09964
CG9682	FBGN0039760	-0.21203	-0.19477	-0.58535	-0.56809
Miro	FBGN0039140	-0.03687	-0.05199	-0.13685	-0.15196
Klp59C	FBGN0034824	0.013052	-0.03769	0.080488	0.029747
Idgf2	FBGN0020415	0.261156	-0.11708	0.74484	0.366607
Jheh1	FBGN0010053	-0.45922	-0.08953	-0.3658	0.003894
velo	FBGN0035713	0.179254	0.050927	0.140543	0.012215
CG8740	FBGN0027585	0.054231	-0.05612	0.228018	0.117668
eRF1	FBGN0036974	-0.06785	-0.03005	-0.15124	-0.11343
Invadolysin	FBGN0086359	0.315565	-0.06306	0.172924	-0.2057
eIF3f1	FBGN0037270	-0.11068	-0.1197	0.062166	0.053143
Tsp42Ed	FBGN0029507	-0.353	0.279035	-0.64145	-0.00942
Frl	FBGN0267795	0.336221	0.035823	0.294015	-0.00638
Sec61alpha	FBGN0086357	0.102521	0.070776	0.094195	0.06245
hebe	FBGN0033448	-0.16733	0.239941	-0.41819	-0.01092
CG5455	FBGN0039430	0.276984	-0.11291	0.473011	0.083121
sima	FBGN0266411	0.306506	0.019567	0.547964	0.261025
Vha68-3	FBGN0032464	0.08139	-0.03002	0.074228	-0.03718
Dpy-30L2	FBGN0035491	-0.25151	-0.04559	-0.16095	0.044967
CG17124	FBGN0032297	0.496685	0.077174	0.570362	0.150851
mRpS5	FBGN0287187	0.293753	-0.01549	0.019656	-0.28958
CG32581	FBGN0052581	0.086562	-0.13872	-0.31855	-0.54383
to	FBGN0039298	-1.02237	-0.27888	-0.39034	0.353147
Tom70	FBGN0032397	0.037723	0.020504	0.000296	-0.01692
Gbeta13F	FBGN0001105	0.237279	0.051138	0.215745	0.029604
Hsp60D	FBGN0032525	0.028448	0.099572	-0.38138	-0.31026
Rbcn-3A	FBGN0023458	0.329599	0.024331	0.383848	0.078581
Hsc70Cb	FBGN0026418	0.158508	0.037172	0.216776	0.095441
retm	FBGN0031814	0.40664	-0.08026	0.571036	0.084135
Jheh2	FBGN0034405	-0.11559	-0.07093	-0.08043	-0.03577

CG32264	FBGN0052264	0.083709	-0.02695	0.245219	0.134561
brp	FBGN0259246	0.669014	-0.03668	0.903248	0.197553
CG17666	FBGN0036311	0.056304	0.049358	0.044937	0.037991
Jon65Ai	FBGN0035667	-0.29842	1.1577	-1.47848	-0.02236
CkIalpha	FBGN0015024	0.223159	0.028829	0.183944	-0.01039
Tpl94D	FBGN0051281	0.059143	0.01595	0.021748	-0.02144
CG5059	FBGN0037007	0.25247	0.080651	0.197823	0.026003
CG33144	FBGN0053144	0.219637	-0.04082	0.431681	0.171223
CG5903	FBGN0038400	-0.05045	-0.0366	0.009677	0.023534
Stt3B	FBGN0011336	0.06465	-0.03074	0.088759	-0.00663
CG11147	FBGN0031734	0.33204	-0.02946	0.318556	-0.04295
cry	FBGN0025680	0.168008	-0.06739	0.189842	-0.04555
ND-SGDH	FBGN0011455	0.036854	-0.11696	0.120733	-0.03308
CG9331	FBGN0032889	0.306011	0.029206	0.369877	0.093071
CG31921	FBGN0051921	0.097031	0.033965	-0.06944	-0.13251
bbc	FBGN0033844	0.038161	-0.02733	0.247547	0.182056
Nurf-38	FBGN0016687	-0.04669	-0.13208	0.154453	0.069058
DnaJ-1	FBGN0263106	0.04096	-0.13674	0.136437	-0.04126
CG7069	FBGN0038952	0.263788	0.018284	0.302599	0.057096
CG7768	FBGN0036415	-0.20389	-0.06637	-0.24122	-0.10369
CG11779	FBGN0038683	0.036487	-0.00911	-0.02047	-0.06608
Ubr1	FBGN0030809	0.444413	-0.12495	0.706727	0.137359
CG1674	FBGN0039897	0.375417	0.006394	0.294376	-0.07465
CG11594	FBGN0035484	0.331944	-0.28688	0.953237	0.334414
dikar	FBGN0261934	0.469519	-0.08142	0.606682	0.055743
CG7966	FBGN0038115	1.294295	0.101455	0.905713	-0.28713
Drp1	FBGN0026479	0.16215	-0.02937	0.148506	-0.04301
eIF3l	FBGN0036258	-0.00901	-0.09546	0.086046	-0.00041
Phb2	FBGN0010551	-0.05278	-0.09954	-0.00954	-0.05631
wrd	FBGN0042693	0.294452	0.011531	0.416553	0.133632
Erk7	FBGN0052703	0.13662	-0.00985	0.199648	0.053178
CG34232	FBGN0085261	-0.3654	0.791175	-2.25371	-1.09714
CG13506	FBGN0034723	0.153615	0.068998	0.293142	0.208525
oys	FBGN0033476	0.145166	0.06512	0.058308	-0.02174
HUWE1	FBGN0030674	0.393182	-0.04288	0.557912	0.121846
msps	FBGN0027948	0.272235	-0.05221	0.444462	0.120014
yip2	FBGN0040064	-0.10674	-0.006	-0.06211	0.038627
Nepl11	FBGN0037230	0.367893	-0.29612	0.930376	0.266364
CG9259	FBGN0032913	0.072141	-0.62545	0.014827	-0.68277
CG9928	FBGN0032472	0.355729	-0.04241	0.79126	0.393119
CG11037	FBGN0037038	-0.28779	-0.19414	-0.44563	-0.35198
CG9281	FBGN0030672	0.093329	-0.01091	0.077551	-0.02669
hpRNA:CR46342	FBGN0285992	-0.05315	0.47891	-0.44116	0.090893
Rhau	FBGN0032883	0.10033	-0.10317	0.163876	-0.03963
Theg	FBGN0038921	-0.07151	-0.00704	-0.08676	-0.02229
CG17839	FBGN0036454	0.363879	-0.11772	0.430635	-0.05097
svr	FBGN0004648	0.271105	0.117199	0.274627	0.120721
LysE	FBGN0004428	0.333455	0.13506	-0.28812	-0.48651
und	FBGN0283478	0.041123	-0.05743	0.087108	-0.01144
Pdcd4	FBGN0030520	-0.24968	-0.16926	0.196099	0.276521
bdg	FBGN0034049	0.314617	0.205882	0.54716	0.438424
CG4983	FBGN0032371	0.219233	0.036434	0.108681	-0.07412
CG42675	FBGN0261561	-0.05153	0.047179	-0.08093	0.01778
SdhC	FBGN0037873	0.056605	-0.0134	0.095231	0.025228
CR43086	FBGN0262532	0.899499	-0.83958	0.064967	-1.67411
CG31689	FBGN0031449	0.233966	-0.01739	0.400259	0.148902
Xe7	FBGN0010772	0.123562	0.031935	0.348062	0.256435
lambdaTry	FBGN0043470	0.083174	0.528471	-0.8701	-0.4248
CG42671	FBGN0261553	0.337129	-0.06719	0.542936	0.138622
CG12990	FBGN0030859	-0.23058	0.019371	-0.62769	-0.37774
Mhcl	FBGN0026059	0.417864	-0.02877	0.557655	0.111025
CG11598	FBGN0038067	-0.43234	-0.07943	-1.04537	-0.69246
CG32026	FBGN0052026	0.02969	-0.04184	0.068325	-0.0032
CG33127	FBGN0053127	-0.34664	0.424643	-1.18536	-0.41407
Pp1-87B	FBGN0004103	0.167364	0.011809	0.197918	0.042363
Dmtn	FBGN0037443	0.441292	-0.13724	0.596068	0.017532
Nuak1	FBGN0262617	0.413232	-0.05068	0.506132	0.04222
eIF3h	FBGN0022023	-0.01142	-0.03501	0.104079	0.080493
spen	FBGN0016977	0.390569	-0.03106	0.676807	0.25518

CG5554	FBGN0034914	0.084537	0.086179	0.139133	0.140776
Sc2	FBGN0035471	-0.0176	-0.07453	0.048383	-0.00856
CG8108	FBGN0027567	0.092523	-0.02599	0.24236	0.123847
Map205	FBGN0002645	0.324792	0.099288	0.309464	0.08396
Mtpalpha	FBGN0028479	-0.02241	-0.13741	0.142177	0.027175
CG6752	FBGN0038296	0.183708	-0.00443	0.135876	-0.05226
Cyp4e2	FBGN0014469	0.063389	-0.00257	0.03578	-0.03017
CG17508	FBGN0039970	-0.0389	-0.02232	-0.04243	-0.02585
CG14245	FBGN0039452	0.275456	-0.10387	0.3527	-0.02663
Dhc64C	FBGN0261797	0.423241	0.077181	0.530367	0.184307
PKD	FBGN0038603	0.162093	-0.10393	0.479966	0.213945
inaC	FBGN0004784	0.083038	-0.21971	0.123701	-0.17905
PhKgamma	FBGN0011754	0.280713	0.086284	0.274226	0.079796
Asph	FBGN0034075	0.161022	-0.00921	0.342867	0.172632
Cht8	FBGN0034580	-0.83685	-0.11198	-1.40188	-0.67701
Gale	FBGN0035147	0.098641	-0.00811	0.255665	0.14891
CG43055	FBGN0262357	1.814509	0.351049	0.780686	-0.68277
CG9360	FBGN0030332	-1.76809	-1.6871	-0.41743	-0.33643
inaD	FBGN0001263	0.138976	-0.35137	0.307976	-0.18237
CG8974	FBGN0030693	0.057782	0.01728	0.00024	-0.04026
CG6209	FBGN0033862	0.023493	0.045262	-0.04957	-0.0278
CG33017	FBGN0053017	0.282711	-0.09292	0.42757	0.051934
CG8547	FBGN0033919	0.055583	0.004102	0.163947	0.112466
CG15117	FBGN0034417	0.124568	-0.05916	-0.31913	-0.50286
Klp59D	FBGN0034827	0.183596	0.005605	0.065407	-0.11258
Usp2	FBGN0031187	0.244576	-0.06781	0.279082	-0.0333
osa	FBGN0261885	0.395103	0.05844	0.481635	0.144971
CG31221	FBGN0051221	0.4406	-0.15415	0.576575	-0.01817
crol	FBGN0020309	0.292618	0.050297	0.314308	0.071986
Atx2	FBGN0041188	0.323122	-0.13997	0.526366	0.06327
CG12229	FBGN0036723	-0.05757	0.065987	-0.18763	-0.06408
Cow	FBGN0039054	0.314489	-0.14474	0.467072	0.007844
Sccpdh2	FBGN0038038	0.096426	-0.09338	0.080987	-0.10882
CG33284	FBGN0053284	-0.02501	-0.01827	-0.02767	-0.02093
dnc	FBGN0000479	0.214278	-0.04014	0.386221	0.131805
Iml1	FBGN0035227	-0.0587	-0.30567	0.471844	0.224874
CG33258	FBGN0053258	0.112348	0.747154	-0.05569	0.579115
DUBAI	FBGN0033738	0.168299	0.063878	0.168576	0.064155
ND-24	FBGN0030853	0.027179	0.094761	0.061668	0.12925
phtf	FBGN0028579	0.133395	0.193868	-0.02303	0.03744
knon	FBGN0285943	0.076806	-0.02907	-0.00101	-0.10689
AGO1	FBGN0262739	0.367386	0.007352	0.453112	0.093079
Npc2b	FBGN0038198	-0.46687	0.019411	-0.38008	0.106209
CG7059	FBGN0038957	-0.12289	0.028136	-0.24216	-0.09113
Pkn	FBGN0020621	0.396679	-0.08717	0.487948	0.004096
Cpr65Au	FBGN0042119	-0.64325	-0.04281	-1.22847	-0.62804
Tudor-SN	FBGN0035121	0.011338	0.019732	0.008196	0.016591
Capr	FBGN0042134	0.245674	0.002442	0.159482	-0.08375
Apoltp	FBGN0032136	0.460938	-0.0151	0.615724	0.139685
lectin-37Da	FBGN0053532	-0.93078	1.59366	-1.37442	1.150012
Men-b	FBGN0029155	0.315105	0.09281	0.126934	-0.09536
vri	FBGN0016076	0.49705	0.220055	0.122704	-0.15429
CG2082	FBGN0027608	-0.13769	-0.11114	0.018448	0.045001
CG33668	FBGN0053668	0.357925	0.039054	0.002693	-0.31618
Eps-15	FBGN0035060	0.188142	0.000874	0.242009	0.054741
CG14305	FBGN0038630	-0.02506	0.040217	-0.09432	-0.02904
drongo	FBGN0020304	0.402593	0.115138	0.274589	-0.01287
BomBc3	FBGN0040582	-0.97028	-0.50274	0.015696	0.48324
Nedd4	FBGN0259174	0.131525	0.170545	0.105609	0.144629
CG16974	FBGN0032479	0.2941	-0.0007	0.394004	0.099203
CG42564	FBGN0260766	-0.24792	-0.1867	-0.13091	-0.06969
Pde8	FBGN0266377	0.395884	0.030991	0.526641	0.161748
Pcf11	FBGN0264962	0.202051	-0.00308	0.316002	0.110867
wdb	FBGN0027492	0.204657	-0.05861	0.370191	0.106928
CG17637	FBGN0037004	0.163237	-0.04178	-0.15327	-0.35829
CG43272	FBGN0262961	-0.6935	-0.25756	-0.86743	-0.43148
ProtB	FBGN0013301	-0.17574	-0.06361	-0.17841	-0.06628
CG12605	FBGN0035481	-0.466	-0.38852	0.14957	0.22705
ND-42	FBGN0019957	-0.00389	0.017624	0.02423	0.045745

Rrp6	FBGN0038269	0.14114	0.01849	0.131616	0.008966
CG8531	FBGN0033918	0.038309	0.020848	-0.00594	-0.0234
CG13978	FBGN0039518	0.300109	0.03337	0.221789	-0.04495
sle	FBGN0037810	0.131363	-0.00274	0.112157	-0.02195
CG17560	FBGN0038450	0.140599	0.355902	0.354318	0.569621
Khc-73	FBGN0019968	0.160847	-0.00054	0.202912	0.041523
mfrn	FBGN0039561	0.131481	-0.05994	0.249341	0.057923
Mtpbeta	FBGN0025352	0.014988	-0.17945	0.183347	-0.01109
Pglym87	FBGN0011270	0.013862	-0.07593	-0.01414	-0.10393
l(1)G0289	FBGN0028331	0.312965	0.041377	0.113654	-0.15793
Saf-B	FBGN0039229	0.105152	0.020765	0.371832	0.287445
sgl	FBGN0261445	0.469831	0.208435	-0.38327	-0.64467
rtp	FBGN0087005	0.03877	-0.23605	0.192741	-0.08208
Try29F	FBGN0015316	1.006939	0.357005	-1.07259	-1.72252
Pka-R2	FBGN0022382	0.181633	-0.00666	0.215844	0.02755
CG32486	FBGN0266918	-0.02077	-0.03536	0.187161	0.172573
CG5050	FBGN0032637	-0.08513	0.019415	-0.18223	-0.07769
Syb	FBGN0003660	-0.11396	0.180687	-0.25015	0.0445
CG6700	FBGN0032305	0.312969	-0.05845	0.507249	0.13583
ND-30	FBGN0266582	-0.09067	-0.08531	-0.04897	-0.04361
Prosbeta7	FBGN0250746	0.029092	0.094045	-0.05357	0.011386
ND-B16.6	FBGN0029868	-0.09459	-0.05317	-0.03672	0.004703
CG14989	FBGN0035495	0.135701	-0.0715	0.331562	0.12436
CG18304	FBGN0031869	0.554571	-0.13066	0.892191	0.206961
Qsox2	FBGN0038919	-0.05172	-0.12071	0.038438	-0.03055
Adk1	FBGN0022709	0.065889	0.032787	0.121415	0.088313
CG31694	FBGN0051694	-0.02426	0.047565	-0.04148	0.030341
nec	FBGN0002930	-0.09024	-0.13829	0.289085	0.241035
Klp10A	FBGN0030268	0.206989	-0.06869	0.267095	-0.00858
ND-20	FBGN0030718	0.024568	-0.01527	0.116319	0.076483
mag	FBGN0036996	0.521267	0.319154	0.353992	0.15188
CAH2	FBGN0027843	0.219123	0.244773	-0.18911	-0.16346
CG42820	FBGN0262002	0.044921	-0.00902	0.141361	0.087418
Spp	FBGN0031260	-0.19469	-0.14159	0.0363	0.089396
HIP	FBGN0260484	0.385311	-0.28451	0.126484	-0.54333
lncRNA:CR44389	FBGN0265539	-0.71734	-0.02853	-0.73936	-0.05055
soti	FBGN0038225	0.075135	0.04072	0.017646	-0.01677
bor	FBGN0287225	-0.14212	-0.04136	-0.07351	0.027255
CG13168	FBGN0033705	-0.22762	-0.12234	-0.25455	-0.14927
CG7381	FBGN0038098	-0.1863	0.154552	-1.10755	-0.7667
Gem4b	FBGN0052786	0.847955	0.359513	-0.064	-0.55244
Aps	FBGN0036111	0.224152	-0.01906	0.313341	0.070129
CG31211	FBGN0051211	0.121103	-0.07157	0.323062	0.13039
Shmt	FBGN0029823	-0.07006	0.21747	0.24741	0.534941
ND-B12	FBGN0034645	-0.1418	-0.01418	-0.09335	0.034265
Taf4	FBGN0010280	0.200574	-0.04558	0.377582	0.131424
Dnah3	FBGN0035581	0.148513	0.023897	0.072157	-0.05246
CG46280	FBGN0283438	-0.11363	0.000428	-0.14165	-0.0276
Hydr1	FBGN0033382	-0.02644	-0.10586	0.136483	0.057061
CG13905	FBGN0035176	1.157133	1.309079	-0.4175	-0.26556
RNASEK	FBGN0262116	-0.10987	0.138931	-0.52222	-0.27342
HIP-R	FBGN0029676	-0.01002	0.364625	0.201046	0.575693
VhaM9.7-b	FBGN0028663	-0.09141	0.194182	-0.41427	-0.12868
Plc21C	FBGN0004611	0.411622	-0.04151	0.717807	0.264676
kappaTry	FBGN0043471	0.205765	0.561723	-1.07907	-0.72311
CG30378	FBGN0050378	0.057258	0.04337	0.025973	0.012085
CG10600	FBGN0032717	0.288619	0.003749	0.284806	-6.40E-05
26-29-p	FBGN0250848	-0.18432	0.116797	-0.39671	-0.09559
sqh	FBGN0003514	-0.12555	0.234294	-0.21731	0.142528
CG6277	FBGN0039475	1.451923	0.653459	0.477027	-0.32144
CG32368	FBGN0052368	-0.93812	0.516707	-1.1503	0.304527
CG13784	FBGN0031897	0.442078	0.004605	0.58378	0.146307
CtBP	FBGN0020496	0.164741	0.032845	0.216374	0.084478
rudhira	FBGN0266019	0.440627	0.065353	0.579192	0.203917
Unr	FBGN0263352	0.522295	-0.04799	0.728599	0.158315
gskt	FBGN0046332	-0.14403	-0.02196	-0.12789	-0.00582
Tep2	FBGN0041182	0.164284	-0.05449	0.532581	0.313808
Cyp6a20	FBGN0033980	0.312788	0.272742	-0.36195	-0.402
mEFTu1	FBGN0024556	0.117632	0.096835	0.045422	0.024625

aay	FBGN0023129	0.092698	0.215069	-0.08817	0.034199
dome	FBGN0043903	-0.51606	0.022301	0.240872	0.779236
Sfp24Ba	FBGN0259951	0.884528	0.029207	0.440933	-0.41439
Adk3	FBGN0042094	-0.19553	0.019283	-0.2756	-0.06079
Sec24AB	FBGN0033460	0.16188	0.022468	0.192665	0.053253
Prosalpha2	FBGN0086134	-0.10952	0.040552	-0.1281	0.021978
BtbVII	FBGN0263108	0.108727	-0.04454	0.332144	0.178875
Acp24A4	FBGN0051779	-0.17763	0.037	-0.46163	-0.247
SPE	FBGN0039102	-0.01828	-0.20734	-0.24211	-0.43116
Rel	FBGN0014018	0.18026	0.228511	-0.01956	0.028694
ATPsyndelta	FBGN0028342	0.004064	-0.02574	0.041242	0.011438
CG18659	FBGN0027561	0.182811	0.063463	0.142717	0.02337
CG32647	FBGN0052647	0.647352	-0.01198	0.931482	0.272146
CG8839	FBGN0033717	-0.06419	0.08244	-0.16598	-0.01935
Ser6	FBGN0011834	2.28459	0.567157	0.996135	-0.7213
Phm	FBGN0283509	-0.25882	-0.05737	-0.05148	0.149962
CG6701	FBGN0033889	0.147715	0.013329	0.18311	0.048724
Peritrophin-15a	FBGN0040959	-1.00843	0.214391	-1.38731	-0.16449
wat	FBGN0039620	-0.24682	-0.00742	-0.3347	-0.09529
CG5966	FBGN0029831	0.592958	0.07861	0.407139	-0.10721
rha	FBGN0027376	0.139526	-0.08773	0.163053	-0.06421
Rh6	FBGN0019940	-0.09098	-0.05038	0.14832	0.188923
Tob	FBGN0028397	0.286783	-0.01284	0.229344	-0.07028
CG31635	FBGN0051635	0.260001	-0.01416	0.351112	0.076947
CG3581	FBGN0038697	0.005049	0.080989	-0.067	0.00894
eIF3i	FBGN0015834	-0.09618	-0.08146	0.001309	0.016035
fwd	FBGN0004373	0.208397	-0.00249	0.254774	0.04389
CG5867	FBGN0027586	-0.19372	0.036944	-0.67695	-0.44629
CG30039	FBGN0050039	-0.05498	0.002156	-0.17075	-0.11362
klhl10	FBGN0040038	0.339382	-0.0993	0.374338	-0.06434
schuy	FBGN0036925	0.121278	-0.03656	0.182583	0.024748
msn	FBGN0010909	0.370222	0.103882	0.396877	0.130537
eIF3d2	FBGN0037994	0.154814	0.175266	-0.58897	-0.56852
CG5122	FBGN0032471	0.185684	-0.04608	0.260809	0.029044
Lon	FBGN0036892	0.070613	0.008743	0.031306	-0.03056
lgs	FBGN0039907	0.247042	-0.047	0.366726	0.072685
Lerp	FBGN0051072	0.293412	0.304897	-0.12937	-0.11789
fbp	FBGN0032820	0.187423	-0.02979	0.672116	0.4549
bond	FBGN0260942	-0.11578	-0.01135	-0.3915	-0.28707
cass	FBGN0286781	0.249883	0.008012	0.352978	0.111107
Gpat4	FBGN0034971	-0.11424	0.085634	-0.24354	-0.04366
Rh5	FBGN0014019	0.822189	0.080676	0.479203	-0.26231
CG8813	FBGN0031476	-0.05233	0.021137	-0.08877	-0.01531
AIF	FBGN0031392	-0.04609	-0.02677	-0.02684	-0.00752
Fkbp12	FBGN0013954	-0.00776	0.041622	0.060404	0.10979
Lip4	FBGN0032264	0.787571	0.074299	0.491286	-0.22199
CG4199	FBGN0025628	0.101263	0.308078	-0.08928	0.117531
puml	FBGN0033226	-0.03093	0.007274	-0.01594	0.022264
CG30427	FBGN0043792	0.626217	0.135962	0.805661	0.315407
CG8468	FBGN0033913	0.797989	0.106909	0.893635	0.202554
eIF1	FBGN0035423	-0.1644	0.005763	-0.2728	-0.10263
lncRNA:CR43684	FBGN0263767	-0.10111	-0.54829	0.22491	-0.22227
CG13917	FBGN0035237	0.292203	-0.07042	0.514842	0.15222
hts	FBGN0263391	0.176656	0.021216	0.143945	-0.0115
lilli	FBGN0041111	0.235687	-0.03045	0.414584	0.148447
CG31326	FBGN0051326	0.338497	-0.21033	-0.03017	-0.57899
CG7630	FBGN0040793	-0.06517	-0.02469	-0.06036	-0.01988
CG33293	FBGN0053293	-0.00116	-0.00483	-0.03218	-0.03585
sals	FBGN0051374	0.206107	-0.05972	0.324695	0.058865
mtgo	FBGN0259735	0.614412	0.049233	0.4989	-0.06628
Irp-1B	FBGN0024957	-0.06246	-0.0659	0.230446	0.227007
CG31205	FBGN0051205	-1.56099	0.070556	-0.14839	1.483149
CycT	FBGN0025455	0.213991	-0.06717	0.26161	-0.01956
coro	FBGN0265935	-0.01738	-0.0907	0.121366	0.048044
sug	FBGN0033782	-0.03561	0.042631	-0.16353	-0.08529
Crtp	FBGN0029501	0.179325	0.011182	0.133774	-0.03437
Vha68-1	FBGN0265262	0.059946	-0.03424	0.142658	0.048476
CG33667	FBGN0053667	-0.66691	-0.62627	-0.52131	-0.48067
CG18568	FBGN0033888	0.025055	0.0016	0.054052	0.030597

ifc	FBGN0001941	0.011327	0.32592	-0.46697	-0.15237
mys	FBGN0004657	0.191995	0.26291	-0.12405	-0.05314
lectin-30A	FBGN0040097	0.064679	-0.09809	-0.05626	-0.21903
Dgk	FBGN0085390	0.356765	0.070486	0.269497	-0.01678
Trp1	FBGN0011584	-0.06351	0.000143	-0.07042	-0.00676
p23	FBGN0037728	-0.01635	-0.00688	-0.03773	-0.02826
djl	FBGN0037463	0.050062	0.136537	-0.15702	-0.07055
trio	FBGN0024277	0.205442	0.080094	0.253452	0.128104
Hipk	FBGN0035142	0.252678	0.021395	0.309115	0.077831
CG14949	FBGN0035358	-0.15201	0.142798	-0.32257	-0.02776
CG2841	FBGN0003159	0.177597	0.111543	0.145905	0.079852
CG11327	FBGN0031849	-0.06774	-0.06689	-0.05349	-0.05265
CG15394	FBGN0250835	-0.07008	0.001076	-0.47559	-0.40443
CG11378	FBGN0040364	0.285613	0.426071	-0.72232	-0.58186
ATP7	FBGN0030343	0.129604	0.076145	0.088631	0.035172
EndoA	FBGN0038659	0.250432	-0.00866	0.371447	0.112351
CG31788	FBGN0051788	-0.0613	-0.0148	-0.18442	-0.13793
PGRP-SC2	FBGN0043575	0.382195	-0.12419	1.145817	0.639427
CG33666	FBGN0053666	0.523903	0.886018	-0.78562	-0.42351
CG4562	FBGN0038740	0.179735	0.379988	-0.39946	-0.1992
CG3625	FBGN0031245	0.588797	0.119138	-0.26471	-0.73436
E(bx)	FBGN0000541	0.302511	-0.0312	0.413603	0.079887
Trx-2	FBGN0040070	-0.09283	-0.06703	-0.08806	-0.06227
tau	FBGN0266579	0.31492	-0.14102	0.737027	0.281086
AMPKalpha	FBGN0023169	0.083492	0.111853	0.164725	0.193086
Ae2	FBGN0036043	0.333208	0.074135	0.452661	0.193588
l(1)G0320	FBGN0028327	0.030592	-0.05982	0.194391	0.10398
tapas	FBGN0027529	0.205901	-0.0291	0.262721	0.027723
CG5326	FBGN0038983	0.398112	0.041571	0.452411	0.09587
sut4	FBGN0028560	-0.03452	-0.07269	-0.00799	-0.04616
CG43783	FBGN0264305	0.120812	-0.03937	0.162878	0.002697
Cdc7	FBGN0028360	0.23926	-0.01655	0.29135	0.035537
Prps	FBGN0036030	0.363298	0.006941	0.636275	0.279918
sw	FBGN0003654	-0.11623	-0.20955	-0.0232	-0.11652
alph	FBGN0086361	0.35027	0.062375	0.183547	-0.10435
GlyS	FBGN0266064	0.367375	-0.04773	0.570154	0.155047
Ehbp1	FBGN0034180	0.200058	-0.03222	0.324294	0.092016
CG15530	FBGN0039752	0.16082	0.13161	0.079118	0.049908
smt3	FBGN0264922	-0.21023	-0.01057	-0.24878	-0.04913
Mondo	FBGN0032940	0.478421	0.088664	0.589868	0.200111
fax	FBGN0014163	0.167775	0.087172	0.461698	0.381095
kraken	FBGN0020545	-0.09608	-0.2182	-0.06385	-0.18597
PAPLA1	FBGN0031990	0.246311	0.039016	0.31977	0.112475
Dlic	FBGN0030276	0.464753	-0.0043	0.392088	-0.07696
mud	FBGN0002873	0.023833	-0.04839	-0.05906	-0.13128
Fim	FBGN0024238	0.102195	0.341419	-0.32471	-0.08549
CG8630	FBGN0038130	0.500621	0.243703	-0.13414	-0.39106
CG12974	FBGN0037065	-0.05805	0.684464	-1.13371	-0.3912
CG18493	FBGN0038701	-0.6669	-0.10885	-0.40868	0.149365
Gyf	FBGN0039936	0.219543	-0.01802	0.277778	0.040211
h	FBGN0001168	0.410976	0.057085	0.342496	-0.0114
CAH13	FBGN0033542	-0.00267	0.013811	-0.06399	-0.04751
CG14740	FBGN0037988	-0.03851	0.009075	-0.0759	-0.02832
CG11089	FBGN0039241	0.276511	0.127345	1.133332	0.984166
sick	FBGN0263873	0.737163	0.278817	0.320169	-0.13818
CG1690	FBGN0033442	0.145972	0.058457	0.08764	0.000125
CG11125	FBGN0033174	0.056108	0.04449	-0.01029	-0.02191
Sec23	FBGN0262125	0.032928	0.004073	0.102978	0.074123
ImpL2	FBGN0001257	0.110923	0.060091	0.157665	0.106833
CG14767	FBGN0040777	0.030067	0.070261	0.000332	0.040526
Prosbeta1	FBGN0010590	-0.0155	0.078699	-0.04604	0.048161
Gug	FBGN0010825	0.545144	0.001811	0.640612	0.097279
AGBE	FBGN0053138	0.023043	-0.23548	0.466089	0.207566
unc80	FBGN0039536	0.367616	0.098206	0.524388	0.254978
Hmu	FBGN0015737	0.325117	0.024004	0.218695	-0.08242
CG31157	FBGN0051157	1.171717	0.18586	0.673058	-0.3128
Ptpmeg	FBGN0261985	0.221996	-0.01365	0.283759	0.048114
boly	FBGN0050362	-0.00504	0.029444	0.000786	0.035269
CG10863	FBGN0027552	0.265064	-0.05003	0.42591	0.110817

ClC-a	FBGN0051116	0.230487	-0.07203	0.378812	0.076298
CG16749	FBGN0037678	0.116015	0.504697	-0.44441	-0.05573
RanBPM	FBGN0262114	0.201681	0.123262	0.309479	0.231059
CG34434	FBGN0250904	-0.37807	0.007782	-0.42672	-0.04087
CG16953	FBGN0038809	0.144066	0.090187	0.237892	0.184013
CG5217	FBGN0038694	0.069879	0.02078	0.064376	0.015277
Sac1	FBGN0283500	-0.07632	-0.02916	-0.11128	-0.06413
Pka-R1	FBGN0259243	0.257977	0.064928	0.236059	0.04301
Hexo2	FBGN0041629	0.313884	-0.07402	0.585609	0.197703
RIC-3	FBGN0050296	-0.00333	-0.08592	0.239067	0.156479
trol	FBGN0284408	0.225129	-0.01664	0.151834	-0.08994
Scsalpha2	FBGN0038708	-0.1804	-0.04181	-0.08725	0.051343
CG33665	FBGN0053665	-0.13751	0.503357	-1.15215	-0.51128
zda	FBGN0034368	0.036232	0.081273	-0.02442	0.020618
Shab	FBGN0262593	0.537854	-0.03057	0.778296	0.209877
CG12099	FBGN0035232	0.08679	-0.06302	0.169703	0.019889
TTLL6A	FBGN0034459	0.292274	0.076461	0.314339	0.098526
nwk	FBGN0263456	0.438424	-0.10533	0.824497	0.280743
CG8475	FBGN0031995	0.22073	0.013629	0.342677	0.135577
unc79	FBGN0038693	0.386784	0.024801	0.587147	0.225164
Cht12	FBGN0050293	0.123549	0.241907	0.052746	0.171104
CG3036	FBGN0031645	-0.32336	-0.25339	0.09058	0.160551
CG15286	FBGN0028531	0.157145	0.021237	0.127363	-0.00855
CG3702	FBGN0031590	0.076997	0.055036	0.000598	-0.02136
slim	FBGN0261477	-0.06776	0.011464	0.022701	0.10192
kcc	FBGN0261794	0.155754	-0.02778	0.1534	-0.03013
NaCP60E	FBGN0085434	0.412938	-0.13256	0.839881	0.294385
capt	FBGN0261458	0.022467	0.05668	0.084401	0.118613
hoe1	FBGN0041150	-0.11186	-0.14248	0.383543	0.352921
rdgB	FBGN0003218	0.051384	-0.02135	0.114941	0.042211
Tektin-A	FBGN0028902	-0.13757	-0.0723	-0.12496	-0.05969
His3.3A	FBGN0014857	-0.10744	0.08899	-0.12054	0.075892
DCP2	FBGN0036534	0.364591	-0.02508	0.582218	0.192549
klar	FBGN0001316	0.304112	-0.06594	0.386926	0.016873
Uch	FBGN0010288	0.020458	0.030901	-0.07235	-0.06191
CG18815	FBGN0042138	0.065849	-0.13584	0.224867	0.023173
CG1902	FBGN0033434	0.221388	0.098069	0.029435	-0.09388
RhoGEF2	FBGN0023172	0.35611	0.020333	0.445454	0.109677
CG14207	FBGN0031037	-0.04097	0.064359	0.037318	0.142645
CaBP1	FBGN0025678	0.040518	-0.09426	0.127362	-0.00741
Mpc1	FBGN0038662	-0.03414	-0.07853	0.030964	-0.01343
CG8728	FBGN0033235	-0.0642	-0.03253	-0.03462	-0.00295
tHMG2	FBGN0038979	-0.21636	-0.0092	-0.2032	0.003948
CG1440	FBGN0030038	0.151515	0.057651	0.141409	0.047545
Strip	FBGN0035437	0.01452	-0.01023	0.011203	-0.01355
CG31145	FBGN0051145	0.327385	-0.01008	0.500028	0.162561
Naprt	FBGN0031589	0.188514	-0.21758	0.504649	0.098553
CG9527	FBGN0031813	0.416146	0.245858	0.094942	-0.07535
COX4L	FBGN0033020	-0.03466	0.033624	-0.15225	-0.08396
Ih	FBGN0263397	0.447521	-0.05808	0.678517	0.172917
CG8001	FBGN0035268	0.204476	-0.03816	0.32487	0.082237
Hmgs	FBGN0010611	0.053091	-0.08327	0.336872	0.200509
Listericin	FBGN0033593	-0.96859	0.038918	-0.59149	0.416022
Hrb87F	FBGN0004237	0.111507	-0.0163	0.072248	-0.05556
CG31773	FBGN0051773	0.157618	0.016669	0.092927	-0.04802
MFS14	FBGN0010651	0.147718	0.227707	0.292175	0.372164
Csk	FBGN0262081	0.345502	0.049697	0.371039	0.075234
enc	FBGN0004875	0.210814	-0.12263	0.392771	0.059329
red	FBGN0285913	0.071081	0.084386	-0.02729	-0.01399
Rbp6	FBGN0260943	0.457925	-0.10946	0.851627	0.284246
CG42481	FBGN0259971	-0.47358	-0.11822	-0.47608	-0.12072
Pp2C1	FBGN0022768	0.049411	-0.08757	0.205747	0.068764
cpo	FBGN0263995	0.217407	0.005146	0.351501	0.139239
eRF3	FBGN0020443	0.167715	0.007015	0.216567	0.055867
Eip75B	FBGN0000568	0.469735	0.016916	0.638424	0.185605
CG10082	FBGN0034644	0.114202	0.078394	0.171168	0.13536
CG8851	FBGN0031546	0.123533	-0.00078	0.044993	-0.07932
atilla	FBGN0032422	-0.4688	-0.03482	-0.45984	-0.02586
CG30122	FBGN0050122	0.11321	-0.01629	0.229353	0.099849

vig2	FBGN0046214	-0.0808	0.032794	-0.06729	0.046305
TotC	FBGN0044812	-1.5805	0.695561	-0.57478	1.701279
Lis-1	FBGN0015754	0.269536	0.0484	0.25311	0.031975
Dhod	FBGN0000447	-0.13131	-0.02285	-0.18257	-0.07411
prage	FBGN0283741	0.166819	-0.02907	0.221626	0.025737
Hex-t2	FBGN0042710	-0.04366	-0.03961	-0.06139	-0.05734
Sfp33A3	FBGN0259964	-0.44686	-0.11124	-0.42555	-0.08994
yellow-d	FBGN0041712	-0.28497	0.191096	-0.3974	0.078666
Vap33	FBGN0029687	0.287625	0.044615	0.294167	0.051157
Zip99C	FBGN0039714	-0.15311	0.038551	-0.19175	-9.21E-05
CG3907	FBGN0034958	0.518537	0.102734	0.448846	0.033043
Egfr	FBGN0003731	0.447236	-0.00222	0.738798	0.289345
CG10565	FBGN0037051	-0.09604	-0.00496	-0.10409	-0.01301
Ca-alpha1T	FBGN0264386	0.348302	-0.11566	0.64567	0.181707
CG3987	FBGN0038292	-0.79759	0.724182	-1.89259	-0.37082
Ip259	FBGN0025366	-0.07797	-0.19551	0.153419	0.035884
GstE6	FBGN0063494	-0.87382	0.021192	-0.65409	0.240922
Mdr49	FBGN0004512	-0.29198	-0.00042	-0.02033	0.271236
CG6051	FBGN0039492	0.189994	0.091468	0.027017	-0.07151
CG2750	FBGN0030376	0.32303	0.016361	0.259795	-0.04687
CG1907	FBGN0039674	0.258097	0.082796	0.520286	0.344985
CG1468	FBGN0030157	0.359809	-0.04555	0.63685	0.231494
Cyp6a18	FBGN0039519	0.606027	0.020554	-0.38069	-0.96616
CG5823	FBGN0038515	-0.03116	0.035313	-0.06033	0.006149
CG31231	FBGN0051231	-0.04892	-0.00427	-0.15245	-0.1078
CG13887	FBGN0035165	-0.04023	-0.00643	-0.09397	-0.06017
sdt	FBGN0261873	0.201323	0.036635	0.257432	0.092744
Patronin	FBGN0263197	0.330752	0.070999	0.491359	0.231606
CG3061	FBGN0038195	0.005098	0.043269	-0.00894	0.029228
NaPi-III	FBGN0260795	-0.1032	0.160628	-0.36898	-0.10515
CG7742	FBGN0031690	0.057699	-0.03098	0.153631	0.064956
Hsp26	FBGN0001225	-0.53035	-0.17544	-0.33549	0.019413
Sec71	FBGN0028538	0.13503	-0.0327	0.127331	-0.0404
Osbp	FBGN0020626	0.216458	0.037687	0.263977	0.085206
xmas	FBGN0286809	0.104957	-0.04547	0.164561	0.014135
Smurf	FBGN0029006	0.014666	-0.07114	0.068318	-0.01749
scny	FBGN0260936	0.086238	-0.0288	0.266631	0.151594
puf	FBGN0039214	0.291953	-0.00756	0.286628	-0.01289
CG5590	FBGN0039537	-0.03487	-0.07054	-0.319	-0.35467
eIF4E5	FBGN0035823	-0.03317	0.052357	-0.15797	-0.07244
Kank	FBGN0027596	0.26523	-0.03342	0.301936	0.003285
Cds	FBGN0010350	0.073066	-0.17068	0.119151	-0.12459
Ppm1	FBGN0035143	-0.06055	-0.02079	-0.09031	-0.05055
Nckx30C	FBGN0028704	0.560545	-0.01494	0.71729	0.141804
Ubc4	FBGN0015321	0.000303	0.013239	-0.01785	-0.00492
if	FBGN0001250	0.300782	-0.03527	0.407051	0.071001
Kap-alpha1	FBGN0024889	0.107334	-0.05745	0.123532	-0.04125
Npc1b	FBGN0261675	-1.07257	-0.08146	-1.76625	-0.77514
vvl	FBGN0086680	0.472966	0.024213	0.623085	0.174332
CG33521	FBGN0250819	0.338975	-0.00797	0.356541	0.009597
Cand1	FBGN0027568	0.061159	-0.05162	0.089494	-0.02328
Ald2	FBGN0039425	0.12832	-0.03296	0.193142	0.031865
Nrx-1	FBGN0038975	0.344243	-0.13289	0.557054	0.079917
pdgy	FBGN0027601	-0.1004	-0.19873	0.091304	-0.00702
MtnC	FBGN0038790	0.292016	-0.19342	0.027602	-0.45784
CG1927	FBGN0027547	0.170306	0.106873	-0.01114	-0.07457
Hsp27	FBGN0001226	-0.35509	-0.16211	-0.39268	-0.1997
CG3270	FBGN0033093	0.240269	-0.05873	0.179129	-0.11987
Moca-cyp	FBGN0039581	0.062053	-0.06225	0.433732	0.309432
lncRNA:Hsromega	FBGN0001234	-0.00507	0.113854	0.096448	0.215371
by	FBGN0000244	0.202413	0.135958	0.009204	-0.05725
Swim	FBGN0034709	-0.42605	0.353449	-0.81411	-0.03461
CG2921	FBGN0034689	-0.09312	0.013835	-0.09901	0.007942
CG2277	FBGN0035204	-0.01796	-0.01613	-0.16735	-0.16552
hiro	FBGN0035154	-0.47047	0.371829	-0.45389	0.388402
betaCOP	FBGN0008635	0.192756	0.037453	0.180169	0.024866
CG16782	FBGN0029659	-0.09379	-0.02236	-0.10167	-0.03024
CG15531	FBGN0039755	-0.04558	0.182679	-0.09146	0.136805
Prosalpha3	FBGN0261394	-0.15068	0.018415	-0.14633	0.022772

Oatp58Dc	FBGN0034716	0.32692	0.164566	-0.1062	-0.26855
fs(1)h	FBGN0004656	0.281125	-0.08748	0.507534	0.138932
CG6441	FBGN0031920	0.08597	-0.04366	0.144696	0.01507
stv	FBGN0086708	0.146183	0.054527	0.188256	0.0966
CG9119	FBGN0035189	0.16627	-0.07233	0.392915	0.154313
CG13482	FBGN0036419	0.126673	0.718841	-0.91441	-0.32224
cindr	FBGN0027598	0.17004	0.134606	0.144037	0.108603
stmA	FBGN0086784	0.214997	0.087318	0.173626	0.045947
SdicB	FBGN0283433	-1.129	-1.44829	-0.53669	-0.85598
cg	FBGN0000289	0.270824	-0.05637	0.364893	0.037695
GluClalpha	FBGN0024963	0.384195	0.043447	0.455937	0.115188
CG5048	FBGN0036437	0.010716	0.222408	-0.06891	0.142779
fat-spondin	FBGN0026721	0.375207	-0.13784	0.732491	0.219442
eIF2beta	FBGN0004926	-0.25244	-0.05347	-0.18076	0.018205
Dic2	FBGN0038797	-0.02491	0.095149	-0.14643	-0.02636
fabp	FBGN0037913	0.048263	0.024056	0.007171	-0.01704
CG43235	FBGN0262880	-0.28324	-0.67647	0.885957	0.492718
Sfxn1-3	FBGN0037239	0.006912	-0.07359	0.224932	0.144427
Vha14-1	FBGN0262512	-0.1062	0.176487	-0.3379	-0.05521
Zw	FBGN0004057	0.182249	-0.03033	0.165432	-0.04715
CG16762	FBGN0035343	0.226347	0.552272	-1.06291	-0.73699
CG46025	FBGN0267689	-0.02542	0.000857	-0.10453	-0.07825
CG7778	FBGN0032025	0.017067	0.123471	-0.07965	0.026754
Wnk	FBGN0037098	0.414087	-0.02888	0.576963	0.133993
Vrp1	FBGN0243516	0.046561	-0.04388	0.162446	0.072004
nmo	FBGN0011817	0.425954	-0.03701	0.495463	0.032499
CG42724	FBGN0261641	0.209051	-0.04598	0.402012	0.146983
CG8420	FBGN0037664	0.210871	-0.17313	0.180908	-0.20309
Fdh	FBGN0011768	-0.04497	-0.0287	0.026329	0.042602
CG43673	FBGN0263748	-1.61929	-1.39652	-0.06459	0.15819
Sgt	FBGN0032640	-0.00952	-0.03095	-0.01378	-0.03521
HmgZ	FBGN0010228	0.001577	-0.07357	0.190243	0.1151
l(3)02640	FBGN0010786	0.190669	0.037438	0.268606	0.115375
Fmr1	FBGN0028734	0.336322	-0.05651	0.368468	-0.02436
Mal-A2	FBGN0002569	0.641269	0.72422	-0.50335	-0.4204
Hydr2	FBGN0014906	0.011724	0.063247	-0.14659	-0.09507
mAcon2	FBGN0037862	0.089363	-0.00351	0.076336	-0.01654
CG31870	FBGN0051870	0.081025	0.075401	-0.02938	-0.035
CG10616	FBGN0036286	-0.1831	-0.09899	-0.33091	-0.24679
Sdic2	FBGN0053497	-0.05756	-0.27342	-0.09641	-0.31227
CG1387	FBGN0030033	-0.00948	-0.02308	0.132027	0.118426
rdgA	FBGN0261549	0.264954	-0.03731	0.399261	0.097001
axo	FBGN0262870	0.326465	-0.05949	0.767548	0.381595
nuf	FBGN0013718	0.303322	0.060276	0.310311	0.067264
l(3)80Fj	FBGN0287182	0.236615	0.100388	0.340688	0.204462
CG7309	FBGN0032314	0.137873	-0.06689	0.200569	-0.0042
nocte	FBGN0261710	0.321875	-0.0139	0.568539	0.232769
Pisd	FBGN0026576	0.378412	-0.10753	0.314065	-0.17188
kat-60L1	FBGN0037375	-0.09249	-0.02082	-0.0214	0.050268
Diedel3	FBGN0085358	0.177285	-0.07067	-0.75197	-0.99993
cic	FBGN0262582	0.470152	0.031124	0.668878	0.22985
CG6115	FBGN0040985	0.022403	0.159907	0.068306	0.20581
CG4734	FBGN0033826	-0.05477	0.686625	-0.20175	0.53964
Mec2	FBGN0030993	0.002162	0.337752	-0.80815	-0.47256
hppy	FBGN0263395	0.407491	0.1399	0.660431	0.392841
eas	FBGN0000536	0.20159	0.052885	0.249636	0.100931
sno	FBGN0265630	0.135006	-0.06515	0.263157	0.062999
tomboy40	FBGN0033074	0.120771	-0.06667	0.12065	-0.06679
Csp	FBGN0004179	0.130129	0.080728	-0.01621	-0.06561
mim	FBGN0053558	0.387276	-0.05998	0.749007	0.301747
Cpr67B	FBGN0035985	-0.55004	0.103255	-0.5053	0.147995
hmw	FBGN0038607	0.023548	-0.04337	-0.07525	-0.14216
CG17349	FBGN0032771	0.011804	-0.0654	0.079679	0.002477
CG10089	FBGN0036369	0.173922	-0.00049	0.270369	0.095955
Dph1	FBGN0036194	0.922821	1.113796	0.080891	0.271866
CG31038	FBGN0051038	0.133847	-0.11887	0.183808	-0.06891
CG3246	FBGN0031538	0.382498	-0.28975	0.857579	0.185328
CG9953	FBGN0035726	0.160749	-0.14055	0.458683	0.157385
alt	FBGN0038535	0.198724	0.035242	0.298919	0.135436

CG13704	FBGN0035583	-0.11121	0.541607	-0.95536	-0.30254
CG10126	FBGN0038088	-0.21982	0.055161	-0.20962	0.06536
Prosalpha7	FBGN0023175	-0.14192	-0.00142	-0.17378	-0.03328
Eaat2	FBGN0026438	0.151011	-0.18404	0.302558	-0.03249
mt:srRNA	FBGN0013688	-0.59253	-0.44533	-0.62801	-0.48081
CG12179	FBGN0025388	0.203063	0.007062	0.114678	-0.08132
CG3222	FBGN0036014	0.035936	-0.02715	0.022962	-0.04012
PlexA	FBGN0025741	0.207315	0.063085	0.254568	0.110338
Iris	FBGN0031305	0.839154	-0.21889	0.818319	-0.23972
Dap160	FBGN0023388	0.145159	-0.01304	0.137406	-0.02079
Sdic4	FBGN0053499	0.351447	-0.05602	0.090644	-0.31682
Rpn10	FBGN0015283	-0.08458	0.018041	-0.14877	-0.04615
Gk2	FBGN0035266	0.238087	0.0991	0.342932	0.203944
Jwa	FBGN0032704	-0.13866	0.254293	-0.42547	-0.03252
mei-P26	FBGN0026206	0.431455	-0.02486	0.553645	0.097325
ox	FBGN0011227	-0.01608	0.014348	-0.08092	-0.05049
SdhD	FBGN0039112	-0.06103	-0.04162	0.053499	0.072915
CG10175	FBGN0039084	0.447098	0.063183	0.288131	-0.09578
CG31178	FBGN0064912	-0.01879	-0.05299	-0.06134	-0.09555
CG10512	FBGN0037057	0.616157	0.046486	0.700969	0.131298
lncRNA:CR45113	FBGN0266588	-0.25836	0.009298	-0.48385	-0.2162
CG7900	FBGN0037548	-0.38896	-0.11389	0.581553	0.856619
Pkcdelta	FBGN0259680	0.366777	-0.00988	0.56013	0.183469
CG3597	FBGN0031417	0.523605	-0.32182	1.153195	0.307768
Cka	FBGN0044323	0.187661	0.006297	0.18137	5.97E-06
CG14183	FBGN0036931	0.009957	0.000448	0.026129	0.016619
CG3630	FBGN0023540	0.312891	-0.01227	0.383375	0.058213
Nazo	FBGN0037562	-0.39657	1.658611	-3.01878	-0.9636
Culd	FBGN0035880	0.077547	-0.28817	0.497477	0.131757
CG12338	FBGN0033543	0.164236	-0.2286	0.537387	0.144553
TMS1	FBGN0028399	0.039374	0.009346	0.035641	0.005613
Gad1	FBGN0004516	0.069658	-0.01442	0.278203	0.194128
SRPK	FBGN0286813	0.206525	-0.04314	0.254275	0.004614
CAH7	FBGN0037788	0.533381	-0.28276	1.237201	0.421062
Sec16	FBGN0052654	0.394114	0.06294	0.555864	0.22469
CG9451	FBGN0036876	0.46897	-0.04671	0.665414	0.149736
CanA-14F	FBGN0267912	0.276321	-0.04698	0.458271	0.13497
snu	FBGN0039594	-0.00277	-0.06182	0.038928	-0.02013
Usp20-33	FBGN0033916	0.137594	0.037307	0.066354	-0.03393
CG13907	FBGN0035173	0.31729	0.129467	0.181561	-0.00626
wdp	FBGN0034718	0.153976	0.200127	0.11365	0.159801
bnb	FBGN0001090	0.132701	-0.12763	0.458633	0.198304
Amph	FBGN0027356	-0.12668	-0.07939	0.054956	0.102247
CG16711	FBGN0036032	0.429052	-0.09005	0.621096	0.101994
CG8485	FBGN0033915	0.531005	-0.10098	0.54645	-0.08553
CG43788	FBGN0264329	-0.4816	-0.60388	-0.45279	-0.57507
ReepB	FBGN0033906	-0.2001	-0.03122	-0.21263	-0.04376
Drip	FBGN0015872	0.1238	0.033195	-0.03321	-0.12382
ergic53	FBGN0035909	-0.00595	-0.16152	0.127334	-0.02824
Hph	FBGN0264785	0.192499	0.29908	-0.11767	-0.01109
Cadps	FBGN0053653	0.367651	-0.05041	0.611974	0.193916
tws	FBGN0004889	0.263732	0.042143	0.360752	0.139163
ClpP	FBGN0032229	-0.01489	-0.01995	0.050713	0.045657
CG16791	FBGN0038881	0.38958	0.185262	0.450189	0.245871
Cul2	FBGN0032956	0.191548	-0.01457	0.184923	-0.0212
Syn	FBGN0004575	0.417342	-0.20944	0.761123	0.134337
Yp1	FBGN0004045	-0.24192	0.1676	-2.49904	-2.08953
CG11537	FBGN0035400	-0.0889	-0.02887	0.017131	0.077163
CG11929	FBGN0031620	0.108934	0.023901	-0.02433	-0.10936
eIF3e	FBGN0025582	-0.23091	-0.12982	-0.14361	-0.04252
Klp3A	FBGN0011606	-0.0205	-0.08485	0.054487	-0.00985
Decay	FBGN0028381	-0.09565	0.536168	-1.00749	-0.37568
stai	FBGN0266521	0.030736	-0.09674	-0.03064	-0.15812
CG12853	FBGN0040747	-0.18732	-0.09673	-0.13766	-0.04707
CG10064	FBGN0035724	-0.09103	0.001222	-0.17251	-0.08026
Eaat1	FBGN0026439	0.114183	-0.0777	0.197243	0.005356
RpS5b	FBGN0038277	-0.93306	-0.35809	-0.72517	-0.1502
CG31659	FBGN0051659	-0.28817	-0.05211	-0.49072	-0.25466
JIL-1	FBGN0020412	0.186342	-0.14387	0.338115	0.007906

Trap1	FBGN0026761	0.020452	-0.00906	-0.00468	-0.03419
RpL34a	FBGN0039406	-0.23179	-0.02745	-0.09428	0.110062
TBC1D23	FBGN0031304	0.150688	0.012918	0.173151	0.035381
lncRNA:CR32690	FBGN0052690	-0.0533	-0.0066	-0.09007	-0.04337
Fs(2)Ket	FBGN0262743	0.165431	0.006338	0.12044	-0.03865
cu	FBGN0261808	0.38991	-0.03792	0.713638	0.285807
Ubc87F	FBGN0267383	-0.20465	0.004062	-0.18092	0.027786
Esyt2	FBGN0266758	0.301529	-0.01291	0.408428	0.093987
stx	FBGN0052676	0.215667	0.039517	0.343871	0.167722
Cyp6g2	FBGN0033696	-1.14789	-0.58986	-0.5579	0.000138
CG9628	FBGN0036433	-0.49615	-0.03444	-0.52645	-0.06475
Chd1	FBGN0250786	0.35927	0.037119	0.448197	0.126046
AP-1gamma	FBGN0030089	0.178674	0.114122	0.251372	0.18682
CG13551	FBGN0040660	-0.12112	-0.02295	-0.0889	0.00926
nemy	FBGN0261673	0.241126	0.05838	0.054465	-0.12828
Khc	FBGN0001308	0.238153	0.155342	0.173393	0.090582
drpr	FBGN0027594	0.354101	0.197798	0.178939	0.022636
FER	FBGN0000723	0.087168	0.187213	-0.22396	-0.12392
CG17083	FBGN0039070	-0.05413	0.033652	-0.17392	-0.08614
Tango1	FBGN0286898	0.142053	0.083808	0.144212	0.085967
Adgf-A2	FBGN0043025	0.011352	-0.00333	-0.04247	-0.05714
CG31678	FBGN0051678	0.189098	-0.16847	0.311873	-0.04569
CG32240	FBGN0052240	0.247478	0.285055	0.088475	0.126052
scb	FBGN0286785	0.104795	0.398292	-0.50125	-0.20776
IRSp53	FBGN0052082	-0.02729	0.138641	-0.61461	-0.44867
CG5023	FBGN0038774	0.153117	-0.12841	0.140445	-0.14108
upSET	FBGN0036398	0.278715	-0.02373	0.405528	0.103081
ND-PDSW	FBGN0021967	-0.02947	-0.0481	0.080503	0.061869
CASK	FBGN0013759	0.357674	-0.09325	0.448089	-0.00284
CG12576	FBGN0031190	0.240386	0.147237	0.092852	-0.0003
CdGAPr	FBGN0032821	0.204697	0.134417	-0.00642	-0.0767
AhcyL1	FBGN0035371	0.104414	0.093032	0.046297	0.034915
mura	FBGN0037705	0.381571	0.023432	0.478532	0.120393
Opa1	FBGN0261276	0.154045	0.021914	0.156147	0.024016
AdenoK	FBGN0036337	0.303061	0.484828	0.236886	0.418653
Uch-L5	FBGN0011327	-0.05338	0.033245	-0.13649	-0.04987
Plp	FBGN0086690	0.436749	0.032817	0.606668	0.202737
CG33080	FBGN0053080	0.32644	-0.05267	0.513579	0.134474
CG18335	FBGN0033610	-0.10122	0.029666	-0.15449	-0.0236
CG2556	FBGN0030396	0.182463	0.554054	-0.71173	-0.34014
CG30069	FBGN0050069	0.299733	-0.0523	0.428258	0.07623
Asator	FBGN0039908	0.32639	-0.04764	0.440013	0.065981
CG8661	FBGN0030837	-1.42406	-1.04454	-0.59857	-0.21906
Rip11	FBGN0027335	0.133481	0.106292	0.192819	0.16563
CG17752	FBGN0038718	-0.70258	-0.922	-0.24098	-0.4604
trbd	FBGN0037734	0.148582	-0.03138	0.23793	0.057969
CG15459	FBGN0031108	-0.24788	-9.96E-05	-0.17801	0.069768
CG1137	FBGN0037454	-0.086	0.015775	-0.16963	-0.06785
plx	FBGN0261261	0.157985	-0.12334	0.352237	0.070911
Slob	FBGN0264087	0.587955	-0.22568	0.589066	-0.22457
CG31313	FBGN0051313	-0.10943	-0.19827	0.132615	0.04378
slmb	FBGN0283468	0.255873	-0.01293	0.264107	-0.0047
eIF4E4	FBGN0035709	-0.04989	-0.00936	-0.11315	-0.07261
wash	FBGN0033692	-0.04322	-0.03141	0.059084	0.070891
l(2)gl	FBGN0002121	0.042264	0.280987	-0.25146	-0.01274
GstO3	FBGN0035904	-0.41666	0.03753	-0.59845	-0.14426
betaTub60D	FBGN0003888	0.180465	0.455142	-0.15524	0.119441
Sod2	FBGN0010213	-0.04159	-0.01009	-0.02061	0.010892
PI31	FBGN0033669	-0.08683	-0.02345	-0.06852	-0.00514
TM9SF2	FBGN0032880	0.0816	0.079438	-0.03342	-0.03558
CG32181	FBGN0052181	0.218681	0.007005	0.1387	-0.07298
CG7997	FBGN0034117	0.678577	-0.02932	1.206857	0.498965
aru	FBGN0029095	0.33515	0.134895	0.28301	0.082754
CG12307	FBGN0032370	0.08129	0.032061	-0.2772	-0.32643
Spn	FBGN0010905	0.435787	0.00911	0.553573	0.126896
Echs1	FBGN0033879	-0.12354	-0.23632	0.045561	-0.06723
CR41597	FBGN0085810	0.283634	-0.01157	-0.01781	-0.31302
CG4198	FBGN0029753	-0.051	0.037048	-0.07804	0.010009
Pkc98E	FBGN0003093	0.414586	0.012806	0.47215	0.07037

janB	FBGN0001281	-0.22429	-0.04153	-0.19043	-0.00768
Rox8	FBGN0005649	0.133418	-0.01303	0.174539	0.028087
ABCD	FBGN0039890	0.217648	0.093874	0.113528	-0.01025
Ufl1	FBGN0037467	-0.36287	-0.0662	-0.31513	-0.01846
CG15631	FBGN0031626	0.277478	0.023354	0.095081	-0.15904
Cul1	FBGN0015509	0.212486	0.05395	0.231727	0.073191
EloC	FBGN0266711	-0.07836	0.023321	0.188091	0.289772
CG9572	FBGN0031089	-0.14945	0.088019	-0.0388	0.198673
Usp10	FBGN0052479	0.093064	0.011375	0.116463	0.034774
jvl	FBGN0263929	0.303177	0.085158	0.279856	0.061837
Galphao	FBGN0001122	0.38696	-0.15508	0.748799	0.206756
Irk2	FBGN0039081	0.051823	0.225113	-0.32497	-0.15168
CG6178	FBGN0039156	0.200499	0.045792	-0.00797	-0.16267
syd	FBGN0024187	0.287494	-0.00769	0.310009	0.014824
CG9775	FBGN0037261	-0.01286	-0.0828	0.144109	0.074172
Prosbeta5	FBGN0029134	-0.0926	0.054731	-0.20725	-0.05991
CG2145	FBGN0030251	0.305589	-0.00065	0.764672	0.458437
CG4907	FBGN0039010	0.287457	0.109598	0.222873	0.045013
Rpi	FBGN0050410	-0.37915	-0.2219	-0.09365	0.063607
cue	FBGN0011204	0.283011	0.018761	0.298651	0.034401
qua	FBGN0003187	0.139526	0.097515	0.039906	-0.0021
ttm2	FBGN0035124	-0.05433	0.014822	-0.1695	-0.10035
sip3	FBGN0039875	0.159318	0.108817	0.067277	0.016776
NT5E-2	FBGN0050104	0.200762	0.047317	0.04873	-0.10472
CG4329	FBGN0034745	0.28547	0.116169	0.20196	0.032659
Acn	FBGN0263198	0.231898	-0.028	0.404878	0.144976
CG43693	FBGN0263776	0.065282	0.183487	0.099418	0.217623
Tom20	FBGN0036928	-0.23641	-0.00037	-0.32503	-0.08899
CG10553	FBGN0039324	-0.4275	0.150123	-0.09268	0.484946
alphaSnap	FBGN0250791	0.081723	0.063321	0.107706	0.089303
CG8312	FBGN0037720	0.13924	-0.08368	0.217997	-0.00492
Cyp4ac1	FBGN0031693	1.006005	-0.39391	1.037266	-0.36265
CG15818	FBGN0031910	-0.6909	0.725929	-2.07788	-0.66106
fan	FBGN0028379	-0.00528	-0.01103	-0.05647	-0.06223
Hnf4	FBGN0004914	0.288958	0.017954	0.372932	0.101928
casp	FBGN0034068	0.307148	-0.03785	0.164973	-0.18003
CG14200	FBGN0031023	0.206042	0.064194	0.33021	0.188362
CG12470	FBGN0040371	-0.01776	-0.03224	-0.02731	-0.04179
UbcE2H	FBGN0029996	0.234429	0.211593	0.262772	0.239937
CG8306	FBGN0034142	-0.1122	-0.03401	-0.38164	-0.30345
Fit1	FBGN0035498	0.231738	0.131354	0.097051	-0.00333
CG31204	FBGN0051204	-0.02098	0.032533	-0.10095	-0.04744
Sdic3	FBGN0052823	-0.17625	-0.0893	-0.77484	-0.68789
SdicA	FBGN0283432	-0.17653	-0.08662	-0.77412	-0.68421
CG6790	FBGN0037915	0.010392	-0.04046	0.019459	-0.0314
Hrd3	FBGN0028475	0.062677	0.041557	0.023862	0.002741
Obp83a	FBGN0011281	-0.18449	-0.45744	0.810128	0.537179
Muc68E	FBGN0053265	0.327965	1.066022	-1.87571	-1.13766
ND-ACP	FBGN0011361	-0.11423	0.021721	-0.07199	0.063963
CG33129	FBGN0053129	-0.03252	-0.05394	-0.00014	-0.02156
MFS3	FBGN0031307	-1.11705	0.899004	-1.89096	0.125094
Tom7	FBGN0033357	-0.19799	0.029259	-0.15005	0.077199
Rbp1-like	FBGN0030479	0.361422	0.000392	0.517955	0.156925
l(2)37Cc	FBGN0002031	-0.11539	0.005491	-0.05767	0.063215
CG16986	FBGN0035356	0.222292	0.638697	-0.82651	-0.4101
sbm	FBGN0030574	0.245767	0.130785	0.095701	-0.01928
lncRNA:noe	FBGN0026197	0.199275	-0.02121	0.049984	-0.1705
NaPi-T	FBGN0016684	0.268536	0.048722	-0.01282	-0.23263
HINT1	FBGN0031459	-0.11772	-0.08544	-0.24111	-0.20884
Sh	FBGN0003380	0.411293	-0.14721	0.722526	0.164018
Nup358	FBGN0039302	0.167685	0.003365	0.262551	0.09823
CR42722	FBGN0261639	0.290851	0.003821	-0.01205	-0.29908
CG5758	FBGN0032666	0.133771	-0.15199	0.384422	0.098666
foxo	FBGN0038197	0.280262	-0.01487	0.311466	0.016332
lectin-29Ca	FBGN0040098	-0.11866	-0.11991	-0.19274	-0.19399
Tapdelta	FBGN0021795	-0.17286	-0.04359	-0.13172	-0.00246
Tao	FBGN0031030	0.374124	0.00241	0.461585	0.089871
Cont	FBGN0037240	0.06493	-0.09701	0.273877	0.111942
alphaCOP	FBGN0025725	0.173648	-0.01794	0.213284	0.0217

CG3092	FBGN0034835	0.022451	0.048207	0.018713	0.044468
Obp99a	FBGN0039678	-0.7079	-0.00062	-0.36046	0.346819
Roe1	FBGN0014877	-0.3244	-0.03281	-0.30994	-0.01835
CG9498	FBGN0031801	0.24075	0.258851	0.039803	0.057903
Rab10	FBGN0015789	0.248789	0.131727	0.215145	0.098084
ND-18	FBGN0031021	0.028704	-0.04044	0.135988	0.066843
ND-B14	FBGN0033570	0.170511	0.086356	0.042527	-0.04163
BG642167	FBGN0250831	-0.36598	-0.02316	-0.51904	-0.17621
Ubr3	FBGN0260970	0.381386	0.04691	0.514212	0.179737
CG14712	FBGN0037924	0.142751	-0.07261	0.186134	-0.02923
AANAT1	FBGN0019643	0.134401	0.11207	-0.16439	-0.18672
Uev1A	FBGN0035601	-0.06264	-0.05532	-0.04683	-0.03951
CG10383	FBGN0032699	0.111331	0.08803	0.076755	0.053455
Pal2	FBGN0262728	0.236749	-0.11322	0.431456	0.081489
bmm	FBGN0036449	0.276616	0.202567	0.434525	0.360476
Rpn8	FBGN0002787	-0.07594	0.042344	-0.06885	0.049431
Tim23	FBGN0267976	-0.02095	0.049304	-0.18353	-0.11327
CG13585	FBGN0035020	0.013083	-0.0475	0.219219	0.158639
IP3K2	FBGN0283680	0.284345	0.066889	0.467231	0.249775
dpy	FBGN0053196	0.321969	0.006119	0.742397	0.426547
CG31041	FBGN0051041	-3.41368	0.564654	-2.32278	1.655547
Cyp6a23	FBGN0033978	0.786107	0.602005	0.446739	0.262637
CG32591	FBGN0052591	0.110386	-0.05818	0.154086	-0.01448
Rpn1	FBGN0028695	0.063144	0.018025	0.02675	-0.01837
Ythdc1	FBGN0027616	0.18388	-0.0711	0.339079	0.084096
CG11106	FBGN0030280	-0.30727	-0.08174	-0.33642	-0.11089
mbc	FBGN0015513	0.429786	0.034577	0.578415	0.183206
CG1999	FBGN0029947	-0.05381	-0.03271	-0.09425	-0.07316
CG31550	FBGN0051550	0.110741	0.016872	0.316243	0.222373
CG31161	FBGN0051161	0.020613	-0.01678	0.035792	-0.0016
E2f1	FBGN0011766	0.495578	-0.05413	0.630017	0.080313
Dic1	FBGN0027610	0.147916	0.083521	0.302492	0.238098
Diap2	FBGN0015247	0.034863	0.017208	0.056361	0.038706
CG4712	FBGN0033818	0.13347	0.013129	-0.0603	-0.18064
Herp	FBGN0031950	0.040589	-0.04638	0.200188	0.113214
eIF4H1	FBGN0262734	0.318353	0.021213	0.351632	0.054492
CG1316	FBGN0035526	0.13264	-0.00276	0.031324	-0.10407
CG4714	FBGN0033819	0.231887	0.096255	0.219252	0.08362
S-Lap5	FBGN0033860	-0.05887	0.014854	-0.05241	0.021313
CG13032	FBGN0036652	0.031067	0.011207	-0.01858	-0.03844
eIF3g1	FBGN0029629	-0.12643	-0.06949	-0.31604	-0.2591
pan	FBGN0085432	0.375668	0.000733	0.393153	0.018218
Dbp80	FBGN0024804	-0.22663	-0.00102	-0.19428	0.031328
TTLL5	FBGN0051108	-0.04091	0.074031	-0.12626	-0.01131
Fkbp14	FBGN0010470	-0.31048	-0.25477	-0.06861	-0.0129
CG9632	FBGN0038377	0.115169	0.02103	0.180176	0.086037
CG8654	FBGN0034479	0.133812	-0.15371	0.362126	0.074608
CR42723	FBGN0261640	0.307834	-0.00879	0.003852	-0.31277
CG2528	FBGN0032969	0.135758	0.045265	0.040472	-0.05002
CG2201	FBGN0032955	0.167299	-0.05609	0.204803	-0.01859
CG4286	FBGN0034601	-0.09504	0.007326	-0.08414	0.018224
CG5171	FBGN0031907	0.257829	-0.10699	0.570303	0.205488
CG2698	FBGN0037536	0.032742	-0.03795	0.099643	0.028948
Sxl	FBGN0264270	0.394776	0.061922	0.421258	0.088405
Ubc6	FBGN0004436	0.066276	0.075061	-0.00405	0.004738
CG1677	FBGN0029941	0.350633	0.009217	0.470801	0.129385
CG2871	FBGN0029725	0.073262	0.039003	-0.07075	-0.10501
Cdlc2	FBGN0026141	0.051047	0.091013	-0.05971	-0.01974
alc	FBGN0260972	-0.11581	-0.04976	0.009278	0.075326
CG6761	FBGN0036031	0.112083	-0.02034	0.161418	0.028993
mbl	FBGN0265487	0.084409	-0.11099	0.142603	-0.0528
twi	FBGN0003900	1.092705	0.482012	0.231393	-0.3793
MtnE	FBGN0262146	0.164605	0.553173	-0.83722	-0.44865
CG3323	FBGN0029750	0.016269	-0.10583	0.082419	-0.03968
CG17691	FBGN0039993	-0.03894	-0.008	-0.24483	-0.21389
SmydA-8	FBGN0053548	0.804836	-0.34542	1.504186	0.353933
Tim17b	FBGN0263977	0.022795	0.101607	-0.0689	0.009912
CG4681	FBGN0069913	0.184542	-0.07107	0.226809	-0.02881
jim	FBGN0027339	0.177532	0.038863	0.268465	0.129796

tay	FBGN0260938	0.447049	0.007268	0.688496	0.248715
CG5355	FBGN0032242	0.125744	0.039525	-0.04039	-0.12661
ntc	FBGN0035461	-0.00488	0.036227	-0.01295	0.028155
CG5687	FBGN0035293	-0.43357	0.144599	-0.41778	0.160391
CG13360	FBGN0025620	0.334068	-0.60895	0.176344	-0.76667
CG6923	FBGN0037944	0.289991	-0.00975	0.381468	0.081722
cact	FBGN0000250	-0.11794	0.033337	-0.03767	0.113614
sev	FBGN0003366	-0.03474	-0.22404	0.502118	0.312813
CG6426	FBGN0034162	0.228307	-0.0051	0.377806	0.144395
CG9014	FBGN0028847	0.027513	0.031822	-0.02644	-0.02213
lncRNA:CR32661	FBGN0030356	-0.114	0.110008	-0.21073	0.013275
siz	FBGN0026179	0.190341	0.036709	0.217716	0.064084
CG7115	FBGN0027515	0.170348	-0.08005	0.383112	0.132715
Tango11	FBGN0050404	-0.04919	-0.00127	-0.02559	0.022329
CG14109	FBGN0036364	0.22787	0.041638	0.348175	0.161944
Cdep	FBGN0265082	0.209275	0.088475	0.179308	0.058508
tweek	FBGN0261671	0.417664	0.012687	0.586613	0.181636
loqs	FBGN0032515	-0.10962	-0.01798	-0.08701	0.004625
Arpc1	FBGN0001961	-0.15966	0.05586	-0.2165	-0.00098
CG8176	FBGN0037702	0.114006	-0.01805	0.284847	0.152792
Ahcy	FBGN0014455	-0.13019	-0.07614	0.027428	0.081478
CG42324	FBGN0259224	0.845653	0.009572	1.15383	0.317749
CG7387	FBGN0035852	-0.05664	0.044769	-0.10309	-0.00168
CG31663	FBGN0051663	0.315939	0.022261	-0.06699	-0.36067
CG2926	FBGN0037344	0.329172	0.005724	0.417294	0.093847
comt	FBGN0000346	0.209084	-0.02121	0.16971	-0.06059
CCHa2	FBGN0038147	0.418292	0.074294	0.587696	0.243697
CG34133	FBGN0083969	0.198989	0.085354	0.145937	0.032301
CG17261	FBGN0031501	-0.13619	-0.09134	-0.06488	-0.02003
Srp54k	FBGN0010747	-0.10333	-0.04559	-0.10987	-0.05214
clu	FBGN0034087	0.297541	-0.10815	0.335756	-0.06993
CG7546	FBGN0035793	0.196089	0.029739	0.250406	0.084056
CG34376	FBGN0085405	0.335617	0.152019	0.500941	0.317343
CG8206	FBGN0030679	0.000207	-0.02722	0.083504	0.056079
Sfp93F	FBGN0261060	-0.18819	-0.06466	-0.04286	0.080672
gro	FBGN0001139	0.287229	0.07079	0.178144	-0.03829
CG3809	FBGN0037995	0.067573	0.024745	-0.09537	-0.1382
tutl	FBGN0010473	0.646294	-0.10733	0.867793	0.11417
CG17230	FBGN0046225	-0.05251	-0.05332	-0.00254	-0.00335
CG9776	FBGN0027866	-0.04363	-0.01991	0.014568	0.038287
pns	FBGN0035229	0.009663	-0.06446	0.19024	0.116119
E(Pc)	FBGN0000581	0.330959	-0.06973	0.516089	0.115402
CG17562	FBGN0038449	0.187089	-0.11899	0.829189	0.523112
Nipped-B	FBGN0026401	0.197314	0.008637	0.16173	-0.02695
CG42249	FBGN0259101	0.562946	0.362476	-0.07184	-0.27231
CG32437	FBGN0052437	0.029724	0.1342	-0.19033	-0.08585
CG7140	FBGN0037147	0.086104	-0.0221	0.10514	-0.00306
Ptpmeg2	FBGN0028341	0.162662	-0.01475	0.114891	-0.06252
Synd	FBGN0053094	0.050538	0.047665	-0.07971	-0.08258
Trpm	FBGN0265194	0.162144	0.044969	0.182291	0.065116
CG16713	FBGN0031560	-0.51814	-0.35634	0.401684	0.56348
CG31407	FBGN0051407	-0.14965	-0.01974	-0.18874	-0.05884
CG18258	FBGN0265267	-0.06204	-0.24944	-0.10137	-0.28876
sqa	FBGN0259678	0.249445	0.153831	0.149362	0.053748
Dab	FBGN0000414	0.350661	0.013328	0.448595	0.111262
Fatp3	FBGN0034999	0.093931	0.048097	-0.2401	-0.28594
CG4390	FBGN0038771	-0.14027	-0.07351	-0.10662	-0.03986
CG8774	FBGN0038136	-0.21278	-0.57279	1.035887	0.675871
lqfR	FBGN0261279	0.201971	0.080941	0.172008	0.050977
CG8746	FBGN0033330	-0.00779	-0.04587	-0.02828	-0.06636
pros	FBGN0004595	0.548089	0.130775	0.708699	0.291385
UQCR-6.4	FBGN0034245	-0.08155	0.038581	-0.15819	-0.03807
LIMK1	FBGN0283712	0.137754	-0.03185	0.056101	-0.11351
CG11050	FBGN0031836	0.018259	-0.09046	0.025532	-0.08319
kermit	FBGN0010504	-0.03403	-0.02029	-0.05783	-0.04409
CG13008	FBGN0030780	0.12971	0.010042	0.018278	-0.10139
CG2736	FBGN0035090	0.189602	-0.228	0.57044	0.152836
Pi4KIIalpha	FBGN0037339	0.139468	0.019776	0.192527	0.072835
CG11414	FBGN0035024	0.168172	0.039021	0.371186	0.242036

KdelR	FBGN0267330	-0.19174	-0.03916	-0.15448	-0.0019
CG11368	FBGN0040923	-0.79747	-0.56519	-0.13117	0.101112
swaPsi	FBGN0016974	-3.297	-2.97028	-0.10492	0.221799
Iru	FBGN0037653	-0.09556	-0.01135	-0.03735	0.04686
BomT2	FBGN0040735	0.511938	0.180944	1.172607	0.841614
CG5539	FBGN0034907	-0.00079	-0.00554	0.12154	0.11679
sowi	FBGN0037460	-0.06969	0.082598	-0.29128	-0.13899
Rab2	FBGN0014009	0.078272	0.020815	0.092502	0.035045
CG5103	FBGN0036784	-0.04994	-0.00526	-0.02283	0.02185
Nplp1	FBGN0035092	0.205062	-0.0015	0.130514	-0.07605
ABCB7	FBGN0035244	0.171372	0.044749	0.02168	-0.10494
CG7518	FBGN0038108	0.173409	-0.07134	0.35433	0.109581
cwo	FBGN0259938	0.384982	0.195401	0.29128	0.101699
Pis	FBGN0030670	-0.08318	0.053704	-0.15293	-0.01604
CG9458	FBGN0037765	0.133756	0.242224	-0.51537	-0.40691
eIF3d1	FBGN0040227	-0.03994	-0.02239	-0.009	0.008551
Rpt1	FBGN0028687	-0.06156	0.02096	-0.08106	0.001453
CG9570	FBGN0031085	-0.0834	-0.0568	-0.0995	-0.0729
Clc	FBGN0024814	-0.09045	0.052115	-0.12831	0.014255
shrb	FBGN0086656	-0.11425	0.097786	-0.24792	-0.03589
CG30197	FBGN0050197	-0.2286	-0.07601	-0.27723	-0.12464
Sec61beta	FBGN0010638	-0.17342	-0.02332	-0.18688	-0.03678
CG5174	FBGN0034345	-0.07955	0.073384	-0.11972	0.033215
Prosbeta6	FBGN0002284	-0.1567	-0.03165	-0.10322	0.021838
CG33669	FBGN0053669	-0.45412	0.140561	-0.48297	0.111705
CG4238	FBGN0031384	0.450713	0.129438	0.03197	-0.28931
Etf-QO	FBGN0286783	0.157226	-0.13295	0.322229	0.032048
Exn	FBGN0261547	0.302689	0.089553	0.316863	0.103727
fray	FBGN0023083	0.162838	0.014465	0.12438	-0.02399
Rop	FBGN0004574	0.008231	-0.02023	-0.02128	-0.04975
OtopLa	FBGN0259994	0.337511	-0.15169	0.533533	0.044332
Ack	FBGN0028484	0.150557	-0.03321	0.231116	0.047349
CG7322	FBGN0030968	0.338109	-0.14118	0.599477	0.120189
CG16739	FBGN0034505	-0.35569	-0.02365	-0.42887	-0.09683
CG10561	FBGN0002036	0.022969	-0.01778	0.074775	0.034029
tHMG1	FBGN0038978	-0.16413	-0.0404	-0.23824	-0.11451
GramD1B	FBGN0085423	0.352827	0.03044	0.429707	0.10732
CG17224	FBGN0031489	-0.23837	-0.06149	0.179122	0.356007
CG7409	FBGN0035817	-0.33568	-0.08872	-0.23663	0.010336
CG17292	FBGN0032029	0.552764	0.018679	0.647531	0.113446
Tat	FBGN0035989	-0.08502	0.017752	-0.05507	0.047693
ND-B17.2	FBGN0031436	0.132074	0.064383	-0.0902	-0.15789
CG8929	FBGN0034504	0.155818	-0.0284	0.325145	0.140923
ppl	FBGN0027945	0.047537	-0.05602	0.198371	0.094812
CHOp24	FBGN0029709	-0.34945	-0.09262	-0.222	0.034836
CG11961	FBGN0034436	0.063148	0.415658	-0.67019	-0.31768
Cf2	FBGN0000286	0.294612	0.016478	0.418397	0.140263
Mob2	FBGN0259481	0.125886	-0.0582	0.221003	0.03692
CG10317	FBGN0038423	0.107262	0.024664	-0.14578	-0.22837
Npc1a	FBGN0024320	-0.02299	0.031989	-0.02963	0.025344
CG12362	FBGN0036082	-0.01418	0.07988	-0.10302	-0.00896
Crag	FBGN0025864	0.350938	0.096763	0.271984	0.017809
ND-B22	FBGN0032511	-0.16859	-0.05333	-0.134	-0.01874
Zn72D	FBGN0263603	0.27047	-0.02674	0.3696	0.072394
cbt	FBGN0043364	0.312769	-0.02571	0.321017	-0.01746
Mics1	FBGN0037506	-0.01253	0.007371	-0.09216	-0.07226
CG9485	FBGN0034618	0.844085	-0.17238	1.123297	0.106828
nAChRbeta1	FBGN0000038	0.263505	-0.05684	0.411331	0.090988
Asx	FBGN0261823	0.587568	-0.04114	0.68599	0.057287
ACXC	FBGN0040508	0.220293	-0.02617	0.230561	-0.01591
ND-B14.7	FBGN0034576	-0.10391	-0.04903	-0.04324	0.011635
CG15155	FBGN0032669	-0.2007	-0.40913	-0.06809	-0.27651
TpnC25D	FBGN0031692	0.063963	-0.23395	-0.16705	-0.46497
CG30389	FBGN0050389	0.204042	-0.128	0.415752	0.083705
Mi-2	FBGN0262519	0.162992	0.011619	0.27988	0.128507
Cndp2	FBGN0259979	0.200073	0.233329	-0.23939	-0.20614
CG12384	FBGN0033624	-0.12125	0.027556	-0.1353	0.013509
rump	FBGN0267790	0.004681	-0.01808	0.000774	-0.02199
Rpn9	FBGN0028691	-0.11877	0.05039	-0.20243	-0.03327

mahe	FBGN0029979	0.238456	-0.01079	0.388068	0.138823
mbf1	FBGN0262732	-0.06957	0.000179	-0.10951	-0.03976
CG3764	FBGN0036684	0.324032	-0.36277	0.824287	0.137486
CG3788	FBGN0034800	-0.07946	-0.0382	-0.05342	-0.01216
RhoGDI	FBGN0036921	-0.14296	0.080871	-0.29408	-0.07025
caps	FBGN0023095	0.186343	0.113173	0.216803	0.143633
CG9173	FBGN0035218	-0.08925	0.003407	-0.18427	-0.09161
CD98hc	FBGN0037533	0.005294	-0.06034	0.098445	0.032807
raw	FBGN0003209	0.308748	0.147596	0.251191	0.090039
CG6664	FBGN0036685	0.133937	-0.0191	0.221229	0.06819
CG8034	FBGN0031011	0.393895	0.462394	0.184412	0.252911
CG18109	FBGN0028901	0.316478	-0.01183	0.214891	-0.11341
CG42232	FBGN0250754	0.094214	-0.04625	0.125311	-0.01515
Rilpl	FBGN0024985	0.189477	0.144326	0.27281	0.22766
CG10845	FBGN0039246	0.006194	-0.01508	0.05833	0.037061
SCaMC	FBGN0052103	0.048911	-0.0257	0.062532	-0.01208
CG9747	FBGN0039754	0.210407	0.087448	0.365359	0.2424
psq	FBGN0263102	0.238587	-0.02977	0.396944	0.128589
CG5381	FBGN0032218	0.415593	0.102449	0.366579	0.053434
CG1513	FBGN0033463	0.161672	0.04233	0.195853	0.076511
CG8128	FBGN0030668	0.274185	0.131393	0.100544	-0.04225
bai	FBGN0045866	-0.20209	-0.04214	-0.28194	-0.12199
HnRNP-K	FBGN0267791	-0.0126	-0.06379	0.045572	-0.00562
cl	FBGN0000318	-0.13825	0.092422	-0.2432	-0.01253
NP15.6	FBGN0027785	-0.0391	0.003593	0.024885	0.067575
Nlp	FBGN0016685	-0.31083	0.034769	-0.42102	-0.07542
AnxB10	FBGN0000084	-0.17131	0.136647	-0.11782	0.190132
Itpr	FBGN0010051	0.396312	-0.075	0.544796	0.073482
CG14034	FBGN0250847	-0.05319	-0.27387	-0.13477	-0.35544
glo	FBGN0259139	0.079859	0.027839	0.137549	0.085529
Pfas	FBGN0000052	0.318761	-0.2081	0.887162	0.360301
sbr	FBGN0003321	0.084866	0.079595	0.123121	0.117849
psidin	FBGN0243511	-0.15484	-0.02988	-0.01464	0.110324
CG14297	FBGN0038655	-0.06917	0.059392	-0.1794	-0.05084
CG7164	FBGN0031946	0.032141	0.018051	-0.00974	-0.02383
Dhc36C	FBGN0013810	0.294336	0.018326	0.199762	-0.07625
Hers	FBGN0052529	0.773127	0.229766	0.725379	0.182018
CG31327	FBGN0051327	0.230863	0.025675	0.16083	-0.04436
CG7251	FBGN0031723	-0.0918	-0.036	-0.09316	-0.03736
Spase22-23	FBGN0039172	-0.25902	-0.03208	-0.216	0.010932
lid	FBGN0031759	0.349304	-0.09739	0.476454	0.029756
Usp30	FBGN0029819	0.082161	-0.03393	0.157768	0.041673
Nulp1	FBGN0027549	0.021032	-0.02751	0.00088	-0.04766
CG3961	FBGN0036821	-0.09684	-0.19261	0.073227	-0.02254
SelR	FBGN0267376	0.066468	-0.10315	0.303391	0.133776
eca	FBGN0069242	-0.32183	-0.07978	-0.21688	0.025178
Pura	FBGN0035802	0.37576	-0.01501	0.44468	0.053914
gzl	FBGN0037442	0.105608	0.042154	0.088747	0.025292
ms(2)34Fe	FBGN0261529	0.166409	-0.06294	0.184634	-0.04472
CG2680	FBGN0024995	0.112097	-0.00691	-0.31965	-0.43865
CG6380	FBGN0032632	-0.08521	0.00679	-0.23571	-0.14371
Mtk	FBGN0014865	-1.87308	0.210854	-1.7831	0.300834
Trf2	FBGN0261793	0.154537	0.058652	0.187273	0.091388
CG1143	FBGN0035359	-0.34369	0.148294	-0.34735	0.144634
CG2519	FBGN0037336	0.192277	-0.07035	0.410094	0.147468
Irc	FBGN0038465	0.117258	0.060927	0.088101	0.03177
lncRNA:CR42850	FBGN0262097	-0.16103	0.102925	0.083414	0.347367
Dif	FBGN0011274	0.414067	0.065486	0.497259	0.148678
Rbfox1	FBGN0052062	0.230036	0.028116	0.451909	0.249988
Ugt49B1	FBGN0027073	0.38085	0.061778	0.550269	0.231197
bur	FBGN0000239	0.214266	-0.01512	0.222882	-0.0065
MED26	FBGN0039923	0.17535	-0.03416	0.269128	0.05962
CCT5	FBGN0010621	-0.25521	0.053883	-0.29913	0.009966
Rim2	FBGN0031359	0.153997	-0.03066	0.110047	-0.07461
qtc	FBGN0028572	0.086646	-0.06551	0.134606	-0.01755
CG42672	FBGN0261554	0.250167	-0.0454	0.284828	-0.01074
p47	FBGN0033179	-0.0049	-0.10635	0.124614	0.02317
Coprox	FBGN0021944	-0.08994	0.091374	-0.25299	-0.07167
CG8093	FBGN0033999	0.503192	0.561753	0.690787	0.749347

CG30412	FBGN0050412	-0.07741	0.063605	-0.13846	0.002548
CG32686	FBGN0052686	0.120568	0.011896	0.195862	0.08719
form3	FBGN0053556	0.013073	-0.16283	0.247158	0.071258
RhoGAP1A	FBGN0025836	0.436782	0.184248	0.393894	0.14136
mib1	FBGN0263601	0.447084	0.093624	0.150491	-0.20297
ProtA	FBGN0013300	-0.0483	0.073573	-0.25219	-0.13032
mmy	FBGN0259749	0.03717	0.128006	-0.08101	0.009827
Top1	FBGN0004924	0.316712	0.018549	0.38162	0.083458
Arf102F	FBGN0013749	-0.20916	0.14586	-0.44447	-0.08945
lncRNA:CR43994	FBGN0264726	-0.06861	-0.06664	-0.54813	-0.54616
Cyp6a8	FBGN0013772	-0.79333	0.002557	-0.07113	0.724759
Stim	FBGN0045073	0.07223	0.052364	0.095368	0.075501
Rap1	FBGN0004636	0.308788	0.046377	0.345546	0.083136
CG9686	FBGN0030158	-0.3531	-0.181	0.17067	0.342775
Rim	FBGN0053547	0.49151	0.037131	0.821181	0.366802
CG16979	FBGN0036512	0.00388	-0.02417	-0.01231	-0.04036
CG13324	FBGN0033789	-0.29656	1.33604	-2.62172	-0.98912
Cdc42	FBGN0010341	0.139673	0.105277	-0.00071	-0.0351
eIF4E3	FBGN0265089	0.002344	0.096235	-0.12783	-0.03394
tyf	FBGN0026083	0.290171	0.081567	0.341998	0.133394
CG2964	FBGN0031462	0.013932	0.028522	0.05848	0.07307
CG15099	FBGN0034400	0.363409	0.094032	0.347972	0.078595
CG13442	FBGN0034546	-0.06383	0.038151	-0.09293	0.00906
Snp	FBGN0265192	-0.08652	-0.01142	-0.23994	-0.16484
CG34002	FBGN0054002	0.010311	-0.06094	-0.0221	-0.09335
nsl1	FBGN0262527	0.238767	-0.0468	0.333344	0.047775
Cyp4p3	FBGN0033397	-0.09948	0.623984	-0.72167	0.001791
CG7611	FBGN0037094	0.203248	0.103528	0.258411	0.158692
CG5886	FBGN0039379	-0.0183	-0.02908	0.026579	0.015803
CG1418	FBGN0033468	-0.02781	0.00191	-0.10673	-0.07701
CG3483	FBGN0035005	-0.07458	-0.02713	-0.13883	-0.09138
stau	FBGN0003520	0.142281	-0.02856	0.27907	0.108228
Prosap	FBGN0040752	0.380728	-0.04812	0.608783	0.179933
rgn	FBGN0261258	0.219887	0.095153	0.250472	0.125739
mex1	FBGN0004228	-0.01577	0.827922	-1.52098	-0.67729
Cyp4p1	FBGN0015037	0.013424	0.365254	-0.40854	-0.05671
CG4822	FBGN0031220	0.300898	0.073035	0.365792	0.137929
CG42795	FBGN0261928	0.366907	-0.14569	0.669252	0.156652
CG33290	FBGN0053290	-0.2883	-0.26709	-0.86169	-0.84048
CG15572	FBGN0029702	0.13409	0.068988	0.089188	0.024086
nej	FBGN0261617	0.259419	-0.01014	0.411139	0.141582
CG4887	FBGN0031318	0.135416	0.093588	0.351334	0.309506
CG8353	FBGN0032002	1.035779	1.438721	-0.45169	-0.04874
bif	FBGN0014133	0.158549	0.064843	0.186586	0.092881
vlc	FBGN0259978	0.073386	-0.02619	0.063307	-0.03627
CG11155	FBGN0039927	0.246003	0.007606	0.157586	-0.08081
prtp	FBGN0030329	-0.07885	-0.01167	0.084558	0.151742
CR44391	FBGN0265541	0.268497	-0.28797	-0.11033	-0.66679
CG30371	FBGN0050371	-0.33086	-0.06648	-0.68571	-0.42132
CG31104	FBGN0051104	0.730087	0.222756	-0.87251	-1.37984
CG4266	FBGN0034598	0.204866	-0.03845	0.380482	0.137162
RhoGAPp190	FBGN0026375	0.298527	-0.09704	0.436812	0.041249
Amun	FBGN0030328	0.318511	-0.04042	0.39082	0.031885
D1	FBGN0000412	-0.05753	-0.03827	0.01068	0.02994
CG5009	FBGN0027572	0.182746	-0.05281	0.232326	-0.00323
ABCA	FBGN0031170	0.377832	0.274452	0.363407	0.260027
egh	FBGN0001404	0.269349	0.101617	0.03199	-0.13574
CG8405	FBGN0034071	0.257138	0.014043	0.300202	0.057107
Spase25	FBGN0030306	-0.30648	-0.03602	-0.26309	0.007368
lute	FBGN0262871	0.202038	-0.00972	0.380989	0.169232
CG1572	FBGN0030309	-0.31617	0.17622	-0.57426	-0.08188
OstDelta	FBGN0034277	-0.16266	-0.12594	-0.07762	-0.0409
Pkd2	FBGN0041195	0.412751	0.055837	1.004425	0.64751
HERC2	FBGN0031107	0.319864	-0.01362	0.513355	0.179869
CYLD	FBGN0032210	0.053862	-0.02509	-0.01677	-0.09573
Mef2	FBGN0011656	0.254354	-0.05149	0.363378	0.057535
Ubc2	FBGN0015320	-0.11339	-0.06165	-0.03446	0.017284
Cyp6a9	FBGN0013771	0.907365	0.336798	0.329854	-0.24071
Nhe3	FBGN0028703	0.153657	0.033825	0.180325	0.060493

CG4239	FBGN0030745	0.189217	-0.3038	0.232758	-0.26026
flfl	FBGN0024555	0.196441	0.0164	0.329036	0.148995
bru2	FBGN0262475	0.310248	0.010379	0.370437	0.070568
CG6067	FBGN0029828	0.434029	-0.0084	0.729156	0.286724
CG7634	FBGN0037101	0.134574	-0.01853	0.002456	-0.15065
ssx	FBGN0024987	0.259941	0.070241	0.381936	0.192237
CG9997	FBGN0039597	0.038187	-0.00616	-0.19024	-0.23458
Cyp4d20	FBGN0035344	0.174954	-0.3665	1.669201	1.127745
Prosbeta3	FBGN0026380	-0.08075	0.023786	-0.09337	0.011168
CG14757	FBGN0033274	0.007303	-0.01006	0.118719	0.101358
C3G	FBGN0259228	0.316695	-0.00257	0.507373	0.18811
Rcd-1	FBGN0031047	0.125932	0.067388	0.200998	0.142454
Rpn5	FBGN0028690	-0.0029	0.079425	-0.09676	-0.01444
btsz	FBGN0266756	0.170152	-0.07624	0.197589	-0.04881
Efa6	FBGN0051158	0.271034	-0.02937	0.421447	0.121044
CG42808	FBGN0261990	-0.20218	-0.14567	-0.26679	-0.21028
PDZ-GEF	FBGN0265778	0.264619	-0.09904	0.264759	-0.0989
Ctl2	FBGN0039637	0.002041	0.048142	-0.22336	-0.17726
CG18609	FBGN0034382	-0.29819	-0.00677	-0.7687	-0.47728
sbb	FBGN0285917	0.344424	-0.0421	0.620215	0.233691
RhoL	FBGN0014380	0.015177	0.267285	-0.70235	-0.45024
nes	FBGN0026630	-0.27237	0.117133	-0.38918	0.000323
Cyt-c-d	FBGN0086907	-0.12987	-0.02266	-0.00126	0.105958
Sec13	FBGN0024509	-0.0722	-0.00876	-0.06875	-0.00531
CG31546	FBGN0051546	-0.16055	-0.01633	-0.13737	0.006852
Pop2	FBGN0036239	0.029162	-0.00152	0.08059	0.049905
mon2	FBGN0031985	0.355862	0.038298	0.336914	0.01935
SF1	FBGN0025571	0.030767	0.026902	0.13538	0.131515
tai	FBGN0041092	0.307072	-0.03946	0.516345	0.169811
CG11791	FBGN0039266	0.115078	-0.0335	0.101724	-0.04685
CG17387	FBGN0037276	0.212747	0.024423	0.142368	-0.04596
CG18231	FBGN0036796	-0.67286	0.005793	-1.21081	-0.53216
CG9005	FBGN0033638	0.202646	-0.09581	0.408422	0.109965
CG1275	FBGN0035321	-0.06997	-0.05119	0.025266	0.04404
Ufd1-like	FBGN0036136	-0.18397	0.075211	-0.35286	-0.09368
Rpt2	FBGN0015282	-0.05801	0.02191	-0.10529	-0.02537
dsx	FBGN0000504	0.399821	-0.20789	0.794678	0.186971
ND-13A	FBGN0031684	-0.11029	-0.01567	-0.14098	-0.04635
Pur-alpha	FBGN0022361	0.173169	0.063977	0.127781	0.018589
CG33970	FBGN0053970	-0.12533	-0.0171	-0.22836	-0.12014
Itgbn	FBGN0010395	0.090379	0.559512	-0.56338	-0.09424
Pcyt2	FBGN0035231	-0.04879	0.030212	-0.10873	-0.02973
CG17739	FBGN0033710	-0.04109	-0.2146	0.034523	-0.13899
CG30271	FBGN0050271	0.139057	-0.03392	0.182237	0.009256
Uggt	FBGN0014075	0.237915	-0.11295	0.408706	0.057837
CanB2	FBGN0015614	0.176984	-0.03246	0.258401	0.048958
Ork1	FBGN0017561	0.927901	-0.05132	1.406118	0.426892
CG31533	FBGN0051533	0.022142	0.033119	-0.0601	-0.04912
CG6304	FBGN0032624	-0.03697	-0.03766	-0.12687	-0.12757
CG8907	FBGN0038466	0.140717	0.569802	-0.8422	-0.41312
vih	FBGN0264848	0.152662	0.047111	0.057384	-0.04817
Sfp51E	FBGN0259966	-0.2672	-0.17043	-0.23526	-0.13849
Gclm	FBGN0046114	0.055301	0.019605	-0.01426	-0.04996
CG43120	FBGN0262580	0.018771	0.166119	-0.68075	-0.5334
CG31077	FBGN0051077	-0.36781	-0.14458	-0.87059	-0.64736
Alp5	FBGN0038845	0.343532	-0.05537	-0.26279	-0.6617
Sfp77F	FBGN0259972	-0.29225	0.016267	-0.58063	-0.27211
Prosalpha5	FBGN0016697	-0.22568	-0.06894	-0.22614	-0.06939
CG9896	FBGN0034808	0.243132	0.134756	0.04968	-0.0587
Myd88	FBGN0033402	0.298612	0.108189	0.439786	0.249363
Gpo2	FBGN0033190	0.010774	-0.02969	-0.04344	-0.08391
NKAIN	FBGN0085442	0.154176	-0.01786	0.07702	-0.09501
Kyat	FBGN0037955	0.064276	-0.12757	0.121512	-0.07033
CG42556	FBGN0260758	0.066499	0.01912	0.0393	-0.00808
Rad23	FBGN0026777	-0.06704	0.047523	-0.18003	-0.06546
Vps13	FBGN0033194	0.355126	-9.65E-05	0.382663	0.027441
Elys	FBGN0031052	-0.00639	-0.00996	0.042477	0.03891
CG34408	FBGN0085437	0.126148	-0.02709	0.424121	0.270883
Rbcn-3B	FBGN0023510	0.508576	0.068098	0.436474	-0.004

Prosbeta2	FBGN0023174	-0.10845	-0.01564	-0.08321	0.009606
Tnpo	FBGN0024921	0.543809	0.081604	0.367493	-0.09471
Cngl	FBGN0263257	0.711839	0.040382	0.935848	0.26439
CG33181	FBGN0053181	0.309965	0.084846	0.244547	0.019428
CG16989	FBGN0025621	0.173073	0.474392	0.276285	0.577604
ND-B17	FBGN0001989	-0.13065	-0.05735	-0.08871	-0.01541
TTLL1B	FBGN0052238	0.092407	0.05326	-0.15591	-0.19505
Vinc	FBGN0004397	0.111087	0.037409	0.198876	0.125198
CG11073	FBGN0034693	-0.28301	-0.06166	-0.19199	0.029359
CG6432	FBGN0039184	0.390201	0.189411	0.523379	0.32259
polo	FBGN0003124	-0.09767	-0.05759	-0.13043	-0.09035
CG11635	FBGN0033283	-0.18576	0.029347	-0.17268	0.042426
BOD1	FBGN0039560	0.00934	-0.04868	0.063833	0.005815
Pgm2b	FBGN0033969	0.210286	0.044153	0.145126	-0.02101
CG12780	FBGN0033301	-0.80232	0.190968	-1.71819	-0.7249
aop	FBGN0000097	0.825875	0.43037	-0.1587	-0.55421
GNBP3	FBGN0040321	0.266547	-0.19294	0.619556	0.160065
Spt6	FBGN0028982	0.067639	-0.14761	0.315431	0.100183
CG3107	FBGN0033005	0.284242	0.021758	0.161878	-0.10061
RhoBTB	FBGN0036980	0.190175	0.003795	0.196368	0.009988
Usp16-45	FBGN0029763	0.314984	0.085069	0.186262	-0.04365
Gbp3	FBGN0039031	0.443668	-0.41725	1.09358	0.232662
CG13928	FBGN0035246	0.170072	-0.14783	0.453536	0.135638
CG44247	FBGN0265182	0.396788	-0.10042	0.602878	0.105665
CG33170	FBGN0053170	-0.19859	-0.063	-0.23825	-0.10266
CG31007	FBGN0051007	0.079865	0.020338	0.12485	0.065323
CG12004	FBGN0035236	0.105508	0.109268	0.097716	0.101476
Rpn3	FBGN0261396	-0.02183	-0.08064	0.056545	-0.00227
CG9550	FBGN0031826	0.086674	0.060078	-0.02785	-0.05445
dj-1beta	FBGN0039802	0.315567	-0.00576	0.373961	0.052639
CG10508	FBGN0037060	0.446482	-0.00215	0.969685	0.521053
Mst27D	FBGN0051907	-0.00012	-0.00158	-0.07204	-0.07349
CG30350	FBGN0050350	-0.00675	-0.02572	-0.00046	-0.01943
lap	FBGN0086372	0.192718	-0.05289	0.264154	0.018551
Ate1	FBGN0025720	0.3446	0.073173	0.593175	0.321748
Cyp9b2	FBGN0015039	0.243382	0.011557	0.054459	-0.17737
Atg2	FBGN0044452	0.230804	0.035902	0.260031	0.065129
Glut4EF	FBGN0267336	0.184542	-0.08355	0.438561	0.170468
CG43168	FBGN0262787	0.636399	0.074238	0.332798	-0.22936
CG5973	FBGN0031914	-0.20486	-0.17699	0.100583	0.128454
CG30324	FBGN0050324	0.10179	-0.02938	0.170329	0.03916
east	FBGN0261954	0.506693	0.033818	0.717346	0.24447
CG10932	FBGN0029969	-0.34041	-0.57562	0.359518	0.12431
rut	FBGN0003301	0.479496	-0.01367	0.555071	0.061904
Eph	FBGN0025936	0.191526	-0.01089	0.162708	-0.03971
CG9044	FBGN0031752	0.190478	-0.08274	0.264966	-0.00825
Ube3a	FBGN0061469	0.029474	-0.04374	0.094434	0.021225
Rab14	FBGN0015791	0.039501	0.033461	0.051139	0.0451
Dscam1	FBGN0033159	0.899808	0.319499	0.356187	-0.22412
tzn	FBGN0037024	-0.15599	0.069303	-0.23829	-0.013
Cpn	FBGN0261714	0.048374	-0.22619	0.792893	0.518331
LRR	FBGN0033212	0.108009	0.094532	0.022624	0.009147
CG6569	FBGN0038909	-0.00626	0.063871	-0.02741	0.042722
CkIIbeta	FBGN0000259	0.157387	0.077899	0.195144	0.115656
Lkb1	FBGN0038167	0.008355	-0.04489	0.026601	-0.02665
BomS6	FBGN0040733	-0.60529	-0.69736	0.298103	0.206034
Nup98-96	FBGN0039120	0.187175	0.011361	0.165127	-0.01069
CG12158	FBGN0040775	-0.51858	-0.35268	-0.094	0.071902
tomboy20	FBGN0037828	-0.03003	0.060485	-0.13221	-0.04169
CG32694	FBGN0052694	-0.02567	-0.1656	0.437978	0.298046
Ac76E	FBGN0004852	0.39855	-0.02394	0.552209	0.129723
Mthfs	FBGN0085453	0.667723	-0.16808	1.177034	0.341227
lncRNA:CR44051	FBGN0264843	-0.11264	-0.20586	-1.63579	-1.72901
CG31140	FBGN0051140	0.733746	-0.12606	1.112712	0.252906
ArfGAP3	FBGN0037182	-0.02999	-0.03505	0.01527	0.010209
Snx3	FBGN0038065	-0.02278	-0.0053	0.048317	0.065802
CG31206	FBGN0051206	0.056495	0.013751	-0.08095	-0.12369
sun	FBGN0014391	-0.08144	-0.10328	-0.12073	-0.14257
Gba1a	FBGN0051148	-0.55349	0.246294	-1.11075	-0.31097

SMSr	FBGN0052380	-0.10557	0.006097	-0.10559	0.00608
Neurl4	FBGN0283503	0.149842	-0.26898	0.168661	-0.25016
CG34398	FBGN0085427	0.207518	-0.09411	0.34137	0.039737
CG15765	FBGN0029814	0.418096	-0.06473	0.497238	0.014408
ago	FBGN0041171	0.252393	0.004842	0.277202	0.029651
Stam	FBGN0027363	0.093888	0.119634	0.031227	0.056974
Set2	FBGN0030486	0.309222	0.014652	0.359348	0.064778
CG12025	FBGN0035285	0.105394	-0.1175	0.237602	0.014708
sol	FBGN0003464	0.125228	0.097656	0.121321	0.093749
ThrRS	FBGN0027081	0.095951	0.092256	-0.11488	-0.11857
Gs1l	FBGN0019982	0.158494	0.03975	0.051035	-0.06771
Nrg	FBGN0264975	0.077573	0.090267	0.096149	0.108842
ND-ASHI	FBGN0029888	0.013907	0.01214	0.050041	0.048273
CG15118	FBGN0034418	0.087848	0.026567	0.119104	0.057823
Dhc98D	FBGN0013813	-0.03526	-0.04802	0.384761	0.371993
CG31908	FBGN0051908	0.301931	-0.02285	0.360812	0.036026
CG8562	FBGN0035779	-0.53949	-0.22033	-0.04291	0.276254
Smox	FBGN0025800	0.144397	-0.03971	0.232598	0.048488
cDIP	FBGN0038865	1.867325	-0.233	2.37657	0.276241
Cep97	FBGN0031575	0.096715	0.02112	-0.05749	-0.13308
S6k	FBGN0283472	0.264514	-0.01184	0.402624	0.126269
CG32459	FBGN0052459	-0.12384	-0.08074	-0.1834	-0.14029
Pex19	FBGN0032407	-0.25236	-0.05422	-0.19558	0.002558
CR18217	FBGN0036646	-0.13455	0.054477	0.936391	1.125419
lncRNA:CR42767	FBGN0261835	-0.05106	0.003783	-0.11678	-0.06193
hdly	FBGN0038842	-0.5066	0.103632	-0.49959	0.110645
CG14609	FBGN0037483	0.019442	0.010974	-0.15304	-0.1615
CG34126	FBGN0083962	0.298436	-0.01766	0.596962	0.280861
maf-S	FBGN0034534	-0.49218	-0.11874	-0.35353	0.019913
CG1824	FBGN0030403	0.056444	0.005773	-0.44139	-0.49206
CG3494	FBGN0035008	-0.14884	-0.06728	0.017026	0.098594
numb	FBGN0002973	0.243999	0.173769	0.113747	0.043517
CG42748	FBGN0261802	0.232701	0.133776	0.092389	-0.00654
CG8369	FBGN0040532	-0.28796	-0.06812	-0.08874	0.131095
Rsbp15	FBGN0038000	-0.27508	-0.0592	-0.16033	0.055549
Srr	FBGN0037684	0.5163	-0.14013	0.703519	0.047085
CG7202	FBGN0037086	-0.06059	-0.01277	-0.01557	0.03226
akirin	FBGN0082598	0.112114	0.021788	0.127347	0.037021
Syt4	FBGN0028400	0.238359	-0.10155	0.478236	0.138325
EloB	FBGN0023212	0.046926	-0.12253	0.135053	-0.03441
Ref1	FBGN0010774	0.080555	-0.03308	0.163752	0.050117
rl	FBGN0003256	0.089865	0.149281	-0.11306	-0.05364
CG42813	FBGN0261995	-0.26977	-0.03888	-0.13819	0.092697
CG43061	FBGN0262363	2.299805	-0.42868	2.119263	-0.60922
CG3348	FBGN0040609	0.445777	0.084521	-0.26561	-0.62686
Gapvd1	FBGN0030286	0.247643	0.160563	0.360722	0.273642
CG10550	FBGN0039321	-0.44628	-0.07182	-0.34123	0.033234
eEF1delta	FBGN0032198	-0.07463	0.016669	-0.07597	0.015329
SP	FBGN0003034	-0.40723	-0.11868	-0.49149	-0.20294
Hlc	FBGN0001565	-0.01707	0.200852	0.020107	0.23803
CG4744	FBGN0033834	0.205945	-0.10565	0.23417	-0.07743
isopeptidase-T-3	FBGN0028372	0.174317	0.001916	0.088258	-0.08414
Mal-A5	FBGN0050359	0.217247	-0.10023	0.582188	0.264708
MFS9	FBGN0038799	0.273967	-0.09659	0.133478	-0.23708
lncRNA:CR40469	FBGN0058469	-0.15443	0.685737	-0.67285	0.167309
exd	FBGN0000611	0.234796	0.040022	0.194745	-2.98E-05
CG7530	FBGN0038256	0.187016	0.124705	0.314148	0.251837
NFAT	FBGN0030505	0.238528	-0.05777	0.483454	0.187155
hiw	FBGN0030600	0.551219	0.21363	0.347727	0.010138
ND-15	FBGN0031228	-0.01011	0.019584	-0.05305	-0.02335
NAAT1	FBGN0029762	0.042801	0.033314	-0.10109	-0.11058
CG1646	FBGN0039600	0.046863	0.026178	0.146231	0.125546
CG8818	FBGN0033751	0.072963	0.015571	0.076978	0.019585
dnr1	FBGN0260866	0.382178	0.031639	0.336674	-0.01387
retn	FBGN0004795	0.467699	-0.02314	0.546646	0.05581
CG32655	FBGN0052655	0.060209	0.017796	-0.01488	-0.05729
CG1673	FBGN0030482	0.033303	0.009924	0.30065	0.277272
CG5773	FBGN0034290	-0.03753	0.13119	0.035805	0.204526
Dek	FBGN0026533	0.028975	-0.0132	0.030339	-0.01184

Lam	FBGN0002525	0.225688	-0.0355	0.290113	0.028925
Nipsnap	FBGN0030724	0.139778	-0.0268	0.324418	0.157837
CG15824	FBGN0031292	0.361865	-0.034	0.486607	0.090743
CG17574	FBGN0033777	-0.09835	0.334463	-0.40903	0.023777
CG32572	FBGN0052572	0.109448	0.028992	0.132347	0.051891
bbg	FBGN0087007	0.284124	0.230153	0.192582	0.138612
dco	FBGN0002413	0.188036	0.101108	0.047738	-0.03919
CG7024	FBGN0029722	-0.04744	0.008381	-0.13089	-0.07506
Helz	FBGN0036451	0.379795	0.005957	0.596762	0.222924
CG18281	FBGN0037003	0.231558	-0.14775	0.149294	-0.23001
Cerk	FBGN0037315	-0.19275	-0.0575	-0.15121	-0.01595
Usp14	FBGN0032216	-0.11137	0.086009	-0.27227	-0.07489
SF2	FBGN0283477	-0.02917	0.061687	-0.12567	-0.03481
pigs	FBGN0029881	0.22934	0.128668	0.035468	-0.0652
Ars2	FBGN0033062	0.097183	-0.03037	0.217869	0.090314
CG7794	FBGN0038565	0.016306	0.018945	0.02683	0.029469
Der-1	FBGN0267972	-0.26087	-0.30587	0.205709	0.160704
nudE	FBGN0036059	-0.06725	-0.00727	-0.10363	-0.04366
Jon65Aii	FBGN0035666	-0.62683	0.503922	-0.75199	0.378768
CG42523	FBGN0260428	-0.11292	-0.05847	-0.08692	-0.03247
CG5885	FBGN0025700	-0.12905	0.000861	-0.18039	-0.05047
CG13700	FBGN0036785	0.079194	0.034344	0.005022	-0.03983
lncRNA:CR45965	FBGN0267627	0.169612	1.046739	0.736694	1.61382
Hel89B	FBGN0022787	0.200887	0.001963	0.190668	-0.00826
Rdl	FBGN0004244	0.603834	-0.06315	0.80988	0.142901
CG11771	FBGN0039252	0.098786	-0.02593	0.114643	-0.01007
CG5597	FBGN0034920	-0.17899	-0.09007	0.093563	0.182484
CG31688	FBGN0263355	0.265774	-0.34255	0.749207	0.140888
Myo31DF	FBGN0086347	0.15155	0.274304	-0.22604	-0.10329
CG30431	FBGN0050431	0.472216	-0.10336	0.773529	0.197954
PGRP-LC	FBGN0035976	0.190746	0.127996	0.258713	0.195962
CG6470	FBGN0030933	-0.10077	-0.05039	-0.03673	0.013644
Eato	FBGN0028539	0.237768	0.082205	0.131598	-0.02396
Best2	FBGN0035696	0.046609	-0.04014	0.135826	0.049081
CCT3	FBGN0015019	-0.12684	0.046209	-0.26666	-0.09362
Ntl	FBGN0267326	0.215082	0.023965	0.152973	-0.03814
prel	FBGN0033413	0.092131	-0.00536	0.108002	0.010506
DopEcR	FBGN0035538	0.364003	0.130437	0.516276	0.28271
CG42789	FBGN0261860	-0.36975	-0.1045	-0.13762	0.12763
CG17564	FBGN0032768	-0.02807	-0.06838	-0.00666	-0.04698
CG2747	FBGN0037541	0.217297	-0.01444	0.343775	0.11204
SCAP	FBGN0033052	0.219715	-0.03864	0.386136	0.127777
stc	FBGN0001978	0.026481	0.027685	0.066398	0.067601
Ptp61F	FBGN0267487	0.117966	0.072699	0.107633	0.062367
CG31224	FBGN0051224	0.144529	-0.17826	0.395318	0.072526
Hyccin	FBGN0034269	-0.76666	-0.27452	-0.82657	-0.33444
Surf4	FBGN0019925	-0.13818	-0.04436	-0.01402	0.079802
HmgD	FBGN0004362	-0.31099	-0.01426	-0.34229	-0.04556
Hmt4-20	FBGN0025639	0.43288	-0.09129	0.609374	0.085209
CG12268	FBGN0039131	0.099456	0.088627	-0.02215	-0.03298
Dgp-1	FBGN0027836	-0.15113	-0.03893	-0.04982	0.062379
Ten-m	FBGN0004449	0.355869	-0.01277	0.460819	0.092175
Fgop2	FBGN0031871	-0.0051	-0.05328	0.008132	-0.04005
CG5002	FBGN0034275	-0.3155	-0.10914	-0.55186	-0.3455
CysRS-m	FBGN0033900	0.030482	-0.02258	-0.00068	-0.05374
sau	FBGN0267378	-0.02423	0.072046	-0.08461	0.011665
chrb	FBGN0036165	0.205702	-0.05553	0.282955	0.021724
NimB2	FBGN0028543	0.137312	-0.0023	0.258408	0.118793
saturn	FBGN0052141	0.096899	-0.01707	-0.17103	-0.285
Irk3	FBGN0032706	-0.13073	0.076935	-0.71533	-0.50766
Naa15-16	FBGN0031020	0.08933	0.013697	0.08995	0.014318
OXA1L	FBGN0027615	-0.07877	-0.02151	-0.09812	-0.04087
Pi3K68D	FBGN0015278	0.221949	-0.0434	0.257685	-0.00767
CG7945	FBGN0036505	-0.08467	-0.0602	-0.10704	-0.08257
Nup153	FBGN0061200	0.305565	-0.01399	0.488715	0.169164
Kr-h2	FBGN0266449	0.045692	0.053409	0.005342	0.013059
EMC10	FBGN0052441	-0.19916	0.023251	-0.23991	-0.01749
CG32017	FBGN0052017	0.356205	0.037465	0.338747	0.020007
CG10492	FBGN0032748	0.114237	-0.01784	0.208127	0.076048

blanks	FBGN0035608	-0.26638	-0.02765	-0.51961	-0.28087
Smg6	FBGN0039260	-0.04435	0.051562	-0.08178	0.01413
Df31	FBGN0022893	-0.23591	0.007816	-0.34373	-0.1
Stoml2	FBGN0034936	-0.05277	0.045583	-0.18744	-0.08909
app	FBGN0260941	0.152335	-0.06941	0.148742	-0.07301
Dyb	FBGN0033739	0.304484	-0.07248	0.500999	0.124036
Chchd3	FBGN0010808	-0.08351	-0.01134	0.138255	0.210425
CkIIalpha	FBGN0264492	0.000755	0.071644	-0.04039	0.030495
CG15111	FBGN0034419	-0.13142	-0.00091	-0.18926	-0.05874
Rsph3	FBGN0052392	-0.14302	-0.01435	-0.10082	0.027845
Nf1	FBGN0015269	0.222472	-0.13188	0.540286	0.185933
CG7557	FBGN0036159	-0.00307	0.025574	-0.03858	-0.00993
Akt1	FBGN0010379	0.142402	0.022054	0.142502	0.022154
CG12024	FBGN0035283	0.48689	0.044833	0.493899	0.051842
7B2	FBGN0041707	-0.26075	-0.16263	-0.14315	-0.04502
CG7656	FBGN0036516	-0.03265	0.07289	-0.05078	0.054759
Dera	FBGN0033735	-0.04772	0.011784	-0.02281	0.036691
cv-c	FBGN0285955	0.456788	0.105277	0.300279	-0.05123
Epg5	FBGN0038651	0.542473	0.249316	0.405888	0.112731
ND-B14.5B	FBGN0031505	-0.04009	-0.02954	0.020433	0.030984
CG43638	FBGN0263647	-0.03281	0.024226	-0.10568	-0.04864
CG14823	FBGN0035734	0.267956	-0.26851	1.097994	0.561528
Nep4	FBGN0038818	0.058409	-0.03812	0.23291	0.136384
Reepl1	FBGN0030313	0.476678	0.433343	-0.13373	-0.17707
CG13284	FBGN0032614	0.199994	0.083086	0.006712	-0.1102
CG17816	FBGN0037525	0.497713	-0.03513	0.517918	-0.01492
Hk	FBGN0263220	0.404386	-0.16122	0.667326	0.101718
CG8963	FBGN0034181	0.05096	0.025488	0.073696	0.048224
Plap	FBGN0024314	0.014841	-0.00357	0.037655	0.019244
CG42613	FBGN0261262	0.271136	0.080037	0.546502	0.355403
Fur2	FBGN0004598	0.269892	-0.05113	0.452166	0.131144
PPP1R15	FBGN0034948	-0.08783	0.069686	-0.08765	0.069858
Ziz	FBGN0260486	0.252962	-0.03846	0.314027	0.022609
nolo	FBGN0051619	0.346367	-0.0727	0.556669	0.137605
yata	FBGN0260990	0.143328	-0.0453	0.240425	0.051798
CG15742	FBGN0030462	-1.20198	0.145812	0.292292	1.64008
CG42855	FBGN0262102	-0.042	0.127994	-0.10316	0.066841
Su(dx)	FBGN0003557	0.281185	0.094923	0.233898	0.047636
CR33319	FBGN0053319	0.409287	0.667508	-0.33028	-0.07206
CG33664	FBGN0053664	-0.44905	-0.23359	-0.40233	-0.18686
Cyp6a17	FBGN0015714	-0.21147	-0.11411	-0.47461	-0.37725
CG8230	FBGN0027607	0.081603	-0.05362	0.049426	-0.08579
CG6707	FBGN0036058	0.224753	0.151327	0.158641	0.085215
CG18171	FBGN0035262	0.182662	0.031357	0.059517	-0.09179
CG30116	FBGN0028496	0.553141	-0.10615	0.804653	0.145363
mEFTu2	FBGN0033184	-0.10287	-0.04895	-0.06537	-0.01145
Pde11	FBGN0085370	0.196507	0.096112	0.157546	0.057151
Spg7	FBGN0024992	-0.04941	0.03476	-0.02226	0.061909
Nep6	FBGN0030425	0.455238	-0.45971	1.010715	0.095765
CG6149	FBGN0036158	-0.1626	0.070915	-0.12832	0.105199
CG6527	FBGN0036085	-0.11624	-0.01114	-0.27385	-0.16875
CG9393	FBGN0037710	-0.02865	0.085787	-0.13603	-0.02159
Agpat4	FBGN0036622	-0.08472	0.314291	-0.65888	-0.25987
sktl	FBGN0016984	0.233455	0.176	0.21218	0.154724
Nak	FBGN0015772	0.119667	-0.13656	0.481903	0.225672
CG1124	FBGN0037290	-0.50043	0.06701	-0.77041	-0.20296
CG43102	FBGN0262562	0.512641	-0.01182	0.72951	0.205044
mmd	FBGN0259110	0.514818	-0.07613	0.780325	0.189381
CG14739	FBGN0037987	-0.17858	-0.04081	-0.14739	-0.00962
wry	FBGN0051665	0.508052	-0.05935	0.568277	0.000875
Rpt5	FBGN0028684	0.003389	0.114983	-0.12138	-0.00978
Golgin245	FBGN0034854	0.20591	-0.00083	0.308676	0.101938
CG42637	FBGN0261360	0.191278	0.060649	0.275014	0.144385
CG1815	FBGN0039863	0.336794	-0.0343	0.41004	0.038943
CG3558	FBGN0025681	0.196767	0.056221	0.159768	0.019222
CG44325	FBGN0265413	-0.3237	0.131836	-0.46209	-0.00656
CG17544	FBGN0032775	0.083068	0.289551	-0.33933	-0.13285
CG7970	FBGN0035252	-0.01296	-0.01564	-0.26216	-0.26484
Sema1b	FBGN0016059	0.141828	0.03585	0.100908	-0.00507

CG9911	FBGN0030734	-0.07751	-0.0269	-0.14231	-0.09171
Gk1	FBGN0025592	0.162373	0.002647	0.206041	0.046315
CG9436	FBGN0033101	-0.20411	-0.20326	0.249496	0.250343
lili	FBGN0027539	0.250457	0.027861	0.302403	0.079807
Rpt3	FBGN0028686	0.169161	0.103514	0.07888	0.013234
Obp56f	FBGN0043533	-0.17241	-0.14463	-0.40393	-0.37616
lncRNA:CR43196	FBGN0262825	1.097885	-0.0877	0.749348	-0.43624
CG30156	FBGN0050156	-0.01032	0.024869	-0.0182	0.01699
CG4230	FBGN0031683	0.016647	-0.05379	0.106753	0.036318
CG32106	FBGN0052106	0.517356	0.036975	0.510896	0.030514
emb	FBGN0020497	0.245738	0.030079	0.262292	0.046633
CG30278	FBGN0050278	0.035955	-0.00566	0.014517	-0.0271
CG31459	FBGN0051459	0.066568	0.089538	-0.1493	-0.12633
CG4213	FBGN0031251	0.440763	0.048601	0.371931	-0.02023
ScpX	FBGN0015808	0.025586	-0.10862	0.135346	0.001136
Cdc27	FBGN0012058	0.098551	-0.04931	0.110183	-0.03768
spoon	FBGN0263987	0.296949	0.018185	0.303326	0.024562
CG31998	FBGN0051998	0.267257	-0.13681	0.456321	0.052255
jdp	FBGN0027654	0.245766	-0.00821	0.258527	0.004554
tok	FBGN0004885	0.295782	-0.0444	0.371936	0.031753
CG4783	FBGN0038756	0.197256	0.362388	0.208876	0.374009
rngo	FBGN0030753	0.107318	-0.05695	0.172962	0.008698
CG8838	FBGN0031526	0.087032	0.014779	0.11872	0.046467
CG31937	FBGN0031360	0.104737	-0.13289	0.25356	0.01593
lwr	FBGN0010602	-0.15064	0.04093	-0.14516	0.04641
CG6028	FBGN0038924	0.228646	0.007015	0.199305	-0.02233
CG6565	FBGN0032513	0.039262	0.00851	-0.04654	-0.07729
Gyc76C	FBGN0266136	0.187039	0.055979	0.273774	0.142713
CG18131	FBGN0031343	0.266272	-0.06784	0.272632	-0.06148
CG10621	FBGN0032726	-0.02737	-0.4007	1.00221	0.628873
XNP	FBGN0039338	0.195875	-0.02181	0.320013	0.102329
CG34129	FBGN0083965	-0.20428	-0.16974	0.00699	0.04153
Shrm	FBGN0085408	0.447243	0.234596	0.237825	0.025178
CG13364	FBGN0026879	-0.22498	0.07238	-0.34169	-0.04433
CG8677	FBGN0026577	-0.22264	-0.00385	-0.02009	0.1987
ND-B14.5A	FBGN0025839	-0.1366	-0.04071	-0.03896	0.056928
CG34203	FBGN0085232	-0.61341	-0.15061	0.175678	0.638481
Sh3beta	FBGN0035772	0.190381	0.145743	0.053426	0.008788
CG5080	FBGN0031313	0.067388	-0.04513	0.326578	0.214057
Pdxk	FBGN0085484	0.045043	0.030859	-0.04567	-0.05985
FucTB	FBGN0032117	-0.02153	0.004924	-0.11617	-0.08972
CG31784	FBGN0051784	0.242806	0.021609	-0.04911	-0.2703
CG33125	FBGN0053125	0.255032	-0.05146	0.302013	-0.00448
CG4294	FBGN0034742	0.383649	-0.01529	0.596541	0.197599
CCT2	FBGN0030086	-0.00609	0.074964	-0.02908	0.051979
Arp1	FBGN0011745	-0.17214	0.126791	-0.33905	-0.04012
mop	FBGN0036448	0.237497	0.095868	0.35239	0.21076
AttA	FBGN0012042	-2.28309	0.108221	-2.41917	-0.02786
CG12054	FBGN0039831	0.419907	0.016481	0.531619	0.128193
CG10589	FBGN0037035	-0.07666	0.022245	-0.21074	-0.11184
cno	FBGN0259212	0.375773	-0.03035	0.600995	0.194869
msk	FBGN0026252	-0.00573	0.016914	0.104786	0.127435
Stip1	FBGN0024352	-0.03288	-0.03922	-0.16378	-0.17012
mamo	FBGN0267033	0.437358	0.035298	0.564398	0.162337
Pif2	FBGN0046873	-0.00785	0.070975	0.031253	0.11008
CG16721	FBGN0029820	0.053797	-0.0074	0.136298	0.0751
Asap	FBGN0050372	0.217426	0.040619	0.346386	0.169579
Jheh3	FBGN0034406	-0.13102	0.203766	-0.34036	-0.00557
CG5819	FBGN0034717	0.301712	0.157689	0.06417	-0.07985
Iswi	FBGN0011604	0.138551	-0.05862	0.152394	-0.04478
Agpat2	FBGN0026718	0.187082	0.054839	-0.15976	-0.292
CG9664	FBGN0031515	0.456483	0.480474	0.082847	0.106839
Sfp65A	FBGN0259969	-0.1627	-0.07326	-0.38395	-0.29451
Ag5r2	FBGN0020508	0.156648	0.805269	-1.01969	-0.37106
deltaCOP	FBGN0028969	-0.03212	-0.04454	-0.0216	-0.03402
P58IPK	FBGN0037718	0.053948	-0.10994	0.241323	0.077436
Hmt-1	FBGN0038376	0.078502	0.046159	0.074769	0.042425
Vps4	FBGN0283469	-0.07622	0.033187	-0.0655	0.043913
SkpA	FBGN0025637	0.001419	0.039822	-0.01588	0.022525

swm	FBGN0002044	0.217913	0.039953	0.272576	0.094616
Fkbp59	FBGN0029174	-0.08535	-0.04419	-0.15203	-0.11087
Chs2	FBGN0029091	0.621399	0.066181	0.090954	-0.46426
ZAP3	FBGN0052685	0.239869	-0.03281	0.412876	0.140195
Eip93F	FBGN0264490	0.415344	0.032284	0.452145	0.069085
CG3829	FBGN0035091	0.443915	-0.04819	0.726897	0.234788
skd	FBGN0003415	0.331234	-0.07531	0.601288	0.194747
tou	FBGN0033636	0.312773	0.015362	0.438074	0.140662
Nha1	FBGN0031865	0.041242	0.112573	0.016551	0.087883
CG5555	FBGN0038686	-0.04692	-0.03469	-0.10823	-0.09601
Usp32	FBGN0036913	0.141986	0.03318	0.188582	0.079776
RhoGAP68F	FBGN0036257	0.239742	0.141772	0.206419	0.108449
CG9812	FBGN0034860	0.081903	-0.13756	-0.24489	-0.46435
CG2113	FBGN0035384	-0.11038	0.020217	-0.16818	-0.03758
Tsp42Ec	FBGN0033124	-0.01256	0.652374	-0.93003	-0.26509
CG3610	FBGN0038266	0.249214	0.006932	0.138033	-0.10425
CG31817	FBGN0028899	0.310688	-0.09034	0.561277	0.160245
CG18234	FBGN0265268	0.092987	-0.04551	0.029751	-0.10875
CG9581	FBGN0031093	-0.002	0.039377	0.128838	0.170213
PH4alphaNE3	FBGN0051017	-0.31651	-0.07165	-0.45322	-0.20836
CG11790	FBGN0039265	-0.22245	-0.13736	-0.53386	-0.44878
CG12069	FBGN0039796	-0.15658	0.119068	-0.20232	0.073326
htt	FBGN0027655	-0.02522	-0.1696	0.321437	0.177061
CG9008	FBGN0028540	0.232984	0.012933	0.199331	-0.02072
Mtch	FBGN0027786	-0.04959	-0.04227	-0.05468	-0.04735
CG10063	FBGN0035727	-0.26202	-0.04317	-0.37201	-0.15315
sxc	FBGN0261403	0.081486	0.018133	0.121834	0.058481
CG7492	FBGN0035807	0.009136	0.143048	0.005171	0.139083
CG12963	FBGN0034031	0.068809	0.113543	-0.16017	-0.11543
CG3356	FBGN0034989	0.108981	-0.06171	0.259336	0.088645
CG5280	FBGN0035952	-0.09058	-0.0104	-0.11387	-0.0337
CG3376	FBGN0034997	0.582059	0.374226	0.579344	0.371512
CCT6	FBGN0027329	0.041925	0.05583	-0.04245	-0.02855
Uro	FBGN0003961	-0.2366	0.255079	-0.43432	0.057356
Act88F	FBGN0000047	-0.31003	-0.11472	-0.37711	-0.1818
CG31624	FBGN0051624	-0.02596	-0.01171	0.079639	0.093887
Thd1	FBGN0026869	0.454772	0.035268	0.532022	0.112518
myo	FBGN0026199	0.285235	0.109715	0.285596	0.110076
Prosbeta5R1	FBGN0034842	-0.13767	0.100429	-0.14234	0.095768
Tina-1	FBGN0035083	-0.04783	-0.02448	-0.33961	-0.31626
CG6454	FBGN0039187	0.189407	0.018536	0.296762	0.125891
CG7694	FBGN0038627	0.083714	0.234802	-0.65481	-0.50372
CCT8	FBGN0284436	-0.17371	-0.0159	-0.18105	-0.02324
REPTOR	FBGN0039209	0.29093	0.111473	0.327052	0.147595
elm	FBGN0037358	-0.03426	0.023328	-0.07584	-0.01826
CG2291	FBGN0033279	-0.04719	0.093285	-0.04367	0.096801
Glg1	FBGN0264561	0.054625	0.019389	-0.23756	-0.27279
CG13243	FBGN0028903	0.02377	-0.01329	0.021806	-0.01525
DIP2	FBGN0024806	0.309692	0.044048	0.32642	0.060776
Mpi	FBGN0286506	-0.02708	-0.03158	-0.02208	-0.02658
Arp53D	FBGN0011743	-0.11697	-0.00889	-0.12169	-0.01361
Ptp10D	FBGN0004370	0.307269	0.080027	0.444533	0.217291
Nepl21	FBGN0027578	0.525046	-0.18181	0.771801	0.064941
CCT1	FBGN0003676	-0.16655	0.093097	-0.34462	-0.08497
eIF3j	FBGN0027619	-0.16146	-0.04927	-0.07378	0.038412
Ciao1	FBGN0033972	0.405819	0.091072	0.523704	0.208957
para	FBGN0285944	0.552445	-0.15314	0.873889	0.168304
chn	FBGN0015371	0.419185	-0.04635	0.680246	0.214711
egl	FBGN0000562	0.324672	0.039986	0.25329	-0.0314
Rpt6	FBGN0020369	-0.03324	0.057885	-0.06656	0.024568
me31B	FBGN0004419	-0.04561	0.010886	-0.15475	-0.09826
Glut1	FBGN0264574	0.158185	0.045168	0.351829	0.238812
Prosbeta4	FBGN0032596	-0.15039	0.088322	-0.29763	-0.05892
Prosalpha4	FBGN0004066	-0.07029	0.007773	-0.0546	0.02346
CG15177	FBGN0037461	-0.18529	-0.03155	-0.31549	-0.16175
CG34241	FBGN0250825	-0.17487	0.082544	-0.37398	-0.11656
CG16894	FBGN0034483	-0.02821	0.032044	-0.16181	-0.10156
Dis3l2	FBGN0035111	0.135523	-0.08919	-0.19895	-0.42367
mv	FBGN0265988	0.48875	-0.0106	0.71446	0.215108

fusl	FBGN0031702	0.22327	-0.193	0.374362	-0.04191
CG6059	FBGN0039491	-0.09386	-0.08011	0.105211	0.118955
CG14964	FBGN0035410	0.399506	-0.05755	0.726771	0.269717
CG4297	FBGN0031258	0.51745	-0.00105	0.685852	0.16735
CG3165	FBGN0031484	-0.48614	0.2778	-1.02238	-0.25843
CNT1	FBGN0033371	0.270636	0.014692	0.095937	-0.16001
CG10934	FBGN0034263	0.028995	-0.05625	-0.01847	-0.10371
NTPase	FBGN0024947	-0.03544	0.072186	-0.13994	-0.03232
Pex3	FBGN0036484	0.186498	0.175229	0.131079	0.11981
CG17475	FBGN0038481	-0.06935	0.21558	-0.3161	-0.03117
CG30344	FBGN0050344	-0.08873	0.103553	-0.27026	-0.07798
amon	FBGN0023179	0.020272	-0.03117	0.080569	0.029129
Pgant9	FBGN0050463	0.138973	-0.04481	0.202724	0.018939
CG8032	FBGN0037606	0.735766	0.107757	0.112591	-0.51542
Ist1	FBGN0035715	-0.08435	0.265388	-0.27773	0.072007
CG13733	FBGN0036729	-0.06879	0.009419	-0.03173	0.046479
Ubc7	FBGN0267384	-0.10654	0.04463	-0.06807	0.083104
CG11122	FBGN0030266	0.422635	-0.02596	0.628489	0.179899
alpha-Cat	FBGN0010215	0.202114	0.098489	0.051544	-0.05208
UQCR-11	FBGN0260008	0.001381	0.024554	-0.17592	-0.15275
lncRNA:CR43157	FBGN0262687	0.093957	0.17971	-0.32007	-0.23432
CG16719	FBGN0036029	-0.02365	-0.03155	-0.08653	-0.09442
CG6891	FBGN0030955	0.173364	0.318893	-0.24512	-0.09959
Unc-76	FBGN0040395	0.223737	0.01945	0.285265	0.080978
betaTub97EF	FBGN0003890	-0.03574	-0.01225	0.002653	0.026147
TpnC41C	FBGN0013348	0.176494	0.102015	-0.06282	-0.1373
CG4968	FBGN0032214	-0.13796	-0.0008	-0.21717	-0.08001
CG18507	FBGN0028527	-0.22756	-0.08306	-0.16774	-0.02324
MAPk-Ak2	FBGN0013987	0.07422	0.141203	-0.13535	-0.06837
Mtl	FBGN0039532	0.098117	0.10248	0.064256	0.068619
Mapmodulin	FBGN0034282	-0.01048	0.074077	0.021993	0.106551
corto	FBGN0010313	0.453249	0.046267	0.461676	0.054693
GNBP-like3	FBGN0034511	-0.56604	-0.35984	0.141796	0.347999
olf186-F	FBGN0041585	0.223347	0.049874	0.19479	0.021317
stas	FBGN0030850	0.235866	0.421255	0.120811	0.3062
CG9391	FBGN0037063	-0.02471	-0.04038	-0.00392	-0.01958
emc	FBGN0000575	0.289166	-0.00754	0.435892	0.139182
trx	FBGN0003862	0.314414	-0.03654	0.48497	0.134021
PsGEF	FBGN0264598	0.472341	-0.11075	0.627511	0.044423
how	FBGN0264491	0.192382	0.070408	0.219444	0.09747
e(y)3	FBGN0087008	0.199468	-0.03843	0.34481	0.106916
eIF3k	FBGN0034654	-0.18726	-0.0695	-0.10885	0.008916
gammaCOP	FBGN0028968	0.050882	0.071071	0.062241	0.08243
Tango5	FBGN0052675	0.080839	0.017525	0.101831	0.038517
t	FBGN0086367	0.383616	-0.13063	0.465213	-0.04903
RtGEF	FBGN0015803	0.279602	0.012168	0.477747	0.210312
Eglp1	FBGN0034882	-0.10417	-0.08668	-0.32563	-0.30814
CG11899	FBGN0014427	0.021527	-0.01586	0.029522	-0.00787
Pp2B-14D	FBGN0011826	0.393183	0.033104	0.4751	0.115021
CG5787	FBGN0032454	0.178337	-0.01858	0.182194	-0.01472
Rab3	FBGN0005586	0.302695	-0.06078	0.422564	0.059091
TRAM	FBGN0040340	-0.14591	-0.19106	0.066462	0.021311
CG5390	FBGN0032213	-0.08609	-0.14769	0.068916	0.007314
CG13631	FBGN0040600	-0.05951	0.153591	0.029665	0.242767
Usp8	FBGN0038862	0.214241	0.004408	0.091427	-0.11841
CG10862	FBGN0035455	-0.19073	-0.03755	-0.22029	-0.06712
Psi	FBGN0014870	0.204568	-0.08894	0.296969	0.00346
Cyp28d1	FBGN0031689	-0.21552	-0.04454	-0.34148	-0.1705
CG42258	FBGN0259143	0.113943	-0.06366	0.264177	0.08657
CG2991	FBGN0031474	0.19452	0.036677	0.324841	0.166998
CG45263	FBGN0266801	0.203654	-0.06444	0.281455	0.013366
Fst	FBGN0037724	1.893024	1.704328	0.380288	0.191592
REG	FBGN0029133	-0.11029	0.009	-0.12138	-0.00209
CG4161	FBGN0028892	0.054248	0.008376	-0.07429	-0.12016
FucTD	FBGN0035217	0.057885	-0.05864	0.151471	0.034943
CG17010	FBGN0032424	-0.01891	-0.00293	0.004665	0.020648
Src42A	FBGN0264959	0.244714	0.08236	0.327	0.164646
Taf1	FBGN0010355	0.146261	-0.05801	0.300601	0.096331
Clic	FBGN0030529	0.099092	0.234239	-0.23337	-0.09822

CG16756	FBGN0029765	0.423121	0.033315	0.60847	0.218664
CG34457	FBGN0085486	-0.29569	-0.0164	-0.35552	-0.07623
Abl	FBGN0000017	0.260457	-0.12185	0.544619	0.162315
papi	FBGN0031401	-0.1204	-0.03174	-0.1034	-0.01474
Rheb	FBGN0041191	0.104113	0.090066	0.117993	0.103946
CG4995	FBGN0032219	-0.03816	0.024623	-0.1249	-0.06212
Rtf1	FBGN0034722	0.036649	0.004163	0.092238	0.059752
CG31373	FBGN0051373	0.192494	0.110595	-0.10496	-0.18686
CG13280	FBGN0032609	-0.01013	0.037291	-0.06435	-0.01694
CG32809	FBGN0023531	0.587947	-0.05385	0.919126	0.277326
kel	FBGN0001301	0.518758	0.078109	0.487238	0.046589
Fatp2	FBGN0265187	0.072957	-0.01087	0.23974	0.155911
Idgf1	FBGN0020416	-0.17429	0.172763	-0.3872	-0.04014
CG31245	FBGN0051245	-0.3795	-0.07228	-0.30161	0.005617
janA	FBGN0001280	-0.08767	0.014841	-0.11092	-0.00841
CG6481	FBGN0030936	-0.09152	0.010905	-0.1573	-0.05487
CG6180	FBGN0032453	-0.02561	-0.13327	0.012031	-0.09562
BicD	FBGN0000183	0.255105	0.109882	0.238711	0.093488
Nrx-IV	FBGN0013997	0.101825	-0.1174	0.235252	0.016032
CG1971	FBGN0039881	-0.08764	0.032917	-0.1992	-0.07865
CG31473	FBGN0051473	-0.13605	-0.03829	-0.13842	-0.04066
CG1486	FBGN0031174	0.114622	0.05866	0.110088	0.054127
Mtp	FBGN0266369	0.523162	-0.14195	0.957871	0.292762
CG8520	FBGN0033734	0.037957	0.033729	0.005849	0.001621
nonC	FBGN0263968	0.161535	-0.1051	0.341266	0.074635
CG11857	FBGN0039303	-0.04777	0.017023	-0.08263	-0.01784
vib	FBGN0267975	0.114278	0.100782	0.165667	0.152171
CG6329	FBGN0033872	0.314976	-0.03755	0.384957	0.032433
Sec31	FBGN0033339	0.215969	-0.02387	0.287064	0.047222
hzg	FBGN0036556	0.353392	0.075181	0.26987	-0.00834
Arp2	FBGN0011742	0.025699	0.166821	-0.15194	-0.01082
CG11841	FBGN0039628	0.215363	0.216154	-0.172	-0.17121
geko	FBGN0020300	0.158155	0.158801	0.256978	0.257624
AP-1-2beta	FBGN0010380	0.055901	0.070376	0.135397	0.149872
CG5043	FBGN0032636	-0.11752	-0.07027	-0.12354	-0.07629
Neurochondrin	FBGN0037447	-0.01816	-0.12808	0.014778	-0.09514
Socs16D	FBGN0030869	0.382608	0.005168	0.437327	0.059888
RpL22-like	FBGN0034837	-0.39708	-0.11209	-0.65772	-0.37273
Grx1t	FBGN0034658	-0.08716	-0.00709	-0.11932	-0.03925
l(3)L1231	FBGN0086686	0.337753	0.04492	0.439315	0.146481
HDAC4	FBGN0041210	0.259899	-0.03018	0.375316	0.08524
CG5697	FBGN0038846	-0.23582	-0.36282	-0.57401	-0.70101
CG6766	FBGN0032398	-0.12617	0.007827	-0.1984	-0.0644
CG43394	FBGN0263256	0.295911	0.342822	-0.44115	-0.39424
CG5958	FBGN0031913	0.229461	0.064729	0.154251	-0.01048
CG9399	FBGN0037715	0.030374	0.01249	0.116042	0.098158
CG40045	FBGN0058045	-0.10846	0.095896	-0.27945	-0.0751
Pvr	FBGN0032006	0.188765	0.083228	0.066288	-0.03925
CG45765	FBGN0267412	-0.30976	-0.09922	-0.16168	0.048865
CG33189	FBGN0053189	-0.20145	-0.0096	-0.15104	0.040806
Ric	FBGN0265605	0.11795	-0.02477	0.221245	0.078523
CG18336	FBGN0040763	0.005166	-0.04343	-0.04219	-0.09078
CG41099	FBGN0039955	0.192977	0.188121	0.078638	0.073783
BuGZ	FBGN0032600	0.300021	-0.00329	0.411813	0.108497
ana1	FBGN0262167	0.267946	0.018577	0.3645	0.115131
Roc1a	FBGN0025638	-0.16869	0.032687	-0.19124	0.010132
Atg17	FBGN0037363	0.286779	-0.06134	0.457979	0.109855
poly	FBGN0086371	-0.12698	0.074714	-0.16437	0.037326
CG14658	FBGN0037283	-0.07683	0.031733	0.058222	0.166781
CG7848	FBGN0034127	0.068716	-0.02991	0.002155	-0.09647
B4	FBGN0023407	0.308571	-0.00189	0.445725	0.135263
lncRNA:CR32835	FBGN0052835	0.19774	0.213315	-0.09084	-0.07527
Gip	FBGN0011770	0.262924	-0.10318	0.238013	-0.12809
stj	FBGN0261041	0.247194	-0.1205	0.327081	-0.04061
brm	FBGN0000212	0.225613	0.069107	0.359273	0.202768
wa-cup	FBGN0037502	0.07657	-0.12673	0.040563	-0.16274
RanBP3	FBGN0039110	-0.22285	-0.08671	-0.12302	0.013127
Prosalpha6	FBGN0250843	-0.02039	0.106026	-0.18816	-0.06174
Ipp	FBGN0016672	-0.32967	-0.22078	-0.23704	-0.12815

Ugt302C1	FBGN0040259	0.243423	0.145182	-0.26268	-0.36092
Syx7	FBGN0267849	0.050594	-0.00865	0.071398	0.01215
beta-Man	FBGN0037215	0.194228	-0.00929	0.170928	-0.03259
foi	FBGN0024236	-0.01053	-0.0185	-0.0221	-0.03008
CG4896	FBGN0031319	0.081606	0.021588	0.113697	0.053679
Pfdn5	FBGN0038976	-0.27673	0.010953	-0.41265	-0.12496
CG9702	FBGN0039787	-0.10505	-0.08847	-0.06054	-0.04396
Klp98A	FBGN0004387	0.242304	0.135451	0.27796	0.171107
Hcf	FBGN0039904	0.167056	-0.05592	0.202146	-0.02083
mam	FBGN0002643	0.45945	-0.02918	0.718687	0.230056
CG33287	FBGN0053287	0.429071	-0.05621	0.474313	-0.01097
CG13747	FBGN0033364	0.085098	0.030102	-0.00682	-0.06182
CG12679	FBGN0031103	-0.41812	-0.13882	-0.24548	0.033819
lncRNA:CR32657	FBGN0052657	-0.16346	0.020179	-0.21085	-0.02722
CG10116	FBGN0036367	-0.03243	0.325192	-0.79641	-0.43879
CG9467	FBGN0037758	0.160906	-0.15372	0.374046	0.059419
CG31802	FBGN0051802	0.056023	-0.00991	-0.05443	-0.12037
Fum4	FBGN0051874	0.009189	-0.00061	-0.12156	-0.13137
CG5793	FBGN0038858	0.13629	0.142768	0.488622	0.495099
Syx5	FBGN0011708	-0.04414	-0.08721	0.034145	-0.00893
Rbp	FBGN0262483	0.638568	-0.12235	0.904024	0.143109
CG43254	FBGN0262899	-0.25225	-0.07424	-0.22087	-0.04286
CG15208	FBGN0030247	0.023984	-0.04251	0.055455	-0.01104
Sox102F	FBGN0039938	0.535188	-0.08681	0.874897	0.252896
Slc45-1	FBGN0035968	0.543133	0.024645	0.332378	-0.18611
Top2	FBGN0284220	-0.10558	-0.0223	-0.05464	0.028638
Adck5	FBGN0036142	-0.1199	0.035904	-0.22916	-0.07335
ClC-c	FBGN0036566	0.153275	0.014922	0.097868	-0.04048
CG1578	FBGN0030336	0.251903	0.049991	0.366894	0.164981
SrpRalpha	FBGN0010391	-0.20057	-0.10757	-0.16785	-0.07485
cac	FBGN0263111	0.397344	0.001314	0.438731	0.042701
Oatp58Db	FBGN0034715	0.388426	0.047841	-0.02311	-0.3637
d4	FBGN0033015	0.166995	0.099318	-0.00252	-0.07019
CG5968	FBGN0032588	0.075645	-0.00086	0.028764	-0.04774
CG12184	FBGN0025387	0.203439	0.043588	0.107454	-0.0524
Zyx	FBGN0011642	0.205808	0.069729	0.125285	-0.01079
mod	FBGN0002780	-0.2253	-0.0412	-0.21839	-0.03428
CG10353	FBGN0030349	0.324619	0.021536	0.27901	-0.02407
ash1	FBGN0005386	0.229679	-0.04997	0.337721	0.058069
Qsox3	FBGN0038918	0.326355	-0.23277	0.351617	-0.20751
CG14721	FBGN0037942	-0.17952	-0.03789	-0.072	0.069629
Fur1	FBGN0004509	0.278613	0.088357	0.346072	0.155816
Apc	FBGN0015589	0.339628	0.031208	0.400831	0.092411
fig	FBGN0039694	-0.29434	-0.19997	-0.14922	-0.05485
FBGN0259234	FBGN0259234	0.547817	0.022473	0.618034	0.09269
l(3)76BDm	FBGN0260655	-0.10058	-0.05241	-0.23946	-0.1913
CG6071	FBGN0036186	-0.15583	-0.14442	0.083088	0.094496
lncRNA:CR43264	FBGN0262945	-0.46777	0.298024	-0.861	-0.0952
CG18130	FBGN0030359	0.000209	-0.02446	0.058204	0.033535
step	FBGN0086779	0.169145	-0.02776	0.267782	0.070872
CG6654	FBGN0038301	-1.77845	0.045243	-0.70109	1.122601
CG6912	FBGN0038290	-1.47947	-0.27966	-0.93289	0.266924
EMC7	FBGN0034066	-0.08673	-0.0411	-0.06454	-0.01892
cert	FBGN0027569	0.204296	0.269205	0.231312	0.296221
alpha-Est9	FBGN0015577	0.229688	-0.00977	0.363196	0.123737
Nup58	FBGN0038722	-0.18387	0.02489	-0.13232	0.076437
QIL1	FBGN0036726	-0.11055	-0.05198	-0.10951	-0.05094
sra	FBGN0086370	-0.02815	0.023994	-0.01383	0.038313
CG2224	FBGN0039773	0.418673	0.03154	0.336676	-0.05046
mRNA-cap	FBGN0030556	0.02847	0.088661	-0.02682	0.033374
Galphas	FBGN0001123	0.306866	0.105328	0.143069	-0.05847
CG32633	FBGN0052633	0.072535	0.43973	-0.86236	-0.49516
Cyp313a1	FBGN0038236	-0.02323	-0.24507	0.236067	0.014237
nahoda	FBGN0034797	0.098115	-0.06721	0.296527	0.131204
Tektin-C	FBGN0035638	-0.00426	0.029752	-0.00031	0.033698
CG9970	FBGN0035380	-0.2663	-0.18037	-0.11468	-0.02876
NfI	FBGN0042696	0.364421	-0.06665	0.558335	0.127266
Ugt305A1	FBGN0042179	0.17482	0.067382	-0.1818	-0.28924
CG15711	FBGN0034122	-0.12575	-0.02847	-0.13277	-0.03548

mod(mdg4)	FBGN0002781	0.121602	-0.01877	0.238407	0.098034
ca	FBGN0000247	0.341488	0.006371	0.501933	0.166816
Prx2540-2	FBGN0033518	0.516651	0.03439	0.622056	0.139795
CG15279	FBGN0028886	0.453105	-0.0328	0.103425	-0.38248
Pal1	FBGN0283510	0.055879	-0.13417	0.285933	0.095884
Fib	FBGN0003062	-0.33534	0.007084	-0.3241	0.018333
Graf	FBGN0030685	0.256419	0.052948	0.175736	-0.02773
CG31075	FBGN0051075	-0.17389	-0.44352	0.431834	0.162209
Rb97D	FBGN0004903	0.15987	0.028621	0.105895	-0.02535
Fas2	FBGN0000635	0.16179	0.019468	0.04646	-0.09586
CG12825	FBGN0033221	0.198516	0.271933	-0.36957	-0.29615
CG7218	FBGN0038569	0.010767	0.006645	-0.00109	-0.00521
CG32112	FBGN0052112	0.033432	0.078812	-0.07169	-0.02631
Sec61gamma	FBGN0031049	-0.13452	0.099222	-0.25683	-0.02308
Hf	FBGN0014000	0.276009	-0.05854	0.470106	0.135553
Prp8	FBGN0033688	0.153745	0.028259	0.224944	0.099458
CG15739	FBGN0030347	0.174191	0.422019	-0.5117	-0.26387
CG34026	FBGN0054026	-1.57219	-0.98565	-0.95673	-0.3702
h-cup	FBGN0038334	-0.28725	-0.01131	-0.16422	0.11173
kmr	FBGN0085412	0.432998	-0.08887	0.735963	0.214092
CG5276	FBGN0037900	-0.03017	-0.11779	0.079254	-0.00837
CG42853	FBGN0262100	0.053569	-0.04882	-0.06385	-0.16624
CG4467	FBGN0039064	0.489775	-0.04597	0.711851	0.176107
ACXA	FBGN0040510	0.048492	0.091524	-0.15093	-0.1079
UK114	FBGN0086691	-0.01887	-0.0939	0.49173	0.416704
CG1309	FBGN0035519	0.069464	-0.00634	0.115993	0.040185
Mgat2	FBGN0039738	0.042038	0.049215	0.251327	0.258503
Sec24CD	FBGN0262126	0.116937	-0.01768	0.263317	0.1287
BTBD9	FBGN0030228	0.106458	-0.08879	0.26515	0.069902
Mo25	FBGN0017572	0.09651	0.078714	0.030504	0.012708
CG9649	FBGN0038211	0.490716	0.04613	0.157215	-0.28737
CG33346	FBGN0053346	-2.05484	-0.40922	-1.7287	-0.08308
CG14785	FBGN0027795	-0.00511	0.04664	0.078827	0.13058
Hsp68	FBGN0001230	0.060865	0.028471	-0.22393	-0.25632
wts	FBGN0011739	0.078385	0.027095	0.381153	0.329863
CG33303	FBGN0053303	-0.17096	-0.03658	-0.12935	0.005029
CG5532	FBGN0034902	-0.15306	-0.00393	0.039189	0.188312
gudu	FBGN0031905	-0.01529	-0.06839	0.012995	-0.04011
Ace	FBGN0000024	0.197123	-0.14137	0.36804	0.029548
CG14077	FBGN0036830	0.434703	0.014437	0.422922	0.002657
p130CAS	FBGN0035101	0.338655	0.087153	0.243258	-0.00824
Adgf-E	FBGN0033952	0.021821	-0.03072	-0.06474	-0.11728
stck	FBGN0020249	-0.07165	0.049087	-0.03712	0.083616
CG15534	FBGN0039769	-0.0901	-0.55039	-0.18474	-0.64504
Taz	FBGN0026619	-0.00442	0.000945	0.129311	0.134679
Jafrac2	FBGN0040308	-0.10986	0.101403	-0.25878	-0.04752
CG1910	FBGN0022349	0.185493	0.027595	0.212223	0.054325
Sms	FBGN0036272	0.162628	-0.09369	0.11252	-0.1438
CG17272	FBGN0038830	-0.37307	0.508915	-1.50228	-0.62029
Blimp-1	FBGN0035625	0.410596	0.139679	0.463555	0.192638
ckn	FBGN0033987	0.349752	0.028676	0.470649	0.149573
cad	FBGN0000251	0.327986	0.045457	0.239188	-0.04334
Vmat	FBGN0260964	0.318544	0.063347	0.383856	0.128659
CG11068	FBGN0030536	-0.02024	0.041862	-0.02178	0.040324
CG31712	FBGN0051712	0.050524	0.03177	0.117384	0.09863
CG7332	FBGN0030973	0.073714	-0.20316	0.17215	-0.10472
Dg	FBGN0034072	0.218826	0.080838	0.219627	0.081639
Ncc69	FBGN0036279	-0.05501	0.000825	-0.14233	-0.0865
CG7987	FBGN0038244	0.312652	-0.0027	0.364605	0.049258
TppII	FBGN0020370	0.021403	-0.00808	0.068754	0.039271
Cpr49Ab	FBGN0050042	-0.74594	-0.43249	-0.66341	-0.34996
Liprin-alpha	FBGN0046704	0.241663	0.012257	0.407359	0.177953
PlexB	FBGN0025740	0.235386	0.082064	0.262495	0.109172
CG11562	FBGN0031247	-0.09361	-0.02148	-0.08085	-0.00872
baz	FBGN0000163	0.047042	0.267485	-0.17648	0.043958
srp	FBGN0003507	0.303728	-0.07169	0.868838	0.493421
Manf	FBGN0027095	-0.3892	-0.05964	-0.28342	0.046148
CG10055	FBGN0037482	0.009592	0.03435	-0.10775	-0.08299
mRpS30	FBGN0030692	0.309869	-0.06637	0.450347	0.074111

Bap111	FBGN0030093	0.020102	-0.04557	0.120596	0.054928
Tsp42Ej	FBGN0033132	-0.10569	-0.16642	-0.02618	-0.08691
CG4502	FBGN0031896	0.046502	-0.00065	0.067336	0.020189
dally	FBGN0263930	0.289522	0.081973	0.113104	-0.09444
Mob4	FBGN0259483	-0.01002	-0.03273	0.003591	-0.01912
Adi1	FBGN0052068	0.076998	-0.05046	-0.20861	-0.33606
CG32396	FBGN0052396	0.008609	0.017017	-0.05088	-0.04248
Rac2	FBGN0014011	0.563018	0.223764	0.252658	-0.0866
AP-2alpha	FBGN0264855	0.289224	-0.04096	0.439243	0.109059
Drsl5	FBGN0035434	0.313247	0.010999	0.176748	-0.1255
GlcAT-P	FBGN0036144	0.222641	-0.36751	0.673753	0.0836
CG32767	FBGN0052767	0.231662	-0.06326	0.284881	-0.01004
Vps60	FBGN0036740	-0.11166	0.00266	-0.12876	-0.01443
cana	FBGN0040233	0.162888	-0.05811	0.201747	-0.01925
CG9641	FBGN0031483	-0.09018	0.037612	-0.30831	-0.18052
Ost48	FBGN0014868	-0.1257	-0.04539	-0.15385	-0.07355
Faf2	FBGN0025608	-0.06404	-0.01327	0.039749	0.090518
miple1	FBGN0027111	0.09463	-0.03241	0.053149	-0.07389
Sply	FBGN0010591	0.226504	0.054333	0.244714	0.072543
Nepl15	FBGN0039024	-0.09561	-0.03767	0.068285	0.126227
CG15475	FBGN0032867	0.005259	-0.02251	-0.06662	-0.09439
CG9449	FBGN0036875	0.146393	-0.0636	0.314149	0.104152
CG9010	FBGN0034173	-0.02329	-0.04124	0.044773	0.026826
Pdh	FBGN0011693	-0.18186	-0.27636	0.307513	0.213016
APP-BP1	FBGN0261112	0.00064	0.003237	-0.01287	-0.01027
CG2225	FBGN0032957	0.204975	-0.21821	0.491734	0.06855
Ac13E	FBGN0022710	0.448548	-0.16269	0.363167	-0.24807
prd1	FBGN0037949	0.413004	0.076067	0.221237	-0.1157
Ssadh	FBGN0039349	-0.10206	-0.05135	0.043382	0.09409
px	FBGN0003175	-0.30494	-0.17657	-0.06632	0.062047
CG7716	FBGN0035800	0.185937	-0.0638	0.062291	-0.18744
SerRS	FBGN0031497	-0.23234	0.062725	-0.365	-0.06994
Ca-beta	FBGN0259822	0.471619	0.050981	0.720433	0.299795
Arp3	FBGN0262716	0.015173	0.314121	-0.41992	-0.12097
CG43111	FBGN0262571	-0.04022	0.039808	-0.14468	-0.06465
aPKC	FBGN0261854	0.361571	0.083177	0.351589	0.073196
CG4701	FBGN0028868	-0.12411	0.001111	-0.13979	-0.01458
Prosbeta4R2	FBGN0031443	0.233808	0.078449	-0.18962	-0.34498
Tab2	FBGN0086358	0.288931	0.015214	0.344717	0.071
sxe2	FBGN0038398	0.191942	-0.16449	0.776328	0.419893
CG14411	FBGN0030582	0.148288	-0.0186	0.137138	-0.02975
lncRNA:CR43146	FBGN0262622	0.00533	-0.36315	0.245847	-0.12263
CRMP	FBGN0023023	0.300396	-0.04197	0.600237	0.25787
Non2	FBGN0035370	-0.1875	-0.00465	-0.16469	0.018167
CG17593	FBGN0031544	-0.01736	0.085065	-0.11567	-0.01325
Ppcs	FBGN0261285	0.455736	0.056535	0.798135	0.398934
CG13898	FBGN0035161	-0.02123	0.076672	-0.1961	-0.0982
CG5565	FBGN0031335	-0.08998	0.057858	-0.32642	-0.17858
sog	FBGN0003463	0.428665	-0.05045	0.508466	0.029349
Rpn7	FBGN0028688	0.010088	0.07245	-0.00403	0.058334
CG3198	FBGN0029887	0.252297	0.015563	0.46604	0.229306
CG42240	FBGN0250869	0.120909	0.174778	0.132877	0.186747
I-2	FBGN0028429	-0.0206	0.029587	0.003377	0.053562
CG18233	FBGN0036795	-0.20871	0.014306	-0.38271	-0.1597
CG11369	FBGN0029951	0.132171	-0.00642	0.173073	0.034477
SsRbeta	FBGN0011016	-0.1182	0.032812	-0.17029	-0.01928
sina	FBGN0003410	-0.00998	0.108681	-0.06011	0.058548
Mipp1	FBGN0026061	0.119466	-0.05372	0.212529	0.039341
Cisd2	FBGN0062442	-0.05168	-0.05154	0.037536	0.037667
Nplp3	FBGN0042201	-1.04264	-0.6178	-0.99282	-0.56798
CG9624	FBGN0038213	0.300219	-0.01383	0.284627	-0.02942
CG5541	FBGN0030603	0.158695	0.019804	0.010951	-0.12794
Rsph4a	FBGN0034957	-0.18255	-0.05073	-0.17864	-0.04682
Rala	FBGN0015286	0.025788	0.071406	-0.02898	0.016637
CG32137	FBGN0052137	0.047771	-0.0815	0.036205	-0.09306
CG32450	FBGN0052450	-0.08938	-0.06612	0.001037	0.024301
TfIIA-L	FBGN0011289	-0.0705	-0.01619	0.025091	0.079399
CG10237	FBGN0032783	-0.22129	-0.16916	0.002978	0.055112
Atg8b	FBGN0038539	-0.15793	-0.0372	-0.07792	0.042813

CG13088	FBGN0032047	-0.06354	0.141406	-0.09637	0.108584
CG5767	FBGN0034292	-0.51203	0.599749	-0.96269	0.149095
CG6693	FBGN0037878	-0.12848	0.189171	-0.31205	0.005601
Dyrk3	FBGN0027101	0.2892	0.029886	0.338206	0.078891
Snx6	FBGN0032005	0.088444	0.040783	0.057493	0.009832
CG10307	FBGN0034655	-0.01517	-0.01158	-0.02605	-0.02246
CG6903	FBGN0029737	-0.16817	-0.18387	0.051305	0.035602
Nph	FBGN0039735	-0.42214	0.000615	-0.44339	-0.02063
Rcd1	FBGN0033897	0.272998	0.040603	0.223007	-0.00939
Sdic1	FBGN0067861	0.145468	-0.22295	0.02664	-0.34178
Rab35	FBGN0031090	0.29413	0.214775	0.203916	0.124562
hrm	FBGN0033028	-0.0014	0.048379	-0.11053	-0.06075
mrva	FBGN0035763	0.118676	-0.05188	0.188375	0.017824
ND-19	FBGN0035046	-0.16394	-0.02968	-0.11812	0.016136
CG7264	FBGN0036214	0.142463	0.058702	0.179908	0.096148
Ssdp	FBGN0011481	0.335258	-0.03591	0.531341	0.160172
nudC	FBGN0021768	-0.07684	-0.01843	-0.17424	-0.11583
dia	FBGN0011202	0.024975	0.143353	-0.02544	0.092933
CG5445	FBGN0030838	0.080613	0.134131	0.092595	0.146112
ZnT63C	FBGN0035432	-0.04971	0.022474	-0.03556	0.036618
Yeti	FBGN0267398	-0.1346	0.0469	-0.34878	-0.16728
CG16727	FBGN0038719	-0.17086	-0.06453	0.826071	0.932403
CG10939	FBGN0010620	0.040265	0.094964	-0.00079	0.053912
CG18003	FBGN0061356	0.282616	-0.19198	0.575872	0.101272
lt	FBGN0002566	0.157888	0.06241	0.125032	0.029554
Cyp6a13	FBGN0033304	-0.45236	-0.05562	-0.85963	-0.46289
CG32236	FBGN0046793	-0.01794	0.088956	-0.07508	0.031815
Cip4	FBGN0035533	0.224584	0.034913	0.2869	0.097229
CG31913	FBGN0051913	0.030964	0.050581	0.108917	0.128534
Rab8	FBGN0262518	0.030453	0.015195	0.110771	0.095513
CG42383	FBGN0259729	-0.11593	-0.07627	0.017752	0.057413
shf	FBGN0003390	0.516126	0.4178	-0.28708	-0.38541
Tom40	FBGN0016041	-0.00364	-0.26352	0.082506	-0.17738
Ide	FBGN0001247	0.090971	0.005989	0.076776	-0.00821
Tig	FBGN0011722	0.392081	0.205704	0.371462	0.185085
CG8814	FBGN0031478	0.09158	-0.09825	0.272516	0.082683
Adar	FBGN0026086	0.316451	0.056355	0.302549	0.042453
CCT4	FBGN0032444	-0.19246	0.034839	-0.28441	-0.05712
CG4686	FBGN0038739	-0.12379	-0.0068	-0.12253	-0.00554
CG9921	FBGN0030743	0.061034	-0.17885	0.33999	0.100107
flw	FBGN0000711	0.147206	0.062533	0.087603	0.002931
CG32641	FBGN0052641	-0.75643	0.040426	-0.30756	0.489288
CG10602	FBGN0032721	0.030955	0.066194	-0.03899	-0.00376
CG9330	FBGN0036888	0.046773	0.110625	-0.01687	0.04698
CG5265	FBGN0038486	0.004978	-0.03667	0.047312	0.005669
CG5139	FBGN0031323	-0.02428	0.067131	-0.09216	-0.00075
CG3262	FBGN0032986	0.093201	0.071013	-0.05634	-0.07853
CG31683	FBGN0051683	-0.34316	0.116903	-0.16573	0.294333
ttk	FBGN0003870	0.111078	-0.03306	0.249873	0.105738
Hsl	FBGN0034491	0.163927	0.028001	0.054519	-0.08141
CG11267	FBGN0036334	-0.06695	0.013083	-0.17885	-0.09881
CG10171	FBGN0036353	0.140368	-0.01227	0.265453	0.112817
CG31055	FBGN0051055	-0.0555	-0.10319	0.103184	0.055487
ND-13B	FBGN0047038	-0.12548	-0.01101	-0.17071	-0.05625
Ran-like	FBGN0036497	-0.04831	-0.23292	0.158595	-0.02602
CG2839	FBGN0031273	-0.24564	-0.22564	-0.36893	-0.34893
Fem-1	FBGN0034542	0.114786	-0.07861	0.268462	0.075065
Hmgcr	FBGN0263782	0.016648	-0.05396	0.10818	0.037571
CG11672	FBGN0037563	-0.41807	-0.12044	-0.68107	-0.38343
Rme-8	FBGN0015477	0.233515	0.078083	0.206146	0.050715
CG9065	FBGN0030610	-0.05995	0.011867	-0.00286	0.068952
CG14132	FBGN0040817	-0.51057	0.018324	-2.11007	-1.58117
whip	FBGN0250827	-0.17305	-0.01356	-0.08678	0.072709
MTA1-like	FBGN0027951	0.342777	0.004658	0.336904	-0.00121
Spred	FBGN0020767	0.139259	-0.09136	0.171929	-0.05869
shn	FBGN0003396	0.375215	0.106167	0.457482	0.188433
CHES-1-like	FBGN0029504	0.540565	0.107292	0.667623	0.23435
L2HGDH	FBGN0032729	-0.02313	-0.07916	0.161316	0.105295
sd	FBGN0003345	0.284808	0.036663	0.203837	-0.04431

Ance-5	FBGN0035076	0.502147	-0.20194	1.207932	0.503848
Fmo-2	FBGN0033079	0.110375	0.088606	-0.19384	-0.21561
Tim17b2	FBGN0020371	-0.12252	-0.0261	-0.09427	0.00215
Clk	FBGN0023076	0.503344	-0.08643	0.542695	-0.04708
Spn88Ea	FBGN0028984	-0.00948	0.143863	-0.05414	0.099201
hale	FBGN0036924	-0.14704	-0.0586	-0.07439	0.014054
CG31200	FBGN0051200	-0.58446	-0.05646	-0.63309	-0.10509
CG1582	FBGN0030246	0.076941	0.095104	0.093719	0.111882
wge	FBGN0051151	0.455967	0.021926	0.511214	0.077173
da	FBGN0267821	0.16586	-0.01172	0.23537	0.057788
Wee1	FBGN0011737	-0.04817	-0.02118	-0.0199	0.007089
axed	FBGN0035708	0.246506	0.157929	0.085187	-0.00339
rush	FBGN0025381	0.132303	-0.00095	0.188807	0.055551
Jarid2	FBGN0036004	0.395895	-0.03262	0.620268	0.191751
CG9917	FBGN0030740	-0.17203	-0.18947	-0.05429	-0.07172
CG33090	FBGN0028916	0.216968	0.262715	-0.23269	-0.18694
goddard	FBGN0036438	-0.05768	-0.10792	-0.09717	-0.14741
CG16903	FBGN0040394	0.136973	0.04903	0.504118	0.416175
CG15362	FBGN0031378	-0.38144	0.134158	0.304779	0.820378
CG31680	FBGN0051680	-0.30269	-0.17913	-0.19794	-0.07438
Dscam2	FBGN0265296	0.568879	-0.01755	0.645729	0.059302
SP1173	FBGN0035710	0.247913	0.030356	-0.03937	-0.25693
4E-T	FBGN0052016	0.264157	0.007152	0.269175	0.012169
Prx2540-1	FBGN0033520	0.186863	0.020036	0.291519	0.124692
lark	FBGN0011640	-0.0163	-0.02143	0.067712	0.062583
PH4alphaEFB	FBGN0039776	-0.16598	0.288581	-0.02041	0.434144
CG3760	FBGN0022343	-0.12131	-0.0062	-0.17718	-0.06206
CG15201	FBGN0030272	-0.40888	-0.06863	-0.29723	0.043019
Sara	FBGN0026369	0.19985	0.02843	0.23221	0.06079
Vha100-3	FBGN0028669	0.001671	0.044178	-0.14129	-0.09878
CG30177	FBGN0050177	0.100679	-0.03271	-0.17495	-0.30834
ssp3	FBGN0032723	0.161981	-0.02421	0.32933	0.143137
CG18858	FBGN0042175	-0.17046	0.105028	-0.11479	0.160697
Tango9	FBGN0260744	-0.17716	-0.05188	-0.01885	0.106437
CG42327	FBGN0259227	0.335272	-0.04302	0.48502	0.106731
modSP	FBGN0051217	0.027338	-0.30536	0.356556	0.023857
CG31415	FBGN0051415	-0.21397	-0.03969	-0.14276	0.031512
CG34425	FBGN0085454	-0.0157	-0.02022	0.025179	0.020653
pio	FBGN0020521	0.004756	-0.02769	0.081903	0.049453
CG43347	FBGN0263072	0.319979	-0.09951	0.557137	0.137647
CenG1A	FBGN0028509	0.185381	0.108311	0.183444	0.106375
lectin-37Db	FBGN0053533	-0.17694	0.524971	-0.60162	0.100288
Ntan1	FBGN0034371	0.021444	0.110077	0.007937	0.096571
eIF2alpha	FBGN0261609	-0.13382	-0.03885	-0.07721	0.017754
CG43066	FBGN0262476	0.130228	-0.17597	0.269154	-0.03705
AkhR	FBGN0025595	0.067899	-0.18696	0.296484	0.041627
Sirt1	FBGN0024291	0.207166	0.069801	0.302374	0.16501
CG5676	FBGN0032200	-0.31653	-0.01845	-0.23398	0.064091
CG31769	FBGN0051769	0.120092	-0.09193	0.271568	0.05955
l(1)G0193	FBGN0027280	0.044871	-0.0784	-0.00831	-0.13159
Gart	FBGN0000053	0.225939	0.133652	0.34072	0.248433
CG44433	FBGN0265625	0.032356	0.004221	-0.02355	-0.05168
MAN1	FBGN0034962	-0.11334	-0.05079	-0.08106	-0.01851
CG14073	FBGN0036814	0.136684	-0.12934	0.237202	-0.02882
CG31999	FBGN0051999	0.415696	0.060616	0.284784	-0.0703
CG11319	FBGN0031835	0.270496	-0.16259	0.469495	0.036406
lectin-28C	FBGN0040099	0.099718	0.665241	0.410556	0.976079
woc	FBGN0010328	0.314084	0.127458	0.108631	-0.078
Sfp78E	FBGN0261059	0.078709	-0.41473	0.422588	-0.07085
btz	FBGN0045862	0.277417	-0.15893	0.014566	-0.42178
crp	FBGN0001994	0.191675	-0.04939	0.380747	0.139683
bsf	FBGN0284256	0.035327	-0.00409	0.107483	0.06807
CG7692	FBGN0036714	0.165664	-0.02205	0.148124	-0.03959
CG6686	FBGN0032388	0.110848	0.053767	0.145342	0.08826
CG5144	FBGN0035957	0.019101	-0.0086	0.022398	-0.0053
eys	FBGN0031414	0.321068	-0.24092	0.576127	0.014142
Mmp1	FBGN0035049	0.075816	0.268441	-0.12647	0.066156
Prtl99C	FBGN0039707	-0.09955	0.048994	-0.17529	-0.02675
CG34176	FBGN0085205	0.037463	0.422098	-0.73169	-0.34705

CG10749	FBGN0036328	-0.05291	0.038655	-0.13822	-0.04665
Ptp99A	FBGN0004369	0.394221	-0.1938	0.622612	0.034595
CG7255	FBGN0036493	0.506578	0.067831	0.154706	-0.28404
CG11249	FBGN0037115	-0.07825	0.027105	0.093434	0.198786
dob	FBGN0030607	1.155923	0.354916	1.402625	0.601618
Rpn11	FBGN0028694	-0.03837	0.033798	-0.13403	-0.06186
Srlp	FBGN0038049	-0.18102	0.007928	-0.11103	0.077926
CG31288	FBGN0051288	0.109207	0.275307	0.28677	0.452869
Pde6	FBGN0038237	0.429018	-0.10854	0.757429	0.219873
CG3530	FBGN0028497	0.189742	-0.0469	0.284347	0.047708
CG42650	FBGN0261502	0.854468	-0.42782	0.545797	-0.7365
Cbs	FBGN0031148	0.268555	0.025566	0.285692	0.042703
CG17029	FBGN0036551	0.251114	0.051929	-0.02613	-0.22531
lolal	FBGN0022238	0.02025	0.003031	0.037623	0.020404
Bug22	FBGN0032248	-0.09174	-0.01001	-0.08591	-0.00418
FeCH	FBGN0266268	0.033153	-0.0314	0.113547	0.048997
dsh	FBGN0000499	-0.02946	0.011961	-0.02506	0.016354
CG7755	FBGN0034105	-0.05589	-0.01145	-0.10022	-0.05578
Drak	FBGN0052666	0.313707	0.089499	0.368531	0.144323
CG4781	FBGN0035043	0.001857	0.622387	-0.87067	-0.25014
eIF2gamma	FBGN0263740	-0.08259	-0.00044	-0.05368	0.028474
Ddc	FBGN0000422	0.032216	-0.05359	0.193194	0.107386
ogre	FBGN0004646	0.187788	0.108827	0.191498	0.112537
CG9646	FBGN0034184	0.093202	-0.04325	0.244788	0.108335
nonA	FBGN0004227	0.186262	0.087401	0.165595	0.066734
tamo	FBGN0041582	0.159183	0.026057	0.37975	0.246624
CG31909	FBGN0051909	-0.07625	-0.07865	-0.26962	-0.27202
Capa	FBGN0039722	0.496732	0.146032	0.231757	-0.11894
fzr2	FBGN0034937	-0.35876	-0.08594	-0.14943	0.123387
CG34107	FBGN0083943	0.060264	-0.00231	-0.0439	-0.10648
CG5397	FBGN0031327	0.000761	0.271052	-0.48677	-0.21648
MetRS	FBGN0034401	0.104192	0.159622	-0.01162	0.043806
inaE	FBGN0261244	0.382458	0.074789	0.371044	0.063376
Mal-A4	FBGN0033294	-0.35228	0.17179	-0.43752	0.086547
Clamp	FBGN0032979	0.130507	-0.00688	0.092985	-0.0444
CG6907	FBGN0031711	0.076256	0.036898	-0.02447	-0.06383
Dlg5	FBGN0032363	0.416825	-0.03101	0.553907	0.10607
SCCRO3	FBGN0033784	0.056476	-0.04493	0.045277	-0.05613
Pomp	FBGN0032884	-0.10854	-0.02636	-0.05564	0.026548
CG5561	FBGN0031333	-0.21855	0.003871	-0.16576	0.056657
Ndf	FBGN0043456	0.099649	0.038631	0.126079	0.065061
CG7289	FBGN0031379	0.123624	-0.0469	-0.04792	-0.21845
Mitf	FBGN0263112	0.294326	0.082352	0.232004	0.02003
Cbl	FBGN0020224	0.197915	0.001974	0.378246	0.182306
CG9222	FBGN0031784	-0.00848	-0.03686	-0.02276	-0.05114
beta'COP	FBGN0025724	-0.01881	0.01113	-0.067	-0.03706
CG12376	FBGN0033323	0.072864	0.002113	0.064485	-0.00627
CG13843	FBGN0038993	-0.29745	0.032719	-0.17688	0.153287
CG4911	FBGN0035959	0.216266	-0.00804	0.216701	-0.00761
CG31687	FBGN0051687	0.015255	-0.28467	0.426072	0.126146
CG16935	FBGN0033883	0.01219	-0.1099	-0.02552	-0.14761
CG33301	FBGN0053301	0.719076	0.487684	0.628938	0.397546
lama	FBGN0016031	-0.0396	-0.02238	0.112486	0.129714
CG15200	FBGN0030278	-0.25919	-0.07781	-0.2253	-0.04391
CG14984	FBGN0035480	-0.23606	-0.03943	-0.9555	-0.75886
SCAR	FBGN0041781	0.298585	0.001786	0.331879	0.03508
CG9003	FBGN0033639	0.234297	0.0393	0.170435	-0.02456
ELOVL	FBGN0037534	0.038122	0.052257	-0.01128	0.002859
Synj	FBGN0034691	0.179438	-0.02977	0.281574	0.072368
salr	FBGN0000287	0.811197	0.106479	0.349339	-0.35538
CG8613	FBGN0033924	0.202718	0.056922	0.196084	0.050289
Cortactin	FBGN0025865	0.242017	0.195817	-0.14729	-0.19349
Fitm	FBGN0035586	0.101892	-0.05055	0.459275	0.306837
bgcn	FBGN0004581	0.421244	0.091198	-0.13539	-0.46544
SLC5A11	FBGN0031998	0.331744	-0.05769	0.51719	0.127753
tkv	FBGN0003716	0.191898	0.091486	0.077292	-0.02312
CG8478	FBGN0037746	-0.07527	-0.00173	-0.19008	-0.11655
CG4988	FBGN0032372	-0.24122	0.005149	-0.11937	0.126999
CG5098	FBGN0034300	0.308477	0.033392	0.402252	0.127166

CG7992	FBGN0031004	0.160983	0.544073	-1.01351	-0.63042
Cdk12	FBGN0037093	0.112885	-0.00976	0.129693	0.007045
CG4607	FBGN0029932	0.338971	0.004312	0.250694	-0.08396
CG13872	FBGN0034477	-0.08226	-0.0631	-0.15732	-0.13817
CG11018	FBGN0034464	-0.03514	-0.16761	-0.07376	-0.20624
sturkopf	FBGN0035206	0.194154	0.099953	-0.20231	-0.29651
CG1943	FBGN0037468	0.215035	-0.02187	0.233093	-0.00382
Pcmt	FBGN0086768	-0.15555	-0.03078	-0.05013	0.074638
CadN	FBGN0015609	0.441442	0.01059	0.457237	0.026385
Mst36Fb	FBGN0261349	-0.02066	0.122479	-0.05788	0.085254
blow	FBGN0004133	0.4386	0.104793	0.476775	0.142968
Rac1	FBGN0010333	0.016604	0.053146	-0.01171	0.024831
igl	FBGN0013467	0.171661	-0.15084	0.282968	-0.03953
Sfp35C	FBGN0259965	0.59293	-0.08744	0.291657	-0.38871
CG12822	FBGN0033229	0.172766	0.077548	0.245436	0.150218
CG33704	FBGN0053704	-0.06663	-0.01934	-0.14207	-0.09478
CG14894	FBGN0038428	-0.07634	0.096667	-0.19329	-0.02028
Evi5	FBGN0262740	0.074281	-0.05911	0.150753	0.017362
Epac	FBGN0085421	0.278311	-0.07596	0.516843	0.16257
uex	FBGN0262124	0.36944	0.15958	0.239817	0.029958
anchor	FBGN0036741	-0.00905	-0.12298	0.088094	-0.02584
Pak	FBGN0267698	0.26464	0.019149	0.138532	-0.10696
rept	FBGN0040075	-0.05484	-0.06051	-0.09776	-0.10343
CG17597	FBGN0032715	-0.10537	-0.0529	-0.17393	-0.12146
Pvf1	FBGN0030964	-0.11215	0.137323	-0.42313	-0.17365
CDC50	FBGN0030752	0.069166	0.295569	-0.18595	0.040449
CG3097	FBGN0029804	-0.37059	-0.15507	-0.16191	0.053613
CG2993	FBGN0037521	0.411056	-0.2361	0.571755	-0.0754
Ltn1	FBGN0262517	0.165929	0.047022	0.202492	0.083584
Ppn	FBGN0003137	-0.0389	0.24216	-0.26832	0.012745
CG3927	FBGN0034739	-0.06324	-0.12337	-0.12218	-0.1823
homer	FBGN0025777	-0.00795	0.072672	0.085177	0.1658
jus	FBGN0039647	0.536066	-0.11272	0.816525	0.167741
Afti	FBGN0038223	0.125122	0.105576	-0.06919	-0.08874
CG10177	FBGN0039083	0.047008	0.024921	0.02737	0.005284
CG6126	FBGN0038407	0.049235	-0.00915	0.075074	0.016691
CG3328	FBGN0034985	0.380694	0.076303	0.387131	0.08274
Eip63E	FBGN0005640	0.16712	-0.03561	0.293996	0.091265
CG11400	FBGN0034198	0.293795	-0.06801	0.423099	0.061291
hrg	FBGN0015949	0.145486	-0.04863	0.167222	-0.02689
Adck1	FBGN0035039	0.577274	0.31211	0.987801	0.722637
Pde1c	FBGN0264815	0.23174	-0.05754	0.307161	0.017882
Elal	FBGN0013949	-0.22299	0.099553	1.169436	1.491982
lncRNA:CR44455	FBGN0265648	-0.03502	0.041523	-0.19745	-0.12091
CoRest	FBGN0261573	0.039262	0.051967	0.019379	0.032084
CG18810	FBGN0042133	0.028742	0.087832	-0.11384	-0.05475
Pgant6	FBGN0035375	0.020503	0.439804	-0.37468	0.044621
CG32199	FBGN0052199	-0.20869	-0.12023	0.04448	0.132939
CG17919	FBGN0037433	-0.47731	-0.06544	-0.51133	-0.09946
Obp56a	FBGN0034468	-0.33024	-0.19935	-0.37179	-0.24089
Ero1L	FBGN0261274	0.027444	0.045867	-0.10935	-0.09093
CG18853	FBGN0042173	0.646837	0.191733	0.674117	0.219013
Liprin-gamma	FBGN0034720	0.139405	-0.07057	0.308277	0.098306
Arf51F	FBGN0013750	0.061314	0.080224	0.006299	0.025209
CG1835	FBGN0031127	-0.34373	-0.14717	-0.29475	-0.0982
SCOT	FBGN0035298	0.256688	-0.04471	0.350641	0.049247
Tsc1	FBGN0026317	0.136321	0.034458	0.566655	0.464792
Rich	FBGN0028500	0.124302	-0.05475	0.250156	0.071103
CG7829	FBGN0039703	0.289634	0.349795	-0.85282	-0.79266
CG43658	FBGN0263706	0.263997	0.006542	0.292769	0.035314
CG46339	FBGN0285963	0.07044	0.267499	-0.09139	0.105671
CG2493	FBGN0032864	-0.0355	-0.30246	0.578702	0.311743
fzo	FBGN0011596	0.006999	-0.01552	-0.09849	-0.12101
Sec22	FBGN0260855	0.05836	0.016951	0.100838	0.059429
Snap25	FBGN0011288	0.142731	-0.03826	0.207575	0.026583
alpha-Est8	FBGN0015576	0.341811	-0.07563	0.212854	-0.20459
Daxx	FBGN0031820	0.181124	-0.07022	0.269797	0.018457
Mkrn1	FBGN0029152	0.01643	-0.00591	-0.00136	-0.02371
ben	FBGN0000173	0.05347	-0.10095	0.112145	-0.04228

sit	FBGN0038986	0.459677	-0.02956	0.763651	0.274411
Wdfy2	FBGN0032246	-0.0745	-0.00638	-0.06054	0.007581
CG12121	FBGN0030109	0.034439	-0.08333	0.099195	-0.01858
Not3	FBGN0033029	0.186093	0.04251	0.148308	0.004724
CG8188	FBGN0030863	0.181963	0.038959	0.175928	0.032925
Mcr	FBGN0267488	-0.02882	0.042127	-0.02843	0.042512
CG12992	FBGN0030846	0.139781	0.075047	0.079545	0.014811
CG10543	FBGN0034570	0.372925	-0.05538	0.518951	0.090648
Flo1	FBGN0024754	0.214918	0.12067	0.193593	0.099345
SdhAL	FBGN0036222	0.059206	0.022115	0.075187	0.038096
pps	FBGN0082831	0.299815	-0.01002	0.374162	0.064326
CCT7	FBGN0037632	0.025431	0.052806	-0.08648	-0.05911
Liprin-beta	FBGN0036376	0.118127	-0.08494	0.329549	0.126486
DAAM	FBGN0025641	0.423202	0.032003	0.285439	-0.10576
RanGAP	FBGN0003346	0.230244	0.38204	0.009819	0.161615
CG18547	FBGN0037973	0.495663	0.149532	0.171888	-0.17424
Os-C	FBGN0010401	-0.66205	-0.51101	0.328322	0.479354
Poc1	FBGN0036354	-0.08912	0.091205	-0.27638	-0.09605
Ranbp9	FBGN0037894	0.162569	0.040115	-0.04111	-0.16356
pum	FBGN0003165	0.311307	-0.00896	0.310273	-0.01
Su(var)2-10	FBGN0003612	0.091707	0.037905	0.081011	0.027209
CG10947	FBGN0032857	0.048881	-0.19076	0.127654	-0.11199
CG6420	FBGN0039451	0.084043	-0.02777	0.210013	0.0982
CG3091	FBGN0029608	0.140401	0.118969	0.065773	0.044342
CG6184	FBGN0038725	0.175822	-0.05507	0.045178	-0.18571
CG4404	FBGN0030432	0.072076	0.012929	0.017304	-0.04184
X11L	FBGN0026313	0.20054	-0.06821	0.322145	0.053399
Ptp4E	FBGN0004368	0.344947	0.258596	0.164632	0.078282
CG9864	FBGN0034490	0.225235	0.225707	0.113742	0.114214
alpha-Est10	FBGN0015569	0.45989	-0.09673	0.496471	-0.06015
CG18418	FBGN0035568	-0.02805	0.023727	-0.07577	-0.024
krz	FBGN0040206	0.156358	0.155267	0.041745	0.040653
bip2	FBGN0026262	0.522163	-0.08594	0.569235	-0.03887
Ranbp16	FBGN0053180	0.129974	0.02599	0.124852	0.020867
CG14605	FBGN0037486	0.069645	-0.1642	0.194869	-0.03898
l(3)mbt	FBGN0002441	0.02135	0.098825	0.065301	0.142775
CG14043	FBGN0031659	-0.00438	-0.04861	-0.06539	-0.10962
rdog	FBGN0039644	0.21274	-0.17665	0.244785	-0.14461
onecut	FBGN0028996	0.369995	-0.03441	0.456513	0.052107
CG1371	FBGN0033482	0.224583	0.099605	0.151619	0.026642
Acp29AB	FBGN0015583	-0.3798	-0.11895	-0.43077	-0.16993
CG33322	FBGN0053322	0.07182	0.079951	-0.01373	-0.00559
puc	FBGN0243512	0.157698	0.171924	-0.07336	-0.05913
CG4603	FBGN0035593	0.04743	0.012308	0.15158	0.116458
CG31141	FBGN0051141	-0.0821	0.027451	-0.29658	-0.18703
CG6966	FBGN0038286	0.065333	0.0074	0.273526	0.215593
Dlc90F	FBGN0024432	-0.08988	0.064026	-0.18499	-0.03108
pcm	FBGN0020261	0.191129	0.017645	0.243576	0.070091
Alk	FBGN0040505	0.473531	-0.0327	0.734831	0.228597
Tailor	FBGN0037470	0.154813	0.079832	0.103568	0.028587
jnj	FBGN0266282	0.046893	0.007525	0.098496	0.059127
CG14277	FBGN0032008	-0.29581	-0.59611	0.120046	-0.18025
Urod	FBGN0033428	-0.19233	-0.06403	-0.10304	0.02526
CG7968	FBGN0028532	-0.65098	0.469701	-1.42844	-0.30776
ste24a	FBGN0034176	-0.07347	0.023981	-0.07173	0.025719
Obp19b	FBGN0031110	-0.64275	-0.62201	0.014242	0.03498
AsnRS	FBGN0086443	0.000848	0.065886	-0.00248	0.062562
CG34109	FBGN0083945	0.488233	0.304684	-0.06662	-0.25017
spg	FBGN0264324	0.670373	-0.0733	0.873388	0.129711
Tet	FBGN0263392	0.367854	0.070808	0.420848	0.123801
CG14120	FBGN0036321	-0.28842	-0.2605	-0.02496	0.002963
CG15771	FBGN0029801	0.122917	0.166269	0.056908	0.100261
Glos	FBGN0029686	0.96104	0.599397	0.254375	-0.10727
CG12448	FBGN0028857	0.059167	0.087134	-0.09478	-0.06681
CG7856	FBGN0033056	-0.08979	0.006591	-0.06841	0.02797
Lnpk	FBGN0033309	-0.12833	-0.10701	-0.17383	-0.15251
CG16985	FBGN0035355	-0.03263	0.663002	-1.02946	-0.33383
GEFmeso	FBGN0050115	0.212383	0.231559	0.030995	0.050171
Tsp42Eg	FBGN0033128	0.012847	0.24345	-0.24673	-0.01612

CG10413	FBGN0032689	0.135577	0.04719	-0.00984	-0.09823
Gfat1	FBGN0287209	0.250777	0.04782	0.101154	-0.1018
Usp1	FBGN0028476	-0.00093	0.010919	-0.06042	-0.04857
Ncoa6	FBGN0031698	0.509648	0.079682	0.699902	0.269936
CG14442	FBGN0029893	0.280298	0.058146	0.325989	0.103837
CG31952	FBGN0051952	-0.00943	-0.20535	0.341144	0.145222
Cp190	FBGN0000283	-0.18414	0.00303	-0.10246	0.084706
CG8586	FBGN0033320	-0.13822	0.009764	-0.06195	0.086038
CG7453	FBGN0030991	0.1907	0.015927	0.19501	0.020236
wkd	FBGN0037917	-0.1376	-0.02966	0.022888	0.130829
crb	FBGN0259685	0.215705	0.09817	0.208558	0.091023
Txl	FBGN0035631	-0.07306	0.072181	-0.05839	0.086858
SLO2	FBGN0261698	0.462838	0.094299	0.649711	0.281172
hth	FBGN0001235	0.404223	0.033848	0.466335	0.095959
Vps35	FBGN0034708	0.099317	0.020749	0.181463	0.102895
CG11262	FBGN0036329	-0.12821	0.084284	-0.1399	0.072596
Mekk1	FBGN0024329	0.235397	0.148909	0.174079	0.087591
Arpc2	FBGN0032859	-0.03909	0.116283	-0.38868	-0.23331
Ance-4	FBGN0033366	0.521804	-0.52425	1.701788	0.655729
Fife	FBGN0264606	0.413055	-0.00862	0.513479	0.091802
CG13369	FBGN0025640	0.095258	-0.17949	0.130037	-0.14471
CG9922	FBGN0038196	0.005387	0.070973	-0.24946	-0.18388
FBGN0031629	FBGN0031629	-0.07588	-0.21224	0.034921	-0.10144
CG33502	FBGN0053502	0.005394	0.040283	0.052031	0.08692
CG2162	FBGN0035388	0.029586	-0.04188	0.011824	-0.05964
Ppox	FBGN0020018	-0.10583	-0.00293	-0.11862	-0.01572
MsrA	FBGN0000565	0.065284	-0.20673	0.268878	-0.00313
Fis1	FBGN0039969	-0.10694	0.05293	-0.31181	-0.15195
Mal-A3	FBGN0002571	0.680995	0.01645	0.753967	0.089423
cv-d	FBGN0265048	0.131021	-0.00536	0.507001	0.37062
CG32500	FBGN0285970	0.005222	0.035547	0.060518	0.090844
CG2861	FBGN0029728	0.242282	-0.0296	0.224784	-0.0471
CG7841	FBGN0036502	0.016912	0.028014	-0.08449	-0.07339
CG11141	FBGN0033177	0.019658	-0.066	0.07161	-0.01405
CG32857	FBGN0052857	0.004761	0.037751	0.055481	0.088471
CG1358	FBGN0033196	0.209714	0.039852	0.472732	0.302869
Srp68	FBGN0035947	-0.04547	0.021432	0.043058	0.109964
Ms	FBGN0011581	0.260708	0.051603	0.150387	-0.05872
CG9727	FBGN0037445	0.355455	-0.00031	0.504424	0.148656
MESR4	FBGN0034240	0.364936	0.080637	0.458393	0.174094
CG5521	FBGN0039466	0.300319	0.025194	0.591607	0.316483
Grasp65	FBGN0036919	0.106195	-0.01971	0.117531	-0.00837
cni	FBGN0000339	-0.03181	0.256322	-0.35022	-0.06208
Ugt35A1	FBGN0026315	-0.10007	0.23676	-0.68123	-0.3444
Su(var)205	FBGN0003607	-0.18753	-0.08051	-0.14614	-0.03913
chinmo	FBGN0086758	0.165578	-0.10187	0.143858	-0.12359
Ugt36D1	FBGN0032713	0.352337	0.078503	0.278471	0.004637
Vps28	FBGN0021814	-0.12246	0.072015	-0.13233	0.062141
PAN2	FBGN0033352	0.234038	0.053194	0.255968	0.075124
Chmp1	FBGN0036805	-0.13896	0.070855	-0.24072	-0.03091
EMC2B	FBGN0038461	0.381567	0.060938	0.007906	-0.31272
CG15198	FBGN0030283	-0.09019	0.018693	-0.06752	0.041368
su(sable)	FBGN0003575	0.249717	-0.01963	0.258855	-0.01049
CG32148	FBGN0047338	-0.09192	0.089194	-0.2877	-0.10659
TM9SF3	FBGN0035622	0.011663	0.075897	-0.04756	0.016677
Rpe	FBGN0050499	-0.02747	-0.05419	0.070768	0.044045
pes	FBGN0031969	-0.02722	0.369596	-0.48833	-0.09151
CG14478	FBGN0028953	0.294969	0.083448	0.353233	0.141712
CG15034	FBGN0029946	-0.01547	0.03891	-0.10234	-0.04795
babo	FBGN0011300	0.178406	0.083517	0.250995	0.156106
Eaf	FBGN0033166	0.21382	0.048576	0.31979	0.154546
eIF4E7	FBGN0040368	-0.05168	-0.01999	-0.41101	-0.37932
dmGlut	FBGN0010497	0.412044	0.371224	0.02298	-0.01784
Ask1	FBGN0014006	0.221939	0.024836	0.303508	0.106404
SelG	FBGN0030350	-0.07879	0.141325	-0.10627	0.113846
CG31244	FBGN0051244	0.068207	0.012445	-0.0267	-0.08246
Gabat	FBGN0036927	-0.18287	-0.18136	-0.01021	-0.00871
CG17734	FBGN0037890	0.107559	0.051128	-0.08665	-0.14308
Dip-C	FBGN0000455	0.047139	0.131376	-0.13129	-0.04705

CG7362	FBGN0038258	0.09981	-0.01173	0.036208	-0.07533
CG1544	FBGN0039827	0.988706	-0.00579	1.448925	0.454433
CG32280	FBGN0052280	0.119028	0.07446	-0.11787	-0.16244
GckIII	FBGN0266465	0.181597	0.017288	0.351686	0.187377
CG8635	FBGN0033317	-0.27009	-0.06642	-0.24272	-0.03905
CG12065	FBGN0030052	0.112354	0.178471	-0.01014	0.055972
CG17698	FBGN0040056	0.052682	-0.07226	0.386838	0.261893
cer	FBGN0034443	-0.29735	-0.09413	0.445178	0.648402
CG4612	FBGN0035016	0.31643	-0.03763	0.38636	0.032299
CG13457	FBGN0036482	0.25172	-0.06908	0.18433	-0.13647
CG33136	FBGN0053136	0.236617	0.040202	-0.08677	-0.28318
COX7AL	FBGN0037579	-0.01044	0.083401	-0.16162	-0.06778
CG6830	FBGN0037934	0.150863	-0.0696	-0.14938	-0.36985
Jra	FBGN0001291	-0.17442	0.107484	-0.17187	0.110041
Sprn	FBGN0036218	0.048164	-0.0172	0.004429	-0.06093
CG5037	FBGN0032222	-0.12144	-0.0554	-0.06922	-0.00318
CG10660	FBGN0036288	0.088472	0.127704	-0.08252	-0.04329
CG8476	FBGN0038127	-0.00304	-0.00751	-0.14836	-0.15282
sli	FBGN0264089	0.345768	0.055843	0.507326	0.217401
Ostgamma	FBGN0032015	-0.20865	-0.04155	-0.07323	0.093871
RhoGAP92B	FBGN0038747	0.176397	0.068154	0.094155	-0.01409
CG33109	FBGN0053109	-0.26236	0.051852	-0.21292	0.101286
RhoGAP18B	FBGN0261461	0.047235	-0.12882	0.193158	0.0171
CG43367	FBGN0263110	0.293429	0.136516	0.324333	0.167419
Cpsf6	FBGN0035872	0.24506	-0.02511	0.2682	-0.00197
Upf1	FBGN0030354	0.182451	-0.09962	0.310008	0.027936
AANATL7	FBGN0040376	-0.2035	-0.34809	-0.21534	-0.35994
CG4520	FBGN0038355	0.027881	-0.00119	-0.01087	-0.03994
fmt	FBGN0035688	0.040693	0.027363	-0.11828	-0.13161
CG6961	FBGN0030959	0.000905	0.035505	-0.07305	-0.03845
CG3544	FBGN0031279	0.018543	0.080447	-0.16033	-0.09843
CG11873	FBGN0039633	0.282758	-0.15214	0.455761	0.020866
CG17237	FBGN0031410	-0.07319	-0.04557	-0.06761	-0.04
CG5693	FBGN0040989	0.222665	0.294997	-0.07107	0.001261
Acox57D-p	FBGN0034628	-0.28054	-0.23925	-0.37298	-0.33169
CG5789	FBGN0039207	0.202152	0.079886	0.507669	0.385403
TpnC73F	FBGN0010424	0.136208	0.151668	-0.40026	-0.3848
CG7567	FBGN0039670	0.654459	1.326659	-0.96919	-0.29699
ATP8B	FBGN0037989	0.170623	0.115817	0.2303	0.175494
scf	FBGN0025682	-0.19265	-0.23281	-0.01395	-0.05412
rictor	FBGN0031006	0.375871	-0.04717	0.466043	0.043004
CG15025	FBGN0038709	-0.12334	0.055809	-0.14962	0.029532
FucTA	FBGN0036485	0.266744	0.213844	-0.47794	-0.53084
CG13436	FBGN0034532	0.107175	-0.03253	0.20382	0.064118
CG10510	FBGN0037059	-0.05143	-0.18016	-0.13025	-0.25898
Sems	FBGN0037036	-0.25946	-0.11668	-0.07419	0.0686
Lrp4	FBGN0030706	0.263764	-0.08064	0.452727	0.108325
crq	FBGN0015924	0.036607	0.082183	0.089866	0.135443
MESR3	FBGN0032694	0.083688	0.117251	-0.12463	-0.09107
CG2187	FBGN0017448	0.648042	0.311779	0.147839	-0.18842
bchs	FBGN0043362	0.408845	-0.0314	0.592306	0.152058
dre4	FBGN0002183	-0.0502	-0.00702	-0.02813	0.01504
CG33489	FBGN0053489	0.350625	-0.11653	0.099939	-0.36722
bc10	FBGN0040239	0.152864	0.08826	-0.04557	-0.11018
CG8298	FBGN0033673	-0.03623	0.027194	-0.12704	-0.06361
CG15422	FBGN0031579	-0.25017	0.589187	-1.42925	-0.5899
CG31010	FBGN0051010	-0.38152	-0.24853	-0.04449	0.088504
Smr	FBGN0265523	0.403081	0.005448	0.547747	0.150114
Ugt36E1	FBGN0027070	0.209617	-0.29393	0.605909	0.102359
Zdhhc8	FBGN0085478	0.310575	0.192539	0.388307	0.270271
CG42540	FBGN0260657	0.34529	0.109179	0.32324	0.087129
cpa	FBGN0034577	-0.04014	0.264493	-0.21495	0.089689
Drsl2	FBGN0052279	-2.4563	0.677182	-3.64422	-0.51073
wcy	FBGN0030812	0.288229	-0.03552	0.506548	0.182803
pic	FBGN0260962	0.080325	0.044415	0.010436	-0.02547
dl	FBGN0260632	-0.04066	0.038277	-0.01967	0.059263
CG11070	FBGN0028467	0.067385	0.025531	0.09471	0.052857
CG9377	FBGN0032507	0.572689	-0.30847	1.534935	0.653776
GstO2	FBGN0035906	-0.25788	-0.01163	-0.16163	0.084615

CG15445	FBGN0031161	-0.21495	0.139086	-0.44355	-0.08952
caz	FBGN0285954	0.142461	0.085351	0.111483	0.054373
Dak1	FBGN0028833	-0.20098	-0.04574	-0.01992	0.135324
CG1416	FBGN0032961	0.004092	-0.10157	0.015313	-0.09035
pdm3	FBGN0261588	0.412043	-0.00512	0.485379	0.068215
CG43736	FBGN0263993	0.38585	0.153103	0.37323	0.140482
Pp1-13C	FBGN0003132	0.063078	-0.04008	0.115835	0.012676
smg	FBGN0016070	0.275149	-0.12712	0.375832	-0.02644
CG1958	FBGN0029940	-0.04001	0.043506	-0.10528	-0.02176
Hel25E	FBGN0014189	-0.05343	-0.00657	-0.16827	-0.12141
CG11656	FBGN0038109	-0.08119	0.042775	-0.25952	-0.13555
sba	FBGN0016754	0.261186	-0.061	0.379357	0.05717
ringer	FBGN0266417	-0.02656	0.038096	-0.05886	0.005796
CG7556	FBGN0030990	-0.10583	-0.12295	-0.08557	-0.10269
CG34331	FBGN0085360	0.413692	0.188829	0.718703	0.49384
CG42674	FBGN0261556	0.458404	0.122641	0.413613	0.077849
mRpL28	FBGN0031660	-0.16211	0.005638	-0.18835	-0.0206
ND-B18	FBGN0030605	-0.07457	-0.04877	-0.02318	0.002618
CG44838	FBGN0266101	-0.1297	0.027391	-0.09986	0.057236
CG31287	FBGN0051287	0.109815	0.080735	-0.12482	-0.1539
CG3632	FBGN0030735	0.300923	-0.00382	0.457495	0.152753
tth	FBGN0030502	0.280507	0.000419	0.46755	0.187462
RhoGAP71E	FBGN0036518	-0.03715	-0.00386	-0.03744	-0.00416
CG42336	FBGN0259238	-0.15046	0.068519	-0.28243	-0.06345
CG1774	FBGN0039856	0.028126	-0.02148	0.028206	-0.0214
uif	FBGN0031879	0.663179	0.180518	0.238865	-0.2438
CG7182	FBGN0035878	0.015931	0.115387	-0.01724	0.08222
nmdyn-D7	FBGN0028997	-0.15547	-0.02066	-0.17877	-0.04396
CG42638	FBGN0261361	0.187623	0.102944	0.001544	-0.08314
Trpml	FBGN0262516	0.189834	0.100264	0.006071	-0.0835
rno	FBGN0035106	0.497872	-0.03617	0.641768	0.107725
Set1	FBGN0040022	0.180573	0.034138	0.277628	0.131193
Pih1D1	FBGN0032455	0.0808	-0.02646	0.186345	0.079084
CG5071	FBGN0039347	0.075022	-0.06842	0.175325	0.031887
CG8012	FBGN0040832	-0.52423	-0.13631	-0.98527	-0.59735
tty	FBGN0015558	0.471307	-0.09203	0.805546	0.242212
Pgant4	FBGN0051956	-0.43218	-0.15454	-0.14985	0.127789
Ire1	FBGN0261984	0.106765	-0.10791	0.167385	-0.04728
CG3819	FBGN0036833	-1.38312	-0.91206	-0.95848	-0.48742
CG13725	FBGN0036708	0.090229	0.150231	-0.0714	-0.0114
mgr	FBGN0264694	-0.19119	0.08323	-0.28918	-0.01475
PIP82	FBGN0024943	0.042051	-0.35594	0.458882	0.060889
LRP1	FBGN0053087	0.34351	-0.07381	0.47092	0.053601
jef	FBGN0033958	0.346741	-0.07991	0.416395	-0.01025
CG3226	FBGN0029882	-0.41387	-0.06619	-0.32209	0.025597
svp	FBGN0003651	0.185064	0.095904	0.20606	0.116899
CG4955	FBGN0030814	-0.01796	0.012158	0.00423	0.03435
hep	FBGN0010303	0.322841	0.025424	0.413612	0.116195
CG1233	FBGN0035137	0.493506	-0.05971	0.674746	0.121529
Pgant5	FBGN0031681	0.121632	-0.06197	0.190153	0.006548
CG15878	FBGN0035316	-0.13565	0.010588	-0.25644	-0.11021
CG17528	FBGN0261387	0.031575	0.046125	-0.0823	-0.06775
CG33286	FBGN0053286	0.305787	-0.00095	0.40898	0.102238
Atg1	FBGN0260945	0.178175	0.025242	0.254563	0.10163
CG6805	FBGN0034179	0.073922	-0.08395	0.515309	0.357435
Fum2	FBGN0029890	-0.18671	-0.05428	-0.07078	0.061653
Klc	FBGN0010235	0.118568	0.101533	0.081286	0.064251
FBGN0037010	FBGN0037010	0.189364	0.029507	0.207135	0.047279
Dnali1	FBGN0037962	-0.10677	0.112695	-0.37832	-0.15886
pont	FBGN0040078	-0.07133	-0.02654	-0.11865	-0.07386
p120ctn	FBGN0260799	0.219644	0.045552	0.175923	0.001831
fl(2)d	FBGN0000662	0.193433	0.02881	0.327879	0.163256
CG31798	FBGN0051798	0.133228	0.104867	0.051798	0.023437
CG5024	FBGN0039373	-0.10817	0.021045	-0.2747	-0.14549
CG4752	FBGN0034733	0.112268	-0.07986	0.201751	0.009624
flr	FBGN0260049	0.176222	-0.05038	0.222811	-0.00379
CG8549	FBGN0035714	-0.29565	0.16852	-0.48903	-0.02486
GstE3	FBGN0063497	-0.10038	-0.07201	-0.31506	-0.28669
SelT	FBGN0031670	-0.11096	-0.02624	0.024866	0.109591

CG11334	FBGN0039849	0.142492	-0.0911	0.190106	-0.04349
FoxK	FBGN0036134	0.198709	-0.06286	0.348529	0.086961
CG33493	FBGN0053493	0.417013	-0.13462	0.605543	0.053907
La	FBGN0011638	-0.17033	0.047665	-0.15051	0.067487
Obp57c	FBGN0034509	-0.08579	-0.08124	-0.16239	-0.15783
CG10958	FBGN0030004	0.068223	-0.01898	-0.0026	-0.0898
Fkbp39	FBGN0013269	-0.39408	0.02923	-0.48849	-0.06518
CG9993	FBGN0034553	0.728856	-0.24878	0.329548	-0.64809
fz2	FBGN0016797	0.507734	0.077269	0.468036	0.037571
CG5191	FBGN0038803	-0.25779	-0.1177	-0.41377	-0.27369
SmydA-9	FBGN0030102	0.10282	0.11118	0.115925	0.124285
Aldh7A1	FBGN0036857	0.480776	0.081938	0.526657	0.127819
CG17375	FBGN0031861	-0.09094	0.066581	-0.26671	-0.10918
Mnn1	FBGN0031885	0.176697	-0.07557	0.282525	0.030258
nAChRalpha7	FBGN0086778	0.427395	0.050703	0.523378	0.146685
chas	FBGN0263258	0.175905	-0.21637	0.224882	-0.16739
CG7299	FBGN0032282	-1.99904	1.430242	-4.07626	-0.64697
CG5044	FBGN0038326	0.175688	0.049588	0.229677	0.103577
Ten-a	FBGN0267001	0.499493	-0.04614	0.636042	0.090408
wbl	FBGN0004003	-0.5951	-0.52536	-0.65852	-0.58878
List	FBGN0034381	0.259767	0.180623	0.416372	0.337229
Dhc16F	FBGN0283476	0.270452	0.018692	0.351668	0.099908
frj	FBGN0031815	0.039079	-0.00321	-0.05536	-0.09765
eIF4EHP	FBGN0053100	-0.08896	-0.06302	-0.14434	-0.1184
LamC	FBGN0010397	0.057707	0.122942	-0.06896	-0.00373
Cap-G	FBGN0259876	0.20064	-0.00598	0.160635	-0.04598
Mtor	FBGN0013756	0.062064	0.025119	0.184158	0.147213
CG16898	FBGN0034480	-0.23286	-0.3065	0.670404	0.59676
nrm	FBGN0262509	0.099616	-0.00656	0.206006	0.099831
CG46304	FBGN0284082	-0.46715	-0.39187	0.189815	0.265098
CG5316	FBGN0038704	0.400763	-0.09598	0.520825	0.024083
CG3744	FBGN0039240	-0.12607	-0.07513	-0.02801	0.022931
pHCl-1	FBGN0264908	0.500282	0.072241	0.365424	-0.06262
Sgt1	FBGN0265101	-0.13873	-0.04041	-0.24109	-0.14277
CG14835	FBGN0035782	-0.21363	-0.08092	-0.31496	-0.18224
tho2	FBGN0031390	0.032351	0.067806	0.120021	0.155477
CG42816	FBGN0261998	0.359567	0.485278	0.278482	0.404194
Vps2	FBGN0039402	-0.24018	0.099341	-0.4038	-0.06428
CG3719	FBGN0024986	-0.04839	0.161688	-0.20773	0.002344
28SrRNA-Psi:CR45859	FBGN0267519	0.325647	0.24296	0.082554	-0.00013
Wdr59	FBGN0032339	0.133007	0.075512	0.026001	-0.03149
CG1172	FBGN0264712	0.143475	-0.01747	0.195641	0.034694
CG6602	FBGN0035673	0.108659	0.207146	-0.42869	-0.3302
CG14262	FBGN0039503	0.542247	0.297564	0.20572	-0.03896
Rok	FBGN0026181	0.173323	0.206989	0.042581	0.076247
CG9034	FBGN0040931	-0.18832	-0.03157	-0.14472	0.012033
sofe	FBGN0030242	-0.02722	-0.00281	0.093312	0.117723
CG4972	FBGN0032217	-0.04634	0.046252	-0.23785	-0.14525
Rpt4	FBGN0028685	0.085236	0.062859	0.105421	0.083044
Obp83b	FBGN0010403	-0.27972	-0.36202	0.307004	0.224701
CG12321	FBGN0038577	-0.07524	0.039098	-0.01662	0.097718
CG30416	FBGN0050416	0.211106	0.029982	0.167803	-0.01332
VGlut	FBGN0031424	0.466524	-0.02338	0.599344	0.109439
Scamp	FBGN0040285	0.235122	0.085181	0.184118	0.034176
CG42450	FBGN0259927	-0.0396	-0.19882	0.361458	0.20224
Zip102B	FBGN0039902	-0.03661	0.050593	-0.12371	-0.03651
CG4341	FBGN0028481	0.023402	-0.18238	0.627819	0.422042
hob	FBGN0035420	0.147696	-0.06559	0.240526	0.027242
bin3	FBGN0263144	0.246574	0.073317	0.224542	0.051285
scramb1	FBGN0052056	-0.02289	0.084584	-0.11405	-0.00658
ND-49L	FBGN0039331	-0.009	-0.08488	0.171502	0.095618
CG8065	FBGN0036075	-0.18318	0.012474	-0.19399	0.001661
CG14408	FBGN0030581	0.304424	-0.09254	0.474965	0.078004
CG10969	FBGN0036310	0.24486	0.029365	0.211069	-0.00443
CG31997	FBGN0051997	-0.29529	0.09817	-0.5084	-0.11493
CG33494	FBGN0053494	0.211103	-0.20037	0.617539	0.206063
Kul	FBGN0039688	0.342038	-0.1401	0.714652	0.232518
CG10086	FBGN0037517	0.194866	0.637659	-0.27278	0.170016
CG17271	FBGN0038829	-0.04152	-0.08925	0.029385	-0.01834

Fie	FBGN0026592	-0.12917	-0.07895	-0.2378	-0.18759
CG14974	FBGN0040694	-0.32677	-0.01417	-0.37742	-0.06482
CG10672	FBGN0035588	-0.19213	-0.22435	-0.21218	-0.2444
CG31808	FBGN0062978	0.123885	0.080404	0.018183	-0.0253
CG4511	FBGN0037843	-0.00041	-0.09388	-0.03533	-0.1288
CG31294	FBGN0051294	-0.04062	0.142183	0.0553	0.238098
CG33110	FBGN0053110	-0.25055	-0.08573	-0.44394	-0.27912
CG11444	FBGN0029715	-0.05236	0.015225	0.001397	0.068983
Eip63F-1	FBGN0004910	-0.06712	-0.0393	0.161052	0.188865
HPS4	FBGN0034261	0.583709	-0.0781	0.822162	0.160352
CG14435	FBGN0029911	0.292467	0.125733	0.196349	0.029615
AlaRS	FBGN0027094	-0.03561	0.00548	0.019551	0.060639
CG8993	FBGN0035334	-0.12323	0.035685	-0.11117	0.04775
His2Av	FBGN0001197	-0.00138	0.036676	0.019998	0.058054
Ilk	FBGN0028427	0.037445	0.081871	0.091336	0.135762
iPLA2-VIA	FBGN0036053	0.036248	-0.09338	0.075609	-0.05402
bab2	FBGN0025525	0.315466	0.161932	0.402043	0.24851
CG34401	FBGN0085430	0.408451	-0.11325	0.592323	0.070625
PIG-Wb	FBGN0035265	0.130526	0.559956	-0.68584	-0.25641
CG4021	FBGN0034659	-0.02205	-0.01217	-0.05707	-0.04719
CG9338	FBGN0032899	-0.08031	0.065109	0.055823	0.201245
Oatp33Eb	FBGN0032435	0.109775	0.535704	-0.75255	-0.32662
SK	FBGN0029761	0.475064	-0.03091	0.555746	0.049777
RpL37b	FBGN0034822	-0.82657	-0.20391	-1.09159	-0.46893
CG8773	FBGN0038135	-0.07068	0.392685	-0.84706	-0.3837
CR43087	FBGN0262533	0.168751	-0.14043	0.287855	-0.02133
CG10919	FBGN0037514	0.053274	0.031816	-0.12423	-0.14569
Sec8	FBGN0266672	0.100899	0.096974	-0.08351	-0.08743
CG16957	FBGN0032519	-0.05719	0.087648	-0.15096	-0.00611
Mst89B	FBGN0020399	0.045647	0.045155	-0.02463	-0.02512
Piezo	FBGN0264953	0.358761	-0.03427	0.3752	-0.01783
CG5062	FBGN0029747	0.365097	-0.02518	0.341455	-0.04882
CG32795	FBGN0040384	0.020088	0.068783	-0.05401	-0.00531
EMC4	FBGN0037199	-0.13907	-0.03806	-0.18322	-0.08221
mle	FBGN0002774	0.196489	0.108494	0.105013	0.017018
Idgf5	FBGN0064237	0.367567	-0.3395	0.594515	-0.11255
Grik	FBGN0038840	0.440115	-0.13881	0.601773	0.022845
CG9410	FBGN0033086	0.002345	-0.00263	-0.00215	-0.00712
CG14011	FBGN0031722	-0.04522	0.035917	-0.07045	0.010688
CG14448	FBGN0037191	0.030033	0.108429	-0.15907	-0.08068
Alh	FBGN0261238	0.403997	0.208218	0.315173	0.119394
CG6340	FBGN0030648	-0.05918	-0.02832	0.005981	0.036849
SCCRO4	FBGN0036967	-0.03643	-0.01242	-0.07673	-0.05272
Ccm3	FBGN0038331	-0.0915	0.078066	-0.28409	-0.11453
mdy	FBGN0004797	0.861169	0.352154	0.76679	0.257775
Obp49a	FBGN0050052	-1.58491	-1.1404	-0.18194	0.262565
CG12692	FBGN0029703	0.034928	0.085191	0.010378	0.060642
fne	FBGN0086675	0.373121	-0.18857	0.670463	0.108769
CG4658	FBGN0032170	0.215175	0.01545	0.220859	0.021135
CG13965	FBGN0032834	-0.26795	-0.1574	-0.3285	-0.21795
Edem2	FBGN0032480	0.144006	0.041838	0.123398	0.02123
CG1814	FBGN0033426	0.047366	0.01222	0.219957	0.184811
CG6660	FBGN0039030	0.04618	0.164875	0.036525	0.155219
Smyd4-4	FBGN0027495	0.030434	-0.09908	0.145377	0.015861
WASp	FBGN0024273	0.018965	0.073774	-0.02855	0.026261
p24-1	FBGN0030341	-0.00144	-0.02241	0.051094	0.030126
CG34450	FBGN0085479	-0.13034	-0.09563	-0.08764	-0.05293
CG7208	FBGN0038575	0.014083	0.06489	-0.20605	-0.15525
CG32512	FBGN0052512	0.497818	0.127592	0.355669	-0.01456
CG11658	FBGN0036196	-0.07593	0.162954	-0.07483	0.164046
shg	FBGN0003391	0.43418	0.049331	0.396078	0.01123
Rpt4R	FBGN0036224	-0.35459	-0.0882	-0.5067	-0.24031
ND-51L1	FBGN0034251	-0.00033	0.142096	-0.27069	-0.12827
CG6695	FBGN0039215	0.132591	-0.01466	0.273271	0.12602
enok	FBGN0034975	0.337729	-0.02878	0.540558	0.174048
CG32485	FBGN0052485	-0.09501	0.192883	-0.39164	-0.10374
Grx1	FBGN0036820	-0.13989	0.207299	-0.36663	-0.01944
CG7139	FBGN0027532	0.155785	0.102388	0.143631	0.090234
CG42847	FBGN0262036	-0.13161	-0.04782	-0.26791	-0.18412

CycB	FBGN0000405	-0.03349	0.016428	-0.12896	-0.07904
CG3534	FBGN0038463	0.192501	-0.15201	0.735061	0.390547
CG33490	FBGN0053490	0.044917	0.194181	-0.30411	-0.15485
CG4080	FBGN0035983	0.075661	0.030682	0.03689	-0.00809
HBS1	FBGN0042712	-0.0662	0.044821	-0.03722	0.073801
unc	FBGN0003950	-0.76291	0.808972	-1.49443	0.077447
CG5938	FBGN0046247	0.024866	-0.04048	-0.03227	-0.09761
CG1354	FBGN0030151	-0.05787	-0.17971	-0.01142	-0.13327
AP-2mu	FBGN0263351	0.119237	-0.01787	-0.03933	-0.17645
HisRS	FBGN0027087	-0.15789	0.025903	-0.20621	-0.02241
Flacc	FBGN0030974	0.103483	0.01347	0.141153	0.05114
Rab3-GEF	FBGN0030613	0.398257	-0.01938	0.445905	0.028272
CG31751	FBGN0086909	0.182182	0.108556	0.037204	-0.03642
CG7806	FBGN0032018	-0.01466	0.206279	-0.18478	0.036154
CG15483	FBGN0032457	0.381222	0.010923	0.125796	-0.2445
ine	FBGN0011603	-0.04002	0.057064	-0.1174	-0.02032
Cbp53E	FBGN0004580	0.142309	-0.0867	0.152304	-0.0767
Mvl	FBGN0011672	-0.1122	0.017596	-0.08458	0.045214
twe	FBGN0002673	0.206155	0.119608	0.104086	0.017539
CG4452	FBGN0035981	0.015567	0.030236	0.127855	0.142525
CG8008	FBGN0033387	-0.04087	0.086174	-0.13059	-0.00355
CG9170	FBGN0030716	0.188772	-0.1635	0.52153	0.169263
koi	FBGN0265003	0.052196	0.015836	0.069621	0.033261
Lac	FBGN0010238	-0.12511	-0.11601	0.043763	0.052858
CG5001	FBGN0031322	0.14621	-0.05774	0.249082	0.045135
Nmdmc	FBGN0010222	0.181063	0.229978	0.598413	0.647329
CG17118	FBGN0032291	-0.09767	0.060038	-0.08477	0.072936
CG14818	FBGN0026088	-0.16164	0.08866	-0.209	0.041298
dsd	FBGN0039528	0.290783	0.104106	0.371782	0.185106
CG6650	FBGN0036402	0.091734	0.010525	0.06825	-0.01296
CG32454	FBGN0260481	0.115005	-0.16375	0.292842	0.014089
Rab9	FBGN0032782	0.36481	0.06242	0.428227	0.125836
spi	FBGN0005672	-0.07297	0.092713	-0.08624	0.079436
pho	FBGN0002521	-0.08272	-0.02691	-0.15139	-0.09558
CG17928	FBGN0032603	0.32466	-0.10117	0.473963	0.048134
CG34040	FBGN0054040	2.329794	1.136648	0.869695	-0.32345
Sbf	FBGN0025802	0.235204	0.064351	0.093971	-0.07688
Tsp	FBGN0031850	-0.202	-0.04837	-0.25097	-0.09735
CG17177	FBGN0036440	2.143514	-0.91002	2.511537	-0.542
CG8665	FBGN0032945	0.025029	0.194782	0.191581	0.361334
Fpps	FBGN0025373	0.051926	0.161649	-0.25762	-0.14789
stops	FBGN0086704	-0.05882	-0.15949	0.330759	0.230085
mew	FBGN0004456	0.304383	0.203976	0.047909	-0.0525
fwe	FBGN0261722	0.071412	0.004818	0.017614	-0.04898
rdx	FBGN0264493	0.200489	-0.05238	0.31114	0.058269
Spn42Dd	FBGN0028988	-0.20267	-0.08048	-0.18674	-0.06455
Crtc	FBGN0036746	0.423834	0.107866	0.43807	0.122102
dtn	FBGN0262730	0.38099	-0.09751	0.63937	0.160866
RpL10Aa	FBGN0038281	0.048356	0.047514	0.001216	0.000373
PH4alphaNE2	FBGN0039783	0.001068	-0.0339	-0.05782	-0.09278
CG7298	FBGN0036948	0.438592	1.481041	-1.77999	-0.73754
Atg18a	FBGN0035850	0.023957	0.065024	0.169516	0.210583
GILT1	FBGN0038149	-0.18229	-0.08094	0.022862	0.124221
CG14402	FBGN0032894	-0.16037	0.02193	-0.139	0.043301
CG14072	FBGN0032318	-0.33847	0.10015	-0.2639	0.17472
CG10631	FBGN0032817	0.214225	-0.0269	0.415646	0.174522
CG15641	FBGN0030643	-0.27646	-0.06919	-0.53097	-0.3237
Col4a1	FBGN0000299	0.163084	-0.10337	0.422621	0.156167
CG1598	FBGN0033191	-0.2348	-0.08435	-0.21496	-0.06451
CG10920	FBGN0029963	0.001395	-0.01999	-0.02948	-0.05087
dbo	FBGN0040230	0.041131	-0.04925	0.185844	0.095458
CG31087	FBGN0051087	0.347198	1.178955	-1.7961	-0.96434
Tor	FBGN0021796	0.189171	0.031879	0.348101	0.190809
CREG	FBGN0025456	-0.16639	-0.01303	-0.00637	0.146988
CG13220	FBGN0033608	-0.0617	-0.00604	-0.04477	0.010893
AspRS-m	FBGN0051739	0.182613	0.049916	0.155583	0.022886
lncRNA:CR43808	FBGN0264352	4.961413	-0.07771	6.182613	1.143493
etaTry	FBGN0011554	-0.15358	0.63287	-1.37444	-0.588
Sem1	FBGN0266666	-0.19146	0.003563	-0.20995	-0.01493

htk	FBGN0085451	0.288078	0.039804	0.407434	0.15916
wmd	FBGN0034876	-0.2334	0.029119	-0.18122	0.081299
CG12506	FBGN0031276	-0.24575	-0.16658	0.223018	0.30219
CG3295	FBGN0034573	0.07178	0.217944	0.149397	0.295561
dtr	FBGN0023090	0.252613	-0.04631	0.132618	-0.1663
CG4839	FBGN0032187	0.548565	0.49566	0.106739	0.053834
CG11360	FBGN0039920	0.165293	0.04964	0.15771	0.042057
qless	FBGN0051005	0.222827	0.172061	0.785191	0.734425
CG12617	FBGN0040996	-0.18161	-0.10487	-0.16201	-0.08528
CG32832	FBGN0052832	-0.10747	-0.00681	-0.18249	-0.08183
Cpr49Ae	FBGN0033728	-0.223	-0.21302	-0.74182	-0.73183
ab	FBGN0264442	0.514343	-0.05933	0.725663	0.151986
Hrs	FBGN0031450	0.047816	0.057263	0.046451	0.055898
gol	FBGN0004919	0.447966	-0.05893	0.300693	-0.2062
CG7564	FBGN0036734	0.058698	-0.11366	0.084905	-0.08746
l(3)05822	FBGN0010877	0.107783	0.06333	0.137306	0.092853
Coq6	FBGN0031713	-0.05801	-0.1112	0.059182	0.005984
Atet	FBGN0020762	0.5303	-0.05134	0.501237	-0.08041
CG34130	FBGN0083966	-0.44769	-0.07675	-0.58284	-0.2119
CG6218	FBGN0038321	-0.10845	-0.03249	-0.12649	-0.05053
EDTP	FBGN0027506	0.036219	0.0213	0.054791	0.039872
CG14401	FBGN0032900	0.217246	-0.03118	0.210174	-0.03825
Gcn2	FBGN0019990	0.436893	-0.20778	0.762745	0.11807
Tlk	FBGN0283657	0.167599	-0.07056	0.26319	0.025026
CG17122	FBGN0036962	-0.07287	-0.01023	-0.20455	-0.1419
CG2533	FBGN0030319	-0.11246	0.00046	-0.0785	0.034418
BRWD3	FBGN0011785	0.279017	0.021976	0.448043	0.191003
Sik3	FBGN0262103	0.253619	-0.06455	0.384608	0.066434
CG3106	FBGN0030148	-0.37852	0.382748	-1.987	-1.22572
CG14861	FBGN0038280	-0.20565	-0.06471	-0.01003	0.130903
Hs3st-A	FBGN0053147	0.446479	-0.01998	0.450657	-0.01581
Rph	FBGN0030230	-1.31722	-0.264	-1.00097	0.052245
Vdup1	FBGN0035103	-0.15528	0.115548	-0.15385	0.116979
glob2	FBGN0250846	-0.13179	0.022809	-0.30923	-0.15464
CG31974	FBGN0051974	0.035575	0.151119	-0.02913	0.086409
ewg	FBGN0005427	0.304453	-0.05317	0.397407	0.039787
Pak3	FBGN0044826	0.154095	0.097822	0.122414	0.066141
CG2004	FBGN0030060	-0.05849	-0.26386	0.407025	0.201656
Slc25A46b	FBGN0032664	0.096331	0.074034	-0.0657	-0.088
Crk	FBGN0024811	-0.04734	0.038784	-0.18462	-0.0985
Syt7	FBGN0039900	0.237578	0.038912	0.308048	0.109382
CG32713	FBGN0052713	-0.614	-0.43908	-0.23153	-0.05661
Pkc53E	FBGN0003091	0.186837	0.031101	0.152756	-0.00298
Cln7	FBGN0035767	0.172193	0.196989	-0.35148	-0.32669
MYPT-75D	FBGN0036801	0.429158	0.123029	0.352576	0.046446
Prosalpha4T2	FBGN0017556	-0.14327	0.047633	-0.2421	-0.0512
ArfGAP1	FBGN0020655	-0.09098	-0.01704	0.100296	0.174234
CG15814	FBGN0030873	0.111761	0.172006	-0.0903	-0.03006
CG3199	FBGN0038210	-0.17117	-0.04819	-0.09967	0.023303
CG30393	FBGN0050393	-0.13558	0.010855	-0.23908	-0.09264
CG10527	FBGN0034583	-0.11226	0.028937	-0.21297	-0.07178
CG12084	FBGN0043458	0.019033	0.026906	-0.0122	-0.00432
simj	FBGN0010762	0.325334	-0.01789	0.308383	-0.03485
lncRNA:CR45013	FBGN0266365	-0.5432	-0.05285	-0.69817	-0.20781
CG2336	FBGN0037455	-0.02613	0.002965	-0.21374	-0.18465
CG30485	FBGN0050485	0.501242	0.108189	0.416644	0.023591
g	FBGN0001087	0.353925	0.006687	0.424552	0.077313
CG7295	FBGN0031372	-0.0684	-0.05328	-0.17875	-0.16363
CG14687	FBGN0037835	-0.13198	-0.0346	-0.18008	-0.0827
CG42355	FBGN0259701	0.024945	0.105839	-0.15665	-0.07575
zetaCOP	FBGN0040512	-0.21609	-0.04783	-0.22122	-0.05295
lncRNA:CR43417	FBGN0263336	0.973668	-0.01518	1.375573	0.386727
ed	FBGN0000547	0.531191	-0.08096	0.480309	-0.13184
CG17746	FBGN0035425	-0.05626	0.098516	-0.11689	0.037888
CG11474	FBGN0034688	-0.2211	-0.07652	-0.11017	0.034418
Fas3	FBGN0000636	-0.20209	-0.03861	-0.11177	0.051712
CG17350	FBGN0032772	0.093718	-0.21716	0.487487	0.176609
ITP	FBGN0035023	0.261089	0.111893	0.04981	-0.09939
CG45764	FBGN0267411	-0.18659	-0.06712	-0.13882	-0.01935

CG32262	FBGN0052262	-0.19672	-0.01669	-0.16466	0.015363
CG2017	FBGN0037391	-0.14197	0.075712	-0.1394	0.078288
CG17121	FBGN0039043	-0.10332	0.237001	-0.22451	0.115806
CG6628	FBGN0036072	0.079346	0.021821	0.070369	0.012844
CG15116	FBGN0034415	-0.37064	-0.15619	-0.32568	-0.11122
MBD-R2	FBGN0038016	0.030429	0.022725	0.096406	0.088702
CG33306	FBGN0053306	-0.01096	-0.00101	-0.49759	-0.48764
CG12746	FBGN0037341	-0.13088	-0.03897	-0.20648	-0.11457
gek	FBGN0023081	0.333401	-0.07382	0.495924	0.088698
CG42656	FBGN0261508	-0.39973	0.178972	-0.32181	0.256883
Galphaq	FBGN0004435	-0.20229	-0.00658	-0.14903	0.046671
Rab1	FBGN0285937	0.080071	0.076107	-0.05055	-0.05452
GlcAT-S	FBGN0032135	0.160261	0.11318	0.02765	-0.01943
CG1636	FBGN0030030	0.355467	0.142223	0.363061	0.149817
Pex5	FBGN0023516	-0.00832	-0.12767	0.105361	-0.01398
cep290	FBGN0035168	0.054758	-0.17311	-0.04228	-0.27015
Lztr1	FBGN0040344	0.241248	-0.05743	0.363435	0.064756
Cyp12b2	FBGN0034387	-0.08223	-0.32929	0.239237	-0.00782
CG34033	FBGN0054033	-0.56834	-0.14114	-0.46924	-0.04204
Coq7	FBGN0029502	0.088507	0.143321	0.02534	0.080154
CG32985	FBGN0052985	-0.07031	-0.00954	-0.2983	-0.23753
CG17660	FBGN0031356	-0.01175	0.192693	-0.16366	0.040787
Ubc10	FBGN0026316	-0.04066	0.045415	-0.06065	0.025426
CG12581	FBGN0037213	0.049919	-0.15669	0.085467	-0.12114
CycA	FBGN0000404	-0.34634	-0.17249	-0.46817	-0.29431
Ugt37A2	FBGN0038082	-0.24532	0.238715	-2.03048	-1.54645
ND-B15	FBGN0033961	-0.12043	-0.00722	-0.10507	0.008138
CG1299	FBGN0035501	0.014203	-0.03138	-0.0619	-0.10748
Jon99Ci	FBGN0003358	0.163964	0.209655	0.493284	0.538976
olf186-M	FBGN0015522	0.364547	-0.02641	0.414809	0.023848
Cdc37	FBGN0011573	-0.13657	-0.03164	-0.13321	-0.02828
Dsp1	FBGN0278608	0.057568	0.026815	0.148685	0.117932
CG15498	FBGN0038892	-0.07057	-0.11533	-0.07521	-0.11997
CG2218	FBGN0039767	0.036543	-0.07313	0.048047	-0.06162
CG14205	FBGN0031034	-1.04798	-0.1288	-2.19505	-1.27587
CG31804	FBGN0051804	0.283798	0.107675	-0.09089	-0.26701
Ankle2	FBGN0028343	0.042435	0.022206	0.116606	0.096378
DhpD	FBGN0261436	0.275072	-0.08383	0.485015	0.126116
Alp10	FBGN0035619	0.203195	0.378888	-0.1884	-0.0127
CG45491	FBGN0267047	-1.12606	-1.17968	-0.34325	-0.39687
daw	FBGN0031461	0.017054	-0.07372	0.30682	0.216049
ZnT35C	FBGN0028516	-0.04068	0.07442	-0.09157	0.023525
CG31601	FBGN0051601	0.172538	0.097278	-0.05679	-0.13205
CG1561	FBGN0030317	-0.32092	-0.34277	-0.06069	-0.08254
Atg16	FBGN0039705	0.144931	-0.05701	0.080888	-0.12105
roq	FBGN0036621	0.226944	-0.0382	0.273297	0.008158
wtrw	FBGN0260005	0.130767	-0.0425	0.323158	0.149889
Rpn12	FBGN0028693	0.018328	0.053086	-0.07788	-0.04312
scaf6	FBGN0261872	0.166496	0.040303	0.32014	0.193948
Ldh	FBGN0001258	0.033748	-0.04959	0.246873	0.163533
Npc2f	FBGN0039154	-0.84989	-0.32536	-0.87274	-0.34821
CrebB	FBGN0265784	0.240184	0.02975	0.282662	0.072229
CG8360	FBGN0032001	0.063459	-0.01031	0.206576	0.132808
t-cup	FBGN0051858	0.176183	0.146891	-0.02632	-0.05561
Atf3	FBGN0028550	0.463713	0.184579	0.287068	0.007935
CG42271	FBGN0259166	0.182633	-0.05889	0.318929	0.077405
tea	FBGN0285892	0.445484	0.018019	0.350663	-0.0768
CG42360	FBGN0259742	0.378023	0.08396	0.271129	-0.02293
CG2182	FBGN0037360	-0.08926	-0.00717	-0.06497	0.017122
Cyt-c1L	FBGN0039651	-0.12054	-0.00473	-0.19555	-0.07974
CG12592	FBGN0037811	0.34538	0.135205	0.25872	0.048545
CG44088	FBGN0264897	0.62282	0.292721	-0.37036	-0.70046
Fdx2	FBGN0035529	0.339323	0.171491	0.326542	0.15871
Ocrl	FBGN0023508	0.13972	0.065904	0.146676	0.07286
DCTN1-p150	FBGN0001108	-0.11526	0.01474	-0.01074	0.119264
CG14997	FBGN0035515	0.054841	0.057273	0.101132	0.103564
CG31266	FBGN0051266	0.736962	0.636282	-0.37442	-0.4751
Hsp23	FBGN0001224	-0.27312	0.046516	-0.49918	-0.17955
Nup214	FBGN0010660	0.023717	0.032457	0.35442	0.36316

CG10417	FBGN0033021	0.127078	0.146124	-0.03443	-0.01539
PMP34	FBGN0052250	-0.0531	-0.01888	-0.17334	-0.13912
Rh2	FBGN0003248	-0.13332	-0.02803	0.149786	0.255081
PGRP-LB	FBGN0037906	-0.3171	0.315825	-0.47243	0.16049
CLS	FBGN0039360	-0.15115	0.023882	-0.15958	0.015455
Pits	FBGN0030400	0.259945	-0.04995	0.367861	0.057962
CG15247	FBGN0030156	0.430462	0.337668	0.37414	0.281346
Tif-IA	FBGN0032988	-0.02426	0.099585	-0.20225	-0.0784
mor	FBGN0002783	0.182891	-0.06398	0.32386	0.076987
CG8712	FBGN0033258	-0.05614	-0.07426	-0.00901	-0.02713
Sec63	FBGN0035771	-0.07402	-0.10783	0.012856	-0.02096
Mul1	FBGN0035483	-0.07698	0.099722	-0.01379	0.162908
CG6878	FBGN0036488	-0.30277	0.046857	-0.35755	-0.00792
osp	FBGN0003016	0.253054	-0.18707	0.502035	0.061909
l(3)72Dr	FBGN0263608	0.813884	-0.67664	0.277122	-1.21341
c-cup	FBGN0031367	-0.08701	0.081972	-0.21621	-0.04723
Ndfip	FBGN0052177	-0.06758	-0.038	-0.00954	0.020037
CG1890	FBGN0039869	-0.00292	0.209505	-0.38497	-0.17255
snz	FBGN0029976	-0.17903	-0.50896	0.372504	0.042574
Rpt6R	FBGN0039788	-0.02452	-0.15305	-0.09515	-0.22369
CG43222	FBGN0262858	-0.07253	-0.00105	-0.16128	-0.08979
CG1246	FBGN0035360	0.065042	0.639983	-0.85716	-0.28222
CG31949	FBGN0051949	-0.09568	-0.02449	-0.22772	-0.15652
nAChRalpha5	FBGN0028875	0.606546	0.069612	0.815398	0.278463
CG34043	FBGN0054043	0.485997	0.351734	-0.21742	-0.35168
aux	FBGN0037218	0.110255	-0.00087	0.195102	0.083975
CG34227	FBGN0085256	-0.39769	-0.20038	0.733064	0.930378
Atg13	FBGN0261108	0.150599	0.032253	0.34018	0.221834
CG3942	FBGN0038008	-0.16568	-0.06611	-0.11035	-0.01078
TM9SF4	FBGN0028541	0.132441	0.038928	0.069291	-0.02422
Sra-1	FBGN0038320	0.282076	-0.00633	0.287626	-0.00078
Uba2	FBGN0029113	-0.16956	0.015027	-0.16414	0.020449
CG12159	FBGN0033232	-0.24697	-0.05171	-0.3477	-0.15244
CG10516	FBGN0036549	0.216693	-0.03728	0.01899	-0.23498
CG13326	FBGN0033794	-0.07511	-0.10549	-0.00762	-0.038
out	FBGN0259834	-0.07905	0.133175	-0.40893	-0.1967
Zip71B	FBGN0036461	0.581877	0.010356	0.500049	-0.07147
CG15547	FBGN0039809	-0.15386	-0.22011	-0.00809	-0.07434
oaf	FBGN0011818	0.051556	0.126678	-0.2248	-0.14968
hang	FBGN0026575	0.44785	0.098041	0.506127	0.156318
Mgat1	FBGN0034521	0.034528	-0.25854	0.299074	0.006003
CG1909	FBGN0039911	0.176944	-0.0666	0.370876	0.127331
RpII18	FBGN0003275	-0.20074	0.037094	-0.17266	0.065174
MICU3	FBGN0038735	0.017937	-0.05821	0.09764	0.021497
CrebA	FBGN0004396	0.189068	-0.1193	0.423898	0.115528
hgo	FBGN0040211	-0.63925	-0.26938	0.194088	0.563956
lobo	FBGN0083946	0.229798	-0.02598	0.288195	0.03242
CG34325	FBGN0085354	0.136019	0.104561	-0.05155	-0.083
bsk	FBGN0000229	0.069979	0.131164	-0.10302	-0.04183
Arl6IP1	FBGN0038453	-0.0289	0.082049	-0.12274	-0.01178
CG5435	FBGN0032431	-0.0109	0.09502	-0.20529	-0.09936
AnxB11	FBGN0030749	0.102762	-0.02426	0.192354	0.06533
PGRP-SB1	FBGN0043578	-0.48165	0.032313	-0.00936	0.504609
Nup54	FBGN0033737	-0.11989	-0.04423	-0.07451	0.001153
FBXO11	FBGN0037760	0.216429	-0.08651	0.322953	0.020018
Gprk1	FBGN0260798	-0.09256	0.0241	-0.04693	0.069731
cdm	FBGN0261532	0.259216	-0.13026	0.295295	-0.09418
CG31496	FBGN0051496	-0.10916	-0.02867	0.120011	0.200507
CG13577	FBGN0034998	-0.35511	-0.13487	-0.36146	-0.14121
FBGN0286831	FBGN0286831	0.349958	0.04365	0.551838	0.24553
Rcd5	FBGN0263832	-0.18481	-0.06026	-0.1786	-0.05405
Dp	FBGN0011763	0.117433	0.034788	0.087674	0.005028
galectin	FBGN0031213	0.081508	0.001119	0.162661	0.082272
CG8311	FBGN0034141	-0.14	0.023144	-0.05804	0.105106
CG15708	FBGN0034099	-0.20146	-0.02865	-0.2549	-0.0821
CG5577	FBGN0036759	0.166374	-0.1428	-0.1064	-0.41558
CG34215	FBGN0085244	0.137109	0.278199	-0.64604	-0.50495
Nha2	FBGN0263390	-0.18903	-0.18201	0.072358	0.079383
CG10479	FBGN0035656	0.150498	0.008484	0.440975	0.29896

Nepl18	FBGN0039611	0.800667	-0.11947	0.704999	-0.21514
Hexo1	FBGN0041630	-0.18223	0.047406	-0.093	0.136632
PTP-ER	FBGN0016641	0.247338	0.010802	0.427333	0.190798
CG33235	FBGN0030307	0.21528	0.203415	0.066762	0.054897
Gnf1	FBGN0004913	0.065879	0.030182	0.090519	0.054822
Spn27A	FBGN0028990	-0.34356	-0.0797	-0.28017	-0.01631
Nsf2	FBGN0266464	0.014337	-0.01861	0.249787	0.216836
Sfp24F	FBGN0259958	0.052743	-0.21816	0.054164	-0.21673
l(2)k05819	FBGN0022153	0.172523	0.020435	0.207003	0.054915
pcs	FBGN0033988	0.085953	0.07697	0.021495	0.012512
tank	FBGN0031635	0.153265	0.026552	0.198587	0.071874
CG14186	FBGN0036935	0.153152	-0.0615	0.511158	0.29651
lncRNA:CR44344	FBGN0265444	-2.09917	-0.58259	-3.9722	-2.45562
Pepck2	FBGN0034356	0.869116	0.679399	-0.18224	-0.37196
TrpRS	FBGN0010803	-0.14259	0.047525	-0.15521	0.034909
RhoGAP19D	FBGN0031118	0.416833	0.013099	0.415197	0.011463
lncRNA:CR43239	FBGN0265270	0.14855	-0.01952	-0.01539	-0.18346
CG42852	FBGN0262099	-0.12659	0.47775	-1.17046	-0.56612
TBPH	FBGN0025790	0.136163	-0.07067	0.169604	-0.03723
CG4287	FBGN0038388	0.015022	-0.00657	0.01164	-0.00995
Amyrel	FBGN0020506	-0.91276	-1.67831	4.103587	3.338042
CG40160	FBGN0058160	0.060436	-0.10579	-0.45771	-0.62394
PIP4K	FBGN0039924	0.044976	0.029397	-0.03204	-0.04762
Arpc5	FBGN0031437	-0.25963	0.056829	-0.49552	-0.17906
Vta1	FBGN0035251	-0.16296	0.05134	-0.18862	0.025678
Rgk3	FBGN0085426	0.453791	-0.04118	0.412306	-0.08266
ema	FBGN0038427	-0.03921	0.064784	0.005934	0.109932
CG30423	FBGN0050423	-0.15259	0.009184	-0.227	-0.06522
CG16799	FBGN0034538	-0.11489	0.010672	0.101931	0.22749
CG44251	FBGN0265186	-0.36445	0.915425	-1.65676	-0.37689
CG5721	FBGN0034315	-0.2057	0.009023	-0.22658	-0.01186
nSMase	FBGN0035421	-0.12873	0.068875	-0.20765	-0.01004
CG31199	FBGN0051199	-0.73712	-0.14899	-0.69812	-0.10999
CG9801	FBGN0037623	0.184348	0.106605	0.208038	0.130295
moody	FBGN0025631	0.369024	-0.04164	0.34844	-0.06222
PEK	FBGN0037327	0.138265	0.06948	0.119477	0.050693
kto	FBGN0001324	0.018511	0.008017	0.099394	0.0889
CG14589	FBGN0033063	-0.06105	-0.00351	-0.105	-0.04747
CG3552	FBGN0035999	-0.0675	-0.04027	0.067813	0.09504
CG12289	FBGN0036160	-0.11672	-0.07756	-0.01135	0.02781
CG42570	FBGN0260776	0.158019	0.087932	0.082191	0.012104
ZnT86D	FBGN0037875	-0.20959	-0.00672	-0.1392	0.063669
Las	FBGN0029158	-0.12514	-0.00584	-0.12693	-0.00762
Scm	FBGN0003334	0.294935	-0.09008	0.425385	0.040368
Hsf	FBGN0001222	0.013258	0.014974	0.0461	0.047816
Spn42Da	FBGN0265137	0.084444	0.044596	0.186645	0.146797
CG14650	FBGN0037252	0.16835	-0.0625	0.312164	0.081313
Eip55E	FBGN0000566	-0.23743	-0.05439	-0.32797	-0.14493
spri	FBGN0085443	0.324316	-0.09892	0.290625	-0.13261
CG31644	FBGN0051644	-0.08879	-0.00361	-0.20497	-0.11979
CG7781	FBGN0032021	0.079226	-0.10388	0.167462	-0.01564
ari-1	FBGN0017418	0.273502	0.061412	0.241798	0.029708
CG3021	FBGN0040337	-0.25556	1.171492	-0.34615	1.080904
Adgf-B	FBGN0036751	-0.04462	-0.05622	-0.09066	-0.10226
Ugt301D1	FBGN0032684	0.367032	0.006567	0.162149	-0.19832
fbl	FBGN0011205	0.045668	-0.02551	0.023361	-0.04781
ppk22	FBGN0051105	0.075793	0.159525	0.444069	0.5278
CG7094	FBGN0032650	0.01226	-0.00645	-0.06024	-0.07895
CG2865	FBGN0023526	-0.22376	-0.08454	-0.29474	-0.15552
Maf1	FBGN0267861	-0.01562	0.028459	-0.07069	-0.02661
CG9961	FBGN0031451	-0.07385	-0.01582	-0.17819	-0.12016
Oatp33Ea	FBGN0032433	0.309441	0.326578	-0.48646	-0.46932
CG12620	FBGN0032626	-0.05396	-0.11371	-0.02233	-0.08209
CG31445	FBGN0051445	-0.01984	-0.21191	0.180268	-0.0118
Sps2	FBGN0032224	0.120574	0.160561	0.037206	0.077194
RhoGAP93B	FBGN0038853	0.241932	-0.12146	0.511435	0.148046
PpD3	FBGN0005777	0.130927	0.027457	0.029282	-0.07419
CG8245	FBGN0033031	0.024629	-0.00711	-0.08131	-0.11305
Whamy	FBGN0037750	-0.03655	0.526483	-0.72051	-0.15748

CG5321	FBGN0030575	0.761709	-0.12472	0.793688	-0.09274
Vsp37A	FBGN0016038	-0.11988	0.035795	-0.15652	-0.00084
ltl	FBGN0268063	-0.05213	0.094547	-0.08951	0.057169
CG12693	FBGN0029705	-0.01926	-0.02177	-0.02369	-0.0262
Ptr	FBGN0262867	0.251889	-0.16247	0.717934	0.303575
ApepP	FBGN0026150	-0.00435	0.146456	-0.34134	-0.19054
CG31735	FBGN0051735	0.081882	0.02441	-0.03088	-0.08835
RpA-70	FBGN0010173	0.106078	0.091734	0.227014	0.21267
v	FBGN0003965	0.566669	-0.11066	1.06666	0.389334
clumsy	FBGN0026255	0.586661	0.154443	0.630408	0.198189
Spn47C	FBGN0033574	-0.20116	-0.03225	-0.15117	0.017735
SC35	FBGN0265298	-0.122	0.001233	-0.0929	0.030327
Zir	FBGN0031216	0.278381	0.070637	0.359199	0.151455
CG45486	FBGN0267042	-0.94408	-1.45859	0.200531	-0.31398
dock	FBGN0010583	0.12609	-0.07419	0.177498	-0.02278
mrt	FBGN0039507	0.209077	0.071311	0.18555	0.047783
CG13912	FBGN0035186	0.215523	-0.17593	0.104783	-0.28667
rb	FBGN0003210	-0.2528	-0.30191	0.17366	0.124551
CG31391	FBGN0051391	0.065106	0.0069	0.037542	-0.02066
su(r)	FBGN0086450	0.126177	0.060966	0.273588	0.208377
Gprk2	FBGN0261988	0.021305	-0.06952	0.39738	0.30656
CG14314	FBGN0038581	0.317952	0.166968	0.562561	0.411578
CG16820	FBGN0032495	0.21496	-0.03721	0.356441	0.104271
CG18259	FBGN0030956	-0.01554	0.11711	-0.07922	0.053435
Snx1	FBGN0031534	-0.05969	-0.08671	0.036117	0.009094
pod1	FBGN0029903	0.297716	0.000197	0.45067	0.153151
CG17754	FBGN0030114	0.193759	0.032812	0.187559	0.026612
Ythdf	FBGN0039261	0.356583	0.086147	0.431574	0.161139
CG14668	FBGN0037320	0.25208	-0.05339	0.251998	-0.05348
CG13544	FBGN0034826	-0.00919	-0.03168	-0.03625	-0.05873
Phae1	FBGN0263234	0.53808	0.646219	-0.75002	-0.64188
Odc1	FBGN0013307	-0.07262	-0.25586	0.078205	-0.10503
CG8229	FBGN0033356	0.079636	-0.07945	0.087219	-0.07186
AhcyL2	FBGN0015011	0.148624	0.093634	-0.32777	-0.38276
p	FBGN0086679	0.174905	-0.08126	0.237111	-0.01906
Frq2	FBGN0083228	0.483572	0.108806	0.441396	0.06663
BomBc1	FBGN0034328	-0.99835	-0.61153	-0.68861	-0.3018
Proc	FBGN0045038	0.17961	-0.03019	0.232044	0.022243
CG8292	FBGN0032004	-0.11391	0.009454	-0.16268	-0.03932
CG1662	FBGN0030481	-0.04047	0.081408	0.083003	0.204878
CG42553	FBGN0260755	-0.06177	0.083783	-0.31174	-0.16618
SH3PX1	FBGN0040475	-0.06139	0.176608	-0.23095	0.007051
gukh	FBGN0026239	0.141543	-0.20652	0.397466	0.049403
CG5346	FBGN0038981	-0.03326	0.166808	-0.209	-0.00893
Mppe	FBGN0259985	-0.0067	-0.28025	0.364809	0.091255
Naa30A	FBGN0024362	0.298794	0.105004	0.433512	0.239722
fzr	FBGN0262699	-0.08727	0.038207	-0.08865	0.036824
MED1	FBGN0037109	0.064458	-0.01014	0.203092	0.128495
yki	FBGN0034970	0.032481	0.017536	0.127257	0.112313
CG6055	FBGN0031918	0.466327	0.069479	0.287829	-0.10902
CG13539	FBGN0034833	-0.32109	0.019207	-0.21674	0.123561
CG2064	FBGN0033205	-0.08212	0.258684	-0.51956	-0.17876
ck	FBGN0000317	0.605253	0.045471	0.728686	0.168905
Cln3	FBGN0036756	0.216895	0.043235	-0.03856	-0.21222
alpha-Man-Ia	FBGN0259170	0.206571	-0.01056	0.237434	0.020305
Bsg25D	FBGN0000228	0.153352	-0.04267	0.358363	0.162344
CG15254	FBGN0028949	-1.03873	0.347141	-2.43655	-1.05068
CG12194	FBGN0031636	0.158487	0.14367	0.274068	0.25925
Vha36-3	FBGN0040377	0.017563	-0.13711	0.336922	0.182246
bon	FBGN0023097	0.206617	-0.10762	-0.00627	-0.3205
CG2034	FBGN0015359	-0.09952	0.012518	-0.03334	0.078706
CG5111	FBGN0039343	0.025523	0.024463	-0.19558	-0.19664
CG7600	FBGN0064766	-0.04502	0.028001	-0.12178	-0.04876
EMC3	FBGN0032292	-0.18986	0.078668	-0.0879	0.180627
CG14441	FBGN0029895	0.491532	0.041702	0.584039	0.134209
CG14439	FBGN0029898	-0.06925	0.165384	-0.37368	-0.13904
ap	FBGN0267978	0.301033	-0.07008	0.412635	0.041527
subdued	FBGN0038721	0.287248	0.016327	0.214826	-0.05609
RpII140	FBGN0262955	0.086116	0.040962	-0.06683	-0.11199

antr	FBGN0050488	-0.01473	0.078243	-0.13828	-0.04531
Pi3K92E	FBGN0015279	0.316706	0.053907	0.389124	0.126324
EMC2A	FBGN0038462	-0.00529	0.158522	-0.73051	-0.5667
CG33143	FBGN0053143	0.419105	0.043826	0.944509	0.56923
CG11076	FBGN0039929	-0.09661	0.047175	-0.22732	-0.08354
Orcokinin	FBGN0034935	-0.08263	-0.05692	-0.11706	-0.09136
ncm	FBGN0086707	-0.10796	-0.13499	0.012835	-0.01419
CG3860	FBGN0034951	0.06171	0.16284	-0.07334	0.027792
CG11835	FBGN0031264	0.29066	-0.27205	0.771144	0.208431
drk	FBGN0004638	-0.11954	-0.00087	-0.04022	0.078448
CG8878	FBGN0027504	0.061219	-0.00559	0.019225	-0.04759
Sos	FBGN0001965	0.179572	-0.05947	0.321976	0.08293
U2af50	FBGN0005411	-0.15114	-0.01904	-0.12011	0.011995
Timp	FBGN0025879	0.051823	0.053831	0.021458	0.023466
bru3	FBGN0264001	0.488403	0.019627	0.494456	0.02568
CG17030	FBGN0035584	0.028495	0.132546	-0.39901	-0.29496
ZnT49B	FBGN0033762	0.041554	0.022217	0.069849	0.050513
drd	FBGN0260006	0.364629	0.431633	-0.16634	-0.09933
UbcE2M	FBGN0035853	-0.01963	0.039191	-0.13291	-0.07409
fru	FBGN0004652	0.272903	-0.08901	0.533502	0.171592
CG5618	FBGN0036975	0.107256	0.372784	0.112709	0.378237
CG13471	FBGN0036443	-0.15602	0.079577	-0.53243	-0.29683
MagR	FBGN0026666	-0.08375	0.050857	-0.02389	0.110724
CG30355	FBGN0050355	-0.14264	-0.00101	-0.28033	-0.1387
Xpc	FBGN0004698	-0.0409	-0.01133	0.066931	0.096494
CG17991	FBGN0039498	-0.01245	0.000847	-0.13621	-0.12291
pzg	FBGN0259785	0.270311	0.092825	0.260023	0.082538
trc	FBGN0003744	0.13918	0.089221	0.182304	0.132346
CG2915	FBGN0033241	0.101538	0.082897	0.013479	-0.00516
Actn3	FBGN0015008	0.050806	0.004724	-0.1233	-0.16938
CG34299	FBGN0085328	-0.10022	0.192867	-0.25793	0.03516
PIG-V	FBGN0265174	0.006716	0.029909	-0.02163	0.001561
CG1827	FBGN0033431	-0.01322	-0.05437	0.097381	0.056233
Obp8a	FBGN0030103	-0.53272	-1.10198	0.211309	-0.35795
CG3690	FBGN0040350	0.23375	0.031437	0.343891	0.141578
Ssrp	FBGN0010278	-0.22513	0.030341	-0.25747	-0.002
CG7366	FBGN0035855	-0.10782	-0.05035	-0.10071	-0.04324
RN-tre	FBGN0020620	0.14257	0.020163	0.222348	0.099941
Dyrk2	FBGN0016930	0.349233	-0.03515	0.366288	-0.01809
AttB	FBGN0041581	-1.34237	0.169129	-1.7623	-0.25081
Lnk	FBGN0028717	0.135158	0.052948	0.166223	0.084013
CG1307	FBGN0026566	0.06271	-0.05147	0.0755	-0.03868
Sox14	FBGN0005612	0.415355	0.044104	0.528368	0.157117
r	FBGN0003189	-0.03072	-0.14032	0.127961	0.018363
CG32022	FBGN0052022	-0.28632	0.28877	-0.51738	0.057717
CG3301	FBGN0038878	0.133547	-0.0929	0.065887	-0.16056
CG5021	FBGN0035944	-0.28244	0.00163	-0.26326	0.020809
CG15260	FBGN0028850	-0.26567	0.000857	-0.21478	0.051745
Ulp1	FBGN0027603	0.080665	-0.11171	0.250408	0.058034
CG31548	FBGN0051548	-0.02356	-0.11813	0.162654	0.06808
Vha36-2	FBGN0033706	-0.08631	-0.04359	0.012091	0.054808
Arc42	FBGN0038742	0.078416	-0.13336	0.245436	0.033661
rogdi	FBGN0036697	0.178528	0.042981	0.041984	-0.09356
Ho	FBGN0037933	-0.1923	-0.03427	-0.25644	-0.0984
Ugt37D1	FBGN0040260	0.070916	0.134351	-0.38037	-0.31693
CG5877	FBGN0030625	-0.25555	0.071358	-0.10755	0.21936
Phk-3	FBGN0035089	-0.2445	0.574533	-0.63886	0.180166
CG15822	FBGN0035308	0.497861	0.012059	0.810678	0.324876
Dhc62B	FBGN0013811	0.362034	0.096585	0.241724	-0.02372
CG32023	FBGN0052023	0.191748	0.500433	-0.2256	0.083085
Rbp1	FBGN0260944	-0.13476	-0.02743	-0.10233	0.004999
dpr3	FBGN0053516	0.921215	0.331666	0.808983	0.219434
fal	FBGN0028380	-0.28216	0.025983	-0.2641	0.044044
fkh	FBGN0000659	0.532626	0.273468	0.238648	-0.02051
Edem1	FBGN0023511	-0.06146	0.088268	-0.05363	0.096096
Zip48C	FBGN0033665	-0.04427	0.139728	-0.3781	-0.1941
Rcc1	FBGN0002638	-0.082	-0.00534	-0.14753	-0.07087
nst	FBGN0036298	0.066436	0.259996	-0.36129	-0.16773
CG6040	FBGN0038679	0.211728	-0.08012	0.408662	0.116814

CG12020	FBGN0035273	-0.07985	0.056791	-0.1481	-0.01145
CG8349	FBGN0032003	-0.16957	-0.04648	-0.09812	0.024959
CG9147	FBGN0031774	-0.10751	0.000318	0.069661	0.17749
CG4970	FBGN0032364	0.010584	-0.11703	0.053685	-0.07392
Pgant7	FBGN0030930	0.111368	0.153522	0.146389	0.188544
PSMG1	FBGN0037378	-0.06991	0.08179	-0.145	0.006698
Socs36E	FBGN0041184	-0.00832	0.460861	-0.43673	0.032452
stac	FBGN0266719	0.157117	0.012239	0.272126	0.127248
Syx6	FBGN0037084	-0.01184	-0.0258	0.042967	0.029009
CG8726	FBGN0033244	0.109513	0.120887	0.063212	0.074586
mRpL50	FBGN0028648	-0.98943	0.059673	-1.03339	0.015721
Tsp29Fa	FBGN0032074	-0.23815	0.586291	-1.24858	-0.42414
CG3306	FBGN0036016	-0.0905	-0.02368	-0.09465	-0.02782
sty	FBGN0014388	0.397399	0.1707	0.25878	0.032081
GluProRS	FBGN0005674	-0.00111	0.00504	0.05767	0.063823
snama	FBGN0086129	0.156103	0.005627	0.141018	-0.00946
pinta	FBGN0038966	0.400576	0.076892	1.087755	0.76407
l(3)72Ab	FBGN0263599	0.198707	-0.00306	0.309964	0.108199
CROT	FBGN0039543	0.220915	-0.16457	0.302317	-0.08316
Pxn	FBGN0011828	-0.02164	-0.2983	0.378151	0.101486
raskol	FBGN0261570	0.078598	0.030178	0.158251	0.109831
CG42542	FBGN0260659	0.078316	0.033624	0.079888	0.035196
Lgr1	FBGN0016650	0.432283	0.261487	0.493542	0.322746
CG2854	FBGN0040391	-0.27069	-0.00098	-0.29568	-0.02596
lncRNA:CR31451	FBGN0051451	0.259142	0.049761	0.22739	0.01801
CG5910	FBGN0036993	0.216084	0.273147	-0.05165	0.005414
Gnpnat	FBGN0039690	0.254582	-0.11977	0.626084	0.251735
CG11291	FBGN0034713	-0.05455	-0.00843	-0.03331	0.012806
CG45049	FBGN0266409	0.319812	0.095209	0.3236	0.098997
mnb	FBGN0259168	-0.0649	-0.03895	-0.02601	-5.77E-05
Klp67A	FBGN0004379	-0.32843	-0.09023	-0.36008	-0.12187
wap	FBGN0266848	0.258248	0.147946	0.209436	0.099134
CG8066	FBGN0038243	-0.20646	0.136742	-0.48156	-0.13836
cpb	FBGN0011570	0.005808	0.148285	-0.18341	-0.04093
CG9471	FBGN0037749	-0.06366	0.027079	-0.22368	-0.13294
SecS	FBGN0037347	0.007336	-0.11807	-0.06799	-0.19339
CR18228	FBGN0037560	0.305689	0.279961	-0.54021	-0.56594
CG13901	FBGN0035164	-0.16186	-0.07119	-0.2615	-0.17083
CG9106	FBGN0030624	-0.07121	0.009056	-0.16296	-0.08269
CG6839	FBGN0036831	-0.75727	0.27377	-2.66878	-1.63774
CG8209	FBGN0035830	-0.06634	-0.00097	-0.00874	0.056625
CG9853	FBGN0086605	-0.1267	0.048201	-0.20711	-0.03221
mRpS7	FBGN0032236	-0.06196	0.036237	-0.14655	-0.04835
Mgstl	FBGN0025814	-0.31177	0.023383	-0.03677	0.298387
CG3748	FBGN0032110	-0.14598	-0.0254	-0.07977	0.040808
CG43800	FBGN0264344	-0.01306	0.029045	-0.45275	-0.41064
frma	FBGN0029769	0.496069	0.038056	0.621447	0.163433
Pfdn6	FBGN0036918	-0.15881	0.0278	-0.15633	0.030289
CG32086	FBGN0052086	0.356607	0.022816	0.150392	-0.1834
CG34041	FBGN0054041	0.051283	-0.03585	-0.22014	-0.30727
Arpc4	FBGN0284255	-0.18483	0.114157	-0.40879	-0.1098
CG4789	FBGN0030792	-0.19959	0.061018	-0.11423	0.146375
Sulf1	FBGN0040271	0.139458	0.059944	0.148168	0.068654
uzip	FBGN0004055	-0.01322	-0.11265	0.192819	0.093386
RhoGAP15B	FBGN0030808	0.419883	0.16869	0.394157	0.142963
per	FBGN0003068	0.511701	0.132239	0.241439	-0.13802
CG32161	FBGN0052161	-0.21578	0.065226	-0.23895	0.04206
RNaseX25	FBGN0010406	-0.06834	0.059838	-0.252	-0.12382
Prx3	FBGN0038519	0.077868	0.002958	0.024153	-0.05076
wnd	FBGN0036896	0.357189	0.049249	0.23277	-0.07517
Pbgs	FBGN0036271	-0.10647	0.175351	-0.65491	-0.37309
meigo	FBGN0250820	-0.08533	-0.08783	0.077588	0.075082
CG10465	FBGN0033017	-0.18164	0.052214	-0.35173	-0.11787
CG12512	FBGN0031703	0.125896	0.015491	0.147997	0.037592
CG10132	FBGN0032798	0.243356	-0.0994	0.510949	0.168195
pygo	FBGN0043900	0.058313	-0.00833	0.125296	0.058652
CG12171	FBGN0037354	0.156261	0.067142	0.073497	-0.01562
CG8336	FBGN0036020	0.091901	0.002159	-0.03476	-0.1245
par-6	FBGN0026192	0.153934	-0.05485	0.292655	0.083876

CG6888	FBGN0036490	-0.07677	0.031965	-0.21831	-0.10958
CG7956	FBGN0038890	0.109626	0.049124	0.043617	-0.01689
qkr58E-2	FBGN0022985	0.108919	-0.01531	0.164466	0.040233
CG1532	FBGN0031143	-0.2102	0.075762	-0.18454	0.101425
Sfp53D	FBGN0259967	-0.12748	-0.10306	-0.10997	-0.08556
CG33233	FBGN0053233	-0.16343	-0.0486	-0.23262	-0.11779
SkpF	FBGN0034863	0.013994	-0.04082	-0.25204	-0.30686
Sirt2	FBGN0038788	0.02225	0.043544	-0.02814	-0.00685
Ca-Ma2d	FBGN0261999	0.367942	-0.06121	0.608587	0.179433
CG42673	FBGN0261555	0.220705	-0.04856	0.269251	-1.04E-05
CG32813	FBGN0052813	0.224137	0.091832	0.157602	0.025297
CG9706	FBGN0036662	-0.20374	-0.01379	-0.29741	-0.10746
Mur2B	FBGN0025390	0.34949	0.284086	0.453831	0.388428
Dgkepsilon	FBGN0020930	0.009785	-0.0833	0.11463	0.021545
spn-F	FBGN0086362	0.185672	0.09432	0.034526	-0.05683
Ephrin	FBGN0040324	0.350227	0.115421	0.254255	0.019449
kug	FBGN0261574	0.284855	0.083323	0.408992	0.207459
CG31528	FBGN0051528	-0.24067	-0.02364	-0.25943	-0.0424
CG1571	FBGN0029993	0.010066	0.062426	-0.07318	-0.02082
CG7878	FBGN0037549	-0.0513	-0.03136	-0.01186	0.00808
Mkk4	FBGN0024326	0.122203	0.009157	0.07821	-0.03484
CG31128	FBGN0051128	-0.12715	-0.01564	-0.21277	-0.10126
CG1138	FBGN0037456	-0.51247	0.325149	-0.57502	0.262603
retinin	FBGN0040074	-0.94857	-1.08197	0.726189	0.59279
Ady43A	FBGN0026602	0.131773	-0.21099	0.609126	0.266366
CG14864	FBGN0038311	0.191362	-0.03287	-0.18021	-0.40444
CG10623	FBGN0032727	-0.0101	-0.07469	0.026336	-0.03825
CG4301	FBGN0030747	0.214758	0.60798	-0.44004	-0.04681
Rh50	FBGN0028699	-0.59346	0.14085	-0.45424	0.28007
COX6AL	FBGN0050093	-0.12174	-0.00612	-0.20095	-0.08533
CG14613	FBGN0031188	-0.05854	-0.06061	-0.04798	-0.05004
Oatp74D	FBGN0036732	0.382908	-0.13942	0.494211	-0.02811
CG14488	FBGN0034278	-0.21755	-0.01223	-0.28071	-0.07539
CG11828	FBGN0039616	-0.29889	-0.11159	-0.01776	0.169546
Nost	FBGN0259734	0.389874	-0.00482	0.309785	-0.08491
CG9394	FBGN0034588	0.151723	0.006322	0.478003	0.332602
CG11034	FBGN0031741	-0.34503	-0.04602	-0.74718	-0.44818
MtnD	FBGN0053192	0.574889	0.262249	-0.30465	-0.61729
dysc	FBGN0264006	0.095934	-0.2266	0.440433	0.117899
CG32085	FBGN0052085	0.061589	0.00494	0.149455	0.092806
Nepl6	FBGN0259716	0.860556	-0.11452	0.876458	-0.09862
CG3626	FBGN0029706	0.32162	0.056734	0.400794	0.135907
CG15425	FBGN0265269	-0.09402	-0.00737	-0.06443	0.022214
CG32695	FBGN0052695	-0.14471	0.321287	0.308788	0.774787
Phae2	FBGN0263235	-0.03555	0.516737	-0.99893	-0.44665
lncRNA:CR42657	FBGN0261522	-0.05804	0.002465	-0.05174	0.008765
CG32195	FBGN0052195	0.432603	0.494264	-0.15706	-0.09539
28SrRNA-Psi:CR40596	FBGN0085753	0.286052	0.189975	0.035142	-0.06094
Snoo	FBGN0085450	0.65585	-0.05457	0.797093	0.086671
CG31935	FBGN0051935	-0.57876	-0.73232	0.456064	0.302506
blot	FBGN0027660	0.218099	-0.13616	0.285261	-0.069
IntS3	FBGN0262117	0.130906	0.068778	0.152173	0.090044
CG1265	FBGN0035517	0.15725	0.227506	0.118281	0.188538
epsilonCOP	FBGN0027496	-0.20444	0.028404	-0.17158	0.061263
CG43867	FBGN0264449	0.122987	0.261805	-0.12034	0.01848
Fic	FBGN0263278	0.39239	0.157087	0.247501	0.012198
Tfb1	FBGN0033929	-0.19865	-0.00494	-0.23195	-0.03824
CG34172	FBGN0085201	-0.27274	-0.31604	0.132873	0.089582
CG6495	FBGN0027550	0.082508	-0.15581	0.658052	0.419735
HtrA2	FBGN0038233	-0.0205	-0.01606	-0.04608	-0.04164
mri	FBGN0035107	0.086228	0.048824	0.240578	0.203174
ytr	FBGN0021895	0.070235	-0.03002	0.082354	-0.0179
Tengl4	FBGN0037857	-0.06915	0.096334	-0.30448	-0.13899
CG31882	FBGN0051882	0.000253	-0.00744	-0.01467	-0.02236
NSD	FBGN0039559	0.041673	-0.07175	-0.09851	-0.21193
CG30392	FBGN0050392	0.016625	0.362019	-0.19066	0.154731
Mad	FBGN0011648	0.068665	0.049614	0.023989	0.004938
CG2100	FBGN0037369	0.016748	-0.07229	-0.08581	-0.17485
CG7653	FBGN0028935	0.189726	0.038902	0.136022	-0.0148

Pngl	FBGN0033050	0.111928	0.109269	-0.02687	-0.02953
Su(var)2-HP2	FBGN0026427	0.126903	-0.04287	0.286999	0.117229
CG9759	FBGN0038160	-1.54057	-0.15172	0.201227	1.590082
Vav	FBGN0040068	0.168755	0.099573	0.228275	0.159093
pelo	FBGN0011207	0.120556	0.036821	0.027686	-0.05605
rdgC	FBGN0265959	0.361579	-0.22733	0.555701	-0.03321
CG10425	FBGN0039304	-0.06304	-0.03268	-0.57025	-0.53989
CG34124	FBGN0083960	0.515029	-0.01196	0.453147	-0.07384
Prestin	FBGN0036770	0.142464	0.273625	-0.09139	0.039774
CG17765	FBGN0033529	0.052315	0.022334	0.109839	0.079858
Dhit	FBGN0028743	0.110821	0.143466	0.058503	0.091148
Pka-C2	FBGN0000274	-0.09435	-0.05361	-0.12841	-0.08766
Ilp2	FBGN0036046	0.228881	-0.03012	0.142502	-0.11649
CG8668	FBGN0031988	0.043928	0.122141	-0.09308	-0.01487
CG31673	FBGN0051673	0.135078	0.033636	0.048745	-0.0527
CG1703	FBGN0030321	-0.03917	-0.0388	-0.06221	-0.06184
pyd3	FBGN0037513	0.176483	-0.03223	-0.34105	-0.54976
Ser7	FBGN0019929	0.162563	-0.05954	0.402281	0.180176
ohgt	FBGN0037780	0.027667	0.018995	0.025713	0.017042
r-cup	FBGN0031142	-0.00171	-0.06865	0.014924	-0.05202
Tnks	FBGN0027508	0.317823	-0.02918	0.392517	0.045514
Usp15-31	FBGN0050421	0.137756	-0.01136	0.183941	0.034822
Tsp42El	FBGN0033134	0.034383	0.210486	-0.29237	-0.11627
smid	FBGN0016983	-0.0688	0.035492	-0.05967	0.044623
TyrRS	FBGN0027080	-0.0731	0.013854	-0.10249	-0.01554
dmpd	FBGN0033486	0.147698	-0.11707	0.144007	-0.12076
Topors	FBGN0267351	0.097046	0.037505	0.133182	0.073642
CG7675	FBGN0038610	0.097221	-0.14501	0.233991	-0.00824
CG18343	FBGN0033683	0.381312	0.087941	0.330945	0.037574
CG6415	FBGN0032287	0.691047	-0.06244	1.004303	0.250814
CG14676	FBGN0037388	-0.01408	0.12661	0.189312	0.330006
CG18787	FBGN0042125	-0.02062	0.064329	0.232567	0.317512
CG5746	FBGN0039186	0.186946	0.017765	0.187931	0.01875
LysRS	FBGN0027084	-0.07381	0.051462	-0.09094	0.03433
Yp2	FBGN0005391	-0.40573	-0.15535	-1.85054	-1.60015
Sep2	FBGN0014029	-0.22739	0.252674	-0.26279	0.217266
mtRNApol	FBGN0261938	0.008913	-0.10997	0.303494	0.18461
CG1314	FBGN0031134	-0.09085	0.048076	-0.19186	-0.05293
CG8051	FBGN0031012	0.219489	0.296575	-0.02574	0.051349
Slh	FBGN0264978	-0.02382	-0.04854	0.00258	-0.02214
CG7382	FBGN0031708	-0.23831	-0.04426	-0.22071	-0.02667
Ttc7	FBGN0021847	-0.06153	0.032251	-0.02363	0.07015
CG7054	FBGN0038972	-0.37944	0.134704	-0.25394	0.260207
CG4661	FBGN0030429	0.064042	0.020033	-0.06508	-0.10909
CG32295	FBGN0260480	0.013265	-0.06331	-0.03808	-0.11465
dpr12	FBGN0085414	0.320146	-0.06845	0.454245	0.065647
Pif1A	FBGN0261015	0.038369	-0.08621	0.057451	-0.06713
gus	FBGN0026238	0.094495	0.14245	-0.03489	0.013067
CG2104	FBGN0037365	0.393748	0.152124	0.186665	-0.05496
HEATR2	FBGN0051320	-0.22255	-0.00938	-0.05127	0.161896
Dcr-2	FBGN0034246	0.239892	0.011465	0.348059	0.119632
CG2924	FBGN0023528	0.226726	0.159914	0.049624	-0.01719
Cyp4ac2	FBGN0031694	1.173128	-0.123	1.521626	0.225497
GAPcenA	FBGN0035879	-0.01661	0.004455	0.016015	0.037085
drm	FBGN0024244	0.297725	0.079148	0.376097	0.15752
Myc	FBGN0262656	0.480931	0.133613	0.440366	0.093048
a10	FBGN0011293	-0.36795	-0.42138	0.46304	0.409604
Son	FBGN0037716	0.455032	0.006905	0.101333	-0.34679
gom	FBGN0029084	0.031302	-0.03789	-0.01527	-0.08446
CG12035	FBGN0035263	-0.05915	-0.002	-0.13417	-0.07703
CG30456	FBGN0050456	0.088624	0.159972	-0.24987	-0.17852
MFS12	FBGN0033234	0.19186	0.377228	-0.64685	-0.46148
CG1129	FBGN0037279	0.042251	0.202505	-0.27287	-0.11262
CG43050	FBGN0262352	-0.16813	-0.12317	-0.20422	-0.15926
crim	FBGN0036198	-0.43793	0.118536	-0.82567	-0.26921
CG17300	FBGN0036345	-0.17585	0.068926	-0.34653	-0.10176
CG15539	FBGN0039782	-0.51774	-0.27565	-0.66248	-0.42039
Fnta	FBGN0031633	-0.20901	0.039761	-0.18306	0.065718
CG8006	FBGN0035857	0.127612	0.067699	0.068766	0.008852

Cda5	FBGN0051973	0.206999	-0.05238	0.383541	0.124162
CG9231	FBGN0036887	-0.12259	-0.00635	-0.1536	-0.03737
CG6733	FBGN0039052	0.293001	-0.06432	0.245743	-0.11158
Pdfr	FBGN0260753	0.678072	-0.16361	0.599397	-0.24229
CG15764	FBGN0029817	-0.21179	-0.03368	-0.23659	-0.05849
CG6908	FBGN0037936	-0.55314	-0.31118	-0.19752	0.044431
CG10467	FBGN0035679	0.239679	-0.03901	0.288645	0.009956
CG4393	FBGN0039075	0.274868	0.075581	0.44394	0.244653
CG31819	FBGN0028893	-0.03525	9.73E-06	-0.11774	-0.08248
CG12213	FBGN0260742	0.133912	-0.24876	0.267756	-0.11492
CG7222	FBGN0033551	0.0309	-0.01162	0.020838	-0.02168
Axn	FBGN0026597	0.13323	-0.04306	0.267079	0.09079
Rab6	FBGN0015797	0.065422	0.18591	-0.13199	-0.0115
CG9426	FBGN0032485	-0.05031	0.139148	-0.17117	0.018287
CG7335	FBGN0036941	-0.01315	-0.07854	-0.0361	-0.10149
CG3604	FBGN0031562	-0.18459	-0.29949	0.440008	0.325107
Cul5	FBGN0039632	0.121107	0.043106	-0.01372	-0.09172
Rab32	FBGN0002567	0.004693	-0.08098	0.001302	-0.08437
Psn	FBGN0284421	0.023995	0.13744	-0.10896	0.004486
CAH3	FBGN0030056	-0.00535	-0.04787	-0.08456	-0.12708
NetA	FBGN0015773	0.412675	0.617476	-0.7635	-0.5587
MED14	FBGN0035145	0.164701	0.052451	0.155768	0.043518
Rs1	FBGN0021995	-0.60729	-0.02151	-0.45575	0.130034
ras	FBGN0003204	0.013475	0.047975	0.169535	0.204035
alpha-Est1	FBGN0015568	0.253862	-0.25888	0.441413	-0.07133
Spt5	FBGN0040273	0.034646	-0.00228	0.123514	0.086587
7SLRNA:CR42652	FBGN0261504	0.161943	0.235009	-0.24731	-0.17424
ValRS-m	FBGN0035942	0.068211	0.109246	-0.07288	-0.03184
Dic3	FBGN0033248	-0.26661	-0.22172	0.185269	0.230163
CG15657	FBGN0034595	-0.21682	-0.11735	-0.30888	-0.20941
TfIIFalpha	FBGN0010282	-0.05049	0.005476	-0.11096	-0.055
CG17065	FBGN0031099	-0.05426	0.025126	-0.17066	-0.09128
CG10011	FBGN0039590	0.477514	-0.22053	0.651919	-0.04613
Vamp7	FBGN0266186	-0.07331	0.082403	-0.19602	-0.0403
CG15083	FBGN0034399	0.102611	0.336089	-0.41915	-0.18567
robl	FBGN0024196	-0.2534	0.121388	-0.46548	-0.09068
CG13102	FBGN0032088	0.343504	0.29583	-0.83809	-0.88576
phr	FBGN0003082	-0.31204	0.175625	0.058799	0.546465
Ntf-2	FBGN0031145	-0.01674	0.157831	-0.13018	0.044395
CG15800	FBGN0034904	-0.26789	-0.14098	0.081611	0.208521
Sod3	FBGN0033631	0.075687	-0.01495	0.042511	-0.04812
Pfdn2	FBGN0010741	-0.31398	0.009408	-0.30169	0.021706
Nipped-A	FBGN0053554	0.201961	0.024514	0.371902	0.194454
Snmp2	FBGN0035815	-0.59964	-0.06729	-0.65274	-0.12039
CG3408	FBGN0036008	-0.20368	0.033843	-0.25619	-0.01867
mars	FBGN0033845	-0.06915	-0.07064	0.005515	0.004029
CG3565	FBGN0035034	-0.19462	-0.10702	-0.19971	-0.11212
pds5	FBGN0260012	0.280376	0.045273	0.293215	0.058112
CG4415	FBGN0031296	-0.46589	-0.12421	-0.61626	-0.27458
Ranbp21	FBGN0031051	0.182873	-0.04813	0.21924	-0.01176
Mrtf	FBGN0052296	0.352672	-0.07374	0.387612	-0.0388
ATPsynbetaL	FBGN0036568	-0.11437	0.011378	-0.30613	-0.18038
CG1161	FBGN0037313	-0.09316	0.023868	-0.02791	0.089116
CG6330	FBGN0039464	0.018187	-0.10735	0.30361	0.178071
twr	FBGN0262801	-0.22016	-0.16339	-0.04263	0.014138
CG45078	FBGN0266448	0.156418	0.135415	0.219271	0.198268
CG15209	FBGN0030237	-0.28836	-0.19027	0.150659	0.248755
Adgf-D	FBGN0038172	0.264786	0.05573	0.447598	0.238543
Mms19	FBGN0037301	-0.1633	0.013408	-0.14774	0.028968
Mrp4	FBGN0263316	0.262198	0.070095	0.150914	-0.04119
Cp110	FBGN0031191	-0.09037	-0.10208	0.079289	0.067581
CG31021	FBGN0051021	0.093368	-0.07302	0.097622	-0.06877
CG5862	FBGN0038868	-0.26934	-0.0853	-0.16263	0.021406
PIP5K59B	FBGN0034789	0.282683	-0.08294	0.567386	0.201768
FipoQ	FBGN0039667	-0.29527	-0.15765	0.108872	0.246495
tant	FBGN0028980	-0.07612	0.015262	-0.06557	0.025815
CG9795	FBGN0037234	0.192109	-0.07696	0.258238	-0.01084
Acp53C14c	FBGN0053530	-1.37917	-0.77438	-0.81909	-0.2143
vari	FBGN0250785	-0.08558	-0.01901	0.004116	0.07069

MICU1	FBGN0031893	-0.01638	0.066299	0.084762	0.167446
CG2701	FBGN0024973	-0.08988	0.005841	-0.11297	-0.01725
CG31650	FBGN0031673	-0.08329	0.009078	-0.14742	-0.05505
Inx2	FBGN0027108	0.351939	0.130312	0.285123	0.063496
usp	FBGN0003964	0.204546	0.072332	0.284381	0.152168
snRNP-U1-70K	FBGN0016978	-0.06348	-0.12107	0.119992	0.06241
CG8197	FBGN0033369	-0.34267	-0.05394	-0.44103	-0.1523
CG12237	FBGN0031048	0.088226	0.099955	0.046154	0.057883
CG15358	FBGN0031373	-1.7793	-2.23512	0.32741	-0.12842
CG14546	FBGN0039395	0.050748	-0.00514	-0.25466	-0.31056
Hacl	FBGN0034488	0.028034	0.03145	-0.02031	-0.01689
CG9705	FBGN0036661	-0.16216	0.080082	-0.08796	0.154277
CG12773	FBGN0024365	0.091549	0.145694	-0.02836	0.025787
CG3008	FBGN0031643	0.05604	0.074451	-0.20532	-0.18691
Yip1d1	FBGN0032465	0.001673	0.067517	0.119595	0.18544
RhoGAP100F	FBGN0039883	0.443277	0.142258	0.600955	0.299935
CG6497	FBGN0036704	-0.11628	0.010135	-0.11324	0.013176
CG34236	FBGN0085265	-0.00903	1.406065	-1.64117	-0.22607
Ser8	FBGN0019928	0.763821	0.55441	0.534811	0.325399
CG3529	FBGN0035995	-0.02261	0.161374	0.056001	0.239986
CG17683	FBGN0262115	0.137765	0.021869	0.068236	-0.04766
CG43077	FBGN0262487	-0.24161	-0.11141	-0.23378	-0.10357
c11.1	FBGN0040236	0.133993	0.173807	0.098074	0.137888
CG15715	FBGN0036538	-0.1068	-0.00183	-0.2744	-0.16943
wapl	FBGN0004655	0.167815	0.040399	0.27937	0.151954
key	FBGN0041205	-0.24139	0.100145	-0.22671	0.114824
CG9316	FBGN0032878	-0.05624	0.022411	-0.12162	-0.04296
CG8080	FBGN0033373	0.168841	-0.00069	0.379228	0.209695
sunz	FBGN0037462	-0.08069	0.076596	-0.46231	-0.30502
CG2246	FBGN0039790	0.062685	0.028632	0.147584	0.113532
CG13197	FBGN0062449	0.043991	0.045011	0.019389	0.020409
CG3894	FBGN0035059	0.051593	0.032238	-0.00545	-0.02481
AstC	FBGN0032336	0.453346	0.152029	0.187339	-0.11398
Nhe1	FBGN0026787	0.098494	0.035097	0.062578	-0.00082
CG18549	FBGN0038053	-0.03127	0.101953	-0.15473	-0.02151
CG5254	FBGN0040383	-0.05442	0.168014	-0.10844	0.11399
CG42659	FBGN0261531	-0.05165	-0.05512	-0.08862	-0.09209
CG15625	FBGN0031644	0.124666	0.119704	-0.10525	-0.11021
Shaw	FBGN0003386	0.44153	0.079559	0.481405	0.119434
CG7560	FBGN0036157	0.783401	-0.48773	1.905529	0.634397
Rbp4	FBGN0010258	-0.44537	-0.15697	-0.44927	-0.16086
Jasper	FBGN0039743	-0.13922	-0.07822	-0.207	-0.146
Buffy	FBGN0040491	-0.3312	0.002606	-0.56458	-0.23077
mav	FBGN0039914	-0.14889	-0.11563	-0.15155	-0.11828
Usp5	FBGN0035402	0.010476	-0.06333	0.003284	-0.07052
Kdm2	FBGN0037659	0.182429	-0.00383	0.359966	0.173706
Trxr-2	FBGN0037170	-0.09056	-0.03053	-0.25803	-0.198
alpha-Est2	FBGN0015570	0.984228	-0.20568	0.97878	-0.21113
CG14891	FBGN0038445	0.07334	-0.01277	0.052056	-0.03406
GlyRS	FBGN0027088	-0.03958	-0.10137	-0.05855	-0.12033
Reph	FBGN0021800	-0.12523	-0.05672	0.041051	0.109563
CG7206	FBGN0030892	0.038156	0.052416	0.020938	0.035199
achi	FBGN0033749	-0.11093	-0.02972	-0.05707	0.024143
CG14232	FBGN0031061	-0.10145	0.008308	-0.0054	0.104352
HDAC1	FBGN0015805	0.001076	0.083929	-0.09879	-0.01594
Obp22a	FBGN0043539	-0.13361	-0.15507	-0.45431	-0.47576
CG2767	FBGN0037537	-0.03345	0.005455	0.008933	0.047843
Sf3b2	FBGN0031493	-0.19225	0.024808	-0.18221	0.034847
Nup160	FBGN0262647	-0.12086	-0.03467	-0.20174	-0.11555
l(2)41Ab	FBGN0262123	0.174426	0.058339	-0.07987	-0.19596
Pli	FBGN0025574	0.112799	-0.12951	0.195808	-0.0465
CG5850	FBGN0032172	0.321871	0.128757	0.313298	0.120184
CG5906	FBGN0036217	-0.12115	-0.00312	-0.22718	-0.10915
CG1965	FBGN0037466	0.198371	0.079535	0.333723	0.214887
CG15012	FBGN0035528	-0.092	0.083431	-0.16139	0.014038
boil	FBGN0029730	-0.08342	-0.03318	-0.1472	-0.09696
CG13527	FBGN0034776	-0.38676	-0.19508	0.17077	0.362457
glec	FBGN0015229	0.277011	0.098375	0.521735	0.343099
bark	FBGN0031571	0.243055	0.348002	-0.32662	-0.22167

Dscam4	FBGN0263219	0.446387	-0.03777	0.822914	0.338755
raptor	FBGN0029840	0.497424	-0.02771	0.83674	0.311603
inc	FBGN0025394	0.235642	0.102867	0.198697	0.065922
Tsp42Ei	FBGN0033130	-0.22418	0.037007	-0.27779	-0.0166
shv	FBGN0031256	-0.02237	-0.04697	-0.00262	-0.02722
Gli	FBGN0001987	-0.01646	0.253944	-0.35421	-0.0838
Myo28B1	FBGN0040299	0.171424	0.550297	-0.8103	-0.43143
Mnt	FBGN0023215	0.739662	0.144339	1.006347	0.411024
CG31693	FBGN0051693	0.009445	-0.06533	0.046303	-0.02847
CR40190	FBGN0085732	0.717611	0.783424	-0.13182	-0.066
CG4269	FBGN0034741	-0.55592	0.089552	-0.6314	0.014068
adp	FBGN0000057	0.034164	-0.09866	0.0764	-0.05643
Bap170	FBGN0042085	0.187723	-0.00765	0.210992	0.015618
Madm	FBGN0027497	0.085089	0.067462	0.036857	0.01923
spartin	FBGN0037265	0.188466	-0.15316	0.421803	0.080174
CalpA	FBGN0012051	-0.16451	-0.05037	-0.23089	-0.11675
CG6656	FBGN0038912	0.118535	-0.19482	0.174086	-0.13927
CkIIbeta2	FBGN0026136	-0.32252	-0.07313	-0.53184	-0.28245
nompB	FBGN0016919	0.334736	-0.14552	0.404979	-0.07528
CG9384	FBGN0036446	0.322605	0.038553	0.378704	0.094652
Den1	FBGN0033716	-0.10454	-0.01142	-0.12055	-0.02743
gig	FBGN0005198	0.202828	-0.09074	0.215697	-0.07787
Rab4	FBGN0016701	-0.07585	0.001389	-0.0946	-0.01736
CG11211	FBGN0033067	0.072831	0.387779	-0.86337	-0.54842
Yif1	FBGN0039450	-0.13939	0.11293	-0.02015	0.232167
CG15136	FBGN0032625	0.01399	0.045258	-0.06224	-0.03098
CG12375	FBGN0031987	0.23127	0.039173	0.186684	-0.00541
Zcchc7	FBGN0036668	0.074636	0.026812	0.227344	0.17952
CecA1	FBGN0000276	-1.09924	-1.08228	-0.11468	-0.09771
CG14022	FBGN0031700	-0.11426	0.035041	-0.23802	-0.08872
CG32267	FBGN0052267	-0.3447	0.003127	-0.26148	0.086343
RnpS1	FBGN0037707	-0.14774	0.139102	-0.03755	0.249294
CG14154	FBGN0036093	0.034124	0.07323	0.064449	0.103556
nsr	FBGN0034740	-0.28155	-0.1358	-0.4518	-0.30605
tadr	FBGN0032911	0.266388	0.010131	0.354847	0.098591
Cyp49a1	FBGN0033524	0.201678	0.104245	0.122916	0.025483
RpS19b	FBGN0039129	-0.3217	0.071313	-0.36487	0.028149
CG42733	FBGN0261686	0.114924	0.094256	-0.03664	-0.05731
Hr78	FBGN0015239	0.0791	0.034308	0.153024	0.108232
Naus	FBGN0034308	0.395981	-0.0179	0.450843	0.036958
Tsp97E	FBGN0039465	0.241694	-0.06291	0.3671	0.062494
CG13989	FBGN0031786	-0.13704	-0.06087	-0.01896	0.057199
CG10750	FBGN0032769	-0.16733	0.015275	-0.26183	-0.07923
PPP4R2r	FBGN0030208	0.141197	0.084498	0.175065	0.118366
Best1	FBGN0040238	0.012706	-0.07829	0.148448	0.057452
Mp	FBGN0260660	0.324509	0.047087	0.475892	0.19847
CG31008	FBGN0051008	-0.00238	0.171998	-0.07759	0.096797
CG11236	FBGN0031860	0.543048	-0.0952	0.960913	0.322669
CG6983	FBGN0035896	0.266105	0.11553	0.105684	-0.04489
CG2794	FBGN0031265	-0.02984	-0.0931	0.071643	0.008383
parvin	FBGN0052528	-0.07317	0.006054	-0.03896	0.040263
alpha-Man-IIb	FBGN0026616	0.252752	-0.34977	0.656147	0.053623
CG32432	FBGN0052432	0.26607	-0.1844	0.515645	0.065174
CG6337	FBGN0033873	-0.23422	-0.21706	0.261647	0.278811
CG31122	FBGN0051122	-0.11354	-0.20753	0.472168	0.378179
hdc	FBGN0010113	0.165314	-0.08327	0.222574	-0.02601
EMC8-9	FBGN0034791	-0.05883	-0.08117	-0.15722	-0.17956
CG17883	FBGN0040005	0.018909	-0.04588	0.014581	-0.0502
Tsp42Er	FBGN0033139	-0.13366	0.682607	-1.0888	-0.27254
CG15864	FBGN0040528	0.162424	-0.13417	0.065901	-0.2307
CG5270	FBGN0037897	0.248066	-0.0345	0.410147	0.127576
Br140	FBGN0033155	0.063967	0.043928	0.224522	0.204483
nvy	FBGN0005636	0.447197	0.067822	-0.02411	-0.40348
pcx	FBGN0003048	0.460428	0.009465	0.712231	0.261268
neb	FBGN0004374	-0.02669	0.003284	0.012155	0.042128
Ptp36E	FBGN0267486	0.187803	0.001352	0.21255	0.026099
CG32523	FBGN0052523	-0.72034	-0.13063	-1.34947	-0.75976
Nab2	FBGN0028471	0.139537	0.004228	0.059758	-0.07555
CG15580	FBGN0037398	0.121055	0.029941	-0.00955	-0.10067

CG31030	FBGN0051030	0.056206	-0.00469	0.022346	-0.03855
CG6629	FBGN0037860	-0.07528	0.098066	-0.20278	-0.02943
CG31342	FBGN0051342	0.064011	-0.07759	0.163431	0.021827
CG31347	FBGN0051347	-0.12109	-0.01695	-0.06399	0.040149
Rpn12R	FBGN0036465	-0.07585	0.064795	-0.14658	-0.00593
CG17233	FBGN0036958	0.272366	-0.00627	0.479996	0.201357
ScsbetaG	FBGN0029118	-0.08788	0.020946	-0.20566	-0.09684
CG30281	FBGN0050281	1.325296	0.204538	0.927102	-0.19366
CG1638	FBGN0039855	0.182459	-0.15286	0.070302	-0.26502
CG17715	FBGN0041004	0.177277	0.110693	0.095212	0.028628
CG11737	FBGN0037592	0.049974	-0.08866	0.123153	-0.01548
SCCRO	FBGN0036510	-0.14023	0.013391	-0.11374	0.039878
Mco4	FBGN0052557	-0.1675	0.070385	-1.07993	-0.84205
Chro	FBGN0044324	-0.02893	-0.01332	-0.05826	-0.04265
CG1607	FBGN0039844	0.079009	-0.12704	0.339953	0.133909
Hip1	FBGN0036309	0.153918	0.096103	-0.02793	-0.08575
CG40191	FBGN0058191	0.155397	0.055223	-0.01681	-0.11698
trv	FBGN0085391	0.62644	0.023802	0.460597	-0.14204
ste24b	FBGN0034175	0.065004	0.079628	-0.11632	-0.10169
nub	FBGN0085424	0.196546	0.915899	-1.10325	-0.3839
CG16952	FBGN0030701	0.220273	-0.00726	0.341431	0.113895
7SLRNA:CR32864	FBGN0000003	0.160634	0.237774	-0.07544	0.001702
CG33308	FBGN0250834	-0.1417	-0.07006	-0.18735	-0.11571
alpha-Est6	FBGN0015574	-0.10051	-0.03377	-0.58292	-0.51618
Mct1	FBGN0023549	0.21688	0.097061	0.457692	0.337873
pita	FBGN0034878	-0.00911	0.011816	0.008343	0.029268
CG2616	FBGN0037512	0.040026	-0.12929	0.185929	0.016609
Cyp309a1	FBGN0031432	0.463781	-0.04017	0.39117	-0.11278
Hat1	FBGN0037376	0.014394	0.078492	-0.08301	-0.01891
IntS1	FBGN0034964	0.111758	-0.02312	0.288352	0.15347
CG10984	FBGN0036305	-0.00502	-0.01516	-0.12617	-0.1363
CG6791	FBGN0037918	0.120016	-0.08468	0.268991	0.06429
CG12567	FBGN0039958	0.029655	0.064505	0.072561	0.107411
A16	FBGN0028965	-0.17943	-0.05796	-0.21562	-0.09414
Bdp1	FBGN0032512	0.004583	-0.06549	0.003627	-0.06644
na	FBGN0002917	0.380811	0.002413	0.577055	0.198657
CG13531	FBGN0034786	0.101913	0.04548	0.655911	0.599477
CG12118	FBGN0030101	-0.05566	0.127739	-0.08814	0.095254
sut1	FBGN0028563	0.086887	0.267823	-0.11634	0.0646
Pi3K21B	FBGN0020622	0.120431	0.205981	-0.09375	-0.0082
CG14683	FBGN0037822	-0.22864	-0.24843	0.060767	0.040973
CG34160	FBGN0250826	-0.05114	0.022497	-0.13868	-0.06504
Tspo	FBGN0031263	-0.39771	0.174262	-0.63403	-0.06205
Tg	FBGN0031975	-0.40374	0.012311	-0.45625	-0.0402
Lint-1	FBGN0030274	-0.04257	0.115761	0.000416	0.158749
Galphai	FBGN0001104	-0.37062	0.202011	-0.29934	0.273294
CG34161	FBGN0085190	-0.2498	0.107351	-0.39783	-0.04069
eIF6	FBGN0034915	-0.32402	0.013526	-0.11422	0.223322
CG43350	FBGN0263082	-0.41347	-0.03302	-0.97826	-0.5978
ct	FBGN0004198	0.462575	-0.0115	0.495325	0.021247
CG43680	FBGN0263763	5.374018	-0.71045	6.877218	0.792751
CG14196	FBGN0031002	0.180402	-0.05797	0.236183	-0.00219
Vps26	FBGN0014411	0.129209	0.093838	0.096428	0.061057
CG2818	FBGN0031566	0.400432	0.214667	0.219692	0.033928
CG30275	FBGN0050275	0.22117	0.064741	0.247705	0.091276
CG33191	FBGN0053191	-0.09177	-0.01464	-0.04592	0.031209
PRAS40	FBGN0267824	0.01452	-0.02554	0.158521	0.118466
Rap2l	FBGN0283666	-0.06407	0.074019	-0.22162	-0.08353
hfw	FBGN0001189	0.21083	0.12581	0.222759	0.13774
CG9416	FBGN0034438	0.362745	-0.13567	0.549939	0.051524
chif	FBGN0000307	0.291786	0.054366	0.356153	0.118733
l(3)neo38	FBGN0265276	0.16583	0.040578	0.233158	0.107906
Lpt	FBGN0263667	0.044405	-0.08654	0.053595	-0.07735
Tim17b1	FBGN0037310	-0.34389	-0.16466	-0.29373	-0.1145
CG12290	FBGN0039419	0.193772	-0.05964	0.412668	0.159253
CG30159	FBGN0050159	0.059952	0.157219	-0.08104	0.016231
Ge-1	FBGN0283682	0.380161	0.026532	0.436054	0.082426
Utx	FBGN0260749	0.172013	0.14985	0.086215	0.064051
CG18480	FBGN0028518	0.349901	0.950139	-0.95144	-0.3512

Vps8	FBGN0035704	0.152669	0.05448	0.112889	0.014701
CG5535	FBGN0036764	0.045296	0.156322	0.29375	0.404776
CG31418	FBGN0051418	-0.20864	-0.15031	-0.01864	0.039692
Trf4-2	FBGN0039251	-0.01048	-0.05694	0.004596	-0.04186
put	FBGN0003169	0.1767	0.104266	0.164397	0.091962
Atg4a	FBGN0031298	0.000221	-0.09953	0.197942	0.098195
Sep4	FBGN0259923	0.177774	0.130099	0.025861	-0.02181
CG2663	FBGN0037323	0.697527	0.390227	0.835977	0.528677
Nlg2	FBGN0031866	0.409127	0.047854	0.467411	0.106138
mld	FBGN0263490	0.218346	-0.1172	0.413287	0.077742
Cht4	FBGN0022700	-0.90218	-0.01954	-1.42076	-0.53812
CG31207	FBGN0051207	-0.80912	-0.17528	-0.83887	-0.20503
CG15576	FBGN0029700	-0.15882	-0.00281	-0.27994	-0.12393
CG18155	FBGN0029945	-0.14088	-0.02352	-0.20391	-0.08655
grk	FBGN0001137	0.101235	-0.01857	0.374509	0.254701
Sur-8	FBGN0038504	0.004701	-0.09365	0.078169	-0.02018
IleRS	FBGN0027086	-0.0425	-0.03452	-0.02532	-0.01733
CG13667	FBGN0035890	-0.12775	0.007707	-0.14244	-0.00698
plh	FBGN0037292	0.284615	-0.02209	0.506933	0.200233
babos	FBGN0034724	0.349489	-0.00103	0.393103	0.042586
Ppt2	FBGN0032358	0.036863	-0.09041	0.537796	0.410525
ome	FBGN0259175	0.094756	-0.12744	-0.01435	-0.23655
sPLA2	FBGN0033170	0.503359	-0.11727	0.936411	0.315787
Ras64B	FBGN0003206	-0.01548	-0.01353	-0.07191	-0.06996
CG3224	FBGN0029885	-0.39148	0.058821	-0.42396	0.026342
bdl	FBGN0028482	-0.32874	-0.14122	0.072265	0.259791
CARPB	FBGN0052698	0.50109	-0.50828	0.912278	-0.09709
Rbf	FBGN0015799	0.046512	-0.12624	0.07327	-0.09948
CG6659	FBGN0030946	0.022204	0.004893	-0.04165	-0.05896
CG34384	FBGN0085413	0.346997	0.012149	0.34187	0.007022
Coop	FBGN0263240	-0.38215	0.066012	-0.25408	0.194084
CG12896	FBGN0033521	-0.04373	0.132364	-0.19506	-0.01896
FarO	FBGN0023550	0.263108	0.275252	0.369438	0.381582
chico	FBGN0024248	0.227212	0.026993	0.340881	0.140662
CG11275	FBGN0034706	-0.35111	-0.11807	-0.14528	0.087765
CG6048	FBGN0029827	1.058655	0.836973	-0.27399	-0.49568
ftz-f1	FBGN0001078	0.266286	0.057753	0.302815	0.094282
CG31099	FBGN0051099	-0.1655	-0.05256	-0.17407	-0.06114
Cyp12a5	FBGN0038680	0.088435	-0.18857	0.234211	-0.04279
jv	FBGN0263973	-0.2554	-0.03293	0.254231	0.476702
CG34291	FBGN0085320	0.419304	0.224976	1.872775	1.678446
Rpt3R	FBGN0037742	-0.02277	0.024722	-0.20249	-0.155
gas	FBGN0034736	-0.97014	0.270423	-1.86615	-0.62558
CG7365	FBGN0036939	-0.25973	0.091276	-0.01439	0.33661
slpr	FBGN0030018	0.346162	-0.11812	0.434799	-0.02948
CG14661	FBGN0037288	-0.29598	-0.15476	-0.17791	-0.0367
ear	FBGN0026441	0.02803	-0.05372	0.091962	0.010216
Btk29A	FBGN0003502	0.219153	0.003995	0.301463	0.086305
Muc14A	FBGN0052580	0.509699	0.048625	0.380609	-0.08046
CG12241	FBGN0038304	-0.00078	-0.12684	0.152447	0.02638
vanin-like	FBGN0040069	0.763472	-0.51315	1.224876	-0.05174
Ras85D	FBGN0003205	0.040784	0.073631	-0.02077	0.012074
Catsup	FBGN0002022	-0.02749	-0.00374	0.051919	0.075672
kuk	FBGN0038476	0.039652	-0.00801	0.001612	-0.04605
CG43737	FBGN0263994	0.568317	0.064412	0.502421	-0.00148
Dscam3	FBGN0261046	0.147082	-0.12556	0.444149	0.171508
CG15035	FBGN0029949	0.116512	0.058214	0.070127	0.011829
Golgin84	FBGN0039188	-0.07297	-0.02231	0.134218	0.184879
CG17221	FBGN0031500	0.16185	-0.16402	0.372269	0.046398
Swip-1	FBGN0032731	0.379899	0.040995	0.442065	0.103161
Vps25	FBGN0022027	-0.27157	0.008653	-0.31302	-0.03279
CG31195	FBGN0051195	0.039866	0.014817	0.084697	0.059649
CG11168	FBGN0039249	0.05696	0.022485	-0.10945	-0.14392
Srp14	FBGN0038808	-0.28488	0.106354	-0.41069	-0.01946
Syx18	FBGN0039212	-0.11473	-0.00525	-0.17124	-0.06176
Bmcp	FBGN0036199	0.13847	-0.08536	0.616428	0.392603
l(3)80Fg	FBGN0287183	-0.06264	-0.10171	0.029846	-0.00923
CG5707	FBGN0026593	-0.13943	-0.18035	0.042348	0.001428
MICAL-like	FBGN0036333	0.094521	0.183819	-0.11043	-0.02113

CG31861	FBGN0051861	-0.50591	-0.17329	-0.22561	0.107017
CG9459	FBGN0037764	0.587895	0.455281	-0.07304	-0.20566
Pi3K59F	FBGN0015277	0.387017	0.145695	0.148306	-0.09302
lbk	FBGN0034083	0.090796	-0.02922	0.038158	-0.08186
CG32066	FBGN0052066	-0.13551	0.145012	-0.17663	0.103885
Parp	FBGN0010247	0.076451	0.037053	-0.32133	-0.36073
GILT2	FBGN0039099	0.033819	-0.07206	0.370893	0.265018
EndoGI	FBGN0028515	-0.10965	0.073985	-0.2319	-0.04827
CG6125	FBGN0038337	-0.18458	0.182462	-0.03143	0.335606
CG10205	FBGN0033970	-0.77973	-0.04126	-1.02776	-0.28929
Teh2	FBGN0035505	0.330664	-0.16793	0.551169	0.052578
Pld3	FBGN0032923	0.05469	0.057904	0.032749	0.035964
Lrch	FBGN0032633	0.031494	0.19068	-0.17844	-0.01926
CG31213	FBGN0051213	0.283665	-0.0044	0.190728	-0.09734
prd	FBGN0003145	0.004148	-0.13226	0.122009	-0.0144
Slip1	FBGN0024728	0.04121	-0.02791	0.01737	-0.05175
CG13476	FBGN0036441	0.01376	0.007062	-0.06081	-0.06751
CG7514	FBGN0035567	0.026557	0.109696	-0.04541	0.037724
Fbxl4	FBGN0030555	0.123813	-0.08198	0.382746	0.176954
CG8243	FBGN0033349	-0.06206	0.031279	-0.07986	0.013481
CG12814	FBGN0037796	0.023482	0.032472	-0.13269	-0.1237
Acp98AB	FBGN0263597	-0.97572	-0.10717	-0.27517	0.593383
Obp57b	FBGN0043534	-0.83762	-0.41283	-0.87903	-0.45423
CG12107	FBGN0033209	-0.15	0.013976	-0.32408	-0.16011
Tpc2	FBGN0035078	0.171451	0.036267	0.142424	0.00724
CG14921	FBGN0032345	-0.28275	-0.04082	-0.33016	-0.08823
CG6873	FBGN0030951	-0.30205	-0.00071	-0.27702	0.024319
Ucp4A	FBGN0030872	0.105319	-0.01088	0.245657	0.129457
Ctr1A	FBGN0062413	0.219516	0.281153	0.160102	0.221739
CG5921	FBGN0029835	-0.26625	0.357038	-1.00297	-0.37968
LeuRS	FBGN0284253	-0.10226	-0.05737	-0.15395	-0.10906
CG30384	FBGN0050384	-0.0685	-0.05876	-0.08688	-0.07714
ry	FBGN0003308	0.034383	-0.17521	0.432271	0.222679
CG3223	FBGN0037538	0.041717	0.031504	0.34872	0.338507
CG10562	FBGN0039326	-0.11523	0.28297	-0.70417	-0.30597
ASPP	FBGN0034606	0.058761	-0.1584	0.405191	0.188034
CG43134	FBGN0262608	0.379614	1.130165	1.082097	1.832648
CG31810	FBGN0051810	-0.35293	-0.14283	-0.58196	-0.37187
X11Lbeta	FBGN0052677	0.358217	-0.1181	0.617268	0.140948
lncRNA:CR43805	FBGN0264349	-0.4259	-0.54437	-0.21983	-0.3383
CG11200	FBGN0034500	0.068116	-0.12521	-0.07146	-0.26478
CG13252	FBGN0037016	0.252062	0.181205	0.084454	0.013597
CG31910	FBGN0051910	-0.10324	0.011672	-0.16536	-0.05045
Nelf-A	FBGN0038872	0.250139	0.077181	0.326833	0.153875
baf	FBGN0031977	-0.24137	0.044083	-0.35033	-0.06488
Abi	FBGN0020510	0.066385	-0.06747	0.234954	0.101099
CG31787	FBGN0051787	-0.19706	-0.07544	-0.31917	-0.19755
CG4267	FBGN0264979	-0.22356	0.11995	-0.43823	-0.09471
CG7231	FBGN0031968	0.014559	0.261737	-0.37328	-0.1261
PheRS-m	FBGN0275436	-0.08455	0.036191	0.072961	0.1937
CG6083	FBGN0036183	-0.06785	-0.0205	-0.15197	-0.10463
KCNQ	FBGN0033494	0.219976	0.036283	0.260552	0.076859
CG3734	FBGN0038700	0.062585	0.074327	-0.36081	-0.34906
kuz	FBGN0259984	0.045934	0.114949	-0.0407	0.028319
sNPF	FBGN0032840	0.115253	-0.08877	0.253573	0.049551
CG5011	FBGN0040723	0.623214	0.36659	0.477326	0.220702
CG32651	FBGN0052651	0.006238	-0.05254	-0.04371	-0.10249
CG8952	FBGN0030688	-0.01051	0.280936	-0.73742	-0.44597
CG14968	FBGN0035431	-0.10157	0.120567	-0.1788	0.043335
Atox1	FBGN0052446	0.067824	0.029538	-0.02578	-0.06407
TBCD	FBGN0027509	-0.04089	0.031977	-0.09893	-0.02607
Frq1	FBGN0030897	0.500459	0.041834	0.508623	0.049998
CG8399	FBGN0034067	-0.17469	-0.0417	-0.21632	-0.08333
AP-1mu	FBGN0024833	0.03316	0.015482	0.019326	0.001649
CG17717	FBGN0029877	-0.19386	0.022527	-0.18853	0.027862
Aef1	FBGN0005694	0.141991	-0.00637	0.120433	-0.02793
CG7296	FBGN0032283	-0.34337	0.286278	-0.05873	0.570919
betaggt-I	FBGN0015000	-0.08321	0.188837	-0.15734	0.11471
CG5070	FBGN0030824	1.355926	4.46025	0.101893	3.206216

GAA1	FBGN0029818	-0.07555	-0.025	-0.11305	-0.0625
Takl1	FBGN0046689	-0.1712	0.914793	-1.26875	-0.18276
CG5087	FBGN0035953	0.370398	-0.09938	0.39506	-0.07472
Chi	FBGN0013764	0.039284	0.104007	0.052111	0.116833
MtnB	FBGN0002869	0.839314	0.056097	-0.71491	-1.49812
Tim17a2	FBGN0037307	-0.19023	0.095621	-0.48613	-0.20027
CG1620	FBGN0033183	0.040687	-0.01957	0.023101	-0.03716
CG9875	FBGN0034850	-0.13036	0.038683	-0.16469	0.004352
Tie	FBGN0014073	-0.04487	0.068844	0.097151	0.210867
CG5646	FBGN0039525	0.040473	0.058138	0.105849	0.123514
CG31524	FBGN0051524	0.169932	-0.12348	-0.00653	-0.29994
Meltrin	FBGN0265140	0.054921	0.116973	0.148312	0.210365
CG33298	FBGN0032120	0.302621	0.18012	0.092156	-0.03034
AQP	FBGN0033807	-0.13431	-0.14702	0.19028	0.177571
CG11608	FBGN0038069	0.190724	-0.10031	-0.101	-0.39203
Tak1	FBGN0026323	0.134307	0.102786	0.137076	0.105554
CG31805	FBGN0051805	0.137571	0.013922	0.068327	-0.05532
CG7707	FBGN0036703	-0.0671	0.011638	-0.01113	0.06761
vtd	FBGN0260987	0.172241	0.021571	0.094937	-0.05573
CG43169	FBGN0262788	-0.2568	-0.03959	-0.47222	-0.25501
unc-45	FBGN0010812	0.003697	0.006945	0.088044	0.091292
Naa35	FBGN0034982	-0.00191	-0.09575	0.015187	-0.07865
Nop56	FBGN0038964	-0.3559	-0.28211	-0.3629	-0.28911
CG13870	FBGN0034506	0.002205	-0.03571	-0.01844	-0.05635
Scp2	FBGN0020907	0.083483	-0.26811	0.589257	0.237664
CG8219	FBGN0035693	0.134634	-0.10129	0.131784	-0.10414
CSN1a	FBGN0028838	-0.27542	0.022904	-0.29369	0.004635
Ack-like	FBGN0263998	0.11632	-0.04016	0.18311	0.026628
DCTN2-p50	FBGN0021825	-0.10653	0.018733	-0.13959	-0.01433
CG7329	FBGN0032271	0.117763	-0.24975	0.087149	-0.28036
CG44403	FBGN0265576	0.010997	-0.00859	-0.29475	-0.31434
CG30151	FBGN0050151	0.160929	-0.14098	0.640409	0.338503
Atf6	FBGN0033010	0.054308	-0.01159	0.059304	-0.00659
Alg1	FBGN0038552	-0.14072	0.001254	-0.13898	0.002994
Sf3b6	FBGN0035692	-0.10859	0.01237	-0.2399	-0.11894
Top3beta	FBGN0026015	-0.15483	-0.03872	-0.20249	-0.08638
CG6036	FBGN0039421	0.040624	-0.04398	0.059024	-0.02558
CG34308	FBGN0085337	-0.53639	-0.43154	0.112482	0.217337
CG44242	FBGN0265177	-0.08325	0.054626	-0.16887	-0.031
b	FBGN0000153	-0.14418	-0.14145	0.14339	0.146118
CG43185	FBGN0262814	0.143687	-0.09267	-0.15085	-0.3872
CG4707	FBGN0035036	0.179569	-0.00875	0.181317	-0.00701
CG32440	FBGN0052440	-0.12674	-0.08152	-0.2335	-0.18829
CG16779	FBGN0037698	0.539463	0.032032	0.709761	0.20233
CG30334	FBGN0050334	-0.22711	-0.04138	-0.22238	-0.03665
Efr	FBGN0029849	0.216267	0.19189	0.044586	0.020209
fdl	FBGN0045063	0.003333	0.009162	0.021936	0.027765
RapGAP1	FBGN0264895	0.210556	-0.03437	0.255175	0.010251
c12.2	FBGN0040234	0.200834	-0.00162	0.27985	0.077395
Orct	FBGN0019952	0.545919	-0.02834	0.42517	-0.14908
Mctp	FBGN0034389	0.205462	0.054574	0.134901	-0.01599
CG14013	FBGN0031720	0.012531	0.10411	-0.05179	0.039793
CG4557	FBGN0029912	-0.03366	-0.01707	0.013185	0.029777
CG8671	FBGN0032938	0.134971	0.00211	0.171467	0.038607
CG7083	FBGN0035877	0.31671	0.057199	0.368243	0.108732
UBL3	FBGN0026076	-0.06439	-0.0268	0.033238	0.070835
CG4462	FBGN0038752	-0.03203	0.132003	-0.48639	-0.32235
CG42266	FBGN0259151	-0.03862	-0.00353	-0.06591	-0.03082
msi	FBGN0011666	-0.09822	-0.19328	0.060952	-0.03411
CG8237	FBGN0033350	-0.10425	-0.0789	-0.13779	-0.11244
CG9168	FBGN0035216	0.304904	-0.16977	-0.04373	-0.5184
CG5500	FBGN0039461	-0.04958	0.084685	-0.04742	0.086853
CG30429	FBGN0050429	0.150401	0.094293	0.144642	0.088534
CG8097	FBGN0030660	-0.0754	-0.02817	-0.13912	-0.09189
CG12104	FBGN0035238	-0.02709	0.125825	-0.03298	0.119939
l(2)05287	FBGN0284251	0.072758	0.144105	-0.12078	-0.04943
OtopLb	FBGN0031514	0.117631	0.091407	-0.05658	-0.08281
CG44296	FBGN0265342	-0.0222	0.009837	-0.21251	-0.18048
CG30056	FBGN0050056	-0.11363	-0.06717	-0.1147	-0.06825

GCS2beta	FBGN0032643	0.017644	-0.06497	0.057779	-0.02483
CG11247	FBGN0037120	0.056515	-0.03864	0.131853	0.036697
CG10311	FBGN0038420	-0.18455	-0.02067	-0.13538	0.02849
CG4587	FBGN0028863	0.229427	-0.28211	0.558212	0.046672
zf30C	FBGN0270924	0.01231	-0.04069	0.054688	0.001686
CG12493	FBGN0035571	-0.11848	-0.08411	-0.23854	-0.20417
conu	FBGN0039994	0.095911	0.016796	0.041818	-0.0373
CG5902	FBGN0039136	0.18212	0.096806	0.203529	0.118215
CG12531	FBGN0031064	0.420224	-0.03429	0.491852	0.037335
CG15548	FBGN0039812	0.072965	-0.01244	-0.13179	-0.21719
Zmynd10	FBGN0266709	-0.11278	0.091601	-0.20031	0.004071
Srrm1	FBGN0036340	0.005619	-0.07839	0.197423	0.113415
Atg3	FBGN0036813	0.028816	0.06528	-0.0402	-0.00374
CG15695	FBGN0038832	0.068424	-0.03708	0.341657	0.236157
TBC1D5	FBGN0038129	0.258265	-0.11576	0.773393	0.399372
Ns4	FBGN0032882	-0.02594	0.075567	-0.12337	-0.02186
CG15403	FBGN0031504	0.106647	-0.00533	-0.2805	-0.39248
Or59b	FBGN0034865	-0.2037	-0.48065	1.147883	0.870931
Als2	FBGN0037116	0.015969	-0.05837	0.199249	0.124905
Noa36	FBGN0026400	-0.22507	-0.02011	-0.14221	0.062754
Vps20	FBGN0034744	-0.17918	0.059881	-0.35359	-0.11453
CG13891	FBGN0035139	-0.10672	-0.09325	-0.06747	-0.05399
CG14763	FBGN0033243	-0.10683	-0.10229	-0.1427	-0.13816
CG32638	FBGN0052638	0.00027	0.107609	-0.24344	-0.13611
jeb	FBGN0086677	0.544092	0.110461	0.713876	0.280245
I-t	FBGN0025821	-0.19444	-0.05421	-0.12968	0.010541
ValRS	FBGN0027079	0.017528	0.057107	0.039694	0.079274
CG5335	FBGN0034365	-0.02096	0.228866	-0.37105	-0.12123
Jon44E	FBGN0001285	-0.02278	0.063279	0.449324	0.535386
wde	FBGN0027499	0.087643	0.043051	0.031672	-0.01292
CG14963	FBGN0035409	1.034589	0.86534	-0.5094	-0.67864
CG14346	FBGN0031337	-0.39434	0.187741	-0.06366	0.518422
Efhc1.1	FBGN0030691	-0.05298	0.056964	-0.11108	-0.00114
CG12147	FBGN0037325	-0.07363	-0.04058	-0.13706	-0.10402
CG11663	FBGN0029539	-0.10863	0.060111	-0.0298	0.138942
CG17385	FBGN0033934	-0.03169	-0.02859	0.009479	0.012581
Tango10	FBGN0030330	0.181563	0.027392	0.114288	-0.03988
galla-1	FBGN0034543	-0.04462	0.043838	-0.03946	0.049001
gry	FBGN0286567	0.225251	0.034239	0.089514	-0.1015
CG43123	FBGN0262583	-0.14617	-0.08106	-0.15791	-0.09281
lncRNA:CR43654	FBGN0263663	-0.31793	-0.06531	-0.66992	-0.41731
Rab18	FBGN0015794	-0.01121	0.071812	-0.14239	-0.05937
Atg101	FBGN0030960	-0.00632	0.170052	-0.15703	0.019346
CG30109	FBGN0050109	0.088872	0.223153	-0.04431	0.089974
CR11023	FBGN0031208	0.541509	-0.21026	0.738255	-0.01351
CG33140	FBGN0053140	0.097688	-0.07272	0.094678	-0.07573
CG15577	FBGN0040904	-0.2942	-0.06464	-0.02094	0.208619
CG31068	FBGN0051068	-0.10292	-0.0016	-0.16371	-0.06239
CG5004	FBGN0260748	-0.01247	-0.00831	-0.04862	-0.04446
trr	FBGN0023518	0.366368	0.042193	0.390268	0.066093
vkg	FBGN0016075	-0.01592	0.025527	0.129412	0.170861
CG11807	FBGN0033996	0.145726	0.022076	0.189313	0.065663
Lrpprc2	FBGN0027794	0.086426	-0.1313	0.372532	0.154809
lncRNA:CR43278	FBGN0262967	-0.10633	0.079144	-0.24721	-0.06174
Spag1	FBGN0039463	0.004267	0.000599	-0.254	-0.25767
Axud1	FBGN0261647	0.04923	-0.13485	0.513024	0.328948
CG15144	FBGN0032648	0.111025	-0.05193	0.131375	-0.03158
Tis11	FBGN0011837	0.459539	-0.0063	0.591811	0.125975
CG2186	FBGN0030243	0.17527	0.001686	0.369946	0.196361
CG9536	FBGN0031818	0.063763	-0.01498	0.04004	-0.0387
iotaTry	FBGN0015001	0.48001	0.22695	-0.48302	-0.73608
Rsph9	FBGN0051803	-0.00363	0.000568	-0.16509	-0.16089
tefu	FBGN0045035	0.184255	-0.17806	0.359155	-0.00316
CG14777	FBGN0026872	-0.25373	0.085008	-0.29345	0.04529
CG34200	FBGN0085229	-0.16693	-0.09251	-0.14713	-0.07272
BomS5	FBGN0040734	-0.91942	-0.08486	-0.99522	-0.16066
Coq8	FBGN0052649	0.091524	-0.04624	0.227673	0.089905
Ubc84D	FBGN0017456	-0.12046	-0.02926	-0.10218	-0.01097
CG15482	FBGN0032483	-0.25829	-0.11323	0.009528	0.154589

FucT6	FBGN0030327	-0.12548	-0.16043	-0.00132	-0.03627
CG8072	FBGN0036070	-0.12477	0.097786	-0.43364	-0.21108
hook	FBGN0001202	-0.0474	0.013713	-0.04854	0.012571
ZnT41F	FBGN0025693	0.282809	0.165956	0.312922	0.196068
tbrd-1	FBGN0039124	0.044582	-0.00614	-0.24255	-0.29327
CG5953	FBGN0032587	0.116738	0.059753	0.103428	0.046443
CG31275	FBGN0063261	-0.32761	-0.08498	-0.43409	-0.19146
AP-1sigma	FBGN0039132	0.0302	0.080366	0.151295	0.201461
CG13366	FBGN0025633	0.119676	0.09462	0.174077	0.14902
CG9132	FBGN0030791	0.105337	0.055212	0.227804	0.177679
GlnRS	FBGN0027090	0.025428	-0.04692	-0.03564	-0.10798
CHKov1	FBGN0045761	0.16695	0.063043	0.174684	0.070777
spas	FBGN0039141	0.198554	0.011504	0.082012	-0.10504
GABA-B-R2	FBGN0027575	0.20129	-0.12547	0.32672	-3.62E-05
ksr	FBGN0015402	0.183506	-0.11835	0.326135	0.024279
Ucp4C	FBGN0031757	-0.05014	0.018656	0.042651	0.111452
Cpr76Bc	FBGN0036880	3.173303	-0.16977	0.878384	-2.46468
CG32640	FBGN0052640	-0.6201	0.051303	-0.21345	0.457954
robo1	FBGN0005631	0.386672	-0.07697	0.595661	0.132021
CG8155	FBGN0034009	0.288394	-0.10208	0.43329	0.042817
Toll-7	FBGN0034476	0.167761	-0.27554	0.498914	0.055609
CG10948	FBGN0036317	0.07865	-0.00905	0.126335	0.038632
CG12689	FBGN0029952	-0.10787	0.023042	-0.11426	0.016647
CG8236	FBGN0037626	-0.04419	0.011209	-0.06981	-0.01441
dsb	FBGN0035290	0.054273	-0.09603	0.136832	-0.01347
CG33056	FBGN0053056	-0.17083	-0.00436	-0.28891	-0.12244
GstE1	FBGN0034335	-0.15047	-0.19405	0.139677	0.096094
CG31482	FBGN0051482	-0.03317	0.005332	-0.09263	-0.05412
PIG-B	FBGN0035464	-0.16718	0.029778	0.107406	0.30436
tinc	FBGN0261649	0.74815	0.057121	0.710165	0.019136
fzy	FBGN0001086	-0.2213	0.017334	-0.27497	-0.03634
RhoGAP102A	FBGN0259216	0.514842	-0.03075	0.655245	0.109655
CG9265	FBGN0032910	-0.09	0.045456	-0.19142	-0.05597
CG8379	FBGN0037638	0.167275	-0.1029	0.219023	-0.05115
mthl8	FBGN0052475	-0.63932	-0.7682	-0.04678	-0.17566
HemK1	FBGN0031817	-0.06564	-0.00754	-0.09205	-0.03395
GstD9	FBGN0038020	0.007313	0.068845	-0.1653	-0.10376
mahj	FBGN0034641	0.030468	0.105044	0.24338	0.317956
Kaz1-ORFB	FBGN0063923	0.714699	-0.10814	0.184401	-0.63843
Pex14	FBGN0037020	-0.02659	0.020917	-0.13707	-0.08957
Ac3	FBGN0023416	0.34674	-0.00936	0.586869	0.230774
CG13605	FBGN0039150	-0.05207	-0.04914	0.13615	0.13908
CG6980	FBGN0039228	-0.14338	0.002116	-0.40195	-0.25646
CG7272	FBGN0036501	0.148129	0.32126	-0.02106	0.152072
yellow-f2	FBGN0038105	0.212975	-0.00298	0.477238	0.261288
CG34283	FBGN0085312	-2.14628	-0.23486	-0.0105	1.900914
AdamTS-A	FBGN0286071	0.122956	-0.06824	0.446904	0.255705
bves	FBGN0031150	0.183743	-0.01536	0.105212	-0.09389
gbb	FBGN0024234	-0.18951	-0.03988	-0.0575	0.092128
CG12684	FBGN0029717	0.017654	0.143283	-0.2168	-0.09117
CycY	FBGN0032378	0.23567	0.041705	0.19174	-0.00223
Zif	FBGN0037446	-0.06445	-0.00077	-0.10915	-0.04547
CG7860	FBGN0030653	-0.16738	-0.30054	-0.02392	-0.15708
Inx3	FBGN0265274	-0.02756	0.056101	-0.19866	-0.115
CG4592	FBGN0032162	0.077058	-0.22577	0.086888	-0.21594
CG11407	FBGN0038733	-0.05903	-0.34449	0.196488	-0.08897
CG15126	FBGN0040729	-0.05201	0.988245	-1.32232	-0.28206
CG7882	FBGN0033047	0.035519	0.360811	-0.25505	0.070244
CG4480	FBGN0032553	-0.02596	-0.09588	0.064745	-0.00518
nonA-l	FBGN0015520	-0.17431	-0.07088	-0.19024	-0.08681
alpha-Man-IIa	FBGN0011740	-0.00328	-0.17507	0.271155	0.099366
CG45011	FBGN0266363	-0.35686	-0.15216	-0.86729	-0.66258
Mid1	FBGN0053988	0.436705	-0.08595	0.573833	0.051182
antdh	FBGN0026268	0.977507	-0.16556	0.966717	-0.17635
CG15147	FBGN0032654	-0.00832	-0.0192	0.04811	0.037233
CG17109	FBGN0039051	-0.1377	0.268369	-0.62039	-0.21432
brun	FBGN0261787	0.289398	0.011717	0.382396	0.104715
Ssb-c31a	FBGN0015299	-0.36514	0.052477	-0.69663	-0.27902
CG15221	FBGN0030331	1.214298	0.292809	0.720784	-0.20071

CG18368	FBGN0033864	0.008594	-0.18369	0.005378	-0.1869
Parp16	FBGN0034129	0.059577	0.096928	0.039918	0.077268
CG14113	FBGN0040814	-0.21235	-0.02268	-0.25397	-0.0643
CG7394	FBGN0036173	-0.20384	0.000809	-0.13256	0.072095
CG10321	FBGN0034643	0.048642	-0.01876	0.113823	0.046418
omd	FBGN0038168	-0.05012	-0.05664	0.033921	0.027398
Dhx15	FBGN0033160	0.019521	0.03227	0.036212	0.048961
CG15431	FBGN0031602	0.71755	-0.12853	0.558828	-0.28726
CG44153	FBGN0265002	-1.16988	-0.06422	-1.03673	0.068933
Ntmt	FBGN0033457	-0.30209	-0.04679	-0.25353	0.001776
TpnC47D	FBGN0010423	-0.24913	-0.09002	-0.68391	-0.5248
ms(2)35Ci	FBGN0011239	-0.03202	-0.0363	-0.05125	-0.05553
CycK	FBGN0025674	-0.10868	0.004998	-0.1613	-0.04762
CG3257	FBGN0034978	-0.10274	-0.12826	0.223297	0.197775
Tbce	FBGN0033055	-0.11828	-0.05015	-0.09752	-0.02939
lncRNA:CR43978	FBGN0264709	0.374594	-0.37141	0.943181	0.197174
CG7791	FBGN0033038	0.197687	0.050633	0.306694	0.15964
PIG-T	FBGN0030035	-0.02374	0.058535	-0.11263	-0.03036
Reg-5	FBGN0015801	-0.20662	0.021552	-0.06725	0.160917
lncRNA:CR42790	FBGN0261861	-0.6273	-0.16265	-0.57736	-0.11272
Stt3A	FBGN0031149	0.055055	0.052671	-0.0422	-0.04458
Nmt	FBGN0020392	0.107142	0.152145	0.015475	0.060478
CG11226	FBGN0037195	-0.02639	-0.05169	0.018119	-0.00719
sas	FBGN0002306	0.090909	-0.2108	0.346139	0.044428
barr	FBGN0014127	-0.04505	-0.07825	-1.76E-05	-0.03322
CG6576	FBGN0035924	-0.02131	0.009495	-0.15486	-0.12406
CG9492	FBGN0037726	0.937239	0.497487	0.644843	0.205091
CG14717	FBGN0265271	-0.0852	-0.11757	0.090877	0.058507
ND-24L	FBGN0036706	-0.20092	-0.21833	-0.07259	-0.08999
yrt	FBGN0004049	0.132509	0.079794	0.001036	-0.05168
CG5781	FBGN0032448	-0.24045	0.03591	-0.25021	0.026149
CG18789	FBGN0042127	0.184134	0.192527	0.216941	0.225334
goe	FBGN0027528	0.222577	0.045188	0.100488	-0.0769
Dnz1	FBGN0027453	0.000839	-0.05239	0.062217	0.008987
Uros2	FBGN0038361	-0.08616	-0.05879	0.097821	0.125187
Pabp2	FBGN0005648	-0.09445	-0.17587	0.028391	-0.05303
mRpS22	FBGN0039555	-0.28176	-0.11391	-0.20275	-0.03491
CG14500	FBGN0034318	0.370272	1.541347	0.689076	1.86015
CG13384	FBGN0032036	0.206628	0.077967	0.185796	0.057135
sut3	FBGN0028561	0.167733	0.144192	-0.06505	-0.08859
CG31286	FBGN0051286	0.088132	0.008911	-0.01725	-0.09647
Fancm	FBGN0038889	0.112294	0.1181	0.143055	0.148862
CG32061	FBGN0052061	-0.09242	-0.00904	-0.19965	-0.11627
CG3706	FBGN0040342	0.041104	0.132568	-0.7074	-0.61594
CG30020	FBGN0050020	0.151096	0.038997	0.150044	0.037945
TfIIA-S	FBGN0013347	-0.10821	0.093149	-0.25501	-0.05365
ana	FBGN0011746	0.638779	0.13544	0.389189	-0.11415
CG11227	FBGN0031139	0.012289	0.08064	-0.15069	-0.08234
CG11379	FBGN0040362	-0.29596	-0.01168	-0.18571	0.098573
Rtnl2	FBGN0015831	-0.20359	0.070863	-0.30554	-0.03109
Ptp69D	FBGN0014007	0.154517	-0.09652	0.170405	-0.08063
Prosalpha6T	FBGN0032492	-0.04865	-0.02479	-0.07172	-0.04786
LysC	FBGN0004426	0.673585	0.643999	-0.34745	-0.37704
SMC1	FBGN0040283	0.006383	0.032518	0.033803	0.059938
Ugt49C1	FBGN0034605	-0.41208	0.507091	-0.93152	-0.01235
CG8888	FBGN0033679	-0.19942	-0.15114	-0.12876	-0.08047
GstZ2	FBGN0037697	-0.12358	-0.21001	0.499047	0.412624
CG11298	FBGN0034721	0.044637	0.030619	0.034652	0.020634
Snx27	FBGN0052758	0.289417	-0.09336	0.433521	0.050748
CG6523	FBGN0032509	-0.07604	-0.03699	-0.04181	-0.00277
CG12547	FBGN0250830	0.119625	0.087197	0.029183	-0.00325
sgll	FBGN0051472	-0.10793	-0.03827	-0.23112	-0.16145
Kat60	FBGN0040208	0.130715	0.119773	0.079749	0.068807
LysX	FBGN0004431	-0.73436	1.5796	-1.44007	0.873886
Acyp	FBGN0025115	-0.13987	-0.01688	-0.07853	0.044457
CG18301	FBGN0032265	0.18537	0.354681	0.206718	0.376028
CG12991	FBGN0030847	0.062318	0.171578	-0.02011	0.08915
CG30065	FBGN0050065	-0.30413	-0.03072	-0.3203	-0.04689
CG30487	FBGN0050487	-0.04445	-0.01685	-0.05161	-0.02402

CG4250	FBGN0034761	-0.31516	-0.12088	0.474669	0.668954
Alp12	FBGN0032779	0.223933	0.288733	-0.01388	0.050919
CG42272	FBGN0259167	1.215291	-0.11725	0.786725	-0.54582
CanA1	FBGN0010015	0.562692	-0.00299	0.449585	-0.1161
CG11983	FBGN0037654	-0.03164	-0.04248	-0.09522	-0.10606
lncRNA:CR44832	FBGN0266095	0.428718	0.230832	0.283044	0.085158
Ing3	FBGN0030945	-0.14807	-0.03775	-0.1007	0.009614
scrt	FBGN0004880	0.560987	-0.02712	0.68338	0.095277
CG10345	FBGN0027562	-0.08015	-0.0791	-0.02632	-0.02527
Hexim	FBGN0038251	-0.06376	0.074986	-0.27687	-0.13813
CG12128	FBGN0033473	-0.57788	0.147169	-0.44043	0.284619
GstT3	FBGN0031117	0.147622	0.045418	0.062601	-0.0396
CG43707	FBGN0263846	0.422081	-0.16158	0.693869	0.110202
CG1998	FBGN0030485	-0.01946	0.006767	0.015416	0.041642
CG17944	FBGN0037500	-0.1712	-0.01096	-0.11727	0.042974
CG14689	FBGN0037826	-0.04576	-0.08773	-0.04426	-0.08623
metro	FBGN0050021	0.011317	-0.1151	0.294129	0.167709
CG15152	FBGN0032665	-0.20423	0.164778	-0.72086	-0.35185
VAChT	FBGN0270928	0.322736	0.142539	0.342061	0.161865
trbl	FBGN0028978	0.116434	0.091244	0.040161	0.01497
CG7120	FBGN0035888	0.020827	-0.0217	0.280882	0.238353
CG8840	FBGN0031531	0.015823	0.069625	-0.09921	-0.04541
sax	FBGN0003317	0.150089	0.009203	0.130505	-0.01038
CG4945	FBGN0034137	0.141203	-0.07956	0.309747	0.088982
Ns2	FBGN0034243	-0.14167	-0.04943	0.019968	0.112201
CG43795	FBGN0264339	0.904703	-0.17687	1.486525	0.404948
CG14579	FBGN0031163	-0.03541	0.013165	-0.14383	-0.09526
Cpsf5	FBGN0035987	0.049993	0.052195	-0.06347	-0.06127
sdk	FBGN0021764	0.335385	0.146535	0.399098	0.210248
DNaseII	FBGN0000477	0.113482	0.487171	-0.07943	0.294261
GABA-B-R3	FBGN0031275	0.793978	-0.166	0.359865	-0.60011
Der-2	FBGN0038438	-0.08793	0.015218	-0.11346	-0.01031
Gp210	FBGN0266580	-0.04027	-0.07038	0.0155	-0.01461
CG1105	FBGN0037465	-0.00895	-0.02746	0.212433	0.19392
wun	FBGN0016078	-0.03714	0.091705	-0.05357	0.075275
Scox	FBGN0262467	-0.16411	0.103228	-0.258	0.009336
Tsp42Eq	FBGN0033138	0.088377	0.172718	-0.28622	-0.20188
Ublcp1	FBGN0027526	-0.23402	-0.01577	-0.35221	-0.13396
CG7408	FBGN0036765	0.6174	0.224367	0.207673	-0.18536
Pdf	FBGN0023178	0.109757	-0.10886	0.234831	0.016218
l(1)G0469	FBGN0040153	0.371396	0.279838	0.203156	0.111599
Atg9	FBGN0034110	-0.05466	0.061314	0.140456	0.256428
CG31183	FBGN0051183	0.606061	0.084253	0.633699	0.111891
CG12831	FBGN0033141	-0.1421	-0.00212	-0.23315	-0.09317
Jon66Cii	FBGN0035887	2.250159	2.992871	-2.81496	-2.07225
yin	FBGN0265575	-0.43918	-0.01615	-0.58335	-0.16032
rn	FBGN0267337	1.021819	-0.06443	0.449457	-0.63679
hpRNA:CR32207	FBGN0052207	-0.50378	-0.16594	-0.4565	-0.11867
MFS17	FBGN0058263	0.042861	0.110437	-0.17681	-0.10923
Sf3b1	FBGN0031266	0.145914	0.11713	0.084769	0.055986
gce	FBGN0261703	0.432259	0.190201	0.303027	0.060969
CG1116	FBGN0037297	0.126007	-0.03254	-0.08962	-0.24817
SecCl	FBGN0036727	-0.03462	0.076992	-0.22648	-0.11486
Alp9	FBGN0035620	0.145876	0.536896	-0.46621	-0.07519
CG9992	FBGN0030744	-0.07639	0.094394	-0.23059	-0.0598
Torsin	FBGN0025615	0.104697	0.165157	-0.09687	-0.03641
eIF2Bdelta	FBGN0034858	-0.0761	-0.20845	0.178788	0.046435
Gem3	FBGN0011802	0.112359	-0.67343	0.393416	-0.39238
SamDC	FBGN0019932	0.112522	0.05711	-0.0799	-0.13531
SAK	FBGN0026371	-0.00062	0.039371	-0.1362	-0.09621
Sfp24C1	FBGN0259956	-0.53287	-0.27095	-0.46809	-0.20617
CG10029	FBGN0037498	-0.09258	-0.21535	-0.03808	-0.16084
CG11251	FBGN0036346	-0.10726	-0.02377	-0.11163	-0.02814
CG13334	FBGN0033856	-0.12896	0.119292	-0.20108	0.047171
CG13693	FBGN0031235	0.01897	-0.0144	-0.05493	-0.08831
18w	FBGN0004364	0.37021	-0.2429	0.669831	0.056717
CG14764	FBGN0033236	0.029597	0.059409	0.038965	0.068776
CG7627	FBGN0032026	-0.13584	0.210899	-0.03433	0.312405
CG9519	FBGN0030589	-0.18861	-0.16115	0.06461	0.09207

CG31797	FBGN0051797	-0.07774	-0.07203	-0.0707	-0.06499
rux	FBGN0003302	0.01123	0.030319	0.069741	0.08883
CG9175	FBGN0031779	0.180567	0.008865	0.258755	0.087053
CG5805	FBGN0039223	0.096051	0.048379	0.071311	0.023639
Cyp12c1	FBGN0036806	0.188318	0.035664	0.184223	0.031568
Debcl	FBGN0029131	-0.31375	0.077772	-0.3361	0.055414
ttm3	FBGN0032971	-0.01006	0.00657	-0.17488	-0.15825
Lap1	FBGN0033984	0.121242	0.09362	0.043591	0.015969
CG15611	FBGN0034194	-0.1583	-0.00092	-0.10625	0.051136
CPT2	FBGN0035383	0.149687	-0.15848	0.353709	0.045545
CG7497	FBGN0036742	-0.22909	0.435207	-0.80559	-0.14129
ple	FBGN0005626	-0.31783	-0.12149	-0.27006	-0.07371
CG7739	FBGN0036509	0.089899	0.004706	0.110895	0.025702
nesd	FBGN0032848	-0.72317	-0.133	-0.68506	-0.09489
CG4306	FBGN0036787	0.625032	-0.1265	0.424369	-0.32716
CG34426	FBGN0085455	0.449628	0.430512	-0.34955	-0.36867
CG11722	FBGN0037777	-0.23568	-0.00299	-0.24128	-0.00859
CG13751	FBGN0033340	-0.25929	0.059204	-0.27999	0.038506
lace	FBGN0002524	0.09203	0.169965	-0.11628	-0.03835
CG12923	FBGN0033461	0.13283	0.153101	-0.13419	-0.11392
Pat1	FBGN0029878	0.1904	0.036021	0.193004	0.038625
EloA	FBGN0039066	0.169412	-0.06148	0.364768	0.133873
CG15452	FBGN0031130	0.096861	0.294645	-0.08164	0.116148
CG33203	FBGN0053203	0.260604	-0.04687	0.47466	0.167188
CG31064	FBGN0051064	0.139092	0.009488	0.238859	0.109254
CG31886	FBGN0032079	0.409324	0.173263	0.180157	-0.0559
nero	FBGN0261479	-0.207	0.070371	-0.25485	0.022518
Gfat2	FBGN0039580	0.167254	-0.01183	0.024244	-0.15484
Nopp140	FBGN0037137	-0.11942	-0.00669	-0.00396	0.108764
CG15256	FBGN0028880	-0.00572	0.038191	-0.09893	-0.05502
gfzf	FBGN0250732	0.021255	0.11837	-0.16999	-0.07287
Cul4	FBGN0033260	0.045803	0.074298	0.009484	0.037979
rnh1	FBGN0023171	-0.21332	-0.01758	-0.26493	-0.06919
CG8323	FBGN0033903	0.360347	0.189946	0.151318	-0.01908
Rift	FBGN0039882	-0.03319	0.011532	-0.17456	-0.12983
CG42585	FBGN0260953	-0.14953	-0.09413	-0.07451	-0.01912
Fbl6	FBGN0033609	0.088884	0.003613	0.080061	-0.00521
CG43114	FBGN0262574	0.054808	-0.39049	0.518224	0.072923
schlank	FBGN0040918	-0.06476	-0.02045	-0.14331	-0.099
Cog4	FBGN0032258	0.054389	0.161729	0.18677	0.294109
Bx42	FBGN0004856	0.00964	-0.03497	0.097723	0.053109
sff	FBGN0036544	0.571829	0.019384	0.690196	0.137751
ebi	FBGN0263933	0.003332	0.060561	-0.04526	0.011964
CG15258	FBGN0032563	-0.07942	-0.09269	0.029268	0.01599
CG13630	FBGN0039219	-0.15846	0.016158	-0.17208	0.002544
CG9427	FBGN0037721	-0.37102	-0.17116	0.168139	0.367995
CG13244	FBGN0032577	-0.13634	0.047926	-0.21619	-0.03193
CG1304	FBGN0031141	5.054074	0.399487	4.258565	-0.39602
Acyp2	FBGN0038363	-0.30904	-0.09794	-0.30799	-0.09689
CG4757	FBGN0027584	0.080397	0.197212	-0.02263	0.094183
yellow-b	FBGN0032601	0.092412	0.417284	-0.41884	-0.09397
CG17744	FBGN0035730	-0.22347	-0.01576	-0.21389	-0.00618
CG11686	FBGN0040551	-0.02655	0.273188	-0.42968	-0.12994
Tsf2	FBGN0036299	-0.02493	0.102013	-0.11392	0.013028
bug	FBGN0034050	-0.32074	0.156086	-0.464	0.012825
pain	FBGN0060296	0.010857	0.079981	-0.17472	-0.10559
dind	FBGN0286828	0.638935	0.210479	0.451096	0.02264
CG15423	FBGN0031580	-0.11622	0.308257	-0.67231	-0.24783
Tengl1	FBGN0051682	-0.17429	-0.10216	-0.0753	-0.00317
wit	FBGN0024179	0.354551	-0.056	0.449754	0.0392
CG8460	FBGN0031996	-0.35973	-0.02364	-0.57699	-0.2409
loco	FBGN0020278	0.091432	0.103336	0.117036	0.12894
Naa80	FBGN0037747	-0.06302	0.079337	-0.1334	0.008948
CG10366	FBGN0032814	-0.03508	0.157322	-0.11297	0.07943
CG45489	FBGN0267045	-1.3596	-0.13619	-1.73004	-0.50663
qkr58E-3	FBGN0022984	-0.03363	-0.0534	-0.09292	-0.11269
CG14556	FBGN0039413	0.241645	0.029742	-0.26299	-0.47489
Upf2	FBGN0029992	0.100561	-0.07011	0.433419	0.262744
Spn77Ba	FBGN0262057	-0.13193	0.044282	-0.17676	-0.00055

CG31835	FBGN0051835	-0.14975	-0.09094	-0.07926	-0.02045
CG13455	FBGN0036498	-0.09678	-0.04266	-0.00841	0.045702
CG13603	FBGN0039135	-0.04083	-0.00054	-0.10508	-0.06479
Nep1	FBGN0029843	0.340013	0.058554	0.273989	-0.00747
CG9692	FBGN0036654	0.036672	0.050012	0.013332	0.026673
CG6479	FBGN0036710	0.069196	-0.01335	0.081682	-0.00086
Cdc23	FBGN0032863	-0.21767	-0.04672	-0.07614	0.094814
Arp5	FBGN0038576	-0.01437	-0.06383	0.19176	0.142294
mnd	FBGN0002778	0.021314	-0.13892	0.46933	0.309099
CG32846	FBGN0052846	-0.02236	-0.01958	0.064502	0.067283
CG14407	FBGN0030584	-0.04654	-0.01304	0.026028	0.059529
Fak	FBGN0020440	0.194031	-0.02468	0.293405	0.074692
Srp19	FBGN0015298	-0.37092	0.024924	-0.35728	0.038564
kek5	FBGN0031016	0.357371	0.278111	0.019216	-0.06004
Cyp305a1	FBGN0036910	0.047695	-0.20028	0.065414	-0.18256
Rrp1	FBGN0004584	-0.25707	0.138157	-0.72677	-0.33154
CG13397	FBGN0014417	0.876718	0.149498	0.729659	0.002439
tsl	FBGN0003867	0.19921	0.024283	0.353787	0.17886
CG43319	FBGN0263024	-0.75134	0.075077	0.029403	0.855823
Dad	FBGN0020493	0.06288	0.081631	0.023728	0.042479
Pdp	FBGN0029958	-0.07974	-0.18685	0.018791	-0.08833
CG12170	FBGN0037356	-0.06679	-0.12059	0.057198	0.003399
CG13833	FBGN0039040	-0.38107	-0.24497	-0.43578	-0.29969
peb	FBGN0003053	0.32406	0.135486	0.039953	-0.14862
CG14715	FBGN0037930	-0.15418	0.17632	-0.70695	-0.37644
Trf4-1	FBGN0030049	0.392931	-0.05908	0.399684	-0.05232
nAChRalpha6	FBGN0032151	0.461302	0.067145	0.610358	0.216201
CG12224	FBGN0037974	0.642225	-0.26801	0.914427	0.004188
Mccc1	FBGN0039877	0.383802	0.356105	0.121098	0.093402
CG5726	FBGN0034313	0.4236	-0.03929	0.541694	0.078807
CG34287	FBGN0085316	-0.13944	-0.00155	-0.7187	-0.58081
CG17598	FBGN0031194	0.281527	-0.08223	0.407715	0.043955
Mocs1	FBGN0263241	0.167709	0.42092	-0.54506	-0.29185
dod	FBGN0015379	-0.2783	0.073107	-0.24075	0.110658
Mtap	FBGN0034215	0.05792	-0.16645	0.071282	-0.15309
CG14507	FBGN0039655	0.080145	0.056201	0.297434	0.27349
Crys	FBGN0005664	0.303834	-0.00427	-0.17749	-0.48559
CG32191	FBGN0052191	0.749443	0.351465	1.19826	0.800282
CG9577	FBGN0031092	-0.05749	0.032466	-0.04147	0.048487
CG11703	FBGN0038690	-0.21229	-0.09074	-0.23594	-0.1144
CG10588	FBGN0037037	0.233572	0.011249	0.261081	0.038758
Hml	FBGN0029167	0.00761	0.1412	-0.59854	-0.46495
ics	FBGN0028546	0.340911	0.348651	-0.01878	-0.01104
SmE	FBGN0261790	-0.34147	0.052063	-0.34869	0.044842
barc	FBGN0037081	-0.01864	-0.11372	0.160651	0.06557
bwa	FBGN0045064	-0.31448	-0.19942	0.045279	0.160343
Tim8	FBGN0027359	-0.15592	0.035302	-0.09065	0.100573
CG5522	FBGN0034158	0.239933	0.011075	0.389216	0.160358
CG32170	FBGN0052170	-0.18457	-0.59692	0.102271	-0.31008
JYalpha	FBGN0267363	0.09315	0.096379	-0.11088	-0.10765
CG9062	FBGN0033607	-0.05039	-0.03034	-0.10122	-0.08118
CG9886	FBGN0031428	0.4177	-0.03603	0.752866	0.299136
Hr96	FBGN0015240	0.005279	0.155337	-0.14084	0.009216
CG11655	FBGN0030638	0.383241	0.047711	0.204963	-0.13057
Deaf1	FBGN0013799	0.131068	0.057534	0.167658	0.094123
CG18585	FBGN0031929	-0.05751	0.267247	-1.46765	-1.1429
CG15638	FBGN0028943	-0.16742	-0.03212	-0.13352	0.001783
CSN1b	FBGN0027057	0.057743	-0.04702	-0.08195	-0.18672
CG32369	FBGN0052369	0.237061	-0.09613	0.391536	0.058348
CG13096	FBGN0032050	-0.27859	0.107736	-0.42201	-0.03568
CG15543	FBGN0039799	0.01367	-0.01652	-0.23507	-0.26526
Tsp42Ef	FBGN0033127	-0.14909	-0.05146	-0.08017	0.017455
Sf3b3	FBGN0035162	0.385065	-0.27471	0.662869	0.003088
bowl	FBGN0004893	0.117571	0.010451	0.419879	0.312759
Spn55B	FBGN0028983	-0.02024	0.423528	-0.42735	0.016418
CG13186	FBGN0033680	-0.00507	0.071295	-0.06335	0.013012
CG13541	FBGN0034841	-0.05459	0.006897	-0.14841	-0.08692
unc-13-4A	FBGN0035756	0.538694	0.028361	0.815908	0.305575
CG13110	FBGN0032111	-0.08372	0.008274	-0.20687	-0.11487

Gal	FBGN0001089	0.230476	0.324729	-0.70975	-0.61549
CG18132	FBGN0031345	-0.38035	0.215302	-0.43993	0.155724
Ude	FBGN0039226	-0.10426	0.046899	0.148456	0.299617
blp	FBGN0038387	-0.22369	0.009193	-0.2832	-0.05032
Clbn	FBGN0259152	-0.05409	0.048853	-0.11075	-0.00781
Rsf1	FBGN0011305	-0.03717	-0.08498	0.045175	-0.00263
Alg11	FBGN0037108	-0.09656	0.015057	-0.22363	-0.11201
CG16825	FBGN0032503	-0.10485	0.012603	-0.15536	-0.03791
dpr13	FBGN0034286	1.165154	0.702841	0.287639	-0.17467
Su(z)12	FBGN0020887	0.07173	-0.03298	0.159292	0.054582
CG12209	FBGN0033498	-0.03469	0.067481	-0.1924	-0.09023
Tango2	FBGN0030503	0.214409	0.00717	0.266175	0.058937
laza	FBGN0037163	-0.04484	-0.0185	0.179595	0.205939
MME1	FBGN0031881	-0.3442	0.256853	-0.77121	-0.17015
Adgf-A	FBGN0036752	-0.08524	0.426422	-0.77652	-0.26486
CG11044	FBGN0034484	-0.14074	-0.10355	0.012027	0.049219
CG10340	FBGN0022344	-0.16076	-0.02865	-0.16738	-0.03527
CG14642	FBGN0037222	0.09135	0.391908	-0.48133	-0.18077
CG3588	FBGN0025643	-0.65052	0.357441	-0.87201	0.135953
spict	FBGN0032451	0.077873	0.210089	-0.00334	0.128877
CG17333	FBGN0030239	-0.02752	-0.1496	0.086231	-0.03585
CG17202	FBGN0038043	-0.1744	0.024745	-0.13811	0.061034
Ddx1	FBGN0015075	0.021747	0.067461	-0.11176	-0.06605
CG12126	FBGN0033280	-0.18923	0.036057	-0.23901	-0.01372
cocoon	FBGN0036496	0.119597	0.054461	0.049506	-0.01563
ADPS	FBGN0033983	-0.17869	-0.00573	-0.16791	0.00505
CG43403	FBGN0263322	1.418324	0.172542	1.950146	0.704363
CG3618	FBGN0037028	0.102807	-0.09862	0.20049	-0.00094
CG14644	FBGN0250821	-0.11855	-0.03732	-0.07948	0.001746
Pfdn1	FBGN0031776	-0.39063	-0.00585	-0.53714	-0.15237
CG9328	FBGN0032886	-0.16686	-0.04382	0.019508	0.142544
tara	FBGN0040071	0.328085	0.008094	0.410844	0.090853
corolla	FBGN0267967	-0.13262	0.030714	-0.15758	0.005755
CG11145	FBGN0033168	-0.1986	0.046776	-0.17752	0.067854
CG15533	FBGN0039768	0.656747	0.444405	-0.08826	-0.30061
CG15236	FBGN0033108	0.230514	-0.02735	0.398988	0.141124
Bin1	FBGN0024491	0.668662	0.861741	-0.13359	0.059487
CG13581	FBGN0035014	-0.00867	0.044022	-0.0639	-0.0112
NitFhit	FBGN0024945	0.080894	-0.00764	0.158579	0.070047
Cyp28a5	FBGN0028940	-0.09329	-0.0333	-0.06502	-0.00504
CG14615	FBGN0031184	0.475856	-0.1297	1.043073	0.437518
CG11588	FBGN0036221	-0.01919	0.039858	-0.1587	-0.09965
CG16781	FBGN0029661	-0.10202	-0.05142	-0.14121	-0.09061
CG31115	FBGN0051115	-0.1838	0.048476	-0.2215	0.010777
CG4073	FBGN0037827	-0.1081	-0.07602	-0.11597	-0.08389
CG10943	FBGN0036320	-1.25698	1.169795	-2.0323	0.394478
CG11000	FBGN0263353	0.368575	-0.06474	0.68088	0.247562
CG6012	FBGN0032615	0.1018	0.162144	0.232658	0.293002
Girdin	FBGN0283724	0.144194	-0.07079	0.385126	0.170145
TM4SF	FBGN0020372	0.186035	-0.08314	0.161163	-0.10801
Adf1	FBGN0284249	-0.04871	0.042856	-0.10835	-0.01678
Dh31-R	FBGN0052843	0.041083	-0.23564	-0.05029	-0.32702
Prip	FBGN0033635	-0.28841	0.013619	-0.56841	-0.26637
udt	FBGN0039113	-0.13865	0.082211	-0.0488	0.172057
Nhe2	FBGN0040297	0.196883	0.131068	0.115056	0.049241
CG6617	FBGN0030944	0.06321	0.254684	-0.1173	0.074176
wech	FBGN0259745	0.380653	0.134834	0.311467	0.065648
Dic61B	FBGN0263988	0.155371	-0.03913	0.093687	-0.10081
slv	FBGN0025469	-0.41446	-0.20059	-0.27876	-0.06489
CG3566	FBGN0029854	-0.09852	-0.00118	-0.09004	0.007303
l(2)37Bb	FBGN0002021	0.037464	0.093444	-0.0733	-0.01732
Sps1	FBGN0261270	-0.24894	0.064243	-0.2888	0.024379
Prosbeta2R2	FBGN0037296	-0.16547	-0.08693	-0.09451	-0.01598
CG7872	FBGN0030658	-0.0336	-0.00434	0.026984	0.056246
CG32719	FBGN0052719	0.068004	-0.00283	-0.0427	-0.11354
asl	FBGN0261004	0.087562	-0.12877	0.008122	-0.20821
CG2681	FBGN0024997	0.23569	0.291159	-0.2299	-0.17443
e(r)	FBGN0011586	-0.00376	0.073389	-0.08828	-0.01113
CG42797	FBGN0261931	-0.07963	-0.10256	-0.04633	-0.06927

CG8858	FBGN0033698	0.200733	0.112903	0.006152	-0.08168
CG10950	FBGN0034205	-0.05161	-0.06511	-0.09148	-0.10498
CSN3	FBGN0027055	0.04447	0.158986	-0.16555	-0.05103
CG44098	FBGN0264907	0.370094	0.133772	0.363322	0.127
Atxn7	FBGN0031420	-0.00411	-0.18208	0.271681	0.093713
CG5382	FBGN0038950	-0.26187	-0.04621	-0.1058	0.109854
asp	FBGN0000140	0.131376	-0.03282	-0.08527	-0.24947
asrij	FBGN0034793	-0.20257	-0.10606	-0.07273	0.023779
cal1	FBGN0038478	0.03449	-0.01619	0.102082	0.051401
CG11883	FBGN0033538	0.275878	-0.03799	0.288425	-0.02544
CG6465	FBGN0037818	0.174426	0.12644	-0.20956	-0.25754
eag	FBGN0000535	0.272897	-0.31486	0.741537	0.153778
CG14006	FBGN0031733	0.139256	-0.09594	0.168197	-0.067
Rga	FBGN0017550	-0.13693	0.089266	-0.12402	0.102177
CG15263	FBGN0028853	-1.60518	0.06004	-2.61015	-0.94492
Spt20	FBGN0036374	0.224363	-0.02659	0.322181	0.071227
mthl10	FBGN0035132	0.244874	0.064967	0.119651	-0.06026
CG13501	FBGN0034684	0.054918	-0.09836	-0.07436	-0.22764
Taf10b	FBGN0026324	-0.08988	0.055391	-0.34151	-0.19624
CG30222	FBGN0050222	0.049284	0.012405	-0.06044	-0.09732
CG15202	FBGN0030271	0.152934	0.758797	-0.56233	0.043532
hop	FBGN0004864	0.283016	0.119519	0.393287	0.22979
Su(P)	FBGN0004465	-0.02116	-0.05917	0.189043	0.151031
CG43092	FBGN0262538	-0.37607	0.148997	-0.57644	-0.05137
CG42239	FBGN0250868	-0.1868	0.246626	-0.72448	-0.29105
Cpes	FBGN0025335	-0.12425	0.008099	-0.17841	-0.04606
CG33223	FBGN0053223	0.167686	0.29245	0.159575	0.284339
Syx17	FBGN0035540	-0.24713	-0.04985	-0.16596	0.031317
elB	FBGN0004858	0.09685	0.071051	0.168304	0.142505
CG1722	FBGN0031168	-0.0308	-0.01574	-0.03421	-0.01914
Sfp24Bd	FBGN0259953	0.000364	-0.12066	-0.18225	-0.30327
mei-S332	FBGN0002715	-0.05772	0.077176	-0.05871	0.076182
CG31778	FBGN0051778	0.708731	-0.15366	0.560691	-0.3017
ash2	FBGN0000139	0.072614	0.072123	0.05002	0.04953
GM130	FBGN0034697	0.011287	-0.08676	0.083956	-0.0141
Jon25Bi	FBGN0020906	1.081456	1.156296	2.039454	2.114295
CG31806	FBGN0051806	-0.13769	-0.05907	-0.12292	-0.0443
128up	FBGN0010339	-0.2401	-0.03372	-0.21733	-0.01095
Tim17a1	FBGN0038018	0.057054	-0.02791	0.102418	0.017458
Coa7	FBGN0039965	0.026458	0.051435	-0.11388	-0.0889
Egm	FBGN0086712	0.00787	0.068565	0.064447	0.125143
AstA	FBGN0015591	0.229495	0.166029	-0.03223	-0.0957
CIA30	FBGN0039689	-0.24984	-0.01367	-0.30945	-0.07328
Mkp3	FBGN0036844	0.172548	0.125117	0.142553	0.095122
MTF-1	FBGN0040305	0.412434	0.174635	0.50582	0.268021
CG30270	FBGN0061435	-0.07439	0.004778	-0.15231	-0.07314
CG17190	FBGN0038761	-0.46292	-0.10424	-0.87383	-0.51515
tra2	FBGN0003742	0.06702	-0.00216	0.030732	-0.03845
CG14194	FBGN0030996	0.109138	0.011563	0.107376	0.009801
ph-p	FBGN0004861	0.243839	-0.07121	0.377434	0.062389
P32	FBGN0034259	0.031654	0.041059	0.041576	0.050981
CG14641	FBGN0037220	-0.0163	0.043532	0.004281	0.064112
ebo	FBGN0266572	0.228445	0.009289	0.263959	0.044803
CG13117	FBGN0032140	-0.40027	0.155593	-0.5064	0.049463
CG7379	FBGN0038546	-0.07853	-0.0177	-0.01272	0.048114
CG3397	FBGN0037975	0.336655	-0.09403	-0.08577	-0.51646
CG30345	FBGN0050345	0.081963	0.000484	-0.25579	-0.33727
edin	FBGN0052185	-1.90879	0.615606	-4.41662	-1.89222
CG1344	FBGN0027507	0.181718	0.198153	-0.02695	-0.01052
CG32833	FBGN0052833	-0.10586	-0.08047	-0.25865	-0.23326
Hip14	FBGN0259824	0.188325	0.182706	0.21589	0.210271
sel	FBGN0263260	-0.20549	-0.01819	-0.18007	0.007228
Wdr37	FBGN0038617	0.061174	-0.0701	0.248631	0.117358
CG6893	FBGN0036807	-0.29427	-0.01555	-0.58051	-0.3018
CG43121	FBGN0262581	-0.23862	-0.21578	0.105019	0.127852
CG14282	FBGN0038685	-0.209	-0.10593	-0.38725	-0.28418
Cyp309a2	FBGN0041337	0.025716	-0.16126	0.533298	0.346323
Pex13	FBGN0033812	-0.04422	-0.0455	-0.11493	-0.11622
Tasp1	FBGN0263602	0.025533	0.343804	-0.48425	-0.16598

Kap3	FBGN0028421	0.173266	-0.03112	0.227403	0.023019
CG12007	FBGN0037293	-0.11916	0.139945	-0.32817	-0.06907
CG31272	FBGN0051272	0.082537	0.288521	-0.25796	-0.05198
CG3556	FBGN0029708	0.260288	-0.04576	0.340781	0.034732
HIPP1	FBGN0037027	0.031185	-0.05128	0.035559	-0.04691
CG13937	FBGN0035287	0.131882	-0.04046	0.379974	0.207629
Es2	FBGN0023506	0.28635	0.232687	0.216673	0.16301
CG42322	FBGN0259222	0.160625	0.021041	0.395436	0.255852
SkpB	FBGN0026176	-0.18094	0.000535	-0.16851	0.012964
IM14	FBGN0067905	-0.61834	-0.09014	0.09158	0.619773
CG18596	FBGN0038953	-0.45863	-0.15035	-0.35309	-0.04481
CG9205	FBGN0035181	-0.22282	-0.17498	-0.09399	-0.04615
Aplip1	FBGN0040281	0.110183	-0.23949	0.378359	0.028683
zetaTry	FBGN0011556	0.139148	-0.09642	0.208963	-0.0266
CG42342	FBGN0259244	0.179391	-0.08511	0.553223	0.288725
GstE5	FBGN0063495	0.682075	0.835922	0.528467	0.682314
TfIIB	FBGN0004915	-0.05494	0.000464	-0.14874	-0.09333
mbo	FBGN0026207	-0.22939	-0.01039	-0.09111	0.127887
Reg-2	FBGN0016715	-0.04457	-0.02819	0.195324	0.211708
Gycalpha99B	FBGN0013972	-0.05298	-0.12316	0.119437	0.049262
dbr	FBGN0067779	-0.1351	-0.08884	0.044474	0.090734
CG2202	FBGN0030240	0.176134	-0.03683	0.200087	-0.01288
Blm	FBGN0002906	-0.17847	0.270722	-0.09905	0.350145
CG14316	FBGN0038567	-0.06853	-0.06001	-0.32529	-0.31678
sowah	FBGN0036302	-0.17501	-0.1448	-0.03123	-0.00102
CG31139	FBGN0051139	-0.00952	0.032854	-0.07069	-0.02831
Rad60	FBGN0039065	-0.05224	0.03705	-0.05593	0.033366
CG13285	FBGN0035611	0.114946	0.118634	0.223965	0.227653
Cyp4s3	FBGN0030615	0.161166	0.096306	-0.45744	-0.5223
noc	FBGN0005771	0.166628	-0.13925	0.323063	0.017184
CG30110	FBGN0050110	-0.20516	-0.33354	-0.07871	-0.20708
Nepl9	FBGN0032613	0.674337	-0.06437	0.919527	0.18082
AP-2sigma	FBGN0043012	-0.0586	0.129758	-0.29779	-0.10943
Su(Ste):CR42418	FBGN0259849	-2.29876	0.009339	-1.33762	0.970473
CG17669	FBGN0034352	0.118909	-0.02497	-0.03241	-0.17628
CG43935	FBGN0264563	-0.28662	-0.01869	-0.33568	-0.06776
CG13855	FBGN0038960	0.075465	-0.03191	0.025944	-0.08143
Hsp70Bbb	FBGN0051354	-0.89178	-0.19907	-0.71358	-0.02088
Reps	FBGN0032341	0.126823	-0.00812	0.242797	0.107853
ClC-b	FBGN0033755	0.184997	0.133461	0.12922	0.077685
CG6044	FBGN0034725	-0.27903	-0.18271	-0.04785	0.04848
st	FBGN0003515	0.432829	-0.02933	0.301398	-0.16076
MED31	FBGN0037262	-0.11069	-0.0056	-0.01355	0.09154
CG32201	FBGN0052201	-0.02907	-0.13316	0.58069	0.476598
Gfrl	FBGN0262869	0.316972	-0.09999	0.48205	0.065089
CG14838	FBGN0035799	0.244216	0.044952	0.151906	-0.04736
magu	FBGN0262169	0.221268	-0.07156	0.410334	0.117506
CSN7	FBGN0028836	-0.02506	-0.03196	-0.03289	-0.03979
CG14868	FBGN0038330	0.116768	9.95E-05	0.045607	-0.07106
SNRPG	FBGN0261791	-0.12654	0.256864	-0.38264	0.000767
CG5727	FBGN0032193	0.514425	0.099563	0.803754	0.388892
Dr	FBGN0000492	0.463895	-0.13067	0.828795	0.234231
TfIIS	FBGN0010422	-0.12994	0.015695	-0.11778	0.02786
Med	FBGN0011655	0.128404	-0.00692	0.223618	0.088298
CG7903	FBGN0039730	0.143255	0.102078	0.161298	0.120121
CG43931	FBGN0264552	-0.0128	-0.24433	-0.06888	-0.30041
Nca	FBGN0013303	-0.06052	-0.05543	-0.12535	-0.12025
Dhap-at	FBGN0040212	0.333452	0.163804	0.455779	0.286131
RasGAP1	FBGN0004390	0.390892	0.03203	0.461953	0.103092
CG3708	FBGN0040345	-0.15649	0.005033	-0.14704	0.014484
Cog1	FBGN0037998	-0.04446	-0.00324	-0.08307	-0.04185
CG8507	FBGN0037756	-0.06718	0.018059	0.006026	0.091267
CG10226	FBGN0035695	-0.24027	-0.16052	0.094044	0.173792
alpha-Est5	FBGN0261393	0.15726	0.201571	-0.03062	0.013687
CG34117	FBGN0083953	-0.30418	-0.0839	-0.10379	0.116491
CG3776	FBGN0035088	-0.11776	0.037162	-0.1027	0.05222
Lsp1beta	FBGN0002563	0.322121	0.013221	0.110199	-0.1987
CG8028	FBGN0031010	0.503784	0.480329	-0.01194	-0.03539
CG32847	FBGN0052847	-0.1627	0.043207	-0.33395	-0.12805

CG5835	FBGN0038682	-0.36288	0.123222	-0.41906	0.067042
ecd	FBGN0000543	-0.00303	0.142359	0.098184	0.24357
CG6138	FBGN0032268	0.096122	-0.07322	0.112961	-0.05638
CG31380	FBGN0051380	0.331125	0.012775	-0.15414	-0.47249
CG43774	FBGN0264296	-0.02067	0.235731	-0.73648	-0.48008
CG2258	FBGN0029997	0.064847	-0.17654	0.182408	-0.05897
Gpdh2	FBGN0034825	0.03877	0.013541	-0.08069	-0.10591
Est-Q	FBGN0037090	0.303096	0.024619	0.416025	0.137548
Dh44	FBGN0012344	0.500048	-0.09908	0.572694	-0.02643
CG8252	FBGN0033344	-0.06857	-0.1258	-0.10562	-0.16285
pnut	FBGN0013726	0.016062	0.075963	-0.02532	0.034577
Tim13	FBGN0036204	-0.43691	-0.15216	-0.19354	0.091205
Myo95E	FBGN0039157	0.24197	0.115887	0.345116	0.219033
RagC-D	FBGN0033272	0.036647	0.020023	0.141256	0.124631
CG15143	FBGN0032647	0.288733	0.076919	0.257174	0.04536
Cyp6a21	FBGN0033981	-0.46989	-0.12567	-0.35982	-0.0156
CG18371	FBGN0033893	-0.06288	0.09265	-0.25254	-0.09701
Glut3	FBGN0015230	-0.11068	-0.12778	0.071262	0.054166
CG8584	FBGN0033322	-0.01476	-0.04744	0.042595	0.00992
Inx7	FBGN0027106	0.099902	0.274012	-0.56126	-0.38715
Nop60B	FBGN0259937	-0.24499	0.044463	-0.27362	0.015836
mats	FBGN0038965	-0.0605	-0.0332	-0.16213	-0.13482
CrzR	FBGN0036278	0.067846	-0.10686	0.064276	-0.11043
CG42263	FBGN0259148	-0.09666	0.410974	-0.77132	-0.26368
mRpS9	FBGN0037529	0.110838	-0.02671	0.192668	0.055122
grp	FBGN0261278	-0.04965	0.038561	-0.11533	-0.02712
CG3841	FBGN0032131	0.182034	0.294781	-0.4147	-0.30195
CG9941	FBGN0030514	0.012457	-0.06638	0.089712	0.010878
sphinx2	FBGN0052382	-0.24763	-0.19535	0.14136	0.193632
CHMP2B	FBGN0035589	-0.19616	0.126054	-0.11027	0.211939
CG31793	FBGN0051793	0.188112	-0.04773	0.324924	0.08908
lncRNA:CR44643	FBGN0265854	0.877195	0.37784	0.626852	0.127496
Tdrd3	FBGN0036450	-0.07869	-0.1113	-0.00919	-0.0418
TotM	FBGN0031701	-1.22278	0.133896	0.290619	1.647299
shtd	FBGN0004391	0.193745	0.008501	0.448674	0.26343
CG10053	FBGN0037490	-0.47488	-0.12021	-0.59452	-0.23984
CG11286	FBGN0037516	0.03284	0.295292	-0.64203	-0.37957
RtcB	FBGN0032781	-0.23944	-0.05004	-0.16531	0.024088
mip40	FBGN0034430	-0.40791	-0.21271	-0.14403	0.051163
miple2	FBGN0029002	-0.15379	0.456024	-0.82903	-0.21922
mRpL16	FBGN0023519	-0.01711	0.002271	0.124614	0.143998
CG9220	FBGN0030662	0.222358	-0.01712	0.380882	0.141404
Nup44A	FBGN0033247	-0.07378	-0.07441	0.119299	0.118662
CG8617	FBGN0033925	-0.24864	-0.04763	-0.20229	-0.00129
cbs	FBGN0086757	0.008595	0.031662	-0.08565	-0.06259
Qsox4	FBGN0051413	0.004852	-0.1464	-0.11432	-0.26558
CG7135	FBGN0030895	0.58035	0.853503	-0.21944	0.05371
CG1236	FBGN0037370	-0.13868	0.02782	0.072009	0.238508
CG11927	FBGN0031638	-0.12274	-0.18808	0.140708	0.075368
Alr	FBGN0031068	-0.20309	-0.09179	-0.12856	-0.01726
CG5556	FBGN0031332	-0.04459	0.038838	0.016983	0.100416
CG31493	FBGN0051493	-0.35781	-0.097	-0.26365	-0.00284
row	FBGN0033998	0.154573	0.054568	0.103498	0.003494
CG11373	FBGN0040679	-0.15674	0.016161	-0.26338	-0.09048
unk	FBGN0004395	0.036459	0.109324	0.014451	0.087316
kri	FBGN0035639	0.022097	-0.0432	0.167784	0.102489
Gcn5	FBGN0020388	0.071962	0.042491	0.243688	0.214217
Cbp20	FBGN0022943	-0.23083	-0.00342	-0.31856	-0.09115
CG13385	FBGN0032039	0.030222	0.00673	-0.00185	-0.02534
CG34284	FBGN0085313	0.214577	-0.04277	-0.11373	-0.37108
CG12355	FBGN0040805	-0.12369	0.019999	-0.20511	-0.06142
l(1)G0007	FBGN0026713	0.059193	0.057262	0.147099	0.145168
Kmn1	FBGN0027259	2.225278	1.437457	-0.26663	-1.05445
arr	FBGN0000119	0.218275	-0.02357	0.258414	0.016571
ZnT33D	FBGN0051860	0.078227	0.000222	-0.27824	-0.35624
CG2691	FBGN0030504	-0.05372	0.0138	-0.00851	0.059017
Elo68alpha	FBGN0052072	0.214801	0.207233	0.140657	0.133089
feo	FBGN0030241	-0.28361	-0.13773	-0.19915	-0.05327
Rnf146	FBGN0036897	0.008881	-0.03808	-0.04971	-0.09667

CG15412	FBGN0031528	-0.04769	0.037803	0.301243	0.38674
CG12521	FBGN0040816	-0.25032	-0.04235	-0.33943	-0.13146
ttm50	FBGN0250874	-0.10412	0.028734	-0.16683	-0.03398
CG12516	FBGN0039577	-0.16533	0.0266	-0.21831	-0.02638
Shal	FBGN0005564	0.267173	0.094823	0.289141	0.116791
CG10916	FBGN0034312	-0.70904	-0.17056	-0.54301	-0.00453
CG1812	FBGN0031119	0.120858	0.052439	0.061878	-0.00654
CTPsyn	FBGN0266452	0.044212	0.080029	0.218452	0.254268
mio	FBGN0031399	0.255812	0.041288	0.159797	-0.05473
Hsp70Bb	FBGN0013278	-0.91136	-0.14488	-0.75089	0.015588
LPCAT	FBGN0052699	0.17604	0.125968	0.237903	0.187832
Hsp70Ab	FBGN0013276	-0.53804	-0.32728	-0.12989	0.08087
CG7483	FBGN0037573	-0.06538	0.061428	-0.10731	0.0195
Irp-1A	FBGN0024958	-0.11024	-0.05735	-0.11866	-0.06577
sano	FBGN0034408	0.523253	0.048801	0.383701	-0.09075
Nadsyn	FBGN0030512	0.357283	-0.00076	0.551145	0.1931
shps	FBGN0286199	-0.01372	-0.04702	0.08341	0.050106
CG1090	FBGN0037238	0.628044	-0.24047	0.840482	-0.02804
CG43348	FBGN0263080	1.336462	1.81964	-1.05361	-0.57043
GCS1	FBGN0030289	-0.04048	-0.02178	0.006454	0.025158
CG11726	FBGN0036156	0.019865	0.091025	-0.0975	-0.02634
CG10166	FBGN0032799	-0.23846	0.119127	-0.39278	-0.03519
Syngr	FBGN0033876	0.155697	-0.16287	0.277242	-0.04132
Bub1	FBGN0031696	0.029213	-0.0611	0.176075	0.085766
CIAPIN1	FBGN0001977	-0.09902	0.045073	-0.14094	0.003153
CalpB	FBGN0025866	0.051676	0.101378	0.018293	0.067995
CG14722	FBGN0037943	-0.05046	-0.00554	-0.07882	-0.03389
Ent2	FBGN0263916	0.376479	0.001987	0.45118	0.076688
CG30090	FBGN0050090	-0.25315	1.120207	-1.48299	-0.10963
REPTOR-BP	FBGN0032202	-0.19473	-0.06512	-0.13095	-0.00134
fliI	FBGN0000709	0.226863	0.120598	0.138802	0.032537
nmd	FBGN0005322	-0.08597	0.033701	-0.10205	0.017629
scra	FBGN0261385	-0.31589	0.012768	-0.37692	-0.04826
C1GalTA	FBGN0032078	0.351106	0.129533	0.256464	0.034891
CG32650	FBGN0052650	-0.1304	0.065639	-0.17113	0.02491
CG8388	FBGN0034062	0.031016	0.034167	-0.15791	-0.15476
CG43057	FBGN0262359	-0.25205	-0.13714	-0.03132	0.083593
Sep1	FBGN0011710	0.211249	0.13828	0.134355	0.061386
CG15429	FBGN0031596	0.09317	-0.15879	-0.52047	-0.77243
CG13994	FBGN0031772	0.006592	-0.00205	-0.09423	-0.10287
Coa8	FBGN0029594	-0.05341	0.267802	-0.44374	-0.12253
CG16704	FBGN0031558	0.145284	-0.49227	1.109564	0.472007
mRpL12	FBGN0011787	-0.13008	0.104162	-0.2011	0.033147
CG15172	FBGN0032740	-0.40315	-0.23774	-0.21091	-0.0455
CG14106	FBGN0260459	0.362366	-0.03003	0.299577	-0.09282
fws	FBGN0024689	0.060046	0.019964	0.006953	-0.03313
CG7702	FBGN0038638	0.044129	0.289288	-0.55185	-0.30669
CG44140	FBGN0264989	-0.78863	-0.57166	0.018491	0.235454
SMC5	FBGN0052438	0.140778	-0.04587	0.065623	-0.12102
CRAT	FBGN0037440	0.127985	-0.03894	0.217759	0.050836
Pld	FBGN0286511	0.39988	0.253001	0.09055	-0.05633
GCC185	FBGN0037979	0.102369	0.037347	0.044051	-0.02097
Glo1	FBGN0283450	-0.31489	0.041492	-0.44004	-0.08366
Spf45	FBGN0086683	0.07669	0.073702	-0.03184	-0.03483
Rab39	FBGN0029959	0.250176	-0.15026	0.185639	-0.21479
CG17027	FBGN0036553	0.011927	0.068502	-0.39781	-0.34123
Sik2	FBGN0025625	0.327036	-0.23376	0.678624	0.117831
CheA75a	FBGN0036783	-0.67727	-0.3262	-0.68498	-0.33391
Vha100-5	FBGN0032373	0.358112	0.403621	-0.41649	-0.37098
Megf8	FBGN0031981	0.103398	0.013696	0.194282	0.104581
CG17904	FBGN0032597	-0.27841	0.05112	-0.20244	0.127085
Ttc19	FBGN0032744	-0.01146	0.017906	0.039062	0.068425
cyst	FBGN0032796	0.545717	0.07913	0.724809	0.258222
CG31406	FBGN0051406	-0.31846	-0.17119	0.206599	0.353873
CG5267	FBGN0034154	-0.75737	-0.39305	-0.60759	-0.24326
Naxd	FBGN0036848	-0.13084	-0.30622	0.437276	0.261896
CG4119	FBGN0028474	0.115286	-0.03148	0.073498	-0.07327
U2af38	FBGN0017457	-0.24444	0.020678	-0.22049	0.044629
CG6621	FBGN0037855	0.206019	0.084013	0.154213	0.032207

CG32428	FBGN0052428	0.130149	0.012183	0.006956	-0.11101
Srp72	FBGN0038810	-0.155	-0.00188	-0.14731	0.005806
CG5569	FBGN0034919	-0.11795	0.061582	-0.04186	0.137669
CG9018	FBGN0035318	-0.17399	0.027255	-0.19774	0.0035
CG6398	FBGN0030870	-0.15829	-0.01266	-0.13495	0.010681
Tengl3	FBGN0051679	-0.05816	0.038208	-0.16395	-0.06758
CG31098	FBGN0051098	0.13298	0.226321	-0.2378	-0.14446
mtm	FBGN0025742	0.052202	0.062473	-0.01843	-0.00816
CG14270	FBGN0029665	-0.08845	0.159097	-0.20863	0.038914
CG31013	FBGN0051013	0.335214	-0.0169	-0.14507	-0.49719
l(3)73Ah	FBGN0002283	-0.00461	-0.04281	-0.05785	-0.09605
Rab19	FBGN0015793	-0.17521	0.018935	-0.11851	0.075633
ATPsynGL	FBGN0031941	-0.21903	-0.04895	-0.19108	-0.021
Cyp310a1	FBGN0032693	0.927377	0.458004	0.250701	-0.21867
CG11912	FBGN0031248	-0.49855	0.343416	-1.12984	-0.28788
dyw	FBGN0000092	-1.29368	-1.33751	-3.44275	-3.48658
Vps13D	FBGN0052113	0.262782	0.070471	0.309534	0.117223
CG5674	FBGN0032656	0.244203	-0.06876	0.245083	-0.06788
CG8138	FBGN0038122	0.19924	-0.0012	0.196397	-0.00404
CG31549	FBGN0051549	-0.18892	0.036424	-0.10707	0.118278
CG7342	FBGN0038716	0.061052	0.05171	0.317352	0.308011
CenB1A	FBGN0039056	-0.00197	-0.0027	-0.00546	-0.00619
CG32681	FBGN0052681	0.238361	-0.25368	0.406449	-0.08559
CG6867	FBGN0030887	0.063395	-0.25041	0.024107	-0.2897
CG14971	FBGN0035449	-0.00848	0.055794	-0.23624	-0.17197
CG11241	FBGN0037186	0.1472	-0.03351	0.446107	0.265393
CG17329	FBGN0028896	-0.22685	-0.02041	-0.17626	0.030182
Patr-1	FBGN0266053	0.152575	0.047227	0.124573	0.019225
S2P	FBGN0033656	-0.0735	0.142087	-0.04618	0.169404
CG30002	FBGN0260474	0.672103	0.079191	0.943313	0.3504
CG7888	FBGN0036116	0.083675	-0.12109	0.160331	-0.04444
IntS6	FBGN0261383	0.265191	0.0532	0.324899	0.112908
mAChR-A	FBGN0000037	0.511595	-0.06974	0.746901	0.165571
CG45002	FBGN0266354	0.397647	-0.13424	0.474548	-0.05734
CG6834	FBGN0037935	0.215709	-0.14414	0.424199	0.064349
CG11752	FBGN0030292	-0.06866	-0.01712	0.009805	0.06135
snf	FBGN0003449	-0.20695	0.010002	-0.2685	-0.05155
CG14275	FBGN0032022	-0.21713	0.000425	-0.03466	0.182902
CG1737	FBGN0030293	0.182054	-0.04391	0.267779	0.041811
sni	FBGN0030026	0.010152	0.350684	0.01559	0.356122
CG44013	FBGN0264775	-0.60613	0.388973	-0.77022	0.224889
CG44141	FBGN0264990	-0.78347	-0.5659	0.001062	0.21864
ball	FBGN0027889	-0.01965	-0.0208	-0.3202	-0.32135
CG18473	FBGN0037683	0.112996	0.06008	-0.18545	-0.23837
Nup62	FBGN0034118	-0.24849	-0.04545	-0.20118	0.001854
CG14537	FBGN0031954	-0.34352	-0.07041	-0.30331	-0.0302
brat	FBGN0010300	0.182271	0.040334	0.248697	0.106761
RpS15Ab	FBGN0033555	0.007186	-0.01142	-0.15478	-0.17339
neur	FBGN0002932	-1.07442	0.144058	-1.35971	-0.14124
CG1441	FBGN0033464	-0.29047	-0.00032	-0.55464	-0.26449
Pten	FBGN0026379	0.087362	0.052435	-0.0536	-0.08853
unc-119	FBGN0025549	0.151741	-0.05452	0.207296	0.001039
lncRNA:CR44631	FBGN0265842	0.53612	0.042446	0.110009	-0.38366
Tsp74F	FBGN0036769	-0.20074	-0.13206	-0.16142	-0.09274
Usp12-46	FBGN0039025	-0.03961	0.083645	-0.00551	0.11774
CG2652	FBGN0025838	-0.15186	0.051231	-0.0563	0.146791
CG17019	FBGN0033783	-0.09052	0.028952	-0.09326	0.02621
sigmar	FBGN0034894	0.07597	0.092533	-0.12609	-0.10952
MCU	FBGN0042185	0.003325	-0.06134	-0.03352	-0.09819
CG14880	FBGN0038422	-0.59143	0.226431	-0.77376	0.044099
CG12012	FBGN0035444	0.068631	0.155115	0.127057	0.213541
sfl	FBGN0020251	0.278465	0.05037	0.250077	0.021982
Fsn	FBGN0043010	-0.08903	-0.01501	-0.03201	0.042014
Ykt6	FBGN0260858	-0.07984	-0.01013	-0.11851	-0.0488
Nep5	FBGN0039478	0.261922	0.013911	0.280951	0.03294
CG15395	FBGN0031440	-0.11122	0.027382	-0.24333	-0.10474
CG3687	FBGN0034097	-0.23149	-0.00576	-0.29614	-0.07042
CG34222	FBGN0250822	-0.13011	-0.02752	-0.08403	0.018562
dpp	FBGN0000490	0.456564	0.155482	-0.02509	-0.32617

Sfp33A1	FBGN0259962	-0.34958	-0.19033	-0.71551	-0.55626
msl-2	FBGN0005616	0.006366	-0.095	0.072555	-0.02881
CG2790	FBGN0027599	-0.09256	0.047089	-0.16292	-0.02328
CG8750	FBGN0040812	-0.3714	-0.02175	-0.24311	0.106535
vap	FBGN0003969	0.095202	-0.02298	0.22275	0.10457
CG42841	FBGN0262030	-0.37752	-0.05512	-0.43375	-0.11136
AsnS	FBGN0270926	-0.4775	-0.19102	-0.49951	-0.21303
CG10031	FBGN0031563	0.154462	0.131714	0.238637	0.215889
heix	FBGN0028375	0.160561	-0.19875	0.411983	0.052671
mbt	FBGN0025743	0.041614	-0.13279	0.274339	0.099934
Dh31	FBGN0032048	0.075143	-0.09944	0.061199	-0.11338
Hsp70Aa	FBGN0013275	-0.54831	-0.3643	-0.10722	0.076789
CG34256	FBGN0085285	-0.39362	-0.37366	-0.54844	-0.52849
qm	FBGN0019662	0.124447	0.082992	-0.03245	-0.07391
Nedd8	FBGN0032725	-0.24209	-0.01622	-0.28115	-0.05529
CG5068	FBGN0035951	0.001271	-0.03418	-0.02675	-0.0622
kune	FBGN0033032	-0.11973	0.036873	-0.24039	-0.08378
ADD1	FBGN0026573	0.023639	-0.02086	0.138241	0.093745
CG30192	FBGN0050192	-0.13394	0.043075	-0.25979	-0.08277
pirk	FBGN0034647	0.418357	0.943676	-0.61102	-0.0857
CG6403	FBGN0039453	-1.0053	0.26438	-0.85153	0.418147
Incenp	FBGN0260991	-0.11522	0.010286	-0.12857	-0.00307
Rabex-5	FBGN0262937	0.12711	0.11175	0.0659	0.05054
pico	FBGN0261811	0.118209	0.000153	0.185053	0.066997
Pcl	FBGN0003044	0.084373	-0.09429	0.063465	-0.1152
CR33318	FBGN0053318	0.042953	-0.31794	0.407532	0.04664
CG30496	FBGN0050496	0.051687	0.330829	-0.21856	0.060583
LanB1	FBGN0261800	-0.00713	0.168424	-0.34643	-0.17087
Dd	FBGN0029067	0.19643	0.031552	0.295762	0.130883
CG15865	FBGN0015336	0.407055	0.799496	-0.93811	-0.54567
cmet	FBGN0040232	0.05055	0.009902	0.007433	-0.03322
P5cr	FBGN0015781	-0.00528	-0.0685	-0.19065	-0.25387
CG9636	FBGN0037556	0.091158	-0.0241	0.179204	0.06395
SPH93	FBGN0032638	-1.73021	-0.05828	1.816722	3.488656
Zip89B	FBGN0038412	-0.10695	0.481839	0.219615	0.808407
sub	FBGN0003545	0.128148	-0.0342	0.203251	0.0409
CG3939	FBGN0040396	-0.15296	-0.02025	-0.11027	0.022441
a	FBGN0000008	0.465125	0.317837	0.520821	0.373534
side	FBGN0016061	0.466233	-0.20854	0.713498	0.038729
CG9396	FBGN0037714	0.12	-0.11838	0.076958	-0.16142
CG40498	FBGN0069969	0.128664	0.088119	0.115452	0.074907
CG32984	FBGN0052984	-2.10424	-0.05338	-2.2519	-0.20104
CG8500	FBGN0037754	0.744362	-0.05024	0.823357	0.028757
CG32806	FBGN0052806	-0.16071	0.079697	-0.23931	0.001089
Sting	FBGN0033453	-0.23949	0.341059	-0.4967	0.083846
CG5550	FBGN0034160	-0.1797	1.750848	-2.52048	-0.58993
PLCXD	FBGN0032402	0.308424	-0.22331	0.546923	0.015185
klg	FBGN0017590	0.305887	-0.13339	0.635373	0.196099
CG5708	FBGN0032196	-0.03168	-0.00226	-0.18613	-0.1567
CG9101	FBGN0030622	-0.10835	-0.00397	-0.06201	0.042366
Wsck	FBGN0046685	-0.01455	0.339601	0.678008	1.032159
CG8508	FBGN0038123	-0.03788	0.032045	-0.06203	0.00789
Arl4	FBGN0039889	0.167425	0.131521	-0.05412	-0.09003
Tmem63	FBGN0033259	0.100296	0.07083	-0.03774	-0.06721
Abd-B	FBGN0000015	0.274345	-0.00902	0.409505	0.126138
CG34198	FBGN0085227	-0.5805	0.810059	-1.92677	-0.53621
CG10555	FBGN0030034	0.302293	0.075608	0.25426	0.027575
ATPsynCF6L	FBGN0035585	-0.21008	-0.0691	-0.2391	-0.09812
alpha-Man-Ib	FBGN0039634	0.105003	-0.02691	0.034418	-0.0975
CG31816	FBGN0051816	0.045357	0.093806	-0.10954	-0.06109
CG9149	FBGN0035203	0.016918	0.051091	0.28099	0.315162
CG32032	FBGN0043806	-0.3137	-0.09256	-0.21238	0.008756
CG2247	FBGN0030320	0.083095	0.051474	-0.0194	-0.05102
CG8765	FBGN0036900	0.034716	-0.08103	0.296827	0.181076
CG33229	FBGN0053229	0.297203	0.164531	0.208831	0.076159
MED19	FBGN0036761	-0.04149	-0.01494	0.021915	0.048466
CG13344	FBGN0033884	-0.02665	0.102498	-0.11217	0.016972
CG17032	FBGN0036547	-0.35746	0.012173	-0.13305	0.236576
alphaKap4	FBGN0035657	0.14659	0.011613	-0.13178	-0.26676

Sidpn	FBGN0032741	0.31819	-0.07535	0.227786	-0.16575
Bre1	FBGN0086694	0.168083	-0.04742	0.178907	-0.03659
Pcd	FBGN0024841	0.004024	-0.10644	0.200794	0.090329
side-V	FBGN0085400	0.409549	0.071709	0.383925	0.046085
Nep2	FBGN0027570	-0.19614	0.038641	-0.19382	0.040955
CG2772	FBGN0031533	-1.80497	-0.82415	0.234681	1.215504
mthl4	FBGN0034219	0.712118	0.34977	0.685208	0.32286
InR	FBGN0283499	0.023608	-0.0477	0.266556	0.195249
lncRNA:CR43754	FBGN0264085	-0.07253	-0.17899	-0.06079	-0.16724
CG42288	FBGN0259184	-0.21038	0.016721	-0.29099	-0.06388
CG17003	FBGN0031082	-0.13622	0.001522	-0.34631	-0.20857
CG5498	FBGN0027565	-0.29456	0.031779	-0.34963	-0.02329
lncRNA:CR45981	FBGN0267643	-0.18509	-0.60056	-0.98822	-1.40368
srl	FBGN0037248	0.3717	0.280877	0.46153	0.370706
CG11601	FBGN0031244	-0.27253	-0.02095	-0.26563	-0.01406
CG15211	FBGN0030234	-0.19538	0.058778	-0.44712	-0.19296
CG11504	FBGN0039733	-0.34676	-0.02945	-0.2847	0.032606
corn	FBGN0259173	0.119691	0.027004	0.231155	0.138468
Ppa	FBGN0020257	0.282782	0.063252	0.174658	-0.04487
SmD1	FBGN0261933	-0.2161	0.107972	-0.4405	-0.11643
Cyp4d21	FBGN0031925	-0.21669	-0.17629	-0.03406	0.006342
AGO3	FBGN0250816	-0.28159	0.044689	-0.69733	-0.37106
CG6967	FBGN0034187	0.668439	1.451455	-1.18597	-0.40295
Cyp4aa1	FBGN0034053	-0.24045	-0.04648	-0.37851	-0.18454
CG10184	FBGN0039094	-0.00788	0.107033	0.254067	0.368982
ena	FBGN0000578	0.2435	0.055176	0.140559	-0.04776
CG31525	FBGN0051525	0.123112	0.142154	-0.04204	-0.02299
Mip	FBGN0036713	0.089292	-0.05367	0.179037	0.036073
CG11977	FBGN0037650	-0.32758	-0.22031	-0.22936	-0.12209
Alg-2	FBGN0086378	-0.1782	0.055425	-0.34964	-0.11602
Sk2	FBGN0052484	0.002896	-0.1088	0.126979	0.015282
CG7639	FBGN0033989	-0.02205	-0.0015	-0.03987	-0.01933
LanB2	FBGN0267348	0.0169	0.242855	-0.09434	0.131614
Eglp2	FBGN0034883	-0.1949	0.051289	-0.1947	0.05149
CG9582	FBGN0032090	0.121752	0.137458	0.164883	0.180589
CG13449	FBGN0036520	-0.18866	-0.06241	-0.13616	-0.00991
wake	FBGN0266418	0.160548	0.107305	0.147396	0.094152
Nup107	FBGN0027868	-0.23231	-0.04884	-0.18269	0.000773
Mer	FBGN0086384	0.073398	0.029194	0.280465	0.236262
Su(z)2	FBGN0265623	0.372695	-0.02693	0.456945	0.057323
ex	FBGN0004583	0.453434	0.01647	0.396394	-0.04057
CG12857	FBGN0033963	-0.04687	-0.0803	0.022293	-0.01114
CG15196	FBGN0030296	0.03823	0.000964	0.06187	0.024604
prod	FBGN0014269	-0.3763	0.06138	-0.40442	0.033257
ND-20L	FBGN0039669	-0.28887	-0.15506	-0.01705	0.116752
CG2574	FBGN0030386	-0.12243	0.004602	-0.12296	0.004076
Ktl	FBGN0038839	0.129218	0.030763	0.160827	0.062372
Gr98a	FBGN0039520	2.60462	0.621515	2.332569	0.349464
CG3191	FBGN0023525	-0.0498	0.204227	-0.45623	-0.2022
sprt	FBGN0082585	0.174107	0.011692	0.233817	0.071402
CG10907	FBGN0036207	-0.15215	-0.1175	-0.08196	-0.04731
mthl14	FBGN0052476	0.162318	0.281768	-0.32699	-0.20754
CG3065	FBGN0034946	0.005952	-0.04573	0.092645	0.040967
CG10587	FBGN0037039	-0.20185	-0.02778	-0.68067	-0.5066
CG31419	FBGN0051419	-0.05651	-0.10435	-0.10127	-0.1491
CG5327	FBGN0034363	-0.02708	-0.05591	-0.2762	-0.30503
G9a	FBGN0040372	0.21879	0.048329	0.15597	-0.01449
Pde9	FBGN0259171	0.430111	-0.11454	0.760982	0.216331
Sap130	FBGN0262714	0.009841	-0.13816	0.111153	-0.03685
QC	FBGN0052412	-0.57513	-0.14998	-0.23423	0.190915
Sfp84E	FBGN0259974	-0.16944	-0.05245	-0.18074	-0.06374
CG12608	FBGN0030630	-0.50314	0.05247	-0.51107	0.044531
CG15385	FBGN0031397	0.380713	-0.12873	0.567953	0.058509
CG14694	FBGN0037845	0.203493	-0.18067	-0.08714	-0.4713
Cyp6a16	FBGN0031726	-0.68131	0.036351	-0.0489	0.668756
Wnt6	FBGN0031902	0.091008	-0.05616	0.494535	0.347366
CG42259	FBGN0266569	-0.38206	-0.07375	-0.58754	-0.27923
CSN4	FBGN0027054	-0.14748	-0.09783	0.001685	0.051335
tko	FBGN0003714	-0.28373	0.087088	-0.37487	-0.00406

spag	FBGN0015544	0.006551	0.115752	-0.28337	-0.17417
CG7536	FBGN0030890	0.035827	0.004636	-0.03327	-0.06446
vis	FBGN0033748	-0.01829	-0.1115	0.033343	-0.05987
Akh	FBGN0004552	-0.54949	-0.50525	-0.98077	-0.93652
w	FBGN0003996	0.204801	-0.16635	0.06337	-0.30778
Sp7	FBGN0037515	-0.27477	0.077488	-0.27823	0.074028
su(Hw)	FBGN0003567	0.102841	0.021615	0.12958	0.048354
grh	FBGN0259211	0.166162	-0.01723	0.079943	-0.10345
B9d1	FBGN0038342	-0.27855	-0.05062	-0.09912	0.128809
CG4270	FBGN0031407	-0.21369	-0.07243	-0.12116	0.0201
CG11999	FBGN0037312	-0.15213	-0.00289	-0.08055	0.06869
CG8578	FBGN0030699	0.194144	0.088701	0.187562	0.082119
CG32982	FBGN0052982	-0.12476	-0.00609	-0.02778	0.09089
Snap24	FBGN0266720	0.136395	0.078565	0.078288	0.020457
Dredd	FBGN0020381	0.025755	-0.1086	0.021082	-0.11327
Nct	FBGN0039234	0.162908	-0.02269	0.076327	-0.10927
eco	FBGN0035766	-0.02396	-0.15601	0.095104	-0.03694
aurA	FBGN0000147	0.031106	0.099708	-0.09226	-0.02366
Sema5c	FBGN0284221	0.431757	0.20761	0.285995	0.061848
CG18508	FBGN0028746	-0.17539	-0.03422	-0.22696	-0.08579
Rab30	FBGN0031882	-0.11476	0.02405	-0.15262	-0.01381
CG3500	FBGN0034849	-0.36448	-0.03585	-0.27003	0.058597
CG11980	FBGN0037652	-0.02712	0.137463	-0.24631	-0.08173
Pu	FBGN0003162	0.020656	-0.09135	0.28071	0.168706
CG14736	FBGN0037986	-0.09681	-0.02364	-0.12007	-0.04691
z	FBGN0004050	0.029105	0.045938	0.088508	0.105341
CG4880	FBGN0030803	-0.37986	-0.41389	-0.16049	-0.19451
Vps52	FBGN0031710	-0.0112	0.11525	0.039848	0.166297
PSR	FBGN0038948	-0.09909	-0.0553	-0.05053	-0.00674
tsu	FBGN0033378	-0.26114	0.10911	-0.29783	0.072425
PGRP-LA	FBGN0035975	0.159801	0.158764	0.271265	0.270229
CG30356	FBGN0050356	-0.15944	0.085509	-0.26407	-0.01912
mRpS17	FBGN0034986	-0.23552	0.014163	-0.16718	0.082506
Rbpn-5	FBGN0034585	0.017173	0.017497	0.157979	0.158303
Aos1	FBGN0029512	-0.22203	0.015141	-0.30931	-0.07214
Smn	FBGN0036641	0.085144	-0.04878	-0.091	-0.22493
Charon	FBGN0031317	-0.34612	0.179926	-0.63982	-0.11378
Vps15	FBGN0260935	0.143095	0.033618	0.189653	0.080176
CG15556	FBGN0039821	0.419341	0.066584	-0.11848	-0.47123
CG42758	FBGN0261816	-0.20188	-0.1971	-0.05532	-0.05054
CG10877	FBGN0038804	0.075208	-0.13957	-0.66004	-0.87483
CG43277	FBGN0262966	-0.10735	0.0033	-0.04252	0.068134
CG43845	FBGN0264427	-0.22429	-0.09258	-0.12955	0.002164
CG30046	FBGN0050046	0.415765	0.042299	1.154665	0.781198
CG14071	FBGN0032312	-0.0737	-0.03638	-0.09654	-0.05922
CG6421	FBGN0025827	-0.60259	-0.04248	-0.66248	-0.10237
CG30291	FBGN0050291	-0.28537	-0.10564	-0.21583	-0.0361
CG9626	FBGN0037565	0.133059	-0.10093	0.388239	0.154254
CG11060	FBGN0033149	0.017245	-0.02541	-0.06501	-0.10766
Syx1A	FBGN0013343	0.5455	0.010473	0.711848	0.176822
CG4645	FBGN0030435	0.075864	0.120213	0.099492	0.14384
CG13538	FBGN0034820	-0.06494	0.040497	-0.01352	0.091917
GstE10	FBGN0063499	0.456686	0.036479	-0.20274	-0.62294
rad50	FBGN0034728	-0.17711	0.077814	-0.15472	0.100205
CG8768	FBGN0033769	0.428677	0.136053	0.38957	0.096946
CG10809	FBGN0036052	0.126247	-0.00505	0.217116	0.085821
CG34021	FBGN0054021	0.329827	0.155448	0.173064	-0.00132
fs(2)ltoPP43	FBGN0004811	-0.22609	0.008549	-0.25436	-0.01972
CG31637	FBGN0051637	0.034864	-0.04411	-0.00172	-0.08069
swi2	FBGN0034262	0.283121	0.186722	-0.051	-0.1474
tun	FBGN0034046	0.222587	0.182338	0.1646	0.124351
tbrd-2	FBGN0034423	0.138546	0.015415	-0.04003	-0.16316
CG33278	FBGN0053278	0.134926	-0.07784	0.315226	0.102461
CG30183	FBGN0050183	-0.07393	-0.05296	0.016107	0.037074
Grip84	FBGN0026430	0.119128	0.01025	0.13882	0.029942
GATAd	FBGN0032223	0.200669	0.074078	0.172789	0.046198
CG11399	FBGN0037021	0.202834	-0.01443	0.370827	0.153566
jagn	FBGN0037374	0.000455	-0.00445	-0.04688	-0.05179
CG9263	FBGN0032530	-0.23607	-0.06415	-0.24248	-0.07056

tgo	FBGN0264075	0.208136	0.066064	0.146071	0.003999
CG9356	FBGN0037688	-0.10612	0.003608	-0.06654	0.04319
CG45546	FBGN0267106	1.050833	0.687782	0.57941	0.216359
CG45066	FBGN0266436	-0.14645	0.041118	-0.24411	-0.05654
lncRNA:CR44953	FBGN0266258	-2.25313	-0.21646	-2.33684	-0.30016
CG14591	FBGN0033054	0.024778	-0.10503	0.17168	0.041871
CG6574	FBGN0037846	0.144852	0.152002	-0.21467	-0.20752
CG8111	FBGN0035825	-0.31849	0.000859	-0.25855	0.060792
qkr58E-1	FBGN0022986	0.133643	-0.11409	0.324968	0.077231
CR45772	FBGN0267419	-0.29803	-0.08848	-0.068	0.141547
TrpA1	FBGN0035934	0.579031	0.003943	1.759408	1.18432
CG33158	FBGN0053158	-0.20167	0.058146	-0.02179	0.238026
dpr16	FBGN0037295	0.366136	-0.53456	0.150123	-0.75057
Mst36Fa	FBGN0086681	0.09504	0.100969	0.035255	0.041184
S	FBGN0003310	-0.08999	-0.11314	0.062912	0.039763
CG11815	FBGN0035299	-0.2918	-0.03629	-0.32523	-0.06971
pot	FBGN0250871	0.220589	0.016932	0.190805	-0.01285
CG15873	FBGN0035003	-0.02826	-0.02924	-0.12049	-0.12147
CG33309	FBGN0053309	0.044145	-0.01196	-0.06112	-0.11722
CG43251	FBGN0262896	0.36857	0.1136	-0.10173	-0.3567
CG7718	FBGN0038649	-0.01395	-0.0256	0.004697	-0.00695
CG42238	FBGN0250867	0.264314	0.096494	0.36194	0.19412
Cen	FBGN0032876	0.2381	-0.08376	0.289656	-0.03221
Ptx1	FBGN0020912	0.196917	0.261397	0.200035	0.264515
CG7183	FBGN0038583	-0.14916	0.147994	0.057449	0.354607
phol	FBGN0035997	0.182044	0.10311	0.154387	0.075453
CG11112	FBGN0033164	-0.06458	-0.05619	-0.06389	-0.0555
tio	FBGN0028979	0.086484	0.051985	0.061451	0.026952
GILT3	FBGN0039098	0.005557	-0.08048	-0.72197	-0.808
GLaz	FBGN0033799	0.015894	0.106518	0.107318	0.197942
CG45492	FBGN0267048	-1.34707	0.485292	-0.88649	0.94587
Cse1	FBGN0022213	-0.00657	-0.01464	0.058701	0.050622
Snx17	FBGN0032191	0.010528	0.044067	-0.00061	0.03293
CG31174	FBGN0051174	-0.01323	0.261052	-0.08842	0.185858
alien	FBGN0013746	0.020265	0.092301	-0.02232	0.049716
Srp54	FBGN0024285	-0.16308	0.020647	-0.05427	0.129458
CG5246	FBGN0038484	0.268467	0.243166	0.025661	0.000359
E2f2	FBGN0024371	-0.0882	-0.03607	-0.10566	-0.05353
GXIVsPLA2	FBGN0036545	0.034951	0.008953	0.148916	0.122919
wdn	FBGN0005642	0.074086	-0.02038	-0.01865	-0.11311
qkr54B	FBGN0022987	0.288373	-0.03837	0.464953	0.138212
CSN6	FBGN0028837	-0.05603	0.051177	-0.18245	-0.07525
CG42346	FBGN0259677	0.303152	-0.34364	1.200143	0.553355
dpr14	FBGN0029974	0.940742	0.489801	0.436312	-0.01463
CG12698	FBGN0030721	0.043001	-0.04194	-0.01888	-0.10382
CG32313	FBGN0052313	-0.08385	0.080812	-0.25973	-0.09507
CG10470	FBGN0032746	-0.19125	-0.04466	-0.22404	-0.07745
pll	FBGN0010441	0.541525	0.269472	0.349155	0.077102
kibra	FBGN0262127	0.252756	0.028335	0.264374	0.039953
CG8314	FBGN0034057	-0.03708	0.177114	-0.17198	0.042219
Tsr1	FBGN0037073	0.010894	-0.08667	0.149587	0.052021
Alp11	FBGN0030661	-0.33505	-0.04587	-0.31545	-0.02627
CG9903	FBGN0030756	0.226121	1.06117	-1.06782	-0.23278
eIF2D	FBGN0041588	-0.34985	-0.18716	-0.17015	-0.00746
l(2)k01209	FBGN0022029	-0.09751	-0.07205	0.113847	0.139307
Corin	FBGN0033192	0.274393	-0.0548	0.482081	0.152885
CG10731	FBGN0034081	-0.03142	0.117185	-0.14249	0.006114
CG4281	FBGN0025626	0.019672	0.014382	0.162185	0.156895
robl37BC	FBGN0028569	-0.07516	-0.03112	-0.02864	0.015393
Wdr92	FBGN0036771	-0.13418	-0.07164	-0.06005	0.002489
SmD3	FBGN0023167	-0.19256	0.070634	-0.23513	0.028068
lncRNA:CR45585	FBGN0267145	-0.43541	0.103368	-0.82919	-0.29042
Cad87A	FBGN0037963	0.178048	0.118186	0.158235	0.098373
CG17776	FBGN0040899	-0.29985	-0.07048	-0.18163	0.047745
CG42541	FBGN0260658	0.338336	0.036957	0.517329	0.215949
CG7668	FBGN0036929	-0.02026	0.203517	-0.10737	0.116401
CG17636	FBGN0025837	0.747348	0.555281	0.686207	0.494141
pck	FBGN0013720	-0.23552	-0.02388	-0.20549	0.006153
Arl8	FBGN0037551	0.131097	0.073395	0.153621	0.09592

CG6689	FBGN0037877	0.070198	0.070374	0.185776	0.185951
CG5623	FBGN0038357	-0.32367	-0.07537	-0.23225	0.016053
Mvb12	FBGN0030894	-0.06452	0.07233	-0.11955	0.017297
CG10298	FBGN0037432	-0.03949	-0.00306	-0.0874	-0.05097
Sfmbt	FBGN0032475	-0.11663	-0.0118	0.026469	0.131297
CG3792	FBGN0031662	-0.01564	0.012988	-0.11583	-0.0872
SmD2	FBGN0261789	-0.16128	0.076401	-0.25604	-0.01836
qjt	FBGN0036730	-0.12097	0.538876	-0.75144	-0.0916
san	FBGN0024188	-0.04399	0.069409	-0.11573	-0.00233
CG8837	FBGN0031520	-0.07529	0.279406	-0.46462	-0.10992
Rfx	FBGN0020379	-0.09671	-0.06295	0.271936	0.305697
CG17454	FBGN0039977	0.034416	-0.0686	0.045077	-0.05794
CG13255	FBGN0040636	0.128917	0.030597	-0.05071	-0.14903
CG16853	FBGN0028941	-0.10652	-0.02127	-0.21557	-0.13031
CG32457	FBGN0052457	0.505447	0.023707	0.518539	0.036799
rho-4	FBGN0030318	0.027473	0.348643	-0.15107	0.170101
CG5639	FBGN0039527	0.066415	0.114555	-0.00332	0.044815
CG10761	FBGN0030015	-0.00613	-0.01005	0.03721	0.03329
Lsm12a	FBGN0030364	0.011079	-0.0328	-0.0109	-0.05478
CG7484	FBGN0036745	-0.3452	-0.05573	-0.363	-0.07354
Nlg1	FBGN0051146	0.146807	-0.05785	0.521085	0.316432
CG6614	FBGN0032369	0.303221	-0.01749	0.197919	-0.12279
CG32091	FBGN0052091	0.167118	-0.36205	0.918812	0.389642
FIG4	FBGN0031611	0.051696	0.185327	0.266249	0.39988
CG12093	FBGN0035372	-0.16609	-0.00315	-0.06226	0.100686
CG12914	FBGN0033499	0.239167	0.261312	-0.42617	-0.40402
Dph5	FBGN0024558	-0.24559	0.028727	-0.30475	-0.03043
CG31633	FBGN0051633	-0.18575	0.239908	-0.83574	-0.41008
PICK1	FBGN0032447	0.113494	-0.12164	0.08635	-0.14878
beat-IIIb	FBGN0053179	0.515739	0.01078	0.343578	-0.16138
CG16775	FBGN0036767	0.479882	1.291609	-0.71062	0.101104
Arpc3B	FBGN0065032	-0.135	0.769792	-1.46392	-0.55913
mtsh	FBGN0262598	0.160196	-0.06682	-0.01945	-0.24646
CR32010	FBGN0052010	0.229198	0.133708	0.17888	0.08339
CG17364	FBGN0036391	0.397183	0.030399	0.373967	0.007182
l(3)psg2	FBGN0035617	0.321755	0.001125	0.339467	0.018837
lic	FBGN0261524	0.008213	-0.03387	0.125857	0.083771
CG30491	FBGN0050491	-0.15437	-0.01273	-0.25143	-0.10979
CG9701	FBGN0036659	-0.42079	0.119166	-0.49503	0.044925
CG7907	FBGN0038887	0.101305	0.030728	0.072006	0.001428
Pex6	FBGN0033564	0.032527	-0.0989	0.092361	-0.03906
ko	FBGN0020294	0.301313	-0.09119	0.562352	0.169851
CG14075	FBGN0036835	-0.64398	-0.50533	-0.88325	-0.7446
CG18063	FBGN0028856	-0.09716	0.001598	-0.17838	-0.07962
CG42554	FBGN0260756	0.115482	0.113363	0.111609	0.10949
CG9240	FBGN0030669	-0.12176	-0.06342	-0.10165	-0.04331
Naa20A	FBGN0031043	0.121827	0.253798	-0.02527	0.106702
CG7638	FBGN0036133	-0.06643	-0.17964	-0.12631	-0.23952
CG8199	FBGN0037709	0.228648	-0.018	0.408241	0.161596
CG8407	FBGN0033687	-0.16268	-0.06648	-0.26332	-0.16712
scat	FBGN0011232	0.05444	0.024431	0.188098	0.158089
CG12173	FBGN0037305	-0.15772	-0.24082	0.478778	0.395674
CG12655	FBGN0031080	-0.85507	0.066979	-0.97085	-0.04881
PGAP1	FBGN0029789	0.160822	0.082871	0.664877	0.586926
CG11659	FBGN0038731	1.385828	-0.46148	1.625647	-0.22166
CG32259	FBGN0052259	-0.43741	-0.0815	-0.60772	-0.25181
Cyp6a22	FBGN0013773	0.362192	-0.03606	0.417909	0.019658
CG10730	FBGN0032843	-0.36489	-0.29314	-0.11386	-0.04211
fs(1)N	FBGN0004650	-0.1147	0.125354	0.237778	0.477829
CG6333	FBGN0036731	-0.11967	-0.19262	-0.1585	-0.23145
beta-PheRS	FBGN0039175	-0.18913	0.025644	-0.26781	-0.05304
CG11322	FBGN0031856	-0.52729	-0.17061	-0.25581	0.100873
CG6959	FBGN0037956	-0.32755	-0.3769	0.399731	0.350385
Msh6	FBGN0036486	0.294431	0.154561	0.017072	-0.1228
RnrS	FBGN0011704	0.143936	0.572805	-0.16528	0.263591
CG42588	FBGN0260965	0.355951	-0.01057	0.33514	-0.03139
CG11970	FBGN0027503	0.23897	-0.07338	0.34786	0.035513
Tpc1	FBGN0037852	-0.15636	0.052671	-0.13718	0.071845
Ptpa	FBGN0016698	-0.25314	0.02864	0.038788	0.320573

Rrp4	FBGN0034879	-0.51505	-0.15261	-0.36739	-0.00496
obe	FBGN0038344	0.408021	0.163194	0.194959	-0.04987
Tl	FBGN0262473	0.190076	-0.03939	0.367598	0.138135
eIF2Bbeta	FBGN0024996	-0.15917	0.020712	-0.23864	-0.05876
Non3	FBGN0038585	-0.41296	-0.11178	-0.31351	-0.01232
CG15270	FBGN0028879	0.344599	-0.11212	0.581026	0.124306
Caf1-55	FBGN0263979	-0.01251	0.017193	-0.06395	-0.03425
CG41128	FBGN0069923	-0.07462	0.067174	-0.41988	-0.27808
CG5056	FBGN0032231	-0.107	0.028102	-0.08653	0.048575
St1	FBGN0034887	-0.62058	0.025285	0.135242	0.781111
Not10	FBGN0260444	-0.23058	-0.02686	-0.22504	-0.02132
CngB	FBGN0266346	-0.76823	0.079442	-0.54516	0.302511
ACXD	FBGN0040507	0.330457	0.196155	-0.13525	-0.26955
CG6428	FBGN0029689	0.167857	-0.01022	0.383336	0.205261
CG16837	FBGN0035009	-0.3369	0.014902	-0.39539	-0.04358
CG33234	FBGN0053234	0.079648	0.03937	-0.11387	-0.15415
Syx16	FBGN0031106	-0.28707	-0.08136	-0.20343	0.002271
CAH5	FBGN0040629	0.810479	0.221828	0.038472	-0.55018
Cyp6v1	FBGN0031126	0.228198	0.010441	0.483011	0.265254
tnc	FBGN0039257	0.057341	0.15379	0.072886	0.169335
CG14657	FBGN0037282	0.154439	0.002599	-0.00934	-0.16118
CR34285	FBGN0085314	0.13946	-0.33068	0.86429	0.394152
GstE11	FBGN0034354	-0.21613	-0.24325	-0.86861	-0.89573
DCAF12	FBGN0037980	-0.03559	0.051362	-0.2529	-0.16594
CG15673	FBGN0034639	-0.25847	0.065303	-0.21073	0.113044
Tsp96F	FBGN0027865	0.091751	0.001387	0.311831	0.221467
CAH9	FBGN0039486	-0.3648	-0.00121	-0.37507	-0.01148
CG3557	FBGN0031423	-0.12776	-0.06042	-0.09416	-0.02683
CG31301	FBGN0051301	-0.14487	0.002694	-0.25695	-0.10939
CDase	FBGN0039774	-0.03007	0.157756	0.12951	0.317335
CG4858	FBGN0037011	-0.1025	0.047529	-0.14852	0.00151
wfs1	FBGN0039003	-0.19438	-0.0964	-0.08199	0.016001
CG42335	FBGN0259237	1.40705	0.793327	0.149017	-0.46471
CG7148	FBGN0046301	0.065245	0.055879	0.071752	0.062386
cv-2	FBGN0000395	-0.2027	0.137558	-0.23186	0.108391
CG11357	FBGN0035558	0.141754	0.05702	0.202353	0.117618
p-cup	FBGN0030840	-0.09331	-0.04042	-0.02293	0.029956
CG11362	FBGN0034737	-0.3044	0.004649	0.079297	0.388347
CG17764	FBGN0029751	-0.02533	0.084889	0.098373	0.208594
abs	FBGN0015331	0.073454	-0.02158	0.091556	-0.00348
CG34208	FBGN0085237	-0.39061	-0.0986	-0.41002	-0.11801
GIIIspla2	FBGN0030013	0.088434	-0.03462	0.049235	-0.07382
CG8370	FBGN0034060	-0.00763	-0.02033	0.127266	0.114572
pn	FBGN0003116	0.151428	-0.07154	0.356516	0.133545
ND-B8	FBGN0040705	0.036124	0.045697	-0.13948	-0.1299
mthl3	FBGN0028956	0.609381	0.196235	0.972324	0.559178
CG14606	FBGN0037485	0.014779	0.294931	-0.64251	-0.36236
CG8412	FBGN0037743	0.143261	-0.01423	0.249695	0.0922
Cog2	FBGN0026634	0.09727	0.041697	-0.00555	-0.06113
CG34396	FBGN0085425	-0.03253	-0.23494	0.221331	0.018923
Seipin	FBGN0040336	0.05223	0.211355	0.29862	0.457746
CG11110	FBGN0034535	0.018216	0.132528	-0.05999	0.054326
Cpr47Ef	FBGN0033603	-0.40985	-0.33803	-0.50201	-0.43018
CG4704	FBGN0039029	0.220409	0.358282	0.029907	0.16778
CG3014	FBGN0037519	0.614883	0.089853	0.497229	-0.0278
Bap60	FBGN0025463	-0.09401	-0.06465	-0.05606	-0.0267
CG5003	FBGN0039554	0.041012	0.175556	-0.04042	0.094129
hwt	FBGN0264542	0.214469	-0.15722	0.457436	0.085747
CG32706	FBGN0052706	-0.53067	-0.5285	-0.53661	-0.53445
CG32772	FBGN0052772	0.095989	-0.00191	0.113958	0.016056
CG3368	FBGN0039508	0.076193	0.051081	0.037606	0.012495
Lim1	FBGN0026411	0.406937	-0.07441	0.648993	0.167645
Arfip	FBGN0037884	0.115124	0.093988	0.062257	0.041121
CG33060	FBGN0053060	-0.22227	0.005477	-0.37871	-0.15096
elgi	FBGN0283649	-0.16431	-0.00876	-0.24975	-0.09419
Proc-R	FBGN0029723	0.185177	0.299455	0.244105	0.358384
intr	FBGN0039599	-0.0808	0.036147	0.164426	0.28137
CG4882	FBGN0025336	-0.19562	-0.02384	-0.16868	0.003111
CG4022	FBGN0035986	0.019529	-0.07618	0.013848	-0.08186

CG8321	FBGN0033677	-0.0983	0.010241	-0.01604	0.092498
CG7772	FBGN0030883	-0.2622	-0.04725	-0.25996	-0.045
PGRP-SA	FBGN0030310	0.129039	0.252393	0.433751	0.557105
CG7601	FBGN0027583	-0.27641	-0.24545	-0.21894	-0.18798
CG7990	FBGN0030997	0.243109	0.043428	0.093205	-0.10648
CG12795	FBGN0031535	-0.22602	-0.06397	-0.10396	0.058081
CG15186	FBGN0037448	0.620473	0.026783	0.434925	-0.15877
RpIIIC53	FBGN0036775	-0.18031	0.096805	-0.25603	0.021086
Cyp18a1	FBGN0010383	0.430562	-0.10211	0.907669	0.374997
Nnp-1	FBGN0022069	-0.18237	0.018375	-0.23154	-0.03079
RluA-1	FBGN0051719	0.127717	0.081961	0.007359	-0.0384
CG42663	FBGN0261545	0.027377	-0.1276	0.265442	0.110465
CR42653	FBGN0261505	0.661895	0.838993	-0.19002	-0.01293
CG8852	FBGN0031548	0.391506	0.338838	-0.11285	-0.16552
H	FBGN0001169	-0.04138	-0.08689	0.17733	0.131824
Cyp4d1	FBGN0005670	0.423079	-0.0926	0.96237	0.446693
CG6282	FBGN0035914	0.03821	0.148971	-0.08529	0.02547
lncRNA:CR44761	FBGN0265982	0.260622	-0.21045	-0.92991	-1.40098
CG2938	FBGN0029685	0.176593	0.158073	0.318574	0.300055
CG2065	FBGN0033204	-0.35964	0.163427	-0.53068	-0.00761
CG15283	FBGN0028844	-0.1304	0.03637	-0.28359	-0.11683
CG31360	FBGN0051360	-0.16804	-0.03605	-0.45175	-0.31976
Idi	FBGN0038876	-0.31431	0.021642	-0.23723	0.09872
AIMP2	FBGN0036515	-0.13917	-0.14017	0.048742	0.047747
Ets98B	FBGN0005659	0.128327	-0.06748	0.328932	0.133124
SP2353	FBGN0034070	0.236953	-0.13148	0.352248	-0.01618
CG9590	FBGN0038360	-0.1233	-0.04613	-0.11731	-0.04014
CG15021	FBGN0035544	-0.14639	0.062799	-0.15449	0.054693
Mur82C	FBGN0037260	-0.04986	-0.15742	-0.14627	-0.25382
CG8134	FBGN0030671	-0.01157	0.027057	0.062415	0.10104
CSN5	FBGN0027053	-0.22171	0.024548	-0.21438	0.031882
CG9497	FBGN0031800	-0.31186	-0.14994	-0.40476	-0.24283
CG9586	FBGN0032101	-0.15319	-0.02329	-0.2113	-0.0814
CG1542	FBGN0039828	-0.26102	0.004394	-0.22659	0.038827
CG30268	FBGN0050268	-0.25359	-0.41835	0.1703	0.005543
CG5641	FBGN0038046	-0.16889	-0.08558	-0.10414	-0.02083
2mit	FBGN0260793	0.589741	0.067538	0.685615	0.163412
CG5861	FBGN0015338	-0.08169	0.128022	-0.22905	-0.01934
lin-52	FBGN0029800	0.376961	0.725861	-0.47683	-0.12793
CG14562	FBGN0037142	0.059952	-0.0371	0.064808	-0.03224
EndoB	FBGN0034433	0.138983	0.022068	0.215245	0.09833
TotX	FBGN0044810	-0.72752	0.369617	0.244668	1.341808
CG33655	FBGN0250824	-0.02818	0.007973	-0.08667	-0.05051
TfIIEalpha	FBGN0015828	-0.22257	0.010805	-0.26699	-0.03362
dos	FBGN0016794	0.161696	-0.05485	0.202613	-0.01394
Nepl5	FBGN0031808	0.516557	-0.23091	0.971421	0.223954
alpha-PheRS	FBGN0030007	-0.06167	0.070022	-0.08524	0.046455
kar	FBGN0001296	-0.11042	-0.01577	0.023117	0.117766
Pvf3	FBGN0085407	0.640232	0.042377	0.506932	-0.09092
Uck	FBGN0263398	-0.04444	-0.05979	0.018617	0.003271
CG7028	FBGN0027587	0.19163	0.033622	0.19042	0.032413
CG11590	FBGN0030545	-0.17285	-0.26868	-0.04833	-0.14416
CG34404	FBGN0085433	0.302106	0.046617	0.315293	0.059804
CG17834	FBGN0028394	0.039014	0.101837	-0.1326	-0.06978
Arl1	FBGN0000115	-0.08398	0.033115	0.049925	0.167017
CG10343	FBGN0032703	-0.21082	-0.0034	-0.26315	-0.05573
Nep3	FBGN0031081	0.176837	-0.06857	0.231556	-0.01385
Su(var)3-7	FBGN0003598	0.166205	0.013155	0.216774	0.063724
STUB1	FBGN0027052	-0.16526	0.019105	-0.20424	-0.01987
GstT1	FBGN0050000	-0.13598	-0.08156	-0.0413	0.013124
CG31267	FBGN0051267	0.030657	0.146681	-0.1176	-0.00158
CG12824	FBGN0033222	0.3086	0.734818	-0.89867	-0.47245
Rae1	FBGN0034646	-0.33891	-0.11063	-0.27947	-0.05118
ebd1	FBGN0035153	-0.17128	-0.16349	0.350659	0.358454
CG5194	FBGN0035955	-0.39345	-0.12412	-0.3344	-0.06506
Spn28B	FBGN0083141	-0.00133	-0.22336	-0.08356	-0.30559
mael	FBGN0016034	0.117128	-0.03239	-0.09235	-0.24187
CG31638	FBGN0051638	0.081425	-0.09197	0.190132	0.016739
CG5027	FBGN0036579	-0.17524	-0.10148	-0.23807	-0.16431

Shc	FBGN0015296	0.033851	0.072525	-0.09706	-0.05839
AIMP1	FBGN0033351	-0.30103	-0.00307	-0.17475	0.123206
lncRNA:CR43905	FBGN0264506	0.304495	0.10471	0.170321	-0.02946
Oamb	FBGN0024944	0.193943	-0.12612	0.543308	0.223243
CG1407	FBGN0033474	0.011862	0.078321	-0.13237	-0.06591
D19A	FBGN0022935	0.198274	0.031017	0.204865	0.037608
Ance-3	FBGN0032536	-0.0171	-0.0783	0.054594	-0.00661
eIF3g2	FBGN0038796	-0.11822	-0.11039	-0.30143	-0.29361
cN-IIIB	FBGN0034988	0.217883	0.287667	-0.13413	-0.06435
Cdk5alpha	FBGN0027491	0.208904	-0.10265	0.293646	-0.01791
CG8272	FBGN0033337	-0.00996	-0.08843	-0.07268	-0.15115
Alg2	FBGN0035401	-0.27834	0.038286	-0.33717	-0.02055
hng3	FBGN0035160	-0.29835	-0.04393	0.347771	0.602198
RYBP	FBGN0034763	-0.11577	0.049929	-0.12595	0.039746
CG9021	FBGN0031747	2.309151	0.586982	4.010892	2.288723
lncRNA:CR43263	FBGN0262944	-3.36569	-0.31322	-1.97303	1.079441
apt	FBGN0015903	0.005123	0.078602	0.000262	0.073741
CG5728	FBGN0039182	0.023495	-0.00795	-0.1073	-0.13874
CG31809	FBGN0051809	-0.18805	-0.32778	-0.13793	-0.27767
CG17258	FBGN0031496	0.158933	0.090258	0.064243	-0.00443
Gga	FBGN0030141	0.04189	0.035072	-0.00521	-0.01203
mt:ND4L	FBGN0013683	-0.37162	0.031847	-1.01429	-0.61082
calypso	FBGN0262166	0.48136	-0.07067	0.631197	0.079172
msl-1	FBGN0005617	0.198378	0.104929	0.104488	0.011039
CG9171	FBGN0031738	0.132702	0.160122	-0.08246	-0.05504
CG12343	FBGN0033556	-0.07561	-0.0656	0.009593	0.0196
CG11700	FBGN0029856	-0.39443	-0.08615	-0.58072	-0.27244
azot	FBGN0033238	0.368372	-0.05849	0.407665	-0.0192
CG42394	FBGN0259740	0.090032	0.221896	-0.17816	-0.04629
Ufm1	FBGN0085220	-0.336	0.092006	-0.56389	-0.13588
Mfap1	FBGN0035294	-0.34157	-0.05691	-0.04216	0.242497
mRpL2	FBGN0036135	-0.11842	-0.02157	-0.1274	-0.03055
Mdr50	FBGN0010241	0.370773	-0.32289	0.727356	0.033697
CG11550	FBGN0039864	-0.18766	-0.40094	-0.11365	-0.32692
Prosbeta5R2	FBGN0051742	0.179607	0.067055	0.229539	0.116987
CG18081	FBGN0036537	-0.13318	0.002669	-0.14584	-0.00999
Taf6	FBGN0010417	-0.01514	0.019029	0.163941	0.198108
CG5213	FBGN0038345	-0.13738	-0.12979	-0.16996	-0.16237
CG11131	FBGN0037204	-0.4667	-0.28405	-0.89962	-0.71696
Atg14	FBGN0039636	0.020783	-0.10432	0.088428	-0.03668
Ir76a	FBGN0260874	-0.78697	0.539477	-1.23282	0.09363
pkaap	FBGN0040079	0.008463	-0.07672	0.079925	-0.00526
mRpS31	FBGN0036557	-0.16051	0.14193	-0.17072	0.131713
Edc3	FBGN0036735	0.256725	0.006645	0.256056	0.005976
meso18E	FBGN0040089	0.075825	0.081999	0.225968	0.232142
CG4408	FBGN0039073	1.046353	-0.62106	0.047944	-1.61946
Cyp28c1	FBGN0030339	-0.34397	-0.08752	-0.03639	0.220048
rad	FBGN0265597	0.381854	0.01143	0.54789	0.177465
mRpS35	FBGN0035374	-0.25087	-0.10547	-0.21664	-0.07124
CG13405	FBGN0035097	-0.02307	-0.04875	-0.04795	-0.07362
CG6153	FBGN0032445	-0.09278	0.166302	-0.27401	-0.01493
CG10803	FBGN0029666	0.066311	-0.14846	0.272001	0.057233
Cpr72Ec	FBGN0036619	0.327743	-0.60048	2.934132	2.005909
Vps29	FBGN0031310	-0.25987	-0.09625	-0.27445	-0.11083
PGRP-SC1b	FBGN0033327	-0.75	0.832134	0.189044	1.771183
su(f)	FBGN0003559	0.079702	0.050088	0.002988	-0.02663
RecQ5	FBGN0027375	0.133094	0.120124	0.184194	0.171224
Patj	FBGN0067864	-0.06765	-0.0701	-0.00242	-0.00486
qsm	FBGN0028622	-0.21755	-0.08956	-0.14481	-0.01682
pins	FBGN0040080	0.262296	0.09279	0.253242	0.083736
CG3149	FBGN0027564	-0.05622	0.117839	0.009789	0.18385
Tusp	FBGN0039530	0.196597	-0.04029	0.349875	0.112983
Cog6	FBGN0033401	-0.06867	0.071932	-0.11454	0.026054
Cda9	FBGN0034197	-0.14812	0.372152	-0.03565	0.484615
CAH4	FBGN0039235	-0.15331	-0.13351	0.047551	0.06735
wrapper	FBGN0025878	-0.32335	-0.42817	0.457113	0.352295
mRpL45	FBGN0263863	-0.12155	-0.04797	-0.24227	-0.16868
CG17264	FBGN0031490	-0.67288	0.395642	-0.58476	0.483766
CG31697	FBGN0051697	-0.20605	-0.06025	-0.23733	-0.09153

Usf	FBGN0029711	-0.02731	-0.04479	-0.10624	-0.12372
CAH15	FBGN0034560	-0.03889	-0.08081	-0.08197	-0.12389
SrpRbeta	FBGN0011509	-0.1038	0.067772	-0.19131	-0.01974
CG6175	FBGN0036152	0.141164	-0.06642	0.137579	-0.07
santa-maria	FBGN0025697	0.380971	-0.08011	0.521702	0.060619
CG3568	FBGN0029710	0.099466	0.60118	0.198736	0.700449
Exo84	FBGN0266668	0.118061	0.095413	-0.05812	-0.08077
CG17486	FBGN0032997	0.05838	0.030654	-0.02485	-0.05257
CG3842	FBGN0029866	-0.28601	-0.07496	-0.1723	0.038761
CG6972	FBGN0039008	-0.04324	-0.1035	0.219151	0.158892
Ugt303A1	FBGN0040252	0.287094	0.450225	-0.79471	-0.63158
Flo2	FBGN0264078	0.243902	0.064011	0.304771	0.124881
CG11975	FBGN0037648	0.129618	0.056185	0.092538	0.019105
CG5854	FBGN0039130	-0.1286	0.08631	-0.3392	-0.12428
lncRNA:CR33218	FBGN0053218	0.029648	-0.04385	0.210636	0.137137
CG12081	FBGN0030053	0.164449	0.136307	0.184734	0.156592
Tap42	FBGN0051852	-0.1241	0.023893	-0.17983	-0.03184
CG17493	FBGN0040010	-0.08818	-0.07891	-0.01956	-0.01029
Rassf	FBGN0039055	0.061867	-0.01718	0.125234	0.046189
CG14688	FBGN0037819	-0.08337	-0.18638	0.248174	0.145168
boss	FBGN0000206	0.022012	-0.29427	0.316629	0.000345
CG12177	FBGN0030510	0.024059	0.109566	-0.16413	-0.07862
obst-B	FBGN0027600	1.548831	0.668247	-0.47108	-1.35166
eIF2Bepsilon	FBGN0023512	-0.0604	0.033548	-0.18675	-0.09281
hoe2	FBGN0031649	0.135296	-0.06635	0.238359	0.036715
CG15468	FBGN0061196	0.065119	-0.02846	0.064377	-0.0292
Cog3	FBGN0031536	0.162572	0.024347	0.095066	-0.04316
wol	FBGN0261020	0.061698	-0.0685	0.099919	-0.03028
Acf	FBGN0027620	0.015302	-0.09973	0.108353	-0.00668
nito	FBGN0027548	0.13771	0.024539	0.207713	0.094542
Efhc1.2	FBGN0034487	0.450822	0.002562	0.404142	-0.04412
CG5126	FBGN0031320	-0.47966	-0.33982	0.236629	0.376467
Naa30B	FBGN0052319	-0.20077	-0.06963	-0.58621	-0.45506
lncRNA:CR44178	FBGN0265067	0.83221	0.279916	0.311423	-0.24087
Pex11	FBGN0034058	0.072987	0.105708	-0.25579	-0.22307
CG30284	FBGN0050284	-0.0922	-0.0244	0.045742	0.11355
mr	FBGN0002791	-0.26594	-0.04744	-0.21997	-0.00147
CG6607	FBGN0039204	-0.358	-0.14117	-0.13908	0.077746
wgn	FBGN0030941	0.118882	0.070724	-0.02893	-0.07709
lncRNA:CR45363	FBGN0266903	-1.34718	-0.57119	-1.0109	-0.23491
Eip74EF	FBGN0000567	0.531205	0.189709	0.473992	0.132496
CG4935	FBGN0028897	0.194659	-0.23972	0.141995	-0.29238
CG8031	FBGN0038110	0.205838	0.166433	-0.05803	-0.09743
CG31642	FBGN0051642	0.02847	0.052677	-0.19778	-0.17358
Dhc93AB	FBGN0013812	0.563163	-0.28308	0.896697	0.050453
Kah	FBGN0035144	0.151513	0.013826	0.21069	0.073002
Atg18b	FBGN0032935	0.162999	0.069644	0.22801	0.134656
NO66	FBGN0266570	-0.02499	0.09581	-0.21529	-0.09449
ci	FBGN0004859	0.534466	0.110161	0.607531	0.183225
CG6845	FBGN0035099	0.148841	0.183035	0.07873	0.112924
Cyp311a1	FBGN0030367	-0.235	-0.12859	0.514207	0.620621
Ent3	FBGN0036319	0.52763	0.372726	0.291002	0.136098
CG13010	FBGN0030770	-0.10602	-0.08038	0.016318	0.041954
jigr1	FBGN0039350	-0.10545	-0.10291	0.062812	0.06535
CG4438	FBGN0032115	-0.22331	-0.03121	-0.14557	0.046527
CG10748	FBGN0036327	-0.20902	0.059547	-0.48353	-0.21496
CG43901	FBGN0264502	0.628444	0.123244	0.690213	0.185013
CG15399	FBGN0031460	-0.5502	-0.10095	-0.86502	-0.41577
arg	FBGN0023535	0.296955	-0.51814	0.933593	0.118501
CG1208	FBGN0037386	0.239157	0.083424	0.197119	0.041386
Samuel	FBGN0032330	0.356368	0.071976	0.459067	0.174676
CG1941	FBGN0033214	0.461484	0.295382	0.104205	-0.0619
Unc-115b	FBGN0260463	-0.40842	0.096974	-0.33813	0.167262
brv3	FBGN0040333	-0.35603	0.046516	-0.42412	-0.02158
CG31100	FBGN0051100	0.333297	0.157986	0.361871	0.18656
CG32117	FBGN0052117	-0.00691	0.057883	0.073331	0.138125
pr	FBGN0003141	0.095775	-0.02108	0.117143	0.000291
pigeon	FBGN0010309	-0.14451	0.005051	-0.16827	-0.01872
CG4360	FBGN0038787	0.072363	-0.03175	0.166447	0.06233

CG3655	FBGN0040397	0.177038	0.023893	-0.03015	-0.18329
CG18731	FBGN0042213	-0.26593	0.033264	-0.22773	0.071461
CG11134	FBGN0030518	-0.11967	-0.00998	-0.08467	0.025017
CG11248	FBGN0037117	-0.06885	-0.10636	-0.04973	-0.08724
Bx	FBGN0265598	0.159194	-0.12763	0.388152	0.101328
CG41520	FBGN0087011	0.116669	0.027431	-0.13191	-0.22114
rho-7	FBGN0033672	-0.06202	0.016504	0.033326	0.111847
CG34292	FBGN0085321	-0.06605	0.05936	-0.25448	-0.12906
Rubicon	FBGN0030055	0.140889	0.014233	0.305685	0.17903
imd	FBGN0013983	-0.08783	0.120536	-0.10831	0.100054
mRpS26	FBGN0036774	-0.08784	0.093305	0.075938	0.257078
S6KL	FBGN0283473	0.473415	0.122321	0.507807	0.156713
CG10435	FBGN0037539	-0.02722	0.105411	-0.05763	0.075002
CG12877	FBGN0039544	0.109942	-0.03768	0.144297	-0.00333
CG43402	FBGN0263321	-0.42208	-0.12917	-0.78099	-0.48807
lncRNA:CR43612	FBGN0263587	-0.04371	-0.37402	0.289188	-0.04112
CG9662	FBGN0031529	-0.16207	0.037639	-0.13312	0.066593
CycB3	FBGN0015625	-0.01607	-0.03851	0.144397	0.121957
obst-E	FBGN0031737	-0.25273	-0.00711	-0.42021	-0.17459
Rpb12	FBGN0262954	-0.15213	0.043041	-0.30815	-0.11298
mRpL1	FBGN0037566	-0.14428	-0.0049	-0.12269	0.016686
CG15356	FBGN0031377	0.412927	-0.00147	0.507013	0.092621
atk	FBGN0036995	0.695569	-0.10621	0.60307	-0.19871
CG12096	FBGN0030457	-0.07506	0.135917	-0.28354	-0.07256
Prosbeta2R1	FBGN0029812	-0.05567	0.019985	-0.1316	-0.05595
CG15210	FBGN0040850	-0.01245	0.557182	-0.80431	-0.23468
Dref	FBGN0015664	-0.08375	0.084431	-0.27679	-0.10861
pbl	FBGN0003041	-0.06705	0.015326	-0.09329	-0.01092
CG14505	FBGN0034327	-0.33092	-0.08542	-0.20555	0.039948
spd-2	FBGN0027500	-0.09246	-0.051	-0.04328	-0.00182
Sardh	FBGN0034276	-0.0774	-0.1491	1.498548	1.426844
CG32407	FBGN0052407	0.079253	-0.06956	0.372622	0.223804
CG45770	FBGN0267417	-0.34665	-0.14975	-0.05569	0.141204
hyx	FBGN0037657	0.013915	0.062116	0.123801	0.172001
Sema1a	FBGN0011259	0.215599	-0.18602	0.421866	0.020246
Skadu	FBGN0259922	-0.16225	0.075538	-0.40412	-0.16633
CG10347	FBGN0030342	-0.07774	0.008013	-0.09068	-0.00492
Lapsyn	FBGN0034602	0.259665	0.147011	0.226739	0.114086
CG8516	FBGN0037757	0.239496	0.079883	0.213764	0.054151
CG14269	FBGN0029658	-0.24664	0.001613	-0.21968	0.028571
Hpr1	FBGN0037382	-0.05401	0.114925	-0.14278	0.026156
CG11007	FBGN0034455	0.119132	0.14018	0.035576	0.056625
CG18808	FBGN0042131	-0.11375	-0.0031	-0.18634	-0.07569
CG14655	FBGN0037275	0.518271	0.171554	0.482829	0.136112
CG14017	FBGN0031721	0.039176	-0.01065	-0.00535	-0.05518
CG42699	FBGN0261610	0.018966	-0.08649	0.076769	-0.02869
Ino80	FBGN0086613	0.047501	0.002258	0.226309	0.181066
EcR	FBGN0000546	0.280058	0.008948	0.371692	0.100582
brwl	FBGN0032130	-0.08445	0.094846	-0.21802	-0.03873
CG13743	FBGN0033368	0.290896	0.05534	0.502539	0.266983
IntS2	FBGN0030858	0.099247	0.142879	0.084734	0.128365
Ctl1	FBGN0035523	-0.06825	0.037666	-0.11173	-0.00582
asRNA:CR44029	FBGN0264821	0.441111	0.16537	0.531661	0.25592
CG14990	FBGN0035496	0.408988	-0.14791	0.521106	-0.03579
Lrrk	FBGN0038816	0.282803	0.102223	0.389657	0.209077
hoip	FBGN0286786	-0.42406	0.052746	-0.5108	-0.034
CG14840	FBGN0038217	-0.34361	-0.17616	-0.27035	-0.10291
CG5770	FBGN0034291	0.68846	1.614525	-1.97152	-1.04546
Ptp52F	FBGN0034085	0.130941	0.423608	-0.49615	-0.20349
CG13838	FBGN0039041	-0.20517	-0.03403	0.027205	0.19834
MFS16	FBGN0034611	0.032512	0.025515	0.065488	0.058491
BigH1	FBGN0038252	-0.22561	-0.08864	-0.44327	-0.3063
CG7857	FBGN0026738	-0.14945	0.10132	-0.1304	0.12037
CG8003	FBGN0036096	-0.22782	-0.14091	-0.29482	-0.20791
ph-d	FBGN0004860	0.189931	0.012704	0.369654	0.192428
CG10702	FBGN0032752	-0.15032	-0.1879	0.012094	-0.02549
CG15145	FBGN0032649	-0.01874	-0.16289	0.085639	-0.05851
CG4598	FBGN0032160	-0.03661	0.046945	-0.14505	-0.06149
Tbc1d15-17	FBGN0031233	-0.09832	-0.06626	0.081916	0.113978

CG14893	FBGN0038451	0.446734	-0.15749	0.125606	-0.47862
CG6106	FBGN0030914	-0.6701	-0.40898	0.589192	0.850314
Ipk1	FBGN0050295	0.441485	0.093147	0.32605	-0.02229
CG10747	FBGN0032845	0.19591	0.207683	0.114139	0.125912
Rnp4F	FBGN0014024	-0.08444	-0.21841	0.048127	-0.08585
mute	FBGN0085444	0.067346	0.086076	0.023284	0.042014
CG5543	FBGN0034908	-0.55214	0.059636	-0.03016	0.581616
CG32939	FBGN0052939	-0.38768	-0.06494	-0.21725	0.105493
CG17154	FBGN0036246	-0.10844	0.066403	-0.28199	-0.10714
CG15124	FBGN0034461	-0.15402	0.004163	-0.22156	-0.06337
CG12848	FBGN0040666	-0.19964	0.006986	-0.23738	-0.03076
CG9723	FBGN0030768	0.017453	0.016065	0.038638	0.03725
CG6511	FBGN0035923	0.097271	0.186331	-0.10606	-0.017
vir	FBGN0003977	0.303984	0.080574	0.144935	-0.07847
lncRNA:CR43932	FBGN0264553	-0.30642	-0.284	0.751553	0.77397
CG15019	FBGN0035541	-0.10048	0.09288	-0.13335	0.060009
Ndc1	FBGN0039125	-0.07592	-0.08978	-0.23057	-0.24443
toy	FBGN0019650	0.486031	-0.01851	0.565621	0.061078
Nrd1	FBGN0030344	0.113772	-0.00728	0.100029	-0.02102
CG4049	FBGN0034976	0.346524	0.049952	0.513186	0.216613
fra	FBGN0011592	-0.09373	0.021854	-0.12913	-0.01354
CG1503	FBGN0031157	-0.25644	-0.10025	-0.18252	-0.02633
opm	FBGN0264389	-0.15567	0.208945	-0.31871	0.045903
Dsk	FBGN0000500	0.156984	-0.08061	0.126623	-0.11097
dgt1	FBGN0039710	-0.23395	0.020798	-0.24868	0.006067
Abp1	FBGN0036372	0.136348	0.279553	-0.14859	-0.00538
ham	FBGN0045852	0.559379	-0.01301	0.708591	0.136197
CG11475	FBGN0034687	-0.10296	-0.01508	-0.01072	0.077169
MED15	FBGN0027592	-0.00025	-0.00764	0.015993	0.008604
CG15706	FBGN0034093	0.20801	0.009901	0.067581	-0.13053
Rgl	FBGN0026376	0.024893	-0.01505	0.058605	0.018664
Prp3	FBGN0036915	-0.02375	-0.02526	0.017973	0.016459
mi	FBGN0261786	0.324539	-0.04637	0.410314	0.039404
Gas8	FBGN0029667	0.016448	-0.05791	-0.06145	-0.13581
lncRNA:CR43888	FBGN0264480	0.167111	-0.16521	-0.21205	-0.54437
viaf	FBGN0036237	-0.14356	-0.12902	-0.09908	-0.08454
CG16964	FBGN0032385	-0.06356	-0.09445	-0.13604	-0.16693
CG5937	FBGN0029834	0.316401	-0.13678	0.681483	0.228304
Tsp66E	FBGN0035936	-0.32318	-0.06537	-0.40955	-0.15174
Dpit47	FBGN0266518	-0.20476	-0.02833	-0.22101	-0.04457
CG10462	FBGN0032815	-0.04217	0.041704	-0.03131	0.052563
CG8927	FBGN0038405	0.030717	-0.94558	0.013897	-0.9624
CG18542	FBGN0037731	-0.4036	-0.0886	-0.21905	0.095953
CG5828	FBGN0031682	0.057209	0.044145	0.006532	-0.00653
Twdlalpha	FBGN0052574	-0.29874	-0.03728	-0.13338	0.128083
CG12637	FBGN0030224	-0.10188	0.18783	-0.03947	0.250231
Spn42Dc	FBGN0033113	-0.02918	0.104223	-0.21783	-0.08442
mRpL9	FBGN0038319	-0.218	0.000226	-0.31491	-0.09668
CG15553	FBGN0039817	-1.8528	-1.07475	0.508484	1.286539
l(1)G0004	FBGN0027334	-0.31707	-0.14677	-0.11682	0.053479
Impbeta11	FBGN0284254	-0.20501	0.035235	-0.23886	0.001394
CG8785	FBGN0033760	-0.27065	0.399879	-0.74207	-0.07154
CG6271	FBGN0039476	4.6061	0.7542	5.768048	1.916147
GstO1	FBGN0035907	-0.24009	0.000136	-0.16298	0.077252
Prp31	FBGN0036487	-0.03404	0.026902	-0.0075	0.053436
CG15545	FBGN0039806	2.965956	2.407112	-0.77486	-1.3337
CG4751	FBGN0032348	0.103659	-0.0761	0.203806	0.024043
CG7551	FBGN0036161	-0.05405	-0.14237	-0.17857	-0.26689
Vps16A	FBGN0285911	0.153487	0.065813	0.062897	-0.02478
RabX1	FBGN0015372	-0.14119	0.076001	-0.09321	0.123976
CG5026	FBGN0035945	0.083348	0.006347	0.214663	0.137662
Gycbeta100B	FBGN0013973	0.280999	-0.08584	0.376612	0.009772
CG43103	FBGN0262563	0.089841	0.092382	-0.0089	-0.00636
del	FBGN0086251	0.25014	0.149495	-0.19931	-0.29996
GATAe	FBGN0038391	0.157351	0.222909	-0.39304	-0.32748
GstE8	FBGN0063492	0.312624	0.110791	0.253414	0.051581
CG9253	FBGN0032919	-0.05142	0.021353	-0.08798	-0.01521
CG11377	FBGN0031217	-0.01382	-0.01108	-0.04842	-0.04568
CG3436	FBGN0031229	-0.08119	0.165121	-0.09807	0.148244

CG1724	FBGN0031164	-0.39102	-0.03012	-0.33719	0.023715
CG34367	FBGN0085396	-1.69637	0.40472	-1.63271	0.468376
CG9825	FBGN0034783	0.929188	2.081764	2.665833	3.818409
CG4891	FBGN0028520	-0.18187	-0.01947	-0.21372	-0.05132
Syx13	FBGN0036341	-0.02315	0.138649	-0.09795	0.063848
Upf3	FBGN0034923	-0.02545	0.092493	-0.11257	0.005365
CG6379	FBGN0029693	0.142696	-0.08863	0.225226	-0.00611
Nmd3	FBGN0023542	-0.13492	0.024026	-0.0067	0.152242
nop5	FBGN0026196	-0.28113	-0.05411	-0.22953	-0.0025
Dh44-R2	FBGN0033744	0.273093	-0.15868	0.259225	-0.17255
side-VI	FBGN0083950	0.467878	-0.08145	0.661821	0.112493
cta	FBGN0000384	0.139716	0.050054	0.046247	-0.04341
CG12075	FBGN0030065	0.069498	0.152264	0.26566	0.348426
CG15894	FBGN0029864	0.714748	-0.16684	0.811968	-0.06962
CG4615	FBGN0029935	0.116556	-0.09981	0.040227	-0.17614
CG9784	FBGN0030761	0.060562	0.129055	0.017586	0.086079
CG34355	FBGN0085384	-0.1371	-0.16399	0.298711	0.271815
CG14651	FBGN0037254	-0.16424	-0.14546	-0.07593	-0.05715
CG43290	FBGN0262982	-0.50469	-0.02822	-0.70259	-0.22613
GABPI	FBGN0031495	-0.17638	-0.02856	-0.16631	-0.01848
Ku80	FBGN0041627	-0.64153	-0.27498	-0.08648	0.28007
CG42329	FBGN0259229	-0.18024	0.222684	-1.47621	-1.07329
CG5446	FBGN0032429	-0.08623	-0.11224	0.146251	0.120236
scramb2	FBGN0035390	0.00521	-0.01024	0.108948	0.093499
PpV	FBGN0003139	0.037232	0.104047	-0.03963	0.027189
Nbr	FBGN0032924	0.137384	-0.01219	0.131083	-0.01849
CG16812	FBGN0032488	-0.05401	-0.01623	-0.03732	0.000452
Nle	FBGN0021874	-0.62617	-0.09609	-0.64986	-0.11979
lds	FBGN0002542	-0.07347	0.011821	-0.16399	-0.0787
CG30285	FBGN0050285	-0.4643	-0.054	-0.25473	0.155561
CG5515	FBGN0039163	-0.21531	0.00657	-0.12872	0.09316
CG3104	FBGN0031473	0.126157	-0.03478	0.396142	0.235205
CG3603	FBGN0029648	0.297806	0.09988	0.111297	-0.08663
cyc	FBGN0023094	0.084119	-0.15022	0.377915	0.143572
CG31510	FBGN0051510	0.134492	0.053954	0.08245	0.001912
CG16854	FBGN0032338	0.127441	-0.08109	-0.03486	-0.24339
rost	FBGN0011705	0.213881	0.307676	-0.17796	-0.08416
CG12609	FBGN0030952	-0.08782	-0.09584	-0.08165	-0.08967
e	FBGN0000527	-1.05711	-0.02396	-0.27505	0.758096
SMC3	FBGN0015615	0.002153	-0.01004	0.043019	0.030823
side-VIII	FBGN0086604	0.067987	-0.1526	0.277653	0.057064
CG10839	FBGN0028858	-0.16741	-0.03046	-0.26035	-0.1234
lncRNA:CR44922	FBGN0266227	0.173601	0.060085	0.139701	0.026185
CG42692	FBGN0261582	-0.09387	-0.03867	-0.27655	-0.22136
CG12926	FBGN0033437	0.066388	0.178744	0.014175	0.126531
Sf3a2	FBGN0036314	0.218693	0.281205	0.129856	0.192367
lncRNA:CR43414	FBGN0263333	-0.49838	-0.80235	0.321788	0.01782
CG18178	FBGN0036035	-0.0327	-0.0332	-0.10836	-0.10886
Mco1	FBGN0032116	0.452786	0.237668	0.008888	-0.20623
side-II	FBGN0259213	0.183409	-0.13166	0.355775	0.040702
CG5961	FBGN0038056	-0.02686	0.056189	-0.12697	-0.04392
Kaz-m1	FBGN0002578	-0.26667	0.259639	-1.02488	-0.49857
Rint1	FBGN0035762	-0.11475	-0.02221	-0.22189	-0.12935
CG5989	FBGN0017429	-0.00593	-0.02021	0.156239	0.141963
Mps1	FBGN0000063	0.184231	0.391901	-0.71615	-0.50848
ND-B14.5AL	FBGN0037172	-0.12639	0.021955	-0.05819	0.090157
Myo10A	FBGN0263705	0.255329	-0.06094	0.268425	-0.04784
CG31102	FBGN0051102	0.108638	0.029261	0.414071	0.334695
aub	FBGN0000146	-0.78928	-0.38175	-0.79477	-0.38724
CG9372	FBGN0036891	-0.14307	-0.20569	-0.17137	-0.23398
GstE7	FBGN0063493	-0.33543	-0.24941	-0.19018	-0.10415
Or59c	FBGN0034866	0.181191	-0.41896	1.291052	0.690898
CG32643	FBGN0052643	0.111134	-0.05998	-0.22847	-0.39959
Npc2d	FBGN0037782	0.468546	0.307397	-0.49962	-0.66077
gprs	FBGN0024232	0.29555	-0.00479	0.600698	0.300358
CG4407	FBGN0030431	-0.17777	-0.00632	-0.13233	0.039113
ast	FBGN0015905	0.044163	0.227719	0.02699	0.210546
Brms1	FBGN0030434	-0.08656	0.034303	-0.03201	0.088861
egr	FBGN0033483	-0.13386	-0.14187	-0.00049	-0.0085

PDCD-5	FBGN0036580	-0.26414	0.019171	-0.19302	0.090289
Set	FBGN0014879	0.01978	0.077882	0.026694	0.084795
gammaTub23C	FBGN0260639	-0.09039	0.088613	-0.18239	-0.00339
CG14294	FBGN0038656	-0.22571	0.052464	-0.23982	0.038363
ND-51L2	FBGN0034007	-0.2153	-0.03088	-0.28749	-0.10307
CG16741	FBGN0042198	-0.14175	-0.10948	-0.03024	0.002033
TTLL12	FBGN0033225	0.045967	-0.07055	0.062684	-0.05383
CG9547	FBGN0031824	0.226711	0.061986	0.166708	0.001983
CG17650	FBGN0031365	-0.68804	0.051123	-0.76795	-0.02879
lncRNA:CR46391	FBGN0286869	1.189437	2.000236	-1.77082	-0.96002
Sec5	FBGN0266670	0.030787	0.030318	0.074071	0.073602
CG43093	FBGN0262539	0.27134	-0.40124	0.470576	-0.202
CG30103	FBGN0050103	0.012045	0.032726	-0.05594	-0.03526
Hr39	FBGN0261239	0.17092	0.130586	0.046147	0.005813
CG14234	FBGN0031065	0.120512	-0.23715	0.091042	-0.26662
CG14931	FBGN0032374	0.13328	0.036058	-0.14049	-0.23771
CR32011	FBGN0052011	0.22828	0.067139	0.242626	0.081484
lncRNA:CR46446	FBGN0287216	0.919355	-0.25287	0.00478	-1.16744
Cfp1	FBGN0030121	0.264937	-0.05914	0.223594	-0.10049
Tk	FBGN0037976	0.112362	0.084071	0.090115	0.061824
CG18128	FBGN0034898	-0.08652	-0.01832	-0.14822	-0.08003
CG40228	FBGN0063670	-0.05463	0.011218	-0.153	-0.08715
slif	FBGN0037203	0.203154	-0.03348	0.26146	0.024829
byn	FBGN0011723	0.230787	0.11893	0.546572	0.434714
mRpL38	FBGN0030552	-7.10E-05	0.053796	0.026307	0.080173
Src64B	FBGN0262733	0.203702	-0.04984	0.281223	0.02768
CG8545	FBGN0033741	-0.09728	-0.01317	-0.07333	0.010784
Acox57D-d	FBGN0034629	0.152328	0.104315	-0.15921	-0.20722
Obp56i	FBGN0043532	-0.02185	-0.08447	-0.51637	-0.579
CG2211	FBGN0035211	0.111855	0.218558	-0.23316	-0.12645
eIF2Balpha	FBGN0039726	-0.26925	0.137483	-0.28099	0.12575
CG30369	FBGN0050369	-0.22217	0.01433	-0.29057	-0.05406
cbc	FBGN0033842	-0.28305	0.005291	-0.3781	-0.08976
CG31730	FBGN0051730	0.080614	0.009857	-0.28182	-0.35257
CG13359	FBGN0025616	-0.15216	0.001801	-0.13784	0.016121
cona	FBGN0038612	-0.26614	0.092558	-0.53116	-0.17246
CG6321	FBGN0036117	0.329938	-0.20369	0.466568	-0.06706
CG17751	FBGN0038717	0.425192	-0.39391	0.046085	-0.77301
Secp43	FBGN0031607	-0.11394	0.060245	-0.12068	0.053506
CG5114	FBGN0036460	-0.0545	0.114379	-0.0044	0.164484
mus201	FBGN0002887	0.140926	0.076274	-0.19147	-0.25612
CR45771	FBGN0267418	-0.31707	-0.10224	0.03177	0.246593
CG3847	FBGN0029867	0.053362	0.067594	-0.06067	-0.04644
CG3795	FBGN0025378	-0.15846	0.051267	-0.22622	-0.01649
NK7.1	FBGN0024321	0.173612	-0.018	0.212773	0.021156
mRpL4	FBGN0001995	-0.14099	-0.06826	-0.13506	-0.06233
Xxylt	FBGN0034959	-0.05525	-0.16615	0.148368	0.037463
hui	FBGN0033968	-0.6494	0.032615	-0.96326	-0.28124
CG45154	FBGN0266647	0.632521	1.721574	0.526549	1.615601
Rgk1	FBGN0264753	0.212709	-0.1103	0.308517	-0.0145
CG13623	FBGN0039205	-0.22468	0.038443	-0.08451	0.178605
CG4020	FBGN0029821	0.123257	-0.26982	0.218231	-0.17484
cv	FBGN0000394	-0.30666	0.125496	-0.62508	-0.19292
CG10979	FBGN0037379	-0.03624	-0.03048	-0.11608	-0.11032
PGAP5	FBGN0031997	0.102892	-0.04828	-0.07185	-0.22303
lncRNA:CR43304	FBGN0262996	-0.11678	0.51926	-0.91051	-0.27447
Sfxn2	FBGN0036843	-0.0689	0.019841	0.05433	0.143072
CG1523	FBGN0039601	-0.07937	0.008566	0.07852	0.166455
Dsor1	FBGN0010269	-0.03119	0.098198	-0.11835	0.011034
Mtr4	FBGN0001986	-0.15828	-0.19374	-0.01462	-0.05009
CG43750	FBGN0264081	-0.24667	0.072797	-0.2721	0.047365
CG11396	FBGN0037022	-0.13822	0.179473	-0.31501	0.002686
CG4497	FBGN0031895	0.228178	-0.02415	0.243458	-0.00887
CG7730	FBGN0036689	0.045535	0.056754	-0.13558	-0.12436
CG12851	FBGN0035086	0.164279	0.050286	0.113012	-0.00098
Bub3	FBGN0025457	-0.02521	0.109869	-0.32552	-0.19045
Uba5	FBGN0030305	-0.18411	-0.03727	-0.01536	0.131483
CG15450	FBGN0031132	-0.21607	-0.05051	-0.22157	-0.05601
CG11030	FBGN0031736	0.064221	-0.03783	0.156532	0.054477

CG43740	FBGN0263997	0.038671	-0.1605	0.444559	0.245386
ocm	FBGN0266083	0.171265	-0.06652	0.274961	0.037172
Cht2	FBGN0022702	0.681744	0.418505	0.652112	0.388873
zfh2	FBGN0004607	0.420963	-0.09147	0.742099	0.229668
lncRNA:CR43939	FBGN0264567	-0.31032	0.117229	-0.68873	-0.26118
CG4335	FBGN0038795	0.25451	-0.3986	0.595391	-0.05772
Uch-L5R	FBGN0030370	-0.16801	-0.10329	-0.11013	-0.04541
Nmdar1	FBGN0010399	0.34524	0.016577	0.447264	0.118601
CG15044	FBGN0030928	1.387155	1.742004	-0.73913	-0.38428
CG2111	FBGN0030223	-0.10994	-0.09771	-0.10031	-0.08809
Dad1	FBGN0263852	-0.23736	-0.02918	-0.18403	0.024157
CG9395	FBGN0032506	0.366796	0.050183	0.520677	0.204064
CG41378	FBGN0085638	-0.30025	-0.04005	-0.59365	-0.33346
CG3726	FBGN0029824	0.090662	0.320987	0.103439	0.333763
kud	FBGN0036667	-0.37193	-0.06437	-0.42132	-0.11377
CG31706	FBGN0051706	-0.38419	-0.27977	0.151002	0.25542
CG6231	FBGN0038720	0.196668	0.09847	0.202417	0.104219
x16	FBGN0028554	-0.1323	0.079757	-0.23219	-0.02013
CG14853	FBGN0038246	0.166701	-0.07851	0.401932	0.156723
Ns1	FBGN0038473	-0.21709	-0.04586	-0.28738	-0.11615
mRpL42	FBGN0033480	-0.22896	0.013865	-0.15136	0.091467
CG15278	FBGN0032554	0.076028	0.070873	-0.03684	-0.04199
CG5913	FBGN0039385	-0.13223	0.0855	-0.17452	0.043211
CG1631	FBGN0031101	0.125985	0.042027	-0.02494	-0.10889
CG18766	FBGN0042111	-0.06232	-0.00076	-0.00346	0.058091
CG2898	FBGN0030195	-0.2349	-0.15481	-0.17373	-0.09364
CG13794	FBGN0031936	0.147996	-0.29679	0.60016	0.155375
CG8204	FBGN0034033	-0.21975	0.016867	-0.33144	-0.09482
pyr	FBGN0033649	0.200228	0.024435	0.155923	-0.01987
CG4025	FBGN0025624	-0.05324	0.093099	-0.17339	-0.02706
Hcs	FBGN0037332	0.302107	0.022133	0.24074	-0.03923
atms	FBGN0010750	-0.01277	-0.03309	0.023432	0.003114
Ubx	FBGN0003944	0.293481	-0.04363	0.627119	0.290013
grass	FBGN0039494	-0.30442	-0.23458	-0.11352	-0.04369
Stlk	FBGN0046692	0.095043	0.084515	-0.01684	-0.02736
CG15446	FBGN0031155	-0.15724	-0.02473	-0.20168	-0.06917
frac	FBGN0035798	0.189285	-0.27498	0.523016	0.058753
CG42471	FBGN0259961	-0.21361	0.003531	-0.34152	-0.12438
CG14131	FBGN0036205	0.158062	0.330549	-0.27916	-0.10667
Con	FBGN0005775	0.33388	-0.07057	0.509735	0.105287
Sf3a1	FBGN0266917	0.003319	0.092937	0.025214	0.114832
Cyp6a14	FBGN0033302	0.367066	0.755398	-0.44907	-0.06074
CG17999	FBGN0034552	0.560775	0.198027	-0.01822	-0.38097
CG34150	FBGN0083986	-0.07692	-0.02845	-0.14096	-0.09249
CG43331	FBGN0263036	-0.04648	0.002304	-0.01412	0.034666
mRpL22	FBGN0030786	-0.13441	0.096537	-0.26674	-0.0358
elav	FBGN0260400	0.44645	0.018388	0.579521	0.151458
CG43630	FBGN0263621	-0.2338	0.094132	-0.16708	0.160857
veli	FBGN0039269	-0.07092	0.077024	-0.20233	-0.05439
CG10694	FBGN0039147	-0.15782	0.014145	-0.34376	-0.17179
CG8389	FBGN0034063	-0.02457	-0.1276	0.048175	-0.05486
CG11885	FBGN0031253	-0.24459	-0.00252	-0.32851	-0.08644
bnl	FBGN0014135	0.096697	0.076489	0.427743	0.407534
mRpL19	FBGN0037608	-0.28381	0.012557	-0.29026	0.006104
CG8010	FBGN0031008	-0.19002	-0.05236	-0.10724	0.030417
CG33978	FBGN0053978	0.31504	0.125372	0.351996	0.162328
CG4610	FBGN0034735	0.255327	0.052019	0.349459	0.146151
CG14391	FBGN0038078	-0.06046	0.012202	0.013031	0.085687
dpr9	FBGN0038282	0.440004	-0.0139	0.530852	0.076948
mRpS29	FBGN0034727	-0.25449	-0.00696	-0.27701	-0.02948
CG17059	FBGN0040754	-0.0341	0.001675	-0.12722	-0.09144
CG42446	FBGN0259917	0.014361	0.070124	0.019954	0.075716
CG43049	FBGN0262351	-0.06665	-0.05352	-0.24281	-0.22967
lncRNA:CR43306	FBGN0262998	0.458965	-0.15037	0.065636	-0.5437
PpN58A	FBGN0025573	-0.20575	0.012152	-0.12283	0.095065
CG8892	FBGN0031664	-0.05803	0.009678	0.036666	0.104374
CG30178	FBGN0050178	0.000361	-0.0085	-0.01544	-0.0243
prom	FBGN0259210	-0.29373	-0.36474	0.271051	0.20004
CG6769	FBGN0030878	-0.1445	0.093285	-0.08111	0.156674

CG5645	FBGN0036254	0.51594	-0.03137	0.568169	0.020854
mRpL43	FBGN0034893	-0.36474	0.070865	-0.3459	0.089698
l(2)SH0834	FBGN0267365	-0.03434	0.016609	-0.07302	-0.02207
robl22E	FBGN0028570	-0.20905	0.0137	-0.28991	-0.06716
lncRNA:CR45102	FBGN0266549	0.270179	0.18137	0.220508	0.1317
CG31867	FBGN0051867	0.107512	0.107551	-0.231	-0.23096
Acph-1	FBGN0000032	-0.08584	0.049241	-0.08375	0.051326
CG43778	FBGN0264308	0.208293	-0.05795	0.105112	-0.16113
lncRNA:CR43404	FBGN0263323	-0.08689	-0.09508	-0.13748	-0.14568
Ccz1	FBGN0035470	-0.00474	0.102458	-0.42622	-0.31903
CG34204	FBGN0085233	-0.12045	0.038146	-0.2559	-0.0973
CG17819	FBGN0038915	-0.06722	-0.0082	-0.22983	-0.17081
CG2147	FBGN0030025	-0.17517	-0.10685	-0.10761	-0.03929
ft	FBGN0001075	1.416192	0.482474	0.974233	0.040515
XRCC1	FBGN0026751	-0.05316	-0.22282	0.27234	0.102685
Amacr	FBGN0032881	-0.18149	-0.07988	-0.15043	-0.04883
Spn88Eb	FBGN0038299	-0.09867	0.023886	-0.08534	0.037214
Camp	FBGN0034210	-0.1219	0.104752	-0.34753	-0.12088
CG7352	FBGN0037581	-0.04741	-0.24754	-0.02848	-0.22861
CG14969	FBGN0035440	-0.08317	0.041941	-0.19049	-0.06538
gkt	FBGN0260817	-0.26941	0.038732	-0.35516	-0.04701
Gmd	FBGN0031661	-0.08584	-0.00059	-0.20543	-0.12018
CG17278	FBGN0046763	-0.08816	0.081308	-0.20203	-0.03257
CG7091	FBGN0038099	-0.01114	0.07338	-0.50053	-0.416
Vha100-4	FBGN0038613	0.017882	0.711458	-0.94481	-0.25123
FMRFa	FBGN0000715	-0.34275	-0.08066	-0.40642	-0.14433
CG42402	FBGN0259821	0.176665	-0.18382	0.496443	0.135957
CG4293	FBGN0024983	0.059081	-0.11522	0.09948	-0.07482
Eogt	FBGN0264672	0.126959	0.057709	-0.16861	-0.23786
CG42536	FBGN0260644	-0.37361	0.116632	-0.72052	-0.23028
RpS10a	FBGN0027494	-0.53494	-0.09106	-0.47927	-0.0354
peng	FBGN0015527	-0.21487	-0.0496	-0.29198	-0.12671
CG10444	FBGN0034494	0.030873	0.16953	0.026361	0.165018
Bet1	FBGN0260857	-0.01875	0.07385	0.14652	0.239121
twf	FBGN0038206	-0.18075	0.109241	-0.26094	0.029047
eIF3f2	FBGN0033069	-0.22631	-0.01843	-0.37639	-0.16851
Cep135	FBGN0036480	-0.04409	0.008518	-0.03926	0.013354
Met	FBGN0002723	0.317196	0.098056	0.323154	0.104014
shakB	FBGN0085387	0.532685	-0.06039	0.820817	0.227743
loh	FBGN0032252	-0.24417	-0.03331	-0.47035	-0.25949
CG30391	FBGN0050391	-0.12925	0.068227	0.025523	0.223002
CG6195	FBGN0038723	-0.08824	0.04834	-0.14745	-0.01088
PIG-K	FBGN0023545	-0.21259	-0.07714	-0.11647	0.018981
Rbsn-5	FBGN0261064	-0.13558	-0.01388	-0.15834	-0.03664
Art3	FBGN0038306	-0.15565	0.138127	-0.23618	0.057595
CG4554	FBGN0034734	-0.32879	0.004211	0.245753	0.578752
MrgBP	FBGN0033341	-0.20222	-0.08947	-0.0041	0.108643
CG32700	FBGN0267253	-0.08089	-0.06374	0.146476	0.16363
Exd2	FBGN0037901	0.020193	-0.08174	-0.06628	-0.16821
CG13850	FBGN0038961	0.060638	0.025621	0.013853	-0.02116
CG12071	FBGN0039808	0.299887	-0.05641	0.499804	0.143503
CG30026	FBGN0050026	-0.00228	0.276452	-0.15627	0.122457
CG1139	FBGN0035300	0.589477	0.180387	0.277156	-0.13193
Cbp80	FBGN0022942	0.099235	0.051832	0.121258	0.073855
CG5510	FBGN0039160	0.021391	-0.11713	0.079106	-0.05942
Slbp	FBGN0041186	0.022682	0.114412	0.045177	0.136907
CG6418	FBGN0036104	0.054422	-0.04318	0.151161	0.053554
MED10	FBGN0036581	-0.2003	0.027182	-0.24309	-0.01561
CG45072	FBGN0266442	7.237414	1.273932	5.521973	-0.44151
CG1695	FBGN0031116	0.18563	-0.09739	0.341873	0.058848
TH1	FBGN0010416	0.134647	0.059252	0.183122	0.107727
CG34159	FBGN0085188	0.012631	0.177424	-0.15125	0.013544
Nup205	FBGN0031078	-0.13803	0.071656	-0.20506	0.004626
CG16896	FBGN0035073	0.121767	0.067002	0.067361	0.012596
CG17078	FBGN0086855	0.06011	0.094993	0.062138	0.097021
dve	FBGN0020307	0.349983	0.048563	0.334239	0.032819
vas	FBGN0283442	-0.84623	-0.02255	-1.15237	-0.32869
Fip1	FBGN0037255	-0.06019	-0.05649	-0.08896	-0.08526
E(z)	FBGN0000629	0.034134	0.018108	-0.04711	-0.06313

dati	FBGN0262636	0.350772	0.051958	0.457611	0.158797
CG43089	FBGN0262535	-0.27561	-0.05218	-0.40346	-0.18004
CG4829	FBGN0030796	0.233254	-0.12478	0.572197	0.214163
CG17565	FBGN0038424	-0.36508	-0.1342	-0.08199	0.148887
Cubn	FBGN0052702	0.346537	0.228491	0.170177	0.052131
CG3505	FBGN0038250	-0.22409	-0.051	0.057078	0.230164
Nelf-E	FBGN0017430	-0.15927	0.01727	-0.16614	0.010398
Klp68D	FBGN0004381	0.197178	-0.0055	0.403666	0.200985
disp	FBGN0029088	0.176367	0.008713	0.155391	-0.01226
comm2	FBGN0041160	0.163583	0.038806	0.303819	0.179042
CG10137	FBGN0032800	0.102402	0.029104	0.077759	0.004461
RpLP0-like	FBGN0033485	-0.25091	0.105027	-0.32761	0.028332
CG6276	FBGN0038316	-0.00917	0.048139	-0.04547	0.01184
Cpr51A	FBGN0033942	-0.23646	-0.05777	-0.59918	-0.4205
Pex23	FBGN0052226	-0.22023	0.072134	-0.25431	0.038057
CG30325	FBGN0050325	1.124785	0.279909	1.054144	0.209268
CG9406	FBGN0034592	-0.12649	0.032306	-0.19948	-0.04068
CG34274	FBGN0085303	0.042594	-0.12929	-0.09412	-0.26601
CG43861	FBGN0264443	0.443799	-0.01386	0.529909	0.072252
CG10208	FBGN0039118	-0.04833	-0.05958	-0.26307	-0.27432
CG14621	FBGN0031183	0.065515	0.099089	0.044116	0.07769
HP6	FBGN0031613	-0.60266	-0.15921	-0.36589	0.077557
CG8079	FBGN0034002	-0.01045	0.072563	-0.11873	-0.03573
Pms2	FBGN0011660	-0.22733	-0.06113	-0.27508	-0.10888
Fer3HCH	FBGN0030449	-0.21858	-0.0344	-0.30048	-0.1163
Surf1	FBGN0029117	0.081115	-0.10239	0.186087	0.002581
Dhpr	FBGN0035964	-0.01725	-0.04582	0.247912	0.21935
Atf-2	FBGN0265193	0.089979	0.121263	0.054132	0.085416
CG10793	FBGN0029656	-0.23566	0.1974	-0.28502	0.14804
side-VII	FBGN0037736	0.287751	-0.0033	0.419019	0.127969
CG11404	FBGN0037169	0.048784	0.010036	-0.00015	-0.0389
CG18675	FBGN0040696	0.164183	-0.08513	0.175827	-0.07349
CG9578	FBGN0031094	-0.27508	-0.0027	-0.22779	0.044588
CG43075	FBGN0262485	-0.20774	0.080962	-0.41281	-0.12412
CG2931	FBGN0037342	-0.30773	-0.02654	-0.24311	0.038087
betaGlu	FBGN0270927	0.231926	0.036338	0.197968	0.00238
CG33169	FBGN0053169	-0.26759	-0.2394	-0.13705	-0.10886
CG3700	FBGN0034796	0.152007	-0.05927	0.17759	-0.03369
CG4853	FBGN0034230	0.075181	-0.04076	0.129693	0.01375
CG10195	FBGN0032787	0.246335	0.117877	0.072516	-0.05594
Pfdn4	FBGN0035603	-0.17766	-0.01671	-0.15659	0.004363
CG15537	FBGN0039770	0.20495	-0.05788	0.155633	-0.1072
CG9915	FBGN0030738	-0.04498	-0.0211	0.073146	0.097026
CG13594	FBGN0035041	0.442256	0.086136	0.517469	0.161349
CG34167	FBGN0085196	-0.09424	-0.01535	-0.06333	0.015566
p38a	FBGN0015765	0.049551	0.07146	-0.05343	-0.03153
SMC2	FBGN0027783	-0.31364	-0.03808	-0.52784	-0.25228
shop	FBGN0030966	0.216126	0.085254	0.411296	0.280424
PpD5	FBGN0005778	-0.12696	0.171782	-0.59663	-0.29788
CG4991	FBGN0030817	-0.42789	0.041732	-0.39563	0.073996
Yippee	FBGN0026749	0.035683	0.112019	-0.11232	-0.03599
mRpL40	FBGN0037892	-0.31987	-0.04941	-0.28864	-0.01819
CG10996	FBGN0030525	-0.09426	0.103836	-0.23782	-0.03972
polybromo	FBGN0039227	0.021189	0.030976	0.165049	0.174836
CG42514	FBGN0260388	0.406175	-0.26456	0.595724	-0.07501
ChAT	FBGN0000303	0.094121	-0.07139	-0.14812	-0.31363
Sp212	FBGN0053329	-0.4276	0.114607	-0.14144	0.400763
CG7065	FBGN0030091	0.180199	-0.08209	0.311771	0.049484
mRpL10	FBGN0031231	-0.02539	0.061922	-0.07592	0.011391
CG42710	FBGN0261627	0.075646	0.185471	-0.15796	-0.04814
CG42830	FBGN0262017	-0.24931	-0.03942	-0.31853	-0.10864
glob3	FBGN0037385	-0.13466	0.001886	-0.18248	-0.04593
Orco	FBGN0037324	-0.59748	-2.0161	0.513244	-0.90538
CG30398	FBGN0050398	-0.3249	0.006867	-0.3504	-0.01863
CG45490	FBGN0267046	-0.75647	-0.07082	-0.50154	0.184111
PrBP	FBGN0032059	0.008016	0.091064	-0.01151	0.071539
CG33514	FBGN0053514	0.165059	0.477513	-0.16455	0.147903
CG14322	FBGN0038532	0.036418	-0.08598	0.173954	0.051561
Inx5	FBGN0030989	-0.249	-0.04118	-0.07326	0.134554

CG7044	FBGN0038854	0.113135	0.136084	0.069222	0.092171
SIDL	FBGN0038303	0.238384	0.104356	0.273669	0.139641
be	FBGN0052594	0.198789	0.07807	0.123357	0.002638
CG12766	FBGN0035476	0.312248	-0.10146	0.583764	0.170061
CG15337	FBGN0030014	-0.11207	-0.02427	-0.22782	-0.14003
CG6841	FBGN0036828	-0.08952	0.02074	0.051887	0.162149
Coq9	FBGN0050493	-0.03548	-0.04336	0.150414	0.142536
CG31933	FBGN0051933	-0.03419	-0.03806	-0.12668	-0.13055
Cyp4ad1	FBGN0033292	-0.08641	-0.02648	-0.48593	-0.426
CG34210	FBGN0085239	-0.20127	-0.0823	-0.21262	-0.09365
TORIP	FBGN0036908	-0.07479	0.135424	-0.13512	0.075096
Max	FBGN0017578	-0.17815	0.088353	-0.11379	0.152711
Dim1	FBGN0031601	-0.33546	0.126916	-0.51877	-0.0564
CG1888	FBGN0033421	-0.11209	-0.03506	-0.04655	0.030485
CG10651	FBGN0032853	0.176518	-0.09565	0.108355	-0.16381
CG9945	FBGN0034527	-0.06389	0.013012	0.012476	0.089377
Miga	FBGN0030037	0.006349	-0.06326	0.077929	0.008319
CG4768	FBGN0030790	-0.05893	0.025566	-0.05324	0.031259
CG30373	FBGN0050373	0.002465	0.045417	0.091919	0.134872
mRpS10	FBGN0038307	-0.25397	0.044716	-0.27488	0.023808
olf413	FBGN0037153	0.37686	0.063855	0.278031	-0.03497
CG13933	FBGN0035270	0.115123	0.05472	0.013819	-0.04658
Obp56h	FBGN0034475	-2.41202	-1.32428	-2.19665	-1.10891
CG14879	FBGN0038419	-0.08844	-0.01504	-0.1405	-0.0671
Bap55	FBGN0025716	-0.3087	-0.05968	-0.34052	-0.0915
CG3611	FBGN0035069	-0.33667	-0.14512	-0.30674	-0.11518
yem	FBGN0005596	0.040245	-0.05639	0.075087	-0.02154
Sclp	FBGN0030357	0.032078	0.046051	-0.17974	-0.16576
CG31717	FBGN0051717	-0.06103	0.106218	-0.20036	-0.03311
CG30089	FBGN0050089	0.183686	-0.02598	0.289819	0.080155
TBCB	FBGN0034451	0.080176	0.074923	-0.18469	-0.18994
CG15605	FBGN0034196	-0.16733	-0.07476	-0.12618	-0.03362
fog	FBGN0000719	-0.0016	0.149667	0.007886	0.159151
CG11634	FBGN0032968	-0.19733	-0.14839	0.004175	0.053115
armi	FBGN0041164	-0.08741	-0.14316	0.018308	-0.03745
CG43127	FBGN0262592	-0.38359	0.047901	-0.89358	-0.46209
koko	FBGN0264816	-0.39897	-0.19444	-0.46957	-0.26504
CG9312	FBGN0038179	0.002045	0.014847	0.019272	0.032073
CG14567	FBGN0037126	-0.70017	-1.03779	0.476521	0.138896
CG31760	FBGN0051760	0.042645	-0.1733	-0.0153	-0.23125
CG1271	FBGN0035392	0.08926	0.095966	0.140279	0.146985
CG40486	FBGN0263830	-0.17978	-0.4207	0.043636	-0.19729
ninaD	FBGN0002939	0.621097	-0.83199	1.153935	-0.29915
CG2200	FBGN0030447	-0.14175	-0.01554	-0.20624	-0.08002
mRpL30	FBGN0029718	-0.39314	-0.13737	-0.21793	0.037846
CG8289	FBGN0030854	0.050868	0.037608	-0.01223	-0.02549
CG6325	FBGN0037814	-0.05328	-0.09175	-0.10381	-0.14227
dila	FBGN0033447	0.140489	0.099548	0.001754	-0.03919
Raf	FBGN0003079	0.146338	-0.04744	0.166012	-0.02777
GCC88	FBGN0037881	-0.03437	-0.09768	0.150326	0.087014
CG6041	FBGN0029826	-0.04799	0.544531	-0.86824	-0.27572
CG4038	FBGN0011824	-0.37555	-0.09668	-0.20936	0.069514
CG3909	FBGN0027524	-0.10493	0.050415	-0.34845	-0.1931
loj	FBGN0061492	-0.15626	-0.04499	-0.07776	0.033506
CG13494	FBGN0034671	-0.14729	-0.04611	-0.27029	-0.16911
CG33111	FBGN0053111	-0.00095	0.230645	0.034365	0.265957
ncd	FBGN0002924	-0.15943	-0.00053	-0.41514	-0.25624
Klp64D	FBGN0004380	-0.08154	-0.12194	0.053535	0.013137
Tsp33B	FBGN0032376	-0.04207	0.085994	-0.05822	0.069842
nAChRalpha4	FBGN0266347	0.270092	0.021781	0.347127	0.098817
robo3	FBGN0041097	0.400105	-0.04728	0.596656	0.149271
Elp1	FBGN0037926	-0.21227	-0.16527	-0.02582	0.021185
CG6999	FBGN0030085	-0.38291	-0.30312	-0.3314	-0.25162
unc-5	FBGN0034013	-0.00423	-0.13173	0.253039	0.125537
GlcT	FBGN0067102	0.069059	0.237693	-0.13258	0.036053
CG4271	FBGN0031409	-0.3794	-0.19228	-0.23805	-0.05092
Slc25A46a	FBGN0030717	0.037472	0.029534	0.027473	0.019535
ttv	FBGN0265974	0.181151	-0.00146	0.320376	0.137761
CG6094	FBGN0032261	-0.16966	0.113188	-0.20238	0.08047

Git	FBGN0033539	-0.04918	0.088678	-0.04514	0.092711
CG13311	FBGN0035929	0.533401	0.62536	-0.72097	-0.62901
CG18327	FBGN0033904	0.373337	0.175997	0.098779	-0.09856
SoxN	FBGN0029123	0.347441	-0.15312	0.730913	0.230352
CG34347	FBGN0085376	0.502638	-0.00805	0.809094	0.298406
CG3955	FBGN0033793	-0.07984	0.089074	-0.2036	-0.03468
CG12438	FBGN0032065	0.039944	0.015625	-0.17819	-0.20251
laf	FBGN0020280	-0.03871	0.079514	-0.14277	-0.02456
yellow-e	FBGN0041711	-0.5367	-0.04542	-0.71452	-0.22324
l(2)09851	FBGN0022288	-0.16152	-0.01906	-0.16718	-0.02472
BomS4	FBGN0034330	0.335513	-0.16972	0.386272	-0.11896
CG18641	FBGN0031426	0.362847	-0.50612	0.266748	-0.60222
CG17716	FBGN0000633	0.487349	-0.13961	0.562704	-0.06426
phyl	FBGN0013725	-0.58978	-0.26022	-0.41897	-0.08942
CG7881	FBGN0033048	0.03601	0.053604	-0.30529	-0.2877
CG1701	FBGN0033167	-0.11993	-0.2411	-0.1384	-0.25957
Snr1	FBGN0011715	-0.16533	-0.03948	-0.19246	-0.06661
CG5196	FBGN0038039	-0.08973	0.021252	-0.09075	0.020234
CG45494	FBGN0267050	-0.85275	-0.75169	-1.04393	-0.94287
CRIF	FBGN0037102	-0.14535	0.044884	-0.26239	-0.07215
CG7488	FBGN0038106	-0.00397	0.089589	-0.09572	-0.00217
CG5653	FBGN0035943	-0.17285	-0.03424	-0.27916	-0.14055
CG3651	FBGN0032974	0.148729	-0.05957	0.141316	-0.06698
Xpac	FBGN0004832	-0.08768	0.091786	-0.21369	-0.03422
CG43784	FBGN0264309	-0.85781	-0.75067	-1.04792	-0.94078
CG17196	FBGN0039368	-0.04112	0.140174	-0.10975	0.07155
Hsepi	FBGN0033087	0.02258	0.006689	0.011686	-0.0042
ICA69	FBGN0037050	-0.25519	-0.14966	-0.20733	-0.1018
CG32568	FBGN0052568	0.132398	-0.05514	0.210566	0.023027
CG11629	FBGN0032965	0.404037	0.055138	0.275242	-0.07366
CG15040	FBGN0030940	0.302596	-0.15242	0.521442	0.066431
mago	FBGN0002736	-0.138	0.06026	-0.18693	0.011325
CG12782	FBGN0034838	-0.31142	-0.1276	-0.28541	-0.10159
CysRS	FBGN0027091	-0.15542	0.001613	-0.22821	-0.07118
CR17438	FBGN0030116	-0.11899	0.013471	-0.19256	-0.0601
CG45493	FBGN0267049	-0.84937	-0.75149	-1.03887	-0.94099
Syn2	FBGN0034135	0.358519	-0.03766	0.519982	0.123802
CG9072	FBGN0030614	-0.2783	-0.11413	-0.16633	-0.00217
CG3040	FBGN0029925	-0.10167	-0.12001	-0.05446	-0.0728
CG7943	FBGN0039741	0.064803	0.120445	0.053058	0.1087
CG12129	FBGN0033475	-0.05278	0.184987	-0.32184	-0.08407
NetB	FBGN0015774	0.400813	-0.18561	0.498875	-0.08755
lncRNA:CR43912	FBGN0264513	-0.27855	-0.41144	0.165067	0.032178
INPP5E	FBGN0036273	0.056693	-0.08177	0.107892	-0.03057
dpr10	FBGN0052057	0.363277	-0.00681	0.368923	-0.00116
CG14812	FBGN0026090	-0.02268	0.108449	-0.03382	0.097307
Cyp4e1	FBGN0015034	-0.17556	0.044877	-0.29488	-0.07444
CG16978	FBGN0040972	-0.19466	-0.03243	-0.55581	-0.39357
Optix	FBGN0025360	0.082546	-0.12364	0.360782	0.154599
Sym	FBGN0037371	0.037212	-0.07313	0.000372	-0.10997
RhoGEF64C	FBGN0035574	-0.03205	-0.22351	0.315312	0.123851
CG31715	FBGN0051715	-0.02641	0.167589	-0.16892	0.025076
CG43108	FBGN0262568	-0.00214	0.08227	-0.05078	0.033629
comm3	FBGN0259236	0.05399	-0.00503	0.034439	-0.02458
alphaTub85E	FBGN0003886	-0.33306	-0.09772	-0.54322	-0.30788
CG31752	FBGN0051752	0.363897	-0.02576	0.246632	-0.14302
CG43293	FBGN0262985	-0.22413	0.035709	-0.19395	0.065891
Ccs	FBGN0010531	-0.02001	-0.03332	-0.0342	-0.04752
Mys45A	FBGN0033379	-0.08932	0.08998	-0.12531	0.053987
Rpn13R	FBGN0029745	0.019145	0.011687	-0.13506	-0.14252
Mob3	FBGN0259482	-0.13086	-0.0674	-0.26719	-0.20372
CG10026	FBGN0032785	-0.01457	-0.29094	0.072547	-0.20383
CG15309	FBGN0030183	0.082382	-0.1101	0.085142	-0.10734
oxt	FBGN0015360	-0.08843	0.000588	-0.16321	-0.0742
mRpL49	FBGN0030433	-0.26918	0.062911	-0.18665	0.145443
CG9631	FBGN0027563	-0.40057	-0.10005	0.311318	0.611837
CG32945	FBGN0052945	-0.35518	-0.10758	-0.40612	-0.15851
CG32087	FBGN0052087	-0.15081	-0.12489	-0.08921	-0.06329
CG13946	FBGN0040725	-0.52814	-0.43917	-0.08929	-0.00032

CG14400	FBGN0032896	0.6234	-0.2022	1.138539	0.312934
CG9445	FBGN0040674	-0.11073	0.051894	-0.21706	-0.05443
CG13185	FBGN0033661	0.010571	0.089937	0.219775	0.299141
Vha14-2	FBGN0037402	0.140053	0.15616	0.134788	0.150895
RpII15	FBGN0004855	-0.20867	0.07955	-0.344	-0.05579
CG31676	FBGN0051676	-0.10983	0.095787	-0.24724	-0.04161
CG5447	FBGN0039427	0.214128	0.212167	0.117596	0.115634
mRpS6	FBGN0035534	-0.43654	-0.06174	-0.51159	-0.1368
CG32278	FBGN0052278	-0.09336	0.02046	-0.10688	0.006947
Arp10	FBGN0031050	-0.13936	-0.06507	-0.07429	4.96E-06
CG17129	FBGN0035151	0.213195	0.04732	-0.0577	-0.22357
CG6013	FBGN0038675	-0.1715	-0.10452	-0.1231	-0.05612
asRNA:CR43152	FBGN0262682	0.060984	0.093053	-0.10683	-0.07476
PIG-O	FBGN0034346	-0.05268	0.054463	-0.24509	-0.13795
CG15312	FBGN0030174	0.395341	0.013382	0.427612	0.045652
rols	FBGN0041096	-0.01439	0.02015	-0.07929	-0.04475
CG31674	FBGN0051674	0.599138	0.170036	0.135392	-0.29371
PIG-L	FBGN0038763	0.046718	0.041043	0.056165	0.05049
CG32971	FBGN0052971	-0.28173	0.073523	-0.64457	-0.28931
CG3815	FBGN0029861	0.103122	-0.02779	0.105708	-0.02521
Ugalt	FBGN0024994	-0.10663	0.084857	-0.37573	-0.18424
Ns3	FBGN0266284	-0.05693	0.119374	0.024945	0.201249
CG12123	FBGN0030039	-0.0695	0.038561	-0.11374	-0.00568
CG45488	FBGN0267044	-0.77193	-0.7756	-0.85354	-0.85721
Alg3	FBGN0011297	-0.18917	-0.25029	0.192483	0.131362
CG9663	FBGN0031516	0.075378	0.084565	-0.0293	-0.02012
GABA-B-R1	FBGN0260446	0.25367	0.118938	0.187137	0.052404
CG11811	FBGN0036099	-0.19112	-0.09797	-0.18717	-0.09402
CG4927	FBGN0034139	2.048309	-0.79071	2.708973	-0.13004
CG13473	FBGN0036442	-0.09189	-0.04406	-0.14844	-0.10061
CG1552	FBGN0030258	-0.16518	-0.22064	0.366872	0.311413
Uxs	FBGN0035848	0.208802	-0.11654	0.353691	0.028347
Vps37B	FBGN0037299	-0.01754	0.07582	-0.04471	0.048659
CG3634	FBGN0037026	-0.01833	-0.0723	0.106317	0.052346
Bem46	FBGN0025109	-0.29807	-0.00172	-0.32095	-0.02461
CG6443	FBGN0032290	0.003082	0.170186	-0.17277	-0.00566
CG31821	FBGN0051821	0.464444	0.081335	0.11453	-0.26858
Uba3	FBGN0263697	0.071983	0.068564	-0.06492	-0.06833
CCAP	FBGN0039007	0.870143	0.963408	0.271525	0.36479
Pgant3	FBGN0027558	-0.14867	0.155608	-0.33826	-0.03399
CG14445	FBGN0029851	-0.65702	0.231665	-0.44788	0.440809
CG13540	FBGN0034839	-0.52943	-0.24031	-0.50558	-0.21646
bou	FBGN0261284	-0.34234	0.23896	-0.10639	0.474907
CG32121	FBGN0052121	0.216164	-0.09031	0.331882	0.025403
sds22	FBGN0028992	-0.13437	0.106462	-0.20175	0.039081
TFAM	FBGN0038805	-0.14465	-0.06712	-0.01537	0.062161
wb	FBGN0261563	0.036339	-0.05877	0.551408	0.4563
SKIP	FBGN0051163	0.329621	-0.0728	0.633697	0.231272
Ilp6	FBGN0044047	-0.09779	-0.36002	-0.26441	-0.52664
CG32669	FBGN0052669	0.115227	-0.02514	-0.15544	-0.29581
CG15599	FBGN0030667	-0.04814	0.043354	-0.26875	-0.17726
spab	FBGN0033358	0.084757	-0.11681	0.22291	0.021342
ghi	FBGN0266124	-0.13358	-0.07115	-0.20041	-0.13799
CG32176	FBGN0052176	0.012733	0.176355	-0.03493	0.128694
CG33285	FBGN0053285	-0.2217	-0.10769	-0.03411	0.079907
CG17199	FBGN0038775	-0.08551	-0.1595	-0.06507	-0.13906
rig	FBGN0250850	-0.10817	-0.03584	-0.25167	-0.17934
lncRNA:CR43489	FBGN0263500	-0.22245	-0.05658	-0.41027	-0.24439
Hdc	FBGN0005619	0.266247	-0.23251	0.451902	-0.04686
Mst77Y-7	FBGN0267492	0.573867	-0.08279	0.067842	-0.58881
Gba1b	FBGN0051414	0.093545	-0.35968	0.73293	0.279704
Ugt303B3	FBGN0039085	0.172347	0.358999	-0.07159	0.115067
CG32718	FBGN0052718	-0.27406	0.084542	-0.53486	-0.17626
CG12446	FBGN0031201	-0.10054	-0.28091	0.329904	0.149533
CG33156	FBGN0053156	-0.14001	-0.09953	0.052876	0.093349
noi	FBGN0014366	-0.01472	0.056478	-0.00116	0.070044
Plod	FBGN0036147	0.201144	0.087134	0.422217	0.308207
CG8180	FBGN0034021	-0.24095	-0.09762	-0.07701	0.066314
CG7154	FBGN0031947	-0.04112	0.090943	0.076538	0.208601

Atg4b	FBGN0038325	-0.11266	-0.07327	0.104943	0.144335
Rlip	FBGN0026056	0.051206	-0.03122	0.221094	0.138668
CG10802	FBGN0029664	-0.00903	-0.06468	-0.34859	-0.40423
CG12279	FBGN0038080	-0.04742	-0.05935	-0.06368	-0.07562
c12.1	FBGN0040235	-0.15274	-0.06049	-0.16208	-0.06983
Dcr-1	FBGN0039016	0.167371	0.064354	0.081697	-0.02132
dmt	FBGN0278604	0.143473	0.122952	0.072038	0.051517
CG43209	FBGN0262845	-0.14674	-0.07742	-0.33234	-0.26303
Arpc3A	FBGN0038369	-0.21597	0.004423	-0.47946	-0.25907
ths	FBGN0033652	0.295107	0.035804	0.432681	0.173378
mRpL3	FBGN0030686	0.047593	0.118513	-0.05369	0.017232
CG31924	FBGN0051924	-0.17947	-0.00889	-0.01276	0.157807
CG14464	FBGN0033000	-0.36967	-0.26764	-0.25741	-0.15538
Cyp6u1	FBGN0033121	-0.13399	-0.01728	-0.07677	0.039933
thoc7	FBGN0035110	-0.02156	0.182199	-0.20017	0.003586
Nup154	FBGN0021761	-0.02247	-0.12506	0.070852	-0.03174
NiPp1	FBGN0026402	-0.33267	-0.14161	-0.22387	-0.03281
stumps	FBGN0020299	0.104845	-0.02223	0.206828	0.079758
Uhg5	FBGN0083123	-0.2231	0.039407	0.176494	0.438997
CG18745	FBGN0042102	-0.0159	0.458073	-1.04932	-0.57535
geminin	FBGN0033081	-0.18337	0.058855	-0.23954	0.002691
Syt12	FBGN0261085	0.367049	-0.49793	-0.01666	-0.88163
CG40198	FBGN0058198	1.695758	0.16725	0.904085	-0.62442
mspo	FBGN0020269	0.17222	-0.15057	0.33956	0.016775
Tgi	FBGN0036373	0.218854	0.125392	0.168567	0.075105
CG12868	FBGN0033945	0.21015	0.371845	-0.15633	0.005361
sinu	FBGN0010894	-0.00899	0.133103	-0.1253	0.016797
Adh	FBGN0000055	1.077484	0.082404	1.115495	0.120415
CG45603	FBGN0267163	-0.19009	-0.01763	-0.24823	-0.07576
Boot	FBGN0033374	0.937266	-0.16019	0.269813	-0.82765
Etl1	FBGN0032157	-0.04997	0.007715	-0.02967	0.028019
Srp9	FBGN0035827	-0.25077	0.000376	-0.30194	-0.05079
BORCS5	FBGN0030346	0.177305	-0.0778	0.040806	-0.21429
snRNP-U1-C	FBGN0261792	-0.08723	0.138142	-0.11661	0.108766
CG8149	FBGN0037700	-0.08762	0.003606	-0.02506	0.066163
CG30411	FBGN0050411	-0.15353	0.077946	-0.32845	-0.09697
CG9107	FBGN0031764	-0.00878	0.059711	-0.53914	-0.47065
CG3009	FBGN0029720	0.217231	0.063995	0.244442	0.091205
CG15458	FBGN0040651	-0.0659	0.185359	-0.21448	0.036782
CG11842	FBGN0039629	0.113892	-0.00481	0.148065	0.029359
CG15141	FBGN0032635	-0.08739	0.08272	-0.09988	0.07023
cold	FBGN0031268	-0.21311	0.141116	-0.25315	0.10107
SP1029	FBGN0263236	-0.40964	-0.16331	0.020115	0.266443
Start1	FBGN0035028	0.172404	0.217773	0.164267	0.209637
RSG7	FBGN0024941	0.399041	0.026869	0.466207	0.094036
mRpS16	FBGN0033907	-0.2309	-0.0655	-0.43428	-0.26888
Pp4-19C	FBGN0023177	0.000394	0.081371	-0.0994	-0.01843
cin	FBGN0000316	-0.00615	0.102759	-0.17239	-0.06347
Prp19	FBGN0261119	-0.31479	-0.02027	-0.29289	0.001632
Sec3	FBGN0266669	0.045386	0.095216	-0.09261	-0.04278
CG13367	FBGN0025634	-0.14208	0.136612	-0.00701	0.271682
Hem	FBGN0011771	0.02233	0.087492	0.031747	0.096909
CG32815	FBGN0052815	0.145375	-0.17317	0.34722	0.028678
Nmnat	FBGN0039254	-0.037	0.015708	0.082505	0.135217
mRpL24	FBGN0031651	-0.07217	0.028746	-0.08853	0.012387
CG8170	FBGN0033365	-0.23485	0.144866	-0.12694	0.252777
CG16743	FBGN0032322	0.117531	-0.10879	0.50256	0.276243
r2d2	FBGN0031951	-0.05098	-0.0506	0.140744	0.14112
Uba4	FBGN0032054	0.071014	0.04256	0.037336	0.008883
RASSF8	FBGN0261986	0.04184	0.097813	0.070523	0.126496
tplus3b	FBGN0051703	0.137053	0.055786	-0.26623	-0.3475
scaf	FBGN0033033	-0.15628	0.120146	-0.05795	0.218478
Rab40	FBGN0030391	-0.03455	0.117464	0.402098	0.554113
stil	FBGN0003527	-0.20654	-0.06294	-0.36776	-0.22416
Actbeta	FBGN0024913	0.313797	0.003621	0.40999	0.099815
CG9722	FBGN0038209	-0.17343	-0.0339	-0.30889	-0.16936
CG31627	FBGN0051627	0.09445	-0.09367	0.027698	-0.16042
Task6	FBGN0038165	0.102172	0.094761	0.0608	0.053389
Tep3	FBGN0041181	-0.0416	0.042437	-0.03854	0.045496

CG3732	FBGN0034750	-0.07725	-0.01748	-0.04765	0.012113
CG17260	FBGN0031498	0.016502	0.078167	-0.09881	-0.03714
Gle1	FBGN0033316	-0.081	0.051426	-0.09424	0.038189
CG15870	FBGN0033798	-0.02283	0.304292	0.015862	0.342983
CG4679	FBGN0033816	0.099881	0.002242	0.256961	0.159322
Phs	FBGN0036522	-0.16395	0.038772	-0.14318	0.059537
hpRNA:CR33940	FBGN0062928	0.432198	-0.07082	0.11706	-0.38596
CG15262	FBGN0028852	-0.16789	0.052807	-0.35036	-0.12966
CG30466	FBGN0050466	0.152012	0.010495	0.123861	-0.01766
CG33506	FBGN0053506	-0.34091	-0.02048	-0.48092	-0.16049
CG2846	FBGN0014930	-0.06706	-0.04592	0.03933	0.060467
CG33217	FBGN0053217	0.031379	0.112658	-0.13467	-0.05339
Rtca	FBGN0025630	0.001722	0.287518	0.083831	0.369628
LanA	FBGN0002526	0.046017	0.083461	-0.1535	-0.11606
Shawl	FBGN0085395	-0.31752	0.282791	-0.77606	-0.17575
CG12111	FBGN0030050	0.040844	-0.13309	0.093918	-0.08001
CG12316	FBGN0036483	-0.04689	0.064011	-0.04753	0.063377
Neto	FBGN0265416	0.101566	0.006689	0.876178	0.781301
Vps50	FBGN0034271	0.04898	0.048998	0.020079	0.020096
Nepl10	FBGN0033742	1.443913	0.233718	1.272744	0.062549
Mst77Y-4	FBGN0267490	-0.24334	-0.00366	-0.38621	-0.14654
CG7523	FBGN0038533	-0.01835	0.097094	-0.01224	0.103205
CG43339	FBGN0263078	0.145166	0.157269	-0.09196	-0.07985
CG13604	FBGN0039137	0.04067	0.143533	0.042515	0.145378
CG4849	FBGN0039566	0.025759	0.114393	0.081441	0.170075
Wnt5	FBGN0010194	0.731815	0.505712	0.170951	-0.05515
ari-2	FBGN0025186	0.072357	-0.0358	0.094115	-0.01404
St3	FBGN0265052	-0.01555	0.075097	0.100722	0.191368
CG32483	FBGN0052483	-0.19471	-0.01029	-0.36907	-0.18465
CG32039	FBGN0052039	-0.01562	0.110429	-0.23294	-0.10689
lncRNA:CR44908	FBGN0266213	-0.26179	0.076013	-0.405	-0.0672
Haspin	FBGN0046706	-0.03763	0.044584	-0.1656	-0.08339
CG8841	FBGN0033713	0.120133	0.036751	0.044232	-0.03915
CG15930	FBGN0029754	-0.93173	-0.00418	-1.09657	-0.16902
beat-IIa	FBGN0038498	0.371823	0.073332	0.518675	0.220185
sav	FBGN0053193	0.152886	0.14018	0.274094	0.261388
Mccc2	FBGN0042083	0.077163	-0.00853	0.214818	0.129126
PGRP-LE	FBGN0030695	0.075484	0.034462	0.041999	0.000978
CG13086	FBGN0032770	0.042445	-0.26503	0.588992	0.281518
comm	FBGN0010105	0.127621	-0.10021	0.370448	0.142614
disco-r	FBGN0285879	0.271649	-0.12509	0.502357	0.10562
lok	FBGN0019686	-0.30456	0.237467	-0.55	-0.00797
CG11964	FBGN0037644	0.010983	0.009535	0.013615	0.012167
mal	FBGN0002641	0.217887	0.26551	-0.09477	-0.04715
Ptip	FBGN0052133	0.383086	0.06598	0.622158	0.305053
CG11294	FBGN0030058	-0.12493	-0.14138	0.047009	0.030557
CG5323	FBGN0034362	-0.24421	0.155116	-0.05283	0.346502
RpI1	FBGN0019938	-0.13098	0.028445	-0.06182	0.09761
Taf12L	FBGN0031623	-0.73908	-0.34806	-0.50275	-0.11174
CG31093	FBGN0051093	-0.31483	-0.11076	-0.32722	-0.12315
CG10638	FBGN0036290	-0.0206	0.145859	-0.01924	0.147217
EMC5	FBGN0032732	-0.18455	0.087976	-0.30678	-0.03426
morgue	FBGN0027609	-0.13083	-0.05064	-0.16614	-0.08596
Qtzl	FBGN0051864	0.1454	0.187498	0.287515	0.329614
CG17036	FBGN0032449	0.368679	0.449662	0.11146	0.192443
Ote	FBGN0266420	-0.43059	0.037671	-0.63096	-0.1627
CG14339	FBGN0031301	0.026494	-0.05051	0.130839	0.05383
mRpL48	FBGN0031357	-0.26142	-0.01601	-0.31971	-0.0743
CG5599	FBGN0030612	0.243323	0.039331	0.343178	0.139185
IPIP	FBGN0031768	-0.01698	0.007536	-0.02116	0.003356
tbrd-3	FBGN0050417	-0.1659	0.632193	-1.18305	-0.38496
MTPAP	FBGN0024360	-0.1366	-0.02114	-0.12661	-0.01115
CG6300	FBGN0038730	1.515067	-0.35893	1.573801	-0.3002
CG34460	FBGN0085489	-0.47887	-0.09606	-0.48087	-0.09806
Hug	FBGN0028374	0.250507	0.09202	0.353248	0.19476
CG12917	FBGN0033490	-0.01663	-0.0715	0.170577	0.115704
CG5662	FBGN0030620	-0.20073	-0.01341	-0.11128	0.076043
Psf2	FBGN0261976	0.30045	-0.1147	0.402517	-0.01263
Cdc5	FBGN0265574	0.098321	0.010797	0.177095	0.089572

jing	FBGN0086655	0.205426	0.040145	0.326247	0.160966
CG10384	FBGN0034731	0.512828	0.06278	0.667866	0.217818
topi	FBGN0037751	0.10896	0.00145	0.055522	-0.05199
DCP1	FBGN0034921	-0.18491	-0.08479	0.004683	0.104798
AspRS	FBGN0002069	0.139911	0.167638	0.076034	0.10376
Mdr65	FBGN0004513	-0.38575	0.048917	-0.19326	0.241409
Skeletor	FBGN0262717	-0.33502	-0.14543	-0.68509	-0.4955
CG13698	FBGN0036773	0.036075	0.085804	-0.18239	-0.13266
PGRP-SC1a	FBGN0043576	-0.07391	1.407786	0.646879	2.128573
UQCR-14L	FBGN0039576	-0.208	0.015511	-0.24787	-0.02435
coil	FBGN0033265	0.035147	-0.02955	-0.05919	-0.12389
lncRNA:CR46194	FBGN0267913	0.1746	0.042611	0.163495	0.031507
Cog7	FBGN0051040	-0.19103	0.062778	-0.3426	-0.08879
CG5180	FBGN0043457	-0.00197	-0.04939	-0.12382	-0.17124
CG6024	FBGN0036202	0.503955	0.011291	0.479716	-0.01295
Cyp9h1	FBGN0033775	0.548309	0.185937	0.448849	0.086478
CG18417	FBGN0035780	-0.03147	-0.4573	0.440006	0.014174
CG14184	FBGN0036932	0.162998	0.055309	0.063605	-0.04408
PIG-G	FBGN0033187	0.017522	0.090932	-0.05166	0.021749
CG9304	FBGN0034674	-0.02214	-0.08105	-0.05483	-0.11374
lncRNA:CR44017	FBGN0264787	1.164122	-0.88563	3.200904	1.151151
CG13488	FBGN0034670	-0.42364	0.621227	-1.21141	-0.16654
Oscillin	FBGN0031717	-0.05606	-0.02163	-0.10819	-0.07377
Sbat	FBGN0051950	0.126046	-0.13294	0.124009	-0.13497
mRpL37	FBGN0261380	0.0086	-0.03233	0.10023	0.059301
SmB	FBGN0262601	-0.23844	0.008334	-0.21307	0.033703
CG42709	FBGN0261674	0.227803	0.034358	0.106955	-0.08649
CG7728	FBGN0036686	-0.03042	0.083117	-0.16586	-0.05233
CG12589	FBGN0040684	-0.1909	0.216838	-0.38293	0.024802
CG44837	FBGN0266100	0.625179	0.001841	0.630155	0.006817
CG10333	FBGN0032690	-0.09354	0.049166	-0.12415	0.018555
Sfp38D	FBGN0261058	-0.1026	-0.16501	0.004185	-0.05823
TwdlM	FBGN0039434	-4.67348	-0.37518	-4.44351	-0.14521
Neos	FBGN0024542	0.056868	-0.07041	0.074562	-0.05272
Tsp39D	FBGN0032943	0.03572	-0.09006	0.075595	-0.05018
nclb	FBGN0263510	-0.19163	0.045847	-0.15464	0.082839
Nup50	FBGN0033264	-0.16493	0.053607	-0.16386	0.054674
CG43691	FBGN0263774	-0.00801	-0.00192	0.168745	0.174838
CG9588	FBGN0038166	-0.14516	-0.04647	-0.05636	0.042326
CG14708	FBGN0037910	-0.09202	-0.06172	-0.33726	-0.30696
CG2053	FBGN0039887	-0.05094	0.030321	-0.19368	-0.11241
Snmp1	FBGN0260004	0.021218	0.144045	0.016658	0.139485
LKRSDH	FBGN0286198	0.130453	0.060396	-0.06796	-0.13801
CG12729	FBGN0029816	-0.23737	0.027355	-0.27184	-0.00711
Taf2	FBGN0011836	-0.04251	-0.03891	-0.09507	-0.09146
CG31126	FBGN0051126	-0.05722	0.092232	0.189959	0.339413
Cyp4g15	FBGN0030304	-0.09294	-0.09666	0.0499	0.04618
cactin	FBGN0031114	-0.04311	0.096044	-0.01954	0.11962
cos	FBGN0000352	0.199131	-0.02792	0.343497	0.116447
M1BP	FBGN0037621	-0.05524	0.11327	-0.13633	0.03218
CG8141	FBGN0038125	-0.27455	0.120787	-0.29911	0.096227
holn1	FBGN0032250	-0.32758	0.01237	-0.44354	-0.10359
CG13795	FBGN0031937	0.366988	-0.08653	0.551169	0.09765
CG31324	FBGN0051324	-0.36703	-0.50778	0.078084	-0.06266
CG31704	FBGN0051704	0.126857	-0.1923	0.487851	0.168698
PR-Set7	FBGN0011474	0.107436	0.03448	-0.0437	-0.11665
CG13365	FBGN0029529	-0.21578	0.062334	-0.18907	0.089044
l(1)10Bb	FBGN0001491	-0.13355	0.029695	-0.18122	-0.01797
Xpd	FBGN0261850	-0.19109	0.022918	-0.3504	-0.13639
Syn1	FBGN0037130	0.264752	-0.1398	0.379434	-0.02511
CG7810	FBGN0032017	-0.58001	0.016572	-0.69318	-0.0966
CG11318	FBGN0039818	0.287483	1.066493	-1.58257	-0.80357
CG4477	FBGN0035971	0.137851	0.020233	-0.02278	-0.1404
EndoU	FBGN0038381	0.064149	0.239751	-0.1608	0.0148
ssp	FBGN0036248	0.033402	0.018542	-0.00589	-0.02075
alpha-Catr	FBGN0029105	0.164305	-0.34989	0.269014	-0.24518
msb1l	FBGN0027949	0.066643	-0.05029	0.015229	-0.10171
CG15803	FBGN0038606	-0.21248	-0.63461	0.448875	0.026753
JhI-21	FBGN0028425	-0.10938	-0.00216	-0.20371	-0.0965

CG15059	FBGN0030905	-0.18275	0.141688	-0.31354	0.0109
crn	FBGN0000377	-0.12694	0.049339	-0.01609	0.160186
p115	FBGN0040087	-0.0117	0.04957	-0.06384	-0.00257
CG30094	FBGN0050094	-0.31398	-0.0972	-0.36623	-0.14945
CG42260	FBGN0259145	0.486969	0.001842	0.642498	0.157371
lncRNA:CR32553	FBGN0052553	-2.42535	-0.82282	-0.75155	0.85098
Pex16	FBGN0037019	-0.03369	0.08835	-0.20506	-0.08302
CG17002	FBGN0033122	-0.14103	-0.01323	-0.07853	0.049269
CG12477	FBGN0036809	-0.33207	0.052012	-0.68719	-0.3031
CG11756	FBGN0030290	-0.26516	-0.15756	0.006477	0.114084
mGluR	FBGN0019985	0.542802	0.197309	0.616816	0.271323
CG14419	FBGN0029639	-1.44486	1.668249	-2.49211	0.62099
CG13760	FBGN0040375	0.103075	0.044964	-0.01313	-0.07124
CG4733	FBGN0038744	0.072352	-0.0986	0.181905	0.010951
CG6225	FBGN0038072	0.012697	-0.02516	0.100806	0.062951
CG42399	FBGN0259818	0.160985	-0.13217	0.230728	-0.06242
sns	FBGN0024189	0.363471	0.056673	0.517038	0.210241
lncRNA:CR46007	FBGN0267671	0.720523	0.510264	-0.11499	-0.32525
hng1	FBGN0034599	0.082835	0.119513	0.043543	0.08022
kek6	FBGN0039862	0.324231	-0.20362	0.483722	-0.04412
CG14070	FBGN0032313	0.015613	-0.05992	-0.0962	-0.17173
Drice	FBGN0019972	0.372037	0.334322	0.080259	0.042545
CG31955	FBGN0051955	0.829338	0.267038	0.007058	-0.55524
CG12828	FBGN0033145	-0.39197	-0.18241	-0.40243	-0.19288
CG31265	FBGN0051265	0.210101	0.208544	-0.47165	-0.47321
Art1	FBGN0037834	-0.02847	0.061268	-0.11174	-0.02201
CG43902	FBGN0264503	0.226942	-0.07882	0.537784	0.23202
Cdk5	FBGN0013762	-0.18249	0.073303	-0.18446	0.071328
CG12502	FBGN0035171	0.19881	0.123062	0.350287	0.274539
CG33288	FBGN0053288	0.113534	0.01751	0.493229	0.397205
Pgant1	FBGN0034025	-0.16086	-0.13465	-0.13409	-0.10788
CG1983	FBGN0039751	0.037795	0.112101	0.012813	0.087119
CG43069	FBGN0262479	-0.00382	0.030841	0.045767	0.080426
PIG-U	FBGN0032052	-0.10575	0.090527	-0.32844	-0.13217
CG10822	FBGN0034478	-0.18676	-0.12991	-0.13272	-0.07587
CG44142	FBGN0264991	-3.0304	-1.23194	-1.08128	0.717191
CG13003	FBGN0030798	-0.13518	-0.29015	0.095836	-0.05913
CG6356	FBGN0039178	-0.19378	-0.29059	0.191767	0.094959
CG3735	FBGN0034933	-0.11291	0.14213	0.317454	0.572489
CG30022	FBGN0050022	-0.00589	0.026433	-0.10972	-0.0774
CG34170	FBGN0085199	-0.16411	0.027998	-0.10915	0.082957
mRpL39	FBGN0036462	-0.22546	0.1648	-0.45044	-0.06018
CG6236	FBGN0038318	-0.15823	0.02538	-0.23481	-0.0512
Hil	FBGN0050147	0.097171	-0.02184	0.249528	0.130523
CG2656	FBGN0037478	-0.30872	-0.11989	-0.08137	0.107464
CG14053	FBGN0029603	-0.05251	-0.0199	-0.12141	-0.0888
CG14669	FBGN0037326	0.239814	0.043226	0.455706	0.259118
Ekar	FBGN0039916	0.423446	-0.39766	0.527268	-0.29383
CG34459	FBGN0085488	0.03759	-0.11077	0.065732	-0.08263
smal	FBGN0085409	0.246714	-0.06916	0.376664	0.060789
Best3	FBGN0036492	-0.14443	0.23232	-0.50651	-0.12976
CR45773	FBGN0267420	-1.75428	0.072174	-0.28105	1.545403
mRpL46	FBGN0035272	-0.20802	-0.08272	-0.10224	0.023059
CG7646	FBGN0036926	-0.09321	-0.04895	-0.0628	-0.01854
Ada2b	FBGN0037555	0.001547	-0.02559	0.040837	0.0137
CG5664	FBGN0037082	-0.1087	0.033793	-0.23951	-0.09702
CG32727	FBGN0265265	-0.45761	-0.01991	-0.42579	0.011903
elfless	FBGN0032660	-0.10798	-0.11032	-0.13278	-0.13512
CG13796	FBGN0031939	0.348745	0.058453	0.632629	0.342337
hpo	FBGN0261456	0.118197	-0.0877	0.213198	0.007302
CG5986	FBGN0043455	-0.15318	0.103247	-0.07191	0.184525
Arp6	FBGN0011741	-0.09426	0.005288	-0.08163	0.017922
CG3285	FBGN0031522	-0.21696	-0.29616	-0.22233	-0.30153
bonsai	FBGN0026261	-0.19052	0.015893	-0.17	0.036411
CG30432	FBGN0050432	-0.23431	0.093232	-0.30782	0.019724
CG42810	FBGN0261992	-0.23039	0.000321	-0.41701	-0.18629
CG17005	FBGN0032109	-0.19178	-0.01202	-0.23791	-0.05815
lncRNA:CR43909	FBGN0264510	-0.11595	-0.04806	-0.18338	-0.11548
Trl	FBGN0013263	0.176995	0.125547	0.289617	0.238169

CG32488	FBGN0052488	-0.12002	-0.09517	-0.19422	-0.16938
mwh	FBGN0264272	0.340415	-0.00063	0.382428	0.041381
CG15408	FBGN0031523	-0.12601	-0.31064	-0.04461	-0.22924
CG30394	FBGN0050394	-0.08983	-0.01298	-0.14214	-0.06528
Cyp9f3	FBGN0038034	-0.04769	0.088736	-0.28115	-0.14473
CG12078	FBGN0035426	-0.26744	-0.03295	-0.20193	0.032564
dlp	FBGN0041604	0.071283	-0.09981	-0.1572	-0.3283
CG32850	FBGN0052850	-0.02096	-0.04593	-0.0793	-0.10427
pasi2	FBGN0037680	-0.39677	-0.00906	-0.38683	0.000879
SLC22A	FBGN0037140	-0.14005	-0.25256	-0.01386	-0.12637
Pex10	FBGN0035233	-0.11339	0.119778	-0.32655	-0.09338
CG11586	FBGN0035520	-0.27478	-0.08335	-0.17637	0.015055
CG5613	FBGN0030839	0.142935	0.061449	0.008167	-0.07332
CG3491	FBGN0028887	0.028961	-0.01323	0.031545	-0.01065
CG5149	FBGN0031904	0.122642	0.088582	-0.17298	-0.20704
CG14834	FBGN0035768	0.072444	0.056438	-0.17363	-0.18964
so	FBGN0003460	0.104974	0.210336	0.129689	0.235051
CG15011	FBGN0035518	-0.01908	0.046475	-0.23482	-0.16926
htl	FBGN0010389	0.135138	-0.04365	0.189814	0.011026
CG43373	FBGN0263131	0.41894	-0.20141	0.813326	0.192974
CG11753	FBGN0037603	-0.20878	0.021657	-0.2786	-0.04817
CG7565	FBGN0035833	0.112406	0.133621	-0.05391	-0.0327
Mat1	FBGN0024956	-0.10859	0.058191	-0.15265	0.014129
Mettl3	FBGN0039139	0.151875	-0.00976	-0.155	-0.31663
MFS15	FBGN0034392	-0.02937	-0.11133	0.021982	-0.05997
SppL	FBGN0039381	0.062635	-0.04941	0.310075	0.198029
CG3156	FBGN0023536	-0.1126	0.021845	-0.1112	0.023243
HP4	FBGN0035829	-0.41512	-0.07863	-0.42017	-0.08367
CG13871	FBGN0034502	-0.02908	-0.03227	-0.05763	-0.06082
CG7149	FBGN0031948	-0.01691	-0.18148	0.125376	-0.03919
CG33307	FBGN0053307	-0.53954	-0.33817	0.112384	0.313754
MED30	FBGN0035149	-0.39279	-0.14148	-0.43987	-0.18856
CG11593	FBGN0035488	0.103157	0.007457	0.152016	0.056317
CG12811	FBGN0037779	-0.03626	0.039507	0.138317	0.214081
kin17	FBGN0024887	-0.15815	0.024261	-0.0918	0.090606
mRpL15	FBGN0036990	-0.12653	0.011303	-0.13793	-9.66E-05
CG43322	FBGN0263027	-0.32929	0.109545	-0.60289	-0.16406
Doc1	FBGN0028789	-0.70202	-0.15885	-0.33393	0.209234
CG8299	FBGN0034052	-0.72466	-0.42907	-0.94634	-0.65075
Ugt37B1	FBGN0026755	1.186168	-0.3564	1.721118	0.178547
Pmm2	FBGN0036300	-0.05153	-0.09058	0.04234	0.003291
Arc2	FBGN0033928	-0.20788	0.201187	-0.52197	-0.1129
abd-A	FBGN0000014	0.086839	-0.15691	0.598657	0.354906
lncRNA:CR46043	FBGN0267710	0.237017	-0.49484	-0.44227	-1.17413
Rat1	FBGN0031868	0.431325	0.147706	0.260275	-0.02334
CR13656	FBGN0039307	-2.38571	-1.74859	-0.2631	0.374013
CG8569	FBGN0033752	0.01709	-0.07394	-0.09098	-0.18202
CG12730	FBGN0029771	-0.17905	0.073399	-0.10791	0.144542
Rev1	FBGN0035150	-0.06124	-0.0478	-0.19369	-0.18025
Gasz	FBGN0033273	-0.35374	-0.20147	-0.19864	-0.04636
CG32243	FBGN0052243	0.028659	0.178111	-0.4546	-0.30514
CG9270	FBGN0032908	0.526779	0.282331	0.159597	-0.08485
Nepl17	FBGN0039609	0.62512	-0.15031	0.730434	-0.04499
Gbp1	FBGN0034199	0.143498	0.08606	0.046547	-0.01089
kl-5	FBGN0267433	0.230108	0.033497	0.204355	0.007744
5-HT2A	FBGN0087012	0.179978	-0.10151	0.386732	0.105241
CG12784	FBGN0038356	-0.03795	0.002603	-0.07303	-0.03248
fand	FBGN0033859	-0.10276	-0.00014	0.00775	0.110373
CG18635	FBGN0034279	-0.23287	0.56155	-1.39795	-0.60353
stwl	FBGN0003459	-0.03639	-0.17984	-0.03797	-0.18143
Top3alpha	FBGN0040268	-0.09244	0.054205	-0.09925	0.047395
CG12310	FBGN0036467	-0.36965	-0.18872	-0.14213	0.038802
fa2h	FBGN0050502	-0.04317	0.55844	-1.04662	-0.44501
Mst77Y-13	FBGN0267491	-0.82227	-0.1239	-0.19796	0.500413
CG31469	FBGN0051469	-0.00497	0.268071	-0.88567	-0.61263
CG10376	FBGN0032702	0.032001	-0.00357	0.173415	0.137849
CG33947	FBGN0083068	-0.07159	0.024141	-0.25758	-0.16185
yip3	FBGN0040063	-0.57441	0.004585	-0.5297	0.049293
CG13481	FBGN0036421	-0.06857	0.151301	-0.24159	-0.02173

CG8320	FBGN0034059	-0.30659	0.009623	-0.37851	-0.0623
Trax	FBGN0038327	-0.25486	0.029815	-0.30267	-0.018
CG1234	FBGN0037489	0.017081	0.085013	-0.11429	-0.04635
OtopLc	FBGN0259150	0.454185	-0.20079	0.726186	0.07121
sif	FBGN0085447	0.892075	-0.25636	1.435828	0.287395
ken	FBGN0011236	-0.22391	0.00995	-0.11288	0.120974
CG5287	FBGN0032477	0.231158	0.100962	0.17807	0.047874
DNApol-iota	FBGN0037554	0.080584	0.019554	0.1494	0.08837
GNBP2	FBGN0040322	-0.0256	-0.07259	0.205781	0.158788
kirre	FBGN0028369	0.067343	0.388902	0.342598	0.664157
CCY	FBGN0267592	0.175507	0.094528	0.077389	-0.00359
CG6985	FBGN0039017	0.323785	0.281335	0.448351	0.405902
salm	FBGN0261648	0.469656	-0.09805	0.575111	0.0074
CG12945	FBGN0037755	0.157645	0.079662	0.144153	0.06617
rho-5	FBGN0041723	0.132702	-0.13278	0.351241	0.085761
CG10764	FBGN0034221	-1.03076	-0.14196	-2.48859	-1.59978
Wdr81	FBGN0032395	0.263455	0.0134	0.416862	0.166807
Taf10	FBGN0028398	-0.17465	0.040784	-0.11176	0.103676
wls	FBGN0036141	0.091352	0.073349	-0.09315	-0.11115
CG34357	FBGN0085386	0.382559	-0.01331	0.455342	0.059469
CG8372	FBGN0032000	-0.04445	0.032471	-0.05776	0.019154
Odj	FBGN0038551	-0.05907	0.11922	-0.10404	0.074252
CG2116	FBGN0030003	0.037862	0.150832	-0.06299	0.049978
CG14191	FBGN0030981	0.823309	-0.93176	0.936637	-0.81843
CG18268	FBGN0037520	0.152894	0.043496	0.169237	0.059839
CG11099	FBGN0034485	-0.00998	-0.26067	0.238277	-0.01242
Acbp1	FBGN0031992	-0.0471	-0.08954	0.030871	-0.01157
SmF	FBGN0000426	-0.37153	0.040841	-0.42997	-0.01759
DCTN3-p24	FBGN0010622	-0.10862	0.126729	-0.12727	0.108077
CG5104	FBGN0037009	-0.08167	0.113548	-0.18341	0.011816
Obp18a	FBGN0030985	-0.64152	-0.67232	0.299951	0.26915
CG4041	FBGN0029736	0.032703	0.048234	0.089047	0.104578
tub	FBGN0003882	-0.03567	0.034491	-0.10109	-0.03093
Ser	FBGN0004197	0.593723	0.110167	0.735869	0.252312
Cap-H2	FBGN0037831	0.024178	0.037252	0.046653	0.059727
Cyp12e1	FBGN0037817	-0.03014	-0.08938	0.202758	0.143511
CG8132	FBGN0037687	0.14041	0.05574	0.166294	0.081624
CG13601	FBGN0039126	-0.20376	-0.02657	-0.17543	0.001758
CG14805	FBGN0023514	0.141355	-0.06208	0.245972	0.042536
CG14440	FBGN0029894	0.151372	0.000535	0.275383	0.124546
CG32944	FBGN0052944	-0.05851	-0.06878	-0.01453	-0.02479
mRpL27	FBGN0053002	-0.15474	0.060211	-0.20303	0.011921
Sec20	FBGN0037383	-0.14307	-0.022	-0.59828	-0.47721
CG2003	FBGN0039886	0.012419	0.35567	-0.40798	-0.06473
r-l	FBGN0003257	0.16232	0.066549	0.029612	-0.06616
Muc4B	FBGN0052774	0.746895	-0.39877	-6.59999	-7.74565
D19B	FBGN0022699	-0.05263	-0.05895	0.081058	0.074734
CG32221	FBGN0052221	-0.13055	-0.00885	-0.17682	-0.05512
stan	FBGN0024836	0.615332	0.112967	0.904854	0.40249
CG12769	FBGN0033252	0.576836	0.020866	0.828493	0.272523
Nepl16	FBGN0039277	0.231468	8.68E-05	0.161272	-0.07011
CG33969	FBGN0053969	-0.04094	0.070752	-0.17342	-0.06172
CG32756	FBGN0052756	-0.10729	-0.15761	-0.12029	-0.1706
CG30060	FBGN0265272	-0.23173	-0.12182	-0.1461	-0.03619
Sfp23F	FBGN0259949	-0.36469	-0.31363	-0.35991	-0.30886
Cpsf100	FBGN0027873	-0.02839	0.042101	-0.23621	-0.16572
Tim9a	FBGN0030480	-0.2887	-0.07321	-0.36994	-0.15445
side-III	FBGN0083949	0.411072	-0.04179	0.491411	0.038554
HPS1	FBGN0033973	0.151389	-0.04473	0.664523	0.468401
CG10887	FBGN0038773	-0.05296	0.073522	-0.38913	-0.26265
CG9084	FBGN0033582	0.256407	0.911454	-0.9969	-0.34186
e(y)2b	FBGN0040670	-0.01963	-0.06599	-0.16278	-0.20914
msl-3	FBGN0002775	-0.17415	0.086704	-0.23891	0.021944
Cdk1	FBGN0004106	-0.44882	-0.11482	-0.66236	-0.32836
Spn28Dc	FBGN0031973	-0.20476	0.059735	-0.28013	-0.01563
CG7275	FBGN0036500	-0.20157	0.028312	-0.23657	-0.00669
CG40439	FBGN0058439	-0.19791	-0.01498	-0.17554	0.007384
Fbw5	FBGN0031773	0.086715	-0.05447	0.336858	0.195675
Sema2b	FBGN0264273	0.467223	0.065152	0.558561	0.15649

nxf4	FBGN0051501	-0.14712	0.0262	-0.2389	-0.06558
Mmp2	FBGN0033438	0.032443	0.134664	-0.002	0.100222
CG15296	FBGN0030215	-0.22983	-0.00377	-0.2148	0.011259
lncRNA:CR44412	FBGN0265585	0.70669	0.089126	0.502069	-0.11549
CG15461	FBGN0040649	-0.40936	-0.14515	-0.38399	-0.11978
PPYR1	FBGN0030623	-0.29281	-0.10236	-0.10098	0.08946
CG1628	FBGN0030218	-0.14362	-0.11483	0.118824	0.147615
lncRNA:CR44744	FBGN0265957	-0.10882	0.081199	-0.41457	-0.22455
lncRNA:CR43847	FBGN0264429	-0.0738	0.513701	-1.86127	-1.27377
insc	FBGN0011674	0.032088	0.583809	-0.16878	0.382945
Snap29	FBGN0034913	-0.21383	-0.07326	-0.19017	-0.0496
DNAlig3	FBGN0286075	0.247039	0.080805	0.168325	0.002091
CG11438	FBGN0037164	-0.38009	-0.18005	-0.05713	0.142908
HSPC300	FBGN0061198	-0.37327	0.034155	-0.39321	0.014212
Gdap1	FBGN0035587	-0.01286	0.125722	0.030408	0.168993
CG5377	FBGN0038974	0.175184	-0.17369	0.436901	0.088025
T48	FBGN0004359	0.132369	-0.08506	0.175984	-0.04145
mthl9	FBGN0035131	0.417939	-0.45506	-0.15243	-1.02543
AdSL	FBGN0038467	0.192327	-0.02717	0.284596	0.065095
CG31826	FBGN0051826	-0.06911	0.127678	-0.26104	-0.06426
mRpL47	FBGN0014023	0.067689	-0.04741	-0.01093	-0.12603
kek1	FBGN0015399	0.209921	-0.18358	0.551799	0.158301
CG31248	FBGN0051248	-0.19167	0.027906	0.025532	0.245107
bigmax	FBGN0039509	0.042859	0.16328	-0.07549	0.044927
MCTS1	FBGN0029833	-0.2712	-0.02916	-0.29848	-0.05644
Hs6st	FBGN0038755	0.453051	0.061551	0.507719	0.116219
Sfp26Ac	FBGN0259959	0.227513	-0.09145	-0.01808	-0.33704
lncRNA:CR43650	FBGN0263659	-0.05459	-0.19542	0.522576	0.381742
Octbeta2R	FBGN0038063	0.07175	0.002772	0.106179	0.037201
Oatp58Da	FBGN0050277	0.199532	0.01712	0.19275	0.010338
pnt	FBGN0003118	0.346494	0.37936	0.000761	0.033627
CG2059	FBGN0029942	-0.00875	-0.01542	0.003931	-0.00274
gcl	FBGN0005695	0.0647	-0.00603	0.095927	0.025195
CG17687	FBGN0036348	0.13786	0.115834	0.065493	0.043466
CG10866	FBGN0035475	-0.07217	-0.00203	-0.17732	-0.10717
Pyroxd1	FBGN0032846	0.24582	0.256508	0.054407	0.065095
Ctr1B	FBGN0062412	-0.54247	0.093593	-0.30734	0.328723
Gadd45	FBGN0033153	0.046058	0.026663	0.038509	0.019114
lncRNA:CR43752	FBGN0264083	-0.29133	-0.34153	-0.63625	-0.68645
CHKov2	FBGN0039328	0.005306	-0.03125	-0.02193	-0.05849
CG2016	FBGN0250839	0.132401	-0.15262	0.373294	0.088276
CG16717	FBGN0036028	0.215437	0.057704	0.059893	-0.09784
CG8300	FBGN0029937	-0.0221	0.107528	-0.05383	0.075803
Ac78C	FBGN0024150	0.241863	-0.04191	0.490842	0.207071
CG31368	FBGN0051368	-0.01799	0.077702	-0.18318	-0.08749
TfIIEbeta	FBGN0015829	-0.12087	-0.06325	-0.18528	-0.12765
l(2)k14505	FBGN0021856	-0.20361	0.079908	-0.20175	0.081764
car	FBGN0000257	0.099077	0.076327	0.069933	0.047183
CG3587	FBGN0023521	-0.04612	0.161698	-0.21246	-0.00464
SA	FBGN0020616	0.165126	-0.05883	0.126854	-0.0971
CG31370	FBGN0051370	-1.2689	-0.1846	-0.32908	0.755227
CG44102	FBGN0264911	-0.008	-0.05002	-0.08562	-0.12764
CG14414	FBGN0030571	0.174509	0.053895	0.176334	0.05572
Sce	FBGN0003330	-0.03906	0.172973	-0.06675	0.145283
CG15549	FBGN0039810	-0.07694	0.081935	-0.16546	-0.00658
lncRNA:CR30055	FBGN0050055	-0.08124	0.001426	-0.26882	-0.18615
CG14561	FBGN0037149	-0.35383	0.064495	-0.62958	-0.21125
CG14457	FBGN0037174	-0.14289	0.161443	-0.51916	-0.21483
CG13526	FBGN0034774	0.289769	-0.17087	-0.1162	-0.57684
CG8435	FBGN0034084	-0.43983	-0.01766	-0.43734	-0.01517
boca	FBGN0004132	-0.08953	-0.01114	-0.07562	0.002765
CG10418	FBGN0036277	-0.43319	0.051034	-0.40315	0.081069
Hex-t1	FBGN0042711	-0.16039	0.029798	-0.23902	-0.04883
CG1698	FBGN0033443	-0.0548	0.240098	-0.43874	-0.14384
CG1494	FBGN0031169	0.331484	-0.00817	0.274886	-0.06477
mRpS33	FBGN0038426	-0.48068	-0.09139	-0.19921	0.190082
CG14495	FBGN0034293	0.049961	0.898351	-1.21831	-0.36992
l(2)gd1	FBGN0261983	0.165576	0.035456	0.088122	-0.042
I-3	FBGN0261624	-0.12211	0.006871	-0.17299	-0.04402

lncRNA:CR43453	FBGN0263407	7.494778	-1.4294	7.48319	-1.44099
CG42753	FBGN0261807	0.133842	0.052504	0.182257	0.100918
CG8738	FBGN0033321	-0.05431	-0.31581	0.336777	0.075281
Nmdar2	FBGN0053513	0.372614	-0.0713	0.524088	0.080177
CG40006	FBGN0058006	-0.27152	-0.08339	-0.22528	-0.03715
lncRNA:CR43849	FBGN0264431	0.512551	0.067355	-0.74091	-1.18611
CG32333	FBGN0052333	0.171815	-0.28388	0.412453	-0.04324
CG11596	FBGN0023522	0.252723	0.036563	0.233316	0.017155
5PtaseI	FBGN0259178	-0.02879	-0.01189	-0.12907	-0.11217
dor	FBGN0000482	0.168597	0.085235	0.196772	0.113411
Ssl	FBGN0015300	-0.17699	-0.21319	-0.03419	-0.0704
CG18809	FBGN0042132	-0.03685	-0.13955	0.228587	0.12589
CG11391	FBGN0038732	-0.0192	-0.39928	1.052875	0.672799
CkIIalpha-i3	FBGN0025676	-0.51185	0.156515	-0.68274	-0.01438
CG9717	FBGN0039789	0.156547	0.02964	0.03774	-0.08917
mRpL20	FBGN0036335	-0.30749	0.057291	-0.36525	-0.00047
Obp57a	FBGN0043535	0.080499	0.00619	-0.00935	-0.08366
CG7724	FBGN0036698	-0.16373	0.096348	-0.25367	0.00641
Sec6	FBGN0266671	0.01212	-0.02689	-0.18918	-0.22819
NHP2	FBGN0029148	-0.41768	-0.06104	-0.32375	0.03289
Zw10	FBGN0004643	0.126277	-0.0646	0.12926	-0.06162
CG6928	FBGN0036240	-0.10463	0.047186	0.060106	0.211918
TpnC4	FBGN0033027	0.703406	1.090153	-0.0457	0.341045
Tmtc3	FBGN0020312	0.052933	0.08979	0.021332	0.058189
aft	FBGN0026309	-0.12012	-0.1754	0.134229	0.078946
Sfp33A2	FBGN0259963	-0.55632	-0.12167	-1.20158	-0.76693
dwg	FBGN0000520	-0.08532	-0.07143	0.202756	0.216647
CG2983	FBGN0031472	-0.00763	-0.15491	-0.15821	-0.30549
CG30428	FBGN0050428	0.379383	0.267623	0.208688	0.096928
WDR79	FBGN0031782	-0.48884	0.006365	-0.31544	0.179766
CG17187	FBGN0037882	0.202327	0.286382	0.303378	0.387434
eIF2Bgamma	FBGN0034029	-0.12967	0.041009	-0.22214	-0.05146
CG9951	FBGN0036671	-0.02012	-0.02202	0.183875	0.181968
IKKbeta	FBGN0024222	0.217149	0.126196	0.197695	0.106742
CG30349	FBGN0050349	-0.20237	0.04558	-0.05088	0.197063
CG30447	FBGN0050447	-0.17588	-0.13181	-0.09274	-0.04866
ana3	FBGN0266111	-0.20475	-0.12754	-0.14295	-0.06574
CG5412	FBGN0038806	-0.34254	-0.09995	-0.20096	0.041634
CG3756	FBGN0031657	-0.12263	-0.00034	-0.15068	-0.02839
pch2	FBGN0051453	-0.42824	-0.03927	-0.47316	-0.08419
CG11858	FBGN0039305	-0.35014	-0.21866	-0.46125	-0.32977
tow	FBGN0035719	0.184153	-0.11001	0.541244	0.247077
Paf-AHalpha	FBGN0025809	-0.0147	0.019044	-0.01431	0.019437
squ	FBGN0267347	-0.17255	-0.07149	-0.07577	0.025293
Sox21a	FBGN0036411	0.388348	1.204989	-1.50813	-0.69149
CG18600	FBGN0038601	0.302265	0.080948	0.085677	-0.13564
CG12674	FBGN0031388	-0.23868	-0.09227	-0.27822	-0.1318
CG13643	FBGN0040601	0.975859	-0.12487	-1.92071	-3.02144
lncRNA:CR43491	FBGN0263502	0.289442	0.408983	-0.3052	-0.18566
sll	FBGN0038524	-0.05712	0.004057	-0.02492	0.03626
Hsp70Ba	FBGN0013277	-0.90045	-0.236	-0.82765	-0.16321
CG13920	FBGN0025712	0.115339	0.100539	-0.00081	-0.01561
O-fut2	FBGN0027791	-0.27397	-0.12425	-0.09885	0.050862
CG14696	FBGN0037853	-0.37894	0.353595	-0.59255	0.139991
CG33061	FBGN0053061	0.081614	0.085321	-0.14206	-0.13836
GluRIB	FBGN0264000	0.448547	-0.2335	0.684001	0.001953
CG14000	FBGN0031749	-0.23859	0.070165	-0.22898	0.079767
CG13131	FBGN0032175	0.286963	-0.0685	0.282587	-0.07287
CG2157	FBGN0030244	-0.14446	0.211348	-0.15216	0.203652
MBD-like	FBGN0027950	-0.03534	0.030968	-0.00264	0.063667
DCTN6-p27	FBGN0086446	-0.27133	-0.02422	-0.14903	0.098083
NC2alpha	FBGN0034650	-0.13101	-0.02554	-0.07948	0.025996
Klp61F	FBGN0004378	-0.10295	-0.04433	-0.19444	-0.13582
CG8958	FBGN0030725	-0.0331	-0.06228	-0.20416	-0.23334
CG9849	FBGN0034803	-0.24335	-0.09052	-0.17808	-0.02526
Hen1	FBGN0033686	-0.10835	0.093813	-0.30675	-0.10458
Cpr73D	FBGN0036680	-0.41688	-0.56297	0.141635	-0.00446
CG31776	FBGN0051776	0.105898	-0.36642	-0.57513	-1.04745
CG7369	FBGN0037188	0.11975	0.029999	0.196292	0.106541

CG18095	FBGN0028872	0.600597	0.075839	-0.06847	-0.59323
mRpL23	FBGN0035335	-0.28145	-0.01217	-0.1577	0.111584
Nup93-1	FBGN0027537	-0.07179	0.035984	-0.10625	0.001526
beta4GalT7	FBGN0039258	-0.10143	0.042458	-0.4014	-0.25752
Ing5	FBGN0032516	-0.1218	-0.06883	-0.03192	0.021048
CG11417	FBGN0024364	-0.06969	0.012328	0.078129	0.160151
CG11638	FBGN0040351	0.562073	-0.36559	0.98307	0.055412
CG4622	FBGN0035021	-0.08107	0.020614	-0.21263	-0.11094
Sry-delta	FBGN0003512	-0.15131	-0.06969	-0.09258	-0.01096
Ibf2	FBGN0037669	-0.343	-0.03707	-0.34306	-0.03713
fs(1)K10	FBGN0000810	0.264261	0.098116	0.198126	0.031982
CG32720	FBGN0052720	0.023185	0.036502	-0.08265	-0.06933
Uhg1	FBGN0045800	-0.09547	0.150337	-0.20828	0.037526
GPHR	FBGN0033995	0.023969	0.154854	-0.19521	-0.06433
vnd	FBGN0261930	0.713472	0.633551	-1.00285	-1.08277
RagA-B	FBGN0037647	-0.02997	0.046808	-0.09375	-0.01696
CG16852	FBGN0028942	-0.00744	0.086735	-0.09855	-0.00438
tsh	FBGN0003866	0.092351	0.05696	0.104939	0.069548
fid	FBGN0259146	0.5048	0.033009	0.596108	0.124317
CG1142	FBGN0037504	-0.2609	0.11211	-0.24792	0.125095
CG34348	FBGN0085377	0.39086	0.107197	0.235939	-0.04772
MED27	FBGN0037359	-0.17131	0.07452	-0.06043	0.185398
asRNA:CR45813	FBGN0267463	-0.72796	-0.28008	-0.53176	-0.08389
CG14932	FBGN0032375	-0.32391	-0.0402	-0.25779	0.025917
CG9308	FBGN0034681	-0.04745	-0.14067	-0.27453	-0.36774
CG3652	FBGN0031600	-0.08723	0.102926	-0.19667	-0.00652
DIP-epsilon	FBGN0259714	0.192426	0.033568	0.435523	0.276665
kek2	FBGN0015400	0.382779	-0.11703	0.535042	0.035231
CG32110	FBGN0052110	0.23368	0.235859	-0.18706	-0.18488
smog	FBGN0051660	0.328072	-0.14091	0.519454	0.050471
CG32052	FBGN0044328	0.360433	0.08114	0.290951	0.011659
CG43059	FBGN0262361	-0.29772	-0.01567	-0.33553	-0.05347
CG14977	FBGN0035469	-0.11987	-0.06105	-0.10856	-0.04974
CG30184	FBGN0050184	-0.27755	-0.06753	-0.51307	-0.30304
CG17195	FBGN0039369	-0.01998	0.07421	-0.20884	-0.11465
CG10801	FBGN0029660	-0.08998	-0.00415	-0.18873	-0.1029
CG31300	FBGN0051300	-0.38155	-0.59975	0.715277	0.497083
Sema2a	FBGN0011260	0.110949	0.221476	-0.02425	0.086282
LeuRS-m	FBGN0027085	0.040999	0.049719	0.062185	0.070905
Pgcl	FBGN0011822	0.034139	1.015678	-1.64704	-0.66551
lncRNA:CR44496	FBGN0265689	-0.17343	-0.48242	-0.19595	-0.50494
Gat	FBGN0039915	-0.0435	-0.23393	0.285387	0.094955
Hakai	FBGN0032812	-0.27615	-0.0144	-0.07606	0.185693
PCNA	FBGN0005655	-0.49325	0.119376	-0.61925	-0.00662
Grip71	FBGN0032705	-0.19122	-0.01855	-0.22204	-0.04937
CG43183	FBGN0262812	-0.05001	0.091759	-0.2209	-0.07913
Rgk2	FBGN0085419	0.135073	-0.33887	0.267511	-0.20643
CG7974	FBGN0035254	-0.43686	0.011905	-0.36791	0.080862
MFS18	FBGN0025684	-0.01263	0.024074	-0.21433	-0.17763
lin	FBGN0002552	0.02708	-0.16879	0.27531	0.079442
CG12391	FBGN0033581	-0.01249	-0.10845	-0.03088	-0.12683
CG14151	FBGN0036089	-0.2305	-0.04156	-0.38408	-0.19514
CG5478	FBGN0038386	0.227442	-0.00272	0.430177	0.200015
spn-E	FBGN0003483	-0.52899	-0.13728	-0.47577	-0.08406
mip130	FBGN0023509	0.025164	0.136185	0.094832	0.205853
CG15743	FBGN0030465	-0.16901	-0.13087	-0.03082	0.007313
CG15649	FBGN0034563	0.205308	-0.40548	0.436603	-0.17418
CG33120	FBGN0053120	0.452372	0.071342	0.666517	0.285487
metl	FBGN0035247	0.239077	0.177927	0.011474	-0.04968
Nf-YA	FBGN0035993	-0.11583	-0.15345	-0.03068	-0.0683
GC	FBGN0035245	0.377578	-0.00821	0.673003	0.287217
TBCC	FBGN0051961	-0.24335	0.192449	-0.36084	0.074956
CG8004	FBGN0036920	-0.21226	-0.04041	-0.25476	-0.0829
CG31050	FBGN0051050	-0.06429	-0.04217	-0.19999	-0.17788
CG14395	FBGN0038073	1.603986	-0.44172	2.563266	0.51756
CG6227	FBGN0030631	0.150979	0.009886	0.186673	0.04558
nAChRalpha3	FBGN0015519	0.560721	-1.20129	1.030984	-0.73103
CG6638	FBGN0035911	0.008886	0.103079	-0.03522	0.05897
CG42750	FBGN0261804	0.387255	-0.13007	0.618688	0.101359

CG1663	FBGN0033449	0.161846	0.120605	-0.05091	-0.09215
CG14354	FBGN0039376	-0.11659	-0.11154	-0.08846	-0.08341
SerT	FBGN0010414	0.046004	-0.28024	0.660893	0.33465
CG4332	FBGN0030456	0.141438	0.02028	-0.01566	-0.13682
CG42597	FBGN0260996	-0.19927	-0.05827	-0.33063	-0.18963
CG6171	FBGN0026737	-0.23681	-0.01879	-0.27837	-0.06035
CG14907	FBGN0038455	-0.1114	0.247596	-0.4954	-0.13641
CG42703	FBGN0261614	-0.23119	0.027491	-0.2626	-0.00392
CG4291	FBGN0031287	-0.12488	-0.0004	-0.30685	-0.18237
beat-VII	FBGN0250908	0.301532	0.063138	0.43295	0.194556
DCTN5-p25	FBGN0040228	-0.09699	0.20364	-0.38918	-0.08856
Vps36	FBGN0086785	-0.31896	0.013403	-0.3472	-0.01484
beag	FBGN0037660	-0.07683	0.020156	-0.08805	0.008928
Sk1	FBGN0030300	0.074015	-0.11584	0.062523	-0.12733
drosha	FBGN0026722	-0.06914	-0.17495	0.153022	0.047213
Brf	FBGN0038499	-0.11463	0.081361	-0.08727	0.108717
CG5466	FBGN0038815	0.020886	-0.32937	0.458025	0.10777
Sec15	FBGN0266674	-0.24427	-0.14039	-0.36098	-0.2571
Vang	FBGN0015838	-0.03083	-0.04425	0.106202	0.092774
CG13564	FBGN0034973	-0.19563	-0.19845	-0.19076	-0.19358
CG11149	FBGN0031732	0.182091	0.359695	-0.60258	-0.42498
CG14384	FBGN0038097	-0.21915	-0.08481	-0.22851	-0.09416
CG8675	FBGN0030834	-0.32789	0.070798	-0.20416	0.194529
CG43110	FBGN0262570	-1.07291	-1.08281	-0.15314	-0.16304
IntS4	FBGN0026679	0.125888	0.062439	0.225847	0.162397
Cyp4ac3	FBGN0031695	0.06668	-0.367	0.365125	-0.06856
CG17217	FBGN0032419	-0.29992	-0.14633	-0.14681	0.006778
Spx	FBGN0015818	-0.10365	0.031404	-0.11744	0.017614
Ugt316A1	FBGN0036842	0.02974	0.003473	0.080374	0.054107
p38b	FBGN0024846	0.14287	0.089035	0.101355	0.04752
CG34188	FBGN0085217	-0.14542	-0.09658	-0.35066	-0.30182
Cks85A	FBGN0037613	-0.19233	-0.13203	0.024839	0.085142
CG2975	FBGN0031468	-0.10744	-0.07086	-0.0999	-0.06332
CG3078	FBGN0023524	0.115544	-0.04932	0.23987	0.075006
esg	FBGN0001981	-0.12007	0.591908	-0.68068	0.031305
Syx8	FBGN0036643	-0.13085	0.094667	-0.17492	0.050599
LManVI	FBGN0032069	0.745235	0.040005	1.005668	0.300437
CG2811	FBGN0035082	-0.31211	-0.25001	-0.49292	-0.43081
CR32009	FBGN0052009	0.29515	0.14903	0.329084	0.182964
VhaM9.7-d	FBGN0038458	-0.03908	0.081926	-0.24097	-0.11997
Papss	FBGN0020389	0.257978	0.192305	0.230839	0.165167
CG12299	FBGN0032295	-0.13831	-0.03704	-0.01361	0.087651
grau	FBGN0001133	-0.06079	-0.04258	-0.01784	0.000369
CG15728	FBGN0030409	-0.16693	0.044732	-0.37702	-0.16536
Alg10	FBGN0052076	-0.08508	-0.05813	-0.00188	0.025069
CheA7a	FBGN0029948	-0.66031	-0.29705	-0.46651	-0.10324
CG41561	FBGN0085692	0.042458	0.034347	-0.06044	-0.06855
Vps51	FBGN0034380	-0.37678	-0.26458	-0.1695	-0.0573
CG32344	FBGN0052344	0.099292	-0.00831	0.09592	-0.01168
dac	FBGN0005677	0.07847	-0.19399	0.335669	0.063212
Gasp	FBGN0026077	-0.50798	0.021605	-0.38831	0.141282
sphinx1	FBGN0052383	-0.01963	0.147728	-0.30889	-0.14153
CG10165	FBGN0032801	0.005612	-0.13626	0.036869	-0.105
CG5964	FBGN0036206	-0.19615	0.023598	-0.43042	-0.21068
Cdk9	FBGN0019949	-0.22342	-0.03564	-0.23967	-0.05189
DMAP1	FBGN0034537	-0.15033	-0.00371	-0.13219	0.014432
CG7265	FBGN0038272	-0.11258	0.102865	-0.10961	0.105837
Tpst	FBGN0086674	0.084089	0.062962	-0.15927	-0.1804
mia	FBGN0014342	-0.21106	-0.45091	-0.12809	-0.36795
CG34181	FBGN0085210	-0.05228	-0.15389	0.175016	0.073411
IntS11	FBGN0039691	-0.19266	0.025423	-0.13405	0.084038
Syx4	FBGN0024980	-0.11371	0.044525	-0.19875	-0.04052
mtg	FBGN0260386	0.263972	0.223072	-0.05538	-0.09628
Nup188	FBGN0033766	0.179844	0.150944	0.163434	0.134535
ord	FBGN0003009	-0.45844	-0.22579	-0.20755	0.025102
CG13116	FBGN0032139	-0.09997	0.192547	-0.46876	-0.17624
Rbbp5	FBGN0036973	-0.16416	0.012485	-0.21857	-0.04192
CG44163	FBGN0265046	0.249953	0.070184	-0.29425	-0.47402
AANATL3	FBGN0032839	0.205072	0.699285	-1.54765	-1.05344

Ufc1	FBGN0034061	-0.29679	-0.10353	-0.26225	-0.069
CG14252	FBGN0039462	-0.08495	0.026255	-0.24101	-0.1298
Pgant2	FBGN0031530	-0.04398	-0.07879	-0.11675	-0.15157
CG16868	FBGN0034498	0.1949	0.139759	0.027675	-0.02747
CG30054	FBGN0050054	0.024066	-0.36257	-0.18575	-0.57238
CG12895	FBGN0033523	-0.17781	-0.02023	-0.00686	0.15073
mRpS14	FBGN0044030	-0.19719	-0.18648	-0.1274	-0.11669
rib	FBGN0003254	0.014866	-0.16231	0.227723	0.050547
CG14190	FBGN0030979	0.192419	-0.1468	0.245704	-0.09352
l(2)35Be	FBGN0261881	-0.41459	0.102992	-0.54146	-0.02388
gwl	FBGN0260399	0.151606	0.042052	-0.26931	-0.37887
CR43212	FBGN0262848	0.816703	0.466332	0.263703	-0.08667
CG13012	FBGN0030769	-0.01731	-0.10397	-0.25128	-0.33793
CG31780	FBGN0051780	0.57332	-0.12965	0.737089	0.03412
CG14647	FBGN0037244	0.112767	0.033245	0.133442	0.05392
Kua	FBGN0032850	-0.26944	-0.16618	-0.12779	-0.02452
CG46441	FBGN0287211	0.169644	0.231054	0.138595	0.200006
rswl	FBGN0034351	-0.23494	-0.00121	-0.19285	0.040878
G6P	FBGN0031463	-0.07593	0.066871	-0.29162	-0.14882
CG18477	FBGN0028864	0.57203	-0.13429	0.731523	0.025205
S6kII	FBGN0262866	-0.04446	-0.05755	0.015897	0.002812
Cpr66D	FBGN0052029	0.631661	0.480013	0.95796	0.806312
Kebab	FBGN0028952	-0.05042	0.098861	-0.53982	-0.39055
DNApol-zeta	FBGN0002891	0.002377	0.135655	0.15224	0.285517
CG9123	FBGN0030629	-0.06668	0.048223	-0.13615	-0.02124
Klp31E	FBGN0032243	0.174362	0.074961	0.084975	-0.01443
dap	FBGN0010316	0.195997	0.072883	0.216396	0.093282
Prx6005	FBGN0031479	-0.34556	0.102062	-0.2199	0.227716
senju	FBGN0031676	-0.15138	-0.00273	-0.15854	-0.00989
CG1951	FBGN0039623	0.165562	0.154268	0.035994	0.024699
ORMDL	FBGN0037110	-0.01683	0.038034	0.035756	0.090619
RhoGAP16F	FBGN0030893	-0.00658	0.110067	-0.31381	-0.19716
CG5895	FBGN0036560	-0.24697	-0.16857	0.274964	0.353365
CHORD	FBGN0029503	-0.27786	-0.07289	-0.29666	-0.09169
sa	FBGN0002842	-0.46613	-0.10244	-0.43802	-0.07432
CG17726	FBGN0037880	0.11333	-0.02906	0.174352	0.031965
ND-MWFE	FBGN0085468	-0.25223	0.070617	-0.41765	-0.09481
CG43187	FBGN0262816	-0.36331	1.342079	-2.01172	-0.30633
CG18213	FBGN0038470	-0.9728	-0.09349	-0.47408	0.405232
Cpr62Ba	FBGN0035279	-0.96375	-0.4972	0.553961	1.020516
CNPYb	FBGN0036847	-0.1445	-0.0513	-0.0826	0.010588
CG8207	FBGN0034035	-0.15294	0.107888	-0.35942	-0.09859
CG4678	FBGN0030778	0.128501	-0.0305	0.209496	0.050491
Cyp4d8	FBGN0015033	0.230766	0.030162	0.249945	0.04934
CG32461	FBGN0052461	-0.12401	0.036756	-0.2448	-0.08403
Cpsf73	FBGN0261065	-0.20758	-0.05509	-0.24484	-0.09235
CR42785	FBGN0261856	0.048891	0.661851	-1.35047	-0.73751
lovit	FBGN0267429	0.199621	-0.12496	0.032706	-0.29188
pit	FBGN0266581	-0.03654	0.21656	0.023353	0.276453
kmg	FBGN0032473	-0.15294	-0.04259	-0.25837	-0.14802
IKKepsilon	FBGN0086657	-0.08263	0.029772	-0.10229	0.010113
CG12155	FBGN0029957	0.111218	0.139888	0.113434	0.142105
CG8861	FBGN0037676	0.45697	0.00284	0.352084	-0.10205
ZC3H3	FBGN0035900	-0.20363	-0.08572	-0.0987	0.019203
lectin-21Ca	FBGN0040107	-0.00812	-0.15795	-0.02336	-0.17318
VhaM9.7-a	FBGN0035521	-0.09096	-0.08521	-0.19695	-0.1912
pall	FBGN0036005	0.068449	0.160804	-0.07373	0.018621
CG34353	FBGN0085382	0.433235	0.161018	0.440747	0.168529
CG9346	FBGN0034572	-0.07827	-0.06387	-0.06465	-0.05025
CG2972	FBGN0030177	-0.19352	0.015125	-0.08227	0.126369
CG10098	FBGN0037472	-0.07607	-0.07409	0.052899	0.054882
CG4558	FBGN0029914	0.289109	0.136001	0.29598	0.142873
Coq5	FBGN0030460	0.03315	0.136071	0.163047	0.265968
CG32100	FBGN0052100	-0.09835	-0.0609	-0.2036	-0.16615
CG15472	FBGN0029724	-0.10192	-0.0097	-0.08745	0.004768
CG11695	FBGN0030316	-0.0941	-0.02784	-0.02797	0.038288
CG43052	FBGN0262354	-0.10953	-0.01213	-0.3019	-0.2045
CG32726	FBGN0052726	-0.82926	-0.31622	-0.11826	0.394781
bocks	FBGN0037719	0.037666	0.024026	0.196468	0.182827

CG6136	FBGN0038332	-0.24634	0.017772	-0.27926	-0.01514
eya	FBGN0000320	0.026328	-0.07491	0.146299	0.045057
Spn28Da	FBGN0051902	0.137554	0.036114	0.090724	-0.01072
Nuf2	FBGN0031886	-0.28525	-0.08392	-0.24305	-0.04172
CG6005	FBGN0038672	-0.3598	-0.29633	-0.1977	-0.13424
CG9030	FBGN0030599	-0.0686	0.110577	-0.29134	-0.11216
mRpL52	FBGN0033208	-0.26888	0.003913	-0.40504	-0.13225
beg	FBGN0036691	0.064971	0.095658	0.27905	0.309737
VGAT	FBGN0033911	-0.00755	-0.13269	0.218164	0.093027
CG16700	FBGN0030816	0.186057	0.186266	0.219393	0.219603
Rab26	FBGN0086913	0.324177	-0.1536	0.599663	0.121887
alpha4GT2	FBGN0039378	0.111493	-0.13895	0.054173	-0.19627
NijA	FBGN0036101	0.18233	0.127281	0.342777	0.287728
CG33543	FBGN0053543	0.147354	0.024552	-0.00862	-0.13142
Oseg1	FBGN0265102	-0.10605	-0.09046	-0.08734	-0.07175
CG11279	FBGN0036342	-0.25299	0.101034	-0.35304	0.000985
wuc	FBGN0033770	-0.48085	-0.06135	-0.65488	-0.23537
lncRNA:CR44601	FBGN0265812	1.519129	-0.40293	1.871794	-0.05026
Rpb8	FBGN0037121	-0.28357	0.047399	-0.32993	0.001037
CG2577	FBGN0030384	-0.06583	-0.06368	-0.10156	-0.09941
cav	FBGN0026257	-0.16378	-0.01346	-0.14171	0.008614
CG43922	FBGN0264543	-0.22877	-0.05404	-0.37916	-0.20443
mRpS34	FBGN0285951	-0.07063	0.049858	-0.00712	0.113361
kon	FBGN0032683	0.221607	0.020321	0.317199	0.115913
CG13293	FBGN0035677	0.248174	-0.40214	0.399724	-0.25059
lncRNA:CR46035	FBGN0267702	0.237863	0.110276	0.418055	0.290468
CG5339	FBGN0034925	-0.15587	0.016886	-0.16693	0.005832
Cep89	FBGN0266708	-0.12214	-0.14157	0.265624	0.246195
RpIII128	FBGN0004463	-0.26008	-0.10248	-0.26292	-0.10532
CG7839	FBGN0036124	-0.23996	-0.08253	-0.1247	0.032721
Mulk	FBGN0260750	-0.13399	-0.0749	-0.24364	-0.18455
CG9300	FBGN0036886	-0.13916	-0.00848	-0.26041	-0.12973
Nlg3	FBGN0083963	-0.20589	0.123139	-0.31231	0.016718
WDY	FBGN0267449	0.588067	0.083173	0.189901	-0.31499
Muc55B	FBGN0034294	-0.12283	0.24994	-1.53396	-1.16119
Vps53	FBGN0031598	0.015399	0.098728	0.028535	0.111865
lncRNA:CR44131	FBGN0264980	0.019553	-0.01161	0.080388	0.049226
AlaRS-m	FBGN0028962	-0.00986	-0.01985	0.028584	0.018592
CG7156	FBGN0038588	0.00924	-0.00963	-0.03892	-0.05779
Dpy-30L1	FBGN0032293	-0.15618	-0.00554	-0.07078	0.079859
CG3542	FBGN0031492	-0.12126	0.032835	-0.06473	0.089365
Obp28a	FBGN0011283	-0.58751	-0.5324	0.241494	0.296607
Keap1	FBGN0038475	0.002064	-0.20545	-0.01424	-0.22176
CG13248	FBGN0036984	0.068269	-0.32937	0.371157	-0.02648
not	FBGN0013717	0.078882	0.038742	0.108298	0.068158
CTCF	FBGN0035769	0.098003	-0.01161	-0.07981	-0.18942
neo	FBGN0039704	1.439886	0.723908	0.074637	-0.64134
CG6836	FBGN0036834	-0.04345	0.068836	-0.12233	-0.01005
CG7016	FBGN0039238	-0.1391	-0.19514	0.327199	0.271168
Zpr1	FBGN0030096	-0.14617	-0.02612	-0.15721	-0.03716
cm	FBGN0000330	0.090239	0.197221	-0.04549	0.061495
nbs	FBGN0261530	-0.06842	-0.0295	-0.01011	0.028812
lncRNA:CR45821	FBGN0267471	0.208128	0.427178	0.307663	0.526713
sicily	FBGN0030352	-0.21345	-0.05948	-0.26163	-0.10766
CG8939	FBGN0030720	-0.10067	0.10333	-0.19366	0.01034
CG14839	FBGN0038219	0.015041	-0.00212	-0.16807	-0.18523
CG10185	FBGN0038397	0.205929	0.227169	0.136006	0.157246
CG4629	FBGN0031299	0.513802	-0.13662	0.770723	0.120306
CG42827	FBGN0262009	0.391011	0.301037	0.185179	0.095204
CG15160	FBGN0032688	-0.16369	-0.08551	0.057452	0.135634
glu	FBGN0015391	-0.20809	0.091302	-0.33744	-0.03804
dbe	FBGN0020305	-0.16756	0.087451	-0.35276	-0.09774
CR43142	FBGN0262616	-0.40281	-0.21402	0.170541	0.359339
Mon1	FBGN0031640	-0.07473	0.000966	0.007882	0.083575
CG43206	FBGN0262842	-0.22178	0.100711	-0.3183	0.004187
CG30047	FBGN0050047	0.350772	0.449344	0.058545	0.157116
hid	FBGN0003997	0.097345	0.226674	0.426574	0.555902
CG9837	FBGN0037635	0.457555	0.054243	0.482611	0.0793
CG4098	FBGN0036648	-0.34299	0.013061	-0.11191	0.244138

MED6	FBGN0024330	0.136162	0.101507	0.111312	0.076657
CG45045	FBGN0266405	-0.21937	1.148458	-2.57342	-1.20559
CG4806	FBGN0260456	-0.22738	-0.02652	0.00063	0.201486
CG11694	FBGN0037571	-0.25353	-0.17858	-0.14177	-0.06682
CG42851	FBGN0262098	-0.14553	-0.07067	-0.01869	0.056164
AIMP3	FBGN0050185	-0.2921	-0.11759	-0.26931	-0.0948
melt	FBGN0023001	0.295132	0.069981	0.108809	-0.11634
CG6688	FBGN0039038	-0.63666	-0.1678	-0.23126	0.237591
CG11723	FBGN0031391	-0.19257	0.020927	-0.16639	0.047107
CG31431	FBGN0051431	0.014181	0.203796	-0.47256	-0.28294
CG31467	FBGN0051467	-0.10703	-0.0446	-0.18189	-0.11945
CG30048	FBGN0050048	0.262693	0.081507	-0.01163	-0.19282
CG3337	FBGN0038871	-0.2099	0.146484	-0.37722	-0.02084
Plekhm1	FBGN0034694	-0.11341	-0.12209	-0.0168	-0.02547
DPCoAC	FBGN0067783	0.059023	-0.03367	0.244642	0.151945
Atg6	FBGN0264325	-0.12025	0.016141	0.070444	0.206831
jub	FBGN0030530	0.181706	0.048387	0.045128	-0.08819
Nup133	FBGN0039004	-0.01695	-0.10859	-0.05068	-0.14232
verm	FBGN0261341	0.307542	0.224337	0.160922	0.077717
CG12219	FBGN0043796	0.091216	-0.06948	0.265766	0.105071
EMRE	FBGN0062440	-0.06058	-0.06557	0.05002	0.045028
CG16787	FBGN0034940	-0.19474	-0.09307	-0.16198	-0.06032
CG33225	FBGN0053225	-0.07302	0.048202	-0.395	-0.27378
mRpL51	FBGN0032053	-0.15367	0.055592	-0.24365	-0.03439
CG13319	FBGN0033781	-0.35647	-0.11173	-0.4098	-0.16506
fidipidine	FBGN0025519	0.047066	0.095254	0.079638	0.127826
CG4901	FBGN0032194	-0.05623	0.092288	-0.16257	-0.01406
pyx	FBGN0035113	0.233803	0.156638	0.029977	-0.04719
Sytalpha	FBGN0261089	0.263971	0.114059	0.1889	0.038989
CSN8	FBGN0261437	-0.36387	0.032366	-0.33765	0.058588
CG43318	FBGN0263023	-0.20051	0.058708	-0.57138	-0.31216
CG9777	FBGN0030764	-0.05297	-0.09812	-0.1427	-0.18784
CG34370	FBGN0085399	0.192969	-0.08483	0.33051	0.052715
Fcp1	FBGN0035026	-0.11467	-0.07551	0.072471	0.111631
ptc	FBGN0003892	0.301664	0.096507	0.172054	-0.0331
CG15734	FBGN0030374	-0.2505	-0.08569	-0.40325	-0.23844
CG6665	FBGN0034172	0.065135	-0.05127	0.214796	0.098396
CG14229	FBGN0031059	-0.16944	0.096959	-0.15722	0.10918
SPR	FBGN0029768	0.356261	-0.06962	0.453956	0.028074
Pez	FBGN0031799	0.098337	0.052814	0.240527	0.195003
CG2209	FBGN0030441	-0.15833	-0.02609	-0.03096	0.10127
CG31800	FBGN0051800	-0.10299	0.005542	-0.1356	-0.02707
CG12206	FBGN0029662	-0.08078	0.02852	-0.11235	-0.00305
CG13458	FBGN0036479	0.510071	-0.14634	0.293222	-0.36319
CG15876	FBGN0035569	-0.18042	-0.11635	-0.28276	-0.21868
Grip128	FBGN0026433	0.03925	0.127662	0.071476	0.159888
Cc2d2a	FBGN0263113	0.004253	-0.0356	0.173351	0.133497
CG6204	FBGN0039165	0.062824	0.109414	-0.05715	-0.01056
CG3704	FBGN0040346	-0.21364	-0.00673	-0.09791	0.108991
isoQC	FBGN0036999	0.137406	0.349139	-0.21393	-0.0022
CG17600	FBGN0031195	-0.39949	-0.08273	-0.23829	0.078463
CG14362	FBGN0038186	-0.2276	0.018425	-0.47888	-0.23285
hay	FBGN0001179	-0.12616	-0.40097	0.200814	-0.074
CG9643	FBGN0031485	-0.09389	0.234844	0.265415	0.594149
CG14456	FBGN0037176	-0.3669	-0.11044	-0.42082	-0.16436
CG34298	FBGN0085327	-0.17138	-0.15996	-0.0432	-0.03177
CG6583	FBGN0032420	0.140938	0.092319	0.128836	0.080217
CG15719	FBGN0030440	-0.28261	-0.13482	-0.31094	-0.16316
Sap30	FBGN0030788	0.247209	0.182378	0.139067	0.074235
lncRNA:CR44308	FBGN0265367	1.64478	0.213667	-0.40723	-1.83834
CG4078	FBGN0029798	-0.06806	-0.02554	0.638909	0.681427
CG3918	FBGN0029873	-0.2274	-0.24041	-0.10993	-0.12293
trsn	FBGN0033528	-0.19253	-0.17946	0.061486	0.074558
CG17321	FBGN0032719	0.319754	-0.05389	0.599921	0.226277
Coq2	FBGN0037574	0.293474	0.113961	0.34092	0.161407
CG7458	FBGN0037144	0.304329	0.076919	0.171477	-0.05593
CG2070	FBGN0033203	-0.72056	-0.43425	-0.22105	0.065265
CG8778	FBGN0033761	-0.08664	0.059498	-0.13069	0.015447
CG6425	FBGN0039449	-0.27169	-0.04418	-0.46254	-0.23503

CG13215	FBGN0033592	-0.40356	0.62469	-0.03577	0.992487
Krn	FBGN0052179	-0.2872	0.096674	-0.1273	0.256569
gb	FBGN0039487	0.087385	-0.05585	0.134671	-0.00856
M6	FBGN0037092	0.091348	0.205527	-0.30937	-0.19519
pasha	FBGN0039861	0.101527	0.057856	0.191787	0.148116
CG15891	FBGN0029860	-0.26018	-0.29504	-0.06497	-0.09983
CG14005	FBGN0031739	0.221569	0.044233	-0.17187	-0.34921
fipi	FBGN0031627	0.099833	-0.12551	0.28499	0.059647
CG15333	FBGN0029989	-0.2537	0.042205	-0.26087	0.035038
CG18748	FBGN0042105	0.667642	0.85367	-0.12668	0.059344
mtt	FBGN0050361	0.621507	0.039916	0.605728	0.024137
d-cup	FBGN0038089	-0.13324	0.137544	-0.50848	-0.2377
Bdbt	FBGN0038857	-0.01292	0.195241	-0.10818	0.099977
BEAF-32	FBGN0015602	-0.11744	-0.00538	-0.09944	0.012623
tipE	FBGN0003710	-0.05767	-0.17297	0.360464	0.245164
mira	FBGN0021776	-0.19501	0.250326	-0.9781	-0.53277
CG10752	FBGN0036325	-0.03747	-0.03011	-0.12429	-0.11693
Kdm4A	FBGN0033233	-0.0872	-0.10577	0.091923	0.073354
CheA87a	FBGN0038142	-0.33131	-0.46154	0.248276	0.118039
crm	FBGN0000376	0.2834	-0.02662	0.320735	0.010719
CG10075	FBGN0035722	-0.27629	0.050764	-0.28541	0.041645
CG15125	FBGN0034463	-0.11904	-0.11225	0.118433	0.125216
MRG15	FBGN0027378	0.064919	0.048896	0.065084	0.049061
CG9773	FBGN0037609	-0.13317	0.115047	-0.2736	-0.02538
CG17168	FBGN0039943	0.006918	0.048089	-0.05661	-0.01544
mxc	FBGN0260789	0.075124	-0.05415	0.34055	0.211278
nkd	FBGN0002945	0.460776	-0.03046	0.503309	0.01207
CG8441	FBGN0034086	0.041129	0.30204	-0.02479	0.236119
CG13921	FBGN0035267	-0.24036	0.032031	0.088482	0.360875
CG12347	FBGN0038558	-0.25857	-0.17762	-0.32666	-0.24571
CG12236	FBGN0029822	0.298781	0.204145	0.068791	-0.02584
Cpsf160	FBGN0024698	-0.06371	-0.02438	-0.01539	0.023931
lncRNA:CR44396	FBGN0265546	0.668423	-0.54407	1.71222	0.499724
CG5681	FBGN0032658	0.043497	-0.05278	-0.17667	-0.27295
lncRNA:CR44138	FBGN0264987	-1.19423	0.022033	-0.548	0.668259
tplus3a	FBGN0051702	0.094466	0.007313	-0.13734	-0.22449
CG4630	FBGN0033809	0.214992	0.198248	-0.0956	-0.11235
ArgRS	FBGN0027093	-0.08008	0.100967	-0.20073	-0.01968
KLHL18	FBGN0037978	-0.0092	-0.00956	-0.01819	-0.01854
CG15439	FBGN0031606	0.291144	0.116321	0.034362	-0.14046
HP1c	FBGN0039019	-0.23087	-0.07818	-0.13587	0.016821
TTLL1A	FBGN0030823	0.238166	-0.02719	0.129143	-0.13621
CG13884	FBGN0035138	-0.15312	-0.00591	-0.07702	0.070185
Nepl13	FBGN0039022	0.388527	-0.26852	0.446927	-0.21012
Nup75	FBGN0034310	-0.11587	-0.0996	-0.08292	-0.06665
CadN2	FBGN0262018	0.338173	0.125388	0.389796	0.177012
csul	FBGN0015925	0.359713	0.053645	0.247658	-0.05841
CG7099	FBGN0032517	0.042075	-0.05429	0.0473	-0.04906
Cul6	FBGN0036332	-0.32774	0.272725	-0.7134	-0.11294
CG11986	FBGN0037656	-0.10455	0.035295	-0.36267	-0.22283
bora	FBGN0259791	-0.02216	0.012822	-0.02438	0.010597
CG43064	FBGN0262366	-0.28019	1.004575	-0.76231	0.522452
CG44422	FBGN0265595	0.286933	0.002296	0.289618	0.00498
dare	FBGN0015582	0.252096	0.113811	0.234048	0.095763
lncRNA:CR44528	FBGN0265721	-0.31896	-0.05446	-0.83511	-0.5706
CG15744	FBGN0030466	0.316094	-0.10267	0.271219	-0.14754
Nos	FBGN0011676	-0.05098	0.017524	0.166238	0.234744
egg	FBGN0086908	-0.06886	0.011547	-0.02829	0.052111
VhaPPA1-2	FBGN0262514	-0.26279	-0.17115	-0.00747	0.084169
CG15602	FBGN0030694	-0.12434	-0.00306	-0.2354	-0.11413
dpr8	FBGN0052600	0.42303	0.018319	0.454455	0.049744
CG15014	FBGN0035532	-0.16289	-0.01316	-0.2462	-0.09646
CG5347	FBGN0030578	0.114296	0.081951	-0.07849	-0.11083
CG31516	FBGN0051516	0.047236	-0.01631	0.12166	0.058117
CG5110	FBGN0032642	0.122496	0.044049	0.034637	-0.04381
CG31855	FBGN0051855	-0.10172	0.088197	-0.09321	0.096703
Crz	FBGN0013767	0.622896	0.021477	0.471895	-0.12952
CG14841	FBGN0038218	-0.19711	0.006534	-0.25469	-0.05104
kat80	FBGN0040207	0.082636	0.026738	0.094136	0.038238

CG1622	FBGN0030468	-0.09133	0.087568	-0.00221	0.176692
CG6931	FBGN0036236	-0.0361	-0.0743	-0.2219	-0.26011
l(3)72Dp	FBGN0263607	0.107945	0.201799	-0.16721	-0.07336
CG4957	FBGN0032205	-0.31813	0.110316	-0.63862	-0.21018
TAF1C-like	FBGN0034631	-0.08264	0.111396	-0.1164	0.077631
CG2641	FBGN0037518	0.865329	-0.21713	0.661829	-0.42063
Nepl14	FBGN0039023	0.240294	-0.12738	0.330239	-0.03743
dpr11	FBGN0053202	0.265811	-0.03407	0.36813	0.068249
CG31103	FBGN0051103	0.062594	0.128946	-0.39321	-0.32686
mirr	FBGN0014343	0.380307	0.188562	0.323632	0.131888
mRRF2	FBGN0051159	0.115253	0.04521	-0.24043	-0.31048
mRpS18A	FBGN0051450	-0.25415	0.05727	-0.33591	-0.0245
Gagr	FBGN0036627	0.392796	0.057733	0.364264	0.029201
CG8944	FBGN0030680	0.145199	-0.00731	0.231302	0.078793
CG10068	FBGN0037473	0.010138	-0.06304	0.268844	0.195669
rau	FBGN0031745	-0.49743	0.180554	-0.92274	-0.24475
CG8539	FBGN0035791	-0.82628	-0.33456	-0.35867	0.133047
CG30016	FBGN0050016	0.027784	-0.0183	-0.21594	-0.26203
grnd	FBGN0032682	-0.01945	0.084458	-0.10479	-0.00089
Snx21	FBGN0031457	0.190096	0.075479	0.209015	0.094398
lncRNA:CR42859	FBGN0262106	-0.1436	-0.10176	-0.30711	-0.26526
CG30424	FBGN0050424	-0.06131	0.167276	-0.25854	-0.02996
temp	FBGN0027296	-0.05751	0.222731	-0.09929	0.180949
mRpL13	FBGN0032720	0.035946	0.128845	-0.01316	0.079734
Oat	FBGN0022774	-0.06587	-0.24849	0.105705	-0.07692
CG4951	FBGN0039563	-0.37742	-0.04554	-0.36913	-0.03724
Hsp70Bc	FBGN0013279	-0.56171	-0.21717	-0.32307	0.021465
Cenp-C	FBGN0266916	0.008256	0.015763	-0.15472	-0.14721
CG17068	FBGN0031098	0.309091	0.256743	0.081662	0.029314
CG12061	FBGN0040031	-0.09154	0.091694	-0.21813	-0.03489
CG10628	FBGN0032818	-0.24583	-0.01089	-0.08431	0.150622
Golgin104	FBGN0036614	0.022091	-0.01502	-0.02121	-0.05832
CG14691	FBGN0037829	-0.16817	-0.10093	-0.10435	-0.03711
CG6937	FBGN0038989	-0.35025	-0.03704	-0.32081	-0.0076
Ugt303B1	FBGN0039086	-1.12175	0.510889	-2.29062	-0.65798
CG7607	FBGN0036145	0.009396	-0.35201	0.620621	0.259216
CG34435	FBGN0085464	-0.17829	0.07755	-0.22951	0.026335
CG15812	FBGN0035405	-0.23802	-0.07727	-0.17262	-0.01187
CG10804	FBGN0029663	0.315159	-0.08085	0.283131	-0.11288
CG43106	FBGN0262566	-0.43105	-0.34391	-0.57251	-0.48537
CG4960	FBGN0039371	-0.3428	-0.11115	-0.05475	0.176901
CG11178	FBGN0030499	0.074218	0.113955	-0.0537	-0.01397
CG32054	FBGN0052054	-0.02254	0.69769	-0.81237	-0.09215
Tbh	FBGN0010329	0.233111	-0.16545	0.278142	-0.12042
mRpL44	FBGN0037330	-0.28549	-0.01225	-0.24118	0.032056
CG34447	FBGN0085476	-0.23824	-0.36957	0.272089	0.140762
sn	FBGN0003447	-0.13975	-0.14342	0.014407	0.010737
Sodh-2	FBGN0022359	-0.45709	0.243456	-0.34671	0.353835
CG12105	FBGN0035241	0.562284	0.267296	0.444839	0.149851
lawc	FBGN0262976	-0.25131	-0.14305	-0.17464	-0.06638
bcn92	FBGN0013432	0.009996	0.038125	0.090715	0.118844
VhaM9.7-c	FBGN0028664	0.01505	0.036614	-0.03073	-0.00916
CG12498	FBGN0040356	0.108961	0.151586	-0.16239	-0.11977
CG43401	FBGN0263320	-2.04284	1.016908	-0.50842	2.551323
Sas-6	FBGN0039731	-0.70697	-0.20932	-0.6263	-0.12865
RpIIIC160	FBGN0030687	0.013527	0.165035	-0.12206	0.029449
lncRNA:CR43839	FBGN0264391	1.595149	0.698424	0.80633	-0.0904
CG12017	FBGN0035429	0.021545	-0.29236	-1.43228	-1.74618
Cad74A	FBGN0036715	0.320245	0.488706	-0.38866	-0.2202
Taf13	FBGN0032847	-0.25552	0.093253	-0.29425	0.054522
Tdc1	FBGN0259977	0.148725	0.133034	-0.05801	-0.0737
tbc	FBGN0052506	0.497061	0.096125	0.317086	-0.08385
psh	FBGN0030926	-0.08361	0.122962	0.114918	0.321492
CG2889	FBGN0030206	-0.18241	-0.09134	-0.01938	0.071686
SkpC	FBGN0026175	-0.43287	-0.08232	-0.70305	-0.3525
l(3)04053	FBGN0010830	-0.08144	0.050986	-0.02397	0.108452
Oseg4	FBGN0035264	-0.84017	-0.3428	-0.33991	0.157462
GNBP1	FBGN0040323	0.135153	0.089048	0.331193	0.285088
CG11052	FBGN0040524	-0.1919	0.045457	-0.31957	-0.08222

CG6429	FBGN0046999	-0.01011	0.180614	-0.16559	0.025136
et	FBGN0031055	0.623481	0.064162	0.543521	-0.0158
Caf1-105	FBGN0033526	0.070924	-0.02205	0.101676	0.008705
CG13999	FBGN0031753	0.192902	-0.44363	0.118723	-0.51781
Dronc	FBGN0026404	-0.0533	0.213204	-0.32062	-0.05411
nos	FBGN0002962	-1.33598	-0.26631	-1.29602	-0.22635
CG11317	FBGN0039816	0.161121	-0.00369	0.480763	0.315955
tilB	FBGN0014395	-0.28745	-0.18331	-0.09543	0.008712
CG2694	FBGN0024991	0.058812	-0.07147	0.140667	0.010386
lncRNA:CR43633	FBGN0263624	-0.25088	-0.26815	-0.22667	-0.24394
CG2685	FBGN0024998	-0.18718	-0.00659	-0.22949	-0.0489
CG9863	FBGN0034846	-0.16884	-0.00635	-0.1164	0.046088
CG6293	FBGN0037807	0.310037	-0.1203	0.414109	-0.01623
CG14759	FBGN0033278	-0.26393	-0.0207	-0.16202	0.081217
CG7789	FBGN0039698	-0.00439	-0.06591	-0.0467	-0.10822
CG15443	FBGN0031609	-0.05756	-0.06249	0.063747	0.058822
CG3473	FBGN0028913	-0.29853	-0.14818	-0.25053	-0.10017
CG12643	FBGN0040942	0.433347	-0.03137	-0.04319	-0.5079
CG8910	FBGN0025833	0.283088	-0.08133	0.548545	0.184125
CG10209	FBGN0033971	0.244537	0.014207	0.166052	-0.06428
CG7685	FBGN0038619	-0.23349	0.100482	-0.13061	0.203358
FDY	FBGN0265047	-0.33525	-0.01769	-0.79334	-0.47577
Rcd2	FBGN0037012	-0.09589	0.124628	-0.18322	0.037301
sstn	FBGN0036476	0.084217	0.085871	-0.10789	-0.10624
CG8509	FBGN0030696	-0.12972	-0.04785	-0.20279	-0.12092
Marc	FBGN0033451	0.077042	0.00028	-0.00263	-0.07939
CG3511	FBGN0035027	0.177846	0.229092	0.171866	0.223112
CG33099	FBGN0053099	0.184151	0.131913	-0.00851	-0.06075
CG13295	FBGN0035674	0.15019	0.046838	0.283011	0.17966
Elp3	FBGN0031604	-0.2059	0.072065	-0.13894	0.139025
sona	FBGN0034903	0.258426	0.172618	0.312661	0.226853
CG14259	FBGN0039483	-0.27754	-0.26068	-0.23975	-0.22289
OS9	FBGN0042129	-0.61412	-0.42209	-0.07465	0.117376
Magi	FBGN0034590	0.009552	-0.10698	0.300158	0.183622
aph-1	FBGN0031458	-0.0051	0.167902	-0.08172	0.091278
CG5439	FBGN0032476	-0.04667	0.020121	0.048859	0.115653
mRpS18B	FBGN0032849	-0.30453	0.091033	-0.37544	0.020119
CG14260	FBGN0039504	-0.12393	0.058306	-0.21875	-0.03651
dpr20	FBGN0035170	0.389589	0.003558	0.406634	0.020603
lncRNA:CR44967	FBGN0266302	-1.17249	-0.11591	-1.3335	-0.27693
Nepl4	FBGN0031805	-0.02291	0.117441	-0.19421	-0.05386
CG10038	FBGN0038013	-0.06244	-0.00049	-0.00139	0.060556
Dop1R1	FBGN0011582	0.783331	0.092271	0.948433	0.257373
CG34354	FBGN0085383	0.425318	0.051105	0.588881	0.214669
CG40470	FBGN0058470	-0.0681	-0.06139	-0.25821	-0.25151
CG7166	FBGN0037107	0.27553	0.025254	0.407486	0.15721
CG31357	FBGN0051357	0.045937	0.031158	0.076699	0.06192
CycE	FBGN0010382	0.084197	-0.05245	0.243041	0.106391
Ripalpha	FBGN0032189	0.202518	-0.02651	0.29665	0.067627
PGRP-SD	FBGN0035806	0.063082	0.395353	-0.29519	0.037081
CG32487	FBGN0052487	-0.1082	-0.07976	-0.2586	-0.23016
Sytbeta	FBGN0261090	0.35987	-0.08551	0.373758	-0.07162
CG8195	FBGN0034032	0.118463	-0.017	0.015381	-0.12009
CG9286	FBGN0038183	-0.09405	0.06012	-0.02891	0.125259
CG33054	FBGN0053054	-0.23714	0.018844	-0.15907	0.096913
resilin	FBGN0034157	-1.56355	0.212763	-1.66446	0.111853
pea	FBGN0086895	0.119123	0.058035	-0.01244	-0.07353
CG43246	FBGN0262891	0.122866	0.19168	-0.16424	-0.09543
CG1894	FBGN0039585	-1.49407	-1.68115	-0.82004	-1.00713
CG34132	FBGN0083968	-0.24429	0.080688	-0.53556	-0.21058
Chd3	FBGN0023395	-0.25924	0.044296	-0.38815	-0.08461
ave	FBGN0050476	-0.18377	0.15756	-0.27356	0.067769
CG7009	FBGN0038861	-0.36365	0.05252	-0.26913	0.147047
CG14024	FBGN0031697	-8.57E-05	0.342137	0.325678	0.667901
Cyp6d4	FBGN0039006	-0.06225	0.116039	-0.22113	-0.04284
CG41106	FBGN0069938	-0.13204	-0.03501	-0.04684	0.050197
lncRNA:CR43942	FBGN0264570	-0.63787	-0.49533	-0.62478	-0.48224
MKP-4	FBGN0031044	0.131961	0.106528	0.025063	-0.00037
CG12395	FBGN0030722	-0.20519	0.027798	-0.24405	-0.01107

dpa	FBGN0015929	-0.17742	0.014895	-0.16811	0.024198
CG11710	FBGN0031115	-0.01513	-0.04609	0.014193	-0.01677
CG9344	FBGN0034564	-0.42673	-0.00487	-0.47064	-0.04879
CG43321	FBGN0263026	0.159999	0.073496	-0.12343	-0.20993
CG4619	FBGN0032166	0.058262	-0.04714	0.064273	-0.04113
CG34125	FBGN0083961	-0.2961	-0.0838	-0.19687	0.015437
Taf12	FBGN0011290	-0.06773	0.047928	-0.0375	0.078166
CG31229	FBGN0051229	-0.15463	-0.04441	-0.32542	-0.21519
mthl15	FBGN0051720	0.223795	0.783142	-0.93235	-0.373
Ice1	FBGN0034853	-0.12999	-0.02507	-0.11469	-0.00977
CG12934	FBGN0033541	0.197513	1.305023	-0.36229	0.745221
CG46302	FBGN0284080	-0.20494	0.018729	-0.14015	0.083523
SmydA-4	FBGN0030257	0.082893	-0.14241	0.475822	0.250521
CG16995	FBGN0031412	-1.31199	0.654328	-1.95995	0.006372
EMC6	FBGN0039259	-0.13147	-0.00252	-0.12894	1.25E-05
beat-Ic	FBGN0028644	0.488762	-0.2835	0.934149	0.16189
CG13658	FBGN0039315	-1.51281	-0.42379	-1.44358	-0.35456
CG5033	FBGN0028744	-0.10609	0.03108	-0.1665	-0.02933
Vha16-5	FBGN0032294	-0.36985	-0.03621	-0.44604	-0.11241
CG43068	FBGN0262478	-0.36852	-0.21541	-0.16374	-0.01063
CG7402	FBGN0036768	0.15099	-0.62852	-0.06999	-0.84951
MED18	FBGN0026873	-0.03567	0.134002	-0.22702	-0.05734
Marf1	FBGN0039972	-0.2417	0.323913	-0.00816	0.557453
CG18249	FBGN0037553	0.341333	-0.12629	0.759903	0.292285
alpha4GT1	FBGN0031491	-0.01074	-0.14747	0.093735	-0.04299
Zfrp8	FBGN0021875	-0.34437	0.025519	-0.25433	0.115557
CG8067	FBGN0033891	0.38479	0.068857	0.298166	-0.01777
CG43702	FBGN0263841	-0.69701	-0.18545	-0.37198	0.139576
Gr43a	FBGN0041243	-0.78705	1.888453	-3.54381	-0.86831
Phax	FBGN0033380	-0.15139	-0.08552	-0.1549	-0.08903
mfr	FBGN0266757	0.100325	-0.13543	0.10295	-0.1328
CanB	FBGN0010014	-0.00983	0.043416	0.027259	0.0805
CG17380	FBGN0039077	0.131685	0.048783	-0.01205	-0.09496
tum	FBGN0086356	-0.04415	0.2937	-0.21634	0.121505
CG7168	FBGN0038586	-0.44474	-0.02667	-0.12403	0.294046
Membrin	FBGN0260856	-0.13461	-0.04115	-0.1616	-0.06814
CG7879	FBGN0035235	0.052114	-0.07093	0.017827	-0.10522
lncRNA:CR43793	FBGN0264337	-0.45852	-0.62582	-0.49563	-0.66293
sei	FBGN0003353	0.058181	-0.09273	0.365182	0.214274
CG30357	FBGN0050357	0.06673	0.007438	0.010935	-0.04836
CG5815	FBGN0027574	0.030204	-0.00156	0.06465	0.032886
qin	FBGN0263974	-0.66165	0.032468	-0.45653	0.237586
CG46042	FBGN0267709	-0.1006	-0.00131	0.104603	0.203899
CAH16	FBGN0040628	0.031412	-0.14446	-0.05004	-0.22592
GstT2	FBGN0050005	-0.23515	0.095961	-0.3123	0.01881
CG8303	FBGN0034143	0.005555	-0.10313	0.144218	0.035531
sti	FBGN0002466	0.017218	-0.13853	0.213275	0.057528
Su(fu)	FBGN0005355	-0.10597	-0.05565	-0.03765	0.012663
zyd	FBGN0265767	0.002319	-0.21823	0.373565	0.153017
zfh1	FBGN0004606	0.196404	0.089895	0.370742	0.264233
wus	FBGN0030805	0.562098	0.374983	0.180361	-0.00676
wuho	FBGN0029857	-0.12403	0.058569	-0.06015	0.122455
lncRNA:CR46006	FBGN0267668	-0.14044	0.345833	-0.66857	-0.18229
CG9919	FBGN0030742	0.075235	-0.08635	0.148603	-0.01298
CG4278	FBGN0014092	-0.09141	0.056622	-0.2322	-0.08417
wds	FBGN0040066	0.044597	0.066769	0.107152	0.129324
trus	FBGN0038055	-0.24536	-0.05009	-0.0459	0.149371
CG42404	FBGN0259823	0.128103	0.113218	0.404832	0.389947
Nprl2	FBGN0030800	0.12767	0.023371	0.046481	-0.05782
CalpC	FBGN0260450	-0.08466	-0.05218	-0.13498	-0.1025
CG31344	FBGN0051344	-0.10077	0.26039	-0.04857	0.312594
clt	FBGN0000326	-0.10911	0.016354	0.017311	0.142779
Tsp26A	FBGN0031760	0.032615	0.080813	-0.45046	-0.40226
mRpL21	FBGN0036853	-0.0869	0.085519	-0.2749	-0.10248
ERR	FBGN0035849	0.003922	0.038274	-0.14221	-0.10786
PpY-55A	FBGN0003140	-0.03045	-0.06538	-0.10117	-0.1361
beta4GalNAcTA	FBGN0027538	0.050529	0.109502	-0.14735	-0.08838
CG4660	FBGN0029839	-0.50897	-0.39721	-0.33391	-0.22215
NimB3	FBGN0054003	0.925296	-0.0078	0.748701	-0.18439

Socs44A	FBGN0033266	0.010404	0.145566	-0.14991	-0.01475
fsd	FBGN0033813	-0.10229	0.111553	-0.29543	-0.08158
CG43203	FBGN0262839	-0.49431	0.018221	-0.45842	0.054108
CG10151	FBGN0033960	-0.15467	-0.02724	-0.02022	0.10721
pav	FBGN0011692	-0.45663	0.077283	-0.46603	0.067885
CR11386	FBGN0260447	-0.68916	-0.3003	-0.92134	-0.53248
CG43924	FBGN0264545	0.071353	0.014863	-0.01056	-0.06705
CG13325	FBGN0033792	0.144724	-0.23184	-0.59259	-0.96915
Rpb10	FBGN0039218	-0.11113	0.095291	-0.25183	-0.0454
CG31404	FBGN0051404	0.06718	0.022528	0.313048	0.268396
CG6191	FBGN0027581	-0.04493	0.048391	-0.35568	-0.26236
CG10286	FBGN0037439	-0.23342	-0.09005	-0.09955	0.043809
dpr7	FBGN0053481	-0.04916	-0.01562	0.001597	0.035136
Nsun2	FBGN0026079	-0.16869	-0.03281	-0.21925	-0.08337
CG15514	FBGN0039712	-0.14835	-0.06773	-0.14175	-0.06112
mRpL14	FBGN0040389	-0.22935	0.043613	-0.2201	0.052867
ddbt	FBGN0284444	-0.24642	-0.18785	-0.15818	-0.09961
exex	FBGN0041156	0.248289	0.489685	-0.85726	-0.61586
Arfrp1	FBGN0030088	-0.23417	-0.0138	-0.12421	0.09616
CG10795	FBGN0034626	-0.20831	0.061906	-0.15841	0.111804
Drep1	FBGN0024732	-0.15199	-0.21598	0.053718	-0.01028
CG1647	FBGN0039602	0.04313	0.084905	0.330541	0.372315
mRpS23	FBGN0260407	-0.20218	-0.0369	-0.08338	0.081903
CG14383	FBGN0038102	-0.17645	-0.11767	-0.1832	-0.12442
CG7203	FBGN0031942	-1.08234	-0.49889	-0.26073	0.322727
lbm	FBGN0016032	-0.05832	-0.17857	0.052343	-0.06791
Cyp6t1	FBGN0031182	-0.24433	-0.19553	0.200256	0.249055
CG15368	FBGN0030104	-0.03164	-0.01832	-0.12018	-0.10686
CG11664	FBGN0040341	0.168515	0.009247	0.381825	0.222557
CG42376	FBGN0259722	0.008681	-0.0525	0.042233	-0.01895
Hr38	FBGN0014859	0.1915	-0.05546	0.722701	0.47574
Sec10	FBGN0266673	-0.03555	0.096599	-0.10975	0.022397
Rab21	FBGN0039966	0.071532	0.030553	-0.03351	-0.07449
drl	FBGN0015380	0.257557	-0.07434	0.171535	-0.16036
wun2	FBGN0041087	-0.383	0.286511	-0.89664	-0.22713
CG3698	FBGN0037023	-0.15383	-0.05106	-0.13441	-0.03164
CG10973	FBGN0036306	-0.18979	0.128882	-0.29666	0.022016
nAChRalpha1	FBGN0000036	0.217227	0.025348	0.236648	0.044769
CG43923	FBGN0264544	0.074791	0.020962	-0.01455	-0.06838
CG31664	FBGN0051664	0.378038	-1.42754	1.629632	-0.17595
ubl	FBGN0022224	-0.1088	0.201192	-0.4252	-0.11521
CG15097	FBGN0034396	0.283188	0.164782	0.578671	0.460265
TBC1D16	FBGN0032249	0.198649	-0.13817	0.323674	-0.01314
CG44227	FBGN0265158	-0.05042	0.185024	-1.3385	-1.10306
CG30339	FBGN0050339	0.001668	-0.27929	0.265827	-0.01513
Rbm13	FBGN0030067	-0.25754	0.045755	-0.07716	0.226136
CG13398	FBGN0032042	0.022765	-0.06521	0.015175	-0.0728
Grip	FBGN0029830	-0.18775	-0.01306	-0.21696	-0.04227
PIG-S	FBGN0265190	-0.10127	0.265085	-0.13985	0.226506
CG34134	FBGN0083970	0.228042	-0.23083	0.419696	-0.03918
nod	FBGN0002948	-0.42926	0.22894	-0.60829	0.049918
CG12728	FBGN0029825	-0.01132	0.011979	-0.12634	-0.10304
CG1764	FBGN0030467	-0.27407	0.146068	0.365424	0.785558
CG14212	FBGN0031045	-0.25006	0.022868	-0.2431	0.029818
CG10361	FBGN0036208	0.312497	0.045642	0.695302	0.428447
Usp39	FBGN0030969	-0.0347	0.266671	-0.28435	0.017022
CG9272	FBGN0032907	-0.32531	-0.07902	-0.59597	-0.34967
CG31515	FBGN0051515	0.082406	0.016983	0.094194	0.028771
Cad86C	FBGN0261053	0.241845	0.015668	0.328823	0.102646
dpr4	FBGN0053512	0.250235	-0.06685	0.258219	-0.05887
Gos28	FBGN0044871	-0.07059	0.10471	0.064251	0.239553
CG6123	FBGN0030913	0.500045	0.166187	0.398752	0.064894
DCTN4-p62	FBGN0033206	-0.0238	-0.01116	0.011644	0.024287
YL-1	FBGN0032321	-0.19763	0.005182	-0.22157	-0.01875
mrn	FBGN0261109	-0.16695	-0.00379	-0.07088	0.092274
CG3781	FBGN0029853	-0.15683	-0.07368	-0.26312	-0.17997
Vps33B	FBGN0039335	-0.04979	0.153495	-0.10643	0.096854
CG44314	FBGN0265373	-0.34409	-0.28148	-0.21696	-0.15436
CG8950	FBGN0034186	0.461557	0.508891	0.18205	0.229383

CG3793	FBGN0028507	-0.01969	0.015867	0.029006	0.06456
Elp2	FBGN0033540	0.093405	0.129547	0.21152	0.247661
CG9799	FBGN0038146	-0.28222	-0.04572	-0.20212	0.034379
Dtg	FBGN0038071	-0.2654	0.763035	-1.5154	-0.48697
CG15767	FBGN0029809	-0.35755	-0.01114	-0.22595	0.120461
Hacd2	FBGN0032524	-0.10466	0.00544	0.023867	0.133971
Mad1	FBGN0026326	-0.01017	-0.06489	0.103312	0.048599
CG14814	FBGN0023515	-0.15431	-0.03275	-0.06903	0.052532
CAHbeta	FBGN0037646	0.157216	0.062524	0.230193	0.135501
CG14778	FBGN0029580	-0.03334	0.000741	0.072448	0.106528
mRpS11	FBGN0038474	-0.18249	0.046196	-0.14679	0.081897
dpr19	FBGN0032233	0.097908	0.021218	0.08918	0.01249
CG43329	FBGN0263034	-0.21142	-0.06739	-0.02265	0.12138
fz4	FBGN0027342	0.178583	0.035738	0.049793	-0.09305
CG17104	FBGN0040496	0.454	0.032054	0.069421	-0.35252
CG34189	FBGN0085218	-0.19419	0.064263	-0.44657	-0.18811
TyrR	FBGN0038542	0.341299	-0.19759	0.273417	-0.26547
lncRNA:CR45408	FBGN0266957	-1.36428	0.521076	-1.48679	0.398563
CG11453	FBGN0038734	0.315496	0.284142	-0.40363	-0.43498
CG14195	FBGN0030998	0.087947	-0.07163	-0.1076	-0.26718
Cpr62Bb	FBGN0035280	-0.19149	0.046102	-0.37369	-0.1361
CG33259	FBGN0036495	-0.93122	-0.1702	-1.49918	-0.73817
CG11035	FBGN0037544	-0.01739	-0.07085	-0.05269	-0.10615
CG13204	FBGN0033627	0.036831	0.19317	-0.30764	-0.1513
GlyT	FBGN0034911	0.549946	-0.0763	0.688302	0.062055
FBGN0030294	FBGN0030294	-0.1335	0.163545	-0.18628	0.110765
chm	FBGN0028387	0.045247	0.104106	-0.03031	0.028553
CG15536	FBGN0039766	-0.30637	-0.05422	-0.16554	0.086613
Spps	FBGN0039169	0.237988	-0.07962	0.243111	-0.0745
CG9806	FBGN0030222	-0.06687	-0.13561	-0.00437	-0.07311
CG5849	FBGN0038897	0.286224	0.137787	0.124369	-0.02407
CG10834	FBGN0032972	-0.18974	-0.0333	-0.33136	-0.17492
CG7239	FBGN0031740	0.15095	0.054549	0.196506	0.100105
CG33230	FBGN0053230	0.332608	-0.11511	0.157111	-0.2906
mth	FBGN0023000	0.119796	0.196059	0.044044	0.120307
lncRNA:CR43174	FBGN0267794	-0.34548	-0.00661	-0.42255	-0.08368
U4-U6-60K	FBGN0036733	-0.27114	-0.09827	-0.26182	-0.08895
CG8249	FBGN0034045	-0.04519	-0.15408	0.097012	-0.01187
ninaB	FBGN0002937	-0.11313	0.071653	-0.17719	0.007589
Strump	FBGN0036571	-0.03865	0.104075	-0.08626	0.05646
CG18747	FBGN0042104	0.27676	0.375109	-0.46255	-0.3642
pk	FBGN0003090	0.329861	-0.00621	0.463915	0.127842
CG42747	FBGN0261801	2.049265	0.285286	0.701559	-1.06242
lush	FBGN0020277	-0.11491	-0.52125	0.727918	0.321585
mre11	FBGN0020270	-0.15738	-0.30012	-0.05635	-0.1991
RAF2	FBGN0036624	0.06983	-0.12716	0.277509	0.080522
trem	FBGN0038767	-0.19653	-0.04328	-0.35159	-0.19835
ACXB	FBGN0040509	0.615168	-0.07415	0.42285	-0.26647
CG9302	FBGN0032514	-0.20987	-0.04868	-0.04483	0.116356
Tip60	FBGN0026080	0.166875	0.018758	0.104477	-0.04364
DJ-1alpha	FBGN0033885	0.299652	0.304894	0.032393	0.037635
Ect3	FBGN0260746	-0.05946	-0.21262	0.398769	0.245607
CDK2AP1	FBGN0030269	-0.02495	0.081089	-0.15611	-0.05007
CG6567	FBGN0037842	0.040684	0.092919	-0.08157	-0.02934
Drsl3	FBGN0052283	-0.84686	-1.15213	0.415544	0.110275
CG14646	FBGN0037241	-0.12343	0.126713	0.006298	0.256445
CG34423	FBGN0085452	0.147468	0.182469	-0.11108	-0.07607
NC2beta	FBGN0028926	-0.29936	0.041372	-0.18468	0.156046
CG9609	FBGN0030787	-0.04988	-0.09955	-0.2524	-0.30207
brk	FBGN0024250	0.614294	-0.10564	0.925324	0.205389
Cpr31A	FBGN0053302	-0.76603	0.153183	-1.32586	-0.40665
CG2278	FBGN0030017	0.165246	0.032357	0.10955	-0.02334
CG42691	FBGN0261581	-0.11591	0.092476	-0.35329	-0.14491
Sin	FBGN0028402	-0.11929	0.023167	-0.21568	-0.07323
Rhp	FBGN0026374	0.094074	0.199284	-0.07405	0.031161
CG10459	FBGN0033440	-0.19892	-0.0815	-0.14759	-0.03017
CG31960	FBGN0051960	-0.22724	0.026528	-0.46099	-0.20722
tey	FBGN0036899	0.212012	-0.17024	0.035479	-0.34677
PIG-N	FBGN0033479	0.075129	-0.06186	0.088011	-0.04898

CG32232	FBGN0052232	-0.07417	-0.18829	0.106882	-0.00724
lncRNA:CR45018	FBGN0266376	-0.15603	0.177412	-0.32352	0.009922
LManI	FBGN0032253	0.532349	0.293536	0.548777	0.309964
CG9215	FBGN0030659	-0.17521	0.019774	-0.11848	0.076501
CG34171	FBGN0085200	-0.16341	-0.46069	0.516213	0.218934
CG43237	FBGN0262882	-0.13384	-0.03057	-0.26271	-0.15944
Hs2st	FBGN0024230	-0.10992	-0.07754	-0.03713	-0.00476
CG18302	FBGN0032266	0.427303	-0.14099	0.810954	0.242659
lncRNA:CR32582	FBGN0052582	-0.37242	0.002018	-0.29958	0.074859
POSH	FBGN0040294	0.186988	0.125097	0.192437	0.130545
KaiR1D	FBGN0038837	0.265502	-0.08766	0.494989	0.141826
CG11902	FBGN0028647	0.206107	0.080312	0.290227	0.164432
Archease	FBGN0038893	-0.20823	0.284481	-0.29281	0.199897
CG10898	FBGN0037911	-0.24474	-0.17347	-0.3473	-0.27603
CG34038	FBGN0054038	1.352037	0.931357	-0.24018	-0.66086
Bili	FBGN0039282	0.041048	0.018328	0.069674	0.046954
mRpL55	FBGN0038678	-0.41705	-0.1618	-0.34341	-0.08816
CG15578	FBGN0040905	0.008091	0.188812	-0.31456	-0.13384
CG31675	FBGN0051675	-0.17082	-0.22143	0.033682	-0.01693
FAM21	FBGN0034529	0.115514	0.01879	0.187165	0.090441
CG9246	FBGN0032925	-0.22235	-0.04835	-0.17337	0.00063
GatA	FBGN0260779	0.05123	0.069439	0.19692	0.215129
Sln	FBGN0033657	0.235846	0.007837	0.37517	0.147161
Jon25Bii	FBGN0031654	0.811614	1.78121	1.565726	2.535322
CG8202	FBGN0037622	0.100611	0.17452	-0.08158	-0.00767
CG1847	FBGN0030345	-0.23572	-0.06468	-0.10074	0.070304
CG7650	FBGN0036519	-0.16836	0.038955	-0.20971	-0.00239
mst	FBGN0020272	-0.61331	0.389595	-0.3773	0.625602
CG5181	FBGN0031909	-0.00027	-0.08998	0.095224	0.005516
betaggt-II	FBGN0028970	-0.19507	-0.17655	-0.1292	-0.11068
Pgam5	FBGN0023517	-0.22331	-0.09961	-0.16784	-0.04414
Shark	FBGN0015295	0.030744	0.046439	0.124803	0.140498
Gr61a	FBGN0035167	0.413526	0.671407	-0.00555	0.252331
CG32263	FBGN0052263	-0.25215	-0.09781	-0.24689	-0.09256
CG7632	FBGN0037071	0.05034	-0.05204	0.026026	-0.07636
CG42233	FBGN0250755	0.292958	-0.08956	0.509072	0.126554
lncRNA:CR42844	FBGN0262033	-0.70999	-0.1161	-1.60306	-1.00917
CG5151	FBGN0036576	0.100798	-0.28157	0.060654	-0.32171
CG32588	FBGN0052588	-0.45723	-0.08615	-0.37299	-0.00191
vimar	FBGN0022960	0.105611	0.084814	0.020299	-0.0005
CG3062	FBGN0025612	-0.24843	-0.00816	-0.27497	-0.0347
xit	FBGN0029906	-0.14613	0.065869	-0.27612	-0.06412
UQCR-11L	FBGN0050354	-0.1846	-0.08695	-0.21662	-0.11897
CG10265	FBGN0033990	-0.03992	0.026634	-0.06436	0.002198
CG1428	FBGN0032967	-0.23235	0.017297	-0.30831	-0.05866
CG6724	FBGN0032298	0.051052	0.178527	-0.24321	-0.11574
CG42764	FBGN0261832	-0.13519	-0.05203	0.169942	0.253101
CG9689	FBGN0030159	-0.20231	0.033253	-0.5568	-0.32124
CG30472	FBGN0050472	-0.5555	-0.08314	-0.69414	-0.22177
CG11191	FBGN0033249	-0.21474	-0.16631	0.049527	0.09796
CG12464	FBGN0033861	-0.02199	-0.04305	-0.08018	-0.10124
CG13375	FBGN0040370	0.440405	0.278944	0.197298	0.035837
CG31957	FBGN0051957	0.079657	0.114789	0.024479	0.059612
CG11583	FBGN0035524	-0.25516	-0.012	-0.52821	-0.28505
CG10341	FBGN0032701	0.10134	0.476564	-0.38418	-0.00896
CG9855	FBGN0037242	-0.10369	-0.11729	0.215592	0.201998
CG32225	FBGN0052225	0.060578	-0.06596	0.132451	0.005916
CG33252	FBGN0053252	-0.45219	-0.19158	-0.27656	-0.01595
PGAP3	FBGN0033088	-0.15571	-0.00305	-0.12273	0.029929
Pk34A	FBGN0028410	-0.24741	-0.01661	-0.62538	-0.39458
lncRNA:CR43456	FBGN0263410	-0.11446	-0.00564	-0.19804	-0.08922
Octalpha2R	FBGN0038653	0.277492	-0.02139	0.644088	0.345208
CG11852	FBGN0039297	-0.28938	0.282502	-0.14652	0.425363
CG6847	FBGN0030884	-0.26395	-0.01087	-0.35153	-0.09846
mRpS2	FBGN0031639	0.025019	-0.02799	0.060405	0.007393
CG32219	FBGN0052219	-0.42223	-0.01604	-0.10253	0.303652
CG14543	FBGN0039404	-0.20139	0.078269	-0.27484	0.004815
TfIIFbeta	FBGN0010421	0.016577	0.106798	0.025163	0.115384
CG32206	FBGN0052206	0.204196	-0.07006	0.424955	0.150702

DNApol-epsilon255	FBGN0264326	-0.69524	-0.10245	-0.8149	-0.2221
mRpS28	FBGN0034361	-0.16488	-0.04672	-0.11019	0.007967
lncRNA:CR44951	FBGN0266256	-1.24895	0.775153	-1.98664	0.03746
Brd8	FBGN0039654	0.093431	0.03049	0.062232	-0.00071
Elk	FBGN0011589	0.266271	0.117425	0.29997	0.151124
CG8366	FBGN0034054	-0.17512	0.036282	-0.33233	-0.12093
CG12929	FBGN0033429	-0.49953	0.035403	-0.26249	0.272447
Csl4	FBGN0032346	-0.51013	-0.17368	-0.37695	-0.0405
CG34432	FBGN0085461	-0.16186	-0.17498	-0.14415	-0.15727
mRpL18	FBGN0026741	-0.24668	0.077453	-0.22435	0.099778
lncRNA:CR43418	FBGN0263337	-0.00741	0.070611	-0.29986	-0.22184
AttD	FBGN0038530	-1.49717	0.724268	-2.29285	-0.07141
CG10505	FBGN0034612	0.169926	0.623334	0.868019	1.321428
CG12702	FBGN0031070	0.095594	-0.13043	0.071223	-0.1548
Trf4	FBGN0031444	-0.11951	-0.07686	-0.2441	-0.20144
Nsun5	FBGN0259704	-0.08864	-0.04722	-0.01371	0.027715
CG10283	FBGN0032681	0.195249	0.075	0.191087	0.070839
CG6675	FBGN0032973	-0.19203	0.045497	-0.30574	-0.06821
LManV	FBGN0032068	1.953823	0.490765	2.218621	0.755563
CG43920	FBGN0264541	-1.936	0.150328	-4.88217	-2.79584
CG10214	FBGN0039115	0.000942	0.156999	-0.20477	-0.04872
CG6220	FBGN0033865	0.017662	-0.06099	-0.13465	-0.2133
Naa60	FBGN0036039	0.077683	0.023017	0.112039	0.057373
Suv3	FBGN0037232	0.007785	0.032567	-0.14187	-0.11709
Rai1	FBGN0030793	-0.58313	0.027583	-0.88247	-0.27176
Galphaf	FBGN0010223	-0.03453	0.115892	-0.43614	-0.28571
CG4042	FBGN0037018	-0.15106	-0.10085	-0.10035	-0.05014
CG42535	FBGN0260643	-0.19046	0.170858	-0.50793	-0.14661
CG5281	FBGN0037902	-0.19468	-0.08372	-0.13702	-0.02606
CG8777	FBGN0033376	0.099064	0.046034	0.187699	0.134669
mRpS21	FBGN0044511	-0.16102	0.093821	-0.27529	-0.02045
CG42685	FBGN0261571	0.468015	0.131223	0.234064	-0.10273
lncRNA:CR44645	FBGN0265856	-2.54966	-0.89222	-2.49707	-0.83963
Nlg4	FBGN0083975	0.350326	0.06534	0.33573	0.050743
CG1103	FBGN0037235	0.025537	0.048667	-0.00431	0.018816
CG13177	FBGN0040759	0.129936	0.224317	0.116839	0.21122
Grip75	FBGN0026431	0.014715	0.005787	0.23428	0.225351
Parg	FBGN0023216	0.048473	0.311752	-0.0876	0.175679
SiaT	FBGN0035050	-0.68854	0.096154	-0.35613	0.428563
CG3645	FBGN0031238	-0.09612	0.058462	-0.14428	0.010296
CG46338	FBGN0285962	-0.11663	0.095324	-0.12283	0.089127
CG10000	FBGN0039596	-0.46855	0.581242	-1.05872	-0.00893
CG33695	FBGN0052831	-0.19223	-0.03756	-0.19194	-0.03728
CG6674	FBGN0036063	-0.24821	0.065932	-0.28152	0.032621
CG7407	FBGN0037134	-0.11177	-0.02582	-0.04026	0.045689
muskelin	FBGN0033757	0.232589	0.002251	0.271169	0.040831
CG6163	FBGN0036155	0.065917	-0.00174	-0.21038	-0.27804
CG16965	FBGN0032387	0.408716	0.537715	-0.01959	0.109404
mthl1	FBGN0030766	0.189189	0.081293	0.034698	-0.0732
CtIP	FBGN0036991	0.139526	0.061303	0.23205	0.153827
CG7194	FBGN0035868	0.191579	0.786574	-0.47143	0.123562
Mybbp1A	FBGN0001341	0.053721	-0.29649	0.008105	-0.34211
Octbeta1R	FBGN0038980	0.307593	0.020279	0.436568	0.149255
CG33282	FBGN0053282	-0.32887	-0.54581	-0.11904	-0.33598
tfc	FBGN0035199	0.618076	0.272277	0.679645	0.333846
CG32301	FBGN0052301	0.243007	0.073735	0.106915	-0.06236
CG5846	FBGN0032171	0.133605	0.200896	0.085117	0.152409
p53	FBGN0039044	-0.37193	-0.06555	-0.3161	-0.00973
CG14820	FBGN0035718	-0.20834	0.459113	-1.49197	-0.82452
hh	FBGN0004644	0.339482	0.504653	-0.31263	-0.14746
l(2)37Cb	FBGN0086444	-0.0828	-0.05475	0.035843	0.063896
Irbp18	FBGN0036126	0.061796	0.212275	-0.1434	0.00708
CG34433	FBGN0085462	-0.13975	0.074124	-0.24056	-0.02669
CG44437	FBGN0265629	0.257774	-0.13726	0.423908	0.028871
lncRNA:CR44050	FBGN0264842	2.073515	-0.88081	0.605944	-2.34838
CG9592	FBGN0036426	-0.16618	0.086712	-0.47368	-0.22079
CG32533	FBGN0052533	-0.06861	0.288264	-0.14011	0.216766
Naa40	FBGN0039687	-0.3093	0.08962	-0.73757	-0.33865
CG14628	FBGN0040365	-0.22131	-0.11081	-0.33936	-0.22886

Wwox	FBGN0031972	0.009926	0.115992	-0.031	0.075071
CR43975	FBGN0264706	-0.28804	-0.09261	-0.29173	-0.0963
Slu7	FBGN0039626	-0.02415	0.016841	-0.08984	-0.04886
CG15203	FBGN0030261	-0.33713	-0.30109	-0.15563	-0.11958
Obp19a	FBGN0031109	0.31111	-0.18634	1.192901	0.695451
CG3703	FBGN0040348	0.06631	-0.04377	0.136287	0.026206
Teh1	FBGN0037766	0.464277	-0.05273	0.735624	0.218612
Alg9	FBGN0039293	0.059147	0.236763	-0.05942	0.118193
CG30083	FBGN0050083	1.434738	-0.03633	1.906548	0.435482
asRNA:CR45600	FBGN0267160	-1.29347	-0.33517	-0.98153	-0.02323
Ntf-2r	FBGN0032680	-0.01908	0.063742	-0.20316	-0.12034
CG10428	FBGN0032724	-0.10417	0.134306	-0.20805	0.030423
CG1136	FBGN0035490	-0.24779	-0.00243	-0.52207	-0.27671
CG6729	FBGN0032296	0.015548	-0.01893	0.037484	0.00301
Trs31	FBGN0266723	-0.06557	0.061906	0.023815	0.15129
CG10559	FBGN0039323	-0.59321	-0.2007	1.039891	1.4324
lncRNA:CR43803	FBGN0264347	-0.02229	-0.03956	-0.11437	-0.13163
CG8060	FBGN0034113	0.161387	-0.01897	0.181841	0.001485
FoxP	FBGN0262477	0.303489	0.038262	0.344798	0.079571
lncRNA:CR45982	FBGN0267644	0.427757	0.636011	-1.3251	-1.11684
CG10189	FBGN0032793	0.059357	0.388281	-0.17982	0.149104
Scgbeta	FBGN0038042	-0.14565	-0.07317	0.162823	0.235301
CR43482	FBGN0263493	-0.38685	-0.1965	-0.77246	-0.58212
ey	FBGN0005558	0.200073	0.030823	0.442013	0.272762
CG15676	FBGN0034651	-0.22014	-0.08109	-0.20518	-0.06614
Nepl12	FBGN0037727	0.296543	-0.09529	0.772228	0.380398
lncRNA:CR43634	FBGN0263625	-0.56087	-0.04091	-1.08456	-0.5646
spel1	FBGN0015546	-0.04558	0.028918	-0.0485	0.025995
CG3515	FBGN0031431	-0.11605	-0.00581	-0.30183	-0.19159
CG11123	FBGN0033169	-0.09466	0.059306	-0.32538	-0.17142
betaNACtes4	FBGN0030566	-0.47655	-0.06185	-0.55002	-0.13531
CG4617	FBGN0029936	0.123718	0.036433	0.16316	0.075874
Dis3	FBGN0039183	-0.07305	-0.03958	0.060373	0.093845
CG8009	FBGN0036090	-0.06269	-0.03083	0.048553	0.080418
CG18476	FBGN0037931	-0.05186	0.16784	-0.15279	0.066902
l(2)k09022	FBGN0086451	-0.1368	-0.3175	0.086972	-0.09372
CR45499	FBGN0267055	-1.27736	-2.62097	-0.9001	-2.24371
CG30154	FBGN0050154	0.108226	0.18886	0.446936	0.52757
CG43076	FBGN0262486	-0.34376	-0.11357	-0.2879	-0.05771
wac	FBGN0035120	-0.30282	-0.10019	-0.32252	-0.11989
LBR	FBGN0034657	0.440199	0.029032	0.406803	-0.00436
CG6435	FBGN0034165	-0.21211	0.121969	-0.6866	-0.35252
Prat	FBGN0004901	-0.10353	0.125849	-0.13334	0.096045
CG1785	FBGN0030061	-0.27976	-0.3455	-0.23219	-0.29793
CG34012	FBGN0054012	-0.23389	-0.18223	-0.17771	-0.12605
Tace	FBGN0039734	0.061202	-0.12036	0.126275	-0.05529
CG7443	FBGN0037577	-0.57323	-0.30073	-0.41304	-0.14055
Cad96Cb	FBGN0039294	0.082152	0.023307	1.931324	1.872479
GluRIIC	FBGN0046113	-0.22198	-0.36697	-0.017	-0.16199
Aprt	FBGN0000109	-0.15359	0.013367	0.200901	0.367859
CG34290	FBGN0085319	-1.23301	-0.24784	-1.11029	-0.12512
lncRNA:CR43104	FBGN0262564	0.144446	-0.2382	0.217724	-0.16492
CG4892	FBGN0028884	-0.22803	-0.1708	-0.26439	-0.20716
Phf7	FBGN0031091	0.012423	0.194093	-0.27906	-0.09739
CG8281	FBGN0035824	0.227078	0.117765	0.145404	0.036091
CG12866	FBGN0033955	-0.05711	-0.02251	-0.19121	-0.15661
Fen1	FBGN0025832	-0.35815	0.156798	-0.48294	0.032014
galla-2	FBGN0036107	-0.04974	-0.27044	0.250409	0.029714
CG15435	FBGN0031608	-0.0719	0.246856	-0.18652	0.132233
CG7339	FBGN0036188	-0.21243	-0.05188	-0.25856	-0.09801
CstF64	FBGN0027841	-0.02445	0.169781	-0.16343	0.030805
CG30099	FBGN0050099	-0.30974	-0.14584	-0.24091	-0.07701
cag	FBGN0017414	-0.5717	-0.15193	-0.00661	0.413165
E(spl)mbeta-HLH	FBGN0002733	-0.51775	0.367532	-1.01447	-0.12919
CG43405	FBGN0263324	-0.20438	0.335659	-0.35757	0.182471
CG44198	FBGN0265087	-0.58994	-0.06797	-0.55299	-0.03102
CG7011	FBGN0036489	-0.13316	-0.07053	-0.05461	0.008021
Tret1-2	FBGN0033644	-0.177	-0.12317	-0.18073	-0.1269
cutlet	FBGN0015376	-0.72348	0.453746	0.409617	1.586842

repo	FBGN0011701	-0.25663	-0.1233	0.216266	0.34959
Bgb	FBGN0013753	-0.19678	0.035014	-0.16027	0.071529
rdo	FBGN0243486	0.443169	0.026217	0.325594	-0.09136
Sil1	FBGN0039296	-0.25376	0.014958	0.211815	0.480534
CG18622	FBGN0038460	-0.15783	0.041431	-0.05896	0.140307
CG31109	FBGN0051109	-0.26131	-0.07303	-0.32961	-0.14134
CG1671	FBGN0033454	-0.11244	0.148282	-0.17533	0.085384
CG14082	FBGN0036851	0.21682	0.173599	0.542014	0.498793
Mes4	FBGN0034726	-0.61923	0.048236	-0.40049	0.266972
CG7133	FBGN0037150	0.167091	0.060277	0.192093	0.085278
CG10778	FBGN0029980	-0.04428	0.080868	-0.08749	0.03765
Arl5	FBGN0035866	0.004829	-0.02597	0.061019	0.030216
Apc2	FBGN0026598	0.007652	0.106181	0.051909	0.150438
sage	FBGN0037672	0.026928	0.088415	-0.15789	-0.0964
CG15056	FBGN0030918	-0.38211	0.107045	-0.71723	-0.22808
Eip78C	FBGN0004865	0.543636	0.193635	0.526136	0.176135
N	FBGN0004647	0.01414	0.126716	0.207707	0.320283
CG11447	FBGN0038737	-0.07866	0.100785	-0.0416	0.137842
aos	FBGN0004569	-0.30502	-0.04067	-0.34697	-0.08262
CG9525	FBGN0032080	-0.04476	-0.16256	-0.23221	-0.35001
beat-IV	FBGN0039089	0.29254	-0.11051	0.299716	-0.10334
CG2901	FBGN0029679	-0.04908	0.004463	0.010031	0.063572
Vti1b	FBGN0264751	-0.20885	0.048705	-0.19165	0.065909
CG31869	FBGN0051869	0.084978	0.104149	0.317161	0.336333
CG13077	FBGN0032810	-0.37603	0.035522	-0.08835	0.323206
mRpL41	FBGN0034001	-0.21135	0.038221	-0.23652	0.013045
Pop4	FBGN0035831	-0.92783	-0.21135	-0.76463	-0.04815
twz	FBGN0034636	-0.61429	0.098502	-0.67903	0.033755
CG43449	FBGN0263403	0.887799	0.304932	0.753425	0.170558
LSm7	FBGN0261068	-0.27252	-0.01877	-0.21442	0.039326
CG13984	FBGN0260452	-0.15039	0.101998	-0.23743	0.014959
wda	FBGN0039067	-0.06728	0.028286	-0.14927	-0.0537
sky	FBGN0032901	0.585449	-0.25278	1.085392	0.247166
CG11906	FBGN0034425	-0.21092	-0.05486	-0.23559	-0.07954
ect	FBGN0000451	0.098724	0.139698	0.198697	0.23967
kek3	FBGN0028370	0.278335	-0.06549	0.428412	0.084586
CG6290	FBGN0030921	-0.62068	-0.63856	-0.00311	-0.02099
CG5742	FBGN0034304	0.22764	0.179072	-0.0924	-0.14097
lncRNA:Yu	FBGN0061188	0.428642	-0.20705	0.228205	-0.40749
luna	FBGN0040765	0.357594	0.023933	0.414188	0.080526
CG4860	FBGN0037999	0.393817	0.317063	0.001068	-0.07569
CG6785	FBGN0032399	0.243277	0.048979	0.412427	0.218129
l(3)neo43	FBGN0011476	-0.13116	-0.10761	-0.04082	-0.01726
CG12880	FBGN0046258	0.231725	-0.24765	0.997991	0.51862
CG8891	FBGN0031663	-0.21144	0.226851	-0.2277	0.210591
CG14817	FBGN0026089	-0.11391	0.044328	-0.16556	-0.00732
CG14883	FBGN0038432	-0.0393	0.049688	-0.17904	-0.09005
CG14220	FBGN0031036	-0.05769	0.062676	-0.04166	0.078705
GstE4	FBGN0063496	-0.85585	-0.84596	0.738144	0.748033
CG18605	FBGN0034411	-0.15483	-0.01524	-0.2075	-0.0679
CG45062	FBGN0266432	0.648298	0.118065	0.504817	-0.02542
CG2909	FBGN0030189	-0.35931	-0.13951	-0.0967	0.123097
CG7137	FBGN0034422	-0.07881	0.095051	-0.28979	-0.11593
mas	FBGN0011653	-0.85359	-0.39315	1.740867	2.2013
lncRNA:CR45155	FBGN0266648	-0.55569	0.307318	-1.22778	-0.36477
CG6870	FBGN0032652	0.04832	-0.01233	0.263185	0.20253
Pex1	FBGN0013563	0.272431	-0.08819	0.190886	-0.16973
CG11696	FBGN0030314	0.047226	0.001741	-0.09766	-0.14314
CG18273	FBGN0029525	-0.07244	-0.00172	-0.0799	-0.00918
CG1789	FBGN0030063	-0.36188	-0.29999	-0.21981	-0.15792
CG7985	FBGN0028499	-0.01542	-0.10619	0.278054	0.18728
CG17712	FBGN0027597	-0.29426	0.054891	-0.10865	0.2405
dpr18	FBGN0030723	0.221036	0.01743	0.097098	-0.10651
ZIPIC	FBGN0039740	-0.01808	0.000228	-0.0573	-0.03899
Art7	FBGN0034817	0.024285	0.063913	0.175717	0.215345
Bet5	FBGN0260860	0.450619	0.385937	-0.06715	-0.13183
Adgf-C	FBGN0038173	-0.11238	0.057852	-0.4081	-0.23786
mldr	FBGN0029858	0.264975	0.350881	-0.05405	0.031857
Su(H)	FBGN0004837	0.041766	-0.01801	0.059545	-0.00023

Smyd4-1	FBGN0033427	-0.14502	-0.16687	-0.18157	-0.20342
lncRNA:CR44311	FBGN0265370	-0.16488	-0.37776	-0.39818	-0.61106
MED24	FBGN0035851	0.050954	0.128962	-0.10462	-0.02661
CG11158	FBGN0030511	0.043866	0.014716	0.405966	0.376815
CG42590	FBGN0260967	0.306499	0.018239	-0.33188	-0.62014
RfC4	FBGN0260985	-0.22943	0.012921	-0.38242	-0.14007
CG9135	FBGN0031769	-0.2245	-0.08899	-0.13885	-0.00333
CG30161	FBGN0050161	-0.08973	0.045009	-0.2376	-0.10285
CG42846	FBGN0262035	0.068042	-0.0098	0.189723	0.111882
ova	FBGN0032197	0.068628	0.04434	0.037594	0.013306
CG18870	FBGN0042180	0.176231	0.023005	0.174279	0.021053
ZnT77C	FBGN0037000	0.224837	-0.02694	0.162666	-0.08911
CG43063	FBGN0262365	-0.3663	-0.25918	-0.1601	-0.05298
CG31815	FBGN0051815	0.044269	-0.04899	-0.07529	-0.16854
CG31156	FBGN0051156	0.056893	-0.00723	0.159798	0.095675
CG17026	FBGN0036550	-0.03548	0.047303	-0.42732	-0.34453
pre-rRNA:CR45847	FBGN0267507	-0.05503	-0.13403	-0.36648	-0.44548
CG32448	FBGN0052448	-0.20616	-0.10758	0.085483	0.184062
CG7304	FBGN0036527	-0.3951	-0.38397	-0.3446	-0.33348
CG3857	FBGN0023520	-0.29414	0.057747	-0.33681	0.015071
CG10584	FBGN0037045	-0.19924	-0.12908	-0.05286	0.017301
Tsp42Eh	FBGN0033129	-0.14762	-0.08598	-0.03538	0.026269
CG6006	FBGN0063649	0.184981	0.159888	0.05606	0.030967
mIF2	FBGN0039588	0.08344	0.14799	-0.22778	-0.16323
CG11454	FBGN0031224	-0.17594	-0.01513	-0.16005	0.000756
CG4053	FBGN0038482	-0.31551	0.579574	-1.4095	-0.51442
Not11	FBGN0034963	-0.03725	0.075776	-0.26855	-0.15553
Vps39	FBGN0038593	0.080205	0.072187	-0.03911	-0.04713
CG43317	FBGN0263022	-0.1852	-0.04866	-0.13493	0.001618
plum	FBGN0039431	0.226285	0.109873	0.389968	0.273556
CG1463	FBGN0030406	-0.21528	0.066944	-0.17136	0.110871
MED22	FBGN0040339	-0.21	0.109978	-0.23149	0.088497
CG17930	FBGN0038416	-0.92462	0.244964	-0.63667	0.532907
CG13995	FBGN0031770	0.321074	-0.17722	0.440439	-0.05786
CG42831	FBGN0262020	-0.55697	-0.55148	-0.17966	-0.17418
CG7840	FBGN0032014	0.016425	0.029859	-0.16858	-0.15514
insv	FBGN0031434	-0.10234	-0.16019	-0.08798	-0.14583
CG18223	FBGN0036832	-0.25288	-0.09168	-0.18021	-0.01902
Ssu72	FBGN0031054	0.028371	0.1058	-0.03577	0.041661
or	FBGN0003008	-0.2454	0.045353	-0.27514	0.015615
Mes2	FBGN0037207	0.237017	-0.03269	0.411942	0.142238
CG43233	FBGN0262878	-0.20635	0.012151	-0.18874	0.029764
CG30001	FBGN0050001	-0.33463	0.292627	1.18023	1.807483
Cyp4p2	FBGN0033395	-0.17614	0.031465	-0.30614	-0.09853
MED17	FBGN0038578	-0.2031	0.068093	-0.14212	0.129078
CG9452	FBGN0036877	0.369333	0.189669	0.213188	0.033524
CG1840	FBGN0030351	-0.21674	0.115455	-0.31335	0.018851
CG2614	FBGN0032873	0.073637	0.112826	-0.0296	0.009587
Schip1	FBGN0032221	0.151892	-0.11125	0.18072	-0.08242
mRpS25	FBGN0030572	-0.15707	-0.02956	-0.07226	0.055252
AstCC	FBGN0032337	0.94369	0.610274	0.154181	-0.17923
Ipk2	FBGN0031267	-0.14839	0.258584	-0.26611	0.140871
sotv	FBGN0029175	-0.01315	-0.22842	0.005781	-0.20948
MED8	FBGN0034503	-0.01274	0.117043	-0.05949	0.070293
PH4alphaSG1	FBGN0051014	-0.54651	-0.39825	0.137458	0.285715
bys	FBGN0010292	-0.15649	-0.0216	-0.10163	0.033267
lncRNA:CR43151	FBGN0262681	-0.35974	-0.02586	-0.35381	-0.01992
CG4646	FBGN0033810	-0.2566	-0.06208	-0.09339	0.10113
CG11597	FBGN0036212	-0.03098	-0.02473	-0.32159	-0.31534
pre-rRNA:CR45845	FBGN0267505	-0.05709	-0.15981	-0.38759	-0.49031
CG3335	FBGN0036018	0.081448	0.074126	0.17004	0.162718
RabX4	FBGN0051118	0.071944	-0.04512	0.237158	0.120094
stl	FBGN0086408	-0.21642	-0.10996	1.069123	1.175583
CG9899	FBGN0034829	0.08056	-0.04765	-0.12809	-0.25629
inv	FBGN0001269	0.144994	0.097261	-0.14993	-0.19766
Dpck	FBGN0037469	-0.18071	0.013351	-0.19455	-0.00048
MED28	FBGN0039337	-0.20883	-0.17362	-0.24251	-0.20729
CG31609	FBGN0051609	-0.37588	-0.05769	-0.60855	-0.29036
Dic4	FBGN0036808	-0.22488	-0.07152	-0.26799	-0.11463

CG15546	FBGN0039807	-0.45363	0.023934	-0.11228	0.365287
CG9514	FBGN0030592	0.571281	0.577018	0.282785	0.288522
spz	FBGN0003495	-0.15514	0.047768	-0.14775	0.055153
GatB	FBGN0039153	-0.2164	-0.01041	0.130533	0.336516
ksh	FBGN0040890	-0.25591	0.077066	-0.23067	0.102302
Pym	FBGN0034918	-0.14146	-0.00439	-0.09674	0.04033
CG1603	FBGN0033185	-0.08709	0.013321	-0.09663	0.003778
pen-2	FBGN0053198	-0.00173	0.19726	-0.47287	-0.27388
CG14982	FBGN0035477	0.039053	-0.20158	0.364252	0.123622
Ski6	FBGN0032487	-0.29192	-0.08548	-0.24307	-0.03663
Wdr82	FBGN0032030	-0.03184	-0.02526	-0.0512	-0.04463
asf1	FBGN0029094	-0.13646	0.082615	-0.09939	0.119682
CG10725	FBGN0036362	-0.45437	-2.87231	2.582842	0.164896
Cnb	FBGN0035295	-0.30282	-0.13544	-0.09203	0.075347
CG12691	FBGN0029701	-0.22333	0.100142	-0.29221	0.031265
Takl2	FBGN0039015	-0.17057	0.618692	-1.28852	-0.49926
CG32069	FBGN0052069	-0.39286	-0.04909	-0.46832	-0.12455
DIP-gamma	FBGN0039617	0.25088	-0.00118	0.341729	0.089669
lncRNA:CR42491	FBGN0259993	-0.09326	0.074085	0.037726	0.205075
DNApol-theta	FBGN0002905	0.098313	-0.12478	0.030022	-0.19307
lncRNA:CR45997	FBGN0267659	-1.24472	-0.2396	-1.81726	-0.81214
Prosalpha4T1	FBGN0265606	-0.27258	-0.10565	-0.16847	-0.00153
CG15167	FBGN0032709	-0.29331	-0.10209	-0.38589	-0.19466
CG43267	FBGN0262948	-0.5266	-0.36852	-0.14234	0.015739
CG42237	FBGN0250862	0.374821	0.11971	0.542349	0.287238
CG8908	FBGN0034493	0.130011	-0.08471	0.111092	-0.10362
CG3740	FBGN0023530	-0.22056	0.006725	-0.13731	0.089975
can	FBGN0011569	-0.01144	-0.05268	-0.09548	-0.13672
s-cup	FBGN0050044	-0.63869	-0.20945	-0.60949	-0.18025
Tnpo-SR	FBGN0031456	0.084508	0.054581	0.114082	0.084156
CCDC53	FBGN0031979	-0.19549	-0.07581	-0.24479	-0.12511
Sobp	FBGN0033654	-0.10904	-0.18538	0.293568	0.217231
CG31446	FBGN0051446	0.424048	0.801915	-0.49175	-0.11388
mEFG1	FBGN0263133	0.093057	-0.04251	0.206466	0.070903
mRpL36	FBGN0042112	-0.11117	-0.04796	-0.13065	-0.06745
Prosbeta4R1	FBGN0031442	-0.23878	-0.14478	-0.20962	-0.11562
CG15882	FBGN0030983	1.199987	0.627788	0.128417	-0.44378
lncRNA:CR43835	FBGN0264383	0.148992	0.051424	-0.08186	-0.17943
Cdc45	FBGN0026143	0.021572	0.123597	0.111766	0.213792
CG14380	FBGN0038124	-0.33298	-0.16661	-0.18394	-0.01758
CG1529	FBGN0031144	0.075665	-0.0944	0.079181	-0.09088
Ada3	FBGN0030891	0.053026	0.105707	-0.0612	-0.00852
CG5890	FBGN0039380	0.188785	-0.27433	0.503979	0.040864
Hira	FBGN0022786	0.108464	-0.01172	-0.03606	-0.15624
CG32576	FBGN0052576	-0.15177	0.025429	-0.19827	-0.02107
CG13148	FBGN0033767	-0.11773	-0.41027	0.249114	-0.04343
PpD6	FBGN0005779	-0.20977	-0.15838	-0.26904	-0.21765
CG7519	FBGN0037087	-0.15076	0.144042	-0.23197	0.062827
CG4594	FBGN0032161	0.209063	0.054779	-0.0658	-0.22008
dx	FBGN0000524	0.119674	-0.14222	0.246583	-0.01531
mRpS18C	FBGN0039765	-0.22858	0.024747	-0.24453	0.008791
Uvrag	FBGN0032499	-0.01872	0.09426	-0.01323	0.09975
mu2	FBGN0002872	-0.01215	-0.08694	0.127301	0.052507
TMEM216	FBGN0037614	0.137895	-0.09431	0.290255	0.058047
beat-VI	FBGN0039584	0.120556	-0.12287	0.311617	0.068187
DIP-beta	FBGN0259245	0.522675	0.134809	0.371546	-0.01632
PIG-F	FBGN0036893	-0.09505	0.132308	-0.37446	-0.1471
fz3	FBGN0027343	0.131832	0.121976	0.11279	0.102934
bma	FBGN0085385	0.774018	0.110497	0.687696	0.024175
Trf	FBGN0010287	-0.08687	-0.03827	-0.07288	-0.02428
CG15922	FBGN0040575	-0.17761	-0.07017	-0.25252	-0.14509
Drep2	FBGN0028408	0.218029	-0.18693	0.369882	-0.03508
CG12479	FBGN0040871	-0.32551	-0.07906	-0.32456	-0.07811
CG7745	FBGN0033616	-0.05547	-0.16779	0.10827	-0.00406
Zip88E	FBGN0038312	-0.15933	0.041567	-0.46991	-0.26902
CG31777	FBGN0051777	0.216597	-0.16642	0.759398	0.376378
dgt2	FBGN0032390	-0.3767	-0.00115	-0.42467	-0.04911
CG4611	FBGN0035591	-0.07342	-0.07402	-0.05969	-0.06029
CG43675	FBGN0263750	-0.12003	0.152223	-0.48014	-0.20789

CG31807	FBGN0051807	-0.20078	0.124711	-0.65576	-0.33027
CG7706	FBGN0038640	-0.20519	-0.07717	-0.24241	-0.11439
Trs20	FBGN0266724	-0.16677	0.245351	-0.52473	-0.11261
5-HT1A	FBGN0004168	0.283027	-0.17196	0.508159	0.053168
CG5731	FBGN0032192	0.053979	-0.04853	-0.03191	-0.13442
CG4593	FBGN0029929	-0.18719	-0.0143	-0.21456	-0.04167
Rpb11	FBGN0032634	-0.30041	-0.01851	-0.57059	-0.28869
alrm	FBGN0039332	-0.50202	-0.43222	0.193767	0.263562
lncRNA:CR44501	FBGN0265694	-0.10147	-0.4264	0.082207	-0.24272
Tsp42A	FBGN0033042	-0.27268	0.061877	-0.40153	-0.06697
dlt	FBGN0024510	0.412819	0.212672	0.118805	-0.08134
Vlet	FBGN0030323	-0.05329	0.02018	-0.18803	-0.11457
IntS8	FBGN0025830	0.115813	0.073668	0.19623	0.154085
CG42331	FBGN0259233	-1.60665	0.01842	-1.51944	0.105633
pdm2	FBGN0004394	0.4883	0.95677	-0.72524	-0.25677
angel	FBGN0016762	-0.41344	0.000277	-0.36459	0.049126
CG13625	FBGN0039210	-0.26156	0.215215	-0.10691	0.369871
CG8064	FBGN0038597	-0.13803	0.098627	-0.00818	0.228481
CG33966	FBGN0053966	-0.12918	0.126198	-0.56809	-0.31271
Achl	FBGN0033936	-0.32183	-0.38834	0.193906	0.127396
CG10362	FBGN0030358	-0.05042	-0.22699	0.283324	0.106756
ric8a	FBGN0028292	0.034021	0.086947	0.051103	0.104028
Taf7	FBGN0024909	-0.05389	-0.03693	-0.07049	-0.05353
Andorra	FBGN0030898	-0.16035	-0.02104	-0.13292	0.00639
Samtor	FBGN0035035	-0.13504	0.130372	-0.04823	0.217181
CG43760	FBGN0264260	-0.27423	0.053001	-0.27854	0.048697
CG13516	FBGN0040658	-0.08553	-0.17516	0.095302	0.005673
CG30158	FBGN0050158	0.233146	0.048686	0.305353	0.120894
CG10268	FBGN0032811	-0.22609	-0.0698	-0.36442	-0.20814
lncRNA:CR40465	FBGN0250817	-0.03688	-0.39243	0.111391	-0.24416
KFase	FBGN0031821	-0.03285	0.001565	-0.01003	0.024389
Taf5	FBGN0010356	-0.00935	-0.07839	0.049781	-0.01925
CG31249	FBGN0051249	-0.1857	-0.01301	-0.06161	0.111081
CG4036	FBGN0032149	-0.4175	-0.1412	-0.52601	-0.24971
borr	FBGN0032105	-0.15347	0.04722	-0.20772	-0.00703
fng	FBGN0011591	-0.01895	0.120467	-0.08362	0.055803
CG4069	FBGN0036301	0.008783	0.159754	0.004726	0.155697
vers	FBGN0011335	-0.13219	0.036809	-0.08186	0.087136
TwdlG	FBGN0037225	0.111269	-0.02079	0.699676	0.567622
CycD	FBGN0010315	0.140767	0.086303	0.037208	-0.01726
MED4	FBGN0035754	-0.273	0.175935	-0.25455	0.194388
spn-A	FBGN0003479	-0.27265	-0.11748	-0.25562	-0.10044
NPF	FBGN0027109	-0.13633	0.045142	-0.31709	-0.13562
dgt3	FBGN0034569	-0.43852	0.020587	-0.27711	0.181993
CR45775	FBGN0267422	-0.46603	-0.12931	-0.10738	0.229334
CG11666	FBGN0040648	-0.08653	0.145147	-0.21717	0.014509
CR43441	FBGN0263389	-0.22948	0.166482	-1.30044	-0.90448
MED7	FBGN0051390	-0.11668	0.016022	-0.0748	0.057901
CG12535	FBGN0029657	-0.16901	-0.05805	-0.11429	-0.00334
pasi1	FBGN0038545	-0.13897	-0.04325	-0.36007	-0.26435
pim	FBGN0003087	-0.10814	-0.01972	-0.19654	-0.10812
Dok	FBGN0029944	0.138679	0.187037	-0.15655	-0.10819
dnt	FBGN0024245	-0.15449	0.078153	0.115225	0.347866
CG10344	FBGN0034729	-0.06409	0.02222	-0.13316	-0.04685
CG34136	FBGN0083972	0.263771	0.113868	0.47349	0.323587
CG4318	FBGN0030455	-0.40875	-0.23931	-0.80179	-0.63235
CG13827	FBGN0039068	-0.07236	0.012439	-0.34358	-0.25878
Prp38	FBGN0050342	-0.13859	0.007142	-0.28393	-0.13819
CG42697	FBGN0261587	-0.06346	0.094478	-0.12191	0.036027
Sr-CII	FBGN0020377	1.851504	0.702786	1.315892	0.167174
edl	FBGN0023214	-0.21862	0.322055	-0.2304	0.310278
Nf-YC	FBGN0029905	0.083221	-0.07661	0.165272	0.005439
CG11951	FBGN0039656	-0.02039	0.049756	-0.42132	-0.35118
CG15653	FBGN0034578	-0.81819	0.144065	-0.85561	0.106645
nAChRalpha2	FBGN0000039	0.133066	0.094618	-0.00172	-0.04016
CG16824	FBGN0040973	-0.09807	-0.05021	-0.15666	-0.1088
Pop1	FBGN0026702	0.002903	0.103671	-0.27145	-0.17069
CG12402	FBGN0038202	0.214926	-0.02962	0.261099	0.016556
IP3K1	FBGN0032147	0.231359	0.020304	0.142823	-0.06823

strat	FBGN0032020	-0.31555	-0.02045	-0.2326	0.062503
sosie	FBGN0039232	-0.07261	-0.22686	0.260249	0.105999
CG6324	FBGN0030647	-0.32729	-0.15016	-0.50997	-0.33284
caup	FBGN0015919	0.087961	-0.36293	0.184916	-0.26597
CG13659	FBGN0039319	-0.11304	0.332165	0.064793	0.509997
Faa	FBGN0016013	-0.13368	0.012623	-0.16297	-0.01666
CG9925	FBGN0038191	-0.84576	0.0634	-1.05877	-0.14961
CG42828	FBGN0262010	0.082048	-0.19672	0.582014	0.303242
CG32204	FBGN0052204	-0.35007	0.020506	-0.10252	0.268052
Fibp	FBGN0036911	0.005922	-0.06192	0.037263	-0.03058
ppk	FBGN0020258	-0.47238	0.193419	-1.10827	-0.44247
CG7506	FBGN0035805	0.055281	-0.0239	0.045595	-0.03359
lncRNA:CR43279	FBGN0262968	-0.18819	0.066326	-0.19094	0.06358
mRpL35	FBGN0038923	-0.14352	0.114657	-0.08332	0.174858
CG15528	FBGN0039742	0.193363	0.061972	0.239126	0.107734
lncRNA:CR44472	FBGN0265665	-1.20282	-0.59676	-0.09796	0.508101
CG4741	FBGN0035040	0.500144	0.042566	0.685927	0.228349
CG10013	FBGN0038012	-0.27918	-0.01832	-0.39462	-0.13376
lncRNA:CR44173	FBGN0265062	-0.24193	0.171372	-0.12891	0.284387
CG13339	FBGN0033871	-0.10801	0.180964	-0.08453	0.204447
Sirt7	FBGN0039631	0.032279	0.043343	-0.0377	-0.02664
Sp1	FBGN0020378	0.14198	0.10284	0.235101	0.19596
CG18518	FBGN0028900	-0.07912	-0.02344	-0.24167	-0.186
CG9986	FBGN0039589	0.193378	0.282522	0.224688	0.313832
a5	FBGN0011294	0.287735	5.42E-05	0.65728	0.369599
CG43351	FBGN0263083	0.616647	-0.01005	0.83483	0.208134
spirit	FBGN0030051	-0.34652	-0.17937	-0.26681	-0.09966
CG33098	FBGN0053098	0.006354	-0.04691	-0.06776	-0.12102
Art2	FBGN0031592	0.46769	-0.07961	0.051185	-0.49611
TAF1B	FBGN0037792	0.263318	0.10155	-0.11841	-0.28017
CG13654	FBGN0039290	0.307065	0.173413	0.311996	0.178344
HP5	FBGN0030301	0.182852	0.152123	0.194376	0.163647
CG17721	FBGN0037885	-0.33652	-0.09134	0.073696	0.318873
lncRNA:CR46268	FBGN0278598	-0.04832	0.085874	0.202355	0.336549
Exo70	FBGN0266667	-0.03431	0.065938	-0.10128	-0.00103
Opbp	FBGN0050443	0.088469	0.004007	-0.01384	-0.0983
ush	FBGN0003963	0.209253	-0.02512	0.409488	0.175113
Ets97D	FBGN0004510	0.043731	-0.03862	0.092824	0.010476
CG8173	FBGN0030864	-0.25537	-0.04737	-0.44963	-0.24163
CG6996	FBGN0036950	-2.49899	-0.28277	-2.14946	0.066752
Tmem18	FBGN0050051	-0.43124	-0.11986	-0.35272	-0.04135
l(3)07882	FBGN0010926	0.167319	-0.00794	0.240464	0.065205
lncRNA:CR43807	FBGN0264351	-0.87367	0.046591	-0.66899	0.25127
Vps45	FBGN0261049	0.141669	0.182956	0.122052	0.163339
rod	FBGN0003268	-0.26047	-0.07206	-0.18647	0.001938
CG3163	FBGN0034961	-0.12268	-0.0598	-0.04865	0.014228
krimp	FBGN0034098	-0.46552	-0.10397	-0.38854	-0.027
thr	FBGN0003701	0.008807	-0.06605	-0.14555	-0.22041
DNApol-delta	FBGN0263600	-0.33927	0.047027	-0.34024	0.046058
CG7582	FBGN0039681	0.144173	0.005111	0.091819	-0.04724
CG15120	FBGN0034454	0.635871	-0.13064	0.505403	-0.2611
Mink	FBGN0039250	0.285353	0.219687	0.084754	0.019088
CG42700	FBGN0261611	0.013887	-0.04986	0.327574	0.263825
CG3663	FBGN0035044	0.026843	0.029041	0.144955	0.147153
CG32409	FBGN0052409	-0.23058	0.020809	-0.35112	-0.09973
hog	FBGN0266710	-0.49153	0.044182	-0.70736	-0.17164
Aasdh	FBGN0027780	0.045043	0.025326	0.286607	0.26689
inaF-B	FBGN0259918	1.011191	-0.41116	1.435898	0.013552
CR41454	FBGN0084017	-0.05339	0.122967	-0.23589	-0.05954
pHCl-2	FBGN0039840	0.081311	-0.06253	-0.30467	-0.44851
CG13133	FBGN0032181	-0.28562	-0.2737	-0.05816	-0.04624
Spt7	FBGN0030874	-0.30755	0.042126	-0.45357	-0.1039
CG2887	FBGN0030207	-0.08743	0.001729	-0.26775	-0.17859
Ppr-Y	FBGN0046697	-0.73119	-0.03135	-0.28694	0.412903
CG15107	FBGN0041702	-0.37605	-0.06291	-0.59773	-0.28459
CG8854	FBGN0033702	-1.26173	-0.59664	-0.35432	0.310767
CG11619	FBGN0036836	-0.1042	0.048187	-0.4124	-0.26001
CG9684	FBGN0037583	-0.02745	0.061501	0.107462	0.196411
Cad96Ca	FBGN0022800	0.02809	-0.07023	-0.0358	-0.13412

ppk10	FBGN0065110	-1.11393	-0.16354	-1.20264	-0.25226
CG42458	FBGN0259935	0.101231	0.019896	0.239201	0.157866
Traf4	FBGN0026319	0.158502	0.644263	-0.48159	0.004177
APC4	FBGN0052707	-0.19245	-0.0741	-0.22018	-0.10182
CG34251	FBGN0085280	-0.37552	-0.02006	4.13118	4.486643
mol	FBGN0086711	0.07827	0.169923	-0.02025	0.071407
lncRNA:CR45114	FBGN0266589	-0.37145	-0.01738	-0.81215	-0.45807
CG42676	FBGN0261562	0.13233	-0.02463	0.176352	0.019396
CG3420	FBGN0033100	0.003753	-0.03216	-0.08134	-0.11725
CG12204	FBGN0031022	-0.34913	0.015905	-0.93251	-0.56747
CG14857	FBGN0038262	0.436181	-0.21159	0.292876	-0.35489
dgt6	FBGN0039638	-0.29271	0.391907	-0.21833	0.466282
CG17855	FBGN0032124	-0.07469	0.430907	-0.7002	-0.19461
Nup93-2	FBGN0038274	-0.10599	0.015825	-0.20391	-0.0821
CG13771	FBGN0031844	0.120817	0.136137	-0.3376	-0.32227
net	FBGN0002931	-0.32267	-0.17375	-0.05903	0.089884
vg	FBGN0003975	0.688604	0.036072	0.807602	0.15507
Surf6	FBGN0038746	-0.45888	-0.07211	-0.52383	-0.13706
CG6144	FBGN0032259	-0.08842	-0.03432	-0.134	-0.0799
CG14671	FBGN0037340	-0.06503	0.000743	-0.16273	-0.09696
CG34288	FBGN0085317	0.125311	0.620795	-0.66257	-0.16709
Wdr33	FBGN0046222	-0.1074	-0.04915	-0.01258	0.045671
CG34228	FBGN0085257	-0.21611	0.071206	-0.30418	-0.01686
Gorab	FBGN0053052	-0.17771	0.020607	-0.01717	0.181143
CG10274	FBGN0035690	0.121585	0.019678	0.158936	0.057029
CG9154	FBGN0031777	-0.2448	0.149779	-0.36513	0.029443
Atg7	FBGN0034366	0.104488	-0.00628	0.111069	0.0003
Mis12	FBGN0035725	0.174345	0.152237	-0.18884	-0.21094
her	FBGN0001185	0.048597	0.013954	-0.03673	-0.07137
CG9150	FBGN0031775	-0.02121	-0.96534	0.348511	-0.59562
CG31636	FBGN0051636	0.196654	0.483617	-0.62833	-0.34136
CG13390	FBGN0032031	-0.08849	0.187562	-0.08137	0.194674
CG42784	FBGN0263354	0.7504	0.077742	0.993009	0.320351
CG43307	FBGN0262999	-0.39645	-0.19999	-0.50292	-0.30647
lncRNA:CR45568	FBGN0267128	-1.16485	-0.33755	-4.48475	-3.65745
CG5348	FBGN0034156	0.302955	-0.04691	0.268665	-0.0812
Cnx14D	FBGN0264077	0.161204	-0.00926	0.194245	0.023783
twit	FBGN0032895	0.169159	-0.06319	0.239382	0.007031
Rnb	FBGN0039696	-0.08201	-0.2705	0.113404	-0.07508
CG9601	FBGN0037578	-0.26173	-0.18535	-0.19261	-0.11623
dgrn	FBGN0037384	-0.24133	-0.07592	-0.27302	-0.1076
GluRIA	FBGN0004619	0.098016	-0.03102	0.107825	-0.02121
Nprl3	FBGN0036397	-0.01911	0.173131	-0.04663	0.145612
RNaseZ	FBGN0028426	0.000578	0.024477	0.13519	0.159089
CG3176	FBGN0029524	-0.31541	-0.37106	-0.44398	-0.49962
CG11630	FBGN0032964	0.092801	-0.18725	0.047826	-0.23223
CG9004	FBGN0035336	0.242955	0.138731	0.006724	-0.0975
rgr	FBGN0267792	-0.05199	-0.0137	-0.08674	-0.04845
CG45766	FBGN0267413	-0.29347	-0.0362	-0.27366	-0.01639
l(2)k09848	FBGN0284246	-0.35243	0.038675	-0.38227	0.00883
rtet	FBGN0028468	0.008814	0.157545	-0.2535	-0.10477
CG13950	FBGN0031289	-0.10295	0.027266	-0.53433	-0.40411
ChT	FBGN0038641	0.072651	0.044014	-0.24033	-0.26897
CG13101	FBGN0032084	0.105814	-0.01575	-0.04803	-0.16959
CG14246	FBGN0040608	0.228789	0.020265	0.206729	-0.0018
ATPsynepsilonL	FBGN0051477	-0.42046	-0.0403	-0.41134	-0.03119
CG34402	FBGN0085431	0.325493	-0.00463	0.017813	-0.31231
CG13097	FBGN0032051	-0.13041	0.00543	-0.13681	-0.00097
lncRNA:CR44024	FBGN0264794	0.238699	0.051835	0.23343	0.046565
mip120	FBGN0033846	0.013347	-0.06319	-0.02437	-0.1009
CG14370	FBGN0038158	-0.38771	-0.22315	-0.27512	-0.11056
Uhg4	FBGN0083124	-0.09383	-0.08543	-0.19004	-0.18165
Rpb5	FBGN0033571	-0.15018	-0.10787	-0.10033	-0.05803
CG14036	FBGN0031677	-0.3524	-0.09811	-0.51449	-0.26019
CG32006	FBGN0052006	-0.22302	-0.47406	-0.11467	-0.36571
CG7276	FBGN0036499	-0.41754	-0.34623	-0.27446	-0.20314
CG18278	FBGN0033836	1.510047	0.401088	0.80077	-0.30819
GluRIIA	FBGN0004620	-0.03045	-0.0733	0.080582	0.037732
CG42806	FBGN0261975	-0.20348	0.035826	-0.146	0.093308

CG34173	FBGN0085202	-0.19941	-0.10833	-0.29597	-0.20488
Prpk	FBGN0035590	-0.31799	-0.05631	-0.23013	0.031546
CG6758	FBGN0034704	-0.32507	0.003379	-0.29561	0.032837
Arl2	FBGN0004908	-0.11869	0.150452	-0.24897	0.020178
Orc4	FBGN0023181	-0.24762	-0.0055	-0.1856	0.05652
CG17977	FBGN0040778	-0.12471	0.179155	-0.14881	0.155058
lectin-21Cb	FBGN0040106	0.031379	0.109487	0.3925	0.470609
PNPase	FBGN0039846	-0.09986	-0.07367	-0.02342	0.002763
lncRNA:CR43655	FBGN0263664	-1.19221	-0.05319	-2.14388	-1.00486
Rtc1	FBGN0020909	-0.27659	0.193313	-0.28646	0.183436
Rpb7	FBGN0051155	-0.28054	-0.05108	-0.36705	-0.13759
sip1	FBGN0024191	-0.20008	-0.295	0.055195	-0.03972
ea	FBGN0000533	-0.15052	-0.03139	-0.27899	-0.15986
CG7025	FBGN0031930	0.096633	0.062581	-0.87114	-0.90519
lft	FBGN0032230	-0.19736	-0.10072	-0.10335	-0.00671
lncRNA:CR41443	FBGN0084008	-0.24279	-0.06209	-0.46951	-0.28881
CG4743	FBGN0039357	-0.45696	-0.00278	-0.47973	-0.02555
PRL-1	FBGN0024734	0.483357	0.034549	0.681774	0.232966
Tango14	FBGN0031312	-0.1676	0.030734	0.028474	0.22681
CG3919	FBGN0036423	0.078136	0.180236	-0.05829	0.043812
CG42752	FBGN0261806	-0.09914	-0.00075	-0.15634	-0.05794
CG12783	FBGN0038448	-0.17289	-0.09102	-0.13375	-0.05189
CG9890	FBGN0034814	-0.22916	-0.00028	-0.26967	-0.04078
GstD3	FBGN0010039	-0.11218	-0.25786	0.002432	-0.14325
CG33773	FBGN0053773	-0.0858	0.192898	-1.14897	-0.87028
Gmer	FBGN0267823	-0.14485	0.082578	-0.01216	0.21527
CG7423	FBGN0030982	-0.50503	-0.03159	-0.55103	-0.07759
CG43324	FBGN0263029	-0.09979	0.03679	-0.22769	-0.09111
CG5380	FBGN0038951	-0.16035	-0.06172	-0.17687	-0.07824
Aduk	FBGN0037679	0.013359	0.046773	-0.05081	-0.0174
CAH1	FBGN0027844	0.007542	0.058441	-0.10717	-0.05627
CG15747	FBGN0030474	-0.05946	-0.06285	-0.00367	-0.00706
lncRNA:CR43357	FBGN0263089	0.840792	-0.12791	0.328602	-0.6401
CG13685	FBGN0035816	0.190142	-0.19565	0.512579	0.126783
sr	FBGN0003499	0.304918	0.299772	0.368368	0.363223
CG34286	FBGN0085315	-0.09097	-0.08019	-0.10324	-0.09245
CG4483	FBGN0035970	-0.09097	0.047888	-0.70236	-0.5635
CG32537	FBGN0052537	0.117143	0.099891	0.095271	0.078019
CG8673	FBGN0031986	-0.14342	-0.07766	-0.1623	-0.09654
CG10139	FBGN0033951	0.062837	0.16656	-0.09189	0.011829
CG1896	FBGN0039870	0.328499	0.024464	0.253518	-0.05052
Lrt	FBGN0034540	0.322934	0.018038	0.306383	0.001487
DIP-delta	FBGN0085420	0.687812	-0.06438	0.686642	-0.06555
gammaSnap1	FBGN0028552	-0.0188	0.118165	-0.19747	-0.0605
Dhfr	FBGN0004087	-0.21735	-0.06681	0.201018	0.351558
CG7573	FBGN0036153	-0.2177	-0.05153	-0.41574	-0.24957
CG13127	FBGN0032176	-0.20909	-0.0272	-0.18074	0.001143
CG4045	FBGN0025629	-0.22619	0.029725	-0.20366	0.052258
Traf6	FBGN0265464	0.238507	-0.00459	0.123546	-0.11955
Gem2	FBGN0036850	-0.24514	-0.18678	-0.08551	-0.02715
CkIIalpha-i1	FBGN0015025	-0.44011	0.25692	-0.83589	-0.13886
Dci	FBGN0035169	-0.01802	-0.06055	-0.06103	-0.10356
CG3225	FBGN0031631	0.147376	0.134629	0.30592	0.293172
CG3862	FBGN0031286	-0.13865	0.1035	0.03561	0.277763
lncRNA:CR44971	FBGN0266306	1.114395	0.504755	0.985037	0.375397
CG17684	FBGN0263780	-0.03345	-0.05964	-0.0802	-0.10638
CG14693	FBGN0037837	0.13549	0.229967	-0.12559	-0.03111
MED21	FBGN0040020	-0.00764	0.100521	-0.16969	-0.06153
CG7579	FBGN0036528	-0.1373	-0.10147	-0.1196	-0.08378
CG4133	FBGN0031257	0.131183	-0.07309	0.281779	0.077506
CNT2	FBGN0025709	-0.58442	-0.17936	-0.49096	-0.0859
CG10348	FBGN0032707	0.239078	0.072831	0.106721	-0.05953
Tsf3	FBGN0034094	0.154137	-0.12806	0.283232	0.001034
mbm	FBGN0086912	0.076486	0.278333	-0.28335	-0.08151
unc-4	FBGN0024184	0.287276	0.085179	0.527284	0.325187
Hmr	FBGN0001206	0.112507	0.016336	0.180286	0.084114
CG15357	FBGN0040719	-0.30423	-0.10549	-0.31775	-0.11902
RpS28-like	FBGN0085211	-0.32194	-0.11998	-0.13268	0.069278
Traf-like	FBGN0030748	0.2521	0.18853	-0.16351	-0.22708

CG5853	FBGN0032167	0.446545	0.171814	-0.07935	-0.35408
CG18004	FBGN0033566	-0.09599	0.018148	-0.03372	0.080409
CG17266	FBGN0033089	-0.37041	-0.13679	-0.38541	-0.1518
CG15233	FBGN0033076	-0.37907	0.198476	-0.70325	-0.12571
nAChRbeta2	FBGN0004118	0.171481	-0.05812	0.295085	0.065482
RPA3	FBGN0266421	-0.31549	-0.08175	-0.39476	-0.16102
CG15525	FBGN0039732	-0.00891	0.216064	-0.12297	0.102002
ECSIT	FBGN0028436	0.110422	0.113844	0.078784	0.082206
CG10909	FBGN0038090	0.004475	0.135299	-0.50253	-0.37171
Tsen54	FBGN0036266	-0.18979	-0.01958	-0.3765	-0.20629
CG1889	FBGN0030164	-0.18549	-0.18909	-0.2824	-0.28599
Tbp	FBGN0003687	-0.12906	-0.03677	-0.12575	-0.03345
Tsp86D	FBGN0037848	-0.04751	-0.0877	0.085552	0.045366
PK1-R	FBGN0038201	0.190249	-0.32307	0.250821	-0.2625
GC1	FBGN0260743	0.11379	-0.00179	0.123741	0.008165
CG1421	FBGN0032966	-0.25949	-0.04719	-0.46521	-0.25291
defl	FBGN0036038	-0.04029	0.075905	0.021096	0.137294
Sf3b5	FBGN0040534	-0.17908	0.107178	-0.37021	-0.08395
RIOK1	FBGN0036187	-0.43681	-0.16483	-0.17269	0.099289
312	FBGN0029514	-0.33895	-0.0333	-0.33002	-0.02437
dpr15	FBGN0037993	0.525507	0.211746	0.715051	0.40129
CG4956	FBGN0039370	-0.27936	-0.08472	-0.11492	0.079723
lncRNA:CR44420	FBGN0265593	-0.4948	-0.04538	-0.2968	0.15262
Ctf4	FBGN0033890	-0.03673	0.040465	0.046134	0.123328
Grip91	FBGN0001612	0.061023	-0.01666	0.049394	-0.02829
hpRNA:CR32205	FBGN0052205	-0.06893	0.132337	-0.17999	0.02128
vret	FBGN0263143	-0.04403	0.218532	-0.43169	-0.16912
CG5262	FBGN0036988	0.153432	0.138522	0.079584	0.064674
Sox100B	FBGN0024288	-0.0432	0.983374	-1.2583	-0.23172
Muc30E	FBGN0053300	-3.12594	-0.75561	-2.43129	-0.06096
CG15456	FBGN0040650	-0.31999	0.089325	-0.49026	-0.08094
CG17724	FBGN0033802	0.106878	0.296049	-0.2769	-0.08773
CG5860	FBGN0038506	0.169955	0.050543	-0.14361	-0.26303
Aatf	FBGN0031851	-0.25246	-0.0272	-0.29279	-0.06753
DIP-kappa	FBGN0051814	0.268602	0.057819	0.311986	0.101202
Mat89Ba	FBGN0261286	-0.08268	-0.04867	-0.13737	-0.10336
lncRNA:CR43940	FBGN0264568	0.33349	-0.47024	-0.39047	-1.19419
CG16890	FBGN0028932	-0.00845	0.086111	-0.00045	0.094111
hng2	FBGN0037634	0.038466	-0.03504	0.199438	0.125931
CG16865	FBGN0028919	-0.43442	0.317828	-0.79762	-0.04538
stum	FBGN0050263	0.193774	-0.30948	0.174399	-0.32886
Kr-h1	FBGN0266450	0.391812	-0.25178	0.885761	0.242165
CG5516	FBGN0038389	-0.2233	-0.05054	-0.17867	-0.00591
CG14231	FBGN0031060	-0.08955	0.016968	-0.21545	-0.10893
CG5969	FBGN0036998	-0.23264	-0.03668	-0.32128	-0.12532
CG42814	FBGN0261996	0.026488	-0.16188	0.033007	-0.15536
LSm3	FBGN0051184	-0.36094	0.000166	-0.38829	-0.02718
SerRS-m	FBGN0021750	-0.05311	0.019717	-0.22221	-0.14938
serp	FBGN0260653	-0.06248	-0.03244	-0.56773	-0.53768
CG15642	FBGN0030642	-0.17612	0.253103	-0.89816	-0.46893
Cpr56F	FBGN0034499	0.076277	-0.08524	0.322814	0.161297
Smu1	FBGN0038666	-0.1047	0.038396	-0.14263	0.000465
CG17294	FBGN0032032	0.058057	0.145764	-0.13822	-0.05051
Cwc25	FBGN0031452	0.132766	0.062041	-0.05087	-0.1216
CG6833	FBGN0036405	-0.24942	0.00738	-0.17659	0.080208
Mcm6	FBGN0025815	-0.43375	-0.02639	-0.12207	0.285291
CG10904	FBGN0034945	0.08361	0.156181	-0.20871	-0.13614
p38c	FBGN0267339	0.057208	0.660404	-0.64928	-0.04609
sl	FBGN0003416	0.231767	0.038297	0.163268	-0.0302
Su(var)3-3	FBGN0260397	0.025995	0.050539	-0.15784	-0.1333
CR43214	FBGN0262850	1.105937	-0.39492	0.824674	-0.67618
CG14744	FBGN0033324	0.002504	-0.03629	-0.33388	-0.37268
CG4820	FBGN0037876	0.066526	0.015476	-0.05751	-0.10856
Smyd3	FBGN0011566	0.152829	-0.03147	0.142344	-0.04196
lncRNA:CR45030	FBGN0266390	-0.04652	0.067831	-0.28757	-0.17321
CG12594	FBGN0037941	0.268296	0.024513	0.263058	0.019275
GMF	FBGN0028894	-0.10053	0.147563	-0.25135	-0.00325
Grip163	FBGN0026432	-0.06085	-0.12636	-0.06852	-0.13403
lncRNA:CR44490	FBGN0265683	-2.63443	0.156373	-3.51221	-0.7214

Rpp25	FBGN0033092	0.060783	0.105866	-0.00853	0.036551
DIP-zeta	FBGN0051708	0.107225	-0.19068	0.122895	-0.17501
mus304	FBGN0002901	-0.13669	0.116708	-0.28457	-0.03117
tra	FBGN0003741	0.074125	0.111392	0.099176	0.136443
mRpL17	FBGN0035122	-0.06859	0.047924	-0.01731	0.099207
Arp8	FBGN0030877	-0.05742	0.183846	-0.11592	0.125342
Mst85C	FBGN0028708	-0.2552	-0.00485	-0.17134	0.079007
SmydA-1	FBGN0033917	0.054676	0.064242	-0.03042	-0.02085
Cyp301a1	FBGN0033753	0.338946	0.260127	0.121542	0.042723
lncRNA:CR45253	FBGN0266788	-0.61432	-0.28621	-0.67015	-0.34205
nord	FBGN0050418	-0.08343	-0.03091	0.177394	0.229913
Fancl	FBGN0037781	0.072837	0.280346	-0.35121	-0.14371
Cad99C	FBGN0039709	0.17259	-0.11745	0.263463	-0.02658
ARY	FBGN0058064	-0.08762	-0.04367	-0.28028	-0.23634
CG31600	FBGN0283728	-0.3884	0.057752	-0.75316	-0.30701
CG10338	FBGN0032700	0.119909	-0.04728	0.16029	-0.0069
lncRNA:CR44175	FBGN0265064	-0.06023	0.379511	-0.54337	-0.10363
haf	FBGN0261509	0.573171	-0.0186	0.5517	-0.04007
thoc5	FBGN0034939	-0.00778	-0.09727	0.02406	-0.06543
CG3071	FBGN0023527	-0.16046	0.028303	0.023654	0.21242
CG6388	FBGN0032430	-0.1515	-0.15401	0.021106	0.018595
CG16848	FBGN0032522	-0.11684	-0.13861	-0.07574	-0.09751
VhaAC39-2	FBGN0039058	-0.05334	0.038083	-0.22471	-0.13329
Cdc16	FBGN0025781	0.069588	-0.05966	0.110521	-0.01873
CG8833	FBGN0036386	-0.07973	-0.11693	-0.09909	-0.13629
lncRNA:CR42549	FBGN0260722	0.068089	0.084788	-0.0443	-0.0276
CG3803	FBGN0034938	-0.21713	-0.06218	-0.23144	-0.07649
CG11898	FBGN0039645	0.053318	0.289495	-0.32553	-0.08936
CG33281	FBGN0053281	-0.11074	0.012227	0.268267	0.391231
frm	FBGN0035612	0.016939	-0.20504	-1.03499	-1.25696
tst	FBGN0039117	0.08386	0.020426	0.119668	0.056234
CG5800	FBGN0030855	-0.22993	-0.00118	-0.11876	0.109993
CG34289	FBGN0085318	-0.50199	-0.10402	-0.58272	-0.18475
l(2)05714	FBGN0010607	-0.17405	0.048128	-0.29552	-0.07334
aly	FBGN0004372	0.146232	0.079237	-0.21233	-0.27932
CG17167	FBGN0039941	0.236504	0.060821	0.00678	-0.1689
CG42824	FBGN0262006	-0.05448	-0.23607	-0.48257	-0.66416
kl-3	FBGN0267432	-0.02078	0.018993	0.049593	0.089366
CG34300	FBGN0085329	-0.42486	-0.21616	-0.40527	-0.19657
Semp1	FBGN0028944	-0.30115	-0.15685	-0.28046	-0.13617
Tango4	FBGN0030365	0.02208	0.047295	-0.06639	-0.04117
CG33511	FBGN0053511	-0.196	-0.33815	-0.15743	-0.29959
CG5509	FBGN0038054	-0.16956	-0.0927	-0.2383	-0.16144
CR33221	FBGN0053221	0.029159	0.34485	0.672745	0.988437
BubR1	FBGN0263855	-0.04061	-0.02158	-0.21266	-0.19363
Rchy1	FBGN0031816	-0.43335	-0.32883	-0.01195	0.092575
Tes	FBGN0034223	0.048781	0.003526	0.133574	0.088319
lncRNA:roX2	FBGN0019660	0.287697	0.118659	0.283519	0.114481
Ada1-1	FBGN0051865	0.360923	0.566032	-0.2274	-0.0223
CG7889	FBGN0031003	-0.12033	-0.09979	-0.16938	-0.14884
Dbp45A	FBGN0010220	-0.09806	-0.01194	-0.06984	0.016276
CheB42c	FBGN0066292	-0.12029	-0.1303	-0.14028	-0.15028
CG9121	FBGN0031675	-0.15135	-0.12951	0.168669	0.190517
CG32683	FBGN0052683	0.109485	-0.39403	0.420035	-0.08348
CG10483	FBGN0035649	-0.11282	-0.07414	-0.12181	-0.08313
botv	FBGN0027535	-0.00919	-0.04723	0.099811	0.061777
CG42359	FBGN0259705	-0.34482	0.047972	-0.55038	-0.15759
CG18428	FBGN0039149	-0.06974	0.062104	-0.10582	0.026018
CG33116	FBGN0053116	-0.0515	-0.00397	-0.1461	-0.09858
vn	FBGN0003984	0.105781	0.010348	0.3586	0.263167
CG6765	FBGN0035903	0.310305	-0.11788	0.551637	0.123455
CG3294	FBGN0031628	0.284252	0.081651	0.419938	0.217337
BHD	FBGN0261111	-0.01512	-0.07956	-0.30385	-0.36828
lncRNA:CR45188	FBGN0266698	0.93203	0.141402	0.602894	-0.18773
CG13192	FBGN0033653	-0.0265	0.009629	0.061045	0.097171
lncRNA:CR44055	FBGN0264864	-0.26228	-0.27266	-0.35479	-0.36517
CG31875	FBGN0051875	0.087083	0.237715	-0.10198	0.048647
Pex2	FBGN0035876	-0.12537	-0.07004	0.00618	0.061507
TbCMF46	FBGN0032163	0.223487	0.193798	0.226077	0.196388

CG42269	FBGN0259164	-0.48122	-0.22819	-0.65757	-0.40454
BORCS6	FBGN0035140	-0.13983	-0.08201	-0.09817	-0.04036
CG12341	FBGN0033550	-0.05206	0.056297	-0.04542	0.062941
CG32147	FBGN0047178	-0.08514	0.050057	-0.3237	-0.1885
CG1409	FBGN0029964	-0.11271	-0.13017	-0.17341	-0.19087
NimB5	FBGN0028936	0.628613	0.202824	0.571996	0.146207
tam	FBGN0004406	-0.07281	0.026689	-0.17252	-0.07302
odd	FBGN0002985	0.302384	0.168953	0.164446	0.031014
AdamTS-B	FBGN0029791	-0.06449	0.106637	-0.0452	0.125926
CG7130	FBGN0037151	-0.45577	0.092628	-0.44737	0.101026
CG4936	FBGN0038768	-0.1179	-0.02724	-0.06603	0.024636
lncRNA:CR43440	FBGN0263388	-0.34322	-0.21221	-1.11982	-0.98881
CG10194	FBGN0032790	0.200764	0.096676	0.10069	-0.0034
stw	FBGN0286203	-0.01863	0.24953	-0.02361	0.244551
lncRNA:CR43242	FBGN0262887	-1.00637	-0.90836	0.04335	0.141364
DNAlig4	FBGN0030506	-0.09651	-0.08844	-0.06166	-0.0536
CG15916	FBGN0030704	0.01459	0.075663	0.012088	0.073161
Cyp9b1	FBGN0015038	-1.27573	-0.78636	-0.56969	-0.08032
e(y)1	FBGN0000617	-0.10179	0.152821	-0.14371	0.110901
mRpL32	FBGN0039835	-0.1371	0.201133	-0.35846	-0.02023
mRpL11	FBGN0038234	-0.20776	-0.03671	-0.27316	-0.10212
CG17625	FBGN0039002	-0.12481	-0.16309	-0.37879	-0.41707
mad2	FBGN0035640	-0.28962	0.043119	-0.31137	0.02137
CG34242	FBGN0085271	-0.08072	0.123012	-0.3048	-0.10107
GAPsec	FBGN0035916	-0.00397	0.027604	-0.17911	-0.14754
Tsp5D	FBGN0029837	0.180234	-0.03871	0.335174	0.116233
asun	FBGN0020407	-0.02684	0.045405	-0.29776	-0.22552
CG17807	FBGN0034748	-0.15901	-0.13321	-0.1498	-0.124
CG32107	FBGN0052107	0.549337	0.873138	0.164792	0.488593
kni	FBGN0001320	0.017706	0.028587	-0.01554	-0.00466
icln	FBGN0029079	-0.33373	0.149449	-0.4705	0.012676
Sdhaf3	FBGN0038437	-0.10503	0.05852	0.03548	0.199032
Pask	FBGN0034950	0.170177	-0.13009	0.241379	-0.05889
mof	FBGN0014340	0.018862	0.121105	-0.05591	0.046331
RpII33	FBGN0026373	-0.23441	-0.01348	-0.1421	0.078833
S1P	FBGN0037105	-0.18173	-0.09348	0.268943	0.357188
CG34351	FBGN0085380	0.025879	-0.11168	0.129781	-0.00777
CG13949	FBGN0031288	-0.76968	-0.10412	-0.5816	0.083959
lncRNA:CR44279	FBGN0265306	0.299734	0.409205	-0.22269	-0.11322
CG13723	FBGN0036705	-0.18282	0.140864	-0.24207	0.081613
CG31690	FBGN0051690	0.02757	0.001885	-0.22955	-0.25523
CG32812	FBGN0025642	-0.35656	-0.07106	-0.23991	0.045588
Ibf1	FBGN0037670	-0.2838	0.087761	-0.31419	0.05737
CG11425	FBGN0037167	-0.11244	0.082671	0.106674	0.301782
CG1092	FBGN0037228	0.389108	0.277454	0.277782	0.166128
knrl	FBGN0001323	0.216043	0.104558	0.266306	0.154821
CG5250	FBGN0038691	-0.0821	-0.09432	0.170455	0.158229
Use1	FBGN0035965	0.026981	0.081465	-0.1838	-0.12932
CG7824	FBGN0039711	0.010964	0.111149	-0.0766	0.023586
Pph13	FBGN0023489	-0.03075	-0.37793	0.364302	0.017119
CG42818	FBGN0262000	0.096717	-0.10363	0.348158	0.147813
Pus1	FBGN0038811	-0.18435	0.023078	-0.04662	0.160806
CG7006	FBGN0039233	-0.3968	-0.06283	-0.49402	-0.16005
Nrt	FBGN0004108	-0.00119	0.212785	-0.18779	0.026187
CG11333	FBGN0039850	-0.35395	-0.32573	0.036925	0.065143
CG32551	FBGN0052551	-0.5156	-0.71917	-0.30141	-0.50498
CG6843	FBGN0036827	0.019663	0.259056	0.051939	0.291331
CG14452	FBGN0037180	-0.36256	0.087364	-0.63341	-0.18348
lncRNA:CR45231	FBGN0266766	-0.06777	0.352296	-0.3079	0.112166
CG7737	FBGN0033584	0.301412	-0.0845	0.476813	0.090905
Wdr24	FBGN0027518	0.003273	0.103086	0.03404	0.133854
fh	FBGN0030092	-0.08968	0.00646	-0.32858	-0.23244
kl-2	FBGN0001313	0.47873	0.340309	0.167685	0.029264
CG31832	FBGN0051832	1.244723	-0.67439	3.06754	1.148427
Pgam5-2	FBGN0035004	-0.24052	0.00181	-0.01684	0.225489
CG3548	FBGN0035033	0.03969	-0.0399	0.250604	0.171012
Octbeta3R	FBGN0250910	0.237632	-0.09841	0.429717	0.093672
Dl	FBGN0000463	0.303023	0.04135	0.058512	-0.20316
CG9143	FBGN0034496	-0.08002	0.112148	-0.01617	0.175996

ver	FBGN0262524	-0.19211	0.064191	-0.34665	-0.09036
NtR	FBGN0029147	-0.30376	0.204442	-0.80922	-0.30102
CG13084	FBGN0032788	1.332043	1.056784	-0.69436	-0.96961
CG7747	FBGN0034109	-0.3341	0.148278	-0.48068	0.001693
uri	FBGN0035025	-0.13741	0.038001	-0.01094	0.164477
Acbp6	FBGN0035743	-0.28805	0.69713	-1.40489	-0.41971
beat-Ib	FBGN0028645	0.458315	-0.03944	0.49794	0.000186
JMJD4	FBGN0032671	-0.01303	-0.07711	-0.06042	-0.1245
mus101	FBGN0002878	-0.28663	-0.21	-0.13642	-0.05979
CG5290	FBGN0036772	-0.41419	-0.20085	-0.34493	-0.13159
lncRNA:CR45653	FBGN0267213	-0.61865	0.05538	-1.01703	-0.343
Prosalpha3T	FBGN0261395	-0.20521	-0.24939	-0.0514	-0.09557
cmpy	FBGN0037015	0.095897	0.122447	0.178879	0.205429
CG42869	FBGN0262143	-0.0032	0.376765	-0.44815	-0.06818
lncRNA:CR43451	FBGN0263405	-1.1038	3.405455	-0.08909	4.420169
RhoGAP5A	FBGN0029778	0.135073	-0.08347	0.226812	0.008274
Fdx1	FBGN0011769	-0.23385	-0.07916	-0.04009	0.114595
br	FBGN0283451	0.417921	-0.08438	0.697821	0.195518
Trissin	FBGN0038343	0.088192	0.013512	-0.01773	-0.09241
CG34216	FBGN0085245	-0.2202	-0.00897	-0.23224	-0.02101
Lim3	FBGN0002023	-0.06866	-0.13182	0.003655	-0.0595
Syt14	FBGN0261086	-0.07326	-0.19296	0.35691	0.237207
CR31953	FBGN0051953	-0.29834	0.193582	-0.46657	0.025347
GlcAT-I	FBGN0066114	0.021509	0.056804	0.014471	0.049766
Dlip1	FBGN0040467	-0.42055	0.020188	-0.46003	-0.01929
ninaG	FBGN0037896	-0.09863	-0.50371	0.509533	0.104457
Naam	FBGN0051216	-0.19314	-0.19131	-0.03059	-0.02875
l(2)k10201	FBGN0016970	-0.23246	0.296048	-0.75066	-0.22214
Taf8	FBGN0022724	-0.159	-0.01472	-0.12332	0.020961
CG32024	FBGN0052024	0.350799	0.350277	-0.15729	-0.15781
CG9667	FBGN0037550	0.086069	0.155966	-0.0448	0.025095
CG6201	FBGN0032343	0.130936	0.08129	0.683626	0.63398
Cp15	FBGN0000355	1.627435	0.354127	1.017983	-0.25532
Phf5a	FBGN0031822	-0.17871	-0.05084	-0.051	0.076875
CG6073	FBGN0039417	-0.05903	0.018778	-0.36324	-0.28544
CG42361	FBGN0259707	0.066578	-0.12977	0.280206	0.083854
CG43056	FBGN0262358	-0.08696	-0.43937	-0.02297	-0.37538
tyn	FBGN0284435	0.361413	0.315857	-0.26476	-0.31031
CG5404	FBGN0038354	0.033529	0.222864	0.124184	0.313519
SkpD	FBGN0026174	-0.41512	-0.17288	-0.43084	-0.1886
CG32104	FBGN0052104	0.061912	0.088638	0.092785	0.119511
CG11456	FBGN0037031	0.063125	-0.02022	0.08821	0.004866
sud1	FBGN0265189	-0.12527	-0.10525	0.167064	0.187083
mTerf5	FBGN0038584	-0.03888	0.118769	-0.13363	0.024016
CG13203	FBGN0033628	0.31114	0.152519	0.431267	0.272646
CG2021	FBGN0035271	-0.42077	-0.09341	-0.56983	-0.24248
CG3823	FBGN0029863	0.073047	0.032909	-0.03641	-0.07654
tgy	FBGN0030984	-0.40542	0.121264	-0.79971	-0.27302
BCAS2	FBGN0039558	-0.19976	-0.01769	-0.20257	-0.0205
cyp33	FBGN0028382	-0.19561	-0.11514	-0.16439	-0.08392
CG2608	FBGN0032870	-0.24253	0.014708	-0.1164	0.140844
snky	FBGN0086916	0.167643	-0.01667	0.201199	0.016884
lsn	FBGN0260940	-0.29691	-0.15484	-0.14305	-0.00097
LSm1	FBGN0261067	0.026677	0.18627	-0.09737	0.062219
CG44385	FBGN0265535	-0.28025	-0.05969	-0.31784	-0.09728
CG33941	FBGN0262731	0.091086	0.128204	-0.34913	-0.31201
Def	FBGN0010385	-0.77052	-0.3126	-0.47536	-0.01744
Dlip2	FBGN0040466	-0.23535	0.150856	-0.21733	0.168871
CG31436	FBGN0051436	-0.29554	-0.55526	0.240774	-0.01895
Fili	FBGN0085397	0.237188	0.193356	0.057417	0.013585
CG14341	FBGN0031315	-0.22815	0.014577	-0.14545	0.097269
SmydA-2	FBGN0036839	0.353472	-0.07788	0.246569	-0.18479
lncRNA:CR44942	FBGN0266247	2.363863	-0.74082	0.944942	-2.15974
CG17075	FBGN0031239	-0.4391	-0.13874	-0.07197	0.22839
CG6179	FBGN0030915	-0.16502	0.100641	-0.10382	0.161834
tut	FBGN0052364	-0.45041	-0.1019	-0.42578	-0.07727
CG8301	FBGN0037717	0.161229	-0.00777	0.421576	0.252574
dnk	FBGN0022338	-0.014	0.076464	0.096754	0.187218
Lar	FBGN0000464	0.341415	0.37229	0.001931	0.032806

lncRNA:CR43130	FBGN0262604	0.137166	-0.21402	-0.05538	-0.40657
lncRNA:CR44615	FBGN0265826	5.54018	1.237656	5.547107	1.244583
park	FBGN0041100	-0.04901	-0.03541	-0.09771	-0.08411
CG15579	FBGN0040906	-0.34266	-0.03819	-0.46837	-0.1639
CG3251	FBGN0031622	-0.46694	0.022196	-0.70361	-0.21447
CG42493	FBGN0260007	-0.42186	-0.0619	-0.42909	-0.06912
CG5199	FBGN0036994	-0.06136	0.119713	-0.01891	0.162165
CG33774	FBGN0053774	-0.30906	-0.17193	-0.31513	-0.178
CG13409	FBGN0038926	-0.13831	-0.00571	0.04616	0.178764
CG8414	FBGN0034073	-0.1094	0.033784	-0.05158	0.091606
JMJD5	FBGN0035166	-0.03438	0.084139	0.051834	0.170353
Tre1	FBGN0046687	-0.02559	0.203246	-0.27929	-0.05045
CG31279	FBGN0051279	-0.05484	0.03578	-0.16524	-0.07463
RpI135	FBGN0003278	-0.25632	0.104062	-0.27725	0.083126
Atg12	FBGN0036255	-0.30173	0.091901	-0.19853	0.195102
euc	FBGN0038665	-0.30412	-0.09837	0.435426	0.641182
jtb	FBGN0034126	0.122226	0.147596	0.10737	0.13274
Tfb4	FBGN0031309	-0.08588	-0.01179	-0.4009	-0.32681
Pol32	FBGN0283467	-0.19791	0.106259	-0.05095	0.253226
E(spl)m3-HLH	FBGN0002609	-0.1759	1.08665	-1.80549	-0.54294
CG11523	FBGN0037156	-0.18472	0.033901	-0.33685	-0.11824
Taf11	FBGN0011291	-0.17021	0.090022	-0.23363	0.026601
CG43689	FBGN0263772	0.646313	0.128105	0.606797	0.088589
en	FBGN0000577	0.321036	0.049841	0.261671	-0.00952
CG12817	FBGN0037798	-0.09394	-0.01112	-0.0109	0.071922
klu	FBGN0013469	0.039749	0.087132	0.28502	0.332403
CG7744	FBGN0034447	-0.22443	0.0346	-0.25649	0.002548
CG43058	FBGN0262360	-0.28367	0.003094	-0.29691	-0.01015
CG8915	FBGN0030833	0.073753	0.116845	-0.03859	0.004505
CG9555	FBGN0032085	0.170816	0.358422	-1.02974	-0.84214
CG44405	FBGN0265578	0.594177	0.130125	0.331724	-0.13233
THADA	FBGN0031077	-0.08386	-0.04751	-0.138	-0.10165
CG17249	FBGN0035249	-0.12426	0.214945	-0.18489	0.154317
CG3999	FBGN0037801	0.425277	0.290489	0.315387	0.1806
CG7849	FBGN0033060	-0.2255	-0.0381	0.020824	0.208229
CG11563	FBGN0039868	-0.4345	-0.14564	-0.37117	-0.08231
CG31016	FBGN0051016	-0.4448	-0.03845	-0.19602	0.210332
pwn	FBGN0003174	0.399577	-0.00915	1.29898	0.890258
ida	FBGN0041147	-0.1002	-0.08485	-0.27733	-0.26197
CG8270	FBGN0035703	-0.01836	0.168571	-0.04261	0.144317
lncRNA:CR43132	FBGN0262606	-0.72459	0.045508	-1.1058	-0.3357
CG14502	FBGN0034321	-0.51234	-0.63547	0.199379	0.07625
Slimp	FBGN0051133	0.249231	0.432086	0.143522	0.326377
CG15760	FBGN0030508	0.209379	0.004112	0.290225	0.084958
CG1024	FBGN0027514	-0.06248	0.078402	-0.118	0.022883
gsb-n	FBGN0001147	0.480067	-0.02347	0.358519	-0.14501
E23	FBGN0020445	0.190199	0.108027	0.131843	0.04967
lncRNA:CR45571	FBGN0267131	0.834912	0.333097	0.118955	-0.38286
CR14033	FBGN0046776	-0.10482	0.171815	-0.476	-0.19937
CG7110	FBGN0032521	-0.07638	0.066716	0.041446	0.184542
CG42833	FBGN0262022	0.024612	-0.18632	-0.14562	-0.35656
Naa20B	FBGN0051851	-0.31	-0.06694	-0.41232	-0.16926
Pol31	FBGN0027903	-0.18222	0.028106	-0.19528	0.015045
lncRNA:CR43487	FBGN0263498	-0.83762	-0.65183	-0.81057	-0.62478
CG42682	FBGN0261568	-0.16317	-0.05425	-0.33579	-0.22686
CG3402	FBGN0035148	-0.00934	0.012443	-0.17369	-0.15191
CG45413	FBGN0266962	-0.20992	0.028372	-0.40554	-0.16725
CG4709	FBGN0032169	-0.21033	0.044577	-0.36905	-0.11414
CG43829	FBGN0264377	-0.6777	-0.49597	-0.8344	-0.65268
lncRNA:CR43461	FBGN0263415	0.449445	0.308054	0.397718	0.256327
CG8519	FBGN0035711	-0.00418	-0.06298	-0.03199	-0.09079
CG43249	FBGN0262894	0.321655	0.061843	-0.36483	-0.62465
CG7457	FBGN0035812	0.040757	0.138909	0.070267	0.168419
gl	FBGN0004618	0.331581	-0.07445	0.402844	-0.00318
Poxm	FBGN0003129	0.270691	-0.13346	0.405444	0.001296
LS2	FBGN0034834	-0.30844	-0.07316	-0.31702	-0.08174
CG43993	FBGN0264725	-0.20856	-0.18394	-0.25601	-0.23139
PTPMT1	FBGN0039111	-0.07879	0.050325	-0.08422	0.044897
CG31475	FBGN0051475	-0.2218	-0.07378	-0.22043	-0.07241

frtz	FBGN0086698	-0.05009	-0.04508	0.134177	0.139185
GV1	FBGN0027790	-0.17361	-0.0569	-0.17393	-0.05722
CG15027	FBGN0030611	-0.1594	0.203937	-0.22664	0.136698
Rrp47	FBGN0030711	-0.21286	0.07794	-0.34744	-0.05665
CG13014	FBGN0030759	-0.15533	-0.1508	-0.04414	-0.03961
Rca1	FBGN0017551	-0.08879	-0.0594	0.058053	0.087436
FANCI	FBGN0033354	-0.11661	0.110803	-0.14917	0.078242
jumu	FBGN0015396	0.191754	0.094628	0.216874	0.119747
CG42857	FBGN0262104	-0.47678	0.06039	-0.57511	-0.03794
lncRNA:CR43621	FBGN0263612	2.337967	-0.54686	3.002954	0.118126
dpr21	FBGN0260995	0.166494	0.104766	0.016032	-0.0457
Cht9	FBGN0034582	-0.54865	-0.28544	0.046381	0.30959
l(2)dtl	FBGN0013548	-0.31939	0.083386	-0.08983	0.312951
lncRNA:CR43794	FBGN0264338	-0.71263	-0.08606	-0.24162	0.384952
Sin1	FBGN0033935	-0.02649	0.05551	0.060679	0.142681
CG2006	FBGN0039664	0.05891	0.159966	-0.16071	-0.05965
CG17163	FBGN0039942	0.021928	0.030795	0.059862	0.068729
CG14803	FBGN0023513	-0.01453	-0.02599	0.132732	0.121267
CG10232	FBGN0039108	-0.55136	-0.8859	-4.25384	-4.58838
CG30108	FBGN0050108	-0.30178	0.273194	-0.29719	0.277784
CG34258	FBGN0085287	-0.28028	-0.01015	-0.15385	0.116283
Sfp70A4	FBGN0259970	-0.27194	0.074365	-0.43764	-0.09133
gdl	FBGN0001099	-0.15543	0.017624	-0.07362	0.099431
CG10931	FBGN0034274	-0.00596	0.094664	-0.10642	-0.0058
CG5220	FBGN0038471	-0.09684	-0.00284	-0.18823	-0.09424
CG12056	FBGN0030099	-0.15431	-0.10971	0.008413	0.053015
dao	FBGN0028862	0.331462	-0.18027	0.458001	-0.05373
mRpL34	FBGN0083983	-0.63495	-0.23445	-0.62273	-0.22223
mdlc	FBGN0038772	-0.32671	-0.01841	-0.3986	-0.0903
CG4872	FBGN0030799	-0.12517	0.282511	0.022993	0.430679
CG30043	FBGN0050043	0.573256	0.518754	-0.26693	-0.32143
CG13671	FBGN0035867	0.231835	0.10473	0.198096	0.070991
CG5704	FBGN0026570	-0.34771	0.037712	-0.22385	0.161581
CG15535	FBGN0039764	-0.41643	-0.20746	-0.37296	-0.16399
CG13876	FBGN0035109	-0.14154	0.112833	-0.16347	0.090906
U3-55K	FBGN0053505	-0.24365	0.059634	-0.23589	0.067391
AstA-R2	FBGN0039595	0.239557	0.295222	-0.08343	-0.02776
CG43796	FBGN0264340	-0.06552	-0.1	-0.03381	-0.06829
rdhB	FBGN0038946	-0.10656	-0.12088	0.224925	0.210599
Spt3	FBGN0037981	0.014528	0.10552	-0.07938	0.01161
Jhedup	FBGN0034076	-0.92858	-0.27769	-0.25125	0.399635
CG11113	FBGN0033165	-0.03874	-0.11122	-0.0133	-0.08579
CG15705	FBGN0034104	-0.07533	-0.04928	-0.10079	-0.07474
mRpL54	FBGN0034579	-0.03721	0.017996	-0.04832	0.006888
CG16736	FBGN0037668	-0.17257	-0.00393	-0.36305	-0.1944
Spc105R	FBGN0037025	0.141336	-0.01758	0.080093	-0.07883
CG12511	FBGN0031729	-0.37633	-0.04914	-0.25901	0.068177
Coq3	FBGN0032922	0.039896	0.090109	0.030952	0.081166
CG3281	FBGN0260741	-0.01559	0.03676	-0.06255	-0.0102
lncRNA:CR45808	FBGN0267458	0.264957	-0.00431	0.035546	-0.23372
ktub	FBGN0015721	-0.39486	-0.40223	0.078351	0.070981
CG34039	FBGN0054039	-0.11881	0.128237	-0.24091	0.006133
aurB	FBGN0024227	-0.35686	0.11668	-0.36637	0.107169
Sid	FBGN0039593	-1.49381	-0.2027	-0.76365	0.527465
Ada1-2	FBGN0051866	-0.18979	0.145497	0.008781	0.344066
CG1792	FBGN0039860	0.075284	0.194313	-0.16633	-0.0473
CG3513	FBGN0031559	0.327261	0.238535	0.215865	0.127139
ds	FBGN0284247	0.085251	-0.25296	0.536583	0.198367
MetRS-m	FBGN0027083	-0.11952	-0.37056	0.041485	-0.20955
Cyp313b1	FBGN0037601	-0.49113	0.03497	-0.74432	-0.21822
CG7368	FBGN0036179	-0.59637	-0.10469	-0.35584	0.135834
mAChR-B	FBGN0037546	0.240281	0.062695	0.556587	0.379001
meng	FBGN0031855	0.285873	0.061079	0.426939	0.202145
CG8078	FBGN0033375	-0.35262	-0.22085	-0.20466	-0.07289
CG10019	FBGN0031568	0.752562	-0.03964	0.737176	-0.05502
CG13025	FBGN0036660	-0.23862	-0.18353	-0.49479	-0.4397
Spn31A	FBGN0032178	-0.0221	0.13056	0.219281	0.371944
CG34269	FBGN0085298	-0.37639	-0.16082	-0.00057	0.215001
Trs23	FBGN0260861	-0.24852	0.039358	-0.18954	0.098334

Hayan	FBGN0030925	0.380227	-0.07494	0.395484	-0.05968
CG17648	FBGN0031364	0.038881	0.098424	-0.08162	-0.02207
lncRNA:CR45262	FBGN0266800	1.143839	-0.16082	0.789117	-0.51555
CG31121	FBGN0051121	0.073616	0.035197	0.011318	-0.0271
CG44271	FBGN0265257	-0.13343	-0.00209	-0.16523	-0.03389
CG7504	FBGN0035842	0.044731	-0.11773	0.261721	0.099256
CG13557	FBGN0034867	-0.16183	-0.29837	0.192744	0.056202
smo	FBGN0003444	0.223334	-0.06624	0.480007	0.190428
lncRNA:CR43627	FBGN0263618	-0.2946	-0.12341	-0.09886	0.072327
Cog8	FBGN0287204	-0.11524	-0.13531	0.028294	0.00822
Gbeta5	FBGN0030011	-0.13627	-0.10235	-0.04196	-0.00804
PVRAP	FBGN0052406	0.312005	-0.14679	0.552634	0.093836
CG14684	FBGN0037824	-0.26235	-0.07066	-0.3886	-0.19691
CG2310	FBGN0039665	-0.29727	-0.10774	-0.3828	-0.19328
MsR1	FBGN0035331	0.202723	-0.12507	-0.12459	-0.45238
lncRNA:CR44864	FBGN0266158	1.301897	0.353795	0.685892	-0.26221
CG7333	FBGN0038715	-0.1891	0.270837	-0.48682	-0.02688
Panx	FBGN0034617	-0.12844	-0.02871	-0.06736	0.032371
CG33977	FBGN0053977	-0.10994	0.192723	-0.41284	-0.11018
shu	FBGN0003401	-1.05291	-0.23391	-1.33555	-0.51655
CG9962	FBGN0031441	-0.23373	-0.10237	-0.53862	-0.40726
E(var)3-9	FBGN0260243	-0.0746	-0.03114	-0.03143	0.012033
Mcm5	FBGN0017577	-0.39252	0.054356	-0.48144	-0.03455
PCID2	FBGN0036184	-0.25926	0.167848	-0.50454	-0.07743
CG34245	FBGN0085274	-0.21369	-0.01311	-0.41713	-0.21656
CG42798	FBGN0261932	0.121326	-0.13284	-0.00379	-0.25795
CG33107	FBGN0053107	-0.1753	-0.06062	-0.31542	-0.20074
JMJD7	FBGN0036366	0.001766	-0.04708	0.069129	0.020281
GstD5	FBGN0010041	-0.763	-0.13107	-0.72414	-0.09221
CG15772	FBGN0029799	0.540385	0.654317	-0.25279	-0.13886
Fit2	FBGN0036688	0.001257	0.002289	-0.0778	-0.07677
CG14230	FBGN0031062	-0.10155	-0.02715	-0.04312	0.031285
CG17048	FBGN0033828	-0.21952	-0.08663	-0.20274	-0.06985
CG6405	FBGN0032428	-0.25842	-0.17638	-0.17589	-0.09386
CG13532	FBGN0034788	0.471566	-0.04288	0.284816	-0.22963
Trim9	FBGN0051721	0.202637	-0.02526	0.031145	-0.19675
CG13126	FBGN0032168	0.177876	0.095814	0.294459	0.212397
Setd3	FBGN0052732	-0.08572	-0.05523	0.249834	0.280326
upd1	FBGN0004956	0.243545	-0.06151	0.097691	-0.20736
Spindly	FBGN0031549	-0.11249	-0.00045	-0.23952	-0.12749
CG34049	FBGN0054049	-0.05313	0.210283	-0.06404	0.199371
CG2617	FBGN0032877	0.202063	0.079542	0.028013	-0.09451
CG14450	FBGN0037184	-0.11257	-0.05413	-0.19067	-0.13222
lov	FBGN0266129	0.407116	0.046228	0.572473	0.211585
JTBR	FBGN0025820	-0.17899	-0.08032	-0.06066	0.038003
CG15073	FBGN0034379	-0.0205	0.081992	-0.01185	0.090651
dpr1	FBGN0040726	0.2771	0.083274	0.198924	0.005099
RPA2	FBGN0032906	-0.18719	-0.15699	0.09036	0.120562
Gyc88E	FBGN0038295	0.263165	0.022446	0.376056	0.135336
CR43080	FBGN0262510	-0.0543	-0.00163	-0.10026	-0.04759
CG31142	FBGN0047114	-0.41645	0.070528	-0.35124	0.135736
lncRNA:CR45234	FBGN0266769	0.341004	-0.08802	-0.10247	-0.53149
CG13639	FBGN0265266	0.011135	0.085076	0.420018	0.493959
CG7800	FBGN0037552	0.003357	-0.02676	0.063092	0.032979
CG5274	FBGN0036987	-0.07175	-0.08459	0.160375	0.147539
rdgBbeta	FBGN0027872	-0.12622	-0.02072	-0.05509	0.050411
l(3)87Df	FBGN0002354	-0.13332	-0.00873	0.020715	0.145312
lncRNA:CR45902	FBGN0267562	0.626306	-0.46537	1.157236	0.065562
CG10431	FBGN0032730	0.205174	0.015021	0.120633	-0.06952
CG34056	FBGN0054056	0.151257	0.10275	0.122528	0.07402
CG18190	FBGN0034403	-0.0454	0.030027	-0.36644	-0.29101
fw	FBGN0001083	0.265956	-0.09544	0.012696	-0.3487
CG32305	FBGN0052305	0.020313	0.076251	0.125826	0.181764
CG42337	FBGN0259239	0.403631	0.147642	0.311936	0.055947
CG11127	FBGN0033178	-0.04743	0.054387	-0.16842	-0.0666
esn	FBGN0263934	0.370511	-0.03187	0.200869	-0.20151
Ice2	FBGN0038860	-0.18603	-0.06286	-0.33065	-0.20749
Strica	FBGN0033051	-0.05271	0.543547	-0.80888	-0.21262
Eaf6	FBGN0035624	-0.14328	-0.03528	-0.15972	-0.05171

CG13807	FBGN0035323	-0.08718	-0.09017	-0.05356	-0.05655
CG10300	FBGN0039107	0.358939	1.155527	-1.08505	-0.28847
CG6023	FBGN0030912	0.699191	0.075279	0.557014	-0.0669
CG42766	FBGN0261834	-0.06967	0.119493	-0.48101	-0.29185
Papst2	FBGN0036695	-0.12164	-0.02934	0.093313	0.185612
Ir62a	FBGN0053971	0.832308	-0.1667	0.77593	-0.22308
CG14929	FBGN0032365	-0.00085	0.028883	0.123608	0.153339
mRF1	FBGN0032486	-0.02883	0.179146	-0.03293	0.175044
CG31230	FBGN0051230	-0.10205	-0.04565	-0.16155	-0.10516
CG2063	FBGN0033400	-0.15874	-0.10301	-0.169	-0.11328
CG5292	FBGN0038491	-0.39317	-0.08853	-0.17825	0.126379
CG14631	FBGN0029552	-0.00071	0.113338	-0.02388	0.090164
CG12935	FBGN0033547	-0.2364	0.040325	-0.43841	-0.16169
CG5934	FBGN0039505	-0.28295	-0.22828	-0.09549	-0.04081
Ak6	FBGN0033754	-0.72853	-0.30415	-0.60266	-0.17827
Esp	FBGN0013953	0.061728	-0.01904	0.298334	0.21757
CG43163	FBGN0262719	0.43542	0.038929	0.367144	-0.02935
Cap-D3	FBGN0051989	0.111982	-0.04366	0.129442	-0.0262
CG7376	FBGN0035689	-0.01097	0.071171	-0.06466	0.017476
Vha16-3	FBGN0028667	-0.32524	0.058761	-0.28227	0.101736
CG3520	FBGN0034859	-0.06985	-0.02533	-0.12018	-0.07566
Ccn	FBGN0052183	-0.00553	-0.11099	0.13958	0.034126
Dop2R	FBGN0053517	0.001428	0.06318	-0.02431	0.037442
CG17440	FBGN0030120	-0.07723	-0.04565	-0.21149	-0.17991
CG43085	FBGN0262531	-0.14408	0.077536	-1.48938	-1.26777
CG17193	FBGN0040571	0.682909	0.209948	0.203925	-0.26904
CG1946	FBGN0033216	0.563328	0.487307	-0.45954	-0.53556
CG42302	FBGN0259198	-0.34972	-0.07789	-0.15212	0.119704
CG7058	FBGN0030961	0.2285	-0.04261	0.389612	0.118503
CG42365	FBGN0259711	-0.60884	-0.06826	-0.25867	0.281909
CG32808	FBGN0052808	-0.09108	0.07338	-0.00054	0.163922
Larp7	FBGN0260771	-0.05549	0.017105	0.036534	0.10913
CG10375	FBGN0039116	0.029849	0.091409	-0.11562	-0.05407
CG10949	FBGN0032858	-0.05033	0.062877	-0.01639	0.096819
CG43098	FBGN0262544	-0.36967	-0.10181	-0.38915	-0.12129
Myt1	FBGN0040298	-0.16715	0.021641	-0.12961	0.059182
Bet3	FBGN0260859	0.010351	0.204103	-0.0253	0.168455
Mcm3	FBGN0284442	-0.35268	0.373532	-0.56267	0.163551
Teh3	FBGN0040697	0.91817	-0.33519	1.456861	0.203504
CG42339	FBGN0259241	0.19018	-0.07788	0.384771	0.116709
Nse4	FBGN0032251	-0.37416	-0.1628	-0.43535	-0.22399
HP1b	FBGN0030082	-0.10474	0.01252	-0.01949	0.097772
CG1218	FBGN0037377	-0.1198	0.070286	-0.0834	0.106682
lncRNA:CR44048	FBGN0264840	-1.12984	-0.53942	-0.89633	-0.30591
CG32413	FBGN0052413	0.286799	-0.14522	0.03691	-0.39511
CG4168	FBGN0028888	0.414377	-0.03345	0.505144	0.057322
lncRNA:CR45434	FBGN0266983	-1.63135	-0.77039	0.200918	1.061875
CG7386	FBGN0035691	0.118412	0.051378	0.079922	0.012888
TyrRS-m	FBGN0035064	-0.22085	-0.02676	-0.10517	0.088927
crok	FBGN0032421	-0.21018	-0.01528	-0.22967	-0.03477
CG10182	FBGN0039091	0.054019	0.068677	-0.84861	-0.83395
Cyp6t3	FBGN0033697	-0.52522	-0.3304	-0.4805	-0.28569
CAH14	FBGN0034554	0.044288	0.064446	0.036608	0.056767
Smyd5	FBGN0038869	-0.28129	-0.05208	-0.11752	0.111696
Pdss2	FBGN0037044	-0.27738	-0.15994	-0.14793	-0.03048
lncRNA:CR43097	FBGN0262543	0.129647	0.908205	-1.32765	-0.54909
FLASH	FBGN0033806	-0.16454	-0.0221	-0.08783	0.054614
Irbp	FBGN0011774	-0.02289	-0.0131	0.013102	0.02289
ana2	FBGN0027513	-0.13305	-0.04442	-0.13371	-0.04509
CG3679	FBGN0027521	-0.21553	0.060505	-0.28708	-0.01104
CG8160	FBGN0034011	-0.8039	-0.19133	-1.17599	-0.56342
CG9902	FBGN0030757	0.14479	0.058137	0.148711	0.062057
eEFSec	FBGN0034627	-0.49921	-0.14294	-0.26235	0.093927
CG13075	FBGN0036563	-0.72962	0.588608	-0.68403	0.634198
Rnmt	FBGN0286027	-0.17541	-0.00023	-0.13391	0.04127
betaNACtes6	FBGN0052598	-0.74186	-0.42087	-0.44493	-0.12394
asRNA:CR43160	FBGN0262690	-0.30486	-0.23858	-0.15649	-0.09021
Sbp2	FBGN0087039	-0.0677	0.102236	-0.08375	0.08619
CG12499	FBGN0038968	-0.0016	-0.01874	0.002998	-0.01414

CG9368	FBGN0036890	0.125507	-0.05781	0.388813	0.205497
lncRNA:CR40053	FBGN0058053	-1.3335	-0.61647	-1.11067	-0.39364
Sugb	FBGN0036191	-0.069	-0.08424	-0.00327	-0.01851
Nup43	FBGN0038609	-0.51262	-0.24452	-0.11927	0.148836
CG43115	FBGN0262575	-0.46795	-0.05559	-0.50769	-0.09533
CG12541	FBGN0029930	0.452133	0.059315	0.106395	-0.28642
T3dh	FBGN0017482	0.354972	0.151809	0.390494	0.187331
mIF3	FBGN0033712	0.06801	0.153025	-0.0175	0.067515
Map60	FBGN0010342	-0.12953	-0.01246	-0.14513	-0.02805
Ptth	FBGN0013323	-0.18622	0.254087	-0.0878	0.352504
jet	FBGN0031652	-0.02451	0.068911	0.142142	0.235565
lncRNA:CR43792	FBGN0264336	-0.35811	-0.42773	-0.15652	-0.22614
CG13559	FBGN0034870	-0.25553	-0.0642	-0.38845	-0.19711
CG2091	FBGN0037372	-0.06493	0.045372	-0.18095	-0.07065
Ets65A	FBGN0005658	0.08597	-0.29144	0.325259	-0.05215
CG14142	FBGN0036143	0.354119	-0.10573	0.382967	-0.07689
CG12680	FBGN0029740	-0.26989	-0.00851	-0.32315	-0.06178
mRpL33	FBGN0040907	-0.17499	-0.26404	0.006656	-0.08239
CG10104	FBGN0033933	0.385984	0.04759	0.198433	-0.13996
Mtr3	FBGN0036916	-0.14527	0.094386	-0.20126	0.038399
lncRNA:iab8	FBGN0264857	0.057147	-0.21198	0.173593	-0.09553
CstF50	FBGN0039867	-0.3692	-0.08552	-0.21212	0.071549
HDAC11	FBGN0051119	-0.22057	-0.10419	0.32487	0.441242
fu	FBGN0001079	0.152893	0.20569	0.086074	0.138872
CG13029	FBGN0036670	-0.17398	-0.02822	-0.16006	-0.0143
lncRNA:CR43713	FBGN0263866	0.920801	-0.27143	0.495879	-0.69635
CG42594	FBGN0260971	0.428196	0.072482	0.557989	0.202276
CG8620	FBGN0040837	-0.35586	-0.03933	-0.28989	0.026643
CG13895	FBGN0035158	-0.10299	0.01544	0.073254	0.191685
CG32845	FBGN0052845	-0.08959	-0.27838	0.118343	-0.07045
CG14881	FBGN0038425	-0.36827	0.098223	-0.26727	0.199223
CG12038	FBGN0035179	-0.25016	-0.07091	-0.15504	0.024216
nht	FBGN0041103	-0.14923	-0.03416	-0.27351	-0.15845
CG43610	FBGN0263585	-0.0468	-0.02293	-0.45581	-0.43194
CG46448	FBGN0287218	-0.13296	-0.19675	0.187915	0.124126
CG31457	FBGN0051457	-0.18485	0.179883	-0.36257	0.002166
CG42300	FBGN0259196	-0.37761	-0.01993	-0.48614	-0.12847
CG15909	FBGN0033090	-0.05922	0.148647	-0.15096	0.056912
CG34015	FBGN0054015	-0.21813	0.119074	-0.3599	-0.02269
lncRNA:CR46108	FBGN0267777	0.231452	0.268811	-0.22047	-0.18312
DENR	FBGN0030802	-0.11626	0.015647	-0.17018	-0.03828
asRNA:CR44027	FBGN0264819	-0.3557	-0.12676	-0.46523	-0.23629
CG43051	FBGN0262353	-0.50563	0.427239	-0.89734	0.035526
D	FBGN0000411	-0.19351	-0.35812	-0.05244	-0.21706
CG5440	FBGN0031331	-0.00756	-0.08606	0.003708	-0.0748
Ced-12	FBGN0032409	0.100052	0.030738	0.11177	0.042456
CG12682	FBGN0029729	0.099268	0.078127	-0.02735	-0.04849
CG3817	FBGN0038275	-0.2152	0.142608	-0.22522	0.132591
CG13067	FBGN0036589	0.593429	0.011765	0.050252	-0.53141
CG5608	FBGN0038058	0.010586	0.035946	0.022729	0.04809
abo	FBGN0000018	0.040715	-0.04462	-0.02524	-0.11057
Leash	FBGN0037856	-0.07328	-0.11946	0.209575	0.163395
CG14160	FBGN0036066	0.356224	0.341273	-0.69004	-0.70499
lncRNA:CR44309	FBGN0265368	-0.15859	-0.22458	0.489253	0.42326
Scgdelta	FBGN0025391	0.317999	-0.11406	0.093674	-0.33838
CG34183	FBGN0085212	-0.163	0.12708	-0.3043	-0.01421
rasp	FBGN0024194	-0.11336	0.029198	-0.28035	-0.13779
CG31643	FBGN0051643	0.116226	-0.04218	0.306143	0.147733
timeout	FBGN0038118	-0.30264	-0.06209	-0.26918	-0.02864
CG44521	FBGN0265714	0.964368	-0.3069	0.333726	-0.93754
Ccdc58	FBGN0036909	-0.2068	0.070205	-0.34558	-0.06858
CG6550	FBGN0034214	-0.16227	-0.07662	-0.14216	-0.05651
CG31097	FBGN0051097	-0.46507	0.145591	0.346913	0.957574
Tmhs	FBGN0262624	-0.24331	-0.33878	0.588355	0.492889
CG43292	FBGN0262984	-0.16687	-0.01272	-0.27612	-0.12197
CG44574	FBGN0265785	0.157523	-0.29528	-0.03814	-0.49094
CG34431	FBGN0085460	0.270092	-0.00405	0.331743	0.057604
mei-41	FBGN0004367	-0.07284	0.071981	0.158506	0.303323
Lst8	FBGN0264691	0.053008	-0.07827	-0.02232	-0.1536

CG13893	FBGN0035146	0.272722	0.040764	0.168082	-0.06388
MED25	FBGN0038760	0.089293	0.006756	0.244757	0.162221
acj6	FBGN0000028	-0.20646	0.035642	-0.0153	0.226798
DCX-EMAP	FBGN0259099	0.232999	-0.17754	0.462673	0.052132
CarT	FBGN0032879	-0.00731	-0.27475	0.294893	0.027453
CG11698	FBGN0037572	-0.12627	-0.10396	-0.15197	-0.12966
Dark	FBGN0263864	0.403639	-0.09012	0.481071	-0.01269
Sas-4	FBGN0011020	-0.19495	0.01961	-0.18634	0.028219
lncRNA:CR43913	FBGN0264514	-0.19799	-0.25582	-0.0498	-0.10763
CG4953	FBGN0032204	-0.11721	0.14669	-0.26299	0.000917
CG42470	FBGN0259960	-0.43876	-0.17258	-0.39447	-0.12829
Pex12	FBGN0031282	-0.19493	0.145499	-0.32268	0.017756
CG5611	FBGN0039531	-0.16057	-0.01593	-0.271	-0.12636
spt4	FBGN0028683	-0.39292	-0.05296	-0.52425	-0.18429
CG11560	FBGN0036249	0.003872	0.010162	0.170842	0.177132
tw	FBGN0086368	0.320307	-0.24186	0.660728	0.098556
CG43072	FBGN0262482	-0.38913	-0.19152	-0.15235	0.045269
CG3589	FBGN0035065	-0.03553	-0.00389	-0.06567	-0.03403
Sld5	FBGN0039403	-0.07928	0.137566	-0.26898	-0.05213
MED23	FBGN0034795	0.426301	0.141231	0.395241	0.110171
lncRNA:CR43685	FBGN0263768	0.005148	0.148918	-0.12004	0.023733
lncRNA:CR43715	FBGN0263868	0.792218	-0.26451	0.552136	-0.50459
Nxt1	FBGN0028411	-0.35904	0.021411	-0.37582	0.00463
CG12439	FBGN0032094	-0.17232	-0.36719	-0.74249	-0.93735
Ets96B	FBGN0039225	0.019295	-0.18121	0.099006	-0.1015
disco	FBGN0000459	0.182702	-0.07357	0.436637	0.180363
Antp	FBGN0260642	0.189106	-0.05567	0.183813	-0.06096
CG14903	FBGN0038446	-0.16813	0.040492	-0.20871	-9.41E-05
CG9114	FBGN0030628	-0.24728	0.150526	-0.30617	0.091636
SmydA-5	FBGN0033061	0.423302	0.144207	0.338625	0.05953
CG5745	FBGN0038855	-0.06566	0.003597	-0.08382	-0.01456
ec	FBGN0000542	0.144935	-0.17134	0.345361	0.029088
CG6962	FBGN0037958	-0.06612	0.058002	0.106819	0.230939
Meics	FBGN0025874	-0.04411	0.007391	0.073013	0.124513
Rrp45	FBGN0030789	-0.01816	0.151631	-0.07148	0.098315
CG10041	FBGN0038014	-0.36839	-0.33887	-0.06193	-0.03241
Fmo-1	FBGN0034943	0.277196	-0.05772	0.189157	-0.14576
Cyp317a1	FBGN0033982	0.060047	0.264115	-0.27338	-0.06931
trn	FBGN0010452	0.251493	0.112525	0.171685	0.032716
CG42287	FBGN0259183	-0.10925	0.164127	-0.14769	0.125691
CG12560	FBGN0031974	-0.10855	0.098198	-0.22885	-0.0221
CG17982	FBGN0030006	-0.23743	0.11826	-0.18534	0.170347
CG43136	FBGN0262610	-0.48856	-0.22177	-0.25156	0.015229
Sdr	FBGN0038279	-0.23114	0.012886	-0.22975	0.014278
Art4	FBGN0037770	0.222279	0.049854	0.161498	-0.01093
oc	FBGN0004102	-0.11114	-0.41076	-0.00507	-0.30469
CG11069	FBGN0039244	-0.05682	-0.03912	-0.4594	-0.44169
CG2199	FBGN0035213	-0.06559	-0.06408	-0.08892	-0.08741
Kif3C	FBGN0039925	0.187522	-0.15561	0.260862	-0.08228
polyph	FBGN0033572	-0.11492	0.115757	-0.31782	-0.08714
CG14410	FBGN0030583	1.003612	0.044751	0.697361	-0.2615
SA-2	FBGN0043865	-0.17852	0.04953	0.026629	0.254674
Cdk7	FBGN0263237	-0.2193	-0.17246	-0.06826	-0.02141
CG17985	FBGN0033199	0.032104	0.064386	-0.00599	0.026287
otp	FBGN0015524	0.158555	-0.01011	0.077973	-0.09069
Ppt1	FBGN0030057	0.066278	-0.07245	0.138937	0.000214
Kdm4B	FBGN0053182	0.115652	0.109589	-0.13656	-0.14262
ppan	FBGN0010770	-0.2767	0.046915	-0.08536	0.23825
CG13423	FBGN0034513	-0.51501	-0.43582	0.218492	0.297683
CheB38b	FBGN0067311	-1.15849	-1.26945	-0.13578	-0.24674
CG14810	FBGN0029589	-0.41443	0.126153	-0.81638	-0.2758
wek	FBGN0001990	0.100629	0.05663	0.073183	0.029185
CG12259	FBGN0039557	-0.18818	0.01717	-0.10601	0.099346
ldbr	FBGN0035838	-0.72516	-0.13264	-0.91208	-0.31955
CG34334	FBGN0263829	-0.10632	-0.47719	0.099047	-0.27182
CR18166	FBGN0029526	-0.57708	-0.37935	-0.18014	0.017599
CG10581	FBGN0037046	-0.36308	-0.05672	-0.08807	0.218288
Pc	FBGN0003042	0.120138	0.076454	0.075878	0.032194
CG12948	FBGN0037739	-0.33882	-0.15071	-0.22678	-0.03867

CG42822	FBGN0262004	0.29038	-0.29807	-0.26001	-0.84845
Pnn	FBGN0037737	-0.26197	-0.07756	-0.12518	0.059219
CG3770	FBGN0035085	0.19696	0.331445	0.278365	0.41285
CG4813	FBGN0039013	-0.24119	-0.00436	-0.20793	0.0289
CG17829	FBGN0025635	-0.0164	0.008809	0.04843	0.07364
CG4766	FBGN0027546	0.228049	-0.17862	0.331632	-0.07504
CG1806	FBGN0030360	-0.04734	0.062391	0.199458	0.309189
CG43396	FBGN0263270	-0.50645	-0.12687	-0.37444	0.005144
Smyd4-3	FBGN0033633	-0.00053	0.076769	-0.00056	0.07673
Uros1	FBGN0030066	-0.00167	-0.07303	-0.00879	-0.08015
CG12909	FBGN0033507	-0.38679	0.146032	-0.34155	0.191275
GstZ1	FBGN0037696	0.406151	-0.10651	1.09653	0.583871
lncRNA:CR43974	FBGN0264705	-1.49241	0.004094	-1.18766	0.30884
Hmgcl	FBGN0031877	-0.23315	-0.19522	-0.02623	0.011696
mTerf3	FBGN0037008	-0.01986	0.213076	-0.0821	0.150835
Mzt1	FBGN0261858	-0.30428	-0.00195	-0.34912	-0.04679
Ada2a	FBGN0263738	0.639459	0.121922	0.359171	-0.15837
CG9213	FBGN0030655	-0.19143	0.000491	-0.1632	0.028717
CG12744	FBGN0033459	-0.5022	0.017097	-0.96377	-0.44447
MESR6	FBGN0036846	0.070344	-0.07394	0.036693	-0.10759
nkt	FBGN0036146	0.337842	-0.27343	0.873038	0.261764
lncRNA:CR44208	FBGN0265106	-0.07834	-0.15701	-0.03311	-0.11178
Mpp6	FBGN0032921	-0.13815	0.034969	-0.28676	-0.11364
CG7384	FBGN0032262	-0.43746	-0.33081	-0.03666	0.069993
CG42615	FBGN0261267	0.079781	0.099674	-0.03474	-0.01485
Irk1	FBGN0265042	0.534837	-0.18159	0.334926	-0.3815
CG4676	FBGN0033815	-0.12233	-0.03106	-0.21656	-0.12529
Tgt	FBGN0031321	-0.29951	-0.06942	-0.42802	-0.19793
Tcs3	FBGN0283681	-0.2839	0.096557	-0.50027	-0.11981
CG15879	FBGN0035309	0.107876	0.368481	-0.02917	0.231434
Det	FBGN0264291	-0.12483	-0.11166	-0.25386	-0.24069
CG18011	FBGN0033491	0.019811	0.001498	-0.11907	-0.13738
CG12426	FBGN0039552	-0.15557	-0.17757	-0.10852	-0.13053
CG4842	FBGN0036620	0.019424	0.253514	0.239548	0.473639
CG32750	FBGN0052750	0.973536	0.163548	0.406342	-0.40365
CG12546	FBGN0037178	-0.36515	0.146499	-0.6912	-0.17955
CG30037	FBGN0050037	0.148468	0.133338	0.047595	0.032465
nom	FBGN0037617	-0.03341	-0.06885	0.023407	-0.01203
CG43798	FBGN0264342	-0.10342	-0.12248	-0.4269	-0.44596
ovo	FBGN0003028	0.051368	0.059239	0.053963	0.061834
beat-IIIc	FBGN0032629	0.058433	-0.23564	0.362668	0.068591
Ass	FBGN0026565	0.236028	-0.04291	0.38184	0.102897
CG9967	FBGN0031413	-0.20989	-0.06217	-0.39228	-0.24456
lncRNA:CR46086	FBGN0267755	-2.47143	-0.83105	0.252662	1.893044
CG3386	FBGN0035152	-0.0117	0.094297	0.218752	0.324744
CG42693	FBGN0261583	-0.33008	-0.2701	-0.14248	-0.0825
TrissinR	FBGN0085410	0.088742	0.074463	0.069558	0.055279
Ctr1C	FBGN0062411	-0.06303	-0.06665	-0.07384	-0.07747
CG4627	FBGN0033808	-0.1011	-0.10822	-0.0276	-0.03472
Cht11	FBGN0029913	0.121114	0.089833	-0.02748	-0.05876
karr	FBGN0040784	-0.39773	-0.14192	-0.54678	-0.29097
CG30377	FBGN0050377	-0.06377	-0.72421	0.532229	-0.12821
lncRNA:CR45633	FBGN0267193	1.439018	-5.7714	3.221738	-3.98868
ms(3)K81	FBGN0002838	-0.15993	-0.09989	-0.50728	-0.44723
CG32447	FBGN0052447	0.602232	-0.58162	0.934693	-0.24916
CG3309	FBGN0029756	0.067277	-0.11827	0.035534	-0.15002
CCHa1-R	FBGN0050106	-0.45811	0.033287	-0.6193	-0.12791
CG4004	FBGN0030418	-0.02095	-0.02435	-0.12783	-0.13123
CG13707	FBGN0035578	-0.26149	-0.20239	0.395927	0.45503
lncRNA:CR46063	FBGN0267732	-1.77408	0.920825	0.240299	2.935205
CG14020	FBGN0031707	-0.40615	-0.16335	-0.22984	0.012956
RacGAP84C	FBGN0045843	0.042698	0.060694	-0.13841	-0.12041
rempA	FBGN0260933	-0.21488	-0.09317	0.177505	0.299215
a6	FBGN0023130	-0.03604	-0.11839	0.206113	0.123766
CG14174	FBGN0036036	-0.07647	-0.00197	-0.12031	-0.04582
Drl-2	FBGN0033791	0.561747	0.053045	0.442586	-0.06612
CG12818	FBGN0037809	-0.10022	0.076627	-0.18029	-0.00344
CG13155	FBGN0033723	-0.83463	-0.29913	-0.99077	-0.45527
Spec2	FBGN0044823	0.028381	0.022732	0.015821	0.010172

CG3527	FBGN0029714	-0.21762	-0.16517	-0.3264	-0.27395
Bka	FBGN0010520	-0.2523	0.016731	-0.26126	0.007771
lncRNA:CR43810	FBGN0264358	-0.2802	-0.17987	-0.86561	-0.76528
CG42876	FBGN0262150	-0.48748	-0.23164	0.940101	1.195944
CG7741	FBGN0033615	-0.13712	0.008658	-0.038	0.107778
Rlb1	FBGN0014022	0.026468	0.076961	-0.12561	-0.07512
CG4797	FBGN0034909	0.302606	-0.2187	0.250174	-0.27113
Pp1-Y2	FBGN0046698	-0.25866	-0.0651	-0.18306	0.0105
Cdc2rk	FBGN0013435	-0.22788	0.222453	-0.3529	0.097437
CG10681	FBGN0036291	-0.24476	0.186269	-0.4564	-0.02537
CG32544	FBGN0052544	0.126809	-0.11657	0.206874	-0.0365
CG31904	FBGN0260479	0.348511	-0.09842	0.724253	0.277322
CG5888	FBGN0028523	-0.1737	0.274029	-0.19692	0.250812
asRNA:CR43637	FBGN0263628	-0.15877	-0.13585	-0.13544	-0.11252
Nup35	FBGN0030943	-0.1075	0.235572	-0.26491	0.078168
ms(3)76Ba	FBGN0036868	0.118044	-0.00044	0.033304	-0.08518
gny	FBGN0032234	0.049751	0.048642	-0.21637	-0.21748
mTTF	FBGN0028530	-0.18623	-0.14675	-0.05609	-0.01661
CG31296	FBGN0051296	-0.9593	-0.46564	0.190937	0.684596
CG30467	FBGN0050467	-0.08429	0.054637	-0.14981	-0.01089
CG14130	FBGN0036210	-0.06444	0.013866	-0.04768	0.030626
Ppat-Dpck	FBGN0035632	-0.17568	-0.04643	-0.2243	-0.09506
CG14516	FBGN0039640	-0.0788	-0.07952	-0.02718	-0.0279
tex	FBGN0037569	-0.01125	0.111335	-0.15444	-0.03186
CG32073	FBGN0052073	0.23761	0.102763	0.855264	0.720416
CG34229	FBGN0259832	-0.29442	0.036613	-0.35175	-0.02072
Naxe	FBGN0030178	-0.22947	0.076066	-0.07549	0.230046
tx	FBGN0263118	-0.14099	-0.04672	-0.00708	0.087185
Rep	FBGN0026378	-0.09657	0.066885	-0.22627	-0.06281
por	FBGN0004957	-0.09107	-0.04808	-0.13047	-0.08748
RluA-2	FBGN0032256	0.224467	0.2517	0.187905	0.215138
CG43165	FBGN0262721	-0.17547	0.219693	1.056828	1.451993
CG13739	FBGN0033403	1.102144	-0.16424	1.219711	-0.04667
kz	FBGN0001330	-0.05138	-0.03996	0.030167	0.041587
GstD2	FBGN0010038	-0.36183	0.110898	-0.10714	0.365584
PCNA2	FBGN0032813	-0.27489	-0.06482	-0.30609	-0.09602
CG15237	FBGN0033104	-0.09742	-0.00486	-0.05483	0.037731
CG15471	FBGN0029726	-0.16088	-0.15732	-0.03808	-0.03452
pie	FBGN0005683	-0.14588	0.131	-0.21466	0.06222
MAGE	FBGN0037481	0.015204	-0.15628	0.052475	-0.11901
CG17580	FBGN0040755	0.033741	0.121132	-0.30744	-0.22005
Spn42Db	FBGN0033112	-0.19969	0.397985	-0.70276	-0.10509
Vps16B	FBGN0039702	-0.03993	0.049781	0.055781	0.145497
Sans	FBGN0033785	0.042794	0.286692	-0.27053	-0.02663
brv1	FBGN0036874	-0.06837	0.023447	-0.16169	-0.06987
CG42580	FBGN0260870	-1.16813	-0.26754	-0.75763	0.142959
Cypl	FBGN0035141	-0.18059	-0.1017	-0.18853	-0.10965
CR43105	FBGN0262565	0.906052	0.496973	1.445727	1.036648
lncRNA:CR44846	FBGN0266140	0.607623	-0.02015	0.330565	-0.29721
CG32228	FBGN0052228	0.111075	-0.0319	0.106204	-0.03677
CG12713	FBGN0036536	-0.39325	-0.07044	-0.37972	-0.05691
Alp13	FBGN0037786	0.251582	0.594997	-0.85997	-0.51655
RhoGAP54D	FBGN0034249	0.053766	-0.17046	-0.06576	-0.28999
IntS14	FBGN0031314	-0.26149	-0.03125	-0.35102	-0.12078
CG31321	FBGN0051321	-0.44565	0.060611	-0.29021	0.216046
Sur	FBGN0028675	0.273421	-0.00791	0.30377	0.022439
Csas	FBGN0052220	-0.50006	-0.32383	0.25508	0.431311
NPFR	FBGN0037408	0.102762	-0.29287	0.103223	-0.29241
CG34393	FBGN0085422	-0.01564	0.081614	0.319245	0.416496
28SrRNA-Psi:CR40741	FBGN0085771	0.148031	0.162503	-0.08613	-0.07165
CG14223	FBGN0031053	0.135808	0.036694	-0.06647	-0.16558
CG34250	FBGN0085279	-0.3601	0.07643	-0.45538	-0.01885
U2A	FBGN0033210	-0.28107	0.143865	-0.22078	0.204157
CG43271	FBGN0262960	0.264845	0.222754	-0.24727	-0.28936
lncRNA:CR45248	FBGN0266783	-0.30714	-1.04827	0.048997	-0.69213
zpg	FBGN0024177	-1.05008	-0.1528	-1.28037	-0.3831
Mettl14	FBGN0032016	-0.01187	0.044452	-0.25737	-0.20105
fred	FBGN0051774	0.330157	-0.10472	0.691739	0.256857
CG5282	FBGN0036986	0.032853	-0.0841	0.124941	0.007991

Trpgamma	FBGN0032593	0.990097	0.031196	0.850298	-0.1086
CG10211	FBGN0032685	-0.10886	-0.15277	0.069678	0.025764
HipHop	FBGN0036815	-0.27545	-0.11203	-0.23532	-0.07191
CG17189	FBGN0039485	0.232327	0.166104	-0.12601	-0.19223
IntS10	FBGN0035462	0.079426	0.021293	-0.00201	-0.06015
robo2	FBGN0002543	0.358005	-0.0949	0.536673	0.083773
CG12975	FBGN0037061	-0.32311	-0.1203	-0.14919	0.053627
udd	FBGN0033261	-0.13134	0.082337	-0.23648	-0.0228
Mvd	FBGN0030683	-0.69751	-0.04682	-0.51717	0.133519
CR43215	FBGN0262851	1.387817	-0.1573	1.071979	-0.47314
CG43145	FBGN0262621	-0.22537	-0.38223	-0.30315	-0.46001
CG14667	FBGN0037317	-0.13868	-0.03787	-0.1297	-0.02889
CG11882	FBGN0039642	-0.33734	-0.09397	-0.1286	0.114767
Ndg	FBGN0026403	-0.1205	-0.04953	0.164057	0.235027
CG8679	FBGN0032934	0.103846	-0.20862	0.502984	0.190515
CG7142	FBGN0038595	0.419109	0.778234	-0.7652	-0.40607
Sfp36F	FBGN0261057	-0.23446	-0.32976	-0.53006	-0.62537
Ttc30	FBGN0032470	0.292241	-0.1859	0.922015	0.443878
CG32040	FBGN0052040	1.37472	-0.00852	2.003117	0.619878
Uhg2	FBGN0063449	-0.0743	0.284371	-0.23363	0.125047
lncRNA:CR43989	FBGN0264721	0.036866	0.237678	0.435553	0.636365
CG42854	FBGN0262101	-0.27767	-0.26907	-0.43201	-0.42341
jhamt	FBGN0028841	-0.15644	-0.17361	0.204338	0.187172
lncRNA:CR45035	FBGN0266395	0.104019	-0.36299	-0.34961	-0.81662
bip1	FBGN0026263	0.014497	-0.16247	0.328308	0.151346
dnd	FBGN0038916	0.068196	0.228405	-0.17301	-0.0128
CG15561	FBGN0039829	-0.33868	0.027524	-0.18249	0.18372
CG34230	FBGN0085259	-0.26507	-0.09877	-0.26836	-0.10206
TwdlT	FBGN0029170	0.70913	0.240611	0.320661	-0.14786
Ref2	FBGN0032439	-0.1659	0.195038	-0.46469	-0.10376
Hmg-2	FBGN0026582	-0.12142	-0.05562	-0.2552	-0.18939
TTLL15	FBGN0037838	-0.06693	0.225244	0.163666	0.45584
CG13773	FBGN0042092	-0.23419	-0.16074	-0.21856	-0.14512
beat-Ia	FBGN0013433	0.194856	-0.01059	0.281827	0.076382
brn	FBGN0000221	-0.15931	-0.18491	-0.32816	-0.35376
RfC38	FBGN0028700	-0.30413	0.203025	-0.135	0.372156
B-H2	FBGN0004854	0.401553	0.117614	0.301028	0.017089
tup	FBGN0003896	-0.04889	-0.225	0.104979	-0.07113
lncRNA:CR44950	FBGN0266255	0.0483	0.267089	-0.40067	-0.18188
CG32379	FBGN0052379	1.906545	0.318026	0.928132	-0.66039
CG30157	FBGN0050157	-0.06393	-0.11457	0.227493	0.176857
140up	FBGN0010340	0.009329	0.032642	0.002416	0.025729
Ir75a	FBGN0036757	-0.76731	-0.71066	-0.94998	-0.89333
DNAlig1	FBGN0262619	-0.37655	0.118328	-0.28425	0.210626
Snx16	FBGN0034265	-0.01276	-0.0198	-0.02771	-0.03475
CG9815	FBGN0034861	-0.25292	-0.12801	-0.27985	-0.15494
CG44259	FBGN0265199	-1.3512	-0.51744	-0.58086	0.252906
CG33310	FBGN0053310	0.092013	-0.17583	0.129368	-0.13847
Fer1	FBGN0037475	0.113128	-0.11029	0.39705	0.173634
beat-IIb	FBGN0038494	0.020256	-0.15285	0.193141	0.020033
CG43759	FBGN0264090	0.282486	-0.00875	0.282553	-0.00868
CG42821	FBGN0262003	-0.63604	0.052119	-0.30689	0.381264
lncRNA:CR43656	FBGN0263665	-0.15497	0.525652	-0.25398	0.42664
CG4456	FBGN0001228	-0.45823	-0.05615	-0.4001	0.001981
CG32547	FBGN0052547	0.280439	-0.35209	0.582788	-0.04975
CG15142	FBGN0032645	-0.17689	-0.00243	-0.47076	-0.2963
CG32187	FBGN0052187	-0.75295	0.225291	-0.45155	0.52669
CG17917	FBGN0037431	0.130054	0.082527	0.2177	0.170174
Pzl	FBGN0267430	-0.17609	0.100177	-0.33046	-0.0542
CG3347	FBGN0031513	0.001834	-0.05376	-0.10299	-0.15859
Marcal1	FBGN0031655	-0.01699	0.062308	-0.28463	-0.20534
DIP-theta	FBGN0051646	0.151756	0.207971	0.113927	0.170142
bs	FBGN0004101	0.05051	-0.02067	-0.01347	-0.08465
CG42658	FBGN0261523	-0.00949	-0.00629	-0.41605	-0.41285
dup	FBGN0000996	-0.07334	0.00685	-0.14076	-0.06057
CG34238	FBGN0085267	-0.41575	-0.24301	-0.53044	-0.35769
mtDNA-helicase	FBGN0032154	0.076087	0.230555	0.011638	0.166107
CG13018	FBGN0040751	-0.11813	0.158322	-0.26132	0.015137
shams	FBGN0039273	-0.23445	0.015921	-0.06737	0.183002

CG43062	FBGN0262364	-0.03554	0.140206	-0.25579	-0.08005
CG40485	FBGN0069973	-0.17616	-0.20862	0.030914	-0.00155
Vps11	FBGN0052350	-0.04165	0.006931	-0.27858	-0.23
CG45428	FBGN0266977	-0.06491	-0.07255	-0.16909	-0.17674
Dfd	FBGN0000439	-0.65045	0.195971	-0.92025	-0.07383
CG6762	FBGN0030876	0.012763	0.195228	0.021605	0.204069
amx	FBGN0000077	0.068174	0.054364	0.066781	0.052971
CG5188	FBGN0032247	-0.16211	-0.2137	-0.21634	-0.26793
CG10654	FBGN0036294	-0.20802	-0.38213	0.504844	0.330741
rho	FBGN0004635	0.163427	-0.16453	0.458048	0.130087
cerv	FBGN0030657	-0.24227	-0.07675	-0.12771	0.037812
CG6154	FBGN0039420	0.004279	-0.0892	-0.02314	-0.11662
firl	FBGN0032405	-0.04126	0.354005	0.141239	0.536501
CG13829	FBGN0039059	0.03149	0.047304	-0.11298	-0.09717
CG12344	FBGN0033558	0.223385	0.099284	0.15246	0.028359
Mcm2	FBGN0014861	-0.40896	-0.02002	-0.20518	0.183751
pre-rRNA:CR45846	FBGN0267506	-0.23062	-0.1566	-0.49751	-0.42349
CG8142	FBGN0030871	-0.23347	-0.05316	-0.12992	0.050392
tomb	FBGN0031715	-0.10322	0.144526	-0.47865	-0.2309
Ent1	FBGN0031250	0.529565	0.114176	0.363495	-0.05189
Dop1R2	FBGN0266137	0.26095	-0.04003	0.436555	0.135572
CG31365	FBGN0051365	0.081267	-0.11673	0.120517	-0.07748
Alg14	FBGN0030645	-0.2361	-0.00626	-0.1999	0.029936
CG1773	FBGN0033439	0.306852	-0.08602	0.944975	0.552101
CG13663	FBGN0039291	-0.00311	0.091637	0.025908	0.120653
CG31759	FBGN0051759	-0.31602	-0.22396	-0.07818	0.013882
Prp18	FBGN0027784	-0.1609	-0.10733	-0.09875	-0.04518
CG34194	FBGN0085223	0.319774	0.975925	-0.62196	0.034188
lncRNA:CR45449	FBGN0267005	-0.82163	0.920803	1.753134	3.495566
l(2)34Fd	FBGN0261535	-0.15129	-0.09569	0.111023	0.166624
mt:ND6	FBGN0013685	-0.34008	-0.37029	0.325517	0.295307
CG34155	FBGN0083991	0.265549	-0.0245	0.333586	0.043532
arx	FBGN0036826	-0.00687	-0.07197	-0.40714	-0.47224
CG34386	FBGN0085415	-0.16077	0.212266	-0.94508	-0.57205
SWIP	FBGN0030739	0.06804	0.04552	0.043977	0.021458
CG5342	FBGN0037916	-0.08441	0.184396	-0.33481	-0.06601
asRNA:CR45882	FBGN0267542	0.030012	-0.38492	-1.03222	-1.44715
CG34054	FBGN0054054	0.539239	0.589511	0.617714	0.667986
MESK4	FBGN0043069	1.06442	0.388449	0.493685	-0.18229
Sfp96F	FBGN0261061	-0.18147	-0.07107	-0.2629	-0.1525
lncRNA:CR46111	FBGN0267780	-0.38174	0.24475	-0.73108	-0.10459
CG17270	FBGN0038828	-0.0789	0.030998	-0.06979	0.040111
CG11353	FBGN0035557	0.28215	0.065294	0.468926	0.252071
CG11679	FBGN0030678	-0.13076	-0.11199	-0.06002	-0.04125
CG3339	FBGN0039510	0.043428	-0.41529	0.556156	0.097438
CG32803	FBGN0052803	-0.11467	0.017502	-0.21929	-0.08712
betaNACtes3	FBGN0052601	-0.04359	-0.22283	-0.27784	-0.45708
O-fut1	FBGN0033901	-0.21773	-0.06506	-0.24844	-0.09577
CG14431	FBGN0029922	0.125067	-0.11583	0.105188	-0.13571
lncRNA:CR43424	FBGN0263343	-0.15564	-0.28308	-0.24355	-0.37099
nxf2	FBGN0036640	-0.17703	0.135875	-0.36264	-0.04973
CG17568	FBGN0032763	-0.08662	0.081681	-0.00632	0.161984
CG44406	FBGN0265579	-0.19092	-0.09454	-0.54297	-0.44658
Ccdc85	FBGN0031488	-0.10471	-0.15976	0.234241	0.179186
Aladin	FBGN0030122	-0.13987	-0.20382	-0.13583	-0.19978
CG42751	FBGN0261805	-0.17119	-0.14745	0.865158	0.888897
CG7246	FBGN0030081	-0.4662	-0.21694	-0.24754	0.001719
gogo	FBGN0052227	0.202164	0.017789	-0.05722	-0.24159
PIG-H	FBGN0037535	-0.06254	-0.00343	-0.30652	-0.24741
CG11367	FBGN0037185	0.144645	0.144507	0.240112	0.239974
CG44158	FBGN0265041	-0.11114	-0.03299	-0.16547	-0.08732
c(3)G	FBGN0000246	-0.09221	0.187821	-0.03809	0.241935
Fadd	FBGN0038928	-0.03124	-0.12567	-0.01125	-0.10569
CG8925	FBGN0038404	-0.19085	-0.25854	-0.04421	-0.1119
CG14607	FBGN0037488	-0.28552	-0.31635	-1.53704	-1.56787
lncRNA:CR44232	FBGN0265163	-0.2228	0.541626	-1.07646	-0.31203
CG13617	FBGN0039201	-0.25806	-0.07901	-0.19949	-0.02044
Sfp24Bc	FBGN0261054	-0.16484	0.141137	-0.70078	-0.3948
CG10669	FBGN0039329	0.087423	-0.11666	0.191584	-0.0125

Toll-6	FBGN0036494	0.426399	-0.19045	0.683099	0.066249
CG15213	FBGN0040843	0.185895	0.30319	-0.0171	0.100197
CG4866	FBGN0034232	-0.42951	-0.14564	-0.47763	-0.19376
Ugt36A1	FBGN0015663	0.127176	0.325261	-0.25846	-0.06038
RnrL	FBGN0011703	-0.14704	0.344713	-0.16793	0.32382
Sas10	FBGN0029755	-0.29271	-0.0331	-0.11792	0.141699
dany	FBGN0050401	-0.24345	0.136151	-0.38557	-0.00597
CG9630	FBGN0037561	-0.16986	-0.00496	-0.02952	0.135384
scro	FBGN0287186	0.197246	0.187696	-0.2599	-0.26945
ArgRS-m	FBGN0037526	0.136924	0.043717	0.176912	0.083705
Clp	FBGN0015621	-0.17527	0.005861	-0.24531	-0.06418
CG17777	FBGN0040900	-0.40969	0.14621	-0.37832	0.177581
CG5013	FBGN0038396	-0.20281	-0.05766	-0.15553	-0.01039
Gpb5	FBGN0063368	-0.23609	0.103924	-0.50736	-0.16735
msd1	FBGN0035209	-0.46417	-0.0529	-0.56764	-0.15637
GstE13	FBGN0033381	-0.1433	-0.14941	0.180213	0.174098
CG1791	FBGN0030163	-0.22726	-0.02277	-0.19455	0.009937
sv	FBGN0005561	0.346863	-0.05189	0.403141	0.004385
CG4409	FBGN0034128	0.123767	-0.08019	0.364047	0.160088
CG43450	FBGN0263404	-0.17714	0.089438	-0.05714	0.20944
lncRNA:CR44955	FBGN0266260	0.404543	-0.2844	0.877263	0.188321
CG18545	FBGN0037812	0.014925	0.137203	-0.08091	0.04137
CG13202	FBGN0033623	-0.16883	0.181154	-0.57352	-0.22354
CR14117	FBGN0036331	0.031433	-0.02696	-0.18243	-0.24081
CG14434	FBGN0029915	-0.47803	0.128514	-0.40839	0.198163
CG31677	FBGN0051677	-0.14865	-0.07049	-0.42423	-0.34607
Atac3	FBGN0052343	-0.13173	-0.07613	-0.05979	-0.00418
CG14274	FBGN0032023	-0.00599	-0.18775	0.123036	-0.05872
CG6610	FBGN0035675	-0.47584	0.161132	-0.55131	0.085668
EndoG	FBGN0033690	-0.06875	0.118006	-0.02766	0.159096
Orct2	FBGN0086365	-0.14334	0.016703	0.206725	0.366765
Sptr	FBGN0014032	-0.17281	0.029903	-0.08984	0.112875
CG34345	FBGN0085374	-0.4985	-0.09785	-0.41391	-0.01326
CG10936	FBGN0034253	0.288468	0.150029	0.123682	-0.01476
CG6345	FBGN0037816	-0.10862	-0.0256	-0.18832	-0.1053
CG43997	FBGN0264739	-0.30939	-0.07697	-0.29167	-0.05925
lncRNA:CR42836	FBGN0262025	-0.10241	0.029801	0.049663	0.18187
TwdlD	FBGN0039444	-4.66875	0.706576	-0.56208	4.813247
Rab27	FBGN0025382	-0.29337	0.077864	-0.23686	0.134376
mab-21	FBGN0029003	-0.0278	-0.16775	0.178645	0.038698
sNPF-R	FBGN0036934	0.143151	-0.05044	0.200385	0.006794
sob	FBGN0004892	0.084284	-0.00513	0.27457	0.185156
Diedel	FBGN0039666	-1.59901	0.423103	1.018341	3.040451
CG31710	FBGN0051710	0.021646	0.089998	-0.10403	-0.03567
lncRNA:CR45191	FBGN0266701	0.603607	-0.17883	1.282275	0.49984
CG5160	FBGN0031906	-0.52786	0.087733	-0.13441	0.481184
mRRF1	FBGN0035980	-0.13295	0.084579	0.02657	0.244101
CG1434	FBGN0030554	0.134505	-0.04143	0.118879	-0.05706
CG42465	FBGN0259955	0.298015	0.268312	0.102045	0.072342
CG15046	FBGN0030927	0.247755	0.200323	-0.05031	-0.09774
CG42694	FBGN0261584	-0.47142	0.246354	-0.22039	0.497379
CG3831	FBGN0034804	0.160197	0.086278	0.269764	0.195844
thoc6	FBGN0036263	-0.03678	-0.04073	0.147898	0.14395
Sgf11	FBGN0036804	-0.3572	-0.34199	-0.13665	-0.12144
CG2129	FBGN0030008	-0.08813	0.11124	-0.35073	-0.15137
CG7637	FBGN0033548	-0.23536	0.170832	-0.36927	0.03692
Pvf2	FBGN0031888	0.144111	0.278393	-0.2246	-0.09032
CG9164	FBGN0030634	0.137015	-0.01831	0.131001	-0.02432
ppk6	FBGN0034489	-0.15624	0.028341	-0.3816	-0.19702
CG14906	FBGN0015351	-0.19226	0.32295	-0.19664	0.318574
clos	FBGN0261016	-0.26969	-0.10545	-0.13841	0.025827
CG15432	FBGN0031603	-0.34409	-0.13233	-0.22507	-0.01331
lncRNA:CR43241	FBGN0262886	-1.01487	-0.19452	-0.98269	-0.16233
slbo	FBGN0005638	1.114459	0.074491	1.081313	0.041345
lncRNA:CR45903	FBGN0267563	0.524723	-0.1711	0.485475	-0.21035
CG9515	FBGN0032077	-0.30951	0.040125	-0.15368	0.195949
CG43371	FBGN0263114	0.364424	-0.03272	0.15882	-0.23833
Sr-CIV	FBGN0031547	0.463331	1.033189	-0.18885	0.381011
lncRNA:TS14	FBGN0265424	-0.08306	0.356382	-0.18752	0.251916

lncRNA:CR44401	FBGN0265551	-0.8778	-0.42517	-0.38313	0.069495
CG3631	FBGN0038268	-0.03684	-0.20691	0.217936	0.047867
Atg5	FBGN0029943	0.071158	0.172425	0.08655	0.187817
PQBP1	FBGN0039270	-0.01213	0.225688	-0.30293	-0.0651
CG15330	FBGN0029987	-0.32299	-0.18028	-0.35272	-0.21001
CG11788	FBGN0034495	-0.78351	-0.01356	-0.88006	-0.11011
asRNA:CR42254	FBGN0259112	-0.40943	0.171416	-1.0711	-0.49025
ProRS-m	FBGN0027082	0.015433	-0.08365	0.02751	-0.07157
CG11839	FBGN0039271	-0.24339	0.077212	-0.06934	0.251269
CG31915	FBGN0051915	0.336758	0.110266	0.404541	0.178049
lncRNA:CR45250	FBGN0266785	-0.55978	-0.8768	-0.75086	-1.06787
CG15601	FBGN0030673	-0.01951	0.118013	-0.14667	-0.00915
Drep3	FBGN0028407	-0.09653	-0.19549	0.074747	-0.02421
nopo	FBGN0034314	-0.09604	0.116988	-0.26204	-0.04901
CG43968	FBGN0264699	0.936546	0.455052	-0.50196	-0.98346
CycC	FBGN0004597	-0.11713	0.009406	-0.2248	-0.09827
CG42489	FBGN0259992	-0.02483	0.222765	-0.17321	0.074379
CG10463	FBGN0032819	-0.26222	-0.1576	0.083538	0.188163
CycH	FBGN0022936	-0.20896	-0.04538	-0.23893	-0.07534
CG15436	FBGN0031610	-0.12633	0.13768	-0.04362	0.220385
CG31076	FBGN0051076	1.051043	0.35016	0.458635	-0.24225
CG17806	FBGN0038548	-0.15959	-0.14241	0.008169	0.025347
CG5909	FBGN0039495	-0.13988	-0.10235	-0.01504	0.022495
CG43091	FBGN0262537	-0.25584	-0.06742	-0.2079	-0.01948
Crg-1	FBGN0021738	0.884285	0.001165	1.047498	0.164378
CR42545	FBGN0260718	-0.03936	0.265382	-0.43811	-0.13337
yellow-f	FBGN0041710	-0.01842	-0.04421	0.352481	0.326701
CG43231	FBGN0262876	-0.23043	0.127978	-0.45029	-0.09188
CG16908	FBGN0037741	0.1346	0.151511	0.215707	0.232618
fend	FBGN0030090	0.007528	-0.15608	0.166839	0.003234
GluRIID	FBGN0028422	0.26035	0.199642	0.398109	0.337402
lncRNA:CR43356	FBGN0263088	-0.48181	-0.20779	-0.54573	-0.2717
Lip2	FBGN0024740	0.275505	0.171621	-0.10563	-0.20952
CG12325	FBGN0033557	-0.13642	0.050451	-0.06857	0.118301
CG17612	FBGN0031597	-0.12616	0.060658	0.190732	0.377551
CG32755	FBGN0052755	-0.10413	0.080311	-0.33317	-0.14873
CG14692	FBGN0037836	0.171193	-0.17096	0.818656	0.4765
IntS9	FBGN0036570	-0.02348	0.012927	0.03595	0.072351
Zwilch	FBGN0061476	-0.11912	0.031477	-0.13984	0.010762
SmydA-7	FBGN0034182	-0.02223	-0.00442	0.112227	0.130037
CG17931	FBGN0038421	-0.04042	-0.0546	0.079206	0.065027
lncRNA:CR43459	FBGN0263413	0.431721	0.036521	0.590014	0.194814
Duox	FBGN0283531	0.148429	-0.26976	0.144135	-0.27406
NimB4	FBGN0028542	-0.28232	-0.23495	0.335856	0.383224
CG14329	FBGN0038525	-0.45449	-0.03431	-1.09526	-0.67508
CG1924	FBGN0030377	0.11635	0.014191	0.008252	-0.09391
Nep7	FBGN0039564	-0.0538	-0.52522	0.107523	-0.3639
CR43100	FBGN0262546	-0.10157	0.126723	-0.26329	-0.035
CG17107	FBGN0032281	0.370701	0.263104	0.976593	0.868995
wcd	FBGN0262560	0.0245	0.139998	-0.02171	0.093791
Rrp42	FBGN0034065	-0.10022	0.204726	0.017192	0.322136
piwi	FBGN0004872	-0.19117	0.092918	-0.33299	-0.0489
Lip1	FBGN0023496	1.767711	0.226753	1.364439	-0.17652
CheB42a	FBGN0053348	-0.67867	-0.79482	0.002735	-0.11341
CG32708	FBGN0052708	-0.18705	-0.11435	-0.2635	-0.1908
Patsas	FBGN0029137	0.280211	0.023264	0.197744	-0.0592
CG34029	FBGN0054029	-0.25567	0.0631	-0.15739	0.161376
lncRNA:CR44852	FBGN0266146	0.101169	-0.06648	-0.08887	-0.25652
CG14506	FBGN0039659	0.111449	-0.08361	0.122106	-0.07295
lncRNA:CR43411	FBGN0263330	0.714992	-0.38654	1.163673	0.062137
CG12883	FBGN0039538	-0.3917	-0.16881	-0.15197	0.070926
CG11459	FBGN0037396	-1.04196	0.049425	-0.50193	0.589457
CG14100	FBGN0036889	-0.00107	0.005352	0.073517	0.079939
CG30419	FBGN0050419	0.212018	-0.01383	0.425259	0.199416
Teh4	FBGN0035504	0.464507	0.100225	0.33971	-0.02457
CG43393	FBGN0263250	-0.51606	0.715771	-0.33343	0.898404
IleRS-m	FBGN0036569	0.191302	0.019457	0.262095	0.090251
RIOK2	FBGN0039306	-0.03934	-0.03381	-0.19144	-0.18591
HGTX	FBGN0040318	-0.58748	-0.40763	-0.20471	-0.02486

sced	FBGN0013732	0.052758	-0.09115	0.253034	0.109126
CR40005	FBGN0058005	0.265585	-0.08528	0.209829	-0.14104
CG8641	FBGN0035733	0.520473	0.139717	0.359756	-0.021
CG34141	FBGN0083977	-0.02054	-0.37253	0.213012	-0.13898
CG2906	FBGN0033240	-0.09601	-0.2534	0.356102	0.198719
CG32281	FBGN0052281	0.047189	0.177134	-0.00222	0.127729
asRNA:CR43299	FBGN0262991	-0.04496	-0.33539	0.299078	0.008649
side-IV	FBGN0038156	0.594755	0.169944	0.421756	-0.00306
dgt4	FBGN0026085	-0.48438	-0.36849	-0.37809	-0.26221
FRG1	FBGN0036964	-0.0463	-0.00396	0.110631	0.152968
Blos1	FBGN0050077	0.076372	0.043218	-0.09418	-0.12733
CG31463	FBGN0051463	0.722916	0.427938	0.331329	0.036351
Cyp28d2	FBGN0031688	-0.23507	-0.09724	0.2232	0.361032
CG30033	FBGN0050033	-0.2754	0.236381	-0.18265	0.329127
Tengl2	FBGN0052463	-0.064	-0.01923	-0.05417	-0.0094
CG17028	FBGN0036552	0.089051	0.142721	-0.09326	-0.0396
CG12910	FBGN0033502	0.096694	0.113972	-0.03097	-0.01369
CG10959	FBGN0030010	-0.03913	0.077714	-0.05947	0.057366
RabX2	FBGN0030200	-0.30824	0.235035	-0.36408	0.179195
CG12301	FBGN0036514	-0.2691	-0.17951	-0.05453	0.035061
CG13151	FBGN0033750	0.27544	0.074655	0.248468	0.047683
CG6749	FBGN0036040	0.138063	0.146129	-0.20157	-0.1935
Ssl1	FBGN0037202	-0.16131	0.010765	-0.36107	-0.18899
TkR99D	FBGN0004622	0.142783	-0.1217	0.311096	0.046611
CG31125	FBGN0051125	-0.48732	-0.34254	0.002307	0.14709
Tsp3A	FBGN0040334	0.027227	0.031395	0.090081	0.094248
lncRNA:CR44300	FBGN0265346	-0.39143	-0.38445	0.158979	0.165958
CG18557	FBGN0031470	-1.28532	-0.87743	-1.04002	-0.63213
Drgx	FBGN0085369	0.327011	-0.1872	0.676893	0.162685
CG4282	FBGN0034114	0.072117	0.008475	0.157287	0.093645
CG30385	FBGN0050385	-0.04689	-0.24379	0.248868	0.051969
CG33509	FBGN0053509	0.791712	0.45855	0.877083	0.543921
CG31648	FBGN0051648	-0.0905	-0.0262	-0.0299	0.034401
Blos4	FBGN0036105	-0.21454	0.112431	-0.16458	0.162396
lncRNA:CR46254	FBGN0267987	-0.30213	-0.18822	-0.40671	-0.2928
CG2126	FBGN0039876	0.115562	0.089992	0.016412	-0.00916
lncRNA:CR46017	FBGN0267681	0.702897	-0.00967	0.810058	0.097494
sut2	FBGN0028562	-0.5482	0.046786	-0.74598	-0.15099
MED16	FBGN0034707	-0.29693	-0.23363	0.028267	0.091569
CG43313	FBGN0263005	0.293862	0.0488	0.19351	-0.05155
CG11180	FBGN0034528	-0.08495	-0.00141	0.093372	0.176911
Osi6	FBGN0027527	-0.08058	0.121578	-0.41393	-0.21177
Vti1a	FBGN0260862	-0.01612	0.080716	-0.1914	-0.09456
NELF-B	FBGN0027553	0.098871	0.132699	-0.13609	-0.10226
nompC	FBGN0016920	0.177533	-0.28226	0.347101	-0.1127
CG15365	FBGN0030077	0.032562	0.202576	-0.13124	0.038777
CG8027	FBGN0033392	-0.09375	-0.05292	-0.02935	0.01147
Cht10	FBGN0250907	0.070338	0.090843	-0.00017	0.020337
CG14105	FBGN0036359	0.034731	0.013132	-0.1607	-0.1823
CG14983	FBGN0035479	-0.21296	0.010252	-0.29923	-0.07601
Asciz	FBGN0035407	-0.24545	-0.02546	-0.06755	0.152435
CG32095	FBGN0052095	0.06331	0.056235	0.085031	0.077957
CG34293	FBGN0085322	-0.20971	-0.0611	0.015213	0.163826
CG4730	FBGN0039355	-0.23891	0.069479	-0.39533	-0.08695
CG6066	FBGN0039488	-0.31261	-0.17617	-0.01376	0.122676
Ets21C	FBGN0005660	-0.15121	0.177394	-0.33201	-0.00341
lncRNA:CR44689	FBGN0265900	-0.15093	0.317437	-1.41682	-0.94845
Sep5	FBGN0026361	0.133401	0.236175	-0.23363	-0.13085
lncRNA:CR45277	FBGN0266815	-3.25781	-2.68847	-0.35952	0.209812
asRNA:CR43481	FBGN0263492	0.441068	0.094424	-0.32772	-0.67437
CG13793	FBGN0031935	-0.26783	-0.25033	0.020686	0.038185
sim	FBGN0004666	0.46466	0.115591	0.670408	0.321338
CG8490	FBGN0033715	-0.26052	-0.11	-0.09807	0.052448
CG30495	FBGN0050495	0.073721	0.064823	-0.04173	-0.05063
lncRNA:CR44135	FBGN0264984	2.480057	-0.87195	3.463814	0.11181
CG4459	FBGN0038753	0.381115	0.054808	-0.06039	-0.3867
lncRNA:CR43608	FBGN0263583	-0.31701	0.0674	-0.30928	0.075132
CG43137	FBGN0262611	-0.56048	-0.02244	-0.51266	0.025379
CG11777	FBGN0033527	-0.11502	-0.08165	-0.23069	-0.19731

CG34005	FBGN0054005	0.33879	0.89442	-1.0444	-0.48876
CG11103	FBGN0030522	-0.10128	0.057733	0.078094	0.237104
CG6310	FBGN0036121	0.668532	-0.00972	1.007532	0.32928
lncRNA:CR43297	FBGN0262989	-0.33797	-0.09301	-0.39573	-0.15077
Sras	FBGN0029121	-0.15881	0.040946	-0.45696	-0.2572
CR30409	FBGN0050409	-0.10087	0.263785	0.545059	0.909717
CG43672	FBGN0263747	0.139652	0.061107	0.112013	0.033468
CG1575	FBGN0029999	-0.22442	-0.00781	-0.11584	0.100769
CG13306	FBGN0040828	0.334251	0.061453	0.269389	-0.00341
Nnf1a	FBGN0034523	-0.43862	-0.27052	-0.21019	-0.04209
MED20	FBGN0013531	-0.12179	0.099623	-0.16987	0.051543
CG31223	FBGN0051223	-0.06362	0.340252	-0.29549	0.108385
CR34262	FBGN0085291	0.213566	-0.00199	0.011371	-0.20419
CG3434	FBGN0036000	-0.21386	0.015191	-0.25472	-0.02567
CG10062	FBGN0034439	0.041921	0.020292	0.09245	0.070822
CG32856	FBGN0052856	-0.16759	-0.01912	-0.27262	-0.12415
CG5916	FBGN0038401	0.003423	0.021059	-0.07137	-0.05373
Saf6	FBGN0031281	-0.20829	-0.00422	-0.17802	0.026051
Ndc80	FBGN0030500	-0.54371	0.002631	-0.26729	0.279052
l(1)G0020	FBGN0027330	-0.32563	-0.15646	-0.32225	-0.15307
Cpr76Bd	FBGN0036881	-0.24603	-0.53915	-0.22269	-0.51581
CG15332	FBGN0029986	-0.2697	-0.04405	-0.27824	-0.05258
asRNA:CR45192	FBGN0266702	1.023241	0.214873	1.653831	0.845463
betaNACtes2	FBGN0030563	-0.12739	-0.16571	-0.65985	-0.69817
hbs	FBGN0029082	0.400424	0.034189	0.359784	-0.00645
CG7079	FBGN0038849	0.037632	-0.12741	0.110656	-0.05439
CG30059	FBGN0260475	1.441826	0.251864	0.850594	-0.33937
CG13670	FBGN0035873	0.36078	0.335571	0.45836	0.433151
GluRIIE	FBGN0051201	0.028073	0.066019	0.100291	0.138237
Lrr47	FBGN0010398	-0.22149	-0.07216	-0.0898	0.059537
Sgf29	FBGN0050390	-0.23577	0.095276	-0.27618	0.054871
lncRNA:CR44611	FBGN0265822	-0.10794	-0.12234	0.014274	-0.00013
Agpat1	FBGN0030421	0.144125	-0.17654	0.535146	0.214477
CG8260	FBGN0030684	0.011152	0.262637	-0.24967	0.001817
Pus7	FBGN0035901	-0.14495	0.02433	-0.20472	-0.03544
CG14892	FBGN0038447	0.283722	0.072062	-0.38036	-0.59202
CG14280	FBGN0038695	0.126321	-0.05179	-0.11112	-0.28923
CG8319	FBGN0037722	-0.0271	-0.08485	-0.18624	-0.24399
CG15651	FBGN0034567	0.290278	0.024994	0.364551	0.099267
CG15908	FBGN0033085	-0.14059	-0.01554	-0.07636	0.048689
Brca2	FBGN0050169	0.078809	-0.0111	0.076044	-0.01386
CG16753	FBGN0035393	-0.15295	-0.07001	0.105224	0.188171
CG7213	FBGN0035861	-0.21101	0.016211	-0.38639	-0.15916
CG34462	FBGN0085491	0.229001	-0.16493	0.551076	0.157141
CG13484	FBGN0036406	-0.37486	-0.01629	-0.32202	0.036555
DNApol-alpha60	FBGN0259676	-0.1823	0.031528	-1.05655	-0.84273
lncRNA:CR45423	FBGN0266972	0.258907	0.447703	-0.59717	-0.40837
CG9067	FBGN0033605	-0.15382	-0.00147	-0.25635	-0.10399
Tango6	FBGN0032728	-0.15776	0.040233	-0.20611	-0.00811
GalT1	FBGN0053145	0.017385	-0.03613	0.123376	0.069866
org-1	FBGN0021767	0.337738	-0.36133	0.737802	0.038729
Tollo	FBGN0029114	0.324083	0.154198	0.102028	-0.06786
CG11555	FBGN0086856	-0.12831	0.092831	-0.22257	-0.00143
CR43734	FBGN0263985	-0.45006	0.158548	-0.70876	-0.10016
CG41562	FBGN0085693	-0.28958	-0.45601	0.104678	-0.06175
CecA2	FBGN0000277	-2.04976	0.383806	-2.50211	-0.06854
CG14015	FBGN0031716	0.120542	-0.04958	0.270482	0.100359
Skp2	FBGN0037236	-0.06422	0.208605	0.039709	0.31253
CG11170	FBGN0034705	0.126684	0.126183	-0.16734	-0.16784
CG11905	FBGN0036678	0.536201	0.388005	0.606127	0.457931
Gr64f	FBGN0052255	0.507268	0.232975	-0.84197	-1.11627
Cyp304a1	FBGN0038095	-0.67896	-0.39402	1.193483	1.478419
CG12112	FBGN0030048	-0.03551	-0.28738	0.292078	0.040214
lncRNA:CR43753	FBGN0264084	-0.26846	-0.31381	0.305889	0.260539
lncRNA:CR44345	FBGN0265445	1.706596	-0.16343	2.364482	0.494451
CG44335	FBGN0265423	-0.68568	0.240024	0.172125	1.097827
CG31189	FBGN0051189	-0.0578	-0.05107	-0.4991	-0.49238
Su(Ste):CR42407	FBGN0259838	-1.69391	0.535458	-1.43733	0.792031
CG5955	FBGN0036997	-0.12037	-0.43772	0.549991	0.232636

CG14731	FBGN0037964	0.18543	0.151002	-0.18694	-0.22137
CG14618	FBGN0031189	0.051036	-0.02256	-0.00927	-0.08287
CG16790	FBGN0037713	0.127419	0.079874	0.173003	0.125458
CG4788	FBGN0032354	-0.41921	-0.09875	-0.47242	-0.15196
mh	FBGN0267977	-0.24857	-0.07377	-0.38469	-0.20989
CG9926	FBGN0038190	-0.381	0.068396	-0.8822	-0.4328
lncRNA:CR45560	FBGN0267120	0.055126	0.195233	0.388534	0.528641
CG3635	FBGN0032981	0.942909	-0.35825	0.721916	-0.57924
5-HT1B	FBGN0263116	0.263632	-0.19126	0.39589	-0.059
Cdk4	FBGN0016131	0.186043	0.1758	-0.07159	-0.08183
l(3)72Dn	FBGN0263605	0.022716	-0.05515	-0.05051	-0.12838
CG17192	FBGN0039472	-2.45372	-2.04935	-0.57537	-0.171
Rrp40	FBGN0260648	-0.14861	0.005133	-0.11889	0.034856
Cby	FBGN0067317	0.154285	0.236434	-0.01202	0.070125
Dcp-1	FBGN0010501	0.130627	0.326611	-0.1026	0.093387
vls	FBGN0003978	-0.27626	-0.16188	-0.07829	0.036077
BCL7-like	FBGN0026149	-0.28561	-0.10332	-0.13114	0.051151
CG46281	FBGN0283439	0.014226	-0.14648	0.218677	0.057968
eater	FBGN0243514	-0.71702	0.659636	-1.75235	-0.37569
CG9766	FBGN0037229	0.093829	-0.08024	0.142703	-0.03136
mei-9	FBGN0002707	0.086937	0.164215	-0.06047	0.016808
CG5131	FBGN0032644	-0.05633	-0.08462	-0.07652	-0.10481
CG10914	FBGN0034307	-0.2236	-0.09683	-0.11687	0.009897
Vhl	FBGN0041174	-0.06376	-0.02197	0.106913	0.148707
CG34279	FBGN0085308	0.063114	0.097437	-0.11009	-0.07577
CR33222	FBGN0053222	0.18073	0.407897	-0.101	0.126166
CG13841	FBGN0040588	0.379718	0.124613	0.378101	0.122996
CG15554	FBGN0039820	0.017794	-0.4125	1.685424	1.255135
CG5421	FBGN0032434	-0.03134	0.230113	-0.13921	0.122241
CG32115	FBGN0052115	0.110122	0.531625	-0.70143	-0.27993
Ddr	FBGN0053531	-0.01829	-0.13922	0.327596	0.206667
CNMa	FBGN0035282	0.840091	0.040352	0.958724	0.158985
lncRNA:CR44539	FBGN0265732	6.741694	-0.57456	7.335094	0.018842
CG18539	FBGN0034325	2.644892	0.30513	3.240566	0.900803
CG33228	FBGN0261373	0.095096	0.468432	-0.29128	0.08206
CG33325	FBGN0053325	0.074061	0.149216	-0.21334	-0.13818
CR43170	FBGN0262789	-0.57085	-0.28079	-0.72512	-0.43506
CG10495	FBGN0032750	-0.10455	0.057643	-0.2596	-0.09741
CG13001	FBGN0030806	0.053993	0.213666	0.06162	0.221294
CG2540	FBGN0030411	-0.13039	-0.04401	-0.12168	-0.03529
nompA	FBGN0016047	-0.21319	-0.27203	0.084885	0.026039
CG40813	FBGN0085521	-0.39499	-0.08286	-0.59355	-0.28142
CG33296	FBGN0053296	-1.31011	-0.05297	-0.54172	0.71542
CG12320	FBGN0038590	-0.1722	-0.15392	-0.18299	-0.16471
CG10395	FBGN0033019	-0.26326	-0.11988	-0.16613	-0.02275
CG16789	FBGN0037712	0.381908	0.016462	0.472527	0.107081
Rpp14b	FBGN0039744	-0.69593	-0.4929	-0.36851	-0.16547
CG34310	FBGN0085339	-0.3067	-0.02412	-0.31813	-0.03556
Odc2	FBGN0013308	-0.52514	0.107397	-0.87698	-0.24444
CG11617	FBGN0031232	-0.06237	-0.25126	0.458287	0.26939
CG18262	FBGN0030012	-0.36353	0.057455	-0.21555	0.205429
lncRNA:CR45345	FBGN0266884	-0.39426	-0.32622	-0.49941	-0.43137
Oga	FBGN0038870	0.052129	-0.08444	0.011822	-0.12475
CG4908	FBGN0032195	0.029098	-0.14305	0.256892	0.084744
CR33294	FBGN0053294	1.39485	0.125231	1.155832	-0.11379
CG12231	FBGN0031026	-0.09836	-0.05058	0.033861	0.081641
Mcm10	FBGN0032929	-0.19896	0.004298	-0.46109	-0.25783
lncRNA:CR44696	FBGN0265907	0.035444	0.308229	-0.93276	-0.65997
CG8461	FBGN0038235	-0.01941	0.066615	-0.29231	-0.20628
Nf-YB	FBGN0032816	-0.33028	-0.0903	-0.11243	0.127549
lectin-24A	FBGN0040104	-0.85403	-0.30139	-1.52703	-0.97438
CG10469	FBGN0035678	0.00555	-0.17031	-0.04269	-0.21856
CG43167	FBGN0262786	-0.15362	-0.20783	0.19707	0.142854
rho-6	FBGN0032415	0.39662	-0.02391	0.623833	0.203304
SLIRP2	FBGN0037602	-0.23712	0.118075	-0.3024	0.052794
lncRNA:CR43126	FBGN0262741	0.19208	0.086908	-0.10433	-0.2095
CG32373	FBGN0052373	-0.4435	-0.44768	0.278265	0.274083
Fbxl7	FBGN0038385	0.080857	-0.04507	-0.08504	-0.21097
CG31323	FBGN0051323	0.047013	0.05373	-0.24531	-0.23859

CG7655	FBGN0038536	-0.25884	-0.06589	-0.35491	-0.16196
CG1239	FBGN0037368	-0.25005	0.140926	-0.1544	0.236574
phr6-4	FBGN0016054	-0.07314	0.311602	-0.19459	0.190146
l(2)10685	FBGN0283525	-0.03692	0.052494	0.234066	0.32348
CG34295	FBGN0085324	-0.01374	-0.10949	0.098855	0.003103
5-HT7	FBGN0004573	0.575985	0.081324	0.635739	0.141078
CG2662	FBGN0024993	-0.08826	0.121971	-0.31693	-0.10671
CG7460	FBGN0036749	-0.95295	-0.42177	-0.5093	0.021871
asRNA:CR44987	FBGN0266322	0.322361	-0.1596	0.826422	0.344457
CG6254	FBGN0037794	-0.30082	-0.02665	-0.06857	0.205601
se	FBGN0086348	0.050007	0.251655	0.246152	0.4478
CG42866	FBGN0262140	-0.64724	-0.22519	-0.50793	-0.08588
CG10874	FBGN0031395	-0.07212	-0.31773	0.20089	-0.04472
lncRNA:CR44376	FBGN0265526	0.330499	0.495266	-0.39725	-0.23249
CG44477	FBGN0265670	0.132713	-0.10909	-0.12521	-0.36702
CG3184	FBGN0029892	-0.03063	-0.00275	-0.00396	0.023922
Scgalpha	FBGN0032013	-0.07312	0.001022	0.05996	0.134098
RfC3	FBGN0032244	-0.21624	0.093249	-0.37812	-0.06862
CG17572	FBGN0032753	-0.1988	0.060533	-0.33982	-0.08049
lncRNA:CR44214	FBGN0265145	-0.51854	-0.25681	-0.96743	-0.70569
CG5589	FBGN0036754	-0.25708	-0.16666	-0.62996	-0.53954
CG3526	FBGN0040355	0.038463	-0.02922	-0.20236	-0.27004
CG43139	FBGN0262613	0.070518	0.411163	-1.18071	-0.84006
CG2712	FBGN0024975	-0.04588	-0.17399	-0.19155	-0.31966
lncRNA:CR44493	FBGN0265686	-0.24942	0.152432	-0.72615	-0.3243
CG33051	FBGN0053051	-0.41822	-0.06517	-0.24224	0.110805
CG17821	FBGN0034383	-0.27543	-0.16689	-0.24633	-0.1378
CG34301	FBGN0085330	-0.10064	0.419637	-0.88082	-0.36054
CG10486	FBGN0035647	0.305773	0.044176	0.222583	-0.03901
DNApol-eta	FBGN0037141	-0.20564	-0.31139	-0.06983	-0.17558
lncRNA:CR46299	FBGN0283626	-0.09025	-0.35708	-0.58667	-0.8535
Ada	FBGN0037661	0.018968	0.15178	-0.17319	-0.04038
CG14182	FBGN0036922	0.082296	0.06479	-0.04981	-0.06732
kek4	FBGN0032484	0.300404	-0.31966	0.64984	0.029772
CR45470	FBGN0267026	1.115305	0.658951	-0.00881	-0.46517
lncRNA:CR43436	FBGN0263384	-0.27873	-0.0161	-0.48759	-0.22496
CG14710	FBGN0037920	0.11652	0.052628	-0.15485	-0.21874
PH4alphaMP	FBGN0026190	0.664935	0.814866	0.700957	0.850888
CG11539	FBGN0039859	-0.14348	0.059857	-0.28262	-0.07928
Dh44-R1	FBGN0033932	0.400243	0.243204	0.395441	0.238403
CG46301	FBGN0283651	0.406037	0.058319	0.610625	0.262907
CG15387	FBGN0031403	-0.2413	0.053523	-0.33679	-0.04196
Atac2	FBGN0032691	0.129021	-0.15091	0.109326	-0.1706
Mau2	FBGN0038300	0.020048	0.223122	0.035968	0.239041
CG6712	FBGN0032408	-0.33369	-0.25072	-0.01182	0.071147
APC7	FBGN0029879	0.336328	-0.88579	1.276251	0.05413
lncRNA:CR43247	FBGN0262892	-0.04323	0.249081	-0.18994	0.102373
dpr5	FBGN0037908	0.249627	0.100684	0.27799	0.129047
otk	FBGN0004839	0.165481	0.036524	0.150966	0.02201
CG9596	FBGN0031832	-0.19917	-0.1262	-0.14179	-0.06882
CG9657	FBGN0029950	-0.02814	-0.81632	1.113688	0.32551
PPO2	FBGN0033367	0.077436	0.064183	0.072924	0.059672
CG13021	FBGN0029669	-0.08156	0.076647	0.00473	0.162938
CG33213	FBGN0053213	-0.58893	-0.25041	-0.28259	0.05593
CG32053	FBGN0052053	0.086114	0.325458	-0.50781	-0.26847
CG15084	FBGN0034402	-0.21146	0.094336	-0.12671	0.179091
lncRNA:CR44779	FBGN0266005	-0.17306	-0.13187	0.072832	0.114016
mthl5	FBGN0037960	0.07828	-0.05438	0.030379	-0.10228
CG34169	FBGN0085198	-0.22917	0.001817	-0.12399	0.106993
Lime	FBGN0033458	0.121251	-1.20663	1.528983	0.201105
CG11257	FBGN0034442	0.274446	0.352482	-0.16126	-0.08322
CG4563	FBGN0035006	0.152004	-0.09484	0.477903	0.231056
CG42395	FBGN0259741	-0.22201	-0.1068	-0.14945	-0.03425
CG31345	FBGN0051345	0.000505	-0.07864	0.178338	0.099189
CG7420	FBGN0031344	-0.19331	-0.25112	0.155277	0.097471
CG45071	FBGN0266441	-0.04818	0.128521	0.024473	0.20117
CG13282	FBGN0032612	0.071842	0.06153	0.147859	0.137547
CG34057	FBGN0054057	-0.03168	0.04819	-0.0232	0.05667
lncRNA:CR43494	FBGN0263505	0.326395	0.44954	-5.29047	-5.16732

CG18469	FBGN0034206	-0.00614	0.037871	-0.25752	-0.21351
CG31495	FBGN0051495	0.183508	0.084687	0.262386	0.163565
CG42299	FBGN0259195	0.214618	0.101875	0.012848	-0.0999
CG2611	FBGN0032871	0.041346	0.282475	-0.28138	-0.04025
Oatp26F	FBGN0051634	0.324639	-0.32984	0.876486	0.222009
CG33337	FBGN0053337	-0.25175	0.610169	-1.67705	-0.81513
Gr22f	FBGN0041249	-0.86943	-0.43349	0.708058	1.144
CG6984	FBGN0034191	0.020468	-0.06802	0.214324	0.125834
CG15497	FBGN0038894	0.557056	0.012553	1.325719	0.781216
CG10713	FBGN0036360	0.570776	-0.30383	1.021248	0.146641
PIG-A	FBGN0034270	-0.41534	-0.01744	-0.50121	-0.10331
CG11095	FBGN0030528	0.008311	0.066692	-0.15429	-0.09591
boi	FBGN0040388	-0.05689	-0.03868	-0.27171	-0.2535
IFT52	FBGN0031829	-1.58981	0.107618	-1.51201	0.185416
CG12717	FBGN0030420	0.326081	-0.11894	0.499616	0.054594
CG3342	FBGN0029874	-0.02783	0.020276	0.021506	0.069609
bab1	FBGN0004870	-0.26947	0.039559	-0.33364	-0.02461
brv2	FBGN0036712	0.125062	0.118504	-0.22675	-0.23331
asRNA:CR44207	FBGN0265105	0.048312	0.348604	-0.8455	-0.54521
CG30049	FBGN0050049	-0.24832	-0.25106	-0.47483	-0.47757
alpha-Est4aPsi	FBGN0027934	0.272715	-0.25239	0.690339	0.165235
lncRNA:CR44417	FBGN0265590	-0.14587	-0.10953	0.176886	0.213233
CG3277	FBGN0031518	-0.012	0.159514	0.018763	0.190275
lncRNA:CR43821	FBGN0264369	0.544654	0.21073	0.657582	0.323658
CG13016	FBGN0033899	0.082741	0.091129	0.032636	0.041024
CG13318	FBGN0037627	-0.85968	0.02968	-0.82737	0.061995
JhI-26	FBGN0028424	-0.22356	-0.07513	-0.23339	-0.08496
Ravus	FBGN0038128	-0.0692	0.039901	-0.15444	-0.04534
Fs	FBGN0259878	0.421575	0.085999	0.104242	-0.23133
Sox21b	FBGN0042630	0.108829	0.12197	0.162325	0.175467
CG18577	FBGN0037870	-0.37986	-0.13046	-1.01502	-0.76562
lncRNA:CR44486	FBGN0265679	1.199074	0.168198	0.790551	-0.24033
trh	FBGN0262139	0.119033	0.000192	0.129026	0.010185
Lcch3	FBGN0010240	0.09878	0.055015	0.171094	0.127329
CG1492	FBGN0030361	0.073453	-0.00029	0.052445	-0.02129
daed	FBGN0031398	-0.25412	-0.12353	-0.27925	-0.14867
CG6723	FBGN0037895	-0.02182	-0.26851	0.454238	0.20755
aust	FBGN0032104	-0.4714	-0.18619	-0.47673	-0.19152
GstD10	FBGN0042206	0.371549	0.0678	0.310804	0.007055
lncRNA:CR43358	FBGN0263090	0.958484	-0.28058	1.095793	-0.14327
Rab9E	FBGN0052673	-0.19107	-0.01318	0.424024	0.601919
CG7691	FBGN0038626	-0.28649	0.032341	-0.44246	-0.12362
APC10	FBGN0034231	-0.32599	-0.06545	-0.24047	0.020075
Blos2	FBGN0036118	0.096544	0.069564	0.016767	-0.01021
slp1	FBGN0003430	0.000904	0.260895	0.082383	0.342374
lncRNA:CR44821	FBGN0266068	-0.2704	-0.17234	-0.36805	-0.27
rpk	FBGN0022981	-0.30838	0.086718	-0.46865	-0.07355
lncRNA:CR44777	FBGN0266003	0.397496	-0.14504	0.639905	0.097369
GstE2	FBGN0063498	-0.00816	-0.03973	0.569591	0.538025
CG9098	FBGN0031762	0.063352	-0.09354	-0.07093	-0.22782
CG32109	FBGN0052109	-0.26571	-0.06074	-0.18087	0.024104
CG42445	FBGN0259916	0.050588	0.036341	0.169593	0.155346
Ugt304A1	FBGN0040250	0.253045	0.213645	-0.62245	-0.66185
CG43296	FBGN0262988	-0.71703	-0.35425	-0.61996	-0.25717
CR42532	FBGN0260437	0.24118	1.591954	-1.8027	-0.45193
Best4	FBGN0036491	0.089749	0.07619	-0.17806	-0.19162
CG32099	FBGN0052099	-0.09298	0.085358	-0.18385	-0.0055
beat-Vb	FBGN0038092	0.242905	-0.0293	0.078631	-0.19357
CG13229	FBGN0033579	-0.08897	-0.27358	0.20457	0.019966
lncRNA:CR43475	FBGN0263452	-0.01415	-0.04759	-0.17962	-0.21306
alpha-Man-Ic	FBGN0051202	-0.4669	-0.00269	-0.63553	-0.17131
CG8187	FBGN0034027	-0.03193	-0.02742	0.03922	0.043723
pip	FBGN0003089	1.275944	-0.31368	2.046	0.456377
CG16710	FBGN0039101	-1.55147	0.113793	-2.02629	-0.36103
CG13024	FBGN0036665	-0.02119	-0.2147	0.48549	0.291981
CG43844	FBGN0264426	-0.11589	0.096725	-0.39409	-0.18148
CG31036	FBGN0051036	0.036816	-0.08209	0.161369	0.042466
Spn43Ad	FBGN0044011	0.048896	-0.11397	0.385596	0.222727
Mesh1	FBGN0039650	-0.38876	-0.151	-0.39817	-0.16041

Obp59a	FBGN0034766	-0.69331	-0.15491	0.144412	0.682821
CG10663	FBGN0036287	-0.03836	0.199511	-0.22671	0.011161
lncRNA:CR44520	FBGN0265713	-0.18118	-0.36683	0.495192	0.309544
PGAP2	FBGN0031284	-0.19186	-0.0468	-0.12351	0.021547
CG3448	FBGN0035996	-0.30626	0.042283	-0.19887	0.149679
asRNA:CR42743	FBGN0261707	1.10265	0.504586	0.384717	-0.21335
lncRNA:CR46444	FBGN0287214	-0.5952	-1.61046	1.423874	0.408609
Nrk	FBGN0020391	-0.01015	0.146354	-0.022	0.13451
CG34195	FBGN0085224	0.158748	0.19392	-0.16407	-0.1289
CG2911	FBGN0037350	0.067949	-0.10336	0.328317	0.157012
lncRNA:CR45473	FBGN0267029	-0.00278	-0.10319	0.145109	0.044703
CG32318	FBGN0052318	-0.1016	-0.09362	1.956964	1.964945
CG18558	FBGN0031469	0.668687	0.245249	0.248662	-0.17478
CG13579	FBGN0035010	0.355073	-0.07487	0.502151	0.072211
CG14210	FBGN0031040	-0.20931	0.017819	-0.13278	0.094357
yellow-c	FBGN0041713	-0.6066	-0.09698	-0.27641	0.233204
CG13386	FBGN0032040	0.359236	0.092255	1.943192	1.676211
Roc2	FBGN0044020	-0.26595	-0.02195	-0.19499	0.049013
CG9400	FBGN0030562	-0.56357	0.424938	-1.04139	-0.05288
lncRNA:CR43605	FBGN0263802	-0.17335	-0.59418	0.186099	-0.23473
lncRNA:CR45567	FBGN0267127	-0.06577	-0.10032	-0.19343	-0.22797
okr	FBGN0002989	-0.0924	-0.10915	0.071826	0.055074
unpg	FBGN0015561	0.290885	-0.06857	0.421887	0.062435
CG14701	FBGN0037883	0.057236	0.278233	0.125594	0.346591
Psc	FBGN0005624	-0.04586	0.33235	-0.02446	0.353745
CG32075	FBGN0052075	-0.03608	0.168871	-0.01526	0.189691
CG43880	FBGN0264472	-0.14266	0.071718	-0.17507	0.039307
CG15890	FBGN0030576	-0.43262	-0.01838	-0.4473	-0.03306
Nepl19	FBGN0039612	0.115806	-0.13199	-0.01715	-0.26494
CG42340	FBGN0259242	0.317575	-0.09333	0.514132	0.103227
CG9518	FBGN0030590	0.166809	-0.10912	0.266501	-0.00942
yellow-h	FBGN0039896	-0.02815	-0.11636	-0.07993	-0.16813
CG9616	FBGN0038214	1.106074	0.434734	2.533949	1.86261
MsR2	FBGN0264002	0.046205	-0.06566	0.147525	0.035662
Inx6	FBGN0027107	-0.14714	-0.21551	-0.19431	-0.26268
CG32645	FBGN0052645	-0.02266	0.515601	-0.66793	-0.12967
lncRNA:CR44938	FBGN0266243	0.439831	-0.35248	0.315359	-0.47695
Trh	FBGN0035187	-0.00566	-0.05466	0.001571	-0.04743
Rad17	FBGN0025808	0.110591	0.02615	-0.12325	-0.20769
CG4596	FBGN0037849	0.308582	-0.09473	0.401495	-0.00181
CG43138	FBGN0262612	-0.10712	-0.00434	-0.2629	-0.16012
CG12970	FBGN0034047	-0.11075	1.119466	-2.72023	-1.49001
escl	FBGN0032391	-0.20156	0.143998	-0.03058	0.314983
CG9444	FBGN0037730	0.285261	0.342505	0.021928	0.079172
CG32452	FBGN0052452	0.139439	0.136527	0.105797	0.102885
Gen	FBGN0263831	-0.53227	-0.21533	-0.29048	0.026465
CG4338	FBGN0038313	-0.55477	0.154208	-0.48065	0.228326
CG10337	FBGN0032805	-0.3654	0.317576	-0.72542	-0.04244
AsnRS-m	FBGN0034177	-0.08431	0.010232	-0.00614	0.088402
lncRNA:CR45436	FBGN0266985	-0.46581	0.182226	-1.27947	-0.63143
CG46394	FBGN0286872	-0.44775	-0.0747	-0.40546	-0.03241
CG45105	FBGN0266566	-0.00741	-0.32546	0.270321	-0.04773
CG5984	FBGN0039500	0.337096	-0.01455	0.62835	0.276704
CG14153	FBGN0036094	-0.14428	-0.00712	-0.04531	0.091846
CG10257	FBGN0033985	0.073964	-0.05307	0.258391	0.131362
CG7330	FBGN0036780	0.126035	0.373007	0.062426	0.309398
CG34454	FBGN0085483	-0.12324	-0.13113	-0.44509	-0.45298
lncRNA:CR44535	FBGN0265728	0.296459	-0.95189	-1.07009	-2.31844
CG11436	FBGN0029713	-0.08063	-0.03593	-0.00127	0.043435
lncRNA:CR45238	FBGN0266773	-0.12739	0.122614	-0.59884	-0.34884
lncRNA:CR43763	FBGN0264263	-0.43123	-0.0463	-0.73395	-0.34902
Drep4	FBGN0028406	0.080066	0.285223	-0.28685	-0.08169
btv	FBGN0023096	0.05958	-0.2716	0.122238	-0.20894
CG9948	FBGN0035721	-0.33836	0.015134	-0.21979	0.133705
Grd	FBGN0001134	0.323232	0.690842	-0.24928	0.118328
CG43071	FBGN0262481	0.353008	-0.00837	0.872407	0.511031
CG14966	FBGN0035415	-0.27249	0.002303	-0.14605	0.128744
lncRNA:CR44665	FBGN0265876	1.402067	0.441093	0.720796	-0.24018
Su(var)3-9	FBGN0263755	-0.02543	0.023211	-0.21515	-0.16651

DNApol-epsilon58	FBGN0035644	-0.31484	-0.17639	-0.28076	-0.1423
CG44623	FBGN0265834	-0.6923	-0.22431	-0.49555	-0.02755
CG15877	FBGN0035337	-0.39148	-0.15422	-0.25219	-0.01493
PIG-Q	FBGN0086448	0.288787	0.139925	0.149901	0.001038
CG2260	FBGN0030000	-0.19967	-0.02019	-0.12917	0.050306
Tsp42En	FBGN0033135	-0.07564	-0.07979	0.127521	0.123374
Mks1	FBGN0030395	1.088659	0.489611	0.195992	-0.40306
CG11029	FBGN0031735	0.430634	0.349785	-0.17603	-0.25688
CG5757	FBGN0034299	-0.23705	0.223315	-0.30758	0.152788
lncRNA:CR44582	FBGN0265793	0.113351	0.001209	0.09791	-0.01423
lncRNA:CR45203	FBGN0266730	0.115831	-0.03494	-0.12031	-0.27108
MED11	FBGN0036811	-0.03997	0.020464	-0.18041	-0.11998
mRpS24	FBGN0039159	-0.27243	-0.13586	-0.24162	-0.10505
CG7328	FBGN0036942	0.253373	-0.15963	0.330798	-0.08221
lncRNA:CR43485	FBGN0263496	-0.13007	-0.01992	-0.33348	-0.22333
Rsph1	FBGN0032478	0.094739	0.097375	-0.01125	-0.00861
DEF8	FBGN0046296	0.091969	0.153613	0.242875	0.304519
fy	FBGN0001084	-0.09726	0.234649	-0.06547	0.266441
asRNA:CR32252	FBGN0052252	0.040284	0.114644	-0.23474	-0.16038
Ir25a	FBGN0031634	-0.50156	-0.15374	-0.31014	0.037681
CG32284	FBGN0052284	-0.26667	0.192407	0.046328	0.505403
CG18048	FBGN0037435	-0.18208	0.118042	-0.23865	0.061467
zld	FBGN0259789	-0.12983	0.120936	0.117284	0.368046
lmd	FBGN0039039	-0.14002	-0.62509	-0.42039	-0.90546
lncRNA:CR43253	FBGN0262898	-0.19625	0.294643	-0.37254	0.118353
ara	FBGN0015904	-0.20492	-0.06497	-0.03393	0.106019
Cyp6d2	FBGN0034756	0.068016	0.060622	-0.1162	-0.12359
betaNACtes1	FBGN0030538	-0.39401	0.042536	-0.51588	-0.07933
CG13599	FBGN0039128	-0.45488	-0.03734	-0.78587	-0.36833
CG32365	FBGN0052365	-0.15641	-0.12393	-0.17141	-0.13894
CG34025	FBGN0054025	-0.15891	0.186745	-0.80093	-0.45527
Caf1-180	FBGN0030054	-0.07417	-0.015	-0.02071	0.038463
asRNA:CR46033	FBGN0267697	-0.83333	-0.19846	-1.479	-0.84413
CG44836	FBGN0266099	0.160329	-0.04609	-0.31354	-0.51996
fz	FBGN0001085	0.027937	-0.17066	-0.05671	-0.25531
CG13766	FBGN0031834	0.152068	0.123638	-0.12055	-0.14898
pad	FBGN0038418	-0.00104	-0.0363	0.153558	0.118294
lncRNA:CR44398	FBGN0265548	0.11317	0.364106	-0.65703	-0.40609
CG16734	FBGN0037667	-0.36705	-0.09816	-0.57521	-0.30632
CG31551	FBGN0051551	0.240601	0.138715	-0.00753	-0.10942
bam	FBGN0000158	-0.53309	0.16562	-0.78992	-0.0912
CG8157	FBGN0034010	-0.66857	-0.42856	0.106673	0.346682
CG42246	FBGN0259098	-0.29477	0.015242	-0.49487	-0.18486
agt	FBGN0024912	-0.21713	-0.08136	-0.14434	-0.00857
CG14695	FBGN0037850	-0.57041	0.157786	-0.55517	0.173027
lncRNA:CR45823	FBGN0267473	-0.20965	-0.13095	-0.36201	-0.28331
CG18661	FBGN0040964	-0.43209	-0.01113	-0.46272	-0.04176
ssp6	FBGN0035676	0.21453	0.110647	0.404478	0.300594
vito	FBGN0052418	-0.27576	-0.08187	-0.06264	0.131259
DIP-eta	FBGN0031725	0.142498	-0.03333	0.286154	0.110321
RhoGEF4	FBGN0035761	-0.77779	0.193838	-0.96156	0.01007
FMRFaR	FBGN0035385	0.32879	-0.03597	0.372834	0.00807
Orc5	FBGN0015271	-0.56991	0.071247	-0.44485	0.196305
JHDM2	FBGN0037703	0.27559	0.111081	0.285566	0.121056
CG3995	FBGN0038472	0.034163	0.125796	-0.03875	0.052886
SmydA-3	FBGN0262599	0.155811	-0.20005	0.147702	-0.20816
CG3709	FBGN0031227	-0.10867	0.046116	-0.1887	-0.03391
CG12134	FBGN0033471	-0.08392	-0.0058	-0.06804	0.010079
cort	FBGN0000351	-0.90494	0.241083	-0.97815	0.167873
lncRNA:CR44302	FBGN0265348	0.255079	0.100597	0.172237	0.017754
CG10336	FBGN0032698	-0.53575	0.092271	-0.3565	0.271523
Cpr47Ee	FBGN0033602	0.274735	0.324943	0.156643	0.206851
CG4325	FBGN0026878	0.093275	-0.45066	0.475498	-0.06843
CG42592	FBGN0260969	-0.25508	0.086386	-0.57409	-0.23263
CG1077	FBGN0037405	0.317682	0.391348	0.320041	0.393707
CG31823	FBGN0051823	-0.07883	0.295573	-0.67763	-0.30322
fs(1)Yb	FBGN0000928	-0.22538	-0.12689	-0.15091	-0.05243
Snm1	FBGN0037338	-0.14723	-0.07377	-3.93E-05	0.073419
CCHa1	FBGN0038199	0.016279	0.006555	-0.08564	-0.09536

CG7550	FBGN0035839	-0.0772	-0.11007	-0.00346	-0.03633
CG1227	FBGN0037491	-0.07256	0.147529	-0.16215	0.057943
CG12253	FBGN0026148	-0.04401	0.022906	-0.27944	-0.21252
CG42870	FBGN0262144	0.285282	-0.04908	-0.0998	-0.43416
slow	FBGN0035539	0.107562	-0.19619	0.072973	-0.23078
lncRNA:CR42861	FBGN0262108	-0.39308	-0.17251	-0.50443	-0.28386
CG11920	FBGN0039274	-0.24656	-0.1387	-0.17793	-0.07007
lncRNA:CR44036	FBGN0264828	-0.86727	-0.15752	-1.0196	-0.30985
CG12985	FBGN0030881	-0.11715	-0.04712	-0.09596	-0.02594
CG18094	FBGN0032791	0.135457	0.038075	0.1661	0.068718
CG34456	FBGN0085485	-0.65876	-0.33663	-0.40392	-0.08179
Nup37	FBGN0039301	-0.26889	0.107135	-0.34217	0.033852
CG31848	FBGN0051848	-0.09906	0.005392	-0.33684	-0.23239
Psf1	FBGN0035194	0.18188	0.165204	-0.07294	-0.08962
asRNA:CR46354	FBGN0286034	0.983991	0.801853	-0.69979	-0.88192
Task7	FBGN0037690	0.05142	-0.20422	0.342471	0.086834
ix	FBGN0001276	0.085455	0.256605	-0.00452	0.166625
CG6808	FBGN0037921	-0.06065	0.136403	-0.2221	-0.02504
CG8611	FBGN0027602	-0.06803	0.115691	-0.13423	0.049494
Hsc20	FBGN0263606	-0.02566	-0.00427	-0.04026	-0.01886
CG15629	FBGN0031630	0.372464	0.324584	0.192467	0.144587
CG17186	FBGN0038741	-0.32944	-0.17256	-0.29927	-0.1424
bi	FBGN0000179	0.368511	-0.07569	0.50733	0.063132
CG12009	FBGN0035430	-0.30355	-0.2065	0.169609	0.266653
CG30172	FBGN0050172	-0.07045	-0.01117	-0.08948	-0.03021
Tsp42Ek	FBGN0033133	-0.15711	0.06506	-0.3323	-0.11013
CG13239	FBGN0037197	0.30425	-0.28455	0.408774	-0.18003
CG8326	FBGN0030851	-0.0464	0.078495	-0.03385	0.091042
Ccp84Af	FBGN0004778	3.574556	0.241094	0.609457	-2.724
CG7785	FBGN0038564	-0.22199	-0.17909	-0.03521	0.007695
lncRNA:cherub	FBGN0262972	0.138725	-0.22699	0.530305	0.164586
Ccp84Ac	FBGN0004781	5.516904	-0.17646	5.361849	-0.33151
ihog	FBGN0031872	-0.10368	0.138743	-0.00849	0.233926
lncRNA:CR43825	FBGN0264373	-0.12017	-1.1461	0.885014	-0.14092
mei-38	FBGN0260986	-0.37433	-0.34701	-0.15494	-0.12761
CG14135	FBGN0036193	-0.06312	-0.02846	0.046017	0.080671
lncRNA:CR44822	FBGN0266069	0.609709	0.053544	0.269194	-0.28697
lncRNA:CR44590	FBGN0265801	-0.01495	0.139023	-0.52826	-0.37429
CG14882	FBGN0038429	-0.22223	-0.02377	-0.35435	-0.15589
CG10646	FBGN0036292	-0.26276	-0.06856	-0.20505	-0.01085
Scr	FBGN0003339	-0.26306	-0.23578	-0.13429	-0.10702
Rif1	FBGN0050085	-0.17894	0.216705	-0.08261	0.313032
CG10405	FBGN0038431	-0.2754	0.300015	-1.14548	-0.57006
CG14830	FBGN0035755	-0.18625	-0.0105	0.011977	0.187731
sca	FBGN0003326	0.208945	-0.20466	0.320611	-0.09299
dhd	FBGN0011761	-0.80471	0.00634	-0.90825	-0.0972
hb	FBGN0001180	0.37606	0.023584	0.521067	0.168591
lncRNA:CR44112	FBGN0264943	0.030647	0.044516	-0.50879	-0.49492
ATbp	FBGN0039946	-0.05829	-0.06127	-0.01006	-0.01304
Dll	FBGN0000157	-0.0834	-0.17165	0.123698	0.03545
lncRNA:CR44081	FBGN0264890	-0.15862	0.160659	0.058672	0.377954
CG14965	FBGN0035414	-0.06533	-0.02789	-0.12943	-0.09199
CG14107	FBGN0036351	-0.14294	0.099608	-1.65387	-1.41132
CG4115	FBGN0038017	-0.32847	-0.14221	0.085843	0.272106
Cdk2	FBGN0004107	-0.47379	-0.14911	-0.24765	0.07703
CG31517	FBGN0047199	0.128147	0.251036	-0.78965	-0.66676
lncRNA:CR45115	FBGN0266590	-0.71637	-0.66003	-0.21401	-0.15767
CG31388	FBGN0051388	-0.03799	-0.0387	0.054907	0.0542
CG15185	FBGN0037449	0.033121	0.305148	-0.22915	0.042877
CG1688	FBGN0027589	-0.08546	-0.15243	0.331671	0.264702
lncRNA:CR45429	FBGN0266978	-0.17234	0.542078	-0.75657	-0.04215
CG7101	FBGN0030963	-0.36551	-0.07412	-0.28465	0.006741
tef	FBGN0086350	0.64735	0.516758	0.649892	0.5193
CG4553	FBGN0039336	-0.23101	-0.08791	-0.05578	0.087327
CG30403	FBGN0050403	-1.26082	-0.11489	-0.92826	0.217666
CCHa2-R	FBGN0033058	0.253481	0.332489	-0.26684	-0.18783
lncRNA:CR43785	FBGN0264310	-0.32984	-0.07919	-0.34611	-0.09546
lncRNA:CR42756	FBGN0261814	0.140248	0.142459	-0.0311	-0.02889
CG5644	FBGN0035948	-0.02909	-0.16776	0.258751	0.120077

Chrac-16	FBGN0043001	-0.26967	-0.12134	0.114901	0.263237
CG17803	FBGN0038547	-0.22831	0.118557	0.246431	0.593297
lncRNA:CR45622	FBGN0267182	-0.09983	-0.03401	-0.16328	-0.09747
CG15414	FBGN0031542	-0.58473	-0.22585	-1.08283	-0.72395
lncRNA:CR43282	FBGN0262971	-0.45104	0.336697	-0.08775	0.699985
CG15375	FBGN0029694	-0.41121	0.040269	-0.52889	-0.07741
CG32579	FBGN0052579	0.168897	0.108038	0.043885	-0.01697
CG8924	FBGN0030710	0.076448	0.012653	0.279421	0.215625
28SrRNA-Psi:CR41609	FBGN0085819	0.098259	0.363348	-0.22589	0.039203
sand	FBGN0033257	0.102224	-0.06775	0.026416	-0.14356
lncRNA:CR44644	FBGN0265855	-1.49672	-0.42199	-1.35067	-0.27594
Pgant8	FBGN0036529	0.022607	-0.24455	0.177139	-0.09002
CG4074	FBGN0037017	-0.415	-0.1378	-0.28928	-0.01208
lncRNA:CR31526	FBGN0051526	0.18682	-0.15702	0.158233	-0.18561
Spn28Db	FBGN0053121	-0.17649	-0.16071	-0.08785	-0.07207
CG45487	FBGN0267043	-0.72163	-1.11631	0.159401	-0.23529
CG13059	FBGN0036607	0.453865	-0.27929	0.741665	0.00851
CG18467	FBGN0034218	0.086706	0.082599	0.075151	0.071044
CG42586	FBGN0260954	0.151838	0.066721	0.244766	0.159649
Jhe	FBGN0010052	-0.39728	-0.43613	0.358544	0.319702
CG9386	FBGN0037708	-0.12941	0.024786	-0.04562	0.10857
NimC1	FBGN0259896	-0.873	0.067197	-1.06459	-0.12439
Mlh1	FBGN0011659	0.171582	0.042474	-0.01283	-0.14194
Sirt4	FBGN0029783	0.353977	0.280043	0.301683	0.22775
lncRNA:CR43818	FBGN0264366	-0.46229	-0.21219	-0.30329	-0.05319
fuss	FBGN0039932	0.184154	-0.11057	0.21023	-0.0845
mid	FBGN0261963	0.027489	-0.3067	0.761202	0.427014
lncRNA:CR45654	FBGN0267214	-0.77667	0.380819	-1.29837	-0.14088
Obp58c	FBGN0034769	-2.9775	-0.89527	-1.32277	0.759464
CG18528	FBGN0039189	-0.25065	0.060611	0.270725	0.581981
CG34445	FBGN0085474	-0.10072	0.512736	-0.35862	0.254831
lncRNA:CR43437	FBGN0263385	-0.31108	-0.13675	-0.17333	0.000996
dpr2	FBGN0261871	0.247328	-0.34033	0.478702	-0.10895
Gas41	FBGN0031873	-0.21704	-0.18197	-0.31616	-0.2811
CR10991	FBGN0037389	-0.28304	-0.01993	-0.45174	-0.18864
lncRNA:CR46216	FBGN0267936	-1.70976	-0.44498	-1.24597	0.018814
CG2321	FBGN0039663	-0.10178	-0.05931	-0.3834	-0.34093
dgo	FBGN0086898	0.03469	-0.24135	0.219971	-0.05607
lncRNA:CR43660	FBGN0263708	0.794402	0.065516	0.445777	-0.28311
Gdn1	FBGN0038692	-0.01807	0.05892	0.17319	0.250183
CARPA	FBGN0029962	0.416033	0.077343	0.424888	0.086199
CG14985	FBGN0035482	0.033919	0.217664	-0.09288	0.090868
CG34165	FBGN0085194	-1.76269	-0.26528	-2.05584	-0.55843
CG46399	FBGN0286877	-0.16728	-0.15118	-0.15974	-0.14364
CG12942	FBGN0033569	0.000451	0.021374	-0.05015	-0.02923
lncRNA:CR44264	FBGN0265204	0.596476	0.171309	-0.1849	-0.61007
CG44006	FBGN0264748	0.316384	-0.09165	0.200191	-0.20784
TBC1d7	FBGN0039158	-0.05051	0.09994	0.156738	0.307183
CG1602	FBGN0033186	0.02723	-0.0148	-0.11499	-0.15702
l(2)37Cd	FBGN0086445	-0.10399	-0.00814	0.143187	0.239044
CG32817	FBGN0052817	0.073941	1.025809	-0.01104	0.940824
dmrt93B	FBGN0038851	-1.32499	0.028294	-1.84695	-0.49367
CG15127	FBGN0040730	-0.60064	0.599315	-1.57891	-0.37896
Uhg3	FBGN0259936	-0.0583	0.091655	-0.01285	0.137108
asRNA:CR43629	FBGN0263620	-0.13796	-0.15179	-0.19544	-0.20926
CG3594	FBGN0035063	-0.36048	-0.06701	-0.35919	-0.06572
CG17141	FBGN0039020	0.021167	0.011711	-0.12313	-0.13259
CG10700	FBGN0032754	-0.16002	0.239481	-0.95514	-0.55564
CG14369	FBGN0038159	5.055452	-0.07199	-2.72502	-7.85247
Rpp30	FBGN0283652	-0.1196	0.062866	-0.2282	-0.04573
Sgsh	FBGN0038660	0.171658	-0.61688	0.74269	-0.04585
Lip3	FBGN0023495	-0.52556	-0.08937	1.200454	1.636641
CG14535	FBGN0031955	0.323662	-0.08962	0.543472	0.130186
Dbp21E2	FBGN0086130	-0.17512	-0.12579	-0.02968	0.019648
CG32354	FBGN0052354	-0.03759	0.045232	0.120241	0.203058
lbl	FBGN0008651	0.074534	0.059401	0.176989	0.161855
lncRNA:CR46061	FBGN0267730	-0.92391	-0.12394	-0.879	-0.07904
dpr6	FBGN0040823	0.282782	-0.1749	0.519479	0.061794
conv	FBGN0261269	-0.05951	0.046272	-0.30946	-0.20368

HP1D3csd	FBGN0030994	-1.19136	0.178189	-1.16073	0.208816
Hr3	FBGN0000448	0.180128	0.065534	0.104926	-0.00967
CG33093	FBGN0053093	0.864352	0.181717	1.882091	1.199455
CG14511	FBGN0039641	-0.04338	-0.14209	-0.04294	-0.14165
Lsp2	FBGN0002565	1.289289	-1.05018	3.310685	0.97122
CG31897	FBGN0051897	-0.08733	-0.24064	-0.16101	-0.31432
Cap-D2	FBGN0039680	-0.18927	0.066159	0.039253	0.294686
Ugt317A1	FBGN0040091	0.034	-0.40174	0.166394	-0.26934
D12	FBGN0027490	-0.01416	0.096574	0.008004	0.118735
btl	FBGN0285896	-0.20801	0.250499	-0.34861	0.109892
SkpE	FBGN0031074	-0.9245	-0.63546	-0.74526	-0.45622
CG44174	FBGN0265063	-0.63321	-0.6541	-0.80226	-0.82316
CR43483	FBGN0263494	-0.16082	0.127808	-0.25637	0.032251
Regnase-1	FBGN0038769	0.313127	0.122084	0.333994	0.142951
fit	FBGN0038914	-0.34939	-0.39514	1.651619	1.605861
Peritrophin-A	FBGN0022770	0.138421	-0.18279	0.198635	-0.12258
CG14957	FBGN0035412	0.410554	-0.04999	0.777105	0.316561
CG17778	FBGN0023534	-0.16727	0.222088	-0.11097	0.278385
Rab9Fa	FBGN0052671	0.620849	-0.32449	0.400142	-0.5452
IntS12	FBGN0039459	0.097103	0.377213	-0.20018	0.079929
ChLD3	FBGN0032598	-0.01346	0.247026	-0.39202	-0.13153
lncRNA:CR46115	FBGN0283501	-0.48221	0.262948	-0.56958	0.175577
CG13023	FBGN0036677	0.620491	0.72033	1.31615	1.415989
CG10147	FBGN0035702	-0.11939	0.083123	0.064548	0.26706
EAChm	FBGN0036470	0.037084	-0.68345	0.626797	-0.09374
NimB1	FBGN0027929	-0.38266	0.028032	-0.09281	0.317875
CG11398	FBGN0040366	-0.32004	0.059658	-0.24416	0.135537
CR41440	FBGN0084049	-0.47281	-0.11052	-0.66991	-0.30763
asRNA:CR43433	FBGN0263381	0.346587	0.198245	-0.04574	-0.19408
lncRNA:CR44796	FBGN0266031	0.317325	0.041106	-0.29788	-0.5741
prg	FBGN0285971	-0.21678	-0.09672	-0.01292	0.107139
H15	FBGN0016660	0.395382	0.127781	0.789655	0.522055
tor	FBGN0003733	0.22461	0.056817	0.271082	0.103289
NijC	FBGN0038079	-0.20543	-0.09876	-0.29099	-0.18432
CG33332	FBGN0067629	0.024182	0.098589	0.201198	0.275606
CG43996	FBGN0264738	-0.13559	0.084187	-0.20189	0.017882
Rab9Fb	FBGN0052670	0.069579	-0.12505	0.17273	-0.0219
Mabi	FBGN0032493	3.578356	0.414532	2.303867	-0.85996
CG8646	FBGN0033763	-0.10093	-0.07282	-0.08092	-0.05281
AstC-R2	FBGN0036789	0.806319	0.350624	0.382596	-0.0731
lncRNA:CR43639	FBGN0263648	-0.13018	-0.00907	-0.30915	-0.18804
CG10324	FBGN0038454	-0.05428	0.051305	-0.06521	0.040367
CG14285	FBGN0038674	0.029903	-0.03292	0.198036	0.135217
natalisin	FBGN0085417	0.064894	-0.3089	0.254592	-0.1192
Cyp6a15Psi	FBGN0033303	-0.65134	-0.30573	-1.03847	-0.69286
CG4815	FBGN0039568	-0.56267	-0.73105	-0.08858	-0.25696
Kal1	FBGN0039155	0.08756	0.009446	0.176561	0.098448
CG4455	FBGN0028506	-0.13074	0.124689	-0.2042	0.051237
CG6424	FBGN0028494	0.397016	-0.08831	1.059524	0.574194
lncRNA:CR45506	FBGN0267062	-1.96296	-1.04294	-0.87677	0.04325
lncRNA:CR44559	FBGN0265752	-0.73695	-0.29071	-0.73975	-0.29351
lncRNA:CR43238	FBGN0262883	-3.39999	-2.43616	-1.36747	-0.40365
yellow-d2	FBGN0034856	0.806793	0.127968	0.814618	0.135794
CG9117	FBGN0031766	-0.34128	0.145242	-0.46101	0.025509
lncRNA:CR43802	FBGN0264346	-0.47608	-0.34558	0.011208	0.141716
CG4950	FBGN0036587	0.036133	0.40503	-0.73662	-0.36772
asRNA:CR44358	FBGN0265458	-0.40684	-0.08855	-0.30972	0.00857
CG43088	FBGN0262534	-0.37422	0.129504	-0.94458	-0.44086
CG4313	FBGN0025632	0.205482	0.207907	0.169802	0.172227
CG4210	FBGN0038302	0.050042	-0.05481	0.152652	0.047796
CG17328	FBGN0028895	-0.0514	0.027498	0.114213	0.193114
CG31176	FBGN0051176	-0.02463	0.349432	-0.08834	0.285717
lncRNA:CR46141	FBGN0267816	-0.75403	-0.21281	-1.20908	-0.66786
asRNA:CR45908	FBGN0267568	-0.63393	0.636334	-0.77606	0.49421
Elba2	FBGN0031435	0.147311	0.077956	-0.00024	-0.06959
CG4496	FBGN0031894	0.069318	-0.64617	0.849531	0.134047
Ugt36F1	FBGN0027074	-0.24536	-0.06619	-0.61232	-0.43315
CG9500	FBGN0031804	0.395132	-0.05703	1.304365	0.852205
lncRNA:CR44834	FBGN0266097	-0.32496	-0.14577	-0.41394	-0.23475

CG43851	FBGN0264433	-0.11022	0.146342	-0.20079	0.055774
CG15529	FBGN0039748	-0.32571	-0.0192	-0.3387	-0.03219
l(2)03659	FBGN0010549	0.144226	-0.01064	-0.10097	-0.25584
lncRNA:CR43874	FBGN0264466	0.268163	0.378585	-0.28608	-0.17566
CG11808	FBGN0034000	-0.09275	0.108706	-0.22004	-0.01859
lncRNA:CR46103	FBGN0267772	-2.43222	-2.09187	-2.39289	-2.05254
eyg	FBGN0000625	0.07043	0.126294	-0.14403	-0.08817
lncRNA:CR44418	FBGN0265591	-0.15784	-0.19101	-0.19805	-0.23122
eg	FBGN0000560	0.223274	-0.38704	-0.08798	-0.6983
CG32202	FBGN0052202	-0.33237	0.082459	-0.30316	0.111671
CG30440	FBGN0050440	0.084622	0.096024	-0.04949	-0.03809
Oseg6	FBGN0034452	-0.39646	-0.12778	-0.11177	0.156906
rumi	FBGN0086253	-0.21586	-0.30619	0.034372	-0.05596
Lhr	FBGN0034217	-0.22536	0.094663	-0.32779	-0.00776
Su(Ste):CR42430	FBGN0259861	-0.59451	0.841975	-1.20149	0.234989
CG13022	FBGN0036679	-0.22706	0.288433	0.08401	0.599507
CBP	FBGN0026144	-0.24323	0.403999	-0.72101	-0.07379
Awh	FBGN0013751	0.11575	0.005941	0.09636	-0.01345
CG9650	FBGN0029939	-0.07584	0.045908	0.007012	0.128756
az2	FBGN0025185	-0.33725	-0.06622	-0.17563	0.095407
CG30203	FBGN0050203	0.317455	0.44645	0.440331	0.569326
CG13919	FBGN0035248	-0.58017	-0.10109	-0.502	-0.02292
CG4942	FBGN0035960	-0.09192	0.054724	-0.19066	-0.04402
lncRNA:CR44534	FBGN0265727	0.266163	-2.55106	4.554171	1.73695
lncRNA:CR44909	FBGN0266214	1.516759	0.079698	1.340664	-0.0964
CG2120	FBGN0030005	0.311825	0.486542	-0.21836	-0.04364
CR43670	FBGN0263745	-0.18691	-0.13353	-0.57545	-0.52206
Obp69a	FBGN0011279	-0.03439	-0.01169	0.303053	0.325749
CG33108	FBGN0053108	-0.18349	0.144366	-0.314	0.013854
CG12913	FBGN0033500	-0.34287	-0.08597	-0.17674	0.080162
CG14286	FBGN0038673	-0.39233	-0.21008	-0.10116	0.081089
eIF5	FBGN0030719	0.544822	0.016184	0.400046	-0.12859
CG42391	FBGN0259737	-0.05754	0.05241	-0.2332	-0.12325
lncRNA:CR45274	FBGN0266812	-0.43402	-0.07771	-0.43471	-0.0784
Oct-TyrR	FBGN0004514	0.259441	0.082095	0.4501	0.272753
CG34446	FBGN0085475	-0.69047	-0.06745	-0.21256	0.410463
CG42571	FBGN0260777	-0.02989	-0.29833	0.192822	-0.07562
Axs	FBGN0000152	0.17293	-0.1377	0.397985	0.087356
Rcd6	FBGN0034530	0.065407	0.049379	0.030125	0.014097
Rev7	FBGN0037345	-0.26028	0.027834	-0.22361	0.064501
CG1632	FBGN0030027	0.042633	0.11705	-0.16073	-0.08632
CG34180	FBGN0085209	-0.72487	-0.25126	-0.87511	-0.4015
CG3407	FBGN0031573	0.134364	0.071446	0.03787	-0.02505
CG1113	FBGN0037304	-0.06502	-0.09022	1.185792	1.160591
Zip42C.2	FBGN0033097	-1.70411	0.750002	-2.49746	-0.04334
lncRNA:CR44105	FBGN0264914	-0.62788	1.31513	-0.63008	1.312933
CngA	FBGN0261612	0.243159	0.044769	-0.01234	-0.21073
CG3358	FBGN0033117	-0.18728	0.020334	-0.11518	0.092431
CG15082	FBGN0034397	-0.17774	0.177566	-0.2401	0.115199
shd	FBGN0003388	0.202128	0.018055	0.299664	0.115591
CheB93a	FBGN0038888	-1.26274	-0.4953	-1.17591	-0.40846
CG3808	FBGN0036838	0.028054	-0.20858	0.177596	-0.05904
lncRNA:CR46112	FBGN0267781	0.437792	-0.15782	0.392551	-0.20307
CG14937	FBGN0032377	-0.22159	0.13184	-0.79306	-0.43963
lncRNA:CR45505	FBGN0267061	-0.04096	-0.22464	0.195391	0.011708
lncRNA:CR43148	FBGN0262631	0.289079	0.315774	0.153675	0.18037
CG13063	FBGN0036601	1.044944	-0.32618	1.574784	0.203663
CG17570	FBGN0260000	0.41479	0.822866	-0.60477	-0.1967
CG15317	FBGN0030137	-0.69468	-0.03667	-0.26041	0.397606
Ir7c	FBGN0029966	-0.23732	0.756343	-0.30265	0.691012
lncRNA:CR46040	FBGN0267707	-0.46831	-0.12541	-0.24339	0.099505
CG14545	FBGN0040602	-1.82873	-0.39784	-1.17048	0.260406
lncRNA:CR44491	FBGN0265684	-0.91873	0.721109	-2.53992	-0.90008
CG42326	FBGN0259226	-0.2694	0.081952	-0.29926	0.05209
CG1368	FBGN0030539	-0.65015	-0.47099	-0.02348	0.155682
CG3746	FBGN0034755	-0.08824	-0.02171	-0.32992	-0.26339
DNApol-alpha180	FBGN0259113	-0.08872	0.370219	-0.3005	0.158432
Rab9Db	FBGN0030221	0.177572	-0.18471	-0.36785	-0.73013
lncRNA:CR44672	FBGN0265883	0.144771	-0.27141	-0.01414	-0.43032

CG30105	FBGN0050105	-0.33168	0.000395	-0.72249	-0.39042
CR46154	FBGN0267866	-2.14472	0.275027	-2.86207	-0.44233
Pldn	FBGN0036192	-0.33397	-0.20292	-0.20745	-0.0764
CG31028	FBGN0051028	-0.15329	-0.74831	0.012535	-0.58249
lncRNA:CR46350	FBGN0286030	-2.9161	-1.43417	-3.69882	-2.21689
CG9733	FBGN0039759	0.098141	0.507979	-0.32462	0.085218
asRNA:CR43806	FBGN0264350	-0.39154	-0.14505	-0.45973	-0.21325
nac	FBGN0265351	0.109596	0.170567	-0.04428	0.016691
AstA-R1	FBGN0266429	-0.02486	-0.02952	0.73096	0.726293
CG33946	FBGN0047000	-0.33726	-0.21981	-0.50197	-0.38452
eIF4E6	FBGN0039622	-0.28529	0.053368	0.056569	0.395224
mt:tRNA:Gly-TCC	FBGN0013694	-0.67545	0.250923	-2.29342	-1.36705
Psf3	FBGN0030196	0.371202	0.366825	0.421801	0.417424
CG3045	FBGN0034703	0.055434	-0.00226	0.031168	-0.02652
CG43843	FBGN0264395	-0.29886	0.081883	-0.54413	-0.16338
CG7191	FBGN0031945	0.2222	-0.12808	0.10529	-0.24499
CG9752	FBGN0034614	-0.18602	0.285663	-0.82164	-0.34995
FBGN0261846	FBGN0261846	-0.38941	-0.07155	-0.54557	-0.22771
lncRNA:CR44217	FBGN0265148	0.35613	0.277894	0.142497	0.064261
lncRNA:CR43918	FBGN0264539	0.060089	0.294329	-0.2358	-0.00156
Rrp46	FBGN0037815	-0.26632	0.154325	-0.11187	0.308777
lncRNA:CR45023	FBGN0266381	0.285184	0.384249	-1.73615	-1.63709
CR43972	FBGN0264703	-0.00209	-0.05008	-0.62751	-0.6755
Dlip3	FBGN0040465	0.054844	-0.02492	0.108963	0.029201
CG32536	FBGN0052536	-0.15417	-0.15426	0.094677	0.09459
CG5776	FBGN0032450	-0.19378	-0.01664	-0.04376	0.133375
lncRNA:CR46445	FBGN0287215	1.273345	-0.11055	-0.12416	-1.50805
ebd2	FBGN0037076	-0.25826	-0.17843	-0.17047	-0.09063
St4	FBGN0033887	0.241987	0.097377	0.07612	-0.06849
Art6	FBGN0038189	-0.02657	0.112768	-0.23618	-0.09684
lncRNA:CR44558	FBGN0265751	-0.98385	-0.39953	-0.7104	-0.12608
Ugt302E1	FBGN0040257	0.46866	0.352988	0.248966	0.133295
CG45061	FBGN0266431	-0.53216	0.172747	-0.03982	0.66509
Rh7	FBGN0036260	0.065183	0.126144	0.290589	0.35155
CG42654	FBGN0261506	-0.36523	0.050825	-0.76966	-0.35361
Rad9	FBGN0025807	-0.3978	0.03147	-0.46868	-0.03941
lncRNA:CR46083	FBGN0267752	-0.25615	-0.79862	0.711441	0.168968
lncRNA:CR44262	FBGN0265202	-0.36407	-1.1931	0.372031	-0.457
CG9839	FBGN0037633	-0.15683	-0.10682	-0.16723	-0.11722
CG9737	FBGN0039758	-0.79574	0.211896	-0.24288	0.764759
lncRNA:CR45048	FBGN0266408	0.905175	0.07392	0.568495	-0.26276
Ugt37A3	FBGN0038083	0.888291	-0.34043	1.658946	0.430227
asRNA:CR45139	FBGN0266632	-0.21317	-0.24007	-0.56649	-0.59339
CG17652	FBGN0031361	-0.42474	-0.0763	-0.25642	0.092022
lncRNA:CR44473	FBGN0265666	-0.49681	-0.81391	0.24999	-0.06711
CG8152	FBGN0034008	-0.08987	0.03611	-0.14013	-0.01415
CG33639	FBGN0053639	0.33777	0.089529	0.515859	0.267617
Chrac-14	FBGN0043002	-0.21458	0.312754	-0.34404	0.183296
CG14102	FBGN0036906	-0.29451	0.250862	-0.19374	0.351633
CG13300	FBGN0035699	0.623097	0.005349	0.621948	0.004201
CG15912	FBGN0029712	-0.49462	-0.38066	-0.03843	0.075536
lncRNA:CR40172	FBGN0058172	-0.76633	-0.36823	-0.39455	0.003549
asRNA:CR45343	FBGN0266882	-0.39713	0.217743	-1.07816	-0.46329
CG18666	FBGN0040967	-0.25341	0.023597	-0.14895	0.128061
CG9988	FBGN0039591	-0.37075	0.51111	-1.37924	-0.49738
Nufip	FBGN0036812	-0.2086	-0.02508	-0.21487	-0.03135
lncRNA:CR44413	FBGN0265586	-0.08956	0.085069	-0.08144	0.093191
beta3GalTII	FBGN0033315	-0.4026	-0.07794	-0.27863	0.046034
CG18530	FBGN0042207	-0.08646	-0.03422	-0.13445	-0.08221
Tmc	FBGN0267796	0.600769	-0.21485	0.994069	0.178449
CG32599	FBGN0260482	0.288453	0.486031	-0.33599	-0.13841
CG32320	FBGN0052320	-0.30264	-0.081	-0.28708	-0.06544
Sr-CI	FBGN0014033	0.007007	0.478515	-0.306	0.16551
CG6678	FBGN0038917	-0.66885	0.094561	-0.73294	0.030476
lncRNA:CR44269	FBGN0265255	-0.09698	-0.10659	-0.09543	-0.10504
Pif1	FBGN0031540	-0.3292	-0.67416	-0.34319	-0.68815
Ir85a	FBGN0037630	-0.4011	0.709062	-0.69946	0.410705
CG5376	FBGN0038977	-0.00042	-0.06521	0.274638	0.20985
lncRNA:CR45877	FBGN0267537	0.071072	-0.33203	0.411963	0.008864

CG11192	FBGN0034507	-0.98994	-0.09801	-1.24743	-0.35549
CG18540	FBGN0034326	-1.0715	-0.55496	-0.61368	-0.09713
Pbp95	FBGN0037540	-0.29406	0.040972	-0.76597	-0.43094
Amt	FBGN0038309	-0.27845	-0.53659	0.576059	0.31792
lncRNA:CR44640	FBGN0265851	0.216824	-0.77403	-0.57523	-1.56608
CG43175	FBGN0262794	-0.0281	0.377218	-0.39892	0.006399
Muc18B	FBGN0031000	-2.52247	0.185397	-2.92768	-0.21982
Had2	FBGN0033949	-0.64902	-0.20989	-0.10646	0.332671
pxb	FBGN0053207	0.48041	0.1135	0.510234	0.143324
CG8191	FBGN0030675	0.206964	0.126736	0.269176	0.188948
CG34001	FBGN0054001	-0.5195	0.639822	-0.90458	0.254751
e(y)2	FBGN0000618	-0.24025	-0.1204	-0.21087	-0.09102
RabX6	FBGN0035155	-0.00323	0.143109	0.080475	0.226817
lncRNA:CR44091	FBGN0264900	-1.49065	-0.66349	1.156011	1.983178
lncRNA:CR45465	FBGN0267021	4.211901	-0.70129	3.417612	-1.49558
CG8401	FBGN0034069	-0.33711	0.063499	-0.56016	-0.15955
CG13426	FBGN0034510	-0.25394	-0.25812	-0.52246	-0.52664
prt	FBGN0043005	-0.35415	-0.28429	-0.08698	-0.01712
CG13392	FBGN0032033	-0.18262	-0.04474	-0.16539	-0.02751
pb	FBGN0051481	0.08925	0.014843	0.347472	0.273066
CG5567	FBGN0036760	0.142068	0.06168	0.130487	0.050099
Trs33	FBGN0266722	-0.15694	0.068576	-0.17287	0.052639
yl	FBGN0004649	0.126797	0.248302	-2.38525	-2.26374
asRNA:CR44182	FBGN0265071	0.639807	-0.43399	-0.06345	-1.13725
CG43789	FBGN0264330	0.087249	0.197281	0.026731	0.136764
Spc25	FBGN0087021	-0.53991	0.190524	-0.46781	0.262623
lncRNA:CR44236	FBGN0265167	-0.71228	1.272044	-0.39998	1.584336
CG34307	FBGN0085336	0.163145	0.043137	-0.32819	-0.4482
CG30338	FBGN0050338	0.051988	-0.02576	0.138056	0.060307
CG33635	FBGN0053635	-0.03378	0.064718	-0.27652	-0.17803
CG15522	FBGN0039723	0.042264	-0.14683	0.342252	0.153155
Dbp73D	FBGN0004556	-0.09104	0.038003	-0.07017	0.05887
CG31849	FBGN0051849	0.24691	-0.12136	0.185825	-0.18245
Rcd4	FBGN0032034	-0.36866	-0.13809	-0.20416	0.026407
DIP-alpha	FBGN0052791	0.530756	0.158392	0.460805	0.088441
Cyp303a1	FBGN0001992	0.869945	0.382486	0.386274	-0.10118
CG5078	FBGN0037005	0.229676	-0.13348	1.174852	0.811698
lncRNA:CR46127	FBGN0267802	-0.0554	-0.56741	0.624386	0.112374
CG31898	FBGN0051898	-1.24126	-0.70583	-1.5814	-1.04597
lncRNA:CR44641	FBGN0265852	0.067336	-0.68572	-1.60062	-2.35368
CG42878	FBGN0262170	-0.02371	-0.00183	0.01626	0.038136
lncRNA:CR44921	FBGN0266226	-0.47996	-0.27608	-0.42943	-0.22556
CG10359	FBGN0035452	-0.217	-0.02166	-0.56159	-0.36624
CG13404	FBGN0030559	0.561704	0.033368	0.176113	-0.35222
CG8248	FBGN0033347	0.015721	-0.00325	0.033162	0.01419
CG16863	FBGN0028931	-0.03382	0.202128	-0.06315	0.172806
CG5808	FBGN0027617	-0.25278	-0.04615	-0.25911	-0.05248
lncRNA:CR44408	FBGN0265581	-0.058	-0.30363	0.171843	-0.07379
CG14356	FBGN0038207	-0.2576	-0.16335	-0.38201	-0.28775
CG7988	FBGN0038582	-0.26578	-0.07022	-0.38592	-0.19035
msd5	FBGN0035210	-0.07605	-0.15076	0.20018	0.12547
CG17287	FBGN0034202	0.033436	0.012844	0.089365	0.068773
CG5334	FBGN0030577	-0.22912	-0.26093	-0.06781	-0.09962
CG30075	FBGN0050075	0.087611	0.334981	-0.4113	-0.16393
ETHR	FBGN0038874	0.161359	-0.07748	0.432194	0.193358
lncRNA:CR44577	FBGN0265788	-0.27843	-0.455	-0.48124	-0.65781
lncRNA:CR44330	FBGN0265418	-1.08838	0.205916	-1.67143	-0.37713
CG4259	FBGN0031389	-0.39255	-0.12964	-0.48523	-0.22233
lncRNA:CR44076	FBGN0264885	0.071308	0.178515	0.205046	0.312252
CG15646	FBGN0030665	0.523728	1.177909	-0.65127	0.002908
lncRNA:CR44480	FBGN0265673	0.117738	-0.08387	0.075858	-0.12575
spz3	FBGN0031959	0.131234	0.141592	0.236556	0.246914
CG5022	FBGN0032225	-0.44149	-0.17629	-0.21637	0.048832
lncRNA:CR44994	FBGN0266329	2.758115	-0.25041	3.084876	0.076353
CG43188	FBGN0262817	-0.28106	-0.13147	-0.40505	-0.25546
Plzf	FBGN0032401	0.040844	0.048563	-0.16561	-0.15789
Toll-9	FBGN0036978	0.45988	0.594655	-0.2204	-0.08563
Lkr	FBGN0035610	0.381154	0.08953	0.459773	0.16815
WRNexo	FBGN0038608	-0.16789	0.648559	-0.7245	0.091947

CG11342	FBGN0035537	-0.54928	0.099574	-0.81328	-0.16443
CG18179	FBGN0036023	-1.59152	0.694421	-1.71576	0.570185
CG9782	FBGN0030763	-0.20306	0.16434	-0.08309	0.284307
tej	FBGN0033921	-0.32556	0.179942	-0.64099	-0.13549
lncRNA:CR44225	FBGN0265156	-0.1662	0.196822	-0.2382	0.124828
CG7991	FBGN0035260	0.358721	0.297311	0.281436	0.220026
Elba3	FBGN0031621	-0.17525	-0.02181	-0.21256	-0.05912
BthD	FBGN0030501	-0.52015	-0.20587	-0.31535	-0.00106
rtv	FBGN0261277	-0.06283	-0.08651	-0.21853	-0.24221
sqz	FBGN0010768	-0.0213	-0.17072	0.109712	-0.03971
CG33331	FBGN0067628	-0.25357	0.030215	-0.46513	-0.18134
CG5783	FBGN0032670	-0.0115	0.267352	-0.15767	0.121178
CR45932	FBGN0267594	0.890257	0.066989	0.350272	-0.473
CG15570	FBGN0029697	-0.4224	0.449171	0.139149	1.010723
CG34163	FBGN0085192	-0.5551	-0.32353	-0.26323	-0.03166
CG10466	FBGN0032822	-0.04847	0.036209	-0.21607	-0.13139
slou	FBGN0002941	0.253801	-0.14661	0.63725	0.23684
lncRNA:CR44576	FBGN0265787	-0.47429	-0.82091	0.415854	0.069236
ppk23	FBGN0030844	-0.46155	-0.42391	0.280182	0.317817
CG14551	FBGN0039408	-2.91902	-1.89729	-2.09345	-1.07172
AOX4	FBGN0038350	0.350587	0.12661	0.73111	0.507133
CG44355	FBGN0265455	4.293733	0.397364	4.021545	0.125175
FucTC	FBGN0044872	0.942078	0.786197	0.025284	-0.1306
lncRNA:CR32111	FBGN0052111	0.136319	-0.08099	-0.13291	-0.35022
CycJ	FBGN0010317	-0.55473	0.145813	-0.31138	0.389162
CG14301	FBGN0038632	-0.32704	-0.56536	0.649249	0.410936
CG9192	FBGN0035193	-0.03109	-0.02441	-0.27721	-0.27052
lncRNA:CR44460	FBGN0265653	-1.43637	-0.33123	-0.90467	0.200464
lncRNA:CR43419	FBGN0263338	-0.78989	-0.61812	-0.01656	0.155212
SIFa	FBGN0053527	0.593749	0.183165	0.535028	0.124444
Hs3st-B	FBGN0031005	0.229245	-0.10532	0.426894	0.092331
CR32745	FBGN0052745	1.972647	1.30639	1.636497	0.970239
CG32811	FBGN0052811	-0.29154	-0.17151	-0.145	-0.02497
CG12010	FBGN0035443	-0.13251	0.089633	-0.19155	0.030586
CG14659	FBGN0037284	-0.07731	0.024851	-0.01541	0.086751
pon	FBGN0025739	-0.35207	-0.14866	-0.20996	-0.00655
CG13082	FBGN0032803	-0.08334	-0.15968	-0.58646	-0.6628
CG15773	FBGN0029795	0.277084	1.075246	-0.73478	0.06338
Gpa2	FBGN0261386	-0.17915	0.143622	-0.28455	0.038215
l(2)37Cg	FBGN0086447	-0.08441	0.172222	0.024741	0.281377
CG4984	FBGN0034267	0.308859	0.090533	0.323374	0.105049
sens-2	FBGN0051632	-0.04207	0.127363	-0.24382	-0.07439
CG5359	FBGN0037773	0.120627	0.176894	-0.07974	-0.02347
CG11529	FBGN0036264	-0.39089	0.305186	-0.61723	0.078854
lncRNA:CR43410	FBGN0263329	-0.23157	-0.1233	-0.24988	-0.14161
CG32271	FBGN0052271	-0.4543	-0.3945	-0.27188	-0.21208
CG11307	FBGN0037106	0.032966	0.066866	0.116314	0.150214
CG17127	FBGN0032299	-1.23064	-0.18363	-0.96669	0.08032
CG2121	FBGN0033289	-0.11923	-0.02347	-0.25479	-0.15902
CG14636	FBGN0037217	0.323533	-0.15774	-0.39577	-0.87705
lncRNA:CR45517	FBGN0267073	-0.28589	-0.51477	0.089183	-0.13969
CG15892	FBGN0029859	0.076163	-0.09795	0.071169	-0.10295
CG15674	FBGN0034642	-0.1842	0.474535	-1.45697	-0.79824
asRNA:CR45281	FBGN0266819	-0.38984	-0.1475	-0.25871	-0.01636
lncRNA:CR45177	FBGN0266687	-0.3286	-0.00365	-0.24012	0.084832
Dtd	FBGN0037898	-0.48084	-0.04874	-0.09222	0.339879
CG17802	FBGN0038549	0.035525	0.128964	-0.06784	0.025601
CG44261	FBGN0265201	-0.0094	0.307089	-0.42892	-0.11243
CG7544	FBGN0033994	0.143992	0.19998	0.029513	0.085501
lncRNA:CR44686	FBGN0265897	0.058128	-0.00775	-0.77012	-0.836
CG6685	FBGN0036062	0.104278	0.139273	0.098073	0.133068
elg1	FBGN0036574	-0.00028	-0.10382	0.166413	0.062875
lncRNA:CR44343	FBGN0265443	-1.14123	-0.85901	-0.77763	-0.49542
CG14118	FBGN0036323	0.177151	0.477065	-0.57753	-0.27761
sisRNA:CR46364	FBGN0286042	-0.79473	0.09801	0.136549	1.02929
lncRNA:CR44479	FBGN0265672	-0.43239	-0.42663	-0.64485	-0.63909
Smyd4-2	FBGN0036282	0.200466	0.178704	0.321344	0.299582
CG12826	FBGN0033207	0.282077	0.856888	-0.53838	0.036427
lncRNA:CR45254	FBGN0266789	0.71477	-0.54021	0.188212	-1.06677

mus301	FBGN0002899	0.136751	-0.10237	0.029538	-0.20959
CG8005	FBGN0035854	0.010237	-0.03575	0.018884	-0.0271
asRNA:CR44176	FBGN0265065	-0.94167	-0.32749	-0.37825	0.235931
kkv	FBGN0001311	0.298043	0.032016	0.331986	0.065959
lncRNA:CR43705	FBGN0263844	-1.61326	-0.76026	-1.23462	-0.38162
lncRNA:CR46088	FBGN0267757	-3.03242	0.646494	0.559141	4.238054
CG7017	FBGN0036951	0.236389	3.498413	-2.01626	1.245765
CG13123	FBGN0032150	0.072661	-0.00387	0.165101	0.088569
Fancd2	FBGN0038827	-0.16839	0.163274	-0.02004	0.311616
CG11162	FBGN0030509	0.622068	-0.22868	0.147911	-0.70284
HSPBAP1	FBGN0263025	-0.39992	-0.15114	-0.05932	0.189463
CG10222	FBGN0036356	0.006287	0.240659	-0.20254	0.031834
lncRNA:CR43718	FBGN0263871	0.685349	-0.09953	0.945186	0.160303
CG12863	FBGN0033948	-0.02104	0.031274	-0.08023	-0.02792
lncRNA:CR43682	FBGN0263765	-0.68009	0.220927	-0.72547	0.175539
Cpr97Eb	FBGN0039481	0.432113	0.187271	0.44862	0.203778
lncRNA:CR42696	FBGN0261586	-0.64059	0.053643	-0.74076	-0.04653
Ccp84Ad	FBGN0004780	5.379023	-0.70948	7.043996	0.955497
mtrm	FBGN0010431	-1.05311	-0.30365	-0.59862	0.150849
lncRNA:CR45389	FBGN0266938	0.005648	-0.69185	0.583118	-0.11438
esc	FBGN0000588	0.054325	0.069603	-0.27532	-0.26005
Cyp318a1	FBGN0030369	0.089345	0.29027	-0.48842	-0.2875
CG13038	FBGN0040795	0.103654	-0.9307	0.756946	-0.27741
obst-A	FBGN0031097	0.083288	0.023723	0.080209	0.020644
CG14826	FBGN0035750	-0.41466	-0.21792	-0.5973	-0.40055
lncRNA:CR43199	FBGN0262828	0.23446	0.174585	0.122412	0.062537
lncRNA:CR46028	FBGN0267692	-1.35145	1.079359	-0.04298	2.387832
CR31292	FBGN0051292	0.261971	0.261347	-0.13723	-0.13785
CG17359	FBGN0036396	-0.04618	-0.20556	0.020822	-0.13855
dgt5	FBGN0033740	-0.11566	-0.10318	-0.34521	-0.33273
lncRNA:CR42839	FBGN0262028	0.760773	0.394282	0.032706	-0.33379
CG32196	FBGN0052196	-0.12839	0.133844	-0.12404	0.138192
CR45948	FBGN0267610	0.384131	-0.04667	0.068254	-0.36255
lncRNA:CR45956	FBGN0267618	1.33352	0.398356	1.062709	0.127545
lncRNA:CR43990	FBGN0264722	0.38676	1.587639	1.173534	2.374413
CG7631	FBGN0028945	0.464142	1.310727	-0.84088	0.005709
CG13606	FBGN0039161	-0.26535	-0.26559	0.333792	0.333554
HLH54F	FBGN0022740	-0.02841	0.219453	0.662654	0.910518
CG13954	FBGN0033405	0.912758	-0.11239	1.510687	0.485544
gsb	FBGN0001148	0.48943	0.085286	0.611477	0.207332
CG43980	FBGN0264711	0.647057	0.096615	0.409119	-0.14132
CG13196	FBGN0033645	0.156126	-0.23876	0.21139	-0.1835
lncRNA:CR43490	FBGN0263501	-1.13879	-0.68424	0.006672	0.461227
CG3777	FBGN0024989	0.17137	-0.23228	0.264683	-0.13897
CG4793	FBGN0028514	-0.76519	-0.03422	-0.63837	0.092612
CG1545	FBGN0030259	0.004718	-0.09555	0.71601	0.615738
lncRNA:CR44874	FBGN0266168	-0.73867	-0.05909	0.026316	0.7059
CG30323	FBGN0050323	-0.18168	-0.05941	0.084204	0.206469
CG15643	FBGN0030654	-0.03151	-0.208	0.103921	-0.07257
lncRNA:CR43652	FBGN0263661	-2.94999	-2.79584	0.496107	0.650258
bib	FBGN0000180	0.206763	0.461589	-0.13114	0.123685
CG11409	FBGN0024366	0.146727	0.090412	0.064936	0.008621
CG14743	FBGN0033326	0.086133	0.304193	-0.20146	0.016598
Ugt35E2	FBGN0040255	-0.13644	-0.54888	0.938978	0.526533
CG6052	FBGN0036747	0.307792	0.023732	0.029902	-0.25416
CG8159	FBGN0037619	-0.27541	-0.01422	-0.02675	0.234432
CG13561	FBGN0034906	-1.40479	-0.52408	-0.46053	0.42018
CG45067	FBGN0266437	0.233378	0.073688	0.168082	0.008392
CG12911	FBGN0033501	-0.9007	-0.19077	0.516379	1.226312
nerfin-2	FBGN0041105	0.154451	0.068988	-1.17453	-1.25999
E(spl)malpha-BFM	FBGN0002732	-0.95827	0.814283	-1.94577	-0.17322
lncRNA:CR44667	FBGN0265878	0.319077	-0.08519	0.015028	-0.38924
CG42714	FBGN0261631	-0.16795	-0.04633	-0.10776	0.013868
CG42467	FBGN0259957	0.079688	-0.07055	-0.27348	-0.42372
lncRNA:CR44606	FBGN0265817	-0.33295	-0.07704	-0.17314	0.082767
lncRNA:CR45580	FBGN0267140	-0.08553	-0.0035	-0.46405	-0.38202
Gr32a	FBGN0041246	0.269986	0.099315	0.106449	-0.06422
lncRNA:CR43879	FBGN0264471	-0.79022	-0.18896	-0.54933	0.051936
CG2124	FBGN0030217	0.20345	0.136827	0.082373	0.01575

Aven	FBGN0030410	-0.26316	-0.09994	-0.09948	0.063731
lncRNA:CR43870	FBGN0264462	-0.37282	-0.10466	-0.62337	-0.3552
CG8800	FBGN0033408	1.332756	0.495074	0.426315	-0.41137
CG18088	FBGN0032082	-0.72953	0.063173	-0.9724	-0.1797
CG2875	FBGN0029672	-0.14622	-0.14261	-0.28318	-0.27957
CG18265	FBGN0036725	0.488613	-0.00958	0.9828	0.484606
CG12483	FBGN0040688	-0.11764	-0.54435	-0.44677	-0.87348
CG44253	FBGN0265188	-0.19288	0.098082	-0.26379	0.02718
AlkB	FBGN0065035	-0.26922	-0.09082	-0.21713	-0.03873
CG6901	FBGN0038414	-0.64332	-0.30276	-0.32927	0.011288
lncRNA:CR44505	FBGN0265698	-1.38551	-0.66307	-1.96836	-1.24593
mei-P22	FBGN0016036	0.225353	0.087622	1.201067	1.063336
lncRNA:CR44109	FBGN0264940	-0.50105	0.356351	-1.99993	-1.14253
Osi8	FBGN0037415	-0.00268	-0.73832	1.009962	0.274325
CapaR	FBGN0037100	0.226377	-0.00788	0.204706	-0.02955
CG42494	FBGN0260026	-0.05935	0.15744	-0.05797	0.158827
CG1750	FBGN0039836	0.110114	0.351084	-0.26392	-0.02295
Ilp3	FBGN0044050	-0.11487	-0.00854	-0.6519	-0.54557
CG14137	FBGN0036178	4.000192	2.6752	2.640368	1.315376
CG17681	FBGN0032668	-0.09098	0.77598	-1.06704	-0.20008
lncRNA:CR43280	FBGN0262969	-0.55989	0.295069	-0.20661	0.64835
CG43841	FBGN0264393	-0.64307	-0.63124	0.104737	0.116573
nw	FBGN0283508	0.798677	-0.60775	2.059624	0.653201
SIFaR	FBGN0038880	0.295814	0.062276	0.26526	0.031722
lncRNA:CR44920	FBGN0266225	0.145593	-0.11826	0.029582	-0.23427
CG10738	FBGN0036368	-0.23971	-0.226	-0.00109	0.012625
CG6362	FBGN0028740	-0.86711	-0.42412	-0.53794	-0.09495
lncRNA:CR43372	FBGN0263130	0.502078	-0.27358	0.732452	-0.04321
Obp83ef	FBGN0046876	0.083253	-0.56976	0.344259	-0.30875
CR43176	FBGN0262795	-0.13288	0.142216	-0.35336	-0.07827
CG11816	FBGN0030495	0.827913	0.279223	-0.34424	-0.89293
lncRNA:CR43053	FBGN0262355	-0.39728	-0.12434	-0.30644	-0.0335
amd	FBGN0000075	-0.25595	0.106505	-0.20342	0.159033
lncRNA:CR44805	FBGN0266040	0.061198	0.229955	-0.30647	-0.13772
ss	FBGN0003513	-0.16254	-0.32606	0.044671	-0.11885
lncRNA:CR44591	FBGN0265802	-1.35074	-0.1897	-1.50768	-0.34664
lncRNA:CR44593	FBGN0265804	-0.42906	-0.48843	0.343051	0.283688
sens	FBGN0002573	-0.27484	-0.13772	-0.39142	-0.25429
rk	FBGN0003255	0.639707	0.633967	0.35019	0.344451
lncRNA:CR45958	FBGN0267620	0.366246	0.370361	0.848184	0.8523
lncRNA:CR45120	FBGN0266595	-1.38647	0.387263	-0.72875	1.044985
CG4586	FBGN0029924	-0.17513	-0.72127	0.237533	-0.30861
PGRP-LF	FBGN0035977	0.207819	0.133079	0.01676	-0.05798
CG13679	FBGN0035856	-0.02758	0.002726	-0.09664	-0.06633
asRNA:CR43948	FBGN0264599	-8.16489	0	-1.33168	6.693824
CG43054	FBGN0262356	-0.18121	-0.0597	-0.10033	0.021177
beat-Vc	FBGN0038084	0.459155	0.10692	0.496737	0.144502
CG14298	FBGN0038654	-0.19683	-0.53594	0.142811	-0.19629
CG42526	FBGN0260431	0.603132	-0.13915	0.988205	0.245919
CG18744	FBGN0042101	-0.06396	0.167228	-0.32721	-0.09603
CG16959	FBGN0036481	0.349374	0.456531	0.261667	0.368825
Wnt2	FBGN0004360	-0.1254	-0.14331	-0.06893	-0.08683
CG18788	FBGN0042126	-0.02699	0.050436	0.027044	0.104473
gammaSnap2	FBGN0266721	-0.24873	-0.06362	-0.03297	0.152143
CG43915	FBGN0264516	-0.17912	0.247013	-0.39083	0.035306
Eo	FBGN0030597	0.226062	-0.01694	1.020561	0.777561
CG4186	FBGN0040634	-0.10363	0.050663	-0.25241	-0.09811
dar1	FBGN0263239	-0.00256	0.086328	0.196875	0.285765
CG10445	FBGN0037531	-0.05502	0.270719	0.140316	0.466053
CG43694	FBGN0263777	0.219943	0.113312	0.694343	0.587712
lncRNA:CR44041	FBGN0264833	0.384488	-0.07324	0.034706	-0.42302
CG14218	FBGN0031031	-0.45974	-2.8345	0.287796	-2.08697
asRNA:CR44179	FBGN0265068	0.472115	0.273465	0.438404	0.239754
CG9760	FBGN0036259	0.678786	0.165661	0.600887	0.087762
CG1504	FBGN0031100	-0.03699	-0.09472	0.282462	0.22473
CG4537	FBGN0032153	-0.19458	0.214414	-0.11444	0.294562
CG14913	FBGN0032331	0.020141	0.003817	-0.35547	-0.37179
lncRNA:CR44157	FBGN0265040	-1.09425	-0.33017	-0.29293	0.471149
CG4949	FBGN0030813	-0.08845	0.107912	-0.31084	-0.11448

BBS1	FBGN0035741	-0.17081	-0.20514	0.277571	0.243241
CheB42b	FBGN0066293	-0.53998	-0.35723	-0.4634	-0.28065
lncRNA:CR44452	FBGN0265645	1.04967	-0.35337	2.245333	0.842291
CG17211	FBGN0032414	0.399112	-0.16181	0.191373	-0.36955
Obp99d	FBGN0039684	0.923527	0.488605	0.513769	0.078847
Osi5	FBGN0037413	-0.75778	-0.42209	-0.44595	-0.11027
asRNA:CR43876	FBGN0264468	-0.64594	-0.13857	-1.00923	-0.50186
RhoU	FBGN0083940	-0.3081	-0.15576	0.063787	0.216131
Oxp	FBGN0034255	-0.5858	-0.31077	0.402663	0.677699
CG13801	FBGN0035332	-0.01727	-0.00556	0.141413	0.153124
lncRNA:CR44786	FBGN0266021	-0.21738	-0.36448	0.017385	-0.12972
lncRNA:CR43846	FBGN0264428	0.943573	1.120356	1.489912	1.666694
CG11309	FBGN0037070	0.247643	0.132531	0.043691	-0.07142
CG33460	FBGN0053460	-0.27586	-0.26007	0.80639	0.822172
Dgat2	FBGN0033215	-0.03445	-0.58307	0.53108	-0.01753
CG3123	FBGN0031465	0.044669	0.081665	-0.38334	-0.34635
CG13288	FBGN0035648	0.243421	-0.12838	-0.02796	-0.39976
CG10993	FBGN0030524	-0.32621	0.055966	-0.49848	-0.11631
Nepl3	FBGN0031678	-0.32617	-0.16253	-0.47825	-0.31461
CG17047	FBGN0033827	-1.12893	-1.39888	-0.79563	-1.06557
CG10339	FBGN0034972	-0.21551	-0.23352	-0.00405	-0.02206
dysf	FBGN0039411	0.09588	-0.10498	0.543087	0.342228
lncRNA:CR44222	FBGN0265153	0.77222	0.42292	0.622736	0.273436
CG5928	FBGN0029836	-0.13239	-0.73412	0.963026	0.361301
5-HT2B	FBGN0261929	0.171846	-0.21434	0.529253	0.143062
Atac1	FBGN0031876	-0.26919	-0.08068	-0.19976	-0.01125
CG31251	FBGN0051251	0.116299	0.166125	-0.1058	-0.05598
Trf5	FBGN0031446	-1.34901	0.189576	-1.56822	-0.02964
CG13005	FBGN0030794	-0.45672	0.068002	-0.25243	0.272292
CG12725	FBGN0030483	-0.44584	-0.06386	-0.59776	-0.21578
CG10962	FBGN0030073	-0.77783	-0.50352	0.347006	0.62131
HisCl1	FBGN0037950	-0.18079	-0.05589	-0.11684	0.008062
CNMaR	FBGN0053696	0.220244	-0.08579	0.093665	-0.21237
CG32335	FBGN0063667	0.05524	0.132426	0.306432	0.383618
Oli	FBGN0032651	-0.25376	-0.25454	-0.01266	-0.01345
CG15914	FBGN0030700	-0.14021	0.001353	-0.27973	-0.13817
ACXE	FBGN0040506	0.106347	-0.05852	-0.00232	-0.16718
Ance-2	FBGN0032535	-2.40368	0.002804	-2.39572	0.010764
lncRNA:CR32218	FBGN0052218	0.908611	-0.25827	1.398389	0.231508
GstD11	FBGN0038029	-0.39887	-0.2016	-0.22871	-0.03143
lncRNA:CR44587	FBGN0265798	-1.65303	-0.1012	-0.92715	0.624679
CG1360	FBGN0033195	0.072252	0.036729	0.147934	0.112412
lncRNA:CR44156	FBGN0265039	-0.28151	-0.11785	-0.10284	0.060814
lncRNA:CR44811	FBGN0266046	0.045847	0.096817	-0.08817	-0.0372
GstD8	FBGN0010044	-0.10121	0.438044	-1.04933	-0.51007
Cpr67Fa2	FBGN0036109	4.549238	-1.60598	6.201115	0.045896
CG13137	FBGN0032188	0.129535	0.067251	-0.24751	-0.30979
CG11403	FBGN0026876	-0.17208	0.19768	-0.23017	0.139596
lncRNA:CR43415	FBGN0263334	-0.47051	0.017444	-0.45667	0.031292
BicC	FBGN0000182	0.377811	-0.12647	0.264963	-0.23931
ORY	FBGN0046323	-0.22711	-0.4115	-0.11381	-0.2982
lncRNA:CR44333	FBGN0265421	4.146904	-0.07185	5.472967	1.254211
lncRNA:CR45351	FBGN0266891	0.047804	-0.40187	0.105415	-0.34426
CG3713	FBGN0040343	0.325584	0.120468	-0.33968	-0.54479
CG15506	FBGN0039686	-0.27066	0.04262	-0.08047	0.232812
Hey	FBGN0027788	-1.16375	-1.85511	0.606944	-0.08442
TyrRII	FBGN0038541	-0.14902	-0.05624	0.336786	0.429557
CG9698	FBGN0039784	-0.11752	-0.10621	0.054959	0.066276
CG18814	FBGN0042137	1.707115	-0.32409	1.443564	-0.58764
CG17672	FBGN0083978	-0.24242	0.306551	-0.29437	0.2546
lncRNA:CR44778	FBGN0266004	-0.2663	-0.25601	-0.39173	-0.38144
lncRNA:CR42646	FBGN0261429	-1.40819	-0.65055	0.488984	1.246625
Hr51	FBGN0034012	0.079626	-0.02019	0.147275	0.047463
Rbf2	FBGN0038390	-0.61957	-0.01974	-0.67165	-0.07182
CG18536	FBGN0034322	-1.11588	-0.5991	-0.29254	0.224236
CG42255	FBGN0259140	0.290474	-1.39356	1.753766	0.069728
Uxt	FBGN0259982	-0.18506	-0.00774	-0.24072	-0.06341
lncRNA:CR45334	FBGN0266873	-0.72162	0.075984	-1.07919	-0.28159
Dysb	FBGN0036819	-0.08489	-0.16669	0.186699	0.104899

CG32639	FBGN0052639	-0.34741	-0.28502	-0.38842	-0.32603
Or43b	FBGN0026393	0.183114	0.063486	-0.06843	-0.18806
lncRNA:CR44572	FBGN0265765	-1.26914	-0.32326	-4.38042	-3.43454
PIG-Wa	FBGN0031422	-0.91555	-0.35254	-0.15595	0.40706
CG30196	FBGN0050196	-0.07351	-0.00329	-0.18237	-0.11215
CG13722	FBGN0035553	0.176245	0.134497	0.924483	0.882735
CG33552	FBGN0053552	-0.195	0.072468	-0.31072	-0.04325
CG15710	FBGN0034120	-0.24059	-0.00222	-0.43141	-0.19304
NimA	FBGN0261514	0.316912	0.128718	0.019034	-0.16916
PIG-X	FBGN0050381	-0.04981	0.088471	-0.20489	-0.06661
Ilp8	FBGN0036690	0.031711	-0.07231	0.409998	0.305975
Cks30A	FBGN0010314	-0.20787	-0.08545	-0.238	-0.11558
lncRNA:CR44546	FBGN0265739	-0.54208	-0.09794	-0.84841	-0.40427
lncRNA:CR46260	FBGN0267993	-0.89067	-1.82799	0.293758	-0.64356
CR43186	FBGN0262815	0.946662	0.662047	1.207184	0.922569
CG13074	FBGN0036567	-0.47729	0.327743	-1.13337	-0.32833
l(2)k05911	FBGN0284244	0.320738	0.058596	0.117262	-0.14488
croc	FBGN0014143	0.367636	0.44807	-0.33574	-0.2553
CG5863	FBGN0038507	0.706391	-0.06725	0.519663	-0.25398
CCKLR-17D3	FBGN0030954	0.023904	0.10379	-0.02548	0.054403
lncRNA:CR44397	FBGN0265547	-0.5969	-0.55918	0.116015	0.153727
lncRNA:CR46064	FBGN0267733	-0.21442	-0.26344	-0.22325	-0.27227
Spn42De	FBGN0033115	-0.04885	0.18166	-0.14944	0.081067
Ts	FBGN0024920	0.284459	0.180855	-0.36557	-0.46917
spz5	FBGN0035379	0.055782	-0.26837	0.129668	-0.19449
lncRNA:CR46023	FBGN0267687	-0.59001	-0.16917	-0.055	0.365842
CG44139	FBGN0264988	-0.28281	-0.63666	-0.39123	-0.74507
CG12267	FBGN0038057	-0.23129	0.031058	-0.07411	0.188231
Orc2	FBGN0015270	-0.59983	-0.12694	-0.7368	-0.26391
CG9541	FBGN0032083	-0.23795	-0.04844	-0.27665	-0.08714
lncRNA:CR30121	FBGN0050121	-1.60785	-0.51649	-2.85643	-1.76507
DNApol-alpha73	FBGN0005696	-0.3587	-0.23634	-0.59703	-0.47467
CG13708	FBGN0035577	0.28811	-0.17519	0.528961	0.065664
lncRNA:CR44952	FBGN0266257	-1.11205	-0.55946	-1.02184	-0.46926
AANATL2	FBGN0031791	-0.03836	-0.63347	0.303781	-0.29133
lncRNA:CR44075	FBGN0264884	0.640134	0.041039	0.072217	-0.52688
CG8419	FBGN0031999	-0.30535	-0.12897	0.029144	0.205523
CG31191	FBGN0051191	0.17542	-0.05805	-0.02099	-0.25446
CG12768	FBGN0037206	-0.25037	-0.30086	0.071482	0.020989
CG12288	FBGN0032620	-0.24471	-0.18173	-0.24545	-0.18247
lncRNA:CR43420	FBGN0263339	-1.06915	-0.72924	-0.43441	-0.0945
DAT	FBGN0034136	0.045504	-0.12282	0.125003	-0.04332
CG5880	FBGN0039489	0.131568	0.24526	-0.03159	0.082105
CG3430	FBGN0031875	-0.27467	0.196325	-0.66529	-0.1943
CG15343	FBGN0030029	0.243766	-0.06734	0.158479	-0.15263
lncRNA:CR45552	FBGN0267112	-0.76361	0.606559	-1.24357	0.126604
OdsH	FBGN0026058	-0.22269	-0.1269	0.138448	0.234247
CG34174	FBGN0085203	-0.43588	0.219254	-0.218	0.437133
rst	FBGN0003285	-0.05872	-0.16926	0.134859	0.024314
lncRNA:CR45726	FBGN0267290	-1.84018	-0.97158	-1.08079	-0.21218
CG14811	FBGN0029590	-0.5762	0.093823	-0.6793	-0.00927
CG33993	FBGN0053993	0.300423	0.054374	0.213014	-0.03303
lncRNA:CR46016	FBGN0267680	0.291186	-0.20074	0.172953	-0.31897
lncRNA:CR45098	FBGN0266537	-2.49345	-0.32107	-2.22234	-0.04995
lncRNA:CR45128	FBGN0266621	-0.94865	-0.28174	-0.94321	-0.2763
CG32816	FBGN0052816	0.159777	0.614969	0.462846	0.918038
asRNA:CR45686	FBGN0267246	0.243912	0.473344	-0.35873	-0.1293
RpI12	FBGN0038903	-0.58312	-0.28353	-0.47762	-0.17802
lncRNA:CR45252	FBGN0266787	0.76283	-0.1517	0.880265	-0.03427
VepD	FBGN0053200	0.230681	-0.04646	0.322811	0.045672
CG9411	FBGN0030569	0.195687	-0.05457	-1.25831	-1.50856
lncRNA:CR44170	FBGN0265059	0.059573	-0.21921	0.081755	-0.19702
CG34027	FBGN0054027	-0.42717	0.237791	0.01118	0.676136
Vps24	FBGN0037231	-0.26074	-0.06846	-0.19265	-0.00037
CG11837	FBGN0039627	-0.2113	-0.16011	-0.10632	-0.05513
beat-Va	FBGN0038087	0.119022	-0.05811	0.2823	0.105167
lncRNA:CR44034	FBGN0264826	-0.20872	0.032744	-0.2563	-0.01484
lncRNA:CR45055	FBGN0266415	-1.06315	-0.55021	-0.92036	-0.40742
mtTFB2	FBGN0037778	-0.04914	0.168477	-0.01536	0.202263

CG5038	FBGN0038324	-0.16887	-0.19797	-0.15354	-0.18265
CG6793	FBGN0036242	-0.1181	-0.23848	-0.22215	-0.34252
HP1e	FBGN0037675	-0.45368	-0.22675	-0.5185	-0.29158
lncRNA:CR44032	FBGN0264824	-0.42792	-0.5131	-0.19781	-0.28299
CG7236	FBGN0031730	-0.16594	-0.2004	-0.0304	-0.06486
CG12182	FBGN0028504	0.1716	0.333774	0.171514	0.333687
AOX2	FBGN0038348	-0.14941	0.119732	-0.05658	0.212559
gt	FBGN0001150	0.54877	-0.03155	0.60535	0.02503
CG15382	FBGN0031393	-0.18208	0.274887	-0.50588	-0.04891
kn	FBGN0001319	0.370892	0.034717	0.681798	0.345623
CG33199	FBGN0053199	0.013779	0.288809	-0.3495	-0.07447
CG44286	FBGN0265313	0.283676	0.000297	0.482438	0.199059
Ir41a	FBGN0040849	0.062708	0.02011	-0.27714	-0.31974
CG8736	FBGN0033308	-0.5415	-0.5875	1.178739	1.132738
lncRNA:CR45547	FBGN0267107	-0.30099	0.262161	0.230662	0.793813
thw	FBGN0037487	0.887582	0.408672	0.573044	0.094134
CG43312	FBGN0263004	0.015899	0.144207	0.052495	0.180802
ort	FBGN0003011	-0.01428	-0.00719	0.345205	0.35229
lncRNA:CR45630	FBGN0267190	-0.14236	0.492717	-0.15366	0.481415
CG7326	FBGN0030970	0.013116	-0.00764	0.096606	0.075852
mms4	FBGN0033549	0.067303	0.468217	-0.38913	0.011785
CG13970	FBGN0032851	-0.65153	-0.22235	-0.61812	-0.18893
CG43742	FBGN0263999	1.435351	0.096132	2.543013	1.203795
Sox15	FBGN0005613	-0.1401	-0.30924	0.016808	-0.15233
CG10494	FBGN0034634	0.03201	-0.01802	0.209034	0.159001
naz	FBGN0286852	0.573373	0.142197	0.032977	-0.3982
Ir75b	FBGN0261402	-0.82766	-0.80179	-0.71565	-0.68978
danr	FBGN0039283	0.107658	-0.33665	0.539038	0.094727
CG34342	FBGN0085371	-1.46841	-0.57744	-0.82274	0.068232
CG14760	FBGN0033277	1.344562	-0.91477	2.866183	0.606855
CG43207	FBGN0262843	0.232757	0.063493	-0.12257	-0.29184
asRNA:CR44911	FBGN0266216	-0.07725	-0.24222	-0.08576	-0.25073
CG33012	FBGN0053012	-0.63007	-0.20698	0.224245	0.647334
CG4465	FBGN0038750	1.322767	1.127229	0.819747	0.624208
CG10710	FBGN0036377	-0.05944	-0.22639	0.142282	-0.02466
lncRNA:CR45020	FBGN0266378	-0.28869	0.24645	-0.92504	-0.3899
meru	FBGN0052150	0.059192	-0.13398	0.250809	0.057634
CG4570	FBGN0037844	-1.00418	-0.29338	-0.83369	-0.12288
CG7914	FBGN0030995	-0.24621	-0.07524	-0.22286	-0.05188
CG34045	FBGN0054045	-1.20407	-0.19479	-1.83218	-0.8229
CG34115	FBGN0083951	-0.17264	0.01162	-0.32478	-0.14051
Ercc1	FBGN0028434	-0.44609	-0.00928	-0.52214	-0.08533
CG4854	FBGN0038766	-0.28985	-0.05166	-0.3235	-0.08531
Mco3	FBGN0039387	-0.2233	-1.17417	1.608198	0.65733
Lsm11	FBGN0033450	0.228288	0.012609	0.407565	0.191886
lncRNA:CR45743	FBGN0267307	-0.20765	-0.78686	0.464133	-0.11508
lncRNA:CR45288	FBGN0266826	-0.36184	0.099069	-0.83285	-0.37194
CG11836	FBGN0039272	-0.0935	-0.13231	-0.21414	-0.25295
CG6739	FBGN0031926	-1.25799	-0.39409	-0.48947	0.374432
nenya	FBGN0051053	-0.12699	-0.8804	1.209376	0.455958
RNaseP:RNA	FBGN0046696	-0.19616	-0.23716	0.139467	0.098469
tld	FBGN0003719	-0.20235	-0.30348	0.099914	-0.00122
BomT1	FBGN0262838	0.50185	0.451185	0.427013	0.376348
CG42364	FBGN0259710	-0.55164	-0.10294	-0.48997	-0.04127
lncRNA:CR43399	FBGN0263290	0.016334	0.475364	0.475538	0.934567
in	FBGN0001259	0.237224	0.005647	-0.23841	-0.46998
Ilp5	FBGN0044048	0.788838	-0.04252	0.618442	-0.21292
Osi24	FBGN0037409	-0.01082	0.16152	-0.25201	-0.07968
lncRNA:CR43681	FBGN0263764	-0.04503	-0.44836	-0.1017	-0.50503
asRNA:CR44981	FBGN0266316	0.136545	0.110998	0.191482	0.165934
SoYb	FBGN0051755	0.192781	0.053246	0.150144	0.01061
Rab9D	FBGN0067052	0.019313	0.101495	0.239022	0.321204
Nek2	FBGN0029970	0.157034	-0.33911	0.829964	0.333818
CG13171	FBGN0033701	0.195031	0.029327	-0.02401	-0.18972
CG32564	FBGN0052564	1.063446	0.000314	1.125042	0.061911
CG3592	FBGN0029642	-0.29789	0.079438	-0.91958	-0.54225
CG42579	FBGN0260869	-0.66481	-1.04536	-0.18843	-0.56897
lncRNA:CR44338	FBGN0265426	0.913341	-0.24478	1.001163	-0.15696
Or63a	FBGN0035382	0.461769	0.142875	0.098819	-0.22008

lncRNA:CR44305	FBGN0265364	-0.50335	-0.33938	-0.60389	-0.43992
CG43230	FBGN0262875	0.476881	0.100047	0.163934	-0.2129
lncRNA:CR43761	FBGN0264261	0.996545	-0.26701	0.750828	-0.51273
lncRNA:CR46030	FBGN0267694	0.927298	0.823499	-0.68255	-0.78635
CG31051	FBGN0051051	-0.55861	-0.13083	-0.11122	0.316558
lin-28	FBGN0035626	-0.04124	-0.00699	-0.10105	-0.0668
CG42464	FBGN0259954	-0.02296	0.922461	-0.48848	0.456942
CG7912	FBGN0039736	0.301255	0.43789	-0.10182	0.034817
lncRNA:CR45166	FBGN0266676	0.666709	0.109856	1.113861	0.557008
lncRNA:CR45150	FBGN0266643	2.068163	-0.07913	2.254224	0.10693
obst-H	FBGN0053983	-2.49582	0.101559	-2.93503	-0.33765
lncRNA:CR45173	FBGN0266683	0.743839	0.113535	-0.39735	-1.02765
lncRNA:CR44187	FBGN0265076	-0.36605	-1.53306	0.089334	-1.07768
CG13896	FBGN0035159	-0.33212	-0.06696	-0.1858	0.079357
lncRNA:CR43878	FBGN0264470	-0.12204	-0.09013	-0.31232	-0.28041
hd	FBGN0086695	-0.65905	-0.21197	-0.40971	0.037363
Arv1	FBGN0052442	-0.02196	-0.01771	0.004788	0.009036
CG14352	FBGN0031351	-0.49376	-0.19783	-0.16189	0.134045
CG14635	FBGN0029535	0.168333	-0.12346	0.184194	-0.1076
lncRNA:CR44750	FBGN0265963	-0.53585	-0.43997	-0.45796	-0.36207
lncRNA:CR43928	FBGN0264549	-0.14008	0.312564	-0.37623	0.076417
lncRNA:CR43625	FBGN0263616	-0.10462	0.023867	-0.16228	-0.0338
snsl	FBGN0031646	-0.13463	0.067593	0.355152	0.557374
CG43447	FBGN0263401	0.170815	0.418804	0.580922	0.828911
Sgs1	FBGN0003372	-0.08308	0.252626	1.395772	1.731476
CG13749	FBGN0033353	-0.82689	-0.30519	0.000658	0.522366
lncRNA:CR43493	FBGN0263504	-1.36672	0.330575	-1.59829	0.099003
CG3349	FBGN0036459	0.376927	0.15799	0.17779	-0.04115
lncRNA:CR43881	FBGN0264473	0.229097	0.155804	-0.3819	-0.4552
lncRNA:CR45158	FBGN0266651	-0.1316	-0.13407	-0.09367	-0.09615
CG33723	FBGN0053723	-0.561	-0.12148	-0.55341	-0.1139
lncRNA:CR45251	FBGN0266786	-0.12605	0.368121	0.047008	0.541178
Cyp313a4	FBGN0038076	-0.28599	-0.0421	-0.16558	0.078315
Ugt303B2	FBGN0039087	0.522034	0.27712	-0.04329	-0.28821
lncRNA:CR46328	FBGN0284414	-1.52961	0.288796	-1.56938	0.24903
CR42875	FBGN0262149	-0.20747	0.04899	-0.3891	-0.13264
Cht5	FBGN0038180	-0.07941	-0.27325	0.008738	-0.1851
CG32797	FBGN0052797	-0.06304	0.928587	-0.99298	-0.00135
CG4830	FBGN0037996	0.487238	0.189823	-0.98564	-1.28306
Reck	FBGN0036463	0.051551	0.021257	0.007549	-0.02274
RunxA	FBGN0083981	0.452257	0.458376	-0.08229	-0.07617
Ogg1	FBGN0027864	-0.15849	-0.14893	-0.00278	0.006782
CG31441	FBGN0051441	0.048073	0.000373	-0.10848	-0.15618
Gyc32E	FBGN0010197	0.461627	-0.01051	0.864684	0.392546
Adat1	FBGN0028658	0.075103	0.105911	0.263441	0.294249
tos	FBGN0015553	0.136554	0.145298	0.215108	0.223851
Mt2	FBGN0028707	-0.10005	0.119186	-0.09525	0.123988
cysu	FBGN0038511	1.030048	0.230373	0.493398	-0.30628
CG7512	FBGN0036168	0.164254	-0.17814	-0.29743	-0.63982
lncRNA:CR43884	FBGN0264476	1.679322	-0.29956	0.204679	-1.7742
lncRNA:CR44337	FBGN0265425	-0.31371	-0.17974	-0.39057	-0.25659
Obp83g	FBGN0046875	0.144802	-0.82981	0.018778	-0.95583
asRNA:CR43723	FBGN0263967	-0.49547	-0.47841	-0.24843	-0.23138
CG15717	FBGN0030451	-0.18905	-0.13793	0.143558	0.19468
CG43407	FBGN0263326	0.391111	-0.40428	-0.03007	-0.82546
CG9095	FBGN0030617	-0.01653	0.055762	-0.19171	-0.11942
lncRNA:CR43764	FBGN0264264	0.326023	0.316762	0.116239	0.106978
asRNA:CR46091	FBGN0267760	-0.37329	0.043713	-0.20736	0.209645
CR42490	FBGN0086200	0.132665	-0.09402	0.178579	-0.04811
slam	FBGN0043854	-0.34671	0.002656	0.448811	0.798182
lncRNA:CR44234	FBGN0265165	-0.15961	-0.08319	-0.66262	-0.58619
spag4	FBGN0032368	-0.36885	-0.06355	-0.3501	-0.04481
Lmx1a	FBGN0052105	0.099971	-0.07584	0.368758	0.192947
CG13857	FBGN0038958	0.385751	-0.20021	-0.24351	-0.82948
Cyp4c3	FBGN0015032	0.084262	-0.24661	-0.4582	-0.78907
Corp	FBGN0030028	-0.61093	-0.4343	-0.44685	-0.27023
CG10352	FBGN0030348	0.224629	0.12083	0.172029	0.06823
Cpr66Cb	FBGN0035875	-0.18071	-0.99072	0.055172	-0.75484
CG33172	FBGN0053172	-0.16603	0.298958	-0.44144	0.023547

CG43273	FBGN0262962	-0.30264	-0.03397	-0.0579	0.210768
lncRNA:CR44926	FBGN0266231	0.097535	0.16561	-0.44705	-0.37897
CG32625	FBGN0052625	-1.22449	0.371952	-0.90193	0.694514
Cdk8	FBGN0015618	-0.08592	0.058575	-0.09589	0.048604
lncRNA:CR46409	FBGN0286890	-0.37893	0.584997	-0.67305	0.290873
CG31371	FBGN0051371	-0.70942	-0.79195	0.550336	0.46781
Osi3	FBGN0037411	3.596615	1.677839	4.432683	2.513906
lncRNA:CR45054	FBGN0266414	0.279859	0.264419	0.079644	0.064203
Fpgs	FBGN0030407	0.173539	0.175104	0.440169	0.441734
CG8607	FBGN0035760	-0.134	-0.15694	0.007771	-0.01516
asRNA:CR44293	FBGN0265339	-0.62946	-0.18204	-0.64212	-0.19469
lncRNA:CR46120	FBGN0267789	-0.9081	-0.62775	-0.01162	0.26873
RecQ4	FBGN0040290	-0.01175	0.237108	-0.21089	0.037967
lncRNA:CR45753	FBGN0267317	0.816175	-0.93155	2.128801	0.381076
CG4962	FBGN0036597	-1.42977	-1.73191	-0.70411	-1.00625
CG1738	FBGN0030291	-0.26442	-0.1672	-0.12325	-0.02604
CG6978	FBGN0029727	-0.23302	-0.08591	-0.23544	-0.08833
lncRNA:CR44331	FBGN0265419	-0.68446	-0.13415	-0.96616	-0.41585
bw	FBGN0000241	0.146108	0.022767	0.38429	0.260949
CG11269	FBGN0034700	0.082672	0.018323	-0.2166	-0.28095
lncRNA:CR44360	FBGN0265467	-0.56345	0.141321	-0.05922	0.645544
CG13078	FBGN0032809	-2.35982	0.218557	-2.26642	0.311954
lncRNA:CR45256	FBGN0266791	0.763253	0.587573	1.00432	0.828639
CG31278	FBGN0051278	-0.23144	0.141013	-0.18959	0.182869
CG18823	FBGN0042146	-0.91175	-0.67834	-0.56057	-0.32716
CG30114	FBGN0050114	-0.96663	0.17643	-2.24918	-1.10612
PK2-R1	FBGN0038140	0.195488	0.366013	0.184505	0.355029
lncRNA:CR43714	FBGN0263867	0.957804	0.129657	0.977742	0.149595
lncRNA:CR44738	FBGN0265951	2.684742	0.601478	2.921508	0.838244
Cdc6	FBGN0035918	0.213758	0.193796	0.360842	0.34088
CR46027	FBGN0267691	0.887507	0.487437	0.460414	0.060344
lncRNA:CR45419	FBGN0266968	-0.26267	-0.13708	-0.202	-0.07641
lncRNA:CR46046	FBGN0267713	-0.1543	-0.0215	-0.38824	-0.25545
CG15282	FBGN0028855	-0.92138	0.29596	-1.23088	-0.01354
lncRNA:CR45905	FBGN0267565	0.339017	-0.53048	0.301074	-0.56842
lncRNA:CR43363	FBGN0263095	0.009641	0.162739	-0.2327	-0.0796
CG46443	FBGN0287213	-0.47567	-0.27567	-0.29375	-0.09375
iav	FBGN0086693	0.010446	-0.15588	0.356581	0.190255
asRNA:CR43480	FBGN0263457	-0.03335	0.042401	-0.03119	0.044568
lncRNA:CR43914	FBGN0264515	0.555853	-0.48101	0.423196	-0.61366
lncRNA:CR43416	FBGN0263335	-0.0086	0.086204	0.035953	0.130758
MFS10	FBGN0030452	-0.44501	-0.06032	-0.22392	0.160771
lncRNA:CR45581	FBGN0267141	0.02346	-0.59377	0.769275	0.152047
lab	FBGN0002522	0.026818	0.121245	-0.37577	-0.28134
lncRNA:CR43823	FBGN0264371	-0.61436	-0.24949	-0.15832	0.206543
lncRNA:CR45430	FBGN0266979	0.131076	-0.41469	0.231413	-0.31436
CG33939	FBGN0047095	-0.11157	-0.07455	-0.22503	-0.18801
lncRNA:CR44324	FBGN0265383	0.171789	0.02498	0.101578	-0.04523
lncRNA:CR44411	FBGN0265584	0.872226	1.055807	-0.73495	-0.55137
lncRNA:CR45589	FBGN0267149	-0.49748	0.065158	-0.76353	-0.20089
CR46272	FBGN0283429	-0.08407	0.612518	-0.02082	0.675769
wg	FBGN0284084	-0.04699	0.11029	0.282815	0.440097
CG34409	FBGN0085438	0.013676	-0.08242	0.097641	0.001548
CG17173	FBGN0036447	0.1974	0.005703	0.165682	-0.02602
CG12984	FBGN0037042	-0.79366	-0.67783	-0.57314	-0.45731
CG15239	FBGN0029681	0.125379	1.516134	0.503863	1.894618
lncRNA:CR43632	FBGN0263623	-0.47056	-0.77691	-0.64261	-0.94896
CG17361	FBGN0036395	-0.33454	-0.16052	-0.21412	-0.0401
alpha-Est4	FBGN0015572	0.11514	-0.01644	-0.17813	-0.30971
Lgr4	FBGN0085440	0.216864	-0.00065	0.449749	0.232239
Ror	FBGN0010407	0.256167	0.164197	0.113406	0.021437
Osi12	FBGN0037419	-0.10509	-0.18121	-0.23819	-0.31431
CG13856	FBGN0038959	0.109592	0.23857	-0.55519	-0.42621
cnir	FBGN0243513	-0.23433	0.012012	-0.30865	-0.06231
CG14069	FBGN0032315	-0.58506	-0.44635	0.316922	0.455625
Hsp67Bc	FBGN0001229	0.01408	-0.01075	-0.15873	-0.18356
CG44037	FBGN0264829	-0.49616	-0.34459	0.462246	0.613816
CR40354	FBGN0058354	-0.27611	-0.14017	-0.56522	-0.42928
CR44383	FBGN0265533	-0.48987	-0.16746	-0.70325	-0.38084

Desi	FBGN0037832	0.153873	0.430354	0.659891	0.936372
Wnt4	FBGN0010453	0.002493	-0.27266	0.220486	-0.05467
CG7214	FBGN0031940	-0.91285	-0.53181	0.853688	1.234726
lncRNA:CR44506	FBGN0265699	1.226392	0.735222	0.555449	0.064279
lncRNA:CR44070	FBGN0264879	-1.74742	-0.89625	-0.53842	0.312756
lncRNA:CR46414	FBGN0286914	4.458522	-0.32428	1.079803	-3.70299
ppk13	FBGN0053508	-0.24425	-0.31547	-0.29404	-0.36526
Oseg5	FBGN0032891	-0.18862	-0.0977	-0.01558	0.075348
lncRNA:CR43488	FBGN0263499	0.603246	-3.20757	1.818728	-1.99209
CG3032	FBGN0029928	-0.22639	0.069117	-0.26179	0.033713
Notum	FBGN0044028	0.102238	-0.00462	0.145576	0.038721
CG17477	FBGN0038479	-0.25805	-0.66837	0.217683	-0.19264
CG14221	FBGN0031042	-0.22793	-0.78736	0.063552	-0.49588
lncRNA:CR44058	FBGN0264867	1.239487	0.635752	-1.52362	-2.12735
Rab23	FBGN0037364	-0.03675	0.002637	0.380364	0.419752
lncRNA:CR44295	FBGN0265341	-0.42727	-0.24875	-0.18449	-0.00598
asRNA:CR42860	FBGN0262107	0.567748	-0.04731	0.839441	0.224388
lncRNA:CR45942	FBGN0267604	-0.10422	0.211463	-0.40429	-0.08861
CG31111	FBGN0051111	-0.11807	0.219195	-0.27263	0.064635
galene	FBGN0035192	-0.25565	-0.29807	-0.12134	-0.16376
CG31775	FBGN0028537	0.088369	-0.1669	0.422215	0.166947
CG34436	FBGN0085465	1.066442	0.713325	0.532247	0.179129
comr	FBGN0034667	0.092677	0.087661	-0.13679	-0.1418
CG3253	FBGN0041706	-0.23023	-0.0935	-0.17815	-0.04142
RpS28a	FBGN0039739	0.172657	0.023882	-0.03594	-0.18472
CR33487	FBGN0053487	-0.10563	0.580817	-0.05173	0.634712
CG31259	FBGN0051259	0.674508	0.590743	-0.35742	-0.44118
lncRNA:CR44380	FBGN0265530	0.444837	0.551252	-0.20213	-0.09572
Pp1-Y1	FBGN0261399	-0.32162	-0.01006	-0.43544	-0.12388
CG9294	FBGN0034666	2.577176	-0.10934	4.282107	1.595592
CG15701	FBGN0034095	0.23326	0.343656	0.32042	0.430815
lncRNA:CR46123	FBGN0267798	5.77665	0.328573	4.882308	-0.56577
lncRNA:CR43766	FBGN0264266	0.005429	-0.32045	0.176811	-0.14907
Oseg2	FBGN0035317	-0.23496	-0.30451	0.018039	-0.05151
CG15093	FBGN0034390	0.238888	0.309074	-0.14737	-0.07718
CG6472	FBGN0034166	-0.47987	-0.60496	0.285412	0.16032
CG14855	FBGN0038260	-0.53893	0.056774	-0.22909	0.366615
lncRNA:CR45409	FBGN0266958	-0.34799	-0.14595	-0.30945	-0.10742
CG15373	FBGN0030889	1.290124	0.22404	0.341207	-0.72488
CG33710	FBGN0053710	-0.27252	0.053108	-0.36324	-0.03762
CG13558	FBGN0034869	-0.35547	-0.14185	-0.11077	0.102853
Rx	FBGN0020617	0.209067	-0.18533	0.067641	-0.32675
CG5948	FBGN0039386	-0.64345	-0.4651	-0.5471	-0.36875
IFT43	FBGN0032446	-0.10604	-0.12416	0.12873	0.110611
ro	FBGN0003267	1.081231	0.303459	0.184263	-0.59351
Nnf1b	FBGN0051658	-0.38173	0.253912	-0.11516	0.520481
jb	FBGN0031104	-0.36557	-0.0478	-0.31927	-0.0015
CG42562	FBGN0260764	-0.14556	-0.00858	-0.13508	0.001903
CG14111	FBGN0036350	-0.31039	0.194676	-0.96186	-0.4568
CG6296	FBGN0039470	1.739101	0.547227	-0.25531	-1.44718
CG9981	FBGN0030746	0.195916	0.280011	-0.30596	-0.22187
lncRNA:CR43937	FBGN0264565	-1.09925	-0.38235	-1.17563	-0.45873
CG17738	FBGN0038009	0.283298	0.291779	-0.05109	-0.04261
CG14321	FBGN0038540	-0.56495	0.16558	0.038931	0.769464
lncRNA:CR44073	FBGN0264882	-0.37996	-0.00582	-0.31508	0.059064
asRNA:CR45479	FBGN0267035	0.215495	-0.0692	-0.08942	-0.37411
MFS1	FBGN0050272	0.80926	0.722893	-2.42328	-2.50964
lncRNA:CR44560	FBGN0265753	-0.8614	-0.8316	-1.4695	-1.43969
lncRNA:CR46010	FBGN0267674	-0.31236	-0.04492	-0.85923	-0.59179
CG14367	FBGN0038170	-0.21016	-0.17536	0.006744	0.041547
CG14634	FBGN0040892	-0.40007	-0.49359	-2.20143	-2.29494
lncRNA:CR44180	FBGN0265069	-3.51353	-1.28404	-1.4156	0.813894
CG13875	FBGN0035104	-0.19707	0.173356	-0.03002	0.340401
lncRNA:CR45259	FBGN0266797	-0.89779	-0.55219	-7.7953	-7.44971
CG44004	FBGN0264746	-0.16974	-0.1833	-0.14921	-0.16277
lncRNA:CR45280	FBGN0266818	-0.25279	-0.1745	-0.00632	0.071969
CG30187	FBGN0050187	-0.32836	0.443524	-0.78728	-0.0154
CG14330	FBGN0038512	-0.10768	0.151603	-0.24143	0.017856
CG31381	FBGN0043799	0.153204	0.012115	0.115493	-0.0256

CG33673	FBGN0053673	-0.1795	-0.11661	-0.39057	-0.32767
CG2444	FBGN0030326	-0.27561	0.174431	0.009573	0.459615
Ir68a	FBGN0036150	0.438512	0.32713	0.70852	0.597138
lncRNA:CR45237	FBGN0266772	-0.07181	0.15601	0.705727	0.933544
CG32554	FBGN0052554	-0.27955	-0.04053	-0.3615	-0.12249
CG13982	FBGN0031811	0.524442	-0.19412	0.735764	0.017201
Mst77Y-16Psi	FBGN0085494	-0.53959	0.04587	-0.3581	0.227362
Atg10	FBGN0040780	-0.31644	0.060833	-0.28065	0.096623
asRNA:CR45126	FBGN0266619	-0.29096	0.099507	-0.07811	0.312357
bin	FBGN0045759	0.45567	0.276431	0.197932	0.018693
Cpr92A	FBGN0038714	0.558517	0.208964	0.426104	0.076552
Cpr11B	FBGN0030398	-0.78864	-0.37079	-0.5456	-0.12775
lncRNA:CR44197	FBGN0265086	-0.27778	0.101631	-0.09176	0.287651
lncRNA:CR43826	FBGN0264374	-0.86505	-0.67482	-0.28259	-0.09236
BBS9	FBGN0034622	-0.28017	-0.0973	-0.08812	0.094757
lncRNA:CR46095	FBGN0267764	-0.16457	-0.23068	0.13217	0.066064
CR31562	FBGN0051562	0.371358	0.516742	0.720277	0.865662
lncRNA:CR43853	FBGN0264435	0.313223	-0.13728	0.334396	-0.1161
CG12994	FBGN0040877	0.031334	-0.25765	0.28706	-0.00192
CG13641	FBGN0039239	-1.22807	0.450775	-1.00985	0.668999
CG11755	FBGN0037611	0.108073	0.248832	-0.02979	0.110973
P5CDh2	FBGN0053092	-0.33083	0.315912	-0.67089	-0.02414
lncRNA:CR45563	FBGN0267123	-0.2686	0.343025	-0.39408	0.217543
lncRNA:CR44754	FBGN0265967	0.310994	0.533465	-0.33952	-0.11705
lncRNA:CR44829	FBGN0266087	-0.57884	-0.46141	-0.46854	-0.35111
Burs	FBGN0038901	-0.45301	0.036065	-0.94712	-0.45804
lncRNA:CR43252	FBGN0262897	-0.34297	0.01266	-0.34344	0.012182
erm	FBGN0031375	0.279017	0.101694	0.213056	0.035734
yellow-e2	FBGN0038151	0.647289	0.355918	0.85616	0.564789
TwdlP	FBGN0039435	-0.25319	-0.19145	-0.05525	0.006492
mus81	FBGN0040347	-0.04212	0.339258	-0.24129	0.140084
CG5039	FBGN0039356	-0.39059	-0.0909	-0.354	-0.05431
CG43400	FBGN0263314	-0.98059	0.16487	-0.79459	0.350866
CG6813	FBGN0037923	-0.11005	-0.15012	-0.25413	-0.29421
TfIIA-S-2	FBGN0040338	-0.71406	-0.31836	-0.35288	0.042816
Tdc2	FBGN0050446	0.101495	-0.10448	0.274011	0.06804
E5	FBGN0008646	0.019129	-0.29431	0.019491	-0.29395
lncRNA:CR44365	FBGN0265496	0.09386	0.92212	-1.02715	-0.19889
lncRNA:CR45410	FBGN0266959	0.721942	0.906035	1.607758	1.79185
CG34112	FBGN0086608	-0.39355	0.063916	-0.81377	-0.35631
CG14219	FBGN0031033	-1.08896	-0.5883	-0.55032	-0.04966
GluRS-m	FBGN0036629	0.120009	-0.03034	0.027037	-0.12331
His-Psi:CR31616	FBGN0051616	-0.10149	0.441866	-0.88171	-0.33836
lncRNA:CR45025	FBGN0266383	-0.61432	-0.20518	-1.49868	-1.08954
PPO3	FBGN0261363	-0.46363	0.007861	-0.07583	0.395657
lncRNA:CR45959	FBGN0267621	-0.4667	-0.49749	0.109474	0.078686
Gr22c	FBGN0265138	-0.92328	0.019999	-2.78379	-1.84051
lncRNA:CR43830	FBGN0264378	-1.18457	0.039955	-0.5793	0.645227
CG11668	FBGN0038113	-0.05075	-0.23911	0.530218	0.341864
CG7179	FBGN0020880	-0.48764	1.197887	-0.41292	1.272603
CG14074	FBGN0036818	-0.12177	0.053624	-0.14973	0.02567
CG31871	FBGN0051871	0.401763	0.189925	0.380002	0.168164
Dlish	FBGN0034264	-0.21654	0.063378	-0.33651	-0.05659
lncRNA:CR43611	FBGN0263586	-0.0716	-0.05458	-0.11787	-0.10085
Claspin	FBGN0052251	-0.76068	0.310321	-1.09648	-0.02548
Hand	FBGN0032209	0.085691	0.322682	-0.49448	-0.25749
CG30484	FBGN0050484	0.040047	0.016711	0.113868	0.090531
CG11741	FBGN0040531	0.786119	-0.31812	1.017931	-0.0863
Cda4	FBGN0052499	-0.57857	-1.15442	-0.44425	-1.0201
Nse1	FBGN0031848	-0.1555	0.009326	-0.18573	-0.0209
CG13039	FBGN0036609	-0.26839	-0.0254	-0.46891	-0.22593
otk2	FBGN0267728	0.032701	0.048661	0.048642	0.064602
lncRNA:CR43144	FBGN0262620	0.352567	0.192922	0.575873	0.416228
Hus1-like	FBGN0026417	-0.38729	0.077978	-0.62911	-0.16385
Sfp33A4	FBGN0265349	-0.07149	-0.00588	-0.9754	-0.90978
CG14854	FBGN0038238	-0.3053	-0.17494	0.630133	0.760491
AstC-R1	FBGN0036790	0.308942	0.273856	0.554839	0.519753
lncRNA:CR45103	FBGN0266564	0.231463	-0.18582	0.425499	0.008212
Pdrg1	FBGN0033467	-0.39461	-0.02745	-0.33417	0.032987

CG42495	FBGN0260027	0.24242	0.07902	0.348488	0.185089
Doc3	FBGN0035954	-0.14565	-0.24829	-0.29594	-0.39858
CG30036	FBGN0050036	0.094014	0.242074	-0.53398	-0.38592
CG13040	FBGN0036608	0.162704	-0.0318	0.379419	0.184911
CG14054	FBGN0029596	0.371075	0.301354	0.140722	0.071
CG10481	FBGN0032827	0.109544	-0.03713	-0.00859	-0.15526
lncRNA:CR44161	FBGN0265044	-0.13166	0.091463	0.204261	0.427381
CG43095	FBGN0262541	0.124769	0.816294	0.120724	0.812249
lncRNA:CR45378	FBGN0266927	-0.1523	-1.02321	1.585869	0.714963
lncRNA:CR45286	FBGN0266824	0.289875	-0.40548	0.800737	0.105387
cuff	FBGN0260932	-0.0095	0.352287	-0.66476	-0.30297
CG44388	FBGN0265538	-0.00784	-0.20654	0.050298	-0.1484
Cyp308a1	FBGN0030949	-0.17432	-0.17995	0.5198	0.51417
CR46155	FBGN0267867	-2.14396	-0.01237	-2.885	-0.75341
CG34452	FBGN0085481	-0.46542	0.086254	-0.60219	-0.05051
CR6900	FBGN0030958	0.114478	0.100933	0.135424	0.12188
lncRNA:let7C	FBGN0263049	0.672874	0.416781	0.272757	0.016665
lncRNA:CR46271	FBGN0283428	-0.47615	-0.50095	-0.77917	-0.80397
CR31032	FBGN0051032	-0.32898	-0.13247	0.058135	0.254639
Nplp4	FBGN0040717	0.469851	-0.05701	0.318671	-0.20819
CG12869	FBGN0033943	0.524869	0.215092	0.585113	0.275337
lncRNA:CR45034	FBGN0266394	-0.14365	-0.19972	-0.0786	-0.13467
lncRNA:CR43640	FBGN0263649	0.063406	-0.24047	0.31107	0.007194
asRNA:CR44119	FBGN0264950	0.513469	0.174956	0.678166	0.339653
CG15170	FBGN0032733	-0.81706	0.160891	-0.92095	0.056999
Su(Ste):CR42410	FBGN0259841	-2.77997	0.254928	-1.1671	1.867801
CG15861	FBGN0035084	-0.12278	0.409158	-0.34084	0.191097
PIG-C	FBGN0035435	-0.11139	-0.10671	-0.17472	-0.17005
CG30280	FBGN0050280	0.008551	-0.01512	0.009353	-0.01432
CG30148	FBGN0050148	-0.07842	0.896618	-0.14355	0.831486
spn-B	FBGN0003480	-0.16444	-0.06456	-0.26351	-0.16364
lncRNA:CR43457	FBGN0263411	0.004638	-0.29151	0.179663	-0.11649
lncRNA:CR44166	FBGN0265051	-0.07802	-0.0386	-0.62637	-0.58695
tRNA:Ala-AGC-1-1	FBGN0051577	0.931399	-0.72061	0.726289	-0.92572
lncRNA:CR44316	FBGN0265375	0.261116	0.298213	-0.0603	-0.0232
CG8192	FBGN0034030	-0.201	0.124456	-0.1446	0.18086
Nox	FBGN0085428	0.279417	0.525175	0.061613	0.307371
CG11600	FBGN0038068	-0.35669	-0.16759	-0.73231	-0.54321
CG43773	FBGN0264295	0.157849	0.569981	-0.9396	-0.52747
CG14544	FBGN0039407	-0.56348	-0.07499	-0.37297	0.115522
CheB93b	FBGN0051438	-1.11495	-0.52538	-0.78854	-0.19897
CG13108	FBGN0032100	-0.21211	-0.19464	0.084702	0.102169
CheB38c	FBGN0032888	-0.81777	-0.35937	-0.14248	0.315918
lncRNA:CR44332	FBGN0265420	0.33517	-0.17585	-1.25447	-1.76549
C15	FBGN0004863	-0.10983	0.091777	-0.26678	-0.06517
CG34213	FBGN0085242	-0.17371	0.077052	0.156227	0.406989
CG30010	FBGN0050010	-0.10558	-0.29327	0.043517	-0.14417
CG13810	FBGN0035313	-0.29347	0.712795	-0.6084	0.397864
CG11825	FBGN0033519	0.16187	0.210886	0.356957	0.405973
lncRNA:CR45762	FBGN0267400	0.413731	-0.22939	-0.19714	-0.84026
Kif19A	FBGN0038205	-0.15604	-0.14213	0.169113	0.18302
lncRNA:CR46215	FBGN0267935	-0.25176	0.257273	0.75315	1.262181
lncRNA:CR46076	FBGN0267745	-0.33878	-0.23182	-0.97344	-0.86647
lz	FBGN0002576	0.425193	-0.01661	0.798131	0.356323
asRNA:CR44267	FBGN0265253	-0.35202	0.03751	-0.21287	0.176659
lncRNA:CR44226	FBGN0265157	-0.52861	0.089146	-0.89917	-0.28141
lncRNA:CR45279	FBGN0266817	-0.09021	0.095607	-0.01652	0.169293
BBS8	FBGN0031255	0.52102	0.127265	0.264597	-0.12916
fs(1)Ya	FBGN0000927	-0.27592	0.455644	0.16799	0.899557
CG14312	FBGN0038596	-0.58988	-0.0521	-0.64491	-0.10713
lncRNA:CR44326	FBGN0265414	-0.06477	-0.14154	-0.88789	-0.96466
CG15071	FBGN0034377	-0.71247	-0.26512	-0.45453	-0.00717
lncRNA:CR44900	FBGN0266205	0.041239	-0.08756	-0.07728	-0.20608
BoYb	FBGN0037205	-0.16365	-0.02562	-0.4565	-0.31847
lncRNA:CR45183	FBGN0266693	-0.75486	0.224302	-1.977	-0.99783
CG13408	FBGN0038929	-0.37296	0.328386	-0.30867	0.392683
CG15515	FBGN0039719	-0.44502	-0.29059	-0.71506	-0.56063
lncRNA:CR45824	FBGN0267474	0.19515	0.026219	-0.15182	-0.32075
CG8483	FBGN0038126	0.181995	0.466566	-0.56221	-0.27764

CG14079	FBGN0036849	-0.23534	0.403754	-0.77753	-0.13844
lncRNA:CR44823	FBGN0266070	-1.03838	-1.16122	1.275988	1.153149
IBIN	FBGN0265577	-1.77468	0.469512	-1.76891	0.475283
lncRNA:CR45793	FBGN0267443	-0.28247	0.449427	-0.45298	0.278912
Ir92a	FBGN0038789	-0.84352	-1.11263	1.896585	1.627476
lncRNA:CR44552	FBGN0265745	-0.5947	-0.276	-0.03325	0.285443
CG44341	FBGN0265429	0.323848	0.544572	-0.21772	0.003007
CG13842	FBGN0039009	0.211737	-0.24975	0.381261	-0.08022
CG31274	FBGN0051274	1.045013	0.355378	0.246018	-0.44362
CG7367	FBGN0031976	0.762785	-0.31118	1.388907	0.314938
CG5116	FBGN0039339	-0.34181	0.756086	-0.70312	0.394779
asRNA:CR43426	FBGN0263345	-0.21027	0.004645	0.363481	0.578393
ndl	FBGN0002926	-2.43786	-1.05982	-1.87581	-0.49777
CG2816	FBGN0031564	-0.17152	-0.25897	-0.09345	-0.1809
DIP-lambda	FBGN0267428	0.383421	0.066295	0.469855	0.15273
lectin-24Db	FBGN0040102	-0.53074	0.442221	-1.35408	-0.38112
Ttc26	FBGN0038358	-0.42815	-0.07845	-0.58474	-0.23504
sunn	FBGN0052088	-0.33814	-0.01184	-0.25304	0.073253
CG43149	FBGN0262679	-0.33941	-0.29797	-0.41695	-0.37551
lncRNA:CR45809	FBGN0267459	-0.77584	0.005233	-1.37499	-0.59391
asRNA:CR43868	FBGN0264460	-0.14825	0.22956	-0.82667	-0.44886
lncRNA:CR45562	FBGN0267122	-0.34417	0.031645	-0.11098	0.264836
Vsx2	FBGN0263512	-0.49194	0.175851	-0.45315	0.214644
CG32590	FBGN0052590	-0.18981	0.109708	-0.18857	0.11095
asRNA:CR45134	FBGN0266627	0.157923	-2.12738	2.944439	0.659133
lncRNA:CR45876	FBGN0267536	-0.81229	-0.28824	-0.90539	-0.38134
CG17658	FBGN0034924	-0.3041	0.605672	-0.56719	0.342581
lncRNA:CR43484	FBGN0263495	0.322218	0.256654	0.190547	0.124983
CR46421	FBGN0286921	-0.79444	-0.04768	-1.25833	-0.51157
CG13502	FBGN0034692	0.02908	0.169997	-0.14305	-0.00214
CG6299	FBGN0030641	0.880236	-0.34651	0.922312	-0.30443
Sse	FBGN0035627	-0.05126	-0.15366	-0.5063	-0.60871
Spn43Aa	FBGN0024294	0.585393	1.056917	0.127874	0.599398
lncRNA:CR45866	FBGN0267526	0.267158	0.203503	-0.41495	-0.4786
CG13744	FBGN0033363	1.378884	0.32807	0.607843	-0.44297
TkR86C	FBGN0004841	-0.14275	0.024851	-0.19285	-0.02525
CG30414	FBGN0050414	0.109408	0.169377	0.146506	0.206475
tj	FBGN0000964	-0.10484	-0.22045	-0.06275	-0.17835
CG34316	FBGN0085345	0.109402	0.061786	-0.0205	-0.06811
lncRNA:CR44564	FBGN0265757	-0.60497	-0.50865	-0.4157	-0.31938
CG42534	FBGN0260487	0.116102	-0.2975	0.200752	-0.21285
CG14115	FBGN0036343	0.362174	-3.08634	-0.96624	-4.41475
flz	FBGN0286782	0.300915	0.449512	0.071993	0.22059
lncRNA:CR43301	FBGN0262993	-0.35867	-0.03722	-0.32683	-0.00538
rpr	FBGN0011706	0.113917	-0.62525	0.060386	-0.67878
THG	FBGN0283659	0.25082	0.256913	-0.0032	0.002895
lncRNA:CR45226	FBGN0266753	-0.51863	0.305059	-0.45851	0.365183
CG12659	FBGN0040929	-0.21725	0.149238	-0.39288	-0.02638
fj	FBGN0000658	0.445403	-0.0601	0.177929	-0.32757
lncRNA:CR45224	FBGN0266751	-0.34137	0.350113	-0.73644	-0.04496
CG46430	FBGN0286933	-0.14889	-0.36272	-0.61614	-0.82997
asRNA:CR44201	FBGN0265096	-0.08722	-0.12547	-0.09451	-0.13276
Cht7	FBGN0035398	0.265303	-0.4459	0.742483	0.031283
CG15042	FBGN0030937	-0.06375	-0.16685	-0.3482	-0.4513
CR42786	FBGN0261857	-1.61474	0.00619	-1.65099	-0.03006
sing	FBGN0261245	0.197172	-0.93705	-0.21633	-1.35055
lncRNA:CR43917	FBGN0264518	-0.32436	0.154764	0.576342	1.055467
lncRNA:CR44943	FBGN0266248	-0.47657	-0.21957	-0.5664	-0.30941
lncRNA:CR43887	FBGN0264479	-0.58143	0.122421	-1.17215	-0.4683
His-Psi:CR31615	FBGN0051615	-0.01907	0.479324	-0.74788	-0.24949
CG31019	FBGN0051019	0.215039	0.067451	0.10426	-0.04333
lncRNA:CR44688	FBGN0265899	-0.47411	-0.52808	-0.22562	-0.2796
CG13622	FBGN0039202	0.378455	-0.24899	0.54475	-0.08269
CR45496	FBGN0267052	5.858615	1.256544	5.025095	0.423024
lncRNA:CR44678	FBGN0265889	0.007982	0.164502	-0.18431	-0.02779
hec	FBGN0030437	0.231492	0.220495	0.019294	0.008297
lncRNA:CR44515	FBGN0265708	-0.09871	0.169501	-0.30607	-0.03786
stet	FBGN0020248	0.018404	0.407185	-0.37284	0.015939
lncRNA:CR43285	FBGN0262974	-0.16285	-0.7291	-0.17762	-0.74386

lncRNA:CR46003	FBGN0267665	-1.18958	-0.33112	-0.76055	0.097905
obst-J	FBGN0036940	-0.003	0.190794	-0.14558	0.04822
lncRNA:CR43620	FBGN0263611	0.083523	-0.30848	0.450955	0.05895
lncRNA:CR43422	FBGN0263341	-0.54791	0.181516	-0.51254	0.21688
lncRNA:CR44077	FBGN0264886	6.086632	-0.33441	7.308319	0.887275
lncRNA:CR46253	FBGN0267986	0.981884	0.629908	-0.44432	-0.7963
lncRNA:CR43260	FBGN0262905	-0.77655	-0.56243	-0.46138	-0.24725
CG16786	FBGN0034974	-0.1533	-0.09793	0.125259	0.180625
Fign	FBGN0031519	-0.21195	-0.03168	-0.01479	0.165479
CR43213	FBGN0262849	-0.37664	-0.10227	-0.86439	-0.59003
lncRNA:CR44151	FBGN0265000	-0.19402	-0.08336	-0.38097	-0.27031
lncRNA:CR43607	FBGN0263582	-0.15275	0.083951	-0.37037	-0.13367
CG17219	FBGN0031494	-0.20572	0.085885	-0.27982	0.011784
rt	FBGN0003292	-0.00584	-0.48821	0.357391	-0.12497
CG13616	FBGN0039200	0.565841	-0.3933	0.379659	-0.57948
Cpr60D	FBGN0050163	-0.60828	-0.46762	-0.34579	-0.20514
lncRNA:CR42765	FBGN0261833	-0.24793	0.045385	-0.97022	-0.67691
asRNA:CR43259	FBGN0262904	0.406062	0.018103	0.106891	-0.28107
asRNA:CR42547	FBGN0260720	0.351813	0.097659	0.11082	-0.14333
Vajk2	FBGN0032538	0.39911	0.299475	0.304533	0.204898
CG17145	FBGN0036953	-1.93316	1.037151	-2.20036	0.769949
Ir51b	FBGN0050081	0.469518	0.158224	0.318519	0.007226
CG18649	FBGN0036469	-0.59315	-0.38673	-0.40057	-0.19414
CG32246	FBGN0052246	-0.36257	-0.25914	-0.57045	-0.46701
CG13230	FBGN0040764	-0.62253	0.154694	0.028497	0.805726
CG9184	FBGN0035208	0.50518	0.283033	0.457016	0.234869
ranshi	FBGN0037620	-0.20283	-0.08756	-0.06471	0.050556
CG13676	FBGN0035844	0.159746	-0.15615	0.610093	0.294193
lncRNA:CR44260	FBGN0265200	6.100873	-0.75008	-0.61164	-7.4626
CG9109	FBGN0031765	-0.50201	0.103275	-0.49258	0.112713
ste14	FBGN0036336	-0.2264	-0.19566	-0.13313	-0.10239
PK2-R2	FBGN0038139	-0.02873	-0.32083	0.328826	0.036725
CG13609	FBGN0039170	-0.00128	-0.26749	0.178046	-0.08816
lncRNA:CR45174	FBGN0266684	-0.70422	0.01659	-0.64448	0.076332
Cpr100A	FBGN0039805	0.179817	0.307365	-0.41251	-0.28496
lncRNA:CR43495	FBGN0263506	-0.34016	0.035842	-1.13764	-0.76163
CG15153	FBGN0032663	0.943478	0.64802	-0.25826	-0.55372
lncRNA:CR45953	FBGN0267615	-0.38012	-0.13852	-0.88895	-0.64735
CG42655	FBGN0261507	-0.25527	0.001284	-0.32251	-0.06596
CR18275	FBGN0029523	-0.12973	-0.46475	0.054724	-0.28029
IFT57	FBGN0031550	0.002476	0.408472	-0.26492	0.141078
CG4476	FBGN0035969	-0.17538	0.130274	-0.58945	-0.28379
CG33965	FBGN0053965	0.30512	-0.04907	0.300439	-0.05375
lncRNA:CR44442	FBGN0265635	-0.27449	-0.28305	-0.31005	-0.31861
hbn	FBGN0008636	-0.29112	-0.12856	0.169506	0.332073
lncRNA:CR44189	FBGN0265078	-2.58654	-0.00615	-2.45356	0.126837
Ste:CG33236	FBGN0053236	1.298221	-0.10643	0.065129	-1.33952
zuc	FBGN0261266	-0.00201	0.582567	-1.12823	-0.54365
CG11164	FBGN0030507	-0.42386	-0.10865	-0.48121	-0.16601
nmdyn-D6	FBGN0030573	0.15269	0.367625	-0.4285	-0.21357
CG42749	FBGN0261803	1.080078	1.160272	0.521456	0.60165
CG7248	FBGN0036229	1.301782	0.454538	4.035199	3.187954
CG12661	FBGN0030071	-0.27742	-0.12656	-0.50186	-0.35101
mt:ATPase8	FBGN0013673	-0.54528	-0.49605	-0.84005	-0.79082
cd	FBGN0263986	0.441435	-0.06461	0.270138	-0.2359
lncRNA:CR44557	FBGN0265750	-0.67856	0.08936	-0.85566	-0.08773
CG8960	FBGN0035315	-0.98307	0.130846	0.032371	1.146285
CG34261	FBGN0085290	-0.54373	-0.04031	-0.5652	-0.06178
Cp18	FBGN0000357	0.096734	-0.17036	0.305431	0.038336
lncRNA:CR45223	FBGN0266750	0.504214	-0.26154	0.879941	0.114185
lncRNA:CR44597	FBGN0265808	0.13863	0.611006	-0.58906	-0.11669
CG10927	FBGN0034360	-0.04689	0.218025	0.067625	0.332544
asRNA:CR45210	FBGN0266737	1.026712	-0.29035	1.58052	0.263459
ftz	FBGN0001077	-0.03846	0.543123	0.146219	0.727805
Gr97a	FBGN0041224	1.800945	0.702525	1.601884	0.503464
lncRNA:CR44526	FBGN0265719	-0.51109	0.527309	-1.2376	-0.1992
CR46273	FBGN0283430	-0.02304	0.313521	0.199468	0.536024
lncRNA:CR41601	FBGN0085812	-0.31348	-0.41433	-0.43091	-0.53176
snRNA:LU	FBGN0263847	0.608558	0.126919	2.202572	1.720933

lncRNA:CR43840	FBGN0264392	1.855995	-0.11236	2.084418	0.116062
CG31612	FBGN0051612	-0.70744	-0.21157	-0.76671	-0.27084
nau	FBGN0002922	-0.10582	-0.09742	-0.15009	-0.14169
RNaseMRP:RNA	FBGN0065098	0.324068	0.501029	-0.20736	-0.03039
CG4194	FBGN0025627	0.471274	0.440605	0.328449	0.29778
CG6763	FBGN0039069	-0.24065	-0.53629	-0.05186	-0.34751
CG18765	FBGN0042110	0.194626	0.345576	-0.30455	-0.1536
CG10073	FBGN0034440	-0.16676	-0.99833	-0.55682	-1.38839
CG34149	FBGN0083985	-0.29212	-0.01584	-0.30167	-0.02539
lncRNA:CR44853	FBGN0266147	-1.00383	0.34361	-1.16927	0.178173
CG11437	FBGN0037165	-0.31523	0.13254	-0.33182	0.115957
CG6683	FBGN0035902	-0.30572	-0.14681	-0.36679	-0.20788
CG43156	FBGN0262686	-0.06945	0.917878	0.014969	1.002294
Cht6	FBGN0263132	-0.47856	0.048757	0.059296	0.586612
CG43192	FBGN0262821	-0.01401	-0.15125	0.018184	-0.11906
snRNA:7SK	FBGN0065099	-0.53266	0.160083	-0.5808	0.111941
Or67b	FBGN0036019	-2.04422	-0.11258	-1.34578	0.585867
lncRNA:CR45322	FBGN0266861	-0.3854	0.316701	-0.96188	-0.25978
ppk21	FBGN0039675	2.171928	-0.0373	-0.90319	-3.11242
CG13692	FBGN0031254	-0.54402	0.437113	-0.76572	0.215414
CG12885	FBGN0039523	0.504004	0.225655	-0.05214	-0.33049
lncRNA:CR44299	FBGN0265345	-0.04936	0.077836	0.562362	0.689562
lncRNA:CR45652	FBGN0267212	0.217573	-0.33339	0.43191	-0.11905
CG1231	FBGN0035134	0.158447	-0.12853	0.725026	0.438051
fd102C	FBGN0039937	0.488365	0.24812	0.765479	0.525233
CG14961	FBGN0035439	0.14089	0.259823	0.046395	0.165328
lncRNA:CR43651	FBGN0263660	0.057986	-0.04685	0.299829	0.194993
CG8916	FBGN0030707	-0.42876	-0.37219	-0.11752	-0.06094
Cpr49Ag	FBGN0033730	0.522747	-0.79411	1.520397	0.20354
lncRNA:CR45316	FBGN0266855	-4.25613	-2.87322	-2.23138	-0.84846
lncRNA:CR44617	FBGN0265828	-1.34743	-0.51885	-1.1052	-0.27661
lncRNA:CR44241	FBGN0265176	-0.76113	-0.04089	-0.54761	0.172635
CG34332	FBGN0085361	-0.62155	0.102639	-0.84422	-0.12003
lncRNA:CR31044	FBGN0051044	-0.116	-0.13769	0.067012	0.045322
Ret	FBGN0011829	0.437488	0.23691	0.533302	0.332724
lncRNA:CR45752	FBGN0267316	0.337219	-0.33531	1.882349	1.209817
CG13694	FBGN0031219	0.342103	-0.1713	0.471842	-0.04156
Muc12Ea	FBGN0052602	-0.11248	0.746128	-0.90606	-0.04745
lncRNA:CR45983	FBGN0267645	0.562897	0.551446	-0.88158	-0.89303
CG3119	FBGN0031466	-0.69392	-0.18896	-1.48432	-0.97936
CG42566	FBGN0260768	-0.33567	-0.3482	-0.10676	-0.11929
CG11699	FBGN0030311	3.712805	2.021755	-1.89293	-3.58398
Mur89F	FBGN0038492	0.324193	0.239011	0.604877	0.519694
asRNA:CR45815	FBGN0267465	-0.37759	-0.74315	0.009149	-0.3564
CG5245	FBGN0038047	-0.50983	0.361233	-0.7009	0.170166
lncRNA:CR43435	FBGN0263383	0.795013	-0.09754	0.303318	-0.58924
Ir76b	FBGN0036937	-0.61115	-0.43554	0.199271	0.374879
lncRNA:CR45357	FBGN0266897	-0.20692	-0.06569	-0.41305	-0.27183
asRNA:CR43464	FBGN0263441	0.14058	0.091823	-0.24169	-0.29045
asRNA:CR45326	FBGN0266865	-0.74567	-1.22621	0.519032	0.038492
CecC	FBGN0000279	-2.58477	-1.0512	-3.37716	-1.84358
lncRNA:CR43768	FBGN0264268	-0.72675	-0.77147	-0.35973	-0.40445
Ipod	FBGN0030187	0.321081	0.142047	1.191472	1.012438
Alp8	FBGN0034712	0.770255	0.806344	0.783924	0.820013
grn	FBGN0001138	-0.05936	-0.27882	0.023101	-0.19636
lncRNA:CR46078	FBGN0267747	-4.18989	0.798567	-7.39916	-2.41071
lncRNA:CR46229	FBGN0267949	-1.22629	-0.02838	-2.73483	-1.53691
CG13775	FBGN0031874	0.03556	0.169207	-0.07923	0.05442
lncRNA:CR44856	FBGN0266150	-0.69658	-0.65863	0.256613	0.29457
lncRNA:CR43719	FBGN0263872	-0.24289	0.005388	-1.12305	-0.87477
CG9826	FBGN0034784	1.547812	1.070731	-1.00175	-1.47883
CG45012	FBGN0266364	0.411657	0.134006	-0.34043	-0.61808
CG42524	FBGN0260429	0.181545	0.116449	0.322524	0.257429
lncRNA:CR44927	FBGN0266232	-0.93065	-0.24327	-0.17193	0.515439
bap	FBGN0004862	0.020832	0.070105	-0.01575	0.033526
lncRNA:CR44066	FBGN0264875	-0.44705	0.358314	-1.82585	-1.02048
Cpr78Cc	FBGN0037069	0.052081	0.645766	0.165602	0.759287
CG17781	FBGN0039196	-0.44645	0.338875	0.626358	1.411683
lncRNA:CR44940	FBGN0266245	-0.02563	1.013334	-1.51298	-0.47401

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lncRNA:CR44229	FBGN0265160	0.007875	-0.46455	-4.92884	-5.40127
ppk8	FBGN0052792	3.194021	1.778336	0.41568	-1.00001
lncRNA:CR43941	FBGN0264569	0.657894	0.292548	0.699828	0.334482
lncRNA:CR45984	FBGN0267646	-0.14698	0.335164	-0.42916	0.052992
Art9	FBGN0038188	-0.18935	0.292283	-0.56067	-0.07904
CG13806	FBGN0035325	-0.39642	0.120349	-0.36059	0.156175
CG10280	FBGN0037395	3.415797	1.480924	1.154927	-0.77995
asRNA:CR44137	FBGN0264986	0.810463	0.103555	0.873241	0.166333
lncRNA:CR45897	FBGN0267557	-0.49564	-0.69628	1.518235	1.317599
CG30287	FBGN0050287	0.96257	2.299519	-0.91614	0.420814
CG5285	FBGN0038490	-0.37838	-0.37424	-0.07047	-0.06632
CG30383	FBGN0050383	-0.5995	-0.31747	-0.47088	-0.18884
Fer3	FBGN0037937	-0.56385	-0.21484	-0.39059	-0.04158
lncRNA:CR44016	FBGN0264786	-0.2263	-0.79841	-0.62457	-1.19668
Pbp45	FBGN0038371	-0.20387	0.028673	0.100304	0.332846
lncRNA:sphinx	FBGN0083990	-0.29622	-0.2445	-0.14972	-0.098
lncRNA:CR44817	FBGN0266052	0.529264	-0.18823	0.755975	0.038479
CG11458	FBGN0040637	-1.34173	0.596772	1.109164	3.047667
CG14662	FBGN0037291	-0.1407	-0.56011	-0.06042	-0.47983
lncRNA:CR44200	FBGN0265095	0.006966	0.071165	0.114547	0.178746
Urm1	FBGN0053276	-0.19814	-0.27142	0.017939	-0.05534
Osi13	FBGN0037422	0.093074	-0.03571	-0.32694	-0.45572
lncRNA:CR44369	FBGN0265500	-0.45847	-0.27959	-0.45866	-0.27978
CG18746	FBGN0042103	0.06571	0.332593	-0.15068	0.116208
Osi9	FBGN0037416	-0.21739	0.175279	-0.67448	-0.28181
d	FBGN0262029	0.114008	-0.39117	0.353271	-0.15191
Gr39a	FBGN0264556	0.996344	-0.04086	1.185614	0.148406
CG34328	FBGN0085357	-0.301	0.048035	-0.29515	0.053889
CG32079	FBGN0052079	-0.38118	-0.17207	-0.74686	-0.53775
lncRNA:CR46259	FBGN0267992	0.072843	0.32842	-1.00845	-0.75288
lncRNA:CR45306	FBGN0266844	1.031191	0.876134	-0.4807	-0.63576
lncRNA:TS11	FBGN0267269	1.359522	0.182947	1.100693	-0.07588
lncRNA:CR43298	FBGN0262990	-0.33109	-1.40582	-0.60498	-1.67971
CG13894	FBGN0035157	0.209416	-0.35416	0.106824	-0.45675
fd59A	FBGN0004896	0.262763	0.133511	0.353856	0.224604
lncRNA:CR45688	FBGN0267248	1.901235	-0.87274	2.385252	-0.38873
CG34302	FBGN0085331	-0.52265	-0.24724	-0.47427	-0.19885
vilya	FBGN0283545	-0.46891	-0.17032	-0.35845	-0.05987
CG14253	FBGN0039467	0.457717	-0.01781	0.249509	-0.22601
lncRNA:CR43250	FBGN0262895	0.794737	-0.1245	0.68892	-0.23032
lncRNA:CR45619	FBGN0267179	-7.19909	0	-0.44944	6.610262
lncRNA:CR44935	FBGN0266240	-0.44014	-0.22342	-0.7479	-0.53117
asRNA:CR45834	FBGN0267484	-0.68153	-0.16544	-0.47308	0.043001
lncRNA:CR45229	FBGN0266764	0.024356	-0.56142	-0.33316	-0.91894
CG31792	FBGN0051792	-0.14866	0.23355	-0.54853	-0.16633
CR43216	FBGN0262852	0.231976	1.116691	-0.3826	0.502112
B-H1	FBGN0011758	-0.53785	0.029694	-0.53964	0.0279
CG15563	FBGN0039832	-0.86146	-0.52209	0.100896	0.44027
CCKLR-17D1	FBGN0259231	0.121949	-0.00479	0.233931	0.107194
Cpr65Ec	FBGN0035737	1.009595	-0.15228	1.341993	0.180115
asRNA:CR45131	FBGN0266624	-0.20667	0.230994	0.085612	0.523274
lncRNA:CR45502	FBGN0267058	-0.23595	-0.05346	0.426737	0.609228
slx1	FBGN0037263	-0.36212	-0.18584	-0.53451	-0.35823
lncRNA:CR44614	FBGN0265825	0.14447	0.105831	0.16891	0.13027
lncRNA:CR45346	FBGN0266885	-1.68087	0.090159	-2.14502	-0.37399
CG12003	FBGN0035234	-0.12761	-0.11149	0.024302	0.040428
DNApol-alpha50	FBGN0011762	-0.4618	-0.11693	-0.31291	0.031965
CG18764	FBGN0042205	0.043064	0.148215	0.054845	0.159996
lncRNA:CR46009	FBGN0267673	0.007728	0.010851	-0.43595	-0.43283
CG10051	FBGN0034437	0.603427	0.96534	-0.63112	-0.26921
CG14787	FBGN0027793	0.288481	-0.30974	0.098299	-0.49992
snoRNA:Psi18S-1275	FBGN0086663	-0.41167	-0.36353	-0.02117	0.026962
CG32037	FBGN0052037	-0.87867	-0.43857	-0.2539	0.186201
CG43647	FBGN0263656	0.370611	0.433708	0.093242	0.15634
lncRNA:CR44612	FBGN0265823	-1.03789	2.915317	-3.60224	0.350969
CG7341	FBGN0036777	0.162728	0.22167	0.049716	0.108658
lncRNA:CR43819	FBGN0264367	-0.49276	-0.7372	0.233613	-0.01083
CG42591	FBGN0260968	-0.15599	-0.0879	-0.42622	-0.35813

CG17283	FBGN0038505	1.729932	-0.36163	1.135776	-0.95579
ppk26	FBGN0035785	-0.03595	0.059149	0.007342	0.102444
lncRNA:CR43452	FBGN0263406	1.409707	0.044244	1.090022	-0.27544
lncRNA:CR45963	FBGN0267625	-0.37205	-0.29378	-0.04378	0.034491
lncRNA:CR43409	FBGN0263328	-0.7629	-0.68433	-0.17315	-0.09458
ems	FBGN0000576	-0.21931	0.050629	0.15337	0.423313
CG14406	FBGN0030595	0.45123	-1.05956	1.230353	-0.28044
CR15345	FBGN0040928	-0.50083	0.231806	-0.36595	0.366689
Ugt302K1	FBGN0040251	-0.07375	0.690431	0.37367	1.137853
asRNA:CR45149	FBGN0266642	-0.81492	-0.19552	-0.68593	-0.06653
CG11374	FBGN0031214	-0.10776	-0.11486	-0.12361	-0.13071
CG3038	FBGN0040373	-0.35124	0.006595	-0.01508	0.342751
lncRNA:CR44349	FBGN0265449	-0.63928	-0.24067	-0.46442	-0.06581
lncRNA:CR45972	FBGN0267634	0.477943	0.122411	0.519259	0.163726
lncRNA:CR44191	FBGN0265080	-0.98518	-0.31799	-0.56867	0.098517
CG13049	FBGN0036592	0.762172	0.291746	0.674653	0.204228
CG14104	FBGN0040786	0.20229	0.241366	0.013688	0.052764
lncRNA:CR45358	FBGN0266898	-1.09128	-0.98228	-0.12939	-0.0204
Ugt37C2	FBGN0040262	-0.05494	0.07622	-0.31289	-0.18173
lncRNA:CR43432	FBGN0263380	0.186817	-0.33658	0.610466	0.08707
LManIII	FBGN0032066	0.162027	0.201499	0.465238	0.50471
CG8172	FBGN0033362	-0.0383	0.151253	0.045635	0.235185
GluRIIB	FBGN0020429	-0.37941	0.080551	0.316061	0.77602
asRNA:CR44192	FBGN0265081	0.412723	0.568723	-0.68872	-0.53272
lncRNA:CR43496	FBGN0263507	0.002555	0.004374	-0.45709	-0.45527
upd3	FBGN0053542	-0.52858	1.079429	-0.9827	0.625302
dec-1	FBGN0000427	0.179978	0.414234	-0.41197	-0.17771
Gr64a	FBGN0045479	-0.05635	-0.1279	0.914303	0.842755
CG1074	FBGN0037250	0.00882	0.079939	-0.24794	-0.17682
lncRNA:CR45383	FBGN0266932	0.079831	0.033957	-0.01888	-0.06475
CG44954	FBGN0266259	0.263378	0.589975	-0.73739	-0.41079
lncRNA:CR45038	FBGN0266398	0.193911	0.550684	-0.36476	-0.00799
CG43070	FBGN0262480	-0.43484	-0.08768	-0.59083	-0.24366
CG11760	FBGN0037615	0.324989	-0.51975	1.05628	0.211545
CR44003	FBGN0264745	-0.51765	-0.54821	0.355003	0.324443
CR14578	FBGN0260469	0.159719	-0.14423	0.299366	-0.00459
lncRNA:CR43977	FBGN0264708	-0.39713	-0.27444	0.103932	0.226619
lncRNA:CR44373	FBGN0265511	-0.88461	-0.26144	-1.54531	-0.92215
Orc1	FBGN0286788	-0.39624	-0.00962	-0.05145	0.335172
CG5592	FBGN0035645	-0.02145	-1.77E-05	-0.04225	-0.02081
asRNA:Eig63F-2	FBGN0004911	-0.12198	-0.5517	0.01149	-0.41823
lncRNA:CR45922	FBGN0267582	-0.27247	0.456297	-1.0057	-0.27692
asRNA:CR31845	FBGN0051845	-0.05247	-0.34383	0.378146	0.086783
CG32532	FBGN0052532	0.760318	0.062054	0.84095	0.142685
lncRNA:CR45576	FBGN0267136	0.113182	-0.22155	0.483711	0.148982
CG15473	FBGN0029719	0.515543	0.644354	0.733696	0.862507
Rcp	FBGN0030801	-0.11477	-0.18977	0.010223	-0.06477
lncRNA:CR45323	FBGN0266862	-0.85634	-0.28652	-0.89549	-0.32568
CG4576	FBGN0038366	-0.32584	-0.02405	-0.2101	0.091683
CG13689	FBGN0031270	-0.12343	-0.09188	0.086151	0.1177
prc	FBGN0028573	-0.25288	-0.10495	-0.80781	-0.65988
CG4424	FBGN0038765	-0.18294	-0.20168	-0.1708	-0.18954
CG14304	FBGN0038629	-0.38438	-0.59144	-0.48532	-0.69239
lncRNA:CR44561	FBGN0265754	0.110895	0.522049	-0.11032	0.300829
Loxl2	FBGN0034660	-0.02458	-0.11419	-0.06345	-0.15305
CG11693	FBGN0037570	-0.24083	-0.58266	0.685623	0.343798
CG42561	FBGN0260763	0.240851	0.327542	0.406138	0.492829
lncRNA:CR44745	FBGN0265958	-0.16651	0.236525	-0.35526	0.047778
lncRNA:CR41352	FBGN0083994	-1.89417	-1.87354	-0.18744	-0.16681
lncRNA:CR44662	FBGN0265873	0.088035	-0.32372	0.307139	-0.10461
CG42366	FBGN0259712	-0.56269	-0.5157	-0.14199	-0.095
snoRNA:Psi18S-531	FBGN0083027	0.25817	0.072148	0.194141	0.008119
dan	FBGN0039286	0.341471	-0.1207	0.581332	0.119156
dimm	FBGN0023091	-0.99509	-1.15245	0.008693	-0.14867
lncRNA:CR44419	FBGN0265592	0.725275	-0.05988	0.264474	-0.52068
lncRNA:CR43421	FBGN0263340	1.001335	0.429085	-0.98287	-1.55511
CG6244	FBGN0036531	-0.36214	-0.06262	-0.35882	-0.0593
CG14752	FBGN0033307	-0.20888	0.137071	-0.98273	-0.63678
lncRNA:CR44573	FBGN0265766	-0.563	0.218109	-1.27322	-0.49211

CG13056	FBGN0040794	-0.12218	0.114786	-0.05236	0.18461
CR41243	FBGN0085570	-0.46096	0.006755	-1.1326	-0.66488
lncRNA:CR44317	FBGN0265376	0.52447	-0.31993	0.415331	-0.42907
ru	FBGN0003295	-0.07516	-0.21115	0.31742	0.181438
b6	FBGN0024897	0.345329	-0.21974	0.321554	-0.24351
lncRNA:CR44033	FBGN0264825	-0.06826	-0.98258	0.976997	0.062674
lncRNA:CR45059	FBGN0266419	-0.67066	1.529692	-0.68883	1.511517
fln	FBGN0005633	-1.40516	-0.38531	-1.15476	-0.1349
lncRNA:CR42651	FBGN0261503	-0.06561	-0.00786	-0.14224	-0.08449
CG14340	FBGN0031302	0.013119	-0.04446	0.399799	0.342223
lncRNA:CR34024	FBGN0054024	-4.77151	-1.0457	-5.46769	-1.74188
CG8870	FBGN0038144	-0.41723	0.413629	-0.41545	0.415408
snoRNA:83E4-5	FBGN0261006	-0.10099	0.900862	-0.30424	0.697611
lncRNA:CR46130	FBGN0267805	-0.80307	-0.88739	-0.56248	-0.6468
CG16723	FBGN0039092	-0.37358	-0.58107	-0.11651	-0.32401
lncRNA:CR43653	FBGN0263662	-0.34367	-0.06392	0.10413	0.383883
lncRNA:CR46211	FBGN0267930	-1.16233	-0.8637	-0.31928	-0.02065
lncRNA:CR45228	FBGN0266763	0.516779	-0.59193	0.749644	-0.35907
Ir100a	FBGN0039879	0.617322	-0.28899	0.441724	-0.46458
CG15544	FBGN0039804	0.415157	-0.18586	0.463767	-0.13725
CG6118	FBGN0038339	-0.43018	-0.62924	1.455044	1.255981
CG33500	FBGN0053500	-1.88793	-0.88489	-1.0192	-0.01615
dsf	FBGN0015381	-0.09884	-0.25414	0.283608	0.128304
CG33177	FBGN0053177	0.148648	-0.74701	0.311469	-0.58419
lncRNA:CR45788	FBGN0267438	-1.64924	-0.92512	-0.50864	0.215471
CG12708	FBGN0030666	-0.21915	1.187385	-0.83847	0.568064
lncRNA:CR45303	FBGN0266841	-0.15767	-0.31769	-0.06518	-0.2252
lncRNA:CR44318	FBGN0265377	1.868549	0.824501	0.08931	-0.95474
CG11626	FBGN0038705	0.826227	-0.16843	2.099862	1.105201
CG13251	FBGN0037014	0.43081	-0.16892	0.635203	0.035468
asRNA:CR44130	FBGN0264961	0.011551	-0.11587	-0.17811	-0.30553
lncRNA:CR45180	FBGN0266690	-0.50549	-0.31038	-0.44251	-0.24739
lncRNA:CR46237	FBGN0267957	-0.76995	-0.55149	-0.73191	-0.51345
CG32712	FBGN0052712	-0.1515	-0.33483	-0.08521	-0.26854
lncRNA:CR45406	FBGN0266955	-0.48522	-0.07753	-0.9393	-0.53161
TTLL3A	FBGN0031854	-0.91009	0.181752	-0.7348	0.357043
lncRNA:CR44963	FBGN0266278	-0.68874	-0.1481	-0.84357	-0.30293
m	FBGN0002577	-0.53294	-0.16552	-1.25618	-0.88877
mtSSB	FBGN0010438	-0.12138	0.04276	0.017154	0.181291
ppk19	FBGN0039679	-4.6883	-4.21912	-0.77462	-0.30544
lncRNA:CR44687	FBGN0265898	0.816572	0.077903	0.826996	0.088328
CAH8	FBGN0038956	0.138148	0.15883	0.037938	0.05862
PH4alphaNE1	FBGN0039780	-0.12702	0.187763	0.487508	0.802294
CG34244	FBGN0085273	0.70011	-0.10359	0.540894	-0.26281
lncRNA:CR44481	FBGN0265674	0.76005	0.406794	0.901739	0.548483
snk	FBGN0003450	0.341669	0.522533	-0.69554	-0.51468
CG17279	FBGN0038850	-0.71341	-0.61512	-0.28628	-0.18799
lncRNA:CR46024	FBGN0267688	-0.79295	-0.51915	-0.45943	-0.18563
lncRNA:CR43858	FBGN0264440	-1.69075	-0.14166	-6.0851	-4.53601
lncRNA:CR33942	FBGN0062961	-0.53395	-0.37627	-0.51278	-0.3551
CG8089	FBGN0033993	0.242388	0.751004	-0.1659	0.342712
CR42546	FBGN0260719	0.537849	-0.03485	0.54738	-0.02532
Cpr50Ca	FBGN0033867	0.288424	-0.06546	0.447674	0.093786
Nap1	FBGN0015268	0.069505	-0.30758	0.194492	-0.1826
CG13223	FBGN0033599	0.111156	-0.07504	-0.16748	-0.35367
CG43232	FBGN0262877	0.088203	0.16641	0.025173	0.10338
lncRNA:CR43334	FBGN0286827	0.004976	0.473974	-0.08661	0.382389
CG3437	FBGN0035998	-0.20817	-0.18343	0.202076	0.226818
Lsm10	FBGN0033554	0.000782	-0.11292	-0.16993	-0.28363
asRNA:CR44892	FBGN0266197	0.550227	0.063078	0.51583	0.028681
Loxl1	FBGN0039848	-0.62856	0.051444	-0.67376	0.006246
lncRNA:CR44756	FBGN0265977	0.967001	0.810502	0.349401	0.192902
snoRNA:Psi28S-3571	FBGN0082954	0.820969	0.605729	0.738689	0.523448
CG9521	FBGN0030588	-1.48802	-0.25923	-1.39142	-0.16262
asRNA:CR43159	FBGN0262689	-0.44395	0.569375	-1.18089	-0.16757
lncRNA:CR44759	FBGN0265980	0.107622	1.768895	-0.507	1.154272
CG10005	FBGN0037972	0.490662	0.269935	0.330986	0.110259
lncRNA:CR44283	FBGN0265310	-0.8538	0.002173	-0.43703	0.418938
lncRNA:CR45047	FBGN0266407	0.148737	-0.30784	0.347707	-0.10887

CG13085	FBGN0032780	0.015457	-0.05508	0.048611	-0.02193
CG34030	FBGN0054030	-0.11151	-0.00123	-0.16845	-0.05817
lncRNA:CR46239	FBGN0267959	-0.17101	0.511959	-0.69212	-0.00915
lncRNA:CR45362	FBGN0266902	-0.60952	-0.16513	-0.85782	-0.41343
lncRNA:CR45394	FBGN0266943	-1.97709	0.077235	-2.58264	-0.52832
CG32163	FBGN0052163	-0.3697	-0.08911	-0.42681	-0.14622
Mipp2	FBGN0026060	0.432569	0.496303	0.347567	0.411301
CG15047	FBGN0030938	-0.58041	-0.08574	-0.88064	-0.38596
AdoR	FBGN0039747	0.595771	-0.15002	0.66477	-0.08102
BBS4	FBGN0033578	0.271813	0.015139	0.235817	-0.02086
lncRNA:CR46353	FBGN0286033	-0.18754	0.32012	-0.59957	-0.09191
CG18367	FBGN0034460	0.298175	0.217891	-0.73925	-0.81953
Gr59b	FBGN0045482	-0.29591	0.306361	-0.39925	0.203012
CG32814	FBGN0052814	-1.78308	-0.3536	-1.51884	-0.08936
lncRNA:CR45599	FBGN0267159	-0.55193	-0.06039	-0.4798	0.011737
CG40298	FBGN0058298	-0.16225	0.323348	-0.67038	-0.18478
lncRNA:CR45904	FBGN0267564	0.739975	-0.22481	0.689543	-0.27524
asRNA:CR45683	FBGN0267243	-0.35152	-0.26476	-0.3458	-0.25904
CG46397	FBGN0286875	0.701764	0.212731	0.752406	0.263373
Gr94a	FBGN0041225	0.798131	0.421716	0.113855	-0.26256
sad	FBGN0003312	0.266675	0.144665	0.098972	-0.02304
CG10864	FBGN0038621	0.405824	-0.16929	0.890133	0.315022
CG6788	FBGN0030880	-0.71391	-0.07734	-0.42612	0.210452
lncRNA:CR44758	FBGN0265979	-0.60586	0.940808	-0.63671	0.909954
CG32668	FBGN0052668	-0.20946	-0.21119	0.096122	0.09439
lncRNA:CR44171	FBGN0265060	0.17109	-0.15208	0.661874	0.338706
Pop5	FBGN0036696	-0.33251	-0.11554	-0.22569	-0.00872
lncRNA:CR45236	FBGN0266771	-0.94087	0.280551	0.45873	1.680154
Arl6	FBGN0034446	-0.11407	0.01479	0.367003	0.495862
snoRNA:Me28S-A1322	FBGN0015543	0.589086	0.09242	0.927659	0.430993
knk	FBGN0001321	0.204526	-0.68842	0.580366	-0.31258
CG18563	FBGN0032639	-0.81186	0.142435	0.098139	1.052433
CG42781	FBGN0261849	-0.27787	0.161883	-0.48348	-0.04372
asRNA:CR45330	FBGN0266869	-2.21685	0.568441	-3.46591	-0.68062
lncRNA:CR44566	FBGN0265759	0.419639	-0.17914	0.970732	0.371957
CG5079	FBGN0039346	0.634496	-0.27396	1.409968	0.501517
CG31922	FBGN0051922	-0.11149	0.338761	-0.2454	0.204848
Sirt6	FBGN0037802	-0.36616	-0.07115	-0.12216	0.172854
asRNA:CR44205	FBGN0265103	0.098461	0.085897	-0.366	-0.37856
lncRNA:CR44366	FBGN0265497	0.310323	0.048995	0.095698	-0.16563
CG6933	FBGN0036952	0.200512	0.745854	-1.09055	-0.54521
Kr	FBGN0001325	0.049846	-0.04188	-0.00433	-0.09605
CG17110	FBGN0039050	-0.21185	-0.43199	0.114025	-0.10612
lncRNA:CR46242	FBGN0267962	-0.08134	-1.42236	2.195307	0.854285
lncRNA:CR45811	FBGN0267461	0.000553	0.116726	-0.46076	-0.34459
CG14443	FBGN0029880	-0.28116	-0.17459	-0.25463	-0.14806
CG7714	FBGN0038645	-0.08171	-0.44458	2.954068	2.59119
lncRNA:CR44671	FBGN0265882	0.270456	0.064717	0.451106	0.245366
lncRNA:CR44039	FBGN0264831	0.217427	0.168917	0.206243	0.157733
lncRNA:CR45249	FBGN0266784	-0.20516	0.247797	-0.68153	-0.22857
lncRNA:CR43498	FBGN0263509	0.042574	0.133587	0.271548	0.362561
CG13445	FBGN0036532	-0.98197	0.264426	-3.57076	-2.32437
CG43288	FBGN0262980	-0.36026	0.081049	-0.44263	-0.00132
lncRNA:CR44306	FBGN0265365	0.382773	-0.14408	0.985974	0.459121
CR12842	FBGN0033131	-0.33389	-0.36888	0.083681	0.048681
CG10814	FBGN0033830	-2.21159	-1.39591	-0.88569	-0.07002
lncRNA:CR44395	FBGN0265545	0.701101	0.061136	0.389688	-0.25028
lncRNA:CR44845	FBGN0266139	0.321126	-0.2279	-0.29314	-0.84217
lncRNA:CR44497	FBGN0265690	-0.01389	-0.29014	-0.14064	-0.41689
TfAP-2	FBGN0261953	-0.04542	-0.0948	0.09623	0.046856
CG17147	FBGN0260393	-2.11337	-0.84839	-1.20617	0.05881
Him	FBGN0030900	0.06492	-0.36455	0.13062	-0.29885
lncRNA:CR44488	FBGN0265681	4.855019	1.21918	4.276678	0.640839
CG5897	FBGN0036220	-0.89573	0.597873	-0.76138	0.732225
lncRNA:CR44387	FBGN0265537	-1.05866	0.010451	-0.93508	0.134033
scw	FBGN0005590	1.537499	1.32851	-1.66547	-1.87446
Muc68Ca	FBGN0036181	-0.05871	0.013489	0.535241	0.607437
CG33468	FBGN0053468	-1.08414	0.569995	-0.44498	1.20915
lncRNA:CR44757	FBGN0265978	0.032719	0.039144	-0.70865	-0.70222

CG34382	FBGN0085411	0.628427	0.306251	-0.08027	-0.40245
lncRNA:CR43412	FBGN0263331	-0.83557	-1.9995	0.838351	-0.32557
ouib	FBGN0037618	0.255676	-0.27481	0.228487	-0.302
lncRNA:CR46131	FBGN0267806	-0.14567	-0.15612	-0.26217	-0.27261
CR45495	FBGN0267051	-0.71133	-0.18889	-0.5526	-0.03017
cid	FBGN0040477	-0.14298	-0.08336	-0.3403	-0.28069
CR43211	FBGN0262847	-0.58946	-0.14029	-1.03159	-0.58242
lncRNA:CR43289	FBGN0262981	-0.32878	-0.12906	-0.34415	-0.14443
lncRNA:CR44143	FBGN0264992	0.039717	-0.18664	0.127251	-0.0991
CG2678	FBGN0014931	0.255637	0.474437	0.449334	0.668134
lncRNA:CR44074	FBGN0264883	-1.49897	-1.18638	-3.91435	-3.60176
CG14483	FBGN0034248	-0.24073	-0.43124	0.357219	0.166714
CR43364	FBGN0263096	-0.13349	0.000373	1.16294	1.296801
CG15696	FBGN0038833	-0.2072	-0.70683	0.104281	-0.39534
GstE14	FBGN0033817	-0.20331	-0.05514	-0.03855	0.109621
dmrt99B	FBGN0039683	-0.71154	-0.31873	-0.48118	-0.08837
CG18537	FBGN0034323	-0.90164	-0.71609	-0.555	-0.36944
lncRNA:CR45220	FBGN0266747	0.150371	0.285829	-0.76825	-0.63279
CG8117	FBGN0030663	-0.33277	-0.07084	-0.76981	-0.50787
lncRNA:CR46148	FBGN0267827	-3.34517	0.103284	-0.53391	2.914546
CG44622	FBGN0265833	-1.38838	-0.55999	-0.71475	0.113644
snRNA:U11	FBGN0083987	-1.39593	-0.14346	-1.37085	-0.11837
lncRNA:CR45422	FBGN0266971	-0.64365	-0.46378	-0.51428	-0.33442
lncRNA:CR42858	FBGN0262105	0.02147	-0.32593	0.011783	-0.33562
CG11345	FBGN0035546	5.845374	2.193145	6.362093	2.709864
CR32496	FBGN0052496	-0.65981	-0.05948	-0.68349	-0.08316
lncRNA:CR44281	FBGN0265308	0.217866	-0.10931	0.080699	-0.24647
lncRNA:CR44379	FBGN0265529	2.289915	-0.36901	2.114593	-0.54433
CG15484	FBGN0032452	-0.40843	-0.27783	-0.3215	-0.1909
CR31054	FBGN0051054	0.434759	-0.00433	0.935524	0.496437
CG44329	FBGN0265417	-0.14881	0.337785	-0.5365	-0.0499
lncRNA:CR44710	FBGN0265921	0.171259	0.713054	0.031832	0.573627
CG14247	FBGN0039454	-0.25168	0.192982	0.170648	0.615312
SpdS	FBGN0037723	-0.46623	-0.40877	-0.40052	-0.34306
asRNA:CR43820	FBGN0264368	-1.00115	-1.04098	-0.97018	-1.01001
PPO1	FBGN0283437	-0.33471	0.146305	-0.07707	0.403942
Hsp67Ba	FBGN0001227	0.017043	0.219457	-0.20878	-0.00637
CR45933	FBGN0267595	0.822228	0.270137	0.373285	-0.17881
CG33253	FBGN0030992	-0.90636	-0.56197	0.058886	0.40328
Klp54D	FBGN0263076	-0.16507	-0.1117	0.214878	0.268252
CG13047	FBGN0036594	6.409541	-0.25813	0.542508	-6.12516
CG33474	FBGN0053474	0.753356	0.319175	0.585023	0.150842
sea	FBGN0037912	0.083949	-0.34022	0.377657	-0.04651
lncRNA:CR44904	FBGN0266209	-0.31087	0.009681	-0.47505	-0.1545
lncRNA:CR46022	FBGN0267686	1.413728	-0.76733	2.063279	-0.11778
lncRNA:CR43882	FBGN0264474	-0.01045	0.006765	-0.18727	-0.17006
Zip42C.1	FBGN0033096	-0.43822	-0.16069	-0.24842	0.029109
Osi14	FBGN0040279	0.037867	0.210493	0.042039	0.214666
CG15820	FBGN0035312	-0.4115	-0.34629	2.559309	2.624519
CheB53a	FBGN0261292	0.445332	-0.8497	0.696993	-0.59804
lncRNA:CR44578	FBGN0265789	-0.78452	0.103333	-0.22427	0.663583
CR45497	FBGN0267053	-0.68889	-0.23732	-0.5549	-0.10333
asRNA:CR43898	FBGN0264496	0.41646	1.355319	0.539989	1.478848
asRNA:CR46089	FBGN0267758	-0.34669	-0.23988	-0.55693	-0.45012
CR31700	FBGN0051700	-0.79786	-0.68574	-0.13124	-0.01912
lncRNA:CR44221	FBGN0265152	-0.83912	0.181347	-1.97148	-0.95101
lncRNA:CR44947	FBGN0266252	-0.49771	0.541136	-1.60394	-0.56509
asRNA:CR44047	FBGN0264839	-0.43177	-0.15489	0.084808	0.361689
Hmx	FBGN0264005	0.523626	0.185548	0.539718	0.20164
CG44869	FBGN0266163	-2.8762	-2.90738	0.606486	0.575301
CG34305	FBGN0085334	0.216568	0.589669	-1.07057	-0.69747
lncRNA:CR46122	FBGN0267797	-0.52238	-0.14697	-0.56095	-0.18554
lncRNA:CR45004	FBGN0266356	0.221904	0.083694	0.192313	0.054104
asRNA:CR44030	FBGN0264822	0.119971	0.121228	0.07857	0.079827
lncRNA:CR43408	FBGN0263327	0.10134	0.344528	-0.42694	-0.18375
CG11498	FBGN0039749	-0.46515	-0.69729	0.104245	-0.12789
lncRNA:CR45353	FBGN0266893	0.291018	0.474693	-0.82761	-0.64393
gcm	FBGN0014179	-0.09788	-0.61288	-0.19624	-0.71124
CR46420	FBGN0286920	-0.75273	-0.14102	-1.20763	-0.59592

CG15478	FBGN0029955	0.245225	-0.00478	0.605177	0.355167
lncRNA:CR45651	FBGN0267211	-1.01573	0.045099	-0.2931	0.767729
CG33062	FBGN0053062	0.078292	-0.11385	0.061949	-0.13019
lncRNA:CR46019	FBGN0267683	0.175782	-0.23167	0.51457	0.107119
lncRNA:CR46110	FBGN0267779	0.117896	0.078839	0.687178	0.648121
Spt	FBGN0033348	-0.37992	-0.452	0.249463	0.177384
Pif1B	FBGN0046874	0.225803	0.061998	0.453837	0.290033
Ugt35E1	FBGN0040253	0.479837	0.671034	-0.3716	-0.18041
lncRNA:CR44895	FBGN0266200	0.154089	0.319073	-0.01781	0.147175
CG45218	FBGN0266745	-0.01452	-0.22057	0.2772	0.071151
lncRNA:CR43863	FBGN0264445	0.076249	0.270722	-0.10125	0.093219
lncRNA:CR45172	FBGN0266682	-0.09699	-0.24426	-0.03638	-0.18365
lncRNA:CR44196	FBGN0265085	-0.06785	-0.03687	0.011417	0.042395
CG14512	FBGN0039639	-0.17594	-0.02333	-0.3488	-0.1962
asRNA:CR43936	FBGN0264564	-0.65686	-0.33441	-1.01844	-0.696
lncRNA:CR45537	FBGN0267097	-0.1886	0.147295	0.028173	0.364069
lncRNA:CR44602	FBGN0265813	-0.62022	-0.05032	0.401237	0.971136
lncRNA:CR45979	FBGN0267641	-0.25632	0.088313	-0.29873	0.045899
asRNA:CR43864	FBGN0264446	-0.10765	-0.48992	-0.21014	-0.59241
lncRNA:CR45324	FBGN0266863	0.481779	0.026005	0.617054	0.16128
lncRNA:CR44133	FBGN0264982	-1.57023	-0.41824	-0.40172	0.750276
lncRNA:CR44206	FBGN0265104	0.882173	0.765178	0.420022	0.303027
PRY	FBGN0267489	-0.09063	-0.11839	-0.15557	-0.18333
CG14044	FBGN0031650	-0.18434	-0.2431	0.317304	0.258539
CG4328	FBGN0036274	-0.04851	-0.10245	0.036924	-0.01702
CG44303	FBGN0265362	-0.12166	0.240847	-0.03024	0.332266
lncRNA:CR45294	FBGN0266832	-0.25158	-0.07569	-0.69269	-0.5168
CG43315	FBGN0263020	-1.48537	-1.00882	-1.00422	-0.52767
CG6951	FBGN0036959	-0.16395	-0.05446	-0.29932	-0.18983
lncRNA:CR43904	FBGN0264505	-0.08617	-0.07833	-0.16651	-0.15868
snoRNA:Or-CD8	FBGN0086061	0.945316	0.514734	0.833016	0.402433
lncRNA:CR44939	FBGN0266244	-0.1451	-0.10952	-0.12849	-0.0929
CR33013	FBGN0053013	-0.25542	0.278463	-0.74223	-0.20836
CG33269	FBGN0053269	-0.27509	0.213818	-1.22621	-0.7373
Nepl20	FBGN0039613	0.464845	-0.61402	1.388385	0.309523
Vha16-4	FBGN0262513	-0.1526	-0.00586	-0.34501	-0.19827
CR6434	FBGN0036972	-1.82525	-0.30615	-2.99579	-1.4767
lncRNA:CR44230	FBGN0265161	-0.17812	0.07826	-0.46429	-0.20791
CG30375	FBGN0050375	0.323607	-0.31175	0.541234	-0.09412
CG30289	FBGN0050289	-0.03655	-0.24228	0.78669	0.58096
CG17191	FBGN0039473	1.361607	1.893453	-2.18317	-1.65132
mey	FBGN0039851	1.069245	0.683823	0.051521	-0.3339
lncRNA:CR44695	FBGN0265906	-0.14944	-0.76072	0.063066	-0.54822
lncRNA:CR45521	FBGN0267077	-0.65205	-0.30982	-0.16528	0.176956
rhi	FBGN0004400	-0.52813	-0.00094	-0.67708	-0.14989
CR46402	FBGN0286880	-1.95082	-2.08101	-1.02484	-1.15503
Rpp21	FBGN0053082	0.276723	-0.00147	0.468518	0.190323
CG12519	FBGN0036872	0.732143	0.204419	0.950712	0.422987
lncRNA:CR44802	FBGN0266037	-0.27635	0.152093	-1.23378	-0.80534
lncRNA:CR45245	FBGN0266780	-0.81691	-0.38973	-0.54852	-0.12135
CR45498	FBGN0267054	-0.66609	-0.19688	-0.55728	-0.08808
CG14357	FBGN0038204	-1.41801	-0.53453	-1.2903	-0.40683
ppk25	FBGN0053349	0.041528	0.297862	0.164285	0.420619
CG43678	FBGN0263761	-0.39376	-0.32677	-0.46625	-0.39926
CG6974	FBGN0038285	-0.73246	-0.65571	-0.97882	-0.90207
lncRNA:CR44730	FBGN0265943	0.778153	0.659396	-1.49655	-1.6153
CG33267	FBGN0053267	0.091618	-0.02911	0.637403	0.516673
CG43919	FBGN0264540	0.178819	0.164944	-0.15048	-0.16435
CG43445	FBGN0263399	3.221417	-0.0378	0.501945	-2.75727
lncRNA:CR44694	FBGN0265905	-0.04224	-0.63458	0.386086	-0.20625
lncRNA:CR44983	FBGN0266318	-1.09907	-0.54239	-0.52547	0.031205
CG8568	FBGN0030841	-0.62578	-0.57092	-0.5588	-0.50394
CG14856	FBGN0038261	0.932516	-0.01399	1.201447	0.254946
lncRNA:CR44484	FBGN0265677	-0.19002	0.525055	-1.04823	-0.33316
lncRNA:CR45692	FBGN0267256	-1.72698	-1.40303	-2.63912	-2.31517
CR44839	FBGN0266102	0.081451	0.122867	0.045714	0.087131
lncRNA:CR46238	FBGN0267958	-1.61047	-0.60932	-1.09655	-0.09541
IFT54	FBGN0038221	0.209708	0.196133	0.199704	0.186129
Tsp47F	FBGN0033629	-0.39748	-0.28724	-0.01428	0.095958

CG5235	FBGN0036565	-0.04138	0.016429	0.234688	0.292499
CG45060	FBGN0266430	0.464648	0.754574	-0.53375	-0.24382
lncRNA:CR44903	FBGN0266208	1.097079	0.663853	1.086397	0.653171
asRNA:CR43957	FBGN0264617	0.128202	0.016937	-0.066	-0.17727
CG13474	FBGN0036439	-0.53908	-0.18933	-0.60903	-0.25928
lncRNA:CR44801	FBGN0266036	-1.33042	-0.61517	-0.93276	-0.21751
lncRNA:CR46036	FBGN0267703	0.256298	0.152611	0.25188	0.148193
asRNA:CR46128	FBGN0267803	0.069963	0.026549	0.276003	0.232588
CG13578	FBGN0035000	-0.71497	-0.0873	-0.04468	0.582994
btd	FBGN0000233	-0.17055	0.158098	-0.02899	0.299653
c(2)M	FBGN0028525	-0.28895	0.08834	-0.48193	-0.10464
lncRNA:CR44347	FBGN0265447	0.30356	0.421487	0.144478	0.262406
betaNACtes5	FBGN0262163	-0.71712	-0.21183	-1.1007	-0.59541
CG18754	FBGN0042106	-0.39053	-0.01314	0.076034	0.453424
CG34375	FBGN0085404	-0.10452	-0.38205	0.17532	-0.10221
asRNA:CR45620	FBGN0267180	0.901253	-0.10283	1.038238	0.034157
lncRNA:CR45199	FBGN0266726	-0.51154	-0.19588	-0.90187	-0.58621
28SrRNA-Psi:CR45855	FBGN0267515	0.691055	0.734988	0.119991	0.163923
CG13055	FBGN0036583	0.476929	0.244782	0.368764	0.136617
lncRNA:CR43983	FBGN0264715	1.085898	0.000169	0.311717	-0.77401
CG43703	FBGN0263842	0.272468	0.006388	0.313422	0.047342
Myo81F	FBGN0267431	-0.65775	-0.31024	-0.183	0.164512
lncRNA:CR46039	FBGN0267706	0.024217	0.349784	-0.38397	-0.05841
Karl	FBGN0030334	-0.02567	0.311325	-0.31198	0.025008
lncRNA:CR45973	FBGN0267635	0.304513	0.324155	-0.46035	-0.44071
Gr28a	FBGN0041247	0.648887	0.941398	-1.97608	-1.68357
lncRNA:CR44669	FBGN0265880	-0.25369	-0.23436	-0.88363	-0.8643
lncRNA:CR45193	FBGN0266703	-0.76006	-0.40819	-0.1781	0.173782
Tsp42Ep	FBGN0033137	-0.6223	-0.19416	-0.53946	-0.11133
lncRNA:CR44518	FBGN0265711	-0.99672	-0.00397	-1.44265	-0.44989
lncRNA:CR45390	FBGN0266939	-0.41975	-0.39052	-0.4937	-0.46447
lncRNA:CR43943	FBGN0264571	-0.1779	0.130631	0.32987	0.638399
lncRNA:CR43270	FBGN0262951	-0.03839	0.590611	-0.3058	0.323199
lncRNA:CR44441	FBGN0265634	1.087732	0.019859	1.23255	0.164677
Osi2	FBGN0037410	0.036622	0.051238	-0.18537	-0.17075
HP1Lcsd	FBGN0263084	-0.45624	-0.24241	-0.52287	-0.30904
lncRNA:CR43988	FBGN0264720	0.126121	0.023392	-0.21986	-0.32259
CG32453	FBGN0052453	-1.58846	0.260723	-4.63888	-2.7897
lncRNA:CR46118	FBGN0267787	-0.57864	0.483894	-0.32901	0.733521
lncRNA:CR44670	FBGN0265881	-0.03278	0.103343	0.257772	0.393898
CR41509	FBGN0085792	0.296087	0.081649	0.300918	0.08648
lncRNA:CR45579	FBGN0267139	-0.4848	0.596136	0.419956	1.500897
CG9483	FBGN0032072	-0.24691	-0.06003	-0.80881	-0.62192
CG14420	FBGN0029643	-0.25927	-1.01167	1.022278	0.269882
CG5883	FBGN0036225	0.499454	-0.12852	-0.06654	-0.69452
CG32603	FBGN0052603	-0.35359	-0.35787	-0.39208	-0.39636
CG33557	FBGN0053557	0.01059	-0.38963	-0.05193	-0.45215
lncRNA:CR44978	FBGN0266313	0.691277	0.157259	0.14697	-0.38705
Vsx1	FBGN0263511	0.440225	-0.1324	0.701931	0.129308
lncRNA:CR45901	FBGN0267561	0.375743	-0.18383	0.898267	0.338691
CheA84a	FBGN0261290	-0.42496	-0.2267	-0.09193	0.106327
asRNA:CR44704	FBGN0265915	-0.28844	0.563158	-0.26958	0.582015
lncRNA:CR44944	FBGN0266249	-0.26453	-0.08876	0.35143	0.527201
lncRNA:CR45675	FBGN0267235	0.812331	-0.17755	1.47287	0.482991
Su(Ste):CR42422	FBGN0259853	-1.34454	-0.27092	-0.821	0.252617
CG6142	FBGN0039415	-0.04166	-0.11433	0.233656	0.160993
lncRNA:CR33987	FBGN0053987	-0.72092	-0.49888	-0.45344	-0.2314
skl	FBGN0036786	0.122934	-0.26489	0.461225	0.073404
Sgs5bis	FBGN0038523	-2.14923	-0.16762	-2.24607	-0.26446
CR43671	FBGN0263746	0.243157	-0.02513	0.564477	0.296186
CG13615	FBGN0039199	0.27632	0.257711	-0.70782	-0.72642
Su(Ste):CR42426	FBGN0259857	-1.71977	-0.09404	-1.10277	0.522968
lncRNA:CR44203	FBGN0265098	1.458437	1.867248	0.448553	0.857363
lncRNA:CR46241	FBGN0267961	-0.29157	-0.36775	0.248848	0.172662
lncRNA:CR45267	FBGN0266805	-0.54631	-0.39549	0.122952	0.27377
CG15369	FBGN0030105	0.017939	-1.42718	0.477755	-0.96737
lncRNA:CR44973	FBGN0266308	-0.39542	0.00802	-0.45228	-0.04885
CheB38a	FBGN0067312	-1.57824	-1.85819	-0.10395	-0.38391
lncRNA:CR43890	FBGN0264482	1.454455	0.744116	-0.38729	-1.09763

BBS5	FBGN0037280	-0.26876	0.468605	0.052531	0.789894
lncRNA:CR45006	FBGN0266358	-2.34351	3.929715	-6.89173	-0.61851
lncRNA:CR45711	FBGN0267275	-1.02596	-0.31905	0.927002	1.63392
CG30096	FBGN0050096	-0.21302	-0.17276	-0.14488	-0.10461
mt:tRNA:Ala-TGC	FBGN0013689	-0.48917	0.093549	-2.43657	-1.85386
lncRNA:CR45977	FBGN0267639	-1.524	-2.09034	-0.30364	-0.86998
fs(1)M3	FBGN0005390	-0.19042	-0.57059	0.374941	-0.00522
CG15597	FBGN0037420	0.185646	0.20233	0.089047	0.10573
lncRNA:CR43717	FBGN0263870	-0.65189	0.272425	-0.38984	0.534476
asRNA:CR45104	FBGN0266565	0.863636	0.590478	-0.1715	-0.44466
lncRNA:CR45432	FBGN0266981	0.178985	-0.30188	0.532926	0.052059
lncRNA:CR43907	FBGN0264508	-0.1463	-0.33271	0.446182	0.25977
CG13045	FBGN0036596	1.253501	0.067372	0.710089	-0.47604
CG42296	FBGN0259192	0.283889	0.170574	0.342454	0.229139
lncRNA:CR44080	FBGN0264889	0.268141	-0.87168	0.597036	-0.54279
CR43669	FBGN0263744	-0.25401	0.086855	-0.11647	0.22439
CheA86a	FBGN0261291	-0.64107	-1.11653	-0.12969	-0.60514
CG12849	FBGN0035068	-2.87896	1.693958	-3.60508	0.967833
Hr4	FBGN0264562	0.111301	-0.15656	0.230664	-0.0372
GstD7	FBGN0010043	-0.24465	-0.16995	-0.09677	-0.02208
CG13437	FBGN0034541	-0.44061	-0.18492	-0.39547	-0.13978
lncRNA:CR44145	FBGN0264994	0.164621	0.401193	-0.0642	0.172373
CG30195	FBGN0050195	-0.44527	-0.0799	-0.55621	-0.19083
Acp1	FBGN0014454	-0.79034	-0.16947	-0.29856	0.322318
CG33339	FBGN0053339	-0.19544	-0.12012	0.126389	0.20171
lncRNA:CR44453	FBGN0265646	0.886204	-0.38876	0.857339	-0.41762
lncRNA:CR44775	FBGN0266001	-0.97553	0.166396	-0.8886	0.253325
Ids	FBGN0035445	-0.16895	-0.12643	0.006402	0.048925
CG31454	FBGN0051454	-0.27366	0.063305	-1.09274	-0.75578
dah	FBGN0015926	-0.60892	0.147288	-1.3515	-0.59529
Uhg8	FBGN0083120	-0.23302	0.05501	-0.19009	0.097943
lncRNA:CR44277	FBGN0265304	-1.03464	-0.20257	-0.61336	0.218717
swa	FBGN0003655	-0.11273	-0.29149	0.128098	-0.05066
lncRNA:CR46212	FBGN0267932	-0.17925	-0.36503	-0.184	-0.36977
ppk20	FBGN0039676	2.080763	0.779781	0.12379	-1.17719
CG4835	FBGN0035607	-0.14882	-0.53119	0.151467	-0.23091
asRNA:CR44018	FBGN0264788	0.701963	-0.19914	0.742439	-0.15867
lncRNA:CR45888	FBGN0267548	-0.93459	-0.45353	-0.76427	-0.2832
CG7509	FBGN0035575	-0.38487	0.136535	0.070962	0.592369
Mcm7	FBGN0020633	0.192254	0.426195	0.13346	0.367401
CR45934	FBGN0267596	0.626139	0.070853	0.608851	0.053566
CG13053	FBGN0040801	0.118216	-0.10809	0.441488	0.215179
CG14958	FBGN0035413	-0.2049	-0.23939	0.217916	0.183424
lms	FBGN0034520	0.323673	-0.34513	0.292223	-0.37658
lncRNA:CR45533	FBGN0267089	0.403583	-0.20085	0.50712	-0.09731
lncRNA:CR44310	FBGN0265369	-0.23155	-0.29039	-1.61117	-1.67001
lncRNA:CR45290	FBGN0266828	-0.04733	-0.32822	0.935529	0.654634
CG13705	FBGN0035582	-0.61452	-0.31403	-0.77745	-0.47696
CAH6	FBGN0039838	0.258349	0.484575	-0.43987	-0.21364
CG32507	FBGN0052507	-0.40272	-0.2716	-0.41309	-0.28198
lncRNA:CR46247	FBGN0267969	0.931418	-1.1876	1.117309	-1.00171
CG11041	FBGN0034481	-0.04801	-0.4799	0.491974	0.060079
asRNA:CR45999	FBGN0267661	0.124195	0.221154	-0.06472	0.032236
lncRNA:CR41257	FBGN0085582	-0.59412	-0.38769	-1.42044	-1.21401
lncRNA:CR43893	FBGN0264485	-0.37606	-0.15255	-0.29699	-0.07349
Six4	FBGN0027364	9.06E-05	0.218192	-0.26117	-0.04307
rec	FBGN0003227	0.030464	-0.23265	0.235219	-0.0279
CG32260	FBGN0052260	0.30455	-0.04333	0.859646	0.511763
CG13690	FBGN0031252	-0.21567	0.899392	-1.66864	-0.55358
CG14518	FBGN0039621	-0.42809	-0.39317	-0.45811	-0.42318
lncRNA:CR46106	FBGN0267775	-0.37716	-1.45437	0.73012	-0.34709
opa	FBGN0003002	0.383923	0.14338	0.215242	-0.0253
CG14459	FBGN0037171	0.490897	-0.14975	0.333575	-0.30707
CG10050	FBGN0037492	-0.20149	-0.2017	-0.03507	-0.03528
Pkg21D	FBGN0000442	0.402855	0.018278	0.068109	-0.31647
Nxf3	FBGN0263232	0.212259	-0.13274	0.265205	-0.07979
lncRNA:CR45582	FBGN0267142	-0.89583	-0.99037	-0.0052	-0.09975
CG15169	FBGN0032734	-0.51692	-0.36182	0.347328	0.502428
CG14451	FBGN0037183	-0.23363	-0.10997	-0.23152	-0.10787

lncRNA:CR46125	FBGN0267800	0.09564	0.005157	-0.27624	-0.36673
CG13837	FBGN0039042	-0.38113	0.733978	0.369684	1.484794
CR31958	FBGN0051958	-0.50712	-0.63922	-0.04758	-0.17967
lncRNA:CR44068	FBGN0264877	-0.36718	-0.02534	-0.44417	-0.10233
lncRNA:CR43804	FBGN0264348	-0.22557	0.048862	-0.50248	-0.22805
CG12164	FBGN0033158	-0.31049	-0.23458	0.083963	0.15987
lncRNA:CR45448	FBGN0267004	5.994954	0.325077	6.986152	1.316275
CG15725	FBGN0030417	1.087014	-0.04674	1.213346	0.079589
Gr59f	FBGN0041234	-0.04013	-0.18154	0.191648	0.050239
lncRNA:CR44767	FBGN0265992	-1.13654	0.166758	-0.95484	0.348456
lncRNA:CR46113	FBGN0267782	-1.18724	-0.2522	-1.03514	-0.10009
Cpr92F	FBGN0038819	-0.87247	-0.48601	-0.40142	-0.01496
lncRNA:CR44826	FBGN0266073	-1.73073	-0.80528	-0.08239	0.84307
lncRNA:CR45301	FBGN0266839	-1.21799	-0.29992	0.26815	1.186221
lncRNA:CR45940	FBGN0267602	-0.82599	-0.11433	-1.70725	-0.9956
Cad88C	FBGN0038247	0.426798	-0.2533	0.163446	-0.51665
lncRNA:CR45484	FBGN0267040	-0.62459	-0.6392	-0.40754	-0.42214
CG15080	FBGN0034391	2.234781	1.120793	1.916438	0.80245
lncRNA:CR44827	FBGN0266074	2.341182	0.635597	1.261344	-0.44424
wisp	FBGN0260780	-0.24157	-0.19507	-0.16616	-0.11966
CR45391	FBGN0266940	0.827092	-0.89401	0.064871	-1.65623
mei-218	FBGN0002709	-0.61911	0.613773	-0.75836	0.474525
lncRNA:CR45957	FBGN0267619	-0.08432	-0.03067	-0.74722	-0.69358
CG43109	FBGN0262569	-0.71577	-0.27176	0.722745	1.166761
CG31559	FBGN0051559	-0.29663	0.043628	0.002072	0.34233
Dbx	FBGN0261723	0.02886	-0.25006	0.533039	0.254115
lncRNA:CR44858	FBGN0266152	-0.41988	-0.0265	-0.73623	-0.34285
asRNA:CR44069	FBGN0264878	0.019524	0.083021	-0.41166	-0.34816
CG11370	FBGN0037181	-0.65014	1.086883	-1.36492	0.372099
asRNA:CR45804	FBGN0267454	-0.21521	-0.20717	-0.10831	-0.10027
lncRNA:CR43704	FBGN0263843	-0.29481	-0.32127	-0.07411	-0.10057
mei-W68	FBGN0002716	-0.00336	-0.05639	0.079994	0.02696
exp	FBGN0033668	0.304193	-0.18887	0.694135	0.201073
lncRNA:CR43262	FBGN0262943	-0.19394	-0.06443	0.545879	0.675384
lncRNA:TS27	FBGN0284420	0.34959	0.40639	-0.29051	-0.23371
CG15617	FBGN0034151	0.2074	0.468808	-0.06765	0.193761
lncRNA:CR44555	FBGN0265748	-0.10353	0.136506	-0.45385	-0.21382
asRNA:ASTR	FBGN0263619	0.016098	0.851427	-0.60622	0.229113
CG17994	FBGN0033072	-0.53991	-0.29814	-0.0991	0.142669
CG33784	FBGN0053784	0.800201	0.435357	-1.58546	-1.9503
lncRNA:CR46041	FBGN0267708	0.53814	-0.26007	0.154953	-0.64326
CR45879	FBGN0267539	0.14297	0.015226	0.225718	0.097974
lncRNA:CR44218	FBGN0265149	-0.92582	-0.04947	-1.32941	-0.45306
Ugt49B2	FBGN0038886	-0.2571	-0.10024	0.023538	0.180396
CG17801	FBGN0038550	-0.59295	0.487322	-1.49503	-0.41475
asRNA:CR44054	FBGN0264863	0.526355	0.049879	-0.2857	-0.76217
Blos3	FBGN0085284	-0.46807	-0.43366	-0.10098	-0.06657
lncRNA:CR43258	FBGN0262903	0.28115	-0.26109	0.347655	-0.19459
Tehao	FBGN0026760	0.490551	0.312252	-0.30465	-0.48295
lncRNA:CR44487	FBGN0265680	0.07746	0.064885	0.000473	-0.0121
CG13748	FBGN0033355	-0.15228	0.17156	-0.40509	-0.08125
lncRNA:CR43862	FBGN0264444	-0.99093	-0.44024	-2.45119	-1.9005
lncRNA:CR43631	FBGN0263622	-0.19787	0.17617	0.446767	0.820806
CG13313	FBGN0035941	0.081826	0.24042	-0.03541	0.123183
lncRNA:CR43837	FBGN0264385	-0.31761	0.069922	-0.21857	0.168965
lncRNA:CR45921	FBGN0267581	-0.10375	0.117036	-0.41641	-0.19562
CG33469	FBGN0053469	-1.19555	0.09103	-0.8294	0.45718
CG43376	FBGN0263206	0.124888	0.09344	0.054051	0.022603
lncRNA:TS4	FBGN0284413	-1.0456	-0.50942	-0.26264	0.273527
asRNA:CR43466	FBGN0263443	-0.29182	-0.12685	-0.52525	-0.36028
CG42577	FBGN0260867	-0.72254	0.319181	-0.58311	0.458618
CG31269	FBGN0051269	-0.04165	0.134569	0.065729	0.241947
Vajk3	FBGN0028544	1.3054	0.78772	1.284315	0.766636
lncRNA:CR45961	FBGN0267623	0.314855	0.007918	-0.27451	-0.58145
lncRNA:CR45414	FBGN0266963	-0.385	-0.81428	-0.89346	-1.32275
lncRNA:CR43648	FBGN0263657	0.592421	0.148276	-0.28702	-0.73117
asRNA:CR46136	FBGN0267811	0.016061	0.406223	0.057697	0.447859
CG7568	FBGN0039673	-0.57804	0.021548	-0.95172	-0.35213
lncRNA:CR44781	FBGN0266008	0.259195	0.583322	-0.64203	-0.3179

lncRNA:CR44673	FBGN0265884	-0.24207	0.477389	-0.41895	0.300518
lncRNA:CR43486	FBGN0263497	-1.02763	-0.97991	-0.72923	-0.68151
lncRNA:CR44594	FBGN0265805	-0.35822	-0.43883	0.637803	0.557187
CG17601	FBGN0031197	-0.03551	-0.27546	-0.19172	-0.43167
png	FBGN0000826	-0.23992	-0.05038	-0.00814	0.181405
CG45063	FBGN0266433	0.166668	0.126029	-0.04401	-0.08465
lncRNA:CR44503	FBGN0265696	0.147521	-0.05785	-0.5974	-0.80278
lncRNA:CR46124	FBGN0267799	-0.01701	-0.24681	0.010256	-0.21954
CR45931	FBGN0267593	0.275434	-0.0333	0.187939	-0.1208
CG14331	FBGN0038510	0.244004	0.266414	0.553788	0.576198
lncRNA:CR44278	FBGN0265305	0.196247	0.208525	-0.00264	0.00964
mt:tRNA:Leu-TAG	FBGN0013698	-1.06122	0.292497	-2.01908	-0.66536
CG11786	FBGN0039264	-0.27604	0.051727	-1.32796	-1.00019
Spn100A	FBGN0039795	1.813268	0.221268	2.32095	0.72895
CG9133	FBGN0035198	-0.28384	-0.25616	-0.04601	-0.01834
lncRNA:CR44319	FBGN0265378	-0.1185	0.354932	0.060163	0.533597
bsh	FBGN0000529	0.252629	-0.55537	0.476754	-0.33125
Gr28b	FBGN0045495	0.399347	0.189425	0.092159	-0.11776
Cib2	FBGN0034558	-0.00051	0.01899	0.017615	0.037115
CG5157	FBGN0036575	0.084838	0.283763	-0.74836	-0.54943
CG13377	FBGN0261446	0.207293	0.136854	-0.43936	-0.5098
lncRNA:CR44199	FBGN0265088	-0.97973	-0.94318	-0.06869	-0.03214
Gsc	FBGN0010323	0.226253	0.00414	0.005005	-0.21711
lncRNA:CR45261	FBGN0266799	0.329458	0.035765	1.36798	1.074287
CG13560	FBGN0034899	0.728791	3.437382	3.898409	6.607001
Tsen2	FBGN0051812	-0.11992	0.06367	-0.2385	-0.0549
lncRNA:CR44979	FBGN0266314	-1.21795	-1.04038	-0.01513	0.162442
lncRNA:CR44918	FBGN0266223	0.647482	0.315174	0.266972	-0.06534
lncRNA:CR44789	FBGN0266024	-3.69036	1.631186	0.008894	5.330438
lncRNA:CR45523	FBGN0267079	-1.051	0.551984	-1.11998	0.483009
lncRNA:CR45336	FBGN0266875	0.470935	-0.63323	0.835279	-0.26889
Obp83cd	FBGN0046878	0.202338	-0.09132	0.067286	-0.22637
lncRNA:CR44022	FBGN0264792	0.037196	0.00457	0.576229	0.543604
CG11384	FBGN0040363	0.379479	0.339515	-1.00802	-1.04798
CR43727	FBGN0263975	0.187282	-0.44895	0.61527	-0.02096
lncRNA:CR44899	FBGN0266204	0.278097	0.100289	0.287244	0.109436
lncRNA:CR44136	FBGN0264985	0.0486	0.180723	-0.05673	0.075396
lncRNA:CR43641	FBGN0263650	-0.27794	-0.15789	-0.81846	-0.69842
CR31427	FBGN0051427	0.328872	0.512204	0.755142	0.938474
DIP-iota	FBGN0031837	0.320765	-0.17839	0.298945	-0.20021
Atx-1	FBGN0029907	-0.08733	0.005367	-0.12488	-0.03218
asRNA:CR45182	FBGN0266692	-0.03751	0.776227	-0.41383	0.399904
CG13566	FBGN0034942	-0.13263	0.218599	-0.48775	-0.13652
CG4374	FBGN0039078	0.534263	0.435695	0.97152	0.872951
CG33510	FBGN0053510	-0.53211	0.278497	-0.53836	0.272245
CG8046	FBGN0033388	0.783397	0.230482	0.863224	0.310309
CG34323	FBGN0085352	-0.28212	-0.03914	-0.39432	-0.15134
CG42819	FBGN0262001	-1.73343	0.677372	-2.27362	0.137183
lncRNA:CR44901	FBGN0266206	-1.42896	-1.15189	-0.27968	-0.00261
CG34008	FBGN0054008	-0.08393	0.425267	-0.15765	0.351547
CG43815	FBGN0264363	-0.72681	-0.55258	0.944586	1.118815
asRNA:CR43865	FBGN0264447	0.509536	0.0333	0.649881	0.173644
CG17929	FBGN0038415	0.082357	0.26288	0.074815	0.255338
lncRNA:CR44603	FBGN0265814	1.332908	0.284105	0.837777	-0.21103
lncRNA:CR44937	FBGN0266242	0.322452	0.709879	-0.64986	-0.26243
CG42823	FBGN0262005	-0.01456	-0.23082	0.222405	0.00614
Cp7Fa	FBGN0014464	0.23271	0.583346	-0.065	0.28564
lncRNA:CR44735	FBGN0265948	0.519335	0.26802	0.107325	-0.14399
CG32055	FBGN0052055	0.706679	0.800833	0.140106	0.23426
lncRNA:CR44537	FBGN0265730	1.503613	1.323817	-0.59592	-0.77571
lncRNA:CR46053	FBGN0267720	-0.44066	-0.40275	-0.98262	-0.94472
Cad89D	FBGN0038439	0.540461	0.405299	0.389831	0.25467
CG34138	FBGN0083974	-0.7119	-0.89482	-0.23708	-0.42
CG7252	FBGN0036226	0.363846	-0.09606	-1.93813	-2.39803
CG13308	FBGN0035932	0.707218	0.396017	0.934251	0.62305
asRNA:CR44509	FBGN0265702	-0.32472	-0.39171	0.132135	0.065149
CG44002	FBGN0264744	-0.27125	0.098687	-0.04619	0.323745
Osi17	FBGN0037427	-0.4289	0.102286	-0.01887	0.512308
CG9447	FBGN0033110	-0.07366	0.247865	0.314774	0.636299

RYa-R	FBGN0004842	0.129654	-0.21552	0.504594	0.159423
Ir94e	FBGN0259194	-0.37824	-0.14955	-1.5468	-1.31812
lncRNA:CR44794	FBGN0266029	0.568954	-0.09925	0.89112	0.222919
asRNA:CR44873	FBGN0266167	0.03633	0.77062	-0.30835	0.425939
Btnd	FBGN0029848	1.263834	-0.78333	1.852074	-0.19509
asRNA:CR43257	FBGN0262902	-0.13045	0.242315	0.673852	1.046614
lncRNA:CR44265	FBGN0265205	0.862213	0.094988	0.608075	-0.15915
asRNA:CR44266	FBGN0265252	1.148095	0.467429	0.15639	-0.52428
lncRNA:CR43622	FBGN0263613	-0.62775	-0.56695	-0.06314	-0.00234
asRNA:CR43971	FBGN0264702	0.186979	0.069679	-0.01877	-0.13607
nan	FBGN0036414	0.578204	0.714066	0.499792	0.635653
CG4324	FBGN0034956	-0.17055	0.271353	-0.19009	0.251819
CG3117	FBGN0031471	0.34742	-0.12475	-0.37113	-0.8433
Pex7	FBGN0035922	-0.22006	-0.74876	0.636946	0.108248
PH4alphaPV	FBGN0051015	0.259878	0.602099	-0.88661	-0.54439
lncRNA:CR45553	FBGN0267113	1.069715	0.012445	-0.02146	-1.07873
CG8664	FBGN0030836	-0.32077	-0.0745	-0.46256	-0.21629
lncRNA:CR43970	FBGN0264701	-0.76445	-0.09206	-1.97418	-1.30179
lncRNA:CR44059	FBGN0264868	-0.13488	0.076118	-0.7631	-0.5521
CG42578	FBGN0260868	0.34715	-0.27571	0.252686	-0.37017
niki	FBGN0045980	-0.14131	-0.30243	0.281671	0.120547
Cpr78E	FBGN0037114	-0.11882	0.256827	-0.42943	-0.05379
lncRNA:CR45464	FBGN0267020	-0.55392	-0.35808	-0.23323	-0.03739
CG10264	FBGN0038394	-2.0272	0.030308	-1.13707	0.920442
lncRNA:CR44912	FBGN0266217	0.111414	0.144641	0.409035	0.442263
Cp7Fb	FBGN0014465	-0.0691	0.474304	-1.01903	-0.47562
asRNA:CR44807	FBGN0266042	-0.26021	-0.17443	-0.39667	-0.31089
FoxL1	FBGN0004895	0.722651	0.040761	0.547626	-0.13426
IFT46	FBGN0032692	-0.39182	-0.47666	0.209675	0.124842
Vajk4	FBGN0050101	-0.14193	-0.45066	0.614853	0.306125
CG2990	FBGN0030170	-0.77394	0.1425	-0.66761	0.248825
CG10903	FBGN0037543	0.121221	0.064799	0.255813	0.199391
lncRNA:CR44870	FBGN0266164	-0.62804	0.140449	-0.98019	-0.21169
lbe	FBGN0011278	-0.14424	-0.34907	-0.25721	-0.46204
asRNA:CR44064	FBGN0264873	-0.31859	-0.46183	-0.51907	-0.66231
C901	FBGN0021742	1.209564	1.073903	0.496996	0.361335
lncRNA:CR45702	FBGN0267266	-0.26729	-0.74427	-0.42136	-0.89834
lncRNA:CR45578	FBGN0267138	0.198907	-0.24538	-0.05318	-0.49747
lncRNA:CR43406	FBGN0263325	0.118176	0.730209	-0.14882	0.46321
CG15336	FBGN0030009	-0.08236	0.650405	0.197184	0.92995
CG3880	FBGN0035057	-0.43482	-0.35788	-0.17787	-0.10093
CG8501	FBGN0033724	0.542945	0.04583	0.645557	0.148442
CR41506	FBGN0085789	0.325614	0.043013	-0.3322	-0.6148
CG12520	FBGN0036324	-0.20376	0.325011	-0.92888	-0.40012
CG14905	FBGN0038452	-0.09127	-0.39095	0.729887	0.4302
CR43275	FBGN0262964	-1.5615	0.76861	-0.50376	1.82635
Phlpp	FBGN0032749	-0.47937	-0.07172	-0.09134	0.316308
lncRNA:CR44824	FBGN0266071	-0.0874	0.51787	-0.73075	-0.12548
Vkor	FBGN0053544	-0.44683	0.430032	-0.74949	0.127375
CG43850	FBGN0264432	-0.33058	-0.17776	-0.03544	0.117383
lncRNA:CR45991	FBGN0267653	-0.57545	-0.35997	-0.64722	-0.43174
CG34253	FBGN0085282	0.043168	0.045831	-0.16659	-0.16392
28SrRNA-Psi:CR45848	FBGN0267508	-0.19898	0.092405	-0.30867	-0.01728
spdo	FBGN0260440	-0.17402	0.496417	-0.21714	0.453293
Ir94d	FBGN0259193	-0.57943	-0.65785	-0.47095	-0.54937
CG5388	FBGN0038944	-0.14751	0.257764	-0.13971	0.265572
CG30340	FBGN0050340	0.056887	0.114037	-0.12477	-0.06762
lncRNA:CR45598	FBGN0267158	-0.45661	-0.27545	-0.72171	-0.54055
lncRNA:CR44924	FBGN0266229	0.028345	-0.09355	-0.16482	-0.28672
lncRNA:CR45435	FBGN0266984	-0.05439	0.093961	-0.01851	0.129841
lncRNA:CR46224	FBGN0267944	-0.05098	0.184188	-0.94659	-0.71143
lncRNA:CR45758	FBGN0267322	-0.48753	-0.23748	-0.47364	-0.22359
lncRNA:CR32194	FBGN0052194	0.09503	-0.02174	0.044664	-0.0721
OSCP1	FBGN0033685	0.158847	0.00549	0.266245	0.112888
tll	FBGN0003720	4.156481	1.580278	-1.89213	-4.46833
lncRNA:CR44692	FBGN0265903	-0.39136	0.002951	-0.05893	0.335379
Orc6	FBGN0023180	0.225412	0.217563	-0.32025	-0.3281
Ir40a	FBGN0259683	-0.23097	0.35289	-0.48398	0.099889
CG13924	FBGN0035286	0.130307	-0.08917	-0.00779	-0.22727

lncRNA:CR43649	FBGN0263658	-0.53393	-0.02984	-0.42275	0.081338
CG13160	FBGN0033720	-0.99641	-0.76287	0.465478	0.699017
CG15919	FBGN0040743	0.512599	-0.45568	1.485845	0.517567
SteXh:CG42398	FBGN0259817	0.896695	0.593699	0.029006	-0.27399
CG12379	FBGN0030676	-0.351	-0.22272	-0.47351	-0.34524
CR43309	FBGN0263001	-0.17253	0.148501	0.000403	0.321437
lncRNA:CR45941	FBGN0267603	0.646987	0.43286	-0.4606	-0.67473
Neu2	FBGN0037085	0.373486	0.787411	-0.67235	-0.25843
lncRNA:CR44553	FBGN0265746	-0.61078	-0.04798	-0.33011	0.232699
lncRNA:CR45971	FBGN0267633	-0.41418	-0.13976	-0.54655	-0.27213
slp2	FBGN0004567	-0.3646	-0.00859	0.021414	0.377419
CG45691	FBGN0267255	-0.13055	0.209847	-0.73536	-0.39497
CR14798	FBGN0029588	-0.52703	-0.42373	-0.75053	-0.64723
lncRNA:CR45295	FBGN0266833	-1.03732	0.618426	-0.46454	1.191207
lncRNA:CR46206	FBGN0267925	0.20982	-1.15863	0.831974	-0.53648
ppk29	FBGN0034965	-0.37487	-0.17101	0.299252	0.503108
pnr	FBGN0003117	-0.22271	-0.31637	-0.80227	-0.89592
lncRNA:CR46094	FBGN0267763	0.285144	0.768668	-0.37036	0.113169
dyl	FBGN0066365	0.199901	0.122739	0.108906	0.031744
Su(Ste):CR42444	FBGN0259875	0.273639	0.773315	-0.26396	0.235713
lncRNA:CR45993	FBGN0267655	-1.79707	-1.39628	-0.66406	-0.26327
lncRNA:CR44519	FBGN0265712	-0.27426	-0.01403	-0.75291	-0.49268
Lcp65Ag2	FBGN0020637	-0.62303	-0.39176	-0.85449	-0.62321
CG10657	FBGN0036289	0.172155	0.095155	0.588973	0.511973
lncRNA:CR44941	FBGN0266246	2.55772	0.369421	4.243439	2.055139
f	FBGN0262111	-0.04193	-0.34292	0.611498	0.310502
sisA	FBGN0003411	1.802976	-1.13014	3.563102	0.629991
CG14780	FBGN0025383	-0.57411	-0.01214	-0.61126	-0.04929
lncRNA:CR45420	FBGN0266969	0.208454	-0.64093	1.281823	0.432441
lncRNA:CR45283	FBGN0266821	0.994908	1.308085	0.71407	1.027247
CG13742	FBGN0033372	0.120854	0.876085	-0.08356	0.67167
nvd	FBGN0287185	0.019772	0.38602	-0.22454	0.141711
snoRNA:Psi28S-3186	FBGN0086662	1.00458	-0.32458	1.292192	-0.03697
CG31785	FBGN0051785	-0.62916	-0.91671	0.238157	-0.04939
lncRNA:CR44468	FBGN0265661	0.568459	0.543167	0.335666	0.310374
lncRNA:CR44731	FBGN0265944	0.298323	-0.15887	0.357564	-0.09963
lncRNA:CR45247	FBGN0266782	-0.55463	0.457401	-2.02604	-1.01401
ppk5	FBGN0053289	1.16199	0.4995	0.17334	-0.48915
CG13562	FBGN0034928	-0.17759	-0.29396	-0.37592	-0.49229
ItgaPS4	FBGN0034005	-0.09111	-0.25572	0.068768	-0.09584
lncRNA:CR43854	FBGN0264436	-0.1702	0.279867	-0.03269	0.417377
lncRNA:CR44042	FBGN0264834	0.274207	0.116717	0.117527	-0.03996
CG42392	FBGN0259738	0.771771	0.324674	0.635533	0.188436
Cpr62Bc	FBGN0035281	1.354259	0.724154	1.231381	0.601276
lncRNA:CR44674	FBGN0265885	-0.77711	0.953154	-0.93997	0.790298
CCDC151	FBGN0036219	-1.42755	-0.67162	-1.0668	-0.31086
Or23a	FBGN0026395	0.016938	0.235183	-1.08271	-0.86447
asRNA:CR46047	FBGN0267714	0.734243	-0.06509	0.7456	-0.05374
lncRNA:CR44371	FBGN0265509	0.309958	0.736616	-0.81991	-0.39326
lncRNA:CR46153	FBGN0267865	-1.43137	-0.75637	-1.54384	-0.86883
lncRNA:CR44164	FBGN0265049	0.969574	0.756247	0.254913	0.041586
Glyat	FBGN0054010	0.182318	0.320742	-0.09996	0.038464
lncRNA:CR44803	FBGN0266038	0.626247	0.004055	0.113969	-0.50822
lncRNA:CR44642	FBGN0265853	0.106258	-0.27192	0.189163	-0.18901
Prdm13	FBGN0035687	-0.22687	-0.06854	-0.44485	-0.28653
lncRNA:CR45658	FBGN0267218	-5.28139	-5.65951	1.142813	0.764686
bcd	FBGN0000166	-0.39351	-0.39105	0.321256	0.323712
CG3216	FBGN0034568	-0.75647	-0.63078	-0.40083	-0.27515
lncRNA:CR44736	FBGN0265949	1.172047	0.53742	0.607553	-0.02707
CG13738	FBGN0036390	0.584451	0.162003	0.729596	0.307148
CG34028	FBGN0054028	-1.10425	-2.02058	0.65611	-0.26022
lncRNA:CR45482	FBGN0267038	0.483108	0.330728	-0.86023	-1.01262
cyr	FBGN0030001	0.172303	-0.09621	0.210117	-0.0584
lncRNA:CR44415	FBGN0265588	-0.27034	-0.52512	-0.49304	-0.74783
CG42323	FBGN0259223	-0.20928	-0.07524	-0.13424	-0.00021
Ir68b	FBGN0036250	0.01994	0.057838	-0.24489	-0.20699
CG4565	FBGN0037841	-0.47258	-0.40879	0.093113	0.1569
CG42728	FBGN0261681	-1.75642	1.670823	-5.7755	-2.34826
ItgaPS5	FBGN0034880	-0.12874	0.29038	-0.84583	-0.42671

H2.0	FBGN0001170	-0.08852	0.449103	-0.42692	0.110697
lncRNA:CR45976	FBGN0267638	-1.41333	-0.7716	-0.26348	0.378254
lncRNA:CR43848	FBGN0264430	0.092485	-0.16981	-0.41571	-0.678
CG43218	FBGN0262854	-0.47405	-0.40641	-0.58541	-0.51777
lncRNA:CR45524	FBGN0267080	-1.73601	-0.81562	-0.73534	0.185051
lncRNA:CR43852	FBGN0264434	0.614097	0.254405	0.413258	0.053565
CG32751	FBGN0052751	-3.11114	-5.02824	-0.29272	-2.20982
lncRNA:CR44082	FBGN0264891	-0.96052	-0.58345	-0.48792	-0.11085
CG7884	FBGN0031001	0.126001	0.982185	0.099078	0.955262
CG41284	FBGN0085599	0.334665	0.326134	-0.34157	-0.3501
mah	FBGN0285912	0.183177	0.45038	-0.84753	-0.58032
lncRNA:CR46011	FBGN0267675	-0.336	0.067145	0.121267	0.524415
CG17732	FBGN0036923	0.194247	0.274196	0.119681	0.199629
Su(Ste):CR42425	FBGN0259856	-0.55504	-0.48129	-2.30518	-2.23143
Desat2	FBGN0043043	-0.1478	-0.04936	-0.25086	-0.15243
CG9757	FBGN0003060	-0.88643	-0.62696	0.571893	0.831363
CG7896	FBGN0039728	-0.05333	0.328011	0.001557	0.382896
CG45116	FBGN0266591	-0.06511	0.189419	-0.93224	-0.67771
asRNA:CR31514	FBGN0051514	0.66889	0.591693	0.797976	0.720778
TwdlL	FBGN0039437	0.073516	0.38202	0.088412	0.396916
CG13847	FBGN0038967	-0.05715	0.135318	0.575665	0.76813
Ir56d	FBGN0034458	1.361123	0.559126	1.409723	0.607727
Or59a	FBGN0026384	1.389779	0.050223	1.218771	-0.12079
lncRNA:CR44720	FBGN0265931	0.650713	0.070567	0.368224	-0.21192
Jon74E	FBGN0023197	0.725209	0.991773	-0.0533	0.213268
CG12011	FBGN0035257	1.037209	0.884291	1.775346	1.622428
asRNA:CR44592	FBGN0265803	-0.33863	-0.40385	0.308534	0.243314
asRNA:CR46050	FBGN0267717	0.482761	0.151753	0.243294	-0.08771
Zasp67	FBGN0036044	0.28238	-0.12724	0.46526	0.05564
spn-D	FBGN0003482	0.140351	-0.19476	-0.46469	-0.79979
lncRNA:CR44980	FBGN0266315	0.354543	0.092466	0.551111	0.289035
CG43198	FBGN0262827	-0.44439	-0.238	-0.38092	-0.17453
ppk3	FBGN0050181	-0.74964	-0.75678	0.624164	0.617023
CG14627	FBGN0040361	-1.03454	-0.68301	-0.20479	0.146742
Toll-4	FBGN0032095	0.397926	-0.65735	-0.0709	-1.12618
CG43354	FBGN0263086	0.181753	-0.30008	-0.49824	-0.98007
CG30053	FBGN0050053	-0.08569	-0.12222	-0.37394	-0.41047
lncRNA:CR46210	FBGN0267929	-1.02873	0.181108	-1.08534	0.124502
lncRNA:CR44861	FBGN0266155	0.379455	0.18629	0.430556	0.23739
CG43094	FBGN0262540	0.533677	-0.0632	0.774495	0.177621
CG43448	FBGN0263402	-1.58938	-0.51048	-0.88534	0.193562
asRNA:CR44429	FBGN0265611	0.400455	0.22389	0.235895	0.059329
asRNA:CR44019	FBGN0264789	-0.65739	-0.48282	0.086967	0.261537
asRNA:CR44690	FBGN0265901	0.69177	0.094967	0.631431	0.034628
lncRNA:CR44399	FBGN0265549	0.706978	0.608782	-1.71832	-1.81652
lncRNA:CR43256	FBGN0262901	0.112188	0.177599	0.017392	0.082803
lncRNA:CR45431	FBGN0266980	-0.75065	-0.64261	-1.12672	-1.01867
Gr66a	FBGN0035870	-0.12723	-0.12996	-0.11895	-0.12168
run	FBGN0003300	0.594324	0.056447	0.523956	-0.01392
Pxt	FBGN0261987	-0.54142	0.387305	-0.81137	0.117358
CG8492	FBGN0035813	0.113487	0.348252	-0.33567	-0.1009
lncRNA:CR44483	FBGN0265676	0.729493	-0.23624	0.466503	-0.49923
CG14050	FBGN0040392	-0.11858	-0.15359	-0.05452	-0.08954
lncRNA:CR45825	FBGN0267475	1.465832	0.147496	0.338263	-0.98007
lncRNA:CR44284	FBGN0265311	-0.02426	0.188006	-0.07084	0.14143
CG30274	FBGN0050274	0.345692	0.040505	1.511864	1.206677
asRNA:CR44046	FBGN0264838	0.585067	0.028868	0.354557	-0.20164
lncRNA:CR44125	FBGN0264956	-0.74472	-0.62441	-0.30409	-0.18378
spz6	FBGN0035056	-0.3448	0.075207	-0.20427	0.215742
CG14227	FBGN0031058	-0.05882	0.236111	-0.67792	-0.383
Ilp7	FBGN0044046	0.054493	0.166029	0.08177	0.193306
lncRNA:CR45159	FBGN0266652	-2.30347	-0.51688	-3.85965	-2.07305
lncRNA:CR44681	FBGN0265892	-0.45091	-0.06799	-0.24592	0.137002
lncRNA:CR44148	FBGN0264997	0.041748	0.402892	-0.19143	0.169711
Or94a	FBGN0039033	-0.8592	0.005187	-0.84308	0.021301
CG46335	FBGN0285938	-1.01939	-1.19196	0.373685	0.201121
lncRNA:CR45215	FBGN0266742	0.117222	-0.07714	-0.43133	-0.6257
lncRNA:CR13130	FBGN0040965	-0.44884	-0.36702	-0.25594	-0.17412
asRNA:CR44431	FBGN0265613	-1.23457	-0.72126	-0.63177	-0.11846

lncRNA:CR46114	FBGN0267783	0.008723	-0.08723	-0.55018	-0.64613
snoRNA:Psi28S-291	FBGN0065064	0.612603	0.81716	0.691653	0.89621
otu	FBGN0003023	-0.13181	-0.17416	-0.35025	-0.3926
Doc2	FBGN0035956	0.321329	0.369443	0.262594	0.310709
snoRNA:U3:54Ab	FBGN0065047	-0.92748	-0.78322	-0.52905	-0.38479
lncRNA:CR45296	FBGN0266834	-1.05957	0.126349	-0.36418	0.821733
CG44249	FBGN0265184	0.498909	0.179124	0.408309	0.088523
lncRNA:CR43771	FBGN0264271	0.135067	0.264232	0.165721	0.294887
asRNA:CR43926	FBGN0264547	-1.9472	-0.87802	-1.08132	-0.01213
CG42867	FBGN0262141	-0.69302	-0.32244	0.117946	0.488525
CG33998	FBGN0053998	-0.99582	-0.77351	-1.68465	-1.46234
CG43179	FBGN0262808	0.019551	-0.04428	-0.32469	-0.38852
lncRNA:CR46203	FBGN0267922	-0.01088	-0.60047	0.293149	-0.29644
CG14829	FBGN0035751	0.501235	0.431519	-2.74004	-2.80976
CG41434	FBGN0084001	0.326617	0.306744	-0.11456	-0.13443
CG17760	FBGN0033756	-0.03541	0.06153	-0.18562	-0.08867
Twdlbeta	FBGN0033658	0.628233	0.505664	-0.33317	-0.45574
CG8563	FBGN0035777	0.316451	0.899328	0.347545	0.930422
lncRNA:CR44315	FBGN0265374	0.311228	0.308193	-0.23695	-0.23999
CG15023	FBGN0035548	1.318883	1.025351	0.247125	-0.04641
CG10357	FBGN0035453	-0.13818	-0.56127	0.435212	0.012121
asRNA:CR44095	FBGN0264904	0.148507	0.011062	-0.41726	-0.5547
lncRNA:CR46142	FBGN0267817	-0.26079	0.451677	-0.29622	0.416243
Cluap1	FBGN0031196	-0.49775	-0.62682	0.17595	0.046885
asRNA:CR45056	FBGN0266416	0.355354	-1.37078	2.142243	0.416112
snoRNA:185	FBGN0065076	0.109424	0.259738	0.463854	0.614169
lncRNA:CR46087	FBGN0267756	0.255055	0.548444	-0.97316	-0.67977
lncRNA:CR45878	FBGN0267538	0.19381	0.254217	0.099682	0.160089
lncRNA:CR42874	FBGN0262148	-0.46145	0.094811	-0.68015	-0.12389
lncRNA:CR44651	FBGN0265862	-0.24345	0.18069	-0.33203	0.092116
ImpE3	FBGN0001255	-0.00237	0.088577	-0.1923	-0.10136
asRNA:CR43833	FBGN0264381	-0.92357	-0.10073	-0.48314	0.339702
Lgr3	FBGN0039354	-0.05752	0.179927	0.079873	0.317324
CR32821	FBGN0052821	-0.88929	-1.25269	0.793183	0.429782
lncRNA:CR45980	FBGN0267642	1.013676	0.720811	0.054585	-0.23828
asRNA:CR45270	FBGN0266808	-0.02146	0.258404	-0.46038	-0.18051
CG7102	FBGN0031961	-0.37658	0.111691	-0.22054	0.267734
lncRNA:CR44461	FBGN0265654	-0.32629	-0.09464	-0.34581	-0.11416
CG15923	FBGN0038814	0.689216	-0.23191	0.834869	-0.08626
lectin-33A	FBGN0040096	-0.71487	-0.27662	-0.77682	-0.33856
lncRNA:CR46073	FBGN0267742	-0.39847	0.101758	-0.47277	0.027454
asRNA:CR44020	FBGN0264790	-0.32222	0.376323	0.338284	1.036823
lncRNA:CR44516	FBGN0265709	0.195139	-0.12127	0.859672	0.543265
asRNA:CR43959	FBGN0264674	0.526113	0.723153	-0.04303	0.154015
Ccp84Ag	FBGN0004777	-1.25573	0.017719	-1.95683	-0.68338
gcm2	FBGN0019809	-0.03786	1.034547	0.228107	1.300518
asRNA:CR46065	FBGN0267734	0.036824	-0.5685	-0.31173	-0.91705
CG12106	FBGN0030100	-0.03275	-0.09944	-0.19694	-0.26363
lncRNA:CR44126	FBGN0264957	-0.4724	0.1391	-1.23216	-0.62066
lncRNA:CR45792	FBGN0267442	-0.0737	1.059874	-0.17816	0.955413
Or13a	FBGN0030715	-0.51373	-1.46381	-0.48533	-1.4354
lncRNA:CR44831	FBGN0266094	-0.34863	-0.78443	0.70197	0.266163
lncRNA:CR43387	FBGN0263217	0.084233	-0.32	0.228589	-0.17564
stg	FBGN0003525	0.153362	0.05009	0.49393	0.390658
lncRNA:CR44231	FBGN0265162	-0.04041	-0.84577	1.191808	0.38645
lncRNA:CR44607	FBGN0265818	-1.55193	-0.57874	-1.12814	-0.15495
CG8543	FBGN0035787	-0.16953	0.591441	-0.59041	0.170558
lncRNA:CR45243	FBGN0266778	-0.82003	-0.45461	0.005143	0.370558
lncRNA:CR45029	FBGN0266389	-0.00017	-0.16232	0.662133	0.499985
lncRNA:CR43911	FBGN0264512	0.065409	0.38617	0.044188	0.364949
asRNA:CR45129	FBGN0266622	-0.41153	0.131722	-0.69553	-0.15228
CG7227	FBGN0031970	-0.67465	0.349363	-1.16634	-0.14233
RunxB	FBGN0259162	-0.67563	-0.96367	0.642422	0.354388
CG31220	FBGN0051220	0.131234	-0.08401	-0.39155	-0.60679
Nepl7	FBGN0032442	-0.1245	1.027785	-0.12623	1.026052
lncRNA:CR43762	FBGN0264262	-0.57793	-0.36652	-0.37321	-0.1618
Edg91	FBGN0004554	-0.70922	-0.45026	-0.57583	-0.31688
Fbp2	FBGN0000640	0.380932	-0.35174	-0.17386	-0.90653
asRNA:CR33945	FBGN0046756	-0.8171	-0.57274	1.787551	2.031915

lncRNA:CR45395	FBGN0266944	-0.87643	0.238736	-0.61895	0.496214
lncRNA:CR46265	FBGN0275433	-0.11601	0.640742	-0.58364	0.173109
lncRNA:CR45285	FBGN0266823	-0.83085	-0.44109	-0.44202	-0.05227
snRNA:U12	FBGN0041721	-0.74061	-0.64452	-0.98931	-0.89322
lncRNA:CR45810	FBGN0267460	-0.2362	0.183251	-0.29611	0.123345
lncRNA:CR44495	FBGN0265688	0.10448	0.248308	-0.33829	-0.19447
lncRNA:CR43963	FBGN0264678	-0.47679	0.388267	-0.24875	0.616302
CG42587	FBGN0260955	-1.16733	-0.12535	-1.08221	-0.04022
gd	FBGN0000808	0.83633	0.417891	0.389026	-0.02941
lncRNA:CR44474	FBGN0265667	-0.20359	-0.31319	-0.29708	-0.40668
Amnionless	FBGN0025686	0.169845	-0.46155	0.195992	-0.43541
lncRNA:CR45613	FBGN0267173	-0.12053	-0.27447	0.24834	0.094406
lncRNA:CR45483	FBGN0267039	-0.61361	-1.2694	-0.36184	-1.01762
lncRNA:CR45697	FBGN0267261	0.190821	0.384155	-0.01128	0.182055
lncRNA:CR45577	FBGN0267137	-0.25371	-0.43847	0.134726	-0.05003
Gr47a	FBGN0041242	-0.4449	-0.25636	0.193536	0.382076
CR43377	FBGN0263207	-0.77852	-1.30105	0.907841	0.385313
lncRNA:CR44993	FBGN0266328	0.449878	0.18065	0.139796	-0.12943
Cpr49Ac	FBGN0033725	1.123022	0.408819	0.63813	-0.07607
CG5084	FBGN0034288	1.332436	0.771814	0.143187	-0.41744
CG17707	FBGN0025835	-0.30493	0.377371	-0.20693	0.475365
lncRNA:alphagamma-element:CR32865	FBGN0052865	0.236003	0.633432	-1.1977	-0.80027
lncRNA:CR44393	FBGN0265543	-0.31298	-1.12536	0.213386	-0.59898
CCAP-R	FBGN0039396	0.019271	-0.21452	0.526588	0.292794
CG16800	FBGN0032462	-0.49203	1.562285	-1.5237	0.530623
Fer2	FBGN0038402	0.264476	-0.27206	0.278395	-0.25814
lncRNA:CR44567	FBGN0265760	0.273903	-0.01102	0.659362	0.374435
CG6938	FBGN0036235	-0.40217	-0.66774	0.264265	-0.0013
lncRNA:CR44916	FBGN0266221	-0.50629	0.002411	-1.01304	-0.50434
asRNA:CR45960	FBGN0267622	-0.84169	-0.15865	-0.76106	-0.07801
lncRNA:CR44609	FBGN0265820	-0.62204	-0.13998	-0.90857	-0.42652
snoRNA:Psi28S-2566	FBGN0086661	-1.13135	-1.07243	0.394922	0.453845
lncRNA:CR45021	FBGN0266379	0.495877	0.190426	0.095884	-0.20957
CG13331	FBGN0033850	-0.34068	-0.46052	0.029722	-0.09013
lncRNA:CR44684	FBGN0265895	0.112941	0.668912	-0.24716	0.308814
CG14837	FBGN0035797	-0.56385	-0.31876	0.068728	0.31382
CheA46a	FBGN0262594	-1.04664	-0.41407	-1.63445	-1.00188
lncRNA:TS16	FBGN0267315	0.839814	0.4019	0.603395	0.165481
His2B:CG33868	FBGN0053868	0.365817	-0.15906	0.133383	-0.39149
asRNA:CR46139	FBGN0267814	-0.16002	-0.23957	-0.6168	-0.69636
CG43330	FBGN0263035	-0.17484	0.031376	-0.39034	-0.18413
Or56a	FBGN0034473	-0.1127	-0.06476	-0.20973	-0.16178
MEP-1	FBGN0035357	0.695345	0.495858	0.314905	0.115417
CG9804	FBGN0037251	-0.59763	-0.29688	0.120843	0.4216
CG43438	FBGN0263386	0.168769	-0.40881	0.407648	-0.16993
CG13403	FBGN0030544	0.564874	0.418118	1.085747	0.938991
CG3081	FBGN0025613	-0.80331	-0.52477	-1.24104	-0.9625
Ir93a	FBGN0259215	0.412352	-0.11643	0.175084	-0.35369
lncRNA:CR45329	FBGN0266868	4.306109	0.292551	3.981979	-0.03158
lncRNA:CR45994	FBGN0267656	0.168096	-1.42518	0.73986	-0.85341
CG10853	FBGN0035478	0.883708	0.821177	-0.58163	-0.64416
pre-lola-G	FBGN0264817	0.466731	-0.01674	1.176607	0.693135
CG4914	FBGN0036436	-0.0142	-0.14422	0.265231	0.135211
CG43386	FBGN0263216	-0.27939	-0.35519	0.630216	0.554414
Or85f	FBGN0037685	1.566243	0.538762	1.293843	0.266362
CG7763	FBGN0040503	-0.36092	-0.52684	0.063073	-0.10285
CG32834	FBGN0052834	-2.82109	-3.49421	-1.74876	-2.42189
ppk12	FBGN0034730	-0.55613	0.033205	-0.97645	-0.38711
lncRNA:CR45744	FBGN0267308	-1.55565	-0.22187	-1.55017	-0.21639
asRNA:CR45350	FBGN0266889	0.010585	0.199122	-0.26498	-0.07644
lncRNA:CR46077	FBGN0267746	-1.21322	-0.60434	-0.59058	0.018292
CG13258	FBGN0032582	0.54759	0.902893	-0.15275	0.202557
CG43236	FBGN0262881	-1.88024	-0.57859	-0.85447	0.44718
Gr47b	FBGN0041241	-0.29234	0.083346	-0.8945	-0.51882
CG15253	FBGN0028948	0.205413	0.900764	-1.0386	-0.34325
CG42449	FBGN0259926	1.016725	-0.23282	1.661472	0.411927
asRNA:CR31912	FBGN0051912	-0.69138	-0.09469	-0.39424	0.202453
lncRNA:CR44833	FBGN0266096	-1.03666	-1.23992	-0.06052	-0.26378

CG12523	FBGN0036102	-0.37967	1.059477	-1.52093	-0.08179
Obp50d	FBGN0050074	-0.16499	0.338823	-0.03496	0.468854
lncRNA:CR46250	FBGN0267983	-1.13566	-0.90398	-1.03363	-0.80195
lncRNA:CR45356	FBGN0266896	0.21865	0.563276	-0.12225	0.22238
CG42598	FBGN0260997	-0.17147	0.275995	-0.61623	-0.16877
ppk17	FBGN0032602	1.045869	0.43163	0.480701	-0.13354
lncRNA:CR44548	FBGN0265741	0.049644	-1.37576	1.159629	-0.26577
CheB98a	FBGN0261289	-1.11256	-0.61422	-0.31891	0.179434
lncRNA:CR44734	FBGN0265947	-0.03176	0.144492	-0.98311	-0.80686
CG6462	FBGN0035663	-0.06977	0.431687	-1.63349	-1.13203
CG33096	FBGN0053096	0.136436	0.186588	0.280542	0.330694
lncRNA:CR44110	FBGN0264941	-0.35743	0.152038	-0.42094	0.088526
CG30259	FBGN0050259	-1.35893	-0.59084	-0.80123	-0.03314
CG5882	FBGN0039490	-1.59511	-1.29866	-0.43805	-0.14161
CG1635	FBGN0039854	0.534205	-0.03154	0.38928	-0.17646
lncRNA:CR46000	FBGN0267662	0.212237	-0.48329	0.215808	-0.47972
lncRNA:CR45417	FBGN0266966	-0.25638	-0.11552	0.281129	0.421994
CG34193	FBGN0085222	-0.11701	-1.20592	0.78977	-0.29914
Fcp3C	FBGN0000644	0.191465	-0.06946	0.451581	0.190651
Cpr50Cb	FBGN0033869	-0.81209	0.397404	-0.7167	0.492801
CR46183	FBGN0267895	-0.96131	-0.61503	0.29952	0.645802
CG12971	FBGN0037078	-0.46942	-0.4659	-0.55217	-0.54865
lncRNA:CR43314	FBGN0263019	-0.09294	0.347106	-0.58494	-0.14489
TotB	FBGN0038838	2.281599	0.478861	1.180797	-0.62194
zye	FBGN0036985	-0.08757	-0.53019	0.848893	0.406271
lncRNA:CR45660	FBGN0267220	-0.2963	-0.4399	-0.26593	-0.40953
CG12836	FBGN0033140	-0.29389	-0.41845	-0.0247	-0.14926
lncRNA:CR45361	FBGN0266901	0.766184	-0.41993	1.263971	0.077856
CG34011	FBGN0054011	0.228651	0.512116	0.666259	0.949724
lncRNA:CR43995	FBGN0264727	0.042857	-0.40658	0.27672	-0.17272
CG12645	FBGN0030181	0.415083	0.009862	0.343499	-0.06172
CG18599	FBGN0038592	0.568841	0.151413	0.15554	-0.26189
CG11300	FBGN0034901	0.316996	0.362813	0.035168	0.080986
lncRNA:CR44660	FBGN0265871	-0.31638	0.297547	-0.23395	0.379978
lncRNA:CR44934	FBGN0266239	-1.0744	-0.47346	-0.30645	0.294494
CG12716	FBGN0030439	-0.28994	-0.60149	0.6315	0.31995
CG5768	FBGN0039198	0.019139	-0.05599	-0.32299	-0.39812
lncRNA:CR44527	FBGN0265720	3.308277	0.344585	2.625353	-0.33834
ich	FBGN0286204	-0.75921	0.425254	-1.16526	0.019206
Alp7	FBGN0034710	0.394782	0.246013	0.943495	0.794727
sha	FBGN0003382	0.20523	-0.10621	-0.01195	-0.32338
fd3F	FBGN0264954	0.209047	-0.29569	-0.56704	-1.07178
lncRNA:CR44581	FBGN0265792	0.433759	0.279434	-0.14466	-0.29898
pre-rRNA:CR45856	FBGN0267516	-0.791	-0.79802	-0.24656	-0.25357
lncRNA:CR44023	FBGN0264793	-0.01205	-0.0783	0.961168	0.894925
CG32302	FBGN0052302	-0.41683	1.026754	-1.61677	-0.17319
CG12964	FBGN0034022	-0.25651	0.541495	-0.31756	0.480441
lncRNA:CR44400	FBGN0265550	-1.17491	-1.2433	-0.37479	-0.44318
asRNA:CR46263	FBGN0267996	-0.31287	-0.07473	-0.14501	0.093128
bbx	FBGN0024251	-0.08968	-0.29816	0.26742	0.05894
CG13305	FBGN0035921	-0.30477	-0.00588	0.481384	0.780277
TwdlV	FBGN0037227	0.599252	0.237252	0.487017	0.125018
PHDP	FBGN0025334	-0.11699	-0.14219	0.435011	0.409803
asRNA:CR45890	FBGN0267550	-0.13421	-1.62429	1.223156	-0.26693
lncRNA:CR46236	FBGN0267956	-1.0249	-0.05884	-0.49553	0.470533
CG9876	FBGN0034821	-1.00734	-0.47917	-0.72604	-0.19787
lncRNA:CR45597	FBGN0267157	0.314475	-0.47121	0.541688	-0.24399
lncRNA:CR46249	FBGN0267982	1.484423	0.400119	-0.02832	-1.11262
wntD	FBGN0038134	0.596976	1.455658	-0.7798	0.078882
CG12688	FBGN0029707	-0.63851	-1.23273	0.102934	-0.49128
CR34254	FBGN0085283	0.413449	-0.10457	0.485068	-0.03295
lncRNA:CR45790	FBGN0267440	0.135092	-0.39145	-0.60171	-1.12826
lncRNA:CR45593	FBGN0267153	0.182641	0.268132	0.506874	0.592365
mt:tRNA:Trp-TCA	FBGN0013709	-0.75845	0.684606	-2.9793	-1.53624
CG14007	FBGN0031731	0.497486	0.644534	0.048974	0.196022
snoRNA:Psi28S-2179	FBGN0086666	-0.10492	-0.5845	0.260176	-0.21941
Eig71Eb	FBGN0004589	-0.85309	0.532739	-0.25859	1.127236
CG30082	FBGN0050082	0.451302	0.372326	-0.25269	-0.33167
asRNA:CR31429	FBGN0063298	-2.41077	0.105375	-1.68871	0.827432

lncRNA:CR44448	FBGN0265641	-0.31414	0.256869	-0.1554	0.415606
lncRNA:CR45032	FBGN0266392	-0.49731	-0.30148	-0.36444	-0.16861
lncRNA:CR44423	FBGN0265596	0.340605	0.064656	-0.28362	-0.55957
alphaTub67C	FBGN0087040	-0.20383	0.706476	-0.38136	0.528943
mt:tRNA:Arg-TCG	FBGN0013704	0.233322	-0.05976	-0.49844	-0.79152
lncRNA:CR44914	FBGN0266219	-0.00344	0.20591	-0.03643	0.17292
lncRNA:CR43985	FBGN0264717	-0.70066	-1.13707	-0.48819	-0.9246
CG14185	FBGN0036936	-0.6394	-0.44646	0.536324	0.729265
CG13545	FBGN0034828	-0.97998	0.892954	-1.51468	0.35825
CG30098	FBGN0050098	0.378161	0.164163	-0.06838	-0.28237
asRNA:TS15	FBGN0266027	-0.23371	-0.09805	0.008877	0.144539
CG42741	FBGN0261705	-0.02638	0.199039	-0.25295	-0.02753
Ugt37A1	FBGN0026756	-0.08699	0.531723	-1.07077	-0.45206
asRNA:CR45485	FBGN0267041	0.998521	-0.12721	0.859132	-0.2666
lncRNA:CR46117	FBGN0267786	-0.80194	-0.46949	-0.46305	-0.1306
CG14257	FBGN0039479	-0.04602	-0.42274	0.287984	-0.08874
CG44195	FBGN0265084	0.833452	-0.19149	0.926789	-0.09815
lncRNA:CR45246	FBGN0266781	0.865011	-0.06603	0.123404	-0.80764
asRNA:CR45802	FBGN0267452	-0.48325	1.68973	-1.18729	0.985687
lncRNA:CR44562	FBGN0265755	0.784647	-0.07205	0.620577	-0.23612
lncRNA:CR44485	FBGN0265678	1.383767	0.237806	-1.89641	-3.04237
CG43155	FBGN0262685	0.387523	-0.09852	0.11266	-0.37338
CG14877	FBGN0038380	-0.65573	-0.3646	0.173566	0.464695
CG32266	FBGN0052266	0.351086	1.513818	-0.14132	1.021409
CG13054	FBGN0036584	-0.40483	-0.45559	0.085563	0.034805
lncRNA:CR44842	FBGN0266116	0.474756	0.16417	0.420709	0.110123
lncRNA:CR45561	FBGN0267121	-0.91207	-0.55889	0.186695	0.539877
CR45716	FBGN0267280	-0.71454	0.410929	0.077092	1.202558
CG12947	FBGN0037753	-0.06749	-0.00325	0.28184	0.346078
CG34219	FBGN0085248	-0.4077	-0.47551	-0.10568	-0.17349
lncRNA:dntRL	FBGN0267585	-0.26134	-0.0279	0.303409	0.536853
CG34451	FBGN0085480	0.917042	-0.40438	1.421675	0.100251
CG13460	FBGN0036471	-0.20972	-0.64496	0.931894	0.496649
lncRNA:CR44675	FBGN0265886	-1.01548	-0.12925	-0.01511	0.871128
CR34311	FBGN0085340	6.199797	3.497679	5.227012	2.524894
CG6753	FBGN0038070	-0.4363	-0.32503	0.001476	0.112745
lncRNA:CR44782	FBGN0266009	-0.03235	1.379026	0.639999	2.051379
TwdlW	FBGN0038487	-0.14034	-0.76061	-0.56206	-1.18233
lncRNA:CR46240	FBGN0267960	-0.28781	-0.48874	-0.11805	-0.31898
lncRNA:CR46132	FBGN0267807	1.13524	-0.13827	1.397999	0.124487
lncRNA:CR44447	FBGN0265640	-0.47551	-0.22049	-0.20505	0.049976
CG6800	FBGN0038902	0.054237	0.063584	0.416766	0.426113
trk	FBGN0003751	-0.62436	-0.02337	-0.50053	0.100461
lncRNA:CR44795	FBGN0266030	0.291739	-0.05667	-0.07081	-0.41921
asRNA:CR46255	FBGN0267988	0.399799	-0.2722	0.227094	-0.44491
lncRNA:CR44430	FBGN0265612	0.49057	-0.00158	-0.20782	-0.69996
spz4	FBGN0032362	1.222094	0.571149	0.312974	-0.33797
mthl2	FBGN0035623	0.875978	0.515372	0.486019	0.125414
CG14302	FBGN0038647	0.217828	1.596407	-0.78383	0.594745
lncRNA:CR46052	FBGN0267719	-0.66111	-0.29403	-0.4945	-0.12742
CG1986	FBGN0030162	-1.35274	-0.35333	-0.66477	0.33465
lncRNA:CR44280	FBGN0265307	-0.04575	0.026777	-0.3614	-0.28887
CG6347	FBGN0033874	-0.51155	-0.51844	-0.07818	-0.08507
Cyp6a19	FBGN0033979	0.220419	0.394267	0.140375	0.314223
reb	FBGN0033667	-0.25999	0.492293	0.068598	0.82088
dunk	FBGN0083973	-0.87828	-0.5205	-0.40742	-0.04964
lncRNA:CR44580	FBGN0265791	-0.4587	-0.26283	-0.70798	-0.51211
CR7448	FBGN0037143	-0.60993	-0.7175	-0.5897	-0.69727
CG4702	FBGN0037992	-0.20934	0.15056	-0.97677	-0.61687
CG34427	FBGN0085456	1.096299	0.489147	-0.22492	-0.83207
Edg78E	FBGN0000551	-0.49873	-0.06449	-0.30258	0.131656
asRNA:CR30267	FBGN0050267	-0.39155	0.120009	0.325941	0.837504
lncRNA:CR44977	FBGN0266312	0.063098	-0.17574	-0.40769	-0.64652
lncRNA:CR44494	FBGN0265687	-0.34543	-0.23214	0.192421	0.305709
CR41507	FBGN0085790	-1.04017	0.04728	-1.08235	0.005102
snoRNA:Me28S-U1688	FBGN0086044	0.495107	-0.26279	0.613268	-0.14463
al	FBGN0000061	-0.97043	-0.35105	-0.30628	0.31311
CG30288	FBGN0050288	0.69325	0.040755	-1.1689	-1.8214
lncRNA:CR44096	FBGN0264905	0.645578	0.074468	1.74257	1.17146

lncRNA:CR44732	FBGN0265945	-1.79197	1.346267	-0.2807	2.857538
asRNA:CR44843	FBGN0266117	-0.62851	0.1228	-0.77473	-0.02342
asRNA:CR45520	FBGN0267076	0.08724	-0.82173	0.918975	0.010009
MstProx	FBGN0015770	-0.04379	0.365036	-0.30822	0.100604
CG5172	FBGN0030830	-2.84032	-2.22027	3.085556	3.705605
CG9593	FBGN0038365	0.30844	-0.66512	0.69673	-0.27683
CG34175	FBGN0085204	-0.33526	-0.57238	-0.27343	-0.51054
lncRNA:bxd	FBGN0020556	-1.86076	-0.36429	-2.34261	-0.84613
lncRNA:CR46231	FBGN0267951	0.331556	-0.70292	0.374959	-0.65952
CG30380	FBGN0050380	-0.78081	0.518134	-0.9158	0.383148
asRNA:CR44224	FBGN0265155	-0.74734	0.299614	-0.62973	0.417227
CR46159	FBGN0267871	-1.00289	-0.49817	0.086985	0.591698
CR46072	FBGN0267741	-0.91356	-0.06751	-1.14183	-0.29578
CR43158	FBGN0262688	-0.32508	-0.60134	0.319163	0.042902
lncRNA:CR45587	FBGN0267147	0.559594	0.267131	-0.11462	-0.40708
CG33137	FBGN0053137	-0.02868	0.074669	1.022261	1.125609
lncRNA:CR46143	FBGN0267818	0.605001	0.57674	0.741119	0.712859
eloF	FBGN0037762	0.655668	0.229022	-0.43133	-0.85798
CG14397	FBGN0032914	-0.56256	-0.34847	-0.68593	-0.47184
lncRNA:CR43150	FBGN0262680	-0.84262	-0.80797	0.139737	0.174382
CG43219	FBGN0262855	0.793233	0.272261	0.970784	0.449812
CG8850	FBGN0033708	1.114833	0.3215	1.961154	1.167821
CR46150	FBGN0267862	-0.61707	-0.27775	-0.35669	-0.01736
lncRNA:CR44682	FBGN0265893	-0.51273	0.574002	-0.96503	0.121707
asRNA:CR44093	FBGN0264902	-0.32957	-0.20237	-0.94017	-0.81297
CG17162	FBGN0039944	1.020047	0.142357	0.247671	-0.63002
Rad51D	FBGN0033389	0.320752	0.172204	-0.15399	-0.30253
lncRNA:CR43695	FBGN0263778	-0.89141	0.357132	-0.91758	0.330957
lncRNA:CR45805	FBGN0267455	-0.25319	0.279485	-2.46439	-1.93171
CG31091	FBGN0051091	0.065391	-0.95343	1.130241	0.111415
Dnai2	FBGN0036195	0.137857	0.094355	-0.01774	-0.06124
CR32511	FBGN0052511	-1.38469	-1.46003	-1.81774	-1.89308
CG43308	FBGN0263000	0.077236	-0.42241	0.010852	-0.48879
lncRNA:CR43984	FBGN0264716	2.57415	0.231393	0.397789	-1.94497
CG11406	FBGN0034990	-0.24532	-0.43754	0.338623	0.146404
CG31928	FBGN0051928	0.600986	-1.93776	4.499085	1.960341
lncRNA:CR45375	FBGN0266915	0.568916	-0.81318	0.957009	-0.42508
NANS	FBGN0038045	-0.80963	-0.45119	-0.2841	0.074334
Ccp84Aa	FBGN0004783	0.263834	1.120172	3.055357	3.911695
lncRNA:CR46013	FBGN0267677	0.447221	-0.19005	1.079603	0.44233
lncRNA:CR44127	FBGN0264958	-0.45715	-0.06727	0.085784	0.475663
lncRNA:CR45097	FBGN0266536	-0.24946	-0.77939	-0.48201	-1.01194
lncRNA:CR43613	FBGN0263588	-1.94851	-3.10853	-0.65472	-1.81474
lncRNA:CR45170	FBGN0266680	1.16593	0.05145	1.424727	0.310247
CG12538	FBGN0038157	-0.87696	-1.05519	1.379499	1.201271
lncRNA:CR44204	FBGN0265099	0.041193	-0.23524	0.346273	0.069837
lncRNA:CR44571	FBGN0265764	0.815324	0.547387	0.386939	0.119002
lncRNA:CR44323	FBGN0265382	-0.5752	-0.17648	0.688007	1.086723
CG15615	FBGN0034159	-0.82646	-0.42672	-0.51792	-0.11818
lncRNA:CR42736	FBGN0261700	0.606921	-0.16448	0.495982	-0.27542
CG34448	FBGN0085477	-0.09538	-0.27434	-0.86592	-1.04487
CG31626	FBGN0051626	-0.88647	-0.722	-0.82579	-0.66131
CG15650	FBGN0034565	0.126498	-0.61891	-0.51929	-1.2647
lncRNA:CR44579	FBGN0265790	0.242098	0.265884	0.238936	0.262722
asRNA:CR43615	FBGN0263590	-0.57742	-0.91524	-0.48205	-0.81987
asRNA:CR44724	FBGN0265937	0.095635	0.342197	-0.36459	-0.11803
Lcp4	FBGN0002535	-0.7096	-2.01937	5.018624	3.708849
lncRNA:CR44464	FBGN0265657	0.054674	-0.25252	0.191271	-0.11592
asRNA:CR43454	FBGN0263408	0.382746	0.114937	-0.31577	-0.58358
CG1537	FBGN0030260	-0.19154	-0.26267	-0.26805	-0.33918
lncRNA:CR44432	FBGN0265614	-0.06788	0.024798	0.185646	0.278323
snoRNA:Psi28S-2648	FBGN0065055	0.413296	0.548101	0.155705	0.29051
CG13332	FBGN0033851	-0.06485	-0.29303	0.082543	-0.14564
lncRNA:CR46218	FBGN0267938	1.138205	-0.57657	2.366749	0.651972
lncRNA:CR45614	FBGN0267174	1.025092	0.219995	0.906003	0.100906
asRNA:CR45009	FBGN0266361	0.470308	0.146514	-0.29918	-0.62297
lncRNA:CR44752	FBGN0265965	0.079221	0.392993	-0.18863	0.125141
lncRNA:CR44797	FBGN0266032	-0.94717	0.359383	-1.21287	0.093684
CG11584	FBGN0030541	0.004599	0.892851	-0.19946	0.688788

lncRNA:CR45289	FBGN0266827	-0.17908	-0.23847	-0.90041	-0.95979
CG14085	FBGN0036859	-0.07506	-0.45544	0.030692	-0.34968
lncRNA:CR45985	FBGN0267647	-0.06634	0.406586	-0.06724	0.405682
lncRNA:CR44932	FBGN0266237	-0.82514	-0.26866	0.159622	0.7161
CG17290	FBGN0034201	-0.03615	0.238237	-0.13484	0.139545
lncRNA:CR44377	FBGN0265527	-0.0606	0.068913	0.172933	0.302449
lncRNA:CR44933	FBGN0266238	0.769954	-0.42276	-0.58626	-1.77898
rg	FBGN0266098	0.677785	-0.02243	0.854537	0.154324
lncRNA:CR44765	FBGN0265986	0.88781	0.341276	0.095395	-0.45114
lncRNA:CR43353	FBGN0263085	-0.19448	0.098253	-0.25146	0.041273
CG12640	FBGN0030202	0.521757	-2.19536	-0.77404	-3.49115
lncRNA:CR46225	FBGN0267945	-1.12767	-0.36359	-0.80283	-0.03875
lncRNA:CR44751	FBGN0265964	-0.53509	-0.10186	-1.28643	-0.8532
CG4763	FBGN0034910	-0.06233	0.188474	-0.00563	0.245166
Or74a	FBGN0036709	0.102111	-0.82938	1.902252	0.970757
lncRNA:CR45216	FBGN0266743	-1.8979	-0.5476	-0.63882	0.711484
CG6738	FBGN0039053	0.840849	0.200089	1.597795	0.957036
Lsp1alpha	FBGN0002562	2.463144	-0.16935	3.939745	1.30725
CR43379	FBGN0263209	-1.34241	-2.63909	1.523755	0.227073
E(spl)mgamma-HLH	FBGN0002735	-2.10149	-0.90662	-1.22748	-0.03261
lncRNA:CR44268	FBGN0265254	0.953683	0.561361	0.820236	0.427914
asRNA:CR43476	FBGN0263453	-0.03684	0.194052	0.764827	0.995723
CG13737	FBGN0036382	0.047459	0.03835	0.200855	0.191746
RabX5	FBGN0035255	0.402115	-0.00853	0.559749	0.149108
lncRNA:CR43966	FBGN0264697	0.683056	-0.18512	-0.34436	-1.21254
CG10970	FBGN0030078	0.360462	0.564521	-0.37275	-0.16869
lncRNA:CR32636	FBGN0052636	-0.63286	-0.24404	-0.08512	0.303698
CG33914	FBGN0053914	-0.27098	0.227535	-0.58905	-0.09054
lncRNA:CR44056	FBGN0264865	-0.46276	-0.27207	-0.81001	-0.61932
scaRNA:MeU5-C46	FBGN0043853	-0.18572	0.546329	0.584858	1.316907
CG34327	FBGN0085356	0.14898	-0.00845	0.839167	0.681735
lncRNA:CR32773	FBGN0052773	0.784199	0.47533	1.092244	0.783375
lncRNA:CR45964	FBGN0267626	-0.41301	-0.54154	-0.07835	-0.20689
CG34273	FBGN0085302	0.303803	-0.18265	0.98793	0.501476
CG12995	FBGN0030826	-0.06759	-0.19373	-0.07042	-0.19657
Tsen34	FBGN0053260	-0.15265	-0.39859	0.171242	-0.07469
CG33958	FBGN0053958	0.166237	-0.05296	0.271278	0.052082
CG13358	FBGN0026874	-0.40253	0.83144	-0.74799	0.485983
lncRNA:CR44851	FBGN0266145	0.904425	0.419832	0.868522	0.383929
plu	FBGN0003114	-0.67456	0.10663	-1.45111	-0.66991
lncRNA:CR45732	FBGN0267296	0.066859	0.332543	-0.76905	-0.50336
lncRNA:CR45551	FBGN0267111	-0.01667	-0.01985	0.1461	0.142923
lncRNA:CR45412	FBGN0266961	-1.2527	-1.0933	0.190192	0.349599
CG43668	FBGN0263743	-0.02056	0.033362	-0.39806	-0.34414
lncRNA:CR45255	FBGN0266790	-0.1366	0.160633	-0.21577	0.08147
CG13640	FBGN0039237	0.330108	0.512696	0.809524	0.992112
lncRNA:CR34044	FBGN0054044	-0.42457	-0.35825	-0.13607	-0.06975
lncRNA:CR43303	FBGN0262995	0.371243	0.183626	0.332495	0.144879
lncRNA:CR44563	FBGN0265756	-0.36092	0.403635	0.77816	1.542719
CG14947	FBGN0032406	0.731575	-0.14028	0.573353	-0.29851
lncRNA:CR45407	FBGN0266956	-0.56224	-0.40716	-1.34738	-1.1923
lncRNA:CR45349	FBGN0266888	-0.0768	0.579003	-0.4476	0.2082
gammaTub37C	FBGN0010097	-0.41919	-0.16163	-0.20019	0.05737
lncRNA:CR45382	FBGN0266931	-0.6917	-0.20559	-0.42738	0.05873
lncRNA:CR32385	FBGN0047205	-0.91376	0.481718	-0.59696	0.798517
lncRNA:CR44809	FBGN0266044	0.235883	-0.25856	-0.07428	-0.56873
CG13786	FBGN0031900	0.506684	0.271764	0.897274	0.662355
snoRNA:Psi28S-612	FBGN0082953	0.047082	0.199946	-0.4131	-0.26024
CG18538	FBGN0034324	-0.5494	-0.71846	-0.54582	-0.71488
lncRNA:CR44798	FBGN0266033	-0.51514	0.20077	-1.40075	-0.68484
lncRNA:CR46207	FBGN0267926	0.072004	-0.51849	0.351883	-0.23861
Cpr64Ad	FBGN0035513	-0.71446	-0.79984	0.154024	0.068647
sro	FBGN0262112	-0.83303	-0.90999	0.416209	0.339253
lncRNA:CR44685	FBGN0265896	-0.36657	-0.10303	-0.25333	0.010215
Cyp4ae1	FBGN0015036	0.218921	0.308603	-0.6	-0.51032
lncRNA:CR45187	FBGN0266697	0.011917	-0.05781	-0.28538	-0.3551
lncRNA:CR44220	FBGN0265151	0.046424	0.166412	-0.86327	-0.74329
lncRNA:CR45649	FBGN0267209	-0.87147	-0.42793	-0.87298	-0.42944
lncRNA:CR44725	FBGN0265938	0.600536	-1.27017	1.863326	-0.00738

mt:tRNA:Leu-TAA	FBGN0013699	-0.45687	0.547479	-0.44697	0.557379
CG11085	FBGN0030408	-0.16671	-0.64559	0.549655	0.070777
lncRNA:CR44530	FBGN0265723	-0.06723	-0.3032	0.276061	0.040096
CG6216	FBGN0036139	0.105118	0.146641	-0.84645	-0.80493
Sesn	FBGN0034897	0.05584	-0.17887	-0.11196	-0.34667
lncRNA:CR45232	FBGN0267793	1.479644	0.415811	2.370171	1.306338
lncRNA:CR44741	FBGN0265954	0.184702	0.144664	0.689474	0.649436
lncRNA:CR45022	FBGN0266380	0.214553	-0.24486	-0.12016	-0.57957
lncRNA:CR45887	FBGN0267547	-0.2031	0.051503	-0.20112	0.053483
lncRNA:CR46156	FBGN0267868	0.489877	0.359265	0.068624	-0.06199
lncRNA:CR44848	FBGN0266142	-0.60433	0.465819	0.285404	1.35555
lncRNA:CR45344	FBGN0266883	-0.53724	-0.1438	-0.93511	-0.54166
asRNA:CR45832	FBGN0267482	-4.10522	2.008715	-3.47448	2.639451
asRNA:CR43842	FBGN0264394	0.059949	0.047309	0.144296	0.131656
CG13226	FBGN0033594	0.044048	-0.79011	0.564004	-0.27015
CR43381	FBGN0263211	-1.84309	-3.87847	1.776771	-0.25861
asRNA:CR43889	FBGN0264481	-0.21607	-0.12269	-0.29684	-0.20346
lncRNA:CR44118	FBGN0264949	-0.34962	-0.15483	-0.22182	-0.02703
CG11263	FBGN0036330	0.490531	0.385528	1.1523	1.047297
lncRNA:CR45664	FBGN0267224	-0.79016	0.953009	-1.06113	0.682041
lncRNA:CR43973	FBGN0264704	-0.19274	0.549969	-0.31392	0.428782
NimC2	FBGN0028939	0.668246	0.123952	-0.55205	-1.09635
sisRNA:CR46357	FBGN0286035	0.425934	0.477689	0.21494	0.266695
CG43204	FBGN0262840	0.381044	-0.16982	1.110562	0.559702
lncRNA:CR45512	FBGN0267068	0.690658	1.371249	-0.94764	-0.26705
lncRNA:CR45558	FBGN0267118	0.257563	0.719017	0.51177	0.973223
CG17267	FBGN0038821	-0.21745	0.116073	-0.37509	-0.04156
nol	FBGN0014368	-0.5306	0.779511	-0.8477	0.462411
CR43697	FBGN0263835	-0.0652	0.10412	0.169586	0.338907
Mos	FBGN0033773	-0.6399	0.094735	-0.24254	0.492095
Su(Ste):CR42432	FBGN0259863	-2.07217	-0.89621	-1.425	-0.24904
lncRNA:CR44919	FBGN0266224	1.015923	0.069379	0.707359	-0.23919
Poxn	FBGN0003130	-0.81951	-0.73519	-0.12229	-0.03797
CG7126	FBGN0038602	-1.01758	1.060625	-0.40106	1.677145
lncRNA:CR46204	FBGN0267923	0.045623	0.164485	0.139684	0.258546
CG43342	FBGN0263047	-0.08594	-0.11911	-0.11688	-0.15005
lncRNA:CR46213	FBGN0267933	-1.46386	0.02914	-0.51705	0.975951
825-Oak	FBGN0052208	0.483836	-0.28231	0.844107	0.07796
lncRNA:CR43811	FBGN0264359	-0.77338	-0.77899	-0.00287	-0.00848
lncRNA:CR44780	FBGN0266007	-1.45448	0.082383	0.215625	1.75249
lncRNA:CR45575	FBGN0267135	1.437872	0.174859	1.08799	-0.17502
asRNA:CR44062	FBGN0264871	-0.21532	-0.13948	-0.12733	-0.0515
Ir75c	FBGN0261401	-1.79876	-1.90799	-1.83647	-1.9457
lncRNA:CR45096	FBGN0266535	0.031602	0.453445	-0.38298	0.038862
CG43938	FBGN0264566	-0.21756	1.38785	2.46626	4.071675
Cyp316a1	FBGN0035790	0.442238	-0.10577	0.427291	-0.12072
CG42826	FBGN0262008	-1.45793	0.042402	-2.86937	-1.36904
asRNA:CR44321	FBGN0265380	0.28832	-0.28705	0.510909	-0.06446
CG14454	FBGN0037177	-1.50171	1.432039	-3.79351	-0.85976
lncRNA:CR45211	FBGN0266738	-0.53194	0.179426	-0.17515	0.536222
CG30091	FBGN0050091	1.717223	1.256167	2.64502	2.183964
CG44439	FBGN0265632	-3.10467	-0.74992	-4.06622	-1.71147
lncRNA:CR45014	FBGN0266366	0.228854	0.274198	0.213502	0.258845
link	FBGN0033855	-0.3233	-0.09405	-0.61156	-0.38231
lncRNA:CR44384	FBGN0265534	-0.47982	-0.14391	-0.36655	-0.03064
lncRNA:CR45233	FBGN0266768	-0.67695	-0.7573	-1.19169	-1.27204
lncRNA:CR45196	FBGN0266706	0.216174	-0.16944	0.380351	-0.00526
nab	FBGN0259986	0.336506	0.27716	-0.11618	-0.17553
CG43338	FBGN0263079	-0.18134	-0.47294	0.143314	-0.14828
CR12628	FBGN0042701	-0.89759	-0.05893	0.406009	1.244666
Or2a	FBGN0023523	-0.19882	-0.55794	0.333376	-0.02574
lncRNA:CR44458	FBGN0265651	-0.30674	1.026459	-0.96452	0.368686
CG15731	FBGN0030390	0.824967	2.946563	2.796384	4.91798
CG11670	FBGN0038114	-0.05307	-0.10557	-0.2213	-0.2738
lncRNA:CR44117	FBGN0264948	-0.32571	-0.15476	-0.18016	-0.00921
snRNA:U1:95Ca	FBGN0004185	-1.33917	-0.50939	-0.91244	-0.08266
lncRNA:CR45819	FBGN0267469	-0.43449	-0.7178	0.72496	0.441657
lncRNA:CR44785	FBGN0266020	0.024381	0.004982	-0.68784	-0.70724
lncRNA:CR45761	FBGN0267399	0.861303	0.817026	0.913228	0.868951

Bro	FBGN0013755	-0.27511	-0.30656	-0.30768	-0.33913
lncRNA:CR44274	FBGN0265301	0.012527	0.2749	-0.32553	-0.06316
Obp19c	FBGN0031111	-0.20001	-0.40628	0.106247	-0.10002
CG7294	FBGN0032284	-1.05164	-0.33931	-1.00046	-0.28813
asRNA:CR45468	FBGN0267024	-0.59922	0.260357	-0.76449	0.095091
CG43366	FBGN0263109	-0.30404	0.481152	0.040234	0.825422
Elo68beta	FBGN0036128	-0.50212	-0.45509	-0.21933	-0.1723
CG12590	FBGN0037294	-0.73015	-0.30367	-0.72064	-0.29416
lncRNA:CR42715	FBGN0261632	0.893936	1.102556	0.562919	0.771538
asRNA:CR45682	FBGN0267242	-0.59168	-0.56841	-0.18052	-0.15725
RYa	FBGN0085512	0.107823	0.564733	-0.38283	0.074084
lncRNA:CR43857	FBGN0264439	-0.20159	-0.32505	-0.19734	-0.32081
AANATL4	FBGN0034429	-0.41431	-0.49778	0.53189	0.44843
Or22b	FBGN0026397	0.316822	0.855843	0.385471	0.924492
lncRNA:CR44322	FBGN0265381	0.757775	0.52418	0.809903	0.576308
CG45081	FBGN0266456	0.16793	0.321186	0.417967	0.571223
sisRNA:2	FBGN0286040	0.633624	0.877808	0.49578	0.739964
lncRNA:CR42721	FBGN0261638	-0.13066	-0.31224	0.508859	0.327278
CG34296	FBGN0085325	-1.71642	-0.02093	-1.09931	0.596181
lncRNA:CR44639	FBGN0265850	-4.15536	-4.1185	-2.81913	-2.78227
CG15564	FBGN0039833	0.743744	0.236023	0.135061	-0.37266
lncRNA:CR44871	FBGN0266165	-0.22066	0.163836	-0.22974	0.154761
CG17974	FBGN0034624	-0.47414	-0.49528	-0.24331	-0.26444
CG30076	FBGN0050076	-0.25592	0.122443	-0.23438	0.14398
lncRNA:CR45881	FBGN0267541	0.998226	-0.14985	0.799686	-0.34839
CG43191	FBGN0262820	0.342071	-0.07348	-0.13675	-0.5523
lncRNA:CR43635	FBGN0263626	-0.35244	-1.15838	0.501715	-0.30423
CG3769	FBGN0032119	-0.20147	-0.04105	-0.11731	0.043121
lncRNA:CR44749	FBGN0265962	0.124928	0.684419	-0.39315	0.166337
Sb	FBGN0003319	0.512093	0.42772	0.651084	0.566711
lncRNA:CR44517	FBGN0265710	-0.51435	0.975097	-0.67428	0.81517
lncRNA:CR45181	FBGN0266691	1.004559	0.36249	1.380429	0.73836
CG13407	FBGN0038931	-0.18018	1.582857	-0.30213	1.4609
asRNA:CR45133	FBGN0266626	0.265183	-1.12612	0.859119	-0.53218
CG46398	FBGN0286876	0.017502	0.144223	-0.28975	-0.16303
asRNA:CR45140	FBGN0266633	0.275329	0.737586	0.264265	0.726522
CG18581	FBGN0036466	-0.99635	-0.19128	0.002678	0.807742
CG13575	FBGN0034996	0.924732	0.704303	0.645759	0.42533
lncRNA:CR43929	FBGN0264550	-0.14186	-0.19265	-0.64891	-0.6997
Rdh	FBGN0064227	1.524913	-0.01026	1.65066	0.115489
CG13427	FBGN0034514	0.995937	0.218611	-0.04305	-0.82037
Oaz	FBGN0284250	-0.22625	-0.68134	-0.11034	-0.56544
lncRNA:CR46199	FBGN0267918	-0.02436	-0.3928	-0.06449	-0.43292
Ir64a	FBGN0035604	-0.23638	-0.63328	0.077927	-0.31897
lncRNA:CR45699	FBGN0267263	0.804403	0.675366	0.000389	-0.12865
CG13962	FBGN0032824	1.44014	1.741243	0.001875	0.302978
CG13157	FBGN0033732	0.72082	0.20813	0.974392	0.461702
CG3598	FBGN0025645	0.009023	-0.23574	0.020297	-0.22446
lncRNA:CR45586	FBGN0267146	-0.067	-0.0193	0.047487	0.095183
lncRNA:CR45504	FBGN0267060	0.14149	0.277586	0.218531	0.354627
CG17786	FBGN0039167	0.054638	0.205752	-0.19835	-0.04724
yellow-g	FBGN0041709	-0.27582	0.353252	-0.47889	0.150179
lncRNA:CR46257	FBGN0267990	-0.68546	0.162387	-0.58199	0.265851
lncRNA:CR45036	FBGN0266396	-0.09158	0.349291	-1.33024	-0.88936
lncRNA:CR45679	FBGN0267239	0.695024	0.768073	-0.14153	-0.06848
lncRNA:CR45967	FBGN0267629	-0.86676	-0.18894	-0.37317	0.304655
lncRNA:CR44608	FBGN0265819	0.438317	0.929823	0.272304	0.76381
asRNA:CR44653	FBGN0265864	-0.26404	0.151453	-1.06671	-0.65122
CG44040	FBGN0264832	-0.13898	1.362272	-1.27196	0.229289
CG33342	FBGN0086610	-0.52982	-1.04943	0.850551	0.330937
asRNA:CR45016	FBGN0266372	-0.57923	-0.15134	-0.03176	0.396125
asRNA:CR46093	FBGN0267762	0.00345	-0.45763	-0.38821	-0.8493
lncRNA:CR43956	FBGN0264616	0.404602	-0.79781	0.212919	-0.98949
sisRNA:3	FBGN0286037	0.219124	-0.19506	0.111224	-0.30296
asRNA:CR45525	FBGN0267081	0.32208	0.793031	2.543594	3.014545
lncRNA:CR46230	FBGN0267950	-0.58062	-1.37205	0.76231	-0.02912
lncRNA:CR43700	FBGN0263838	-0.25135	0.184377	-0.49693	-0.0612
Pcp	FBGN0003046	-0.39446	-0.03233	0.588972	0.951103
Tep5Psi	FBGN0264845	-0.25645	-0.44748	0.823226	0.632203

CG32237	FBGN0052237	-1.53127	-1.73037	1.899624	1.700524
CG42792	FBGN0261925	-0.27012	0.080541	-0.50949	-0.15883
asRNA:CR46145	FBGN0267820	-0.1219	0.125658	0.418144	0.665706
CR33929	FBGN0053929	1.224093	1.0827	-1.99633	-2.13772
Cyp6t2Psi	FBGN0041336	0.918249	-0.1339	1.198178	0.146027
CR46405	FBGN0286883	0.323778	-0.23264	0.483971	-0.07245
lncRNA:CR44699	FBGN0265910	-0.41806	-0.29174	-0.83184	-0.70552
lncRNA:CR45644	FBGN0267204	0.621228	1.578142	-1.13004	-0.17312
asRNA:CR45135	FBGN0266628	-0.19117	-0.02379	-0.19164	-0.02426
CG10918	FBGN0031178	-0.2256	-0.57184	-0.65585	-1.00208
narya	FBGN0031018	-0.24598	-0.60818	-0.34198	-0.70418
Or47b	FBGN0026385	0.333768	-0.44654	0.799795	0.019487
CG34430	FBGN0085459	0.147334	0.092606	-0.09926	-0.15399
Gr39b	FBGN0041245	0.149987	-0.19159	-0.0893	-0.43088
lncRNA:CR45424	FBGN0266973	-0.57041	0.091176	-0.64051	0.021079
CR33491	FBGN0053491	-0.20467	-0.05675	0.105489	0.253415
apn	FBGN0038132	0.624735	-0.4664	-0.25436	-1.3455
lncRNA:CR44320	FBGN0265379	0.512383	0.431654	0.847557	0.766827
CG13154	FBGN0033736	-1.26997	-0.41945	-0.6879	0.162611
CG15322	FBGN0031088	0.36238	1.207893	-0.01453	0.830985
snoRNA:Psi28S-1153	FBGN0083006	0.943771	0.259405	0.928679	0.244313
lncRNA:CR45590	FBGN0267150	0.079111	0.758543	0.301706	0.981138
lncRNA:CR44766	FBGN0265987	-0.73493	-1.27319	-0.37394	-0.91219
CG14453	FBGN0037179	0.045389	-0.30516	0.232623	-0.11793
CG45676	FBGN0267236	-0.32054	-0.6141	0.696607	0.403049
lncRNA:CR44352	FBGN0265452	-0.90046	0.105637	-0.61392	0.392175
CG42759	FBGN0261817	1.505029	0.449346	2.448054	1.392371
AgmNAT	FBGN0029813	-0.43944	-0.52467	-0.07209	-0.15731
lncRNA:CR43951	FBGN0264602	-0.11038	-0.03197	0.533439	0.611856
CG42284	FBGN0259179	0.483913	-0.07371	0.736552	0.178932
lncRNA:CR32027	FBGN0052027	-0.10148	0.368331	-0.04228	0.427528
lncRNA:CR44889	FBGN0266183	-0.14869	0.023769	0.155554	0.328017
lncRNA:CR45559	FBGN0267119	0.017843	0.006562	-0.09941	-0.11069
CG34031	FBGN0054031	-0.29056	0.348366	0.21799	0.856915
asRNA:CR42742	FBGN0261706	-0.59588	-0.64908	0.767273	0.714076
asRNA:CR44237	FBGN0265168	-1.19607	0.379039	-0.94364	0.63147
ppk15	FBGN0039424	0.594886	0.179445	0.208576	-0.20687
lncRNA:CR45359	FBGN0266899	-0.58442	-0.27371	-0.20115	0.109563
lncRNA:CR44748	FBGN0265961	0.230496	1.072574	-1.30712	-0.46505
lncRNA:CR44886	FBGN0266180	-1.04847	-0.47912	-2.3702	-1.80084
P5cr-2	FBGN0038516	-1.64986	-0.20691	-2.08481	-0.64186
lncRNA:CR44233	FBGN0265164	0.204051	-0.66954	-0.35153	-1.22512
asRNA:CR45955	FBGN0267617	-0.85656	-0.59611	-0.86203	-0.60158
lncRNA:CR44307	FBGN0265366	-0.60499	0.127491	-1.05426	-0.32178
Gr8a	FBGN0030108	0.161614	0.14078	-0.25328	-0.27411
asRNA:CR45146	FBGN0266639	0.66455	0.583388	0.933569	0.852408
lncRNA:CR46116	FBGN0267785	-0.43621	-0.27802	-0.47933	-0.32114
lncRNA:CR43274	FBGN0262963	0.818161	0.286803	0.901578	0.37022
lncRNA:CR45916	FBGN0267576	-0.1594	-0.18772	0.663356	0.635028
lncRNA:CR44964	FBGN0266279	-0.91174	-0.75801	0.584952	0.738676
lncRNA:CR45717	FBGN0267281	-1.09176	1.748795	-3.69249	-0.85194
Osi11	FBGN0037418	-1.24489	-0.70997	-0.47755	0.057373
snoRNA:Psi18S-301	FBGN0083039	0.012412	-0.30148	-0.47579	-0.78968
lncRNA:CR44150	FBGN0264999	-1.14516	0.369229	-2.74696	-1.23257
lncRNA:CR44917	FBGN0266222	-2.5239	-0.93279	-1.73249	-0.14138
CG13068	FBGN0036588	-0.88214	1.024497	-0.69777	1.208862
asRNA:CR45535	FBGN0267091	0.097089	-0.72996	0.742728	-0.08432
CR9337	FBGN0032898	0.152551	0.015668	0.25254	0.115656
snoRNA:Psi28S-2996	FBGN0082980	0.341594	0.525214	0.72418	0.9078
Ir31a	FBGN0051718	1.052189	0.109495	0.35568	-0.58701
amn	FBGN0086782	1.938539	1.231845	1.105363	0.398668
CR45227	FBGN0266762	-0.9343	0.51295	-1.05743	0.389825
lncRNA:CR45335	FBGN0266874	-0.2978	-0.21823	-0.37544	-0.29587
lncRNA:CR44925	FBGN0266230	-0.18108	-0.04086	-0.07189	0.068334
lncRNA:CR44652	FBGN0265863	0.02678	0.108154	0.49293	0.574303
lncRNA:CR44392	FBGN0265542	-0.92631	0.573563	-2.23456	-0.73469
asRNA:CR45171	FBGN0266681	0.283088	-0.04201	-0.1121	-0.43719
asRNA:CR45108	FBGN0266577	-0.463	0.165252	-0.69462	-0.06636
asRNA:CR43933	FBGN0264554	-0.2302	0.28367	-0.12455	0.389324

lncRNA:CR43969	FBGN0264700	-0.14062	-0.65488	0.612442	0.098185
lncRNA:CR44598	FBGN0265809	-0.25773	0.496967	-2.78147	-2.02677
lncRNA:CR45513	FBGN0267069	0.730881	0.146554	0.498881	-0.08545
asRNA:CR44291	FBGN0265318	-0.42409	0.750278	-0.38484	0.78953
CG33465	FBGN0053465	-0.60954	-0.49345	-0.57478	-0.45869
mt:tRNA:Tyr-GTA	FBGN0013710	-0.38987	0.063967	-0.71608	-0.26224
lncRNA:CR44654	FBGN0265865	0.106981	-0.17328	-0.66323	-0.94349
Or67a	FBGN0036009	-0.78521	-0.53742	0.699955	0.947746
lncRNA:CR42794	FBGN0261927	-0.06448	-0.29497	0.129101	-0.10138
lncRNA:CR44498	FBGN0265691	-0.24226	-0.05801	-0.00987	0.174381
CG14626	FBGN0040360	-0.40389	0.553706	-0.70146	0.256132
lncRNA:CR43431	FBGN0263379	0.546653	0.49552	-0.85637	-0.9075
CG34231	FBGN0085260	-0.12038	0.472218	-0.33563	0.256963
lncRNA:CR44273	FBGN0265300	-0.66725	-0.44249	-0.03634	0.188415
CR46432	FBGN0286938	1.600106	0.632315	1.0169	0.049109
lncRNA:CR44804	FBGN0266039	-0.08688	0.242062	-0.08594	0.243006
CG45690	FBGN0267254	-1.10391	-0.59123	-0.36222	0.15046
lncRNA:TS9	FBGN0284416	0.319223	-0.49963	0.025017	-0.79383
CG13992	FBGN0031756	-0.2372	-0.04192	-0.15939	0.035885
asRNA:CR43614	FBGN0263589	0.777399	1.023868	0.292366	0.538835
CG44270	FBGN0265256	-2.25646	-0.28349	-0.63053	1.342438
lncRNA:TS20	FBGN0284417	-0.73523	1.396995	-1.07387	1.058358
lncRNA:CR42719	FBGN0261636	0.018181	-0.02658	-0.32797	-0.37273
CG12672	FBGN0030886	0.065278	0.064484	0.550024	0.549231
CG15927	FBGN0030389	0.320207	0.546868	0.189145	0.415806
lncRNA:CR45564	FBGN0267124	-0.20774	0.589917	0.265634	1.063287
CG43248	FBGN0262893	-0.116	0.148584	-0.28764	-0.02305
lncRNA:CR44816	FBGN0266051	0.794713	0.867773	-0.43657	-0.36351
CG6034	FBGN0036750	1.703321	1.067275	2.046658	1.410612
dmrt11E	FBGN0030477	0.230981	-0.4651	0.82548	0.129402
Cyp313a3	FBGN0038007	-0.74653	-0.28087	-1.23448	-0.76882
lncRNA:CR43661	FBGN0263709	-0.87654	-1.02022	-0.99685	-1.14052
CG10140	FBGN0036363	-0.25502	0.541622	-0.53587	0.260769
CG17959	FBGN0029647	0.422413	0.545647	-3.70783	-3.5846
snoRNA:Psi28S-3385b	FBGN0082961	0.080618	0.133018	0.103153	0.155552
CG13500	FBGN0034683	-0.02446	-0.40255	0.519027	0.140931
Ama	FBGN0000071	-0.9506	-0.02935	-0.72367	0.197573
CG43208	FBGN0262844	-0.74557	-0.77302	-1.02365	-1.05109
Mcad	FBGN0035811	0.540116	0.80398	0.000498	0.264362
Or1a	FBGN0029521	-0.87612	0.010925	-0.95584	-0.06879
snoRNA:Psi18S-1377c	FBGN0083049	1.394295	3.026396	0.585579	2.217681
lncRNA:CR45978	FBGN0267640	-3.61426	-4.27029	-0.00709	-0.66311
asRNA:CR44372	FBGN0265510	0.192774	0.041547	-0.34928	-0.5005
Gr23a	FBGN0041248	0.090614	-1.16056	-0.8572	-2.10838
CG34377	FBGN0263117	0.08155	0.230472	-0.19843	-0.04951
E(spl)m2-BFM	FBGN0002592	0.078112	0.610406	0.014103	0.546396
lncRNA:CR45534	FBGN0267090	-0.75487	-0.10778	-0.42152	0.225571
CG14342	FBGN0031324	-0.43022	0.005544	-0.04941	0.386357
mthl11	FBGN0045443	0.536984	0.034449	0.621041	0.118507
asRNA:CR44992	FBGN0266327	0.658242	0.502598	0.632899	0.477255
CG5391	FBGN0038943	-0.27233	0.332298	-0.16848	0.436141
Ir8a	FBGN0052704	-0.95416	-0.24864	0.2989	1.004426
ppk18	FBGN0265001	0.169572	0.308432	-0.46923	-0.33037
CG5367	FBGN0032228	-0.70036	0.268261	-0.84455	0.124071
ckd	FBGN0035427	0.271398	0.420069	-0.11982	0.028849
asRNA:CR44124	FBGN0264955	1.113123	-0.68734	1.588544	-0.21191
lncRNA:CR44740	FBGN0265953	0.482008	-1.137	1.569139	-0.04987
lncRNA:CR44859	FBGN0266153	0.866946	0.778429	-0.17048	-0.259
lncRNA:CR43987	FBGN0264719	-0.58033	-0.2409	0.961555	1.300979
CG13728	FBGN0036716	0.140604	-0.03464	-0.23634	-0.41158
PH4alphaSG2	FBGN0039779	0.48974	1.052122	-0.50048	0.0619
lncRNA:CR43991	FBGN0264723	0.438417	-0.05805	-0.53464	-1.03111
CR46447	FBGN0287217	-0.31854	0.153843	-0.31332	0.159062
lncRNA:CR45566	FBGN0267126	-0.11514	-0.05927	0.337848	0.393711
lncRNA:CR46349	FBGN0286029	0.113785	-1.50245	1.702319	0.086086
snRNA:U1:21D	FBGN0003916	-1.02484	-0.83083	-1.1094	-0.91539
lncRNA:CR43751	FBGN0265017	0.330294	-0.62573	-1.08301	-2.03903
gnu	FBGN0001120	-1.27609	-0.12796	-0.80605	0.342088
lncRNA:CR45201	FBGN0266728	0.562927	0.316986	0.75211	0.506169

robls54B	FBGN0263233	-0.5087	0.06713	-1.31561	-0.73977
lncRNA:CR44061	FBGN0264870	0.090211	-0.12047	-0.60269	-0.81337
lncRNA:CR44348	FBGN0265448	0.979031	-0.5161	1.039051	-0.45608
asRNA:CR45205	FBGN0266732	-0.56933	-0.72987	0.504788	0.344243
CG33920	FBGN0053920	0.409145	0.051082	0.065937	-0.29213
asRNA:CR44512	FBGN0265705	0.002744	0.657302	-0.10776	0.546796
CG6294	FBGN0030640	-0.19056	0.323713	-0.62368	-0.10941
CG6026	FBGN0038676	-0.51782	-1.65042	1.204406	0.071807
Mst77Y-9	FBGN0267493	-0.53886	0.262567	-0.01654	0.784889
CheB74a	FBGN0261294	-0.58331	0.14848	-1.54093	-0.80914
HHEX	FBGN0038852	-1.01096	-0.48652	-0.94068	-0.41625
lncRNA:CR44875	FBGN0266169	-0.21343	-0.39533	-0.31872	-0.50062
CG42460	FBGN0259950	-0.46935	0.749026	-0.67192	0.546453
lncRNA:CR44658	FBGN0265869	-0.12293	0.165644	-0.81268	-0.52411
Osi20	FBGN0037430	0.490225	0.182021	0.61162	0.303416
CG14568	FBGN0037124	-0.53415	-0.22742	-0.13746	0.169267
CG3502	FBGN0046253	-0.47664	-0.94043	0.064189	-0.39961
CG34214	FBGN0085243	-1.02975	-0.06923	0.089926	1.050441
lncRNA:CR44456	FBGN0265649	0.105366	-0.63243	0.178292	-0.55951
lncRNA:CR45293	FBGN0266831	-1.05613	-1.53588	0.07755	-0.4022
asRNA:CR45549	FBGN0267109	-0.55796	0.533693	-1.34751	-0.25586
CG14086	FBGN0036860	-0.80924	-0.44829	-0.28969	0.071264
asRNA:CR46066	FBGN0267735	-0.00194	0.657582	0.321627	0.981145
CG11356	FBGN0030375	-1.87715	-0.61044	1.641419	2.908123
CG31606	FBGN0051606	1.197008	0.221519	0.757205	-0.21828
CG44290	FBGN0265317	0.805156	0.133088	0.18756	-0.48451
lncRNA:CR44554	FBGN0265747	0.097092	-0.07425	-0.51138	-0.68272
lncRNA:CR44547	FBGN0265740	-2.0478	-0.11322	2.020634	3.955216
lncRNA:CR45314	FBGN0266853	-0.94202	0.100431	-2.11556	-1.07312
CG43295	FBGN0262987	-0.45004	0.073838	-0.40665	0.117222
lncRNA:CR45605	FBGN0267165	-0.85992	-0.4948	-0.89396	-0.52884
lncRNA:CR33948	FBGN0063083	0.418541	-0.41768	0.283657	-0.55256
CG34453	FBGN0085482	-0.55264	0.054876	0.074485	0.682005
lncRNA:CR45452	FBGN0267008	1.376558	0.229651	1.551948	0.405041
lncRNA:CR44830	FBGN0266088	-0.54328	-0.3983	-0.02987	0.115109
CG33783	FBGN0053783	-0.0276	0.09585	-5.07825	-4.9548
snoRNA:Psi28S-1192b	FBGN0083000	1.995524	0.932067	0.722385	-0.34107
snRNA:U2:38ABa	FBGN0003922	-0.26252	-0.40983	-1.35156	-1.49888
Tb	FBGN0243586	-1.07511	-2.79705	-0.97256	-2.69449
CG13287	FBGN0035643	0.624515	0.532836	0.624309	0.532631
lncRNA:CR44575	FBGN0265786	2.23036	-0.5069	3.126994	0.389733
asRNA:CR46082	FBGN0267751	3.158575	1.225514	1.497142	-0.43592
CG2256	FBGN0029995	0.071347	-0.39273	1.098475	0.634393
CG15140	FBGN0032631	0.080899	0.990919	0.58431	1.49433
lncRNA:CR44902	FBGN0266207	-1.94814	-2.15413	0.545329	0.339337
CG14625	FBGN0040358	-0.53824	-0.26207	-0.19583	0.080341
lncRNA:CR44630	FBGN0265841	0.48015	-0.14399	1.536295	0.912152
asRNA:CR44115	FBGN0264946	-1.21284	-1.07254	-0.11961	0.020692
CG14238	FBGN0039429	0.023603	-0.9329	1.057543	0.101036
lncRNA:CR45583	FBGN0267143	-0.2275	-0.26066	0.020464	-0.0127
CheA56a	FBGN0262595	-0.17391	-0.32805	0.195373	0.04123
lncRNA:CR43958	FBGN0264618	-0.48465	-0.27053	-0.15513	0.058992
CG13144	FBGN0032260	0.417879	-0.42349	0.628103	-0.21327
lncRNA:CR45678	FBGN0267238	1.731279	1.599013	2.117738	1.985472
Su(Ste):CR42414	FBGN0259845	-1.81585	-0.43437	-0.77142	0.610055
CG12133	FBGN0033469	-1.25245	-0.14669	-1.8121	-0.70634
CG13312	FBGN0035931	3.746654	-0.47802	3.534792	-0.68988
Cpr64Aa	FBGN0035510	-0.80615	-0.40835	1.235809	1.633614
CG15756	FBGN0030493	0.950951	0.136985	-0.03009	-0.84406
asRNA:CR45712	FBGN0267276	0.474922	0.542805	-0.15147	-0.08358
CG14096	FBGN0036871	0.910619	0.366333	0.680533	0.136247
lncRNA:CR45966	FBGN0267628	0.09389	-0.74167	0.459133	-0.37643
lncRNA:CR44216	FBGN0265147	-0.83808	0.38031	-0.93816	0.280226
ste24c	FBGN0050462	0.372444	0.023401	0.0316	-0.31744
lncRNA:CR45217	FBGN0266744	0.085585	0.314653	-0.37747	-0.1484
lncRNA:CR46322	FBGN0284238	-1.23994	-0.09549	-0.80586	0.338585
CG9522	FBGN0030587	-0.50045	-0.21911	0.863702	1.14504
lncRNA:CR44346	FBGN0265446	0.727969	-0.50349	0.529552	-0.70191
lncRNA:CR45418	FBGN0266967	-0.38015	-0.19006	0.18781	0.377907

Alp1	FBGN0283479	0.300146	0.02656	-0.20225	-0.47584
lncRNA:CR44708	FBGN0265919	-0.28434	1.572795	-1.28562	0.571519
CG4372	FBGN0034665	0.362121	0.23422	0.348731	0.22083
Acbp4	FBGN0035742	0.725425	-0.10446	-0.16641	-0.99629
lncRNA:CR44698	FBGN0265909	-0.17528	-0.48876	-0.61241	-0.92589
CG31437	FBGN0051437	0.072278	-0.18409	-0.34995	-0.60632
Or19b	FBGN0062565	0.370322	-1.23191	1.138221	-0.46401
CG13247	FBGN0036979	0.722643	0.080246	0.655868	0.013471
lncRNA:CR45365	FBGN0266905	3.226512	-0.06623	1.743883	-1.54886
CG4582	FBGN0039344	-1.33943	-2.70283	0.183426	-1.17997
CG6280	FBGN0033866	0.05387	-0.22403	-0.49934	-0.77724
asRNA:CR45870	FBGN0267530	0.842886	-0.12115	0.938161	-0.02588
asRNA:CR45024	FBGN0266382	0.700921	0.789661	0.227873	0.316613
lncRNA:CR45720	FBGN0267284	0.202261	-0.60562	-0.93192	-1.7398
lncRNA:CR45291	FBGN0266829	-1.6259	0.162098	-1.44364	0.34436
lncRNA:CR43822	FBGN0264370	-1.7651	0.22129	-1.1129	0.873488
lncRNA:CR44026	FBGN0264818	-0.58271	-0.63091	-0.44519	-0.49339
lncRNA:CR44844	FBGN0266138	-0.36671	-0.96931	0.121603	-0.481
lncRNA:CR45530	FBGN0267086	0.048376	-0.25571	-1.24939	-1.55347
CG14421	FBGN0029644	0.59732	-0.76723	0.454845	-0.90971
snoRNA:Psi28S-3091b	FBGN0082978	-0.03403	-0.10691	0.354388	0.281503
CG5810	FBGN0038866	0.495957	0.11492	-0.1388	-0.51984
asRNA:CR45396	FBGN0266945	0.757908	-0.5084	0.971742	-0.29456
fd96Cb	FBGN0004898	0.089678	-0.12712	0.378289	0.161491
asRNA:CR45260	FBGN0266798	-0.55102	-0.35302	-1.37086	-1.17286
lncRNA:CR45302	FBGN0266840	-1.61596	-0.50613	-1.28943	-0.1796
Or71a	FBGN0036474	0.398321	0.562454	0.704538	0.868671
ImpE1	FBGN0001253	0.269646	0.064583	1.19029	0.985227
nyo	FBGN0039852	-1.39937	-0.39254	-0.69912	0.307698
lncRNA:CR45052	FBGN0266412	0.128487	-0.70557	-0.71715	-1.5512
CG13071	FBGN0036585	1.20081	0.91182	0.619166	0.330176
CG4362	FBGN0038784	-0.06708	-1.10858	-0.31527	-1.35677
CG42633	FBGN0261356	-0.20526	-0.06859	-0.84493	-0.70826
lncRNA:CR45380	FBGN0266929	-0.97679	0.485645	-0.55034	0.912089
CG44038	FBGN0264830	0.40587	-0.15595	0.217751	-0.34407
snRNA:U1:95Cb	FBGN0004186	-0.56347	0.008091	-0.47543	0.096127
lncRNA:CR44768	FBGN0265993	0.258073	0.886652	0.646294	1.274873
lncRNA:CR43831	FBGN0264379	0.465818	0.217099	0.650512	0.401793
lncRNA:CR44868	FBGN0266162	-0.44941	-0.18365	-0.00643	0.25933
CG4613	FBGN0036427	0.093987	0.007348	-0.15802	-0.24466
asRNA:CR43730	FBGN0263981	-0.73214	-0.56628	-0.304	-0.13815
asRNA:CR45812	FBGN0267462	0.06385	-0.41993	-0.38568	-0.86947
lncRNA:CR45669	FBGN0267229	0.224391	0.09	-0.30363	-0.43802
asRNA:CR45214	FBGN0266741	-1.05806	-0.01666	0.355919	1.397312
CG11159	FBGN0034539	0.843054	0.210622	1.32625	0.693818
Kmn2	FBGN0266598	0.261792	1.102273	0.174707	1.015188
asRNA:CR43413	FBGN0263332	-0.86043	-1.06598	0.148959	-0.05659
lncRNA:CR44799	FBGN0266034	-0.38073	-0.27084	-1.16714	-1.05725
CG34205	FBGN0085234	2.131624	-0.02846	1.845376	-0.31471
lncRNA:CR45898	FBGN0267558	0.746852	0.060657	0.419505	-0.26669
Lsp1gamma	FBGN0002564	0.00647	0.178436	-0.21585	-0.04388
lncRNA:CR44723	FBGN0265934	0.792838	-0.11345	1.141494	0.235207
CG44428	FBGN0265610	-1.8171	0.240485	-0.23549	1.822093
asRNA:CR45121	FBGN0266596	-0.4074	0.477041	0.153249	1.037686
CR45548	FBGN0267108	0.270657	0.266707	0.277278	0.273328
asRNA:CR45952	FBGN0267614	0.95026	-0.50066	1.051093	-0.39982
CG31089	FBGN0051089	-0.12487	-0.51026	1.037062	0.651671
TwdlB	FBGN0039436	0.672539	-0.31456	-0.93199	-1.91909
ImpL1	FBGN0001256	0.814315	0.386129	-0.05633	-0.48451
lncRNA:CR45392	FBGN0266941	-0.20413	-0.18322	-0.6121	-0.59118
lncRNA:CR44649	FBGN0265860	-1.51105	-1.37767	-0.52756	-0.39417
lncRNA:CR44185	FBGN0265074	0.368337	0.91149	0.30168	0.844832
CG6927	FBGN0029733	-0.31861	1.176014	-0.5748	0.919819
Gr89a	FBGN0038440	-0.50841	0.688294	-1.47469	-0.27798
lncRNA:CR44991	FBGN0266326	-0.37572	-0.76351	0.118885	-0.26891
Ugt37C1	FBGN0026754	0.014266	0.068939	0.650959	0.705632
Gr63a	FBGN0035468	-0.15549	0.051073	-0.44426	-0.23769
CG34007	FBGN0054007	0.66456	0.109358	0.749968	0.194767
CG13299	FBGN0035694	-0.04169	-0.57557	-0.46912	-1.003

lncRNA:CR45031	FBGN0266391	-1.77528	-1.84795	-0.61959	-0.69226
lncRNA:CR44292	FBGN0265338	0.735781	0.90182	0.362355	0.528395
lncRNA:CR45241	FBGN0266776	-0.41957	0.505119	0.251858	1.176543
lncRNA:CR45647	FBGN0267207	0.034968	0.172027	0.097984	0.235043
Gr5a	FBGN0003747	0.296819	0.601188	-0.21853	0.085837
Obp50e	FBGN0033931	0.510669	0.041549	0.833508	0.364388
Obp58d	FBGN0034770	-1.38132	0.01555	-1.87007	-0.4732
lncRNA:CR44808	FBGN0266043	-5.79596	-4.08421	-3.57703	-1.86528
Ccp84Ab	FBGN0004782	-0.90794	0.774167	1.464989	3.147095
phm	FBGN0004959	-0.02053	-0.60345	-0.75586	-1.33878
CG10035	FBGN0038028	0.203332	-0.80991	1.391268	0.378023
CR12460	FBGN0040045	-0.80928	0.269373	-2.70855	-1.62991
CG43797	FBGN0264341	0.479835	0.328149	-0.15907	-0.31075
lncRNA:CR44668	FBGN0265879	1.189072	0.448891	-0.02589	-0.76607
lncRNA:CR45462	FBGN0267018	0.068376	-0.16589	-1.34066	-1.57493
lncRNA:CR45636	FBGN0267196	-0.67825	0.518319	-1.34459	-0.14802
CG43646	FBGN0263655	-0.28114	-0.14965	-0.64879	-0.51731
asRNA:CR45889	FBGN0267549	1.156531	-0.63452	1.468502	-0.32255
CG14187	FBGN0036938	0.511768	0.658838	1.182856	1.329926
CR41423	FBGN0085644	-0.26958	-0.77166	0.110695	-0.39138
Cpr47Ea	FBGN0033597	-0.84543	-0.34625	-0.37666	0.12252
CG15020	FBGN0035543	-0.3563	-0.47154	0.139727	0.024493
asRNA:CR31144	FBGN0051144	-1.05554	-0.68948	0.276025	0.642087
lncRNA:CR44596	FBGN0265807	-0.89563	-0.93823	-0.55747	-0.60006
lncRNA:CR44928	FBGN0266233	0.196251	-0.35549	0.430817	-0.12093
lncRNA:CR45945	FBGN0267607	-0.26997	-0.16237	2.005682	2.113291
lncRNA:CR44863	FBGN0266157	-0.51035	-0.64512	-0.20744	-0.34221
Or82a	FBGN0041621	0.393309	-0.38697	-0.42455	-1.20483
CG33178	FBGN0053178	-1.39704	-0.2261	-1.70951	-0.53858
lncRNA:CR44294	FBGN0265340	-0.52491	-0.89137	0.044423	-0.32204
eve	FBGN0000606	-1.48416	-0.10197	0.142204	1.524395
CG43814	FBGN0264362	0.71533	-0.02045	0.886352	0.150568
lncRNA:CR44540	FBGN0265733	0.733735	-0.90283	1.483567	-0.153
CG32855	FBGN0052855	0.294258	-0.13207	0.576395	0.150063
CG33155	FBGN0053155	-0.04949	0.027102	0.280466	0.357055
upd2	FBGN0030904	-0.87049	-0.29727	-0.56267	0.010547
CG8223	FBGN0037624	1.519059	0.253009	1.277024	0.010974
CG14014	FBGN0031718	-0.00879	0.251051	-1.19904	-0.93921
lncRNA:CR45554	FBGN0267114	-0.32798	0.491871	-0.84078	-0.02093
CG13250	FBGN0037013	-1.28927	-0.54325	-0.94995	-0.20394
CG16798	FBGN0032856	-0.05528	-0.09224	-0.41107	-0.44803
lncRNA:CR44729	FBGN0265942	0.719504	0.915798	-0.54012	-0.34383
CG7906	FBGN0036417	0.489832	-1.22923	2.136257	0.417192
lncRNA:CR44440	FBGN0265633	-0.06761	0.23243	-0.09003	0.210009
Obp46a	FBGN0033508	-0.19856	-0.24937	-0.34834	-0.39915
ppk9	FBGN0085398	0.396183	0.633918	-0.89451	-0.65677
CG30265	FBGN0050265	0.945155	-0.89566	-1.40392	-3.24473
CG9877	FBGN0034819	0.93785	0.739193	0.643775	0.445117
lncRNA:CR43300	FBGN0262992	-0.46594	0.358278	-0.53286	0.291354
lncRNA:CR44619	FBGN0265830	-0.8063	-1.06596	-0.75357	-1.01324
lncRNA:CR45668	FBGN0267228	0.548002	-0.29388	1.311798	0.469917
CG15390	FBGN0031419	-0.05906	-0.01259	-0.87619	-0.82972
asRNA:CR45167	FBGN0266677	-0.03382	0.756317	0.327294	1.117427
lncRNA:CR45331	FBGN0266870	-0.09086	0.115131	-0.11578	0.09021
asRNA:CR46137	FBGN0267812	0.194325	0.787336	0.059676	0.652687
Cpr23B	FBGN0031467	-0.99474	-0.9311	-0.51473	-0.45109
CheA29a	FBGN0053194	-0.26781	-0.371	-0.49351	-0.5967
CG32213	FBGN0052213	0.844448	0.021341	0.89059	0.067483
Gr33a	FBGN0032416	-0.39998	-0.07124	-1.03276	-0.70402
CG13002	FBGN0030804	0.236172	0.274315	0.918323	0.956466
lncRNA:CR44584	FBGN0265795	-0.41331	-0.65126	0.605719	0.367765
CG30062	FBGN0050062	0.100143	-0.09294	-0.064	-0.25708
lncRNA:CR45379	FBGN0266928	1.340766	0.606452	0.421897	-0.31242
lncRNA:CR46008	FBGN0267672	-0.43852	-0.21946	0.246216	0.465281
CG31253	FBGN0051253	-0.77457	-1.13493	0.096367	-0.26399
lncRNA:CR44700	FBGN0265911	0.190373	-0.70536	0.173852	-0.72189
CG13362	FBGN0029531	-1.08399	-0.50073	0.052087	0.63535
Or67d	FBGN0036080	-1.64294	-0.52898	-1.44738	-0.33342
CG34276	FBGN0085305	0.274016	-0.05582	-1.60446	-1.9343

CG34281	FBGN0085310	-1.98383	-1.90706	1.187647	1.264418
CG46395	FBGN0286873	-1.70279	0.958202	-1.29449	1.366502
CR41508	FBGN0085791	-0.98131	-0.09541	-1.02488	-0.13898
CG32074	FBGN0052074	0.267088	0.612075	-0.45248	-0.10749
lncRNA:CR44256	FBGN0265196	-0.49665	-0.35086	0.687256	0.833043
CG44426	FBGN0265608	0.281084	1.81332	0.250643	1.782878
lncRNA:CR45327	FBGN0266866	-0.32434	-1.06599	0.416758	-0.32489
lncRNA:CR44702	FBGN0265913	0.456475	0.083158	0.841037	0.46772
CG13170	FBGN0033703	-5.15559	-4.08047	-2.2346	-1.15949
lncRNA:CR44111	FBGN0264942	0.165841	-1.72157	1.128923	-0.75849
lncRNA:CR44783	FBGN0266010	-0.07008	-0.22592	0.400679	0.244832
lncRNA:CR45372	FBGN0266912	-1.3195	-0.48324	-0.66802	0.168246
CG1273	FBGN0035522	-0.64182	-0.41597	-0.33882	-0.11297
CR46173	FBGN0267885	0.176214	-0.31184	0.45576	-0.0323
HLH4C	FBGN0011277	-0.39568	-0.08249	0.021626	0.334816
CG7406	FBGN0030980	1.097693	0.697113	0.758432	0.357853
Or7a	FBGN0030016	-0.86613	0.571141	-0.64732	0.789958
CG14052	FBGN0029606	-0.63648	-0.02443	-0.38942	0.222628
asRNA:CR46029	FBGN0267693	0.505101	0.053546	-0.3328	-0.78435
CR46170	FBGN0267882	0.121963	-0.33132	0.266233	-0.18705
lncRNA:CR44177	FBGN0265066	-0.96273	-1.09245	0.006412	-0.1233
CG15005	FBGN0035508	1.144735	0.408557	2.026284	1.290106
Gr59e	FBGN0041233	-0.68993	-1.41535	0.015177	-0.71024
asRNA:CR43866	FBGN0264448	-0.30508	0.337995	-0.23099	0.412085
snoRNA:Psi18S-920	FBGN0083015	0.236462	0.063356	0.395511	0.222406
CG33725	FBGN0053725	-1.73535	-1.25381	-1.24233	-0.76079
lncRNA:CR45584	FBGN0267144	-0.2614	-0.30938	-0.79126	-0.83924
lncRNA:CR30009	FBGN0050009	0.770759	0.346923	-0.10013	-0.52397
asRNA:CR11538	FBGN0017424	-0.47651	0.140399	-0.2794	0.337508
lncRNA:CR46062	FBGN0267731	0.052631	0.223099	0.095071	0.26554
lncRNA:CR46235	FBGN0267955	-0.53573	-0.18654	0.069802	0.418991
nur	FBGN0051813	-1.29041	-0.31684	-1.74658	-0.77301
lncRNA:CR44628	FBGN0265839	0.5693	0.350362	0.701818	0.482879
CG32679	FBGN0052679	-1.07572	0.536171	-1.56455	0.04734
inaF-C	FBGN0085350	1.074068	-0.63	0.376398	-1.32767
lncRNA:CR44957	FBGN0266262	-0.22811	-0.00825	-0.37622	-0.15636
lncRNA:CR46084	FBGN0267753	-0.34444	-0.52828	0.945504	0.761659
CG14860	FBGN0038273	0.08004	0.40792	-0.41503	-0.08715
Hr83	FBGN0037436	-0.07183	0.129958	-0.94521	-0.74342
snoRNA:Psi28S-1192c	FBGN0082999	1.352306	1.242505	0.169493	0.059692
lncRNA:CR45627	FBGN0267187	0.936018	0.923753	0.23754	0.225275
lncRNA:CR44697	FBGN0265908	-0.26786	-1.58129	0.293679	-1.01975
lncRNA:CR45542	FBGN0267102	0.028401	-0.13329	0.758288	0.596596
Su(Ste):CR42433	FBGN0259864	-0.13416	0.102025	-0.4097	-0.17352
lncRNA:CR44465	FBGN0265658	-0.95258	3.94394	-3.41888	1.477634
lncRNA:CR45662	FBGN0267222	0.720766	-0.90279	0.055175	-1.56839
CG33263	FBGN0053263	-0.49173	-1.4579	-0.95626	-1.92244
CG7049	FBGN0035102	0.512425	0.535267	-0.41509	-0.39225
CG12398	FBGN0030596	1.152086	0.462285	1.238742	0.548941
CG34265	FBGN0085294	-0.71103	-0.18069	-1.18131	-0.65096
lncRNA:CR44298	FBGN0265344	-0.33409	-0.7485	-0.18321	-0.59761
CG14570	FBGN0037122	-0.20032	0.056009	-0.0325	0.223828
lncRNA:CR44784	FBGN0266011	-0.29855	0.656269	-0.76539	0.189429
lncRNA:CR44790	FBGN0266025	-0.87702	-0.44965	-1.19384	-0.76647
lncRNA:CR45757	FBGN0267321	0.253254	-0.12446	0.242338	-0.13537
Cpr76Bb	FBGN0036879	-0.76584	-0.00629	-0.26788	0.491672
CG32182	FBGN0052182	1.401066	0.369756	1.79965	0.768341
lncRNA:CR46119	FBGN0267788	-0.86169	0.252719	-0.31314	0.80127
hkb	FBGN0261434	0.67911	0.162717	0.777005	0.260612
CG14770	FBGN0029573	0.137385	0.115229	0.493811	0.471655
lncRNA:CR45741	FBGN0267305	1.33811	0.060759	1.25333	-0.02402
asRNA:CR44998	FBGN0266349	1.339308	-0.10119	1.163126	-0.27737
Cp38	FBGN0000360	-3.28178	-0.43197	-0.02057	2.829244
lncRNA:CR45677	FBGN0267237	0.340815	0.328169	0.385362	0.372715
CG32212	FBGN0052212	0.329287	-0.21558	0.439774	-0.10509
lncRNA:CR44212	FBGN0265143	0.434957	-0.18795	0.13383	-0.48907
lncRNA:CR45472	FBGN0267028	-0.92271	0.406621	0.32934	1.658667
snoRNA:Me28S-A774a	FBGN0086079	0.324533	0.79498	0.402352	0.872799
CG8642	FBGN0033312	0.847394	0.040612	0.61403	-0.19275

asRNA:CR44703	FBGN0265914	-0.43983	-0.26511	-0.83205	-0.65733
lncRNA:CR43952	FBGN0264603	-0.36757	0.56176	-0.99702	-0.06769
lncRNA:CR45749	FBGN0267313	-0.93931	-0.23673	1.173476	1.876062
lncRNA:CR45325	FBGN0266864	0.251075	-0.59672	0.211796	-0.636
lncRNA:CR44445	FBGN0265638	-0.1355	0.932839	-0.84146	0.226884
CG43446	FBGN0263400	-0.28356	0.103056	-0.29958	0.087042
CG13563	FBGN0034966	0.058411	0.224356	0.350296	0.516241
asRNA:CR45271	FBGN0266809	-0.83865	0.103031	-2.47583	-1.53414
CG44243	FBGN0265178	-0.19942	-0.16469	-0.9753	-0.94057
His-Psi:CR31614	FBGN0051614	-0.87653	0.257501	-0.80487	0.329155
lncRNA:CR43836	FBGN0264384	0.353226	-0.52334	0.758095	-0.11847
lncRNA:CR45039	FBGN0266399	-0.0171	0.060826	0.831086	0.909011
CG18735	FBGN0042098	4.439661	3.207869	1.20633	-0.02546
lncRNA:CR44511	FBGN0265704	0.398429	-0.94226	1.303765	-0.03693
CR46406	FBGN0286884	1.381772	0.19618	0.182109	-1.00348
CG14416	FBGN0040352	0.652011	-0.8817	-0.17526	-1.70897
CG45307	FBGN0266845	-0.17967	-0.26565	-0.18115	-0.26713
CG9503	FBGN0030598	-0.14454	1.199607	0.25352	1.597664
tpr	FBGN0034661	0.467044	-0.39361	1.021003	0.160354
CG14664	FBGN0040682	-0.57599	-0.70399	0.294259	0.166253
lncRNA:CR45157	FBGN0266650	-0.41233	-0.3449	-1.74492	-1.67748
lncRNA:CR44893	FBGN0266198	1.39182	0.736794	-0.33701	-0.99203
CG45073	FBGN0266443	1.396955	-0.72965	1.538175	-0.58843
lncRNA:CR45748	FBGN0267312	-0.87778	-0.04836	-1.39346	-0.56403
lncRNA:CR45756	FBGN0267320	1.027549	0.443151	0.883951	0.299553
CG43428	FBGN0263376	-0.86558	0.796428	-0.70975	0.952255
lncRNA:CR43961	FBGN0264676	0.516511	0.307975	0.608475	0.399939
CG18269	FBGN0031719	0.476254	0.275618	0.121863	-0.07877
lncRNA:CR45935	FBGN0267597	-0.19511	0.884846	-2.1733	-1.09334
asRNA:CR45185	FBGN0267495	-0.60507	-0.55263	-0.29389	-0.24146
CG13716	FBGN0035563	0.988148	0.790342	1.183834	0.986028
lncRNA:CR43953	FBGN0264604	0.62432	0.751585	-0.58241	-0.45514
lncRNA:CR43458	FBGN0263412	-1.3907	-0.75051	0.170385	0.810578
lncRNA:CR46226	FBGN0267946	-0.50204	-0.15164	-0.96374	-0.61335
Vajk1	FBGN0028938	0.360352	1.403382	0.816698	1.859728
CG13218	FBGN0033587	-0.10841	-0.34292	-0.80265	-1.03715
CG13840	FBGN0039028	0.689796	0.438543	0.843547	0.592294
lncRNA:CR43910	FBGN0264511	1.058837	0.528047	1.618328	1.087539
CG11674	FBGN0030551	0.096972	-0.91868	0.08432	-0.93134
Cralbp	FBGN0035636	-1.14826	0.112932	-0.60447	0.656728
lncRNA:CR43945	FBGN0264573	0.461656	0.749349	-0.80966	-0.52196
CG31219	FBGN0051219	1.642044	0.358497	0.144214	-1.13933
asRNA:CR43468	FBGN0263445	0.359234	1.621651	0.451046	1.713464
asRNA:CR45467	FBGN0267023	1.277645	0.192882	1.047168	-0.0376
lncRNA:CR45555	FBGN0267115	-1.27927	0.160141	-0.84112	0.598295
snRNA:U2:34ABb	FBGN0004192	0.082234	0.20474	-0.32812	-0.20561
asRNA:CR44841	FBGN0266115	0.065963	-0.55871	-0.31107	-0.93575
Lcp3	FBGN0002534	-1.33487	-1.01757	0.058494	0.375798
lncRNA:CR44570	FBGN0265763	0.326801	0.257513	0.081388	0.0121
LysS	FBGN0004430	1.189467	1.438978	0.695541	0.945052
CG43291	FBGN0262983	-0.6643	0.272215	-1.04556	-0.10905
CG13198	FBGN0033640	0.802877	-0.14975	0.639844	-0.31278
asRNA:CR44960	FBGN0266275	0.251949	0.124098	0.55979	0.43194
lncRNA:CR44504	FBGN0265697	-0.47125	-0.076	-0.19648	0.198765
lncRNA:CR45681	FBGN0267241	0.4224	0.047746	-0.18797	-0.56262
Ir52c	FBGN0050468	0.282498	0.311186	-0.24274	-0.21405
CG13138	FBGN0032211	-0.96125	-0.41924	-0.97177	-0.42976
snoRNA:U3:54Aa	FBGN0065048	-1.3205	-0.26147	-1.61796	-0.55893
CR40801	FBGN0085520	-0.61268	0.013544	0.397971	1.024192
hll	FBGN0286723	1.423152	0.706317	1.78472	1.067885
CG34309	FBGN0259831	-1.03609	-0.27481	-0.36906	0.392219
CG33641	FBGN0053641	-1.47536	0.821826	-1.4208	0.876388
fd96Ca	FBGN0004897	0.233579	0.626618	-0.10493	0.288113
snoRNA:Or-CD10	FBGN0065071	-0.80225	-1.15748	-0.11008	-0.46531
asRNA:CR44806	FBGN0266041	-0.77927	-0.26648	-0.71959	-0.2068
CG13043	FBGN0036600	0.471135	0.134571	1.004049	0.667485
lncRNA:CR45269	FBGN0266807	0.087245	-0.49491	0.760549	0.178395
lncRNA:CR45759	FBGN0267323	2.172542	-0.66744	2.236912	-0.60307
asRNA:CR45366	FBGN0266906	-0.32097	-0.32038	-0.35675	-0.35615

snoRNA:Psi28S-1060	FBGN0083013	1.786259	-0.29701	1.964754	-0.11851
CG43895	FBGN0264487	-0.94344	-1.04298	0.547946	0.448403
asRNA:CR44599	FBGN0265810	-1.0368	0.092378	-1.29508	-0.16591
CG33679	FBGN0053679	0.991578	-0.08723	0.677599	-0.40121
lncRNA:CR44421	FBGN0265594	3.177701	-1.83503	5.49722	0.484491
CR40068	FBGN0058068	-0.18055	-0.09652	-0.83492	-0.7509
asRNA:CR44368	FBGN0265499	0.378689	0.128414	0.612231	0.361956
Obp50a	FBGN0050067	-0.10022	-0.32672	-0.38946	-0.61596
lncRNA:CR45574	FBGN0267134	0.021852	0.11092	0.211861	0.300929
asRNA:CR45272	FBGN0266810	0.81607	-0.19782	0.167783	-0.84611
tap	FBGN0015550	0.25887	-0.33955	-0.42107	-1.01949
asRNA:CR46264	FBGN0275432	0.643289	0.145722	1.028975	0.531408
snRNA:U4:39B	FBGN0003930	0.537582	1.083231	0.012802	0.558451
ric8b	FBGN0030117	0.172937	-0.07303	0.36726	0.121292
CG9068	FBGN0034106	-0.58399	-0.68291	-0.53742	-0.63633
asRNA:CR45481	FBGN0267037	-3.03759	-2.5148	-0.13649	0.386297
asRNA:CR45195	FBGN0266705	-0.50081	0.699922	-0.03668	1.164052
solo	FBGN0283440	0.2335	-0.04806	-0.61448	-0.89604
CG13813	FBGN0036956	0.216816	-0.10089	0.502346	0.184645
CR46176	FBGN0267888	0.134424	-0.21931	0.413607	0.059872
Wnt10	FBGN0031903	-1.53248	-1.87421	-0.26585	-0.60758
Send2	FBGN0264253	-0.69733	-0.94109	-0.3693	-0.61306
CR43281	FBGN0262970	0.117371	0.382746	-0.2687	-0.00332
lncRNA:CR46217	FBGN0267937	-0.21704	0.514202	-0.01954	0.711698
CG42525	FBGN0260430	-0.65116	-0.09749	-0.31272	0.240952
lncRNA:CR46032	FBGN0267696	-1.07515	0.744039	-1.6165	0.202692
CG4440	FBGN0040984	1.329612	0.621584	1.995629	1.287602
SmydA-6	FBGN0034183	-0.11358	0.403007	-0.22845	0.288145
Obp58b	FBGN0034768	-0.86238	-0.286	-0.50972	0.066664
CG13931	FBGN0035258	0.314358	0.223476	-0.63705	-0.72793
lncRNA:CR45519	FBGN0267075	-0.25321	0.197368	0.015515	0.466093
lncRNA:CR45298	FBGN0266836	-0.23896	-0.1555	0.131	0.214455
asRNA:CR45124	FBGN0266617	0.163671	0.341533	-0.5619	-0.38404
lncRNA:CR31386	FBGN0051386	1.239716	0.31418	1.283026	0.357489
lncRNA:CR43721	FBGN0263874	0.541901	-0.46357	-0.0976	-1.10307
lncRNA:CR44772	FBGN0265997	0.718227	0.075819	0.313068	-0.32934
CG46303	FBGN0284081	-0.52753	-0.57726	-2.8979	-2.94763
Spn85F	FBGN0037772	0.115671	-0.33366	0.393512	-0.05582
CG17780	FBGN0039197	0.530607	-0.17125	2.319955	1.618098
CG4009	FBGN0038469	-0.63426	-0.72212	-0.41496	-0.50282
Or49b	FBGN0028963	-0.07632	0.936281	-0.11608	0.896523
lncRNA:CR44585	FBGN0265796	0.211248	0.645831	1.738601	2.173185
CG42544	FBGN0260713	3.934715	0.62405	-1.18872	-4.49938
snoRNA:Me28S-A2564	FBGN0065066	-1.10273	0.205003	-0.44236	0.865371
ppk7	FBGN0031802	1.307454	-0.22089	1.845543	0.317203
CG42704	FBGN0261615	-0.37672	1.132513	-0.16019	1.349039
CG14143	FBGN0036138	-2.21943	-2.96161	-0.04951	-0.79169
NimC4	FBGN0260011	-2.01411	-0.19509	-0.59463	1.224383
CG34260	FBGN0085289	1.335968	0.732405	1.467323	0.86376
lncRNA:CR44855	FBGN0266149	0.357171	0.034807	-0.75944	-1.08181
dib	FBGN0000449	0.81956	-0.28096	1.188616	0.088092
lncRNA:CR43287	FBGN0262979	-0.49204	-0.65614	-0.23827	-0.40237
lncRNA:CR46079	FBGN0267748	-0.76647	-0.44203	-0.23343	0.091021
lncRNA:CR44209	FBGN0265107	-0.19994	0.252822	-0.74111	-0.28836
asRNA:CR45874	FBGN0267534	0.481147	0.246152	-0.92883	-1.16383
asRNA:CR45907	FBGN0267567	-0.05386	0.000401	0.112759	0.167015
asRNA:CR43809	FBGN0264353	1.111585	0.598495	-0.22035	-0.73344
asRNA:CR45161	FBGN0266654	-3.01202	0.623907	-2.90549	0.730435
CG32036	FBGN0052036	-0.54618	-0.28005	-0.06077	0.205363
lncRNA:CR44650	FBGN0265861	-1.63131	0.413862	-1.32916	0.716018
lncRNA:CR45962	FBGN0267624	-0.15814	-0.44211	-0.41928	-0.70325
lncRNA:CR45915	FBGN0267575	1.319174	1.49742	0.231456	0.409702
CG15130	FBGN0032860	0.537411	0.142348	-0.08489	-0.47996
lncRNA:CR45573	FBGN0267133	0.419719	1.547661	0.005264	1.133206
lncRNA:CR46228	FBGN0267948	0.50337	-0.35252	-0.52609	-1.38198
CR43696	FBGN0263834	-0.03021	0.149553	0.244622	0.424385
lncRNA:CR44646	FBGN0265857	-0.30186	-0.56222	0.212775	-0.04759
asRNA:CR46048	FBGN0267715	-0.47829	0.649354	-1.78388	-0.65624
CG42711	FBGN0261628	-0.21597	0.18703	-1.35881	-0.95581

Cpr97Ea	FBGN0039480	0.696631	-0.40158	-0.70139	-1.7996
CG13216	FBGN0033591	-1.80369	1.333681	-0.76433	2.373047
lncRNA:CR46001	FBGN0267663	-0.12993	-0.31965	-0.10977	-0.29948
CG10301	FBGN0039106	0.394216	0.81753	-0.07435	0.348962
NT1	FBGN0261526	0.847124	0.440443	0.693889	0.287208
CR42499	FBGN0260225	-0.80376	0.576782	-0.9461	0.434443
asRNA:CR45144	FBGN0266637	1.126431	-0.13503	1.335419	0.073953
CG15249	FBGN0030161	0.179914	0.132784	0.794337	0.747206
Ir48b	FBGN0033648	0.768473	-0.589	1.08428	-0.2732
CG43117	FBGN0262577	0.641086	-0.4518	0.586437	-0.50645
lncRNA:CR44544	FBGN0265737	0.847641	-0.2666	0.953587	-0.16065
lncRNA:CR43967	FBGN0264698	-0.09527	1.107331	-1.59005	-0.38745
lncRNA:CR45949	FBGN0267611	0.26753	-0.1589	0.252166	-0.17427
lncRNA:CR43859	FBGN0264441	0.373051	-0.31157	1.108681	0.424061
lncRNA:CR44525	FBGN0265718	0.063365	-0.69973	0.711015	-0.05208
CG14313	FBGN0038579	-0.22167	-0.45885	-0.2658	-0.50299
Eig71Ef	FBGN0004593	-0.1318	0.603759	-0.96714	-0.23158
lncRNA:CR45461	FBGN0267017	0.261124	-0.65412	0.996812	0.081568
CG4770	FBGN0038751	-0.45085	1.574053	0.4674	2.492306
asRNA:CR44340	FBGN0265428	-0.23084	0.860581	-0.41165	0.679768
lncRNA:CR45138	FBGN0266631	-1.43171	-0.92342	0.162051	0.670343
Ste:CG33247	FBGN0053247	0.074531	0.592599	-0.61812	-0.10005
lncRNA:CR43899	FBGN0264500	0.248592	-0.54155	-1.24802	-2.03816
lncRNA:CR45037	FBGN0266397	-1.26809	-0.84283	0.585972	1.011237
CR46300	FBGN0283627	0.149501	0.363882	-0.36819	-0.15381
Or83c	FBGN0037399	0.141938	0.370464	0.340783	0.569309
lncRNA:CR46014	FBGN0267678	-0.61689	-0.71831	1.767241	1.665821
Eglp3	FBGN0034884	-0.58625	-0.81854	-0.02674	-0.25903
CG14490	FBGN0034281	-0.54898	0.929242	-1.34687	0.13135
snRNA:U3	FBGN0003926	2.420245	-2.39411	4.365112	-0.44924
Ir10a	FBGN0083979	0.414424	0.059161	0.408541	0.053278
CG32829	FBGN0052829	-0.82915	-0.36153	-0.77685	-0.30923
lncRNA:CR44100	FBGN0264909	-1.53023	-0.79472	-2.71956	-1.98405
CG31337	FBGN0051337	-1.27574	-0.12637	-0.26187	0.887505
lncRNA:CR45082	FBGN0266457	0.215937	1.860494	1.250289	2.894846
asRNA:CR44382	FBGN0265532	-0.89368	-0.30934	0.391456	0.975789
CG14204	FBGN0031032	-0.61922	-1.20543	-0.12017	-0.70638
Or85e	FBGN0026399	-0.08691	-0.53024	0.46041	0.017078
Obp73a	FBGN0036681	-0.92834	-0.87596	0.523694	0.576076
asRNA:CR44035	FBGN0264827	0.298451	1.948714	-0.1998	1.450462
His-Psi:CR33867	FBGN0053867	0.371815	0.862242	0.818617	1.309044
CheB53b	FBGN0261293	-0.94765	-0.87627	-0.30944	-0.23806
lncRNA:CR45826	FBGN0267476	1.47304	-0.54472	3.717948	1.700188
lncRNA:CR44502	FBGN0265695	0.367568	0.331657	0.329276	0.293365
lncRNA:CR44813	FBGN0266048	-0.15291	-0.55748	-0.03284	-0.43742
asRNA:CR43472	FBGN0263449	0.735544	-0.04634	1.104074	0.322192
lncRNA:CR45200	FBGN0266727	0.00467	-0.1704	0.573326	0.398253
lncRNA:CR43801	FBGN0264345	-0.1185	-0.229	-0.0515	-0.162
TwdlU	FBGN0037223	0.265472	-0.26008	0.110767	-0.41478
Ir94b	FBGN0051424	0.323276	0.935811	0.229219	0.841753
lncRNA:CR44524	FBGN0265717	0.849111	0.12534	0.667375	-0.0564
CG8860	FBGN0033691	0.441696	-0.04586	0.373855	-0.1137
CG14237	FBGN0039428	-1.56303	-2.1939	1.009434	0.378566
CG45122	FBGN0266615	-1.41161	-0.52137	-0.07782	0.812423
CG31668	FBGN0051668	-1.43945	-0.81633	-0.31731	0.305805
lncRNA:CR45565	FBGN0267125	-0.93761	-0.17933	-0.61476	0.143523
Cpr47Ec	FBGN0033600	-0.46227	1.223474	0.570623	2.256372
CG14866	FBGN0038315	-0.09973	-0.32857	0.039041	-0.18981
CG17169	FBGN0040514	0.267872	-0.32328	-0.51192	-1.10308
CG12662	FBGN0030074	-0.23505	-1.22273	0.489955	-0.49772
Cp7Fc	FBGN0014466	0.427467	0.000843	-0.54655	-0.97318
moon	FBGN0030373	0.224748	0.201391	0.047258	0.0239
lncRNA:CR9162	FBGN0031778	0.844628	-0.22878	0.606974	-0.46643
CG7924	FBGN0036416	0.054482	-0.24523	-0.12374	-0.42346
snmRNA:254	FBGN0065100	-1.08316	0.11126	0.2648	1.459216
CG13674	FBGN0035858	0.698585	-0.2393	1.301816	0.363931
CG31681	FBGN0051681	-1.64517	-1.07804	-0.42358	0.143559
CG31131	FBGN0051131	-0.83919	-1.28355	-0.25966	-0.70402
lncRNA:CR44718	FBGN0265929	0.575593	0.095151	0.487806	0.007364

lncRNA:CR45703	FBGN0267267	-0.69726	-1.44228	-0.39653	-1.14155
snoRNA:Psi28S-1192d	FBGN0082998	-0.19599	-0.02237	-0.33694	-0.16332
CG34221	FBGN0085250	0.187279	0.018105	-0.90727	-1.07644
snoRNA:Me18S-C1831	FBGN0065053	0.276119	0.370208	0.792909	0.886999
lncRNA:CR44717	FBGN0265928	-0.11431	1.057358	-0.47062	0.701048
HLH3B	FBGN0011276	-0.01551	-0.21116	-0.02602	-0.22167
mthl7	FBGN0035847	-0.21055	-0.5031	0.268595	-0.02396
CG14377	FBGN0038148	-0.21803	-0.77156	0.421567	-0.13197
CG44815	FBGN0266050	-0.3191	-0.78047	0.124417	-0.33696
lncRNA:CR45444	FBGN0266993	-0.46874	-0.06189	-0.29715	0.109696
CG43060	FBGN0262362	1.003898	-0.3801	-0.52918	-1.91318
TwdlF	FBGN0037224	0.205307	0.526687	0.567354	0.888733
Acp65Aa	FBGN0020765	-0.745	0.062981	0.733161	1.541144
CG14797	FBGN0029587	0.893983	0.056228	0.801154	-0.0366
lncRNA:CR45608	FBGN0267168	-0.38598	-0.51228	-0.73225	-0.85855
tRNA:Leu-TAA-2-1	FBGN0053536	0.759312	1.302149	-2.7845	-2.24167
Ir51a	FBGN0033997	-1.11465	-0.87639	-0.49177	-0.25352
CG43886	FBGN0264478	-0.81705	0.153997	-1.23679	-0.26574
Or22a	FBGN0026398	0.630663	-1.39496	1.33553	-0.6901
asRNA:CR45189	FBGN0266699	0.481204	1.664715	0.18664	1.37015
ppk30	FBGN0039677	0.174762	-0.03272	-0.28402	-0.49151
lncRNA:CR45118	FBGN0266593	-0.44159	-0.31978	-0.39782	-0.27601
CG33777	FBGN0053777	-0.04455	-0.11875	-1.85909	-1.93329
CG42581	FBGN0260871	-1.53891	-1.09387	-0.68067	-0.23563
snoRNA:Tudor-SN-a	FBGN0263470	0.076129	0.199272	-0.1207	0.002443
CR46184	FBGN0267896	1.439939	1.070586	-0.28804	-0.65739
asRNA:CR43875	FBGN0264467	-0.28328	-0.06694	-0.16775	0.048594
lncRNA:CR44444	FBGN0265637	-0.21901	-0.56422	0.717499	0.372287
asRNA:CR45143	FBGN0266636	0.022892	0.535378	0.948003	1.460489
asRNA:CR45264	FBGN0266802	0.516985	-0.03881	-0.2974	-0.85319
snoRNA:Psi28S-2442b	FBGN0082988	2.049752	0.213344	1.283606	-0.5528
lncRNA:CR45526	FBGN0267082	-2.21554	-1.0524	-1.97942	-0.81627
snRNA:U6:96Aa	FBGN0004188	0.66627	-0.82134	1.510924	0.023314
snoRNA:Psi28S-1837a	FBGN0086660	-0.5446	0.43957	-1.06069	-0.07652
lncRNA:CR42791	FBGN0261924	0.317698	-0.77642	0.983205	-0.11092
CR44028	FBGN0264820	0.125222	-0.27226	0.036438	-0.36105
lncRNA:CR44626	FBGN0265837	-1.33917	-0.43851	-1.70015	-0.79949
snoRNA:Psi28S-1175c	FBGN0083003	-0.16027	-0.84155	1.170116	0.488828
lncRNA:CR45645	FBGN0267205	0.557332	0.312339	-0.22846	-0.47346
PGRP-LD	FBGN0260458	0.558543	-0.28621	-0.60238	-1.44713
asRNA:CR45789	FBGN0267439	1.596228	0.954017	0.761604	0.119393
CG8945	FBGN0030815	0.64012	1.462859	-0.07717	0.745565
Ir7a	FBGN0029961	-0.38557	0.778756	-1.10616	0.058164
CG33923	FBGN0053923	-0.46797	0.312541	0.251906	1.032418
CG17782	FBGN0039195	1.553669	0.868339	1.853731	1.1684
snoRNA:Psi28S-2149	FBGN0086664	1.223743	0.88041	0.73454	0.391207
CG13996	FBGN0031763	-0.40994	-0.13614	-0.01742	0.256375
lncRNA:CR33963	FBGN0053963	0.734	-0.65259	1.448765	0.062174
lncRNA:CR44965	FBGN0266280	0.792104	0.498581	0.444226	0.150703
lncRNA:CR45425	FBGN0266974	-0.51935	-1.35932	0.829945	-0.01002
Or19a	FBGN0041626	-0.36331	-1.12362	0.685847	-0.07447
asRNA:CR45621	FBGN0267181	0.241498	0.075589	-0.65901	-0.82492
tin	FBGN0004110	-0.17842	0.111122	-0.25093	0.038616
CG13955	FBGN0033412	-0.79565	-0.67219	-0.29332	-0.16987
CG43245	FBGN0262890	-1.60967	-1.19401	-1.26793	-0.85227
CG12920	FBGN0033481	-0.17009	0.139672	-0.12343	0.186333
CG10674	FBGN0035592	-0.20676	-0.30067	-0.06699	-0.1609
cas	FBGN0004878	0.388032	0.106839	0.491928	0.210734
snoRNA:Psi28S-3436a	FBGN0086668	0.153426	0.740834	-0.03558	0.551826
Obp57e	FBGN0050145	-0.69032	-0.98039	-1.68113	-1.9712
lncRNA:CR44810	FBGN0266045	0.528029	0.830357	-1.54719	-1.24486
asRNA:CR46144	FBGN0267819	-0.39044	-0.59481	-0.3566	-0.56098
CG14852	FBGN0038242	-1.14968	-1.97143	1.849036	1.027277
Obp93a	FBGN0038859	-0.05509	0.402132	-0.4298	0.027419
28SrRNA-Psi:CR45860	FBGN0267520	-0.0962	-0.15017	-0.18909	-0.24305
Obp56b	FBGN0046880	-2.50002	-2.53087	-1.51616	-1.547
lncRNA:CR45591	FBGN0267151	-1.57003	-1.23423	-1.08315	-0.74735
CG12723	FBGN0030459	0.274989	-0.50094	-0.46754	-1.24348
mAChR-C	FBGN0029909	0.419739	0.419428	0.225683	0.225373

CG43925	FBGN0264546	-1.18895	-0.73562	-0.22466	0.228671
CG15517	FBGN0039718	2.030081	1.250672	1.331187	0.551778
CecB	FBGN0000278	-3.01911	-1.51318	-2.38755	-0.88162
CG12491	FBGN0034900	3.515735	0.853702	1.972637	-0.6894
Or35a	FBGN0028946	-0.92328	-0.85377	-0.67905	-0.60954
lncRNA:CR45588	FBGN0267148	0.33441	0.313965	0.80492	0.784475
CG10591	FBGN0035621	0.488334	1.400131	0.226097	1.137894
Or42a	FBGN0033041	-0.75123	-1.55052	1.584554	0.785265
CG42500	FBGN0260226	0.588695	0.324412	0.654062	0.389779
CR46279	FBGN0283435	-0.40969	-0.3464	-0.11957	-0.05628
Pxd	FBGN0004577	0.807162	-0.88464	1.717318	0.025519
lncRNA:CR45119	FBGN0266594	0.381882	2.29705	0.373395	2.288563
lncRNA:CR45527	FBGN0267083	-0.88386	0.316935	-0.69546	0.505328
Su(Ste):CR41533	FBGN0085673	-0.95714	-1.65942	-0.23761	-0.93988
lncRNA:CR45320	FBGN0266859	0.647903	1.211374	-0.4983	0.065173
Ir60b	FBGN0259185	0.004786	0.162054	-0.18007	-0.0228
CG43074	FBGN0262484	0.385745	0.631606	-0.28562	-0.03976
asRNA:CR46135	FBGN0267810	-0.88168	0.01882	-0.38959	0.510911
Ir20a	FBGN0031181	-0.46797	0.063686	-0.52639	0.005267
tRNA:Leu-AAG-1-4	FBGN0050229	0.230606	-0.73569	0.523708	-0.44259
Cpr64Ac	FBGN0035512	-0.25634	-0.50731	0.707839	0.456872
lncRNA:CR44043	FBGN0264835	-0.21802	-0.56332	-1.11306	-1.45836
asRNA:CR45175	FBGN0266685	-0.87789	-0.94419	1.074199	1.007897
Nach	FBGN0024319	-1.819	-1.61972	-0.99793	-0.79865
CG30050	FBGN0050050	1.252932	-0.0257	1.157993	-0.12064
CG13231	FBGN0033580	0.034205	0.121869	0.642446	0.73011
Z600	FBGN0004052	0.26441	-0.11078	-0.06189	-0.43707
snoRNA:Psi18S-1377b	FBGN0083050	-0.9205	-1.59963	-0.25335	-0.93248
snoRNA:MeU2-A31	FBGN0086076	3.594658	-0.90872	4.423661	-0.07972
GstD6	FBGN0010042	-0.19421	-0.08034	0.586714	0.700583
asRNA:CR45190	FBGN0266700	0.835938	0.813165	0.233085	0.210311
snoRNA:Psi28S-3385a	FBGN0082962	0.329985	0.197419	0.181335	0.048769
lncRNA:CR46002	FBGN0267664	0.876393	0.203934	-0.85687	-1.52933
CR44706	FBGN0265917	-1.52458	-0.9765	-2.4002	-1.85212
CR44394	FBGN0265544	-1.4105	-1.34608	-0.98313	-0.9187
lncRNA:CR44764	FBGN0265985	-1.16034	-1.06402	0.704451	0.800768
lncRNA:CR45911	FBGN0267571	-0.42655	0.618562	-1.26384	-0.21873
ind	FBGN0025776	-0.87701	0.746178	-1.39973	0.223452
lncRNA:CR45338	FBGN0266877	-0.86291	2.020202	0.682763	3.565876
asRNA:CR46067	FBGN0267736	-0.32607	-0.42726	-0.69866	-0.79985
Or42b	FBGN0033043	-2.03393	-2.29823	0.480771	0.216468
CG13033	FBGN0036638	-1.03698	-0.50029	-0.86797	-0.33128
asRNA:CR44065	FBGN0264874	0.909061	0.267823	0.628651	-0.01259
p24-2	FBGN0053105	-1.26694	0.572069	-1.15609	0.682917
asRNA:CR43906	FBGN0264507	-0.11992	0.698601	-0.41974	0.398777
lncRNA:CR45707	FBGN0267271	-0.66501	-0.44417	-0.14493	0.075911
CG9289	FBGN0032058	-0.3469	0.65781	-1.42275	-0.41804
lncRNA:CR34046	FBGN0054046	0.802305	0.045583	0.127145	-0.62958
CG14327	FBGN0038526	-1.54973	-0.90656	-0.38329	0.259891
CR4575	FBGN0029920	-1.28481	-1.40371	-2.05539	-2.1743
gem	FBGN0050011	-0.32688	0.591191	0.317441	1.23551
CG14598	FBGN0037503	-0.21389	-0.41342	0.006304	-0.19323
lncRNA:CR44770	FBGN0265995	-0.3202	-1.19662	0.693432	-0.18299
lncRNA:CR45659	FBGN0267219	0.488335	0.526125	0.85838	0.896169
snoRNA:Me18S-G1189	FBGN0086058	1.24181	-0.00775	0.695204	-0.55436
lncRNA:CR45480	FBGN0267036	0.878853	0.080989	0.550005	-0.24786
asRNA:CR45604	FBGN0267164	1.39848	0.849469	1.067514	0.518503
lncRNA:CR44691	FBGN0265902	-0.5941	-0.57596	-0.61234	-0.5942
lncRNA:CR45369	FBGN0266909	-0.40942	-0.30999	-0.43387	-0.33444
snoRNA:CD-24	FBGN0263851	0.678808	1.941734	-0.09426	1.168665
CG13073	FBGN0036577	0.279571	-0.97541	0.637977	-0.617
Tep1	FBGN0041183	-0.83872	-0.1862	-0.91718	-0.26466
lncRNA:CR45696	FBGN0267260	1.050902	0.030978	1.368511	0.348587
CR46182	FBGN0267894	0.509779	0.155541	-0.23019	-0.58443
CG6696	FBGN0030947	1.971553	-0.77312	3.80167	1.057
Ir56b	FBGN0034456	3.414115	0.600415	2.733214	-0.08049
asRNA:CR46262	FBGN0267995	0.181908	-0.75826	-0.02474	-0.9649
CG14515	FBGN0039648	0.034416	0.28389	0.858552	1.108026
CG43333	FBGN0263038	-0.07939	-0.17896	-0.381	-0.48057

Cpr47Eg	FBGN0086519	-1.27265	-1.40478	-0.05469	-0.18681
asRNA:CR44083	FBGN0264892	-0.78877	-0.204	-0.39422	0.190562
lncRNA:CR43856	FBGN0264438	-1.26461	1.712621	0.427162	3.404394
CG12420	FBGN0037797	-0.35029	-0.48775	-0.65838	-0.79584
lncRNA:CR45399	FBGN0266948	0.88046	-0.16074	0.760929	-0.28027
lncRNA:CR45522	FBGN0267078	1.170023	1.612662	-0.30067	0.141965
Tsen15	FBGN0050343	-0.13087	0.199396	0.521659	0.851926
lncRNA:CR45731	FBGN0267295	1.333867	-1.03401	1.718658	-0.64922
CR46160	FBGN0267872	0.061083	-0.43771	0.323697	-0.1751
asRNA:CR44114	FBGN0264945	0.346874	0.59595	-0.54335	-0.29427
snoRNA:Psi28S-3091a	FBGN0082979	1.035933	0.394819	0.758826	0.117712
CG5892	FBGN0038873	-0.56176	0.39552	-0.77351	0.183766
CG6592	FBGN0035669	-0.86324	0.002228	0.377917	1.243388
CG33632	FBGN0053632	-0.22735	1.077208	-0.78415	0.520408
lncRNA:CR45735	FBGN0267299	0.982322	0.379733	0.485454	-0.11713
CG5255	FBGN0038485	0.614736	0.503481	-0.89583	-1.00709
CG15036	FBGN0040922	1.030391	0.404511	0.881053	0.255173
Cyp313a5	FBGN0038005	-2.5386	-2.79407	1.523008	1.267538
lncRNA:CR44489	FBGN0265682	-0.08513	-0.42689	-1.55896	-1.90072
Gr92a	FBGN0045471	-0.55768	0.913138	-0.48652	0.984303
CG13069	FBGN0040798	-1.71757	-0.20519	-0.24439	1.267995
snoRNA:2R:9445410	FBGN0263459	0.156745	0.236986	-0.06991	0.010326
lncRNA:CR46248	FBGN0267970	-0.53094	-0.55425	-0.96681	-0.99012
Su(Ste):CR45795	FBGN0267445	-2.16447	-0.78574	-1.52705	-0.14832
lncRNA:CR43706	FBGN0263845	0.667511	0.229315	0.802532	0.364336
CR46158	FBGN0267870	1.177335	1.234394	-0.30677	-0.24971
Vm26Ab	FBGN0003980	-0.09099	0.054908	0.724841	0.870739
CG13081	FBGN0032804	0.09122	1.314913	-0.02513	1.198567
CR46407	FBGN0286885	-2.72653	-0.13041	0.420693	3.016809
lncRNA:CR45706	FBGN0267270	-0.6487	-0.72178	-0.03532	-0.1084
CG15740	FBGN0030340	-1.91033	-0.76212	-0.39805	0.750161
asRNA:CR45136	FBGN0266629	-0.12819	0.389198	-0.46652	0.050868
CR43217	FBGN0262853	1.575311	1.732301	-0.44165	-0.28466
lncRNA:CR45401	FBGN0266950	-1.70008	-0.35929	-1.24844	0.09235
Ir87a	FBGN0038153	-2.06057	-2.4298	0.837993	0.46876
slmo	FBGN0029161	-0.58282	-1.24632	-0.74017	-1.40367
CG13869	FBGN0034486	-0.59851	-1.01868	0.767943	0.34777
CR40601	FBGN0085500	-0.18768	0.54751	-1.90915	-1.17396
lncRNA:CR45996	FBGN0267658	-2.73771	-2.15339	-1.31912	-0.7348
snoRNA:Me28S-G2017	FBGN0086057	-0.51219	-1.03245	0.041815	-0.47845
asRNA:CR44165	FBGN0265050	0.375517	0.883165	0.005363	0.513012
CG12540	FBGN0030570	-0.36549	4.068741	-1.37248	3.061759
lncRNA:CR44773	FBGN0265999	1.200412	-0.49631	1.206988	-0.48973
CG43799	FBGN0264343	0.151022	-0.58754	1.240198	0.50164
lncRNA:CR44409	FBGN0265582	-0.44797	0.19548	-1.04322	-0.39977
lncRNA:CR43832	FBGN0264380	-0.8162	-0.10547	-1.51065	-0.79992
lncRNA:CR44103	FBGN0264912	0.009222	0.732865	0.092428	0.816072
asRNA:CR45164	FBGN0266657	0.354881	-0.22705	0.100337	-0.4816
asRNA:CR45142	FBGN0266635	0.090399	-0.72715	0.69432	-0.12323
CG16815	FBGN0032491	0.307004	-0.70158	1.055038	0.046456
lncRNA:CR45820	FBGN0267470	0.006738	-1.28437	0.221653	-1.06946
asRNA:CR46104	FBGN0267773	0.949505	0.328353	-0.38162	-1.00277
lncRNA:CR45178	FBGN0266688	-0.34042	-0.03548	-1.31412	-1.00918
lncRNA:CR44471	FBGN0265664	-0.45628	-0.10954	-0.91438	-0.56763
asRNA:CR45501	FBGN0267057	-0.81542	-0.81565	-0.86902	-0.86925
lncRNA:CR44905	FBGN0266210	-0.84936	-0.54856	-0.21012	0.09069
CG43229	FBGN0262874	0.809	0.106455	0.418571	-0.28397
snoRNA:Psi28S-3327c	FBGN0086601	-0.87691	-0.87539	0.029439	0.030963
asRNA:CR45384	FBGN0266933	1.066814	0.450208	1.064243	0.447636
CG15370	FBGN0030107	0.03235	-0.56457	0.934526	0.337607
lncRNA:CR42746	FBGN0261709	1.184134	0.759181	0.637659	0.212705
lncRNA:CR44618	FBGN0265829	-0.26202	-0.01133	-0.56776	-0.31706
CG5756	FBGN0034301	-0.10795	-0.64457	1.178829	0.642207
Muc91C	FBGN0038642	-1.51484	-0.78099	-0.31646	0.417391
asRNA:CR45213	FBGN0266740	0.08026	-0.05437	-0.57482	-0.70944
lncRNA:CR45920	FBGN0267580	1.671588	0.539397	1.604765	0.472574
CG30283	FBGN0260477	0.11259	1.3059	-0.57176	0.621551
lncRNA:CR45360	FBGN0266900	0.181671	0.028966	0.373321	0.220615
lncRNA:CR42755	FBGN0261813	0.438912	0.450679	1.601393	1.61316

lncRNA:CR45646	FBGN0267206	-0.45525	-0.97056	0.18839	-0.32693
CG7320	FBGN0036782	0.526045	0.536015	0.360725	0.370695
Ir54a	FBGN0034272	-0.76863	0.689182	-1.06249	0.395328
Pgant35A	FBGN0001970	-1.8037	-1.92282	-0.51686	-0.63599
snRNA:U5:34A	FBGN0003935	1.887851	-0.17149	2.513569	0.454228
TwdlX	FBGN0052571	0.047324	0.981875	-0.73039	0.20416
asRNA:CR46261	FBGN0267994	-0.65542	0.367886	-1.41128	-0.38798
Gyc89Db	FBGN0038436	0.098136	-0.58337	0.584802	-0.0967
Ste:CG33245	FBGN0053245	1.056643	1.139069	-0.17138	-0.08896
lncRNA:CR45685	FBGN0267245	-0.99528	-1.36082	-0.09049	-0.45604
Gr59d	FBGN0041236	0.351726	0.312808	-0.02407	-0.06299
lncRNA:CR43724	FBGN0263970	-0.15798	0.073723	-1.36567	-1.13397
lncRNA:CR44657	FBGN0265868	1.523307	-1.14387	2.579536	-0.08764
CG10163	FBGN0035697	0.78326	0.972326	0.853166	1.042232
CR46164	FBGN0267876	-2.36344	-2.24012	0.141378	0.264691
Cpr65Az	FBGN0035686	0.299959	0.940229	-0.30446	0.335812
CR46423	FBGN0286926	-0.10963	0.572325	-0.90466	-0.22271
snRNA:U2:34ABa	FBGN0004191	0.323629	-0.46099	-0.07551	-0.86013
CG15024	FBGN0040699	0.91724	0.756935	0.010461	-0.14984
Or65b	FBGN0041624	-0.80878	-0.20121	0.20324	0.810811
lncRNA:CR45734	FBGN0267298	0.513383	1.010129	0.166112	0.662858
CG16984	FBGN0062517	0.800797	-0.17165	0.279258	-0.69319
snoRNA:2R:9445205	FBGN0263472	-1.95268	-1.93486	-0.117	-0.09918
CG7606	FBGN0040565	-1.97263	2.009209	-1.4914	2.49044
CG13272	FBGN0086673	0.534571	-0.20762	0.620689	-0.1215
Ste:CG33244	FBGN0053244	1.057369	1.045548	-0.17022	-0.18204
lncRNA:CR45529	FBGN0267085	-0.65607	-1.00882	-0.31228	-0.66504
Gr77a	FBGN0045474	0.000566	-0.01252	0.518419	0.505333
halo	FBGN0001174	0.049991	0.197747	-0.29128	-0.14352
Or30a	FBGN0032096	0.540331	0.55663	0.606187	0.622486
Ir60a	FBGN0034994	0.184452	-0.24697	0.215046	-0.21638
tRNA:Gly-GCC-1-1	FBGN0011859	-0.45378	0.24867	-0.09859	0.603858
asRNA:CR45053	FBGN0266413	1.337724	1.127638	0.497341	0.287255
CG5418	FBGN0032436	-0.39558	-0.57029	0.343995	0.16929
lncRNA:CR43855	FBGN0264437	0.249163	0.212608	1.13704	1.100484
asRNA:CR44375	FBGN0265525	0.303521	-0.15094	0.824221	0.369763
lncRNA:CR44523	FBGN0265716	-0.92123	-0.25334	-0.42817	0.239722
asRNA:CR44894	FBGN0266199	0.098064	-0.16678	1.450176	1.185333
Victoria	FBGN0053117	-1.71479	-0.14902	-0.61185	0.953929
lncRNA:CR45117	FBGN0266592	-0.55159	0.137788	-0.30026	0.389115
lncRNA:CR44819	FBGN0266066	-1.59809	-1.02045	-0.20753	0.370102
CR46185	FBGN0267897	-0.2969	-0.76927	0.366414	-0.10595
Or43a	FBGN0026389	-2.48286	-2.02085	1.068227	1.530236
lncRNA:CR45704	FBGN0267268	-1.45344	-0.06301	-0.86311	0.527322
GstD4	FBGN0010040	-1.12435	-0.77966	-0.89218	-0.54749
snRNA:U6:96Ab	FBGN0004189	-0.00924	-0.01667	0.524735	0.517303
lncRNA:CR43492	FBGN0263503	0.325619	-0.83974	0.81296	-0.3524
CG46387	FBGN0286833	0.520105	-0.30165	0.308696	-0.51306
CG4998	FBGN0036612	0.11987	0.023696	-1.28002	-1.3762
scaRNA:PsiU5-44	FBGN0263487	0.566234	1.058911	-0.14905	0.34363
CG44532	FBGN0265725	-1.08556	-0.03489	-0.9593	0.091377
CG15550	FBGN0039811	-1.04428	2.441094	0.365158	3.850528
CR17024	FBGN0032437	0.773535	0.813211	-0.75272	-0.71304
CG13678	FBGN0035859	0.127883	0.062747	0.689735	0.624599
Lcp2	FBGN0002533	-0.30856	0.089853	0.697353	1.095767
ppk31	FBGN0051065	0.391204	0.30343	0.63785	0.550076
lncRNA:CR45684	FBGN0267244	0.019178	0.408184	-0.63297	-0.24396
lncRNA:CR45531	FBGN0267087	0.350626	0.390948	-0.09329	-0.05296
asRNA:CR44155	FBGN0265038	-0.88276	-0.17366	-1.01044	-0.30134
lncRNA:CR45347	FBGN0266886	0.050684	-0.35885	0.754049	0.344519
snoRNA:Me28S-A2113	FBGN0086039	-0.14334	-0.09073	-0.1879	-0.13529
Lcp65Ag1	FBGN0020638	-0.26775	-0.19556	-0.92083	-0.84863
CG1339	FBGN0033202	-0.59407	-0.58487	0.639148	0.648353
lncRNA:CR45125	FBGN0266618	-0.14084	0.438163	-0.3559	0.223102
asRNA:CR46055	FBGN0267722	0.222141	0.115025	-1.54356	-1.65068
CR40450	FBGN0085734	1.068315	0.258655	-0.66997	-1.47963
l(3)mbn	FBGN0002440	-1.157	-0.28474	-1.26754	-0.39528
snoRNA:Me28S-A982b	FBGN0082942	1.047803	1.598574	1.280207	1.830978
CG43133	FBGN0262607	0.259571	-0.61364	-2.11078	-2.98399

asRNA:CR43787	FBGN0264328	-1.76651	-1.68436	0.067888	0.150045
snRNA:U5:23D	FBGN0003934	0.233542	-0.09886	-0.495	-0.8274
asRNA:CR45928	FBGN0267590	-0.19929	0.067521	-0.25498	0.011836
asRNA:CR45209	FBGN0266736	0.018684	0.78095	-0.57713	0.185139
asRNA:CR42738	FBGN0261702	-0.67737	0.282323	-0.60816	0.35153
yellow-k	FBGN0036504	0.376192	-0.20474	0.492467	-0.08847
CG14455	FBGN0037175	0.200905	0.945577	-0.52641	0.218262
CG34184	FBGN0085213	0.873017	-0.04351	-1.13445	-2.05098
Sfp79B	FBGN0259973	-0.69572	-0.13747	-0.44397	0.11428
lncRNA:CR44129	FBGN0264960	0.162373	0.021122	-0.36718	-0.50843
lncRNA:CR45221	FBGN0266748	0.950209	0.229004	-0.01783	-0.73904
asRNA:CR45827	FBGN0267477	-1.25674	-0.7574	-0.83846	-0.33911
CG33792	FBGN0053792	-0.29607	-0.81526	0.59737	0.078177
snoRNA:Psi28S-1192a	FBGN0083001	-0.13566	0.398486	-0.22645	0.307696
CG40635	FBGN0085506	-0.1603	0.284518	-0.42552	0.019295
lncRNA:CR45617	FBGN0267177	0.415562	0.413827	1.098961	1.097226
CG43677	FBGN0263760	0.134908	-0.55703	0.680005	-0.01193
Hesr	FBGN0030899	0.583443	0.587015	0.400222	0.403794
CG34437	FBGN0085466	-0.52897	0.107788	-0.10565	0.531111
CR46187	FBGN0267899	-0.04905	-0.5227	-0.00445	-0.47811
lncRNA:CR46208	FBGN0267927	-0.75217	-1.31028	-1.12736	-1.68547
Ste:CG33237	FBGN0053237	-0.42732	-0.13413	-0.27329	0.019897
lncRNA:CR44589	FBGN0265800	-0.74227	-0.98855	-0.05041	-0.29669
asRNA:CR45969	FBGN0267631	0.226649	0.210687	0.858981	0.84302
lncRNA:CR44787	FBGN0266022	0.358412	0.811413	-0.34888	0.104123
CG15721	FBGN0030438	-0.9309	-0.65807	-0.56143	-0.2886
Osi7	FBGN0037414	-0.51379	-1.10947	0.45171	-0.14397
lncRNA:CR44946	FBGN0266251	-1.52838	-0.95001	-0.70994	-0.13157
CG13361	FBGN0029532	1.093386	0.443276	0.163371	-0.48674
CG14258	FBGN0039482	0.338284	0.130627	0.6089	0.401242
snoRNA:Me28S-A2958	FBGN0086037	0.754105	0.488972	0.709841	0.444708
lncRNA:CR44648	FBGN0265859	-0.7265	0.580837	-0.05259	1.254743
CG3288	FBGN0037030	-0.90764	-0.67493	0.256755	0.489469
lncRNA:CR45292	FBGN0266830	-0.79986	-0.86834	-0.85844	-0.92692
CG45207	FBGN0266734	0.820325	3.862376	-3.08348	-0.04143
asRNA:CR45629	FBGN0267189	-1.14556	0.235496	0.793464	2.174521
lncRNA:CR43927	FBGN0264548	-0.32946	0.005076	0.185782	0.520318
lncRNA:CR45606	FBGN0267166	-0.23012	0.80103	-0.77217	0.25898
CG33160	FBGN0053160	-0.47003	-0.44084	-0.67141	-0.64221
CG7432	FBGN0038727	1.126026	0.519313	0.549741	-0.05697
asRNA:CR44181	FBGN0265070	-0.734	-0.04424	-0.04926	0.640499
lncRNA:CR44470	FBGN0265663	1.872417	-0.07051	1.139746	-0.80318
Mst77Y-8Psi	FBGN0267494	-0.37575	0.441745	-0.77033	0.047169
lncRNA:CR43838	FBGN0264390	-0.74275	-0.48893	-0.97777	-0.72395
asRNA:CR45000	FBGN0266351	1.258035	-0.10497	0.510273	-0.85273
lncRNA:CR46085	FBGN0267754	0.288648	0.349887	0.797482	0.858721
CR46425	FBGN0286928	1.313311	0.232984	0.634665	-0.44566
lncRNA:CR45398	FBGN0266947	-0.21512	-0.55377	0.604866	0.266213
Lcp1	FBGN0002531	0.557432	0.880703	0.269368	0.59264
Or65c	FBGN0041623	-0.55298	0.414087	0.657337	1.6244
CG13724	FBGN0036707	1.214001	0.523138	1.256473	0.56561
Osi21	FBGN0283678	-1.41574	-0.93775	-0.94163	-0.46365
CG13065	FBGN0036590	1.273336	0.710902	0.598573	0.036139
snoRNA:Psi28S-1175b	FBGN0083004	0.564611	0.453824	-0.1479	-0.25869
lncRNA:TS25	FBGN0284418	-0.18033	-0.81365	0.117961	-0.51535
CR33283	FBGN0053283	0.21028	-0.03142	-0.98103	-1.22273
Su(Ste):CR45796	FBGN0267446	-3.91505	-1.72448	-0.9602	1.230375
lncRNA:CR45222	FBGN0266749	0.172968	-0.10881	-1.48834	-1.77011
asRNA:CR45469	FBGN0267025	-0.75022	-0.67806	-0.33046	-0.2583
CG33003	FBGN0053003	-0.17275	0.83862	-0.79949	0.21188
lncRNA:CR44492	FBGN0265685	-0.86992	0.645894	-0.38479	1.131022
lncRNA:CR46219	FBGN0267939	1.366356	0.524843	0.368503	-0.47301
Or94b	FBGN0039034	-0.32181	-0.33938	-0.6287	-0.64627
lncRNA:CR46348	FBGN0286028	0.477242	-0.52457	1.063024	0.061215
asRNA:CR44600	FBGN0265811	0.905575	0.895742	0.629608	0.619776
CG5715	FBGN0039180	-1.05163	-0.31753	-0.44705	0.287052
lncRNA:CR46393	FBGN0286871	1.09695	-0.41769	0.432757	-1.08188
asRNA:CR45044	FBGN0266404	0.897745	0.437415	0.984511	0.524181
CG11350	FBGN0035552	-1.19435	0.191576	-3.81429	-2.42837

snoRNA:Psi28S-3436b	FBGN0086602	-0.06572	-0.76946	0.427231	-0.2765
CG11382	FBGN0040367	-0.48585	-0.11405	-0.3488	0.023003
Ugt35D1	FBGN0051002	0.326817	-0.85009	1.147679	-0.02923
lncRNA:CR44974	FBGN0266309	0.032593	0.809811	-0.06896	0.70826
Lcp65Ac	FBGN0020642	-1.57622	-0.34815	-0.85654	0.37153
lncRNA:CR45403	FBGN0266952	-1.35835	-0.97086	-0.71464	-0.32714
lncRNA:CR45634	FBGN0267194	-1.34849	-0.90273	-0.5405	-0.09474
snRNA:U6:96Ac	FBGN0004190	0.117991	-0.08982	0.864961	0.657149
CG42367	FBGN0259713	0.99787	0.749992	1.420292	1.172414
lncRNA:CR44923	FBGN0266228	0.033379	-0.03219	-0.0237	-0.08927
lncRNA:CR45616	FBGN0267176	0.048996	-0.70004	0.843893	0.094855
asRNA:CR44866	FBGN0266160	-0.92028	0.34127	-0.49937	0.762177
lncRNA:CR45655	FBGN0267215	0.104637	-0.83946	0.538884	-0.40521
lncRNA:CR44721	FBGN0265932	0.099863	0.288941	-0.16585	0.023224
CG13699	FBGN0036781	0.144807	0.732497	0.58239	1.17008
inaF-D	FBGN0260812	0.951209	-0.27847	1.31395	0.084271
CG8026	FBGN0033391	-0.01415	-0.93482	-0.04419	-0.96486
lncRNA:CR44339	FBGN0265427	-0.00305	0.509328	0.15108	0.66346
lncRNA:CR45730	FBGN0267294	0.133149	0.124192	0.780936	0.771979
psd	FBGN0086265	-0.49605	0.799593	-0.91031	0.385328
CR40100	FBGN0058100	-0.60413	-0.0535	-1.46475	-0.91412
dsx-c73A	FBGN0261799	0.664108	-0.3398	0.98637	-0.01754
CG15199	FBGN0030270	0.103916	-0.32477	0.181366	-0.24732
lncRNA:CR44522	FBGN0265715	-0.31099	-0.96055	-0.13982	-0.78939
Lcp65Ag3	FBGN0086611	-0.29476	0.187051	-0.49917	-0.01736
lncRNA:CR43992	FBGN0264724	-0.24773	1.089847	-0.0504	1.287175
CG14756	FBGN0033275	-0.65642	-1.09404	-1.72835	-2.16597
CG12016	FBGN0035436	1.169689	0.826966	-0.61824	-0.96096
lncRNA:CR44089	FBGN0264898	0.517047	0.912186	-0.99857	-0.60343
CG44476	FBGN0265669	-0.19327	0.151563	-0.68962	-0.34479
lncRNA:CR44514	FBGN0265707	-0.21515	-0.12511	-0.62196	-0.53192
CG13228	FBGN0033588	0.082905	0.913501	-1.00192	-0.17132
lncRNA:CR44595	FBGN0265806	0.494835	1.547568	-0.6904	0.362334
snoRNA:Psi28S-1175a	FBGN0083005	0.557445	0.470418	0.799282	0.712256
CG15252	FBGN0030167	-0.60634	-0.2334	0.158138	0.531077
CR43276	FBGN0262965	-0.14812	-0.2906	-0.24662	-0.38911
snoRNA:Psi18S-1377e	FBGN0083047	0.270612	-0.60007	-0.26146	-1.13214
lncRNA:CR44913	FBGN0266218	0.645591	-0.06195	1.133882	0.42634
lncRNA:CR44078	FBGN0264887	0.570681	0.590708	-1.22541	-1.20538
snoRNA:Psi18S-1397	FBGN0083044	0.500902	-0.2723	-0.12654	-0.89974
lncRNA:CR44620	FBGN0265831	-0.61812	-0.55352	-0.72262	-0.65801
CG43184	FBGN0262813	-0.55292	-1.39966	-0.71324	-1.55998
Lcp65Af	FBGN0020639	-0.31317	-0.98643	0.13391	-0.53935
CG43335	FBGN0263040	0.186271	0.639888	0.669157	1.122773
asRNA:CR44116	FBGN0264947	1.128421	1.03398	-1.14608	-1.24052
CG12522	FBGN0036131	-0.27198	-1.37716	0.77342	-0.33176
lncRNA:CR44701	FBGN0265912	0.825754	1.020389	0.264265	0.4589
lncRNA:CR44693	FBGN0265904	0.528767	-0.42213	0.425556	-0.52534
lncRNA:CR45674	FBGN0267234	-0.4806	-0.16884	0.476495	0.78825
Sr-CIII	FBGN0020376	-0.68772	0.046594	-0.36614	0.368174
Gr36a	FBGN0045487	1.13459	-0.27693	1.099118	-0.3124
snoRNA:Pi4KIIalpha-a	FBGN0263484	1.804187	0.749451	1.049577	-0.00516
tRNA:Met-CAT-1-5	FBGN0011919	-1.09208	-1.57395	-1.01495	-1.49682
CG33159	FBGN0053159	0.691154	0.031248	0.573969	-0.08594
lncRNA:CR44728	FBGN0265941	-0.90723	0.178067	-0.8399	0.245401
lncRNA:CR44638	FBGN0265849	0.427706	0.615162	-0.33725	-0.14979
lncRNA:CR44272	FBGN0265299	0.037307	0.166319	-1.75616	-1.62715
lncRNA:CR44997	FBGN0266348	-0.02621	-0.43805	0.789505	0.377666
asRNA:CR46256	FBGN0267989	2.460588	-0.39173	2.431612	-0.42071
CG31954	FBGN0051954	-0.19543	0.275096	-1.24818	-0.77766
asRNA:CR44367	FBGN0265498	-1.29432	-1.43034	-0.71269	-0.84871
srw	FBGN0261952	-0.21743	0.50304	-0.81835	-0.09789
Mst84Da	FBGN0004172	-0.37897	-0.22224	-0.61616	-0.45943
TwdlO	FBGN0039438	-0.25841	1.265418	-0.3352	1.188629
CG33775	FBGN0053775	-0.75821	-1.19407	-1.99589	-2.43175
CG13376	FBGN0029518	-0.45712	-0.53751	0.592088	0.511698
CG30379	FBGN0050379	0.239731	0.227158	-0.38864	-0.40121
tRNA:CR32123:Psi	FBGN0052123	1.525104	-0.97803	1.238347	-1.26479
asRNA:CR45257	FBGN0266795	-0.49785	0.86024	-0.70467	0.653415

CR41320	FBGN0085612	0.72201	-0.65482	0.920536	-0.45629
lncRNA:CR46196	FBGN0267915	0.546191	0.126976	0.348384	-0.07083
CG4975	FBGN0034266	0.200108	0.160665	0.092339	0.052896
CG30471	FBGN0050471	0.210783	-0.15606	0.400215	0.033369
lncRNA:CR45656	FBGN0267216	-0.41551	1.015981	-0.96948	0.462011
lncRNA:CR44289	FBGN0265316	0.534842	0.444315	0.245758	0.155232
snoRNA:Psi28S-1837c	FBGN0082994	-0.31785	-0.01779	-1.96627	-1.66621
snoRNA:Psi18S-1377a	FBGN0086665	-1.02669	-1.04474	-0.89659	-0.91463
CG43896	FBGN0264488	-0.54324	-0.21813	-0.94927	-0.62417
asRNA:CR46012	FBGN0267676	-1.33086	-0.12887	-0.4241	0.777879
CG3355	FBGN0031619	2.105752	1.465397	1.389879	0.749524
asRNA:CR45305	FBGN0266843	0.738332	1.178325	1.190622	1.630615
lncRNA:CR45592	FBGN0267152	0.507235	-0.04424	0.174473	-0.377
lncRNA:CR45689	FBGN0267249	-0.09421	0.935942	-0.99527	0.03488
CG14244	FBGN0040607	-0.20595	-0.99741	0.594294	-0.19717
Ir84a	FBGN0037501	-1.64996	-1.36773	0.216491	0.498718
CG4229	FBGN0036639	-1.06492	-0.70684	0.449949	0.808037
Ilp4	FBGN0044049	0.155892	-0.35843	0.456909	-0.05741
lncRNA:CR45641	FBGN0267201	1.009963	-0.16275	1.148677	-0.02403
CG31460	FBGN0051460	-0.36148	-0.09465	-0.52209	-0.25526
lncRNA:yar	FBGN0266568	-0.42305	-1.17747	1.099744	0.345322
Su(Ste):CR42428	FBGN0259859	0.636388	1.086999	-0.46506	-0.01445
lncRNA:CR44788	FBGN0266023	1.528673	1.607622	0.90086	0.97981
snoRNA:Or-aca3	FBGN0082923	-0.45817	-0.1472	0.13566	0.446632
lncRNA:CR45381	FBGN0266930	-0.72782	0.552023	-1.02238	0.257471
CG14564	FBGN0037131	-0.89707	-0.37325	0.36227	0.886091
lncRNA:CR44469	FBGN0265662	-0.30321	-0.36577	-0.29583	-0.3584
Gr93a	FBGN0041229	0.655344	-0.51041	0.564135	-0.60162
CG7715	FBGN0038646	-0.72484	-0.38397	0.321194	0.66206
lncRNA:CR45112	FBGN0266587	-0.19736	-1.03627	0.561715	-0.27719
lncRNA:CR46015	FBGN0267679	0.415588	0.181441	-0.10844	-0.34259
CG14273	FBGN0032024	0.033058	0.523351	0.394997	0.88529
CG13227	FBGN0033589	0.266073	1.124319	-2.60925	-1.75101
lncRNA:CR43234	FBGN0262879	0.531578	1.169308	0.494114	1.131844
lncRNA:CR45910	FBGN0267570	0.998102	0.774411	0.798246	0.574555
CG13930	FBGN0035256	-1.47395	-0.95839	-0.72736	-0.2118
Ir56a	FBGN0050125	0.97084	0.52614	0.316438	-0.12826
CG15614	FBGN0034168	0.15411	0.478713	-0.04475	0.279851
lncRNA:CR44467	FBGN0265660	-0.59863	-0.82824	-0.76643	-0.99603
CG15418	FBGN0031554	1.495822	0.435414	1.353396	0.292987
lncRNA:CR45727	FBGN0267291	-1.01988	-1.70254	-0.23854	-0.9212
asRNA:CR45198	FBGN0266725	-0.44512	-0.98102	0.332663	-0.20324
CG31358	FBGN0051358	-0.85381	-0.68273	-0.6544	-0.48331
Art8	FBGN0032329	-0.56838	0.388217	-0.9509	0.005697
lncRNA:CR44551	FBGN0265744	-0.11276	0.160764	-0.97777	-0.70424
lncRNA:CR46198	FBGN0267917	-1.7422	-1.15865	-0.98146	-0.3979
mt:tRNA:Gln-TTG	FBGN0013703	-0.82371	-0.03109	-0.46965	0.322974
CG14309	FBGN0038611	-0.55957	-0.17017	-0.81187	-0.42247
lncRNA:CR46060	FBGN0267729	0.106687	0.518451	-0.21693	0.19483
lncRNA:CR44854	FBGN0266148	-1.22718	-0.92743	0.200535	0.500278
CG14110	FBGN0036352	-0.57899	-0.94927	-0.16583	-0.53611
lncRNA:CR44184	FBGN0265073	-0.49479	-1.22322	0.506603	-0.22182
lncRNA:CR46220	FBGN0267940	-0.30503	-0.04375	-1.69839	-1.43711
asRNA:CR45924	FBGN0267586	0.430301	-0.54155	0.094951	-0.8769
Rcd7	FBGN0260461	-0.10453	-0.23781	-1.24586	-1.37914
CG45545	FBGN0267105	-0.00478	-0.25412	0.03913	-0.21022
Ir7g	FBGN0029968	-1.86175	-2.93468	0.557361	-0.51557
CG34207	FBGN0085236	-0.79847	-0.30477	-1.87716	-1.38346
lncRNA:CR34047	FBGN0054047	0.532308	-1.05815	0.971677	-0.61878
CG34190	FBGN0085219	0.124944	1.733111	-0.54222	1.065945
lncRNA:CR44727	FBGN0265940	-0.92716	-0.93375	-0.04822	-0.05481
snoRNA:Psi28S-3327a	FBGN0082967	0.076531	0.72961	0.741938	1.395017
CG3649	FBGN0034785	1.162008	0.842531	1.097354	0.777878
Gr98d	FBGN0046885	-0.89823	-0.47388	0.604081	1.028436
snoRNA:Or-aca1	FBGN0082925	-0.46364	0.98659	-0.91825	0.53198
CG43725	FBGN0263971	0.172789	0.528449	0.261131	0.616791
lncRNA:CR43617	FBGN0263595	0.739287	0.317466	0.968246	0.546425
lncRNA:CR45405	FBGN0266954	-0.11292	-1.13614	0.009061	-1.01415
lncRNA:CR45212	FBGN0266739	0.306022	1.069788	0.799848	1.563615

lncRNA:CR44466	FBGN0265659	1.008616	-0.41467	1.0075	-0.41578
CG10081	FBGN0034441	-0.03957	-0.40568	-0.58151	-0.94763
snoRNA:Psi28S-3305c	FBGN0082974	1.383293	-0.07131	1.646508	0.1919
Ir11a	FBGN0030385	-0.82195	0.851248	0.118305	1.791506
CG32071	FBGN0052071	-0.87892	-0.99892	0.13532	0.015321
Obp56c	FBGN0046879	0.48805	-0.024	0.279326	-0.23272
CG14423	FBGN0029646	0.195161	0.428392	0.163538	0.396769
CG32277	FBGN0052277	-0.21963	0.081077	0.103348	0.404056
ac	FBGN0000022	NA	NA	NA	NA
Adhr	FBGN0000056	NA	NA	NA	NA
ase	FBGN0000137	NA	NA	NA	NA
Brd	FBGN0000216	NA	NA	NA	NA
Bsg25A	FBGN0000227	NA	NA	NA	NA
Cec-Psi1	FBGN0000280	NA	NA	NA	NA
Cec2	FBGN0000281	NA	NA	NA	NA
cn	FBGN0000337	NA	NA	NA	NA
Cp16	FBGN0000356	NA	NA	NA	NA
Cp19	FBGN0000358	NA	NA	NA	NA
Cp36	FBGN0000359	NA	NA	NA	NA
cup	FBGN0000392	NA	NA	NA	NA
Edg84A	FBGN0000552	NA	NA	NA	NA
Eh	FBGN0000564	NA	NA	NA	NA
E(spl)m8-HLH	FBGN0000591	NA	NA	NA	NA
Est-P	FBGN0000594	NA	NA	NA	NA
Fbp1	FBGN0000639	NA	NA	NA	NA
Hsp22	FBGN0001223	NA	NA	NA	NA
ImpE2	FBGN0001254	NA	NA	NA	NA
NimC3	FBGN0001967	NA	NA	NA	NA
wor	FBGN0001983	NA	NA	NA	NA
l(1)sc	FBGN0002561	NA	NA	NA	NA
E(spl)m4-BFM	FBGN0002629	NA	NA	NA	NA
E(spl)m5-HLH	FBGN0002631	NA	NA	NA	NA
E(spl)m6-BFM	FBGN0002632	NA	NA	NA	NA
E(spl)m7-HLH	FBGN0002633	NA	NA	NA	NA
E(spl)mdelta-HLH	FBGN0002734	NA	NA	NA	NA
Acp95EF	FBGN0002863	NA	NA	NA	NA
mus312	FBGN0002909	NA	NA	NA	NA
Myb	FBGN0002914	NA	NA	NA	NA
ng1	FBGN0002933	NA	NA	NA	NA
ninaA	FBGN0002936	NA	NA	NA	NA
osk	FBGN0003015	NA	NA	NA	NA
CG10598	FBGN0003057	NA	NA	NA	NA
CG2150	FBGN0003065	NA	NA	NA	NA
Pepck1	FBGN0003067	NA	NA	NA	NA
Pig1	FBGN0003086	NA	NA	NA	NA
amos	FBGN0003270	NA	NA	NA	NA
sala	FBGN0003313	NA	NA	NA	NA
Sgs3	FBGN0003373	NA	NA	NA	NA
Sgs4	FBGN0003374	NA	NA	NA	NA
Sgs5	FBGN0003375	NA	NA	NA	NA
Sgs7	FBGN0003377	NA	NA	NA	NA
Sgs8	FBGN0003378	NA	NA	NA	NA
sna	FBGN0003448	NA	NA	NA	NA
spo	FBGN0003486	NA	NA	NA	NA
Sry-alpha	FBGN0003510	NA	NA	NA	NA
Sry-beta	FBGN0003511	NA	NA	NA	NA
term	FBGN0003683	NA	NA	NA	NA
tsg	FBGN0003865	NA	NA	NA	NA
snRNA:U2:14B	FBGN0003920	NA	NA	NA	NA
snRNA:U2:38ABb	FBGN0003923	NA	NA	NA	NA
snRNA:U4:38AB	FBGN0003931	NA	NA	NA	NA
snRNA:U5:14B	FBGN0003933	NA	NA	NA	NA
snRNA:U5:35D	FBGN0003936	NA	NA	NA	NA
snRNA:U5:63BC	FBGN0003938	NA	NA	NA	NA
Vm26Aa	FBGN0003979	NA	NA	NA	NA
Vm34Ca	FBGN0003983	NA	NA	NA	NA
y	FBGN0004034	NA	NA	NA	NA
zen	FBGN0004053	NA	NA	NA	NA
zen2	FBGN0004054	NA	NA	NA	NA

nullo	FBGN0004143	NA	NA	NA	NA
sc	FBGN0004170	NA	NA	NA	NA
snRNA:U1:82Eb	FBGN0004183	NA	NA	NA	NA
snRNA:U1:95Cc	FBGN0004187	NA	NA	NA	NA
bnk	FBGN0004389	NA	NA	NA	NA
DNApol-gamma35	FBGN0004407	NA	NA	NA	NA
dy	FBGN0004511	NA	NA	NA	NA
Eig71Ea	FBGN0004588	NA	NA	NA	NA
Eig71Ec	FBGN0004590	NA	NA	NA	NA
Eig71Ed	FBGN0004591	NA	NA	NA	NA
Eig71Ee	FBGN0004592	NA	NA	NA	NA
Eig71Eg	FBGN0004594	NA	NA	NA	NA
Cys	FBGN0004629	NA	NA	NA	NA
Ccp84Ae	FBGN0004779	NA	NA	NA	NA
Orc3	FBGN0005654	NA	NA	NA	NA
dpn	FBGN0010109	NA	NA	NA	NA
ng2	FBGN0010294	NA	NA	NA	NA
ng3	FBGN0010295	NA	NA	NA	NA
ng4	FBGN0010296	NA	NA	NA	NA
ato	FBGN0010433	NA	NA	NA	NA
Acam	FBGN0011273	NA	NA	NA	NA
Obp84a	FBGN0011282	NA	NA	NA	NA
Cyp4d2	FBGN0011576	NA	NA	NA	NA
Lcp1Psi	FBGN0011812	NA	NA	NA	NA
Ser12	FBGN0011832	NA	NA	NA	NA
tRNA:Ala-AGC-2-3	FBGN0011840	NA	NA	NA	NA
tRNA:Asp-GTC-1-10	FBGN0011844	NA	NA	NA	NA
tRNA:Asp-GTC-1-11	FBGN0011845	NA	NA	NA	NA
tRNA:Glu-TTC-1-6	FBGN0011848	NA	NA	NA	NA
tRNA:Glu-TTC-1-5	FBGN0011849	NA	NA	NA	NA
tRNA:Glu-TTC-1-4	FBGN0011850	NA	NA	NA	NA
tRNA:Glu-CTC-3-4	FBGN0011851	NA	NA	NA	NA
tRNA:Glu-CTC-3-5	FBGN0011852	NA	NA	NA	NA
tRNA:Glu-CTC-3-6	FBGN0011853	NA	NA	NA	NA
tRNA:Glu-CTC-3-8	FBGN0011854	NA	NA	NA	NA
tRNA:Glu-CTC-3-9	FBGN0011855	NA	NA	NA	NA
tRNA:Phe-GAA-1-8	FBGN0011858	NA	NA	NA	NA
tRNA:Gly-GCC-1-2	FBGN0011860	NA	NA	NA	NA
tRNA:Gly-GCC-1-3	FBGN0011861	NA	NA	NA	NA
tRNA:Gly-GCC-1-4	FBGN0011862	NA	NA	NA	NA
tRNA:Gly-GCC-1-5	FBGN0011863	NA	NA	NA	NA
tRNA:Gly-GCC-1-6	FBGN0011864	NA	NA	NA	NA
tRNA:Gly-GCC-1-7	FBGN0011865	NA	NA	NA	NA
tRNA:Gly-GCC-2-1	FBGN0011866	NA	NA	NA	NA
tRNA:Gly-GCC-1-8	FBGN0011867	NA	NA	NA	NA
tRNA:Gly-GCC-1-9	FBGN0011868	NA	NA	NA	NA
tRNA:Gly-GCC-1-10	FBGN0011869	NA	NA	NA	NA
tRNA:Gly-GCC-1-11	FBGN0011870	NA	NA	NA	NA
tRNA:Gly-GCC-1-12	FBGN0011871	NA	NA	NA	NA
tRNA:Gly-GCC-1-13	FBGN0011872	NA	NA	NA	NA
tRNA:His-GTG-2-1Psi	FBGN0011877	NA	NA	NA	NA
tRNA:His-GTG-1-4	FBGN0011878	NA	NA	NA	NA
tRNA:Ala-TGC-2-1	FBGN0011879	NA	NA	NA	NA
tRNA:Ile-AAT-1-1	FBGN0011880	NA	NA	NA	NA
tRNA:Ile-AAT-1-3	FBGN0011881	NA	NA	NA	NA
tRNA:Ile-AAT-1-4	FBGN0011882	NA	NA	NA	NA
tRNA:Ile-AAT-1-5	FBGN0011883	NA	NA	NA	NA
tRNA:Ile-AAT-1-6	FBGN0011884	NA	NA	NA	NA
tRNA:Ile-AAT-1-7	FBGN0011885	NA	NA	NA	NA
tRNA:Lys-CTT-1-4	FBGN0011887	NA	NA	NA	NA
tRNA:Lys-CTT-1-3	FBGN0011888	NA	NA	NA	NA
tRNA:Lys-CTT-1-2	FBGN0011889	NA	NA	NA	NA
tRNA:Lys-CTT-1-5	FBGN0011890	NA	NA	NA	NA
tRNA:Lys-CTT-1-1	FBGN0011891	NA	NA	NA	NA
tRNA:Lys-CTT-1-6	FBGN0011892	NA	NA	NA	NA
tRNA:Lys-CTT-1-7	FBGN0011893	NA	NA	NA	NA
tRNA:Lys-CTT-1-8	FBGN0011894	NA	NA	NA	NA
tRNA:Lys-CTT-1-9	FBGN0011895	NA	NA	NA	NA
tRNA:Lys-CTT-1-10	FBGN0011896	NA	NA	NA	NA

tRNA:Lys-CTT-1-11	FBGN0011897	NA	NA	NA	NA
tRNA:Lys-TTT-1-1	FBGN0011902	NA	NA	NA	NA
tRNA:Lys-TTT-2-4	FBGN0011904	NA	NA	NA	NA
tRNA:Lys-TTT-2-5	FBGN0011905	NA	NA	NA	NA
tRNA:Leu-CAG-1-1	FBGN0011906	NA	NA	NA	NA
tRNA:Leu-CAA-2-1	FBGN0011909	NA	NA	NA	NA
tRNA:Leu-CAA-1-1	FBGN0011910	NA	NA	NA	NA
tRNA:Met-CAT-1-1	FBGN0011915	NA	NA	NA	NA
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tRNA:iMet-CAT-2-1	FBGN0011921	NA	NA	NA	NA
tRNA:iMet-CAT-1-4	FBGN0011927	NA	NA	NA	NA
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tRNA:Asn-GTT-1-6	FBGN0011931	NA	NA	NA	NA
tRNA:Asn-GTT-1-5	FBGN0011932	NA	NA	NA	NA
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tRNA:Arg-TCG-3-1	FBGN0011948	NA	NA	NA	NA
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tRNA:Arg-TCG-3-3	FBGN0011950	NA	NA	NA	NA
tRNA:Arg-TCG-3-4	FBGN0011951	NA	NA	NA	NA
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tRNA:Arg-TCG-2-2	FBGN0011954	NA	NA	NA	NA
tRNA:Arg-ACG-1-5	FBGN0011955	NA	NA	NA	NA
tRNA:Arg-ACG-1-3	FBGN0011956	NA	NA	NA	NA
tRNA:Arg-ACG-1-2	FBGN0011957	NA	NA	NA	NA
tRNA:Arg-ACG-1-1	FBGN0011958	NA	NA	NA	NA
tRNA:Arg-ACG-1-10	FBGN0011959	NA	NA	NA	NA
tRNA:Arg-ACG-1-9	FBGN0011960	NA	NA	NA	NA
tRNA:Arg-ACG-1-8	FBGN0011961	NA	NA	NA	NA
tRNA:Arg-ACG-1-7	FBGN0011962	NA	NA	NA	NA
tRNA:Arg-ACG-1-6	FBGN0011963	NA	NA	NA	NA
tRNA:Arg-TCG-4-1	FBGN0011965	NA	NA	NA	NA
tRNA:Arg-TCG-2-3	FBGN0011966	NA	NA	NA	NA
tRNA:Ser-GCT-2-1	FBGN0011970	NA	NA	NA	NA
tRNA:Ser-GCT-2-2	FBGN0011971	NA	NA	NA	NA
tRNA:Ser-AGA-1-1	FBGN0011974	NA	NA	NA	NA
tRNA:Ser-CGA-1-1	FBGN0011975	NA	NA	NA	NA
tRNA:Ser-CGA-1-2	FBGN0011976	NA	NA	NA	NA
tRNA:Ser-CGA-1-3	FBGN0011977	NA	NA	NA	NA
tRNA:Ser-AGA-3-1	FBGN0011980	NA	NA	NA	NA
tRNA:Ser-AGA-3-2	FBGN0011981	NA	NA	NA	NA
tRNA:Ser-AGA-2-1	FBGN0011982	NA	NA	NA	NA
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tRNA:Ser-AGA-2-4	FBGN0011984	NA	NA	NA	NA
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tRNA:Thr-AGT-1-5	FBGN0011993	NA	NA	NA	NA
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tRNA:Val-CAC-2-2	FBGN0011998	NA	NA	NA	NA
tRNA:Val-CAC-2-1	FBGN0011999	NA	NA	NA	NA
tRNA:Val-CAC-2-3	FBGN0012000	NA	NA	NA	NA
tRNA:Val-CAC-2-4	FBGN0012001	NA	NA	NA	NA
tRNA:Val-CAC-1-1	FBGN0012002	NA	NA	NA	NA
tRNA:Val-CAC-2-5	FBGN0012003	NA	NA	NA	NA
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mt:tRNA:Cys-GCA	FBGN0013690	NA	NA	NA	NA
mt:tRNA:Asp-GTC	FBGN0013691	NA	NA	NA	NA
mt:tRNA:Glu-TTC	FBGN0013692	NA	NA	NA	NA
mt:tRNA:Phe-GAA	FBGN0013693	NA	NA	NA	NA
mt:tRNA:His-GTG	FBGN0013695	NA	NA	NA	NA
mt:tRNA:Ile-GAT	FBGN0013696	NA	NA	NA	NA
mt:tRNA:Lys-CTT	FBGN0013697	NA	NA	NA	NA
mt:tRNA:Met-CAT	FBGN0013700	NA	NA	NA	NA
mt:tRNA:Asn-GTT	FBGN0013701	NA	NA	NA	NA
mt:tRNA:Pro-TGG	FBGN0013702	NA	NA	NA	NA
mt:tRNA:Ser-GCT	FBGN0013705	NA	NA	NA	NA
mt:tRNA:Ser-TGA	FBGN0013706	NA	NA	NA	NA
mt:tRNA:Thr-TGT	FBGN0013707	NA	NA	NA	NA
mt:tRNA:Val-TAC	FBGN0013708	NA	NA	NA	NA
Vm32E	FBGN0014076	NA	NA	NA	NA
Eig71Eh	FBGN0014848	NA	NA	NA	NA
Eig71Ei	FBGN0014849	NA	NA	NA	NA
Eig71Ej	FBGN0014850	NA	NA	NA	NA
Eig71Ek	FBGN0014851	NA	NA	NA	NA
CG14630	FBGN0014903	NA	NA	NA	NA
btn	FBGN0014949	NA	NA	NA	NA
Cyp9c1	FBGN0015040	NA	NA	NA	NA
alpha-Est3	FBGN0015571	NA	NA	NA	NA
grim	FBGN0015946	NA	NA	NA	NA
pgc	FBGN0016053	NA	NA	NA	NA
stnB	FBGN0016975	NA	NA	NA	NA
stnA	FBGN0016976	NA	NA	NA	NA
Atu	FBGN0019637	NA	NA	NA	NA
snoRNA:Me28S-G764	FBGN0020518	NA	NA	NA	NA
lncRNA:iab4	FBGN0020546	NA	NA	NA	NA
Lcp65Ae	FBGN0020640	NA	NA	NA	NA
Lcp65Ad	FBGN0020641	NA	NA	NA	NA
Lcp65Ab2	FBGN0020643	NA	NA	NA	NA
Lcp65Ab1	FBGN0020644	NA	NA	NA	NA
Lcp65Aa	FBGN0020645	NA	NA	NA	NA
Lcp65APsi	FBGN0020646	NA	NA	NA	NA
Cyp4d14	FBGN0023541	NA	NA	NA	NA
waw	FBGN0024182	NA	NA	NA	NA
cato	FBGN0024249	NA	NA	NA	NA
CG3457	FBGN0024984	NA	NA	NA	NA
tRNA:Pro-CGG-3-1	FBGN0025118	NA	NA	NA	NA
SuUR	FBGN0025355	NA	NA	NA	NA
CG14795	FBGN0025393	NA	NA	NA	NA
CG4101	FBGN0025558	NA	NA	NA	NA
Lcp9	FBGN0025578	NA	NA	NA	NA
CG14424	FBGN0025644	NA	NA	NA	NA
Klf15	FBGN0025679	NA	NA	NA	NA
Lfg	FBGN0025692	NA	NA	NA	NA
HDAC3	FBGN0025825	NA	NA	NA	NA
snoRNA:Me18S-A1576	FBGN0025881	NA	NA	NA	NA
snoRNA:MeU6-A47	FBGN0025882	NA	NA	NA	NA
KP78b	FBGN0026063	NA	NA	NA	NA
KP78a	FBGN0026064	NA	NA	NA	NA
tRNA:Lys-TTT-2-1	FBGN0026162	NA	NA	NA	NA
tRNA:Lys-TTT-2-2	FBGN0026163	NA	NA	NA	NA
tRNA:Lys-TTT-2-3	FBGN0026164	NA	NA	NA	NA
snoRNA:Psi18S-1820	FBGN0026169	NA	NA	NA	NA
Tom	FBGN0026320	NA	NA	NA	NA
Or47a	FBGN0026386	NA	NA	NA	NA
Or46a	FBGN0026388	NA	NA	NA	NA
Or33c	FBGN0026390	NA	NA	NA	NA
Or33b	FBGN0026391	NA	NA	NA	NA
Or33a	FBGN0026392	NA	NA	NA	NA
Or24a	FBGN0026394	NA	NA	NA	NA

Or22c	FBGN0026396	NA	NA	NA	NA
Rad1	FBGN0026778	NA	NA	NA	NA
Tim9b	FBGN0027358	NA	NA	NA	NA
Tim10	FBGN0027360	NA	NA	NA	NA
CG2061	FBGN0027498	NA	NA	NA	NA
CG2217	FBGN0027544	NA	NA	NA	NA
MP1	FBGN0027930	NA	NA	NA	NA
gdl-ORF39	FBGN0028377	NA	NA	NA	NA
Lk	FBGN0028418	NA	NA	NA	NA
He	FBGN0028430	NA	NA	NA	NA
CG18478	FBGN0028517	NA	NA	NA	NA
mei-217	FBGN0028581	NA	NA	NA	NA
Vha16-2	FBGN0028668	NA	NA	NA	NA
ETH	FBGN0028738	NA	NA	NA	NA
fab1	FBGN0028741	NA	NA	NA	NA
CG18420	FBGN0028866	NA	NA	NA	NA
CR15280	FBGN0028867	NA	NA	NA	NA
Cpr35B	FBGN0028871	NA	NA	NA	NA
CG15269	FBGN0028878	NA	NA	NA	NA
tRNA:Pro-AGG-1-1	FBGN0028882	NA	NA	NA	NA
tRNA:Leu-TAA-3-1	FBGN0028889	NA	NA	NA	NA
tRNA:Gln-CTG-4-1	FBGN0028909	NA	NA	NA	NA
tRNA:Pro-AGG-1-4	FBGN0028910	NA	NA	NA	NA
tRNA:Pro-AGG-1-3	FBGN0028911	NA	NA	NA	NA
tRNA:Pro-AGG-1-2	FBGN0028912	NA	NA	NA	NA
CG11865	FBGN0028947	NA	NA	NA	NA
CG8788	FBGN0028955	NA	NA	NA	NA
tRNA:Ser-CGA-1-4	FBGN0028981	NA	NA	NA	NA
seq	FBGN0028991	NA	NA	NA	NA
nerfin-1	FBGN0028999	NA	NA	NA	NA
Menl-2	FBGN0029153	NA	NA	NA	NA
Menl-1	FBGN0029154	NA	NA	NA	NA
Fad2	FBGN0029172	NA	NA	NA	NA
CG13373	FBGN0029522	NA	NA	NA	NA
CG11381	FBGN0029568	NA	NA	NA	NA
CG14422	FBGN0029645	NA	NA	NA	NA
CG4116	FBGN0029649	NA	NA	NA	NA
CG6414	FBGN0029690	NA	NA	NA	NA
CG15571	FBGN0029696	NA	NA	NA	NA
CG3546	FBGN0029716	NA	NA	NA	NA
CG15465	FBGN0029746	NA	NA	NA	NA
CG4151	FBGN0029770	NA	NA	NA	NA
CG3108	FBGN0029807	NA	NA	NA	NA
Cpr5C	FBGN0029811	NA	NA	NA	NA
CG14427	FBGN0029931	NA	NA	NA	NA
Ir7b	FBGN0029965	NA	NA	NA	NA
ND-MNLL	FBGN0029971	NA	NA	NA	NA
hdm	FBGN0029977	NA	NA	NA	NA
CG12115	FBGN0030097	NA	NA	NA	NA
CG2962	FBGN0030186	NA	NA	NA	NA
Or9a	FBGN0030204	NA	NA	NA	NA
Vago	FBGN0030262	NA	NA	NA	NA
CG2076	FBGN0030263	NA	NA	NA	NA
Gr10b	FBGN0030297	NA	NA	NA	NA
Or10a	FBGN0030298	NA	NA	NA	NA
CG15741	FBGN0030338	NA	NA	NA	NA
Cpr11A	FBGN0030394	NA	NA	NA	NA
CG12715	FBGN0030443	NA	NA	NA	NA
CG15754	FBGN0030492	NA	NA	NA	NA
Cpr12A	FBGN0030494	NA	NA	NA	NA
CG12480	FBGN0030537	NA	NA	NA	NA
CG11581	FBGN0030540	NA	NA	NA	NA
CG12481	FBGN0030542	NA	NA	NA	NA
CG11585	FBGN0030543	NA	NA	NA	NA
CG1461	FBGN0030558	NA	NA	NA	NA
CG12539	FBGN0030586	NA	NA	NA	NA
CG8119	FBGN0030664	NA	NA	NA	NA
CG12507	FBGN0030729	NA	NA	NA	NA
UQCR-14	FBGN0030733	NA	NA	NA	NA

ppk28	FBGN0030795	NA	NA	NA	NA
CG13004	FBGN0030797	NA	NA	NA	NA
CG13000	FBGN0030807	NA	NA	NA	NA
CG12998	FBGN0030829	NA	NA	NA	NA
CG10597	FBGN0030832	NA	NA	NA	NA
CG12986	FBGN0030868	NA	NA	NA	NA
lncRNA:CR15061	FBGN0030911	NA	NA	NA	NA
Xrcc2	FBGN0030931	NA	NA	NA	NA
Tyler	FBGN0031038	NA	NA	NA	NA
Shawn	FBGN0031039	NA	NA	NA	NA
Pstk	FBGN0031041	NA	NA	NA	NA
fd19B	FBGN0031086	NA	NA	NA	NA
CR11235	FBGN0031135	NA	NA	NA	NA
CG15449	FBGN0031146	NA	NA	NA	NA
CG11566	FBGN0031159	NA	NA	NA	NA
Ir21a	FBGN0031209	NA	NA	NA	NA
nAChRbeta3	FBGN0031261	NA	NA	NA	NA
CG15880	FBGN0031283	NA	NA	NA	NA
Send1	FBGN0031406	NA	NA	NA	NA
CG3528	FBGN0031430	NA	NA	NA	NA
HemK2	FBGN0031454	NA	NA	NA	NA
Snapin	FBGN0031455	NA	NA	NA	NA
CG15404	FBGN0031512	NA	NA	NA	NA
CG31917	FBGN0031668	NA	NA	NA	NA
Ucp4B	FBGN0031758	NA	NA	NA	NA
CG13983	FBGN0031792	NA	NA	NA	NA
ppk14	FBGN0031803	NA	NA	NA	NA
COX5BL	FBGN0031831	NA	NA	NA	NA
Ugt307A1	FBGN0031887	NA	NA	NA	NA
TwdlE	FBGN0031957	NA	NA	NA	NA
CG9287	FBGN0032057	NA	NA	NA	NA
LManIV	FBGN0032067	NA	NA	NA	NA
CG17906	FBGN0032086	NA	NA	NA	NA
Rcd-1r	FBGN0032089	NA	NA	NA	NA
Cpr30B	FBGN0032125	NA	NA	NA	NA
CG13113	FBGN0032126	NA	NA	NA	NA
CG13114	FBGN0032127	NA	NA	NA	NA
CG4382	FBGN0032132	NA	NA	NA	NA
CG4017	FBGN0032143	NA	NA	NA	NA
CG13135	FBGN0032184	NA	NA	NA	NA
CG17768	FBGN0032240	NA	NA	NA	NA
CG17105	FBGN0032280	NA	NA	NA	NA
CG7300	FBGN0032286	NA	NA	NA	NA
CG6431	FBGN0032289	NA	NA	NA	NA
CG6508	FBGN0032303	NA	NA	NA	NA
CG17134	FBGN0032304	NA	NA	NA	NA
CG12517	FBGN0032311	NA	NA	NA	NA
CG14915	FBGN0032335	NA	NA	NA	NA
CG14930	FBGN0032366	NA	NA	NA	NA
RpL7-like	FBGN0032404	NA	NA	NA	NA
CG15480	FBGN0032489	NA	NA	NA	NA
CG16813	FBGN0032490	NA	NA	NA	NA
CG16956	FBGN0032523	NA	NA	NA	NA
CG16888	FBGN0032533	NA	NA	NA	NA
CG4650	FBGN0032549	NA	NA	NA	NA
CG18636	FBGN0032551	NA	NA	NA	NA
Nepl8	FBGN0032585	NA	NA	NA	NA
CG17996	FBGN0032595	NA	NA	NA	NA
CG31743	FBGN0032618	NA	NA	NA	NA
CG17343	FBGN0032751	NA	NA	NA	NA
CG17344	FBGN0032755	NA	NA	NA	NA
CG13083	FBGN0032789	NA	NA	NA	NA
CG9257	FBGN0032916	NA	NA	NA	NA
chk	FBGN0033095	NA	NA	NA	NA
Tsp42Eo	FBGN0033136	NA	NA	NA	NA
CG1850	FBGN0033154	NA	NA	NA	NA
Or45a	FBGN0033404	NA	NA	NA	NA
Or45b	FBGN0033422	NA	NA	NA	NA
Alp6	FBGN0033423	NA	NA	NA	NA

CG12912	FBGN0033497	NA	NA	NA	NA
CG12902	FBGN0033512	NA	NA	NA	NA
Ir47a	FBGN0033515	NA	NA	NA	NA
CG12898	FBGN0033516	NA	NA	NA	NA
Obp47a	FBGN0033573	NA	NA	NA	NA
CG13217	FBGN0033590	NA	NA	NA	NA
Cpr47Eb	FBGN0033598	NA	NA	NA	NA
Cpr47Ed	FBGN0033601	NA	NA	NA	NA
Obp47b	FBGN0033614	NA	NA	NA	NA
CG13193	FBGN0033650	NA	NA	NA	NA
Ir48c	FBGN0033651	NA	NA	NA	NA
CG13175	FBGN0033693	NA	NA	NA	NA
CG13159	FBGN0033721	NA	NA	NA	NA
Cpr49Ad	FBGN0033726	NA	NA	NA	NA
Or49a	FBGN0033727	NA	NA	NA	NA
Cpr49Af	FBGN0033729	NA	NA	NA	NA
Cpr49Ah	FBGN0033731	NA	NA	NA	NA
Balat	FBGN0033778	NA	NA	NA	NA
CG13330	FBGN0033848	NA	NA	NA	NA
CG6553	FBGN0033880	NA	NA	NA	NA
CG18324	FBGN0033905	NA	NA	NA	NA
CG12862	FBGN0033950	NA	NA	NA	NA
Ir52a	FBGN0034023	NA	NA	NA	NA
CG7798	FBGN0034092	NA	NA	NA	NA
CG7786	FBGN0034096	NA	NA	NA	NA
CG15712	FBGN0034131	NA	NA	NA	NA
Spn53F	FBGN0034195	NA	NA	NA	NA
CG10953	FBGN0034204	NA	NA	NA	NA
insb	FBGN0034224	NA	NA	NA	NA
veil	FBGN0034225	NA	NA	NA	NA
CG14480	FBGN0034242	NA	NA	NA	NA
CG14492	FBGN0034283	NA	NA	NA	NA
CG14491	FBGN0034284	NA	NA	NA	NA
CG5189	FBGN0034350	NA	NA	NA	NA
CG5493	FBGN0034364	NA	NA	NA	NA
Gint3	FBGN0034372	NA	NA	NA	NA
CG15115	FBGN0034413	NA	NA	NA	NA
AANATL5	FBGN0034426	NA	NA	NA	NA
CG10474	FBGN0034427	NA	NA	NA	NA
AANATL6	FBGN0034428	NA	NA	NA	NA
Ir56c	FBGN0034457	NA	NA	NA	NA
CG15905	FBGN0034462	NA	NA	NA	NA
Obp56e	FBGN0034471	NA	NA	NA	NA
Cpr57A	FBGN0034517	NA	NA	NA	NA
CG13430	FBGN0034518	NA	NA	NA	NA
BORCS7	FBGN0034519	NA	NA	NA	NA
CG13438	FBGN0034545	NA	NA	NA	NA
CG13443	FBGN0034548	NA	NA	NA	NA
CG15225	FBGN0034551	NA	NA	NA	NA
CG9822	FBGN0034623	NA	NA	NA	NA
PIG-M	FBGN0034649	NA	NA	NA	NA
CG13510	FBGN0034758	NA	NA	NA	NA
CG13511	FBGN0034759	NA	NA	NA	NA
CG12490	FBGN0034782	NA	NA	NA	NA
CG9897	FBGN0034807	NA	NA	NA	NA
CG2812	FBGN0034931	NA	NA	NA	NA
CG13589	FBGN0035011	NA	NA	NA	NA
CG13590	FBGN0035012	NA	NA	NA	NA
Ir60e	FBGN0035019	NA	NA	NA	NA
CG11413	FBGN0035022	NA	NA	NA	NA
CG13587	FBGN0035031	NA	NA	NA	NA
CG3650	FBGN0035070	NA	NA	NA	NA
CG9083	FBGN0035077	NA	NA	NA	NA
CG13877	FBGN0035112	NA	NA	NA	NA
CG9130	FBGN0035197	NA	NA	NA	NA
CG18170	FBGN0035239	NA	NA	NA	NA
CG33791	FBGN0035240	NA	NA	NA	NA
CG13926	FBGN0035243	NA	NA	NA	NA
CR15821	FBGN0035311	NA	NA	NA	NA

yellow-g2	FBGN0035328	NA	NA	NA	NA
CG14960	FBGN0035428	NA	NA	NA	NA
ppk27	FBGN0035458	NA	NA	NA	NA
Gr64d	FBGN0035486	NA	NA	NA	NA
Cpr64Ab	FBGN0035511	NA	NA	NA	NA
CG12607	FBGN0035545	NA	NA	NA	NA
CG15022	FBGN0035547	NA	NA	NA	NA
CG11349	FBGN0035550	NA	NA	NA	NA
CG7465	FBGN0035551	NA	NA	NA	NA
CG13721	FBGN0035554	NA	NA	NA	NA
CG13720	FBGN0035555	NA	NA	NA	NA
CG13712	FBGN0035570	NA	NA	NA	NA
CG13711	FBGN0035572	NA	NA	NA	NA
CG4597	FBGN0035594	NA	NA	NA	NA
CG5568	FBGN0035641	NA	NA	NA	NA
CG18586	FBGN0035642	NA	NA	NA	NA
CG13297	FBGN0035685	NA	NA	NA	NA
Cpr65Ea	FBGN0035735	NA	NA	NA	NA
Cpr65Eb	FBGN0035736	NA	NA	NA	NA
Tsp66A	FBGN0035786	NA	NA	NA	NA
CG8541	FBGN0035788	NA	NA	NA	NA
mthl6	FBGN0035789	NA	NA	NA	NA
CG7548	FBGN0035792	NA	NA	NA	NA
CG16998	FBGN0035795	NA	NA	NA	NA
CG13675	FBGN0035845	NA	NA	NA	NA
CG7201	FBGN0035865	NA	NA	NA	NA
mkg-p	FBGN0035889	NA	NA	NA	NA
CG13310	FBGN0035928	NA	NA	NA	NA
CG13314	FBGN0035949	NA	NA	NA	NA
Ir67a	FBGN0036010	NA	NA	NA	NA
CG6709	FBGN0036056	NA	NA	NA	NA
Hez	FBGN0036057	NA	NA	NA	NA
Or67c	FBGN0036078	NA	NA	NA	NA
Ir67b	FBGN0036083	NA	NA	NA	NA
Cpr67Fa1	FBGN0036108	NA	NA	NA	NA
Cpr67Fb	FBGN0036110	NA	NA	NA	NA
CG14147	FBGN0036112	NA	NA	NA	NA
CG11714	FBGN0036170	NA	NA	NA	NA
CG7377	FBGN0036176	NA	NA	NA	NA
CG33268	FBGN0036177	NA	NA	NA	NA
CG17826	FBGN0036227	NA	NA	NA	NA
obst-G	FBGN0036228	NA	NA	NA	NA
CG11570	FBGN0036230	NA	NA	NA	NA
SNCF	FBGN0036349	NA	NA	NA	NA
CG10154	FBGN0036361	NA	NA	NA	NA
CG8757	FBGN0036380	NA	NA	NA	NA
ssp2	FBGN0036389	NA	NA	NA	NA
CG17362	FBGN0036393	NA	NA	NA	NA
CG9040	FBGN0036394	NA	NA	NA	NA
CG6661	FBGN0036403	NA	NA	NA	NA
CG8100	FBGN0036410	NA	NA	NA	NA
CG13461	FBGN0036468	NA	NA	NA	NA
CG13454	FBGN0036503	NA	NA	NA	NA
CG13070	FBGN0036586	NA	NA	NA	NA
CG13050	FBGN0036591	NA	NA	NA	NA
CG13048	FBGN0036593	NA	NA	NA	NA
CG13046	FBGN0036595	NA	NA	NA	NA
CG4982	FBGN0036598	NA	NA	NA	NA
CG13044	FBGN0036599	NA	NA	NA	NA
CG13042	FBGN0036602	NA	NA	NA	NA
CG13062	FBGN0036603	NA	NA	NA	NA
CG13041	FBGN0036605	NA	NA	NA	NA
CG13060	FBGN0036606	NA	NA	NA	NA
CG13058	FBGN0036610	NA	NA	NA	NA
Cpr72Ea	FBGN0036617	NA	NA	NA	NA
Cpr72Eb	FBGN0036618	NA	NA	NA	NA
CG13031	FBGN0036655	NA	NA	NA	NA
CG13026	FBGN0036656	NA	NA	NA	NA
CG13028	FBGN0036676	NA	NA	NA	NA

CG13727	FBGN0036711	NA	NA	NA	NA
CG13731	FBGN0036717	NA	NA	NA	NA
CG7271	FBGN0036791	NA	NA	NA	NA
CG4174	FBGN0036793	NA	NA	NA	NA
CG13380	FBGN0036799	NA	NA	NA	NA
CG6885	FBGN0036810	NA	NA	NA	NA
CG6865	FBGN0036817	NA	NA	NA	NA
NijB	FBGN0036822	NA	NA	NA	NA
Ir75d	FBGN0036829	NA	NA	NA	NA
CG9666	FBGN0036856	NA	NA	NA	NA
CG14088	FBGN0036858	NA	NA	NA	NA
CG14089	FBGN0036861	NA	NA	NA	NA
CG14095	FBGN0036870	NA	NA	NA	NA
CG18294	FBGN0036873	NA	NA	NA	NA
Cpr76Ba	FBGN0036878	NA	NA	NA	NA
CG9279	FBGN0036882	NA	NA	NA	NA
obst-F	FBGN0036947	NA	NA	NA	NA
CG7290	FBGN0036949	NA	NA	NA	NA
CG5665	FBGN0036977	NA	NA	NA	NA
Cpr78Ca	FBGN0037067	NA	NA	NA	NA
Cpr78Cb	FBGN0037068	NA	NA	NA	NA
CG7173	FBGN0037099	NA	NA	NA	NA
CG14569	FBGN0037123	NA	NA	NA	NA
CG14573	FBGN0037125	NA	NA	NA	NA
CG14566	FBGN0037127	NA	NA	NA	NA
CG14572	FBGN0037128	NA	NA	NA	NA
CG14565	FBGN0037129	NA	NA	NA	NA
CG7370	FBGN0037133	NA	NA	NA	NA
CG14563	FBGN0037139	NA	NA	NA	NA
CG11449	FBGN0037162	NA	NA	NA	NA
CG11109	FBGN0037200	NA	NA	NA	NA
Or83a	FBGN0037322	NA	NA	NA	NA
CR1075	FBGN0037397	NA	NA	NA	NA
Osi1	FBGN0037406	NA	NA	NA	NA
Osi4	FBGN0037412	NA	NA	NA	NA
CG15594	FBGN0037421	NA	NA	NA	NA
Osi15	FBGN0037424	NA	NA	NA	NA
Osi18	FBGN0037428	NA	NA	NA	NA
Osi19	FBGN0037429	NA	NA	NA	NA
CG14610	FBGN0037477	NA	NA	NA	NA
CR10032	FBGN0037493	NA	NA	NA	NA
Or85a	FBGN0037576	NA	NA	NA	NA
CG7963	FBGN0037584	NA	NA	NA	NA
Obp85a	FBGN0037589	NA	NA	NA	NA
Or85b	FBGN0037590	NA	NA	NA	NA
Or85c	FBGN0037591	NA	NA	NA	NA
Or85d	FBGN0037594	NA	NA	NA	NA
CG8112	FBGN0037612	NA	NA	NA	NA
CG11768	FBGN0037625	NA	NA	NA	NA
CG11997	FBGN0037662	NA	NA	NA	NA
St2	FBGN0037665	NA	NA	NA	NA
CR16735	FBGN0037666	NA	NA	NA	NA
CG12951	FBGN0037677	NA	NA	NA	NA
CG8135	FBGN0037689	NA	NA	NA	NA
CG8534	FBGN0037761	NA	NA	NA	NA
Npc2c	FBGN0037783	NA	NA	NA	NA
CG14711	FBGN0037922	NA	NA	NA	NA
CG14720	FBGN0037940	NA	NA	NA	NA
GC2	FBGN0037970	NA	NA	NA	NA
CG14742	FBGN0037997	NA	NA	NA	NA
CG17404	FBGN0038001	NA	NA	NA	NA
CG12256	FBGN0038002	NA	NA	NA	NA
CG3916	FBGN0038003	NA	NA	NA	NA
Cyp313a2	FBGN0038006	NA	NA	NA	NA
CG4066	FBGN0038011	NA	NA	NA	NA
CG10096	FBGN0038032	NA	NA	NA	NA
CG10097	FBGN0038033	NA	NA	NA	NA
CG17207	FBGN0038051	NA	NA	NA	NA
CG17327	FBGN0038107	NA	NA	NA	NA

CG15888	FBGN0038131	NA	NA	NA	NA
Osi22	FBGN0038133	NA	NA	NA	NA
yellow-e3	FBGN0038150	NA	NA	NA	NA
CG9269	FBGN0038161	NA	NA	NA	NA
Or88a	FBGN0038203	NA	NA	NA	NA
CG14850	FBGN0038239	NA	NA	NA	NA
CG14851	FBGN0038240	NA	NA	NA	NA
CG8087	FBGN0038241	NA	NA	NA	NA
CG3984	FBGN0038291	NA	NA	NA	NA
Gyc89Da	FBGN0038435	NA	NA	NA	NA
CG5225	FBGN0038468	NA	NA	NA	NA
CG5866	FBGN0038508	NA	NA	NA	NA
CG14332	FBGN0038509	NA	NA	NA	NA
CG14324	FBGN0038527	NA	NA	NA	NA
CG14326	FBGN0038528	NA	NA	NA	NA
CG14323	FBGN0038529	NA	NA	NA	NA
CG14325	FBGN0038531	NA	NA	NA	NA
CG14317	FBGN0038566	NA	NA	NA	NA
CG14315	FBGN0038568	NA	NA	NA	NA
Prx5	FBGN0038570	NA	NA	NA	NA
CG7215	FBGN0038571	NA	NA	NA	NA
CG18598	FBGN0038589	NA	NA	NA	NA
CG14300	FBGN0038643	NA	NA	NA	NA
Xport-A	FBGN0038749	NA	NA	NA	NA
CG4367	FBGN0038783	NA	NA	NA	NA
Or92a	FBGN0038798	NA	NA	NA	NA
CG12278	FBGN0038847	NA	NA	NA	NA
CG17298	FBGN0038879	NA	NA	NA	NA
CG6015	FBGN0038927	NA	NA	NA	NA
CG7080	FBGN0038941	NA	NA	NA	NA
CG13862	FBGN0038942	NA	NA	NA	NA
CG5386	FBGN0038945	NA	NA	NA	NA
CG7031	FBGN0039027	NA	NA	NA	NA
CG17119	FBGN0039045	NA	NA	NA	NA
CG6726	FBGN0039049	NA	NA	NA	NA
Ir94g	FBGN0039079	NA	NA	NA	NA
Ir94h	FBGN0039080	NA	NA	NA	NA
CG10183	FBGN0039093	NA	NA	NA	NA
CG6000	FBGN0039145	NA	NA	NA	NA
CG17784	FBGN0039192	NA	NA	NA	NA
CG13613	FBGN0039193	NA	NA	NA	NA
CG13614	FBGN0039194	NA	NA	NA	NA
CG13627	FBGN0039217	NA	NA	NA	NA
CG13634	FBGN0039224	NA	NA	NA	NA
Mocs2B	FBGN0039280	NA	NA	NA	NA
CG13653	FBGN0039288	NA	NA	NA	NA
CG11889	FBGN0039308	NA	NA	NA	NA
CG11891	FBGN0039309	NA	NA	NA	NA
CG5112	FBGN0039341	NA	NA	NA	NA
CG17198	FBGN0039366	NA	NA	NA	NA
CG17197	FBGN0039367	NA	NA	NA	NA
CG17770	FBGN0039374	NA	NA	NA	NA
PIG-P	FBGN0039405	NA	NA	NA	NA
TwdlK	FBGN0039439	NA	NA	NA	NA
TwdlJ	FBGN0039440	NA	NA	NA	NA
TwdlN	FBGN0039441	NA	NA	NA	NA
TwdlS	FBGN0039443	NA	NA	NA	NA
TwdlQ	FBGN0039448	NA	NA	NA	NA
TwdlC	FBGN0039469	NA	NA	NA	NA
CG13972	FBGN0039522	NA	NA	NA	NA
Or98a	FBGN0039551	NA	NA	NA	NA
CG4884	FBGN0039565	NA	NA	NA	NA
Or98b	FBGN0039582	NA	NA	NA	NA
CG14062	FBGN0039592	NA	NA	NA	NA
beta4GalNAcTB	FBGN0039625	NA	NA	NA	NA
CG11843	FBGN0039630	NA	NA	NA	NA
CG11470	FBGN0039671	NA	NA	NA	NA
Osi23	FBGN0039771	NA	NA	NA	NA
CG11313	FBGN0039798	NA	NA	NA	NA

CG11077	FBGN0039930	NA	NA	NA	NA
CG17159	FBGN0039945	NA	NA	NA	NA
CR40282	FBGN0039979	NA	NA	NA	NA
CR12798	FBGN0039987	NA	NA	NA	NA
CG17490	FBGN0040009	NA	NA	NA	NA
primo-2	FBGN0040076	NA	NA	NA	NA
primo-1	FBGN0040077	NA	NA	NA	NA
Ugt37E1	FBGN0040261	NA	NA	NA	NA
Roc1b	FBGN0040291	NA	NA	NA	NA
Ocho	FBGN0040296	NA	NA	NA	NA
CG14417	FBGN0040353	NA	NA	NA	NA
CG14418	FBGN0040354	NA	NA	NA	NA
CG14624	FBGN0040357	NA	NA	NA	NA
CG11380	FBGN0040359	NA	NA	NA	NA
CG12496	FBGN0040385	NA	NA	NA	NA
CG14265	FBGN0040393	NA	NA	NA	NA
BobA	FBGN0040487	NA	NA	NA	NA
kappaB-Ras	FBGN0040513	NA	NA	NA	NA
CG14374	FBGN0040553	NA	NA	NA	NA
asRNA:CR17025	FBGN0040554	NA	NA	NA	NA
lncRNA:CR14310	FBGN0040569	NA	NA	NA	NA
Spase12	FBGN0040623	NA	NA	NA	NA
CG14645	FBGN0040687	NA	NA	NA	NA
CG15386	FBGN0040715	NA	NA	NA	NA
CG15353	FBGN0040718	NA	NA	NA	NA
Tango8	FBGN0040737	NA	NA	NA	NA
CG13064	FBGN0040796	NA	NA	NA	NA
CG13066	FBGN0040797	NA	NA	NA	NA
CG13051	FBGN0040799	NA	NA	NA	NA
CG13465	FBGN0040809	NA	NA	NA	NA
CG15212	FBGN0040842	NA	NA	NA	NA
CG15308	FBGN0040941	NA	NA	NA	NA
CG13998	FBGN0040949	NA	NA	NA	NA
Muc26B	FBGN0040950	NA	NA	NA	NA
Peritrophin-15b	FBGN0040958	NA	NA	NA	NA
CG14933	FBGN0040968	NA	NA	NA	NA
CG10570	FBGN0040992	NA	NA	NA	NA
CG17325	FBGN0040993	NA	NA	NA	NA
Gr68a	FBGN0041231	NA	NA	NA	NA
CG32395	FBGN0041232	NA	NA	NA	NA
Gr59c	FBGN0041235	NA	NA	NA	NA
Gr58c	FBGN0041237	NA	NA	NA	NA
Gr58b	FBGN0041238	NA	NA	NA	NA
Gr58a	FBGN0041239	NA	NA	NA	NA
Gr57a	FBGN0041240	NA	NA	NA	NA
Gr21a	FBGN0041250	NA	NA	NA	NA
Femcoat	FBGN0041252	NA	NA	NA	NA
Or69a	FBGN0041622	NA	NA	NA	NA
Or65a	FBGN0041625	NA	NA	NA	NA
snRNA:U6atac	FBGN0041717	NA	NA	NA	NA
snRNA:U4:25F	FBGN0041719	NA	NA	NA	NA
snRNA:U2:34ABc	FBGN0041720	NA	NA	NA	NA
Ssl2	FBGN0041780	NA	NA	NA	NA
Cpr65Ax2	FBGN0042118	NA	NA	NA	NA
CG18749	FBGN0042182	NA	NA	NA	NA
CG17239	FBGN0042186	NA	NA	NA	NA
CG17234	FBGN0042187	NA	NA	NA	NA
CG13713	FBGN0042199	NA	NA	NA	NA
frc	FBGN0042641	NA	NA	NA	NA
snRNA:U5:38ABb	FBGN0043021	NA	NA	NA	NA
snRNA:U5:38ABa	FBGN0043022	NA	NA	NA	NA
Obp57d	FBGN0043536	NA	NA	NA	NA
Tsp68C	FBGN0043550	NA	NA	NA	NA
PGRP-SB2	FBGN0043577	NA	NA	NA	NA
Ilp1	FBGN0044051	NA	NA	NA	NA
Pmi	FBGN0044419	NA	NA	NA	NA
snoRNA:M	FBGN0044508	NA	NA	NA	NA
TotZ	FBGN0044809	NA	NA	NA	NA
TotF	FBGN0044811	NA	NA	NA	NA

Ste12DOR	FBGN0044817	NA	NA	NA	NA
mthl12	FBGN0045442	NA	NA	NA	NA
Gr93d	FBGN0045468	NA	NA	NA	NA
Gr93c	FBGN0045469	NA	NA	NA	NA
Gr93b	FBGN0045470	NA	NA	NA	NA
Gr85a	FBGN0045473	NA	NA	NA	NA
Gr64e	FBGN0045476	NA	NA	NA	NA
Gr64c	FBGN0045477	NA	NA	NA	NA
Gr64b	FBGN0045478	NA	NA	NA	NA
Gr59a	FBGN0045483	NA	NA	NA	NA
Gr36c	FBGN0045485	NA	NA	NA	NA
Gr36b	FBGN0045486	NA	NA	NA	NA
Gr22e	FBGN0045497	NA	NA	NA	NA
Gr22d	FBGN0045498	NA	NA	NA	NA
Gr22b	FBGN0045500	NA	NA	NA	NA
Gr22a	FBGN0045501	NA	NA	NA	NA
Gr10a	FBGN0045502	NA	NA	NA	NA
CG13245	FBGN0045827	NA	NA	NA	NA
Gr98c	FBGN0046886	NA	NA	NA	NA
Gr98b	FBGN0046887	NA	NA	NA	NA
CG31750	FBGN0046888	NA	NA	NA	NA
lncRNA:CR32730	FBGN0047092	NA	NA	NA	NA
CG32235	FBGN0047330	NA	NA	NA	NA
mthl13	FBGN0050018	NA	NA	NA	NA
CR30029	FBGN0050029	NA	NA	NA	NA
Cpr49Aa	FBGN0050045	NA	NA	NA	NA
CG30058	FBGN0050058	NA	NA	NA	NA
Obp50c	FBGN0050072	NA	NA	NA	NA
Obp50b	FBGN0050073	NA	NA	NA	NA
CG30080	FBGN0050080	NA	NA	NA	NA
CG30087	FBGN0050087	NA	NA	NA	NA
CG30088	FBGN0050088	NA	NA	NA	NA
CG30095	FBGN0050095	NA	NA	NA	NA
CG30100	FBGN0050100	NA	NA	NA	NA
CG30120	FBGN0050120	NA	NA	NA	NA
tRNA:Trp-CCA-1-1	FBGN0050155	NA	NA	NA	NA
tRNA:Ala-CGC-1-1	FBGN0050198	NA	NA	NA	NA
tRNA:Ala-CGC-1-2	FBGN0050199	NA	NA	NA	NA
tRNA:Ala-CGC-1-3	FBGN0050200	NA	NA	NA	NA
tRNA:Ser-TGA-1-1	FBGN0050201	NA	NA	NA	NA
tRNA:Ser-TGA-2-1	FBGN0050202	NA	NA	NA	NA
tRNA:Trp-CCA-2-3	FBGN0050206	NA	NA	NA	NA
tRNA:Trp-CCA-2-4	FBGN0050208	NA	NA	NA	NA
tRNA:Trp-CCA-2-6	FBGN0050209	NA	NA	NA	NA
tRNA:Trp-CCA-1-2	FBGN0050211	NA	NA	NA	NA
tRNA:Arg-CCT-1-2	FBGN0050212	NA	NA	NA	NA
tRNA:Ile-AAT-1-9	FBGN0050215	NA	NA	NA	NA
tRNA:iMet-CAT-1-2	FBGN0050218	NA	NA	NA	NA
tRNA:Glu-CTC-2-2	FBGN0050220	NA	NA	NA	NA
tRNA:His-GTG-1-5	FBGN0050223	NA	NA	NA	NA
tRNA:Val-AAC-2-1	FBGN0050225	NA	NA	NA	NA
tRNA:Trp-CCA-2-2	FBGN0050227	NA	NA	NA	NA
tRNA:Phe-GAA-1-5	FBGN0050231	NA	NA	NA	NA
tRNA:Ala-TGC-1-1	FBGN0050232	NA	NA	NA	NA
tRNA:Leu-AAG-1-2	FBGN0050234	NA	NA	NA	NA
tRNA:Leu-AAG-1-3	FBGN0050235	NA	NA	NA	NA
tRNA:Gln-CTG-1-1	FBGN0050237	NA	NA	NA	NA
tRNA:Glu-TTC-1-1	FBGN0050238	NA	NA	NA	NA
tRNA:Glu-CTC-1-1	FBGN0050239	NA	NA	NA	NA
tRNA:Glu-TTC-1-2	FBGN0050240	NA	NA	NA	NA
tRNA:Leu-AAG-1-1	FBGN0050241	NA	NA	NA	NA
tRNA:His-GTG-1-1	FBGN0050249	NA	NA	NA	NA
tRNA:His-GTG-1-2	FBGN0050250	NA	NA	NA	NA
tRNA:His-GTG-1-3	FBGN0050251	NA	NA	NA	NA
tRNA:Arg-TCT-1-1	FBGN0050254	NA	NA	NA	NA
tRNA:Thr-TGT-2-1	FBGN0050257	NA	NA	NA	NA
CG30269	FBGN0050269	NA	NA	NA	NA
CG30273	FBGN0050273	NA	NA	NA	NA
CG30286	FBGN0050286	NA	NA	NA	NA

Ppcdc	FBGN0050290	NA	NA	NA	NA
tRNA:Ile-AAT-1-2	FBGN0050297	NA	NA	NA	NA
tRNA:Thr-AGT-2-1	FBGN0050298	NA	NA	NA	NA
tRNA:Thr-AGT-1-2	FBGN0050299	NA	NA	NA	NA
tRNA:Arg-ACG-1-4	FBGN0050316	NA	NA	NA	NA
tRNA:Val-AAC-2-2	FBGN0050326	NA	NA	NA	NA
tRNA:Phe-GAA-1-4	FBGN0050333	NA	NA	NA	NA
cola	FBGN0050363	NA	NA	NA	NA
hubl	FBGN0050364	NA	NA	NA	NA
spaw	FBGN0050365	NA	NA	NA	NA
swif	FBGN0050366	NA	NA	NA	NA
CR30374	FBGN0050374	NA	NA	NA	NA
tRNA:Gly-TCC-2-2	FBGN0050406	NA	NA	NA	NA
tRNA:Gly-TCC-2-1	FBGN0050407	NA	NA	NA	NA
CG30413	FBGN0050413	NA	NA	NA	NA
IFT20	FBGN0050441	NA	NA	NA	NA
tRNA:Glu-CTC-5-1Psi	FBGN0050449	NA	NA	NA	NA
tRNA:iMet-CAT-1-1	FBGN0050452	NA	NA	NA	NA
tRNA:Glu-CTC-2-1	FBGN0050454	NA	NA	NA	NA
CG30457	FBGN0050457	NA	NA	NA	NA
CG30458	FBGN0050458	NA	NA	NA	NA
CG30461	FBGN0050461	NA	NA	NA	NA
Ir52d	FBGN0050464	NA	NA	NA	NA
Ir52b	FBGN0050469	NA	NA	NA	NA
CG30479	FBGN0050479	NA	NA	NA	NA
CG30480	FBGN0050480	NA	NA	NA	NA
mRpL53	FBGN0050481	NA	NA	NA	NA
CG30486	FBGN0050486	NA	NA	NA	NA
CG30503	FBGN0050503	NA	NA	NA	NA
tRNA:Thr-TGT-2-2	FBGN0050506	NA	NA	NA	NA
tRNA:Ile-AAT-1-8	FBGN0050509	NA	NA	NA	NA
tRNA:Leu-TAG-1-2	FBGN0051023	NA	NA	NA	NA
tRNA:Gln-TTG-1-3	FBGN0051070	NA	NA	NA	NA
tRNA:Gln-TTG-1-2	FBGN0051071	NA	NA	NA	NA
TwdlH	FBGN0051080	NA	NA	NA	NA
TwdlR	FBGN0051081	NA	NA	NA	NA
CG31086	FBGN0051086	NA	NA	NA	NA
CG31088	FBGN0051088	NA	NA	NA	NA
tRNA:Leu-TAA-4-1	FBGN0051130	NA	NA	NA	NA
tRNA:Leu-CAA-2-3	FBGN0051143	NA	NA	NA	NA
tRNA:Ser-GCT-2-4	FBGN0051162	NA	NA	NA	NA
Ir94a	FBGN0051164	NA	NA	NA	NA
tRNA:Ser-GCT-2-3	FBGN0051165	NA	NA	NA	NA
tRNA:Ser-GCT-2-5	FBGN0051166	NA	NA	NA	NA
tRNA:Ser-GCT-1-1	FBGN0051167	NA	NA	NA	NA
tRNA:Ala-AGC-2-11	FBGN0051215	NA	NA	NA	NA
Ir94f	FBGN0051225	NA	NA	NA	NA
tRNA:Pro-TGG-1-5	FBGN0051228	NA	NA	NA	NA
tRNA:Gly-TCC-1-3	FBGN0051242	NA	NA	NA	NA
CG31262	FBGN0051262	NA	NA	NA	NA
CG31268	FBGN0051268	NA	NA	NA	NA
tRNA:Thr-AGT-1-4	FBGN0051282	NA	NA	NA	NA
tRNA:Phe-GAA-1-7	FBGN0051331	NA	NA	NA	NA
tRNA:Thr-CGT-1-3	FBGN0051333	NA	NA	NA	NA
tRNA:Thr-CGT-1-2	FBGN0051334	NA	NA	NA	NA
tRNA:Thr-TGT-1-1	FBGN0051356	NA	NA	NA	NA
tRNA:Asp-GTC-1-12	FBGN0051382	NA	NA	NA	NA
tRNA:Leu-TAG-1-1	FBGN0051383	NA	NA	NA	NA
Npc2e	FBGN0051410	NA	NA	NA	NA
tRNA:Asp-GTC-3-1	FBGN0051416	NA	NA	NA	NA
Ir94c	FBGN0051423	NA	NA	NA	NA
tRNA:Thr-TGT-2-5	FBGN0051432	NA	NA	NA	NA
Muc96D	FBGN0051439	NA	NA	NA	NA
CG31464	FBGN0051464	NA	NA	NA	NA
CG31465	FBGN0051465	NA	NA	NA	NA
tRNA:Thr-AGT-1-7	FBGN0051471	NA	NA	NA	NA
tRNA:Thr-CGT-1-1	FBGN0051480	NA	NA	NA	NA
tRNA:Lys-CTT-2-1Psi	FBGN0051485	NA	NA	NA	NA
tRNA:Gly-TCC-1-2	FBGN0051491	NA	NA	NA	NA

tRNA:Gly-TCC-1-1	FBGN0051494	NA	NA	NA	NA
tRNA:Thr-AGT-1-3	FBGN0051497	NA	NA	NA	NA
tRNA:Leu-TAA-1-1	FBGN0051506	NA	NA	NA	NA
tRNA:Gly-TCC-1-4	FBGN0051518	NA	NA	NA	NA
CG31542	FBGN0051542	NA	NA	NA	NA
CG31560	FBGN0051560	NA	NA	NA	NA
Osi16	FBGN0051561	NA	NA	NA	NA
tRNA:Ala-AGC-2-6	FBGN0051568	NA	NA	NA	NA
tRNA:Ala-AGC-2-5	FBGN0051569	NA	NA	NA	NA
tRNA:Ala-AGC-2-2	FBGN0051570	NA	NA	NA	NA
tRNA:Pro-TGG-1-3	FBGN0051573	NA	NA	NA	NA
tRNA:Ala-AGC-2-9	FBGN0051575	NA	NA	NA	NA
tRNA:Ala-AGC-2-10	FBGN0051576	NA	NA	NA	NA
tRNA:Pro-TGG-1-4	FBGN0051578	NA	NA	NA	NA
tRNA:Ala-AGC-2-7	FBGN0051579	NA	NA	NA	NA
tRNA:Ala-AGC-2-8	FBGN0051580	NA	NA	NA	NA
tRNA:Asn-GTT-1-10	FBGN0051583	NA	NA	NA	NA
tRNA:Phe-GAA-1-6	FBGN0051588	NA	NA	NA	NA
tRNA:Val-AAC-1-2	FBGN0051591	NA	NA	NA	NA
tRNA:Asp-GTC-1-6	FBGN0051602	NA	NA	NA	NA
tRNA:Asp-GTC-1-5	FBGN0051603	NA	NA	NA	NA
tRNA:Asp-GTC-1-4	FBGN0051604	NA	NA	NA	NA
His4:CG31611	FBGN0051611	NA	NA	NA	NA
His3:CG31613	FBGN0051613	NA	NA	NA	NA
His1:CG31617	FBGN0051617	NA	NA	NA	NA
His2A:CG31618	FBGN0051618	NA	NA	NA	NA
tRNA:Arg-CCT-1-1	FBGN0051631	NA	NA	NA	NA
lncRNA:CR31647	FBGN0051647	NA	NA	NA	NA
CG31661	FBGN0051661	NA	NA	NA	NA
tRNA:Gln-CTG-2-5	FBGN0051669	NA	NA	NA	NA
CG31698	FBGN0051698	NA	NA	NA	NA
Apf	FBGN0051713	NA	NA	NA	NA
CG31741	FBGN0051741	NA	NA	NA	NA
His-Psi:CR31754	FBGN0051754	NA	NA	NA	NA
CG31789	FBGN0051789	NA	NA	NA	NA
CR31822	FBGN0051822	NA	NA	NA	NA
CR31824	FBGN0051824	NA	NA	NA	NA
CG31827	FBGN0051827	NA	NA	NA	NA
lncRNA:CR31840	FBGN0051840	NA	NA	NA	NA
CG31862	FBGN0051862	NA	NA	NA	NA
Cpr30F	FBGN0051876	NA	NA	NA	NA
tRNA:Thr-AGT-1-1	FBGN0051885	NA	NA	NA	NA
tRNA:Asp-GTC-1-9	FBGN0051888	NA	NA	NA	NA
tRNA:Asp-GTC-1-7	FBGN0051889	NA	NA	NA	NA
tRNA:Asp-GTC-1-8	FBGN0051890	NA	NA	NA	NA
tRNA:Asp-GTC-1-3	FBGN0051892	NA	NA	NA	NA
tRNA:Phe-GAA-1-3	FBGN0051895	NA	NA	NA	NA
tRNA:Asp-GTC-1-2	FBGN0051896	NA	NA	NA	NA
tRNA:Asp-GTC-1-1	FBGN0051914	NA	NA	NA	NA
CG31926	FBGN0051926	NA	NA	NA	NA
tRNA:Gln-CTG-2-4	FBGN0051939	NA	NA	NA	NA
tRNA:Gln-CTG-3-1	FBGN0051940	NA	NA	NA	NA
tRNA:Arg-TCT-2-1	FBGN0051942	NA	NA	NA	NA
tRNA:Gln-CTG-2-2	FBGN0051943	NA	NA	NA	NA
tRNA:Gln-CTG-2-3	FBGN0051944	NA	NA	NA	NA
tRNA:Arg-TCT-3-1	FBGN0051946	NA	NA	NA	NA
tRNA:Trp-CCA-2-1	FBGN0051963	NA	NA	NA	NA
tRNA:Asp-GTC-2-1	FBGN0051971	NA	NA	NA	NA
CG31975	FBGN0051975	NA	NA	NA	NA
ovm	FBGN0051976	NA	NA	NA	NA
tRNA:Thr-AGT-3-1Psi	FBGN0052034	NA	NA	NA	NA
Ir67c	FBGN0052058	NA	NA	NA	NA
tRNA:Gln-TTG-1-1	FBGN0052093	NA	NA	NA	NA
CG32102	FBGN0052102	NA	NA	NA	NA
tRNA:Pro-AGG-1-7	FBGN0052126	NA	NA	NA	NA
tRNA:Leu-CAA-2-2	FBGN0052127	NA	NA	NA	NA
tRNA:Pro-AGG-1-6	FBGN0052128	NA	NA	NA	NA
tRNA:Pro-AGG-1-5	FBGN0052129	NA	NA	NA	NA
CG32152	FBGN0052152	NA	NA	NA	NA

tRNA:Met-CAT-1-3	FBGN0052153	NA	NA	NA	NA
lncRNA:CR32160	FBGN0052160	NA	NA	NA	NA
tRNA:Pro-CGG-2-2	FBGN0052173	NA	NA	NA	NA
Coq4	FBGN0052174	NA	NA	NA	NA
CG32188	FBGN0052188	NA	NA	NA	NA
CG32189	FBGN0052189	NA	NA	NA	NA
CG32198	FBGN0052198	NA	NA	NA	NA
tRNA:Pro-CGG-2-3	FBGN0052200	NA	NA	NA	NA
CG32214	FBGN0052214	NA	NA	NA	NA
asRNA:CR32224	FBGN0052224	NA	NA	NA	NA
CG32241	FBGN0052241	NA	NA	NA	NA
CG32248	FBGN0052248	NA	NA	NA	NA
CG32249	FBGN0052249	NA	NA	NA	NA
Drsl6	FBGN0052268	NA	NA	NA	NA
CG32269	FBGN0052269	NA	NA	NA	NA
CG32270	FBGN0052270	NA	NA	NA	NA
tRNA:Lys-CTT-1-13	FBGN0052272	NA	NA	NA	NA
tRNA:Met-CAT-2-1	FBGN0052273	NA	NA	NA	NA
Drsl1	FBGN0052274	NA	NA	NA	NA
tRNA:Lys-CTT-1-12	FBGN0052285	NA	NA	NA	NA
tRNA:Cys-GCA-1-4	FBGN0052286	NA	NA	NA	NA
tRNA:Cys-GCA-1-3	FBGN0052287	NA	NA	NA	NA
tRNA:Cys-GCA-1-1	FBGN0052288	NA	NA	NA	NA
tRNA:Cys-GCA-1-2	FBGN0052289	NA	NA	NA	NA
CG32298	FBGN0052298	NA	NA	NA	NA
CG32299	FBGN0052299	NA	NA	NA	NA
tRNA:Cys-GCA-3-1	FBGN0052303	NA	NA	NA	NA
obst-I	FBGN0052304	NA	NA	NA	NA
tRNA:Cys-GCA-2-1	FBGN0052312	NA	NA	NA	NA
tRNA:Glu-CTC-3-7	FBGN0052324	NA	NA	NA	NA
tRNA:Glu-CTC-3-2	FBGN0052328	NA	NA	NA	NA
tRNA:Glu-CTC-3-3	FBGN0052329	NA	NA	NA	NA
tRNA:Glu-CTC-3-1	FBGN0052330	NA	NA	NA	NA
tRNA:Met-CAT-1-4	FBGN0052357	NA	NA	NA	NA
tRNA:Leu-CAG-1-2	FBGN0052358	NA	NA	NA	NA
tRNA:Leu-CAG-1-3	FBGN0052359	NA	NA	NA	NA
tRNA:Leu-CAG-1-4	FBGN0052360	NA	NA	NA	NA
tRNA:Leu-CAG-1-5	FBGN0052361	NA	NA	NA	NA
tRNA:Leu-CAG-1-6	FBGN0052362	NA	NA	NA	NA
tRNA:Leu-CAG-1-7	FBGN0052363	NA	NA	NA	NA
tRNA:Ala-AGC-2-1	FBGN0052370	NA	NA	NA	NA
CG32374	FBGN0052374	NA	NA	NA	NA
CG32376	FBGN0052376	NA	NA	NA	NA
CG32391	FBGN0052391	NA	NA	NA	NA
Cpr65Aw	FBGN0052404	NA	NA	NA	NA
Cpr65Av	FBGN0052405	NA	NA	NA	NA
tRNA:Val-TAC-1-1	FBGN0052420	NA	NA	NA	NA
tRNA:Val-TAC-1-2	FBGN0052421	NA	NA	NA	NA
tRNA:Cys-GCA-4-1	FBGN0052449	NA	NA	NA	NA
tRNA:Glu-CTC-2-3	FBGN0052460	NA	NA	NA	NA
CG32462	FBGN0052462	NA	NA	NA	NA
tRNA:Ile-TAT-1-1	FBGN0052480	NA	NA	NA	NA
tRNA:Ile-TAT-1-2	FBGN0052481	NA	NA	NA	NA
tRNA:iMet-CAT-1-3	FBGN0052482	NA	NA	NA	NA
tRNA:Gln-TTG-2-1	FBGN0052493	NA	NA	NA	NA
tRNA:Ile-AAT-2-1Psi	FBGN0052518	NA	NA	NA	NA
tRNA:Tyr-GTA-1-1	FBGN0052520	NA	NA	NA	NA
tRNA:Tyr-GTA-2-1	FBGN0052525	NA	NA	NA	NA
tRNA:Pro-CGG-2-1	FBGN0052546	NA	NA	NA	NA
CG32563	FBGN0052563	NA	NA	NA	NA
TwdlZ	FBGN0052569	NA	NA	NA	NA
TwdlY	FBGN0052570	NA	NA	NA	NA
CG32573	FBGN0052573	NA	NA	NA	NA
CG32631	FBGN0052631	NA	NA	NA	NA
CG32642	FBGN0052642	NA	NA	NA	NA
Mur11Da	FBGN0052644	NA	NA	NA	NA
lncRNA:CR32660	FBGN0052660	NA	NA	NA	NA
ssp7	FBGN0052667	NA	NA	NA	NA
Gr9a	FBGN0052693	NA	NA	NA	NA

CR32733	FBGN0052733	NA	NA	NA	NA
CG32736	FBGN0052736	NA	NA	NA	NA
tRNA:Phe-GAA-1-2	FBGN0052740	NA	NA	NA	NA
tRNA:Phe-GAA-1-1	FBGN0052748	NA	NA	NA	NA
tRNA:Glu-CTC-6-1Psi	FBGN0052761	NA	NA	NA	NA
CG32762	FBGN0052762	NA	NA	NA	NA
tRNA:Gln-CTG-2-1	FBGN0052785	NA	NA	NA	NA
CG32793	FBGN0052793	NA	NA	NA	NA
CG32801	FBGN0052801	NA	NA	NA	NA
tRNA:Pro-CGG-1-1	FBGN0052826	NA	NA	NA	NA
CG32983	FBGN0052983	NA	NA	NA	NA
CG32986	FBGN0052986	NA	NA	NA	NA
CG32987	FBGN0052987	NA	NA	NA	NA
CG32988	FBGN0052988	NA	NA	NA	NA
CG33057	FBGN0053057	NA	NA	NA	NA
CG33095	FBGN0053095	NA	NA	NA	NA
CG33124	FBGN0053124	NA	NA	NA	NA
CG33128	FBGN0053128	NA	NA	NA	NA
Ste:CG33238	FBGN0053238	NA	NA	NA	NA
Ste:CG33239	FBGN0053239	NA	NA	NA	NA
Ste:CG33240	FBGN0053240	NA	NA	NA	NA
Ste:CG33241	FBGN0053241	NA	NA	NA	NA
Ste:CG33242	FBGN0053242	NA	NA	NA	NA
Ste:CG33243	FBGN0053243	NA	NA	NA	NA
Ste:CG33246	FBGN0053246	NA	NA	NA	NA
CR33255	FBGN0053255	NA	NA	NA	NA
CG33257	FBGN0053257	NA	NA	NA	NA
CG33262	FBGN0053262	NA	NA	NA	NA
CG33270	FBGN0053270	NA	NA	NA	NA
CG33271	FBGN0053271	NA	NA	NA	NA
CG33272	FBGN0053272	NA	NA	NA	NA
CG33299	FBGN0053299	NA	NA	NA	NA
CR33315	FBGN0053315	NA	NA	NA	NA
CR33317	FBGN0053317	NA	NA	NA	NA
CG33333	FBGN0053333	NA	NA	NA	NA
CG33341	FBGN0053341	NA	NA	NA	NA
5SrRNA:CR33353	FBGN0053353	NA	NA	NA	NA
5SrRNA:CR33354	FBGN0053354	NA	NA	NA	NA
5SrRNA:CR33355	FBGN0053355	NA	NA	NA	NA
5SrRNA-Psi:CR33356	FBGN0053356	NA	NA	NA	NA
5SrRNA:CR33357	FBGN0053357	NA	NA	NA	NA
5SrRNA:CR33358	FBGN0053358	NA	NA	NA	NA
5SrRNA:CR33359	FBGN0053359	NA	NA	NA	NA
5SrRNA:CR33360	FBGN0053360	NA	NA	NA	NA
5SrRNA:CR33361	FBGN0053361	NA	NA	NA	NA
5SrRNA:CR33362	FBGN0053362	NA	NA	NA	NA
5SrRNA-Psi:CR33363	FBGN0053363	NA	NA	NA	NA
5SrRNA:CR33364	FBGN0053364	NA	NA	NA	NA
5SrRNA:CR33365	FBGN0053365	NA	NA	NA	NA
5SrRNA:CR33366	FBGN0053366	NA	NA	NA	NA
5SrRNA:CR33367	FBGN0053367	NA	NA	NA	NA
5SrRNA:CR33368	FBGN0053368	NA	NA	NA	NA
5SrRNA:CR33369	FBGN0053369	NA	NA	NA	NA
5SrRNA:CR33370	FBGN0053370	NA	NA	NA	NA
5SrRNA-Psi:CR33371	FBGN0053371	NA	NA	NA	NA
5SrRNA:CR33372	FBGN0053372	NA	NA	NA	NA
5SrRNA:CR33373	FBGN0053373	NA	NA	NA	NA
5SrRNA:CR33374	FBGN0053374	NA	NA	NA	NA
5SrRNA:CR33375	FBGN0053375	NA	NA	NA	NA
5SrRNA:CR33376	FBGN0053376	NA	NA	NA	NA
5SrRNA:CR33377	FBGN0053377	NA	NA	NA	NA
5SrRNA:CR33378	FBGN0053378	NA	NA	NA	NA
5SrRNA:CR33379	FBGN0053379	NA	NA	NA	NA
5SrRNA:CR33380	FBGN0053380	NA	NA	NA	NA
5SrRNA:CR33381	FBGN0053381	NA	NA	NA	NA
5SrRNA:CR33382	FBGN0053382	NA	NA	NA	NA
5SrRNA:CR33383	FBGN0053383	NA	NA	NA	NA
5SrRNA:CR33384	FBGN0053384	NA	NA	NA	NA
5SrRNA:CR33385	FBGN0053385	NA	NA	NA	NA

5SrRNA:CR33386	FBGN0053386	NA	NA	NA	NA
5SrRNA:CR33387	FBGN0053387	NA	NA	NA	NA
5SrRNA:CR33388	FBGN0053388	NA	NA	NA	NA
5SrRNA:CR33389	FBGN0053389	NA	NA	NA	NA
5SrRNA:CR33390	FBGN0053390	NA	NA	NA	NA
5SrRNA:CR33391	FBGN0053391	NA	NA	NA	NA
5SrRNA:CR33392	FBGN0053392	NA	NA	NA	NA
5SrRNA:CR33393	FBGN0053393	NA	NA	NA	NA
5SrRNA:CR33394	FBGN0053394	NA	NA	NA	NA
5SrRNA:CR33395	FBGN0053395	NA	NA	NA	NA
5SrRNA:CR33396	FBGN0053396	NA	NA	NA	NA
5SrRNA:CR33397	FBGN0053397	NA	NA	NA	NA
5SrRNA:CR33398	FBGN0053398	NA	NA	NA	NA
5SrRNA:CR33399	FBGN0053399	NA	NA	NA	NA
5SrRNA:CR33400	FBGN0053400	NA	NA	NA	NA
5SrRNA:CR33401	FBGN0053401	NA	NA	NA	NA
5SrRNA:CR33402	FBGN0053402	NA	NA	NA	NA
5SrRNA:CR33403	FBGN0053403	NA	NA	NA	NA
5SrRNA:CR33404	FBGN0053404	NA	NA	NA	NA
5SrRNA:CR33405	FBGN0053405	NA	NA	NA	NA
5SrRNA:CR33406	FBGN0053406	NA	NA	NA	NA
5SrRNA:CR33407	FBGN0053407	NA	NA	NA	NA
5SrRNA:CR33408	FBGN0053408	NA	NA	NA	NA
5SrRNA:CR33409	FBGN0053409	NA	NA	NA	NA
5SrRNA:CR33410	FBGN0053410	NA	NA	NA	NA
5SrRNA:CR33411	FBGN0053411	NA	NA	NA	NA
5SrRNA:CR33412	FBGN0053412	NA	NA	NA	NA
5SrRNA:CR33413	FBGN0053413	NA	NA	NA	NA
5SrRNA:CR33414	FBGN0053414	NA	NA	NA	NA
5SrRNA:CR33415	FBGN0053415	NA	NA	NA	NA
5SrRNA-Psi:CR33416	FBGN0053416	NA	NA	NA	NA
5SrRNA:CR33417	FBGN0053417	NA	NA	NA	NA
5SrRNA:CR33418	FBGN0053418	NA	NA	NA	NA
5SrRNA:CR33419	FBGN0053419	NA	NA	NA	NA
5SrRNA:CR33420	FBGN0053420	NA	NA	NA	NA
5SrRNA:CR33421	FBGN0053421	NA	NA	NA	NA
5SrRNA:CR33422	FBGN0053422	NA	NA	NA	NA
5SrRNA:CR33423	FBGN0053423	NA	NA	NA	NA
5SrRNA:CR33424	FBGN0053424	NA	NA	NA	NA
5SrRNA:CR33425	FBGN0053425	NA	NA	NA	NA
5SrRNA:CR33426	FBGN0053426	NA	NA	NA	NA
5SrRNA:CR33427	FBGN0053427	NA	NA	NA	NA
5SrRNA:CR33428	FBGN0053428	NA	NA	NA	NA
5SrRNA:CR33429	FBGN0053429	NA	NA	NA	NA
5SrRNA:CR33430	FBGN0053430	NA	NA	NA	NA
5SrRNA:CR33431	FBGN0053431	NA	NA	NA	NA
5SrRNA:CR33432	FBGN0053432	NA	NA	NA	NA
5SrRNA:CR33433	FBGN0053433	NA	NA	NA	NA
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5SrRNA:CR33435	FBGN0053435	NA	NA	NA	NA
5SrRNA:CR33436	FBGN0053436	NA	NA	NA	NA
5SrRNA:CR33437	FBGN0053437	NA	NA	NA	NA
5SrRNA:CR33438	FBGN0053438	NA	NA	NA	NA
5SrRNA:CR33439	FBGN0053439	NA	NA	NA	NA
5SrRNA:CR33440	FBGN0053440	NA	NA	NA	NA
5SrRNA:CR33441	FBGN0053441	NA	NA	NA	NA
5SrRNA:CR33442	FBGN0053442	NA	NA	NA	NA
5SrRNA:CR33443	FBGN0053443	NA	NA	NA	NA
5SrRNA:CR33444	FBGN0053444	NA	NA	NA	NA
5SrRNA:CR33445	FBGN0053445	NA	NA	NA	NA
5SrRNA:CR33446	FBGN0053446	NA	NA	NA	NA
5SrRNA:CR33447	FBGN0053447	NA	NA	NA	NA
5SrRNA:CR33448	FBGN0053448	NA	NA	NA	NA
5SrRNA:CR33449	FBGN0053449	NA	NA	NA	NA
5SrRNA:CR33450	FBGN0053450	NA	NA	NA	NA
5SrRNA:CR33451	FBGN0053451	NA	NA	NA	NA
5SrRNA:CR33452	FBGN0053452	NA	NA	NA	NA
CG33453	FBGN0053453	NA	NA	NA	NA
CG33454	FBGN0053454	NA	NA	NA	NA

CG33458	FBGN0053458	NA	NA	NA	NA
CG33459	FBGN0053459	NA	NA	NA	NA
CG33461	FBGN0053461	NA	NA	NA	NA
CG33462	FBGN0053462	NA	NA	NA	NA
CG33463	FBGN0053463	NA	NA	NA	NA
CG33467	FBGN0053467	NA	NA	NA	NA
Ir48a	FBGN0053471	NA	NA	NA	NA
CG33475	FBGN0053475	NA	NA	NA	NA
CG33476	FBGN0053476	NA	NA	NA	NA
CG33477	FBGN0053477	NA	NA	NA	NA
CG33483	FBGN0053483	NA	NA	NA	NA
CR33496	FBGN0053496	NA	NA	NA	NA
CR33498	FBGN0053498	NA	NA	NA	NA
snRNA:U7	FBGN0053504	NA	NA	NA	NA
tRNA:Ala-AGC-2-4	FBGN0053534	NA	NA	NA	NA
tRNA:Glu-TTC-1-3	FBGN0053535	NA	NA	NA	NA
tRNA:Asn-GTT-1-9	FBGN0053537	NA	NA	NA	NA
tRNA:Arg-CCT-1-3	FBGN0053538	NA	NA	NA	NA
tRNA:Trp-CCA-2-5	FBGN0053539	NA	NA	NA	NA
tRNA:Arg-TCG-2-4	FBGN0053551	NA	NA	NA	NA
CG33626	FBGN0053626	NA	NA	NA	NA
CG33627	FBGN0053627	NA	NA	NA	NA
CR33629	FBGN0053629	NA	NA	NA	NA
CG33630	FBGN0053630	NA	NA	NA	NA
CG33631	FBGN0053631	NA	NA	NA	NA
CG33640	FBGN0053640	NA	NA	NA	NA
CG33642	FBGN0053642	NA	NA	NA	NA
CG33643	FBGN0053643	NA	NA	NA	NA
CG33644	FBGN0053644	NA	NA	NA	NA
CG33645	FBGN0053645	NA	NA	NA	NA
CG33647	FBGN0053647	NA	NA	NA	NA
CG33648	FBGN0053648	NA	NA	NA	NA
CG33654	FBGN0053654	NA	NA	NA	NA
CG33658	FBGN0053658	NA	NA	NA	NA
CG33680	FBGN0053680	NA	NA	NA	NA
CG33687	FBGN0053687	NA	NA	NA	NA
CG33688	FBGN0053688	NA	NA	NA	NA
CG33689	FBGN0053689	NA	NA	NA	NA
CG33690	FBGN0053690	NA	NA	NA	NA
CG33700	FBGN0053700	NA	NA	NA	NA
CR33701	FBGN0053701	NA	NA	NA	NA
CG33702	FBGN0053702	NA	NA	NA	NA
CG33703	FBGN0053703	NA	NA	NA	NA
CG33721	FBGN0053721	NA	NA	NA	NA
snmRNA:430a	FBGN0053727	NA	NA	NA	NA
snmRNA:430b	FBGN0053728	NA	NA	NA	NA
snmRNA:430c	FBGN0053729	NA	NA	NA	NA
snmRNA:430d	FBGN0053730	NA	NA	NA	NA
snmRNA:430e	FBGN0053731	NA	NA	NA	NA
snmRNA:430f	FBGN0053732	NA	NA	NA	NA
snmRNA:430g	FBGN0053733	NA	NA	NA	NA
snmRNA:430h	FBGN0053734	NA	NA	NA	NA
snmRNA:430i	FBGN0053735	NA	NA	NA	NA
snmRNA:430j	FBGN0053736	NA	NA	NA	NA
snmRNA:430k	FBGN0053737	NA	NA	NA	NA
snmRNA:430l	FBGN0053738	NA	NA	NA	NA
snmRNA:430m	FBGN0053739	NA	NA	NA	NA
snmRNA:430n	FBGN0053740	NA	NA	NA	NA
snmRNA:430o	FBGN0053741	NA	NA	NA	NA
snmRNA:430p	FBGN0053742	NA	NA	NA	NA
snmRNA:430q	FBGN0053743	NA	NA	NA	NA
snmRNA:430r	FBGN0053744	NA	NA	NA	NA
snmRNA:430s	FBGN0053745	NA	NA	NA	NA
snmRNA:430t	FBGN0053746	NA	NA	NA	NA
CG33752	FBGN0053752	NA	NA	NA	NA
CG33757	FBGN0053757	NA	NA	NA	NA
CG33758	FBGN0053758	NA	NA	NA	NA
CG33764	FBGN0053764	NA	NA	NA	NA
CG33766	FBGN0053766	NA	NA	NA	NA

CG33767	FBGN0053767	NA	NA	NA	NA
CG33768	FBGN0053768	NA	NA	NA	NA
CG33769	FBGN0053769	NA	NA	NA	NA
CG33770	FBGN0053770	NA	NA	NA	NA
CG33771	FBGN0053771	NA	NA	NA	NA
CG33772	FBGN0053772	NA	NA	NA	NA
CG33795	FBGN0053795	NA	NA	NA	NA
CG33796	FBGN0053796	NA	NA	NA	NA
CR33797	FBGN0053797	NA	NA	NA	NA
CG33798	FBGN0053798	NA	NA	NA	NA
His1:CG33801	FBGN0053801	NA	NA	NA	NA
His-Psi:CR33802	FBGN0053802	NA	NA	NA	NA
His3:CG33803	FBGN0053803	NA	NA	NA	NA
His1:CG33804	FBGN0053804	NA	NA	NA	NA
His-Psi:CR33805	FBGN0053805	NA	NA	NA	NA
His3:CG33806	FBGN0053806	NA	NA	NA	NA
His1:CG33807	FBGN0053807	NA	NA	NA	NA
His2A:CG33808	FBGN0053808	NA	NA	NA	NA
His3:CG33809	FBGN0053809	NA	NA	NA	NA
His1:CG33810	FBGN0053810	NA	NA	NA	NA
His-Psi:CR33811	FBGN0053811	NA	NA	NA	NA
His3:CG33812	FBGN0053812	NA	NA	NA	NA
His1:CG33813	FBGN0053813	NA	NA	NA	NA
His2A:CG33814	FBGN0053814	NA	NA	NA	NA
His3:CG33815	FBGN0053815	NA	NA	NA	NA
His1:CG33816	FBGN0053816	NA	NA	NA	NA
His2A:CG33817	FBGN0053817	NA	NA	NA	NA
His3:CG33818	FBGN0053818	NA	NA	NA	NA
His1:CG33819	FBGN0053819	NA	NA	NA	NA
His2A:CG33820	FBGN0053820	NA	NA	NA	NA
His3:CG33821	FBGN0053821	NA	NA	NA	NA
His1:CG33822	FBGN0053822	NA	NA	NA	NA
His2A:CG33823	FBGN0053823	NA	NA	NA	NA
His3:CG33824	FBGN0053824	NA	NA	NA	NA
His1:CG33825	FBGN0053825	NA	NA	NA	NA
His2A:CG33826	FBGN0053826	NA	NA	NA	NA
His3:CG33827	FBGN0053827	NA	NA	NA	NA
His1:CG33828	FBGN0053828	NA	NA	NA	NA
His2A:CG33829	FBGN0053829	NA	NA	NA	NA
His3:CG33830	FBGN0053830	NA	NA	NA	NA
His1:CG33831	FBGN0053831	NA	NA	NA	NA
His2A:CG33832	FBGN0053832	NA	NA	NA	NA
His3:CG33833	FBGN0053833	NA	NA	NA	NA
His1:CG33834	FBGN0053834	NA	NA	NA	NA
His2A:CG33835	FBGN0053835	NA	NA	NA	NA
His3:CG33836	FBGN0053836	NA	NA	NA	NA
His1:CG33837	FBGN0053837	NA	NA	NA	NA
His2A:CG33838	FBGN0053838	NA	NA	NA	NA
His3:CG33839	FBGN0053839	NA	NA	NA	NA
His1:CG33840	FBGN0053840	NA	NA	NA	NA
His2A:CG33841	FBGN0053841	NA	NA	NA	NA
His3:CG33842	FBGN0053842	NA	NA	NA	NA
His1:CG33843	FBGN0053843	NA	NA	NA	NA
His2A:CG33844	FBGN0053844	NA	NA	NA	NA
His3:CG33845	FBGN0053845	NA	NA	NA	NA
His1:CG33846	FBGN0053846	NA	NA	NA	NA
His2A:CG33847	FBGN0053847	NA	NA	NA	NA
His3:CG33848	FBGN0053848	NA	NA	NA	NA
His1:CG33849	FBGN0053849	NA	NA	NA	NA
His2A:CG33850	FBGN0053850	NA	NA	NA	NA
His3:CG33851	FBGN0053851	NA	NA	NA	NA
His1:CG33852	FBGN0053852	NA	NA	NA	NA
His2A:CG33853	FBGN0053853	NA	NA	NA	NA
His3:CG33854	FBGN0053854	NA	NA	NA	NA
His1:CG33855	FBGN0053855	NA	NA	NA	NA
His2A:CG33856	FBGN0053856	NA	NA	NA	NA
His3:CG33857	FBGN0053857	NA	NA	NA	NA
His1:CG33858	FBGN0053858	NA	NA	NA	NA
His2A:CG33859	FBGN0053859	NA	NA	NA	NA

His3:CG33860	FBGN0053860	NA	NA	NA	NA
His1:CG33861	FBGN0053861	NA	NA	NA	NA
His2A:CG33862	FBGN0053862	NA	NA	NA	NA
His3:CG33863	FBGN0053863	NA	NA	NA	NA
His1:CG33864	FBGN0053864	NA	NA	NA	NA
His2A:CG33865	FBGN0053865	NA	NA	NA	NA
His3:CG33866	FBGN0053866	NA	NA	NA	NA
His4:CG33869	FBGN0053869	NA	NA	NA	NA
His2B:CG33870	FBGN0053870	NA	NA	NA	NA
His4:CG33871	FBGN0053871	NA	NA	NA	NA
His2B:CG33872	FBGN0053872	NA	NA	NA	NA
His4:CG33873	FBGN0053873	NA	NA	NA	NA
His2B:CG33874	FBGN0053874	NA	NA	NA	NA
His4:CG33875	FBGN0053875	NA	NA	NA	NA
His2B:CG33876	FBGN0053876	NA	NA	NA	NA
His4:CG33877	FBGN0053877	NA	NA	NA	NA
His2B:CG33878	FBGN0053878	NA	NA	NA	NA
His4:CG33879	FBGN0053879	NA	NA	NA	NA
His2B:CG33880	FBGN0053880	NA	NA	NA	NA
His4:CG33881	FBGN0053881	NA	NA	NA	NA
His2B:CG33882	FBGN0053882	NA	NA	NA	NA
His4:CG33883	FBGN0053883	NA	NA	NA	NA
His2B:CG33884	FBGN0053884	NA	NA	NA	NA
His4:CG33885	FBGN0053885	NA	NA	NA	NA
His2B:CG33886	FBGN0053886	NA	NA	NA	NA
His4:CG33887	FBGN0053887	NA	NA	NA	NA
His2B:CG33888	FBGN0053888	NA	NA	NA	NA
His4:CG33889	FBGN0053889	NA	NA	NA	NA
His2B:CG33890	FBGN0053890	NA	NA	NA	NA
His4:CG33891	FBGN0053891	NA	NA	NA	NA
His2B:CG33892	FBGN0053892	NA	NA	NA	NA
His4:CG33893	FBGN0053893	NA	NA	NA	NA
His2B:CG33894	FBGN0053894	NA	NA	NA	NA
His4:CG33895	FBGN0053895	NA	NA	NA	NA
His2B:CG33896	FBGN0053896	NA	NA	NA	NA
His4:CG33897	FBGN0053897	NA	NA	NA	NA
His2B:CG33898	FBGN0053898	NA	NA	NA	NA
His4:CG33899	FBGN0053899	NA	NA	NA	NA
His2B:CG33900	FBGN0053900	NA	NA	NA	NA
His4:CG33901	FBGN0053901	NA	NA	NA	NA
His2B:CG33902	FBGN0053902	NA	NA	NA	NA
His4:CG33903	FBGN0053903	NA	NA	NA	NA
His2B:CG33904	FBGN0053904	NA	NA	NA	NA
His4:CG33905	FBGN0053905	NA	NA	NA	NA
His2B:CG33906	FBGN0053906	NA	NA	NA	NA
His4:CG33907	FBGN0053907	NA	NA	NA	NA
His2B:CG33908	FBGN0053908	NA	NA	NA	NA
His4:CG33909	FBGN0053909	NA	NA	NA	NA
His2B:CG33910	FBGN0053910	NA	NA	NA	NA
CG33912	FBGN0053912	NA	NA	NA	NA
CG33919	FBGN0053919	NA	NA	NA	NA
CG33922	FBGN0053922	NA	NA	NA	NA
CG33927	FBGN0053927	NA	NA	NA	NA
CG33928	FBGN0053928	NA	NA	NA	NA
CG33964	FBGN0053964	NA	NA	NA	NA
CG33985	FBGN0053985	NA	NA	NA	NA
CG33986	FBGN0053986	NA	NA	NA	NA
CG33995	FBGN0053995	NA	NA	NA	NA
lncRNA:CR34006	FBGN0054006	NA	NA	NA	NA
lncRNA:CR34052	FBGN0054052	NA	NA	NA	NA
CR40182	FBGN0058182	NA	NA	NA	NA
CR40441	FBGN0058441	NA	NA	NA	NA
CR40461	FBGN0058461	NA	NA	NA	NA
snoRNA:U49:66Db	FBGN0060291	NA	NA	NA	NA
snoRNA:U49:66Da	FBGN0060292	NA	NA	NA	NA
His2B:CG17949	FBGN0061209	NA	NA	NA	NA
CG33671	FBGN0061359	NA	NA	NA	NA
CG33672	FBGN0061360	NA	NA	NA	NA
CG33786	FBGN0061361	NA	NA	NA	NA

CG33785	FBGN0061362	NA	NA	NA	NA
lncRNA:CR33938	FBGN0063127	NA	NA	NA	NA
snoRNA:snR38:54Ec	FBGN0063373	NA	NA	NA	NA
snoRNA:snR38:54Eb	FBGN0063374	NA	NA	NA	NA
snoRNA:Me28S-G3277a	FBGN0063375	NA	NA	NA	NA
snoRNA:U76:54Eb	FBGN0063376	NA	NA	NA	NA
snoRNA:Me28S-A1666a	FBGN0063377	NA	NA	NA	NA
snoRNA:U31:54Ed	FBGN0063378	NA	NA	NA	NA
snoRNA:U31:54Ec	FBGN0063379	NA	NA	NA	NA
snoRNA:U31:54Eb	FBGN0063380	NA	NA	NA	NA
snoRNA:Me28S-G3081a	FBGN0063381	NA	NA	NA	NA
snoRNA:U29:54Ed	FBGN0063382	NA	NA	NA	NA
snoRNA:U29:54Ec	FBGN0063383	NA	NA	NA	NA
snoRNA:U29:54Eb	FBGN0063384	NA	NA	NA	NA
snoRNA:Me28S-A3407a	FBGN0063385	NA	NA	NA	NA
snoRNA:Me18S-A28a	FBGN0063386	NA	NA	NA	NA
snoRNA:U27:54Eb	FBGN0063387	NA	NA	NA	NA
snoRNA:U27:54Ea	FBGN0063388	NA	NA	NA	NA
snoRNA:Me18S-G1620	FBGN0063389	NA	NA	NA	NA
snoRNA:U14:30Eb	FBGN0063391	NA	NA	NA	NA
snoRNA:U14:30Ea	FBGN0063392	NA	NA	NA	NA
Lasp	FBGN0063485	NA	NA	NA	NA
Kaz1-ORFA	FBGN0063924	NA	NA	NA	NA
GatC	FBGN0064115	NA	NA	NA	NA
anox	FBGN0064116	NA	NA	NA	NA
SLIRP1	FBGN0064117	NA	NA	NA	NA
CG33934	FBGN0064119	NA	NA	NA	NA
stg1	FBGN0064123	NA	NA	NA	NA
CG33722	FBGN0064126	NA	NA	NA	NA
snoRNA:U3:9B	FBGN0065046	NA	NA	NA	NA
scaRNA:MeU5-U42	FBGN0065051	NA	NA	NA	NA
scaRNA:MeU2-C28	FBGN0065057	NA	NA	NA	NA
snoRNA:684	FBGN0065058	NA	NA	NA	NA
snoRNA:660	FBGN0065059	NA	NA	NA	NA
snoRNA:291	FBGN0065070	NA	NA	NA	NA
snoRNA:229	FBGN0065073	NA	NA	NA	NA
snoRNA:Me18S-A1374	FBGN0065080	NA	NA	NA	NA
snmRNA:838	FBGN0065081	NA	NA	NA	NA
snmRNA:765	FBGN0065083	NA	NA	NA	NA
snmRNA:763	FBGN0065084	NA	NA	NA	NA
snmRNA:649	FBGN0065087	NA	NA	NA	NA
snmRNA:641	FBGN0065088	NA	NA	NA	NA
snmRNA:438	FBGN0065092	NA	NA	NA	NA
snmRNA:419	FBGN0065094	NA	NA	NA	NA
snmRNA:400	FBGN0065095	NA	NA	NA	NA
snmRNA:359	FBGN0065096	NA	NA	NA	NA
snmRNA:357	FBGN0065097	NA	NA	NA	NA
snmRNA:204	FBGN0065101	NA	NA	NA	NA
snmRNA:184	FBGN0065102	NA	NA	NA	NA
snmRNA:158	FBGN0065104	NA	NA	NA	NA
snmRNA:157	FBGN0065105	NA	NA	NA	NA
snmRNA:128	FBGN0065107	NA	NA	NA	NA
ppk16	FBGN0065108	NA	NA	NA	NA
ppk11	FBGN0065109	NA	NA	NA	NA
CG33932	FBGN0066303	NA	NA	NA	NA
Rpp20	FBGN0066304	NA	NA	NA	NA
Or98P	FBGN0067407	NA	NA	NA	NA
LSm-4	FBGN0067622	NA	NA	NA	NA
att-ORFB	FBGN0067782	NA	NA	NA	NA
IM18	FBGN0067903	NA	NA	NA	NA
CG33226	FBGN0069056	NA	NA	NA	NA
snoRNA:Or-CD4	FBGN0082919	NA	NA	NA	NA
snoRNA:Or-aca4	FBGN0082922	NA	NA	NA	NA
snoRNA:Or-aca2	FBGN0082924	NA	NA	NA	NA
snoRNA:Me28S-U1848	FBGN0082926	NA	NA	NA	NA
snoRNA:Me28S-G3255b	FBGN0082927	NA	NA	NA	NA
snoRNA:Me28S-G3255a	FBGN0082928	NA	NA	NA	NA
snoRNA:Me28S-G2703c	FBGN0082929	NA	NA	NA	NA
snoRNA:Me28S-G2703b	FBGN0082930	NA	NA	NA	NA

snoRNA:Me28S-G2703a	FBGN0082931	NA	NA	NA	NA
snoRNA:Me28S-G1083d	FBGN0082932	NA	NA	NA	NA
snoRNA:Me28S-G1083c	FBGN0082933	NA	NA	NA	NA
snoRNA:Me28S-G1083b	FBGN0082934	NA	NA	NA	NA
snoRNA:Me28S-G1083a	FBGN0082935	NA	NA	NA	NA
snoRNA:Me28S-C2645c	FBGN0082936	NA	NA	NA	NA
snoRNA:Me28S-C2645b	FBGN0082937	NA	NA	NA	NA
snoRNA:Me28S-C2645a	FBGN0082938	NA	NA	NA	NA
snoRNA:Me28S-C3227b	FBGN0082939	NA	NA	NA	NA
snoRNA:Me28S-C3227a	FBGN0082940	NA	NA	NA	NA
snoRNA:Me28S-A992	FBGN0082941	NA	NA	NA	NA
snoRNA:Me28S-A982a	FBGN0082943	NA	NA	NA	NA
snoRNA:Me28S-A2634c	FBGN0082944	NA	NA	NA	NA
snoRNA:Me28S-A2634b	FBGN0082945	NA	NA	NA	NA
snoRNA:Me28S-A2634a	FBGN0082946	NA	NA	NA	NA
snoRNA:Me18S-U1356c	FBGN0082947	NA	NA	NA	NA
snoRNA:Me18S-U1356b	FBGN0082948	NA	NA	NA	NA
snoRNA:Me18S-U1356a	FBGN0082949	NA	NA	NA	NA
snoRNA:Me18S-G1952	FBGN0082950	NA	NA	NA	NA
snoRNA:Me18S-C1366	FBGN0082951	NA	NA	NA	NA
snoRNA:Me18S-A1061	FBGN0082952	NA	NA	NA	NA
snoRNA:Psi28S-3405d	FBGN0082957	NA	NA	NA	NA
snoRNA:Psi28S-3405c	FBGN0082958	NA	NA	NA	NA
snoRNA:Psi28S-3405b	FBGN0082959	NA	NA	NA	NA
snoRNA:Psi28S-3405a	FBGN0082960	NA	NA	NA	NA
snoRNA:Psi28S-3378	FBGN0082963	NA	NA	NA	NA
snoRNA:Psi28S-3327b	FBGN0082966	NA	NA	NA	NA
snoRNA:Psi28S-3316e	FBGN0082968	NA	NA	NA	NA
snoRNA:Psi28S-3316d	FBGN0082969	NA	NA	NA	NA
snoRNA:Psi28S-3316c	FBGN0082970	NA	NA	NA	NA
snoRNA:Psi28S-3316b	FBGN0082971	NA	NA	NA	NA
snoRNA:Psi28S-3316a	FBGN0082972	NA	NA	NA	NA
snoRNA:Psi28S-3308	FBGN0082973	NA	NA	NA	NA
snoRNA:Psi28S-3305b	FBGN0082975	NA	NA	NA	NA
snoRNA:Psi28S-3305a	FBGN0082976	NA	NA	NA	NA
snoRNA:Psi28S-2949	FBGN0082981	NA	NA	NA	NA
snoRNA:Psi28S-2626	FBGN0082983	NA	NA	NA	NA
snoRNA:Psi28S-2562	FBGN0082986	NA	NA	NA	NA
snoRNA:Psi28S-2444	FBGN0082987	NA	NA	NA	NA
snoRNA:Psi28S-2442a	FBGN0082989	NA	NA	NA	NA
snoRNA:Psi28S-2263	FBGN0082990	NA	NA	NA	NA
snoRNA:Psi28S-1936	FBGN0082993	NA	NA	NA	NA
snoRNA:Psi28S-1837b	FBGN0082995	NA	NA	NA	NA
snoRNA:Psi28S-1232	FBGN0082997	NA	NA	NA	NA
snoRNA:Psi28S-1135f	FBGN0083007	NA	NA	NA	NA
snoRNA:Psi28S-1135e	FBGN0083008	NA	NA	NA	NA
snoRNA:Psi28S-1135d	FBGN0083009	NA	NA	NA	NA
snoRNA:Psi28S-1135c	FBGN0083010	NA	NA	NA	NA
snoRNA:Psi28S-1135b	FBGN0083011	NA	NA	NA	NA
snoRNA:Psi28S-1135a	FBGN0083012	NA	NA	NA	NA
snoRNA:Psi18S-996	FBGN0083014	NA	NA	NA	NA
snoRNA:Psi18S-841d	FBGN0083016	NA	NA	NA	NA
snoRNA:Psi18S-841c	FBGN0083017	NA	NA	NA	NA
snoRNA:Psi18S-841b	FBGN0083018	NA	NA	NA	NA
snoRNA:Psi18S-640g	FBGN0083020	NA	NA	NA	NA
snoRNA:Psi18S-640f	FBGN0083021	NA	NA	NA	NA
snoRNA:Psi18S-640e	FBGN0083022	NA	NA	NA	NA
snoRNA:Psi18S-640d	FBGN0083023	NA	NA	NA	NA
snoRNA:Psi18S-640c	FBGN0083024	NA	NA	NA	NA
snoRNA:Psi18S-640b	FBGN0083025	NA	NA	NA	NA
snoRNA:Psi18S-640a	FBGN0083026	NA	NA	NA	NA
snoRNA:Psi18S-525k	FBGN0083028	NA	NA	NA	NA
snoRNA:Psi18S-525j	FBGN0083029	NA	NA	NA	NA
snoRNA:Psi18S-525i	FBGN0083030	NA	NA	NA	NA
snoRNA:Psi18S-525h	FBGN0083031	NA	NA	NA	NA
snoRNA:Psi18S-525g	FBGN0083032	NA	NA	NA	NA
snoRNA:Psi18S-525f	FBGN0083033	NA	NA	NA	NA
snoRNA:Psi18S-525e	FBGN0083034	NA	NA	NA	NA
snoRNA:Psi18S-525d	FBGN0083035	NA	NA	NA	NA

snoRNA:Psi18S-525c	FBGN0083036	NA	NA	NA	NA
snoRNA:Psi18S-525b	FBGN0083037	NA	NA	NA	NA
snoRNA:Psi18S-525a	FBGN0083038	NA	NA	NA	NA
snoRNA:Psi18S-1854c	FBGN0083040	NA	NA	NA	NA
snoRNA:Psi18S-1854b	FBGN0083041	NA	NA	NA	NA
snoRNA:Psi18S-1854a	FBGN0083042	NA	NA	NA	NA
snoRNA:Psi18S-1389b	FBGN0083045	NA	NA	NA	NA
snoRNA:Psi18S-1389a	FBGN0083046	NA	NA	NA	NA
snoRNA:Psi18S-1377d	FBGN0083048	NA	NA	NA	NA
snoRNA:Psi18S-1347b	FBGN0083053	NA	NA	NA	NA
snoRNA:Psi18S-1347a	FBGN0083054	NA	NA	NA	NA
snoRNA:Psi18S-1295	FBGN0083055	NA	NA	NA	NA
snoRNA:Psi18S-110	FBGN0083057	NA	NA	NA	NA
snoRNA:Psi18S-1086	FBGN0083058	NA	NA	NA	NA
Uhg7	FBGN0083121	NA	NA	NA	NA
CG34105	FBGN0083941	NA	NA	NA	NA
CG34106	FBGN0083942	NA	NA	NA	NA
CG34116	FBGN0083952	NA	NA	NA	NA
Muted	FBGN0083967	NA	NA	NA	NA
CG34135	FBGN0083971	NA	NA	NA	NA
CG34140	FBGN0083976	NA	NA	NA	NA
CG34148	FBGN0083984	NA	NA	NA	NA
snoRNA:Me28S-C3420a	FBGN0083988	NA	NA	NA	NA
snoRNA:Me28S-C3420b	FBGN0083989	NA	NA	NA	NA
Mkp	FBGN0083992	NA	NA	NA	NA
CG34162	FBGN0085191	NA	NA	NA	NA
CG34164	FBGN0085193	NA	NA	NA	NA
CG34177	FBGN0085206	NA	NA	NA	NA
CG34178	FBGN0085207	NA	NA	NA	NA
CG34179	FBGN0085208	NA	NA	NA	NA
CG34185	FBGN0085214	NA	NA	NA	NA
CG34196	FBGN0085225	NA	NA	NA	NA
CG34199	FBGN0085228	NA	NA	NA	NA
CG34201	FBGN0085230	NA	NA	NA	NA
CG34202	FBGN0085231	NA	NA	NA	NA
CG34206	FBGN0085235	NA	NA	NA	NA
CG34211	FBGN0085240	NA	NA	NA	NA
CG34217	FBGN0085246	NA	NA	NA	NA
CG34223	FBGN0085252	NA	NA	NA	NA
CG34224	FBGN0085253	NA	NA	NA	NA
CG34225	FBGN0085254	NA	NA	NA	NA
CG34234	FBGN0085263	NA	NA	NA	NA
CG34235	FBGN0085264	NA	NA	NA	NA
CG34247	FBGN0085276	NA	NA	NA	NA
CG34248	FBGN0085277	NA	NA	NA	NA
CG34259	FBGN0085288	NA	NA	NA	NA
CG34263	FBGN0085292	NA	NA	NA	NA
CG34266	FBGN0085295	NA	NA	NA	NA
CG34267	FBGN0085296	NA	NA	NA	NA
CG34268	FBGN0085297	NA	NA	NA	NA
Cpr65Ay	FBGN0085300	NA	NA	NA	NA
CG34277	FBGN0085306	NA	NA	NA	NA
CG34278	FBGN0085307	NA	NA	NA	NA
CG34280	FBGN0085309	NA	NA	NA	NA
CG34282	FBGN0085311	NA	NA	NA	NA
CG34297	FBGN0085326	NA	NA	NA	NA
CG34303	FBGN0085332	NA	NA	NA	NA
CG34312	FBGN0085341	NA	NA	NA	NA
CG34313	FBGN0085342	NA	NA	NA	NA
Sws1	FBGN0085343	NA	NA	NA	NA
CG34315	FBGN0085344	NA	NA	NA	NA
Rpp14a	FBGN0085346	NA	NA	NA	NA
CR34320	FBGN0085349	NA	NA	NA	NA
inaF-A	FBGN0085351	NA	NA	NA	NA
Vml	FBGN0085362	NA	NA	NA	NA
CG34337	FBGN0085366	NA	NA	NA	NA
CG34338	FBGN0085367	NA	NA	NA	NA
CG34428	FBGN0085457	NA	NA	NA	NA
CG34429	FBGN0085458	NA	NA	NA	NA

lmgB	FBGN0085470	NA	NA	NA	NA
CG34442	FBGN0085471	NA	NA	NA	NA
CG34443	FBGN0085472	NA	NA	NA	NA
CG34444	FBGN0085473	NA	NA	NA	NA
CG34458	FBGN0085487	NA	NA	NA	NA
lncRNA:CR40629	FBGN0085505	NA	NA	NA	NA
lncRNA:CR40719	FBGN0085511	NA	NA	NA	NA
Su(Ste):CR40820	FBGN0085523	NA	NA	NA	NA
lncRNA:CR40947	FBGN0085540	NA	NA	NA	NA
CG41242	FBGN0085569	NA	NA	NA	NA
CR41519	FBGN0085664	NA	NA	NA	NA
2SrRNA-Psi:CR40677	FBGN0085765	NA	NA	NA	NA
CR41379	FBGN0085784	NA	NA	NA	NA
CR41501	FBGN0085786	NA	NA	NA	NA
CR41504	FBGN0085788	NA	NA	NA	NA
18SrRNA:CR41548	FBGN0085802	NA	NA	NA	NA
CR41571	FBGN0085804	NA	NA	NA	NA
CR42201	FBGN0085831	NA	NA	NA	NA
snoRNA:MeU6-C68	FBGN0086021	NA	NA	NA	NA
snoRNA:Me28S-U1130	FBGN0086022	NA	NA	NA	NA
snoRNA:Me28S-A2589a	FBGN0086023	NA	NA	NA	NA
snoRNA:Me28S-A2589b	FBGN0086024	NA	NA	NA	NA
snoRNA:Me28S-A2589c	FBGN0086025	NA	NA	NA	NA
snoRNA:Me28S-G2596	FBGN0086026	NA	NA	NA	NA
snoRNA:Or-CD1	FBGN0086027	NA	NA	NA	NA
snoRNA:Me28S-G2173	FBGN0086028	NA	NA	NA	NA
snoRNA:Me18S-A1597	FBGN0086029	NA	NA	NA	NA
snoRNA:Me18S-G393	FBGN0086030	NA	NA	NA	NA
snoRNA:Me28S-U1230	FBGN0086031	NA	NA	NA	NA
snoRNA:Me28S-C437	FBGN0086032	NA	NA	NA	NA
snoRNA:Me28S-A2486	FBGN0086033	NA	NA	NA	NA
snoRNA:Me28S-G2743	FBGN0086034	NA	NA	NA	NA
snoRNA:Me18S-G642	FBGN0086035	NA	NA	NA	NA
snoRNA:Me18S-A934	FBGN0086036	NA	NA	NA	NA
snoRNA:Me28S-C1237	FBGN0086038	NA	NA	NA	NA
snoRNA:Me28S-A3365	FBGN0086040	NA	NA	NA	NA
snoRNA:Me18S-A469	FBGN0086041	NA	NA	NA	NA
snoRNA:Me28S-G980	FBGN0086042	NA	NA	NA	NA
snoRNA:Me18S-C1024	FBGN0086043	NA	NA	NA	NA
snoRNA:Me18S-A627	FBGN0086045	NA	NA	NA	NA
snoRNA:Me28S-A1705	FBGN0086046	NA	NA	NA	NA
snoRNA:Me18S-G894	FBGN0086047	NA	NA	NA	NA
snoRNA:Me28S-U3344b	FBGN0086048	NA	NA	NA	NA
snoRNA:Me28S-U3344a	FBGN0086049	NA	NA	NA	NA
snoRNA:Me28S-U2134a	FBGN0086051	NA	NA	NA	NA
snoRNA:Me18S-G423	FBGN0086052	NA	NA	NA	NA
snoRNA:Me18S-G1358a	FBGN0086053	NA	NA	NA	NA
snoRNA:Me18S-G1358b	FBGN0086054	NA	NA	NA	NA
snoRNA:Me18S-C1096	FBGN0086055	NA	NA	NA	NA
snoRNA:Me18S-A425	FBGN0086056	NA	NA	NA	NA
snoRNA:Me18S-C1280	FBGN0086059	NA	NA	NA	NA
snoRNA:Me28S-U1554	FBGN0086060	NA	NA	NA	NA
snoRNA:Me28S-C788b	FBGN0086062	NA	NA	NA	NA
snoRNA:Me28S-C788a	FBGN0086063	NA	NA	NA	NA
snoRNA:Me28S-G3113b	FBGN0086064	NA	NA	NA	NA
snoRNA:Me28S-G3113a	FBGN0086065	NA	NA	NA	NA
snoRNA:Me5.8S-G74	FBGN0086066	NA	NA	NA	NA
snoRNA:Me28S-A771	FBGN0086067	NA	NA	NA	NA
snoRNA:Or-CD12	FBGN0086068	NA	NA	NA	NA
snoRNA:Me28S-C3351	FBGN0086069	NA	NA	NA	NA
snoRNA:Or-CD11c	FBGN0086070	NA	NA	NA	NA
snoRNA:Or-CD11b	FBGN0086071	NA	NA	NA	NA
snoRNA:Or-CD11a	FBGN0086072	NA	NA	NA	NA
snoRNA:Me18S-A1494	FBGN0086073	NA	NA	NA	NA
snoRNA:Me18S-A1806	FBGN0086074	NA	NA	NA	NA
snoRNA:Me28S-G3253	FBGN0086075	NA	NA	NA	NA
snoRNA:Me18S-G962	FBGN0086077	NA	NA	NA	NA
snoRNA:Me28S-A774b	FBGN0086078	NA	NA	NA	NA
snoRNA:Me28S-A576	FBGN0086080	NA	NA	NA	NA

snoRNA:Me28S-A30	FBGN0086081	NA	NA	NA	NA
snoRNA:Or-CD11	FBGN0086082	NA	NA	NA	NA
Vm26Ac	FBGN0086266	NA	NA	NA	NA
Spt-I	FBGN0086532	NA	NA	NA	NA
snoRNA:Me18S-C419	FBGN0086533	NA	NA	NA	NA
snoRNA:Psi18S-1347c	FBGN0086600	NA	NA	NA	NA
snoRNA:Or-CD2	FBGN0086603	NA	NA	NA	NA
snoRNA:Psi28S-1180	FBGN0086658	NA	NA	NA	NA
snoRNA:Psi18S-176	FBGN0086659	NA	NA	NA	NA
snoRNA:Psi28S-3342	FBGN0086667	NA	NA	NA	NA
snoRNA:Psi18S-841a	FBGN0086669	NA	NA	NA	NA
snoRNA:Psi28S-2622	FBGN0086670	NA	NA	NA	NA
snoRNA:Psi28S-2876	FBGN0086671	NA	NA	NA	NA
snoRNA:Or-aca5	FBGN0086672	NA	NA	NA	NA
Cpr65Ax1	FBGN0086900	NA	NA	NA	NA
spok	FBGN0086917	NA	NA	NA	NA
CG42231	FBGN0087041	NA	NA	NA	NA
5.8SrRNA:CR40454	FBGN0250731	NA	NA	NA	NA
CG34461	FBGN0250833	NA	NA	NA	NA
dUTPase	FBGN0250837	NA	NA	NA	NA
CG32388	FBGN0250849	NA	NA	NA	NA
CG33981	FBGN0250851	NA	NA	NA	NA
lmgA	FBGN0250903	NA	NA	NA	NA
CG42245	FBGN0250911	NA	NA	NA	NA
CG42264	FBGN0259149	NA	NA	NA	NA
Ir60c	FBGN0259186	NA	NA	NA	NA
Ir60d	FBGN0259187	NA	NA	NA	NA
Ir7f	FBGN0259188	NA	NA	NA	NA
Ir7e	FBGN0259189	NA	NA	NA	NA
Ir7d	FBGN0259190	NA	NA	NA	NA
Snup	FBGN0259199	NA	NA	NA	NA
CG42304	FBGN0259200	NA	NA	NA	NA
CG42305	FBGN0259201	NA	NA	NA	NA
CG42306	FBGN0259202	NA	NA	NA	NA
CG42307	FBGN0259203	NA	NA	NA	NA
CG42308	FBGN0259204	NA	NA	NA	NA
lectin-22C	FBGN0259230	NA	NA	NA	NA
CG42353	FBGN0259699	NA	NA	NA	NA
CG42354	FBGN0259700	NA	NA	NA	NA
CG42356	FBGN0259702	NA	NA	NA	NA
CG42357	FBGN0259703	NA	NA	NA	NA
CG42362	FBGN0259708	NA	NA	NA	NA
CG42363	FBGN0259709	NA	NA	NA	NA
CG42371	FBGN0259717	NA	NA	NA	NA
CG42372	FBGN0259718	NA	NA	NA	NA
CG42374	FBGN0259720	NA	NA	NA	NA
CG42375	FBGN0259721	NA	NA	NA	NA
CG42379	FBGN0259725	NA	NA	NA	NA
CG42380	FBGN0259726	NA	NA	NA	NA
CG42381	FBGN0259727	NA	NA	NA	NA
CG42382	FBGN0259728	NA	NA	NA	NA
tal-1A	FBGN0259730	NA	NA	NA	NA
tal-2A	FBGN0259731	NA	NA	NA	NA
tal-3A	FBGN0259732	NA	NA	NA	NA
tal-AA	FBGN0259733	NA	NA	NA	NA
Su(Ste):CR42406	FBGN0259837	NA	NA	NA	NA
Su(Ste):CR42408	FBGN0259839	NA	NA	NA	NA
Su(Ste):CR42409	FBGN0259840	NA	NA	NA	NA
Su(Ste):CR42411	FBGN0259842	NA	NA	NA	NA
Su(Ste):CR42412	FBGN0259843	NA	NA	NA	NA
Su(Ste):CR42415	FBGN0259846	NA	NA	NA	NA
Su(Ste):CR42416	FBGN0259847	NA	NA	NA	NA
Su(Ste):CR42417	FBGN0259848	NA	NA	NA	NA
Su(Ste):CR42419	FBGN0259850	NA	NA	NA	NA
Su(Ste):CR42420	FBGN0259851	NA	NA	NA	NA
Su(Ste):CR42421	FBGN0259852	NA	NA	NA	NA
Su(Ste):CR42424	FBGN0259855	NA	NA	NA	NA
Su(Ste):CR42427	FBGN0259858	NA	NA	NA	NA
Su(Ste):CR42429	FBGN0259860	NA	NA	NA	NA

Su(Ste):CR42431	FBGN0259862	NA	NA	NA	NA
Su(Ste):CR42438	FBGN0259869	NA	NA	NA	NA
Su(Ste):CR42439	FBGN0259870	NA	NA	NA	NA
CG42455	FBGN0259932	NA	NA	NA	NA
CG42456	FBGN0259933	NA	NA	NA	NA
CG42486	FBGN0259989	NA	NA	NA	NA
CG42487	FBGN0259990	NA	NA	NA	NA
CG42488	FBGN0259991	NA	NA	NA	NA
lncRNA:CR40341	FBGN0259996	NA	NA	NA	NA
snoRNA:Me28S-U2134b	FBGN0260002	NA	NA	NA	NA
CG42496	FBGN0260222	NA	NA	NA	NA
CG42497	FBGN0260223	NA	NA	NA	NA
CG42498	FBGN0260224	NA	NA	NA	NA
CG42502	FBGN0260228	NA	NA	NA	NA
Mocs2A	FBGN0260229	NA	NA	NA	NA
CG42504	FBGN0260230	NA	NA	NA	NA
CG42505	FBGN0260231	NA	NA	NA	NA
CG42507	FBGN0260233	NA	NA	NA	NA
Xport-B	FBGN0260234	NA	NA	NA	NA
BBIP1	FBGN0260237	NA	NA	NA	NA
CG42512	FBGN0260238	NA	NA	NA	NA
CG42516	FBGN0260390	NA	NA	NA	NA
CG42518	FBGN0260392	NA	NA	NA	NA
Pbp49	FBGN0260398	NA	NA	NA	NA
MED9	FBGN0260401	NA	NA	NA	NA
CR42530	FBGN0260435	NA	NA	NA	NA
CG42531	FBGN0260436	NA	NA	NA	NA
CG14042	FBGN0260451	NA	NA	NA	NA
CG17140	FBGN0260453	NA	NA	NA	NA
CG17139	FBGN0260454	NA	NA	NA	NA
CG10332	FBGN0260455	NA	NA	NA	NA
CG9288	FBGN0260464	NA	NA	NA	NA
Indy-2	FBGN0260466	NA	NA	NA	NA
CG7071	FBGN0260467	NA	NA	NA	NA
CG7950	FBGN0260468	NA	NA	NA	NA
SP555	FBGN0260470	NA	NA	NA	NA
CG42537	FBGN0260645	NA	NA	NA	NA
CG42538	FBGN0260646	NA	NA	NA	NA
CR42548	FBGN0260721	NA	NA	NA	NA
CG42557	FBGN0260759	NA	NA	NA	NA
CG42558	FBGN0260760	NA	NA	NA	NA
CG42559	FBGN0260761	NA	NA	NA	NA
CG42560	FBGN0260762	NA	NA	NA	NA
CG42565	FBGN0260767	NA	NA	NA	NA
CG42568	FBGN0260770	NA	NA	NA	NA
DnaJ-60	FBGN0260775	NA	NA	NA	NA
CG42583	FBGN0260873	NA	NA	NA	NA
moi	FBGN0261019	NA	NA	NA	NA
Ccdc56	FBGN0261353	NA	NA	NA	NA
CG42634	FBGN0261357	NA	NA	NA	NA
CG42635	FBGN0261358	NA	NA	NA	NA
mtTFB1	FBGN0261381	NA	NA	NA	NA
scaRNA:MeU2-G25	FBGN0261452	NA	NA	NA	NA
scaRNA:MeU2-C41	FBGN0261453	NA	NA	NA	NA
scaRNA:MeU4-A65	FBGN0261454	NA	NA	NA	NA
scaRNA:MeU5-G38	FBGN0261455	NA	NA	NA	NA
CG42649	FBGN0261501	NA	NA	NA	NA
l(2)34Fc	FBGN0261534	NA	NA	NA	NA
CG42660	FBGN0261536	NA	NA	NA	NA
CG42661	FBGN0261537	NA	NA	NA	NA
CG42662	FBGN0261538	NA	NA	NA	NA
CG42680	FBGN0261566	NA	NA	NA	NA
CG42681	FBGN0261567	NA	NA	NA	NA
CG42690	FBGN0261580	NA	NA	NA	NA
CG42705	FBGN0261616	NA	NA	NA	NA
CG42713	FBGN0261630	NA	NA	NA	NA
CG42716	FBGN0261633	NA	NA	NA	NA
CG42717	FBGN0261634	NA	NA	NA	NA
CG42718	FBGN0261635	NA	NA	NA	NA

CG42726	FBGN0261679	NA	NA	NA	NA
CG42727	FBGN0261680	NA	NA	NA	NA
CG42729	FBGN0261682	NA	NA	NA	NA
B9d2	FBGN0261683	NA	NA	NA	NA
tctn	FBGN0261697	NA	NA	NA	NA
CG42740	FBGN0261704	NA	NA	NA	NA
CG42762	FBGN0261830	NA	NA	NA	NA
CG42763	FBGN0261831	NA	NA	NA	NA
pre-mod(mdg4)-T	FBGN0261837	NA	NA	NA	NA
pre-mod(mdg4)-Z	FBGN0261838	NA	NA	NA	NA
pre-mod(mdg4)-Y	FBGN0261839	NA	NA	NA	NA
pre-mod(mdg4)-X	FBGN0261840	NA	NA	NA	NA
pre-mod(mdg4)-AD	FBGN0261841	NA	NA	NA	NA
pre-mod(mdg4)-AE	FBGN0261842	NA	NA	NA	NA
pre-mod(mdg4)-W	FBGN0261843	NA	NA	NA	NA
pre-mod(mdg4)-V	FBGN0261844	NA	NA	NA	NA
pre-mod(mdg4)-U	FBGN0261845	NA	NA	NA	NA
CG42779	FBGN0261847	NA	NA	NA	NA
CG42780	FBGN0261848	NA	NA	NA	NA
snoRNA:Or-CD9a	FBGN0261973	NA	NA	NA	NA
snoRNA:Or-CD9b	FBGN0261974	NA	NA	NA	NA
CG42809	FBGN0261991	NA	NA	NA	NA
CG42811	FBGN0261993	NA	NA	NA	NA
CG42812	FBGN0261994	NA	NA	NA	NA
CG42815	FBGN0261997	NA	NA	NA	NA
CG42832	FBGN0262021	NA	NA	NA	NA
CG42834	FBGN0262023	NA	NA	NA	NA
CG42835	FBGN0262024	NA	NA	NA	NA
CG42837	FBGN0262026	NA	NA	NA	NA
CR42838	FBGN0262027	NA	NA	NA	NA
CR42842	FBGN0262031	NA	NA	NA	NA
lncRNA:CR42868	FBGN0262142	NA	NA	NA	NA
CG43082	FBGN0262528	NA	NA	NA	NA
CG43083	FBGN0262529	NA	NA	NA	NA
CG43084	FBGN0262530	NA	NA	NA	NA
CG43090	FBGN0262536	NA	NA	NA	NA
CR43096	FBGN0262542	NA	NA	NA	NA
CG43107	FBGN0262567	NA	NA	NA	NA
CG43112	FBGN0262572	NA	NA	NA	NA
CG43116	FBGN0262576	NA	NA	NA	NA
CG43124	FBGN0262587	NA	NA	NA	NA
CG43125	FBGN0262588	NA	NA	NA	NA
CG43131	FBGN0262605	NA	NA	NA	NA
CG43135	FBGN0262609	NA	NA	NA	NA
CG43153	FBGN0262683	NA	NA	NA	NA
lncRNA:CR43166	FBGN0262722	NA	NA	NA	NA
CG43171	FBGN0262790	NA	NA	NA	NA
CG43172	FBGN0262791	NA	NA	NA	NA
CR43177	FBGN0262806	NA	NA	NA	NA
CG43178	FBGN0262807	NA	NA	NA	NA
CG43181	FBGN0262810	NA	NA	NA	NA
CG43182	FBGN0262811	NA	NA	NA	NA
CG43190	FBGN0262819	NA	NA	NA	NA
lncRNA:CR43193	FBGN0262822	NA	NA	NA	NA
hemo	FBGN0262823	NA	NA	NA	NA
CG43195	FBGN0262824	NA	NA	NA	NA
CG43200	FBGN0262836	NA	NA	NA	NA
CG43201	FBGN0262837	NA	NA	NA	NA
CG43210	FBGN0262846	NA	NA	NA	NA
CG43220	FBGN0262856	NA	NA	NA	NA
CG43221	FBGN0262857	NA	NA	NA	NA
Diedel2	FBGN0262873	NA	NA	NA	NA
CR43240	FBGN0262885	NA	NA	NA	NA
asRNA:CR43243	FBGN0262888	NA	NA	NA	NA
CG43244	FBGN0262889	NA	NA	NA	NA
CG43255	FBGN0262900	NA	NA	NA	NA
CG43294	FBGN0262986	NA	NA	NA	NA
lncRNA:CR43302	FBGN0262994	NA	NA	NA	NA
CR43310	FBGN0263002	NA	NA	NA	NA

snRNA:U4atac	FBGN0263018	NA	NA	NA	NA
CG43316	FBGN0263021	NA	NA	NA	NA
CG43325	FBGN0263030	NA	NA	NA	NA
CG43326	FBGN0263031	NA	NA	NA	NA
CG43327	FBGN0263032	NA	NA	NA	NA
CG43328	FBGN0263033	NA	NA	NA	NA
CG43332	FBGN0263037	NA	NA	NA	NA
CG43336	FBGN0263041	NA	NA	NA	NA
CG43337	FBGN0263042	NA	NA	NA	NA
CG43341	FBGN0263046	NA	NA	NA	NA
CG43345	FBGN0263050	NA	NA	NA	NA
CG43346	FBGN0263051	NA	NA	NA	NA
CG43355	FBGN0263087	NA	NA	NA	NA
CR43359	FBGN0263091	NA	NA	NA	NA
CR43360	FBGN0263092	NA	NA	NA	NA
CR43361	FBGN0263093	NA	NA	NA	NA
CG43362	FBGN0263094	NA	NA	NA	NA
scaRNA:MeU1b-A234	FBGN0263201	NA	NA	NA	NA
CR43378	FBGN0263208	NA	NA	NA	NA
CR43380	FBGN0263210	NA	NA	NA	NA
CR43382	FBGN0263212	NA	NA	NA	NA
CR43383	FBGN0263213	NA	NA	NA	NA
CR43384	FBGN0263214	NA	NA	NA	NA
CR43385	FBGN0263215	NA	NA	NA	NA
CG43389	FBGN0263246	NA	NA	NA	NA
CG43390	FBGN0263247	NA	NA	NA	NA
CG43391	FBGN0263248	NA	NA	NA	NA
vnc	FBGN0263251	NA	NA	NA	NA
CG43397	FBGN0263271	NA	NA	NA	NA
lncRNA:CR43423	FBGN0263342	NA	NA	NA	NA
asRNA:CR43425	FBGN0263344	NA	NA	NA	NA
asRNA:CR43429	FBGN0263377	NA	NA	NA	NA
asRNA:CR43430	FBGN0263378	NA	NA	NA	NA
lncRNA:CR43434	FBGN0263382	NA	NA	NA	NA
CG43439	FBGN0263387	NA	NA	NA	NA
lncRNA:CR43455	FBGN0263409	NA	NA	NA	NA
asRNA:CR43460	FBGN0263414	NA	NA	NA	NA
asRNA:CR43465	FBGN0263442	NA	NA	NA	NA
asRNA:CR43467	FBGN0263444	NA	NA	NA	NA
asRNA:CR43469	FBGN0263446	NA	NA	NA	NA
asRNA:CR43470	FBGN0263447	NA	NA	NA	NA
asRNA:CR43471	FBGN0263448	NA	NA	NA	NA
asRNA:CR43474	FBGN0263451	NA	NA	NA	NA
asRNA:CR43477	FBGN0263454	NA	NA	NA	NA
asRNA:CR43478	FBGN0263455	NA	NA	NA	NA
snoRNA:CG43051-a	FBGN0263458	NA	NA	NA	NA
snoRNA:CG31191-a	FBGN0263460	NA	NA	NA	NA
snoRNA:CG32479-a	FBGN0263461	NA	NA	NA	NA
snoRNA:Dek-a	FBGN0263462	NA	NA	NA	NA
snoRNA:gcl-a	FBGN0263463	NA	NA	NA	NA
snoRNA:hts-a	FBGN0263464	NA	NA	NA	NA
snoRNA:kis-a	FBGN0263465	NA	NA	NA	NA
snoRNA:lola-a	FBGN0263466	NA	NA	NA	NA
snoRNA:nop5-x16-a	FBGN0263467	NA	NA	NA	NA
snoRNA:SC35-a	FBGN0263468	NA	NA	NA	NA
snoRNA:SC35-b	FBGN0263469	NA	NA	NA	NA
scaRNA:MeU2-48	FBGN0263471	NA	NA	NA	NA
snoRNA:abba-a	FBGN0263473	NA	NA	NA	NA
scaRNA:PsiU2-38.40.42	FBGN0263474	NA	NA	NA	NA
snoRNA:CG16892-a	FBGN0263475	NA	NA	NA	NA
snoRNA:CG32479-b	FBGN0263476	NA	NA	NA	NA
scaRNA:PsiU1-6	FBGN0263477	NA	NA	NA	NA
snoRNA:Edc3-a	FBGN0263478	NA	NA	NA	NA
scaRNA:PsiU2-35.45	FBGN0263479	NA	NA	NA	NA
snoRNA:Irbp-a	FBGN0263480	NA	NA	NA	NA
snoRNA:lola-b	FBGN0263481	NA	NA	NA	NA
snoRNA:lola-c	FBGN0263482	NA	NA	NA	NA
snoRNA:lola-d	FBGN0263483	NA	NA	NA	NA
scaRNA:PsiU2-55	FBGN0263485	NA	NA	NA	NA

scaRNA:PsiU6-40	FBGN0263486	NA	NA	NA	NA
snmRNA:CR43603	FBGN0263488	NA	NA	NA	NA
lncRNA:CR43604	FBGN0263489	NA	NA	NA	NA
lncRNA:CR43606	FBGN0263581	NA	NA	NA	NA
asRNA:CR43609	FBGN0263584	NA	NA	NA	NA
CG43618	FBGN0263596	NA	NA	NA	NA
lncRNA:CR43624	FBGN0263615	NA	NA	NA	NA
lncRNA:CR43626	FBGN0263617	NA	NA	NA	NA
asRNA:CR43636	FBGN0263627	NA	NA	NA	NA
lncRNA:CR43642	FBGN0263651	NA	NA	NA	NA
lncRNA:CR43643	FBGN0263652	NA	NA	NA	NA
lncRNA:CR43644	FBGN0263653	NA	NA	NA	NA
CG43645	FBGN0263654	NA	NA	NA	NA
CG43659	FBGN0263707	NA	NA	NA	NA
CG43666	FBGN0263741	NA	NA	NA	NA
CG43667	FBGN0263742	NA	NA	NA	NA
Rpb4	FBGN0263757	NA	NA	NA	NA
asRNA:CR43683	FBGN0263766	NA	NA	NA	NA
lncRNA:CR43686	FBGN0263769	NA	NA	NA	NA
CR43687	FBGN0263770	NA	NA	NA	NA
CR43688	FBGN0263771	NA	NA	NA	NA
snmRNA:CR43701	FBGN0263839	NA	NA	NA	NA
CG43709	FBGN0263848	NA	NA	NA	NA
CG43710	FBGN0263849	NA	NA	NA	NA
CG43711	FBGN0263850	NA	NA	NA	NA
lncRNA:CR43716	FBGN0263869	NA	NA	NA	NA
asRNA:CR43728	FBGN0263976	NA	NA	NA	NA
CG43731	FBGN0263982	NA	NA	NA	NA
CG43732	FBGN0263983	NA	NA	NA	NA
asRNA:CR43735	FBGN0263992	NA	NA	NA	NA
CG43739	FBGN0263996	NA	NA	NA	NA
lncRNA:CR43765	FBGN0264265	NA	NA	NA	NA
asRNA:CR43767	FBGN0264267	NA	NA	NA	NA
lncRNA:CR43769	FBGN0264269	NA	NA	NA	NA
CG43775	FBGN0264297	NA	NA	NA	NA
CG43776	FBGN0264298	NA	NA	NA	NA
CG43777	FBGN0264299	NA	NA	NA	NA
CG43779	FBGN0264301	NA	NA	NA	NA
CG43780	FBGN0264302	NA	NA	NA	NA
CG43781	FBGN0264303	NA	NA	NA	NA
asRNA:CR43786	FBGN0264327	NA	NA	NA	NA
asRNA:CR43812	FBGN0264360	NA	NA	NA	NA
CG43813	FBGN0264361	NA	NA	NA	NA
CG43816	FBGN0264364	NA	NA	NA	NA
lncRNA:CR43817	FBGN0264365	NA	NA	NA	NA
asRNA:CR43824	FBGN0264372	NA	NA	NA	NA
lncRNA:CR43827	FBGN0264375	NA	NA	NA	NA
lncRNA:CR43828	FBGN0264376	NA	NA	NA	NA
lncRNA:CR43834	FBGN0264382	NA	NA	NA	NA
asRNA:CR43872	FBGN0264464	NA	NA	NA	NA
asRNA:CR43877	FBGN0264469	NA	NA	NA	NA
lncRNA:CR43883	FBGN0264475	NA	NA	NA	NA
asRNA:CR43885	FBGN0264477	NA	NA	NA	NA
asRNA:CR43891	FBGN0264483	NA	NA	NA	NA
lncRNA:CR43892	FBGN0264484	NA	NA	NA	NA
CG43894	FBGN0264486	NA	NA	NA	NA
lncRNA:CR43900	FBGN0264501	NA	NA	NA	NA
asRNA:CR43903	FBGN0264504	NA	NA	NA	NA
asRNA:CR43908	FBGN0264509	NA	NA	NA	NA
asRNA:CR43916	FBGN0264517	NA	NA	NA	NA
lncRNA:CR43930	FBGN0264551	NA	NA	NA	NA
asRNA:CR43944	FBGN0264572	NA	NA	NA	NA
lncRNA:CR43949	FBGN0264600	NA	NA	NA	NA
lncRNA:CR43950	FBGN0264601	NA	NA	NA	NA
CG43954	FBGN0264605	NA	NA	NA	NA
lncRNA:CR43960	FBGN0264675	NA	NA	NA	NA
lncRNA:CR43962	FBGN0264677	NA	NA	NA	NA
asRNA:CR43964	FBGN0264679	NA	NA	NA	NA
CG43965	FBGN0264696	NA	NA	NA	NA

asRNA:CR43979	FBGN0264710	NA	NA	NA	NA
asRNA:CR43981	FBGN0264713	NA	NA	NA	NA
CG43982	FBGN0264714	NA	NA	NA	NA
CG43998	FBGN0264740	NA	NA	NA	NA
CG43999	FBGN0264741	NA	NA	NA	NA
CG44000	FBGN0264742	NA	NA	NA	NA
CG44001	FBGN0264743	NA	NA	NA	NA
CG44005	FBGN0264747	NA	NA	NA	NA
asRNA:CR44021	FBGN0264791	NA	NA	NA	NA
Pburs	FBGN0264810	NA	NA	NA	NA
asRNA:CR44031	FBGN0264823	NA	NA	NA	NA
CG44044	FBGN0264836	NA	NA	NA	NA
asRNA:CR44045	FBGN0264837	NA	NA	NA	NA
asRNA:CR44049	FBGN0264841	NA	NA	NA	NA
asRNA:CR44052	FBGN0264844	NA	NA	NA	NA
asRNA:CR44053	FBGN0264862	NA	NA	NA	NA
lncRNA:CR44057	FBGN0264866	NA	NA	NA	NA
lncRNA:CR44060	FBGN0264869	NA	NA	NA	NA
asRNA:CR44063	FBGN0264872	NA	NA	NA	NA
asRNA:CR44067	FBGN0264876	NA	NA	NA	NA
asRNA:CR44071	FBGN0264880	NA	NA	NA	NA
CR44079	FBGN0264888	NA	NA	NA	NA
lncRNA:CR44084	FBGN0264893	NA	NA	NA	NA
asRNA:CR44087	FBGN0264896	NA	NA	NA	NA
CG44090	FBGN0264899	NA	NA	NA	NA
lncRNA:CR44092	FBGN0264901	NA	NA	NA	NA
CG44094	FBGN0264903	NA	NA	NA	NA
lncRNA:CR44097	FBGN0264906	NA	NA	NA	NA
asRNA:CR44106	FBGN0264915	NA	NA	NA	NA
asRNA:CR44107	FBGN0264916	NA	NA	NA	NA
asRNA:CR44108	FBGN0264939	NA	NA	NA	NA
lncRNA:CR44113	FBGN0264944	NA	NA	NA	NA
lncRNA:CR44120	FBGN0264951	NA	NA	NA	NA
lncRNA:CR44121	FBGN0264952	NA	NA	NA	NA
asRNA:CR44134	FBGN0264983	NA	NA	NA	NA
asRNA:CR44144	FBGN0264993	NA	NA	NA	NA
lncRNA:CR44146	FBGN0264995	NA	NA	NA	NA
asRNA:CR44147	FBGN0264996	NA	NA	NA	NA
lncRNA:CR44149	FBGN0264998	NA	NA	NA	NA
Np	FBGN0265011	NA	NA	NA	NA
asRNA:CR44160	FBGN0265043	NA	NA	NA	NA
asRNA:CR44168	FBGN0265053	NA	NA	NA	NA
asRNA:CR44169	FBGN0265058	NA	NA	NA	NA
lncRNA:CR44172	FBGN0265061	NA	NA	NA	NA
lncRNA:CR44183	FBGN0265072	NA	NA	NA	NA
lncRNA:CR44186	FBGN0265075	NA	NA	NA	NA
lncRNA:CR44188	FBGN0265077	NA	NA	NA	NA
lncRNA:CR44190	FBGN0265079	NA	NA	NA	NA
CG44194	FBGN0265083	NA	NA	NA	NA
lncRNA:CR44202	FBGN0265097	NA	NA	NA	NA
Gr2a	FBGN0265139	NA	NA	NA	NA
Ir47b	FBGN0265141	NA	NA	NA	NA
Ir56e	FBGN0265142	NA	NA	NA	NA
lncRNA:CR44213	FBGN0265144	NA	NA	NA	NA
CG44215	FBGN0265146	NA	NA	NA	NA
lncRNA:CR44219	FBGN0265150	NA	NA	NA	NA
Ir60f	FBGN0265154	NA	NA	NA	NA
asRNA:CR44228	FBGN0265159	NA	NA	NA	NA
asRNA:CR44235	FBGN0265166	NA	NA	NA	NA
asRNA:CR44238	FBGN0265169	NA	NA	NA	NA
CG44257	FBGN0265197	NA	NA	NA	NA
lncRNA:CR44258	FBGN0265198	NA	NA	NA	NA
lncRNA:CR44263	FBGN0265203	NA	NA	NA	NA
asRNA:CR42871	FBGN0265295	NA	NA	NA	NA
asRNA:CR44275	FBGN0265302	NA	NA	NA	NA
lncRNA:CR44276	FBGN0265303	NA	NA	NA	NA
lncRNA:CR44282	FBGN0265309	NA	NA	NA	NA
lncRNA:CR44285	FBGN0265312	NA	NA	NA	NA
asRNA:CR44287	FBGN0265314	NA	NA	NA	NA

lncRNA:CR44288	FBGN0265315	NA	NA	NA	NA
asRNA:CR44297	FBGN0265343	NA	NA	NA	NA
lncRNA:CR44301	FBGN0265347	NA	NA	NA	NA
asRNA:CR44304	FBGN0265363	NA	NA	NA	NA
lncRNA:CR44312	FBGN0265371	NA	NA	NA	NA
lncRNA:CR44313	FBGN0265372	NA	NA	NA	NA
lncRNA:CR44334	FBGN0265422	NA	NA	NA	NA
lncRNA:CR44350	FBGN0265450	NA	NA	NA	NA
asRNA:CR44351	FBGN0265451	NA	NA	NA	NA
lncRNA:CR44353	FBGN0265453	NA	NA	NA	NA
lncRNA:CR44354	FBGN0265454	NA	NA	NA	NA
lncRNA:CR44357	FBGN0265457	NA	NA	NA	NA
lncRNA:CR44361	FBGN0265468	NA	NA	NA	NA
CG44362	FBGN0265469	NA	NA	NA	NA
lncRNA:CR44363	FBGN0265470	NA	NA	NA	NA
asRNA:CR44374	FBGN0265524	NA	NA	NA	NA
asRNA:CR44381	FBGN0265531	NA	NA	NA	NA
asRNA:CR44386	FBGN0265536	NA	NA	NA	NA
asRNA:CR44390	FBGN0265540	NA	NA	NA	NA
lncRNA:CR44407	FBGN0265580	NA	NA	NA	NA
lncRNA:CR44410	FBGN0265583	NA	NA	NA	NA
lncRNA:CR44414	FBGN0265587	NA	NA	NA	NA
asRNA:CR44416	FBGN0265589	NA	NA	NA	NA
beat-IIIa	FBGN0265607	NA	NA	NA	NA
asRNA:CR44427	FBGN0265609	NA	NA	NA	NA
CG44434	FBGN0265626	NA	NA	NA	NA
CG44435	FBGN0265627	NA	NA	NA	NA
CG44438	FBGN0265631	NA	NA	NA	NA
lncRNA:CR44443	FBGN0265636	NA	NA	NA	NA
lncRNA:CR44446	FBGN0265639	NA	NA	NA	NA
lncRNA:TS18	FBGN0265642	NA	NA	NA	NA
lncRNA:CR44450	FBGN0265643	NA	NA	NA	NA
lncRNA:CR44451	FBGN0265644	NA	NA	NA	NA
lncRNA:CR44457	FBGN0265650	NA	NA	NA	NA
lncRNA:CR44459	FBGN0265652	NA	NA	NA	NA
lncRNA:CR44462	FBGN0265655	NA	NA	NA	NA
lncRNA:CR44463	FBGN0265656	NA	NA	NA	NA
CG44475	FBGN0265668	NA	NA	NA	NA
lncRNA:CR44478	FBGN0265671	NA	NA	NA	NA
lncRNA:CR44482	FBGN0265675	NA	NA	NA	NA
lncRNA:CR44499	FBGN0265692	NA	NA	NA	NA
lncRNA:CR44500	FBGN0265693	NA	NA	NA	NA
lncRNA:CR44507	FBGN0265700	NA	NA	NA	NA
lncRNA:CR44508	FBGN0265701	NA	NA	NA	NA
lncRNA:CR44510	FBGN0265703	NA	NA	NA	NA
lncRNA:CR44513	FBGN0265706	NA	NA	NA	NA
lncRNA:CR44529	FBGN0265722	NA	NA	NA	NA
lncRNA:CR44531	FBGN0265724	NA	NA	NA	NA
lncRNA:CR44536	FBGN0265729	NA	NA	NA	NA
lncRNA:CR44538	FBGN0265731	NA	NA	NA	NA
lncRNA:CR44541	FBGN0265734	NA	NA	NA	NA
lncRNA:CR44542	FBGN0265735	NA	NA	NA	NA
lncRNA:CR44543	FBGN0265736	NA	NA	NA	NA
lncRNA:CR44545	FBGN0265738	NA	NA	NA	NA
lncRNA:CR44549	FBGN0265742	NA	NA	NA	NA
lncRNA:CR44550	FBGN0265743	NA	NA	NA	NA
lncRNA:CR44556	FBGN0265749	NA	NA	NA	NA
lncRNA:CR44565	FBGN0265758	NA	NA	NA	NA
lncRNA:CR44568	FBGN0265761	NA	NA	NA	NA
CG44569	FBGN0265762	NA	NA	NA	NA
lncRNA:CR44583	FBGN0265794	NA	NA	NA	NA
lncRNA:CR44586	FBGN0265797	NA	NA	NA	NA
lncRNA:CR44588	FBGN0265799	NA	NA	NA	NA
lncRNA:CR44604	FBGN0265815	NA	NA	NA	NA
lncRNA:CR44605	FBGN0265816	NA	NA	NA	NA
lncRNA:CR44610	FBGN0265821	NA	NA	NA	NA
lncRNA:CR44613	FBGN0265824	NA	NA	NA	NA
lncRNA:CR44616	FBGN0265827	NA	NA	NA	NA
lncRNA:CR44621	FBGN0265832	NA	NA	NA	NA

CG44624	FBGN0265835	NA	NA	NA	NA
CG44625	FBGN0265836	NA	NA	NA	NA
lncRNA:CR44627	FBGN0265838	NA	NA	NA	NA
lncRNA:CR44629	FBGN0265840	NA	NA	NA	NA
lncRNA:CR44632	FBGN0265843	NA	NA	NA	NA
lncRNA:CR44633	FBGN0265844	NA	NA	NA	NA
lncRNA:CR44634	FBGN0265845	NA	NA	NA	NA
lncRNA:CR44635	FBGN0265846	NA	NA	NA	NA
lncRNA:CR44636	FBGN0265847	NA	NA	NA	NA
lncRNA:CR44647	FBGN0265858	NA	NA	NA	NA
lncRNA:CR44655	FBGN0265866	NA	NA	NA	NA
CR44659	FBGN0265870	NA	NA	NA	NA
lncRNA:CR44661	FBGN0265872	NA	NA	NA	NA
lncRNA:CR44663	FBGN0265874	NA	NA	NA	NA
lncRNA:CR44664	FBGN0265875	NA	NA	NA	NA
CG44666	FBGN0265877	NA	NA	NA	NA
lncRNA:CR44676	FBGN0265887	NA	NA	NA	NA
lncRNA:CR44677	FBGN0265888	NA	NA	NA	NA
lncRNA:CR44679	FBGN0265890	NA	NA	NA	NA
lncRNA:CR44680	FBGN0265891	NA	NA	NA	NA
lncRNA:CR44683	FBGN0265894	NA	NA	NA	NA
lncRNA:CR44705	FBGN0265916	NA	NA	NA	NA
lncRNA:CR44707	FBGN0265918	NA	NA	NA	NA
lncRNA:CR44709	FBGN0265920	NA	NA	NA	NA
lncRNA:CR44711	FBGN0265922	NA	NA	NA	NA
lncRNA:CR44712	FBGN0265923	NA	NA	NA	NA
lncRNA:CR44713	FBGN0265924	NA	NA	NA	NA
lncRNA:CR44714	FBGN0265925	NA	NA	NA	NA
lncRNA:CR44715	FBGN0265926	NA	NA	NA	NA
lncRNA:CR44716	FBGN0265927	NA	NA	NA	NA
lncRNA:CR44719	FBGN0265930	NA	NA	NA	NA
lncRNA:CR44722	FBGN0265933	NA	NA	NA	NA
lncRNA:CR44726	FBGN0265939	NA	NA	NA	NA
lncRNA:CR44733	FBGN0265946	NA	NA	NA	NA
lncRNA:CR44737	FBGN0265950	NA	NA	NA	NA
lncRNA:CR44739	FBGN0265952	NA	NA	NA	NA
lncRNA:CR44742	FBGN0265955	NA	NA	NA	NA
lncRNA:CR44743	FBGN0265956	NA	NA	NA	NA
lncRNA:CR44747	FBGN0265960	NA	NA	NA	NA
lncRNA:CR44753	FBGN0265966	NA	NA	NA	NA
Tfb5	FBGN0265968	NA	NA	NA	NA
lncRNA:CR44755	FBGN0265976	NA	NA	NA	NA
lncRNA:CR44760	FBGN0265981	NA	NA	NA	NA
lncRNA:CR44762	FBGN0265983	NA	NA	NA	NA
lncRNA:CR44763	FBGN0265984	NA	NA	NA	NA
lncRNA:CR44769	FBGN0265994	NA	NA	NA	NA
lncRNA:CR44771	FBGN0265996	NA	NA	NA	NA
lncRNA:CR44776	FBGN0266002	NA	NA	NA	NA
lncRNA:CR44791	FBGN0266026	NA	NA	NA	NA
asRNA:CR44793	FBGN0266028	NA	NA	NA	NA
lncRNA:CR44800	FBGN0266035	NA	NA	NA	NA
CG44812	FBGN0266047	NA	NA	NA	NA
lncRNA:CR44814	FBGN0266049	NA	NA	NA	NA
asRNA:CR44818	FBGN0266065	NA	NA	NA	NA
lncRNA:CR44820	FBGN0266067	NA	NA	NA	NA
lncRNA:CR44825	FBGN0266072	NA	NA	NA	NA
lncRNA:CR44828	FBGN0266086	NA	NA	NA	NA
asRNA:CR44840	FBGN0266114	NA	NA	NA	NA
asRNA:CR44847	FBGN0266141	NA	NA	NA	NA
asRNA:CR44849	FBGN0266143	NA	NA	NA	NA
asRNA:CR44850	FBGN0266144	NA	NA	NA	NA
lncRNA:CR44857	FBGN0266151	NA	NA	NA	NA
lncRNA:CR44860	FBGN0266154	NA	NA	NA	NA
lncRNA:CR44862	FBGN0266156	NA	NA	NA	NA
lncRNA:CR44865	FBGN0266159	NA	NA	NA	NA
lncRNA:CR44867	FBGN0266161	NA	NA	NA	NA
asRNA:CR44872	FBGN0266166	NA	NA	NA	NA
pre-mod(mdg4)-C	FBGN0266170	NA	NA	NA	NA
pre-mod(mdg4)-AB	FBGN0266171	NA	NA	NA	NA

pre-mod(mdg4)-E	FBGN0266172	NA	NA	NA	NA
pre-mod(mdg4)-K	FBGN0266173	NA	NA	NA	NA
pre-mod(mdg4)-L	FBGN0266174	NA	NA	NA	NA
pre-mod(mdg4)-P	FBGN0266175	NA	NA	NA	NA
pre-mod(mdg4)-J	FBGN0266176	NA	NA	NA	NA
pre-mod(mdg4)-I	FBGN0266177	NA	NA	NA	NA
pre-mod(mdg4)-B	FBGN0266178	NA	NA	NA	NA
lncRNA:CR44885	FBGN0266179	NA	NA	NA	NA
lncRNA:CRG	FBGN0266181	NA	NA	NA	NA
lncRNA:CR44888	FBGN0266182	NA	NA	NA	NA
Tgs1	FBGN0266195	NA	NA	NA	NA
asRNA:CR44891	FBGN0266196	NA	NA	NA	NA
asRNA:CR44896	FBGN0266201	NA	NA	NA	NA
asRNA:CR44897	FBGN0266202	NA	NA	NA	NA
lncRNA:CR44898	FBGN0266203	NA	NA	NA	NA
CR44906	FBGN0266211	NA	NA	NA	NA
asRNA:CR44907	FBGN0266212	NA	NA	NA	NA
asRNA:CR44910	FBGN0266215	NA	NA	NA	NA
lncRNA:CR44915	FBGN0266220	NA	NA	NA	NA
lncRNA:CR44929	FBGN0266234	NA	NA	NA	NA
lncRNA:CR44930	FBGN0266235	NA	NA	NA	NA
lncRNA:CR44931	FBGN0266236	NA	NA	NA	NA
lncRNA:CR44936	FBGN0266241	NA	NA	NA	NA
lncRNA:CR44945	FBGN0266250	NA	NA	NA	NA
lncRNA:CR44948	FBGN0266253	NA	NA	NA	NA
lncRNA:CR44949	FBGN0266254	NA	NA	NA	NA
CG44956	FBGN0266261	NA	NA	NA	NA
asRNA:CR44958	FBGN0266263	NA	NA	NA	NA
asRNA:CR44959	FBGN0266264	NA	NA	NA	NA
asRNA:CR44961	FBGN0266276	NA	NA	NA	NA
asRNA:CR44962	FBGN0266277	NA	NA	NA	NA
lncRNA:CR44966	FBGN0266281	NA	NA	NA	NA
asRNA:CR44968	FBGN0266303	NA	NA	NA	NA
asRNA:CR44969	FBGN0266304	NA	NA	NA	NA
lncRNA:CR44970	FBGN0266305	NA	NA	NA	NA
asRNA:CR44972	FBGN0266307	NA	NA	NA	NA
asRNA:CR44975	FBGN0266310	NA	NA	NA	NA
asRNA:CR44976	FBGN0266311	NA	NA	NA	NA
asRNA:CR44982	FBGN0266317	NA	NA	NA	NA
asRNA:CR44984	FBGN0266319	NA	NA	NA	NA
lncRNA:CR44985	FBGN0266320	NA	NA	NA	NA
lncRNA:CR44986	FBGN0266321	NA	NA	NA	NA
lncRNA:CR44988	FBGN0266323	NA	NA	NA	NA
asRNA:CR44989	FBGN0266324	NA	NA	NA	NA
asRNA:CR44990	FBGN0266325	NA	NA	NA	NA
asRNA:CR44995	FBGN0266330	NA	NA	NA	NA
asRNA:CR44996	FBGN0266331	NA	NA	NA	NA
lncRNA:CR44999	FBGN0266350	NA	NA	NA	NA
asRNA:CR45001	FBGN0266352	NA	NA	NA	NA
lncRNA:CR45003	FBGN0266355	NA	NA	NA	NA
lncRNA:CR45005	FBGN0266357	NA	NA	NA	NA
asRNA:CR45007	FBGN0266359	NA	NA	NA	NA
asRNA:CR45008	FBGN0266360	NA	NA	NA	NA
lncRNA:CR45010	FBGN0266362	NA	NA	NA	NA
asRNA:CR45015	FBGN0266371	NA	NA	NA	NA
asRNA:CR45026	FBGN0266384	NA	NA	NA	NA
asRNA:CR45028	FBGN0266388	NA	NA	NA	NA
CR45033	FBGN0266393	NA	NA	NA	NA
lncRNA:CR45040	FBGN0266400	NA	NA	NA	NA
asRNA:CR45041	FBGN0266401	NA	NA	NA	NA
asRNA:CR45042	FBGN0266402	NA	NA	NA	NA
lncRNA:CR45043	FBGN0266403	NA	NA	NA	NA
asRNA:CR45046	FBGN0266406	NA	NA	NA	NA
asRNA:CR43463	FBGN0266428	NA	NA	NA	NA
CG45064	FBGN0266434	NA	NA	NA	NA
CG45065	FBGN0266435	NA	NA	NA	NA
PIG-Z	FBGN0266438	NA	NA	NA	NA
CG45069	FBGN0266439	NA	NA	NA	NA
CG45075	FBGN0266445	NA	NA	NA	NA

fau	FBGN0266451	NA	NA	NA	NA
CG45079	FBGN0266454	NA	NA	NA	NA
CG45084	FBGN0266459	NA	NA	NA	NA
CG45085	FBGN0266486	NA	NA	NA	NA
CG45086	FBGN0266487	NA	NA	NA	NA
CG45087	FBGN0266488	NA	NA	NA	NA
CG45088	FBGN0266489	NA	NA	NA	NA
CG45089	FBGN0266490	NA	NA	NA	NA
SclA	FBGN0266491	NA	NA	NA	NA
SclB	FBGN0266492	NA	NA	NA	NA
CG45092	FBGN0266525	NA	NA	NA	NA
CG45095	FBGN0266534	NA	NA	NA	NA
CG45099	FBGN0266538	NA	NA	NA	NA
CG45100	FBGN0266539	NA	NA	NA	NA
CG45101	FBGN0266540	NA	NA	NA	NA
tRNA:Thr-TGT-2-3	FBGN0266573	NA	NA	NA	NA
tRNA:Thr-TGT-2-4	FBGN0266574	NA	NA	NA	NA
lncRNA:CR45109	FBGN0266578	NA	NA	NA	NA
tRNA:Leu-CAG-1-8	FBGN0266585	NA	NA	NA	NA
lncRNA:CR45111	FBGN0266586	NA	NA	NA	NA
lncRNA:CR45123	FBGN0266616	NA	NA	NA	NA
lncRNA:CR45127	FBGN0266620	NA	NA	NA	NA
asRNA:CR45130	FBGN0266623	NA	NA	NA	NA
asRNA:CR45132	FBGN0266625	NA	NA	NA	NA
asRNA:CR45137	FBGN0266630	NA	NA	NA	NA
asRNA:CR45141	FBGN0266634	NA	NA	NA	NA
asRNA:CR45145	FBGN0266638	NA	NA	NA	NA
lncRNA:CR45147	FBGN0266640	NA	NA	NA	NA
lncRNA:CR45148	FBGN0266641	NA	NA	NA	NA
asRNA:CR45151	FBGN0266644	NA	NA	NA	NA
asRNA:CR45152	FBGN0266645	NA	NA	NA	NA
lncRNA:CR45153	FBGN0266646	NA	NA	NA	NA
lncRNA:CR45156	FBGN0266649	NA	NA	NA	NA
asRNA:CR45160	FBGN0266653	NA	NA	NA	NA
asRNA:CR45162	FBGN0266655	NA	NA	NA	NA
asRNA:CR45163	FBGN0266656	NA	NA	NA	NA
lncRNA:CR45165	FBGN0266675	NA	NA	NA	NA
lncRNA:CR45168	FBGN0266678	NA	NA	NA	NA
lncRNA:CR45169	FBGN0266679	NA	NA	NA	NA
lncRNA:CR45176	FBGN0266686	NA	NA	NA	NA
lncRNA:CR45179	FBGN0266689	NA	NA	NA	NA
lncRNA:CR45184	FBGN0266694	NA	NA	NA	NA
lncRNA:CR45197	FBGN0266707	NA	NA	NA	NA
asRNA:CR45202	FBGN0266729	NA	NA	NA	NA
lncRNA:CR45204	FBGN0266731	NA	NA	NA	NA
asRNA:CR45206	FBGN0266733	NA	NA	NA	NA
asRNA:CR45208	FBGN0266735	NA	NA	NA	NA
lncRNA:CR45225	FBGN0266752	NA	NA	NA	NA
lncRNA:CR45239	FBGN0266774	NA	NA	NA	NA
lncRNA:CR45240	FBGN0266775	NA	NA	NA	NA
lncRNA:CR45242	FBGN0266777	NA	NA	NA	NA
lncRNA:CR45258	FBGN0266796	NA	NA	NA	NA
lncRNA:CR45265	FBGN0266803	NA	NA	NA	NA
lncRNA:CR45266	FBGN0266804	NA	NA	NA	NA
asRNA:CR45268	FBGN0266806	NA	NA	NA	NA
CG45273	FBGN0266811	NA	NA	NA	NA
asRNA:CR45275	FBGN0266813	NA	NA	NA	NA
lncRNA:CR45276	FBGN0266814	NA	NA	NA	NA
lncRNA:CR45278	FBGN0266816	NA	NA	NA	NA
lncRNA:CR45282	FBGN0266820	NA	NA	NA	NA
lncRNA:CR45284	FBGN0266822	NA	NA	NA	NA
lncRNA:CR45287	FBGN0266825	NA	NA	NA	NA
lncRNA:CR45297	FBGN0266835	NA	NA	NA	NA
lncRNA:CR45299	FBGN0266837	NA	NA	NA	NA
asRNA:CR45300	FBGN0266838	NA	NA	NA	NA
lncRNA:CR45304	FBGN0266842	NA	NA	NA	NA
lncRNA:CR45308	FBGN0266846	NA	NA	NA	NA
lncRNA:CR45309	FBGN0266847	NA	NA	NA	NA
lncRNA:CR45310	FBGN0266849	NA	NA	NA	NA

lncRNA:CR45311	FBGN0266850	NA	NA	NA	NA
lncRNA:CR45312	FBGN0266851	NA	NA	NA	NA
lncRNA:CR45313	FBGN0266852	NA	NA	NA	NA
CR45315	FBGN0266854	NA	NA	NA	NA
lncRNA:CR45317	FBGN0266856	NA	NA	NA	NA
lncRNA:CR45318	FBGN0266857	NA	NA	NA	NA
lncRNA:CR45319	FBGN0266858	NA	NA	NA	NA
lncRNA:CR45321	FBGN0266860	NA	NA	NA	NA
lncRNA:CR45328	FBGN0266867	NA	NA	NA	NA
lncRNA:CR45332	FBGN0266871	NA	NA	NA	NA
lncRNA:CR45333	FBGN0266872	NA	NA	NA	NA
lncRNA:CR45337	FBGN0266876	NA	NA	NA	NA
lncRNA:CR45339	FBGN0266878	NA	NA	NA	NA
lncRNA:CR45340	FBGN0266879	NA	NA	NA	NA
asRNA:CR45341	FBGN0266880	NA	NA	NA	NA
asRNA:CR45342	FBGN0266881	NA	NA	NA	NA
lncRNA:CR45348	FBGN0266887	NA	NA	NA	NA
lncRNA:CR45352	FBGN0266892	NA	NA	NA	NA
lncRNA:CR45354	FBGN0266894	NA	NA	NA	NA
lncRNA:CR45355	FBGN0266895	NA	NA	NA	NA
lncRNA:CR45364	FBGN0266904	NA	NA	NA	NA
asRNA:CR45367	FBGN0266907	NA	NA	NA	NA
lncRNA:CR45370	FBGN0266910	NA	NA	NA	NA
asRNA:CR45371	FBGN0266911	NA	NA	NA	NA
lncRNA:CR45373	FBGN0266913	NA	NA	NA	NA
lncRNA:CR45374	FBGN0266914	NA	NA	NA	NA
asRNA:CR45376	FBGN0266925	NA	NA	NA	NA
lncRNA:CR45377	FBGN0266926	NA	NA	NA	NA
CR45385	FBGN0266934	NA	NA	NA	NA
lncRNA:CR45386	FBGN0266935	NA	NA	NA	NA
lncRNA:CR45387	FBGN0266936	NA	NA	NA	NA
lncRNA:CR45388	FBGN0266937	NA	NA	NA	NA
lncRNA:CR45393	FBGN0266942	NA	NA	NA	NA
asRNA:CR45397	FBGN0266946	NA	NA	NA	NA
lncRNA:CR45400	FBGN0266949	NA	NA	NA	NA
lncRNA:CR45402	FBGN0266951	NA	NA	NA	NA
lncRNA:CR45404	FBGN0266953	NA	NA	NA	NA
lncRNA:CR45411	FBGN0266960	NA	NA	NA	NA
lncRNA:CR45415	FBGN0266964	NA	NA	NA	NA
lncRNA:CR45416	FBGN0266965	NA	NA	NA	NA
lncRNA:CR45421	FBGN0266970	NA	NA	NA	NA
lncRNA:CR45426	FBGN0266975	NA	NA	NA	NA
lncRNA:CR45427	FBGN0266976	NA	NA	NA	NA
lncRNA:CR45433	FBGN0266982	NA	NA	NA	NA
lncRNA:CR45437	FBGN0266986	NA	NA	NA	NA
lncRNA:CR45438	FBGN0266987	NA	NA	NA	NA
lncRNA:CR45439	FBGN0266988	NA	NA	NA	NA
lncRNA:CR45440	FBGN0266989	NA	NA	NA	NA
lncRNA:CR45441	FBGN0266990	NA	NA	NA	NA
lncRNA:CR45442	FBGN0266991	NA	NA	NA	NA
lncRNA:CR45443	FBGN0266992	NA	NA	NA	NA
asRNA:CR45445	FBGN0266994	NA	NA	NA	NA
lncRNA:CR45446	FBGN0266995	NA	NA	NA	NA
lncRNA:CR45447	FBGN0267003	NA	NA	NA	NA
lncRNA:CR45450	FBGN0267006	NA	NA	NA	NA
lncRNA:CR45451	FBGN0267007	NA	NA	NA	NA
lncRNA:CR45453	FBGN0267009	NA	NA	NA	NA
lncRNA:CR45454	FBGN0267010	NA	NA	NA	NA
lncRNA:CR45455	FBGN0267011	NA	NA	NA	NA
lncRNA:CR45456	FBGN0267012	NA	NA	NA	NA
lncRNA:CR45457	FBGN0267013	NA	NA	NA	NA
CR45458	FBGN0267014	NA	NA	NA	NA
lncRNA:CR45463	FBGN0267019	NA	NA	NA	NA
asRNA:CR45466	FBGN0267022	NA	NA	NA	NA
lncRNA:CR45471	FBGN0267027	NA	NA	NA	NA
lncRNA:CR45474	FBGN0267030	NA	NA	NA	NA
lncRNA:CR45475	FBGN0267031	NA	NA	NA	NA
lncRNA:CR45476	FBGN0267032	NA	NA	NA	NA
lncRNA:CR45478	FBGN0267034	NA	NA	NA	NA

lncRNA:CR45500	FBGN0267056	NA	NA	NA	NA
lncRNA:CR45503	FBGN0267059	NA	NA	NA	NA
lncRNA:CR45507	FBGN0267063	NA	NA	NA	NA
lncRNA:CR45508	FBGN0267064	NA	NA	NA	NA
lncRNA:CR45509	FBGN0267065	NA	NA	NA	NA
lncRNA:CR45510	FBGN0267066	NA	NA	NA	NA
lncRNA:CR45511	FBGN0267067	NA	NA	NA	NA
lncRNA:CR45514	FBGN0267070	NA	NA	NA	NA
lncRNA:CR45515	FBGN0267071	NA	NA	NA	NA
lncRNA:CR45516	FBGN0267072	NA	NA	NA	NA
asRNA:CR45518	FBGN0267074	NA	NA	NA	NA
asRNA:CR45528	FBGN0267084	NA	NA	NA	NA
lncRNA:CR45532	FBGN0267088	NA	NA	NA	NA
lncRNA:CR45536	FBGN0267096	NA	NA	NA	NA
asRNA:CR45538	FBGN0267098	NA	NA	NA	NA
lncRNA:CR45539	FBGN0267099	NA	NA	NA	NA
lncRNA:CR45540	FBGN0267100	NA	NA	NA	NA
lncRNA:CR45541	FBGN0267101	NA	NA	NA	NA
lncRNA:CR45543	FBGN0267103	NA	NA	NA	NA
CG45544	FBGN0267104	NA	NA	NA	NA
lncRNA:CR45550	FBGN0267110	NA	NA	NA	NA
lncRNA:CR45556	FBGN0267116	NA	NA	NA	NA
lncRNA:CR45569	FBGN0267129	NA	NA	NA	NA
lncRNA:CR45570	FBGN0267130	NA	NA	NA	NA
lncRNA:CR45572	FBGN0267132	NA	NA	NA	NA
lncRNA:CR45594	FBGN0267154	NA	NA	NA	NA
lncRNA:CR45595	FBGN0267155	NA	NA	NA	NA
lncRNA:CR45596	FBGN0267156	NA	NA	NA	NA
asRNA:CR45601	FBGN0267161	NA	NA	NA	NA
lncRNA:CR45602	FBGN0267162	NA	NA	NA	NA
lncRNA:CR45607	FBGN0267167	NA	NA	NA	NA
lncRNA:CR45609	FBGN0267169	NA	NA	NA	NA
lncRNA:CR45610	FBGN0267170	NA	NA	NA	NA
asRNA:CR45611	FBGN0267171	NA	NA	NA	NA
asRNA:CR45612	FBGN0267172	NA	NA	NA	NA
lncRNA:CR45615	FBGN0267175	NA	NA	NA	NA
lncRNA:CR45618	FBGN0267178	NA	NA	NA	NA
asRNA:CR45623	FBGN0267183	NA	NA	NA	NA
lncRNA:CR45624	FBGN0267184	NA	NA	NA	NA
lncRNA:CR45625	FBGN0267185	NA	NA	NA	NA
lncRNA:CR45626	FBGN0267186	NA	NA	NA	NA
lncRNA:CR45628	FBGN0267188	NA	NA	NA	NA
lncRNA:CR45631	FBGN0267191	NA	NA	NA	NA
lncRNA:CR45632	FBGN0267192	NA	NA	NA	NA
lncRNA:CR45635	FBGN0267195	NA	NA	NA	NA
lncRNA:CR45637	FBGN0267197	NA	NA	NA	NA
lncRNA:CR45638	FBGN0267198	NA	NA	NA	NA
lncRNA:CR45639	FBGN0267199	NA	NA	NA	NA
lncRNA:CR45640	FBGN0267200	NA	NA	NA	NA
lncRNA:CR45642	FBGN0267202	NA	NA	NA	NA
lncRNA:CR45643	FBGN0267203	NA	NA	NA	NA
asRNA:CR45648	FBGN0267208	NA	NA	NA	NA
lncRNA:CR45650	FBGN0267210	NA	NA	NA	NA
lncRNA:CR45657	FBGN0267217	NA	NA	NA	NA
lncRNA:CR45661	FBGN0267221	NA	NA	NA	NA
asRNA:CR45663	FBGN0267223	NA	NA	NA	NA
lncRNA:CR45665	FBGN0267225	NA	NA	NA	NA
lncRNA:CR45666	FBGN0267226	NA	NA	NA	NA
lncRNA:CR45667	FBGN0267227	NA	NA	NA	NA
lncRNA:CR45670	FBGN0267230	NA	NA	NA	NA
lncRNA:CR45671	FBGN0267231	NA	NA	NA	NA
lncRNA:CR45672	FBGN0267232	NA	NA	NA	NA
lncRNA:CR45673	FBGN0267233	NA	NA	NA	NA
lncRNA:CR45680	FBGN0267240	NA	NA	NA	NA
lncRNA:CR45687	FBGN0267247	NA	NA	NA	NA
lncRNA:CR45693	FBGN0267257	NA	NA	NA	NA
lncRNA:CR45694	FBGN0267258	NA	NA	NA	NA
lncRNA:CR45695	FBGN0267259	NA	NA	NA	NA
lncRNA:CR45698	FBGN0267262	NA	NA	NA	NA

lncRNA:CR45700	FBGN0267264	NA	NA	NA	NA
asRNA:CR45701	FBGN0267265	NA	NA	NA	NA
lncRNA:CR45708	FBGN0267272	NA	NA	NA	NA
lncRNA:CR45709	FBGN0267273	NA	NA	NA	NA
lncRNA:CR45710	FBGN0267274	NA	NA	NA	NA
asRNA:CR45713	FBGN0267277	NA	NA	NA	NA
asRNA:CR45714	FBGN0267278	NA	NA	NA	NA
asRNA:CR45715	FBGN0267279	NA	NA	NA	NA
lncRNA:CR45718	FBGN0267282	NA	NA	NA	NA
lncRNA:CR45719	FBGN0267283	NA	NA	NA	NA
lncRNA:CR45721	FBGN0267285	NA	NA	NA	NA
lncRNA:CR45722	FBGN0267286	NA	NA	NA	NA
lncRNA:CR45723	FBGN0267287	NA	NA	NA	NA
lncRNA:CR45724	FBGN0267288	NA	NA	NA	NA
lncRNA:CR45725	FBGN0267289	NA	NA	NA	NA
lncRNA:CR45728	FBGN0267292	NA	NA	NA	NA
lncRNA:CR45729	FBGN0267293	NA	NA	NA	NA
lncRNA:CR45733	FBGN0267297	NA	NA	NA	NA
lncRNA:CR45736	FBGN0267300	NA	NA	NA	NA
lncRNA:CR45737	FBGN0267301	NA	NA	NA	NA
asRNA:CR45738	FBGN0267302	NA	NA	NA	NA
lncRNA:CR45739	FBGN0267303	NA	NA	NA	NA
lncRNA:CR45740	FBGN0267304	NA	NA	NA	NA
lncRNA:CR45742	FBGN0267306	NA	NA	NA	NA
lncRNA:CR45745	FBGN0267309	NA	NA	NA	NA
lncRNA:CR45746	FBGN0267310	NA	NA	NA	NA
lncRNA:CR45747	FBGN0267311	NA	NA	NA	NA
lncRNA:CR45750	FBGN0267314	NA	NA	NA	NA
lncRNA:CR45754	FBGN0267318	NA	NA	NA	NA
lncRNA:CR45755	FBGN0267319	NA	NA	NA	NA
CR45776	FBGN0267423	NA	NA	NA	NA
CR45777	FBGN0267424	NA	NA	NA	NA
asRNA:CR45778	FBGN0267425	NA	NA	NA	NA
CR45779	FBGN0267426	NA	NA	NA	NA
CR45780	FBGN0267427	NA	NA	NA	NA
lncRNA:CR45791	FBGN0267441	NA	NA	NA	NA
Su(Ste):CR45794	FBGN0267444	NA	NA	NA	NA
asRNA:CR45797	FBGN0267447	NA	NA	NA	NA
asRNA:CR45798	FBGN0267448	NA	NA	NA	NA
asRNA:CR45800	FBGN0267450	NA	NA	NA	NA
asRNA:CR45801	FBGN0267451	NA	NA	NA	NA
lncRNA:CR45803	FBGN0267453	NA	NA	NA	NA
asRNA:CR45806	FBGN0267456	NA	NA	NA	NA
asRNA:CR45807	FBGN0267457	NA	NA	NA	NA
asRNA:CR45814	FBGN0267464	NA	NA	NA	NA
asRNA:CR45818	FBGN0267468	NA	NA	NA	NA
asRNA:CR45822	FBGN0267472	NA	NA	NA	NA
asRNA:CR45828	FBGN0267478	NA	NA	NA	NA
asRNA:CR45829	FBGN0267479	NA	NA	NA	NA
asRNA:CR45830	FBGN0267480	NA	NA	NA	NA
asRNA:CR45831	FBGN0267481	NA	NA	NA	NA
lncRNA:CR45833	FBGN0267483	NA	NA	NA	NA
asRNA:CR45835	FBGN0267485	NA	NA	NA	NA
2SrRNA:CR45836	FBGN0267496	NA	NA	NA	NA
28SrRNA:CR45837	FBGN0267497	NA	NA	NA	NA
18SrRNA:CR45838	FBGN0267498	NA	NA	NA	NA
5.8SrRNA:CR45839	FBGN0267499	NA	NA	NA	NA
2SrRNA:CR45840	FBGN0267500	NA	NA	NA	NA
18SrRNA:CR45841	FBGN0267501	NA	NA	NA	NA
5.8SrRNA:CR45842	FBGN0267502	NA	NA	NA	NA
2SrRNA:CR45843	FBGN0267503	NA	NA	NA	NA
28SrRNA:CR45844	FBGN0267504	NA	NA	NA	NA
5.8SrRNA-Psi:CR45849	FBGN0267509	NA	NA	NA	NA
2SrRNA-Psi:CR45850	FBGN0267510	NA	NA	NA	NA
5.8SrRNA:CR45852	FBGN0267512	NA	NA	NA	NA
28SrRNA-Psi:CR45853	FBGN0267513	NA	NA	NA	NA
5.8SrRNA-Psi:CR45854	FBGN0267514	NA	NA	NA	NA
5.8SrRNA-Psi:CR45857	FBGN0267517	NA	NA	NA	NA
2SrRNA-Psi:CR45858	FBGN0267518	NA	NA	NA	NA

18SrRNA-Psi:CR45861	FBGN0267521	NA	NA	NA	NA
28SrRNA-Psi:CR45862	FBGN0267522	NA	NA	NA	NA
5.8SrRNA-Psi:CR45863	FBGN0267523	NA	NA	NA	NA
2SrRNA:CR45864	FBGN0267524	NA	NA	NA	NA
asRNA:CR45865	FBGN0267525	NA	NA	NA	NA
asRNA:CR45867	FBGN0267527	NA	NA	NA	NA
asRNA:CR45868	FBGN0267528	NA	NA	NA	NA
asRNA:CR45869	FBGN0267529	NA	NA	NA	NA
asRNA:CR45871	FBGN0267531	NA	NA	NA	NA
asRNA:CR45872	FBGN0267532	NA	NA	NA	NA
asRNA:CR45873	FBGN0267533	NA	NA	NA	NA
asRNA:CR45875	FBGN0267535	NA	NA	NA	NA
lncRNA:CR45880	FBGN0267540	NA	NA	NA	NA
lncRNA:CR45883	FBGN0267543	NA	NA	NA	NA
lncRNA:CR45884	FBGN0267544	NA	NA	NA	NA
asRNA:CR45885	FBGN0267545	NA	NA	NA	NA
asRNA:CR45886	FBGN0267546	NA	NA	NA	NA
asRNA:CR45891	FBGN0267551	NA	NA	NA	NA
asRNA:CR45892	FBGN0267552	NA	NA	NA	NA
lncRNA:CR45893	FBGN0267553	NA	NA	NA	NA
asRNA:CR45894	FBGN0267554	NA	NA	NA	NA
asRNA:CR45895	FBGN0267555	NA	NA	NA	NA
asRNA:CR45896	FBGN0267556	NA	NA	NA	NA
lncRNA:CR45899	FBGN0267559	NA	NA	NA	NA
lncRNA:CR45900	FBGN0267560	NA	NA	NA	NA
lncRNA:CR45906	FBGN0267566	NA	NA	NA	NA
asRNA:CR45909	FBGN0267569	NA	NA	NA	NA
asRNA:CR45912	FBGN0267572	NA	NA	NA	NA
lncRNA:CR45913	FBGN0267573	NA	NA	NA	NA
lncRNA:CR45914	FBGN0267574	NA	NA	NA	NA
lncRNA:CR45917	FBGN0267577	NA	NA	NA	NA
lncRNA:CR45918	FBGN0267578	NA	NA	NA	NA
lncRNA:CR45919	FBGN0267579	NA	NA	NA	NA
asRNA:CR45925	FBGN0267587	NA	NA	NA	NA
asRNA:CR45926	FBGN0267588	NA	NA	NA	NA
asRNA:CR45927	FBGN0267589	NA	NA	NA	NA
asRNA:CR45929	FBGN0267591	NA	NA	NA	NA
lncRNA:CR45936	FBGN0267598	NA	NA	NA	NA
lncRNA:CR45937	FBGN0267599	NA	NA	NA	NA
lncRNA:CR45938	FBGN0267600	NA	NA	NA	NA
lncRNA:CR45939	FBGN0267601	NA	NA	NA	NA
asRNA:CR45943	FBGN0267605	NA	NA	NA	NA
asRNA:CR45944	FBGN0267606	NA	NA	NA	NA
CR45946	FBGN0267608	NA	NA	NA	NA
CR45947	FBGN0267609	NA	NA	NA	NA
lncRNA:CR45950	FBGN0267612	NA	NA	NA	NA
asRNA:CR45951	FBGN0267613	NA	NA	NA	NA
lncRNA:CR45954	FBGN0267616	NA	NA	NA	NA
asRNA:CR45968	FBGN0267630	NA	NA	NA	NA
asRNA:CR45970	FBGN0267632	NA	NA	NA	NA
asRNA:CR45974	FBGN0267636	NA	NA	NA	NA
lncRNA:CR45975	FBGN0267637	NA	NA	NA	NA
pre-mod(mdg4)-G	FBGN0267648	NA	NA	NA	NA
pre-mod(mdg4)-H	FBGN0267649	NA	NA	NA	NA
pre-mod(mdg4)-AA	FBGN0267650	NA	NA	NA	NA
pre-mod(mdg4)-O	FBGN0267651	NA	NA	NA	NA
pre-mod(mdg4)-N	FBGN0267652	NA	NA	NA	NA
asRNA:CR45995	FBGN0267657	NA	NA	NA	NA
lncRNA:CR45998	FBGN0267660	NA	NA	NA	NA
lncRNA:CR46004	FBGN0267666	NA	NA	NA	NA
asRNA:CR46005	FBGN0267667	NA	NA	NA	NA
asRNA:CR46018	FBGN0267682	NA	NA	NA	NA
asRNA:CR46020	FBGN0267684	NA	NA	NA	NA
lncRNA:CR46021	FBGN0267685	NA	NA	NA	NA
CG46026	FBGN0267690	NA	NA	NA	NA
lncRNA:CR46031	FBGN0267695	NA	NA	NA	NA
asRNA:CR46034	FBGN0267701	NA	NA	NA	NA
lncRNA:flam	FBGN0267704	NA	NA	NA	NA
asRNA:CR46038	FBGN0267705	NA	NA	NA	NA

asRNA:CR46044	FBGN0267711	NA	NA	NA	NA
asRNA:CR46045	FBGN0267712	NA	NA	NA	NA
asRNA:CR46049	FBGN0267716	NA	NA	NA	NA
asRNA:CR46054	FBGN0267721	NA	NA	NA	NA
lncRNA:CR46056	FBGN0267723	NA	NA	NA	NA
lncRNA:CR46057	FBGN0267724	NA	NA	NA	NA
asRNA:CR46058	FBGN0267725	NA	NA	NA	NA
asRNA:CR46068	FBGN0267737	NA	NA	NA	NA
asRNA:CR46069	FBGN0267738	NA	NA	NA	NA
asRNA:CR46070	FBGN0267739	NA	NA	NA	NA
asRNA:CR46071	FBGN0267740	NA	NA	NA	NA
asRNA:CR46074	FBGN0267743	NA	NA	NA	NA
lncRNA:CR46075	FBGN0267744	NA	NA	NA	NA
lncRNA:CR46080	FBGN0267749	NA	NA	NA	NA
asRNA:CR46081	FBGN0267750	NA	NA	NA	NA
lncRNA:CR46090	FBGN0267759	NA	NA	NA	NA
asRNA:CR46092	FBGN0267761	NA	NA	NA	NA
asRNA:CR46096	FBGN0267765	NA	NA	NA	NA
asRNA:CR46097	FBGN0267766	NA	NA	NA	NA
lncRNA:CR46098	FBGN0267767	NA	NA	NA	NA
asRNA:CR46099	FBGN0267768	NA	NA	NA	NA
lncRNA:CR46100	FBGN0267769	NA	NA	NA	NA
asRNA:CR46101	FBGN0267770	NA	NA	NA	NA
lncRNA:CR46102	FBGN0267771	NA	NA	NA	NA
asRNA:CR46105	FBGN0267774	NA	NA	NA	NA
asRNA:CR46107	FBGN0267776	NA	NA	NA	NA
asRNA:CR46109	FBGN0267778	NA	NA	NA	NA
lncRNA:CR46126	FBGN0267801	NA	NA	NA	NA
asRNA:CR46129	FBGN0267804	NA	NA	NA	NA
asRNA:CR46133	FBGN0267808	NA	NA	NA	NA
asRNA:CR46134	FBGN0267809	NA	NA	NA	NA
asRNA:CR46138	FBGN0267813	NA	NA	NA	NA
asRNA:CR46140	FBGN0267815	NA	NA	NA	NA
lncRNA:CR46147	FBGN0267826	NA	NA	NA	NA
CR46151	FBGN0267863	NA	NA	NA	NA
CR46152	FBGN0267864	NA	NA	NA	NA
CR46157	FBGN0267869	NA	NA	NA	NA
CR46161	FBGN0267873	NA	NA	NA	NA
CR46162	FBGN0267874	NA	NA	NA	NA
CR46163	FBGN0267875	NA	NA	NA	NA
CR46165	FBGN0267877	NA	NA	NA	NA
CR46166	FBGN0267878	NA	NA	NA	NA
CR46167	FBGN0267879	NA	NA	NA	NA
CR46168	FBGN0267880	NA	NA	NA	NA
CR46169	FBGN0267881	NA	NA	NA	NA
CR46171	FBGN0267883	NA	NA	NA	NA
CR46172	FBGN0267884	NA	NA	NA	NA
CR46174	FBGN0267886	NA	NA	NA	NA
CR46175	FBGN0267887	NA	NA	NA	NA
CR46177	FBGN0267889	NA	NA	NA	NA
CR46178	FBGN0267890	NA	NA	NA	NA
CR46179	FBGN0267891	NA	NA	NA	NA
CR46180	FBGN0267892	NA	NA	NA	NA
CR46181	FBGN0267893	NA	NA	NA	NA
CR46186	FBGN0267898	NA	NA	NA	NA
CR46188	FBGN0267900	NA	NA	NA	NA
CR46189	FBGN0267901	NA	NA	NA	NA
CR46190	FBGN0267902	NA	NA	NA	NA
CG46191	FBGN0267903	NA	NA	NA	NA
CG46192	FBGN0267904	NA	NA	NA	NA
CG46193	FBGN0267905	NA	NA	NA	NA
asRNA:CR46195	FBGN0267914	NA	NA	NA	NA
lncRNA:CR46197	FBGN0267916	NA	NA	NA	NA
lncRNA:CR46200	FBGN0267919	NA	NA	NA	NA
lncRNA:CR46202	FBGN0267921	NA	NA	NA	NA
lncRNA:CR46205	FBGN0267924	NA	NA	NA	NA
lncRNA:CR46209	FBGN0267928	NA	NA	NA	NA
lncRNA:CR46214	FBGN0267934	NA	NA	NA	NA
lncRNA:CR46221	FBGN0267941	NA	NA	NA	NA

lncRNA:CR46227	FBGN0267947	NA	NA	NA	NA
CR46232	FBGN0267952	NA	NA	NA	NA
lncRNA:CR46233	FBGN0267953	NA	NA	NA	NA
lncRNA:CR46234	FBGN0267954	NA	NA	NA	NA
lncRNA:CR46243	FBGN0267963	NA	NA	NA	NA
CG46244	FBGN0267964	NA	NA	NA	NA
lncRNA:CR46245	FBGN0267965	NA	NA	NA	NA
asRNA:CR46246	FBGN0267966	NA	NA	NA	NA
asRNA:CR46251	FBGN0267984	NA	NA	NA	NA
lncRNA:CR46252	FBGN0267985	NA	NA	NA	NA
lncRNA:CR46258	FBGN0267991	NA	NA	NA	NA
asRNA:CR46266	FBGN0275434	NA	NA	NA	NA
lncRNA:CR46267	FBGN0278597	NA	NA	NA	NA
asRNA:CR46269	FBGN0278599	NA	NA	NA	NA
CG46270	FBGN0278600	NA	NA	NA	NA
lncRNA:acal	FBGN0283426	NA	NA	NA	NA
CR46274	FBGN0283431	NA	NA	NA	NA
Adk2	FBGN0283494	NA	NA	NA	NA
CG46305	FBGN0284083	NA	NA	NA	NA
CG46306	FBGN0284222	NA	NA	NA	NA
CG46307	FBGN0284223	NA	NA	NA	NA
CG46308	FBGN0284224	NA	NA	NA	NA
CG46309	FBGN0284225	NA	NA	NA	NA
CG46310	FBGN0284226	NA	NA	NA	NA
CG46311	FBGN0284227	NA	NA	NA	NA
CG46312	FBGN0284228	NA	NA	NA	NA
CG46313	FBGN0284229	NA	NA	NA	NA
CG46314	FBGN0284230	NA	NA	NA	NA
CG46315	FBGN0284231	NA	NA	NA	NA
CG46316	FBGN0284232	NA	NA	NA	NA
CG46317	FBGN0284233	NA	NA	NA	NA
CG46318	FBGN0284234	NA	NA	NA	NA
CG46319	FBGN0284235	NA	NA	NA	NA
CG46320	FBGN0284236	NA	NA	NA	NA
CG46321	FBGN0284237	NA	NA	NA	NA
lncRNA:TS1	FBGN0284409	NA	NA	NA	NA
lncRNA:TS2	FBGN0284410	NA	NA	NA	NA
lncRNA:TS3	FBGN0284411	NA	NA	NA	NA
lncRNA:CR46326	FBGN0284412	NA	NA	NA	NA
lncRNA:TS6	FBGN0284415	NA	NA	NA	NA
lncRNA:TS26	FBGN0284419	NA	NA	NA	NA
lncRNA:CR46336	FBGN0285940	NA	NA	NA	NA
lncRNA:CR46337	FBGN0285941	NA	NA	NA	NA
Fuca	FBGN0285958	NA	NA	NA	NA
sisRNA:1	FBGN0285959	NA	NA	NA	NA
hpRNA:1	FBGN0285966	NA	NA	NA	NA
sisRNA:4	FBGN0285969	NA	NA	NA	NA
hpRNA:CR46343	FBGN0285993	NA	NA	NA	NA
hpRNA:CR46340	FBGN0285994	NA	NA	NA	NA
lncRNA:CR46351	FBGN0286031	NA	NA	NA	NA
lncRNA:CR46352	FBGN0286032	NA	NA	NA	NA
sisRNA:CR46358	FBGN0286036	NA	NA	NA	NA
sisRNA:CR46360	FBGN0286038	NA	NA	NA	NA
sisRNA:CR46361	FBGN0286039	NA	NA	NA	NA
sisRNA:CR46363	FBGN0286041	NA	NA	NA	NA
Had1	FBGN0286508	NA	NA	NA	NA
snoRNA:Or-ACA6	FBGN0286726	NA	NA	NA	NA
snoRNA:Or-ACA7	FBGN0286727	NA	NA	NA	NA
snoRNA:Or-CD13	FBGN0286728	NA	NA	NA	NA
snoRNA:Or-CD15	FBGN0286729	NA	NA	NA	NA
snoRNA:Me28S-A2629	FBGN0286730	NA	NA	NA	NA
snoRNA:Or-ACA8	FBGN0286731	NA	NA	NA	NA
snoRNA:Or-CD14	FBGN0286732	NA	NA	NA	NA
snoRNA:Me28S-C2789	FBGN0286733	NA	NA	NA	NA
snoRNA:Me18S-G1506	FBGN0286734	NA	NA	NA	NA
scaRNA:MeU1:95C-A24	FBGN0286735	NA	NA	NA	NA
snoRNA:Or-ACA9	FBGN0286736	NA	NA	NA	NA
snoRNA:Or-CD16	FBGN0286737	NA	NA	NA	NA
scaRNA:MeU4:25F-C137	FBGN0286738	NA	NA	NA	NA

snoRNA:Me28S-C993	FBGN0286739	NA	NA	NA	NA
snoRNA:Or-CD17	FBGN0286740	NA	NA	NA	NA
CG46383	FBGN0286741	NA	NA	NA	NA
snoRNA:Me18S-G1358c	FBGN0286758	NA	NA	NA	NA
CG46388	FBGN0286834	NA	NA	NA	NA
lncRNA:osk	FBGN0286867	NA	NA	NA	NA
lncRNA:SMRG	FBGN0286868	NA	NA	NA	NA
lncRNA:enrr	FBGN0286870	NA	NA	NA	NA
CG46396	FBGN0286874	NA	NA	NA	NA
sbRNA:1	FBGN0286878	NA	NA	NA	NA
CR46401	FBGN0286879	NA	NA	NA	NA
CR46403	FBGN0286881	NA	NA	NA	NA
CR46404	FBGN0286882	NA	NA	NA	NA
lncRNA:CR46408	FBGN0286889	NA	NA	NA	NA
lncRNA:CR46410	FBGN0286891	NA	NA	NA	NA
lncRNA:CR46411	FBGN0286892	NA	NA	NA	NA
CG46412	FBGN0286893	NA	NA	NA	NA
CR46413	FBGN0286913	NA	NA	NA	NA
CR46415	FBGN0286915	NA	NA	NA	NA
lncRNA:CR46416	FBGN0286916	NA	NA	NA	NA
CR46417	FBGN0286917	NA	NA	NA	NA
CR46418	FBGN0286918	NA	NA	NA	NA
CR46419	FBGN0286919	NA	NA	NA	NA
CR46422	FBGN0286925	NA	NA	NA	NA
CR46424	FBGN0286927	NA	NA	NA	NA
CG46426	FBGN0286929	NA	NA	NA	NA
CG46427	FBGN0286930	NA	NA	NA	NA
CG46428	FBGN0286931	NA	NA	NA	NA
CG46429	FBGN0286932	NA	NA	NA	NA
lncRNA:CR46431	FBGN0286937	NA	NA	NA	NA
CG46433	FBGN0286939	NA	NA	NA	NA
CG46434	FBGN0286940	NA	NA	NA	NA
CG46435	FBGN0286941	NA	NA	NA	NA
Osi10a	FBGN0286976	NA	NA	NA	NA
Osi10b	FBGN0286977	NA	NA	NA	NA
CG46439	FBGN0286979	NA	NA	NA	NA
Iyd	FBGN0286980	NA	NA	NA	NA
CG46440	FBGN0287210	NA	NA	NA	NA
CG46442	FBGN0287212	NA	NA	NA	NA

References

Abram, P.K., Boivin, G., Moiroux, J. and Brodeur, J., 2017. Behavioural effects of temperature on ectothermic animals: unifying thermal physiology and behavioural plasticity. *Biological Reviews*, *92*(4), pp.1859-1876.

Adams, M.D. and Sekelsky, J.J., 2002. From sequence to phenotype: reverse genetics in *Drosophila melanogaster*. *Nature Reviews Genetics*, *3*(3), pp.189-198.

Albin, R.L., 1993. Antagonistic pleiotropy, mutation accumulation, and human genetic disease. Genetica, 91, pp.279-286.

Alic, N., Hoddinott, M.P., Foley, A., Slack, C., Piper, M.D. and Partridge, L., 2012. Detrimental effects of RNAi: a cautionary note on its use in *Drosophila* ageing studies.

Aly, K.B., Pipkin, J.L., Hinson, W.G., Feuers, R.J., Duffy, P.H., Lyn-Cook, L. and Hart, R.W., 1994. Chronic caloric restriction induces stress proteins in the hypothalamus of rats. *Mechanisms of Ageing and Development*, *76*(1), pp.11-23.

Anders, S. and Huber, W., 2010. Differential expression analysis for sequence count data. Nature Precedings, pp.1-1.

Aranda, J.F., Ramírez, C.M. and Mittelbrunn, M., 2024. Inflammaging, a targetable pathway for preventing cardiovascular diseases. Cardiovascular Research, p.cvae240.

Ashburner, M., 1989. *Drosophila. A laboratory handbook* (pp. xliii+-1331pp).

Aslanidis, C. and De Jong, P.J., 1990. Ligation-independent cloning of PCR products (LIC-PCR). *Nucleic acids research*, *18*(20), pp.6069-6074.

Bahadorani, S., Mukai, S., Egli, D. and Hilliker, A.J., 2010. Overexpression of metal-responsive transcription factor (*MTF*-1) in *Drosophila melanogaster* ameliorates life-span reductions associated with oxidative stress and metal toxicity. *Neurobiology of aging*, *31*(7), pp.1215-1226.

Banerjee, K.K., Ayyub, C., Ali, S.Z., Mandot, V., Prasad, N.G. and Kolthur-Seetharam, U., 2012. dSir2 in the adult fat body, but not in muscles, regulates life span in a diet-dependent manner. *Cell reports*, *2*(6), pp.1485-1491.

Baron, U. and Bujard, H., 2000. Tet repressor-based system for regulated gene expression in eukaryotic cells: principles and advances. In *Methods in enzymology* (Vol. 327, pp. 401-421). Academic Press.

Barzilai, N. and Shuldiner, A.R., 2001. Searching for human longevity genes: the future history of gerontology in the post-genomic era. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *56*(2), pp.M83-M87.

Bass, T.M., Grandison, R.C., Wong, R., Martinez, P., Partridge, L. and Piper, M.D., 2007. Optimization of dietary restriction protocols in *Drosophila*. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *62*(10), pp.1071-1081.

Bell, R., Hubbard, A., Chettier, R., Chen, D., Miller, J.P., Kapahi, P., Tarnopolsky, M., Sahasrabuhde, S., Melov, S. and Hughes, R.E., 2009. A human protein interaction network shows conservation of aging processes between human and invertebrate species. *PLoS genetics*, *5*(3), p.e1000414.

Bellen, H.J., Levis, R.W., Liao, G., He, Y., Carlson, J.W., Tsang, G., Evans-Holm, M., Hiesinger, P.R., Schulze, K.L., Rubin, G.M. and Hoskins, R.A., 2004. The *BDG*P gene disruption project: single transposon insertions associated with 40% of *Drosophila* genes. *Genetics*, *167*(2), pp.761-781.

Bello, B., Resendez-Perez, D. and Gehring, W.J., 1998. Spatial and temporal targeting of gene expression in *Drosophila* by means of a tetracycline-dependent transactivator system. *Development*, *125*(12), pp.2193-2202.

Benedetto, A., Bambade, T., Au, C., Tullet, J.M., Monkhouse, J., Dang, H., Cetnar, K., Chan, B., Cabreiro, F. and Gems, D., 2019. New label-free automated survival assays reveal unexpected stress resistance patterns during C. elegans aging. Aging Cell, 18(5), p.e12998.

Bhandari, P., Jones, M.A., Martin, I. and Grotewiel, M.S., 2007. Dietary restriction alters demographic but not behavioral aging in *Drosophila*. *Aging cell*, *6*(5), pp.631-637.

Bischof, J., Björklund, M., Furger, E., Schertel, C., Taipale, J. and Basler, K., 2013. A versatile platform for creating a comprehensive UAS-ORFeome library in Drosophila. Development, 140(11), pp.2434-2442.

Bischof, J., Maeda, R.K., Hediger, M., Karch, F. and Basler, K., 2007. An optimized transgenesis system for Drosophila using germ-line-specific φC31 integrases. *Proceedings of the National Academy of Sciences*, *104*(9), pp.3312-3317.

Blagosklonny, M.V., 2012. Answering the ultimate question "what is the proximal cause of aging?". Aging (Albany NY), 4(12), p.861.

Blagosklonny, M.V., 2021. The hyperfunction theory of aging: three common misconceptions. Oncoscience, 8, p.103.

Blasco, M.A., Lee, H.W., Hande, M.P., Samper, E., Lansdorp, P.M., DePinho, R.A. and Greider, C.W., 1997. Telomere shortening and tumor formation by mouse cells lacking telomerase RNA. Cell, 91(1), pp.25-34.

Bluher, M., Kahn, B.B. and Kahn, C.R., 2003. Extended longevity in mice lacking the insulin receptor in adipose tissue. *Science*, *299*(5606), pp.572-574.

Bolotin, A., Quinquis, B., Sorokin, A. and Ehrlich, S.D., 2005. Clustered regularly interspaced short palindrome repeats (CRISPRs) have spacers of extrachromosomal origin. *Microbiology*, *151*(8), pp.2551-2561.

Bonduriansky, R., Maklakov, A., Zajitschek, F. and Brooks, R., 2008. Sexual selection, sexual conflict and the evolution of ageing and life span. Functional ecology, pp.443-453.

Bordet, G., Lodhi, N., Kossenkov, A. and Tulin, A., 2021. Age-related changes of gene expression profiles in *Drosophila*. *Genes*, *12*(12), p.1982.

Boutros, M. and Ahringer, J., 2008. The art and design of genetic screens: RNA interference. *Nature Reviews Genetics*, *9*(7), pp.554-566.

Boyle, E.A., Li, Y.I. and Pritchard, J.K., 2017. An expanded view of complex traits: from polygenic to omnigenic. *Cell*, *169*(7), pp.1177-1186.

Boynton, F.D.D., Ericsson, A.C., Uchihashi, M., Dunbar, M.L. and Wilkinson, J.E., 2017. Doxycycline induces dysbiosis in female C57BL/6NCrl mice. *BMC research notes*, *10*, pp.1-7.

Brand, A.H. and Perrimon, N., 1993. Targeted gene expression as a means of altering cell fates and generating dominant phenotypes. *development*, *118*(2), pp.401-415.

Brand, A.H., Manoukian, A.S. and Perrimon, N., 1994. Ectopic expression in *Drosophila*. *Methods in cell biology*, *44*, pp.635-654.

Brown, E.J., Albers, M.W., Bum Shin, T., Ichikawa, K., Keith, C.T., Lane, W.S. and Schreiber, S.L., 1994. A mammalian protein targeted by G1-arresting rapamycin–receptor complex. *Nature*, *369*(6483), pp.756-758.

Buffenstein, R., 2005. The naked mole-rat: a new long-living model for human aging research. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 60(11), pp.1369-1377.

Burcin, M.M., O'Malley, B.W. and Tsai, S.Y., 1998. A regulatory system for target gene expression. Front Biosci, 3, pp.c1-7.

Burcin, M.M., Schiedner, G., Kochanek, S., Tsai, S.Y. and O'Malley, B.W., 1999. Adenovirus-mediated regulable target gene expression in vivo. *Proceedings of the National Academy of Sciences*, *96*(2), pp.355-360.

Burke, M.K., 2012. How does adaptation sweep through the genome? Insights from long-term selection experiments. *Proceedings of the Royal Society B: Biological Sciences*, *279*(1749), pp.5029-5038.

Bustin, S.A., 2002. INVITED REVIEW Quantification of mRNA using real-time reverse transcription PCR (RT-PCR): trends and problems. *Journal of molecular endocrinology*, *29*, pp.23-39.

Buszczak, M., Lu, X., Segraves, W.A., Chang, T.Y. and Cooley, L., 2002. Mutations in the midway gene disrupt a *Drosophila* acyl coenzyme A: diacylglycerol acyltransferase. *Genetics*, *160*(4), pp.1511-1518.

C. elegans Sequencing Consortium*, 1998. Genome sequence of the nematode *C. elegans*: a platform for investigating biology. *Science*, *282*(5396), pp.2012-2018.

Campisi, J., 2013. Aging, cellular senescence, and cancer. Annual review of physiology, 75(1), pp.685-705.

Campisi, J., Andersen, J.K., Kapahi, P. and Melov, S., 2011, December. Cellular senescence: a link between cancer and age-related degenerative disease?. In Seminars in cancer biology (Vol. 21, No. 6, pp. 354-359). Academic Press.

Campos, I., Geiger, J.A., Santos, A.C., Carlos, V. and Jacinto, A., 2010. Genetic screen in *Drosophila melanogaster* uncovers a novel set of genes required for embryonic epithelial repair. *Genetics*, *184*(1), pp.129-140.

Carey, J.R., Papadopoulos, N., Kouloussis, N., Katsoyannos, B., Müller, H.G., Wang, J.L. and Tseng, Y.K., 2006. Age-specific and lifetime behavior patterns in *Drosophila melanogaster* and the Mediterranean fruit fly, Ceratitis capitata. *Experimental gerontology*, *41*(1), pp.93-97.

Carnes, M.U., Campbell, T., Huang, W., Butler, D.G., Carbone, M.A., Duncan, L.H., Harbajan, S.V., King, E.M., Peterson, K.R., Weitzel, A. and Zhou, S., 2015. The genomic basis of postponed senescence in *Drosophila melanogaster*. *PLoS One*, *10*(9), p.e0138569.

Carter, A.J. and Nguyen, A.Q., 2011. Antagonistic pleiotropy as a widespread mechanism for the maintenance of polymorphic disease alleles. BMC medical genetics, 12, pp.1-13.

Cellerino, A. and Ori, A., 2017, October. What have we learned on aging from omics studies?. In Seminars in cell & developmental biology (Vol. 70, pp. 177-189). Academic Press.

Chang, A.Y., Skirbekk, V.F., Tyrovolas, S., Kassebaum, N.J. and Dieleman, J.L., 2019. Measuring population ageing: an analysis of the Global Burden of Disease Study 2017. *The Lancet Public Health*, *4*(3), pp.e159-e167.

Chao, R., Yuan, Y. and Zhao, H., 2015. Recent advances in DNA assembly technologies. *FEMS yeast research*, *15*(1), p.1.

Chari, S. and Dworkin, I., 2013. The conditional nature of genetic interactions: the consequences of wild-type backgrounds on mutational interactions in a genome-wide modifier screen. *PLoS genetics*, *9*(8), p.e1003661.

Chatsirisupachai, K. and de Magalhães, J.P., 2024. Somatic mutations in human ageing: New insights from DNA sequencing and inherited mutations. Ageing Research Reviews, p.102268.

Chavous, D.A., Jackson, F.R. and O'Connor, C.M., 2001. Extension of the *Drosophila* lifespan by overexpression of a protein repair methyltransferase. *Proceedings of the National Academy of Sciences*, *98*(26), pp.14814-14818.

Chayot, R., Montagne, B., Mazel, D. and Ricchetti, M., 2010. An end-joining repair mechanism in Escherichia coli. *Proceedings of the National Academy of Sciences*, *107*(5), pp.2141-2146.

Chen, C., Jack, J.O.S.E.P.H. and Garofalo, R.S., 1996. The *Drosophila* insulin receptor is required for normal growth. *Endocrinology*, *137*(3), pp.846-856.

Chen, F., Li, Y.Y., Yu, Y.L., Dai, J., Huang, J.L. and Lin, J., 2021. Simplified plasmid cloning with a universal MCS design and bacterial in vivo assembly. *BMC biotechnology*, *21*, pp.1-13.

Clancy, D.J., Gems, D., Hafen, E., Leevers, S.J. and Partridge, L., 2002. Dietary restriction in long-lived dwarf flies. *Science*, *296*(5566), pp.319-319.

Clancy, D.J., Gems, D., Harshman, L.G., Oldham, S., Stocker, H., Hafen, E., Leevers, S.J. and Partridge, L., 2001. Extension of life-span by loss of *CHICO*, a *Drosophila* insulin receptor substrate protein. *Science*, *292*(5514), pp.104-106.

Clark, A.G., 1987. Senescence and the genetic-correlation hang-up. *The American Naturalist*, *129*(6), pp.932-940.

Clemens, J.C., Worby, C.A., Simonson-Leff, N., Muda, M., Maehama, T., Hemmings, B.A. and Dixon, J.E., 2000. Use of double-stranded RNA interference in *Drosophila* cell lines to dissect signal transduction pathways. *Proceedings of the National Academy of Sciences*, *97*(12), pp.6499-6503.

Cohen, S.N., Chang, A.C., Boyer, H.W. and Helling, R.B., 1973. Construction of biologically functional bacterial plasmids in vitro. *Proceedings of the National Academy of Sciences*, *70*(11), pp.3240-3244.

Collado, M., Blasco, M.A. and Serrano, M., 2007. Cellular senescence in cancer and aging. Cell, 130(2), pp.223-233.

Cooley, L., Kelley, R. and Spradling, A., 1988. Insertional mutagenesis of the *Drosophila* genome with single P elements. *Science*, *239*(4844), pp.1121-1128.

da Silva, R., Conde, D.A., Baudisch, A. and Colchero, F., 2022. Slow and negligible senescence among testudines challenges evolutionary theories of senescence. Science, 376(6600), pp.1466-1470.

Dalton, J.E., Kacheria, T.S., Knott, S.R., Lebo, M.S., Nishitani, A., Sanders, L.E., Stirling, E.J., Winbush, A. and Arbeitman, M.N., 2010. Dynamic, mating-induced gene expression changes in female head and brain tissues of *Drosophila melanogaster*. *BMC genomics*, *11*, pp.1-13.

De Magalhães, J.P., Curado, J. and Church, G.M., 2009. Meta-analysis of age-related gene expression profiles identifies common signatures of aging. *Bioinformatics*, *25*(7), pp.875-881.

Deltcheva, E., Chylinski, K., Sharma, C.M., Gonzales, K., Chao, Y., Pirzada, Z.A., Eckert, M.R., Vogel, J. and Charpentier, E., 2011. CRISPR RNA maturation by trans-encoded small RNA and host factor RNase III. *Nature*, *471*(7340), pp.602-607.

Demidenko, Z.N. and Blagosklonny, M.V., 2008. Growth stimulation leads to cellular senescence when the cell cycle is blocked. *Cell cycle*, *7*(21), pp.3355-3361.

Denzel, M.S., Lapierre, L.R. and Mack, H.I., 2019. Emerging topics in C. elegans aging research: Transcriptional regulation, stress response and epigenetics. Mechanisms of ageing and development, 177, pp.4-21.

Descamps, S., Boutin, S., Berteaux, D. and Gaillard, J.M., 2006. Best squirrels trade a long life for an early reproduction. Proceedings of the Royal Society B: Biological Sciences, 273(1599), pp.2369-2374.

Dietzl, G., Chen, D., Schnorrer, F., Su, K.C., Barinova, Y., Fellner, M., Gasser, B., Kinsey, K., Oppel, S., Scheiblauer, S. and Couto, A., 2007. A genome-wide transgenic RNAi library for conditional gene inactivation in *Drosophila*. *Nature*, *448*(7150), pp.151-156.

Ding, M., Li, H. and Zheng, L., 2022. Drosophila exercise, an emerging model bridging the fields of exercise and aging in human. Frontiers in Cell and Developmental Biology, 10, p.966531.

Dobson, S.L., Bourtzis, K., Braig, H.R., Jones, B.F., Zhou, W., Rousset, F. and O'Neill, S.L., 1999. Wolbachia infections are distributed throughout insect somatic and germ line tissues. *Insect biochemistry and molecular biology*, *29*(2), pp.153-160.

Elya, C., Lok, T.C., Spencer, Q.E., McCausland, H., Martinez, C.C. and Eisen, M., 2018. Robust manipulation of the behavior of Drosophila melanogaster by a fungal pathogen in the laboratory. *Elife*, *7*, p.e34414.

Engler, C., Kandzia, R. and Marillonnet, S., 2008. A one pot, one step, precision cloning method with high throughput capability. *PloS one*, *3*(11), p.e3647.

Ermak, G., Cancasci, V.J. and Davies, K.J., 2003. Cytotoxic effect of doxycycline and its implications for tet-on gene expression systems. *Analytical biochemistry*, *318*(1), pp.152-154.

Evangelou, A., Ignatiou, A., Antoniou, C., Kalanidou, S., Chatzimatthaiou, S., Shianiou, G., Ellina, S., Athanasiou, R., Panagi, M., Apidianakis, Y. and Pitsouli, C., 2019. Unpredictable effects of the genetic background of transgenic lines in physiological quantitative traits. *G3: Genes, Genomes, Genetics*, *9*(11), pp.3877-3890.

Fabian, D.K., Fuentealba, M., Dönertaş, H.M., Partridge, L. and Thornton, J.M., 2021. Functional conservation in genes and pathways linking ageing and immunity. *Immunity & Ageing*, *18*(1), p.23.

Fafournoux, P., Bruhat, A. and Jousse, C., 2000. Amino acid regulation of gene expression. *Biochemical Journal*, *351*(1), pp.1-12.

Finch, C.E. and Tanzi, R.E., 1997. Genetics of aging. *Science*, *278*(5337), pp.407-411.

Fire, A., Xu, S., Montgomery, M.K., Kostas, S.A., Driver, S.E. and Mello, C.C., 1998. Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans. *nature*, *391*(6669), pp.806-811.

Fischer, J.A., Giniger, E., Maniatis, T. and Ptashne, M., 1988. GAL4 activates transcription in *Drosophila*. *Nature*, *332*(6167), pp.853-856.

Ford, D., Hoe, N., Landis, G.N., Tozer, K., Luu, A., Bhole, D., Badrinath, A. and Tower, J., 2007. Alteration of *Drosophila* life span using conditional, tissue-specific expression of transgenes triggered by doxycyline or RU486/Mifepristone. *Experimental gerontology*, *42*(6), pp.483-497.

Fox, C.W., Dublin, L. and Pollitt, S.J., 2003. Gender differences in lifespan and mortality rates in two seed beetle species. Functional Ecology, 17(5), pp.619-626.

Franceschi, C., Bonafè, M., Valensin, S., Olivieri, F., De Luca, M., Ottaviani, E. and De Benedictis, G., 2000. Inflamm-aging: an evolutionary perspective on immunosenescence. Annals of the new York Academy of Sciences, 908(1), pp.244-254.

Friedman, D.B. and Johnson, T.E., 1988. A mutation in the age-1 gene in Caenorhabditis elegans lengthens life and reduces hermaphrodite fertility. *Genetics*, *118*(1), pp.75-86.

Gan, T., Fan, L., Zhao, L., Misra, M., Liu, M., Zhang, M. and Su, Y., 2021. JNK signaling in *Drosophila* aging and longevity. *International Journal of Molecular Sciences*, *22*(17), p.9649.

Garagnani, P., Giuliani, C., Pirazzini, C., Olivieri, F., Bacalini, M.G., Ostan, R., Mari, D., Passarino, G., Monti, D., Bonfigli, A.R. and Boemi, M., 2013. Centenarians as super-controls to assess the biological relevance of genetic risk factors for common age-related diseases: a proof of principle on type 2 diabetes. *Aging (Albany NY)*, *5*(5), p.373.

Gargano, J.W., Martin, I., Bhandari, P. and Grotewiel, M.S., 2005. Rapid iterative negative geotaxis (RING): a new method for assessing age-related locomotor decline in *Drosophila*. *Experimental gerontology*, *40*(5), pp.386-395.

Gavrilov, L.A. and Gavrilova, N.S., 2002. Evolutionary theories of aging and longevity. The Scientific World Journal, 2(1), pp.339-356.

Giannakou, M.E., Goss, M., Jacobson, J., Vinti, G., Leevers, S.J. and Partridge, L., 2007. Dynamics of the action of *dFOXO* on adult mortality in *Drosophila*. *Aging cell*, *6*(4), pp.429-438.

Giannakou, M.E., Goss, M., Junger, M.A., Hafen, E., Leevers, S.J. and Partridge, L., 2004. Long-lived *Drosophila* with overexpressed *dFOXO* in adult fat body. *Science*, *305*(5682), pp.361-361.

Gibson, D.G., Young, L., Chuang, R.Y., Venter, J.C., Hutchison, C.A. and Smith, H.O., 2009. Enzymatic assembly of DNA molecules up to several hundred kilobases. *Nature methods*, *6*(5), pp.343-345.

Gibson, G. and Gehring, W.J., 1988. Head and thoracic transformations caused by ectopic expression of Antennapedia during *Drosophila* development. *Development*, *102*(4), pp.657-675.

Gillespie, J.H. and Turelli, M., 1989. Genotype-environment interactions and the maintenance of polygenic variation. *Genetics*, *121*(1), pp.129-138.

Girard, V., Jollivet, F., Knittelfelder, O., Celle, M., Arsac, J.N., Chatelain, G., Van den Brink, D.M., Baron, T., Shevchenko, A., Kühnlein, R.P. and Davoust, N., 2021. Abnormal accumulation of lipid droplets in neurons induces the conversion of alpha-Synuclein to proteolytic resistant forms in a *Drosophila* model of Parkinson's disease. *PLoS genetics*, *17*(11), p.e1009921.

Golic, K.G. and Lindquist, S., 1989. The FLP recombinase of yeast catalyzes site-specific recombination in the *Drosophila* genome. *Cell*, *59*(3), pp.499-509.

Gossen, M., Freundlieb, S., Bender, G., Müller, G., Hillen, W. and Bujard, H., 1995. Transcriptional activation by tetracyclines in mammalian cells. *Science*, *268*(5218), pp.1766-1769.

Gould, A.B. and Clark, A.M., 1977. X-ray induced mutations causing adult life-shorting in *Drosophila melanogaster*. *Experimental gerontology*, *12*(3-4), pp.107-112.

Grandison, R.C., Wong, R., Bass, T.M., Partridge, L. and Piper, M.D., 2009. Effect of a standardised dietary restriction protocol on multiple laboratory strains of *Drosophila melanogaster*. *PloS one*, *4*(1), p.e4067.

Gratz, S.J., Cummings, A.M., Nguyen, J.N., Hamm, D.C., Donohue, L.K., Harrison, M.M., Wildonger, J. and O'Connor-Giles, K.M., 2013. Genome engineering of *Drosophila* with the CRISPR RNA-guided Cas9 nuclease. *Genetics*, *194*(4), pp.1029-1035.

Graves Jr, J.L., Hertweck, K.L., Phillips, M.A., Han, M.V., Cabral, L.G., Barter, T.T., Greer, L.F., Burke, M.K., Mueller, L.D. and Rose, M.R., 2017. Genomics of parallel experimental evolution in *Drosophila*. *Molecular biology and evolution*, *34*(4), pp.831-842.

Groth, A.C., Fish, M., Nusse, R. and Calos, M.P., 2004. Construction of transgenic *Drosophila* by using the site-specific integrase from phage φC31. *Genetics*, *166*(4), pp.1775-1782.

Guarente, L. and Kenyon, C., 2000. Genetic pathways that regulate ageing in model organisms. *Nature*, *408*(6809), pp.255-262.

Guo, B. and Bi, Y., 2002. Cloning PCR products: An overview. *PCR cloning protocols*, pp.111-119.

Haigh, A.J., MacDonald, W.A. and Lloyd, V.K., 2005. The generation of cloned *Drosophila melanogaster*. *Genetics*, *169*(2), pp.1165-1167.

Halim, M.A., Tan, F.H.P., Azlan, A., Rasyid, I.I., Rosli, N., Shamsuddin, S. and Azzam, G., 2020. Ageing, Drosophila melanogaster and epigenetics. The Malaysian Journal of Medical Sciences: MJMS, 27(3), p.7.

Han, Z.S., Enslen, H., Hu, X., Meng, X., Wu, I.H., Barrett, T., Davis, R.J. and Ip, Y.T., 1998. A conserved p38 mitogen-activated protein kinase pathway regulates *Drosophila* immunity gene expression. *Molecular and cellular biology*.

Hannon, G.J., 2002. RNA interference. *nature*, *418*(6894), pp.244-251.

Harley, C.B., Futcher, A.B. and Greider, C.W., 1990. Telomeres shorten during ageing of human fibroblasts. Nature, 345(6274), pp.458-460.

Harrison, D.E., Strong, R., Sharp, Z.D., Nelson, J.F., Astle, C.M., Flurkey, K., Nadon, N.L., Wilkinson, J.E., Frenkel, K., Carter, C.S. and Pahor, M., 2009. Rapamycin fed late in life extends lifespan in genetically heterogeneous mice. *nature*, *460*(7253), pp.392-395.

Harshman, L.G. and Hoffmann, A.A., 2000. Laboratory selection experiments using *Drosophila*: what do they really tell us?. *Trends in Ecology & Evolution*, *15*(1), pp.32-36.

Hayflick, L., 1965. The limited in vitro lifetime of human diploid cell strains. Experimental cell research, 37(3), pp.614-636.

He, S. and Sharpless, N.E., 2017. Senescence in health and disease. Cell, 169(6), pp.1000-1011.

He, Y. and Jasper, H., 2014. Studying aging in *Drosophila*. *Methods*, *68*(1), pp.129-133.

Heintz, C., Doktor, T.K., Lanjuin, A., Escoubas, C.C., Zhang, Y., Weir, H.J., Dutta, S., Silva-García, C.G., Bruun, G.H., Morantte, I. and Hoxhaj, G., 2017. Splicing factor 1 modulates dietary restriction and TORC1 pathway longevity in C. elegans. Nature, 541(7635), pp.102-106.

Heitman, J., Movva, N.R. and Hall, M.N., 1991. Targets for cell cycle arrest by the immunosuppressant rapamycin in yeast. *Science*, *253*(5022), pp.905-909.

Helfand, S.L., Blake, K.J., Rogina, B., Stracks, M.D., Centurion, A. and Naprta, B., 1995. Temporal patterns of gene expression in the antenna of the adult *Drosophila melanogaster*. *Genetics*, *140*(2), pp.549-555.

Hemann, M.T. and Greider, C.W., 2000. Wild-derived inbred mouse strains have short telomeres. Nucleic acids research, 28(22), pp.4474-4478.

Herbig, U., Ferreira, M., Condel, L., Carey, D. and Sedivy, J.M., 2006. Cellular senescence in aging primates. Science, 311(5765), pp.1257-1257.

Hestand, M.S., Van Houdt, J., Cristofoli, F. and Vermeesch, J.R., 2016. Polymerase specific error rates and profiles identified by single molecule sequencing. *Mutation Research/Fundamental and Molecular Mechanisms of Mutagenesis*, *784*, pp.39-45.

Hill, K., Boesch, C., Goodall, J., Pusey, A., Williams, J. and Wrangham, R., 2001. Mortality rates among wild chimpanzees. *Journal of human evolution*, *40*(5), pp.437-450.

Hillary, V.E. and Ceasar, S.A., 2021. Genome engineering in insects for the control of vector borne diseases. *Progress in Molecular Biology and Translational Science*, *179*, pp.197-223.

Hjelmborg, J.V., Iachine, I., Skytthe, A., Vaupel, J.W., McGue, M., Koskenvuo, M., Kaprio, J., Pedersen, N.L. and Christensen, K., 2006. Genetic influence on human lifespan and longevity. *Human genetics*, *119*, pp.312-321.

Holliday, R., 1989. Food, reproduction and L'ongevity: Is the extended lifespan of calorie-restricted animals an evolutionary adaptation?. *Bioessays*, *10*(4), pp.125-127.

Hossie, T.J., Hassall, C., Knee, W. and Sherratt, T.N., 2013. Species with a chemical defence, but not chemical offence, live longer. Journal of Evolutionary Biology, 26(7), pp.1598-1602.

Howitz, K.T., Bitterman, K.J., Cohen, H.Y., Lamming, D.W., Lavu, S., Wood, J.G., Zipkin, R.E., Chung, P., Kisielewski, A., Zhang, L.L. and Scherer, B., 2003. Small molecule activators of sirtuins extend Saccharomyces cerevisiae lifespan. *Nature*, *425*(6954), pp.191-196.

Hsiao, K.C., 1993. Exonuclease III induced ligase-free directional subcloning of PCR products. *Nucleic acids research*, *21*(23), p.5528.

Hu, G., 1993. DNA polymerase-catalyzed addition of nontemplated extra nucleotides to the 3′ of a DNA fragment. *DNA and cell biology*, *12*(8), pp.763-770.

Hu, J.L., Todhunter, M.E., LaBarge, M.A. and Gartner, Z.J., 2018. Opportunities for organoids as new models of aging. *Journal of Cell Biology*, *217*(1), pp.39-50.

Huang, C., Xiong, C. and Kornfeld, K., 2004. Measurements of age-related changes of physiological processes that predict lifespan of Caenorhabditis elegans. *Proceedings of the National Academy of Sciences*, *101*(21), pp.8084-8089.

Hughes, S.E., Evason, K., Xiong, C. and Kornfeld, K., 2007. Genetic and pharmacological factors that influence reproductive aging in nematodes. *PLoS genetics*, *3*(2), p.e25.

Hwangbo, D.S., Gersham, B., Tu, M.P., Palmer, M. and Tatar, M., 2004. *Drosophila dFOXO* controls lifespan and regulates insulin signalling in brain and fat body. Nature, 429(6991), pp.562-566.

Ishino, Y., Shinagawa, H., Makino, K., Amemura, M. and Nakata, A., 1987. Nucleotide sequence of the iap gene, responsible for alkaline phosphatase isozyme conversion in Escherichia coli, and identification of the gene product. *Journal of bacteriology*, *169*(12), pp.5429-5433.

Ivanov, D.K., Escott-Price, V., Ziehm, M., Magwire, M.M., Mackay, T.F., Partridge, L. and Thornton, J.M., 2015. Longevity GWAS using the *Drosophila* genetic reference panel. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*, *70*(12), pp.1470-1478.

Ivanov, D.K., Escott-Price, V., Ziehm, M., Magwire, M.M., Mackay, T.F., Partridge, L. and Thornton, J.M., 2015. Longevity GWAS using the *Drosophila* genetic reference panel. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*, *70*(12), pp.1470-1478.

Ja, W.W., Carvalho, G.B., Madrigal, M., Roberts, R.W. and Benzer, S., 2009. The *Drosophila* G protein-coupled receptor, Methuselah, exhibits a promiscuous response to peptides. *Protein Science*, *18*(11), pp.2203-2208.

Jacobson, J., Lambert, A.J., Portero-Otín, M., Pamplona, R., Magwere, T., Miwa, S., Driege, Y., Brand, M.D. and Partridge, L., 2010. Biomarkers of aging in *Drosophila*. *Aging Cell*, *9*(4), pp.466-477.

Jinek, M., Chylinski, K., Fonfara, I., Hauer, M., Doudna, J.A. and Charpentier, E., 2012. A programmable dual-RNA–guided DNA endonuclease in adaptive bacterial immunity. *science*, *337*(6096), pp.816-821.

Jinek, M., East, A., Cheng, A., Lin, S., Ma, E. and Doudna, J., 2013. RNA-programmed genome editing in human cells. *elife*, *2*, p.e00471.

Johnson, T.E., 2003. Advantages and disadvantages of Caenorhabditis elegans for aging research. Experimental gerontology, 38(11-12), pp.1329-1332.

Jolliffe, I.T. and Cadima, J., 2016. Principal component analysis: a review and recent developments. Philosophical transactions of the royal society A: Mathematical, Physical and Engineering Sciences, 374(2065), p.20150202.

Jones, D.H., Sakamoto, K., Vorce, R.L. and Howard, B.H., 1990. DNA mutagenesis and recombination. *Nature*, *344*(6268), pp.793-794.

Joshi, P.K., Fischer, K., Schraut, K.E., Campbell, H., Esko, T. and Wilson, J.F., 2016. Variants near CHRNA3/5 and APOE have age-and sex-related effects on human lifespan. *Nature communications*, *7*(1), p.11174.

Jung, V., Pestka, S.B. and Pestka, S., 1990. Efficient cloning of PCR generated DNA containing terminal restriction endonuclease recognition sites. *Nucleic acids research*, *18*(20), p.6156.

Kalluri, R. and Zeisberg, M., 2006. Fibroblasts in cancer. *Nature reviews cancer*, *6*(5), pp.392-401.

Kapahi, P., Zid, B.M., Harper, T., Koslover, D., Sapin, V. and Benzer, S., 2004. Regulation of lifespan in *Drosophila* by modulation of genes in the TOR signaling pathway. *Current biology*, *14*(10), pp.885-890.

Kennedy, B.K., Austriaco Jr, N.R., Zhang, J. and Guarente, L., 1995. Mutation in the silencing gene SIR4 can delay aging in S. cerevisiae. *Cell*, *80*(3), pp.485-496.

Kennerdell, J.R. and Carthew, R.W., 2000. Heritable gene silencing in *Drosophila* using double-stranded RNA. *Nature biotechnology*, *18*(8), pp.896-898.

Kenyon, C., Chang, J., Gensch, E., Rudner, A. and Tabtiang, R., 1993. A *C. elegans* mutant that lives twice as long as wild type. *Nature*, *366*(6454), pp.461-464.

Kern, C.C., Srivastava, S., Ezcurra, M., Hsiung, K.C., Hui, N., Townsend, S., Maczik, D., Zhang, B., Tse, V., Konstantellos, V. and Bähler, J., 2023. C. elegans ageing is accelerated by a self-destructive reproductive programme. Nature Communications, 14(1), p.4381.

Kim, D.H. and Rossi, J.J., 2008. RNAi mechanisms and applications. *Biotechniques*, *44*(5), pp.613-616.

Kim, H.S., Parker, D.J., Hardiman, M.M., Munkácsy, E., Jiang, N., Rogers, A.N., Bai, Y., Brent, C., Mobley, J.A., Austad, S.N. and Pickering, A.M., 2023. Early-adulthood spike in protein translation drives aging via juvenile hormone/germline signaling. *Nature communications*, *14*(1), p.5021.

Kimura, K.D., Tissenbaum, H.A., Liu, Y. and Ruvkun, G., 1997. *daf-2*, an insulin receptor-like gene that regulates longevity and diapause in Caenorhabditis elegans. Science, 277(5328), pp.942-946.

Kinde, I., Wu, J., Papadopoulos, N., Kinzler, K.W. and Vogelstein, B., 2011. Detection and quantification of rare mutations with massively parallel sequencing. *Proceedings of the National Academy of Sciences*, *108*(23), pp.9530-9535.

Kirkwood, T.B., 1977. Evolution of ageing. *Nature*, *270*(5635), pp.301-304.

Kirkwood, T.B., 2011. Systems biology of ageing and longevity. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *366*(1561), pp.64-70.

Kirkwood, T.B.L. and Kowald, A., 1997. Network theory of aging. Experimental gerontology, 32(4-5), pp.395-399.

Klass, M.R., 1983. A method for the isolation of longevity mutants in the nematode Caenorhabditis elegans and initial results. *Mechanisms of ageing and development*, *22*(3-4), pp.279-286.

Klein, R.J., Zeiss, C., Chew, E.Y., Tsai, J.Y., Sackler, R.S., Haynes, C., Henning, A.K., SanGiovanni, J.P., Mane, S.M., Mayne, S.T. and Bracken, M.B., 2005. Complement factor H polymorphism in age-related macular degeneration. *Science*, *308*(5720), pp.385-389.

Kõks, S., Dogan, S., Tuna, B.G., González-Navarro, H., Potter, P. and Vandenbroucke, R.E., 2016. Mouse models of ageing and their relevance to disease. *Mechanisms of ageing and development*, *160*, pp.41-53.

Koskela, E.V. and Frey, A.D., 2015. Homologous recombinatorial cloning without the creation of single-stranded ends: exonuclease and ligation-independent cloning (ELIC). *Molecular biotechnology*, *57*, pp.233-240.

Kostylev, M., Otwell, A.E., Richardson, R.E. and Suzuki, Y., 2015. Cloning should be simple: Escherichia coli DH5α-mediated assembly of multiple DNA fragments with short end homologies. *PloS one*, *10*(9), p.e0137466.

Krtolica, A., Parrinello, S., Lockett, S., Desprez, P.Y. and Campisi, J., 2001. Senescent fibroblasts promote epithelial cell growth and tumorigenesis: a link between cancer and aging. *Proceedings of the National Academy of Sciences*, *98*(21), pp.12072-12077.

Lai, C.H., Chou, C.Y., Ch'ang, L.Y., Liu, C.S. and Lin, W.C., 2000. Identification of novel human genes evolutionarily conserved in Caenorhabditis elegans by comparative proteomics. *Genome research*, *10*(5), pp.703-713.

Lailvaux, S.P. and Irschick, D.J., 2006. A functional perspective on sexual selection: insights and future prospects. Animal Behaviour, 72(2), pp.263-273.

Landis, G.N., Doherty, D. and Tower, J., 2020. Analysis of *Drosophila melanogaster* lifespan. *Aging: Methods and Protocols*, pp.47-56.

Landis, G.N., Salomon, M.P., Keroles, D., Brookes, N., Sekimura, T. and Tower, J., 2015. The progesterone antagonist mifepristone/RU486 blocks the negative effect on life span caused by mating in female *Drosophila*. *Aging (albany NY)*, *7*(1), p.53.

Lans, H. and Vermeulen, W., 2015. Tissue specific response to DNA damage: *C. elegans* as role model. *DNA repair*, *32*, pp.141-148.

Lansing, A.I., 1947. A transmissible, cumulative, and reversible factor in aging. *Journal of Gerontology*, *2*(3), pp.228-239.

Larsen, P.L., 1993. Aging and resistance to oxidative damage in Caenorhabditis elegans. *Proceedings of the National Academy of Sciences*, *90*(19), pp.8905-8909.

Laufer, Y., 2005. Effect of age on characteristics of forward and backward gait at preferred and accelerated walking speed. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *60*(5), pp.627-632.

Le Bourg, É., 2001. A mini-review of the evolutionary theories of aging. Is it the time to accept them?. Demographic Research, 4, pp.1-28.

Lee, T. and Luo, L., 1999. Mosaic analysis with a repressible cell marker for studies of gene function in neuronal morphogenesis. *Neuron*, *22*(3), pp.451-461.

Leffelaar, D. and Grigliatti, T.A., 1983. A mutation in *Drosophila* that appears to accelerate aging. *Developmental genetics*, *4*(3), pp.199-210.

Lemaitre, B. and Hoffmann, J., 2007. The host defense of Drosophila melanogaster. *Annu. Rev. Immunol.*, *25*(1), pp.697-743.

Levis, R., Hazelrigg, T. and Rubin, G.M., 1985. Effects of genomic position on the expression of transduced copies of the white gene of *Drosophila*. *Science*, *229*(4713), pp.558-561.

Lewis, K.N., Andziak, B., Yang, T. and Buffenstein, R., 2013. The naked mole-rat response to oxidative stress: just deal with it. Antioxidants & redox signaling, 19(12), pp.1388-1399.

Li, A., Koch, Z. and Ideker, T., 2022. Epigenetic aging: Biological age prediction and informing a mechanistic theory of aging. Journal of internal medicine, 292(5), pp.733-744.

Li, H., Rai, M., Buddika, K., Sterrett, M.C., Luhur, A., Mahmoudzadeh, N.H., Julick, C.R., Pletcher, R.C., Chawla, G., Gosney, C.J. and Burton, A.K., 2019. Lactate dehydrogenase and glycerol-3-phosphate dehydrogenase cooperatively regulate growth and carbohydrate metabolism during *Drosophila melanogaster* larval development. *Development*, *146*(17), p.dev175315.

Lin, Y.J., Seroude, L. and Benzer, S., 1998. Extended life-span and stress resistance in the *Drosophila* mutant methuselah. *Science*, *282*(5390), pp.943-946.

Lindquist, S. and Craig, E.A., 1988. The heat-shock proteins. *Annual review of genetics*, *22*(1), pp.631-677.

Lindquist, S., 1986. The heat-shock response. *Annual review of biochemistry*, *55*(1), pp.1151-1191.

Ling, D. and Salvaterra, P.M., 2011. Robust RT-qPCR data normalization: validation and selection of internal reference genes during post-experimental data analysis. *PloS one*, *6*(3), p.e17762.

Lints, F.A., Stoll, J., Gruwez, G. and Lints, C.V., 1979. An attempt to select for increased longevity in *Drosophila melanogaster*. *Gerontology*, *25*(4), pp.192-204.

Lohff, C.J. and Cease, K.B., 1992. PCR using a thermostable polymerase with 3'to 5'exonuclease activity generates blunt products suitable for direct cloning. *Nucleic acids research*, *20*(1), p.144.

López-Otín, C., Blasco, M.A., Partridge, L., Serrano, M. and Kroemer, G., 2023. Hallmarks of aging: An expanding universe. Cell, 186(2), pp.243-278.

López-Otín, C., Blasco, M.A., Partridge, L., Serrano, M. and Kroemer, G., 2013. The hallmarks of aging. *Cell*, *153*(6), pp.1194-1217.

López-Otín, C., Blasco, M.A., Partridge, L., Serrano, M. and Kroemer, G., 2023. Hallmarks of aging: An expanding universe. *Cell*, *186*(2), pp.243-278.

Lu, C. and Thompson, C.B., 2012. Metabolic regulation of epigenetics. Cell metabolism, 16(1), pp.9-17.

Lü, J., Yang, C., Zhang, Y. and Pan, H., 2018. Selection of reference genes for the normalization of RT-qPCR data in gene expression studies in insects: a systematic review. *Frontiers in physiology*, *9*, p.1560.

Luckinbill, L.S., Arking, R., Clare, M.J., Cirocco, W.C. and Buck, S.A., 1984. Selection for delayed senescence in *Drosophila melanogaster*. *Evolution*, pp.996-1003.

Lunetta, K.L., D'Agostino, R.B., Karasik, D., Benjamin, E.J., Guo, C.Y., Govindaraju, R., Kiel, D.P., Kelly-Hayes, M., Massaro, J.M., Pencina, M.J. and Seshadri, S., 2007. Genetic correlates of longevity and selected age-related phenotypes: a genome-wide association study in the Framingham Study. *BMC medical genetics*, *8*, pp.1-12.

Ma, Y., Creanga, A., Lum, L. and Beachy, P.A., 2006. Prevalence of off-target effects in *Drosophila* RNA interference screens. *Nature*, *443*(7109), pp.359-363.

Mack, H.I., Heimbucher, T. and Murphy, C.T., 2018. The nematode Caenorhabditis elegans as a model for aging research. *Drug Discovery Today: Disease Models*, *27*, pp.3-13.

Magalhães, J.P.D., Costa, J. and Church, G.M., 2007. An analysis of the relationship between metabolism, developmental schedules, and longevity using phylogenetic independent contrasts. The Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 62(2), pp.149-160.

Mahajan, A., Go, M.J., Zhang, W., Below, J.E., Gaulton, K.J., Ferreira, T., Horikoshi, M., Johnson, A.D., Ng, M.C., Prokopenko, I. and Saleheen, D., 2014. DIAbetes Genetics Replication And Meta-analysis (DIAGRAM) Consortium; Asian Genetic Epidemiology Network Type 2 Diabetes (AGEN-T2D) Consortium; South Asian Type 2 Diabetes (SAT2D) Consortium; Mexican American Type 2 Diabetes (MAT2D) Consortium; Type 2 Diabetes Genetic Exploration by Nex-generation sequencing in muylti-Ethnic Samples (T2D-GENES) Consortium. Genome-wide trans-ancestry meta-analysis provides insight into the genetic architecture of type 2 diabetes susceptibility. *Nat Genet*, *46*(3), pp.234-244.

Makarova, K.S., Wolf, Y.I., Alkhnbashi, O.S., Costa, F., Shah, S.A., Saunders, S.J., Barrangou, R., Brouns, S.J., Charpentier, E., Haft, D.H. and Horvath, P., 2015. An updated evolutionary classification of CRISPR–Cas systems. *Nature reviews microbiology*, *13*(11), pp.722-736.

Mallard, F., Nolte, V., Tobler, R., Kapun, M. and Schlötterer, C., 2018. A simple genetic basis of adaptation to a novel thermal environment results in complex metabolic rewiring in *Drosophila*. *Genome biology*, *19*, pp.1-15.

Manolio, T.A., Collins, F.S., Cox, N.J., Goldstein, D.B., Hindorff, L.A., Hunter, D.J., McCarthy, M.I., Ramos, E.M., Cardon, L.R., Chakravarti, A. and Cho, J.H., 2009. Finding the missing heritability of complex diseases. *Nature*, *461*(7265), pp.747-753.

Marchuk, D., Drumm, M., Saulino, A. and Collins, F.S., 1991. Construction of T-vectors, a rapid and general system for direct cloning of unmodified PCR products. *Nucleic acids research*, *19*(5), p.1154.

Masoro, E.J. and Austad, S.N., 1996. The evolution of the antiaging action of dietary restriction: a hypothesis. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *51*(6), pp.B387-B391.

McCarroll, S.A., Murphy, C.T., Zou, S., Pletcher, S.D., Chin, C.S., Jan, Y.N., Kenyon, C., Bargmann, C.I. and Li, H., 2004. Comparing genomic expression patterns across species identifies shared transcriptional profile in aging. *Nature genetics*, *36*(2), pp.197-204.

McCay, C.M., Crowell, M.F. and Maynard, L.A., 1935. The effect of retarded growth upon the length of life span and upon the ultimate body size: one figure. *The journal of Nutrition*, *10*(1), pp.63-79.

McClellan, J. and King, M.C., 2010. Genetic heterogeneity in human disease. *Cell*, *141*(2), pp.210-217.

McClure, C.D., Hassan, A., Aughey, G.N., Butt, K., Estacio-Gómez, A., Duggal, A., Sia, C.Y., Barber, A.F. and Southall, T.D., 2022. An auxin-inducible, GAL4-compatible, gene expression system for Drosophila. *Elife*, *11*, p.e67598.

McElwee, J.J., Schuster, E., Blanc, E., Thornton, J. and Gems, D., 2006. Diapause-associated metabolic traits reiterated in long-lived *daf-2* mutants in the nematode Caenorhabditis elegans. *Mechanisms of ageing and development*, *127*(5), pp.458-472.

McGuire, S.E., Le, P.T., Osborn, A.J., Matsumoto, K. and Davis, R.L., 2003. Spatiotemporal rescue of memory dysfunction in *Drosophila*. *Science*, *302*(5651), pp.1765-1768.

Medvedev, Z.A., 1990. An attempt at a rational classification of theories of ageing. Biological Reviews, 65(3), pp.375-398.

Melzer, D., Pilling, L.C. and Ferrucci, L., 2020. The genetics of human ageing. Nature Reviews Genetics, 21(2), pp.88-101.

Merritt, T.J., Sezgin, E., Zhu, C.T. and Eanes, W.F., 2006. Triglyceride pools, flight and activity variation at the *Gpdh* locus in *Drosophila melanogaster*. *Genetics*, *172*(1), pp.293-304.

Michailidou, K., Hall, P., Gonzalez-Neira, A., Ghoussaini, M., Dennis, J., Milne, R.L., Schmidt, M.K., Chang-Claude, J., Bojesen, S.E., Bolla, M.K. and Wang, Q., 2013. Large-scale genotyping identifies 41 new loci associated with breast cancer risk. *Nature genetics*, *45*(4), pp.353-361.

Miller, M.B., Huang, A.Y., Kim, J., Zhou, Z., Kirkham, S.L., Maury, E.A., Ziegenfuss, J.S., Reed, H.C., Neil, J.E., Rento, L. and Ryu, S.C., 2022. Somatic genomic changes in single Alzheimer's disease neurons. Nature, 604(7907), pp.714-722.

Min, K.T. and Benzer, S., 1997. Wolbachia, normally a symbiont of Drosophila, can be virulent, causing degeneration and early death. *Proceedings of the National Academy of Sciences*, *94*(20), pp.10792-10796.

Minois, N., Sykacek, P., Godsey, B. and Kreil, D.P., 2010. RNA interference in ageing research–a mini-review. *Gerontology*, *56*(5), pp.496-506.

Miquel, J., 2009. An update of the oxidation-inflammation theory of aging: the involvement of the immune system in oxi-inflamm-aging. Current pharmaceutical design, 15(26), pp.3003-3026.

Mirisola, M.G., Braun, R.J. and Petranovic, D., 2014. Approaches to study yeast cell aging and death. FEMS yeast research, 14(1), pp.109-118.

Misquitta, L. and Paterson, B.M., 1999. Targeted disruption of gene function in *Drosophila* by RNA interference (RNA-i): a role for nautilus in embryonic somatic muscle formation. *Proceedings of the National Academy of Sciences*, *96*(4), pp.1451-1456.

Moffat, J., Reiling, J.H. and Sabatini, D.M., 2007. Off-target effects associated with long dsRNAs in *Drosophila* RNAi screens. *Trends in pharmacological sciences*, *28*(4), pp.149-151.

Morrow, J.F., Cohen, S.N., Chang, A.C., Boyer, H.W., Goodman, H.M. and Helling, R.B., 1974. Replication and transcription of eukaryotic DNA in Esherichia coli. *Proceedings of the National Academy of Sciences*, *71*(5), pp.1743-1747.

Moullan, N., Mouchiroud, L., Wang, X., Ryu, D., Williams, E.G., Mottis, A., Jovaisaite, V., Frochaux, M.V., Quiros, P.M., Deplancke, B. and Houtkooper, R.H., 2015. Tetracyclines disturb mitochondrial function across eukaryotic models: a call for caution in biomedical research. *Cell reports*, *10*(10), pp.1681-1691.

Munro, D., Baldy, C., Pamenter, M.E. and Treberg, J.R., 2019. The exceptional longevity of the naked mole-rat may be explained by mitochondrial antioxidant defenses. *Aging Cell*, *18*(3), p.e12916.

Naftelberg, S., Schor, I.E., Ast, G. and Kornblihtt, A.R., 2015. Regulation of alternative splicing through coupling with transcription and chromatin structure. Annual review of biochemistry, 84(1), pp.165-198.

Naqvi, S., Kim, S., Hoskens, H., Matthews, H.S., Spritz, R.A., Klein, O.D., Hallgrímsson, B., Swigut, T., Claes, P., Pritchard, J.K. and Wysocka, J., 2023. Precise modulation of transcription factor levels identifies features underlying dosage sensitivity. Nature genetics, 55(5), pp.841-851.

Naranjo-Galindo, F.J., Ai, R., Fang, E.F., Nilsen, H.L. and SenGupta, T., 2022. C. elegans as an animal model to study the intersection of DNA repair, aging and neurodegeneration. Frontiers in Aging, 3, p.916118.

Nebel, A., Kleindorp, R., Caliebe, A., Nothnagel, M., Blanche, H., Junge, O., Wittig, M., Ellinghaus, D., Flachsbart, F., Wichmann, H.E. and Meitinger, T., 2011. A genome-wide association study confirms APOE as the major gene influencing survival in long-lived individuals. *Mechanisms of ageing and development*, *132*(6-7), pp.324-330.

Niemann, H. and O'Kane, C.J., 1995. Targeted expression of tetanus toxin light chain in *Drosophila* specifically eliminates synaptic transmission and causes behavioral defects. *Neuron*, *14*, pp.341-351.

Nikpay, M., Goel, A., Won, H.H., Hall, L.M., Willenborg, C., Kanoni, S., Saleheen, D., Kyriakou, T., Nelson, C.P. and Hopewell, J.C., A comprehensive 1000 Genomes-based genome-wide association meta-analysis of coronary artery disease., 2015, 47. *PMID: https://www. ncbi. nlm. nih. gov/pubmed/26343387*, pp.1121-1130.

Norry, F.M. and Loeschcke, V., 2003. Heat-induced expression of a molecular chaperone decreases by selecting for long-lived individuals. *Experimental gerontology*, *38*(6), pp.673-681.

Oakley, A.J., Coggan, M. and Board, P.G., 2010. Identification and characterization of γ-glutamylamine cyclotransferase, an enzyme responsible for γ-glutamyl-ϵ-lysine catabolism. *Journal of Biological Chemistry*, *285*(13), pp.9642-9648.

Ogienko, A.A., Omelina, E.S., Bylino, O.V., Batin, M.A., Georgiev, P.G. and P*Indy*urin, A.V., 2022. *Drosophila* as a model organism to study basic mechanisms of longevity. *International Journal of Molecular Sciences*, *23*(19), p.11244.

O'Kane, C.J. and Gehring, W.J., 1987. Detection in situ of genomic regulatory elements in *Drosophila*. *Proceedings of the National Academy of Sciences*, *84*(24), pp.9123-9127.

Oldham, S. and Hafen, E., 2003. Insulin/IGF and target of rapamycin signaling: a TOR de force in growth control. *Trends in cell biology*, *13*(2), pp.79-85.

Oldham, S., Montagne, J., Radimerski, T., Thomas, G. and Hafen, E., 2000. Genetic and biochemical characterization of dTOR, the *Drosophila* homolog of the target of rapamycin. *Genes & development*, *14*(21), pp.2689-2694.

Oliner, J.D., Kinzler, K.W. and Vogelstein, B., 1993. In vivo cloning of PCR products in E. coli. *Nucleic acids research*, *21*(22), pp.5192-5197.

Olshansky, S.J. and Rattan, S.I., 2009. What determines longevity: metabolic rate or stability?. *Discovery Medicine*, *5*(28), pp.359-362.

Orr, W.C. and Sohal, R.S., 1994. Extension of life-span by overexpression of superoxide dismutase and catalase in *Drosophila melanogaster*. *Science*, *263*(5150), pp.1128-1130.

Osterwalder, T., Yoon, K.S., White, B.H. and Keshishian, H., 2001. A conditional tissue-specific transgene expression system using inducible GAL4. *Proceedings of the National Academy of Sciences*, *98*(22), pp.12596-12601.

Palandri, A., L'hôte, D., Cohen-Tannoudji, J., Tricoire, H. and Monnier, V., 2015. Frataxin inactivation leads to steroid deficiency in flies and human ovarian cells. *Human molecular genetics*, *24*(9), pp.2615-2626.

Pandey, U.B. and Nichols, C.D., 2011. Human disease models in *Drosophila melanogaster* and the role of the fly in therapeutic drug discovery. *Pharmacological reviews*, *63*(2), pp.411-436.

Parkes, T.L., Elia, A.J., Dickinson, D., Hilliker, A.J., Phillips, J.P. and Boulianne, G.L., 1998. Extension of *Drosophila* lifespan by overexpression of human SOD1 in motorneurons. *Nature genetics*, *19*(2), pp.171-174.

Partridge, L. and Fowler, K., 1992. Direct and correlated responses to selection on age at reproduction in *Drosophila melanogaster*. *Evolution*, *46*(1), pp.76-91.

Pawlikowska, L., Hu, D., Huntsman, S., Sung, A., Chu, C., Chen, J., Joyner, A.H., Schork, N.J., Hsueh, W.C., Reiner, A.P. and Psaty, B.M., 2009. Association of common genetic variation in the insulin/IGF1 signaling pathway with human longevity. *Aging cell*, *8*(4), pp.460-472.

Pearl, R., 1928. Experiments on longevity. *The Quarterly Review of Biology*, *3*(3), pp.391-407.

Perkins, L.A., Holderbaum, L., Tao, R., Hu, Y., Sopko, R., McCall, K., Yang-Zhou, D., Flockhart, I., Binari, R., Shim, H.S. and Miller, A., 2015. The transgenic RNAi project at Harvard Medical School: resources and validation. *Genetics*, *201*(3), pp.843-852.

Phipps, S.M., Berletch, J.B., Andrews, L.G. and Tollefsbol, T.O., 2007. Aging cell culture: methods and observations. *Biological Aging: Methods and Protocols*, pp.9-19.

Piccin, A., Salameh, A., Benna, C., Sandrelli, F., Mazzotta, G., Zordan, M., Rosato, E., Kyriacou, C.P. and Costa, R., 2001. Efficient and heritable functional knock-out of an adult phenotype in *Drosophila* using a GAL4-driven hairpin RNA incorporating a heterologous spacer. *Nucleic Acids Research*, *29*(12), pp.e55-e55.

Pilling, L.C., Atkins, J.L., Bowman, K., Jones, S.E., Tyrrell, J., Beaumont, R.N., Ruth, K.S., Tuke, M.A., Yaghootkar, H., Wood, A.R. and Freathy, R.M., 2016. Human longevity is influenced by many genetic variants: evidence from 75,000 UK Biobank participants. *Aging (Albany NY)*, *8*(3), p.547.

Piper, M.D. and Partridge, L., 2016. Protocols to study aging in *Drosophila*. *Drosophila: Methods and Protocols*, pp.291-302.

Piper, M.D. and Partridge, L., 2018. Drosophila as a model for ageing. Biochimica et Biophysica Acta (BBA)-Molecular Basis of Disease, 1864(9), pp.2707-2717.

Pitrez, P.R., Monteiro, L.M., Borgogno, O., Nissan, X., Mertens, J. and Ferreira, L., 2024. Cellular reprogramming as a tool to model human aging in a dish. Nature Communications, 15(1), p.1816.

Pitt, J.N. and Kaeberlein, M., 2015. Why is aging conserved and what can we do about it?. *PLoS biology*, *13*(4), p.e1002131.

Plyusnina, E.N., Shaposhnikov, M.V. and Moskalev, A.A., 2011. Increase of *Drosophila melanogaster* lifespan due to D-GADD45 overexpression in the nervous system. *Biogerontology*, *12*, pp.211-226.

Poirier, L., Shane, A., Zheng, J. and Seroude, L., 2008. Characterization of the *Drosophila* gene-switch system in aging studies: a cautionary tale. *Aging cell*, *7*(5), pp.758-770.

Ponton, F., Chapuis, M.P., Pernice, M., Sword, G.A. and Simpson, S.J., 2011. Evaluation of potential reference genes for reverse transcription-qPCR studies of physiological responses in *Drosophila melanogaster*. *Journal of insect physiology*, *57*(6), pp.840-850.

Potapov, V. and Ong, J.L., 2017. Examining sources of error in PCR by single-molecule sequencing. *PloS one*, *12*(1), p.e0169774.

Promislow, D.E., Tatar, M., Khazaeli, A.A. and Curtsinger, J.W., 1996. Age-specific patterns of genetic variance in *Drosophila melanogaster*. I. Mortality. *Genetics*, *143*(2), pp.839-848.

Puca, A.A., Daly, M.J., Brewster, S.J., Matise, T.C., Barrett, J., Shea-Drinkwater, M., Kang, S., Joyce, E., Nicoli, J., Benson, E. and Kunkel, L.M., 2001. A genome-wide scan for linkage to human exceptional longevity identifies a locus on chromosome 4. *Proceedings of the National Academy of Sciences*, *98*(18), pp.10505-10508.

Rai, M., Carter, S.M., Shefali, S.A., Mahmoudzadeh, N.H., Pepin, R. and Tennessen, J.M., 2022. The *Drosophila melanogaster* enzyme glycerol-3-phosphate dehydrogenase 1 is required for oogenesis, embryonic development, and amino acid homeostasis. *G3*, *12*(8), p.jkac115.

Raices, M., Maruyama, H., Dillin, A. and Karlseder, J., 2005. Uncoupling of longevity and telomere length in *C. elegans*. *PLoS genetics*, *1*(3), p.e30.

Rao, R.P., Yuan, C., Allegood, J.C., Rawat, S.S., Edwards, M.B., Wang, X., Merrill Jr, A.H., Acharya, U. and Acharya, J.K., 2007. Ceramide transfer protein function is essential for normal oxidative stress response and lifespan. *Proceedings of the National Academy of Sciences*, *104*(27), pp.11364-11369.

Rattan, S.I. (2005). Ageing Genes: Gerontogenes. In eLS, (Ed.). https://doi.org/10.1038/npg.els.0003862

Rawls, A.S., Schultz, S.A., Mitra, R.D. and Wolff, T., 2007. Bedraggled, a putative transporter, influences the tissue polarity complex during the R3/R4 fate decision in the *Drosophila* eye. *Genetics*, *177*(1), pp.313-328.

Ren, X., Sun, J., Housden, B.E., Hu, Y., Roesel, C., Lin, S., Liu, L.P., Yang, Z., Mao, D., Sun, L. and Wu, Q., 2013. Optimized gene editing technology for *Drosophila melanogaster* using germ line-specific Cas9. *Proceedings of the National Academy of Sciences*, *110*(47), pp.19012-19017.

Ren, Y. and Hughes, K.A., 2014. Vitellogenin family gene expression does not increase *Drosophila* lifespan or fecundity. *F1000Research*, *3*.

Rhine, R.J., Norton, G.W. and Wasser, S.K., 2000. Lifetime reproductive success, longevity, and reproductive life history of female yellow baboons (Papio cynocephalus) of Mikumi National Park, Tanzania. American Journal of Primatology: Official Journal of the American Society of Primatologists, 51(4), pp.229-241.

Rhodenizer, D., Martin, I., Bhandari, P., Pletcher, S.D. and Grotewiel, M., 2008. Genetic and environmental factors impact age-related impairment of negative geotaxis in *Drosophila* by altering age-dependent climbing speed. *Experimental gerontology*, *43*(8), pp.739-748.

Ricklefs, R.E. and Cadena, C.D., 2007. Lifespan is unrelated to investment in reproduction in populations of mammals and birds in captivity. Ecology letters, 10(10), pp.867-872.

Riddle, D.L., Swanson, M.M. and Albert, P.S., 1981. Interacting genes in nematode dauer larva formation. *Nature*, *290*(5808), pp.668-671.

Robine, J.M. and Vaupel, J.W., 2002. Emergence of supercentenarians in low-mortality countries. *North American Actuarial Journal*, *6*(3), pp.54-63.

Robinson, M.D., McCarthy, D.J. and Smyth, G.K., 2010. edgeR: a Bioconductor package for differential expression analysis of digital gene expression data. *bioinformatics*, *26*(1), pp.139-140.

Roede, J.R., Uppal, K., Liang, Y., Promislow, D.E., Wachtman, L.M. and Jones, D.P., 2013. Characterization of plasma thiol redox potential in a common marmoset model of aging. Redox Biology, 1(1), pp.387-393.

Rogina, B., Reenan, R.A., Nilsen, S.P. and Helfand, S.L., 2000. Extended life-span conferred by cotransporter gene mutations in *Drosophila*. *Science*, *290*(5499), pp.2137-2140.

Rolff, J., 2002. Bateman's principle and immunity. Proceedings of the Royal Society of London. Series B: Biological Sciences, 269(1493), pp.867-872.

Rose, M.R. and Charlesworth, B., 1981. Genetics of life history in *Drosophila melanogaster*. II. Exploratory selection experiments. *Genetics*, *97*(1), pp.187-196.

Rose, M.R., 1984. Laboratory evolution of postponed senescence in *Drosophila melanogaster*. Evolution, pp.1004-1010.

Rubin, G.M. and Spradling, A.C., 1982. Genetic transformation of *Drosophila* with transposable element vectors. *Science*, *218*(4570), pp.348-353.

Rubner, M., 2012. *The laws of energy consumption in nutrition*. Elsevier.

Ryder, E. and Russell, S., 2003. Transposable elements as tools for genomics and genetics in *Drosophila*. *Briefings in Functional Genomics*, *2*(1), pp.57-71.

Sadagurski, M., Landeryou, T., Blandino-Rosano, M., Cady, G., Elghazi, L., Meister, D., See, L., Bartke, A., Bernal-Mizrachi, E. and Miller, R.A., 2014. Long-lived crowded-litter mice exhibit lasting effects on insulin sensitivity and energy homeostasis. American Journal of Physiology-Endocrinology and Metabolism, 306(11), pp.E1305-E1314.

Sarup, P., Sørensen, P. and Loeschcke, V., 2014. The long-term effects of a life-prolonging heat treatment on the *Drosophila melanogaster* transcriptome suggest that heat shock proteins extend lifespan. *Experimental gerontology*, *50*, pp.34-39.

Schächter, F., Faure-Delanef, L., Guénot, F., Rouger, H., Froguel, P., Lesueur-Ginot, L. and Cohen, D., 1994. Genetic associations with human longevity at the APOE and ACE loci. *Nature genetics*, *6*(1), pp.29-32.

Scharf, S.J., Horn, G.T. and Erlich, H.A., 1986. Direct cloning and sequence analysis of enzymatically amplified genomic sequences. *Science*, *233*(4768), pp.1076-1078.

Schena, M., Shalon, D., Davis, R.W. and Brown, P.O., 1995. Quantitative monitoring of gene expression patterns with a complementary DNA microarray. *Science*, *270*(5235), pp.467-470.

Schmelzle, T. and Hall, M.N., 2000. TOR, a central controller of cell growth. *Cell*, *103*(2), pp.253-262.

Scialo, F., Sriram, A., Stefanatos, R. and Sanz, A., 2016. Practical recommendations for the use of the GeneSwitch Gal4 system to knock-down genes in *Drosophila melanogaster*. *Plos one*, *11*(8), p.e0161817.

Selman, C., Nussey, D.H. and Monaghan, P., 2013. Ageing: it'sa dog's life. Current Biology, 23(10), pp.R451-R453.

Seroude, L., 2002. Differential gene expression and aging. *The Scientific World Journal*, *2*(1), pp.618-631.

Shattuck, M.R. and Williams, S.A., 2010. Arboreality has allowed for the evolution of increased longevity in mammals. Proceedings of the National Academy of Sciences, 107(10), pp.4635-4639.

Shen, B., Zhang, J., Wu, H., Wang, J., Ma, K., Li, Z., Zhang, X., Zhang, P. and Huang, X., 2013. Generation of gene-modified mice via Cas9/RNA-mediated gene targeting. *Cell research*, *23*(5), pp.720-723.

Shen, J., Curtis, C., Tavaré, S. and Tower, J., 2009. A screen of apoptosis and senescence regulatory genes for life span effects when over-expressed in *Drosophila*. *Aging*, *1*(2), p.191.

Shenoi, V.N., Ali, S.Z. and Prasad, N.G., 2016. Evolution of increased adult longevity in Drosophila melanogaster populations selected for adaptation to larval crowding. Journal of Evolutionary Biology, 29(2), pp.407-417.

Shindyapina, A.V., Cho, Y., Kaya, A., Tyshkovskiy, A., Castro, J.P., Deik, A., Gordevicius, J., Poganik, J.R., Clish, C.B., Horvath, S. and Peshkin, L., 2022. Rapamycin treatment during development extends life span and health span of male mice and Daphnia magna. Science Advances, 8(37), p.eabo5482.

Shuldiner, A.R., Scott, L.A. and Roth, J., 1990. PCR-induced (ligase-free) subcloning: a rapid reliable method to subclone polymerase chain reaction (PCR) products. *Nucleic acids research*, *18*(7), p.1920.

Siegal, M.L. and Hartl, D.L., 1996. Transgene coplacement and high efficiency site-specific recombination with the Cre/loxP system in *Drosophila*. *Genetics*, *144*(2), pp.715-726.

Simms, D., Cizdziel, P.E. and Chomczynski, P., 1993. TRIzol: A new reagent for optimal single-step isolation of RNA. *Focus*, *15*(4), pp.532-535.

Simon, A.F., Liang, D.T. and Krantz, D.E., 2006. Differential decline in behavioral performance of *Drosophila melanogaster* with age. *Mechanisms of ageing and development*, *127*(7), pp.647-651.

Slack, C., Alic, N., Foley, A., Cabecinha, M., Hoddinott, M.P. and Partridge, L., 2015. The Ras-Erk-ETS-signaling pathway is a drug target for longevity. *Cell*, *162*(1), pp.72-83.

Smith, C., Day, P.J. and Walker, M.R., 1993. Generation of cohesive ends on PCR products by UDG-mediated excision of dU, and application for cloning into restriction digest-linearized vectors. *Genome Research*, *2*(4), pp.328-332.

Sohal, R.S. and Weindruch, R., 1996. Oxidative stress, caloric restriction, and aging. *Science*, *273*(5271), pp.59-63.

Sørensen, J.G., Nielsen, M.M. and Loeschcke, V., 2007. Gene expression profile analysis of *Drosophila melanogaster* selected for resistance to environmental stressors. *Journal of evolutionary biology*, *20*(4), pp.1624-1636.

St Johnston, D., 2002. The art and design of genetic screens: *Drosophila melanogaster*. *Nature reviews genetics*, *3*(3), pp.176-188.

Stebbins, M.J. and Yin, J.C., 2001. Adaptable doxycycline-regulated gene expression systems for *Drosophila*. *Gene*, *270*(1-2), pp.103-111.

Stern, D.L. and Orgogozo, V., 2008. The loci of evolution: how predictable is genetic evolution?. *Evolution*, *62*(9), pp.2155-2177.

Stevanovic, A.L., Arnold, P.A. and Johnson, K.N., 2015. Wolbachia-mediated antiviral protection in Drosophila larvae and adults following oral infection. *Applied and environmental microbiology*, *81*(23), pp.8215-8223.

Stoeger, T., Grant, R.A., McQuattie-Pimentel, A.C., Anekalla, K.R., Liu, S.S., Tejedor-Navarro, H., Singer, B.D., Abdala-Valencia, H., Schwake, M., Tetreault, M.P. and Perlman, H., 2022. Aging is associated with a systemic length-associated transcriptome imbalance. Nature Aging, 2(12), pp.1191-1206.

Struhl, G., 1985. Near-reciprocal phenotypes caused by inactivation or indiscriminate expression of the *Drosophila* segmentation gene ftz. *Nature*, *318*(6047), pp.677-680.

Subramanian, A., Tamayo, P., Mootha, V.K., Mukherjee, S., Ebert, B.L., Gillette, M.A., Paulovich, A., Pomeroy, S.L., Golub, T.R., Lander, E.S. and Mesirov, J.P., 2005. Gene set enrichment analysis: a knowledge-based approach for interpreting genome-wide expression profiles. *Proceedings of the National Academy of Sciences*, *102*(43), pp.15545-15550.

Sud, A., Kinnersley, B. and Houlston, R.S., 2017. Genome-wide association studies of cancer: current insights and future perspectives. *Nature Reviews Cancer*, *17*(11), pp.692-704.

Sun, J., Folk, D., Bradley, T.J. and Tower, J., 2002. Induced overexpression of mitochondrial Mn-superoxide dismutase extends the life span of adult *Drosophila melanogaster*. *Genetics*, *161*(2), pp.661-672.

T Das, A., Tenenbaum, L. and Berkhout, B., 2016. Tet-on systems for doxycycline-inducible gene expression. *Current gene therapy*, *16*(3), pp.156-167.

Talbert, M.E., Barnett, B., Hoff, R., Amella, M., Kuczynski, K., Lavington, E., Koury, S., Brud, E. and Eanes, W.F., 2015. Genetic perturbation of key central metabolic genes extends lifespan in *Drosophila* and affects response to dietary restriction. *Proceedings of the Royal Society B: Biological Sciences*, *282*(1815), p.20151646.

Tam, V., Patel, N., Turcotte, M., Bossé, Y., Paré, G. and Meyre, D., 2019. Benefits and limitations of genome-wide association studies. *Nature Reviews Genetics*, *20*(8), pp.467-484.

Taormina, G., Ferrante, F., Vieni, S., Grassi, N., Russo, A. and Mirisola, M.G., 2019. Longevity: lesson from model organisms. *Genes*, *10*(7), p.518.

Tatar, M., 2004. The neuroendocrine regulation of Drosophila aging. Experimental Gerontology, 39(11-12), pp.1745-1750.

Tatar, M., Kopelman, A., Epstein, D., Tu, M.P., Yin, C.M. and Garofalo, R., 2001. A mutant *Drosophila* insulin receptor homolog that extends life-span and impairs neuroendocrine function. *Science*, *292*(5514), pp.107-110.

Thibault, S.T., Singer, M.A., Miyazaki, W.Y., Milash, B., Dompe, N.A., Singh, C.M., Buchholz, R., Demsky, M., Fawcett, R., Francis-Lang, H.L. and Ryner, L., 2004. A complementary transposon tool kit for *Drosophila melanogaster* using P and piggyBac. *Nature genetics*, *36*(3), pp.283-287.

Thomas, A., Lee, P.J., Dalton, J.E., Nomie, K.J., Stoica, L., Costa-Mattioli, M., Chang, P., Nuzhdin, S., Arbeitman, M.N. and Dierick, H.A., 2012. A versatile method for cell-specific profiling of translated mRNAs in *Drosophila*. *PloS one*, *7*(7), p.e40276.

Thorpe, H.M. and Smith, M.C., 1998. In vitro site-specific integration of bacteriophage DNA catalyzed by a recombinase of the resolvase/invertase family. *Proceedings of the National Academy of Sciences*, *95*(10), pp.5505-5510.

Toivonen, J.M., Walker, G.A., Martinez-Diaz, P., Bjedov, I., Driege, Y., Jacobs, H.T., Gems, D. and Partridge, L., 2007. No influence of *Indy* on lifespan in *Drosophila* after correction for genetic and cytoplasmic background effects. *PLoS genetics*, *3*(6), p.e95.

Valdes, A.M., Glass, D. and Spector, T.D., 2013. Omics technologies and the study of human ageing. *Nature Reviews Genetics*, *14*(9), pp.601-607.

van den Berg, N., Rodríguez-Girondo, M., van Dijk, I.K., Mourits, R.J., Mandemakers, K., Janssens, A.A., Beekman, M., Smith, K.R. and Slagboom, P.E., 2019. Longevity defined as top 10% survivors and beyond is transmitted as a quantitative genetic trait. *Nature communications*, *10*(1), p.35.

van Duin, L., Krautz, R., Rennie, S. and Andersson, R., 2023. Transcription factor expression is the main determinant of variability in gene co-activity. Molecular Systems Biology, 19(7), p.e11392.

Van Voorhies, W.A. and Ward, S., 1999. Genetic and environmental conditions that increase longevity in Caenorhabditis elegans decrease metabolic rate. *Proceedings of the National Academy of Sciences*, *96*(20), pp.11399-11403.

Vanhooren, V. and Libert, C., 2013. The mouse as a model organism in aging research: usefulness, pitfalls and possibilities. *Ageing research reviews*, *12*(1), pp.8-21.

Vasudevan, S., Tong, Y. and Steitz, J.A., 2007. Switching from repression to activation: microRNAs can up-regulate translation. *Science*, *318*(5858), pp.1931-1934.

Vellai, T., Takacs-Vellai, K., Zhang, Y., Kovacs, A.L., Orosz, L. and Müller, F., 2003. Influence of TOR kinase on lifespan in *C. elegans*. *Nature*, *426*(6967), pp.620-620.

Venken, K.J. and Bellen, H.J., 2005. Emerging technologies for gene manipulation in *Drosophila melanogaster*. *Nature Reviews Genetics*, *6*(3), pp.167-178.

Visscher, P.M., Brown, M.A., McCarthy, M.I. and Yang, J., 2012. Five years of GWAS discovery. *The American Journal of Human Genetics*, *90*(1), pp.7-24.

Vrailas-Mortimer, A., del Rivero, T., Mukherjee, S., Nag, S., Gaitanidis, A., Kadas, D., Consoulas, C., Duttaroy, A. and Sanyal, S., 2011. A muscle-specific p38 MAPK/Mef2/MnSOD pathway regulates stress, motor function, and life span in *Drosophila*. *Developmental cell*, *21*(4), pp.783-795.

Walker, G.A., Walker, D.W. and Lithgow, G.J., 1998. Genes That Determine Both Thermotolerance and Rate of Aging in Caenorhabditis elegans a. *Annals of the New York Academy of Sciences*, *851*(1), pp.444-449.

Wang, H.D., Kazemi-Esfarjani, P. and Benzer, S., 2004. Multiple-stress analysis for isolation of *Drosophila* longevity genes. *Proceedings of the National Academy of Sciences*, *101*(34), pp.12610-12615.

Wang, Y., O'Malley Jr, B.W., Tsai, S.Y. and O'Malley, B.W., 1994. A regulatory system for use in gene transfer. *Proceedings of the National Academy of Sciences*, *91*(17), pp.8180-8184.

Wang, Y., Zhou, Y. and Graves, D.T., 2014. FOXO transcription factors: their clinical significance and regulation. *BioMed research international*, *2014*(1), p.925350.

Wang, Z., Gerstein, M. and Snyder, M., 2009. RNA-Seq: a revolutionary tool for transcriptomics. *Nature reviews genetics*, *10*(1), pp.57-63.

Waskar, M., Landis, G.N., Shen, J., Curtis, C., Tozer, K., Abdueva, D., Skvortsov, D., Tavaré, S. and Tower, J., 2009. *Drosophila melanogaster* p53 has developmental stage-specific and sex-specific effects on adult life span indicative of sexual antagonistic pleiotropy. *Aging (Albany NY)*, *1*(11), p.903.

Wat, L.W., Chao, C., Bartlett, R., Buchanan, J.L., Millington, J.W., Chih, H.J., Chowdhury, Z.S., Biswas, P., Huang, V., Shin, L.J. and Wang, L.C., 2020. A role for triglyceride lipase brummer in the regulation of sex differences in *Drosophila* fat storage and breakdown. *PLoS biology*, *18*(1), p.e3000595.

Watson, J.F. and García-Nafría, J., 2019. In vivo DNA assembly using common laboratory bacteria: A re-emerging tool to simplify molecular cloning. *Journal of Biological Chemistry*, *294*(42), pp.15271-15281.

Webster, G.C. and Webster, S.L., 1979. Decreased protein synthesis by microsomes from aging *Drosophila melanogaster*. *Experimental gerontology*, *14*(6), pp.343-348.

Weismann, A., 1889. *Essays Upon Heredity and Kindred Biological Problems: Authorized Translation* (Vol. 1). Clarendon Press.

Westendorp, R.G. and Kirkwood, T.B., 1998. Human longevity at the cost of reproductive success. Nature, 396(6713), pp.743-746.

Wheelan, S.J., Boguski, M.S., Duret, L. and Makałowski, W., 1999. Human and nematode orthologs—lessons from the analysis of 1800 human genes and the proteome of Caenorhabditis elegans. *Gene*, *238*(1), pp.163-170.

Wheeler, J.C., Bieschke, E.T. and Tower, J., 1995. Muscle-specific expression of *Drosophila Hsp*70 in response to aging and oxidative stress. *Proceedings of the National Academy of Sciences*, *92*(22), pp.10408-10412.

Whittemore, K., Vera, E., Martínez-Nevado, E., Sanpera, C. and Blasco, M.A., 2019. Telomere shortening rate predicts species life span. Proceedings of the National Academy of Sciences, 116(30), pp.15122-15127.

Willcox, B.J., Willcox, D.C. and Ferrucci, L., 2008. Secrets of healthy aging and longevity from exceptional survivors around the globe: lessons from octogenarians to supercentenarians. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, *63*(11), pp.1181-1185.

Williams, G.C., 2001. Pleiotropy, Natural Selection, and the Evolution of Senescence: Evolution 11, 398-411 (1957). *Science of Aging Knowledge Environment*, *2001*(1), pp.cp13-cp13.

Wilson, R.H., Lai, C.Q., Lyman, R.F. and Mackay, T.F., 2013. Genomic response to selection for postponed senescence in *Drosophila*. *Mechanisms of ageing and development*, *134*(3-4), pp.79-88.

Wisidagama, D.R., Thomas, S.M., Lam, G. and Thummel, C.S., 2019. Functional analysis of Aarf domain-containing kinase 1 in *Drosophila melanogaster*. *Developmental Dynamics*, *248*(9), pp.762-770.

Wordsworth, J., O'Keefe, H., Clark, P. and Shanley, D., 2022. The damage-independent evolution of ageing by selective destruction. *Mechanisms of Ageing and Development*, *207*, p.111709.

Wright, K.M., Rand, K.A., Kermany, A., Noto, K., Curtis, D., Garrigan, D., Slinkov, D., Dorfman, I., Granka, J.M., Byrnes, J. and Myres, N., 2019. A prospective analysis of genetic variants associated with human lifespan. *G3: Genes, Genomes, Genetics*, *9*(9), pp.2863-2878.

Wu, L. and Belasco, J.G., 2008. Let me count the ways: mechanisms of gene regulation by miRNAs and siRNAs. *Molecular cell*, *29*(1), pp.1-7.

Xu, J., Ren, X., Sun, J., Wang, X., Qiao, H.H., Xu, B.W., Liu, L.P. and Ni, J.Q., 2015. A toolkit of CRISPR-based genome editing systems in *Drosophila*. *Journal of Genetics and Genomics*, *42*(4), pp.141-149.

Yamada, R., Deshpande, S.A., Keebaugh, E.S., Ehrlich, M.R., Soto Obando, A. and Ja, W.W., 2017. Mifepristone reduces food palatability and affects *Drosophila* feeding and lifespan. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*, *72*(2), pp.173-180.

Yang, J.H., Hayano, M., Griffin, P.T., Amorim, J.A., Bonkowski, M.S., Apostolides, J.K., Salfati, E.L., Blanchette, M., Munding, E.M., Bhakta, M. and Chew, Y.C., 2023. Loss of epigenetic information as a cause of mammalian aging. Cell, 186(2), pp.305-326.

Yoon, W., Hwang, S.H., Lee, S.H. and Chung, J., 2019. *Drosophila ADCK*1 is critical for maintaining mitochondrial structures and functions in the muscle. *PLoS genetics*, *15*(5), p.e1008184.

Yuan, R., Musters, C.J.M., Zhu, Y., Evans, T.R., Sun, Y., Chesler, E.J., Peters, L.L., Harrison, D.E. and Bartke, A., 2020. Genetic differences and longevity-related phenotypes influence lifespan and lifespan variation in a sex-specific manner in mice. Aging Cell, 19(11), p.e13263.

Zaborowski, A.B. and Walther, D., 2020. Determinants of correlated expression of transcription factors and their target genes. Nucleic acids research, 48(20), pp.11347-11369.

Zahn, J.M., Sonu, R., Vogel, H., Crane, E., Mazan-Mamczarz, K., Rabkin, R., Davis, R.W., Becker, K.G., Owen, A.B. and Kim, S.K., 2006. Transcriptional profiling of aging in human muscle reveals a common aging signature. *PLoS genetics*, *2*(7), p.e115.

Zajitschek, F. and Connallon, T., 2018. Antagonistic pleiotropy in species with separate sexes, and the maintenance of genetic variation in life-history traits and fitness. *Evolution*, *72*(6), pp.1306-1316.

Zappia, M.P., Damschroder, D., Westacott, A., Wessells, R.J. and Frolov, M.V., 2024. The RU486-dependent activation of the GeneSwitch system in adult muscles leads to severe adverse effects in *Drosophila*. *G3: Genes, Genomes, Genetics*, *14*(5), p.jkae039.

Zeng, Y., Nie, C., Min, J., Chen, H., Liu, X., Ye, R., Chen, Z., Bai, C., Xie, E., Yin, Z. and Lv, Y., 2018. Sex differences in genetic associations with longevity. JAMA network open, 1(4), pp.e181670-e181670.

Zenin, A., Tsepilov, Y., Sharapov, S., Getmantsev, E., Menshikov, L.I., Fedichev, P.O. and Aulchenko, Y., 2019. Identification of 12 genetic loci associated with human healt*Hsp*an. *Communications biology*, *2*(1), pp.1-11.

Zhang, J., Wang, S. and Liu, B., 2023. New insights into the genetics and epigenetics of aging plasticity. Genes, 14(2), p.329.

Zhang, S., Li, F., Zhou, T., Wang, G. and Li, Z., 2020. Caenorhabditis elegans as a useful model for studying aging mutations. Frontiers in endocrinology, 11, p.554994.

Zhang, Y., Werling, U. and Edelmann, W., 2012. SLiCE: a novel bacterial cell extract-based DNA cloning method. *Nucleic acids research*, *40*(8), pp.e55-e55.

Zhou, L., Schnitzler, A., Agapite, J., Schwartz, L.M., Steller, H. and Nambu, J.R., 1997. Cooperative functions of the reaper and head involution defective genes in the programmed cell death of *Drosophila* central nervous system midline cells. *Proceedings of the National Academy of Sciences*, *94*(10), pp.5131-5136.

Zhu, M. and Zhao, S., 2007. Candidate gene identification approach: progress and challenges. *International journal of biological sciences*, *3*(7), p.420.

Ziehm, M., Piper, M.D. and Thornton, J.M., 2013. Analysing variation in *Drosophila* aging across independent experimental studies: a meta-analysis of survival data. *Aging Cell*, *12*(5), pp.917-922.

Zimmermann, A., Hofer, S., Pendl, T., Kainz, K., Madeo, F. and Carmona-Gutierrez, D., 2018. Yeast as a tool to identify anti-aging compounds. *FEMS yeast research*, *18*(6), p.foy020.

Zuker, C.S., Mismer, D., Hardy, R. and Rubin, G.M., 1988. Ectopic expression of a minor *Drosophila* opsin in the major photoreceptor cell class: distinguishing the role of primary receptor and cellular context. *Cell*, *53*(3), pp.475-482.

Zwaan, B., Bijlsma, R. and Hoekstra, R.F., 1995. Direct selection on life span in *Drosophila melanogaster*. *Evolution*, *49*(4), pp.649-659.