Supplementary material:

Fig S1. Verification of the *Idgf3^{L1}* mutant. *Idgf3* expression was measured by qRT-PCR. Lower expression levels compared to white control (*w^{1118}*) were detected in *dac^{7}* (*w; dac^{7}/+)* and *Idgf3^{L1}* (*w; Idgf3^{L1}*/+) heterozygotes, whereas no expression was detected in transheterozygous mutant flies (*w; dac^{7}*/*Idgf3^{L1}*). The *dac^{7}* is deletion mutant was generated by Mardon (Mardon et al., 1994), which covers the end of the *dachshund* gene and part of the *Idgf 1-3* cluster. Data were compared using a t-test to control expression, *p < 0.05, ***p < 0.001, error bars represents SEM from four independent biological replicates.

Fig. S2. *Idgf3^{L1}* adult flies show wing defects. ~52% of adult flies homozygous for the *Idgf3^{L1}* mutation exhibit partially missing wing vein 5 (**A**) at least in one wing. **B:** The phenotype is more common to observe in females (f) than in males (m). 100 flies/sex were analyzed. Error bars represents SEM. Data were analyzed using a t-test, *p < 0.05.

Fig. S3. *Idgf3^{L1}* females exhibit lower fecundity. 8 females/genotype (*w; Idgf3^{L1}* – homozygotes for *Idgf3* mutation and *w; Idgf3^{L1}*/+ - heterozygotes for *Idgf3* mutation) were crossed with 3 *w^{1118}* males in one vial. After mating females were transferred to new vial with fly food for 48 hours. The number of progeny was counted subsequently. Data were compared using a t-test, ***p < 0.001, error bars represents SEM from four replicates.

Fig. S4. PCA of the transcriptome data: a principal component analysis is shown for the *Idgf3* mutants and controls with and without infection with EPNs (*Heterorhabditis/Photorhabdus*).

Fig. S5. IDGF3 mutant lacked the fibrous clot matrix. Clot preparations were made as described before (Lindgren et al., 2008), caught on glass coverslip and shown in phase contrast (left) and after labeling with PNA-FITC (right). In control (**A**) PNA strongly stain hemocytes (white arrows) and clot fibers (yellow arrow). In *Idgf3^{L1}* mutant (**B**) the fibrous clot matrix is not detectable after PNA staining as well as in phase contrast exposures, only hemocytes (white arrows) are labeled with PNA. Ectopic expression of IDGF3 with the *hml* driver (**C**) restores formation of clot fibers (yellow arrows) in the *Idgf3^{L1}* mutant background. The scale bar corresponds to 50 μm.

Fig. S6. IDGF3 overexpression leads to thicker clots. Ubiquitous inducible overexpression of IDGF3 (with a progesterone inducible *Act* driver) leads to more extensive clot formation visualized in clot preparations (**B**, oEx Idgf3) as compared to wild type (l**A**, non-induced driver control). Note the stronger PNA signal (quantified in **C**) and the formation of foci of clot formation in the preparations from overexpression larvae (yellow arrow). The scale bar corresponds to 50 µm. **C**: The strength of green fluorescence from PNA-FITC labeled clot preparations was measured with ImageJ. Data were compared using a t-test, *p < 0.05, error bars represents SEM from three replicates.

Fig. S7. Wounds from *Idgf3* mutants exhibit stronger melanization. Feeding stage 3rd instar larvae were wounded with tungsten needle according to (Burra et al., 2013). The wound site was examined after 1h. *Idgf3* mutants (**C**) show more extensive melanization similar to other mutants with bleeding defects (Goto et al., 2003) compared to control wild-type larvae w^{1118} (**A**) and *Canton S* (**B**). **D**: Quantification of melanin at the wound site. Data were analyzed using one-way ANOVA and Tukey´s test, *p < 0.05, error bars represent SEM from five measurements.

Table S1. Gene list of significantly regulated probes ($|\log_2 FC| > 1$, $q < 0.05$), comparison of the response to EPN infection in the control genotype and *Idgf3* mutants.

Table S2. GO term enrichment analysis for significantly regulated probes ($|\log_2 FC| > 1$, $q < 0.05$) after EPN infection, in three groups **A:** genes significantly changed only in infected control, **B:** genes shared in infected control and infected *Idgf3* mutant, **C:** genes significantly regulated only in *Idgf3* mutant.

Table S3. GSEA of KEGG pathways. Significantly enriched pathways for nematode response in control (ctri x ctr) and mutant (m3i x m3).

Table S4. Enrichment analysis of KEGG pathways using DAVID. Significantly enriched pathways for nematode response in control (ctri x ctr) and mutant (m3i x m3).

Table S5. List of primers used in real-time RT-PCR.

Table S6. Genotypes and treatments of the lines used for the array study.

References:

Burra, S., Wang, Y., Brock, A. R. and Galko, M. J. (2013). Using Drosophila larvae to study epidermal wound closure and inflammation. ***Methods Mol Biol*** **1037, 449-61.**

Goto, A., Kadowaki, T. and Kitagawa, Y. (2003). Drosophila hemolectin gene is expressed in embryonic and larval hemocytes and its knock down causes bleeding defects(1). ***Dev Biol*** **264, 582-91.**

Lindgren, M., Riazi, R., Lesch, C., Wilhelmsson, C., Theopold, U. and Dushay, M. S. (2008). Fondue and transglutaminase in the Drosophila larval clot. ***J Insect Physiol*** **54, 586-92.**

Mardon, G., Solomon, N. M. and Rubin, G. M. (1994). dachshund encodes a nuclear protein required for normal eye and leg development in Drosophila. ***Development*** **120, 3473-86.**

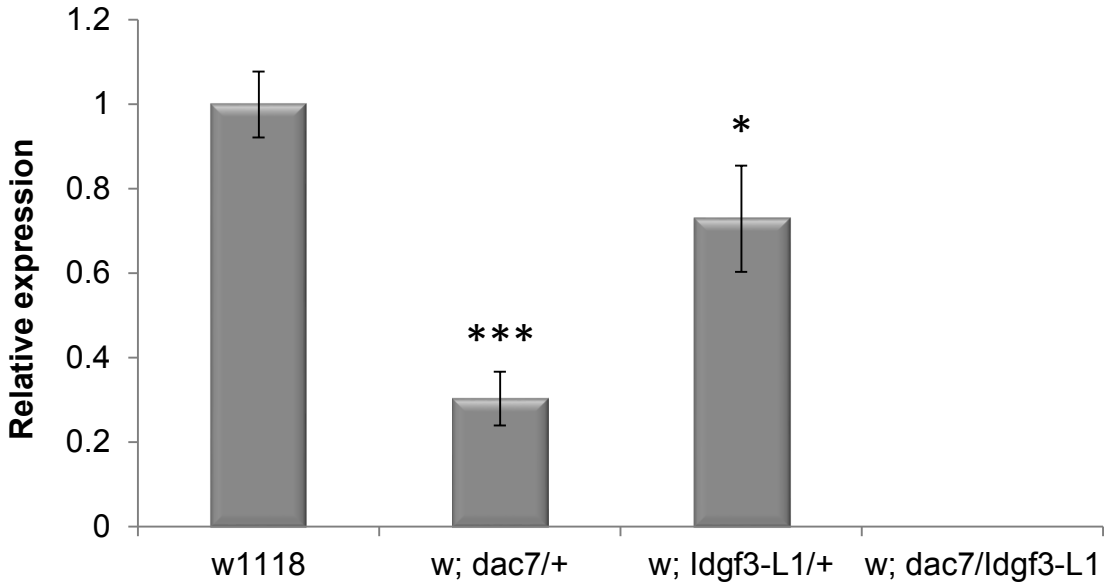

1.2
1
0.8
0.6
0.4
0.2
0
Relative expression
***
*
w1118
w; dac7/+
w; ldgf3-L1/+
w; dac7/ldgf3-L1

Figure S1

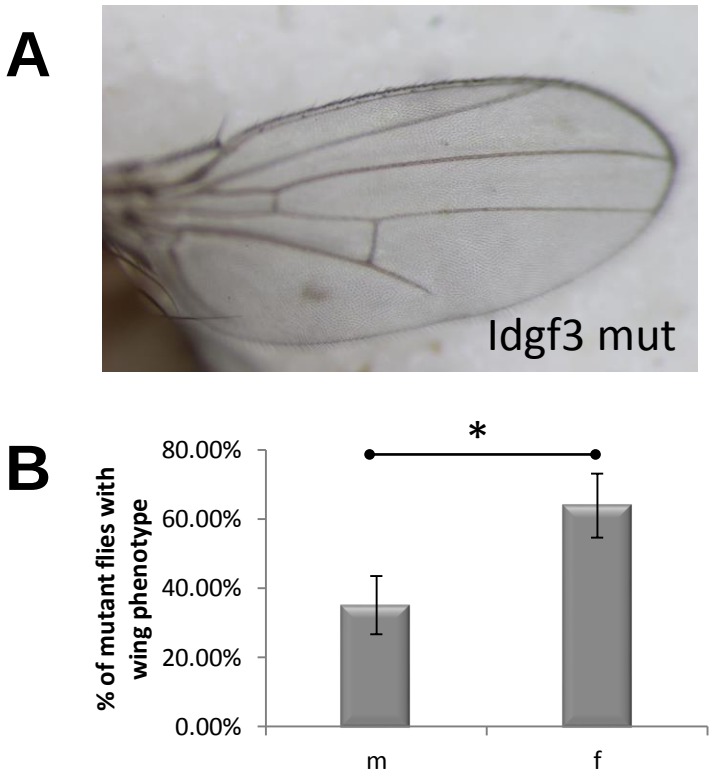

A
Idgf3 mut
B
*
80.00%
60.00%
40.00%
20.00%
0.00%
% of mutant flies with wing phenotype
m
f

Figure S2

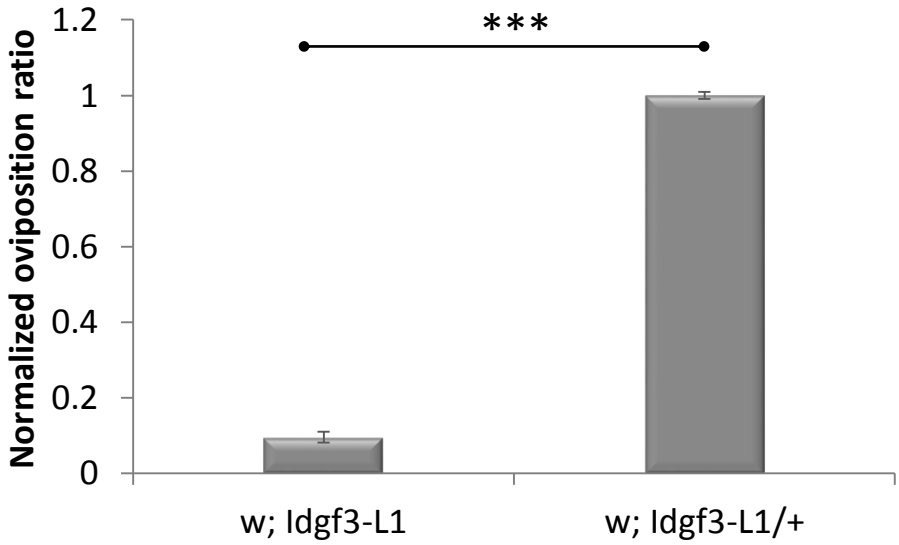

Normalized oviposition ratio
1.2
1
0.8
0.6
0.4
0.2
0
***
w; Idgf3-L1
w; Idgf3-L1/+

Figure S3

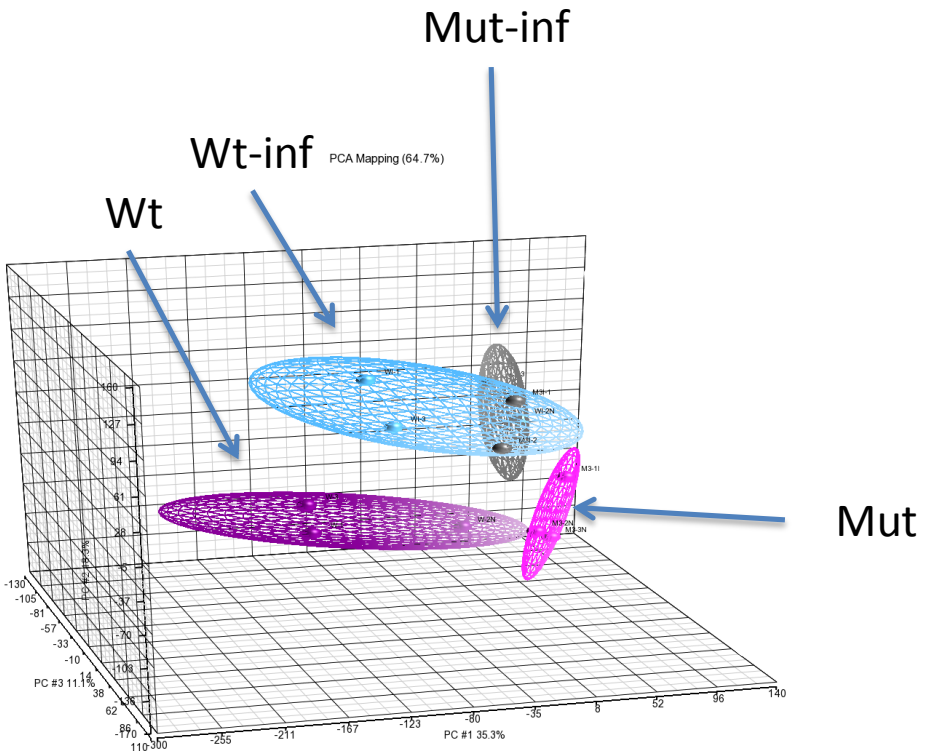


Figure S4

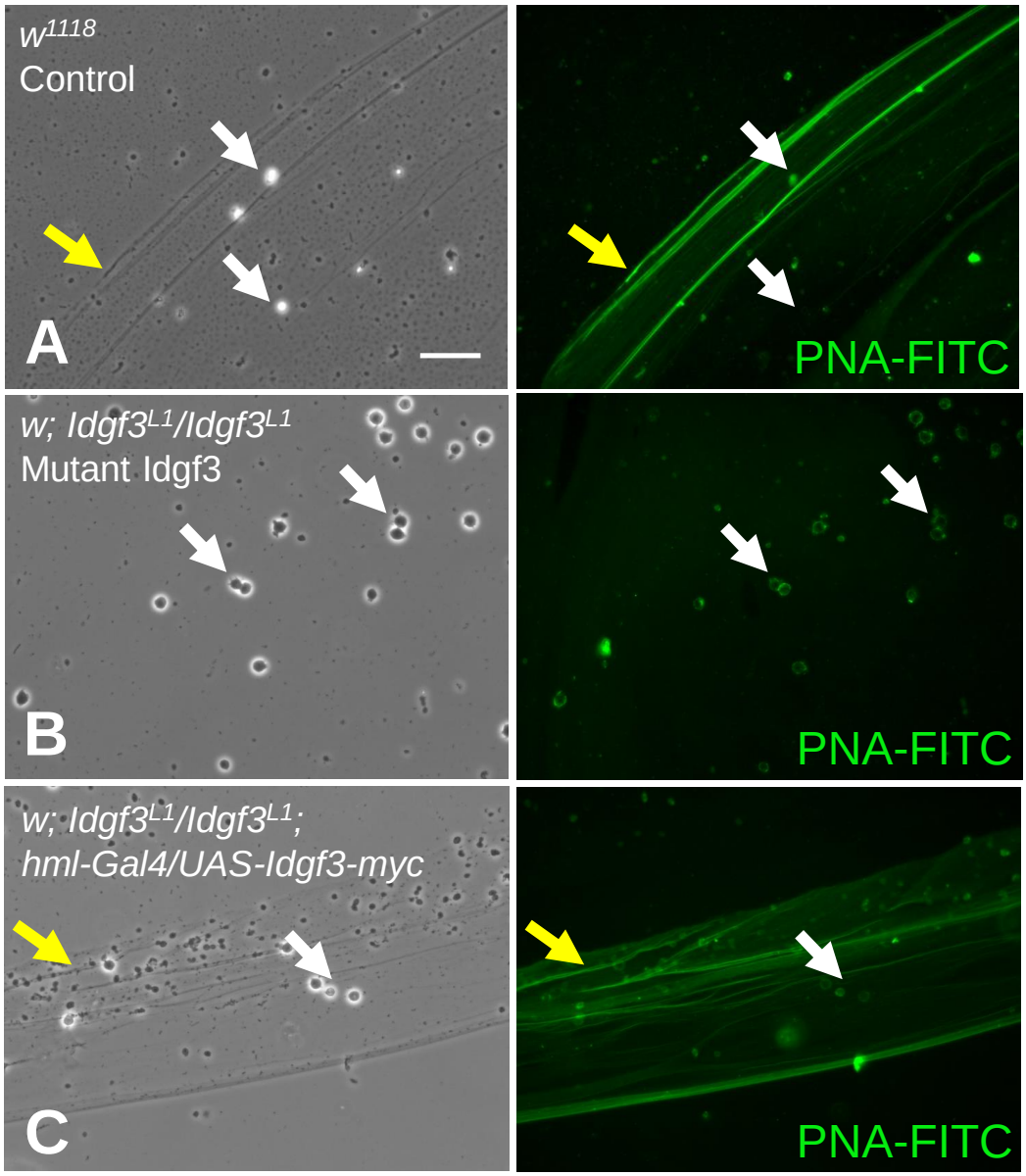
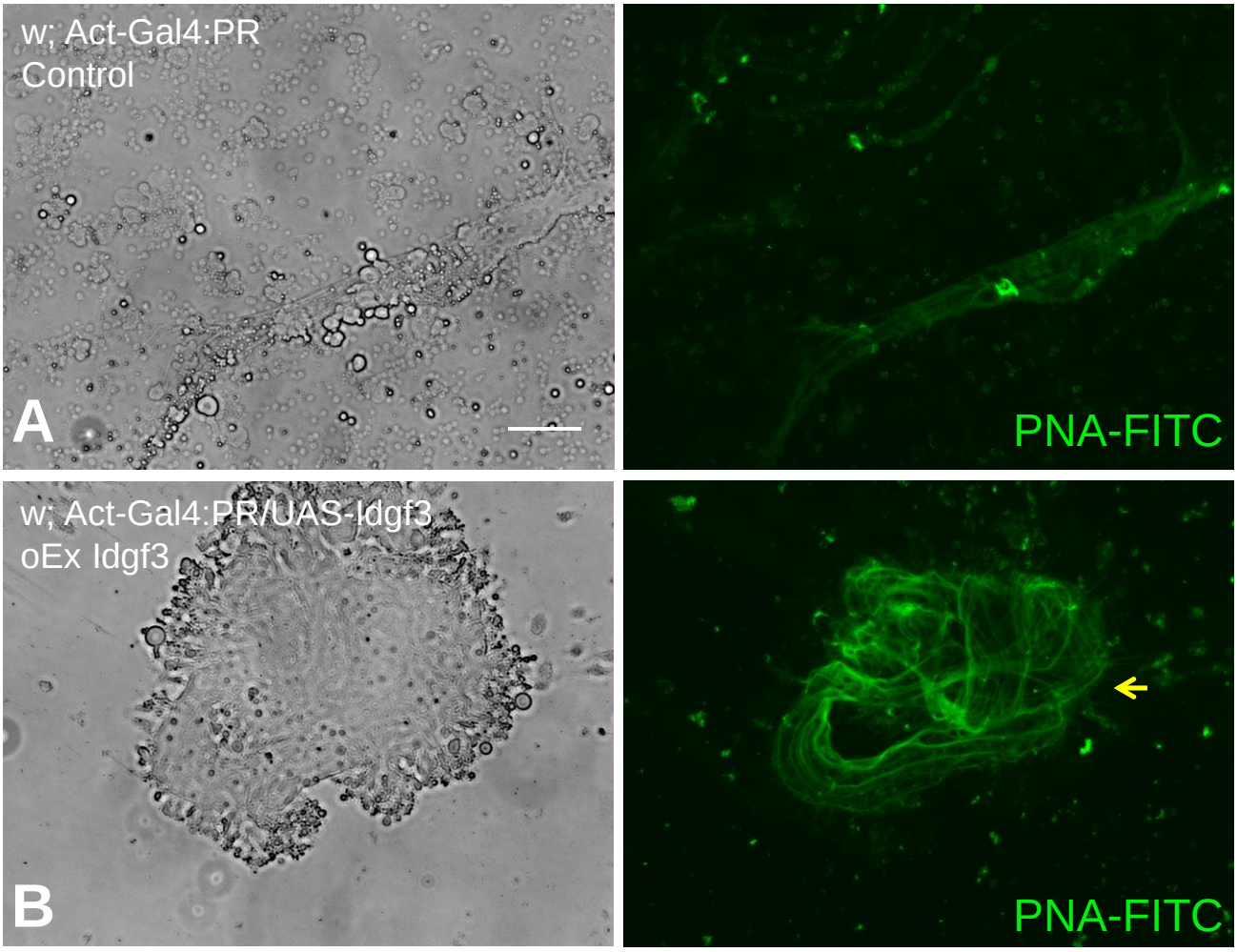

w1118
Control
A
PNA-FITC
w; Idgf3L1/Idgf3L1
Mutant Idgf3
B
PNA-FITC
w; Idgf3L1/Idgf3L1;
hml-Gal4/UAS-Idgf3-myc
C
PNA-FITC

Figure S5


w; Act-Gal4:PR
Control
A
PNA-FITC
w; Act-Gal4:PR/UAS-Idgf3
oEx Idgf3
B
PNA-FITC

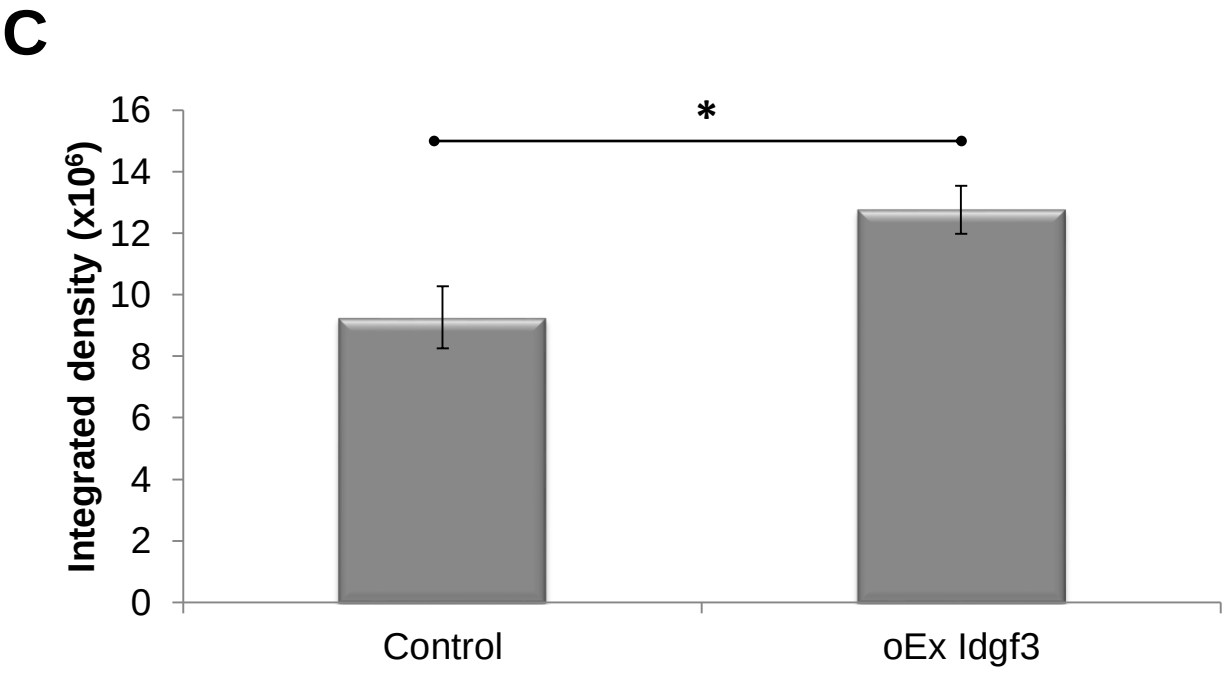
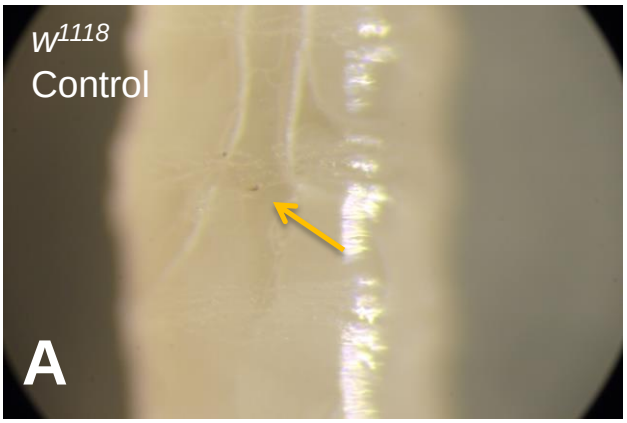
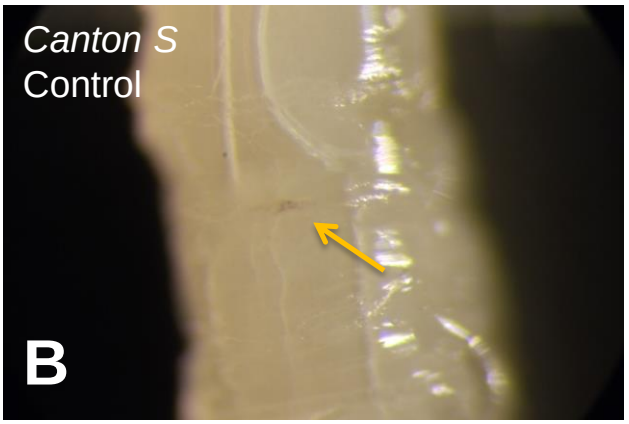
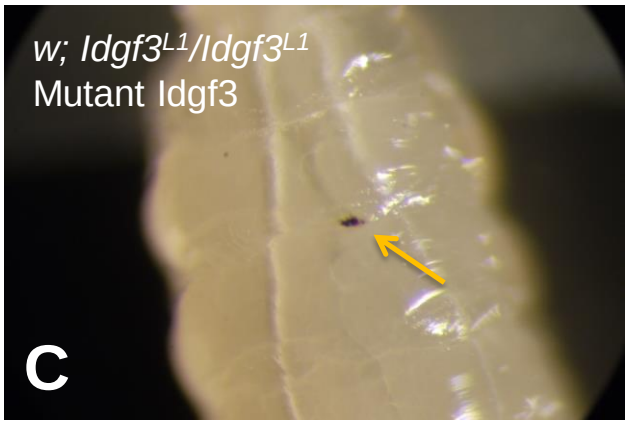

C
Integrated density (x10⁶)
16
14
12
10
8
6
4
2
0
*
Control
oEx Idgf3

Figure S6


w1118
Control
A


Canton S
Control
B


w; Idgf3L1/Idgf3L1
Mutant Idgf3
C

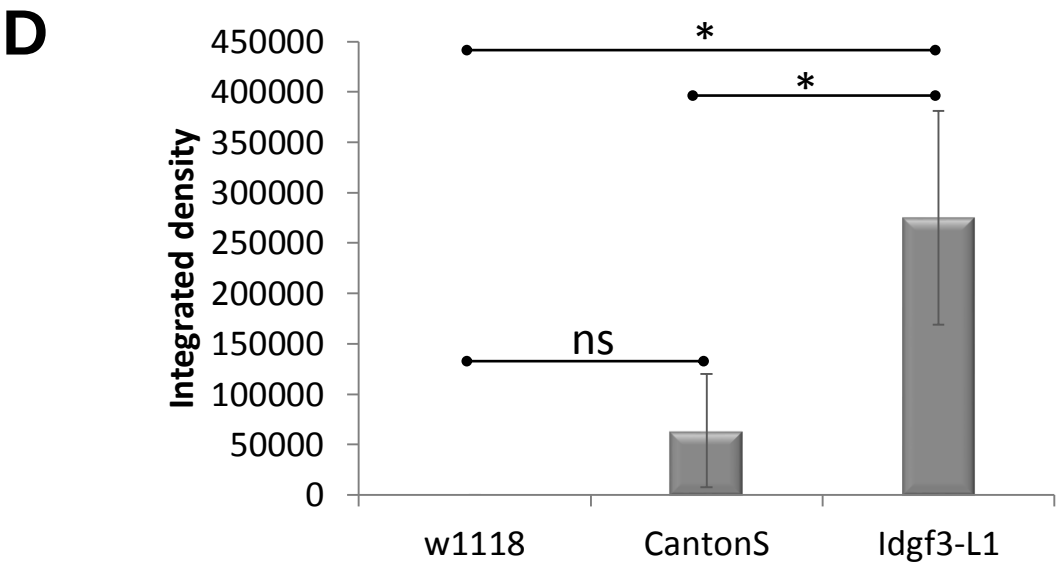

D
Integrated density
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
*
*
ns
w1118
CantonS
Idgf3-L1

Figure S7

Shared genes	no.
upregulated	150
downregulated	51
upregulated in mutant downregulated in ctr	2

List of genes changed after infection shared in mutant and control:

ID	FLY	GENENAME	m3-m3i	ctr-ctri	
1627271_at		--- /// ---	9.5	7.1	
1634366_at	•	elevated during infection	8.86	8.76	
1638235_at	•	Diptericin B	8.26	7.29	
1626345_at	•	Immune induced molecule 4	7.59	8.23	
1641419_at	•	Attacin-C	7.35	7.94	
1634271_at	•	Defensin	7.32	7.81	
1629530_at	•	Immune induced molecule 23	7.22	6.75	
1625174_at	•	CG15067 gene product from transcript CG15067-RA	7.19	6.95	
1631370_at	•	CG30026 gene product from transcript CG30026-RB	7.08	5.29	
1633053_at	•	Immune induced molecule 1	6.91	7.87	
1622893_at	•	Immune induced molecule 3	6.88	8.99	
1627613_at	•	Metchnikowin	5.92	5.5	
1631660_at	•	CG15065 gene product from transcript CG15065-RA	5.66	7.81	
1634477_at	•	CG42335 gene product from transcript CG42335-RC	5.64	3.53	
1626319_a_at	•	Immune induced molecule 10	5.61	5.95	
1634633_s_at		---	5.51	2.92	unknown
1627551_s_at		attacin /// attacin	5.5	5.46	
1625124_at	•	Attacin-A	5.46	5.44	
1623669_at	•	CG16836 gene product from transcript CG16836-RA	5.44	6.59	
1639019_s_at		Immune induced molecule 10	5.39	6.93	
1640360_at	•	Immune induced molecule 2	5.05	6.84	
1636490_at	•	CG9681 gene product from transcript CG9681-RA	4.77	5.27	
1631475_at	•	Attacin-D	4.77	3.84	
1640757_at	•	CG33462 gene product from transcript CG33462-RA	4.56	4.49	
1626530_at	•	Cecropin B	4.28	4.45	
1632719_at	•	Cecropin C	4.26	5	
1623884_at	•	CG16775 gene product from transcript CG16775-RB	4.12	3.57	

1635601_at	•	CG42335 gene product from transcript CG42335-RC	3.96	1.95
1636293_at	•	CG2217 gene product from transcript CG2217-RA	3.55	2.87
1626392_s_at	•	Myocyte enhancer factor 2	3.52	1.46
1640144_at	•	CG18067 gene product from transcript CG18067-RA	3.32	3.28
1639704_at	•	CG14695 gene product from transcript CG14695-RA	3.06	2.29
1629201_at	•	CG5550 gene product from transcript CG5550-RB	2.77	2.81
1628355_at	•	CG32379 gene product from transcript CG32379-RB	2.75	-2.15
1632809_at	•	CG14762 gene product from transcript CG14762-RA	2.69	2.95
1624342_at	•	CG10911 gene product from transcript CG10911-RA	2.66	1.82
1641518_a_at	•	split ends	2.61	1.38
1629484_s_at	•	Chronologically inappropriate morphogenesis	2.49	2.45
1623455_s_at	•	IGF-II mRNA-binding protein	2.44	1.97
1638648_at	•	CG8160 gene product from transcript CG8160-RA	2.42	2.31
1628005_at	•	Chronologically inappropriate morphogenesis	2.4	2.16
1632017_at	•	Mucin 26B	2.38	2.44
1635959_at	•	CG13461 gene product from transcript CG13461-RA	2.37	2.06
1636521_at	•	CG1981 gene product from transcript CG1981-RA	2.34	1.54
1631700_at	•	Mucin 68Ca	2.34	1.89
1630067_a_at	•	Thiolester containing protein II	2.28	1.99
1625698_at		--- /// Regulator of G-protein signalling 7	2.22	2.47
1624587_at	•	CG13323 gene product from transcript CG13323-RA	2.19	1.91
1629307_s_at	•	headcase	2.17	1.96
1634920_at		Drosophila melanogaster LD07388 full insert cDNA.	2.16	1.86
1632945_at		Muscle-specific protein-300	2.12	2.02
1625048_at		neurofibromatosis type 1	2.06	2.03
1625139_at	•	CG11086 gene product from transcript CG11086-RA	2.04	1.24
1636798_at	•	CG13482 gene product from transcript CG13482-RA	2.02	2.22
1640884_at	•	CG15784 gene product from transcript CG15784-RA	2.01	1.22
1636205_at	•	CG42232 gene product from transcript CG42232-RB	2.01	2.47
1625445_s_at	•	schnurri	2	1.66
1638341_s_at	•	Mucin 68Ca	1.97	2.03
1636946_at	•	Serpin 88Eb	1.94	1.01
1622952_at		Immune induced molecule 18	1.93	1.83
1633145_at	•	Peptidoglycan recognition protein LF	1.85	1.8
1625269_at	•	CG9004 gene product from transcript CG9004-RA	1.85	1.09
1635580_at	•	CG7037 gene product from transcript CG7037-RB	1.82	1.93
1632430_at	•	Transferrin 1	1.82	1.18

1634992_s_at	•	CG9821 gene product from transcript CG9821-RB	1.8	1.74
1632958_a_at	•	CG42365 gene product from transcript CG42365-RA	1.79	1.5
1630088_at	•	CG16743 gene product from transcript CG16743-RA	1.74	1.7
1633821_at	•	CG10851 gene product from transcript CG10851-RM	1.71	1.39
1635030_at	•	CG12868 gene product from transcript CG12868-RB	1.69	1.39
1636297_at	•	Integrator 1	1.68	1.13
1625997_s_at		Drosophila melanogaster GH03753 full length cDNA.	1.68	1.58
1639321_s_at		Toll	1.67	1.18
1629113_a_at		Drosophila melanogaster GH15104 full insert cDNA.	1.67	1.32
1638708_s_at		cdna:known chromosome:BDGP5:3R:2232579:2271718:1	1.66	2.12
1640223_a_at		Perlecan	1.64	1.15
1624183_a_at	•	Fasciclin 1	1.63	1.95
1635168_at	•	CG5872 gene product from transcript CG5872-RA	1.61	1.14
1624619_s_at		--- /// ---	1.6	1.48
1634804_at	•	CG42533 gene product from transcript CG42533-RF	1.59	1.33
1629638_at	•	convoluted	1.59	1.13
1630207_at	•	CG16972 gene product from transcript CG16972-RA	1.57	1.52
1637712_at	•	CG30007 gene product from transcript CG30007-RB	1.55	1.06
1635282_at	•	CG7142 gene product from transcript CG7142-RA	1.55	1.35
1631109_at	•	CG13550 gene product from transcript CG13550-RA	1.55	1.32
1625999_at	•	asterless	1.52	1.23
1634447_at	•	CG31140 gene product from transcript CG31140-RB	1.47	1.17
1627376_at	•	Relish	1.47	1.82
1633846_at	•	CG15523 gene product from transcript CG15523-RA	1.46	1.14
1624252_s_at		--- /// slender lobes	1.44	1.23
1637703_a_at	•	Suppressor of cytokine signaling at 36E	1.43	1.15
1633313_at		Ankyrin 2	1.42	1.32
1636905_at	•	leak	1.41	1.82
1624719_at	•	CG10777 gene product from transcript CG10777-RB	1.4	1.24
1636653_at	•	necrotic	1.38	1.22
1632231_a_at	•	Myosin heavy chain-like	1.38	1.21
1624941_at	•	Breast cancer 2, early onset homolog	1.37	1.19
1635229_at	•	Elongase 68alpha	1.36	1.87
1634454_at	•	CG6303 gene product from transcript CG6303-RA	1.35	1.93
1629347_at	•	klumpfuss	1.35	2.08
1624533_s_at	•	trithorax	1.35	1.41
1623907_at	•	armitage	1.35	1.76

1635778_at	•	CG8771 gene product from transcript CG8771-RB	1.32	1.65	
1625970_at	•	expanded	1.32	1.15	
1639551_at	•	CG2009 gene product from transcript CG2009-RA	1.31	1.08	
1636061_at		cdna:known chromosome:BDGP5:3R:27050639:2705664	1.31	1.29	unknown
1633866_at	•	Suppressor of zeste 2	1.3	1.42	
1628423_at	•	Brahma associated protein 170kD	1.29	1.24	
1632287_at	•	CG32113 gene product from transcript CG32113-RB	1.28	1.4	
1631645_at	•	CG3363 gene product from transcript CG3363-RB	1.28	1.08	
1629398_at	•	CG10383 gene product from transcript CG10383-RA	1.28	1.46	
1633016_a_at	•	staufen	1.27	1.6	
1629295_at	•	Checkpoint suppressor homologue	1.27	1.48	
1628867_s_at	•	CG42390 gene product from transcript CG42390-RB	1.27	1.45	
1625530_at	•	CG10462 gene product from transcript CG10462-RB	1.27	1.14	
1634654_at	•	purity of essence	1.26	1.39	
1632210_at	•	CG30091 gene product from transcript CG30091-RA	1.24	1.47	
1626086_at	•	CG10621 gene product from transcript CG10621-RA	1.24	-1.36	
1622939_at	•	embargoed	1.23	1.03	
1639435_at	•	CG12359 gene product from transcript CG12359-RA	1.2	1.12	
1634092_at	•	Jumonji, AT rich interactive domain 2	1.2	1.52	
1627694_at	•	CG9715 gene product from transcript CG9715-RA	1.2	1.29	
1641272_at	•	CG42611 gene product from transcript CG42611-RA	1.19	1.29	
1628548_at	•	APC-like	1.19	1.46	
1639297_at	•	CG9568 gene product from transcript CG9568-RA	1.18	1.17	
1634174_at	•	CG9702 gene product from transcript CG9702-RA	1.17	1.02	
1633237_at	•	Imaginal disc growth factor 1	1.17	1.18	
1640747_s_at	•	CG8547 gene product from transcript CG8547-RC	1.16	1.39	
1638560_a_at	•	CG34407 gene product from transcript CG34407-RG	1.16	1.47	
1637539_a_at	•	hibris	1.16	1.37	
1631013_at	•	myoblast city	1.15	1.37	
1638352_at	•	CG16896 gene product from transcript CG16896-RA	1.13	1.31	
1632712_s_at	•	CG17836 gene product from transcript CG17836-RB	1.13	1.1	
1631696_s_at	•	CG3167 gene product from transcript CG3167-RA	1.13	1.15	
1624644_a_at	•	CG5514 gene product from transcript CG5514-RC	1.13	1.4	
1628159_a_at	•	CG32206 gene product from transcript CG32206-RB	1.12	1.06	
1633855_s_at	•	little imaginal discs	1.11	1.13	
1626478_at	•	windei	1.11	1.15	
1637542_s_at		Drosophila melanogaster DNA repair endonuclease (XPG)	1.09	1.21	

1624727_s_at	•	Ubiquitin-specific protease 64E	1.09	1.13
1636998_at	•	scabrous	1.07	1.62
1641048_a_at	•	toucan	1.06	1.18
1641226_a_at	•	multiple ankyrin repeats single KH domain	1.05	1.29
1631940_s_at	•	Centrosomal protein 190kD	1.04	1.32
1624620_at	•	Kinesin-like protein at 61F	1.04	1.12
1637478_s_at	•	hephaestus	1.03	1.03
1636939_at	•	Transport and Golgi organization 6	1.03	1.08
1641089_s_at	•	CG1815 gene product from transcript CG1815-RA	1.02	1.17
1640945_at	•	longitudinals lacking	1.02	1.41
1637619_s_at	•	Down syndrome cell adhesion molecule	1.01	1.16
1628172_at	•	mini spindles	1.01	1.16
1639072_at	•	hopscotch	1	1.33
1636126_at	•	CG8290 gene product from transcript CG8290-RA	1	1.11
1629685_at	•	CG16986 gene product from transcript CG16986-RA	-1	-1.13
1627354_at		--- /// ---	-1.03	-1.09
1624012_at	•	mitochondrial ribosomal protein L10	-1.03	-1.04
1626684_at	•	CG7607 gene product from transcript CG7607-RA	-1.08	-1.01
1623959_at	•	CG1532 gene product from transcript CG1532-RA	-1.08	-1.38
1637129_at	•	Glutathione S transferase E3	-1.09	-1.01
1632406_at	•	CG9117 gene product from transcript CG9117-RA	-1.11	-1.08
1634245_at	•	CG34229 gene product from transcript CG34229-RA	-1.13	-1.03
1633171_at	•	CG13690 gene product from transcript CG13690-RA	-1.13	-1.13
1629259_at	•	CG4186 gene product from transcript CG4186-RA	-1.2	-1.13
1625166_at	•	CG15456 gene product from transcript CG15456-RA	-1.22	-1.31
1640365_s_at	•	fuseless	-1.24	-1.29
1638634_at	•	CG32448 gene product from transcript CG32448-RC	-1.24	-1.16
1640584_at		Cyp9f3Psi	-1.25	-1.35
1639196_at	•	Jonah 25Bii	-1.27	-1.07
1633949_at	•	CG15152 gene product from transcript CG15152-RA	-1.29	-1.17
1639368_at	•	CG10505 gene product from transcript CG10505-RA	-1.32	-1.24
1638845_at	•	CG18643 gene product from transcript CG18643-RB	-1.37	-1.43
1638764_at	•	CG13516 gene product from transcript CG13516-RA	-1.38	-1.04
1634197_at	•	CG11576 gene product from transcript CG11576-RA	-1.42	-1.32
1630725_at	•	CG14572 gene product from transcript CG14572-RA	-1.42	-1.45
1634436_at	•	Allatostatin C	-1.5	-1.26
1634977_at	•	Tetraspanin 42Er	-1.54	-1.37

1633333_a_at	•	CG7231 gene product from transcript CG7231-RE	-1.65	-1.01
1631382_at	•	CG13085 gene product from transcript CG13085-RA	-1.67	-1.55
1635525_at	•	CG9672 gene product from transcript CG9672-RA	-1.71	-1.36
1636460_at	•	Jonah 65Ai	-1.73	-1.75
1641102_at	•	CG14141 gene product from transcript CG14141-RA	-1.8	-1.61
1623556_at	•	CG32669 gene product from transcript CG32669-RA	-1.81	-1.26
1637889_at	•	CG5883 gene product from transcript CG5883-RA	-1.89	-1.95
1625861_at	•	CG13012 gene product from transcript CG13012-RB	-1.93	-2.17
1632970_at	•	CG15336 gene product from transcript CG15336-RC	-1.99	-1.65
1632584_at	•	CG3344 gene product from transcript CG3344-RA	-1.99	-2.31
1637833_at	•	Juvenile hormone esterase	-2	-1.49
1627943_at	•	Insulin-like peptide 3	-2	-1.61
1634029_at	•	CG15902 gene product from transcript CG15902-RA	-2.01	-1.51
1632359_at	•	Tak1-like 2	-2.04	-1.45
1623817_at	•	CG7916 gene product from transcript CG7916-RA	-2.13	-1.24
1635371_at	•	CG31323 gene product from transcript CG31323-RA	-2.15	-1.24
1625203_at	•	CG9826 gene product from transcript CG9826-RB	-2.26	-2.22
1630740_at	•	CG4363 gene product from transcript CG4363-RA	-2.34	-2.33
1630218_at	•	CG13227 gene product from transcript CG13227-RA	-2.43	-1.31
1630404_at	•	CG34112 gene product from transcript CG34112-RB	-2.44	-1.77
1630977_at	•	CG16771 gene product from transcript CG16771-RC	-2.48	-1.84
1623229_at	•	CG7881 gene product from transcript CG7881-RA	-2.96	-2.4
1627321_x_at		--- /// Glutathione Synthetase	-3.04	-2.35
1636970_at	•	CG9394 gene product from transcript CG9394-RA	-3.16	-1.83
1631816_at	•	Adipokinetic hormone	-3.26	-2.26
1634445_at	•	CG32750 gene product from transcript CG32750-RA	-3.54	-2.41
1637326_at	•	CG15773 gene product from transcript CG15773-RB	-3.6	-2.85
1624333_at	•	CG9903 gene product from transcript CG9903-RA	-5.42	-2.55

only in ctr infection	no.
upregulated	365
downregulated	71

List of genes changed after infection specific for control:

ID	FLY	GENENAME	ctr-ctri	
1635189_at	•	Drosomycin	6.02	AMP
1635060_at	•	CG15068 gene product from transcript CG15068-RA	5.15	AMP-Bomanin
1638021_at	•	CG4757 gene product from transcript CG4757-RA	4.66	Carboxylesterase
1638772_at	•	CG18107 gene product from transcript CG18107-RA	2.95	AMP-Bomanin
1629046_a_at	•	CG4716 gene product from transcript CG4716-RA	2.94	methylenetetrahydrofolate dehydrogenase [NAD(P)+] activity
1636492_at		Drosophila melanogaster LP05669 full insert cDNA.	2.92	
1628963_at	•	CG4716 gene product from transcript CG4716-RA	2.7	
1637734_at	•	Thiolester containing protein I	2.66	
1628262_a_at	•	Zn finger homeodomain 1	2.54	
1636058_at	•	Mucin 96D	2.44	Chitin-binding domain
1637322_at	•	polychaetoid	2.4	guanylate kinase activity
1635733_x_at	•	Mucin 96D	2.4	
1629141_at	•	Insulin-like receptor	2.35	
1626087_at	•	starry night	2.32	transmembrane signaling receptor activity
1632295_s_at		cdna:novel chromosome:BDGP5:Uextra:8300480:830078	2.31	
1624033_at	•	beta amyloid protein precursor-like	2.31	
1623710_at	•	CG5847 gene product from transcript CG5847-RA	2.31	structural constituent of chitin-based cuticle
1631303_s_at	•	CG8524 gene product from transcript CG8524-RA	2.22	sequence-specific DNA binding;
1636576_s_at	•	no receptor potential A	2.21	GTPase activator activity; phosphatidylinositol phospholipase C activity;
1630502_at	•	anachronism	2.21	Transforming growth factor-beta, N-terminal
1635512_at	•	CG11893 gene product from transcript CG11893-RA	2.19	Protein kinase-like domain;
1633112_at	•	CG4322 gene product from transcript CG4322-RD	2.14	G-protein coupled receptor activity;
1624189_at	•	CG12236 gene product from transcript CG12236-RA	2.13	metal ion binding; nucleic acid binding
1624215_s_at	•	DISCO Interacting Protein 1	2.09	chromatin binding; double-stranded RNA binding
1625672_s_at		Drosophila melanogaster GH06422 full length cDNA.	2.08	
1638969_at	•	CG6279 gene product from transcript CG6279-RA	2.07	
1640472_at		Drosophila melanogaster GH06422 full length cDNA.	2.05	
1639785_s_at	•	wech	2.04	
1635730_at	•	CG30069 gene product from transcript CG30069-RA	2.02	
1634083_at	•	Neurofibromin 1	2.02	
1628632_at	•	polyA-binding protein interacting protein 2	2.01	
1624932_at	•	Odorant-binding protein 49a	2.01	
1627323_at	•	CG8388 gene product from transcript CG8388-RA	2	
1632130_s_at	•	CG8174 gene product from transcript CG8174-RA	1.98	

1633512_at	•	twin of eyeless	1.96
1624143_a_at	•	CG12071 gene product from transcript CG12071-RB	1.95
1629217_at	•	CG31258 gene product from transcript CG31258-RA	1.94
1624819_s_at		cdna:novel chromosome:BDGP5:Uextra:24197253:24212	1.93
1638359_s_at	•	CG14478 gene product from transcript CG14478-RA	1.92
1631691_at	•	CG16772 gene product from transcript CG16772-RA	1.92
1627796_s_at		cdna:known chromosome:BDGP5:3R:2232579:2271718:1	1.89
1634009_at	•	CG33957 gene product from transcript CG33957-RE	1.88
1631471_at	•	CG42342 gene product from transcript CG42342-RI	1.88
1627136_at	•	Kinesin-73	1.87
1629129_at	•	Tie-like receptor tyrosine kinase	1.85
1624565_a_at	•	CG16711 gene product from transcript CG16711-RB	1.85
1624297_at	•	derailed	1.85
1639894_at		Drosophila melanogaster LP21052 full insert cDNA.	1.8
1625511_at	•	CG34383 gene product from transcript CG34383-RE	1.79
1640598_s_at		lethal (3) neo38	1.78
1638060_at	•	CG10077 gene product from transcript CG10077-RA	1.77
1634075_at	•	dumpy	1.76
1637897_at	•	Cyclin T	1.75
1640892_a_at	•	Darkener of apricot	1.73
1636088_at	•	Distal-less	1.71
1636848_at	•	CG6024 gene product from transcript CG6024-RD	1.7
1639235_at	•	tartan	1.69
1637397_a_at		anastral spindle phenotype 1	1.69
1633303_at	•	CG43374 gene product from transcript CG43374-RC	1.69
1635900_at		insulin-stimulated eIF-4E binding protein	1.67
1632827_a_at	•	mutagen-sensitive 210	1.67
1635047_s_at	•	CG18214 gene product from transcript CG18214-RA	1.66
1624300_s_at	•	nemo	1.66
1630456_at	•	Myosin binding subunit	1.65
1636461_at	•	CG3630 gene product from transcript CG3630-RA	1.64
1639913_at	•	Connectin	1.63
1637079_at	•	CG5098 gene product from transcript CG5098-RA	1.63
1635684_a_at	•	CG2999 gene product from transcript CG2999-RD	1.63
1634084_at	•	CG4213 gene product from transcript CG4213-RA	1.63
1630729_at	•	telomere fusion	1.63
1640760_at	•	CG17838 gene product from transcript CG17838-RA	1.62

1639138_at	•	CG5524 gene product from transcript CG5524-RA	1.62
1625236_s_at	•	CG30483 gene product from transcript CG30483-RB	1.62
1634063_a_at	•	CG31317 gene product from transcript CG31317-RC	1.61
1641704_at	•	CG32176 gene product from transcript CG32176-RA	1.6
1641436_at	•	dim gamma-tubulin 5	1.6
1630570_at	•	CG13003 gene product from transcript CG13003-RB	1.6
1627191_a_at	•	enabled	1.59
1640805_at	•	anastral spindle 3	1.55
1637987_at	•	eukaryotic translation initiation factor 4G2	1.55
1636679_at	•	Myocardin-related transcription factor	1.55
1630361_at	•	naked cuticle	1.55
1629702_a_at	•	abrupt	1.55
1629325_at		mRNA-like ncRNA in embryogenesis 2	1.55
1625852_at	•	golden goal	1.55
1624970_s_at	•	Cullin-3	1.55
1639528_at	•	Nutrient Amino Acid Transporter 1	1.54
1627971_s_at	•	serrano	1.54
1627852_at	•	CG14655 gene product from transcript CG14655-RA	1.54
1637605_s_at	•	CG1146 gene product from transcript CG1146-RB	1.53
1632644_s_at		cdna:known chromosome:BDGP5:3R:13769829:1384150	1.52
1624378_at		enhanced adult sensory threshold	1.52
1630923_at	•	CG6945 gene product from transcript CG6945-RA	1.51
1637665_at		Drosophila melanogaster GH18144 full length cDNA.	1.5
1634039_at	•	nervous fingers 1	1.5
1633241_at		Drosophila melanogaster GH05922 full insert cDNA.	1.5
1626842_a_at	•	CG32464 gene product from transcript CG32464-RI	1.5
1640640_at	•	CG8639 gene product from transcript CG8639-RH	1.49
1632734_s_at	•	bangles and beads	1.49
1630376_at	•	CG1922 gene product from transcript CG1922-RA	1.49
1639582_at	•	Phosphodiesterase 11	1.47
1636526_at	•	CG9451 gene product from transcript CG9451-RA	1.46
1631059_at	•	Protein C kinase 98E	1.46
1630026_s_at	•	decapentaplegic	1.46
1623441_at	•	polyhomeotic proximal	1.46
1637710_at	•	karst	1.45
1636189_at	•	CG12306 gene product from transcript CG12306-RA	1.45
1630415_at	•	Alhambra	1.45

1626232_at	•	Calmodulin-binding transcription activator	1.45
1625687_at	•	kon-tiki	1.45
1635124_at	•	asense	1.44
1631516_s_at	•	skuld	1.44
1627151_at	•	CG4612 gene product from transcript CG4612-RC	1.44
1625921_at		mushroom body expressed	1.44
1624125_at	•	fat	1.44
1627394_s_at	•	anterior open	1.43
1633059_at	•	CG6357 gene product from transcript CG6357-RA	1.42
1629709_at	•	Meiotic central spindle	1.42
1626710_at	•	Stromalin	1.42
1638611_at		Drosophila melanogaster RE24931 full insert cDNA.	1.41
1625011_at	•	CG11206 gene product from transcript CG11206-RA	1.41
1624725_at	•	CG9626 gene product from transcript CG9626-RC	1.41
1624520_a_at	•	ftz transcription factor 1	1.41
1641738_a_at	•	CG13636 gene product from transcript CG13636-RB	1.4
1636974_at	•	dally-like	1.4
1631594_s_at	•	CG4141 gene product from transcript CG4141-RB	1.4
1631408_at	•	SoxNeuro	1.4
1627881_at		spalt major	1.4
1623863_a_at	•	Tis11 homolog	1.4
1623124_at	•	CG7376 gene product from transcript CG7376-RA	1.4
1638887_a_at	•	CG6339 gene product from transcript CG6339-RE	1.39
1633715_s_at	•	CG18769 gene product from transcript CG18769-RH	1.39
1632298_s_at	•	midline fasciclin	1.38
1629765_at	•	CG7715 gene product from transcript CG7715-RA	1.38
1628743_at	•	gliolectin	1.38
1626774_s_at	•	roundabout	1.38
1636092_a_at	•	wings apart-like	1.37
1632916_at	•	CG31357 gene product from transcript CG31357-RA	1.37
1631406_at	•	CG11414 gene product from transcript CG11414-RA	1.37
1627530_at	•	CG6700 gene product from transcript CG6700-RA	1.37
1637750_at	•	CG32139 gene product from transcript CG32139-RA	1.36
1631635_at	•	CG7294 gene product from transcript CG7294-RA	1.36
1629104_at	•	CG2258 gene product from transcript CG2258-RA	1.36
1626206_at	•	CG6947 gene product from transcript CG6947-RA	1.36
1625556_at	•	ariadne 2	1.36

1625447_at	•	CAP-D2 condensin subunit	1.36
1641548_at	•	CG10289 gene product from transcript CG10289-RA	1.35
1641475_at	•	Synaptotagmin 4	1.35
1640510_at	•	CG8600 gene product from transcript CG8600-RB	1.35
1639940_at	•	disconnected	1.35
1629290_at	•	Smad on X	1.35
1637481_at	•	CG6890 gene product from transcript CG6890-RA	1.34
1628849_at		cdna:novel chromosome:BDGP5:2R:15347450:15350135	1.34
1628420_s_at	•	CG6923 gene product from transcript CG6923-RC	1.34
1635127_at	•	CG34398 gene product from transcript CG34398-RF	1.33
1626352_at	•	scribbler	1.33
1624375_at	•	CG3227 gene product from transcript CG3227-RA	1.33
1638370_s_at	•	vielfaltig	1.32
1635123_at	•	gluon	1.32
1631222_at		pou domain motif 3	1.32
1630995_at	•	chiffon	1.32
1630010_a_at	•	pointed	1.32
1627122_at	•	CG32767 gene product from transcript CG32767-RD	1.32
1637365_at	•	CG31122 gene product from transcript CG31122-RA	1.31
1634291_at		cdna:known chromosome:BDGP5:3L:1950306:1964178:-	1.31
1630165_s_at	•	CG8815 gene product from transcript CG8815-RC	1.31
1623405_at	•	pavarotti	1.31
1639534_at	•	CG6792 gene product from transcript CG6792-RA	1.3
1628323_s_at	•	optic ganglion reduced	1.3
1637537_at	•	Leukocyte-antigen-related-like	1.29
1633852_at	•	found in neurons	1.29
1630772_at	•	squeeze	1.29
1630515_s_at	•	Glutactin	1.29
1630064_at	•	CG5639 gene product from transcript CG5639-RA	1.29
1635500_a_at	•	prospero	1.28
1630609_s_at	•	CG2225 gene product from transcript CG2225-RC	1.28
1640809_at	•	CG12105 gene product from transcript CG12105-RA	1.27
1634406_at	•	CG32982 gene product from transcript CG32982-RE	1.27
1632251_s_at	•	CG6181 gene product from transcript CG6181-RA	1.27
1625366_at	•	roughest	1.27
1625127_at	•	female sterile (1) homeotic	1.27
1622925_at		CREB binding protein	1.27

1640098_at	•	CG31132 gene product from transcript CG31132-RA	1.26
1627580_at	•	Dicer-1	1.26
1625768_s_at	•	longitudinals lacking	1.26
1622892_s_at		monkey-king	1.26
1636321_s_at	•	CG13624 gene product from transcript CG13624-RD	1.25
1633082_at	•	CG8449 gene product from transcript CG8449-RA	1.25
1628318_at	•	Spc105-related	1.25
1628243_at	•	debra	1.25
1636801_at	•	CG8232 gene product from transcript CG8232-RA	1.24
1636145_at	•	Serpin 28D	1.24
1624969_s_at	•	CG42319 gene product from transcript CG42319-RE	1.24
1641015_at	•	Bub1-related kinase	1.23
1639306_s_at	•	homeodomain interacting protein kinase	1.23
1623525_at	•	Polycomblike	1.23
1641024_at	•	Hybrid male rescue	1.21
1640020_at	•	CG10990 gene product from transcript CG10990-RB	1.21
1639266_at	•	CG15744 gene product from transcript CG15744-RA	1.21
1638956_at	•	Fasciclin 2	1.21
1630023_at	•	Daxx-like protein	1.21
1640838_s_at	•	A kinase anchor protein 200	1.2
1640627_at	•	dachsous	1.2
1640433_a_at	•	toutatis	1.2
1640096_at	•	CG17269 gene product from transcript CG17269-RA	1.2
1639703_s_at	•	CG10936 gene product from transcript CG10936-RB	1.2
1635037_at	•	CG4022 gene product from transcript CG4022-RC	1.2
1632554_at	•	CG9839 gene product from transcript CG9839-RA	1.2
1630975_at	•	CG2909 gene product from transcript CG2909-RA	1.2
1639798_at	•	mirror	1.19
1639396_s_at	•	Ceramidase	1.19
1627150_at	•	sister-of-Sex-lethal	1.19
1624463_s_at	•	CG3307 gene product from transcript CG3307-RC	1.19
1623755_at	•	Tenascin accessory	1.19
1623418_at	•	CG10244 gene product from transcript CG10244-RA	1.19
1641575_at	•	CG6977 gene product from transcript CG6977-RA	1.18
1640337_a_at		Ankyrin 2	1.18
1639438_at	•	male-specific lethal 1	1.18
1639411_at	•	lethal (1) G0148	1.18

1635378_at	•	CG7177 gene product from transcript CG7177-RA	1.18
1630390_at	•	DNA ligase I	1.18
1628865_at	•	odd paired	1.18
1625992_s_at	•	Na,K-ATPase Interacting	1.18
1639091_at	•	CG1100 gene product from transcript CG1100-RA	1.17
1638653_a_at		Elongation factor 4a	1.17
1637016_at		cdna:known chromosome:BDGP5:3R:2232579:2273729:1	1.17
1636182_a_at	•	CG10948 gene product from transcript CG10948-RB	1.17
1634061_a_at	•	retinal degeneration C	1.17
1629899_at	•	cactus	1.17
1627156_at	•	CG33225 gene product from transcript CG33225-RB	1.17
1641365_s_at		Drosophila melanogaster SD27140 full insert cDNA.	1.16
1641310_at	•	knockout	1.16
1639190_at	•	masquerade	1.16
1636887_s_at	•	CG11247 gene product from transcript CG11247-RC	1.16
1635007_at	•	Sulfated	1.16
1634125_at	•	CG30440 gene product from transcript CG30440-RA	1.16
1632308_at	•	ATAC complex component 2	1.16
1628418_at	•	abnormal oocyte	1.16
1623590_s_at	•	CG32438 gene product from transcript CG32438-RE	1.16
1639149_at		CG2989	1.15
1635619_a_at	•	centrosomin	1.15
1633390_at	•	tay bridge	1.15
1624263_at	•	Mta70 homologue	1.15
1639061_at	•	enoki mushroom	1.14
1637552_s_at	•	alan shepard	1.14
1631151_at	•	CG4951 gene product from transcript CG4951-RB	1.14
1629496_at	•	lethal (3) L1231	1.14
1628150_a_at	•	CG9449 gene product from transcript CG9449-RF	1.14
1626553_at	•	CG10376 gene product from transcript CG10376-RA	1.14
1641452_a_at	•	LIM-kinase1	1.13
1641352_at	•	CG7922 gene product from transcript CG7922-RA	1.13
1640764_at	•	RNA polymerase II 215kD subunit	1.13
1639494_at		cdna:known chromosome:BDGP5:2L:8525663:8528618:-	1.13
1639189_at	•	CG10255 gene product from transcript CG10255-RA	1.13
1635742_s_at	•	CG6445 gene product from transcript CG6445-RA	1.13
1634430_at		Drosophila melanogaster GM08142 full length cDNA.	1.13

1633752_at	•	Na,K-ATPase Interacting	1.13
1633020_at	•	unkempt	1.13
1626332_s_at	•	CG11486 gene product from transcript CG11486-RG	1.13
1641685_at	•	Enhancer of decapping 3	1.12
1641470_s_at	•	vestigial	1.12
1638839_at	•	relative of woc	1.12
1638568_s_at	•	Hairless	1.12
1634691_a_at	•	CG30020 gene product from transcript CG30020-RA	1.12
1634149_at	•	CG10212 gene product from transcript CG10212-RA	1.12
1631552_at	•	pyramus	1.12
1626090_at	•	pickled eggs	1.12
1625603_at	•	CG13604 gene product from transcript CG13604-RD	1.12
1623923_a_at	•	glass	1.12
1641445_s_at	•	CG7192 gene product from transcript CG7192-RA	1.11
1641333_s_at	•	CG7740 gene product from transcript CG7740-RD	1.11
1637684_at	•	CG8566 gene product from transcript CG8566-RB	1.11
1637111_a_at	•	Fak-like tyrosine kinase	1.11
1635403_at	•	shifted	1.11
1632602_s_at	•	Argonaute-1	1.11
1631768_at	•	quaking related 58E-1	1.11
1630717_s_at	•	combgap	1.11
1628866_at	•	nucampholin	1.11
1624543_s_at		Drosophila melanogaster SD01615 full length cDNA.	1.11
1624119_at	•	CG32486 gene product from transcript CG32486-RD	1.11
1640862_a_at	•	capsuleen	1.1
1637428_a_at	•	polychaetoid	1.1
1634562_s_at	•	Verprolin 1	1.1
1631094_s_at	•	skywalker	1.1
1628016_s_at	•	ariadne	1.1
1626147_s_at		withered	1.1
1640417_a_at	•	Protein kinase related to protein kinase N	1.09
1640083_at	•	CG1472 gene product from transcript CG1472-RA	1.09
1637947_s_at	•	CG30389 gene product from transcript CG30389-RA	1.09
1632666_at	•	Laminin B2	1.09
1631621_s_at	•	egghead	1.09
1629819_s_at	•	CG4700 gene product from transcript CG4700-RC	1.09
1627053_at	•	sloppy paired 2	1.09

1625243_a_at	•	Enhancer of bithorax	1.09
1631095_at	•	Posterior sex combs	1.08
1628901_at		Additional Sex Combs	1.08
1625578_at		Drosophila melanogaster GH12404 full length cDNA.	1.08
1622931_at	•	lethal (3) persistent salivary gland 2	1.08
1640541_at	•	fat facets	1.07
1639185_at	•	Myb-interacting protein 130	1.07
1637361_a_at	•	CG12179 gene product from transcript CG12179-RD	1.07
1636911_at	•	CG11352 gene product from transcript CG11352-RB	1.07
1630550_a_at	•	CG5674 gene product from transcript CG5674-RB	1.07
1628669_at	•	CG9754 gene product from transcript CG9754-RA	1.07
1628146_at	•	crumbs	1.07
1627649_at	•	CG7649 gene product from transcript CG7649-RC	1.07
1626494_at	•	CG7143 gene product from transcript CG7143-RA	1.07
1624304_s_at		Dorsal switch protein 1	1.07
1623100_at	•	CG6582 gene product from transcript CG6582-RA	1.07
1635909_at		Capicua	1.06
1634278_at	•	CG6409 gene product from transcript CG6409-RA	1.06
1633681_at	•	CG2519 gene product from transcript CG2519-RB	1.06
1633335_at	•	Son of sevenless	1.06
1633200_at	•	CG9449 gene product from transcript CG9449-RF	1.06
1632420_at	•	Reduction in Cnn dots 5	1.06
1631550_at	•	Negative elongation factor A	1.06
1626730_s_at	•	tonalli	1.06
1626018_a_at	•	crooked legs	1.06
1640311_s_at		Drosophila melanogaster batman protein mRNA, comple	1.05
1637774_s_at	•	CG8389 gene product from transcript CG8389-RB	1.05
1633021_s_at	•	Spinophilin	1.05
1630237_a_at	•	Distal-less	1.05
1628952_s_at	•	Furin 1	1.05
1628103_at	•	CG31496 gene product from transcript CG31496-RA	1.05
1625638_a_at	•	Hexokinase A	1.05
1639048_a_at	•	CG8229 gene product from transcript CG8229-RE	1.04
1634156_at	•	CG5604 gene product from transcript CG5604-RA	1.04
1633727_s_at	•	wallenda	1.04
1633387_at	•	CG32513 gene product from transcript CG32513-RA	1.04
1632471_at	•	CG12155 gene product from transcript CG12155-RA	1.04

1629160_s_at		Prosap	1.04
1628275_at		cdna:known chromosome:BDGP5:3L:14741029:1475105	1.04
1626756_a_at	•	CG42378 gene product from transcript CG42378-RI	1.04
1626454_at	•	Cyclin B3	1.04
1625148_s_at	•	CG17870 gene product from transcript CG17870-RB	1.04
1623693_a_at	•	CG3365 gene product from transcript CG3365-RH	1.04
1636122_at	•	Suppressor of Cytokine Signaling at 16D	1.03
1632457_s_at	•	mastermind	1.03
1632161_at		lethal (3) 67BDr	1.03
1631919_at	•	CG17078 gene product from transcript CG17078-RB	1.03
1631502_at	•	worniu	1.03
1631481_a_at	•	Kruppel homolog 1	1.03
1629145_at	•	CG11734 gene product from transcript CG11734-RC	1.03
1627840_a_at	•	zipper	1.03
1627506_at	•	echinoid	1.03
1625515_a_at	•	scalloped	1.03
1623670_at	•	CG14562 gene product from transcript CG14562-RA	1.03
1638486_at	•	RNA-binding protein 1	1.02
1624301_at	•	CG10542 gene product from transcript CG10542-RA	1.02
1623133_a_at	•	CG10508 gene product from transcript CG10508-RK	1.02
1634309_at	•	CG14322 gene product from transcript CG14322-RA	1.01
1633876_at	•	CG7110 gene product from transcript CG7110-RB	1.01
1626738_at		mitochondrial RNA polymerase	1.01
1641639_at	•	escargot	1
1641620_s_at	•	CG4532 gene product from transcript CG4532-RA	1
1640054_at	•	CG10269 gene product from transcript CG10269-RA	1
1638681_at	•	piopio	1
1636248_at	•	CG15628 gene product from transcript CG15628-RA	1
1632519_at	•	CG8366 gene product from transcript CG8366-RA	1
1632381_at	•	domeless	1
1628791_at	•	CG13933 gene product from transcript CG13933-RA	1
1628342_s_at	•	ballchen	1
1627184_at		scaf6	1
1625945_a_at	•	CG1233 gene product from transcript CG1233-RB	1
1622949_at	•	pebbled	1
1632606_a_at	•	CG33169 gene product from transcript CG33169-RA	-1
1630830_a_at	•	Spermidine Synthase	-1

1629541_at	•	CG13018 gene product from transcript CG13018-RA	-1
1640452_at	•	CG2540 gene product from transcript CG2540-RA	-1.01
1637916_at	•	CG33013 gene product from transcript CG33013-RC	-1.01
1637379_at	•	CG14671 gene product from transcript CG14671-RA	-1.01
1641624_at	•	CG31957 gene product from transcript CG31957-RA	-1.03
1627349_at	•	Bekka	-1.03
1624635_at	•	CG14210 gene product from transcript CG14210-RA	-1.04
1627803_at	•	CG11875 gene product from transcript CG11875-RA	-1.05
1626658_at		--- /// ---	-1.06
1638047_at	•	cornichon related	-1.07
1633840_a_at	•	CG8026 gene product from transcript CG8026-RD	-1.07
1630821_at	•	CG2680 gene product from transcript CG2680-RB	-1.07
1633054_at	•	CG14057 gene product from transcript CG14057-RA	-1.08
1633691_at	•	CG32262 gene product from transcript CG32262-RA	-1.09
1630701_at	•	CG10778 gene product from transcript CG10778-RA	-1.11
1627432_at	•	CG6041 gene product from transcript CG6041-RA	-1.11
1624984_at	•	CG8021 gene product from transcript CG8021-RA	-1.11
1640917_at	•	CG15706 gene product from transcript CG15706-RA	-1.12
1635849_at	•	CG9804 gene product from transcript CG9804-RA	-1.12
1634023_at	•	CG14544 gene product from transcript CG14544-RA	-1.12
1624765_at	•	mitochondrial ribosomal protein L36	-1.12
1636630_s_at		--- /// garnysstan	-1.13
1626534_at	•	technical knockout	-1.13
1637118_at	•	CG30010 gene product from transcript CG30010-RA	-1.14
1640424_at	•	CG14463 gene product from transcript CG14463-RA	-1.15
1627633_at	•	CG42235 gene product from transcript CG42235-RE	-1.15
1630268_at	•	CG11781 gene product from transcript CG11781-RA	-1.16
1630505_a_at	•	CG1488 gene product from transcript CG1488-RB	-1.17
1630351_at	•	CG31229 gene product from transcript CG31229-RA	-1.17
1627438_at		Drosophila melanogaster RH74240 full insert cDNA.	-1.18
1631473_at	•	CG33170 gene product from transcript CG33170-RB	-1.19
1625149_at	•	CG7460 gene product from transcript CG7460-RB	-1.2
1636387_at	•	CG10300 gene product from transcript CG10300-RA	-1.21
1632145_a_at	•	CG31720 gene product from transcript CG31720-RC	-1.21
1628621_at	•	mitochondrial ribosomal protein S18C	-1.23
1639619_a_at	•	CG3994 gene product from transcript CG3994-RA	-1.24
1623464_at	•	CG13217 gene product from transcript CG13217-RA	-1.25

1631684_at	•	CG13014 gene product from transcript CG13014-RA	-1.26
1633989_at	•	CG1124 gene product from transcript CG1124-RA	-1.27
1633247_at	•	CG7006 gene product from transcript CG7006-RA	-1.27
1628221_at	•	CG17036 gene product from transcript CG17036-RA	-1.27
1631695_at	•	CG13066 gene product from transcript CG13066-RB	-1.29
1634158_at	•	Niemann-Pick type C-2f	-1.31
1632319_at	•	CG18598 gene product from transcript CG18598-RA	-1.32
1631002_at		cdna:known chromosome:BDGP5:3L:6141071:6141715:1	-1.32
1625901_s_at	•	CG34172 gene product from transcript CG34172-RB	-1.33
1633264_at	•	CG13024 gene product from transcript CG13024-RC	-1.34
1627723_at	•	CG14701 gene product from transcript CG14701-RA	-1.36
1630692_at	•	CG31789 gene product from transcript CG31789-RA	-1.43
1628284_at	•	CG3690 gene product from transcript CG3690-RA	-1.45
1640065_at	•	Glutathione S transferase E7	-1.46
1636683_at	•	CG14610 gene product from transcript CG14610-RB	-1.48
1625342_at	•	CG33282 gene product from transcript CG33282-RB	-1.53
1635263_at	•	CG11825 gene product from transcript CG11825-RB	-1.56
1626597_at	•	CG9521 gene product from transcript CG9521-RA	-1.58
1635878_s_at	•	CG17571 gene product from transcript CG17571-RA	-1.59
1628660_at	•	CG7130 gene product from transcript CG7130-RA	-1.63
1638742_at	•	Cuticular protein 67Fb	-1.7
1636604_at	•	CG12490 gene product from transcript CG12490-RB	-1.75
1634286_at	•	CG15554 gene product from transcript CG15554-RA	-1.78
1626025_at	•	CG34267 gene product from transcript CG34267-RA	-1.78
1633031_at	•	CG8299 gene product from transcript CG8299-RA	-1.84
1639350_at		cdna:known chromosome:BDGP5:3L:3934718:3935992:1	-1.85
1633142_at	•	CG17681 gene product from transcript CG17681-RA	-1.85
1639641_at	•	CG8560 gene product from transcript CG8560-RA	-1.87
1635274_at	•	CG34451 gene product from transcript CG34451-RA	-1.89
1623491_at	•	CG15155 gene product from transcript CG15155-RA	-2.15
1628500_at	•	CG32483 gene product from transcript CG32483-RA	-3.08
1625802_a_at	•	CG13135 gene product from transcript CG13135-RA	-3.58

only in mutant infection	no.
upregulated	309

downregulated	243

List of genes changed after infection specific for mutant:

ID	FLY	GENENAME	m3-m3i
1629934_at	•	CG14219 gene product from transcript CG14219-RA	6.54
1635270_at		cdna:known chromosome:BDGP5:2R:14075227:1407579	6.01
1639571_s_at		heat shock 70 /// heat shock 70	5.42
1638238_at	•	CG5778 gene product from transcript CG5778-RB	4.57
1638003_at	•	CG14204 gene product from transcript CG14204-RA	4.33
1633812_at	•	CG9080 gene product from transcript CG9080-RA	4.2
1625235_at	•	CG13325 gene product from transcript CG13325-RA	3.79
1637229_a_at	•	CG11796 gene product from transcript CG11796-RA	3.77
1633009_a_at		Drosophila melanogaster GH19118 full length cDNA.	3.66
1629147_at	•	CG42633 gene product from transcript CG42633-RA	3.54
1627837_at	•	CG5527 gene product from transcript CG5527-RA	3.44
1635486_at	•	CG33468 gene product from transcript CG33468-RA	3.43
1641245_a_at		Drosophila melanogaster IP07237 full insert cDNA.	3.42
1634815_at	•	CG31104 gene product from transcript CG31104-RA	3.41
1634957_at	•	Diuretic hormone 44	3.4
1624283_at	•	Cuticular protein 47Eb	3.39
1623346_at	•	CG2861 gene product from transcript CG2861-RA	3.06
1623521_at		target of brain insulin	3.05
1636611_at	•	Trypsin 29F	2.82
1627807_at	•	world cup	2.8
1625557_at	•	CG34198 gene product from transcript CG34198-RA	2.77
1640657_at	•	CG42316 gene product from transcript CG42316-RD	2.61
1629905_s_at		IGF-II mRNA-binding protein	2.61
1636015_s_at	•	CG32850 gene product from transcript CG32850-RA	2.55
1626133_s_at		Drosophila melanogaster GH06606 full insert cDNA.	2.53
1633857_at	•	CG13659 gene product from transcript CG13659-RA	2.4
1635713_at	•	CG13185 gene product from transcript CG13185-RB	2.35
1627263_at	•	CG31601 gene product from transcript CG31601-RC	2.35
1641384_a_at	•	CG11327 gene product from transcript CG11327-RA	2.34
1636192_at	•	CG18178 gene product from transcript CG18178-RA	2.34
1633905_at	•	Ribosomal protein L28	2.29

1627936_s_at		cdna:novel chromosome:BDGP5:2L:22954463:22955770:	2.28
1630309_s_at		IGF-II mRNA-binding protein	2.26
1641534_at	•	CG11842 gene product from transcript CG11842-RA	2.24
1623247_at	•	CG10420 gene product from transcript CG10420-RA	2.24
1634962_s_at	•	hu li tai shao	2.22
1634020_at	•	CG12218 gene product from transcript CG12218-RA	2.22
1630934_at		cdna:novel chromosome:BDGP5:Uextra:15714903:15715	2.18
1640147_at	•	CG18518 gene product from transcript CG18518-RA	2.17
1640092_a_at	•	Ca[2+]-channel protein alpha[[1]] subunit D	2.14
1623415_at	•	dorsal	2.11
1631999_at	•	CG10710 gene product from transcript CG10710-RA	2.09
1624624_at	•	mushroom body defect	2.09
1626073_a_at	•	mushroom body defect	2.07
1626023_at	•	CG14932 gene product from transcript CG14932-RC	2.06
1631617_at	•	CG13742 gene product from transcript CG13742-RB	2.04
1631192_at	•	CG10887 gene product from transcript CG10887-RA	2.02
1635076_at	•	CG12674 gene product from transcript CG12674-RA	2
1630933_at	•	CG6738 gene product from transcript CG6738-RA	1.99
1623258_at	•	CG12493 gene product from transcript CG12493-RA	1.98
1635258_s_at		cdna:novel chromosome:BDGP5:3L:23166093:23171606:	1.96
1623825_s_at	•	CG17018 gene product from transcript CG17018-RC	1.96
1632870_at	•	CG32364 gene product from transcript CG32364-RA	1.95
1640903_at	•	CG4367 gene product from transcript CG4367-RA	1.92
1635893_at	•	alpha-Esterase-8	1.92
1634848_at	•	Spatzle-Processing Enzyme	1.92
1638991_at	•	CG5506 gene product from transcript CG5506-RA	1.91
1638331_s_at	•	CG4849 gene product from transcript CG4849-RA	1.91
1623784_at	•	CG5732 gene product from transcript CG5732-RB	1.91
1639218_s_at	•	CG15530 gene product from transcript CG15530-RB	1.9
1638849_a_at	•	CG2875 gene product from transcript CG2875-RB	1.9
1638053_at	•	Cytochrome P450-4p1	1.9
1636852_at	•	CG8939 gene product from transcript CG8939-RA	1.89
1628406_s_at		Drosophila melanogaster RH61266 full insert cDNA.	1.88
1637800_at	•	CG3347 gene product from transcript CG3347-RB	1.87
1634912_at	•	modulo	1.87
1629125_at	•	CG7897 gene product from transcript CG7897-RA	1.85
1627236_s_at		Drosophila melanogaster SD06908 full insert cDNA.	1.85

1633231_a_at		TBP-like factor	1.83
1633130_at		Drosophila melanogaster RT08037 full insert cDNA.	1.83
1630247_at	•	CG4554 gene product from transcript CG4554-RA	1.83
1637275_a_at		Drosophila melanogaster GH09427 full length cDNA.	1.8
1630938_a_at	•	CG14879 gene product from transcript CG14879-RB	1.8
1634724_at	•	CG12499 gene product from transcript CG12499-RA	1.79
1627847_s_at	•	yippee interacting protein 3	1.79
1635163_at	•	CG5731 gene product from transcript CG5731-RA	1.78
1623173_at	•	CG10013 gene product from transcript CG10013-RA	1.78
1639047_at	•	multiple ankyrin repeats single KH domain	1.77
1634520_at	•	vein	1.76
1640242_s_at		---	1.75
1630931_at	•	CG2843 gene product from transcript CG2843-RA	1.74
1625197_at	•	extra bases	1.74
1630119_s_at	•	no receptor potential A	1.73
1623855_s_at	•	CG11660 gene product from transcript CG11660-RA	1.72
1635886_s_at		Drosophila melanogaster SD06908 full insert cDNA.	1.71
1631087_a_at	•	CG9809 gene product from transcript CG9809-RB	1.7
1637386_at	•	retinal degeneration C	1.69
1635446_at	•	CG15043 gene product from transcript CG15043-RA	1.69
1631519_at	•	CG9143 gene product from transcript CG9143-RA	1.69
1641428_at	•	Cytochrome P450-9c1	1.68
1637658_at	•	methuselah-like 3	1.68
1636073_at	•	CG32344 gene product from transcript CG32344-RA	1.67
1633331_at	•	domino	1.67
1624809_s_at		cdna:novel chromosome:BDGP5:U:5573655:5575850:-1	1.67
1639408_a_at	•	shaking B	1.66
1638301_at	•	CG8157 gene product from transcript CG8157-RA	1.66
1625856_at	•	diminutive	1.66
1639442_a_at	•	Transferrin 1	1.64
1625195_s_at	•	schnurri	1.64
1624803_at	•	CG42316 gene product from transcript CG42316-RD	1.64
1634421_at	•	CG8414 gene product from transcript CG8414-RA	1.63
1623431_at	•	CG13423 gene product from transcript CG13423-RA	1.63
1630466_at	•	lethal (2) k09022	1.62
1625317_at	•	CG3735 gene product from transcript CG3735-RA	1.62
1634950_at	•	Maternal transcript 89Ba	1.6

1623852_at	•	CG10407 gene product from transcript CG10407-RA	1.6
1625046_at	•	RNA-binding motif protein 13	1.59
1639302_at	•	CG5645 gene product from transcript CG5645-RA	1.58
1635109_at	•	CG5888 gene product from transcript CG5888-RA	1.58
1639355_s_at		Female sterile (2) Ketel	1.57
1640080_at	•	CG9253 gene product from transcript CG9253-RA	1.56
1634712_s_at	•	Cytoplasmic linker protein 190	1.56
1632352_a_at	•	CG30007 gene product from transcript CG30007-RB	1.56
1624928_at	•	CG6064 gene product from transcript CG6064-RA	1.55
1623888_at	•	Caliban	1.55
1626818_at	•	CG13097 gene product from transcript CG13097-RA	1.54
1625316_s_at		protein phosphatase from PCR fragment D27	1.54
1625263_at	•	CG33554 gene product from transcript CG33554-RE	1.54
1637060_a_at	•	CG7421 gene product from transcript CG7421-RB	1.53
1629964_at	•	CG4076 gene product from transcript CG4076-RA	1.53
1628174_at	•	nimrod B1	1.52
1639447_at	•	CG15561 gene product from transcript CG15561-RA	1.51
1637356_a_at	•	CG12864 gene product from transcript CG12864-RB	1.51
1624573_at	•	CG4998 gene product from transcript CG4998-RB	1.51
1629617_at	•	CG14893 gene product from transcript CG14893-RB	1.5
1639367_a_at		cdna:known chromosome:BDGP5:2R:4016859:4018837:-	1.48
1633944_at	•	CG17362 gene product from transcript CG17362-RA	1.48
1636346_at	•	CG7839 gene product from transcript CG7839-RA	1.47
1634364_s_at	•	starvin	1.47
1623790_at	•	Mucin related 29B	1.47
1636625_at	•	krimper	1.46
1632850_at	•	CG7338 gene product from transcript CG7338-RA	1.46
1641282_at	•	methuselah-like 4	1.45
1638153_at	•	CG7907 gene product from transcript CG7907-RB	1.45
1623782_at	•	SREBP cleavage activating protein	1.45
1635894_at	•	CG30148 gene product from transcript CG30148-RA	1.44
1631180_at	•	CG5728 gene product from transcript CG5728-RA	1.44
1630950_at	•	CG10206 gene product from transcript CG10206-RA	1.44
1641059_at	•	Calcium ATPase at 60A	1.42
1639810_at	•	Dead box protein 73D	1.42
1635854_s_at	•	CG40351 gene product from transcript CG40351-RF	1.42
1628344_at	•	Casein kinase II beta subunit	1.42

1626680_at	•	CG9305 gene product from transcript CG9305-RA	1.42
1625752_at	•	Troponin C at 41C	1.42
1625437_at		--- /// ---	1.42
1624779_at	•	CG11583 gene product from transcript CG11583-RA	1.42
1628160_a_at	•	domino	1.41
1625880_at		cdna:known chromosome:BDGP5:3R:18552691:1855808	1.41
1641298_at	•	Elongator complex protein 1	1.4
1638780_at	•	Glutamate receptor IIE	1.4
1636119_at	•	CG1468 gene product from transcript CG1468-RA	1.4
1633717_a_at	•	CG2199 gene product from transcript CG2199-RB	1.4
1631248_at	•	lethal (1) G0020	1.4
1630324_at		wicked	1.4
1627967_a_at	•	methuselah-like 4	1.4
1627682_at	•	CG14949 gene product from transcript CG14949-RA	1.4
1641576_a_at	•	CG5205 gene product from transcript CG5205-RA	1.39
1640595_at	•	CG12301 gene product from transcript CG12301-RA	1.39
1629924_at		CG10238	1.39
1626077_s_at	•	CG43143 gene product from transcript CG43143-RF	1.39
1624826_at	•	CG8552 gene product from transcript CG8552-RA	1.39
1626884_a_at		Ataxin-2 Binding Protein 1	1.38
1634623_a_at		Drosophila melanogaster IP16196 full insert cDNA.	1.37
1632639_at	•	CG13941 gene product from transcript CG13941-RA	1.37
1624750_at	•	CG8545 gene product from transcript CG8545-RA	1.37
1639509_at	•	CG12396 gene product from transcript CG12396-RA	1.36
1624269_at	•	glaikit	1.36
1640808_at	•	CG11180 gene product from transcript CG11180-RA	1.35
1630445_at	•	lethal (3) 07882	1.35
1625116_at		Perlecan	1.35
1624957_a_at	•	CG4821 gene product from transcript CG4821-RE	1.35
1635568_at	•	mahjong	1.34
1629605_at	•	CG15056 gene product from transcript CG15056-RA	1.34
1629405_s_at		twenty-four	1.34
1634304_a_at	•	CG17233 gene product from transcript CG17233-RG	1.33
1629950_at	•	CG1785 gene product from transcript CG1785-RA	1.33
1627571_at	•	Cyclic-AMP response element binding protein A	1.33
1623496_at	•	kurz	1.33
1637412_a_at	•	stranded at second	1.32

1625551_at	•	Juvenile hormone-inducible protein 1	1.32
1623926_at	•	mushroom body miniature	1.32
1628264_a_at	•	homolog of RecQ	1.31
1639632_at	•	CG1234 gene product from transcript CG1234-RA	1.3
1636496_at	•	Nucleoporin 153	1.3
1628629_at	•	Microcephalin	1.3
1627183_at		cdna:known chromosome:BDGP5:3R:12475703:1247802	1.3
1625972_at	•	CG31999 gene product from transcript CG31999-RA	1.3
1625646_at	•	CG11148 gene product from transcript CG11148-RD	1.3
1629471_at	•	CG10803 gene product from transcript CG10803-RA	1.29
1632821_a_at	•	CG3287 gene product from transcript CG3287-RB	1.28
1632791_at	•	CG32479 gene product from transcript CG32479-RA	1.28
1629356_at	•	RNA polymerase I subunit	1.28
1628691_at	•	CG17514 gene product from transcript CG17514-RF	1.27
1624138_at	•	CG5800 gene product from transcript CG5800-RA	1.27
1633163_at	•	nucleostemin 3	1.26
1629753_at	•	Kruppel	1.26
1625843_s_at		PFTAIRE-interacting factor 1B	1.26
1636780_at	•	CG14233 gene product from transcript CG14233-RA	1.25
1631356_at		scaf6	1.25
1639414_at	•	Sno oncogene	1.24
1634601_at	•	CG9684 gene product from transcript CG9684-RA	1.24
1633003_at	•	CG30349 gene product from transcript CG30349-RA	1.24
1623924_at	•	CG12325 gene product from transcript CG12325-RA	1.24
1637866_at	•	CG9246 gene product from transcript CG9246-RA	1.23
1630806_at	•	female sterile (1) K10	1.23
1641032_at	•	unconventional prefoldin RPB5 interactor	1.22
1638614_at	•	CG18273 gene product from transcript CG18273-RA	1.21
1635664_at	•	Buzidau	1.21
1635441_at	•	CG33337 gene product from transcript CG33337-RB	1.21
1627492_at	•	lethal (3) 72Dn	1.21
1626444_at	•	Fibrillarin	1.21
1639719_at	•	CG2163 gene product from transcript CG2163-RA	1.2
1638445_a_at	•	Secretory Pathway Calcium atpase	1.2
1635934_at	•	spaghetti	1.2
1629696_a_at	•	CG30497 gene product from transcript CG30497-RA	1.2
1629371_at	•	Elongase 68beta	1.2

1627656_at	•	gurken	1.2
1641486_at	•	CG42588 gene product from transcript CG42588-RA	1.19
1632294_at	•	senseless	1.19
1631083_at	•	lethal (1) G0144	1.19
1624720_s_at	•	CG6043 gene product from transcript CG6043-RG	1.19
1624272_at	•	CG10618 gene product from transcript CG10618-RB	1.19
1638283_at	•	CG9799 gene product from transcript CG9799-RA	1.18
1633412_s_at	•	CG3249 gene product from transcript CG3249-RC	1.18
1628180_at	•	CG12909 gene product from transcript CG12909-RA	1.18
1627461_at	•	bicoid stability factor	1.18
1636941_at	•	CG9007 gene product from transcript CG9007-RA	1.17
1631611_at	•	obstructor-H	1.17
1628216_at	•	peter pan	1.17
1623537_at		cdna:novel chromosome:BDGP5:X:12776214:12784445:-	1.17
1639288_at	•	Mystery 45A	1.15
1638480_at	•	CG8161 gene product from transcript CG8161-RA	1.15
1631465_at	•	CG3919 gene product from transcript CG3919-RB	1.15
1631198_at	•	CG2173 gene product from transcript CG2173-RA	1.15
1625253_at	•	Plenty of SH3s	1.15
1623607_at	•	UDP-GlcNAc:a-3-D-mannoside-beta-1,2-N-acetylglucosan	1.15
1641297_at	•	hyperplastic discs	1.14
1640382_at	•	CG2691 gene product from transcript CG2691-RA	1.14
1640068_at	•	CG10286 gene product from transcript CG10286-RA	1.14
1637489_at	•	CG6133 gene product from transcript CG6133-RA	1.14
1629242_x_at		---	1.14
1624335_at	•	CG11188 gene product from transcript CG11188-RA	1.14
1634727_a_at	•	three rows	1.13
1632035_at		cdna:novel chromosome:BDGP5:3R:5233571:5233867:-1	1.13
1623998_at	•	CG10565 gene product from transcript CG10565-RB	1.13
1641081_at	•	obstructor-G	1.12
1640341_s_at	•	CG5729 gene product from transcript CG5729-RA	1.12
1637162_at	•	CG12054 gene product from transcript CG12054-RA	1.12
1636958_s_at	•	lethal (2) k01209	1.12
1636301_s_at		CG14065	1.12
1632728_at	•	CG1609 gene product from transcript CG1609-RA	1.12
1626347_at	•	CG15877 gene product from transcript CG15877-RA	1.12
1640562_at	•	CG30033 gene product from transcript CG30033-RB	1.11

1627778_a_at	•	Arginine methyltransferase 3	1.11
1626016_s_at	•	tropomodulin	1.11
1622906_at		Drosophila melanogaster MIP19391 full insert cDNA.	1.11
1641382_at	•	CG8169 gene product from transcript CG8169-RA	1.1
1641324_at	•	Laminin A	1.1
1627924_at	•	RNA polymerase I 135kD subunit	1.1
1641369_at		--- /// ---	1.09
1640191_a_at	•	CTP synthase	1.09
1636926_s_at	•	cactus	1.09
1634705_at	•	CG10341 gene product from transcript CG10341-RA	1.09
1632676_s_at	•	CG11897 gene product from transcript CG11897-RA	1.09
1631106_s_at	•	Isoleucyl-tRNA synthetase	1.09
1628807_at	•	CG5205 gene product from transcript CG5205-RA	1.09
1625758_s_at	•	pitchoune	1.09
1638964_at	•	CG7800 gene product from transcript CG7800-RA	1.08
1636513_a_at	•	kismet	1.08
1631433_at	•	CG3335 gene product from transcript CG3335-RA	1.08
1627641_s_at	•	CG17494 gene product from transcript CG17494-RA	1.08
1626933_s_at	•	CG2469 gene product from transcript CG2469-RB	1.08
1624412_at	•	apterous	1.08
1639671_at	•	eiger	1.07
1637468_at		lethal (2) 34Fd	1.07
1633466_at	•	CG7728 gene product from transcript CG7728-RA	1.07
1631822_at	•	mutagen-sensitive 205	1.07
1640143_at	•	CG10463 gene product from transcript CG10463-RA	1.06
1637125_at	•	CG2004 gene product from transcript CG2004-RA	1.06
1628767_s_at	•	Mediator complex subunit 26	1.06
1623612_at	•	Serpin 47C	1.06
1623432_s_at	•	plexin B	1.06
1633394_a_at	•	CG13900 gene product from transcript CG13900-RA	1.05
1640653_at	•	Eukaryotic initiation factor 4B	1.04
1636773_a_at	•	degringolade	1.04
1631093_at	•	CG11837 gene product from transcript CG11837-RA	1.04
1624660_at	•	Protein tyrosine phosphatase 10D	1.04
1637410_s_at	•	lethal (2) giant larvae	1.03
1633878_at	•	Misexpression suppressor of ras 4	1.03
1628884_at	•	Peptidoglycan recognition protein SA	1.03

1625130_at	•	CG8170 gene product from transcript CG8170-RB	1.03
1624780_at	•	CG2995 gene product from transcript CG2995-RA	1.03
1624267_at	•	CG7182 gene product from transcript CG7182-RA	1.03
1624141_at	•	CG4901 gene product from transcript CG4901-RA	1.03
1637494_at	•	CG3071 gene product from transcript CG3071-RA	1.02
1636468_a_at	•	CG5033 gene product from transcript CG5033-RA	1.02
1630823_at		l(3)76BDr	1.02
1629429_at	•	CG31388 gene product from transcript CG31388-RB	1.02
1626676_at	•	plexin B	1.02
1641026_a_at		Par-1 kinase	1.01
1639914_at	•	CG5961 gene product from transcript CG5961-RB	1.01
1639873_at	•	CG6745 gene product from transcript CG6745-RA	1.01
1637943_at	•	held out wings	1.01
1636869_at		Argonaute	1.01
1628240_at	•	CG4825 gene product from transcript CG4825-RA	1.01
1640915_at	•	CG3800 gene product from transcript CG3800-RA	1
1640214_at	•	Nicotinamide amidase	1
1627383_at	•	abnormal spindle	1
1625589_at	•	centrosomin's beautiful sister	1
1639731_at	•	CG7785 gene product from transcript CG7785-RA	-1
1637251_a_at	•	CG10622 gene product from transcript CG10622-RA	-1.01
1635473_at	•	diadenosine tetraphosphate hydrolase	-1.01
1626514_at	•	CG5013 gene product from transcript CG5013-RA	-1.01
1640298_at	•	CG6308 gene product from transcript CG6308-RA	-1.02
1637154_at	•	CG7470 gene product from transcript CG7470-RB	-1.02
1630229_at	•	CG9815 gene product from transcript CG9815-RB	-1.02
1628935_at	•	CG10962 gene product from transcript CG10962-RB	-1.02
1625477_a_at	•	CG4797 gene product from transcript CG4797-RA	-1.02
1624506_at	•	Jonah 25Biii	-1.02
1623632_s_at	•	CG6327 gene product from transcript CG6327-RD	-1.02
1634298_at	•	CG12375 gene product from transcript CG12375-RA	-1.03
1632378_at	•	no mechanoreceptor potential A	-1.03
1630523_at	•	CG12106 gene product from transcript CG12106-RA	-1.03
1640992_at	•	CG2811 gene product from transcript CG2811-RA	-1.04
1630908_at	•	CG13617 gene product from transcript CG13617-RA	-1.04
1626089_at		axotactin	-1.04
1625756_at	•	CG6656 gene product from transcript CG6656-RA	-1.04

1630450_s_at	•	CG1981 gene product from transcript CG1981-RA	-1.05
1623453_at	•	Nuclear factor Y-box B	-1.05
1623231_at	•	dynactin-subunit-p25	-1.05
1622908_a_at	•	CG10962 gene product from transcript CG10962-RB	-1.05
1640857_at	•	CG10208 gene product from transcript CG10208-RA	-1.06
1638000_at	•	spalt-adjacent	-1.06
1637510_s_at	•	Hexosaminidase 1	-1.06
1634609_at	•	CG31111 gene product from transcript CG31111-RA	-1.06
1624437_s_at		--- /// --- /// deltaTrypsin /// gammaTrypsin	-1.06
1637402_at	•	CG32109 gene product from transcript CG32109-RA	-1.07
1634199_at	•	CG15220 gene product from transcript CG15220-RA	-1.07
1631321_s_at		His1:CG31617 /// His1:CG33801 /// His1:CG33804 /// His	-1.07
1627460_at	•	CG18343 gene product from transcript CG18343-RA	-1.07
1622907_at		Drosophila melanogaster FI01425 full insert cDNA.	-1.07
1635223_at		Drosophila melanogaster GH07620 full insert cDNA.	-1.08
1629072_at		--- /// suppressor of white-apricot	-1.08
1628599_at		Psf2	-1.08
1625233_at	•	Phosphotidylinositol 3 kinase 68D	-1.08
1638504_s_at		Drosophila melanogaster LP09838 full insert cDNA.	-1.09
1633641_a_at	•	CG15611 gene product from transcript CG15611-RB	-1.09
1625644_at	•	CG2641 gene product from transcript CG2641-RA	-1.09
1632975_at	•	CG4398 gene product from transcript CG4398-RA	-1.1
1636168_s_at	•	CG13101 gene product from transcript CG13101-RA	-1.11
1632979_at	•	CG11784 gene product from transcript CG11784-RB	-1.11
1639515_at	•	CG7367 gene product from transcript CG7367-RB	-1.12
1633830_at	•	CG10195 gene product from transcript CG10195-RB	-1.12
1629973_at		GABA transporter /// ---	-1.12
1629520_at	•	CG8997 gene product from transcript CG8997-RA	-1.12
1625840_at	•	CG12001 gene product from transcript CG12001-RA	-1.12
1637063_at	•	CG33099 gene product from transcript CG33099-RA	-1.13
1633405_s_at	•	CG4288 gene product from transcript CG4288-RB	-1.13
1631101_at	•	CG6480 gene product from transcript CG6480-RA	-1.13
1628177_at	•	juvenile hormone acid methyltransferase	-1.13
1639951_at	•	CG2611 gene product from transcript CG2611-RA	-1.15
1637022_at	•	CG3532 gene product from transcript CG3532-RB	-1.15
1635222_at	•	CG1513 gene product from transcript CG1513-RA	-1.15
1631674_at	•	O-fucosyltransferase 1	-1.15

1636942_at	•	CG8498 gene product from transcript CG8498-RA	-1.16
1635398_at		--- /// Calexcitin	-1.16
1635031_s_at	•	CG11147 gene product from transcript CG11147-RA	-1.16
1629821_at		Drosophila melanogaster GM14547 full length cDNA.	-1.16
1629430_s_at	•	CG1803 gene product from transcript CG1803-RA	-1.16
1641360_at	•	CG10222 gene product from transcript CG10222-RA	-1.17
1636816_s_at	•	CG33090 gene product from transcript CG33090-RB	-1.18
1631784_at	•	CG13663 gene product from transcript CG13663-RA	-1.18
1636431_at	•	CG8768 gene product from transcript CG8768-RA	-1.19
1623953_at	•	CG11592 gene product from transcript CG11592-RA	-1.19
1636535_at	•	CG15912 gene product from transcript CG15912-RA	-1.2
1636196_s_at		--- /// ---	-1.2
1633801_s_at	•	CG9171 gene product from transcript CG9171-RC	-1.2
1640901_at	•	CG6753 gene product from transcript CG6753-RB	-1.21
1638661_at	•	yippee interacting protein 7	-1.21
1636121_at	•	CG12924 gene product from transcript CG12924-RA	-1.21
1640101_at	•	CG8152 gene product from transcript CG8152-RA	-1.22
1638031_at	•	CG14512 gene product from transcript CG14512-RA	-1.22
1638811_at	•	CG7334 gene product from transcript CG7334-RE	-1.23
1638417_at	•	CG31373 gene product from transcript CG31373-RA	-1.24
1637928_at		CG6070 /// Organic anion transporting polypeptide 58Db	-1.24
1635110_at	•	CG2397 gene product from transcript CG2397-RA	-1.24
1638975_at	•	CG13876 gene product from transcript CG13876-RA	-1.25
1635086_at	•	CG4666 gene product from transcript CG4666-RA	-1.25
1629875_a_at	•	Cytochrome P450-4d1	-1.25
1636742_at		--- /// --- /// nord	-1.26
1631252_a_at	•	CG12023 gene product from transcript CG12023-RA	-1.26
1639322_at	•	etaTrypsin	-1.27
1634925_at	•	Transport and Golgi organization 2	-1.27
1640561_at	•	CG5978 gene product from transcript CG5978-RA	-1.28
1628184_at	•	Tetraspanin 3A	-1.28
1625531_at	•	Odorant-binding protein 18a	-1.28
1632431_s_at	•	Angiotensin converting enzyme	-1.29
1640286_at		--- /// UDP-sugar transporter in 74C	-1.3
1634746_at	•	CG3589 gene product from transcript CG3589-RA	-1.3
1640658_at	•	CG10005 gene product from transcript CG10005-RA	-1.31
1628330_at	•	CG34116 gene product from transcript CG34116-RA	-1.31

1626524_at	•	Phaedra 1	-1.31
1635919_at	•	CG13255 gene product from transcript CG13255-RA	-1.33
1633789_at	•	CG18144 gene product from transcript CG18144-RA	-1.33
1630989_a_at	•	CG32442 gene product from transcript CG32442-RA	-1.33
1638844_s_at	•	CG3714 gene product from transcript CG3714-RC	-1.34
1634699_a_at		Peroxin 6	-1.34
1626204_at	•	CG42246 gene product from transcript CG42246-RA	-1.34
1631432_at		Drosophila melanogaster RE24790 full insert cDNA.	-1.36
1628682_at	•	CG5577 gene product from transcript CG5577-RA	-1.36
1625800_at	•	CG4074 gene product from transcript CG4074-RA	-1.36
1637097_at	•	CG7497 gene product from transcript CG7497-RB	-1.37
1637041_a_at	•	CG3332 gene product from transcript CG3332-RB	-1.37
1633880_s_at	•	Ionotropic receptor 76a	-1.37
1628314_a_at	•	CG6891 gene product from transcript CG6891-RA	-1.37
1641412_at	•	CG31809 gene product from transcript CG31809-RB	-1.38
1637469_at	•	presenilin enhancer	-1.38
1629199_at	•	Antigen 5-related 2	-1.38
1628345_at	•	Cytochrome P450-6a9	-1.39
1627744_at	•	CG15209 gene product from transcript CG15209-RA	-1.4
1630414_at	•	CG13603 gene product from transcript CG13603-RA	-1.41
1637346_at	•	CG33514 gene product from transcript CG33514-RA	-1.42
1633378_at	•	Galactose-specific C-type lectin	-1.43
1623883_at	•	CG18661 gene product from transcript CG18661-RA	-1.43
1637791_at	•	CG31922 gene product from transcript CG31922-RA	-1.45
1633707_at	•	CG12824 gene product from transcript CG12824-RA	-1.45
1626166_at	•	CG13082 gene product from transcript CG13082-RA	-1.45
1640665_at	•	CG14133 gene product from transcript CG14133-RB	-1.47
1636409_at	•	CG11034 gene product from transcript CG11034-RB	-1.47
1637403_at	•	CG7953 gene product from transcript CG7953-RA	-1.48
1636793_at	•	Cytochrome P450-4d2	-1.48
1634016_at	•	CG2781 gene product from transcript CG2781-RA	-1.48
1634628_at	•	CG30392 gene product from transcript CG30392-RA	-1.49
1633268_s_at	•	Na[+]/H[+] hydrogen antiporter 1	-1.5
1632540_at	•	iotaTrypsin	-1.52
1624824_at	•	Jonah 74E	-1.52
1637309_a_at	•	CG14680 gene product from transcript CG14680-RC	-1.53
1636929_at	•	aveugle	-1.54

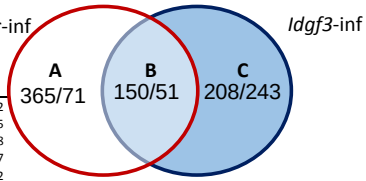
1635756_at	•	CG32039 gene product from transcript CG32039-RA	-1.54
1639049_at	•	CG17145 gene product from transcript CG17145-RA	-1.55
1637301_a_at	•	slowpoke	-1.55
1631387_at	•	CG30344 gene product from transcript CG30344-RA	-1.55
1629215_at	•	CG10723 gene product from transcript CG10723-RA	-1.55
1630528_at	•	CG17751 gene product from transcript CG17751-RB	-1.56
1629716_a_at	•	CG13284 gene product from transcript CG13284-RA	-1.56
1630957_s_at	•	slimfast	-1.57
1629897_a_at	•	CG6044 gene product from transcript CG6044-RA	-1.57
1625177_at	•	CG14182 gene product from transcript CG14182-RA	-1.57
1636973_at	•	Senescence marker protein-30	-1.58
1630467_a_at	•	Diuretic hormone 31	-1.58
1623620_a_at	•	rhomboid-6	-1.58
1636059_at	•	CG9689 gene product from transcript CG9689-RA	-1.59
1640244_at	•	CG33514 gene product from transcript CG33514-RA	-1.6
1631420_at	•	CG9509 gene product from transcript CG9509-RA	-1.6
1641190_at	•	Jonah 65Aii	-1.62
1639111_at	•	CG15362 gene product from transcript CG15362-RA	-1.62
1631266_a_at	•	CG5840 gene product from transcript CG5840-RB	-1.62
1639904_at	•	O-6-alkylguanine-DNA alkyltransferase	-1.64
1634607_at	•	CG14160 gene product from transcript CG14160-RA	-1.64
1637983_s_at	•	CG10365 gene product from transcript CG10365-RC	-1.65
1626022_at	•	CG14680 gene product from transcript CG14680-RC	-1.68
1623555_at	•	CG10131 gene product from transcript CG10131-RA	-1.68
1638473_at	•	CG4386 gene product from transcript CG4386-RA	-1.69
1627207_at	•	CG14352 gene product from transcript CG14352-RA	-1.69
1625304_s_at	•	CG34301 gene product from transcript CG34301-RA	-1.7
1637632_at	•	CG12194 gene product from transcript CG12194-RA	-1.73
1631277_at	•	alpha-Esterase-4	-1.74
1628907_at	•	Type III alcohol dehydrogenase	-1.74
1636392_at		Drosophila melanogaster IP21342 full insert cDNA.	-1.75
1635507_at		--- /// ---	-1.76
1633386_s_at	•	methuselah-like 8	-1.76
1631369_at	•	CG7567 gene product from transcript CG7567-RA	-1.78
1627741_at	•	CG13086 gene product from transcript CG13086-RA	-1.78
1625948_at	•	CG17633 gene product from transcript CG17633-RA	-1.78
1626689_at	•	CG1644 gene product from transcript CG1644-RA	-1.8

1635868_at	•	CG6295 gene product from transcript CG6295-RA	-1.81
1636736_s_at		--- /// Misexpression suppressor of KSR 4	-1.82
1623468_at	•	mitotic spindle density 5	-1.85
1636154_at	•	CG30090 gene product from transcript CG30090-RA	-1.87
1633783_a_at	•	CG5921 gene product from transcript CG5921-RD	-1.87
1637829_at	•	CG4020 gene product from transcript CG4020-RA	-1.88
1631285_at	•	Tetraspanin 5D	-1.88
1624670_at	•	CG7589 gene product from transcript CG7589-RA	-1.88
1628430_at	•	CG15704 gene product from transcript CG15704-RA	-1.89
1641664_at	•	CG10170 gene product from transcript CG10170-RA	-1.91
1637551_at	•	CG1887 gene product from transcript CG1887-RD	-1.92
1635975_s_at		Drosophila melanogaster RE54004 full length cDNA.	-1.92
1623728_at	•	CG13689 gene product from transcript CG13689-RA	-1.92
1626605_at	•	CG14075 gene product from transcript CG14075-RA	-1.93
1638973_s_at	•	CG11149 gene product from transcript CG11149-RD	-1.97
1626481_a_at	•	Tafazzin	-1.97
1626342_at	•	CG12115 gene product from transcript CG12115-RA	-1.98
1636470_at	•	CG34026 gene product from transcript CG34026-RA	-2.02
1634033_s_at		Drosophila melanogaster glucose transporter 1 (glut1) m	-2.02
1636193_at	•	CG13893 gene product from transcript CG13893-RA	-2.04
1633033_s_at	•	CG1732 gene product from transcript CG1732-RA	-2.04
1638775_at	•	Multi drug resistance 50	-2.05
1634143_at	•	CG8345 gene product from transcript CG8345-RA	-2.05
1632695_at	•	CG18585 gene product from transcript CG18585-RA	-2.05
1628896_a_at	•	CG4210 gene product from transcript CG4210-RC	-2.05
1638601_at	•	spookier	-2.08
1627657_at	•	CG16749 gene product from transcript CG16749-RA	-2.08
1624732_at	•	Glutathione S transferase E5	-2.1
1637291_at	•	CG18031 gene product from transcript CG18031-RA	-2.12
1624092_at	•	Jonah 99Ci	-2.14
1630886_at	•	CG6584 gene product from transcript CG6584-RI	-2.18
1634267_at	•	CG30495 gene product from transcript CG30495-RA	-2.19
1639338_at	•	CG11912 gene product from transcript CG11912-RA	-2.22
1631668_at	•	CG17147 gene product from transcript CG17147-RA	-2.25
1624171_at	•	CG13488 gene product from transcript CG13488-RB	-2.28
1624816_at	•	CG30283 gene product from transcript CG30283-RB	-2.29
1623256_at	•	Glutathione S transferase E1	-2.31

1637516_at	•	CG15449 gene product from transcript CG15449-RA	-2.35
1637561_at	•	CG16834 gene product from transcript CG16834-RB	-2.37
1637253_s_at	•	CG17570 gene product from transcript CG17570-RA	-2.43
1634323_at	•	CG17191 gene product from transcript CG17191-RA	-2.43
1625833_at	•	CG9896 gene product from transcript CG9896-RA	-2.47
1635254_at	•	CG17662 gene product from transcript CG17662-RB	-2.53
1640060_at	•	CG33096 gene product from transcript CG33096-RE	-2.58
1633411_s_at		--- /// ---	-2.62
1634076_at	•	CG12057 gene product from transcript CG12057-RA	-2.63
1639733_s_at	•	CG14275 gene product from transcript CG14275-RA	-2.64
1633050_at	•	Niemann-Pick type C-2d	-2.64
1625082_a_at	•	CG7882 gene product from transcript CG7882-RA	-2.78
1627946_at		shroud	-2.82
1640978_at	•	CG14567 gene product from transcript CG14567-RA	-2.85
1625487_at	•	CG6839 gene product from transcript CG6839-RA	-2.86
1632444_at	•	CG15170 gene product from transcript CG15170-RA	-2.95
1623559_s_at		---	-3.02
1641125_at	•	CG1942 gene product from transcript CG1942-RA	-3.11
1627120_at	•	CG1014 gene product from transcript CG1014-RA	-3.18
1624137_at	•	CG11911 gene product from transcript CG11911-RA	-3.2
1635952_at	•	lethal (2) essential for life	-3.23
1632045_at	•	CG5697 gene product from transcript CG5697-RA	-3.24
1633460_at	•	CG6034 gene product from transcript CG6034-RA	-3.25
1626028_at	•	CG4783 gene product from transcript CG4783-RA	-3.45
1640037_at	•	CG7798 gene product from transcript CG7798-RA	-3.52
1637590_at	•	CG42329 gene product from transcript CG42329-RA	-3.55
1629542_at	•	CG31821 gene product from transcript CG31821-RA	-3.6
1637986_at	•	CG15253 gene product from transcript CG15253-RA	-3.68
1629184_at	•	CG3819 gene product from transcript CG3819-RA	-3.75
1627499_at	•	CG2016 gene product from transcript CG2016-RB	-3.79
1625910_at	•	CG1773 gene product from transcript CG1773-RA	-3.89
1630619_at	•	Serine protease inhibitor 1	-3.92
1625739_at	•	CG3292 gene product from transcript CG3292-RA	-4
1627477_at		cdna:known chromosome:BDGP5:3R:3866970:3881259:1	-4.02
1640542_at	•	CG5892 gene product from transcript CG5892-RA	-4.16
1641715_at	•	CG11162 gene product from transcript CG11162-RA	-4.34
1635306_at	•	CG4650 gene product from transcript CG4650-RB	-4.62

1629324_at	•	CG6870 gene product from transcript CG6870-RA	-4.7
1630822_at	•	CG13078 gene product from transcript CG13078-RA	-5.26
1626031_at	•	CG12539 gene product from transcript CG12539-RA	-5.4

Analysis Type:	PANTHER Overrepresentation Test (release 20150430)
Annotation Version and Release Date:	GO Ontology database Released 2015-06-06
Reference List:	Drosophila melanogaster (all genes in database)
	Bonferroni correction for multiple testing



A - genes significantly changed only in infected control

GO biological process complete	#ref	#analyzed	expected	Fold Enrichment	+/-	P value
regulation of hippo signaling	16	6	0.44	> 5	+	0.0172
negative regulation of Wnt signaling pathway	33	10	0.9	> 5	+	0.000105
homophilic cell adhesion via plasma membrane adhesion molecules	34	10	0.93	> 5	+	0.000138
regulation of Wnt signaling pathway	72	16	1.97	> 5	+	8.06E-07
cell-cell adhesion via plasma-membrane adhesion molecules	62	12	1.7	> 5	+	0.000582
establishment of ommatidial planar polarity	62	10	1.7	> 5	+	0.0287
cell-cell adhesion	83	13	2.27	> 5	+	0.00194
peripheral nervous system development	94	14	2.57	> 5	+	0.00132
establishment of tissue polarity	91	12	2.49	4.81	+	0.0288
establishment of planar polarity	91	12	2.49	4.81	+	0.0288
chemotaxis	267	35	7.31	4.79	+	1.32E-10
brain development	125	16	3.42	4.67	+	0.00149
axonogenesis	291	37	7.97	4.64	+	6E-11
axon development	300	38	8.22	4.62	+	2.94E-11
morphogenesis of a polarized epithelium	103	13	2.82	4.61	+	0.0198
axon guidance	246	31	6.74	4.6	+	1.05E-08
neuron projection guidance	254	32	6.96	4.6	+	4.69E-09
neuron recognition	113	14	3.1	4.52	+	0.0109
taxis	325	40	8.9	4.49	+	1.42E-11
cell recognition	119	14	3.26	4.29	+	0.0195
cell morphogenesis involved in differentiation	478	55	13.09	4.2	+	1.27E-15
cell morphogenesis involved in neuron differentiation	434	49	11.89	4.12	+	2.72E-13
head development	151	17	4.14	4.11	+	0.00375
imaginal disc-derived appendage development	406	44	11.12	3.96	+	4.65E-11
appendage development	409	44	11.2	3.93	+	5.98E-11
wing disc morphogenesis	352	37	9.64	3.84	+	1.55E-08
imaginal disc-derived appendage morphogenesis	402	42	11.01	3.81	+	6.29E-10
imaginal disc-derived wing morphogenesis	346	36	9.48	3.8	+	4.02E-08
post-embryonic appendage morphogenesis	395	41	10.82	3.79	+	1.52E-09
appendage morphogenesis	405	42	11.09	3.79	+	7.99E-10
central nervous system development	233	24	6.38	3.76	+	0.000133
negative regulation of signal transduction	243	25	6.66	3.76	+	7.11E-05
regulation of neurogenesis	167	17	4.57	3.72	+	0.014
negative regulation of response to stimulus	296	30	8.11	3.7	+	3.91E-06
negative regulation of signaling	259	26	7.09	3.66	+	6.04E-05
negative regulation of cell communication	263	26	7.2	3.61	+	8.14E-05
neuron projection morphogenesis	527	52	14.44	3.6	+	6.4E-12
post-embryonic organ morphogenesis	459	45	12.57	3.58	+	7.2E-10
imaginal disc morphogenesis	459	45	12.57	3.58	+	7.2E-10
neuron projection development	541	53	14.82	3.58	+	4.46E-12
regulation of cell proliferation	184	18	5.04	3.57	+	0.0127
dendrite morphogenesis	195	19	5.34	3.56	+	0.00737
neuron development	664	64	18.19	3.52	+	7.41E-15
locomotion	564	54	15.45	3.5	+	5.95E-12
dendrite development	199	19	5.45	3.49	+	0.00982
compound eye development	326	31	8.93	3.47	+	9.05E-06
cell adhesion	200	19	5.48	3.47	+	0.0105
instar larval or pupal morphogenesis	474	45	12.98	3.47	+	2.13E-09
post-embryonic morphogenesis	485	46	13.29	3.46	+	1.2E-09
positive regulation of nucleobase-containing compound metabolic process	327	31	8.96	3.46	+	9.71E-06
post-embryonic organ development	517	49	14.16	3.46	+	1.96E-10
eye development	341	32	9.34	3.43	+	6.84E-06
metamorphosis	501	47	13.72	3.42	+	9.53E-10
tube morphogenesis	556	52	15.23	3.41	+	5.18E-11
open tracheal system development	215	20	5.89	3.4	+	0.00802
regulation of anatomical structure size	183	17	5.01	3.39	+	0.0448
positive regulation of macromolecule biosynthetic process	325	30	8.9	3.37	+	3.15E-05
wing disc development	466	43	12.76	3.37	+	1.77E-08
compound eye morphogenesis	250	23	6.85	3.36	+	0.00176
morphogenesis of an epithelium	642	59	17.59	3.35	+	1.54E-12
positive regulation of nitrogen compound metabolic process	349	32	9.56	3.35	+	1.18E-05
sensory organ morphogenesis	262	24	7.18	3.34	+	0.00108
eye morphogenesis	262	24	7.18	3.34	+	0.00108
epithelial tube morphogenesis	524	48	14.35	3.34	+	1.22E-09
positive regulation of RNA metabolic process	306	28	8.38	3.34	+	0.000118
tissue morphogenesis	656	60	17.97	3.34	+	1.04E-12
positive regulation of RNA biosynthetic process	299	27	8.19	3.3	+	0.000267
positive regulation of transcription, DNA-templated	299	27	8.19	3.3	+	0.000267
positive regulation of nucleic acid-templated transcription	299	27	8.19	3.3	+	0.000267
neuron differentiation	767	69	21.01	3.28	+	1E-14
biological adhesion	213	19	5.83	3.26	+	0.0253
cell projection morphogenesis	584	52	16	3.25	+	3.41E-10
respiratory system development	225	20	6.16	3.25	+	0.0156
positive regulation of transcription from RNA polymerase II promoter	215	19	5.89	3.23	+	0.0288
cell morphogenesis	681	60	18.65	3.22	+	5.42E-12
cell part morphogenesis	591	52	16.19	3.21	+	5.36E-10
positive regulation of cellular biosynthetic process	364	32	9.97	3.21	+	3.13E-05
positive regulation of biosynthetic process	364	32	9.97	3.21	+	3.13E-05
positive regulation of gene expression	342	30	9.37	3.2	+	9.57E-05
generation of neurons	883	77	24.19	3.18	+	4.48E-16
instar larval or pupal development	574	50	15.72	3.18	+	2.36E-09
cell projection organization	656	57	17.97	3.17	+	5.35E-11
regulation of transcription from RNA polymerase II promoter	441	38	12.08	3.15	+	2.14E-06
organ morphogenesis	758	65	20.76	3.13	+	1.09E-12
embryo development	502	43	13.75	3.13	+	1.81E-07
regulation of nervous system development	259	22	7.09	3.1	+	0.0109
imaginal disc development	636	54	17.42	3.1	+	6.99E-10
cellular component morphogenesis	801	68	21.94	3.1	+	3.31E-13
movement of cell or subcellular component	594	50	16.27	3.07	+	8.08E-09
tube development	767	64	21.01	3.05	+	6.74E-12
muscle structure development	240	20	6.57	3.04	+	0.0391
post-embryonic development	637	53	17.45	3.04	+	2.58E-09
cell fate commitment	478	39	13.09	2.98	+	5.69E-06
epithelial cell differentiation	360	29	9.86	2.94	+	0.000932
epithelium development	1005	80	27.53	2.91	+	1.5E-14
sensory organ development	455	36	12.46	2.89	+	5.29E-05
ovarian follicle cell development	283	22	7.75	2.84	+	0.0423
columnar/cuboidal epithelial cell development	284	22	7.78	2.83	+	0.0446
tissue development	1120	86	30.68	2.8	+	5.56E-15
cell development	1409	108	38.6	2.8	+	5.62E-20
regulation of cell differentiation	333	25	9.12	2.74	+	0.0202
positive regulation of cellular process	956	70	26.19	2.67	+	1.58E-10
oogenesis	605	44	16.57	2.66	+	1.54E-05
regulation of multicellular organismal development	455	33	12.46	2.65	+	0.00147
positive regulation of macromolecule metabolic process	513	37	14.05	2.63	+	0.000335
female gamete generation	612	44	16.76	2.62	+	2.15E-05

negative regulation of cellular process	1003	72	27.47	2.62	+	1.68E-10
organ development	1226	88	33.58	2.62	+	1.24E-13
regulation of cellular macromolecule biosynthetic process	936	67	25.64	2.61	+	1.69E-09
regulation of macromolecule biosynthetic process	938	67	25.69	2.61	+	1.86E-09
regulation of RNA biosynthetic process	842	60	23.06	2.6	+	3.99E-08
regulation of transcription, DNA-templated	842	60	23.06	2.6	+	3.99E-08
regulation of nucleic acid-templated transcription	842	60	23.06	2.6	+	3.99E-08
positive regulation of cellular metabolic process	537	38	14.71	2.58	+	0.00036
regulation of cellular biosynthetic process	987	69	27.04	2.55	+	2.12E-09
regulation of biosynthetic process	988	69	27.06	2.55	+	2.22E-09
anatomical structure morphogenesis	1634	114	44.76	2.55	+	4.11E-18
regulation of signal transduction	661	46	18.11	2.54	+	2.54E-05
regulation of RNA metabolic process	919	63	25.17	2.5	+	5.65E-08
nervous system development	1548	106	42.4	2.5	+	7.26E-16
regulation of nucleobase-containing compound metabolic process	968	66	26.52	2.49	+	2.17E-08
positive regulation of biological process	1087	74	29.78	2.49	+	9.51E-10
response to external stimulus	838	57	22.95	2.48	+	7.92E-07
regulation of developmental process	677	46	18.54	2.48	+	5.17E-05
cellular process involved in reproduction in multicellular organism	771	52	21.12	2.46	+	7.04E-06
neurogenesis	1397	94	38.27	2.46	+	4.62E-13
negative regulation of biological process	1133	76	31.04	2.45	+	8.82E-10
regulation of nitrogen compound metabolic process	1002	67	27.45	2.44	+	3.41E-08
response to chemical	869	58	23.8	2.44	+	1.09E-06
regulation of response to stimulus	904	60	24.76	2.42	+	6.43E-07
behavior	548	36	15.01	2.4	+	0.00433
regionalization	472	31	12.93	2.4	+	0.0236
pattern specification process	518	34	14.19	2.4	+	0.00869
positive regulation of metabolic process	611	40	16.74	2.39	+	0.0012
germ cell development	703	46	19.26	2.39	+	0.000155
developmental process involved in reproduction	810	53	22.19	2.39	+	1.34E-05
anatomical structure formation involved in morphogenesis	571	37	15.64	2.37	+	0.00422
negative regulation of cellular metabolic process	483	31	13.23	2.34	+	0.0367
regulation of signaling	735	47	20.13	2.33	+	0.000215
gamete generation	832	53	22.79	2.33	+	3.26E-05
system development	2180	138	59.72	2.31	+	2.46E-19
regulation of gene expression	1076	68	29.47	2.31	+	2.66E-07
regulation of cell communication	745	47	20.41	2.3	+	0.000318
single organism reproductive process	898	56	24.6	2.28	+	2.48E-05
negative regulation of metabolic process	564	35	15.45	2.27	+	0.0206
multicellular organismal reproductive process	940	58	25.75	2.25	+	1.88E-05
regulation of multicellular organismal process	618	38	16.93	2.24	+	0.0102
mitotic cell cycle	537	33	14.71	2.24	+	0.0459
cell differentiation	2204	133	60.37	2.2	+	1.58E-16
sexual reproduction	962	58	26.35	2.2	+	4.23E-05
multi-organism reproductive process	972	58	26.63	2.18	+	6.05E-05
regulation of primary metabolic process	1357	80	37.17	2.15	+	1.2E-07
cellular component assembly	748	44	20.49	2.15	+	0.00524
reproductive process	1037	61	28.41	2.15	+	4.13E-05
cellular developmental process	2272	133	62.24	2.14	+	2.18E-15
regulation of cellular metabolic process	1404	82	38.46	2.13	+	1.01E-07
regulation of macromolecule metabolic process	1407	82	38.54	2.13	+	1.12E-07
cell cycle	725	41	19.86	2.06	+	0.0303
single-organism organelle organization	1034	57	28.32	2.01	+	0.0011
regulation of metabolic process	1603	88	43.91	2	+	3.88E-07
regulation of biological quality	996	54	27.28	1.98	+	0.00382
multicellular organismal development	2731	148	74.81	1.98	+	8.85E-15
anatomical structure development	2966	160	81.25	1.97	+	1.94E-16
multi-organism process	1251	67	34.27	1.96	+	0.000256
multicellular organism reproduction	1139	61	31.2	1.96	+	0.00107
regulation of cellular process	2928	155	80.2	1.93	+	7.25E-15
single-organism developmental process	3249	170	89	1.91	+	1.26E-16
cellular component organization	2342	122	64.15	1.9	+	7.4E-10
developmental process	3273	170	89.65	1.9	+	2.77E-16
regulation of biological process	3143	162	86.09	1.88	+	9.36E-15
reproduction	1270	65	34.79	1.87	+	0.00203
cellular component organization or biogenesis	2403	122	65.82	1.85	+	4.46E-09
response to stimulus	2341	117	64.13	1.82	+	4.55E-08
biological regulation	3426	171	93.85	1.82	+	1.3E-14
single-multicellular organism process	3274	155	89.68	1.73	+	1.99E-10
organelle organization	1529	72	41.88	1.72	+	0.00952
multicellular organismal process	3716	167	101.79	1.64	+	1.07E-09
single-organism cellular process	4942	196	135.37	1.45	+	3.29E-07
single-organism process	6392	229	175.09	1.31	+	4.19E-05
cellular process	6179	218	169.26	1.29	+	0.000783
Unclassified	3088	73	84.59	0.86	-	0

B - Shared genes (present in both - in infected control and infected Idgf3 mutant)

GO biological process complete	#ref	#analyzed	expected	Fold Enrichment	+/-	P value
antibacterial humoral response	30	12	0.4	> 5	+	4.96E-11
defense response to Gram-positive bacterium	40	10	0.54	> 5	+	7.18E-07
antimicrobial humoral response	76	16	1.02	> 5	+	3.75E-11
humoral immune response	95	19	1.28	> 5	+	2.88E-13
immune response	197	21	2.65	> 5	+	1.26E-09
defense response to other organism	223	19	3	> 5	+	7.26E-07
response to external biotic stimulus	287	23	3.86	> 5	+	2.85E-08
response to other organism	287	23	3.86	> 5	+	2.85E-08
response to biotic stimulus	289	23	3.88	> 5	+	3.26E-08
defense response to bacterium	181	14	2.43	> 5	+	0.000565
immune system process	290	22	3.9	> 5	+	2.31E-07
defense response	331	25	4.45	> 5	+	1.19E-08
response to bacterium	201	15	2.7	> 5	+	0.000324
response to external stimulus	838	30	11.26	2.66	+	0.00252
response to stress	1038	37	13.95	2.65	+	0.000118
multi-organism process	1251	40	16.81	2.38	+	0.000548
negative regulation of cellular process	1003	31	13.48	2.3	+	0.0321
response to stimulus	2341	61	31.46	1.94	+	0.000249
Unclassified	3088	48	41.5	1.16	+	0

C - genes significantly changed only in infected Idgf3 mutant

GO biological process complete	#ref	#analyzed	expected	Fold Enrichment	+/-	P value
rRNA processing	41	15	1.47	> 5	+	1.35E-07
rRNA metabolic process	43	15	1.54	> 5	+	2.58E-07
ribosome biogenesis	76	23	2.72	> 5	+	4.97E-11
ribonucleoprotein complex biogenesis	113	23	4.04	> 5	+	1.36E-07
ncRNA processing	100	18	3.58	> 5	+	0.000107
cellular response to starvation	109	16	3.9	4.1	+	0.00819
cellular response to nutrient levels	110	16	3.94	4.06	+	0.00918
cellular response to external stimulus	117	17	4.19	4.06	+	0.00464
cellular response to extracellular stimulus	112	16	4.01	3.99	+	0.0115
ncRNA metabolic process	158	20	5.66	3.54	+	0.00469
response to starvation	159	20	5.69	3.51	+	0.00515
response to nutrient levels	176	20	6.3	3.17	+	0.0226
response to extracellular stimulus	178	20	6.37	3.14	+	0.0266
Unclassified	3088	120	110.53	1.09	+	0

#ref - total number of reference genes annotated for GO process
#analyzed - number of significantly regulated genes
expected - expected number of genes

GSEA of KEGG pathways

logFC cutoff 0.4 (TRUE), Q-VALUE cutoff 0.05

Hypergeometric test, genes deregulated in any direction	KEGG	name	#ref	#analyzed	Q value
Regulated in ctr upon infection (ctri x ctr):	dme04914	*Progesterone-mediated oocyte maturation*	30	13	0.00102
	dme03020	RNA polymerase	20	9	0.0404
Regulated in mutant upon infection (m3i x m3):	dme03008	Ribosome biogenesis in eukaryotes	52	28	5.07E-11

Hypergeometric test, UP-deregulated genes	KEGG	name	#ref	#analyzed	Q value
Regulated in ctr upon infection (ctri x ctr):	dme04914	*Progesterone-mediated oocyte maturation*	30	13	2.42E-05
	dme04310	Wnt signaling pathway	51	17	0.00467
	dme04120	Ubiquitin mediated proteolysis	63	17	0.00988
	dme04630	Jak-STAT signaling pathway	13	6	0.0197
	dme04340	Hedgehog signaling pathway	17	8	0.0197
	dme04320	Dorso-ventral axis formation	16	5	0.0209
	dme04512	ECM-receptor interaction	9	4	0.0276
Regulated in mutant upon infection (m3i x m3):	dme03008	Ribosome biogenesis in eukaryotes	52	28	1.74E-16
	dme03013	RNA transport	79	21	0.000831

Hypergeometric test, DOWN-deregulated genes	KEGG	name	#ref	#analyzed	Q value
Regulated in ctr upon infection (ctri x ctr):	dme03020	RNA polymerase	20	9	0.00887
	dme00240	Pyrimidine metabolism	51	15	0.0252
Regulated in mutant upon infection (m3i x m3):					ns

#ref - total number of reference genes annotated for KEGG process and present on Affymetrix microarray

#analyzed - number of significantly regulated genes

ns - no significant results

DAVID gene annotation chart KEGG

ctri x ctr

Category	Term	Count	%	PValue	Genes	Fold Enrichment
KEGG_PATHWAY	dme03020:RNA polymerase	10	0.569476	0.005545	RNA polymerase II 15kD subunit, CG31155, RNA polymerase II 215kD subunit, CG7339, CG11246, CG13773, RNA polymerase II 140kD subunit, CG33051, lethal (2) 37Cg, CG3756	2.807161
KEGG_PATHWAY	dme04310:Wnt signaling pathway	19	1.082005	0.005608	Ras-like GTP-binding protein Rho1, Smad on X, nejire, wingless, Van Gogh, seven in absentia, nemo, shifted, cAMP-dependent protein kinase 3, F-box-like/WD repeat-containing protein ebi, division abnormally delayed, Calcineurin B2, no receptor potential A, microtubule star, CG2185, arrow, APC-like, RING-box protein 1B, naked cuticle	1.946046
KEGG_PATHWAY	dme04630:Jak-STAT signaling pathway	8	0.455581	0.007743	Suppressor of cytokine signaling at 36E, hopscotch, nejire, Signal-transducer and activator of transcription protein at 92E, CG4141, Son of sevenless, CG7037, Suppressor of Cytokine Signaling at 16D	3.191299
KEGG_PATHWAY	dme00310:Lysine degradation	10	0.569476	0.01184	CG7144, CG9149, grappa, Glycosyltransferase 25 family member, Probable histone-lysine N-methyltransferase CG1716, CG9629, Histone-lysine N-methyltransferase pr-set7, Probable histone-lysine N-methyltransferase Mes-4, CG2995, Histone-lysine N-methyltransferase Suv4-20	2.526445
KEGG_PATHWAY	dme04120:Ubiquitin mediated proteolysis	22	1.252847	0.011878	CG6303, Elongin C, CG8711, CG5087, CG3356, CG10254, seven in absentia, CG8610, courtless, Ubiquitin conjugating enzyme 10, DNA damage-binding protein 1, CG2508, CG7037, morula, Ubiquitin conjugating enzyme, Probable E3 ubiquitin-protein ligase HERC2, abnormal oocyte, imaginal discs arrested, CG6759, guftagu, RING-box protein 1B, Anaphase Promoting Complex 4	1.719025

KEGG_PATHWAY	dme00240:Pyrimidine metabolism	19	1.082005	0.013043	Ribonucleoside diphosphate reductase large subunit, CG31155, mutagen-sensitive 201, CG8891, CG4827, CG13773, Probable deoxycytidylate deaminase, CG3756, RNA polymerase II 15kD subunit, Probable uridine-cytidine kinase; Uridine kinase, DNA polymerase epsilon, diadenosine tetraphosphate hydrolase, RNA polymerase II 215kD subunit, CG7339, CG11246, RNA polymerase II 140kD subunit, lethal (2) k01209, CG33051, lethal (2) 37Cg	1.800092
KEGG_PATHWAY	*dme04914:Progesterone-mediated oocyte maturation*	12	0.683371	0.013646	Cyclin B3, Bub1-related kinase; Bub1 homologue, Serine/threonine-protein kinase polo, Mitogen-activated protein kinase 14B, imaginal discs arrested, CG4141, CG8610, CG6759, cAMP-dependent protein kinase 3, CG2508, Anaphase Promoting Complex 4, morula	2.218342
KEGG_PATHWAY	dme04320:Dorso-ventral axis formation	9	0.512528	0.014841	cappuccino, encore, anterior open, egghead, Protein giant-lens, spire, squid, pointed, Son of sevenless	2.623616
KEGG_PATHWAY	dme04340:Hedgehog signaling pathway	8	0.455581	0.0298	discs overgrown, costa, wingless, decapentaplegic, cAMP-dependent protein kinase 3, fused, CG34352, cubitus interruptus	2.526445

m3i x m3

Category	Term	Count	%	PValue	Genes	Fold Enrichment
				ns		

ns - nothing significant
settings of analyses: counts = 2, $p < 0.05$
Genes with $q < 0.05$ counted as significant

Table S5. List of primers used in real-time RT-PCR.

Primer name	Sequence
rp49 fw	CTTCATCCGCCACCAGTC
rp49 rev	GGCGACGCACTCTGTTGT
Idgf3 fw	GATCTGCTGCTCAGTCTCACC
Idgf3 rev	TCGACGGGGCATCATAGTA

Table S6. Genotypes and treatments of the lines used for the array study.

#	Name	Abbreviation	Genotypes	Infected by EPN*
1	Control	ctr	*w; $Idgf3^{L1}$/+; UAS-Idgf3-myc/+*	N
2	EPN infection in control	ctri	*w; $Idgf3^{L1}$/+; UAS-Idgf3-myc/+*	Y
3	Idgf3 mutant	m3	*w; $Idgf3^{L1}/dac^{7}$; UAS-Idgf3-myc/+*	N
4	EPN infection in Idgf3 mutant	m3i	*w; $Idgf3^{L1}/dac^{7}$; UAS-Idgf3-myc/+*	Y

* EPN infection lasts for 2 hours, larvae were analyzed 6 hours post infection.