

Table S1: Supplementary information on genes in the three gene sets

Walser et al. 2006

Heat-shock promoters: targets for evolution by *P* transposable elements in *Drosophila*

Sources used for the tables and for further information:

(1) *Drosophila* developmental gene expression timecourse
<http://genome.med.yale.edu/Lifecycle/>

Drosophila Developmental Gene Expression Timecourse (<http://genome.med.yale.edu/Lifecycle/>).

Color coded time course for gene list: 

Yellow color represents high relative levels of expression while blue represents low levels. The brightest color is three-fold or greater differential from the reference black

(2) FlyBase - a database of the *Drosophila* Genome
<http://flybase.bio.indiana.edu/>

(3) FlyGRID - a database of genetic and physical interactions developed
http://biodata.mshri.on.ca:80/fly_grid/servlet/SearchPage

(4) MitoDrome – a database with the aim to annotate the complete set of *Drosophila melanogaster* nuclear genes encoding for mitochondrial proteins in order to contribute to their functional characterization.
<http://www2.ba.itb.cnr.it/MitoDrome/>

(5) BDGP Gene Expression Summary
<http://www.fruitfly.org/cgi-bin/ex/bquery.pl?qpage=entry&qtype=summary>

Gene Set I. Heat-inducible genes, *hsp* genes, chaperone genes. ID: FlyBase ID; SYM This is the standard abbreviation (gene symbol) for the name of the gene.; Location: Chromosome arm and Location of the gene on the cytological (polytene chromosome) map. Developmental Gene Expression Timecourse (for color code see above)

ID	SYM	Location	Metamorphosis				Adult		Ref.
			Embryo	Larvae	Prepupae	Pupae	□	□	
CG4460	<i>Hsp22</i>	3L-67B2							1-5
CG4463	<i>Hsp23</i>	3L-67B3							1,5
CG4183	<i>Hsp26</i>	3L-67B2							1,5
CG4466	<i>Hsp27</i>	3L-67B3							1,5
CG5436	<i>Hsp68</i>	3R-95D11							5
CG18743	<i>Hsp70Ab</i>	3R-87A3							1,5,6
CG1242	<i>Hsp83</i>	3L-63B11							5
CR31400	<i>Hrsω</i>	3R-93D4							7
CG10578	<i>DnaJ-1</i>	3L-64E5							8
CG12240	<i>DnaJ-60</i>	2R-60C1							9
CG5504	<i>DnaJ</i>	2R-59F6							10
CG9920		3R-88A8							
CG12101	<i>Hsp60</i>	X-10A4							11
CG2830	<i>Hsp60b</i>	2L-21E2							12
CG7756	<i>Hsc70-2</i>	3R-87D10							13-15
CG4147	<i>Hsc70-3</i>	X-10E3-4							14,15
CG4264	<i>Hsc70-4</i>	3R-88E4							13-15
CG8542	<i>Hsc70-5</i>	2R-50E6							14,15
CG4167	<i>Hsp67Ba</i>	3L-67B21							5

Red: Location in areas known for high recombination (Charlesworth B (1996) Background selection and patterns of genetic diversity in *Drosophila melanogaster*. Genetical Research 68: 131-149)

Gene Set II. Genes resembling *hsp70* in regulation by polymerase pausing or DNase hypersensitivity. ID: FlyBase ID; SYM This is the standard abbreviation (gene symbol) for the name of the gene; Location: Chromosome arm and Location of the gene on the cytological (polytene chromosome) map. Genes resembling *hsp70* in regulation by A) polymerase pausing, B) Dnase hypersensitivity, C) high germline transcriptional activity ¹⁶, D) duplicated genes. Developmental Gene Expression Timecourse (for color code see above) and Reference.

ID	SYM	Location		Metamorphosis				Adult		Ref.
				Embryo	Larvae	Prepupae	Pupae	□	□	
CG12055	<i>Gapdh1</i>	2R-43E17	A							17
CG8893	<i>Gapdh2</i>	X-13F17	A							18-21
CG9277	<i>βTub56D</i>	2R-56D7-8	A							18
CG10798	<i>dm</i>	X-3D2	A							22-25
CG3481	<i>adh</i>	(2L)-35B3	A							
CG12181	<i>Sgs4</i>	X-3C10	B							26,27
CG6222	<i>su(s)</i>	X-1B13	B							28
CG4027	<i>Act5C</i>	X-5C7	B							18,29,30
CG4550	<i>ninaE</i>	3R-92B4	B							31
CG7939	<i>RpL32</i>	3R-99D3	B							32
CG6382	<i>Elf</i>	2L-33E4-5	C							
CG8040	<i>CG32061</i>	3L-67E3	C							
CG13340		2R-50C5	C							
CG4750		2R-53C7	C							
CG2512	<i>αTub84D</i>	3R-84D9	D							33-36
CG1913	<i>αTub84B</i>	3R-84R4	D							33-36
CG2238	<i>Ef2b</i>	2L-39Ef	D							37
CG11181	<i>cup</i>	X-26F5-6	D							38

Red: areas known for high recombination (Charlesworth B (1996) Background selection and patterns of genetic diversity in *Drosophila melanogaster*. *Genetical Research* 68: 131-149)

Gene Set III. Non-*hsp* genes with limited transcription during the life cycle and negligible germ-line expression (features expected to minimize transposition and its vertical transmission). ID: FlyBase ID; SYM This is the standard abbreviation (gene symbol) for the name of the gene.; Location: Chromosome arm and Location of the gene on the cytological (polytene chromosome) map. Developmental Gene Expression Timecourse (for color code see above) and Reference.

ID	SYM	Location	Metamorphosis				Adult		Ref.
			Embryo	Larvae	Prepupae	Pupae	<input type="checkbox"/>	<input type="checkbox"/>	
CG7906		3L-70D4					<input type="checkbox"/>	<input type="checkbox"/>	
CG7924		3L-70D4					<input type="checkbox"/>	<input type="checkbox"/>	
CG15634		2L-25A3					<input type="checkbox"/>	<input type="checkbox"/>	
CG12011		3L-62B1					<input type="checkbox"/>	<input type="checkbox"/>	
CG4818		3L-72E2					<input type="checkbox"/>	<input type="checkbox"/>	
CG2916	<i>Sep5</i>	2R-43F8					<input type="checkbox"/>	<input type="checkbox"/>	
CG10591		3L-64D5					<input type="checkbox"/>	<input type="checkbox"/>	
CG11650	<i>Lcp1</i>	2R-44CR					<input type="checkbox"/>	<input type="checkbox"/>	
CG2961	<i>Ipod</i>	X-9B4					<input type="checkbox"/>	<input type="checkbox"/>	
CG9506	<i>slam</i>	2L-26C4					<input type="checkbox"/>	<input type="checkbox"/>	
CG7252		3L-68E3					<input type="checkbox"/>	<input type="checkbox"/>	
CG4602	<i>Srp54</i>	2L-30E4					<input type="checkbox"/>	<input type="checkbox"/>	
CG9984	<i>TH1</i>	X-14C2					<input type="checkbox"/>	<input type="checkbox"/>	
CG14025	<i>Bsg25D</i>	2L-25D2-3					<input type="checkbox"/>	<input type="checkbox"/>	
CG10154		3L-70B1					<input type="checkbox"/>	<input type="checkbox"/>	
CG7724		3L-73E5					<input type="checkbox"/>	<input type="checkbox"/>	
CG2070		2R-43E8					<input type="checkbox"/>	<input type="checkbox"/>	
CG6296		3R-97D13					<input type="checkbox"/>	<input type="checkbox"/>	

Red: Location in areas known for high recombination (Charlesworth B (1996) Background selection and patterns of genetic diversity in *Drosophila melanogaster*. *Genetical Research* 68: 131-149)

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