

Additional Table S3

List of confirmed melanotic suppressor genes

CG	NAME	SYMBOL	inferred function	other information
CG12276	<i>Aos1</i>	<i>Aos1</i>	Ubiquitin activating enzyme; Toll signaling	zygotic mutation associated to melanotic masses and lamellocytes (<i>Aos1</i> ^{c06048})
CG14512	<i>Asparagine-linked glycosylation 13</i>	<i>Alg13</i>	UDP-GlcNAc transferase; protein sorting	
CG8444	<i>ATP6AP2</i>	<i>ATP6AP2</i>	vacuolar H(+)-ATPase, putative receptor; signaling	
CG9305	<i>B double prime 1</i>	<i>Bdp1</i>	TFIIIB subunit; transcription	
CG31256	<i>Brf</i>	<i>Brf</i>	TFIIIB subunit; transcription	
CG5848	<i>cactus</i>	<i>cact</i>	inhibitor of NF-kB transcription factors; Toll signalling, immune response	known as melanotic tumor tumor suppressor [32]
CG7033	<i>Cct2</i>	<i>Cct2</i>	chaperonin-containing T-complex; protein folding	
CG15784	CG15784	CG15784	unknown	
CG31044	CG31044	CG31044	unknown	
CG7845	CG7845	CG7845	putative pre-ribosomal particle constituent; ribosome assembly?	
CG15349	<i>Chorion protein a at 7F</i>	<i>Cp7Fa</i>	unknown	
CG3889	<i>COP9 complex homolog subunit 1 b</i>	<i>CSN1b</i>	COP9 signalosome; protein degradation	partner of known melanotic tumor suppressors (<i>CSN5</i> [43]; <i>CSN8</i> [44])
CG8711	<i>cullin-4</i>	<i>cul-4</i>	ubiquitin-protein ligase; protein degradation, transcription, DNA repair	partner of known melanotic tumor suppressor (<i>Ddb1</i> [47])

CG11837	<i>Dimethyladenosine transferase 1</i>	<i>Dim1</i>	ribosomal RNA processing	
CG5838	<i>DNA replication-related element factor</i>	<i>Dref</i>	transcription factor; transcription	known as melanotic tumor suppressor [39]
CG11901	<i>Ef1g</i>	<i>Ef1g</i>	translation elongation factor; translation	
CG1873	<i>Elongation factor 1a100E</i>	<i>Ef1a100E</i>	translation elongation factor; translation	partner of a known melanotic tumor suppressor (<i>Hsc70-4</i> [45])
CG5605	<i>eukaryotic release factor 1</i>	<i>eRF1</i>	translation termination factor; translation	
CG4407	<i>Flavin adenine dinucleotide synthetase 1</i>	<i>Fad1</i>	mitochondrial respiratory chain; ATP synthesis	
CG10033	<i>foraging</i>	<i>for</i>	cGMP-dependent kinase; signaling	
CG4396	<i>found in neurons</i>	<i>fne</i>	RNA splicing	
CG2522	<i>GTP-binding protein</i>	<i>Gtp-bp</i>	signal recognition particle receptor; protein targeting	
CG6489	<i>Heat-shock-protein-70Bc</i>	<i>Hsp70Bc</i>	chaperon; protein folding	partner of a known melanotic tumor suppressor (<i>Hsc70-4</i> [45])
CG11990	<i>hyrax</i>	<i>hyx</i>	Paf1 complex component; elongation of transcription	
CG5222	<i>Ints9</i>	<i>Ints9</i>	integrator complex subunit; transcription, RNA processing	
CG1994	<i>lethal (1) G0020</i>	<i>l(1)G0020</i>	N-acetyltransferase; ribosomal constituent processing	
CG11295	<i>lethal-(2)-denticleless</i>	<i>l(2)dtl</i>	response to DNA damage; DNA replication	partner of a known melanotic tumor suppressor (<i>Ddb1</i> [47])
CG10603	<i>mitochondrial ribosomal protein L13</i>	<i>mRpL13</i>	mitochondrial large ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>mRpL55</i> [42])
CG12954	<i>mitochondrial ribosomal protein L41</i>	<i>mRpL41</i>	mitochondrial large ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>mRpL55</i> [42])

CG1577	<i>mitochondrial ribosomal protein L52</i>	<i>mRpL52</i>	mitochondrial large ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>mRpL55</i> [42])
CG8470	<i>mitochondrial ribosomal protein S30</i>	<i>mRpS30</i>	mitochondrial small ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>mRpL55</i> [42])
CG8025	<i>Mtr3</i>	<i>Mtr3</i>	exosome component; RNA processing	
CG2286	<i>NADH:ubiquinone reductase 75kD subunit precursor</i>	<i>ND75</i>	mitochondrial respiratory chain complex; ATP synthesis	lymph-gland driven dsRNA induces lamellocyte formation [37]
CG1857	<i>necrotic</i>	<i>nec</i>	serine-type endopeptidase inhibitor; Toll signalling, immune response	
CG14230	<i>Nucleolar protein 8</i>	<i>Nol8</i>	ribosomal RNA processing	
CG5786	<i>peter pan</i>	<i>ppan</i>	pre-ribosomal particles constituent; ribosome assembly	
CG4904	<i>Proteasome 35kD subunit</i>	<i>Pros35</i>	proteasome component; protein degradation	
CG17331	<i>Proteasome subunit, beta type, 2</i>	<i>Psmb2</i>	proteasome component; protein degradation	
CG5519	<i>Prp19 (GTP-binding-protein)</i>	<i>Prp19 (Gbp)</i>	RNA splicing	
CG7757	<i>Prp3</i>	<i>Prp3</i>	RNA splicing	
CG6322	<i>Prp4</i>	<i>Prp4</i>	RNA splicing	
CG13194	<i>pyramus</i>	<i>pyr</i>	cytokine; fibroblast growth factor receptor signaling	zygotic mutation associated to melanotic masses and lamellocytes (<i>pyr</i> ^{MB02808})
CG14999	<i>Replication factor C subunit 4</i>	<i>RfC4</i>	replication factor C component; DNA replication	partner of known melanotic tumor suppressor (<i>RfC1</i> [46]); zygotic mutations associated to melanotic masses and lamellocytes (<i>RfC4</i> ^{B6} : <i>RfC4</i> ^{B6} / <i>RfC4</i> ^{A18})
CG5371	<i>Ribonucleoside diphosphate reductase large subunit</i>	<i>RnrL</i>	ribonucleoside-diphosphate reductase complex; DNA replication	

CG6846	<i>Ribosomal protein L26</i>	<i>RpL26</i>	cytosolic large ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>RpS6</i> [41])
CG11522	<i>Ribosomal protein L6</i>	<i>RpL6</i>	cytosolic large ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>RpS6</i> [41])
CG7014	<i>Ribosomal protein S5b</i>	<i>RpS5b</i>	cytosolic small ribosomal subunit; translation	partner of a known melanotic tumor suppressor (<i>RpS6</i> [41])
CG7885	<i>RNA polymerase II 33kD subunit</i>	<i>RpII33</i>	RNA polymerase II subunit; transcription	
CG11888	<i>Rpn2</i>	<i>Rpn2</i>	proteasome component; protein degradation	
CG9107	<i>Rrp7</i>	<i>Rrp7</i>	ribosomal RNA processing	
CG4659	<i>Signal recognition particle protein 54k</i>	<i>Srp54k</i>	signal recognition particle receptor; protein targeting	
CG11941	<i>skpC</i>	<i>skpC</i>	SCF complex; ubiquitin-dependent protein degradation	
CG12225	<i>Spt6</i>	<i>Spt6</i>	elongation of transcription; RNA maturation (exosome)	
CG32211	<i>TBP-associated factor 6</i>	<i>Taf6</i>	TFIID subunit; transcription	
CG12870	<i>Tia1-like</i>	<i>Tial</i>	RNA splicing	
CG11527	<i>Tiggrin</i>	<i>Tig</i>	integrin binding; signaling	zygotic mutations associated to melanotic masses and lamellocyte (<i>tig^{A1}/tig^X</i>)
CG2762	<i>u-shaped</i>	<i>ush</i>	transcriptional co-repressor; transcription	zygotic mutation associated to lamellocytes [38] and melanotic masses (<i>ush^{rev24}</i> ; <i>ush^{rev24}/ush^{VX22}</i>)
CG17437	<i>will die slowly</i>	<i>wds</i>	MLL complex component; histone methylation; transcription	partner of a known melanotic tumor suppressor (<i>Ddb1</i> [47])
CG6197	<i>Xpa binding protein 2</i>	<i>Xab2</i>	RNA splicing	
