

Genes associated with SINV-1 and SINV-2 infections

	<i>Drosophila ortholog</i>	<i>Gene symbol</i>	<i>Biological function</i>	<i>Ref</i>	<i>S. invicta gene</i>	<i>Estimate</i>
IMMUNITY	<i>ATP synthase, subunit B</i>	<i>ATPsyn-b</i>	phagocytosis	(Stroschein-Stevenson et al., 2006)	SINVlc3_039069	-0.5806
	<i>α-Mannosidase class II b</i>	<i>α-Man-lib</i>	encapsulation response	(Mortimer et al., 2012)	SINVlc3_015687	-1.3932
METHYLATION	<i>capsuleen</i>	<i>csul</i>	methyltransferase activity	(Gonsalvez et al., 2006)	SINVlc3_015973	-0.9694
	<i>absent, small, or homeotic discs 2</i>	<i>ash2</i>	histone H3-K4 methylation	(Mohan et al., 2011)	SI2.2.0_13294	-0.6947
AUTOPHAGY	<i>pancreatic eIF-2alpha kinase</i>	<i>PEK</i>	positive regulation of autophagy	(Nagy et al., 2013)	SI2.2.0_04925	1.2945
	<i>Transport and Golgi organization 7</i>	<i>Tango7</i>	regulation of apoptotic signalling pathway	(D'Brot et al., 2013)	SINVlc3_025162	-0.9321
TRANSCRIPTION	<i>Dorsocross1</i>	<i>Doc1</i>	regulation of gene expression	(Stöbe et al., 2009)	SINVlc3_010276	-1.1348
	<i>Protein Dr1; Negative Cofactor 2β</i>	<i>NC2β</i>	transcription factor	(Willy et al., 2000)	SINVlc3_030042	-1.003
FAT BODIES	<i>CDP diglyceride synthetase</i>	<i>CdsA</i>	lipid storage	(Liu et al., 2014)	SINVlc3_026357	1.526
	<i>Hormone receptor-like in 96</i>	<i>Hr96</i>	triacylglycerol and cholesterol metabolism	(Sieber and Thummel, 2012)	SINVlc3_024099	-0.7612
	<i>Cullin 1</i>	<i>Cul1</i>	InR/PI3K/TOR pathways	(Wong et al., 2013)	SI2.2.0_13032	-0.5181
	<i>bubblegum</i>	<i>bgm</i>	long-chain fatty acid metabolic process	(Min and Benzer, 1999)	SINVlc3_031713	-0.6886
	<i>Longevity assurance gene 1</i>	<i>schlank</i>	body fat metabolism	(Bauer et al., 2009)	SI2.2.0_13166	-0.982
REPRODUCTION	<i>casein kinase IIa</i>	<i>CkIIa</i>	response to starvation; circadian rhythms; oogenesis	(Ding et al., 2014, Lin et al., 2005, Wong et al., 2011)	SINVlc3_042716	-0.9853
	<i>nanos</i>	<i>nos</i>	oogenesis	(Becalska et al., 2011)	SINVlc3_017341	-0.9608
	<i>retain</i>	<i>retn</i>	oogenesis; regulation of female receptivity	(Schupbach and Wieschaus, 1991, Ditch et al., 2005)	SINVlc3_016720	-0.6532
	<i>frizzled 2</i>	<i>fz2</i>	ovarian development	(Cohen et al., 2002)	SINVlc3_024002	-0.7077
NEURO-SENSORY	<i>concertina</i>	<i>cta</i>	D5 dopamine receptor binding	N/A	SINVlc3_032097	-0.8345
	<i>no on or off transient A</i>	<i>nonA</i>	visual perception	(Rendahl et al., 1992)	SI2.2.0_09391	-1.7529
	<i>Rho GTPase activating protein p190</i>	<i>RhoGAPp190</i>	mushroom body development	(Billuart et al., 2001)	SINVlc3_029401	-0.5636
	<i>Dmel_CG11180</i>	<i>CG11180</i>	neurogenesis	(Neumüller et al., 2011)	SI2.2.0_08138	-0.6541
	<i>Formin-like protein CG32138</i>	<i>CG6807</i>	neuron projection morphogenesis	(Sepp et al., 2008)	SINVlc3_032090	-0.6422
OTHERS	<i>Death resistor Adh domain containing target</i>	<i>Drat</i>	cellular response to ethanol; response to hypoxia	(Chen et al., 2012)	SINVlc3_012825	-0.4861
	<i>Dmel_CG5237</i>	<i>unc79</i>	locomotory rhythm	(Lear et al., 2013)	SINVlc3_007105	-0.4946
	<i>PICK1 ortholog</i>	<i>PICK1</i>	neuroendocrine system; regulated secretory pathway	(Jansen et al., 2009)	SINVlc3_038018	-0.7021
	<i>Poly(A) RNA polymerase gld-2 homolog A</i>	<i>Gld2</i>	long-term memory	(Kwak et al., 2008)	SINVlc3_018308	-0.7352

Note: positive “Estimate” means up-regulated in SINV-1 infected, while negative “Estimate” means up-regulated in SINV-2 infected.

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