

Supplemental Figure Legend

Supplemental Figure S1. Table of hits from RNAi screen. Color coding describes relative intensity of GFP signal to background within the plate. Red font denotes the strongest scoring hits, blue are medium, and purple are the weakest scoring hits. Column one denotes the CG number present in flybase (www.flybase.net). Column two gives the fly gene name while column three is the putative human orthologue according to ensemble (www.ensembl.org). The fourth column is a short description of known function or putative domains in the absence of known function. Novel means that no characterization of the gene has been found and “NA” means that no orthologue or function is known at this time.

Gene number	Fly gene name	Human orthologue	function/domains
CG3173	Integrator 1	Integrator 1	snRNA 3'-end processing
CG8211	Integrator 2	Integrator 2	snRNA 3'-end processing
CG12113	Integrator 4	Integrator 4	snRNA 3'-end processing
CG9591	Integrator 5	Integrator 5	snRNA 3'-end processing
CG3125	Integrator 6	Integrator 6	snRNA 3'-end processing
CG18176	Integrator 7	Integrator 7	snRNA 3'-end processing
CG5859	Integrator 8	Integrator 8	snRNA 3'-end processing
CG5222	Integrator 9	Integrator 9	snRNA 3'-end processing
CG1972	Integrator 11	Integrator 11	snRNA 3'-end processing
CG5491	Integrator 12	Integrator 12	snRNA 3'-end processing
CG6233	UFD1-like	UFD1L	ubiquitin-specific protease activity
CG3593	rudimentary like	UMPS	UMP biosynthetic process
CG1743	Gs2	GLUL	glutamine synthesis
CG42797	Novel	HECW1	(HECT, C2 and WW domain) protein ubiquitination
CG3307	pr-Set7	SETD8	chromatin modification
CG3931	Rrp4	EXOSC2	deadenylation-dependent decay
CG4482	mol	DUOXA1	protein transport
CG4467	Novel	TRHDE	metallopeptidase
CG6437	GLcT-1	UGCG	Glycosyl transferase
CG6721	Gap1	RASA2	Ras GTPase activator
CG7281	CycC	CCNC	Cyclin
CG34401	novel	KIAA0913	zinc finger protein
CG7610	ATPsyn-gamma	ATP5C1	ATP biosynthetic process
CG7487	RecQ4	NA	ATP-dependent DNA helicase
CG7940	Arp5	ACTR5	DNA repair
CG8114	pebble	ECT2	guanyl-nucleotide exchange factor
CG8274	Megator	TPR	protein import into nucleus
CG8344	RpIII128	POLR3B	RNA polymerase III
CG34389	crossveinless c	STARD13	GTPase activator
CG9428	ZIP1	SLC39A1	metal ion transport
CG10572	Cyclin-dependent kinase 8	CDK8	cyclin-dependent protein kinase
CG10583	Separase	ESPL1	peptidase activity

CG13345	tumbleweed	RACGAP1	Rac GTPase activator
CG18525	Serine protease inhibitor 5	SERPINC1	erine-type endopeptidase inhibitor
CG4260	α -Adaptin	AP2A2	Adaptor protein complex AP-2
CG10911	Novel	NA	NA
CG30184	Novel	NA	phospholipase A2 activity
CG7608	Ecdysone-induced gene 71Ec	NA	defense response to bacterium
CG3181	thymidylate synthase	TYMS	dTMP biosynthetic process
CG42670	pasilla	NOVA1	RNA splicing
CG10134	beat-Va	NA	NA
CG5614	Novel (LisH dimerisation motif)	NA	NA
CG11504	Novel (MADF domain)	NA	NA
CG43374	Cht6	CHI3L2	Chitinase II
CG1030	Sex combs reduced	HOXB5	sequence-specific DNA binding transcription factor
CG1258	pavarotti	KIF23	microtubule motor
CG3924	Chip	LDB2	LIM domain binding 2
CG4021	Novel	KHDRBS	KH domain containing, RNA binding protein
CG4079	TBP-associated factor 11	TAF11	transcription coactivator
CG4082	Minichromosome maintenance	MCM5	DNA helicase
CG4567	iconoclast	GFM1	Translation elongation factor
CG4785	Novel	C15orf44	NA
CG4798	lethal (2) k01209	UCKL1	uridine kinase
CG34420	Novel	DPEP2	peptidase activity
CG5941	Novel	MCTS1	RNA binding
CG6147	Tsc1	TSC1	kinase binding
CG6196	novel	TRAPPC6B	vesicle-mediated transport
CG6814	asunder	ASUN	spermatogenesis regulator
CG6939	SET domain binding factor	SBF2	SET binding factor
CG7108	DNA polymerase α 50kD	PRIM1	DNA primase
CG7109	microtubule star	PPP2CB	protein serine/threonine phosphatase
CG7538	Minichromosome maintenance	MCM2	DNA replication
CG8372	Novel	TMEM222	transmembrane protein
CG8388	novel	NA	DNA binding
CG9504	Ecdysone oxidase	CHDH	choline dehydrogenase activity

CG9667	ISY like splicing factor	ISY1	RNA splicing
CG9741	Dihydroorotate dehydrogenase	DHODH	UMP biosynthetic process
CG9755	pumilio	PUM2	RNA binding
CG9945	Novel (WD40 repeat)	DCAF11	protein ubiquitination
CG9943	Surfeit 1	SURF1	cytochrome-c oxidase activity
CG9951	novel	CCDC22	coiled-coil domain containing 22
CG10399	novel	HMGCL	leucine metabolic process
CG10463	novel	DUS3L	tRNA-dihydrouridine synthase
CG11352	jim	NA	regulation of chromatin silencing
CG11207	fascetto	PRC1	cytokinesis
CG11247	novel	NA	Zinc finger protein
CG11291	Novel	PGP	4-nitrophenylphosphatase activity
CG42568	novel	NA	NA
CG32239	Guanine nucleotide exchange	NET1	guanyl-nucleotide exchange factor
CG13604	novel (SH3 domain)	UBASH3	NA
CG14325	novel (Leucine-rich repeat)	TCTE1	carboxy-lyase activity
CG14105	Novel (Tetratricopeptide repeat)	TTC36	NA
CG10395	Novel	INO80B	DNA repair
CG32845	Novel	PIN1	isomerase activity
CG14339	Novel (Tetratricopeptide repeat)	NA	NA
CG32198	Novel	NA	NA
CG14024	Novel	CHST	carbohydrate biosynthetic process
CG10342	neuropeptide F	NA	neuropeptide hormone
CG7837	Novel (Armadillo and BTB domain)	ARMC5	ATP hydrolysis coupled proton transport