Supplementary Table 1. Bristle prescreen results

JM Number	Construct	Transformant	CG number	Gene Symbol	Gene Synonyms	GAL4 line	Temp	Phenotype Colour	Phenotype	Comment
19	122G6	T2	CG5462	scrib	scribbled	fz3	29		extra M at scutellum	
20	122G6	T3	CG5462	scrib	scribbled	fz3	29		no phenotype	
21	122G6	T4	CG5462	scrib	scribbled	fz3	29		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	fz3	29		empty sockets	
23	123A7		CG5771	Rab11	Rab-protein 11	fz3	29		lethal	
32	129E3		CG7867	nuf	nuclear fallout	fz3	29		no phenotype	
33	129E3		CG7867	nuf	nuclear fallout	fz3	29		no phenotype	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	fz3	29		no phenotype	
35	122G6	T1	CG5462	scrib	scribbled	fz3	29		lethal	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	fz3	29		no phenotype	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	fz3	29		rare loss of M	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	fz3	29		no phenotype	
58	15H5	T2	CG5055	baz	Par3	fz3	29		gain and loss M on same fly	
59	15H5	T1	CG5055	baz	Par3	fz3	29		duplicated hairs and loss	
60				white minus		fz3	29		no phenotype	
61	16C8	T1	CG3779	numb	nb	fz3	29		empty or multiple sockets	
66	2B7	T1	CG3619	Dl	Delta	fz3	29		lethal	
67	2B7	T1	CG3619	Dl	Delta	fz3	29		adults die in food, gain of bristles	
68	2B7	T2	CG3619	Dl	Delta	fz3	29		adults die in food	
69	2B7	T2	CG3619	Dl	Delta	fz3	29		adults die in food, gain of bristles	
70	2H6	T1	CG3936	N	Notch split	fz3	29		lethal, escapers mild gain of bristles	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	fz3	29		adults die in food, pupal lethal	
72	2H6	T1	CG3936	N	Notch split	fz3	29		lethal	
73	32B1	T1	CG1539	spdo	sanpodo CG1149 3 CG15540	fz3	29		mild loss and rare duplication of hairs	
74	32B8	T1	CG1539	spdo	sanpodo CG11493 CG15540	fz3	29		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	fz3	29		no phenotype	
78	3D8	T2	CG7012	nct	nicastrin agro	fz3	29		no phenotype	
79	43H2	T1	CG5884	par-6		fz3	29		lethal	
80	43H2	T2	CG5884	par-6		fz3	29		lethal	
81	47B8	T3	CG11988	neur	neuralized	fz3	29		mild gain of bristles on head	
82	47B8	T4	CG11988	neur	neuralized	fz3	29		mild gain of bristles on head, M only	
83	47B8		CG11988	neur	neuralized	fz3	29		gain of bristles, duplicated hairs, both head and notum	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	fz3	29		lethal	
124	16B7	T1	CG5099	msi		fz3	29		lethal	
125	17H1	T2	CG3497	Su(H)		fz3	29		not checked	bad cross
126	17H1	T3	CG3497	Su(H)		fz3	29		no phenotype	
141	15F3	T2	CG10261	aPKC		fz3	29		lethal	
144	14B5	T2	CG5248	loco	CG17229	fz3	29		no phenotype	
146	130D8	T1	CG3258	ase		fz3	29		no phenotype	
147	130D8	T2	CG3258	ase		fz3	29		no phenotype	
148	130D8	T3	CG3258	ase		fz3	29		no phenotype	
19	122G6	T2	CG5462	scrib	scribbled	fz3	25		loss of M on head	
20	122G6	T3	CG5462	scrib	scribbled	fz3	25		loss of M on head	
21	122G6	T4	CG5462	scrib	scribbled	fz3	25		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	fz3	25		rare loss of m and empty/multiple sockets	
23	123A7		CG5771	Rab11	Rab-protein 11	fz3	25		lethal	
32	129E3		CG7867	nuf	nuclear fallout	fz3	25		not checked	
33	129E3		CG7867	nuf	nuclear fallout	fz3	25		not checked	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	fz3	25		not checked	
35	122G6	T1	CG5462	scrib	scribbled	fz3	25		lethal	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	fz3	25		no phenotype	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	fz3	25		rare loss of m and empty/multiple sockets	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	fz3	25		no phenotype	
58	15H5	T2	CG5055	baz	Par3	fz3	25		no phenotype	
59	15H5	T1	CG5055	baz	Par3	fz3	25		loss of m and duplicated hairs	
60				white minus		fz3	25		no phenotype	
61	16C8	T1	CG3779	numb	nb	fz3	25		empty or multiple sockets, M only, head and notum	
66	2B7	T1	CG3619	Dl	Delta	fz3	25		gain of bristles, head and notum	
67	2B7	T1	CG3619	Dl	Delta	fz3	25		adults die in food, gain of bristles	
68	2B7	T2	CG3619	Dl	Delta	fz3	25		gain of bristles	
69	2B7	T2	CG3619	Dl	Delta	fz3	25		gain of bristles	
70	2H6	T1	CG3936	N	Notch split	fz3	25		lethal, escapers with rare gain of bristles	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	fz3	25		adults die in food, escapers have no phenotype	
72	2H6	T1	CG3936	N	Notch split	fz3	25		lethal	
73	32B1	T1	CG1539	spdo	sanpodo CG1149 3 CG15540	fz3	25		no phenotype	
74	32B8	T1	CG1539	spdo	sanpodo CG1149 3 CG15540	fz3	25		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	fz3	25		not checked	
78	3D8	T2	CG7012	nct	nicastrin agro	fz3	25		not checked	
79	43H2	T1	CG5884	par-6		fz3	25		not checked	bad cross
80	43H2	T2	CG5884	par-6		fz3	25		not checked	bad cross
81	47B8	T3	CG11988	neur	neuralized	fz3	25		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	fz3	25		no phenotype	
83	47B8		CG11988	neur	neuralized	fz3	25		no phenotype	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	fz3	25		strong loss of bristles, m only	
124	16B7	T1	CG5099	msi		fz3	25		empty or multiple sockets	
125	17H1	T2	CG3497	Su(H)		fz3	25		not checked	bad cross
126	17H1	T3	CG3497	Su(H)		fz3	25		no phenotype	
141	15F3	T2	CG10261	aPKC		fz3	25		loss of bristles and gain of bristles on same fly	
144	14B5	T2	CG5248	loco	CG17229	fz3	25		no phenotype	
146	130D8	T1	CG3258	ase		fz3	25		no phenotype	
147	130D8	T2	CG3258	ase		fz3	25		no phenotype	
148	130D8	T3	CG3258	ase		fz3	25		no phenotype	
19	122G6	T2	CG5462	scrib	scribbled	fz3	18		rare loss of M	
20	122G6	T3	CG5462	scrib	scribbled	fz3	18		loss of M on head	
21	122G6	T4	CG5462	scrib	scribbled	fz3	18		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	fz3	18		no phenotype	
23	123A7		CG5771	Rab11	Rab-protein 11	fz3	18		lethal, escapers no phenotype	
32	129E3		CG7867	nuf	nuclear fallout	fz3	18		not checked	
33	129E3		CG7867	nuf	nuclear fallout	fz3	18		not checked	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	fz3	18		not checked	
35	122G6	T1	CG5462	scrib	scribbled	fz3	18		lethal	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	fz3	18		not checked	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	fz3	18		no phenotype	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	fz3	18		not checked	
58	15H5	T2	CG5055	baz	Par3	fz3	18		no phenotype	
59	15H5	T1	CG5055	baz	Par3	fz3	18		duplicated hairs	
60				white minus		fz3	18		no phenotype	
61	16C8	T1	CG3779	numb	nb	fz3	18		empty or multiple sockets, mostly M, some m affected	
66	2B7	T1	CG3619	Dl	Delta	fz3	18		strong gain of bristles, m only	
67	2B7	T1	CG3619	Dl	Delta	fz3	18		gain of bristles, m only	
68	2B7	T2	CG3619	Dl	Delta	fz3	18		gain of bristles, m only	
69	2B7	T2	CG3619	Dl	Delta	fz3	18		gain of bristles, m only	
70	2H6	T1	CG3936	N	Notch split	fz3	18		gain of bristles, m only	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	fz3	18		no phenotype	
72	2H6	T1	CG3936	N	Notch split	fz3	18		lethal, escapers no phenotype	
73	32B1	T1	CG1539	spdo	sanpodo CG1149 3 CG15540	fz3	18		not checked	
74	32B8	T1	CG1539	spdo	sanpodo CG1149 3 CG15540	fz3	18		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	fz3	18		not checked	
78	3D8	T2	CG7012	nct	nicastrin agro	fz3	18		not checked	
79	43H2	T1	CG5884	par-6		fz3	18		not checked	bad cross
80	43H2	T2	CG5884	par-6		fz3	18		not checked	bad cross
81	47B8	T3	CG11988	neur	neuralized	fz3	18		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	fz3	18		no phenotype	
83	47B8		CG11988	neur	neuralized	fz3	18		not checked	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	fz3	18		loss of m	
124	16B7	T1	CG5099	msi		fz3	18		empty or multiple sockets, rare duplicated M	
125	17H1	T2	CG3497	Su(H)		fz3	18		no phenotype	
126	17H1	T3	CG3497	Su(H)		fz3	18		not checked	
141	15F3	T2	CG10261	aPKC		fz3	18		no phenotype	
144	14B5	T2	CG5248	loco	CG17229	fz3	18		no phenotype	
146	130D8	T1	CG3258	ase		fz3	18		not checked	
147	130D8	T2	CG3258	ase		fz3	18		not checked	
148	130D8	T3	CG3258	ase		fz3	18		not checked	
19	122G6	T2	CG5462	scrib	scribbled	pnr	29		empty socket, short hairs, some remnants of hairs, loss of M at scutellum	
20	122G6	T3	CG5462	scrib	scribbled	pnr	29		bristle morphology defects	
21	122G6	T4	CG5462	scrib	scribbled	pnr	29		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	pnr	29		loss of m and empty sockets	
23	123A7		CG5771	Rab11	Rab-protein 11	pnr	29		no phenotype	
32	129E3		CG7867	nuf	nuclear fallout	pnr	29		no phenotype	

Supplementary Table 1

JM Number	Construct	Transformant	CG number	Gene Symbol	Gene Synonyms	GAL4 line	Temp	Phenotype Colour	Phenotype	Comment
33	129E3		CG7867	nuf	nuclear fallout	pnr	29		not checked	bad cross
34	12H12	T3	CG4482	mol	moladietz nip CG15268	pnr	29		no phenotype	
35	122G6	T1	CG5462	scrib	scribbled	pnr	29		lethal	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	pnr	29		no phenotype	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	pnr	29		loss of m and empty sockets	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	pnr	29		no phenotype	
58	15H5	T2	CG5055	baz	Par3	pnr	29		duplicated hairs and loss	
59	15H5	T1	CG5055	baz	Par3	pnr	29		duplicated hairs and loss	
60				white minus		pnr	29		no phenotype	
61	16C8	T1	CG3779	numb	nb	pnr	29		strong empty or multiple sockets	
66	2B7	T1	CG3619	Dl	Delta	pnr	29		strong gain of bristles	
67	2B7	T1	CG3619	Dl	Delta	pnr	29		strong gain of bristles	
68	2B7	T2	CG3619	Dl	Delta	pnr	29		strong gain of bristles	
69	2B7	T2	CG3619	Dl	Delta	pnr	29		strong gain of bristles	
70	2H6	T1	CG3936	N	Notch split	pnr	29		notum death malformation, loss of bristles, duplicated hairs	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	pnr	29		no phenotype	
72	2H6	T1	CG3936	N	Notch split	pnr	29		notum death malformation, loss of bristles	
73	32B1	T1	CG1539	spdo	sanpodo CG11493CG15540	pnr	29		stronger loss of bristles, rare duplication of hairs	
74	32B8	T1	CG1539	spdo	sanpodo CG11493CG15540	pnr	29		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	pnr	29		no phenotype	
78	3D8	T2	CG7012	nct	nicastrin agro	pnr	29		no phenotype	
79	43H2	T1	CG5884	par-6		pnr	29		lethal	
80	43H2	T2	CG5884	par-6		pnr	29		lethal	
81	47B8	T3	CG11988	neur	neuralized	pnr	29		gain of bristles, duplicated hairs	
82	47B8	T4	CG11988	neur	neuralized	pnr	29		mild gain of bristles on head and notum	
83	47B8		CG11988	neur	neuralized	pnr	29		gain of bristles, duplicated hairs	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	pnr	29		strong loss of bristles	
124	16B7	T1	CG5099	msi		pnr	29		strong duplication of hairs and empty/multiple sockets	
125	17H1	T2	CG3497	Su(H)		pnr	29		no phenotype	
126	17H1	T3	CG3497	Su(H)		pnr	29		no phenotype	
141	15F3	T2	CG10261	aPKC		pnr	29		lethal	
144	14B5	T2	CG5248	loco	CG17229	pnr	29		rare empty sockets	
146	130D8	T1	CG3258	ase		pnr	29		no phenotype	
147	130D8	T2	CG3258	ase		pnr	29		rare multiple sockets, loss of bristles	
148	130D8	T3	CG3258	ase		pnr	29		no phenotype	
19	122G6	T2	CG5462	scrib	scribbled	pnr	25		loss of notum m and empty sockets	
20	122G6	T3	CG5462	scrib	scribbled	pnr	25		rare loss of notum m and empty sockets	
21	122G6	T4	CG5462	scrib	scribbled	pnr	25		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	pnr	25		loss of m and empty/multiple sockets	
23	123A7		CG5771	Rab11	Rab-protein 11	pnr	25		lethal?	
32	129E3		CG7867	nuf	nuclear fallout	pnr	25		not checked	
33	129E3		CG7867	nuf	nuclear fallout	pnr	25		not checked	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	pnr	25		not checked	
35	122G6	T1	CG5462	scrib	scribbled	pnr	25		lethal	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	pnr	25		no phenotype	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	pnr	25		rare loss of m and empty/multiple sockets	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	pnr	25		no phenotype	
58	15H5	T2	CG5055	baz	Par3	pnr	25		loss of m and rare empty/multiple sockets, rare duplicated hairs	
59	15H5	T1	CG5055	baz	Par3	pnr	25		loss of m and duplicated hairs	
60				white minus		pnr	25		no phenotype	
61	16C8	T1	CG3779	numb	nb	pnr	25		strong empty or multiple sockets	
66	2B7	T1	CG3619	Dl	Delta	pnr	25		strong gain of bristles	
67	2B7	T1	CG3619	Dl	Delta	pnr	25		gain of bristles, m only	
68	2B7	T2	CG3619	Dl	Delta	pnr	25		gain of bristles	
69	2B7	T2	CG3619	Dl	Delta	pnr	25		gain of bristles	
70	2H6	T1	CG3936	N	Notch split	pnr	25		gain of bristles, some notum death malformation	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	pnr	25		no phenotype	
72	2H6	T1	CG3936	N	Notch split	pnr	25		notum death malformation, loss of bristles	
73	32B1	T1	CG1539	spdo	sanpodo CG11493CG15540	pnr	25		no phenotype	
74	32B8	T1	CG1539	spdo	sanpodo CG11493CG15540	pnr	25		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	pnr	25		not checked	
78	3D8	T2	CG7012	nct	nicastrin agro	pnr	25		not checked	
79	43H2	T1	CG5884	par-6		pnr	25		not checked	bad cross
80	43H2	T2	CG5884	par-6		pnr	25		lethal	
81	47B8	T3	CG11988	neur	neuralized	pnr	25		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	pnr	25		no phenotype	
83	47B8		CG11988	neur	neuralized	pnr	25		no phenotype	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	pnr	25		strong loss of bristles	
124	16B7	T1	CG5099	msi		pnr	25		empty or multiple sockets, duplicated hairs	
125	17H1	T2	CG3497	Su(H)		pnr	25		no phenotype	
126	17H1	T3	CG3497	Su(H)		pnr	25		no phenotype	
141	15F3	T2	CG10261	aPKC		pnr	25		notum death malformation	
144	14B5	T2	CG5248	loco	CG17229	pnr	25		no phenotype	
146	130D8	T1	CG3258	ase		pnr	25		no phenotype	
147	130D8	T2	CG3258	ase		pnr	25		no phenotype	
148	130D8	T3	CG3258	ase		pnr	25		no phenotype	
19	122G6	T2	CG5462	scrib	scribbled	pnr	18		rare loss of bristles	
20	122G6	T3	CG5462	scrib	scribbled	pnr	18		no phenotype	
21	122G6	T4	CG5462	scrib	scribbled	pnr	18		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	pnr	18		no phenotype	
23	123A7		CG5771	Rab11	Rab-protein 11	pnr	18		lethal	
32	129E3		CG7867	nuf	nuclear fallout	pnr	18		not checked	
33	129E3		CG7867	nuf	nuclear fallout	pnr	18		not checked	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	pnr	18		not checked	
35	122G6	T1	CG5462	scrib	scribbled	pnr	18		lethal, escapers with strong notum malformation	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	pnr	18		not checked	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	pnr	18		no phenotype	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	pnr	18		not checked	
58	15H5	T2	CG5055	baz	Par3	pnr	18		no phenotype	
59	15H5	T1	CG5055	baz	Par3	pnr	18		duplicated hairs	
60				white minus		pnr	18		no phenotype	
61	16C8	T1	CG3779	numb	nb	pnr	18		strong empty or multiple sockets	
66	2B7	T1	CG3619	Dl	Delta	pnr	18		strong gain of bristles, m only	
67	2B7	T1	CG3619	Dl	Delta	pnr	18		gain of bristles, m only	
68	2B7	T2	CG3619	Dl	Delta	pnr	18		gain of bristles, m only	
69	2B7	T2	CG3619	Dl	Delta	pnr	18		not checked	bad cross
70	2H6	T1	CG3936	N	Notch split	pnr	18		gain of bristles, m only, rare notum death malformation	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	pnr	18		no phenotype	
72	2H6	T1	CG3936	N	Notch split	pnr	18		lethal, escapers loss of bristles and notum death malformation	
73	32B1	T1	CG1539	spdo	sanpodo CG11493CG15540	pnr	18		not checked	
74	32B8	T1	CG1539	spdo	sanpodo CG11493CG15540	pnr	18		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	pnr	18		not checked	
78	3D8	T2	CG7012	nct	nicastrin agro	pnr	18		not checked	
79	43H2	T1	CG5884	par-6		pnr	18		not checked	bad cross
80	43H2	T2	CG5884	par-6		pnr	18		not checked	bad cross
81	47B8	T3	CG11988	neur	neuralized	pnr	18		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	pnr	18		no phenotype	
83	47B8		CG11988	neur	neuralized	pnr	18		not checked	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	pnr	18		stronger loss of bristles, rare duplication of hairs	
124	16B7	T1	CG5099	msi		pnr	18		empty or multiple sockets	
125	17H1	T2	CG3497	Su(H)		pnr	18		no phenotype	
126	17H1	T3	CG3497	Su(H)		pnr	18		not checked	
141	15F3	T2	CG10261	aPKC		pnr	18		rare empty or multiple sockets, loss of bristles	
144	14B5	T2	CG5248	loco	CG17229	pnr	18		no phenotype	
146	130D8	T1	CG3258	ase		pnr	18		not checked	
147	130D8	T2	CG3258	ase		pnr	18		not checked	
148	130D8	T3	CG3258	ase		pnr	18		not checked	
19	122G6	T2	CG5462	scrib	scribbled	sca	29		no phenotype	
20	122G6	T3	CG5462	scrib	scribbled	sca	29		no phenotype	
21	122G6	T4	CG5462	scrib	scribbled	sca	29		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	sca	29		rare duplicated hair	
23	123A7		CG5771	Rab11	Rab-protein 11	sca	29		lethal	
32	129E3		CG7867	nuf	nuclear fallout	sca	29		no phenotype	
33	129E3		CG7867	nuf	nuclear fallout	sca	29		not checked	bad cross
34	12H12	T3	CG4482	mol	moladietz nip CG15268	sca	29		no phenotype	
35	122G6	T1	CG5462	scrib	scribbled	sca	29		lethal	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	sca	29		no phenotype	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	sca	29		rare loss of M	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	sca	29		no phenotype	
58	15H5	T2	CG5055	baz	Par3	sca	29		gain and loss M on same fly	

Supplementary Table 1.

JM Number	Construct	Transformant	CG number	Gene Symbol	Gene Synonyms	GAL4 line	Temp	Phenotype Colour	Phenotype	Comment
59	15H5	T1	CG5055	baz	Par3	sca	29		no phenotype	
60				white minus		sca	29		no phenotype	
61	16C8	T1	CG3779	numb	nb	sca	29		empty or multiple sockets	
66	2B7	T1	CG3619	Dl	Delta	sca	29		weak gain of bristles, lethal	
67	2B7	T1	CG3619	Dl	Delta	sca	29		weak gain of bristles, lethal	
68	2B7	T2	CG3619	Dl	Delta	sca	29		lethal	
69	2B7	T2	CG3619	Dl	Delta	sca	29		lethal	
70	2H6	T1	CG3936	N	Notch split	sca	29		lethal, escapers no phenotype	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	sca	29		lethal	
72	2H6	T1	CG3936	N	Notch split	sca	29		lethal	
73	32B1	T1	CG1539	spdo	sanpodo CG11493CG15540	sca	29		lethal	
74	32B8	T1	CG1539	spdo	sanpodo CG11493CG15540	sca	29		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	sca	29		no phenotype	
78	3D8	T2	CG7012	nct	nicastrin agro	sca	29		no phenotype	
79	43H2	T1	CG5884	par-6		sca	29		lethal	
80	43H2	T2	CG5884	par-6		sca	29		lethal, escapers loss of all bristles	
81	47B8	T3	CG11988	neur	neuralized	sca	29		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	sca	29		no phenotype	
83	47B8		CG11988	neur	neuralized	sca	29		no phenotype	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	sca	29		adults die in food	
124	16B7	T1	CG5099	msi		sca	29		lethal, escapers duplication of M	
125	17H1	T2	CG3497	Su(H)		sca	29		no phenotype	
126	17H1	T3	CG3497	Su(H)		sca	29		no phenotype	
141	15F3	T2	CG10261	aPKC		sca	29		no phenotype	
144	14B5	T2	CG5248	loco	CG17229	sca	29		no phenotype	
146	130D8	T1	CG3258	ase		sca	29		no phenotype	
147	130D8	T2	CG3258	ase		sca	29		rare duplicated hair, loss of M	
148	130D8	T3	CG3258	ase		sca	29		no phenotype	
19	122G6	T2	CG5462	scrib	scribbled	sca	25		no phenotype	
20	122G6	T3	CG5462	scrib	scribbled	sca	25		no phenotype	
21	122G6	T4	CG5462	scrib	scribbled	sca	25		lethal	
22	123A4	T1	CG5692	raps	rapsynoid	sca	25		no phenotype	
23	123A7		CG5771	Rab11	Rab-protein 11	sca	25		lethal	
32	129E3		CG7867	nuf	nuclear fallout	sca	25		not checked	
33	129E3		CG7867	nuf	nuclear fallout	sca	25		not checked	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	sca	25		not checked	
35	122G6	T1	CG5462	scrib	scribbled	sca	25		strong loss of bristles, M only	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	sca	25		no phenotype	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	sca	25		no phenotype	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	sca	25		no phenotype	
58	15H5	T2	CG5055	baz	Par3	sca	25		no phenotype	
59	15H5	T1	CG5055	baz	Par3	sca	25		adults die in food, rare duplicated hairs	
60				white minus		sca	25		no phenotype	
61	16C8	T1	CG3779	numb	nb	sca	25		empty or multiple sockets, M only, head and notum	
66	2B7	T1	CG3619	Dl	Delta	sca	25		lethal, pharate adults with gain of bristles	
67	2B7	T1	CG3619	Dl	Delta	sca	25		adults die in food, escapers have no phenotype	
68	2B7	T2	CG3619	Dl	Delta	sca	25		no phenotype	
69	2B7	T2	CG3619	Dl	Delta	sca	25		no phenotype	
70	2H6	T1	CG3936	N	Notch split	sca	25		lethal, escapers mild gain of bristles	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	sca	25		no phenotype	
72	2H6	T1	CG3936	N	Notch split	sca	25		lethal	
73	32B1	T1	CG1539	spdo	sanpodo CG11493CG15540	sca	25		no phenotype	
74	32B8	T1	CG1539	spdo	sanpodo CG11493CG15540	sca	25		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	sca	25		not checked	
78	3D8	T2	CG7012	nct	nicastrin agro	sca	25		not checked	
79	43H2	T1	CG5884	par-6		sca	25		loss of bristles, head and notum, M only	
80	43H2	T2	CG5884	par-6		sca	25		not checked	bad cross
81	47B8	T3	CG11988	neur	neuralized	sca	25		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	sca	25		no phenotype	
83	47B8		CG11988	neur	neuralized	sca	25		no phenotype	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	sca	25		no phenotype	
124	16B7	T1	CG5099	msi		sca	25		lethal	
125	17H1	T2	CG3497	Su(H)		sca	25		no phenotype	
126	17H1	T3	CG3497	Su(H)		sca	25		no phenotype	
141	15F3	T2	CG10261	aPKC		sca	25		no phenotype	
144	14B5	T2	CG5248	loco	CG17229	sca	25		no phenotype	
146	130D8	T1	CG3258	ase		sca	25		no phenotype	
147	130D8	T2	CG3258	ase		sca	25		no phenotype	
148	130D8	T3	CG3258	ase		sca	25		no phenotype	
19	122G6	T2	CG5462	scrib	scribbled	sca	18		no phenotype	
20	122G6	T3	CG5462	scrib	scribbled	sca	18		no phenotype	
21	122G6	T4	CG5462	scrib	scribbled	sca	18		no phenotype	
22	123A4	T1	CG5692	raps	rapsynoid	sca	18		no phenotype	
23	123A7		CG5771	Rab11	Rab-protein 11	sca	18		lethal, escapers with strong loss of bristles, M only	
32	129E3		CG7867	nuf	nuclear fallout	sca	18		not checked	
33	129E3		CG7867	nuf	nuclear fallout	sca	18		not checked	
34	12H12	T3	CG4482	mol	moladietz nip CG15268	sca	18		not checked	
35	122G6	T1	CG5462	scrib	scribbled	sca	18		no phenotype	
52	14B5	T2	CG5248	loco	CG17229 locomotion defects	sca	18		not checked	
53	14B5	T3	CG5248	loco	CG17229 locomotion defects	sca	18		no phenotype	
54	14B5	T4	CG5248	loco	CG17229 locomotion defects	sca	18		not checked	
58	15H5	T2	CG5055	baz	Par3	sca	18		no phenotype	
59	15H5	T1	CG5055	baz	Par3	sca	18		no phenotype	
60				white minus		sca	18		no phenotype	
61	16C8	T1	CG3779	numb	nb	sca	18		rare empty or multiple sockets	
66	2B7	T1	CG3619	Dl	Delta	sca	18		no phenotype	
67	2B7	T1	CG3619	Dl	Delta	sca	18		no phenotype	
68	2B7	T2	CG3619	Dl	Delta	sca	18		no phenotype	
69	2B7	T2	CG3619	Dl	Delta	sca	18		no phenotype	
70	2H6	T1	CG3936	N	Notch split	sca	18		no phenotype	
71	2C7		CG6127	Ser	Serrate Beaded Ripped wing	sca	18		no phenotype	
72	2H6	T1	CG3936	N	Notch split	sca	18		lethal	
73	32B1	T1	CG1539	spdo	sanpodo CG11493CG15540	sca	18		not checked	
74	32B8	T1	CG1539	spdo	sanpodo CG11493CG15540	sca	18		no phenotype	
77	3D8	T1	CG7012	nct	nicastrin agro	sca	18		not checked	
78	3D8	T2	CG7012	nct	nicastrin agro	sca	18		not checked	
79	43H2	T1	CG5884	par-6		sca	18		rare loss of M	
80	43H2	T2	CG5884	par-6		sca	18		not checked	bad cross
81	47B8	T3	CG11988	neur	neuralized	sca	18		no phenotype	
82	47B8	T4	CG11988	neur	neuralized	sca	18		no phenotype	
83	47B8		CG11988	neur	neuralized	sca	18		not checked	
86	49H2	T1	CG5868	psn	Presenilin Dps CG18803	sca	18		no phenotype	
124	16B7	T1	CG5099	msi		sca	18		rare loss of M, rare duplication of hairs	
125	17H1	T2	CG3497	Su(H)		sca	18		no phenotype	
126	17H1	T3	CG3497	Su(H)		sca	18		not checked	
141	15F3	T2	CG10261	aPKC		sca	18		no phenotype	
144	14B5	T2	CG5248	loco	CG17229	sca	18		no phenotype	
146	130D8	T1	CG3258	ase		sca	18		not checked	
147	130D8	T2	CG3258	ase		sca	18		not checked	
148	130D8	T3	CG3258	ase		sca	18		not checked	

Colour Key

- medium to strong phenotypes
- rare, weak phenotypes
- no phenotype
- lethal (even if escapers are present)
- no colour — not checked

To identify a suitable GAL4 driver line for the genome-wide screen we tested *fzIII*-GAL4, *sca*-GAL4 and *pnr*-GAL4 at 18, 25 and 29 °C. Table shows the gene targeted by RNAi, temperature, driver and resulting phenotype. **(pdf; 116 kb)**

Supplementary Table 3. GO Term over-representation among genes with similar phenotypes

GO Term	*Number*	*P value*
Growth and Proliferation Phenotypes ($P_{Overprolif}$>0)		
imaginal disc development	GO:0007444	2.34E-11
regulation of organ growth	GO:0046620	8.95E-08
cell proliferation	GO:0008283	4.33E-05
regulation of growth	GO:0040008	1.67E-04
Bristle Polarity Defects ($P_{Polarity}$≥4)		
establishment of planar polarity	GO:0001736	4.62E-19
establishment of imaginal disc-derived wing hair orientation	GO:0001737	2.87E-11
Bristle Morphology Defects (P_{BMorph}>0)		
mitochondrion	GO:0005739	8.75E-79
ribosome	GO:0005840	2.08E-39
primary metabolic process	GO:0044238	1.21E-13
cytoskeleton	GO:0005856	9.04E-05
translation	GO:0006412	9.16E-04
Asymmetric Cell Division		
nervous system development	GO:0007399	8.22E-12
asymmetric cell division	GO:0008356	5.23E-06
regulation of cell cycle	GO:0051726	1.28E-05
Notch signaling pathway	GO:0007219	2.96E-05
lateral inhibition	GO:0046331	7.80E-04
sensory organ precursor cell fate determination	GO:0016360	1.37E-03
spindle localization	GO:0051653	7.66E-03
Lateral Inhibition		
neurogenesis	GO:0022008	7.67E-10
Notch signaling pathway	GO:0007219	4.62E-05
cell fate commitment	GO:0045165	7.03E-05
lateral inhibition	GO:0046331	1.10E-03
imaginal disc-derived wing vein specification	GO:0007474	6.64E-03

Selected GO Terms and corresponding P-values for statistical over-representation compared to random gene sets of comparable sizes are shown for groups of genes that cause growth and proliferation, polarity, bristle morphology, asymmetric cell division and lateral inhibition phenotypes in the genome-wide screen. **(doc; 79 kb)**

Supplementary Table 4.False negative result data

Transformant ID	CG Number 5.7	Expected phenotype? (line)	Expected phenotype? (gene)
11257	CG1007	yes	yes
15620	CG10542	notum malformation death	notum malformation death
35507	CG11798	no	no
35508	CG11798	no	
10662	CG11988	yes	yes
44046	CG12366	yes	yes
27044	CG12676	lethal	yes
3087	CG12676	yes	
938	CG12676	yes	
937	CG12676	yes	
12647	CG13281	lethal	lethal
12648	CG13281	lethal	
13759	CG1520	yes	yes
13757	CG1520	yes	
41134	CG1725	lethal	lethal
44527	CG17579	yes	yes
44528	CG17579	yes	
43075	CG17697	yes (polarity)	yes
43077	CG17697	yes (polarity)	
10855	CG1856	yes	yes
43083	CG18803	yes	yes
43082	CG18803	yes	
28341	CG1903	lethal	lethal
19124	CG2204	no	no
7769	CG2534	no	no
7005	CG2621	no	no
16820	CG2855	yes	yes
16821	CG2855	yes	
6858	CG31020	yes	yes
6856	CG31020	no	
14480	CG31152	no	no
14481	CG31152	no	
11690	CG32120	lethal	lethal
9925	CG3497	no	no
27187	CG3619	yes	yes
3720	CG3619	yes	
37288	CG3619	yes	
37287	CG3619	yes	
	CG3779	yes	yes
7758	CG3796	no	no
7756	CG3796	no	
7759	CG3796	no	
5302	CG3874	no	no
21469	CG3874	no	
21468	CG3874	no	
47542	CG3874	no	
47543	CG3874	no	
7796	CG3929	no	no
7795	CG3929	no	
1112	CG3936	yes	yes
27229	CG3936	yes	
27228	CG3936	yes	
15565	CG4260	lethal	lethal
15566	CG4260	lethal	
21928	CG4713	lethal	lethal
8892	CG4722	no	yes
8893	CG4722	yes	
2914	CG5055	yes	yes
2915	CG5055	yes	
11784	CG5099	yes	yes
44895	CG5099	yes	
41839	CG5363	notum malformation death	notum malformation death
41838	CG5363	notum malformation death	
24466	CG5460	yes	yes
33294	CG5820	lethal	yes
900	CG5820	lethal	
899	CG5820	lethal	
36301	CG5820	yes	
33295	CG5820	no	
27525	CG5841	yes	yes
27526	CG5841	yes	
34340	CG6235	yes	yes
34339	CG6235	yes	
35132	CG6897	yes	yes
35134	CG6897	yes	
7376	CG8075	yes	yes
48690	CG8118	no	no
6315	CG8384	yes	yes
6316	CG8384	yes	

Table indicates whether phenotypes in the genome-wide screen agree with published phenotypes for set of 42 genes previously described as members of the Notch signaling pathway or the asymmetric cell fate specification machinery. **(pdf; 32 kb)**

Supplementary Table 5.Second UAS-hairpin transgenic line results

CG number 5.7	Source	RNAi line ID	overlap 1st construct	Same pheno. multi 1st lines?	Result (line)	Result (gene)
CG10210	NIG-FLY	10210R-1	0%	no	similar	same
CG10210	NIG-FLY	10210R-2	0%	no	same	
CG10261	custom	1B1 T1	0%	1 line	lethal (p)	same (p)
CG10261	custom	1B1 T2	0%	1 line	lethal (p)	
CG10618	NIG-FLY	10618R-1	53%	1 line	no pheno.	no pheno.
CG10618	NIG-FLY	10618R-2	53%	1 line	no pheno.	
CG10776	NIG-FLY	10776R-1	0%	no	no pheno.	no pheno.
CG10776	NIG-FLY	10776R-2	0%	no	no pheno.	
CG10954	NIG-FLY	10954R-1	40%	1 line	same	same
CG10954	NIG-FLY	10954R-4	40%	1 line	same	
CG11101	NIG-FLY	11101R-2	0%	no	similar (p)	similar (p)
CG11101	NIG-FLY	11101R-3	0%	no	similar (p)	
CG11940	NIG-FLY	11940R-2	0%	no	lethal	similar
CG11940	NIG-FLY	11940R-3	0%	no	similar	
CG11988	custom	1A3-5 T1	0%	1 line	same (p)	same (p)
CG12352	NIG-FLY	12352R-1	57%	yes	same	same
CG12352	NIG-FLY	12352R-3	57%	yes	same	
CG12366	custom	1G3 1 T1	0%	1 line	same (p)	same (p)
CG12366	custom	1G3 1 T2	0%	1 line	same (p)	
CG12484	NIG-FLY	12484R-1	0%	yes	no pheno.	no pheno.
CG12484	NIG-FLY	12484R-2	0%	yes	no pheno.	
CG12818	NIG-FLY	12818R-1	59%	no	no pheno.	no pheno.
CG12818	NIG-FLY	12818R-3	59%	no	no pheno.	
CG12880	NIG-FLY	12880R-1	0%	no	no pheno.	no pheno.
CG13208	NIG-FLY	13208R-2	0%	yes	same	same
CG13208	NIG-FLY	13208R-3	0%	yes	same	
CG13472	NIG-FLY	13472R-1	0%	no	no pheno.	no pheno.
CG13472	NIG-FLY	13472R-3	0%	no	no pheno.	
CG13983	custom	1D4 b) T1	44%	no	no pheno.	no pheno.
CG14721	NIG-FLY	14721R-2	5%	1 line	no pheno.	similar
CG14721	NIG-FLY	14721R-2	5%	1 line	similar	
CG15543	NIG-FLY	15443R-1	63%	1 line	no pheno.	no pheno.
CG15543	NIG-FLY	15443R-2	63%	1 line	no pheno.	
CG15769	NIG-FLY	15769R-2	0%	no	no pheno.	no pheno.
CG15769	NIG-FLY	15769R-4	0%	no	no pheno.	
CG16908	NIG-FLY	16908R-4	0%	yes	similar	similar
CG16993	NIG-FLY	16993R-1	0%	no	same (p)	same (p)
CG16993	NIG-FLY	16993R-2	0%	no	same (p)	
CG17559	NIG-FLY	17559R-2	36%	no	no pheno.	no pheno.
CG17559	NIG-FLY	17559R-3	36%	no	no pheno.	
CG17579	NIG-FLY	17579R-1	0%	yes	similar (p)	similar (p)
CG17657	NIG-FLY	17657R-1	0%	1 line	same (p)	same (p)
CG17657	NIG-FLY	17657R-3	0%	1 line	same (p)	
CG17928	NIG-FLY	17928R-1	0%	1 line	no pheno.	no pheno.
CG17928	NIG-FLY	17928R-2	0%	1 line	no pheno.	
CG1804	NIG-FLY	1804R-1	0%	no	different	different
CG1804	NIG-FLY	1804R-3	0%	no	different	
CG18214	NIG-FLY	18214R-1	0%	no	different	different
CG18214	NIG-FLY	18214R-2	0%	no	different	
CG1903	NIG-FLY	1903R-2	0%	1 line	same (p)	same (p)
CG2179	NIG-FLY	2179R-2	0%	1 line	similar	similar
CG2183	NIG-FLY	2183R-1	59%	no	no pheno.	no pheno.
CG31904	NIG-FLY	31904R-2	0%	1 line	same	same
CG31904	NIG-FLY	31904R-3	0%	1 line	same	
CG32707	NIG-FLY	4350R-2	0%	yes	same	same
CG32707	NIG-FLY	4350R-1	0%	yes	same	
CG32732	NIG-FLY	12542R-3	0%	1 line	similar	similar
CG3298	NIG-FLY	3298R-1	0%	yes	same	same
CG3298	NIG-FLY	3298R-2	0%	yes	same	
CG33193	NIG-FLY	13831R-1	0%	no	no pheno.	no pheno.
CG33193	NIG-FLY	13831R-2	0%	no	no pheno.	
CG33196	NIG-FLY	15637R-1	0%	yes	no pheno.	same
CG33196	NIG-FLY	15637R-2	0%	yes	similar	
CG33196	NIG-FLY	31724R-2	0%	yes	same	
CG33196	NIG-FLY	31725R-1	0%	yes	same	
CG33196	NIG-FLY	31725R-3	0%	yes	same	
CG33196	NIG-FLY	31727R-1	0%	yes	same	
CG33196	NIG-FLY	31727R-3	0%	yes	same	
CG33205	NIG-FLY	32049R-1	0%	yes	same	same
CG33205	NIG-FLY	32049R-2	0%	yes	same	

Supplementary Table 5.

CG number 5.7	Source	RNAi line ID	overlap 1st construct	Same pheno. multi 1st lines?	Result (line)	Result (gene)
CG33484	NIG-FLY	32311R-1	0%	no	similar	similar
CG33484	NIG-FLY	32311R-2	0%	no	similar	
CG33554	NIG-FLY	2905R-3	0%	no	no pheno.	same
CG33554	NIG-FLY	2905R-7	0%	no	same	
CG33956	NIG-FLY	15507R-2	0%	yes	same	same
CG33956	NIG-FLY	15507R-4	0%	yes	same	
CG34409	custom	1E8 3 T1	0%	no	no pheno.	no pheno.
CG34409	custom	1E8 5 T1	0%	no	no pheno.	
CG34409	custom	1E8 5 T2	0%	no	no pheno.	
CG3619	custom	1A10 T1	0%	yes	same (p)	same (p)
CG3619	custom	1A10 T2	0%	yes	same (p)	
CG3690	NIG-FLY	3690R-1	0%	no	no pheno.	no pheno.
CG3722	NIG-FLY	3722R-1	0%	yes	same (p)	same (p)
CG3722	NIG-FLY	3722R-2	0%	yes	same (p)	
CG3779	NIG-FLY	3779R-1	66%	1 line	same (p)	same (p)
CG3779	NIG-FLY	3779R-3	66%	1 line	same (p)	
CG3891	NIG-FLY	3891R-1	67%	yes	same	same
CG3891	NIG-FLY	3891R-2	67%	yes	same	
CG3936	NIG-FLY	3936R-2	0%	yes	same (p)	same (p)
CG3936	NIG-FLY	3936R-3	0%	yes	same (p)	
CG4311	NIG-FLY	4311R-1	49%	yes	same	same
CG4311	NIG-FLY	4311R-3	49%	yes	same	
CG4633	NIG-FLY	4633R-2	0%	yes	different	different
CG4633	NIG-FLY	4633R-4	0%	yes	different	
CG5055	NIG-FLY	5055R-2	0%	yes	same (p)	same (p)
CG5055	NIG-FLY	5055R-1	0%	yes	same (p)	
CG5070	custom	1G11 T1	28%	no	different	different
CG5070	custom	1G11 T2	28%	no	different	
CG5165	NIG-FLY	5165R-2	0%	no	no pheno.	no pheno.
CG5441	custom	1C12 a) T1	0%	yes	same	same
CG5460	custom	1D12 T1	0%	1 line	similar (p)	similar (p)
CG5460	custom	1D12 T2	0%	1 line	no pheno. (p)	
CG5608	NIG-FLY	5608R-1	19%	1 line	no pheno.	no pheno.
CG5608	NIG-FLY	5608R-3	19%	1 line	no pheno.	
CG5640	NIG-FLY	5640R-3	0%	yes	same	same
CG5640	NIG-FLY	5640R-2	0%	yes	similar	
CG5680	NIG-FLY	5680R-1	62%	yes	same (p)	same (p)
CG5680	NIG-FLY	5680R-2	62%	yes	same (p)	
CG5857	custom	2B1 T2	0%	yes	no pheno.	no pheno.
CG6098	NIG-FLY	6098R-1	0%	yes	same	same
CG6098	NIG-FLY	6098R-2	0%	yes	same	
CG6202	custom	2G1 T1	25%	no	same	same
CG6202	custom	2G1 T2	25%	no	same	
CG6255	NIG-FLY	6255R-3	0%	no	no pheno.	no pheno.
CG6627	NIG-FLY	6627R-4	0%	no	no pheno.	no pheno.
CG6883	NIG-FLY	6883R-1	0%	yes	same	same
CG6883	NIG-FLY	6883R-2	0%	yes	same	
CG7454	NIG-FLY	7454R-1	50%	no	no pheno.	no pheno.
CG7454	NIG-FLY	7454R-3	50%	no	no pheno.	
CG7614	NIG-FLY	7614R-1	0%	1 line	similar	similar
CG7614	NIG-FLY	7614R-3	0%	1 line	similar	
CG7999	NIG-FLY	7999R-1	0%	1 line	same	same
CG7999	NIG-FLY	7999R-2	0%	1 line	same	
CG8142	NIG-FLY	8142R-2	70%	1 line	same	same
CG8142	NIG-FLY	8142R-3	70%	1 line	same	
CG8657	NIG-FLY	8657R-1	0%	1 line	no pheno.	no pheno.
CG8657	NIG-FLY	8657R-2	0%	1 line	no pheno.	
CG8865	NIG-FLY	8865R-1	0%	1 line	different	different
CG8865	NIG-FLY	8865R-2	0%	1 line	different	
CG8890	NIG-FLY	8890R-2	0%	1 line	same (p)	same (p)
CG9249	NIG-FLY	9249R-1	0%	yes?	similar	similar
CG9249	NIG-FLY	9249R-3	0%	yes?	similar	
CG9596	NIG-FLY	9596R-1	0%	no	same	same
CG9596	NIG-FLY	9596R-2	0%	no	same	
CG9901	NIG-FLY	9901R-2	0%	yes	similar	same
CG9901	NIG-FLY	9901R-1	0%	yes	same	

Note: (p) denotes positive control genes in the Notch pathway or asymmetric cell division

Table indicates whether phenotypes with an independently generated transgenic RNAi line agree with phenotypes obtained in the genome-wide screen for a set of 73 genes. The sequence overlap with the original library transgenic line is shown. **(pdf; 54 kb)**

Supplementary Table 6. False positive result data

Transformant ID	CG Number 5.7	Gene Symbol	Expected phenotype?
9240	CG10385	msl-1	yes
9239	CG10385	msl-1	yes
13562	CG10612	Or83a	yes
13563	CG10612	Or83a	yes
4225	CG10888	Rh3	yes
31390	CG10986	g	yes
31391	CG10986	g	yes
39766	CG10986	g	yes
41369	CG10986	g	yes
41368	CG10986	g	yes
19691	CG11680	mle	yes
9354	CG13206	Or47b	yes
26805	CG14360	Or88a	yes
11321	CG1555	cn	yes
11322	CG1555	cn	yes
13730	CG15779	Tre	yes
12347	CG15779	Tre	yes
2560	CG16724	tra	yes
2561	CG16724	tra	yes
7210	CG16740	Rh2	yes
7723	CG16910	key	yes
28225	CG1980	dj	yes
28224	CG1980	dj	yes
13673	CG2075	aly	yes
25591	CG30170	bgcn	yes
25590	CG30170	bgcn	yes
25015	CG3029	or	yes
25014	CG3029	or	Expected? (notum malformation and overproliferation)
3875	CG31783	ninaD	yes
29356	CG3241	msl-2	yes
14535	CG32498	dnc	Expected? (notum malformation death)
26299	CG32498	dnc	yes
24616	CG32498	dnc	yes
24615	CG32498	dnc	yes
16717	CG32498	dnc	yes
14534	CG32498	dnc	Expected? (notum malformation death)
15444	CG32498	dnc	yes
18140	CG32498	dnc	Expected? (notum malformation death)
45688	CG3331	e	yes
45689	CG3331	e	yes
26211	CG3504	inaD	yes
34286	CG3525	eas	yes
34287	CG3525	eas	yes
21490	CG3620	norpA	yes
10374	CG4215	spel1	yes
40876	CG4314	st	yes
40875	CG4314	st	yes
12045	CG4319	rpr	yes
27359	CG5125	ninaC	yes
27360	CG5125	ninaC	yes
1836	CG5192	Rh6	yes
23201	CG5216	Sir2	yes
23199	CG5216	Sir2	yes
19834	CG5529	B-H1	yes
9253	CG5576	imd	yes
1748	CG5638	Rh7	yes
8933	CG6203	Fmr1	yes
13380	CG7303	Gr68a	yes
13381	CG7303	Gr68a	yes
35240	CG7399	Hn	yes
28041	CG7486	Dredd	yes
4365	CG8285	boss	yes
4366	CG8285	boss	yes
35876	CG8318	Nf1	Expected? (loss of bristles and notum malformation)
35877	CG8318	Nf1	yes
4867	CG8536	beta4GalNAcTA	yes
4869	CG8536	beta4GalNAcTA	yes
2998	CG8631	msl-3	yes
9827	CG9151	acj6	yes
29108	CG9347	ninaB	yes
3149	CG9771	Dip2	yes
3148	CG9771	Dip2	yes

Table indicates whether phenotypes in the genome-wide screen agree with published adult mutant phenotypes (or lack thereof) for a set of 43 non-essential genes. **(pdf; 37 kb)**

Supplementary Table 7. Wing assay results

Transformant ID	Lateral Inhibition	CG number 5.7	Wing Margin Notching	Broad Delta-like Veins	Positive in Su(H) reporter assay	Bent Up (Spoon-shaped) wing	Other wing phenotype or no phenotype	Known Notch Pathway Gene
3774	Yes	CG10021	no	no	not tested	no		
15425	Yes	CG10036	no	no	not tested	no		
11257	Yes	CG1007	no	yes, weak	no	no	ectopic bristles	yes
35469	Yes	CG10108	no	no	not tested	yes		
16039	Yes	CG10210, CG10375	no	no	not tested	no		
16040	Yes	CG10377	no	no	no	no	wrinkled, small	
29715	Yes	CG10570	no	no	not tested	no		
3326	Yes	CG10657	no	no	not tested	yes		
42245	Yes	CG10776	no	no	no	yes	terminal L4 and L5 are absent	
35489	Yes	CG10800	yes	yes	no	no	wrinkled, small, tufts of trichomes	
35490	Yes	CG10800	yes	yes	no	no	wrinkled, small, tufts of trichomes	
45013	Yes	CG10954	no	no	not tested	yes		
27090	Yes	CG10975	no	no	no	no		
40631	Yes	CG10975	no	no	no	yes	darker margin	
37812	Yes	CG11154	no	no	not tested	no		
10942	Yes	CG1119	no	no	not tested	yes		
3046	Yes	CG11282	no	no	not tested	no		
17541	Yes	CG11286	yes	yes	yes	no		
39686	Yes	CG11286	yes	yes	yes	no		
2495	Yes	CG11592	no	no	not tested	no		
38541	Yes	CG11597	no	no	not tested	no		
48786	Yes	CG11637	no	no	not tested	no		
16258	Yes	CG11659, CG6300	no	no	not tested	yes	wrinkled	
16371	Yes	CG11940	no	no	not tested	no	wrinkled	
3335	Yes	CG11956	no	no	not tested	no		
3336	No	CG11956	no	no	not tested	no		
10662	Yes	CG11988	no	no	not tested	no		yes
31121	Yes	CG12065	no	no	not tested	no		
17043	Yes	CG1216	no	no	not tested	no		
43112	Yes	CG12265	no	no	not tested	no		
43113	Yes	CG12265	yes	yes	no	no	wrinkled, small, tufts of trichomes	
23091	Yes	CG12333	no	no	not tested	no		
44046	Yes	CG12366	yes	yes	yes	no	wrinkled, small	yes
25576	Yes	CG12484	no	no	not tested	yes		
45761	Yes	CG12537	no	no	not tested	no		
938	Yes	CG12676	no	no	not tested	no		yes
31898	Yes	CG12818	no	no	not tested	no		
46248	No	CG12818	no	no	not tested	no		
15081	Yes	CG13208, CG7741	no	no	not tested	yes or lethal		
23873	Yes	CG13349	no	no	not tested	no		
32194	Yes	CG13472	no	no	not tested	yes		
43848	Yes	CG13586	no	no	not tested	yes		
17334	Yes	CG13623	no	no	not tested	yes		
17690	Yes	CG13708	no	no	not tested	no		
24481	Yes	CG13827	no	no	not tested	no		
38003	Yes	CG13983	no	no	not tested	no		
17340	Yes	CG14011	no	no	not tested	no		
45414	Yes	CG14011	no	no	no	yes	thin	
17349	Yes	CG14039	yes	yes	no	no		
17471	Yes	CG14299	no	no	not tested	no		
32278	Yes	CG14544	no	no	not tested	no		
43588	Yes	CG14549	no	no	not tested	yes		
44064	Yes	CG14624	no	yes	no	yes		
44065	Yes	CG14624	no	no	not tested	no		
37757	Yes	CG14999	no	no	not tested	yes		
28552	Yes	CG15292	no	no	not tested	no	wrinkled	
14645	Yes	CG15307	no	no	not tested	no	sprouting vein (L3)	
43402	Yes	CG15330	no	no	not tested	no		
11245	Yes	CG15367	no	no	no	no	wrinkled, supernumary trichomes	
27045	Yes	CG15427	no	no	not tested	yes		
20205	Yes	CG15429	no	no	not tested	no		
40877	Yes	CG15443	no	no	not tested	no		
40024	Yes	CG15753	no	no	not tested	yes		
14404	Yes	CG15769	no	no	not tested	yes		
33846	No	CG16713	no	no	not tested	no		
32767	Yes	CG16908	no	no	not tested	yes		
28758	Yes	CG17060	no	no	not tested	no		
14194	Yes	CG17081	no	no	not tested	no		
27056	Yes	CG17559	no	no	no	yes		
3861	Yes	CG17928	no	no	no	no	wrinkled margin	
969	Yes	CG1804	no	no	no	no	wrinkled margin	
27165	No	CG1804	no	no	no	no		
40137	Yes	CG18214	no	no	not tested	no		
12821	No	CG18332	no	yes	no	no	wrinkled, thin, necrotic, ectopic bristles	
12822	Yes	CG18332	no	no	no	no		
46043	Yes	CG18582, CG4013	no	yes, weak	no	no	flattened border	
46044	Yes	CG18582, CG4013	no	no	not tested	no		
43082	Yes	CG18803	no	yes	no	yes		yes
20799	Yes	CG2091	no	no	no	yes	flattened margin (weak)	
20826	Yes	CG2161	no	no	no	no	furrows	
20829	Yes	CG2179	no	no	no	yes		
13762	Yes	CG2183	no	no	not tested	no		
20849	Yes	CG2222	no	no	no	yes	altered pattern of hairs; parts of wing are delaminating	
33509	Yes	CG2257	no	no	not tested	no	wings bent down	
33510	Yes	CG2257	no	no	no	no	wings bent down, wrinkled, necrotic	
7035	Yes	CG2938	no	no	not tested	no		
21763	Yes	CG2950	no	no	not tested	no		
43880	Yes	CG30023, CG4013	no	no	no	yes		
44747	Yes	CG30182	no	no	not tested	yes or lethal		
35799	Yes	CG30321	no	no	not tested	no		
29193	Yes	CG30470	no	no	no	yes	wrinkled, small	
33739	Yes	CG31007	no	yes, weak	no	no		
38854	Yes	CG31012	no	no	not tested	no		
40207	Yes	CG31122	no	no	not tested	no		
27194	Yes	CG31140	no	no	not tested	yes		
14727	Yes	CG31238	no	no	no	yes		
9075	Yes	CG31292, CG3303	no	no	not tested	yes		
43430	Yes	CG31389	no	no	not tested	no		
30545	Yes	CG31612	no	no	not tested	no		
9425	Yes	CG31781	no	no	not tested	yes or lethal		
8234	Yes	CG32060	no	no	not tested	no		
34408	Yes	CG32130	no	yes, weak	no	yes		
37441	Yes	CG32136	yes	yes	no	no	wrinkled, small, ectopic bristles	
34446	Yes	CG32203	no	no	not tested	no		
14339	Yes	CG32206	no	no	not tested	no		
41875	Yes	CG32315	no	no	not tested	yes		
41876	Yes	CG32315	no	no	not tested	yes		
45459	Yes	CG32315	no	no	not tested	yes	wrinkled	
24740	Yes	CG32346	no	no	not tested	yes		
7255	Yes	CG32463	no	no	not tested	yes		
18140	Yes	CG32498	no	no	not tested	yes		
27035	Yes	CG32676	no	no	not tested	yes		
45071	Yes	CG32717	no	no	not tested	yes	thin	
19428	Yes	CG32717, CG4013	yes	yes, weak	no	yes	furrows	
25620	Yes	CG32732	no	no	not tested	yes		
43370	Yes	CG32813	no	no	no	yes	furrows	
43751	Yes	CG3298	no	no	no	no	necrotic	
29542	Yes	CG33106, CG4013	no	no	not tested	yes		
24801	Yes	CG33193	no	no	not tested	yes		
25823	Yes	CG33196	no	no	not tested	no	only 1 male adult, wrinkled, blistered, small	
32275	Yes	CG33203	no	no	not tested	yes		
21435	Yes	CG33205	no	no	not tested	yes		
50497	Yes	CG33270	no	no	no	no	wrinkled, small	
47834	Yes	CG33324	no	yes	no	no		

Supplementary Table 7.

Transformant ID	Lateral Inhibition	CG number 5.7	Wing Margin Notching	Broad Delta-like Veins	Positive in Su(H) reporter assay	Bent Up (Spoon-shaped) wing	Other wing phenotype or no phenotype	Known Notch Pathway Gene
47835	Yes	CG33324	no	yes	no	no	thin	
48476	Yes	CG33688	no	no	not tested	no	sprouting vein (L4)	
45652	Yes	CG33696	no	no	not tested	yes		
33197	Yes	CG34315, CG4088	no	no	not tested	yes		
45670	Yes	CG34319	no	no	not tested	yes		
25197	Yes	CG34341	no	yes, weak	no	no		
12475	Yes	CG34343, CG4013	no	no	not tested	yes		
20105	Yes	CG34345	yes	yes	yes	no		
10133	Yes	CG3443	no	no	not tested	yes		
3720	Yes	CG3619	yes	yes	no	no		yes
27187	Yes	CG3619	yes	yes	no	no	thin	yes
37287	Yes	CG3619	yes	yes	not tested	no	wrinkled, blistered	yes
37288	Yes	CG3619	yes	yes	no	no	wrinkled, blistered	yes
28359	Yes	CG3690	no	no	not tested	no		
34719	Yes	CG3845	no	no	not tested	yes	wrinkled	
11270	Yes	CG3891	no	no	no	yes		
29674	Yes	CG3927	no	no	not tested	no		
1112	Yes	CG3936	yes	yes	yes	no	wrinkled	yes
27228	Yes	CG3936	yes	yes	yes	no	wrinkled, small	yes
27229	Yes	CG3936	yes	yes	yes	no	wrinkled	yes
19339	Yes	CG4013	no	no	not tested	yes		
13716	Yes	CG4013, CG8254	no	no	no	yes		
13661	Yes	CG4039	no	no	no	no	furrows	
27223	Yes	CG4125	no	no	not tested	no		
6248	Yes	CG4158	no	yes, weak	no	no		
35583	Yes	CG4178	no	no	not tested	no		
26505	Yes	CG4311	no	no	not tested	no		
35385	Yes	CG4412	no	no	not tested	no	wrinkled, small	
3238	Yes	CG4531	no	yes	no	no		
8893	Yes	CG4722	no	no	no	yes	wrinkled	yes
34893	Yes	CG4733	no	no	not tested	yes		
34894	Yes	CG4733	no	no	not tested	yes		
21536	Yes	CG4760	no	no	not tested	yes		
2942	Yes	CG4952	no	no	not tested	yes		
34953	Yes	CG5165	no	no	not tested	no		
37761	Yes	CG5313	no	no	not tested	yes		
41437	Yes	CG5362	no	no	not tested	yes	wrinkled	
11570	Yes	CG5488	no	no	not tested	no		
45569	Yes	CG5608	yes	yes	yes	no		
34136	Yes	CG5674	no	no	not tested	yes		
27526	Yes	CG5841	yes	yes	yes	no	blistered, ectopic bristles	yes
32421	Yes	CG5940	no	no	no	no	wrinkled, small, tufts of trichomes	
41397	Yes	CG5953	no	no	no	yes		
27566	Yes	CG6098	no	no	not tested	no		
27567	Yes	CG6098	no	no	not tested	no		
4301	Yes	CG6124	no	no	not tested	no		
10639	Yes	CG6146	no	no	not tested	yes		
40354	Yes	CG6255	no	no	not tested	no		
30274	Yes	CG6308	no	no	not tested	no		
27577	Yes	CG6315	no	no	not tested	yes		
27578	Yes	CG6315	no	no	not tested	yes		
27625	Yes	CG6444	no	no	not tested	yes		
37988	Yes	CG6453	no	no	not tested	no		
22496	Yes	CG6509	no	no	no	no	thin	
42799	Yes	CG6627	no	no	not tested	no		
35123	Yes	CG6838	no	no	not tested	no		
22704	Yes	CG6883	no	no	not tested	yes		
34362	Yes	CG6889	no	no	not tested	no		
6313	Yes	CG6975	no	no	not tested	yes	wrinkled	
41858	Yes	CG7015	no	no	not tested	yes		
37553	Yes	CG7417	no	no	not tested	no		
37555	Yes	CG7417	no	no	not tested	no		
14099	Yes	CG7454	no	no	not tested	no		
13041	Yes	CG7631	no	no	no	no	wrinkled, small, ectopic bristles, vein material in E cell	
12429	Yes	CG7655	no	no	not tested	no		
43649	Yes	CG7668	no	yes	no	yes	ectopic bristles, marginal sensory bristles partially deformed	
14392	Yes	CG7714	no	no	not tested	no		
40322	Yes	CG7883	no	no	not tested	yes	small, wing margin is less brown and narrower	
38963	Yes	CG7935	no	no	not tested	yes		
23675	Yes	CG8021	yes	yes	yes	no		
35338	Yes	CG8094	no	no	not tested	yes		
23748	Yes	CG8136	yes	yes	yes	yes	thin	
10881	Yes	CG8142	no	no	not tested	yes	wrinkled margin	
24253	Yes	CG8239	no	no	not tested	yes		
20210	Yes	CG8355	no	yes, weak	no	no		
38233	Yes	CG8355	no	yes, weak	no	no		
6315	Yes	CG8384	no	no	not tested	no		yes
6316	Yes	CG8384	no	yes, weak	no	yes		yes
35922	Yes	CG8386	no	no	not tested	yes or lethal		
28243	Yes	CG8472	no	no	no	no	wrinkled, small	
28908	Yes	CG8489	no	no	not tested	no		
50350	Yes	CG8556	no	no	not tested	no		
28942	Yes	CG8725	no	no	not tested	yes		
45988	Yes	CG8743	no	no	not tested	yes or lethal	larger	
45989	Yes	CG8743	no	no	no	yes		
28247	Yes	CG8765	no	no	not tested	no		
37975	Yes	CG8946	no	no	not tested	no		
42182	Yes	CG8994	no	no	not tested	no		
23335	Yes	CG9032	no	no	not tested	no		
23685	Yes	CG9032	no	no	not tested	yes	wrinkled	
40837	Yes	CG9194	no	no	not tested	no		
42211	Yes	CG9249	no	no	not tested	no	wrinkled, parts of wing are delaminating	
47643	No	CG9249	no	no	not tested	yes		
29962	Yes	CG9270	no	no	not tested	no		
15347	Yes	CG9415	no	no	not tested	no	wrinkled, blistered, small	
15337	Yes	CG9473	no	no	not tested	no	wrinkled	
8329	Yes	CG9518	no	no	not tested	no	additional vein parallel to L3	
27026	Yes	CG9596	no	no	not tested	no		
24193	Yes	CG9731	no	no	not tested	yes or lethal		
13779	Yes	CG9768	no	no	not tested	no		
39205	Yes	CG9802	no	yes	no	yes	wrinkled, small, ectopic bristles, supernumary trichomes	
2575	Yes	CG9964	no	no	not tested	no		

Results of the *MS1096*-GAL4 wing secondary screen describing phenotypes in wing margin notching, wing vein broadening and other phenotypes for genes in the lateral inhibition category. Results of the Su(H)-*lacZ* reporter assay for genes whose knockdown caused wing margin notching or broad wing vein phenotypes in the *MS1096*-GAL4 secondary screen are also included. **(pdf; 71 kb)**

Supplementary Table 8. Live imaging analysis for SOP specification results

Transformant ID	CG Number 5.7	Loss of Bristles	Phenotype in Live Imaging Assay	Positive Control Gene?
35469	CG10108	9.0	too many SOP cells	no
29715	CG10570	10.0	no SOP cells	no
3326	CG10657	7.0	normal number, size SOP cells	no
42245	CG10776	9.0	no SOP cells	no
35489	CG10800	10.0	no SOP cells	no
35490	CG10800	9.0	few SOP cells, big SOP cells	no
37812	CG11154	9.0	small SOP cells	no
10942	CG1119	8.0	normal number, size SOP cells	no
3046	CG11282	8.0	normal number, size SOP cells	no
2495	CG11592	9.0	lethal	no
38541	CG11597	10.0	no SOP cells	no
43112	CG12265	10.0	few SOP cells, big SOP cells	no
43113	CG12265	10.0	few SOP cells, big SOP cells	no
23091	CG12333	9.0	no SOP cells	no
31741	CG12352	7.0	normal number, size SOP cells	no
44046	CG12366	9.0	too many SOP cells	yes, Notch
17334	CG13623	7.0	normal number, size SOP cells	no
17690	CG13708	10.0	no SOP cells	no
24481	CG13827	10.0	no SOP cells	no
17471	CG14299	10.0	no SOP cells	no
32278	CG14544	9.0	normal number, size SOP cells	no
32279	CG14544	8.0	normal number, size SOP cells	no
43588	CG14549	8.0	normal number, size SOP cells	no
37757	CG14999	8.0	normal number, size SOP cells	no
28552	CG15292	8.0	normal number, size SOP cells	no
14645	CG15307	10.0	no SOP cells	no
11245	CG15367	9.0	normal number, size SOP cells	no
20205	CG15429	10.0	no SOP cells	no
40877	CG15443	9.0	no SOP cells	no
14404	CG15769	7.0	few SOP cells	no
32767	CG16908	10.0	normal number, size SOP cells	no
14194	CG17081	10.0	no SOP cells	no
40137	CG18214	9.0	few SOP cells	no
43082	CG18803	9.0	too many SOP cells	yes, Notch
13762	CG2183	8.0	normal number, size SOP cells	no
20849	CG2222	9.0	normal number, size SOP cells	no
7035	CG2938	9.0	no SOP cells	no
44747	CG30182	9.0	normal number, size SOP cells	no
35799	CG30321	10.0	no SOP cells	no
30545	CG31612	9.0	no SOP cells	no
9425	CG31781	8.0	normal number, size SOP cells	no
34446	CG32203	9.0	no SOP cells	no
14339	CG32206	9.0	no SOP cells	no
41875	CG32315	8.0	normal number, size SOP cells	no
41876	CG32315	8.0	normal number, size SOP cells	no
45459	CG32315	8.0	normal number, size SOP cells	no
7255	CG32463	10.0	no SOP cells	no
43370	CG32813	10.0	no SOP cells	no
43751	CG3298	9.0	lethal	no
48476	CG33688	10.0	no SOP cells	no
33197	CG34315, CG4088	7.0	normal number, size SOP cells	no
18682	CG34345	8.0	too many SOP cells	no
20105	CG34345	9.0	too many SOP cells	no
27187	CG3619	8.0	too many SOP cells	yes, Notch, ACD
37287	CG3619	7.0	too many SOP cells	yes, Notch, ACD
37288	CG3619	8.0	too many SOP cells	yes, Notch, ACD
28359	CG3690	10.0	no SOP cells	no
29674	CG3927	8.0	normal number, size SOP cells	no
1112	CG3936	9.0	too many SOP cells	yes, Notch, ACD
27228	CG3936	9.0	too many SOP cells	yes, Notch, ACD

Supplementary Table 8.

Transformant ID	CG Number 5.7	Loss of Bristles	Phenotype in Live Imaging Assay	Positive Control Gene?
27229	CG3936	10.0	too many SOP cells	yes, Notch, ACD
13661	CG4039	9.0	normal number, size SOP cells	no
35583	CG4178	10.0	no SOP cells	no
35385	CG4412	9.0	no SOP cells	no
3238	CG4531	7.0	too many SOP cells	no
21536	CG4760	8.0	few SOP cells	no
34953	CG5165	9.0	no SOP cells	no
37761	CG5313	8.0	normal number, size SOP cells	no
32421	CG5940	10.0	few SOP cells, big SOP cells	yes, ACD
27566	CG6098	9.0	normal number, size SOP cells	no
27567	CG6098	9.0	normal number, size SOP cells	no
30274	CG6308	9.0	no SOP cells	no
42799	CG6627	9.0	no SOP cells	no
35123	CG6838	10.0	no SOP cells	no
14099	CG7454	9.0	no SOP cells	no
12429	CG7655	9.0	no SOP cells	no
14392	CG7714	10.0	no SOP cells	no
40322	CG7883	9.0	lethal	no
38963	CG7935	7.0	small SOP cells	no
35338	CG8094	7.0	normal number, size SOP cells	no
10881	CG8142	7.0	normal number, size SOP cells	no
24253	CG8239	7.0	normal number, size SOP cells	no
28243	CG8472	10.0	no SOP cells	no
50350	CG8556	9.0	lethal	no
28247	CG8765	9.0	no SOP cells	no
23335	CG9032	9.0	normal number, size SOP cells	no
23685	CG9032	9.0	few SOP cells	no
42211	CG9249	8.0	normal number, size SOP cells	no
29962	CG9270	10.0	no SOP cells	no
27026	CG9596	9.0	normal number, size SOP cells	no
24193	CG9731	9.0	too many SOP cells	no

Live imaging secondary screen results indicating phenotypes observed on SOP number and size for knockdown of genes with $P_{Loss} \geq 7$ in the genome-wide screen.
(pdf; 45 kb)

Supplementary Table 9. Lineage analysis results

TransformantID	CG Number 5.7	Phenotype in Lineage Staining
3326	CG10657	notum too malformed to get good staining
10942	CG1119	less than 4 cells per organ
3046	CG11282	cell fate transformation, 2 neuron 2 sheath or 3 neuron 1 sheath
31741	CG12352	notum too malformed, potential rare cell fate transformation
32278	CG14544	no phenotype - could be differentiation problem
32279	CG14544	no phenotype - could be differentiation problem
43588	CG14549	less than 4 cells per organ
37757	CG14999	no phenotype - could be differentiation problem
28552	CG15292	unhealthy cells- weak cut staining, otherwise no phenotype
11245	CG15367	less than 4 cells per organ
32767	CG16908	cell fate transformation, 2 neuron 2 sheath or 3 neuron 1 sheath
13762	CG2183	cell fate transformation, 2 neuron 2 sheath
20849	CG2222	less than 4 cells per organ
45459	CG32315	very few unhealthy cells, otherwise no phenotype
41875	CG32315	unhealthy cells
41876	CG32315	unhealthy cells
33197	CG34315, CG4088	less than 4 cells per organ
29674	CG3927	cell fate transformation, 2 neuron 2 sheath or 3 neuron 1 sheath
37761	CG5313	less than 4 cells per organ
27566	CG6098	less than 4 cells per organ
27567	CG6098	less than 4 cells per organ
35338	CG8094	cell fate transformation, 2 neuron 2 sheath or 3 neuron 1 sheath
10881	CG8142	no phenotype - could be differentiation problem
24253	CG8239	no phenotype - could be differentiation problem
42211	CG9249	cell fate transformation, 2 neuron 2 sheath or 3 neuron 1 sheath
27026	CG9596	no phenotype - could be differentiation problem

Results of antibody staining lineage analysis are indicated for genes with no apparent phenotype in the live imaging secondary screen. **(pdf; 34 kb)**

Supplementary Table 10. Primer Sequences for Custom Second RNAi lines

RNAi line ID	*CG number 5.7*	*Primer 1 Sequence*	*Primer 2 Sequence*
1B1 T1	CG10261	GCGTCTAGAATGCAGAAAATGCCCTCGCAAAT	CGCGAATTCAATCCCGGCGCTTGAGGAAC
1B1 T2	CG10261	GCGTCTAGAATGCAGAAAATGCCCTCGCAAAT	CGCGAATTCAATCCCGGCGCTTGAGGAAC
1A3-5 T1	CG11988	GCGTCTAGACGACCAGCAGAGCACCGATT	CGCGAATTCTGGTGTAGGTGCGGATGACG
1G3 1 T1	CG12366	GCGTCTAGAGTGAGAGCCTGTGAGCACGTCAAG	CGCGAATTCGATAAAGTGGTTCGACTGTCCGAGAATG
1G3 1 T2	CG12366	GCGTCTAGAGTGAGAGCCTGTGAGCACGTCAAG	CGCGAATTCGATAAAGTGGTTCGACTGTCCGAGAATG
1D4 b) T1	CG13983	GCGTCTAGACGCCACTCTGGTTGCCTTTTG	CGCGAATTCTGCATGTTGTTGGGGTTGATGA
1E8 3 T1	CG34409	GCGTCTAGAGATTTGGGATGGTGCGGATAGTGA	CGCGAATTCCCAGGGGCGGACCTTGATCT
1E8 5 T1	CG34409	GCGTCTAGAGATTTGGGATGGTGCGGATAGTGA	CGCGAATTCCCAGGGGCGGACCTTGATCT
1E8 5 T2	CG34409	GCGTCTAGAGATTTGGGATGGTGCGGATAGTGA	CGCGAATTCCCAGGGGCGGACCTTGATCT
1A10 T1	CG3619	GCGTCTAGAGCGGACGAGTGTCTCATGTACGG	CGCGAATTCGACCACGGATCGCTGCTGTTG
1A10 T2	CG3619	GCGTCTAGAGCGGACGAGTGTCTCATGTACGG	CGCGAATTCGACCACGGATCGCTGCTGTTG
1G11 T1	CG5070	GCGTCTAGACCCTAGCGAAGCCGGGAGAAG	CGCGAATTCGCCCACAAAGCCGCTGGAATA
1G11 T2	CG5070	GCGTCTAGACCCTAGCGAAGCCGGGAGAAG	CGCGAATTCGCCCACAAAGCCGCTGGAATA
1C12 a) T1	CG5441	GCGTCTAGAGCCAGAGCGACGGACTCCAA	CGCGAATTCGCTTCGGGAACACAATGCCTCA
1D12 T1	CG5460	GCGTCTAGAACAACGGCAGCAGCAGCAATAAC	CGCGAATTCGTGGGCTTGGACGCAGTAGCTC
1D12 T2	CG5460	GCGTCTAGAACAACGGCAGCAGCAGCAATAAC	CGCGAATTCGTGGGCTTGGACGCAGTAGCTC
2B1 T2	CG5857	GCGTCTAGAACCCGAAGGTGCCAAGACGAC	CGCGAATTCCAGTTCCTCTCCAGGGGGTAGCA
2G1 T1	CG6202	GCGTCTAGAGGAGGATGTGGCGGAACAGGT	CGCGAATTCGCAGTAGGGCTCCGATGAGTGC
2G1 T2	CG6202	GCGTCTAGAGGAGGATGTGGCGGAACAGGT	CGCGAATTCGCAGTAGGGCTCCGATGAGTGC