

**Table S1.** RNAi lines, drivers and crosses used in this study.

<u>Gene</u>	<u>Sex</u>	<u>RNAi Line</u>	<u>Driver</u>	<u>Crosses used to generate flies**</u>
CG34033	M	homemade TRiP line	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: y v 1509 x tubulin-GAL4
CG11037	M	VDRG-KK transformant 108803	ovulin-GAL4*	KD: RNAi x ovulin-GAL4 cont: AttP x ovulin-GAL4
CG11977	M	VDRG-KK transformant 100463	ovulin-GAL4*	KD: RNAi x ovulin-GAL4 cont: AttP x ovulin-GAL4
CG14034	M	VDRG-KK transformant 100114	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: RNAi x w1118
<b>CG14061</b> <b>(aquarius)</b>	M	homemade TRiP line	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: y v 1509 x tubulin-GAL4
CG2975	M	VDRG-GD transformant 2601	ovulin-GAL4	KD: RNAi x ovulin-GAL4 cont: AttP x ovulin-GAL4
<b>CG30488</b> <b>(antares)</b>	M	VDRG-KK transformant 100513	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: AttP x tubulin-GAL4
CG42326	M	VDRG-KK transformant 104709	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: RNAi x w1118
<b>CG12558</b> <b>(intrepid)</b>	M	VDRG-GD transformant 14844	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: TM3 siblings of KD cross

CG13077	F	VDRRC-KK transformant 105526	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: AttP x tubulin-GAL4
CG3097	F	homemade TRiP line	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: y v 1509 x tubulin-GAL4
<b>CG3239</b> <b>(fra mauro)</b>	F	TRiP line Bloom stock 34558	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: y v 1509 x tubulin-GAL4 (also attempted KD with Send1-GAL4, but saw no phenotype)
CG6910	F	VDRRC-KK transformant 103766	Send1-GAL4; UAS-Dicer2	KD: RNAi x Send1-GAL4; UAS-Dicer2 cont: AttP x Send1-GAL4; UAS-Dicer2
CG42564	M	VDRRC-KK transformant 101703	ovulin-GAL4*	KD: RNAi x ovulin-GAL4 cont: AttP x ovulin-GAL4
CG8420	M	VDRRC-KK transformant 104679	ovulin-GAL4*	KD: RNAi x ovulin-GAL4 cont: AttP x ovulin-GAL4
<b>CG5630</b> <b>(hadley)</b>	F	VDRRC-GD transformant 52066	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: RNAi x w1118
SPR (control)	F	VDRRC-KK transformant 106804	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: RNAi x w1118
CG30486	M	VDRRC-KK transformant 107568	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: AttP x tubulin-GAL4
CG34295	M	VDRRC-KK transformant 109546	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: AttP x tubulin-GAL4
sda	F	VDRRC-KK transformant 100215	tubulin-GAL4	KD: RNAi x tubulin-GAL4 cont: AttP x tubulin-GAL4

**Esp**                    F                    VDRC-GD                    tubulin-GAL4                    KD: RNAi x tubulin-GAL4  
**(CG7005)**                    transformant 9795                    cont: RNAi x w1118

\* knockdown with tubulin-GAL4 caused pre-adult lethality

\*\*We used four types of controls in our experiments:

-For most experiments with VDRC lines, we crossed the RNAi line and its genetic background control to the driver line.  
(The tubulin-GAL4 line had been backcrossed for 7 generations into a w1118 background that had itself  
been backcrossed for 8 generations.)

-For some experiments, we crossed the RNAi line to F7 tubulin-GAL4 (for KD flies) and to F8 w1118 (for controls).

-For crosses involving a TRiP RNAi line, we crossed the RNAi line and the y v 1509 genetic background control to the driver line.

-For crosses involving intrepid, controls were flies that carried the RNAi construct but received TM3, Sb instead of tubulin-GAL4

Additionally, crosses involving the following genes (VDRC stock number) did not produce detectable knockdown:

CG16713 (105067), CG4302 (100167), CG8586 (106597), Mtp (110414), vkg (106812)