

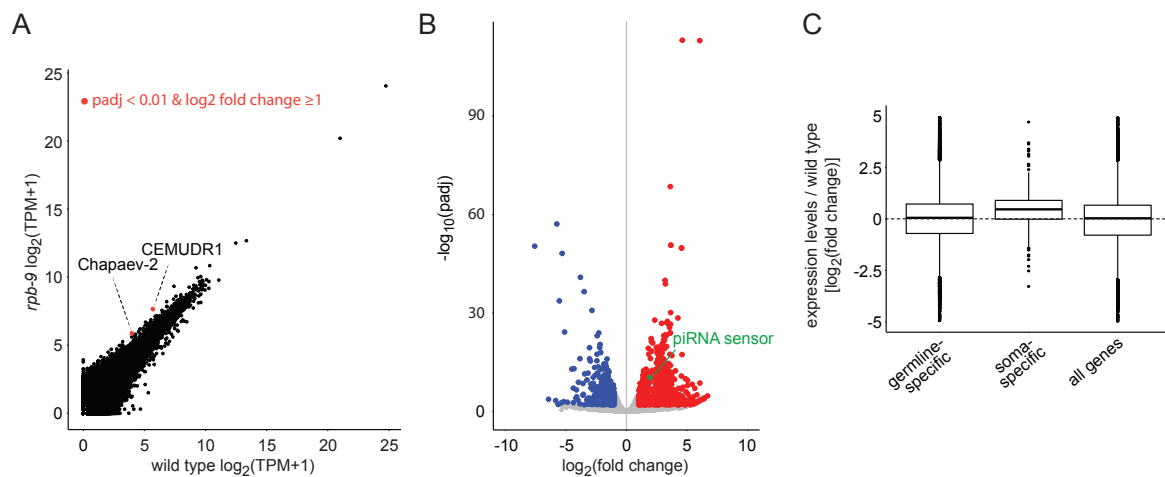
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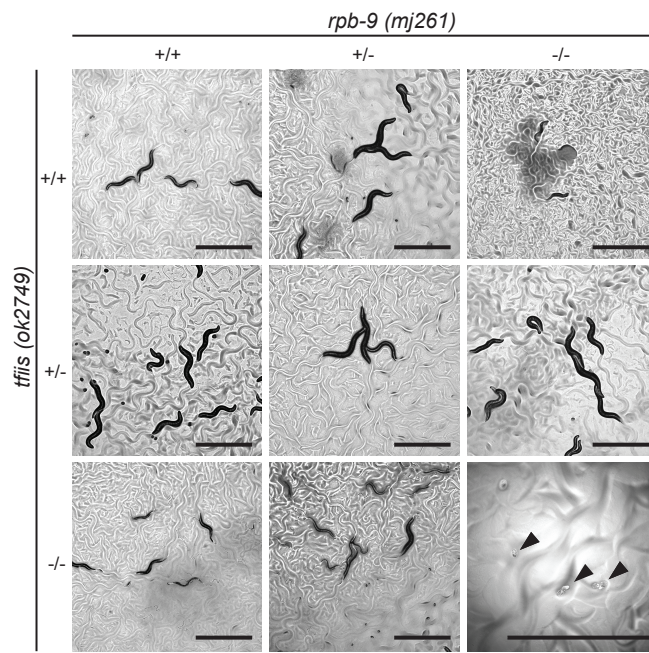
Percentage of desilenced animals

	wild type					<i>rpb-9</i>					<i>hrde-1</i>					<i>prg-1; prg-2</i>				
	r1	r2	r3	r4	r5	r1	r2	r3	r4	r5	r1	r2	r3	r4	r5	r1	r2	r3	r4	r5
P0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G1	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	0	0	0	0	0
G2	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	0	0	0	0	0
G3	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	0	0	0	0	0
G4	0	0	0	0	0	0	0	0	0	0	100	100	100	100	100	0	0	0	0	0
G5	0	0	0	5.33	0	0	0	5.12	St	0	100	100	100	100	100	0	0	2.34	0	0
G6	0	3.23	0	10.65	6.75	9	8.73	St		8.76	100	100	100	100	100	4.34	6.75	5.26	12.76	7.78

Appendix Figure S1. **Related to Figure 2. A)** Table of the inheritance of silencing experiment, showing the percentages of desilenced animals at each generation for individual replicates separately, for all the indicated genotypes.



Appendix Figure S2. **Related to Figure 3.** **A)** Differential expression analysis of transposable elements in *rpb-9* (*mj261*) mutants versus wild type (total RNA “Ribo-Zero” RNA-seq libraries). **B)** Genome-wide differential expression analysis of *rpb-9* (*mj261*) mutants versus wild type (total RNA “Ribo-Zero” RNA-seq libraries). **C)** Differential expression analysis of germline-specific and soma-specific genes, as classified in (Reinke et al, 2004). All genes are shown for comparison. (Total RNA “Ribo-Zero” RNA-seq libraries).



Appendix Figure S3. **Cross between *rpb-9* and *tfiis* mutants.** Representative bright light images of all the genotypes obtained from the *rpb-9 (mj261)* x *tfiis (ok2749)* cross (F3 generation). *Tfiis*; *rpb-9* double mutant embryos (indicated with black arrowheads) do not hatch. Scale bar = 1mm.

<i>C. elegans</i> : SX1316 – piRNA sensor ( <i>mjls144</i> )	Ashe et al., 2012
<i>C. elegans</i> : SX1984 – <i>rpb-9</i> ( <i>mj261</i> )	This paper
<i>C. elegans</i> : SX3501 – ( <i>mjls31</i> ); <i>rpb-9</i> ( <i>mj261</i> )	This paper
<i>C. elegans</i> : SX2646 [rescue] – ( <i>mjSi70</i> ); <i>rpb-9</i> ( <i>mj261</i> )	This paper, injections of EG6701, cross SX1984
<i>C. elegans</i> : SX3031 [deficient rescue] – ( <i>mjSi89</i> ); sensor ( <i>mjls144</i> ); <i>rpb-9</i> ( <i>mj261</i> )	This paper, injections of EG6701, cross SX1316 and SX1984
<i>C. elegans</i> : VC20618 – <i>rpb-9</i> ( <i>gk357431</i> )	(Thompson et al. 2013)
<i>C. elegans</i> : VC40196 – <i>rpb-9</i> ( <i>gk508135</i> )	(Thompson et al. 2013)
<i>C. elegans</i> : SX3317 [ <i>rpb-9::ollas</i> ] – <i>rpb-9</i> ( <i>mj604</i> )	This paper, injections N2 strain
<i>C. elegans</i> : SX2000 – <i>hrde-1</i> ( <i>tm1200</i> ); ( <i>mjls144</i> )	Ashe et al., 2012
<i>C. elegans</i> : SX1888 – <i>prg-1</i> ( <i>n4357</i> ); ( <i>mjls144</i> )	Ashe et al., 2012
<i>C. elegans</i> : FX1200 – <i>hrde-1</i> ( <i>tm1200</i> )	Buckley et al., 2012
<i>C. elegans</i> : SX1158 – <i>prg-1</i> ( <i>n4357</i> ); ( <i>mjls144</i> ); <i>prg-2</i> ( <i>n4358</i> )	Ashe et al., 2012
<i>C. elegans</i> : SX3376 – sensor ( <i>mjls144</i> ); <i>rpb-9</i> ( <i>mj604</i> )	This paper, cross SX3317 x SX1316

Appendix Table S1. *C. elegans* strains used in this study.

<i>rpb-9 (mj261)</i> genotyping primer fwd: CCCGAAGACTGAAGAACATC
<i>rpb-9 (mj261)</i> genotyping primer rev: TATTGGAACAGGTAGGGAACA
<i>rpb-9::ollas (mj604)</i> genotyping primer fwd: CTGTGAGCATCGTGAAGT
<i>rpb-9::ollas (mj604)</i> genotyping primer rev: AGGTAGGGAACATATGGAGA
RPB9::ollas CRISPR HR template:  GGCAGAAGAAGAGATGAGATTGTACTATGTATGTGCATCGCAAGATTGTCAGCACAGATGGACaGAAGGAGGTGGAG GTGGAGCTCCGGATTCGCCAACGAGCTCGGACCACGTCTCATGGGAAAGAtaaACATAGTGTCCAATTGTTTCTATTT ATTTGAAACGTTTTCTTAATCGTC
RPB-9::ollas CRISPR gRNA: CGCAAGAUUGUCAGCACAGA
dpy-10 CRISPR gRNA: GCUACCAUAGGCACCACGAG

Appendix Table S2. Genotyping primers, CRISPR repair template and guide RNAs used in this study.

<i>Spliced gfp</i> ex1 fwd: GTGAAGGTGATGCAACATACGG
<i>Spliced gfp</i> ex1-ex2 rev: ACAAGTGTGGCCATGGAAC
<i>Unspliced gfp</i> ex1 fwd: AACATACGGAAAACCTACCCTTA
<i>Unspliced gfp</i> ex2-in1 rev: CAAGTGTGGCTGAAAATTTAAA
<i>Unspliced gfp</i> ex2-in2 fwd: TGACGGGAACTACAAGACACG
<i>Unspliced gfp</i> ex3-in2 rev: TCAAACCTGACTTCAGCACCTG
<i>Unspliced gfp</i> ex3 fwd: ACAATGTATACATCATGGCAGAC
<i>Unspliced gfp</i> ex4-in3 rev: CTAATTTTGAAGTTCTGAAAATT
<i>cdc-42</i> for: CTGCTGGACAGGAAGATTACG
<i>cdc-42</i> rev: CTCGGACATTCTCGAATGAAG

Appendix Table S3. qPCR primers used in this study.