



Figure S1 *In situ* hybridization to embryos with a sense-strand probe for *SRm160* transcripts produces no signal (A) Pre-cellular blastoderm; (B) Cellularized blastoderm; (C) gastrulating embryo; (D) embryo following germ-band retraction; (E) late stage embryo (approximate 16 hr).

Table S1 Complementation of *SRm160* alleles

Male	<u>C52</u> <u>TM6B</u>	<u>GE25979</u> <u>TM6B</u>	<u>G18603</u> <u>TM6C</u>
Female			
<u>B103*</u> <u>TM6B</u>	Lethal, no <i>Tb</i> ⁺ larvae or pupae	<i>Tb</i> ⁺ pupae 52-66% female survival 80-100% male survival Females sterile, males fertile Slightly reduced vaginal teeth	Viable, normal 6% female survival 100% male survival Females sterile, males fertile
<u>C52</u> <u>TM6B</u>	Lethal, no <i>Tb</i> ⁺ larvae or pupae	Occasional <i>Tb</i> ⁺ 3 rd instar larvae, no <i>Tb</i> ⁺ pupae.	Viable, normal
<u>GE25979</u> <u>TM6B</u>	Lethal	Lethal, no <i>Tb</i> ⁺	Viable, normal larvae or pupae Females sterile
<u>G18603</u> <u>TM6C</u>	Viable Reduced vaginal teeth Females sterile Males fertile	Viable, no visible defects Females sterile (few/no eggs)	Lethal

*The *B103* chromosome used in these tests was previously “cleansed” of potential second-site lethal mutations, as described in Materials and Methods.

Table S2 Phenotypes of *SRm160* over-expression and RNA-interference with various *GAL4* driver elements

Tissue	<i>GAL4</i> driver	<i>SRm160</i> allele / Phenotype*	
		<i>GE25979</i> (Over-expression)	RNAi lines <i>CG 11274 R-1</i> and <i>R-3</i>
Ubiquitous	<i>da-GAL4</i>	Lethal	Lethal
Dorsal wing surface	<i>MS1096-GAL4</i>	No phenotype	Un-expanded wings
Eye disc	<i>GMR-GAL4</i>	Rough eyes, male lethal at 29°C.	Slightly rough eyes
Genital (+ other) discs	<i>esg-GAL4</i>	Loss of external analia in 10% of males Unelongated testes (25°)	No phenotype
Pan-neural	<i>elav-GAL4</i> (<i>C155, G1-9, G1-10</i>)	No phenotype	No phenotype
Fatbody	<i>Lsp2-GAL4</i>	No phenotype	No phenotype
Salivary gland	<i>SG-GAL4</i>	No phenotype	No phenotype

*: Phenotypes were observed in crosses at both 25°C and 29°C, except as indicated.

Table S3 Rescue of *da>SRm160^{GE25979}* induced lethality by mutations at *Doa*

Parents : Male x Female		Surviving F1		
		Genotype	Female	Males
<i>w; da-GAL4 Pr Doa^{HD}/TM6</i>	<i>w; SRm160^{GE25979}/TM6</i>	<i>da-GAL4 Pr Doa^{HD} / SRm160^{GE25979} :</i>	54	2
<i>w; da-GAL4</i> (result from Table 2)	<i>w; SRm160^{GE25979}/TM6</i>	<i>da-GAL4 / SRm160^{GE25979}</i>	0	0