

## SUPPLEMENTARY MATERIAL

**Table S1. *spe-18* genetic mapping data**

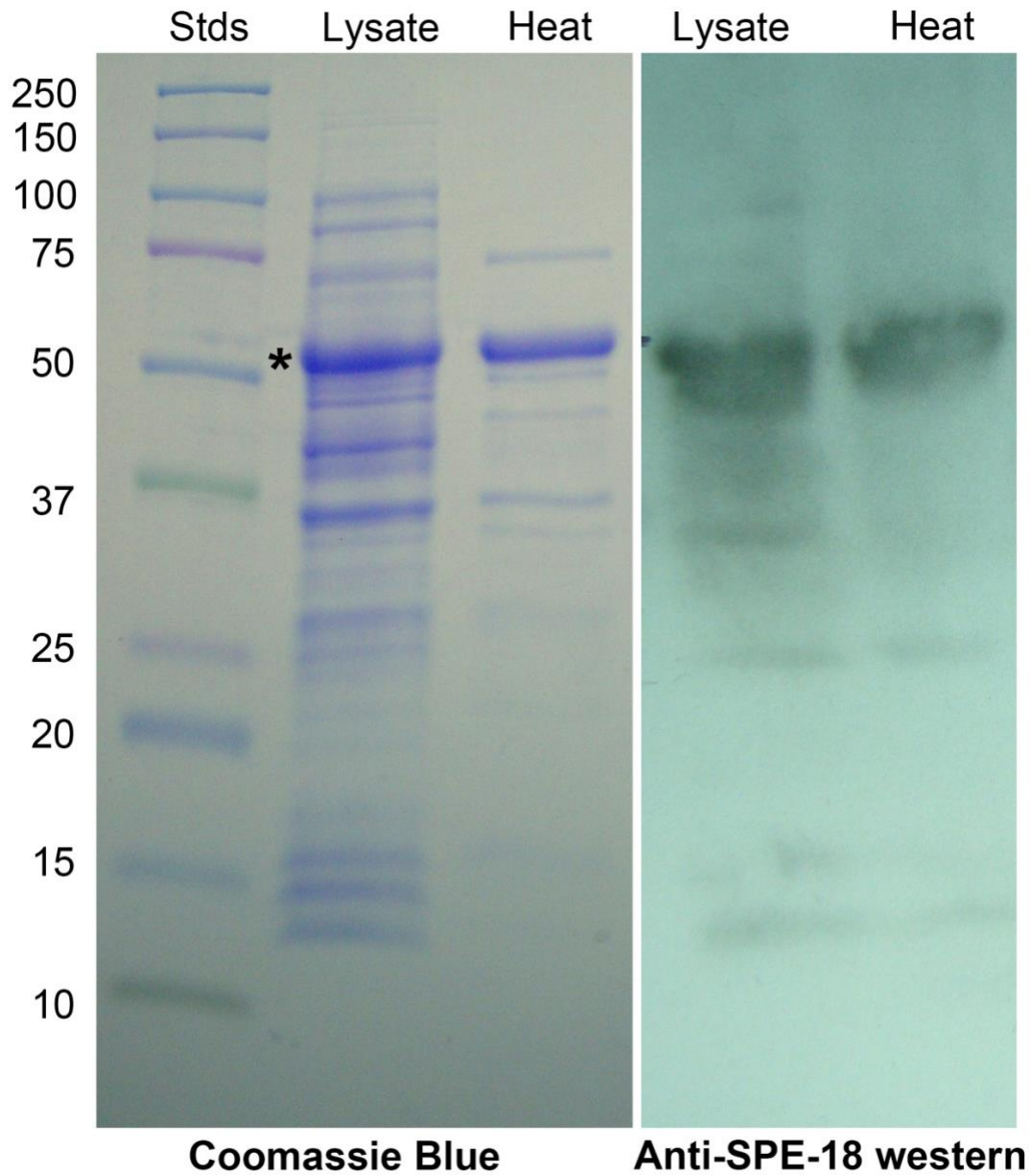
### Two-factor mapping

<b>Genotype</b>	<b>Recombinants</b>	<b>Segregation</b>
<i>unc-4 spe-18</i> / + +	Unc Non-Spe	8/72
<i>rol-1 spe-18</i> / + +	Rol Non-Spe	13/114

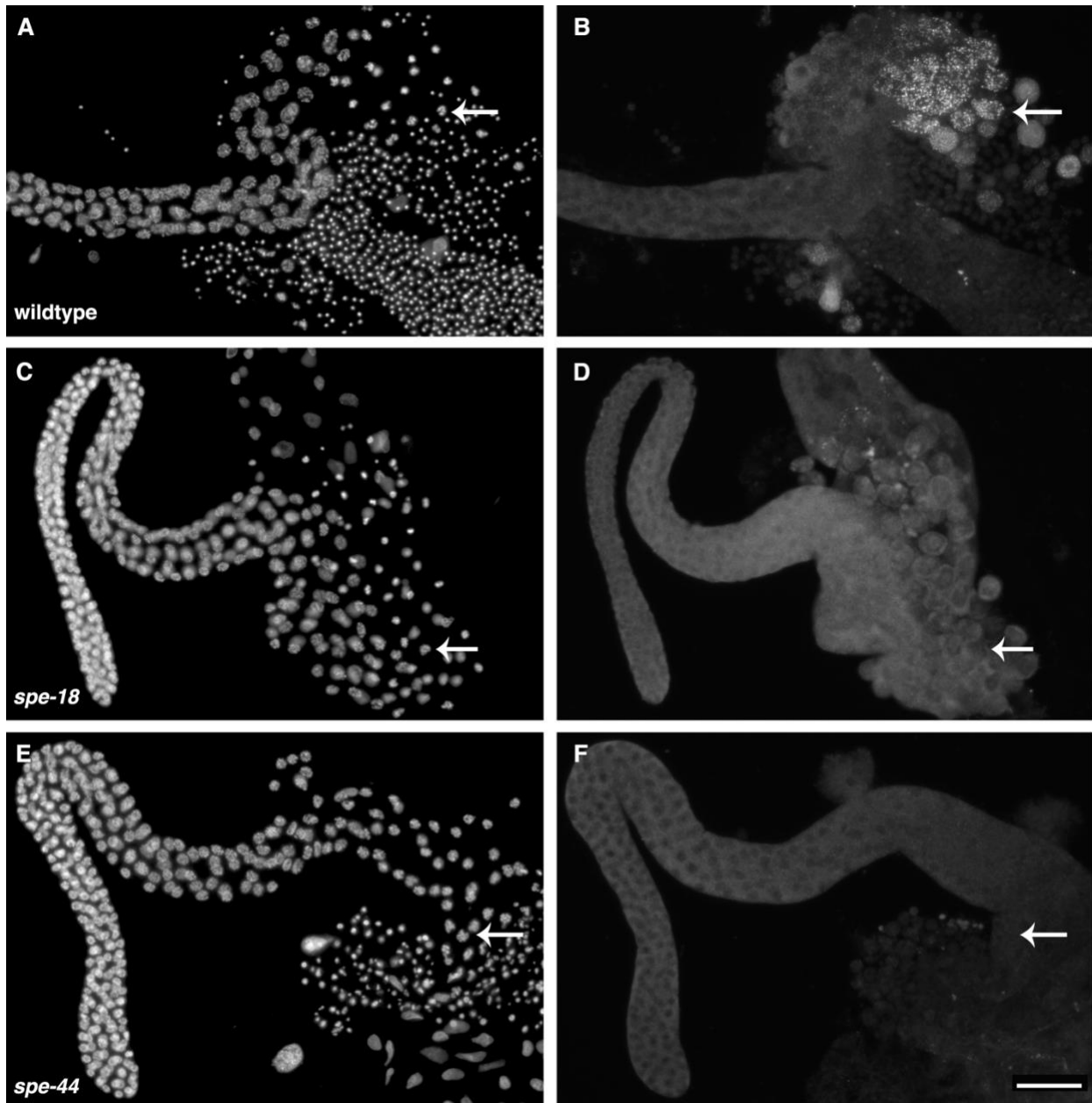
### SNIP SNP mapping (Rol Non-Spe recombinants)

<b>Marker</b>	<b>Genetic</b>	<b>Molecular</b>	<b>Marker N2</b>
<i>unc-4</i>	1.77	9898 kb	
<i>rol-1</i>	6.90	12172 kb	
pkP2112	13.20	12990 kb	5/18
pkP2116	16.09	13235 kb	0/18
pkP2154	19.17	13647 kb	1*/17

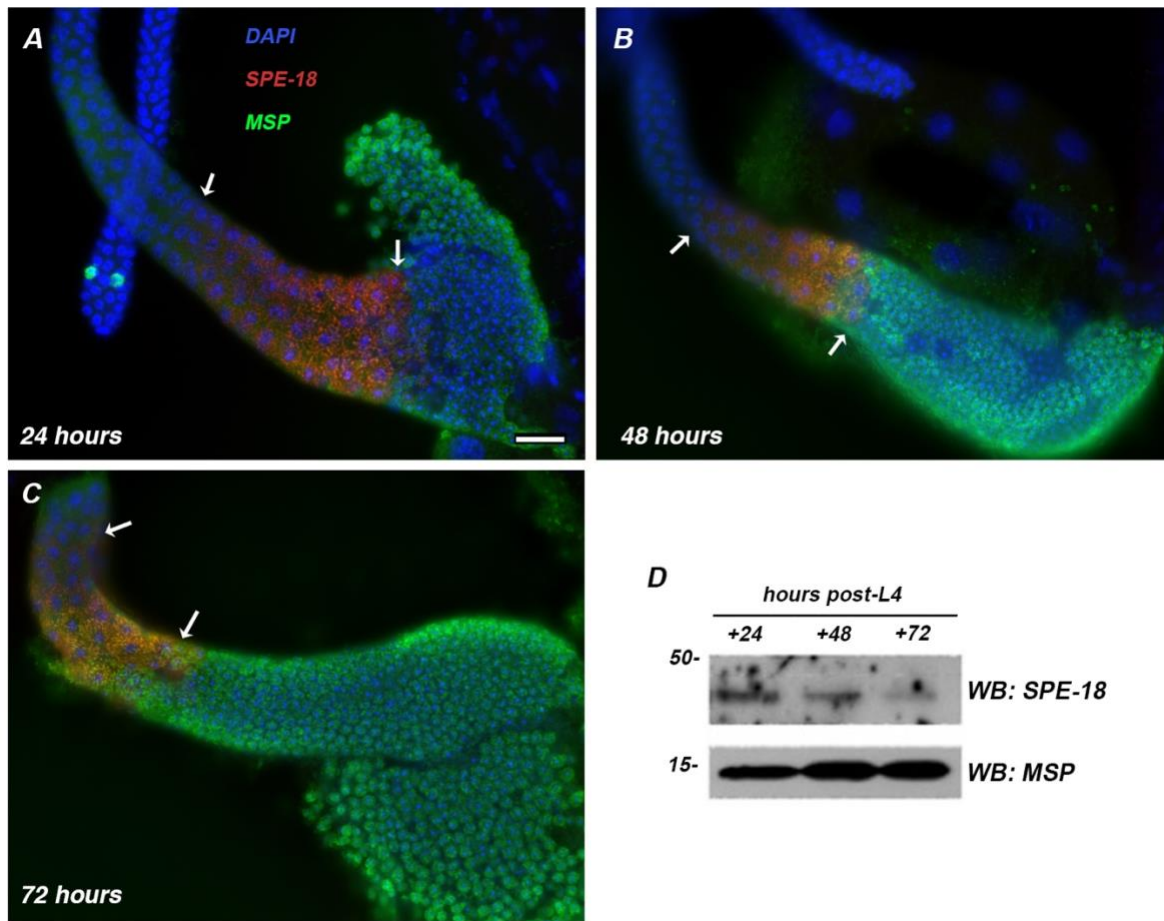
\*presumed double-cross over event



**Figure S1.** Heat treatment of supernatant +/- 95°C heat treatment from *E. coli* expression *C. elegans* SPE-18 fused to an 8.2 kDa Profinity eXact tag (Bio-Rad). The Coomassie blue gel of lysate from induced bacteria and corresponding western blot with anti-SPE-18 antibody (see methods and figure 4 for antibody details).



**Figure S2.** Isolated whole gonads from wildtype, *spe-18*, and *spe-44* males co-labelled with DAPI (A,C,E) and anti-SPE-18 antibodies (B,D,F). Arrows indicated metaphase I spermatocytes. Samples were prepared at the same time and photographed with identical exposures. Scale bar = 20 microns.



**Figure S3.** Isolated gonads co-labelled with DAPI(blue), anti-SPE-18 (red), and anti-MSP(green) antibody in synchronized, aging celibate wildtype males (A-C) and anti-SPE-18 western blot of sibling male populations (D). Arrows delineate the boundaries of SPE-18 labelling within each gonad. Scale bar = 10 microns.