Developmental Cell 14

Nonautonomous Sex Determination Controls Sexually

Dimorphic Development of the Drosophila Gonad

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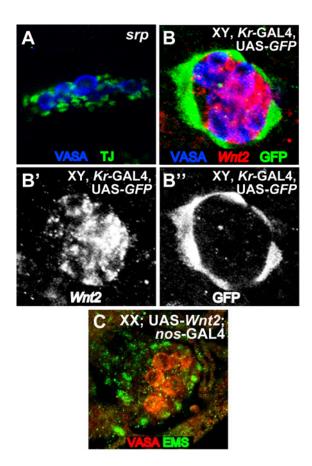


Figure S1. Antibody Stainings and In Situ Hybridization on St. 17 Embryos as Indicated in the Figure

Anterior is to the left in each panel. (A) St. 17 *srp* mutant embryo exhibiting association of SGPs (labeled with TJ) and germ cells (labeled with VASA). (B) In situ hybridization for *Wnt2* RNA and immunostaining for a PC marker (*Kr*-GAL4, UAS-*GFP*) show that *Wnt2* is expressed only in SGPs and not in PCs. (B'-B") *Wnt2* and GFP channels alone, respectively. (C) Female (XX) embryo exhibiting EMS-positive PC precursors when *Wnt2* is ectopically expressed in germ cells (UAS-*Wnt2*; *nos*-GAL4).

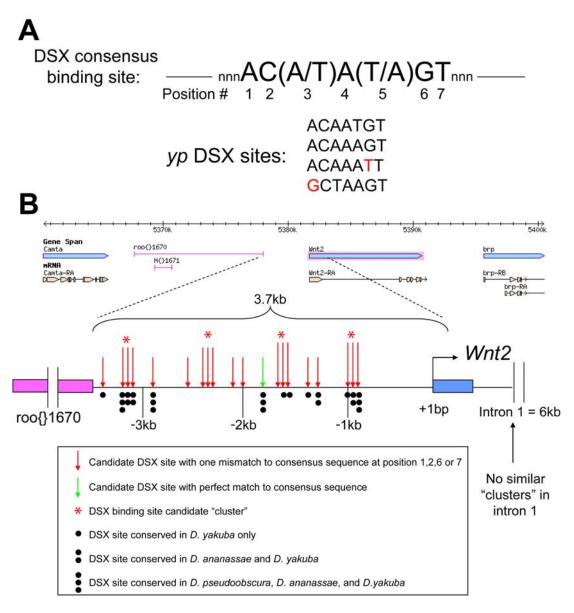


Figure S2.

(A) Diagram of the 7-bp consensus DSX binding site, as determined in (Erdman et al., 1996).

The four DSX binding sites discovered in the *yolk protein* (*yp*) locus are also listed (Burtis et al., 1991, Coschigano et al., 1993). Red letters indicate mismatches to the consensus sequence. (B) Chromosome 2 genomic region flanking the *Wnt2* locus, shown as in Flybase GBrowse utilizing *D. melanogaster* Genome Release 5.3 (http://flybase.bio.indiana.edu/cgi-bin/gbrowse/dmel). Ruler is in 1-kb increments. Nearby genes and transposable elements are shown. The 3.7 kb region upstream of the *Wnt2* first exon is highlighted. Pink box denotes roo transposable element and blue box denotes *Wnt2* first exon. Candidate DSX binding sites which match either perfectly or with one mismatch at positions 1, 2, 6 or 7 are shown. The evolutionary conservation of these sites in *Drosophila* species *D. yakuba*, *D. ananassae*, and *D. pseudoobsura* is indicated. Four candidate DSX binding site "clusters" are present in this 3.7-kb region, while no such similar groups of binding sites are found in the entire 6-kb first intron of *Wnt2*.