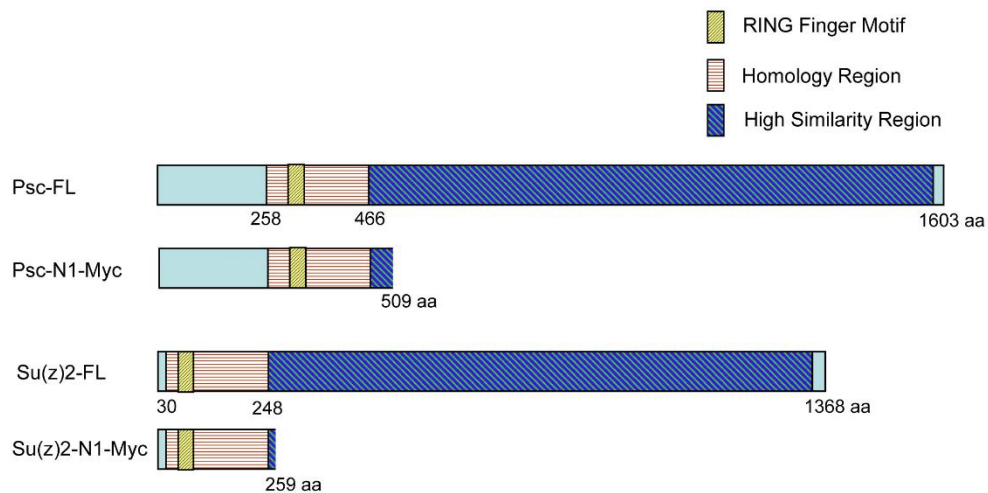
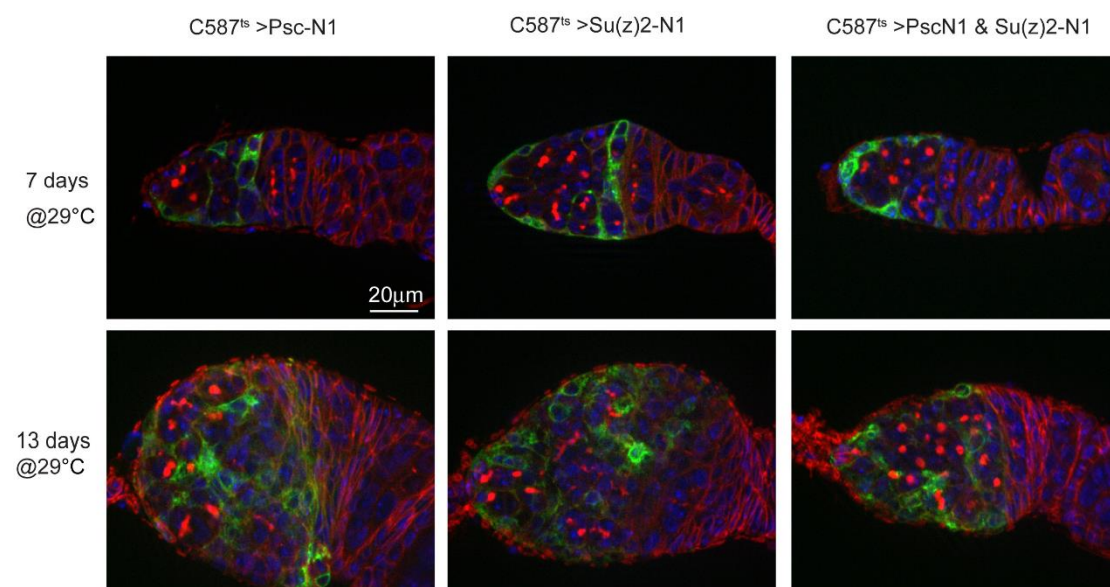


## Supplementary Data

A



B

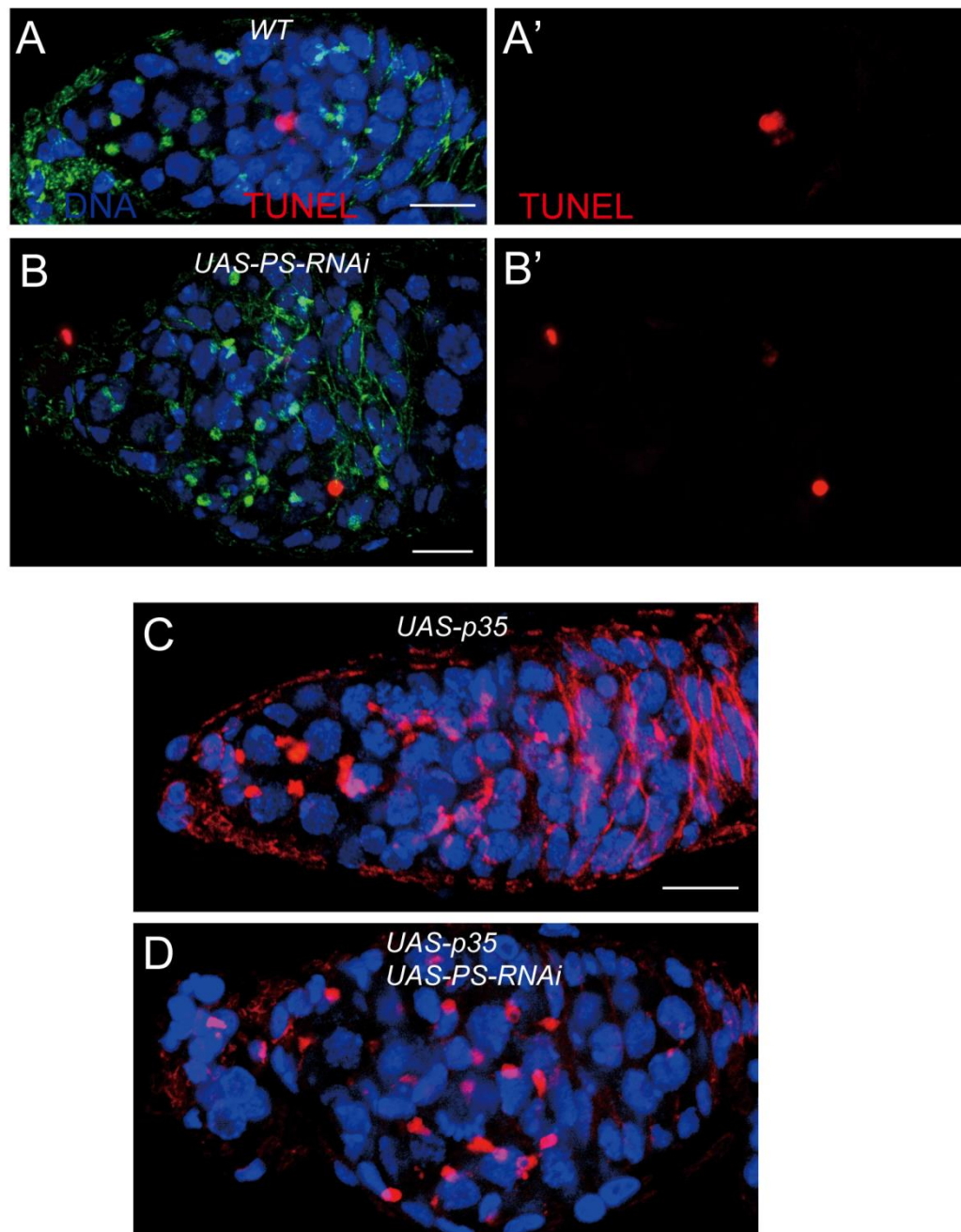


**Figure S1. Expression of dominant negative PcG proteins in escort cells causes GSC-like tumor formation.**

(A) A schematic drawing of full-length and truncated forms Psc and Su(z)2.

Psc-N1 and Su(z)2-N1 have their C-terminal high similarity region removed.

(B) Expression of Psc-N1 or Su(z)2-N1 for 7 days driven by *c587-GAL4<sup>ts</sup>* did not produce any obvious phenotype; but germaria became enlarged and accumulating abnormal differentiated cysts when expressed for 13 days; However, simultaneous expression of both Psc-N1 and Su(z)2-N1 for 7 days driven by *c587-GAL4<sup>ts</sup>* was sufficient to cause accumulation of GSC-like cells the germarium, and more GSC-like cells accumulated with age.



**Figure S2. Depletion of PRC1 in escort cells does not cause cell apoptosis.**

(A-D) Flies were raised at 18°C. 3-5 days old females with desired genotype were shifted to 29°C for 7 days. Scale bar, 10µm.

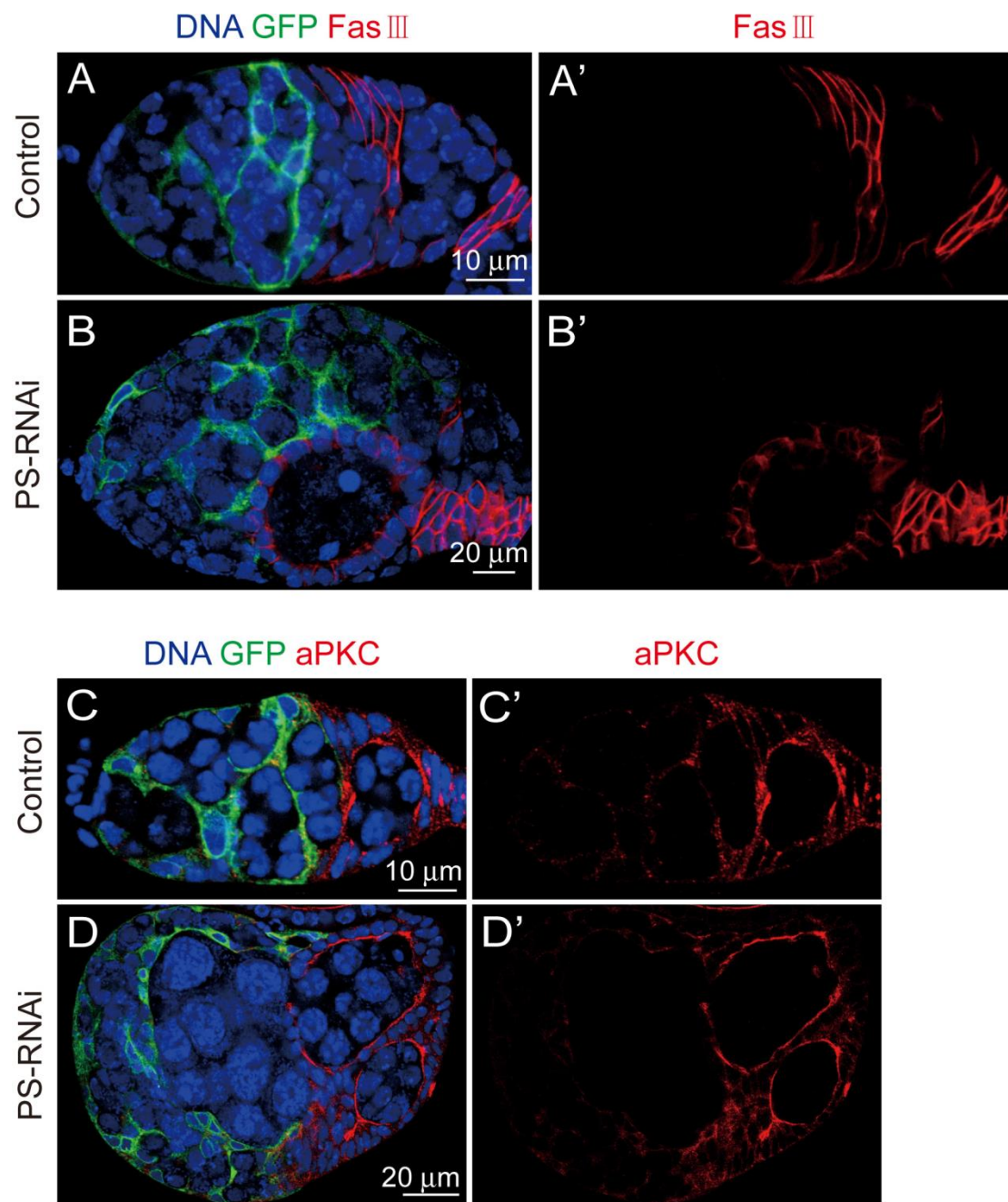
(A, A') In a wild type germarium, a TUNEL (red) signal was found in the mid

region of the germarium.

(B, B') In *Psc* & *Su(z)2-RNAi* germaria, there was no obvious increase of TUNEL signals; Spectrosomes were highlighted by  $\alpha$ -Spectrin staining (green).

(C) The germarium with expression of *UAS-p35* in escort cells, cyst undergoes normal differentiation indicated by branched fusome ( $\alpha$ -Spectrin, red).

(D) Co-expression of *UAS-p53* and *Psc* & *Su(z)2-RNAi* in escort cells could not prevent GSC-like tumor formation. GSC-like cells are indicated by round fusome ( $\alpha$ -Spectrin, red). Scale bar, 20 $\mu$ m.



**Figure S3. Depletion of PcG proteins in escort cells does not show pre-follicle cell markers.**

Flies were raised at 18°C. 3-5 days old females with desired genotype were shifted to 29°C for 10 days. The escort cells were label by *c587>UAS-GFP*.

(A, A', C, C') In control germaria, Fas III (red, A and A') and aPKC (red, C and

C') were both expressed in follicle cells but not escort cells. Scale bar, 10µm.  
(B, B', D, D') In *Psc* & *Su(z)2-RNAi* germaria, Fas III (red, B and B') and aPKC (red, D and D') expression patterns remained unchanged. Scale bar, 20µm.