Supplemental Figure 1 – Fig. S1. yanP(lacZ) is expressed in outer border cells but not in polar cells. (A) Stage 9 and (B) stage 10 yanP(lacZ) egg chamber stained with anti-b-Gal to mark Yan-expressing cells, Fas3 to mark polar cells (PC), rhodamine-phalloidin to outline the actin cytoskeleton and DAPI to label nuclei. Outer BCs are indicated by white arrows, PCs are indicated by yellow arrows. (a-d) Individual channels. (e) The staining for b-Gal (green) and DAPI (red) overlaps in outer BCs. Polar cells, marked by Fas3 (blue), show only weak b-Gal staining.

Supplemental Figure 2 – Fig. S2. Quantification of DE-Cad intensity in wild-type (WT) and yan443 mutant border cells. Border cell cluster of (A) wild-type and (B) yan443 mutant stage 9 egg chambers were imaged on a Leica SP2 confocal microscope using the same settings. (a) DE-Cad staining. (b) Alexa-568-phalloidin staining to indicate cell boundaries. (c) Histogram of relative fluorescent intensities of DE-Cad and Alexa-568-phalloidin along the line indicated in a,b. Blue line indicates the maximum DE-Cad fluorescence intensity at BC-BC and BC-squamous follicular cell boundaries in wild-type egg chambers. Arrows indicate the boundary between BC and squamous follicular epithelium. DE-Cad staining intensity appears to be significantly elevated in yan443 mutant BCs when compared with WT control BCs.

Supplemental Figure 3 – Fig. S3. Quantification of DE-Cad intensity in wild-type and slbo-Gal4::UAS-yanACT-expressing border cells. Border cell cluster of (A) wild-type and (B) slboGal4::UAS-YanACT stage 9 egg chambers were imaged on a Leica SP2 confocal microscope using the same settings. (a) DE-Cad staining. (b) Alexa-568-phalloidin staining to indicate cell boundaries. (c) Histogram of relative fluorescent intensities of DE-Cad and Alexa-568-phalloidin along the line indicated in a,b. Arrows indicate the boundary between BC and NC surfaces. (A) DE-Cad staining at the wild-type BC-NC boundary is approximately 3-fold higher than background fluorescence (broken yellow line). (B) DE-Cad staining in slbo-Gal4::UAS-yanACT-expressing egg chambers at the BC-NC boundary is indistinguishable from background fluorescence.

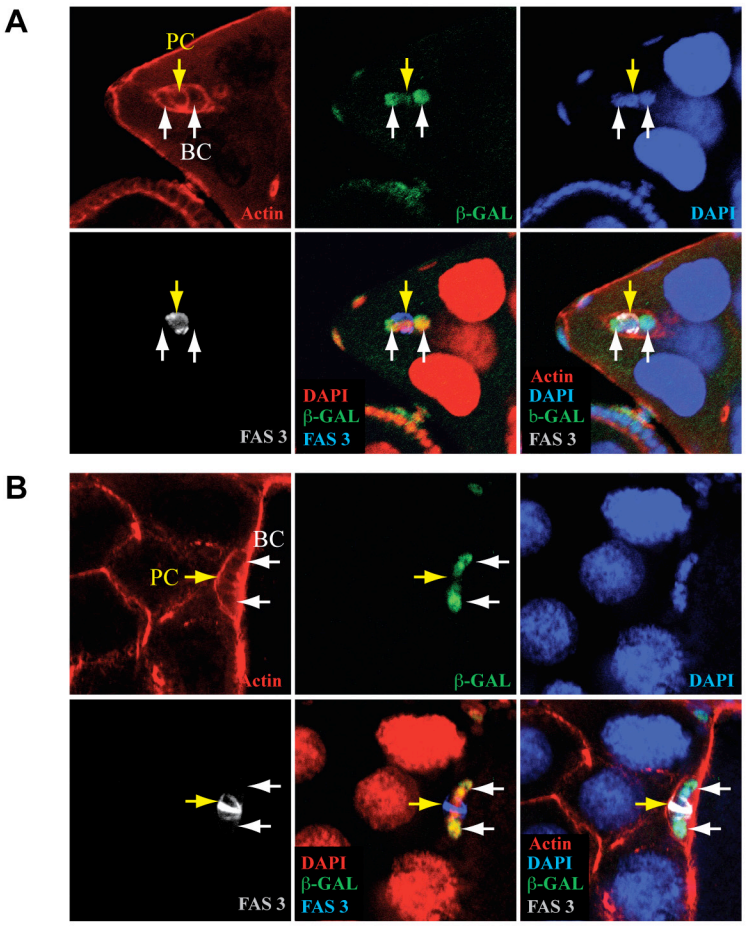
A
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Figure 1

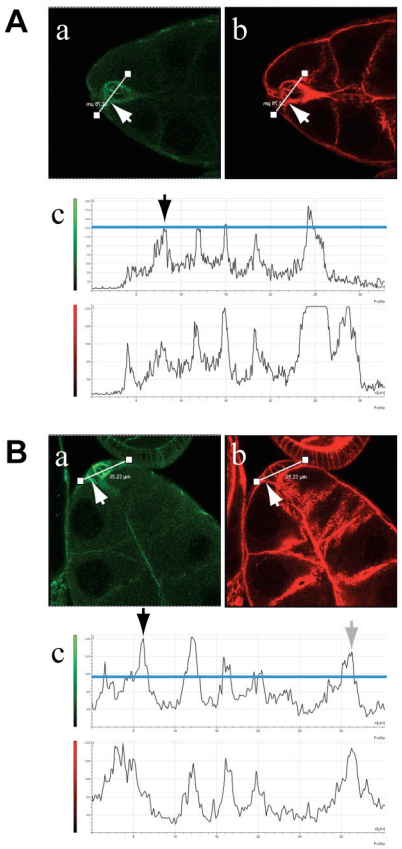

Figure 2

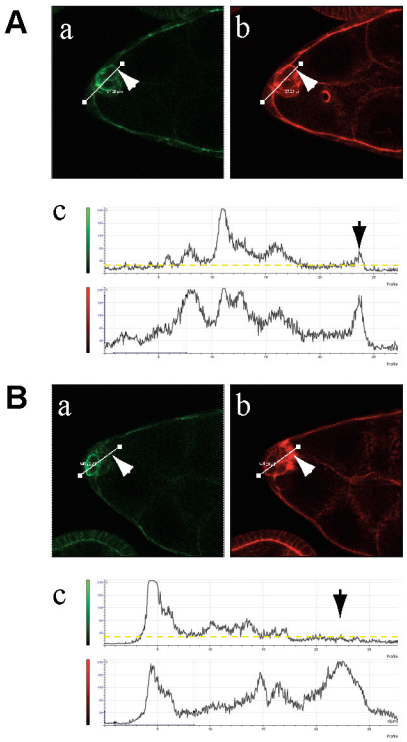

Figure 3