

SUPPLEMENTARY MATERIALS

Supplementary Figure 1. Expression of outer border cells markers.

Expression of Slbo-lacZ (**a, b**) and E(spl)-LacZ (**c, d**) markers in which the two anterior polar cells were either heterozygous (**a, c**) or homozygous mutant for *DralA* (**b, d**). Markers expression is normal as is migration of the cluster (arrowheads) when cells are heterozygous (**a, c**). In contrast, the expression of both markers is absent when polar cells are mutant for *DralA* (**b, d**). Stars indicate the theoretical position of the cluster if it would have been wild type. **a, c**, stage 10B egg chambers; **b, d**, stage 9 egg chambers.

Supplementary Figure 2. Border cell migration phenotype in egg chambers overexpressing Rap1 dominant negative.

Expression of UAS-Rap1DN in border cells block their migration; stage 10 egg chamber (**a**). (**b**) percentage of migration defects in stage 10 egg chambers following expression of Rap1DN.

Supplementary Methods

DNA cloning. pUAS-*DralA*-GFP was constructed by single-step ligation of a DNA fragment containing the 5'UTR and coding regions of *DralA*, amplified by PCR and cloned in the pUAS-(C)GFP plasmid. pUAS-GFP-*DralA* was constructed by single-step ligation of a *DralA* DNA fragment containing the coding region amplified by PCR and cloned in the pUAS-(N)GFP plasmid. GFP-*DralA*^{ACTLL} was made by introducing, using PCR, a stop codon at amino-acid 197.

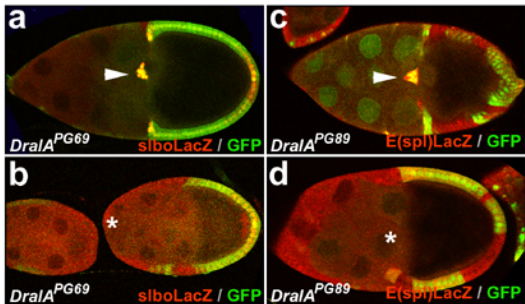
The UAS constructs were introduced into w^{1118} flies by standard methods of P-element-mediated germline transformation, using the $\Delta 2-3$ helper plasmid. For each construct, several independent transgenic lines were generated and tested.

In situ hybridization. In situ hybridization to ovaries was performed as described (Queenan et al., 1997), using a digoxigenin-labeled antisense RNA probe encompassing the entire *DralA* cDNA. A sense probe was used in parallel as a control.

slbo-lacZ

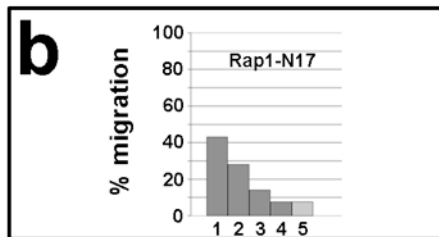
E(spl)lacZ

DralA $-/+$



DralA $-/-$

Supplemental fig. 1 (Ghiglione et al.)



suppl. fig. 2 (Ghiglione et al.)