



Figure S1. *Drosophila* pax6 orthologues are expressed in the egg chamber

(A-D) in situ hybridization on egg chambers for *eyeless* (*ey*, A), *twin of eyeless* (*toy*, B), *eyegone* (*eg*, C) and *twin of eyegone* (*toe*, D). Various stages are presented as well as the basal surface of the follicle cells at stage 10 showing that all orthologues are detectable in nurse cells, follicle cells and oocyte. (E) Immunostainings for Ey and Toy showing both proteins present in nurse cells, follicle cells and oocyte, consistent with the in situ hybridization data. (F) Phylogenetic tree redrawn from the current TreeFam tree showing the evolutionary relationship between pax6 homologues in *C. elegans* (vab-3 and Y53C12C.1), *Homo Sapiens* (Pax6, Pax4) and *Drosophila melanogaster* (*ey*, *toy*, *eg*, *toe*). Scale bars, 20 μ m.