

Figure S1. **Reduction of *Irbp* does not affect wing growth.** (A–C) Control (*69B-Gal4*) wing (A), wing expressing *UAS-Irbp<sup>RNAi</sup>* with *69B-Gal4* (B), and overlay (C). (D–F) Wing expressing *UAS-Irbp<sup>RNAi</sup>* with *69B-Gal4* (D), wing expressing *UAS-bbg<sup>RNAi</sup>* with *69B-Gal4* (E), and overlay (F). (G) Measurement of the wing surface area of 15 independent females per genotype. The statistical analysis (G) used *t* test and ANOVA. \*\*\*,  $P \leq 0.001$ . Error bars show SD. Bar, 500  $\mu\text{m}$ .

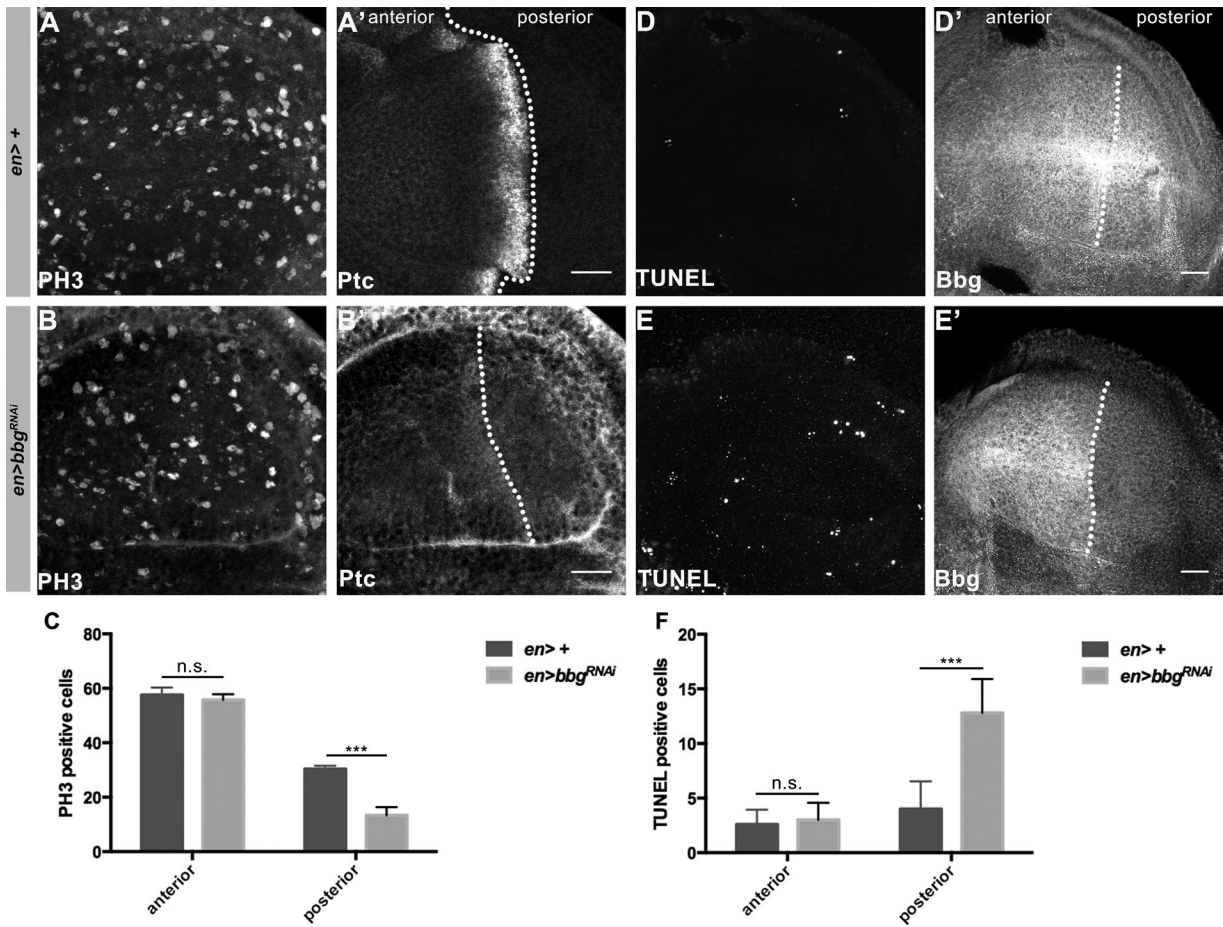


Figure S2. RNAi-mediated reduction of *bbg* results in reduced cell numbers and increased apoptosis in L3 wing discs. *en-Gal4* and *en-Gal4*; *UAS-bbg<sup>RNAi</sup>* L3 wing discs stained with anti-PH3/anti-Ptc (A–B') and TUNEL/anti-Bbg (C–D'), respectively. The dotted lines highlight the AP boundary. (C and F) Quantification of PH3-positive cells (C) and TUNEL positive cells (F) in the anterior (control) and posterior (reduced *bbg*) compartment, based on eight independent L3 wing discs per genotype. The statistical analysis (C and F) used *t* test and ANOVA. \*\*\*,  $P \leq 0.01$ ; \*\*\*,  $P \leq 0.001$ . Error bars show SD. Bars, 25  $\mu$ m. Ptc, Patched.

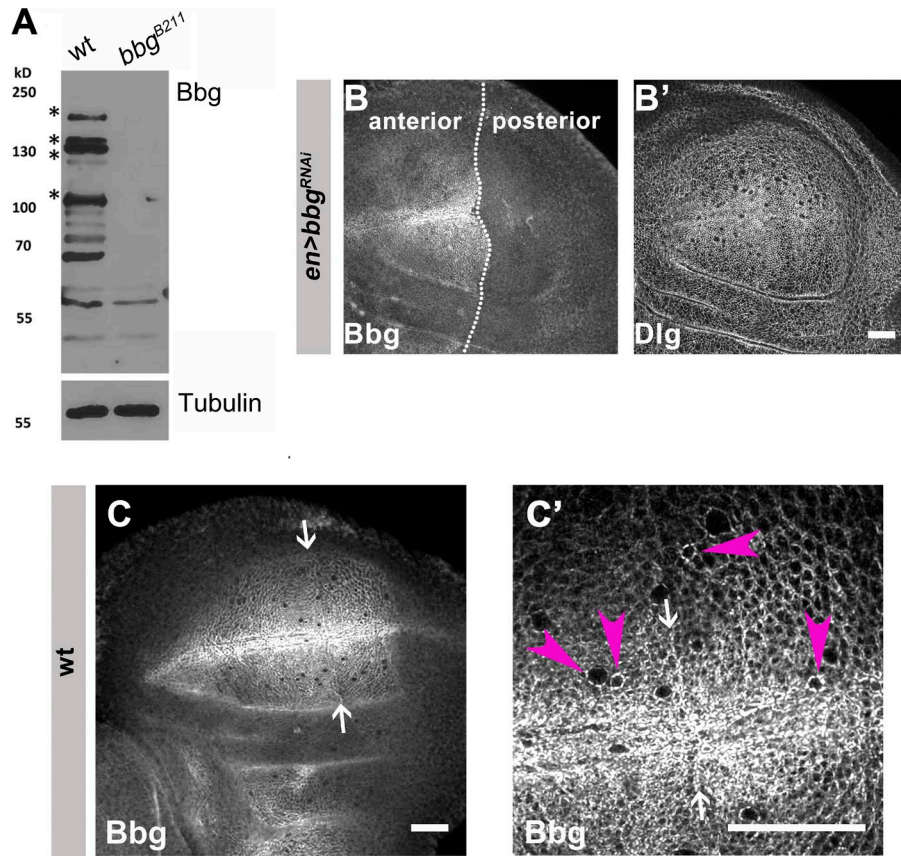


Figure S3. **The anti-Bbg antibody specifically detects Bbg molecules.** (A) WB of lysates prepared from adult abdomen of WT and *bbg*<sup>B211</sup> female flies. The asterisks point to the predicted isoforms of Bbg. (B and B') Expression of UAS-*bbg*<sup>RNAi</sup> with *en-Gal4* in the posterior compartment of L3 wing disc abolishes Bbg protein, but leaves Dlg unaffected. The dotted line in B highlights the AP boundary. (C and C') WT L3 wing disc stained with anti-Bbg. (C') Magnification of the central pouch area of the L3 wing disc shown in C. White arrows in C and C' mark the AP boundary. Magenta arrowheads in C' show the enrichment of Bbg in the cytocortex of dividing cells. Bars, 25  $\mu$ m.