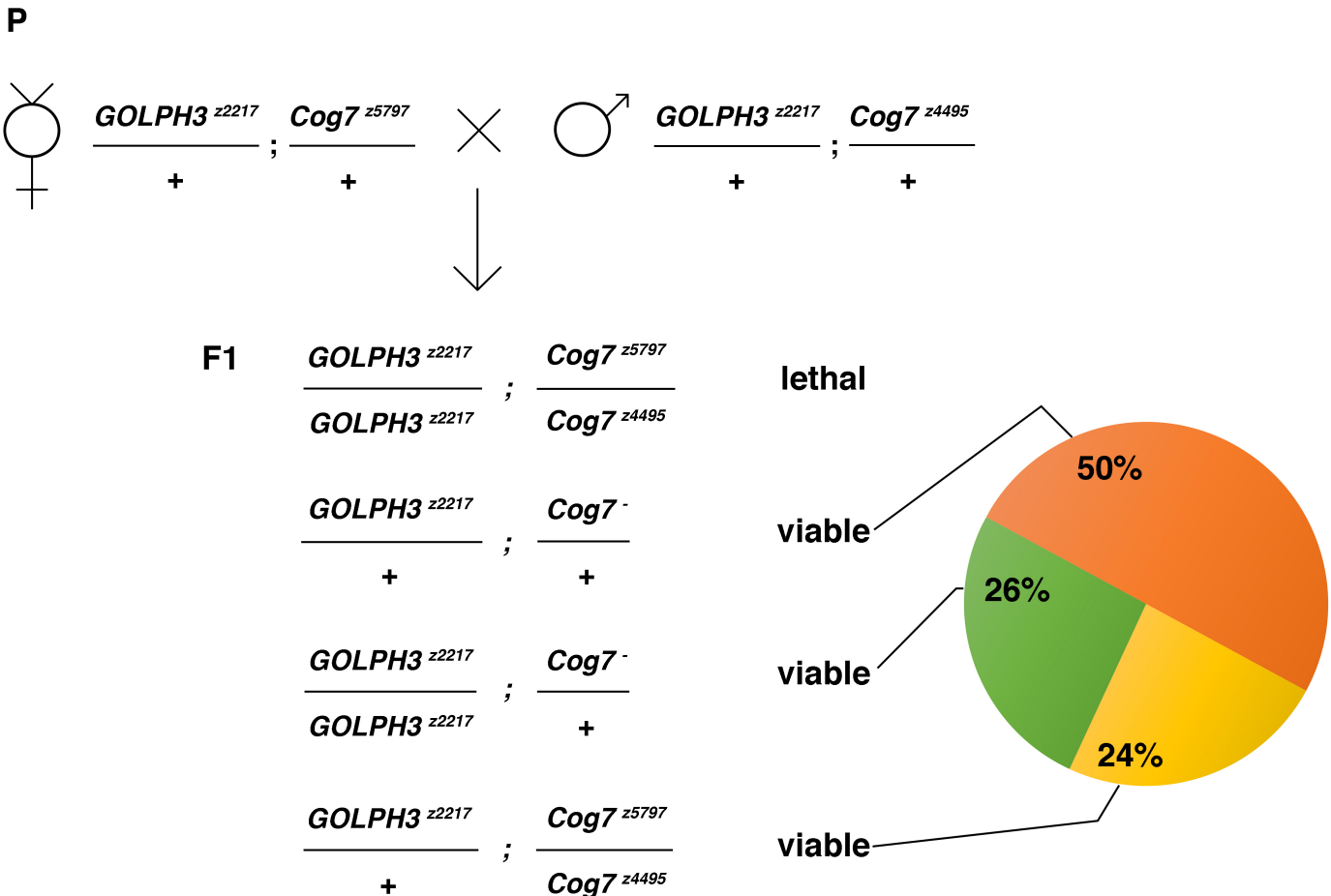


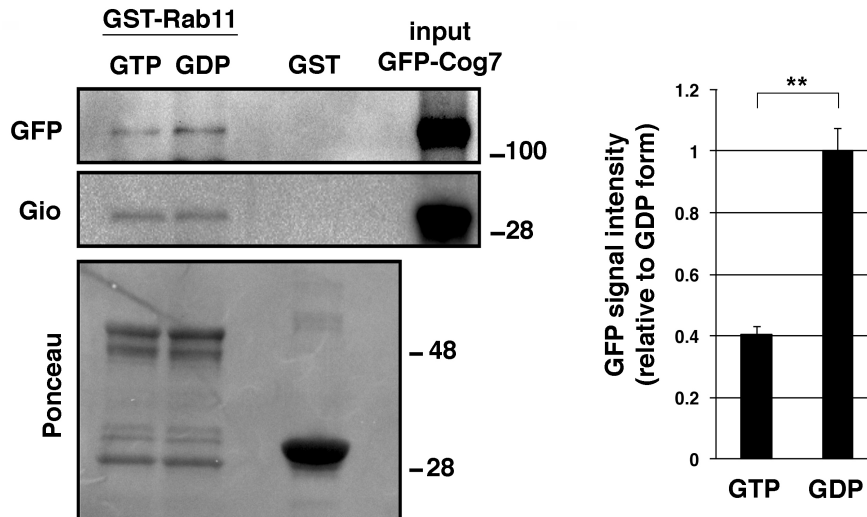
Supplemental File

Figure S1



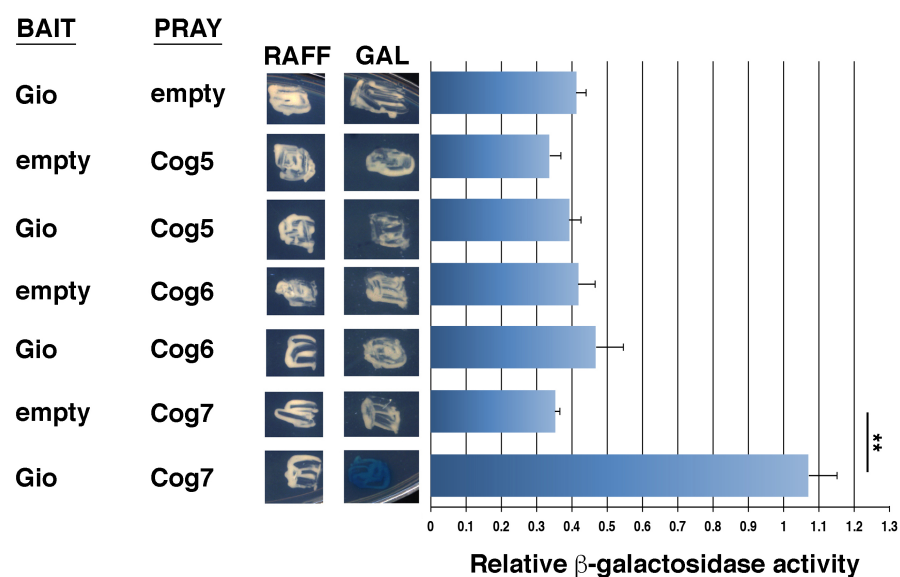
**Figure S1. Double mutants carrying both *Cog7* and *GOLPH3* mutations are synthetic lethal.** Females of genotype  $GOLPH3^{z2217}/CyO; Cog7^{z5797}/TM6B$  ( $GOLPH3^{z2217}/+; Cog7^{z5797}/+$  in the figure) were crossed to males of genotype  $GOLPH3^{z2217}/CyO; Cog7^{z5797}/TM6B$  ( $GOLPH3^{z2217}/+; Cog7^{z4495}/+$  in the figure). 500 flies were counted in the progeny to evaluate the percentages in the pie chart. Animals of genotype  $Cog7^{z4495}/Cog7^{z5797}$  and heterozygous for *GOLPH3* ( $GOLPH3^{z2217}/+; Cog7^{z4495}/Cog7^{z5797}$ ) and animals that are heterozygous for *Cog7* and homozygous for *GOLPH3* ( $GOLPH3^{z2217}/GOLPH3^{z2217}; Cog7^{z4495}/+$  or  $GOLPH3^{z2217}/GOLPH3^{z2217}; Cog7^{z5797}/+$  i.e.  $GOLPH3^{z2217}/GOLPH3^{z2217}; Cog7/+$  in the figure) are both viable. However, double mutants of genotype  $GOLPH3^{z2217}/GOLPH3^{z2217}; Cog7^{z4495}/Cog7^{z5797}$  were lethal.

**Figure S2**



**Figure S2. *Drosophila* Rab11 interacts with the COG complex.** Recombinant GST-Rab11 protein, immobilized on glutathione beads and loaded with either GDP- $\beta$ -S (GDP) or GMP-PNP (GTP), was incubated with larval brain extracts expressing GFP-Cog7. GST-Rab11 but not GST, precipitated both GFP-Cog7 and Gio from brain protein extracts. 2 % of the input and 25% of the pull-downs were loaded and probed with the indicated antibody. Molecular masses are in kilodalton. The graph represents quantification of the amount of GFP-Cog7 that was pulled down from each form of GST-Rab11 in western blotting analysis. Ponceau staining (Ponceau) is shown as a loading control. Protein band intensities were obtained from three independent experiments. Error bars indicate s.e.m. Statistically significant difference is \*\*  $p < 0.01$  (unpaired Student's t-test).

### Figure S3



**Figure S3. Gio protein interacts with Cog7.** Yeast two-hybrid assay was used to test Giotto interaction with Cog6, Cog7 and Cog5 proteins. In presence of the Gio bait, only Cog7 induces LacZ expression (blue color indicates positive interaction). Quantification of LacZ reporter expression (graph), induced with different combinations of bait and prey plasmids is shown. Error bars indicate s.e.m. values. See Materials and Methods for further details. Statistically significant difference is: \*\*  $p < 0.01$  (unpaired Student's t-test)