



**Figure S5.** Loss of one copy of *kelch* dominantly enhances the *kelch*-like phenotype with proteasome inhibition. (A) Quantification of ring canal F-actin intensity plot allows for accurate measurement of key ring canal parameters. Using FIJI, intensity plots were acquired across the span of ring canals. Horizontal dotted colored line across each ring canal corresponds to plotted line below of F-actin intensity values. The full width at half maximum (FWHM) (black dotted lines) accurately corresponds to the boundaries of the ring canal F-actin. The ring canal lumen was calculated as the distance spanned between the two inner half maximum points (lumen represented by shaded box). (B) Quantification and distribution of ring canal diameters measured for analysis. The ring canal diameter is the distance spanned by the two outer half maximum points. Colored points represent all measurements and bars represent mean diameter. Ring canals analyzed were of similar sizes. (C) Quantification of FWHM - a representation of ring canal F-actin thickness. Filled-in bars represent FWHM mean and error bars show standard deviation. (D) Quantification and distribution of maximum intensity values measured. The distributions of maximum F-actin intensity values across analyzed ring canals were similar, indicating that staining and imaging conditions were comparable across samples. (E) Quantification of minimum intensity value of F-actin within the lumen of each ring canal. Colored points represent all measurements and bars represent the mean lumen intensity value. Note the appearance of points with high minimum lumen intensity values with loss of one copy of *kelch* in addition to proteasome inhibition. This indicates dominant enhancement of the *kelch*-like phenotype, since the minimum lumen F-actin intensity value indicates the extent of F-actin occluding the ring canal lumen. \*P<0.05, \*\*\*P<0.0005, \*\*\*\*P<0.0001, One-way ANOVA test. Scale bar: (A) 1  $\mu$ m.