



Figure S1. Frequency distribution of pixel intensities for anti-ubiquitin staining in flight muscles of *parkin* mutants and *ttv*/*+*; *park*^{Δ21}/*park*¹ animals. The frequency plots represent the averages of three independent experiments, with n=15 for each genotype. Note that *park*^{Δ21}/*park*¹ animals showed a shift, with more pixels with elevated brightness or intensity compared to controls (*park*¹/*+*). The distribution of pixel intensities is shifted toward the control distribution when animals are heterozygous for *ttv* (*ttv*⁰⁰⁶⁸¹/*+*; *park*^{Δ21}/*park*¹). The frequency distribution of *park*^{Δ21}/*park*¹ is significantly different from *ttv*⁰⁰⁶⁸¹/*+*; *park*^{Δ21}/*park*¹ ($p < 0.001$, Wilcoxon Signed Ranked Median Test).