



Figure S2 *LRRK^{HA}* recapitulates wild type *LRRK* function. (A) FM 1-43 staining following a 1 min 90 mM KCl stimulation protocol in larval boutons of wild type *LRRK* (*LRRK^{wt/wt}*), mutant *LRRK* (*LRRK^{P1/P1}*) and HA-tagged *LRRK* (*LRRK^{HA/HA}*), (B) indicating a defect in FM 1-43 dye uptake in mutant *LRRK^{P1}* but not in HA-tagged *LRRK^{HA}* compared to wild type. Thereby showing reduced synaptic vesicle endocytosis in *LRRK^{P1}*, not present in HA-tagged *LRRK^{HA}*. (C) Trikinetics activity assay indicating total activity counts over a 24 h period of the same genotypes as in (A) en (B). A defect in total activity in mutant *LRRK^{P1}* but not in HA-tagged *LRRK^{HA}* compared to wild type *LRRK* is evident.