



Figure S12 *shep* promoted outgrowth of the peripheral projections of the bursicon neurons during metamorphosis. (A-C) Sholl analysis on the peripheral projections of P14 stage pharate adult bursicon neurons. For this analysis, we counted the number of axon intersections with nested, concentric rings, each with a 50 μm increase in radius from the next smallest ring. Sample sizes are listed in parentheses following each genotype. (D-I) In wandering 3rd instar larvae, the morphology of the neuromuscular junctions (NMJ) of the hypomorphic mutants *shep*^{Exel6103/shep}^{Exel6104} (E), *shep*^{BG00836/shep}^{ED210} (G), and *ccap>shep-RNAi, Dicer-2* (I) was similar to the morphology of the respective hemizygous controls (D, F, and H). (J-L) Binned counts of wandering 3rd instar larval NMJ boutons within size classes for *shep* loss-of-function animals. Sample sizes are listed in parentheses. Two-way ANOVAs, $P=0.452479$ (panel J), $P=0.597591$ (panel K), and $P=0.271019$ (panel L). Scale bars: 100 μm.