



**Figure S5**  $\beta$  spectrin overexpression in the larval fat body resulted in a loss of lipophorin accumulation at the midgut, comparable to that observed with lipophorin RNAi. Dissected preparations of larval midgut from wild type (A-C),  $\beta$  spectrin overexpresser in fat body (*Cg-Gal4* driven *UAS- $\beta$ -Spec<sup>95</sup>*; D-F), or lipophorin knockdown in the fat body (*Cg-Gal4* driven *UAS-lipophorin RNAi* (P{TRiP.HMS00265}; G-I) were stained with lipophorin antibody. The lipophorin antibody staining pattern on the surface of the midgut in wild type (*Cg-Gal4* parent line, A) was eliminated by either  $\beta$  spectrin overexpression (D) or knockdown of lipophorin (G). Anti- $\beta_H$  spectrin was used as a positive staining control (B,E,H). Fat body did not exhibit  $\beta_H$  spectrin staining above background (arrowhead, E) but did stain strongly for lipophorin after  $\beta$  spectrin overexpression (arrowhead, D). Bar = 50  $\mu$ m.