



Figure S6 Embryonic *shep* mRNA and SHEP protein expression patterns. (A-B) Ectopic expression of *shep* in stage 11-12 *engrailed-Gal4/UAS-shep* embryos was detected by *in situ* hybridization (A) and immunostaining (B) with an anti-SHEP antiserum. (C-F) Expression of *shep* was detected in oocytes (arrows in panels C-D) in the ovaries of P14 stage pharate adult females and in syncytial blastoderm embryos (panels E-F) by *in situ* hybridization (blue) and immunostaining with antibodies to SHEP (gray). (G-N) Expression of *shep* in early embryonic stages detected by *in situ* hybridization. Each top-bottom pair of images shows signals from the same embryo with dark field and köhler illumination. Zygotic *shep* was first detected at stage 7 in the pro-cephalic neurogenic region (arrow, panel K). (O-V) In later embryonic stages, the expression of *shep* expanded to include the entire central and peripheral nervous systems. Each top-bottom pair of images are lateral (top) and ventral (bottom) views of the same embryos. Arrows, putative mesectoderm; open arrowheads, ventral neurogenic region; arrowheads, peripheral nervous system. (W) Anti-SHEP immunostaining produced labeling in the CNS, PNS (arrows), and the antennomaxillary complex and labral sensory complex (arrowhead). (X) Control *in situ* hybridization with the sense probe in an *Oregon R* embryo. The embryonic stage is indicated in the lower right corner of each panel. Scale bars: (C, D), 25 μ m; (all other panels), 50 μ m.