

Fig. S1. DRG neuron addition is altered in *ouchless.* (A) Lateral view of 10 dpf transgenic zebrafish expressing *Tg(neurog1:EGFP)*, immunostained for EGFP (green) and Elavl (red). High magnification view of a single DRG composed of six EGFP/Elavl⁺ neurons. (B) Lateral view of 10 dpf *ouchless; Tg(neurog1:EGFP)* larva, immunostained for EGFP (green) and Elav1 (red), and high magnification view of a single DRG composed of two EGFP/ElavL1⁺ neurons. Arrows in A,B indicate dorsal and ventral axonal projections. (C) Quantification of the number of EGFP/ElavL1⁺ cells per DRG in wild type (white bars) and *ouchless* (black bars) at 3 dpf and 10 dpf. (D) Quantification of the number of EGFP/ElavL1⁺ DRG per fish side in wild type (white bars) and *ouchless* (black bars) at 3 dpf and 10 dpf. For C,D, *n*=6 fish and error bars are s.e.m.



Fig. S2. Other neurons are unaffected in *ouchless.* (A) Confocal image of a 4 dpf wild-type larvae immunostained with Elavl, showing cranial ganglia. (B) Image of a 4 dpf *ouchless* larvae, showing normal cranial ganglia morphology. (C) Confocal image of a 7 dpf wild-type larvae immunostained with ElavL1, showing DRG (arrows), SG (asterisks) and enteric neurons (brackets). (B) Image of a 7 dpf *ouchless* larva. SG and enteric neurons are present in segments lacking DRG.