



**SUPPLEMENTARY FIG. S3.** Transgenic lines expressing TagYFP in cranial motor neurons, brain, and interneurons. A diagram of the CREST1 enhancer (from the *isl1* gene) transgene construct (as in Xie *et al.*<sup>31</sup>) is shown at the top; versions with wtNTR and mutNTR (*nfsB*) were used to derive transgenic lines. Dorsal views of representative larvae from complementary transgenic lines coexpressing TagYFP with either wtNTR (A, A', line *isl1*-wtNTR-03; C, C' line *isl1*-wtNTR-05) or mutNTR (B, B', line *isl1*-mutNTR-04; D, D', line *isl1*-mutNTR-06) in cranial motor neurons at 2 dpf (left panel) and 4 dpf (right panel). In lines *isl1*-wtNTR-03 and *isl1*-mutNTR-04, this expression stays constant through 4 dpf (A', B'); while in lines *isl1*-wtNTR-05 and *isl1*-mutNTR-06, expression is extended throughout the brain, and within spinal interneurons by 4 dpf (C', D'). Note that some expression in interneurons can randomly occur in lines *isl1*-wtNTR-03 and *isl1*-mutNTR-04 (as seen in A'), and that interneuron expression commences earlier in line *isl1*-wtNTR-05 (C). (E) Dorsal view of *isl1*-mutNTR-04 larva at 4 dpf, with cranial motor neuron groups labeled with roman numerals (III, IV, Va, VII and X) as in Higashijima *et al.*<sup>34</sup>