

Supplementary figure 1. **Confirmation of Tmem184a KD.** Two MOs for Tmem184a sufficiently KD expression of the Tmem184a protein. (A) Embryos injected with the subthreshold concentration of the Tmem184a ATG MO (0.75mM) (n=14). (B) Embryos injected with the subthreshold concentration of the Tmem184a SB MO (0.75mM) (n=11). (C) 48 hpf embryos co-injected with both subthreshold concentrations of the Tmem184a ATG and Tmem184a SB MOs (n=10). Asterisks indicate ISVs that failed to complete outgrowth. (D). KD with SB and ATG together is depicted in the graph (E) as the mean number of intact ISVs +/- SEM P<0.001. (F) Embryo survival for all treatments shown as compared to SC embryo survival at 24 hrs.

