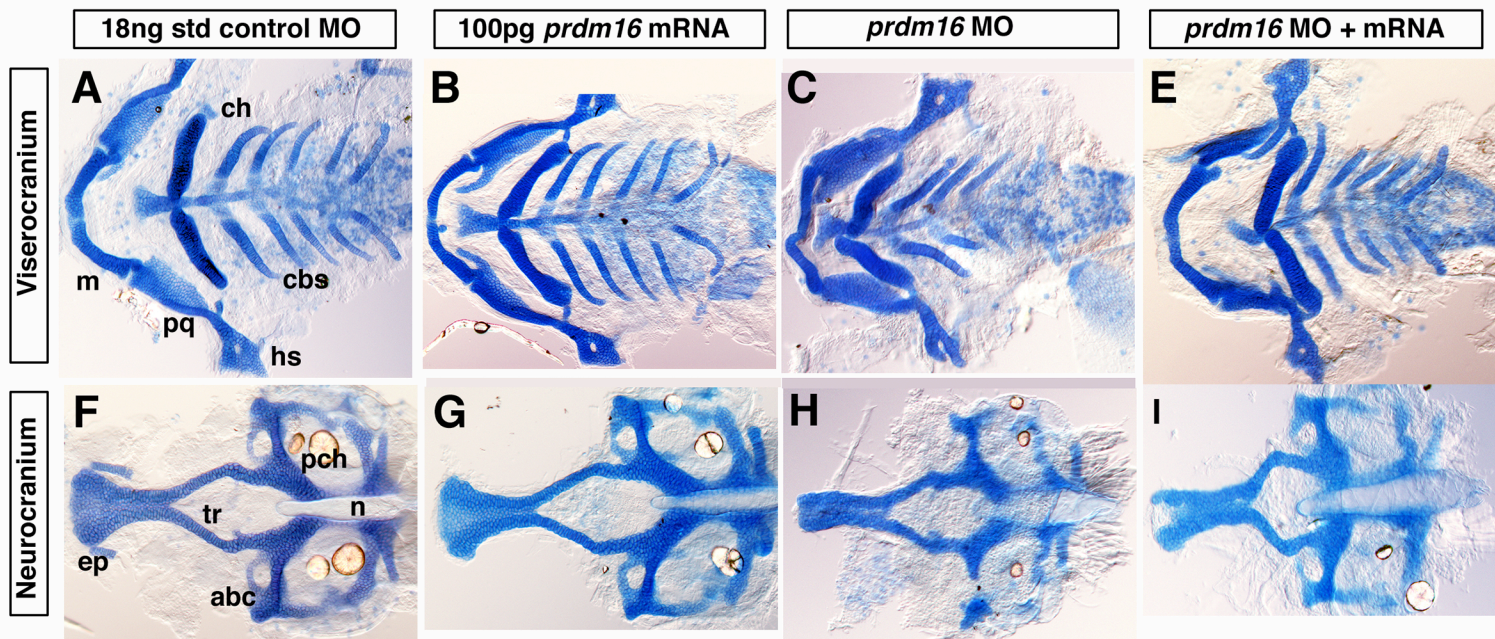


Ding et al, Supplemental Figure 1

Splice junction targeted Morpholinos interfered with splicing. (A, B) Embryos injected with 12ng *prdm3* i2e3 MO (A) or 6ng *prdm16* e2i2 MO (B) were isolated and RT-PCR was performed. *prdm3* MO caused exon skipping of exon 3, creating a band of 211 bp compared to uninjected/ *tp53M214K* embryos that maintain exon 3 and the size of 302 bp. In addition, a ~450bp band was also observed, possibly creating a 350 bp+ including some of intron 2 (A). *prdm16* MO also caused exon skipping of exon 2, resulting in a 192 bp band compared to 340 bp in uninjected/ *tp53M214K* embryos (B). In both cases some of wildtype RNA remains, but we believe that we have significant knockdown of both *prdm3* and *prdm16* in these assays. A β -actin band is amplified as a control in both samples below 100 bp (labeled).



Ding et al, Supplemental Figure 2
***prdm16* mRNA injection rescues the *prdm16* Morpholino phenotype. Alcian blue stained embryos at 5 dpf. (A, B) Embryos injected with 18 ng of the control MO show no craniofacial phenotype. (C, D) 100pg *prdm16* mRNA also shows no phenotype when injected by itself. (E, F) 6ng *prdm16* e2i2 MO injected embryo. (G, H) 6ng *prdm16* MO co-injected with 100pg of mRNA demonstrates a partial rescue of the length of the viscerocranium, width of ethmoid plate (arrow), and the anterior basicapsular commissure. Anterior is to the left in all images. abc, anterior basicapsular commissure; cbs, ceratobranchials; ch, ceratohyal; ep, ethmoid plate; m, Meckel's cartilage; n, notochord; pch, parachordal; tr, trabeculae**