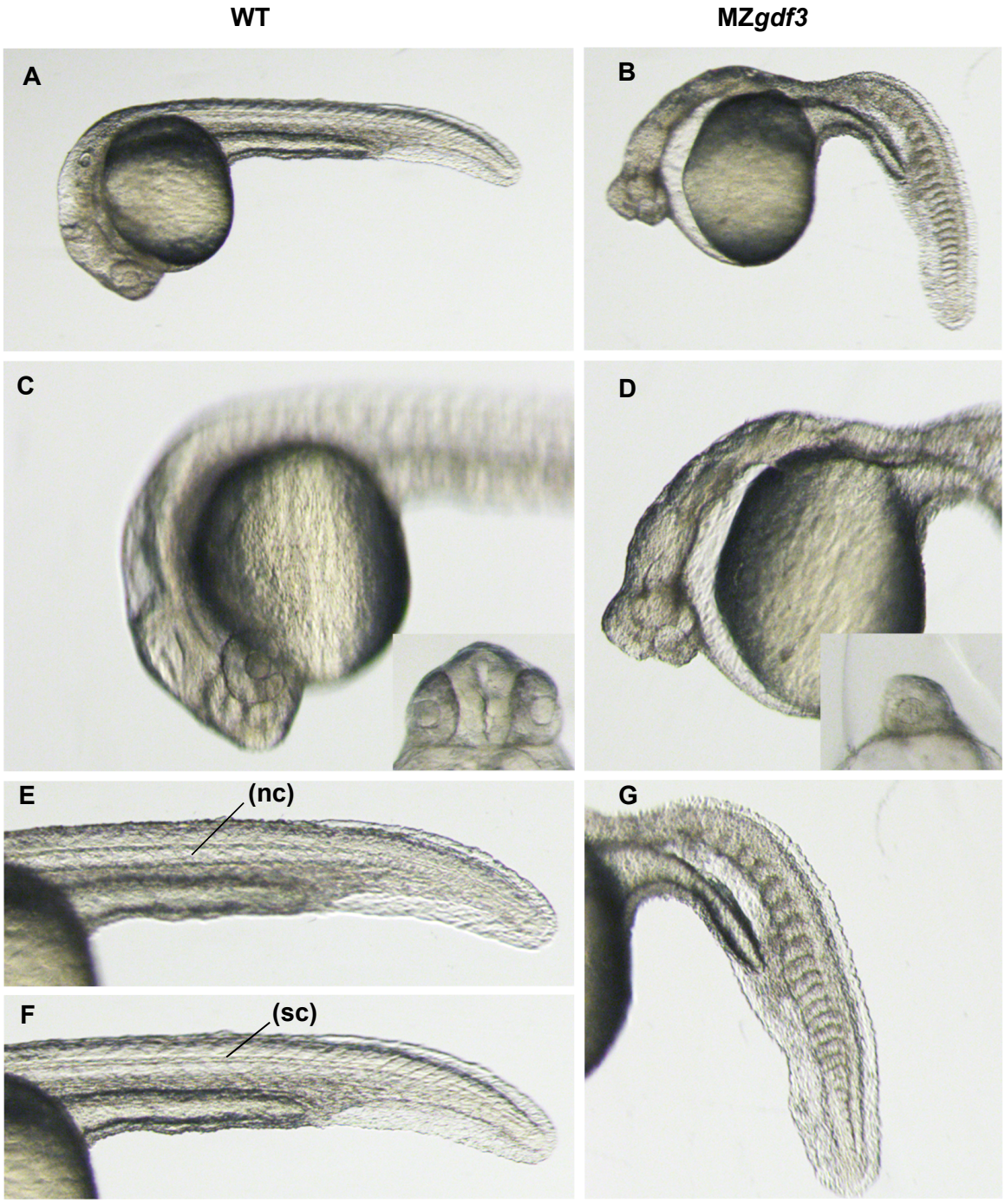

Figure 1 - Figure supplement 3. High magnification views of wild-type and MZ*gdf3* mutant embryos. Overview of WT (A) and MZ*gdf3* (B) embryos at 26 hpf. (C) A focal plane at the anterior neural tube of WT embryos shows well developed eyes and complex brain morphology including ventricles and a fold at the midbrain-hindbrain junction. The eyes (inset) are widely separated by the tissue of the forebrain. (D) In contrast to WT embryos MZ*gdf3* embryos have a narrow simple neural tube, and the eyes are cyclopic (inset). The large space between the anterior neural tube and yolk is created by the loss of pharyngeal endoderm and cranial mesoderm including the anterior lateral plate that give rise to the heart. (E, F) The trunk and tail of a WT embryo shows a well-defined notochord (nc) in (E) and spinal cord (sc) in (F) and chevron-shaped somites. (G) The notochord and spinal cord are absent from the trunk and tail of MZ*gdf3* and the somites are U-shaped and malformed.