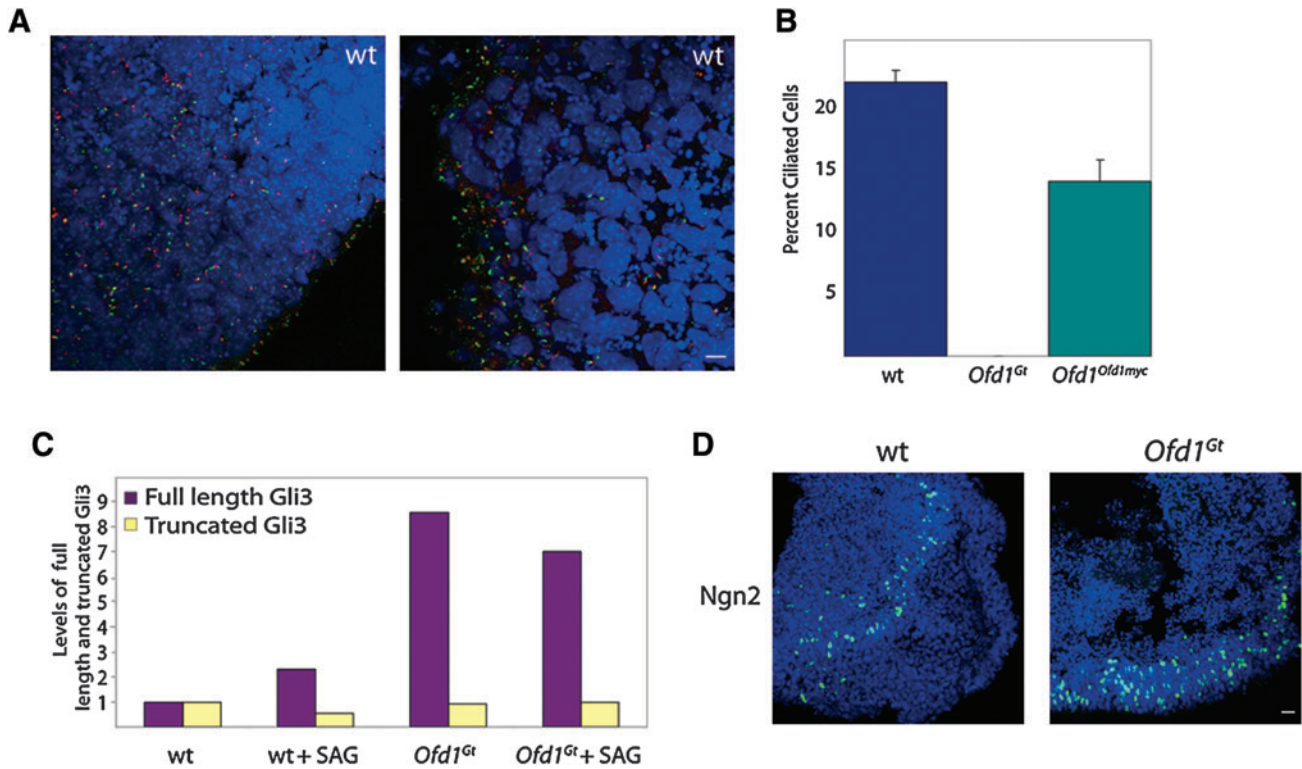
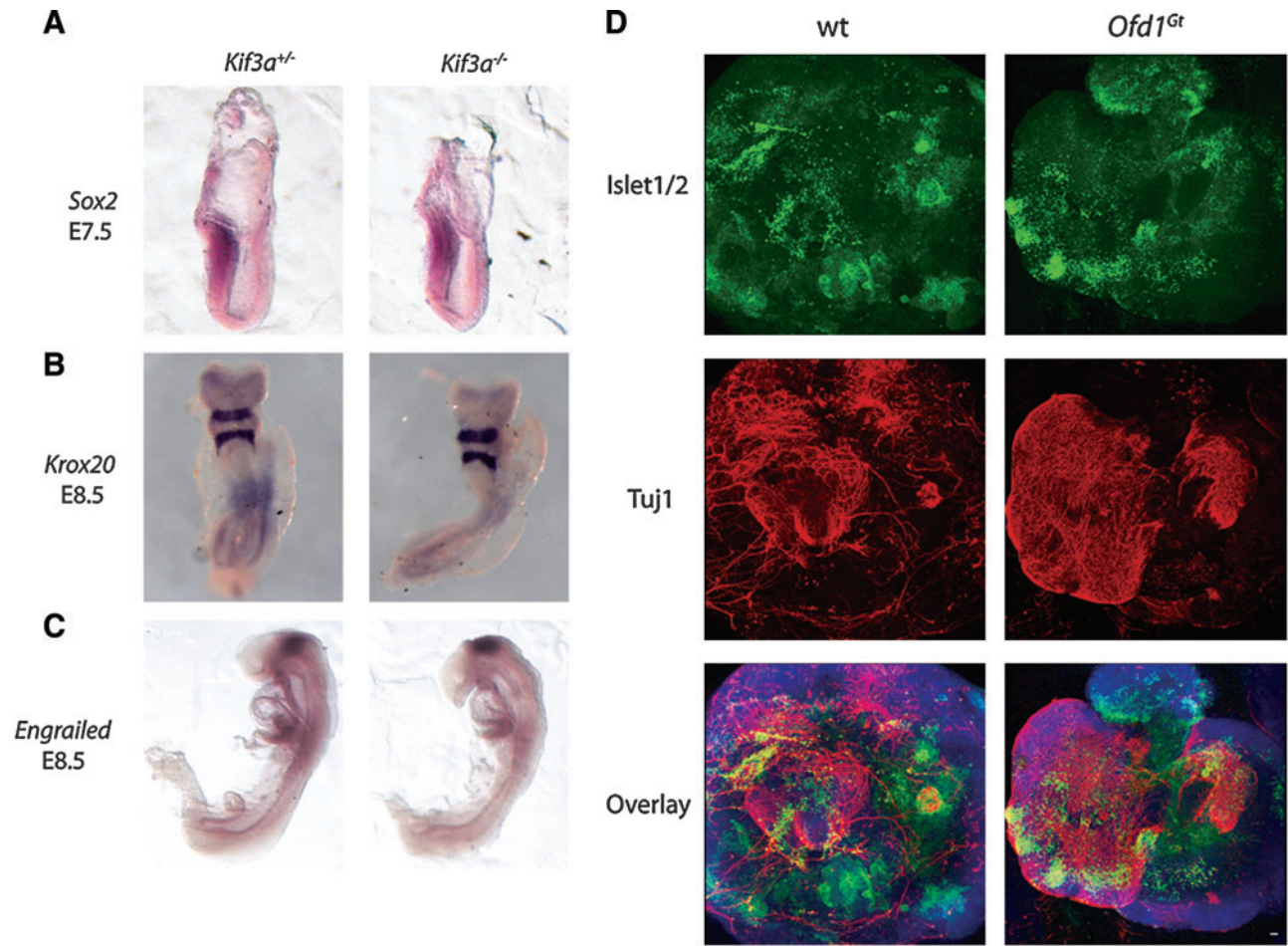


## Supplementary Data



**SUPPLEMENTARY FIG. S1.** Ciliation in wild-type, *Ofd1<sup>Gt</sup>*, and *Ofd1<sup>Ofd1myc</sup>* EBs. **(A)** Wild-type EBs stained for Arl13b (green) marking cilia and  $\gamma$ -tubulin (red) marking basal bodies. Scale bar 10  $\mu$ m. **(B)** Percent ciliated cells in synchronized wild-type, *Ofd1<sup>Gt</sup>*, and *Ofd1<sup>Ofd1myc</sup>* embryonic stem cells. **(C)** Quantification of full-length and truncated Gli3 by immunoblot in wild-type and *Ofd1<sup>Gt</sup>* control and SAG treated EBs. **(D)** Sections of wild-type and *Ofd1<sup>Gt</sup>* EBs stained with Ngn2 (green) after 15 days of differentiation. Scale bar 20  $\mu$ m. wt, wild type; *Ofd1*, Oral-Facial-Digital 1; *Ofd1<sup>Gt</sup>*, gene trap insertion into the gene *Ofd1*; EB, embryoid body.



**SUPPLEMENTARY FIG. S2.** Neural specification and patterning in wild-type and *Ofd1*<sup>Gt</sup> EBs and *Kif3a* mutant embryos. (A–C) Wholemount in situs of wild-type and *Kif3a* mutant embryos at E7.5 or E8.5 of development probed for ectoderm (*Sox2*), hindbrain (*Krox20*), and midbrain (*Engrailed*) markers. (D) Wild-type and *Ofd1*<sup>Gt</sup> EBs stained for motor neurons (Islet1/2, green), postmitotic neurons (Tuj1, red), and nuclei (4',6-diamidino-2-phenylindole, blue). Scale bar 20 μm.