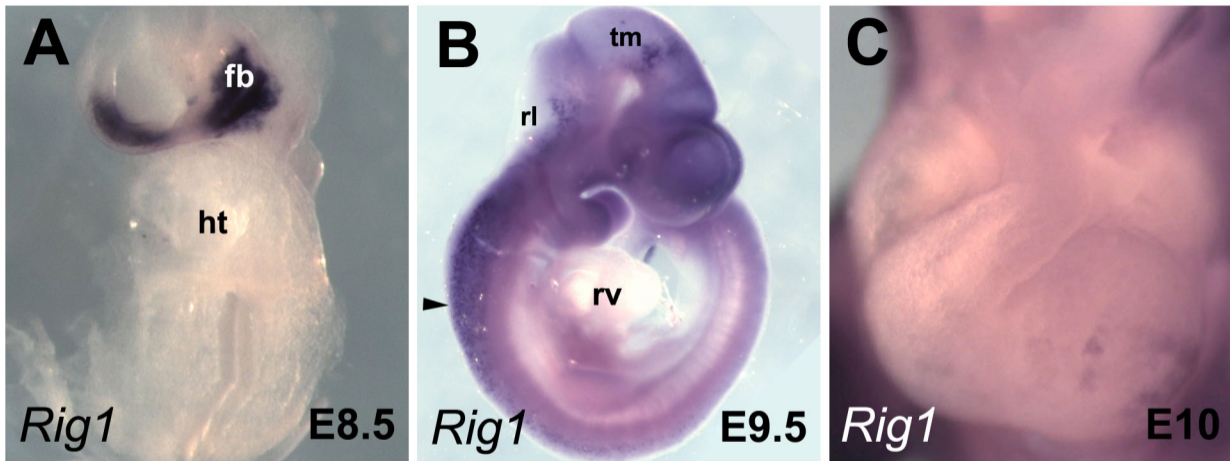


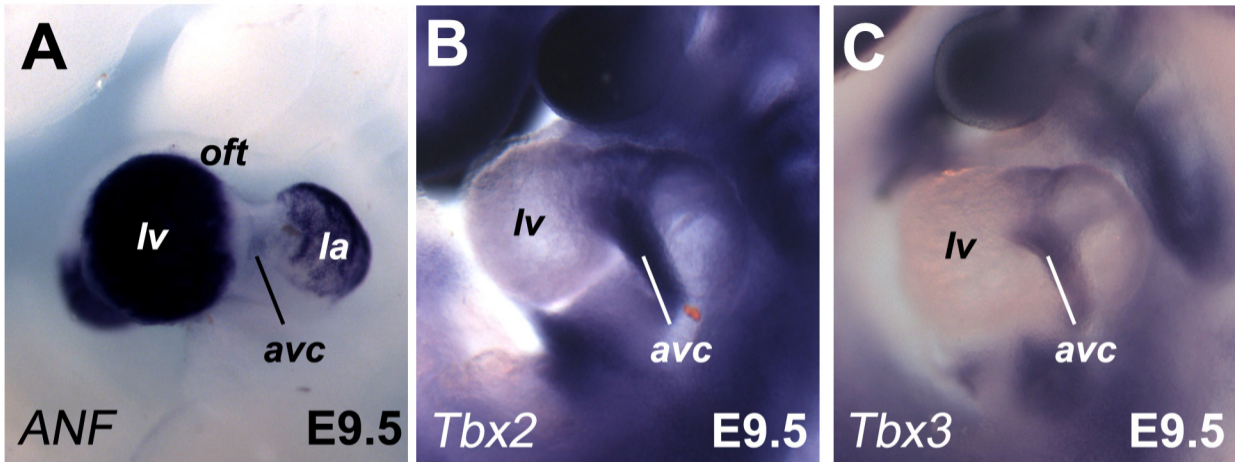
Supp. Fig. S1. Expression pattern of *Rig1/Robo3* gene during embryonic development. Whole-mount *in situ* hybridization analysis of embryos with *Rig1/Robo3* riboprobe. **(A-C)** Views of E8.5 to E10 embryos showing lack of *Robo3* expression in the embryonic heart. Note the expression of *Robo3* in the ventral part of the forebrain (fb) of E8.5 embryo **(A)** and in the spinal cord (arrowhead), in the rhombic lip (rl), and the tectum (tm) of E9.5 embryo **(B)**. ht, heart tube; rv, right ventricle.

Supp. Fig. S2. Expression of *ANF*, *Tbx2* and *Tbx3* genes in E9.5 heart. Whole-mount *in situ* hybridization analysis of heart with *ANF*, *Tbx2* and *Tbx3* riboprobes. **(A)** Lateral view of the *ANF* gene expression on the heart of E9.5 mouse embryo. **(B,C)** *Tbx2* and *Tbx3* are expressed in the atrioventricular canal (avc) region. la, left atria; lv, left ventricle; oft, outflow tract.

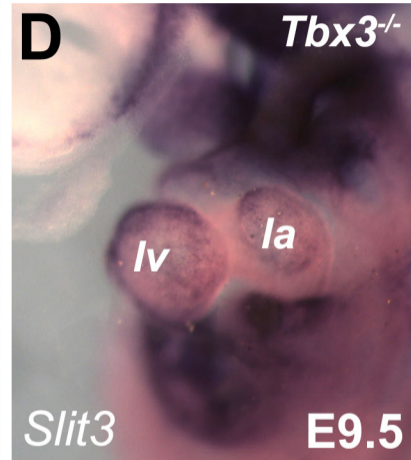
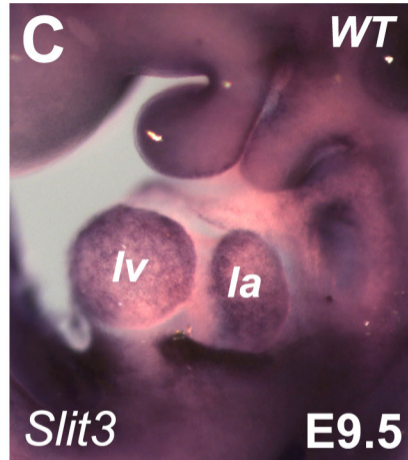
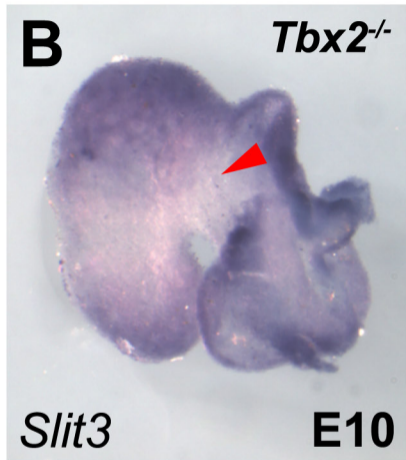
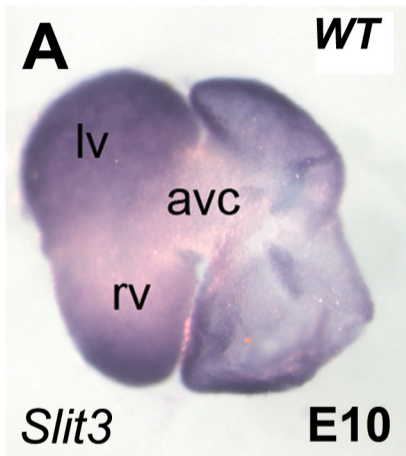
Supp. Fig. S3. Expression of *Slit3* in *Tbx2* and *Tbx3* mutant embryos. **(A,B)** Dorsal views of wild-type (WT) and *Tbx2*<sup>-/-</sup> E10 hearts. *Slit3* expression is up-regulated in the atrioventricular canal (AVC) of *Tbx2* mutant heart (red arrowhead). **(C,D)** Lateral views of wild-type (WT) and *Tbx3*<sup>-/-</sup> E9.5 embryos showing no significant differences in the *Slit3* expression. la, left atria; lv, left ventricle; rv, right ventricle.



**Supplementary Figure S 1**



**Supplementary Figure S2**



**Supplementary Figure S3**