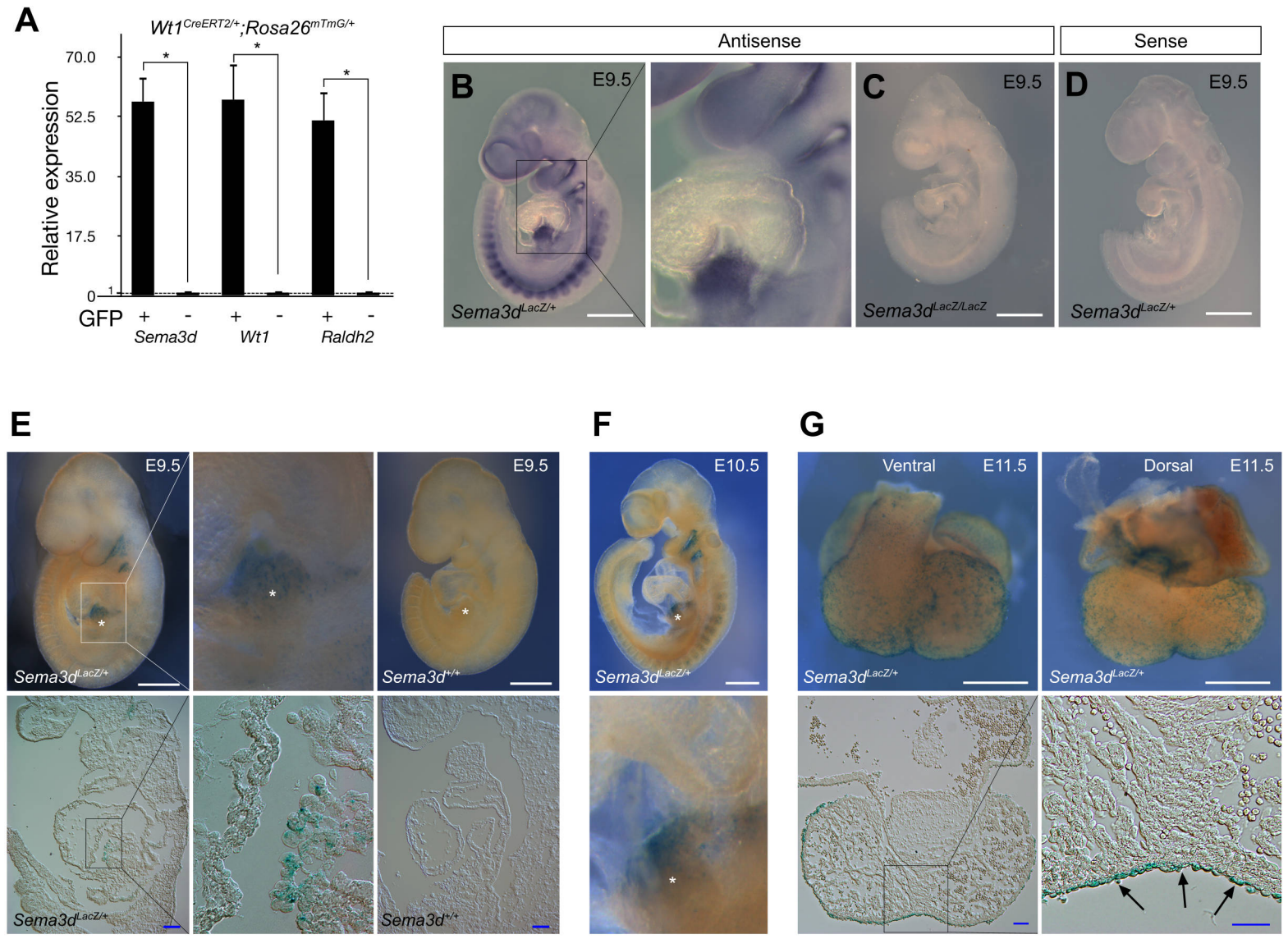

Supplementary information, Figure S3 Characterization of Sema3d$^{LacZ/+}$ knockin line. (**A**) Epicardium-derived cells (EPDCs, GFP^{+}) were sorted from E15.5 Wt1$^{CreERT2/+}$;Rosa26$^{mTmG/+}$ heart apex. Tamoxifen was induced at E10.5. Similar to *Wt1* and *Raldh2*, *Sema3d* is highly enriched in epicardium and EPDCs (GFP^{+}) compared with non-epicardium cells (GFP^{-}). *P < 0.05, n = 3. (**B-D**) In situ hybridization of Sema3d shows strong expression in the proepicardium (*) at E9.5 embryo. Similar results were observed with 4 different antisense probes. The same antisense probe does not detect any signal in Sema3d null embryos (*Sema3d$^{LacZ/LacZ}$*), and the sense probe is always negative. (**E-G**) X-gal staining of Sema3d showed beta-galactosidase expression in the proepicardium (white asterisks) and epicardium (black arrows) at E9.5 (E), E10.5 (F) and E11.5 (G). White bar = 0.5 mm; blue bar = 100 um.