

**SUPPLEMENTARY FIG. S2.** Generation of epicardial-like cells from H9 and hiPSC lines. (A) Immunofluorescence staining of TBX18 and WT1 in D14 H9- and hiPSC-derived proepicardial-like cells. Scale bars, 100  $\mu$ m. (B) High-content imaging assays of the proportion of TBX18<sup>+</sup>/WT1<sup>+</sup> cells in D14 H9- and hiPSC-derived proepicardial-like cell populations. Error bars represent standard error of mean (SEM); n=3. (C) Immunofluorescence staining for WT1 and ZO1 protein in D15+2 H9- and hiPSC-derived epicardial-like populations. Scale bars, 100  $\mu$ m. (D) Immunofluorescence staining of CNN1 and TAGLN in D15+8 TGF $\beta$ 1+bFGF-induced H9- and hiPSC-EPLC cultures. Scale bars, 100  $\mu$ m. (E) Immunofluorescence staining of POSTN in D15+8 + 6 bFGF+S-induced H9- and hiPSC-EPLC cultures. Scale bars, 100  $\mu$ m. (F) Flow cytometry analysis of the proportion of CNN1<sup>+</sup>/TAGLN<sup>+</sup> SMCs in D15+8 TGF $\beta$ 1+bFGF-induced H9- and hiPSC-EPLC cultures. Error bars represent SEM; n=3. (G) Flow cytometry analysis of the proportion of POSTN<sup>+</sup> CFs in D15+8 + 6 bFGF+S-induced pluripotent stem cell; SMCs, smooth muscle cells; TGF $\beta$ 1, transforming growth factor  $\beta$ 1.



SUPPLEMENTARY FIG. S2. (Continued).