

Figure S1

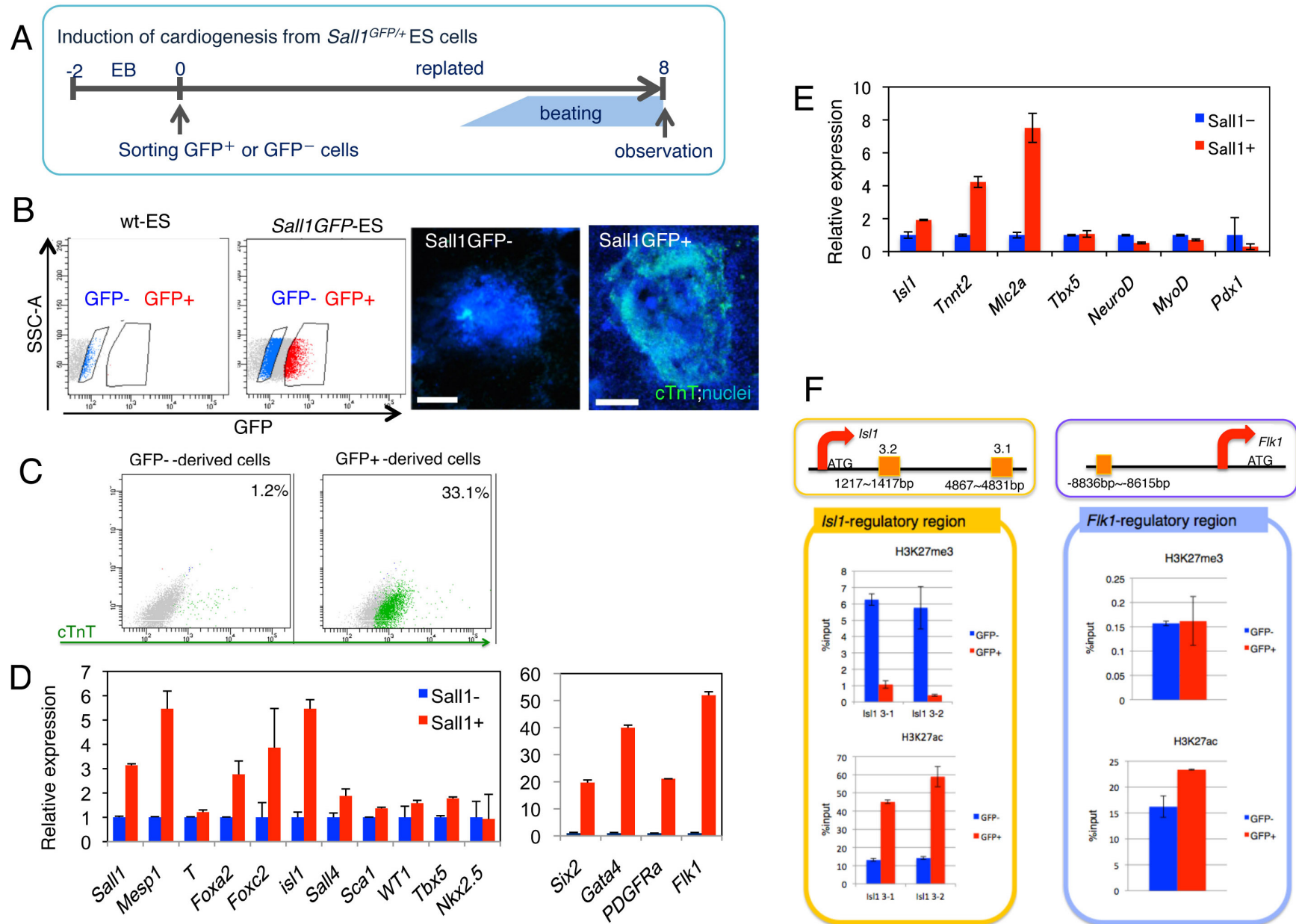


Figure S1: Characterization of *Sall1*+ cells isolated from ESCs.

(A) Schematic diagram of isolation and culture of *Sall1*-GFP+ cells derived from ESCs.

(B) Left, Histogram showing of GFP+ cells (Red) and GFP- cells (Blue). Right, cultured GFP+/- cells stained with cardiac Troponin T (cTnT). Scale bars: 200µm.

(C) FACS analysis of cultured *Sall1*-GFP+ cells at day 20

(D) Relative mRNA expression of early cardiac transcription factors in sorted GFP+ cells before re-culture.

(E) Relative mRNA expression of cardiomyocyte (*Myl7/Mlc2a*, *Tnnt2/cTnT*), and progenitors in several organs (*NeuroD* for neuron, *MyoD* for skeletal muscle, *Pdx1* for Pancreas) after 8 days of culture.

(F) Putative *Sall1*-binding sites (orange square) identified in genes indicated and ChIP assay against H3K27me3 or H3K27ac in *Sall1*-GFP+(red)/-(red) cells.

Figure S2

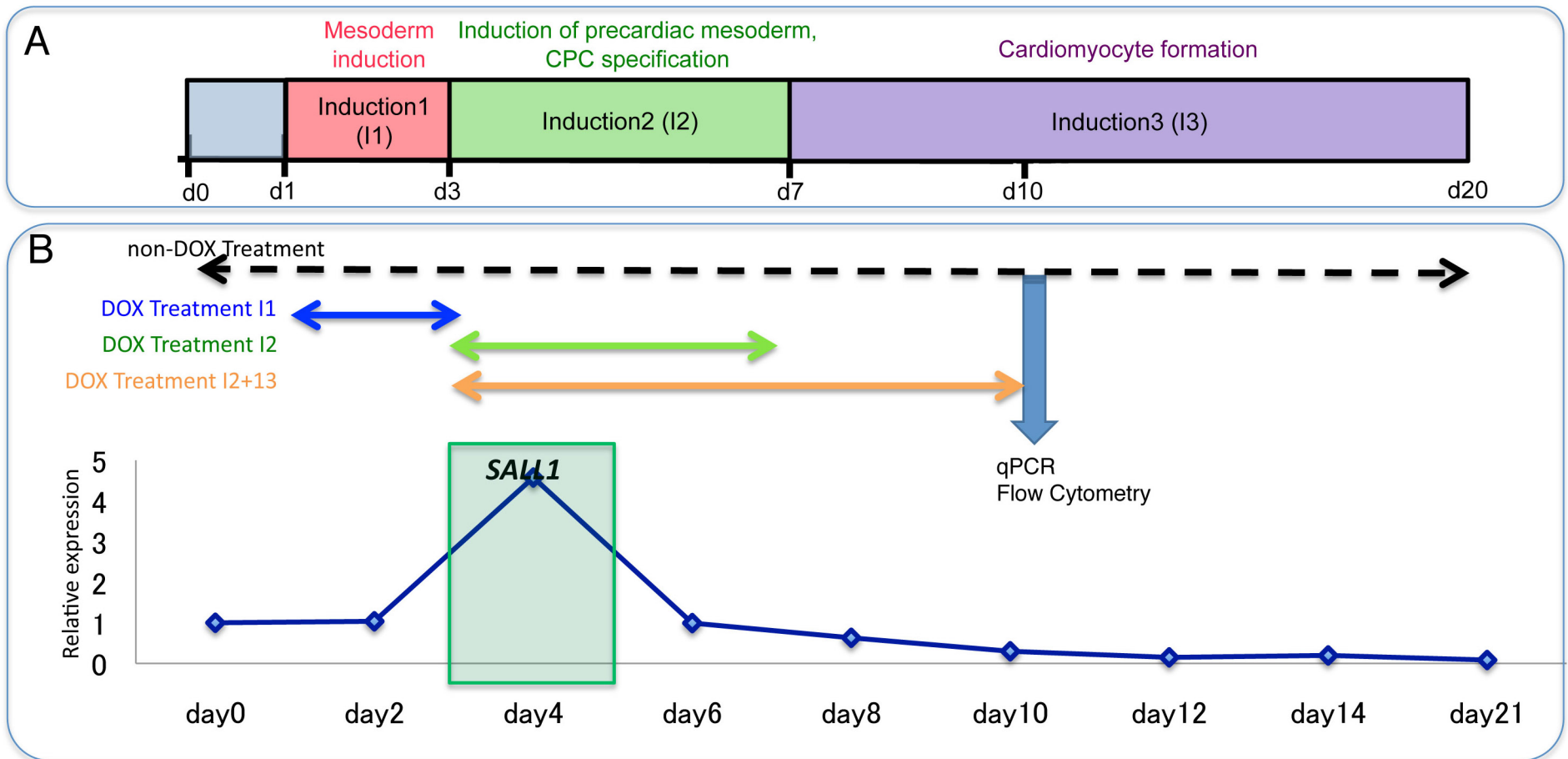


Figure S2: Diagram of cardiac differentiation (A) and SALL1 expression profile (B) in human PSC culture system.