



**Supplementary Figure 5**  $Ca^{2+}$  handling properties of iPS-CMs induced with or without AA. A, Effect of AA on the amplitude, basal  $[Ca^{2+}]_i$ , upstroke  $V_{max}$ , and decay rate of  $Ca^{2+}$  transients in day 16-18 iPS-CMs (n=12-13). B and C, AA increases the expression of  $Ca^{2+}$  handling and gap junction proteins in TMRM fluorescent dye sorted iPS-CMs. Quantitative RT-PCR (B) and Western blot (C) analysis of the relative expression levels of various  $Ca^{2+}$  handling proteins in day-18 iPS-CMs with or without AA treatment. Results were obtained from three assays and expressed as means  $\pm$  SEM. \*P<0.05, \*\*P<0.01 vs. control.