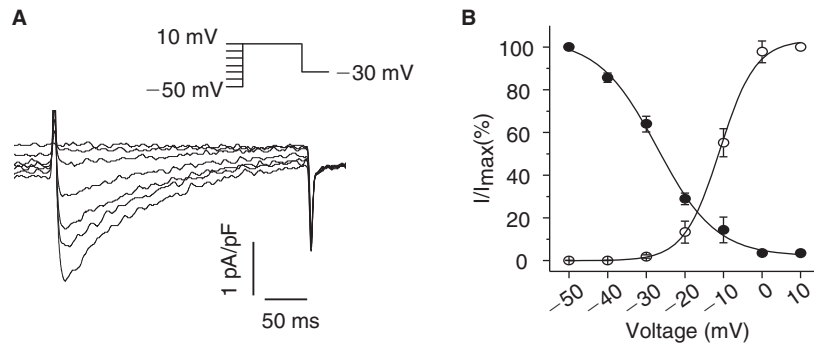


**SUPPLEMENTARY FIG. 1.** The stably LV-MLC2v-dsRed-transduced human embryonic stem cell (hESC) cell line. (A) After LV-MLC2v-dsRed transduction, human fetal left ventricular (FLV) cardiomyocytes (CMs) expressed dsRed. (B) The stable transduced hESC line had normal karyotype. (C) Undifferentiated MLC2v-dsRed hESC colonies had no dsRed expression. Bars represent 50  $\mu$ m.



**SUPPLEMENTARY FIG. 2.** (A) Electrophysiological characterization of steady-state inactivation of L-type  $\text{Ca}^{2+}$  current ( $I_{\text{Ca-L}}$ ) in 7+40-day dsRed+ ventricular hESC-CMs and (B) the steady-state inactivation and activation curves of  $I_{\text{Ca-L}}$ .