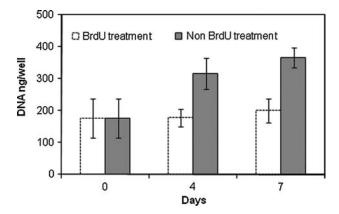
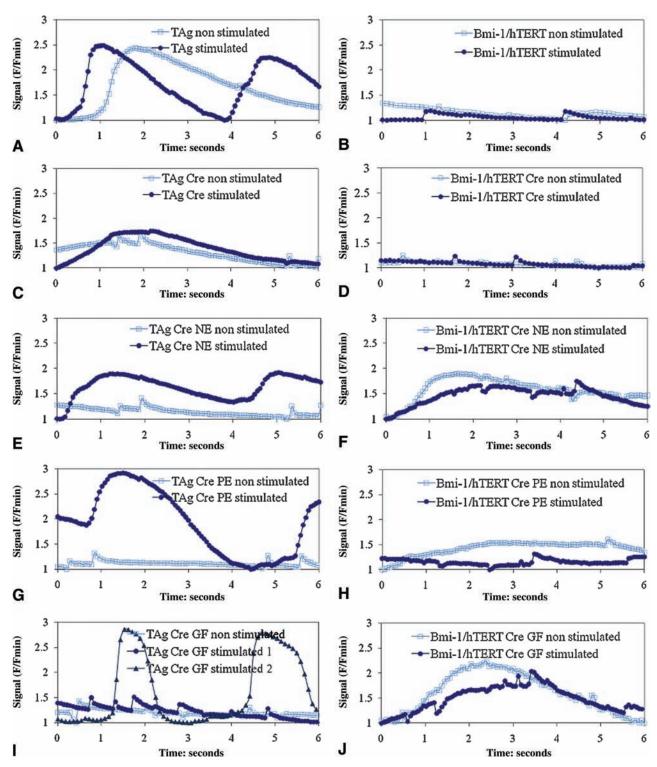


**SUPPLEMENTARY FIG. 1.** Purification and transduction of primary cardiomyocytes. **(A)** FACS data. **(B)** Immuno-fluorescence of primary cardiomyocytes after preplating and BrdU treatment, showing that most cells were troponin<sup>+</sup> (FITC)/vimentin<sup>-</sup> (PE or Texas red). **(C)** Primary cardiomyocytes transduced with lentiviral vector expressing GFP (MOI, 2). Scale bar:  $50 \, \mu \text{m}$ .



**SUPPLEMENTARY FIG. 2.** Proliferation of primary neonatal cardiomyocytes with BrdU or without BrdU treatment ( $100 \,\mu\text{M}$ ). Cell growth kinetics were monitored by measuring total DNA quantification. Cell culture medium was DMEM supplemented with 10% FBS,  $10 \, \text{mM}$  HEPES,  $2 \, \text{mM}$  L-glutamine, and penicillin–streptomycin ( $100 \, \text{U/ml}$ ).



**SUPPLEMENTARY FIG. 3.** Calcium transient in TAg clone 8 and Bmi-1/hTERT clone 4. Spontaneous and paced calcium transient (stimulation: 34.2 V/cm, 0.3 Hz, 100 ms duration; stimulation 2: 34.2 V/cm, 1 Hz, 2 ms duration) in TAg clone 8 before (A) and after Cre expression (C), with NE (E), PE (G) or GF treatment (I). Spontaneous and paced calcium transient (stimulation: 34.2 V/cm, 0.3 Hz, 100 ms duration) in Bmi-1/hTERT clone 4 before (B) and after Cre expression (D), with NE (F), PE (H) or growth factor treatment (J). PE: phenylephrine  $100 \,\mu\text{M}$ ; NE: norepinephrine  $10 \,\mu\text{M}$ ; GF:  $10 \,\text{ng/ml}$  VEGF,  $150 \,\text{ng/ml}$  DKK1.