

Fig S1. Expression of miR-17 enhanced cell survival. (a) Mock control and miR-17 transfected NiH3T3 cells were cultured in serum free medium for 10 days. Typical pictures showed that miR-17 transfected NiH3T3 Cells showed high viability compared with control cells. (b) miR-17 transfected NiH3T3 cells showed enhanced cell survival in cell survival assays. Asterisks indicate significant differences. *, $p < 0.05$, **, $p < 0.01$. Error bars, SD ($n=6$). (c) Mock control and miR-17 transfected BEAS2B cells were cultured in serum free medium for 11 days. Typical pictures showed that miR-17 transfected EBAS2B Cells showed high viability compared with control cells.

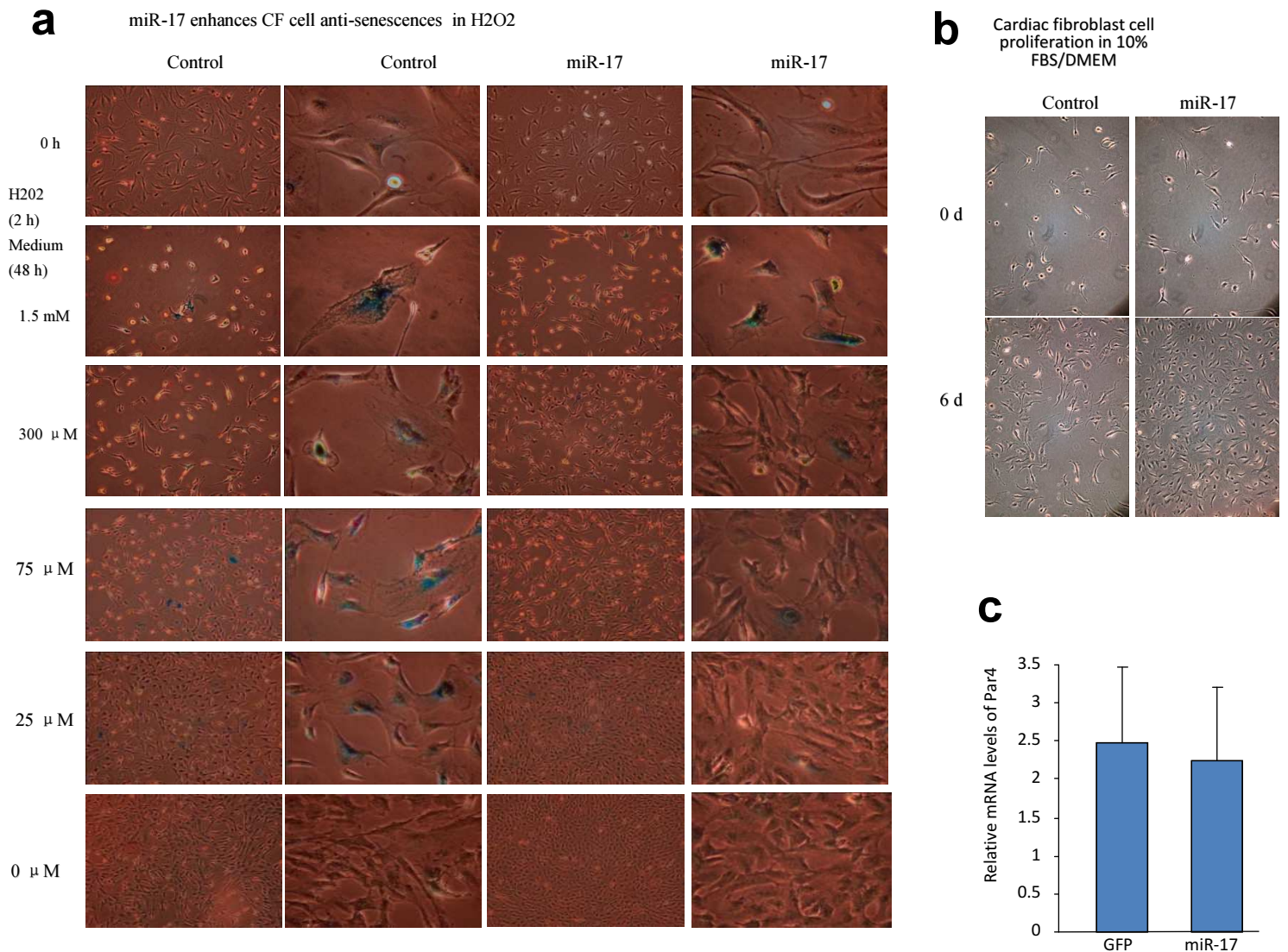


Fig S2. Expression of miR-17 enhanced CF survival, and repressed senescence.

(A) Mock control or miR-17 transfected CFs were treated with indicated concentration of H₂O₂ for 2 hours, and then cultured in basal medium for 48 hours. Cell number were fixed and stained with β-gal. The typical images showed that miR-17 transfected MCFs showed enhanced cell survival and had less β-gal staining.

(B) Mock control or miR-17 transfected MCFs were culture in basal medium for 6 days. Typical images showed that miR-17 transfected CFs showed enhanced cell viability.

(C) Mock control or miR-17 transfected MCFs were subjected to RT-PCR to test the miRNA levels of Par4.

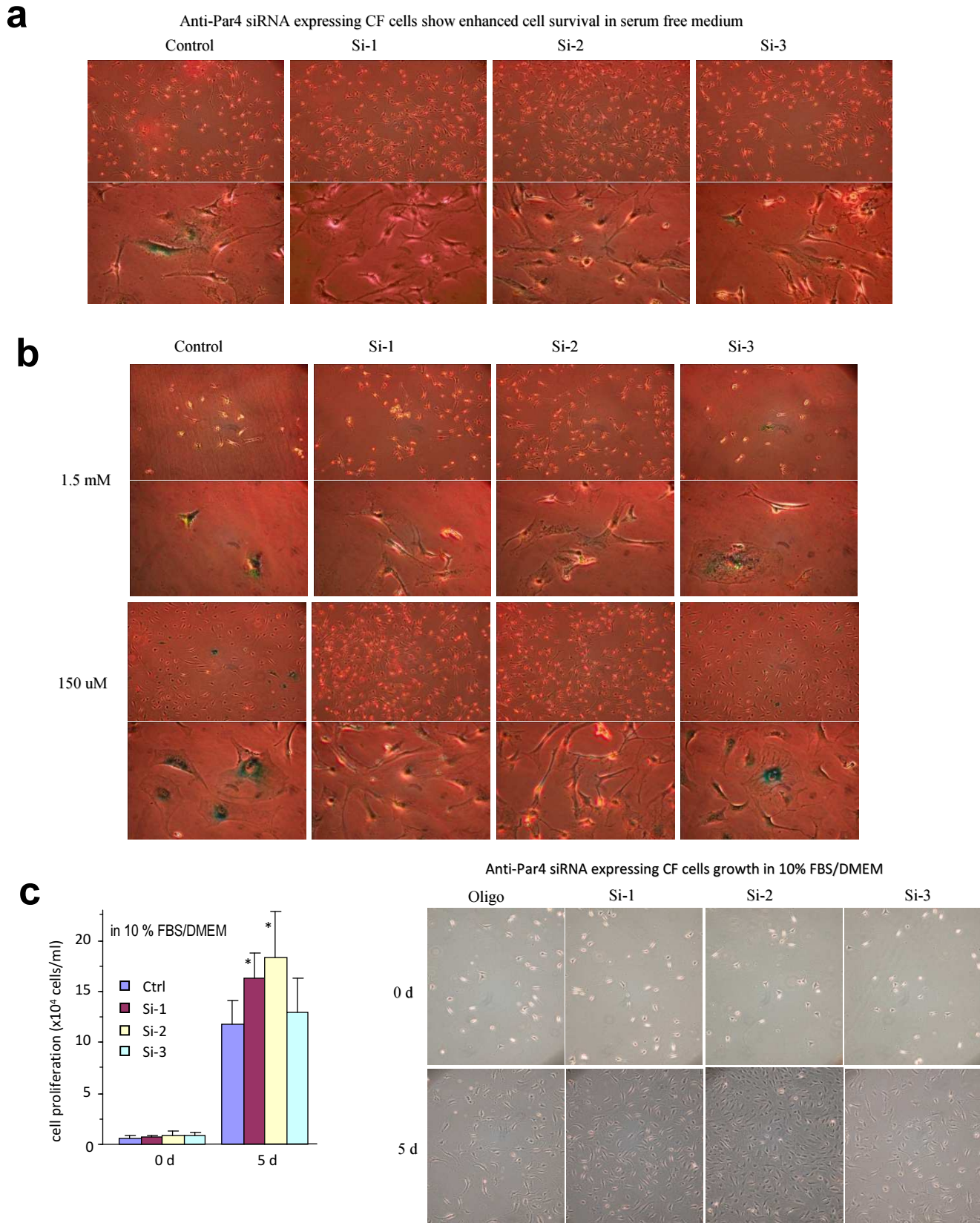


Fig S3. Silencing Par4 enhanced CF survival and proliferation

(A) Control oligos and anti-Par4 siRNA transiently transfected MCFs were cultured in serum free medium for 5 days, fixed and stained with β -gal. The typical images showed that miR-17 transfected CFs showed enhanced cell survival and had less β -gal staining.

(B) Control oligos and anti-Par4 siRNA transiently transfected MCFs were treated with indicated concentration of H_2O_2 for 2 hours, and then cultured in basal medium for 48 hours. Cells were fixed and stained with β -gal. The typical images showed that miR-17 transfected CFs showed enhanced cell survival and had less β -gal staining.

(C) Left, Control oligos and anti-Par4 siRNA transiently transfected MCFs were cultured in indicated concentration of H_2O_2 for 6 hours. Par siRNA transfected MCFs showed enhanced cell viability after treatment. Asterisks indicate significant differences. *, $p < 0.05$, **, $p < 0.01$. Error bars, SD ($n=6$). Right, Typical photos are shown.

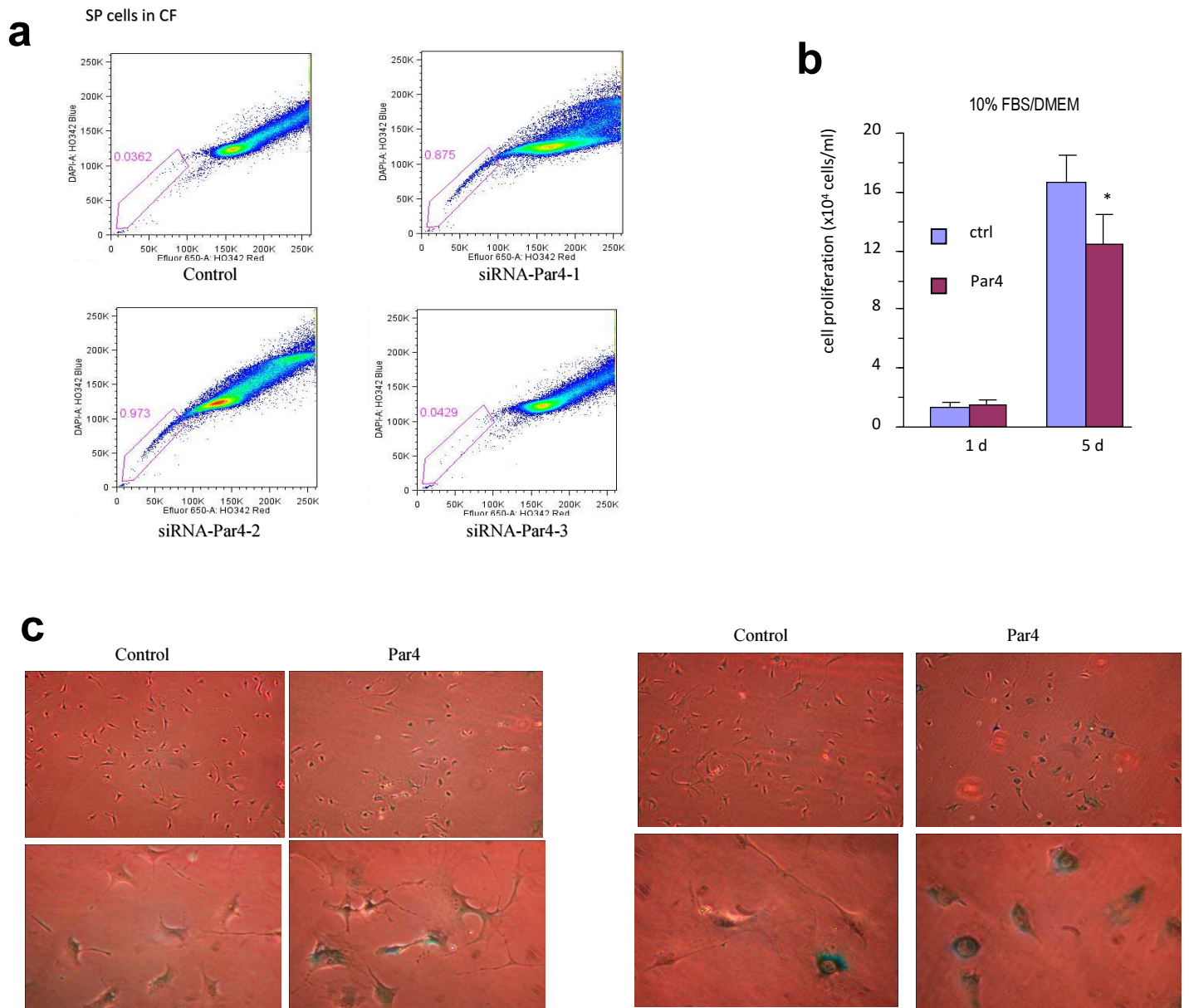


Fig S4. Expression of Par4 repressed CF survival and self-renewal.

(A) Control oligos and anti-Par4 siRNA transiently transfected MCFs were treated with 150 μ M H₂O₂ for 2 hours, and then cultured in basal medium for 48 hours. The number of β -gal stained CFs were counted and quantified. Par4 siRNA transfected MCFs showed less β -gal staining. Asterisks indicate significant differences. **, $p < 0.01$. Error bars, SD ($n = 6$).

(B) The cells were culture in basal medium for 6 days. Par4 transfected miR-17 CFs showed repressed viability. *, $p < 0.05$. Error bars, SD ($n = 6$).

(C) Left, Control vector and Par4 transfected miR-17 MCFs were cultured in serum free medium for 5 days, fixed and stained with β -gal. The typical images showed that Par4 transfected miR-17 CFs showed decreased cell survival and had more β -gal staining. Right, Control vector and Par4 transfected miR-17 MCFs were cultured in 150 μ M H₂O₂ for 2 hours, and cultured in basal medium for 48 hours. The typical images showed that Par4 transfected miR-17 CFs showed decreased cell survival and had more β -gal staining.