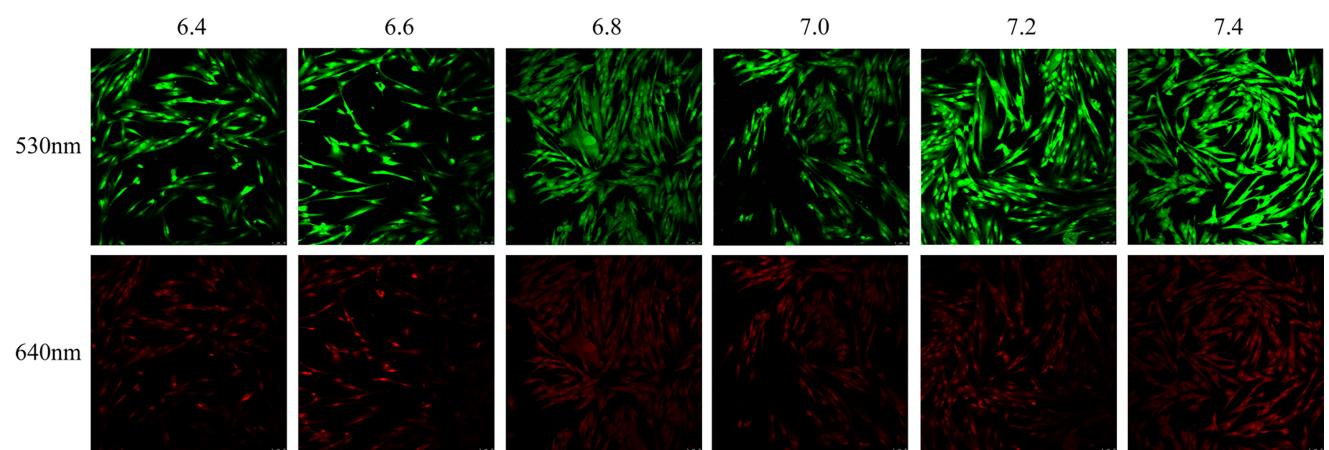
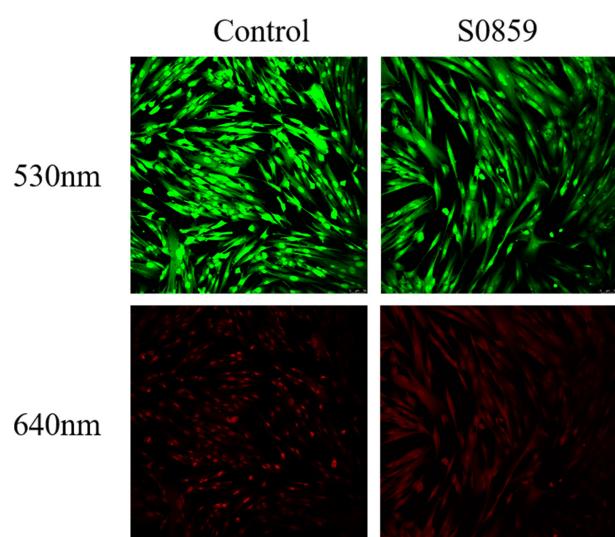


**Table S1.** Primers sequences used in real-time polymerase chain reaction

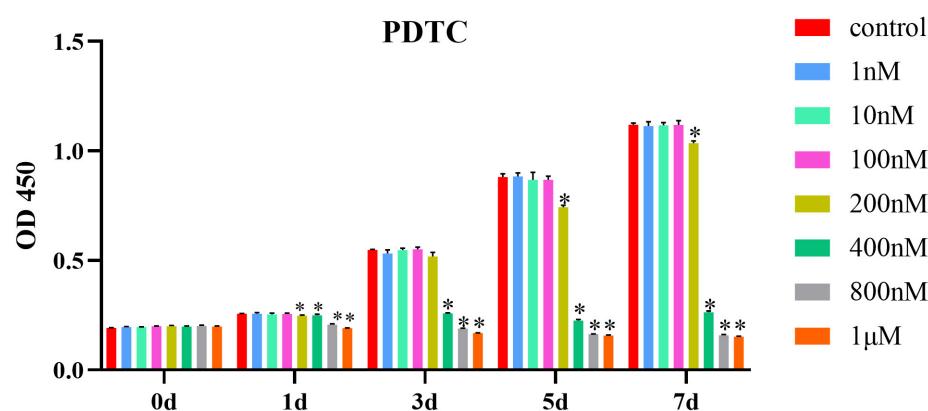
Genens	Forward primer	Reverse primer	bp
DMP-1	CAGGAAGAGGTGGTGAGTGAGT	TGGATTCGCTGTCTGCTTGCT	160
DSPP	GGAGCCACAAACAGAAGCAACA	TGGACAACAGCGACATCCTCAT	101
GAPDH	CCAGAACATCATCCCTGCCCT	GACGCCTGCTTCACCACCTT	189
OCN	CCGCAGCTCCAACCACAAT	GCCAGCCTCCAGCACTGTTA	170
OPN	TGCTACAGACGAGGACATCACC	TCTGGACTGCTTGTGGCTGTG	184
RUNX2	TCCAGACCAGCAGCACTCCATA	TCCATCAGCGTCAACACCATCA	185



**Fig. S1.** Different fluorescence intensity at 530 nm and 640 nm under intracellular pH conditions.



**Fig. S2.** After cultured with S0859, fluorescence pictures at 530 nm and 640 nm were collected by laser confocal microscope.



**Fig. S3.** Effect of PDTC (an inhibitor of NF- $\kappa$ B pathway) on the proliferation of DPSCs in 0, 1, 3, 5 and 7 days. The concentration of 1 nM and 100 nM did not affect cell proliferation. In comparison, 200 nM and 400 nM significantly inhibited cell proliferation, and the concentration of PDTC at 800 nM and 1  $\mu$ M could induce cell apoptosis. 100 nM PDTC was chosen for subsequent experiments ( $n=3$ , \* $p<0.05$ ).