



Supplemental Figure 1 Differentiation ability and characteristic surface markers of bone marrow mesenchymal stem cells were identified. A: Differentiation osteogenesis ability of BMSCs was detected by Alizarin Red staining ($\times 200$). **B:** Differentiation adipogenesis ability was detected by Oil red O staining ($\times 200$). **C:** Alcian Blue staining detected differentiation chondrogenesis ability. Scale bar: 200 μm . **D:** Flow cytometry confirmed that BMSCs were positive for CD44 and negative for CD45. BMSCs: bone marrow mesenchymal stem cells.

Supplemental Table 1 Primers used in RT-qPCR.

Gene	Primer	Sequence (5'-3')
Caspase-3	Forward	AGT CTG ACT GGA AAG CCG AA
	Reverse	CGG GAT CTG TTT CTT TGC AT
Bcl-2	Forward	GCTGAGGCAGAAAGGGTTATG
	Reverse	GCCCCCTTGAAAAAGTTCAT
Bax	Forward	AGGGTTTCATCCAGGATCGAGCAG
	Reverse	ATCTTCTTCCAGATGGTGAGCGAG
IL-1 β	Forward	CCA CCT CCA GGG ACA GGA TA
	Reverse	AAC ACG CAG GAC AGG TAC AG
TNF- α	Forward	CTC CCA GAA AAG CAA GCA AC
	Reverse	CGA GCA GGA ATG AGA AGA GG
GAPDH	Forward	CCA TCT TCC AGG AGC GAG ATC
	Reverse	GCC TTC TCC ATG GTG GTG AA

The caspase-3 ^[21], Bcl-2 ^[22], Bax ^[22], IL-1 β ^[23], TNF- α ^[23] and GAPDH ^[24] primers were used as described. Bcl-2, B-cell lymphoma 2; Bax, BCL2-Associated X; IL- β , Interleukin-1 β ; TNF- α , tumor necrosis factor- α .