

Osteopromotive Carbon Dots Promote Bone Regeneration Through PERK-eIF2 α -ATF4 Pathway

Author names

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Supplementary data

Table S1

Primers used for qPCR.

Genes	Primers
PERK	F 5'-CATCA GCACT TTAGA TGGAC GAA-3' R 5'-GATGA AACCA AGGAA CCAGA CC-3'
BIP	F 5'- GAACA CTGTG GTACC CACCA AGAA-3' R 5'- TCCAG TCAGA TCAAA TGTAC CCAGA-3'
ATF4	F 5'- GAAGA GGTCC GTAAG GCAAG G-3' R 5'- CAGCA AACAC AGCAA CACAA GA-3'
BSP	F 5'- GAACA CTGTG GTACC CACCA AGAA-3' R 5'- TCCAG TCAGA TCAAA TGTAC CCAGA-3'
OCN	F 5'- GTGCA GAGGA AACCG AAGAG-3' R 5'- TCATT GCTGC ACACC TTCTC-3'
IP3R1	F 5'- ATCAAGTGCAACTCCCTGCTC-3' R 5'- TCTCCTTCATTTCCACCTCTGTATC-3'
IP3R2	F 5'- AGTCACAGTTCCCGCTGAATGATA-3' R 5'- CTCTTGAGATGCAGAATGGAGCAC-3'
IP3R3	F 5'- CTCCTGTTCTTCTTCATCGTCATC-3' R 5'- TCCTCCTTCTTCTGCTTCTCACTAC-3'

β -actin	F 5'- CATCC GTAAA GACCT CTATG CCAAC-3' R 5'- ATGGA GCCAC CGATC CACA-3'
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Table S2

Antibodies used for western blotting and Immunofluorescence.

Name	Description	Manufacturer
Anti-PERK	Mouse monoclonal, 140 kDa	Abcam (ab181499)
Anti-eIF2 α	Mouse monoclonal, 65 kDa	CST (#5324S)
Anti-phospho-eIF2 α	Mouse monoclonal, 38 kDa	CST (#3398P)
Anti-ATF4	Mouse monoclonal, 38 kDa	Abcam (ab216839)
Anti-OCN	Mouse monoclonal, 12 kDa	Abcam (ab13420)
Anti-BSP	Mouse polyclonal, 35 kDa	Abcam (ab52128)
Anti-GAPDH	Mouse monoclonal, 36 kDa	Abcam (ab8245)