Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary material

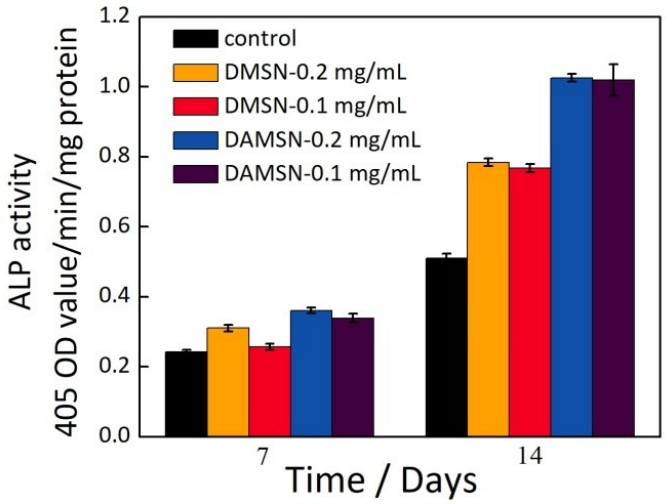

Figure. S-1 The ALP activity of DAMSN and DMSN at concentrations of 0.1 mg / mL and 0.2 mg / mL on BMSC cells

The BMSC cells were seeded in two 96-well plates with a density of 8×10^3 cells per well. The cells were co-cultured with DAMSM and DMSN under 5% CO_2 at 37 °C for 7 days and 14 days respectively, using the same method as MTT assays. After that, the cell media was removed and the cells were washed once by PBS. 200 μL of Nonidet P-40 (NP-40) solution was added to each well and the cells were continuously incubated at 37 °C for 1 h in a constant-temperature shaking chamber to realize cell lysis. Then 2 μL of the cell lysate was pipetted respectively into a new 96-well plate, to which 10 μL of PBS and 200 μL of BCA reagent were added and continuously incubated at 37 °C for 30 min. The value of optical density (OD) was measured at 562 nm by ultraviolet-visible (UV-vis) spectrophotometry to obtain the concentration of protein. Then 100 μL of 2.5% PNPP-Na ALP substrate chromogenic solution was added to each well and incubated at 37 °C for 1 h. Finally 100 μL of 0.1 M NaOH solution was added to each well to terminate the reaction and the value of OD was measured at a wavelength of 405 nm using an enzyme-linked immune detector.