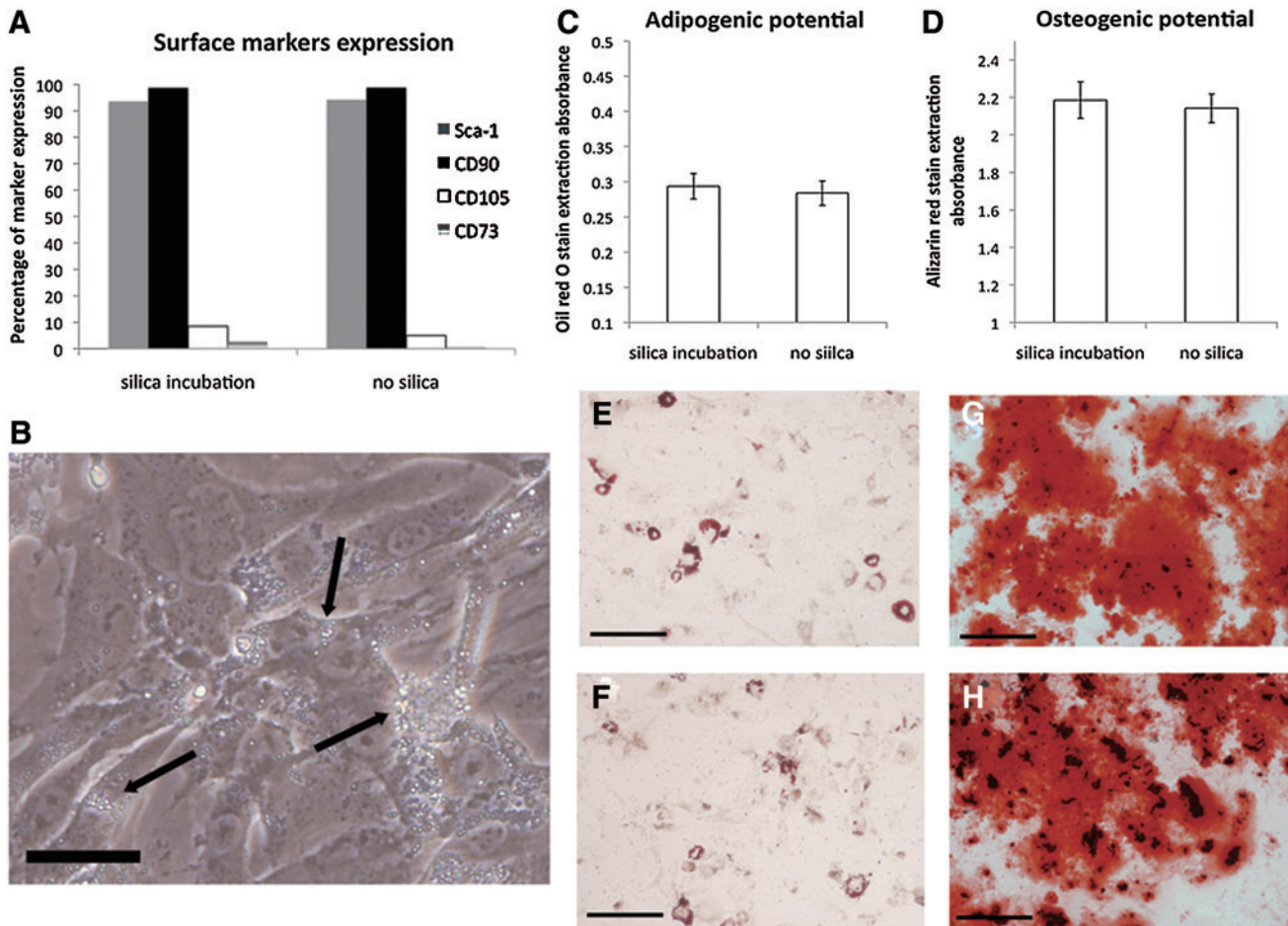


Supplementary Data



SUPPLEMENTARY FIG. S1. Minimal influence of silica microbeads incubation on BMSCs' surface markers expression and differentiation abilities. Passage 7 NS-BMSCs were incubated overnight with 100 $\mu\text{g}/\text{mL}$ silica microbeads. Surface markers expression and differentiation potentials were tested after overnight incubation. **(A)** Comparison of surface markers expression between silica incubation group and control group. **(B)** BMSCs engulfing silica microbeads after incubation (*black arrows*). **(C)** Comparison of oil red O stain extraction absorbance of silica incubation group and nonincubation control group after 7 days' adipogenic differentiation. **(D)** Comparison of alizarin red stain extraction absorbance of silica incubation group and control group after 3 weeks' osteogenic differentiation. **(E, F)** Oil red O staining of 7 days' differentiated BMSCs with **(F)** or without **(E)** silica microbeads incubation. **(G, H)** Alizarin red staining of 3 weeks' differentiated BMSCs with **(H)** or without **(G)** silica microbeads incubation. Scale bars: **(B)**=50 μm ; **(E-H)**=500 μm . BMSCs, bone marrow stromal cells.