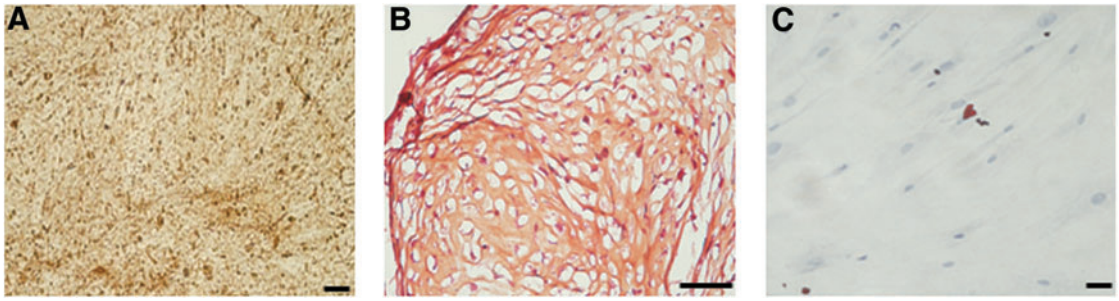


**SUPPLEMENTARY FIG. S1.** Multilineage differentiation potential of human umbilical cord blood (hUCB)-MSCs. hUCB-MSCs were differentiated under specific culture conditions. **(A)** For osteogenic induction, cells were treated with β-glycerophosphate (10 mM), dexamethasone (0.1 μM), and L-ascorbate 2-phosphate (50 μM) for 14 days and then stained with von Kossa. **(B)** For chondrogenic differentiation, cells were cultured in a pellet in the presence of transforming growth factor-beta-β3 (10 ng/mL), 100 nM dexamethasone, 50 mg/mL ITS+Premix, 500 ng/mL bone morphogenic protein-6, 100 μg/mL sodium pyruvate, 40 μg/mL L-proline, and 50 μg/mL L-ascorbate 2-phosphate for 21 days, and then sulfated proteoglycans were visualized with Safranin-O staining. **(C)** Adipogenic differentiation was induced using dexamethasone (1 μM), 3-isobutyl-1-methylxanthine (0.5 mM), and insulin (10 μg/mL) for 28 days, and the cells were stained with Oil-Red-O staining. Scale bars = 50 μm.