



**Supplementary Fig. 3.** Distribution of stiffness in ADSCs (A) and UCSCs (B). Stiffness was measured separately in the nuclear and cytoplasm regions. Inset shows the atomic force microscopy image of ADSCs as an example of the region selected to measure the stiffness of a cell ( $k_{cell}$ ). The red lines indicate the Gaussian fit to the data. MSCs, mescenchymal stem cells; ADSCs, adipose-derived MSCs; UCSCs, umbilical cord-derived MSCs.