

Supplementary Materials: Mesenchymal Stem Cell Culture on Poly(*N*-isopropylacrylamide) Hydrogel with Repeated Thermo-Stimulation

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LIVE/DEAD Assay

The cytotoxicity of the PNIPAAm gel was evaluated using the LIVE/DEAD Viability/Cytotoxicity Kit (L3224). The PNIPAAm gel was synthesized by mixing poly(NIPAAm-*co*-NAPMAm), pNHS-*octa*-PEG, and RGDS peptides in the presence of hbmMSCs (2.0×10^5 cells/mL) to encapsulate cells. After seven days of culture in a humidified atmosphere with 5.0% CO₂ at 37°C, the encapsulated cells were double-stained with an acetomethoxy derivative of calcein (for live cells) and ethidium homodimer I (for dead cells) according to the general procedure.

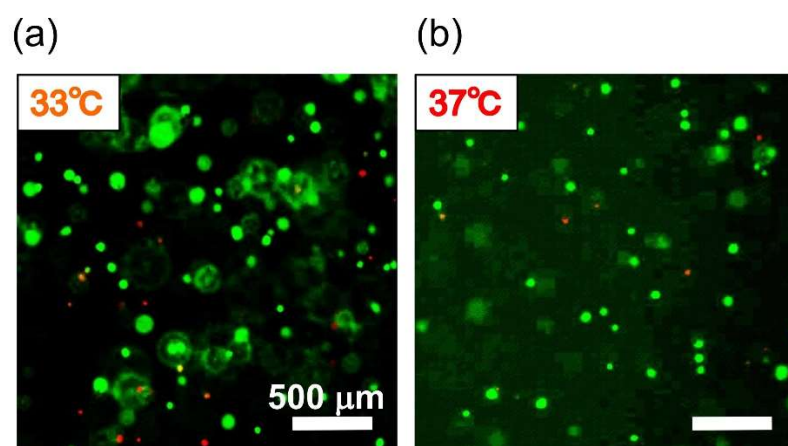


Figure S1. Fluorescence images showing the results of LIVE/DEAD assay for hbmMSCs encapsulated inside the PNIPAAm gel after seven days of culture at (a) 33 °C and (b) 37 °C.

hbmMSC Culture Using Normal Cell Culture Media

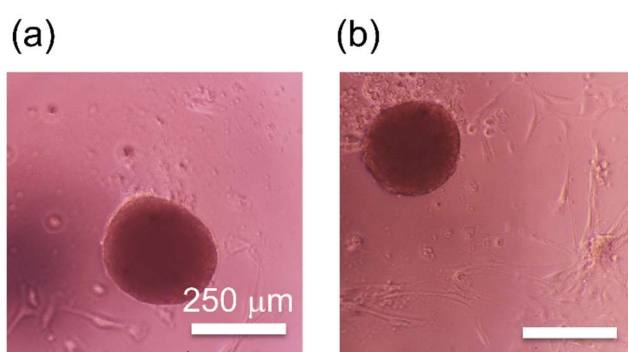


Figure S2. Phase-contrast images of hbmMSCs on the PNIPAAm gel at (a) 33°C and (b) 37°C after four days in culture using MSCBM as cell culture media.

Although the large cell aggregation was observed, all other hbmMSCs showed elongated shapes.