## **Supporting Information**

## Controlled Osteogenic Differentiation of Human Mesenchymal Stem Cells Using Dexamethasone-Loaded Light-Responsive Microgels

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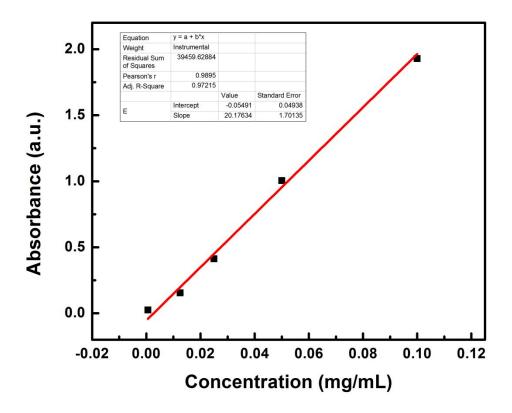


Figure S1. Calibration curve for DEX standard solution by UV-vis spectra

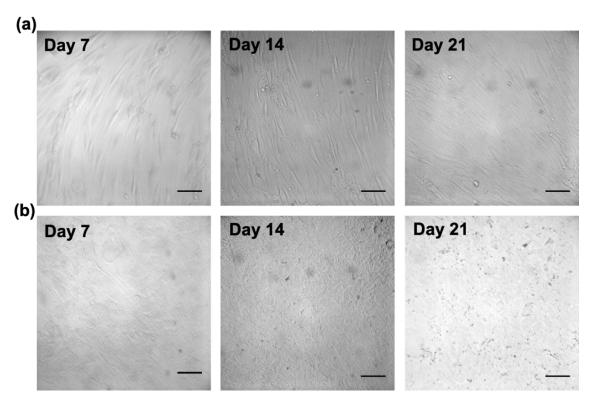


Figure S2. All cell groups were cultured with supernatant from DEX-loaded light-responsive microgels in basal medium (a) without UV-irradiation (b) with UV-irradiation. All of the images were collected using an inverted phase-contrast microscope. (Scale bar = 50 micron)

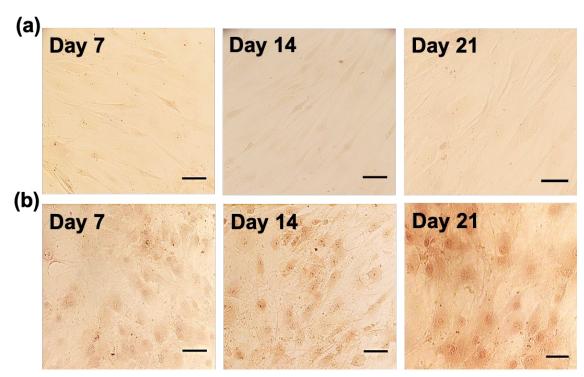


Figure S3. Evaluation of the mineralized extracellular matrix produced by Alizarin Red S staining. All cell groups were cultured with supernatant from DEX-loaded light-responsive microgels in basal medium (a) without UV-irradiation (b) with UV-irradiation. (Scale bar = 50 micron)