

SUPPLEMENTARY FIG. S2. (**A**) IF imaging of human myoblasts (hSKMs) seeded in 2D silk/collagen gels in growth media for 5 days, followed by 3 days of differentiation media, express the muscle-specific cytoskeletal protein desmin (*left*), and show nuclear colocalization of the differentiation factor MyoD, indicating exit from cell cycle. Percentage of Desmin, and MyoD-positive nuclei quantitated through CellProfiler (Broad Institute) on *right* (**B**) IF imaging of hSKMs plated in 2D silk/collagen gels (*left*) and grown in 3D suspended gels (center) with percentage of Desmin+ nuclei (*right*). Scale bars 50 µm. IF, immunofluorescence; hSKM, human skeletal myoblast; 2D, two-dimensional; 3D, three-dimensional.