Supplementary Data for "Modulus-Driven Differentiation of Marrow Stromal Cells in 3D Scaffolds Is Independent of Myosin-based Cytoskeletal Tension" by Parekh and Chatterjee *et al*.

Figure S1

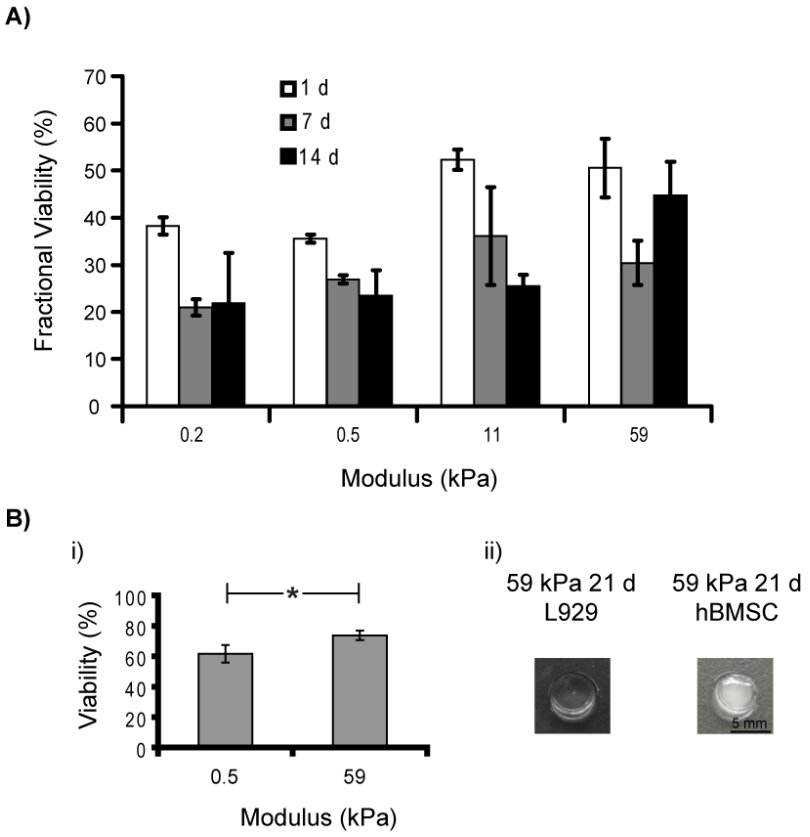

Figure S1. A) Fractional viability of hBMSCs in PEGTM hydrogels as a function of compressive modulus and time. Cell viability was determined by Live/Dead staining (n = 4 per condition)**. B)** i) Viability of L929 murine fibroblasts in both soft (0.5 kPa) and stiff (59 kPa) hydrogels (n = 3). ii) Contrary to hBMSCs, 21 d culture of L929 cells in 59 kPa scaffolds did not lead to mineralization (no white deposits were visible).

Figure S2

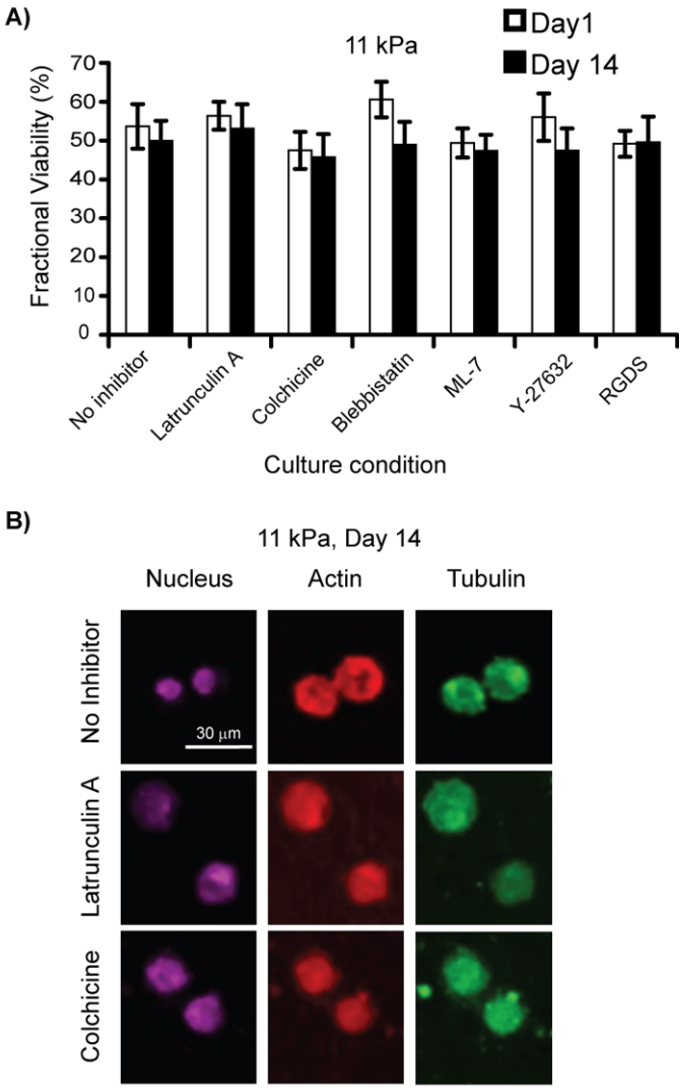

Figure S2. A) hBMSC viability was not affected by treatment with cytoskeletal inhibitors or RGDS peptide (11 kPa gels, n = 4). No significant differences were observed for hBMSCs in scaffolds treated with actin, myosin, and microtubule inhibitors. **B)** Maximum intensity projections of confocal image stacks show that cell morphology in 3D scaffolds was not altered by cytoskeletal inhibition. hBMSCs cultured in both Latrunculin A and colchicine in 11 kPa scaffolds had morphology similar to cells cultured without inhibitors.