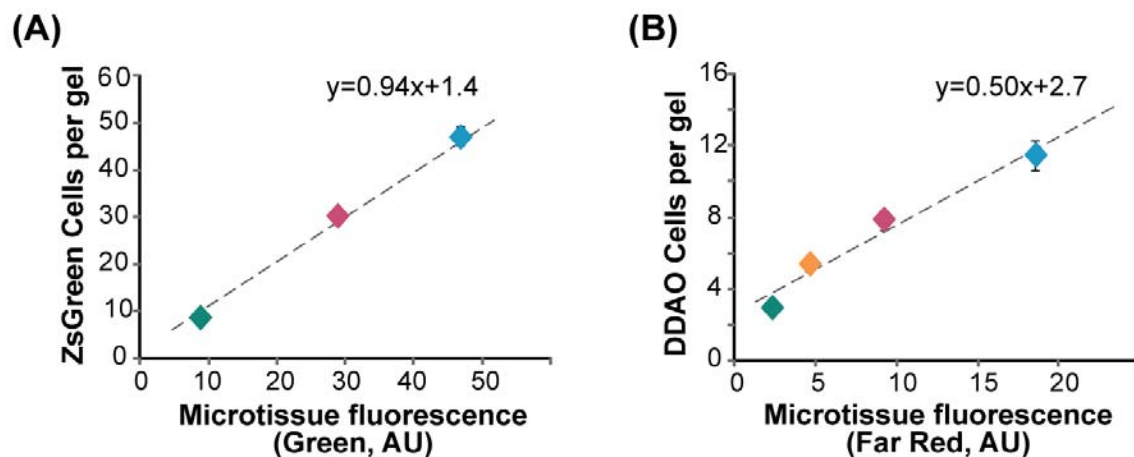
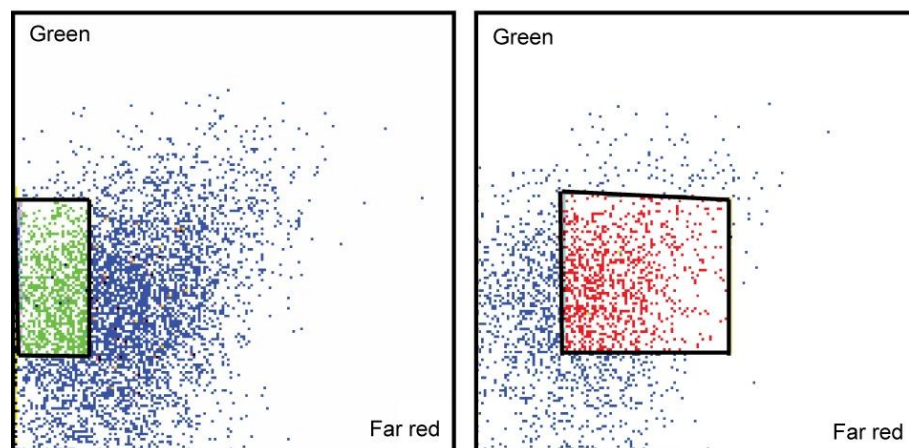


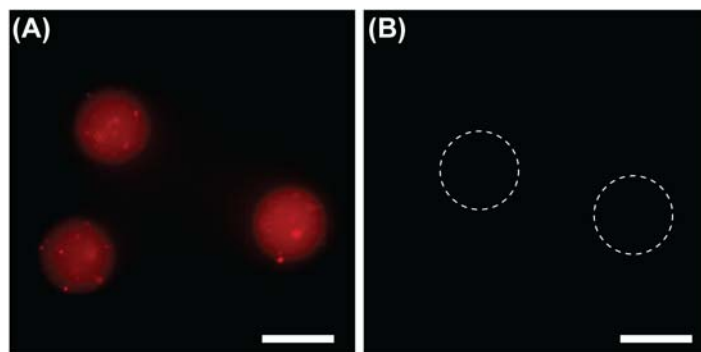
Supplementary Information



Supplemental Figure 1. Correlation of number of (A) ZsGreen expressing 393T5 cells or (B) CellTracker FarRed DDAO-stained J2-3T3 fibroblasts encapsulated per microtissue as quantified by nuclear staining and microscopy, with microtissue fluorescence in the corresponding channel as detected by flow analysis.



Supplemental Figure 2. Flow analysis and sorting of microtissues containing co-encapsulated tumor (393T5) and stromal (J2-3T3) cells, with individual microtissues (blue events) displaying variations in number of each cell type (y-axis = Green 393T5 cell density, x-axis = FarRed J2-3T3 cell density). Low stromal ratio and high stromal ratio populations were defined by gating in both channels, maintaining the same y-axis range in both gates, but shifting the x-axis gate to the left (green events) for lower stromal density, and to the right (red events) for higher stromal density.



Supplemental Figure 3. Epifluorescence microscopy of cell-free microtissues formed from either (A) prepolymer containing 20 μg/ml of Texas Red labeled antibody (rabbit, polyclonal IgG), or (B) control blank PEG prepolymer. Microtissues were washed in PBS for 24 hours post-polymerization. Scale bar = 100 μm.