

Electronic Supplementary Information

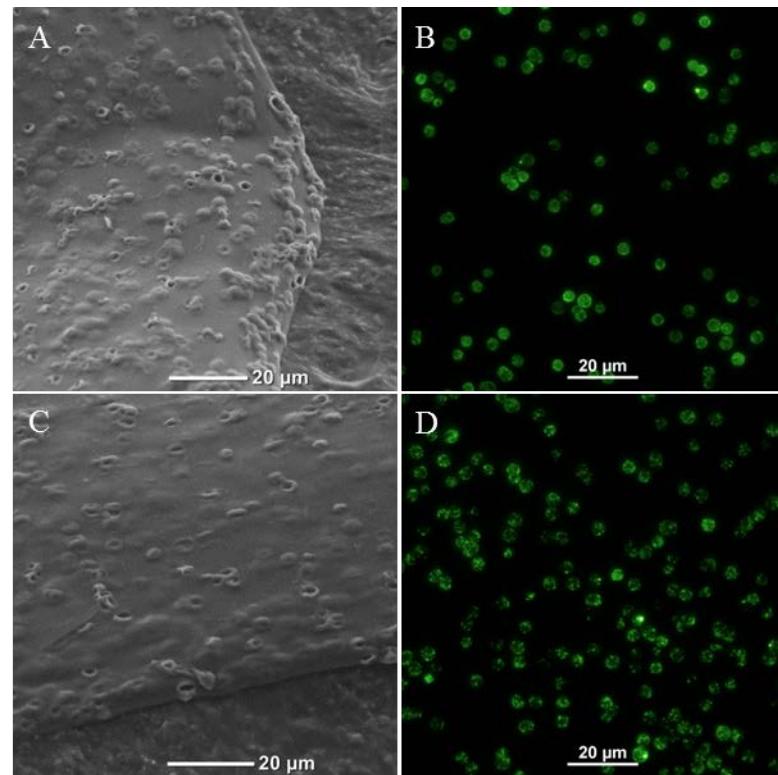


Fig. S1. Electron micrographs (left) and fluorescence micrographs (right) of MPA hydrogels formed with PEM-coated CaCO_3 microspheres containing 100 nm Fluospheres (top) and 200 nm Fluospheres (bottom). Both formulations appear identical in SEM micrographs (A, C), but in MPA hydrogels formed with 200 nm Fluospheres, individual fluorescent particles can be visualized within the micropores (D).

Video S1. See attached file entitled “3D Reconstruction of MPA Hydrogel.avi.” Three-dimensional reconstruction of a MPA hydrogel with micropores containing 100 nm FluoSpheres. Distinct regions of encapsulated material can be visualized throughout the alginate matrix.

Video S2. See attached file entitled “NPs Moving in MPA Hydrogel.avi.” Video of a MPA hydrogel formed with PEM-coated CaCO_3 containing 200 nm Fluospheres. Individual Fluospheres can be visualized moving randomly within the micropores of the material.