Journal of Materials Chemistry B

ARTICLE

Supporting Information

Title:
In situ protein-templated porous protein-hydroxylapatite nanocomposite microspheres for pH-dependent sustained anticancer drug release

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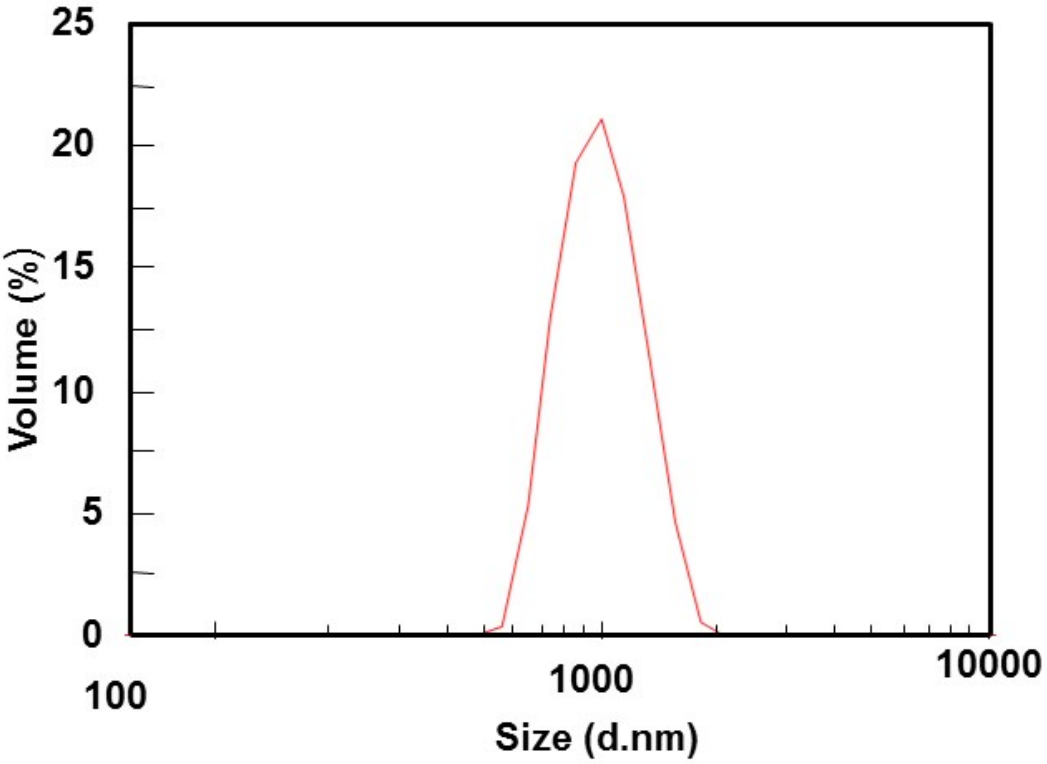

Figure S1. DLS spectra of ASM in water (1mg mL^{-1}).

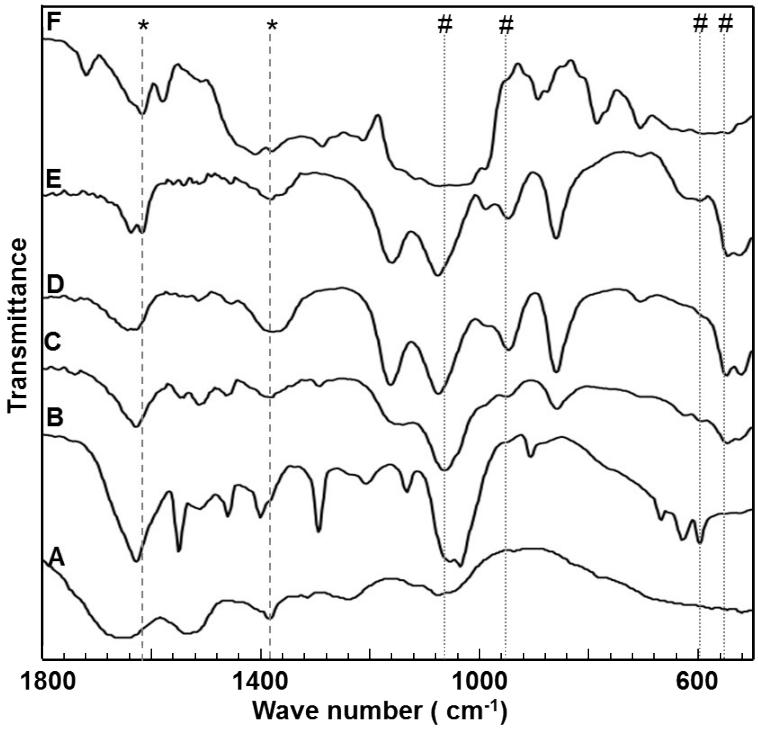

Figure S2. FTIR spectra of (A) AS powder; (B) ASM; (C) ASM: DOX= 20:1; (D) ASM: DOX= 2:1; (E) ASM: DOX= 1:5; (F) DOX powder.

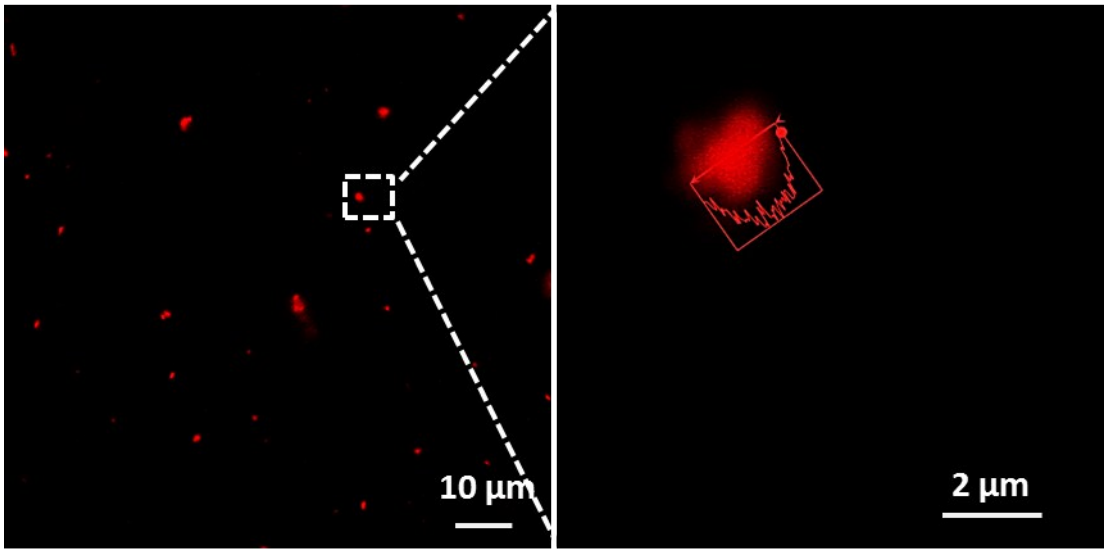

Figure S3. DOX-derived fluorescence signal from DOX@ASM. The red profile on the right image shows the fluorescence intensity change across a particle.

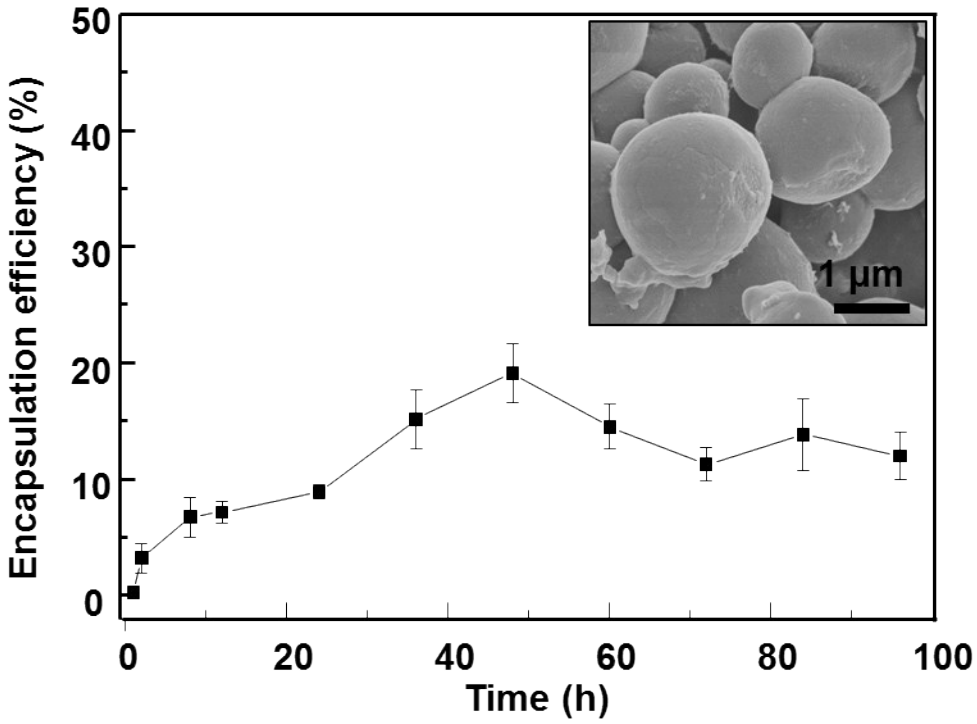

Figure S4. Encapsulation efficiency of silk fibroin microspheres at different adsorption times. The inset is the morphology of silk fibroin microspheres.

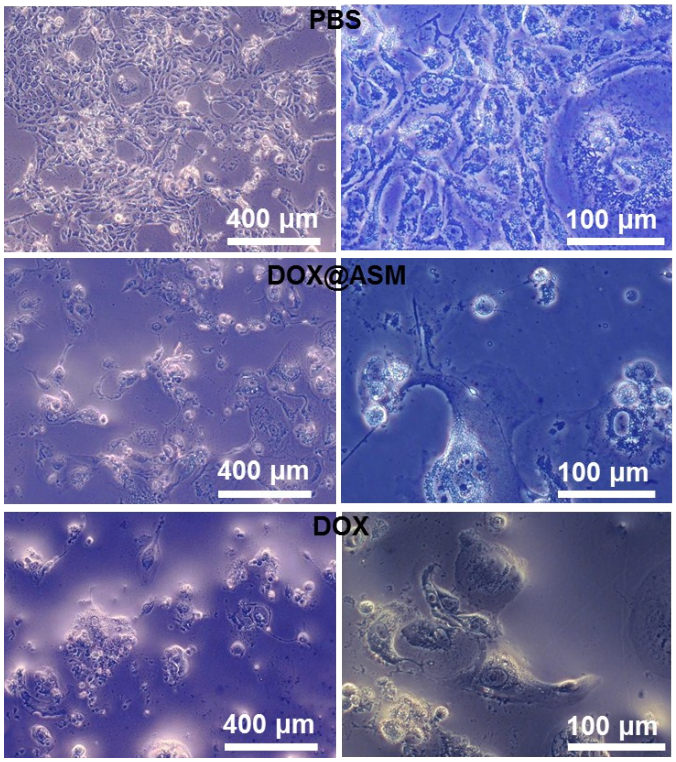

Figure S5. Morphology of Bcap-37 cells incubated with PBS, DOX@ASM and free DOX with a concentration of 20 μg mL^{-1} after 60 h incubation.

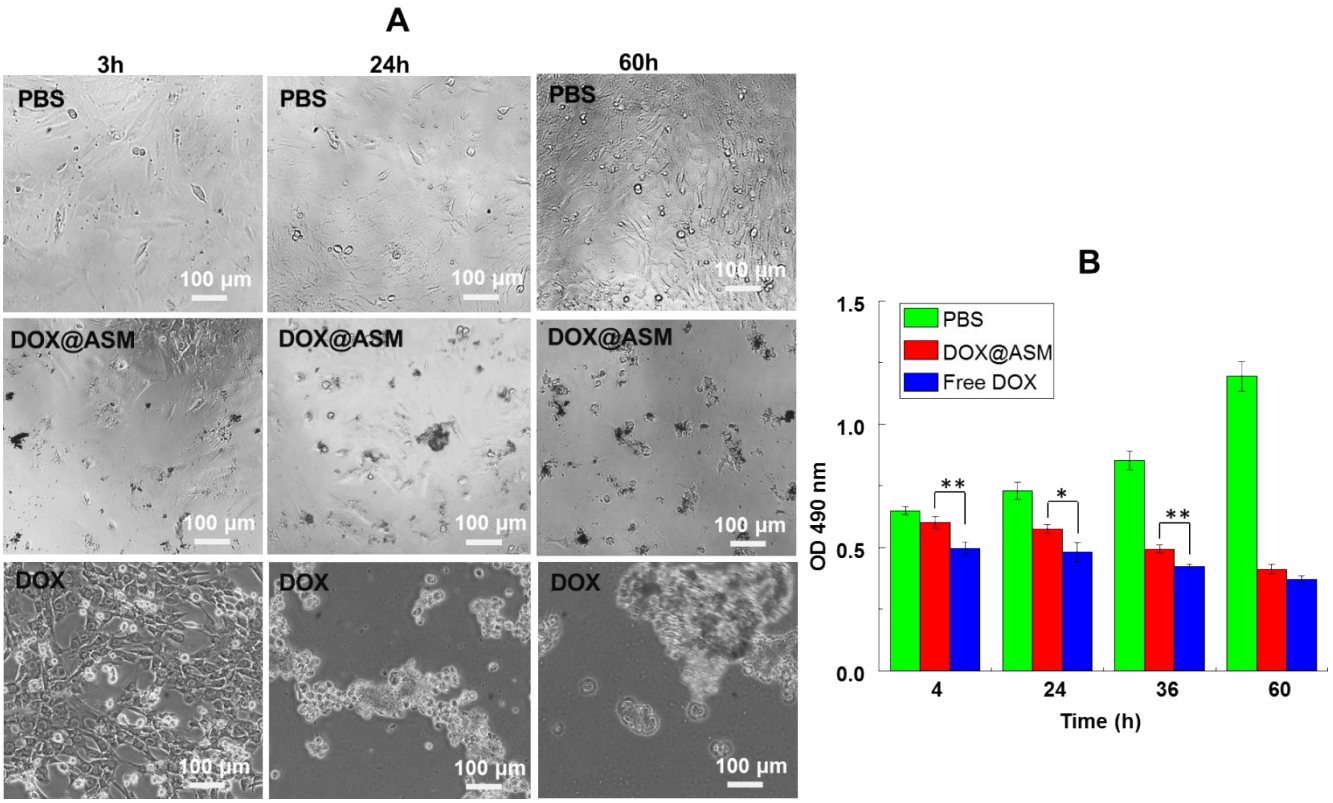

Figure S6. Morphology and cytotoxicity of C2C12 cells after incubation with DOX@ASM. (A) Morphology of C2C12 cells after 12 h incubation with PBS, DOX@ASM (10 μg mL^{-1}) and free DOX (10 μg mL^{-1}) for 3 h, 24 h, and 60 h. (B) The proliferation of C2C12 cells after incubation with PBS, DOX@ASM (10 μg mL^{-1}) and free DOX (10 μg mL^{-1}) was determined using MTS assay. *$p < 0.05$,**, $p < 0.01$.