## **Supplementary Materials**

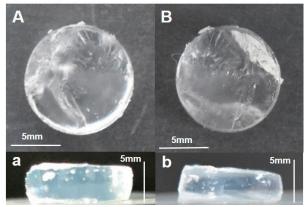
# Fabrication and Evaluation of Silk Sericin-Derived Hydrogel for the Release of the Model Drug Berberine

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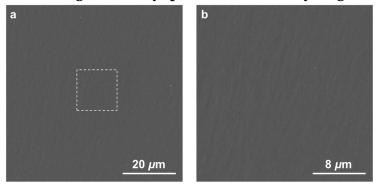
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#### 1. Representative images of PEGDA hydrogel



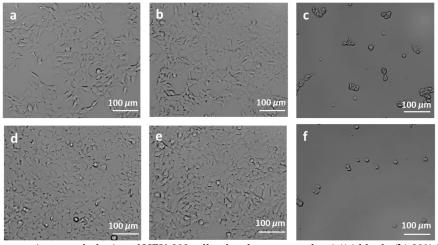
**Figure S1.** PEGDA hydrogel was prepared by mixing PEGDA and diH<sub>2</sub>O in a 1:1 ratio (v/v), then illuminating under a 405 nm LED for 30 minutes. (**A**) and (**B**) are the top view images of the prepared PEGDA hydrogel before and after lyophilization, respectively; (**a**) and (**b**) are the corresponding side view images of (**A**) and (**B**).

#### 2. Representative SEM images of the lyophilized PEGDA hydrogel



**Figure S2.** (a) shows representative SEM images of the lyophilized PEGDA hydrogel; (b) is the zoom-in SEM image of the region marked by a dashed line in (a).

#### 3. Morphologies of HEK-293 cells of each group in the MTT assay on day 1 and day 3



**Figure S3.** Representative morphologies of HEK-293 cells of each group on day 1 ((a) blank, (b) 20% SS/PEGDA, (c) positive control) and day 3 ((d) blank, (e) 20% SS/PEGDA, (f) positive control).

#### 4. Standard calibration curve of berberine in diH2O

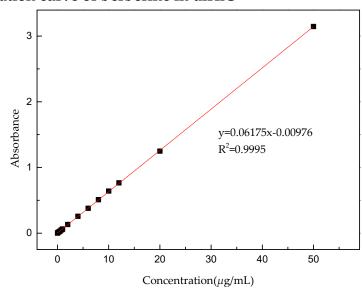
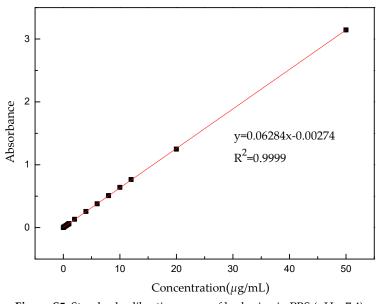


Figure S4. Standard calibration curve of berberine in diH<sub>2</sub>O.

### 5. Standard calibration curve of berberine in PBS



**Figure S5.** Standard calibration curve of berberine in PBS (pH = 7.4).