

**Supporting Information For:**

**Water-Based Synthesis of Cationic Hydrogel Particles: Effect of the Reaction Parameters  
and *in vitro* Cytotoxicity Study**

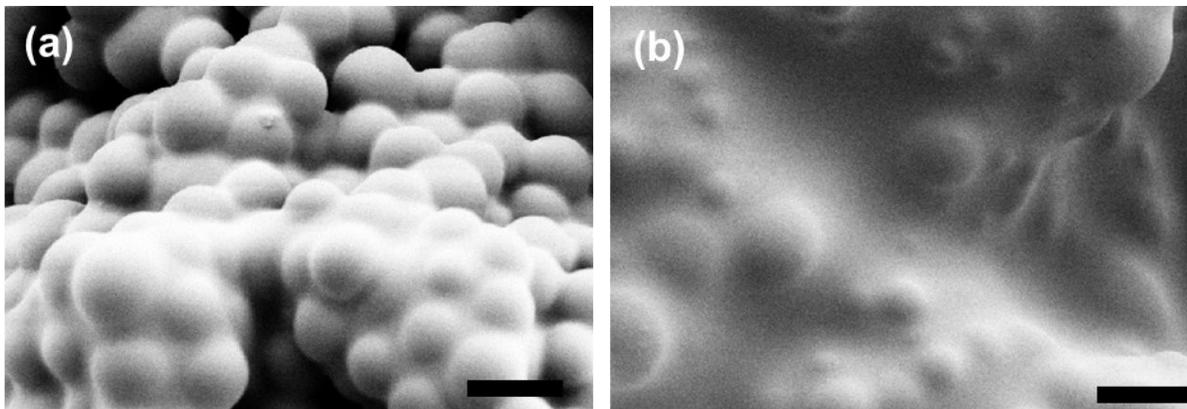
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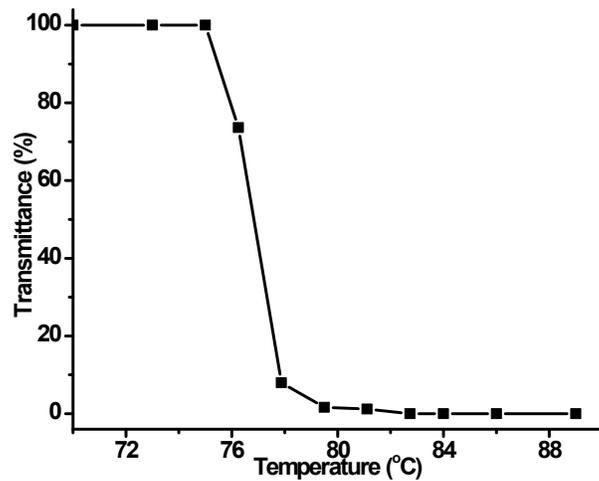
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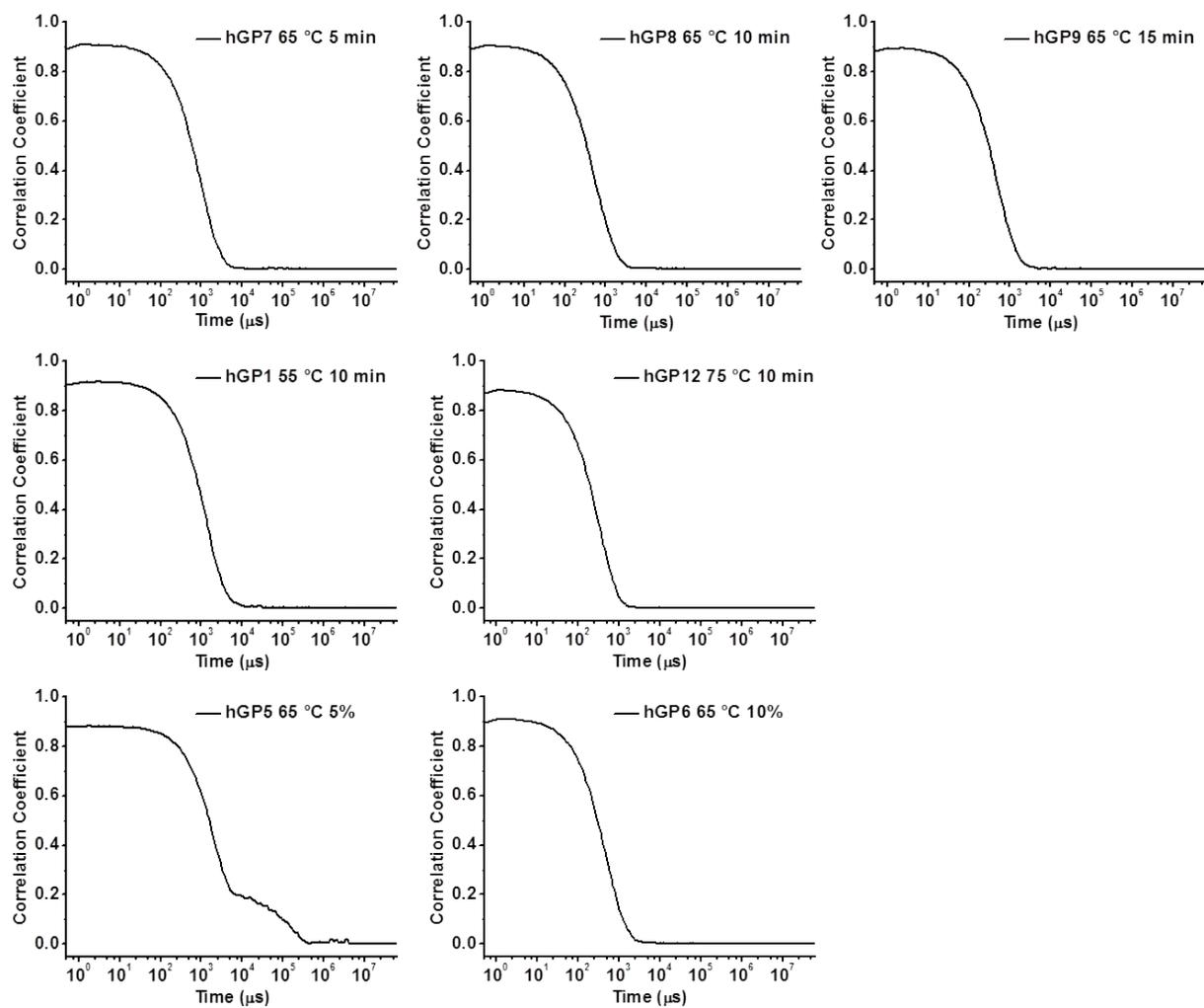
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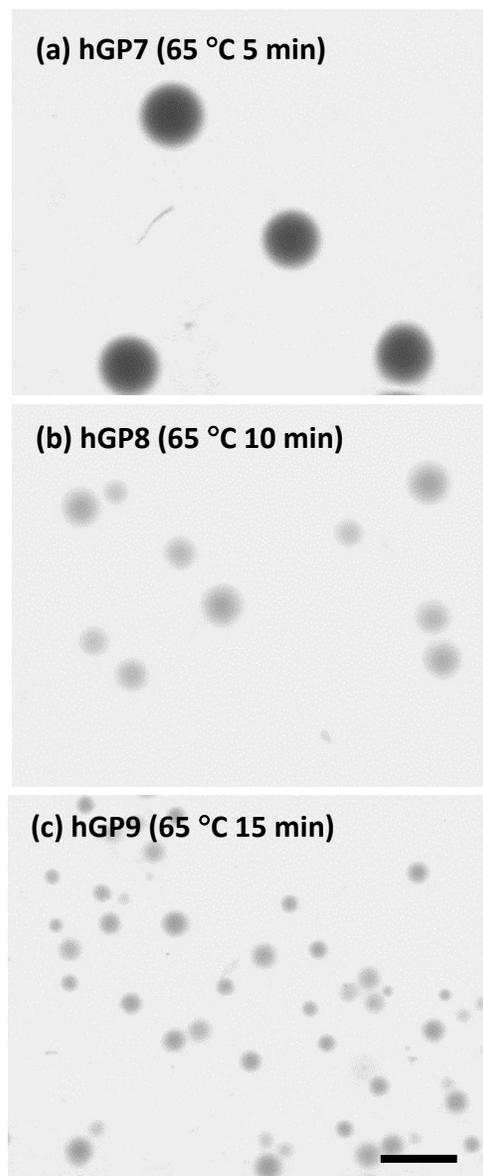
**Figure S1** Scanning electron microscopy images of the reaction products based on amino hydrogen to epoxy stoichiometric molar ratio of (a) 1:1 and (b) 1:2. Scale bar is 10  $\mu\text{m}$ .



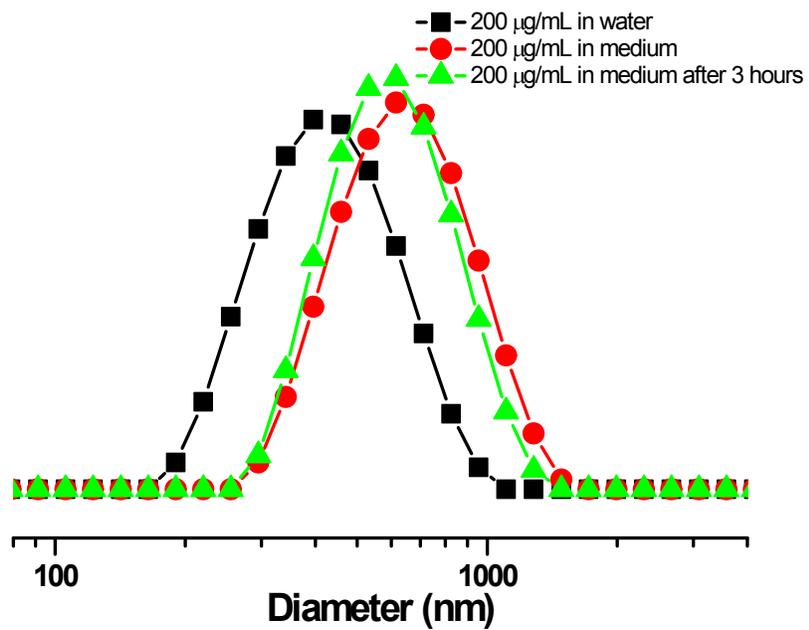
**Figure S2** The phase transition profile of the polyetheramine monomer Jeffamine T-403 at a concentration of 2.5 mg/mL in aqueous solution.



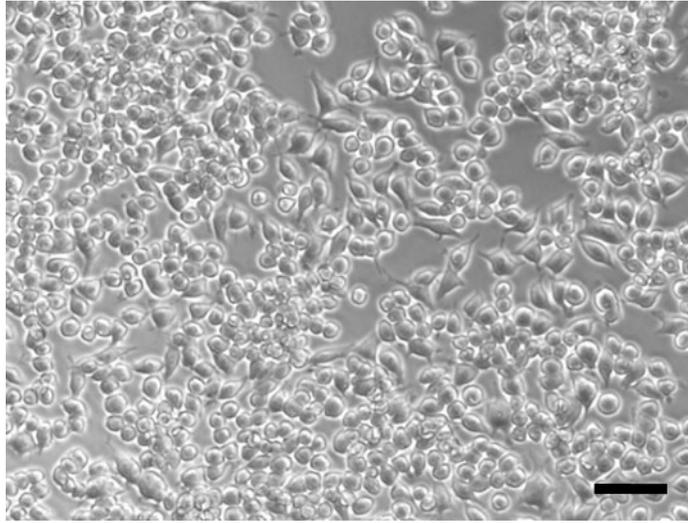
**Figure S3** Intensity correlation functions obtained from dynamic light scattering of hydrogel particles (hGPs) prepared under various reaction conditions.



**Figure S4** Transmission electron microscopy (TEM) images of hGPs prepared from different reaction times. TEM samples were prepared by placing a drop of the hGP solution onto a carbon coated copper grid and air dried. The images were recorded using a Zeiss Auriga. Scale bar is 1  $\mu\text{m}$ .



**Figure S5** The intensity-averaged hydrodynamic size distribution of 200 µg/mL hGPs in water, and in serum-containing cell culture medium before and after 3 h of incubation at 37 °C.



**Figure S6** Morphology of the untreated RAW264.7 macrophages. The phase contrast image was captured at 100 X magnification. Scale bar is 50  $\mu\text{m}$ .