

Supporting Information

**Exploring thermal reversible hydrogels for stem cell expansion in
three-dimension**

Zheyu Shen,^a Jingxiu Bi,^a Bingyang Shi,^a Dzuy Nguyen,^a Cory J Xian,^b Hu Zhang,^{a,*} Sheng Dai^{a,*}

^a School of Chemical Engineering, The University of Adelaide, Adelaide, SA5005, Australia

^b Sansom Institute & School of Pharmacy and Medical Sciences, University of South Australia,
Adelaide, SA 5001, Australia

*Corresponding author.

Tel.: + 61 8 83131015 (S. Dai) or + 61 8 83033810 (H. Zhang)

Fax: + 61 8 83034373 (S. Dai and H. Zhang)

E-mail: s.dai@adelaide.edu.au (S. Dai) or hu.zhang@adelaide.edu.au (H. Zhang)

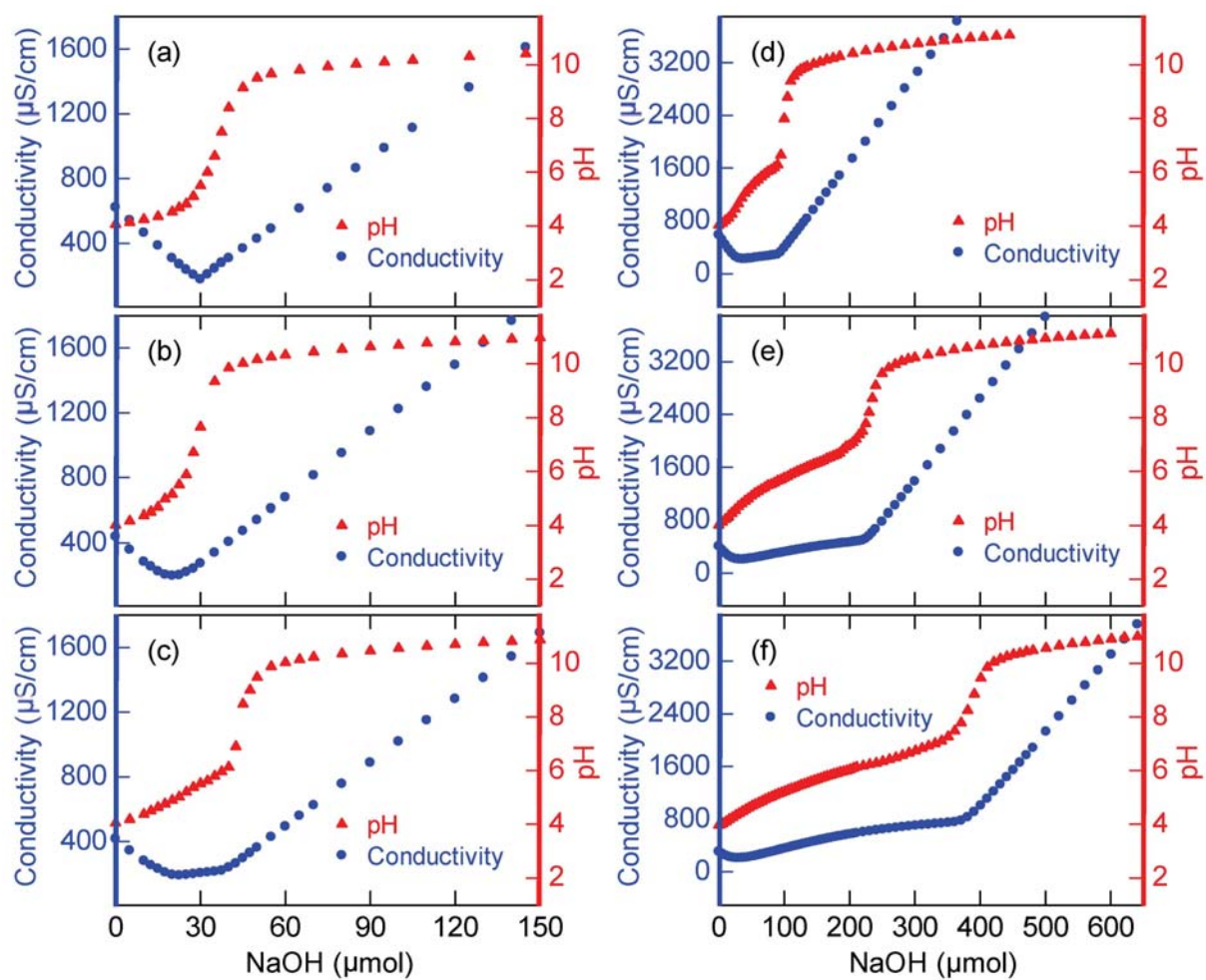


Figure S1. Conductivity and pH back titrations of microgels at room temperature. (a): P(NIPAM); (b): P(NIPAM-AA)1; (c): P(NIPAM-AA)2; (d): P(NIPAM-AA)3; (e): P(NIPAM-AA)4; (f): P(NIPAM-AA)5.

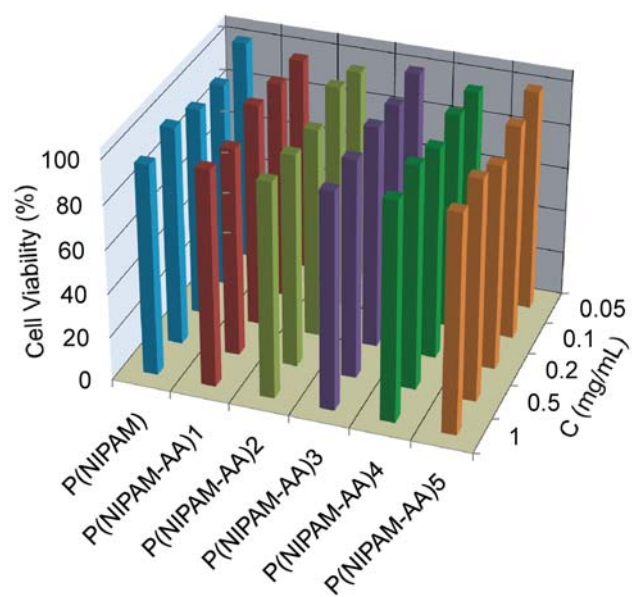


Figure S2. Cytotoxicity of P(NIPAM), P(NIPAM-AA)1-5 microgels at various concentrations in C3H/10T1/2 cells. Incubation time: 48 h.

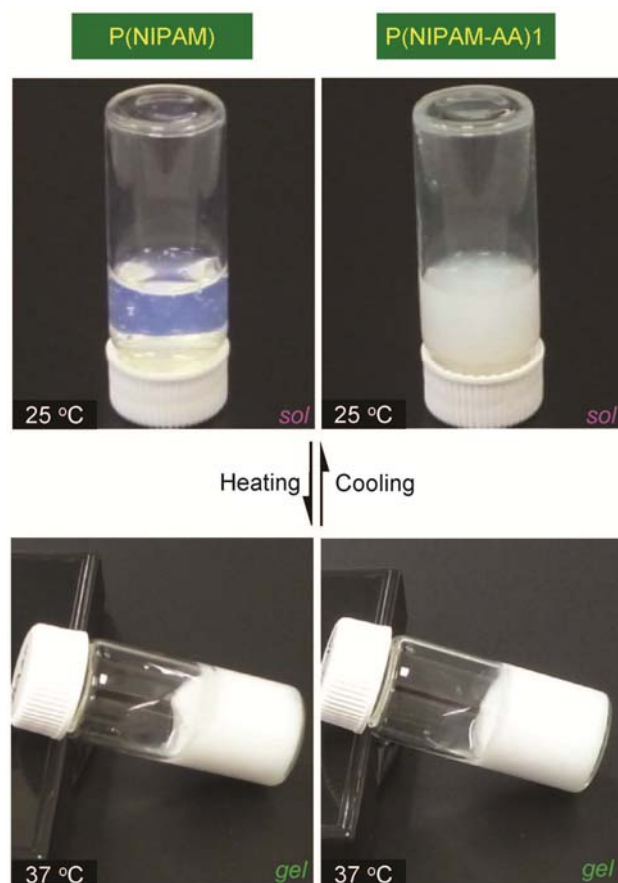


Figure S3. Photographs of 50 mg/mL P(NIPAM) and P(NIPAM-AA)1 microgel dispersions (in physiological saline, pH ~ 7.4) exhibiting the *sol* state at 25 °C and the *gel* state at 37 °C.