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Supporting Information

A thermal responsive cationic nanogel based platform for cell three-dimensional culture and recovery

Zheyu Shen, Amir Mellati, Jingxiu Bi, Hu Zhang* and Sheng Dai*

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

*Corresponding authors.

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

Fax: + 61 8 8313 4373

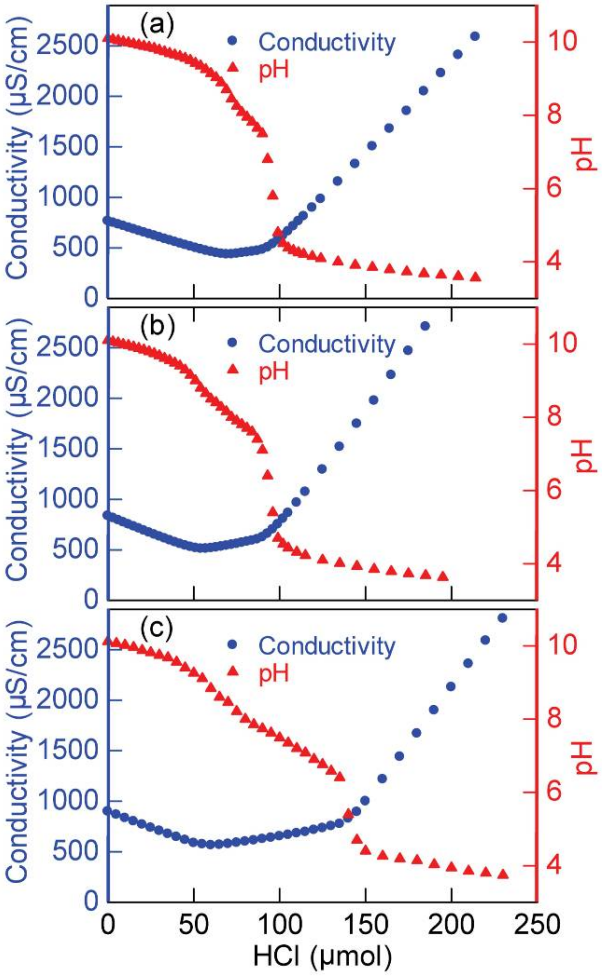

Figure S1. Conductivity and pH titrations of the PNHD nanogels. (a): PNHD1; (b): PNHD2; (c): PNHD3.

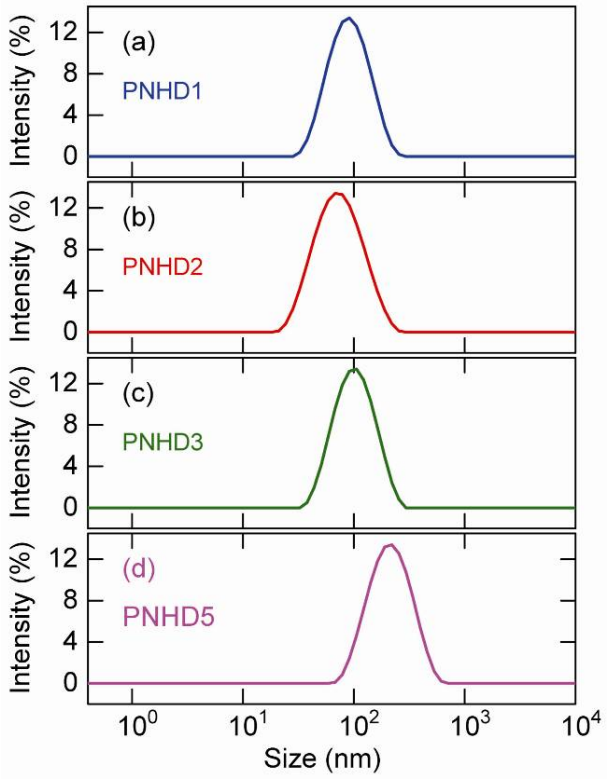

Figure S2. Hydrodynamic size distributions of the PNHD nanogels measured by dynamic light scattering (DLS) in water (C ~ 1.0 mg/mL, pH ~ 7.0) at 25 °C. (a): PNHD1; (b): PNHD2; (c): PNHD3; (d): PNHD5.

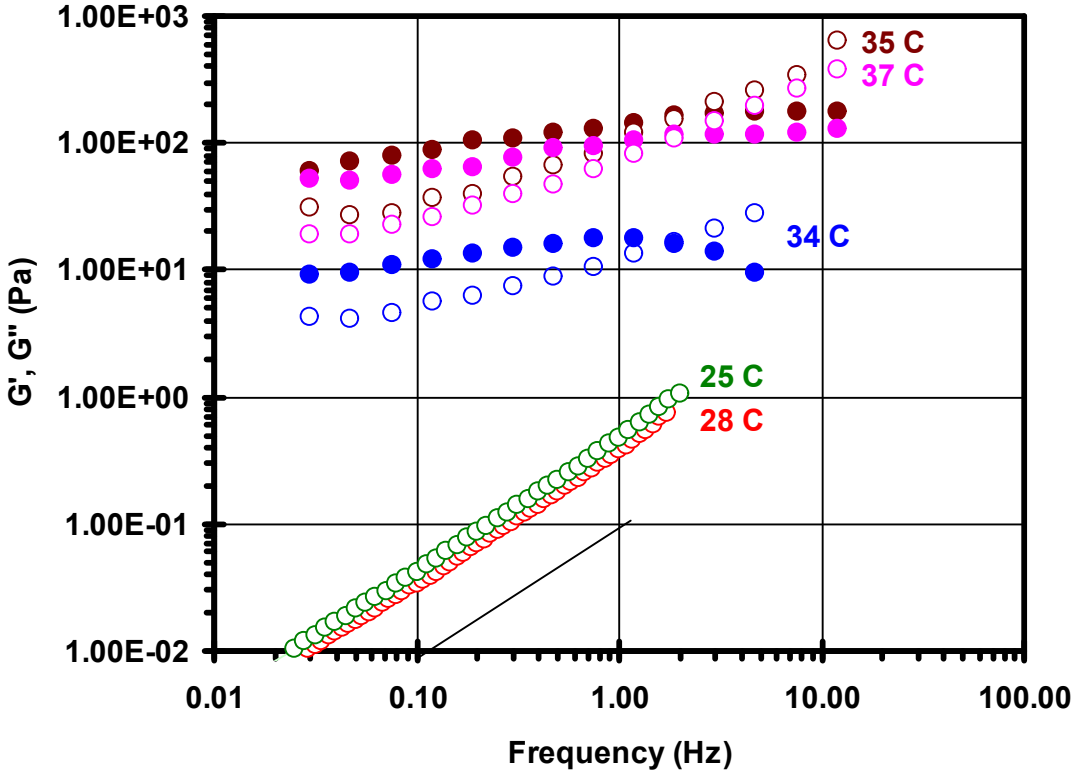

Figure S3. Frequency sweeps of 50 mg/ml PNHD nanogels at different temperatures. The open symbols are G" and closed symbols are G'.

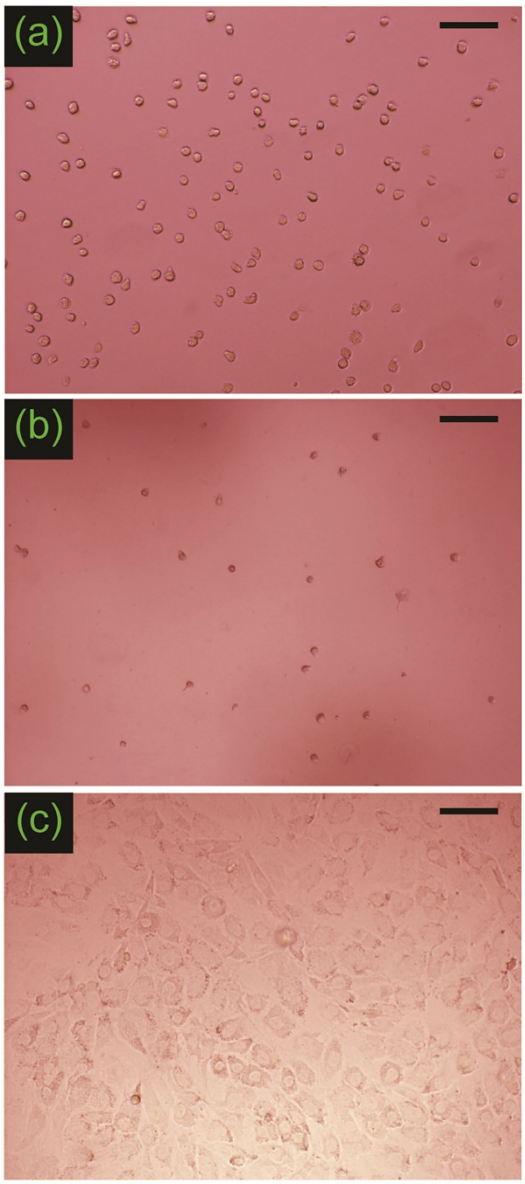

Figure S4. (a): Image of trypsinized adherent C3H/10T1/2 cells as the reference of cell size. (b): Image of C3H/10T1/2 cells cultured in the *in situ* formed PNHD1 hydrogel for 6 days; the cultured cells were recovered from the hydrogels by cooling the culturing system to room temperature. (c): Image of the attached C3H/10T1/2 cells (released from the *in situ* formed PNHD1 hydrogel) to a 2D substrate. Scale bar: 50 μm.