

Supporting information

Thermo-responsive polyion complex of polysulfobetaine and a cationic surfactant in water

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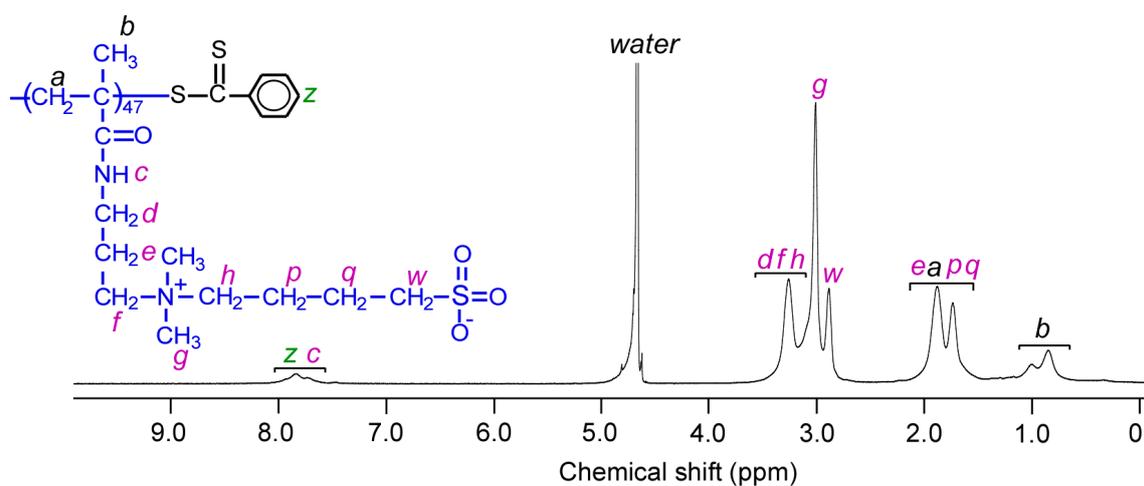


Figure S1. ¹H NMR spectrum of PSBP in D₂O at 25°C.

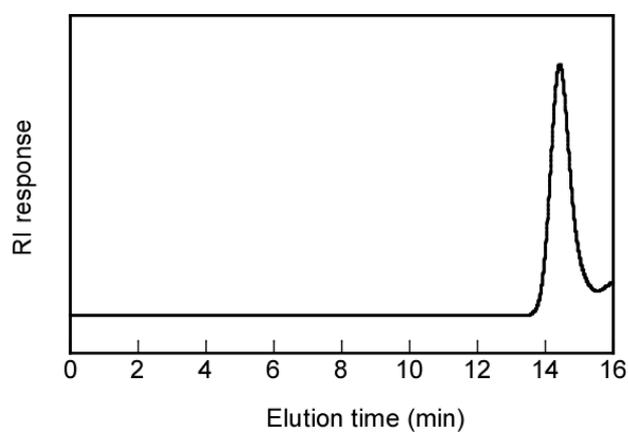


Figure S2. Gel-permeation chromatography (GPC) elution curve of PSBP obtained using a refractive index (RI) detector working at 40°C and phosphate buffer as an eluent.

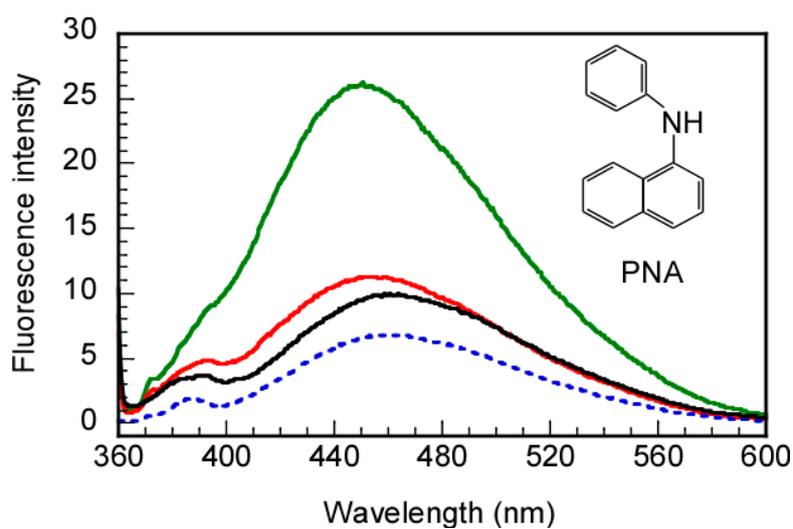


Figure S3. Fluorescence spectra of PNA only (---) and PNA in the presence of PSBP at a concentration of 0.5 g/L (—), CTAB at a concentration of 0.05 g/L (—), and PSBP/CTAB at a concentration of 0.084 g/L (—) in 0.1 M aqueous solutions.

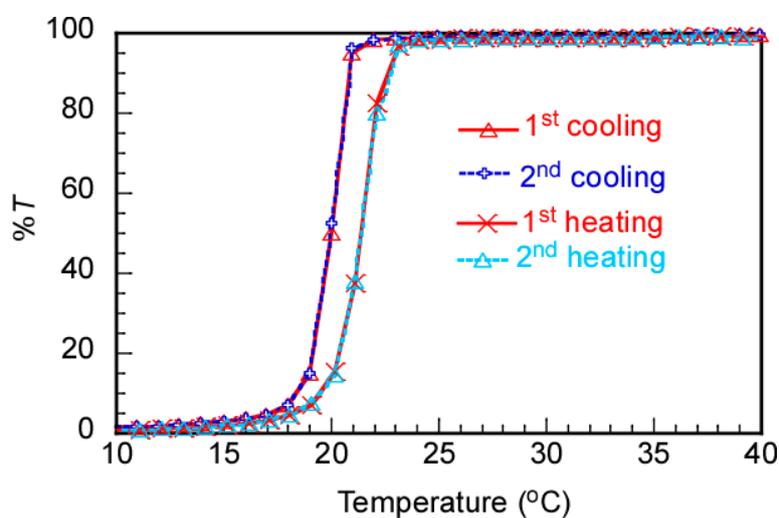


Figure S4. Percent transmittance (% T) of an aqueous PSBP at a concentration of 3.0 g/L as a function of temperature upon heating and cooling processes.

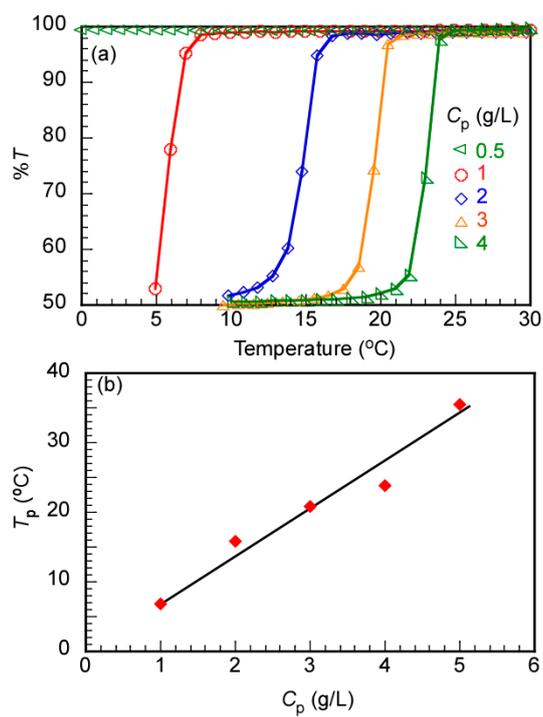


Figure S5. (a) Percent transmittance ($\%T$) of aqueous PSBP solutions as a function of temperature at different polymer concentrations (C_p) and (b) C_p dependence of the phase transition temperature (T_p) of an aqueous PSPB solution.

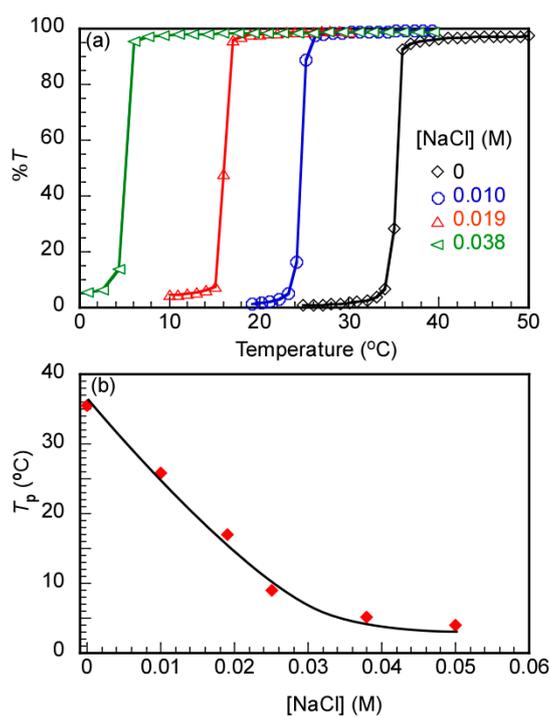


Figure S6. (a) Percent transmittance ($\%T$) of aqueous PSBP solutions as a function of temperature at different NaCl concentration ($[\text{NaCl}]$) and (b) $[\text{NaCl}]$ dependence of the phase transition temperature (T_p) of an aqueous PSPB solution at a concentration of 5.0 g/L.

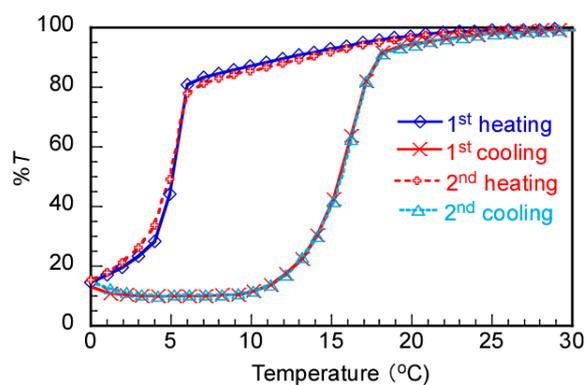


Figure S7. Percent transmittance ($\%T$) of a 0.1 M NaCl aqueous PSBP/CTAB complex solution with a mixing ratio of 0.5 as a function of temperature upon heating and cooling processes at a complex concentration of 0.084 g/L.