Supporting Information

Brush Macromolecules with Thermo-Sensitive Coil Backbones and Pendant Polypeptide Side Chains: Synthesis, Self-assembly and Functionalization



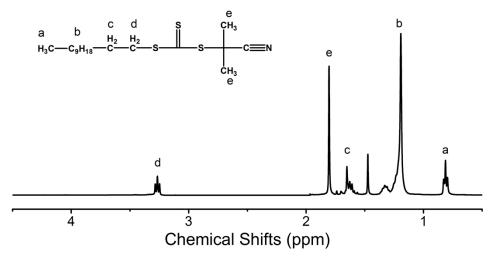


Figure S1. ¹H NMR spectrum of RAFT agent 2-cyanopropan-2-yl decyl carbonotrithioate.

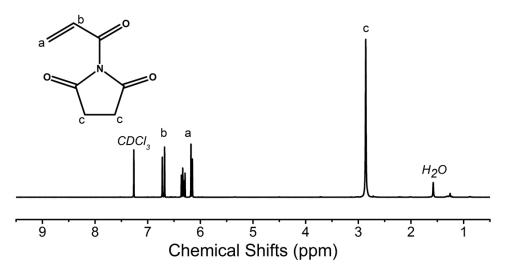
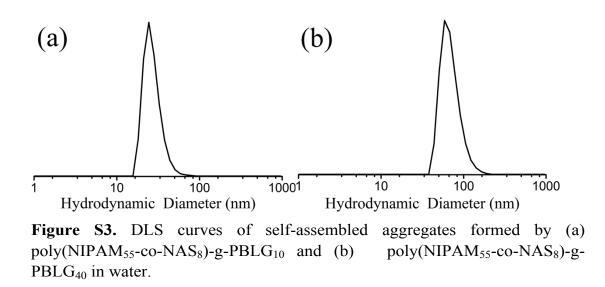


Figure S2. ¹H NMR spectrum of N-acryloxysuccinimide.



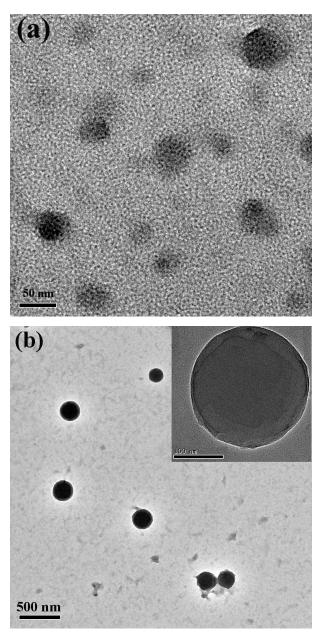


Figure S4. TEM images of self-assembled aggregates of (a) $poly(NIPAM_{480}-co-NAS_{60})$ -*graft*-PBLG₁₀ and (b) $poly(NIPAM_{480}-co-NAS_{60})$ -*graft*-PBLG₂₀ in water.

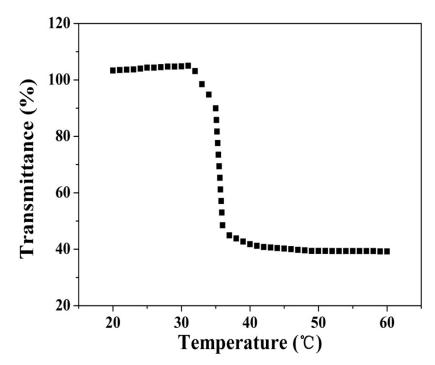


Figure S5. Transmittance change of aqueous solution of poly(NIPAM₄₈₀-*co*-NAS₆₀-NH-Boc) with temperature.

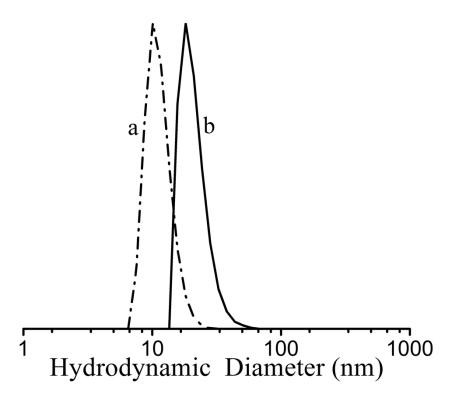


Figure S6. DLS curves of self-assembled aggregates formed by $poly(NIPAM_{480}$ -*co*-NAS₆₀)-*graft*-PBLG₁₀ brush macromolecules at 25 (a) and 50 °C (b) in aqueous solution.

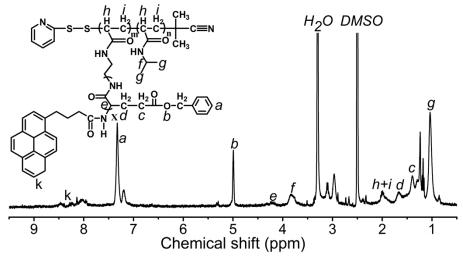


Figure S7. ¹H NMR spectrum of the fluorescence-modified brush polymer, pypoly(NIPAM₅₅-*co*-NAS₈)-*g*-PBLG₁₀.