Supporting Information

Thermo-Tunable Colorimetric Detection of Mercury(II) Ions Driven by Temperature-Dependent Assembly and Disassembly of a Block Copolymer

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Figure S1. Average hydrodynamic diameters of 0.010 wt%, 0.020 wt%, and 0.025 wt% aqueous solution of P1 as a function of temperature.
Figure S2. Average hydrodynamic diameters of 0.025 wt% aqueous solution of P1 as a function of temperature a) at pH 4.5 and b) pH 6.0.
\[ y = 0.5813x + 0.0046 \]
\[ R^2 = 0.982 \]

**Figure S3.** Linear regression curve of P1 aqueous solutions with increasing concentration of mercury(II) ions at 25 °C (LOD = 0.031 mM).
Figure S4. UV-vis absorption spectra of 0.025 wt % micellar solution of P1 (48 μM of oxime units) up to the addition of 38.0 mM of mercury(II) ions in aqueous solution at 60 °C.
Figure S5. Linear regression curve of P1 aqueous solutions with increasing concentration of mercury(II) at 60 °C (LOD = 3.13 mM).
Figure S6. (a–i) UV-vis absorption spectra of aqueous solutions of P1 (48 μM) with various concentrations of different metal cations (0.44 mM) at 25 °C.