## **Supporting Information**

## Redox-Responsive Thermal Sensitivity Based on a Selenium-Containing Small Molecule

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## **Materials**

30% H<sub>2</sub>O<sub>2</sub> was from the Beijing Chemical Reagent Company. Ascorbic acid was from Alfa Aesar. All chemicals were analytical reagents and were used as received. Deionized water was used for the preparation of all aqueous solutions.

## Instruments

TEM images were obtained with a JEM-2010 Microscope with an accelerating voltage of 120 kV. Samples were stained with 1.2% uranium acetate. DLS measurements were carried out on a Malvern 3000HS Zetasizer with a monochromatic coherent He–Ne laser (633 nm) as the light source. Transmittance experiments were conducted on a HITACHI U-3010 spectrophotometer with a programmable temperature controller (PolyScience, USA). Transmittance at 700 nm was monitored. Heating/cooling rate was set at 1°C/min. <sup>1</sup>H-NMR spectra were recorded on a JEOL JNM-ECA 400 (400 MHz) spectrometer. ESI mass spectra were acquired with a Brucker Esquire-LC 00136 mass spectrometer.