

Supplementary Information

Nuclear magnetic resonance (NMR) spectroscopy

¹H and ¹³C NMR measurements were performed on a Varian ⁵ INOVA - 400 MHz multinuclear NMR at 25 °C. All samples were dissolved in deuterated water for NMR measurements.

Sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE)

¹⁰ SDS-PAGE was carried out using a Bio-Rad Ready Gel® Precast Gel System. Samples were prepared at 1 mg/ml concentration in Tris buffer containing bromophenol blue and run on a precast Tris-HCl gradient gel (4-20%) under denaturing conditions (voltage 200 V, 500 mA, 90 min).

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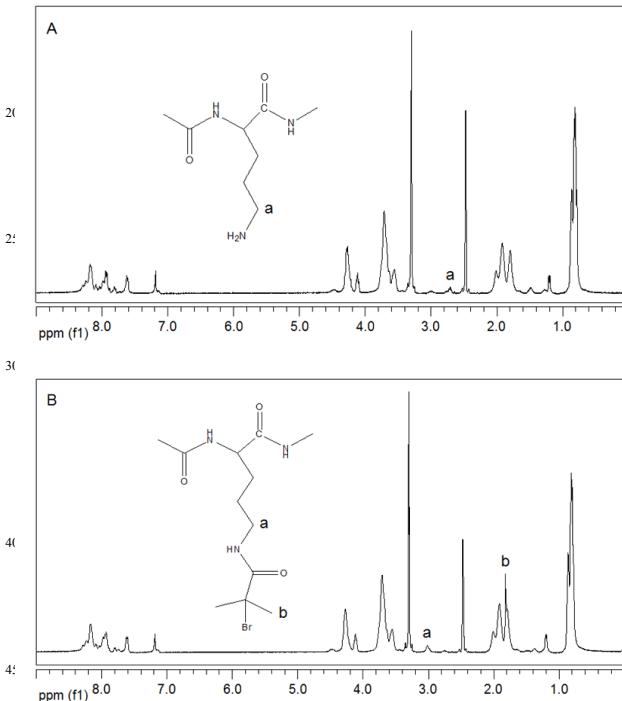


Figure S1. ¹H NMR spectra of tELP (A), tELP-g-Br (B).

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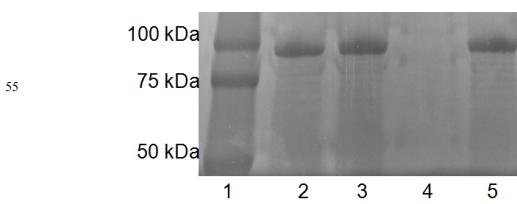


Figure S2. SDS-PAGE analysis of ATRP from tELP-g-Br. Lane 1: protein marker; Lane 2: tELP; Lane 3: tELP-g-Br; Lane 4: tELP-g-poly(OEGMA); Lane 5: ATRP from tELP.

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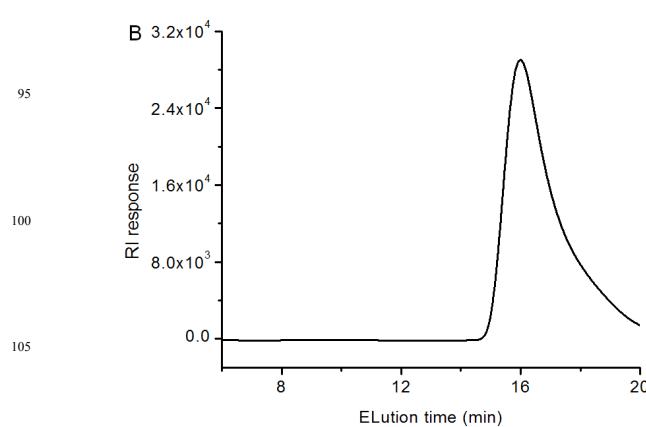
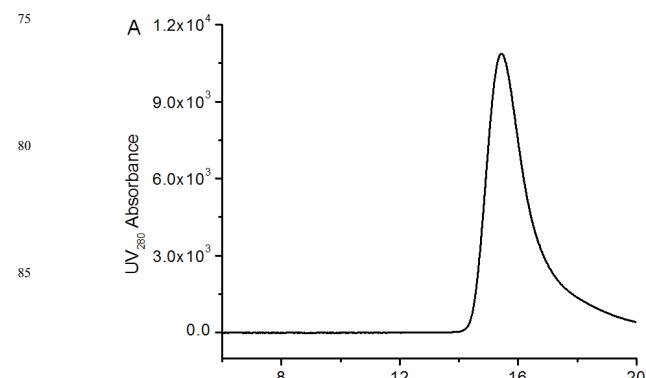


Figure S3. SEC analysis after 60 min ATRP using unmodified tELP as a macroinitiator (negative control). (A) UV traces at the absorbance of 280 nm; (B) RI traces.

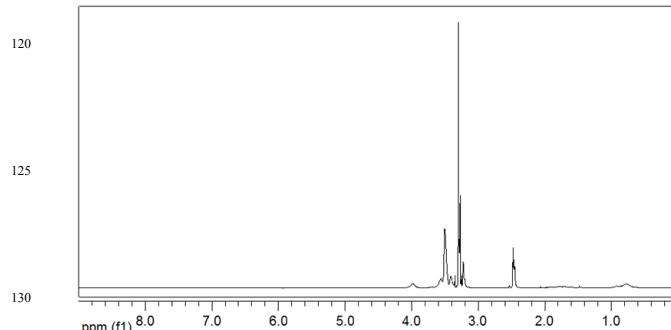
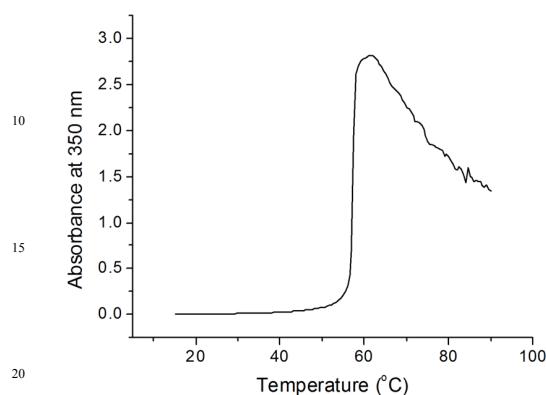


Figure S4. ¹H NMR spectrum of tELP-g-poly(OEGMA).

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Figure S5. Turbidity profile of poly(OEGMA) as a function of temperature.

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