

SUPPORTING INFORMATION

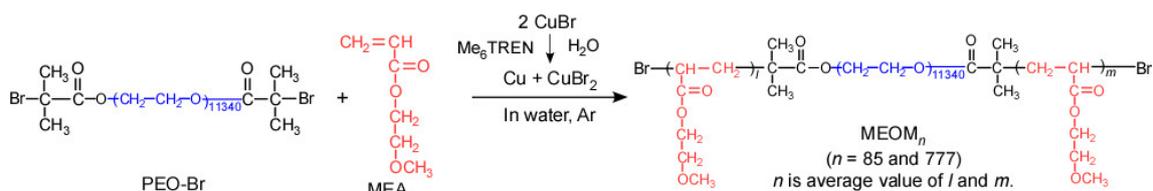
Association Behavior of Amphiphilic ABA Triblock Copolymer Composed of Poly(2-methoxyethyl acrylate) (A) and Poly(ethylene oxide) (B) in Aqueous Solution

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Scheme S1. Synthesis of MEOM_n (n = 85 and 777).

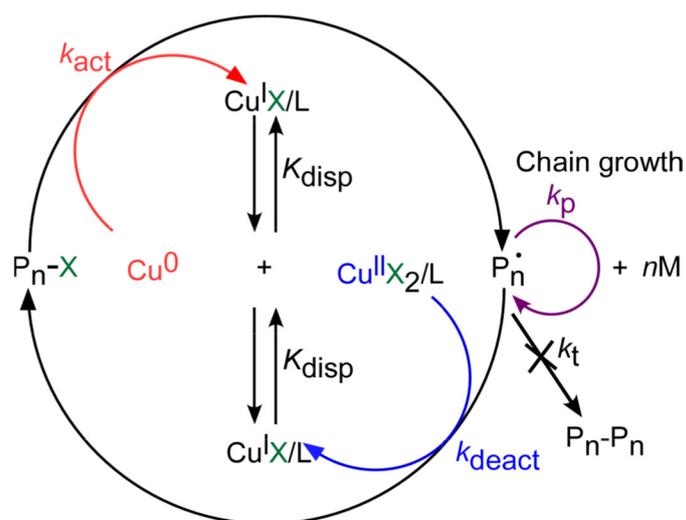


Figure S1. Mechanism of single-electron transfer-living radical polymerization (SET-LRP); M; monomer, P; polymer, Cu; copper, X; halogen, L; ligand, k_{act} ; activation, k_{deact} ; deactivation, k_p ; propagation, k_t ; termination.

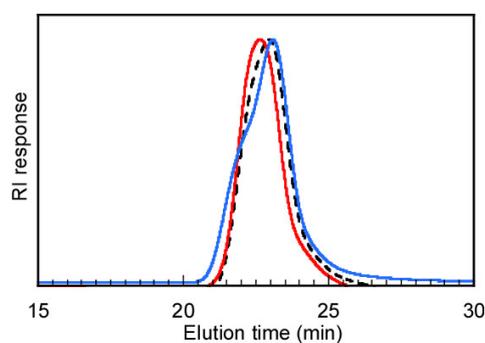


Figure S2. Gel-permeation chromatography (GPC) elution curves of PEO₁₁₃₄₀-Br (black line), MEOM₈₅ (red line), and MEOM₇₇₇ (blue line) using THF as an eluent with a flow rate of 1.0 mL/min at 40 °C.

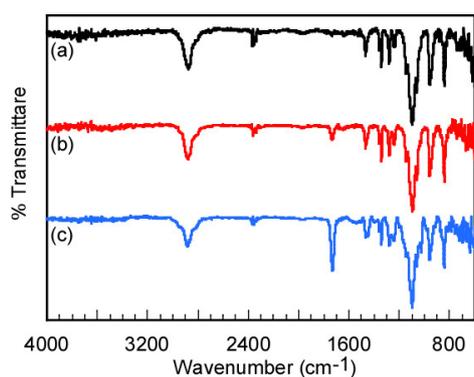


Figure S3. Attenuated total reflection (ATR) Fourier-transform infrared (FTIR) spectra of (a) PEO₁₁₃₄₀-Br, (b) MEOM₈₅, and (c) MEOM₇₇₇.

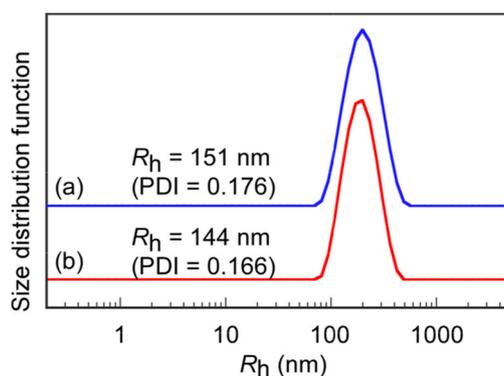


Figure S4. Hydrodynamic radius (R_h) distributions of MEOM₈₅ aqueous solution prepared by directly dissolution (blue line) and by dialysis from THF solution against aqueous solution (red line); the final polymer concentration (C_p) was adjusted to 0.1 g/L.

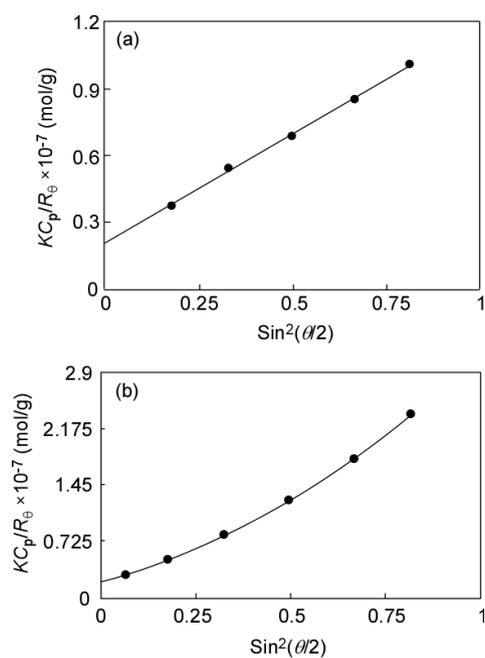


Figure S5. Debye plots for (a) MEOM₈₅ and (b) MEOM₇₇₇ in water.

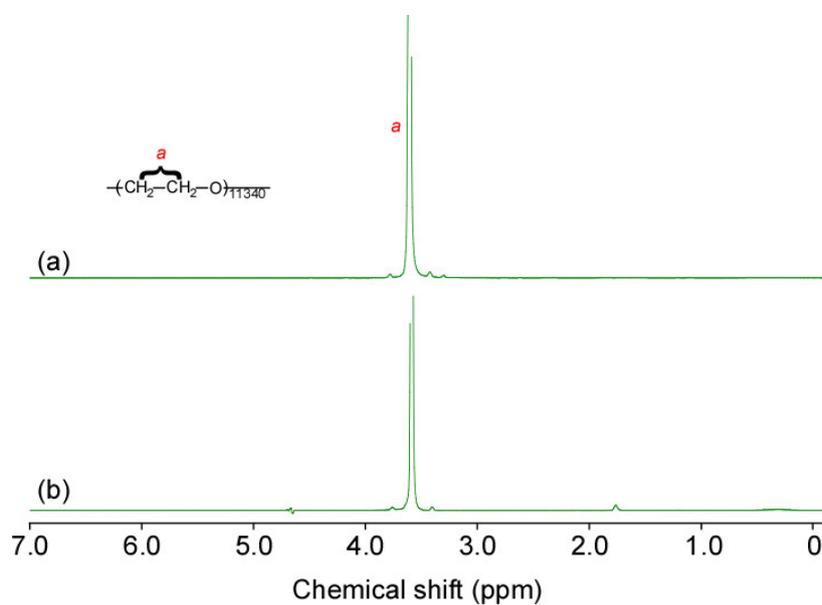


Figure S6. Water suppression by gradient-tailored excitation (WATERGATE) ¹H NMR spectroscopy in D₂O for (a) MEOM₈₅ and (b) MEOM₇₇₇ at 25 °C.