

Supplementary materials

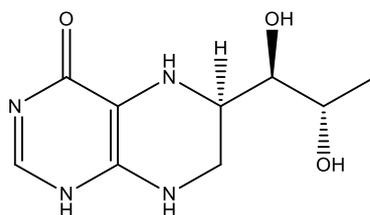


Figure S1. Chemical structure of BH4.

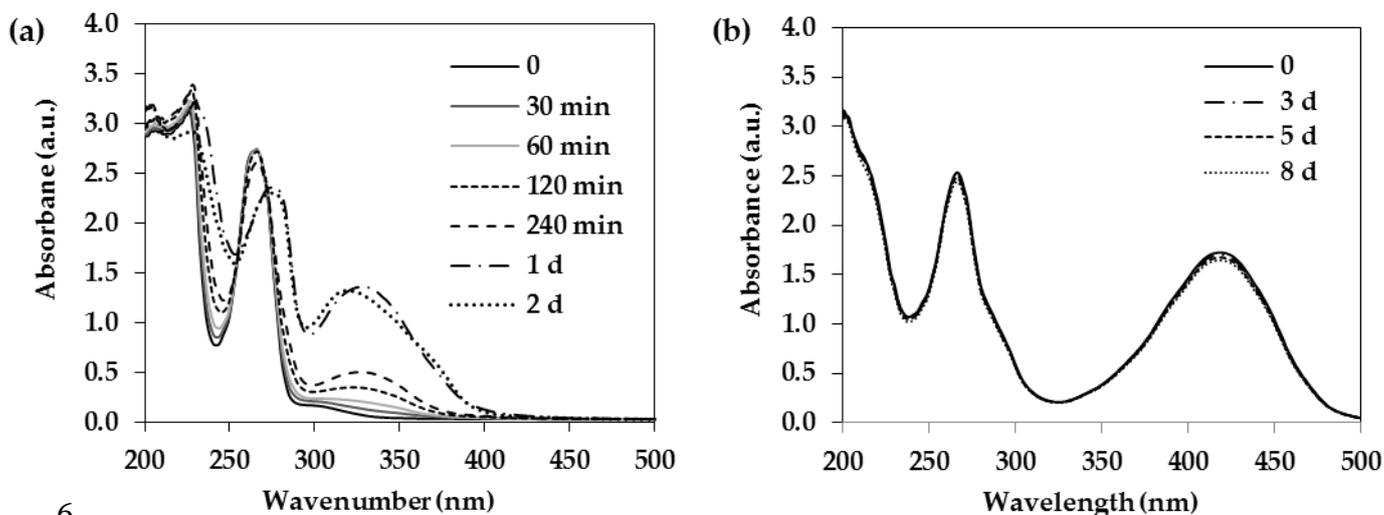


Figure S2. UV-Vis spectra of (a) pure BH4 and (b) pure SP solutions in water (1% w/v) at different times.

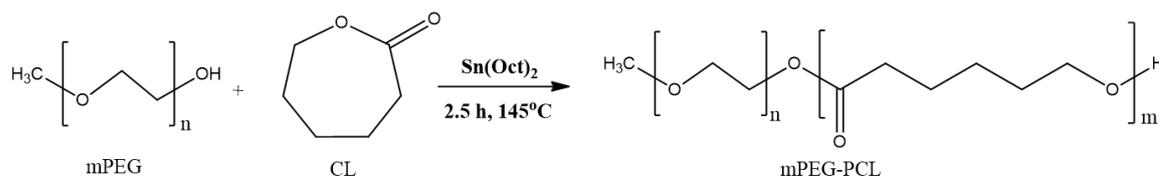
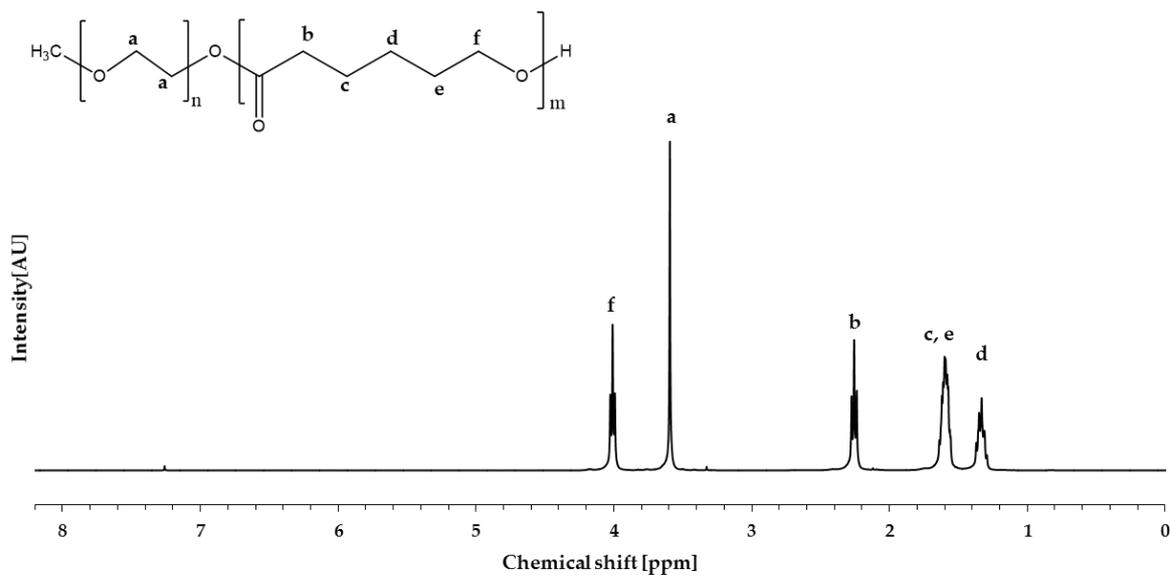


Figure S3. Ring opening polymerization reaction of CL initiated by the hydroxyl groups of mPEG with molecular weight of 4000 g mol^{-1} .



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Figure S4. ¹H-NMR spectrum of the mPEG-PCL copolymer in CDCl₃.

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Table S1. The number average molecular weight (M_n), the weight average molecular weight (M_w) and the dispersity (\mathcal{D} , M_w/M_n), as determined by ¹H-NMR and GPC.

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Copolymer	M_n (theoretical) [g mol ⁻¹]	M_n (¹ H-NMR) [g mol ⁻¹]	M_n (GPC) [g mol ⁻¹]	M_w (GPC) [g mol ⁻¹]	\mathcal{D} (M_w/M_n , GPC)
mPEG-PCL	24,000	25,000	19,000	32,600	1.71