

Electronic Supplementary Information (ESI) for Journal of Materials Chemistry
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Electronic Supplementary Information (ESI)

for

Biocompatible and acid-cleavable poly(ϵ -caprolactone)-*acetal*-poly(ethylene glycol)-*acetal*-poly(ϵ -caprolactone) triblock copolymers: Synthesis, characterization and pH-triggered doxorubicin delivery

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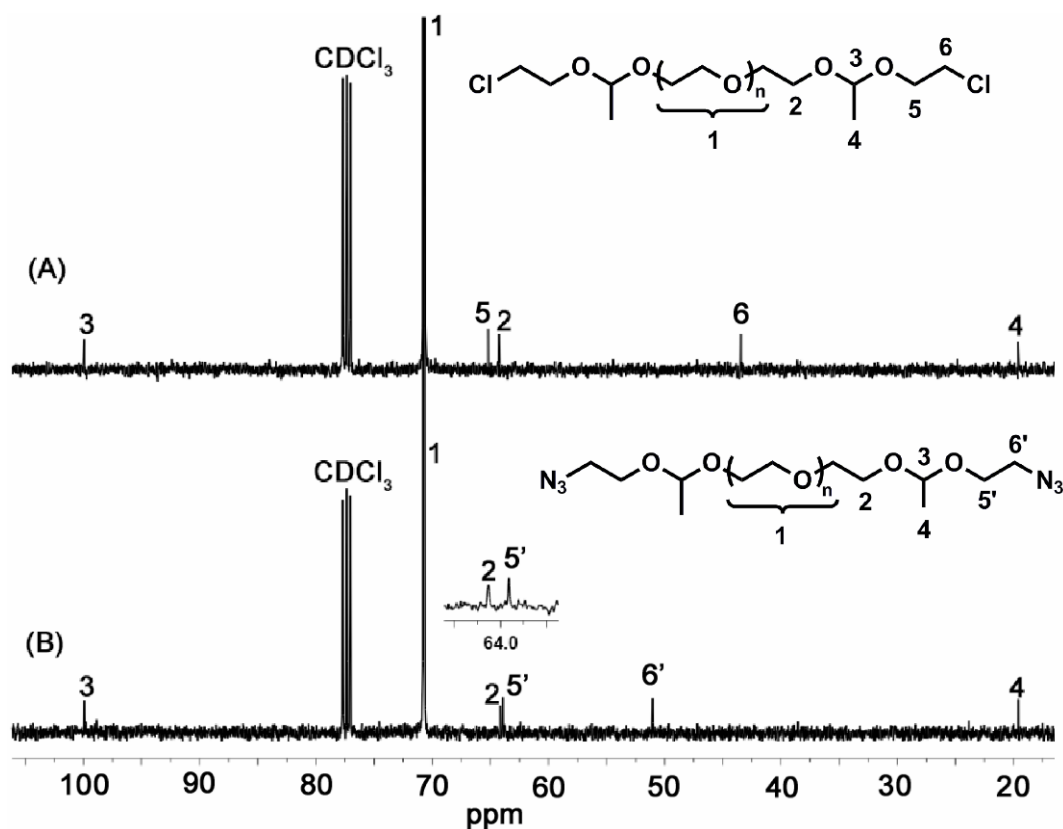
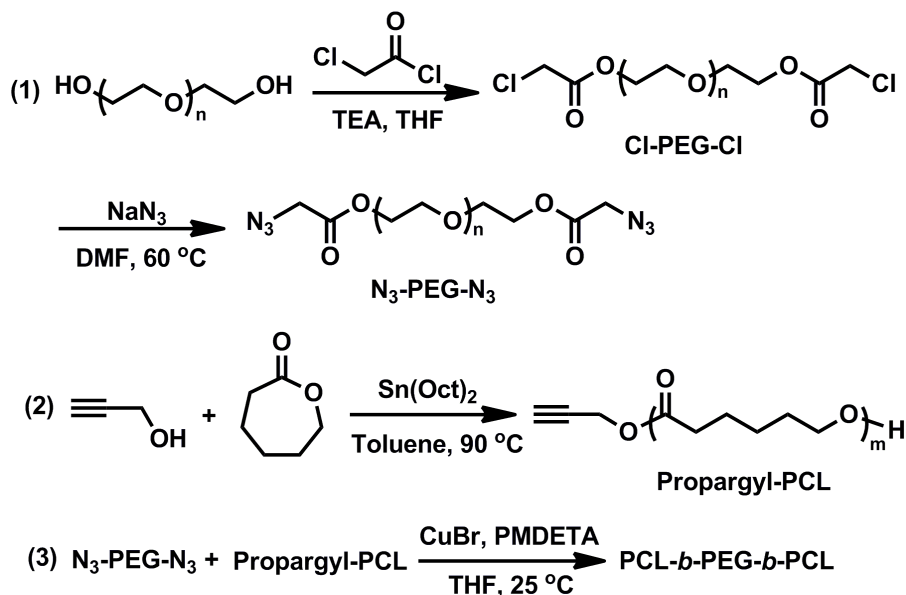


Fig. S1 ^{13}C NMR spectra of (A) Cl-*a*-PEG₁₃₅-*a*-Cl and (B) N₃-*a*-PEG₁₃₅-*a*-N₃ in CDCl₃.



Scheme S1 Synthesis route of pH-insensitive triblock copolymer PCL-*b*-PEG-*b*-PCL.

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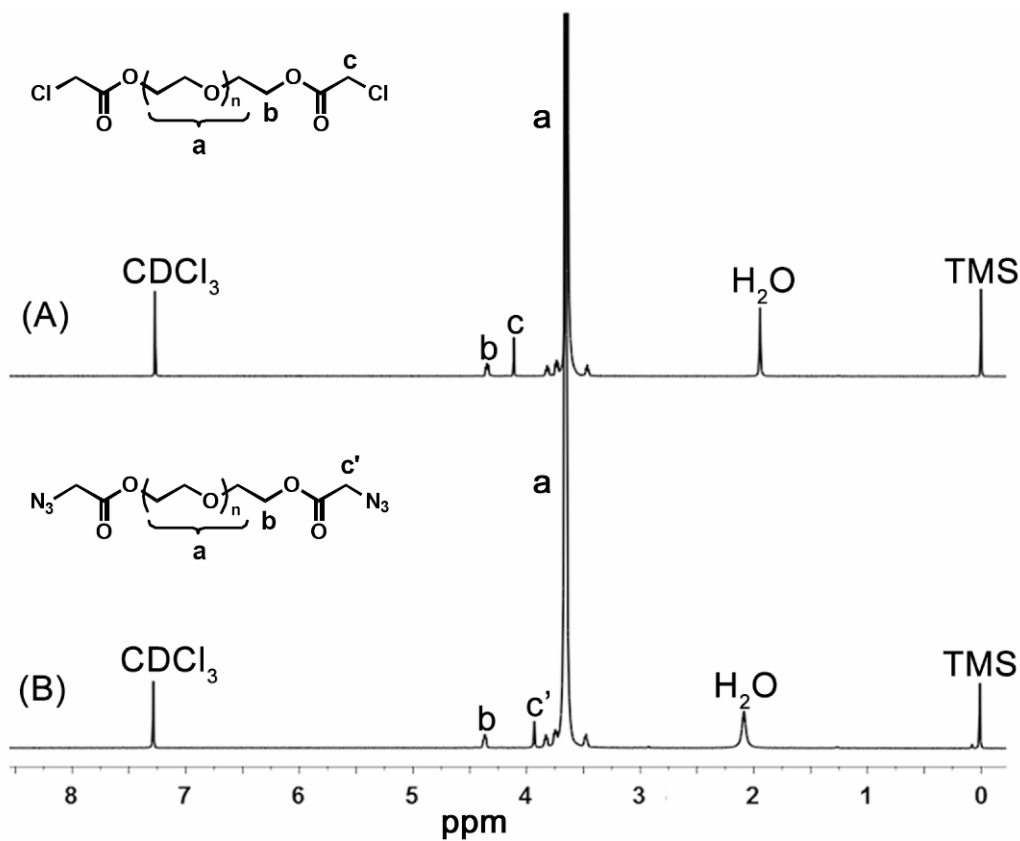


Fig. S2 ¹H NMR spectra of (A) Cl-PEG₁₃₅-Cl and (B) N₃-PEG₁₃₅-N₃ in CDCl₃.

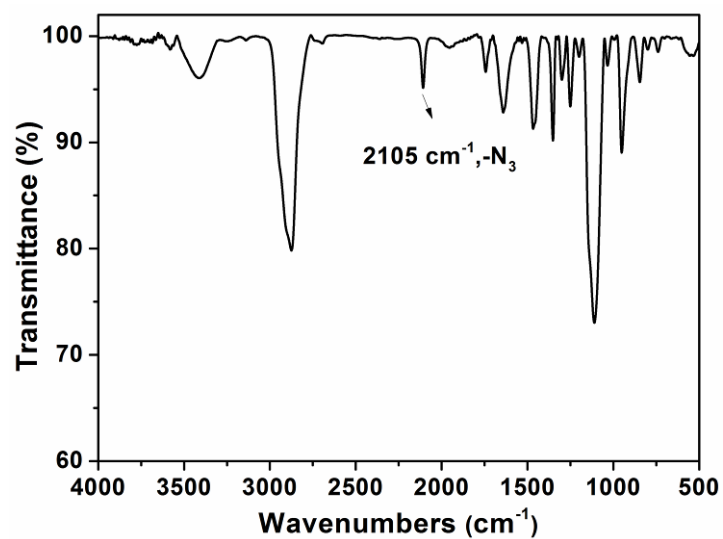


Fig. S3 FT-IR spectrum of N₃-PEG₁₃₅-N₃.

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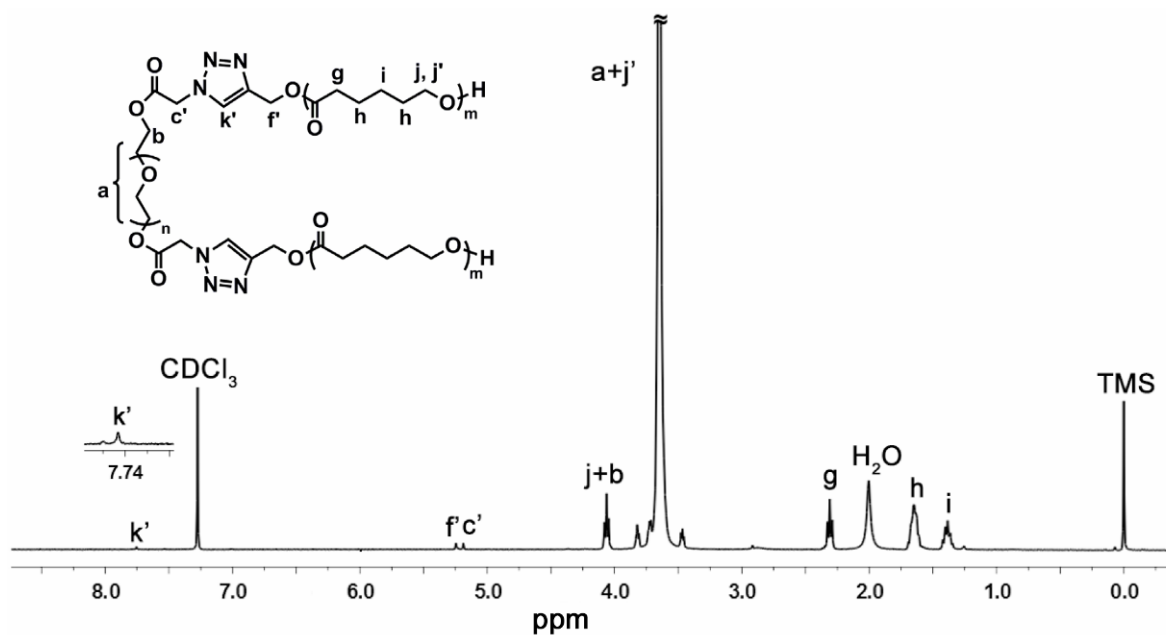


Fig. S4 ^1H NMR spectrum of $\text{PCL}_{30}\text{-}b\text{-PEG}_{135}\text{-}b\text{-PCL}_{30}$ in CDCl_3 .

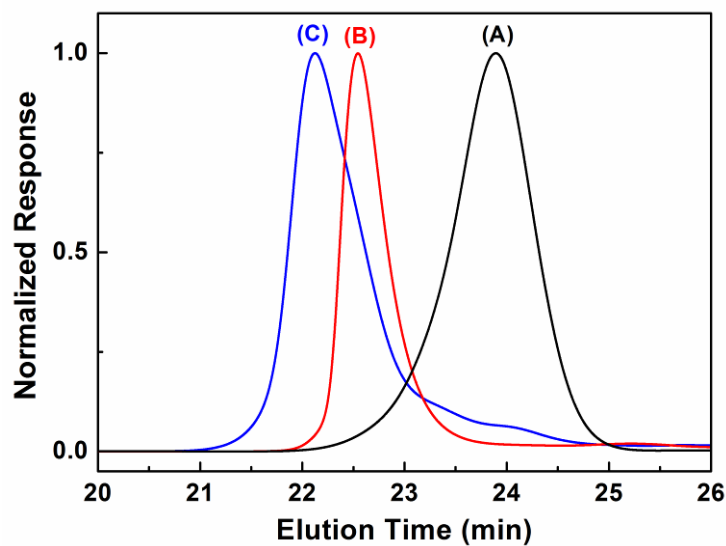


Fig. S5 GPC curves of (A) Propargyl- PCL_{30} ($\overline{M}_{n,\text{GPC}} = 3010 \text{ g mol}^{-1}$, PDI = 1.19), (B) $\text{N}_3\text{-PEG}_{135}\text{-N}_3$ ($\overline{M}_{n,\text{GPC}} = 6950 \text{ g mol}^{-1}$, PDI = 1.13), and (C) $\text{PCL}_{30}\text{-}b\text{-PEG}_{135}\text{-}b\text{-PCL}_{30}$ ($\overline{M}_{n,\text{GPC}} = 11070 \text{ g mol}^{-1}$, PDI = 1.19).

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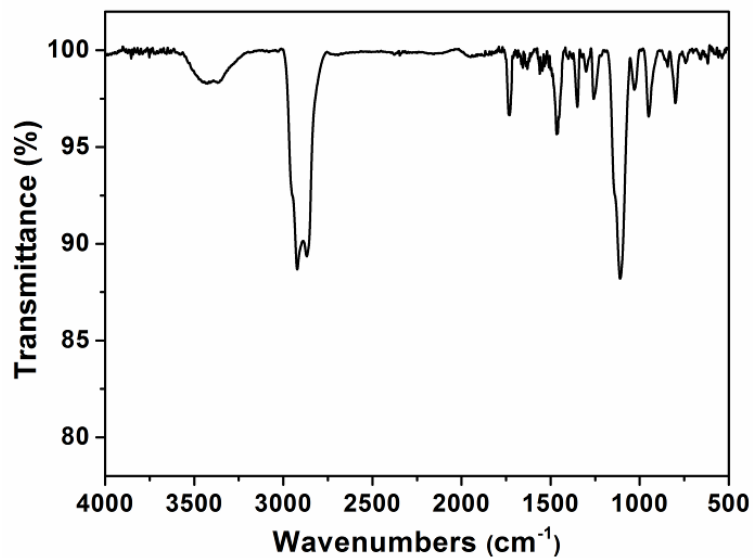


Fig. S6 FT-IR spectrum of PCL₃₀-*b*-PEG₁₃₅-*b*-PCL₃₀.