

SUPPORTING INFORMATION

Dual Acid/Glutathione-Responsive Core-Degradable/Shell-Sheddable Block Copolymer Nanoassemblies Bearing Benzoic Imines for Enhanced Drug Release

Xiaolei Hu, Kevin Larocque, Alisa Piekny, Jung Kwon Oh*

E-mail: john.oh@concordia.ca

Figure S1. ^1H -NMR spectrum of MBzImOH in CDCl_3 .

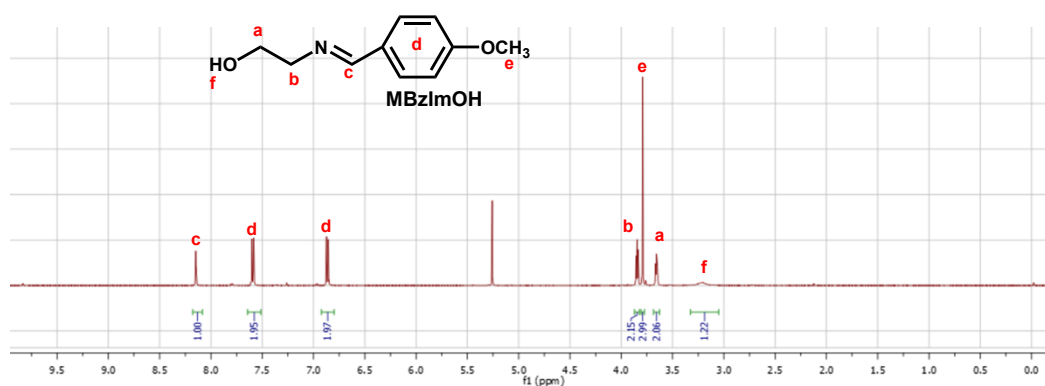


Figure S2. ^1H -NMR spectrum of BrBzImOH in CDCl_3 .

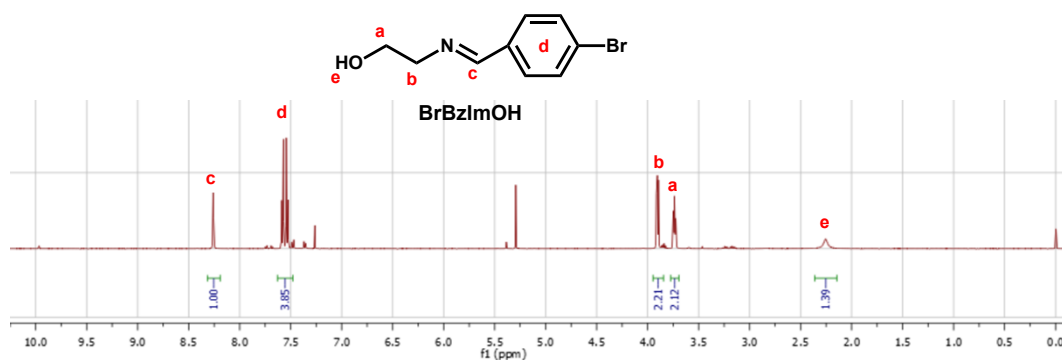


Figure S3. ^1H -NMR spectrum of NBzImOH in CDCl_3 .

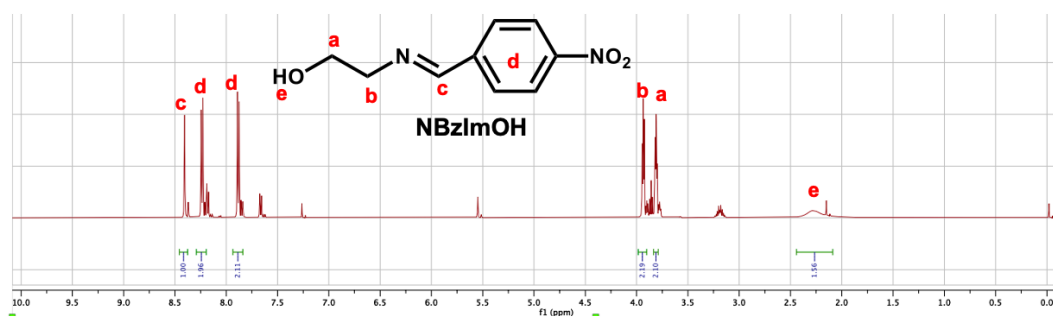


Figure S4. ^{13}C -NMR spectrum of BrBzImMA in CDCl_3 .

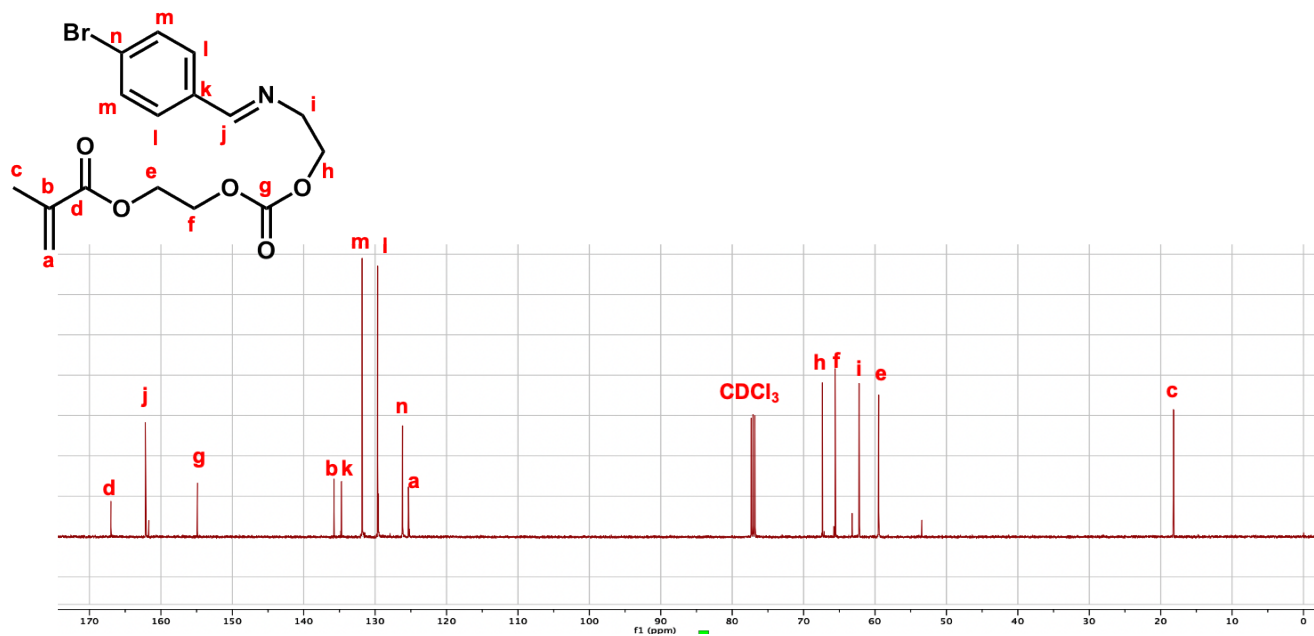


Figure S5. ^{13}C -NMR spectrum of MBzImMA in CDCl_3 .

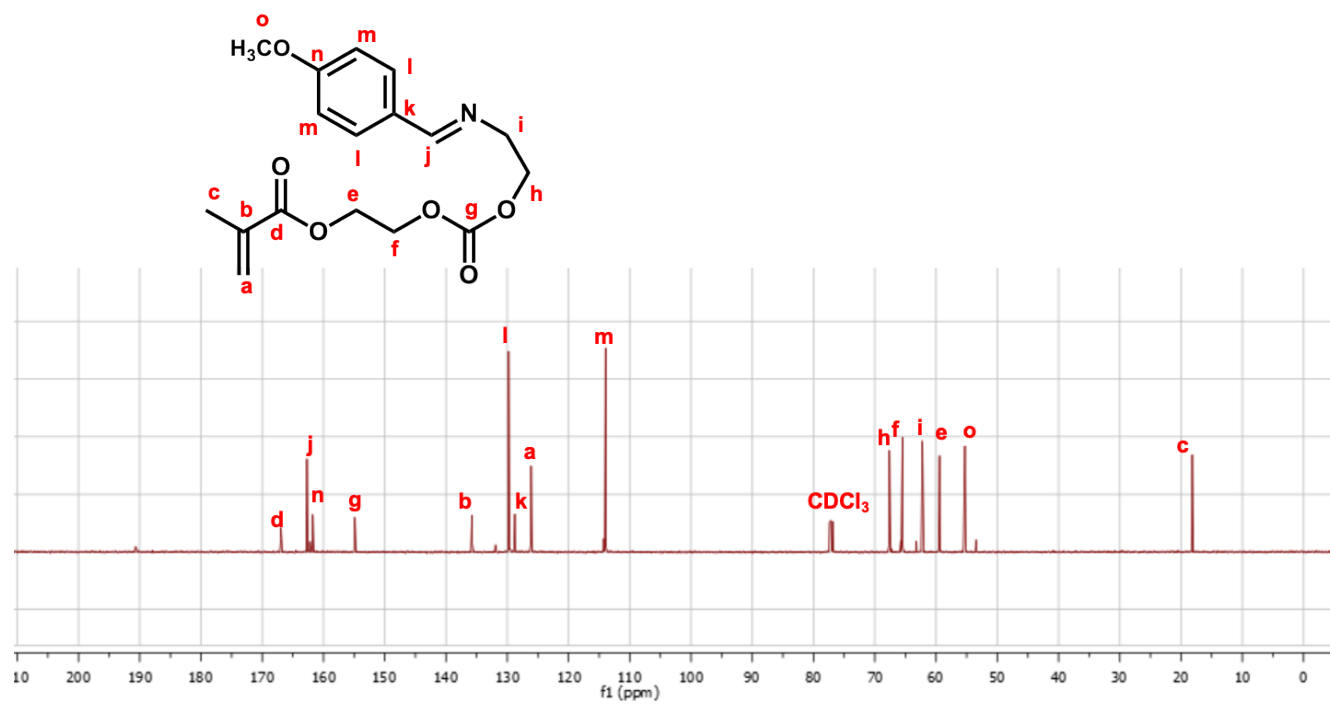


Figure S6. ^{13}C -NMR spectrum of NBzImMA in CDCl_3 .

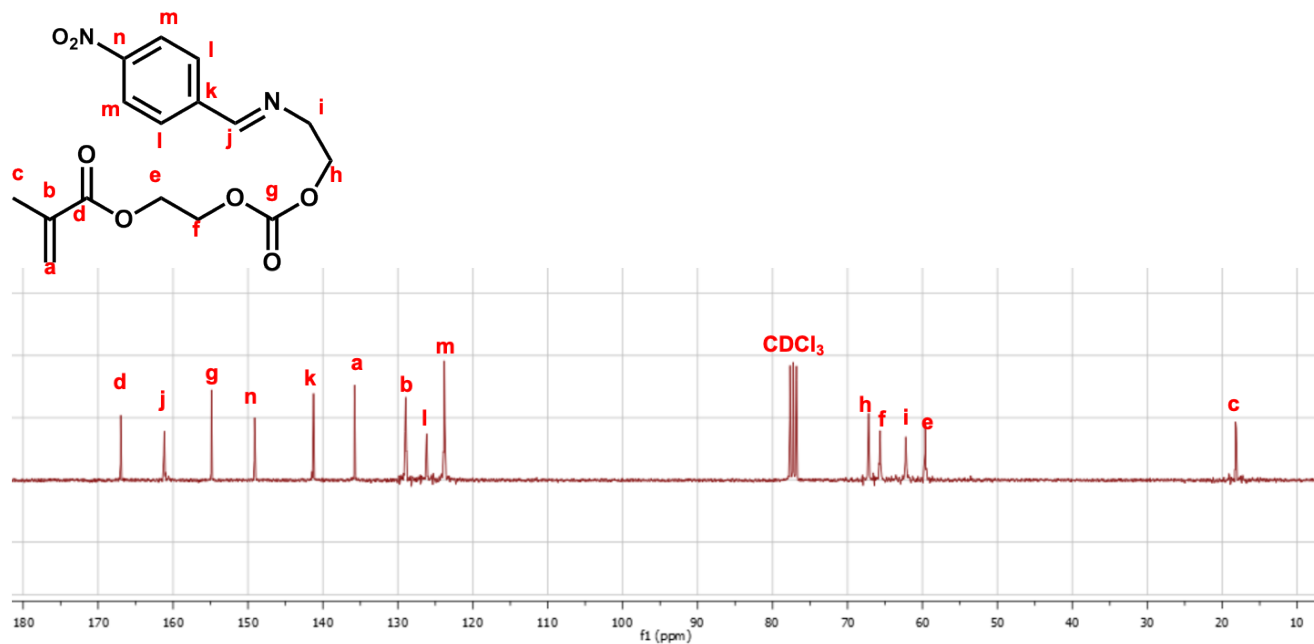


Figure S7. Overlaid ^1H -NMR spectra of MBzImMA over time after incubation under $\text{pD} = 6.8$.

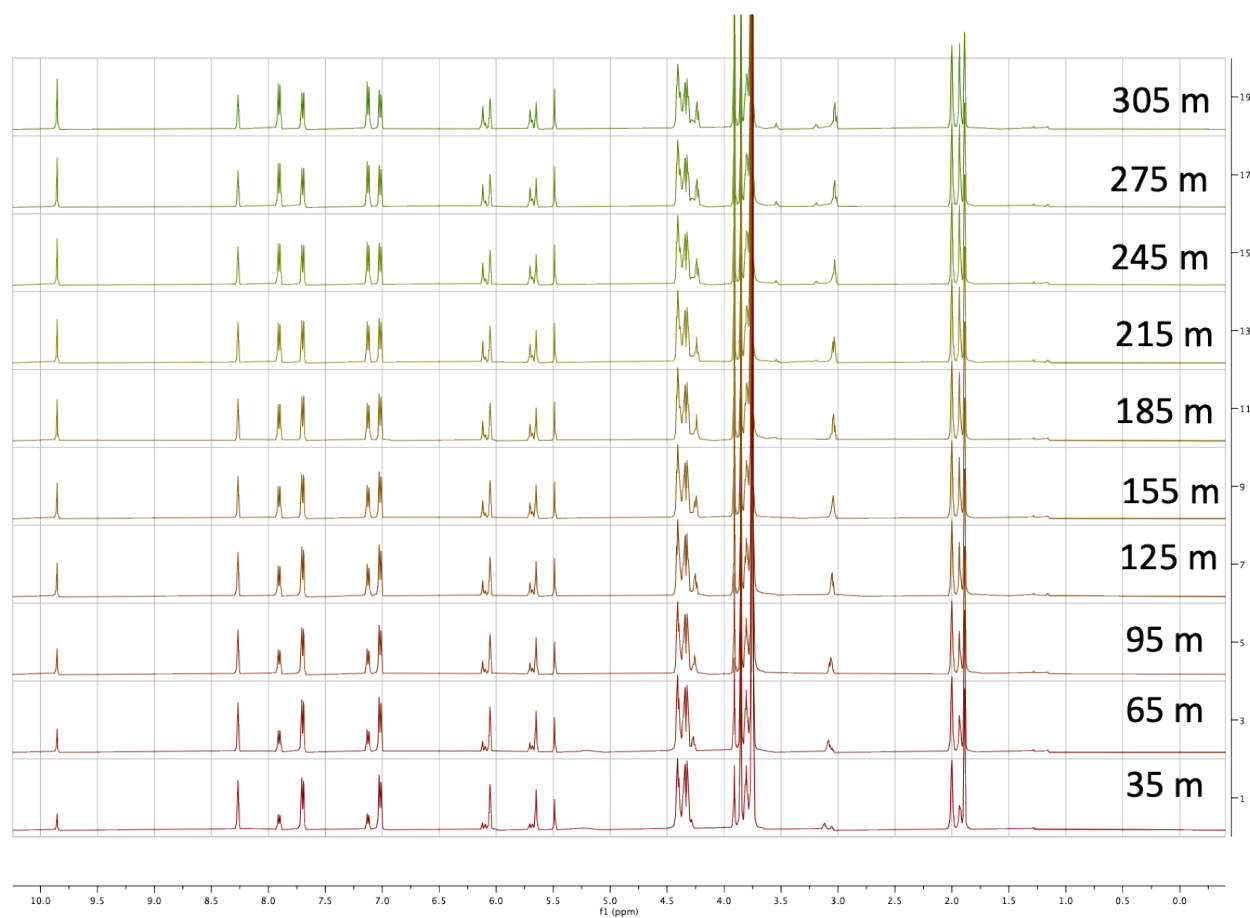


Figure S8. Overlaid ^1H -NMR spectra of BrBzImMA over time after incubation under $\text{pD} = 6.8$.

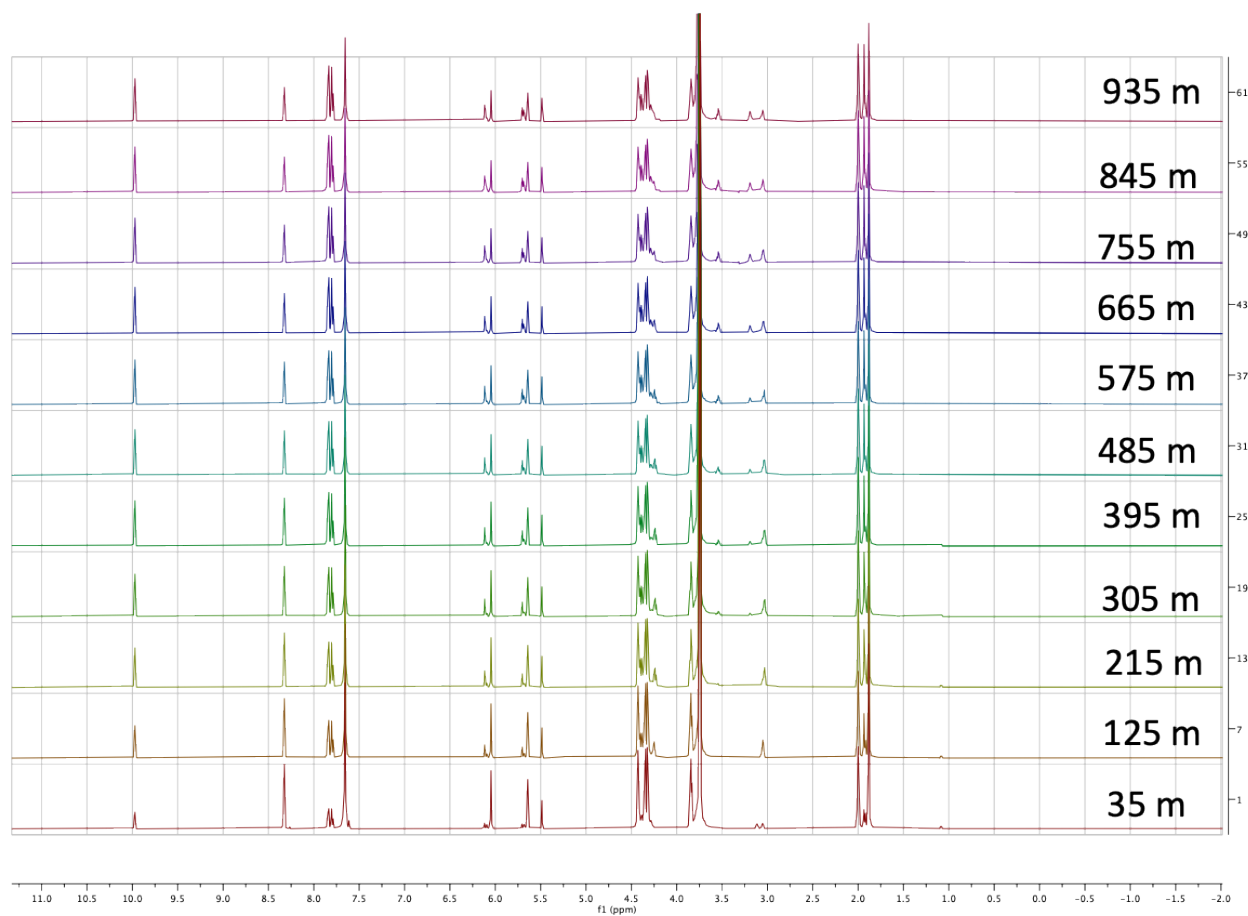


Figure S9. Overlaid ^1H -NMR spectra of NBzImMA over time after incubation under $\text{pD} = 6.8$.

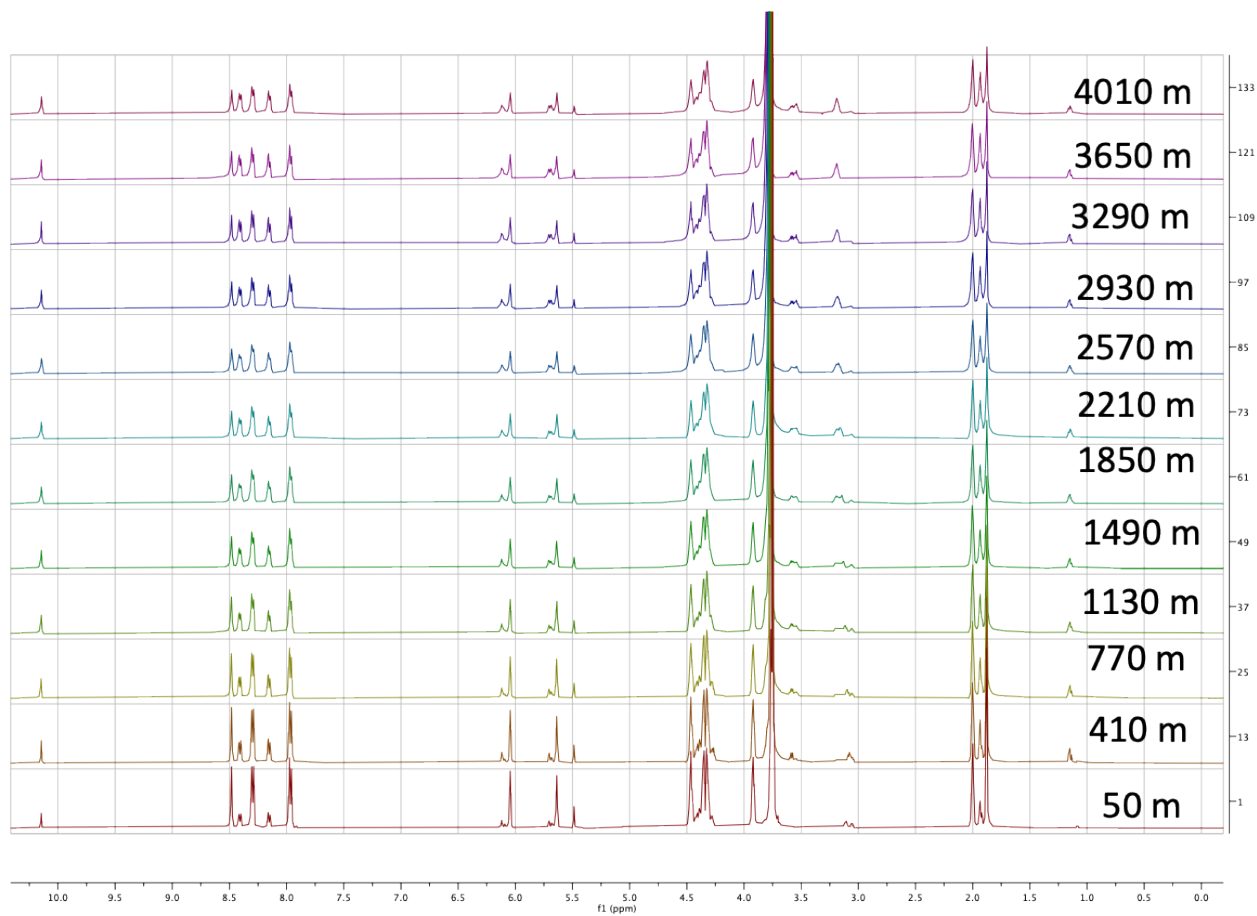


Figure S10. ^1H -NMR for isolated supernatant methoxybenzaldehyde (A) and precipitates PEG-SS-PAM in DMSO- d_6 (B).

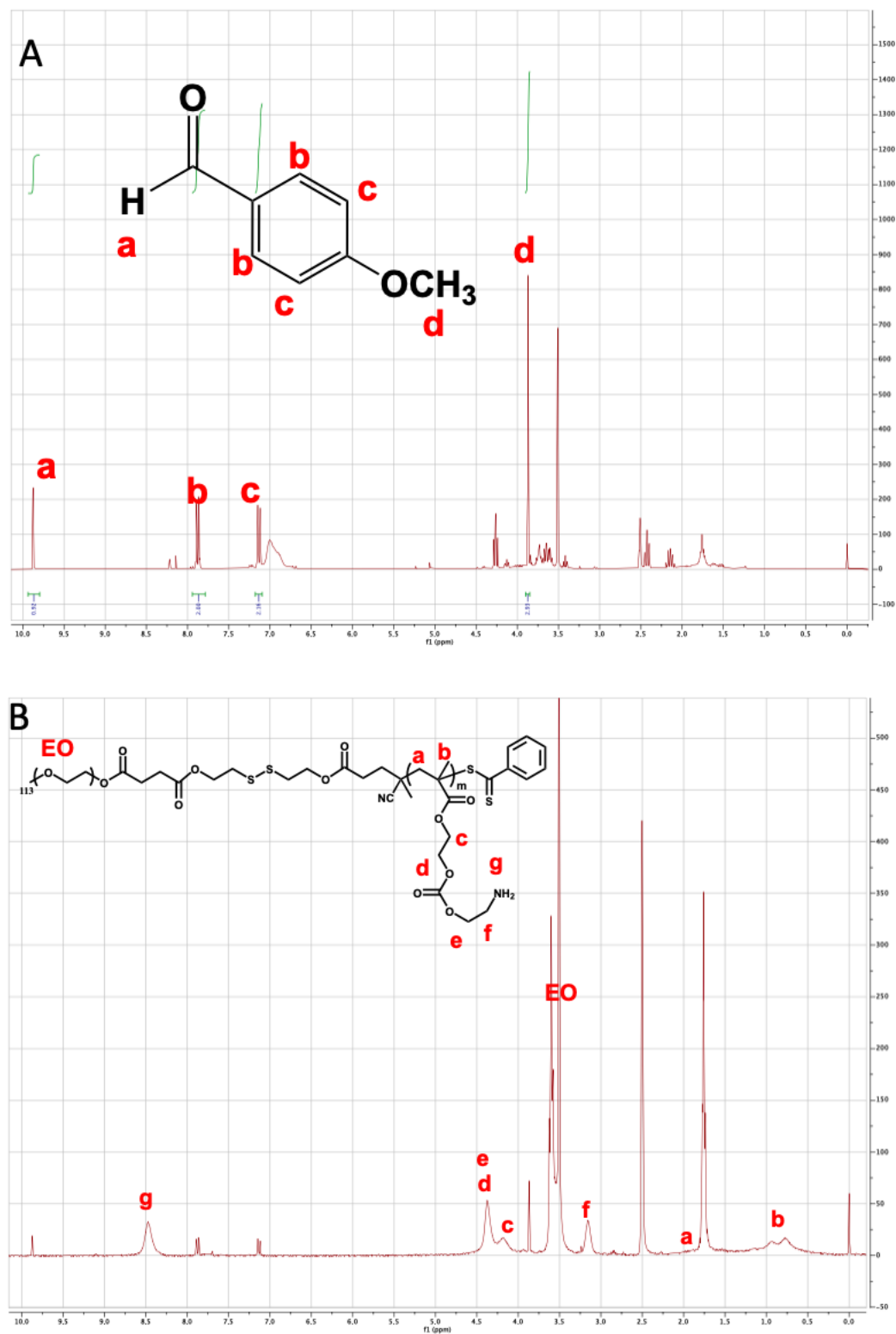


Figure S11. UV/Vis spectrum of a mixture of aqueous Dox-NPs (1 mL) with DMF (5 mL).

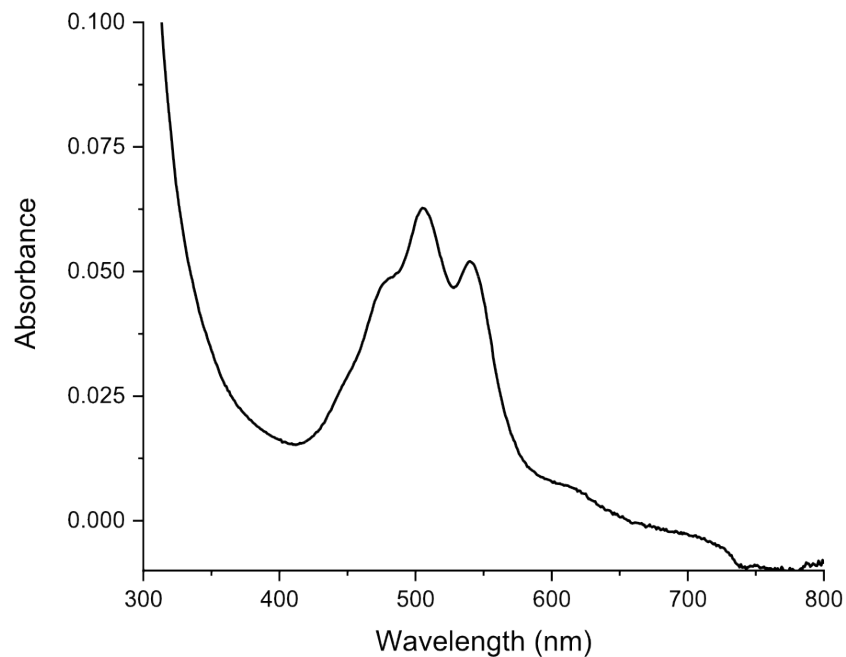


Table S1. Characteristics and results for PEG-SS-PMBzImMA (ImSSP) block copolymers synthesized by RAFT polymerization.^a

ImSSP	DP _t ^b	Time (hr)	Conv ^c	DP _{theo} ^d	DP _{NMR} ^c	M _n ^e (kg/mol)	Đ ^e
ImSSP-1	75	3.9	0.65	49	38	20.5	1.10

^a[MBzImMA]₀ / [PEG-SS-CTA]₀ / [AMBN]₀ = 75/1/0.3 in anisole at 70 °C and [MBzImMA]₀/anisole = 0.6 wt/wt; ^bDP_t = [MBzImMA]₀/[PEG-SS-CTA]₀; ^cBy ¹H-NMR; ^dDP_{theo} = [MBzImMA]₀/[PEG-SS-CTA]₀ × conversion; ^eGPC with PMMA standards.