

Supporting Information

Redox-Responsive Hydrogels for Tunable and ‘On-Demand’

Release of Biomacromolecules

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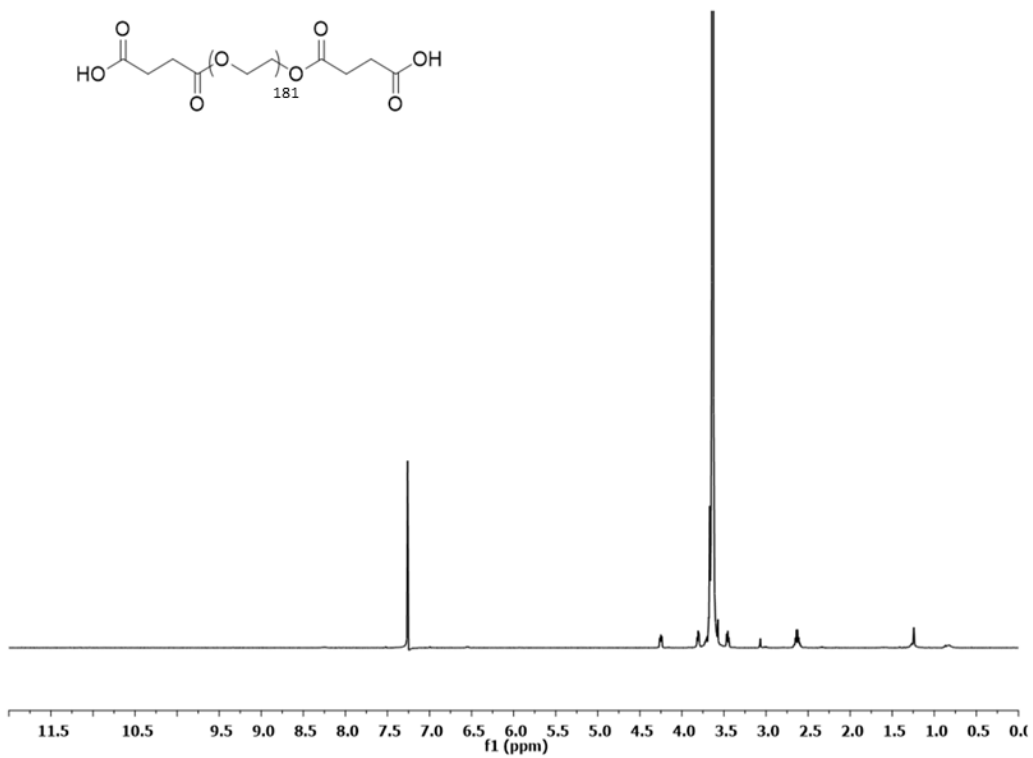


Figure S1. ^1H NMR spectrum of P2K-COOH in CDCl_3 .

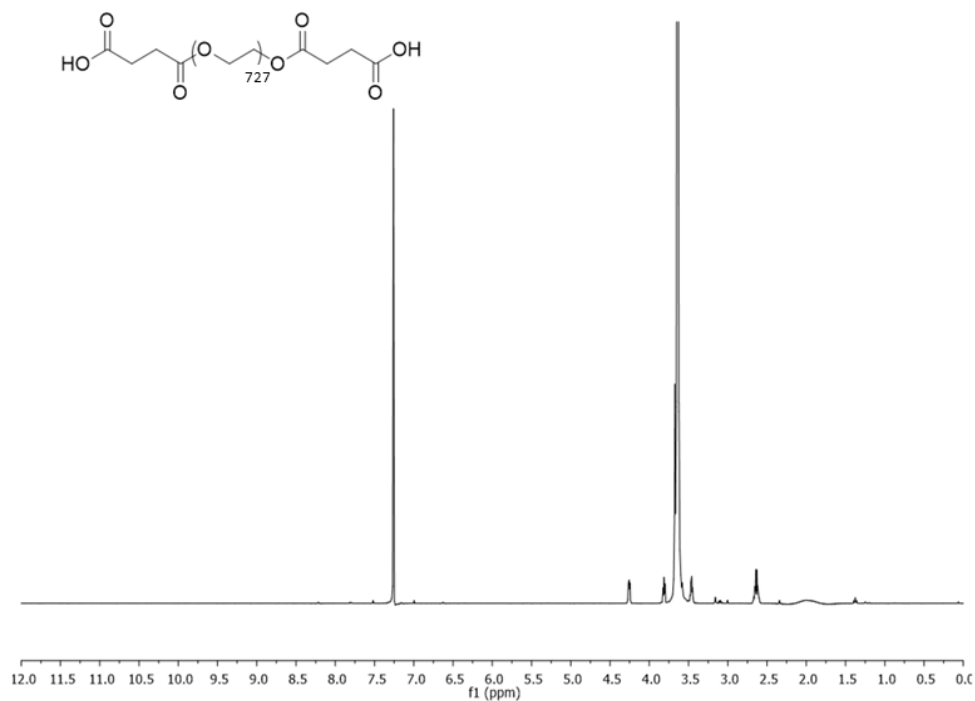


Figure S2. ^1H NMR spectrum of P8K-COOH in CDCl_3 .

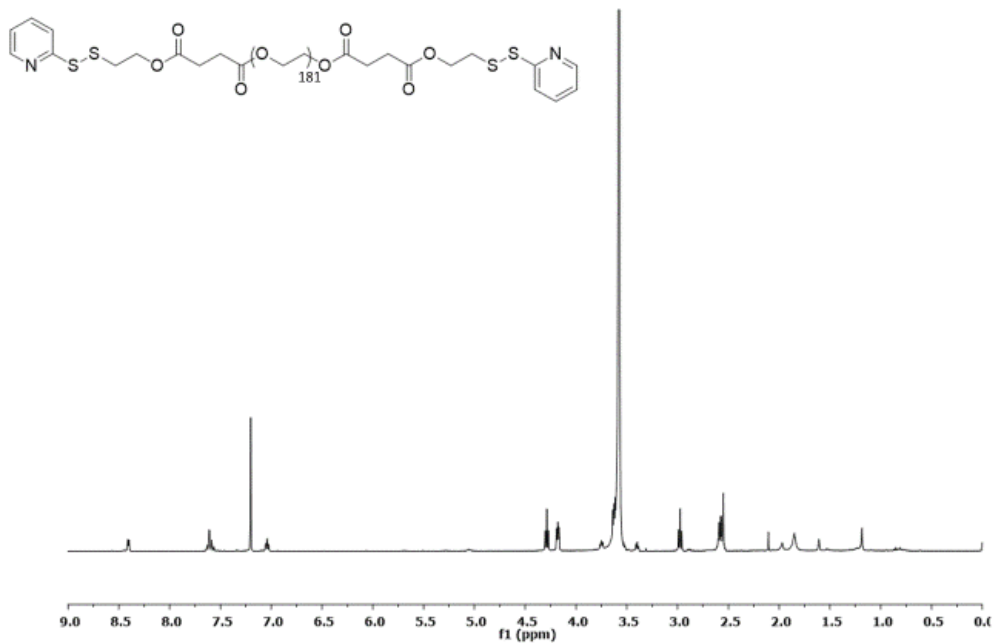


Figure S3. ^1H NMR spectrum of P2K-PDS in CDCl_3 .

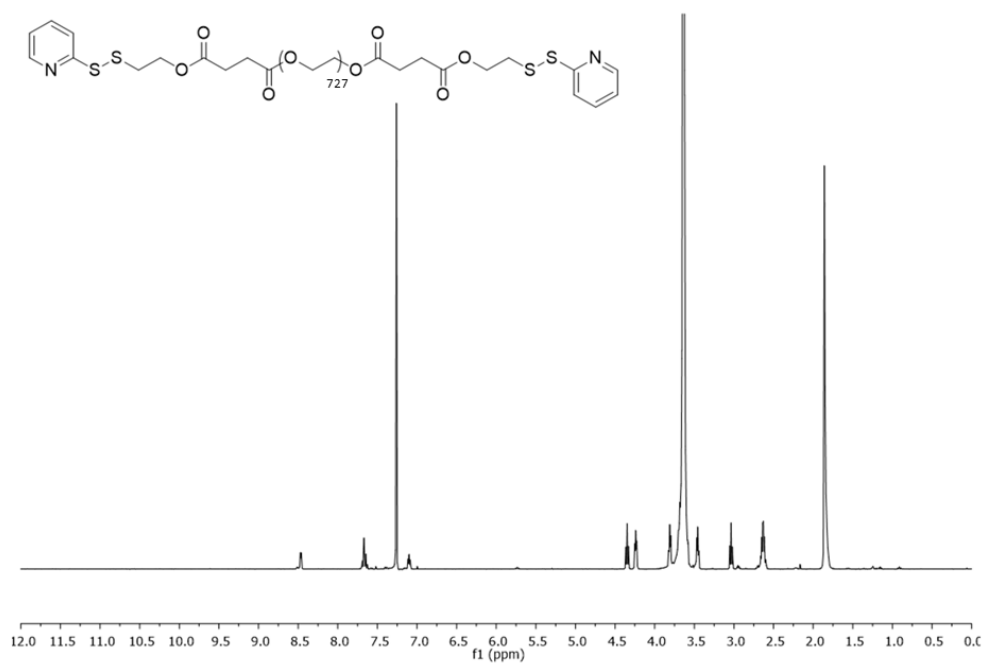


Figure S4. ^1H NMR spectrum of P8K-PDS in CDCl_3 .

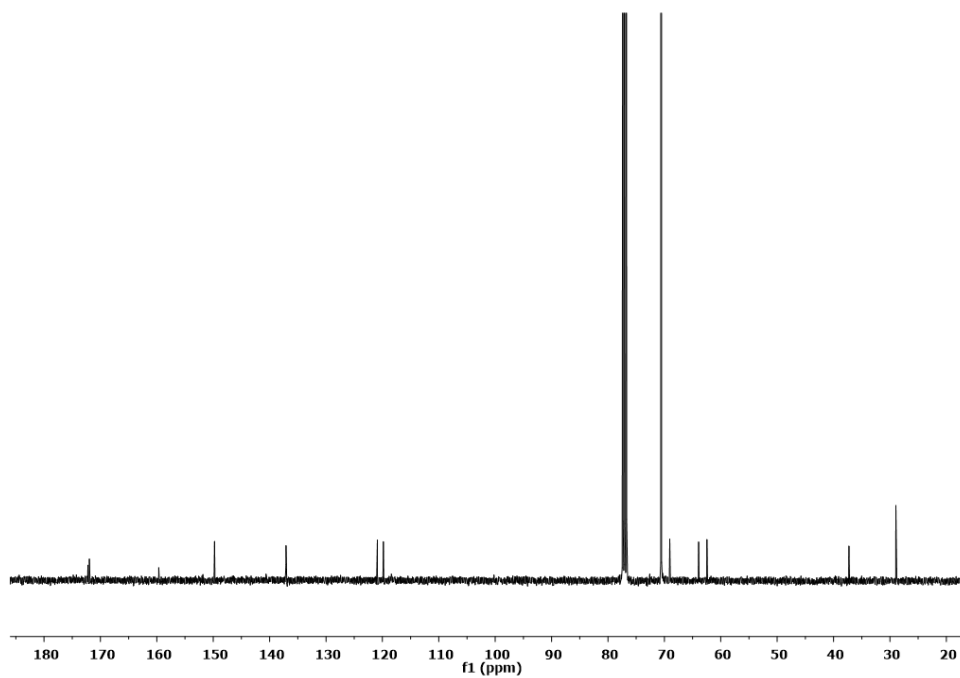


Figure S5. ^{13}C NMR spectrum of P2K-PDS in CDCl_3 .

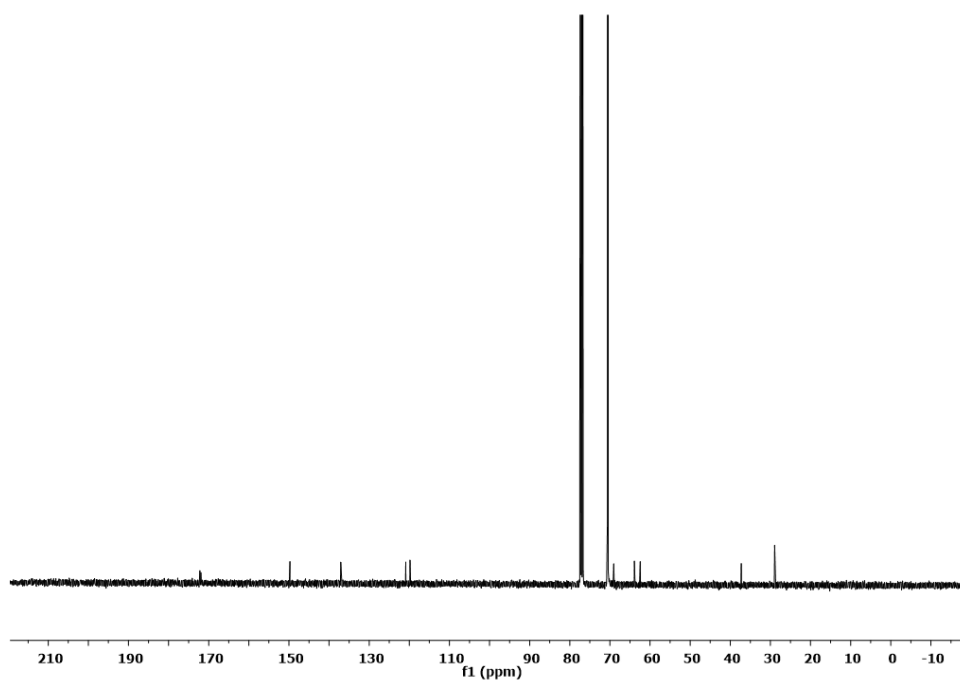


Figure S6. ^{13}C NMR spectrum of P8K-PDS in CDCl_3 .

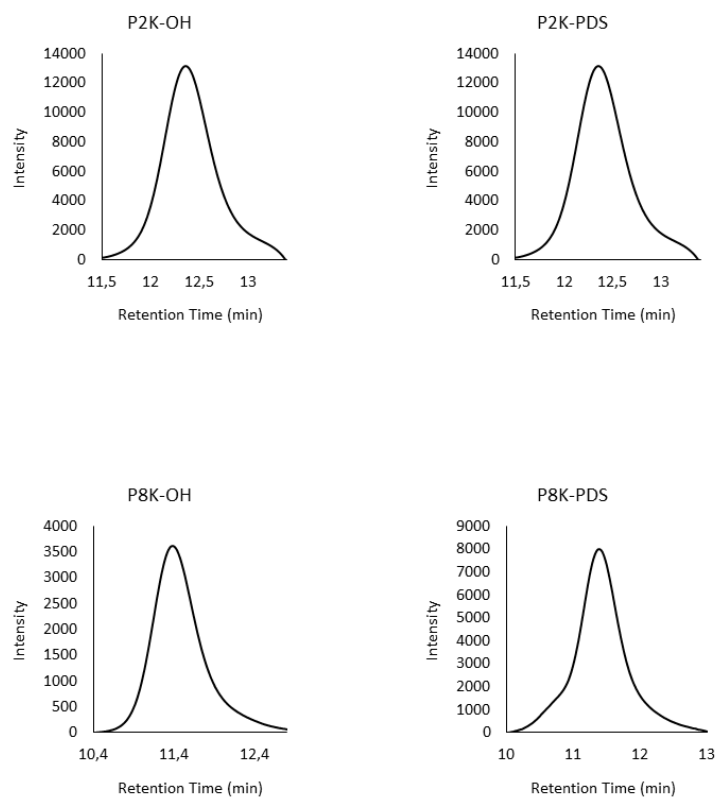


Figure S7. GPC chromatograms of linear PEG-OH (left) and PDS-functionalized PEG (right).

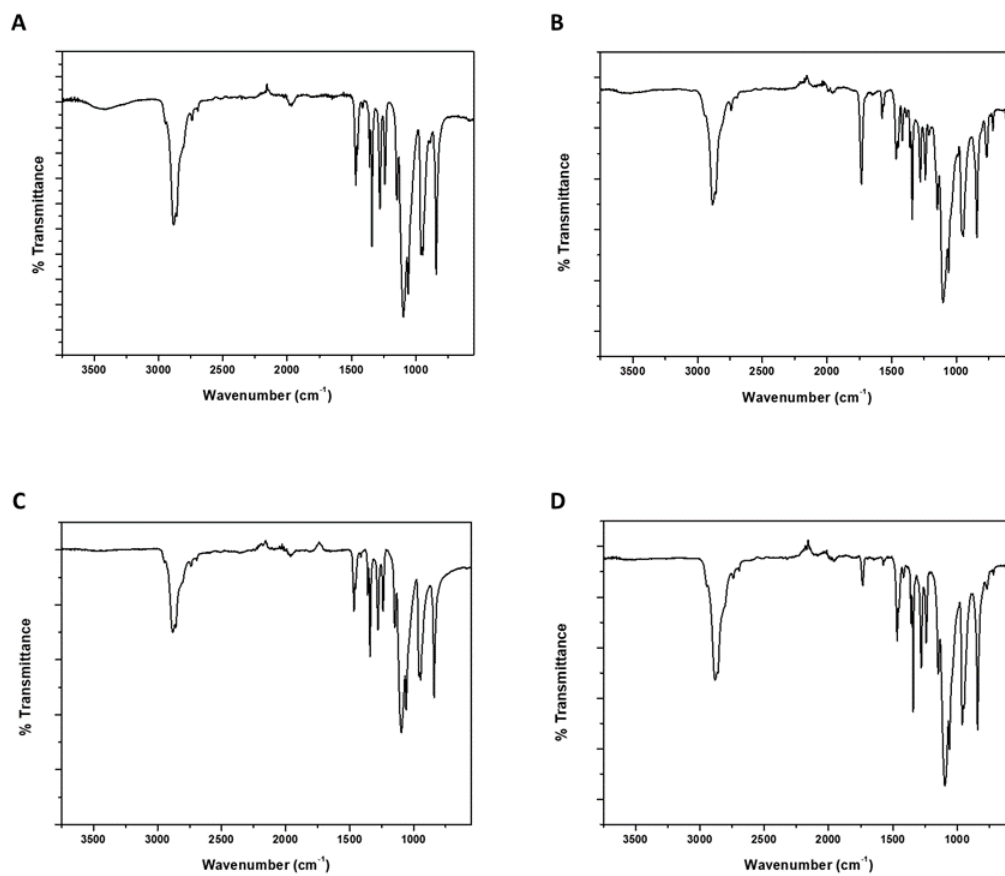


Figure S8. FTIR spectra of P2K-OH (A), P2K-PDS (B), P8K-OH (C), P8K-PDS (D).

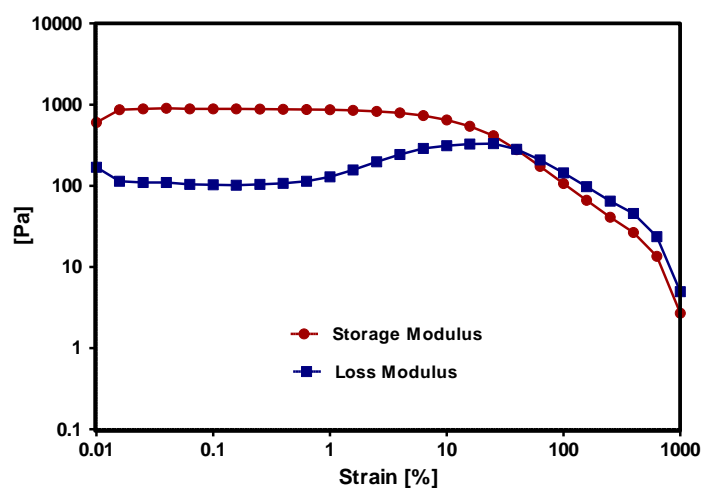


Figure S9. Strain dependent deformation of hydrogel (P8K).

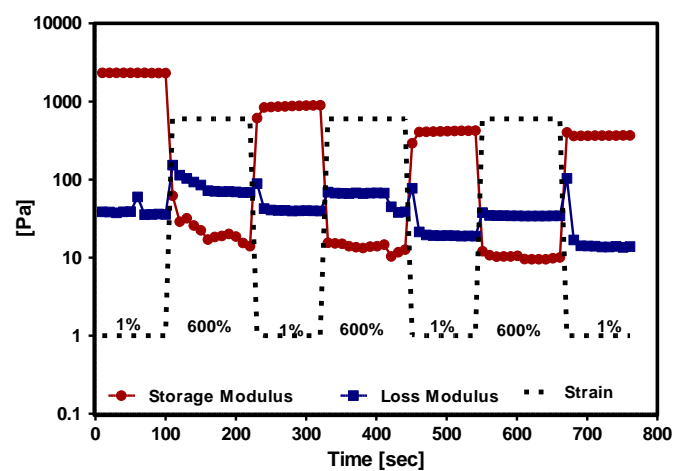


Figure S10. Rheological self-healing test for P8K hydrogel (40 mg) soaked in ethyl-maleimide containing PBS solution (0.6 mg/mL) showing storage modulus (G') and loss modulus (G'') at alternating strains of 1 and 600% (three cycles).

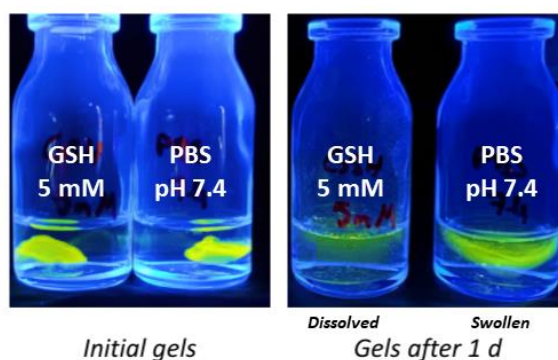


Figure S11. Visual degradation of dye-conjugated hydrogel (P8K) in GSH (5 mM) and PBS at 37 °C.