

*Supporting information*

# Redox-Responsive Heparin–Chlorambucil Conjugate Polymeric Prodrug for Improved Anti-Tumor Activity

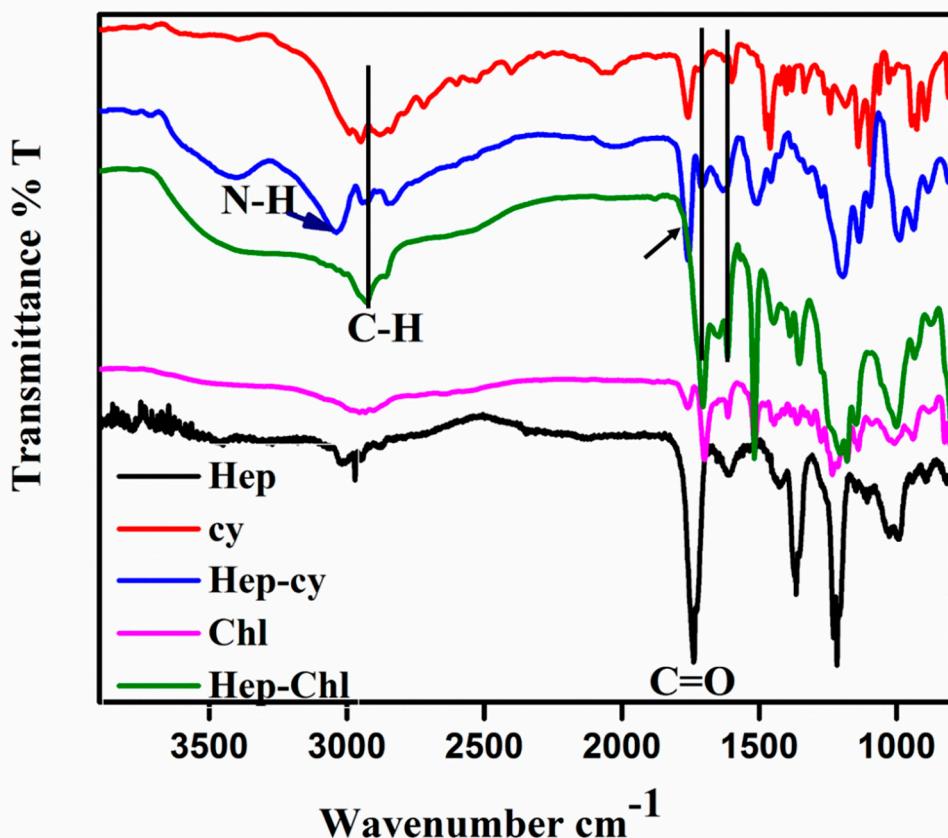
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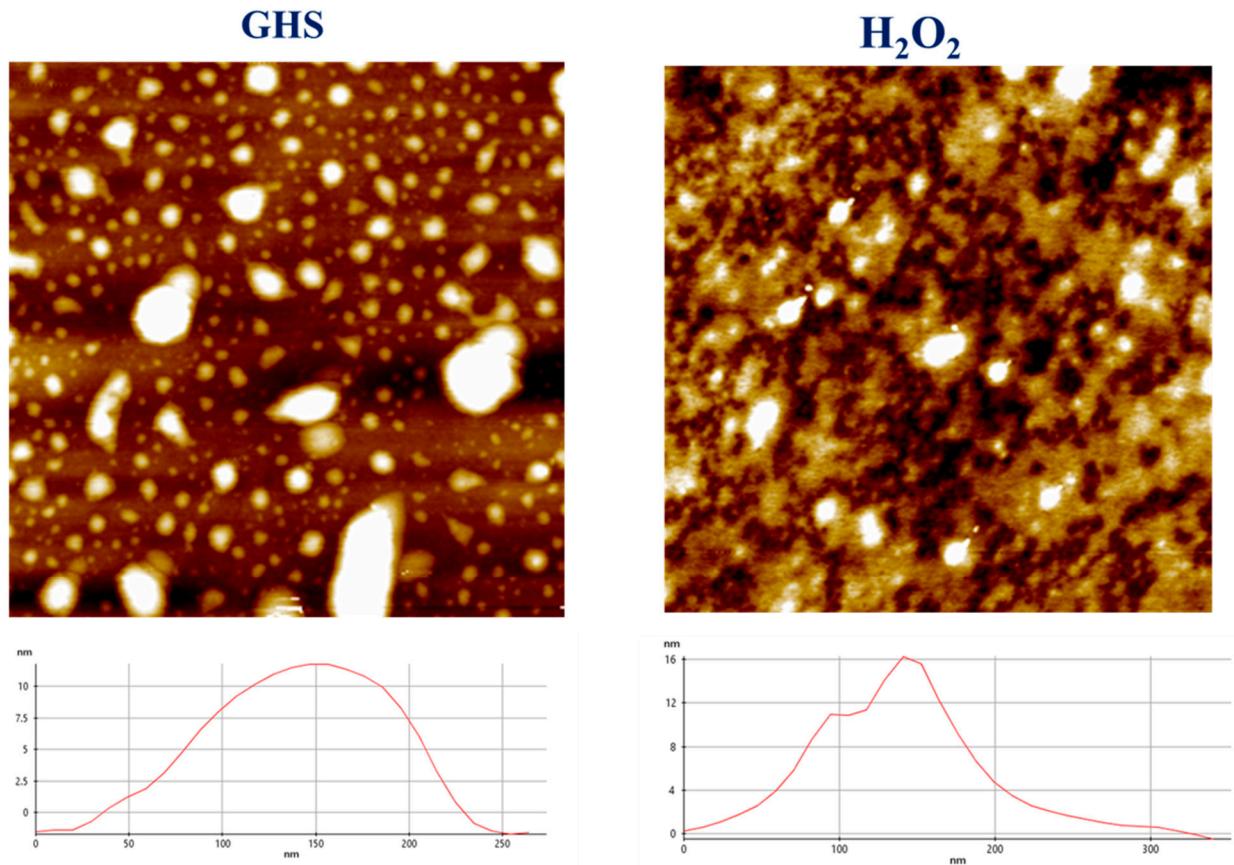
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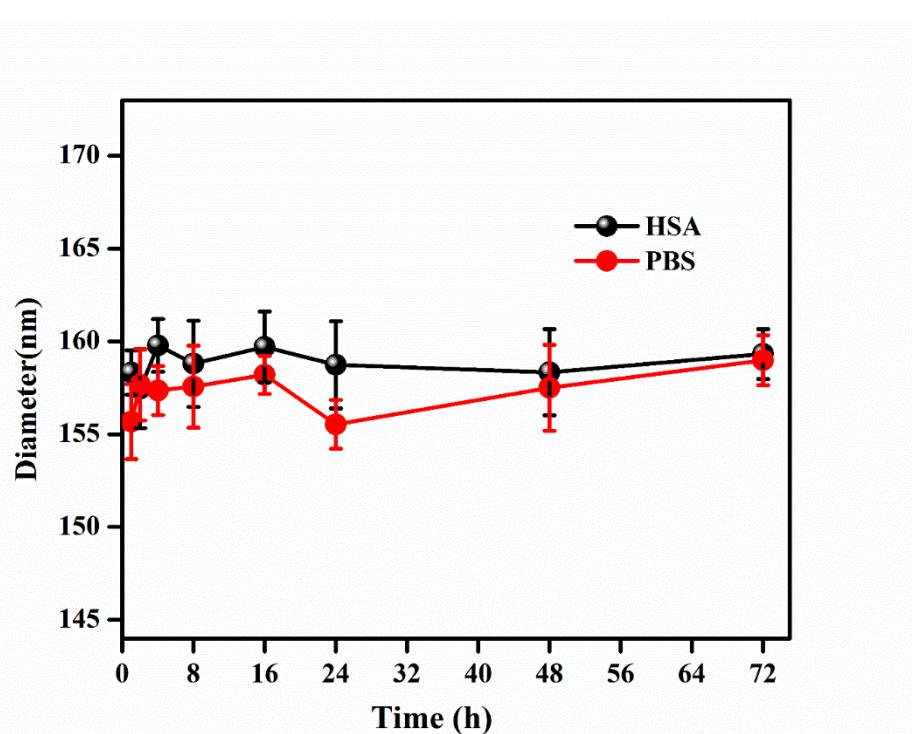
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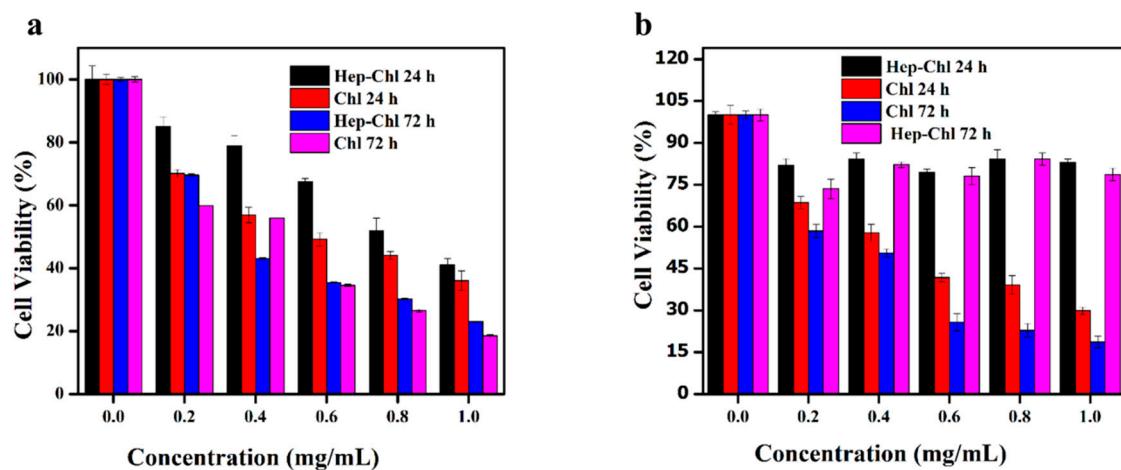
**Figure S1.** FTIR spectrum of heparin (black), PNIPAm-NH<sub>2</sub> (red), and conjugation (copolymer) (blue).



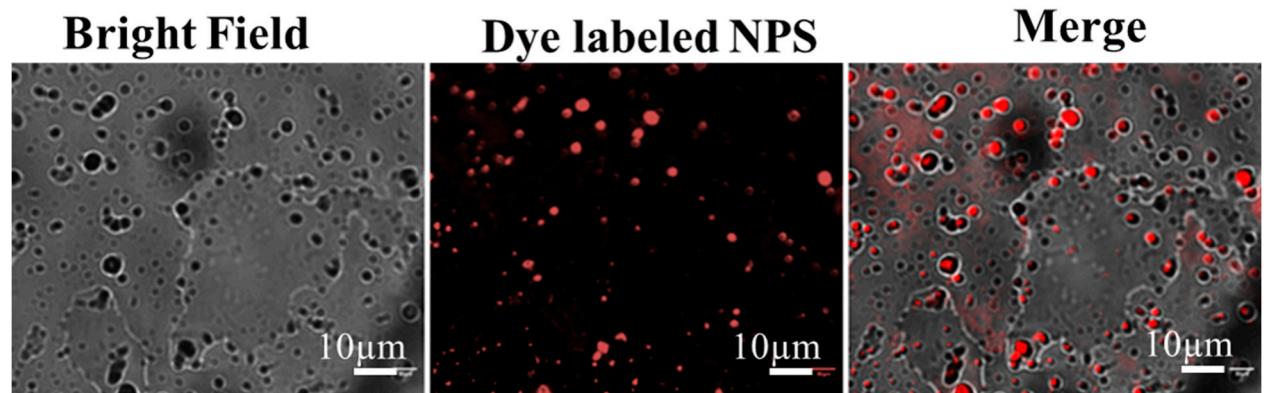
**Figure S2.** Particle morphology by AFM imaging of Hep-Chl-1 prodrug nanoparticles and after treatment either with 6 mM GSH and 0.1% H<sub>2</sub>O<sub>2</sub>.



**Figure S3.** The size of Hep-Chl-1 prodrug nanoparticles after incubating in human serum albumin and PBS with 1, 2, 4, 8, 16, 24, 48, and 72 h at 37 °C.



**Figure S4.** MTT profiles of (a) HeLa cells and (b) RAW264.7 cells treated with Chl and Hep-Chl (equivalent amount of Chl) for 24 and 72 h.



**Figure S5.** The fluorescence intensity measuring Rhodamine B labeled Hep-Chl-1 prodrug nanoparticle.