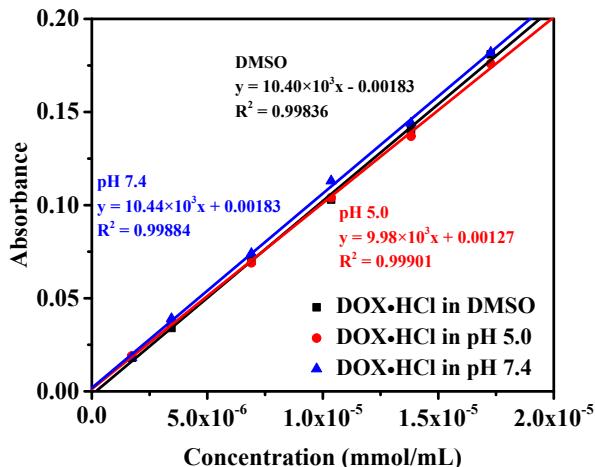
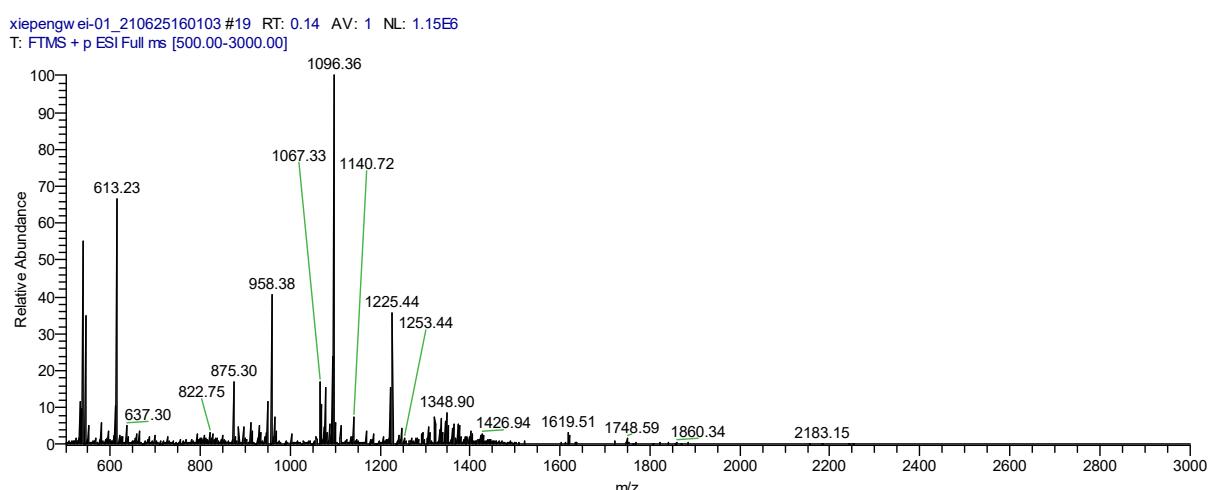


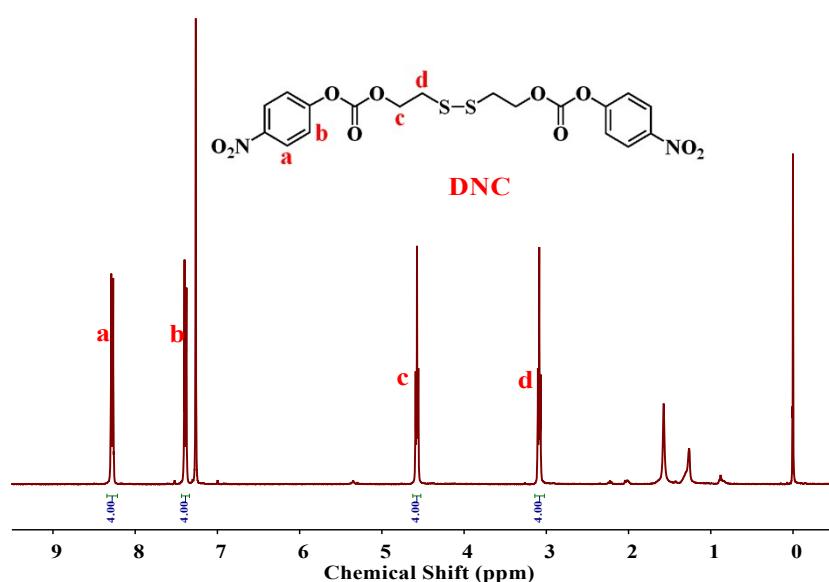
### Supporting Information



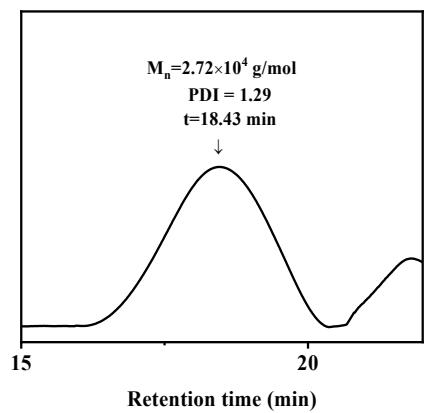
**Fig. S1.** Calibration curves of DOX·HCl in different solutions.



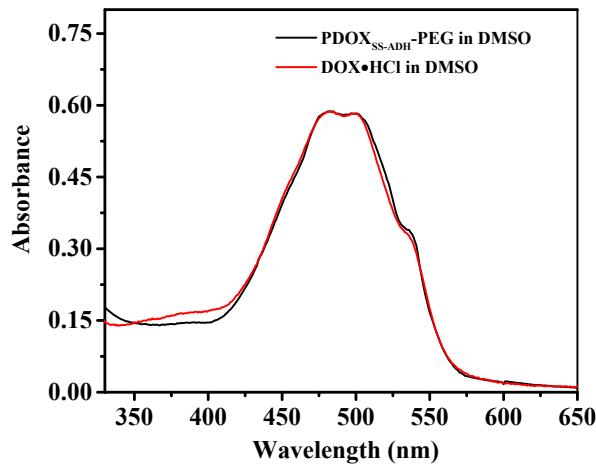
**Fig. S2.** ESI mass spectrum of D-DOX<sub>ADH</sub>.



**Fig. S3.** <sup>1</sup>H NMR spectra of DNC (CDCl<sub>3</sub>, 20 °C).



**Fig. S4.** GPC trace of the PDOX<sub>SS-ADH</sub>-PEG in DMF with calibrator of PMMA.



**Fig. S5.** UV-vis spectra of DOX·HCl ( $4.682 \times 10^{-5}$  mmol/mL) and PDOX<sub>SS-ADH</sub>-PEG( $4.682 \times 10^{-5}$  mmol/mL) in DMSO.