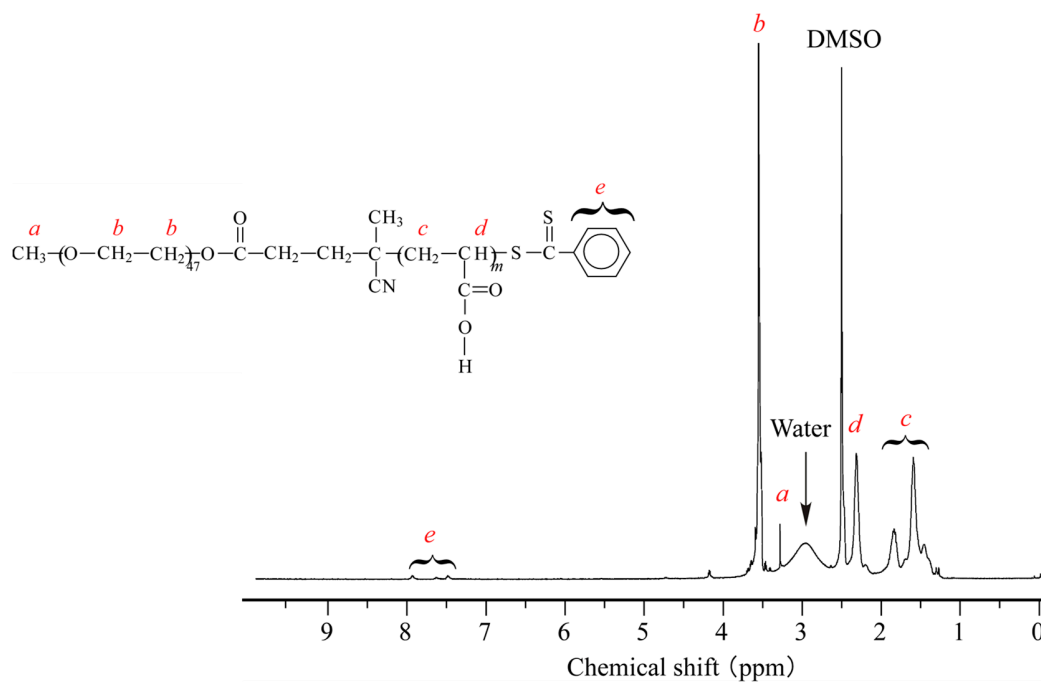
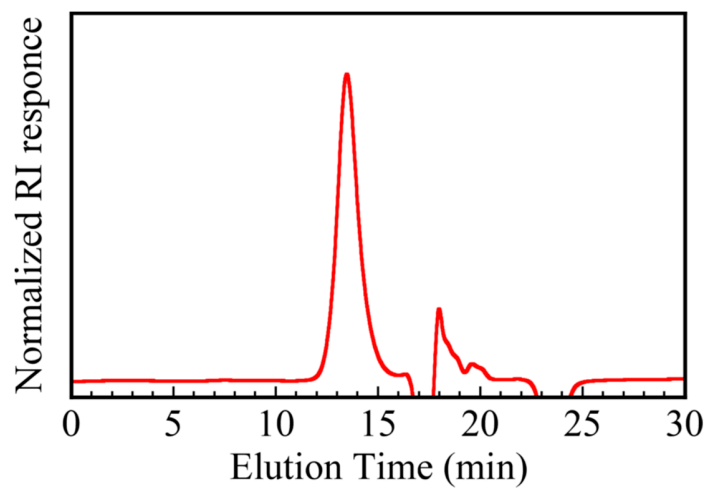


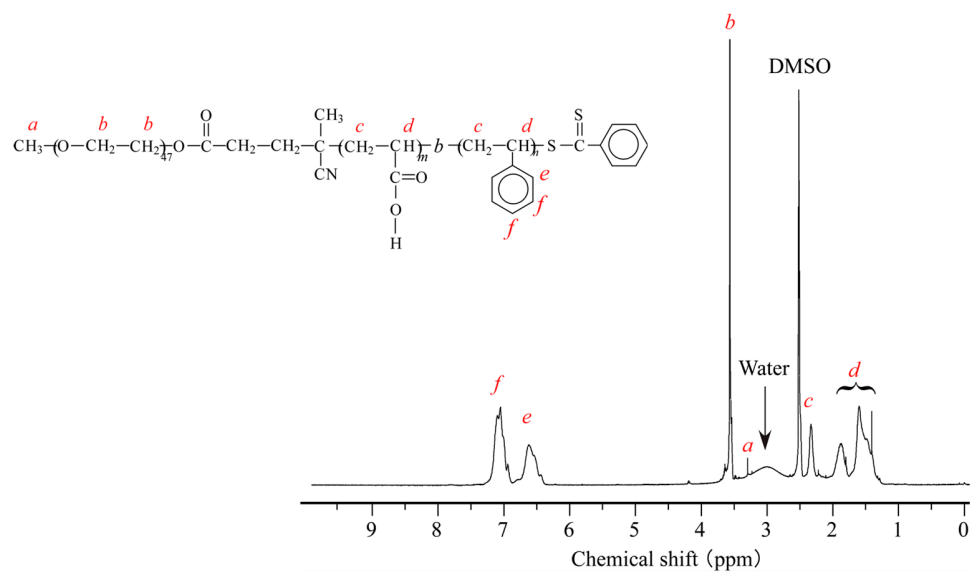
## Supporting Information



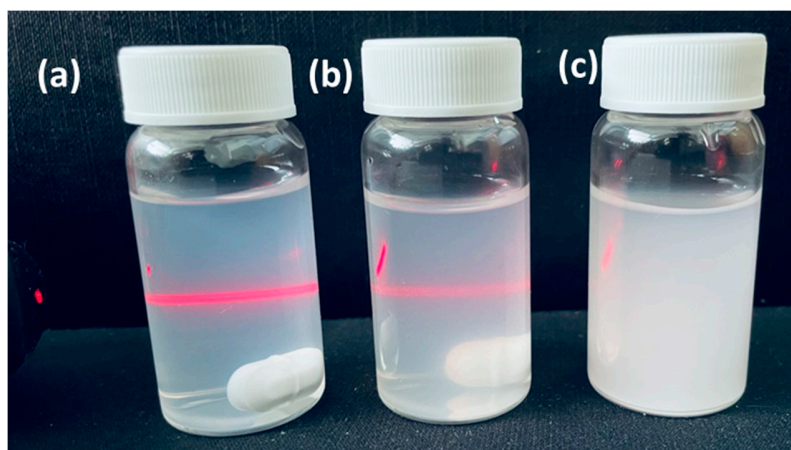
**Figure S1.**  $^1\text{H}$  NMR for PEG-PAA in DMSO- $d_6$  at 100 °C.



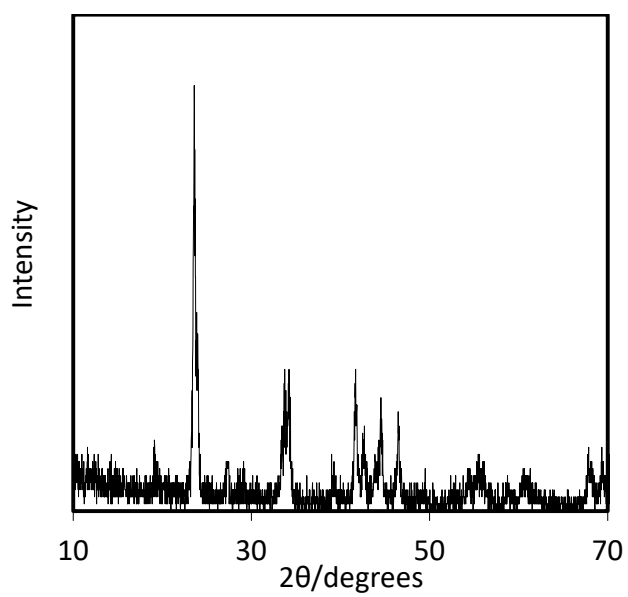
**Figure S2.** GPC elution curve for PEG-PAA using phosphate buffer as an eluent at 40 °C.



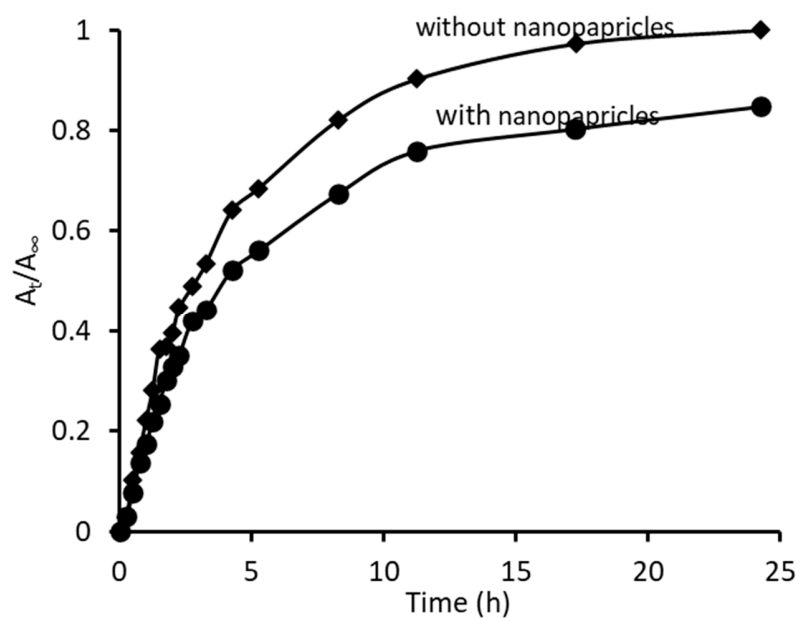
**Figure S3.**  $^1\text{H}$  NMR for PEG-PAA-PS in  $\text{DMSO-}d_6$  at  $100\text{ }^\circ\text{C}$ .



**Figure S4.** Tyndal effect showing formation of colloidal particles (a) PEG-PAA-PS polymer, (b)  $\text{Ba}^{2+}$ /PEG-PAA-PS (c)  $\text{BaCO}_3$ /PEG-PAA-PS aqueous solutions.



**Figure S5.** XRD spectrum of hollow BaCO<sub>3</sub> nanoparticles.



**Figure S6.** Drug release profile from hollow BaCO<sub>3</sub> nanoparticles.  $A_t$  and  $A_{\infty}$  are the absorbance of the released drug at time  $t$  and infinity, respectively.