

Supporting Information

Photosensitive Poly(*o*-nitrobenzyloxycarbonyl-L-lysine)-*b*-PEO Polypeptide Copolymers: Synthesis, Multiple Self-Assembly Behaviors, and the Photo/pH-Thermo-Sensitive Hydrogels

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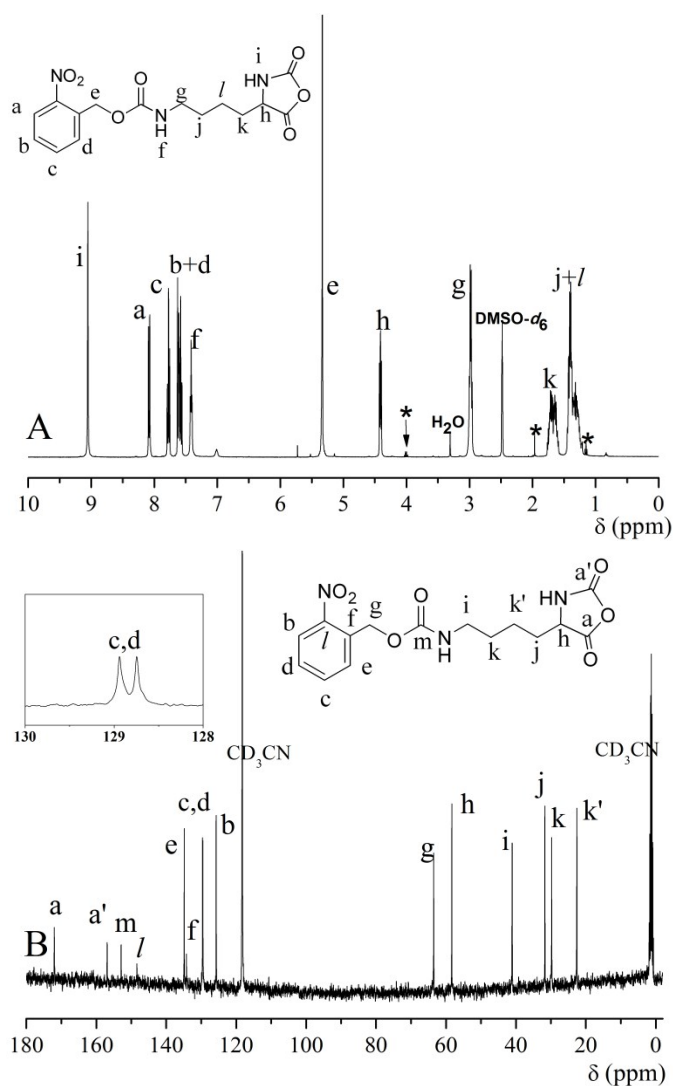


Figure S1. ^1H NMR spectrum of *o*NB-Lys NCA in $\text{DMSO-}d_6$ (A) and its ^{13}C NMR spectrum in CD_3CN (B) (“*” denotes the EtOAc solvent peaks).

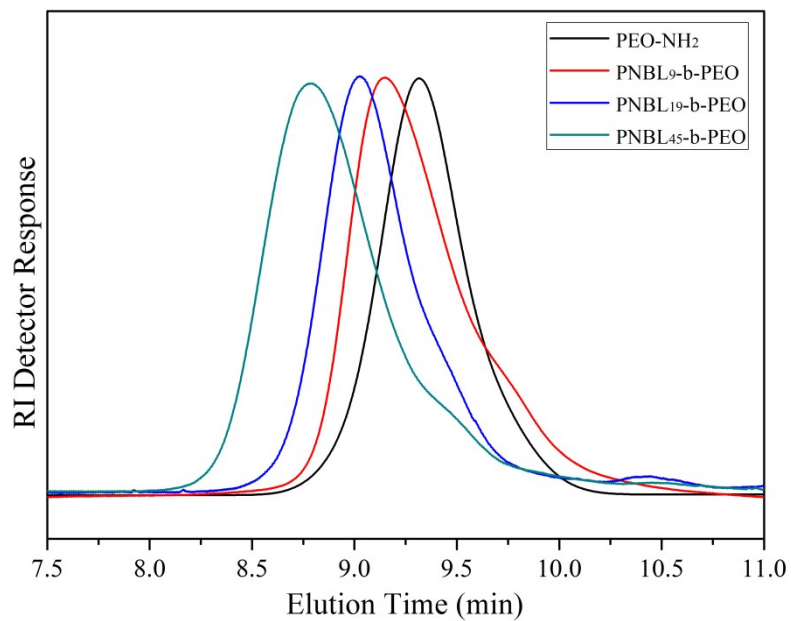


Figure S2. GPC traces of the PEO-NH₂ and PNBL-b-PEO block copolymers.

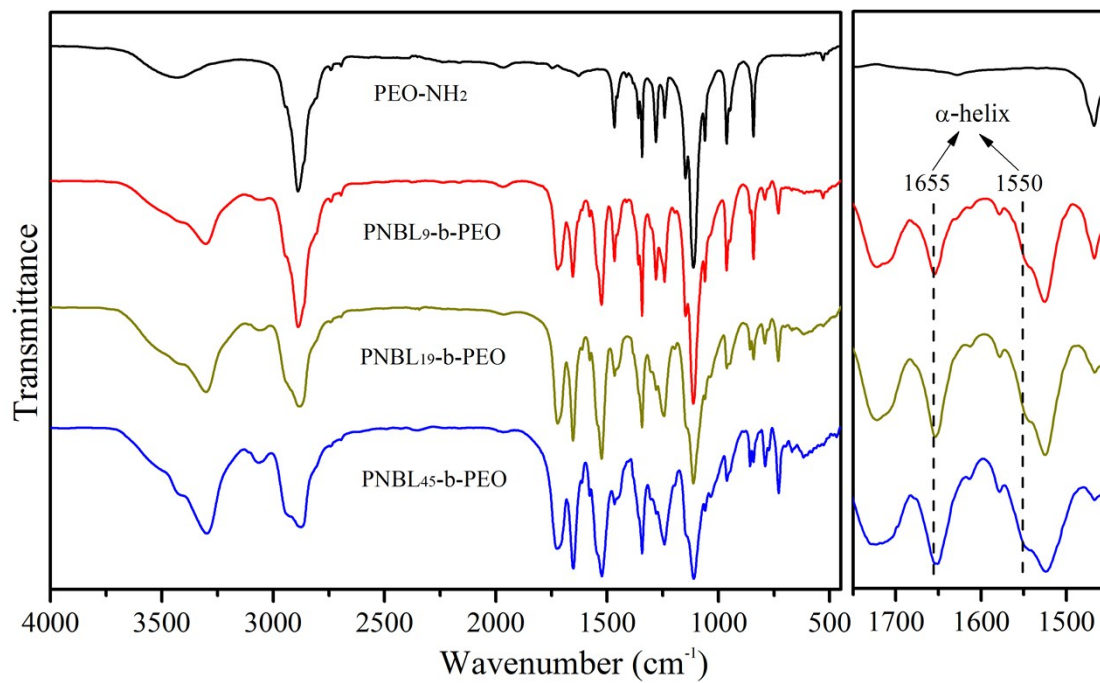


Figure S3. FT-IR spectra of the PEO-NH₂ and PNBL-b-PEO block copolymers.

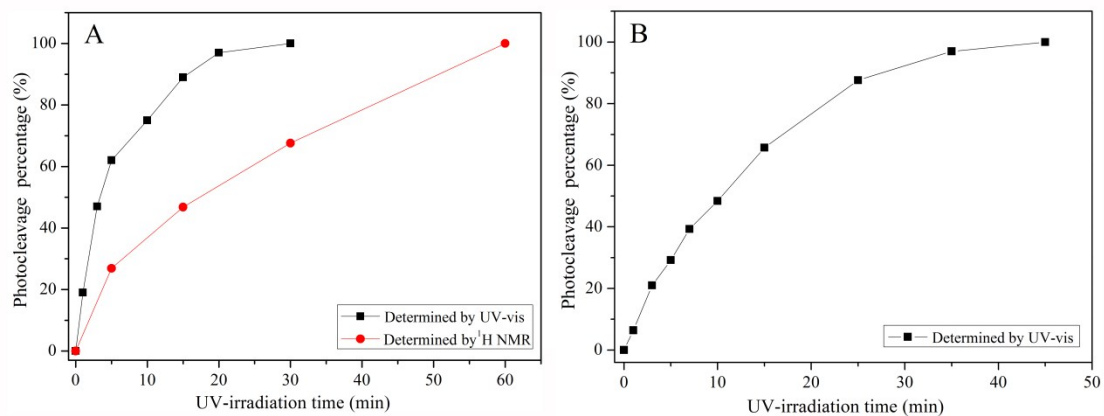


Figure S4. Photocleavage percentage of oNB group of PNBL₉-b-PEO in methanol solution (A) and in aqueous solution (B).

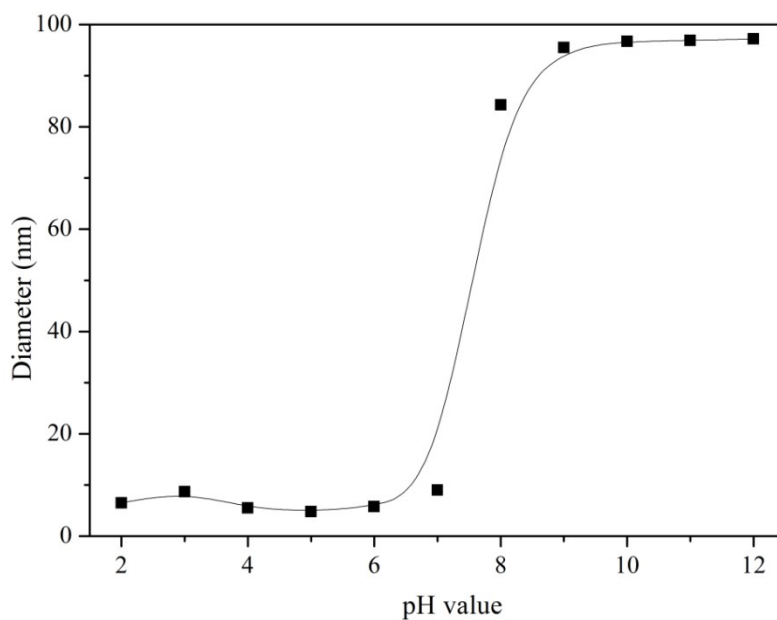
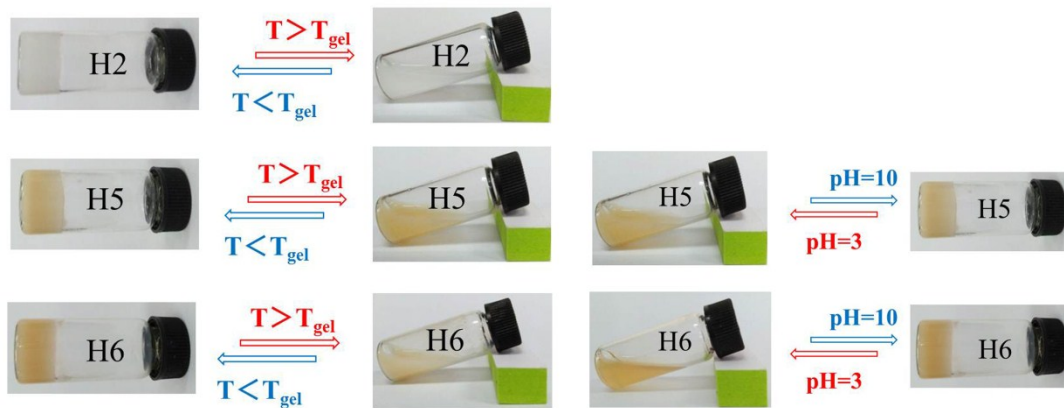


Figure S5. DLS-averaged diameter of PLys₉-b-PEO micelles as a function of pH.



(A) Thermo-sensitive hydrogel

(B) pH-Sensitive hydrogel

Figure S6. Digital images of thermo-sensitive hydrogels H2, H5 and H6 (A) and pH-sensitive hydrogels H5 and H6 (B).

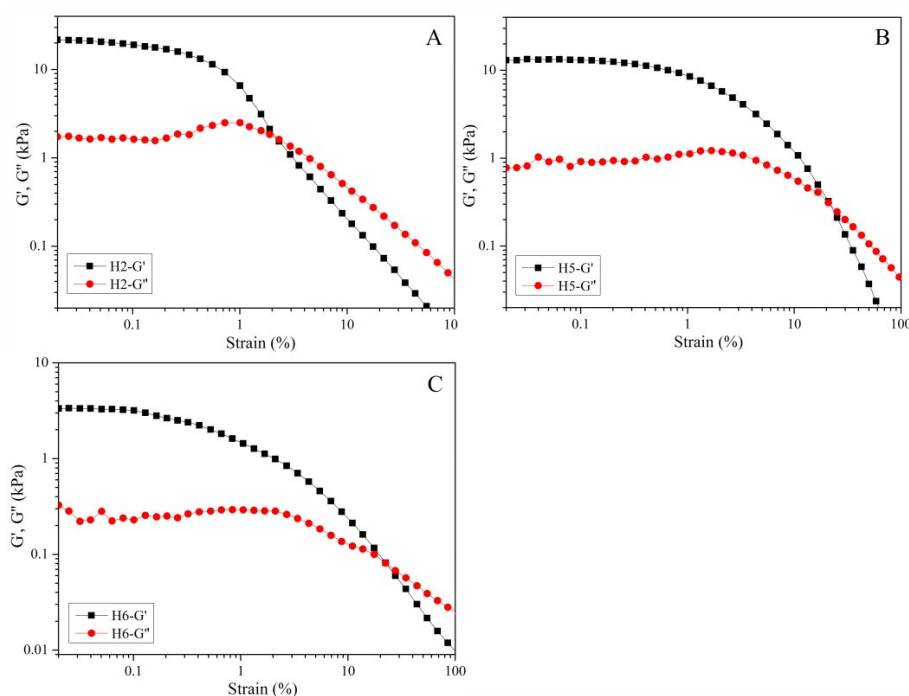


Figure S7. Storage (G') and (G'') loss modulus as a function of strain for hydrogels H2, H5 and H6.

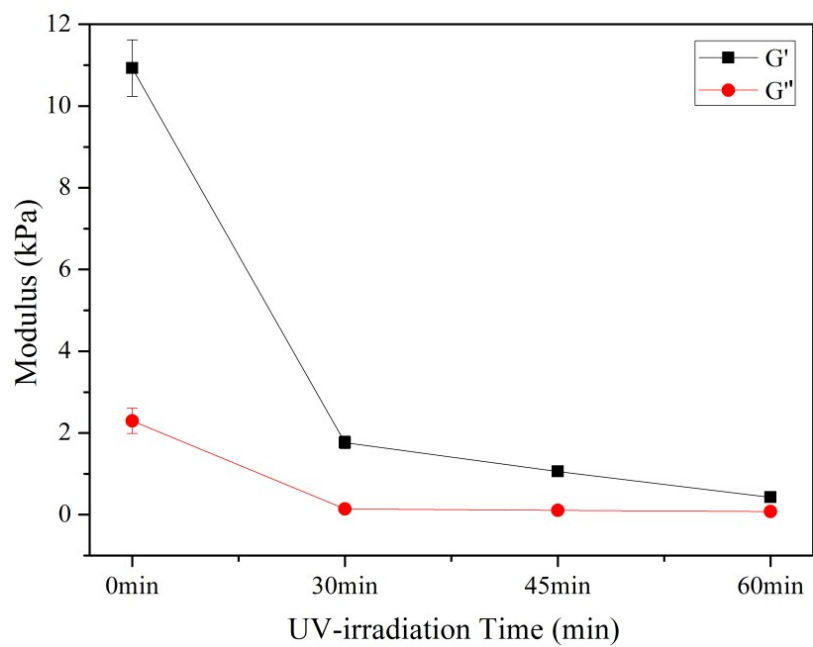


Figure S8. Dependence of UV cleavage time on the hydrogel mechanical properties.

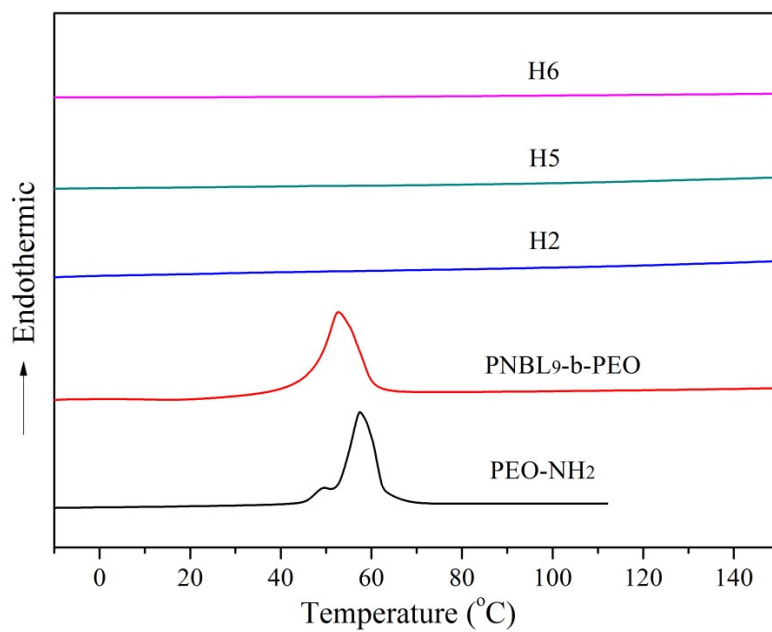


Figure S9. DSC curves of PEO-NH₂, PNBL₉-b-PEO, hydrogel H2, H5 and H6 in the second heating run.

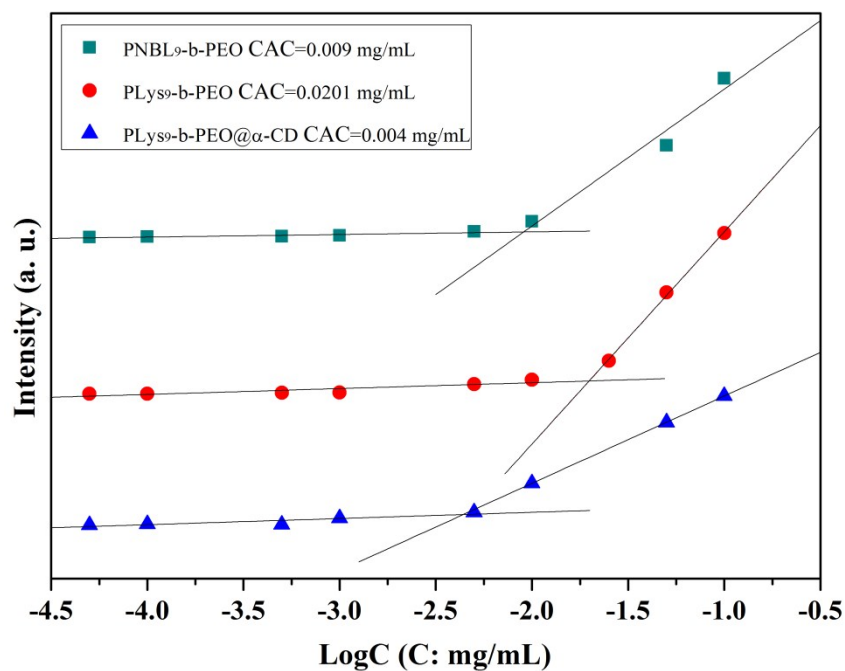


Figure S10. The relationship of the absorbance intensity of DPH as a function of copolymer concentration of PNBL₉-b-PEO (pH=7.5), PLys₉-b-PEO (pH=10) and PLys₉-b-PEO@α-CD (pH=3) respectively.