Supporting Information

Multi-Responsive Protein Nanocarriers from Anionic Dynamic Covalent Copolymer

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Modified TNBS assay

Poly(methylacryloylhydrazide) (PMAH) homopolymer was prepared by the reaction of PMAO homopolymer and excess Hydrazine hydrate. A stock solution of PMAH (1.1 mg/mL) was prepared in a borate buffer (pH 9.3, 0.05 M). A calibration curve was obtained by preparing PMAH of known concentration (3.564, 5.319, 7.092, 8.865, 10.638, 14.184, 19.5 × 10⁻⁵ mol/mL). 25 μL of this solution were added to a cuvette containing 950 μL of borate buffer and 25 μL of 0.03 M TNBS solution. After 100 min incubation, the absorption at 500 nm was measured.
Figure S1. GPC traces of (A) P(PEGMA)$_{17}$ homopolymer and (B) P(PEGMA)$_{17}$-b-PMAO$_{16}$ block copolymer.

Figure S2. Formation of acylhydrazone bond monitored by UV-vis.
Figure S3. Dependence of Zeta potential of the PIC micelles on mass ratio.