

Supplementary Materials

Thermoresponsive Poly(*N,N*-diethylacrylamide-*co*-glycidyl methacrylate) Copolymers and Its Catalytically Active α -Chymotrypsin Bioconjugate with Enhanced Enzyme Stability

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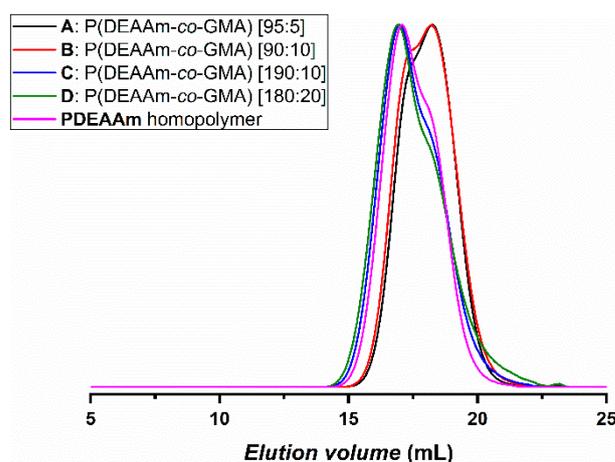


Figure S1. GPC chromatograms of the P(DEAAm-*co*-GMA) copolymers and PDEAAm homopolymer.

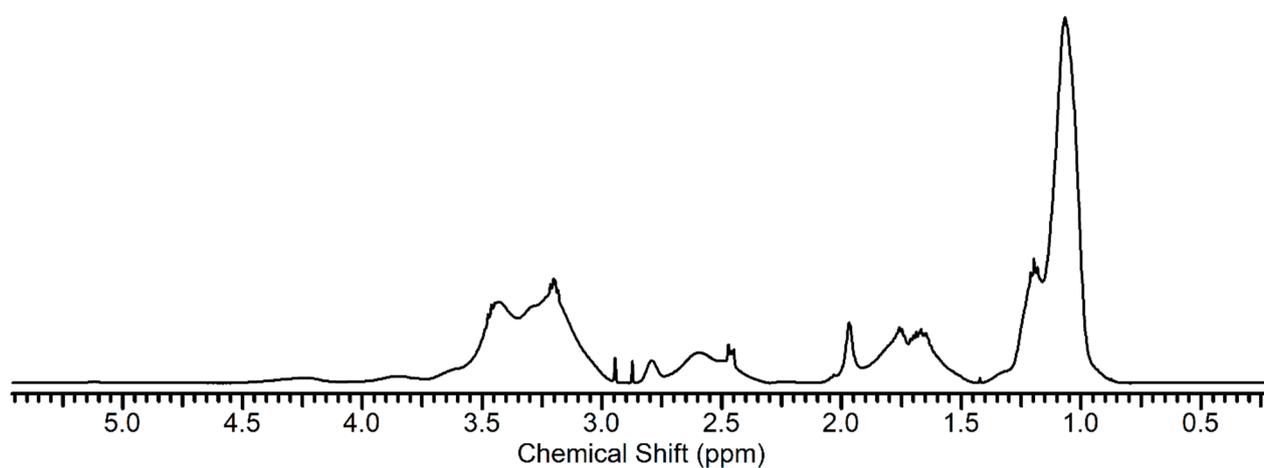


Figure S2. ¹H NMR spectrum of *Sample B* P(DEAAm-co-GMA) copolymer (molar feed ratio AIBN:DEAAm:GMA = 1:90:10).

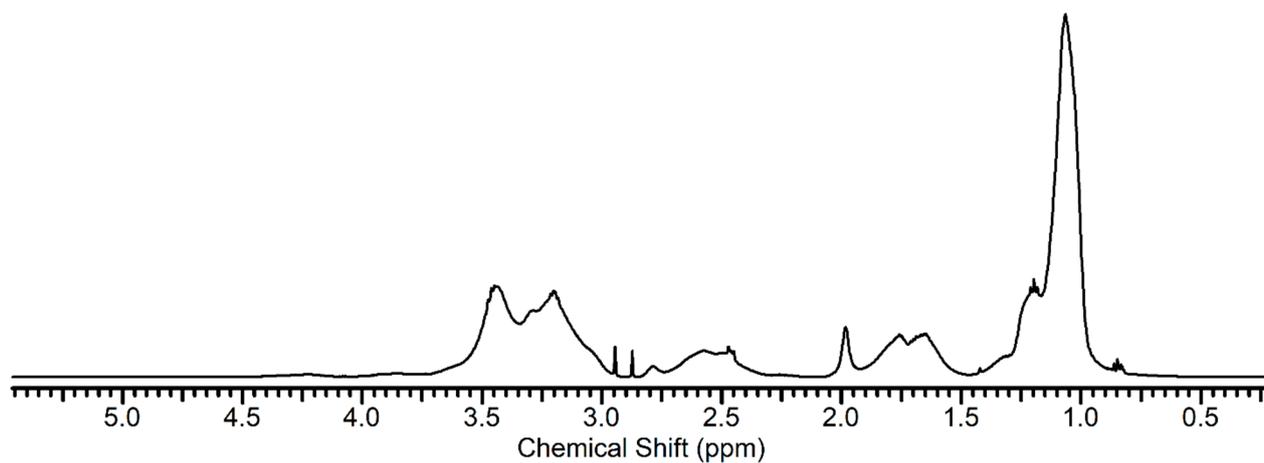


Figure S3. ¹H NMR spectrum of *Sample C* P(DEAAm-co-GMA) copolymer (molar feed ratio AIBN:DEAAm:GMA = 1:190:10).

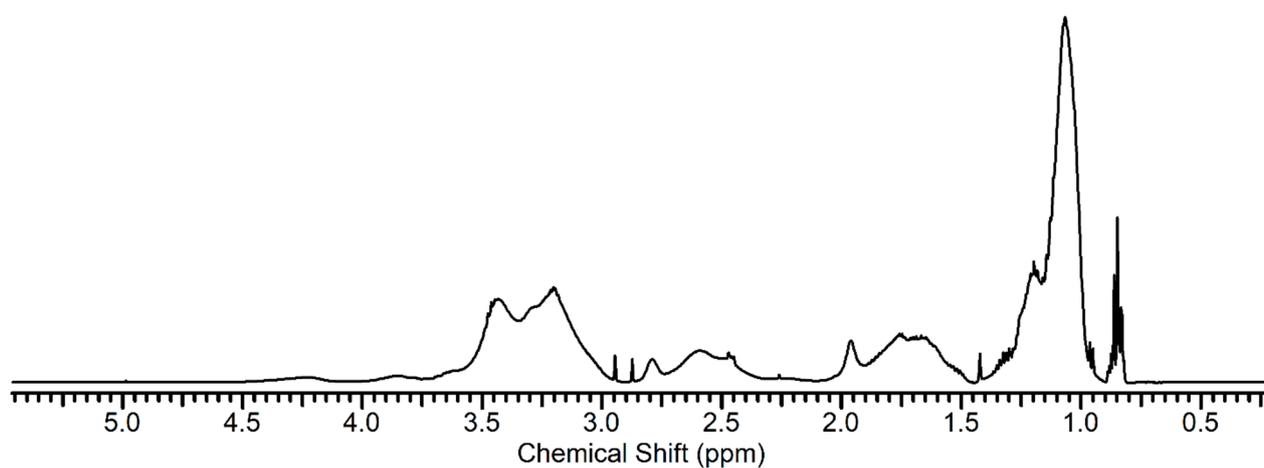


Figure S4. ¹H NMR spectrum of *Sample D* P(DEAAm-co-GMA) copolymer (molar feed ratio AIBN:DEAAm:GMA = 1:180:20).

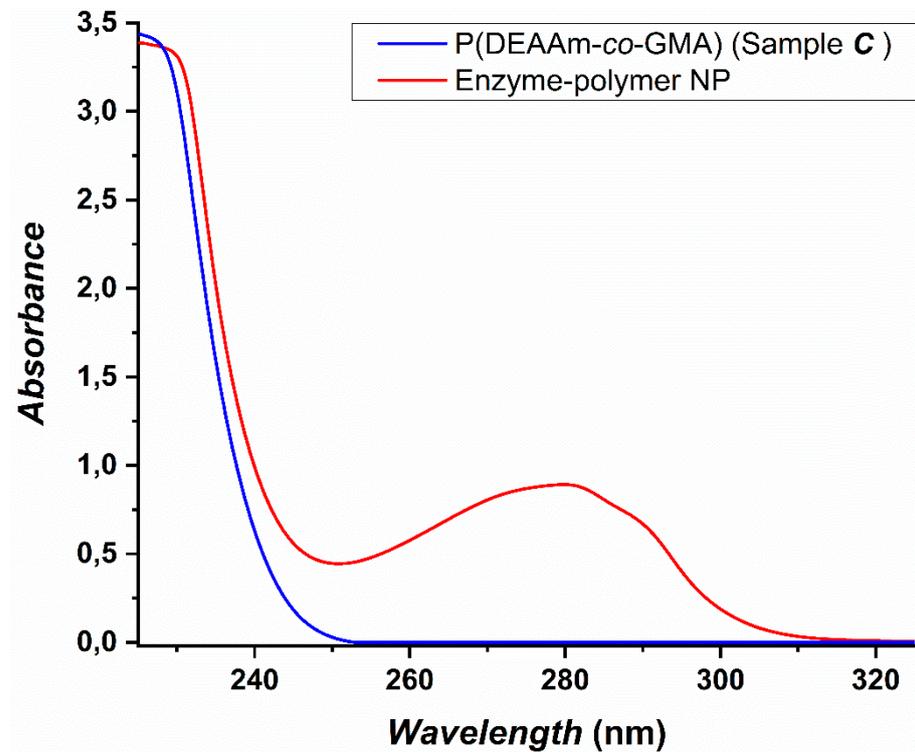


Figure S5. UV spectra of the P(DEAAm-co-GMA) (Sample C, blue) and the produced enzyme-polymer nanoparticle (red).

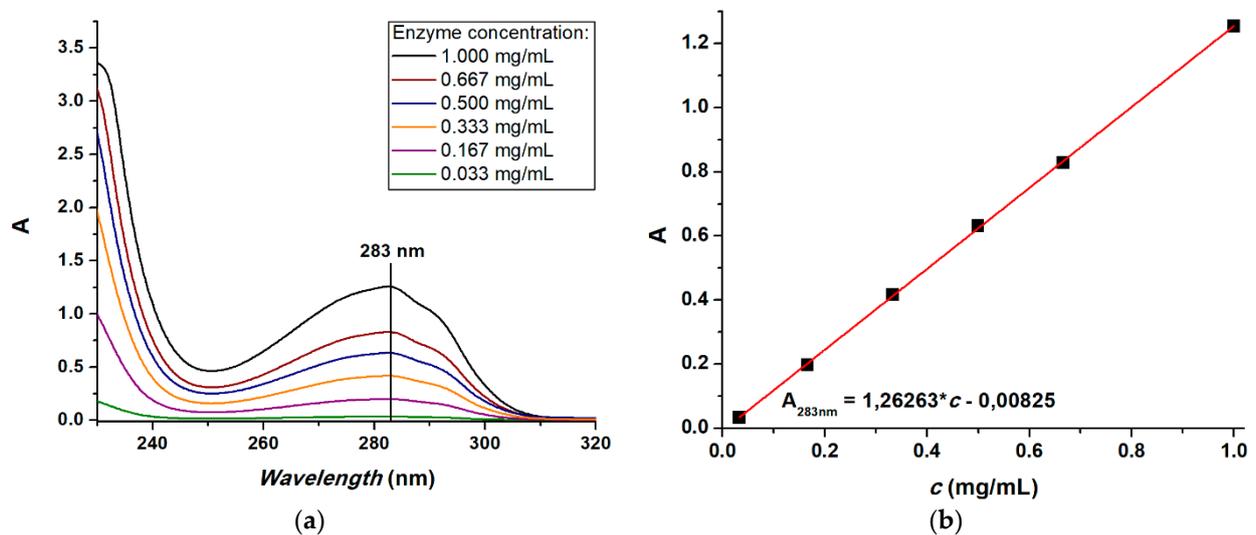


Figure S6. UV spectra of the α -chymotrypsin in the concentration range of 0.033–1 mg/mL (a) and the calibration curve fitted on the absorbance at 283 nm as a function of the enzyme concentration (b).

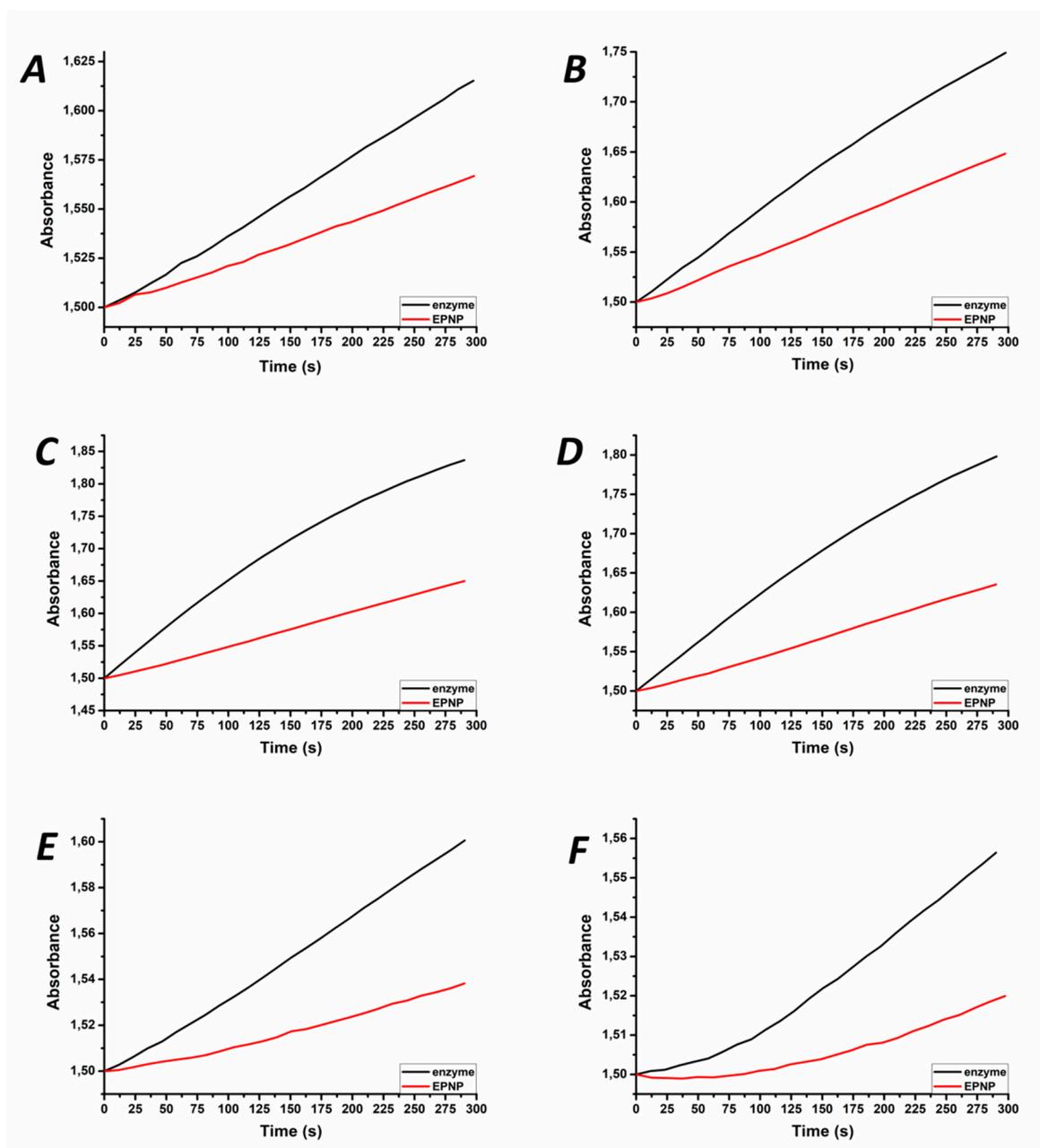


Figure S7. Representative enzymatic activity investigation curves of the absorbance measurement of the enzyme (black) and EPNP (red) in time in different pH solvents (pH = 6 (A); 7 (B); 7.4 (C); 7.8 (D); 8 (E); 9 (F)).

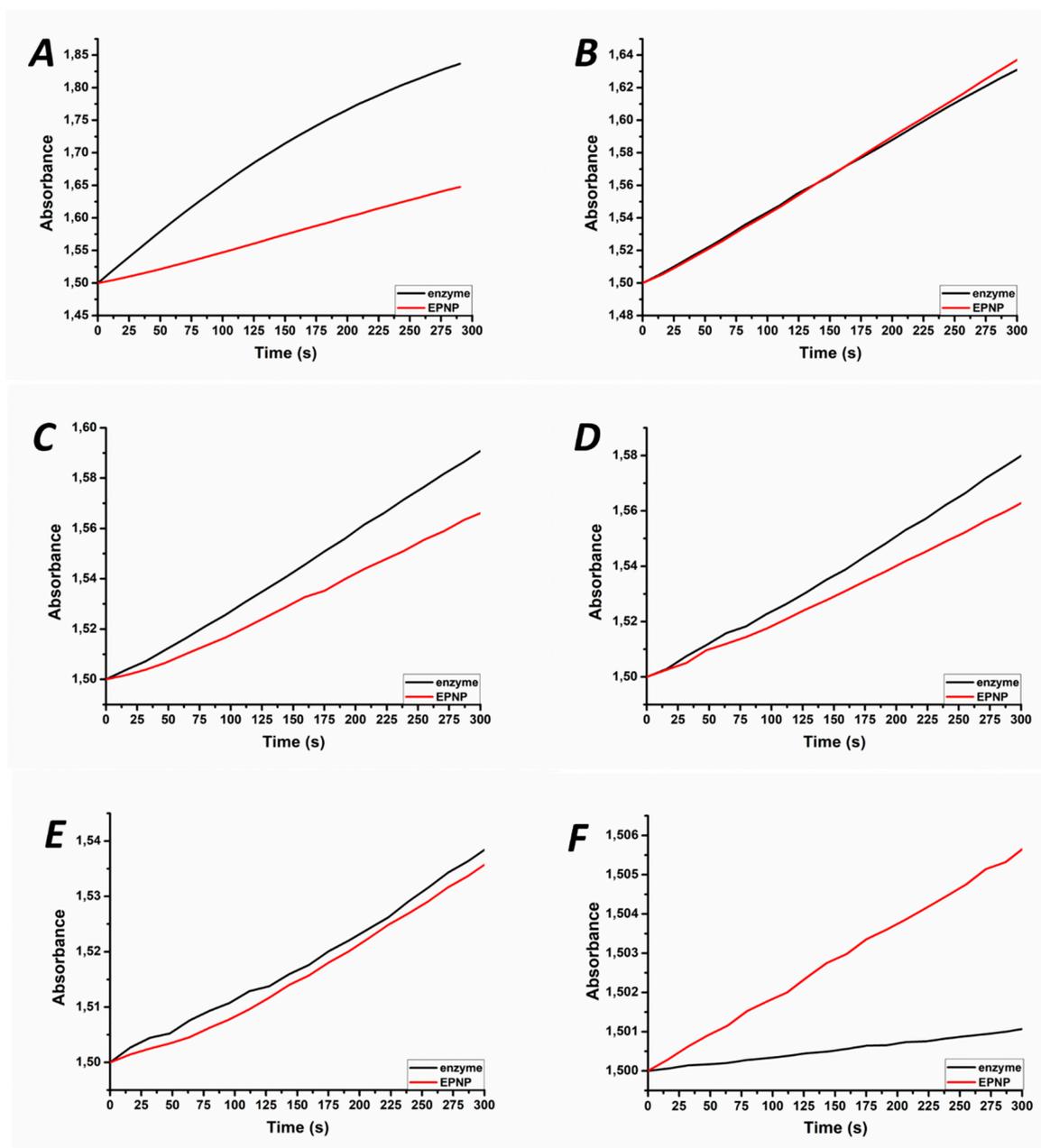


Figure S8. Representative curves of the activity measurements of the enzyme (black) and EPNP (red) in PBS buffer after thermostated at 45 °C for 0 min (A), 5 min (B), 15 min (C), 30 min (D), 60 min (E) and 120 min (F).