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Supporting Information

Preparation and Thermoresponsive Properties of Helical Polypeptides Bearing Pyridinium Salts

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HO
$$\frac{\text{CI}}{\text{NH}_2}$$
 OH $\frac{\text{CI}}{\text{H}_2}$ OH $\frac{\text{CI}}{\text{H}_2}$ OH $\frac{\text{Triphosgene}}{\text{THF}}$ OH $\frac{\text{Triphosgene}}{\text{THF}}$ OH $\frac{\text{CP-Glu or CH-Glu}}{\text{NH}_2}$ OH $\frac{\text{CP-Glu or CH-Glu}}{\text{THF}}$ OH $\frac{\text{CP-NCA or CH-NCA}}{\text{CP-NCA or CH-NCA}}$ PCPLG or PCHLG

Scheme S1. The synthetic route of poly(γ -3-propyl-_L-glutamate) and poly(γ -6-hexyl-_L-glutamate).

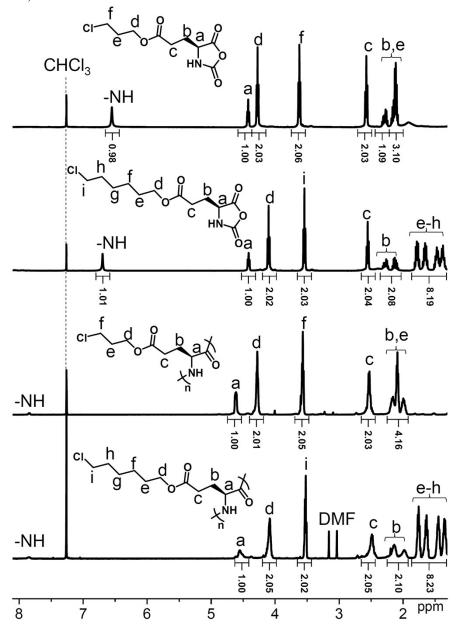


Figure S1. ¹H NMR spectra of CP-NCA and CH-NCA in CDCl₃, PCPLG and PCHLG in CDCl₃/TFA-d (V/V = 80/20).

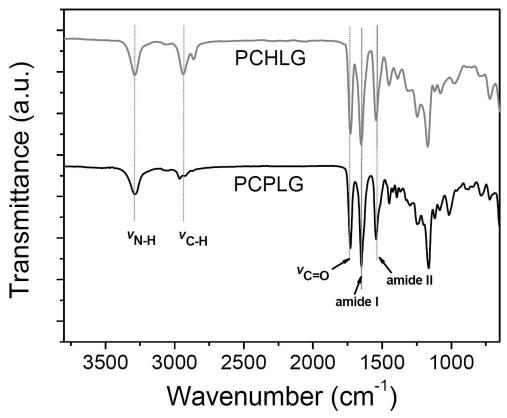


Figure S2. FTIR spectra of PCPLG and PCHLG.

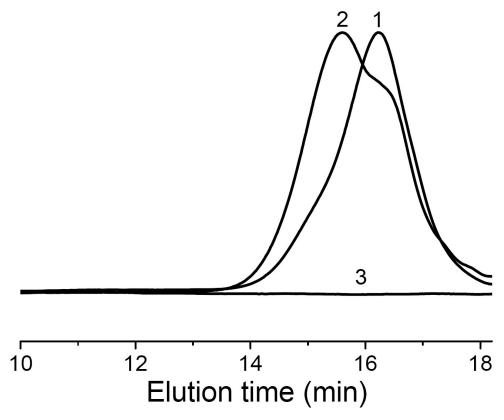


Figure S3. GPC chromatogram of PCPLG (curve 1: $M_n = 5570$, PDI = 1.32, DP = 27), PCHLG (curve 2: $M_n = 6430$, PDI = 1.57, DP = 26), and **P15** (curve 3).