**Supplementary Material**

Investigation of the Temperature Responsive Behaviors of Novel Polyaspartamide Derivatives Bearing Alkyl Ether-type Pendants

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**Fig.S1** 1H NMR spectrum of PSI in DMSO-d6.

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**Fig.S2** The optical pictures of PASP-OC6 in deionized water at pH value of 2.0 and 12.0 for (A) 0 hour and (B) 24 hours.

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**Fig.S3** Temperature dependence of the light transmittance for PNIPAAm in deionized water on the heating and cooling process (polymer concentration: 5.0 mg/mL).

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**Fig.S4** Effect of polymer concentration on the temperature responsive behavior of PASP-OC5.

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**Fig.S5** SEC traces of PASP-OC5 samples treated at pH 2.0 and 12.0 for 24 hours and untreated PASP-OC5 sample.

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**Fig.S6** Effect of NaCl concentration on the LCST of PASP-OC5 (polymer concentration: 5.0 mg/mL)

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**Fig.S7** The change of zeta potential of PASP-OC5 in deionized water from temperature (polymer concentration: 5.0 mg/mL)