# Synthesis and Thermo- / pH- Dual Responsive Properties of Poly(amidoamine) Dendronized Poly(2-hydroxyethyl) Methacrylate By Min Gao, ${ }^{\dagger}$ Xinru Jia, ${ }^{, \dagger}{ }^{\dagger}$ Yan Li, ${ }^{\dagger}$ Dehai Liang, ${ }^{\dagger}$ and Yen Wei ${ }^{\S}$ 

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Figure S1. ${ }^{1} \mathrm{H}$ NMR spectrum of 2-((4-nitrophenoxy)carbonyloxy)ethyl methacrylate (1, unpurified) in $\mathrm{CDCl}_{3}$ with TMS as internal standard at 300 MHz .


Figure S2. GPC traces for (a) PG1-macro (black line) and PG1-macro2 (red line), and (b) PG2-macro with DMF containing $0.05 \mathrm{wt} \% \mathrm{LiBr}$ as the eluent.


Figure S3. The plots of transmittance vs. temperature for PG2-macro solution ( $\mathrm{pH}=7.4$ ) during one heating and cooling cycle.


Figure S4. A series of optical micrographs of PG2-macro solution ( $\mathrm{pH}=7.4$ ) in the process of cooling (from 36 to $20^{\circ} \mathrm{C}$ ) at the rate of $2{ }^{\circ} \mathrm{C} / \mathrm{min}$. The concentration of the solution is 1.0 mg $\mathrm{mL}^{-1}$.


Figure S5. The ESI MS spectra of (a) G1-macro and (b) G2-macro.

