

Table S1. Characteristic data of P(NIPAAm-*co*-AMPS)s

Code^a	AMPS content	$M_{n,theo.}^b$	M_n^c	M_w/M_n^c
	in copolymer^b			
	(mol%)	(-)	(-)	(-)
NA_5	5	21300	28000	1.30
NA_10	11	23100	34600	1.28
NA_20	19	26000	43300	1.25

^aP(NIPAAm-*co*-AMPS)s were abbreviated as NA_X, where X is the AMPS content in the copolymer in feed. ^bEstimated by ¹H NMR.

^cDetermined by GPC using DMF with 10 mM LiBr.

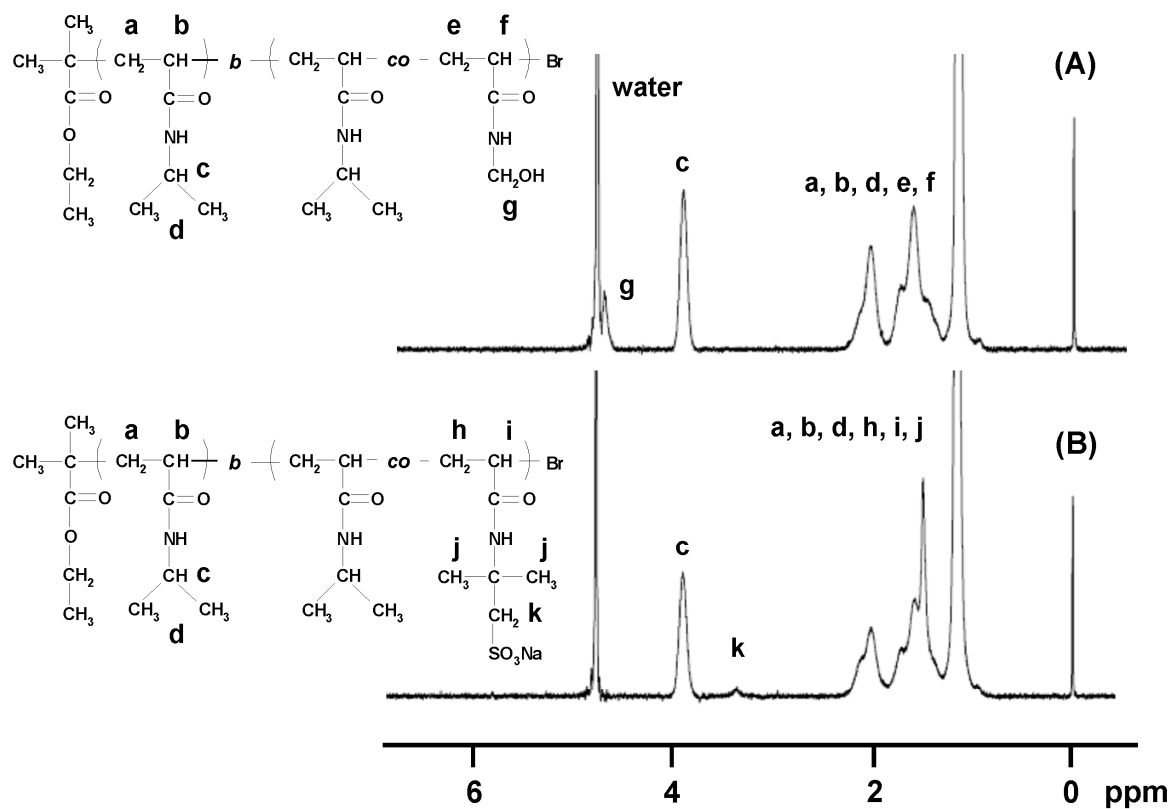


Fig. S1. Temperature-dependent ¹H NMR spectra of 1 w/v% solution of (A) NbnH, and (B) NbnA in D₂O at 22 °C.

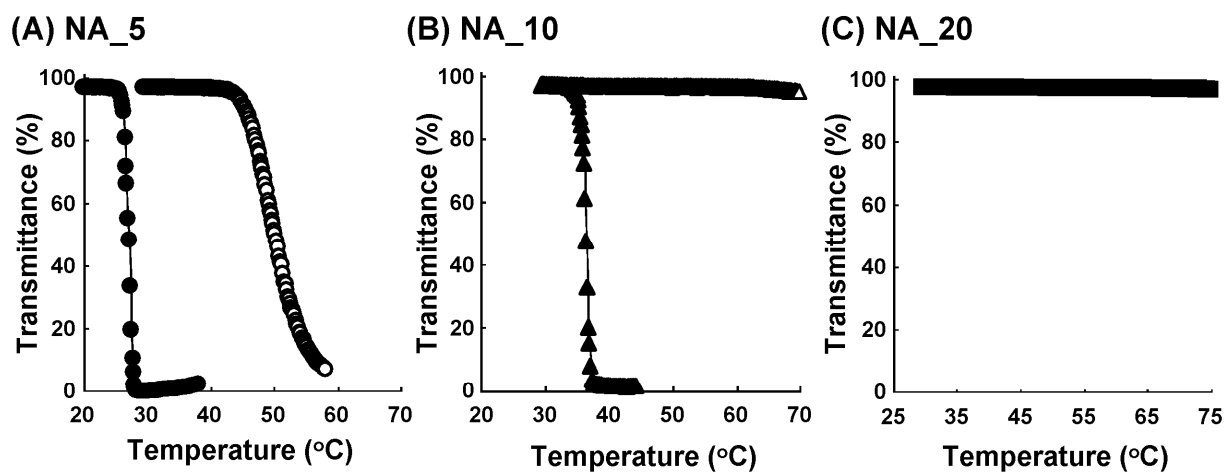
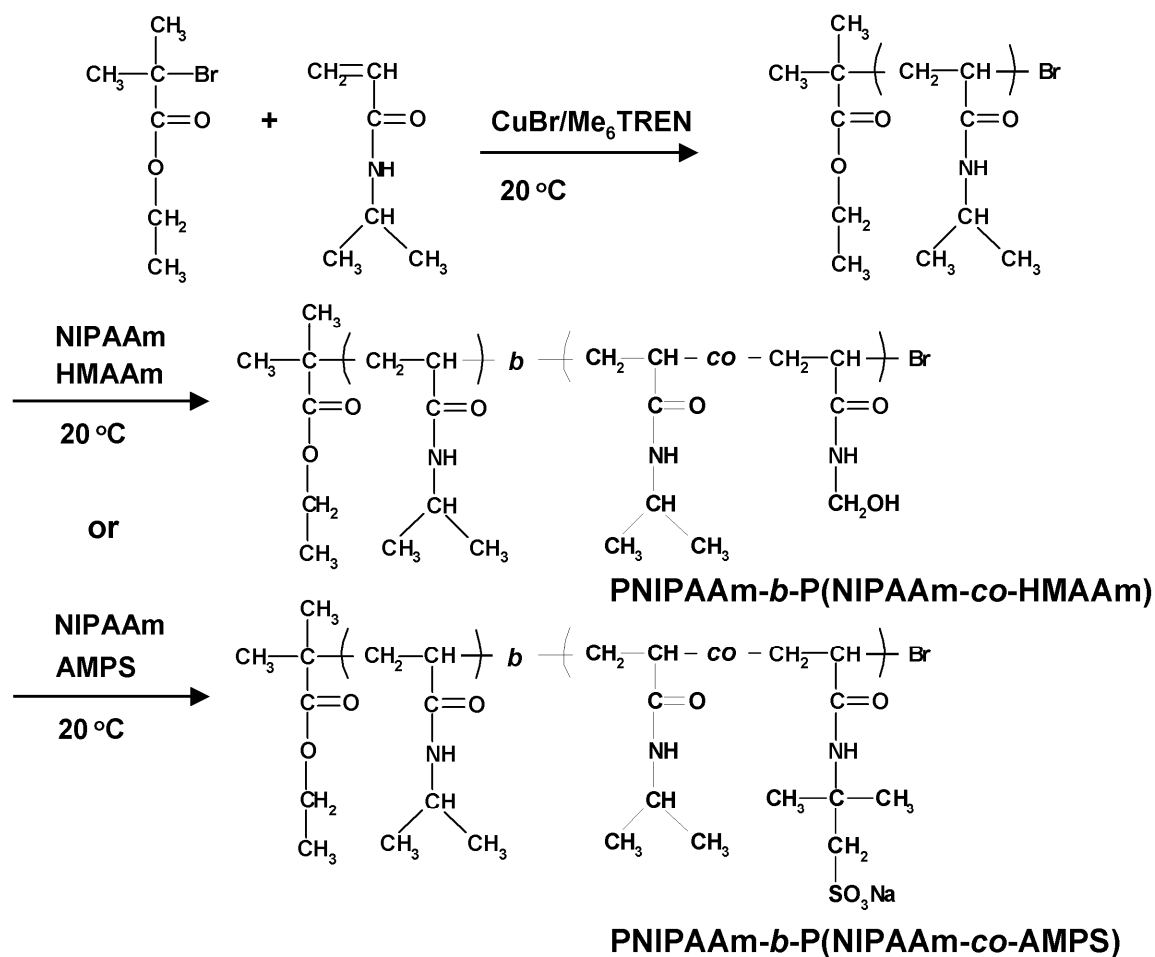
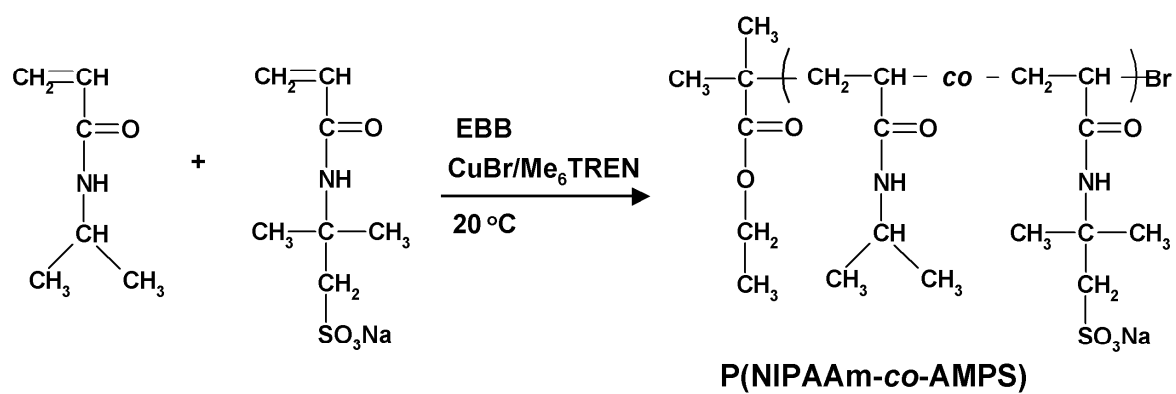


Fig. S2. Temperature-dependent transmittance changes of 0.5 w/v% aqueous solution of P(NIPAAm-*co*-AMPS)s without ((○) NA_5 and (△) NA_10) and with ((●) NA_5, (▲) NA_10 and (■) NA_20) 1M NaCl_{aq.} as a function of temperature.



Scheme S1. Synthesis of the PNIPAAm-*b*-P(NIPAAm-co-HMAAm) and PNIPAAm-*b*-P(NIPAAm-co-AMPS).



Scheme S2. Synthesis of the P(NIPAAm-co-AMPS).