

Supplementary Information for

Enantioselective Assembly of Amphipathic Chiral Polymer and Racemic Chiral Small Molecules during Preparing Micro-scale Polymer Vesicles

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Characterization of materials

1. GPC characterization of the macro chain transition agent

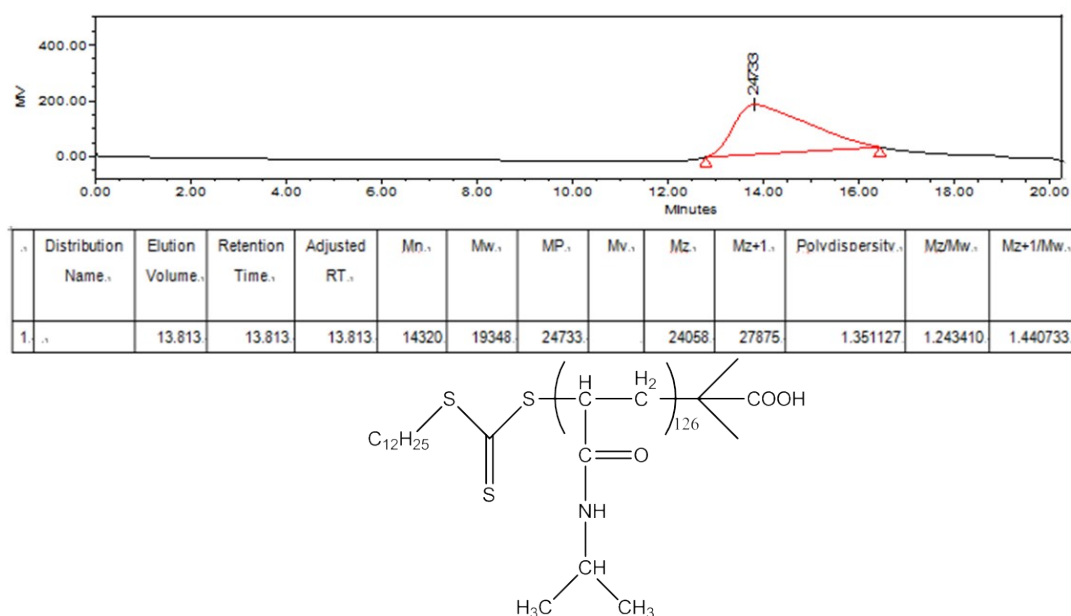


Figure S1 GPC of macro chain transition agent (Macro-CTA) of N, N-isopropylacrylamide.

2. ^1H -NMR spectra of PNIPAM-*b*-P[L (or D)-Phe]

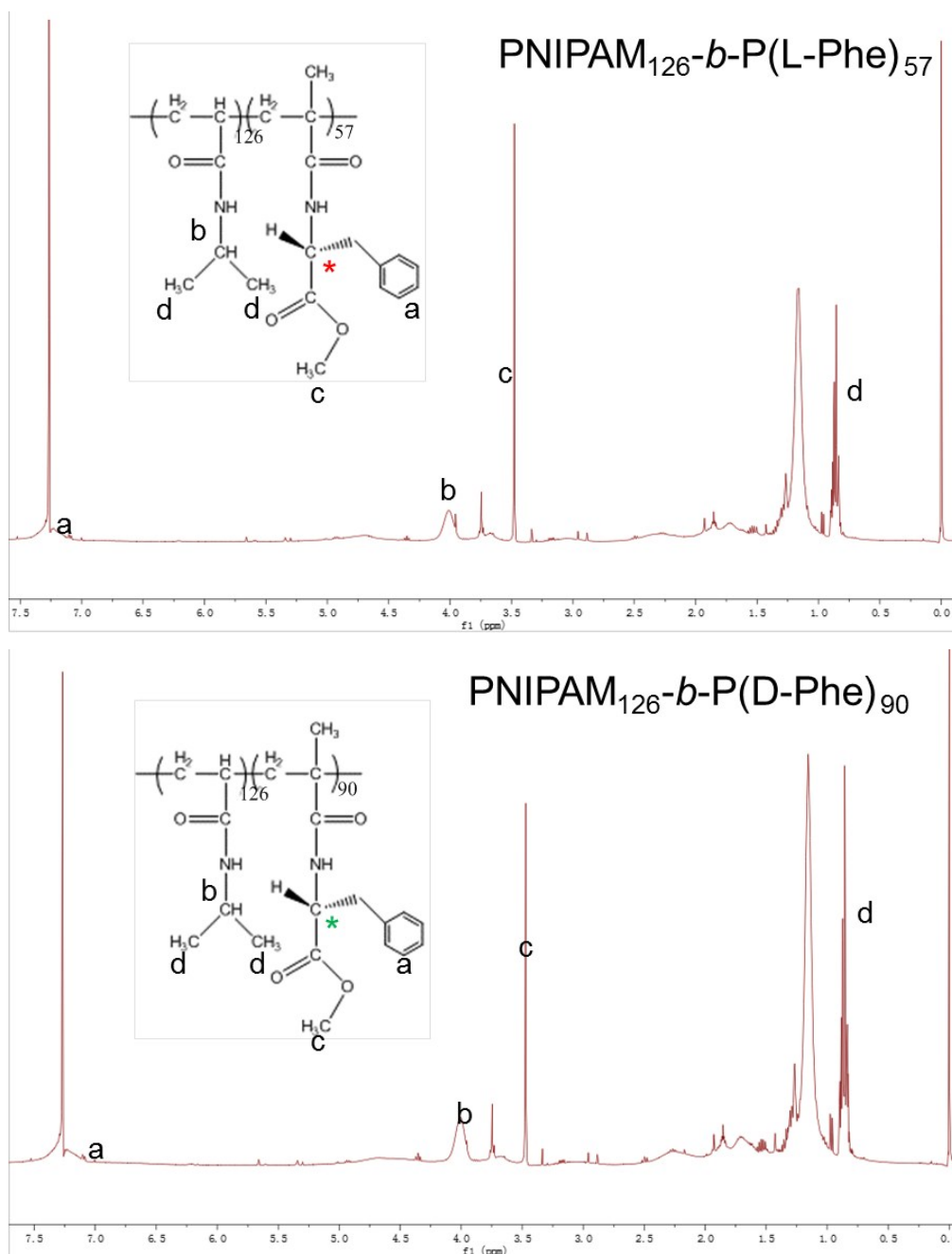


Figure S2 ^1H -NMR spectra of the copolymers PNIPAM-*b*-P(L-Phe) (upper) and PNIPAM-*b*-P(D-Phe) (down).

The molecular weights of copolymers are calculated according to the ^1H NMR spectra. The shift at 3.5 ppm (c) is assigned to the methyl of the NIPAM in copolymers and the shift at 0.8 ppm (d) is assigned to the methyl of the phenylalanine-methyl ester. Herein, the block ratio of the copolymers could be calculated according to the integral area ratio of c and d. The number of L-

phenylalanine and D-phenylalanine repeating units among the copolymers is 57 and 90 while the number of NIPAM is 126 for both enantiomers.

Table S1 Characterization of block copolymers PNIPAM-*b*-P[L(or D)-Phe]

Polymer	PNIPAM	Poly(Phenylalanine)
PNIPAM- <i>b</i> -P(L-Phe)	126	57
PNIPAM- <i>b</i> -P(D-Phe)	126	90

3. Standard working curves of BOC-L-phenylalanine

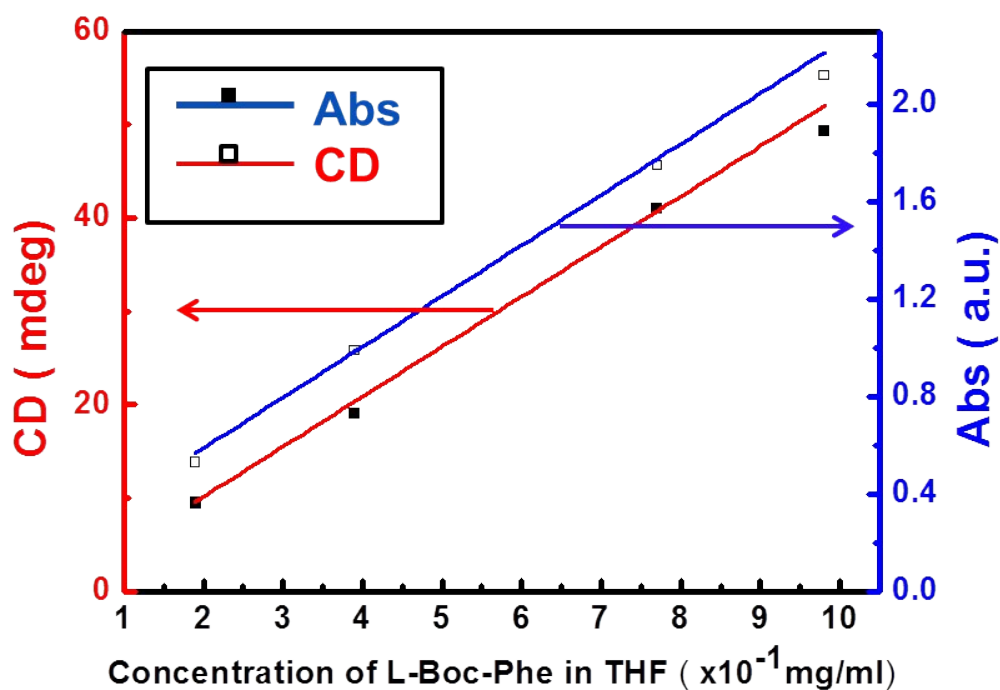


Figure S3 Standard working curves of BOC-L-phenylalanine's CD signals (red) and the absorption intensity (blue) at wavelength of 220 nm.