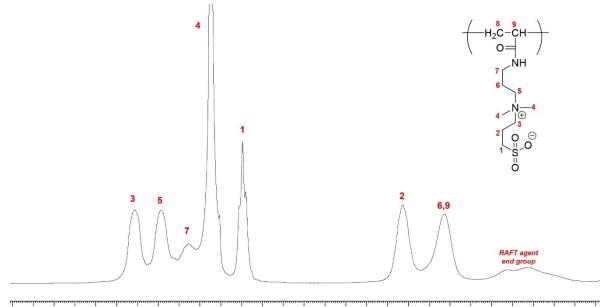
## Design of Polysulfobetaine Derivatives for Enhanced Inhibition of Protein Aggregation

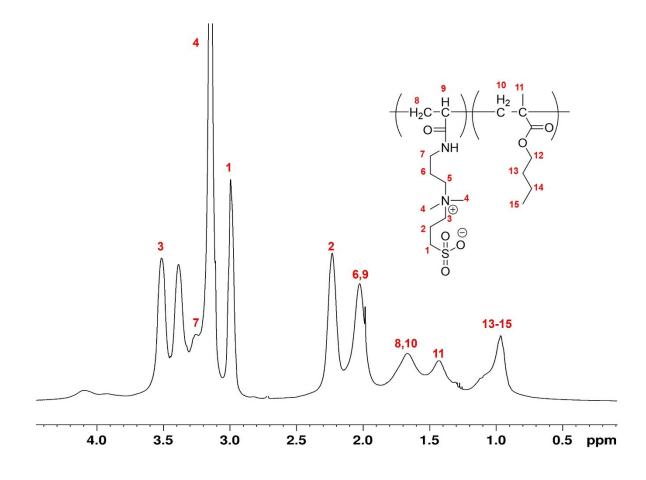
Robin Rajan\*a and Kazuaki Matsumura\*a

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4.0 3.9 3.8 3.7 3.6 3.5 3.4 3.3 3.2 3.1 3.0 2.9 2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 ppm

Fig. S1 <sup>1</sup>H NMR spectrum of polysulfobetaine in  $D_2O$ .



**Fig. S2** <sup>1</sup>H NMR spectrum of P(SPB-r-BuMA) in D<sub>2</sub>O.

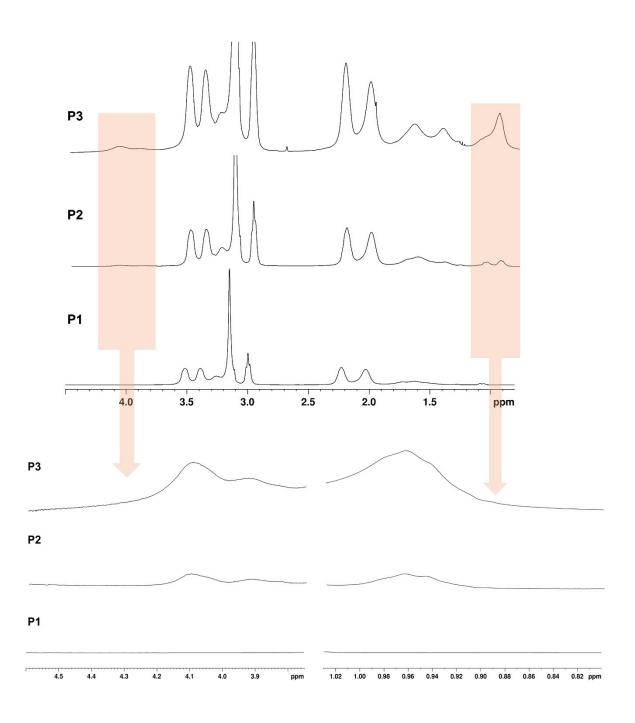


Fig. S3 Comparison of P1, P2, and P3 by  ${}^{1}H$  NMR spectroscopy in D<sub>2</sub>O.

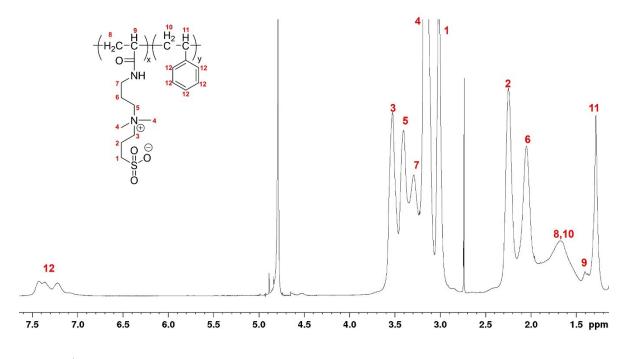


Fig. S4 <sup>1</sup>H NMR spectrum of P(SPB-*r*-St) in D<sub>2</sub>O.

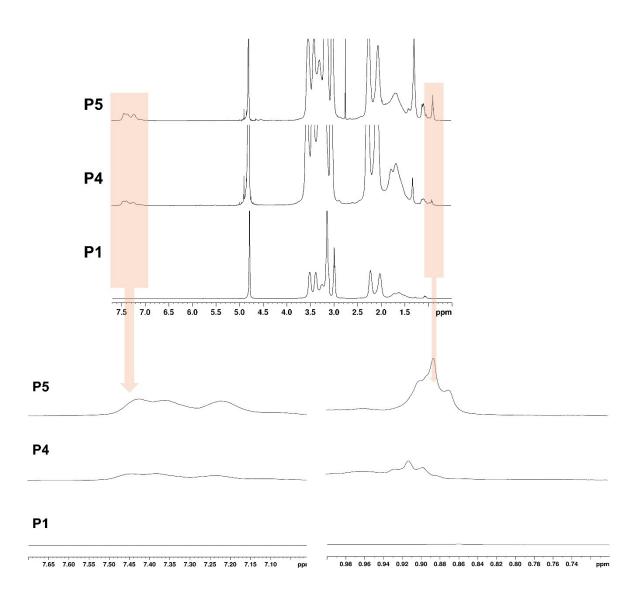
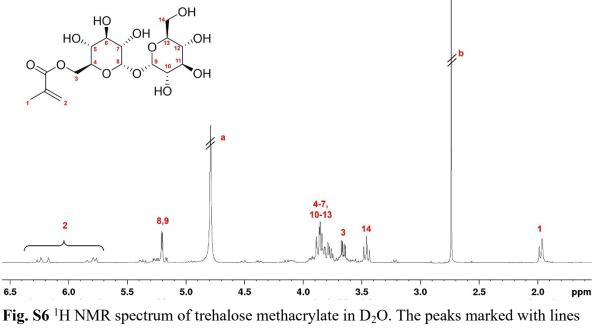


Fig. S5 Comparison of P1, P4, and P5 by  $^{1}$ H NMR spectroscopy in D<sub>2</sub>O.



represent the residual solvent peaks, with a and b corresponding to water and dimethylsulfoxide, respectively.

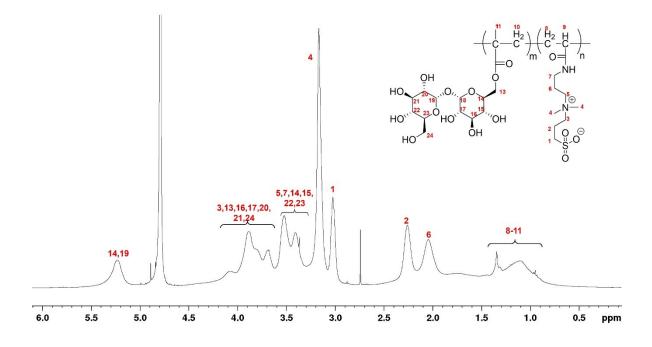


Fig. S7 <sup>1</sup>H NMR spectrum of P(SPB-r-TrMA) in  $D_2O$ .

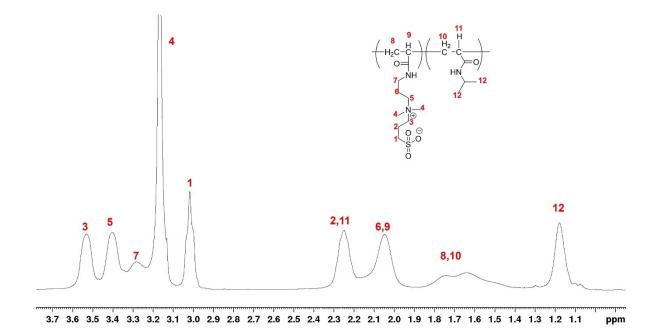
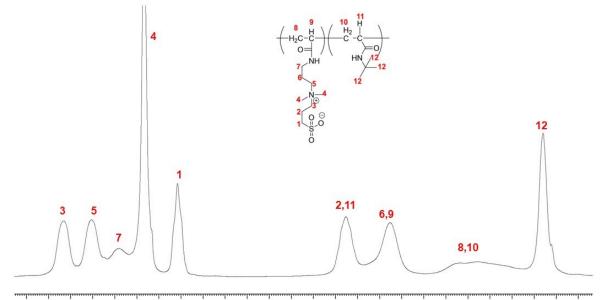


Fig. S8 <sup>1</sup>H NMR spectrum of P(SPB-*r*-NTBAm) in D<sub>2</sub>O.



3.7 3.6 3.5 3.4 3.3 3.2 3.1 3.0 2.9 2.8 2.7 2.6 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3 ppm

Fig. S9 <sup>1</sup>H NMR spectrum of P(SPB-*r*-NIPAm) in D<sub>2</sub>O.

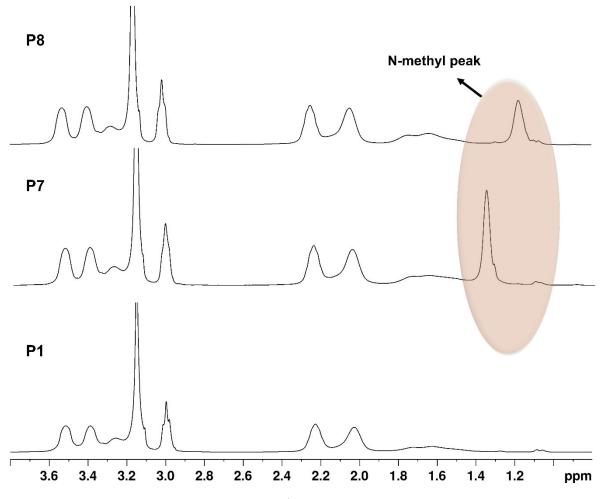
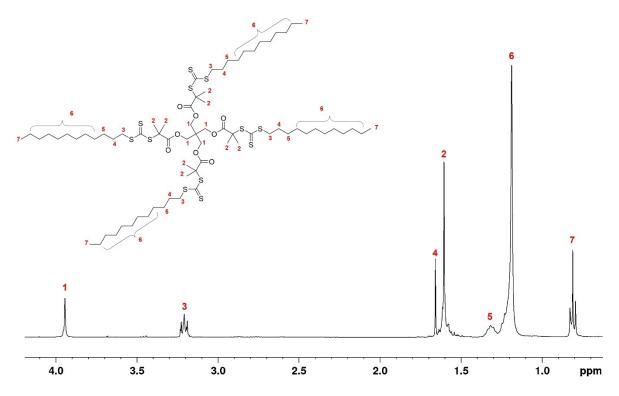


Fig. S10 Comparison of P1, P7, and P8 by  $^{1}$ H NMR spectroscopy in D<sub>2</sub>O.



**Fig. S11** <sup>1</sup>H NMR spectrum of four-armed reversible addition–fragmentation chain transfer agent in CDCl<sub>3</sub>.