

Electronic supplementary information (ESI)

A cyclodextrin-core star copolymer with Y-shaped ABC miktoarms and its unimolecular micelles

Yan Wang^{ab} Yuyang Liu,^{*ab} Jianghu Liang^{ab} and Minhao Zou^{ab}

^a Key Laboratory of Macromolecular Science and Technology of Shaanxi Province, Department of Applied Chemistry, Northwestern Polytechnical University, Xi'an 710072, P.R. China

^b The Key Laboratory of Space Applied Physics and Chemistry, Ministry of Education, school of science, Northwestern Polytechnical University, Xi'an 710072, P.R. China.

*E-mail: liu_yyang1120@nwpu.edu.cn

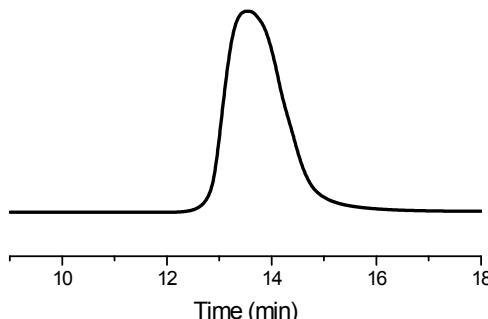


Fig. S1 DRI signal of SEC/MALLS chromatograms of CD-star-PEMA-Cl.

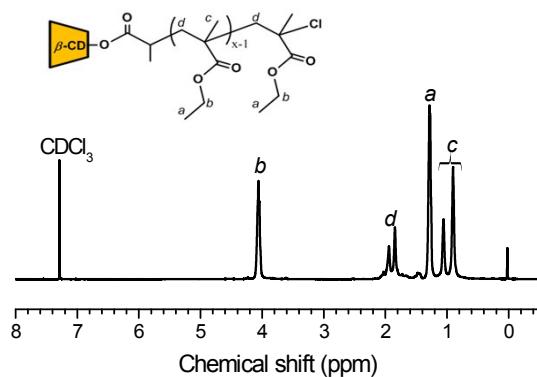


Fig. S2 ^1H -NMR spectrum of CD-star-PEMA-Cl in CDCl_3 (400 MHz).

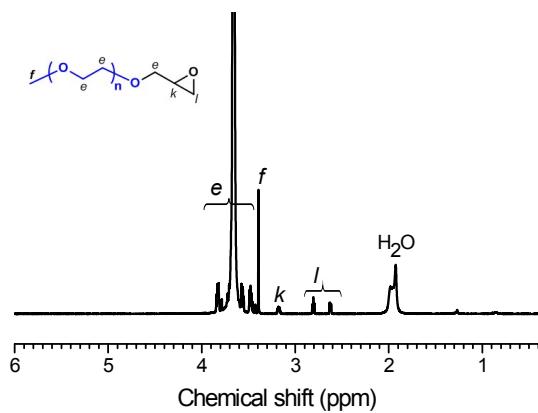


Fig. S3 ¹H-NMR spectrum of mPEG-epoxide in CDCl₃ (400 MHz).

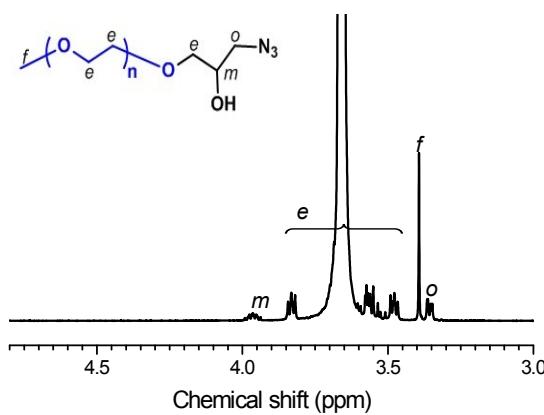


Fig. S4 ¹H-NMR spectrum of mPEG(-OH)-N₃ in CDCl₃ (400 MHz).

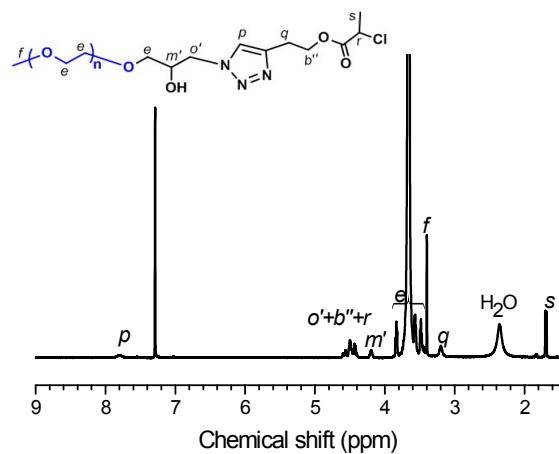


Fig. S5 ¹H-NMR spectrum of mPEG(-OH)-Cl in CDCl₃ (400 MHz).

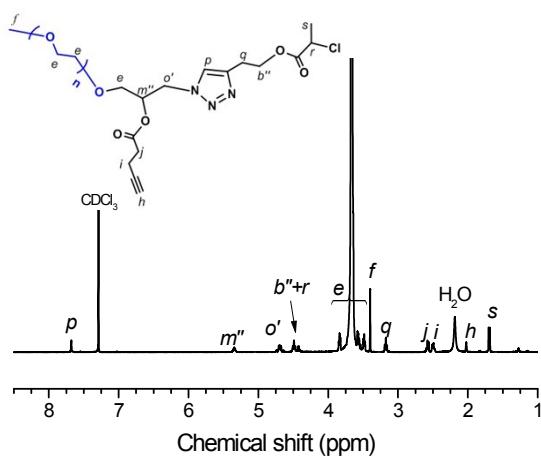


Fig. S6 ^1H -NMR spectrum of mPEG(-alkynyl)-Cl in CDCl_3 (400 MHz).

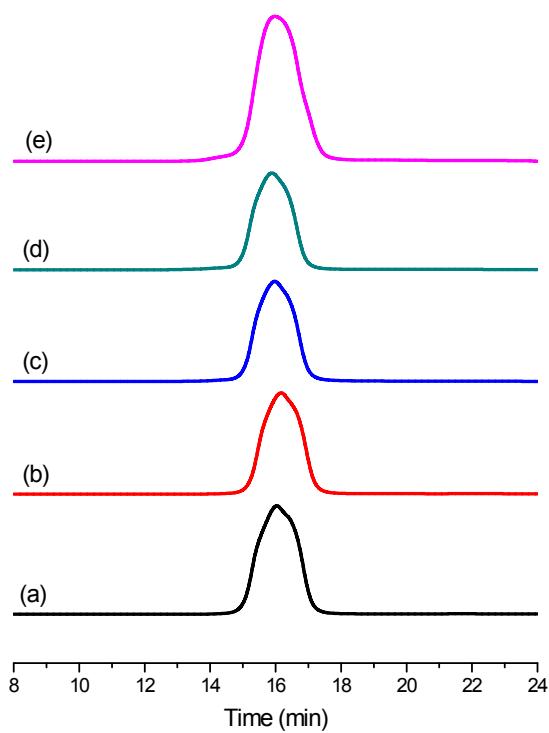


Fig. S7 DRI signals of SEC/MALLS chromatograms for (a) mPEG, (b) mPEG-epoxide, (c) mPEG(-OH)- N_3 , (d) mPEG(-OH)-Cl and (e) mPEG(-alkynyl)-Cl.

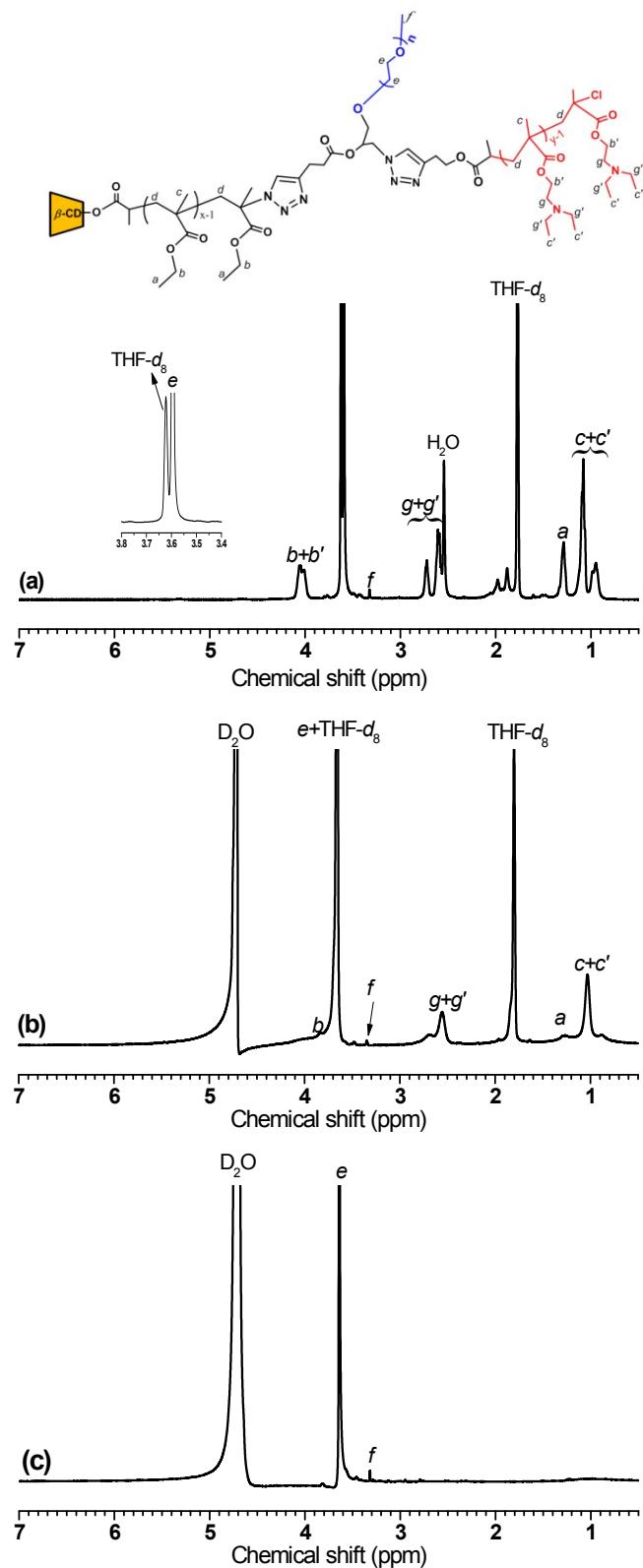


Fig. S8 ¹H-NMR spectrum of CD-star-PEMA(-*b*-PDEA)-*b*-mPEG in (a) THF-*d*₈, (b) THF-*d*₈/D₂O mixture and (c) D₂O.