Electronic Supplementary Material (ESI) for Journal of Materials Chemistry B.

Supporting Information

Chiral Porous Hybrid Particles Constructed by Helical Substituted Polyacetylene Covalently Bonded Organosilica for Enantioselective Release

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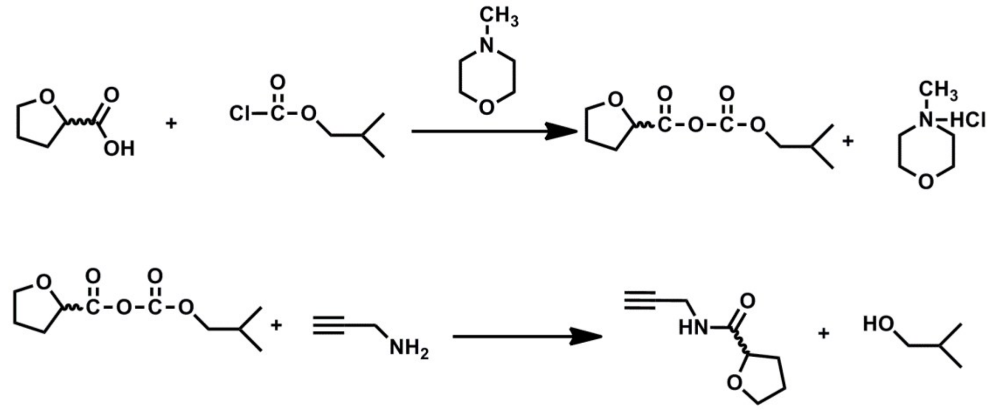

Scheme S1. The synthesis of monomer FA (in KBr tablet).

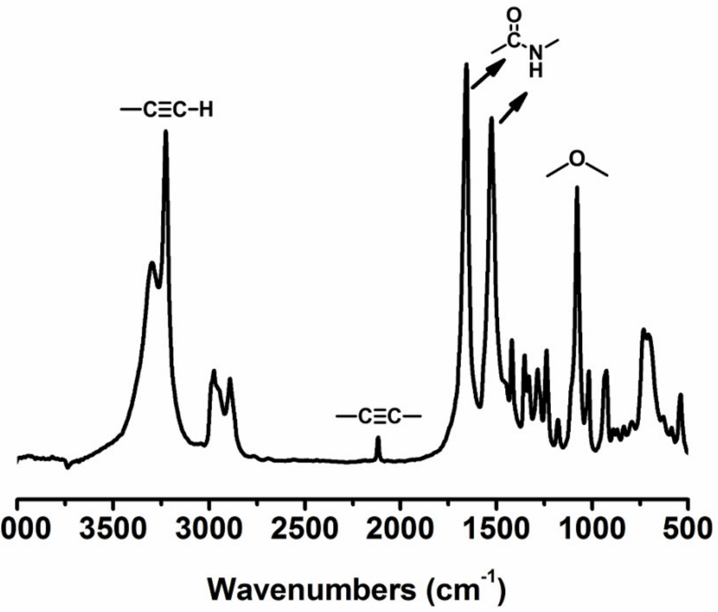

Figure S1. FT-IR spectrum of *R*-FA (KBr tablet).

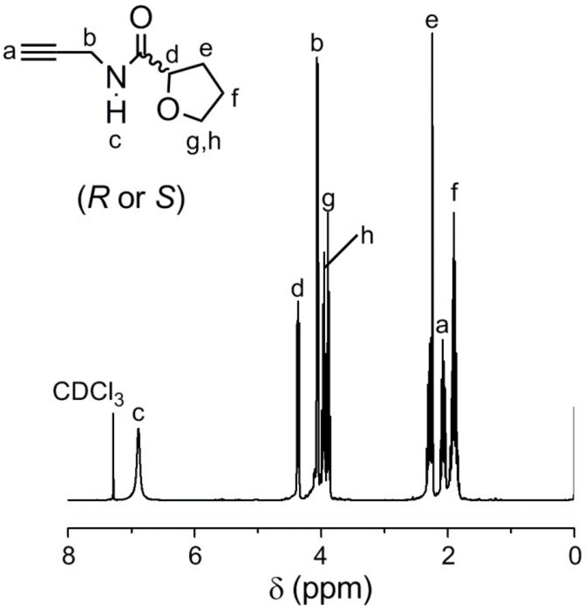

Figure S2. ^{1}H NMR spectrum of *R*-FA (in CDCl$_3$).

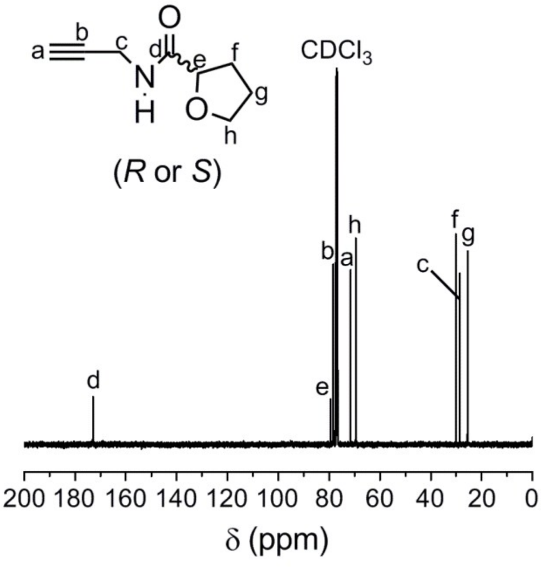

Figure S3. ^{13}C NMR spectrum of *R*-FA (in CDCl$_3$).

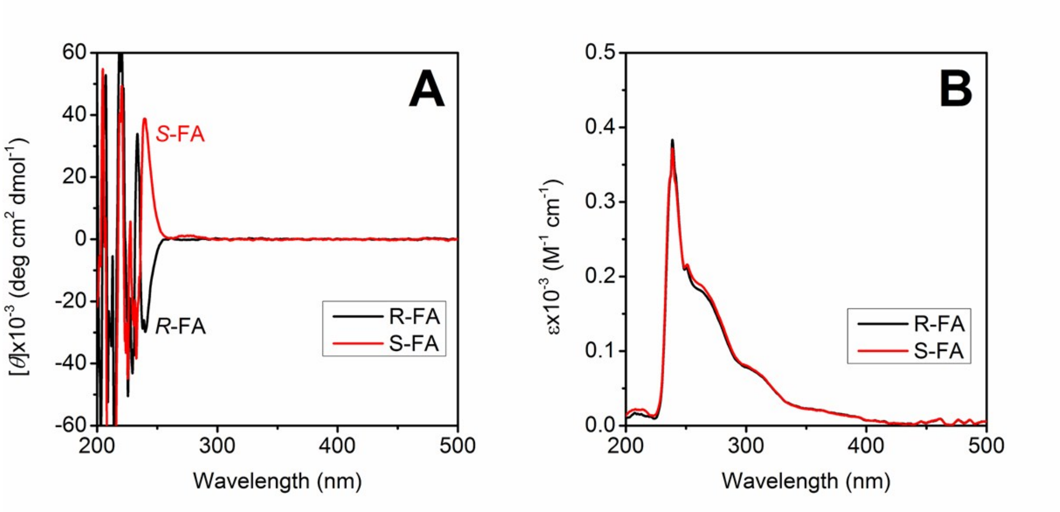

Figure S4. (A) CD and (B) UV-vis spectra of *R*-FA and *S*-FA measured in $CHCl_3$ at r.t. (c = 0.01 M).

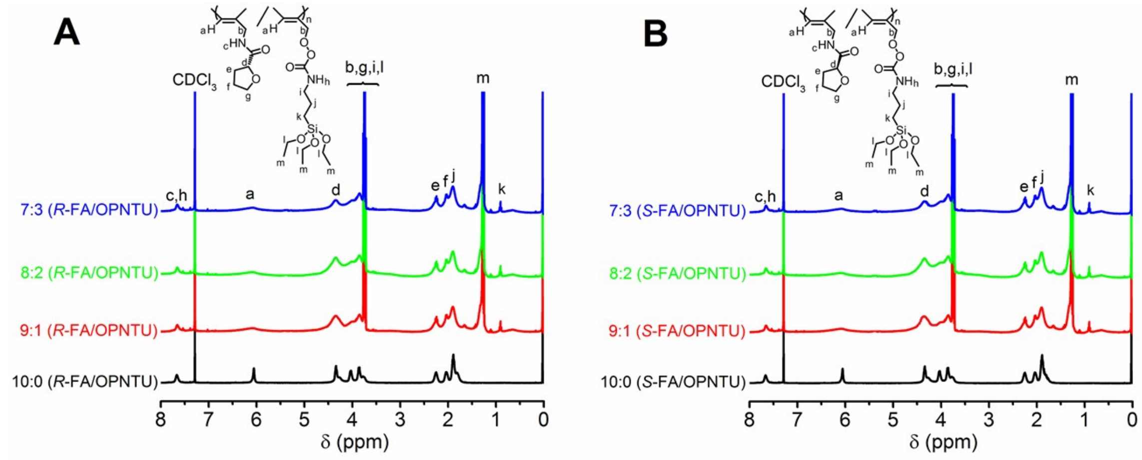

Figure S5. ^1H NMR spectrum of the copolymers in $CDCl_3$. The compositions of the copolymers constructed by *R*-FA in (A) are 7/2.8, 8/2.1, 9/1.1 and 10/0; the compositions of the copolymers constructed by *S*-FA in (B) are 7/3.1, 8/2.0, 9/0.9 and 10/0.

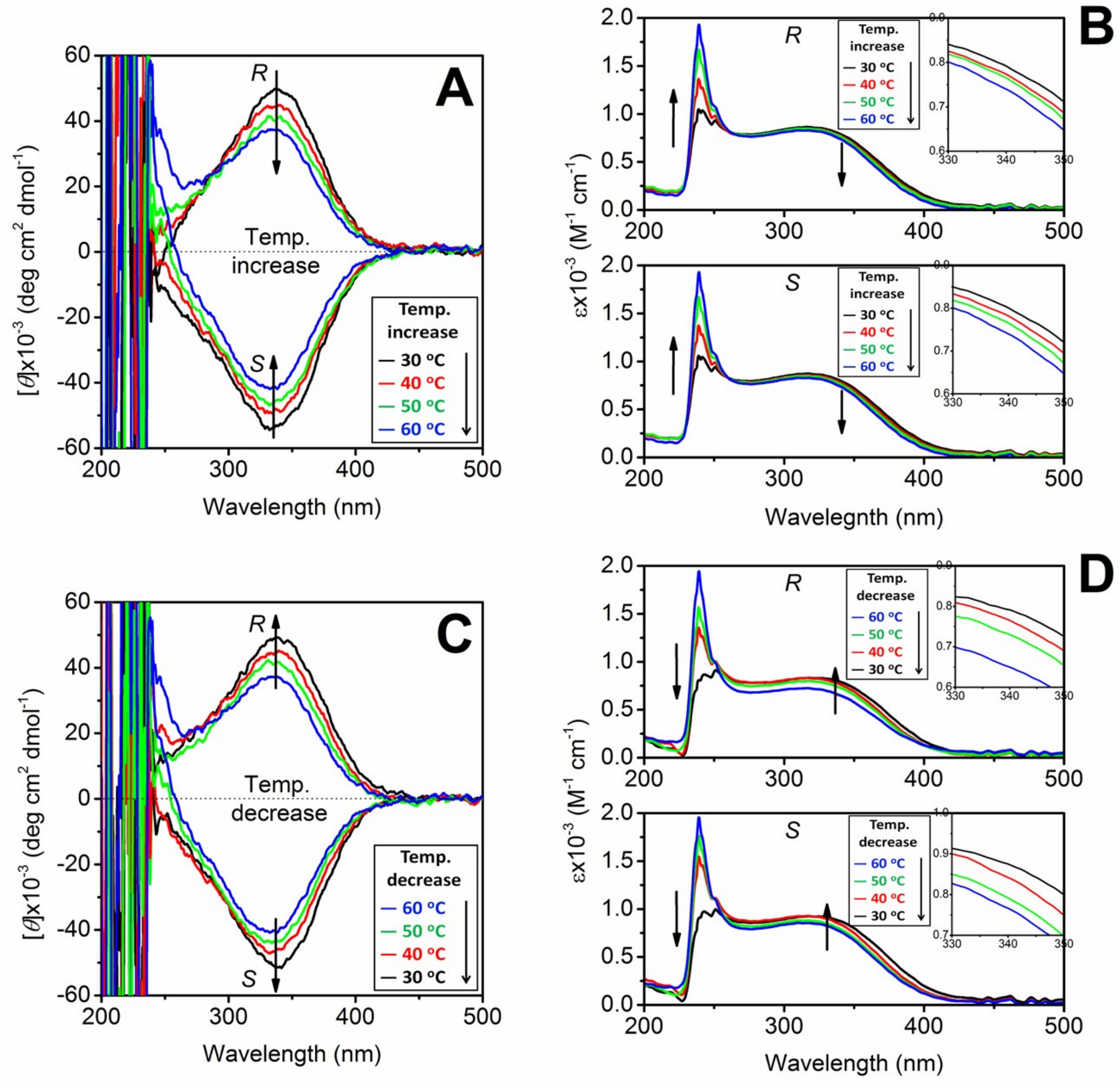

Figure S6. (A) CD and (B) UV-vis absorption spectra of poly(FA$_1$-*co*-OPNTU$_0$) at increasing temperature (from 30 to 60 °C, the arrow shows a temp. increase); (C) CD and (D) UV-vis absorption spectra of poly(FA$_1$-*co*-OPNTU$_0$) at decreasing temperature (from 60 to 30 °C, the arrow shows a temp. decrease) in $CHCl_3$ (c = 0.1 mM, by monomer units).

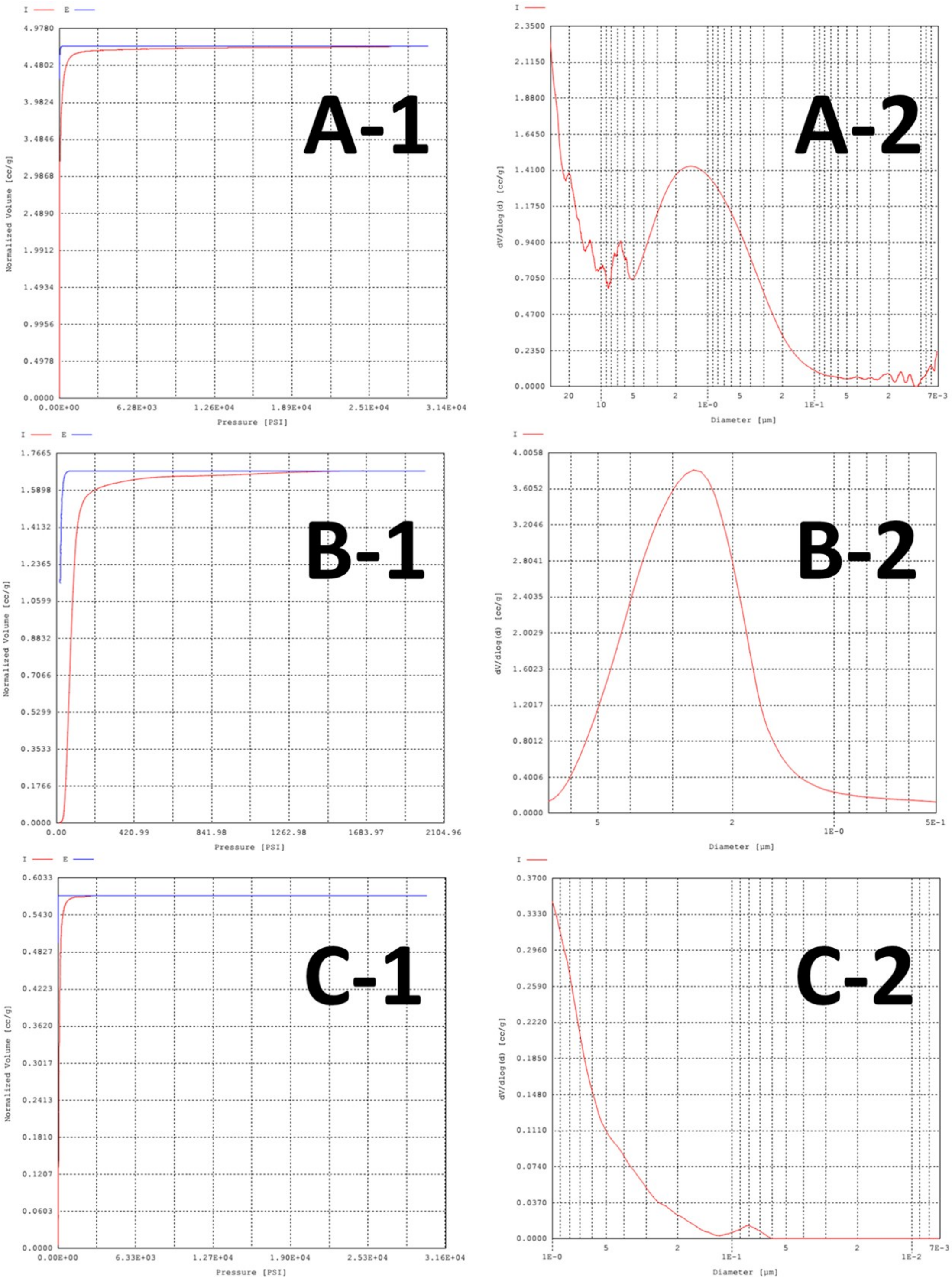

Figure S7. Mercury adsorption/desorption isotherms and pore size distribution of (A) CHPs, (B) pure silica products, (C) pure copolymer products.

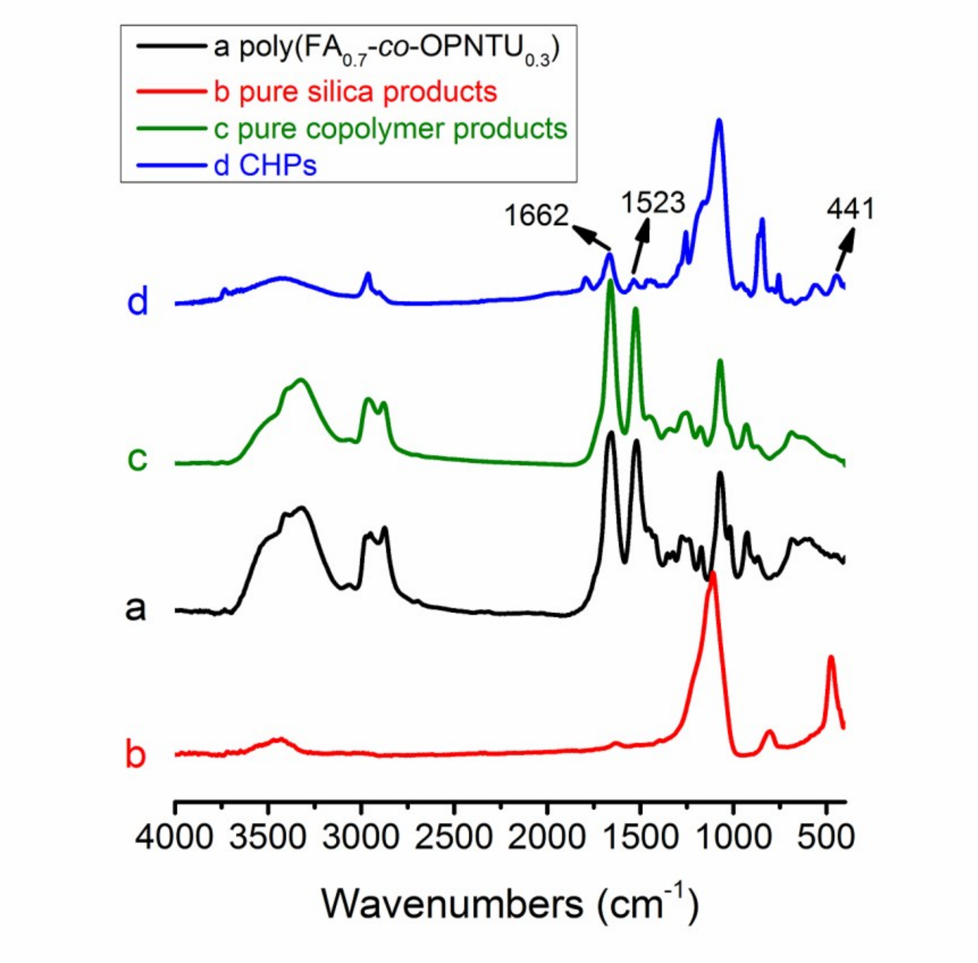

Figure S8. Typical FT-IR spectra of (a) poly($FA_{0.7}$-*co*-$OPNTU_{0.3}$), (b) pure silica products, (c) pure copolymer products, and (d) CHPs (in KBr tablet).

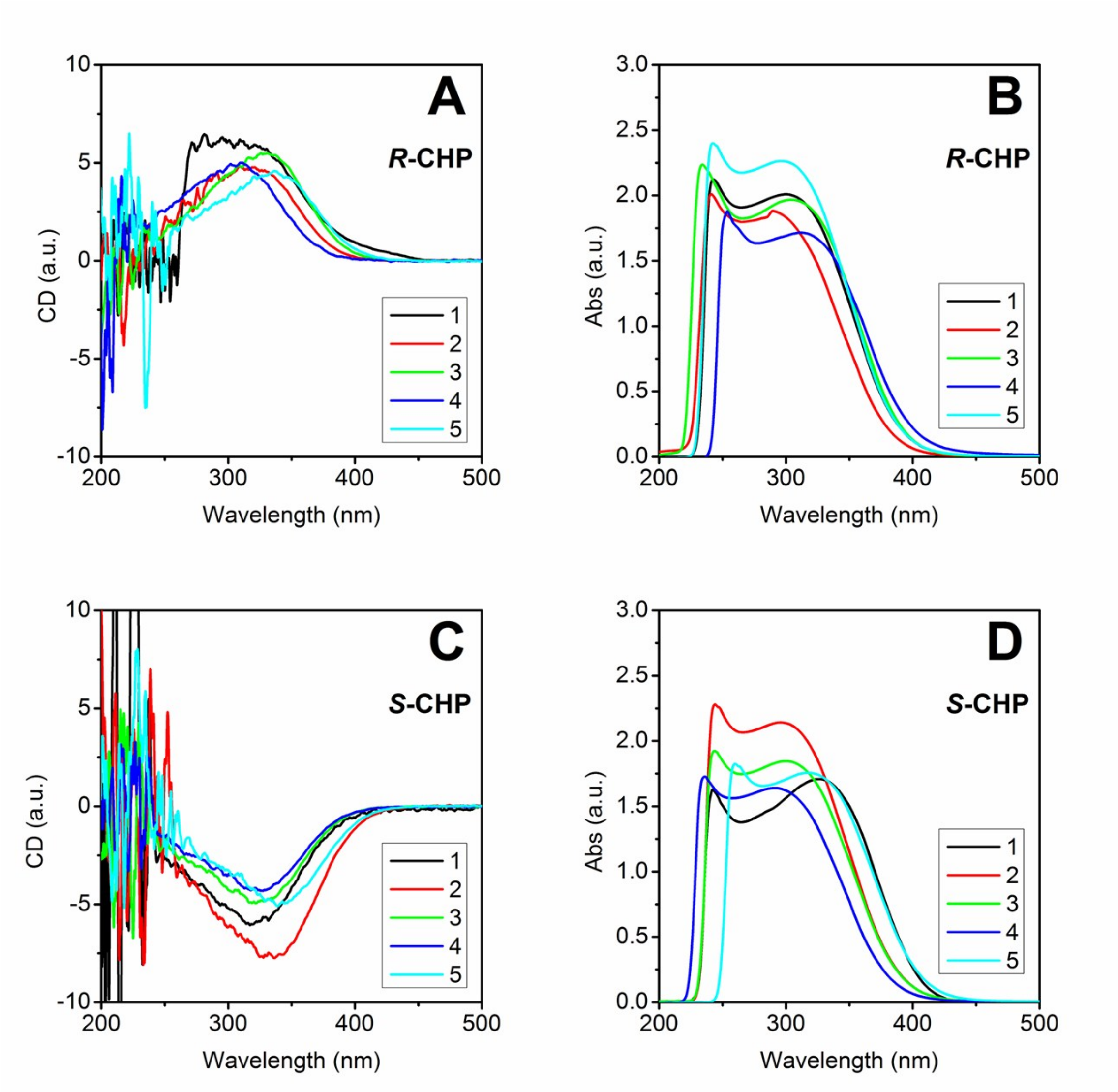

Figure S9. (A) CD and (B) UV-vis spectra of *R*-CHP measured for five times at r.t; (C) CD and (D) UV-vis spectra of *S*-CHP measured for five times at r.t. (The samples were clipped between two quartz slides for spectra measurement.)

Each sample was repeatedly measured for five times, and there appeared shifts in the five spectra for the same sample. Therefore, the shifts are mainly due to the sample preparation and the spectra measurement method.

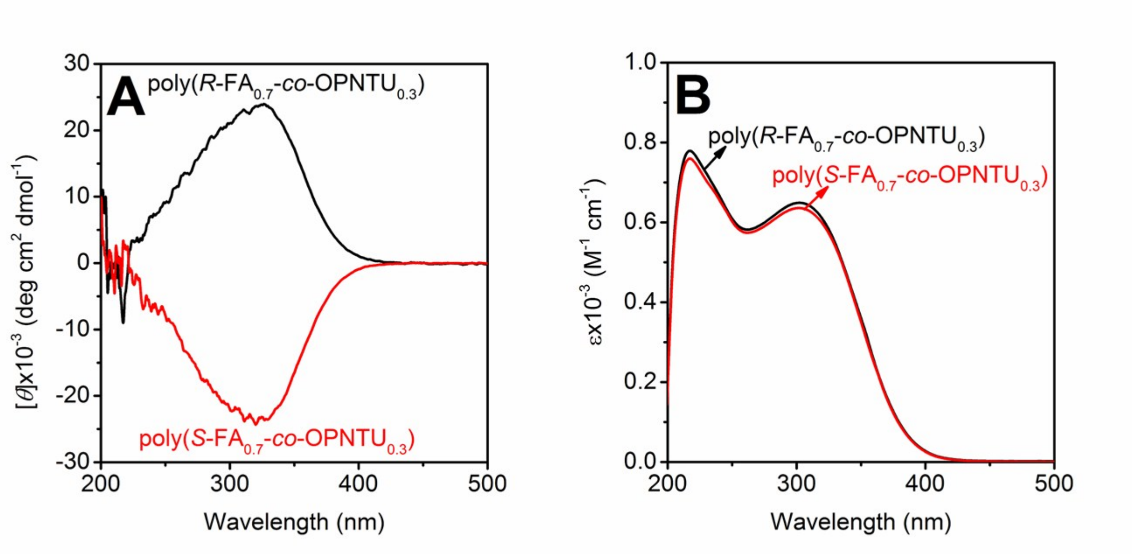

Figure S10. (A) CD and (B) UV-vis spectra of poly($FA_{0.7}$-*co*-$OPNTU_{0.3}$) measured in EtOH at r.t. (c = 0.1 mM, by monomer units).

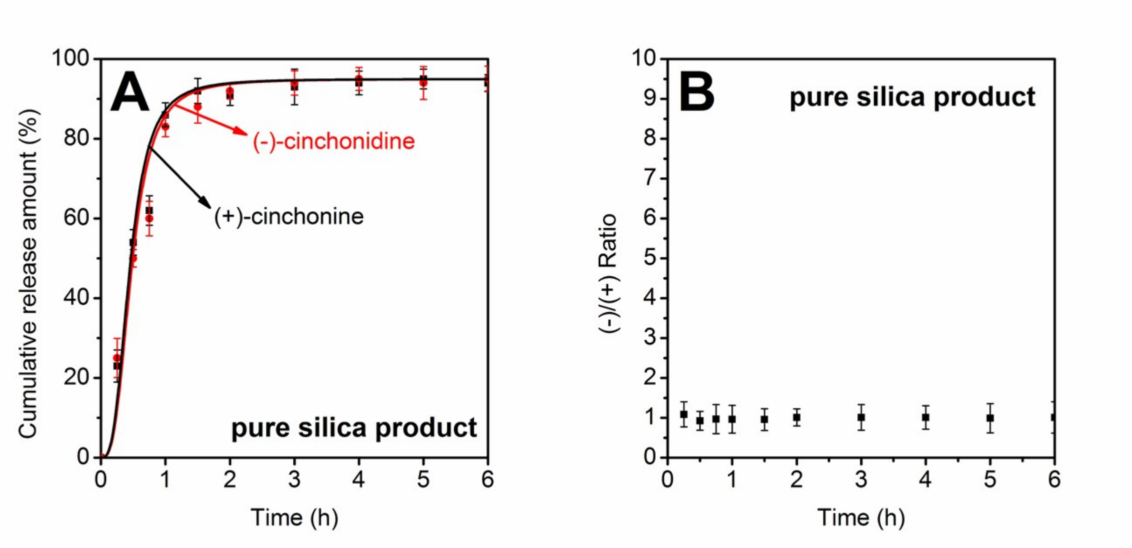

Figure S11. (A) Time-release profiles of (+)-cinchonine and (–)-cinchonidine released by the pure silica product; (B) the (–)/(+) ratio of the pure silica product (release processes were performed in ethanol at r.t.).