Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

Effect of molecular chirality on the collagen self-assembly

Weizhe Zhu[a], Ke Li[a], Qi Liu[b], Huaying Zhong[a], Chengzhi Xu[a], Juntao Zhang[a], Huizhi Kou[a], Benmei Wei*[a] and Haibo Wang*[a]

[a] School of Chemical and Environmental Engineering, Wuhan Polytechnic University, Wuhan 430023, P. R. China
[b] School of Food Science and Engineering, Wuhan Polytechnic University, Wuhan 430023, P. R. China

*To whom correspondence should be addressed: benmeiwei@whpu.edu.cn (Benmei Wei); wanghaibo@whpu.edu.cn (Haibo Wang).

1. SDS-PAGE of BATC

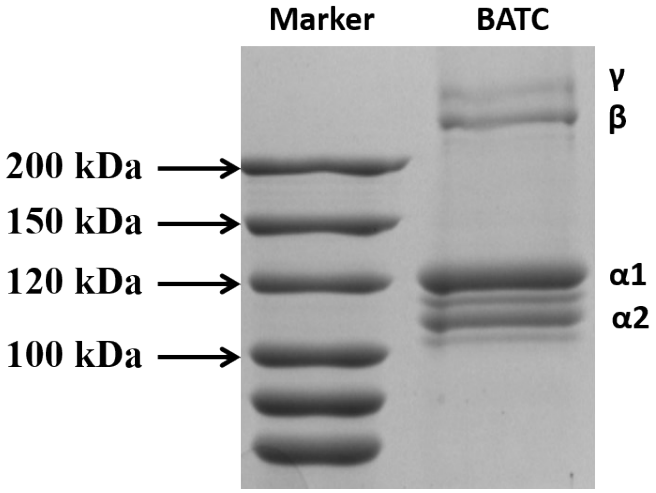

Figure S1. SDS-PAGE of Marker and BATC.

2. CD spectrum of BATC

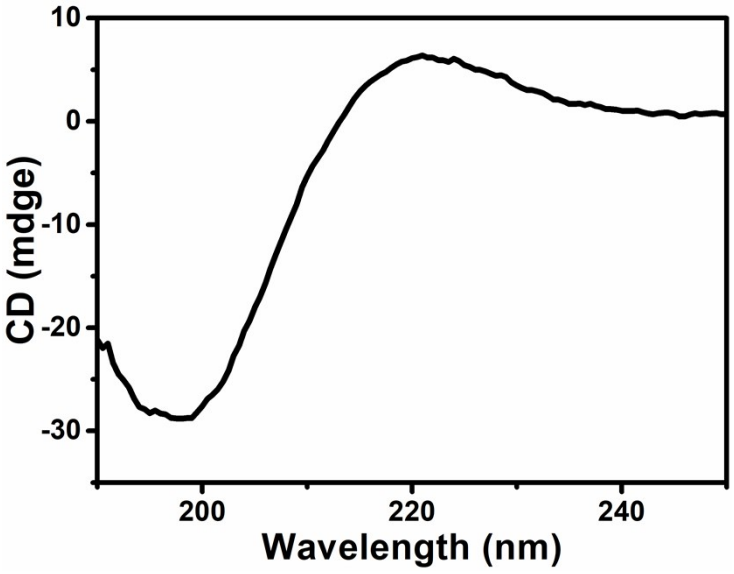

Figure S2. CD spectrum of BATC.

3. Turbidity-time curves of BATC self-assembly in the presence of L/D-GA

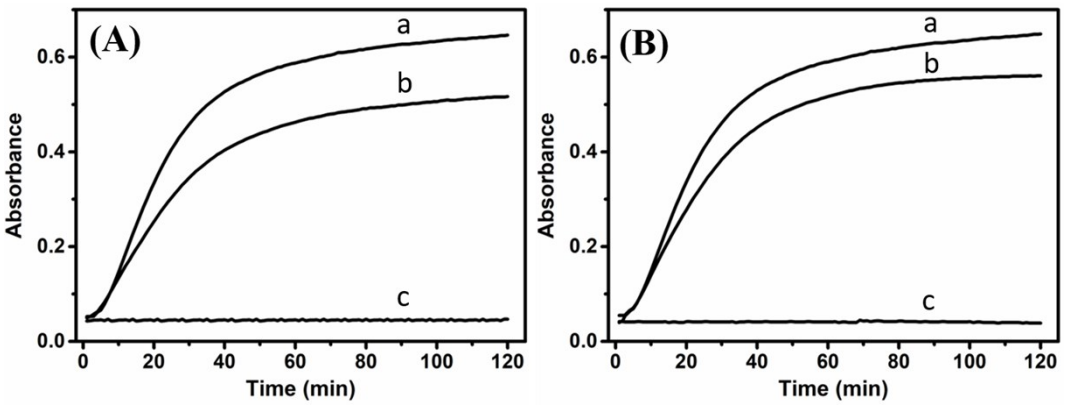

Figure S3. Turbidity-time curves of BATC self-assembly in the presence of different concentrations of L-GA (A) and D-GA (B). (a) 0 M, (b) 0.01 M, (c) 0.05 M.

4. Calculation the self-assembly rate constant (*k*)

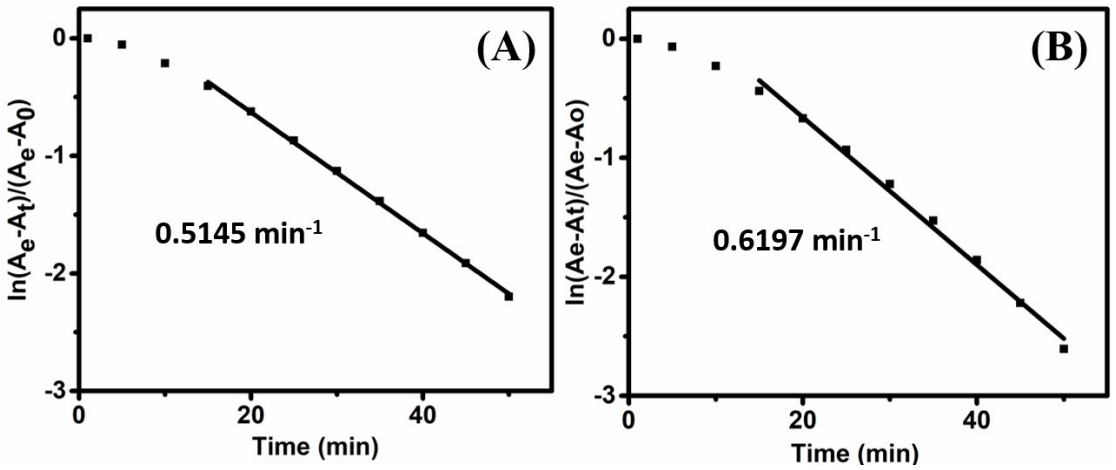

Figure S4. Rate constant of collagen self-assembly in the presence of L-GA (A) and D-GA (B).

5. Turbidity-time curves of BATC self-assembly in the presence of other amino acid enantiomers

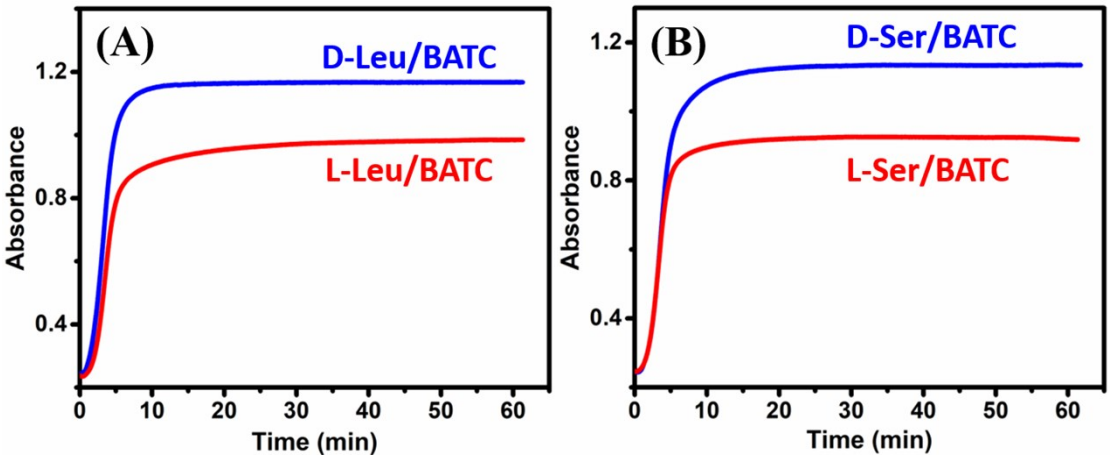

Figure S5. Turbidity-time curves of BATC self-assembly in the presence of 0.01 M L/D-Leu (A) and L/D-Ser (B).

6. FT-IR spectra of BATC, D-GA/BATC and L-GA/BATC

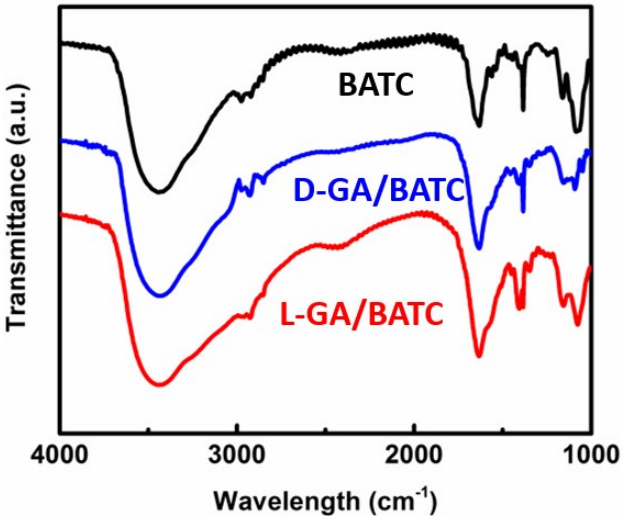

Figure S6. FT-IR spectra of BATC, D-GA/BATC and L-GA/BATC.

7. Viscoelastic properties of collagen gels

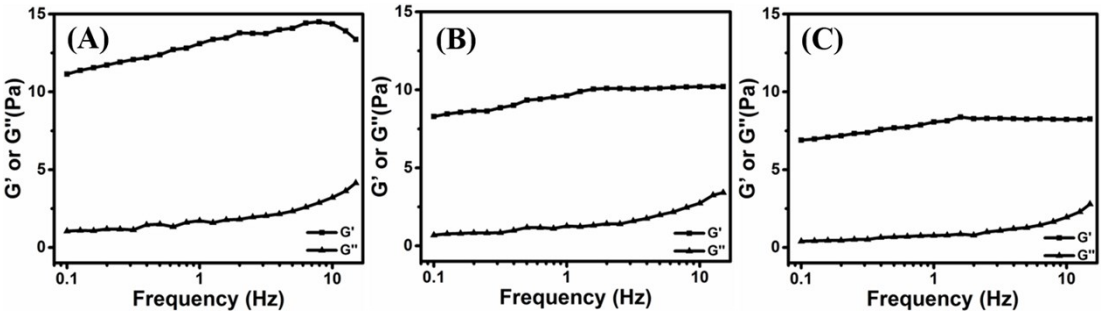

Figure S7. Changes of frequency dependencies in G' and G'' of BATC (A), D-GA/BATC (B) and L-GA/BATC gels (C).

,