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Supporting information

Fabrication of Antibacterial Hydrogel Nanocomposite with Self-Healing Property using ZnO/β-Cyclodextrin Dimer/Modified Alginate

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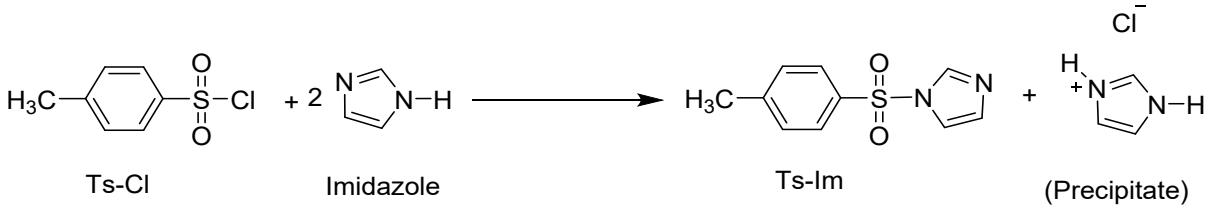

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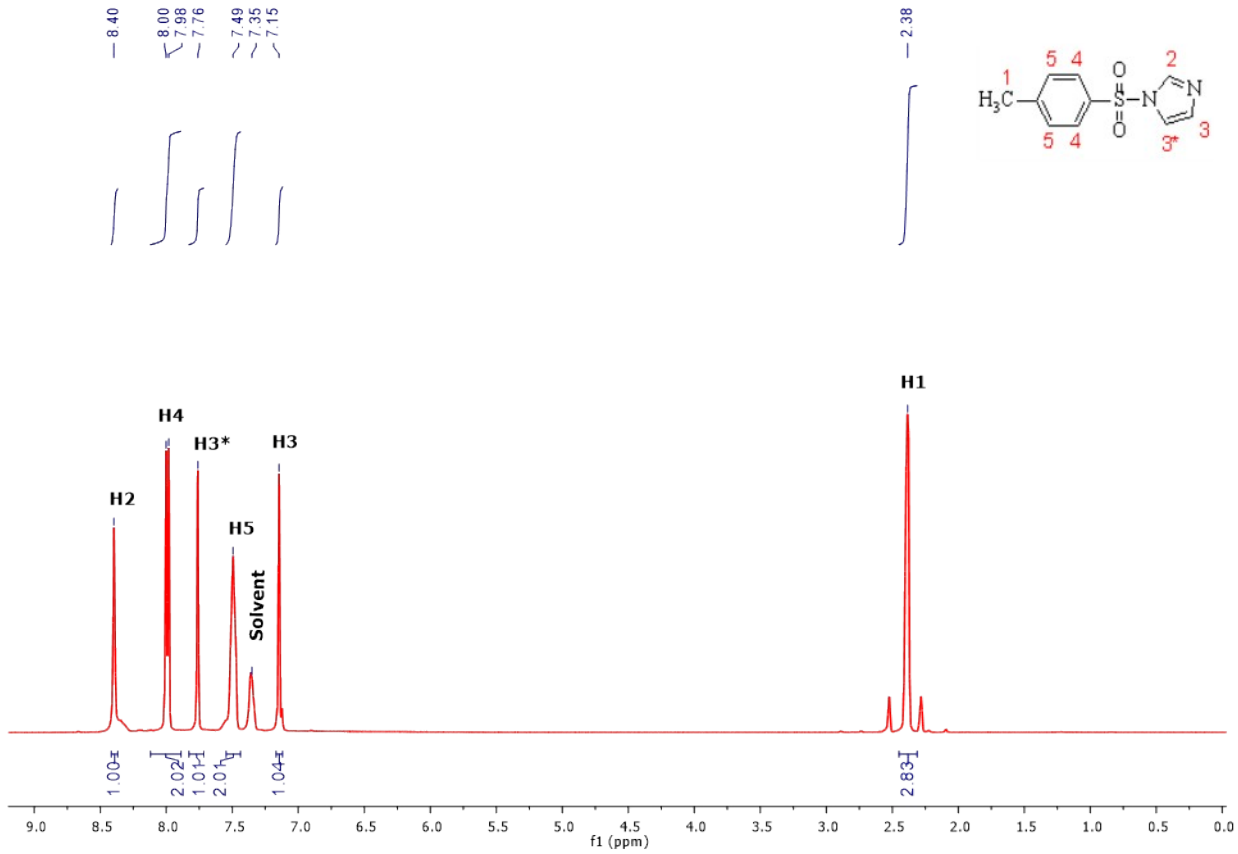
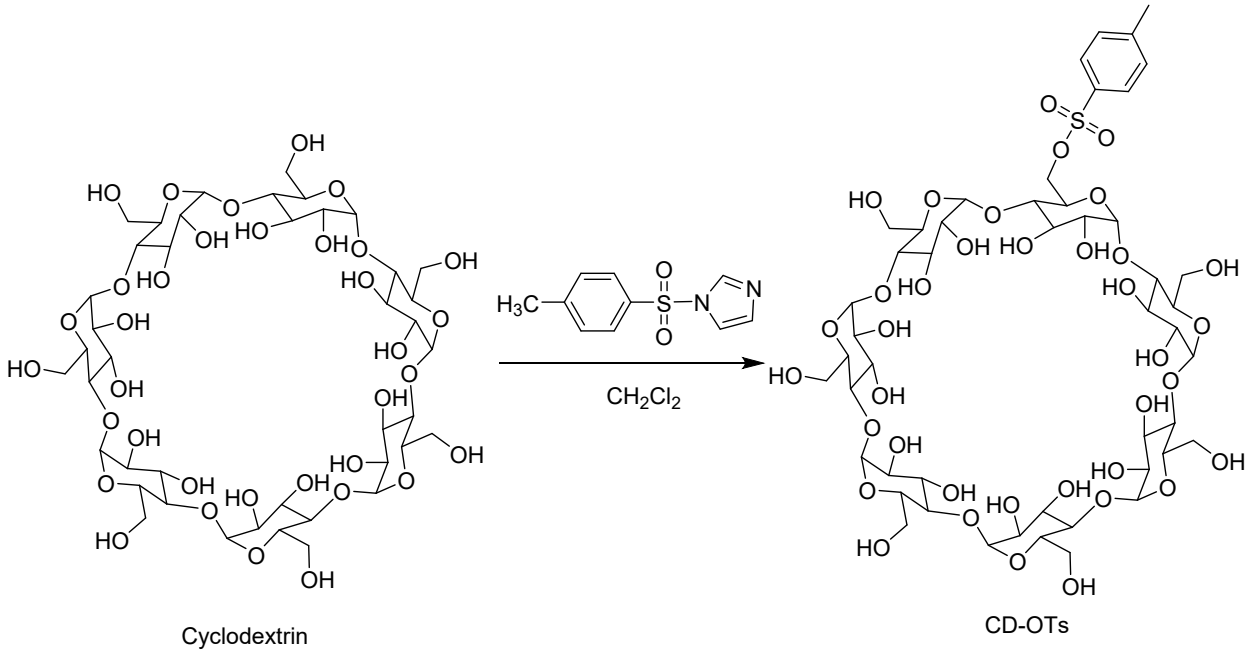


Figure S1. ^{1}H NMR spectra of Ts-Im in $CDCl_3$.



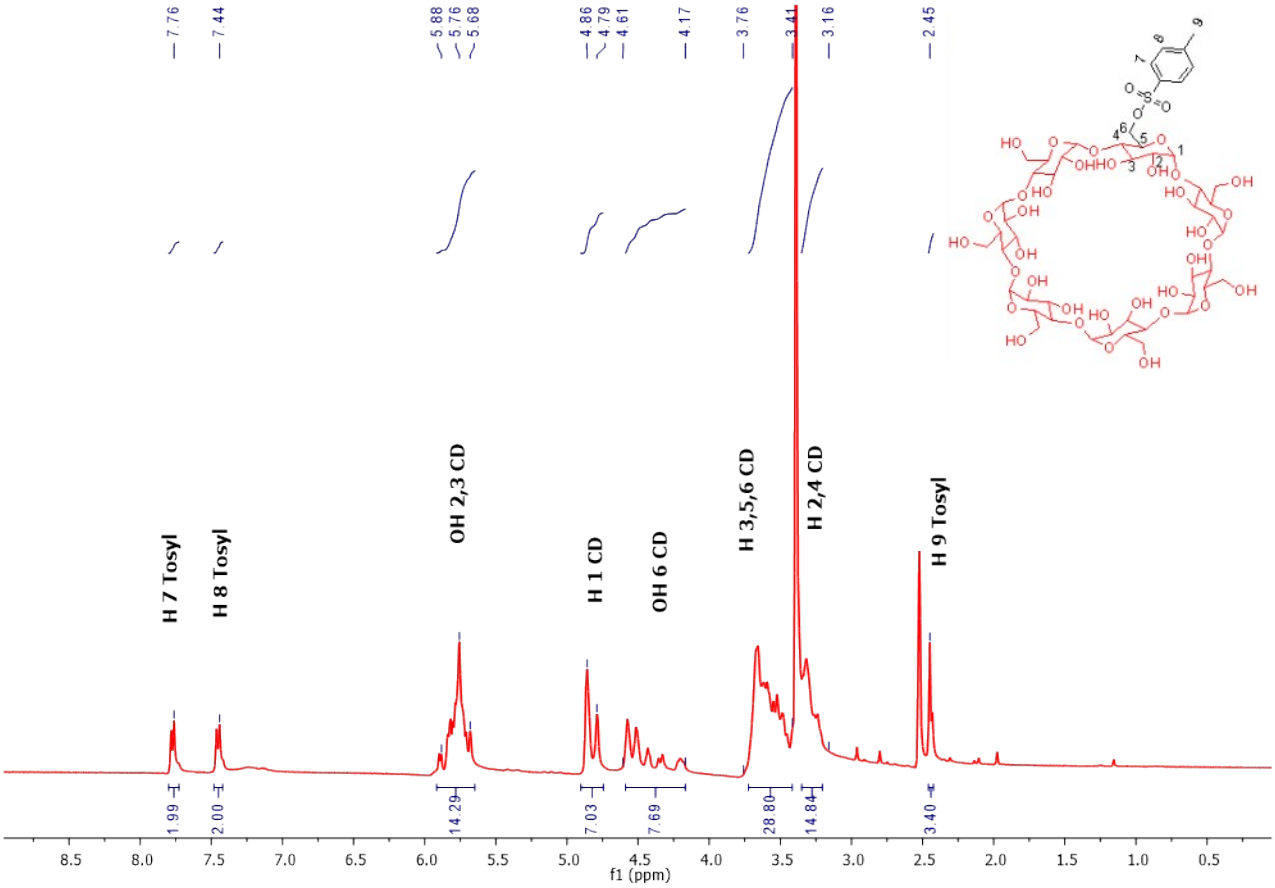


Figure S2. ^{1}H NMR spectra of CD-OTs in DMSO-d_6

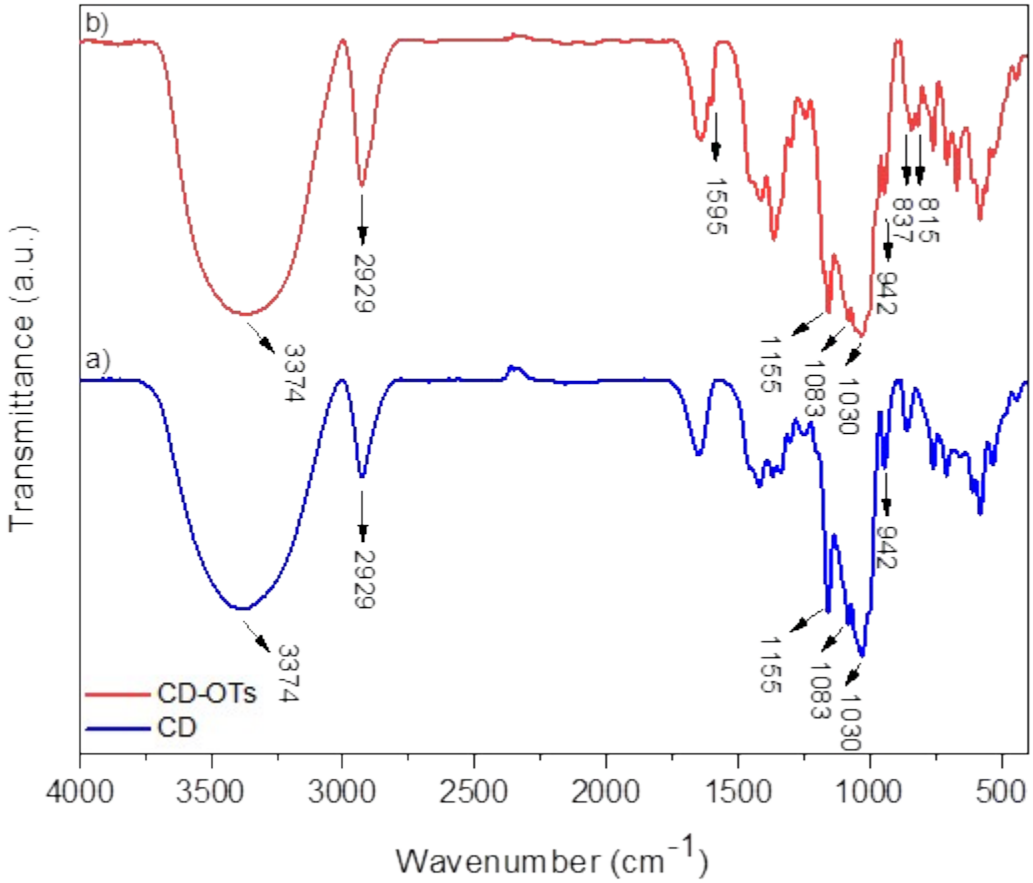
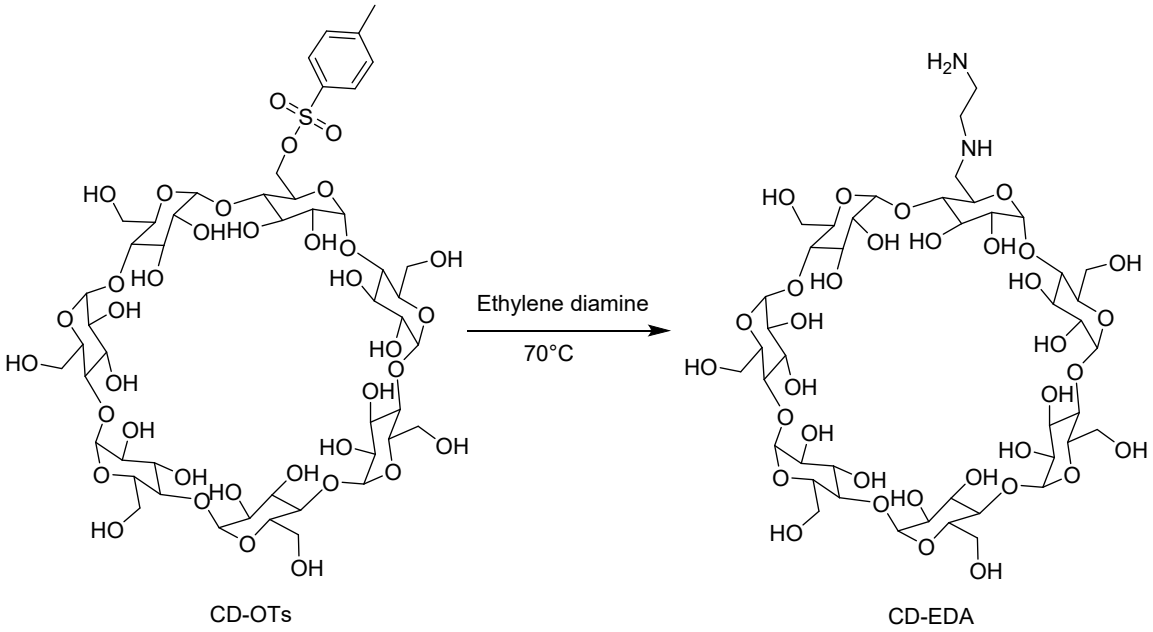


Figure S3. FT-IR spectra of a) βCD and b) CD-OTs



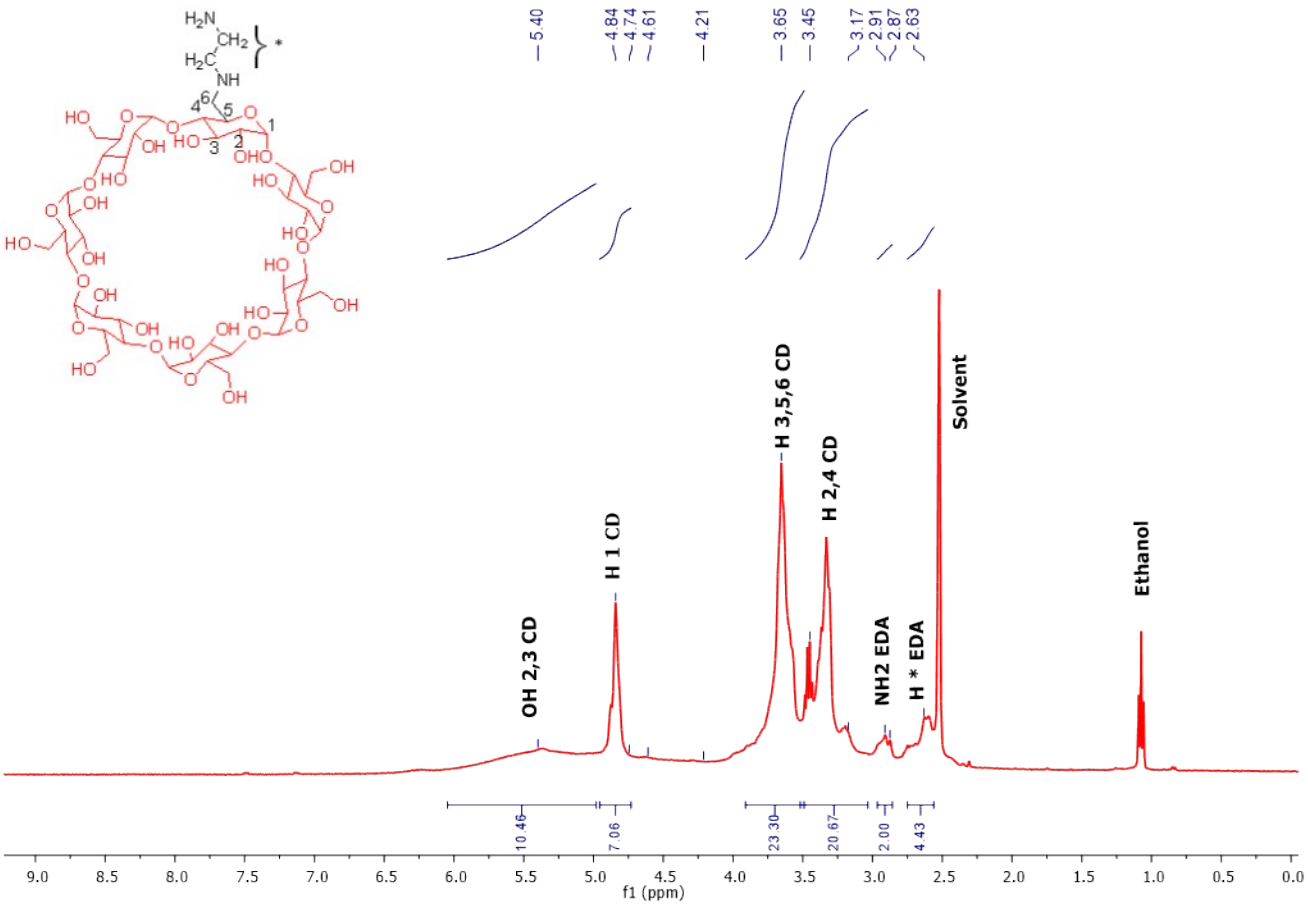


Figure S4. ^{1}H NMR spectra of CD-EDA in DMSO-d_6.

Table S1. CHNS analysis of ALG-CD and ALG-Ad

Sample	Weight % (Experimental)
ALG-CD	C: 48.05 N: 16.8 S: 0.05 H: 5.21
ALG-Ad	C: 49.05 N: 12.33 S: 0.08 H: 8.15

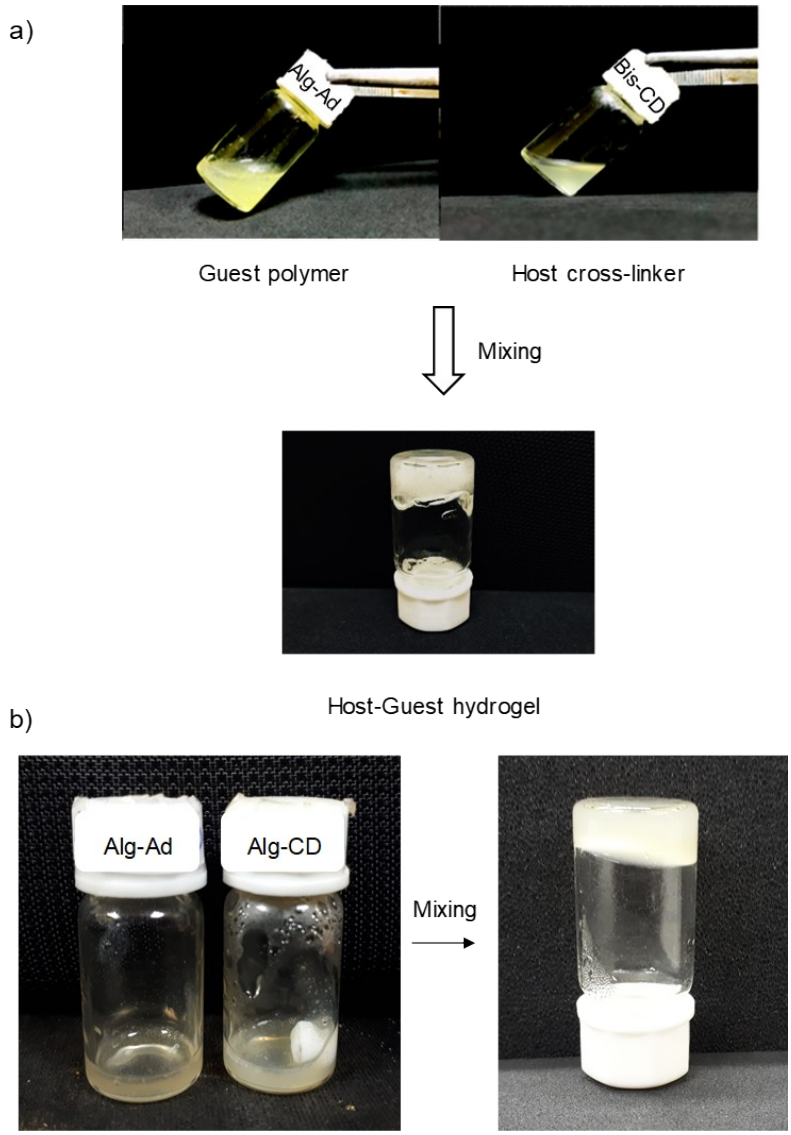


Figure S5. HG hydrogel formation of a) mixing of the ALG-Ad solution as guest polymer with bis-CD solution as host cross-linker, b) mixing of the ALG-CD solution as host polymer with ALG-Ad solution as guest polymer.

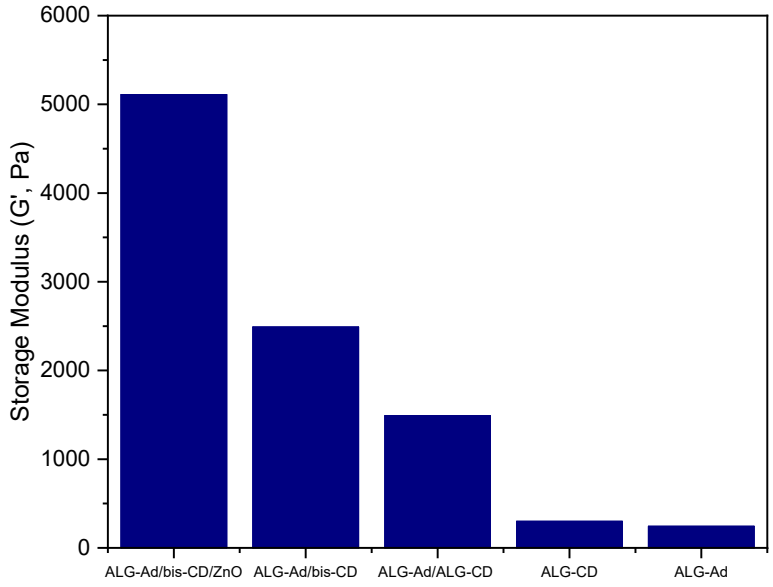


Figure S6. Comparison of the storage modulus of the prepared hydrogels