## Supporting information

## Anti-degradable gelatin films crosslinked by active ester based on cellulose

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- Fig. S1 The <sup>1</sup>H-NMR spectra of EDTAD
- Fig. S2 The FTIR spectrum of EDTAD

Fig. S3 The FTIR spectra of MCC, ME and MEN

- Fig. S4 TGA (1) and DSC (2) curves of MCC, ME and MEN
- Fig. S5 Photos of water contact angles of gelatin films

a Gel, b Gel-15%MEN, c Gel-25%MEN

- Fig. S6 Light transmission of films at selected wavelengths
  - (1) light transmission of different Gel-MEN films
  - (2) light transmission comparison of Gel-MEN and Gel/MCC films



Fig. S1 The <sup>1</sup>H-NMR spectrum of EDTAD



Fig. S2 The FTIR spectra of EDTAD



Fig. S3 The FTIR spectra of MCC, ME and MEN



Fig. S4 TGA (1) and DSC (2) curves of MCC, ME and MEN  $% \mathcal{M} = \mathcal{M} = \mathcal{M} + \mathcal{M} +$ 



Fig. S5 Photos of water contact angles of gelatin films

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Fig. S6 Light transmission of films at selected wavelengths(1) light transmission of different Gel-MEN films(2) light transmission comparison of Gel-MEN and Gel/MCC films