

## Supporting Information

### **A low-swelling and toughened adhesive hydrogel with anti-microbial and hemostatic capacities for wound healing**

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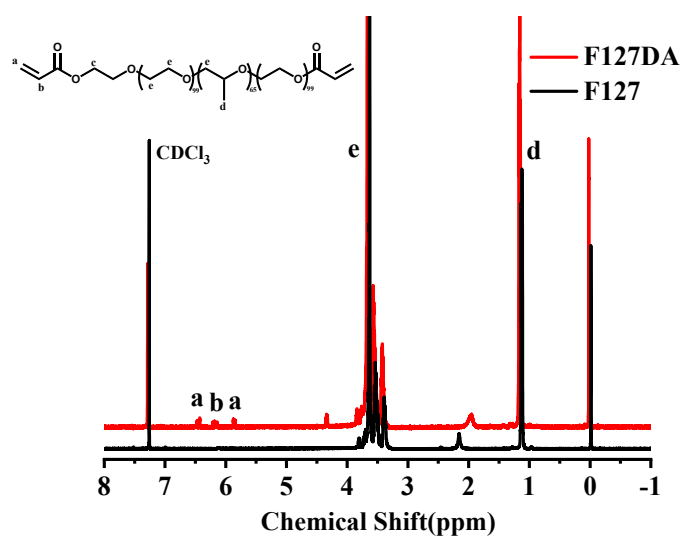
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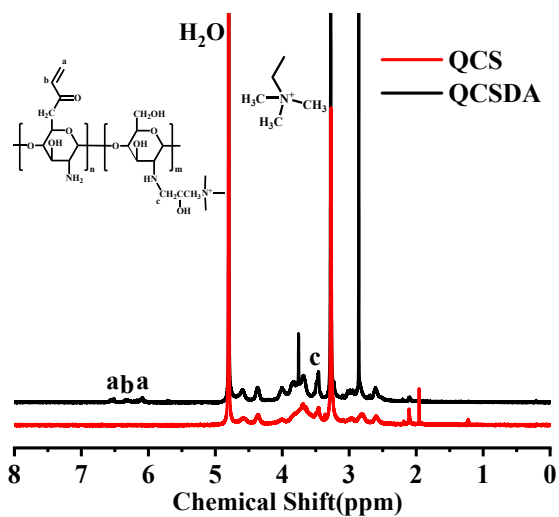
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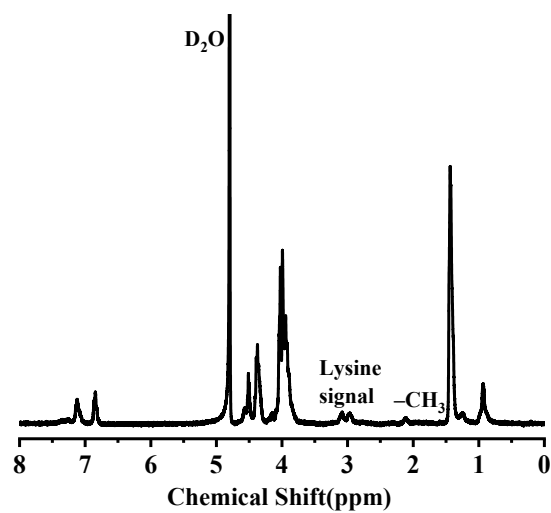
E-mail: [rjpei2011@sinano.ac.cn](mailto:rjpei2011@sinano.ac.cn)



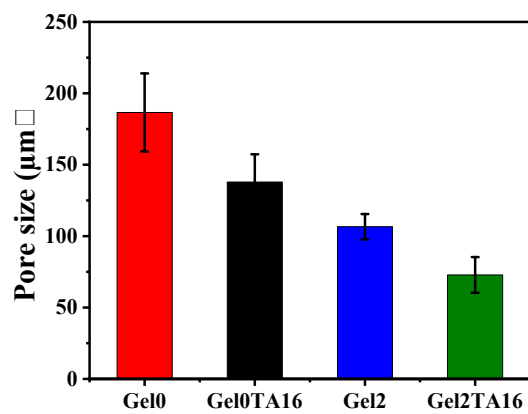
**Fig. S1** <sup>1</sup>H NMR spectra of F127 and F127DA.



**Fig. S2** <sup>1</sup>H NMR spectra of QCS and QCSDA.



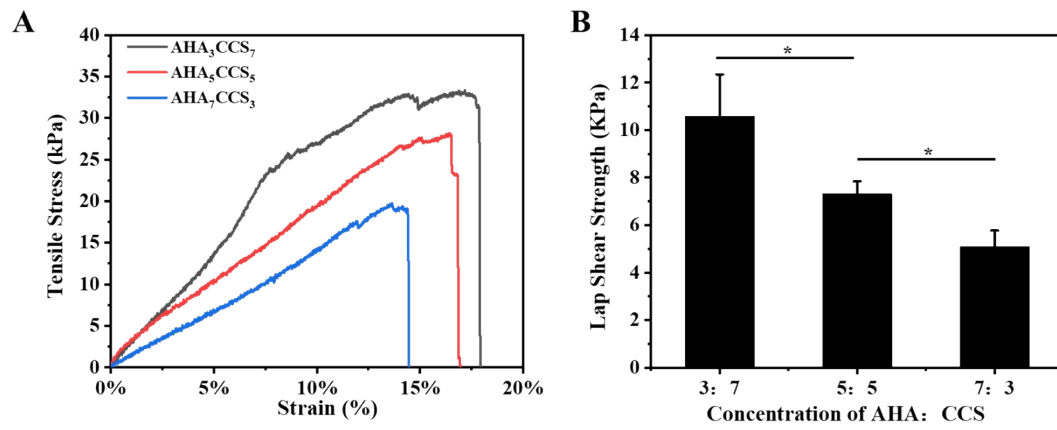
**Fig. S3** <sup>1</sup>H NMR spectra of SF.



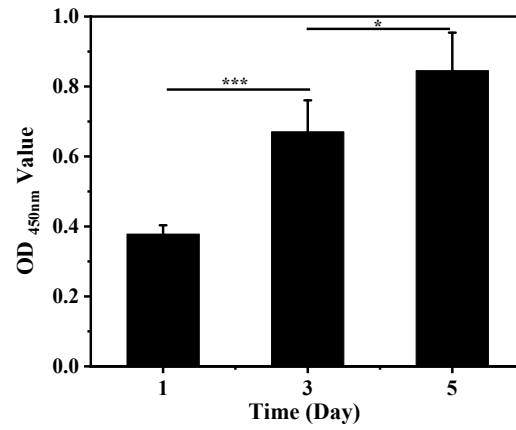
**Fig. S4** The average size of pore in the hydrogels. Mean  $\pm$  SD, n = 10.



**Fig. S5** The inset images showed the water contact angle of the corresponding samples. (A) Gel2 (B) Gel2TA4 (C) Gel2TA16.



**Fig. S6** (A) The tensile stress of hydrogel AHA/CCS. (B) The tissue adhesion strength of high-swelling hydrogel AHA/CCS. \* $p \leq 0.05$ .



**Fig. S7** OD<sub>450nm</sub> value of L929 cells on the Cell Culture Plates from 1 to 5 days. \* $p \leq 0.05$ , \*\* $p \leq 0.01$ , and \*\*\* $p \leq 0.001$ .