Supplementary Information

Cationic peptidopolysaccharides synthesized by 'click' chemistry with enhanced broad-spectrum antimicrobial activities

Yajuan Su,^a Liang Tian,^b Meng Yu,^a Qiang Gao,^a Dehui Wang,^c Yuewei Xi,^a Peng Yang,^c Bo Lei,^a Peter X. Ma^{a,d,e,f,g} and Peng Li^{*b}

- ^a Center for Biomedical Engineering and Regenerative Medicine, Frontier Institute of Science and Technology, Xi'an Jiaotong University, Xi'an 710054, China.
- b Key Laboratory of Flexible Electronics (KLOFE) and Institute of Advanced Materials (IAM), Jiangsu National Synergetic Innovation Center for Advanced Materials (SICAM), Nanjing Tech University (NanjingTech), Nanjing 211816, China.
- *E-mail: <u>iampli@njtech.edu.cn</u>; Tel/Fax: (86) 25-83587982.
- ^c Key Laboratory of Applied Surface and Colloids Chemistry, Ministry of Education, School of Chemistry and Chemical Engineering, Shaanxi Normal University, Xi'an 710119, China.
- ^d Department of Biomedical Engineering, University of Michigan, Ann Arbor, MI 48109, USA.
- ^e Department of Biologic and Materials Sciences, University of Michigan, Ann Arbor, MI 48109, USA.
- ^f Macromolecular Science and Engineering Center, University of Michigan, Ann Arbor, MI 48109, USA.
- ^g Department of Materials Science and Engineering, University of Michigan, Ann Arbor, MI 48109, USA.

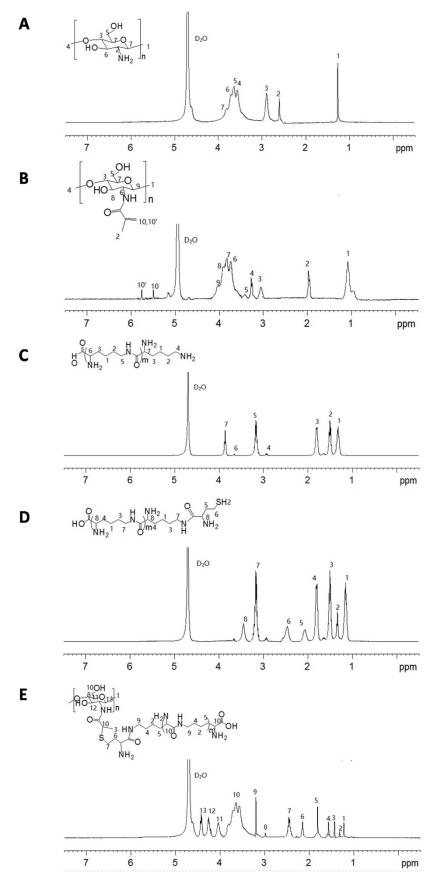


Figure S1. ¹H NMR spectra of (A) chitosan, (B) CS-g-MA, (C) EPL, (D) EPL-g-HT and (E) CS-g-EPL.

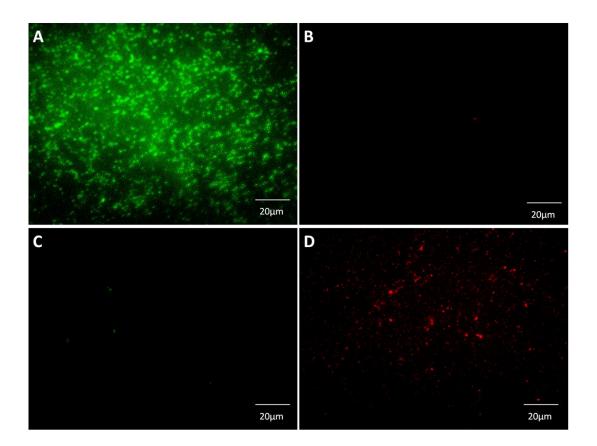


Figure S2. The *E. coli* were stained using LIVE/DEAD assay. PBS treated (A, B) and CS_L-g-EPL_{50%} treated (C, D) cells were stained and imaged using an inverted fluorescence microscope (left column is LIVE and right column is DEAD).