Supporting Information

Dendritic polyglutamic acid-chelerythrine nanocomplex for

the reversal of bacterial tooth decay

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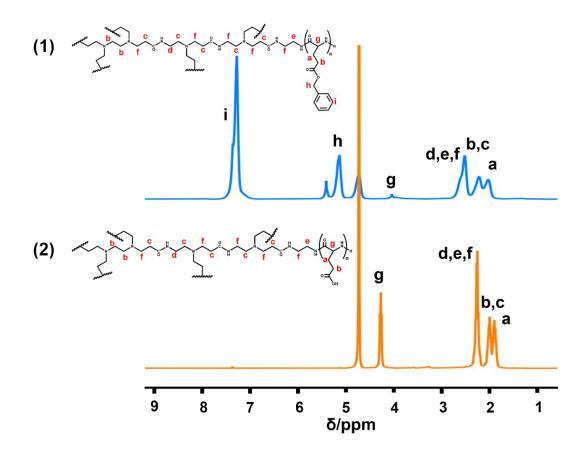


Fig S1. ¹H NMR of DPGlu (1) before and (2) after deprotection

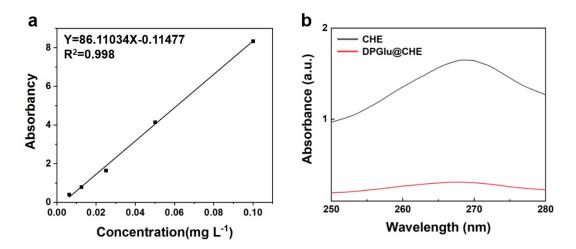


Fig. S2 (a) Absorbance standard curve of CHE. (b) UV spectra of CHE and DPGlu@CHE.

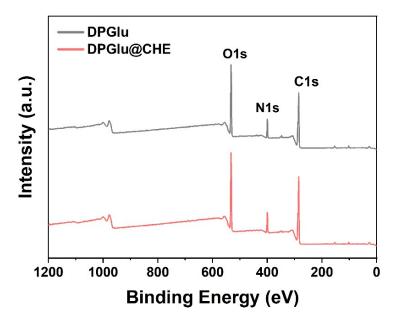


Fig S3. XPS spectra of DPGlu and DPGlu@CHE.

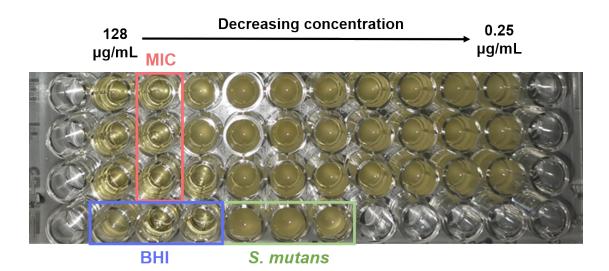


Fig. S4 Antibacterial experiments of CHE against Streptococcus mutans.

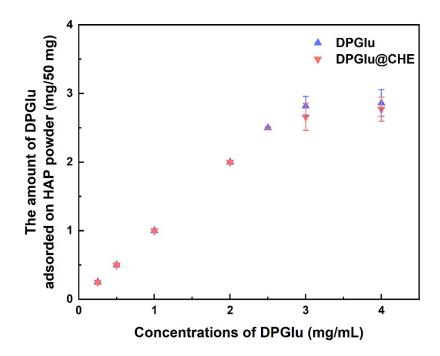


Fig. S5 The apparent absorption of DPGlu and DPGlu@CHE on HAP powders.

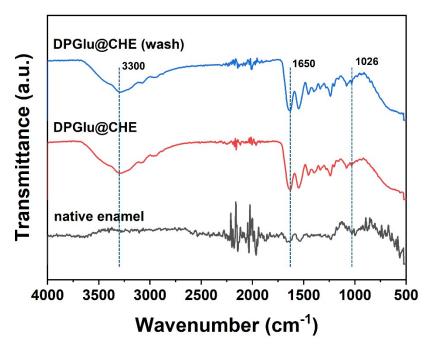


Fig. S6 ATR-IR spectra of acid-etched tooth enamel before/ after DPGlu@CHE modification and

after washing.

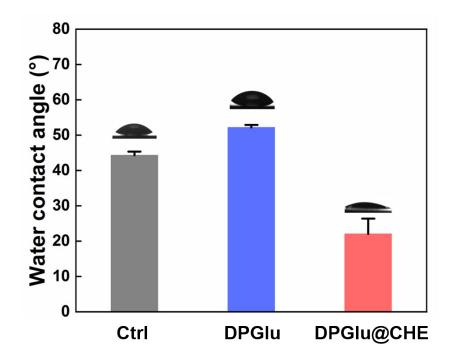


Fig. S7 Water contact angle of intrinsic tooth enamel (Ctrl group), enamel modified with DPGlu (DPGlu group) and DPGlu@CHE (DPGlu@CHE group) respectively.

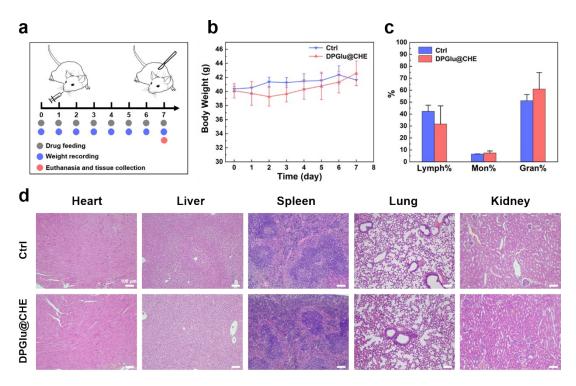


Fig. S8 (a) Schematic illustration of the schedule for in vivo experiment. (b) The body weight of rats in control and DPGlu@CHE groups. (c) Blood routine analysis of rats. (d) H&E staining images of heart, liver, spleen, lung and kidney in each group.

Name	Element	Atomic %
DPGlu	С	62.47
	Ν	9.73
	0	27.8
DPGlu@CHE	С	63.62
	Ν	9.66
	0	26.72

Table S1. Relative atomic content of DPGlu and DPGlu@CHE.