

Antibacterial peptide microspheres and recombinant human type XVII collagen (rhCXVII) modified protein hydrogels for synergistically combating dental caries

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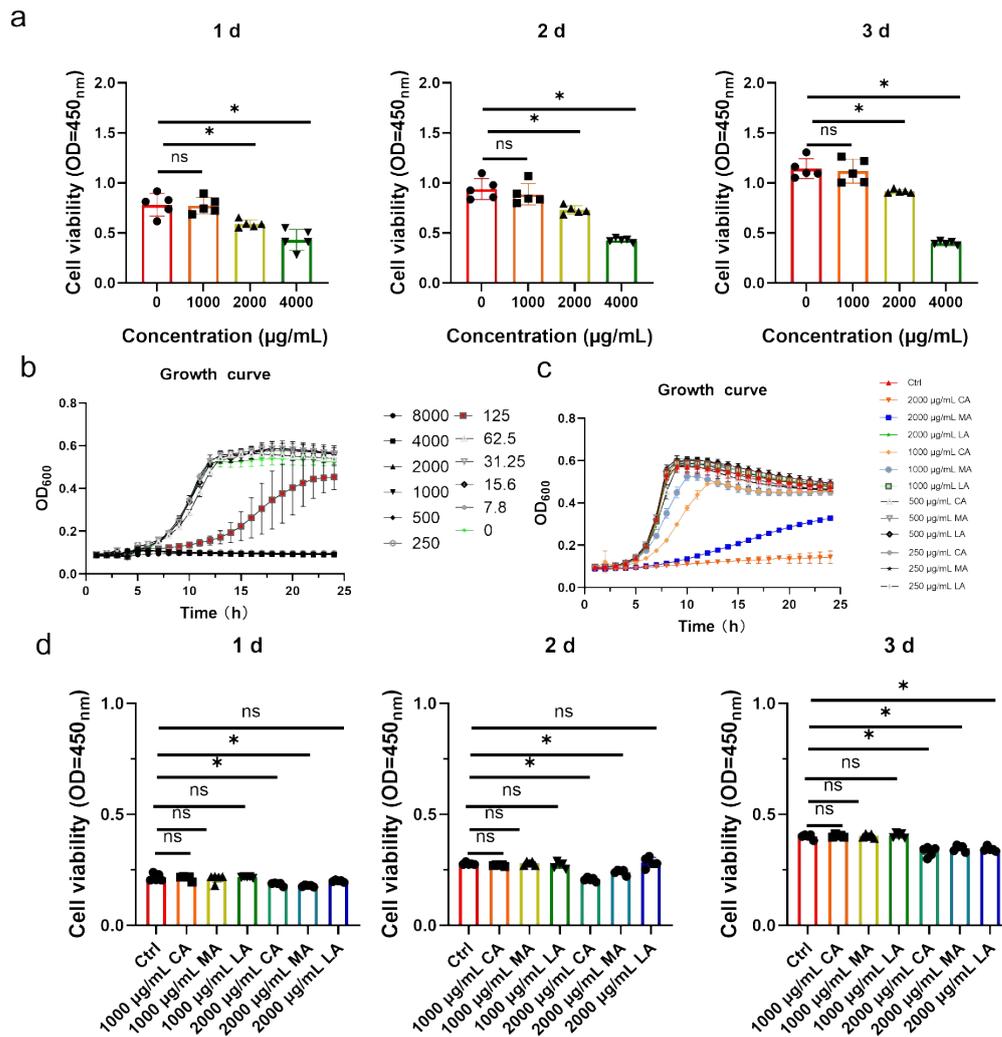


Figure S1: The cytotoxicity and antibacterial activity of PL. (a) The effect of different concentrations of PL on the proliferation of hDPCs cells. (b) The inhibitory of different concentrations of PL on *S. mutans* UA159. (c) The inhibitory of different concentrations of CA, MA, LA on *S. mutans* UA159. (d) The effect of different concentrations of CA, MA, LA on the proliferation of hDPCs cells. * $P < 0.5$.

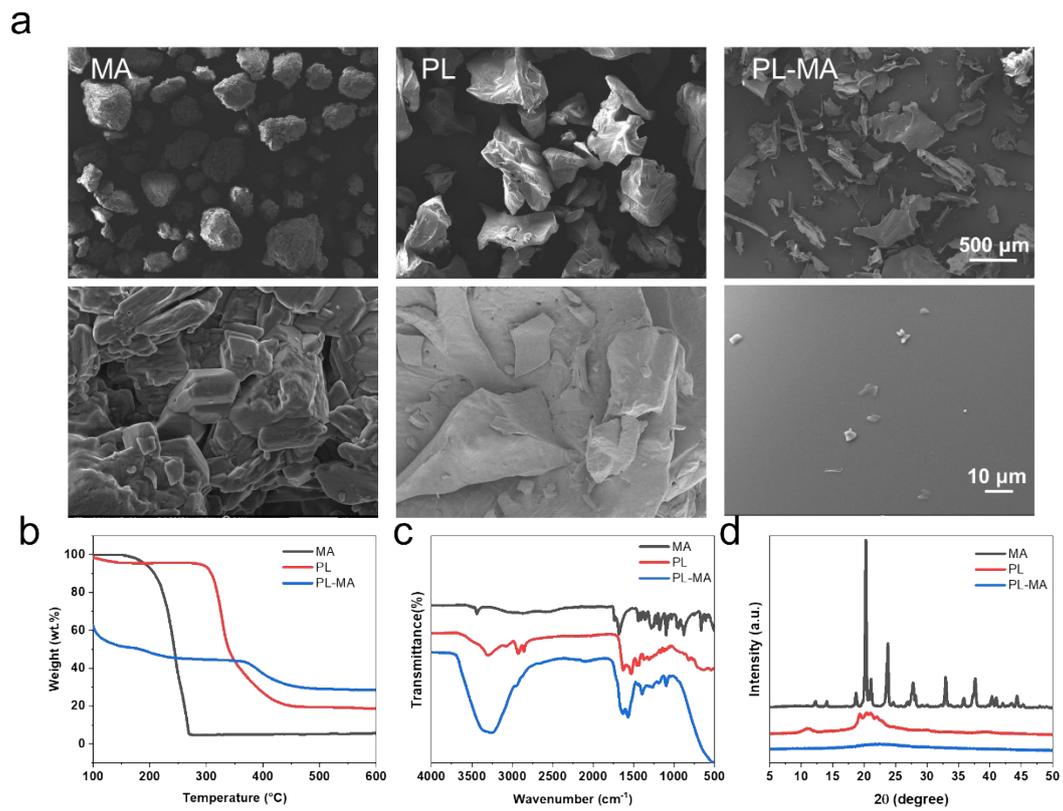


Figure S2: Characterization of PL-MA. (a) SEM images of MA, PL and PL-MA. (b) TGA curves of MA, PL and PL-MA. (c) FTIR spectra of MA, PL and PL-MA. (d) XRD patterns of MA, PL and PL-MA. Scale bar, 500 μm and 10 μm .

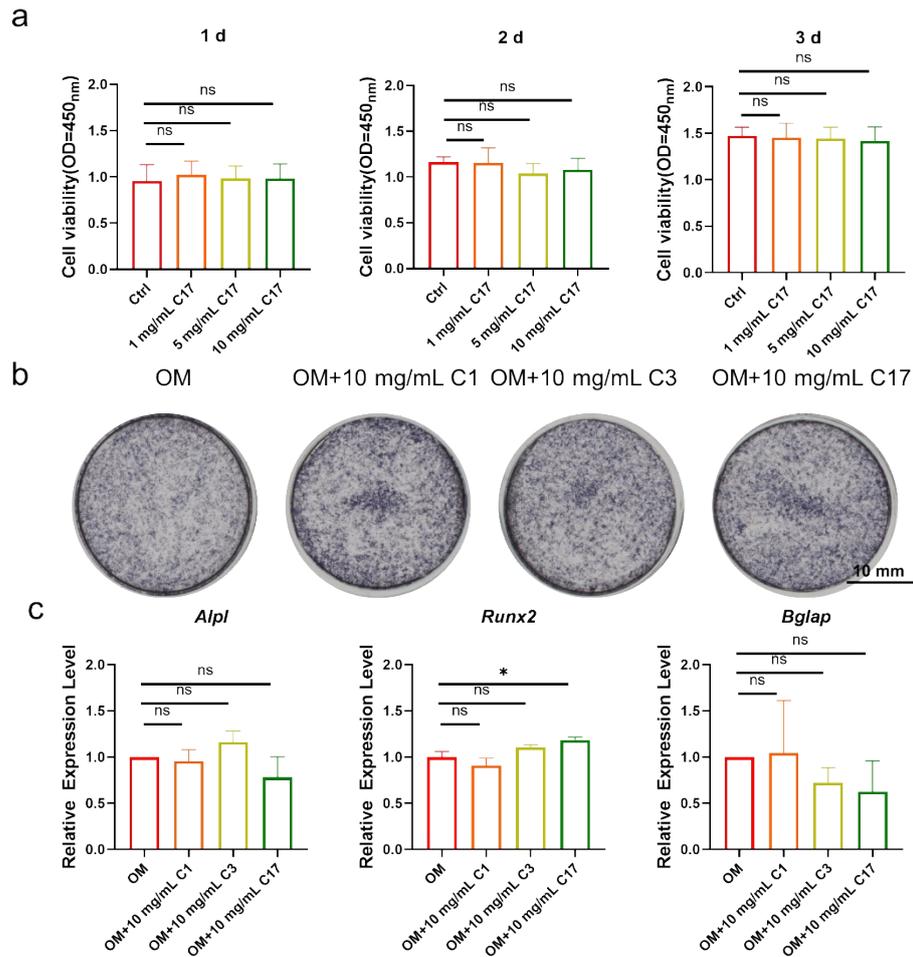
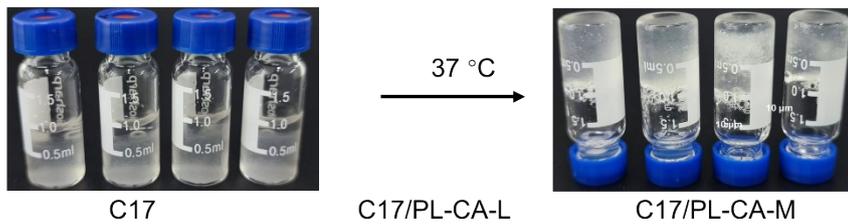


Figure S3: C17 promotes the remineralization of hPDCs. (a) The effect of different concentrations of C17 on the proliferation of hDPCs cells. (b) ALP staining of hDPCs after 4 days of treatment with OM, C1, C3, and C17. (c) hDPCs cells were treated with OM, C1, C3, and C17 for 4 days and relative expression of osteogenic genes was tested by RT-qPCR. * $P < 0.5$.

a



b

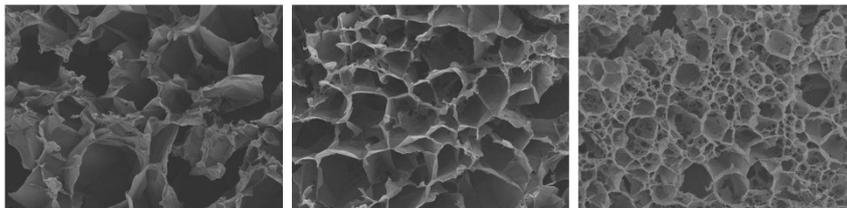


Figure S4: Photographic illustration and characterization of hydrogels. (A) Photograph of the hydrogels. (B) SEM images of the cross-section of the hydrogels.