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Supporting information

Biofunctional peptide-click PEG-based hydrogel as a 3D cell scaffold for corneal epithelial regeneration

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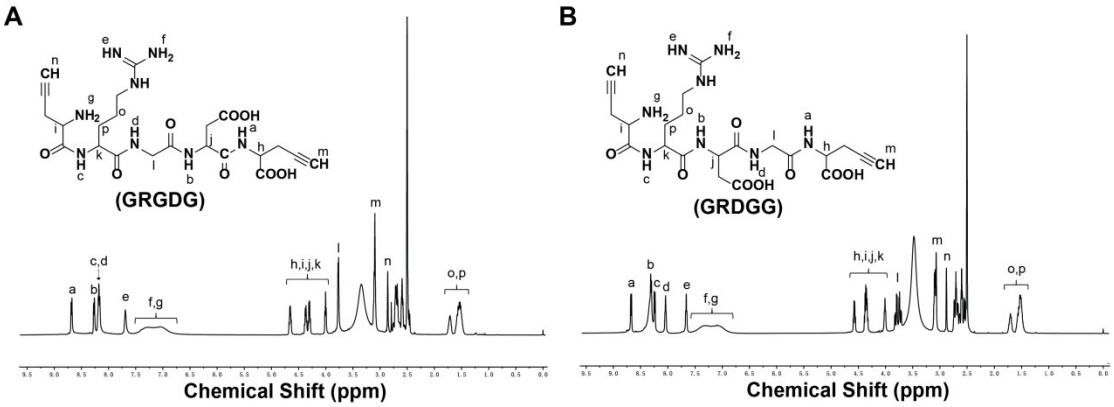

Fig. S1. ^{1}H-NMR spectra of **(A)** GRGDG and **(B)** GRDGG di-propargylated peptide in DMSO-d_6.

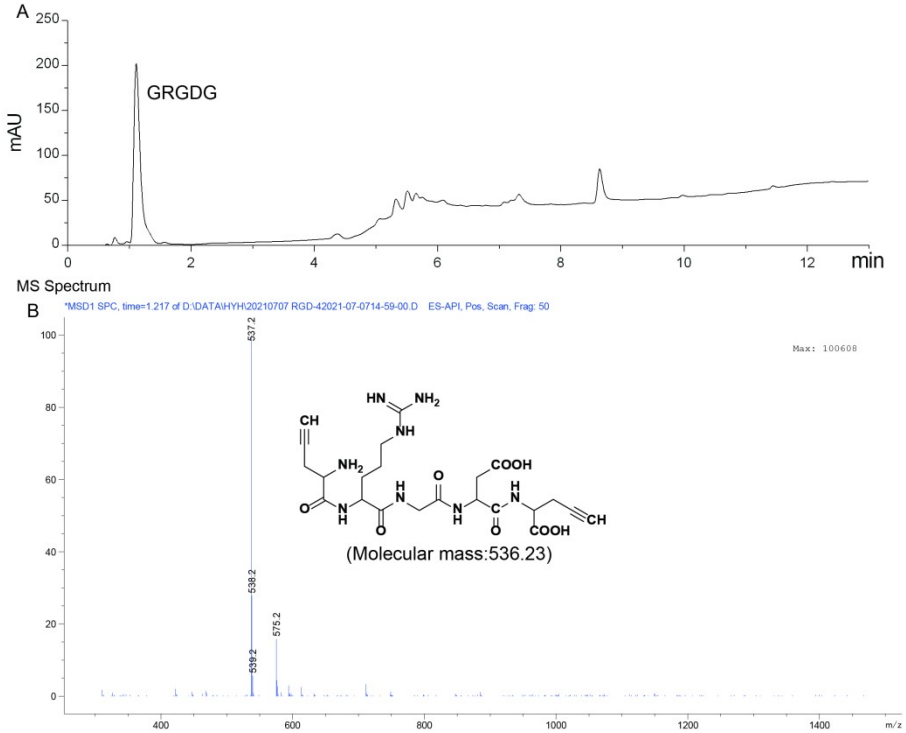

Fig. S2. (A) The DAD signal of GRGDG peptide measured by HPLC at 220 nm; **(B)** MS spectrum of GRGDG peptide.

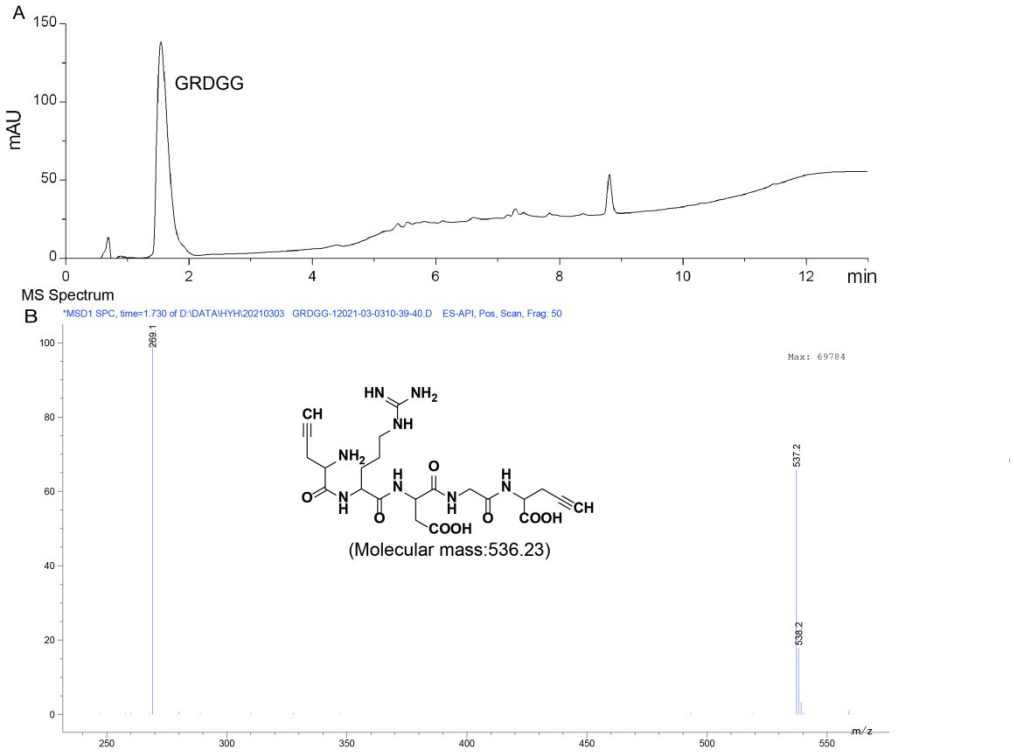

Fig. S3. (A) The DAD signal of GRDGG peptide measured at 220 nm; **(B)** MS spectrum of GRDGG peptide.

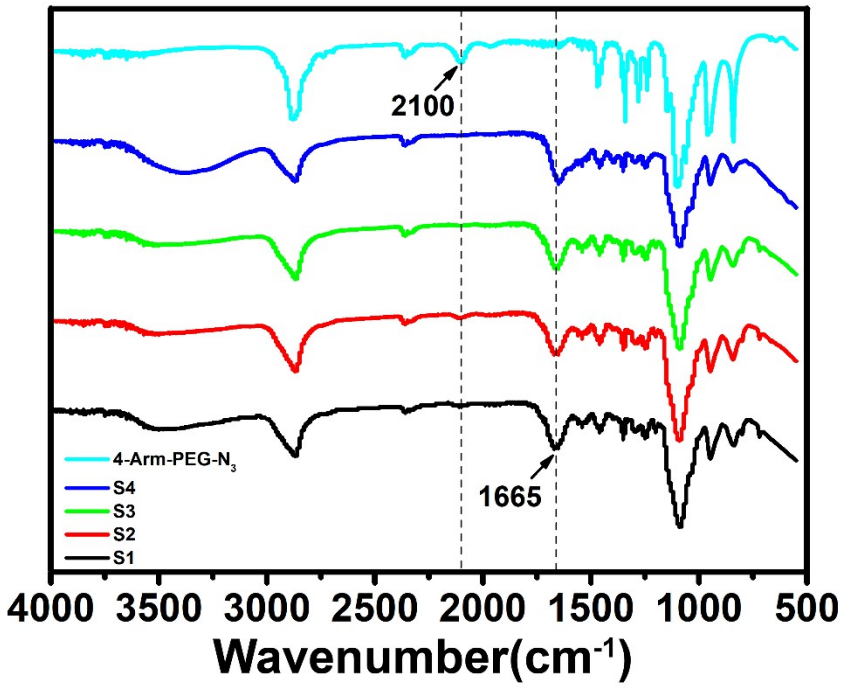

Fig. S4. ATR-FTIR spectra of the various lyophilized PEG-peptide hydrogels (S1, S2, S3, and S4) and 4-arm-PEG-N_3.

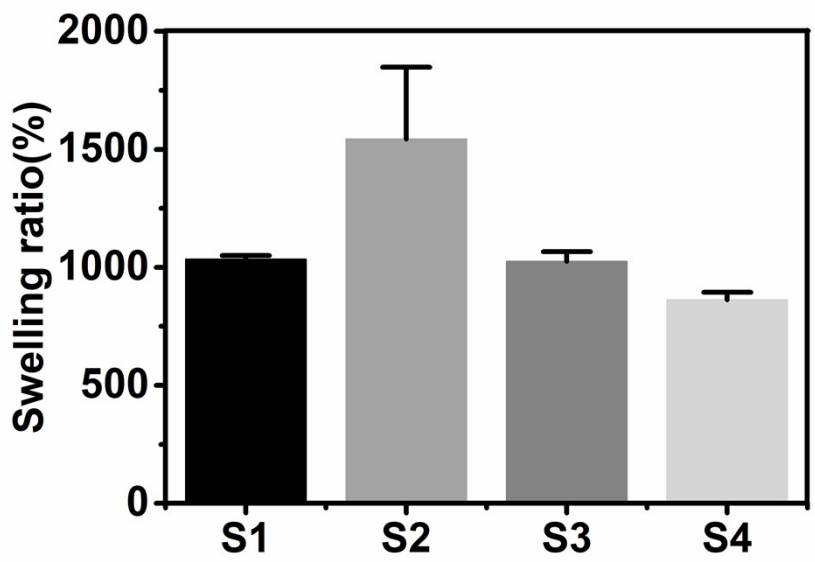

Fig. S5. The equilibrium swelling ratios of the various PEG-peptide hydrogels (S1, S2, S3, and S4) measured at 48 h.

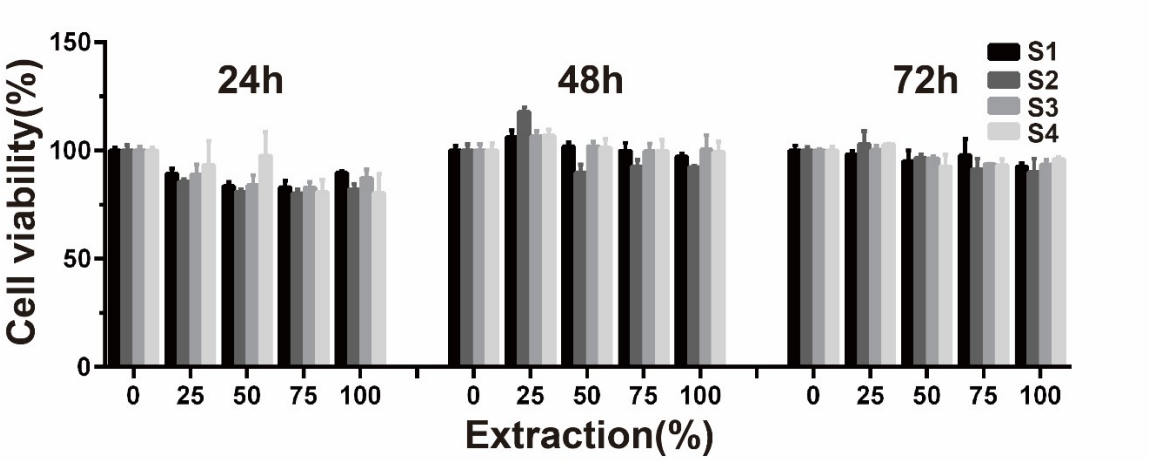

Fig. S6. Viability of HCECs cultured in 0%, 25%, 50%, 75%, and 100% extracts of the various PEG-peptide hydrogels (S1, S2, S3, and S4) at 24, 48, and 72 h.

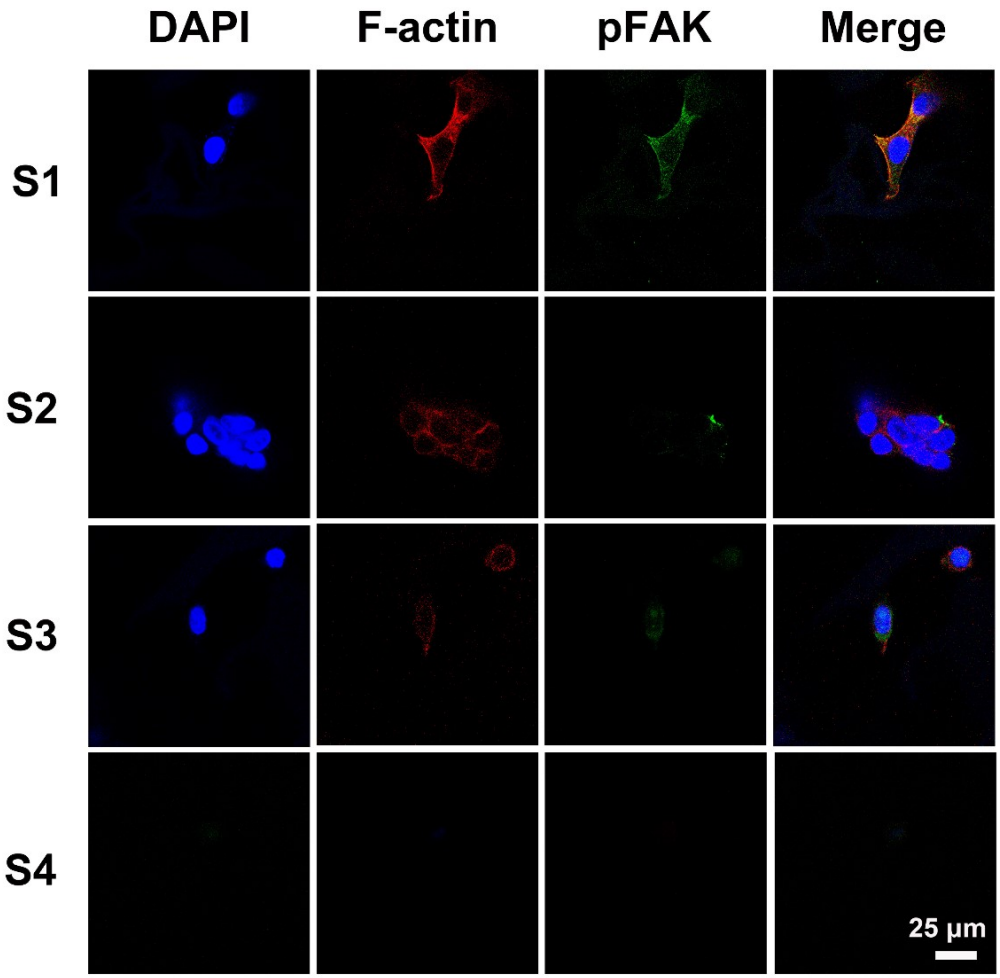

Fig. S7. Representative images of immunofluorescence staining against F-actin (red), nuclei (blue), and pFAK (green) of HCECs seeding on the various PEG-peptide hydrogels (S1, S2, S3, and S4) at 24 h.