Electronic Supplementary Material (ESI) for Soft Matter.

Supplementary Information

Formulation of thrombin-inhibiting hydrogels by self-assembly of ionic peptides with peptide-modified polymers

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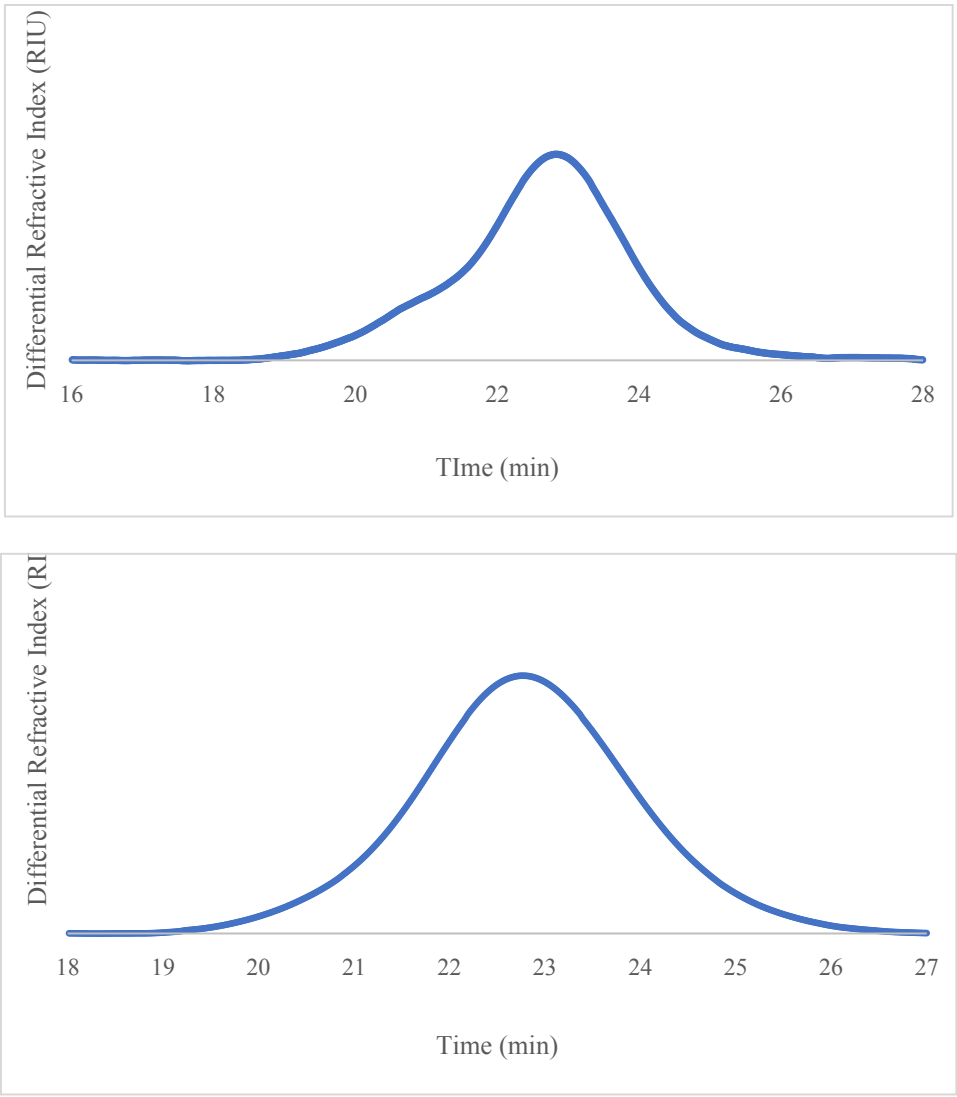

Fig. S1 Gel permeation chromatography of pTEGMA (top) and p(TEGMA-co-PDMSA) (bottom) with refractive index detection.

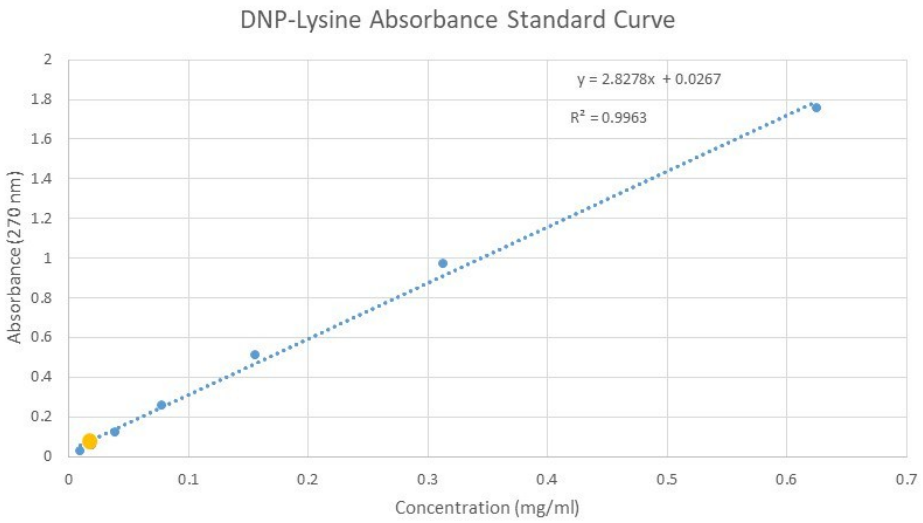

Fig. S2 Standard curve of absorbance (wavelength = 270 nm) of DNP-lysine. Absorbance of 0.5 mg/mL of polymer-peptide conjugate shown in orange, corresponding to 95% conjugation efficiency.

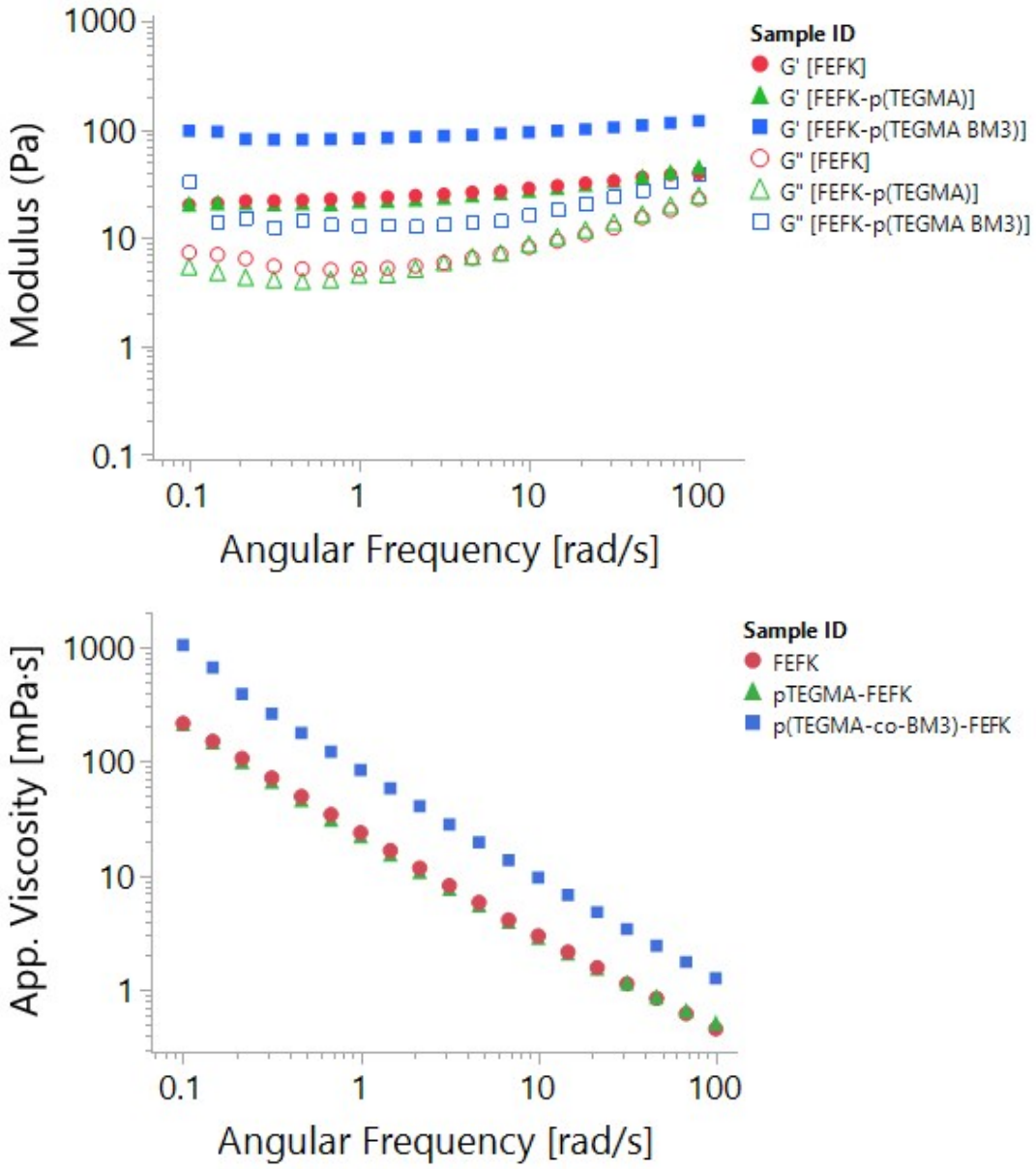

Fig. S3 Rheology studies for hydrogels formed without sodium hydroxide (pH ~4). Frequency sweep (left) and viscosity profile (right) of 20 mg/mL solutions of FEFK-p(TEGMA BM3), FEFK-p(TEGMA), and pure FEFK gels at 2.5% wt. For each gel, the data represents two replicates averaged together.

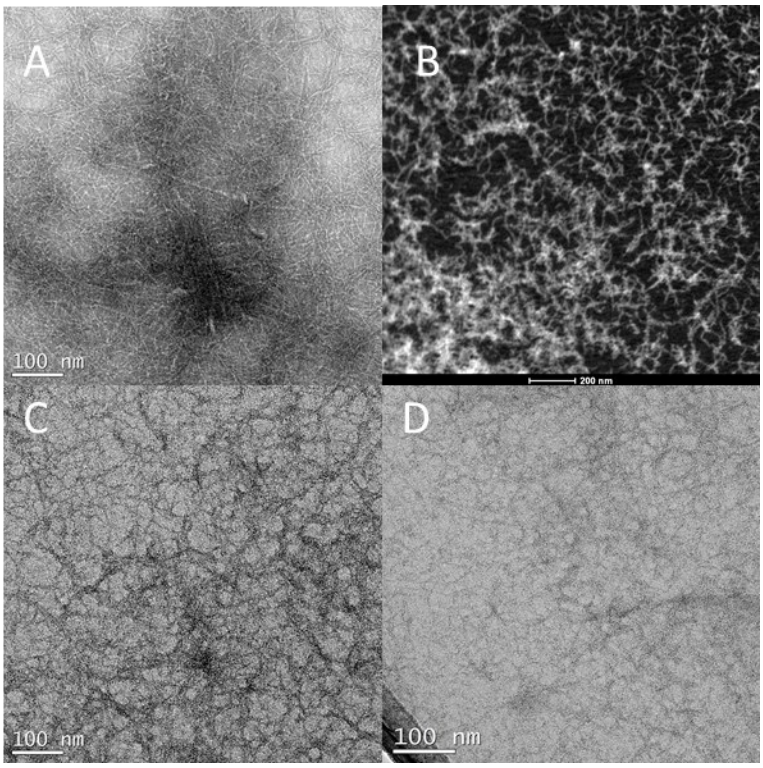

Fig. S4 TEM micrographs of (A) FEFK, (B) FEFK/pTEGMA-FEFK, (C) FEFK/p(TEGMA-co-BM3)-FEFK, and (D) FEFK/pTEGMA, all at 0.5 mg/ml.

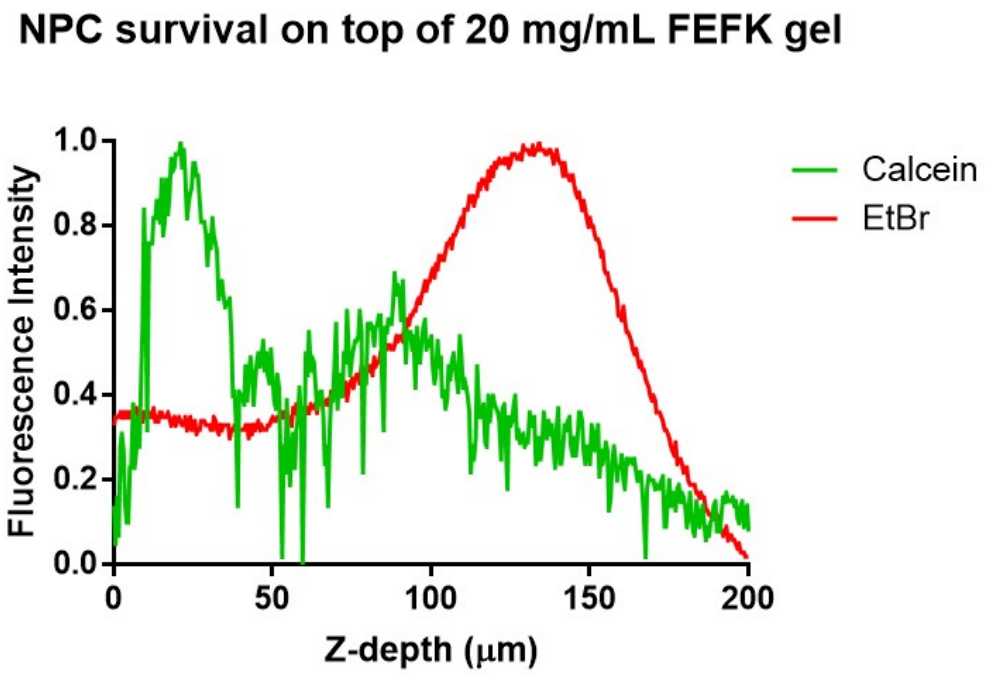

Fig. S5 Live/dead staining of murine neural progenitor cells cultured on top of an within FEFK hydrogels monitored by confocal laser scanning microscopy. Calcein AM fluorescence reveals live cells and ethidium bromide (EtBr) fluorescence reveals dead cells. Cell cultured at the top of hydrogel (low Z-depth) have high viability but cell cultured within the hydrogels (Z depth between 50 and 200 μm have poor viability.