Supporting Material

Structural transformation and physical properties of a hydrogel forming peptide studied by NMR, TEM and dynamic rheometer

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Fig. S1 Dynamic Light Scatter (DLS) data of hydrodynamic diameters of h9e peptide amorphous morphologies in 100% (A and C) and 90% (B and D) DMSO with 0 (A and B) and 30 (C and D) mM Ca^{2+}.

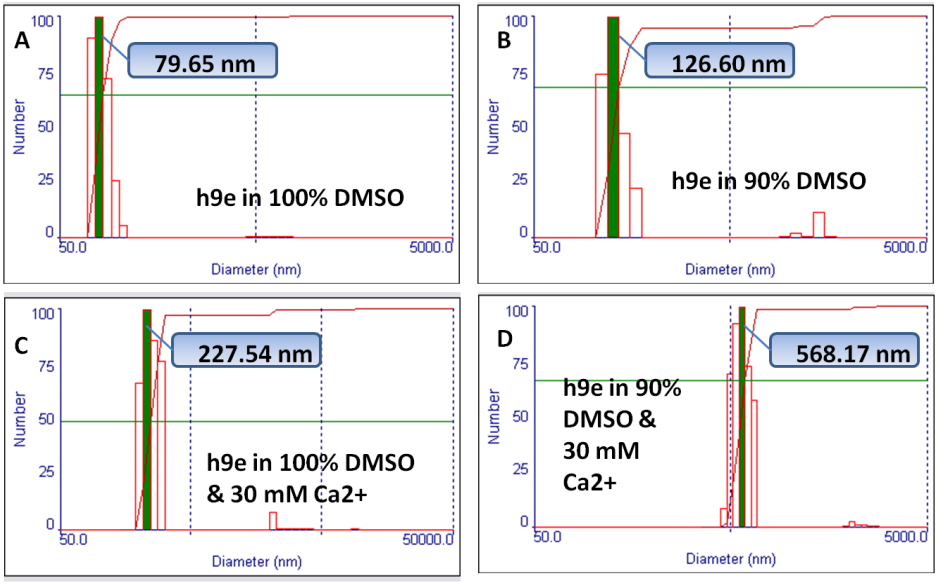

Fig. S2 TOCSY and NOESY of h9e in 100% DMSO. A. TOCSY spectra of h9e in 100% DMSO show resonance assignments in the HN-Hα, HN-Side chain and Side Chain-Side Chain regions. **B.** Sample of NOESY spectra showing assignments of NOESY peaks in the HN-Hα and HN-HN regions.

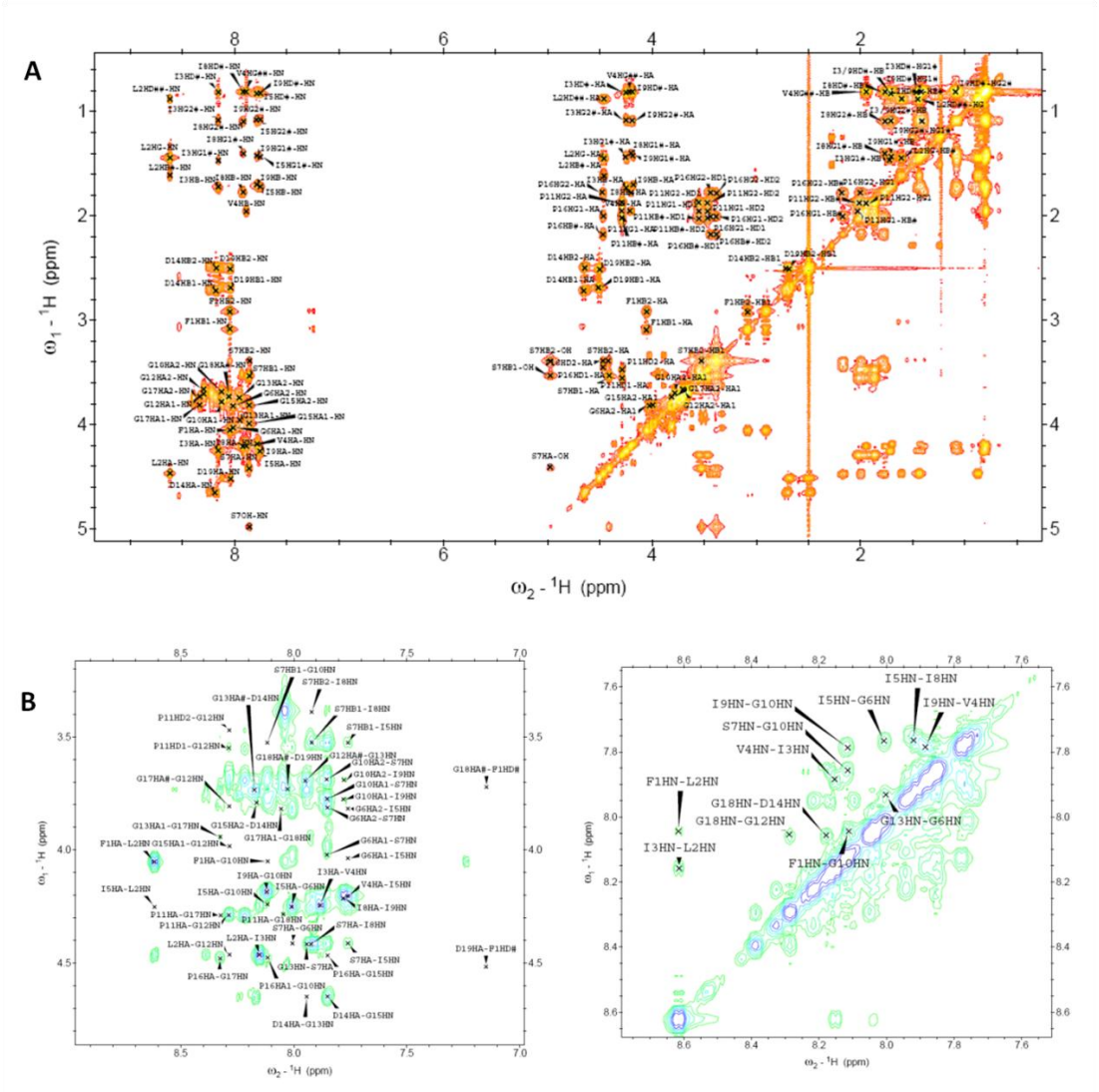

Fig. S3 Frequency sweep test of 3 mM h9e peptide in 90%, 70% and 50% DMSO solution after 48 h hydrogel stabilization.

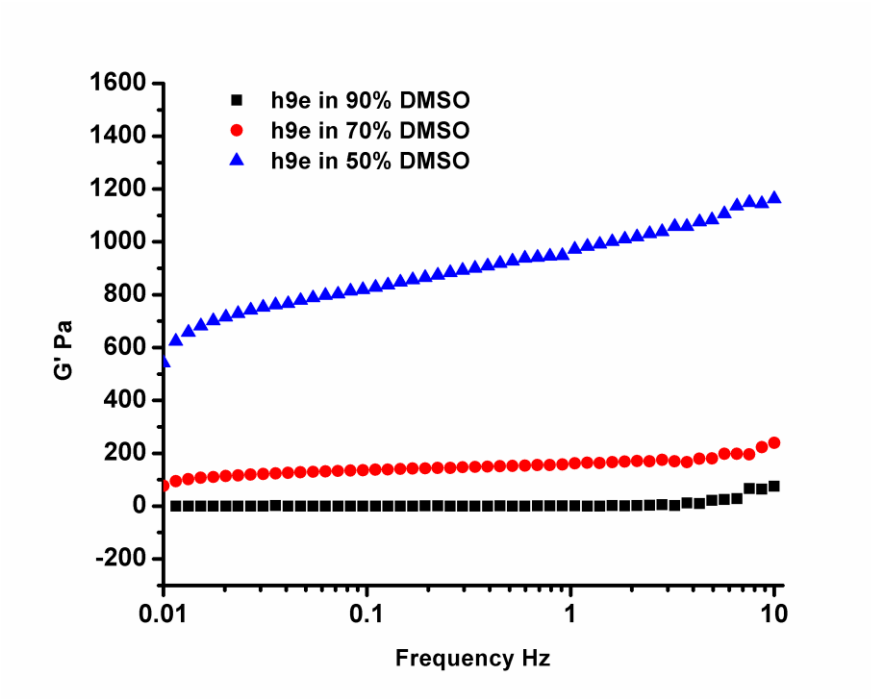

Fig. S4 Frequency sweep test of 3 mM h9e peptide in 70% DMSO with 0, 3 and 30 mM Ca^{2+} after 12 h hydrogel stabilization.

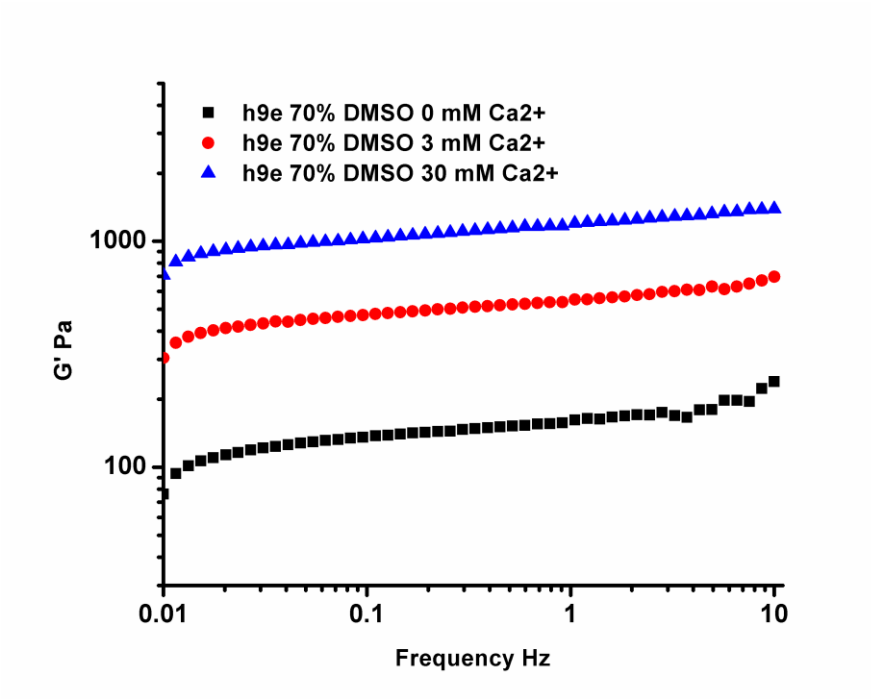

Fig. S5 Amplitude sweep test of 3 mM h9e hydrogel in 70% DMSO with 0, 3 and 30 mM Ca^{2+} under the range of shear strain from 0.01% to 500 %. The enlarged window shows the linear viscoelastic regime of h9e hydrogel in a linear scale.