

Supporting Information

Characterizations of compound 1:

^1H NMR (300 MHz, DMSO- d_6) δ 8.25-8.34 (m, 2H); 8.13-8.17 (m, 2H); 7.91-8.05 (m, 4H); 7.75-7.86 (m, 4H); 7.66-7.73 (m, 4H); 7.37-7.47 (m, 3H); 7.14-7.20 (m, 10H); 7.02 (d, $J=8.429$ 2H); 6.63 (d, $J=8.356$, 2H); 4.45-4.57 (m, 7H); 4.21-4.35 (m, 8H); 3.61-3.72 (m, 25H); 2.89-2.98 (m, 3H); 2.53-2.74 (m, 7H); 2.28 (m, 2H); 1.87-2.02 (m, 8H); 1.50-1.65 (m, 8H); 1.31-1.34 (m, 4H). MS: calc. $M^+ = 1910.86$, obsvd. $(M+H)^+ = 1911.18$.

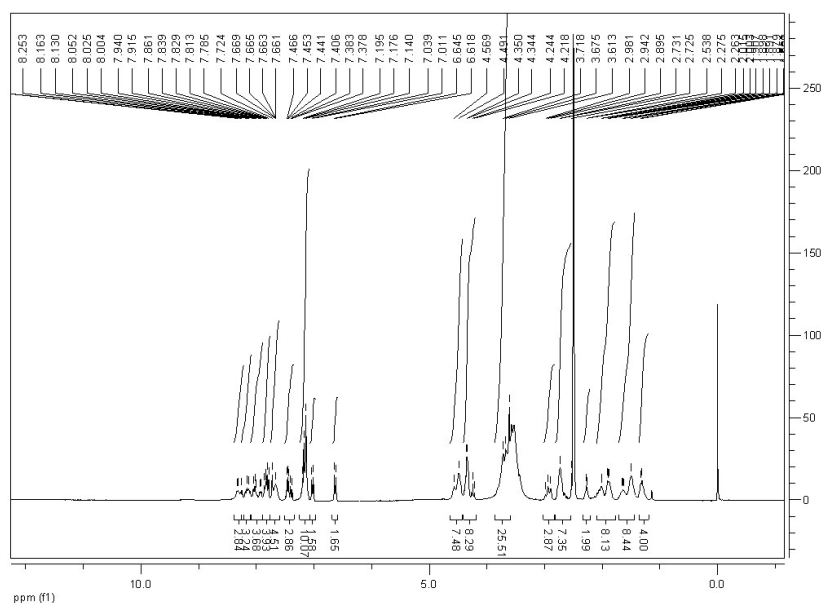


Fig. S-1. ^1H NMR of compound 1

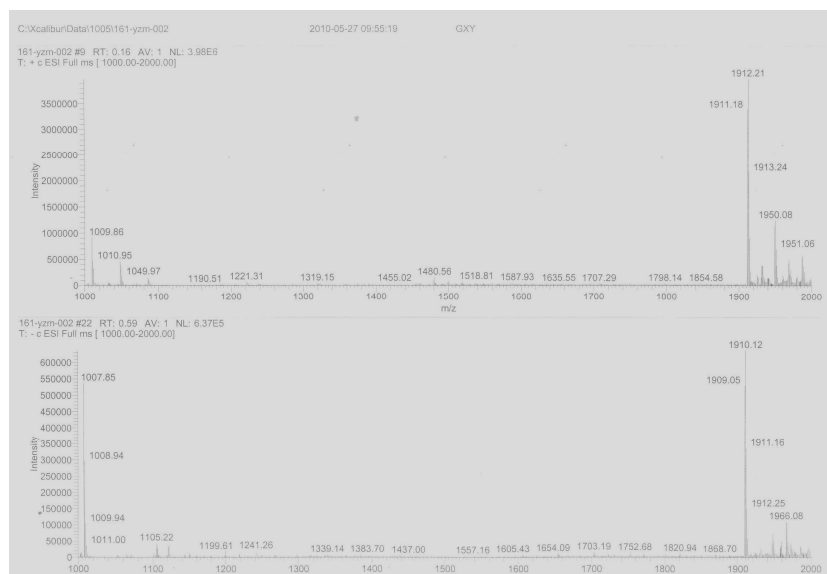


Fig. S-2. The MS spectrum of compound 1

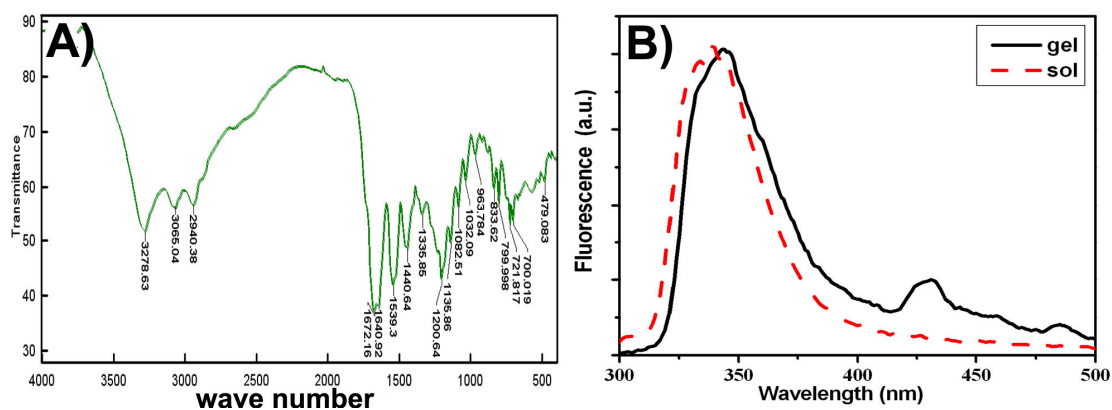
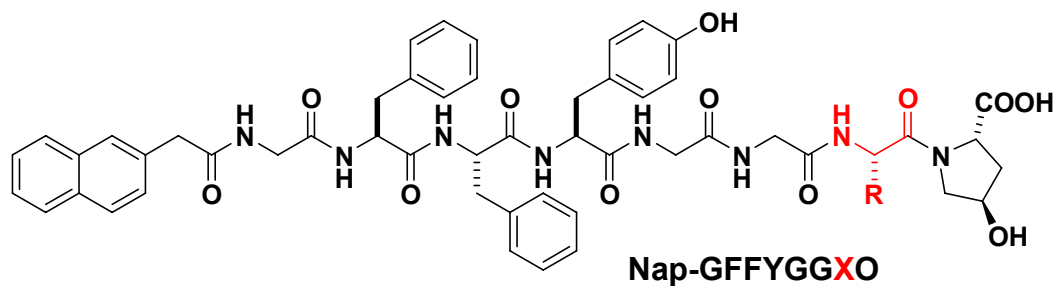


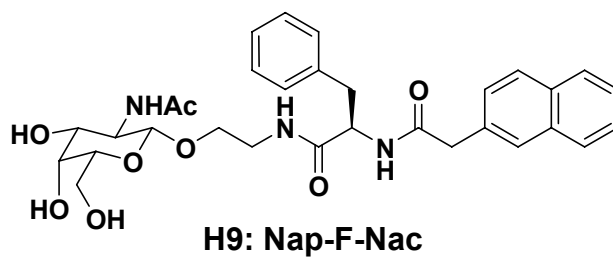
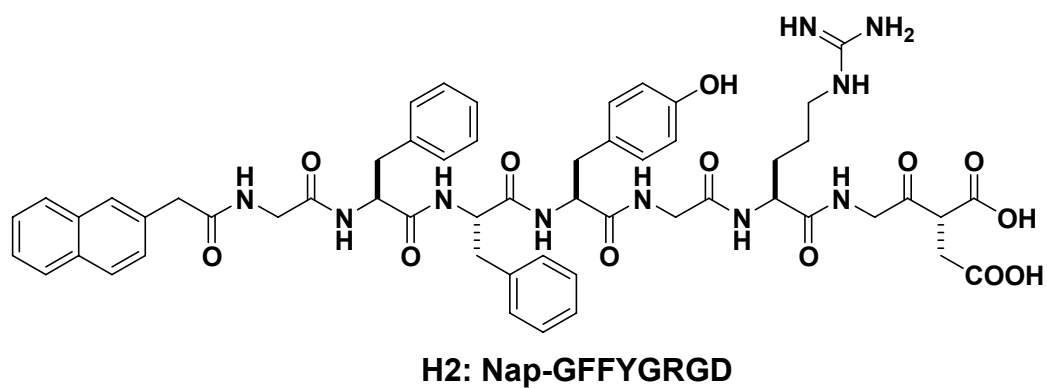
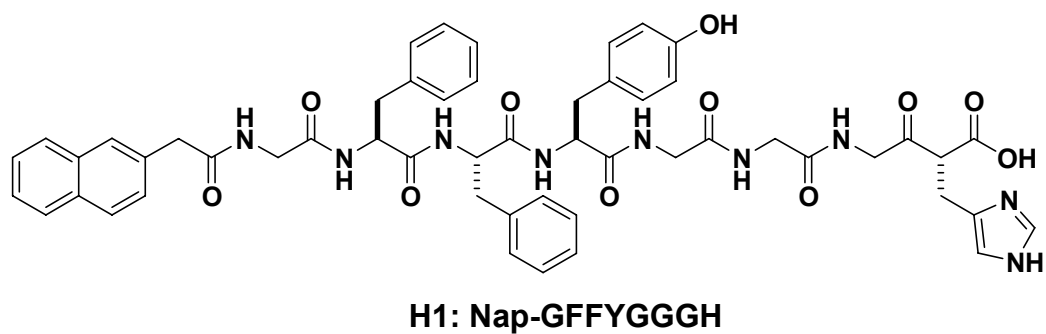
Fig. S-3. C) FT-IR spectroscopy of the gel, and D) emission spectra of solution of **1** and the gel of **1** ($\lambda_{\text{exc.}} = 272 \text{ nm}$)

Table S-1. Primer sequences for reverse transcription-polymerase chain reaction analyses

Gene	Forward prime	Reverse prime
<i>Sox1</i>	CCAGAGCTCAACCTACATTGGAGA	GGGCGTCATTCTTGAATCTCTTGC
<i>Pax6</i>	TAACGGAGAAGACTCGGATGAAGC	GGGCAAACACATCTGGATAATGGG
<i>Brachyury</i>	CATCGGAACAGCTCTCCAACCTAT	TACCATTGCTCACAGACCAGAGAC
<i>Flk1</i>	CAGGAAACTACACGGTCATCCTCA	AGGAATCCATAGGCGAGATCAAGG
<i>Gata4</i>	GCTATGCATCTCCTGTCACTCAGA	CCAAGTCCGAGCAGGAATTTGAAG
<i>Sox17</i>	CCCAACACTCCTCCCAAAGTATCT	TCTCTGTCTTCCCTGTCTTGGTTG
<i>β-Actin</i>	CAGAAGGAGATTACTGCTCTGGCT	TACTCCTGCTTGCTGATCCACATC



H0: Nap-GFFYG H3: Nap-GFFYGGKO H4: Nap-GFFYGGEO
H5: Nap-GFFYGGSO H6: Nap-GFFYGGAO H7: Nap-GFFYGGPO



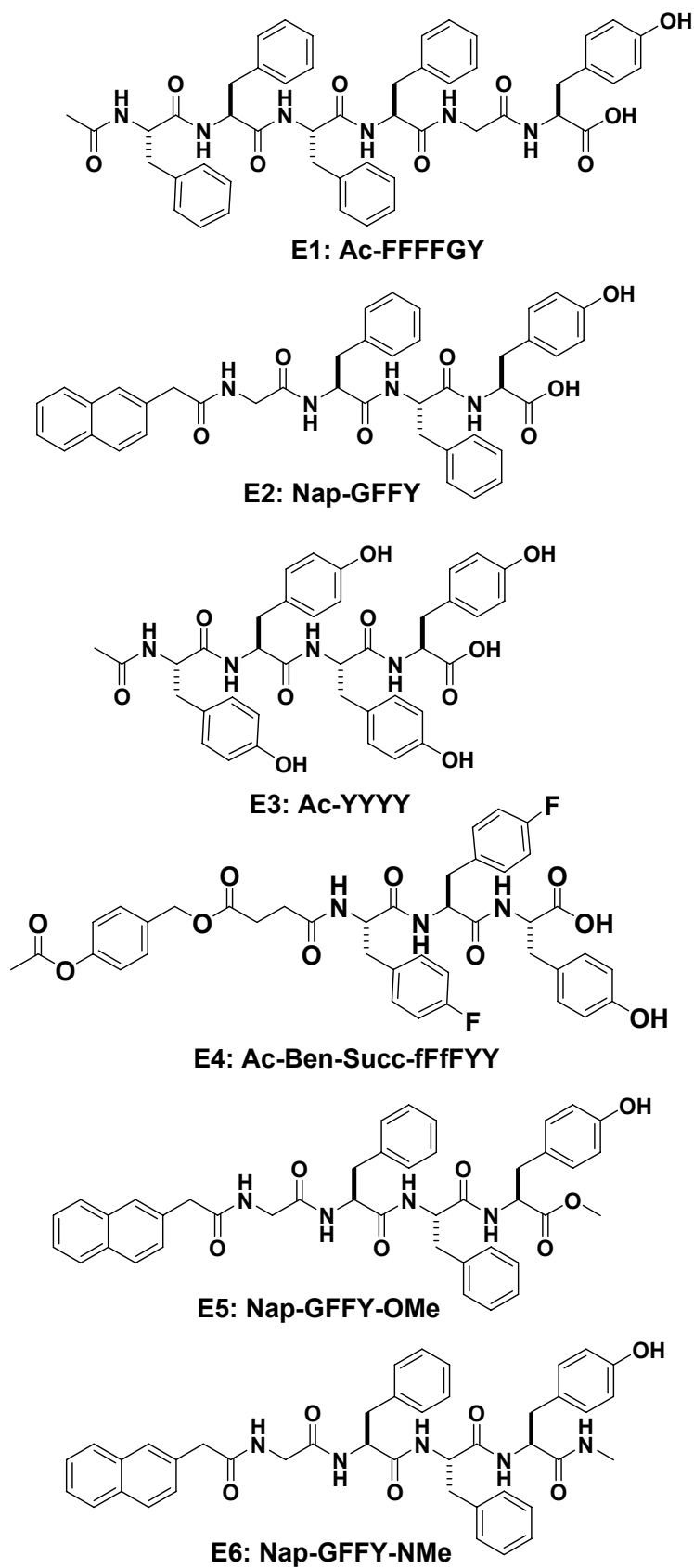


Fig. S-4. Chemical structures of the gelators used in this study (characterization of hydrogels formed by H0-H7 and E2 was reported in ref (1), gels of E5 in ref (2), gels of H9 in ref (3), gels of others will be reported in due course)

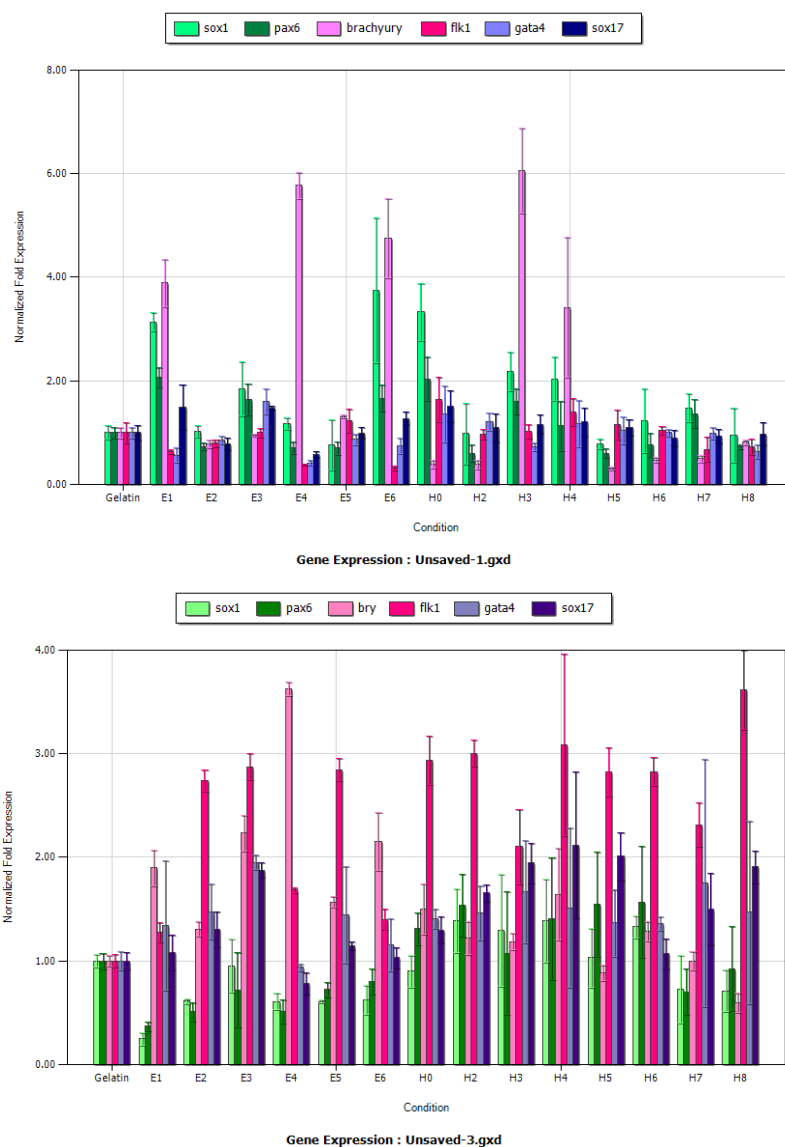


Fig. S-5. The gene expression of differentiated mES cells on gelatin and hydrogel surface after 72 hours' culture: up) the first experiment and down) the second experiment

- Ref (1) Hu, Y. H.; Wang, H. M.; Wang, J. Y.; Kong, D. L.;* Yang, Z. M.* "Supramolecular Hydrogels Inspired by Collagen for Tissue Engineering" *Org. Biomol. Chem.*, **2010**, 8(14), 3267-3271.
- Ref (2) Wang, H. M.; Ren, C. H.; Song, Z. J.; Wang, L.; Chen, X. M.; Kong, D. L.; Yang, Z. M.* "Enzyme-triggered Self-assembly of a Small Molecule: A Supramolecular Hydrogel with Leaf-like Structures and an Ultra-low Minimum Gelation Concentration" *Nanotechnology*, **2010**, 21, 225606.
- Ref (3) Wang, W. J.; Wang, H. M.; Tan, M.; Shen, J.; Wang, George P.;* Yang, Z. M.; Wang, L.* "A Saccharide-based Supramolecular Hydrogel for Cell Culture" *Carbohydrate Research*, **2011**, In press.