

ELECTRONIC SUPPLEMENTARY INFORMATION

Limpid hydrogels from β -turn motif-connected tandem repeats of A β ₁₆₋₂₂

Debika Datta[§], Vishnu Kumar[§], Sachin Kumar[§], Ramakrishnan Nagaraj^{#*} and Nitin Chaudhary^{§*}

[§]Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati, Guwahati – 781 039, India

[#]CSIR-Centre for Cellular and Molecular Biology, Uppal Road, Hyderabad – 500 007, India

*Authors for correspondence:

Nitin Chaudhary

Tel: +91-361-2582224

Fax: +91-361-2582249

E-mail: chaudhary@iitg.ac.in

Ramakrishnan Nagaraj

Tel: +91-40-27192589

Fax: +91-40-27160591/27160311

E-mail: nraj@ccmb.res.in

Transmission Electron Microscopy (TEM)

TEM samples were prepared by drop-casting 5 μl of the gel samples (24 h old) on 200 mesh Formvar/Carbon coated copper grids. After 2 minutes, the excess amount was blotted out from the periphery of the grid by Whatman I filter paper. The grids were then stained with saturated uranyl acetate negative stain solution which was blotted out after 30 seconds. The samples were dried and images recorded on Field Emission Transmission Electron Microscopy instrument (Make: JEOL, Model: 2100F).

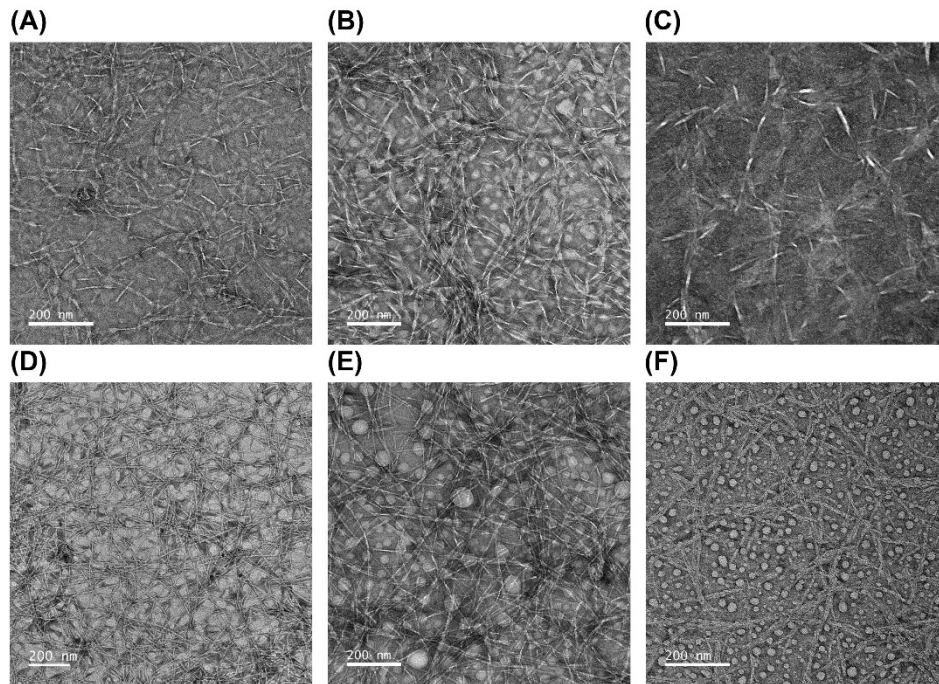


Figure S1. TEM images of A β FF-NG (A), A β FF-pG (B), A β FF-Up (C), A β FY-NG (D), A β FY-pG (E), and A β FY-Up (F) gel samples

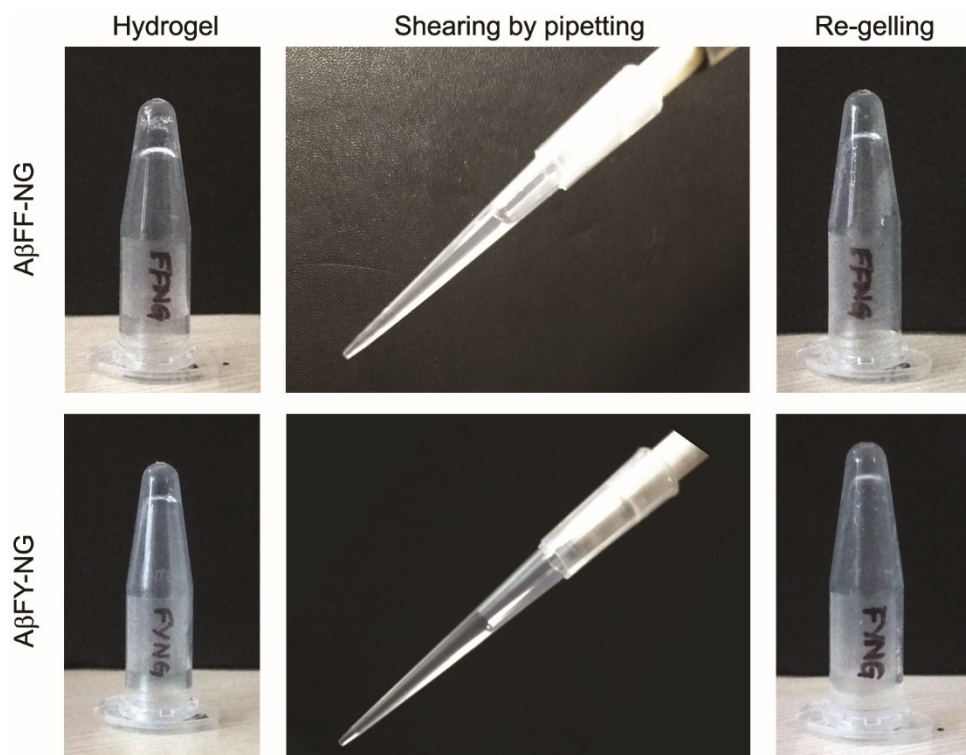


Figure S2. Mechano-responsive behaviour of the 5 mM A β FF-NG and A β FY-NG gels. The shear-thinned samples form gels upon 12 h standing.

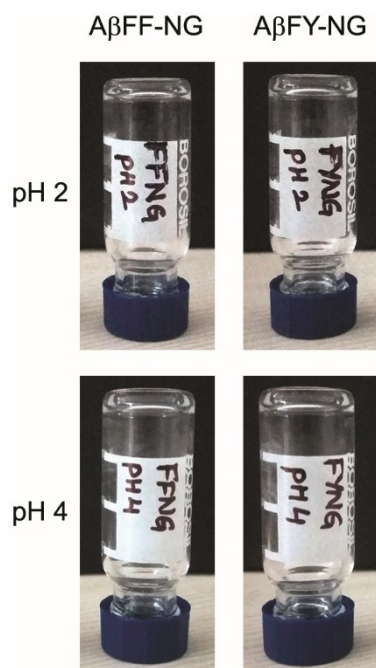


Figure S3. Hydrogelation by A β FF-NG and A β FY-NG at pH 2 and 4. The pH of the peptide solutions was adjusted using HCl.

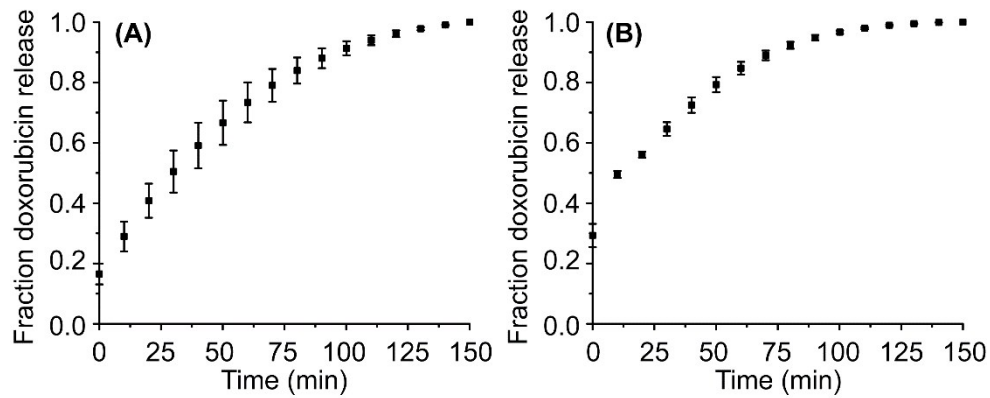


Figure S4. Fraction doxorubicin release from 5 mM A β FF-pG (panel A) and A β FF-Up (panel B) gel samples.

Table S1. The sequences of the PCR primers used for GAPDH and insulin-1 cDNA amplification

GAPDH primers
5'-ATGGAGAAGGCTGGGGCTCA-3' 5'-GTTGTCATGGATGACCTTGGC-3'
Insulin-1 primers
5'-GCACCTTTGTGGTCCTCACCT-3' 5'-GCCTCCACCCAGCTCCAGTT-3'