Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Self-assembled peptide nanotubes as potential nanocarriers for drug delivery

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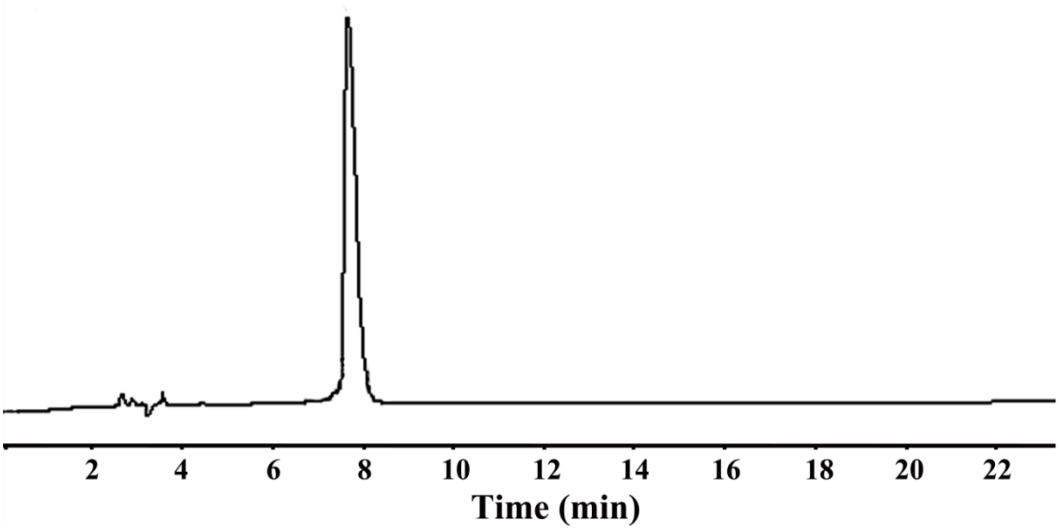

Fig. S1 HPLC spectrum of I_3K. The conditions for HPLC analysis of the peptides were as follows: eluent A, 0.1% trifluoroacetic acid in acetonitrile, eluent B, 0.1% trifluoroacetic acid in water, 0→2 min, 95% (A%), 3→22 min, 95→40% (A%); UV detector, 214 nm; flow rate, 1.0 mL/min; column, VYDAC-C18, 4.6 mm × 250 mm.

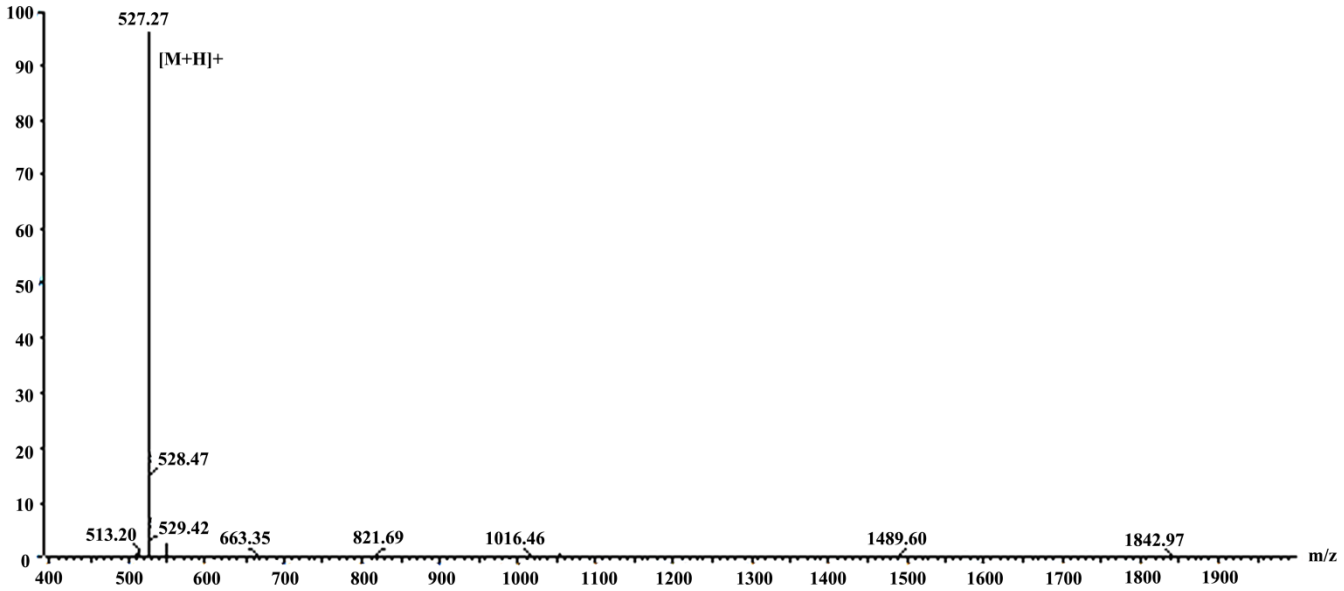

Fig. S2 ESI-MS spectrum of I_3K. Aside from the singly charged molecular ion peaks, no other peak or fragmental ion peak was found, indicating that the peptide was of high purity. The measured molecular weight of the peptide was consistent with its respective theoretical value.

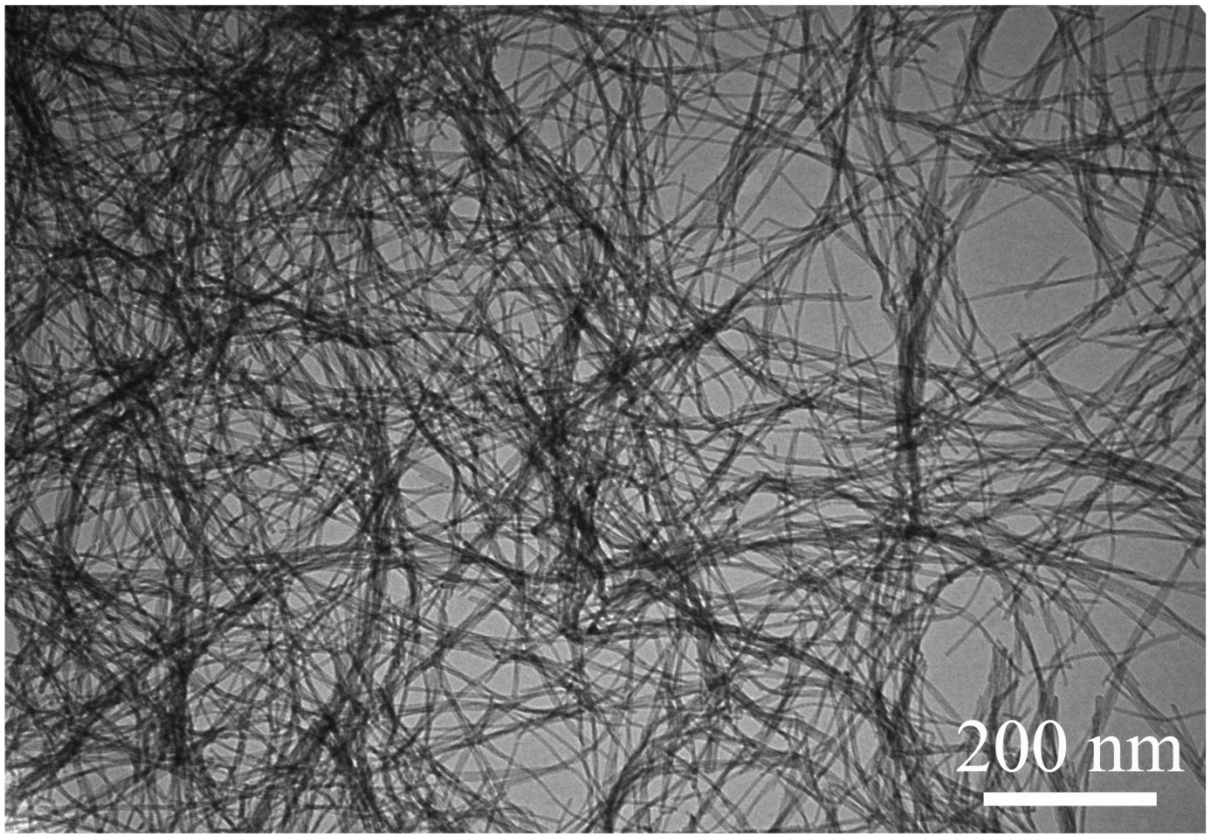

Fig. S3 Representative Transmission Electron Microscopy (TEM) image of I_3K peptide in aqueous solution.

Experimental Method:

The structural information of self-assembled peptide nanostructures was investigated by TEM measurement using a JEOL JEM-1400 electron microscope operated at 120 kV. A small volume (about 10 μL) of aged I_3K peptide solution was placed on a 400-mesh copper grid covered with carbon-stabilized Formvar film. Excess fluid was removed after 3 min, and the grid was negatively stained with uranyl acetate (2%, w/v) aqueous solution for 2 min. The sample was then left to dry at room temperature before analysis.