## Supplementary data

## AFM imaging of RADA16-DGE

RADA16-DGE samples were dissolved in distilled water (GIBCO), at a concentration of 1% w/v one day prior imaging. The day after peptide solutions were diluted (in a ratio of 1:50), 2 ml of these solutions were placed on mica muscovite substrates and kept at room temperature for 2 minutes. The mica surfaces were then rinsed with distilled water to remove loosely bound peptides and solution was let to evaporate for 30 minutes. AFM images were collected in tapping<sup>™</sup> mode by a MultiMode Nanoscope IIIa (Digital Instruments) using single-beam silicon cantilever probes (Veeco RTESP: resonance frequency 300 KHz, nominal tip radius of curvature 10nm, forces constant 40 N/m). If necessary, images (1024x1024 resolution) were subjected to flattening.



## **Supplementary Fig.1**

RADA-DGE self-assembles into nanofibers showing features comparable to those of the other tested self-assembling peptides (see references in the main manuscript).