

COMMUNICATION

## Mechanical Properties of Amyloid-like Fibrils Defined by Secondary Structures fibrils

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### Supporting Information

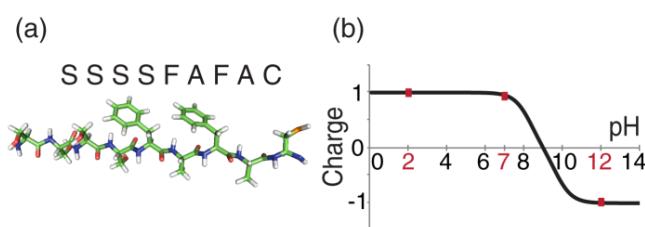


Fig. S1. Peptide molecular model (a) and charge chart (b).

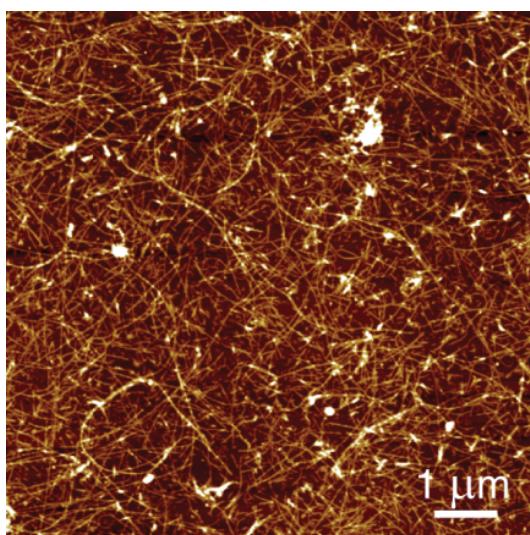


Fig. S2. AFM image showing fibrils obtained by incubating the peptide at pH 4.

**Table S1.** Synchrotron Radiation Circular Dichroism (SR-CD) secondary structure contents predicted by using Dichroweb<sup>47, 48</sup> a) Table showing the global results obtained for three different pH values analysed. b) Summary table indicating the percentages of secondary structures' content.

| a)   | $\alpha$ -helix ordered | $\alpha$ -helix distorted | $\beta$ -sheet ordered | $\beta$ -sheet distorted | Turns | Random Coil |
|------|-------------------------|---------------------------|------------------------|--------------------------|-------|-------------|
| pH 2 | -0.02                   | 0.02                      | 0.37                   | 0.18                     | 0.07  | 0.38        |
| pH 4 | 0.36                    | 0.07                      | 0.18                   | 0.13                     | 0.07  | 0.17        |
| pH 7 | 0.36                    | 0.07                      | 0.20                   | 0.13                     | 0.05  | 0.18        |

| b)   | $\alpha$ -helix (total) | $\beta$ -sheet (total) | Turns | Random Coil |
|------|-------------------------|------------------------|-------|-------------|
| pH 2 | 0%                      | 55%                    | 7%    | 38%         |
| pH 4 | 43%                     | 31%                    | 7%    | 17%         |
| pH 7 | 43%                     | 33%                    | 5%    | 18%         |