

Electronic Supplementary Information (ESI) for Organic & Biomolecular Chemistry

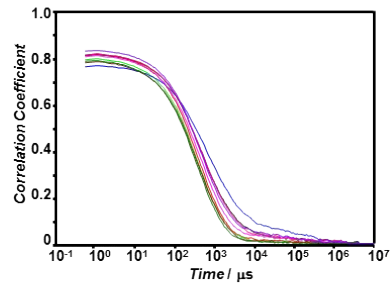
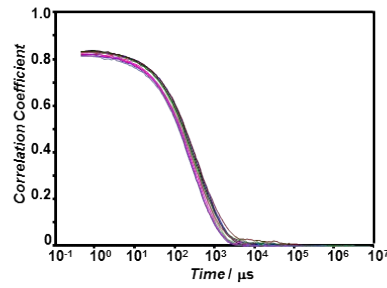
Self-assembled artificial viral capsid bearing coiled-coils at the surface

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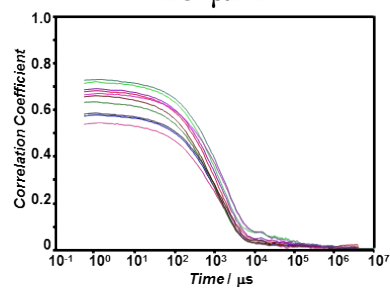
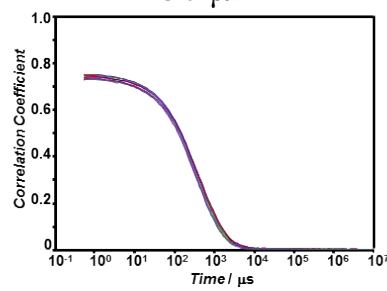
[β -annulus-coiled-coil-B]
= 100 μ M

75 μ M



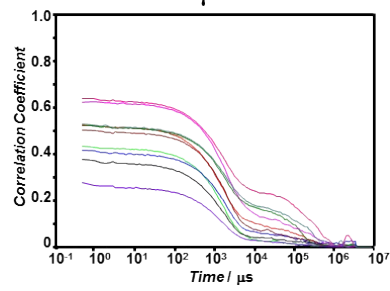
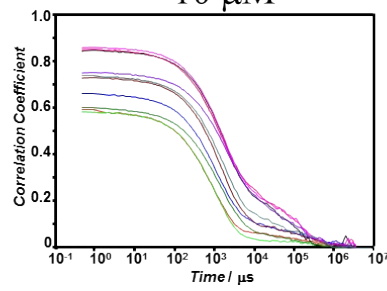
50 μ M

25 μ M



10 μ M

5 μ M



1 μ M

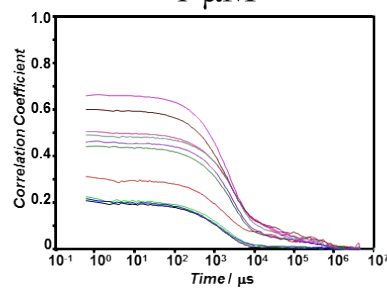


Figure S1. Autocorrelation function curves obtained from DLS of β -annulus-coiled-coil-B peptide in 10 mM Tris-HCl buffer (pH 7.4).

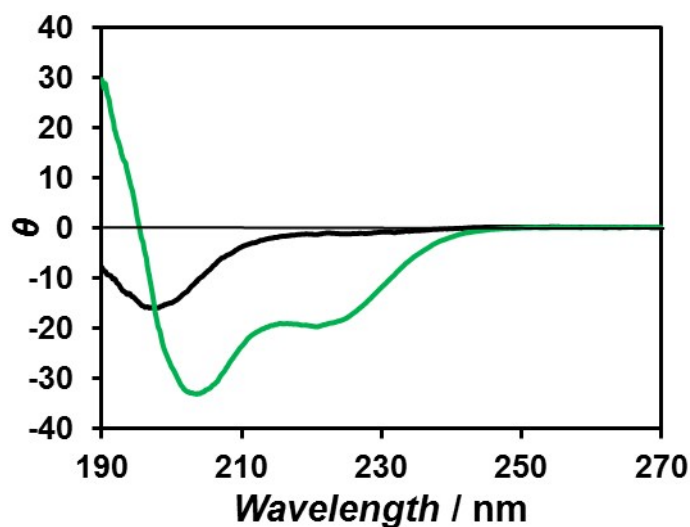


Figure S2. CD spectra of β -annulus-24 peptide (black) and mixture of β -annulus-coiled-coil-B peptide and coiled-coil-A peptide (green) in 10mM Tris-HCl buffer before dividing by residue molar concentration. [β -annulus-coiled-coil-B peptide] = [β -annulus-24 peptide] = 50 μ M, [coiled-coil-A] = 12.5 μ M.

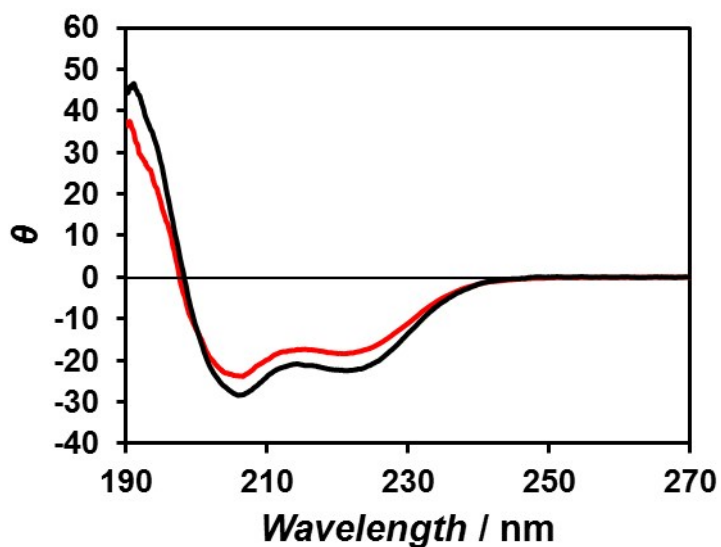


Figure S3. CD spectrum of mixture of coiled-coil-B and coiled-coil-A (black) and spectrum subtracting β -annulus peptide from 4:1 mixture of β -annulus-coiled-coil-B peptide and coiled-coil-A peptide (red) in 10mM Tris-HCl buffer before dividing by residue molar concentration. [coiled-coil-B peptide] = 50 μ M, [coiled-coil-A] = 12.5 μ M.

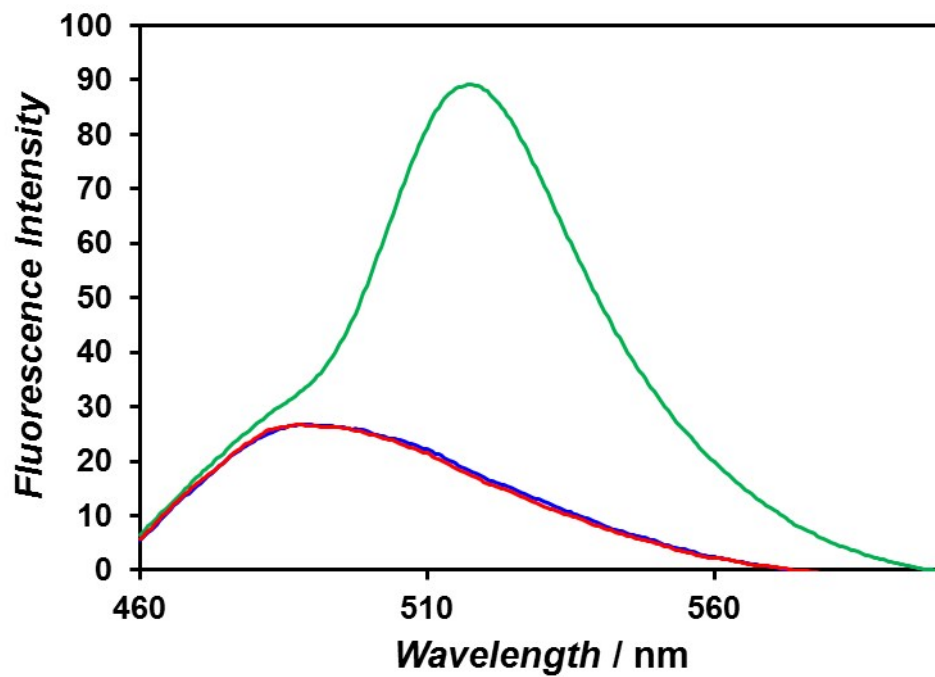


Figure S4. Fluorescence spectra of Thioflavin T (Ex = 440 nm) in aqueous solution of β -annulus-coiled-coil-B peptide (50 μ M) (red), mixture of 50 μ M β -annulus-coiled-coil-B and 12.5 μ M coiled-coil-A (blue), mixture of 50 μ M β -annulus-coiled-coil-B and 50 μ M coiled-coil-A (green) in 10mM Tris-HCl buffer.

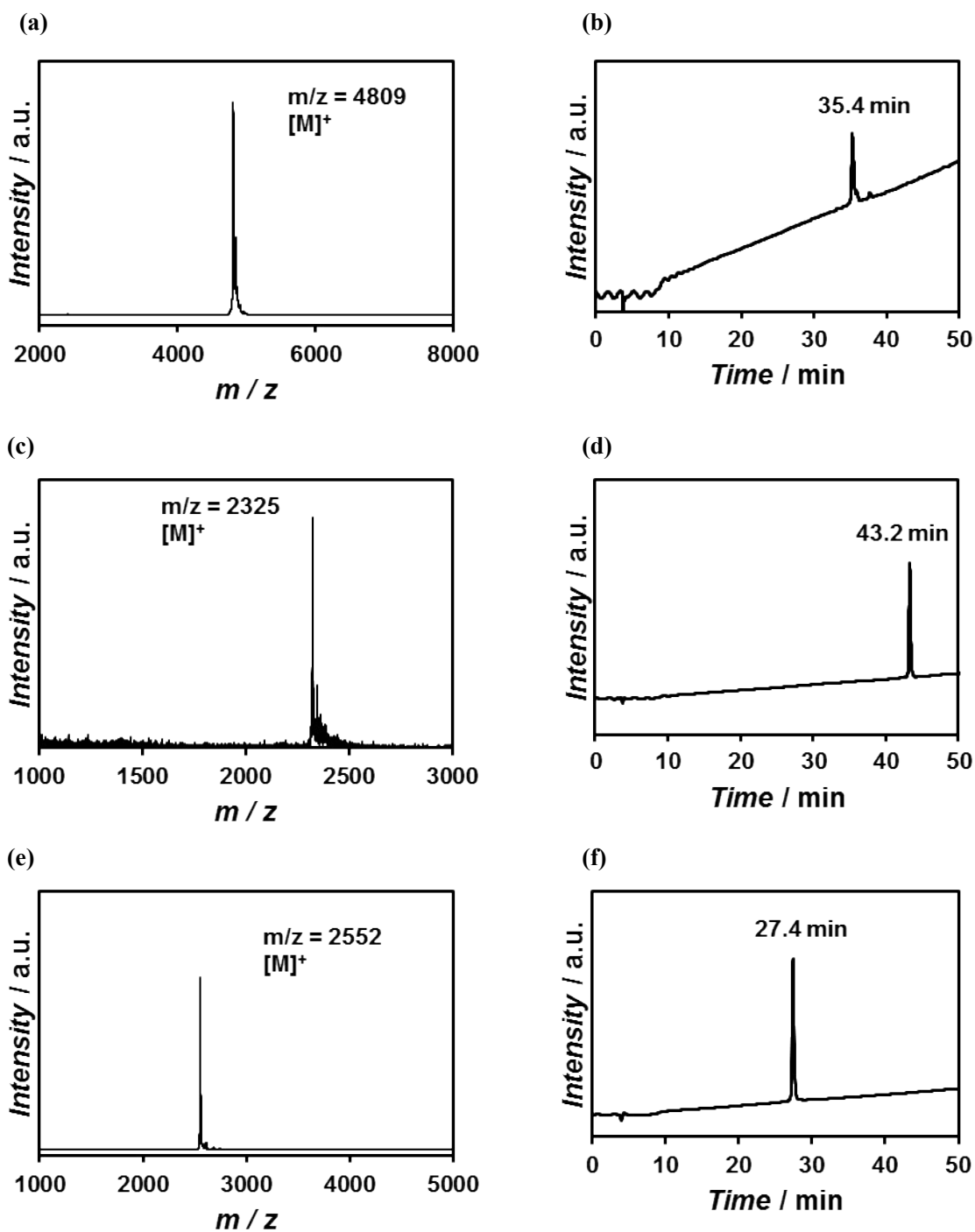


Figure S5. MALDI-TOF-Mass spectra and Reverse-phase HPLC charts of pure peptides. (a, b) β -annulus-coiled-coil-B peptide, (c,d) coiled-coil-A peptide, (e, f) coiled-coil-B peptide. RP-HPLC eluting with a linear gradient of $\text{CH}_3\text{CN}/\text{water}$ containing 0.1% TFA (5/95 to 100/0 over 100 min).