Electronic Supplementary Information (ESI) for Organic & Biomolecular Chemistry

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

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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 μM, [coiled-coil-A] = 12.5 μM.

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 μM, [coiled-coil-A] = 12.5 μM.
Figure S4. Fluorescence spectra of Thioflavin T (Ex = 440 nm) in aqueous solution of β-annulus-coiled-coil-B peptide (50 μM) (red), mixture of 50 μM β-annulus-coiled-coil-B and 12.5 μM coiled-coil-A (blue), mixture of 50 μM β-annulus-coiled-coil-B and 50 μM 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 CH$_3$CN/water containing 0.1% TFA (5/95 to 100/0 over 100 min).