**Table S1.** Chemical properties of aS dimers.

	amino	Theoretical	Experimental	
	acids	pI	$MW(Da)^a$	$(Da)^b$
aS	140	4.7	14461.1 ±0.7	14460.1
NN	280	4.7	$28926.3 \pm 0.5$	28927.2
CC	284	4.7	$29240.2 \pm 0.3$	29239.6
NC	282	4.7	$29145.5 \pm 0.1$	29145.5
DC	216	5.2	$21969.5 \pm 0.1$	21969.7

<sup>&</sup>lt;sup>a</sup> Experimental molecular masses determined by ESI-MS.

<sup>b</sup> Molecular masses calculated from the amino acid sequence of proteins.