Electronic Supplementary Material (ESI) for Biomaterials Science.

Cellular uptake of drug loaded spider silk particles

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Supplementary Information

Table S 1: Loading efficiency of different protein particles upon incubation with 0.4 nmol of the corresponding model substance Fl-ODN or PEI-Fl per mg particle

Protein particle	Uptake efficiency Fl-ODN / %	Uptake efficiency PEI-Fl / %
eADF4(C16)	-	26.6 ± 0.4
eADF4(C16)RGD	-	26.9 ± 0.4
eADF4(C16)R_8G	-	23.6 ± 0.3
eADF4(κ16)	40.6 ± 0.3	-

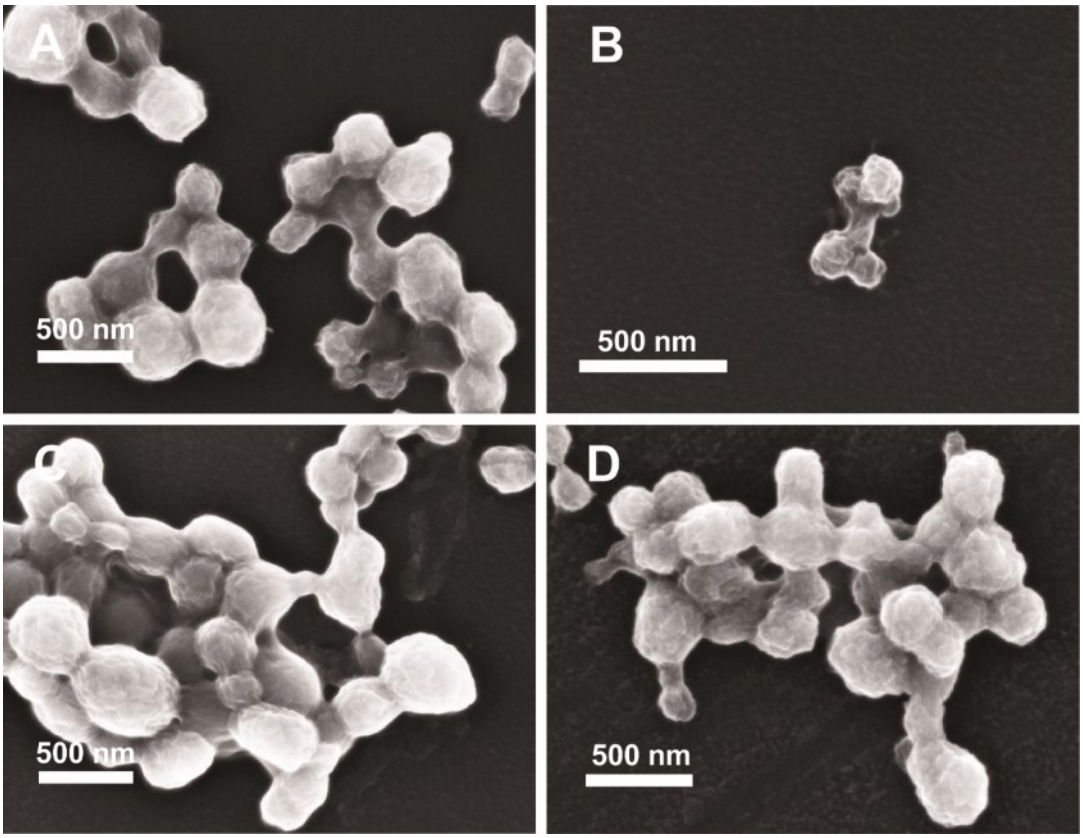

Fig. S 1 SEM Images of spider silk protein particles in dry state, A) eADF4(C16), B) eADF4(C16)R_8G, C) eADF4(C16)RGD, and D) eADF4(κ16). Particles were produced after resuspending the respective protein in EMiM[acetate] followed by potassium phosphate precipitation. SEM images were taken at an accelerating voltage of 3 kV. Before imaging, the particles were air dried and sputtered with platinum**.**

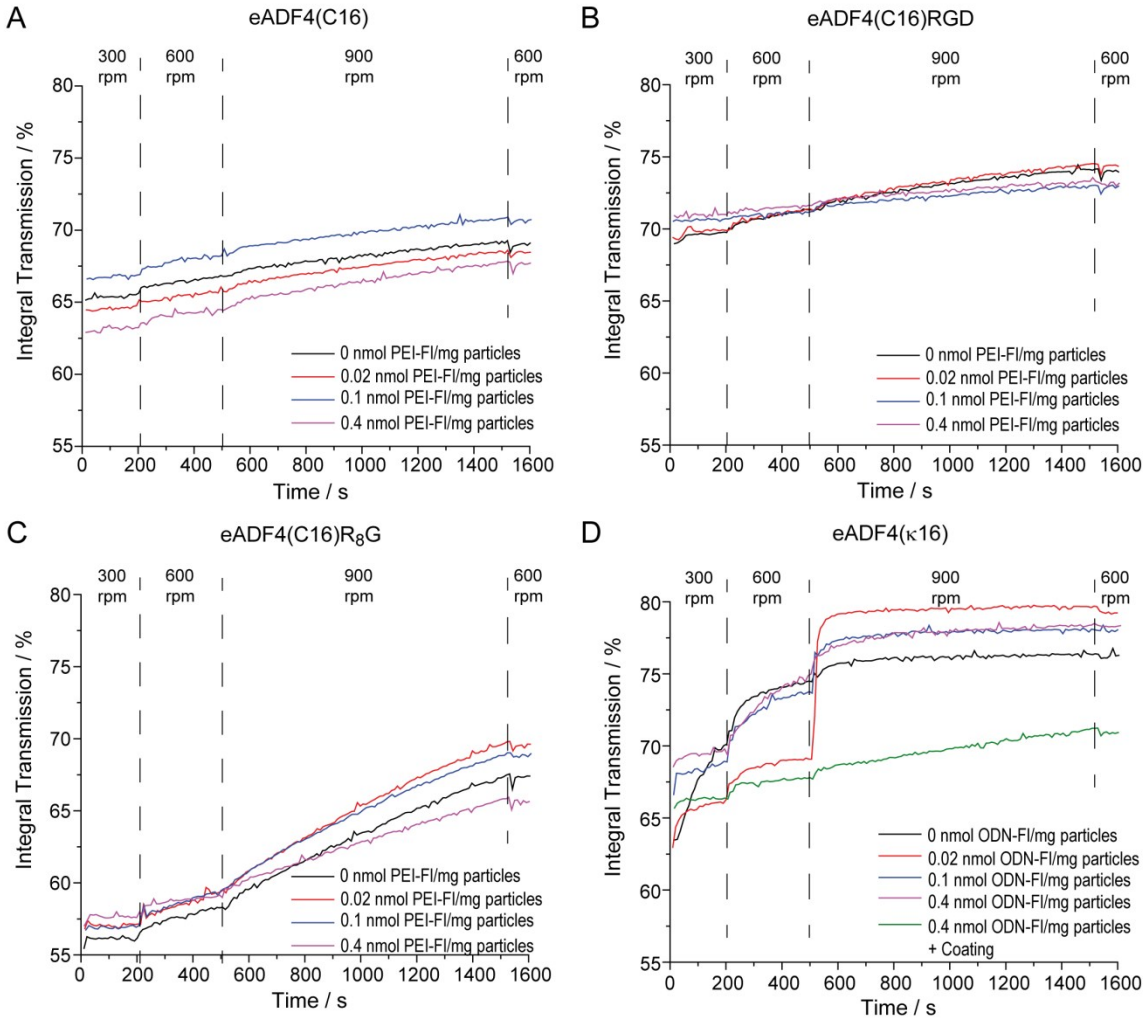

Fig. S 2 Representative sedimentation curves of spider silk and PEI-Fl or Fl-ODN loaded spider silk particles prepared from a 2 mg ml^{-1} solution in EMiM[acetate] and analyzed at a concentration of 1.25 mg ml^{-1}, measured at an ionic strength of 12 mM (1/11 PBS) and pH 7.4. The single graphs show (A) eADF4(C16) particles, (B) eADF4(C16)RGD particles, (C) eADF4(C16)R_8G and (D) eADF4(κ16) particles, each in the absence and presence model drug as indicated.