Supplementary material

Engineering of doxorubicin-encapsulating and TRAIL-conjugated poly(RGD)

proteinoid nanocapsules for drug delivery applications

Elad Hadad,^a Safra Rudnick-Glick,^a Ella Itzhaki,^a Matan Y. Avivi,^b Igor Grinberg,^a Yuval Elias^a and Shlomo Margel^{a*}

^a Department of Chemistry, Institute of Nanotechnology & Advanced Materials, Bar-Ilan University, Ramat Gan 5290002, Israel

^b The Mina and Everard Goodman Faculty of Life Sciences, Institute for Nanotechnology and Advanced Materials, Bar Ilan University, Ramat Gan 5290002, Israel

* Correspondence: shlomo.margel@biu.ac.il +972-52-889-8600 Supporting information includes:

Figure S1. FTIR and UV-Vis spectra of P(RGD).

Figure S2. Degraded Dox sample chromatogram.



Figure S1. FTIR and UV-Vis spectra of P(RGD). (A) FTIR spectrum (with ATR spectrometer) showing peaks of NH stretching at 2951 and 3356 cm⁻¹, amide CO stretching at 1570 cm⁻¹, amide NH bending at 1490 cm⁻¹, and CO bending at 500–600 cm⁻¹. (B) UV-Vis spectrum showing an absorbance peak at 218 nm, characteristic of peptide bonds.



Figure S2. Degraded Dox sample chromatogram. A degraded Dox sample (1 mg/ml) was analyzed during the HPLC method optimization process. Undegraded Dox was detected after 20.9 min, and two degradation products were detected after 26.3 and 34.7 min.