

Supplementary information to “Production of polycaprolactone nanoparticles for targeted drug delivery with hydrodynamic diameters below 100 nm”

Authors: Sandra ~~Kuhlmeier~~Witt, Thomas Scheper, Johanna-Gabriela Walter

Preparation of Polymers

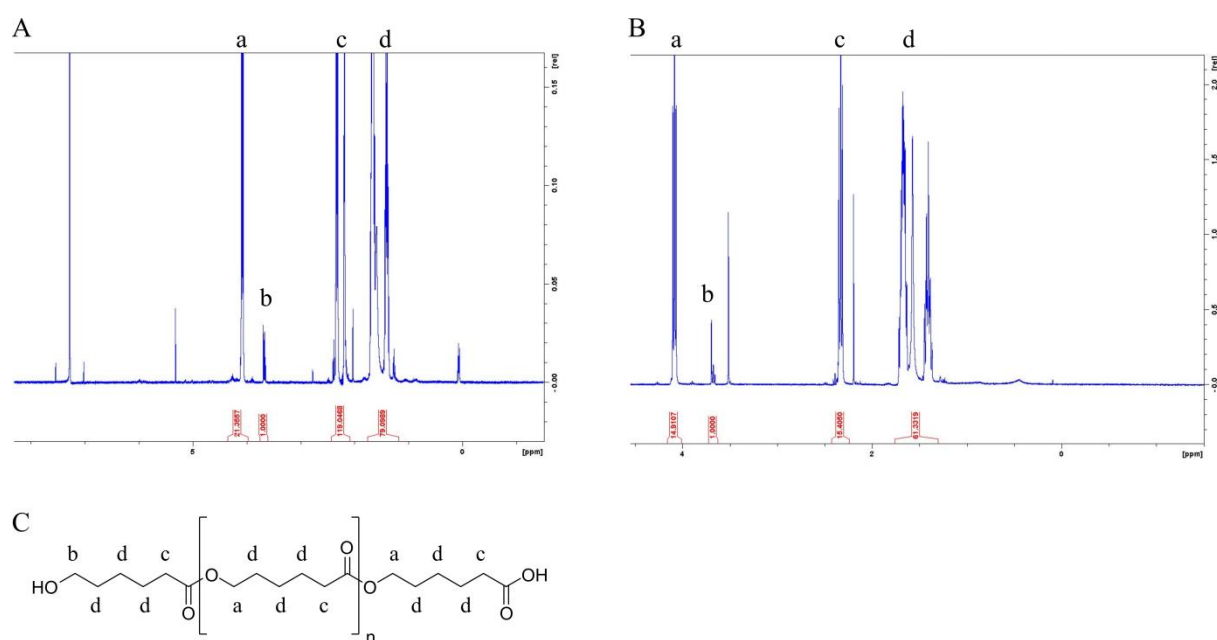
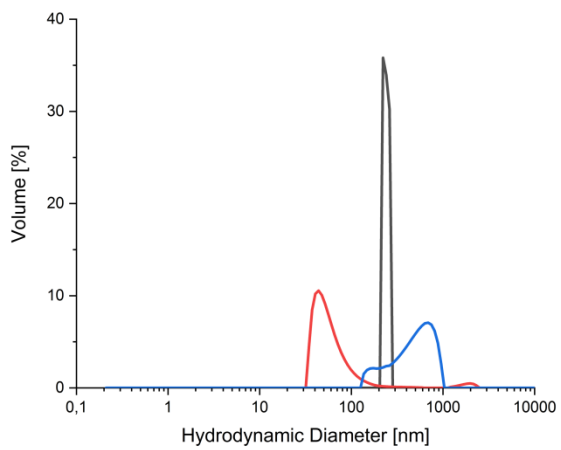


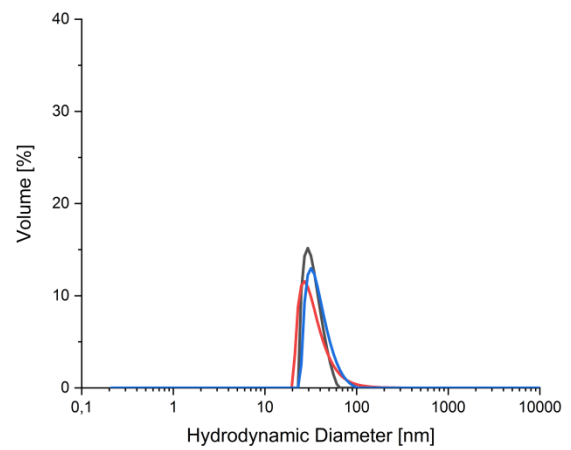
Figure S1: $^1\text{H-NMR}$ spectra of the $\text{PCL}_{1.8}$ (A) and $\text{PCL}_{13.6}$ (B) with assignment of peaks to the structural formula of PCL (C).

Preparation of PCL-PTX-NP

A



B



C

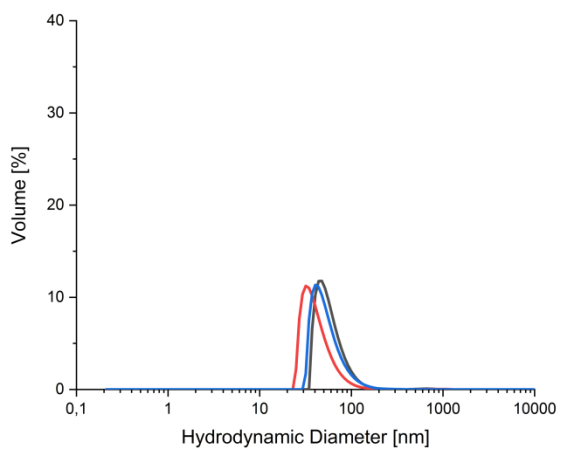


Figure S2: Size distribution of nanoparticles with encapsulated PTX generated from different PCL-length polymers. A: PTX-PCL_{1.8}-NP, B: PTX-PCL_{5.4}-NP, C: PTX-PCL_{13.6}-NP.

Functionalization of PCL_{5.4} with the aptamer S15

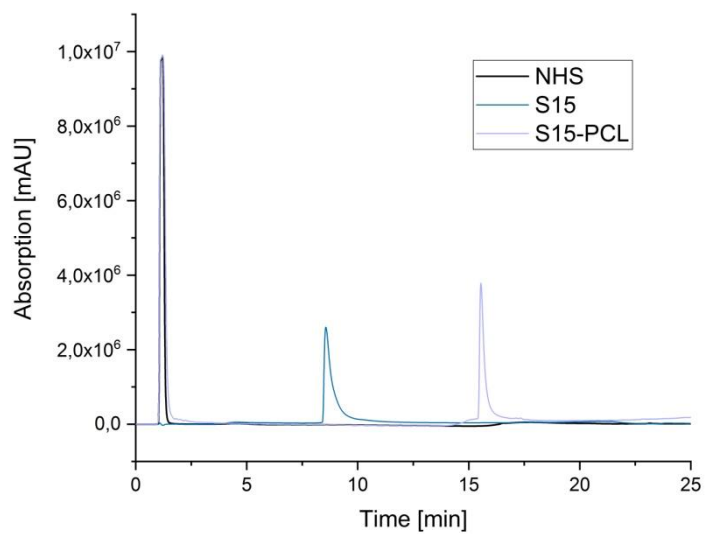


Figure S3: Chromatogram of the RP-HPLC of S15, the S15-PCL_{5.4} and NHS at 260 nm. The S15-PCL_{5.4} shows a shift in elution time from 8 min to 16 min, compared to the uncoupled S15. NHS, which also absorbs at 260 nm, elutes after 1 minute.