

Appendix A. Supplementary Materials

Self-assembled supramolecular nanoparticles improve the cytotoxic efficacy of CK2 inhibitor THN7

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CAPTIONS:

Figure S1. Job plot for the complexation of THN7 with α -C₄H₉ amphiphilic derivative.

Figure S2. Job plot for the complexation of THN7 with α -C₆H₁₃ amphiphilic derivative.

Figure S3. Job plot for the complexation of THN7 with α -C₈H₁₇ amphiphilic derivative.

Figure S4. Job plot for the complexation of THN7 with α -C₄F₉ amphiphilic derivative.

Figure S5. Benesi-Hildebrand plot for amphiphilic α -cyclodextrins. THN7 at constant concentration in the presence of increasing concentrations of amphiphilic α -CD derivatives at 256 nm.

Figure S6. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₄H₉ amphiphilic CDs.

Figure S7. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₆H₁₃ amphiphilic CDs.

Figure S8. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₈H₁₇ amphiphilic CDs.

Figure S9. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₄F₉ amphiphilic CDs.

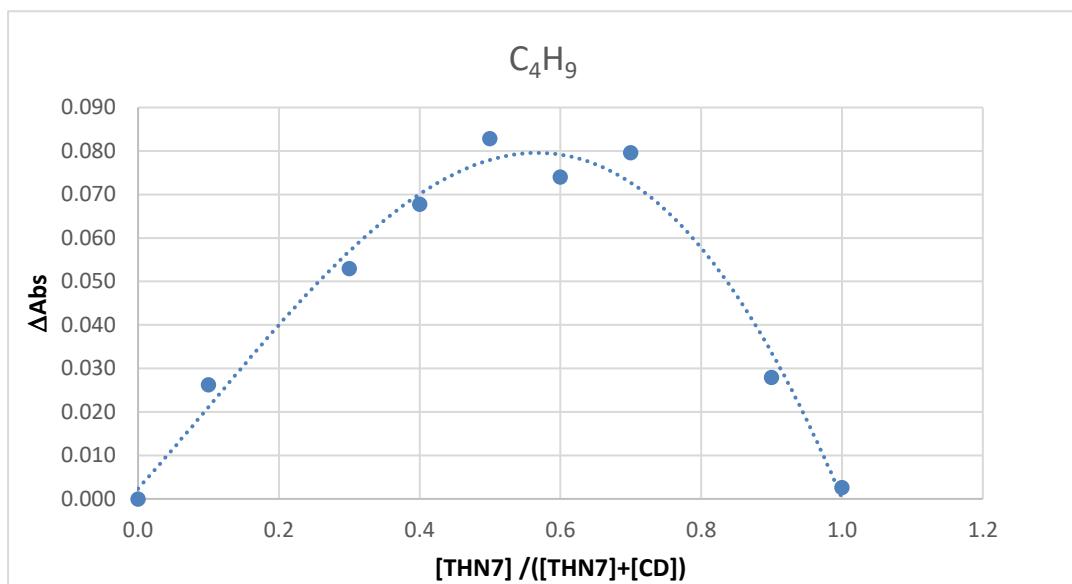


Figure S1. Job plot for the complexation of THN7 with α -C₄H₉ amphiphilic derivative.

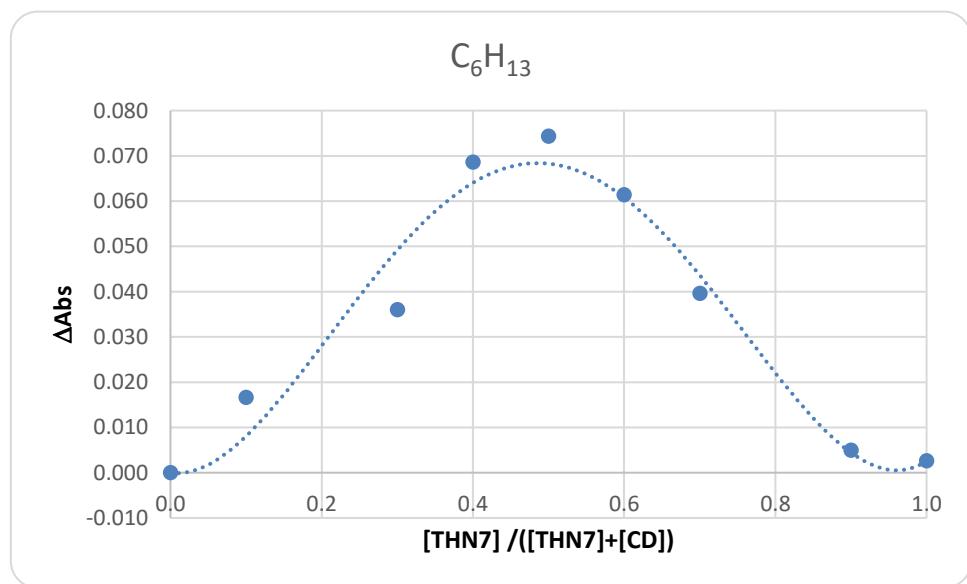


Figure S2. Job plot for the complexation of THN7 with α -C₆H₁₃ amphiphilic derivative.

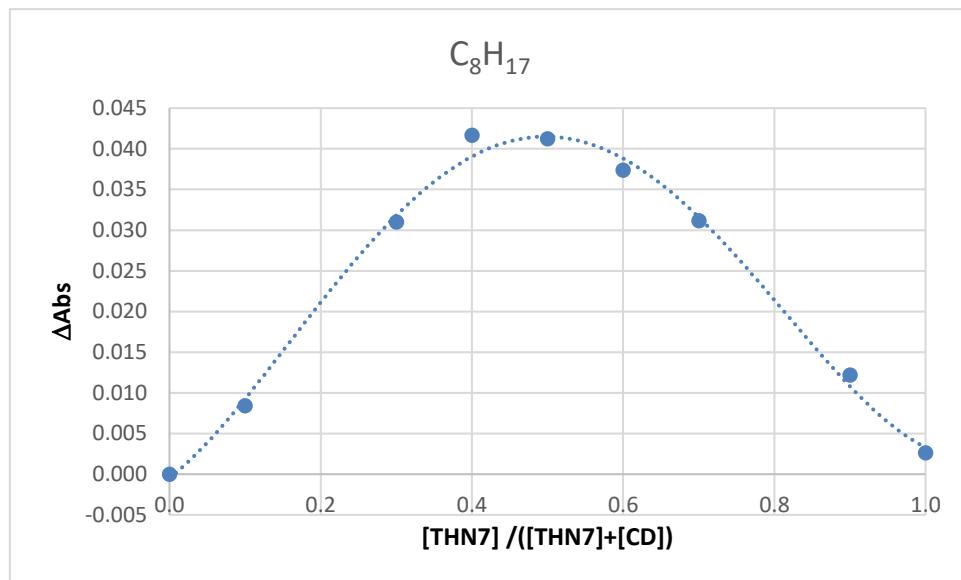


Figure S3. Job plot for the complexation of THN7 with α -C₈H₁₇ amphiphilic derivative.

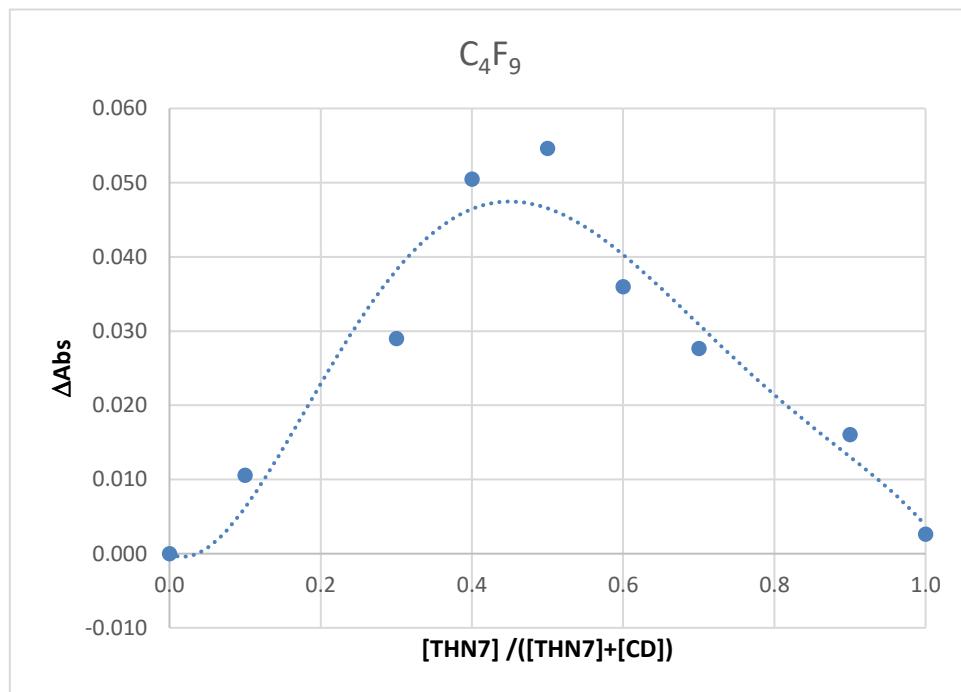


Figure S4. Job plot for the complexation of THN7 with α -C₄F₉ amphiphilic derivative.

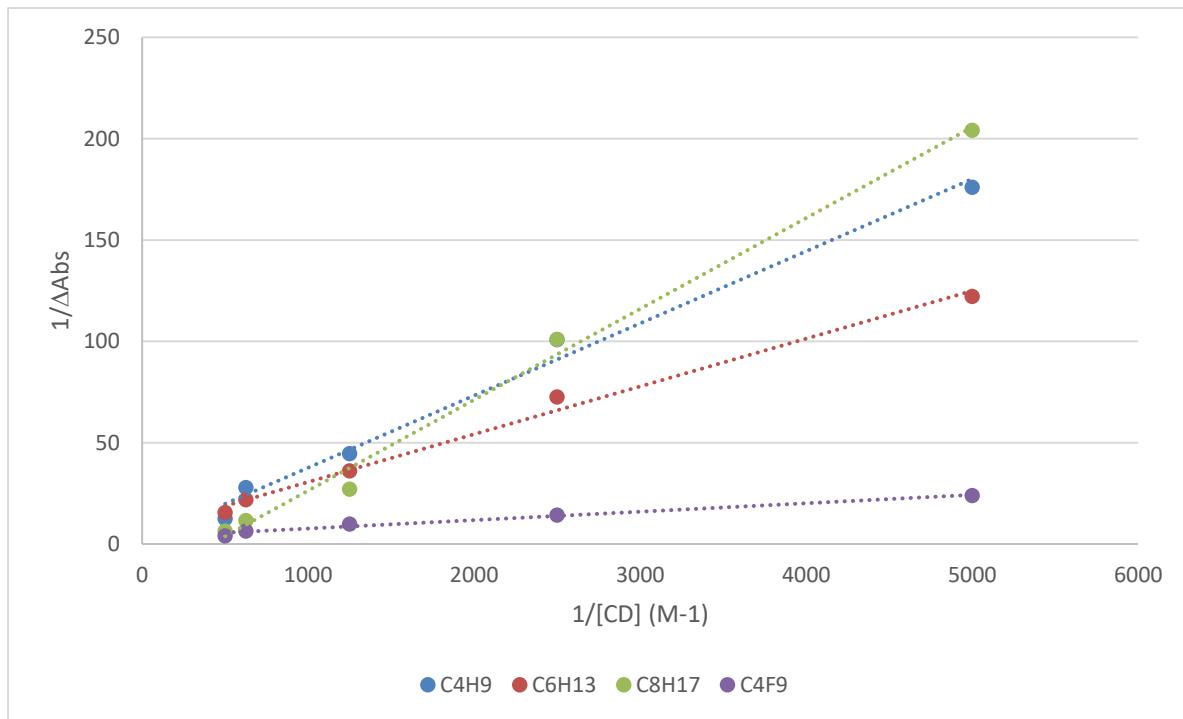


Figure S5. Benesi-Hildebrand plot for amphiphilic α -cyclodextrins. THN7 at constant concentration in the presence of increasing concentrations of amphiphilic α -CD derivatives at 460 nm.

Results

		Size (d.nm)	% Intensity:	St Dev (d.nm)
Z-Average (d.nm):	82,03	Peak 1:	85,62	100,0
Pdl:	0,075	Peak 2:	0,000	0,000
Intercept:	0,966	Peak 3:	0,000	0,000

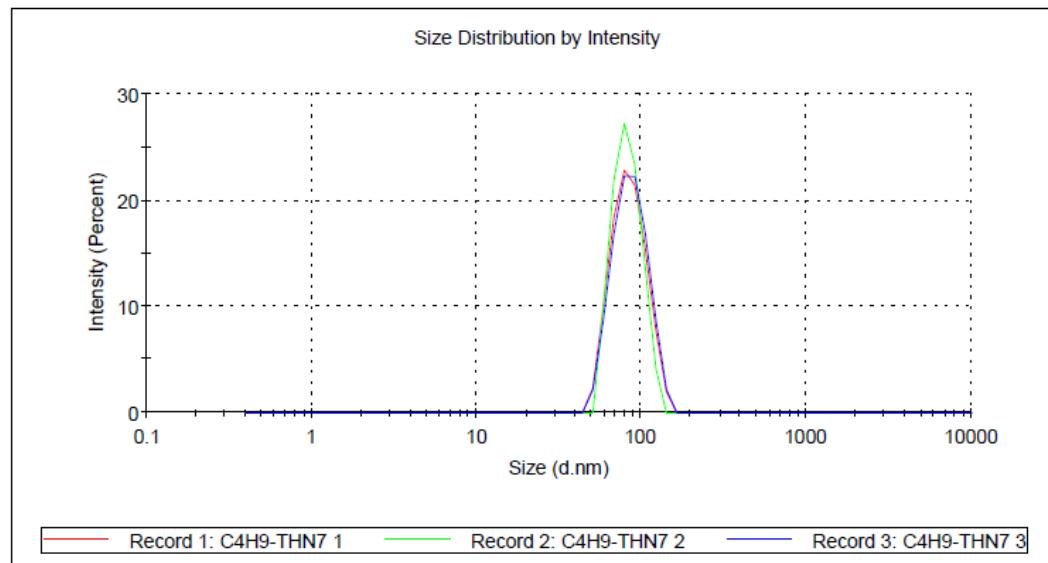
Result quality Good

Figure S6. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₄H₉ amphiphilic CDs.

Results

	Size (d.nm)	% Intensity:	St Dev (d.nm)
Z-Average (d.nm): 132,3	Peak 1: 143,6	100,0	41,65
Pdl: 0,084	Peak 2: 0,000	0,0	0,000
Intercept: 0,962	Peak 3: 0,000	0,0	0,000

Result quality Good

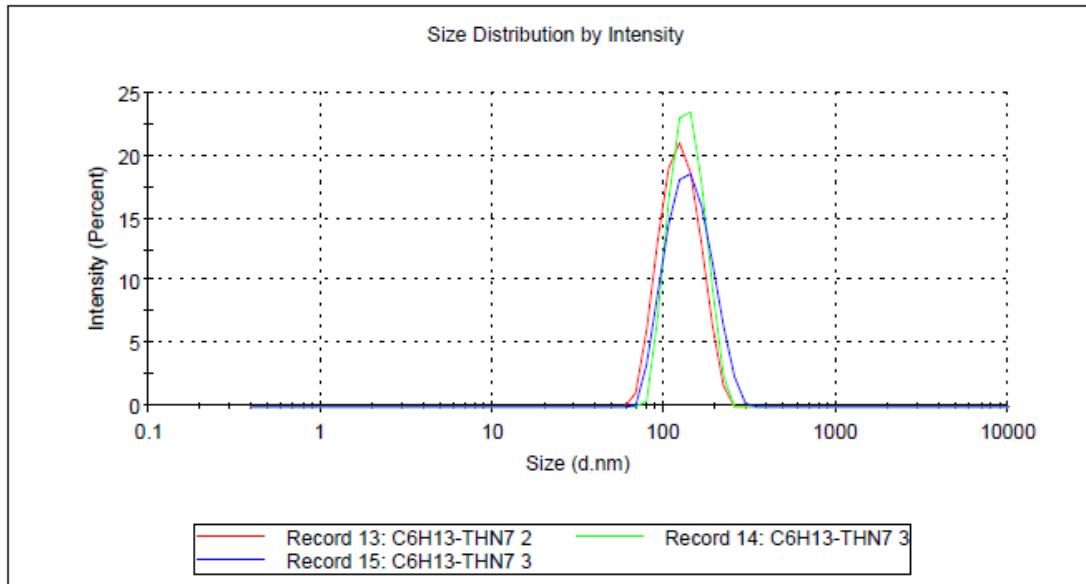


Figure S7. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₆H₁₃ amphiphilic CDs.

Results

	Size (d.nm)	% Intensity:	St Dev (d.nm)
Z-Average (d.nm): 68,81	Peak 1: 60,11	100,0	13,23
Pdl: 0,198	Peak 2: 0,000	0,0	0,000
Intercept: 0,938	Peak 3: 0,000	0,0	0,000

Result quality [Refer to quality report](#)

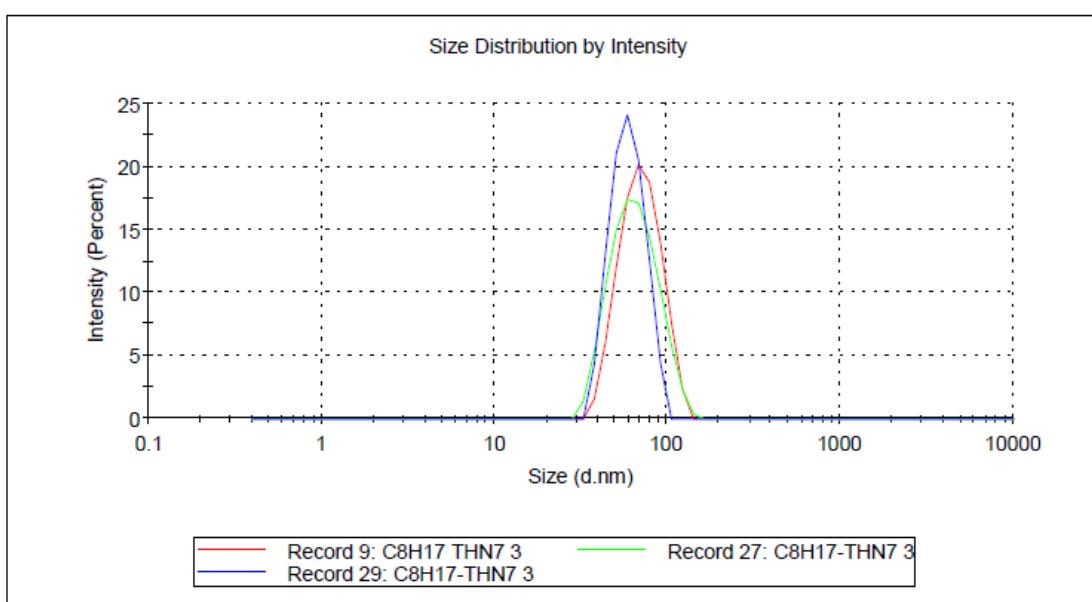


Figure S8. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₈H₁₇ amphiphilic CDs.

Results

	Size (d.nm)	% Intensity:	St Dev (d.nm)
Z-Average (d.nm): 103,3	Peak 1: 114,5	100,0	37,77
Pdl: 0,103	Peak 2: 0,000	0,0	0,000
Intercept: 0,963	Peak 3: 0,000	0,0	0,000

Result quality Good

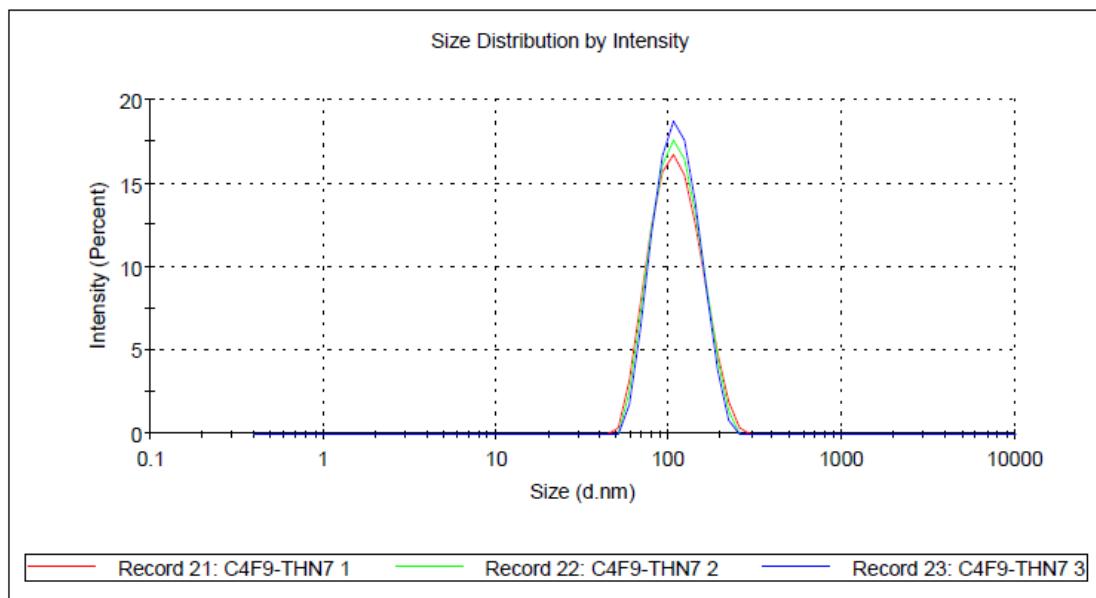


Figure S9. Dynamic light scattering experiments spectra and mean diameter of THN7 loaded C₄F₉ amphiphilic CDs.