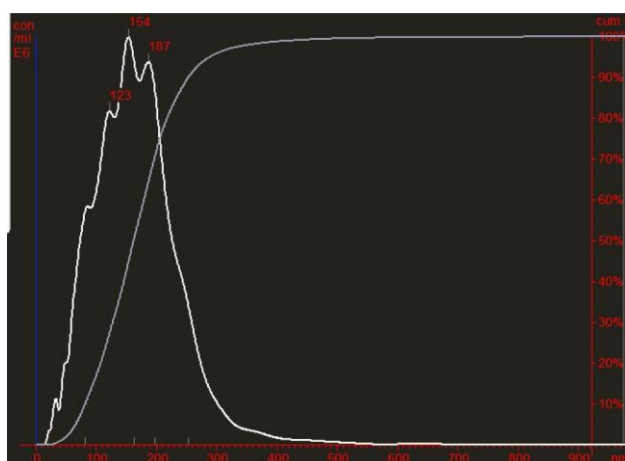


**Table S1.** The degree of substitution (DS) for CD-based polymers.

CD-based poymer	DS	
	FTIR-spectroscopy	NMR-spectroscopy
MPolS	3.6	3,0
HPolS	3.9	3.1
HPolH	1.0	0.8
MPolH	0.6	0.6

**Figure S1.** The size distribution of the sample HPolS obtained by NTA in Milli Q water, 25°C



**Figure S2.**  $^1\text{H}$  NMR of HPCD, succinic anhydride, HPolH, HPolS, MPolH and MPolS,  $\text{D}_2\text{O}$ , 400 MHz.

