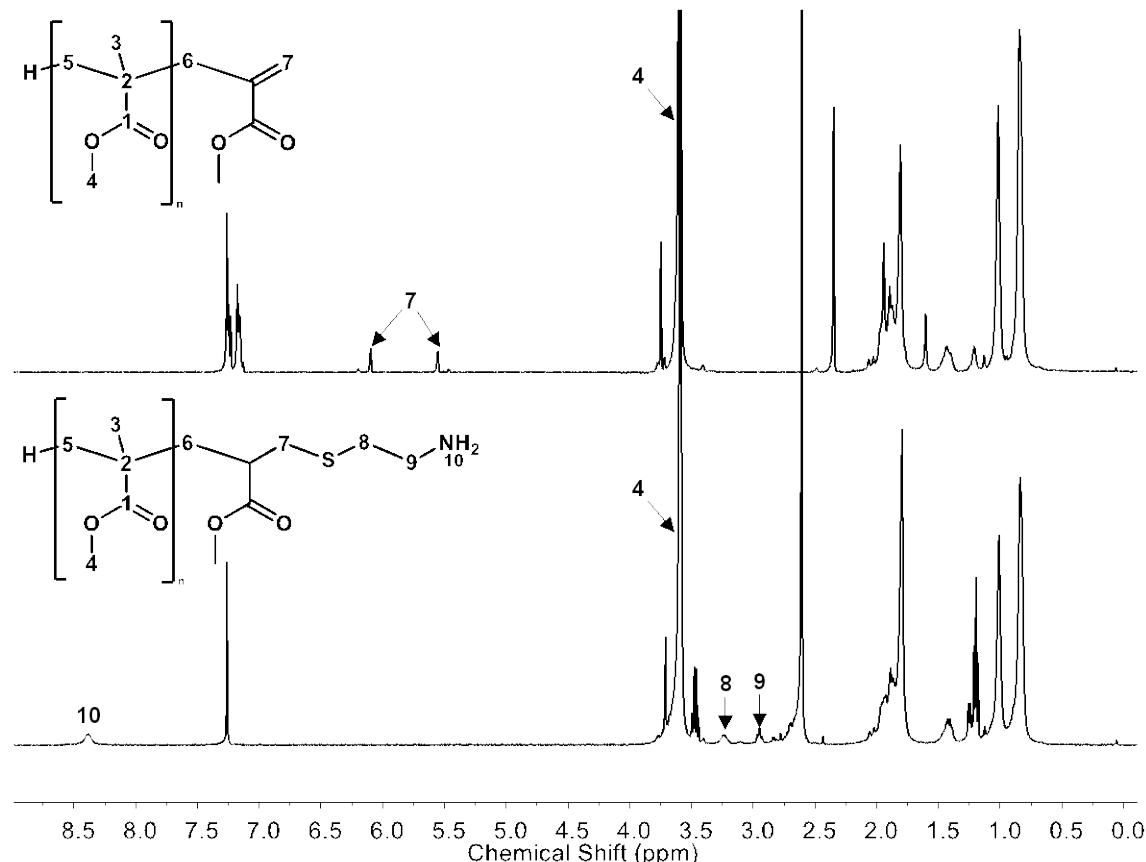
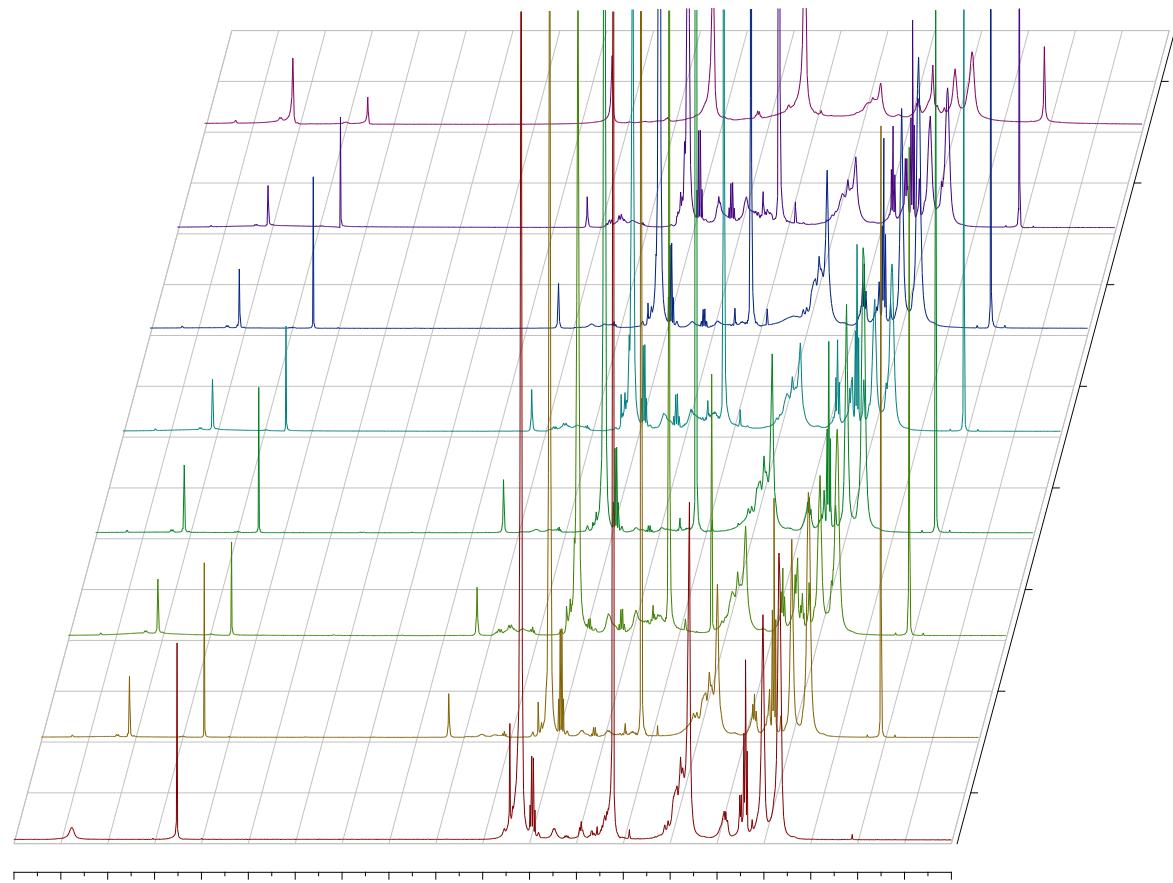


## Polysaccharide-stabilized Core Cross-linked Polymer Micelle Analogues<sup>†</sup>

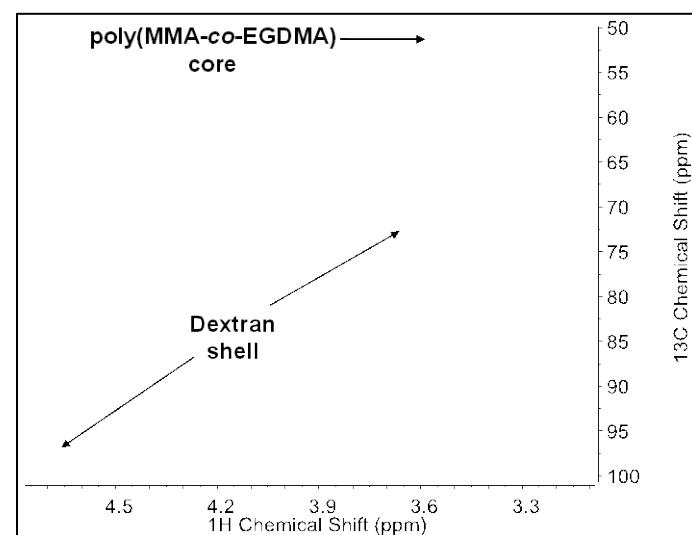
Daniel J. Krasznai<sup>a</sup>, Timothy F.L. McKenna<sup>a</sup>, Michael F. Cunningham<sup>a</sup>, Pascale Champagne<sup>\*b</sup> and Niels M.B. Smeets<sup>a‡</sup>



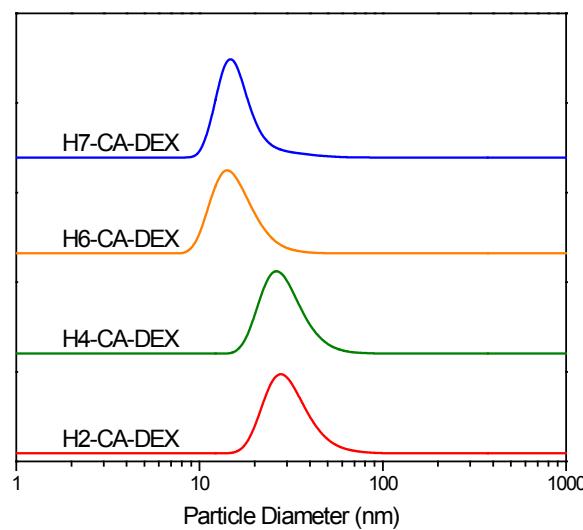
**Fig. S1** <sup>1</sup>H-NMR ( $\text{CDCl}_3$ ) spectra of L1 before (top) and after (bottom) thiol-Michael addition chemistry with cysteamine hydrochloride.



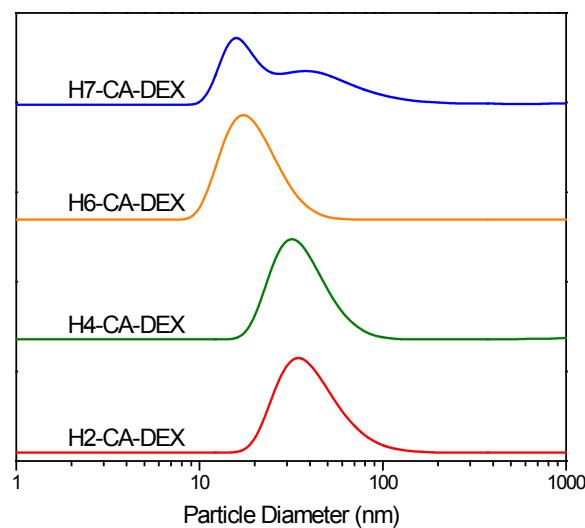
**Fig. S2**  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ ) spectra of the linear ( $\text{L}1 = 1$ ) and hyperbranched polymers ( $\text{H}1 = 2$ ,  $\text{H}2 = 3$ ,  $\text{H}3 = 4$ ,  $\text{H}4 = 5$ ,  $\text{H}5 = 6$ ,  $\text{H}6 = 7$  and  $\text{H}7 = 8$ ) after thiol-Michael addition chemistry with cysteamine hydrochloride.



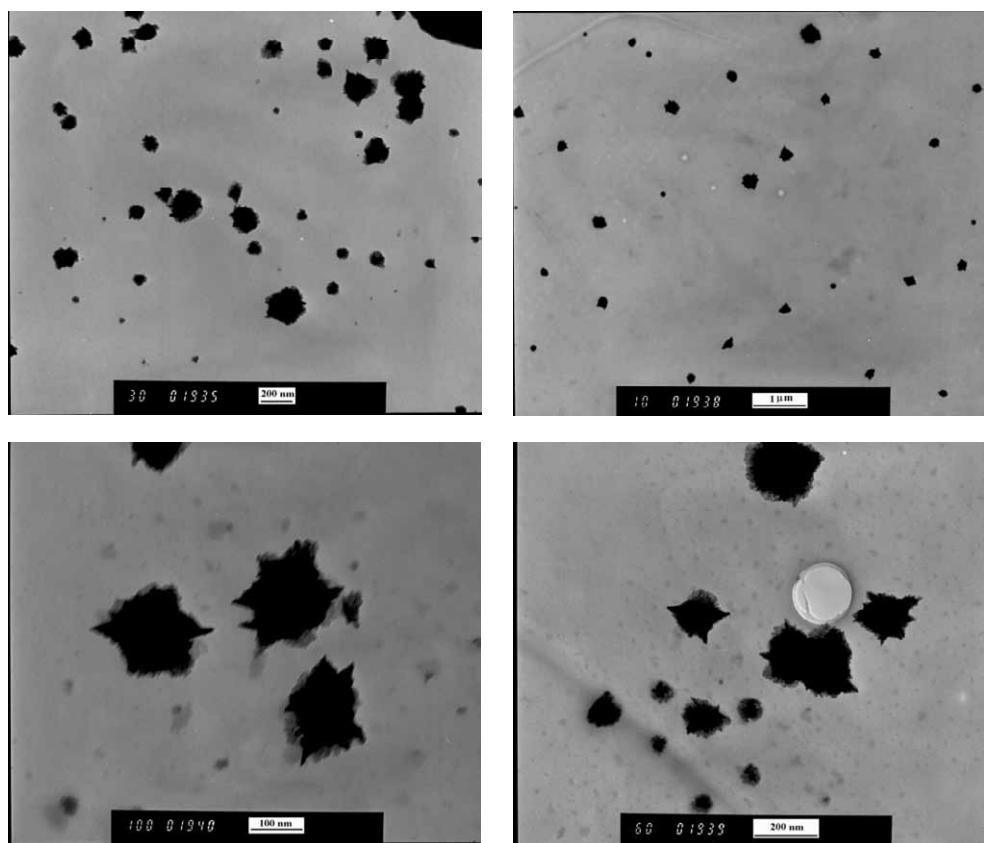
**Fig. S3** 2D HSQC NMR ( $\text{DMSO-d}_6$ ) spectrum of H6-CA-DEX after extensive dialysis and lyophilization showing carbon-coupled protons from both the core (methoxy protons) and shell (backbone dextran protons) components.



**Fig. S4** Number-average particle size distributions as measured by DLS



**Fig. S5** Volume-average particle size distributions as measured by DLS



**Fig. S6** TEM micrographs of H6-CA-DEX (1.0 w/w% in water) at different magnifications.