

Supporting Information

Electrosprayed cysteine-functionalized degradable amphiphilic block copolymer microparticles for low pH-triggered drug delivery

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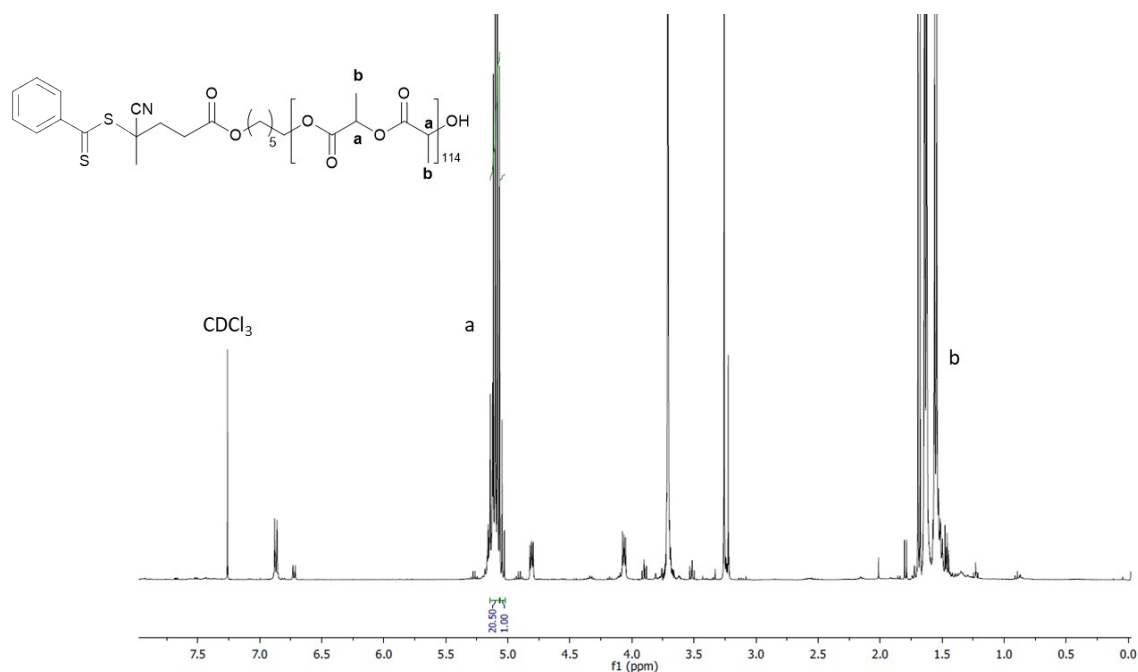


Figure S1. ¹H NMR (CDCl₃) spectrum of the reaction product for the synthesis of the PLA₁₁₄ homopolymer.

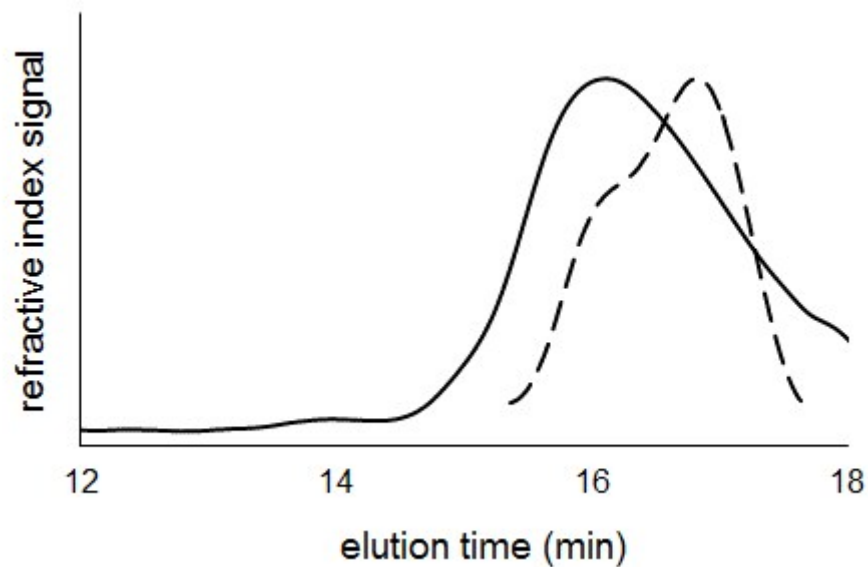


Figure S2. SEC (THF) chromatograms of PLA₁₁₄ homopolymer (dashed line) and PLA₁₁₄-*b*-P(MPC₁₇-*st*-NHSMA₂) amphiphilic diblock copolymer (solid line).

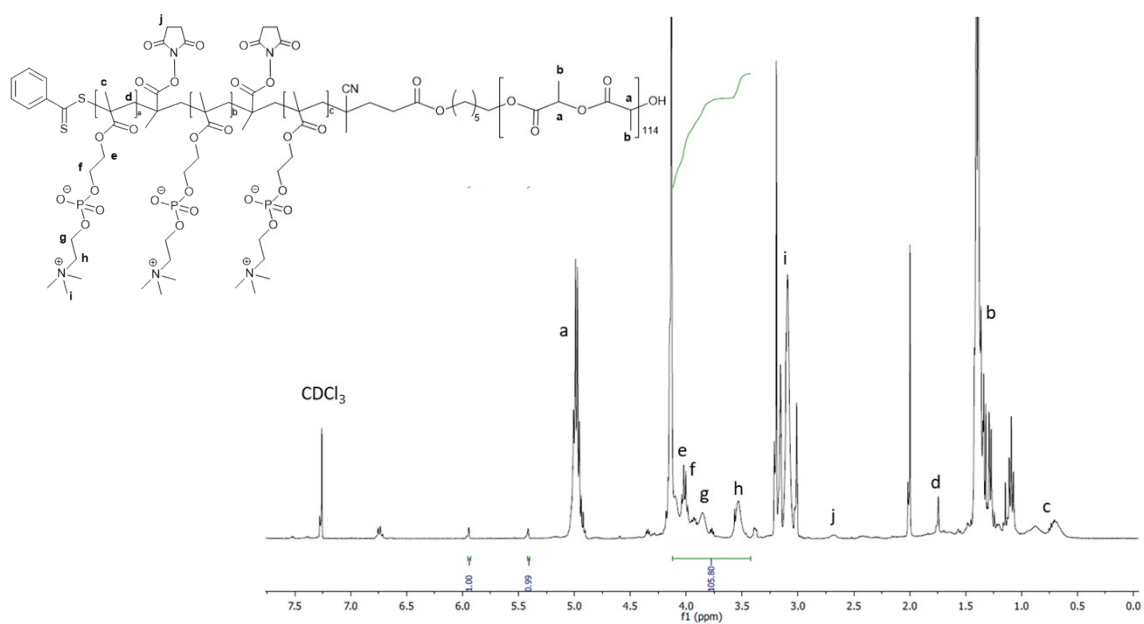


Figure S3. ¹H NMR (CDCl₃/CD₃OD 3/1 v/v) spectrum of the reaction product for the synthesis of the PLA₁₁₄-*b*-P(MPC₁₇-*st*-NHSMA₂) amphiphilic diblock copolymer.

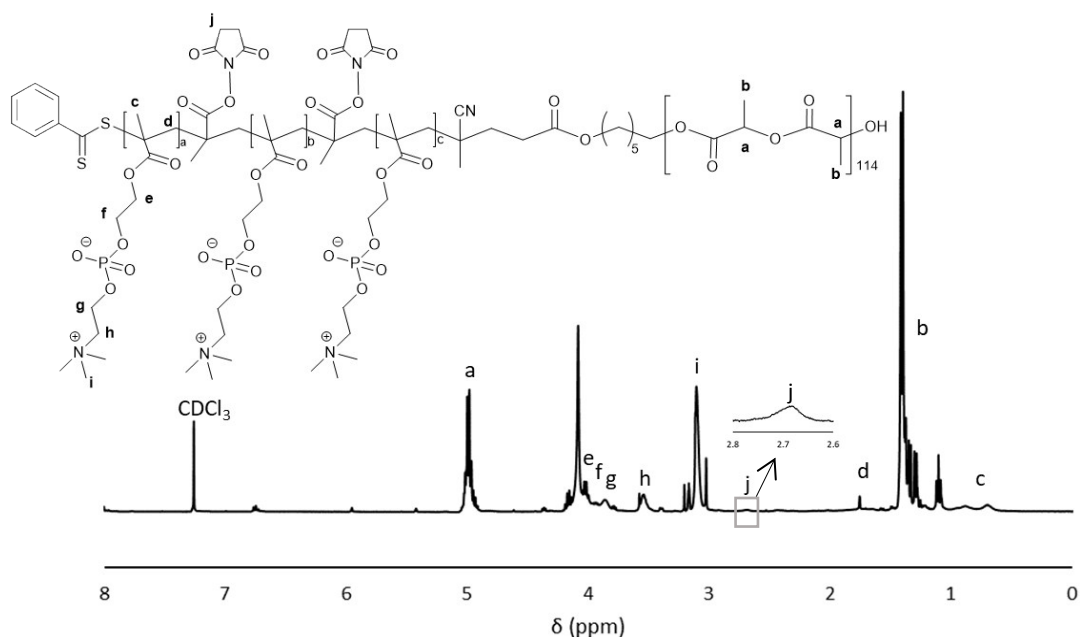
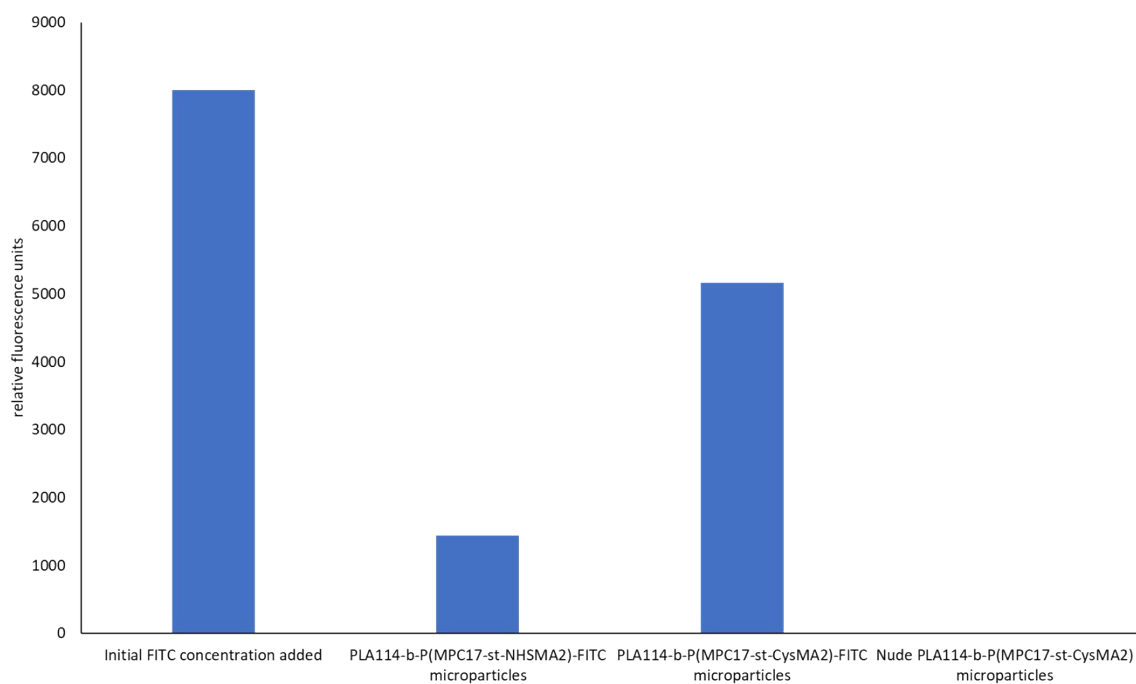


Figure S4. ^1H NMR ($\text{CDCl}_3/\text{CD}_3\text{OD}$ 3/1 v/v) spectrum of the $\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-NHSMA}_2)$ amphiphilic diblock copolymer after purification by dialysis.



	relative fluorescence units
initial FITC concentration added	8000
$\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-NHSMA}_2)\text{-FITC}$ microparticles	1437
$\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-CysMA}_2)\text{-FITC}$ microparticles	5167
Nude $\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-CysMA}_2)$ microparticles	3

Figure S5. Fluorescence data of FITC attachment to cysteine (thiol)-functionalized $\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-CysMA}_2)$, NHS-functionalized $\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-NHSMA}_2)$ and nude thiol-functionalized $\text{PLA}_{114}\text{-}b\text{-P}(\text{MPC}_{17}\text{-}st\text{-CysMA}_2)$ polymer microparticles for comparison.