

## **Functional Nanoporous Materials From Boronate-Containing Stimuli-Responsive Diblock Copolymers**

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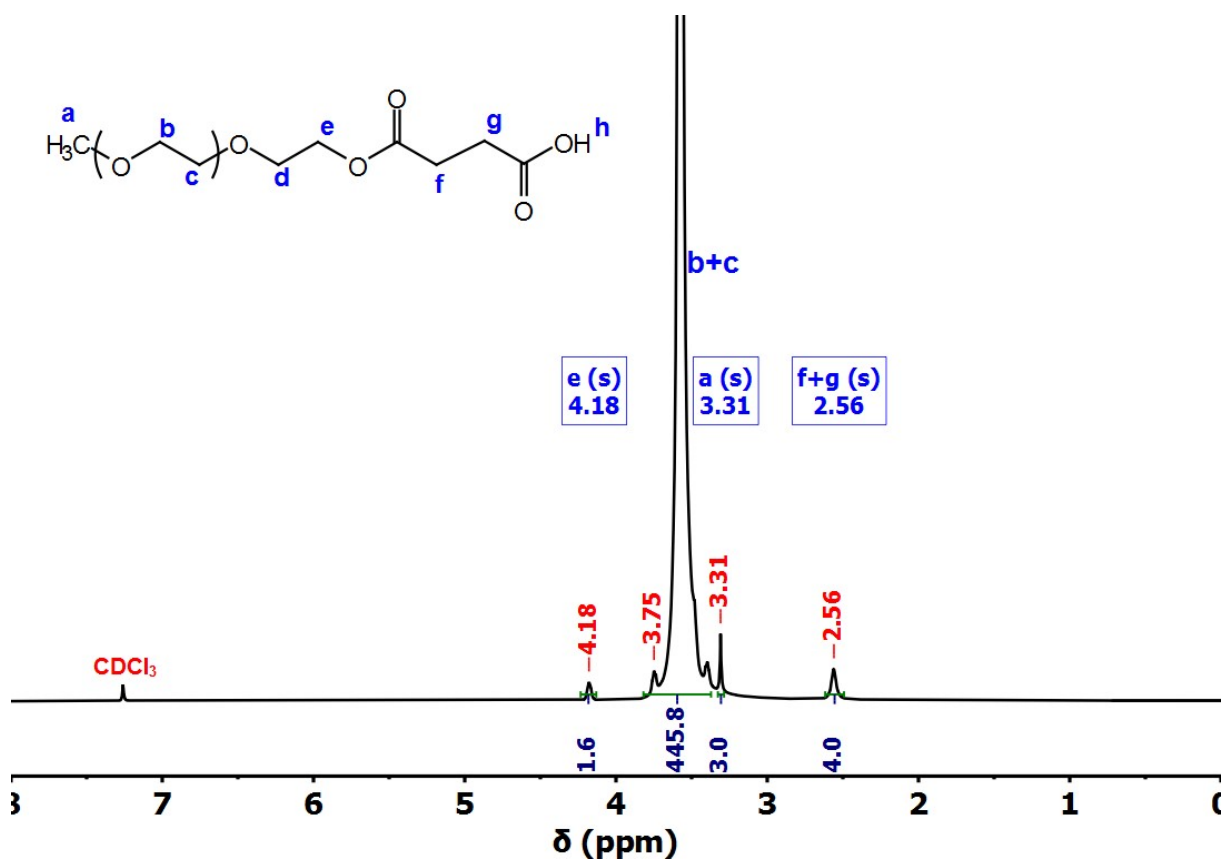
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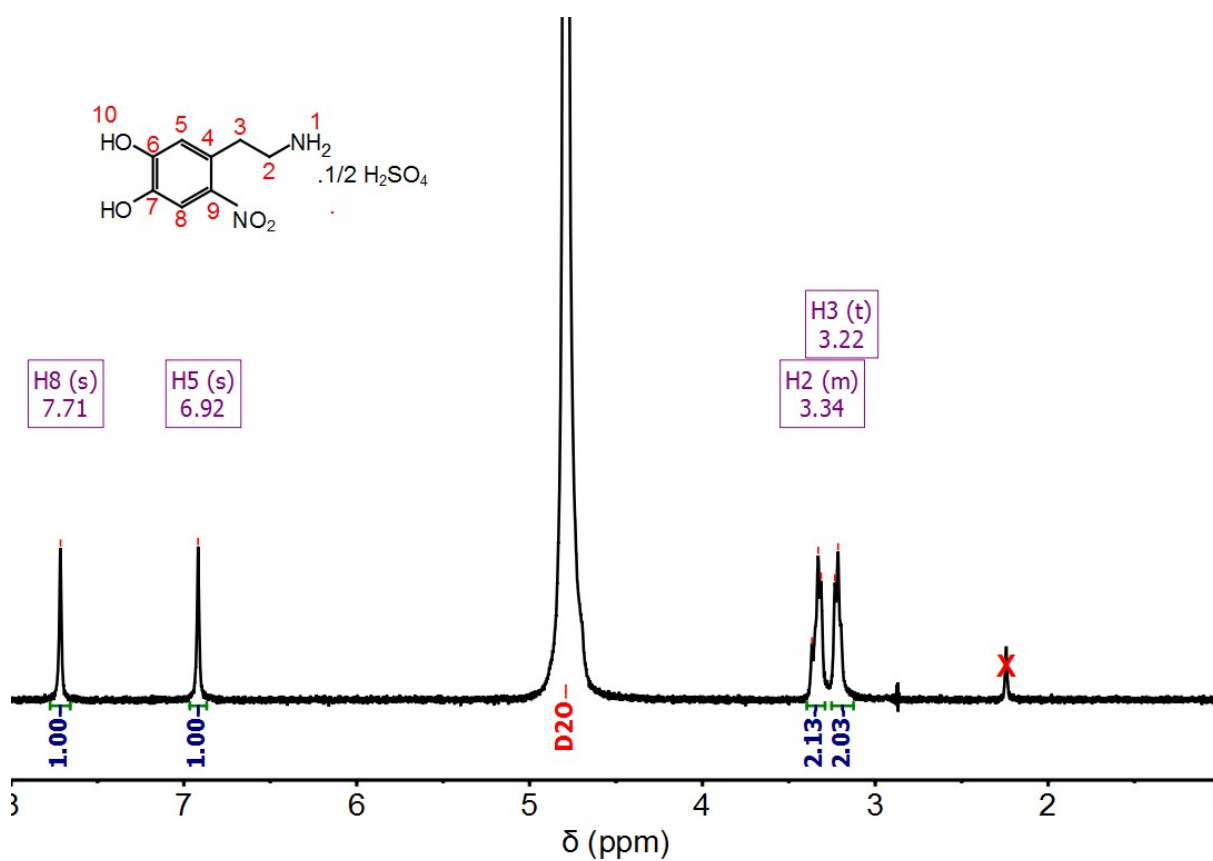
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### **SUPPORTING INFORMATION**

**Figure S1.**  $^1\text{H}$  NMR spectrum of carboxylic acid functionalized poly(ethylene oxide), PEO-COOH.



**Figure S2.**  $^1\text{H-NMR}$  spectrum of nitrodopamine (ND).



**Figure S3.**  $^{13}\text{C-NMR}$  spectrum of nitrodopamine (ND).

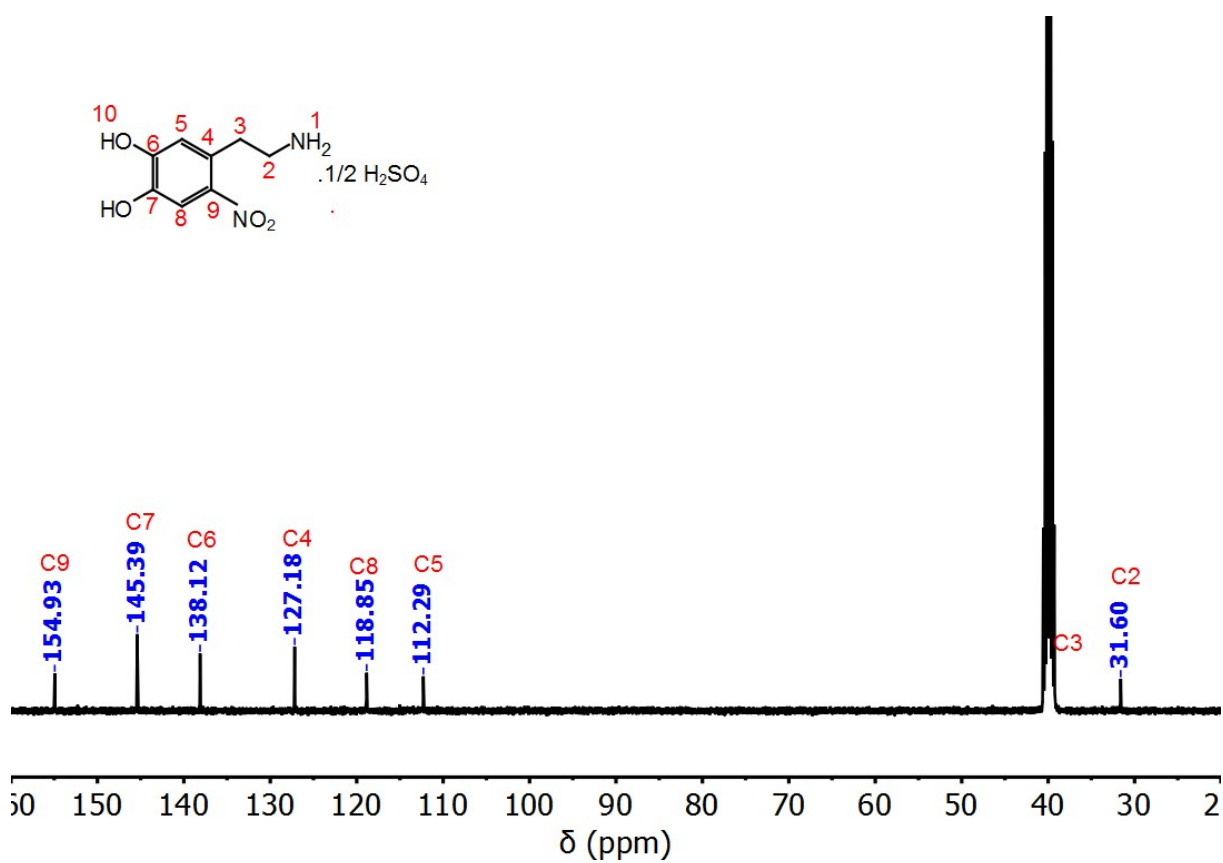


Figure S4.  $^{13}\text{C}$ -DEPT NMR spectrum of nitrodopamine (ND).

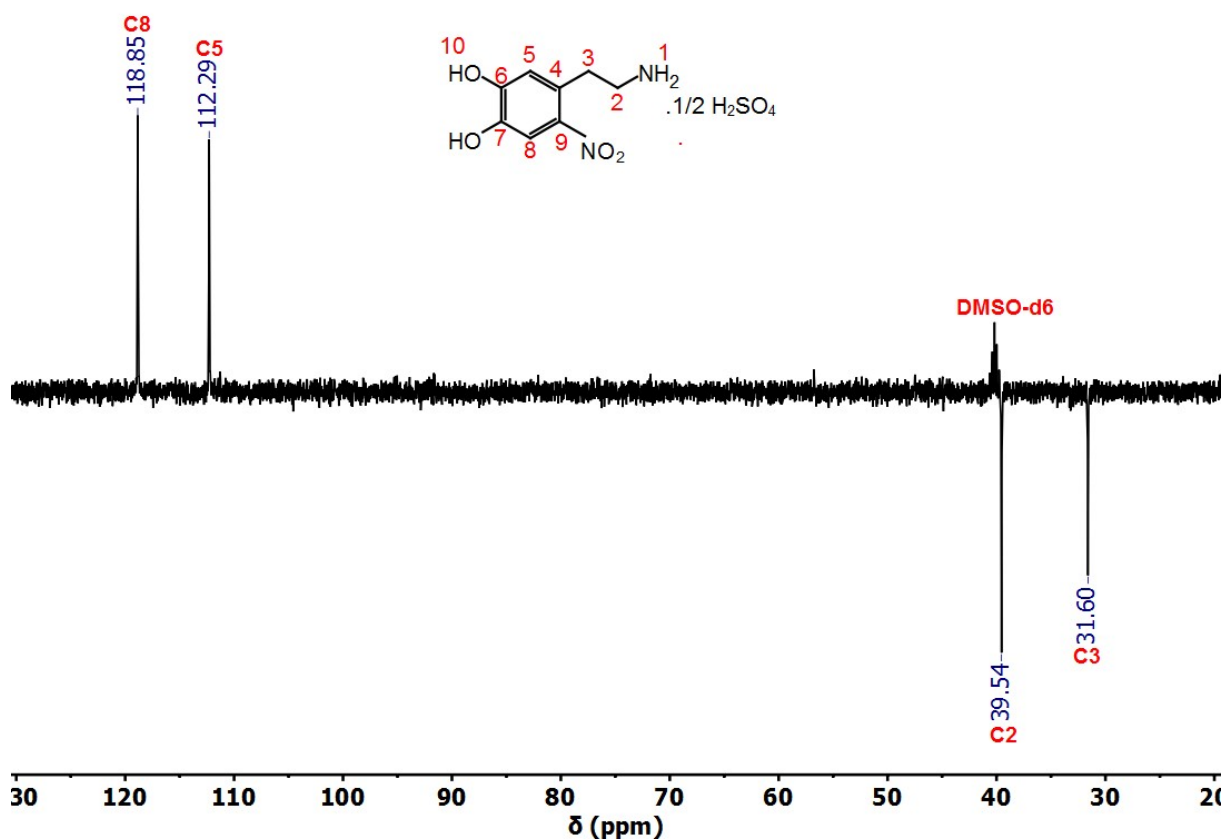
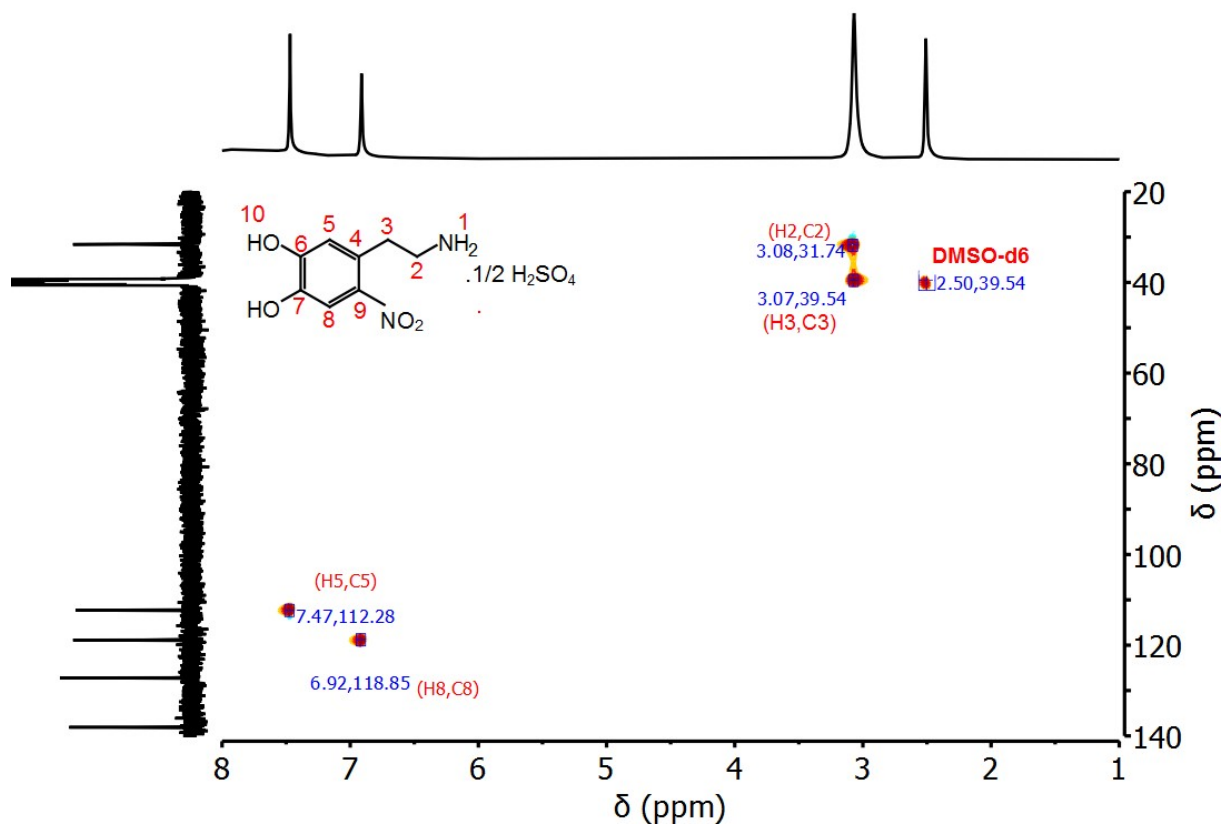
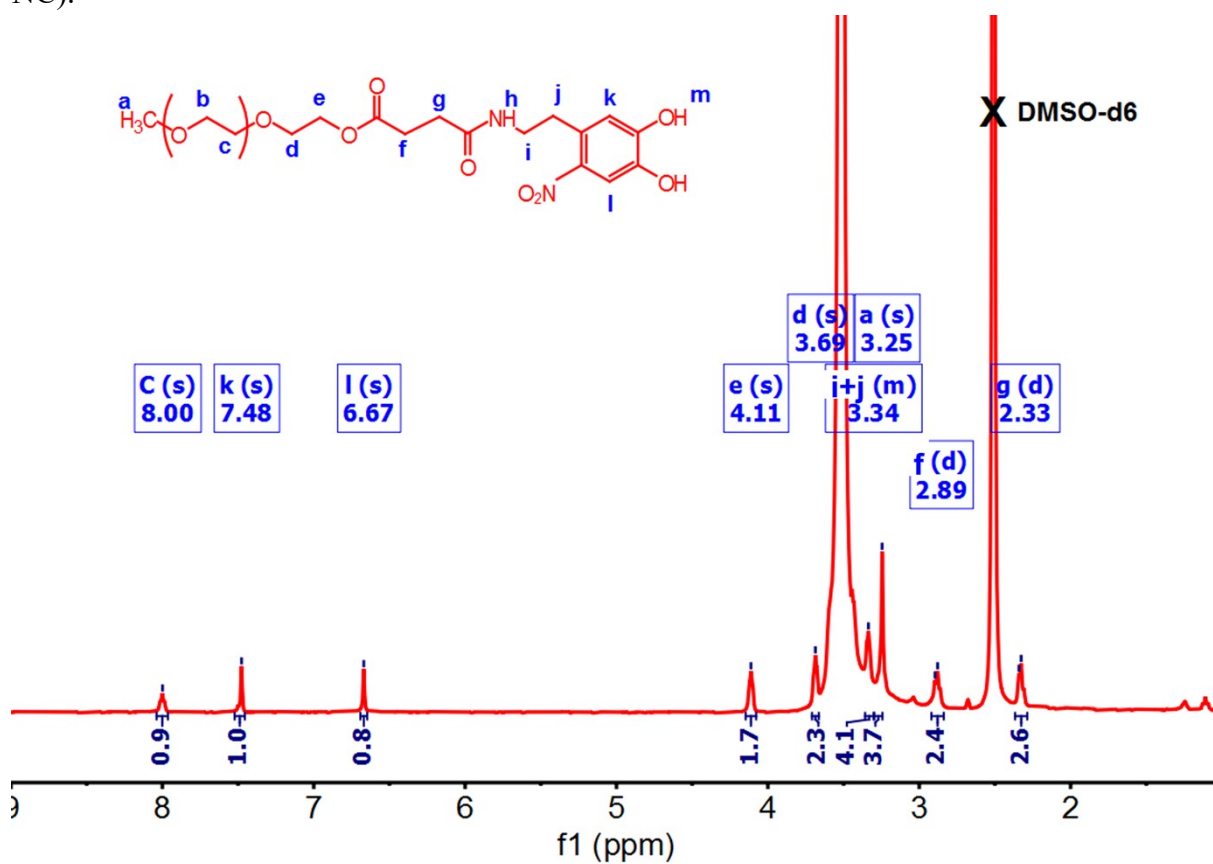


Figure S5. 2-dimensional  $^1\text{H}$ ,  $^{13}\text{C}$ -HQC NMR spectrum of nitrodopamine (ND).



**Figure S6.**  $^1\text{H-NMR}$  spectrum of nitrocatechol functionalized poly(ethylene oxide) (PEO-NC).



**Figure S7.**  $^1\text{H-NMR}$  spectrum of boronic acid functionalized poly(ethylene oxide) (PEO-Bora)

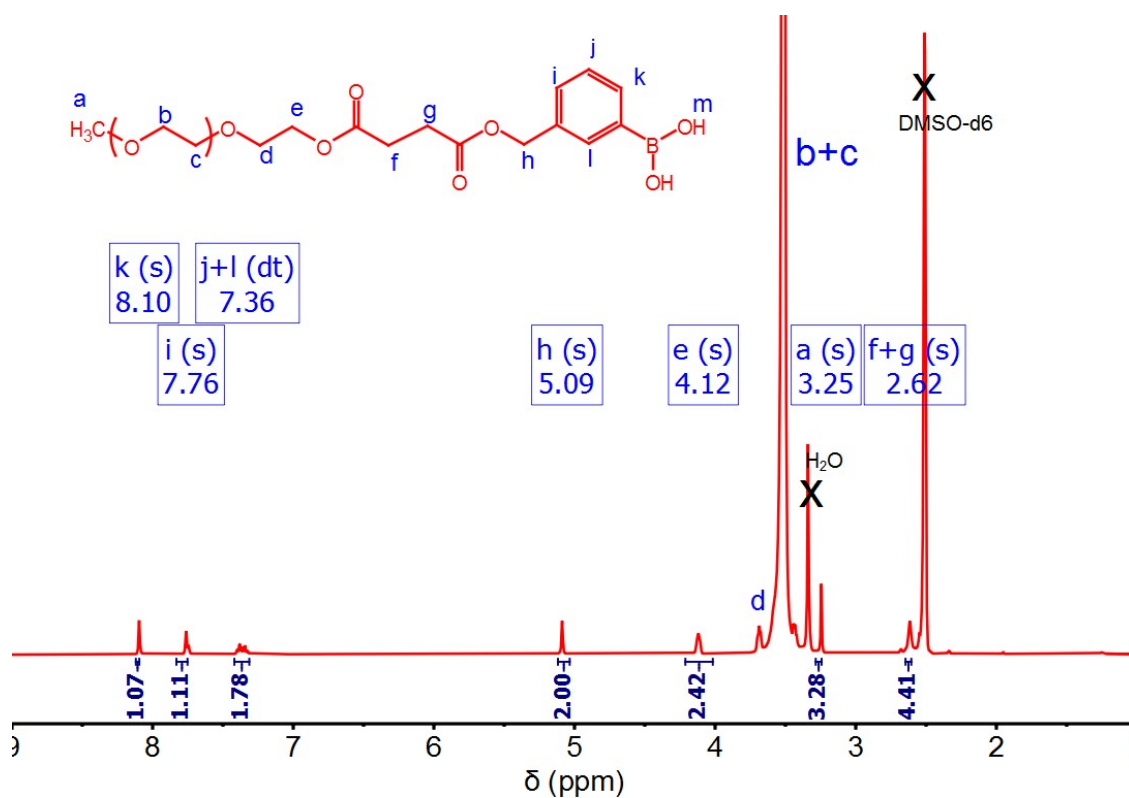


Figure S8.  $^1\text{H-NMR}$  spectrum of DDMAT-NC.

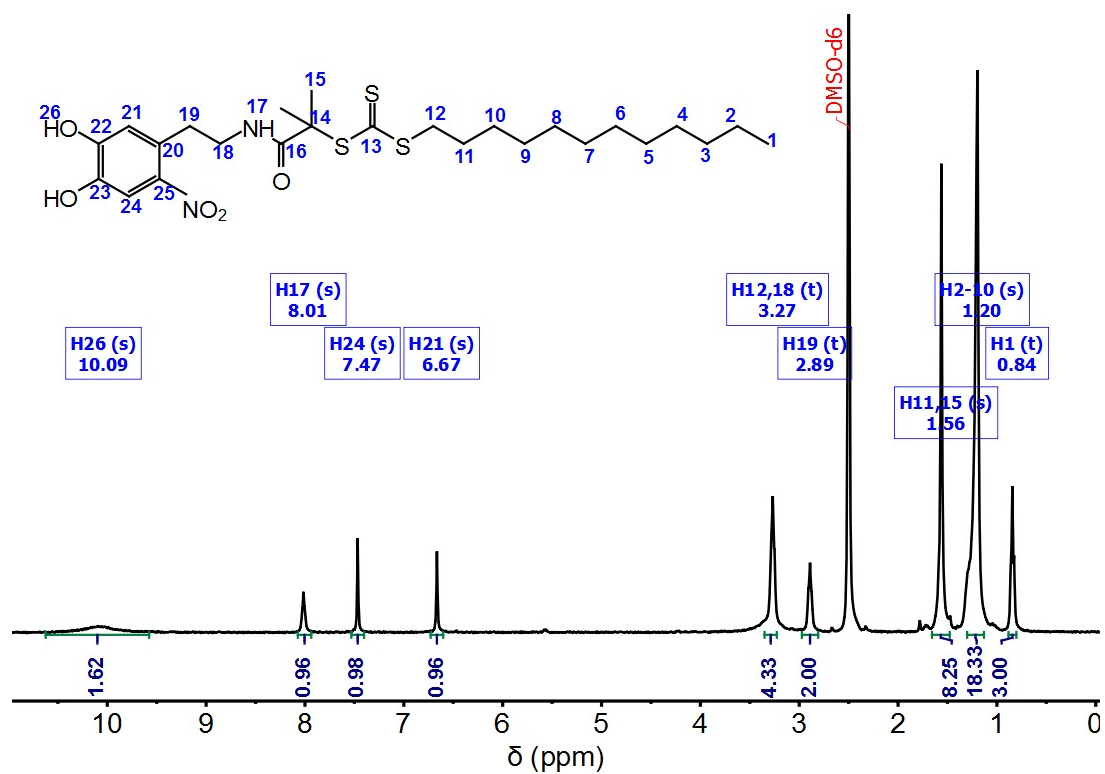


Figure S9.  $^1\text{H-COSY}$  NMR spectrum of DDMAT-NC.

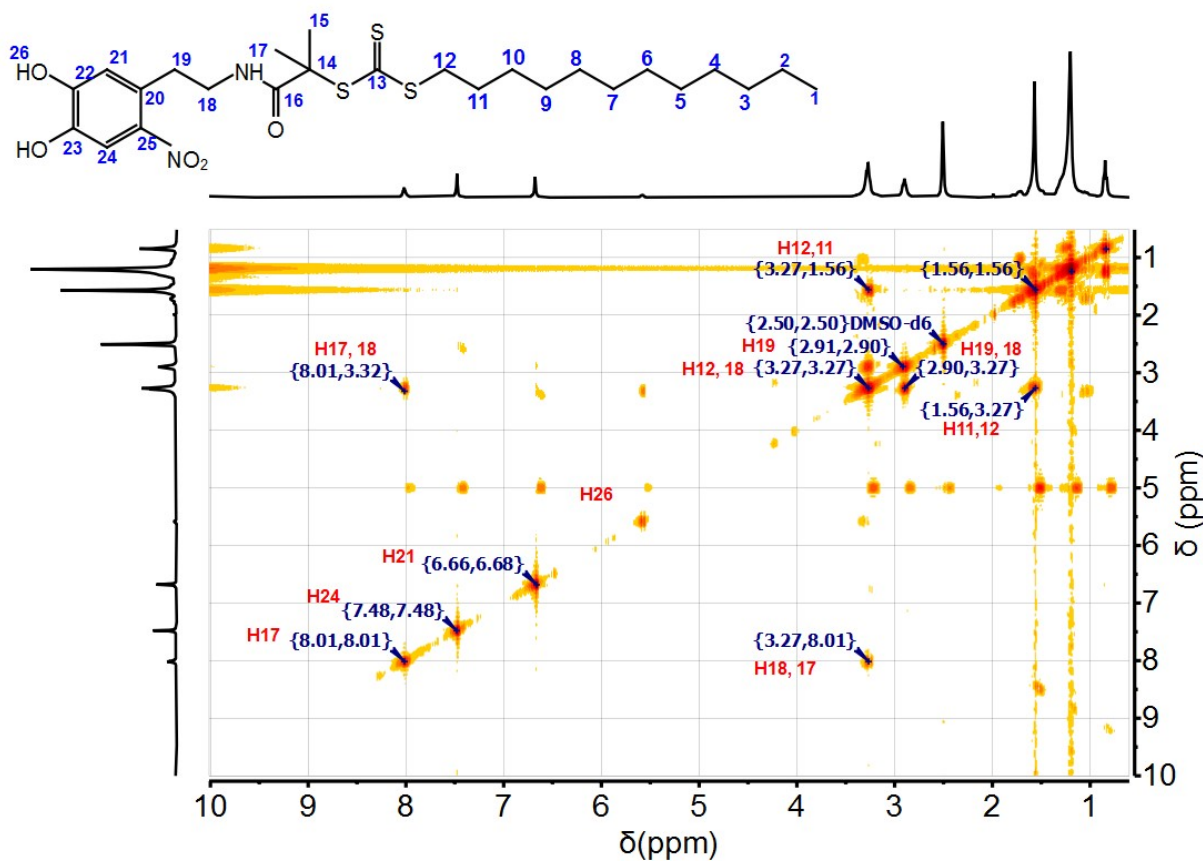
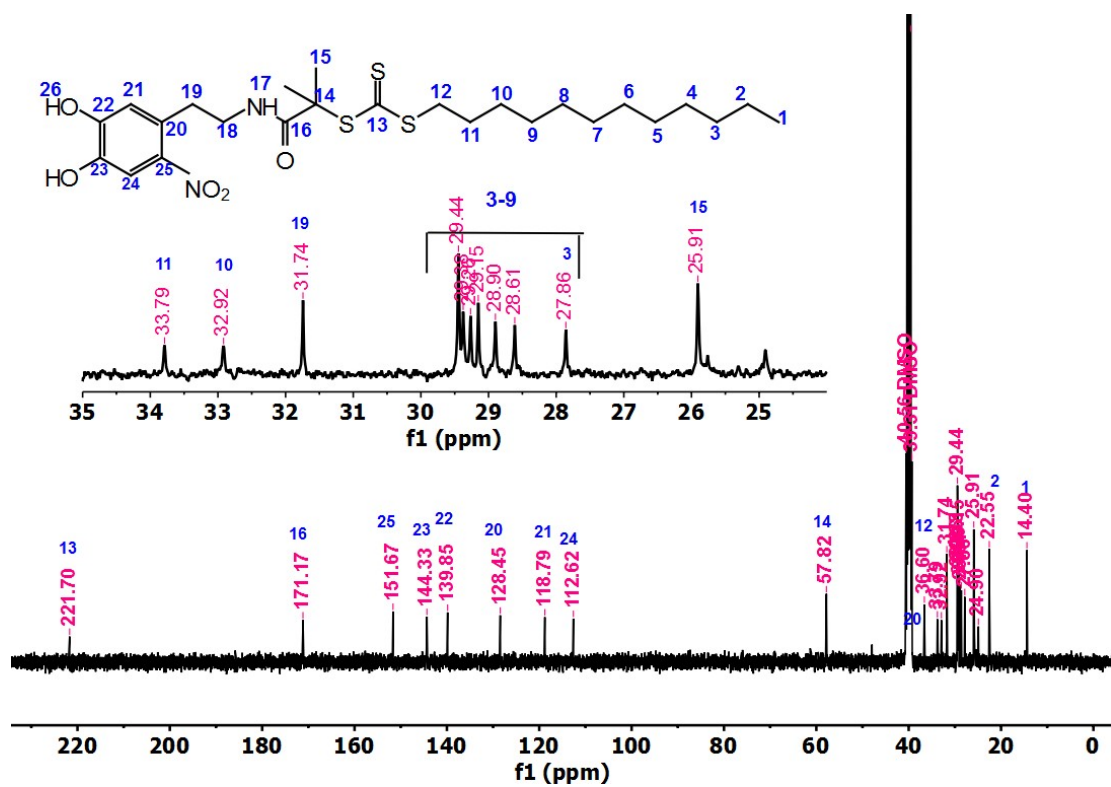
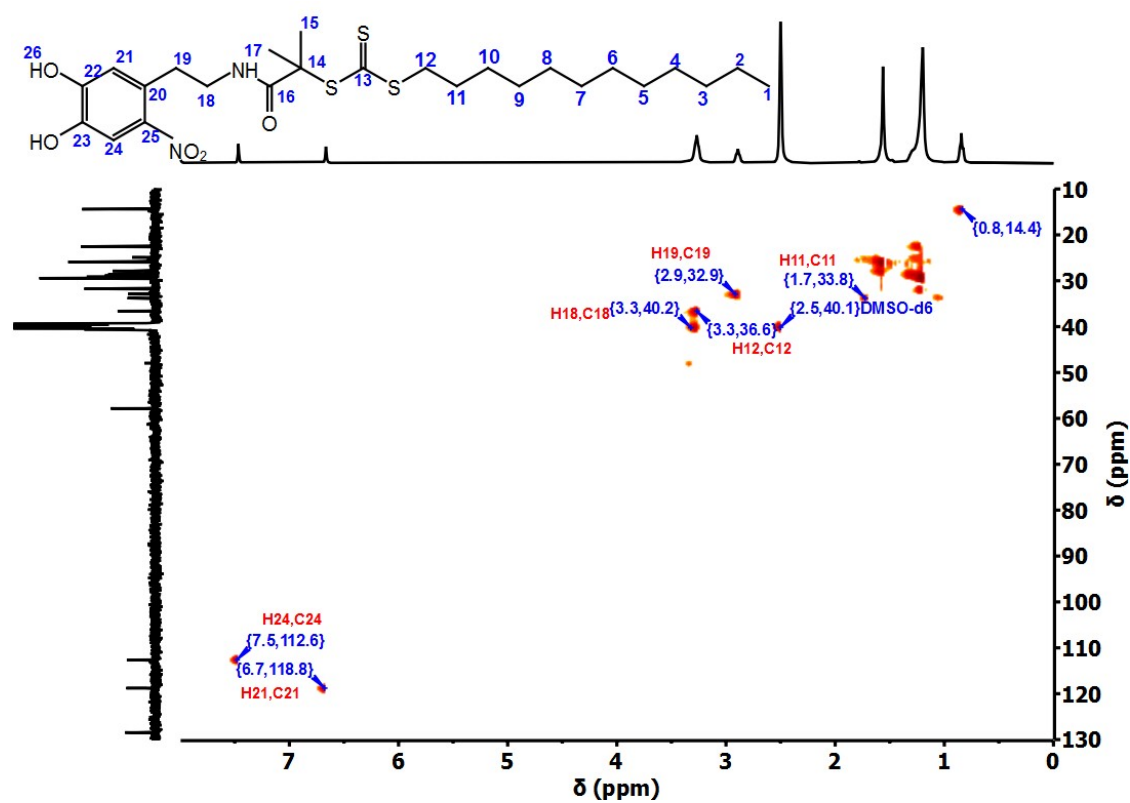


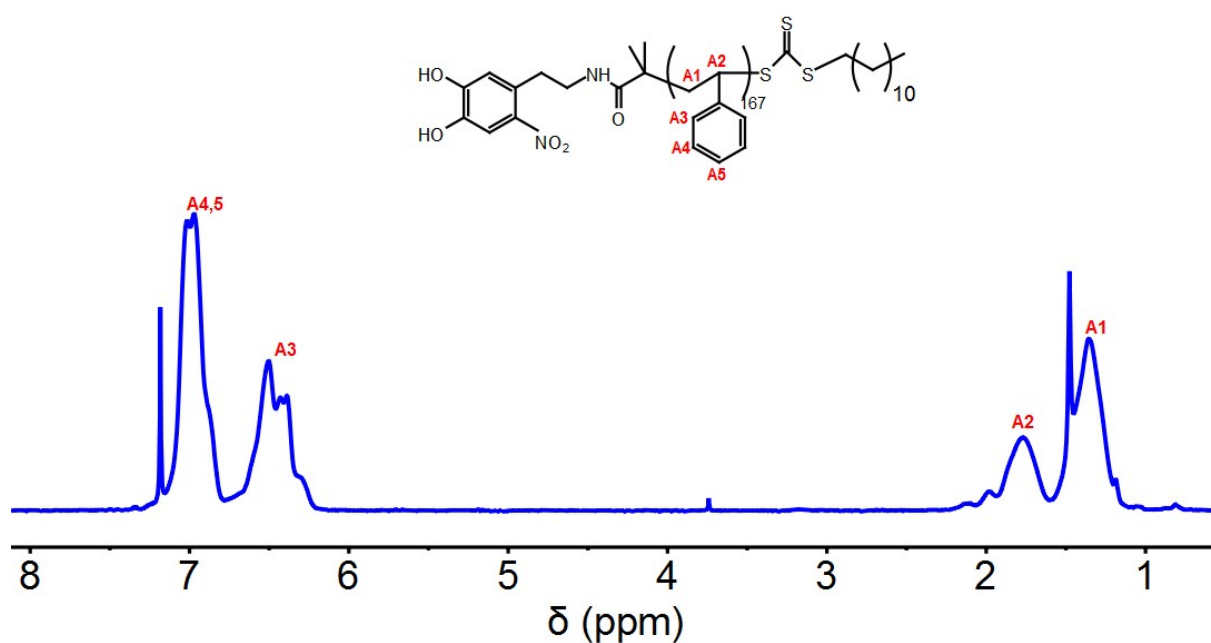
Figure S10. <sup>13</sup>C-NMR spectrum of DDMAT-ND.



**Figure S11.** 2-dimensional  $^1\text{H}$ ,  $^{13}\text{C}$ -HQC NMR spectrum of DDMAT-ND.

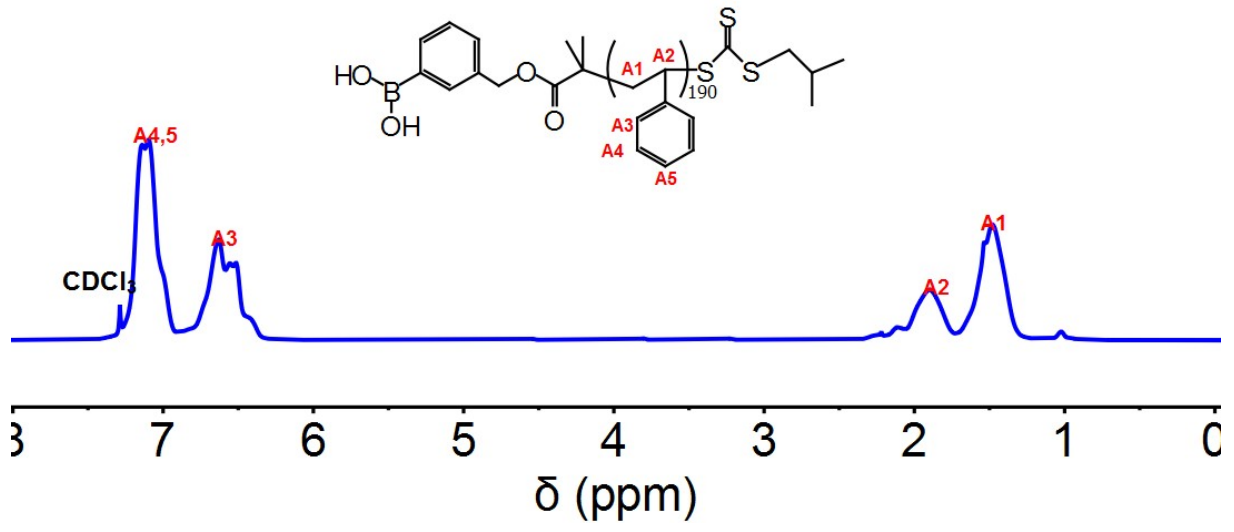


**Figure S12.**  $^1\text{H}$ -NMR spectrum of catechol functionalized polystyrene (PS-NC).



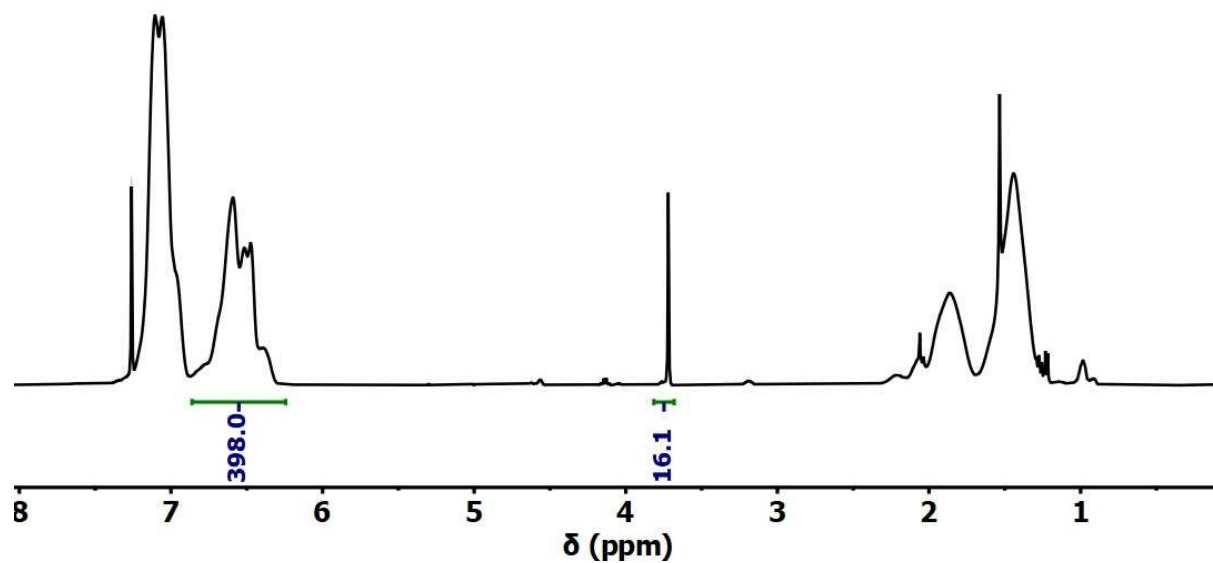
**Figure S13.**  $^1\text{H}$ -NMR spectrum of boronic acid functionalized polystyrene (PS-Bora).







**Figure S16.**  $^1\text{H-NMR}$  spectrum of polystyrene washed out from silicium substrate after selective removal of PEO block.



**Figure S17.** SEC trace of the  $\text{PS}_{190}\text{-}b\text{-PEO}_{114}$  diblock copolymer after TFA-mediated selective cleavage of the boronate ester junction using DMF as the eluent at a flowrate of  $1\text{ mL}\cdot\text{min}^{-1}$  at  $50\text{ }^\circ\text{C}$ .

