

**Supporting Informatio for**

## **Cylindrical Micelles by the Self-Assembly of Crystalline-b-Coil Polyphosphazene-b-P2VP Block Copolymers. Stabilization of Gold Nanoparticles**

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1. NMR spectra of P2VP-PPh<sub>2</sub> (4)

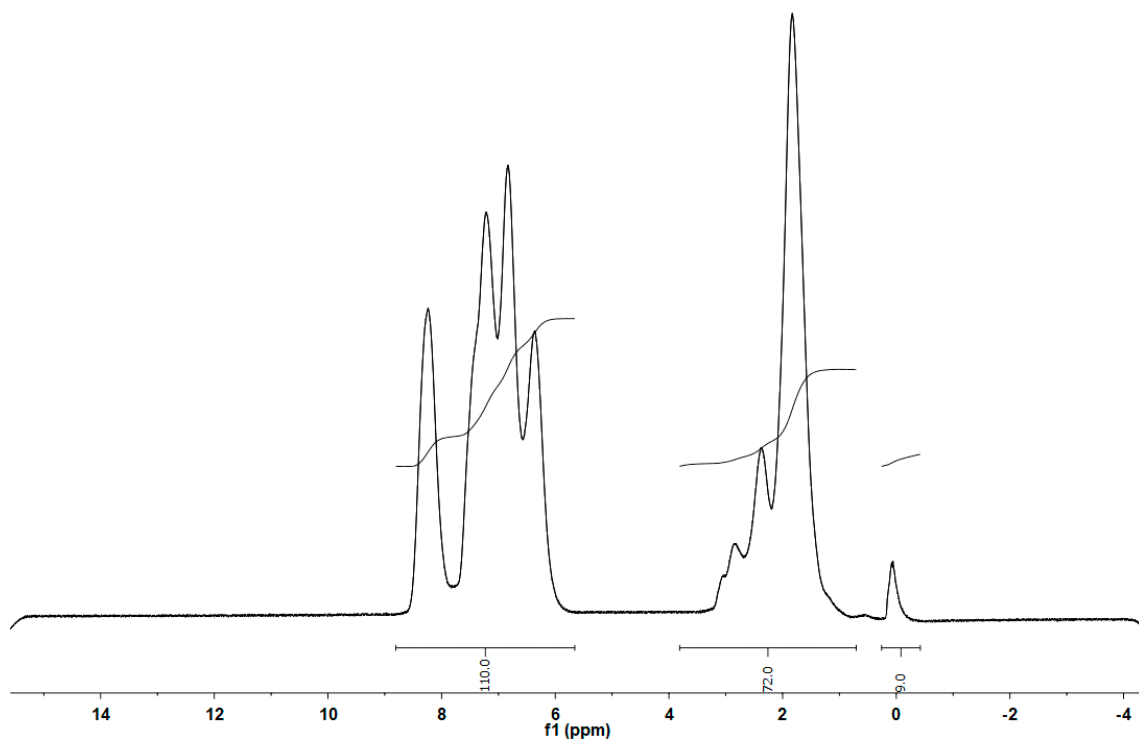


Figure S1. <sup>1</sup>H-NMR (CDCl<sub>3</sub>)

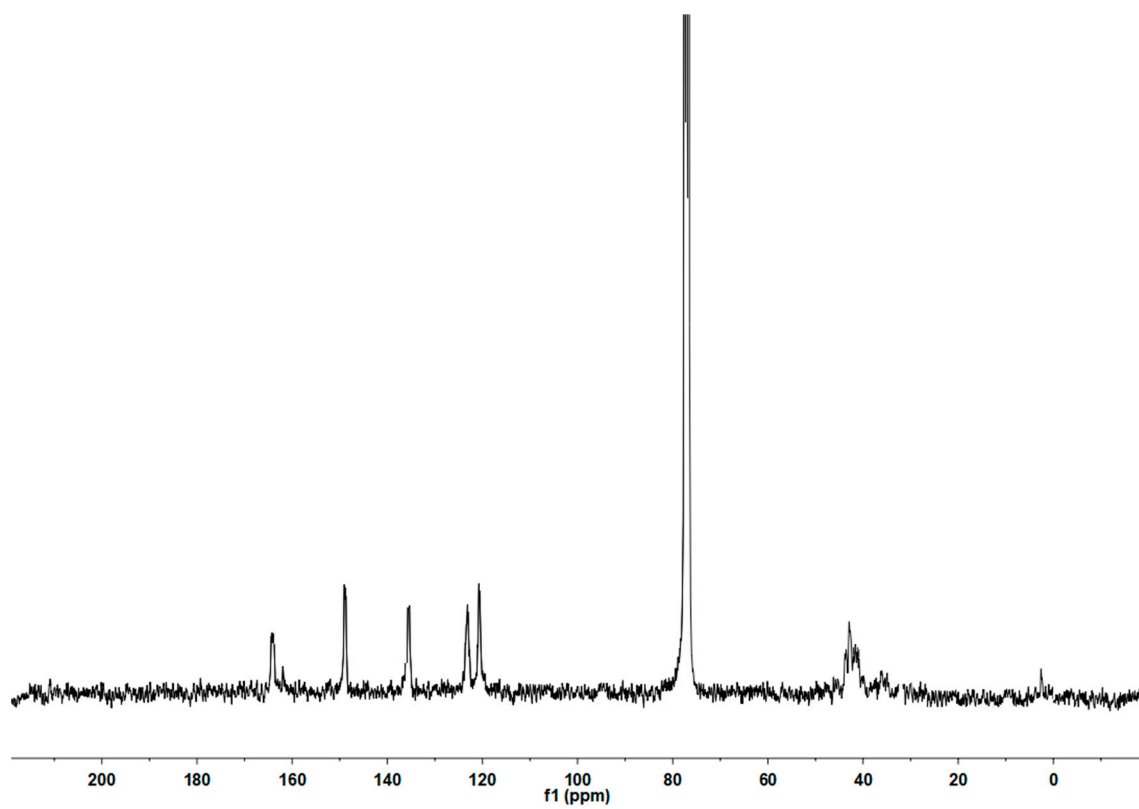


Figure S2. <sup>13</sup>C-<sup>1</sup>H-NMR (CDCl<sub>3</sub>)

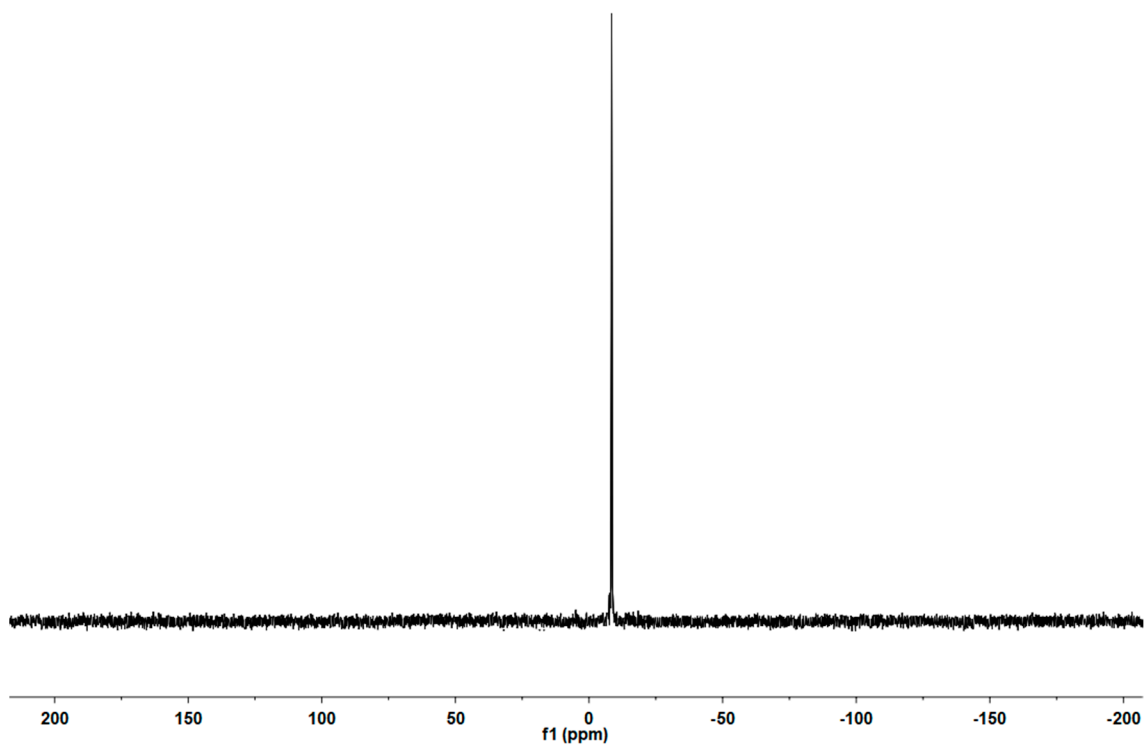


Figure S3.  $^{31}\text{P}$ - $\{^1\text{H}\}$ -NMR ( $\text{CDCl}_3$ )

2. NMR spectra of P2VP-PPH<sub>2</sub>Cl<sub>2</sub> (5)

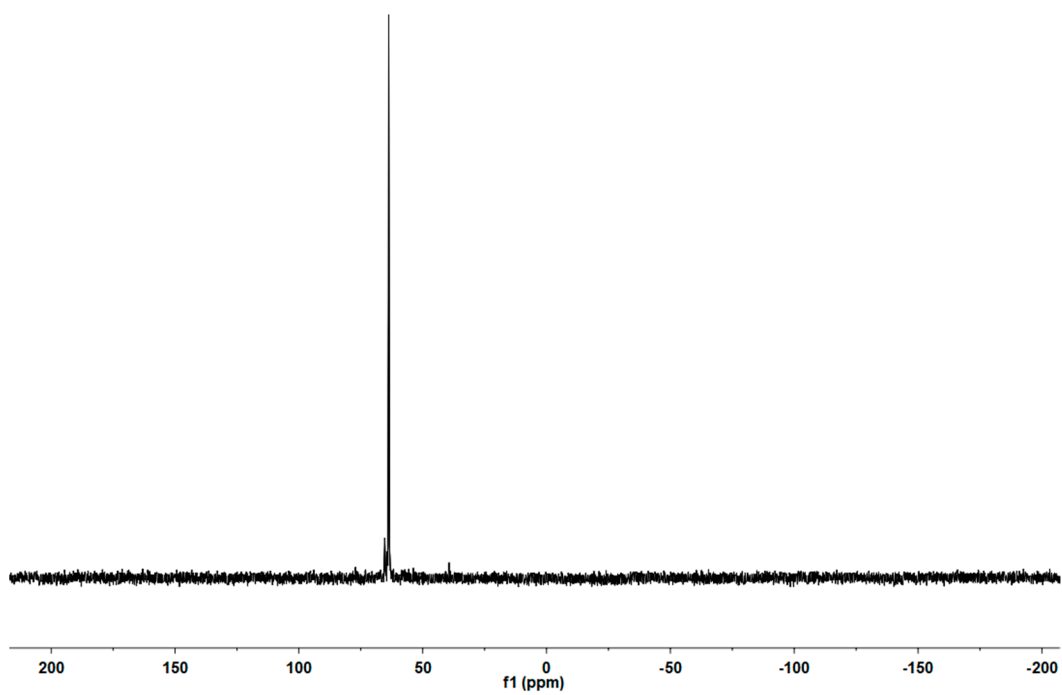


Figure S4.  $^{31}\text{P}$ - $\{^1\text{H}\}$ -NMR ( $\text{CH}_2\text{Cl}_2$  with external reference of  $\text{D}_2\text{O}$ )

### 3. NMR spectra of PTFEP-*b*-P2VP (**8a**)

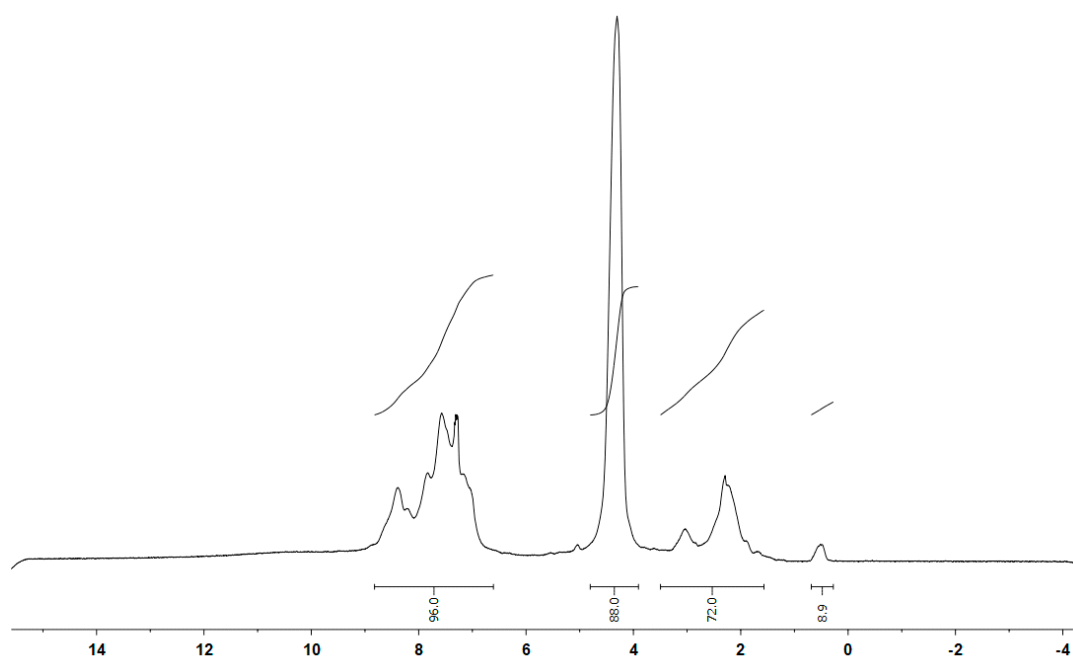


Figure S5.  $^1\text{H}$ -NMR ( $\text{CDCl}_3$ )

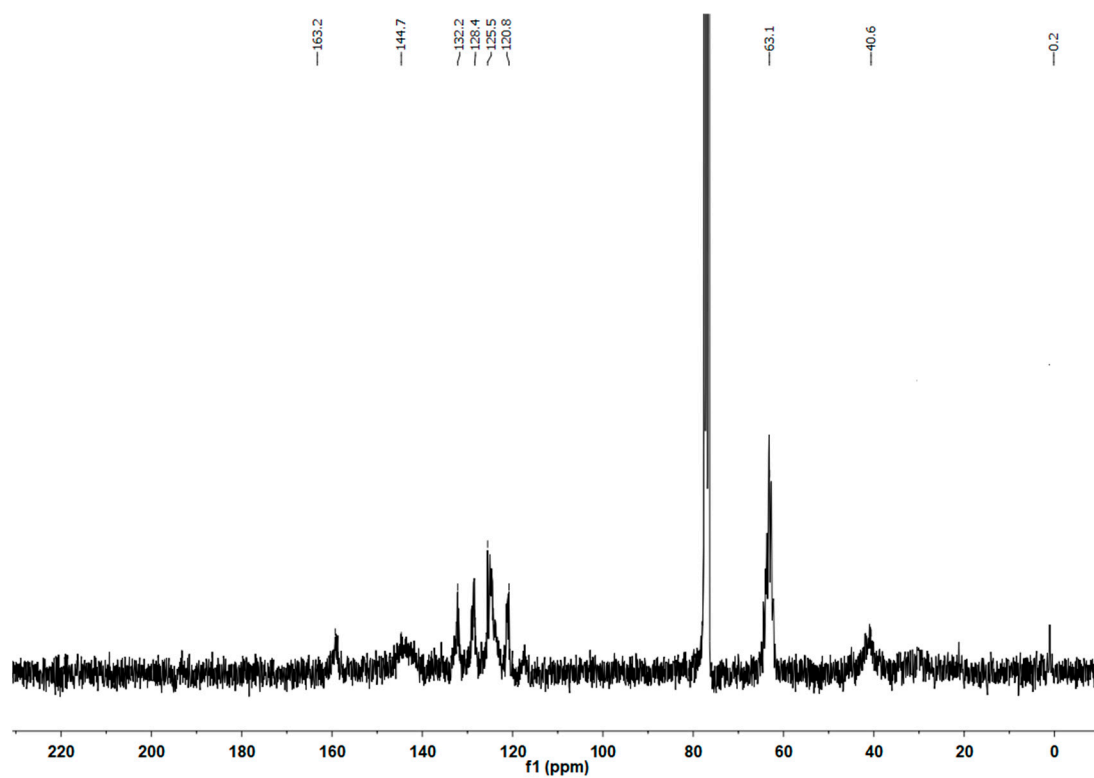


Figure S6.  $^{13}\text{C}$ - $\{^1\text{H}\}$ -NMR ( $\text{CDCl}_3$ )

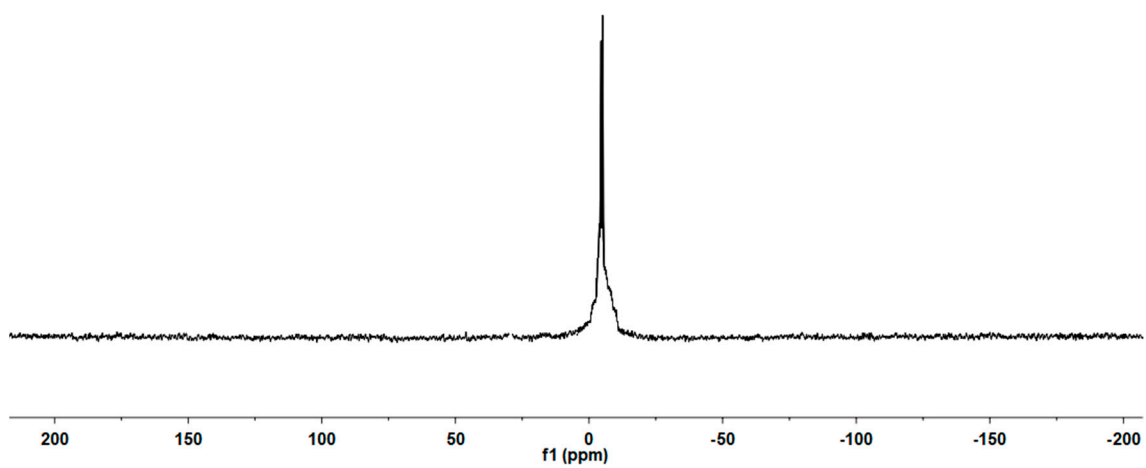


Figure S7.  $^{31}\text{P}$ - $\{^1\text{H}\}$ -NMR ( $\text{CDCl}_3$ )

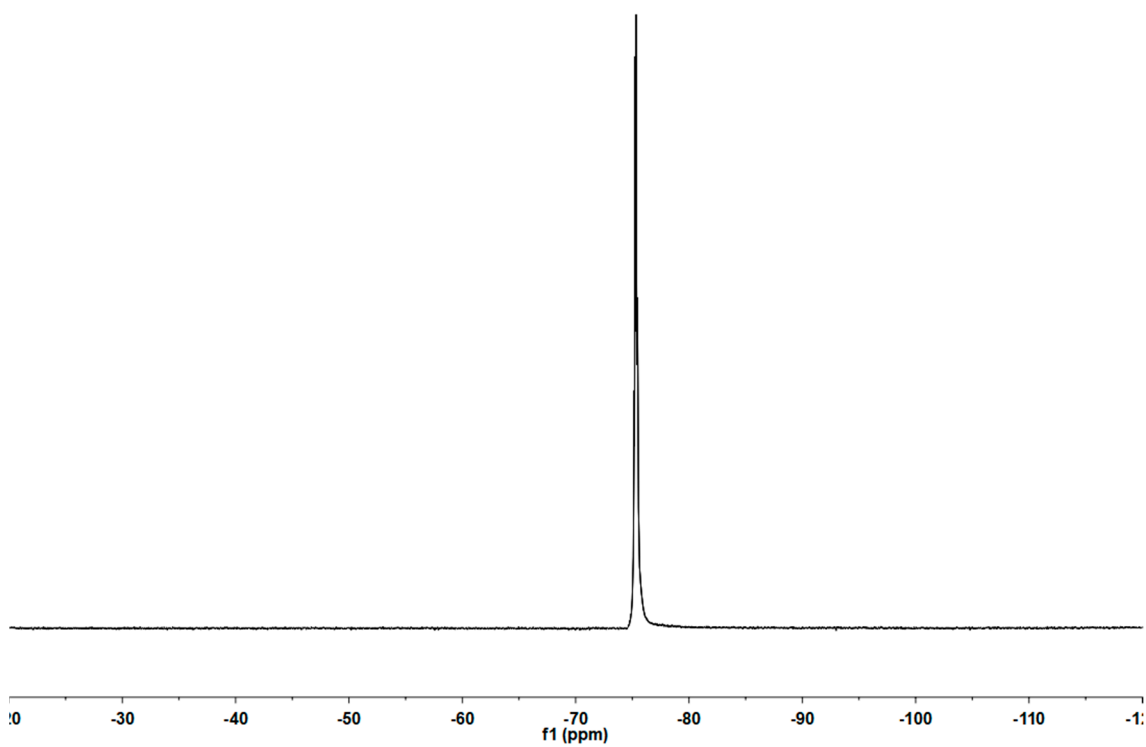
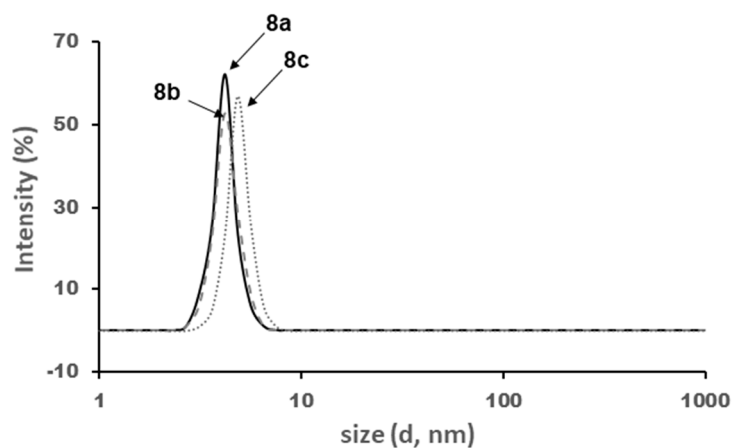
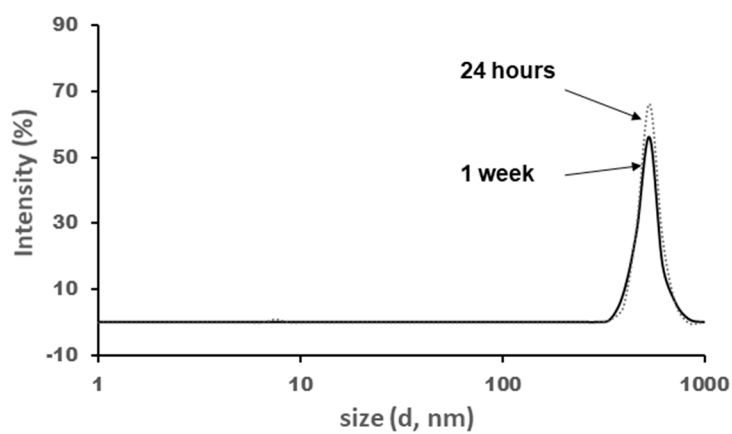


Figure S8.  $^{19}\text{F}$ - $\{^1\text{H}\}$ -NMR ( $\text{CDCl}_3$ )

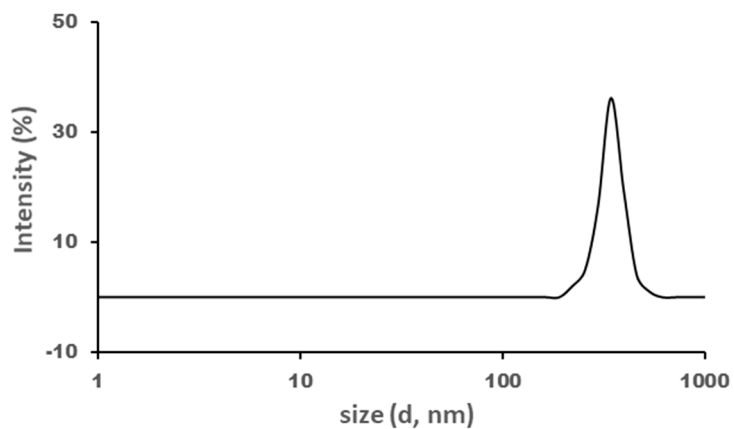
4. DLS data of the self-assembly studies of PTFEP-*b*-P2VP (**8a-c**)



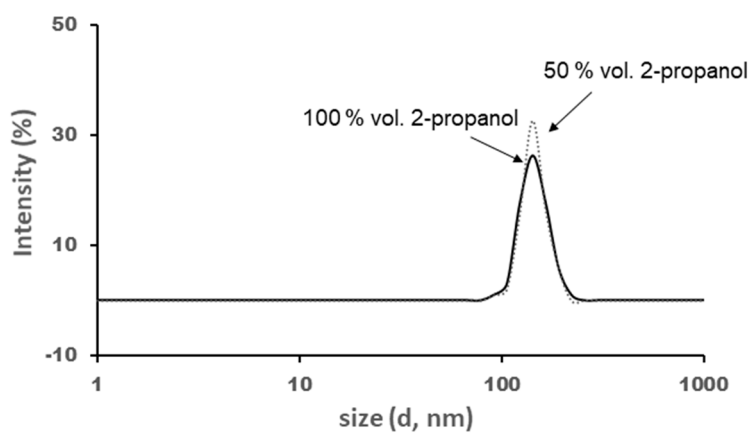
**Figure S9.** DLS of BCPs **8a-c** in THF at 0.5 mg/mL



**Figure S10.** DLS of a solution of BCP **8a** at different times (24 h and 1 week) after the addition of 50 % vol. of 2-propanol over a 0.5 mg/mL THF solution of **8a** (addition rate = 1 drop / 5 sec).



**Figure S11.** DLS of a solution of BCP **8a** after the addition of 100 % vol. of 2-propanol over a 0.5 mg/mL THF solution of **8a** (addition rate = 1 drop / 5 sec).



**Figure S12.** DLS of solutions of BCP **8a** after the addition of 50 and 100 % vol. of 2-propanol over a 0.5 mg/mL THF solution of **8a** (addition rate = 1 step).