molecules

MDPI

Supplementary Materials

Phosphorus-Containing Polymers as Sensitive Biocompatible Probes for ^{31}P Magnetic Resonance

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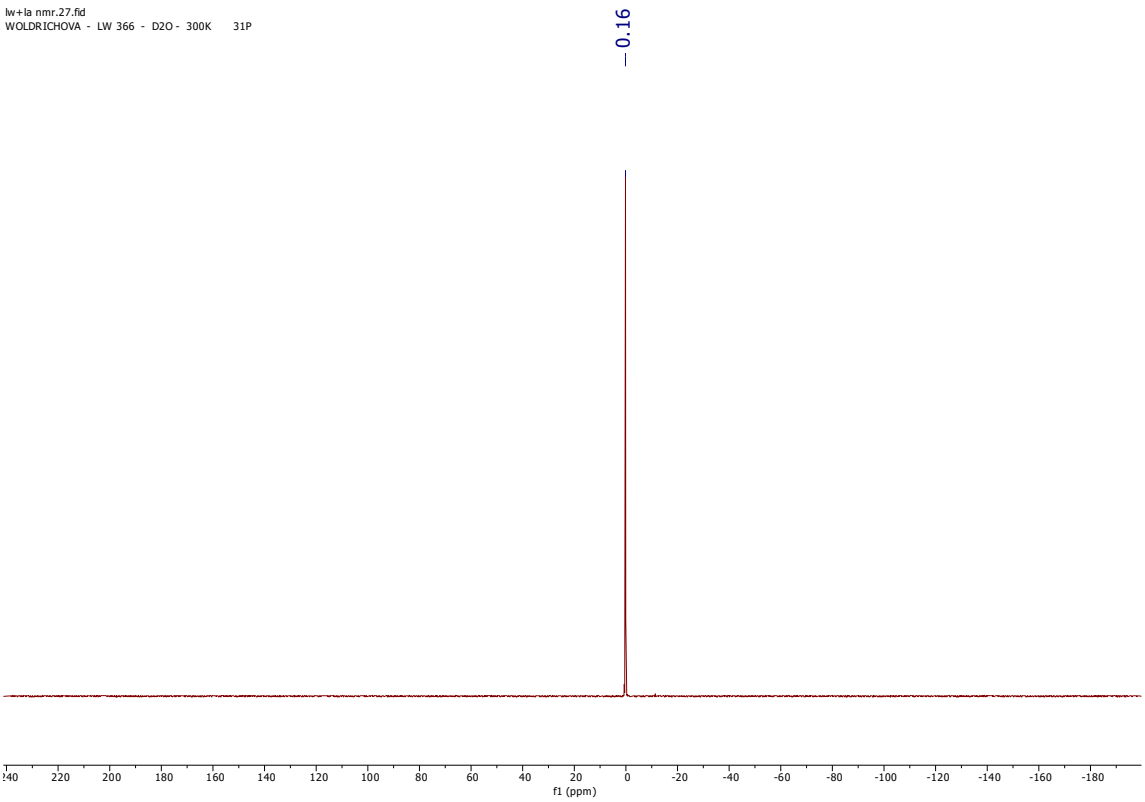

Figure S1. ^{31}P NMR spectrum of polymer (**2a**) in D_2O.

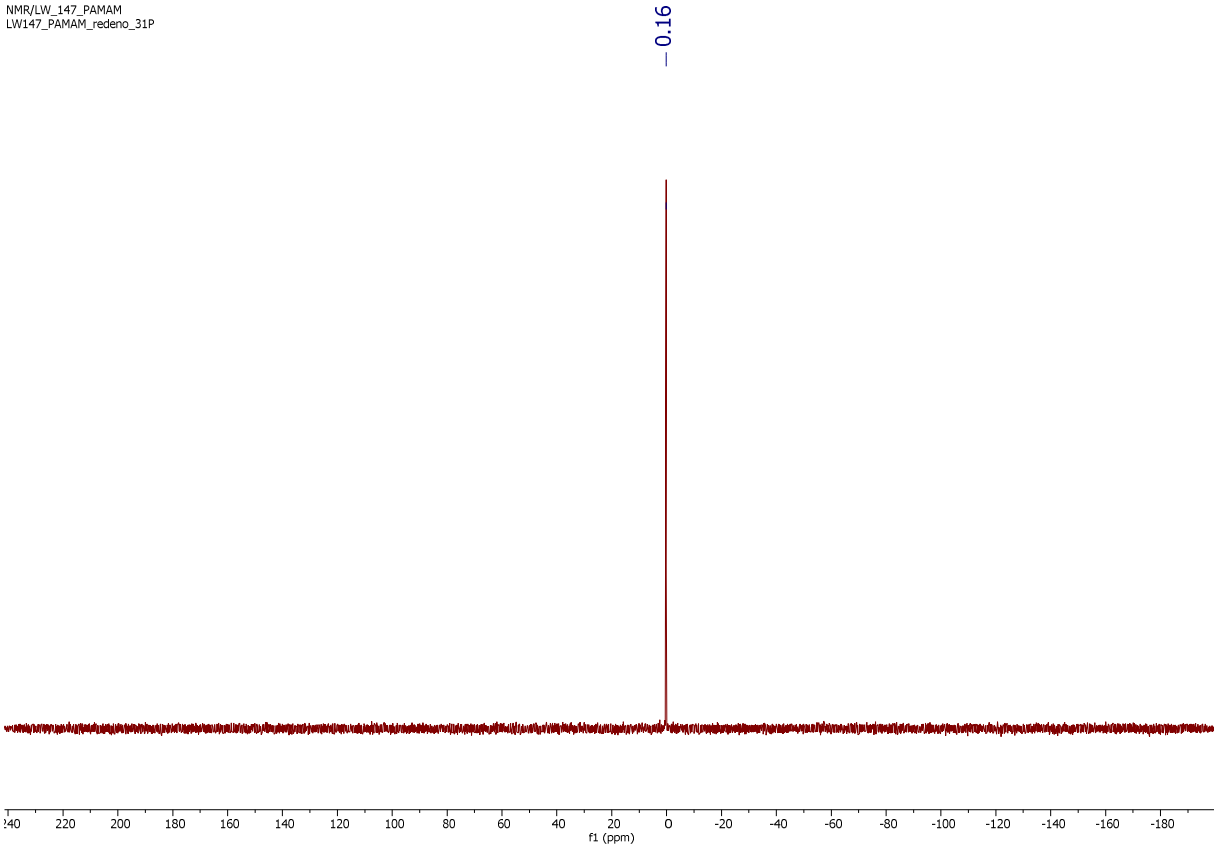

Figure S2. ^{31}P NMR spectrum of polymer (**2b**) in D_2O.

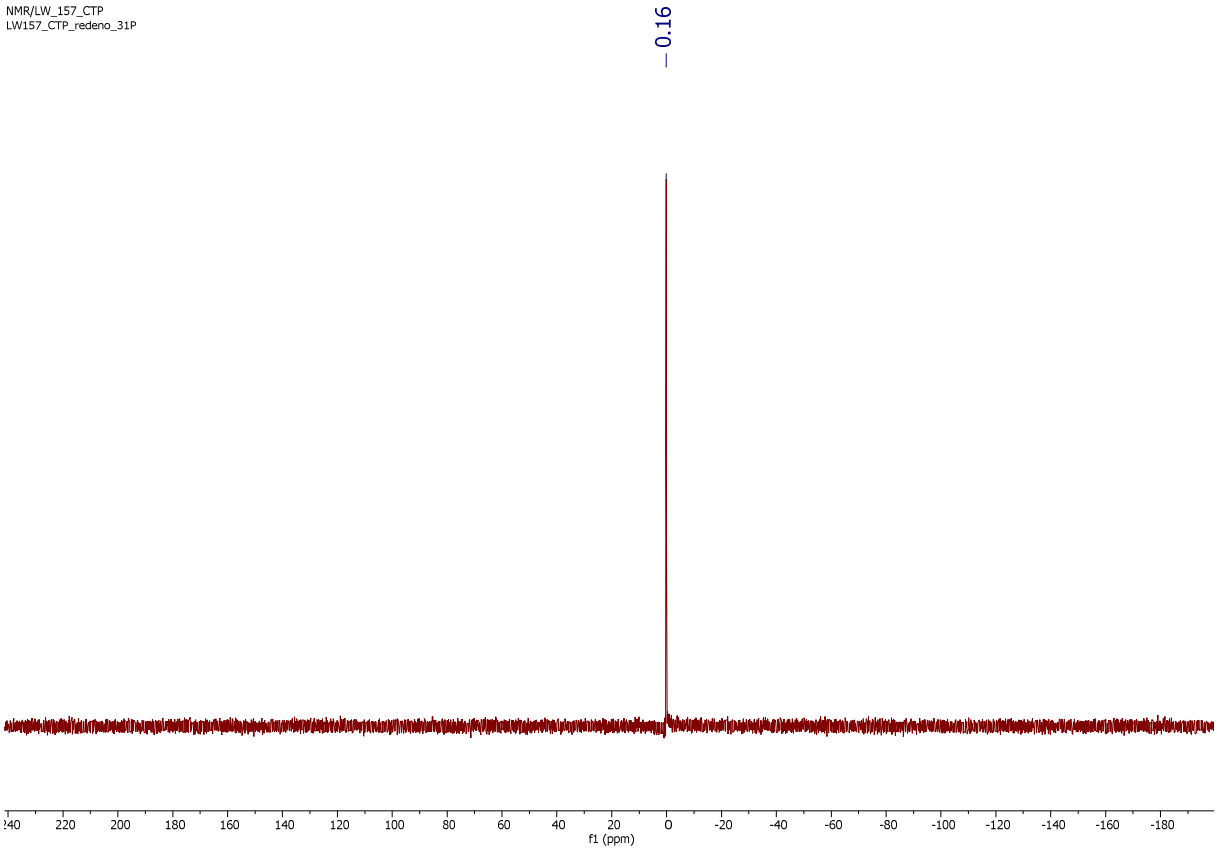

Figure S3. ^{31}P NMR spectrum of polymer (**2c**) in D_2O.

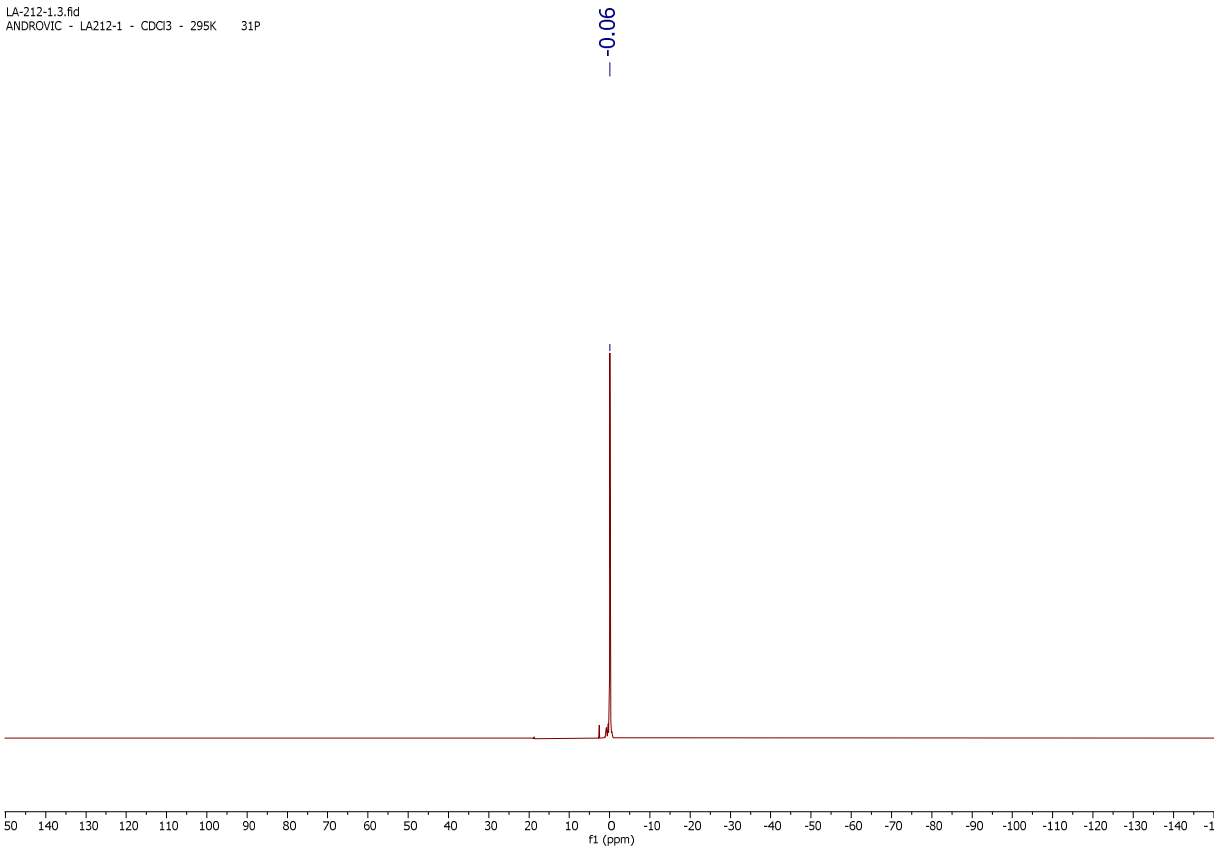

Figure S4. ^{31}P NMR spectrum of polymer (**2d**) in D_2O.

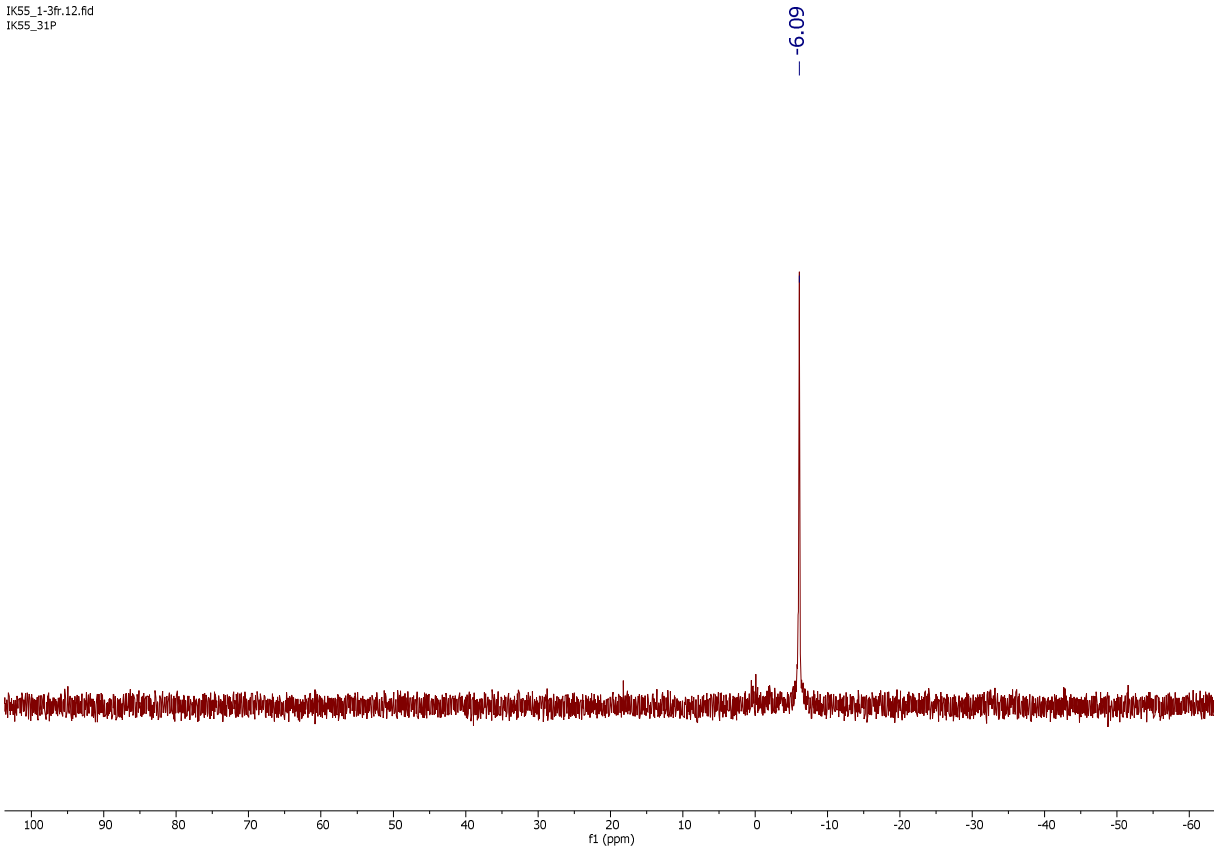

Figure S5. ^{31}P NMR spectrum of polymer (**2e**) in D_2O.

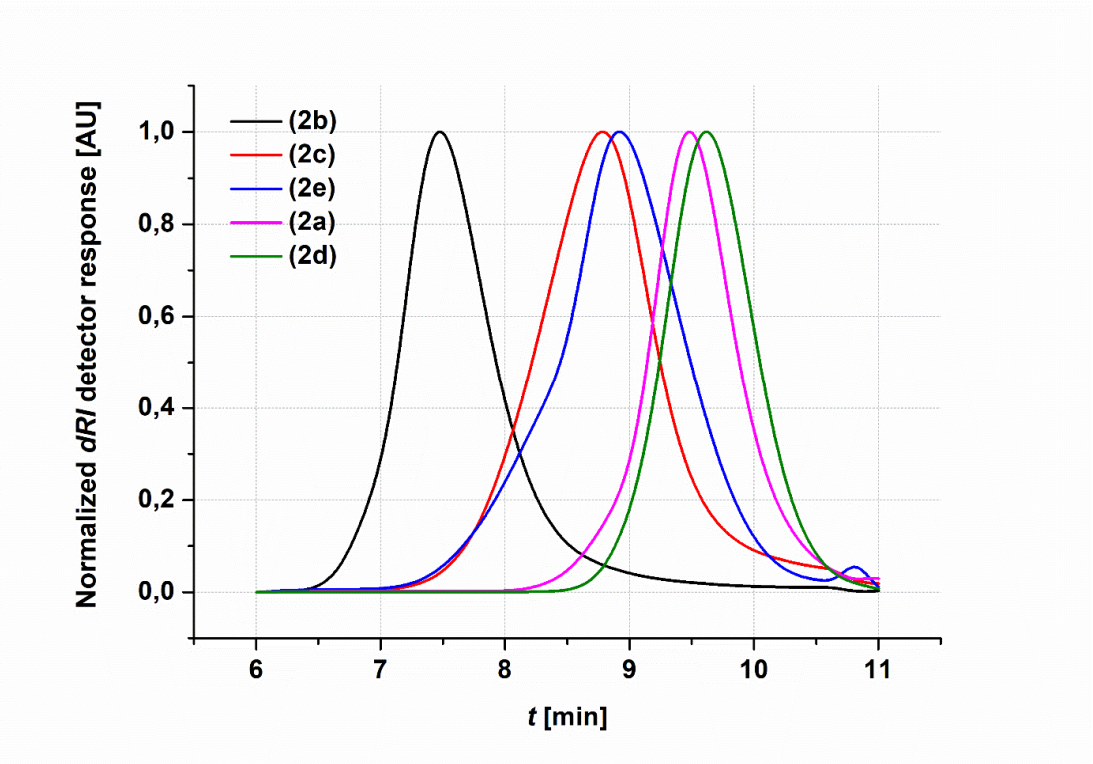

Figure S6. SEC profiles of ^{31}P-MR probes: (**2a**) IBN-PMPC-Pg, (**2b**) PAMAM-g-PMPC-Pg, (**2c**) CTP-g-PMPC-Pg, (**2d**) PEEP-Pg and (**2e**) PMEEEP-Vi.

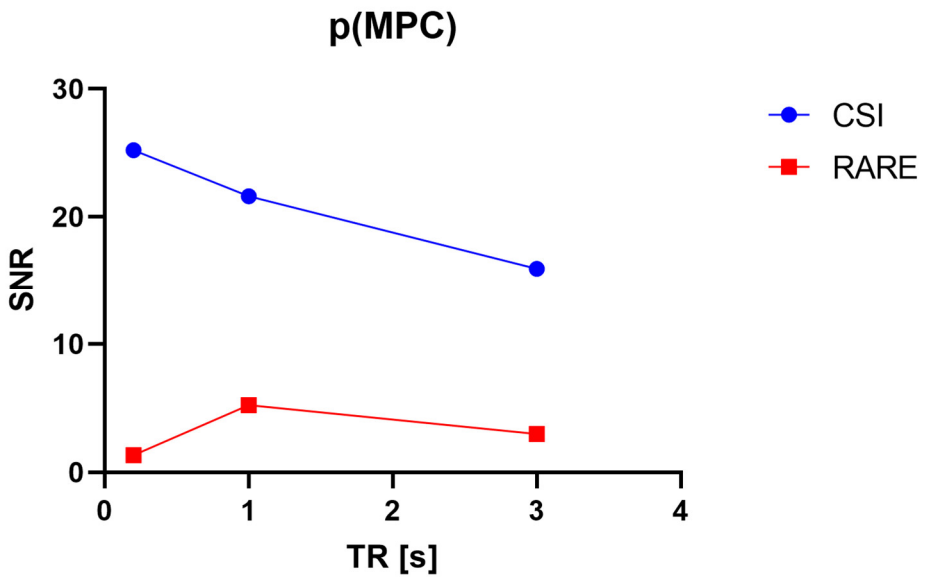

Figure S7. Comparison of the sensitivities of ^{31}P MR measurements of PMPC polymer probe using ^{31}P CSI (blue line) and ^{31}P RARE sequences (red line), at constant measurement time with varying TR.

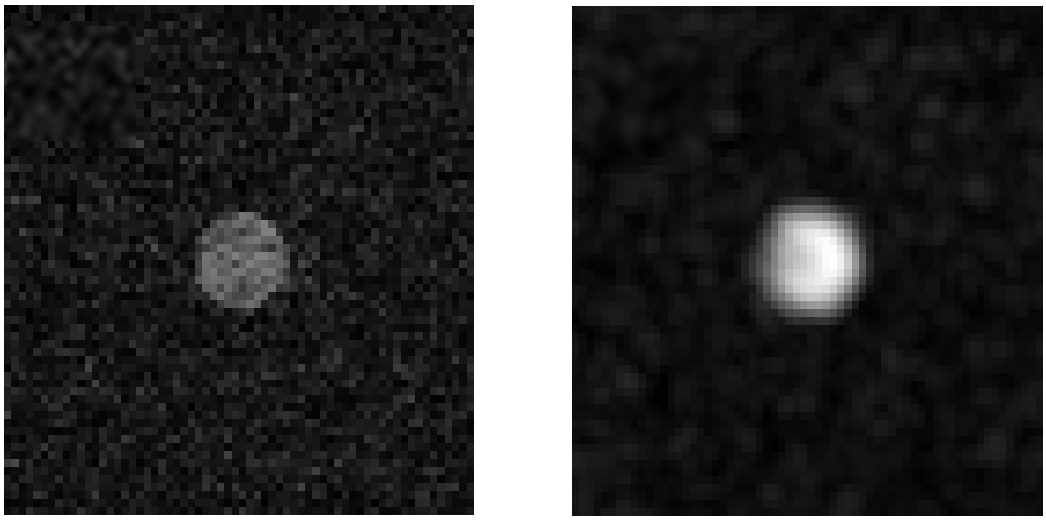

Figure S8. Comparison of the sensitivities of ^{31}P MRI/MRSI measurements of PMPC polymer probe using ^{31}P RARE (A) and ^{31}P CSI (B) sequences. Images were acquired with the same repetition time (TR) and geometry/resolution (TR = 1s, FOV = 4 x 4 cm, slice thickness = 1 cm); No post-process filtration was performed.