

Figure S1 : ^1H NMR of PPI-1-PhA in CD_3OD

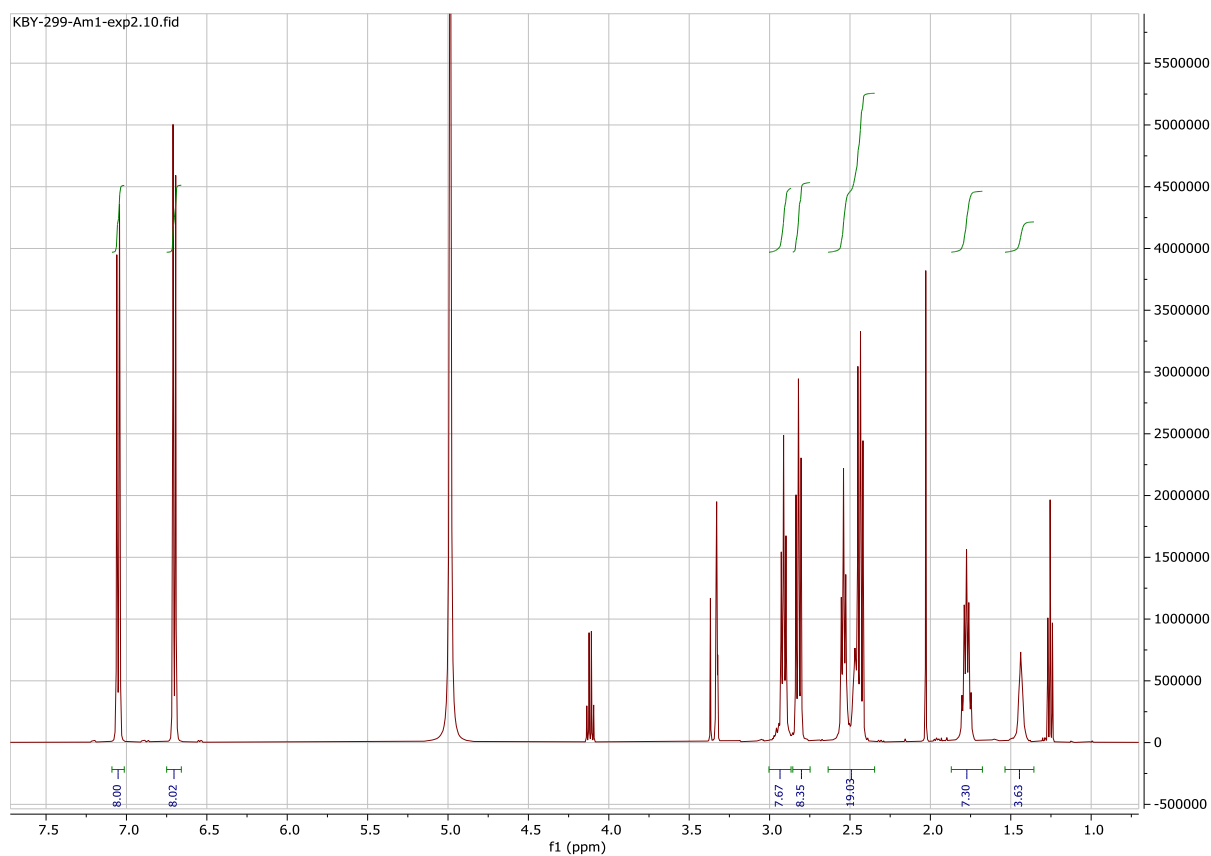


Figure S2 : ^{13}C NMR of PPI-1-PhA in CD_3OD

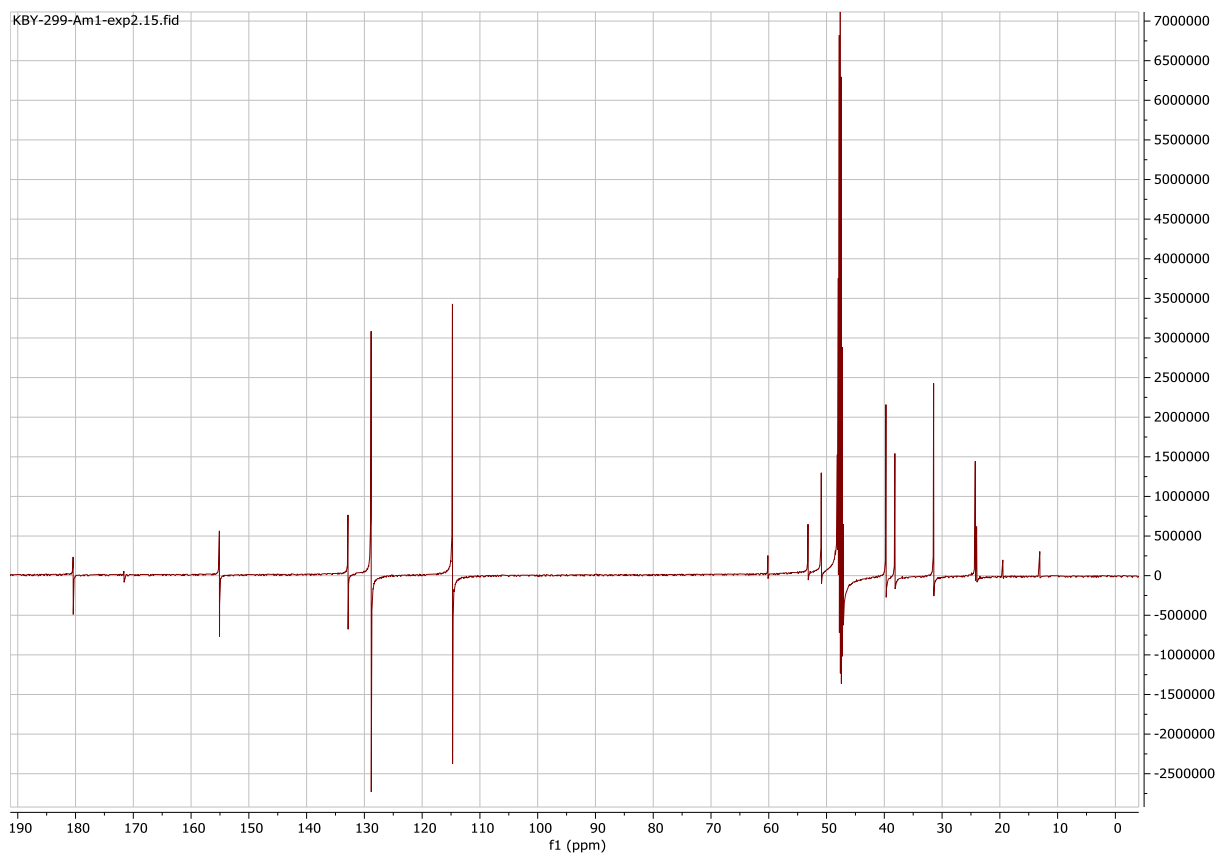


Figure S3 : COSY NMR of PPI-1-PhA in CD₃OD

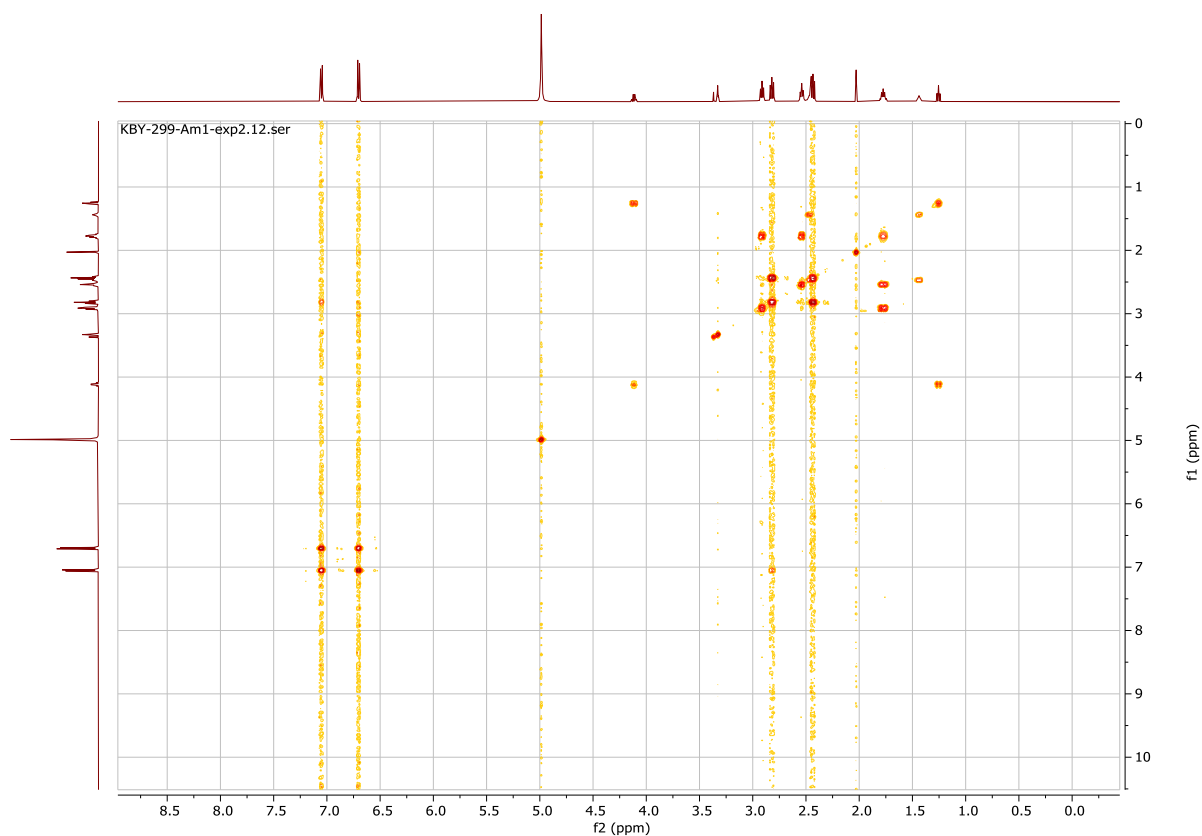


Figure S4 : HSQC NMR of PPI-1-PhA in CD₃OD

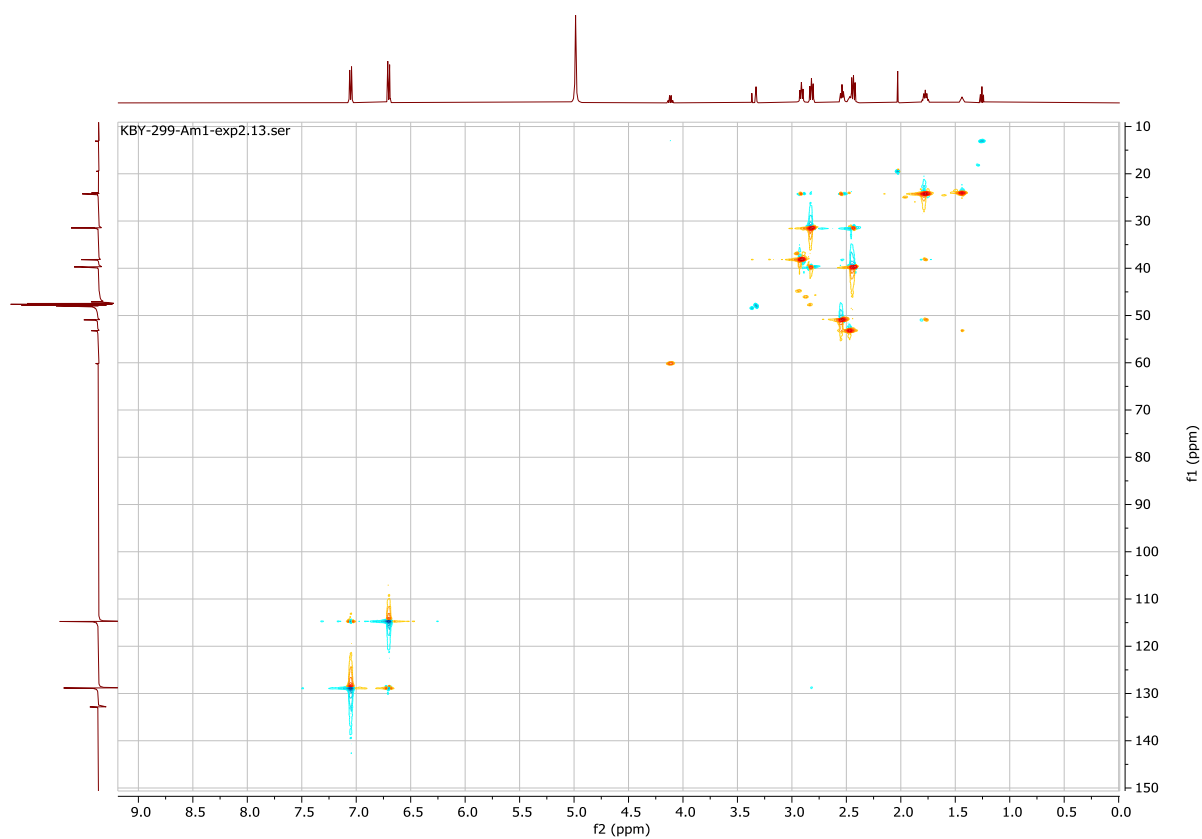


Figure S5: HMBC NMR of PPI-1-PhA in CD₃OD

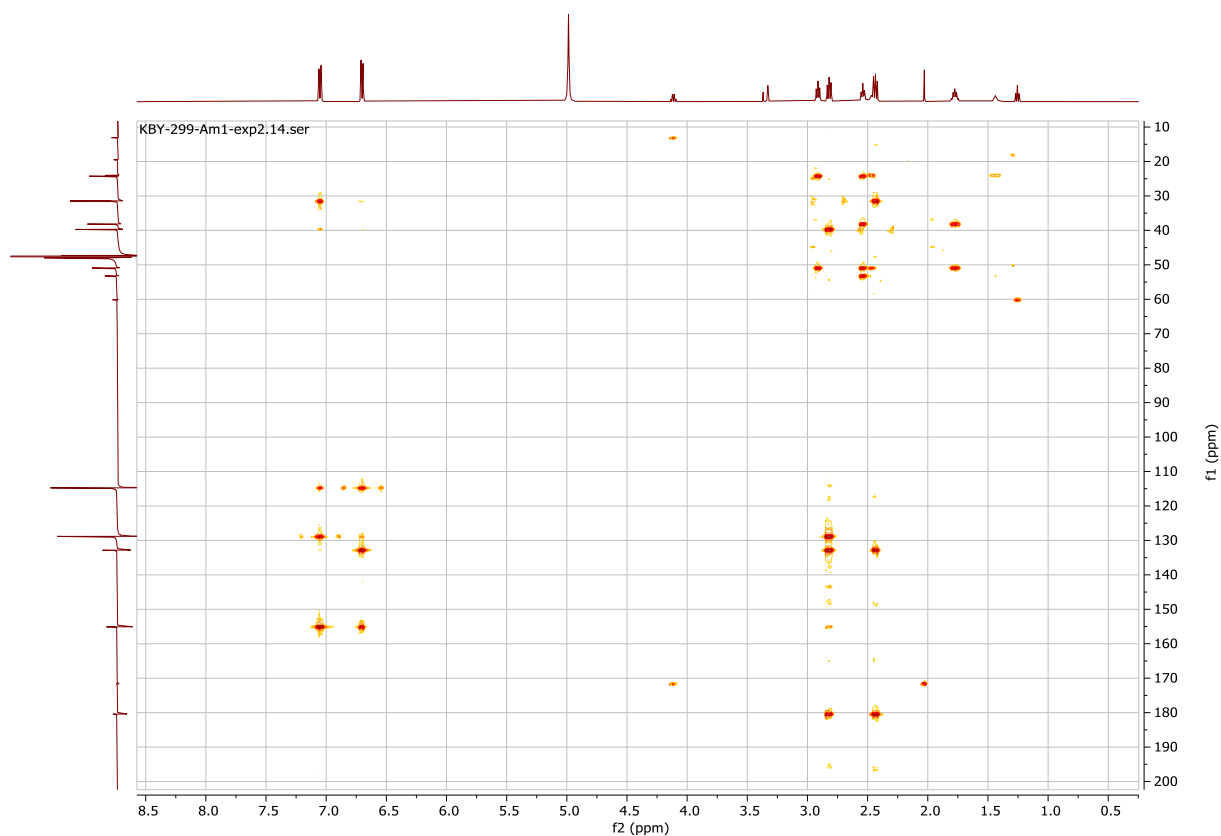


Figure S6: ¹H NMR of PPI-2-PhA in CD₃OD

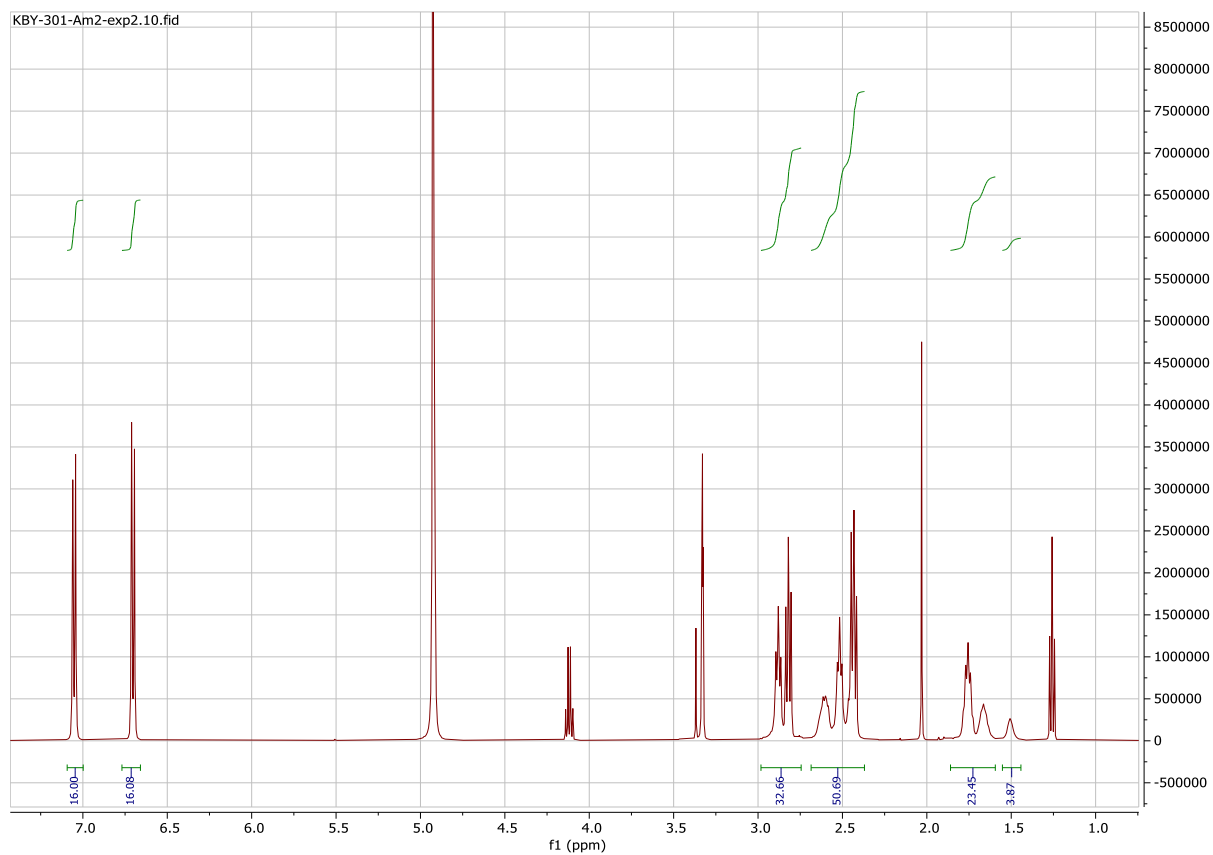


Figure S7: ^{13}C NMR of PPI-2-PhA in CD_3OD

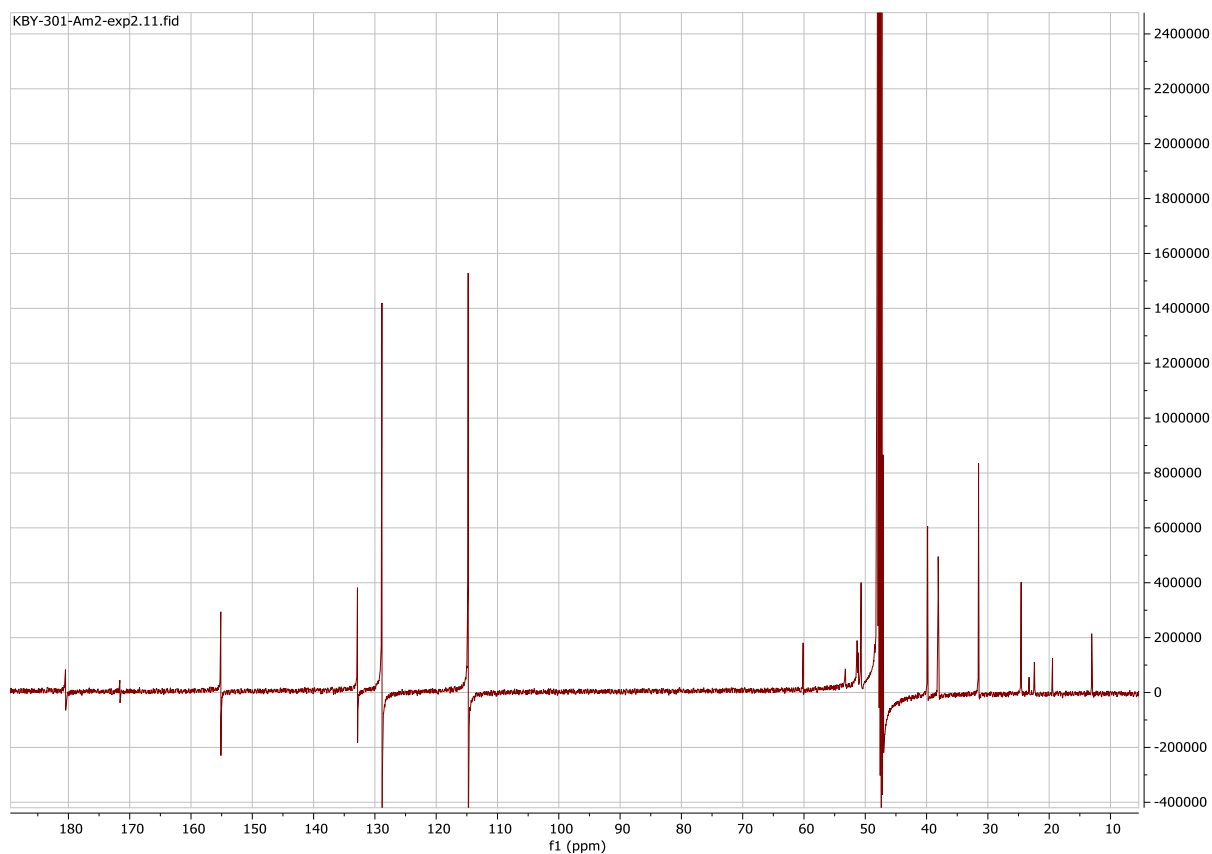


Figure S8: ^1H NMR of PPI-3-PhA in CD_3OD

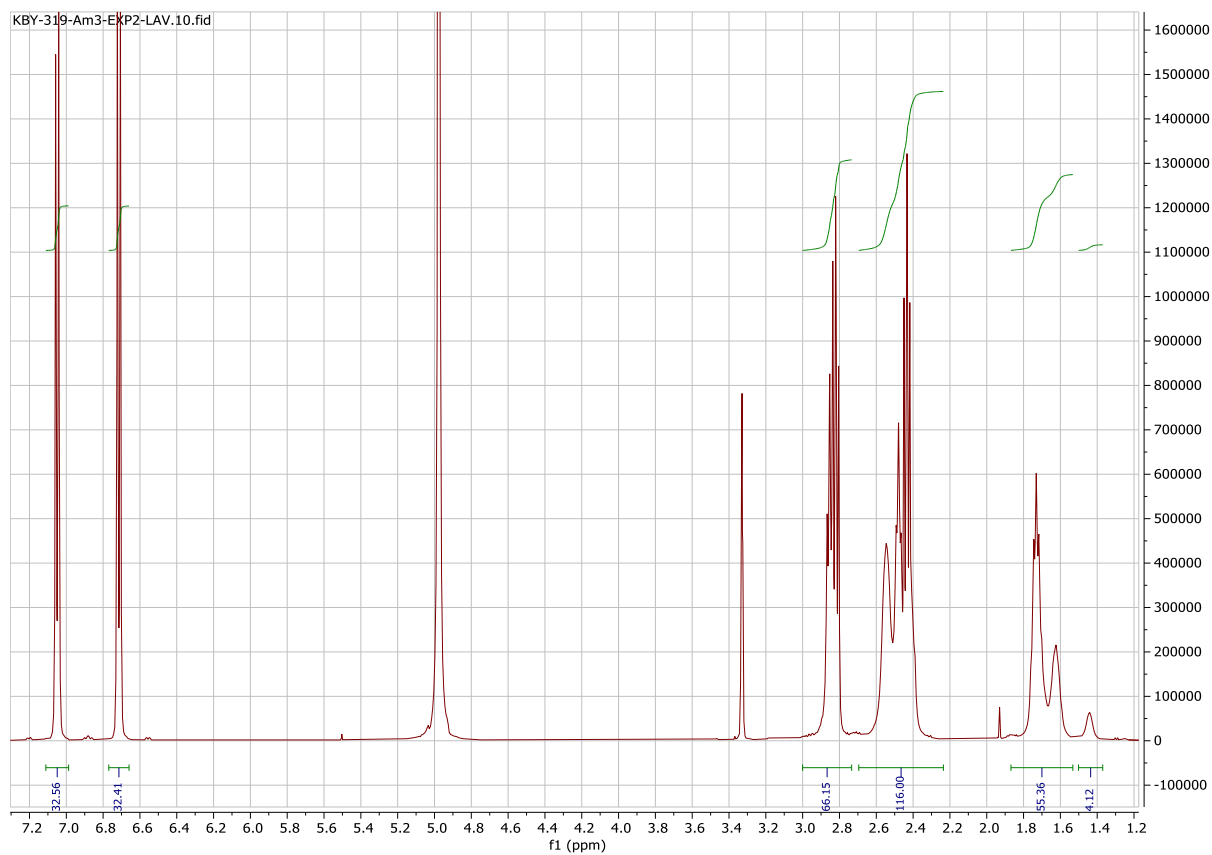


Figure S9: ^1H NMR of PPI-1-FA in CD_3OD

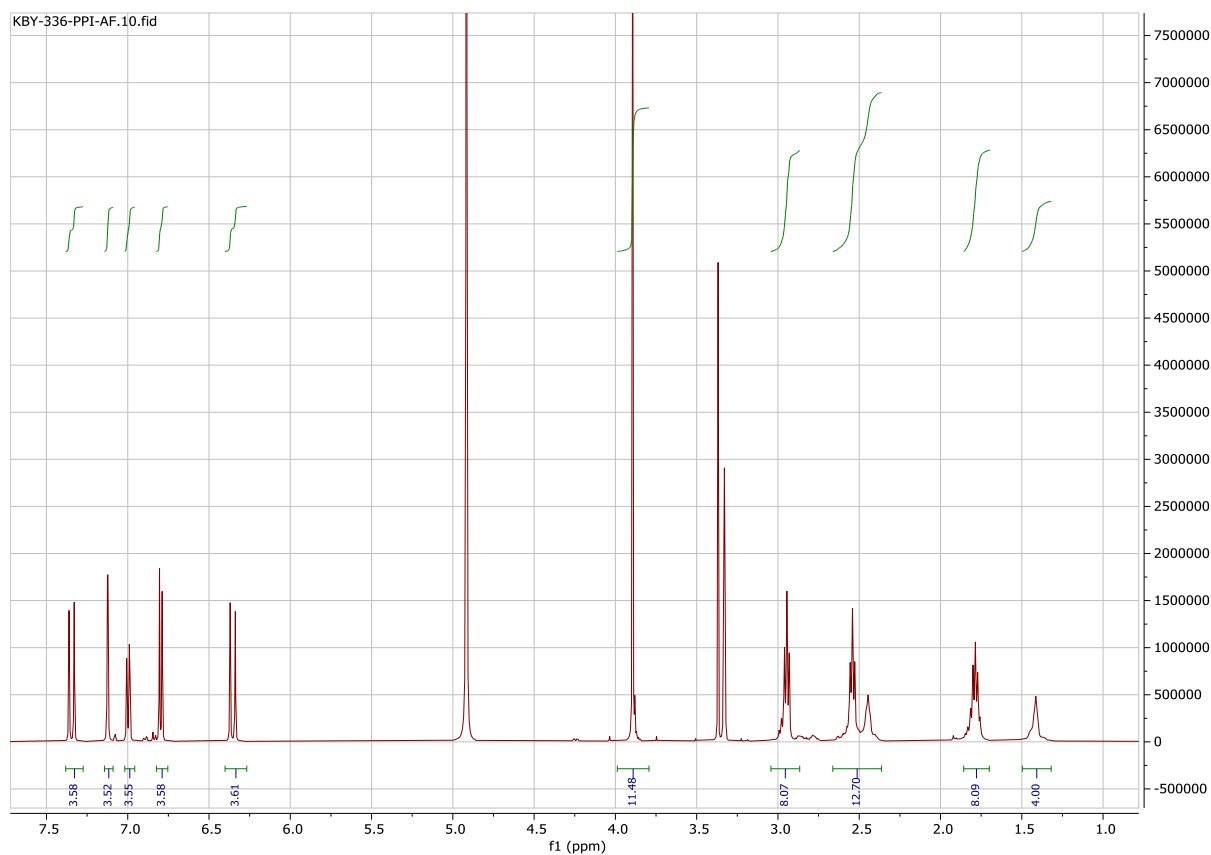


Figure S10: ^{13}C NMR of PPI-1-FA in CD_3OD

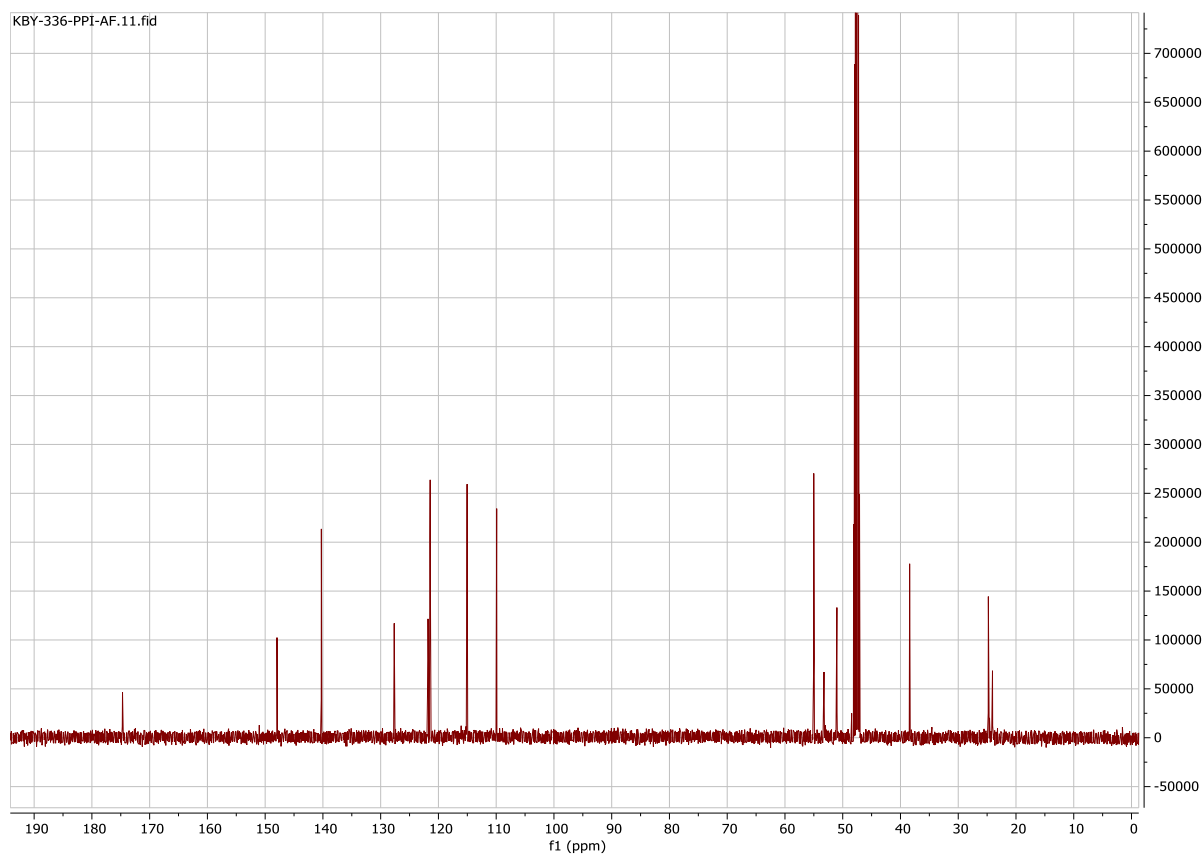


Figure S11: COSY NMR of PPI-1-FA in CD₃OD

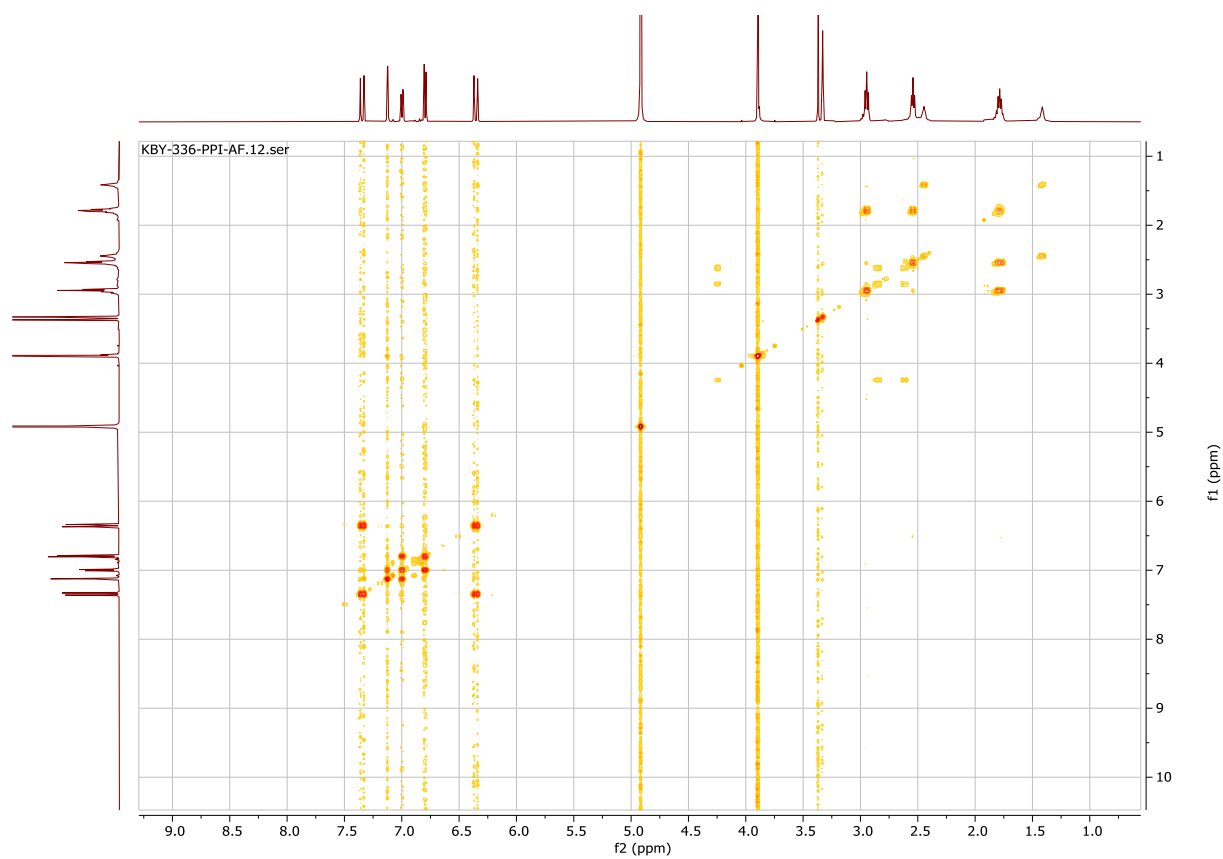


Figure S12: HSQC NMR of PPI-1-FA in CD₃OD

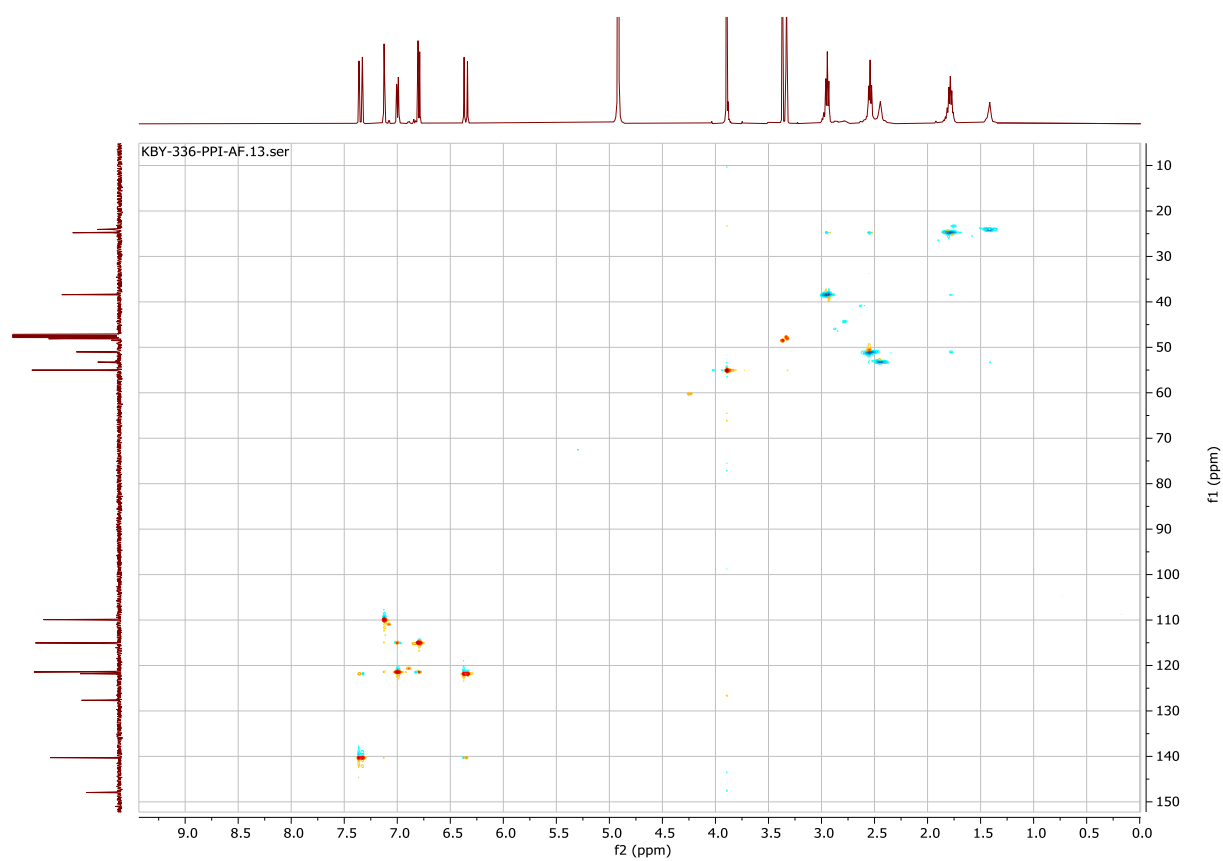


Figure S13: HMBC NMR of PPI-1-FA in CD₃OD

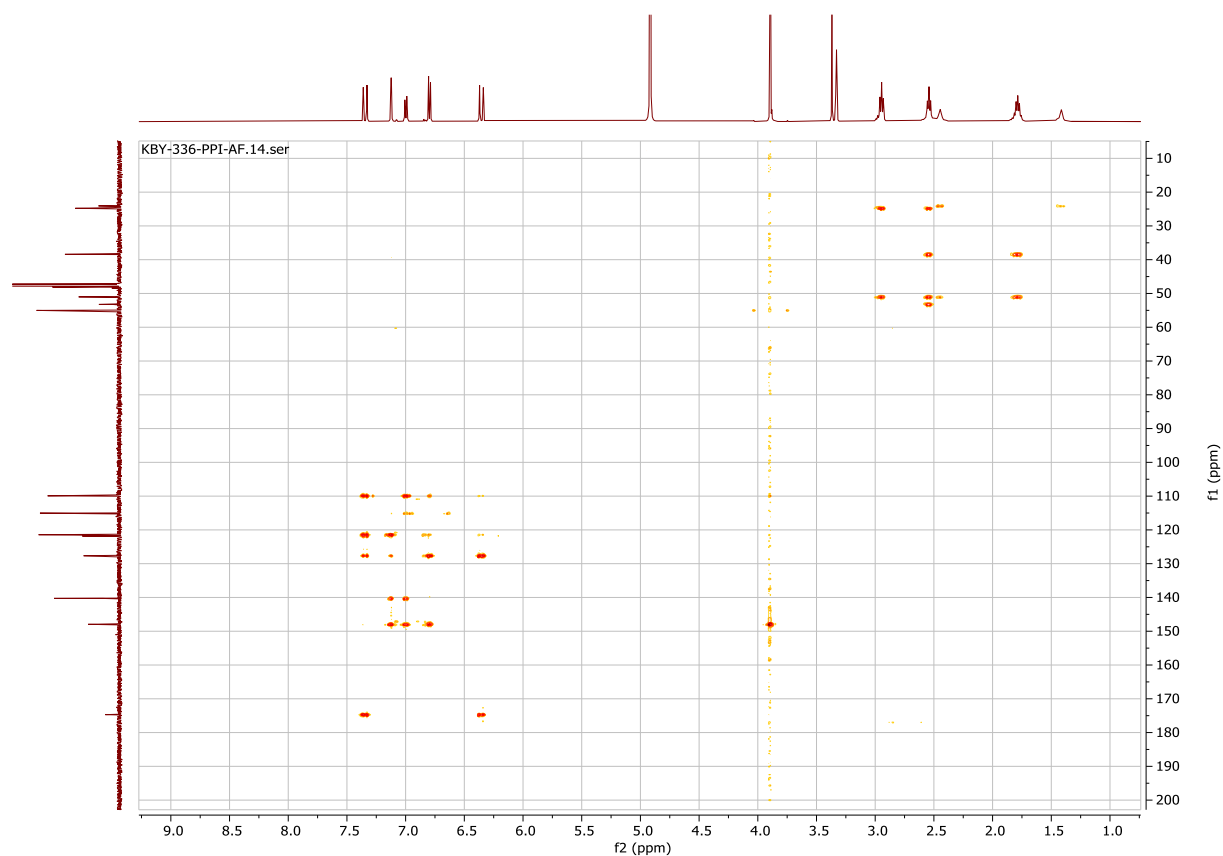


Figure S14: ¹H NMR of PPI-2-FA in CD₃OD

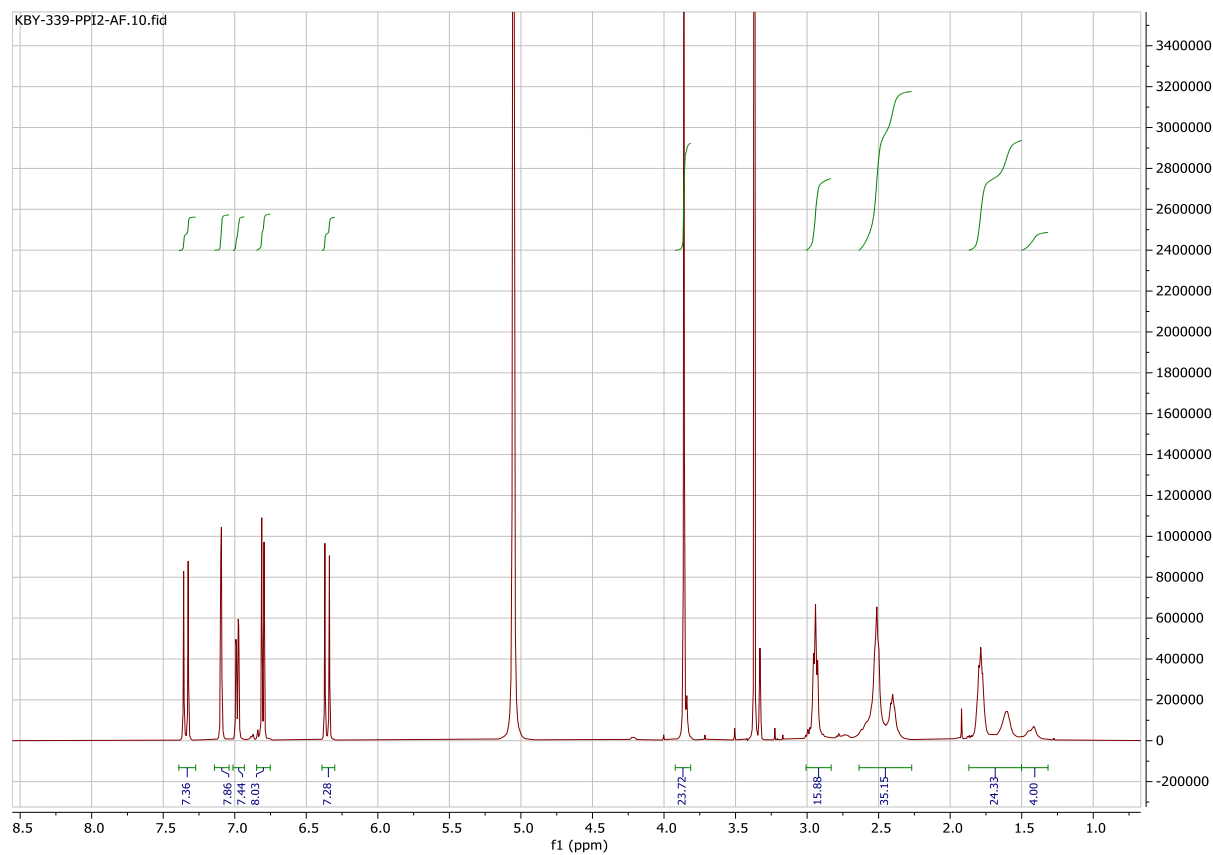


Figure S15: ^{13}C NMR of PPI-2-FA in CD_3OD

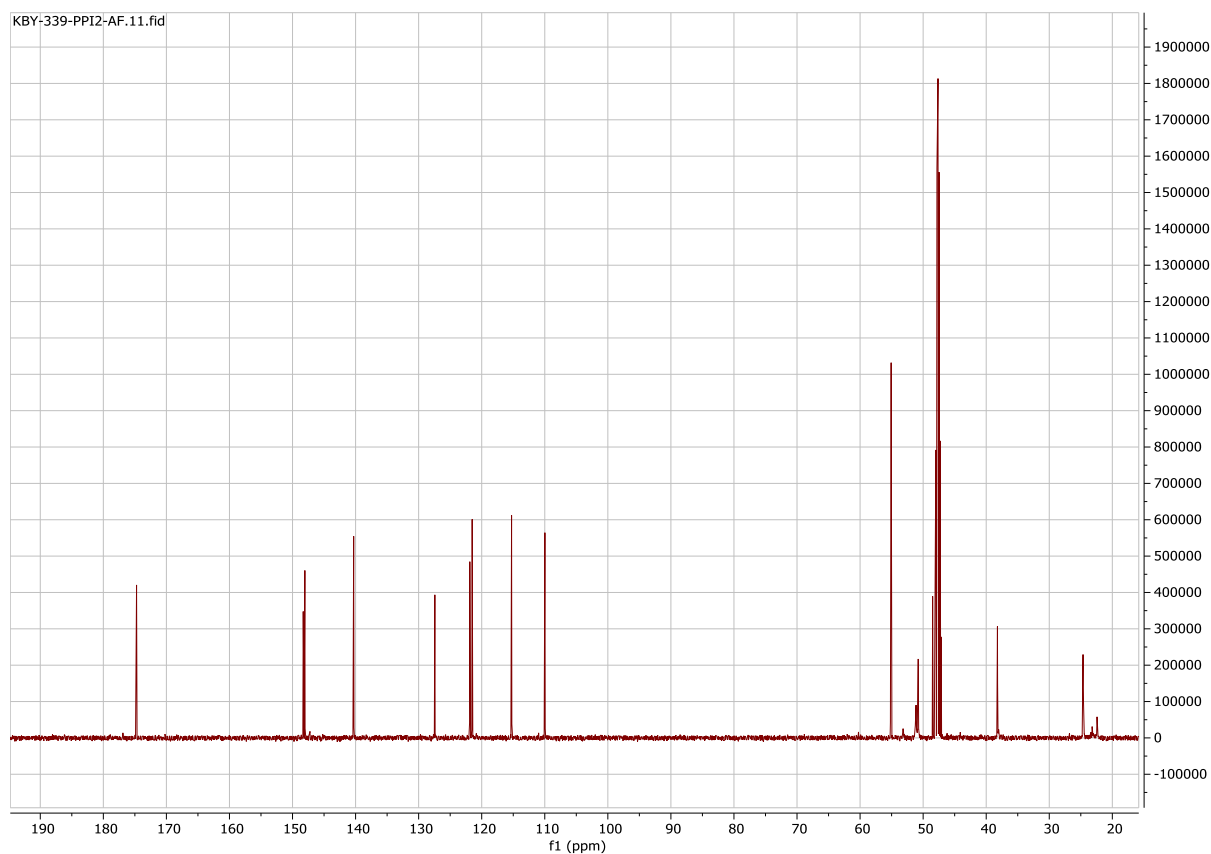


Figure S16: ^1H NMR of PPI-3-FA in CD_3OD

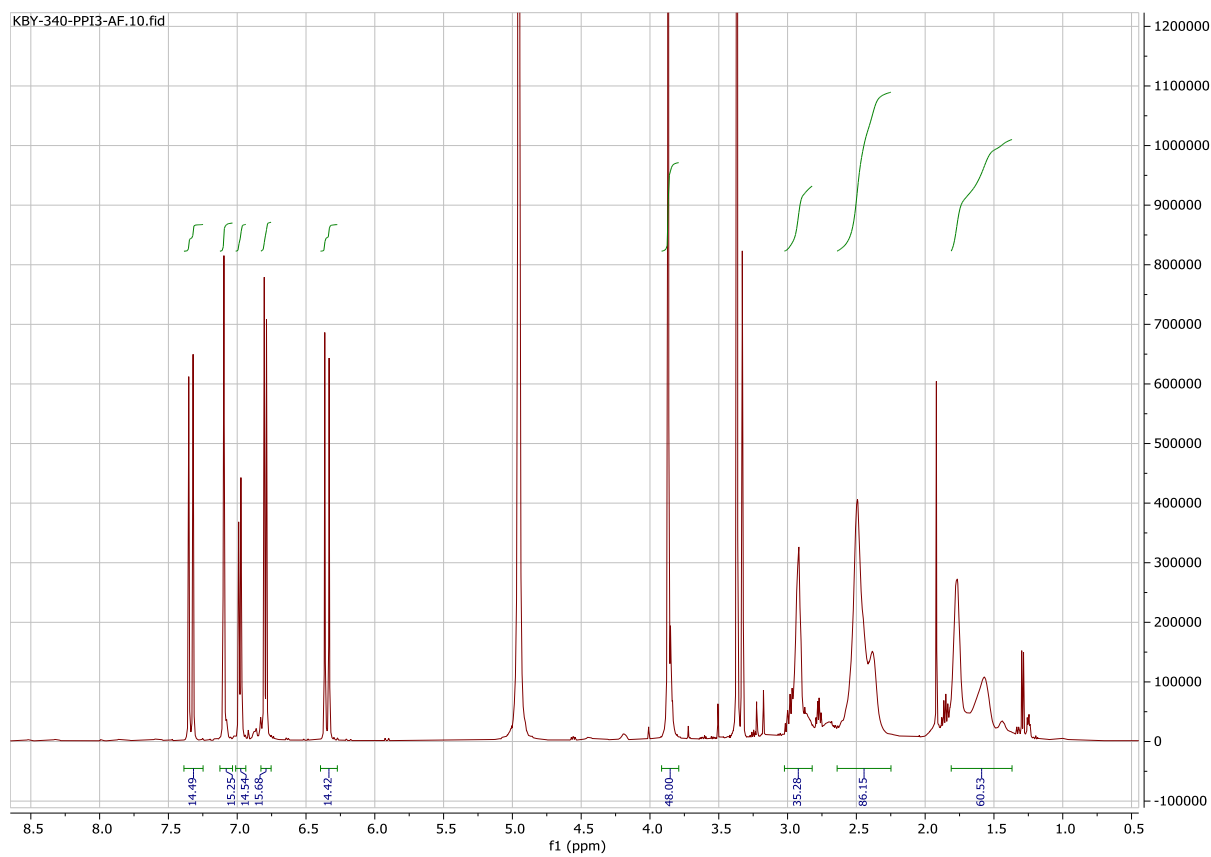


Figure S17: ^{13}C NMR of PPI-3-FA in CD_3OD

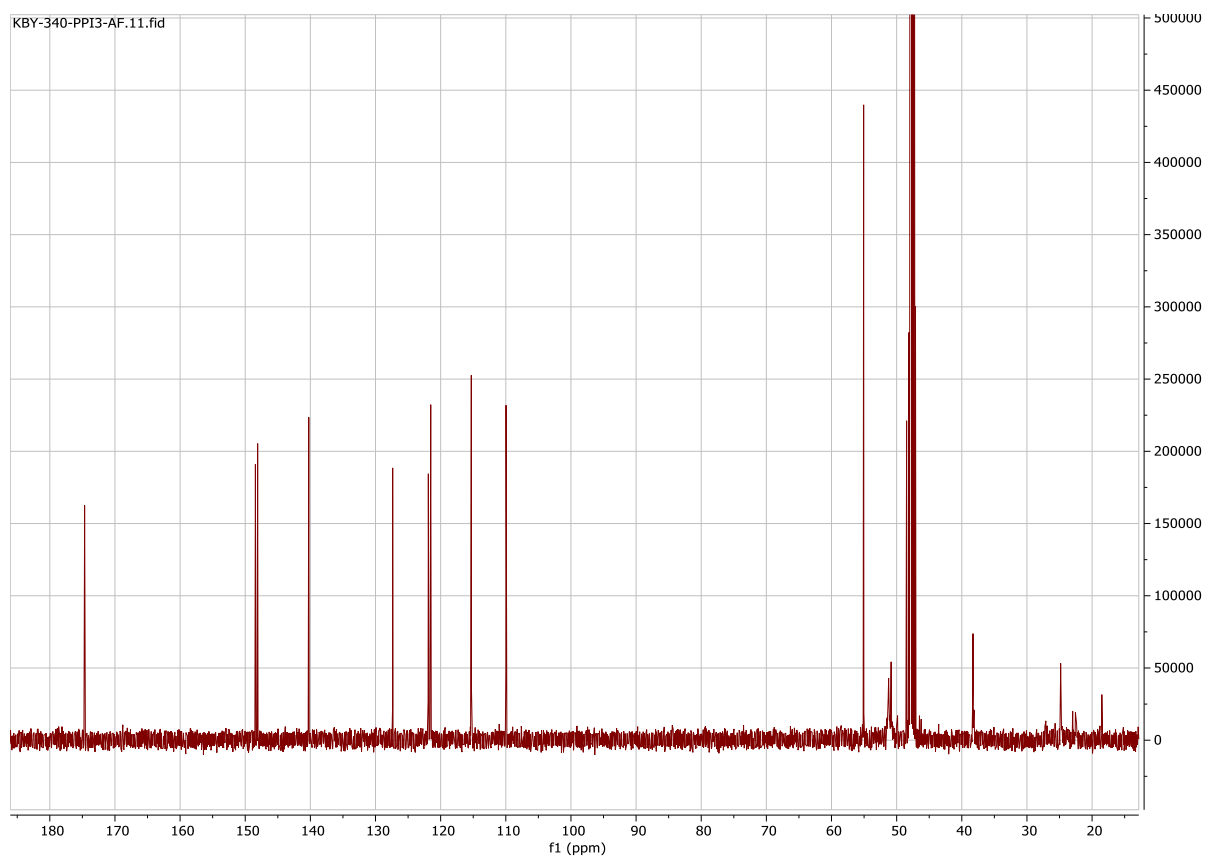


Figure S18: IR of PPI-3-FA

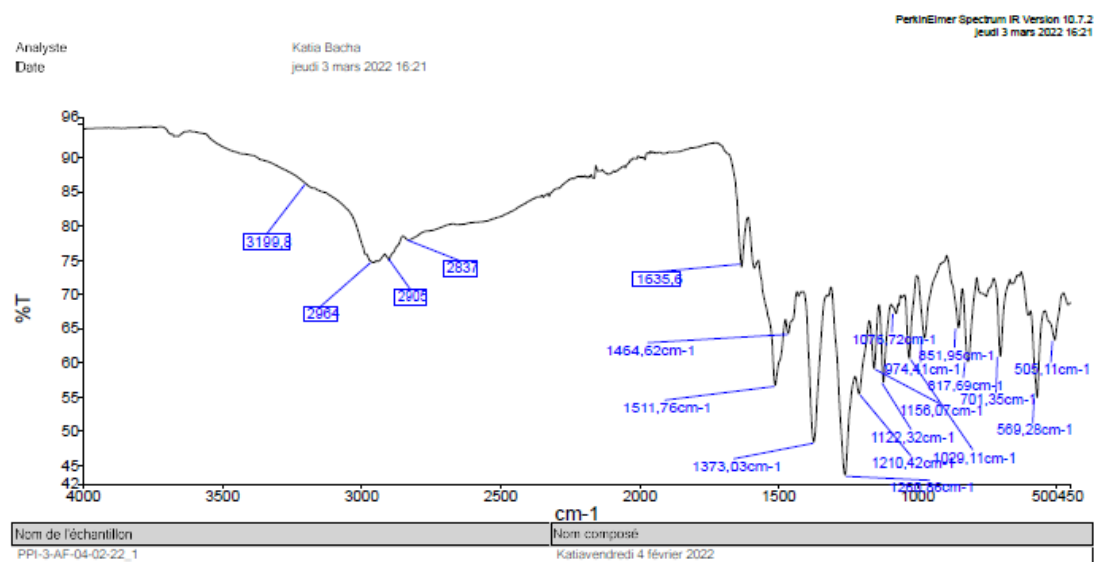


Figure S19: ^1H NMR of PPI-1-CA in $(\text{CD}_3)_2\text{SO}$

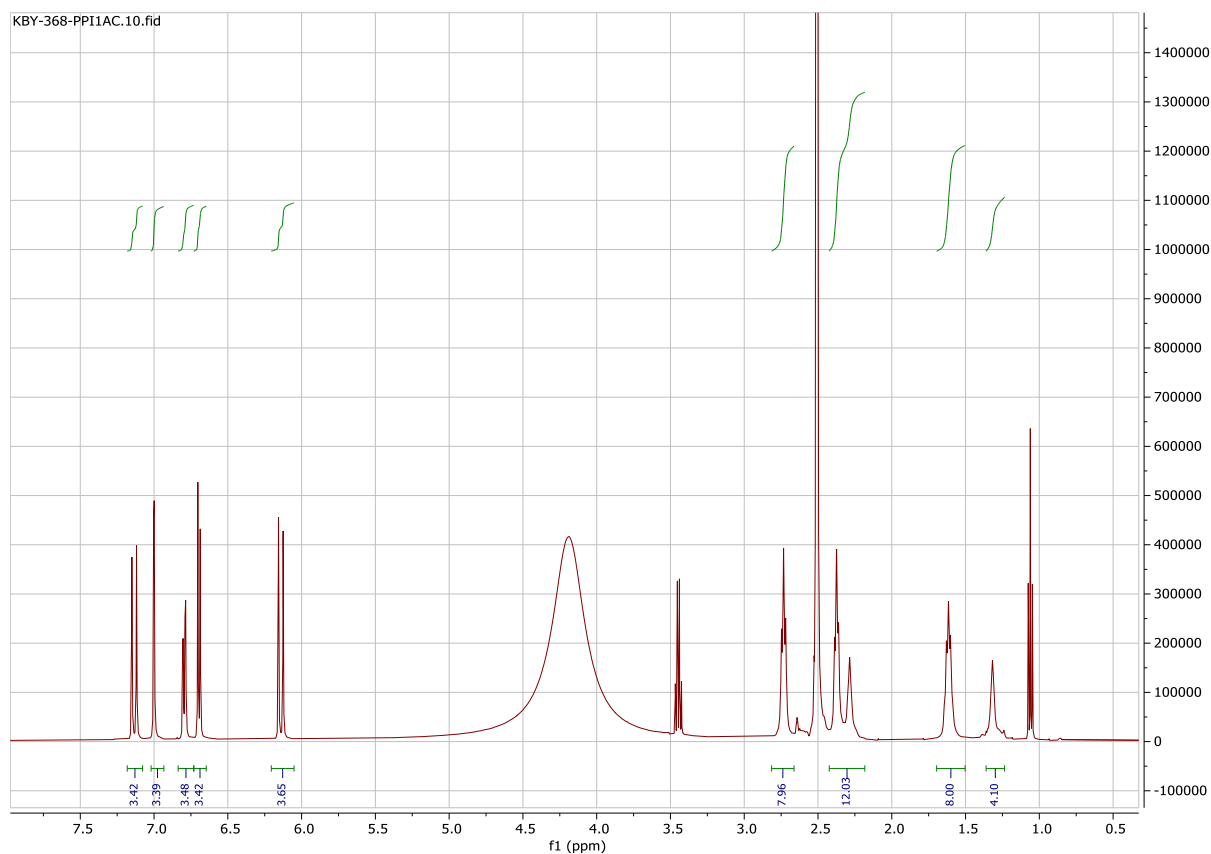


Figure S20: ^{13}C NMR of PPI-1-CA in $(\text{CD}_3)_2\text{SO}$

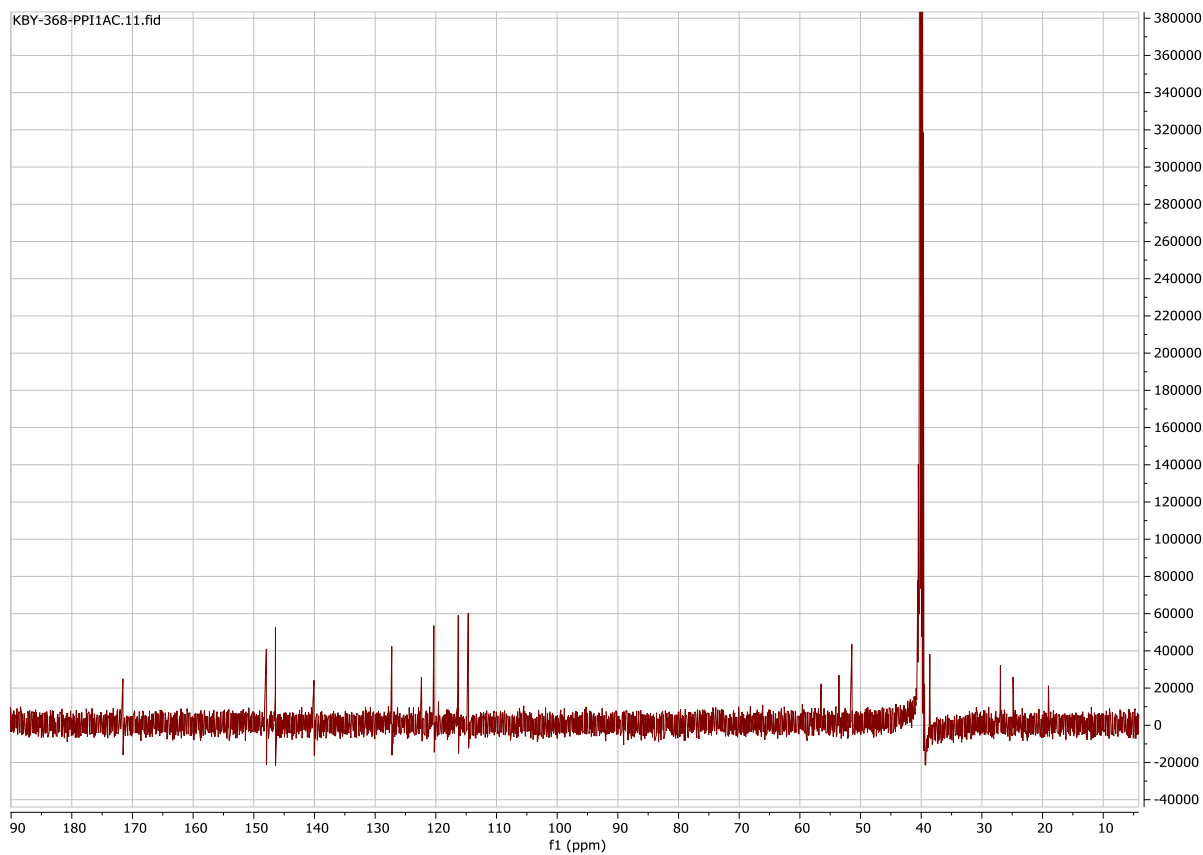


Figure S21: ^1H NMR of PPI-2-CA in $(\text{CD}_3)_2\text{SO}$

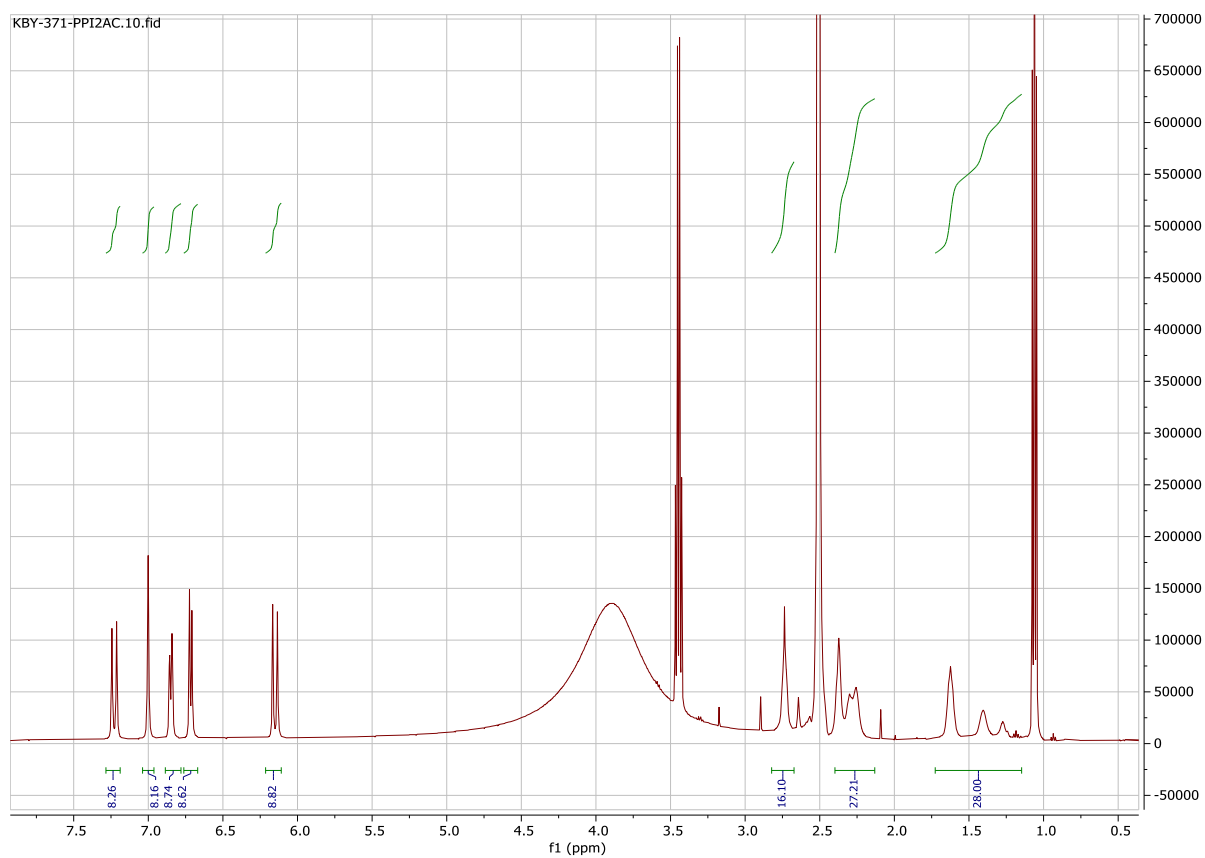


Figure S22: ^{13}C NMR of PPI-2-CA in $(\text{CD}_3)_2\text{SO}$

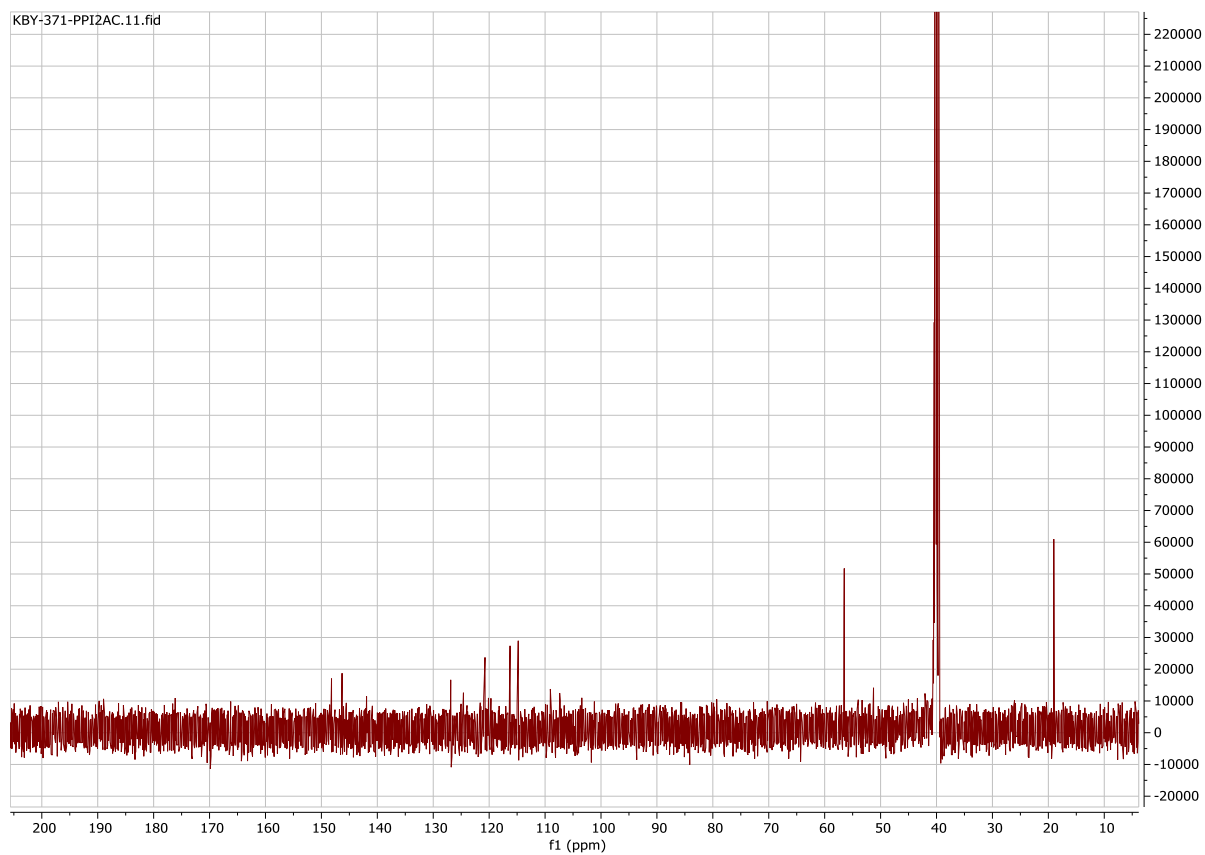


Figure S23: ^1H NMR of PPI-3-CA in $(\text{CD}_3)_2\text{SO}$ (weak solubility)

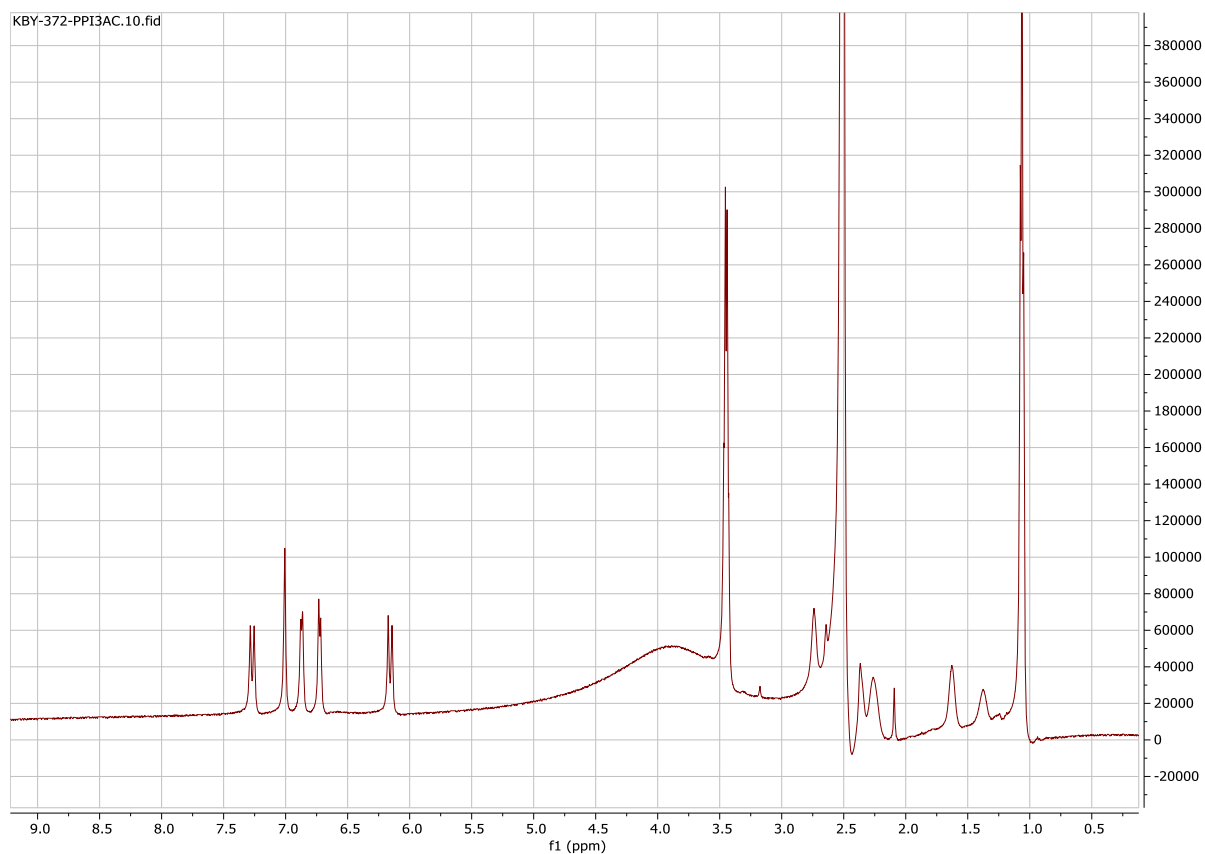


Figure S24: ^{13}C NMR de PPI-3-CA in $(\text{CD}_3)_2\text{SO}$ (weak solubility)

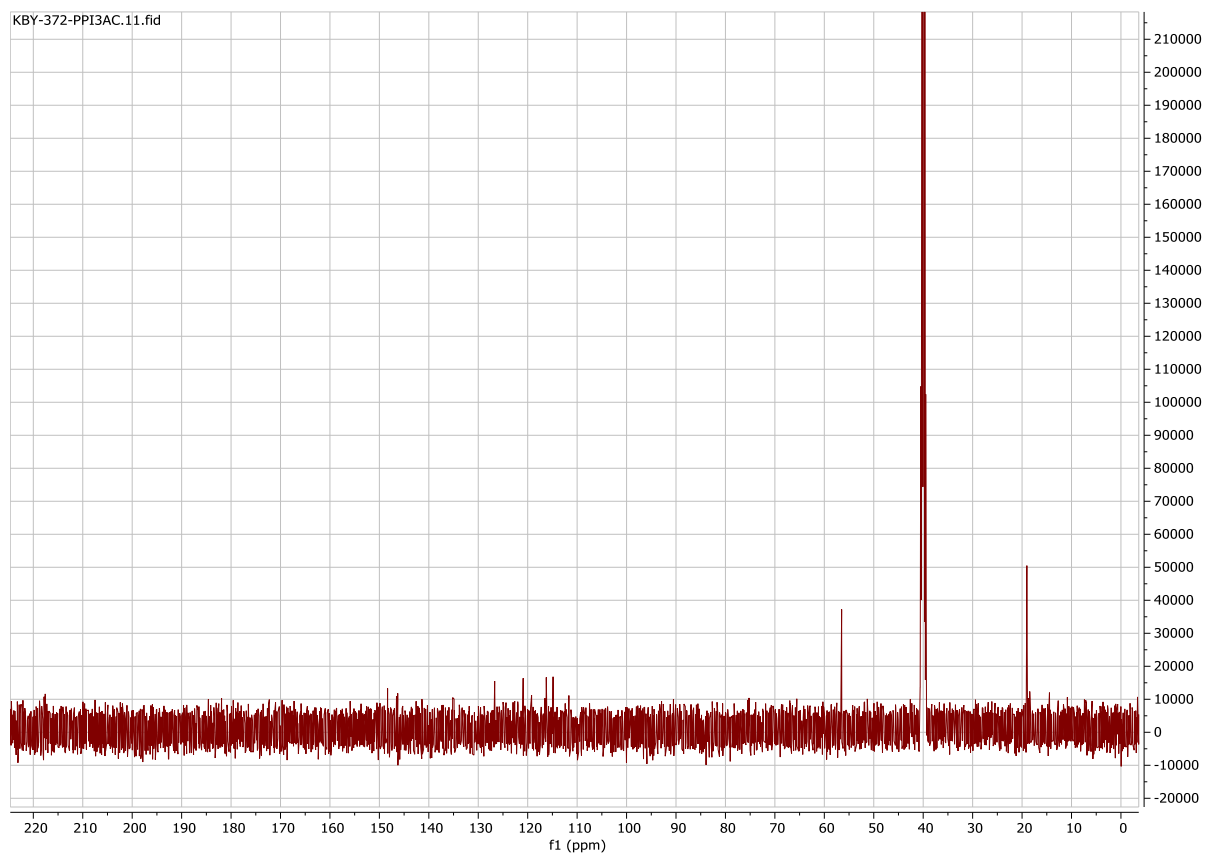


Figure S25: IR of PPI-3-CA

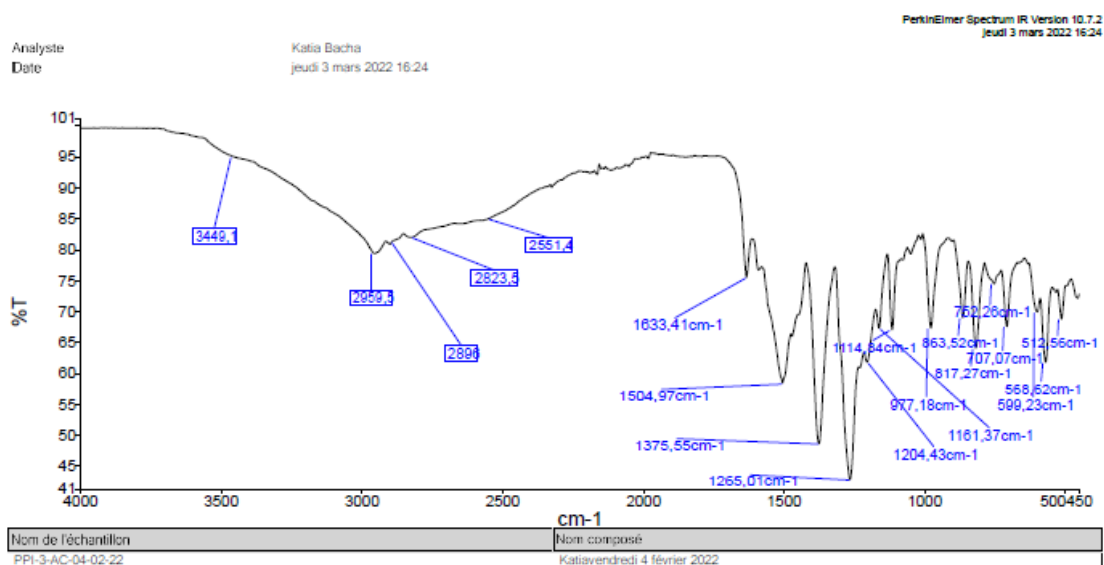


Figure S26: IR of Caffeic acid

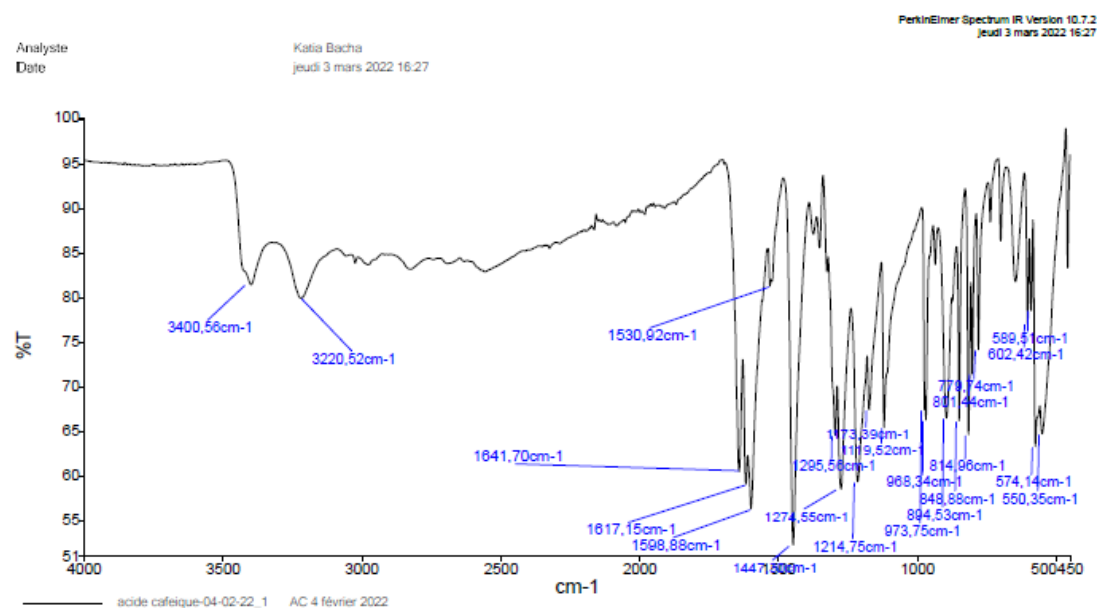


Figure S27: ^1H NMR of PAMAM-1-PhA in CD_3OD

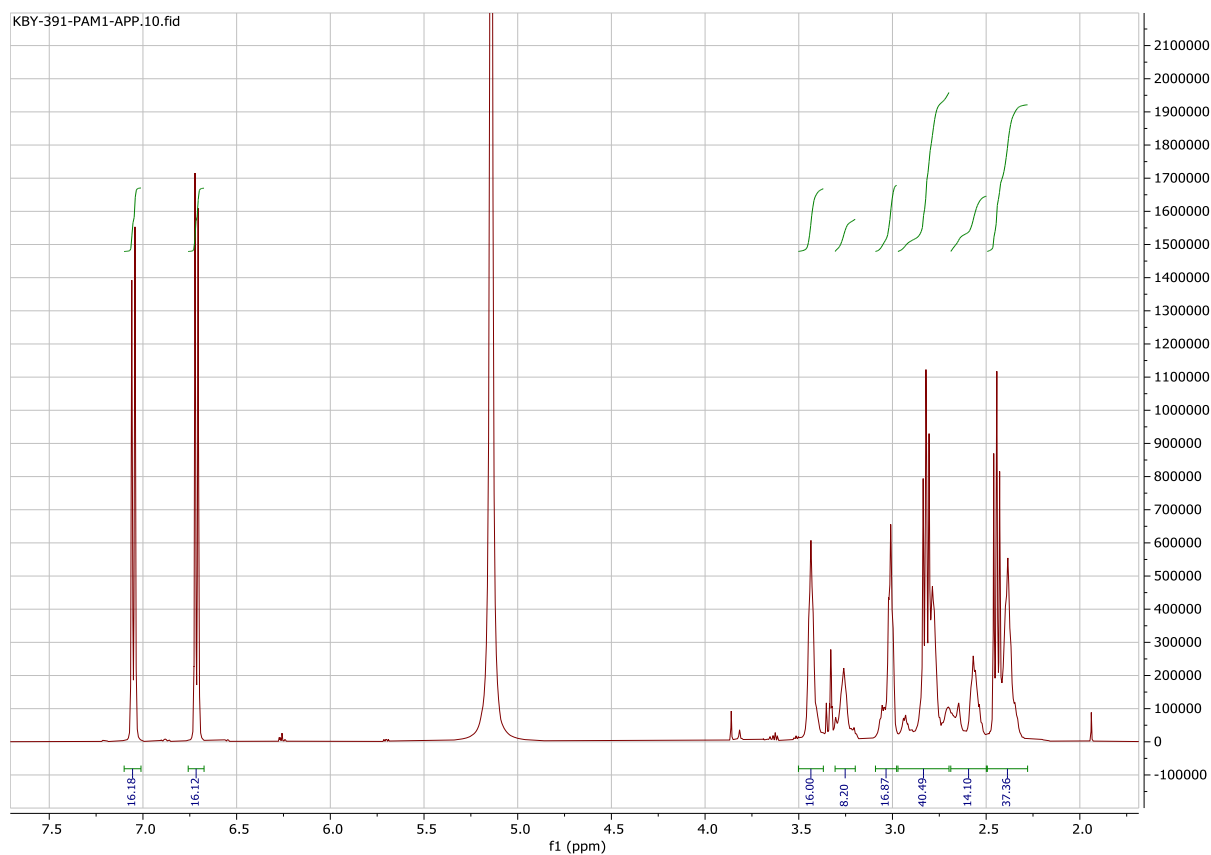


Figure S28: ^{13}C NMR of PAMAM-1-PhA in CD_3OD

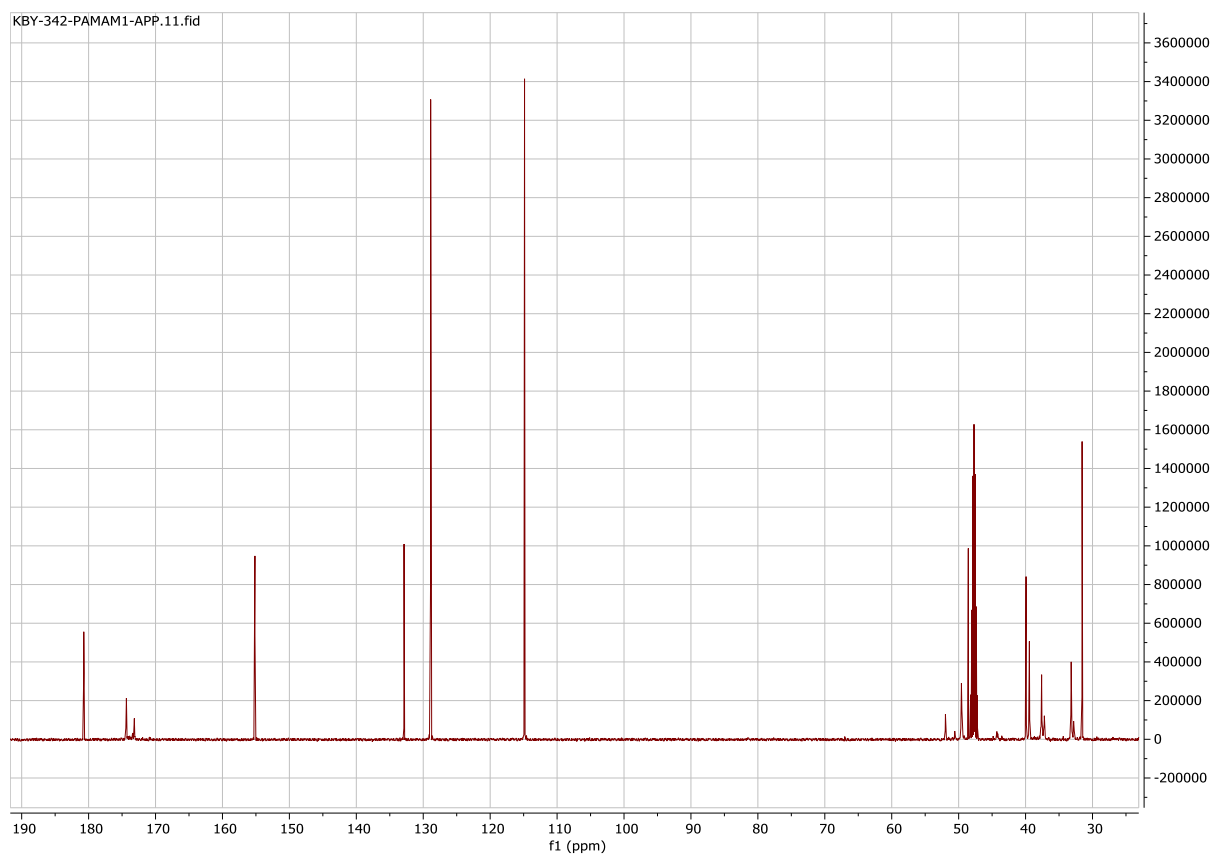


Figure S29: COSY NMR of PAMAM-1-PhA in CD₃OD

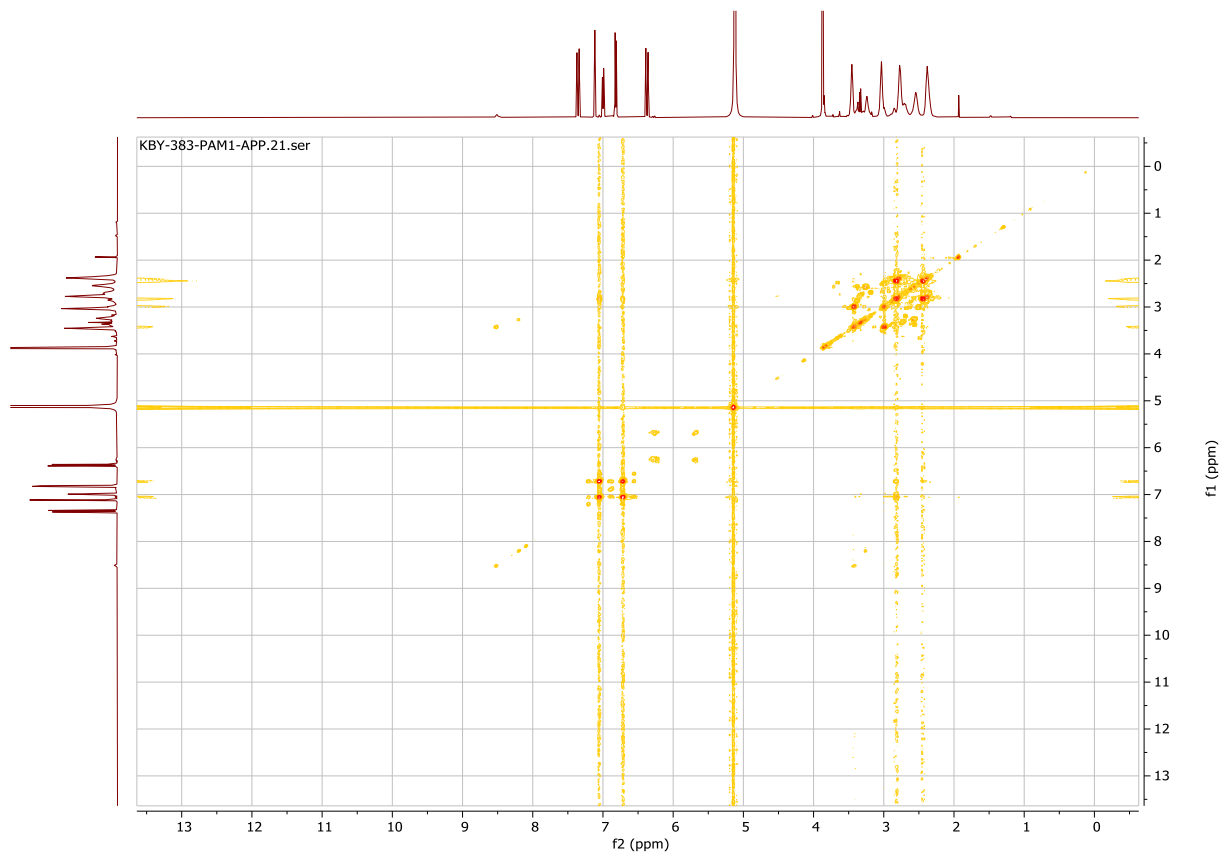


Figure S30: IR of PAMAM-1-PhA

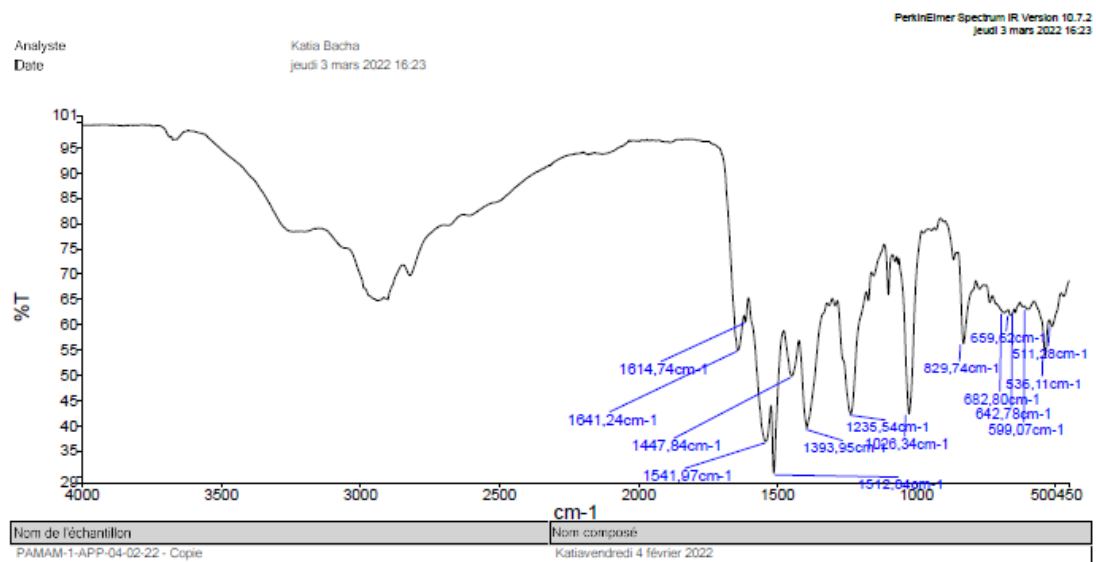


Figure S31: IR of Phloretic acid

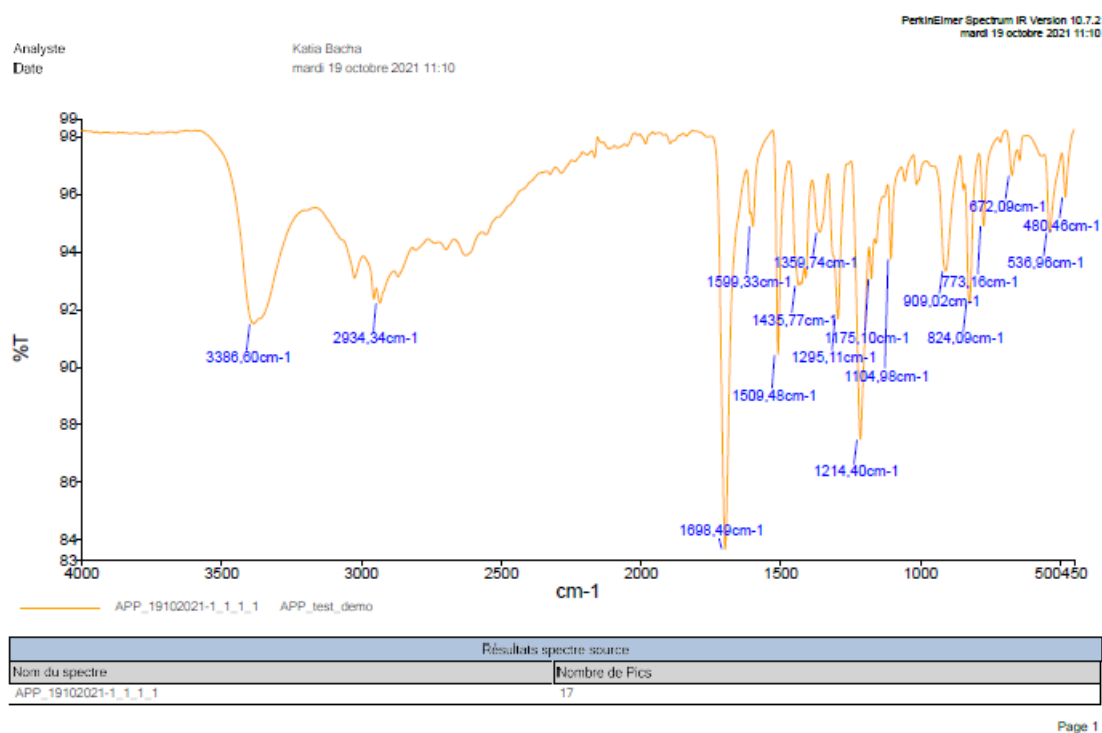


Figure S32: ^1H NMR of PAMAM-2-PhA in CD_3OD

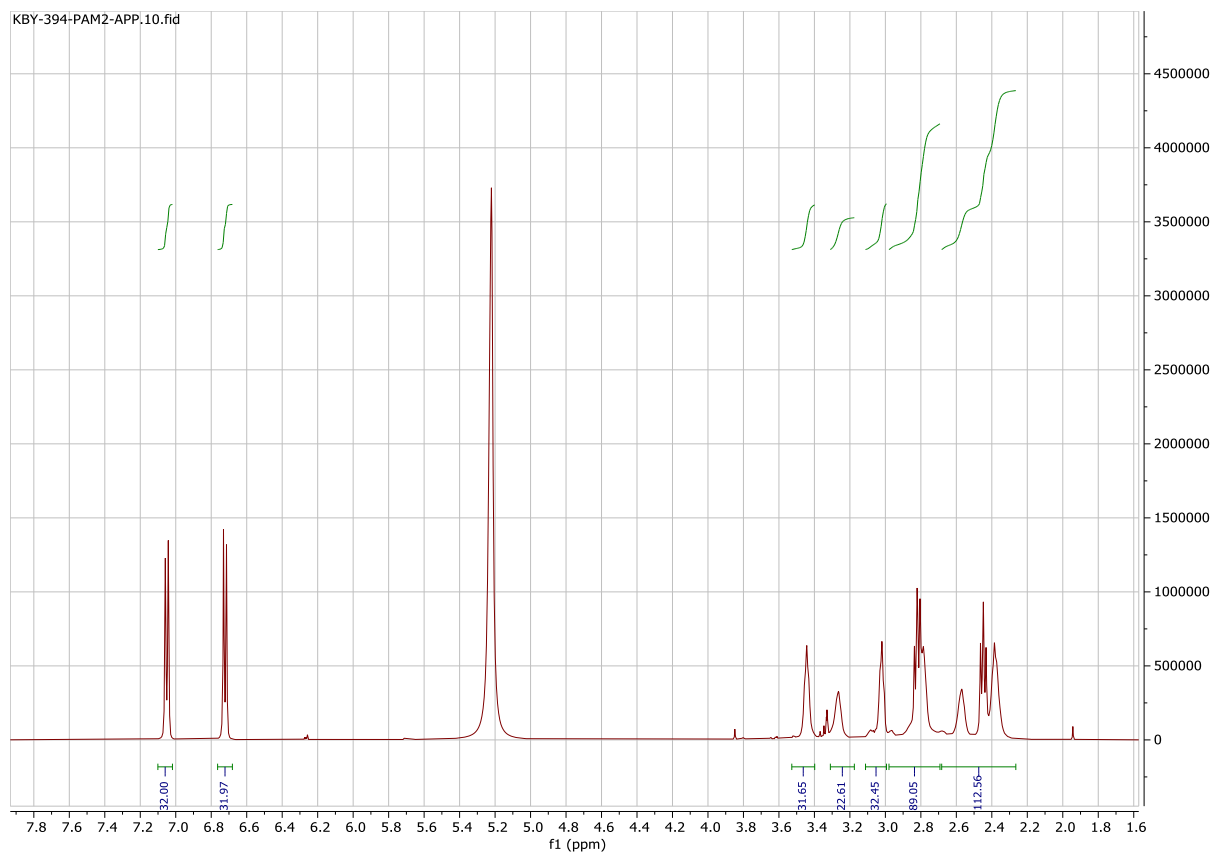


Figure S33: IR of PAMAM-2-PhA

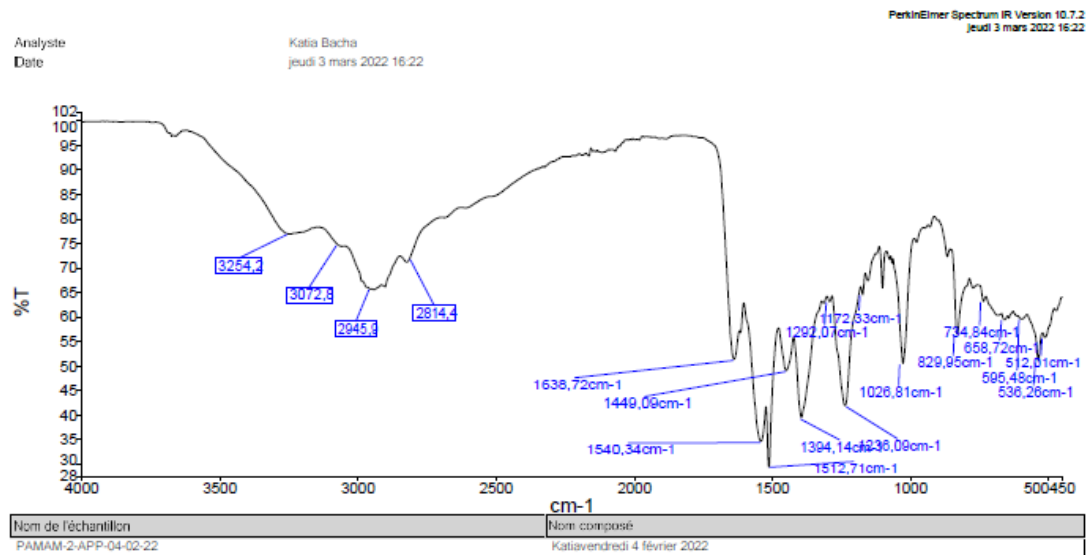


Figure S34: ¹H NMR of PAMAM-3-PhA in CD₃OD

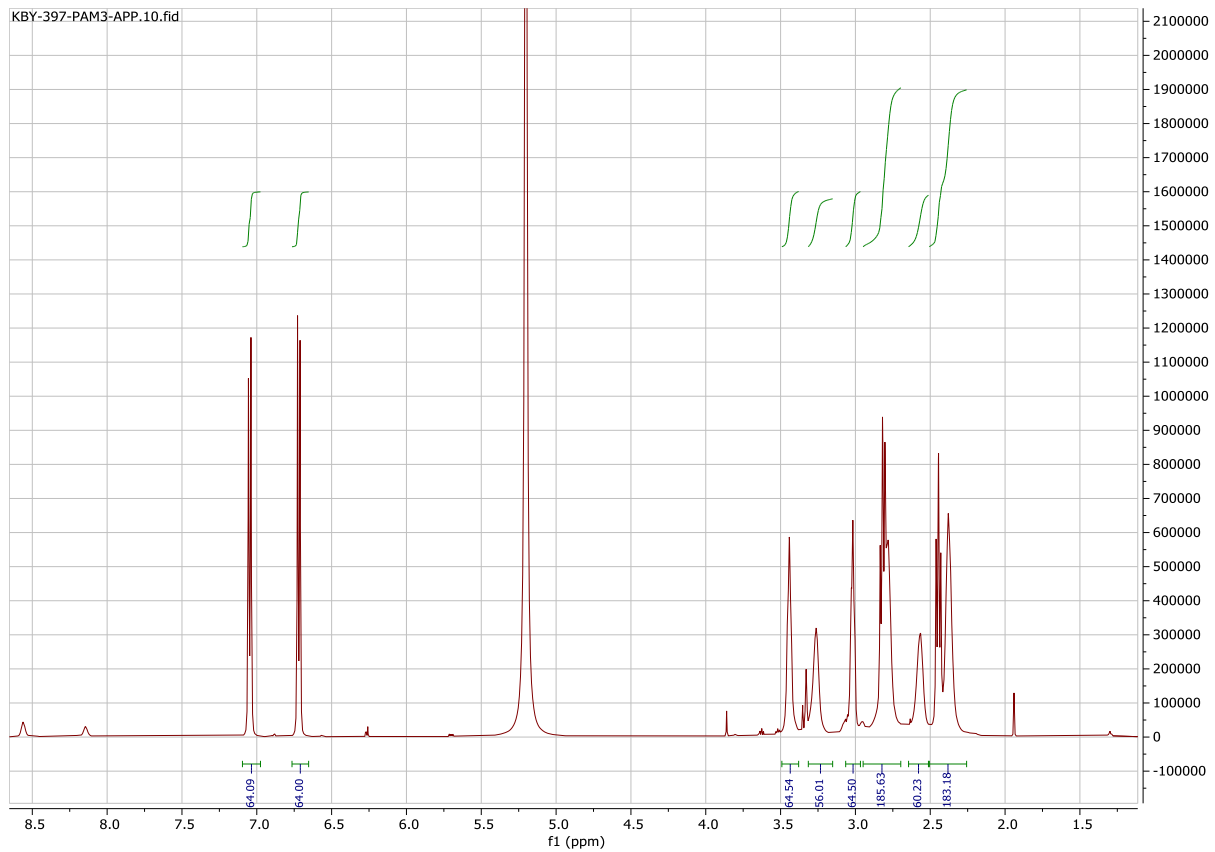


Figure S35: ^{13}C NMR of PAMAM-3-PhA in CD_3OD

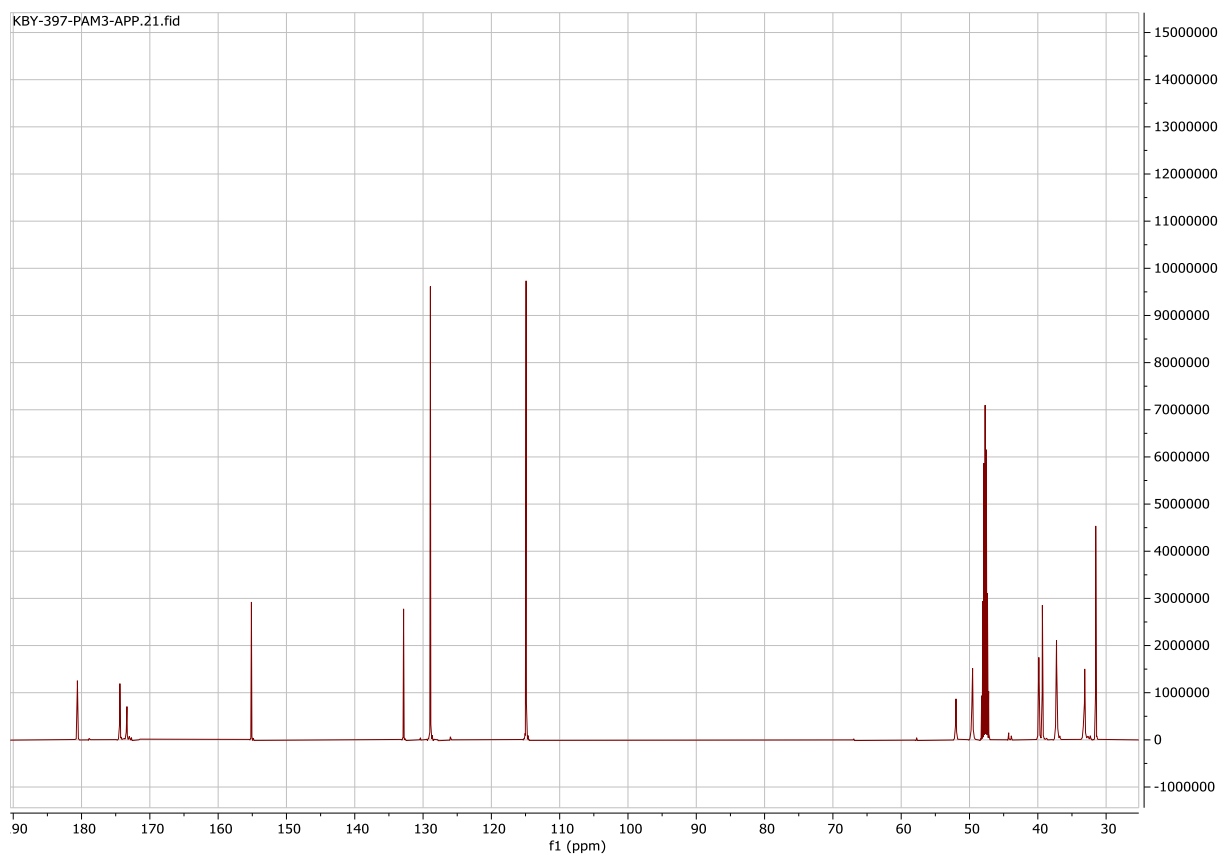


Figure S36: HMBC NMR of PAMAM-3-PhA in CD_3OD

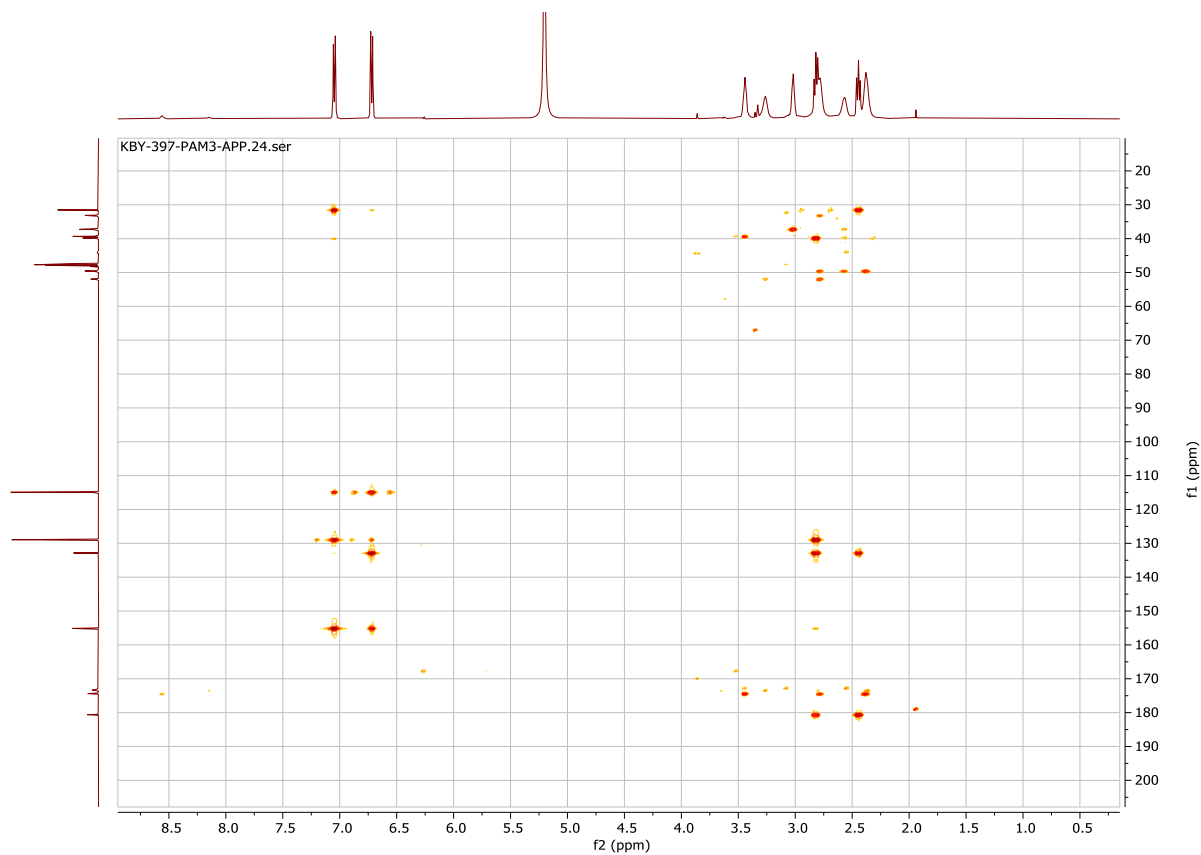


Figure S37: ^1H NMR of PAMAM-1-FA in CD_3OD

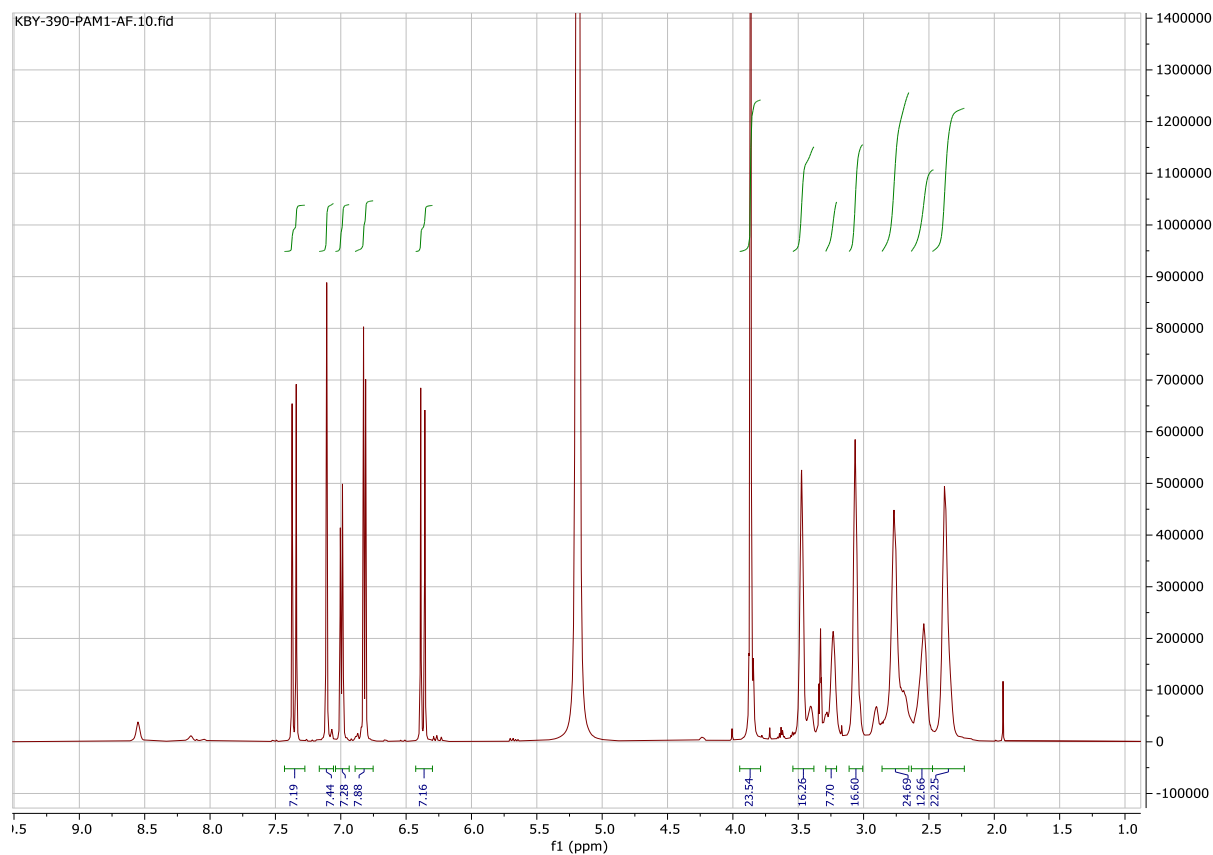


Figure S38: ^{13}C NMR of PAMAM-1-FA in CD_3OD

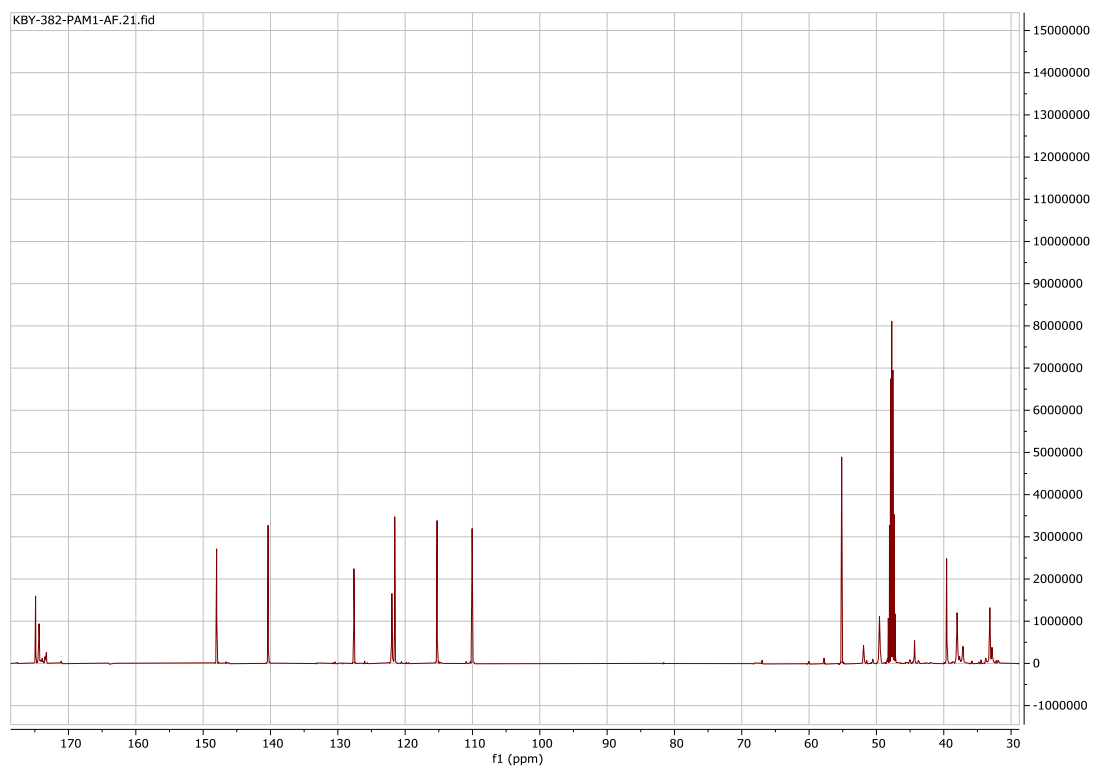


Figure S39: ^1H NMR of PAMAM-2-FA in CD_3OD

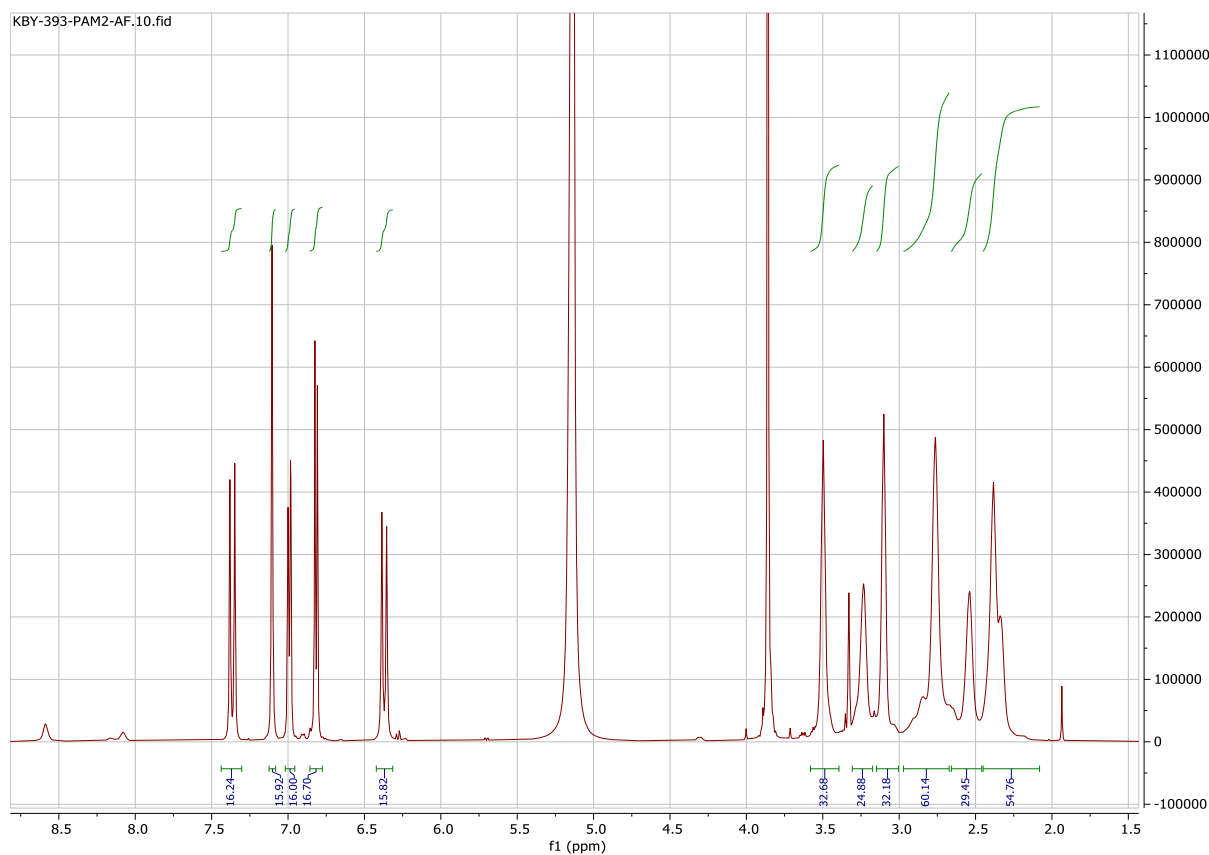


Figure S40: IR of PAMAM-2-FA

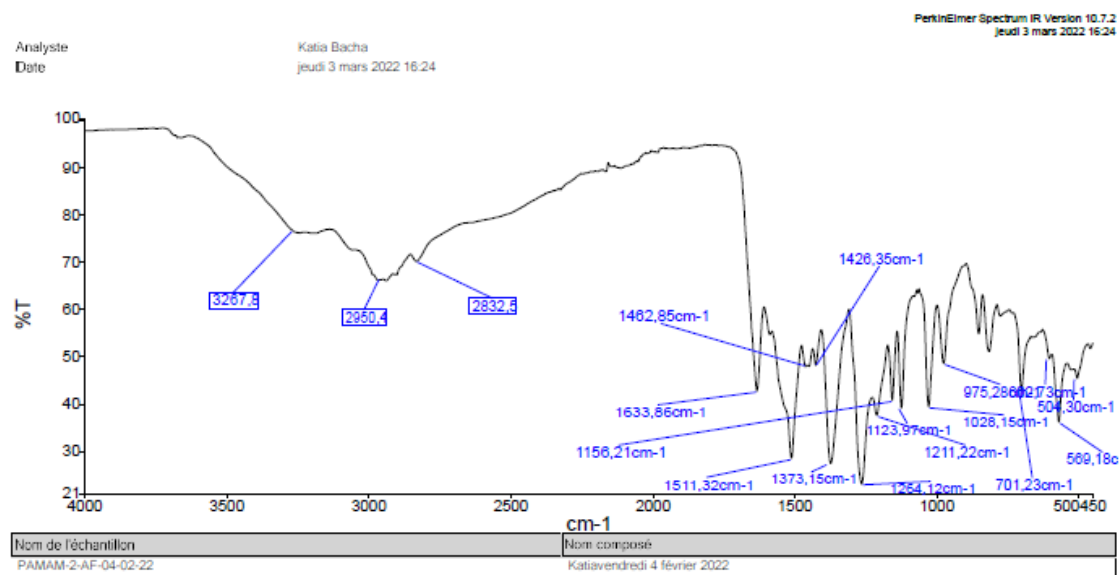


Figure S41: ^1H NMR of PAMAM-1-CA in $(\text{CD}_3)_2\text{SO}$

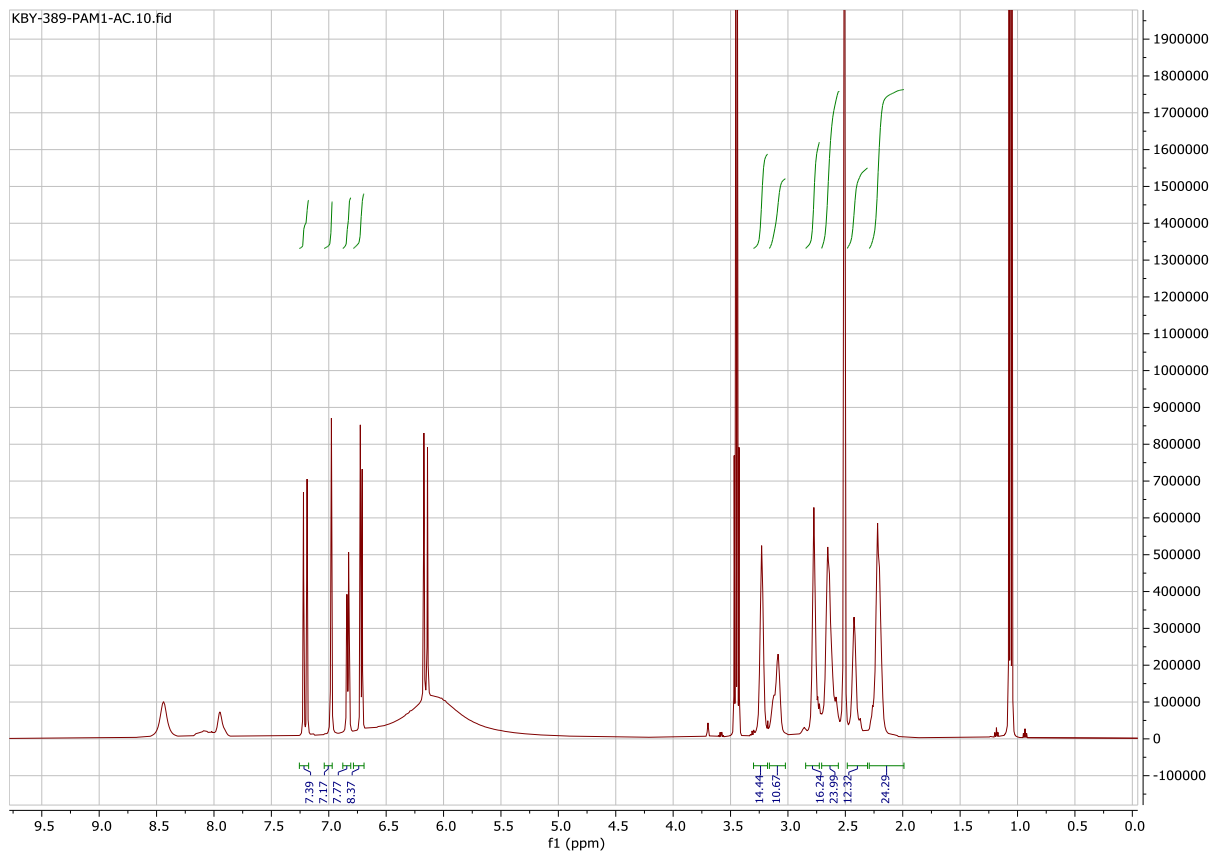


Figure S42: ^{13}C NMR of PAMAM-1-CA in $(\text{CD}_3)_2\text{SO}$

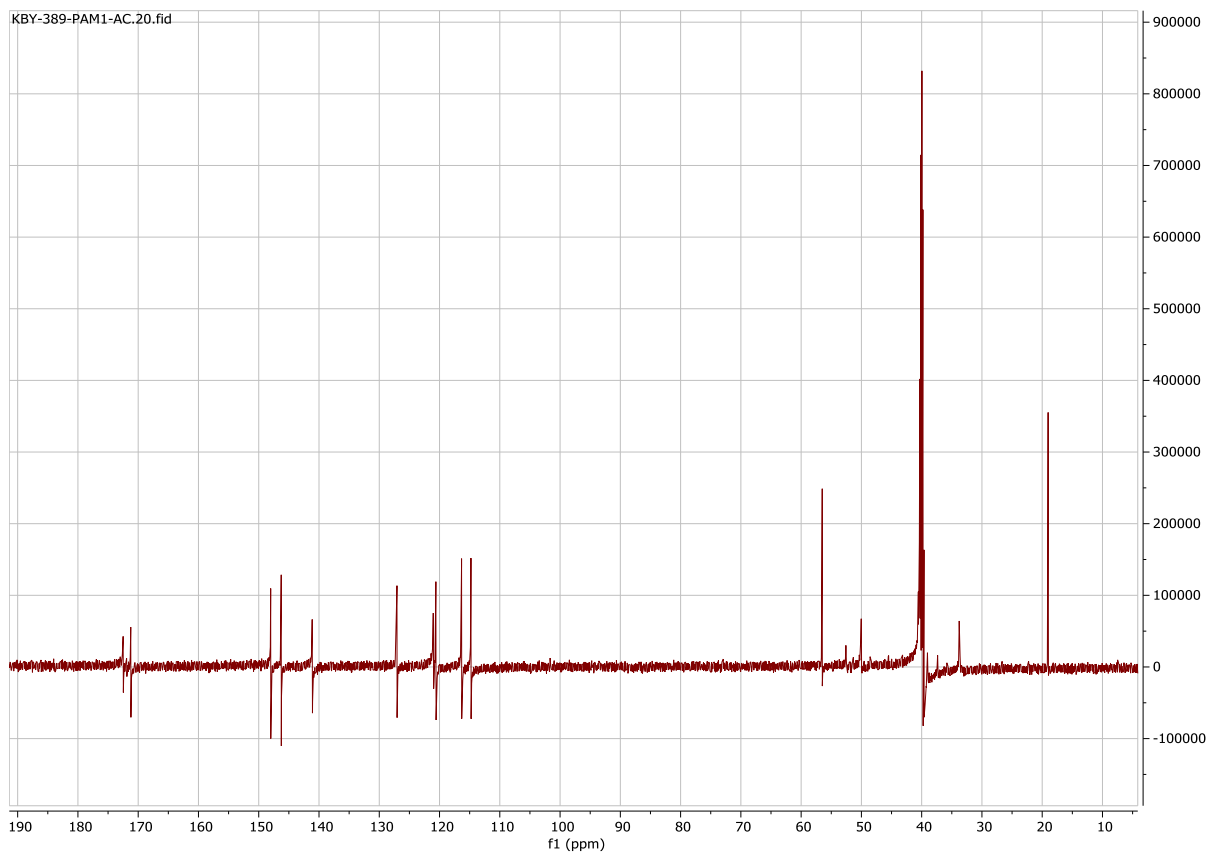


Figure S43: IR of PAMAM-1-CA

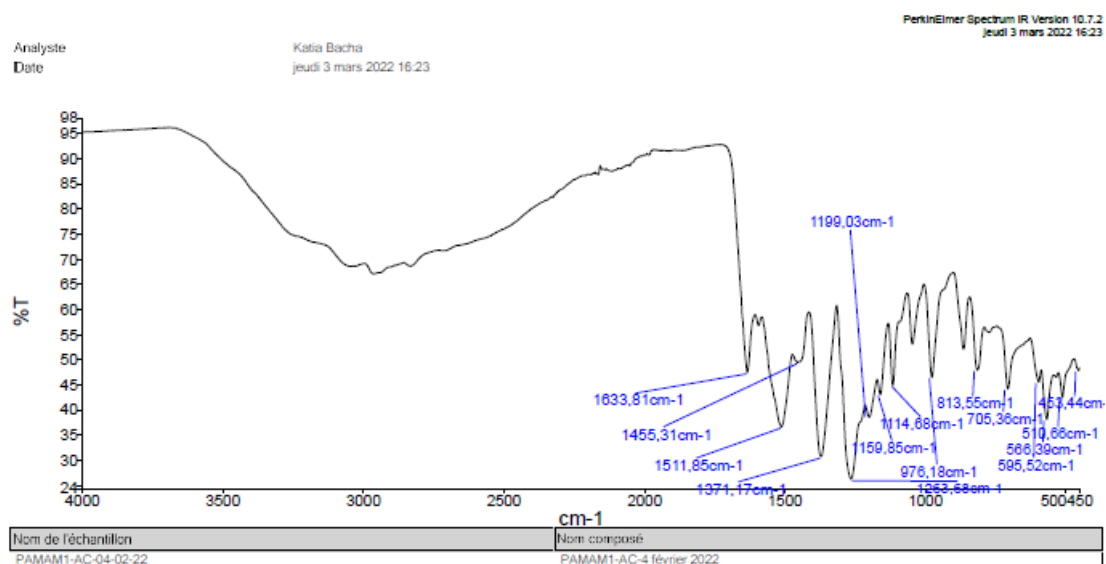


Figure S44: ¹H NMR of PAMAM-2-CA in (CD₃)₂SO

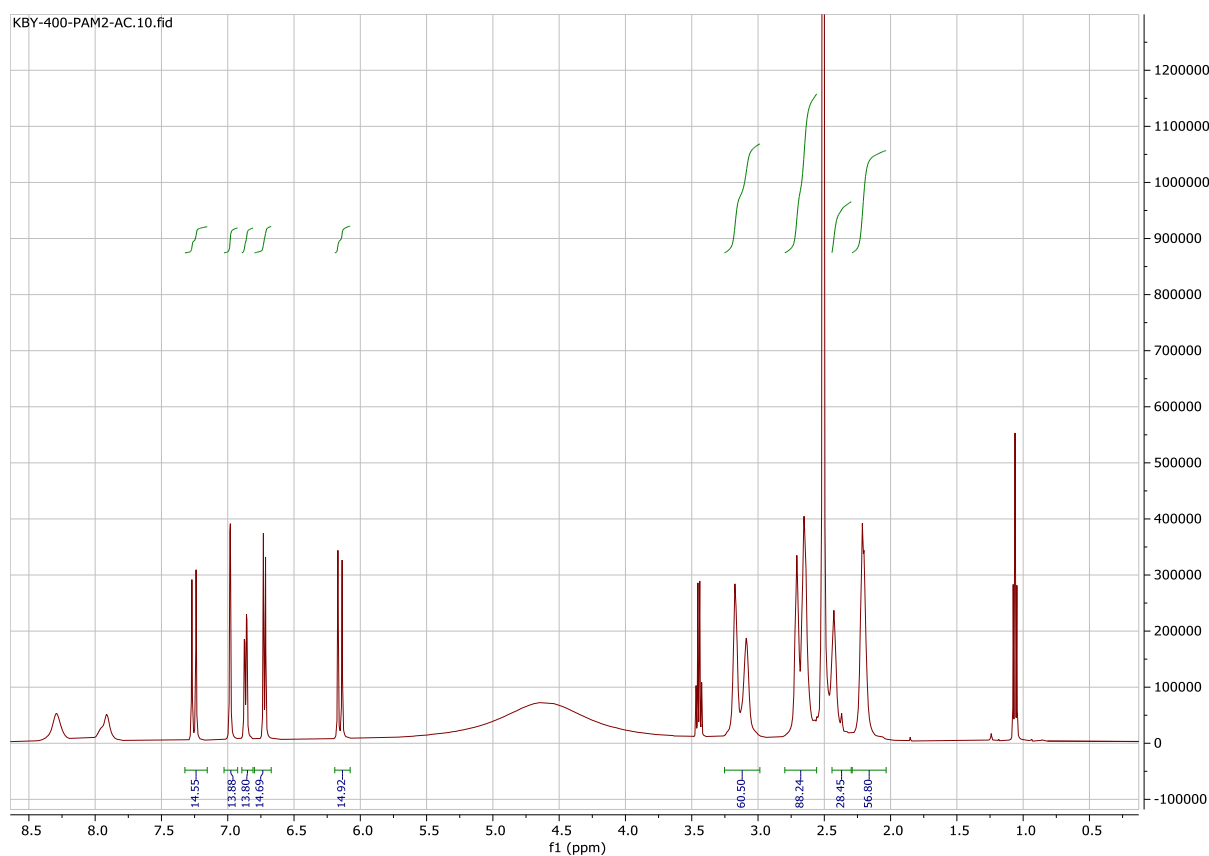


Figure S45: IR of PAMAM-2-CA

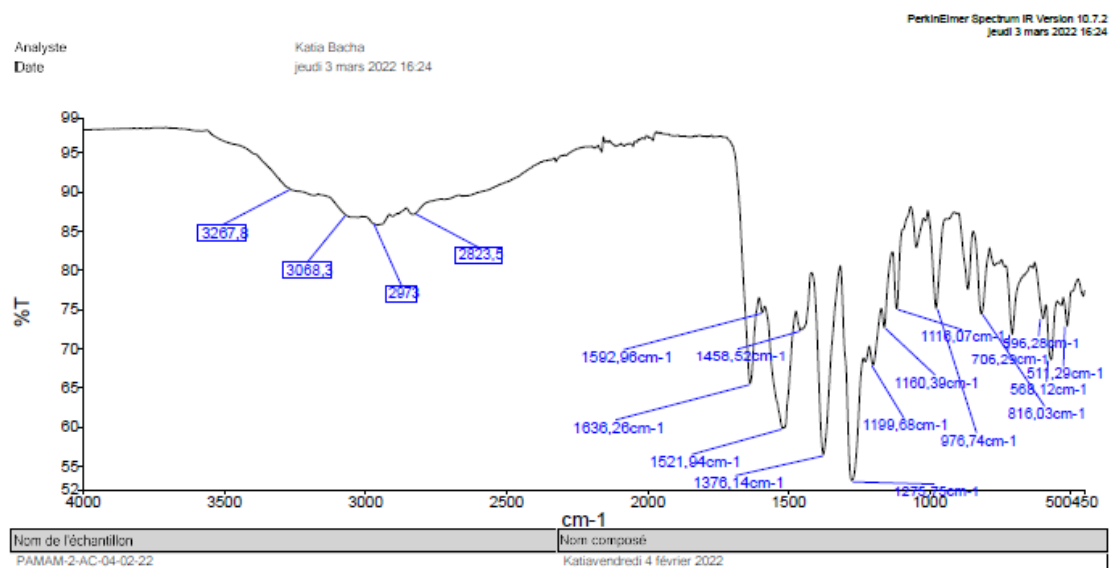


Figure S46: ¹H NMR of PAMAM-3-CA in (CD₃)₂SO

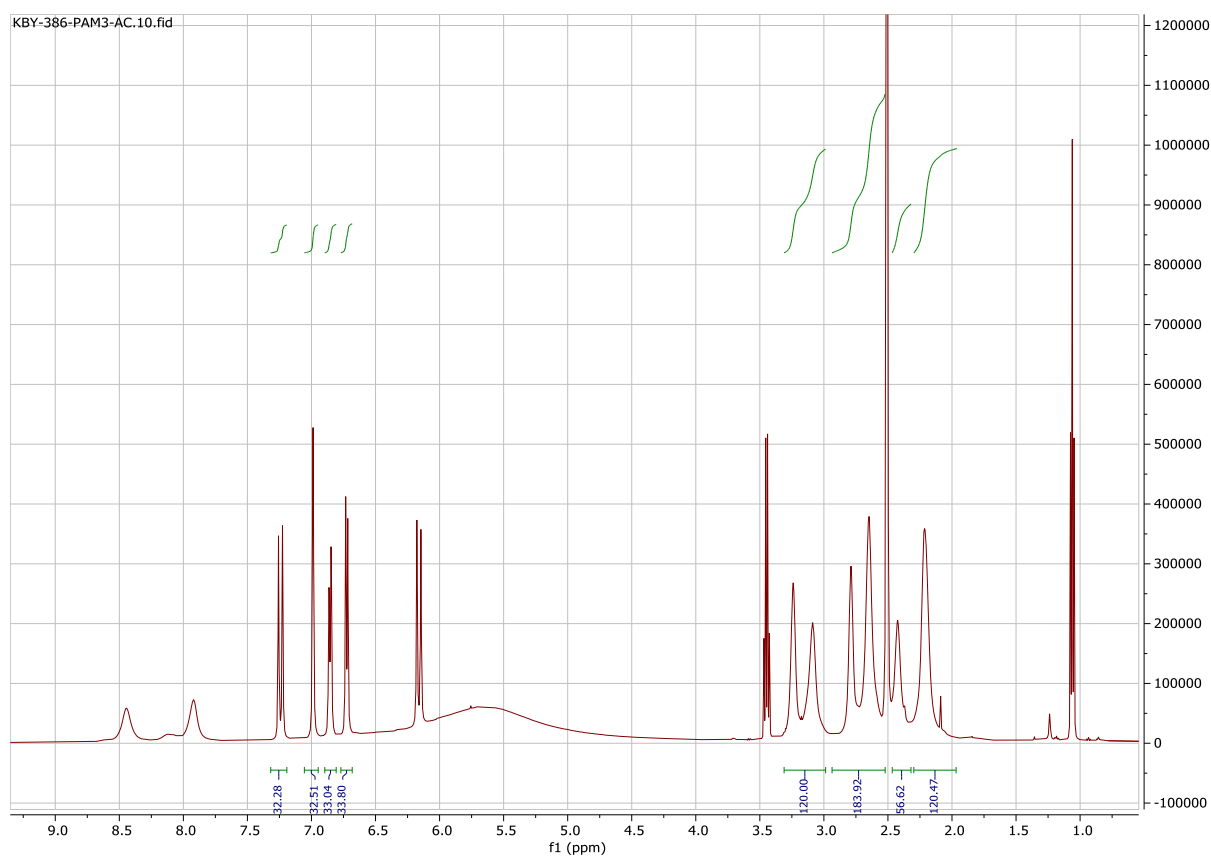
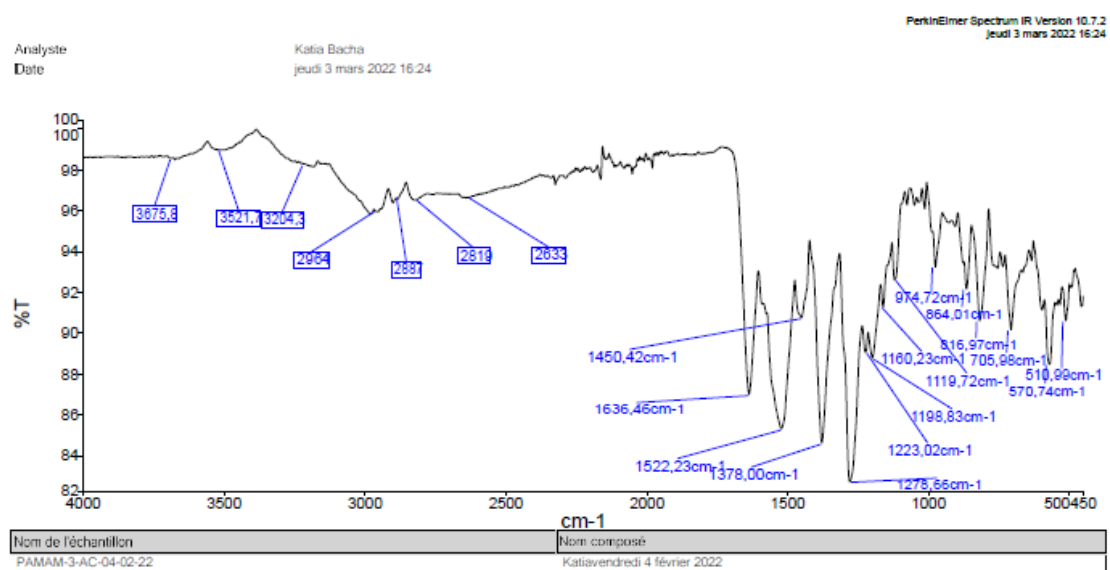


Figure S47: IR of PAMAM-3-CA



IR of PAMAM-3-CA

Figure S48: Inhibition of DPPH (300 μ mol or 118.3mg/L) by caffeic acid derived-PAMAM dendrimers

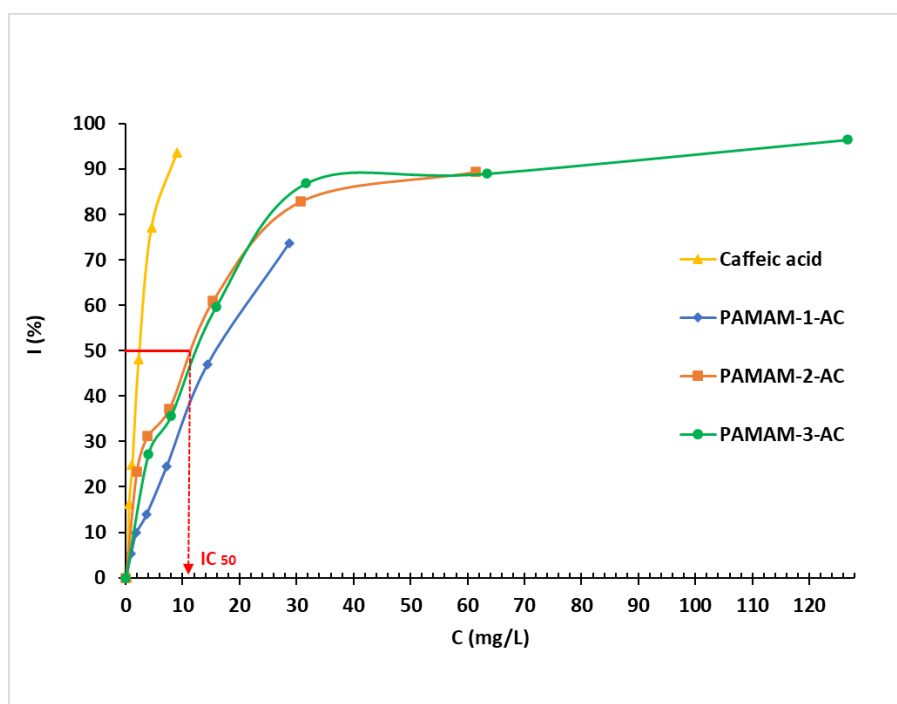


Figure S49: Inhibition of DPPH (300 μ mol or 118.3mg/L) by ionic antioxidant dendrimers

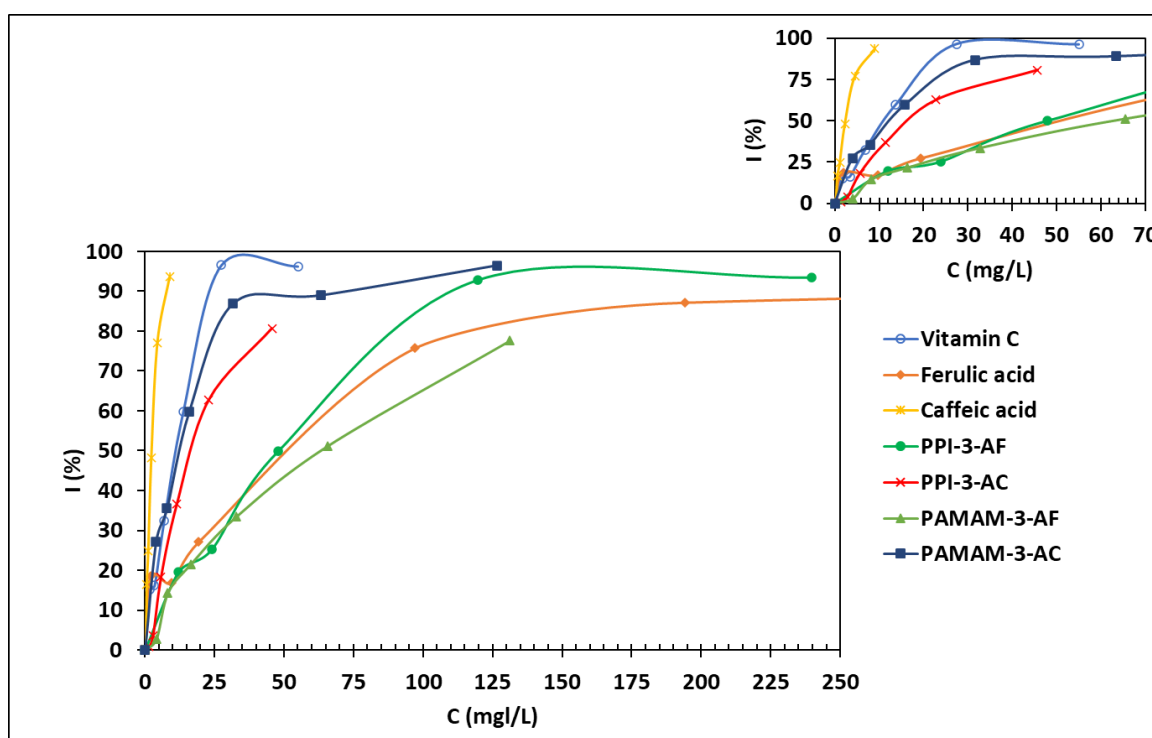


Table S1: IC₅₀ (mg/L)

Entry	Samples	IC ₅₀ (mg/L)	Standard deviation
1	Vitamin C	10.92	± 0.3
2	Ferulic acid	52.42	± 4.6
3	PPI-1-FA (4 FA units)	32.79	± 1.9
4	PPI-2-FA (8 FA units)	39.61	± 4.9
5	PPI-3-FA (16 FA units)	47.92	± 12.4
6	PAMAM-1-FA (8 FA units)	65.63	± 5.9
7	PAMAM-2-FA (16 FA units)	54.72	± 8.3
8	PAMAM-3-FA (32 FA units)	62.99	± 10.5
9	Caffeic acid	2.34	± 0.2
10	PPI-1-CA (4 CA units)	10.47	± 1.3
11	PPI-2-CA (8 CA units)	16.64	± 2.2
12	PPI-3-CA (16 CA units)	15.99	± 5.0
13	PAMAM-1-CA (8 CA units)	15.50	± 3.1
14	PAMAM-2-CA (16 CA units)	11.04	± 5.5
15	PAMAM-3-CA (32 CA units)	12.67	± 5.1
16	PAMAM-3-PhA	5868.44	± 52.6