

Supplementary Materials

Figure S1. ^1H -NMR spectrum of **4k**.

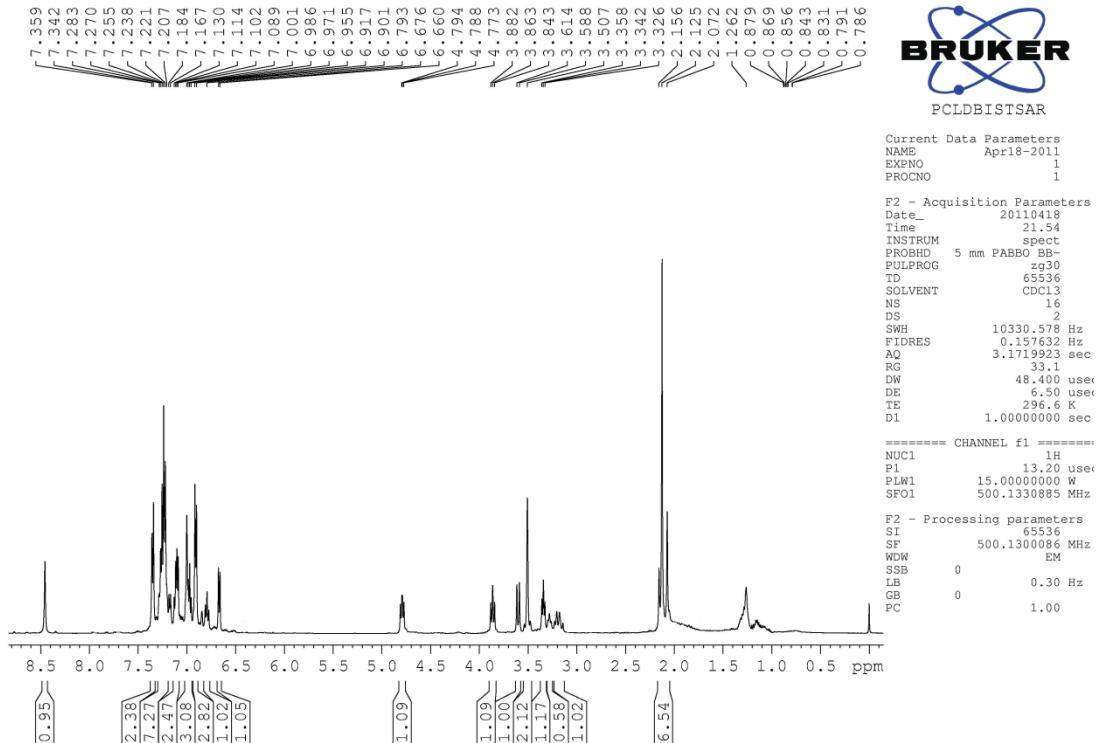


Figure S2. ^1H -NMR spectrum of **4k**.

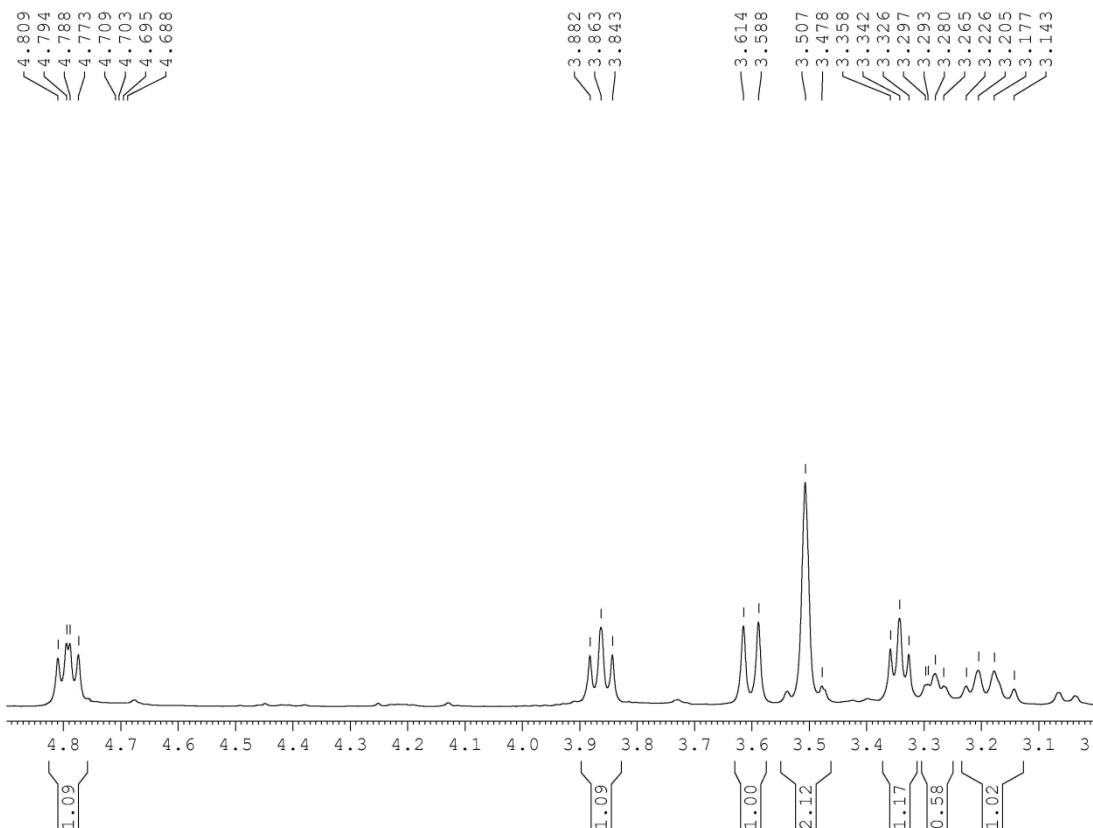


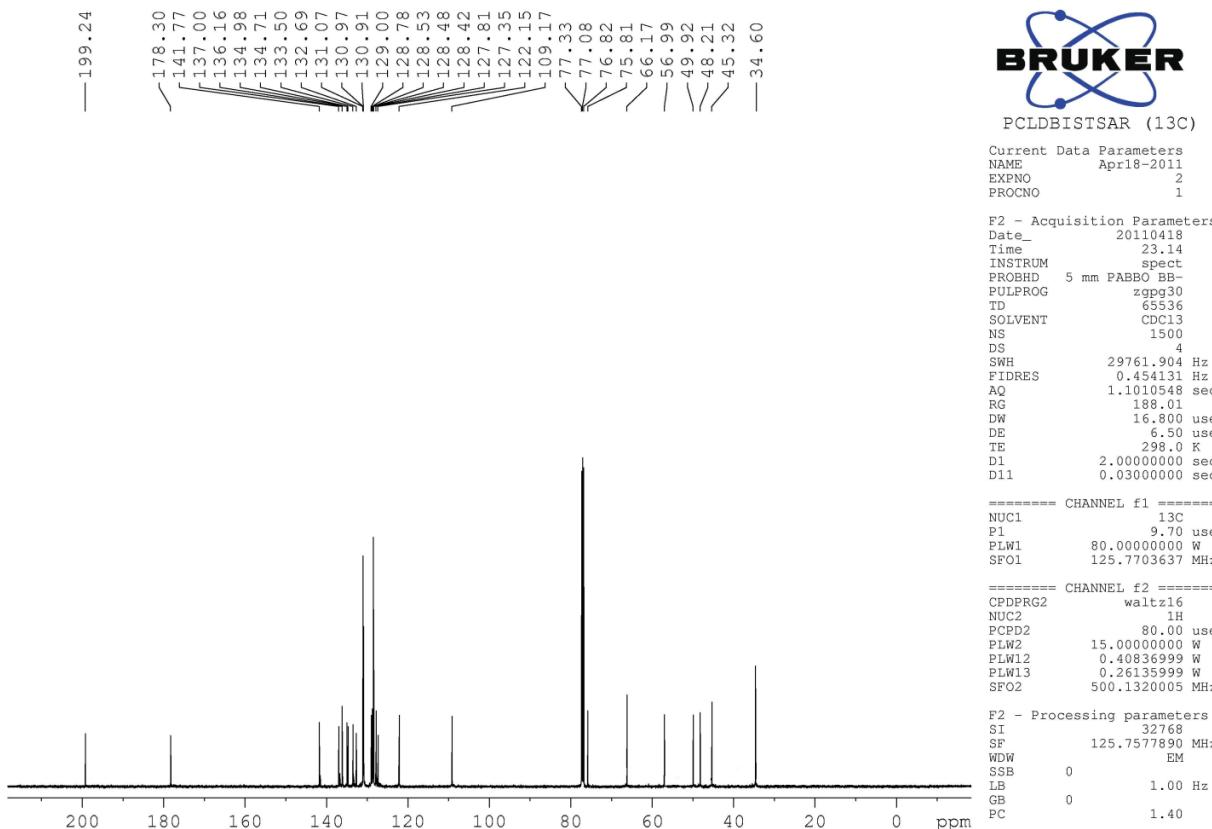
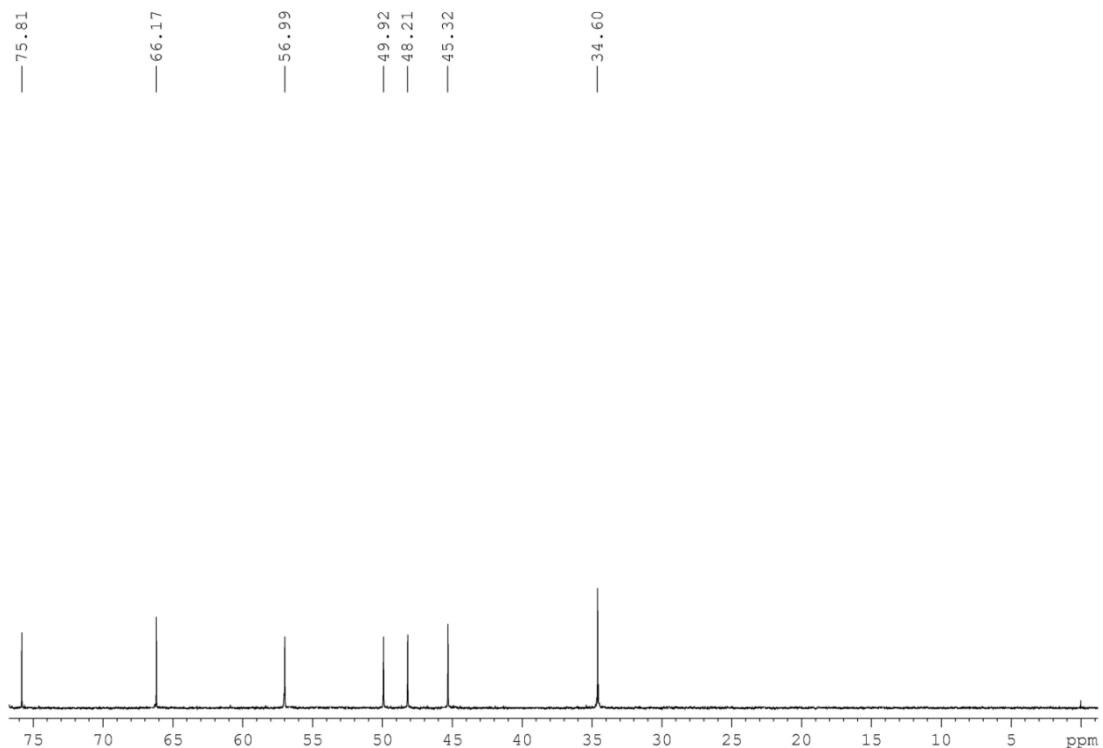
Figure S3. ^{13}C -NMR spectrum of **4k**.**Figure S4.** ^{13}C -NMR spectrum of **4k**.

Figure S5. ^{13}C -NMR spectrum of **4k**.

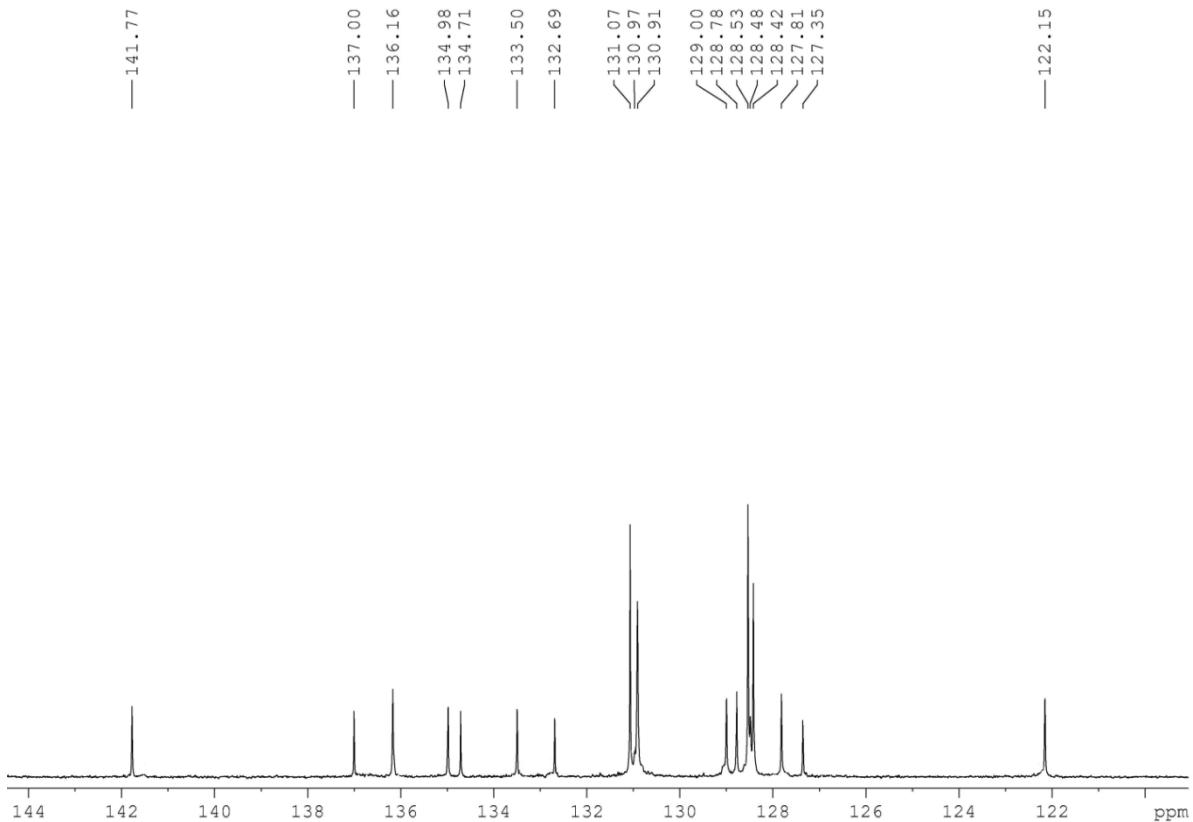


Figure S6. DEPT-135 NMR spectrum of **4k**.

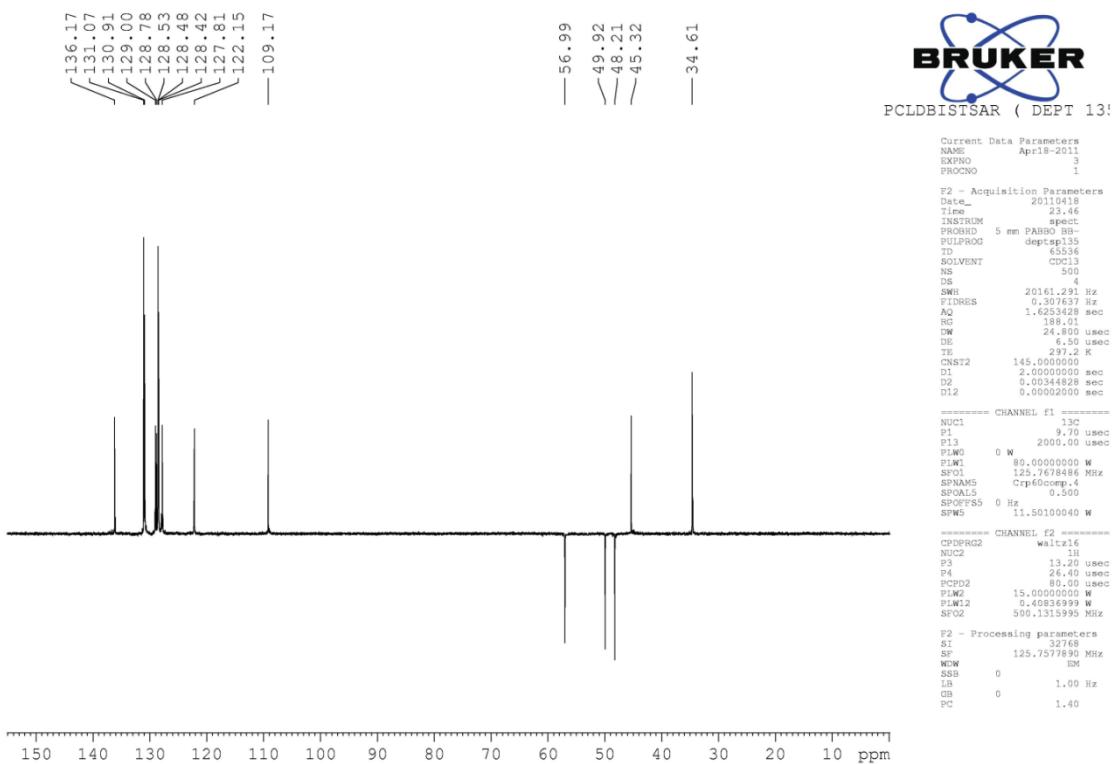


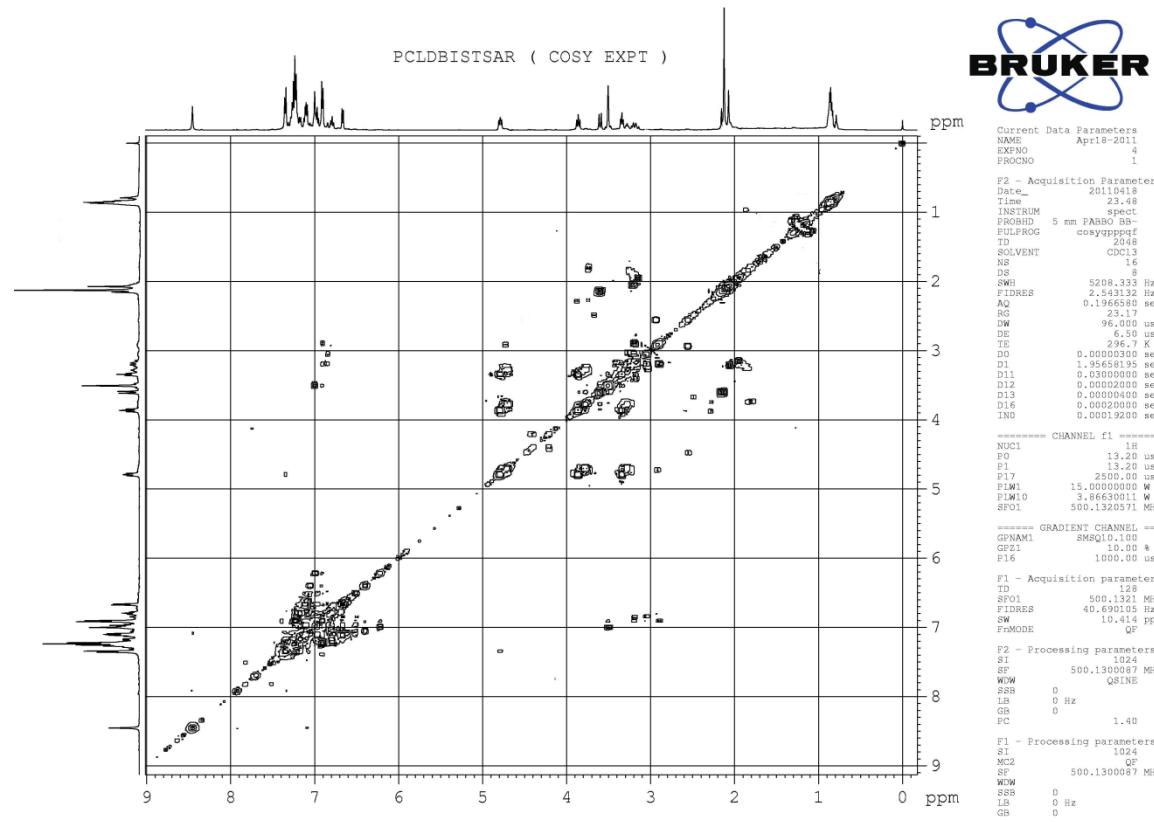
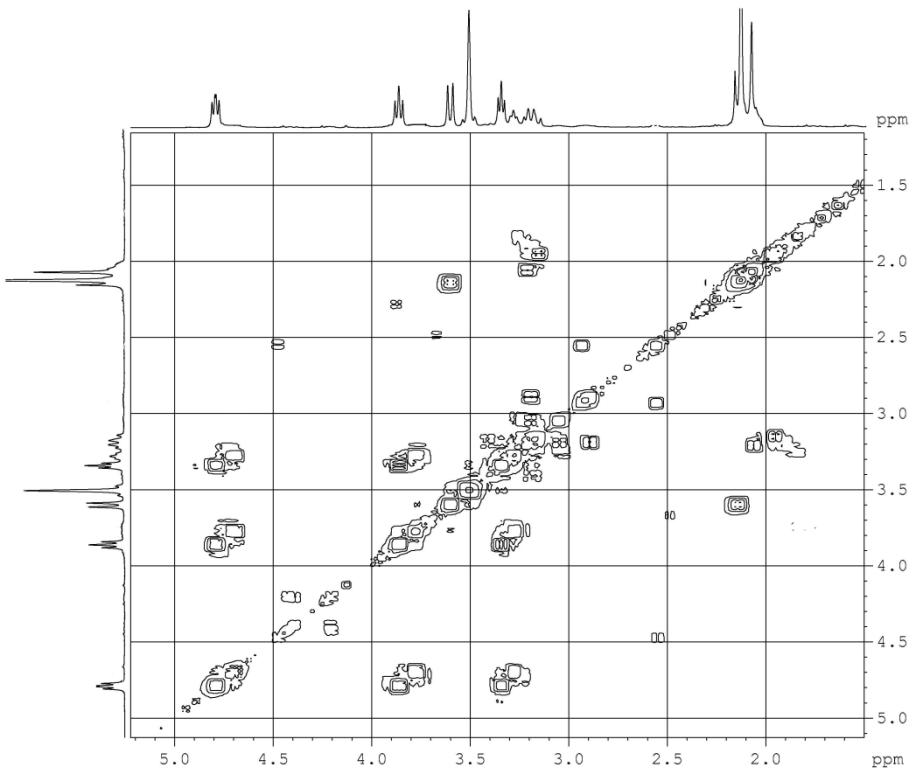
Figure S7. H,H-COSY spectrum of **4k**.**Figure S8.** H,H-COSY spectrum of **4k**.

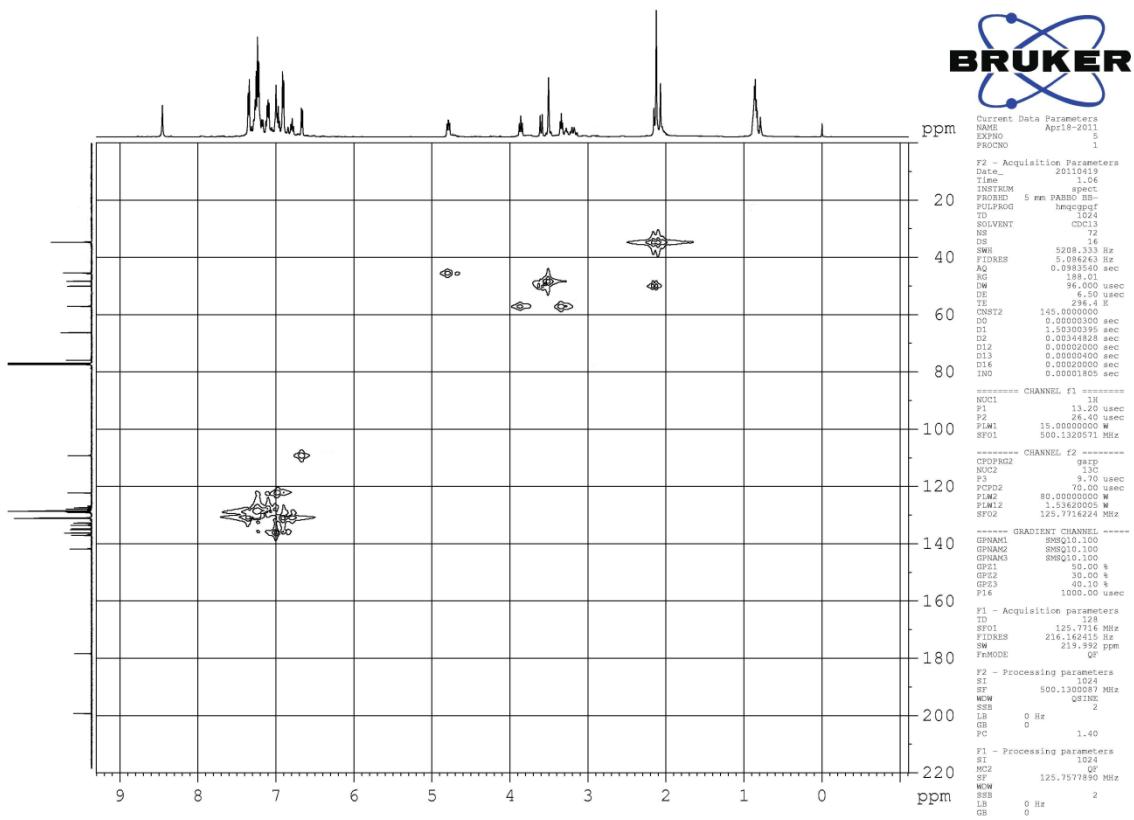
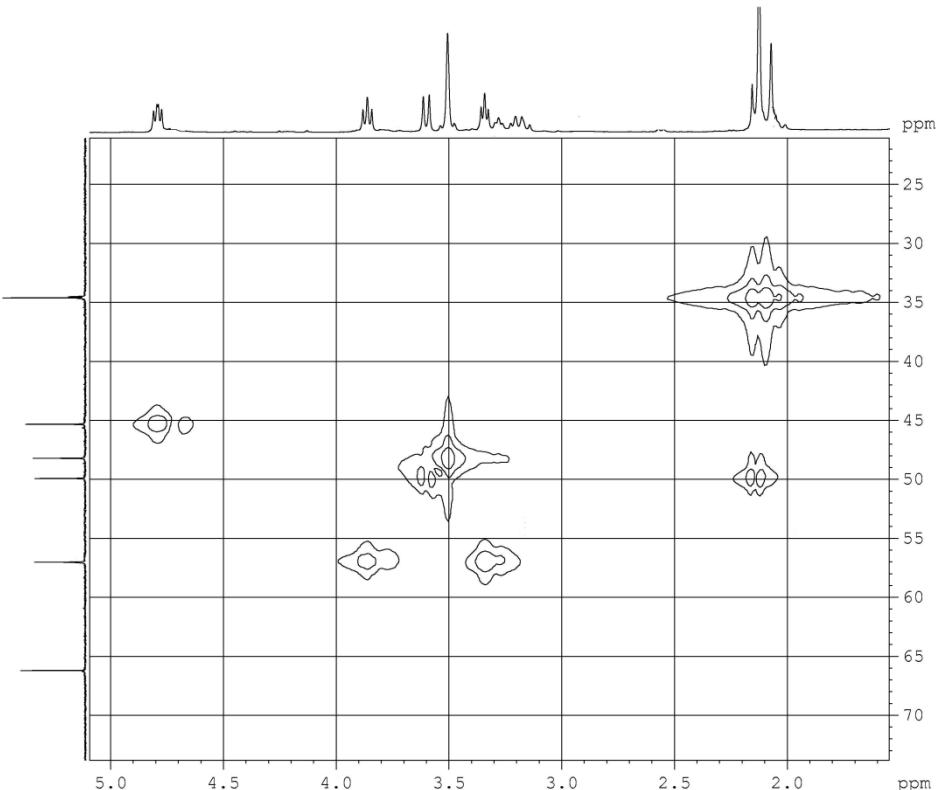
Figure S9. C,H-COSY spectrum of **4k**.**Figure S10.** C,H-COSY spectrum of **4k**.

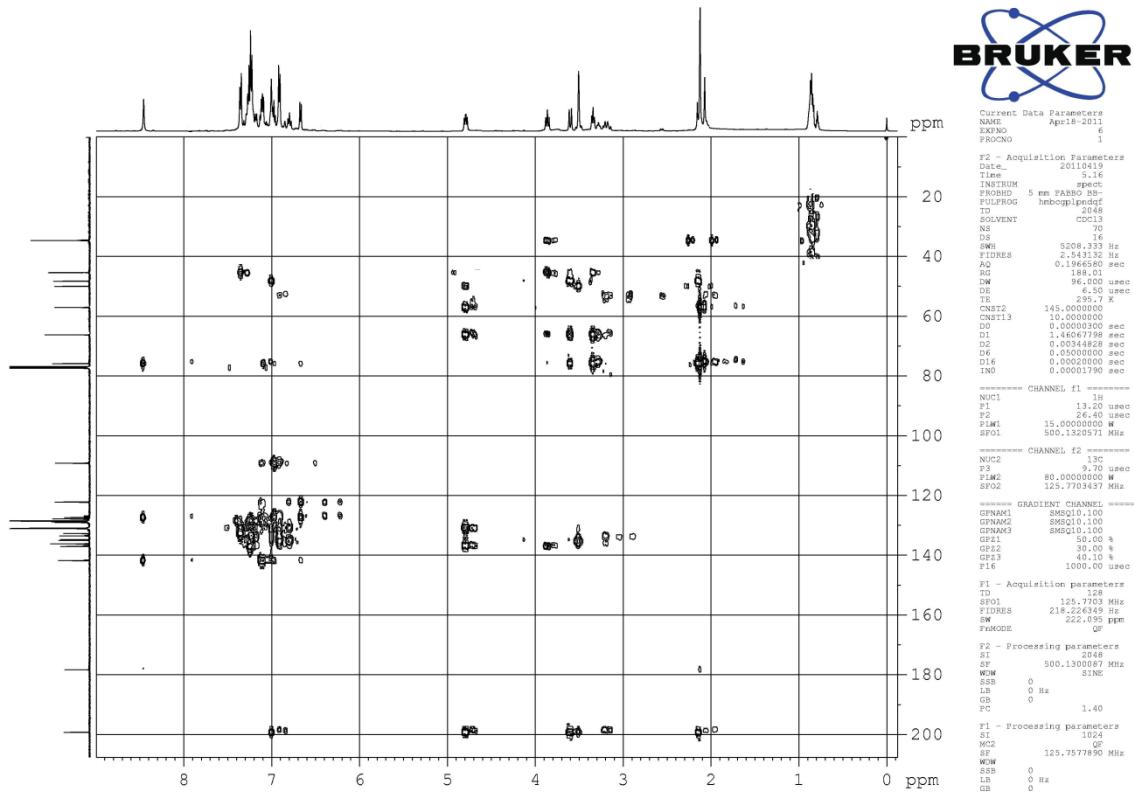
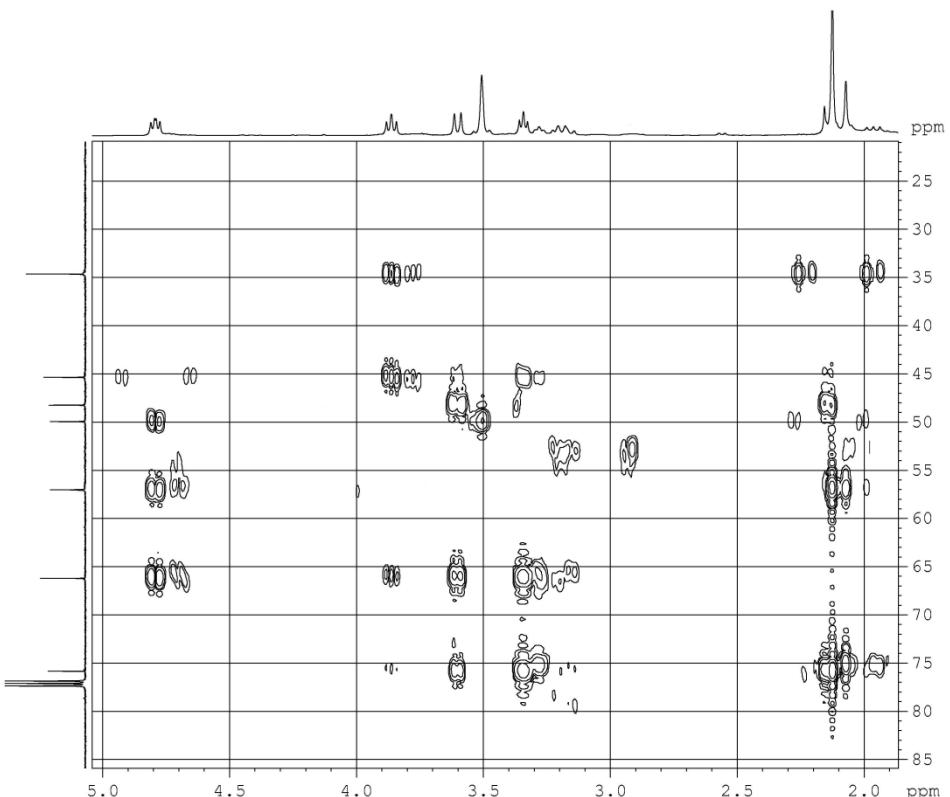
Figure S11. HMBC spectrum of **4k**.**Figure S12.** HMBC spectrum of **4k**.

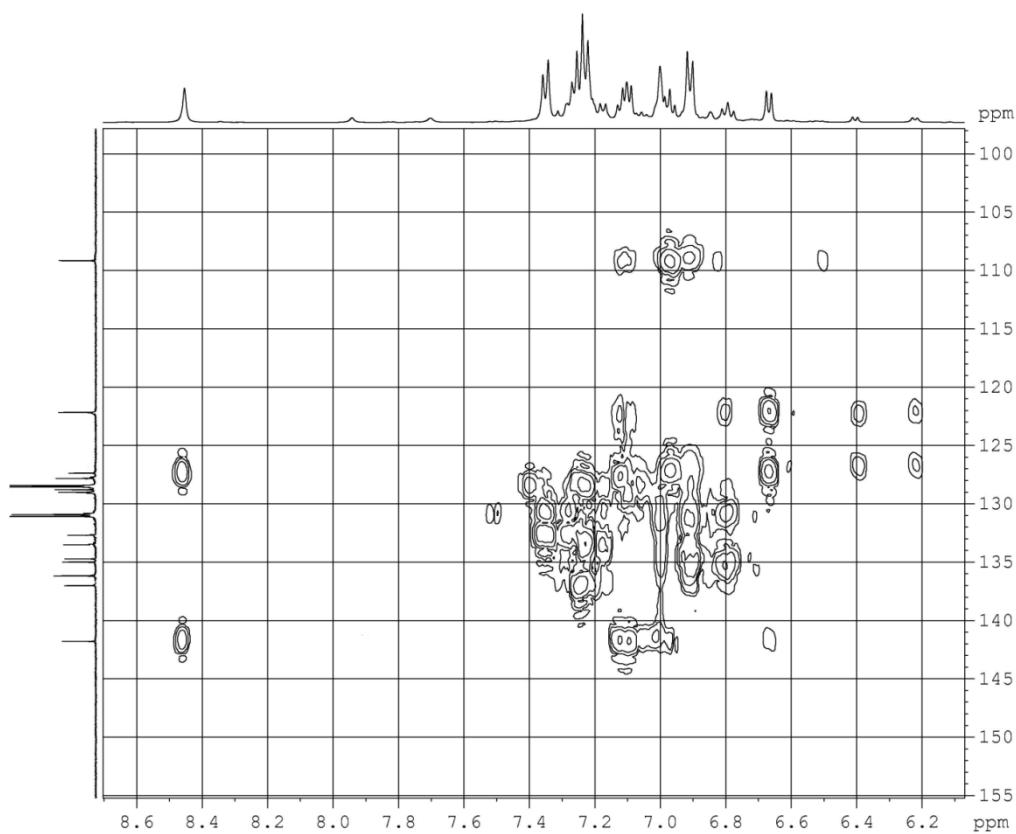
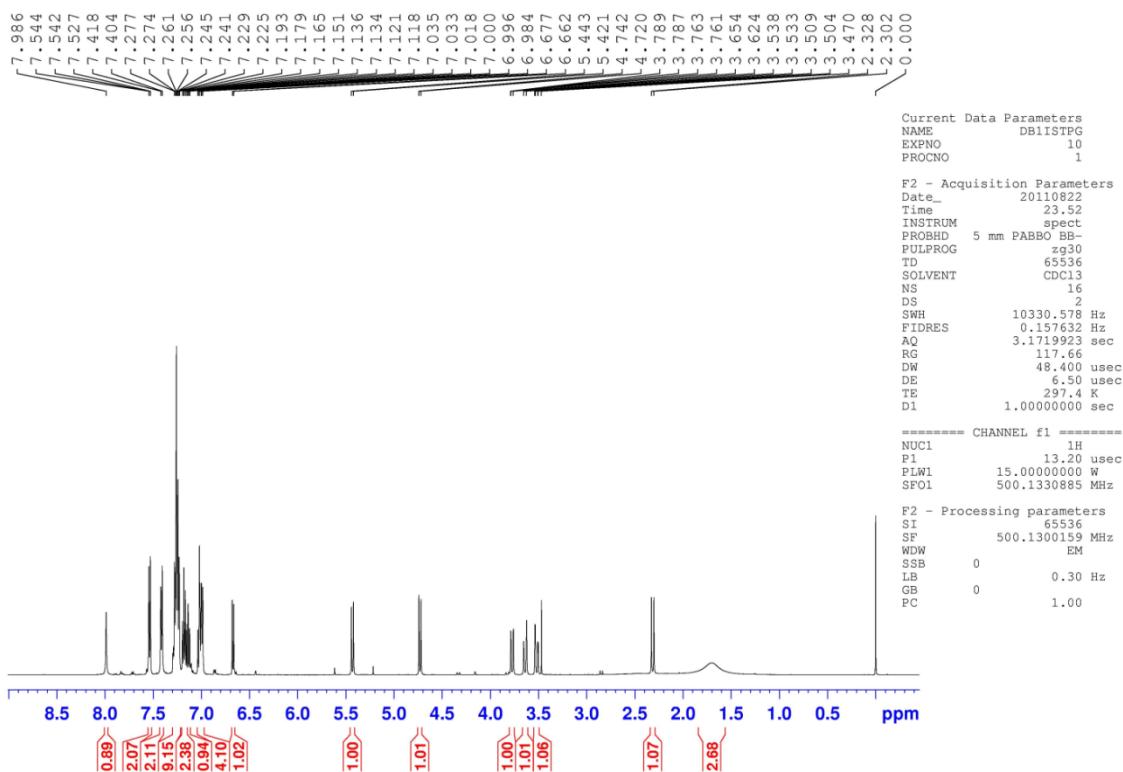
Figure S13. HMBC spectrum of **4k**.**Figure S14.** ^1H -NMR spectrum of **5a**.

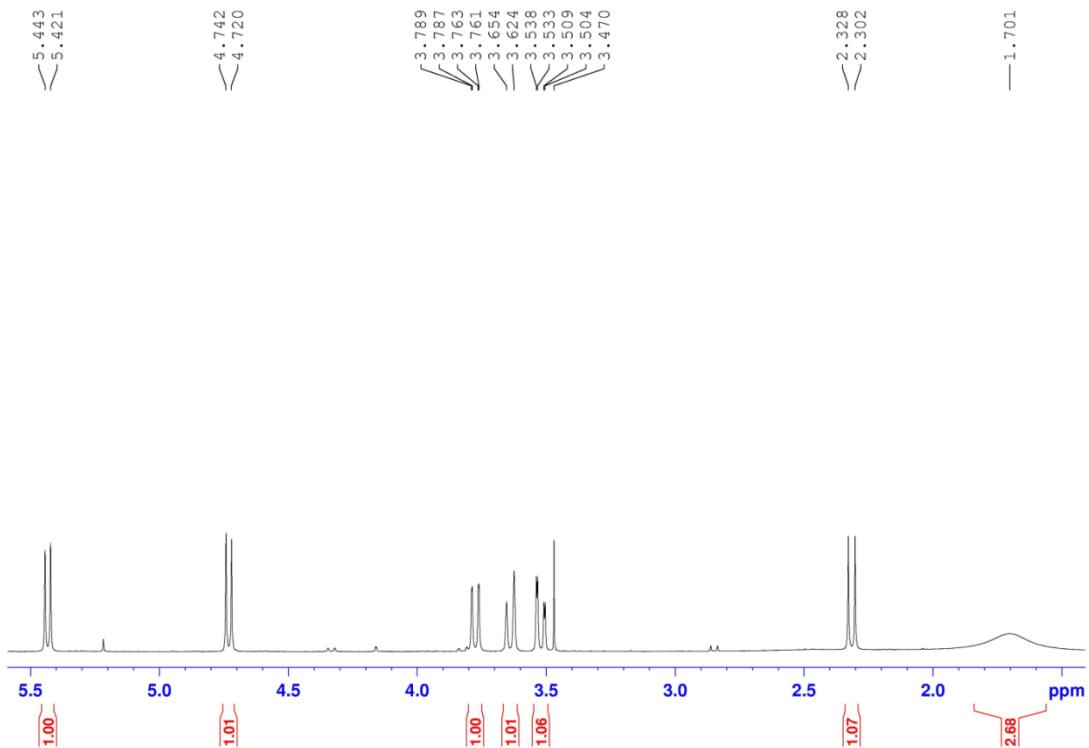
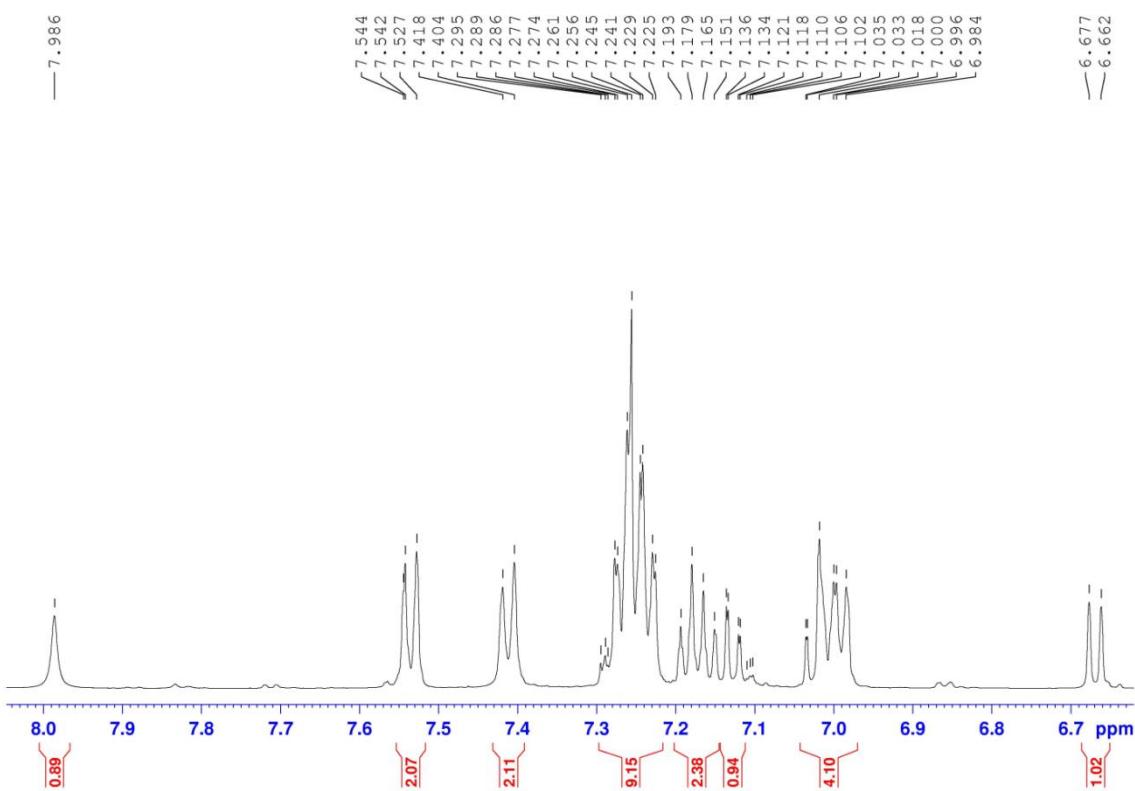
Figure S15. ^1H -NMR spectrum of **5a**.**Figure S16.** ^1H -NMR spectrum of **5a**.

Figure S17. ^{13}C -NMR spectrum of **5a**.

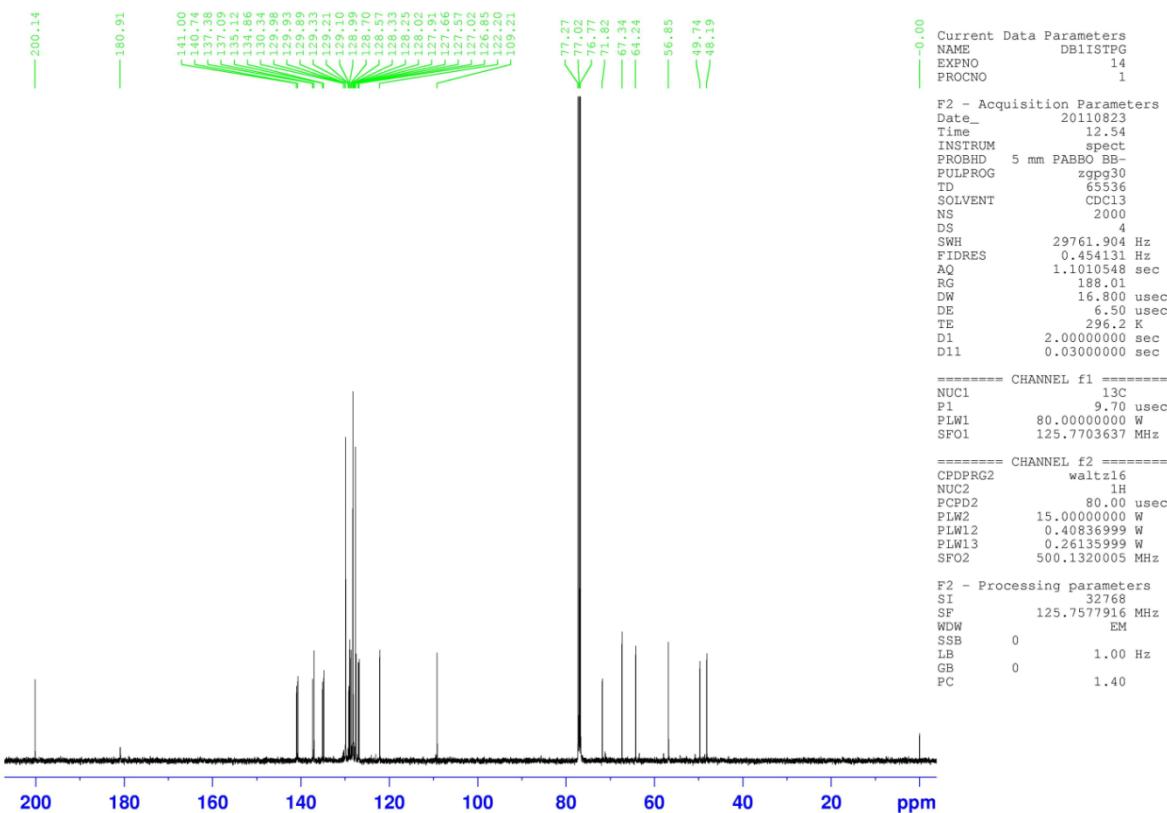


Figure S18. ^{13}C -NMR spectrum of **5a**.

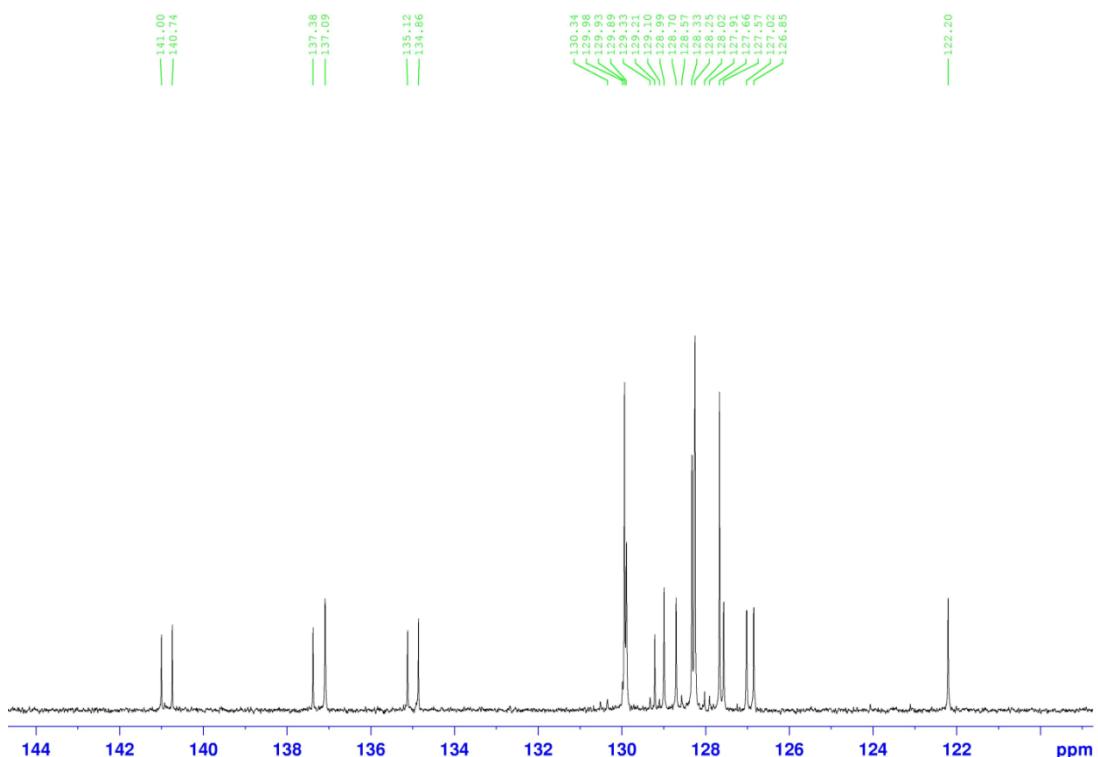


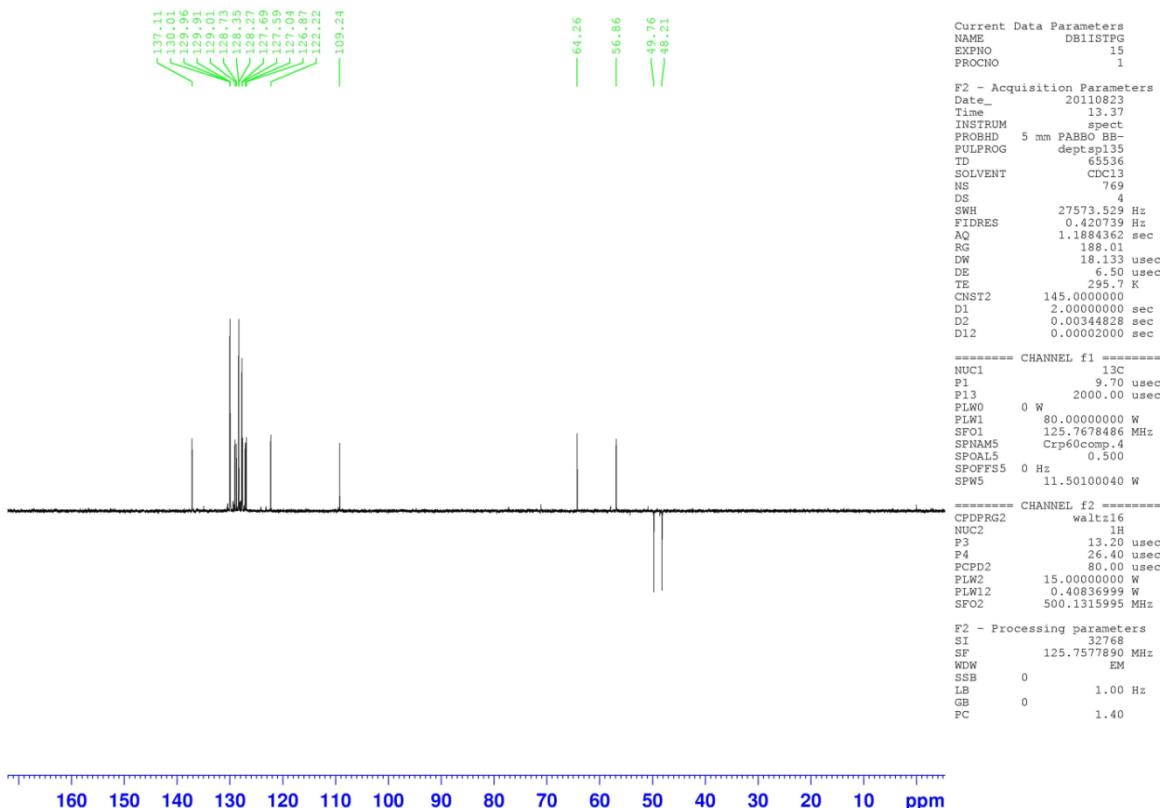
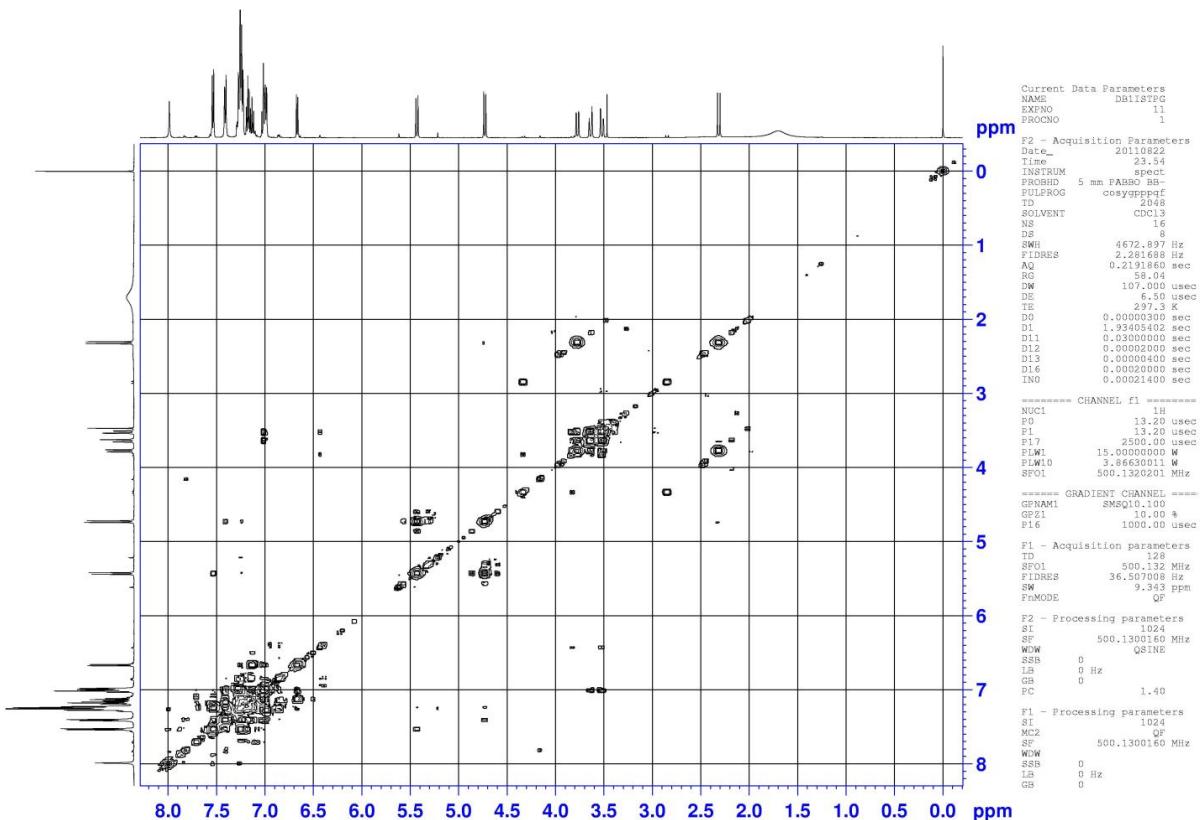
Figure S19. DEPT-135 NMR spectrum of **5a**.**Figure S20.** H,H-COSY spectrum of **5a**.

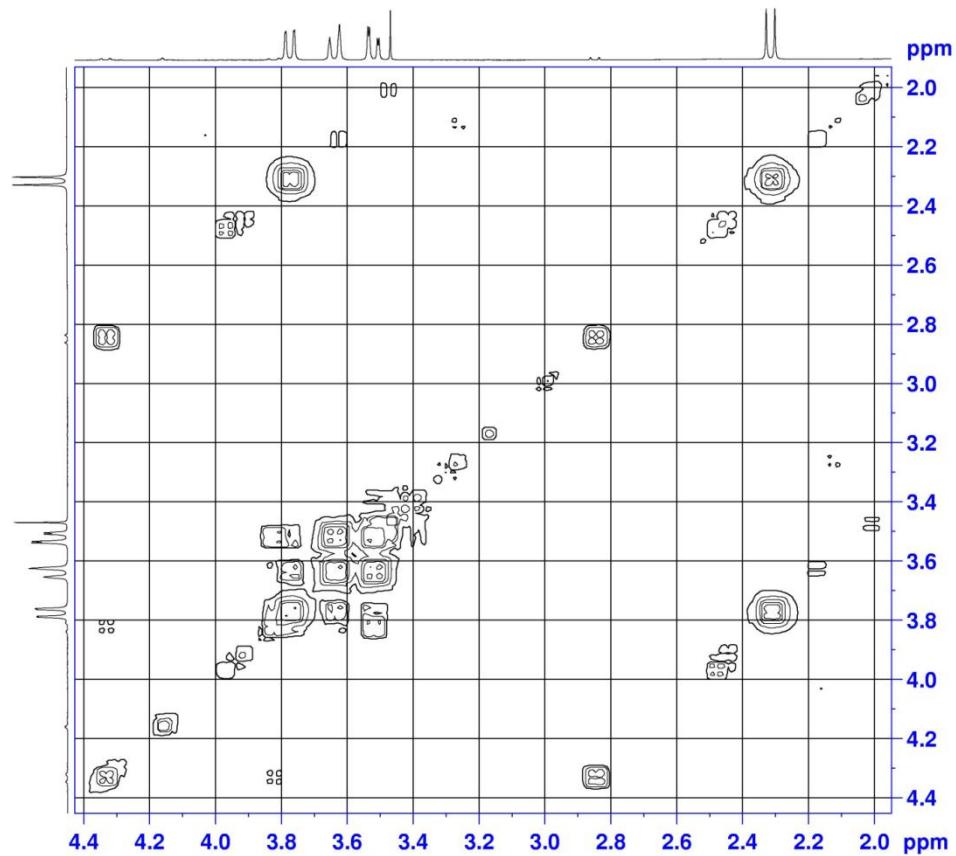
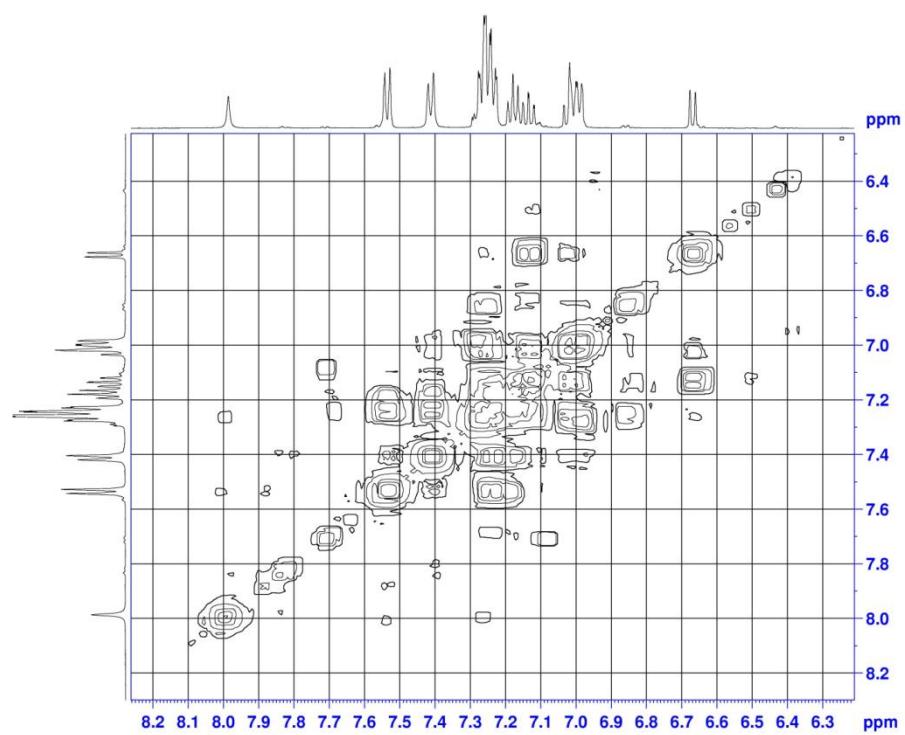
Figure S21. H,H-COSY spectrum of **5a**.**Figure S22.** H,H-COSY spectrum of **5a**.

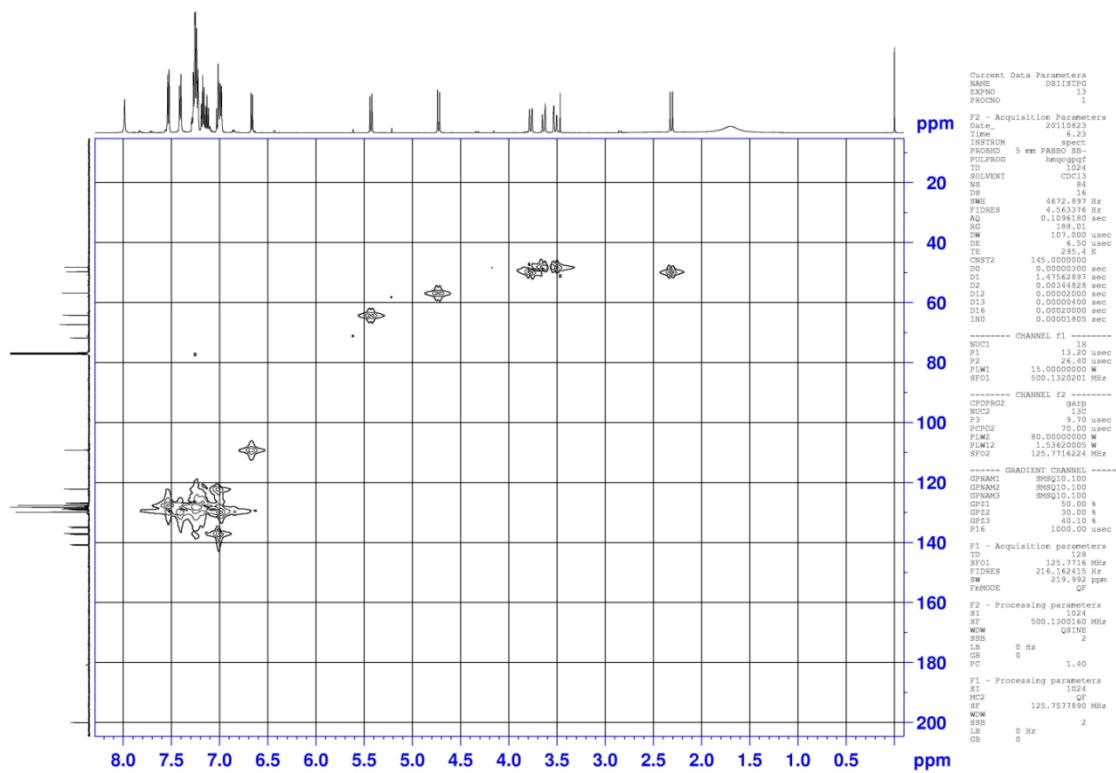
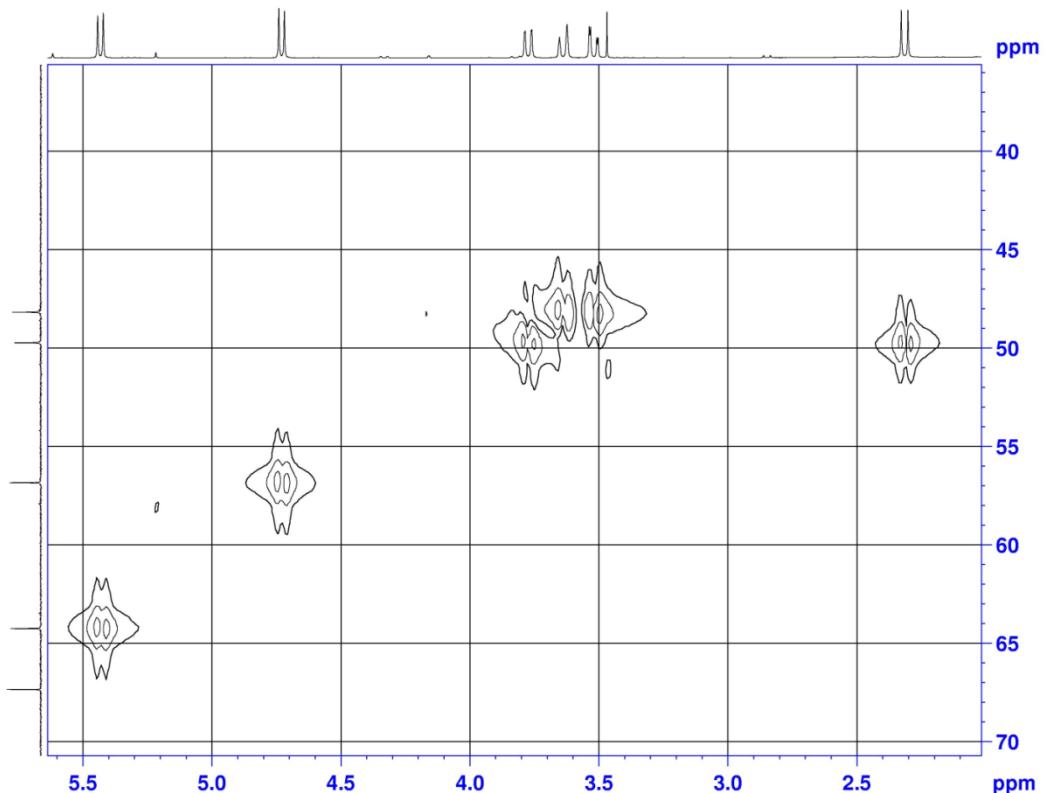
Figure S23. C,H-COSY spectrum of **5a**.**Figure S24.** C,H-COSY spectrum of **5a**.

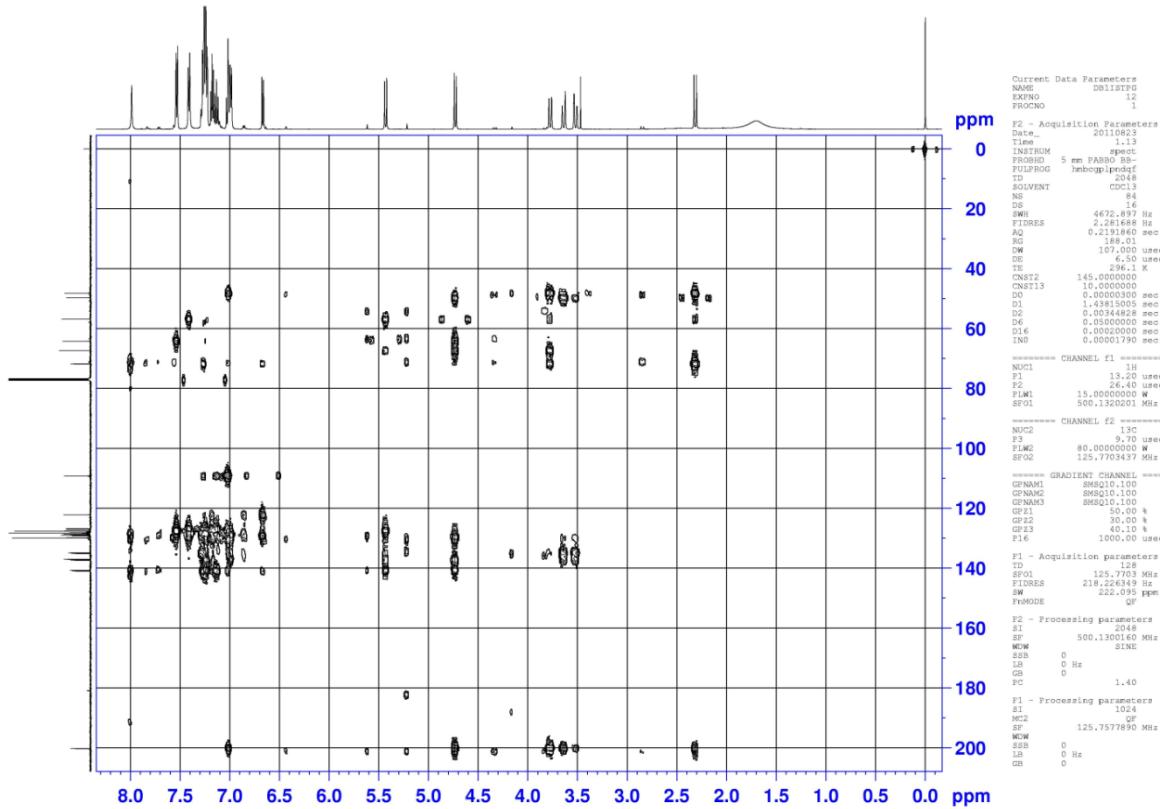
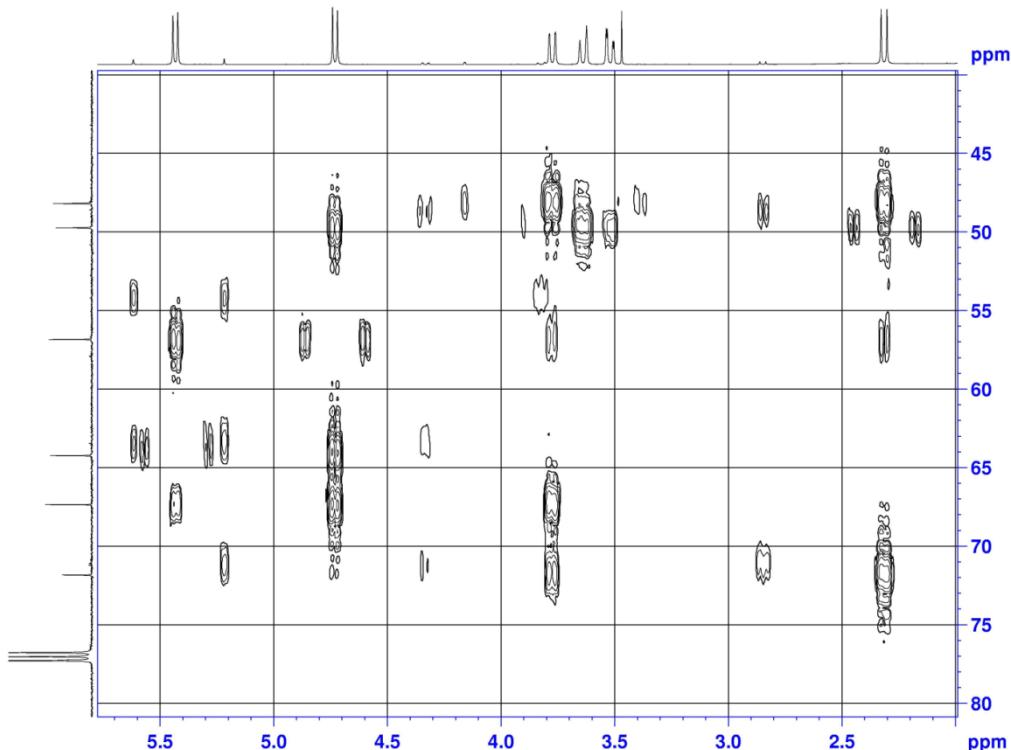
Figure S25. HMBC spectrum of **5a**.**Figure S26.** HMBC spectrum of **5a**.

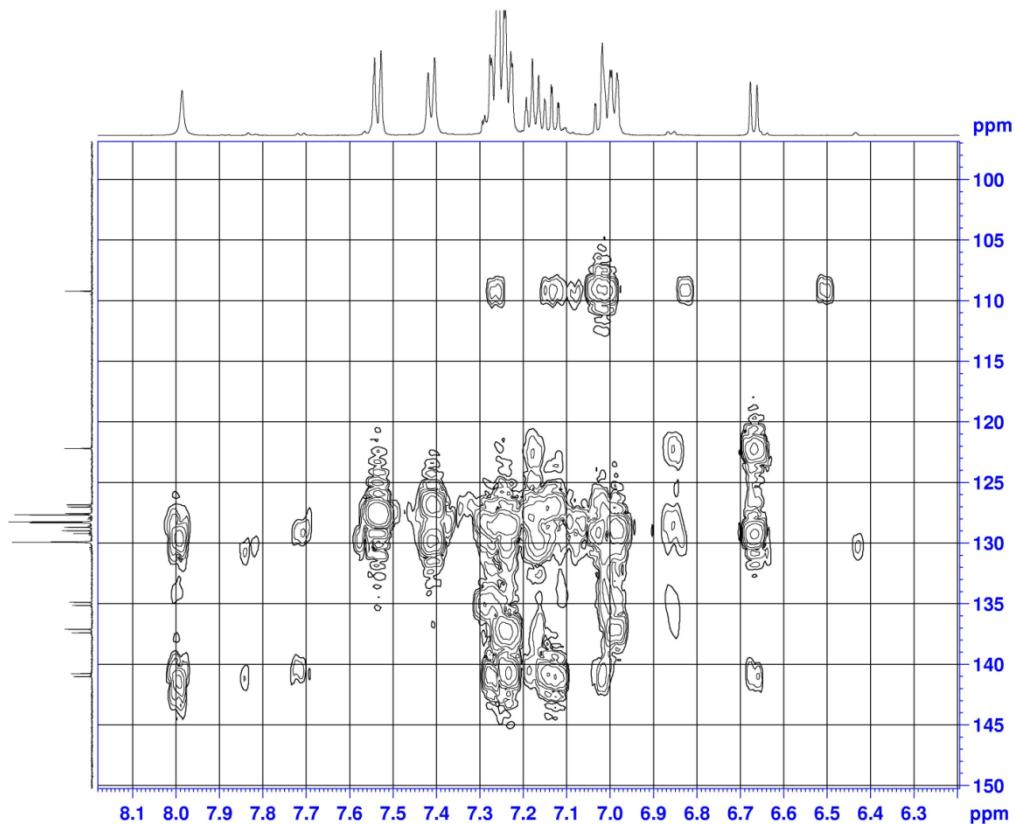
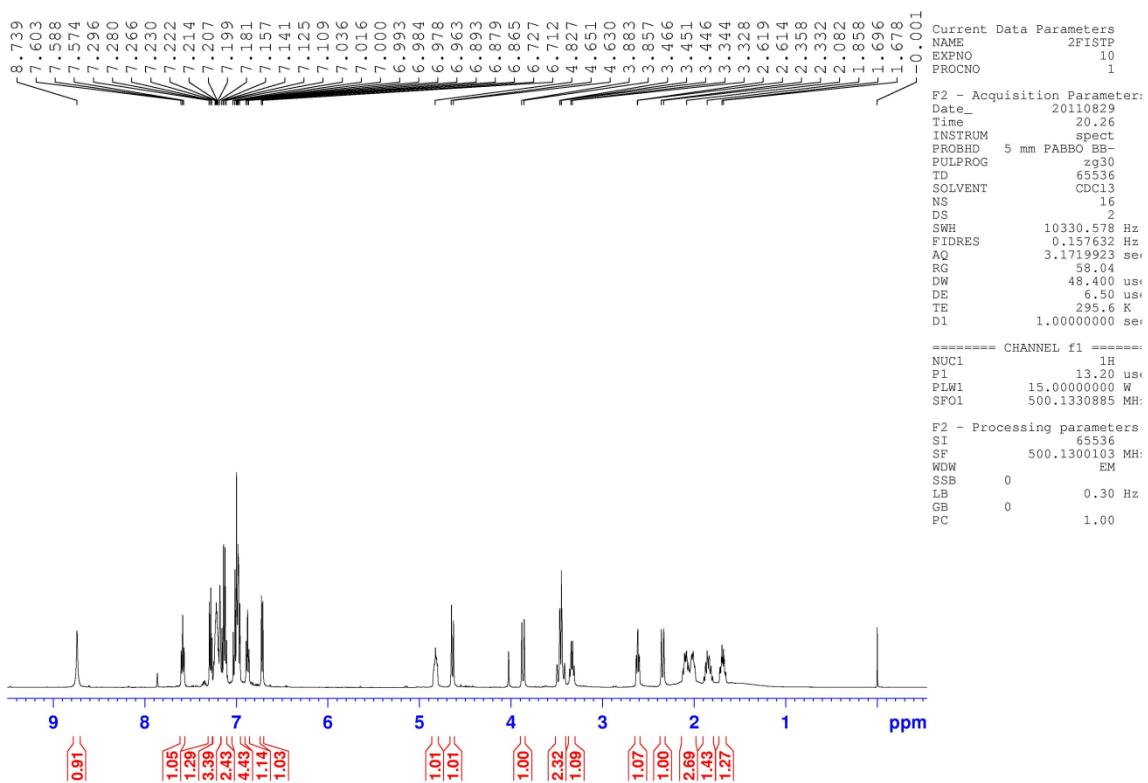
Figure S27. HMBC spectrum of **5a**.**Figure S28.** ^1H -NMR spectrum of **6f**.

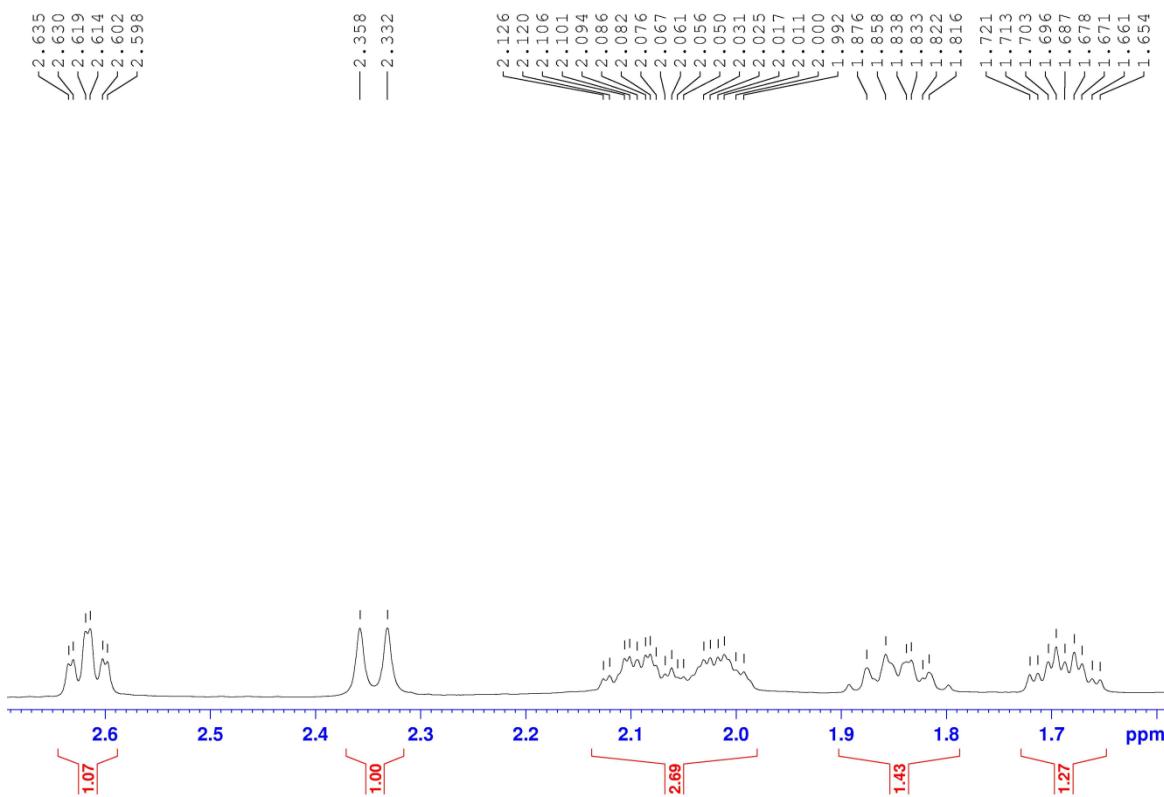
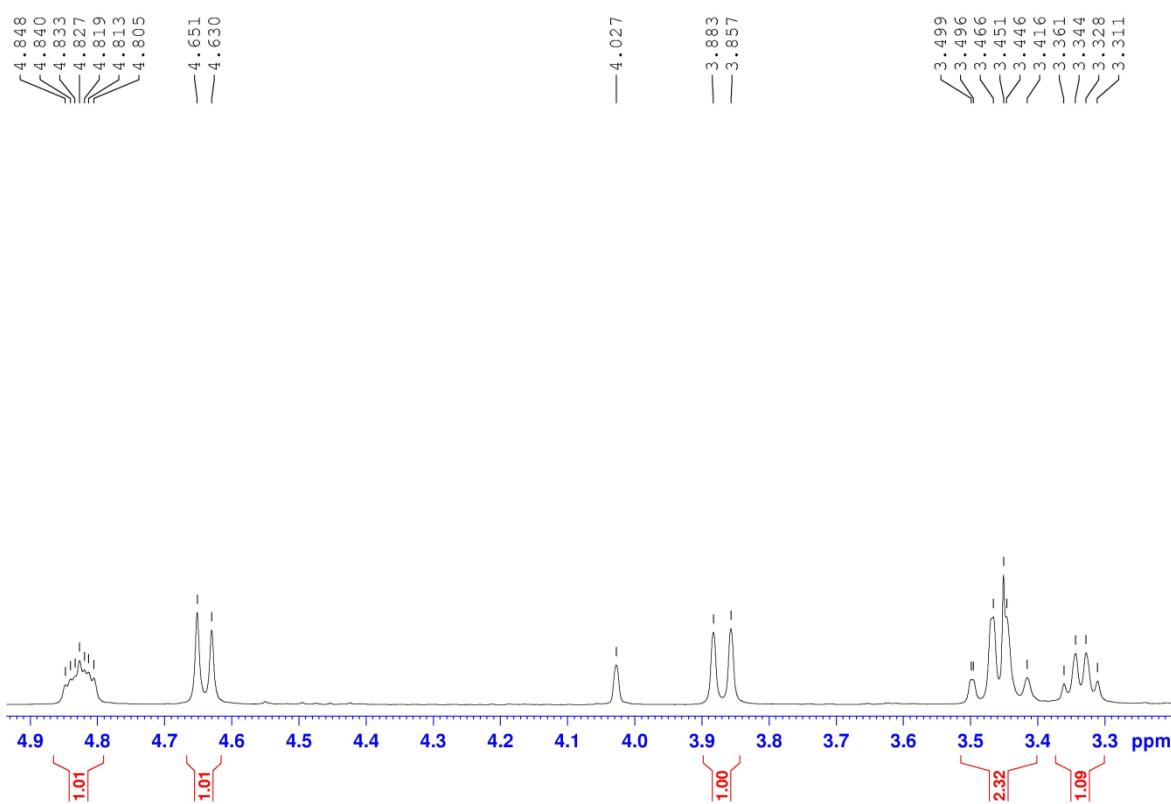
Figure S29. ^1H -NMR spectrum of **6f**.**Figure S30.** ^1H -NMR spectrum of **6f**.

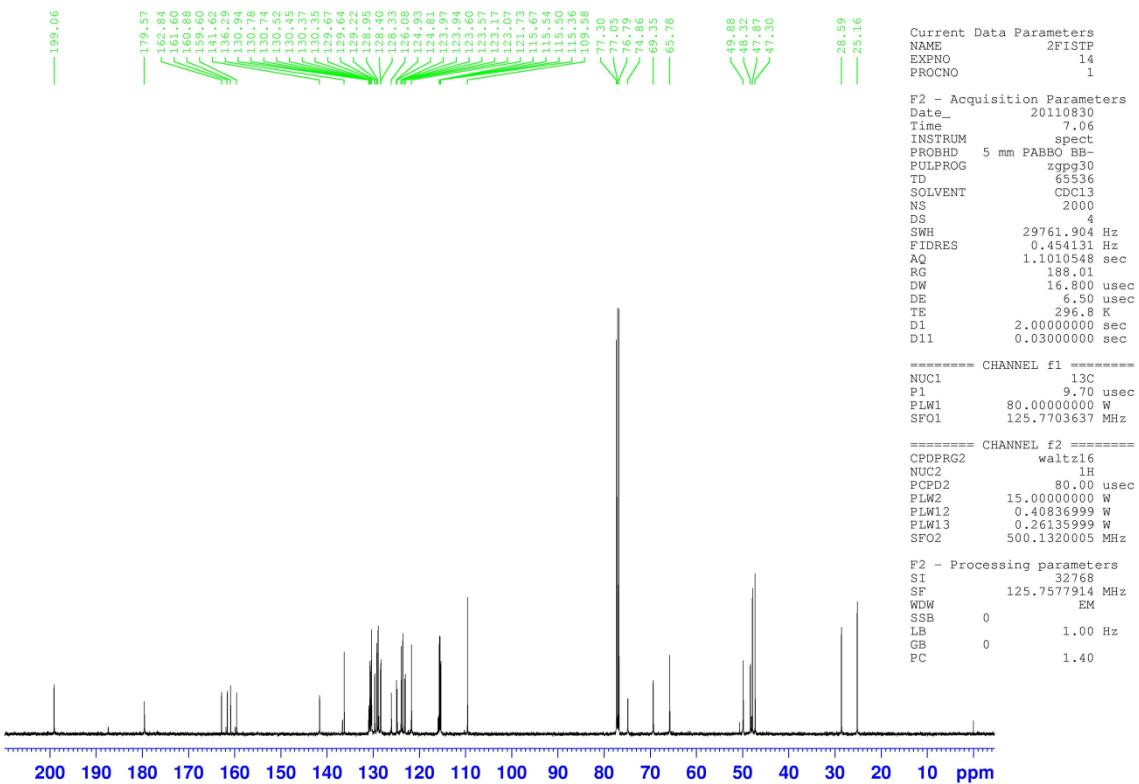
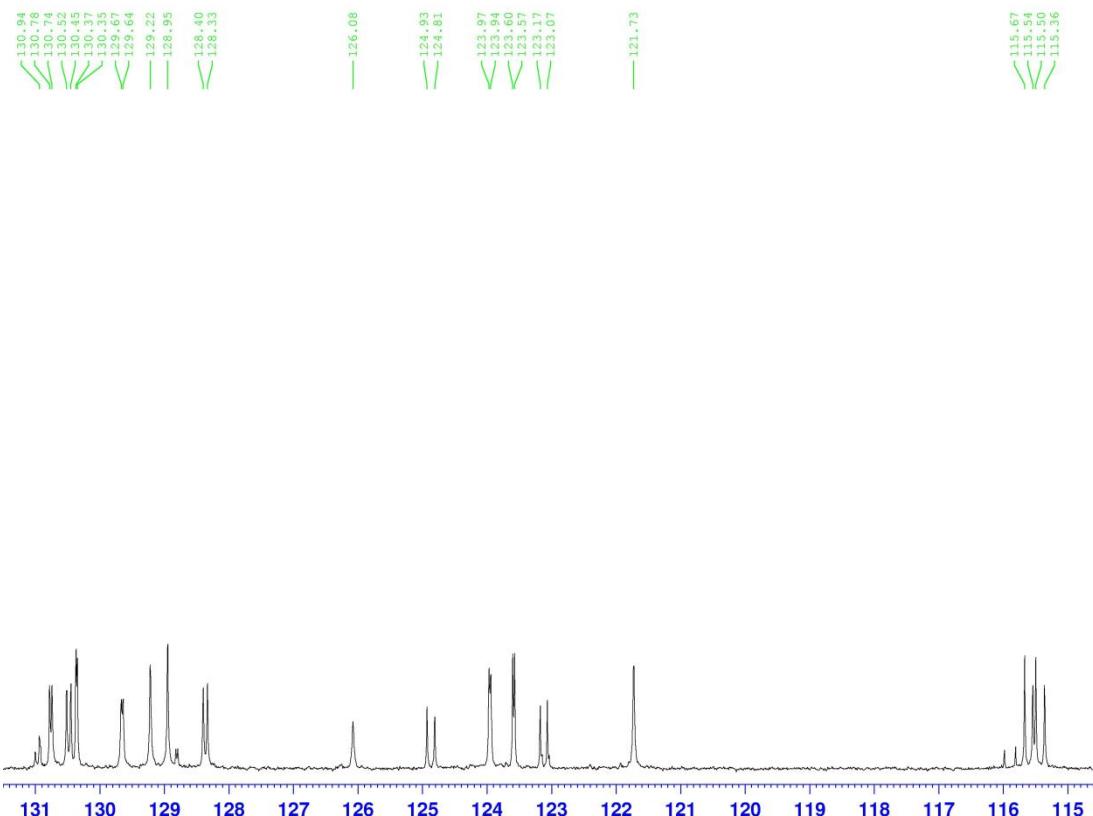
Figure S31. ^{13}C -NMR spectrum of 6f.**Figure S32.** ^{13}C -NMR spectrum of 6f.

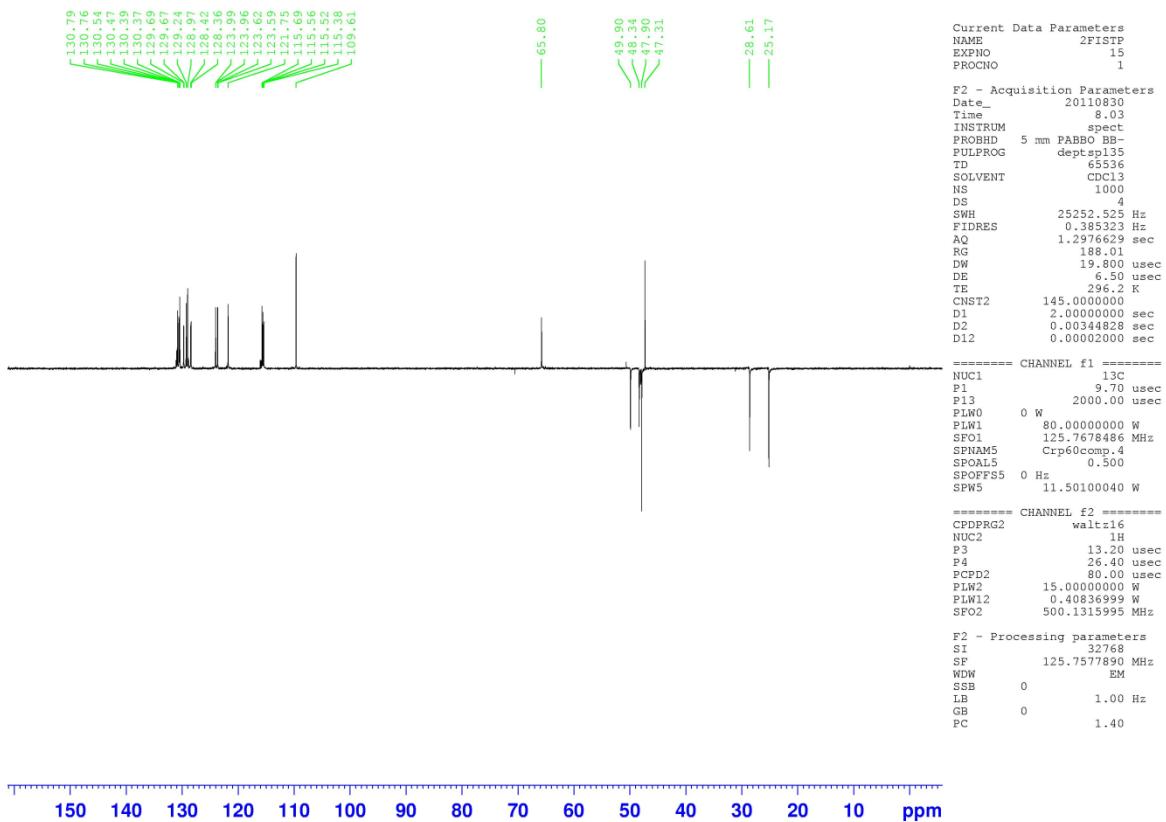
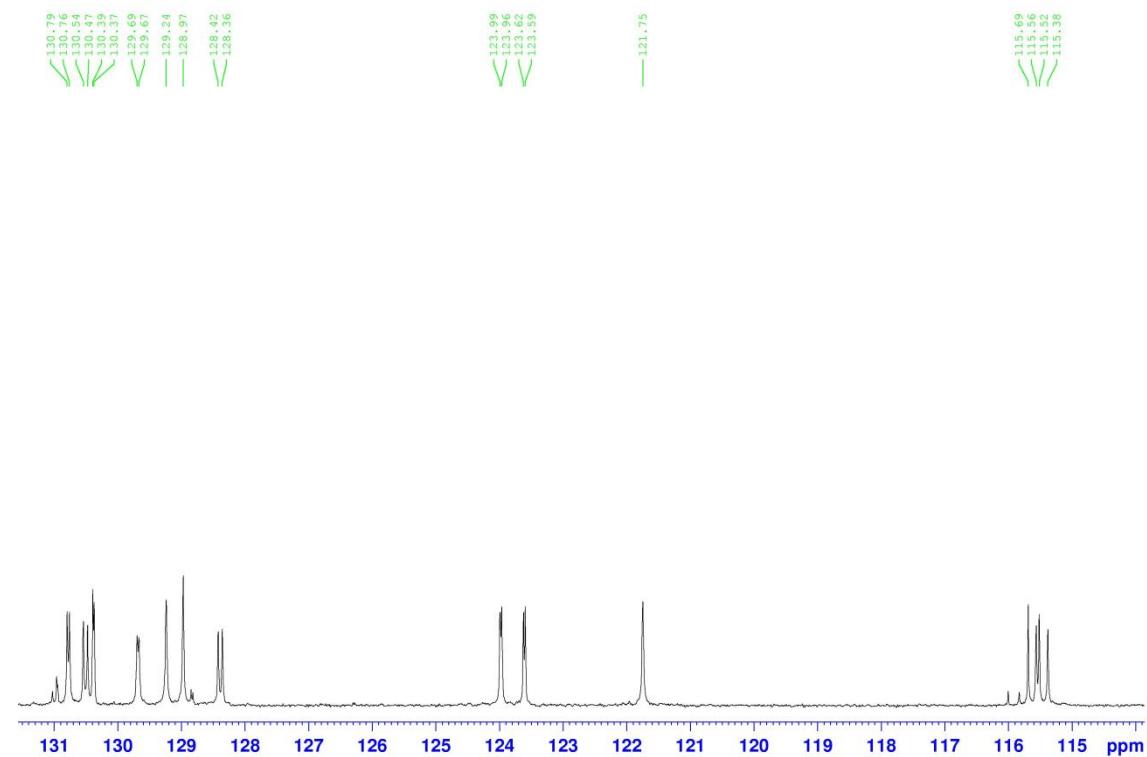
Figure S33. DEPT-135 NMR spectrum of **6f**.**Figure S34.** DEPT-135 NMR spectrum of **6f**.

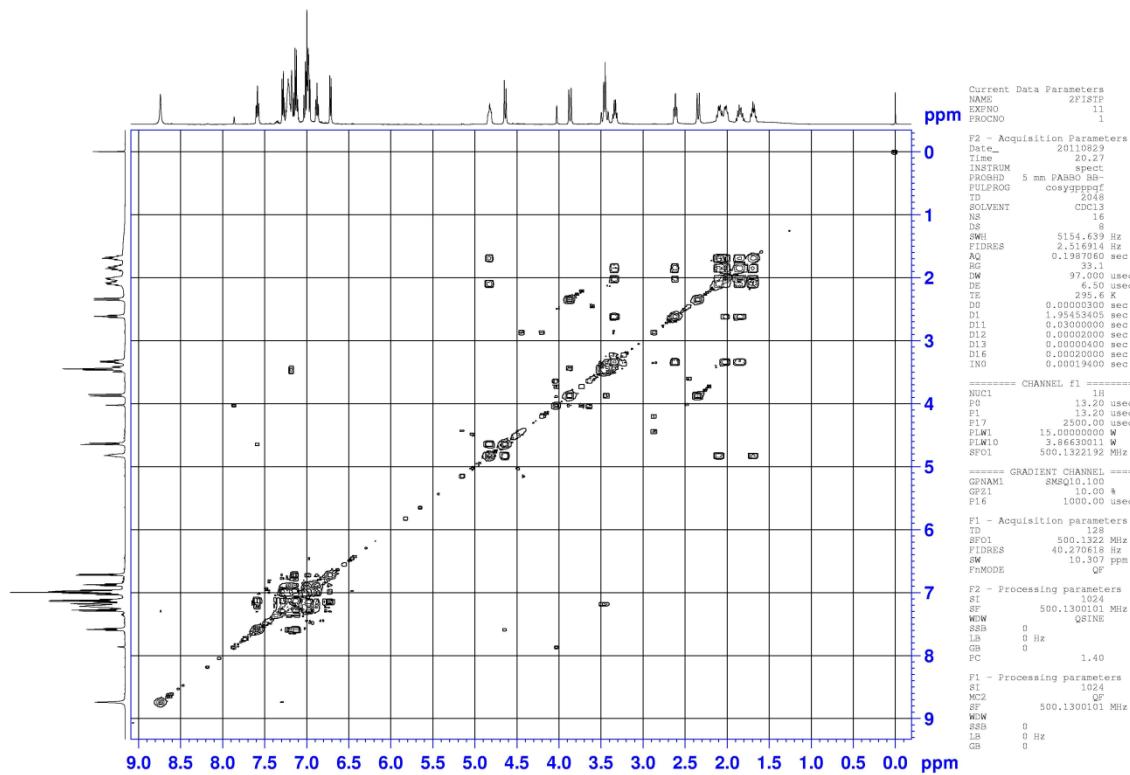
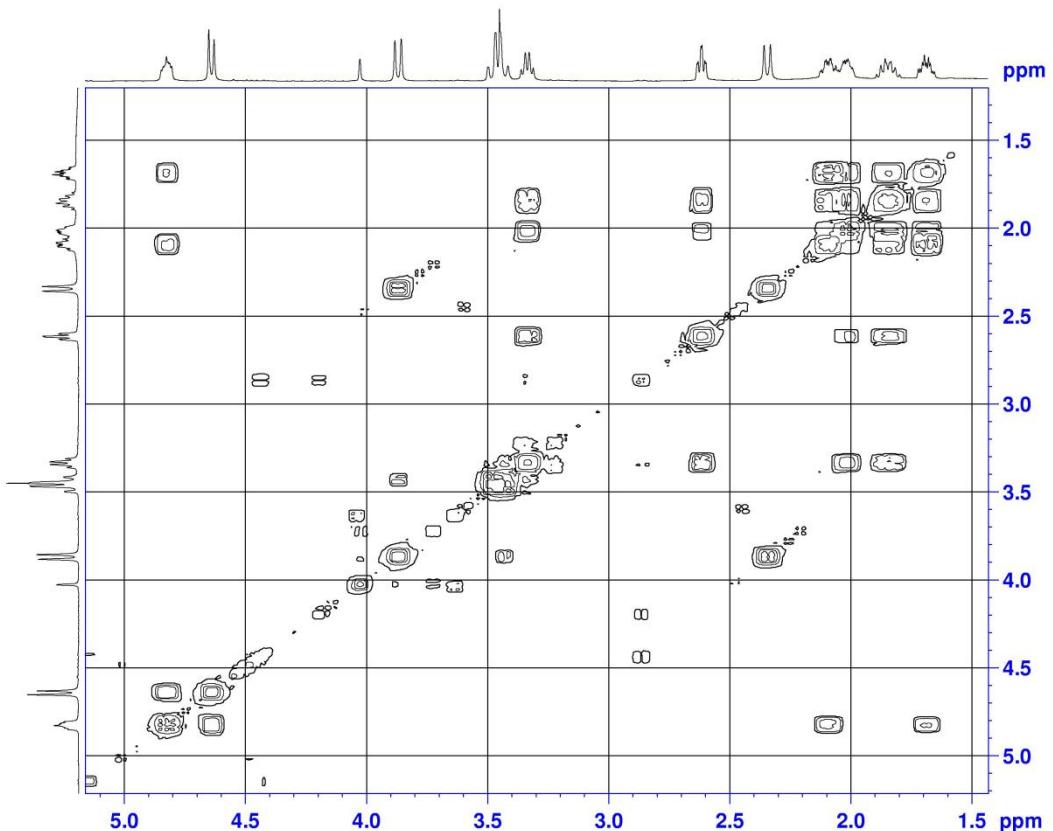
Figure S35. H,H-COSY spectrum of **6f**.**Figure S36.** H,H-COSY spectrum of **6f**.

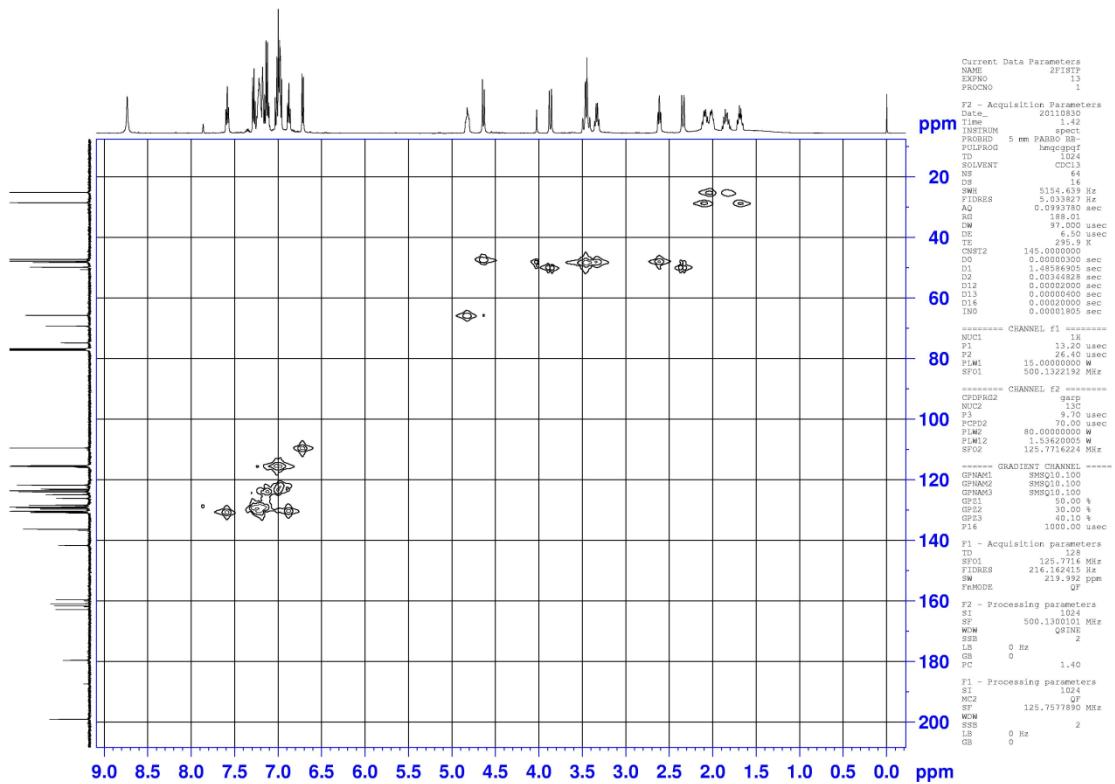
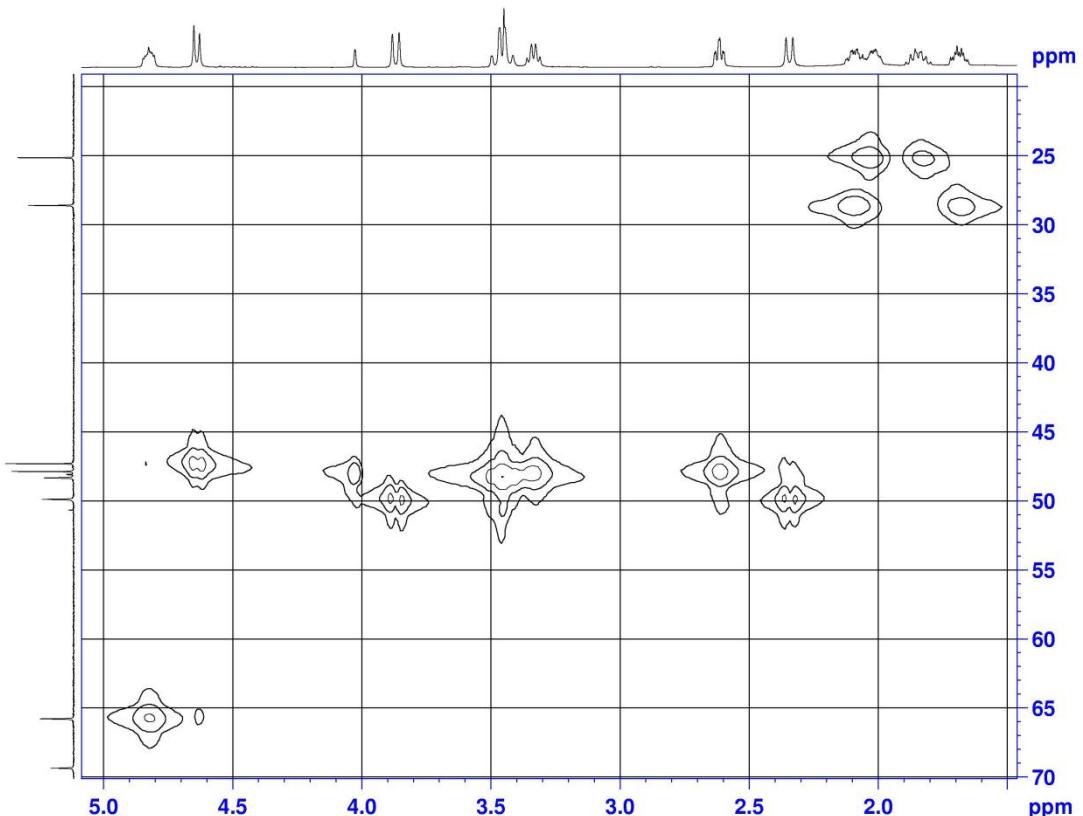
Figure S37. C,H-COSY spectrum of **6f**.**Figure S38.** C,H-COSY spectrum of **6f**.

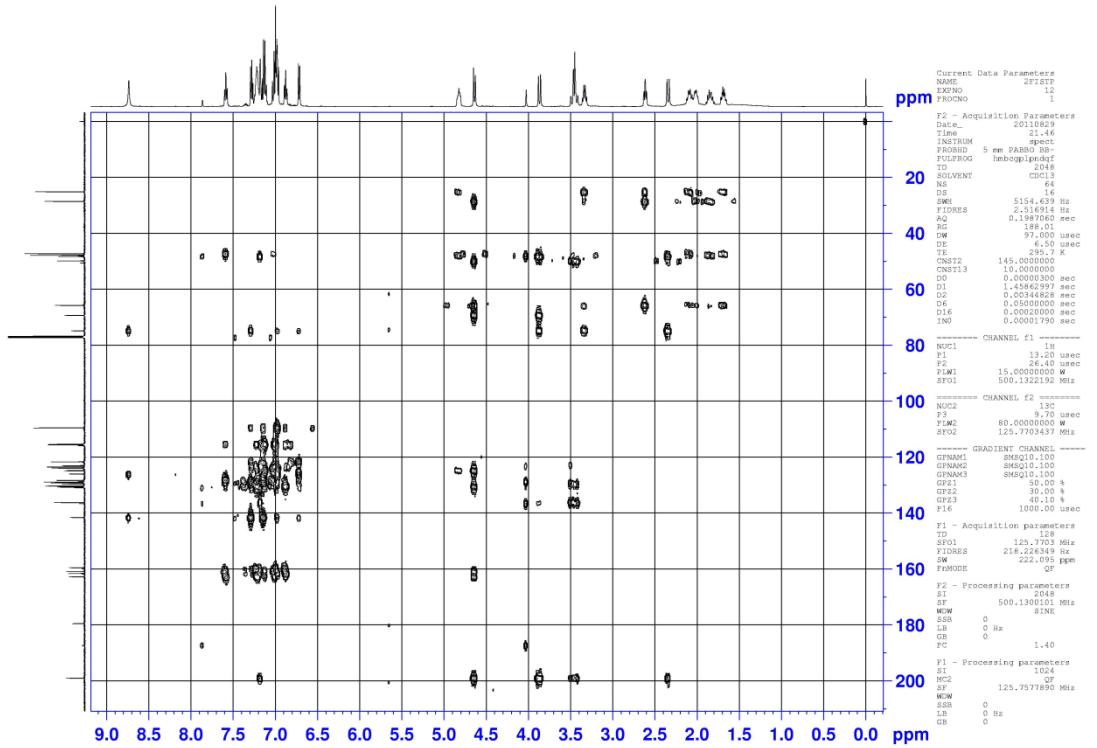
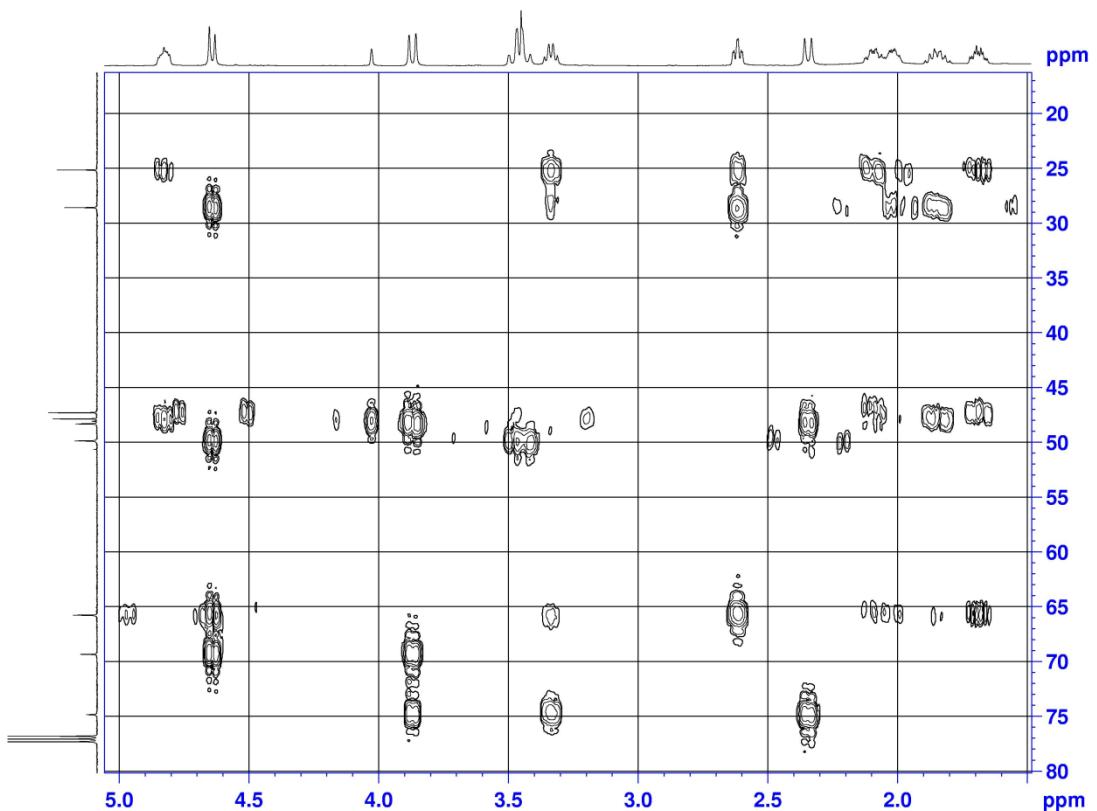
Figure S39. HMBC spectrum of **6f**.**Figure S40.** HMBC spectrum of **6f**.

Table S1. Antiproliferative activity of **2a–n**, **4a–n**, **5a–n** and **6a–n**¹.

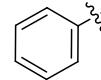
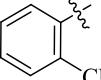
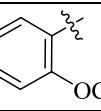
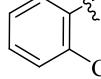
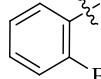
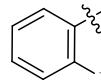
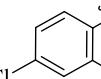
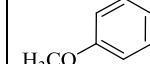
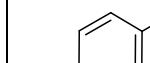
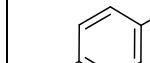
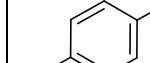
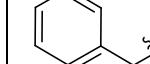
Ar		CCRF-CEM	MDA-MB-231	SK-OV-3			CCRF-CEM	MDA-MB-231	SK-OV-3			CCRF-CEM	MDA-MB-231	SK-OV-3			CCRF-CEM	MDA-MB-231	SK-OV-3
	Comp				Comp	Yield (%)				Comp	Yield (%)			Comp	Yield (%)				
	2a	51.68	85.51	73.60	4a	92	37.07	35.48	-21.46	5a	93	53.56	77.03	58.83	6a	90	61.01	87.01	72.54
	2b	51.81	87.72	73.91	4b	90	58.88	41.33	18.30	5b	90	52.22	83.16	72.02	6b	91	62.34	81.59	74.04
	2c	56.74	88.72	73.11	4c	86	52.32	26.60	-10.61	5c	85	53.72	86.53	63.20	6c	83	60.92	85.47	71.11
	2d	51.61	87.87	-41.45	4d	91	51.14	0.00	-43.19	5d	92	45.03	74.88	51.68	6d	92	56.48	73.80	18.62
	2e	62.06	86.45	56.17	4e	90	48.21	24.80	-24.73	5e	89	45.61	58.83	55.69	6e	90	57.85	72.67	23.91
	2f	53.34	85.94	-33.65	4f	92	49.50	45.67	-1.07	5f	90	46.89	81.67	40.56	6f	89	28.13	76.71	-13.31
	2g	47.40	87.41	-25.73	4g	90	40.99	53.30	3.69	5g	92	43.99	82.03	22.47	6g	91	29.56	60.52	-18.16

Table S1. Cont.

Ar		CCRF-CEM	MDA-MB-231	SK-OV-3		CCRF-CEM	MDA-MB-231	SK-OV-3		CCRF-CEM	MDA-MB-231	SK-OV-3		CCRF-CEM	MDA-MB-231	SK-OV-3			
	Comp				Comp	Yield (%)			Comp	Yield (%)			Comp	Yield (%)					
	2j	53.75	75.69	50.53	4j	85	48.28	53.91	36.37	5j	86	64.15	84.90	61.03	6j	82	62.29	81.52	60.35
	2k	49.31	76.84	56.05	4k	93	57.70	70.86	68.28	5k	90	56.57	84.07	67.80	6k	92	62.44	86.84	68.65
	2l	47.33	74.93	43.78	4l	91	56.01	71.96	70.52	5l	92	57.45	81.95	70.28	6l	89	64.03	86.09	61.38
	2m	48.44	74.63	50.25	4m	94	57.88	69.09	56.58	5m	93	57.91	84.75	73.89	6m	90	64.03	85.60	56.75
	2n	46.70	84.03	12.23	4n	90	51.20	79.55	69.64	5n	87	57.35	73.62	71.35	6n	89	26.83	-0.57	-41.20

¹ The control was calculated to be 0% inhibition.