

Clinoposides A–F: meroterpenoids with protective effects on H9c2

cardiomyocyte from *Clinopodium chinense*

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Table S1. ¹H and ¹³C NMR Data for 1 and 2 (600 MHz, pyridine-*d*₅)

position	1		2	
	δ_C , type	δ_H (<i>J</i> in Hz)	δ_C , type	δ_H (<i>J</i> in Hz)
1	39.9, CH ₂	1.50, br d, (12.6) 2.00, m	39.7, CH ₂	1.60, m 1.94, br d, (13.2)
2	26.7, CH ₂	2.06, br t, (12.6) 2.12, m	26.8, CH ₂	2.03, m 2.20, m
3	83.6, CH	4.25, br t, (12.6)	84.4, CH	4.25, m
4	44.7, C		44.4, C	
5	49.1, CH	1.79, br d, (10.8)	49.2, CH	1.68, br d, (11.4)
6	19.0, CH ₂	1.42, m 1.81, m	19.0, CH ₂	1.43, br d, (11.4) 1.70, m
7	34.9, CH ₂	1.49, m 1.90, m	34.8, CH ₂	1.32, m 1.52, m
8	41.7, C		41.5, C	
9	48.5, CH	3.14, d, (10.8)	48.7, CH	2.81, d, (11.4)
10	39.9, C		39.9, C	
11	32.8, CH	4.57, dd, (10.8, 1.8)	33.2, CH	4.65, dd, (10.8, 1.8)
12	128.2, CH	5.28 d, (1.8)	128.5, CH	5.24, d, (2.4)
13	141.6, C		141.8, C	
14	44.4, C		44.4, C	
15	37.9, CH ₂	1.81, m 2.32, br t, (12.6)	37.6, CH ₂	1.54, m 2.16, m
16	67.3, CH	4.71, m	67.2, CH	4.45, m
17	43.5, C		43.3, C	
18	45.0, CH	2.49, dd, (13.8, 4.2)	45.0, CH	2.35, dd, (13.8, 4.2)
19	47.4, CH ₂	1.35, br d, (11.4) 1.81, m	47.4, CH ₂	1.32, m 1.79, br t, (13.8)
20	31.5, C		31.7, C	
21	35.0, CH ₂	1.29, br d, (11.4) 1.66, br t, (11.4)	34.8, CH ₂	1.26, br d, (11.4) 1.57, br t, (11.4)
22	26.5, CH ₂	1.80, m 2.84, d, (12.6)	26.6, CH ₂	1.73, m 2.78, br d, (12.6)
23	65.8, CH ₂	3.74, d, (10.2) 4.35, d, (10.2)	66.5, CH ₂	3.76, d, (10.8) 4.33, d, (10.8)
24	13.9, CH ₃	1.13, s	13.8, CH ₃	1.13, s
25	17.8, CH ₃	1.52, s	17.7, CH ₃	1.48, s
26	18.8, CH ₃	1.42, s	19.0, CH ₃	1.34, s
27	25.7, CH ₃	1.77, s	25.9, CH ₃	0.96, s
28	69.3, CH ₂	3.77, d, (10.2) 4.52, d, (10.2)	69.6, CH ₂	3.63, d, (10.8) 4.43, d, (10.8)
29	33.8, CH ₃	0.82, s	34.0, CH ₃	1.08, s
30	24.3, CH ₃	0.92, s	24.4, CH ₃	1.01, s
2'	79.8, CH	5.21, dd, (13.8, 2.4)	80.6, CH	5.35, dd, (12.6, 3.6)

3'	44.0, CH ₂	2.74, dd, (16.8, 2.4) 3.23, dd, (16.8, 13.8)	45.0, CH ₂	2.71, dd, (16.8, 3.6) 3.17, dd, (16.8, 12.6)
4'	196.9, C		197.3, C	
5'	162.1, C		163.2, C	
6'	96.8, CH	6.18, s	97.3, CH	6.48, s
7'	167.6, C		165.4, C	
8'	115.3, C		114.8, C	
9'	161.5, C		162.7, C	
10'	103.1, CH		103.9, CH	
1''	130.4, C		130.8, C	
2''	128.7, CH	7.49, d, (8.4)	130.1, CH	7.54, d, (8.4)
3''	119.0, CH	7.19, d, (8.4)	116.9, CH	7.26, d, (8.4)
4''	159.9, C		160.0, C	
5''	119.0, CH	7.19, d, (8.4)	116.9, CH	7.26, d, (8.4)
6''	128.7, CH	7.49, d, (8.4)	130.1, CH	7.54, d, (8.4)
1'''	104.0, CH	4.73, d, (7.8)	104.1, CH	4.81, d, (7.8)
2'''	77.3, CH	4.55, m	77.1, CH	4.58, dd, (9.6, 7.8)
3'''	85.5, CH	4.02, dd, (9.6, 2.4)	85.5, CH	4.00, dd, (9.6, 3.0)
4'''	72.3, CH	4.15, d, (2.4)	72.2, CH	4.09, d, (3.0)
5'''	70.8, CH	3.43, q, (6.6)	70.8, CH	3.28, q, (6.0)
6'''	17.4, CH ₃	1.08, d, (6.6)	17.4, CH ₃	1.03, d, (6.0)
1''''	104.0, CH	5.57, d, (7.8)	104.3, CH	5.57, d, (7.8)
2''''	76.6, CH	4.07, m	76.5, CH	4.11, m
3''''	79.2, CH	4.19, br t, (9.0)	79.2, CH	4.17, br t, (9.0)
4''''	72.5, CH	4.18, br t, (9.0)	72.3, CH	4.17, br t, (9.0)
5''''	77.9, CH	3.56, m	77.9, CH	3.58, m
6''''	63.4, CH ₂	4.28, m 4.30, m	63.4, CH ₂	4.28, m 4.28, m
1'''''	105.5, CH	5.25, d, (7.8)	105.5, CH	5.23, d, (7.8)
2'''''	75.7, CH	3.97, br t, (8.4)	75.7, CH	3.97, br t, (7.8)
3'''''	78.8, CH	4.23, br t, (9.6)	78.8, CH	4.22, br t, (9.0)
4'''''	72.0, CH	4.21, br t, (9.6)	72.0, CH	4.21, br t, (9.0)
5'''''	78.9, CH	3.91, m	78.9, CH	3.89, m
6'''''	63.0, CH ₂	4.30, m 4.42, dd, (10.2, 2.4)	62.9, CH ₂	4.30, (12.6, 5.4) 4.41, dd, (12.6, 3.0)

Table S2. ¹H and ¹³C NMR Data for 3 and 4 (600 MHz, pyridine-*d*₅)

position	3		4	
	δ_C , type	δ_H (<i>J</i> in Hz)	δ_C , type	δ_H (<i>J</i> in Hz)
1	39.9, CH ₂	1.52, br d, (12.6)	39.7, CH ₂	1.56, br d, (12.6)
		1.96, m		1.95, br d, (12.6)
2	26.5, CH ₂	1.99, m	26.7, CH ₂	2.03, br t, (12.6)
		2.05, m		2.18, m
3	83.6, CH	4.06, m	84.1, CH	4.25, m

4	44.7, C		44.4, C	
5	49.1, CH	1.79, m	49.1, CH	1.69, br d, (10.8)
6	18.7, CH ₂	1.44, m	19.0, CH ₂	1.43, br t, (12.6)
		1.86, m		1.73, m
7	35.0, CH ₂	1.52, m	34.8, CH ₂	1.30, m
		1.89, m		1.64, br t, (12.6)
8	41.7, C		41.6, C	
9	48.4, CH	3.16, d, (10.8)	48.8, CH	2.79, d, (10.8)
10	39.9, C		39.9, C	
11	32.8, CH	4.57, dd, (10.8, 1.8)	33.2, CH	4.64, dd, (10.8, 1.8)
12	128.6, CH	5.29, d, (1.8)	128.5, CH	5.24 d, (2.4)
13	141.6, C		141.8, C	
14	44.3, C		44.4, C	
15	37.9, CH ₂	1.83, m	37.6, CH ₂	1.56, br d, (12.6)
		2.32, br t, (12.6)		2.16, br t, (12.6)
16	67.3, CH	4.69, m	67.1, CH	4.41, m
17	43.5, CH ₂		43.4, CH ₂	
18	45.1, CH	2.48, dd, (13.8, 4.2)	44.5, CH	2.36, dd, (13.8, 4.2)
19	47.4, CH ₂	1.37, br d, (10.8)	47.6, CH ₂	1.29, m
		1.97, m		1.75, m
20	31.5, C		31.7, C	
21	34.9, CH ₂	1.29, br d, (11.4)	34.8, CH ₂	1.27, m
		1.66, br t, (11.4)		1.54, m
22	26.5, CH ₂	1.79, m	26.6, CH ₂	1.77, m
		2.84, br d, (12.6)		2.77, br d, (11.4)
23	65.8, CH ₂	3.74, d, (10.2)	66.2, CH ₂	3.76, d, (10.2)
		4.42, d, (10.2)		4.34, d, (10.2)
24	13.8, CH ₃	1.22, s	13.9, CH ₃	1.12, s
25	17.8, CH ₃	1.50, s	17.7, CH ₃	1.47, s
26	18.7, CH ₃	1.41, s	18.8, CH ₃	1.34, s
27	25.7, CH ₃	1.77, s	26.0, CH ₃	0.93, s
28	69.4, CH ₂	3.77, d, (10.2)	69.5, CH ₂	3.63, d, (10.2)
		4.52, d, (10.2)		4.43, d, (10.2)
29	33.8, CH ₂	0.83, s	34.1, CH ₃	1.12, s
30	24.3, CH ₂	0.91, s	24.4, CH ₃	1.01, s
2'	80.3, CH	5.37, dd, (13.8, 2.4)	80.3, CH	5.38, dd, (12.6, 3.6)
3'	43.9, CH ₂	2.74, dd, (16.8, 2.4)	45.0, CH ₂	2.70, dd, (16.8, 3.6)
		3.06, dd, (16.8, 13.8)		3.10, dd, (16.8, 12.6)
4'	197.1, C		197.0, C	
5'	162.2, C		162.5, C	
6'	97.0, CH	6.25, s	97.4, CH	6.51, s
7'	167.5, C		165.5, C	
8'	115.5, C		114.9, C	
9'	161.5, C		161.0, C	

10'	103.2, C		103.9, C	
1''	130.4, C		132.4, C	
2''	129.3, CH	7.46, d, (8.4)	128.5, CH	7.50, d, (8.4)
3''	116.9, CH	7.16, d, (8.4)	114.9, CH	7.11, d, (8.4)
4''	160.0, C		161.0, C	
5''	116.9, CH	7.16, d, (8.4)	114.9, CH	7.11, d, (8.4)
6''	129.3, CH	7.46, d, (8.4)	128.5, CH	7.50, d, (8.4)
1'''	104.0, CH ₂	4.71, d, (7.8)	104.0, CH	4.82, d, (7.8)
2'''	77.3, CH	4.55, br d, (9.6)	77.2, CH	4.59, dd, (9.6, 7.8)
3'''	85.5, CH	4.02, dd, (9.6, 2.4)	85.6, CH	4.02, dd, (9.6, 3.0)
4'''	72.3, CH	4.13, d, (2,4)	72.2, CH	4.12, d, (2,4)
5'''	70.8, CH	3.40, q, (6.6)	70.8, CH	3.32, q, (6.6)
6'''	17.4, CH ₃	1.03, d, (6.6)	17.4, CH ₃	1.06, d, (6.6)
1''''	104.3, CH	5.56, d, (7.8)	104.3, CH	5.57, d, (7.8)
2''''	76.5, CH ₂	4.06, m	76.5, CH	4.08, br t, (7.8)
3''''	79.2, CH	4.19, br t, (9.0)	79.3, CH	4.18, m
4''''	72.4, CH	4.17, br t, (9.6)	72.3, CH	4.17, m
5''''	77.9, CH	3.56, m	77.9, CH	3.59, m
6''''	63.4, CH ₂	4.28, m	63.4, CH ₂	4.28, m
		4.28, m		4.28, m
1'''''	105.5, CH	5.24, d, (7.8)	105.5, CH	5.23, d, (7.8)
2'''''	75.7, CH	3.97, br t, (7.8)	75.8, CH	3.98, br t, (7.8)
3'''''	78.8, CH	4.24, br t, (9.0)	78.8, CH	4.21, m
4'''''	72.0, CH	4.22, br t, (9.0)	72.0, CH	4.20, m
5'''''	78.9, CH	3.91, m	78.9, CH	3.90, m
6'''''	63.0, CH ₂	4.30, m	63.0, CH ₂	4.30, dd, (10.2, 5.4)
		4.42, dd, (10.2, 2.4)		4.41, dd, (10.2, 2.4)
OCH ₃			55.9, CH ₃	3.76

Table S3. ¹H and ¹³C NMR Data for 5 and 6 (600 MHz, pyridine-*d*₅)

position	5		6	
	δ_C , type	δ_H (<i>J</i> in Hz)	δ_C , type	δ_H (<i>J</i> in Hz)
1	39.7, CH ₂	1.48, m	39.7, CH ₂	1.53, m
		1.95, m		1.93, m
2	26.7, CH ₂	1.97, m	26.8, CH ₂	2.02, m
		2.03, m		2.10, m
3	83.5, CH	4.05, m	83.3, CH	4.13, dd, (12.6, 4.8)
4	44.7, C		44.5, C	
5	49.1, CH	1.77, m	48.9, CH	1.84, m
6	19.0, CH ₂	1.51, m	18.8, CH ₂	1.53, m
		1.81, m		1.82, m
7	34.9, CH ₂	1.53, m	34.9, CH ₂	1.65, br t, (12.6)
		1.86, m		1.95, m
8	41.7, C		41.7, C	

9	48.1, CH	3.19, d, (10.8)	48.0, CH	3.20, d, (11.4)
10	40.0, C		40.0, C	
11	33.2, CH	4.70, dd, (10.8, 1.8)	33.2, CH	4.56, dd, (10.8, 1.8)
12	128.1, CH	5.39 d, (2.4)	128.5, CH	5.39, d, (2.4)
13	141.9, C		141.8, C	
14	45.2, C		45.1, C	
15	37.9, CH ₂	1.84, m 2.34, br t, (12.6)	37.6, CH ₂	1.83, m 2.34, br t, (12.6)
16	67.3, CH	4.77, m	67.2, CH	4.74, m
17	43.5, C		43.5, C	
18	45.2, CH	2.48, dd, (12.6, 4.2)	45.1, CH	2.47, dd, (13.2, 4.2)
19	47.1, CH ₂	1.50, m 2.09, br t, (13.8)	47.4, CH ₂	1.44, m 2.08, m
20	31.5, C		31.5, C	
21	34.9, CH ₂	1.29, m 1.66, br t, (11.4)	34.9, CH ₂	1.29, m 1.53, m
22	26.5, CH ₂	1.82, m 2.84, d, (13.8)	26.6, CH ₂	1.78, m 2.84, br d, (11.4)
23	66.0, CH ₂	3.75, d, (10.8) 4.35, d, (10.8)	65.6, CH ₂	3.77, d, (10.8) 4.39, d, (10.8)
24	13.8, CH ₃	1.11, s	13.8, CH ₃	1.12, s
25	17.8, CH ₃	1.51, s	17.8, CH ₃	1.51, s
26	18.8, CH ₃	1.43, s	18.7, CH ₃	1.44, s
27	26.0, CH ₃	1.83, s	25.9, CH ₃	1.82, s
28	69.6, CH ₂	3.74, d, (10.8) 4.55, d, (10.8)	69.6, CH ₂	3.74, d, (10.8) 4.54, d, (10.8)
29	33.9, CH ₃	0.85, s	33.9, CH ₃	0.82, s
30	24.3, CH ₃	0.86, s	24.2, CH ₃	0.85, s
2'	79.8, CH	4.90, dd, (13.2, 3.6)	79.3, CH	5.13, dd, (13.2, 3.0)
3'	44.0, CH ₂	2.48, dd, (17.4, 3.6) 2.85, dd, (17.4, 13.2)	45.0, CH ₂	2.61, dd, (16.8, 3.0) 2.87, dd, (16.8, 13.2)
4'	197.0, C		197.1, C	
5'	164.2, C		164.3, C	
6'	115.7, C		115.2, C	
7'	165.3, C		165.4, C	
8'	96.2, CH	6.41, s	96.0, CH	6.36, s
9'	161.9, C		161.9, C	
10'	103.2, C		103.4, C	
1''	131.9, C		131.9, C	
2''	129.0, CH	7.36, d, (8.4)	130.1, CH	7.40, d, (8.4)
3''	115.4, CH	6.98, d, (8.4)	114.9, CH	6.96, d, (8.4)
4''	160.8, C		160.0, C	
5''	115.4, CH	6.98, d, (8.4)	114.9, CH	6.96, d, (8.4)
6''	129.0, CH	7.36, d, (8.4)	130.1, CH	7.40, d, (8.4)

1'''	103.6, CH	4.70, d, (7.8)	104.1, CH	4.73, d, (7.8)
2'''	77.3, CH	4.54, m	77.3, CH	4.56, dd, (9.6, 7.8)
3'''	85.5, CH	4.01, dd, (9.6, 3.0)	85.5, CH	4.01, dd, (9.6, 3.0)
4'''	72.2, CH	4.13, d, (2.4)	72.3, CH	4.14, d, (2.4)
5'''	70.8, CH	3.35, q, (6.6)	70.8, CH	3.40, q, (6.6)
6'''	17.3, CH ₃	1.02, d, (6.6)	17.4, CH ₃	1.06, d, (6.6)
1''''	103.9, CH	5.56, d, (7.8)	104.3, CH	5.78, d, (7.8)
2''''	76.5, CH	4.09, br t, (7.8)	76.6, CH	4.09, br t, (7.8)
3''''	79.2, CH	4.18, br t, (9.0)	79.2, CH	4.19, br t, (9.0)
4''''	72.4, CH	4.18, br t, (9.0)	72.5, CH	4.18, br t, (8.4)
5''''	77.9, CH	3.59, m	78.0, CH	3.60, m
6''''	63.4, CH	4.27, m	63.5, CH ₂	4.28, m
		4.30, m		4.28, m
1'''''	104.3, CH	5.23, d, (7.8)	105.5, CH	5.24, d, (7.8)
2'''''	75.8, CH	3.96, br t, (7.8)	75.7, CH	3.96, br t, (7.8)
3'''''	78.8, CH	4.24, br t, (9.0)	78.8, CH	4.23, br t, (9.0)
4'''''	72.0, CH	4.22, br t, (9.0)	72.2, CH	4.21, br t, (9.0)
5'''''	78.9, CH	3.91, m	78.9, CH	3.92, m
6'''''	62.9, CH ₂	4.32, dd, (12.0, 5.4)	62.9, CH ₂	4.31, (12.6, 5.4)
		4.42, dd, (12.0, 2.4)		4.43, dd, (12.6, 3.0)
OCH ₃	55.7, CH ₃	3.65, s	55.7, CH ₃	3.64, s

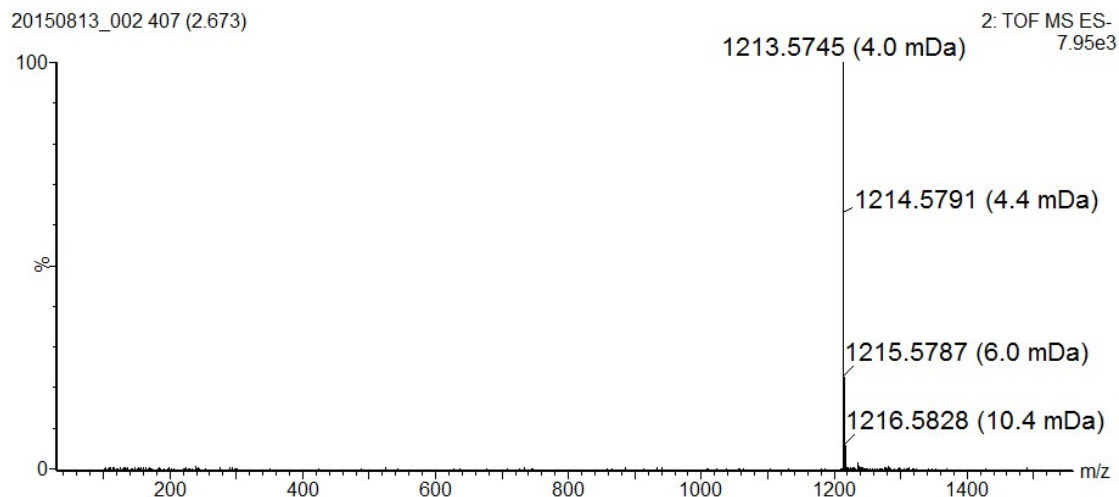


Figure S1. The HR-ESI-MS of 1.

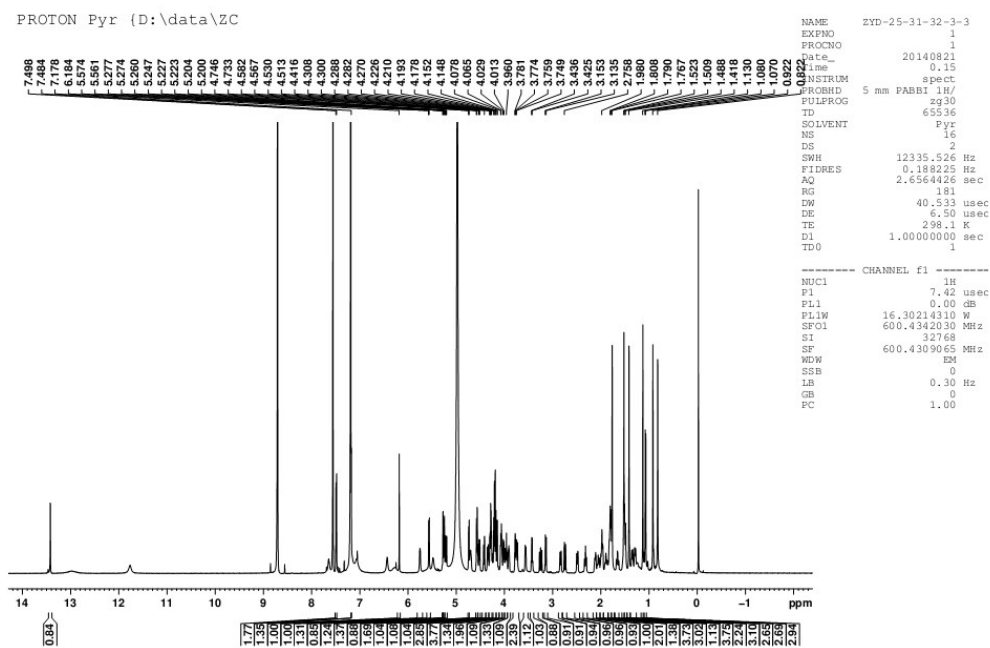


Figure S2. ¹H NMR spectrum of 1 in Pyridine-*d*₅.

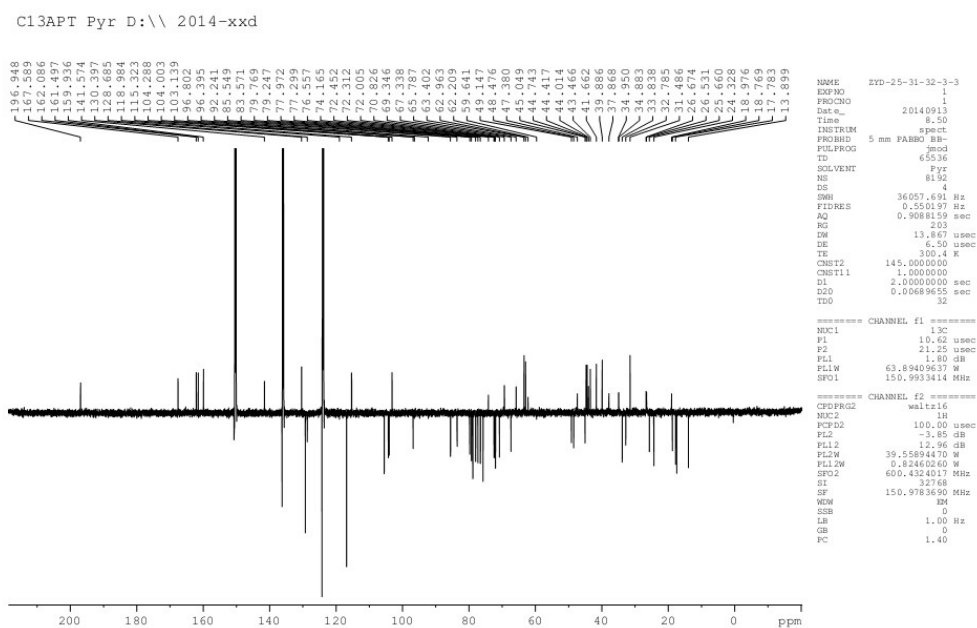


Figure S3. ^{13}C APT spectrum of **1** in Pyridine- d_5 .

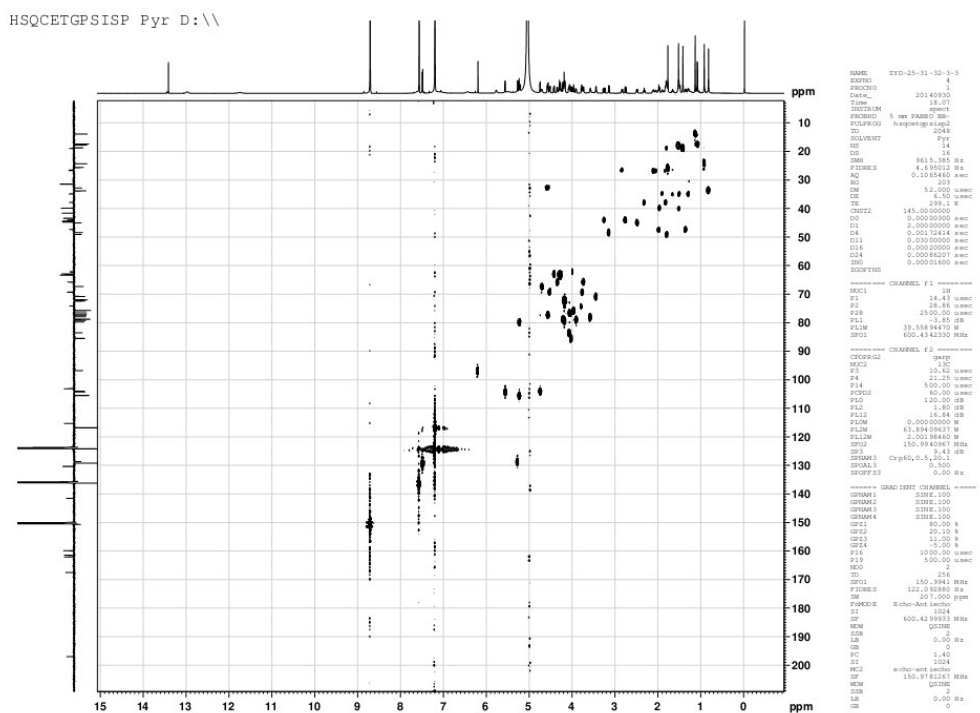


Figure S4. HSQC spectrum of **1** in Pyridine- d_5 .

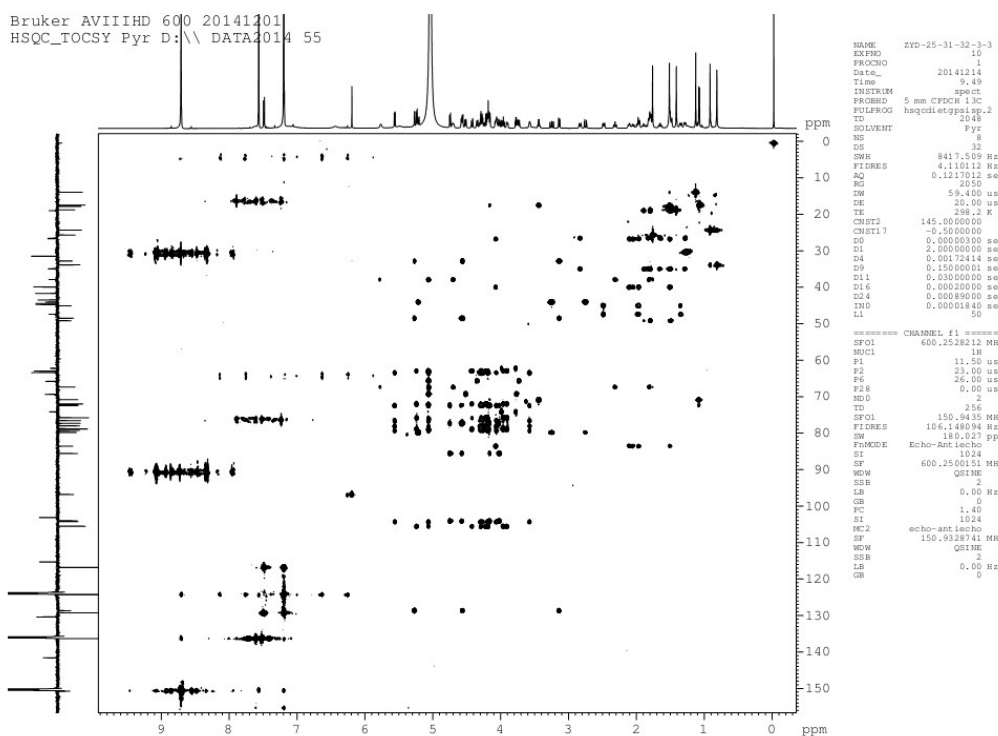


Figure S5. HSQC-TOCSY spectrum of **1** in Pyridine-*d*₅.

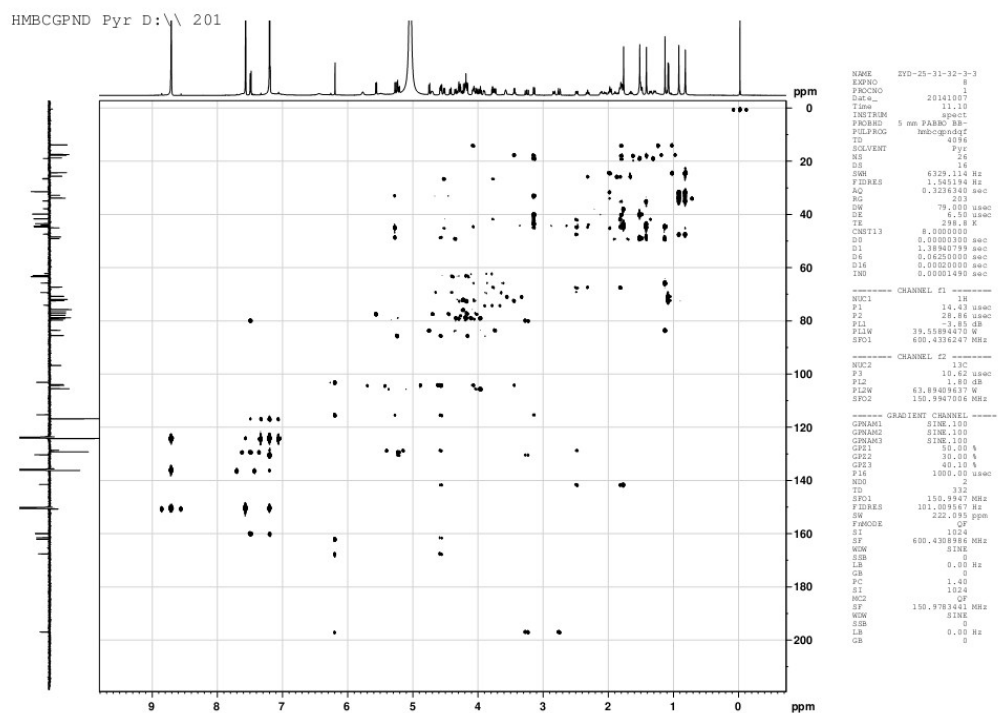


Figure S6. HMBC spectrum of **1** in Pyridine-*d*₅.

COSYGMFSW Pyr D:\ 2

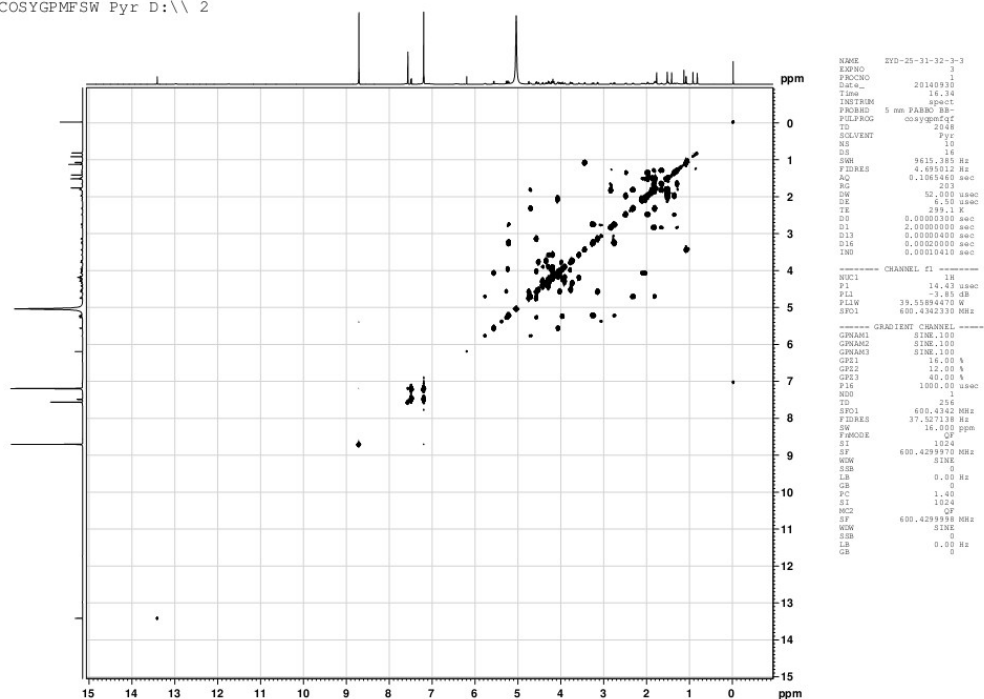


Figure S7. COSY spectrum of 1 in Pyridine- d_5 .

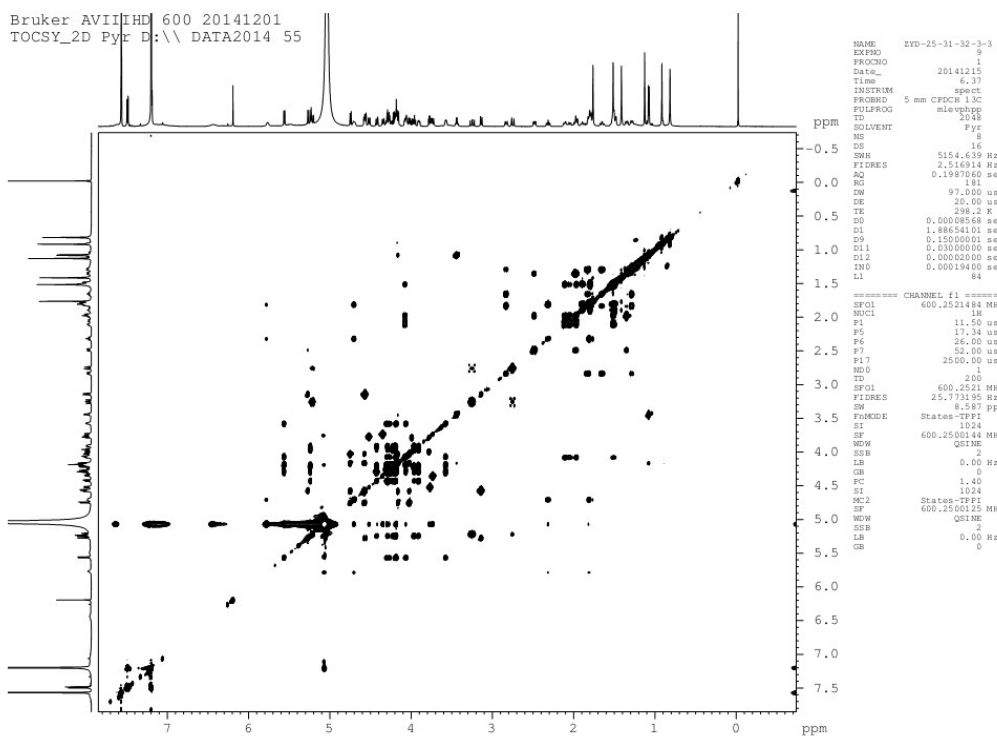


Figure S8. TOCSY spectrum of 1 in Pyridine- d_5 .

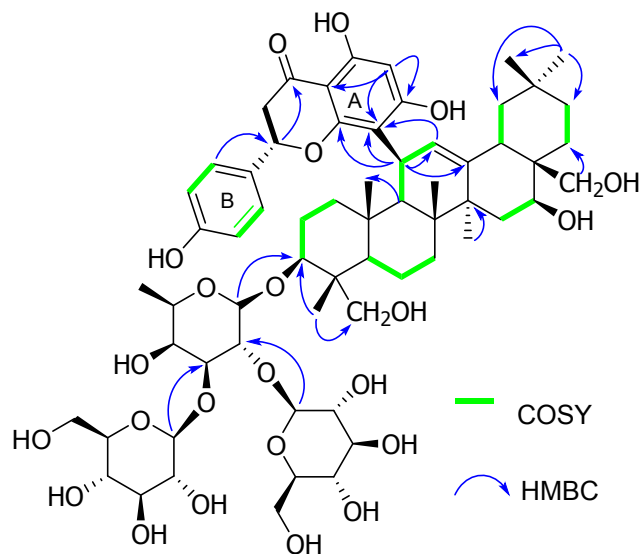


Figure S9. COSY and HMBC correlations of **1** in Pyridine-*d*₅.

NOESYPSHW Pyr D:\ 20

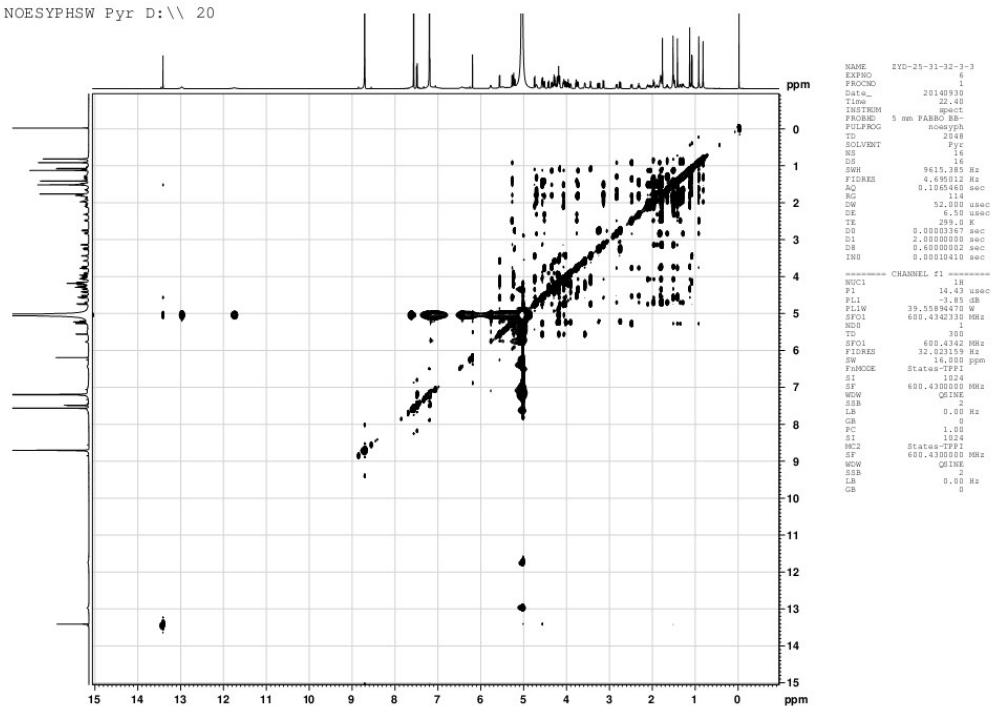


Figure S10. NOESY Spectrum of **1** in Pyridine-*d*₅.

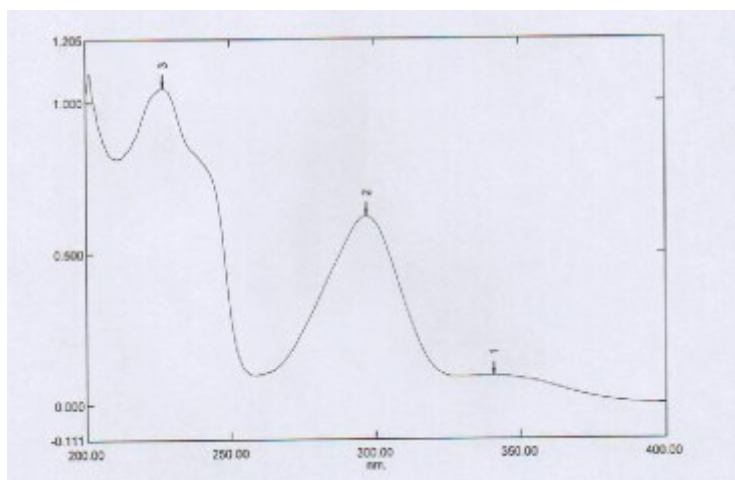


Figure S11. The experimental UV spectrum of **1**.

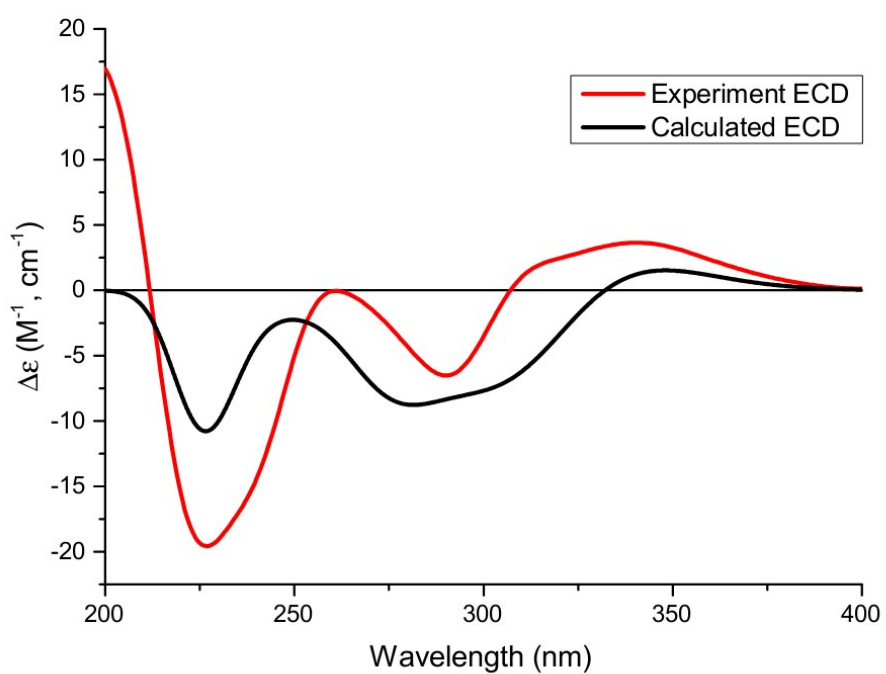


Figure S12. The experimental and calculated ECD spectra of **1**.

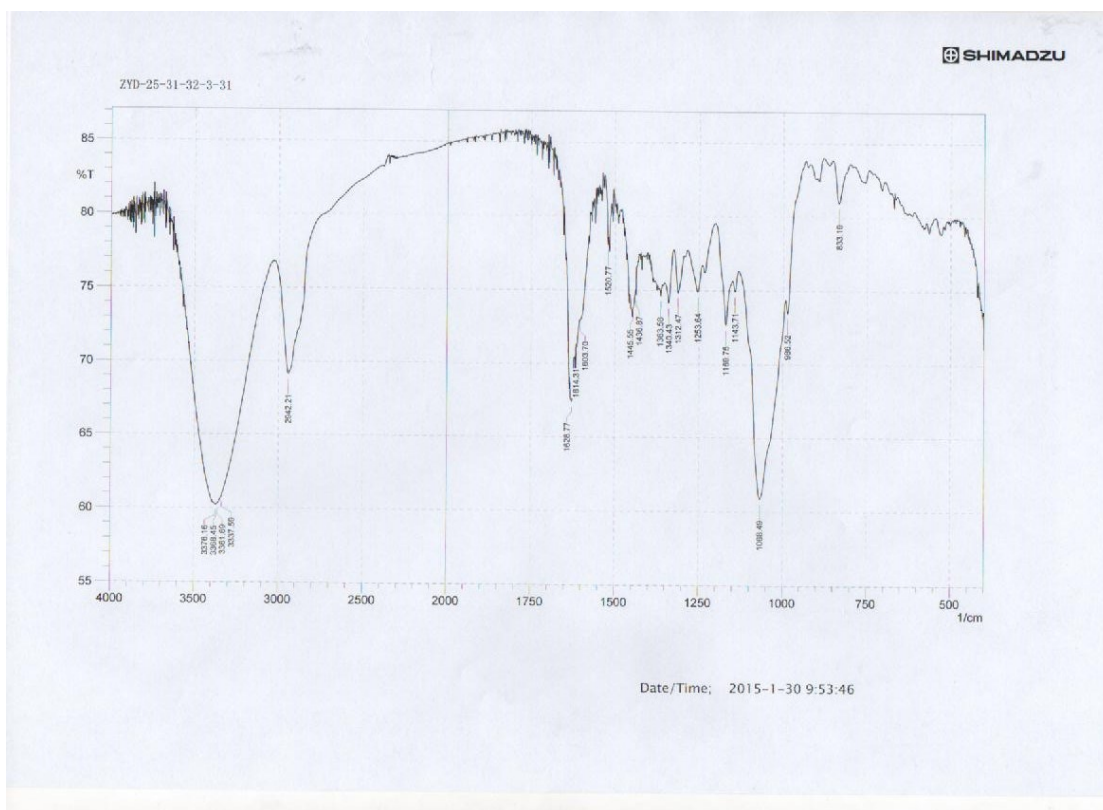


Figure S13. The IR spectrum of **1**.

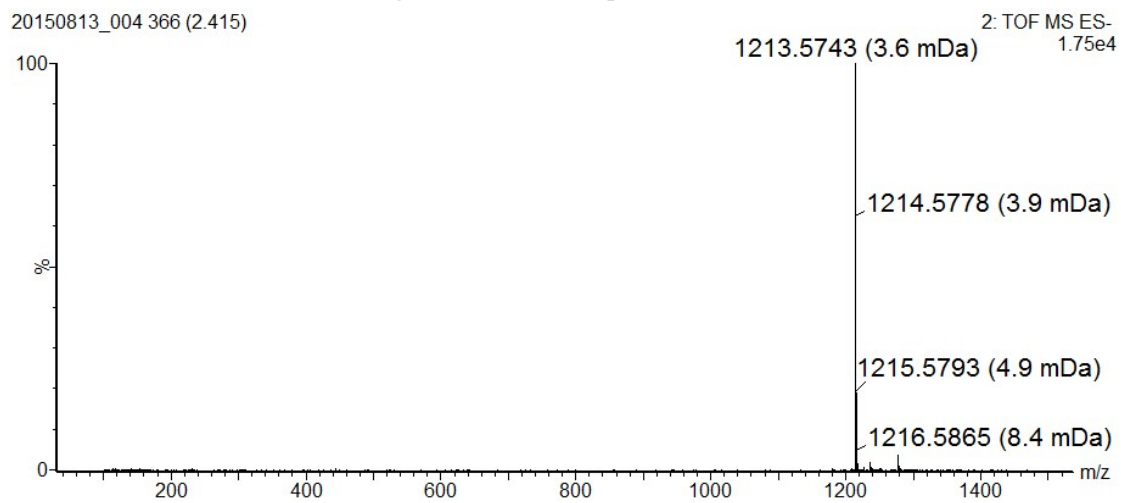


Figure S14. The HR-ESI-MS of **2**.

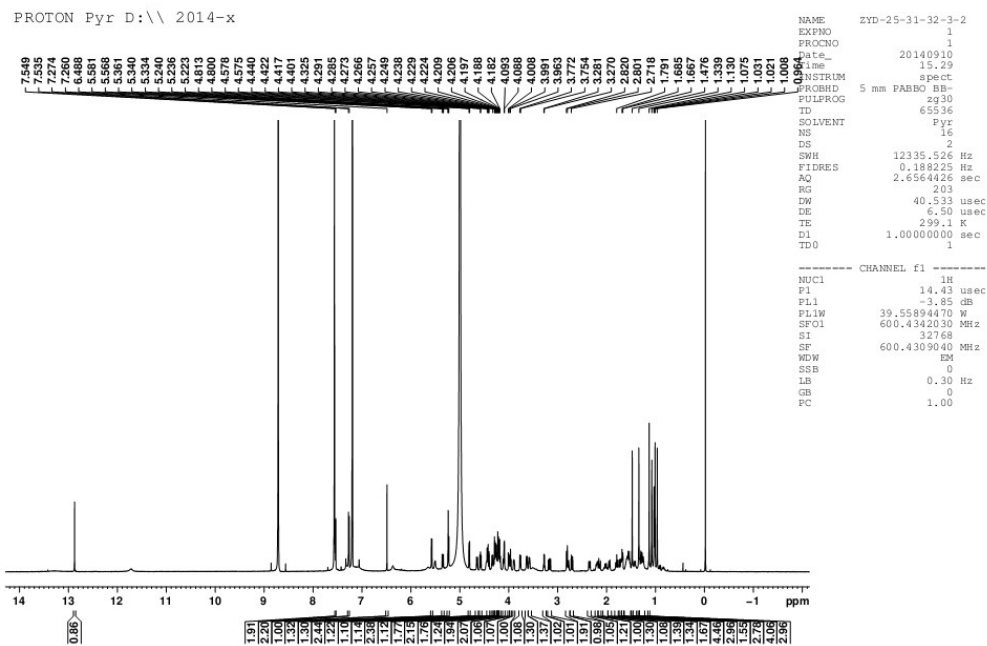


Figure S15. ¹H NMR spectrum of **2** in Pyridine-*d*₅.

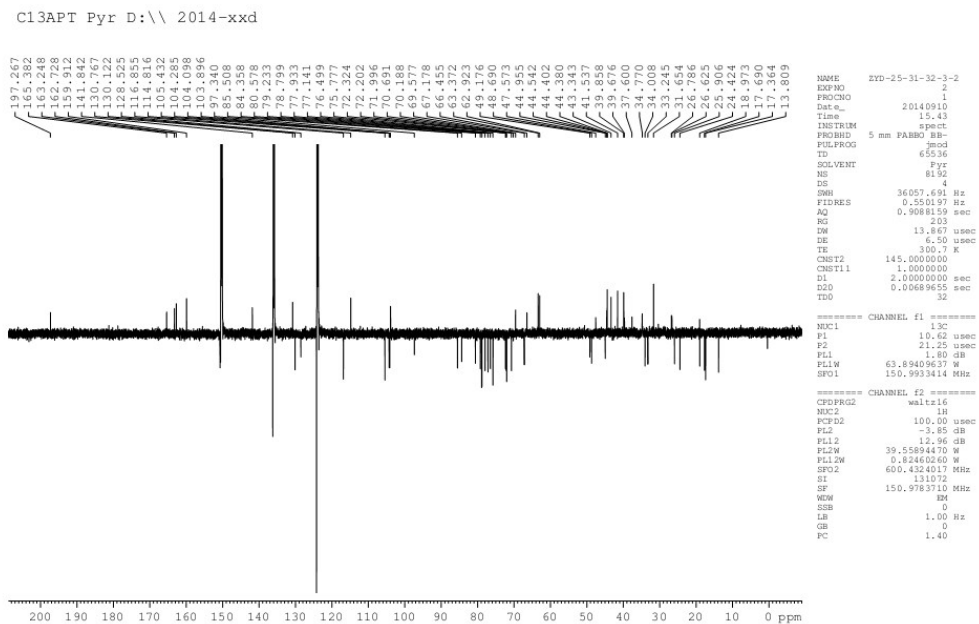


Figure S16. ¹³C APT spectrum of **2** in Pyridine-*d*₅.

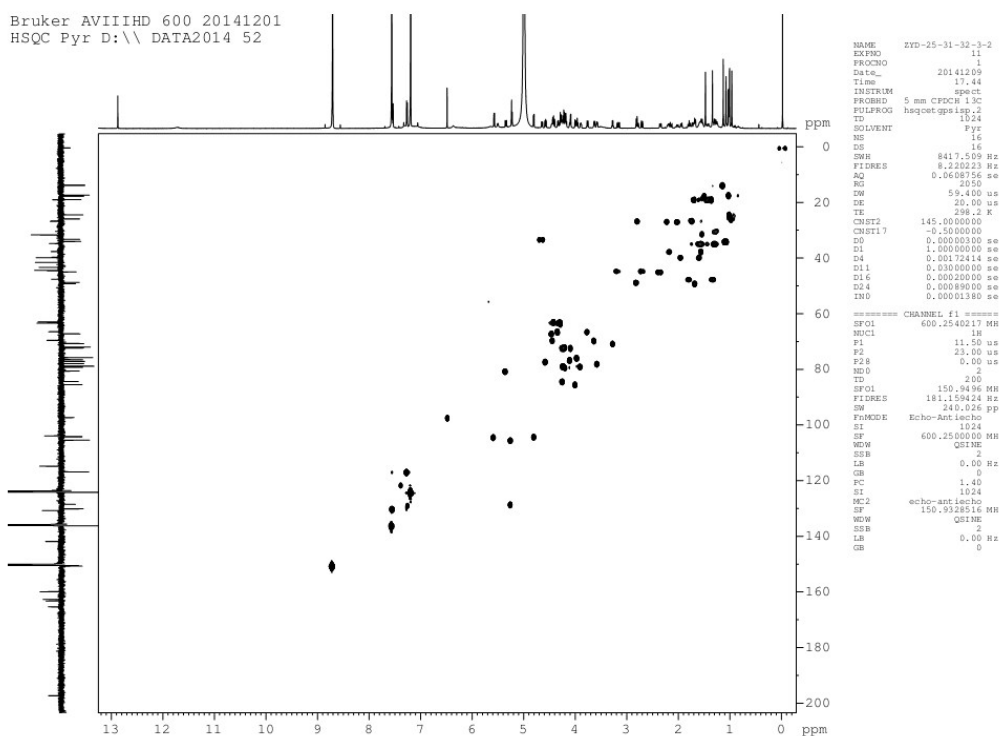


Figure S17. HSQC spectrum of **2** in Pyridine- d_5 .

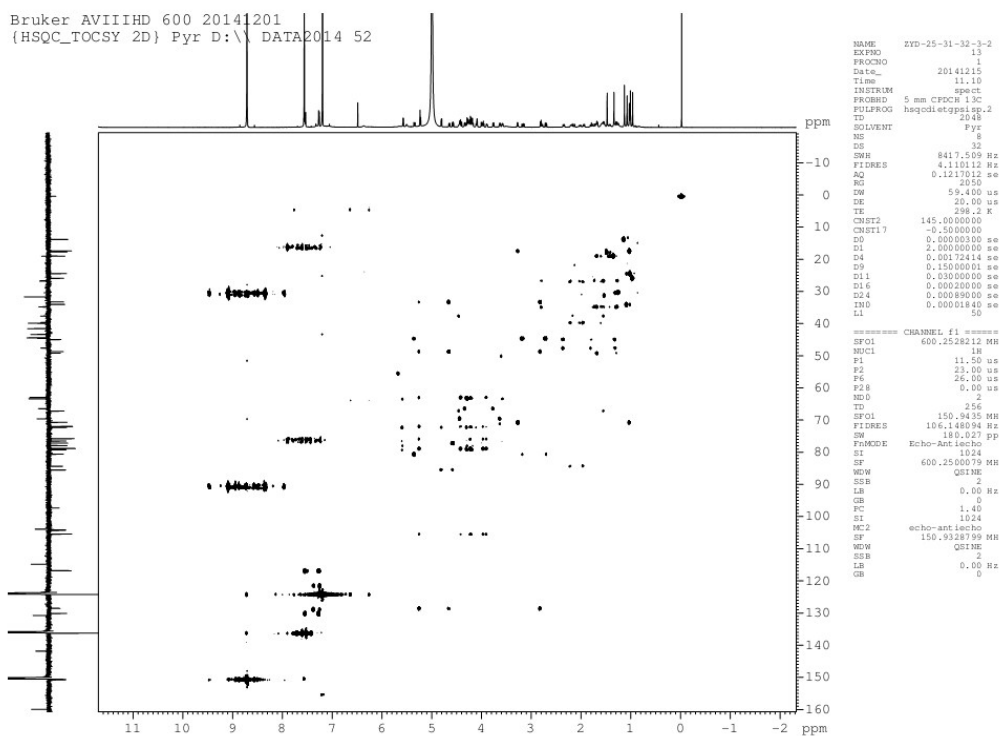


Figure S18. HSQC-TOCSY spectrum of **2** in Pyridine- d_5 .

Bruker AVIIHD 600 20141217
 HMBC Pyr D:\ DATA2014 57

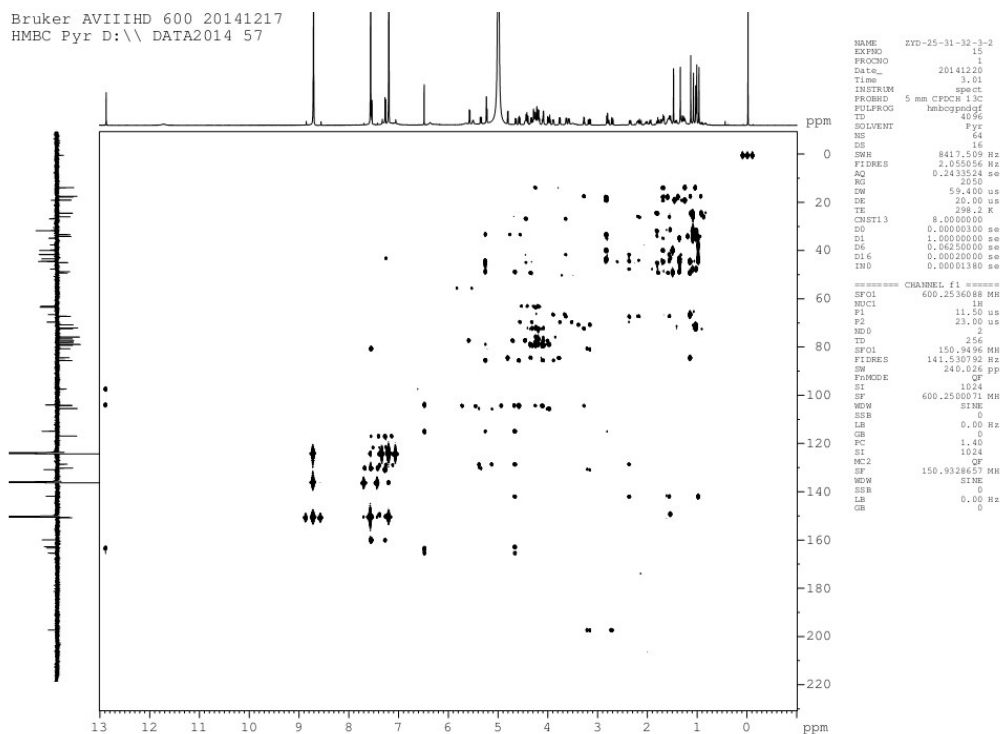


Figure S19. HMBC spectrum of 2 in Pyridine-*d*₅.

COSYGMFSW Pyr D:\ 2

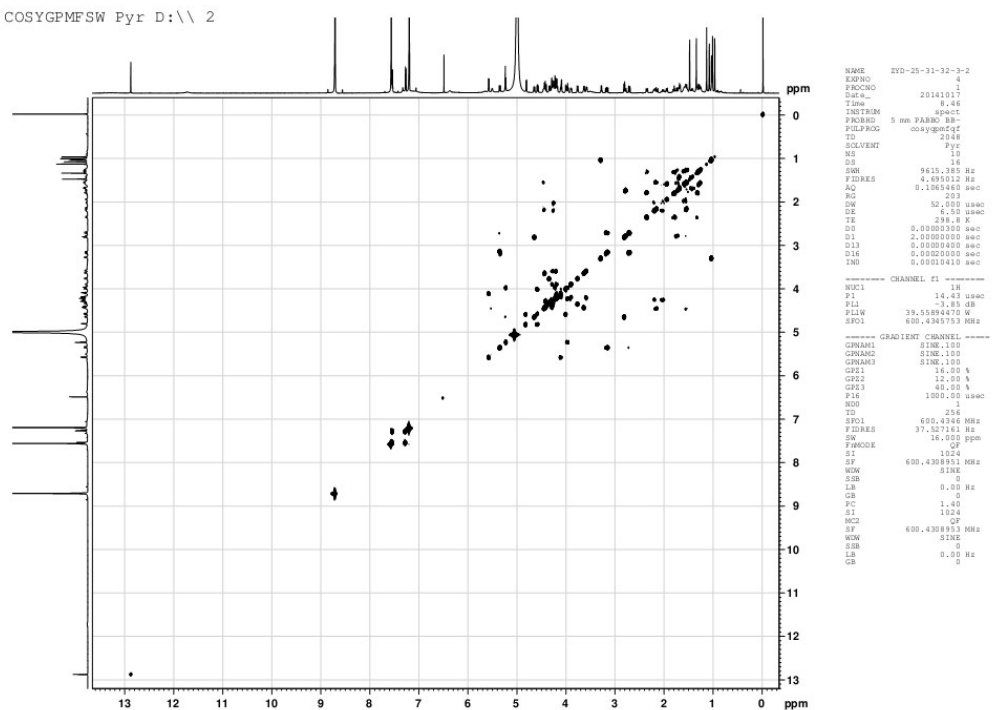


Figure S20. COSY spectrum of 2 in Pyridine-*d*₅.

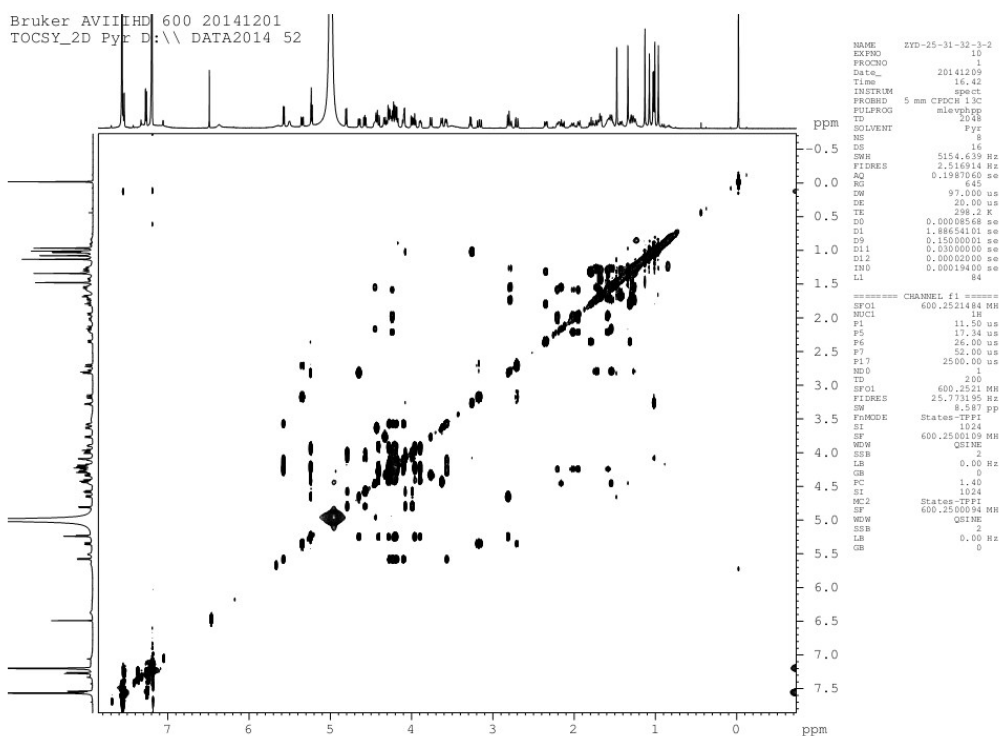


Figure S21. TOCSY spectrum of **2** in Pyridine- d_5 .

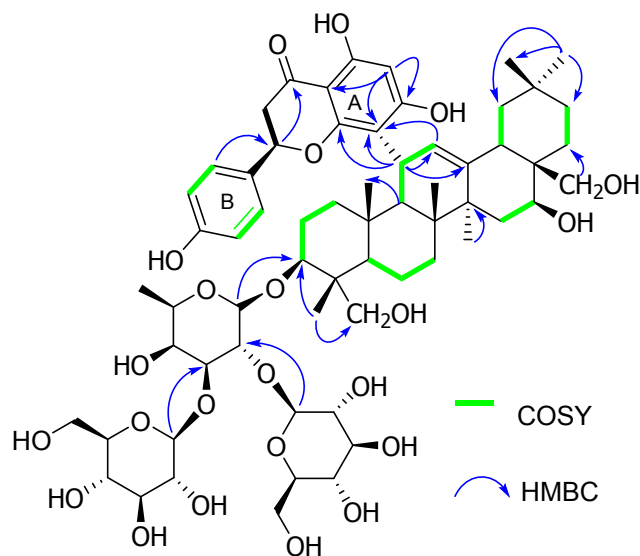


Figure S22. COSY and HMBC correlations of **2** in Pyridine- d_5 .

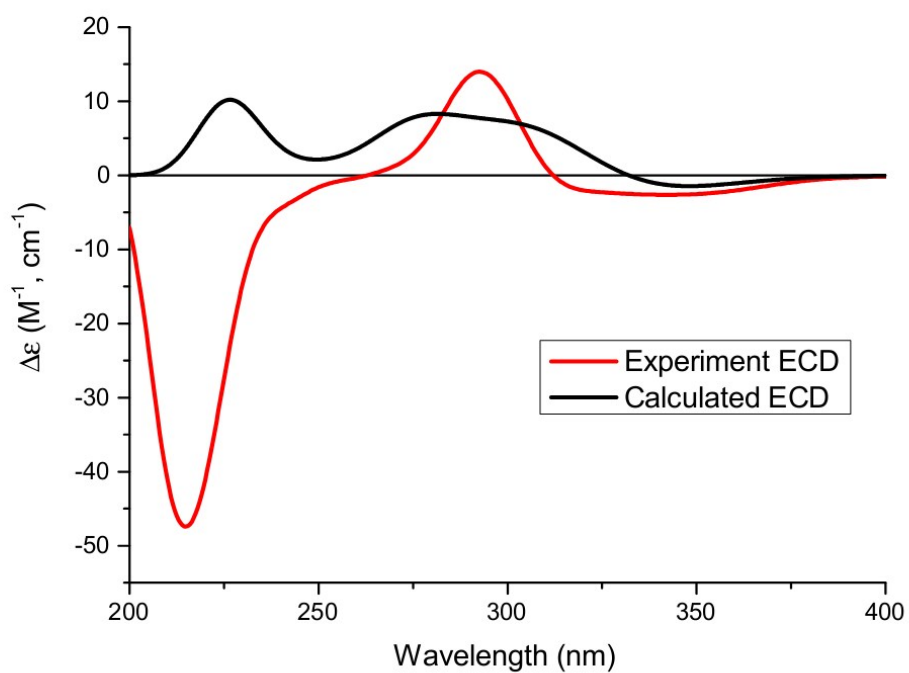


Figure S25. The experimental and calculated ECD spectra of **2**.

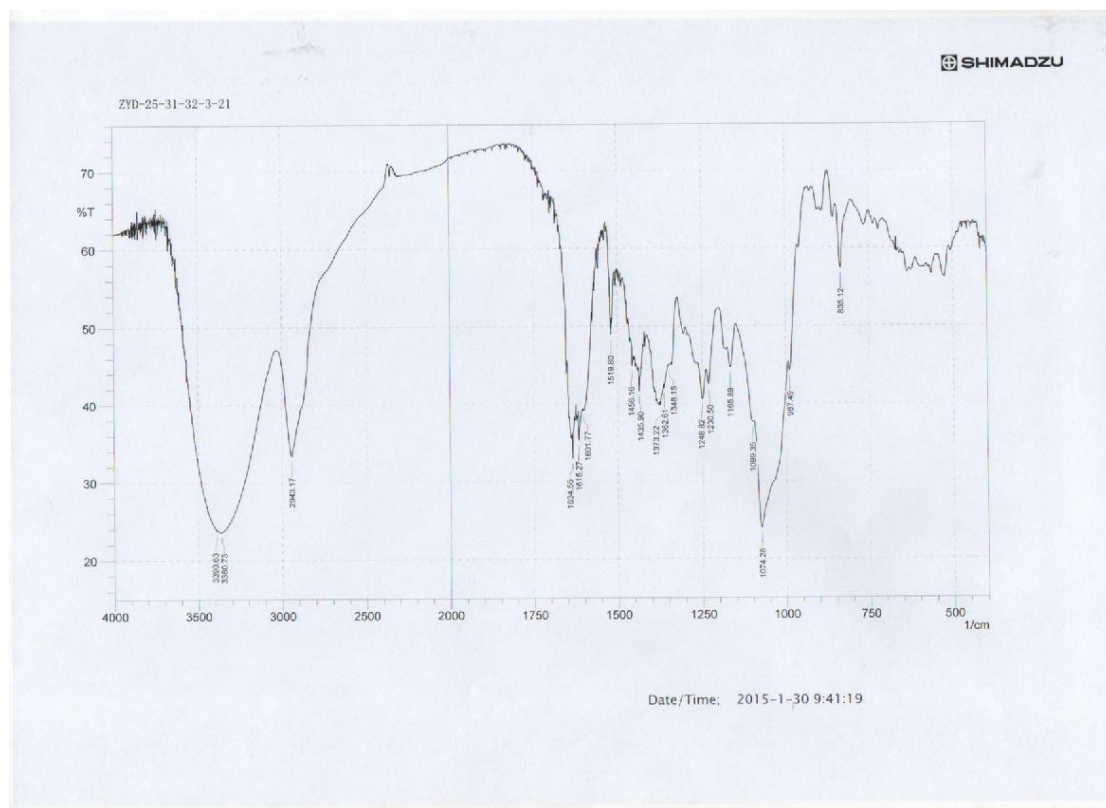


Figure S26. The IR spectrum of **2**.

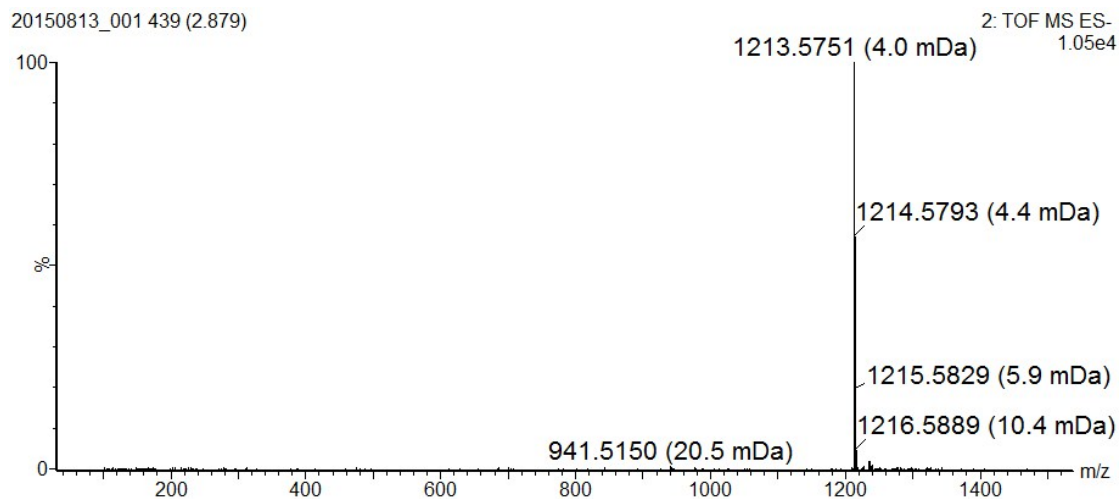


Figure S27. The HR-ESI-MS of **3**.

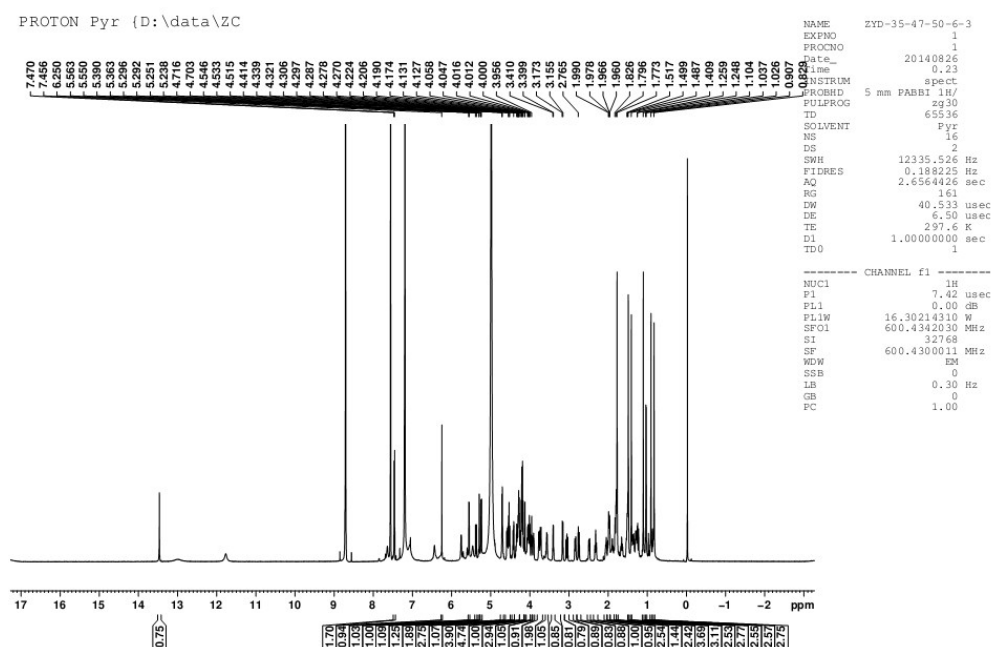


Figure S28. ¹H NMR spectrum of **3** in Pyridine-*d*₅.

C13APT Pyr D:\\ 2014-xxd

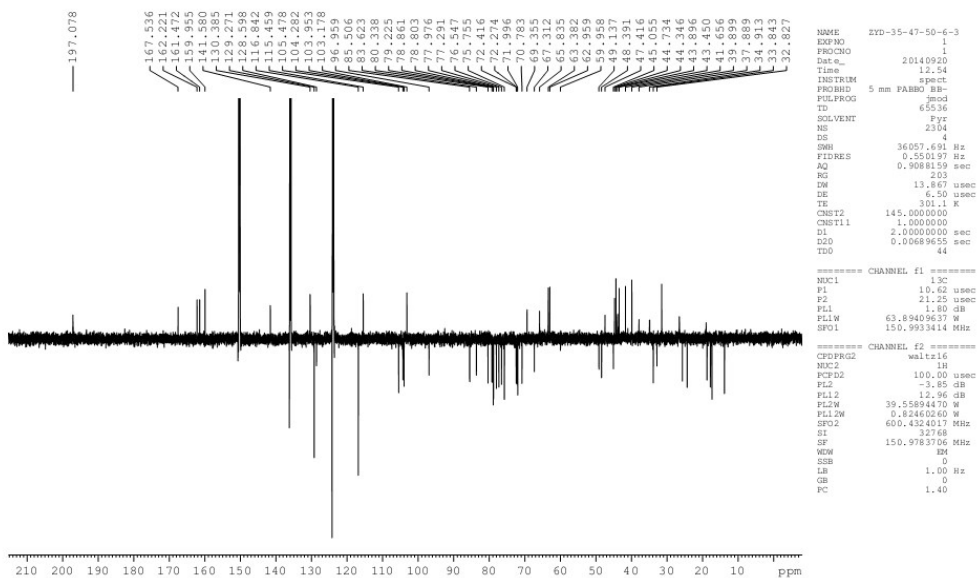


Figure S29. ¹³C APT spectrum of 3 in Pyridine-*d*₅.

HSQCETGPSISP Pyr D:\\

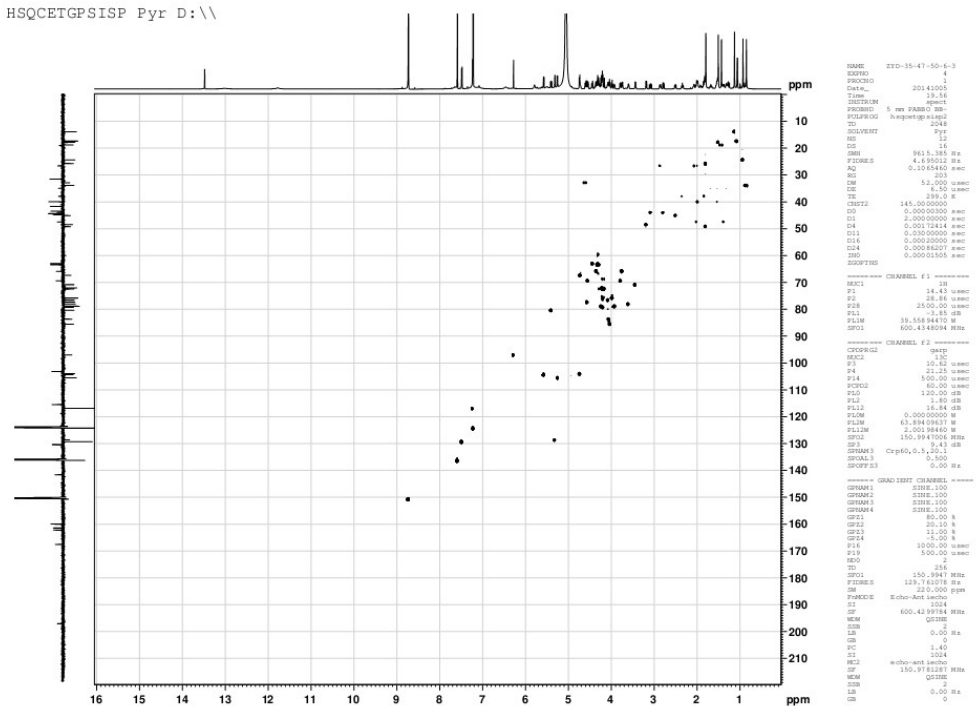


Figure S30. HSQC spectrum of 3 in Pyridine-*d*₅.

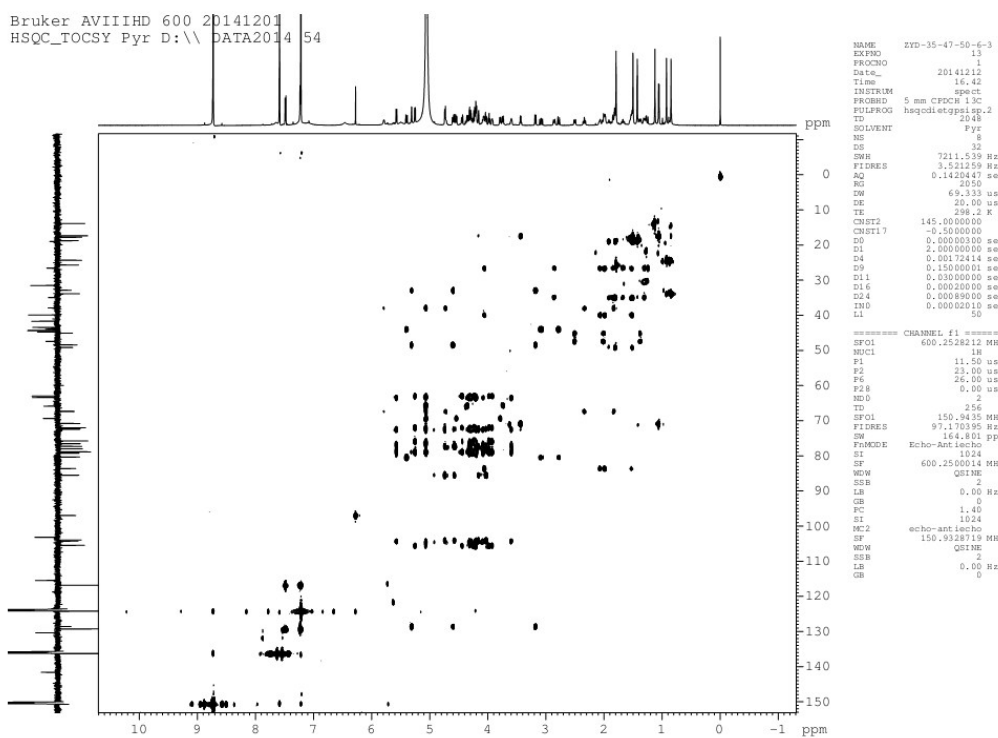


Figure S31. HSQC-TOCSY spectrum of **3** in Pyridine- d_5 .

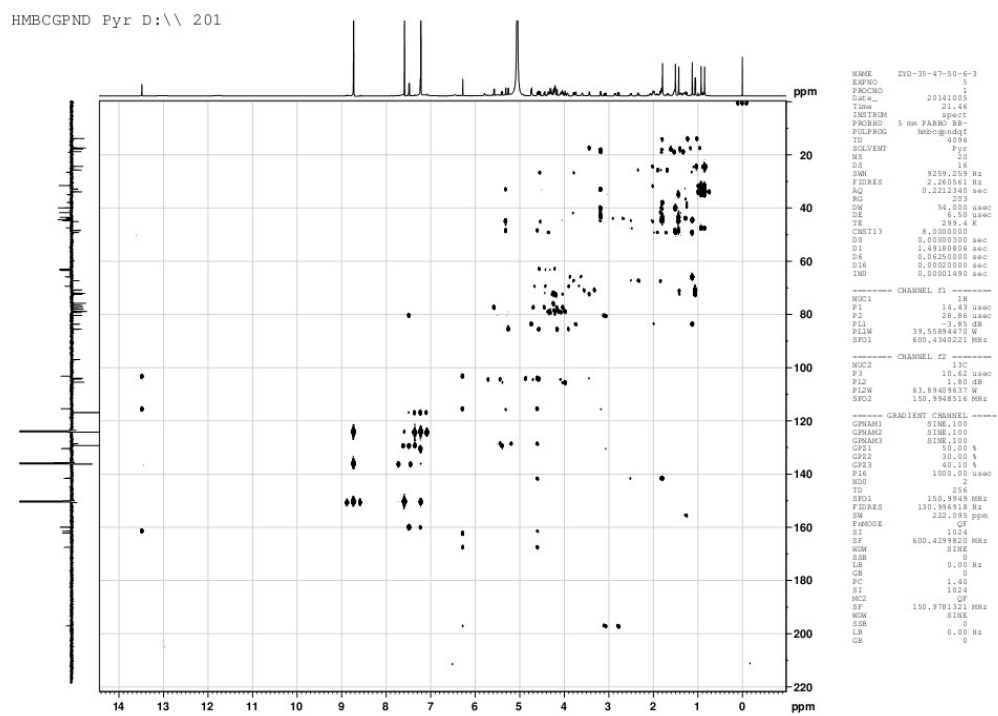


Figure S32. HMBC spectrum of **3** in Pyridine- d_5 .

COSYGMFSW Pyr D:\ 2

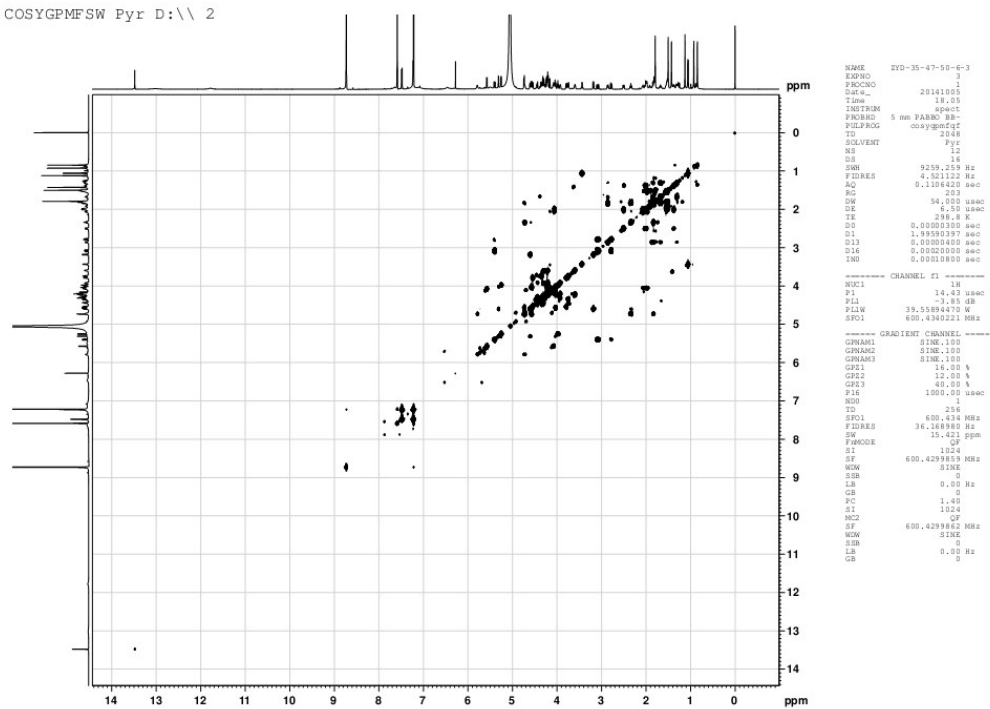


Figure S33. COSY spectrum of 3 in Pyridine-*d*₅.

Bruker AVIIHHD 600 20141201
 TOCSY_2D Pyr D:\ DATA2014 54

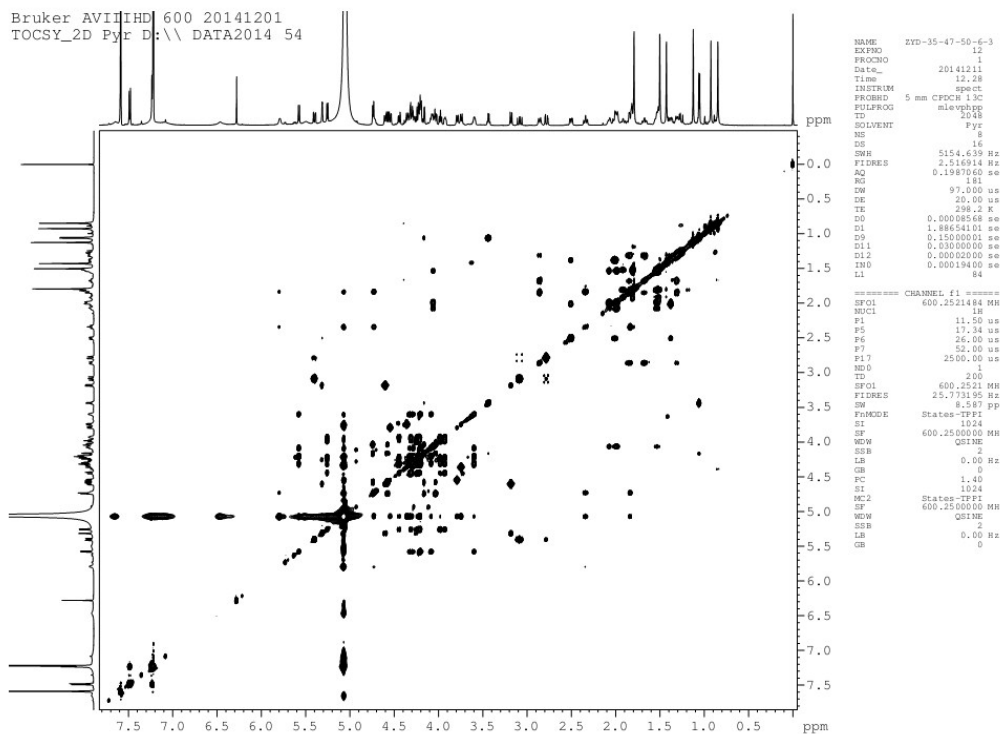


Figure S34. TOCSY spectrum of 3 in Pyridine-*d*₅.

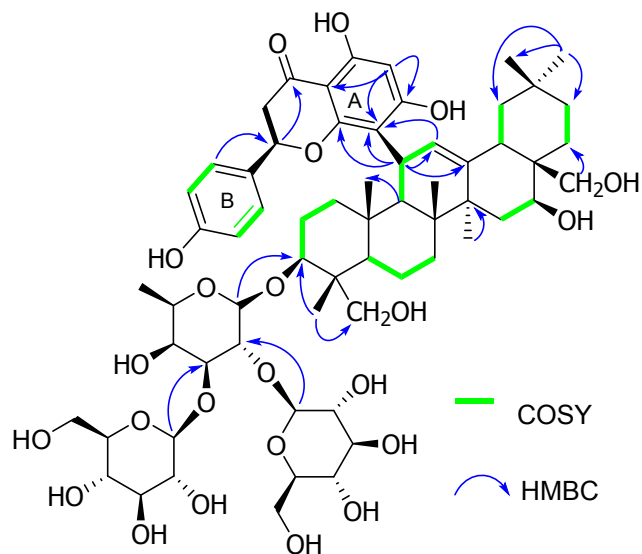


Figure S35. COSY and HMBC correlations of **3** in Pyridine-*d*₅.

NOESYPSHW Pyr D:\ 20

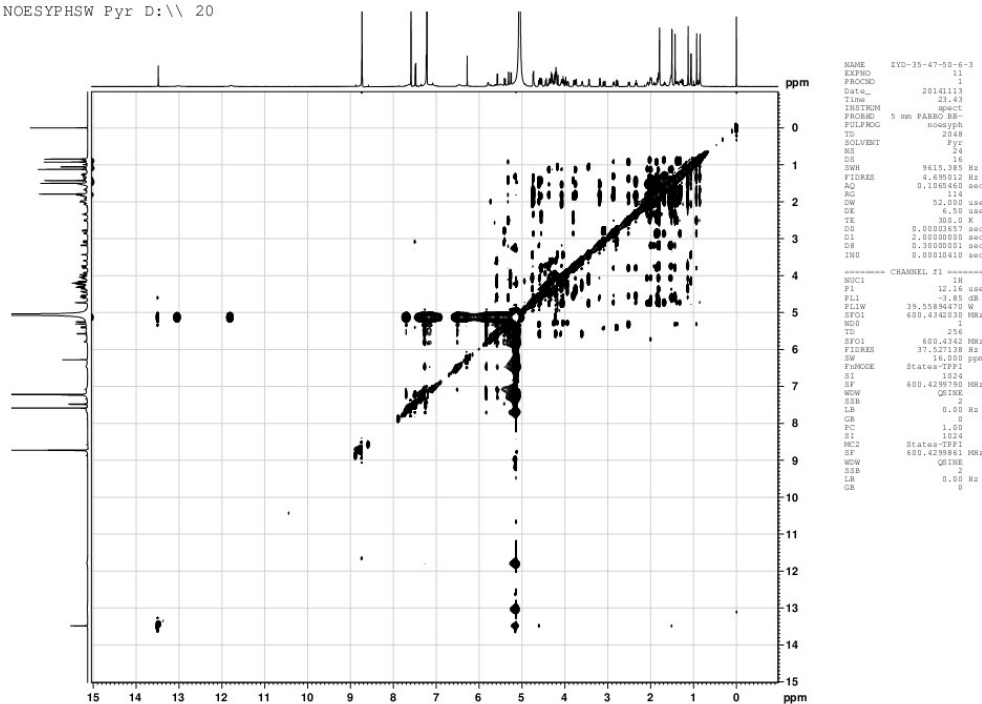


Figure S36. NOESY Spectrum of **3** in Pyridine-*d*₅.

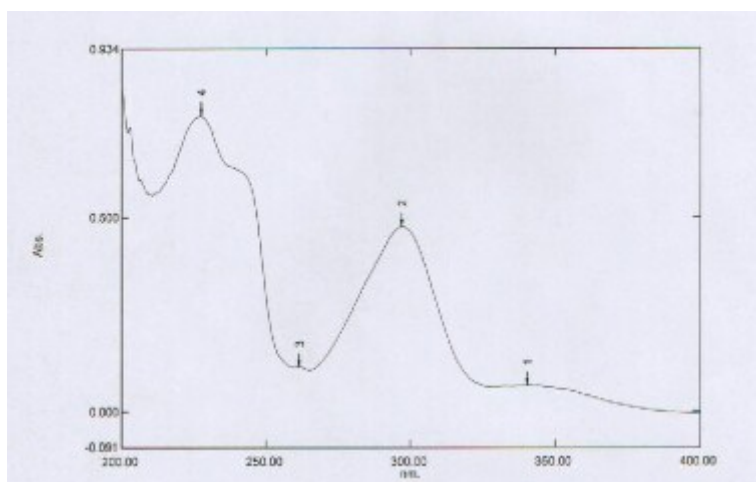


Figure S37. The experimental UV spectrum of **3**.

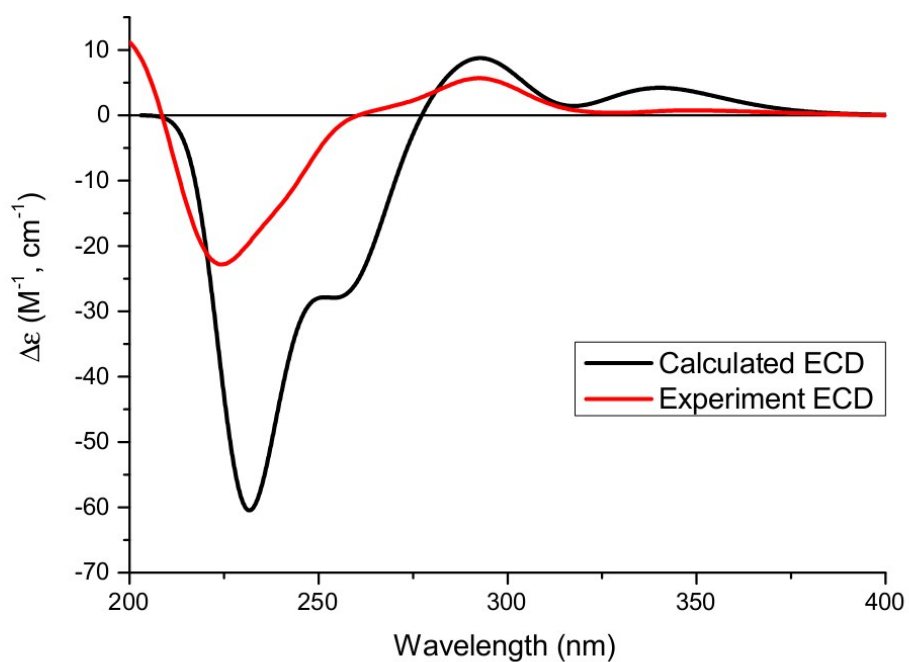


Figure S38. The experimental and calculated ECD spectra of **3**.

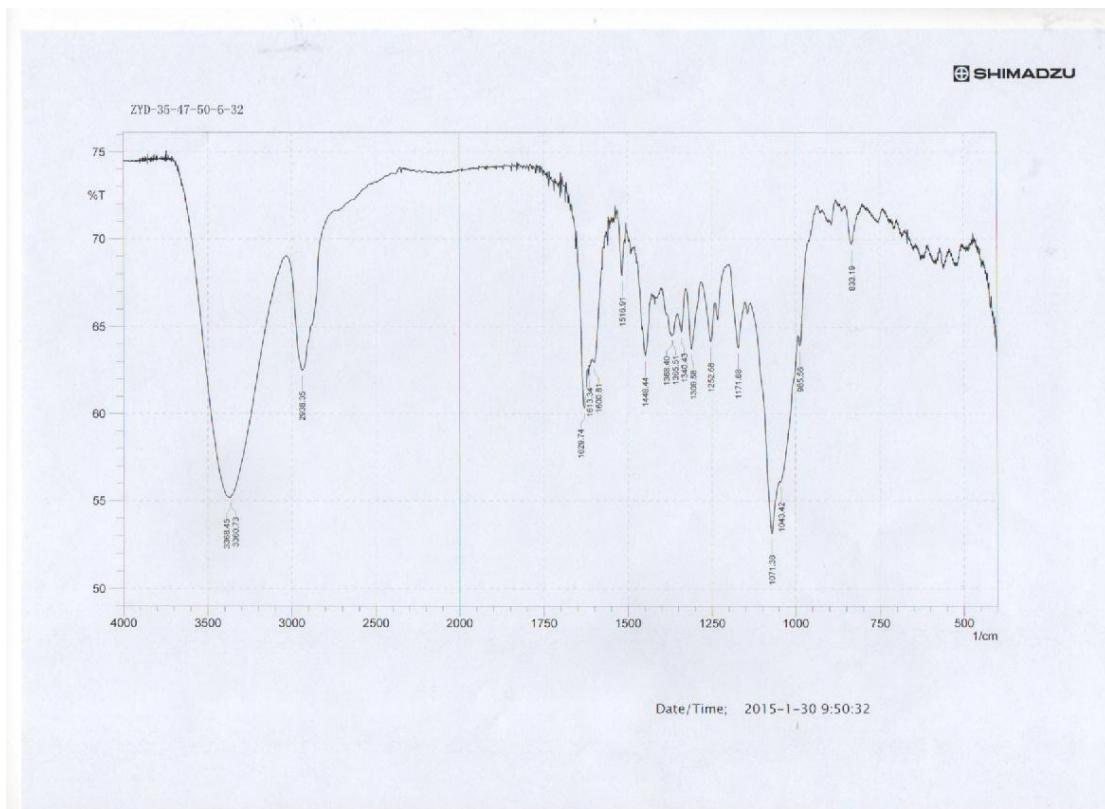


Figure S39. The IR spectrum of **3**.

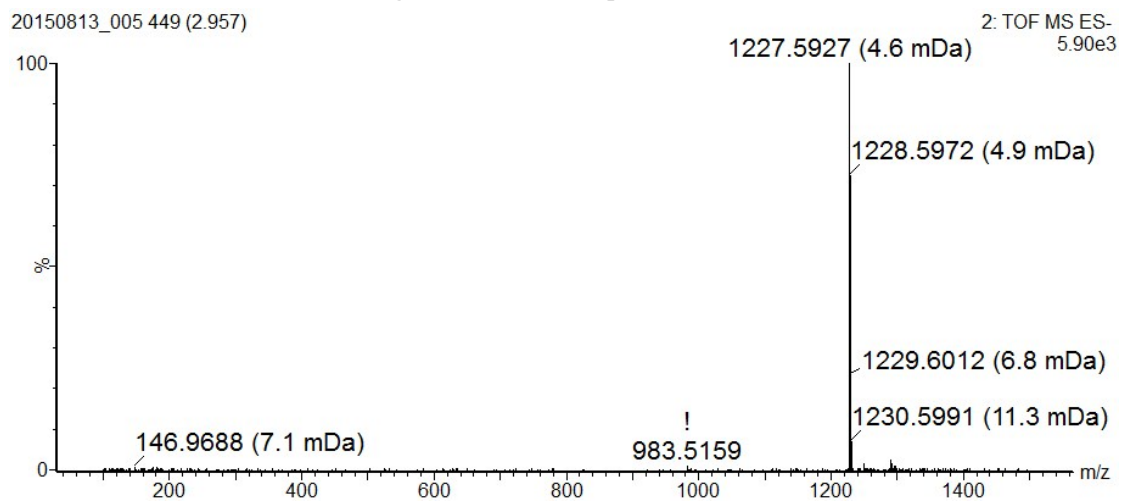


Figure S40. The HR-ESI-MS of **4**.

HMBCGPNP Pyr D:\ 201

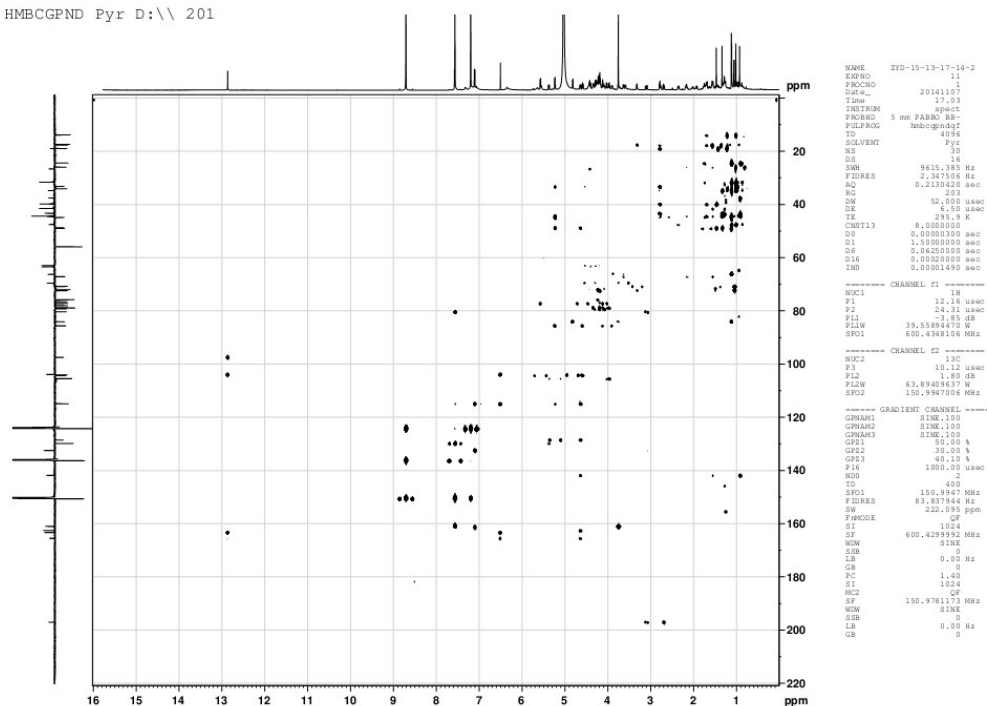


Figure S45. HMBC spectrum of 4 in Pyridine-*d*₅.

COSYGPMFSW Pyr D:\ 2

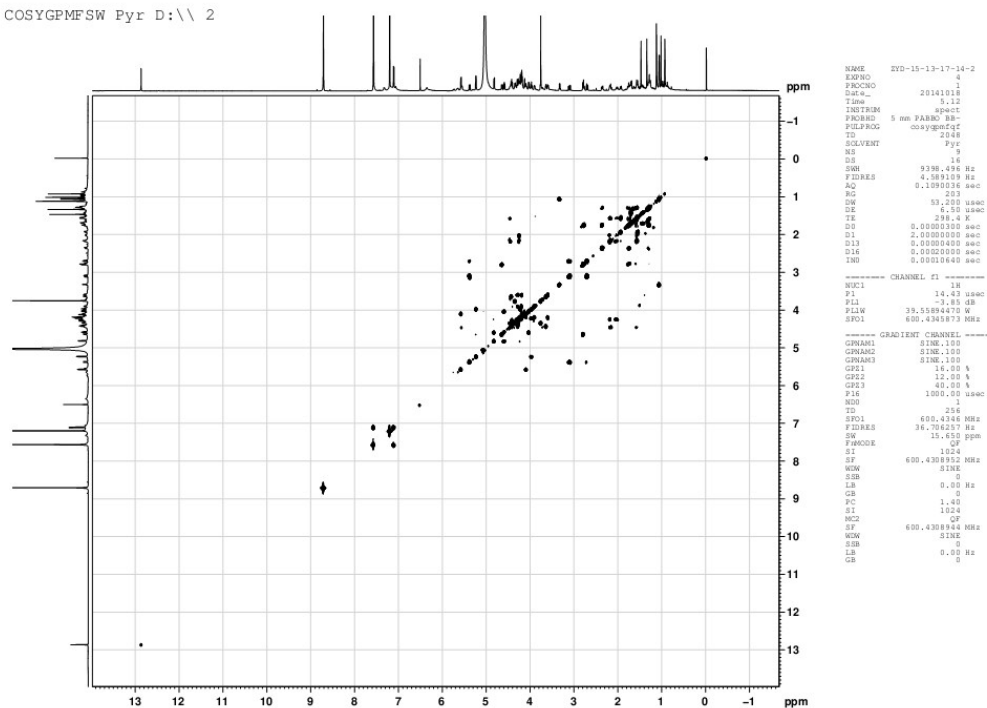


Figure S46. COSY spectrum of 4 in Pyridine-*d*₅.

Bruker AVIIIHD 600 20141201
 TOCSY_2D Pyr D:\ DATA2014 56

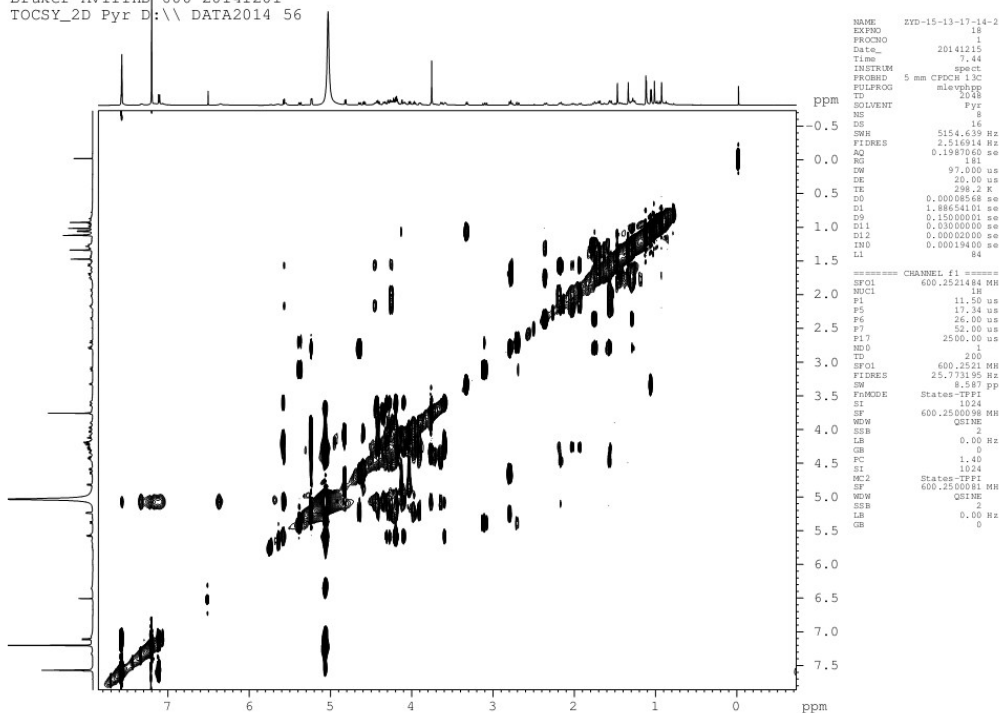


Figure S47. TOCSY spectrum of 4 in Pyridine-*d*₅.

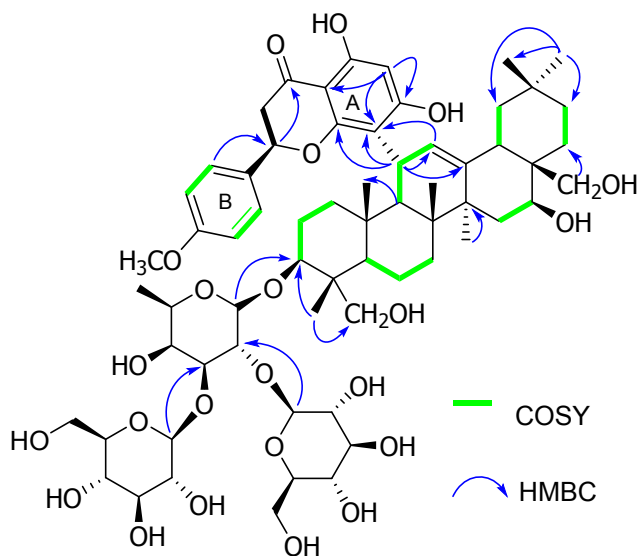


Figure S48. COSY and HMBC correlations of 4 in Pyridine-*d*₅.

NOESYPSHW Pyr D:\\ 20

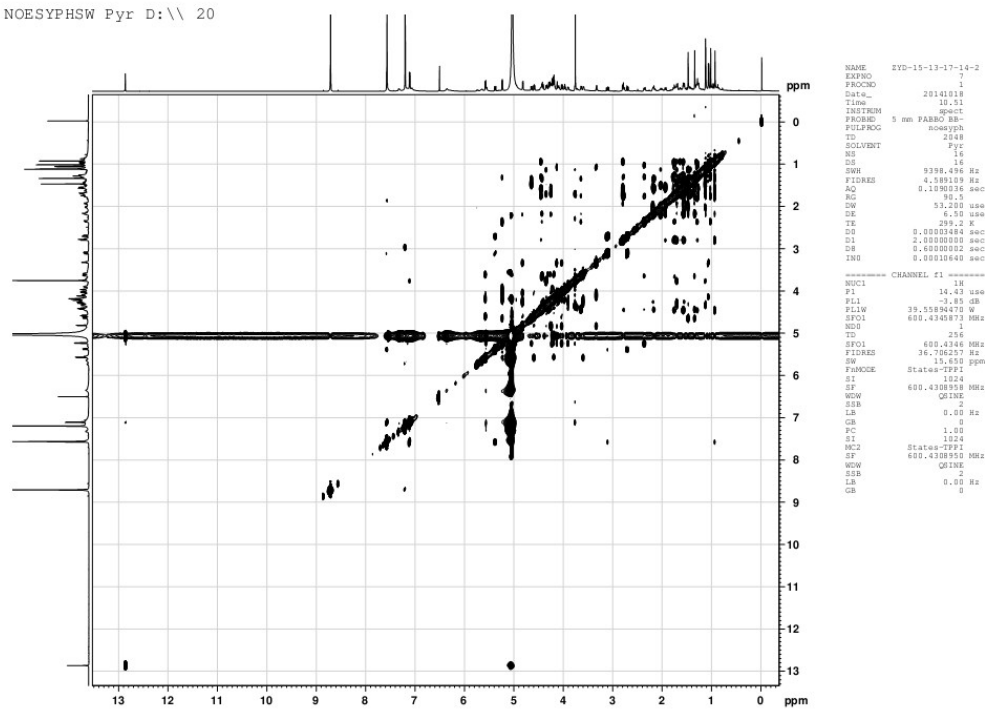


Figure S49. NOESY Spectrum of 4 in Pyridine- d_5 .

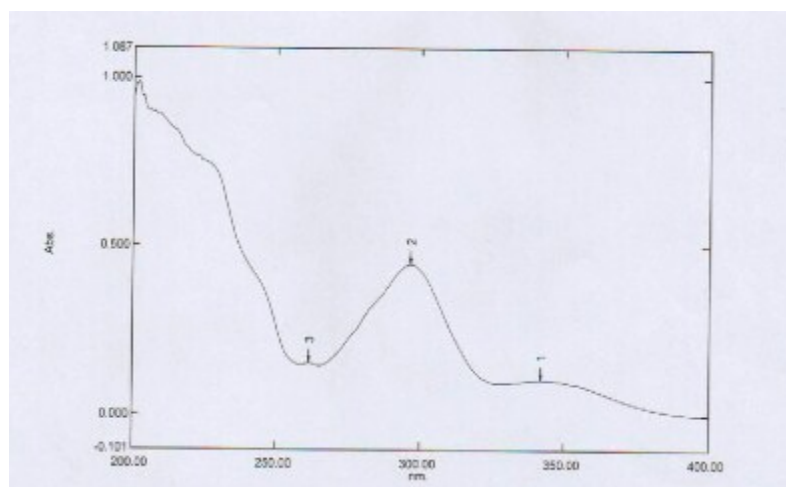


Figure S50. The experimental UV spectrum of 4.

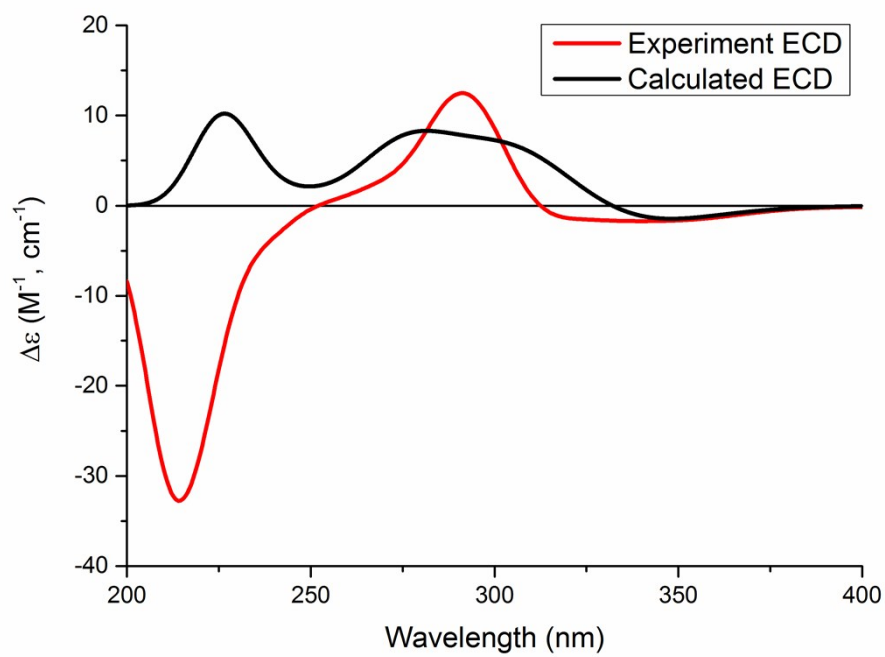


Figure S51. The experimental ECD spectrum of 4.

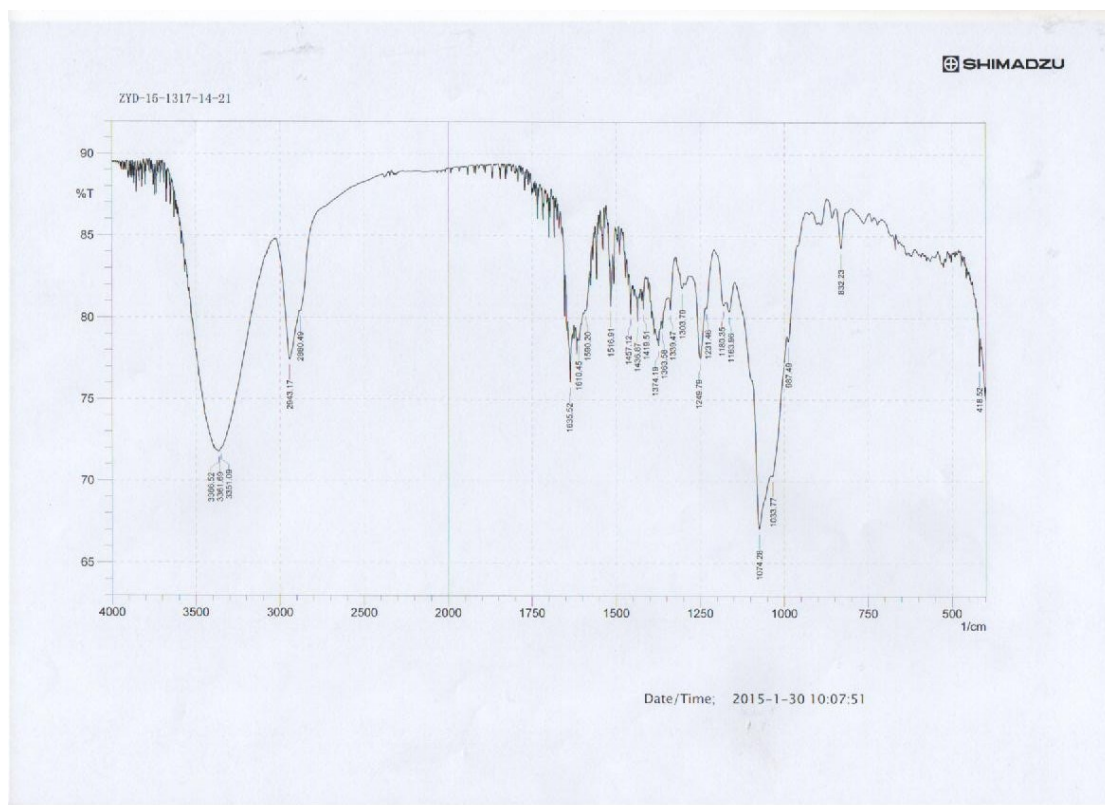


Figure S52. The IR spectrum of 4.

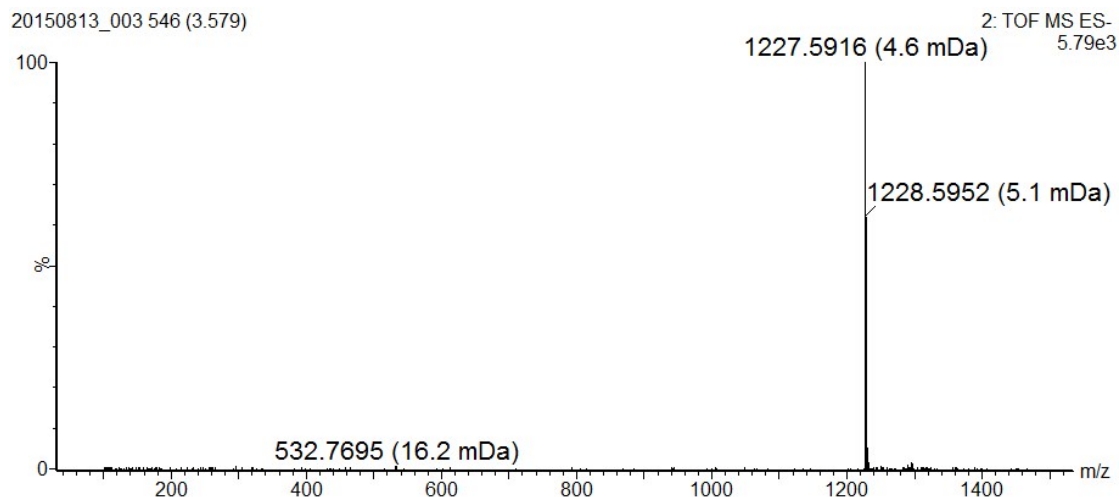


Figure S53. The HR-ESI-MS of **5**.

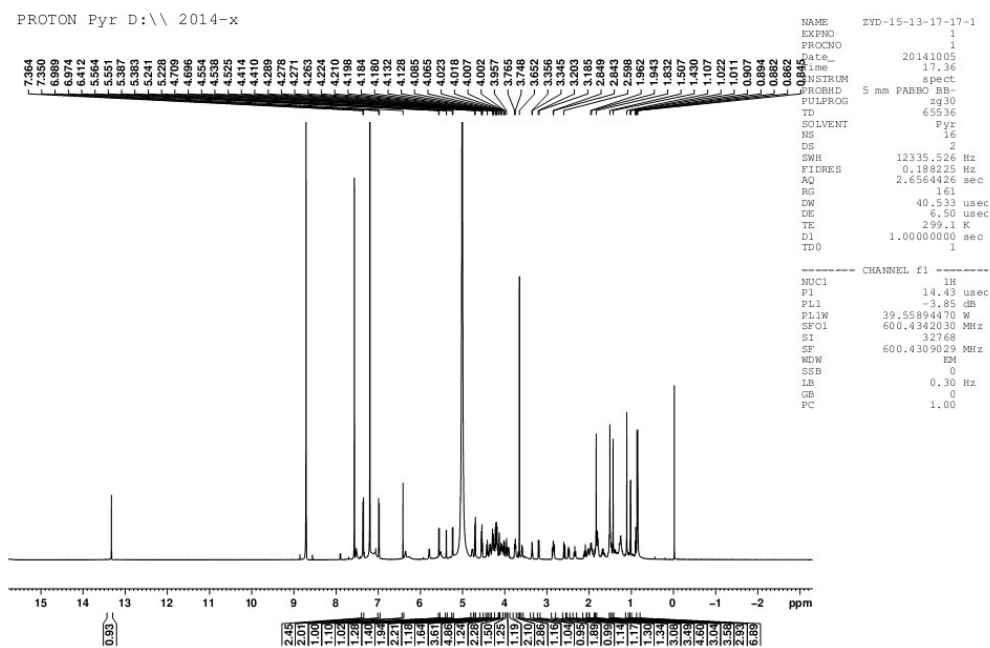


Figure S54. ¹H NMR spectrum of **5** in Pyridine-*d*₅.

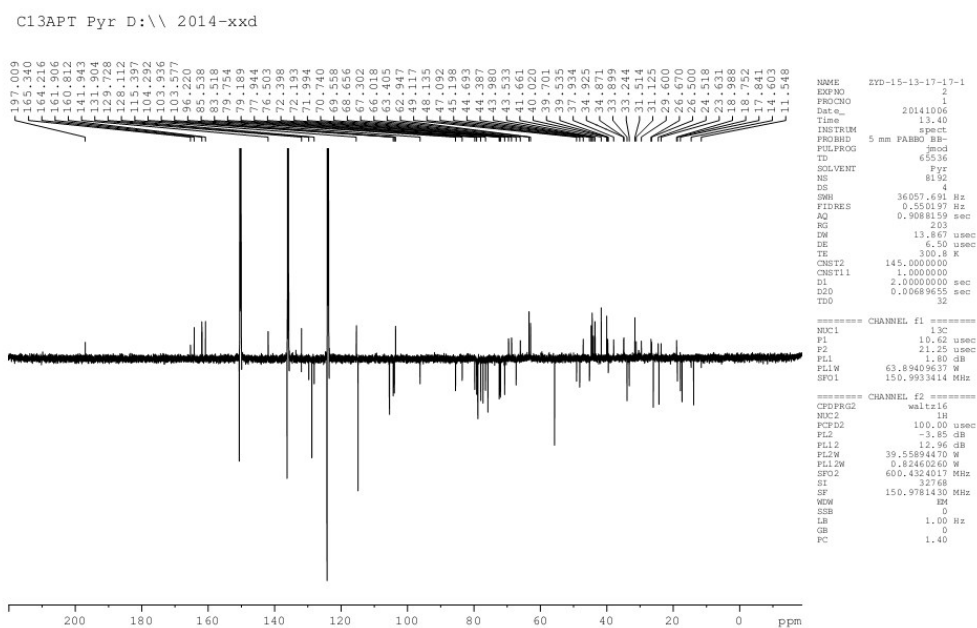


Figure S55. ^{13}C APT spectrum of **5** in Pyridine- d_5 .

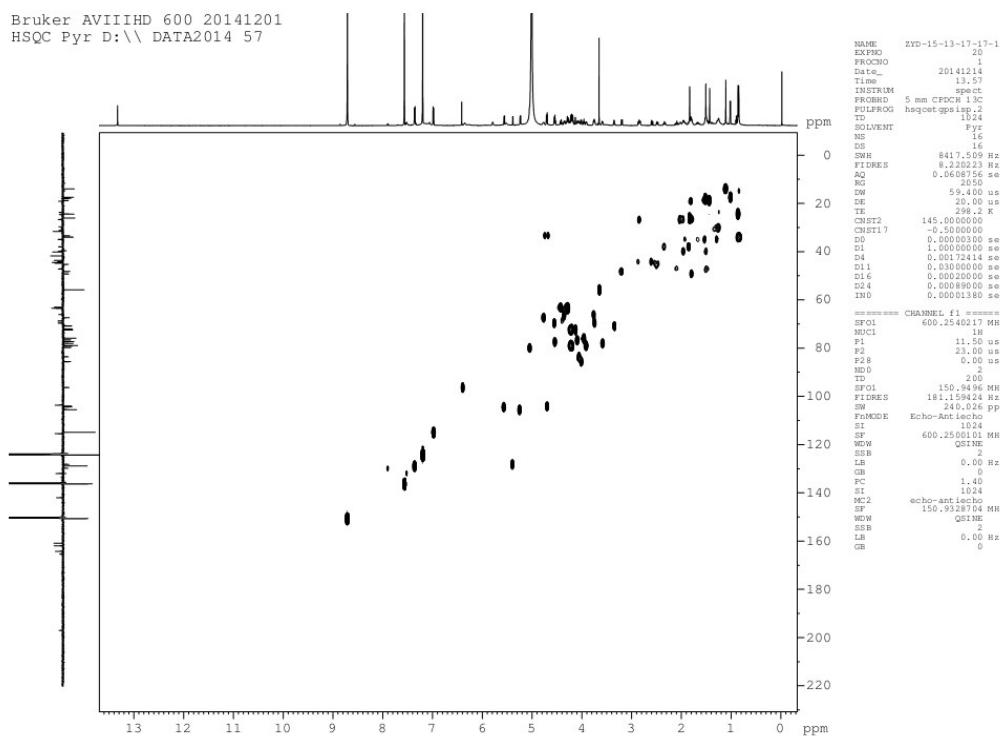


Figure S56. HSQC spectrum of **5** in Pyridine- d_5 .

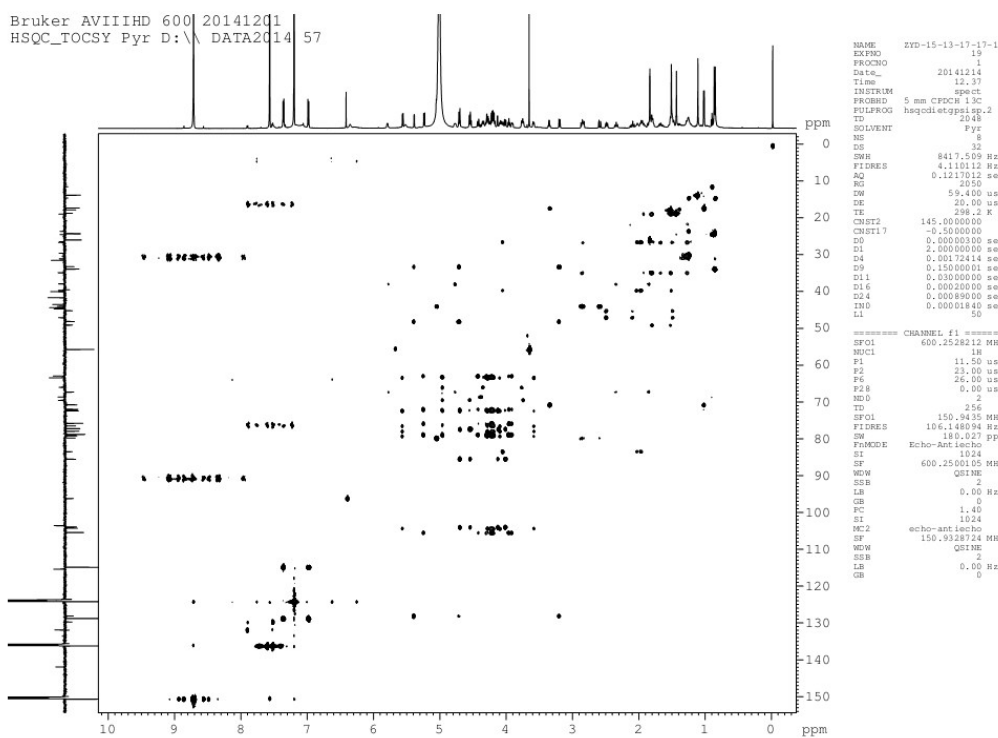


Figure S57. HSQC-TOCSY spectrum of **5** in Pyridine- d_5 .

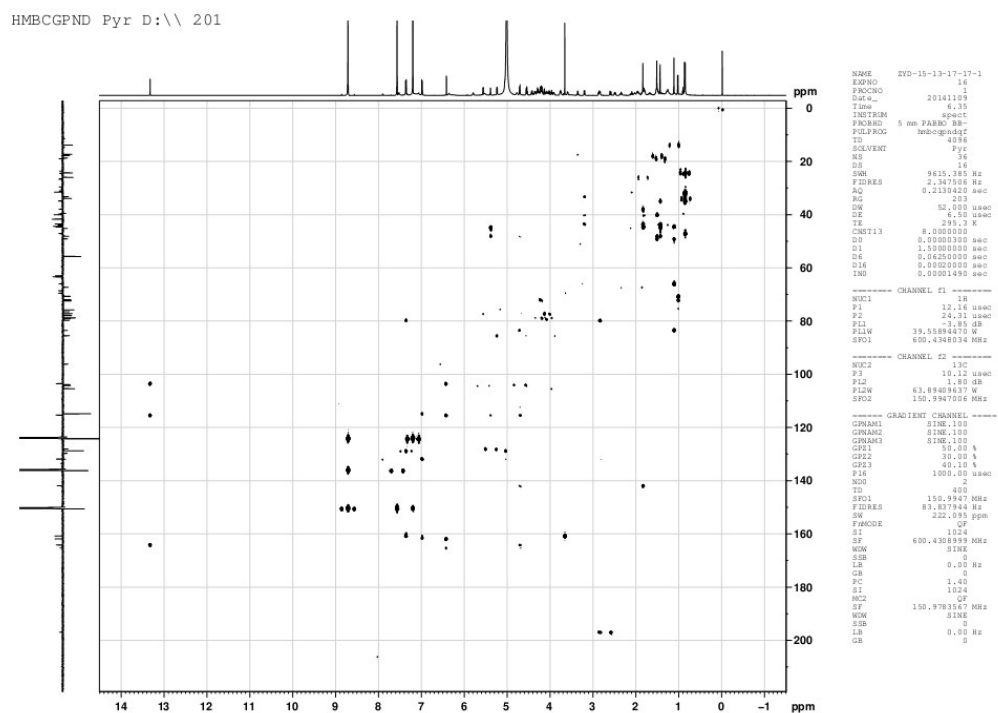


Figure S58. HMBC spectrum of **5** in Pyridine- d_5 .

COSYGMFSW Pyr D:\ 2

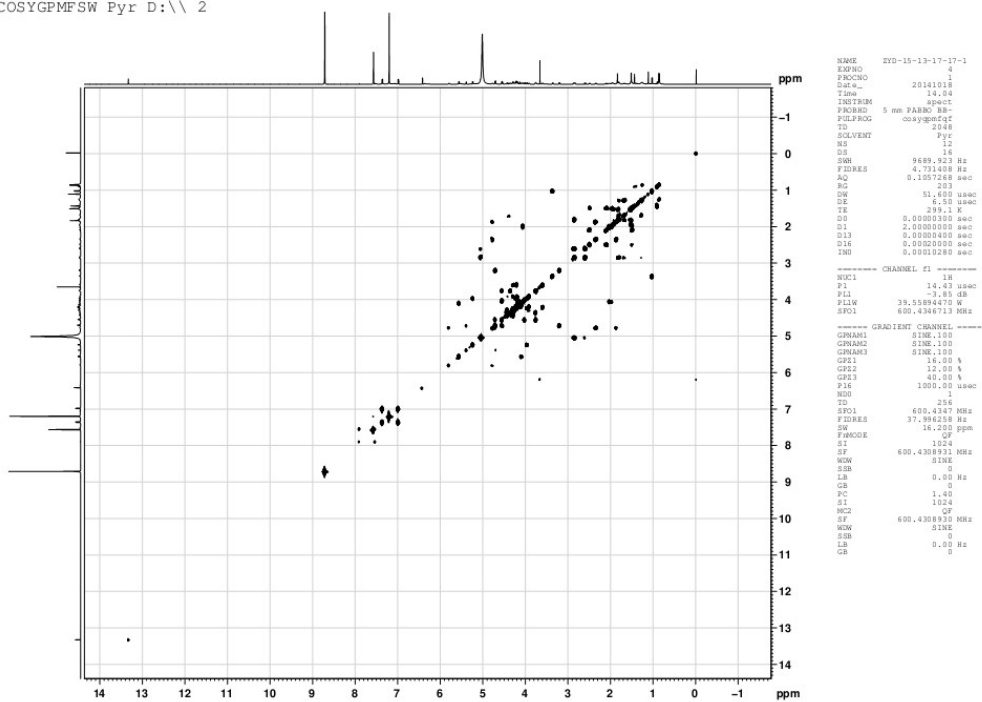


Figure S59. COSY spectrum of 5 in Pyridine- d_5 .

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TOCSY_2D Pyr D:\ DATA2014 57

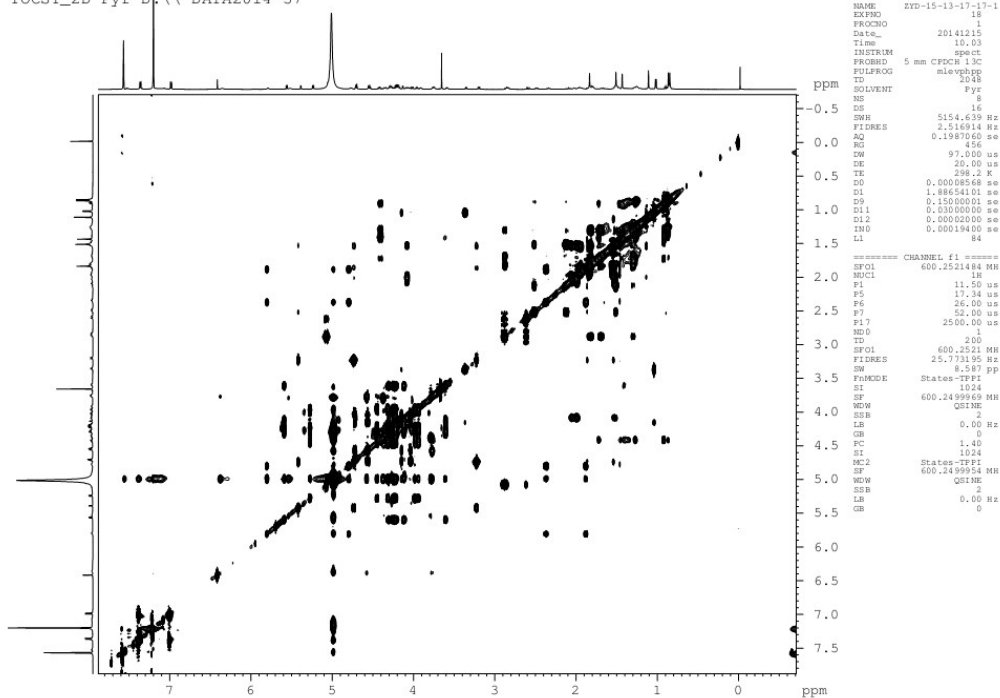


Figure S60. TOCSY spectrum of 5 in Pyridine- d_5 .

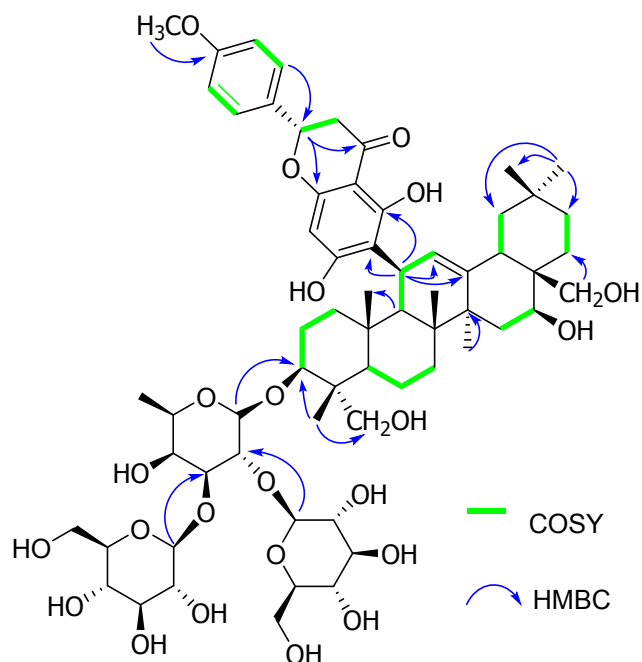


Figure S61. TOCSY and HMBC correlations of **5** in Pyridine-*d*₅.

NOESYPSHW Pyr D:\ 20

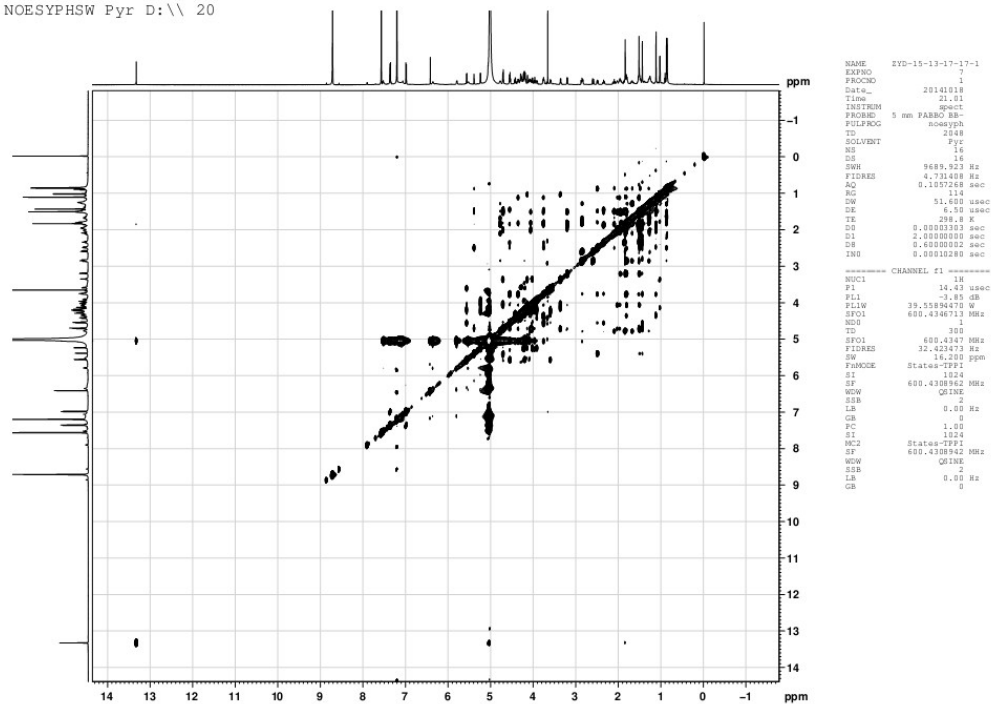


Figure S62. NOESY Spectrum of **5** in Pyridine-*d*₅.

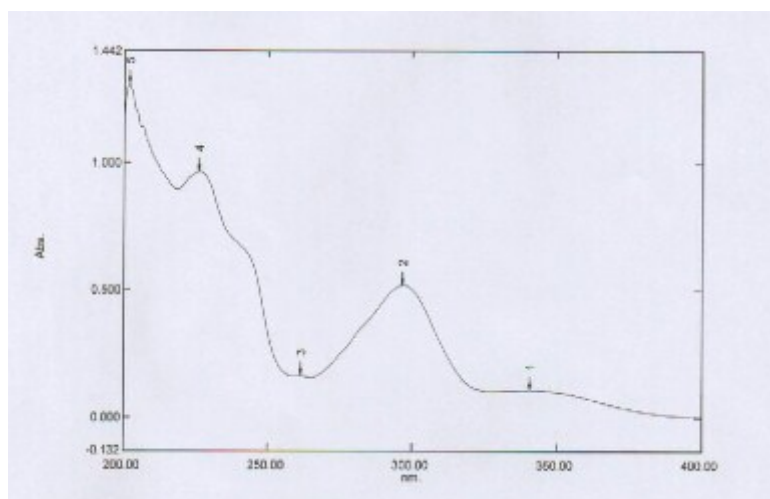


Figure S63. The experimental UV spectrum of **5**.

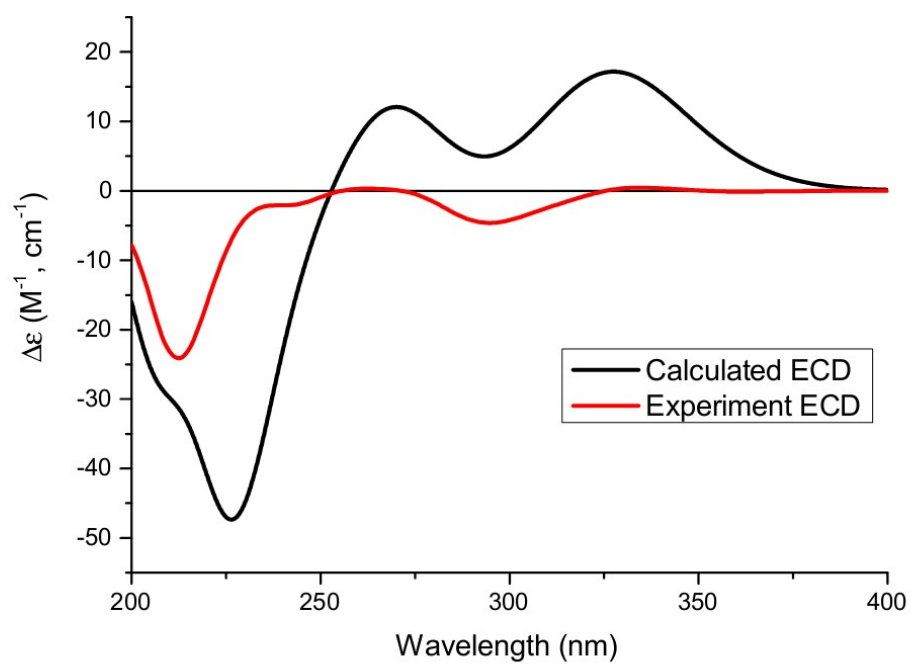


Figure S64. The experimental and calculated ECD spectra of **5**.

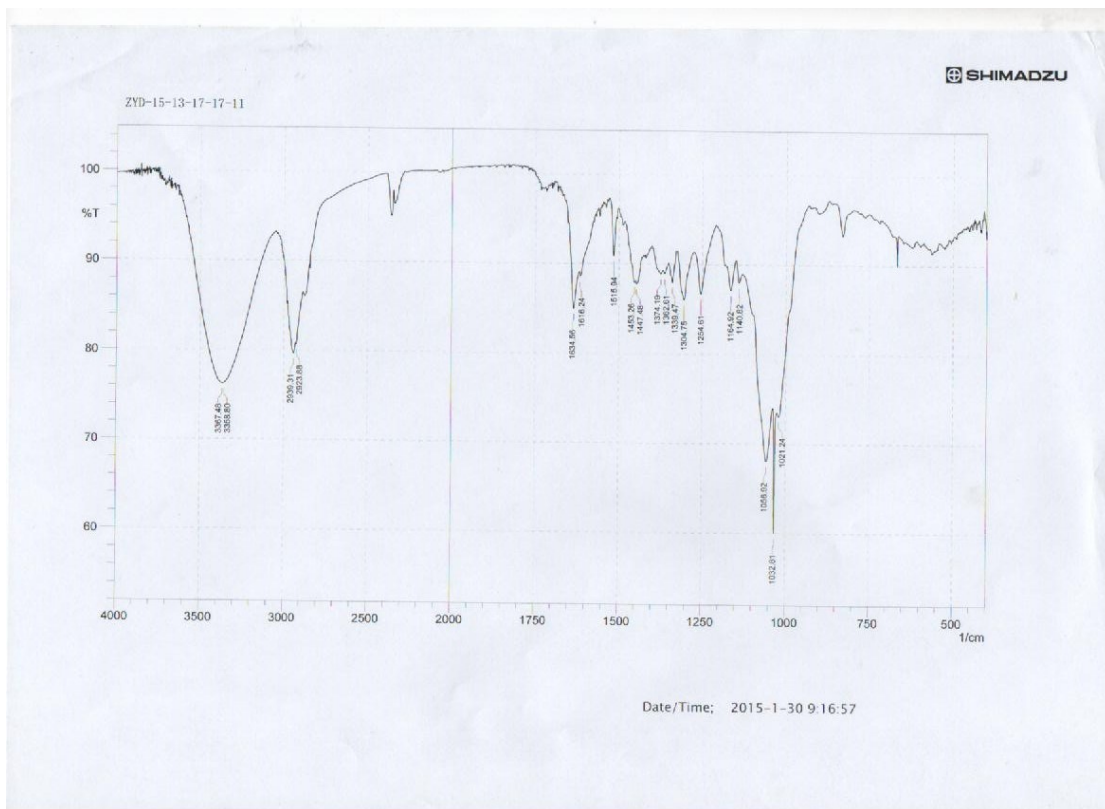


Figure S65. The IR spectrum of 5.

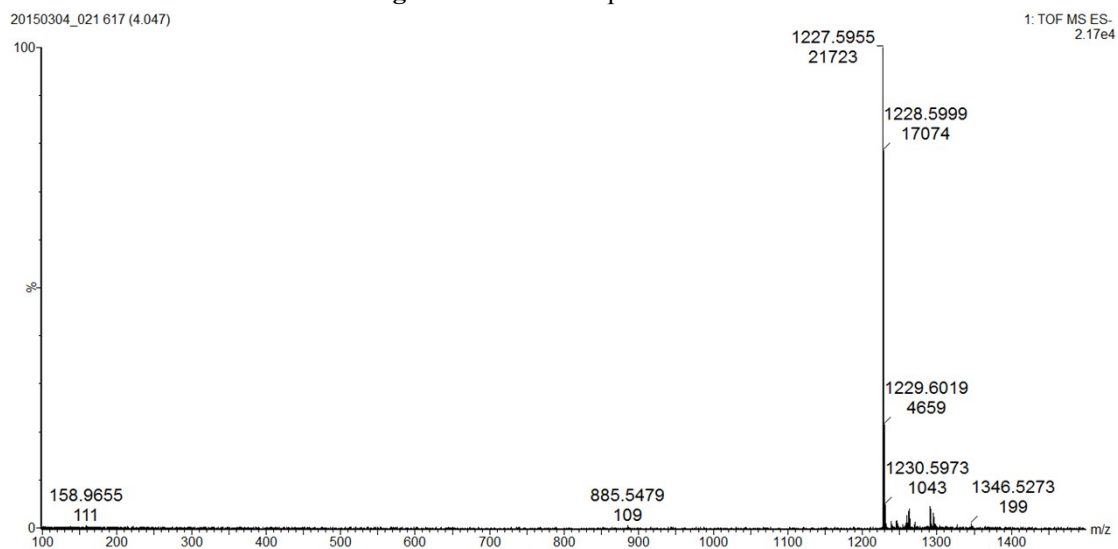


Figure S66. The HR-ESI-MS of 6.

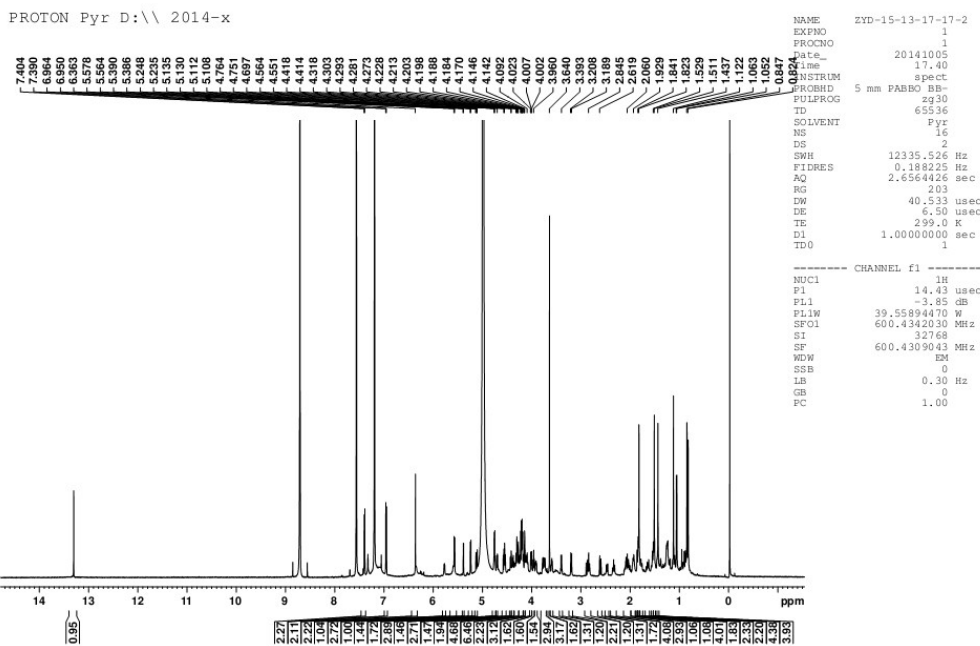


Figure S67. ¹H NMR spectrum of **6** in Pyridine-*d*₅.

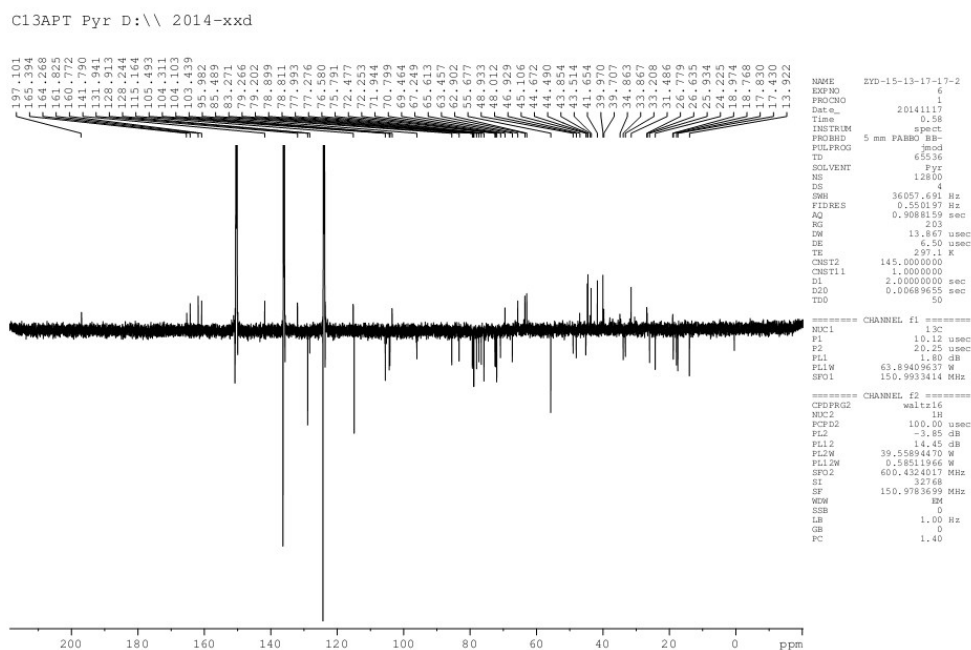


Figure S68. ¹³C APT spectrum of **6** in Pyridine-*d*₅.

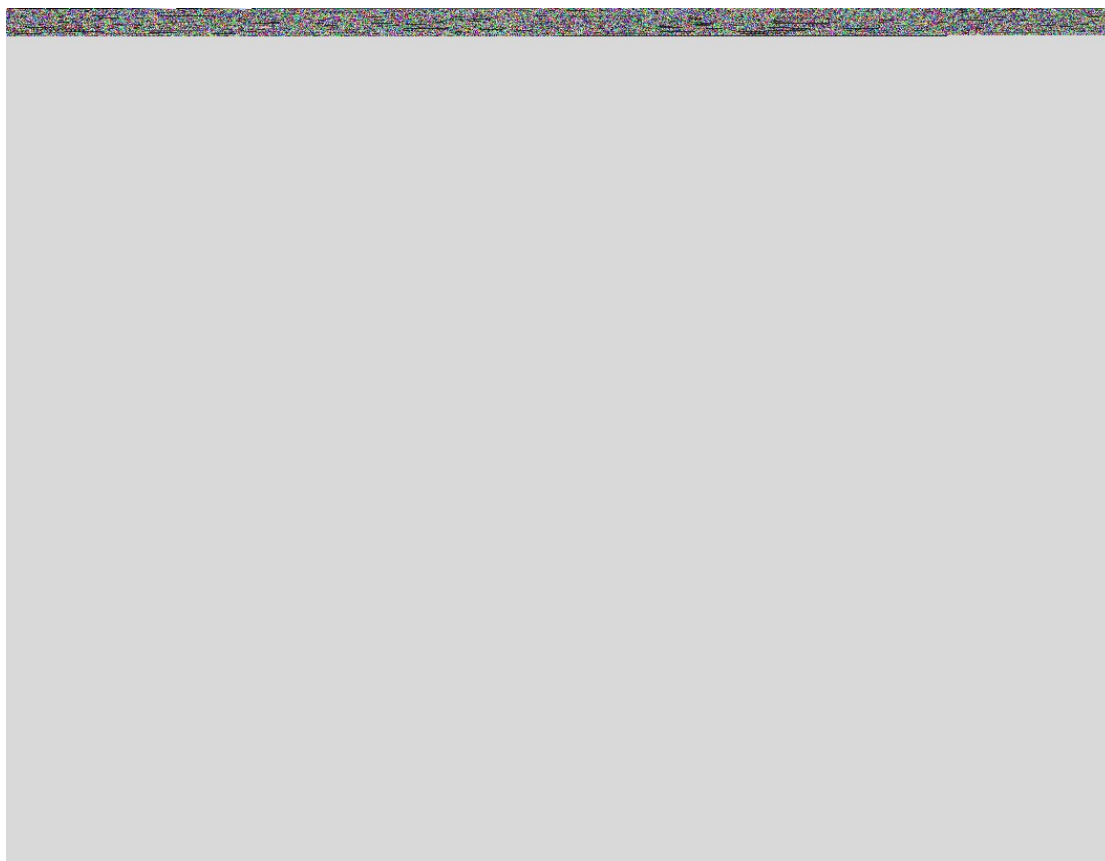


Figure S69. HSQC spectrum of 6 in Pyridine-*d*₅.

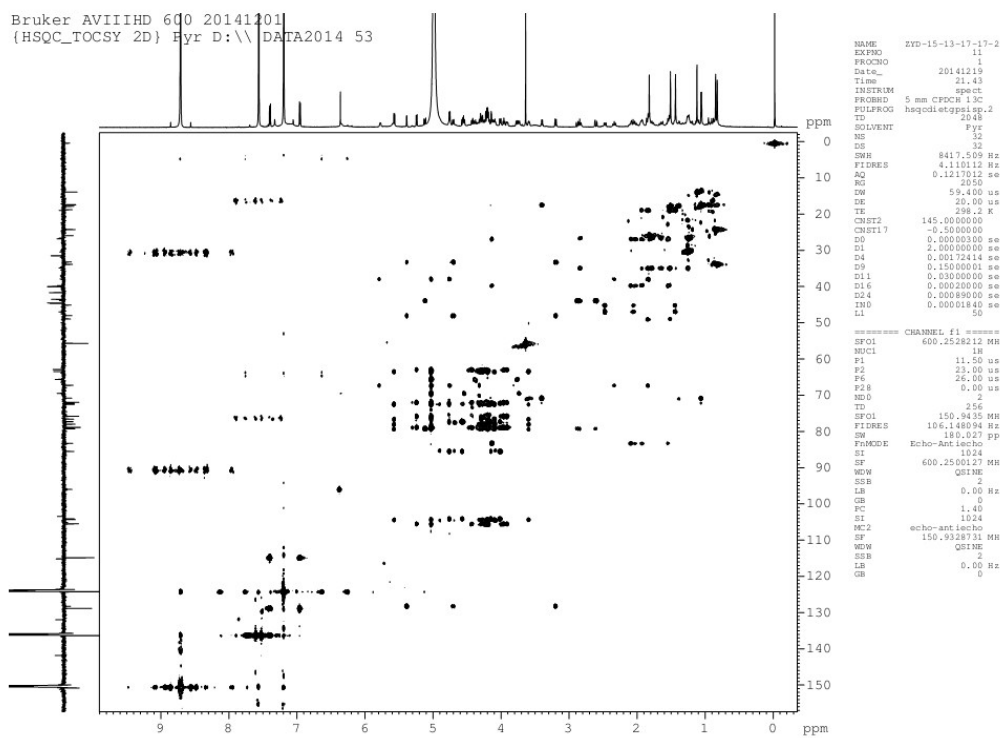


Figure S70. HSQC-TOCSY spectrum of 6 in Pyridine-*d*₅.

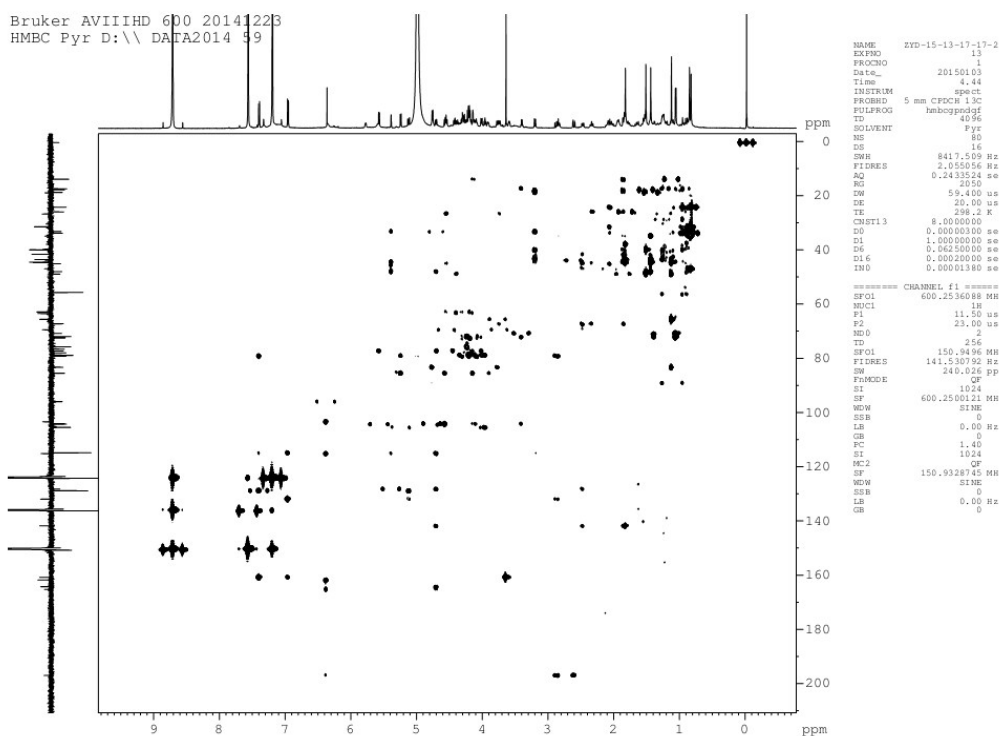


Figure S71. HMBC spectrum of 6 in Pyridine-*d*₅.

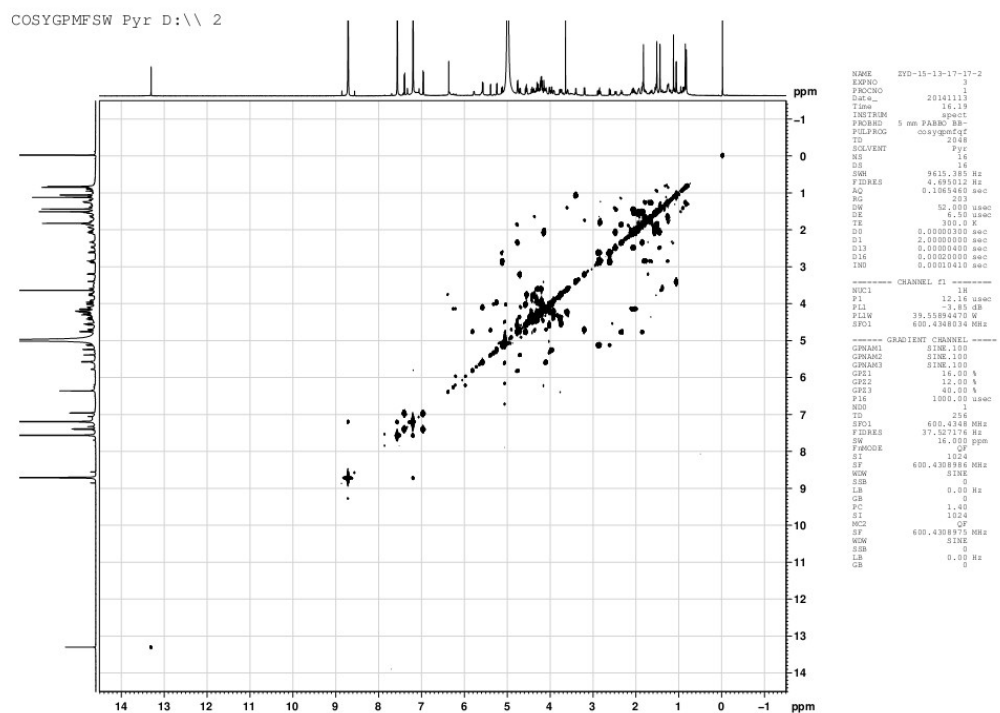


Figure S72. COSY spectrum of 6 in Pyridine-*d*₅.

NOESYPSHW Pyr D:\\ 20

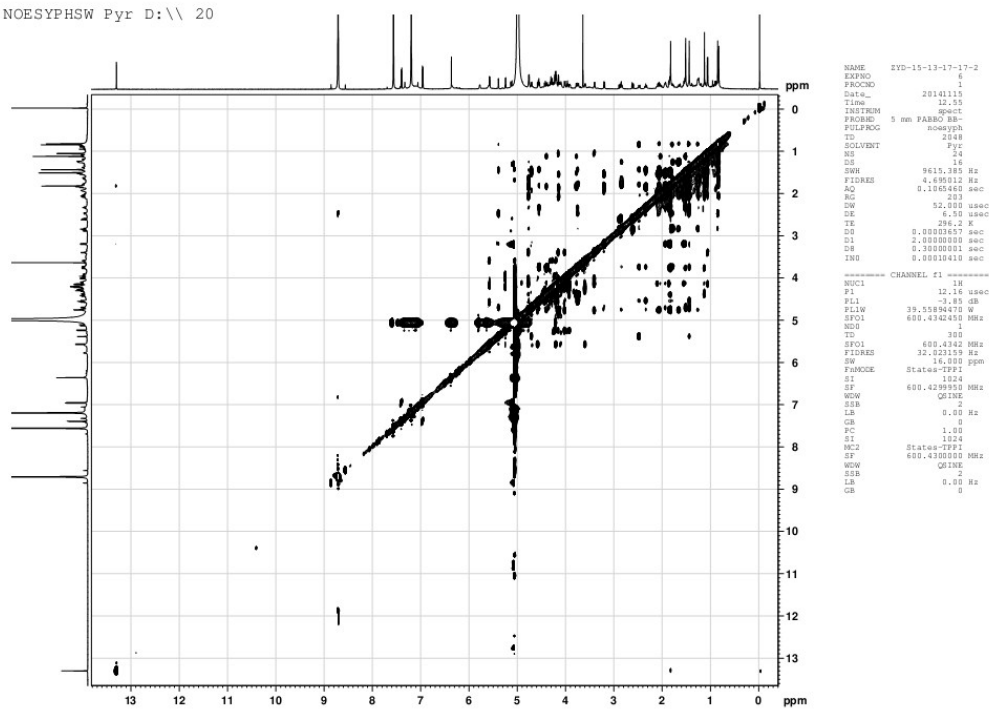


Figure S75. NOESY Spectrum of 6 in Pyridine- d_5 .

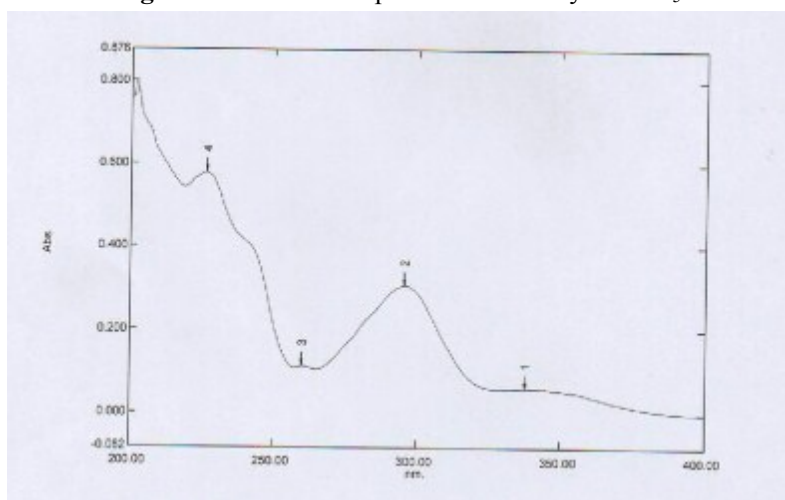


Figure S76. The experimental UV spectrum of 6.

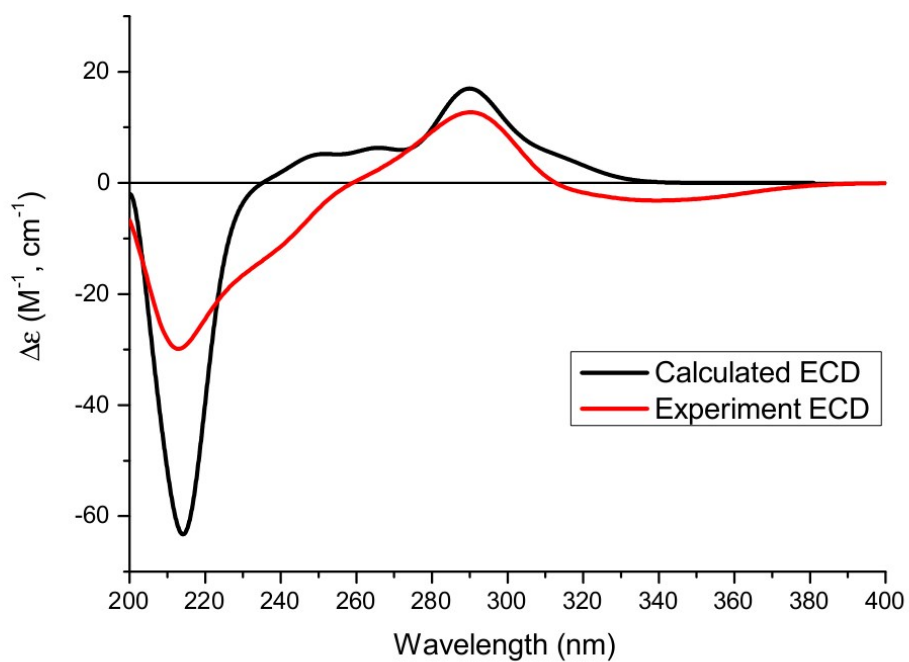


Figure S77. The experimental and calculated ECD spectra of **6**.

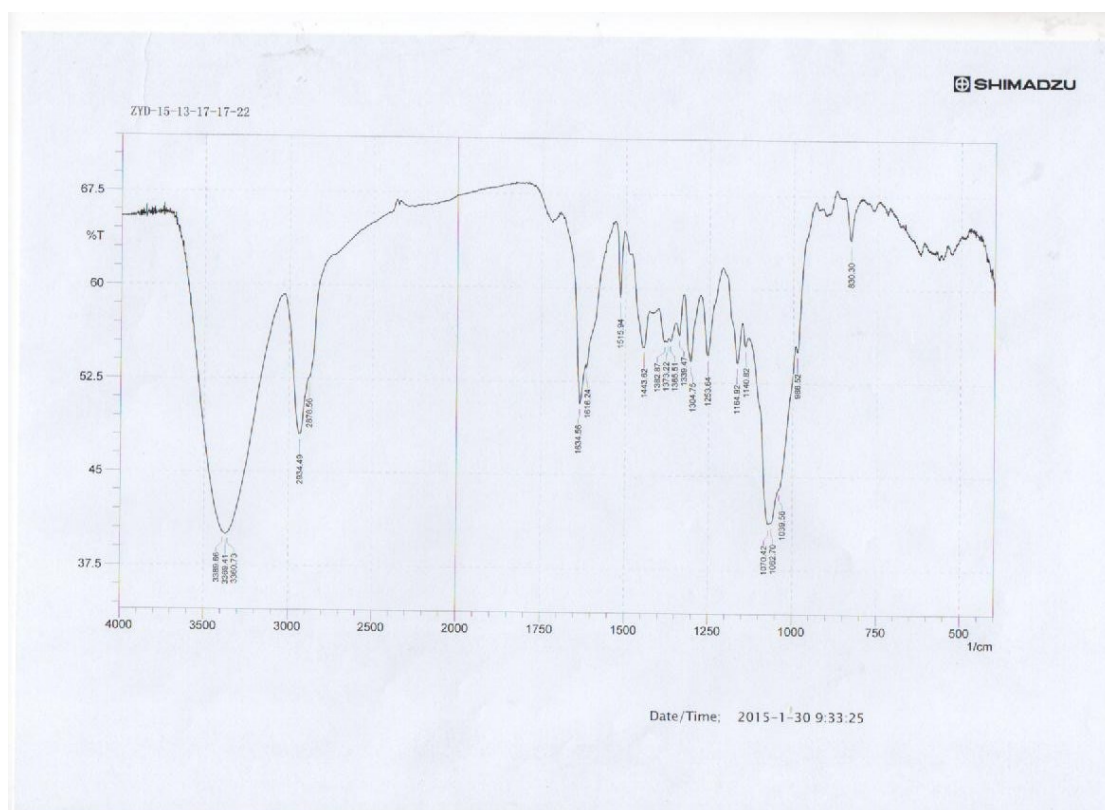


Figure S78. The IR spectrum of **6**.

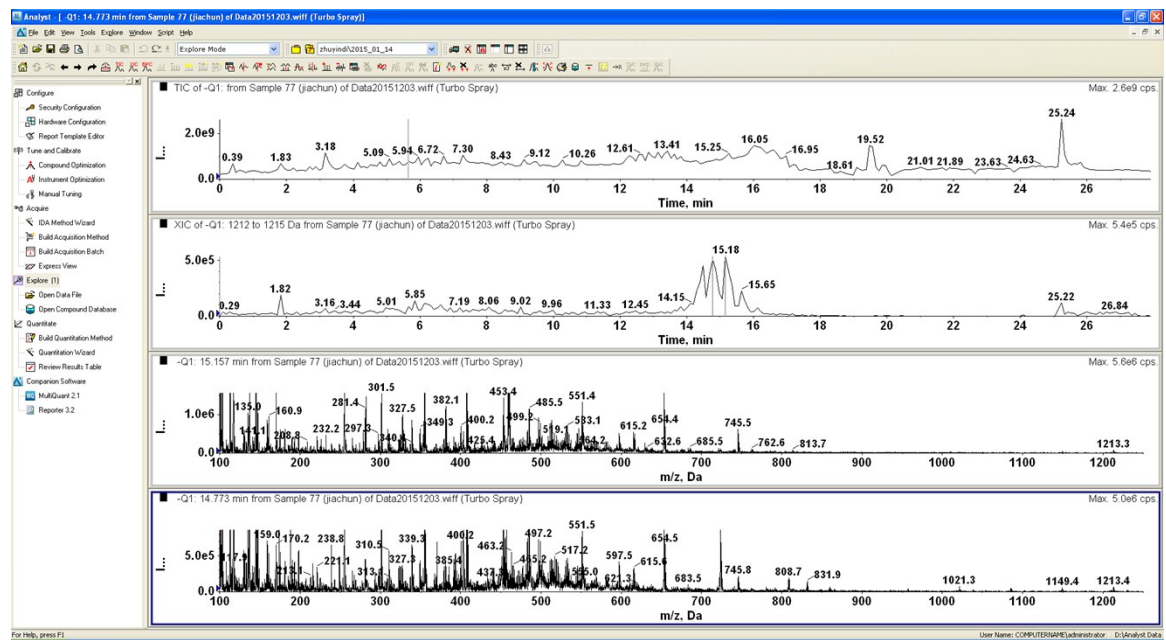


Figure S79. LC-ESI(-)MS chromatogram of methanol extract.