

Supplementary Materials: Ergosterols from Culture Broth of a Marine Derived *Streptomyces* sp. H41-59

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Compound 1

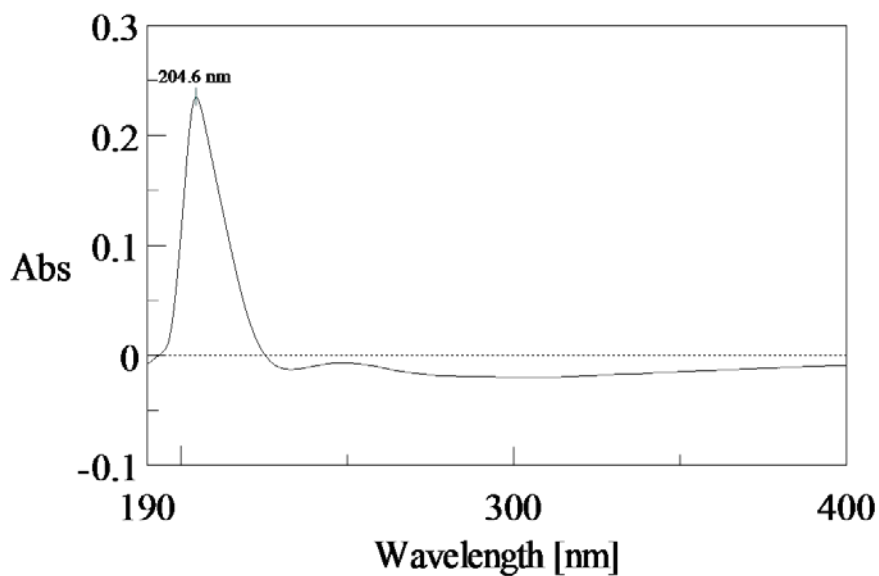


Figure S1. UV spectrum of compound 1 in MeOH.

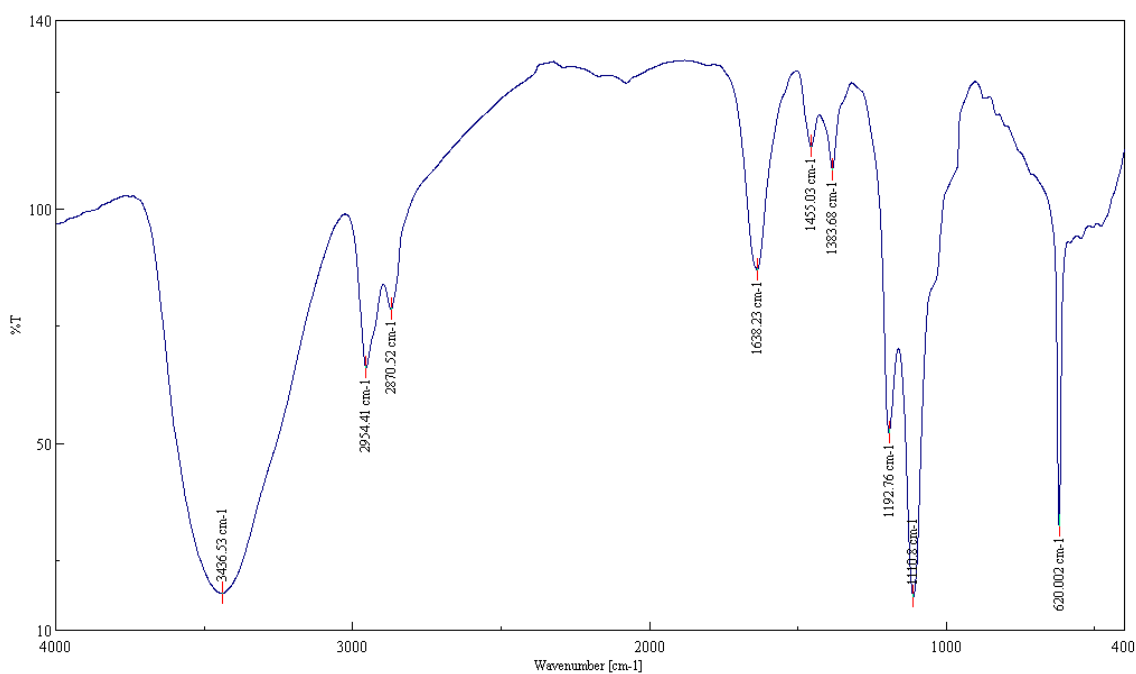
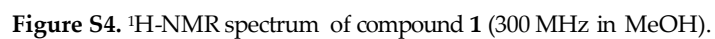
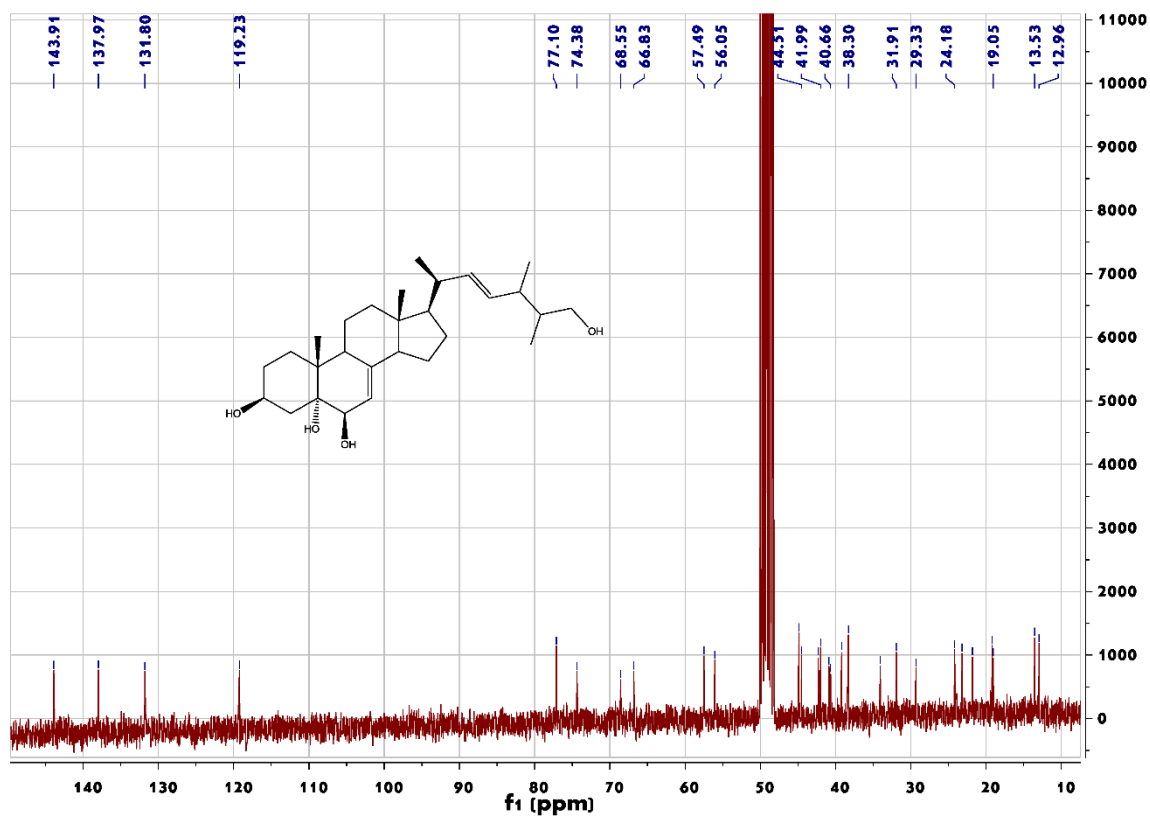
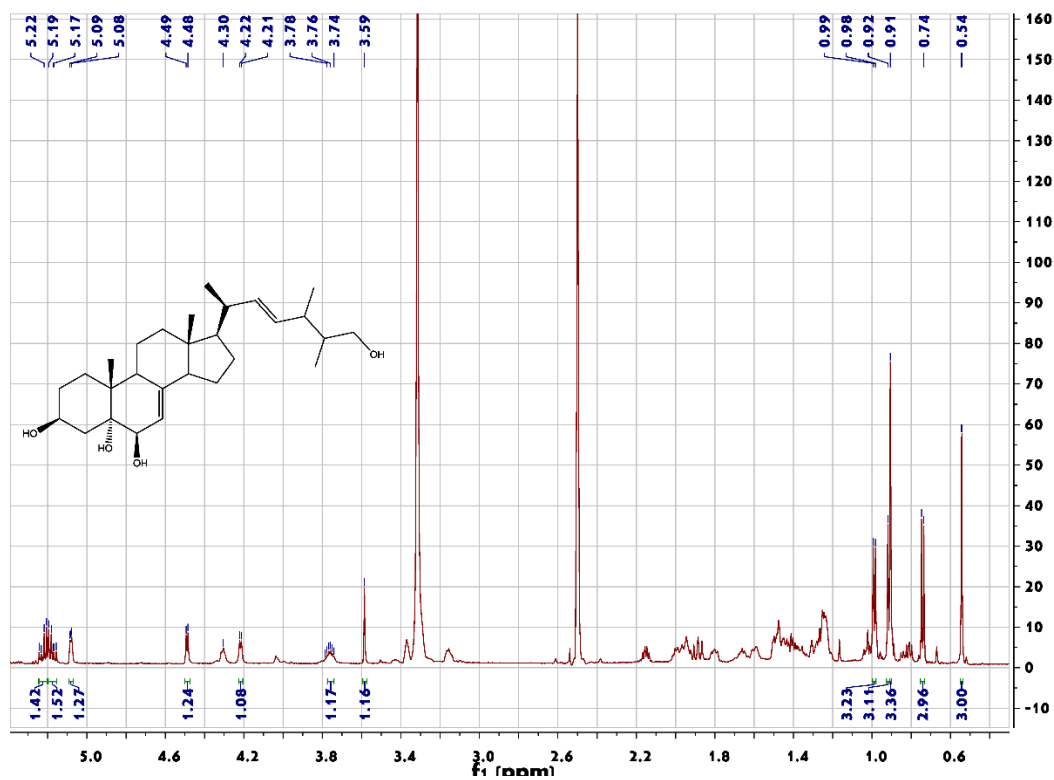
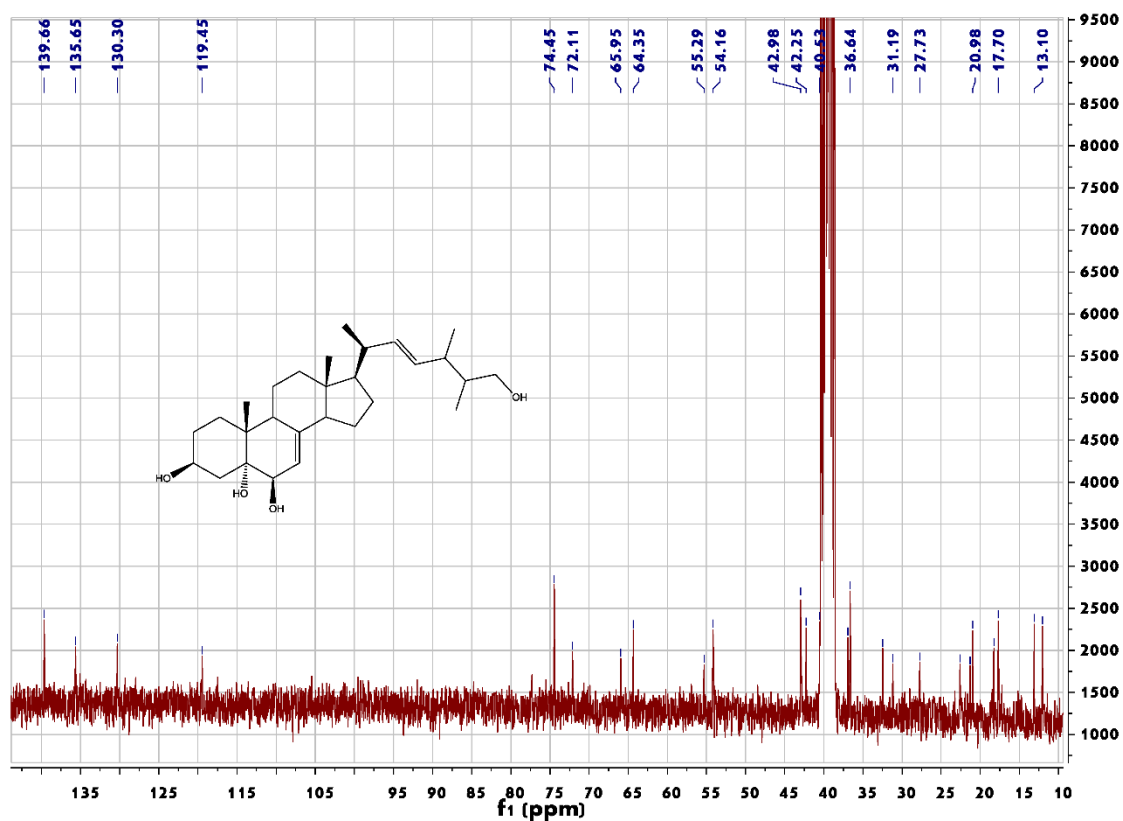
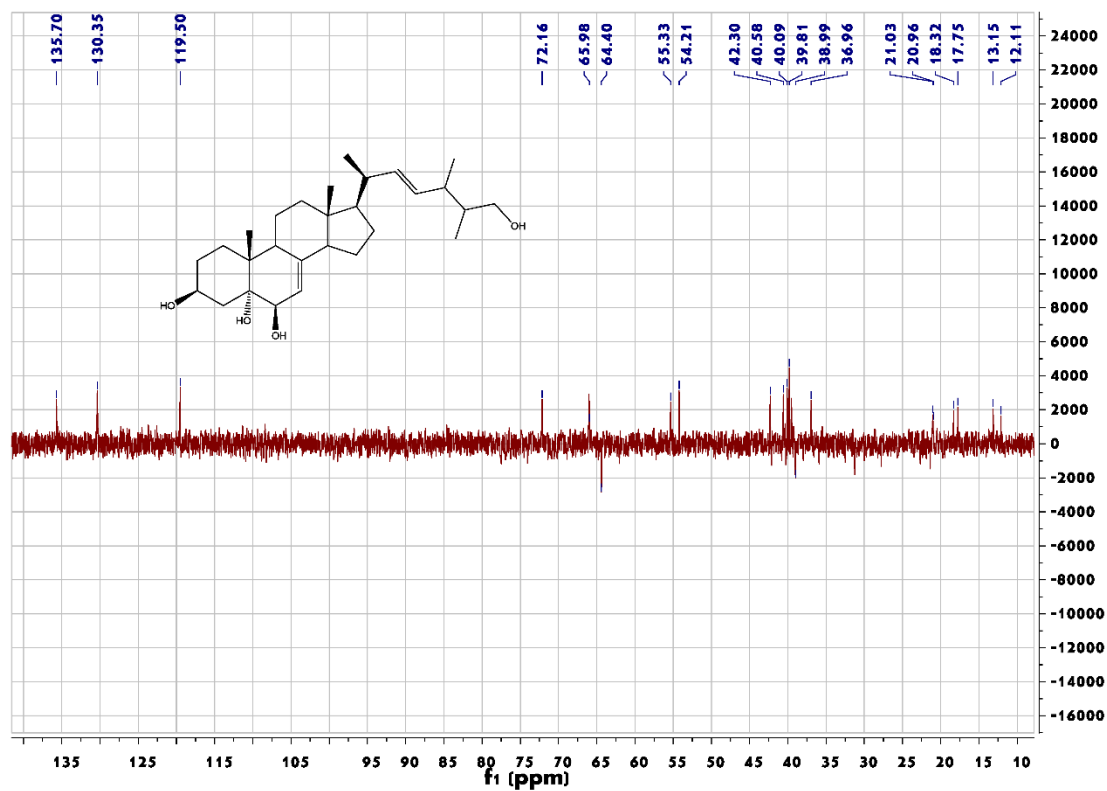
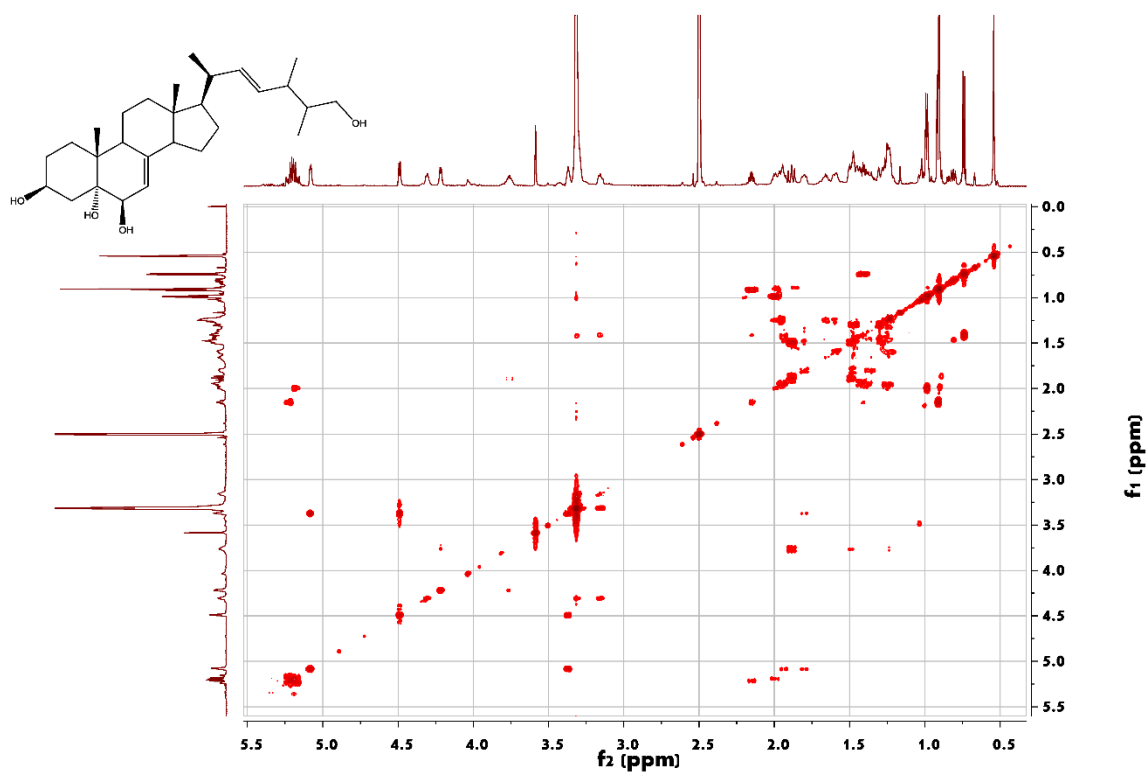
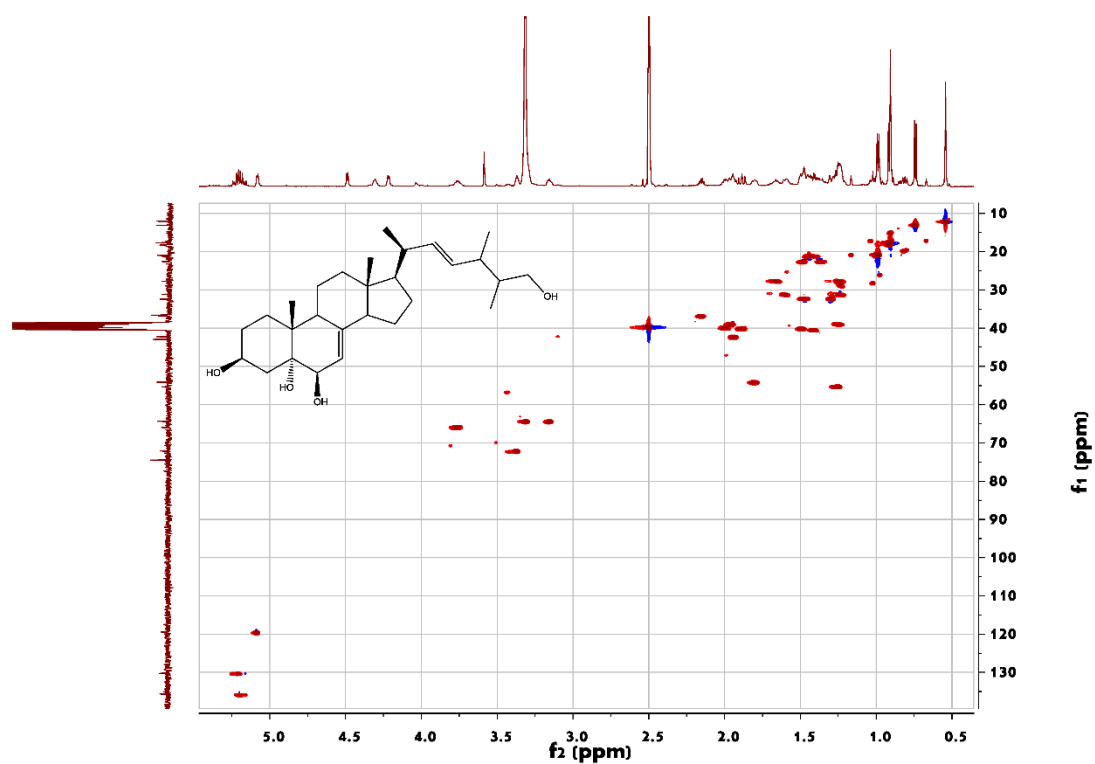


Figure S2. IR spectrum of compound 1.



Figure S5. ¹³C-NMR spectrum of compound 1 (75 MHz in MeOH).Figure S6. ¹H-NMR spectrum of compound 1 (300 MHz in DMSO-*d*₆).

Figure S7. ¹³C-NMR spectrum of compound 1 (75 MHz in DMSO-*d*₆).Figure S8. DEPT spectrum of compound 1 (75 MHz in DMSO-*d*₆).

Figure S9. COSY spectrum of compound 1 (600 MHz in $\text{DMSO-}d_6$).Figure S10. HMBC spectrum of compound 1 (600 MHz in $\text{DMSO-}d_6$).

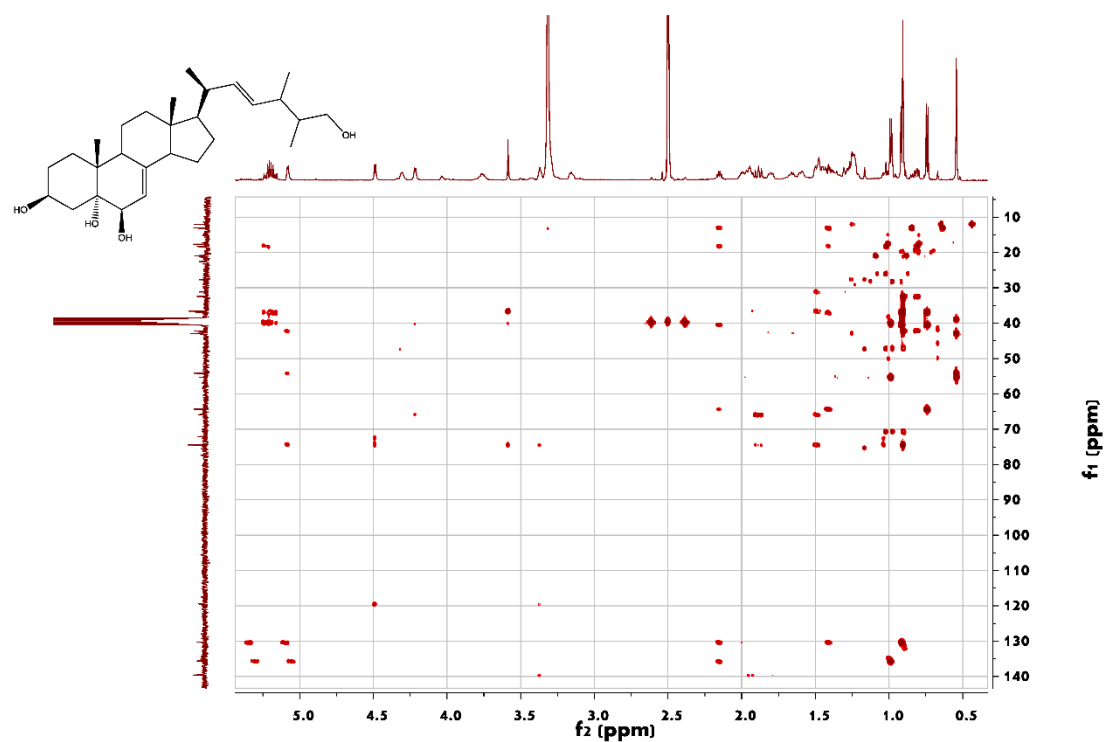


Figure S11. HMBC spectrum of compound 1 (600 MHz in DMSO-*d*₆).

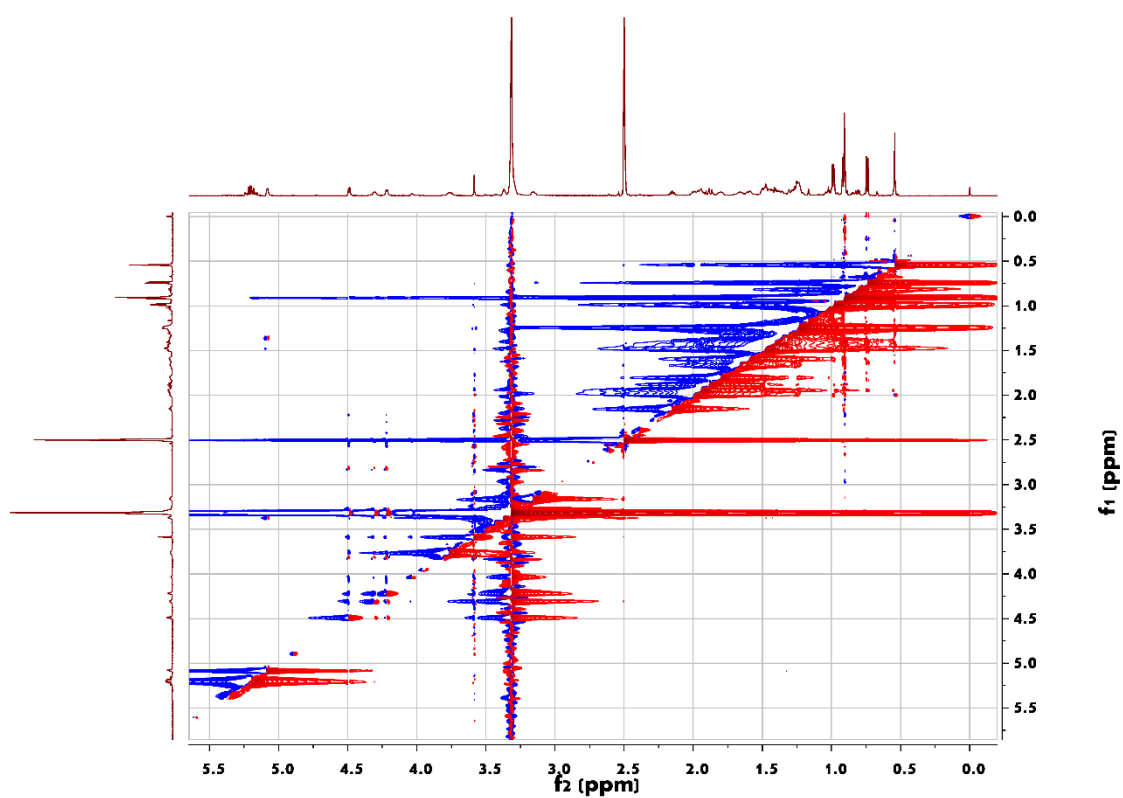
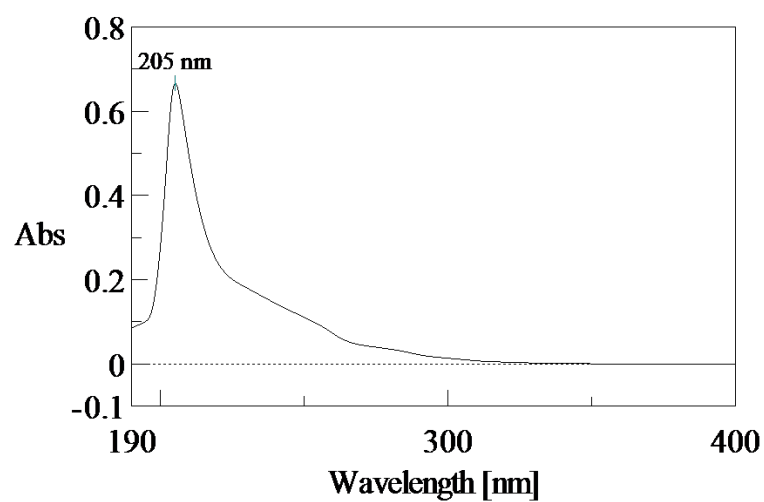
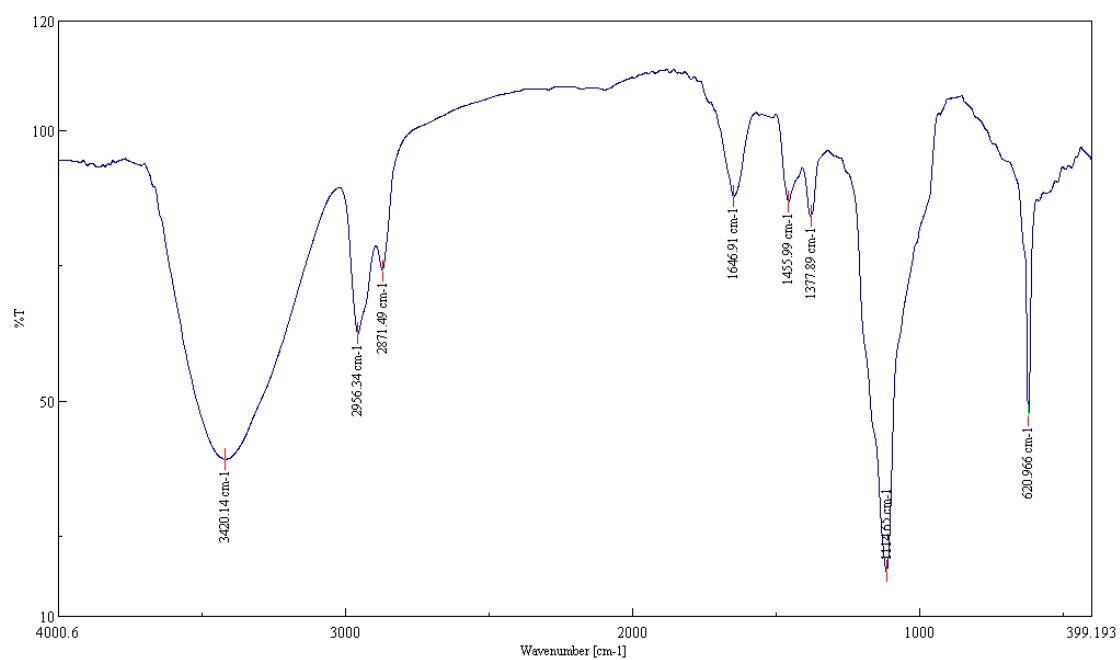


Figure S12. NOESY spectrum of compound 1 (600 MHz in DMSO-*d*₆).

Compound 2**Figure S13.** UV spectrum of compound 2 in MeOH.**Figure S14.** IR spectrum of compound 2.

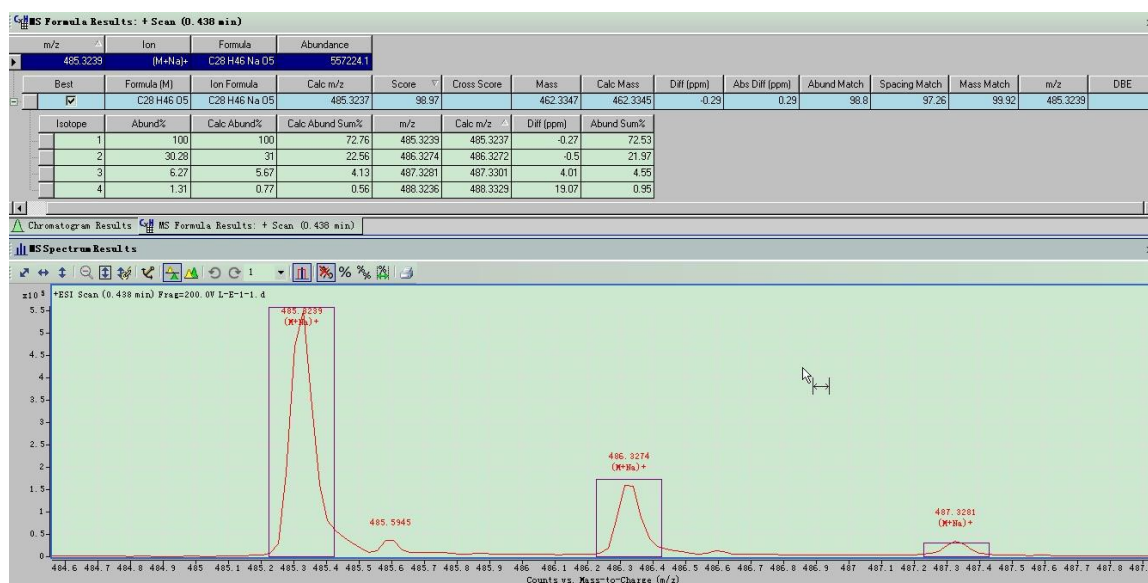
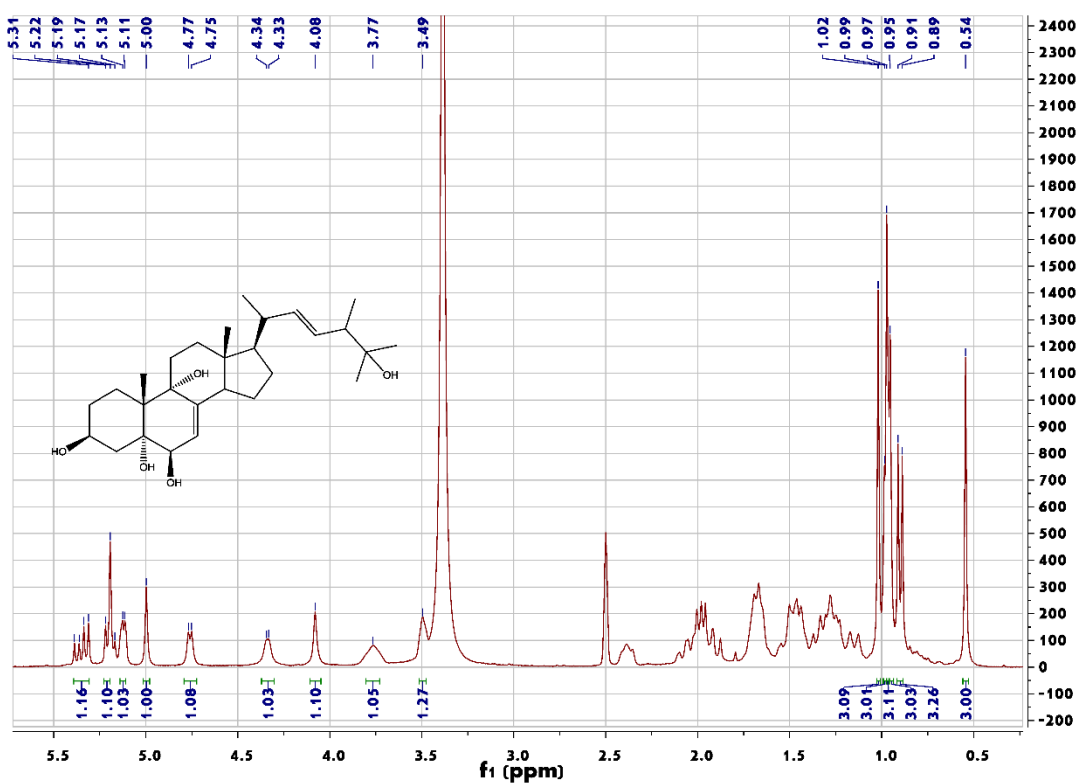
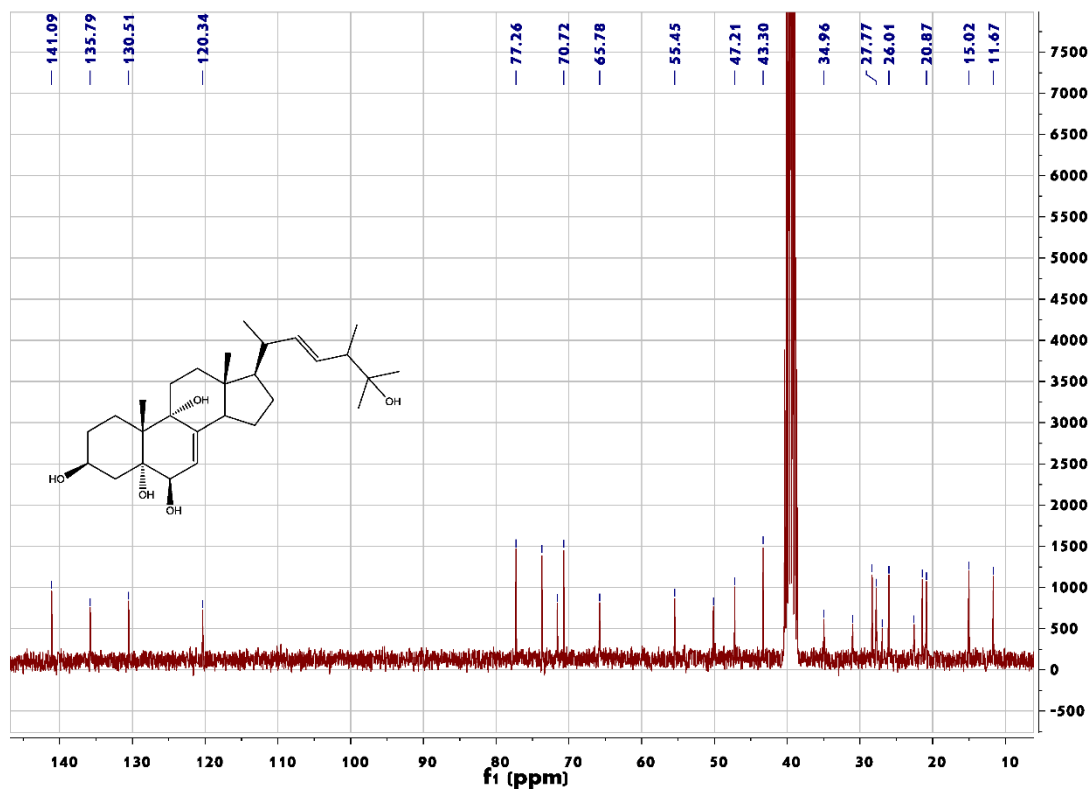
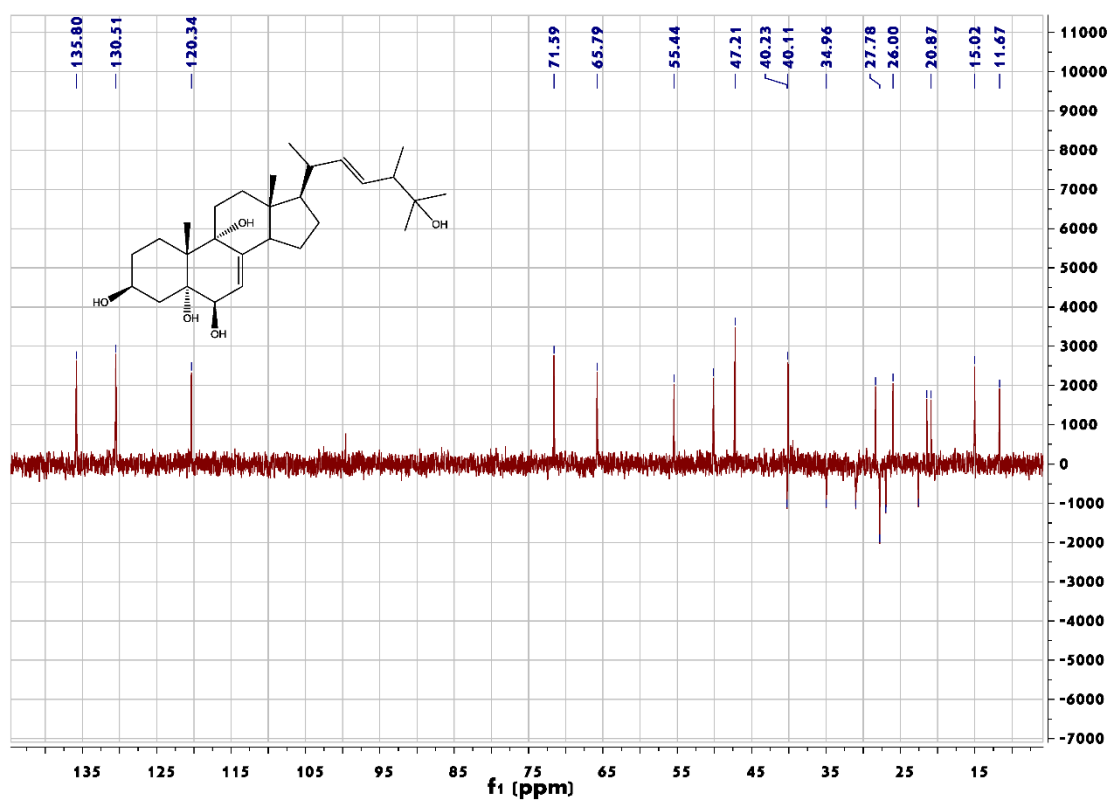


Figure S15. HR-MS of compound 2.

Figure S16. ¹H-NMR spectrum of compound 2 (300 MHz in DMSO-*d*₆).

Figure S17. ^{13}C -NMR spectrum of compound 2 (75 MHz in $\text{DMSO-}d_6$).Figure S18. DEPT spectrum of compound 2 (75 MHz in $\text{DMSO-}d_6$).

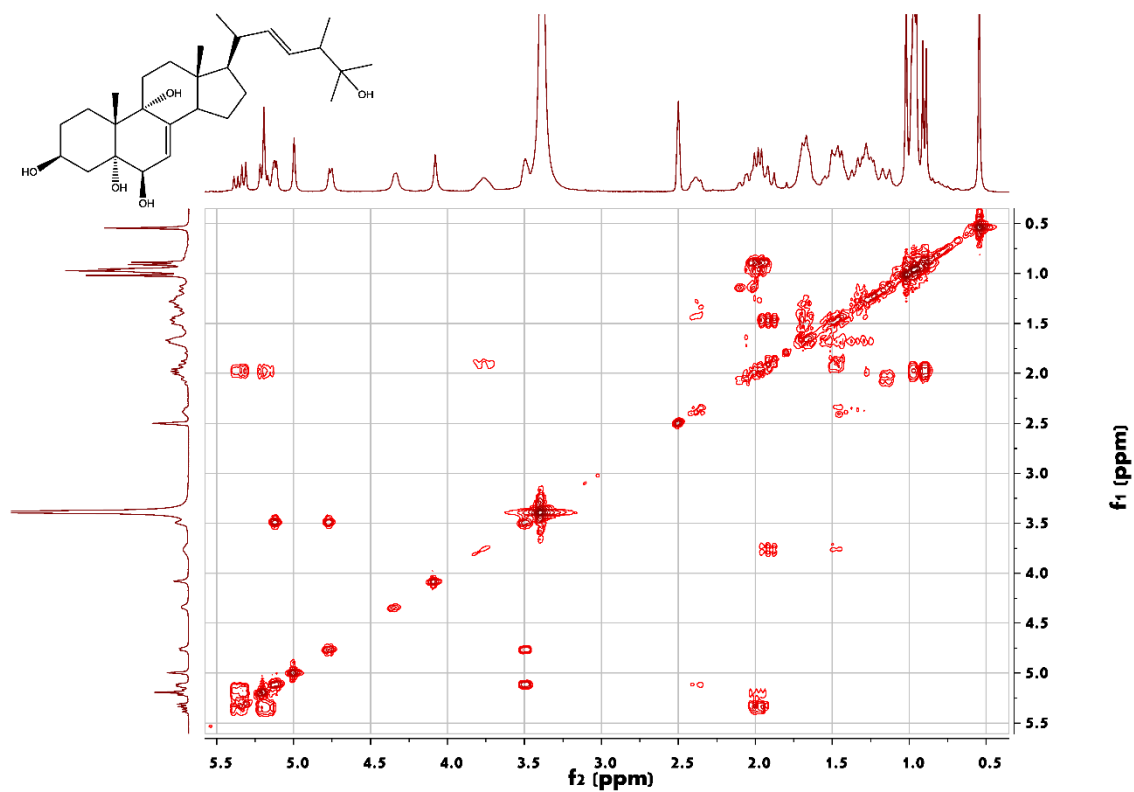


Figure S19. COSY spectrum of compound 2 (300 MHz in DMSO-*d*₆).

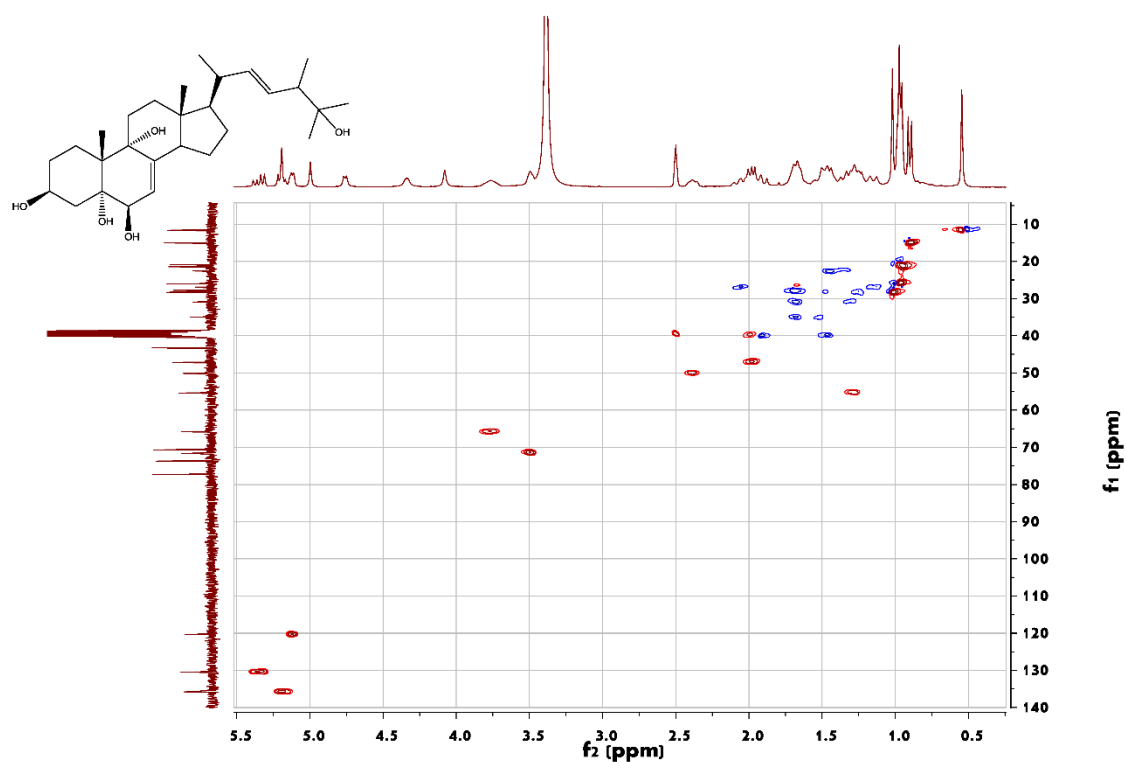


Figure S20. HMQC spectrum of compound 2 (300 MHz in DMSO-*d*₆).

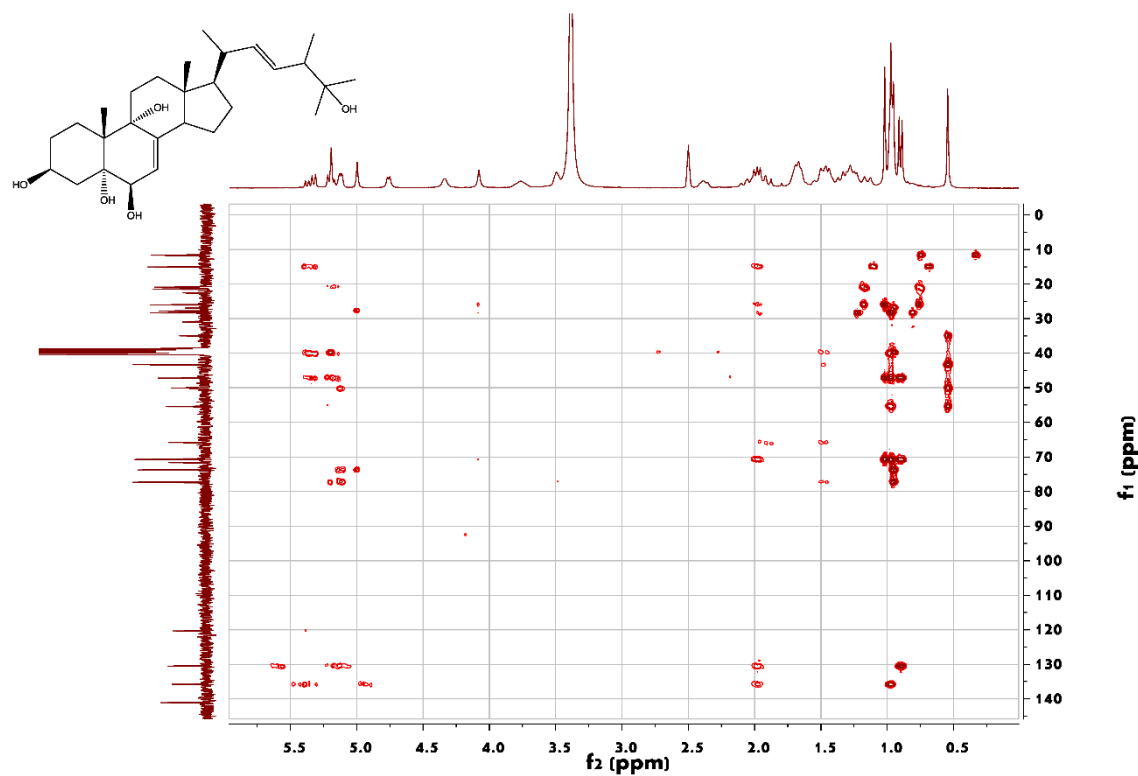


Figure S21. HMBC spectrum of compound 2 (300 MHz in DMSO-*d*₆).

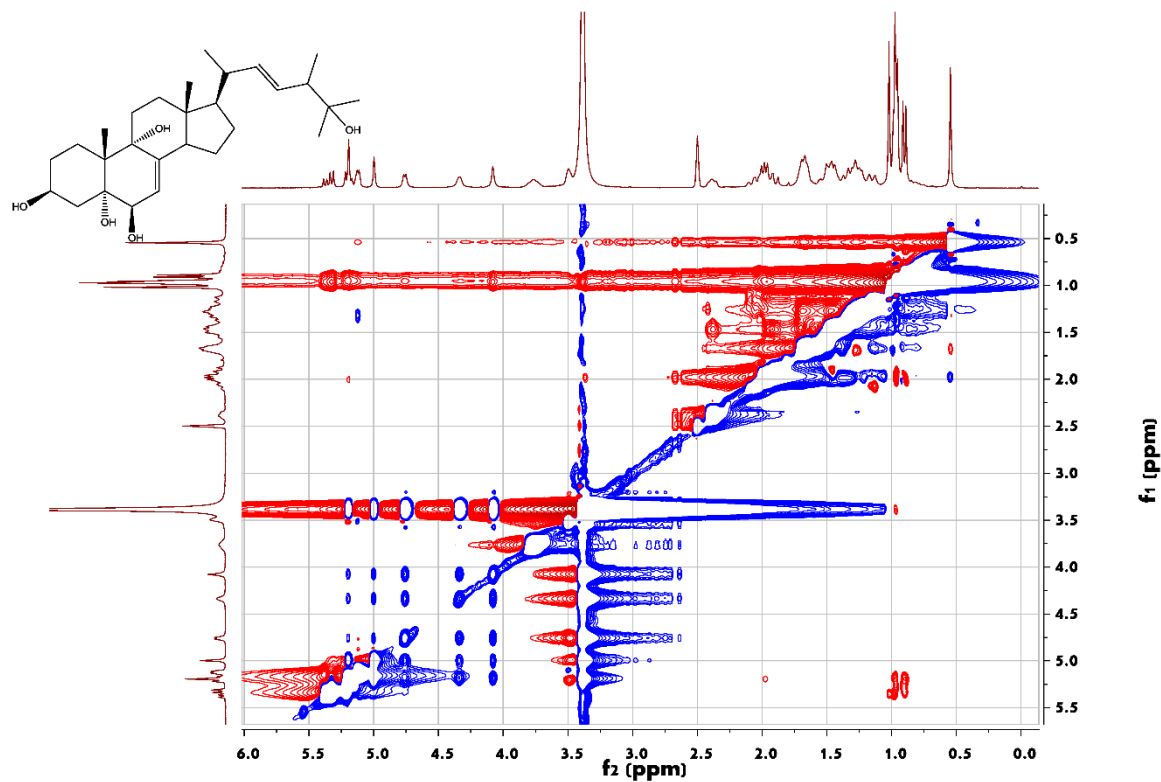


Figure S22. NOESY spectrum of compound 2 (300 MHz in DMSO-*d*₆).

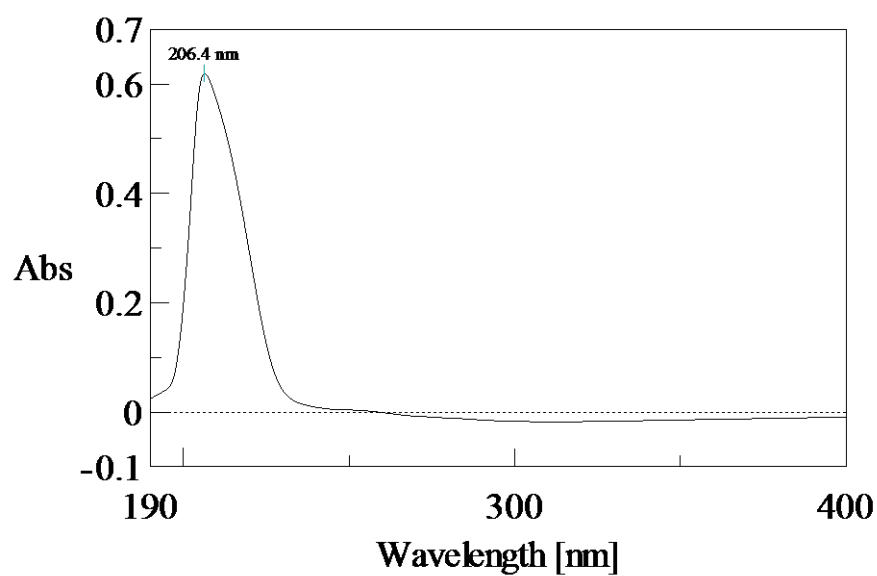
Compound 3

Figure S23. UV spectrum of compound 3 in MeOH.

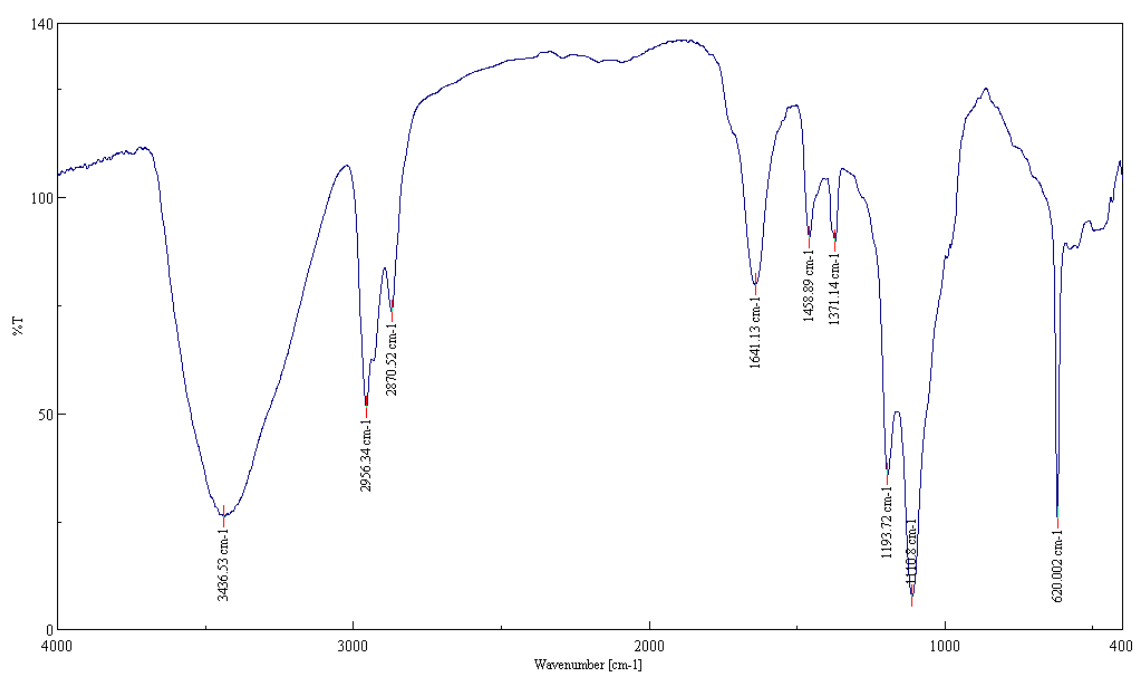


Figure S24. IR spectrum of compound 3.

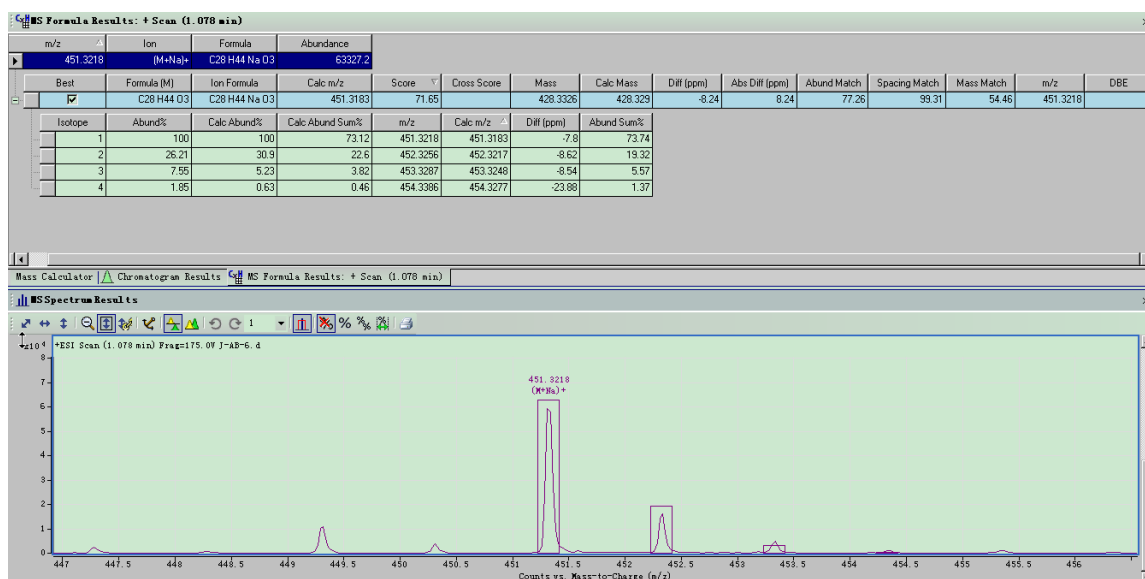
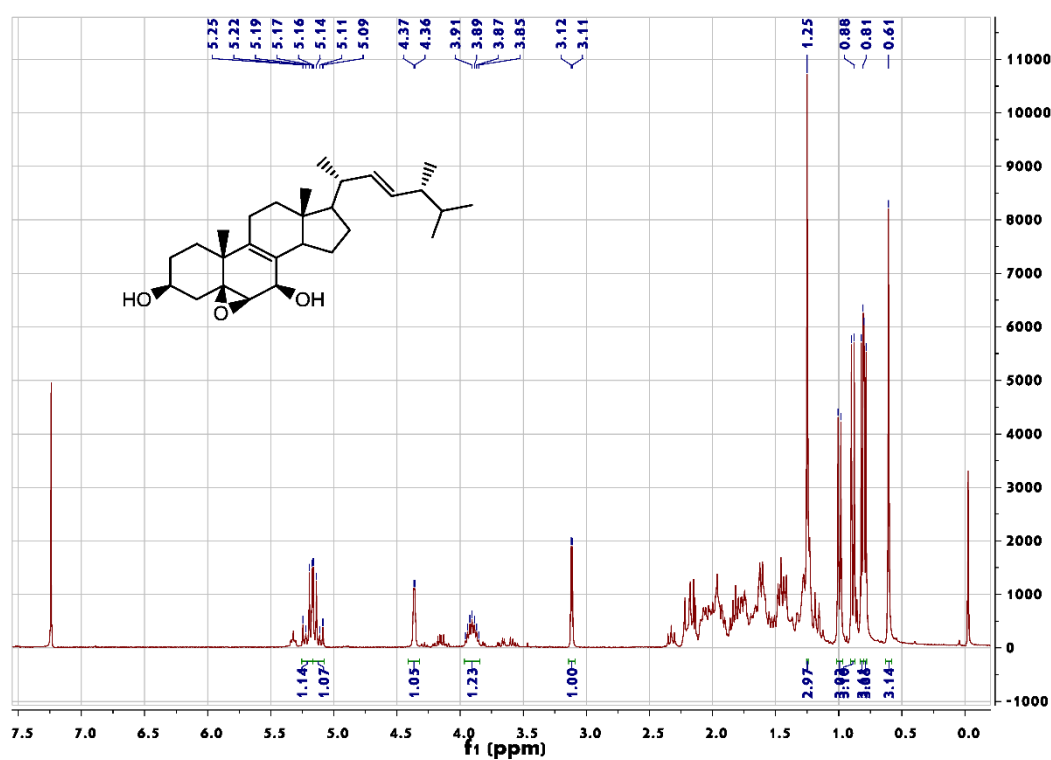
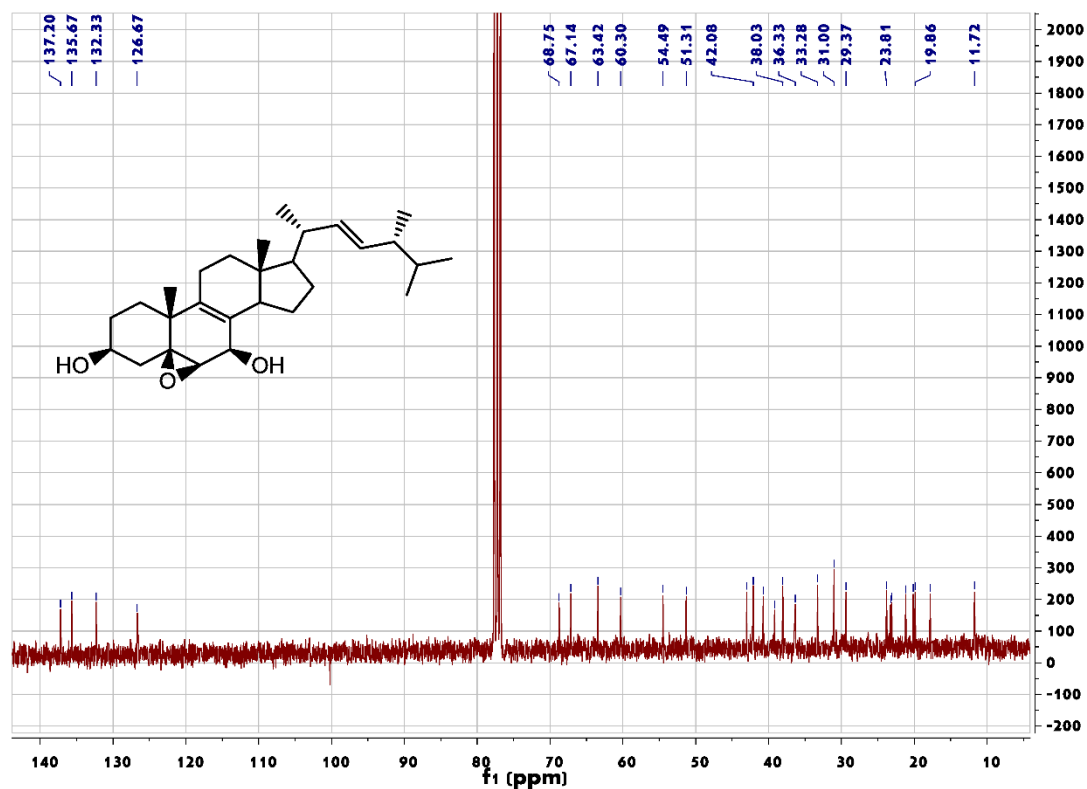
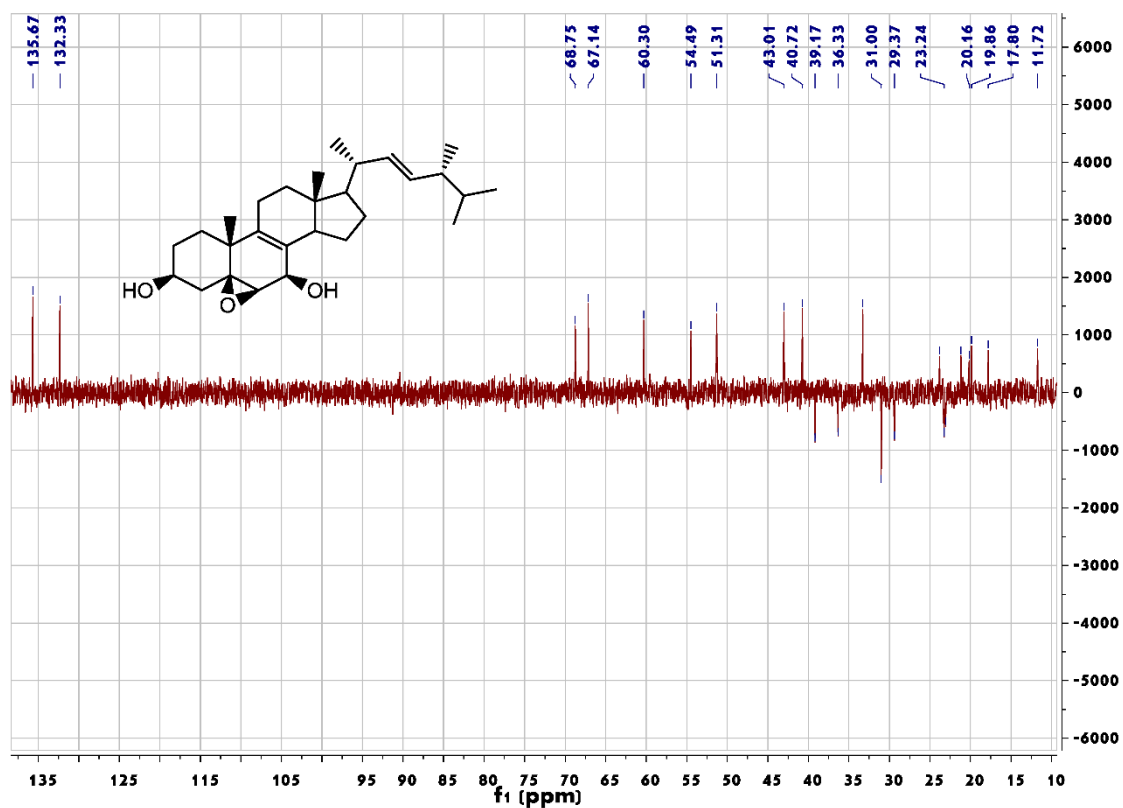


Figure S25. HR-MS of compound 3.

Figure S26. ¹H-NMR spectrum of compound 3 (300 MHz in CDCl₃).

Figure S27. ¹³C-NMR spectrum of compound 3 (75 MHz in CDCl₃).Figure S28. DEPT spectrum of compound 3 (75 MHz in CDCl₃).

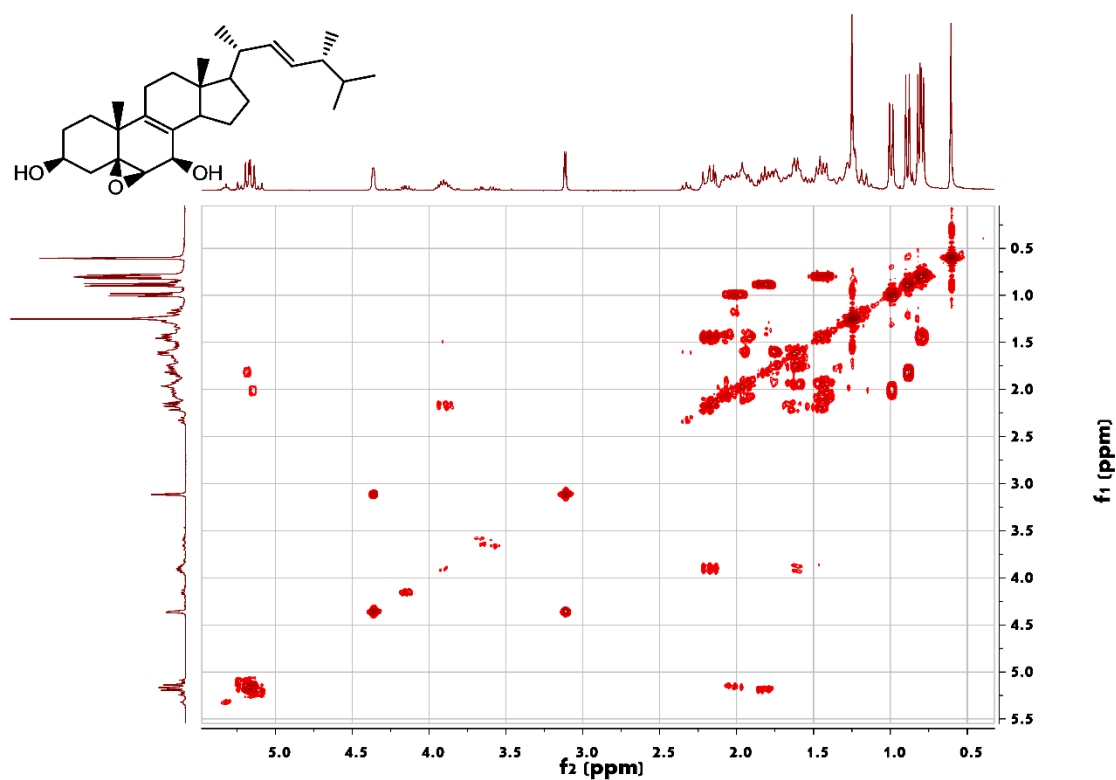


Figure S29. COSY spectrum of compound 3 (300 MHz in CDCl₃).

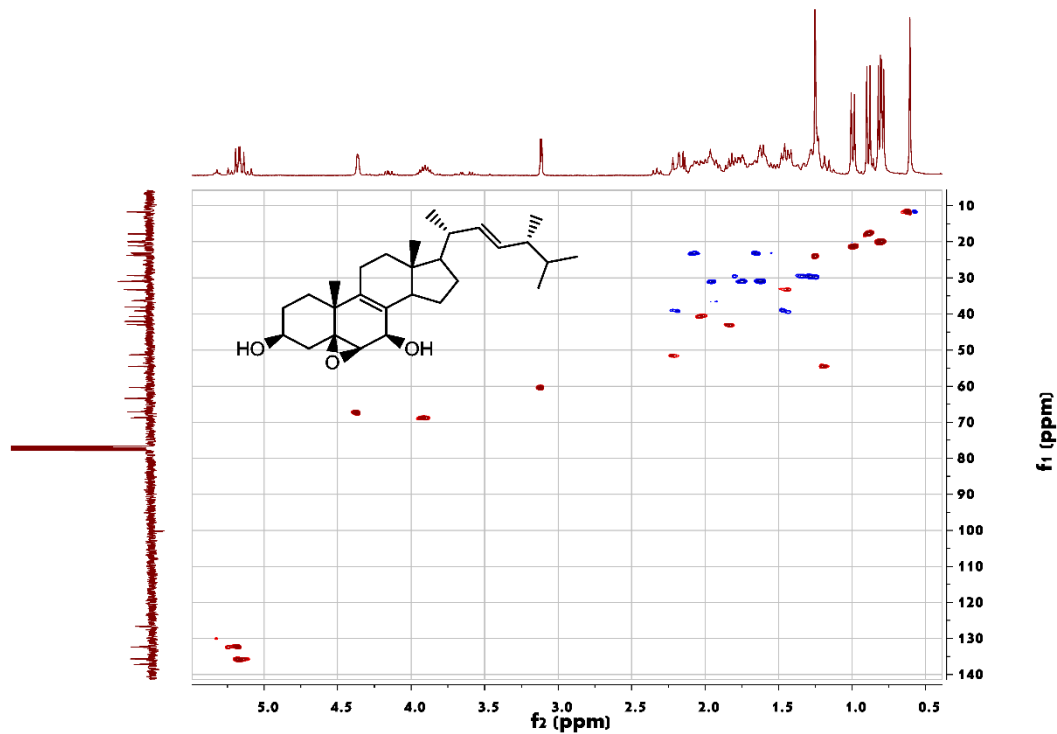


Figure S30. HMQC spectrum of compound 3 (300 MHz in CDCl₃).

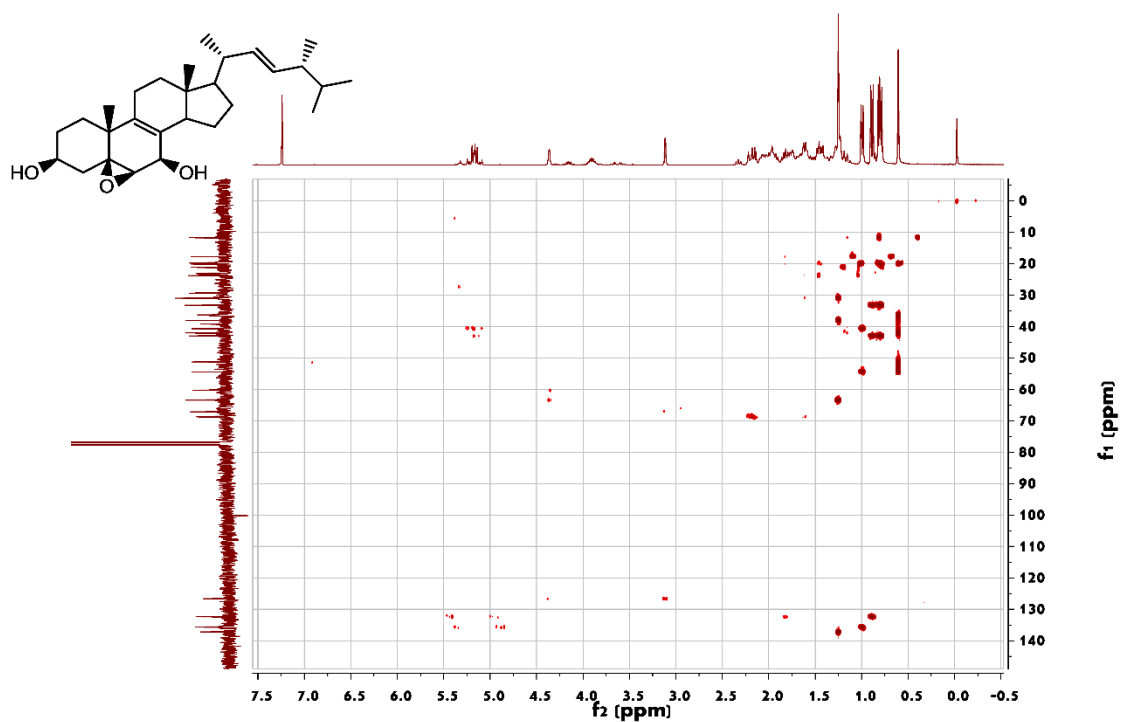


Figure S31. HMBC spectrum of compound 3 (300 MHz in CDCl₃).

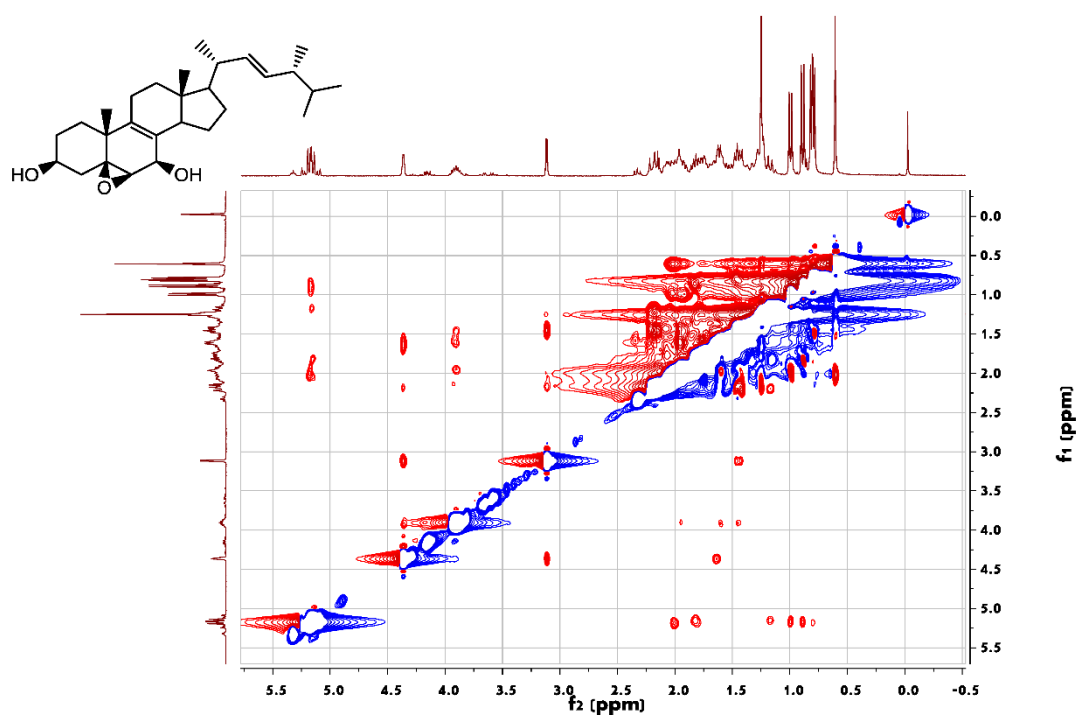
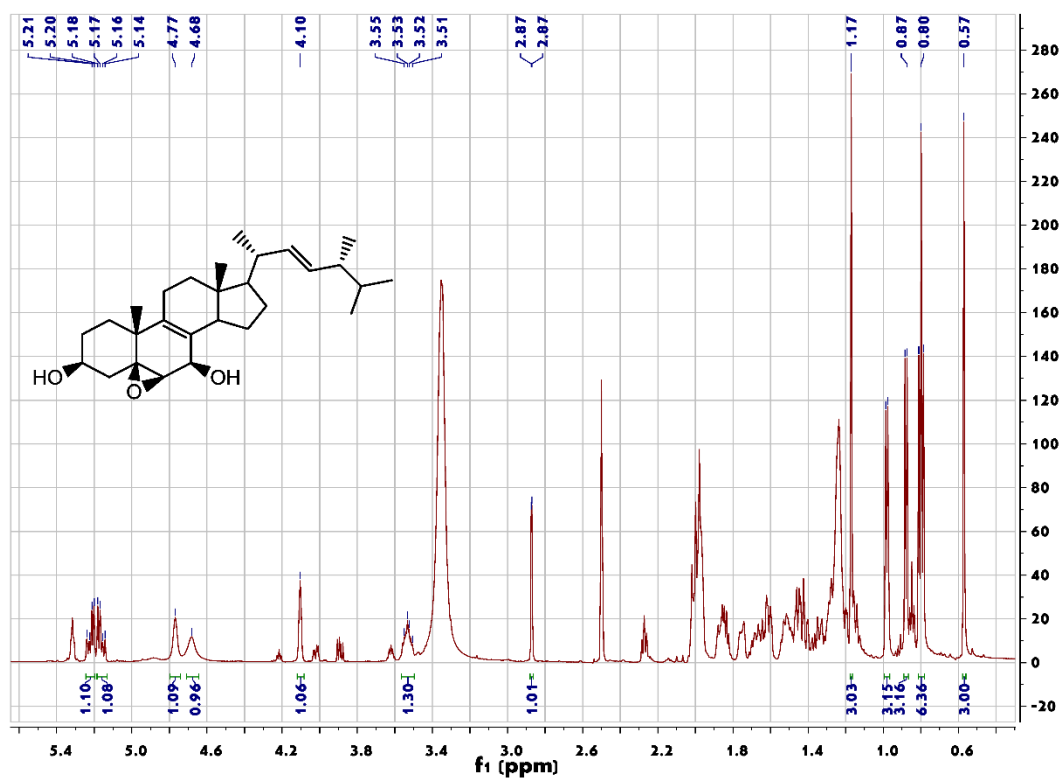
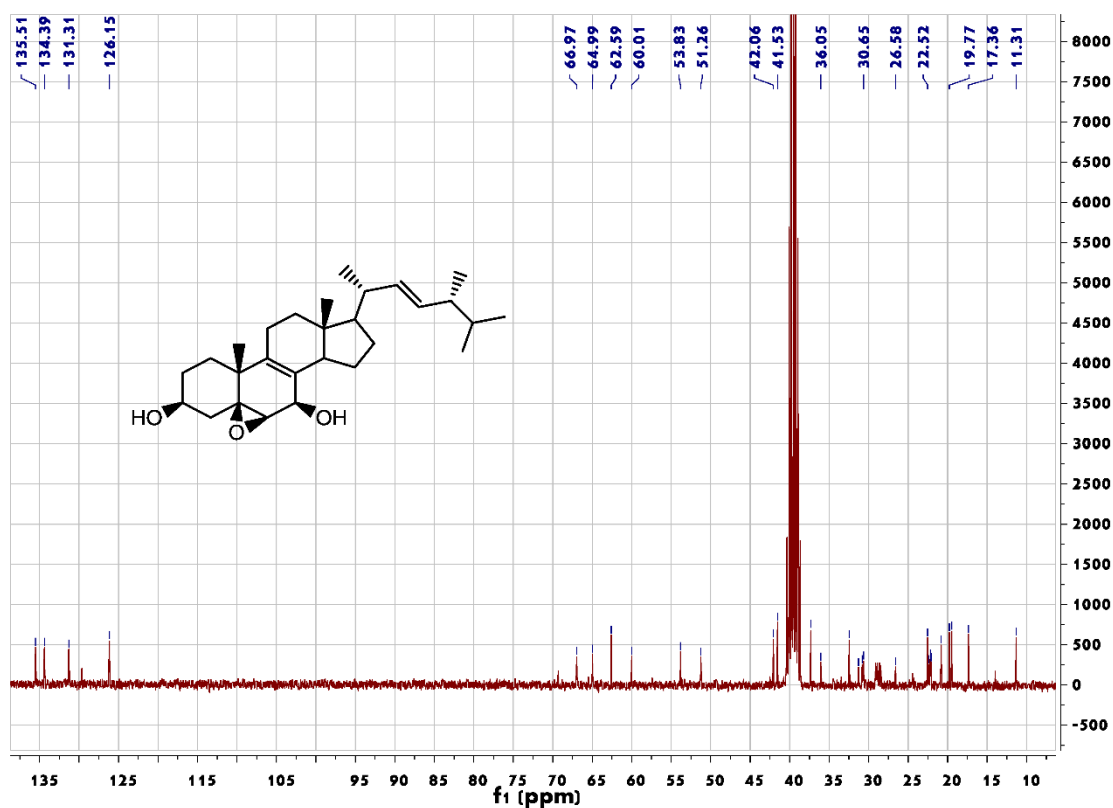


Figure S32. NOESY spectrum of compound 3 (300 MHz in CDCl₃).

Figure S33. ¹H-NMR spectrum of compound 3 (600 MHz in DMSO-*d*₆).Figure S34. ¹³C-NMR spectrum of compound 3 (150 MHz in DMSO-*d*₆).

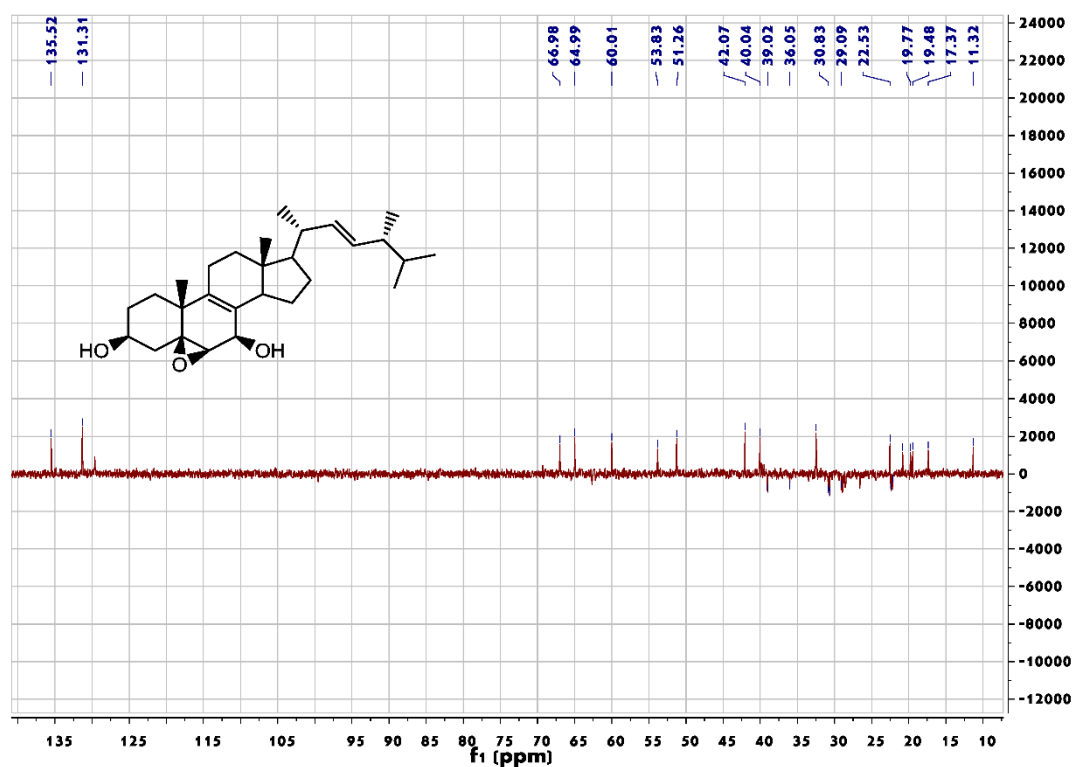


Figure S35. DEPT spectrum of compound 3 (150 MHz in DMSO-*d*₆).

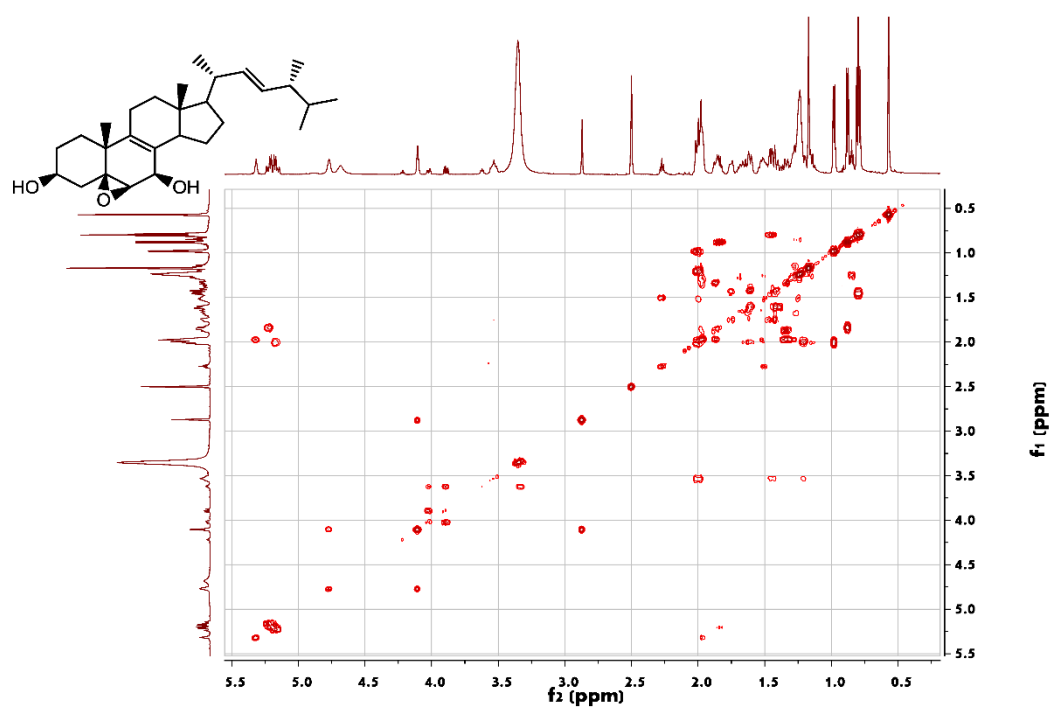
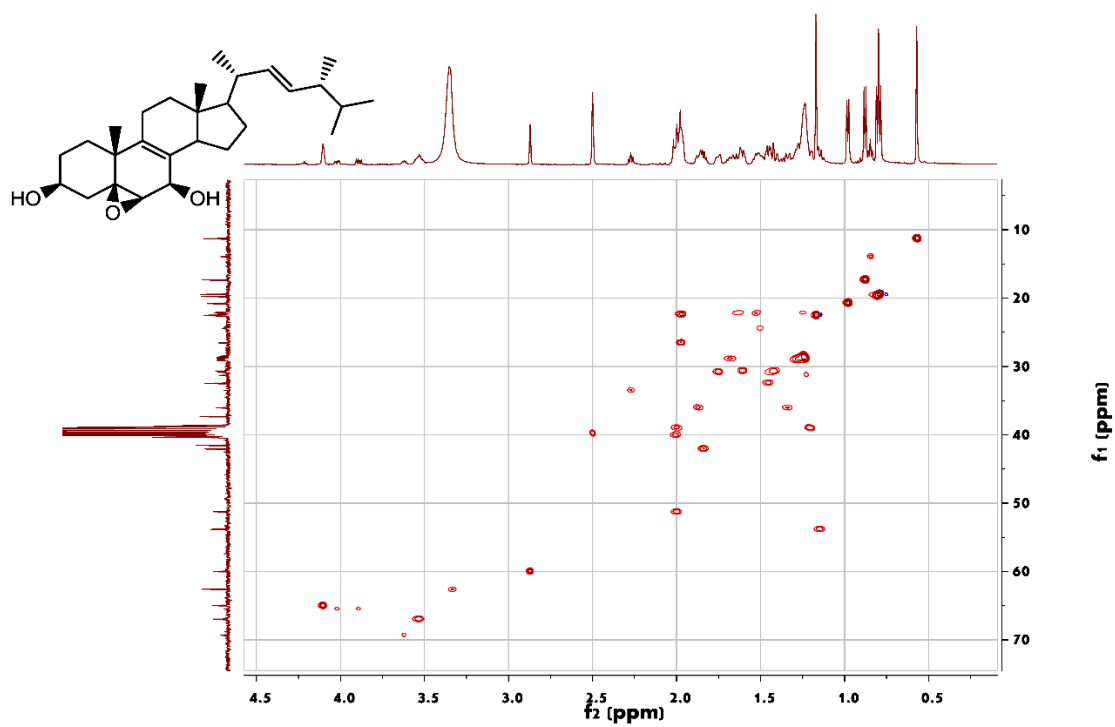
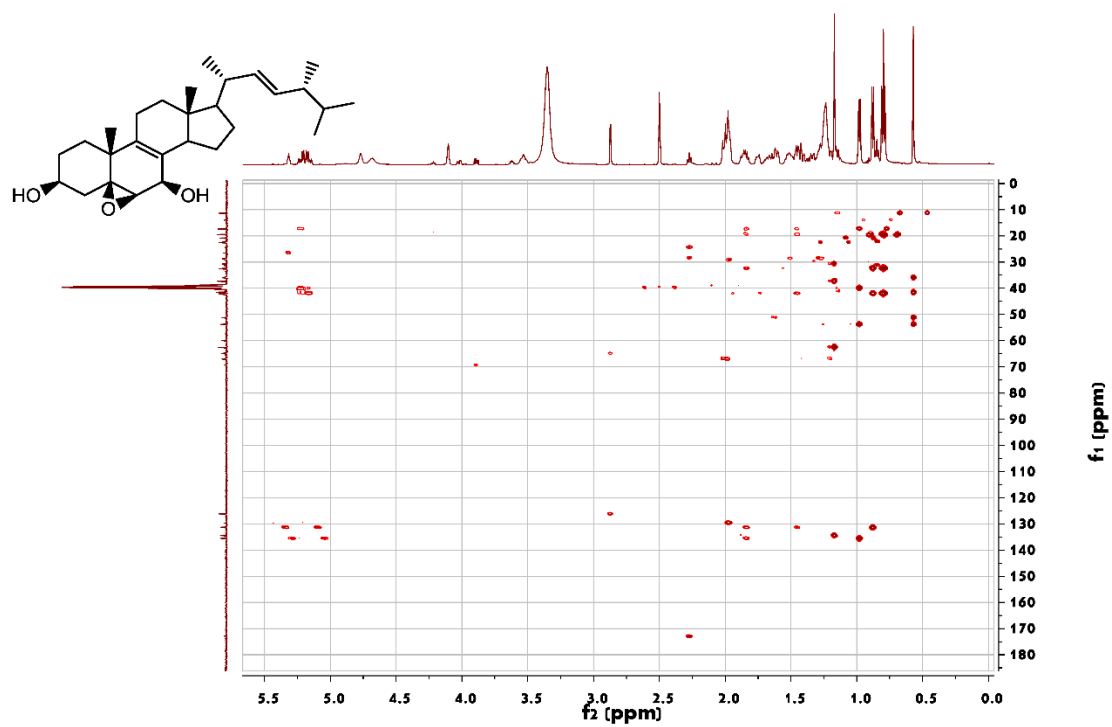


Figure S36. COSY spectrum of compound 3 (600 MHz in DMSO-*d*₆).

Figure S37. HMQC spectrum of compound 3 (600 MHz in DMSO-*d*₆).Figure S38. HMBC spectrum of compound 3 (600 MHz in DMSO-*d*₆).

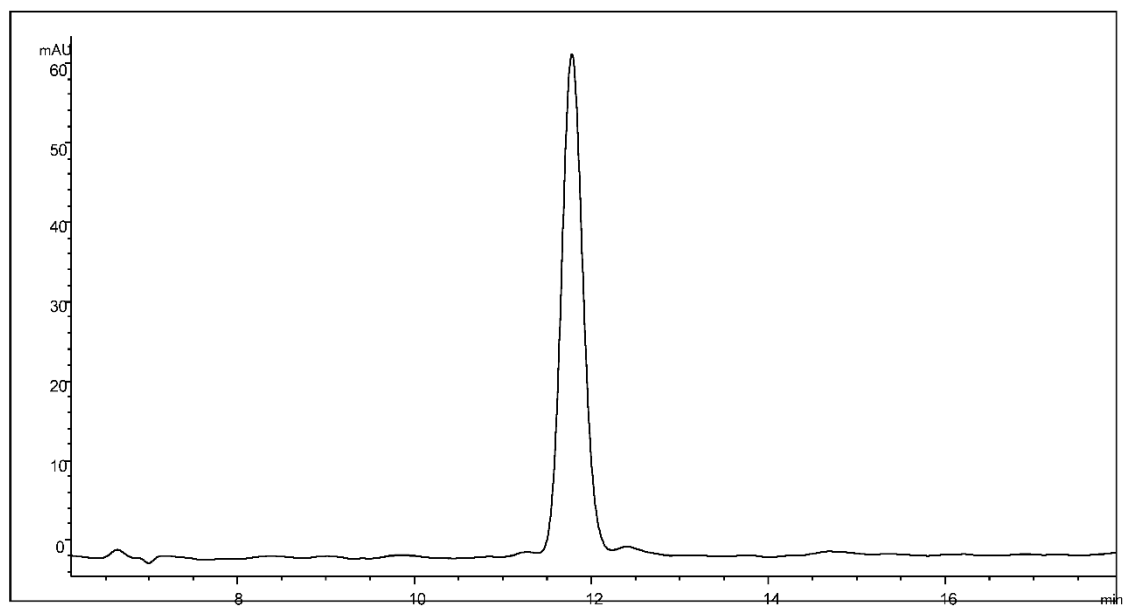


Figure S39. HPLC profile of compound **1** (80% MeOH at 210 nm).

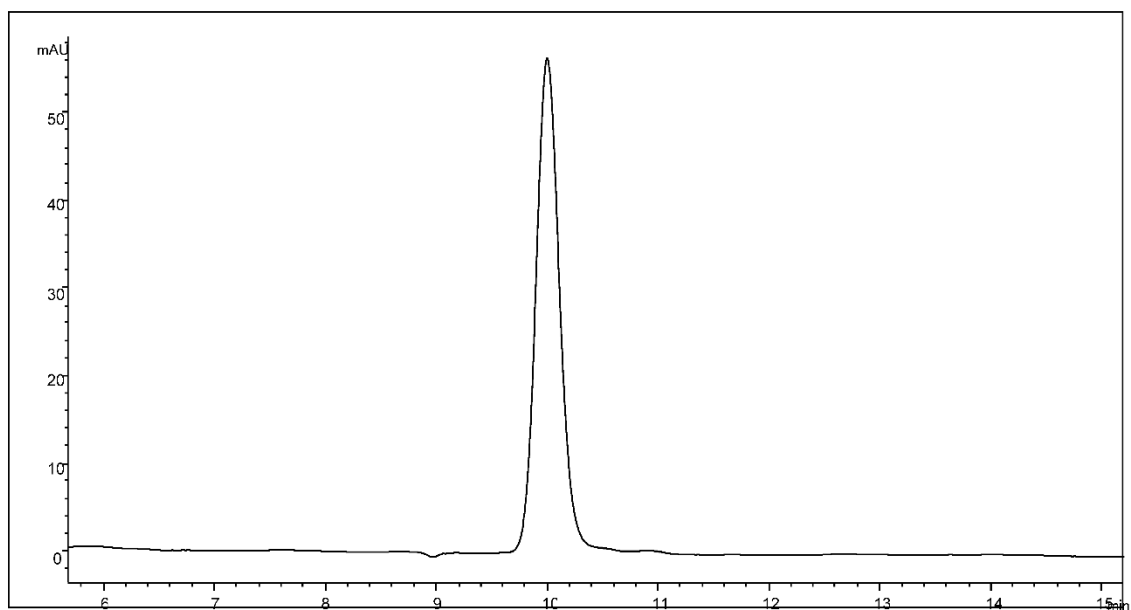


Figure S40. HPLC profile of compound **2** (75% MeOH at 210 nm).

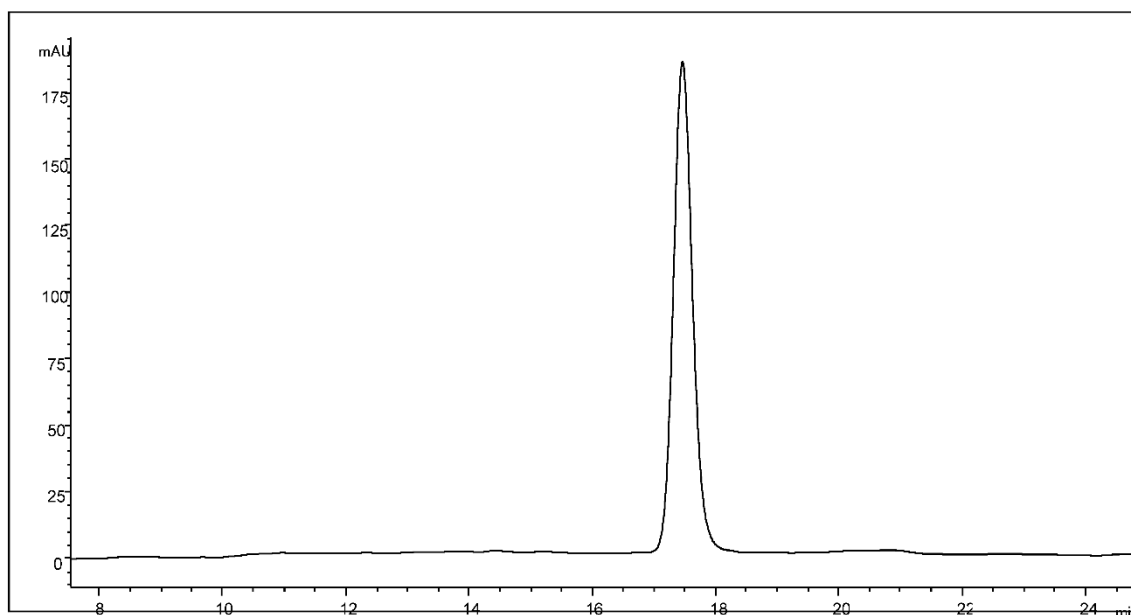


Figure S41. HPLC profile of compound **3** (90% MeOH at 210 nm).

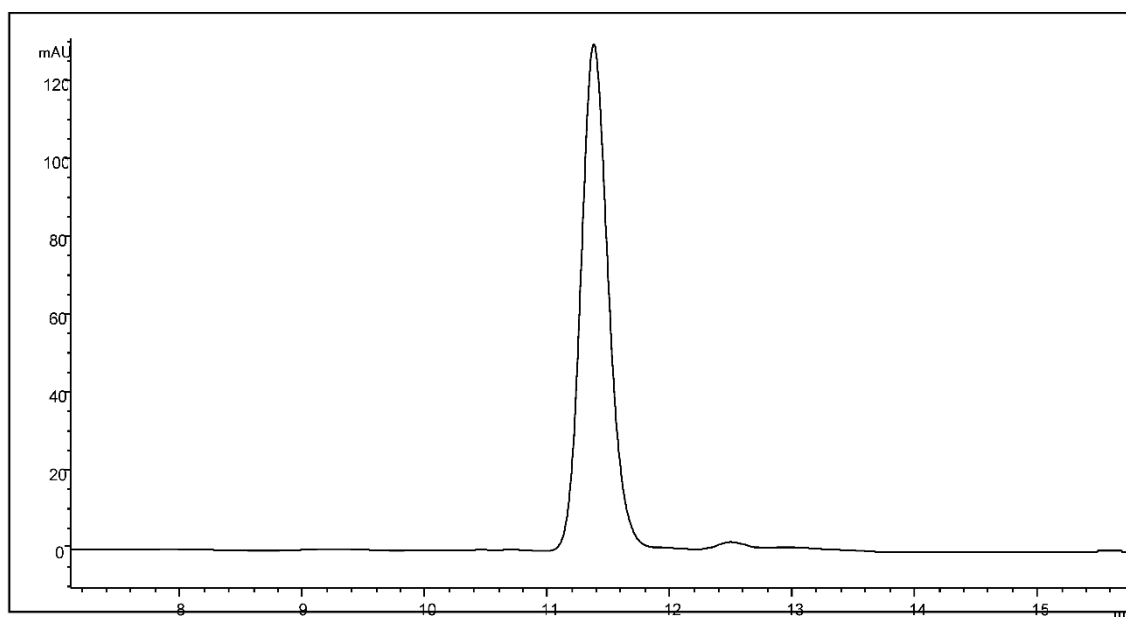


Figure S42. HPLC profile of compound **4** (80% MeOH at 210 nm).

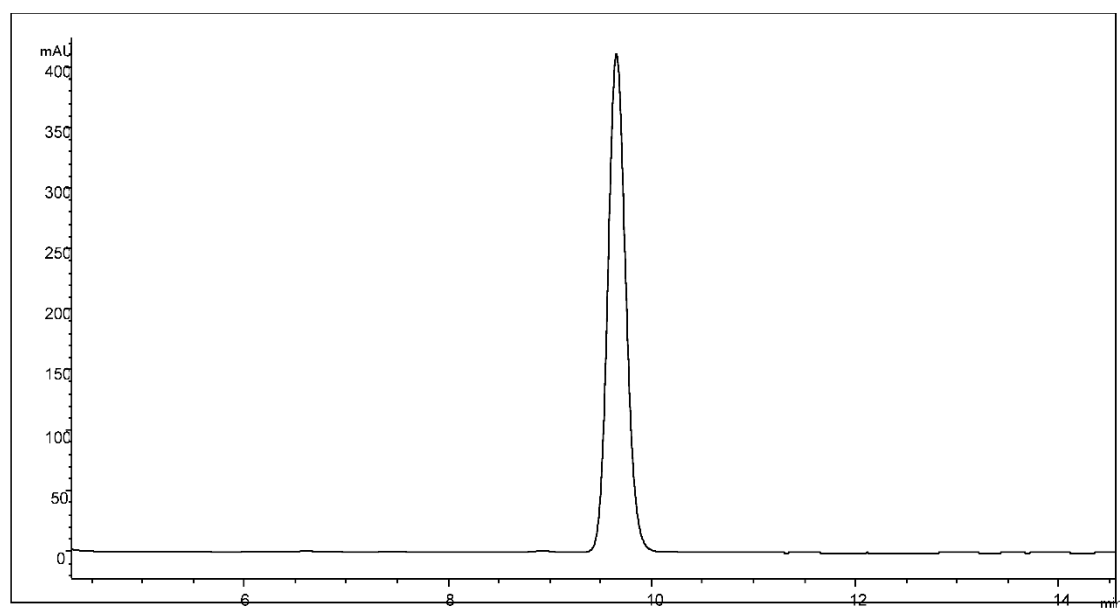


Figure S43. HPLC profile of compound **5** (95% MeOH at 210 nm).

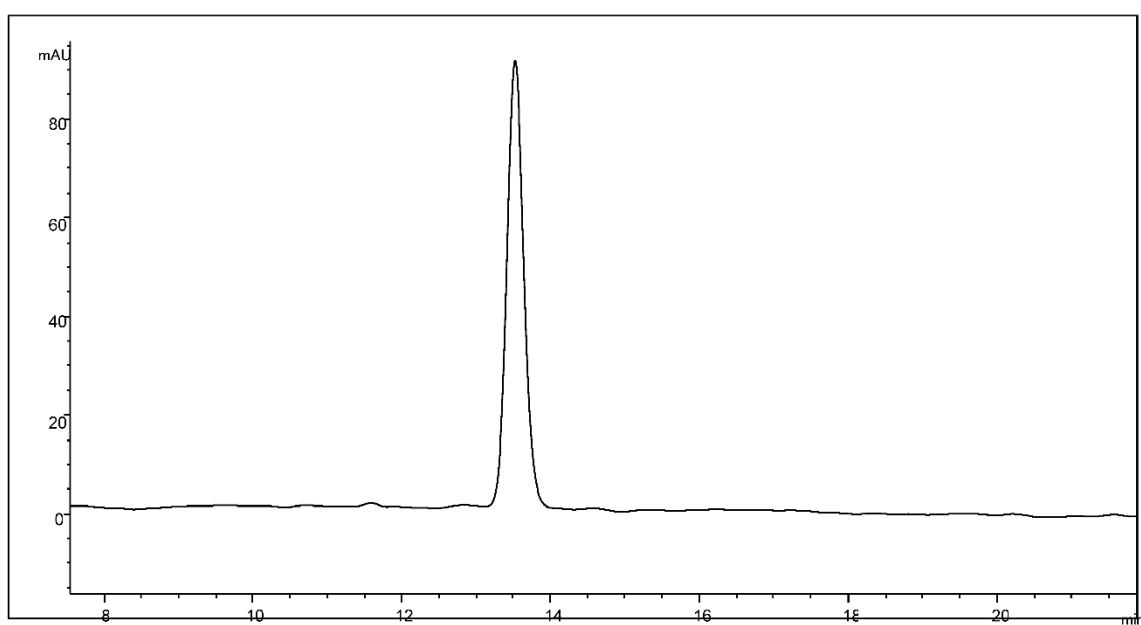


Figure S44. HPLC profile of compound **6** (95% MeOH at 210 nm).

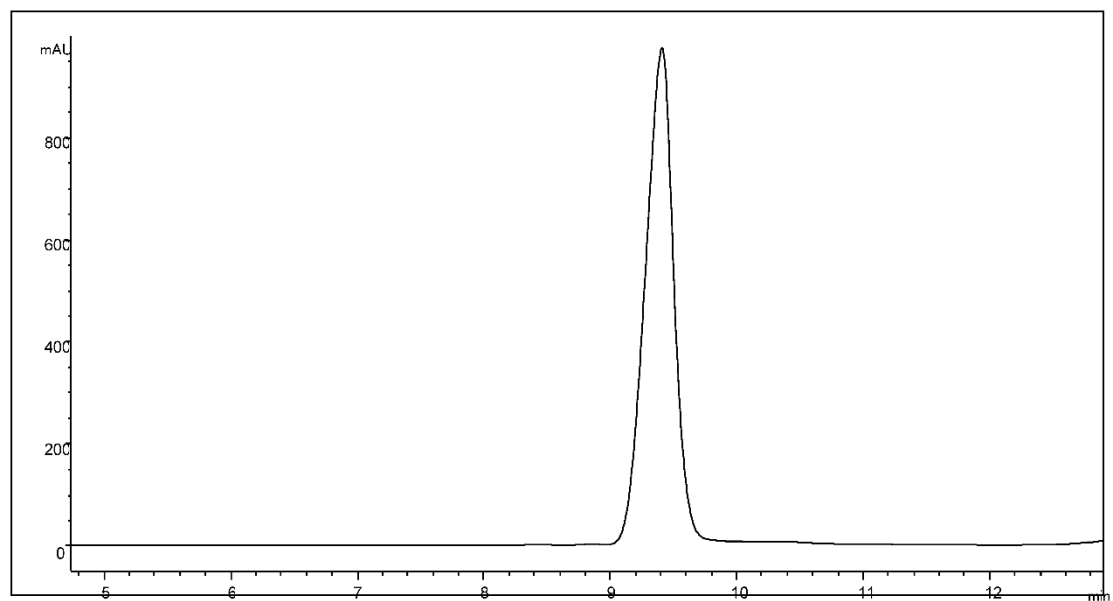


Figure S45. HPLC profile of compound **7** (90% MeOH at 210 nm).

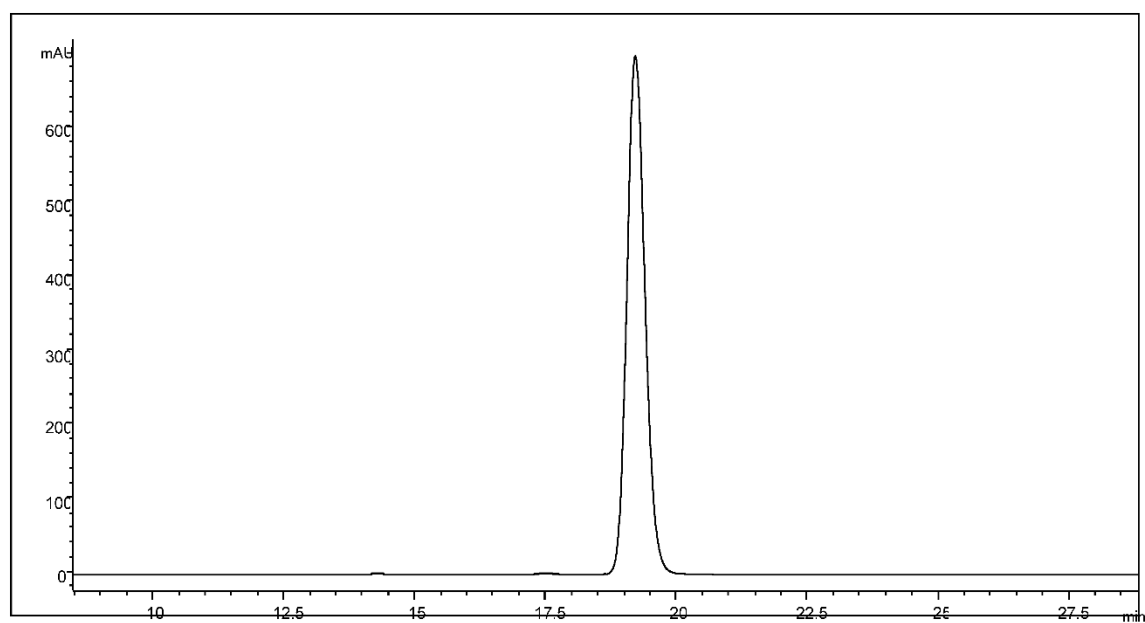


Figure S46. HPLC profile of compound **8** (80% MeOH at 210 nm).

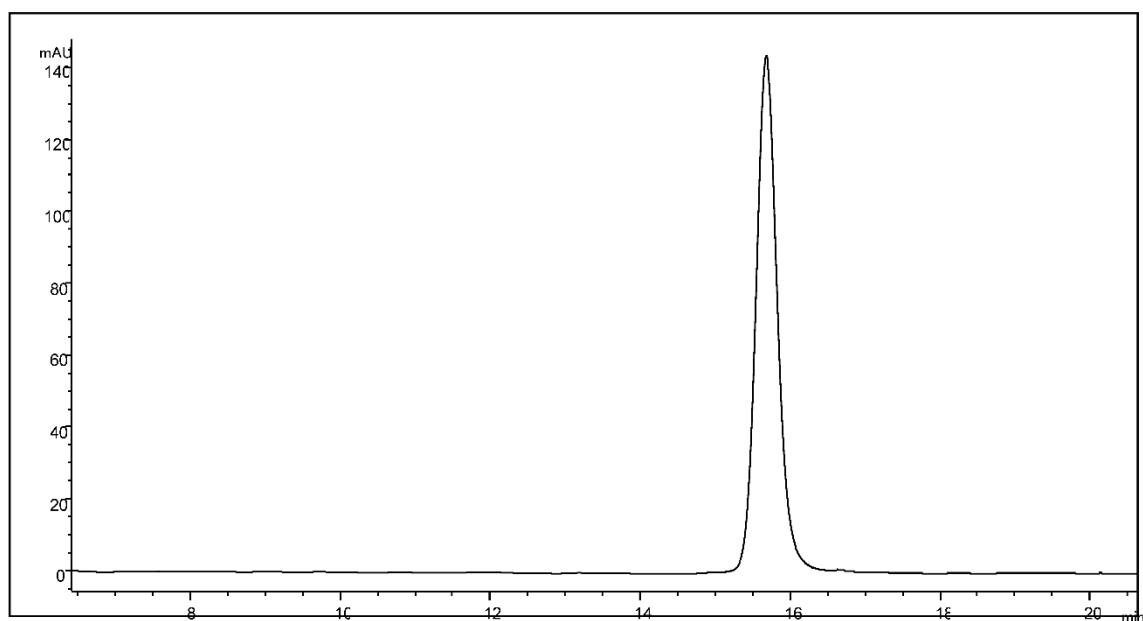


Figure S47. HPLC profile of compound **11** (90% MeOH at 210 nm).

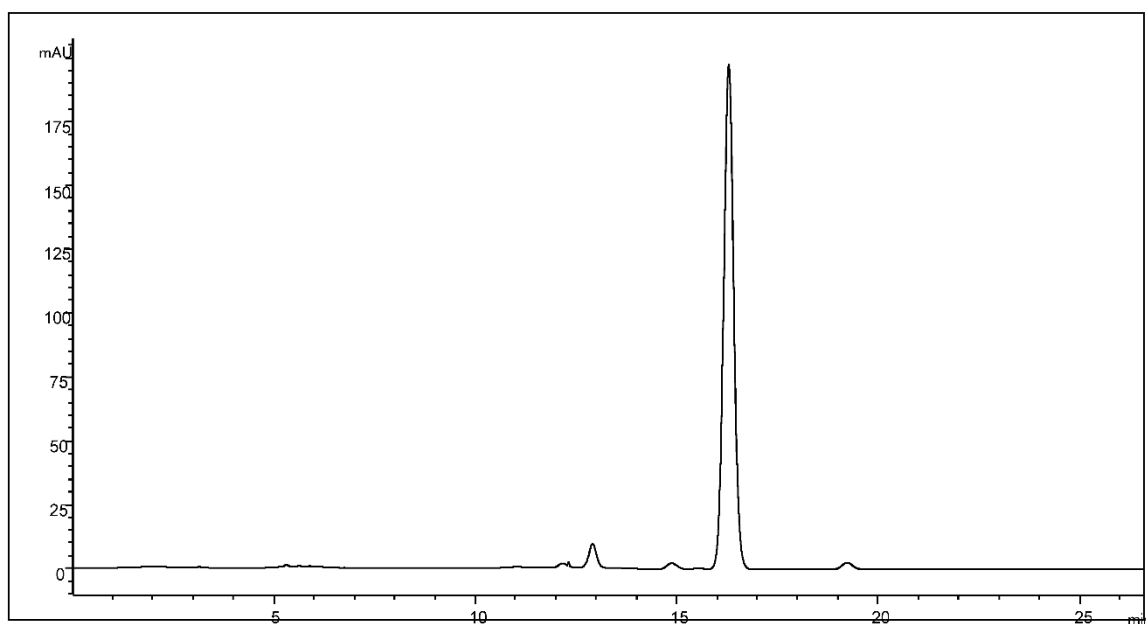


Figure S48. HPLC profile of compound **12** (100% MeOH at 280 nm).

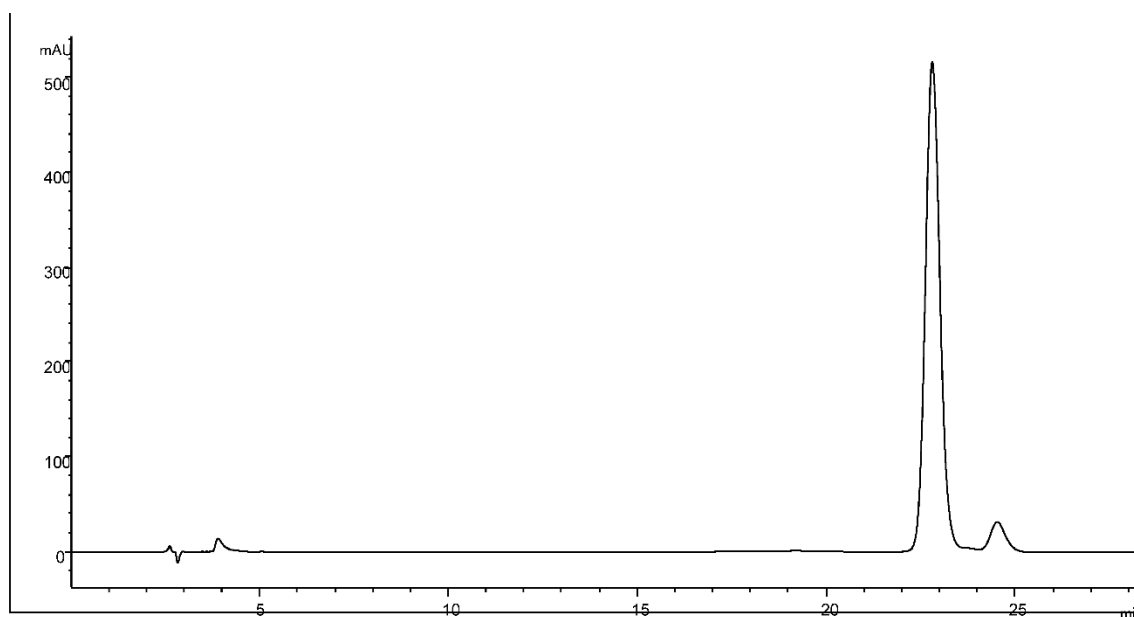


Figure S49. HPLC profile of compound **13** (90% MeOH at 210nm).

Table S1. Characteristics of compounds **1–8**, **11** and **12**.

Compounds	Retention Time (min)	Purity	Wavelength
1	11.773	97.60%	210
2	10.004	98.97%	210
3	19.003	99.00%	210
4	11.376	96.805%	210
5	9.657	99.09%	210
6	13.524	99.12%	210
7	9.406	93.57%	210
8	19.227	98.87%	210
11	15.686	98.07%	210
12	15.803	97.893	280
13	22.797	93.774	210

Table S2. ^{13}C -NMR data (δ) of 4–13 (75 MHz).

No.	4 ^a	5 ^a	6 ^{a,*}	7 ^a	8 ^b	9 ^b	10 ^{a,*}	11 ^{a,*}	12 ^b	13 ^b
1	31.2	31.2	31.4	26.9	30.4	31.1	30.7	31.7	38.6	31.4
2	32.5	32.5	30.9	31.0	31.0	32.2	31.0	31	32.0	33.2
3	65.9	66.0	65.6	65.8	68.8	68.7	65.1	65.1	70.7	68.9
4	40.2	40.0	39.2	40.2	39.3	39.6	40.5	40.9	41.0	39.5
5	74.5	74.5	74.5	73.7	65.9	67.8	74.5	76.3	140.0	65.1
6	72.1	72.2	69.1	71.6	62.8	61.3	77.9	76.0	116.5	60.5
7	119.5	119.5	120.6	120.3	67.0	65.1	71.6	71.6	119.8	63.9
8	139.7	139.7	139.7	141.1	127.1	125.2	127.2	127.0	141.6	126.9
9	42.3	42.3	42.6	77.3	134.7	38.7	136.2	36.4	46.3	39.8
10	36.7	36.6	38.1	40.0	38.2	35.8	40.2	39.8	37.2	34.9
11	27.7	21.3	20.6	26.9	23.6	19.0	23.0	18.8	21.3	19.5
12	39.0	38.9	38.9	35.0	35.9	36.6	35.9	36.6	39.3	37.3
13	43.0	43.0	43.1	43.3	42.3	42.9	41.3	42.4	43.0	43.8
14	54.2	54.2	54.2	50.1	49.8	152.5	49.4	147.6	54.6	151.9
15	22.6	22.6	22.4	22.6	24.1	24.9	28.6	24.7	23.2	26.1
16	27.7	27.8	27.9	27.8	29.2	27.2	22.7	27.2	28.5	28.2
17	55.3	55.3	55.2	55.4	53.8	56.8	53.9	56.0	55.8	55.6
18	12.1	12.0	12.0	11.7	11.5	17.6	11.2	18.0	12.3	17.9
19	17.7	17.7	17.4	21.4	23.0	16.5	22.9	17.5	16.5	17.1
20	40.1	40.0	39.8	39.8	40.6	39.3	40.0	38.5	42.9	40.6
21	20.9	21	21	21.0	21.2	21.2	20.9	21.2	21.3	21.3
22	135.7	135.4	135.4	135.5	135.8	135.3	135.5	135.5	135.8	135.4
23	130.5	131.4	131.4	131.4	132.2	132.2	131.3	131.5	132.2	132.5
24	47.2	42.0	41.9	42.1	43.0	42.8	42.1	42.1	40.4	43.1
25	70.7	32.5	32.5	32.5	33.3	33.1	32.5	32.5	33.3	33.3
26	26.0	19.5	19.5	19.5	19.9	19.7	19.5	19.5	19.9	19.9
27	28.3	19.8	19.8	19.8	20.2	20.0	19.8	19.8	20.2	20.2
28	15.0	17.3	17.3	17.4	17.9	18.1	17.4	17.4	17.8	17.9

^a Measured in DMSO-*d*₆; ^b Measured in CDCl₃; * Measured in solvent different from literature.