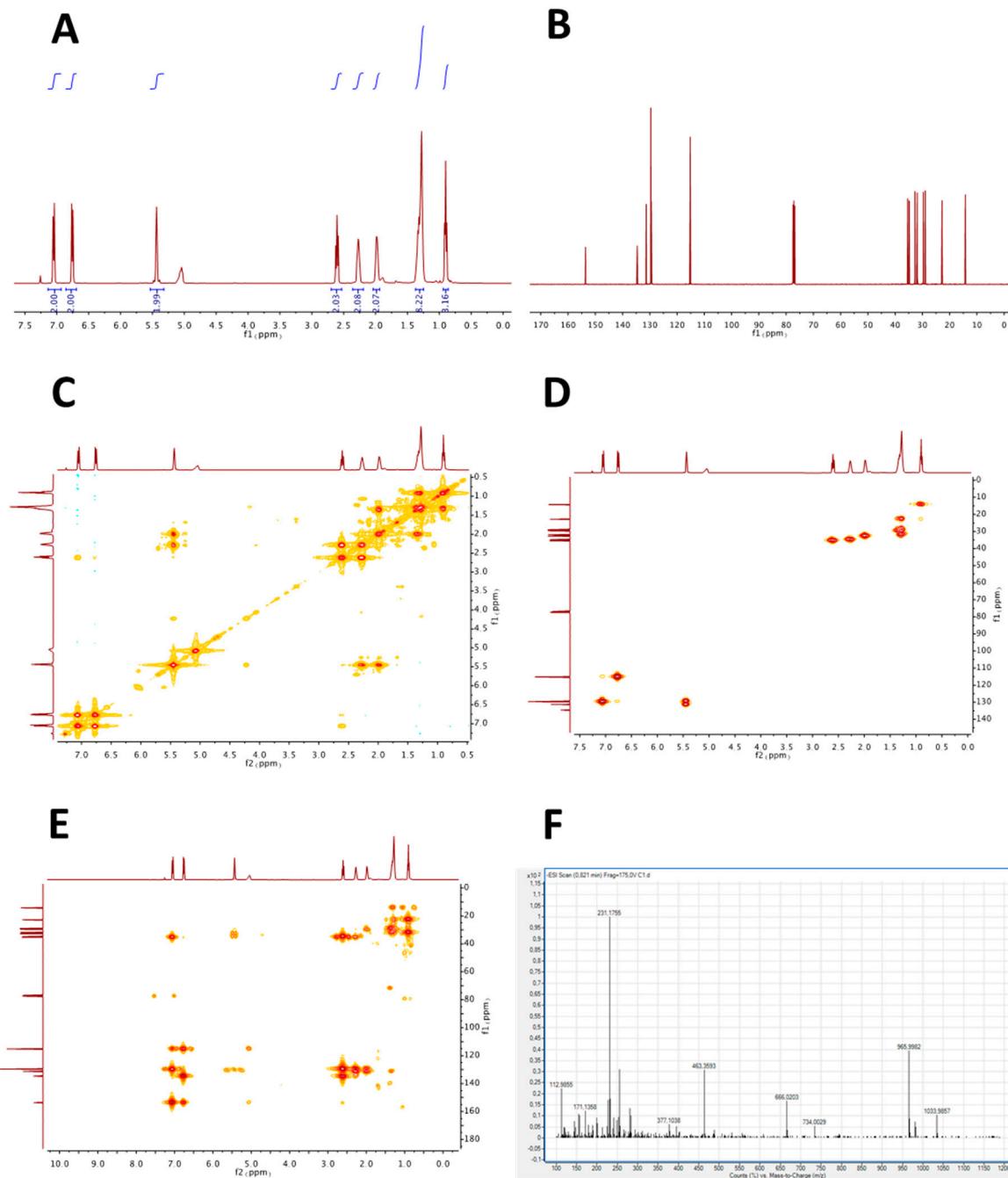
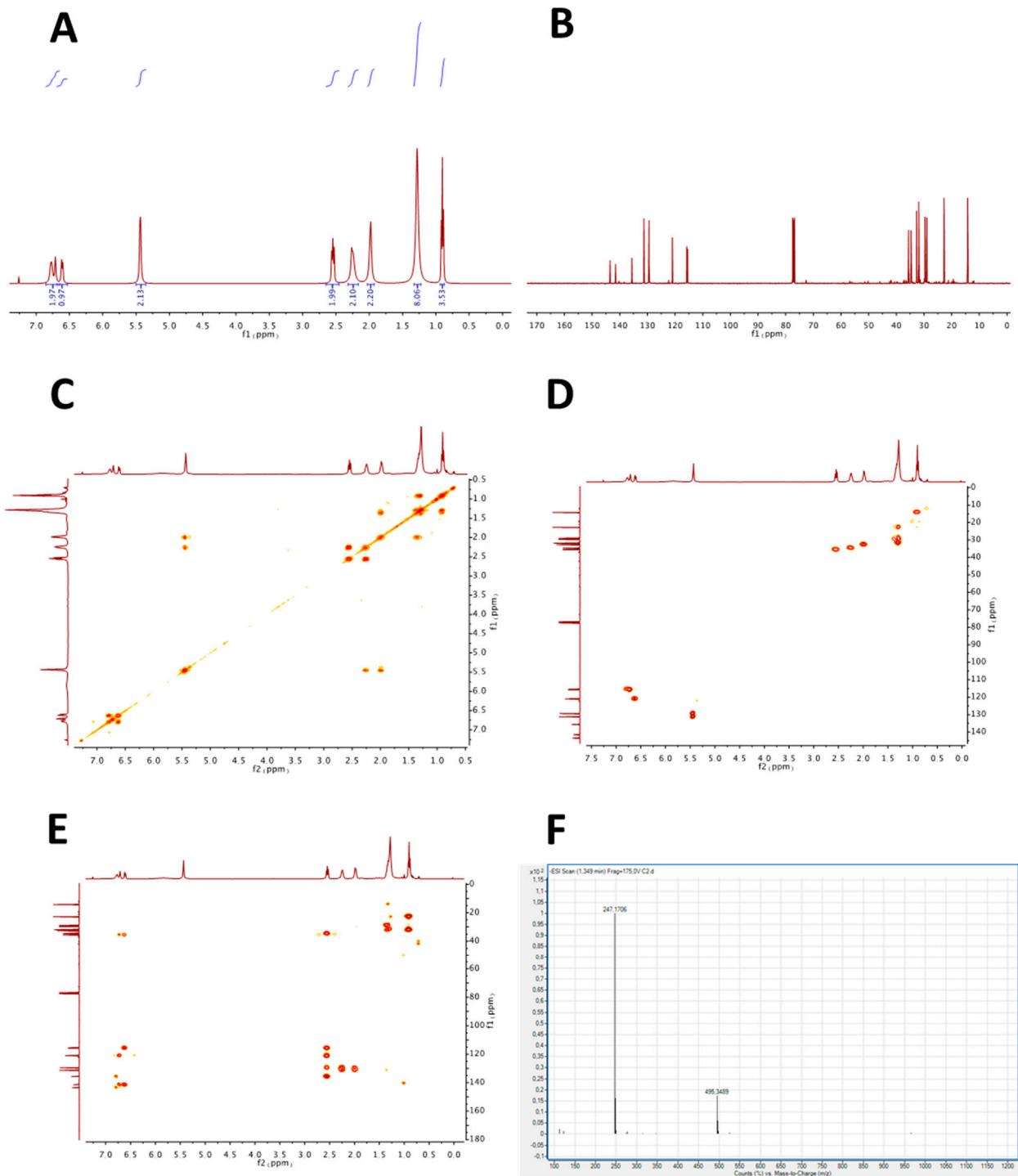


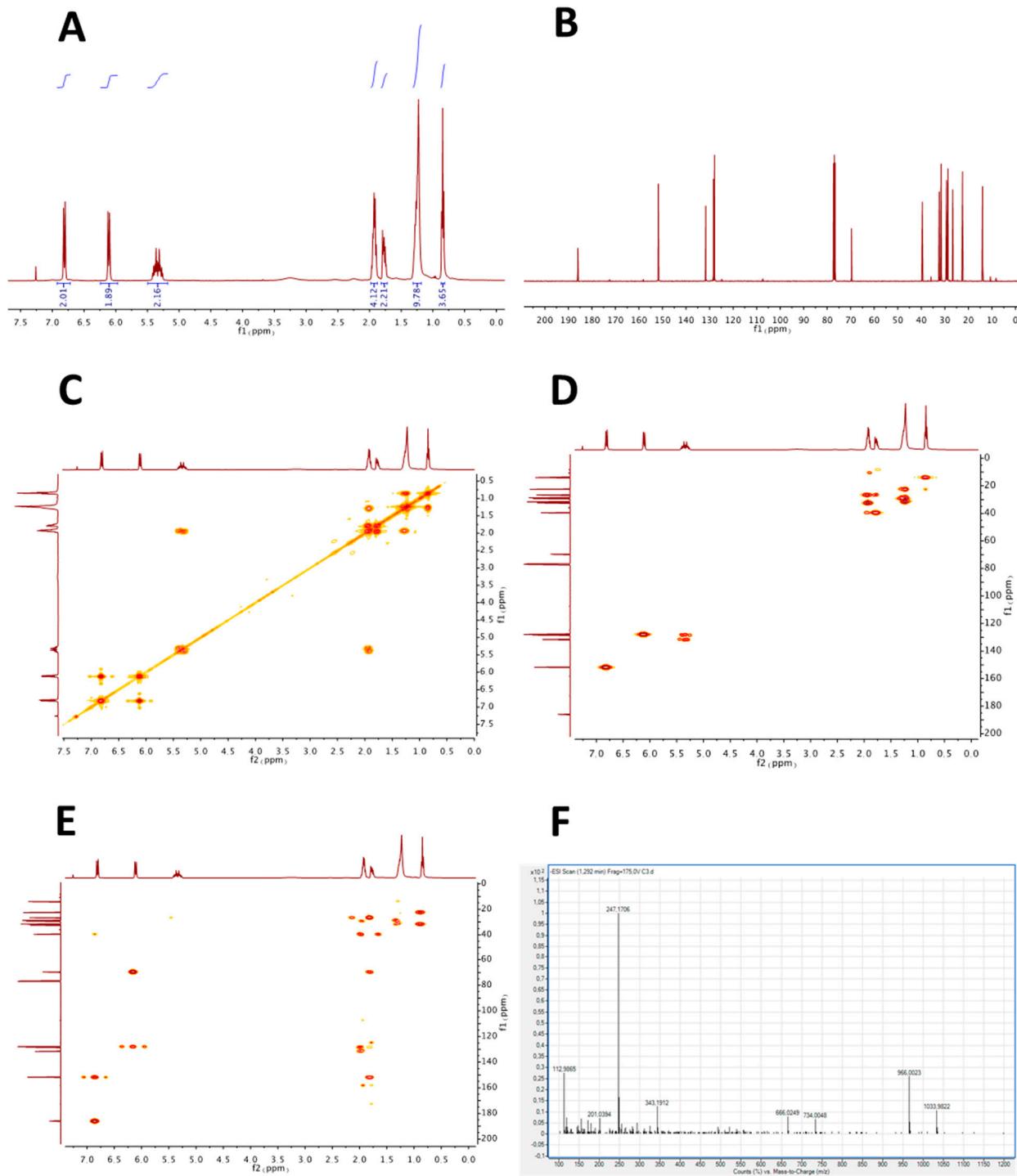
Supplementary Materials



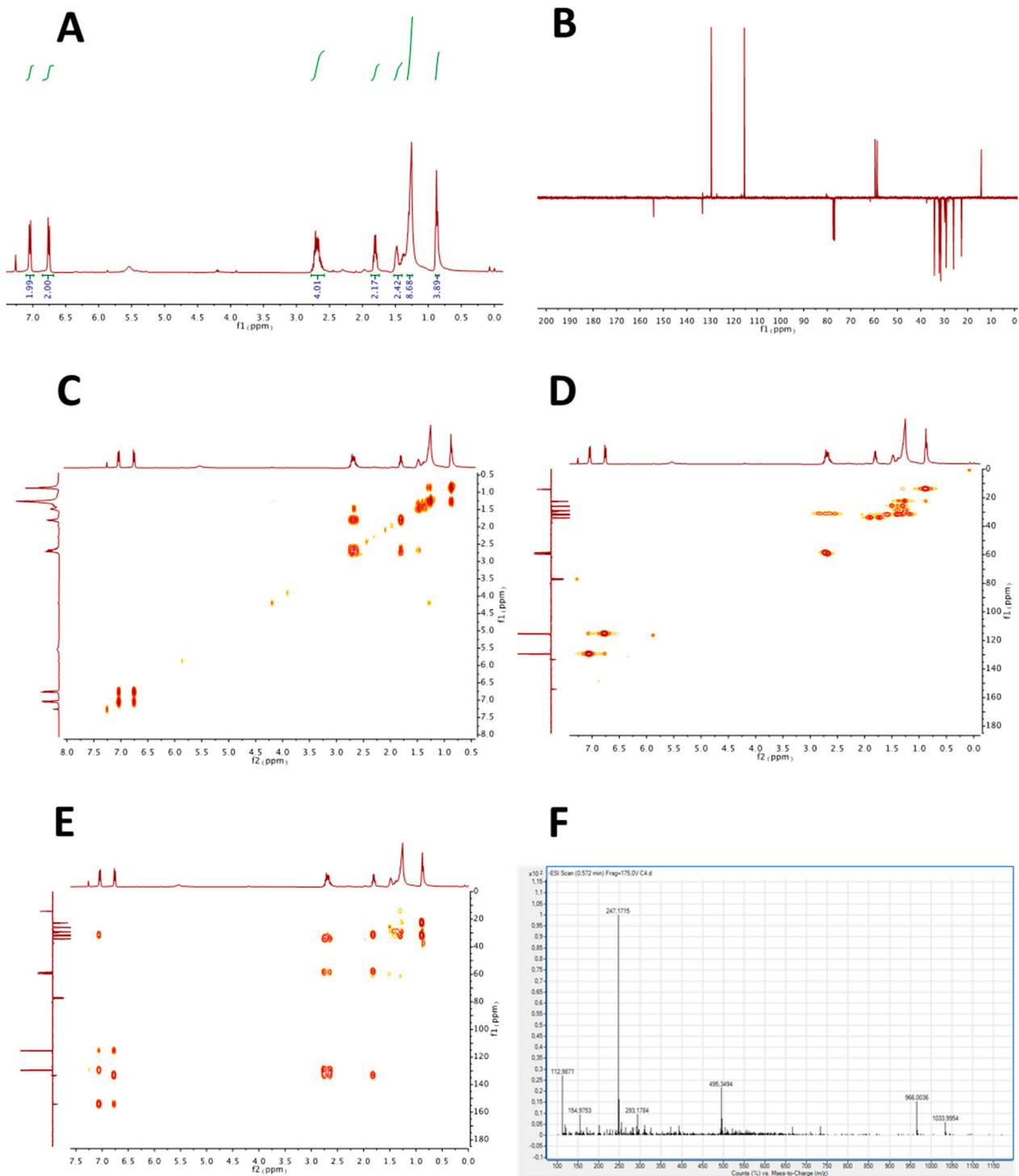
**Figure S1.** NMR spectroscopy (400 MHz,  $\text{CDCl}_3$ ) and HRESIMS of compound 1. **(A)**  $^1\text{H}$  NMR spectrum. **(B)**  $^{13}\text{C}$  NMR spectrum (75 MHz,  $\text{CDCl}_3$ ). **(C)**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum. **(D)** HMQC spectrum. **(E)** HMBC spectrum. **(F)** HRESIMS spectrum.



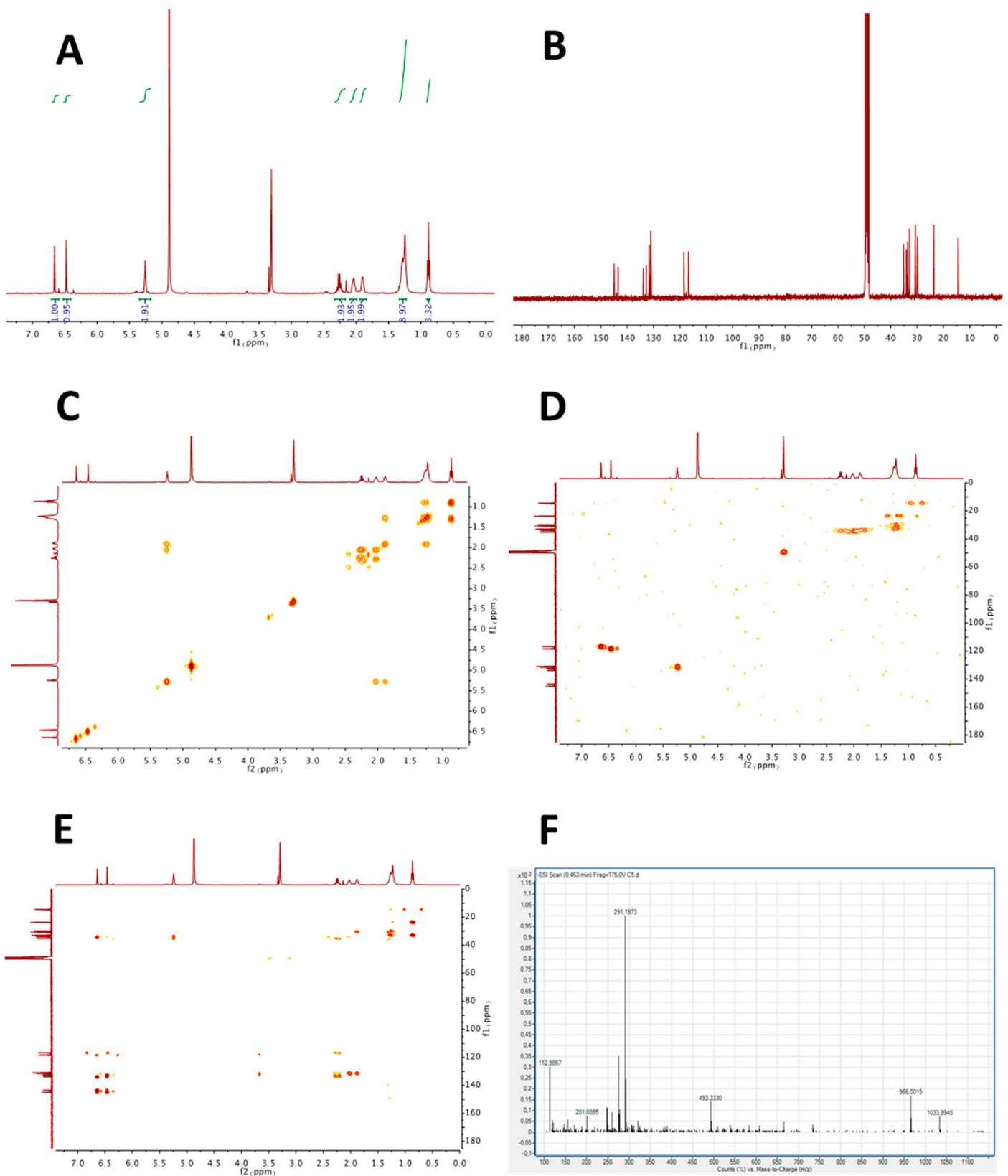
**Figure S2.** NMR spectroscopy (400 MHz,  $\text{CDCl}_3$ ) and HRESIMS of compound 2. (A)  $^1\text{H}$  NMR spectrum. (B)  $^{13}\text{C}$  NMR spectrum (75 MHz,  $\text{CDCl}_3$ ). (C)  $^1\text{H}$ - $^1\text{H}$  COSY spectrum. (D) HMQC spectrum. (E) HMBC spectrum. (F) HRESIMS spectrum.



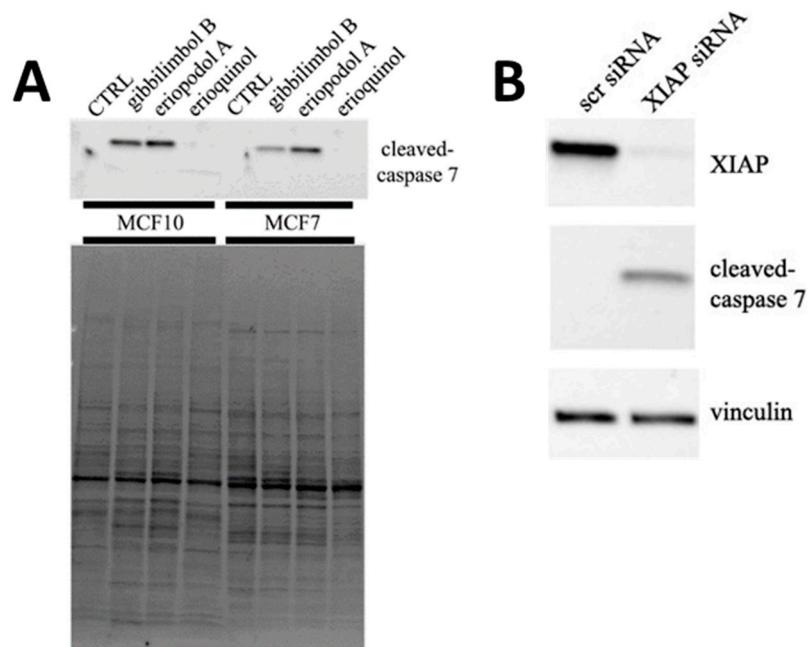
**Figure S3.** NMR spectroscopy (400 MHz,  $\text{CDCl}_3$ ) and HRESIMS of compound 3. (A)  $^1\text{H}$  NMR spectrum. (B)  $^{13}\text{C}$  NMR spectrum (75 MHz,  $\text{CDCl}_3$ ). (C)  $^1\text{H}$ - $^1\text{H}$  COSY spectrum. (D) HMQC spectrum. (E) HMBC spectrum. (F) HRESIMS spectrum.



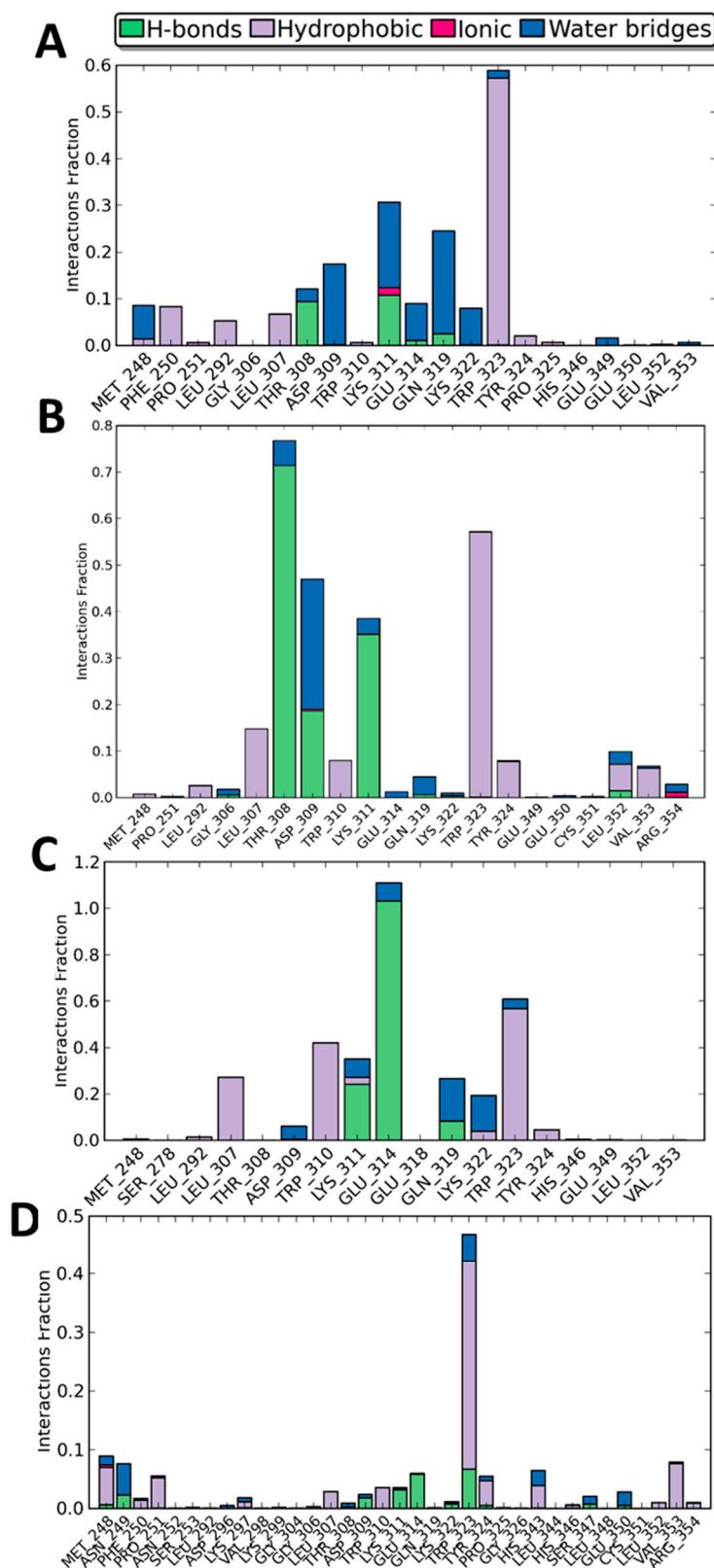
**Figure S4.** NMR spectroscopy (400 MHz,  $\text{CDCl}_3$ ) and HRESIMS of compound 4. (A)  $^1\text{H}$  NMR spectrum. (B)  $^{13}\text{C}$  NMR spectrum (75 MHz,  $\text{CDCl}_3$ ). (C)  $^1\text{H}$ - $^1\text{H}$  COSY spectrum. (D) HMQC spectrum. (E) HMBC spectrum. (F) HRESIMS spectrum.



**Figure S5.** NMR spectroscopy (400 MHz, CDCl<sub>3</sub>) and HRESIMS of compound 5. (A) <sup>1</sup>H NMR spectrum. (B) <sup>13</sup>C NMR spectrum (75 MHz, CDCl<sub>3</sub>). (C) <sup>1</sup>H-<sup>1</sup>H COSY spectrum. (D) HMQC spectrum. (E) HMBC spectrum. (F) HRESIMS spectrum.



**Figure S6.** Western blot. (A) Western blot analysis of cleaved-caspase 7 in MCF10 and MCF7 cells treated for 6 h in the absence (CTRL, control) and in the presence of 30 µg/mL gibbilimbol B/eriopodol A or 10 µg/mL erioquinol. The stain-free gel was used as loading control. Images are representative of three independent experiments. (B) Western blot analysis of X-linked inhibitor of apoptosis protein (XIAP) and cleaved-caspase 7 in MCF7 cells transfected for 24 h with a XIAP-specific and scrambled targeting (scr) siRNA (100 nM). Vinculin was used as internal standard. Images are representative of three independent experiments.



**Figure S7.** Protein-ligand interactions fraction for evaluated ligands and X-linked inhibitor of apoptosis protein (XIAP) baculovirus IAP repeat (BIR)-3 domain during the molecular dynamics trajectory of 50 ns. (A) embelin, (B) erioquinol, (C) eriopodol A and (D) gibbilimbol B.

**Table S1.**  $^1\text{H}$  NMR (400 MHz) data for compounds 1–4 in  $\text{CDCl}_3$  and compound 5 in MeOD.

Position	$\delta\text{H}$ (J in Hz)				
	C-1	C-2	C-3	C-4	C-5
1	-	-	-	-	-
2	6.75 (2H, d, $J = 8.48$ )	-	6.11 (2H, d, $J = 9.94$ )	6.76 (2H, d, $J = 8.3$ )	-
3	7.04 (2H, d, $J = 8.47$ )	6.71 (1H, s)	6.81 (2H, d, $J = 9.96$ )	7.04 (2H, d, $J = 8.3$ )	6.51 (1H, s)
4	-	-	-	-	-
5	7.04 (2H, d, $J = 8.47$ )	6.60 (1H, d, $J = 7.5$ )	6.81 (2H, d, $J = 9.96$ )	7.04 (2H, d, $J = 8.3$ )	-
6	6.75 (2H, d, $J = 8.48$ )	6.77 (1H, d, $J = 7.6$ )	6.11 (2H, d, $J = 9.94$ )	6.76 (2H, d, $J = 8.3$ )	6.69 (1H, s)
1'	2.60 (2H, t, $J = 7.3$ )	2.54 (2H, t, $J = 7.3$ )	1.77 (2H, m)	2.69 (2H, m)	2.26 (2H, m)
2'	2.26 (2H, m)	2.24 (2H, m)	1.93 (2H, m)	1.81 (2H, m)	2.04 (2H, m)
3'	5.42 (2H, brs)	5.42 (2H, brs)	5.34 (2H, m)	2.69 (1H, m)	5.26 (1H, brs)
4'	5.42 (2H, brs)	5.42 (2H, brs)	5.34 (2H, m)	2.69 (1H, m)	5.26 (1H, brs)
5'	1.97 (2H, m)	1.98 (2H, m)	1.93 (2H, m)	1.48 (2H, m)	1.91 (2H, m)
6'	1.26 (2H, m)	1.27 (2H, m)	1.23 (2H, m)	1.27 (2H, m)	1.29 (2H, m)
7'	1.26 (2H, m)	1.27 (2H, m)	1.23 (2H, m)	1.27 (2H, m)	1.29 (2H, m)
8'	1.26 (2H, m)	1.27 (2H, m)	1.23 (2H, m)	1.27 (2H, m)	1.29 (2H, m)
9'	1.26 (2H, m)	1.27 (2H, m)	1.23 (2H, m)	1.27 (2H, m)	1.29 (2H, m)
10'	0.89 (3H, t, $J = 6.8$ )	0.89 (3H, t, $J = 6.7$ )	0.85 (3H, t, $J = 6.75$ )	0.88 (3H, t, $J = 6.5$ )	1.29 (2H, m)
11'	-	-	-	-	1.29 (2H, m)
12'	-	-	-	-	0.89 (3H, t, $J = 6.8$ )

**Table S2.**  $^{13}\text{C}$  NMR (100 MHz) data for compounds 1–4 in  $\text{CDCl}_3$  and compound 5 in MeOD.

Position	$\delta\text{C}$ (ppm)				
	C-1	C-2	C-3	C-4	C-5
1	153.4	141.3	185.9	154.1	144.9
2	115.0	143.4	128.3	115.4	143.3
3	129.5	115.6	151.7	129.5	118.4
4	134.4	135.5	69.6	133.3	132.7
5	129.5	120.8	151.7	129.5	133.9
6	115.0	115.3	128.3	115.4	116.8
1'	35.2	35.4	39.5	31.5	34.1
2'	34.6	34.6	32.4	34.2	35.1
3'	129.2	129.3	127.9	59.6	131.0
4'	131.1	131.1	131.6	58.6	131.6
5'	32.5	32.6	26.6	32.1	33.5
6'	29.5	29.5	29.3	29.2	29.8
7'	28.8	28.8	28.7	26.0	30.6
8'	31.7	31.7	31.6	31.8	30.6
9'	22.6	22.6	22.5	22.6	32.8
10'	14.0	14.1	14.0	14.1	32.8
11'	-	-	-	-	23.6
12'	-	-	-	-	14.4