

Supplementary data to:**ANTITRYPANOSOMAL BUTANOLIDES FROM *AIOUEA TRINERVIS***

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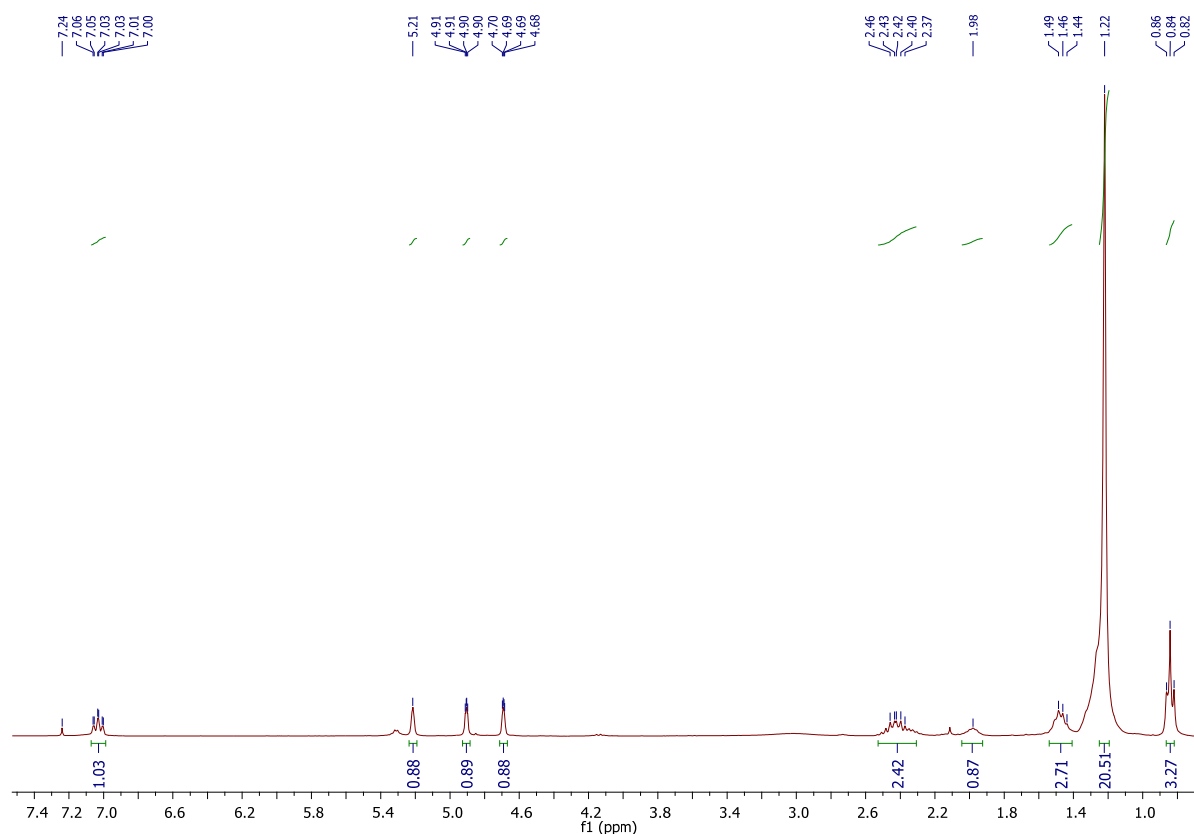
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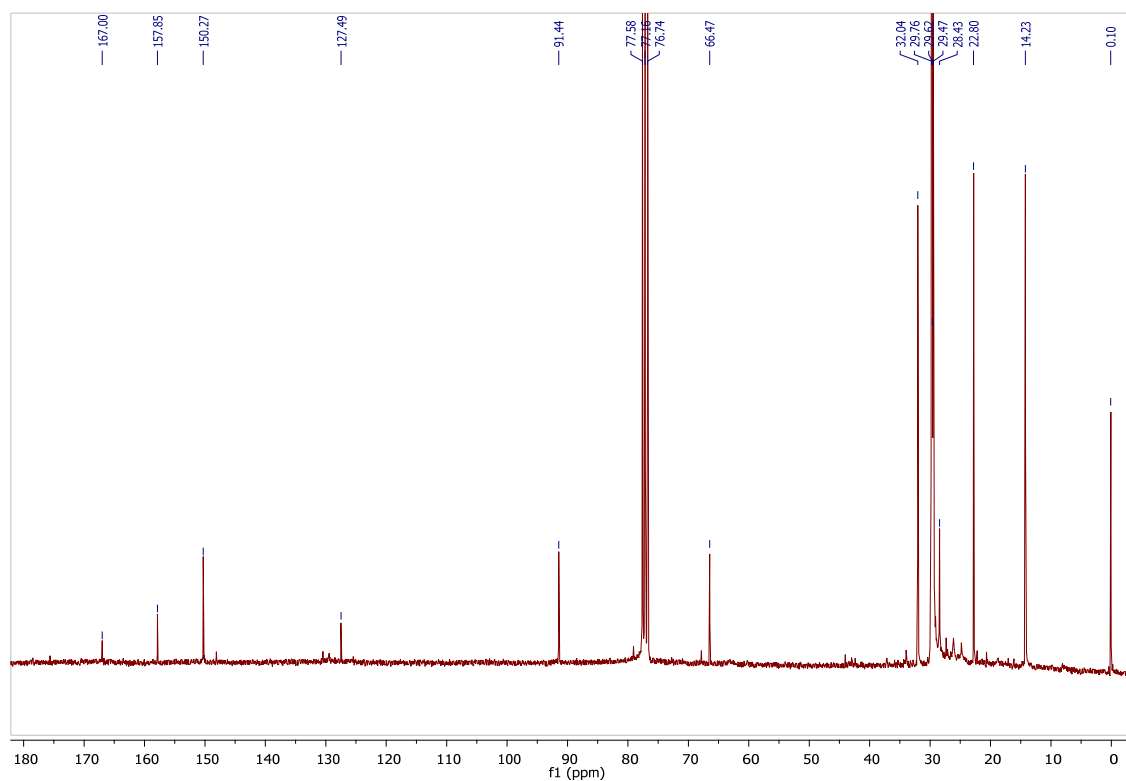
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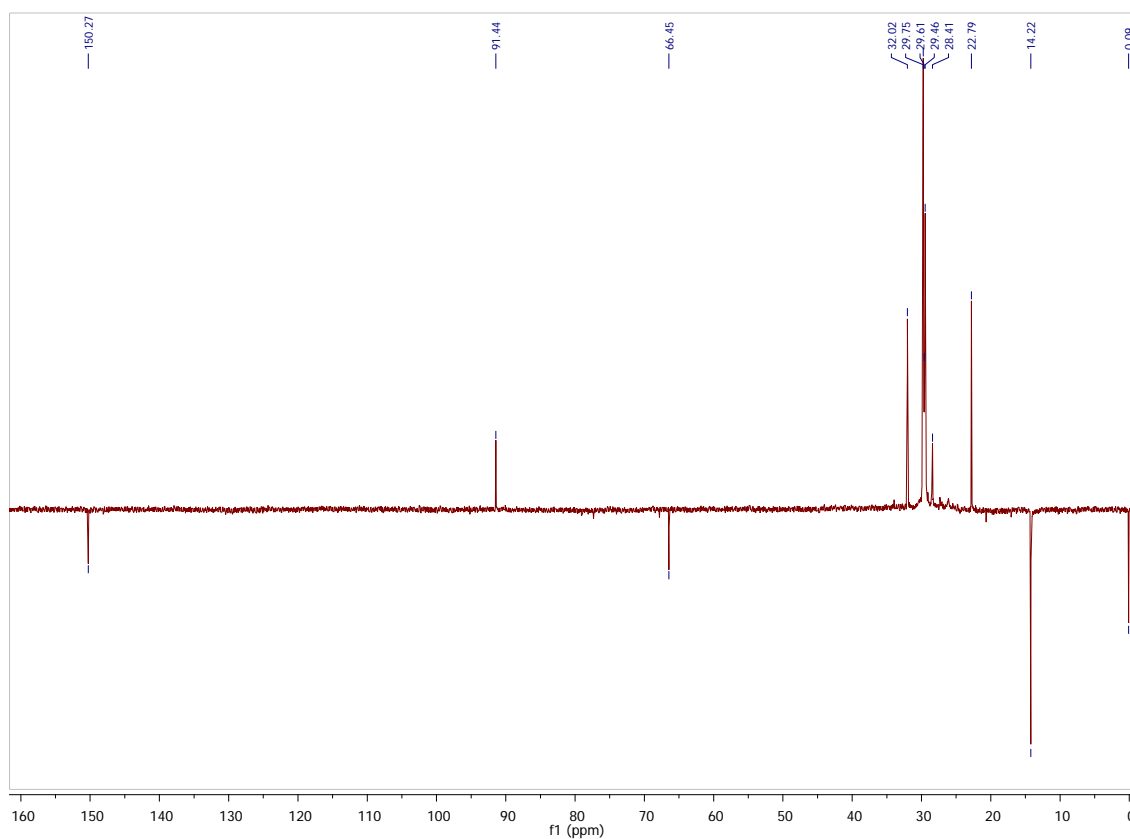
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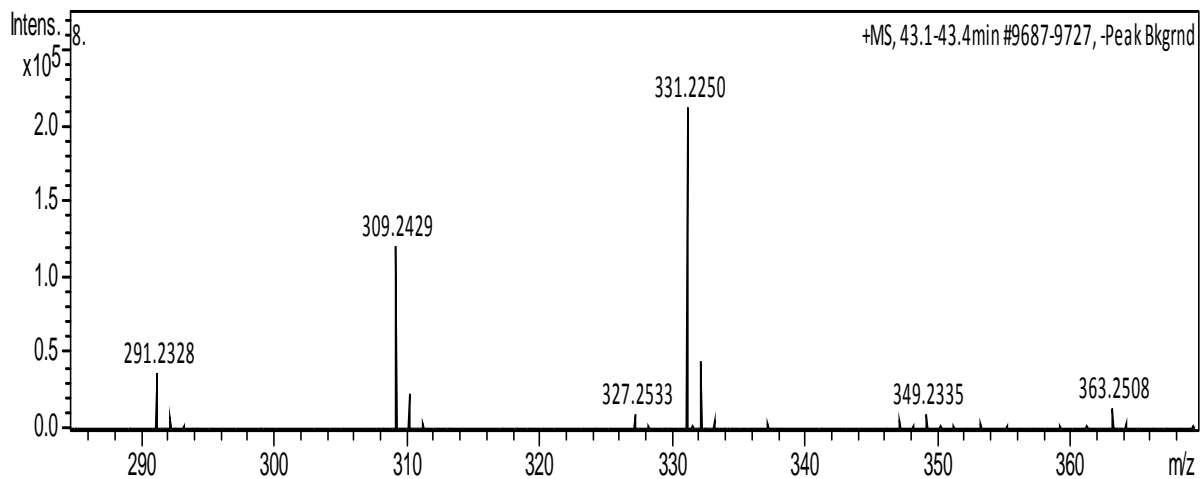
Supplementary Figure 1: ¹H NMR spectrum of compound **1** (300 MHz, CDCl₃)



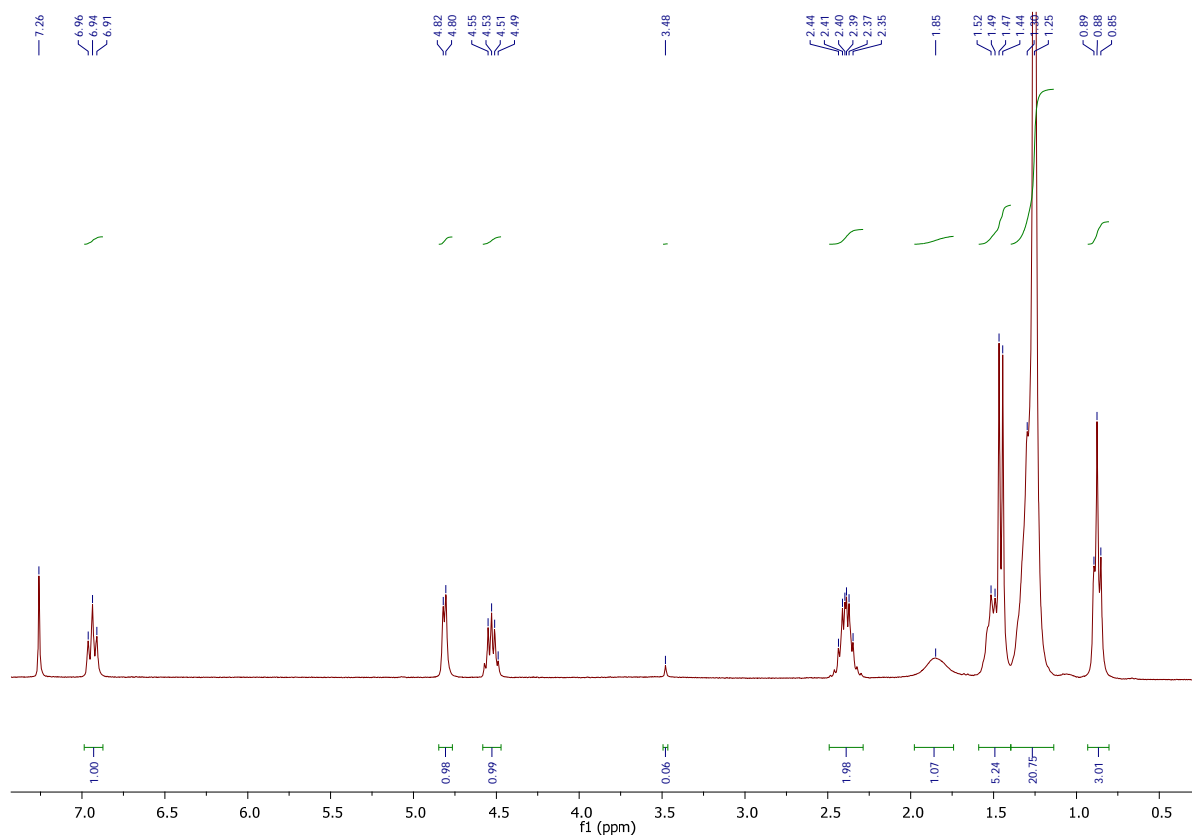
Supplementary Figure 2: ^{13}C NMR spectrum of compound **1** (75 MHz, CDCl_3)



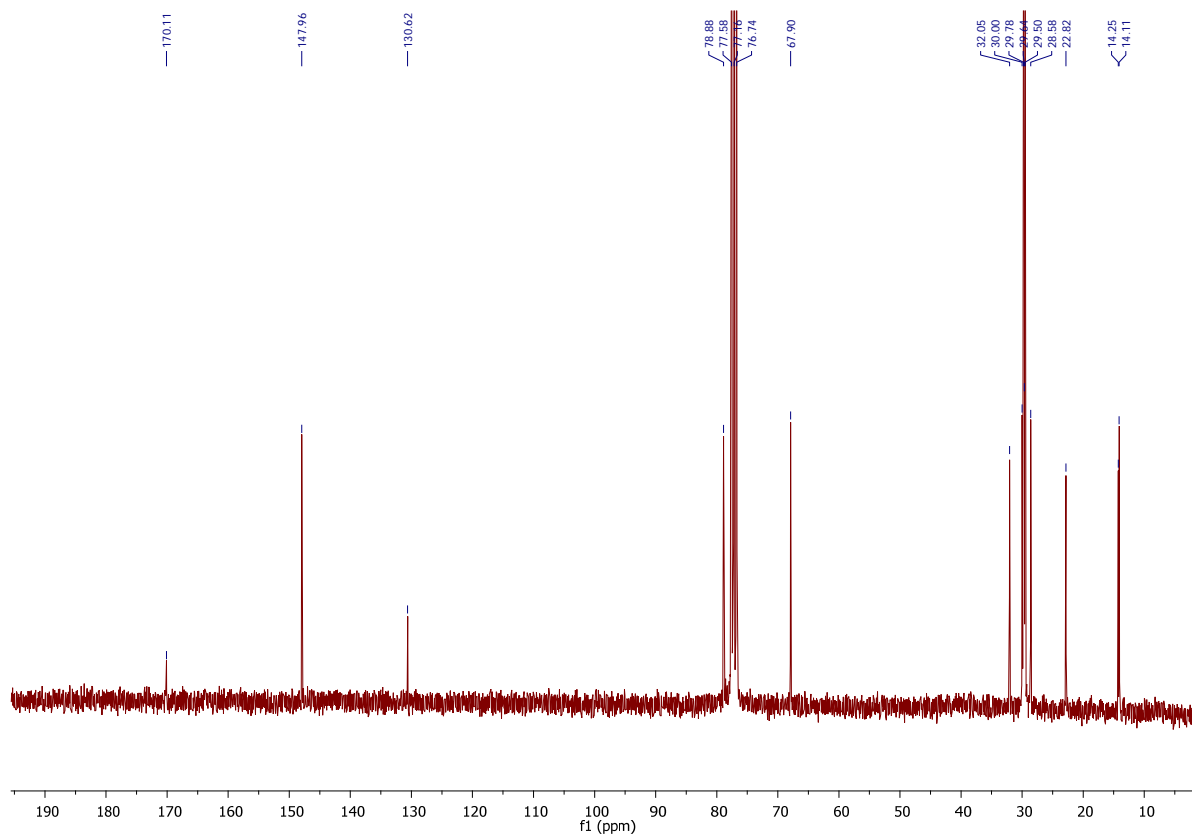
Supplementary Figure 3: DEPT-135 NMR spectrum of compound **1** (75 MHz, CDCl_3)



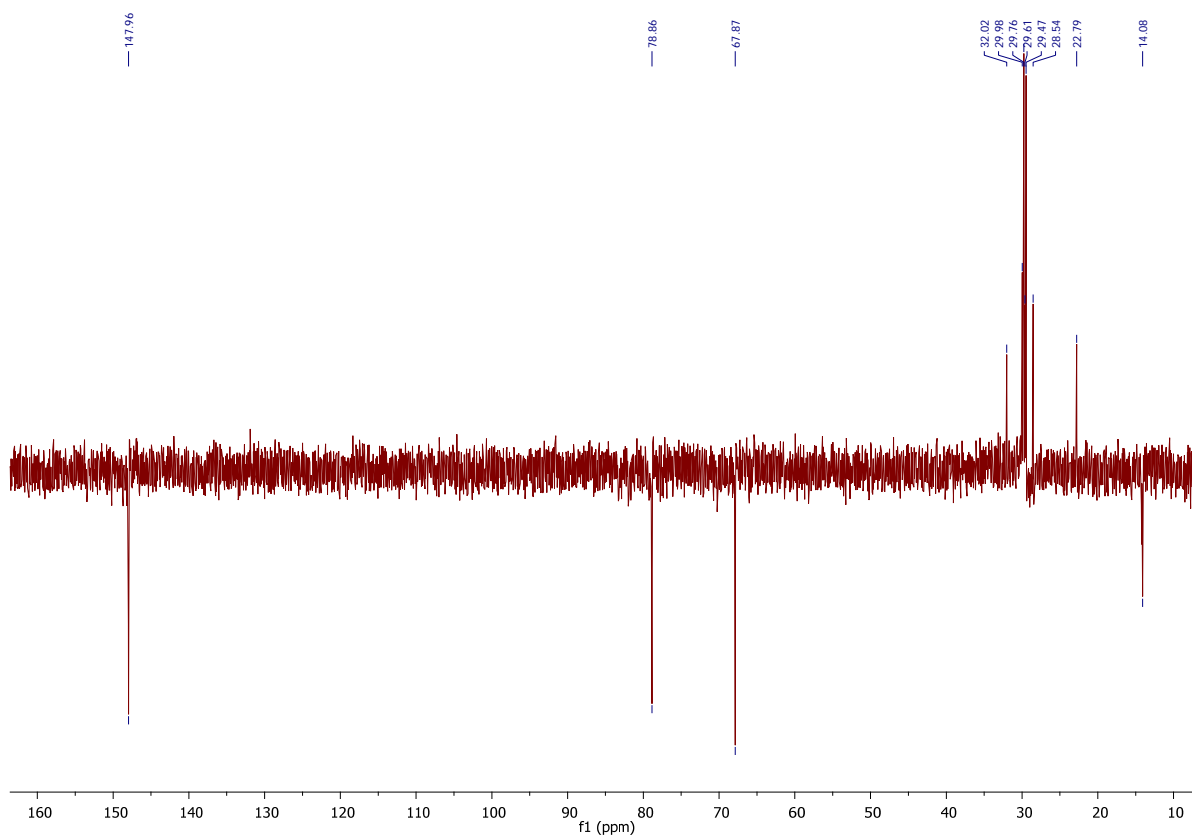
Supplementary Figure 4: HRESIMS spectrum (positive mode) of compound 1



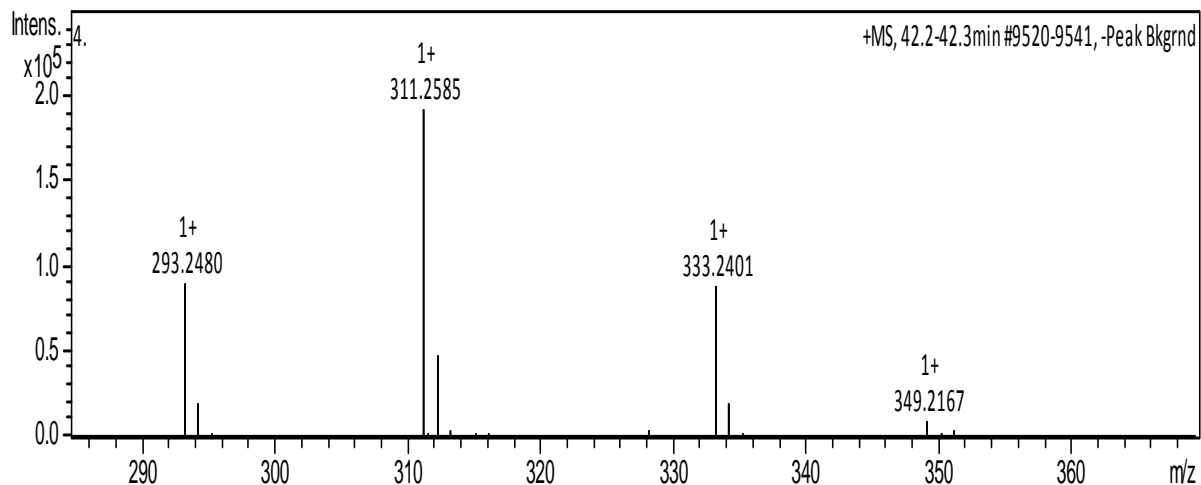
Supplementary Figure 5: ^1H NMR spectrum of compound 2 (300 MHz, CDCl_3)



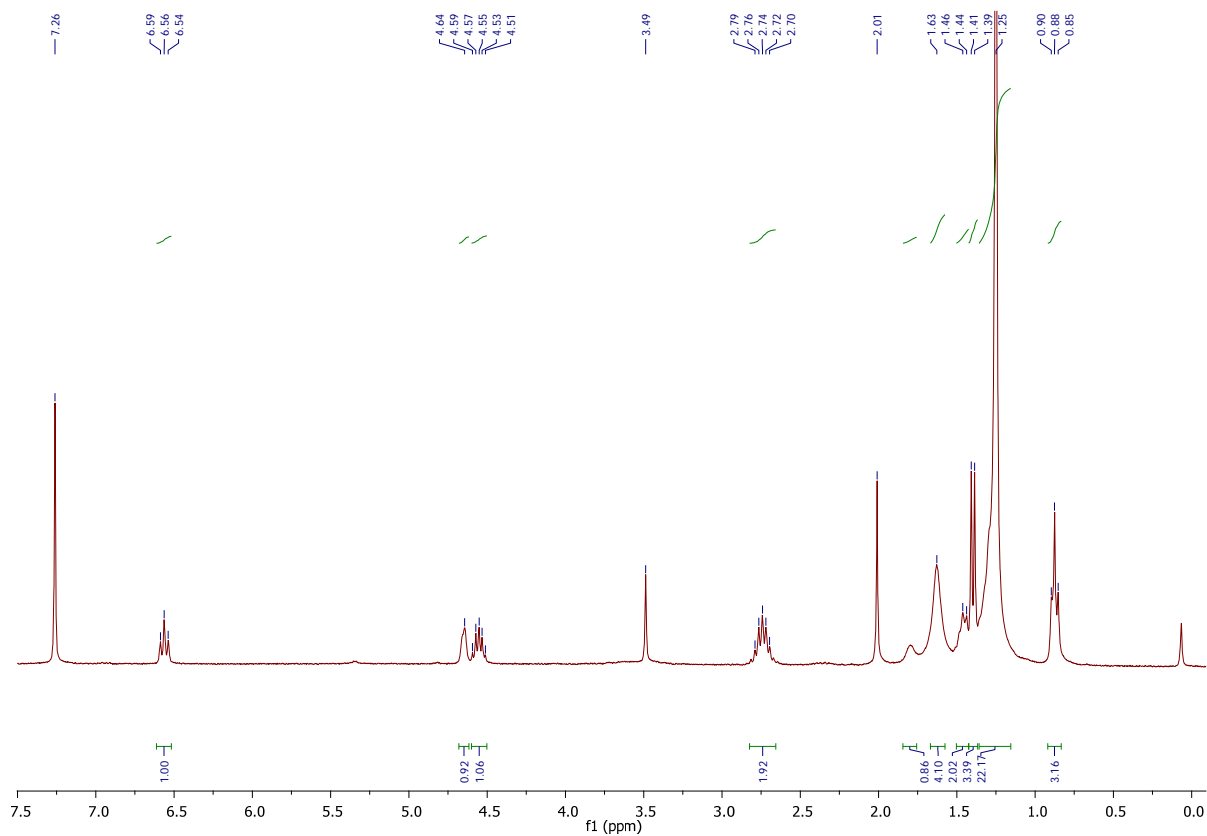
Supplementary Figure 6: ^{13}C NMR spectrum of compound **2** (75 MHz, CDCl_3)



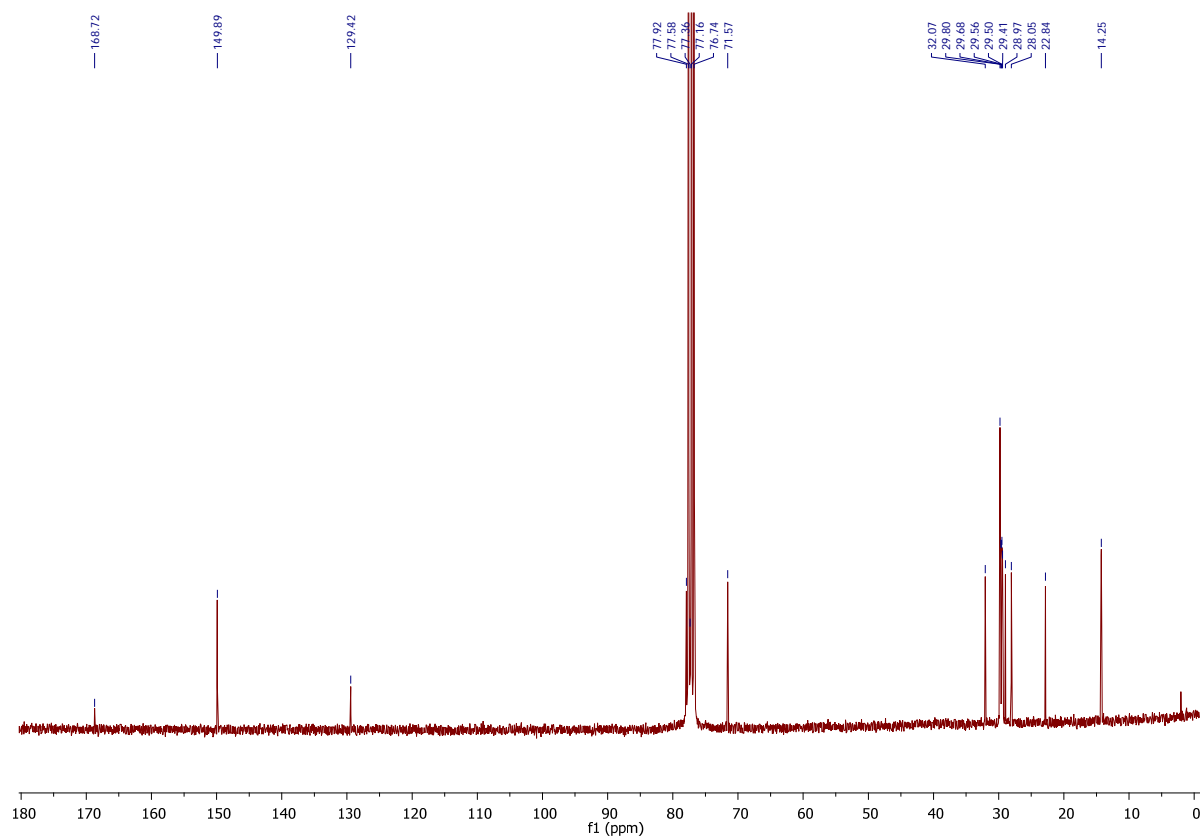
Supplementary Figure 7: DEPT-135 NMR spectrum of compound **2** (75 MHz, CDCl_3)



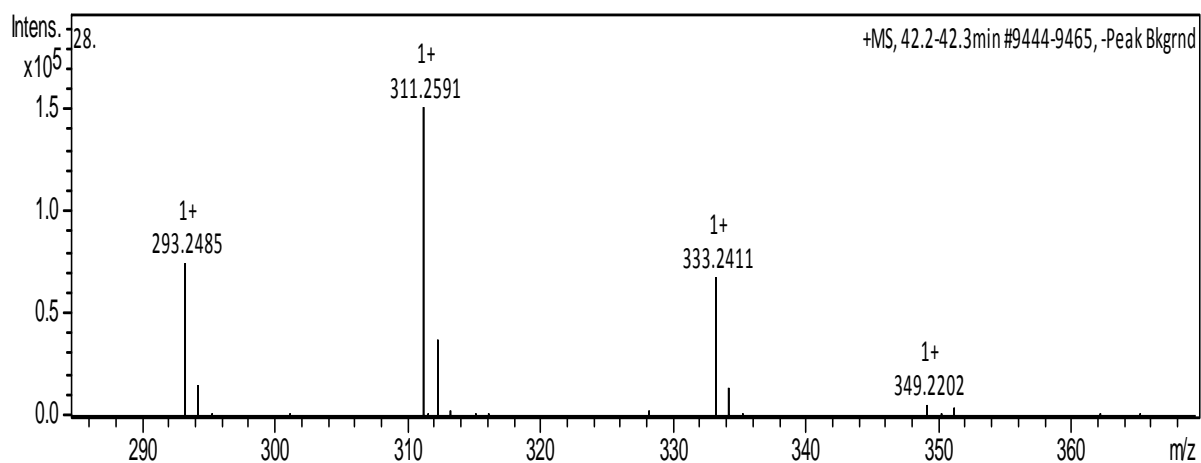
Supplementary Figure 8: HRESIMS spectrum (positive mode) of compound 2



Supplementary Figure 9: ¹H NMR spectrum of compound 3 (300 MHz, CDCl₃)



Supplementary Figure 10: ¹³C NMR spectrum of compound 3 (75 MHz, CDCl₃)



Supplementary Figure 11: HRESIMS spectrum (positive mode) of compound 3

Supplementary Table 1: Raw data of epimastigotes antiproliferative assay of isolated butanolides according to different time exposures. These data were used to calculate the IC₅₀ values.

Concentrations ($\mu\text{mol L}^{-1}$)	Viability (%)					
	Isoobtusilactone A					
	(24 h)			(72 h)		
0	100.0	100.0	100.0	100.0	100.0	100.0
1	100.0	100.0	100.0	100.0	100.0	100.0
2	81.77	84.6	87.43	100.0	100.0	56.63
4	46.79	45.56	46.79	31.91	29.08	23.72
8	36.45	35.95	35.46	5.05	6.54	4.07
16	22.16	22.16	29.55	2.23	2.71	1.33
Epilitsenolide C1						
(24 h)			(72 h)			
0	100.0	100.0	100.0	100.0	100.0	100.0
2	100.0	100.0	100.0	100.0	100.0	100.0
4	95.39	79.68	100	100	100	100
8	75.94	69.21	65.84	81.60	75.94	80.18
16	65.84	57.98	51.25	37.73	20.09	19.81
32	38.53	33.67	28.99	6.13	5.33	3.86
Benznidazole						
(24 h)			(72 h)			
0	100.0	100.0	100.0	100.0	100.0	100.0
5	83.75	85.42	84.58	96.95	93.9	100
10	84.42	76.04	80.23	76.5	81.9	79.2
20	60.30	77.05	68.67	41.5	47.2	44.35
40	15.74	34.50	25.12	11.2	12.6	16.3
80	4.69	5.02	4.85	7.2	8.5	7.1

Supplementary Table 2: Raw data of Vero cells cytotoxicity assay with the butanolides at 24 h of exposition. These data were used to calculate the CC₅₀/24 h values.

Concentrations ($\mu\text{mol L}^{-1}$)	Cell viability (%)		
	Isoobtusilactone A		
0	100.0	100.0	100.0
12.5	100.0	100.0	100.0
25	98.28	98.72	104.5
50	90.43	87.74	90.06
100	92.69	89.12	90.62
200	25.41	20.14	22.02
400	10.66	8.22	8.59
Epilitsenolide C1			
0	100.0	100.0	100.0
5	100	90.25	95.13
10	91.82	93.01	92.42
20	91.31	90.69	68.18
40	83.22	82.56	81.90
Benznidazole			
0	100.0	100.0	100.0
211	100.0	100.0	100.0
422	100.0	100.0	100.0
845	60.43	60.34	57.16
1,691	39.58	36.97	37.85

Supplementary Table 3: Epimastigotes concentration ($10^5/\text{mL}$) obtained from three replicates in the antiproliferative assay with **Isoobtusin lactone A** according to the exposure time

Concentrations ($\mu\text{mol L}^{-1}$)	Epimastigotes concentration ($10^5/\text{mL}$)								
	0 hours			24 hours			72 hours		
0	10.0	10.0	10.0	24.0	18.7	18.2	188.0	108.0	96.0
4	10.0	10.0	10.0	9.5	9.25	9.5	41.7	38.0	31.0
8	10.0	10.0	10.0	7.4	5.5	7.2	6.6	8.5	5.32
16	10.0	10.0	10.0	4.5	4.5	6.0	2.92	3.55	1.75