Supporting Information for

Natural and Semisynthetic Mammea-Type Isoprenylated Dihydroxycoumarins Uncouple Cellular Respiration

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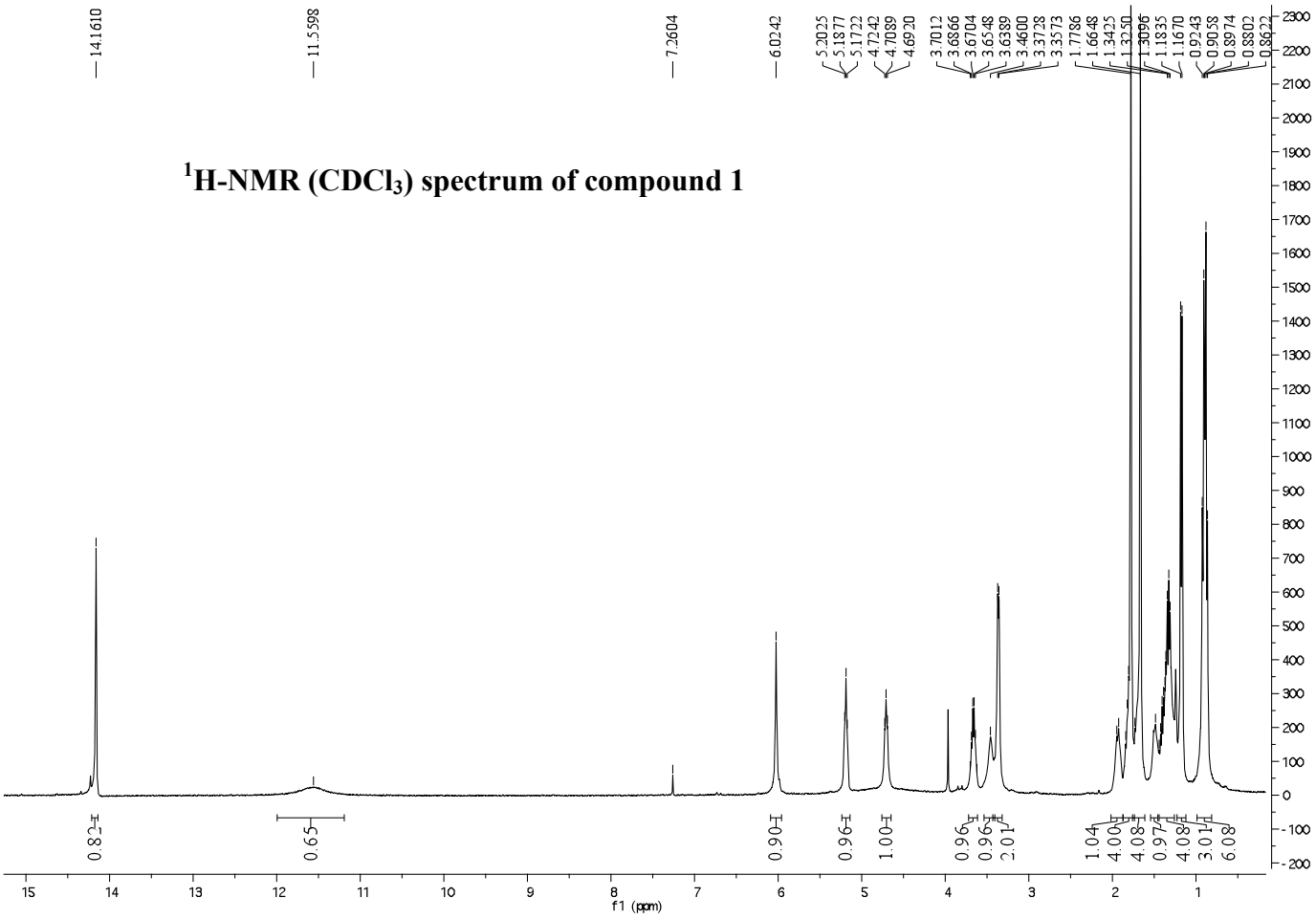
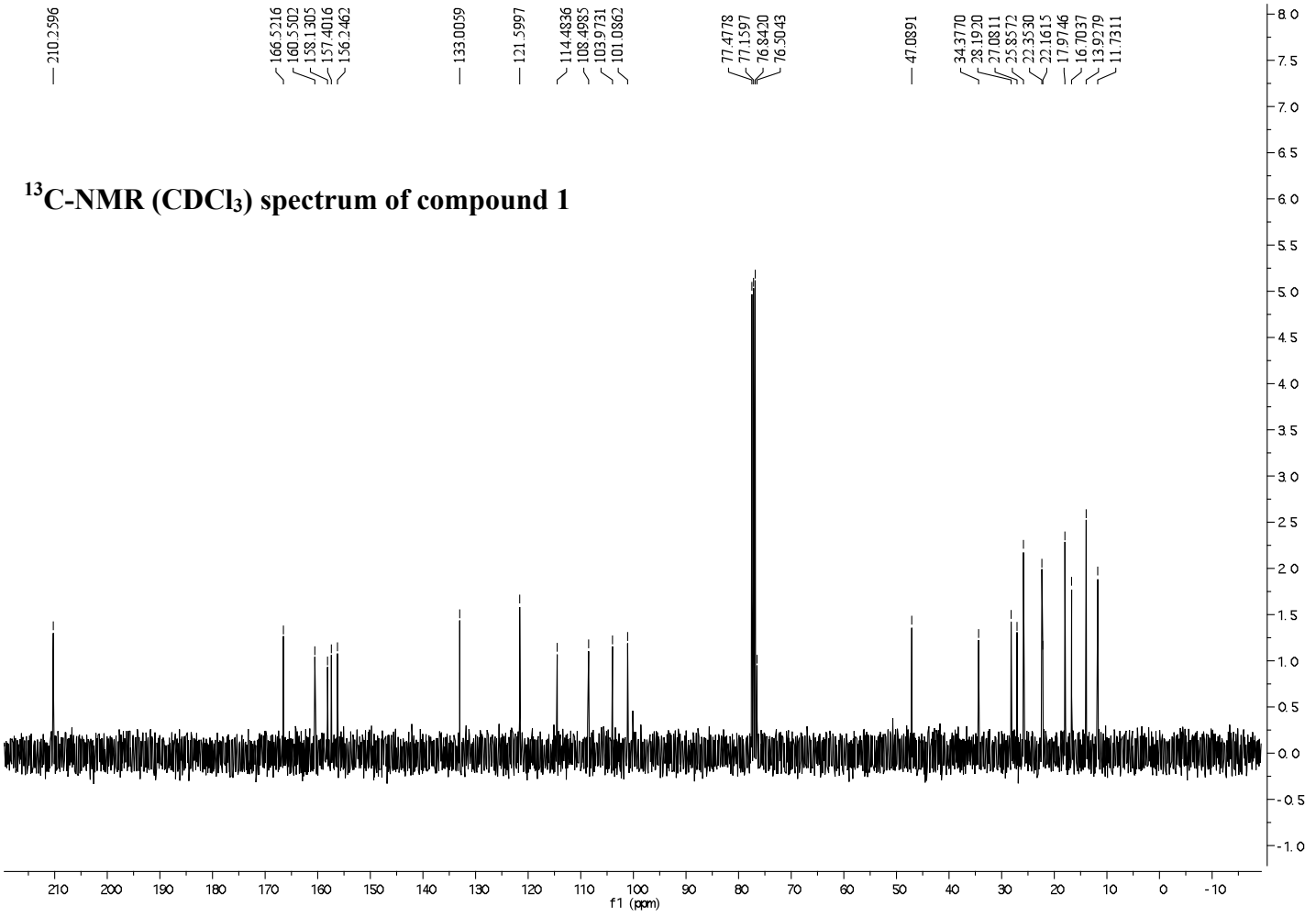
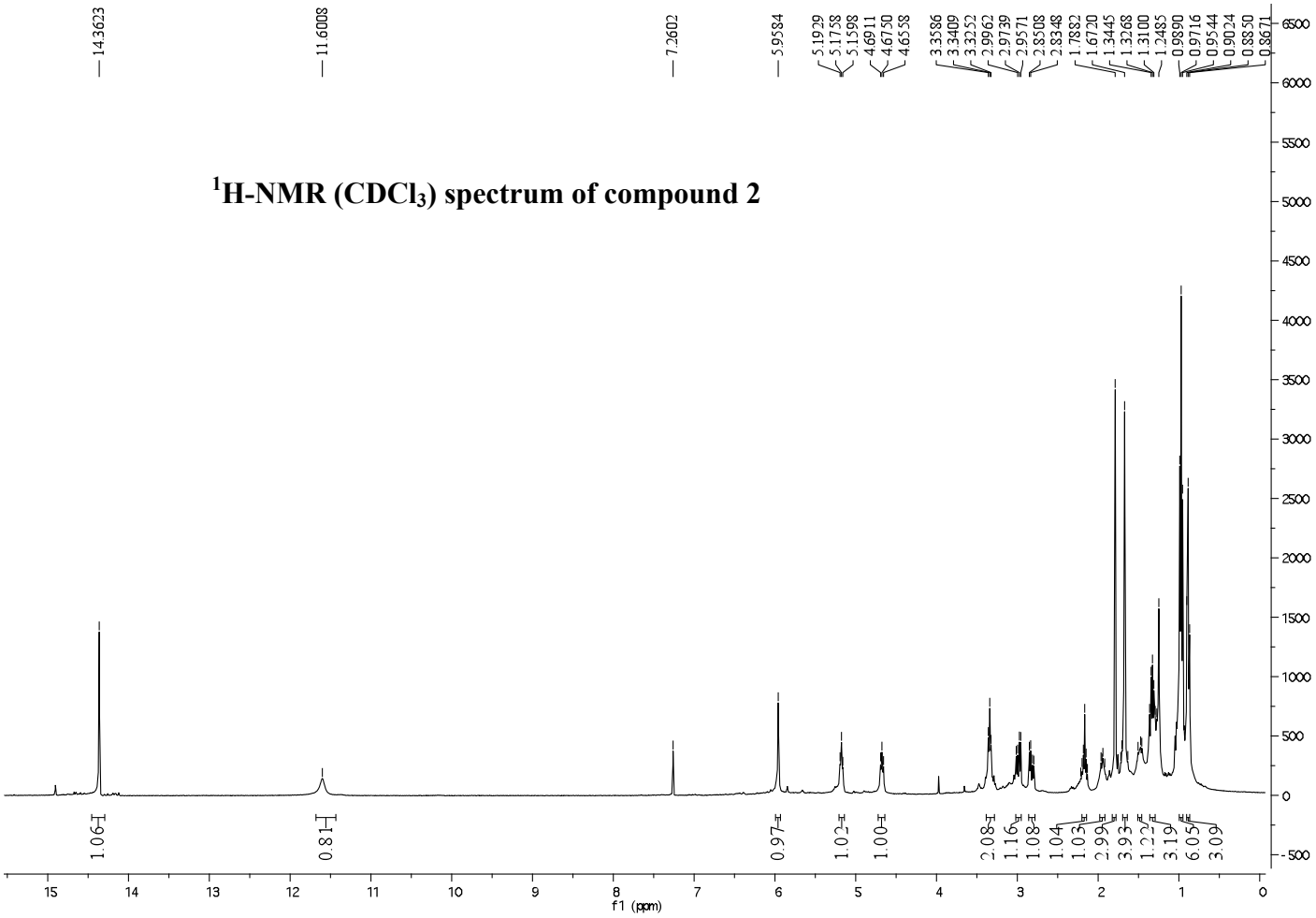
^{1}H-NMR ($CDCl_3$) spectrum of compound 1



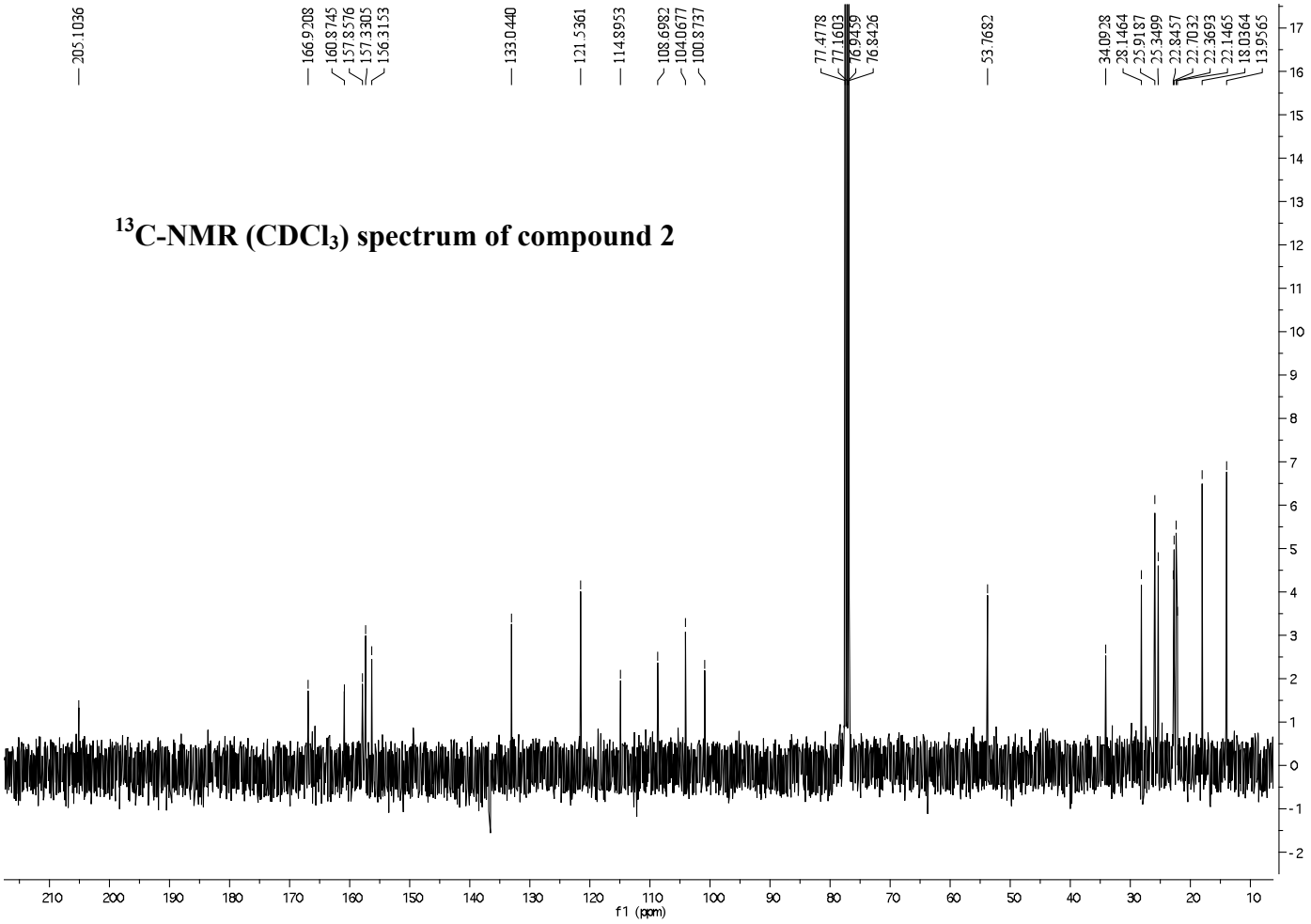
^{13}C-NMR ($CDCl_3$) spectrum of compound 1



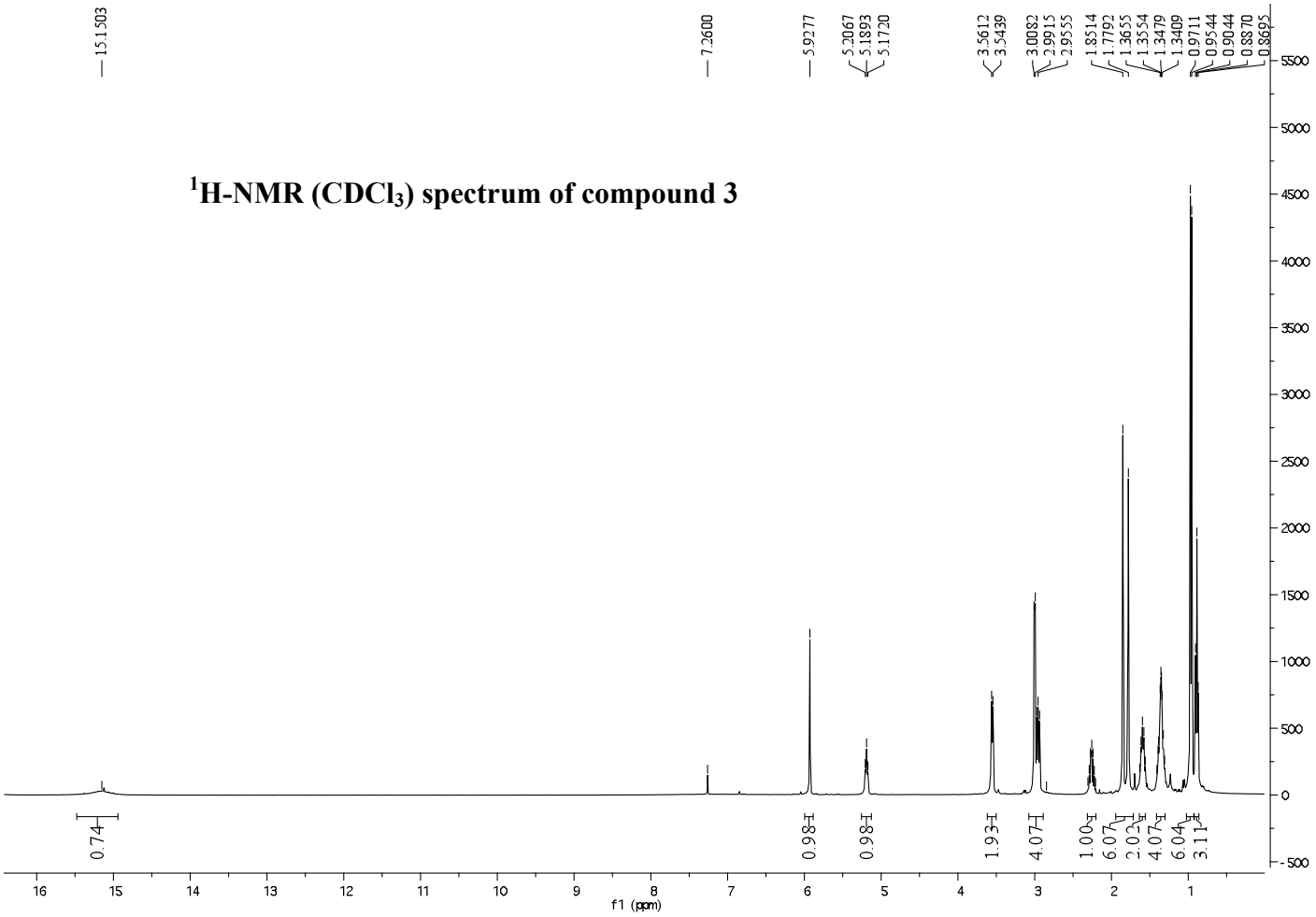
^{1}H-NMR ($CDCl_3$) spectrum of compound 2



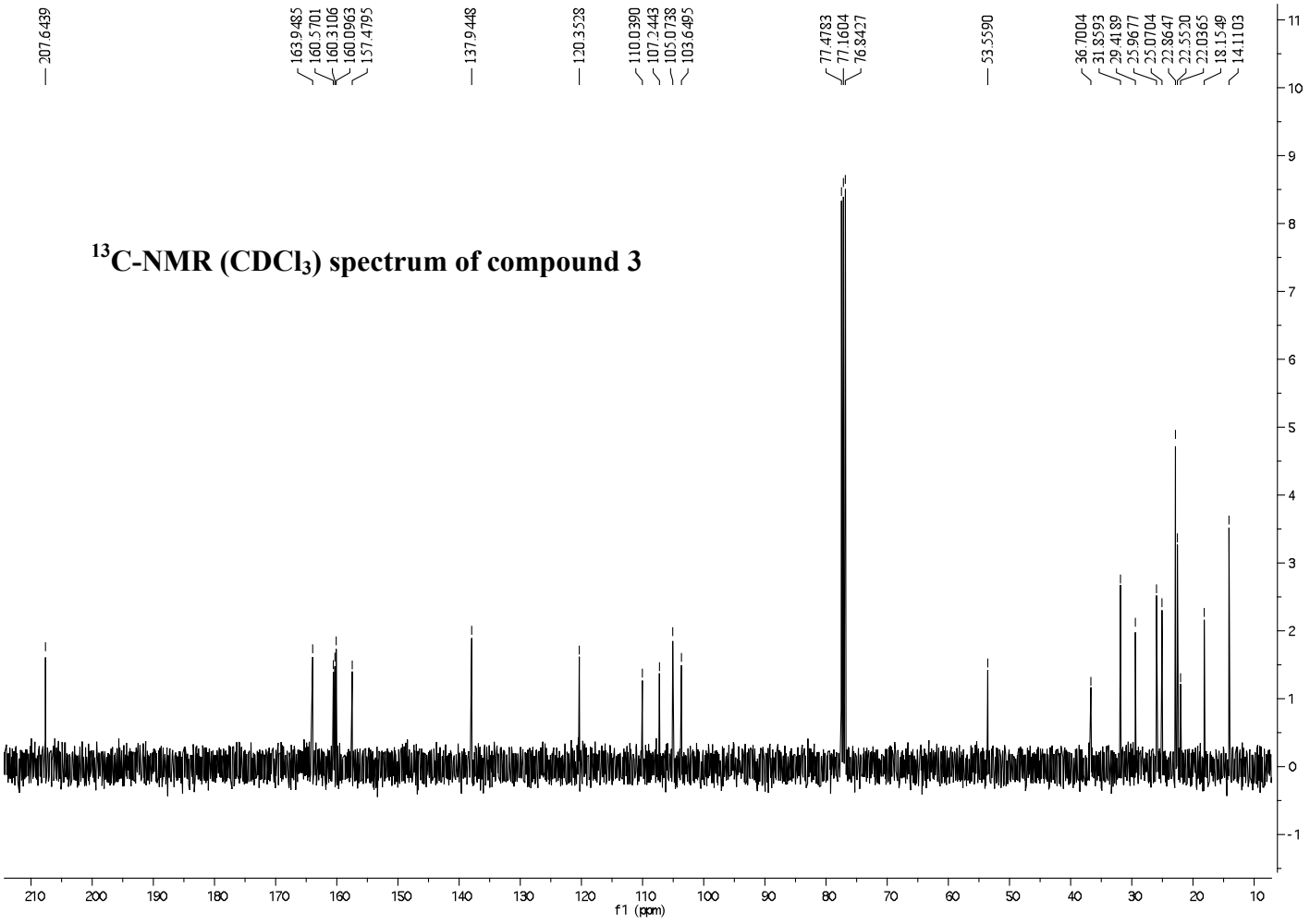
^{13}C-NMR ($CDCl_3$) spectrum of compound 2



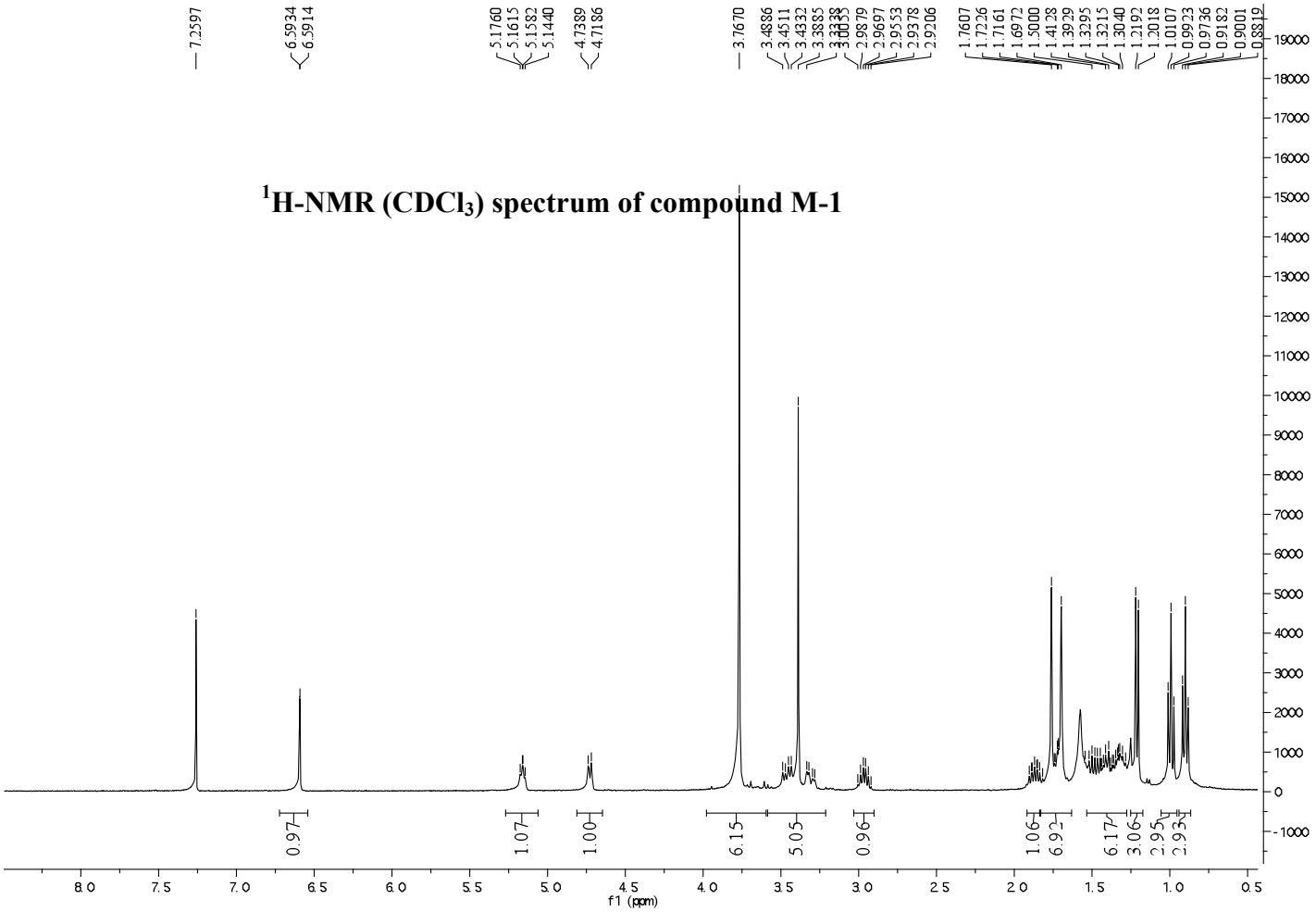
^{1}H-NMR ($CDCl_3$) spectrum of compound 3

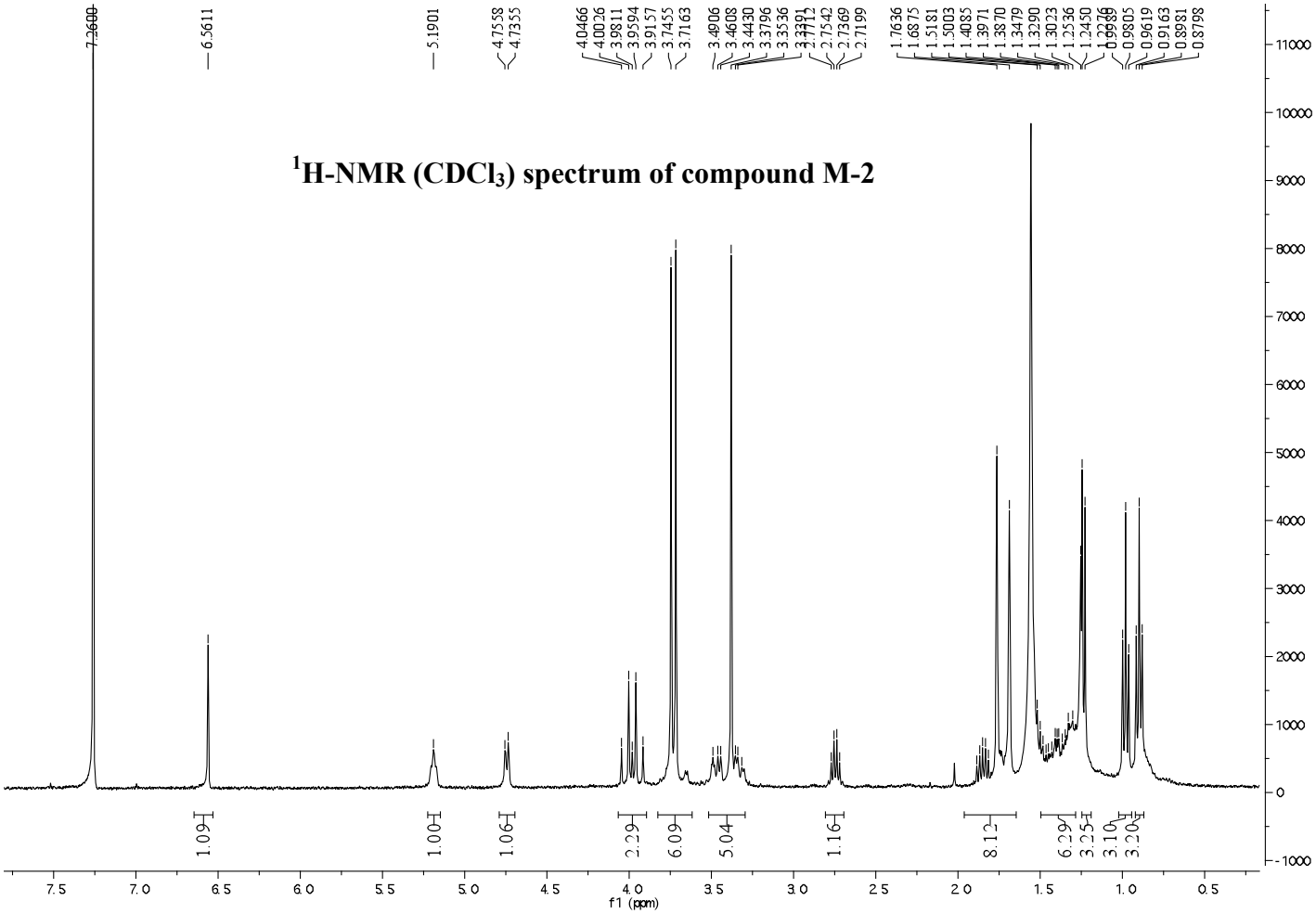


^{13}C-NMR ($CDCl_3$) spectrum of compound 3



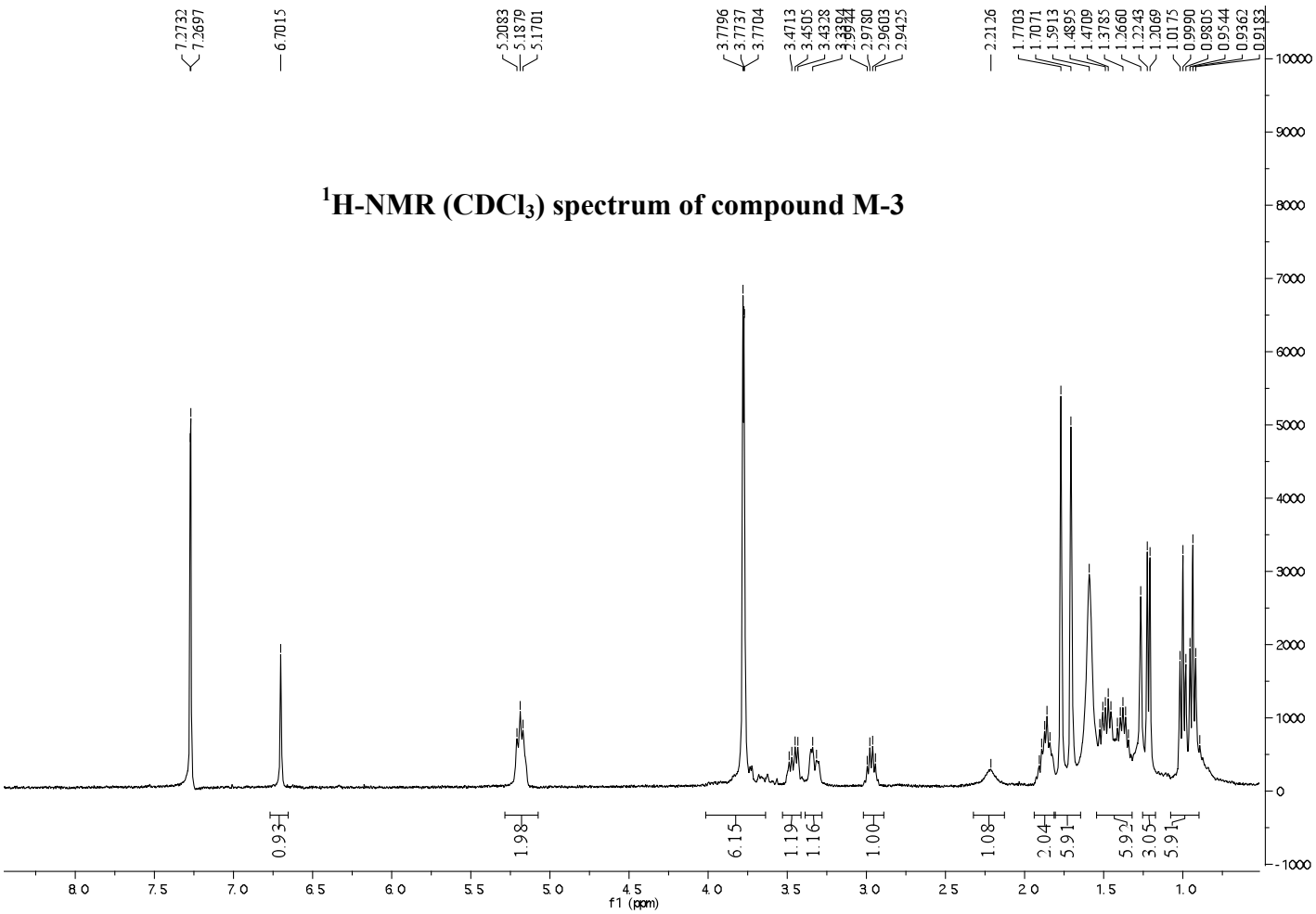
^{1}H-NMR ($CDCl_3$) spectrum of compound M-1

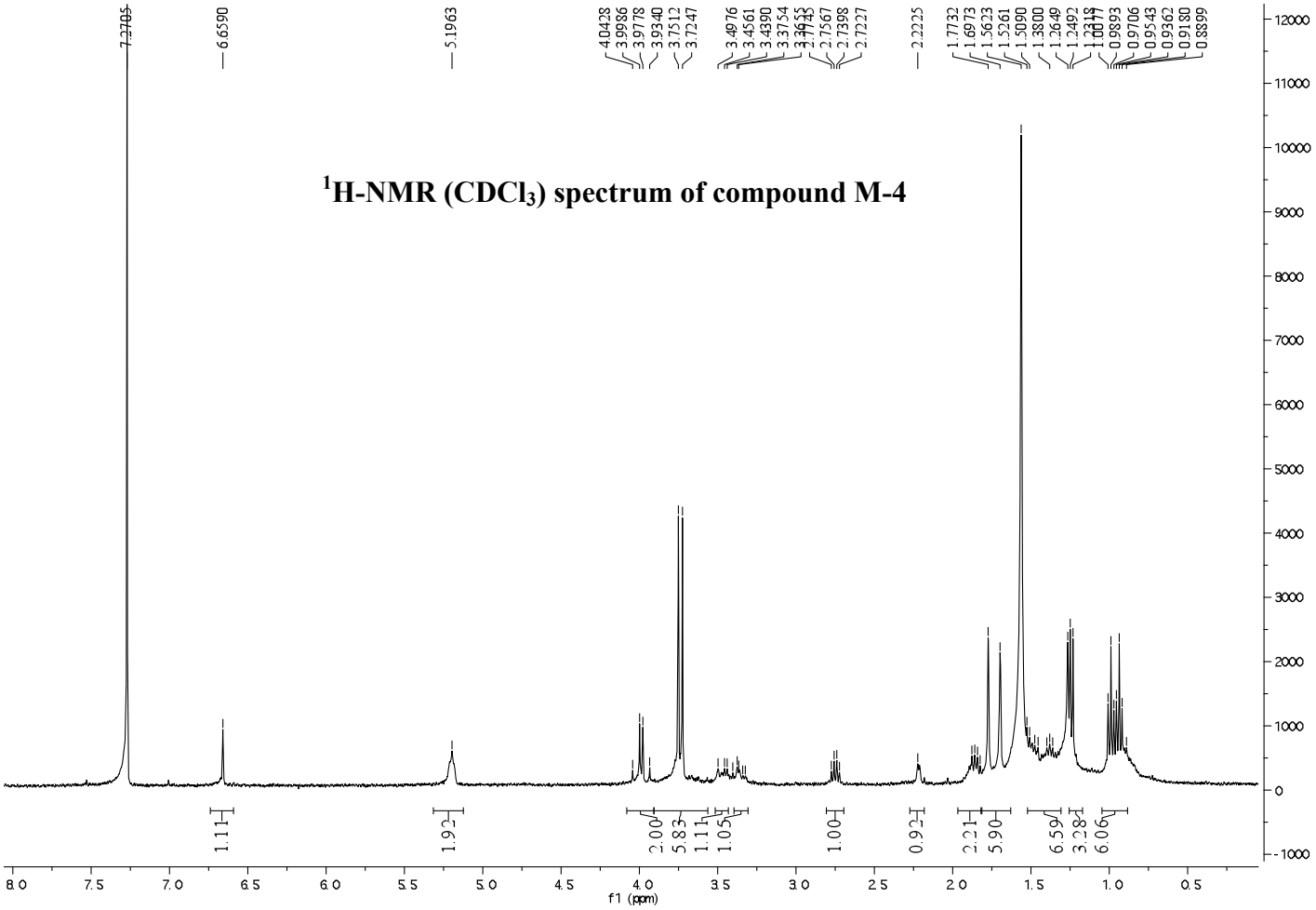




^{1}H-NMR ($CDCl_3$) spectrum of compound M-2

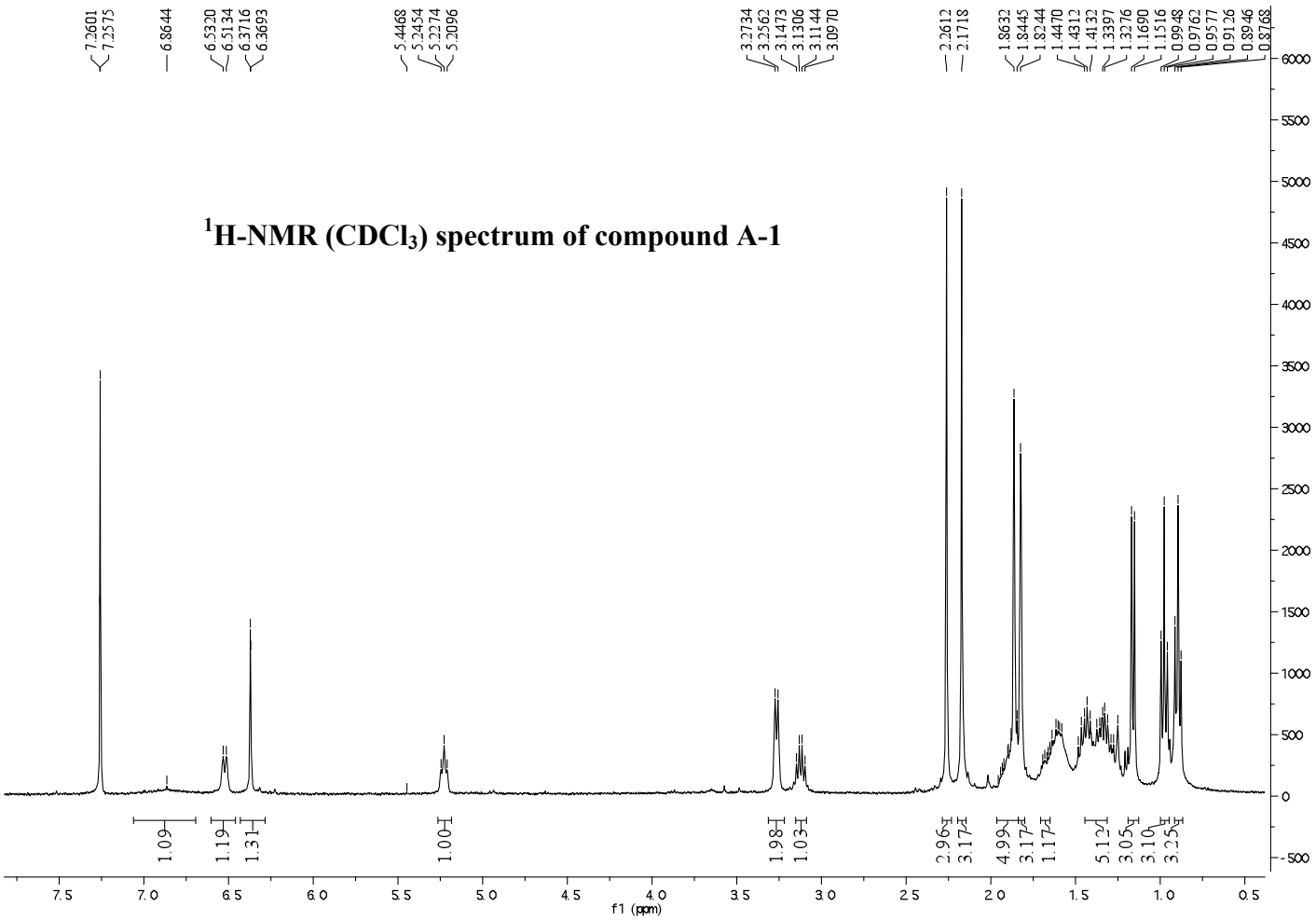
^{1}H-NMR ($CDCl_3$) spectrum of compound M-3



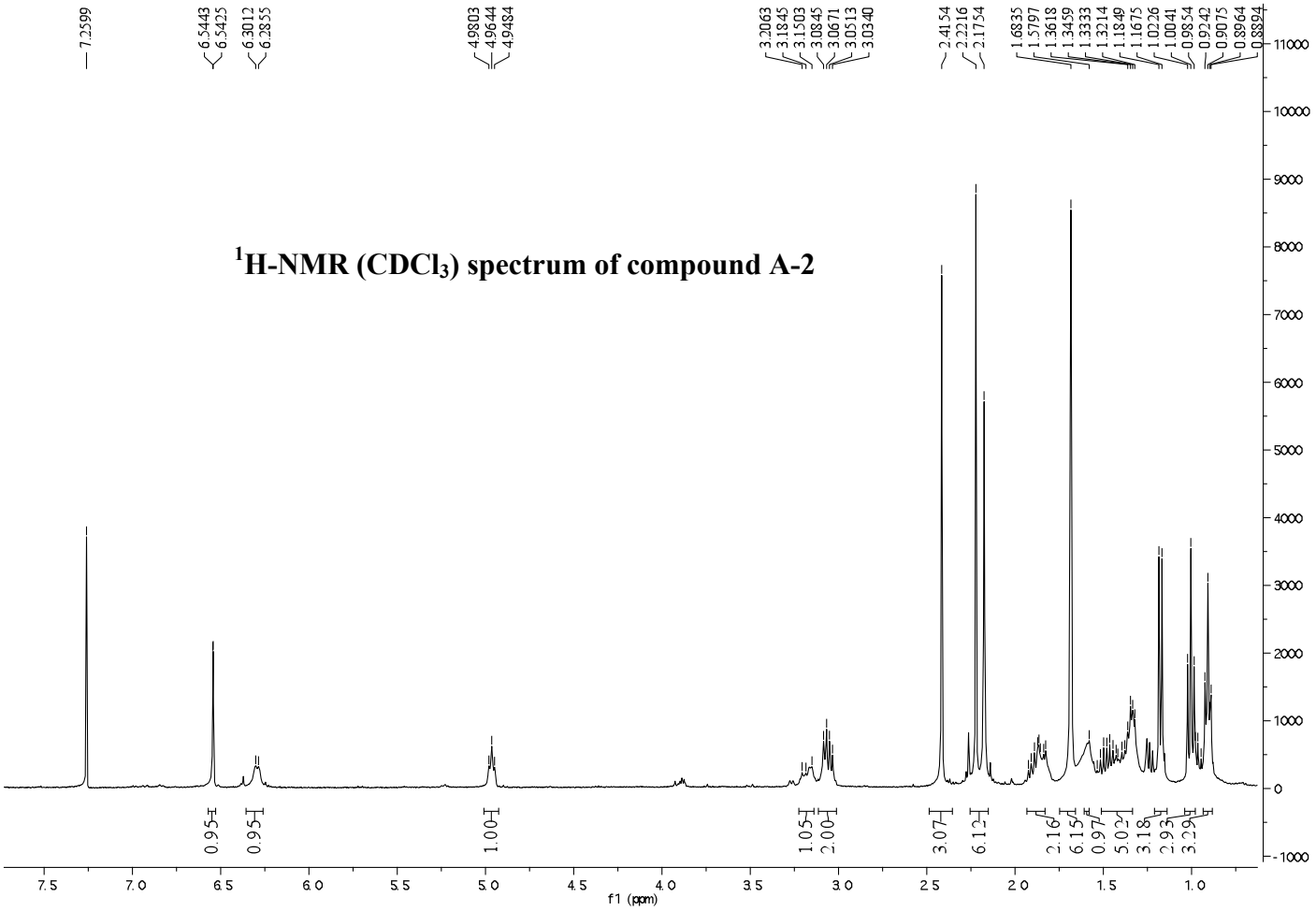


^{1}H-NMR ($CDCl_3$) spectrum of compound M-4

^{1}H-NMR ($CDCl_3$) spectrum of compound A-1



^{1}H-NMR ($CDCl_3$) spectrum of compound A-2



^{1}H-NMR ($CDCl_3$) spectrum of compound A-3

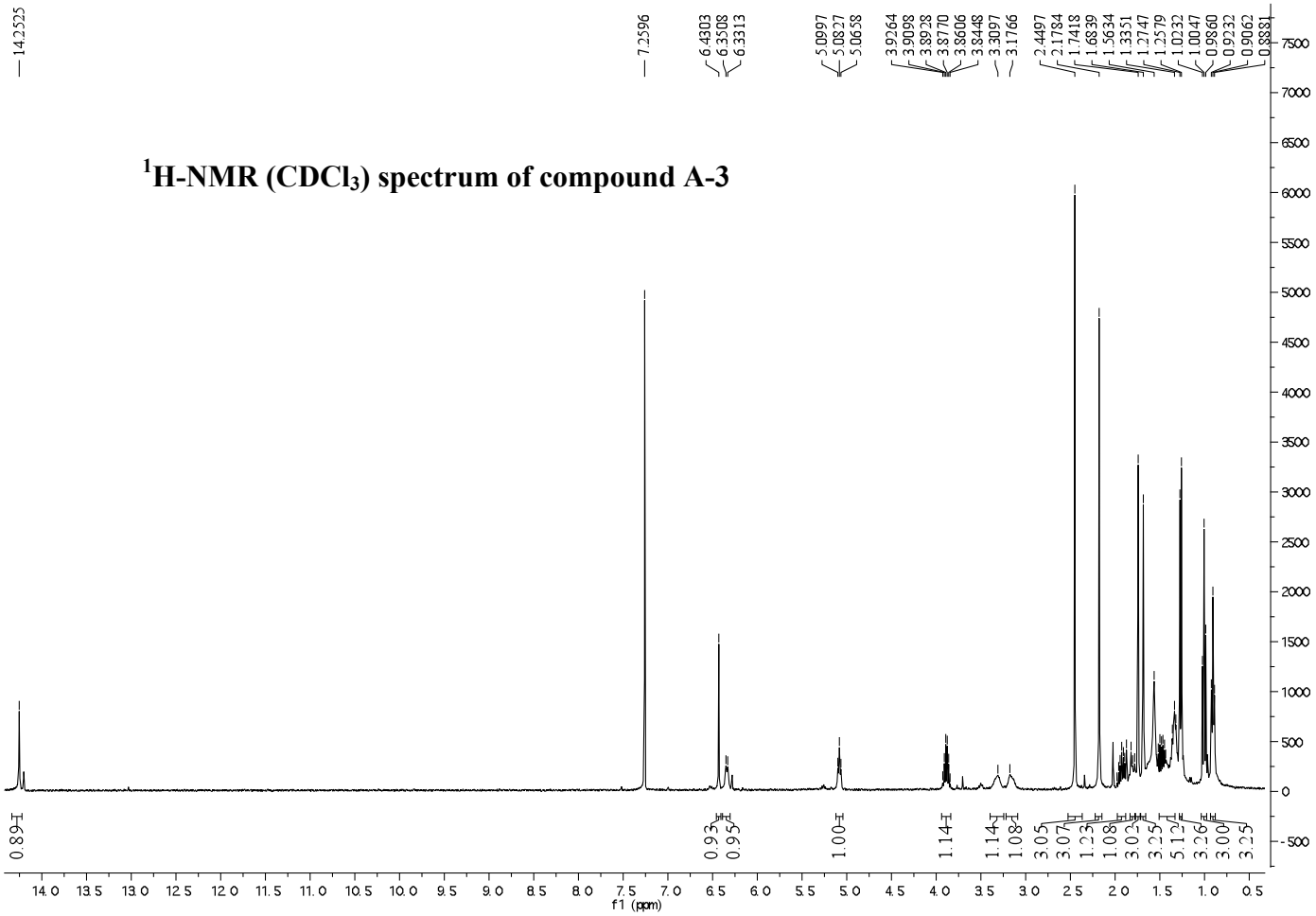


Table S1. IC_{50} values of **1** – **14**, **M-1** – **M-4**, and **A-1** – **A-3** suppressing HIF-1 activation in a PC3 cell-based reporter assay. The IC_{50} and 95% CI values were determined from one experiment performed in triplicate. The data on mammea E/BB (**15**) were from an earlier publication.[10]

Compound	1% O_2, 16 h		10 μM 1,10-phen, 16 h	
	IC_{50} μM	(95% CI) μM	IC_{50} μM	(95% CI) μM
1	4.50	(4.15 - 4.88)	5.14	(3.91 - 6.76)
2	2.48	(2.30 - 2.69)	4.23	(3.14 - 5.70)
3	4.88	(4.55 - 5.24)	8.02	(6.16 - 10.43)
4	5.24	(4.82 - 5.70)	8.37	(6.58 - 10.66)
5	2.97	(2.75 - 3.21)	5.33	(4.13 - 6.86)
6	3.65	(3.39 - 3.94)	6.66	(5.51 - 8.05)
7	9.90	(9.49 - 10.57)	11.33	(9.21 - 13.95)
8	10.29	(9.48 - 11.17)	12.77	(11.44 - 15.19)
9	6.94	(5.96 - 8.08)	13.38	(7.15 - 25.05)
10	>20	NA	14.88	(11.56 - 19.15)
11	9.36	(8.15 - 10.75)	13.90	(8.29 - 23.30)
12	7.33	(6.21 - 8.66)	16.38	(8.89 - 30.18)
13	6.78	(5.86 - 7.84)	7.55	(5.14 - 11.09)
14	11.43	(9.99 - 13.08)	10.56	(8.34 - 13.38)
M-1	>20	NA	>20	NA
M-2	18.18	(11.20 - 29.49)	>20	NA
M-3	8.67	(6.76 - 11.13)	15.71	(13.12 - 18.81)
M-4	14.16	(11.35 - 17.67)	>20	NA
A-1	9.88	(8.73 - 11.19)	6.87	(6.15 - 7.67)
A-2	0.94	(0.79 - 1.11)	2.87	(2.53 - 3.25)
A-3	2.24	(2.04 - 2.46)	4.16	(3.62 - 4.78)
15	2.05	(1.83 - 2.30)	6.57	(5.08 - 8.49)

Compound	Purity
1	97.4%
2	99.1%
3	95.6%
4	97.2%
5	96.3%
6	98.2%
7	95.4%
8	96.1%
9	97.2%
10	95.2%
11	95.3%
12	96.7%
13	96.8%
14	95.2%
M-1	98.8%
M-2	98.7%
M-3	97.6%
M-4	97.4%
A-1	96.5%
A-2	98.3%
A-3	97.7%
15	98.1%

Table S2. The purity of all compounds was judged on the percentage of the integrated signal at UV 220 nm.