

**Cytotoxicity and antimicrobial activity of isolated compounds from
Monsonia angustifolia and *Dodonaea angustifolia***

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S1. Spectral data of compound 1

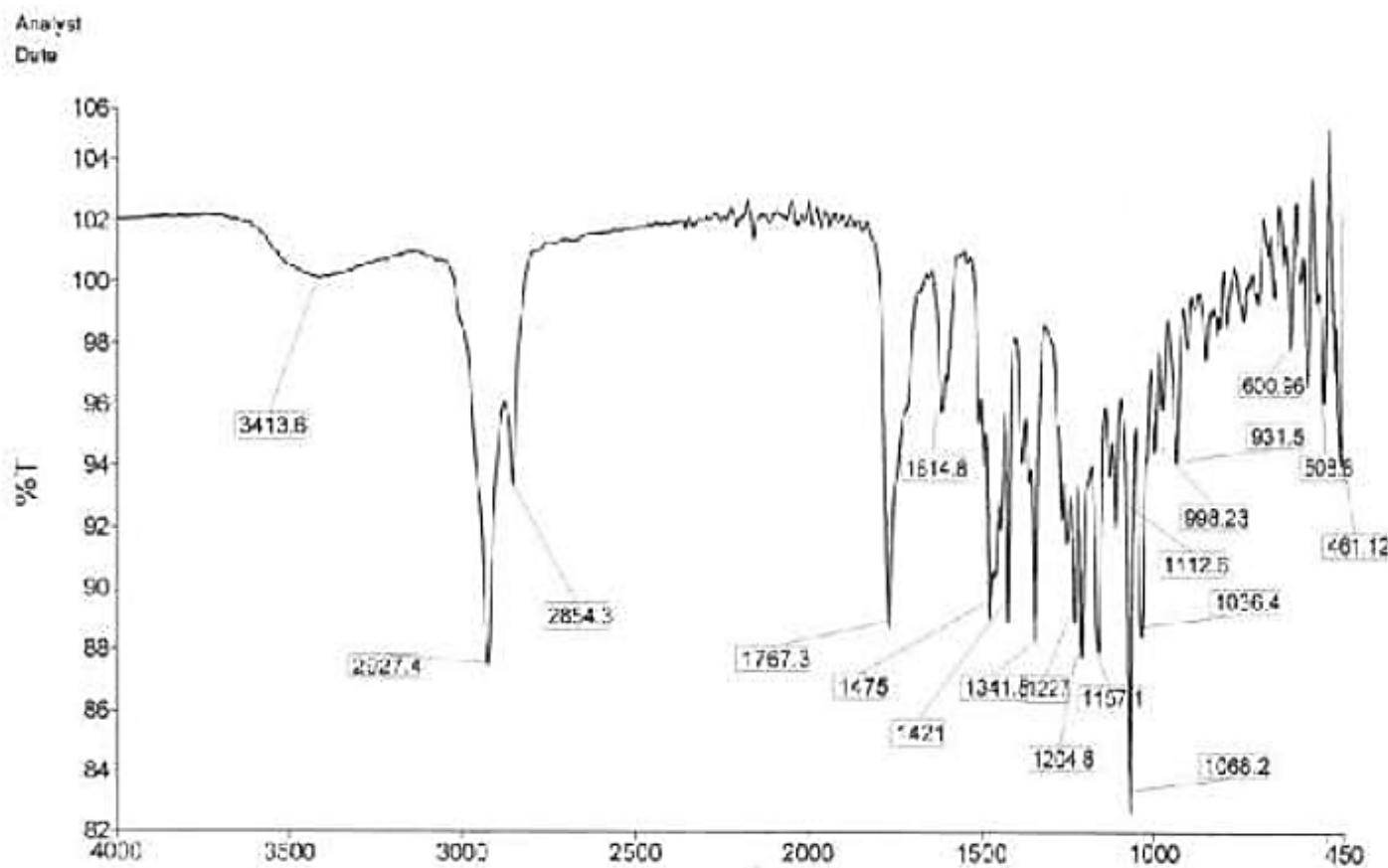


Figure S1.1. Fourier-Transform Infrared Spectroscopy (FTIR) spectrum of 5-methoxyjusticidin A

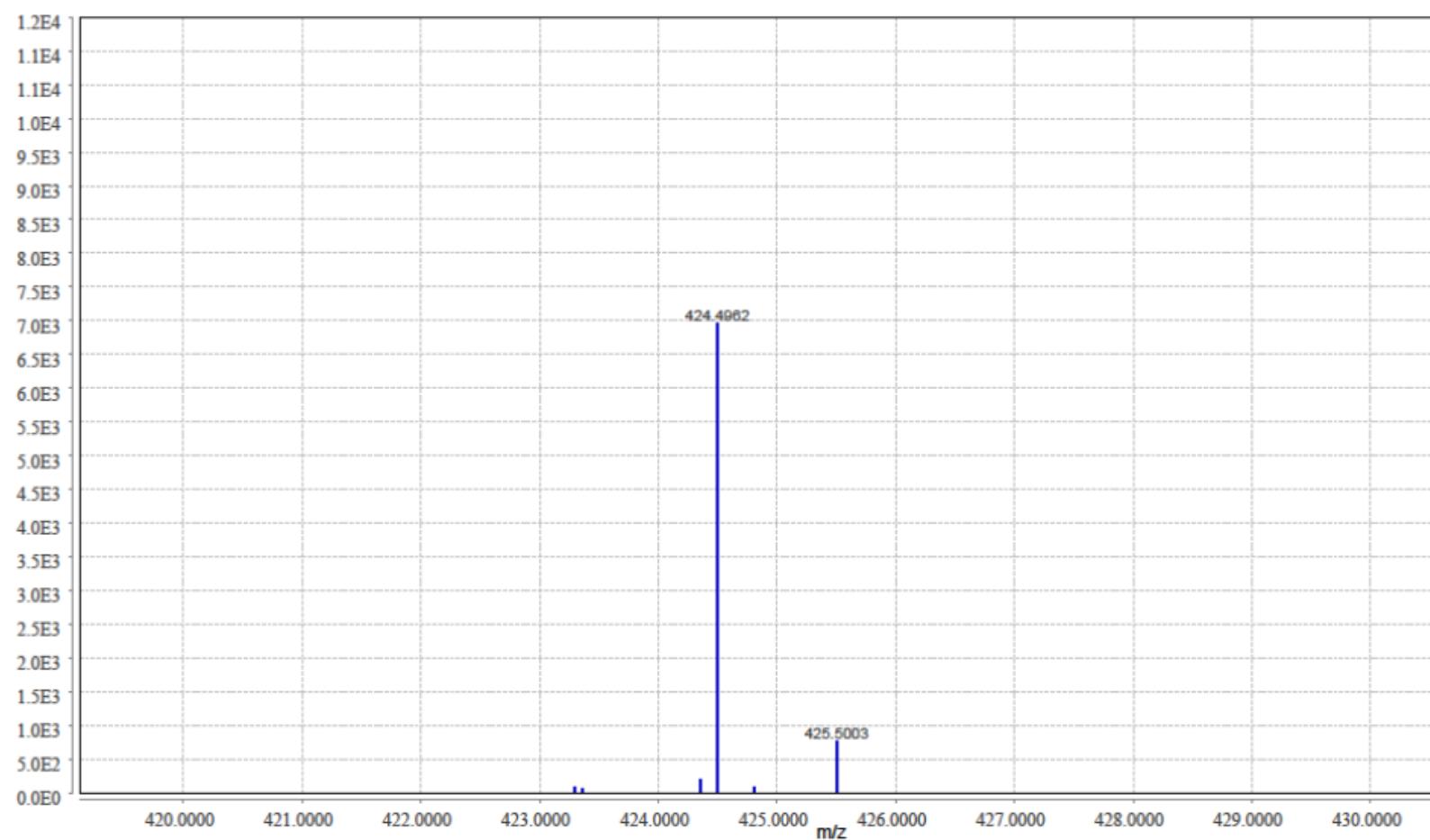
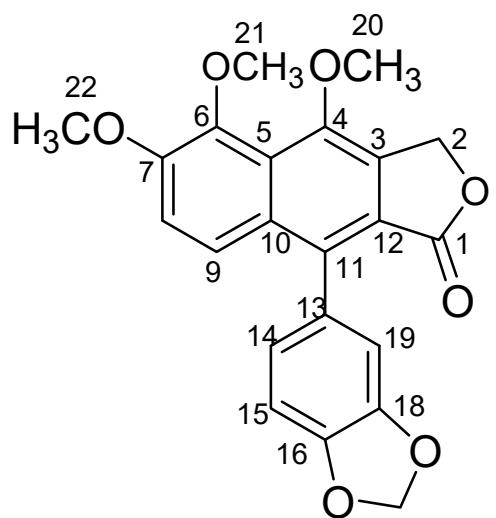


Figure S1.2. High-Resolution Electrospray Ionization Mass spectrum (HR-ESI-MS) of 5-methoxyjusticidin A; $[M+H]^+$ m/z = 425.5003



INDEX	FREQUENCY	PPM	HEIGHT
1	2893.0	7.237	6.5
2	2774.1	6.939	7.0
3	2711.5	6.783	4.8
4	2692.7	6.736	2.4
5	2429.8	6.078	8.0
6	2411.0	6.031	8.7
7	2166.9	5.420	17.1
8	1622.2	4.058	7.2
9	1603.5	4.011	18.5
10	1590.9	3.980	30.4
11	1578.4	3.948	23.5
12	1497.0	3.745	26.3
13	927.4	2.320	2.0
14	808.4	2.022	4.4
15	714.5	1.787	4.9
16	664.5	1.662	5.7
17	626.9	1.568	3.5
18	539.3	1.349	10.9
19	508.0	1.271	11.1
20	489.2	1.224	37.9
21	345.2	0.864	4.4
22	332.7	0.832	4.4

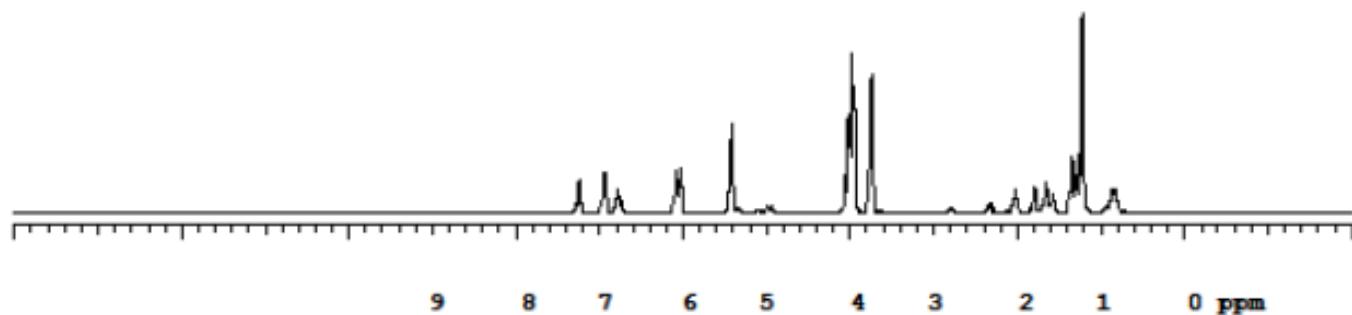


Figure S1.3. Proton Nuclear Magnetic Resonance (¹H NMR) spectrum of 5-methoxyjusticidin A (CDCl₃, 400 MHz)

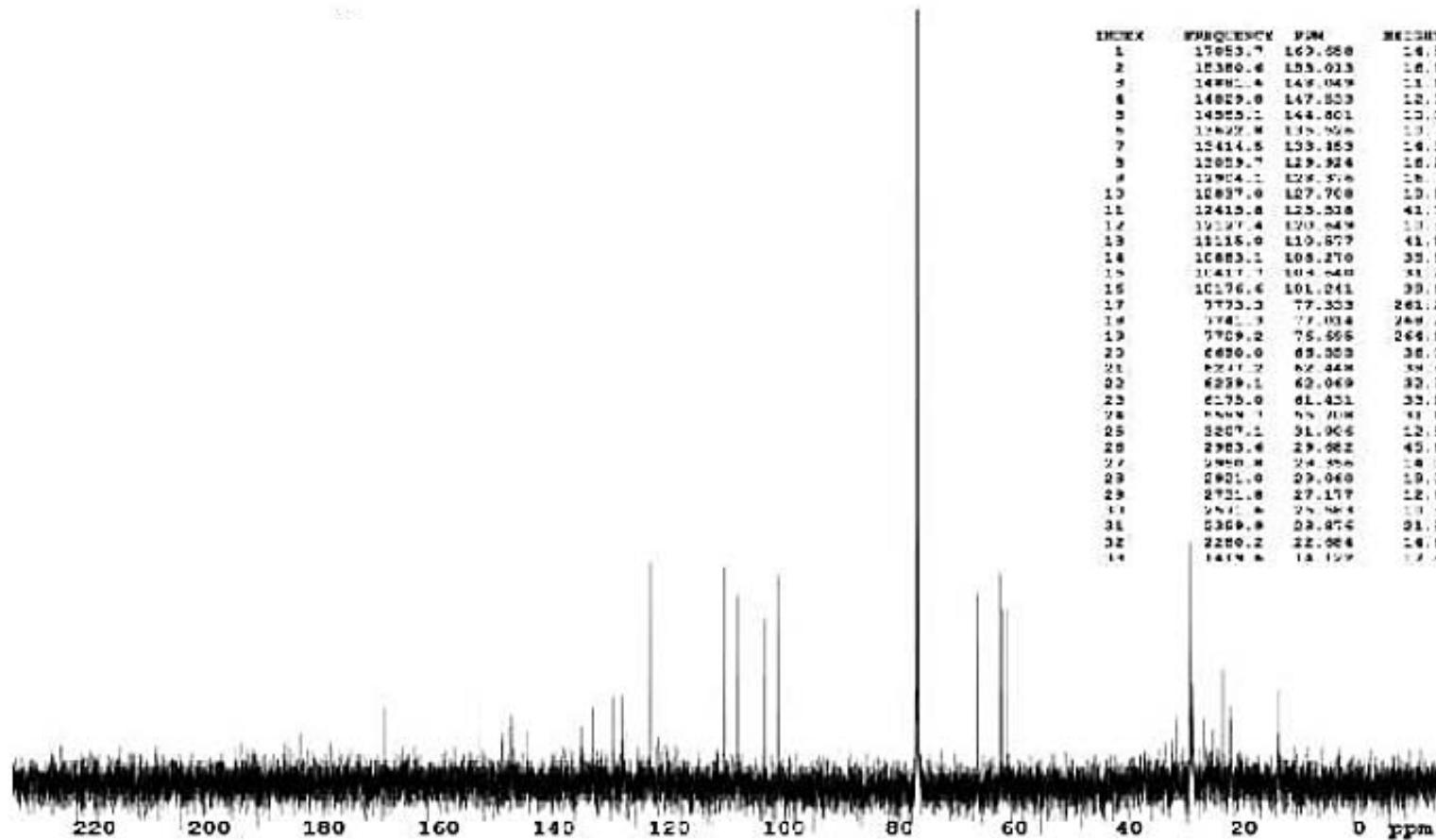


Figure S1.4. Carbon-13 Nuclear Magnetic Resonance (^{13}C NMR) spectrum of 5-methoxyjusticidin A (CDCl_3 , 100 MHz)

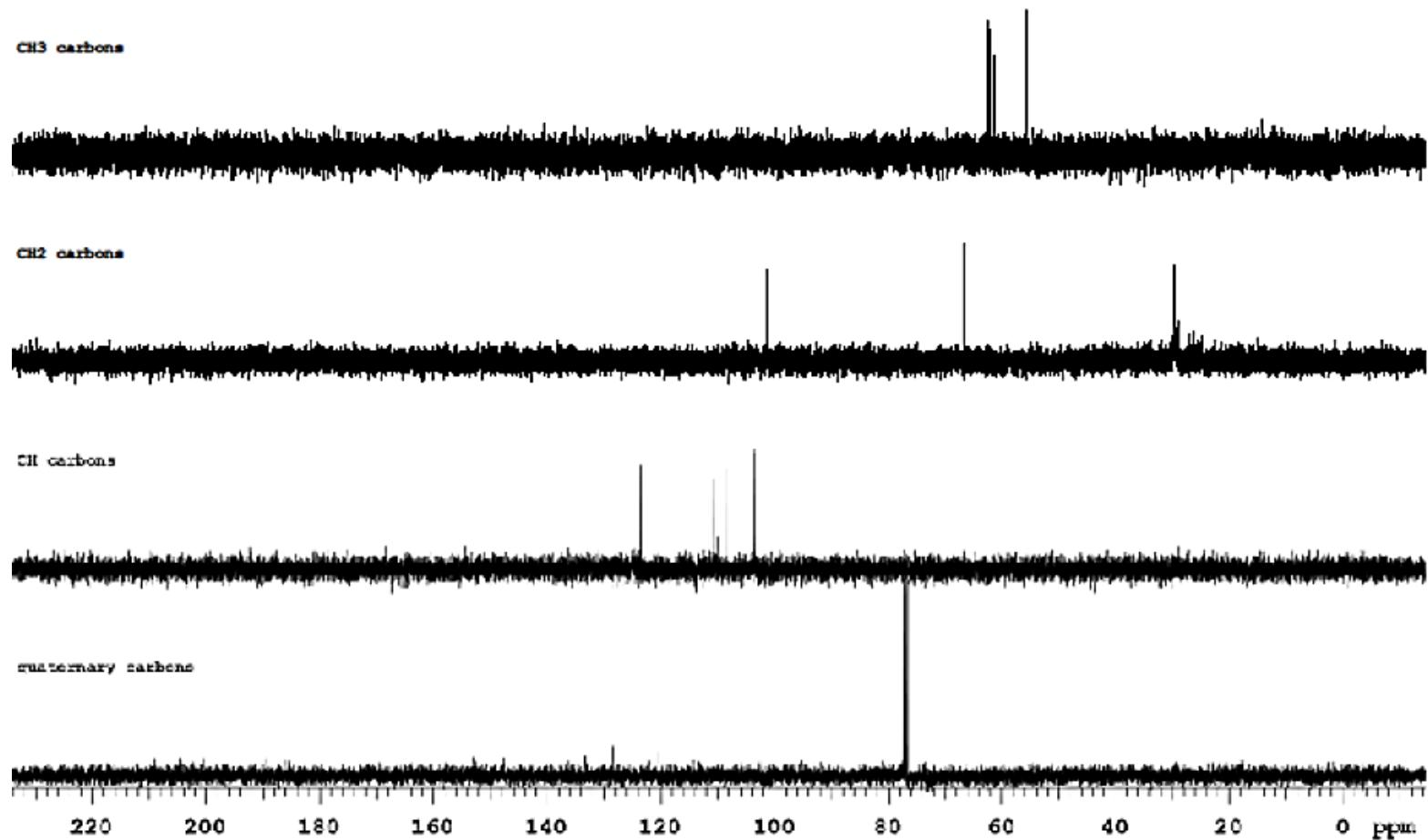


Figure S1.5. Distortionless Enhancement by Polarization Transfer (DEPT) NMR spectra of 5-methoxyjusticidin A (CDCl_3 , 100 MHz)

S2. Spectral data of compound 2

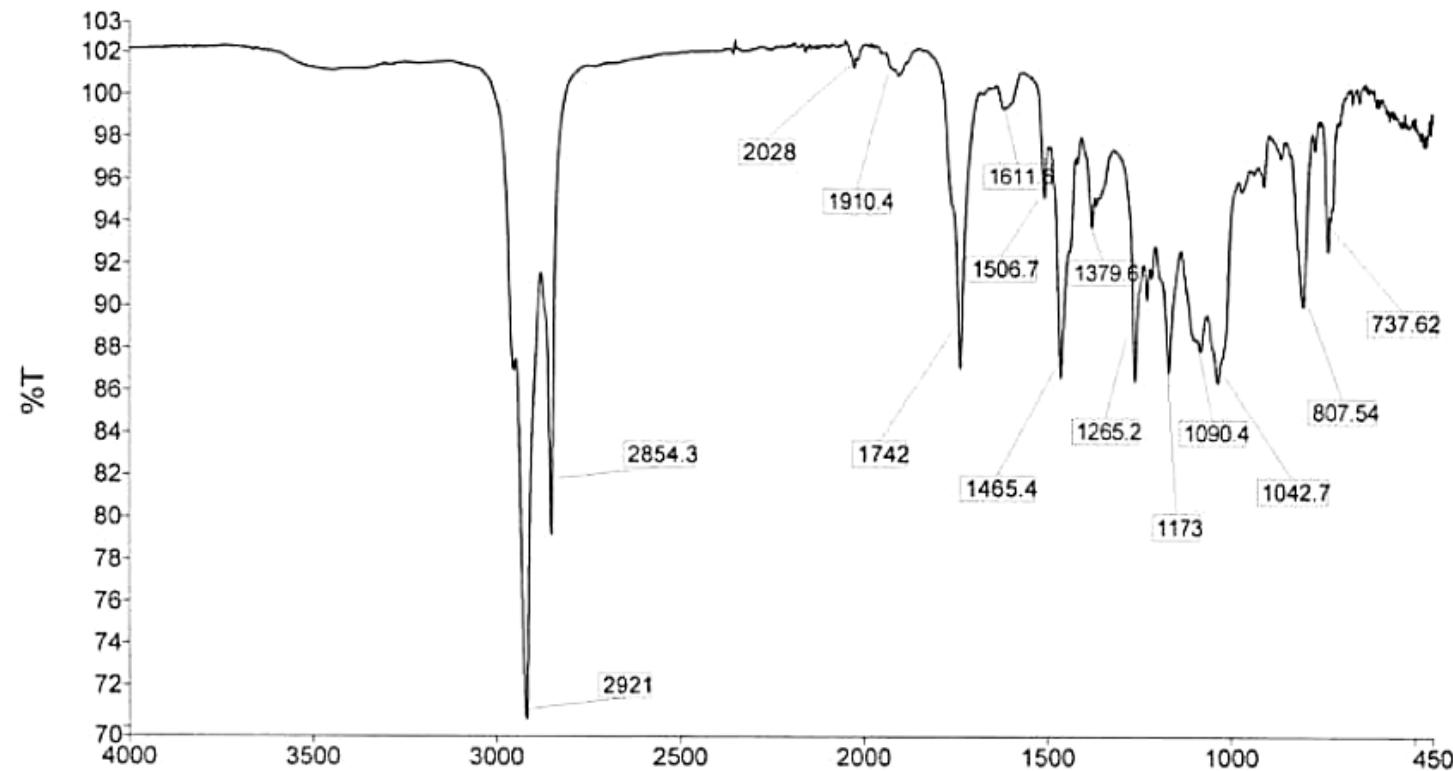


Figure S2.6. Fourier-Transform Infrared Spectroscopy (FTIR) spectrum of *cis*-phytyl diterpenoidal fatty ester

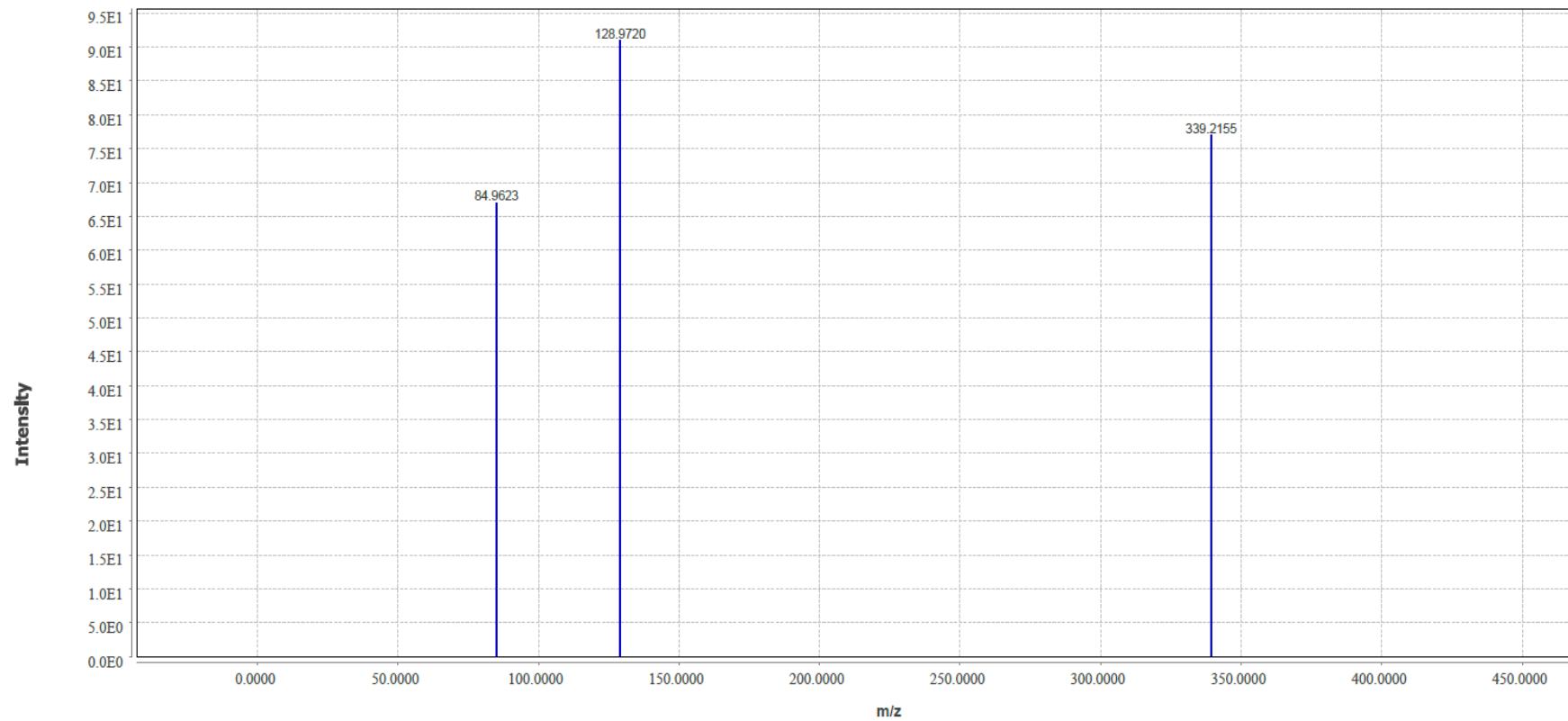
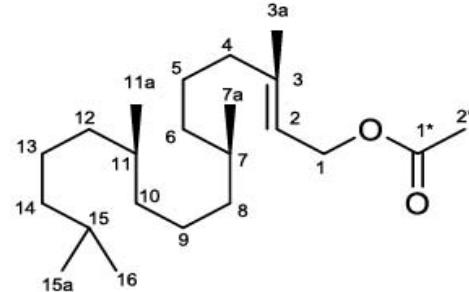


Figure S2.7. High-Resolution Electrospray Ionization Mass spectrum (HR-ESI-MS) of *cis*-phytyl diterpenoidal fatty ester; $[M+H]^+$ $m/z = 339.2155$



INDEX	FREQUENCY	PPM	HEIGHT	INDEX	FREQUENCY	PPM	HEIGHT
1	2896.2	7.245	36.1	35	385.9	0.965	14.5
2	2132.4	5.334	4.9	36	379.2	0.949	11.0
3	2125.0	5.316	6.4	37	365.2	0.913	21.2
4	1831.2	4.581	15.7	38	358.5	0.897	30.1
5	1824.1	4.563	13.4	39	352.2	0.881	63.7
6	1621.1	4.055	5.2	40	345.2	0.864	127.2
7	1614.4	4.039	8.8	41	343.6	0.860	126.3
8	1458.7	3.649	9.5	42	337.0	0.843	132.3
9	918.0	2.296	17.0	43	334.6	0.837	73.5
10	914.9	2.289	14.6	44	329.9	0.825	59.4
11	910.6	2.278	24.6	45	328.0	0.820	52.7
12	907.8	2.271	15.8	46	315.5	0.789	16.5
13	902.7	2.258	13.8	47	313.5	0.784	16.3
14	900.4	2.252	8.0	48	265.4	0.664	7.5
15	801.0	2.004	9.8	49	21.2	0.053	129.9
16	794.4	1.987	12.5				
17	786.9	1.969	7.2				
18	669.5	1.675	43.9				
19	639.8	1.601	26.8				
20	633.2	1.584	20.9				
21	616.3	1.542	11.3				
22	609.3	1.524	11.6				
23	603.0	1.509	12.7				
24	596.4	1.492	10.8				
25	589.7	1.475	8.7				
26	495.0	1.238	941.3				
27	458.3	1.146	21.2				
28	451.2	1.129	22.3				
29	444.2	1.111	19.2				
30	431.7	1.080	19.8				
31	421.1	1.053	28.0				
32	412.5	1.032	18.2				
33	401.5	1.004	16.8				
34	398.0	0.996	15.8				

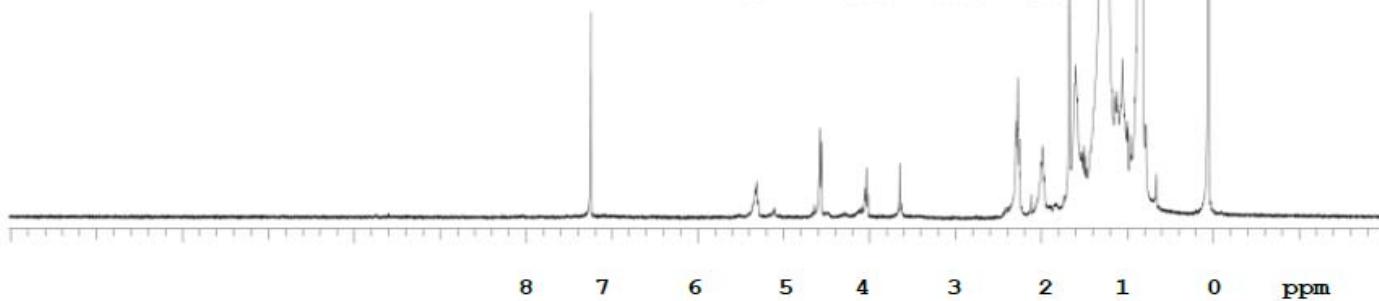


Figure S2.8. Proton Nuclear Magnetic Resonance (^1H NMR) spectrum of *cis*-phytyl diterpenoidal fatty ester (CDCl_3 , 400 MHz)

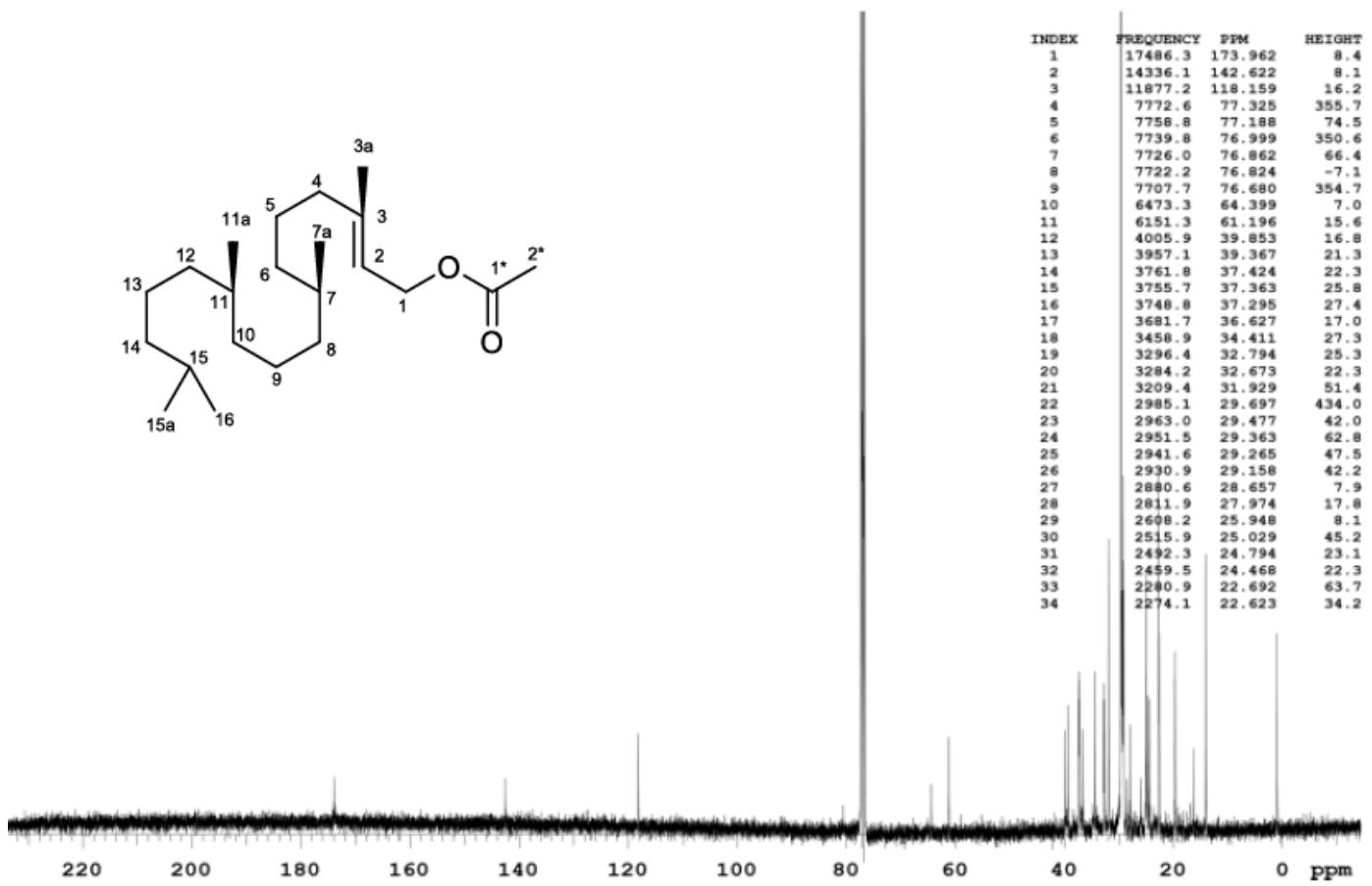


Figure S2.9. Carbon-13 Nuclear Magnetic Resonance (^{13}C NMR) spectrum of *cis*-phytyl diterpenoidal fatty ester (CDCl_3 , 100 MHz)

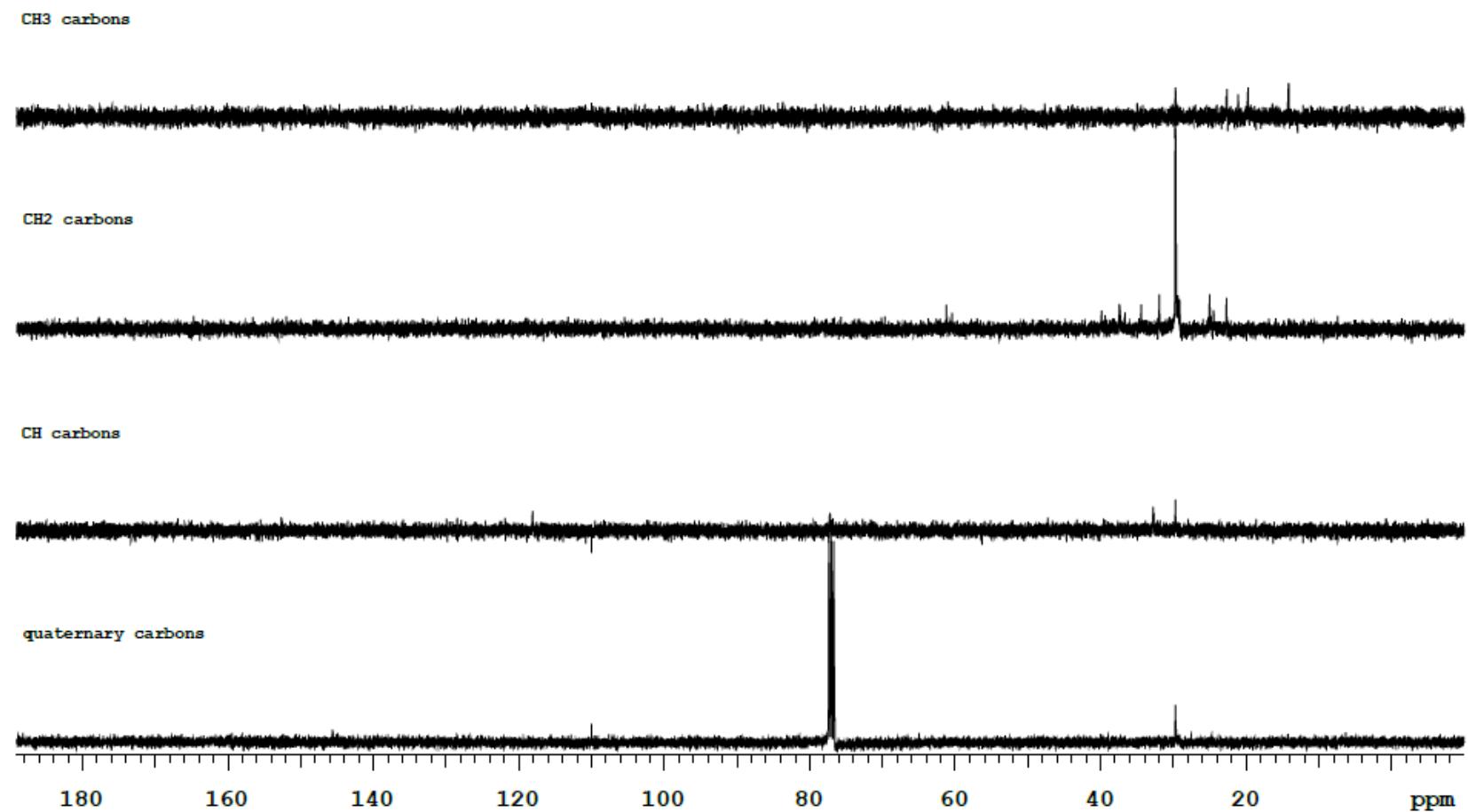


Figure S2.10. Distortionless Enhancement by Polarization Transfer (DEPT) NMR spectra of *cis*-phytyl diterpenoidal fatty ester (CDCl_3 , 100 MHz)

S3. Spectral data of compound 3

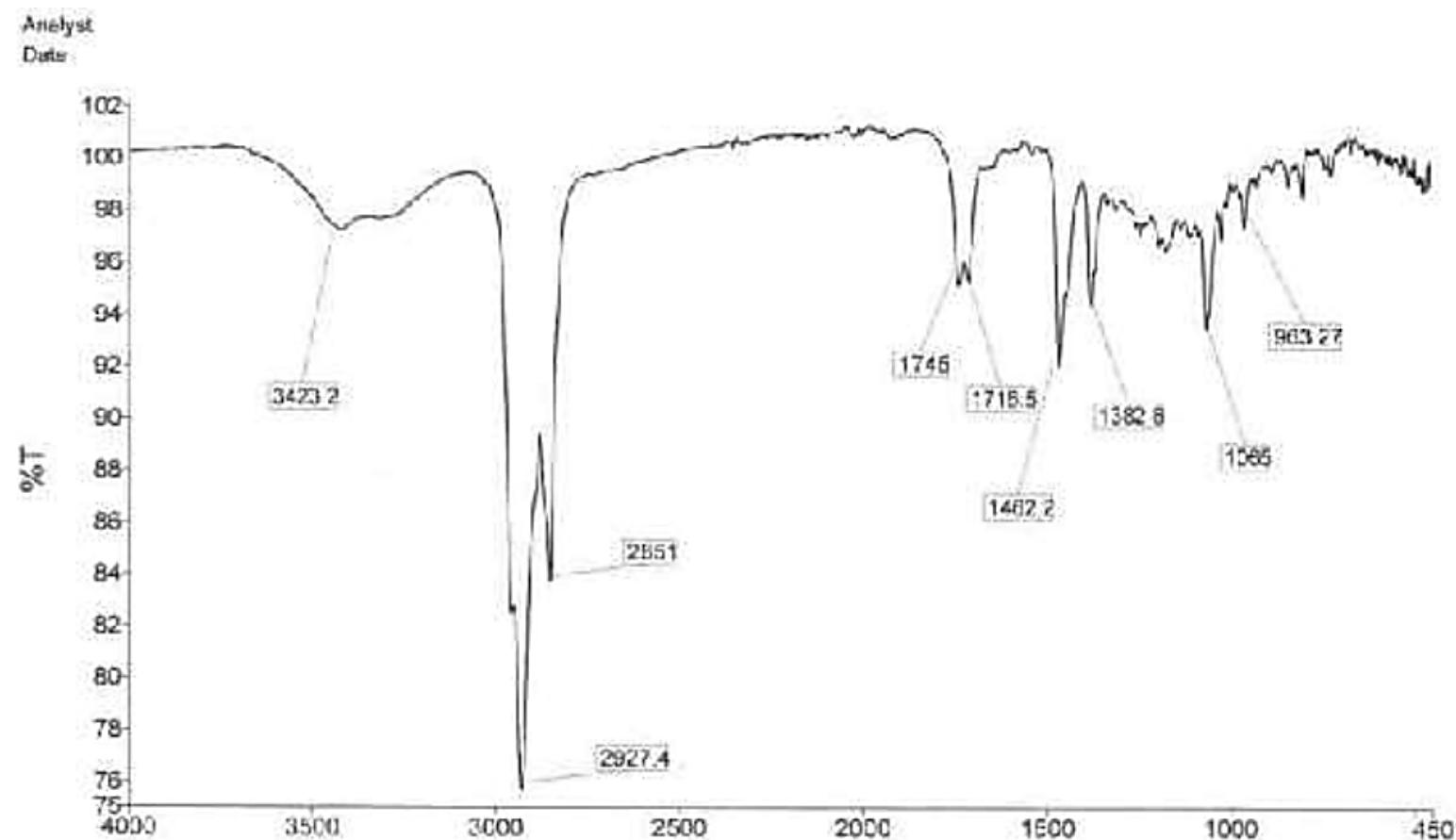


Figure S3.11 Fourier-Transform Infrared Spectroscopy (FTIR) spectrum of stigmasterol

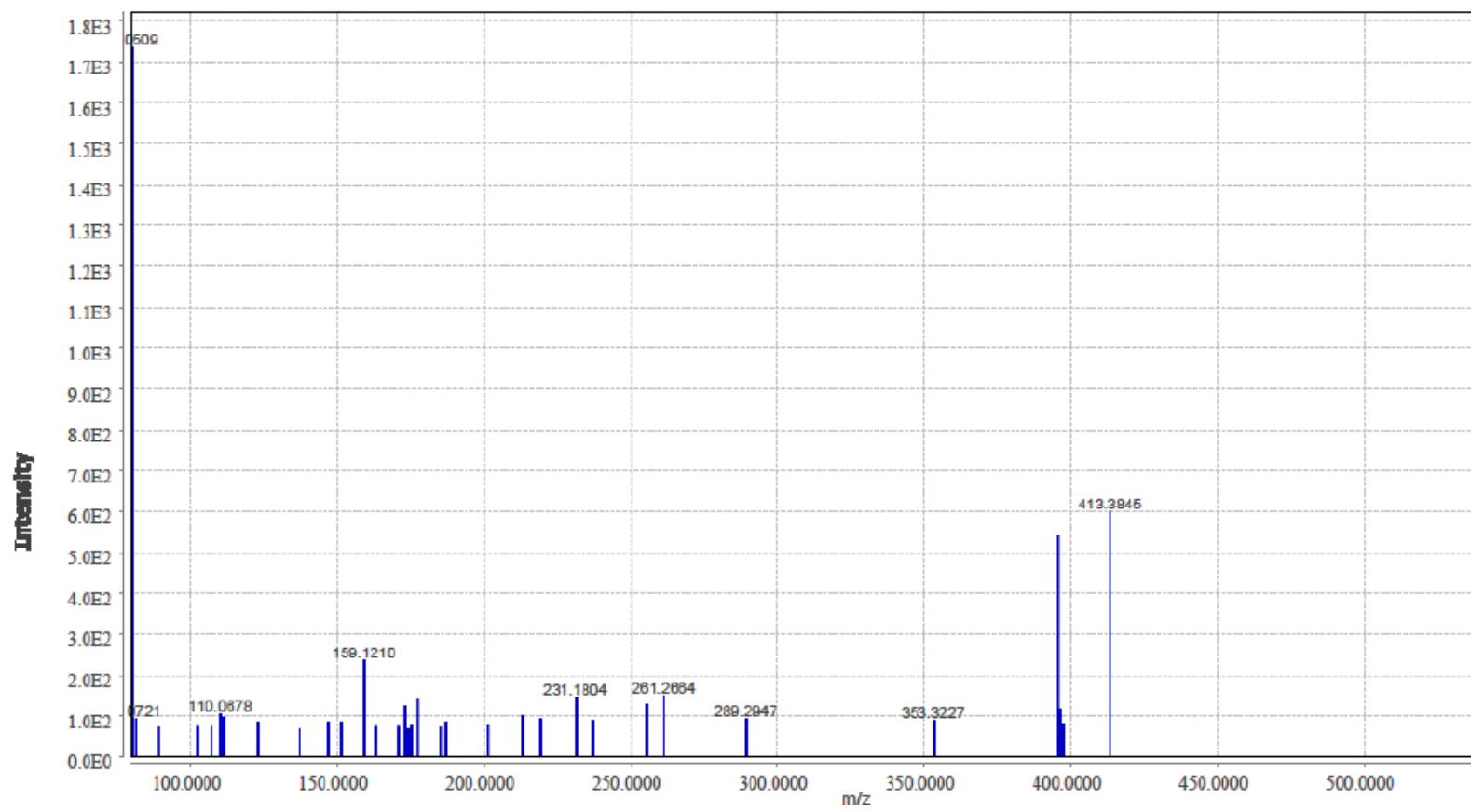


Figure S3.12 High-Resolution Electrospray Ionization Mass spectrum (HR-ESI-MS) of stigmasterol

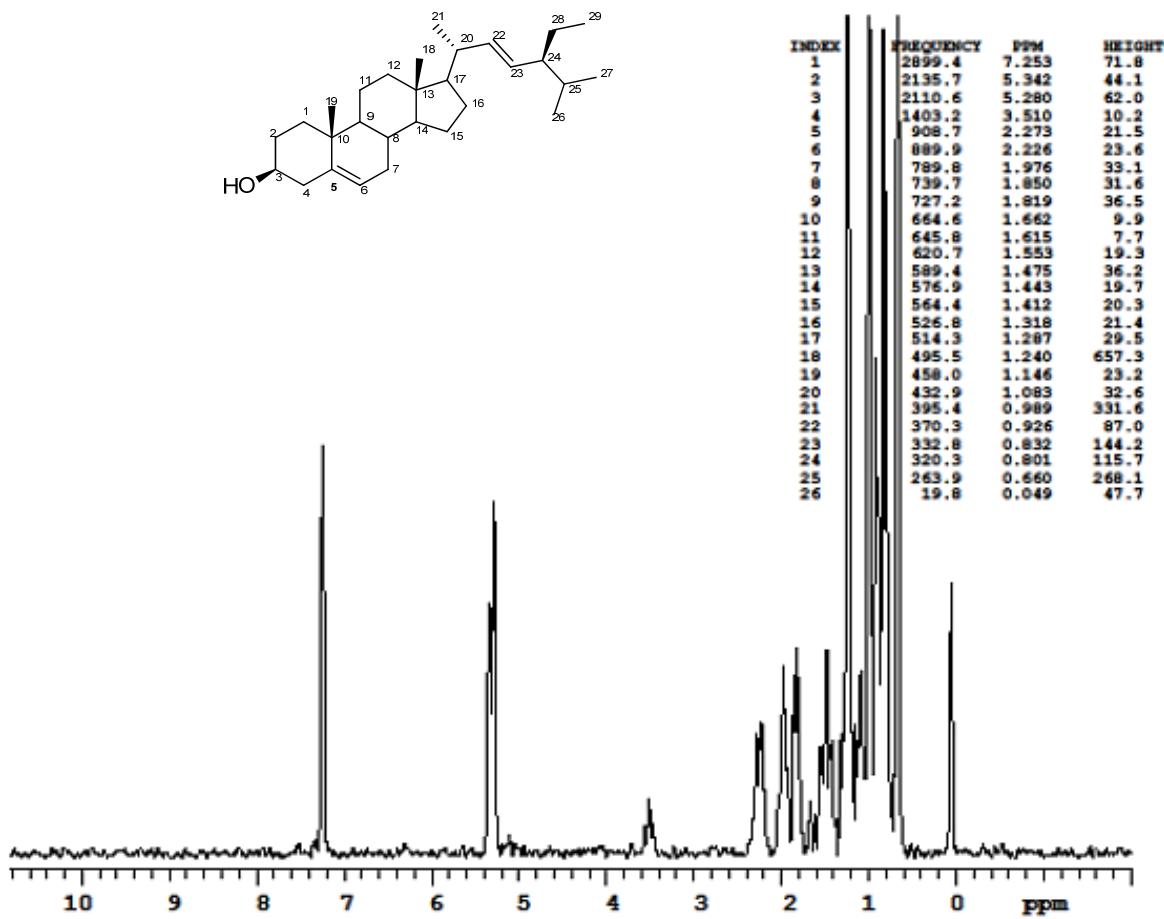


Figure S3.13 Proton Nuclear Magnetic Resonance (^1H NMR) spectrum of stigmasterol

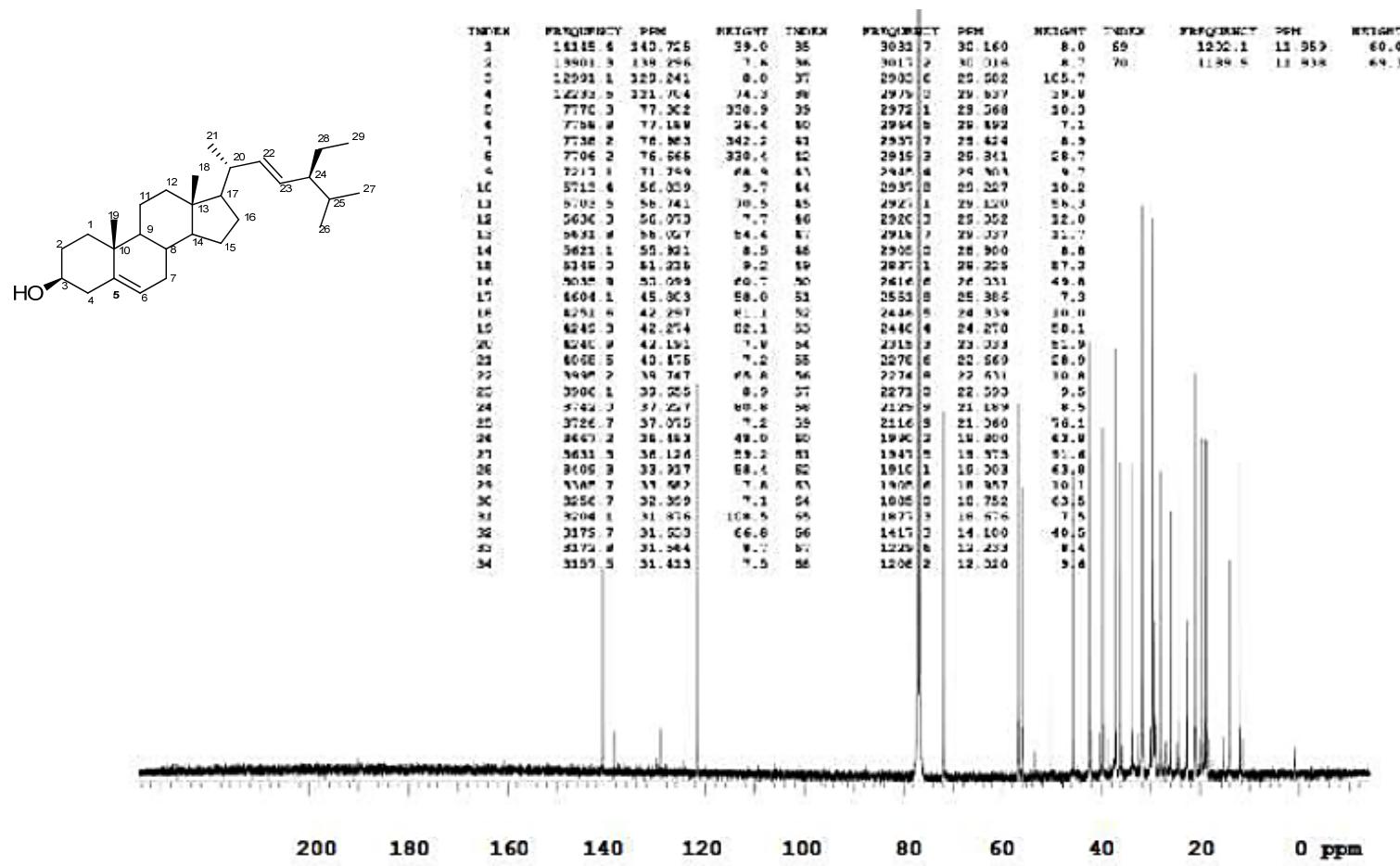


Figure S3.14 Carbon-13 Nuclear Magnetic Resonance (^{13}C NMR) spectrum of stigmasterol

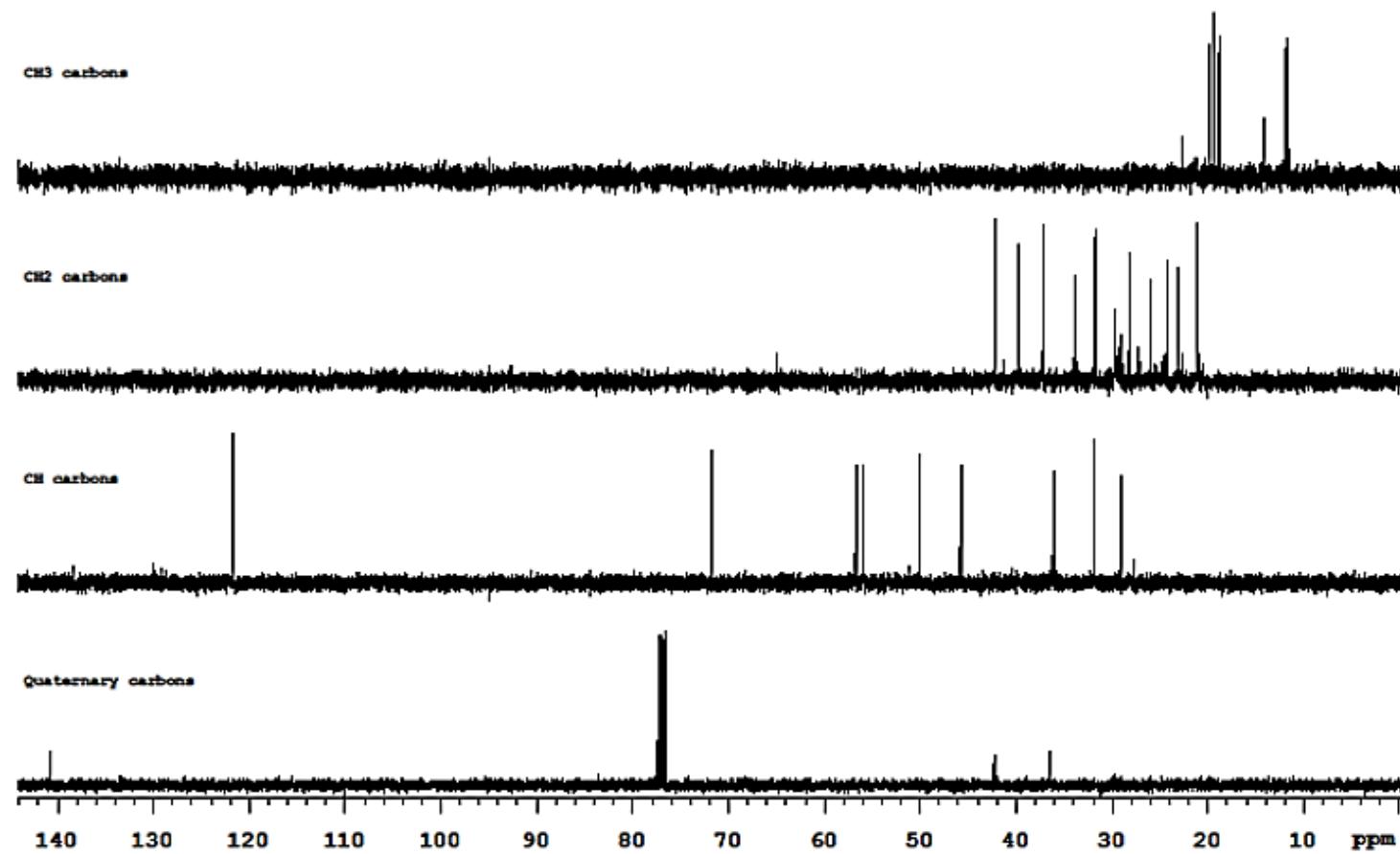


Figure S3.15 Distortionless Enhancement by Polarization Transfer (DEPT) NMR spectra of stigmasterol (CDCl₃, 100 MHz)

S4. Spectral data of compound 4

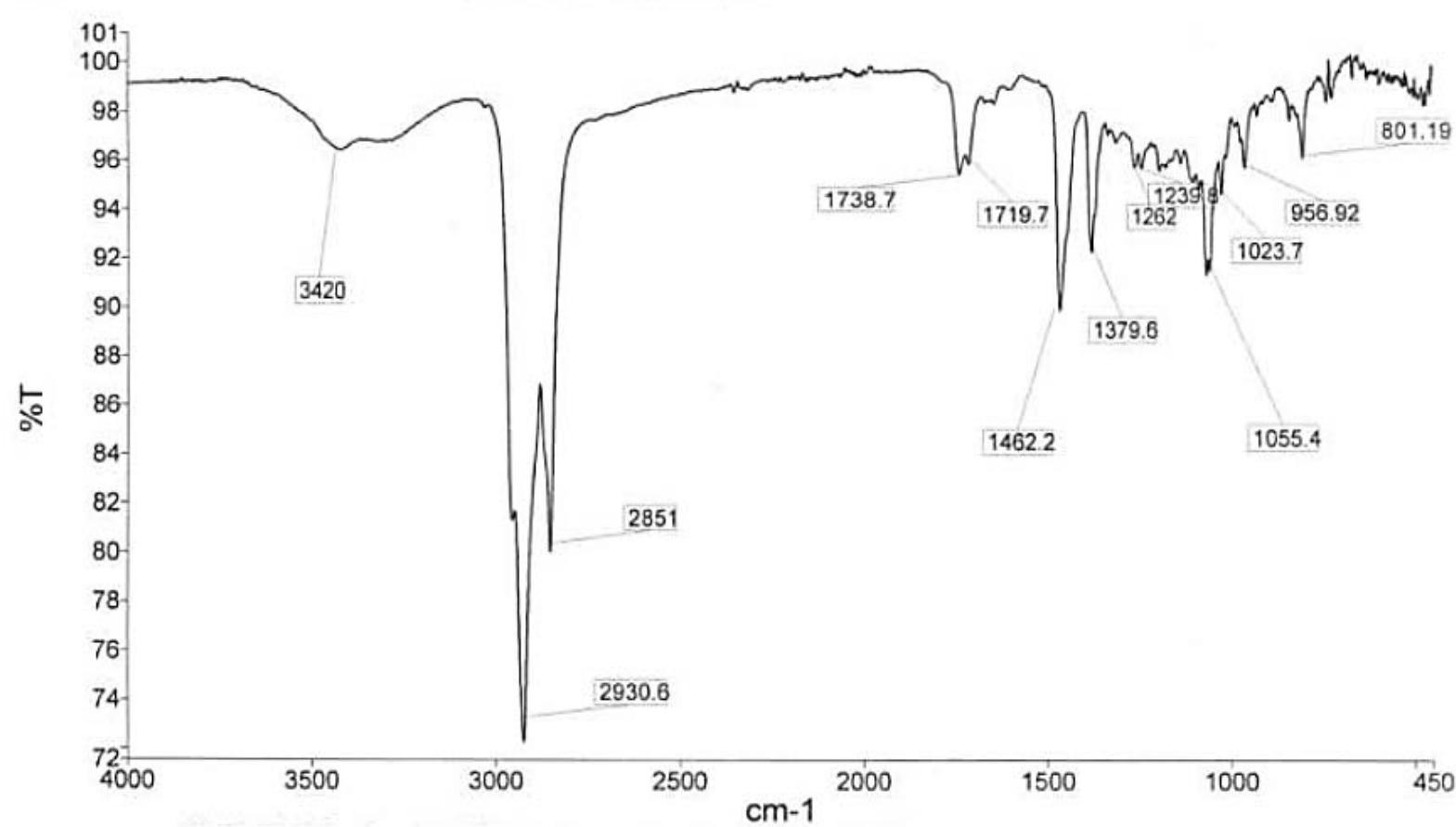


Figure S4.16. Fourier-Transform Infrared Spectroscopy (FTIR) spectrum of β -sitosterol

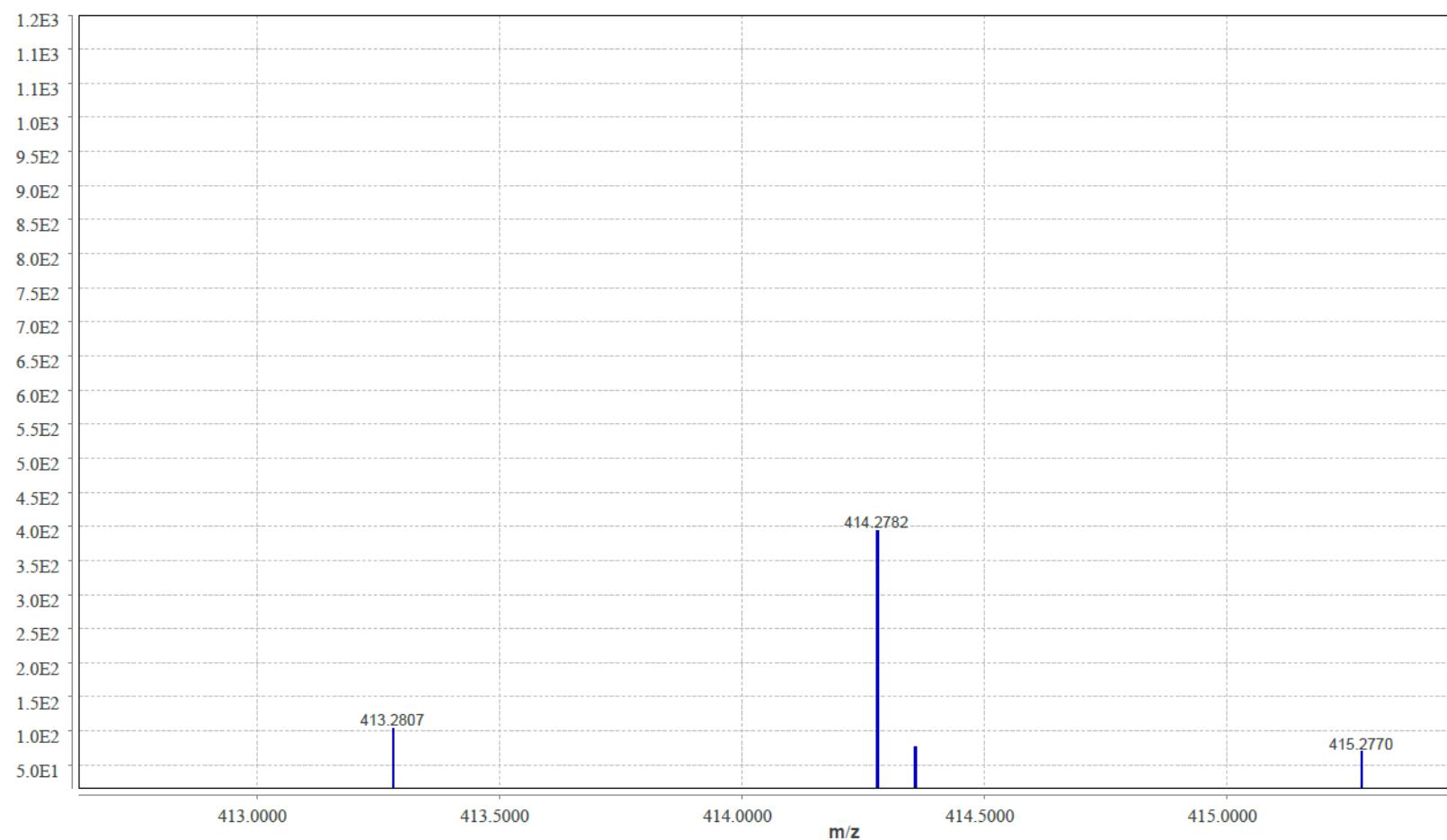


Figure S4.17 High-Resolution Electrospray Ionization Mass spectrum (HR-ESI-MS) of β -sitosterol; $[M+H] = 415.27$

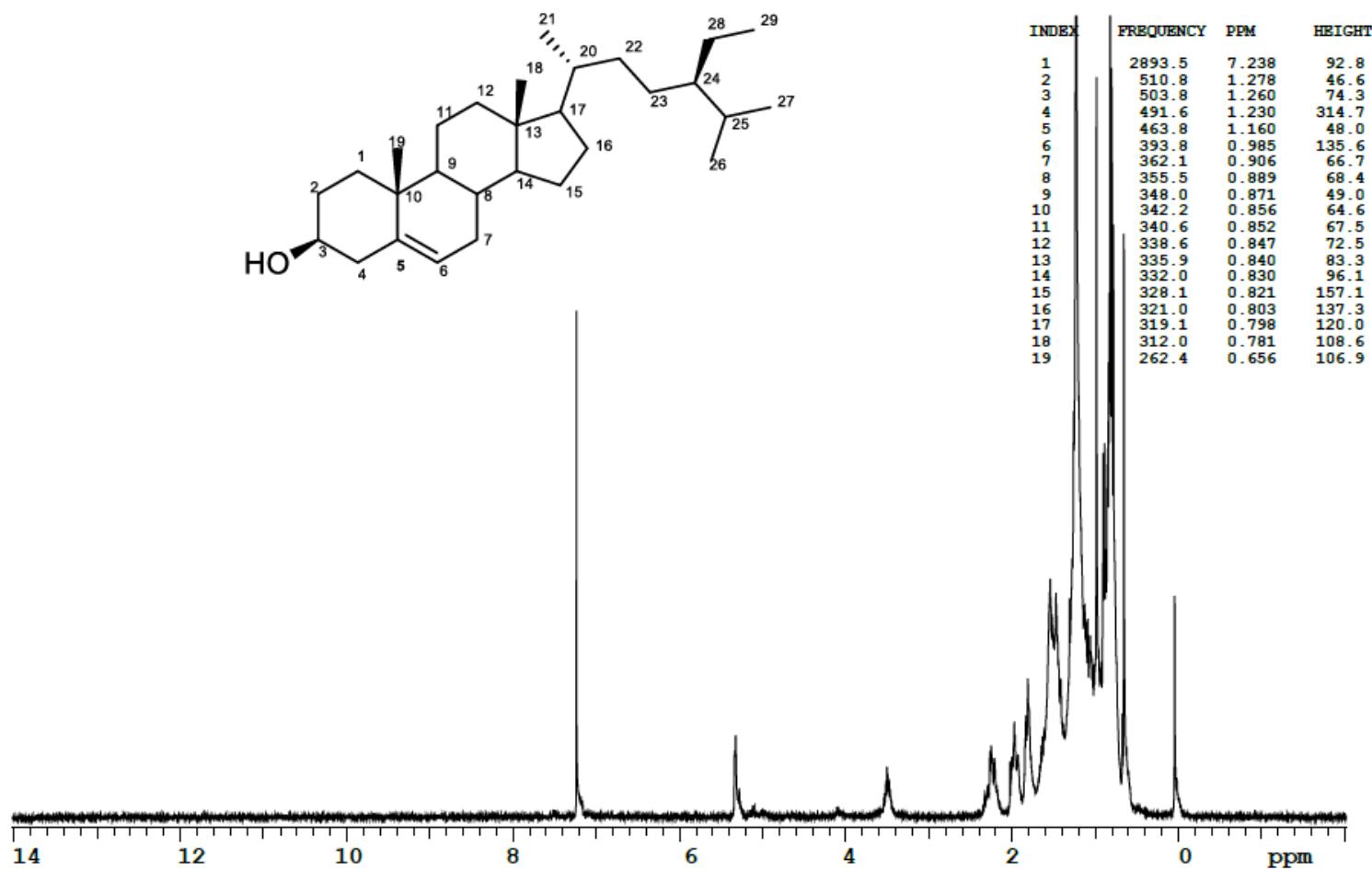


Figure S4.18 Proton Nuclear Magnetic Resonance (^1H NMR) spectrum of β -sitosterol

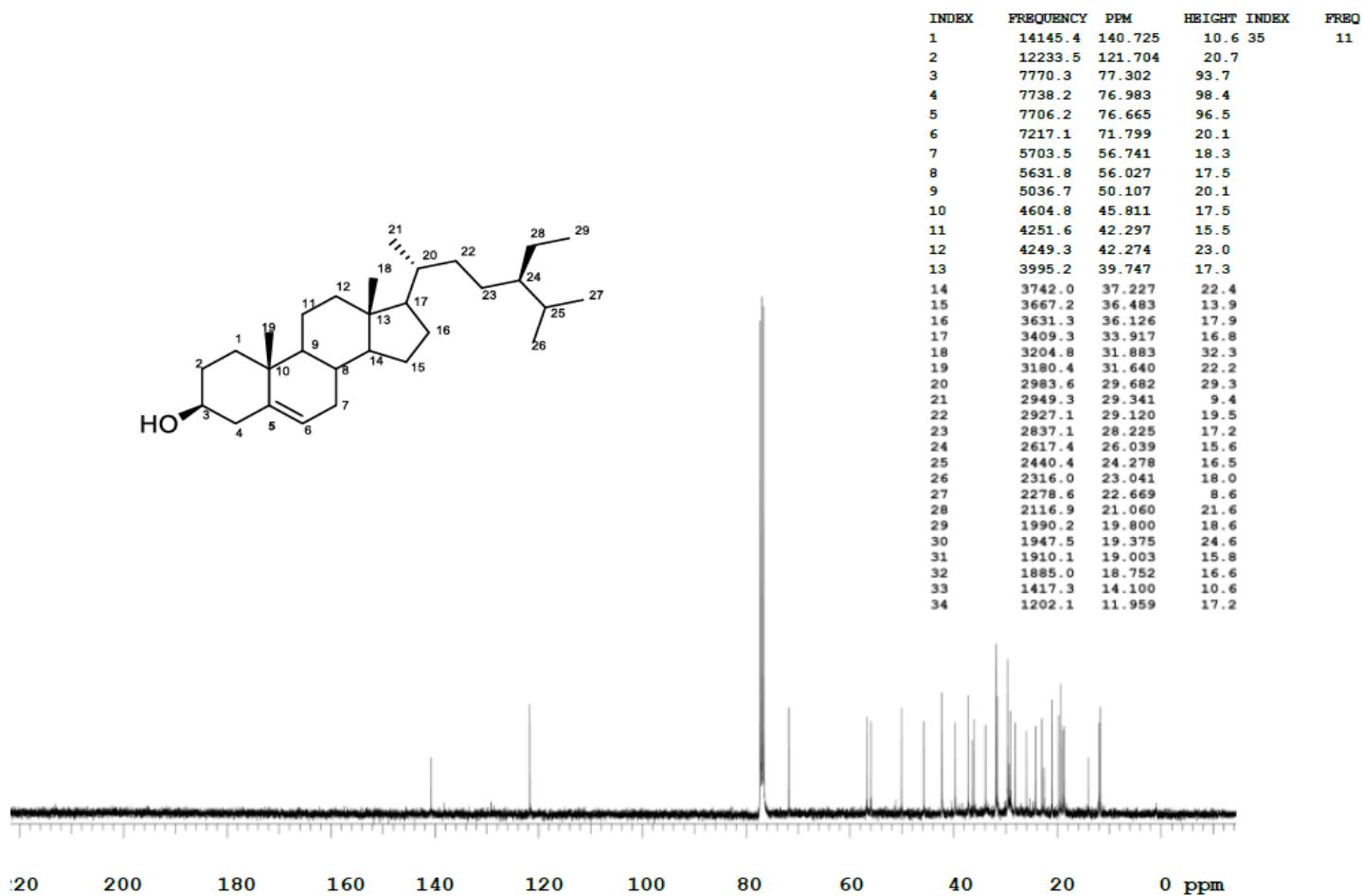


Figure S4.19 Carbon-13 Nuclear Magnetic Resonance (^{13}C NMR) spectrum of β -sitosterol

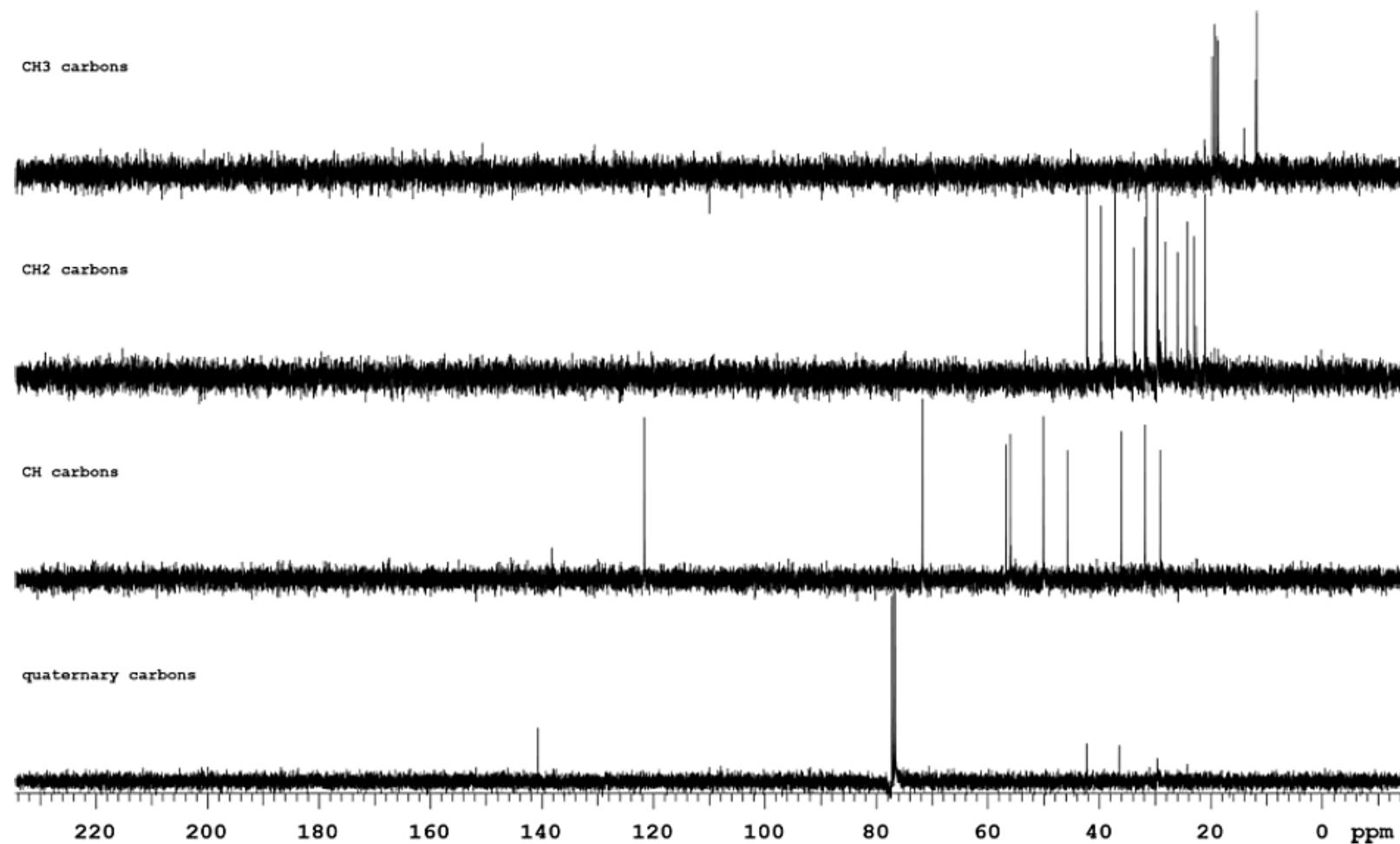


Figure S4.20 Distortionless Enhancement by Polarization Transfer (DEPT) NMR spectra of β -sitosterol (CDCl_3 , 100 MHz)

S5. Spectral data of compound 5

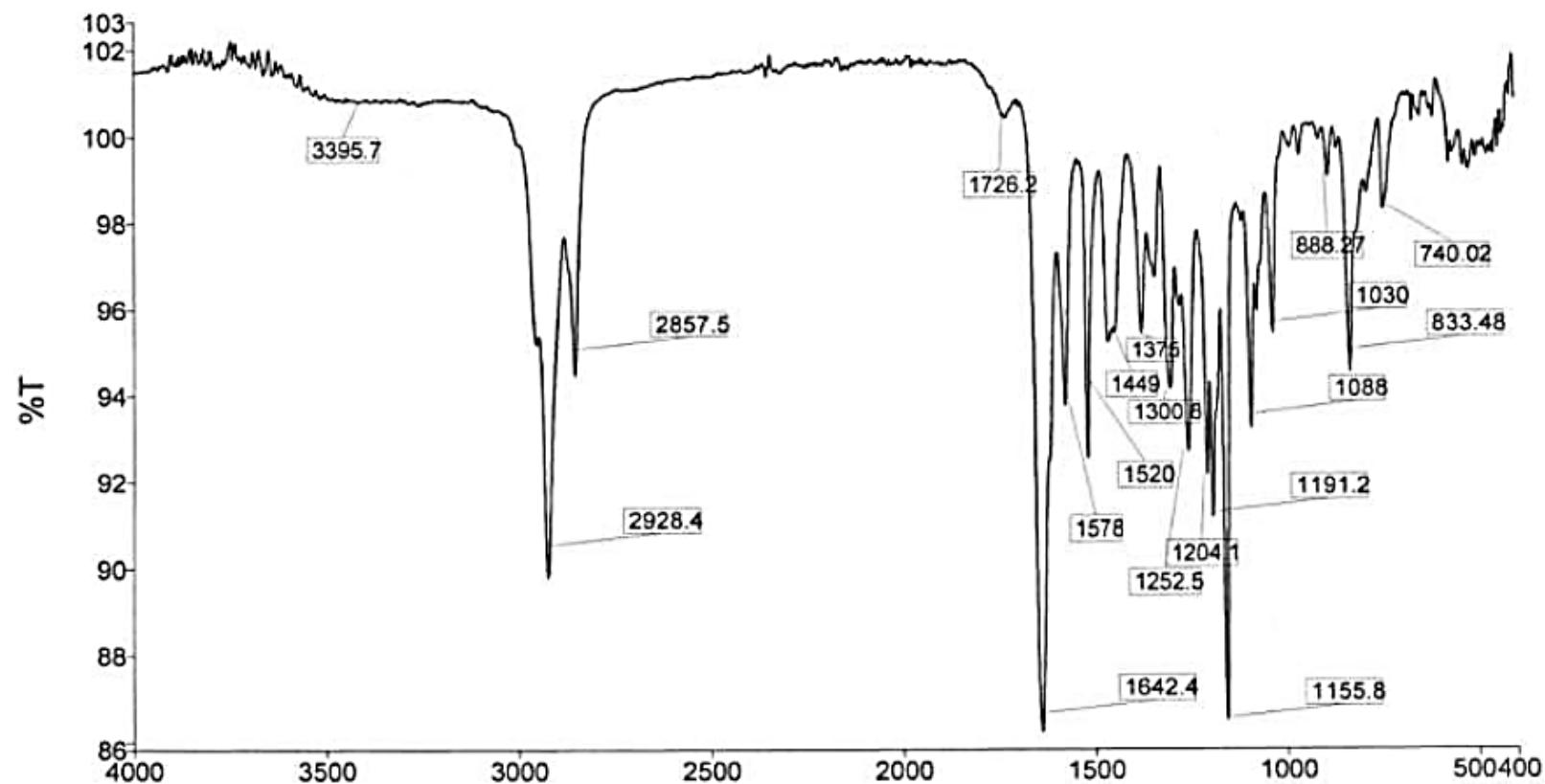


Figure S5.21. Fourier-Transform Infrared Spectroscopy (FTIR) spectrum of 5-hydroxy-7,4'-dimethoxyflavone

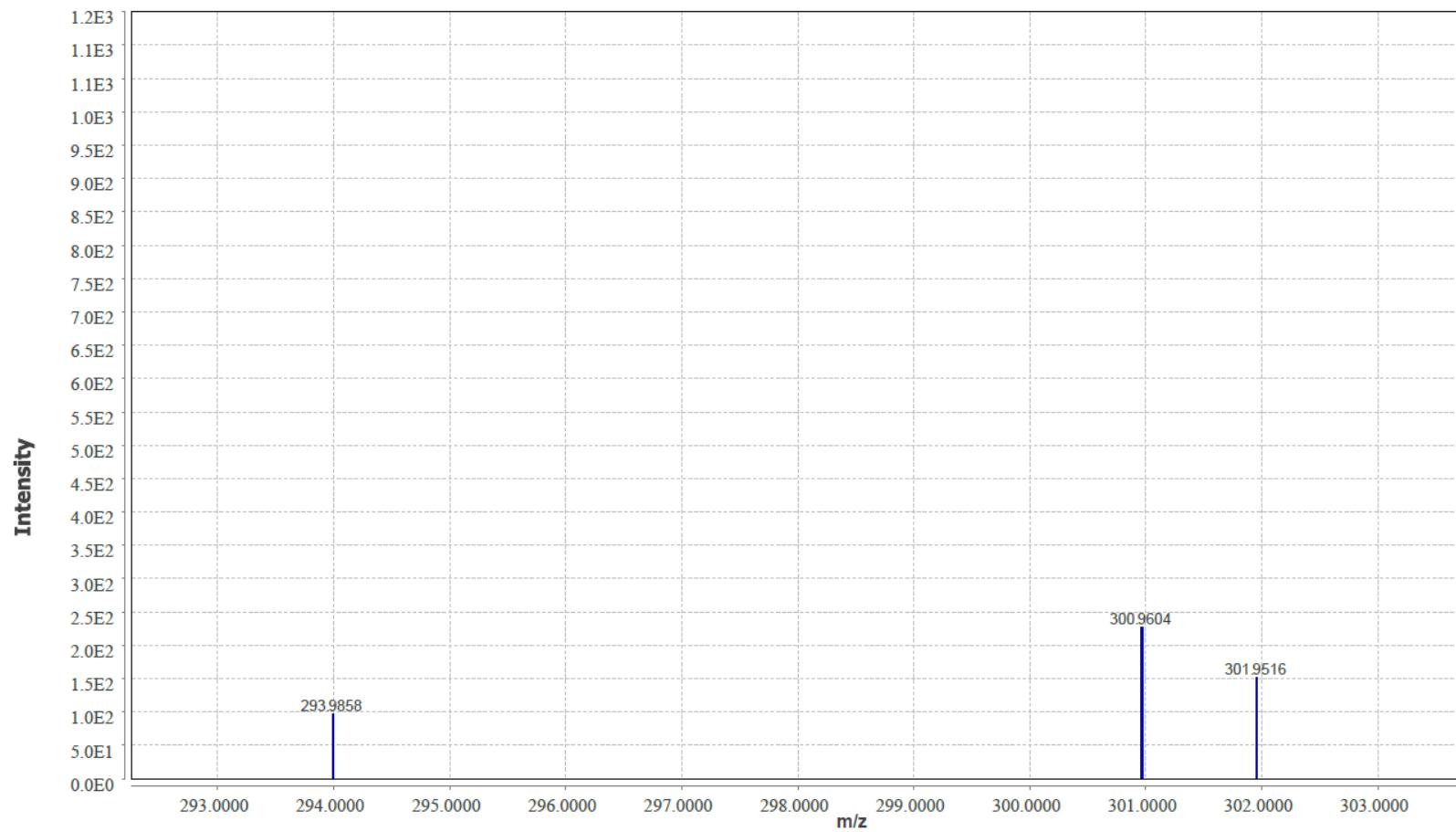


Figure S5.22. High-Resolution Electrospray Ionization Mass spectrum (HR-ESI-MS) of 5-hydroxy-7,4'-dimethoxyflavone; $[M+H]^+$ $m/z = 301.9516$

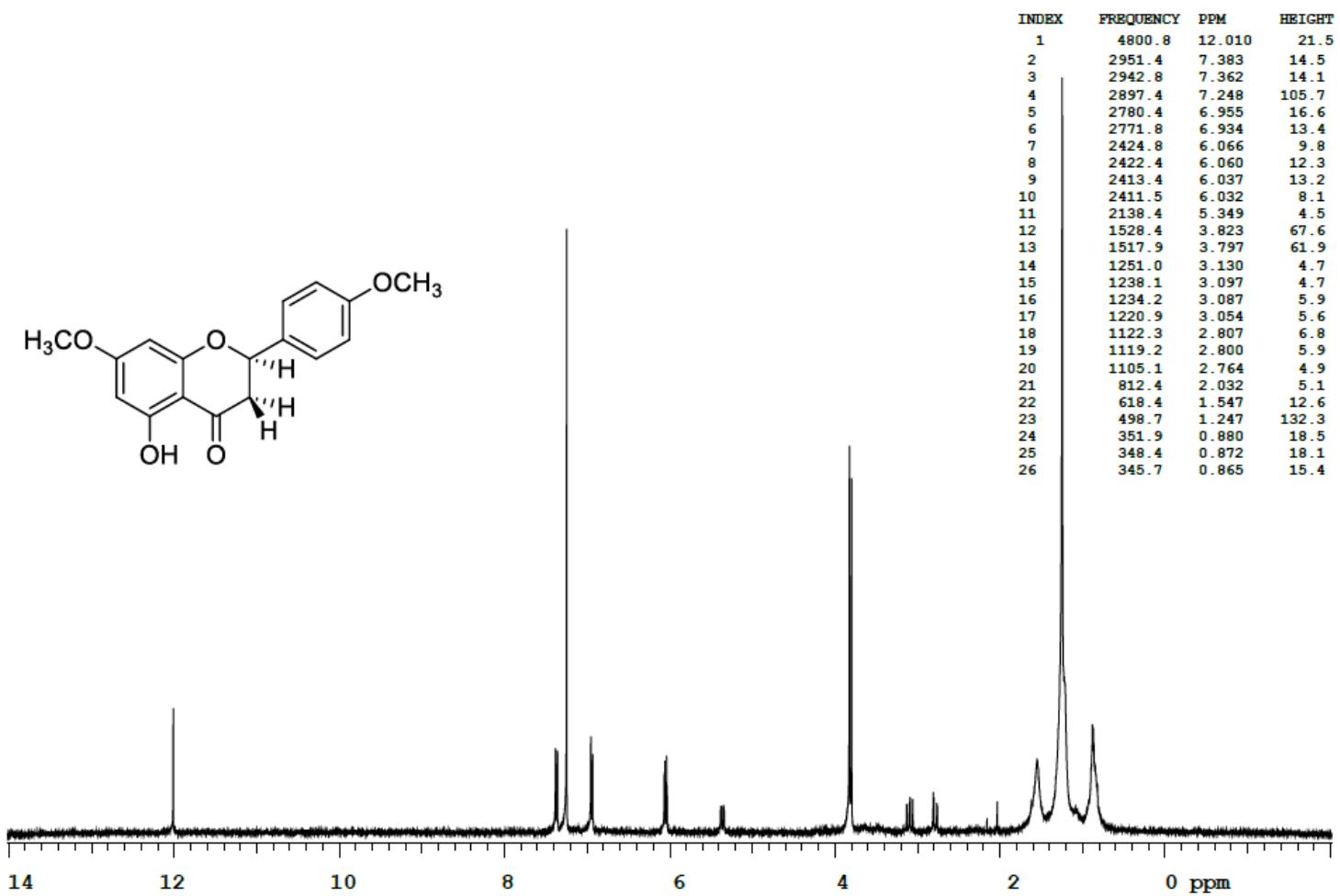


Figure S5.23. Proton Nuclear Magnetic Resonance (^1H NMR) spectrum of 5-hydroxy-7,4'-dimethoxyflavone (CDCl_3 , 400 MHz)

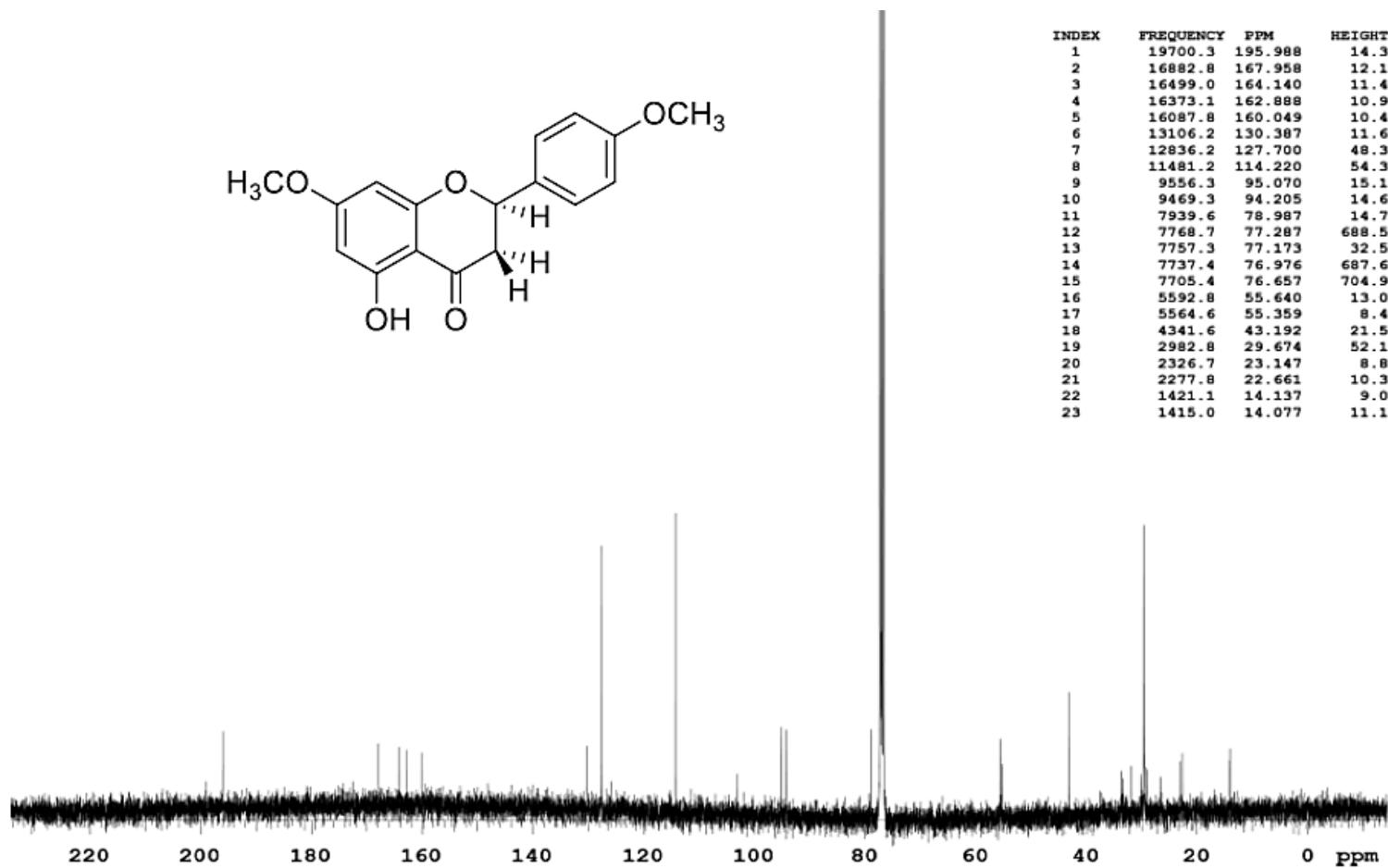


Figure S5.24. Carbon-13 Nuclear Magnetic Resonance (^{13}C NMR) spectrum of 5-hydroxy-7,4'-dimethoxyflavone (CDCl_3 , 100 MHz)

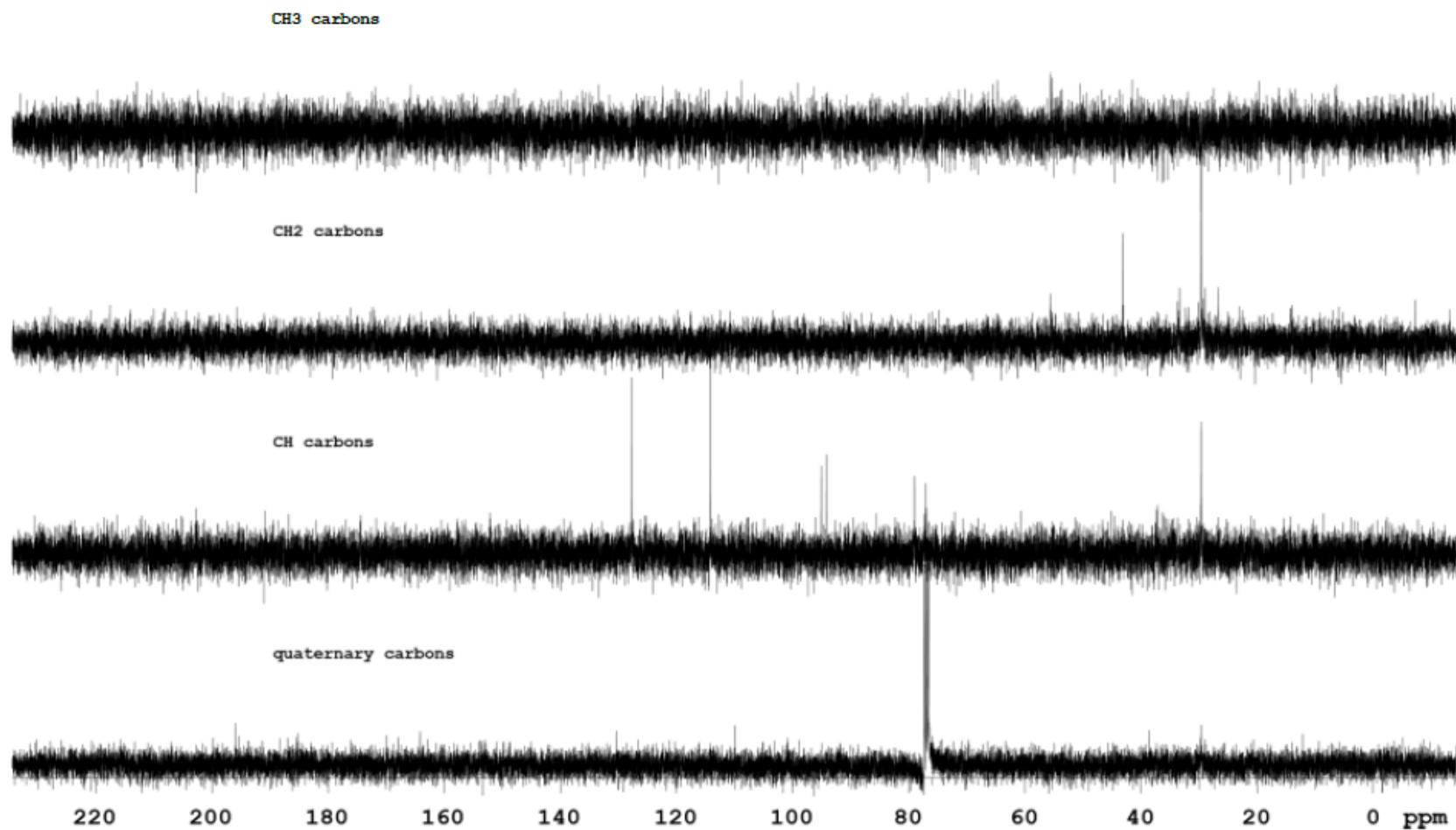


Figure S5.25. Distortionless Enhancement by Polarization Transfer (DEPT) NMR spectra of 5-hydroxy-7,4'-dimethoxyflavone (CDCl_3 , 100 MHz)