

## Electronic Supplementary Information

### Structure–activity studies of non-steroid analogues structurally-related to neuroprotective estrogens<sup>†</sup>

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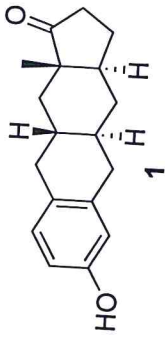
Copies of <sup>1</sup>H and <sup>13</sup>C NMR spectra for compounds 1 to 26.

mq2153

PPF15 Sequence: s2pu1

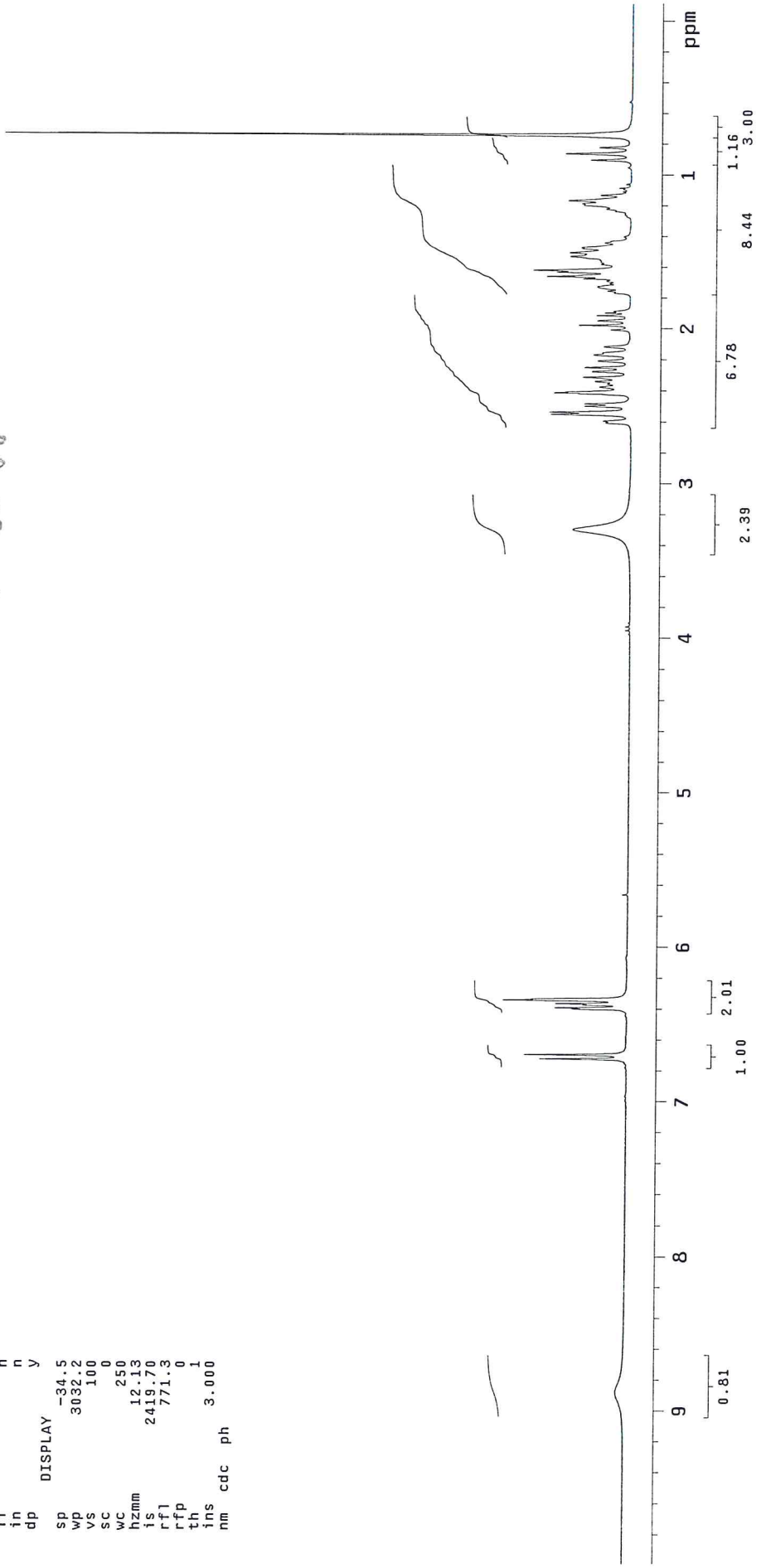
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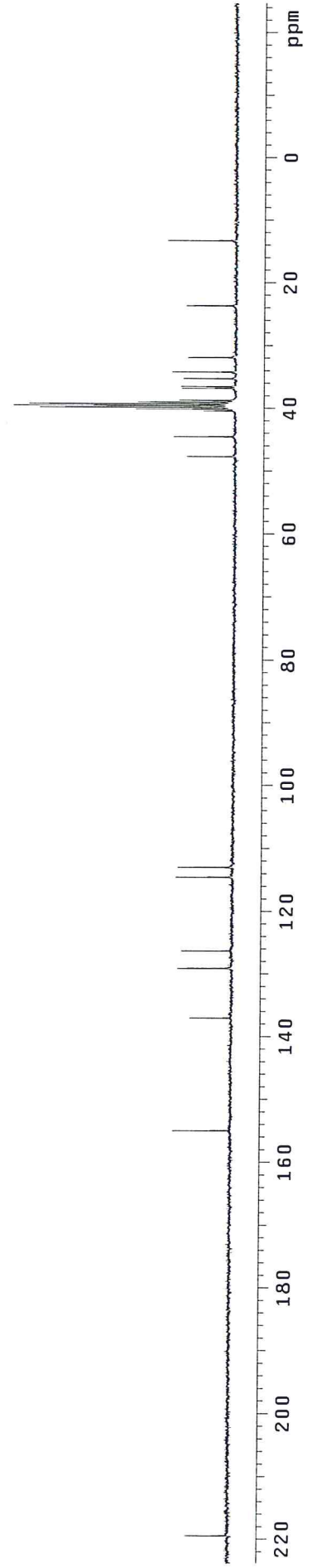
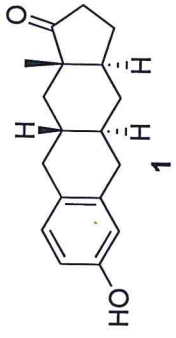


Hg

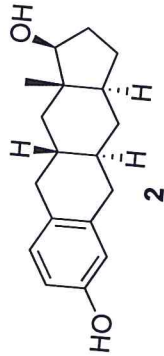
in DMSO-d6



INDEX	FREQUENCY	PPM	HEIGHT
1	16559.501	219.484	6.8
2	11692.423	154.975	9.3
3	10338.803	137.033	6.7
4	9739.866	129.095	8.7
5	9528.005	126.287	8.1
6	8640.479	114.523	9.1
7	8522.524	112.960	8.8
8	3595.896	47.661	7.7
9	3356.550	44.489	9.8
10	3045.057	40.360	5.1
11	3024.444	40.087	15.9
12	3003.830	39.814	31.2
13	2982.072	39.525	35.4
14	2961.458	39.252	32.9
15	2940.845	38.979	15.6
16	2916.795	38.660	9.0
17	2772.501	36.747	8.5
18	2751.887	36.474	8.7
19	2655.691	35.199	8.3
20	2575.527	34.137	10.1
21	2402.603	31.845	7.6
22	1783.053	23.633	7.9
23	997.449	13.220	10.9

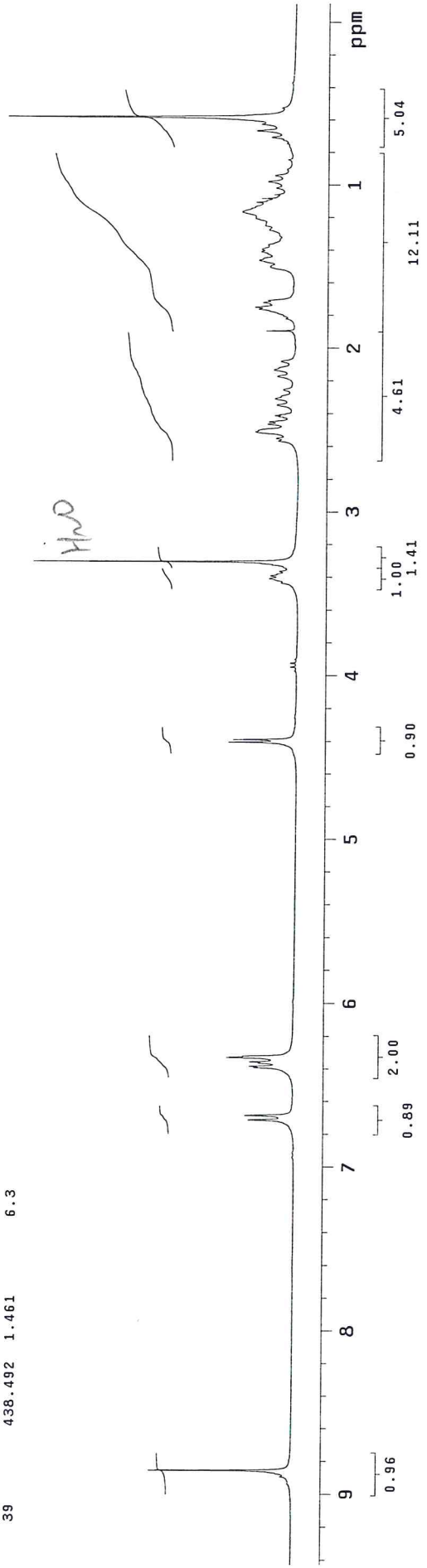


2155

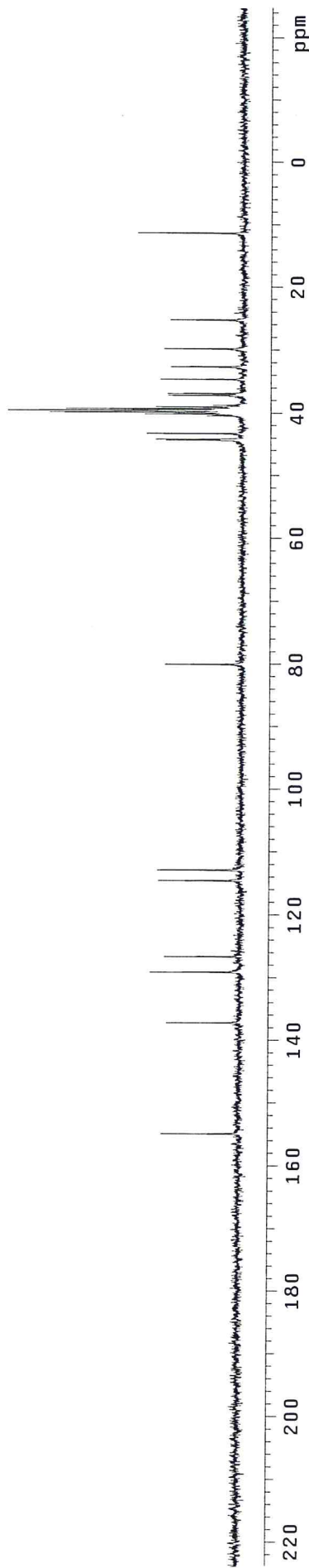
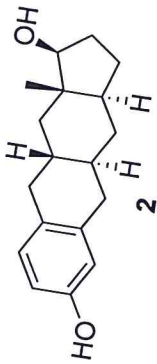


*in DMSo-d6*

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1	2668.801	8.895	1.8	422.285	1.407
2	2657.539	8.857	22.8	418.164	1.394
3	2014.185	6.713	7.3	409.923	1.366
4	2005.944	6.685	7.8	382.178	1.274
5	1917.765	6.392	6.5	374.212	1.247
6	1915.293	6.383	7.1	349.489	1.165
7	1909.524	6.364	5.7	331.358	1.104
8	1907.326	6.357	7.1	324.216	1.081
9	1899.085	6.329	10.8	317.074	1.057
10	1321.386	4.404	10.8	305.262	1.017
11	1316.441	4.387	10.1	293.449	0.978
12	1029.927	3.433	2.6	282.461	0.941
13	1022.235	3.407	4.5	270.924	0.903
14	1016.741	3.389	4.2	253.068	0.843
15	1017.290	3.390	4.2	223.126	0.744
16	1008.774	3.362	2.8	211.588	0.705
17	991.194	3.303	42.1	199.226	0.664
18	769.509	2.565	3.2	187.139	0.624
19	765.113	2.550	3.5	174.228	0.581
20	753.027	2.510	6.8	157.197	0.524
21	738.742	2.462	4.9	110.772	0.369
22	734.896	2.449	4.6		
23	725.007	2.416	3.2		
24	723.359	2.411	3.7		
25	721.436	2.404	2.9		
26	704.404	2.348	3.4		
27	692.592	2.308	3.7		
28	676.110	2.253	2.4		
29	651.661	2.172	3.3		
30	639.849	2.132	3.9		
31	624.191	2.080	2.8		
32	567.877	1.893	5.2		
33	545.626	1.818	2.1		
34	528.045	1.760	6.4		
35	524.474	1.748	6.9		
36	516.233	1.720	5.7		
37	512.387	1.708	4.9		
38	450.030	1.500	4.6		
39	438.492	1.461	6.3		

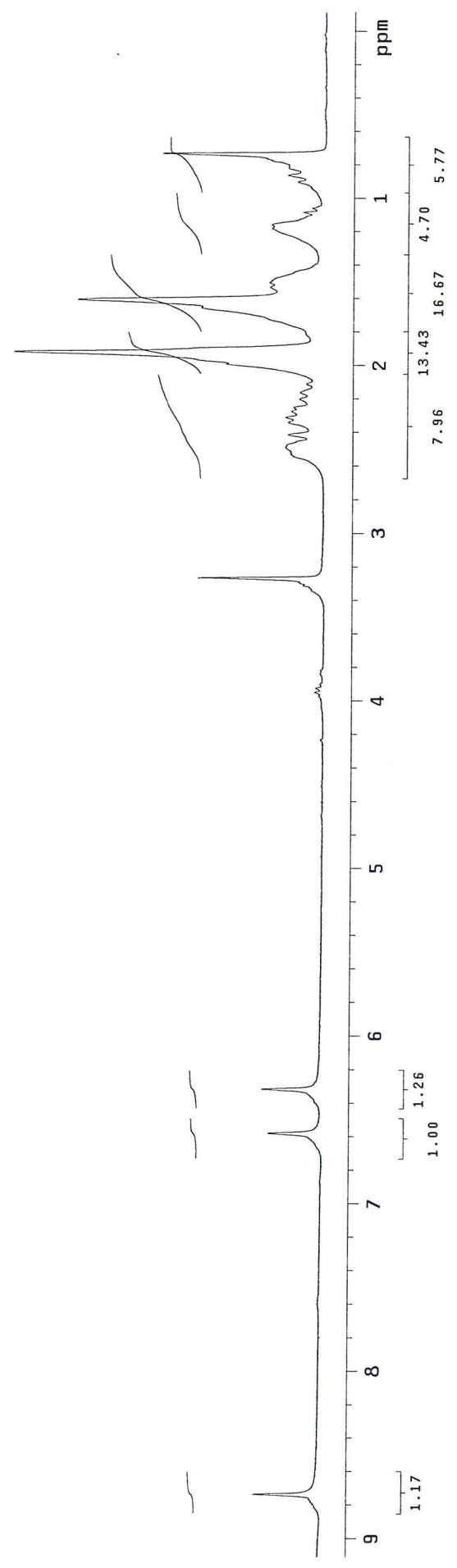
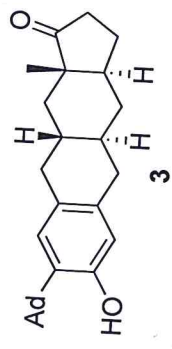


INDEX	FREQUENCY	PPM	HEIGHT
1	11686.697	154.899	12.4
2	10350.255	137.185	11.7
3	9738.721	129.080	14.3
4	9552.054	126.605	12.0
5	8641.624	114.538	13.1
6	8515.653	112.869	13.2
7	6034.016	79.976	12.1
8	3339.372	44.261	12.2
9	3326.775	44.094	13.8
10	3259.209	43.198	15.2
11	3043.912	40.345	5.7
12	3022.153	40.056	15.6
13	3001.540	39.783	30.7
14	2980.926	39.510	37.4
15	2974.055	39.419	17.6
16	2960.313	39.237	28.2
17	2938.554	38.948	13.8
18	2917.941	38.675	4.7
19	2797.695	37.081	11.8
20	2777.082	36.808	11.9
21	2606.448	34.547	13.1
22	2456.427	32.558	11.5
23	2242.276	29.720	12.5
24	1897.572	25.151	11.5
25	849.719	11.262	16.8

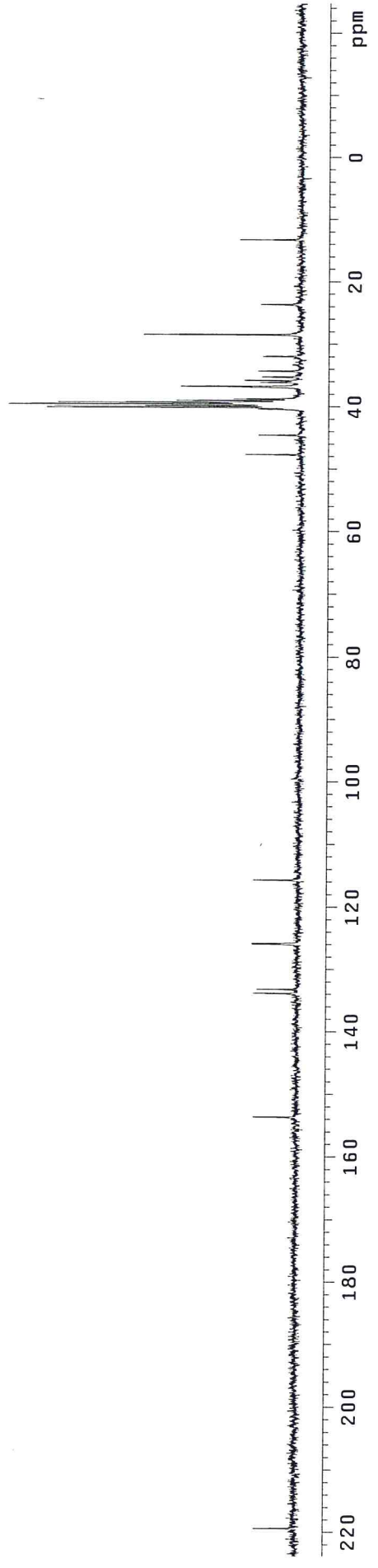
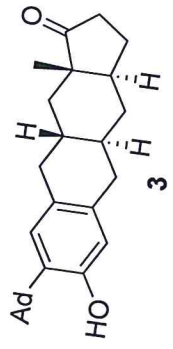


MQZ156

INDEX	FREQUENCY	PPM	HEIGHT
1	2622.377	8.740	10.5
2	1974.903	6.582	8.4
3	1895.514	6.317	9.5
4	979.656	3.265	20.3
5	746.983	2.490	6.3
6	723.633	2.412	5.9
7	701.657	2.338	5.8
8	692.317	2.307	6.3
9	682.153	2.273	5.4
10	659.353	2.197	4.1
11	647.815	2.159	4.0
12	632.432	2.108	3.0
13	576.942	1.923	50.0
14	482.719	1.609	39.8
15	460.194	1.534	8.9
16	451.129	1.504	9.0
17	353.609	1.179	8.7
18	347.840	1.159	8.7
19	324.765	1.082	3.7
20	317.623	1.059	2.2
21	270.374	0.901	4.6
22	258.287	0.861	6.1
23	220.104	0.734	26.3

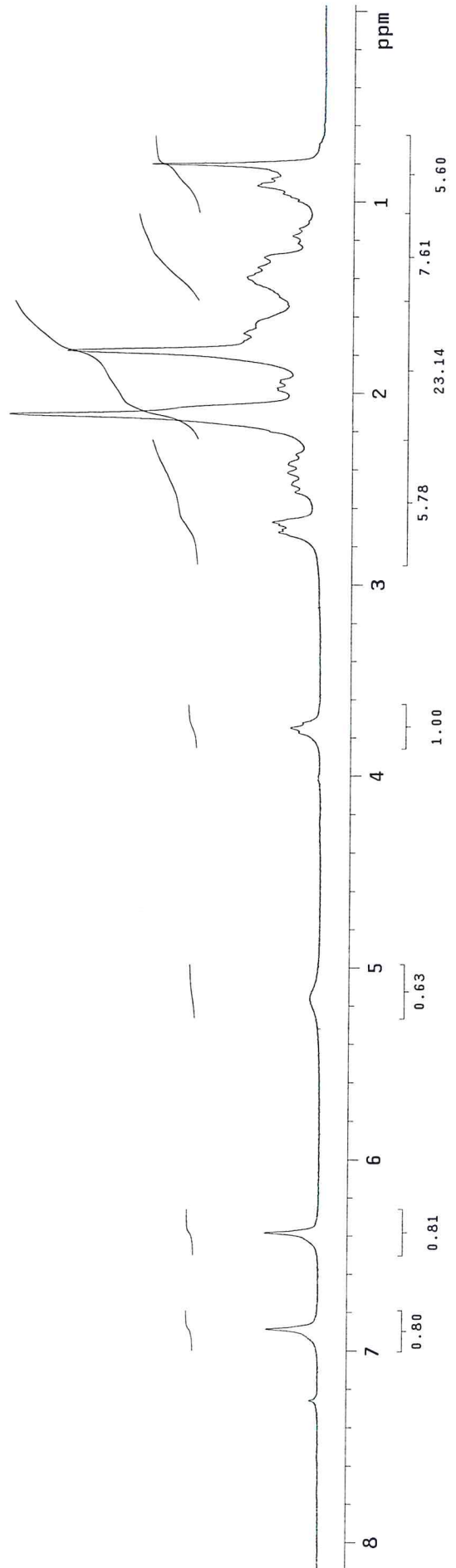
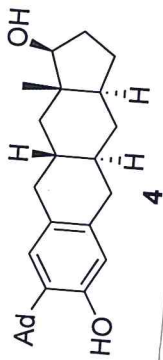


INDEX	FREQUENCY	PPM	HEIGHT
1	16552.630	219.393	6.5
2	11589.356	153.608	6.9
3	10094.876	133.800	7.0
4	10045.633	133.148	6.4
5	9497.085	125.877	7.3
6	9487.923	125.755	7.3
7	8724.078	115.631	7.1
8	3592.460	47.615	8.7
9	3356.550	44.489	6.6
10	3043.912	40.345	6.8
11	3022.153	40.056	40.5
12	3001.540	39.783	39.4
13	2980.926	39.510	46.8
14	2959.168	39.222	38.8
15	2938.554	38.948	19.8
16	2917.941	38.675	10.6
17	2766.775	36.672	19.1
18	2718.677	36.034	6.4
19	2694.628	35.715	8.9
20	2652.256	35.154	6.1
21	2581.253	34.213	6.7
22	2406.039	31.890	6.0
23	2143.789	28.414	25.1
24	1780.762	23.603	6.3
25	994.014	13.175	9.7



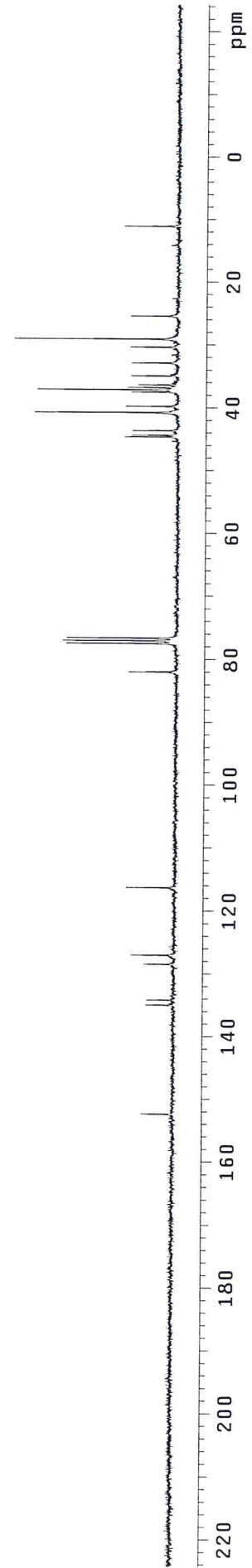
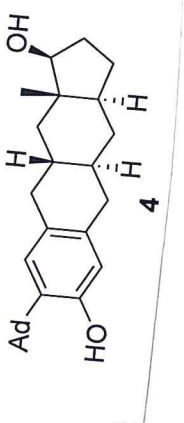
MQ2157

INDEX	FREQUENCY	PPM	HEIGHT
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2	1915.729	6.385	8.6
3	1551.748	5.172	1.7
4	1124.586	3.748	5.1
5	817.469	2.724	7.1
6	801.811	2.672	8.2
7	754.013	2.513	4.6
8	742.200	2.474	5.2
9	724.619	2.415	5.8
10	710.610	2.368	5.7
11	696.050	2.320	4.5
12	634.517	2.115	50.0
13	591.389	1.971	7.5
14	582.324	1.941	7.1
15	534.251	1.781	40.8
16	505.956	1.686	12.9
17	417.777	1.392	12.5
18	402.943	1.343	10.7
19	387.285	1.291	9.7
20	353.222	1.177	5.2
21	341.410	1.138	4.2
22	274.107	0.914	10.9
23	263.119	0.877	8.7
24	240.868	0.803	27.7



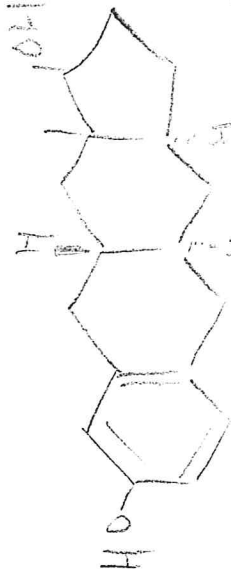
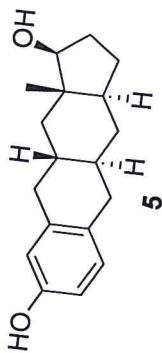


INDEX	FREQUENCY	PPM	HEIGHT
1	11494.166	152.348	5.0
2	10180.628	134.937	4.4
3	10118.787	134.118	4.3
4	9688.194	128.411	4.7
5	9580.546	126.984	6.8
6	8772.038	116.268	7.7
7	6179.317	81.903	7.5
8	5841.485	77.425	17.4
9	5809.419	77.000	18.0
10	5777.354	76.575	17.3
11	3363.283	44.578	8.3
12	3341.524	44.290	7.2
13	3286.555	43.561	7.1
14	3070.113	40.692	22.7
15	2995.676	39.706	8.2
16	2825.042	37.444	7.3
17	2796.412	37.065	22.3
18	2768.927	36.700	7.9
19	2738.007	36.290	6.2
20	2630.358	34.864	7.4
21	2475.757	32.815	7.3
22	2286.800	30.310	7.5
23	2190.604	29.035	26.0
24	1914.612	25.377	7.5
25	832.403	11.033	8.6

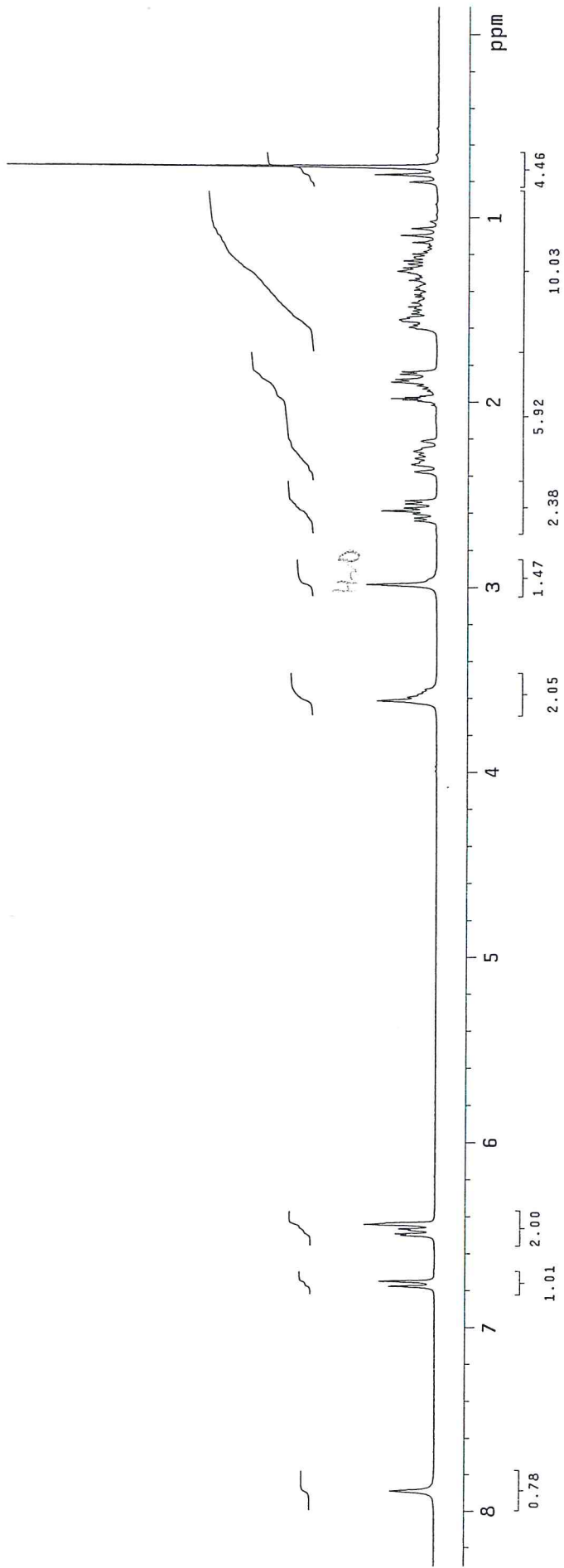


mq1261

Pulse Sequence: s2pu1



*in acetone-d6*



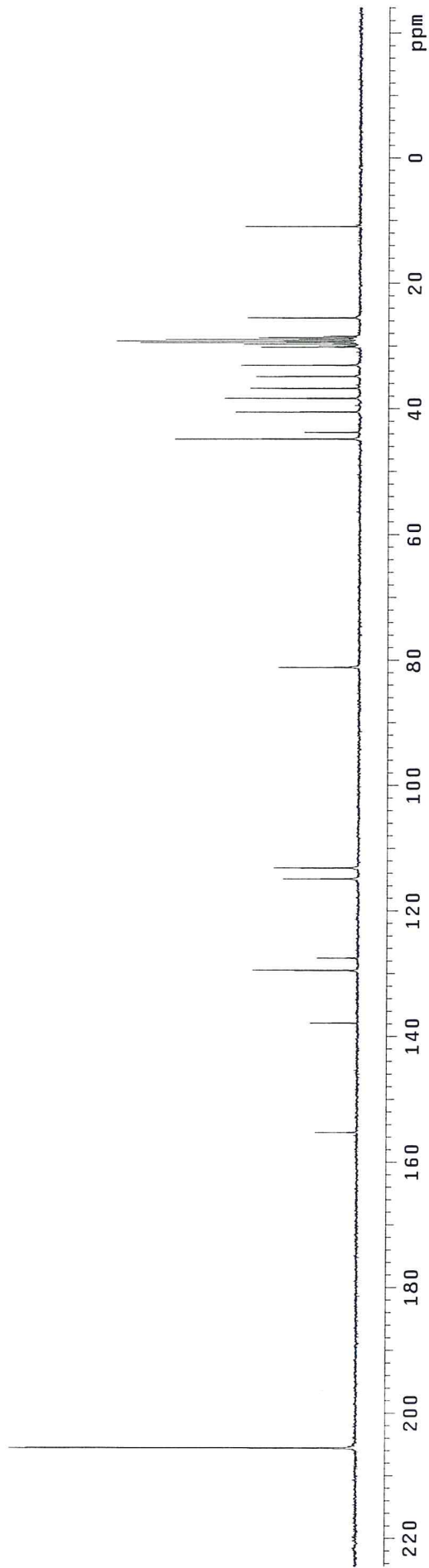
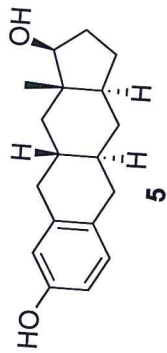
6

Q

O

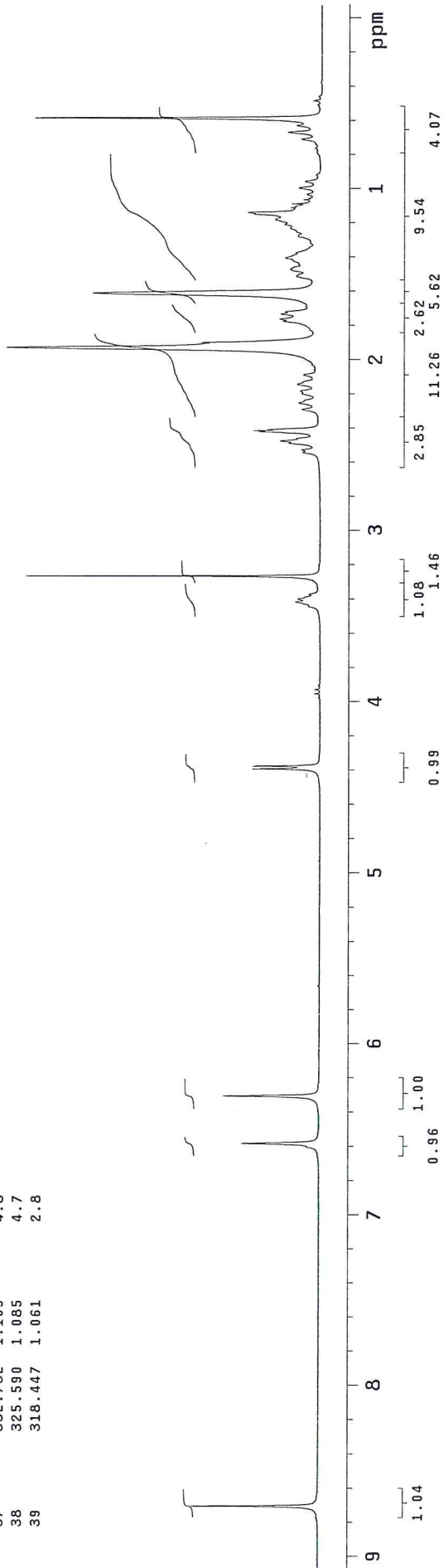
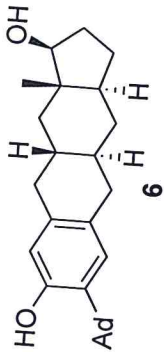
mq1261C

Pulse Sequence: s2pu1



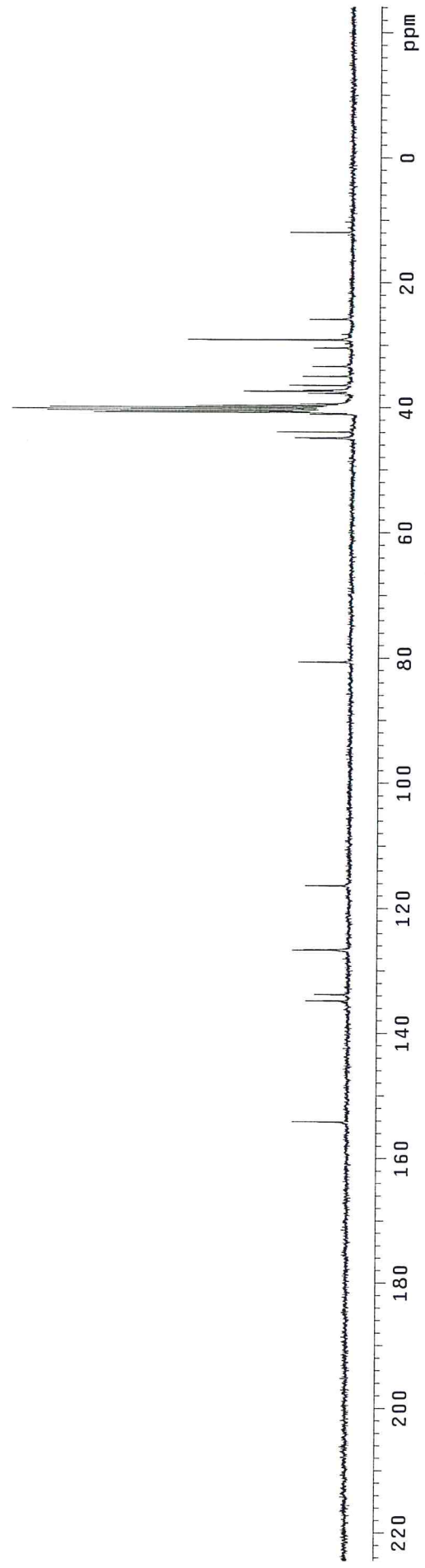
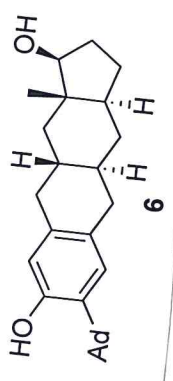
1262

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1	2611.938	8.705	40	309.107	1.030
2	1975.178	6.583	41	297.845	0.993
3	1891.943	6.305	42	286.307	0.954
4	1317.540	4.391	43	211.863	0.706
5	1312.870	4.376	44	200.050	0.667
6	1023.883	3.412	45	187.964	0.626
7	1019.213	3.397	46	174.778	0.582
8	1010.697	3.368			
9	979.107	3.263			
10	762.092	2.540			
11	757.696	2.525			
12	745.884	2.486			
13	741.764	2.472			
14	725.556	2.418			
15	723.908	2.413			
16	721.985	2.406			
17	686.549	2.288			
18	674.736	2.249			
19	653.584	2.178			
20	642.047	2.140			
21	625.839	2.086			
22	578.041	1.926			
23	569.251	1.897			
24	531.616	1.772			
25	527.771	1.759			
26	519.255	1.731			
27	515.409	1.718			
28	482.719	1.609			
29	452.777	1.509			
30	440.690	1.469			
31	420.637	1.402			
32	382.453	1.275			
33	361.576	1.205			
34	353.334	1.178			
35	343.445	1.145			
36	340.973	1.136			
37	332.732	1.109			
38	325.590	1.085			
39	318.447	1.061			



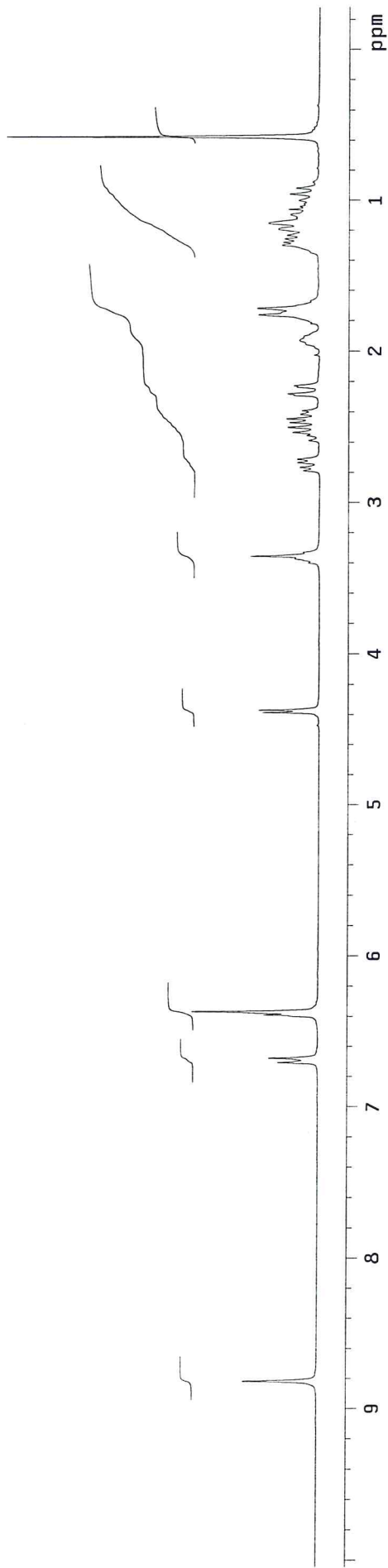
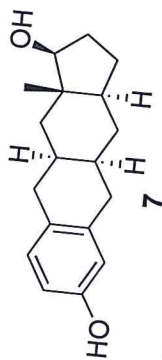
1262

INDEX	FREQUENCY	PPM	HEIGHT
1	11628.582	154.128	8.8
2	10168.459	134.776	6.8
3	10092.876	133.774	5.4
4	9553.489	126.625	9.0
5	9548.909	126.564	7.1
6	8775.902	116.318	6.9
7	6080.114	80.588	8.2
8	3386.616	44.887	6.7
9	3378.599	44.781	9.0
10	3307.597	43.840	11.9
11	3092.301	40.986	6.7
12	3071.687	40.713	41.2
13	3060.235	40.561	13.1
14	3051.073	40.440	48.7
15	3030.460	40.167	54.3
16	3008.701	39.878	48.3
17	2988.088	39.605	24.9
18	2967.474	39.332	8.2
19	2840.358	37.647	7.0
20	2815.163	37.313	17.2
21	2801.421	37.131	7.7
22	2743.016	36.357	9.9
23	2633.077	34.900	7.8
24	2512.832	33.306	6.3
25	2289.519	30.346	6.1
26	2192.177	29.056	26.2
27	1943.670	25.762	6.7
28	894.672	11.858	9.9



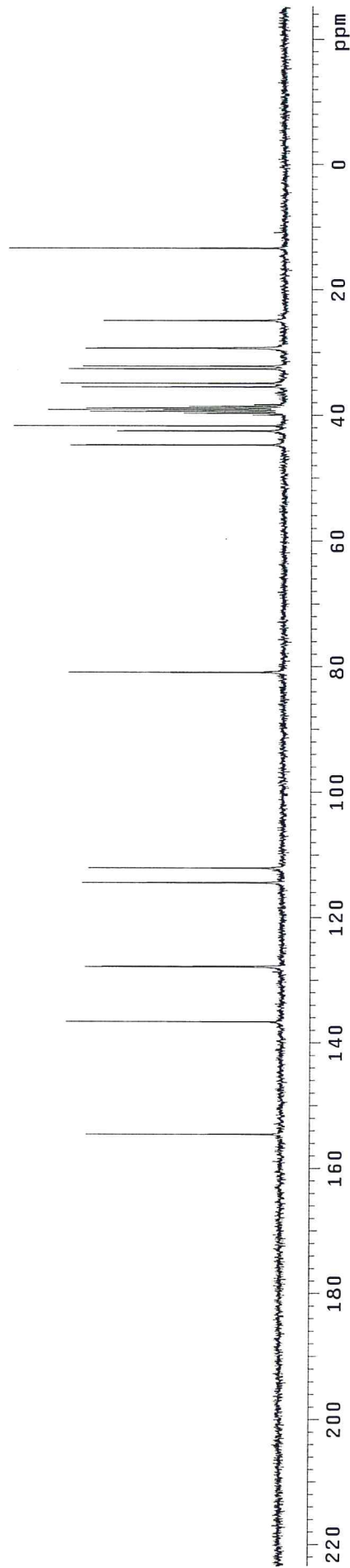
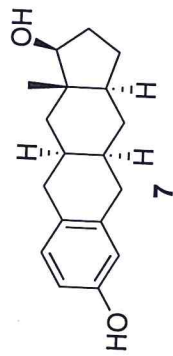
mq2072

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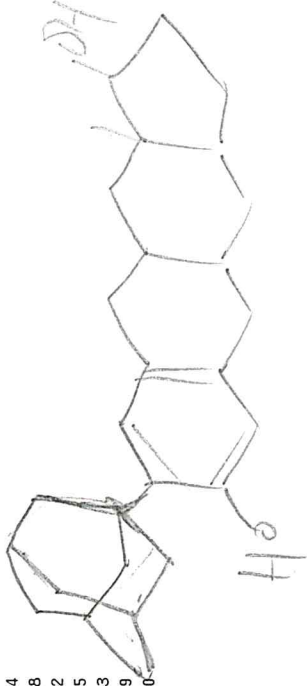


mq2072C

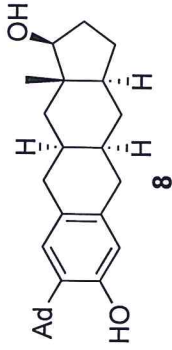
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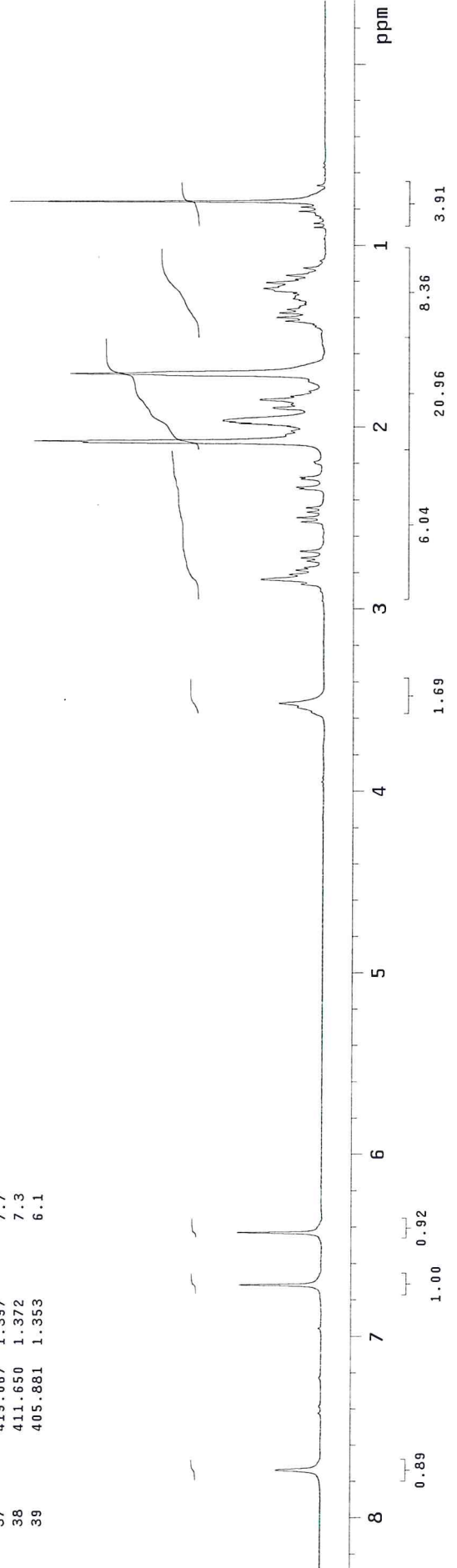
MQ2075



acetone-d6

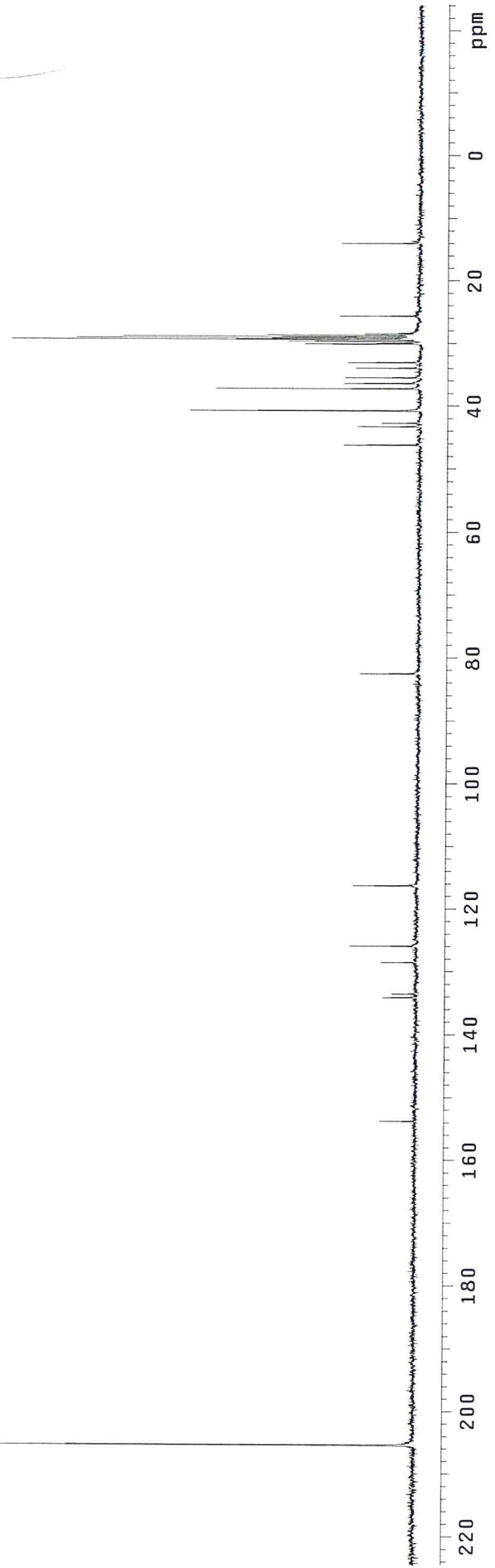
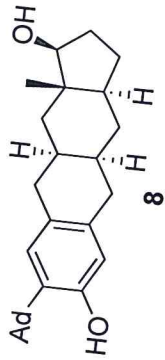


INDEX	FREQUENCY	PPM	HEIGHT	INDEX	FREQUENCY	PPM	HEIGHT
1	2322.206	7.739	7.2	40	400.113	1.333	4.1
2	2015.638	6.718	13.2	41	396.267	1.321	3.3
3	1929.381	6.430	13.6	42	390.773	1.302	4.2
4	1061.047	3.536	4.3	43	388.300	1.294	5.1
5	1055.003	3.516	7.2	44	378.961	1.263	5.2
6	858.316	2.861	3.7	45	370.719	1.236	9.8
7	850.899	2.836	10.1	46	367.972	1.226	7.5
8	842.384	2.807	5.6	47	361.105	1.203	9.4
9	835.516	2.785	4.5	48	355.886	1.186	4.8
10	830.846	2.769	3.2	49	349.018	1.163	6.2
11	820.133	2.733	2.8	50	336.656	1.122	3.5
12	814.639	2.715	3.8	51	242.708	0.809	4.3
13	803.925	2.679	3.9	52	235.566	0.785	3.9
14	755.303	2.517	3.8	53	226.501	0.755	50.0
15	748.435	2.494	4.5				
16	739.370	2.464	2.8				
17	732.228	2.440	2.9				
18	701.461	2.338	4.2				
19	698.439	2.328	4.5				
20	685.254	2.284	3.8				
21	682.232	2.274	4.0				
22	625.094	2.083	38.3				
23	622.622	2.075	46.1				
24	606.139	2.020	5.4				
25	598.722	1.995	6.1				
26	596.250	1.987	9.0				
27	594.053	1.980	13.7				
28	591.855	1.973	15.2				
29	589.383	1.964	16.2				
30	567.681	1.892	8.3				
31	562.462	1.875	5.4				
32	555.319	1.851	10.3				
33	549.276	1.831	5.5				
34	540.760	1.802	2.6				
35	512.191	1.707	40.3				
36	425.111	1.417	6.4				
37	419.067	1.397	7.7				
38	411.650	1.372	7.3				
39	405.881	1.353	6.1				



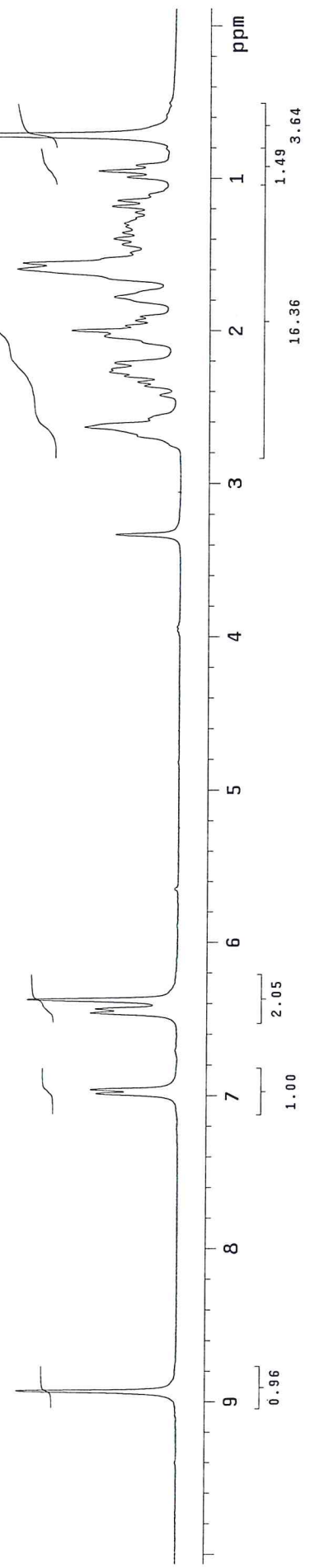
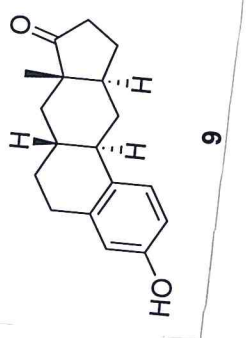


INDEX	FREQUENCY	PPM	HEIGHT
1	15499.344	205.433	82.8
2	11599.956	153.749	5.7
3	10115.783	134.077	5.3
4	10072.266	133.501	3.9
5	9694.352	128.492	5.6
6	9498.523	125.896	10.6
7	8770.179	116.242	10.2
8	6222.121	82.470	9.3
9	3481.670	46.147	12.0
10	3259.502	43.202	9.9
11	3218.275	42.656	6.0
12	3071.690	40.713	36.5
13	2806.005	37.192	32.5
14	2741.874	36.342	12.0
15	2672.017	35.416	11.9
16	2557.498	33.898	10.1
17	2489.931	33.002	11.5
18	2265.473	30.027	18.2
19	2254.021	29.875	6.8
20	2234.553	29.617	20.9
21	2213.939	29.344	65.0
22	2195.616	29.101	54.6
23	2176.148	28.843	47.3
24	2156.680	28.585	24.3
25	2137.211	28.327	8.8
26	1931.076	25.595	12.8
27	1050.421	13.923	12.4



M21310

INDEX	FREQUENCY	PPM	HEIGHT
1	2680.614	8.934	25.7
2	2096.596	6.988	13.1
3	2088.904	6.962	14.0
4	1938.917	6.462	14.1
5	1930.676	6.435	13.3
6	1913.095	6.376	24.2
7	999.435	3.331	10.4
8	789.837	2.632	15.4
9	772.530	2.575	5.3
10	726.106	2.420	3.4
11	707.975	2.360	5.9
12	700.284	2.334	7.0
13	689.296	2.297	9.1
14	680.780	2.269	11.6
15	676.385	2.254	11.2
16	663.199	2.210	10.7
17	610.181	2.034	12.3
18	599.468	1.998	17.6
19	589.304	1.964	9.0
20	579.415	1.931	7.4
21	571.723	1.905	6.7
22	532.990	1.776	10.8
23	478.873	1.596	26.3
24	467.061	1.557	25.4
25	445.634	1.485	8.3
26	428.878	1.429	9.6
27	418.439	1.395	10.9
28	406.627	1.355	9.5
29	393.990	1.313	9.0
30	387.947	1.293	9.3
31	365.971	1.220	7.5
32	354.708	1.182	11.2
33	343.170	1.144	10.3
34	332.457	1.108	5.4
35	296.746	0.989	8.8
36	285.208	0.951	13.3
37	273.671	0.912	7.4
38	215.159	0.717	75.6

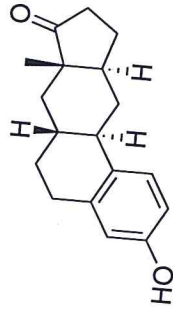


1310

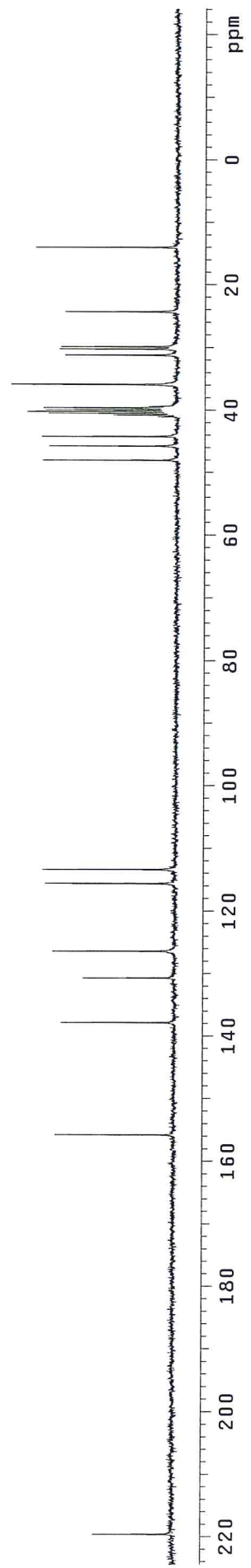
13C OBSERVE

Pulse Sequence: s2pul  
Solvent: DMSO  
Ambient temperature  
GEMINI-300BB "mbp-nmr"

Relax. delay 1.327 sec  
Pulse 54.0 degrees  
Acq. time 0.873 sec  
Width 18761.7 Hz  
320 repetitions  
OBSERVE C13, 75.4473439 MHz  
DECOUPLE H1, 300.0504026 MHz  
Power 39 dB  
continuously on  
WALTZ-16 modulated  
DATA PROCESSING  
Line broadening 1.1 Hz  
FT size 32768  
Total time 0 min, 0 sec

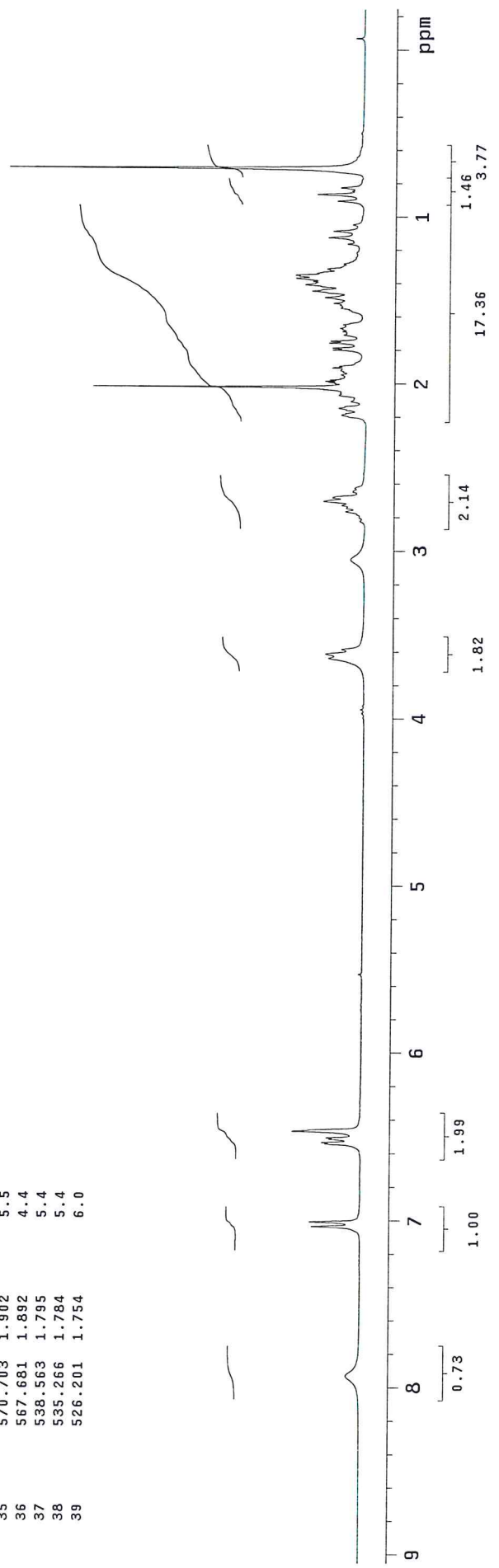
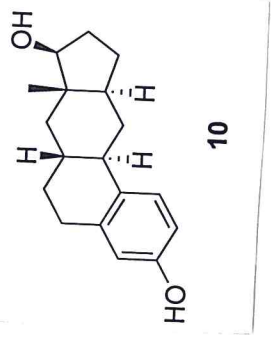


9



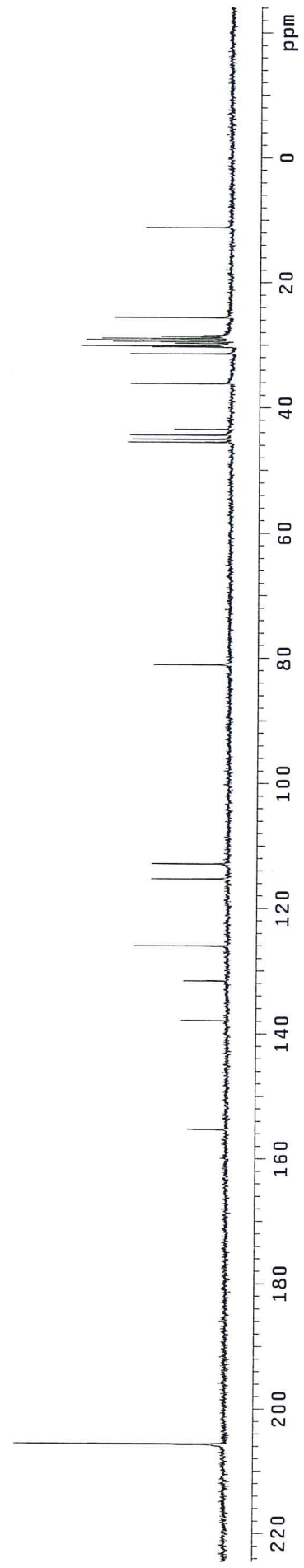
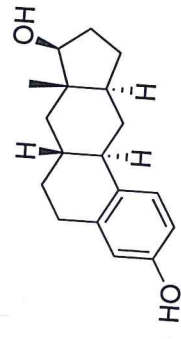
1311

INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
40	522.905	1.743	40	522.905	1.743
41	511.917	1.706	41	511.917	1.706
42	509.719	1.699	42	509.719	1.699
43	505.873	1.686	43	505.873	1.686
44	502.027	1.673	44	502.027	1.673
45	499.830	1.666	45	499.830	1.666
46	495.709	1.652	46	495.709	1.652
47	493.511	1.645	47	493.511	1.645
48	463.844	1.546	48	463.844	1.546
49	461.371	1.538	49	461.371	1.538
50	458.624	1.528	50	458.624	1.528
51	455.328	1.518	51	455.328	1.518
52	444.889	1.483	52	444.889	1.483
53	433.626	1.445	53	433.626	1.445
54	422.089	1.407	54	422.089	1.407
55	416.045	1.387	55	416.045	1.387
56	410.551	1.368	56	410.551	1.368
57	406.705	1.355	57	406.705	1.355
58	405.057	1.350	58	405.057	1.350
59	401.486	1.338	59	401.486	1.338
60	395.717	1.319	60	395.717	1.319
61	393.520	1.312	61	393.520	1.312
62	384.729	1.282	62	384.729	1.282
63	364.401	1.214	63	364.401	1.214
64	348.469	1.161	64	348.469	1.161
65	336.931	1.123	65	336.931	1.123
66	325.394	1.084	66	325.394	1.084
67	313.856	1.046	67	313.856	1.046
68	271.002	0.903	68	271.002	0.903
69	259.190	0.854	69	259.190	0.854
70	252.872	0.843	70	252.872	0.843
71	247.103	0.824	71	247.103	0.824
72	211.941	0.706	72	211.941	0.706
73	-21.556	-0.072	73	-21.556	-0.072



1311

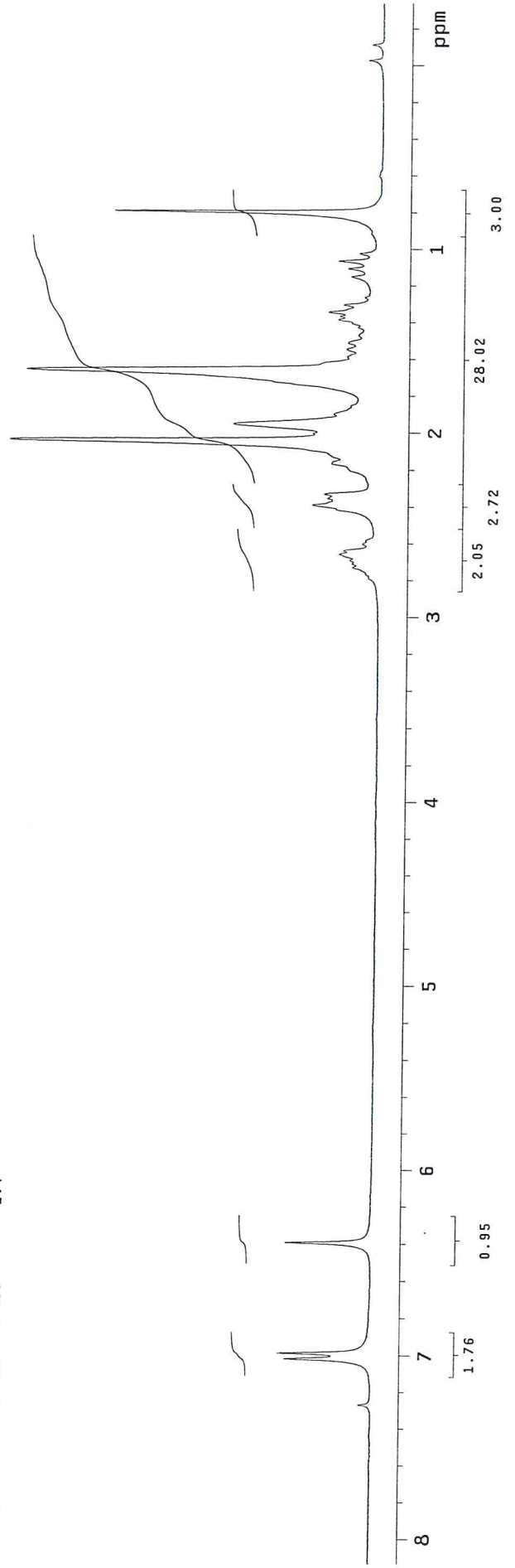
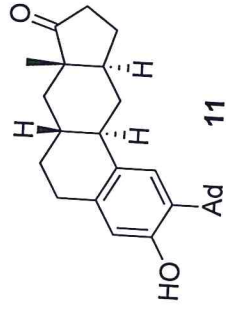
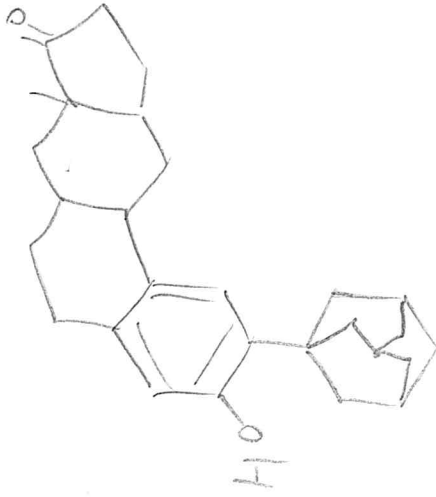
INDEX	FREQUENCY	PPM	HEIGHT
1	15516.522	205.660	33.8
2	11714.475	155.267	6.2
3	10400.937	137.857	7.4
4	9925.681	131.558	7.1
5	9505.395	125.987	15.0
6	8694.597	115.241	12.4
7	8512.511	112.827	12.3
8	6113.328	81.028	12.2
9	3431.281	45.479	16.6
10	3396.926	45.024	15.8
11	3346.537	44.356	16.2
12	3275.535	43.415	9.1
13	2724.696	36.114	16.2
14	2366.250	31.363	16.3
15	2283.796	30.270	12.7
16	2271.199	30.103	24.1
17	2256.312	29.906	5.4
18	2237.988	29.663	9.2
19	2218.520	29.405	19.1
20	2199.052	29.147	23.2
21	2179.583	28.889	20.8
22	2160.115	28.631	11.2
23	2140.647	28.373	4.5
24	1927.641	25.549	18.8
25	840.851	11.145	13.8



1313

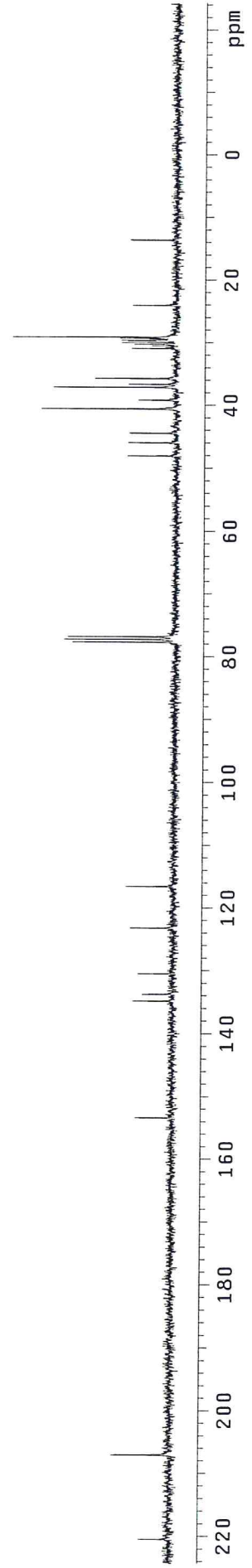
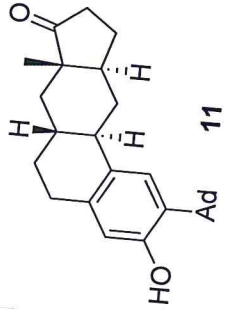
CDCl<sub>3</sub>-G2060

INDEX	FREQUENCY	PPM	HEIGHT
1	2106.363	7.020	13.8
2	2097.023	6.989	14.9
3	1918.741	6.395	13.8
4	818.283	2.727	4.2
5	811.965	2.706	4.3
6	806.471	2.688	4.6
7	795.208	2.650	6.0
8	796.856	2.656	6.3
9	791.088	2.637	5.7
10	780.374	2.601	2.6
11	716.643	2.388	10.7
12	705.655	2.352	8.3
13	698.513	2.328	8.8
14	649.341	2.164	7.7
15	613.355	2.044	59.2
16	600.993	2.003	10.8
17	585.885	1.953	23.4
18	568.579	1.895	7.4
19	498.804	1.662	56.6
20	476.279	1.587	5.4
21	463.368	1.544	5.4
22	453.204	1.510	5.2
23	441.117	1.470	3.6
24	415.020	1.383	6.8
25	409.251	1.364	6.5
26	402.658	1.342	8.4
27	390.846	1.303	6.0
28	378.210	1.260	2.6
29	344.971	1.150	4.8
30	331.510	1.105	5.3
31	318.874	1.063	6.9
32	306.787	1.022	3.5
33	238.661	0.795	42.7
34	-9.121	-0.030	2.4



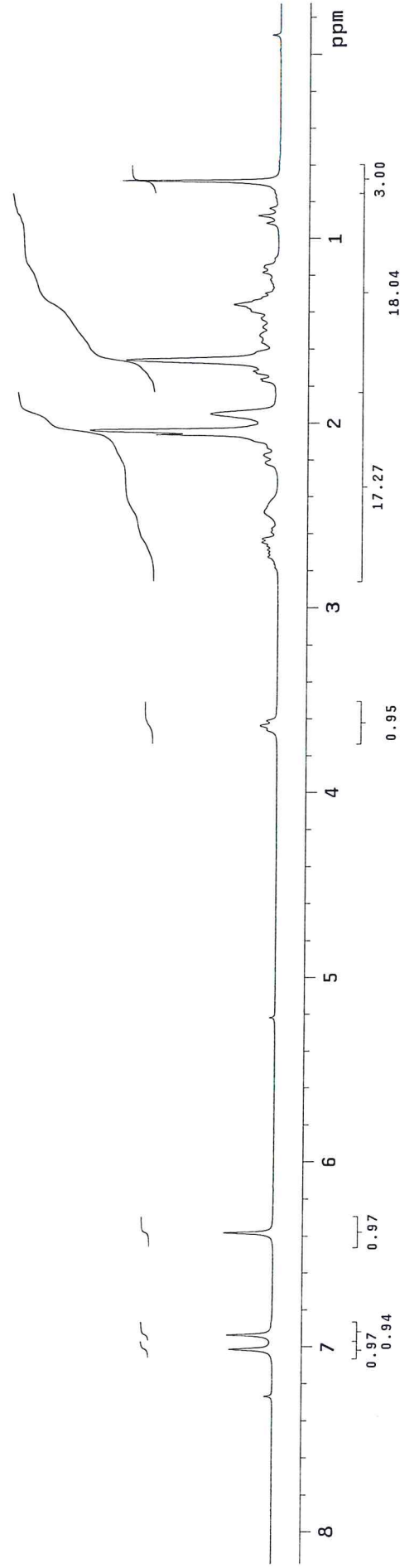
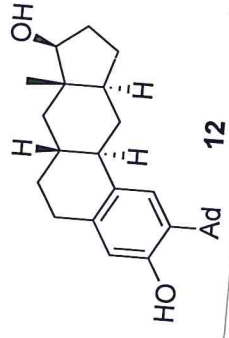
1313

INDEX	FREQUENCY	PPM	HEIGHT
1	16637.441	220.517	4.8
2	15625.088	207.099	9.3
3	11571.099	153.366	5.8
4	10171.671	134.818	6.4
5	10090.362	133.740	4.8
6	9844.145	130.477	5.6
7	9294.452	123.191	6.8
8	8794.002	116.558	7.6
9	5857.722	77.640	16.3
10	5825.657	77.215	17.7
11	5793.591	76.790	17.1
12	3621.157	47.996	7.6
13	3464.265	45.916	7.6
14	3349.746	44.398	7.4
15	3057.721	40.528	21.4
16	2951.218	39.116	6.0
17	2796.617	37.067	19.5
18	2761.115	36.597	7.5
19	2690.113	35.655	12.9
20	2329.377	30.874	7.1
21	2296.166	30.434	3.9
22	2276.698	30.176	6.7
23	2257.230	29.918	8.7
24	2237.761	29.660	7.8
25	2230.890	29.569	8.8
26	2206.841	29.250	9.0
27	2193.099	29.068	26.1
28	1809.459	23.983	7.0
29	1022.710	13.555	7.4



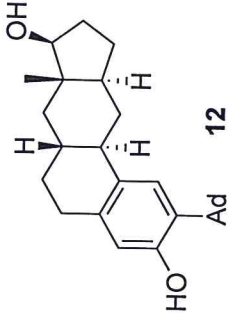
1312

INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2181.345	7.270	40	231.782	0.772
2	2104.978	7.015	41	205.685	0.686
3	2081.353	6.937	42	-32.207	-0.107
4	1915.158	6.383			
5	1565.462	5.217			
6	1097.919	3.659			
7	1090.227	3.634			
8	1082.535	3.608			
9	817.448	2.724			
10	811.129	2.703			
11	805.910	2.686			
12	799.867	2.666			
13	793.823	2.646			
14	787.780	2.626			
15	776.517	2.588			
16	771.572	2.572			
17	744.377	2.481			
18	664.164	2.214			
19	651.527	2.171			
20	618.838	2.062			
21	612.245	2.040			
22	584.775	1.949			
23	530.933	1.769			
24	527.636	1.759			
25	518.846	1.729			
26	515.550	1.718			
27	498.243	1.661			
28	468.026	1.560			
29	457.587	1.525			
30	443.852	1.479			
31	429.018	1.430			
32	407.591	1.358			
33	388.637	1.295			
34	366.111	1.220			
35	354.849	1.183			
36	346.333	1.154			
37	274.361	0.914			
38	262.274	0.874			
39	250.187	0.834			



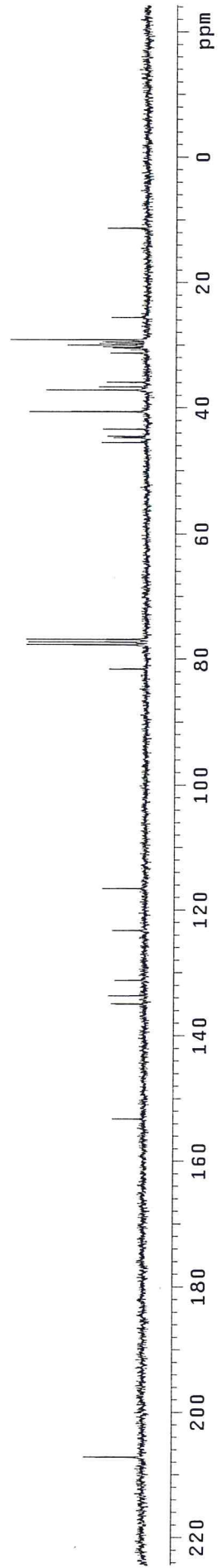


1312

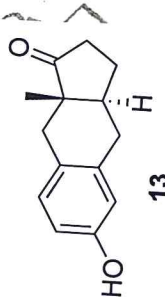


12

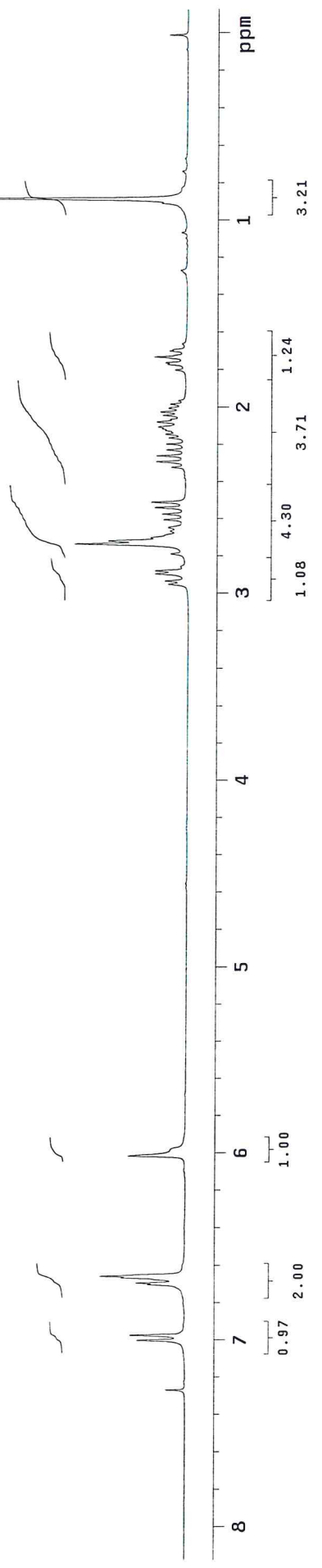
INDEX	FREQUENCY	PPM	HEIGHT
1	15630.784	207.176	9.4
2	11557.326	153.185	5.1
3	10178.512	134.909	5.4
4	10081.170	133.619	5.8
5	9896.794	131.175	4.8
6	9295.566	123.207	5.3
7	8790.536	116.513	6.9
8	6148.571	81.495	5.9
9	5857.692	77.640	19.1
10	5825.626	77.215	18.8
11	5793.561	76.790	19.1
12	3427.588	45.430	7.2
13	3370.329	44.671	5.3
14	3353.151	44.444	6.3
15	3266.116	43.290	7.0
16	3058.836	40.543	18.8
17	2798.876	37.097	16.1
18	2759.940	36.581	7.7
19	2704.970	35.853	6.4
20	2353.396	31.193	5.8
21	2297.281	30.449	3.7
22	2289.265	30.343	5.5
23	2277.813	30.191	7.1
24	2258.344	29.933	12.7
25	2238.876	29.675	7.6
26	2218.263	29.402	7.2
27	2194.214	29.083	21.8
28	1925.093	25.516	5.7
29	846.319	11.217	6.4



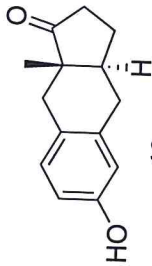
MQ 1042



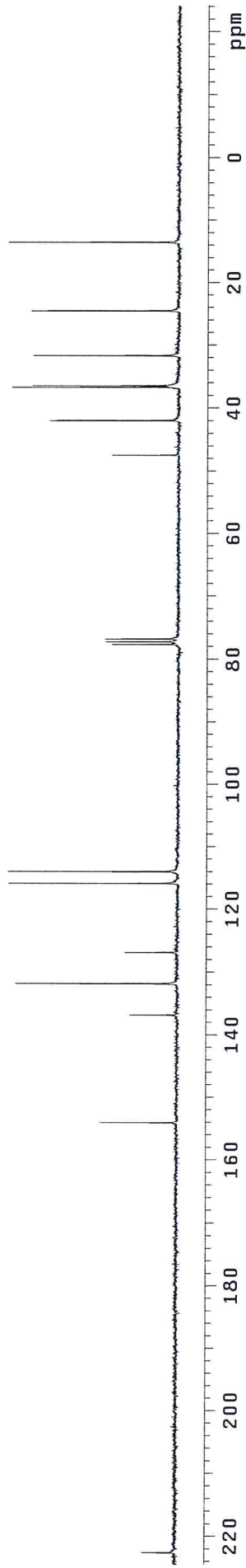
INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2181.345	7.270	40	531.208	1.770
2	2101.407	7.004	41	528.735	1.762
3	2093.440	6.977	42	519.670	1.732
4	2011.304	6.703	43	509.781	1.699
5	2009.107	6.696	44	508.133	1.694
6	2000.591	6.668	45	272.163	0.907
7	1998.119	6.659	46	265.021	0.883
8	1805.277	6.017	47	2.955	0.010
9	885.299	2.951			
10	879.805	2.932			
11	868.542	2.895			
12	863.598	2.878			
13	836.402	2.788			
14	820.469	2.734			
15	815.799	2.719			
16	810.305	2.701			
17	799.592	2.665			
18	793.823	2.646			
19	781.187	2.604			
20	772.122	2.573			
21	761.683	2.539			
22	752.892	2.509			
23	696.304	2.321			
24	687.513	2.291			
25	677.899	2.259			
26	668.284	2.227			
27	658.944	2.196			
28	649.055	2.163			
29	643.011	2.143			
30	636.968	2.123			
31	634.221	2.114			
32	631.199	2.104			
33	623.508	2.078			
34	619.387	2.064			
35	612.794	2.042			
36	607.300	2.024			
37	601.531	2.005			
38	594.939	1.983			
39	540.273	1.801			



1042

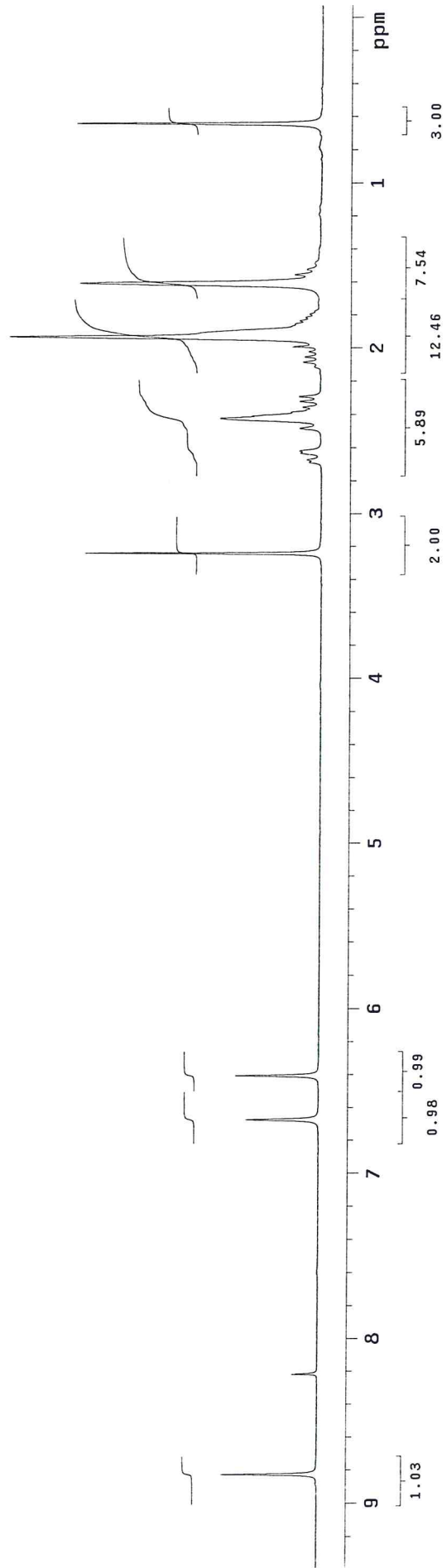
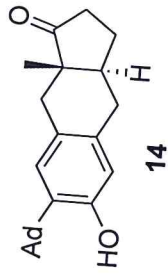
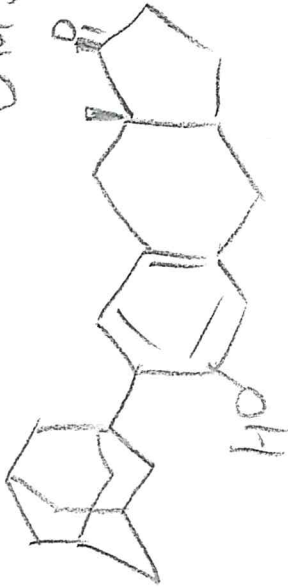


INDEX	FREQUENCY	PPM	HEIGHT
1	16796.592	222.628	5.4
2	11621.456	154.035	12.4
3	10320.515	136.792	7.6
4	9942.601	131.783	26.0
5	9569.267	126.834	8.5
6	8740.146	115.845	27.2
7	8598.142	113.963	27.3
8	5856.546	77.625	10.6
9	5824.480	77.200	11.7
10	5792.415	76.775	11.8
11	3576.463	47.404	10.7
12	3163.048	41.924	20.8
13	2765.665	36.657	26.8
14	2746.197	36.399	23.6
15	2385.460	31.618	23.4
16	1847.219	24.484	23.7
17	1016.953	13.479	27.4



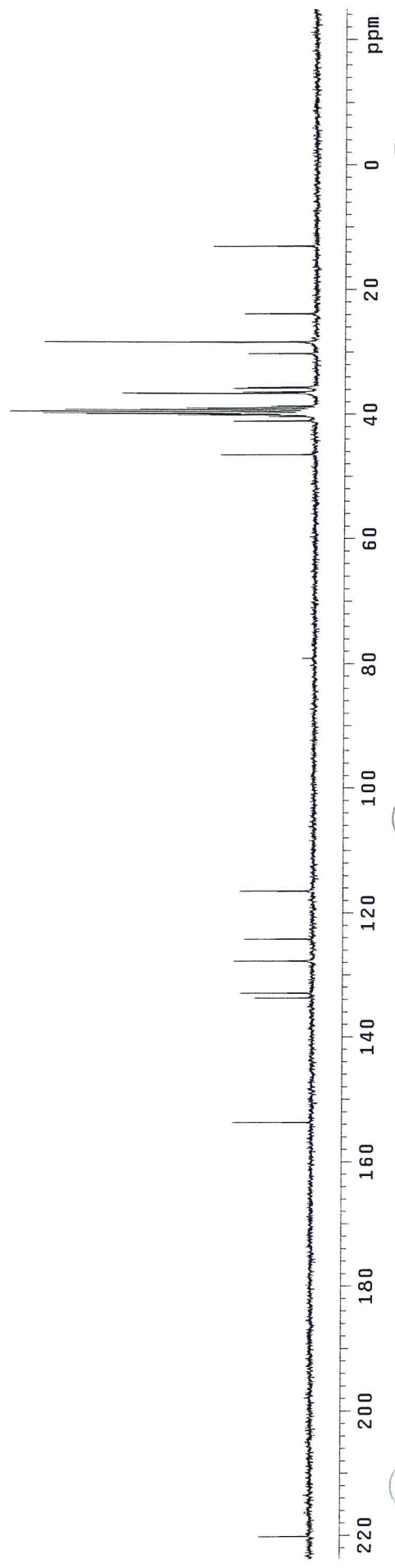
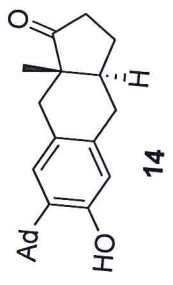
INDEX	FREQUENCY	PPM	HEIGHT
1	2649.297	8.830	15.5
2	2466.071	8.219	4.1
3	2002.648	6.674	11.7
4	1922.435	6.407	13.4
5	973.063	3.243	37.7
6	805.495	2.685	2.0
7	801.099	2.670	2.4
8	789.013	2.630	3.4
9	785.441	2.618	3.5
10	744.511	2.481	3.5
11	726.930	2.423	16.2
12	723.084	2.410	11.2
13	706.602	2.355	3.0
14	696.163	2.320	3.5
15	687.647	2.292	3.6
16	625.015	2.083	3.1
17	615.675	2.052	2.7
18	606.061	2.020	2.1
19	597.545	1.991	4.7
20	580.513	1.935	50.0
21	549.747	1.832	3.6
22	544.253	1.814	2.6
23	537.934	1.793	2.0
24	483.269	1.611	38.8
25	466.512	1.555	4.3
26	456.348	1.521	2.4
27	192.908	0.643	39.3

1044  
DMSO



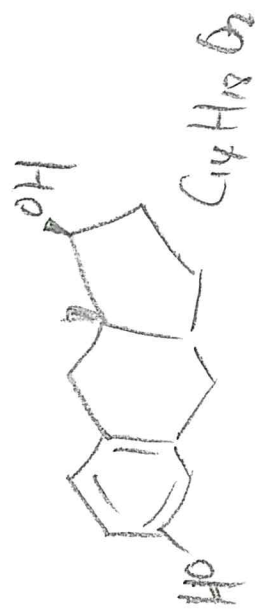
1044

INDEX	FREQUENCY	PPM	HEIGHT
1	16613.325	220.197	8.2
2	11595.082	153.684	13.0
3	10090.296	133.739	9.3
4	10030.746	132.950	11.8
5	9639.089	127.759	13.0
6	9371.113	124.207	11.2
7	8788.209	116.481	12.0
8	3506.571	46.477	15.4
9	3097.736	41.058	13.3
10	3043.912	40.345	7.4
11	3022.154	40.056	22.4
12	3010.702	39.905	37.2
13	3001.540	39.783	44.3
14	2980.927	39.510	49.5
15	2959.168	39.222	40.7
16	2938.554	38.948	21.0
17	2917.941	38.675	7.1
18	2761.049	36.596	31.4
19	2743.871	36.368	11.9
20	2698.063	35.761	13.5
21	2686.612	35.609	11.0
22	2281.213	30.236	10.9
23	2139.208	28.354	44.0
24	1800.231	23.861	11.6
25	983.707	13.038	16.8

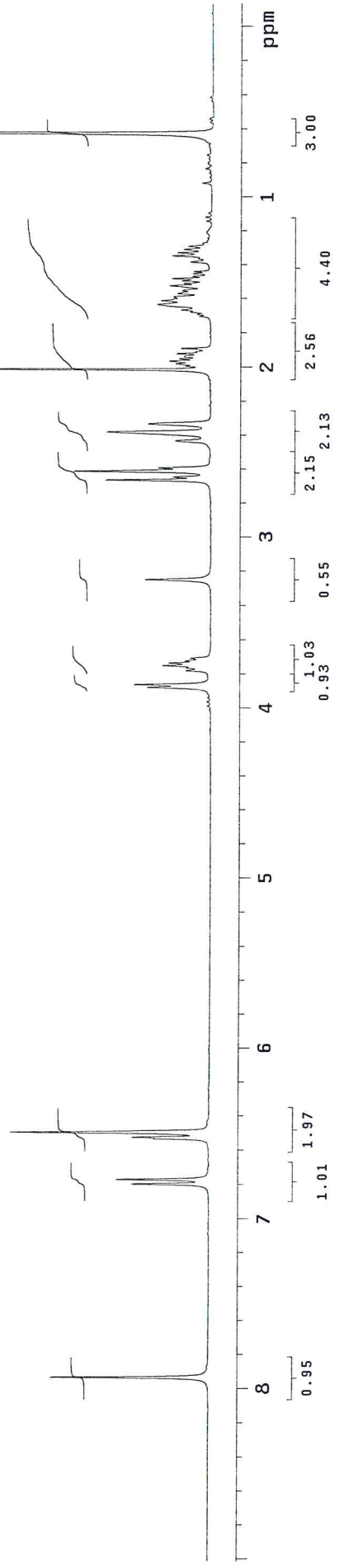
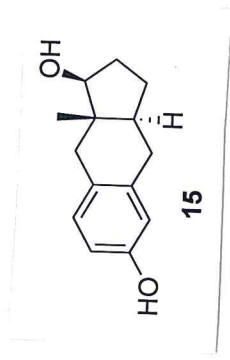


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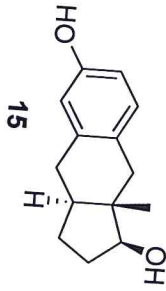
INDEX	FREQUENCY	PPM	HEIGHT	INDEX	FREQUENCY	PPM	HEIGHT
1	2380.992	7.935	25.5	40	456.976	1.523	6.8
2	2039.811	6.798	12.6	41	452.855	1.509	4.6
3	2031.845	6.772	15.0	42	447.911	1.493	4.9
4	1960.422	6.534	9.0	43	444.065	1.480	6.5
5	1957.950	6.525	12.5	44	440.219	1.467	3.2
6	1949.434	6.497	32.1	45	435.275	1.451	3.1
7	1163.511	3.878	10.3	46	431.703	1.439	3.0
8	1158.566	3.861	12.4	47	414.672	1.382	3.5
9	1133.568	3.778	4.1	48	403.958	1.346	6.4
10	1128.623	3.761	4.1	49	398.464	1.328	5.6
11	1125.052	3.750	7.8	50	392.146	1.307	4.6
12	1120.382	3.734	6.8	51	386.927	1.290	3.8
13	1116.262	3.720	4.3	52	186.944	0.623	100.0
14	1111.867	3.706	3.4				
15	974.515	3.248	10.7				
16	798.981	2.663	17.1				
17	793.487	2.645	6.2				
18	783.323	2.611	22.1				
19	777.279	2.591	8.6				
20	729.481	2.431	5.9				
21	713.823	2.379	16.9				
22	699.538	2.331	10.3				
23	603.942	2.013	49.2				
24	597.624	1.992	4.3				
25	593.228	1.977	5.8				
26	588.833	1.962	6.9				
27	584.987	1.950	5.3				
28	580.043	1.933	4.5				
29	575.647	1.919	5.7				
30	572.626	1.908	2.7				
31	566.857	1.889	5.0				
32	507.247	1.691	2.4				
33	503.126	1.677	3.5				
34	499.555	1.665	5.0				
35	490.215	1.634	8.8				
36	483.347	1.611	8.2				
37	476.205	1.587	6.2				
38	470.711	1.569	5.5				
39	465.492	1.551	4.8				



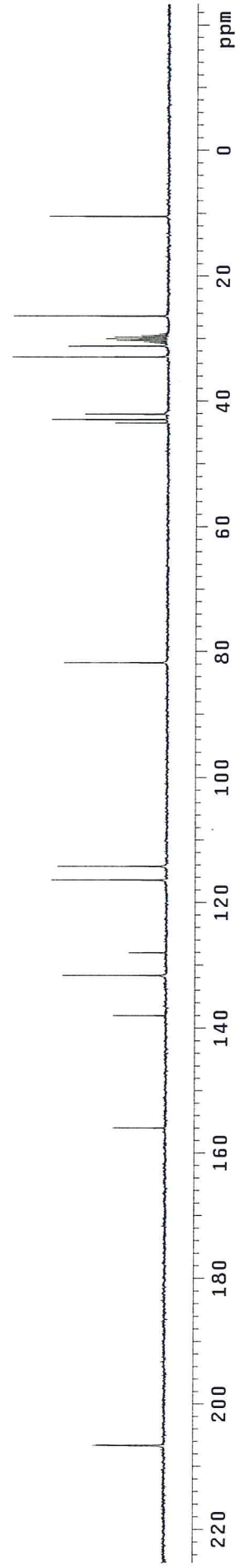
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1047

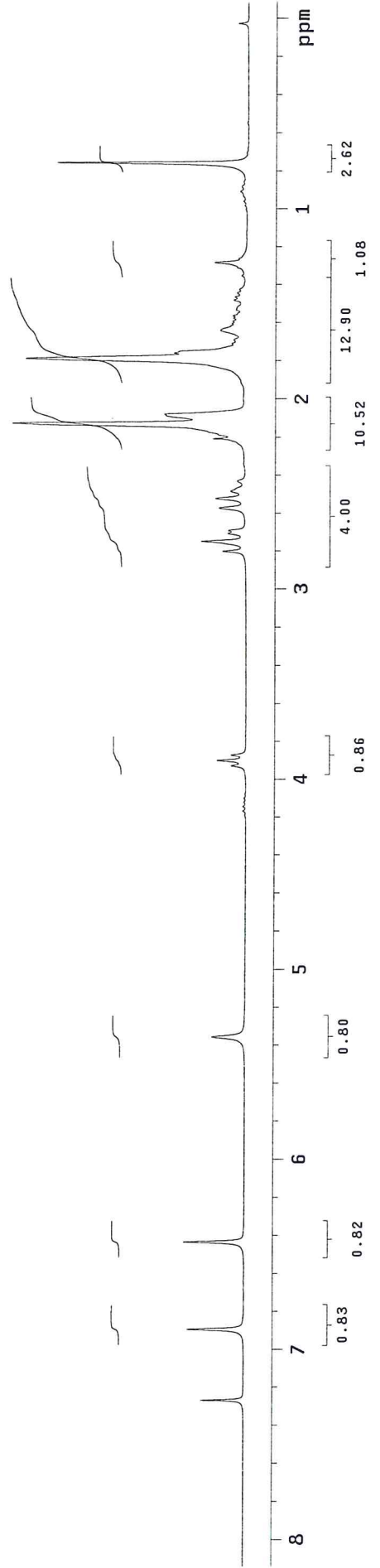
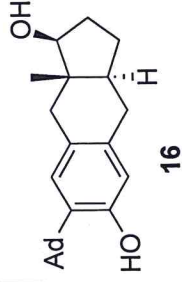
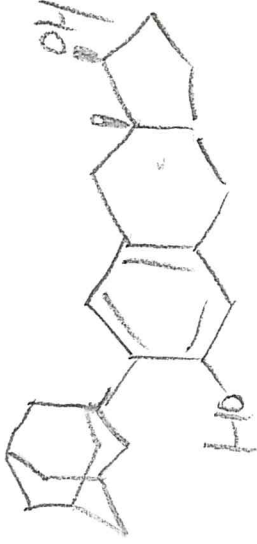


INDEX	FREQUENCY	PPM	HEIGHT
1	15592.307	206.665	11.5
2	11765.066	155.937	8.5
3	10410.300	137.981	8.5
4	9929.318	131.606	16.7
5	9656.762	127.993	6.1
6	8779.543	116.367	18.5
7	8613.490	114.166	17.5
8	6166.208	81.729	16.6
9	3276.882	43.433	8.5
10	3236.800	42.901	18.6
11	3171.524	42.036	13.3
12	2480.972	32.883	25.0
13	2350.419	31.153	16.1
14	2298.886	30.470	4.0
15	2279.417	30.212	8.3
16	2259.949	29.954	10.0
17	2240.481	29.696	8.7
18	2221.012	29.438	4.3
19	1987.393	26.341	24.8
20	786.083	10.419	19.1



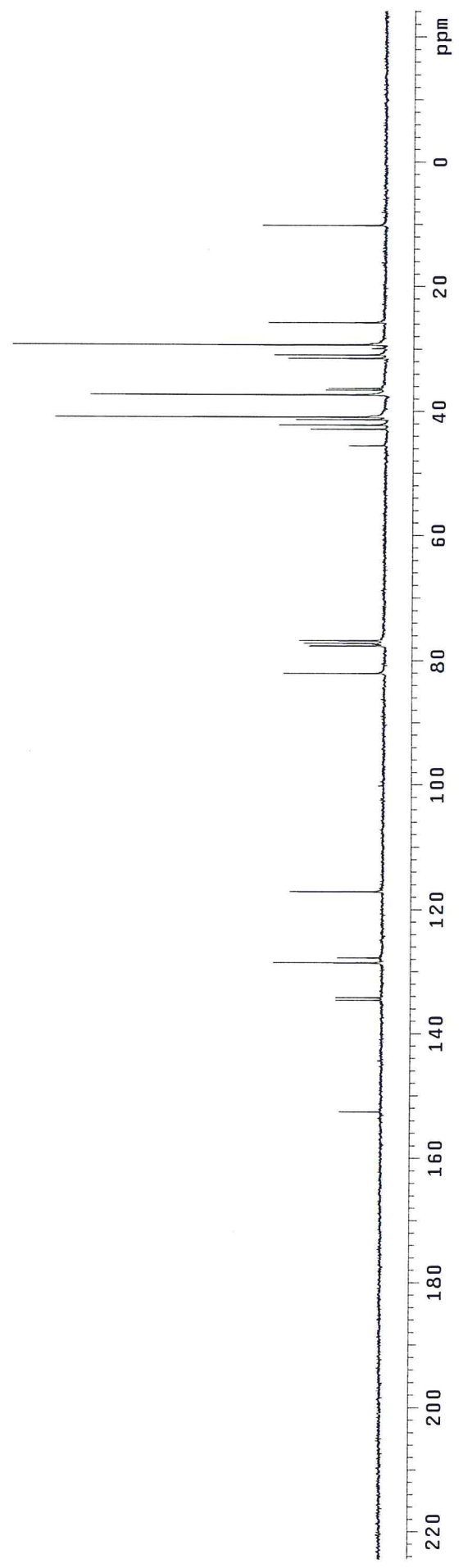
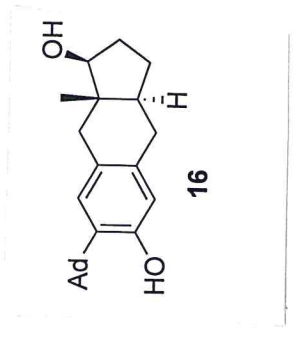
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INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2181.345	7.270	6.8		
2	2068.717	6.895	9.1		
3	1930.542	6.434	9.7		
4	1607.217	5.357	5.2		
5	1178.407	3.927	2.4		
6	1170.165	3.900	4.6		
7	1161.375	3.871	2.4		
8	839.973	2.799	3.8		
9	824.590	2.748	7.2		
10	811.953	2.706	3.0		
11	807.284	2.691	2.9		
12	771.572	2.572	4.4		
13	756.464	2.521	5.0		
14	745.201	2.484	2.5		
15	728.719	2.429	1.5		
16	661.966	2.206	5.4		
17	638.067	2.127	37.5		
18	623.508	2.078	13.2		
19	536.702	1.789	35.4		
20	527.911	1.759	11.7		
21	513.077	1.710	2.4		
22	507.308	1.691	2.2		
23	492.200	1.640	4.2		
24	481.212	1.604	2.4		
25	477.366	1.591	2.3		
26	472.696	1.575	2.2		
27	468.575	1.562	2.3		
28	459.236	1.531	1.8		
29	443.852	1.479	2.2		
30	438.908	1.463	2.0		
31	432.589	1.442	1.6		
32	427.095	1.423	1.2		
33	405.394	1.351	0.9		
34	384.516	1.282	5.2		
35	378.473	1.261	1.4		
36	272.163	0.907	1.1		
37	264.197	0.881	0.9		
38	226.837	0.756	30.4		
39	7.350	0.024	1.5		



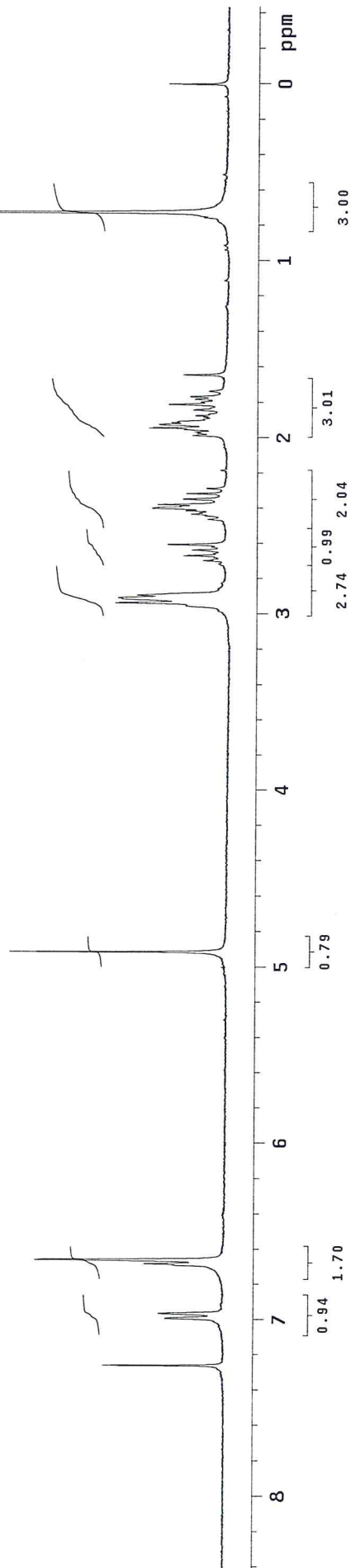
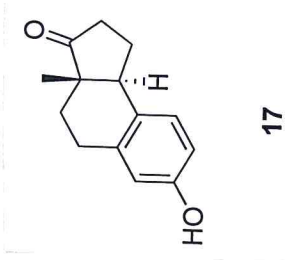


INDEX	FREQUENCY	PPM	HEIGHT
1	11509.454	152.550	6.8
2	10154.689	134.594	7.5
3	10123.769	134.184	7.5
4	9698.901	128.553	17.6
5	9638.206	127.748	7.3
6	8833.134	117.077	15.0
7	6187.734	82.014	16.3
8	5855.628	77.612	12.1
9	5823.562	77.187	12.9
10	5791.497	76.762	13.7
11	3430.105	45.464	5.8
12	3229.696	42.807	12.0
13	3180.453	42.155	17.1
14	3112.886	41.259	14.4
15	3084.256	40.880	53.3
16	2812.845	37.282	47.6
17	2754.440	36.508	9.6
18	2733.827	36.235	9.2
19	2369.655	31.408	15.7
20	2328.428	30.862	17.9
21	2208.182	29.268	60.2
22	1940.207	25.716	18.9
23	764.092	10.128	19.9

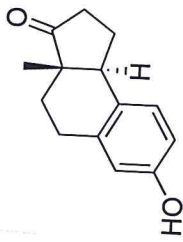


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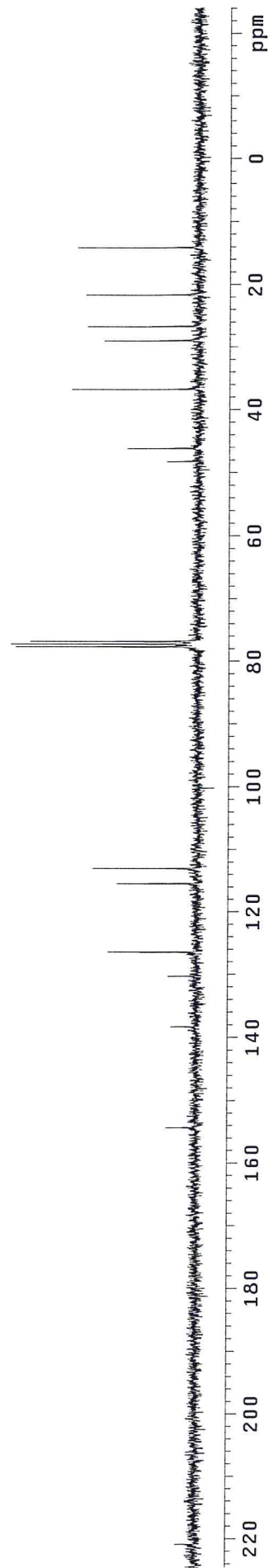
INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2179.489	7.264	40	-0.000	-0.000
2	2178.940	7.262			9.8
3	2099.001	6.996			
4	2090.211	6.966			
5	2005.603	6.684			
6	1999.010	6.662			
7	1474.328	4.914			
8	881.245	2.937			
9	872.730	2.909			
10	868.609	2.895			
11	809.273	2.697			
12	800.758	2.669			
13	791.143	2.637			
14	781.803	2.606			
15	738.950	2.463			
16	729.884	2.433			
17	724.116	2.413			
18	720.270	2.401			
19	713.677	2.379			
20	704.337	2.347			
21	694.722	2.315			
22	686.207	2.287			
23	595.830	1.986			
24	592.533	1.975			
25	589.786	1.966			
26	583.193	1.944			
27	577.150	1.924			
28	574.403	1.914			
29	564.788	1.882			
30	562.041	1.873			
31	552.427	1.841			
32	543.361	1.811			
33	538.966	1.796			
34	534.296	1.781			
35	529.901	1.766			
36	520.836	1.736			
37	493.091	1.643			
38	218.114	0.727			
39	0.824	0.003			



INDEX	FREQUENCY	PPM	HEIGHT
1	16659.168	220.806	3.1
2	11640.924	154.293	5.0
3	10433.889	138.294	4.2
4	9828.081	130.265	4.8
5	9537.201	126.409	14.6
6	8709.226	115.435	13.3
7	8524.849	112.991	17.1
8	7560.595	100.211	-2.7
9	5857.691	77.640	29.6
10	5825.625	77.215	30.4
11	5793.560	76.790	27.3
12	3638.303	48.223	5.3
13	3481.411	46.144	11.8
14	2771.391	36.733	20.7
15	2185.051	28.961	15.5
16	2013.272	26.685	18.2
17	1633.067	21.645	18.5
18	1063.905	14.101	19.9

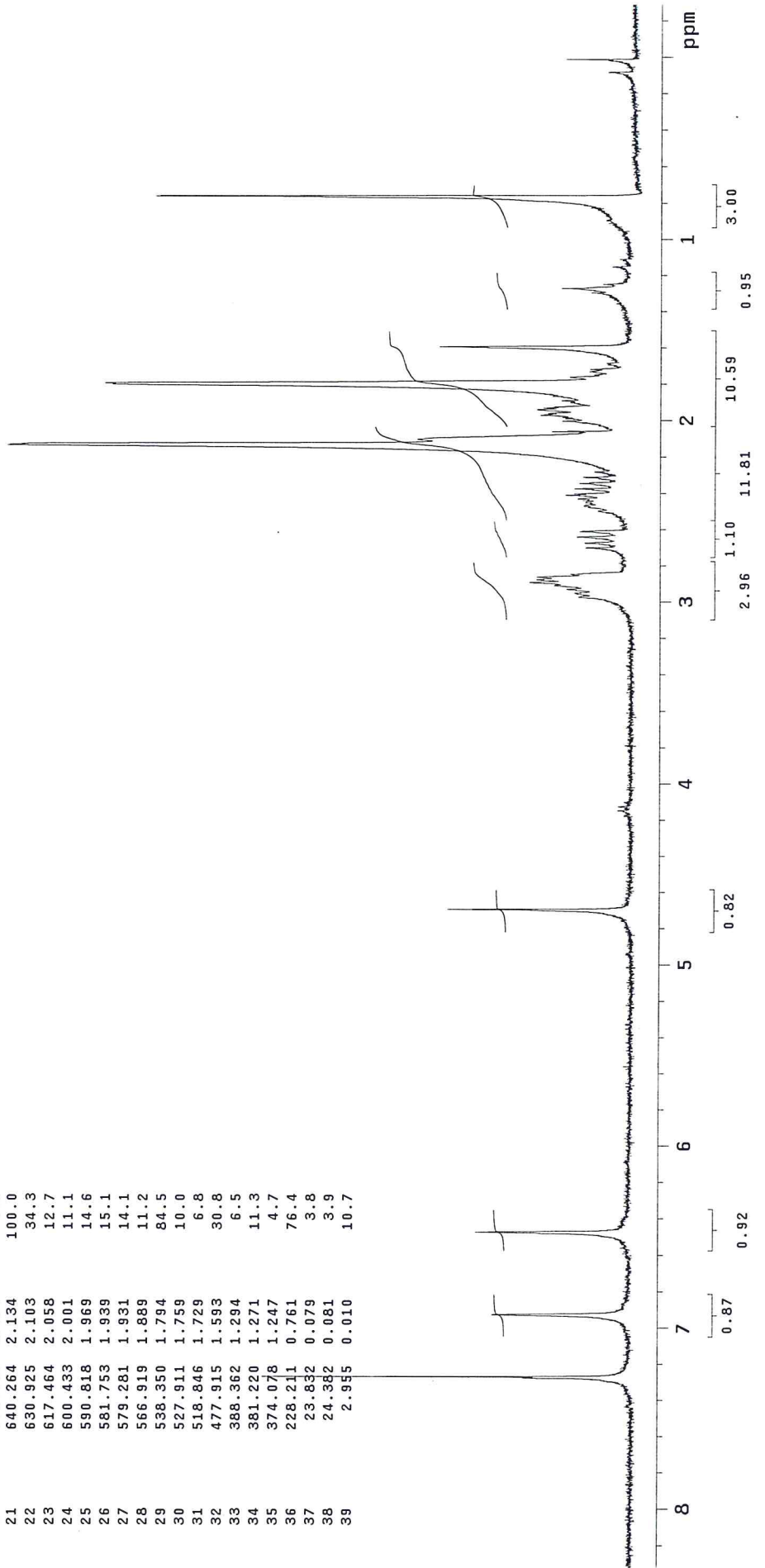
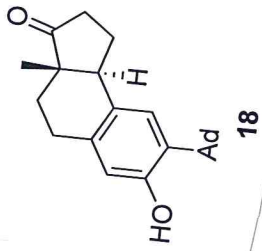


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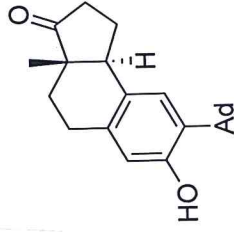
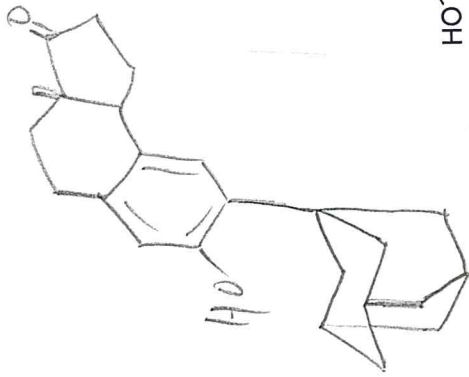


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INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2181.345	7.270	58.8		
2	2078.332	6.927	21.9		
3	1942.354	6.473	24.6		
4	1408.607	4.695	29.3		
5	884.475	2.948	9.1		
6	878.431	2.928	10.4		
7	867.443	2.891	16.3		
8	862.499	2.875	15.2		
9	858.103	2.860	15.1		
10	809.756	2.699	7.3		
11	801.789	2.672	7.5		
12	791.900	2.639	8.7		
13	782.560	2.608	8.3		
14	728.719	2.429	8.6		
15	722.400	2.408	10.6		
16	720.203	2.400	9.2		
17	711.687	2.372	9.1		
18	703.171	2.344	8.3		
19	692.733	2.309	7.8		
20	683.942	2.279	5.9		
21	640.264	2.134	100.0		
22	630.925	2.103	34.3		
23	617.464	2.058	12.7		
24	600.433	2.001	11.1		
25	590.818	1.969	14.6		
26	581.753	1.939	15.1		
27	579.281	1.931	14.1		
28	566.919	1.889	11.2		
29	538.350	1.794	84.5		
30	527.911	1.759	10.0		
31	518.846	1.729	6.8		
32	477.915	1.593	30.8		
33	388.362	1.294	6.5		
34	381.220	1.271	11.3		
35	374.078	1.247	4.7		
36	228.211	0.761	76.4		
37	23.832	0.079	3.8		
38	24.382	0.081	3.9		
39	2.955	0.010	10.7		

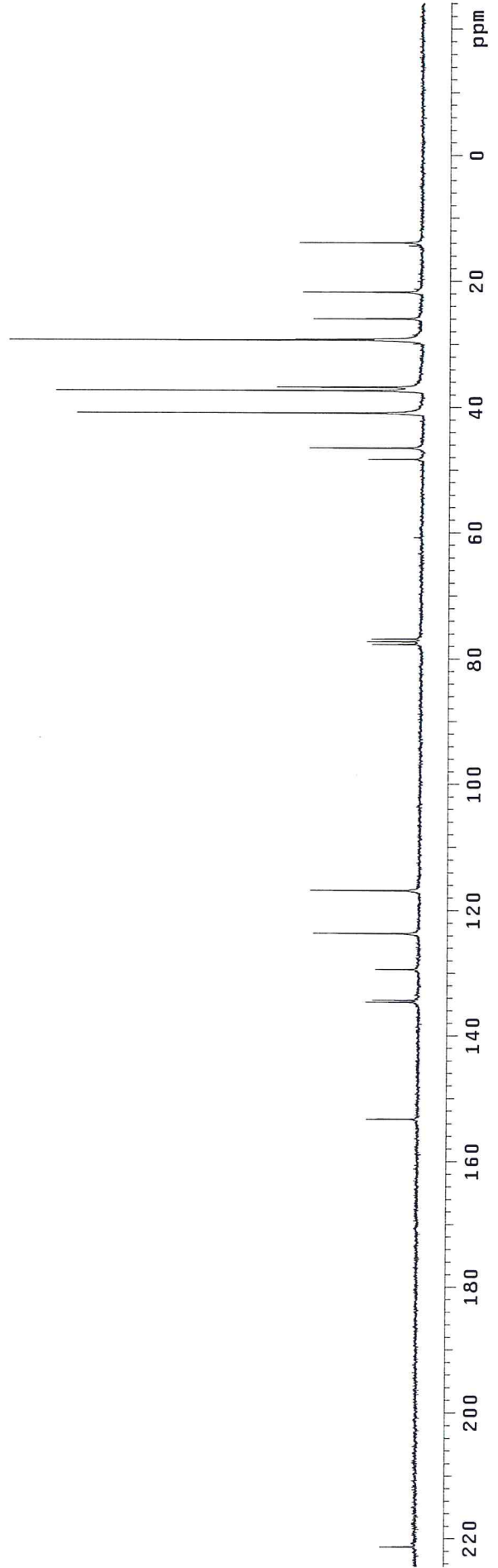


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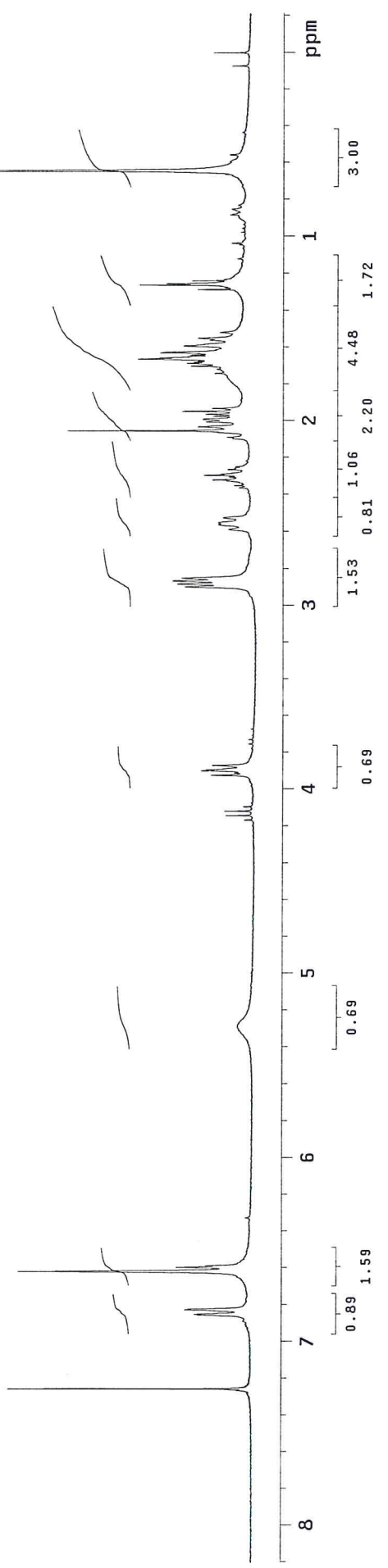
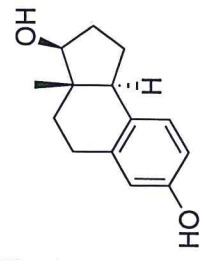
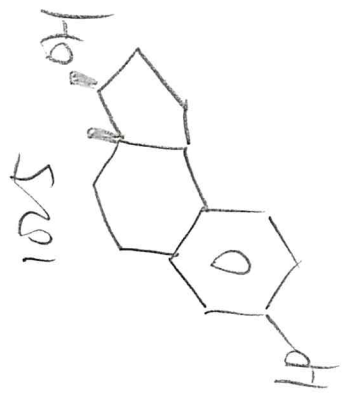


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INDEX	FREQUENCY	PPM	HEIGHT
1	16699.250	221.338	5.6
2	11561.906	153.245	8.2
3	10155.607	134.606	8.4
4	10133.848	134.317	7.4
5	9758.224	129.339	6.9
6	9326.486	123.616	16.9
7	8811.148	116.786	17.4
8	5856.546	77.625	7.7
9	5824.480	77.200	8.5
10	5792.415	76.775	7.8
11	3639.449	48.238	8.4
12	3502.025	46.417	17.9
13	3081.739	40.846	55.1
14	2811.473	37.264	58.5
15	2771.391	36.733	23.1
16	2766.810	36.672	14.4
17	2207.955	29.265	66.0
18	2195.358	29.098	20.2
19	1951.432	25.865	17.3
20	1635.358	21.676	19.1
21	1043.292	13.828	19.5

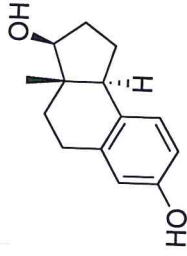


INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2180.588	7.267	40	626.871	2.089	79	249.430	0.831	79	249.430	0.831
2	2180.039	7.266	41	616.432	2.054	80	199.159	0.664	80	199.159	0.664
3	2178.116	7.259	42	609.839	2.032	81	193.665	0.645	81	193.665	0.645
4	2175.369	7.250	43	601.598	2.005	82	193.116	0.644	82	193.116	0.644
5	2174.819	7.248	44	597.753	1.992	83	166.744	0.556	83	166.744	0.556
6	2057.521	6.857	45	596.654	1.989	84	167.294	0.558	84	167.294	0.558
7	2056.422	6.854	46	592.533	1.975	85	130.209	0.434	85	130.209	0.434
8	2049.280	6.830	47	589.237	1.964	86	21.427	0.071	86	21.427	0.071
9	2048.181	6.826	48	584.567	1.948	87	-0.000	-0.000	87	-0.000	-0.000
10	1986.923	6.622	49	579.897	1.933						
11	1979.780	6.598	50	522.484	1.741						
12	1977.308	6.590	51	515.616	1.718						
13	1898.469	6.327	52	510.397	1.701						
14	1588.329	5.294	53	506.002	1.686						
15	1250.171	4.167	54	503.804	1.679						
16	1242.754	4.142	55	502.156	1.674						
17	1235.612	4.118	56	499.134	1.664						
18	1228.469	4.094	57	497.211	1.657						
19	1177.649	3.925	58	492.541	1.642						
20	1173.804	3.912	59	488.696	1.629						
21	1170.232	3.900	60	487.597	1.625						
22	1168.584	3.895	61	477.433	1.591						
23	1161.442	3.871	62	468.093	1.560						
24	869.159	2.897	63	464.797	1.549						
25	864.763	2.882	64	455.457	1.518						
26	860.093	2.867	65	385.682	1.285						
27	855.423	2.851	66	383.210	1.277						
28	776.309	2.587	67	378.540	1.262						
29	768.892	2.563	68	376.342	1.254						
30	757.629	2.525	69	371.398	1.238						
31	709.007	2.363	70	369.200	1.230						
32	705.436	2.351	71	336.236	1.121						
33	698.019	2.326	72	313.435	1.045						
34	696.371	2.321	73	310.963	1.036						
35	691.426	2.304	74	293.108	0.977						
36	688.679	2.295	75	286.515	0.955						
37	687.031	2.290	76	280.196	0.934						
38	679.339	2.264	77	265.088	0.883						
39	674.669	2.249	78	255.473	0.851						

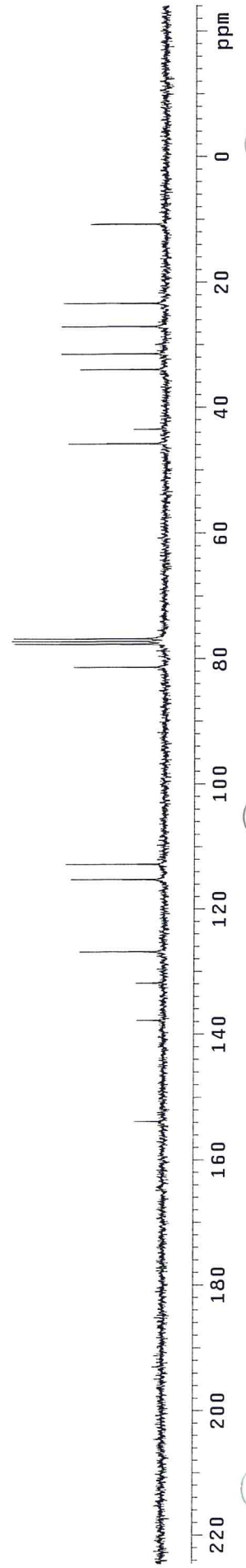


8 7 6 5 4 3 2 1 ppm

INDEX	FREQUENCY	PPM	HEIGHT
1	11604.278	153.807	4.6
2	10394.952	137.778	4.2
3	9947.181	131.843	4.4
4	9566.977	126.804	13.8
5	8692.048	115.207	15.3
6	8506.526	112.748	16.1
7	6135.973	81.328	14.9
8	5857.691	77.640	24.5
9	5825.625	77.215	24.9
10	5793.560	76.790	24.6
11	3453.927	45.780	15.9
12	3278.712	43.457	5.1
13	2558.384	33.910	14.0
14	2369.427	31.405	17.1
15	2039.611	27.034	17.1
16	1761.329	23.345	16.8
17	808.527	10.716	12.4

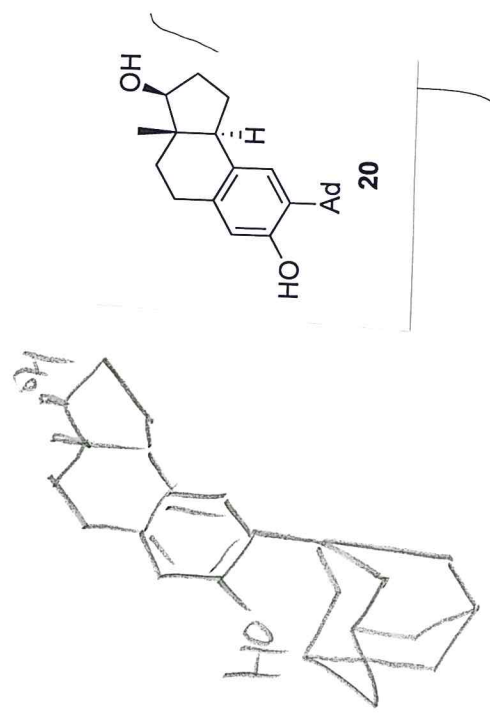


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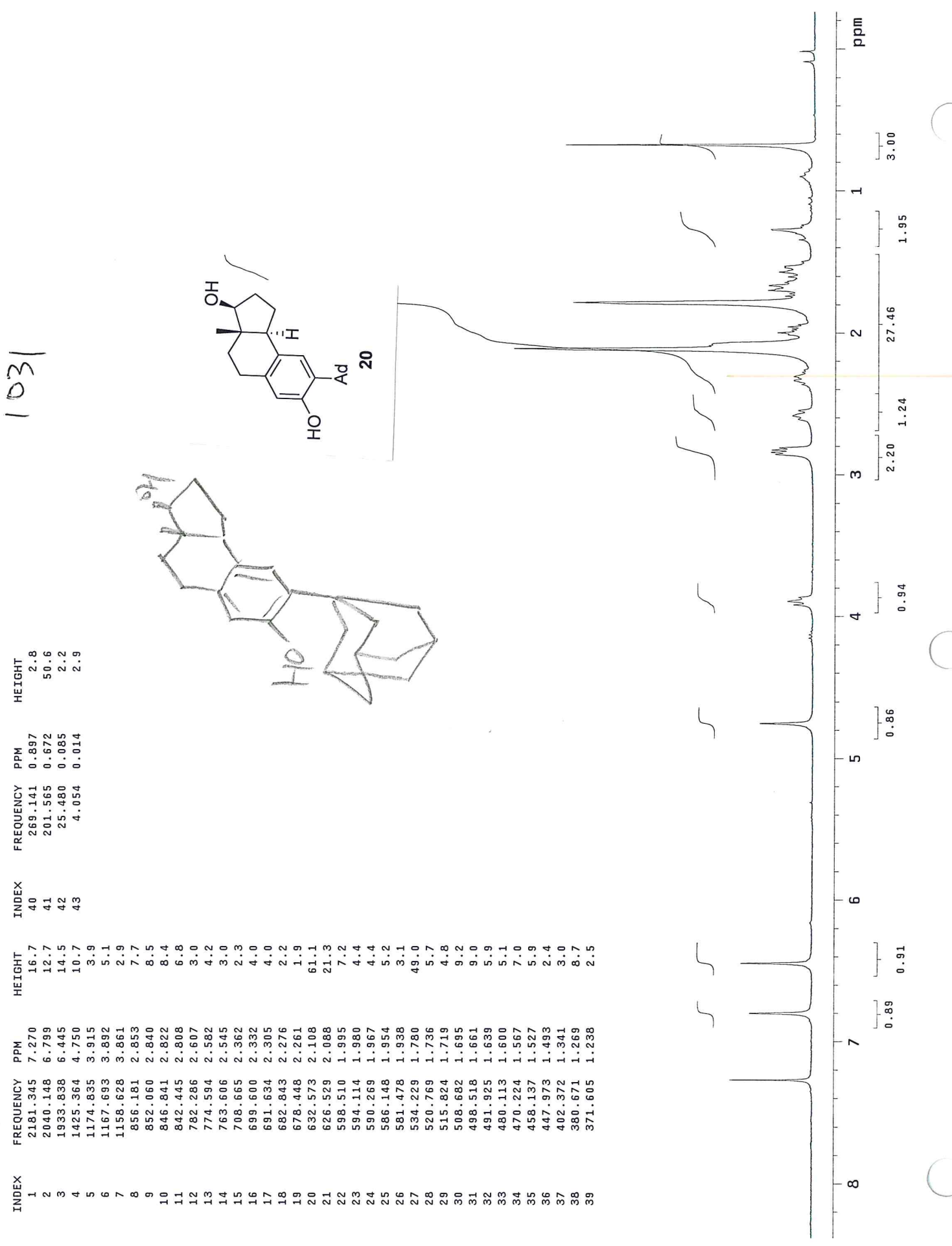


1031

INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2181.345	7.270	40	269.141	0.897
2	2040.148	6.799	41	201.565	0.672
3	1933.838	6.445	42	25.480	0.085
4	1425.364	4.750	43	4.054	0.014
5	1174.835	3.915			
6	1167.693	3.892			
7	1158.628	3.861			
8	856.181	2.853			
9	852.060	2.840			
10	846.841	2.822			
11	842.445	2.808			
12	782.286	2.607			
13	774.594	2.582			
14	763.606	2.545			
15	708.665	2.362			
16	699.600	2.332			
17	691.634	2.305			
18	682.843	2.276			
19	678.448	2.261			
20	632.573	2.108			
21	626.529	2.088			
22	598.510	1.995			
23	594.114	1.980			
24	590.269	1.967			
25	586.148	1.954			
26	581.478	1.938			
27	534.229	1.780			
28	520.769	1.736			
29	515.824	1.719			
30	508.682	1.695			
31	498.518	1.661			
32	491.925	1.639			
33	480.113	1.600			
34	470.224	1.567			
35	458.137	1.527			
36	447.973	1.493			
37	402.372	1.341			
38	380.671	1.269			
39	371.605	1.238			

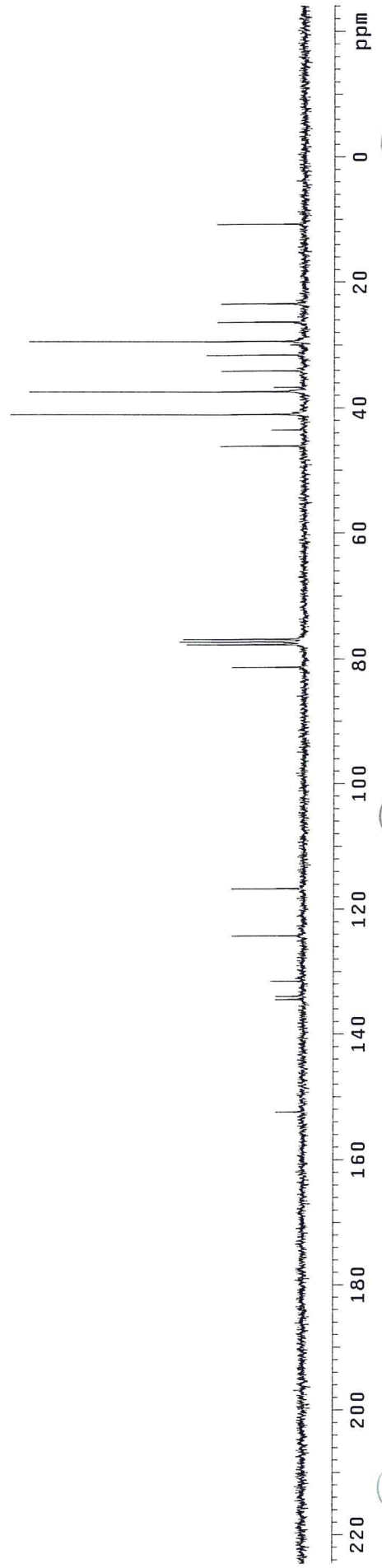
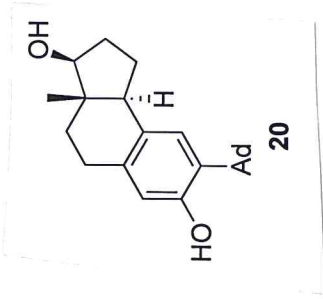


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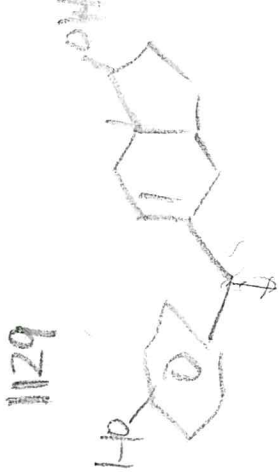




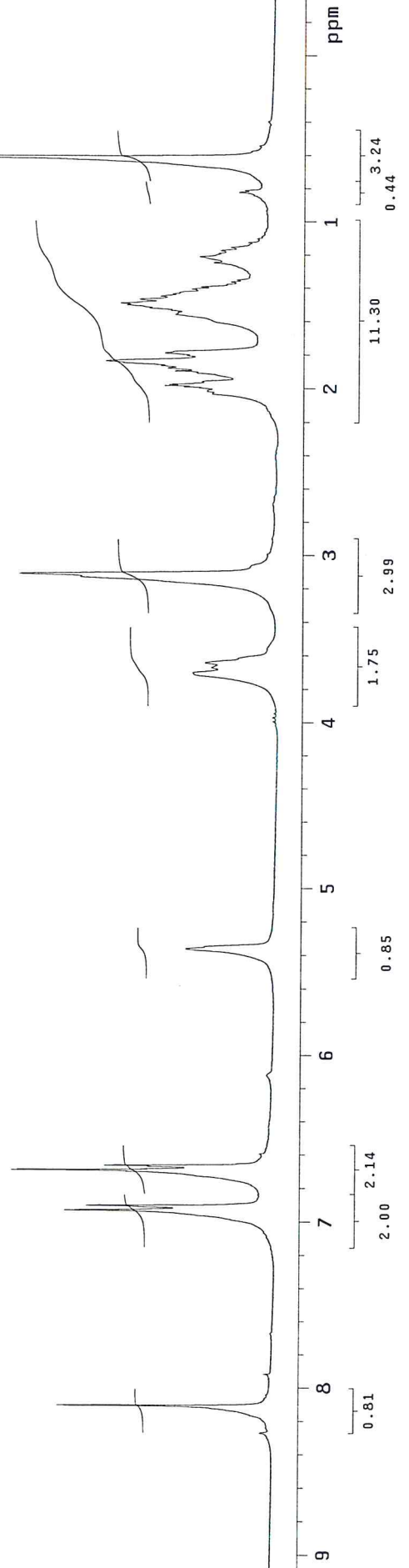
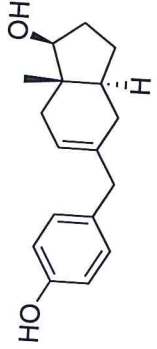
INDEX	FREQUENCY	PPM	HEIGHT
1	11497.775	152.395	4.4
2	10143.009	134.439	4.4
3	10104.073	133.923	4.3
4	9920.842	131.494	5.2
5	9371.148	124.208	11.7
6	8801.986	116.665	11.8
7	6131.392	81.268	11.8
8	5856.545	77.625	19.1
9	5824.480	77.200	20.4
10	5792.415	76.775	19.7
11	3474.540	46.053	13.7
12	3279.857	43.472	5.2
13	3092.045	40.983	47.5
14	2816.053	37.325	44.5
15	2764.520	36.642	4.8
16	2566.401	34.016	13.6
17	2376.298	31.496	16.0
18	2211.390	29.311	44.4
19	1983.497	26.290	14.2
20	1763.619	23.376	13.7
21	805.091	10.671	14.3



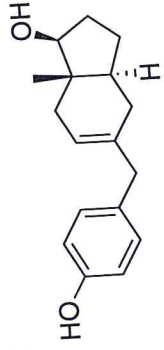
INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2481.533	8.270	40	362.204	1.207
2	2432.087	8.106	41	356.435	1.188
3	2079.643	6.931	42	350.941	1.170
4	2071.128	6.903	43	345.447	1.151
5	2007.397	6.690	44	336.656	1.122
6	2005.199	6.683	45	329.514	1.098
7	2000.804	6.668	46	245.730	0.819
8	1998.881	6.662	47	242.433	0.808
9	1977.729	6.591	48	181.449	0.605
10	1607.979	5.359	49	161.946	0.540
11	1110.218	3.700	50	117.993	0.393
12	1101.153	3.670			
13	1092.637	3.642			
14	932.486	3.108			
15	608.337	2.027			
16	604.217	2.014			
17	597.898	1.993			
18	595.701	1.985			
19	593.778	1.979			
20	591.580	1.972			
21	570.428	1.901			
22	567.681	1.892			
23	562.462	1.875			
24	558.341	1.861			
25	549.551	1.832			
26	539.936	1.799			
27	535.541	1.785			
28	466.591	1.555			
29	455.053	1.517			
30	449.559	1.498			
31	446.263	1.487			
32	439.395	1.464			
33	434.176	1.447			
34	429.780	1.432			
35	420.990	1.403			
36	417.144	1.390			
37	408.079	1.360			
38	404.233	1.347			
39	373.192	1.244			



in acetone-d<sub>6</sub>

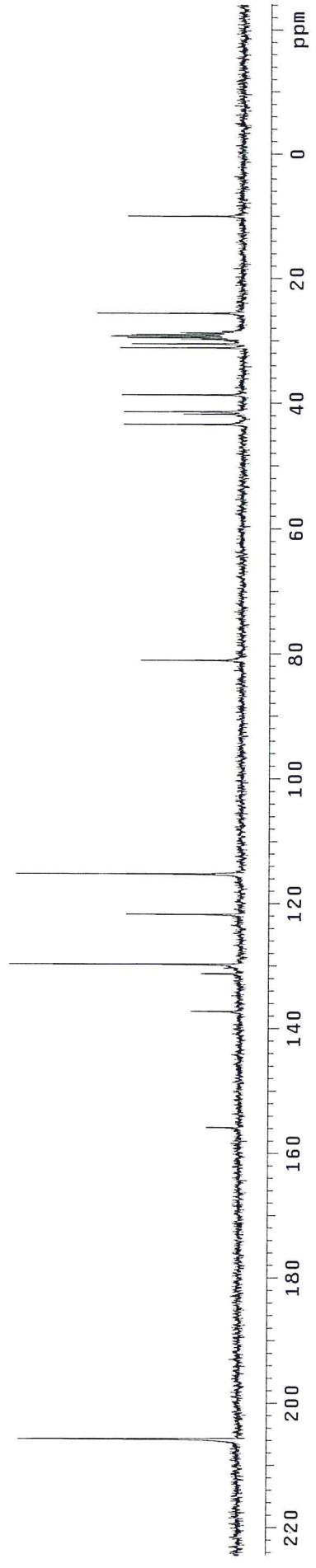


11209



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INDEX	FREQUENCY	PPM	HEIGHT
1	15523.393	205.751	35.2
2	11753.412	155.783	5.3
3	10351.693	137.204	7.8
4	9898.196	131.193	6.2
5	9783.677	129.676	37.0
6	9180.159	121.676	18.2
7	8690.016	115.180	36.0
8	6109.892	80.982	16.1
9	3266.373	43.293	18.9
10	3142.692	41.654	9.4
11	3115.208	41.290	18.9
12	2911.363	38.588	19.3
13	2341.056	31.029	19.5
14	2292.958	30.391	17.7
15	2237.988	29.663	9.8
16	2218.520	29.405	18.5
17	2200.197	29.162	21.0
18	2180.729	28.904	17.8
19	2161.260	28.646	10.0
20	1924.205	25.504	23.2
21	748.090	9.915	18.4



nb

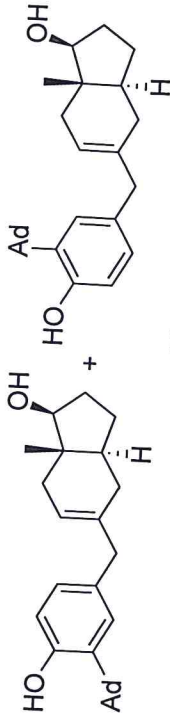
MQ 1130  
C1177) in DMSO-d6

STANDARD 1H OBSERVE

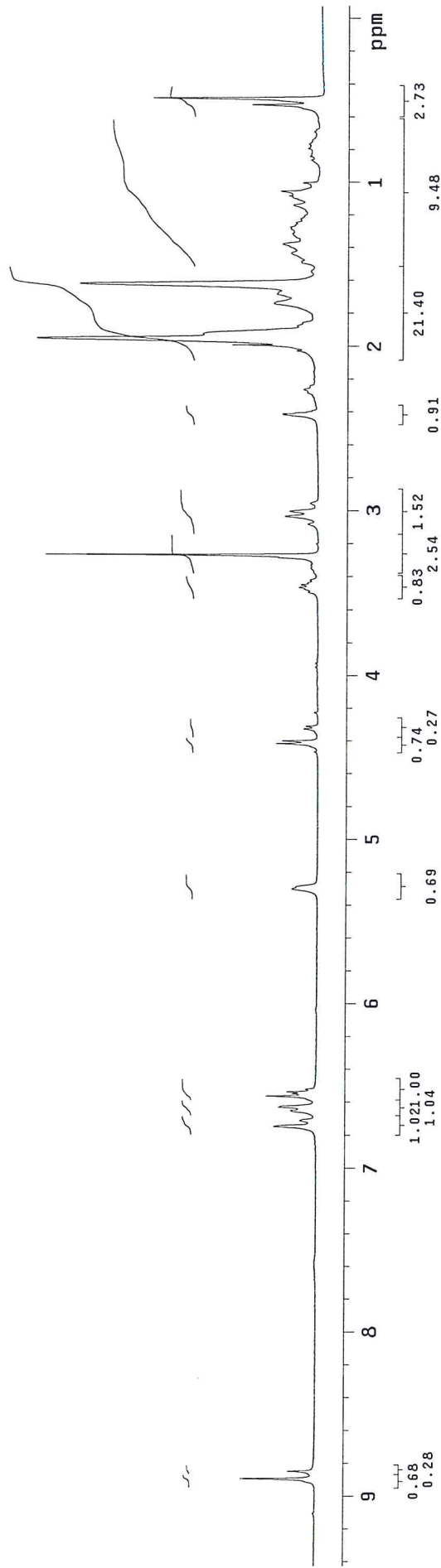
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tn H1 dmm c
at 1.998 dmf 200
np 17984 wtfile PROCESSING
sw 4500.5 wfile
fb 2600 proc ft
bs 16 fn not used
tpwr 49
pw 7.0 werr
dl 1.000 wexp
tof 0 wbs
nt 8 wnt
ct 8
alock n
gain not used
FLAGS n
i1 n
in n
dp y
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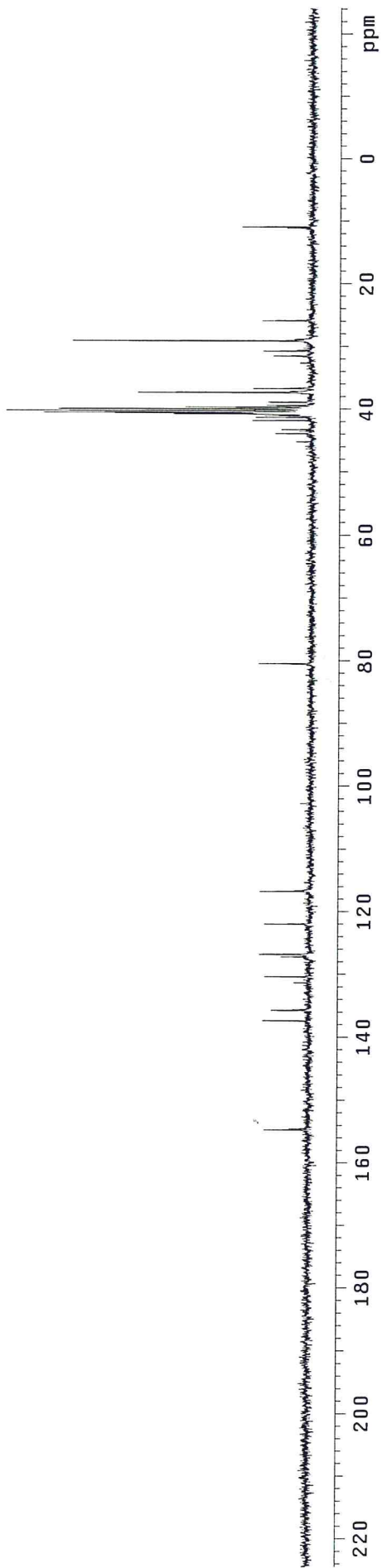
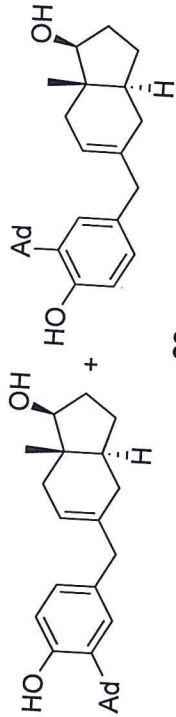
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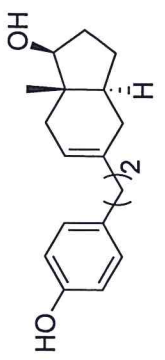
22



INDEX	FREQUENCY	PPM	HEIGHT
1	11672.100	154.705	7.1
2	11654.922	154.478	3.0
3	10363.142	137.356	7.4
4	10238.316	135.701	6.0
5	10226.864	135.550	2.6
6	9907.355	131.315	2.4
7	9835.207	130.359	7.1
8	9595.862	127.186	4.5
9	9568.377	126.822	8.0
10	9562.651	126.746	7.4
11	9200.769	121.950	7.2
12	8805.677	116.713	7.9
13	6067.517	80.421	8.2
14	3406.084	45.145	2.5
15	3308.742	43.855	5.7
16	3278.967	43.460	2.0
17	3258.354	43.187	4.7
18	3150.705	41.760	9.4
19	3114.059	41.275	8.9
20	3093.446	41.001	7.5
21	3072.832	40.728	22.0
22	3063.671	40.607	31.3
23	3052.219	40.455	42.7
24	3031.605	40.182	48.6
25	3010.992	39.909	40.3
26	2989.233	39.620	20.1
27	2968.619	39.347	7.1
28	2929.683	38.831	6.9
29	2814.018	37.298	27.6
30	2767.065	36.675	9.3
31	2456.717	32.562	1.8
32	2373.118	31.454	6.1
33	2314.713	30.680	7.7
34	2192.177	29.056	38.0
35	1949.396	25.838	7.8
36	833.976	11.054	4.0
37	820.234	10.872	11.1

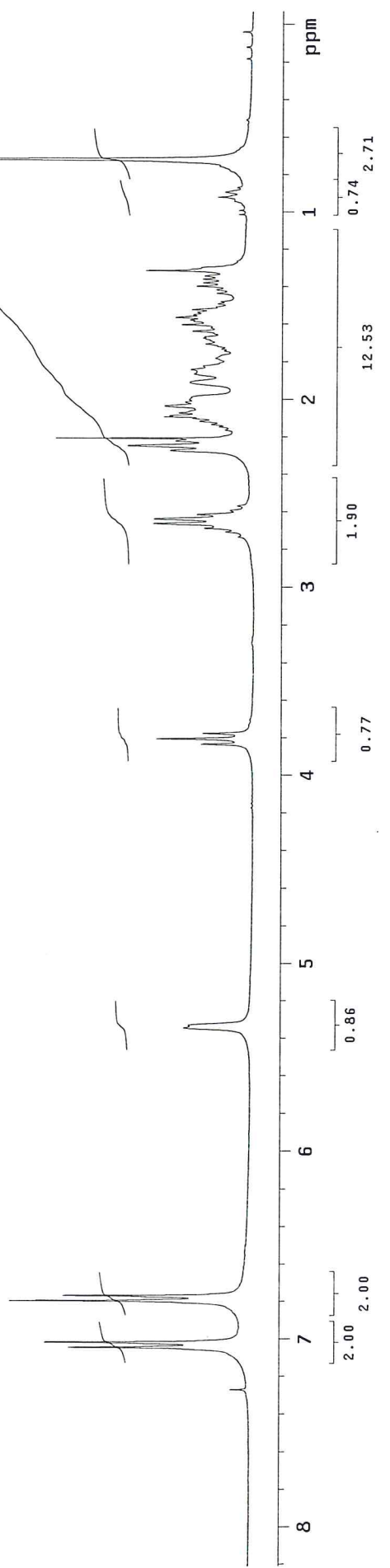


1151

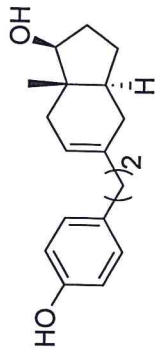


23

INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2181.345	7.270	40	518.571	1.728
2	2114.043	7.046	41	510.880	1.703
3	2105.802	7.018	42	501.540	1.672
4	2039.324	6.797	43	499.617	1.665
5	2031.083	6.769	44	490.552	1.635
6	1603.371	5.344	45	485.607	1.618
7	1599.800	5.332	46	480.113	1.600
8	1149.837	3.832	47	474.894	1.583
9	1141.322	3.804	48	472.696	1.575
10	1132.531	3.775	49	468.575	1.562
11	819.370	2.731	50	464.730	1.549
12	811.404	2.704	51	460.334	1.534
13	805.635	2.685	52	456.214	1.520
14	798.218	2.660	53	452.093	1.507
15	790.801	2.636	54	446.874	1.489
16	783.934	2.613	55	443.578	1.478
17	777.341	2.591	56	430.117	1.433
18	770.199	2.567	57	424.623	1.415
19	681.195	2.270	58	418.580	1.395
20	673.503	2.245	59	413.360	1.378
21	665.537	2.218	60	407.317	1.358
22	661.417	2.204	61	402.372	1.341
23	648.231	2.160	62	393.582	1.312
24	643.286	2.144	63	377.924	1.260
25	639.166	2.130	64	303.205	1.011
26	634.221	2.114	65	296.612	0.989
27	629.826	2.099	66	275.460	0.918
28	627.079	2.090	67	267.219	0.891
29	624.881	2.083	68	260.076	0.867
30	620.761	2.069	69	225.738	0.752
31	609.772	2.032	70	214.750	0.716
32	603.729	2.012	71	11.196	0.037
33	599.883	1.999			
34	572.413	1.908			
35	558.678	1.862			
36	551.810	1.839			
37	546.042	1.820			
38	533.680	1.779			
39	521.868	1.739			

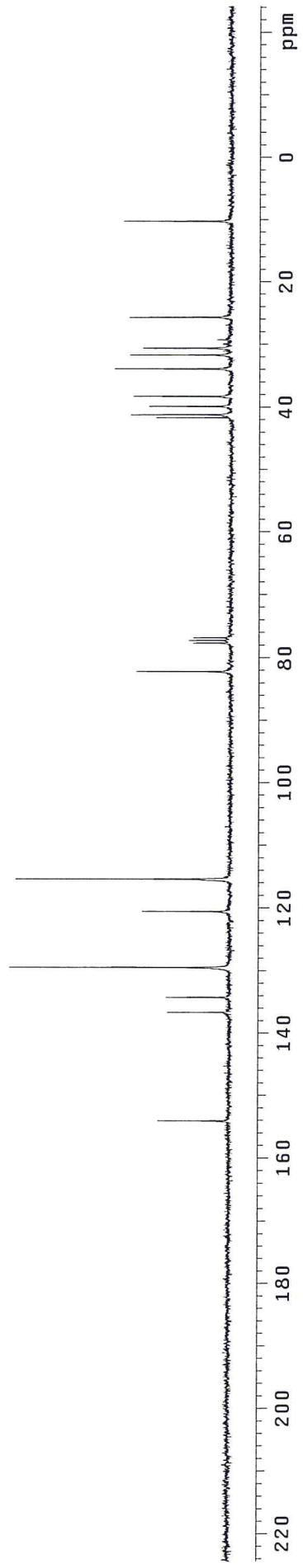


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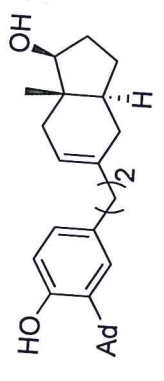


23

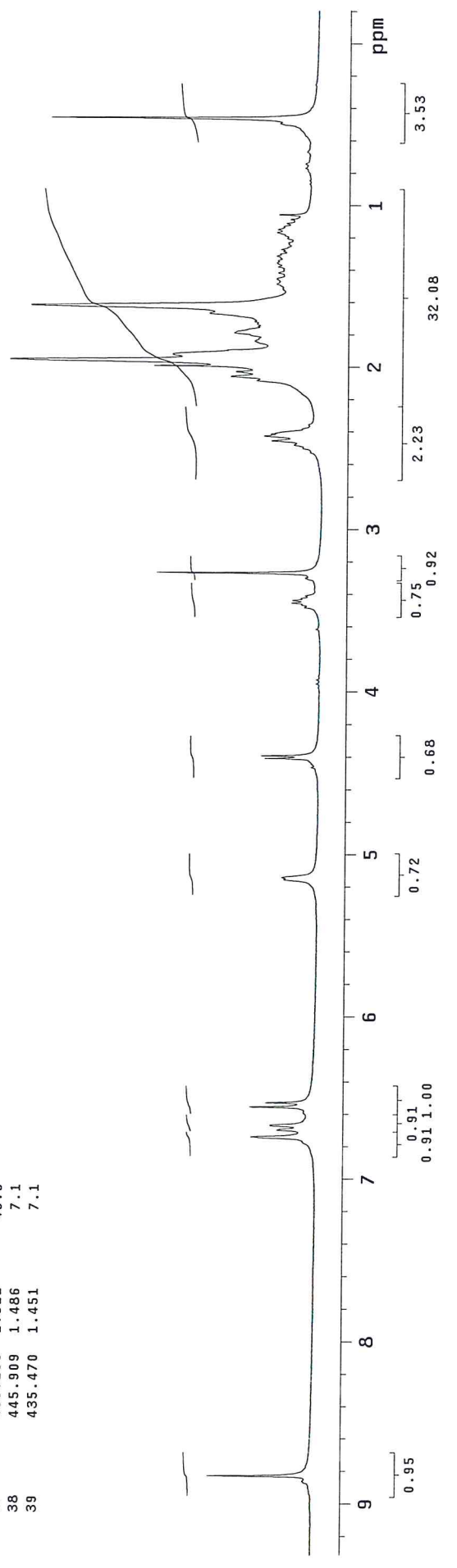
INDEX	FREQUENCY	PPM	HEIGHT
1	11622.602	154.050	11.4
2	10307.918	136.625	9.9
3	10126.977	134.226	10.1
4	9765.096	129.430	35.2
5	9091.721	120.505	14.0
6	8703.500	115.359	34.2
7	6196.669	82.133	14.9
8	5857.691	77.640	5.9
9	5825.626	77.215	6.6
10	5793.560	76.790	5.8
11	3138.999	41.605	11.9
12	3104.643	41.150	16.0
13	3003.866	39.814	13.0
14	2883.620	38.220	15.5
15	2553.804	33.849	18.6
16	2386.606	31.633	16.1
17	2305.297	30.555	14.0
18	1934.254	25.637	16.2
19	768.446	10.185	17.1



1153



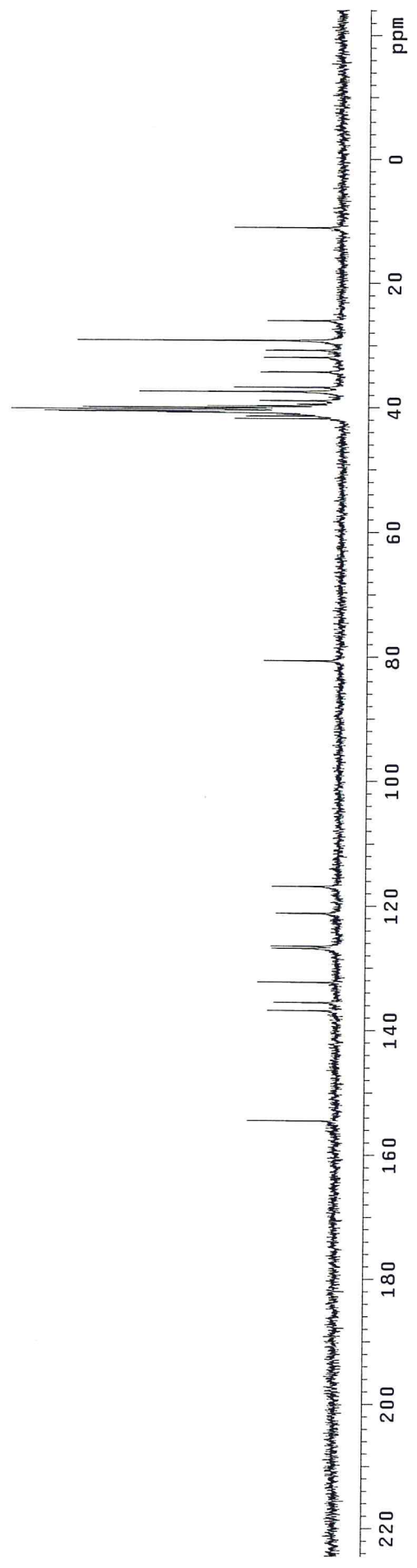
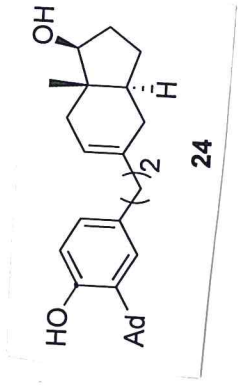
INDEX	FREQUENCY PPM	HEIGHT	INDEX	FREQUENCY PPM	HEIGHT
1	2659.187	8.863	40	424.482	1.415
2	2649.572	8.830	41	413.769	1.379
3	2022.426	6.740	42	406.077	1.353
4	2009.515	6.697	43	401.957	1.340
5	2000.176	6.666	44	393.441	1.311
6	1966.937	6.555	45	385.200	1.284
7	1958.970	6.529	46	381.079	1.270
8	1546.642	5.155	47	368.992	1.230
9	1542.796	5.142	48	349.489	1.165
10	1338.692	4.462	49	344.544	1.148
11	1322.210	4.407	50	332.182	1.107
12	1317.540	4.391	51	332.732	1.109
13	1125.798	3.752	52	325.040	1.083
14	1043.936	3.479	53	316.799	1.056
15	1035.695	3.452	54	259.112	0.864
16	1030.751	3.435	55	253.068	0.843
17	1022.235	3.407	56	230.268	0.767
18	989.545	3.298	57	222.301	0.741
19	980.205	3.267	58	200.050	0.667
20	867.028	2.890	59	147.582	0.492
21	743.687	2.479	60	138.242	0.461
22	735.995	2.453			
23	727.479	2.425			
24	723.359	2.411			
25	721.710	2.405			
26	624.740	2.082			
27	617.598	2.058			
28	608.258	2.027			
29	597.820	1.992			
30	587.106	1.957			
31	575.843	1.919			
32	550.846	1.836			
33	536.561	1.788			
34	524.199	1.747			
35	515.134	1.717			
36	499.751	1.666			
37	486.290	1.621			
38	445.909	1.486			
39	435.470	1.451			





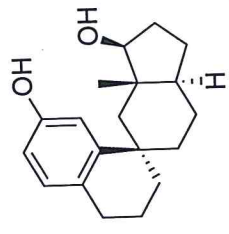
1153

INDEX	FREQUENCY	PPM	HEIGHT
1	11653.777	154.462	14.2
2	10320.770	136.794	11.1
3	10223.428	135.504	10.0
4	9978.357	132.256	12.6
5	9564.941	126.776	10.4
6	9538.602	126.427	10.6
7	9138.929	121.130	9.8
8	8810.258	116.774	10.4
9	6077.823	80.557	12.0
10	3144.979	41.684	17.0
11	3115.204	41.290	15.1
12	3093.446	41.001	10.3
13	3072.832	40.728	29.4
14	3061.380	40.576	45.2
15	3052.219	40.455	47.6
16	3031.605	40.182	53.0
17	3009.846	39.893	41.4
18	2989.233	39.620	21.4
19	2968.619	39.347	6.9
20	2927.392	38.800	12.9
21	2817.454	37.343	32.3
22	2764.775	36.645	17.1
23	2578.108	34.171	12.8
24	2400.603	31.818	12.3
25	2314.713	30.680	12.0
26	2195.613	29.101	42.3
27	1955.122	25.914	11.7
28	825.960	10.948	17.2

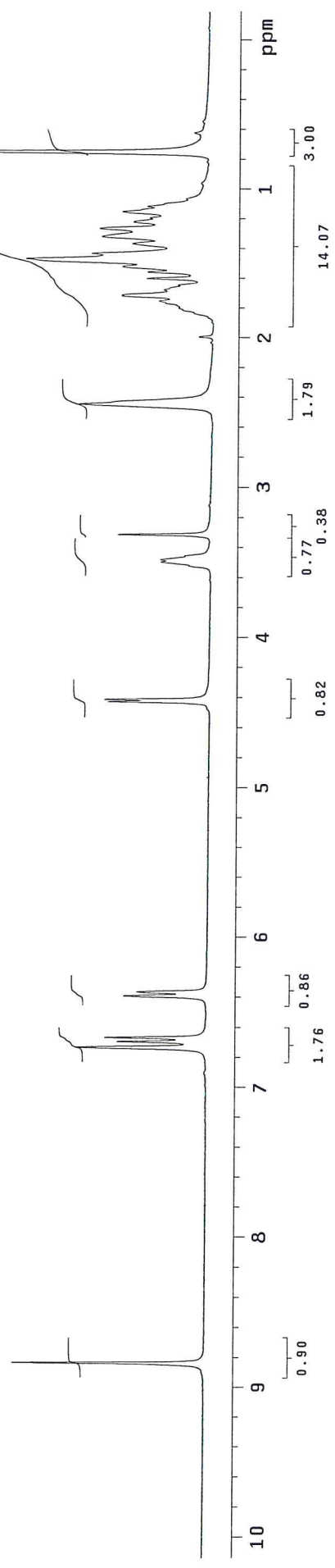


1169

INDEX	FREQUENCY	PPM	HEIGHT
1	2652.044	8.839	31.1
2	2020.504	6.734	21.2
3	2008.966	6.695	14.4
4	2001.000	6.669	16.4
5	1917.765	6.392	13.4
6	1909.798	6.365	11.3
7	1328.253	4.427	16.3
8	1324.133	4.413	16.8
9	1048.881	3.496	7.8
10	1043.936	3.479	7.9
11	993.941	3.313	14.8
12	733.797	2.446	21.1
13	525.298	1.751	8.3
14	515.134	1.717	14.3
15	514.310	1.714	14.4
16	503.047	1.677	7.6
17	493.433	1.645	5.3
18	480.247	1.601	10.4
19	467.061	1.557	10.2
20	456.348	1.521	14.3
21	441.239	1.471	29.8
22	430.251	1.434	19.2
23	409.923	1.366	12.6
24	395.639	1.319	17.6
25	379.156	1.264	18.0
26	366.795	1.222	12.5
27	357.730	1.192	9.9
28	345.917	1.153	14.3
29	335.204	1.117	10.3
30	318.997	1.063	4.0
31	225.873	0.753	81.1

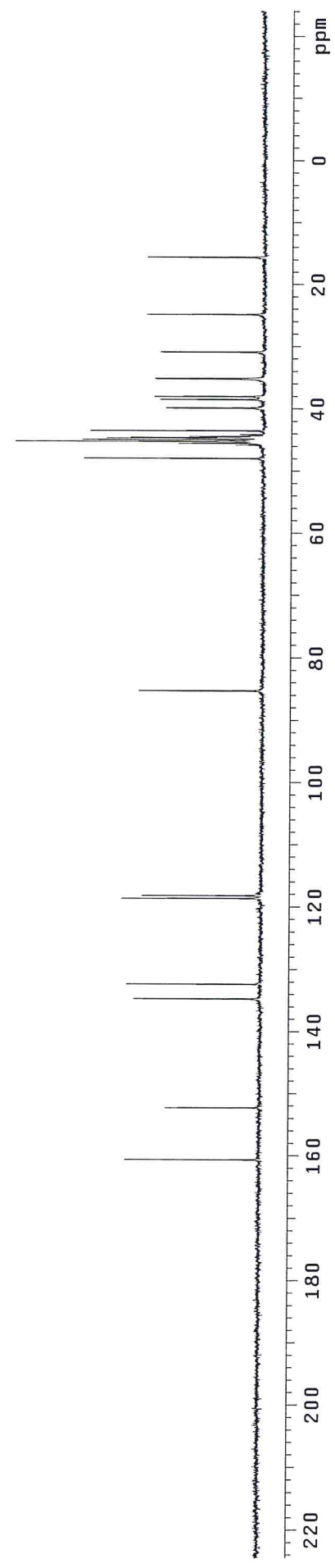
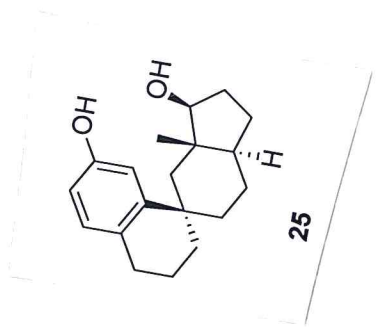


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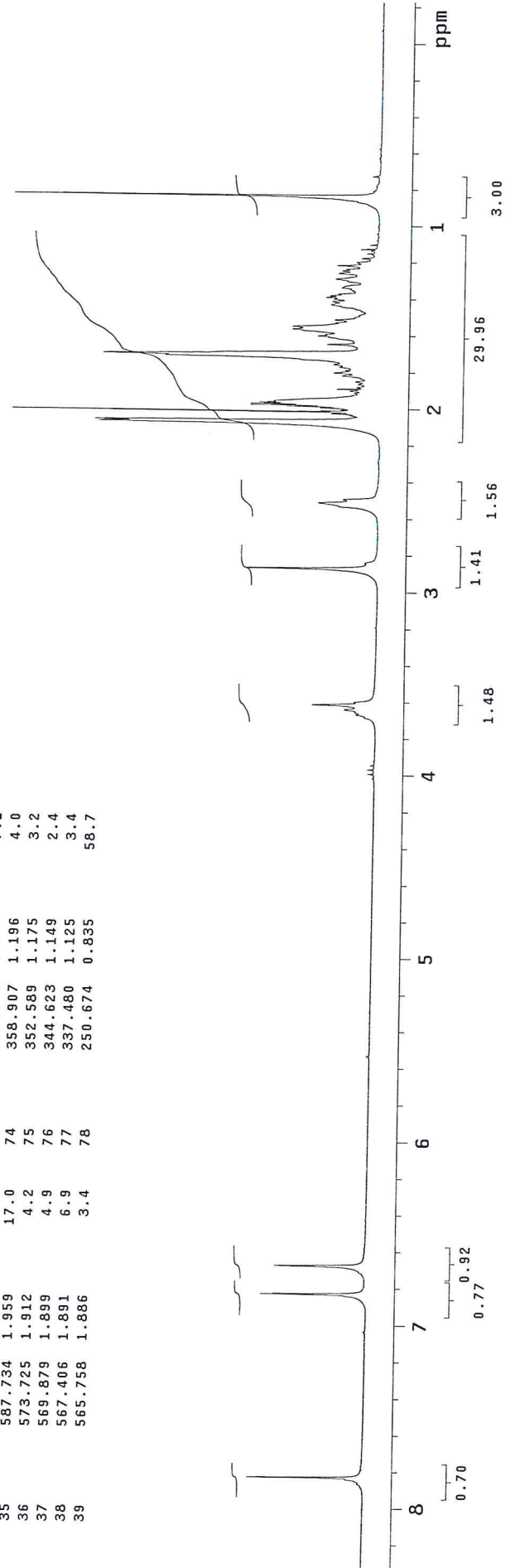
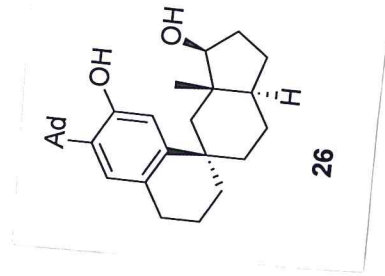
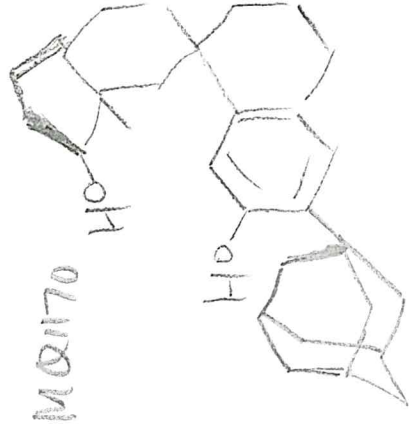


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INDEX	FREQUENCY	PPM	HEIGHT
1	12119.843	160.641	21.7
2	11488.841	152.277	15.2
3	10162.705	134.700	20.5
4	9984.055	132.332	21.6
5	8948.799	118.610	22.5
6	8915.588	118.170	19.2
7	6430.516	85.232	19.8
8	3613.336	47.892	28.9
9	3430.105	45.464	13.6
10	3409.492	45.191	39.9
11	3387.733	44.902	29.2
12	3367.120	44.629	25.3
13	3357.958	44.508	21.3
14	3346.506	44.356	11.9
15	3277.794	43.445	27.9
16	3002.948	39.802	15.7
17	2901.025	38.451	16.6
18	2864.379	37.965	17.6
19	2653.663	35.173	17.3
20	2646.792	35.081	17.5
21	2326.137	30.831	16.6
22	1869.205	24.775	18.8
23	1171.781	15.531	18.7



INDEX	FREQUENCY	PPM	HEIGHT	INDEX	FREQUENCY	PPM	HEIGHT	INDEX	FREQUENCY	PPM	HEIGHT
1	2350.225	7.833	18.5	40	564.659	1.892	3.8				
2	2049.701	6.831	16.8	41	559.165	1.864	3.5				
3	2003.551	6.677	14.6	42	555.045	1.850	3.9				
4	1100.329	3.667	3.0	43	545.156	1.817	6.0				
5	1092.088	3.640	4.9	44	540.760	1.802	7.4				
6	1084.122	3.613	10.1	45	536.640	1.789	5.6				
7	1079.726	3.598	3.4	46	531.146	1.770	6.5				
8	861.063	2.870	21.0	47	526.750	1.756	7.5				
9	753.929	2.513	9.5	48	514.114	1.713	34.3				
10	748.161	2.493	5.6	49	511.367	1.704	44.2				
11	623.171	2.077	44.6	50	494.061	1.647	8.6				
12	620.424	2.068	45.3	51	489.666	1.632	4.4				
13	613.007	2.043	3.9	52	480.326	1.601	10.1				
14	612.458	2.041	4.0	53	478.128	1.593	8.9				
15	610.535	2.035	4.6	54	469.338	1.564	14.1				
16	609.985	2.033	4.8	55	467.140	1.557	12.9				
17	609.436	2.031	5.0	56	464.942	1.550	14.1				
18	608.062	2.027	7.8	57	458.624	1.528	7.3				
19	607.513	2.025	7.6	58	453.954	1.513	7.4				
20	606.964	2.023	7.4	59	446.263	1.487	3.6				
21	606.414	2.021	7.3	60	429.231	1.431	8.0				
22	604.766	2.016	58.6	61	423.462	1.411	7.7				
23	604.217	2.014	13.0	62	419.616	1.398	7.6				
24	603.667	2.012	9.4	63	417.144	1.390	8.8				
25	603.118	2.010	6.5	64	414.397	1.381	8.1				
26	602.294	2.007	5.8	65	411.375	1.371	6.9				
27	601.744	2.005	6.3	66	406.705	1.355	4.7				
28	601.195	2.004	6.1	67	403.409	1.344	5.0				
29	600.645	2.002	5.8	68	401.211	1.337	6.3				
30	598.448	1.994	9.5	69	386.927	1.290	7.4				
31	596.250	1.987	14.9	70	377.312	1.258	6.8				
32	594.053	1.980	20.6	71	373.192	1.244	6.3				
33	591.855	1.973	20.6	72	370.719	1.236	5.7				
34	589.657	1.965	19.2	73	364.401	1.214	7.1				
35	587.734	1.959	17.0	74	358.907	1.196	4.0				
36	573.725	1.912	4.2	75	352.589	1.175	3.2				
37	569.879	1.899	4.9	76	344.623	1.149	2.4				
38	567.406	1.891	6.9	77	337.480	1.125	3.4				
39	565.758	1.886	3.4	78	250.674	0.835	58.7				



INDEX	FREQUENCY PPM	HEIGHT
1	15501.634	205.463
2	11628.586	154.128
3	9625.640	127.581
4	9559.219	126.700
5	8663.676	114.831
6	6107.602	80.952
7	3248.050	43.051
8	3064.819	40.622
9	3030.463	40.167
10	3005.269	39.833
11	2870.136	38.042
12	2804.860	37.176
13	2732.713	36.220
14	2623.919	34.778
15	2527.723	33.503
16	2504.819	33.200
17	2290.667	30.361
18	2275.780	30.164
19	2252.876	29.860
20	2233.408	29.602
21	2213.939	29.344
22	2211.649	29.314
23	2195.616	29.101
24	2176.148	28.843
25	2156.680	28.585
26	2137.211	28.327
27	1945.964	25.792
28	1510.790	20.024
29	737.783	9.779

