

YG5-145f1

Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-400 "fid"

PULSE SEQUENCE

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

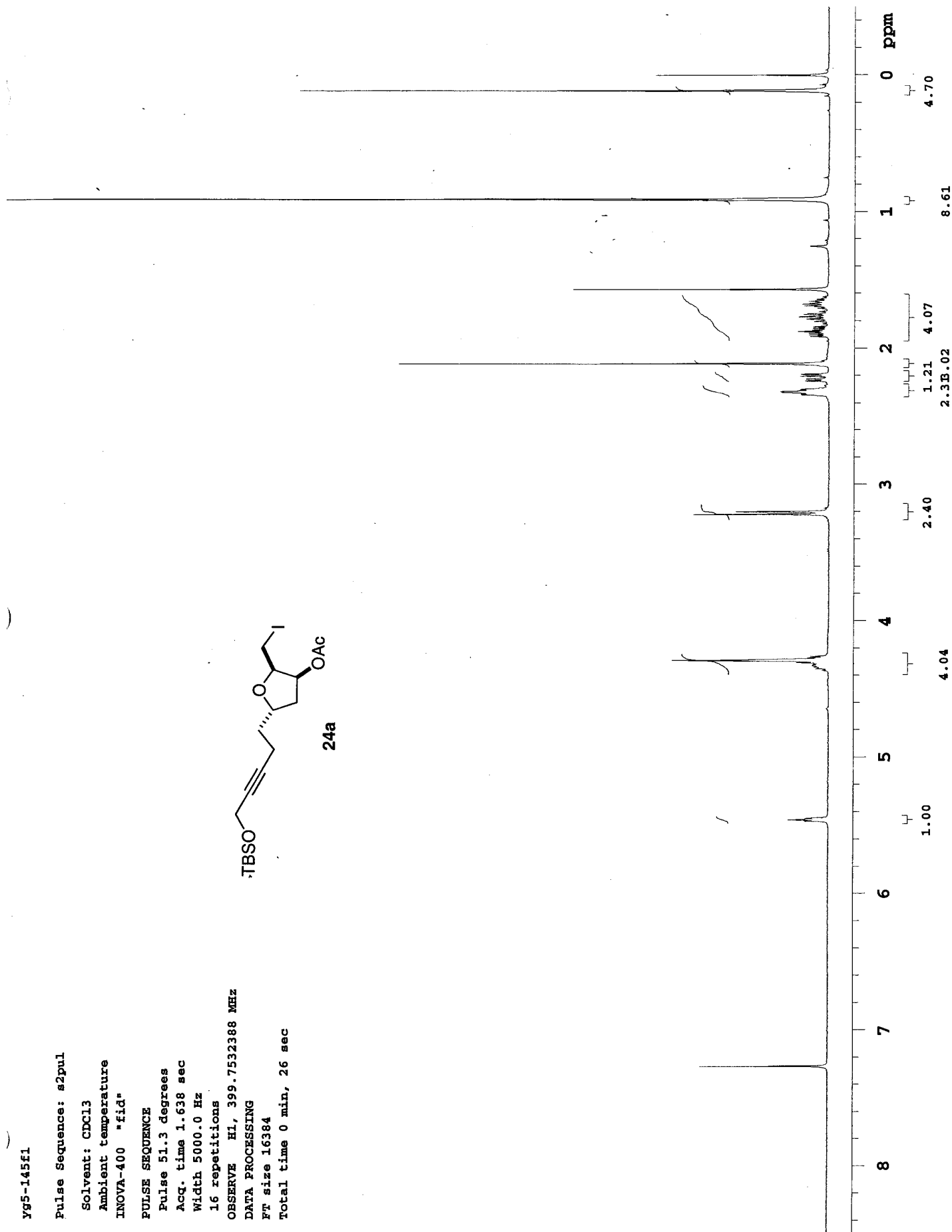
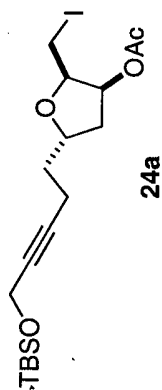
16 repetitions

OBSERVE H1, 399.7532388 MHz

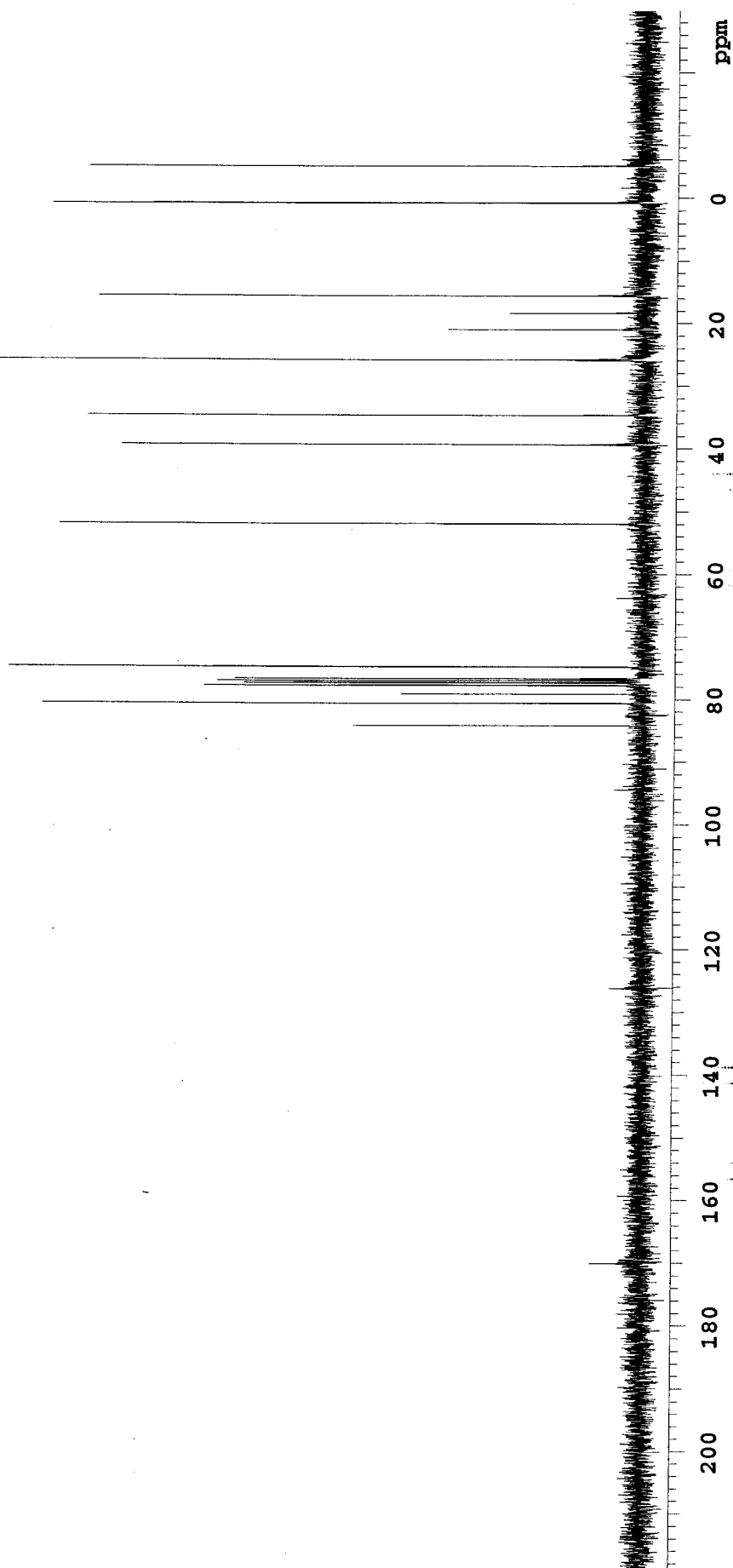
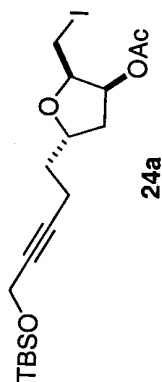
DATA PROCESSING

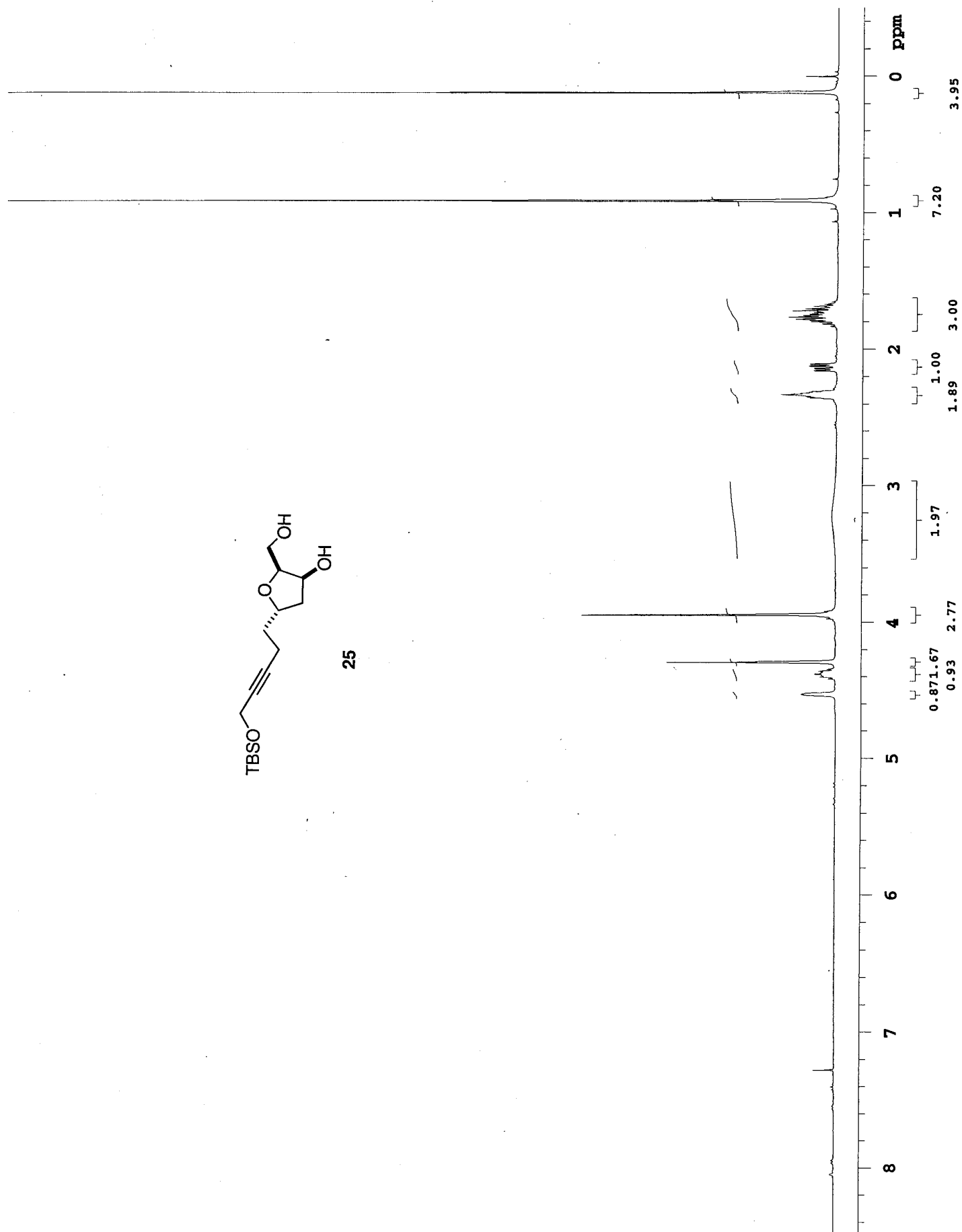
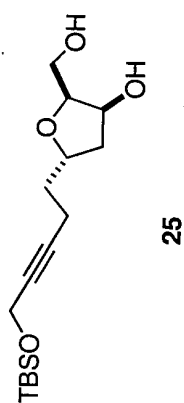
Ft size 16384

Total time 0 min, 26 sec



INDEX	FREQUENCY	PPM	HEIGHT
1	17093.812	170.057	8.0
2	8464.703	84.211	45.9
3	8103.822	80.621	95.3
4	7952.755	79.118	38.4
5	7815.422	77.751	69.6
6	7771.933	77.319	63.2
7	7739.889	77.000	67.5
8	7707.844	76.681	64.7
9	7517.866	74.791	100.6
10	5219.060	51.922	92.8
11	3954.830	39.344	82.9
12	3486.371	34.684	88.4
13	2596.757	25.834	168.6
14	2105.409	20.946	31.5
15	1839.135	18.297	21.7
16	1563.705	15.556	86.7
17	74.402	0.740	94.2
18	-516.131	-5.135	88.3

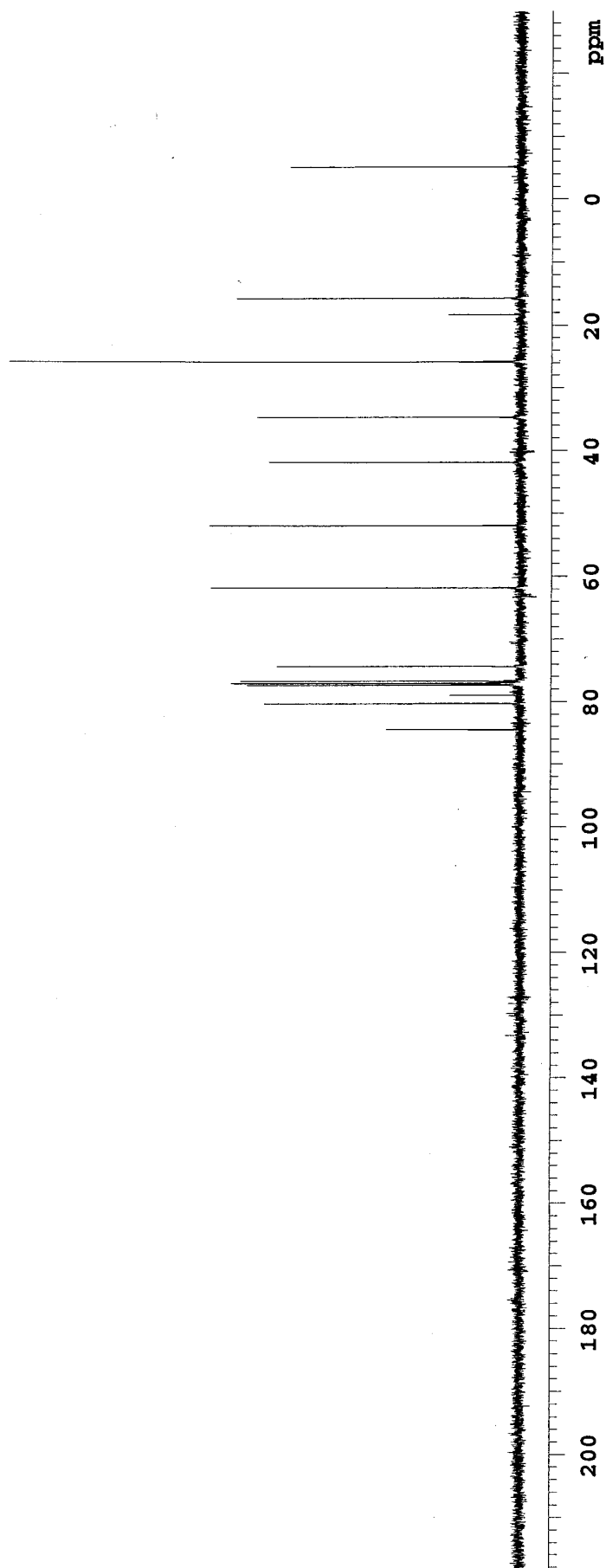




INDEX	FREQUENCY	PPM	HEIGHT
1	8490.644	84.469	21.2
2	8067.963	80.264	40.4
3	7935.207	78.943	11.3
4	7771.933	77.319	43.1
5	7748.281	77.083	45.2
6	7739.889	77.000	45.6
7	7707.844	76.681	44.1
8	7471.326	74.328	38.5
9	6213.200	61.812	48.8
10	5220.586	51.937	49.1
11	4209.660	41.880	39.8
12	3485.608	34.676	41.6
13	2595.231	25.819	80.8
14	1839.135	18.297	11.6
15	1577.439	15.693	44.9
16	-518.420	-5.157	36.5



25



yg6-29f1

Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

File: yg6-29f1

INOVA-400 "fid"

PULSE SEQUENCE

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

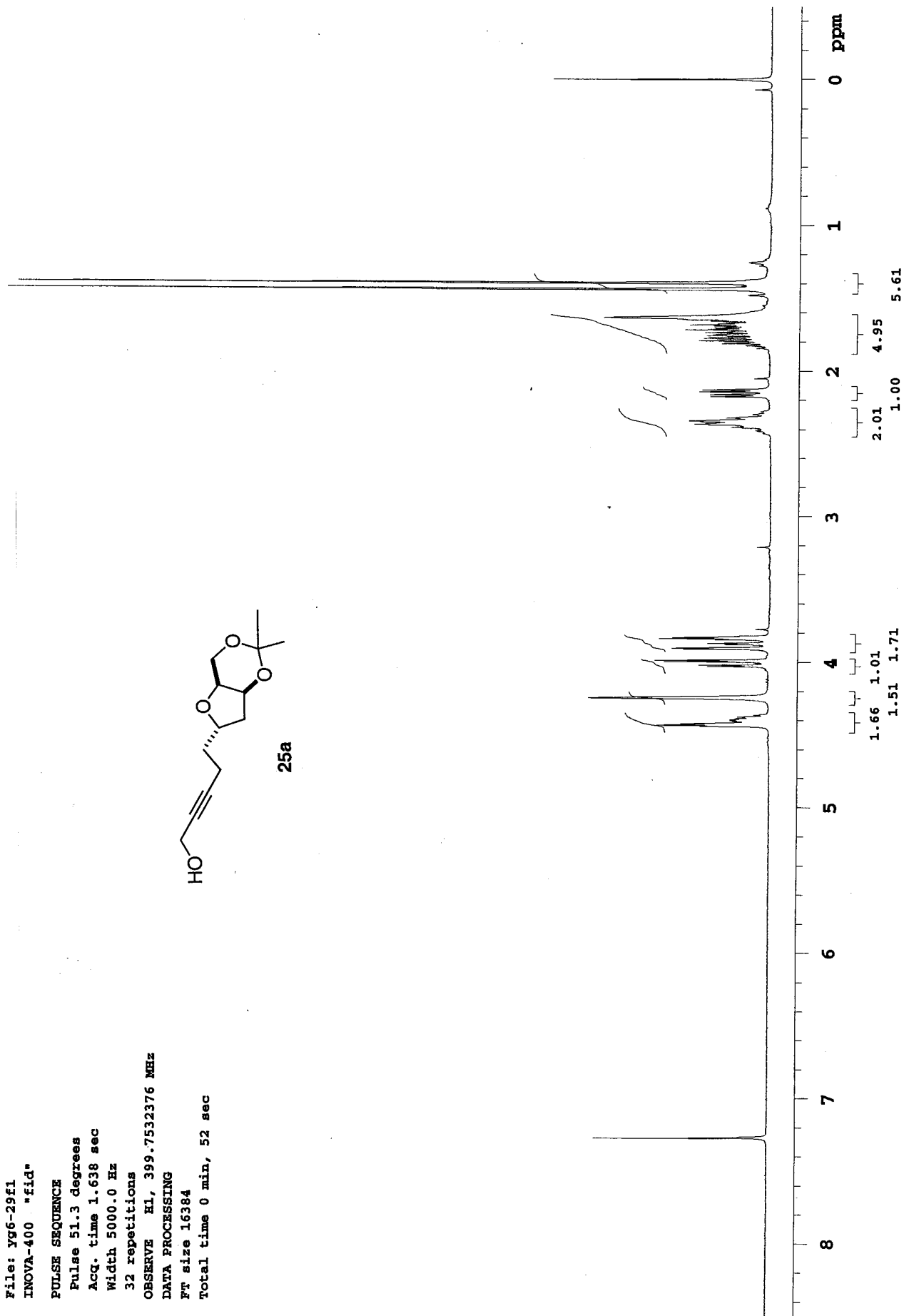
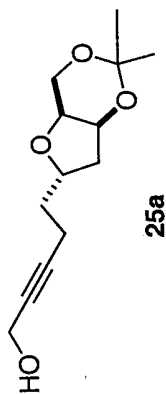
32 repetitions

OBSERVE H1, 399.7532376 MHz

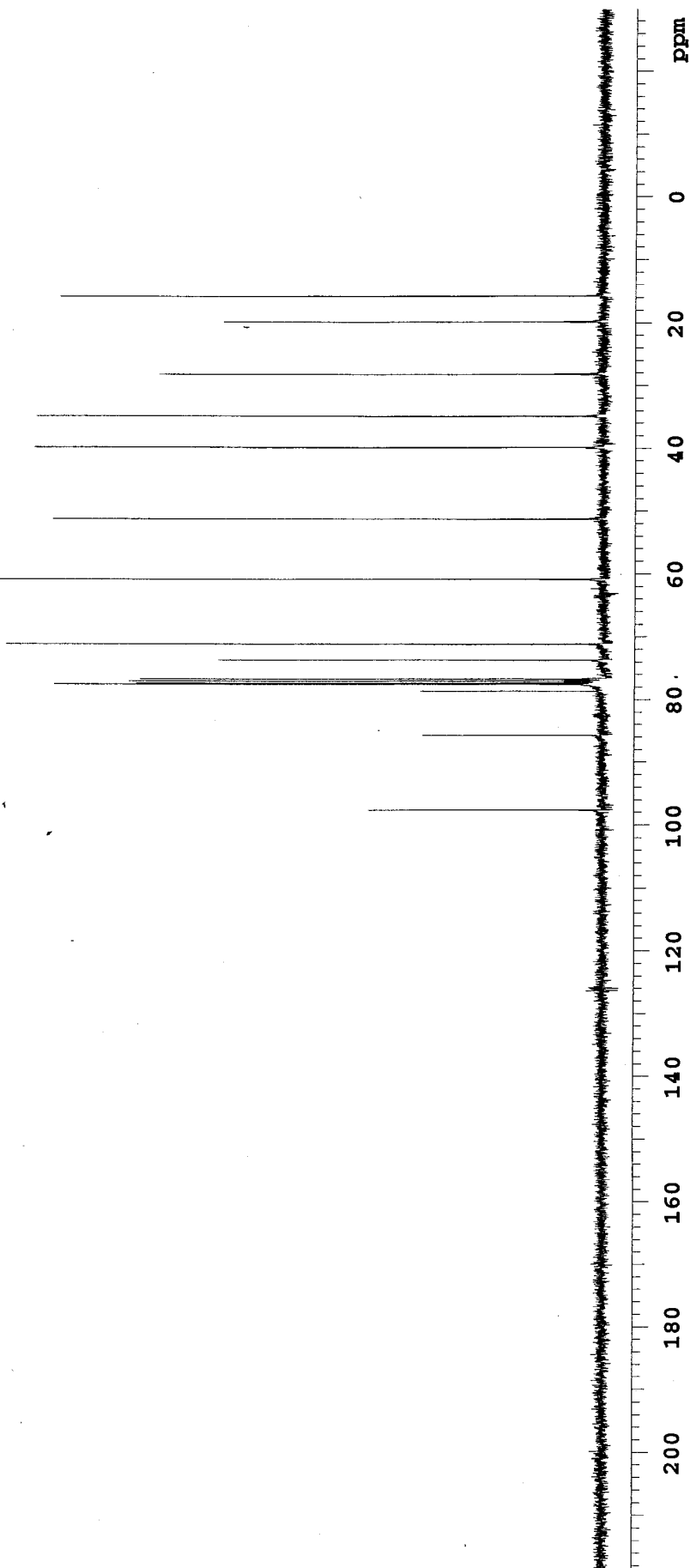
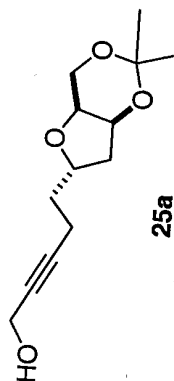
DATA PROCESSING

Ft size 16384

Total time 0 min, 52 sec



INDEX	FREQUENCY	PPM	HEIGHT
1	9809.807	97.593	37.0
2	8612.718	85.683	28.5
3	7903.163	78.624	28.9
4	7791.770	77.516	86.8
5	7771.933	77.319	73.7
6	7739.889	77.000	74.9
7	7707.844	76.681	73.1
8	7404.185	73.660	60.8
9	7150.118	71.133	94.4
10	6114.015	60.825	123.2
11	5149.630	51.231	87.1
12	4005.949	39.853	90.0
13	3504.683	34.866	89.6
14	2830.986	28.164	70.2
15	1993.253	19.830	60.0
16	1582.779	15.746	85.9



Yg6-101f1

Pulse Sequence: s2pul

Solvent: CDCl₃

Ambient temperature

File: Yg6-101f1

INNOVA-500 "gamble"

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

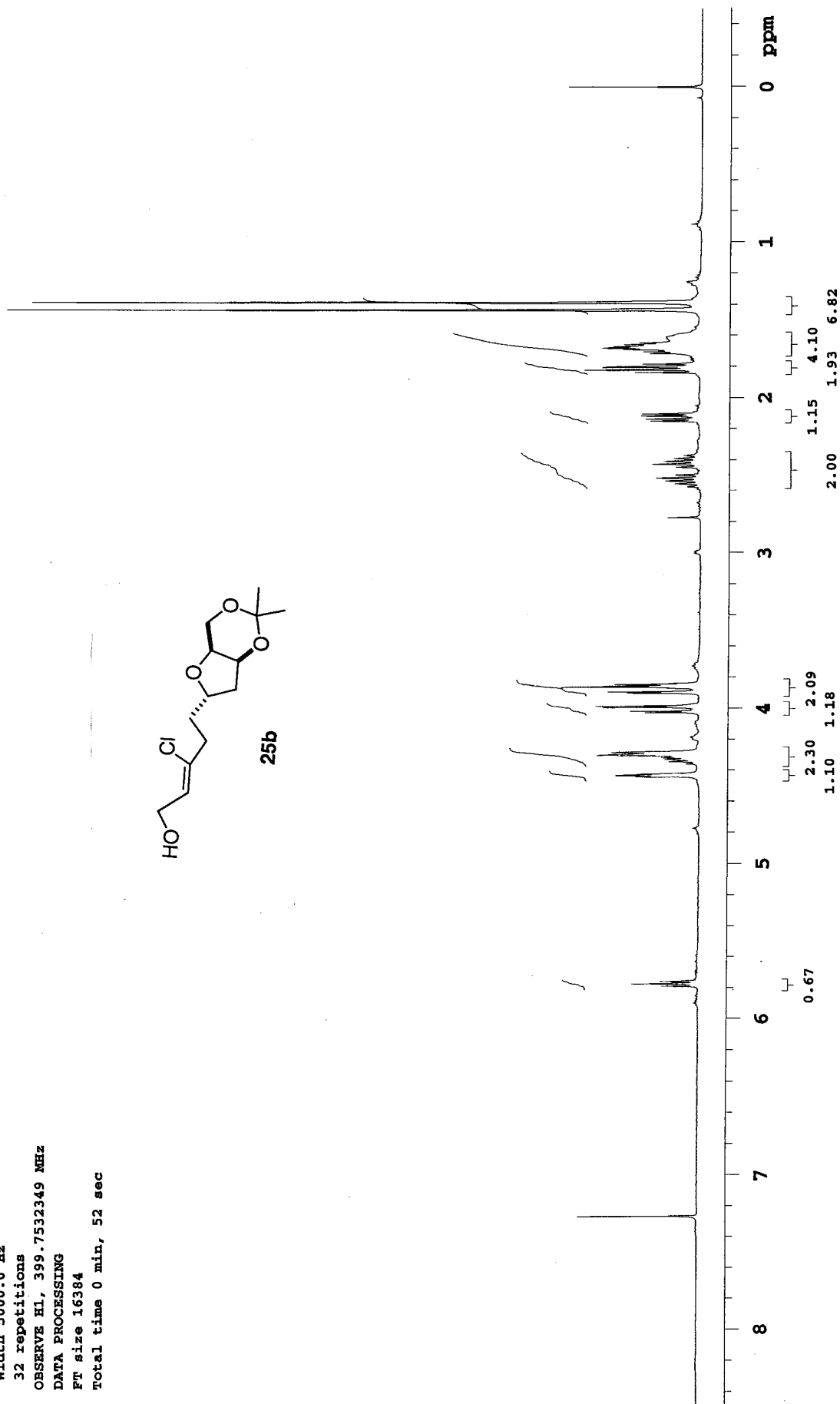
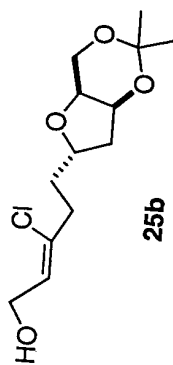
32 repetitions

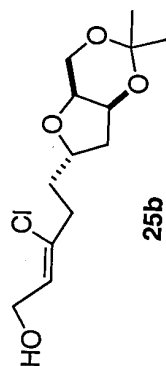
OBSERVE H1, 399.7532349 MHz

DATA PROCESSING

FT size 16384

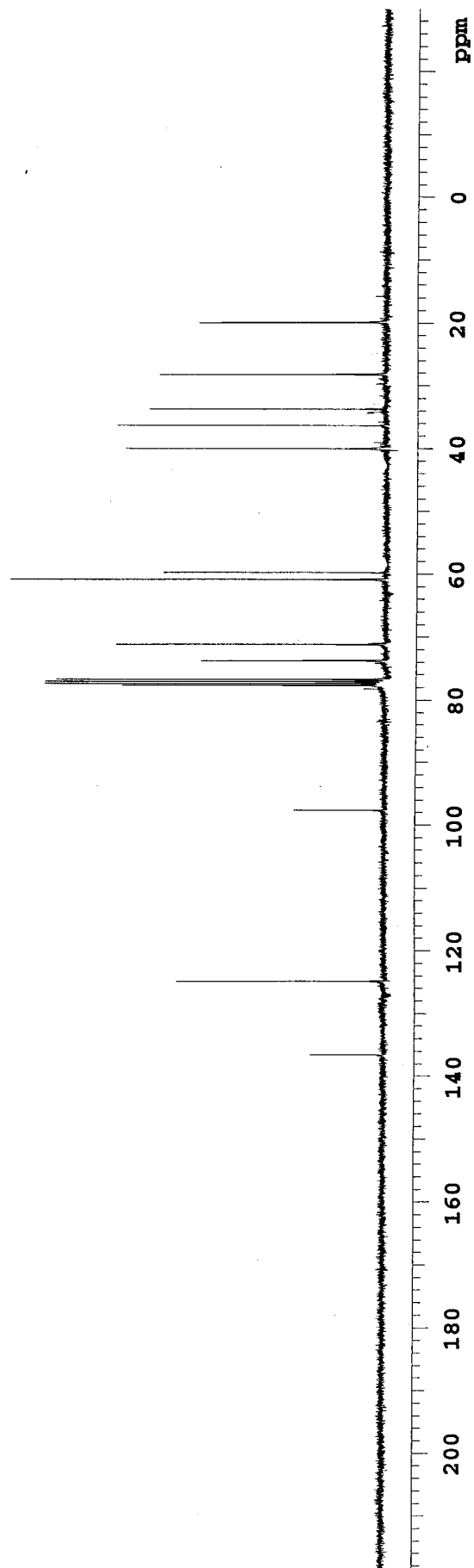
Total time 0 min, 52 sec





25b

INDEX	FREQUENCY	PPM	HEIGHT
1	13724.568	136.538	11.5
2	12545.028	124.804	32.7
3	9810.570	97.600	14.3
4	7803.215	77.630	41.4
5	7771.933	77.319	53.4
6	7739.889	77.000	53.3
7	7707.844	76.681	51.6
8	7408.000	73.698	29.0
9	7147.830	71.110	42.4
10	6116.304	60.848	58.9
11	6003.385	59.724	34.9
12	4019.682	39.990	41.0
13	3647.357	36.286	42.3
14	3384.134	33.667	37.3
15	2830.223	28.156	35.7
16	1997.068	19.868	29.5



Y98-83f1

Pulse Sequence: s2pul

Solvent: CDCl₃

Ambient temperature

INOVA-500 "cosy"

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

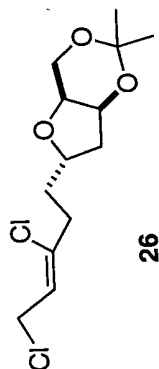
16 repetitions

OBSERVE H1, 399.7532388 MHz

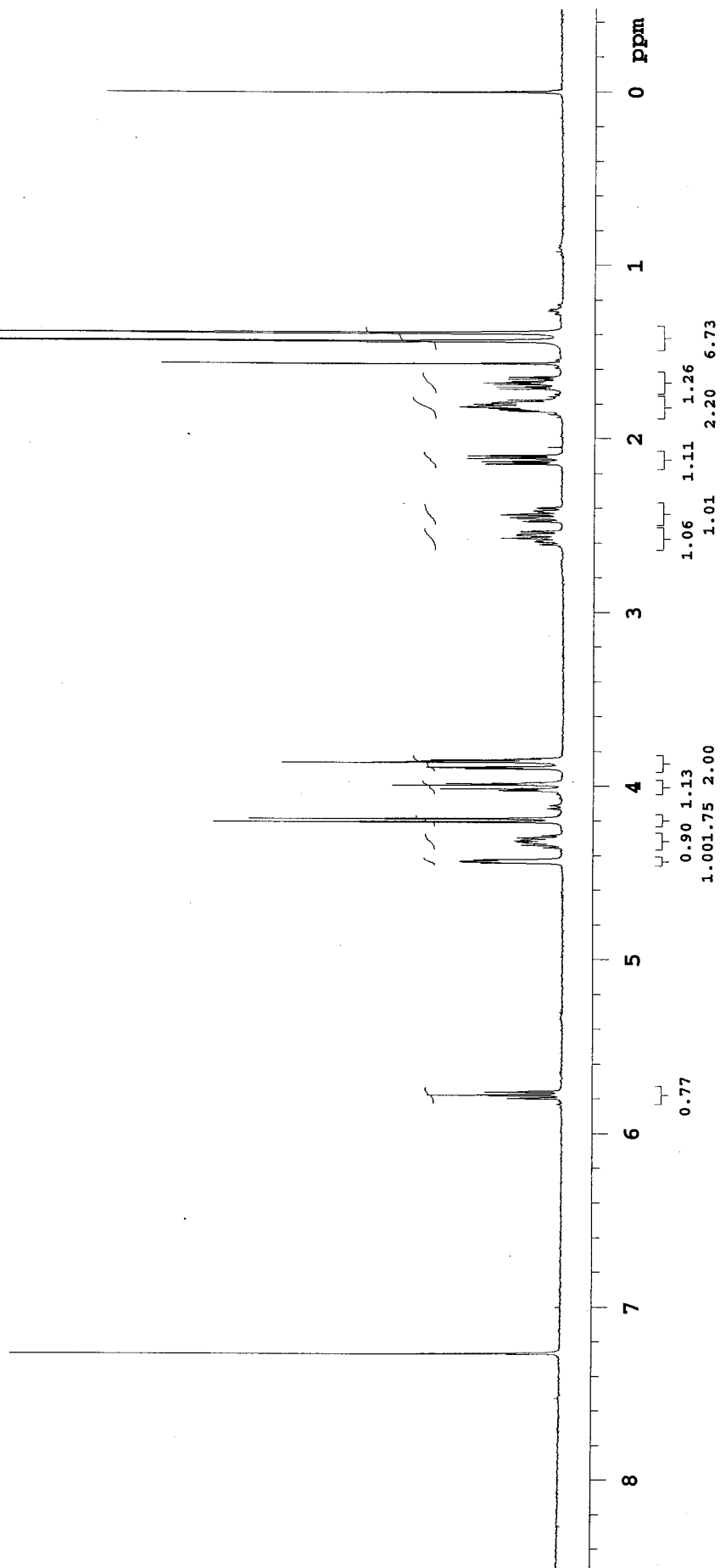
DATA PROCESSING

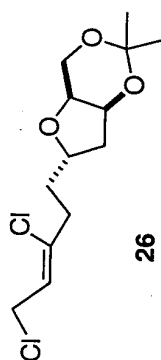
Ft size 16384

Total time 0 min, 26 sec



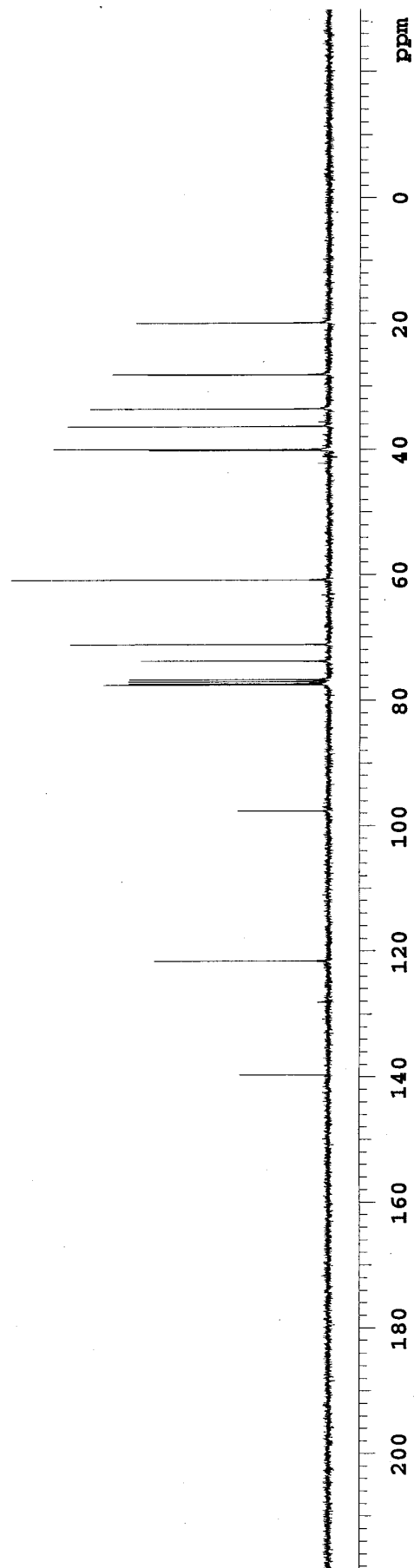
26





26

INDEX	FREQUENCY	PPM	HEIGHT
1	14034.331	139.620	14.2
2	12315.428	121.525	27.6
3	9807.518	97.570	14.4
4	7787.955	77.478	35.5
5	7771.933	77.319	31.6
6	7739.889	77.000	31.6
7	7707.844	76.681	31.5
8	7411.815	73.736	29.6
9	7144.778	71.080	40.7
10	6113.252	60.817	50.0
11	4036.468	40.157	28.4
12	4018.919	39.982	43.4
13	3650.408	36.316	41.2
14	3372.690	33.553	37.7
15	2826.409	28.118	34.2
16	1999.357	19.891	30.5



YG6-131f2

Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

INOVA-400 "fid"

PULSE SEQUENCE

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

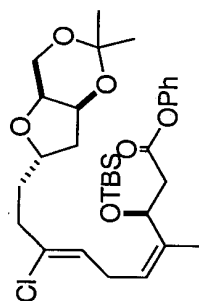
64 repetitions

OBSERVE H1, 399.7532376 MHz

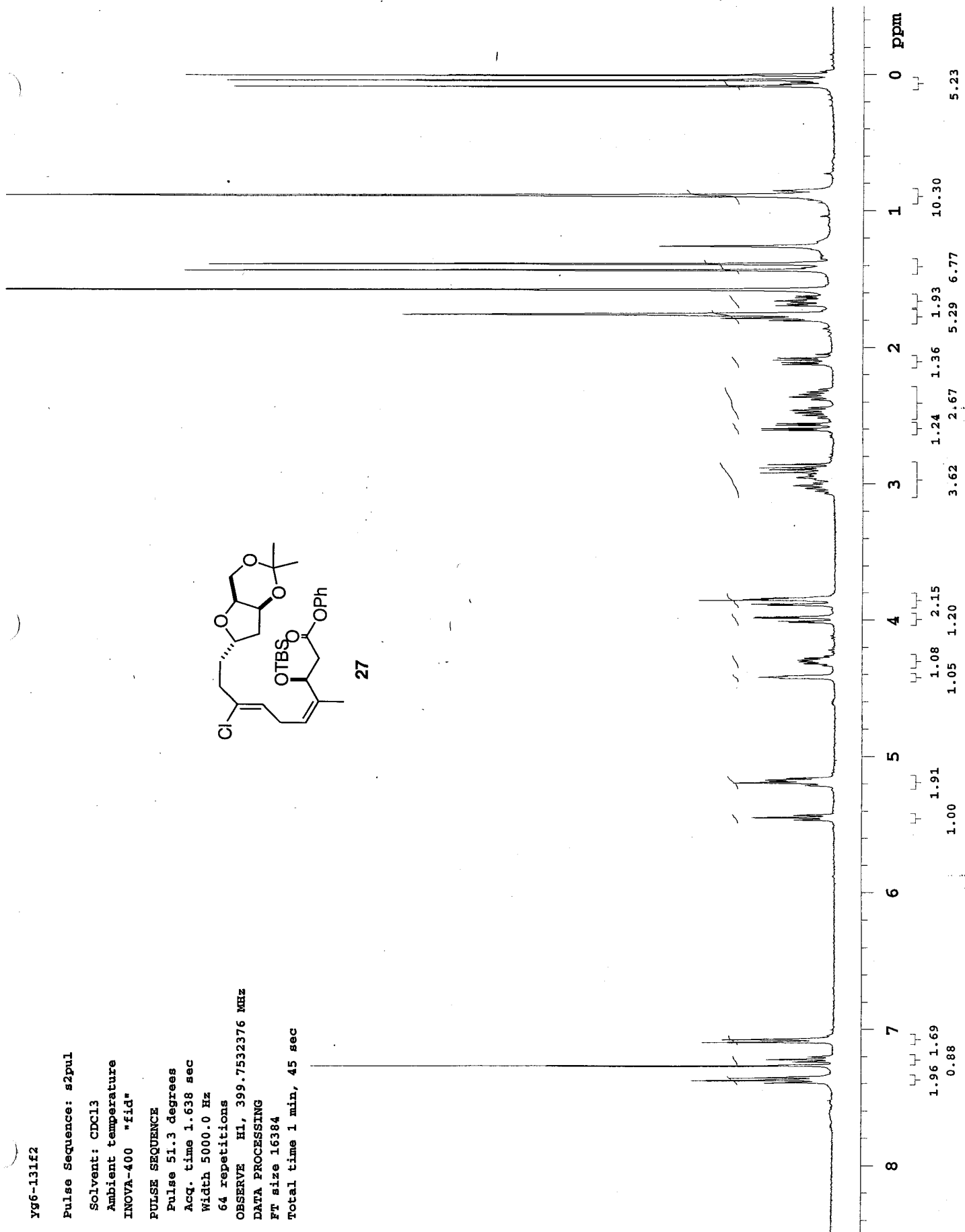
DATA PROCESSING

Ft size 16384

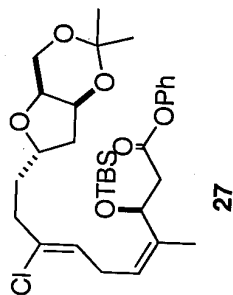
Total time 1 min, 45 sec



27



INDEX	FREQUENCY PPM	HEIGHT
1	17032.012	14.7
2	15149.783	10.5
3	13830.620	25.0
4	13544.509	17.2
5	13001.280	87.7
6	12633.531	44.3
7	12406.169	40.1
8	12378.702	39.0
9	12216.191	91.9
10	9810.569	25.4
11	7814.659	37.9
12	7771.933	86.8
13	7739.888	86.7
14	7708.607	87.3
15	7414.866	35.1
16	7153.933	40.7
17	6747.274	36.4
18	6118.593	47.4
19	4215.001	43.0
20	4020.445	46.1
21	3645.830	42.9
22	3410.838	37.6
23	2827.171	37.0
24	2733.327	42.6
25	2583.786	138.4
26	2009.275	32.8
27	1813.194	23.6
28	1762.838	31.2
29	-494.768	26.5
30	-512.316	21.5



200 180 160 140 120 100 80 60 40 20 0 ppm

yq7-69f1

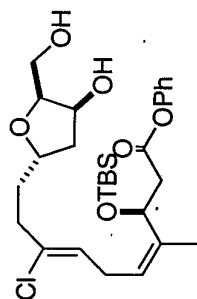
Pulse Sequence: s2pul
Solvent: CDCl₃
Ambient temperature
File: yq7-69f1
INOVA-500 "cosy"

Pulse 51.3 degrees
Acq. time 1.638 sec
Width 5000.0 Hz
16 repetitions
OBSERVE H1, 399.7532394 MHz
DATA PROCESSING
Ft size 16384
Total time 0 min, 26 sec

27a

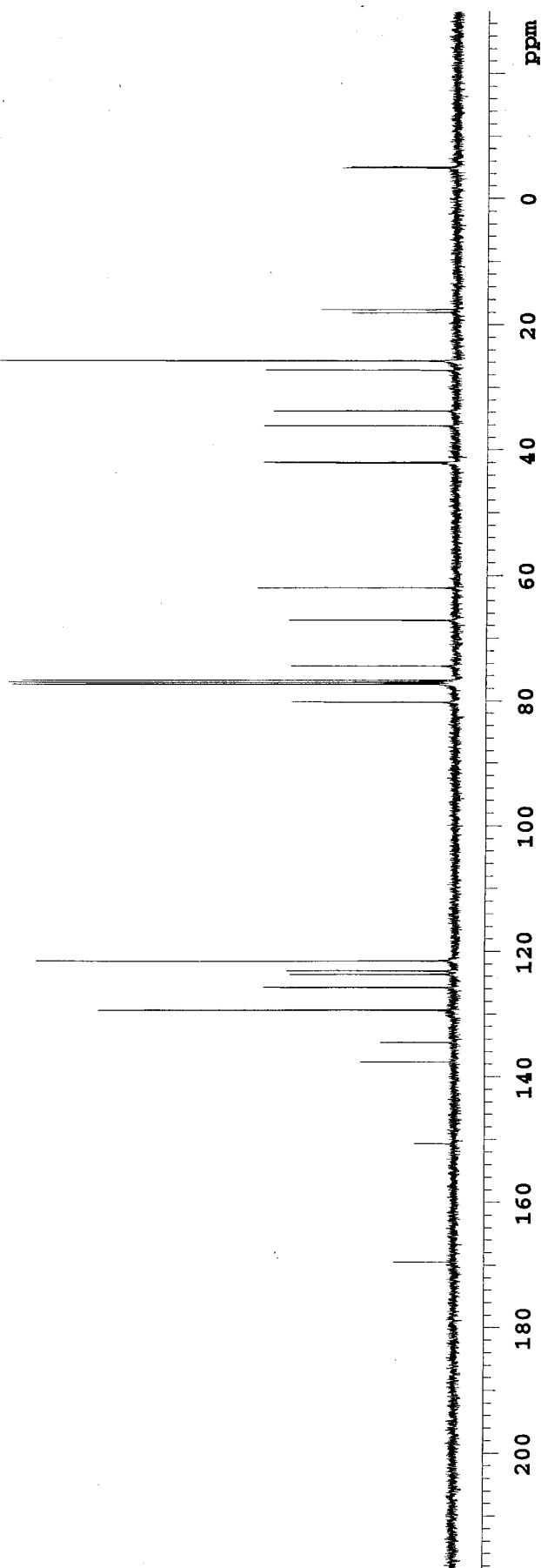
C[C@H](C)[C@@H](OC(=O)c1ccccc1)C=C(C)[C@H](Cl)CO[C@H]([C@H](O)[C@H](O)CO)O

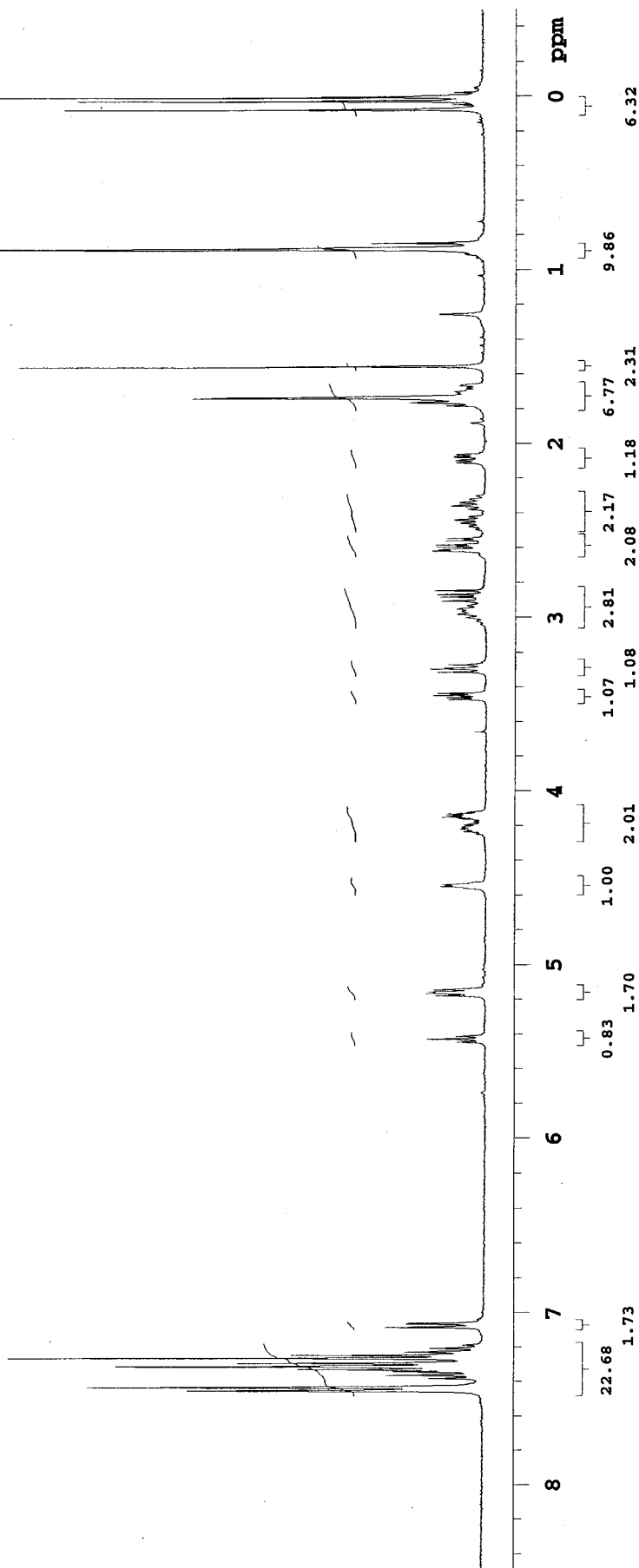
Chemical Shift (ppm)	Integration
0.85	1.86
1.00	1.77
1.10	0.85
1.12	1.00
1.32	2.02
1.35	1.00
1.36	1.00
3.36	1.00
3.49	1.00
3.94	1.00
5.44	1.00
7.46	1.00
10.16	1.00
0	1.00

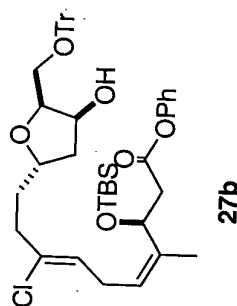


27a

INDEX	FREQUENCY	PPM	HEIGHT
1	17040.404	169.526	9.4
2	15145.968	150.679	6.2
3	13837.487	137.662	14.8
4	13520.094	134.504	11.6
5	13002.806	129.358	56.0
6	12637.346	125.722	30.2
7	12428.295	123.642	26.0
8	12374.124	123.104	26.5
9	12215.428	121.525	65.9
10	8059.570	80.180	25.8
11	7771.933	77.319	69.9
12	7765.829	77.258	28.8
13	7739.889	77.000	70.6
14	7707.844	76.681	68.3
15	7478.192	74.397	26.0
16	6744.222	67.095	26.3
17	6224.645	61.926	31.3
18	4233.312	42.115	8.1
19	4227.971	42.062	28.6
20	4213.475	41.918	30.4
21	3629.045	36.103	30.4
22	3389.475	33.720	28.8
23	2733.327	27.192	30.2
24	2583.023	25.697	89.5
25	1812.431	18.031	16.6
26	1762.838	17.538	21.4
27	-495.531	-4.930	18.2
28	-513.079	-5.104	16.8







INDEX	FREQUENCY	PPM	HEIGHT
1	17031.248	169.435	7.6
2	15149.782	150.717	4.8
3	14428.020	143.537	30.7
4	13829.094	137.578	10.1
5	13539.931	134.702	10.4
6	13001.279	129.343	39.4
7	12931.850	128.652	4.9
8	12910.487	128.440	141.4
9	12867.761	128.014	148.1
10	12789.176	127.233	71.0
11	12634.294	125.692	21.5
12	12410.746	123.468	20.0
13	12379.465	123.157	16.0
14	12216.190	121.532	37.2
15	8764.548	87.194	9.4
16	8051.177	80.097	19.5
17	7771.170	77.311	306.9
18	7739.888	77.000	313.8
19	7707.844	76.681	319.0
20	7395.029	73.569	21.1
21	6745.748	67.110	17.7
22	6294.074	62.616	16.9
23	4214.238	41.925	19.6
24	4139.467	41.181	14.3
25	3643.542	36.248	16.6
26	3397.867	33.804	14.3
27	2732.564	27.185	18.0
28	2583.786	25.705	52.9
29	1813.194	18.038	6.6
30	1761.312	17.522	13.0
31	-1.894	-0.019	9.3
32	-495.531	-4.930	12.5
33	-513.080	-5.104	11.7

ppm

y98-101f3

Pulse Sequence: s2pul

Solvent: CDC13

Ambient temperature

File: yg8-101f3

INOVA-500 "cosy"

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

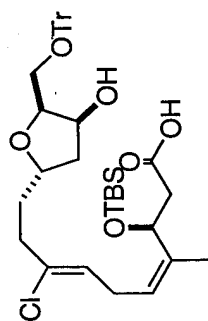
32 repetitions

OBSERVE H1, 399.7532406 MHZ

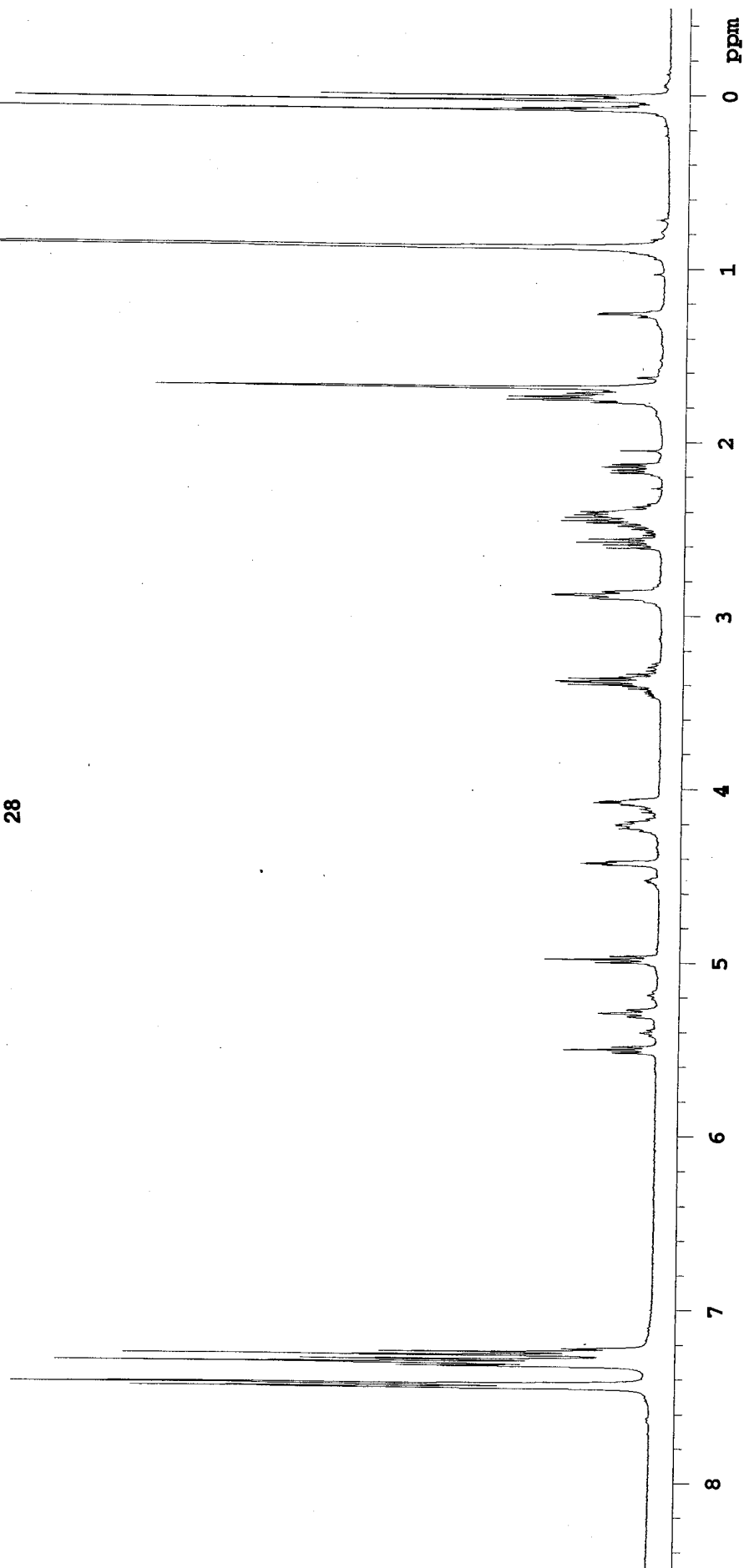
DATA PROCESSING

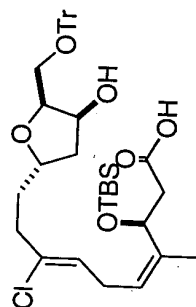
Print size 16384

Total time 0 min, 52 sec



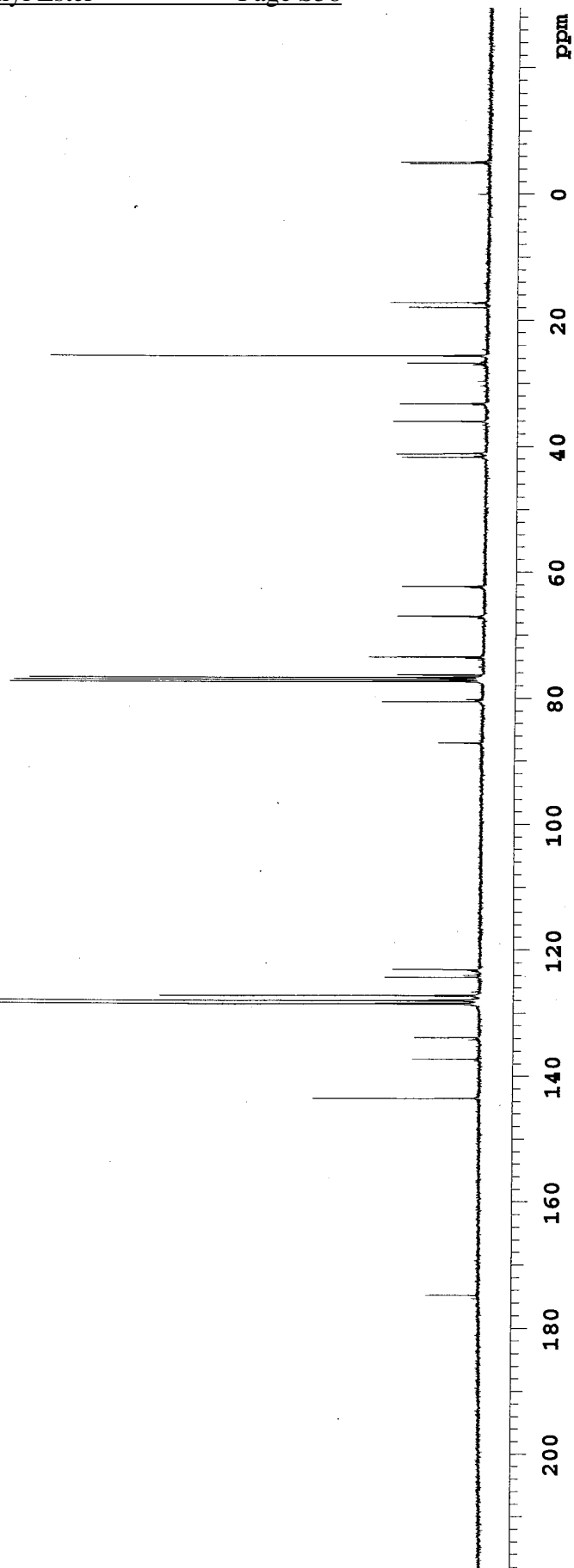
28





28

INDEX	FREQUENCY	PPM	HEIGHT
1	17567.612	174.771	8.6
2	14426.494	143.521	26.5
3	14423.442	143.491	7.4
4	13794.761	137.237	11.0
5	13450.665	133.813	10.7
6	12915.065	128.485	96.1
7	12908.961	128.424	27.4
8	12866.235	127.999	31.4
9	12860.895	127.946	107.7
10	12786.887	127.210	18.3
11	12782.309	127.164	50.6
12	12494.672	124.303	15.4
13	12372.598	123.088	14.1
14	8752.340	87.072	7.1
15	8094.666	80.529	16.1
16	7771.933	77.319	74.6
17	7739.889	77.000	74.0
18	7708.607	76.689	71.5
19	7668.170	76.287	13.7
20	7380.533	73.425	18.1
21	6735.830	67.011	13.8
22	6259.741	62.275	13.1
23	4190.586	41.690	13.2
24	4134.890	41.136	14.1
25	3622.942	36.043	14.6
26	3339.120	33.219	13.7
27	2697.468	26.836	12.5
28	2577.683	25.644	68.5
29	1810.142	18.008	12.3
30	1730.794	17.219	15.2
31	-493.242	-4.907	12.2
32	-517.657	-5.150	13.6



yg8-103f1

Pulse Sequence: s2pul

Solvent: CDCl3

Ambient temperature

File: yg8-103f1

INOVA-500 "gamble"

Pulse 51.3 degrees

Acq. time 1.638 sec

Width 5000.0 Hz

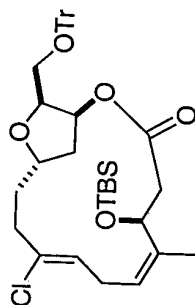
166 repetitions

OBSERVE H1, 399.7532349 MHz

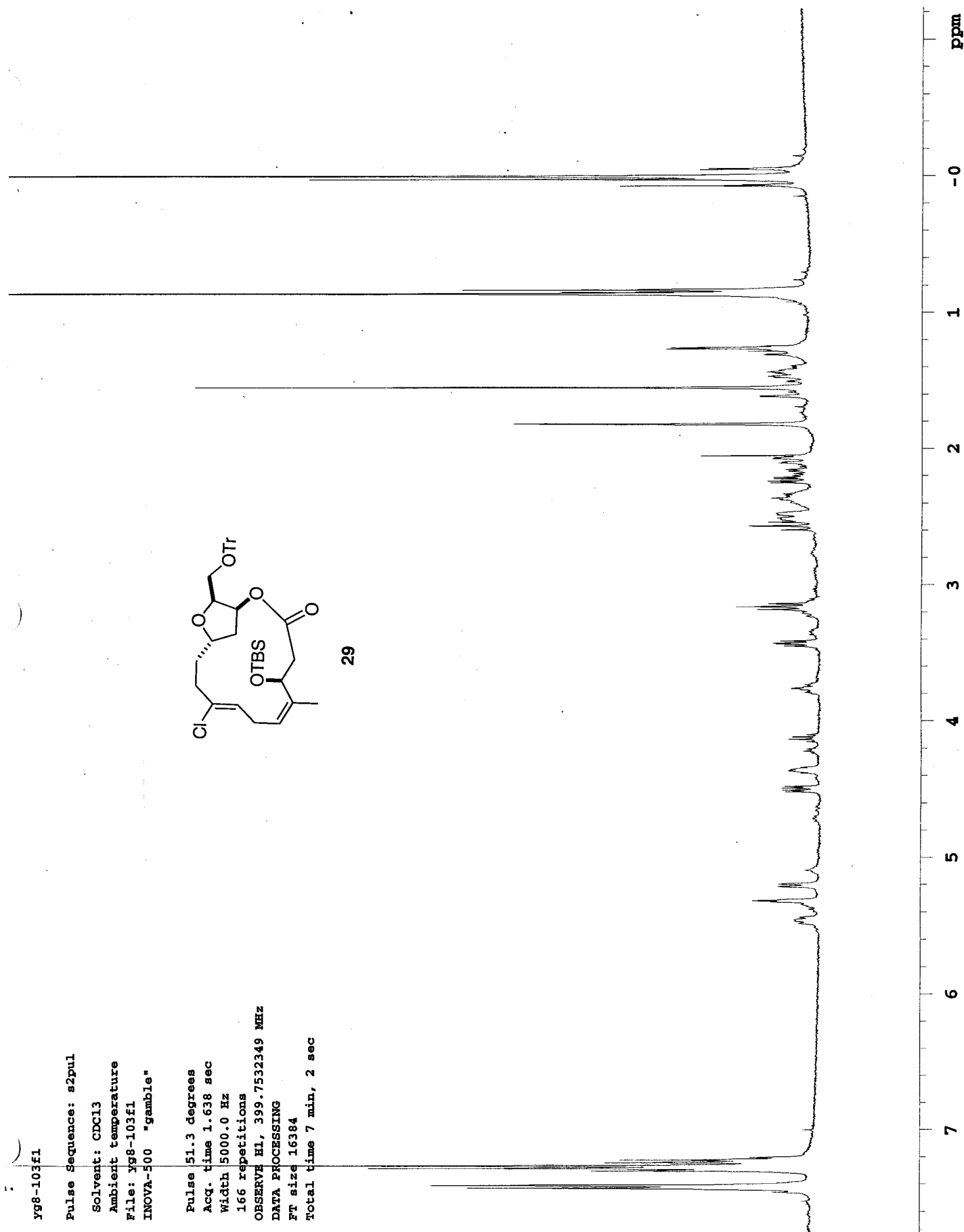
DATA PROCESSING

Ft size 16384

Total time 7 min, 2 sec



29



yg8-137f1

Pulse Sequence: s2pul

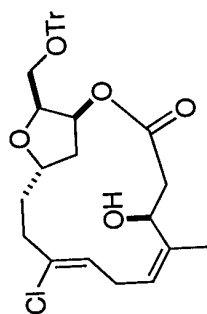
Solvent: CDCl3

Ambient temperature

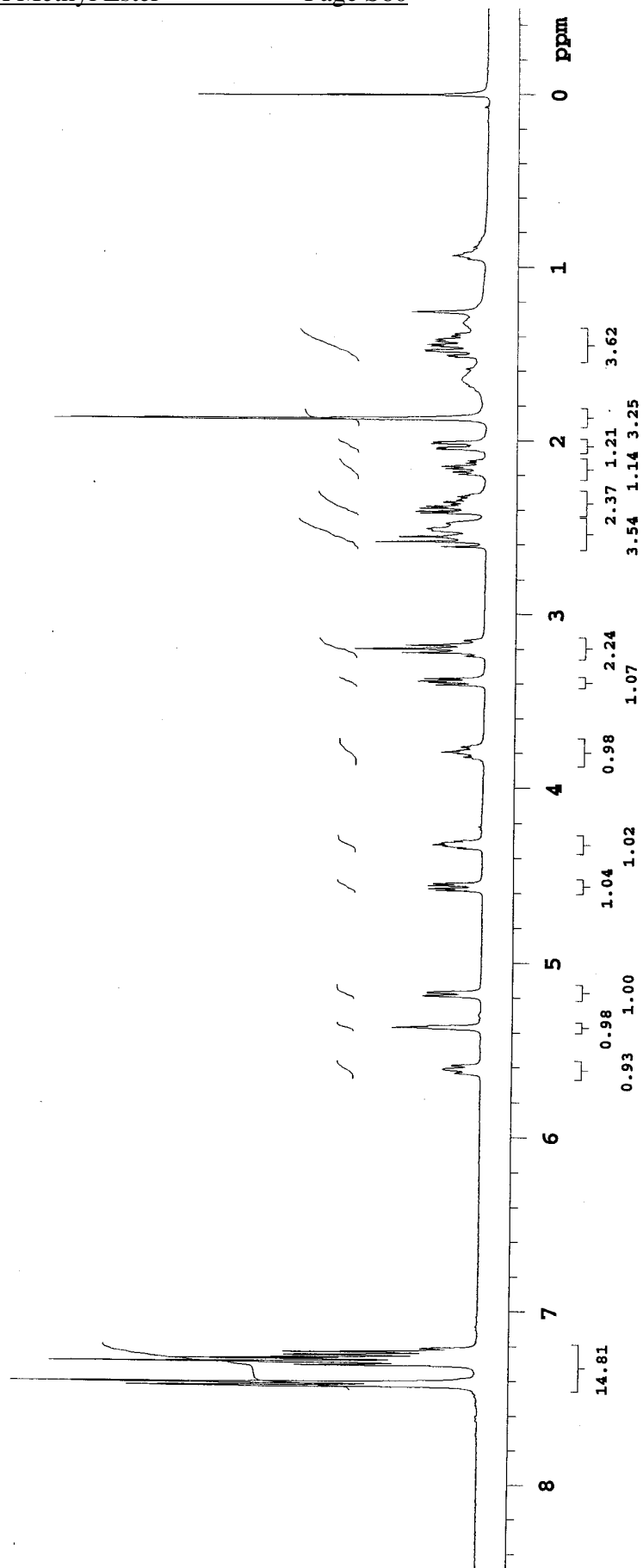
File: yg8-137f1

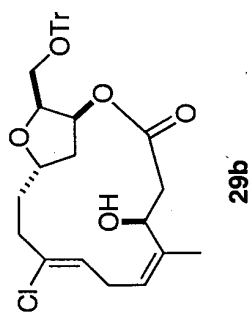
INOVA-500 "cosy"

Pulse 59.1 degrees
Acq. time 1.638 sec
Width 5000.0 Hz
16 repetitions
OBSERVE H1, 399.7532394 MHz
DATA PROCESSING
FT size 16384
Total time 0 min, 26 sec

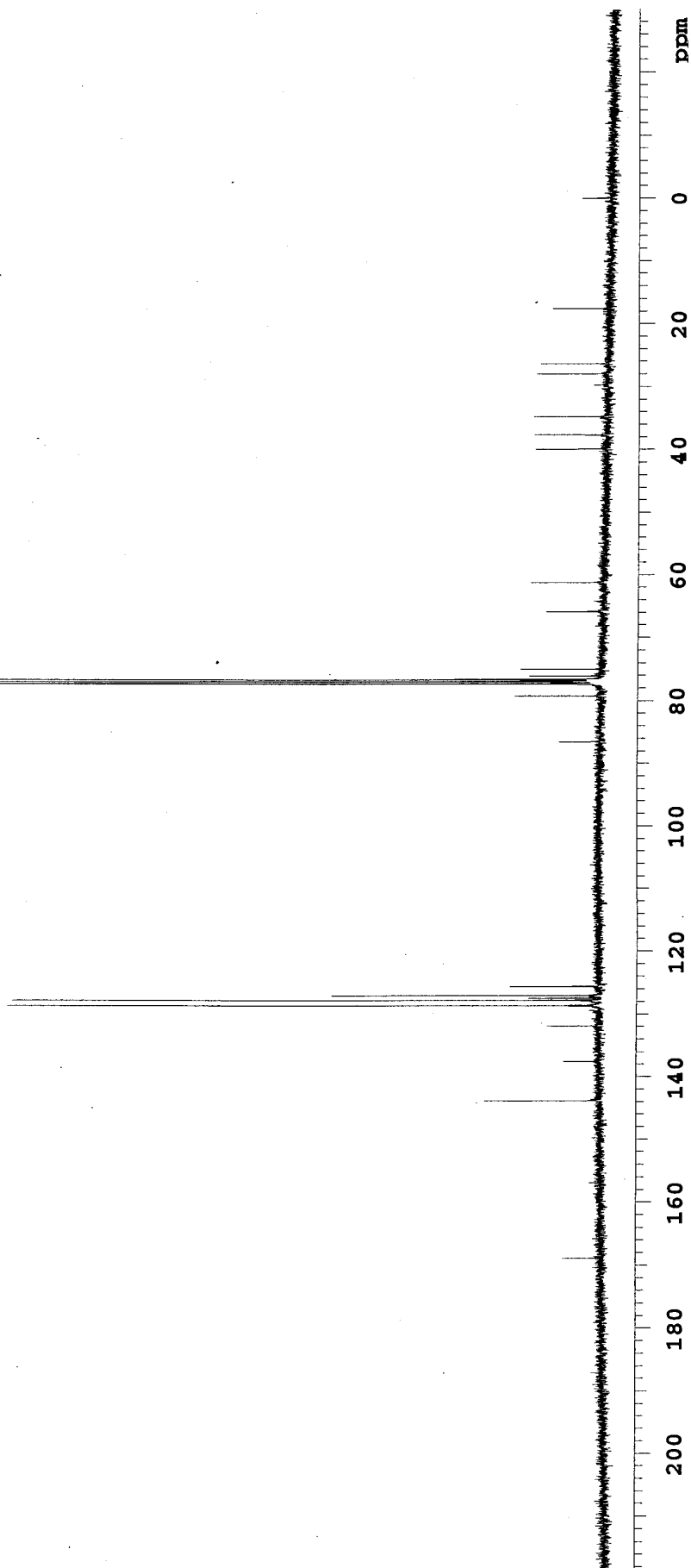


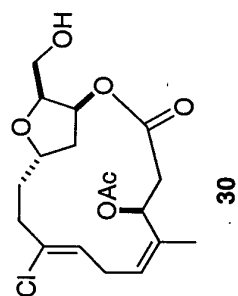
29b

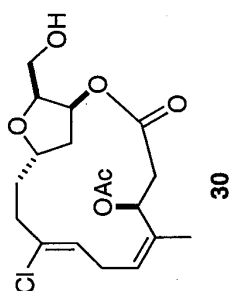




INDEX	FREQUENCY PPM	HEIGHT
1	16970.975	6.7
2	14455.487	19.1
3	13821.465	6.6
4	13251.531	9.3
5	12930.324	94.6
6	12843.346	93.8
7	12808.250	12.3
8	12767.813	43.2
9	12622.087	15.2
10	8696.644	7.6
11	7964.200	14.6
12	7771.933	165.8
13	7760.489	8.8
14	7739.889	175.6
15	7707.844	175.8
16	7647.570	12.4
17	7538.466	13.7
18	6620.622	9.7
19	6155.978	12.2
20	4009.001	11.5
21	3785.453	11.7
22	3494.001	11.8
23	2808.860	11.3
24	2647.112	10.8
25	1764.364	8.8







INDEX	FREQUENCY	PPM	HEIGHT
1	17213.674	171.249	5.5
2	17027.512	169.397	7.0
3	13526.274	134.565	7.3
4	13384.364	133.154	7.1
5	13160.053	130.922	9.3
6	12766.364	127.005	19.6
7	8248.861	82.063	19.8
8	7790.321	77.502	17.2
9	7718.603	76.788	20.2
10	6902.232	68.666	12.7
11	6158.344	61.266	19.3
12	4989.485	49.638	261.0
13	4968.122	49.425	757.3
14	4946.759	49.213	1482.9
15	4925.396	49.000	1763.8
16	4904.033	48.787	1544.0
17	4882.670	48.575	727.2
18	4861.307	48.362	226.0
19	3891.581	38.715	27.0
20	3571.137	35.527	21.5
21	2910.411	28.954	18.9
22	2782.997	27.686	17.3
23	2103.960	20.931	13.1
24	1859.812	18.502	9.9

