

Supporting Information for

**Synthesis of a Tristearoyl Lipomannan via Pre-activation-based
Iterative One-pot Glycosylation**

Jian Gao[†] and Zhongwu Guo^{†,‡,*}

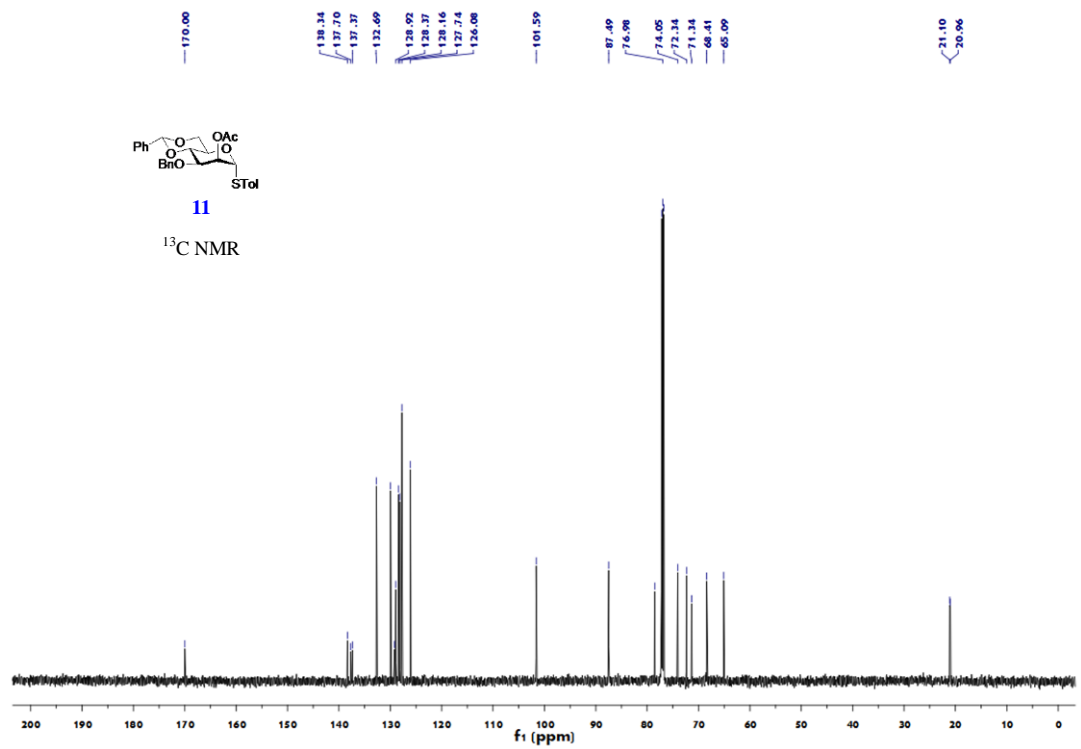
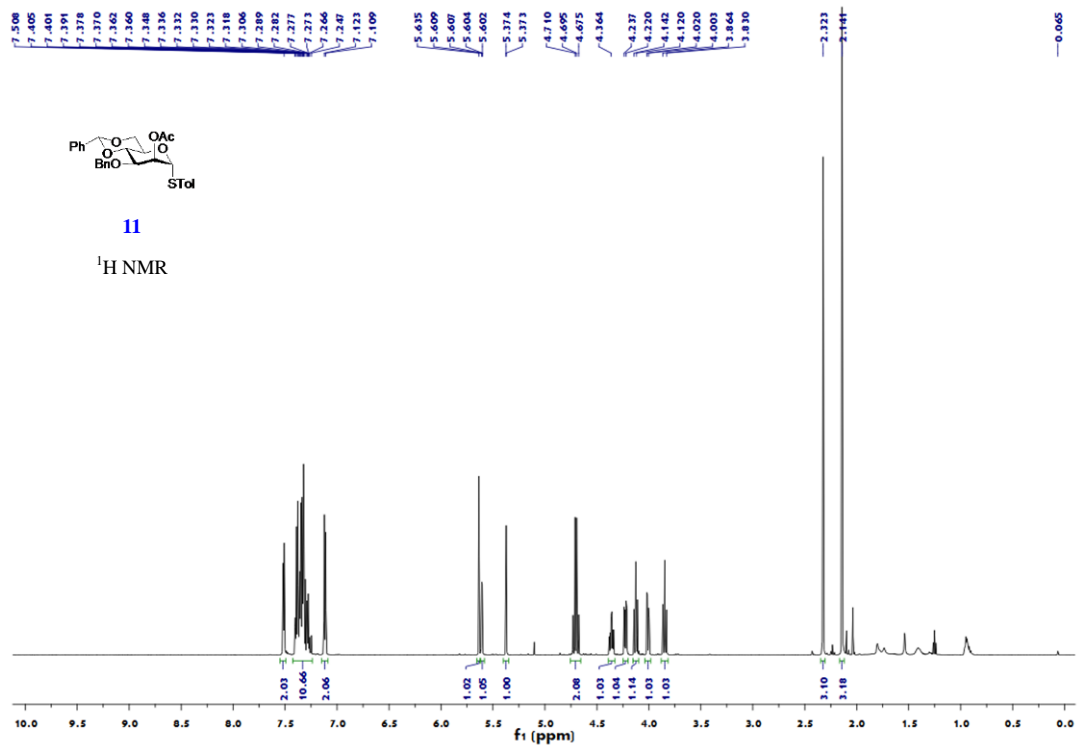
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[‡] *National Glycoengineering Research Center, Shandong University, Jinan 250100, China*

^{*} *Corresponding author, E-mail: zwguo@chem.wayne.edu*

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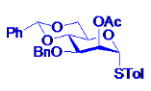


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 Sample directory:

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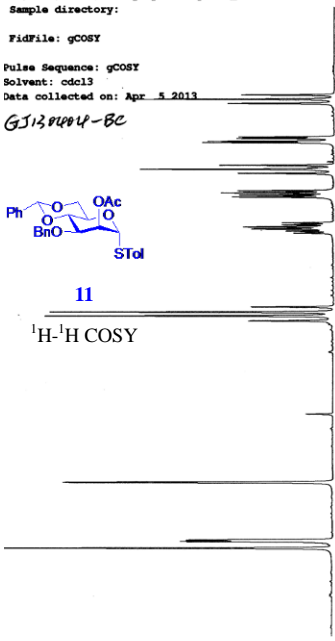
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GJ120004-BC

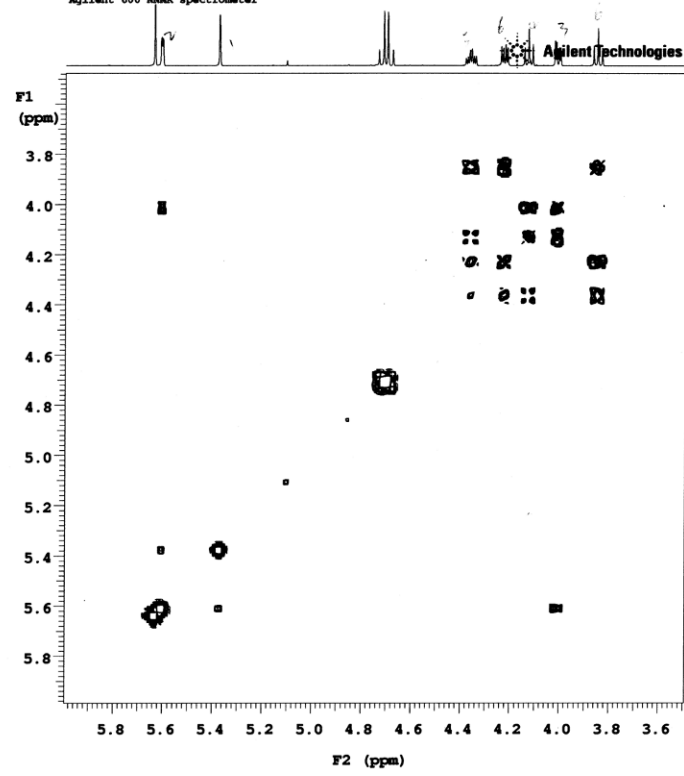


11

¹H-¹H COSY



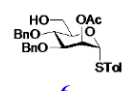
Agilent 600 NMR spectrometer



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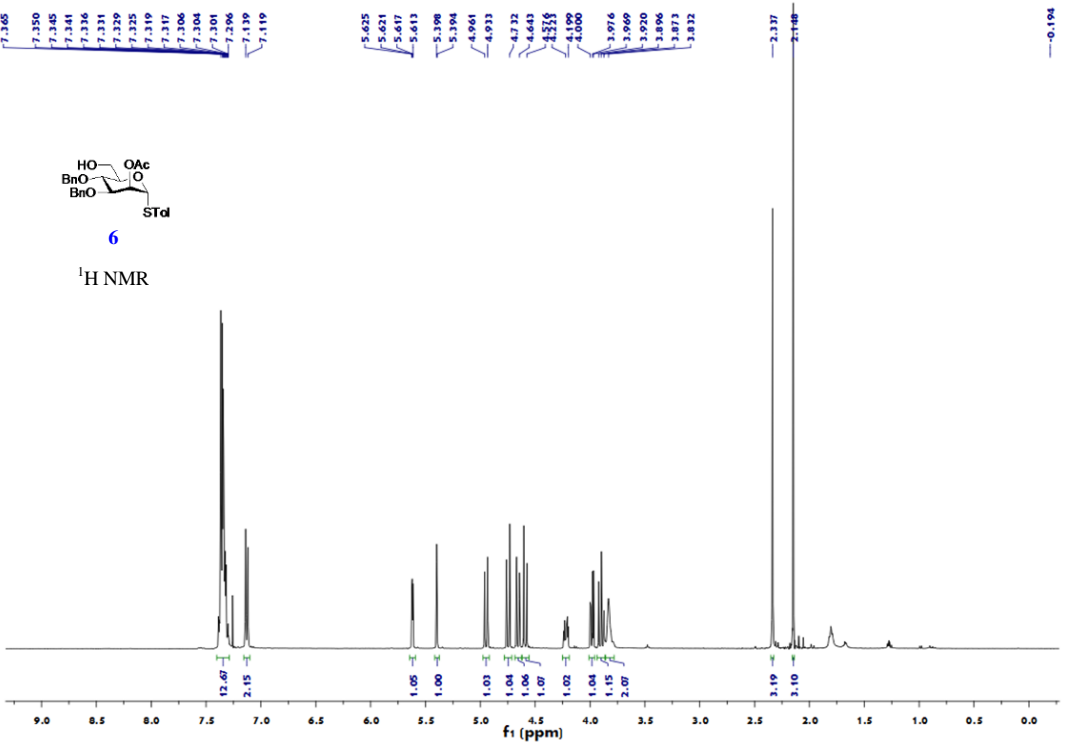
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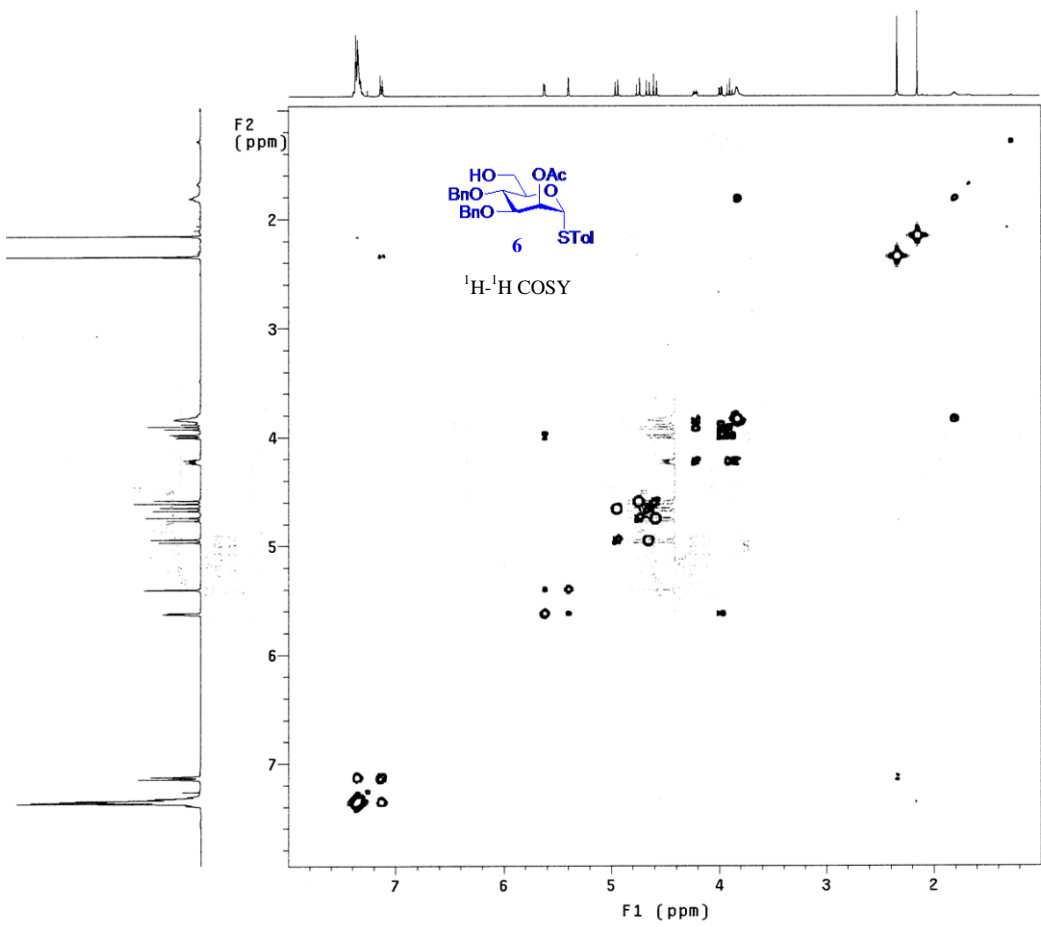
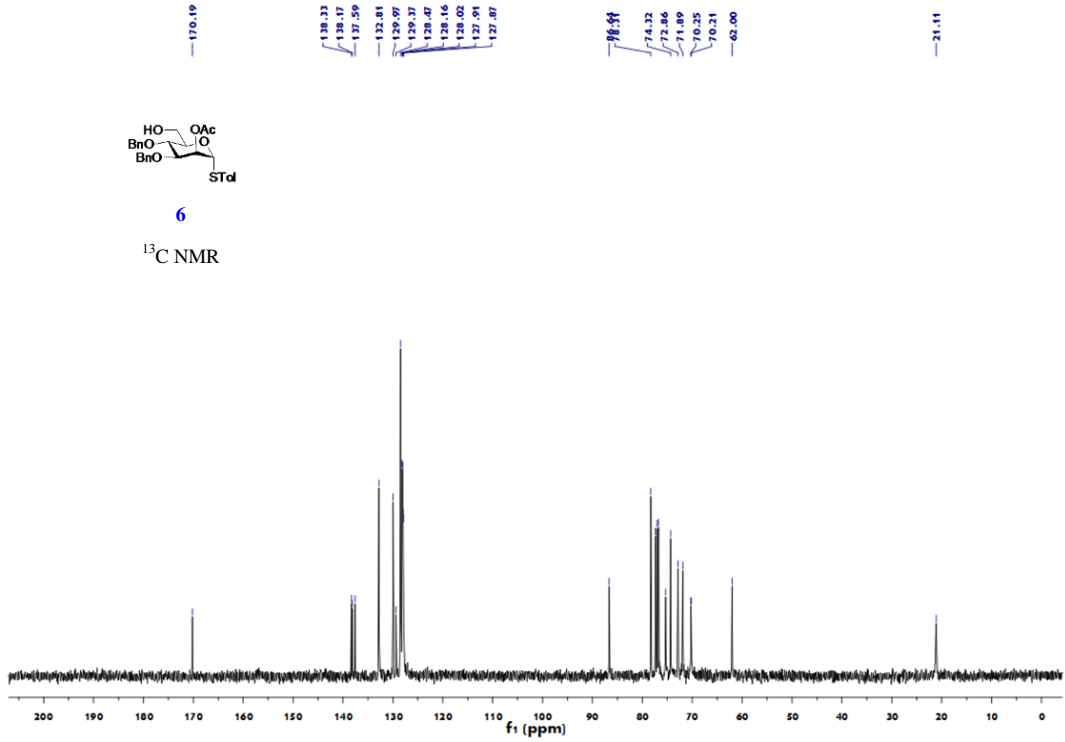
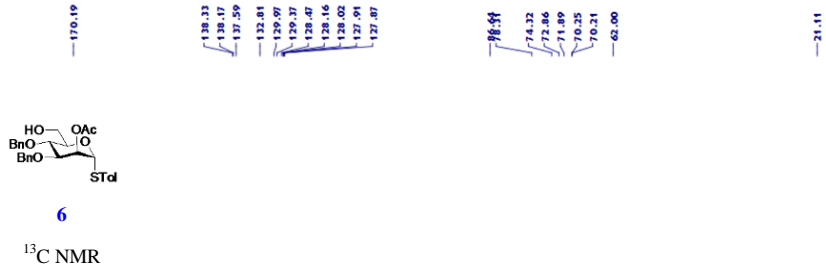
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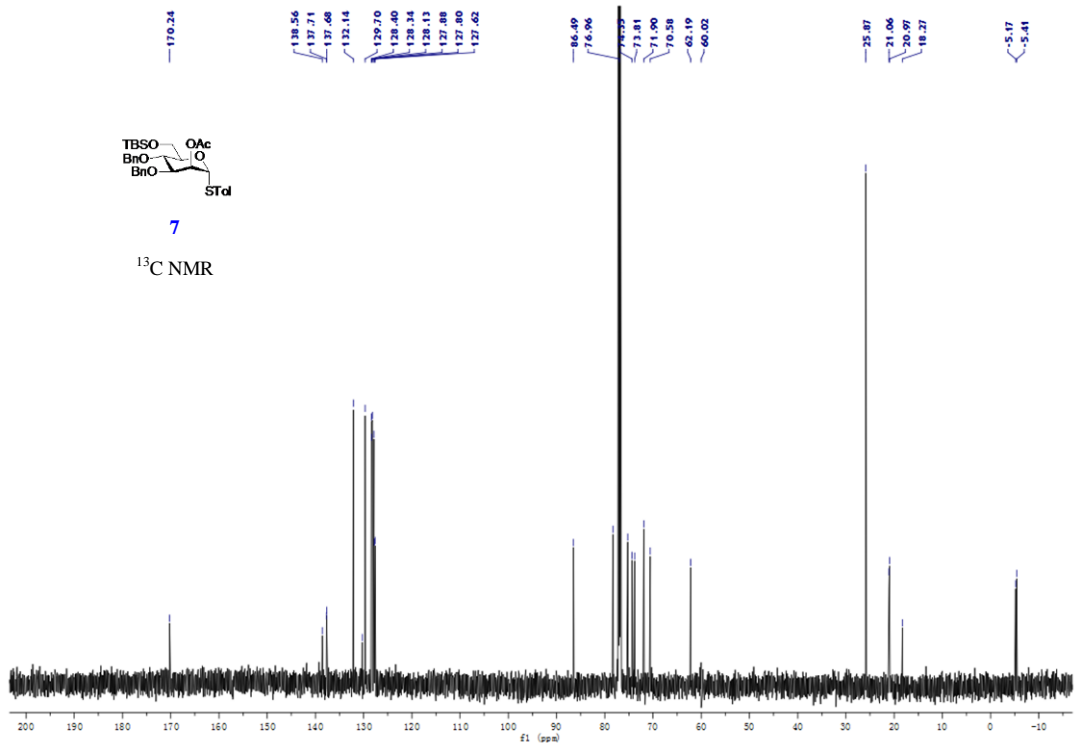
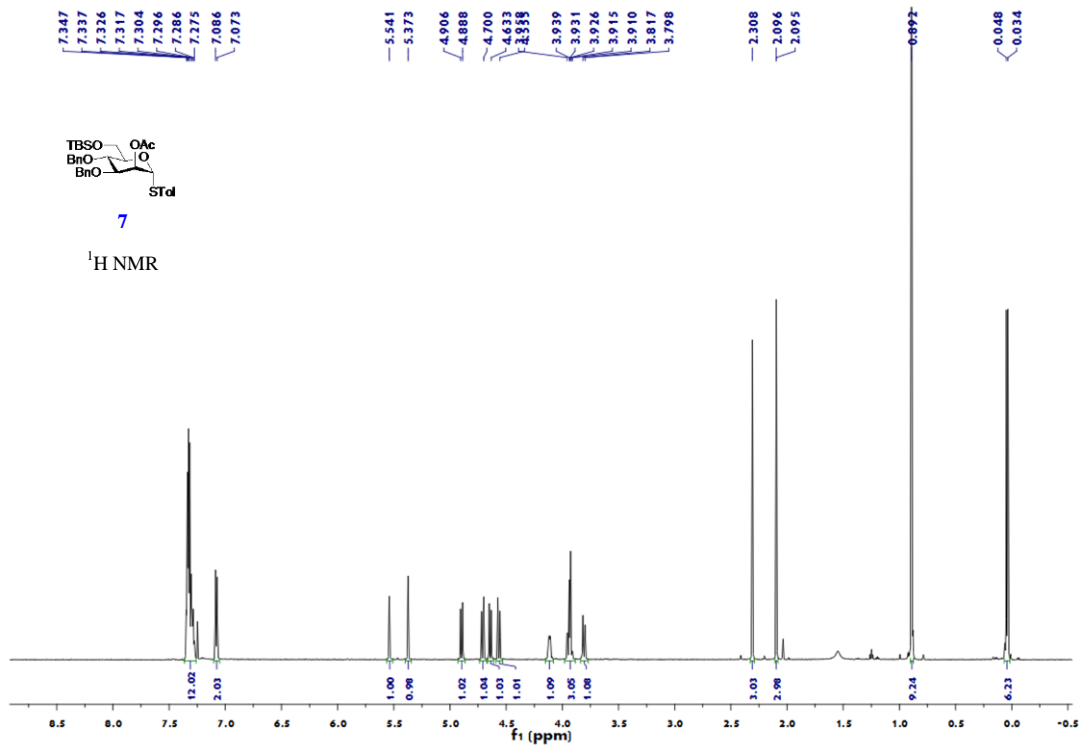


6

¹H NMR







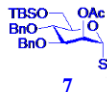
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Agilent 600 NMR spectrometer

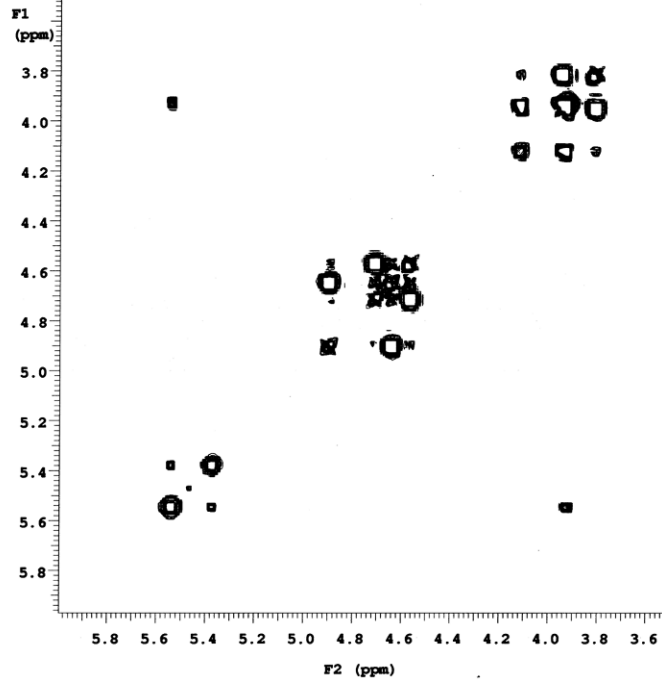


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GJ130407-TB6D



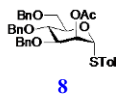
¹H-¹H COSY



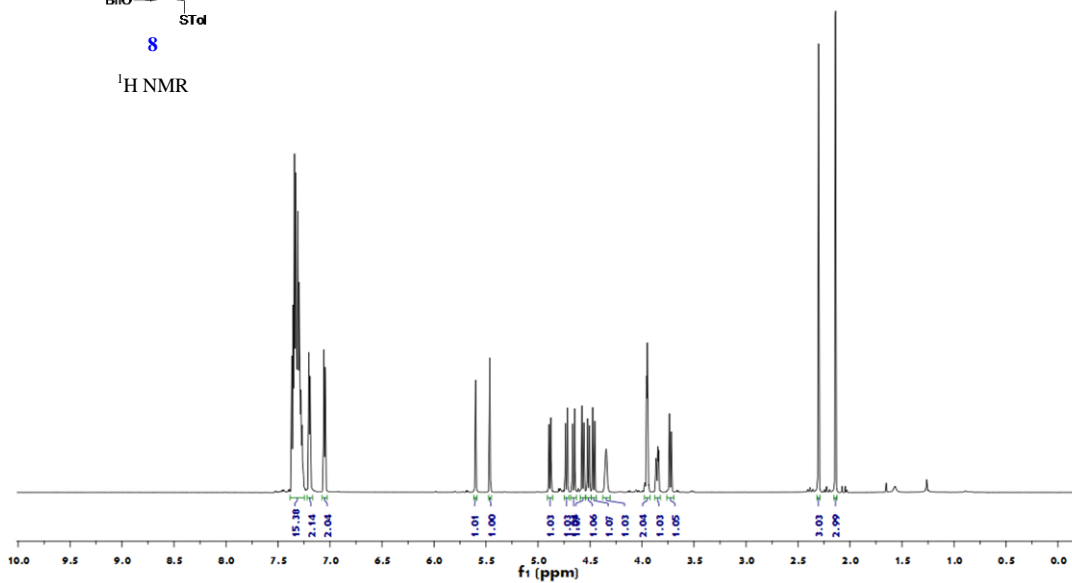
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7.192
7.059
7.047

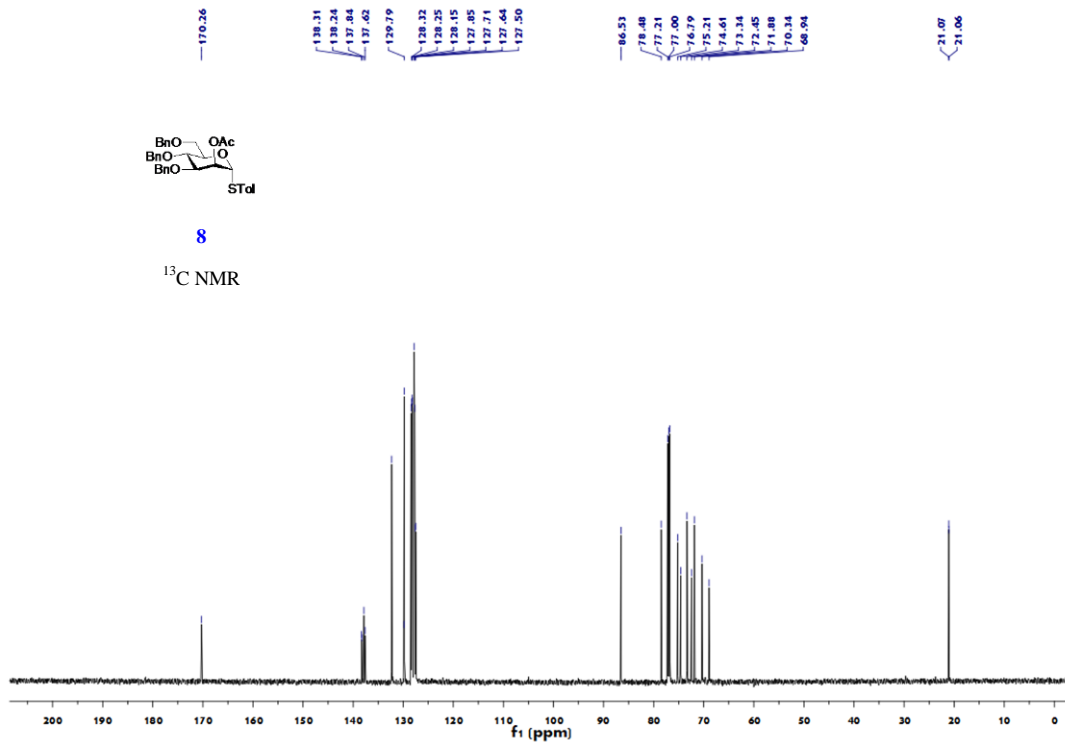
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3.843
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3.736
3.718

2.102
2.139

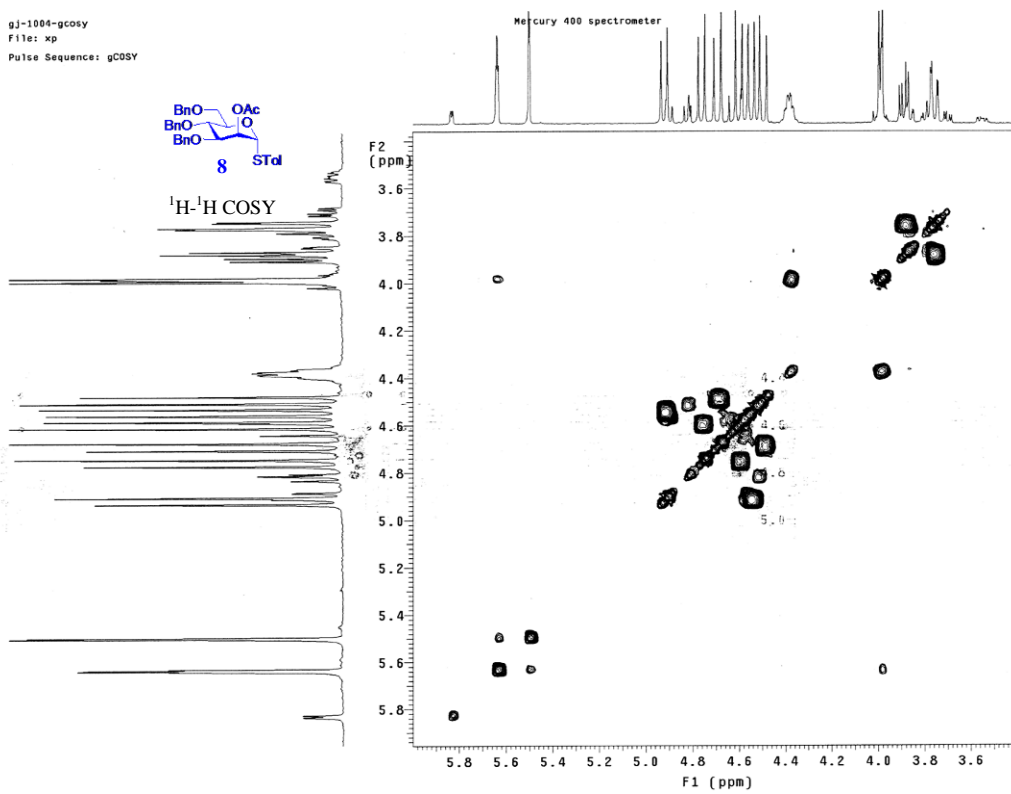


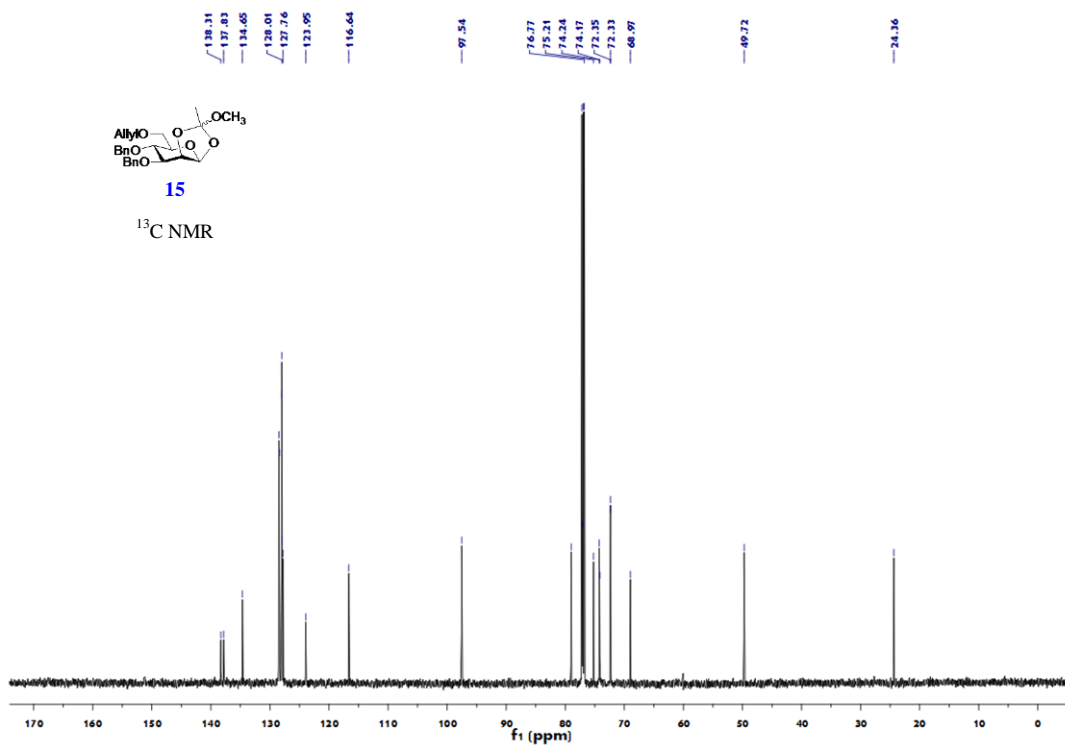
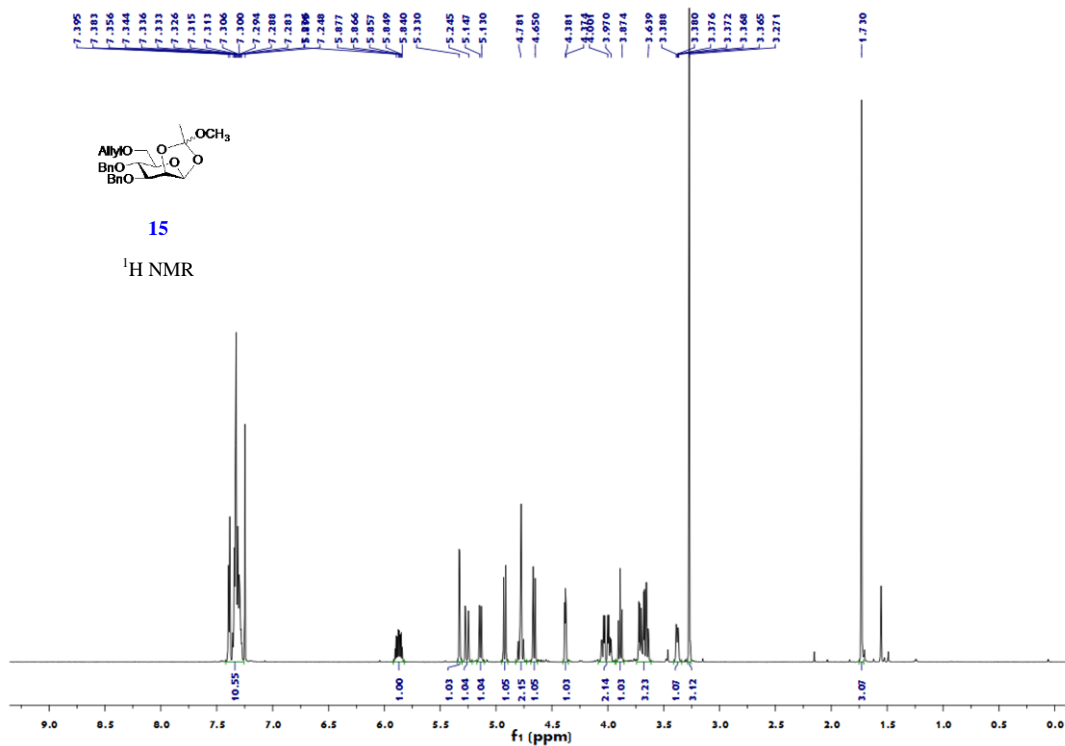
¹H NMR





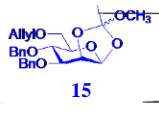
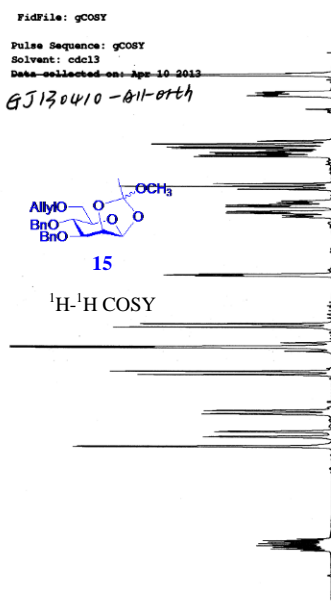
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Pulse Sequence: gCOSY



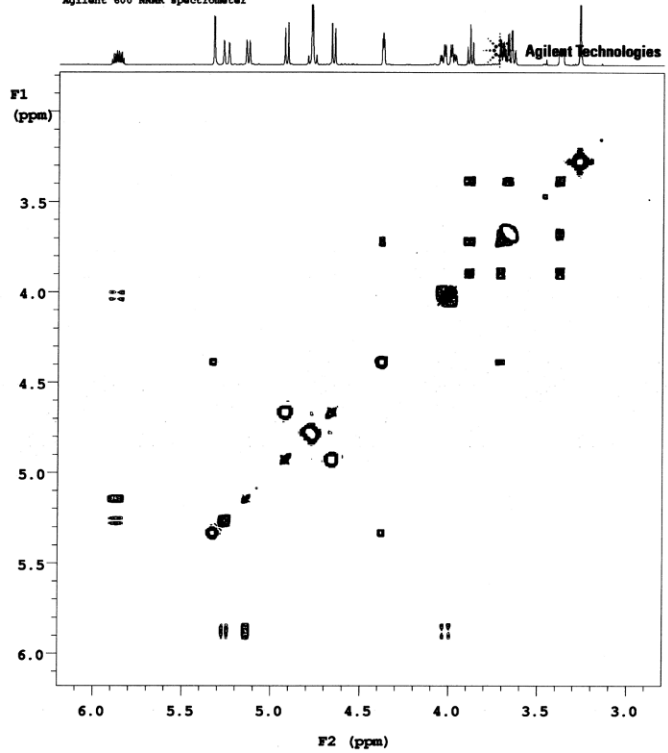


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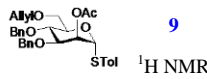
Agilent 600 NMR spectrometer



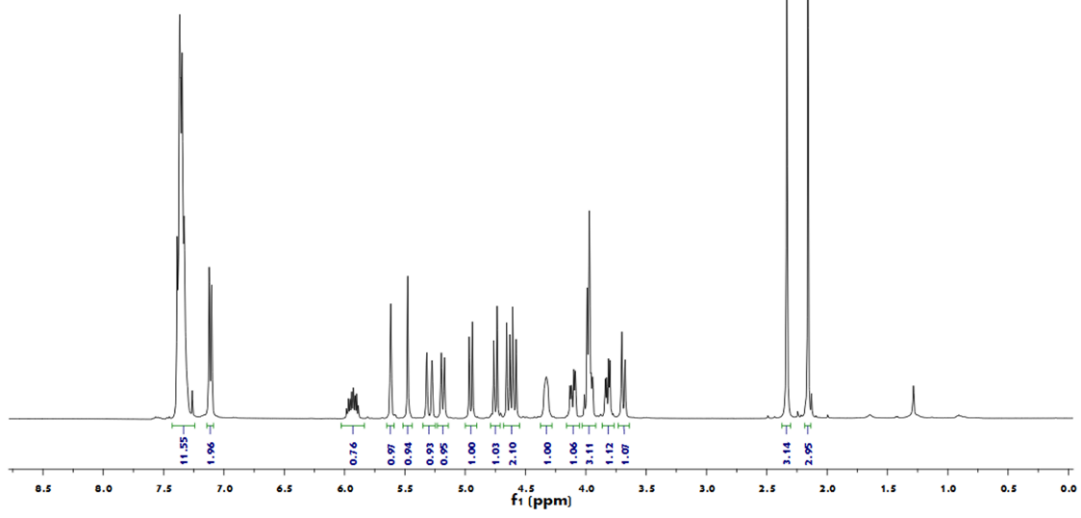
¹H-¹H COSY

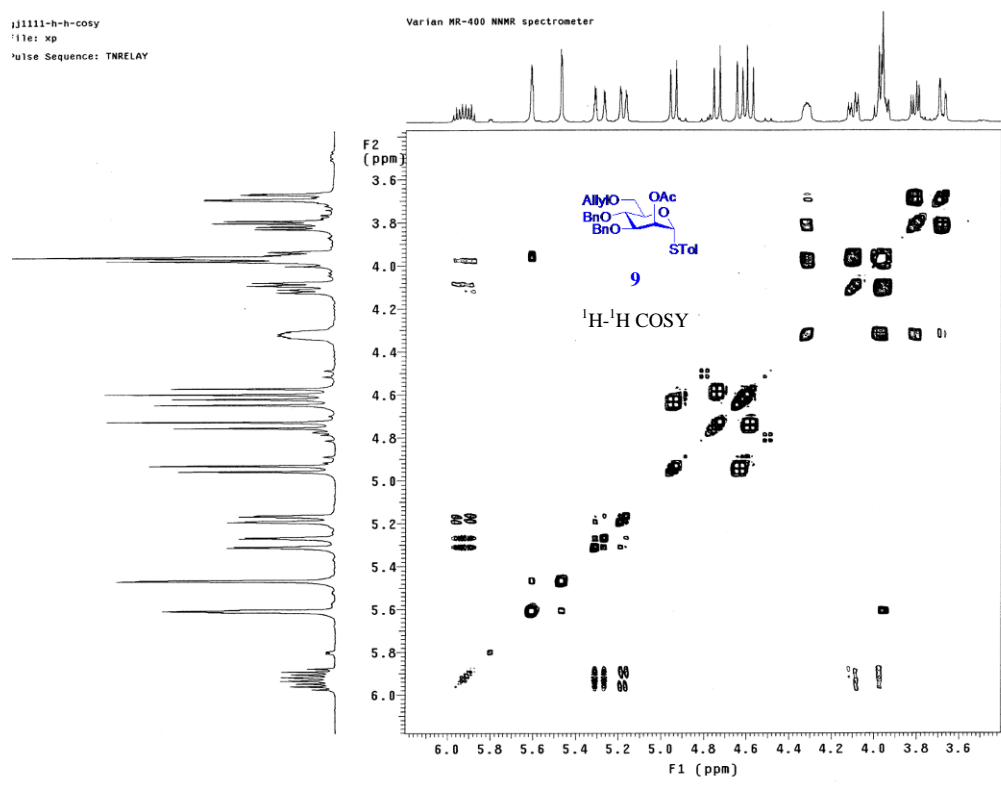
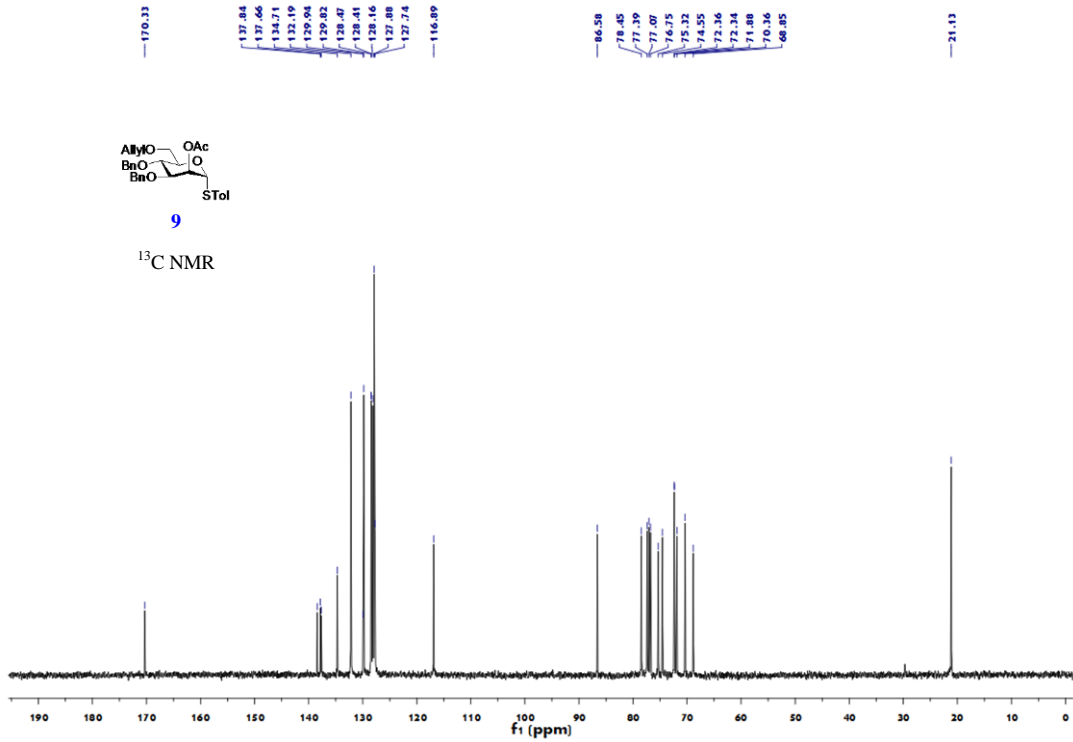


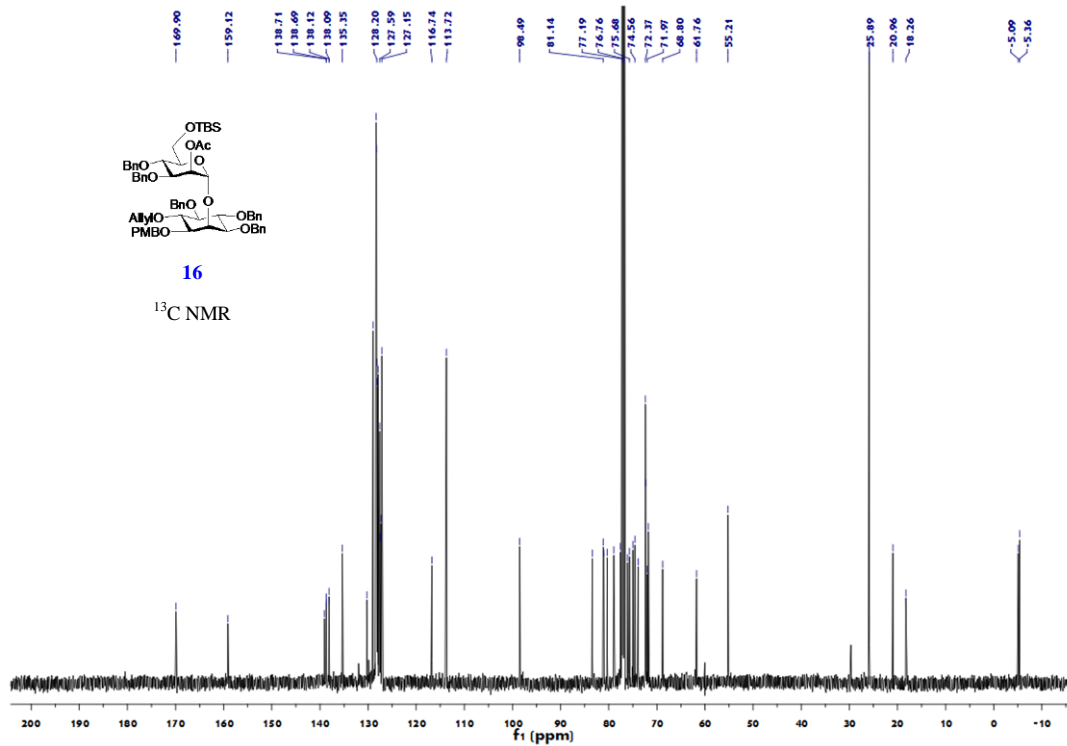
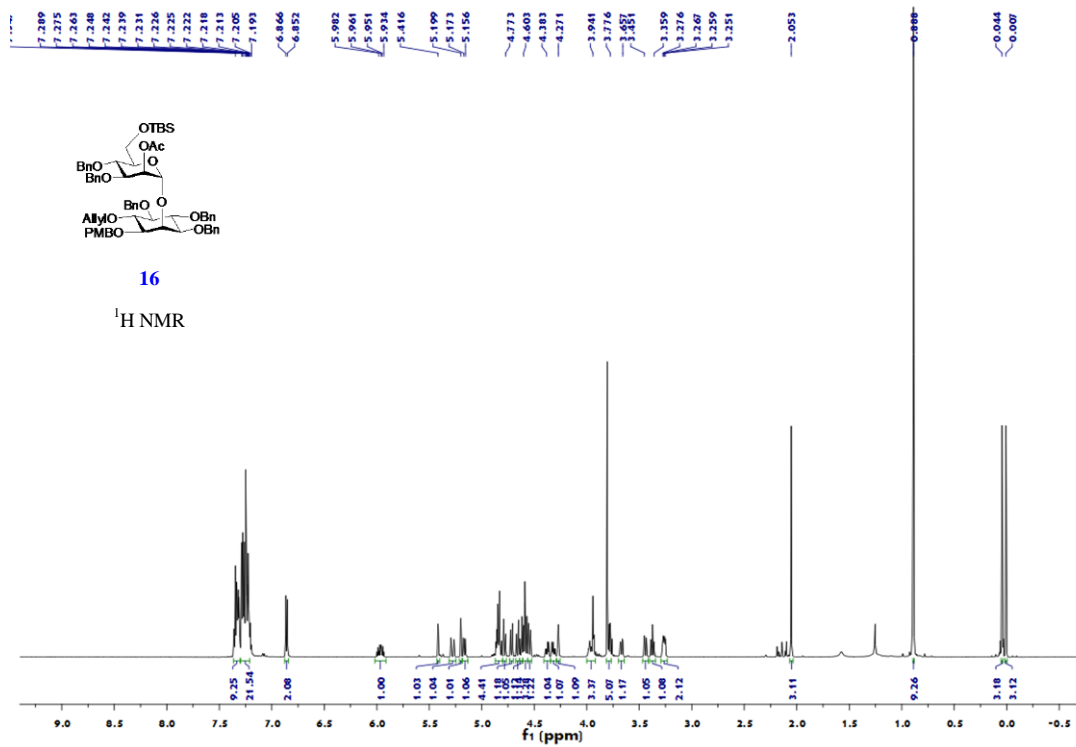
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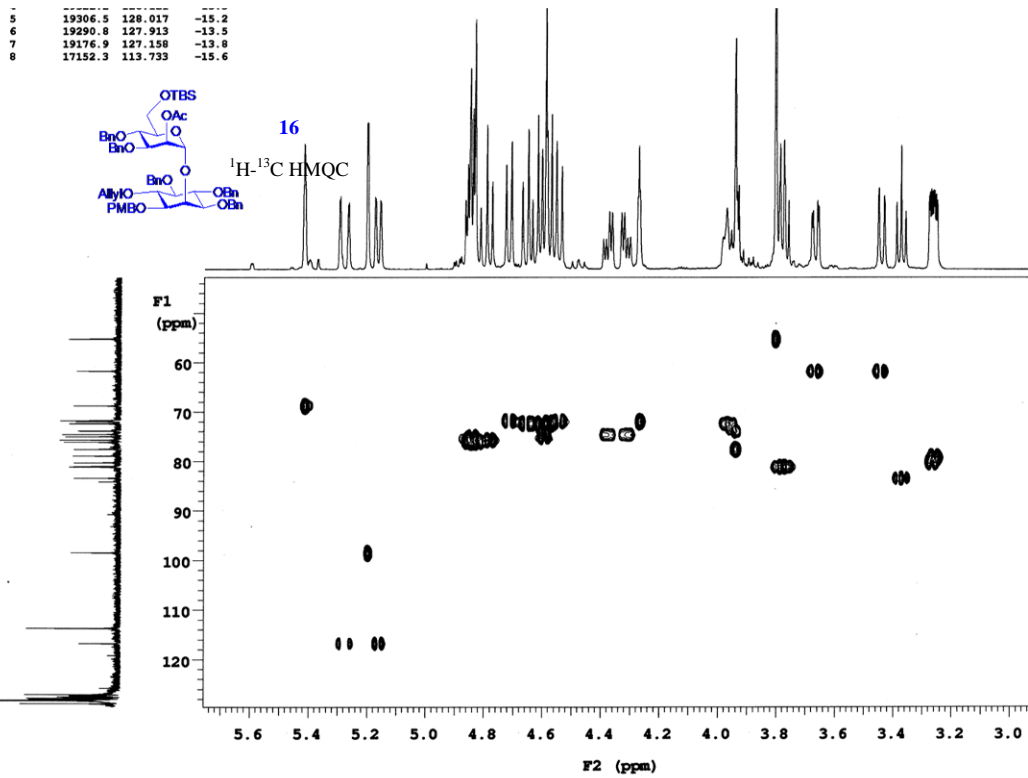
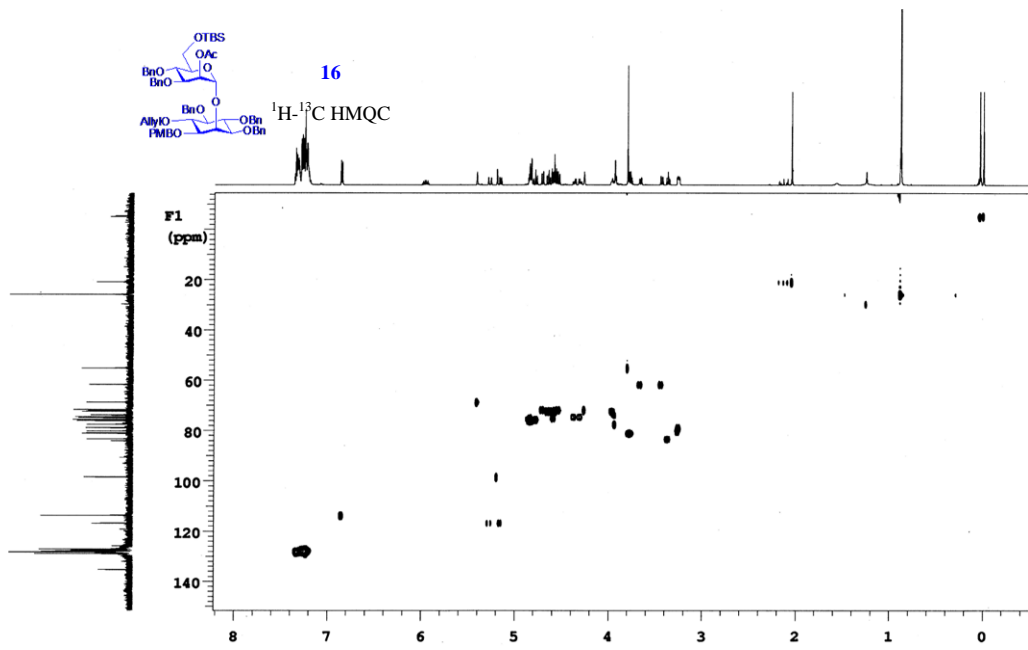


¹H NMR

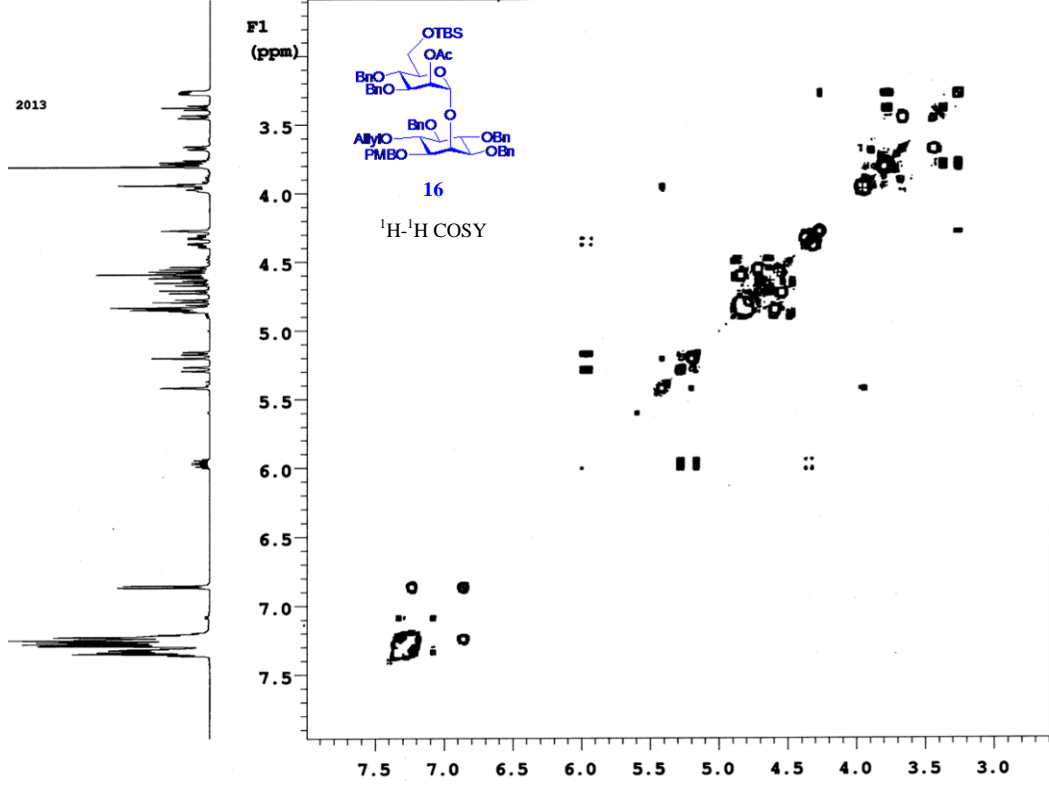




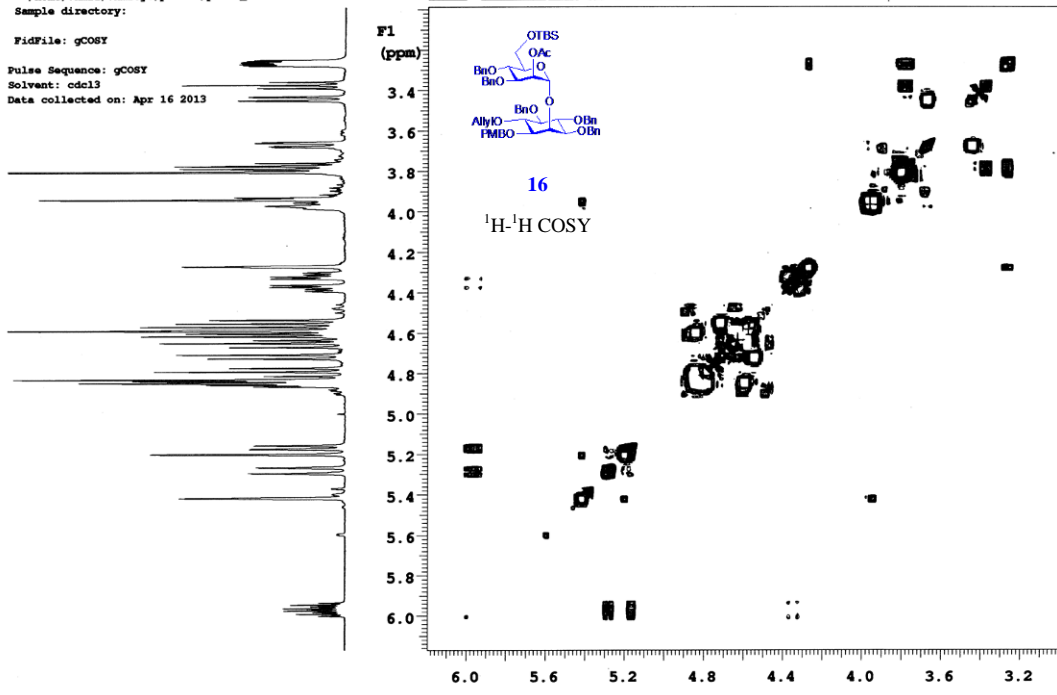


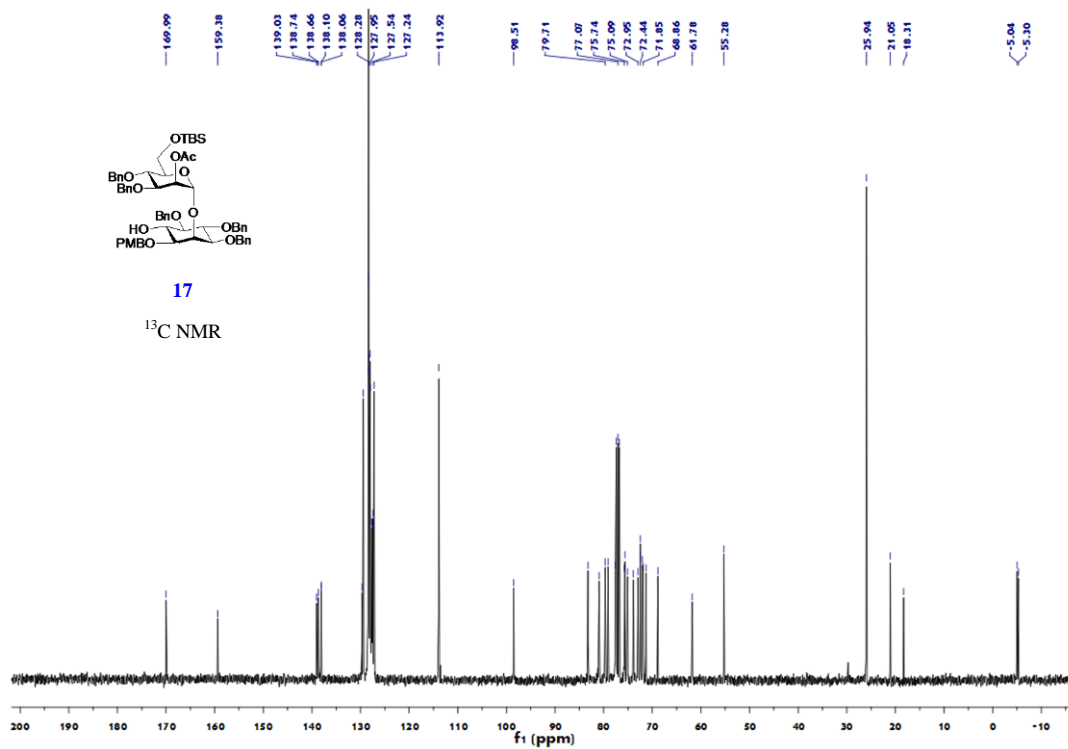
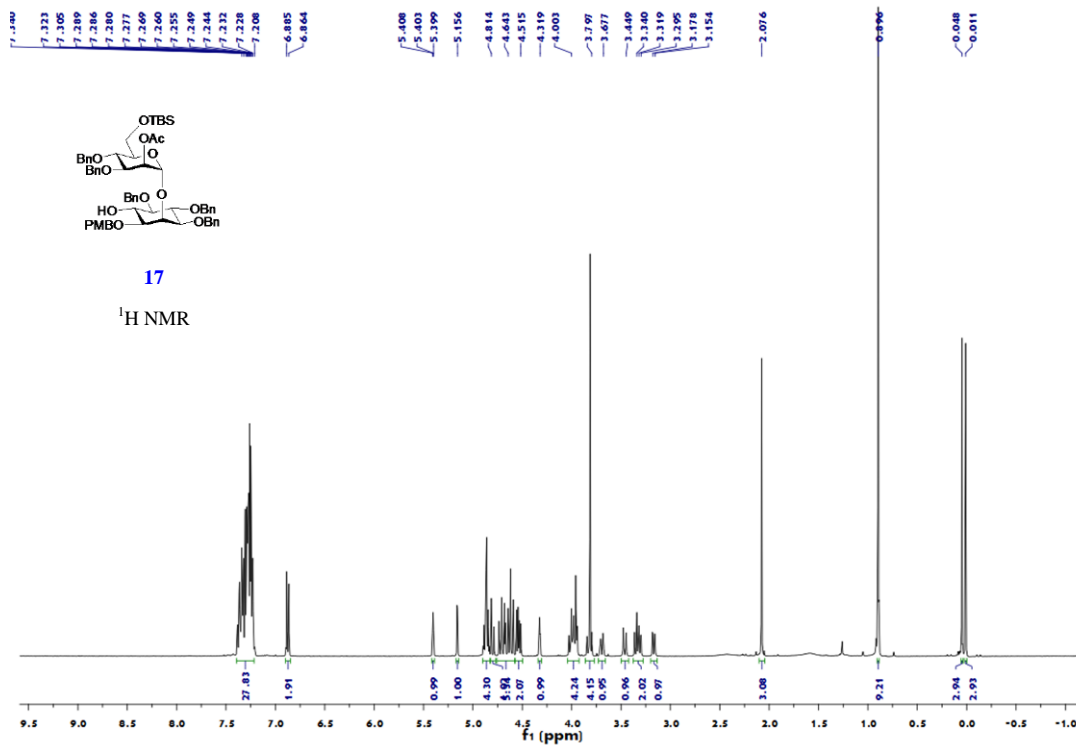


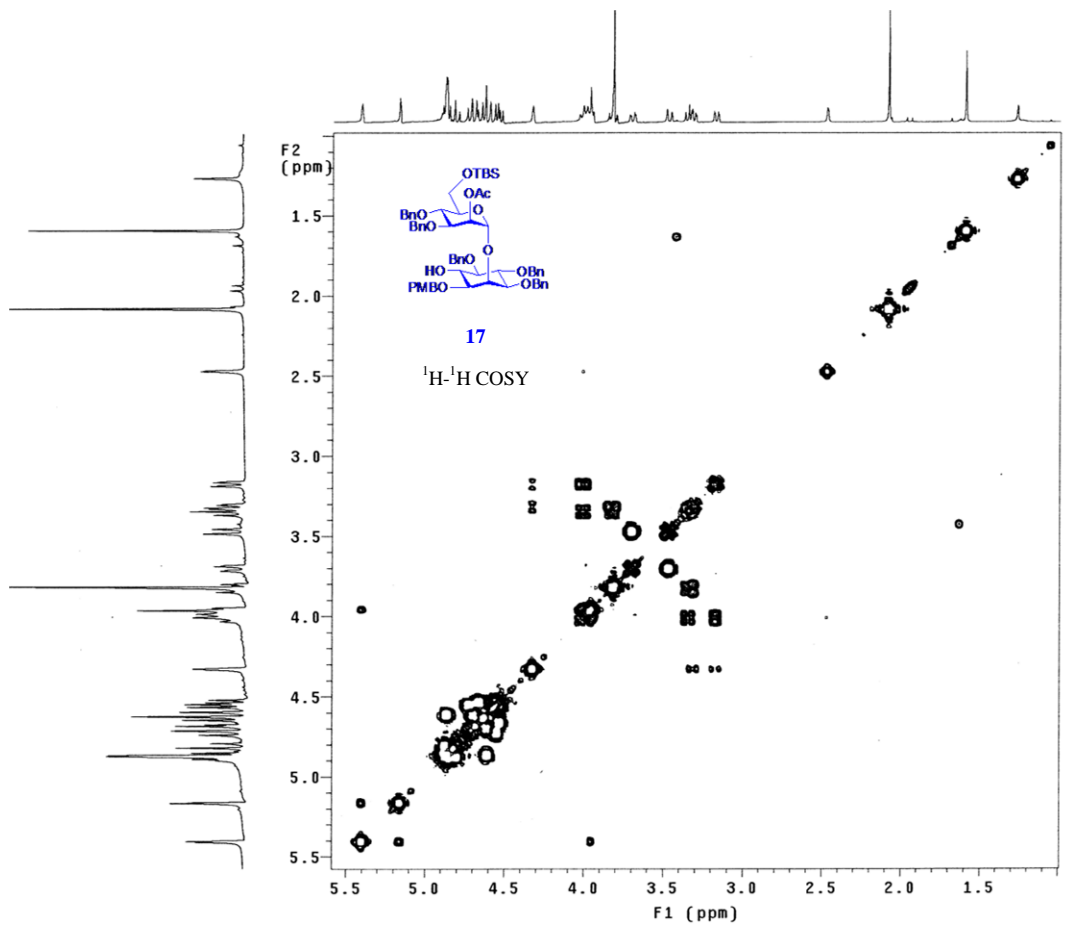
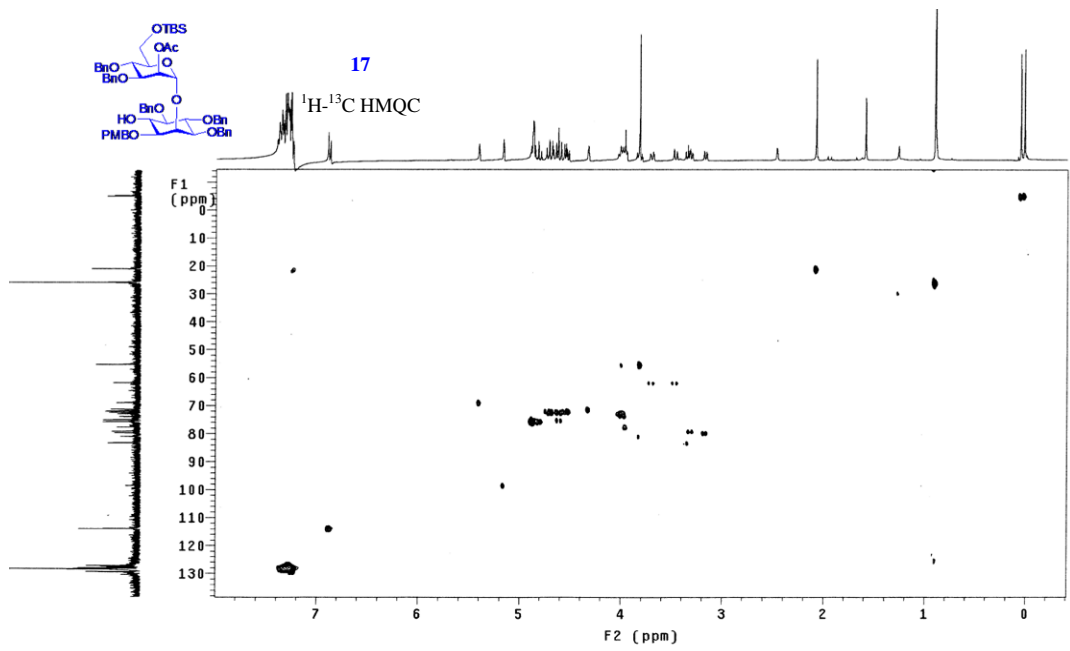
obes/probe_calibs

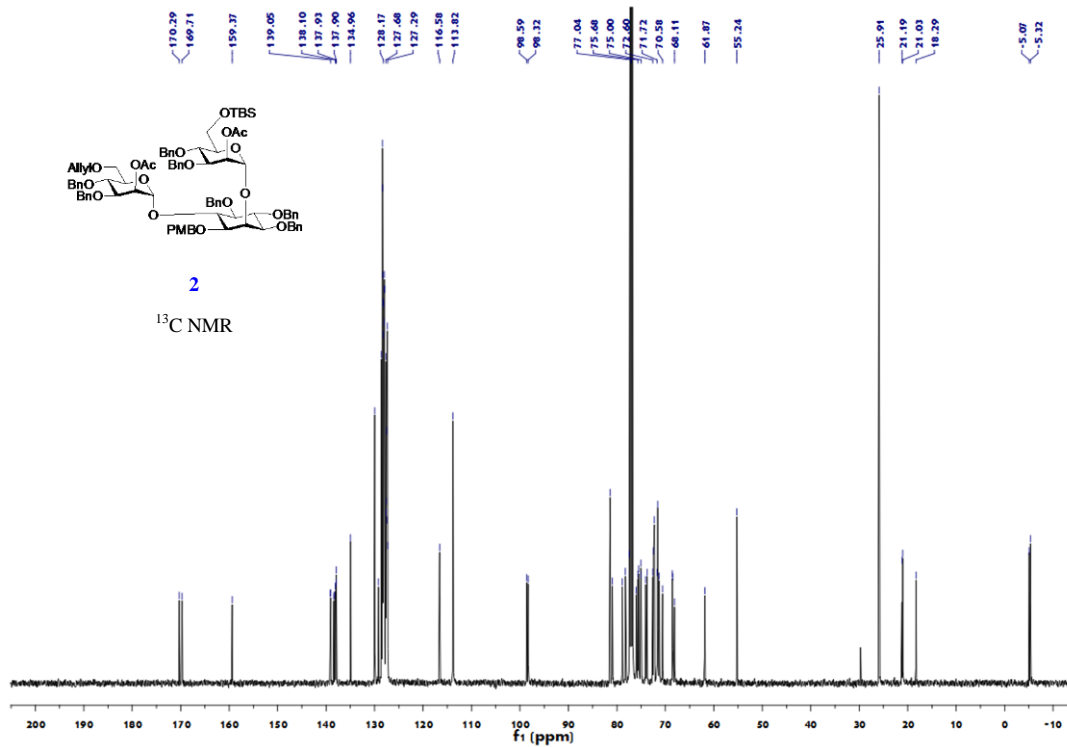
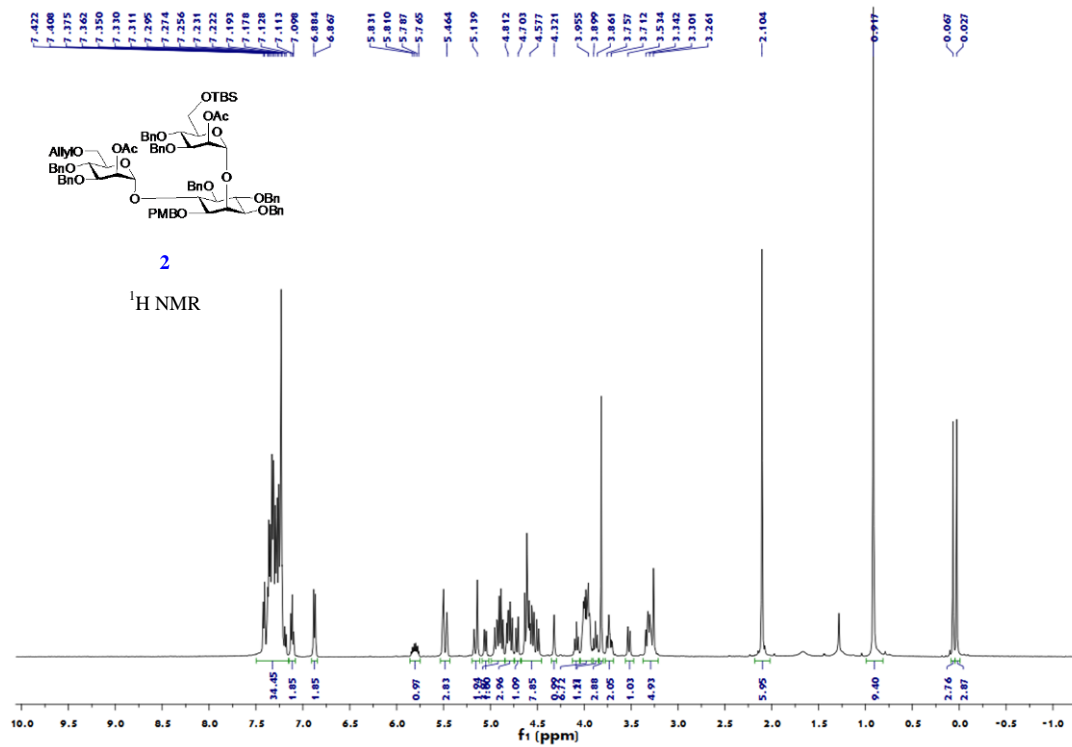


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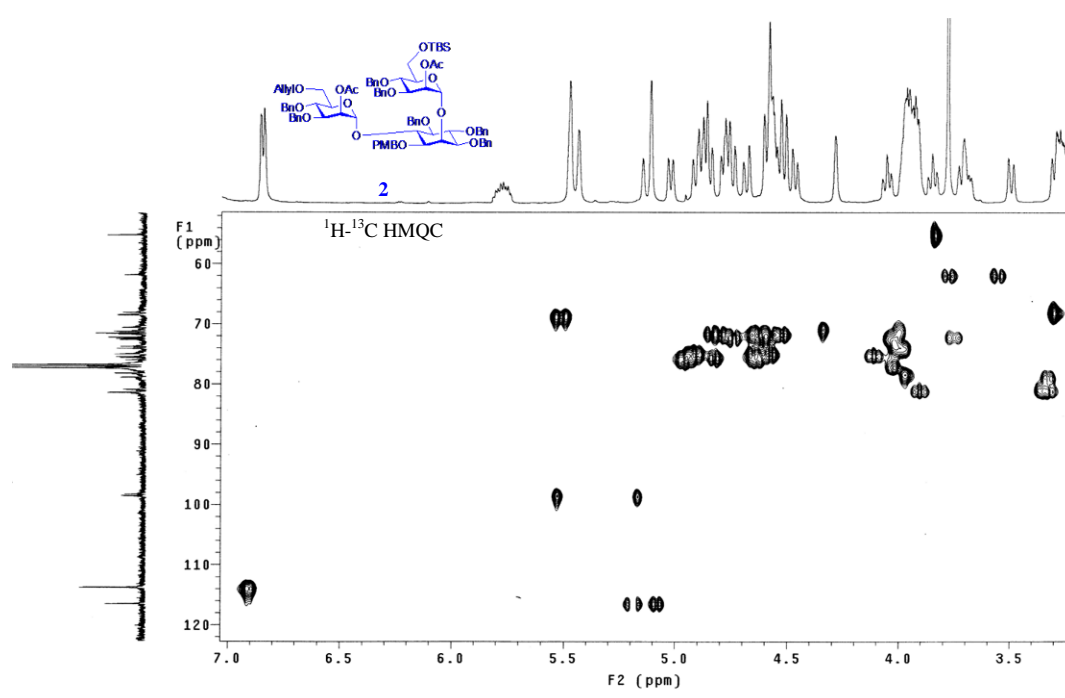
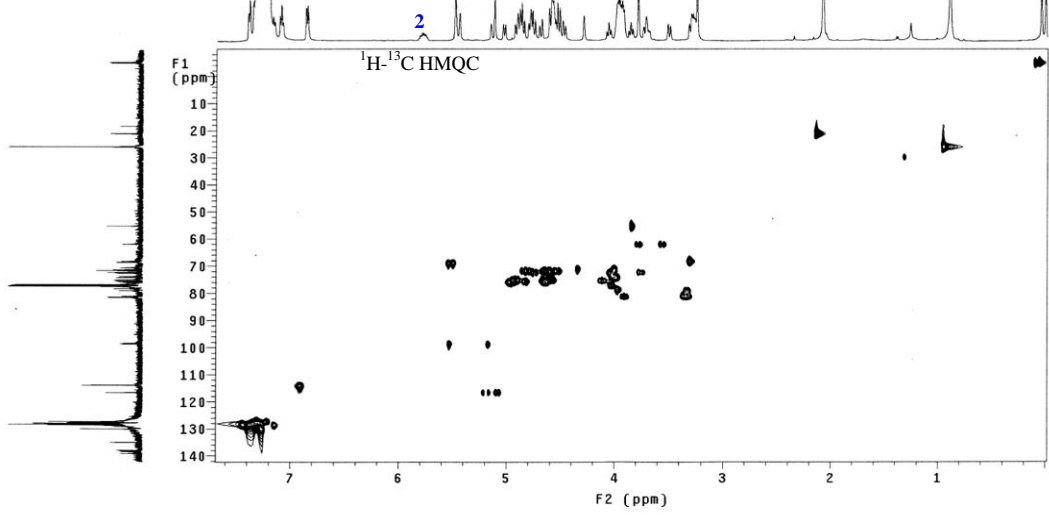
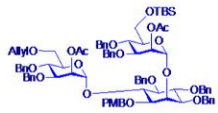






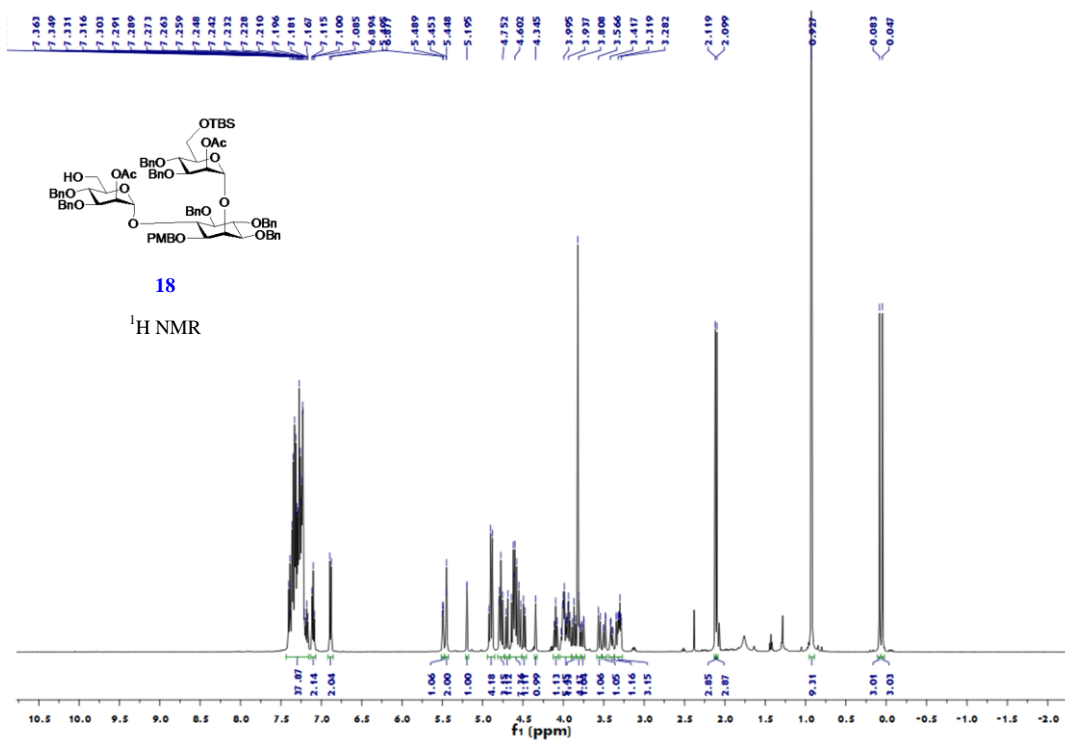
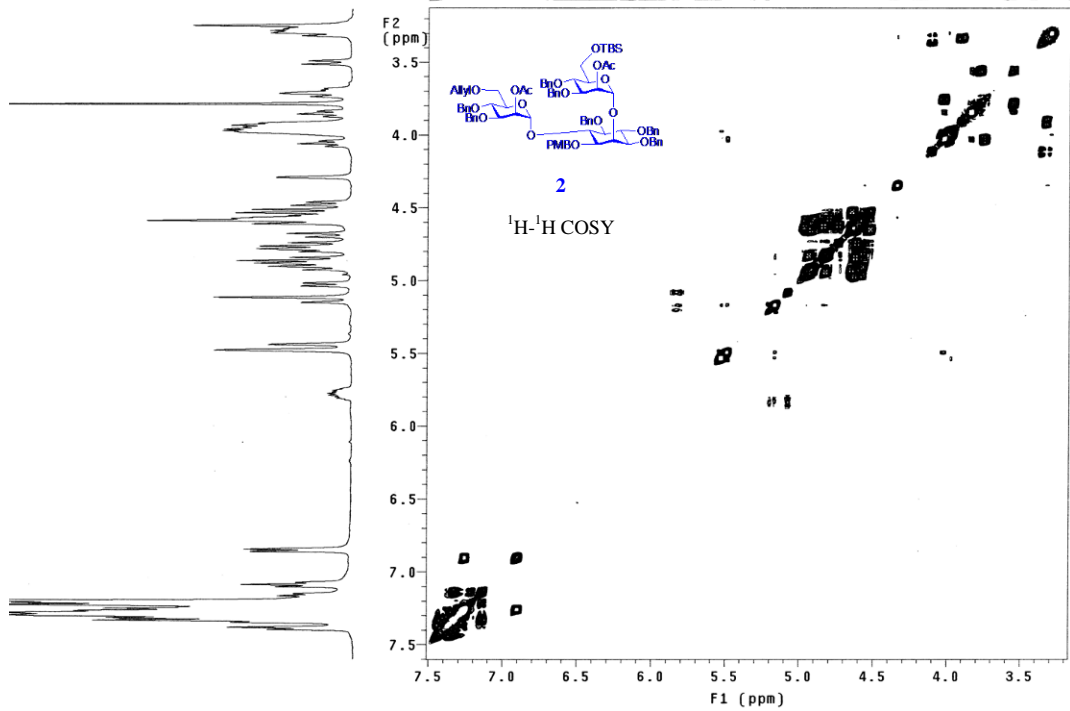


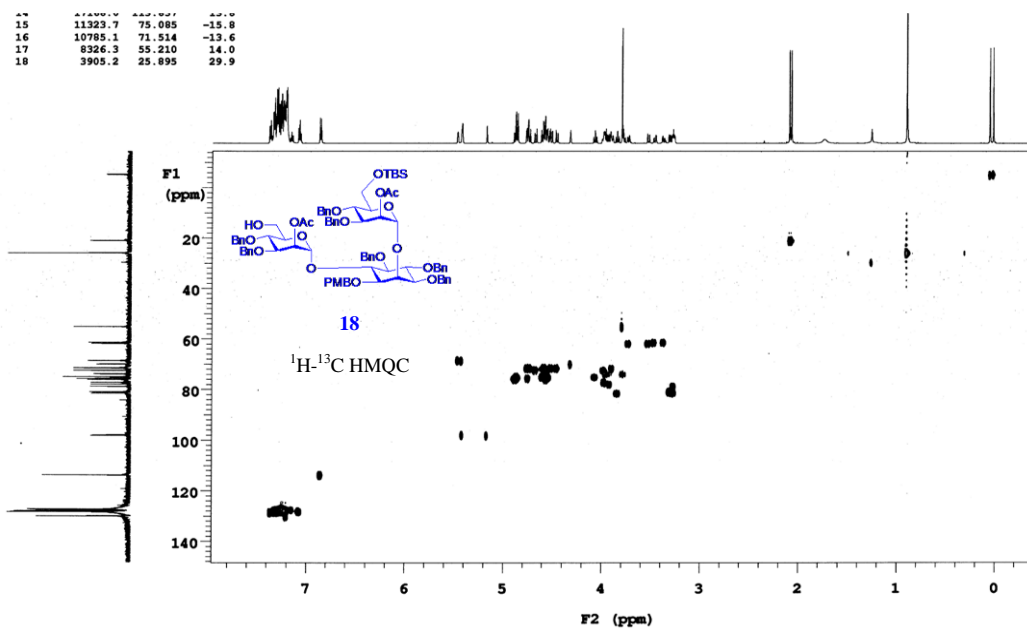
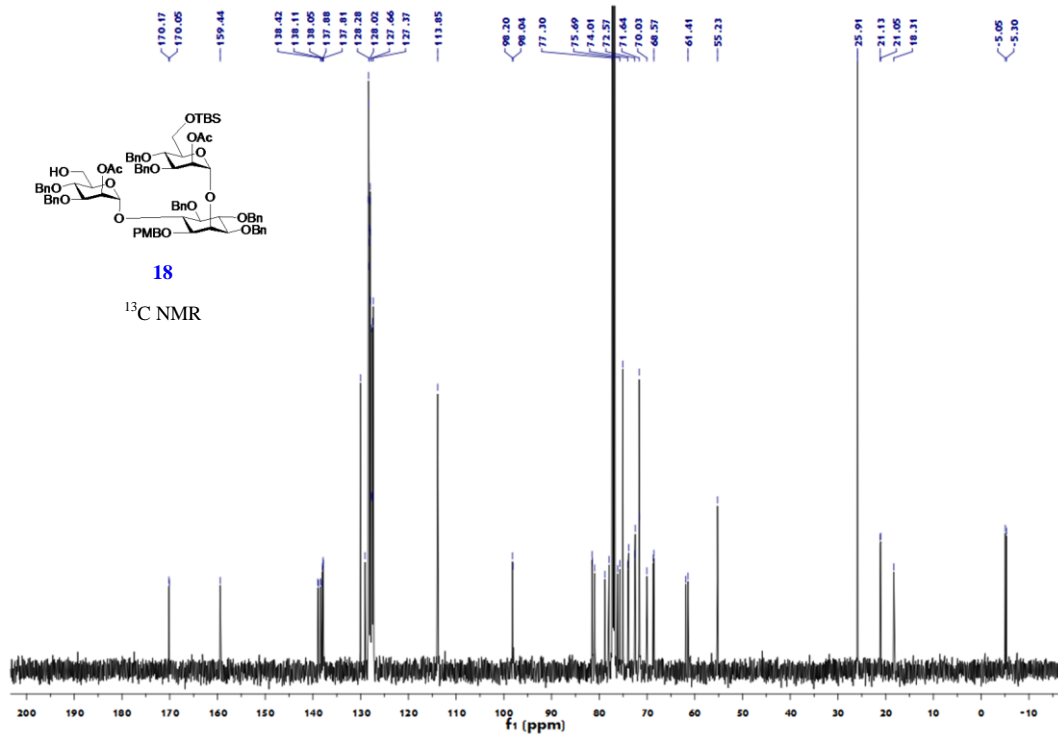
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13	16040.4	127.712	17.9
14	16020.4	127.553	16.2
15	16000.8	127.397	19.9
16	14301.4	113.887	14.5
17	8714.5	77.346	32.2
18	8682.4	77.090	32.5
19	8650.8	76.839	31.3
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td proton
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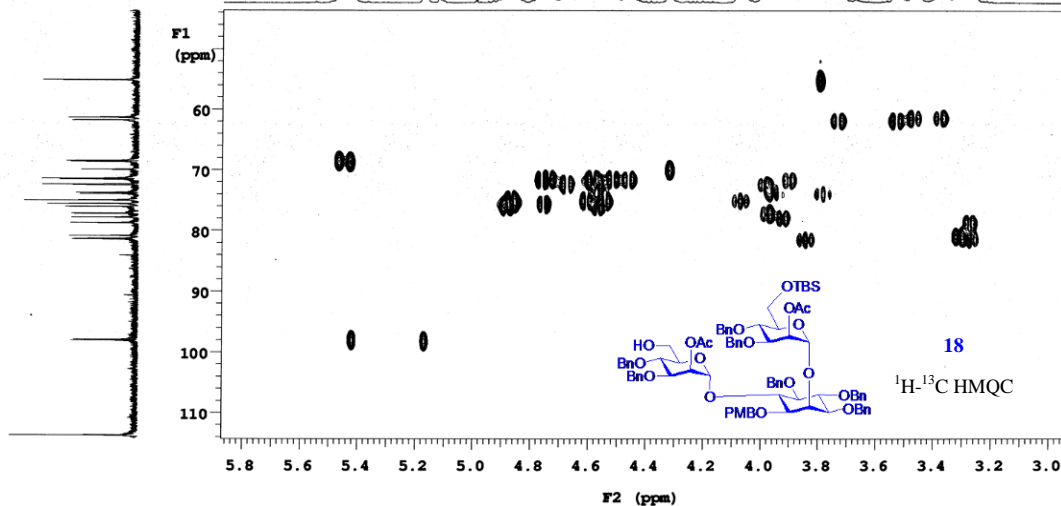
Varian 500 NMR spectrometer





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2	17168.0	113.937	22.3
3	14782.7	98.021	12.7
4	12278.5	81.416	14.2
5	12208.9	80.955	15.0
6	11886.9	78.819	14.5
7	11750.0	77.912	14.2
8	11654.1	77.276	15.0
9	11482.4	76.138	-15.2
10	11412.3	75.673	-19.3
11	11323.7	75.085	-25.7
12	11136.3	73.842	14.2
13	10941.7	72.552	15.4
14	10927.1	72.455	-19.8
15	10800.3	71.614	-17.9
16	10785.1	71.514	-22.1
17	10588.8	70.011	12.4
18	10363.3	68.717	14.8
19	10339.2	68.557	16.8
20	9328.8	61.857	-15.4
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22	8326.3	55.210	22.7

Agilent 600 NMR spectrometer Standard_proton

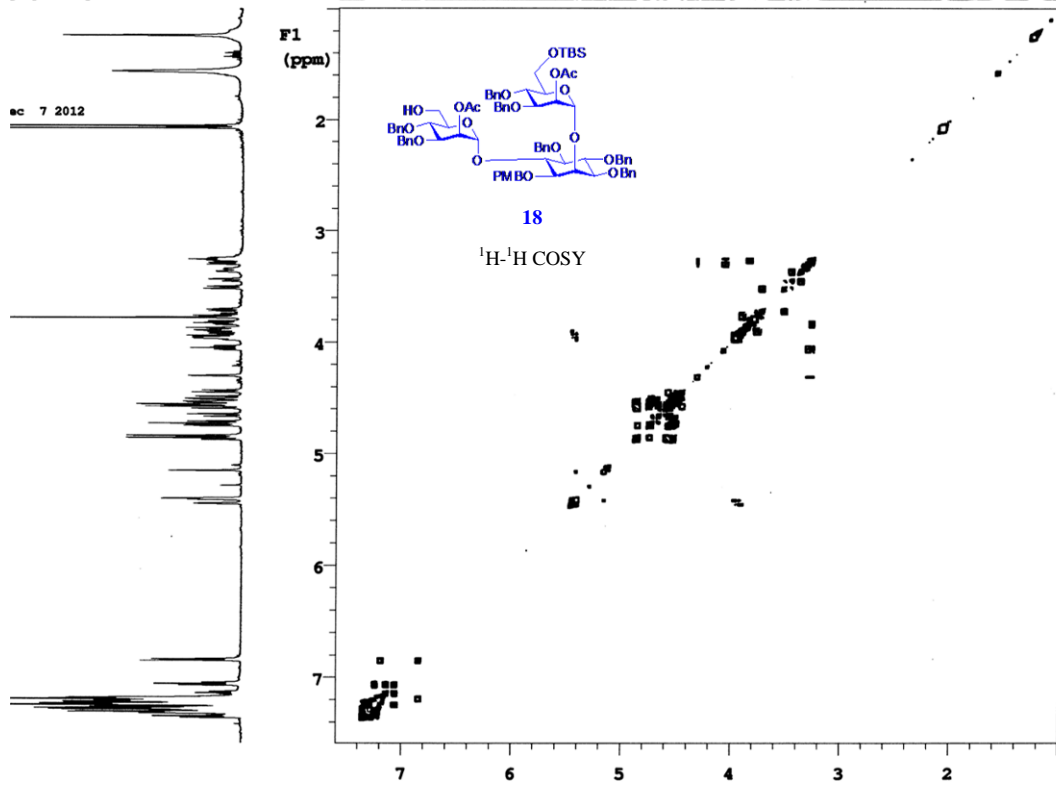


Agilent 600 NMR spectrometer

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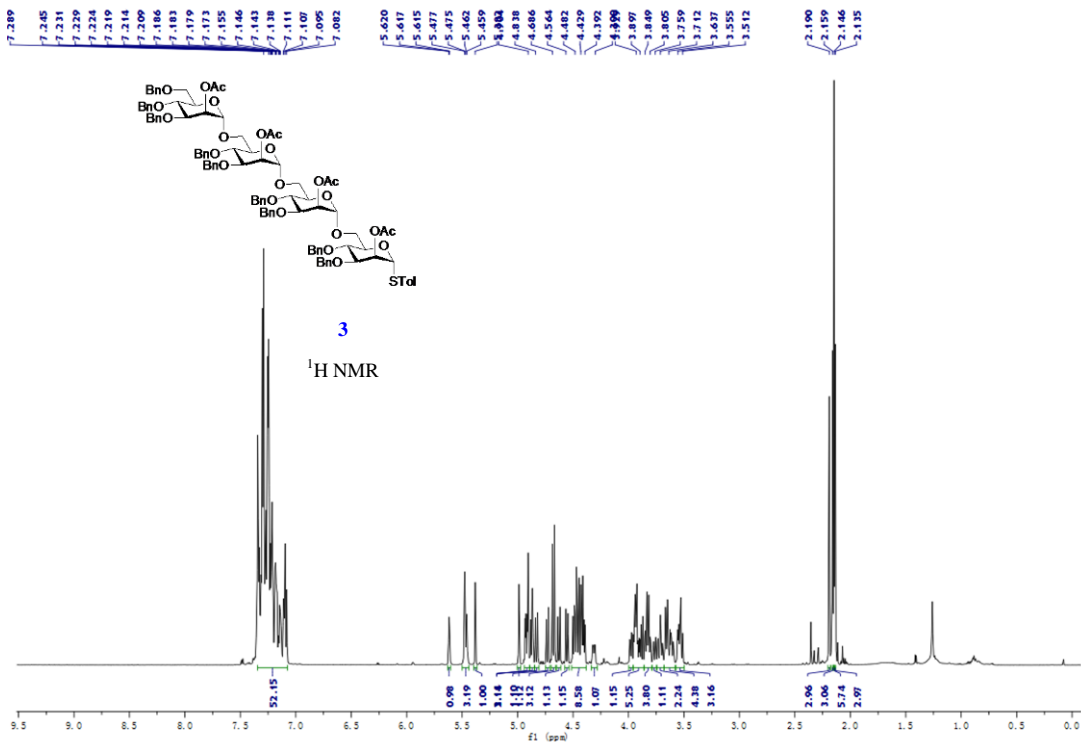
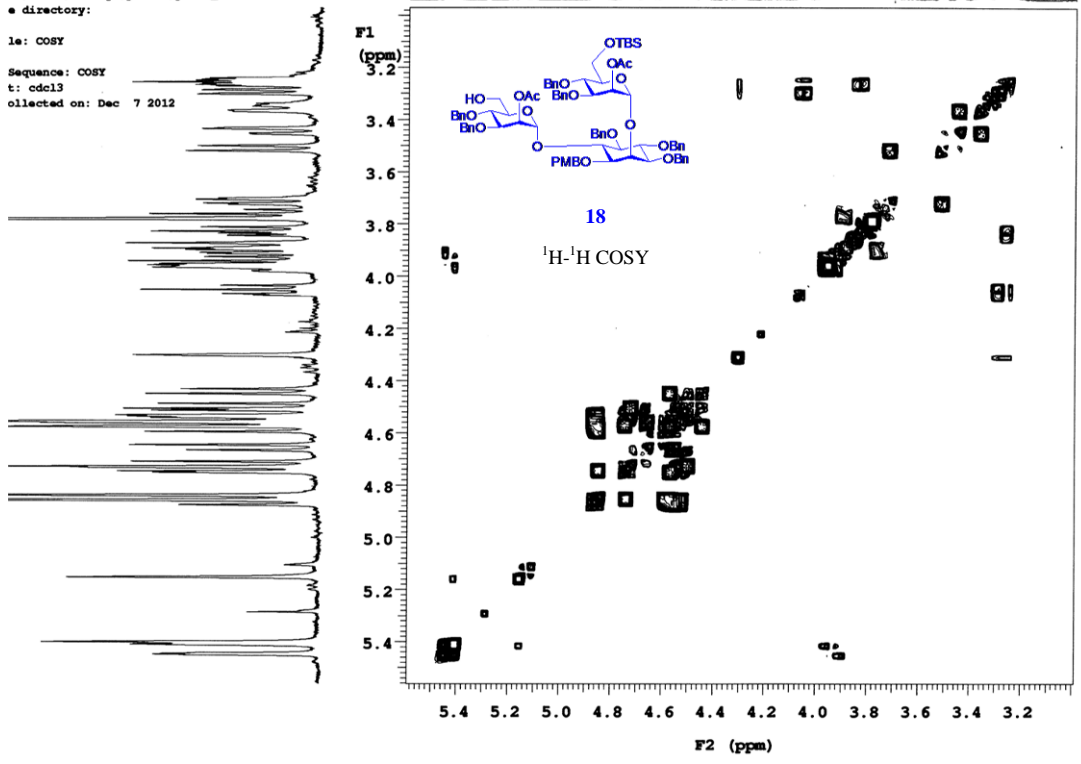
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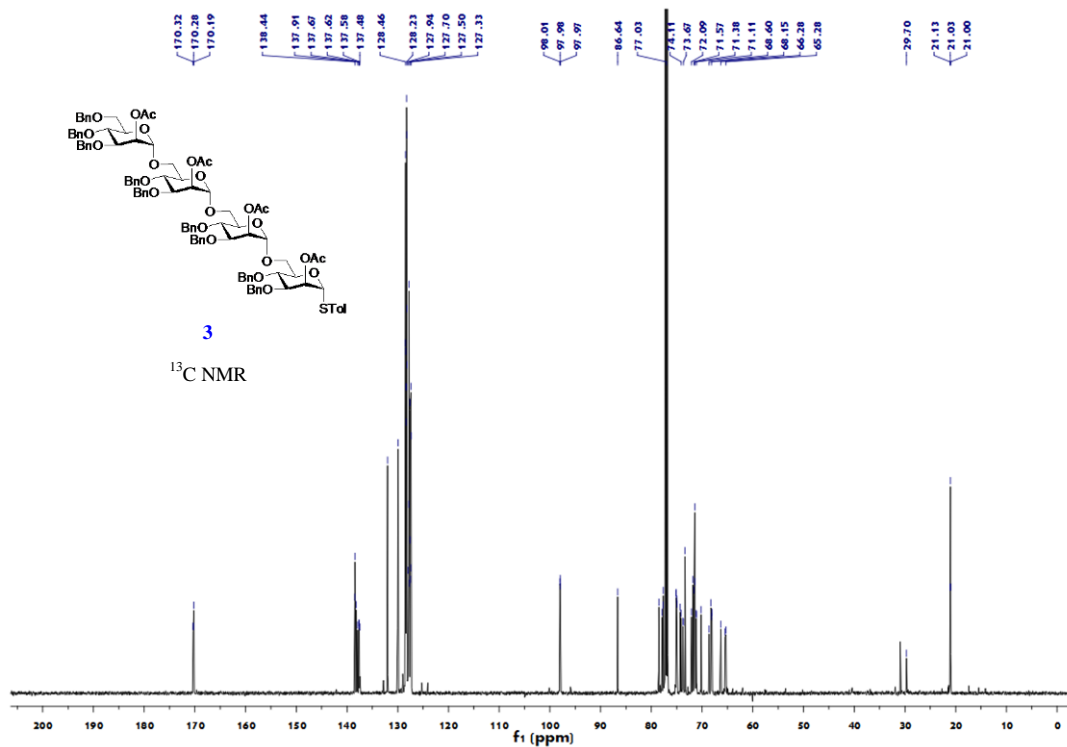
Agilent Technologies



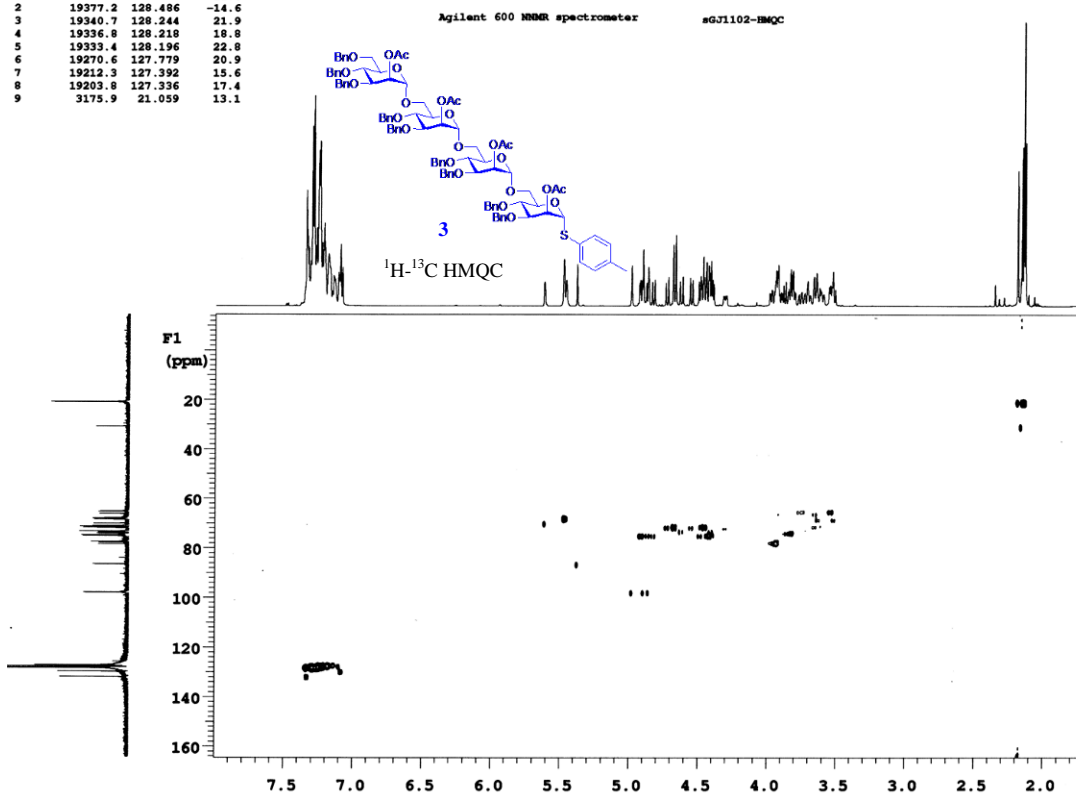
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 t: cdc13
 collected on: Dec 7 2012

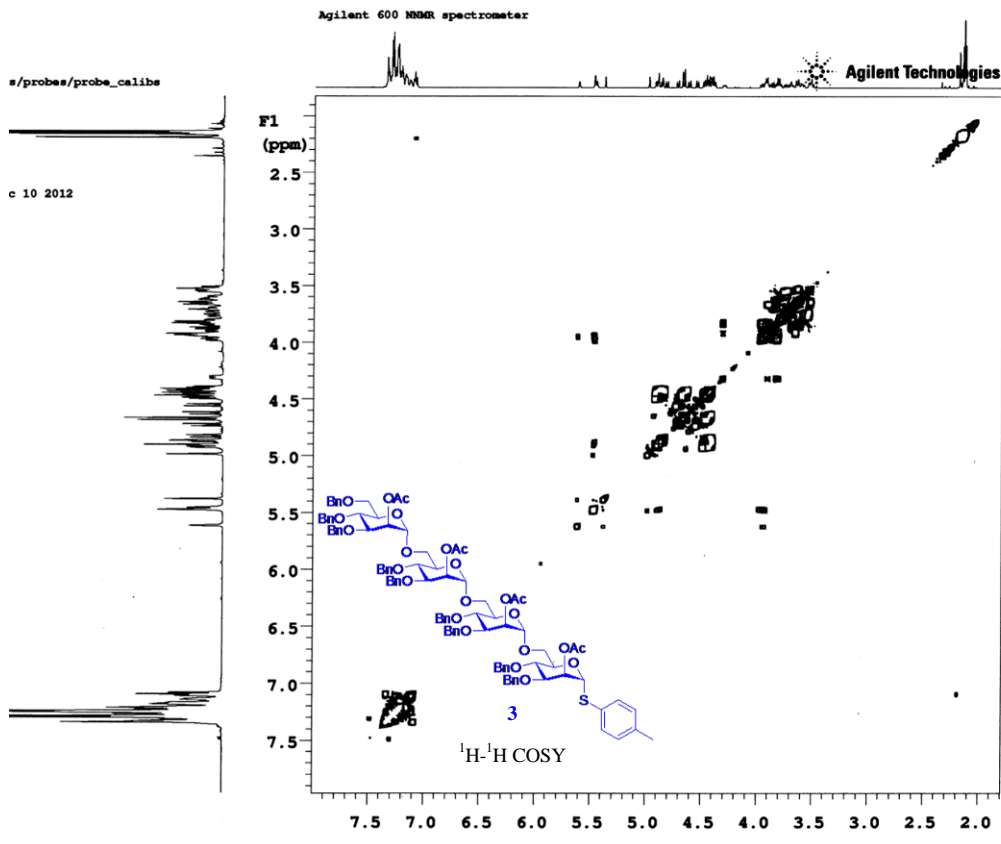
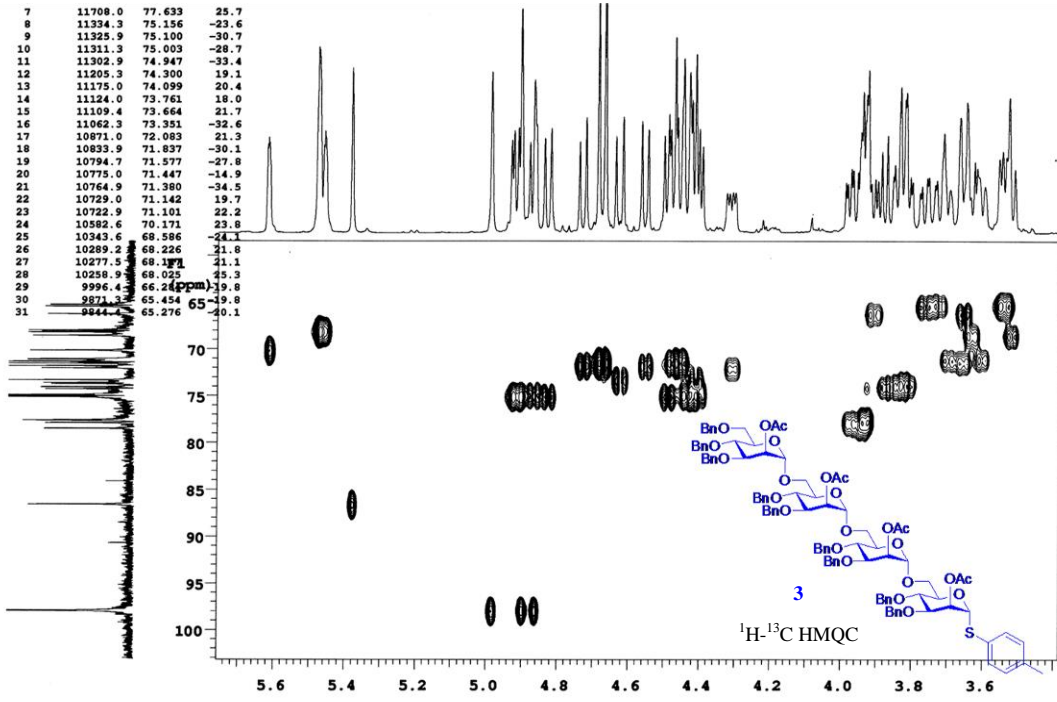
Agilent 600 NMR spectrometer
 Agilent Technologies

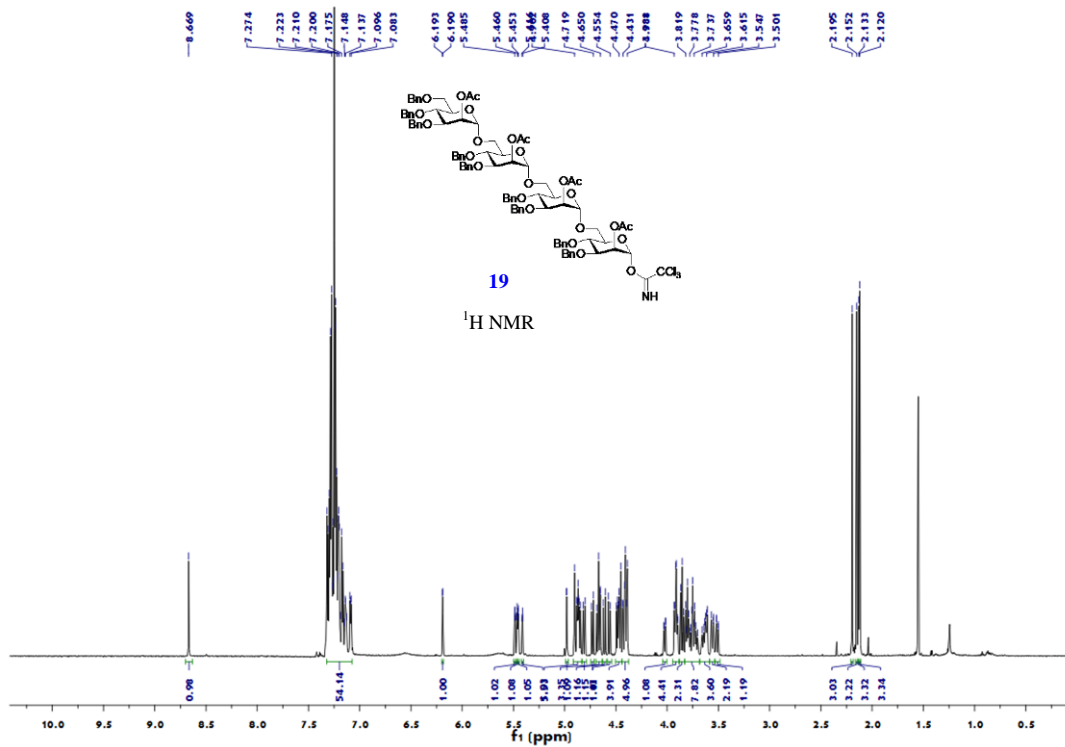
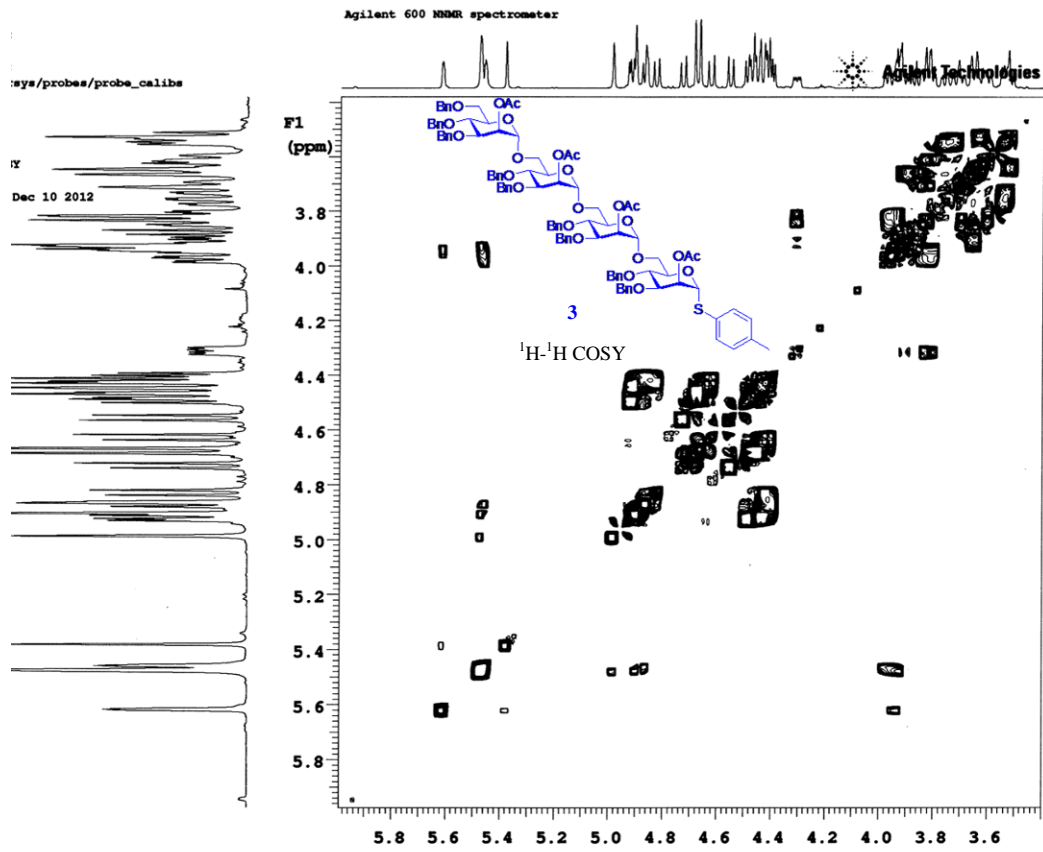


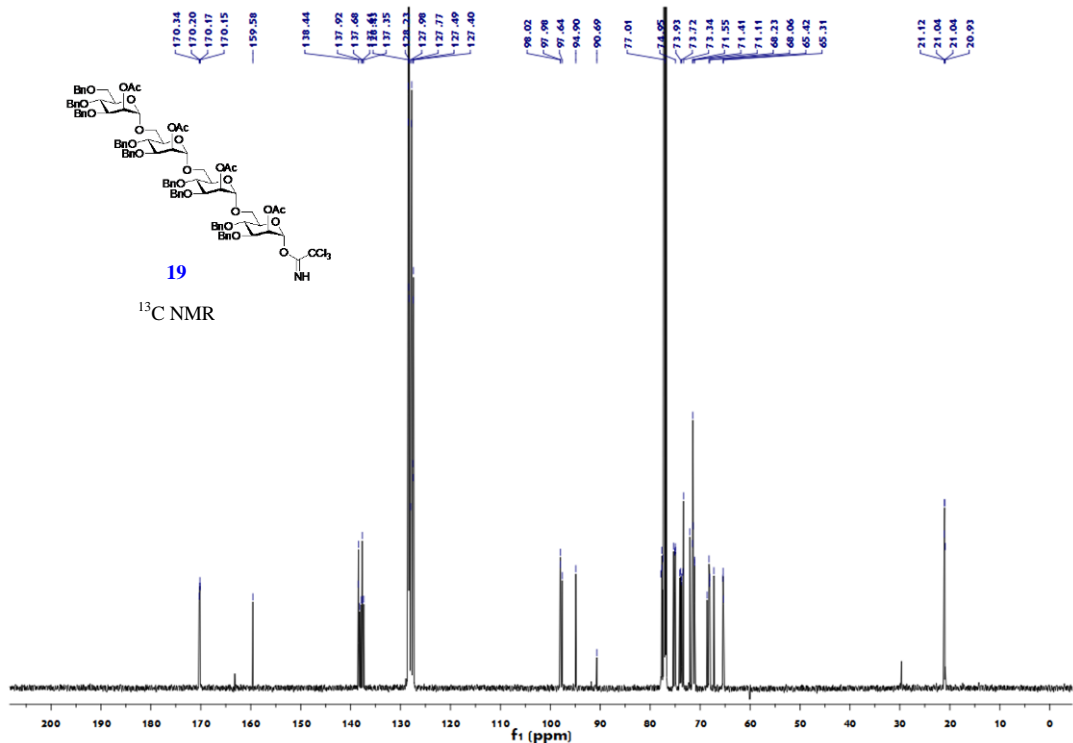


1	19380.0	128.504	-21.6
2	19377.2	128.486	-14.6
3	19340.7	128.244	21.9
4	19336.8	128.218	18.8
5	19333.4	128.196	22.8
6	19270.6	127.779	20.9
7	19212.3	127.392	15.6
8	19203.8	127.336	17.4
9	3175.9	21.059	13.1

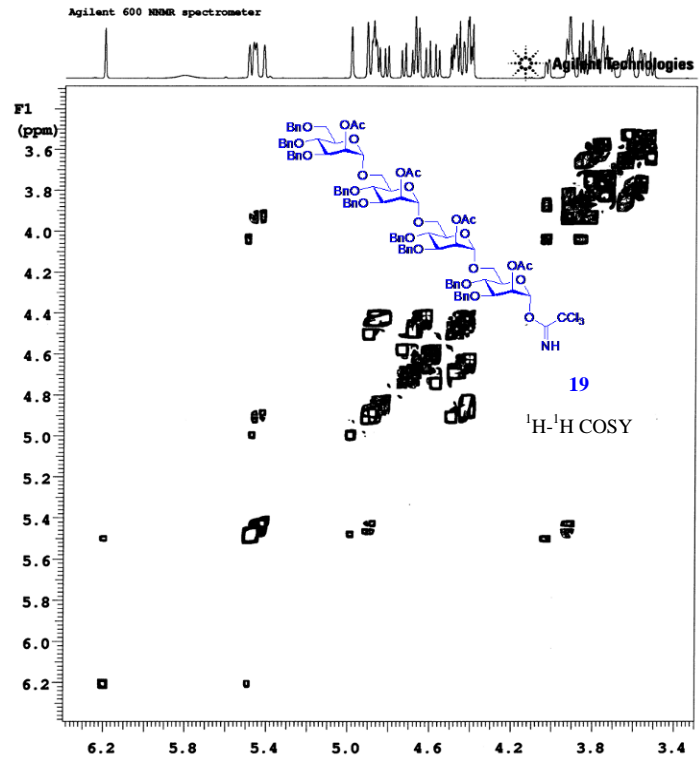


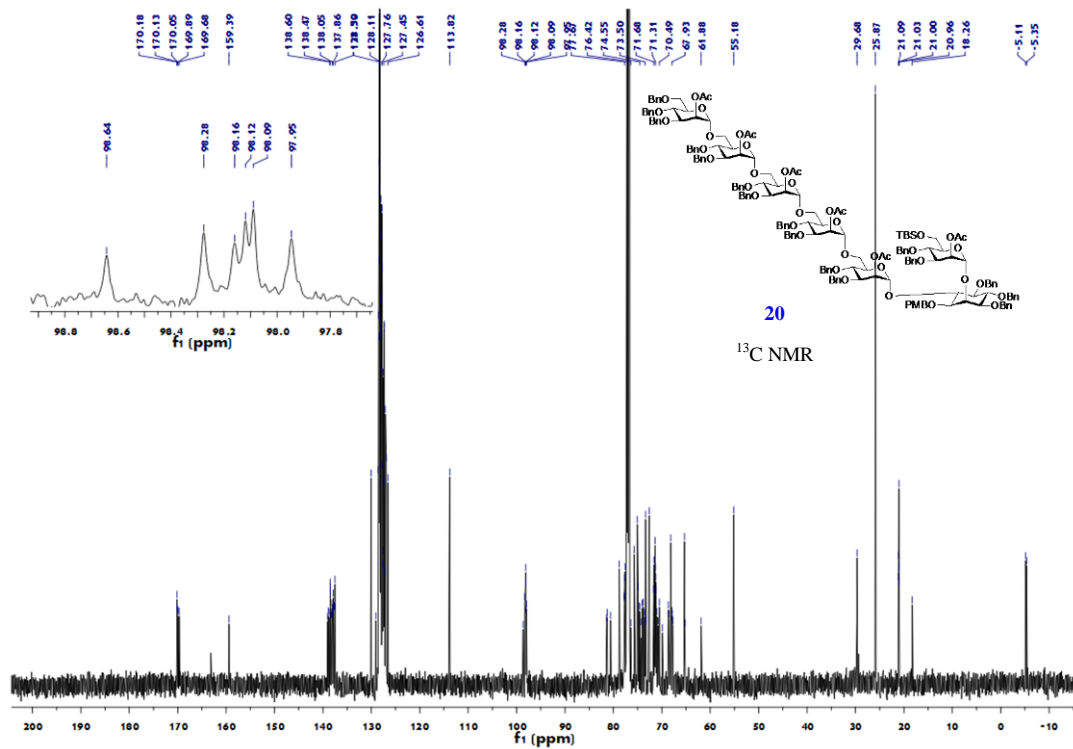
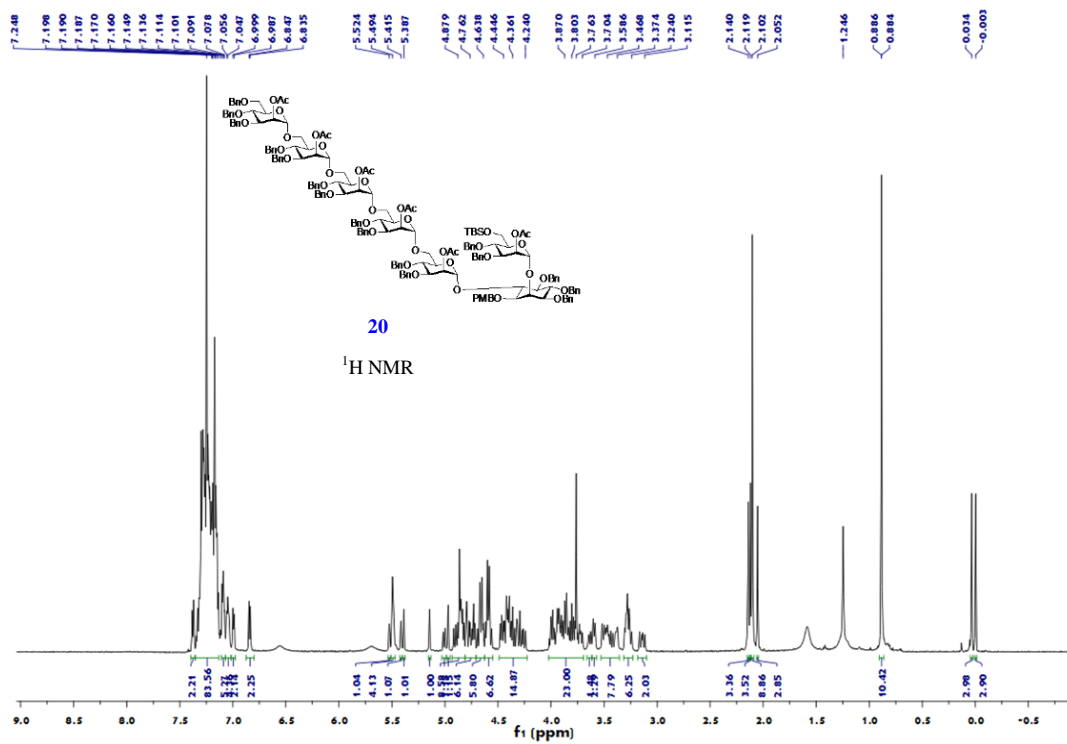




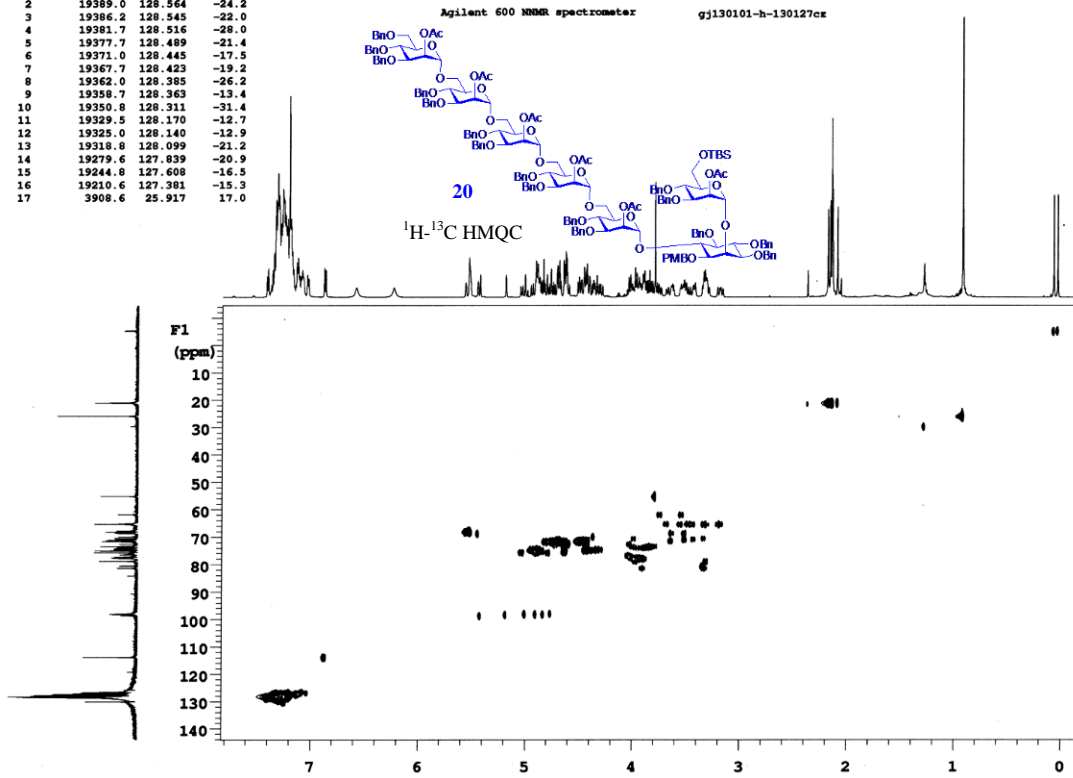


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 Sample directory:
 Fidfile: COSY
 Pulse Sequence: COSY
 Solvent: cdcl3
 Data collected on: Dec 27 2012

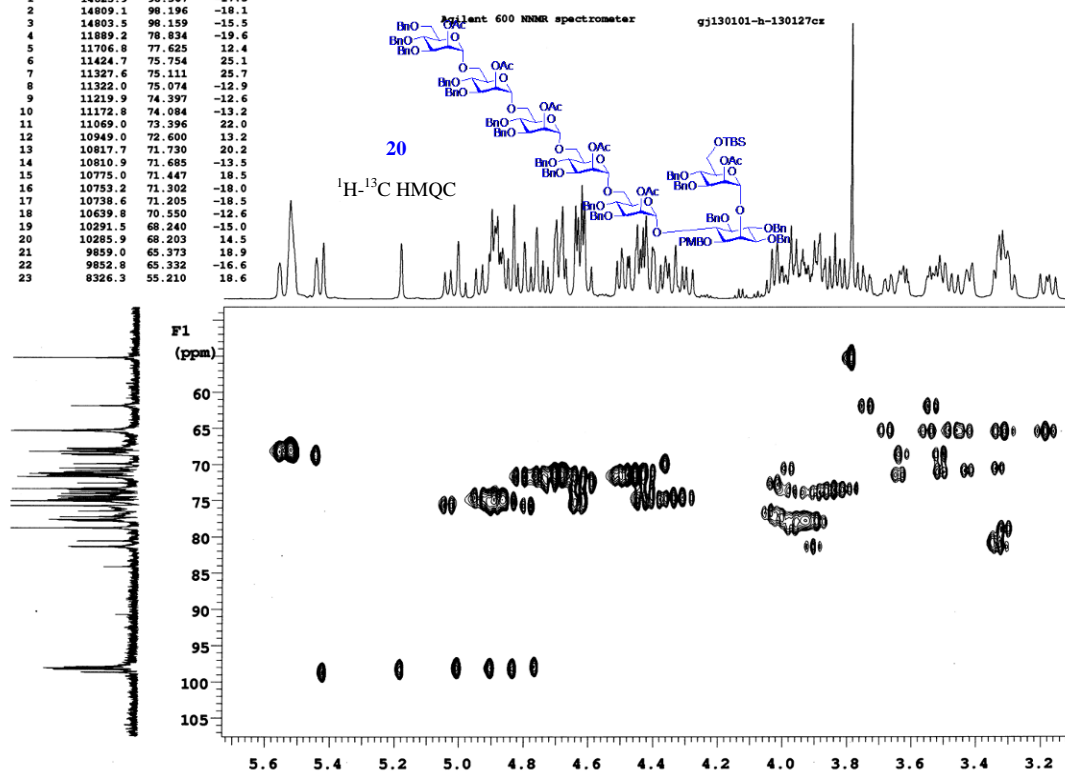


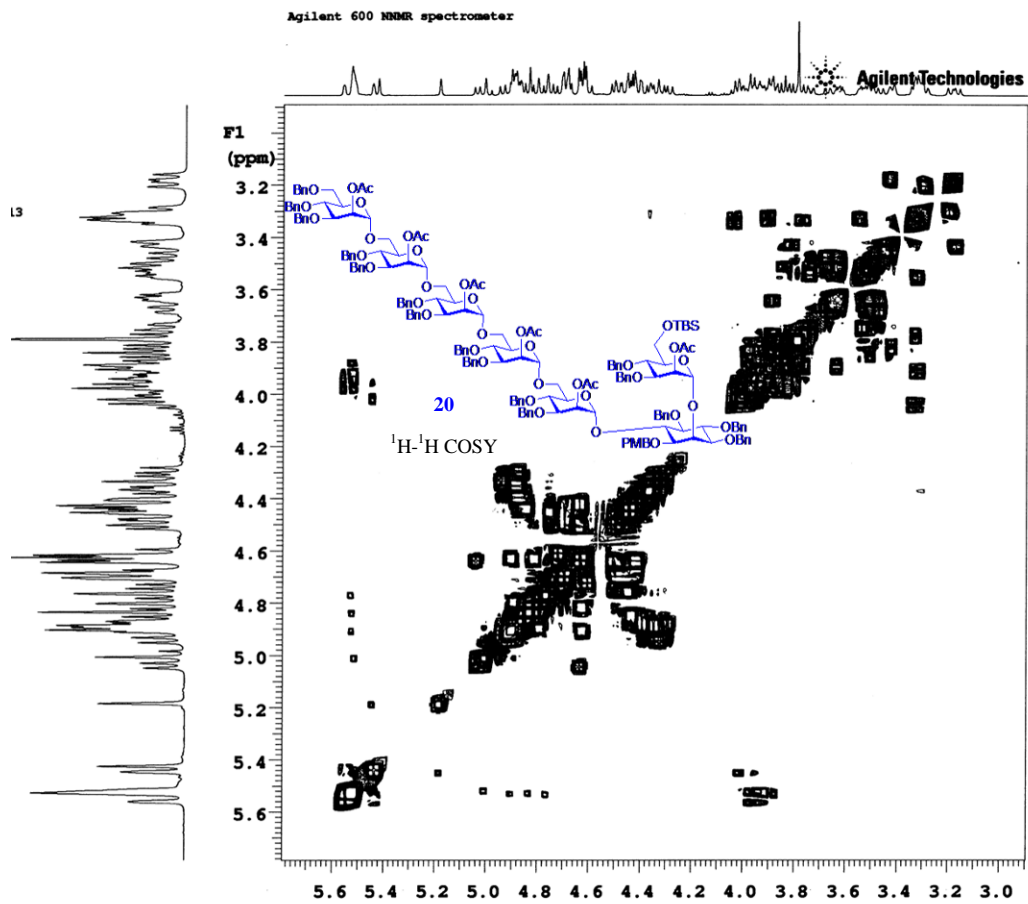
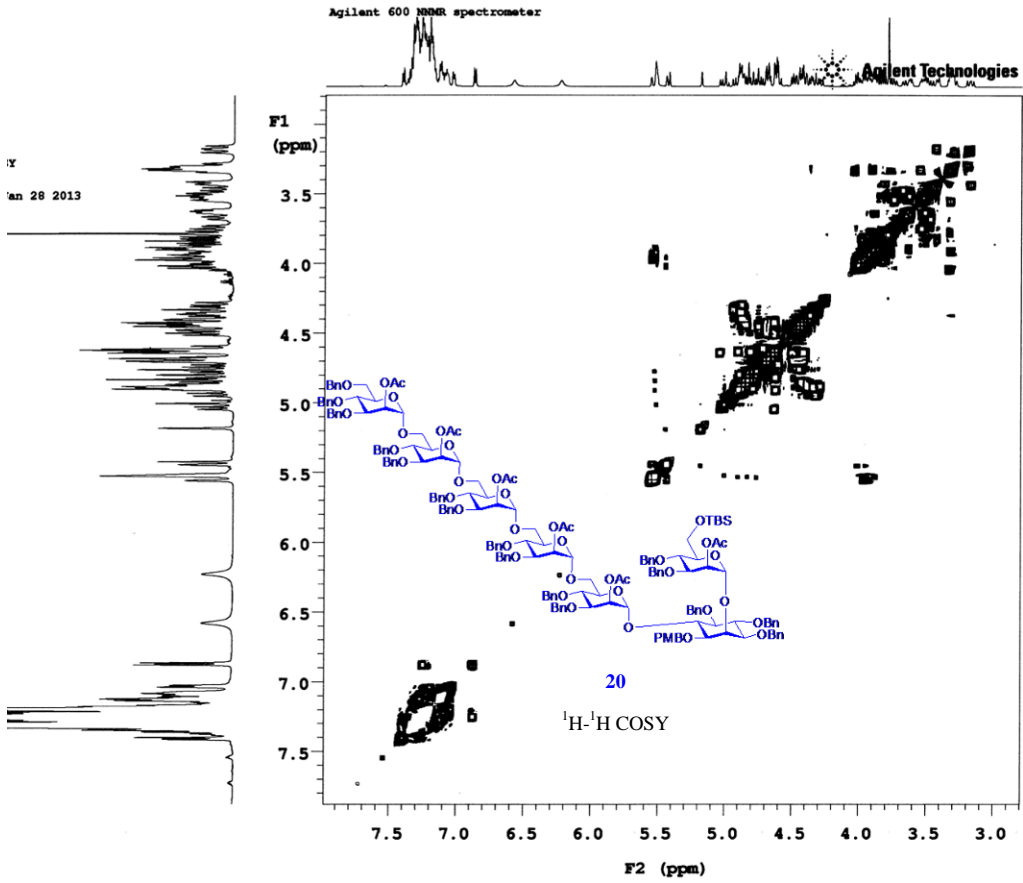


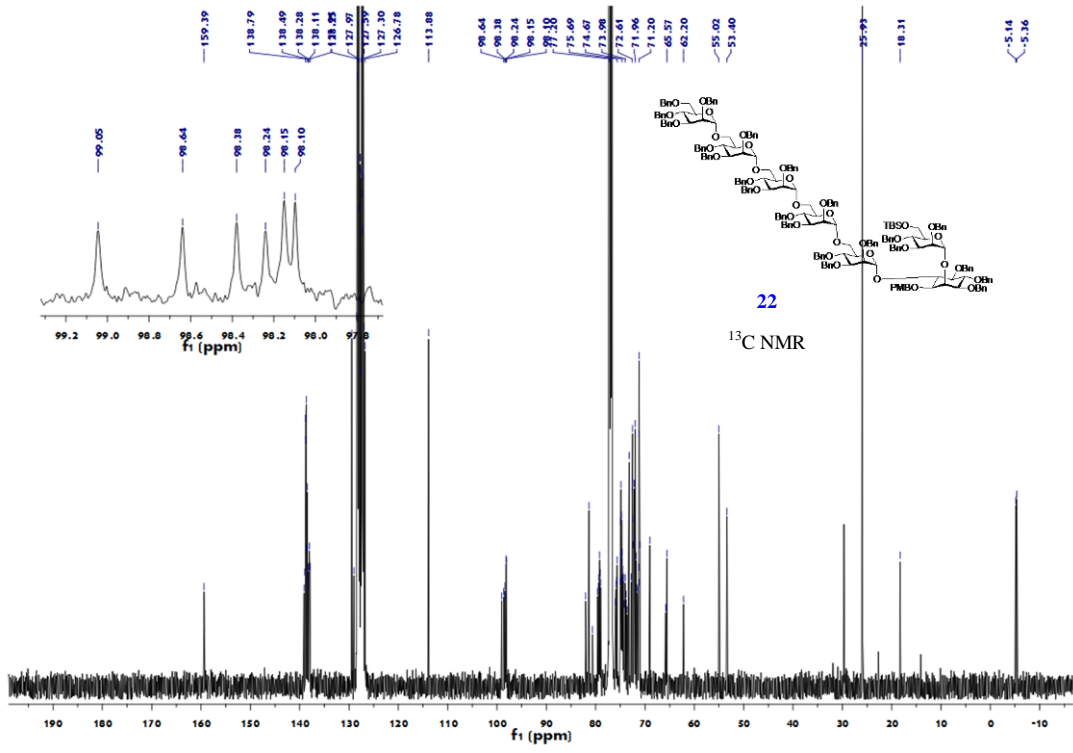
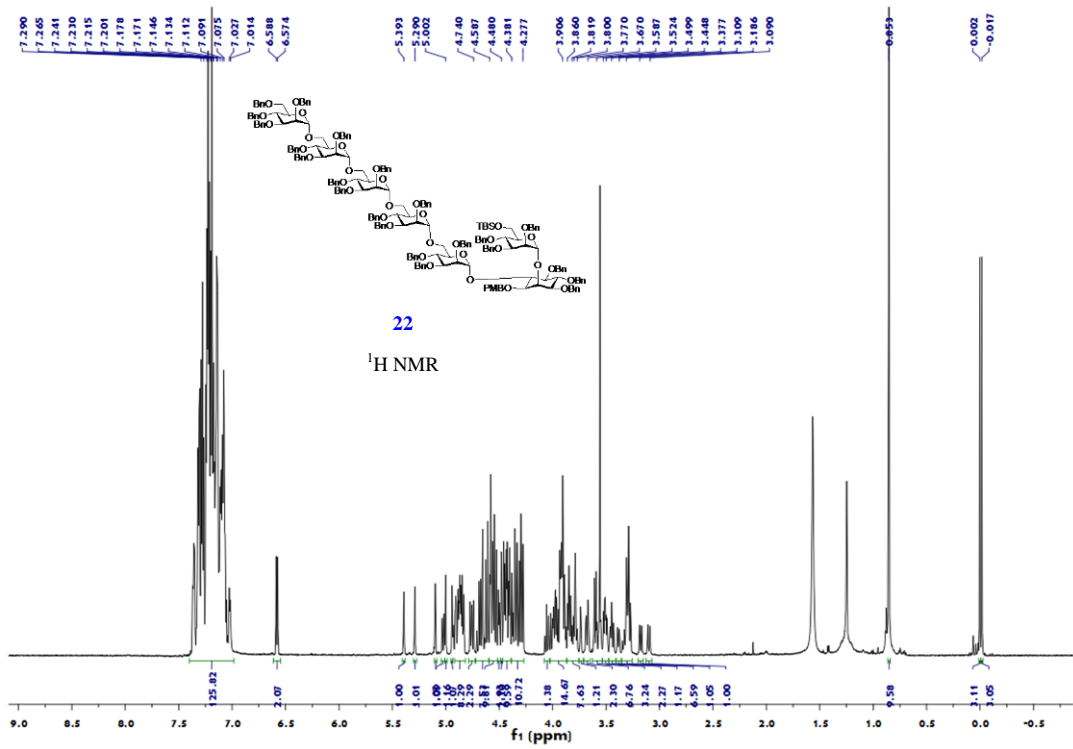
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2	19389.0	128.564	-24.2
3	19386.2	128.545	-22.0
4	19381.7	128.516	-28.0
5	19377.7	128.489	-21.4
6	19371.0	128.445	-17.5
7	19367.7	128.423	-19.2
8	19362.0	128.385	-26.2
9	19358.7	128.363	-13.4
10	19350.8	128.311	-31.4
11	19329.5	128.170	-12.7
12	19325.0	128.140	-12.9
13	19318.8	128.099	-21.2
14	19279.6	127.839	-20.9
15	19244.8	127.608	-16.5
16	19210.6	127.361	-15.3
17	3908.6	25.917	17.0



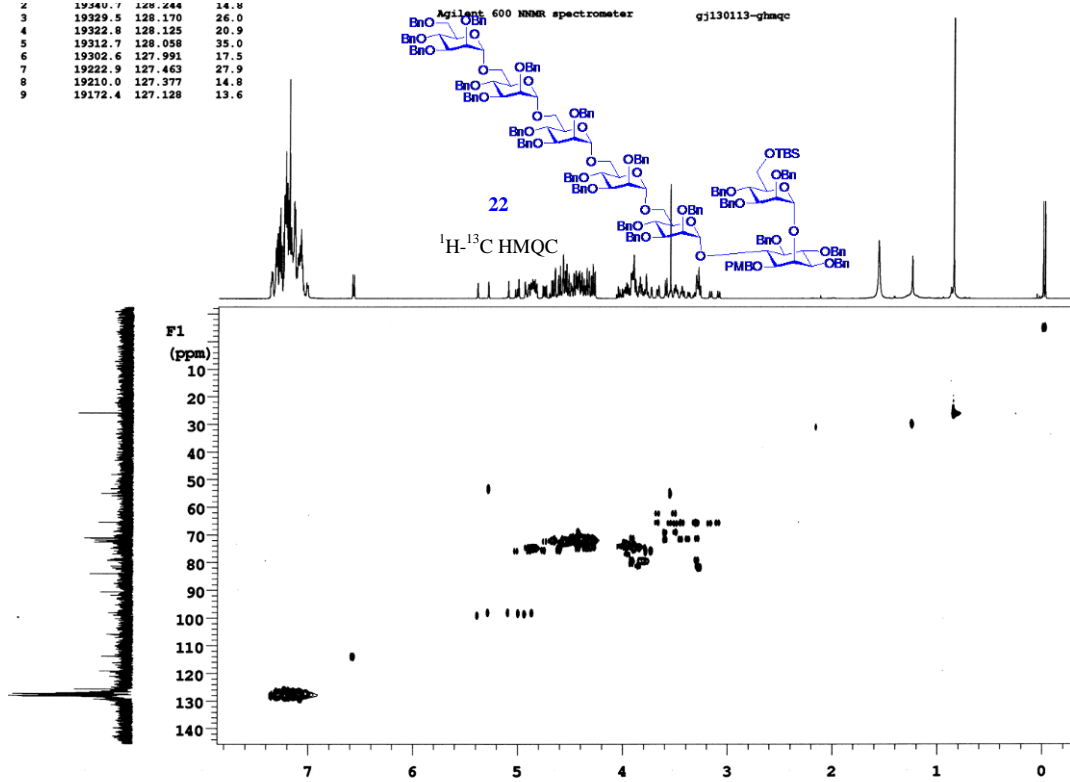
1	14825.9	98.307	-17.3
2	14809.1	98.196	-18.1
3	14803.5	98.159	-15.5
4	11989.2	78.634	-19.6
5	11706.8	77.625	12.4
6	11424.7	75.754	25.1
7	11327.6	75.111	25.7
8	11322.0	75.074	-12.9
9	11219.9	74.397	-12.6
10	11172.8	74.084	-13.2
11	11069.0	73.396	22.0
12	10949.0	72.600	13.2
13	10817.7	71.730	20.2
14	10810.9	71.685	-13.5
15	10775.0	71.447	18.5
16	10753.2	71.302	-18.0
17	10738.6	71.205	-18.5
18	10639.8	70.550	-12.6
19	10291.5	68.240	-15.0
20	10285.9	68.203	14.5
21	9859.0	65.373	18.9
22	9852.8	65.332	-16.6
23	8326.3	55.210	18.6



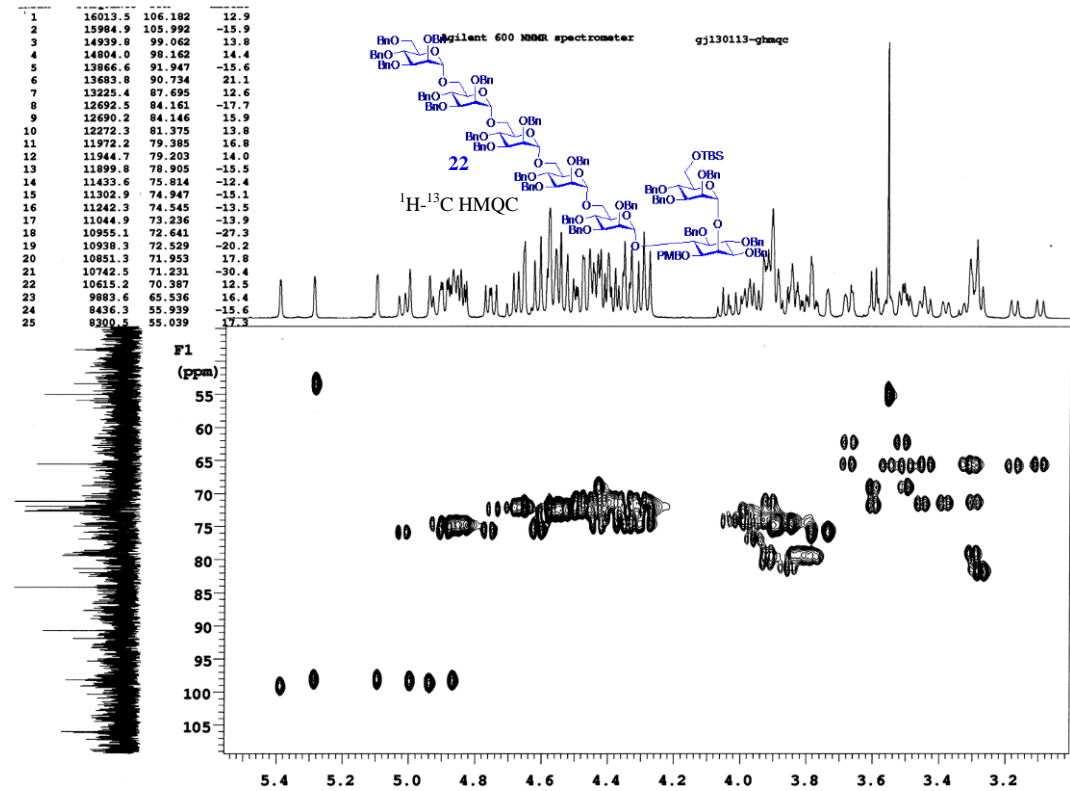




2	19340.7	128.244	14.8
3	19329.5	128.170	26.0
4	19322.8	128.125	20.9
5	19312.7	128.058	35.0
6	19302.6	127.991	17.5
7	19222.9	127.463	27.9
8	19210.0	127.377	14.8
9	19172.4	127.128	13.6

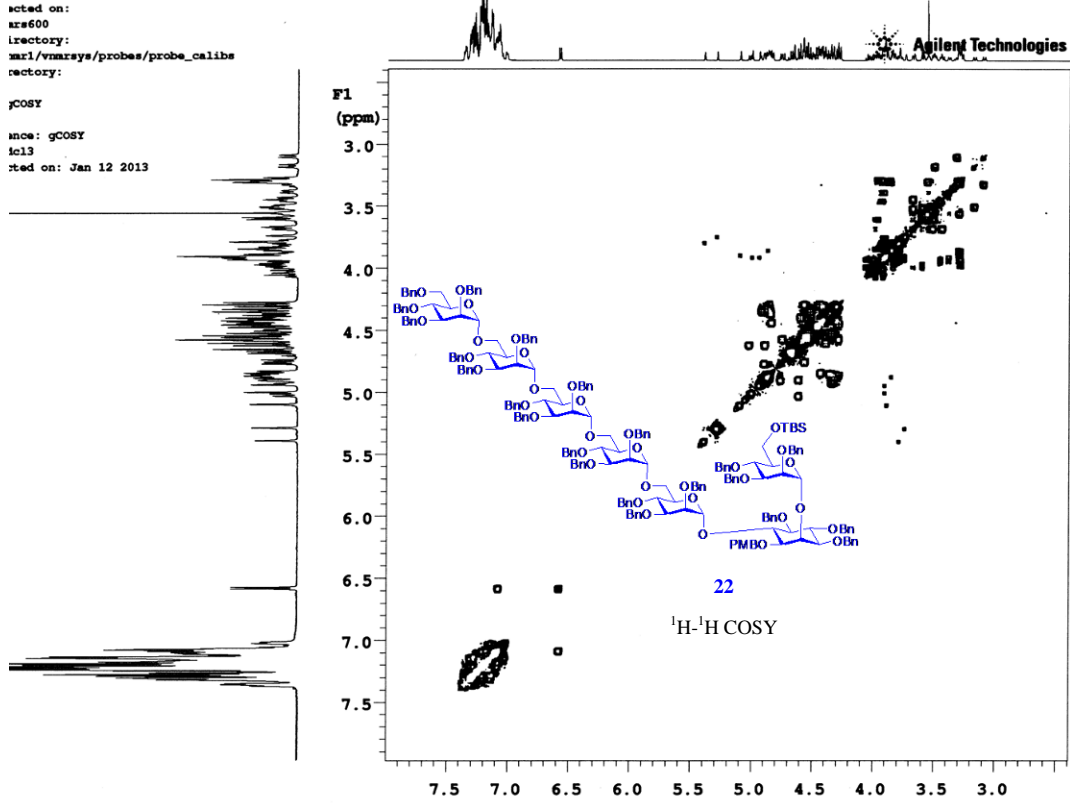


1	16013.5	106.182	12.9
2	15984.9	105.922	-15.9
3	14939.8	99.062	13.8
4	14804.0	98.162	14.4
5	13866.6	91.947	-15.6
6	13683.8	90.734	21.1
7	13225.4	87.695	12.6
8	12692.5	84.161	-17.7
9	12690.2	84.146	15.9
10	12272.3	81.375	13.8
11	11972.2	79.385	16.8
12	11944.7	79.203	14.0
13	11899.8	78.905	-15.5
14	11433.6	75.814	-12.4
15	11302.9	74.947	-15.1
16	11242.3	74.545	-13.5
17	11044.9	73.236	-13.9
18	10955.1	72.641	-27.3
19	10938.3	72.529	-20.2
20	10851.3	71.953	17.8
21	10742.5	71.231	-30.4
22	10615.2	70.387	12.5
23	9883.6	65.536	16.4
24	8436.3	55.939	-15.6
25	8300.3	55.039	-17.3



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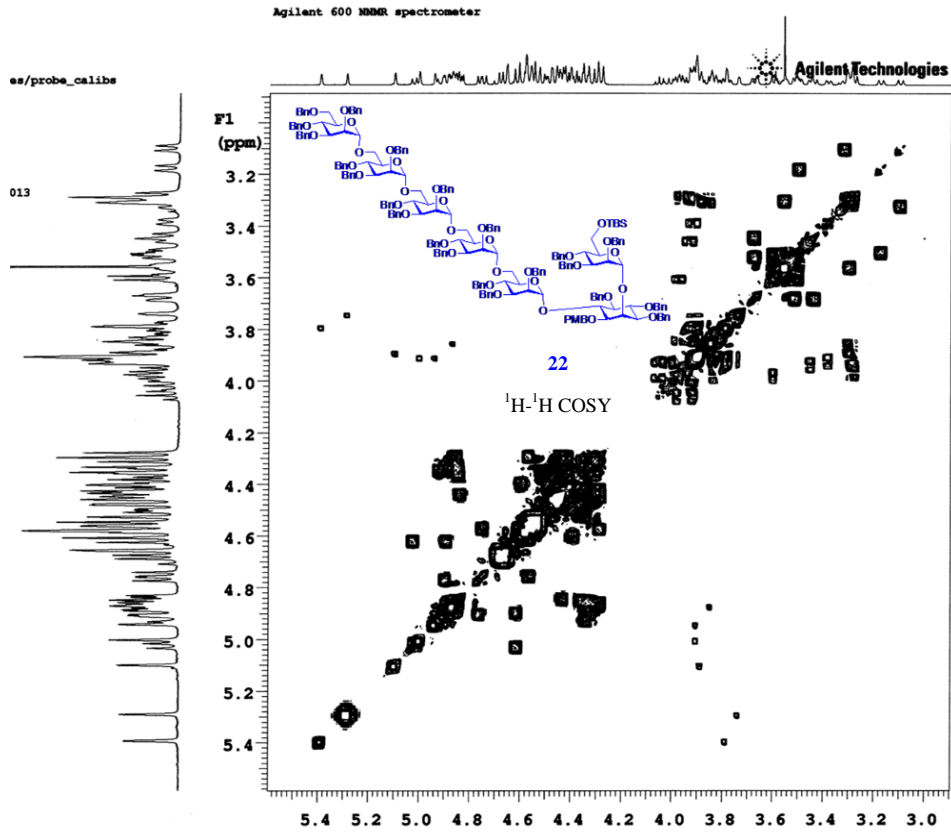
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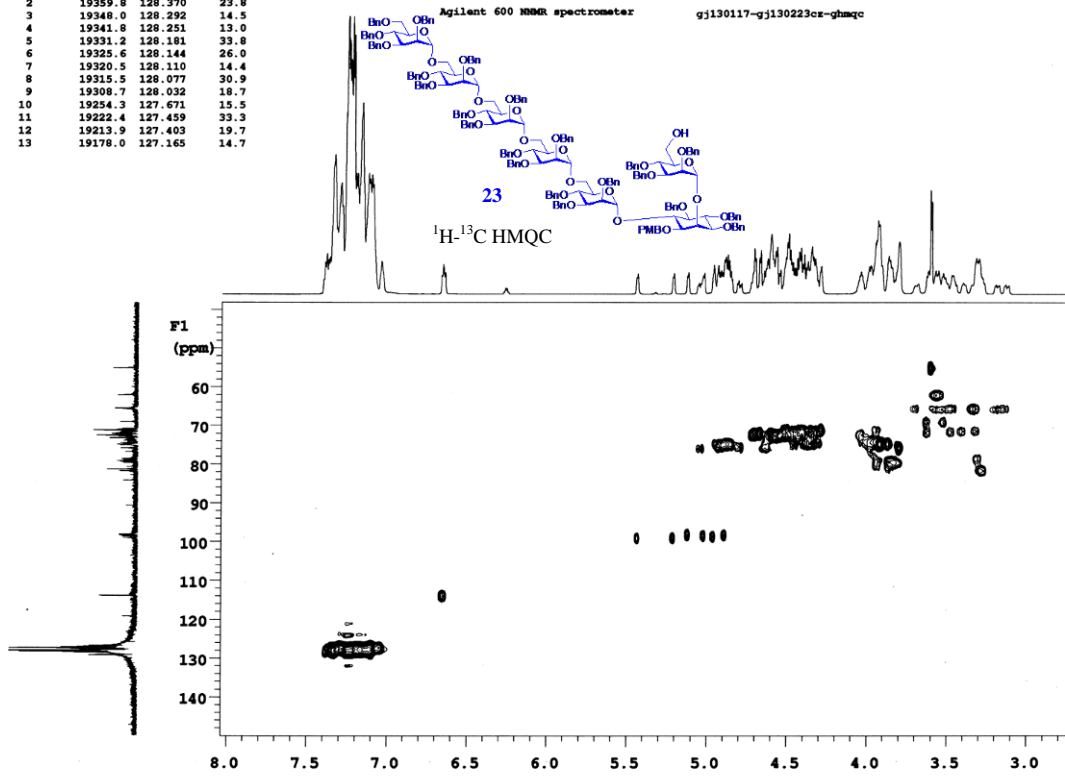
Agilent 600 NMR spectrometer

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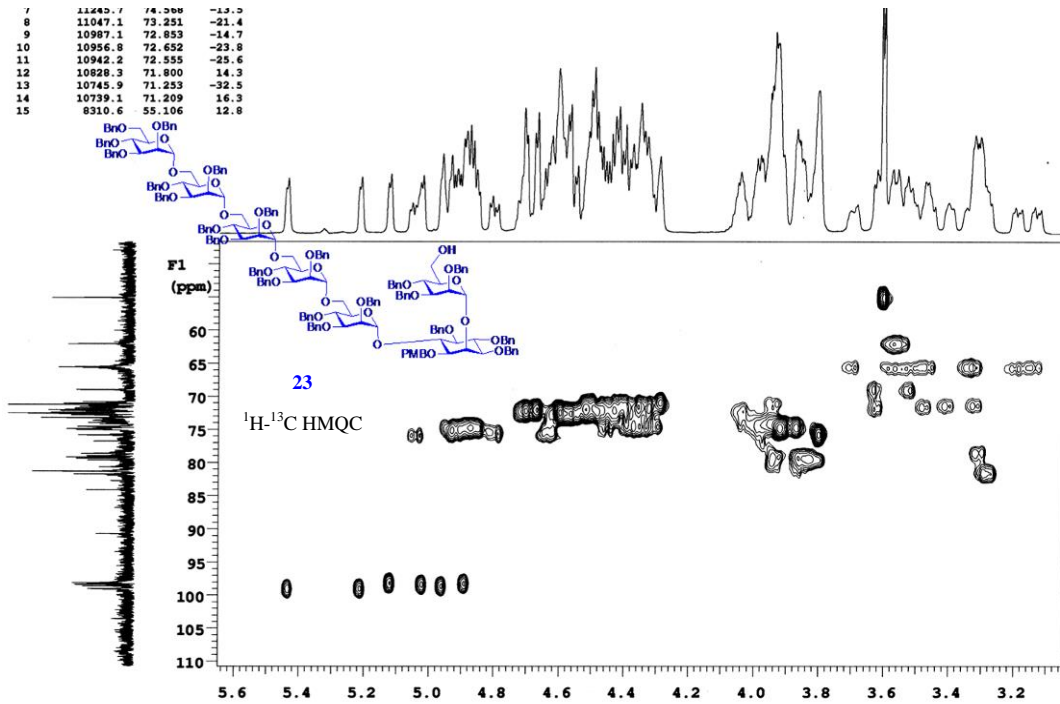
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1	19364.8	128.404	13.8
2	19359.8	128.370	23.8
3	19348.0	128.292	14.5
4	19341.8	128.251	13.0
5	19331.2	128.181	33.8
6	19325.6	128.144	26.0
7	19320.5	128.110	14.4
8	19315.5	128.077	30.9
9	19308.7	128.032	18.7
10	19254.3	127.671	15.5
11	19222.4	127.459	33.3
12	19213.9	127.403	19.7
13	19178.0	127.165	14.7



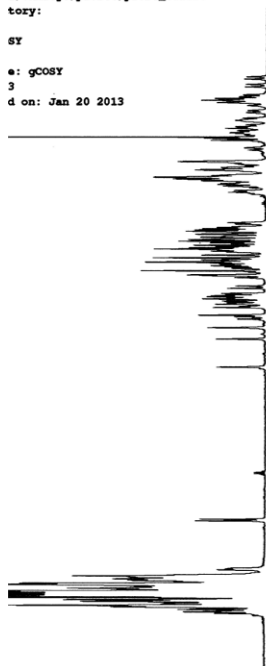
7	11240.7	74.288	-13.2
8	11047.1	73.251	-21.4
9	10987.1	72.853	-14.7
10	10956.8	72.652	-23.8
11	10942.2	72.555	-25.6
12	10828.3	71.800	14.3
13	10745.9	71.253	-32.5
14	10739.1	71.209	16.3
15	8310.6	55.106	12.8



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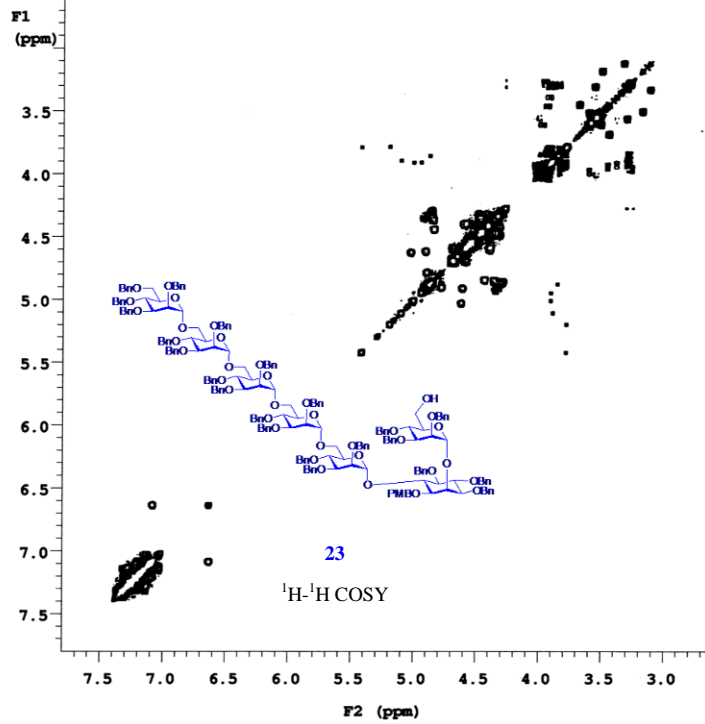
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Agilent 600 NMR spectrometer

Agilent Technologies



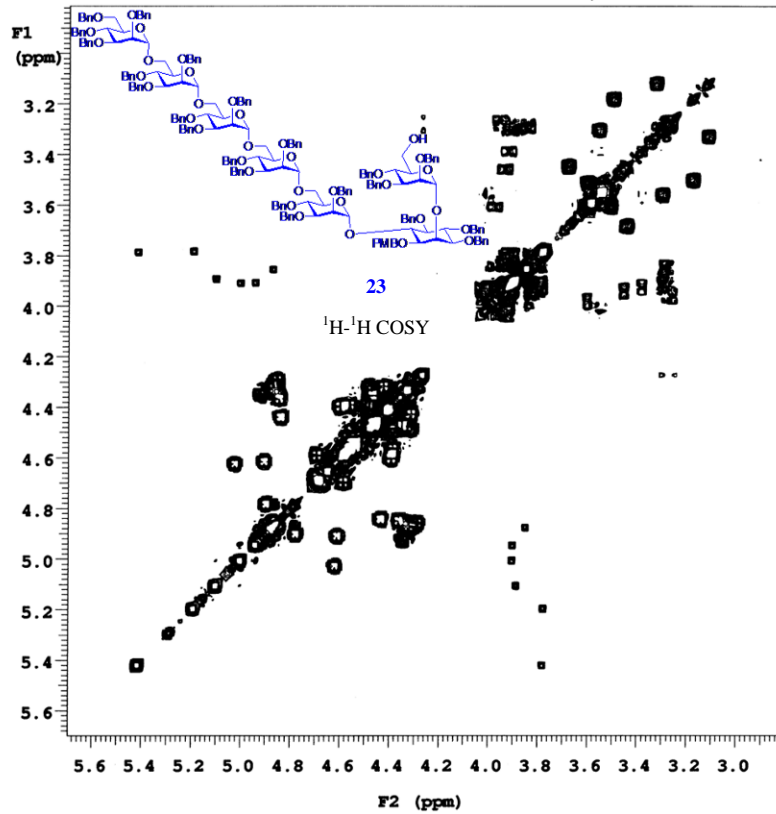
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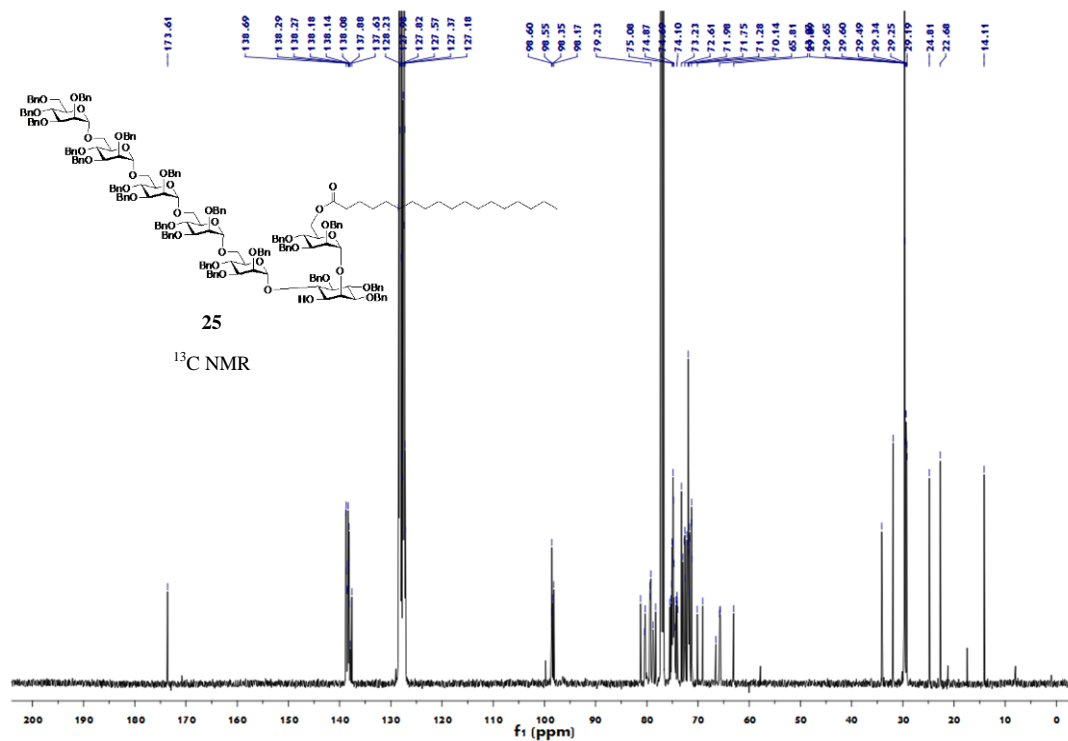
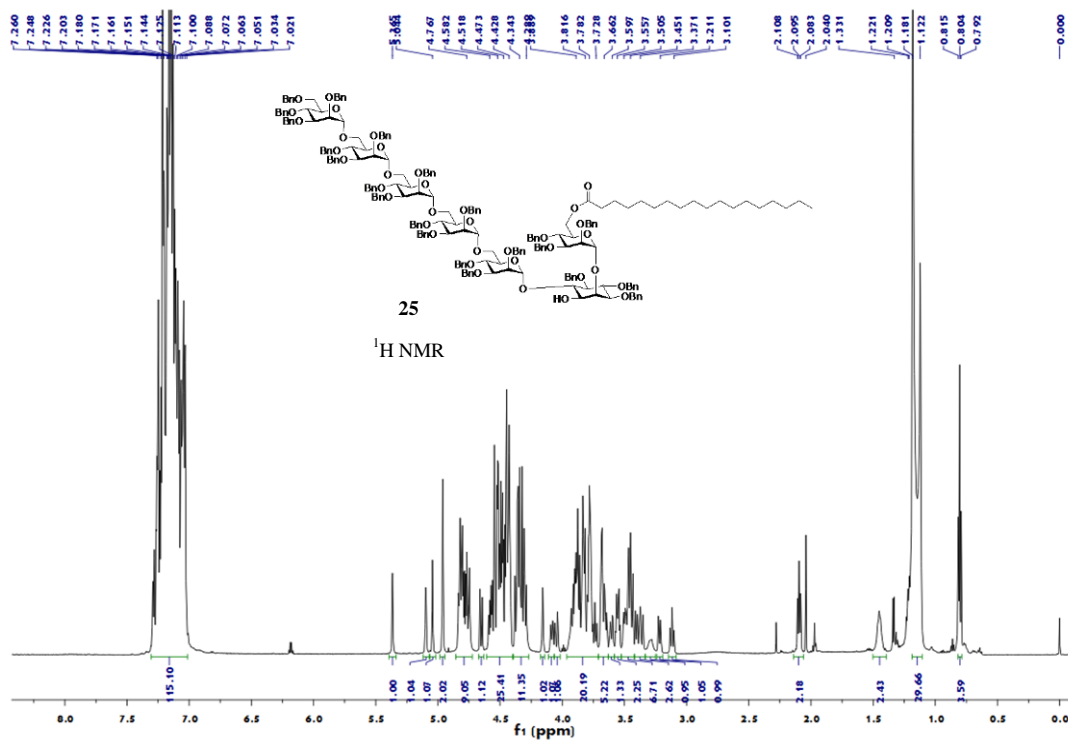
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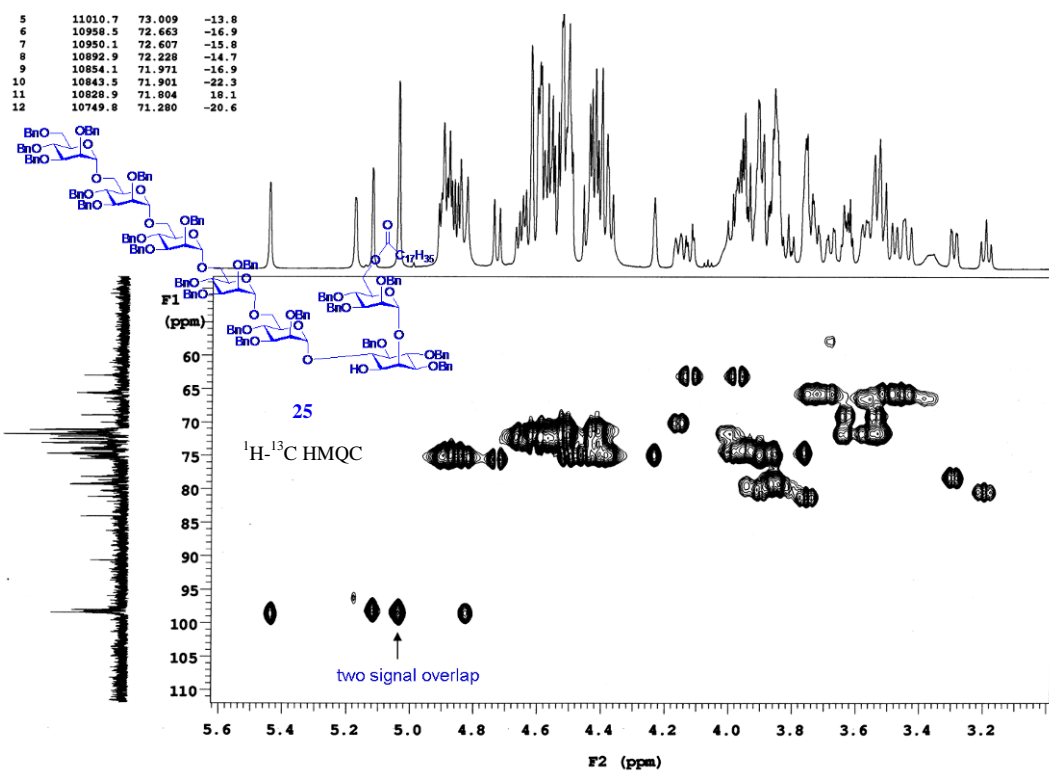
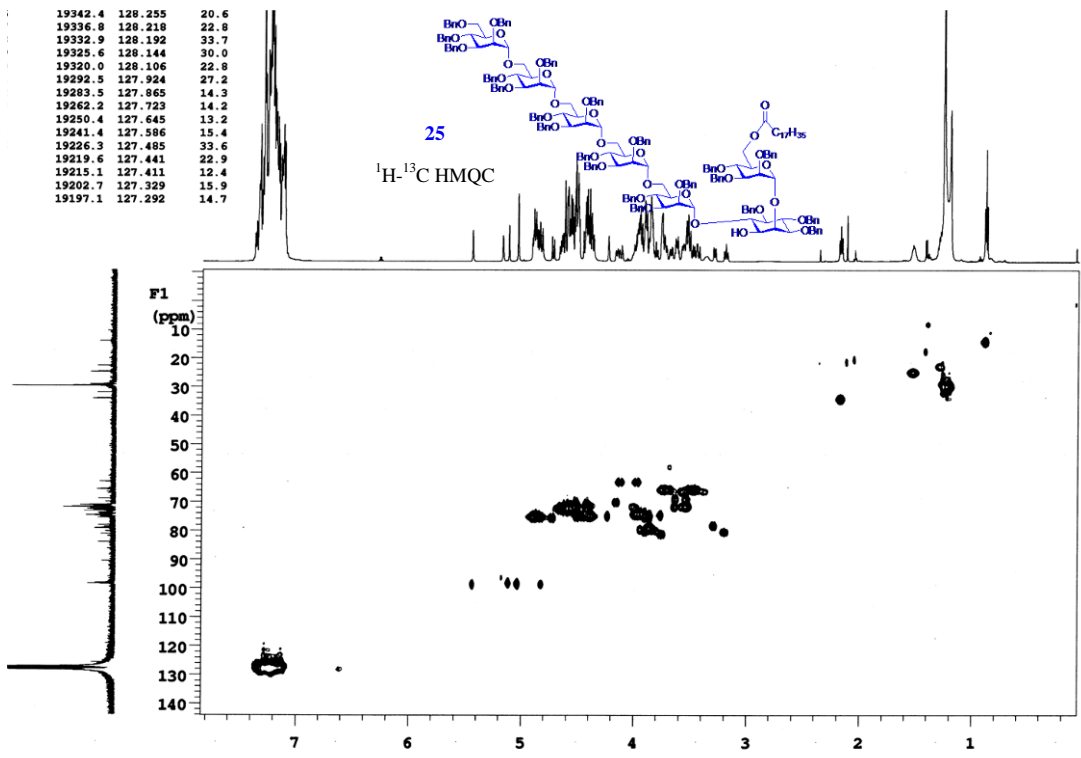


Agilent 600 NMR spectrometer

Agilent Technologies

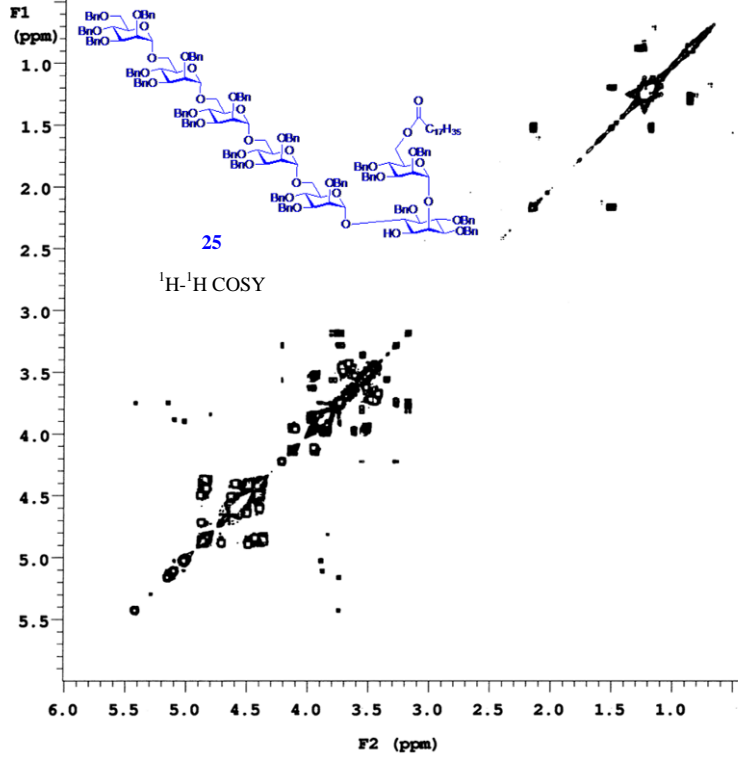




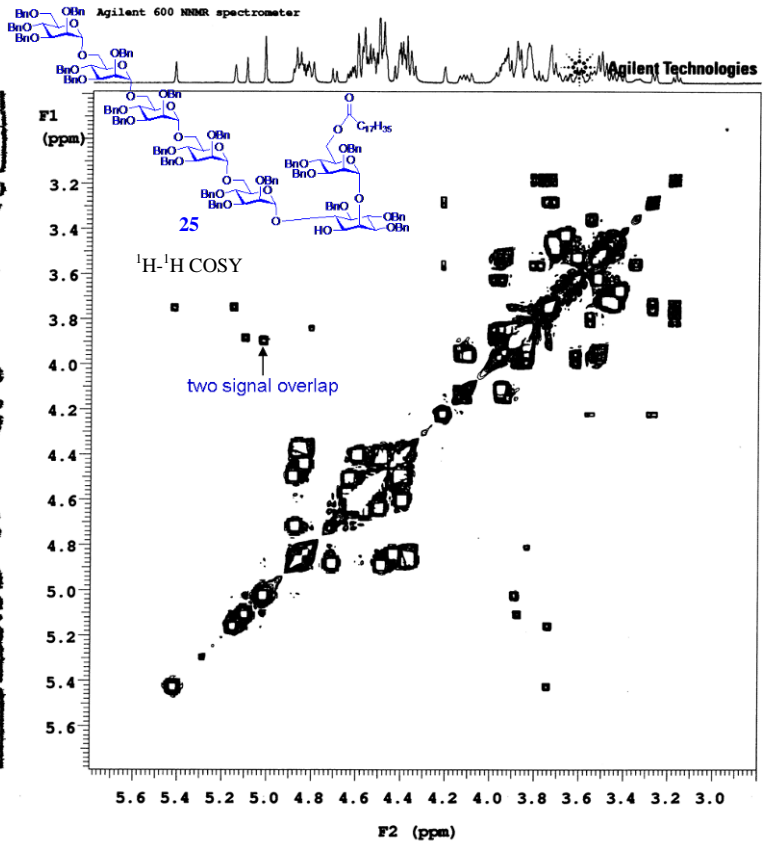


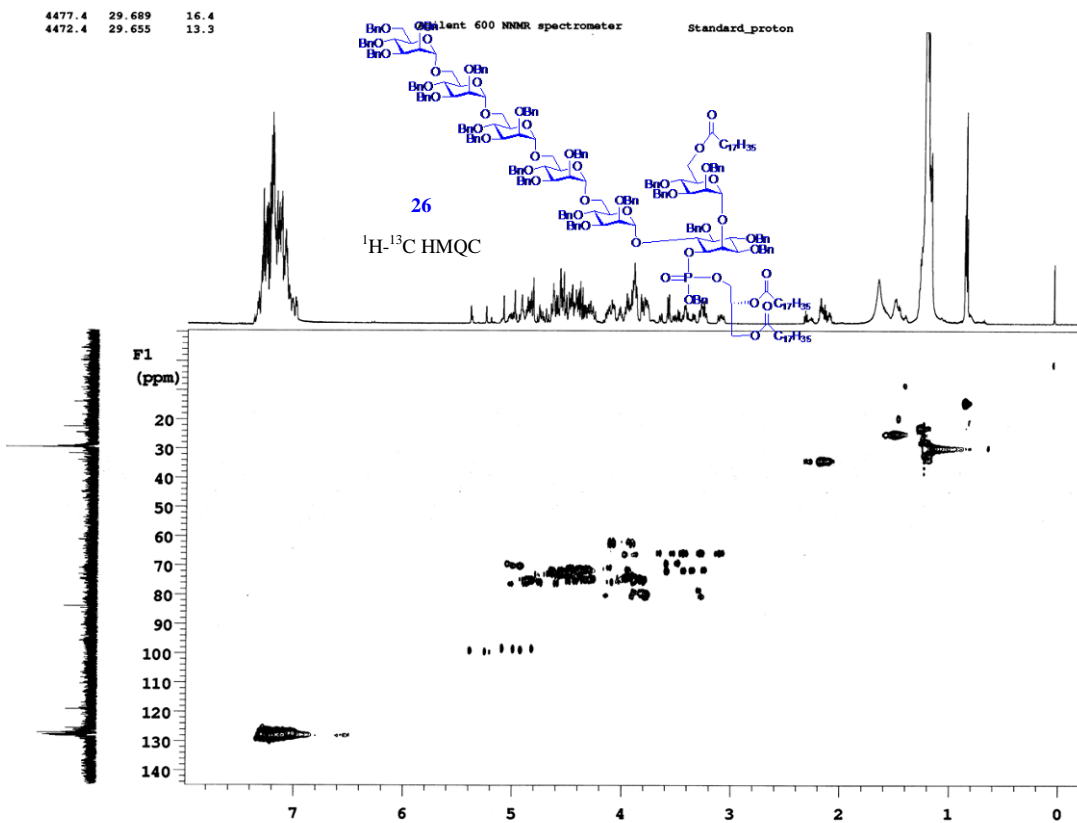
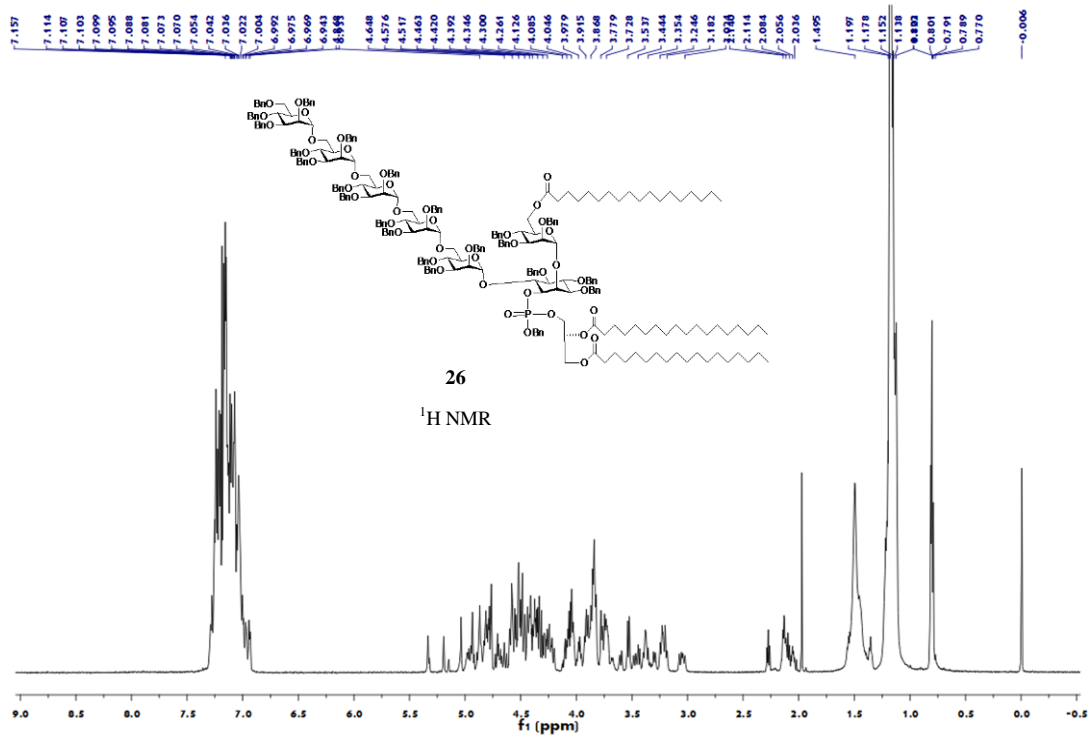
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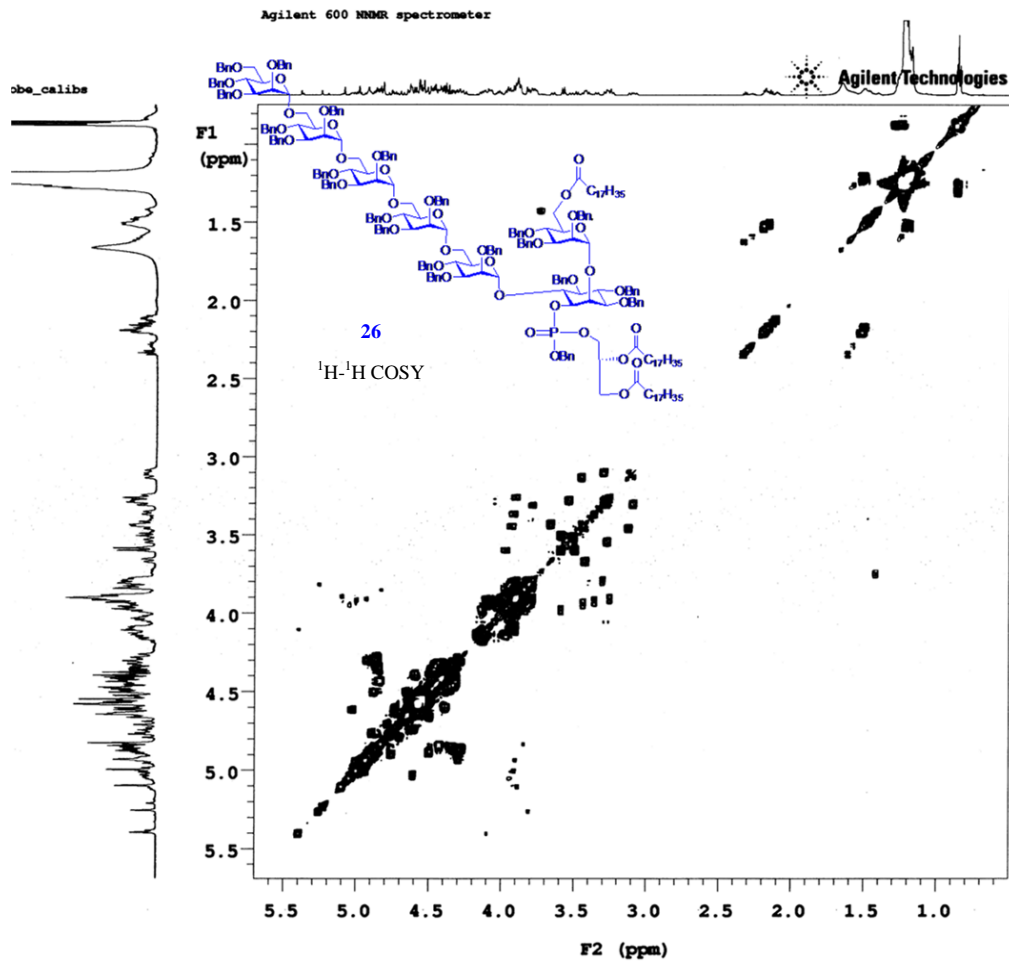
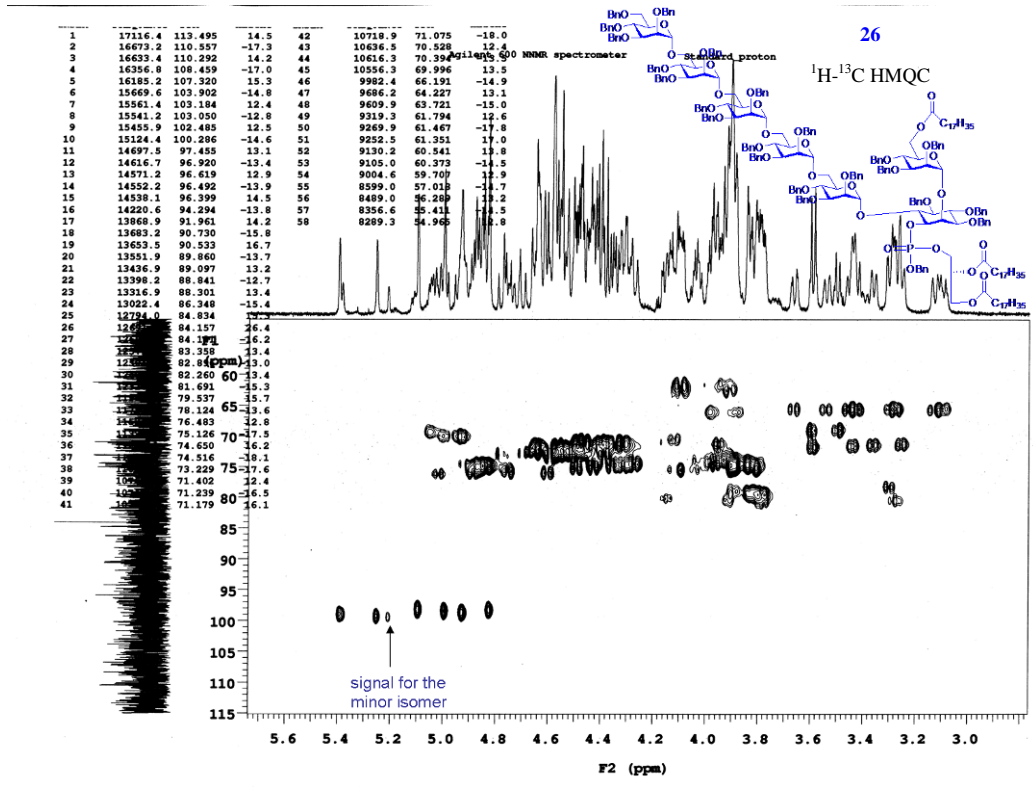
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