

10.1071/CH13621_AC

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Australian Journal of Chemistry 2014, 67(10),

1461-1470

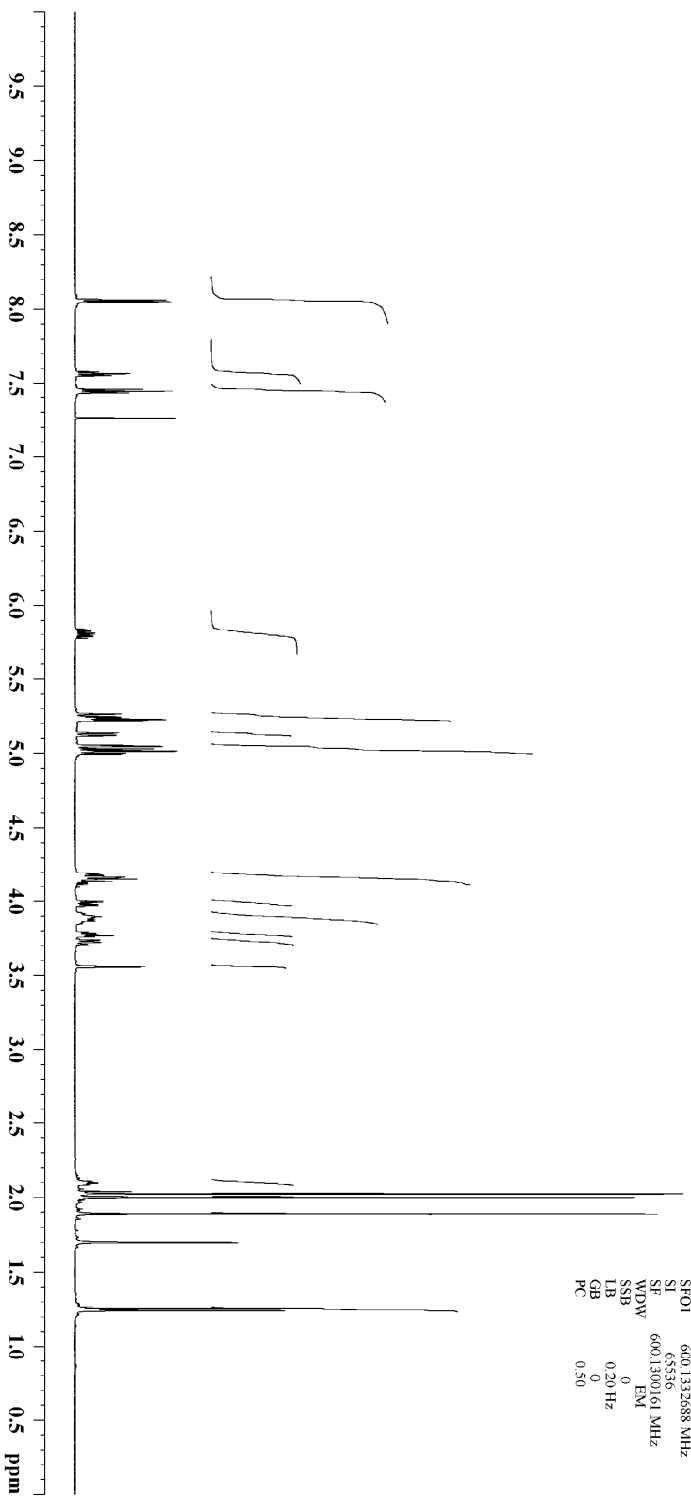
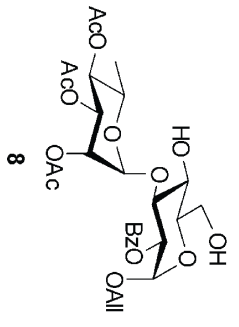
The Synthesis of Carbohydrate-Based Natural Products from *Leonurus japonicus* and their Biological Evaluation as Anti-Oxidants

*Evette Clayton, Mitchell Hattie, Aleksandra W. Debowski and Keith A. Stubbs**

School of Chemistry and Biochemistry, The University of Western Australia, 35 Stirling Highway,

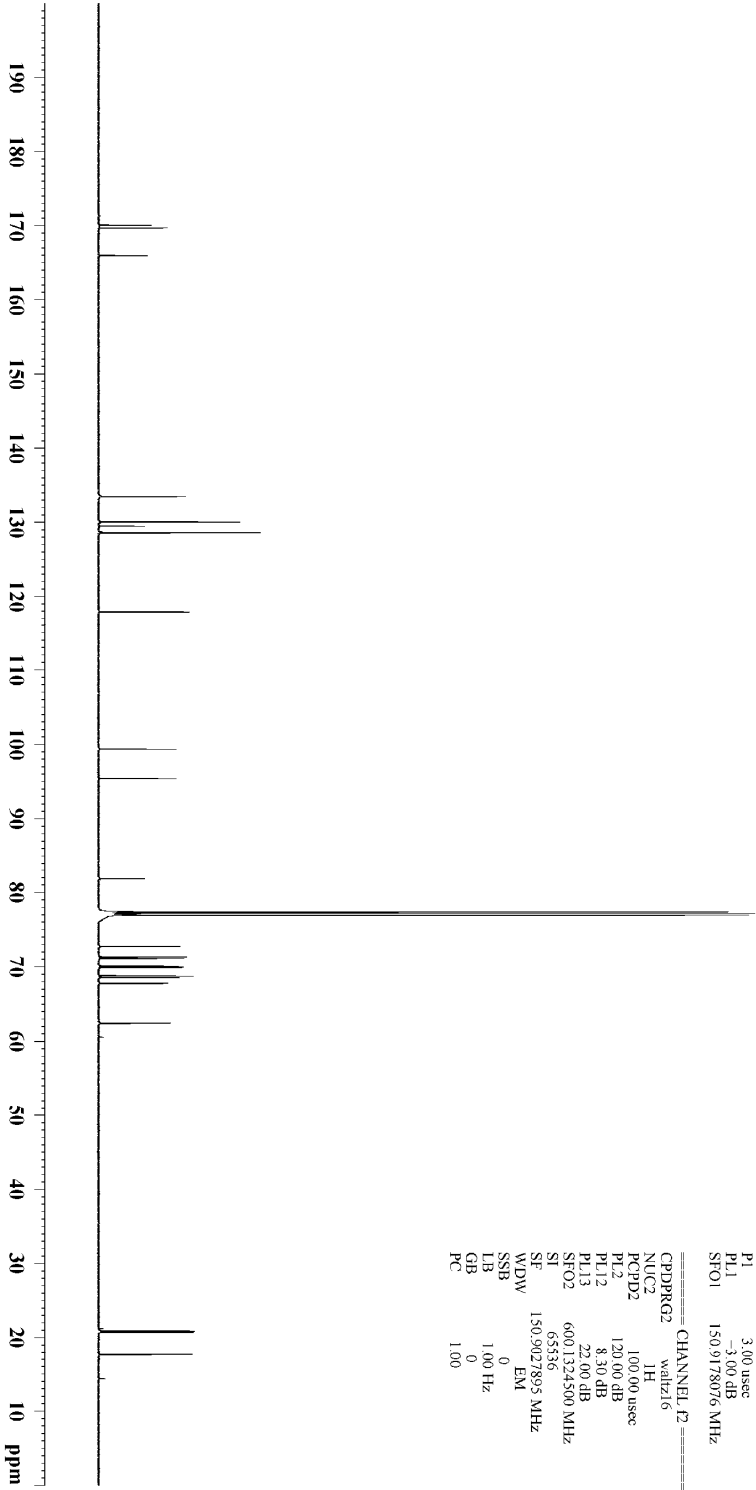
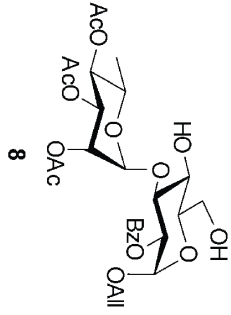
Crawley, WA, Australia 6009

SUPPLEMENTARY MATERIAL



NAME EV07_3
 EXPNO 2
 PROCNO 1
 Date_ 20130706
 Time 18.18
 INSTRUM spect
 PROBHD 5mm TBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 4
 DS 4
 SWH 8992.806 Hz
 FIDRES 0.137219 Hz
 AQ 3.343073 sec
 RG 320
 DW 55.600 usec
 DE 7.00 usec
 TE 297.9 K
 D1 5.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300161 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50



```

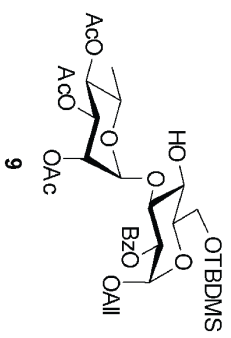
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EXPNO         3
PROCNO        1
Date_         20130706
Time          18.20
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       CDCl3
NS            12000
DS            4
SWH           37893.984 Hz
FIDRES        0.576639 Hz
AQ            0.8716921 sec
RG            7298.2
DW           13.300 usec
DE           7.00 usec
TE           298.0 K
D1           2.00000000 sec
D11          0.03000000 sec
TD0          10
  
```

```

===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1          -3.00 dB
SFO1         150.9178076 MHz
  
```

```

===== CHANNEL f2 =====
CPDPRG2      walz16
NUC2          1H
PCPD2        100.00 usec
PL2          120.00 dB
PL12         8.30 dB
PL13         22.00 dB
SFO2         600.1324500 MHz
SI           65536
SF           150.9027895 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.00
  
```

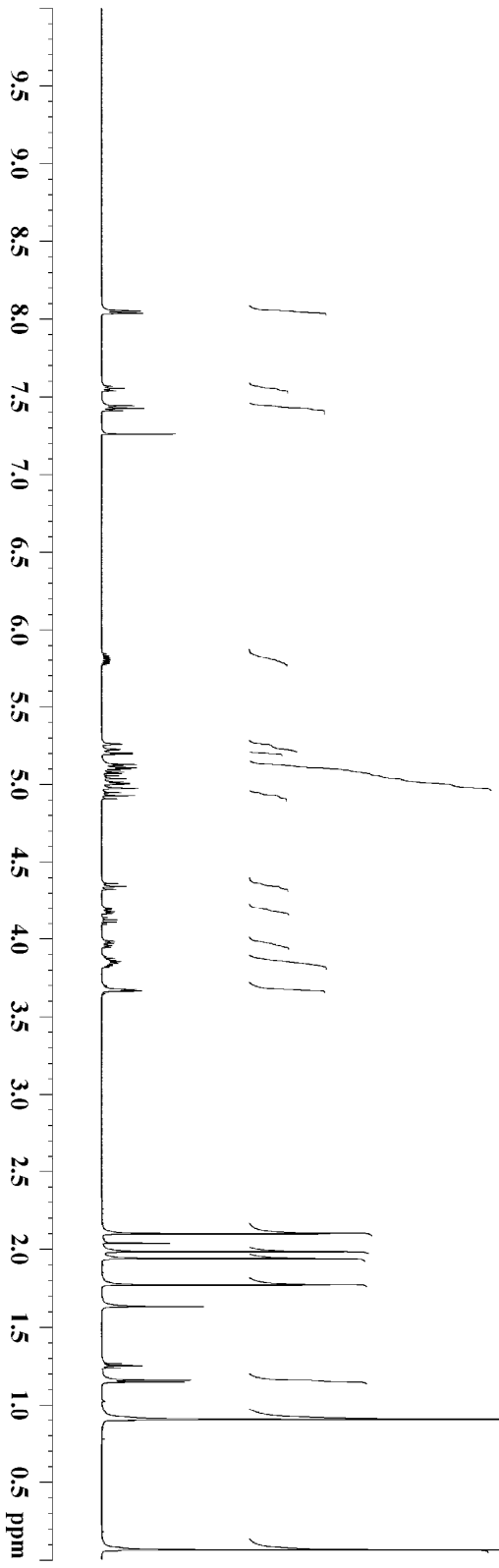
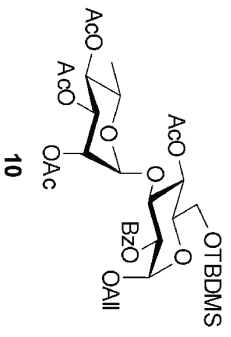



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NAME          E3109
EXPNO         3
PROCNO        1
Date_         20120912
Time          19:42
INSTRUM       spect
PROBHD        5 mm Dual 13C/
PULPROG       zgpg30
TD            65536
SOLVENT       CDCl3
NS            16736
DS            4
SWH           31146.541 Hz
FDRRES        0.479836 Hz
AQ            1.0420883 sec
RG            23170.5
DNV           18.590 usec
DE            298.0 K
TE            298.0 K
D1            2.00000000 sec
d11           0.03000000 sec
DELTA         1.69292926 sec
DELTA2        0.00000000 sec
DELTA3        0.03500000 sec
MCWRRK        0.03500000 sec

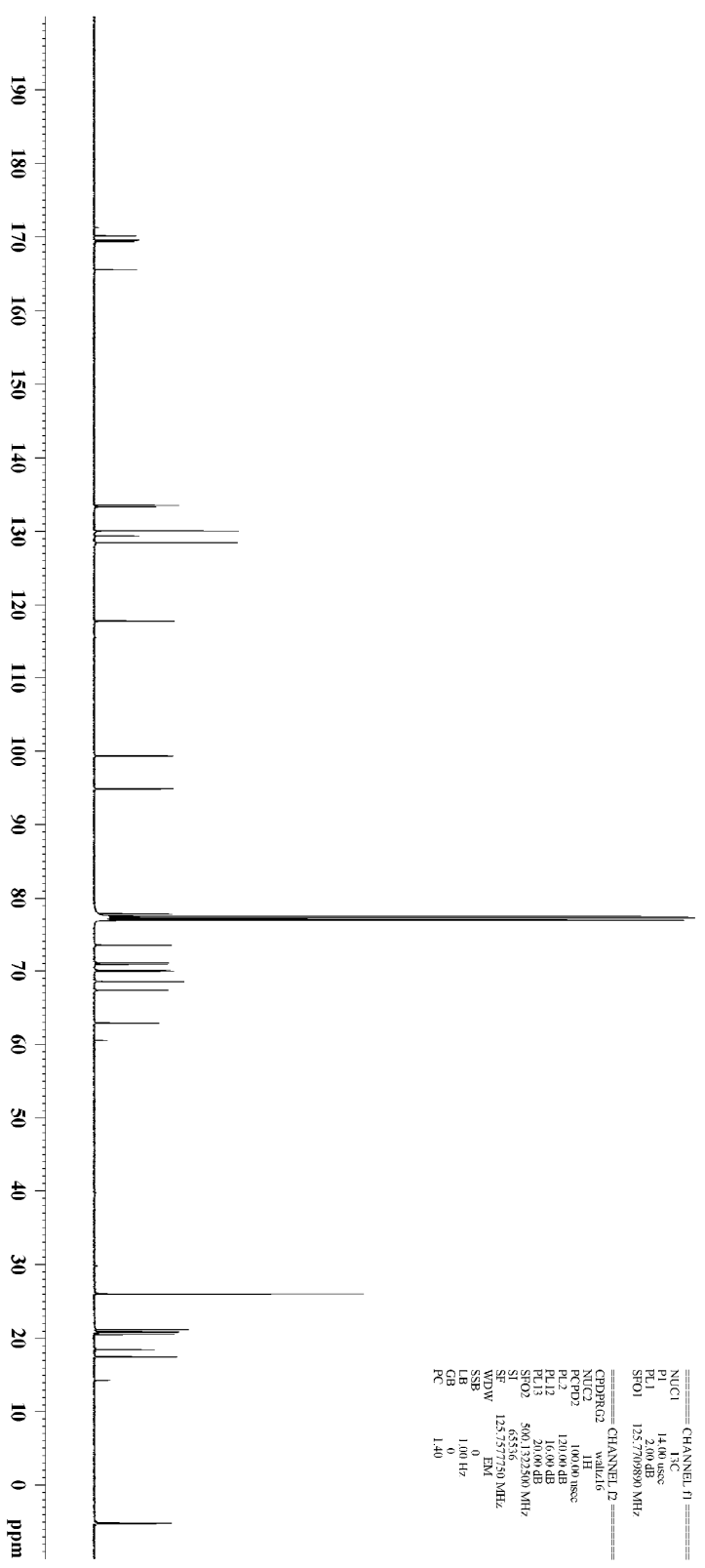
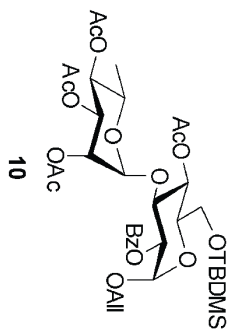
===== CHANNEL f1 =====
NUC1          13C
P1/CT         14.40 usec
PL1           2.00 dB
SFO1          125.7709890 MHz

===== CHANNEL f2 =====
CPDPRG2       1H
NUC2          1H
P1/CT         100.00 usec
PL2           120.00 dB
SFO2          500.1322500 MHz
SI            65336
SF           125.757750 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.40
  
```



NAME EV10
 EXPNO 2
 PROCNO 1
 Date_ 20120919
 Time 18:13
 InstrUM spect
 PROBD 5 mm Z80
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 16
 DS 4
 SWH 7507.507 Hz
 FIDRES 0.114555 Hz
 AQ 4.3648143 sec
 RG 406.4
 KQ 66.600 usec
 DM 19.000 usec
 DE 288.0 K
 TE 300.2 K
 DL 5.00000000 sec
 MCREST 0.00000000 sec
 MCWRR 0.01500000 sec

===== CHANNEL f1 =====
 NUCL1 1H
 P1 12.70 usec
 PL1 1.00 dB
 SFO1 500.1327500 MHz
 SF 500.1327500 MHz
 WDW EM
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

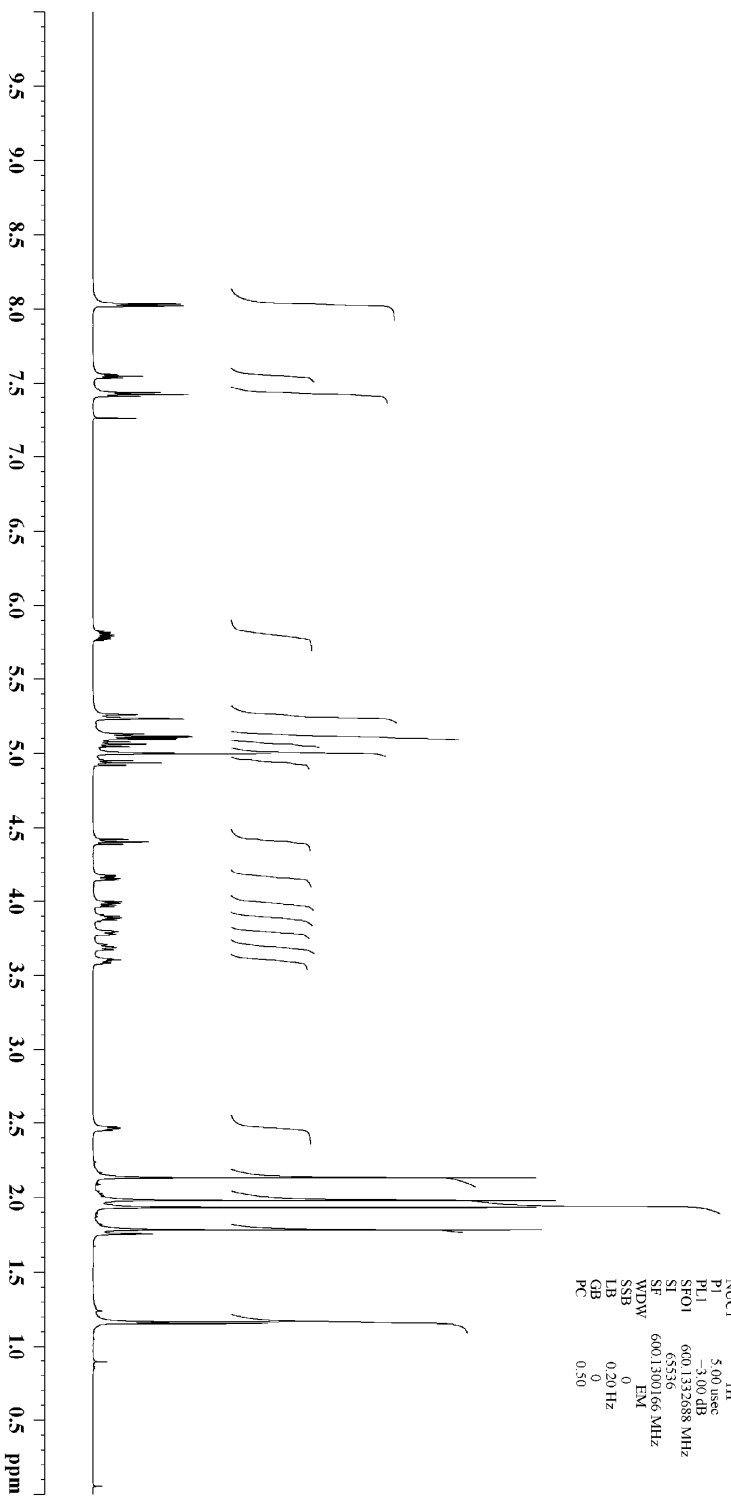
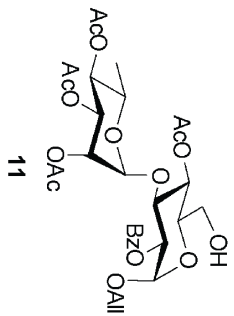


```

NAME          EV10
EXPNO         3
PROCNO        1
PROCNO        20120919
Time          19:23
INSTRUM       spect
PROBHD        5 mm Dual 13C/
PULPROG       zgpg30
SOLVENT       CDCl3
NS            16128
DS            4
SWH           31446.541 Hz
FIDRES        1.0420885 Hz
AQ            1.0420885 sec
RG            26608
DW            15.940 usec
DE            20.00 usec
TE            300.2 K
D1            2.0000000 sec
d11           0.030000000 sec
DELTA         1.899999978 sec
MCREST        0.000000000 sec
MCVBRK        0.015000000 sec

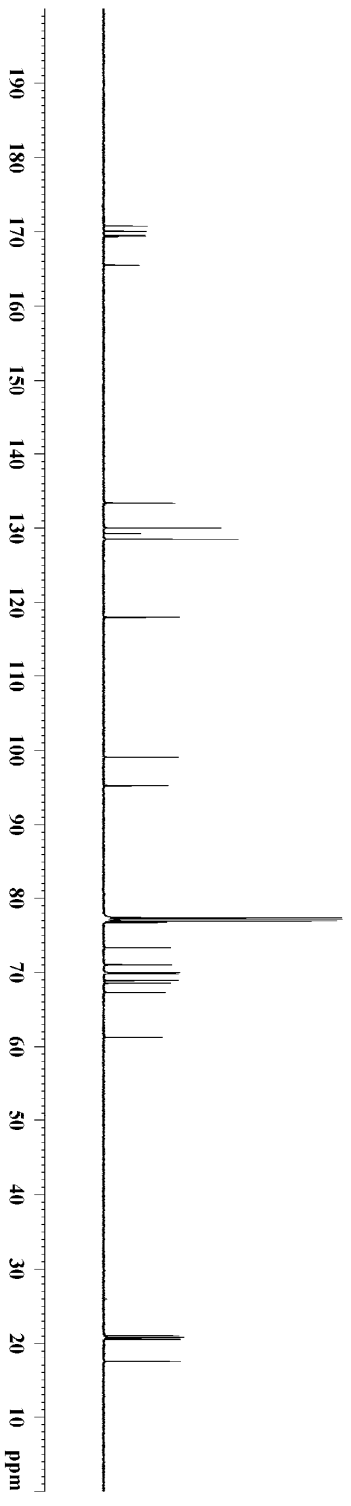
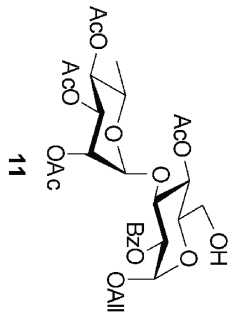
===== CHANNEL f1 =====
NUC1          13C
P1            14.00 usec
PL1           2.00 dB
SFO1          125.7698260 MHz

===== CHANNEL f2 =====
CPRPRG2      waltz16
NUC2          1H
PCPD2         100.00 usec
PL2           120.00 dB
PL12          16.00 dB
PL13          20.00 dB
SFO2          500.1325500 MHz
SF            125.7577750 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.40
  
```



NAME mharev0004
 EXPNO 2
 PROCNO 1
 Date_ 20131008
 Time 12.53
 INSTRUM spect
 PROBHID 5mm TBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT l6
 NS 4
 DS 4
 SWH 892.806 Hz
 FIDRES 0.72179 Hz
 AQ 3.543073 sec
 RG 181
 RC 181
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300166 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50



```

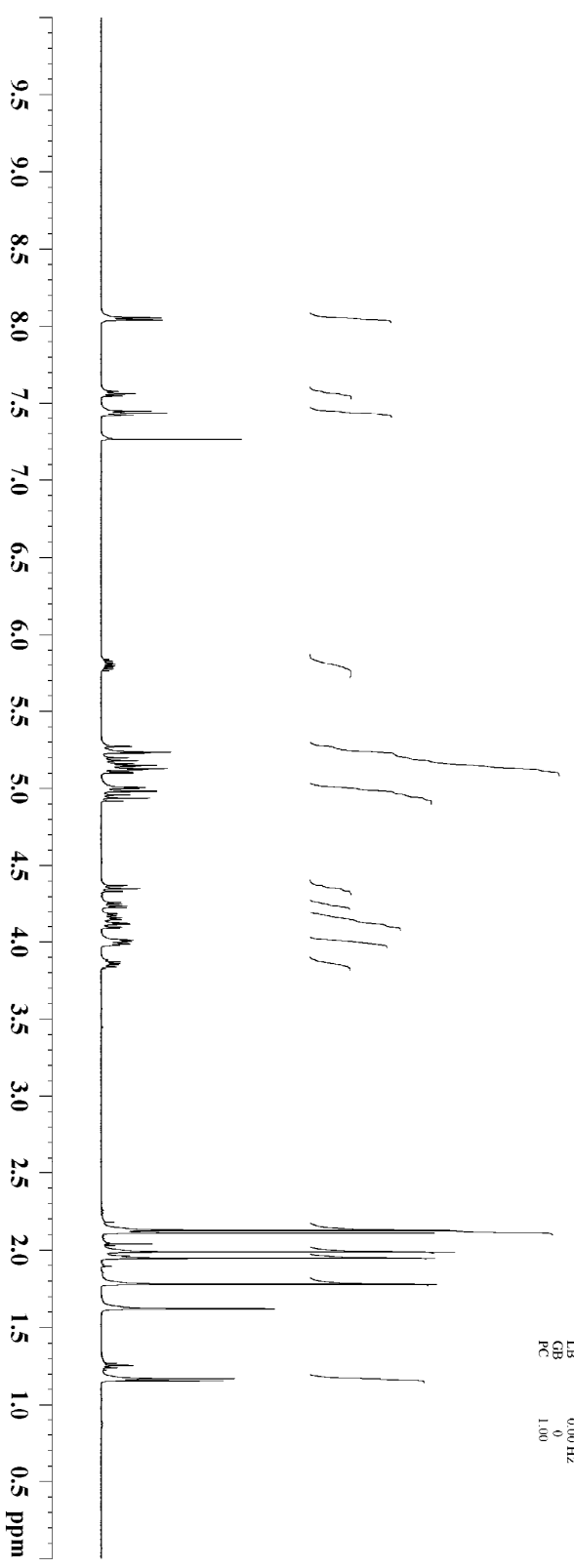
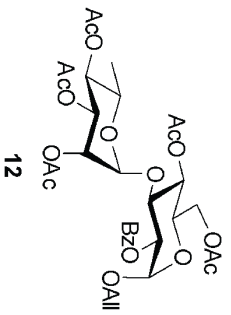
NAME mhaeyv0004
EXPNO 3
PROCNO 1
Date_ 20131008
Time 13:02
INSTRUM spect
PROBHD 5 mm TBO BB-1H
PULPROG zgpg
TD 65536
SOLVENT CDCl3
NS 1200
DS 4
SWH 37593.984 Hz
FIDRES 0.573639 Hz
AQ 0.8716921 sec
RG 7298.2
DW 13.300 usec
DE 7.00 usec
TE 298.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1
===== CHANNEL f1 =====
NUC1 13C
P1 3.00 usec
PL1 -3.00 dB
SFO1 150.9178076 MHz

```

```

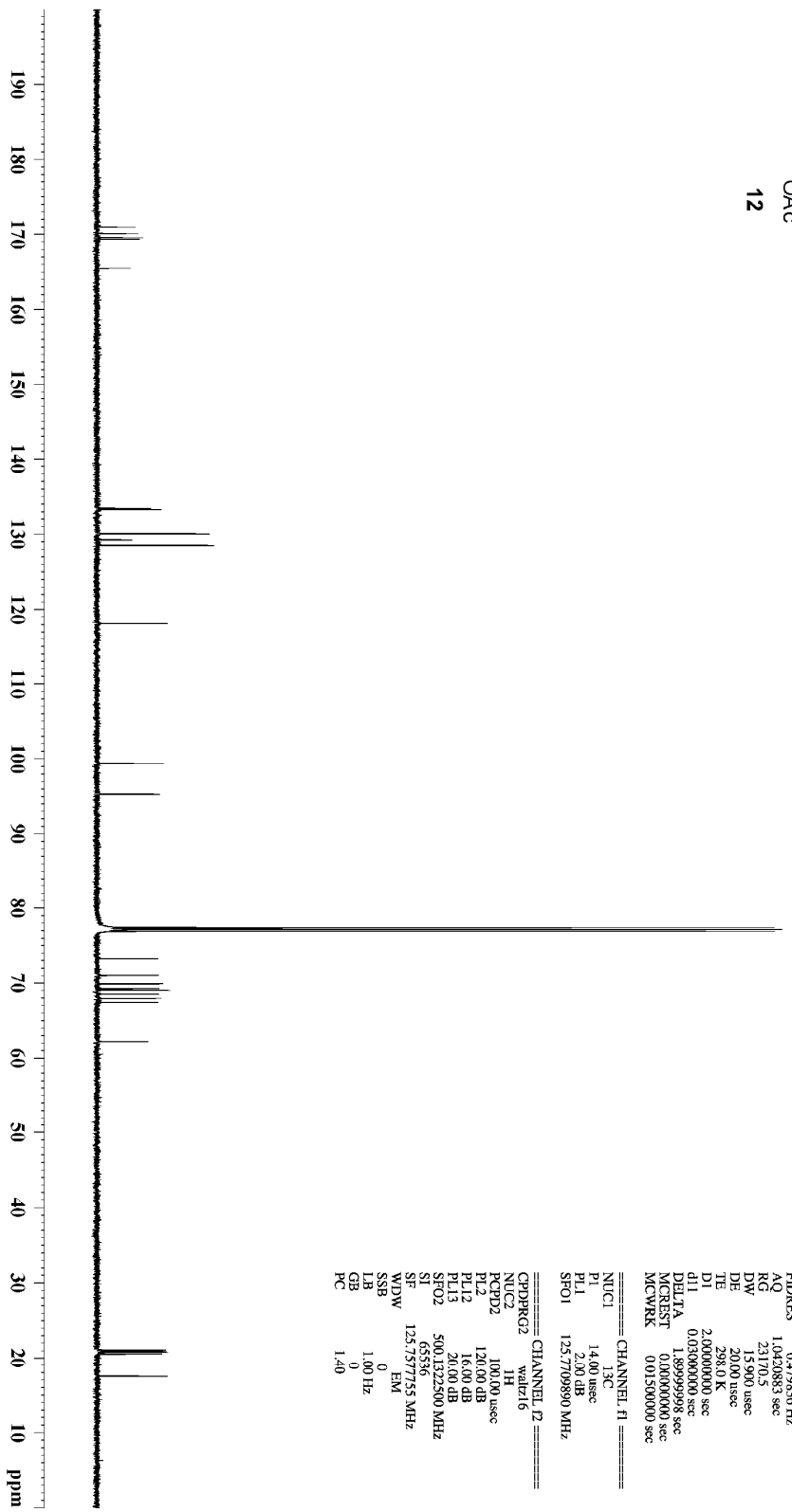
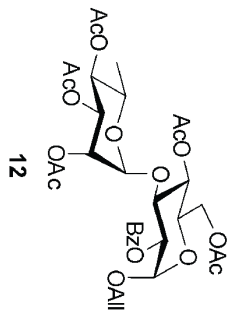
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 120.00 dB
PL12 8.30 dB
PL13 22.00 dB
SFO2 600.1324500 MHz
SI 65536
SF 150.9027941 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.00

```



NAME EV08
 EXPNO 2
 PROCNO 1
 Date_ 20120830
 Time 10:52
 InstrUM spect
 PROBHD 5 mm ZB80
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 16
 DS 4
 SWH 7507.507 Hz
 FIDRES 0.114555 Hz
 AQ 4.3648143 sec
 RG 6481
 KQ 6481
 DM 66600 usec
 DE 19.0 usec
 TE 298.0 K
 D1 5.00000000 sec
 MCREST 0.00000000 sec
 MCWRR 0.01500000 sec

----- CHANNEL f1 -----
 NUCL 1H
 P1 12.70 usec
 PL1 -1.00 dB
 SFO1 500.1327500 MHz
 SF 500.1327500 MHz
 SI 506.1300231 MHz
 WDW EM
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

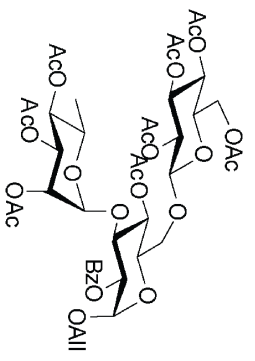


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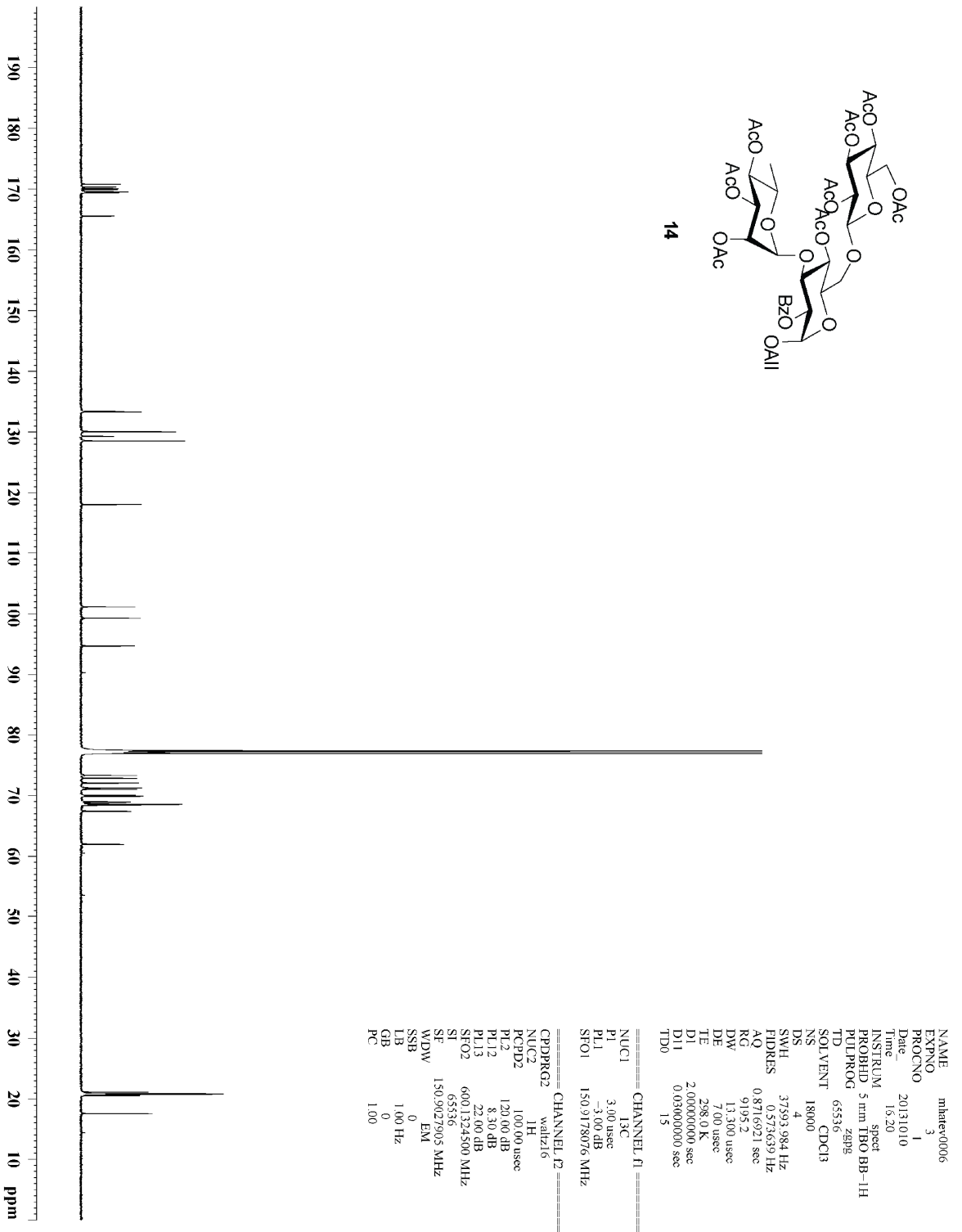
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EXPNO         3
PROCNO       1
Date_        20120830
Time         12:09
INSTRUM      spect
PROBHD      5 mm BBO-13C/
PULPROG     zgpg30
TD          65536
SOLVENT     CDCl3
NS          1152
DS          4
SWH         31446.541 Hz
FIDRES     0.479836 Hz
AQ         1.0420883 sec
RG         23170.5
DW         15900. usec
DE         20.000 usec
TE         298.0 K
D1         2.00000000 sec
d11        0.05000000 sec
DELTA      1.00000000 sec
ACQNTST    100000000 usec
MCVPRK     0.01500000 sec

===== CHANNEL f1 =====
NUC1        13C
P1          14.00 usec
PL1         2.00 dB
SFO1        125.7709890 MHz

===== CHANNEL f2 =====
CPDPRG2    waltz16
NUC2        1H
PCPD2      100.000 usec
R2PD2      120.00 dB
PL2        16.00 dB
PL12       16.00 dB
SFO2       500.1322500 MHz
SF         65536
WDW        0
SSB        0
LB         1.00 Hz
GB         0
PC         1.40
  
```

14

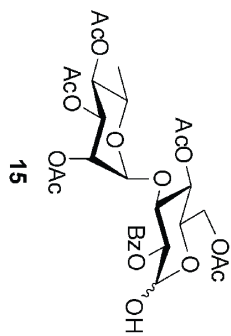


```

NAME      mharev0006
EXPNO     3
PROCNO    1
Date_     20131010
Time      15:20
INSTRUM   spect
PROBHD    5 mm TBO BB-1H
PULPROG   zgpg
TD         65536
SOLVENT   CDCl3
NS         18000
DS         4
SWMH      37593.984 Hz
FIDRES    0.5736391 Hz
AQ         0.8716921 sec
RG         9195.2
DW         13.300 usec
DE         7.00 usec
TE         298.0 K
D1         2.00000000 sec
D11        0.03000000 sec
TD0        15

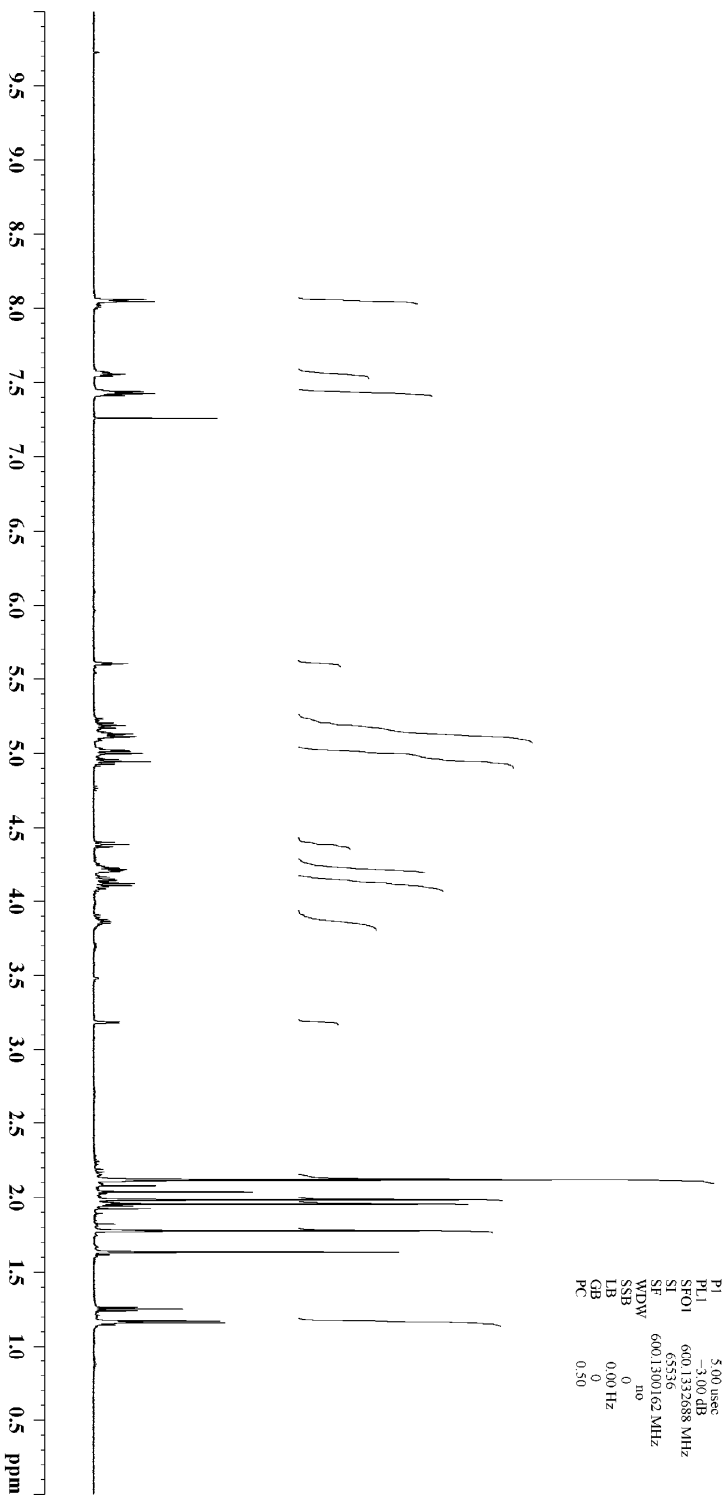
===== CHANNEL f1 =====
NUC1      13C
P1        3.00 usec
PL1       -3.00 dB
SFO1     150.9178076 MHz

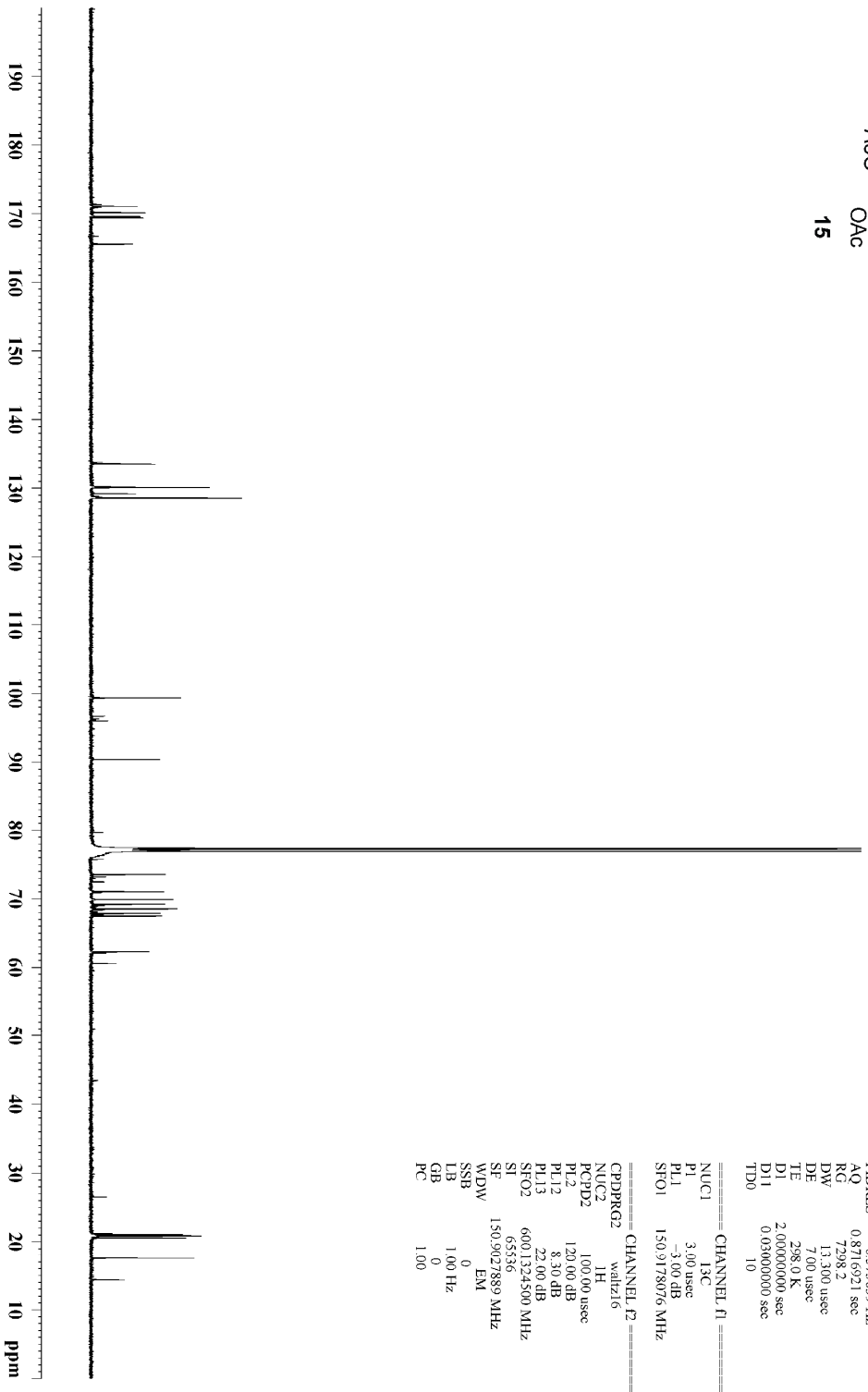
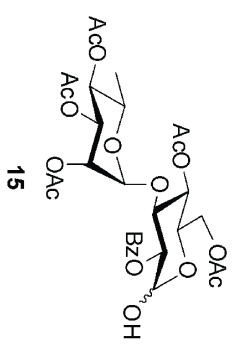
===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2      1H
PCPD2     100.00 usec
PL2       120.00 dB
PL12      8.30 dB
PL13      22.00 dB
SFO2     600.1324500 MHz
SI        65536
SF        150.9027905 MHz
WDW       EM
SSB       0
LB        1.00 Hz
GB        0
PC        1.00
  
```



NAME EV31
 EXPNO 2
 PROCNO 1
 Date_ 20130605
 Time 20:42
 INSTRUM spect
 PROBHID 5mm TBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 4
 DS 16
 SWH 892.806142
 FIDRES 0.372179 Hz
 AQ 3.549873 sec
 RG 512
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300162 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 0.50

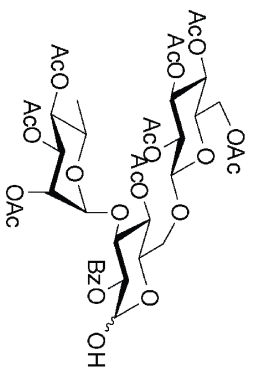




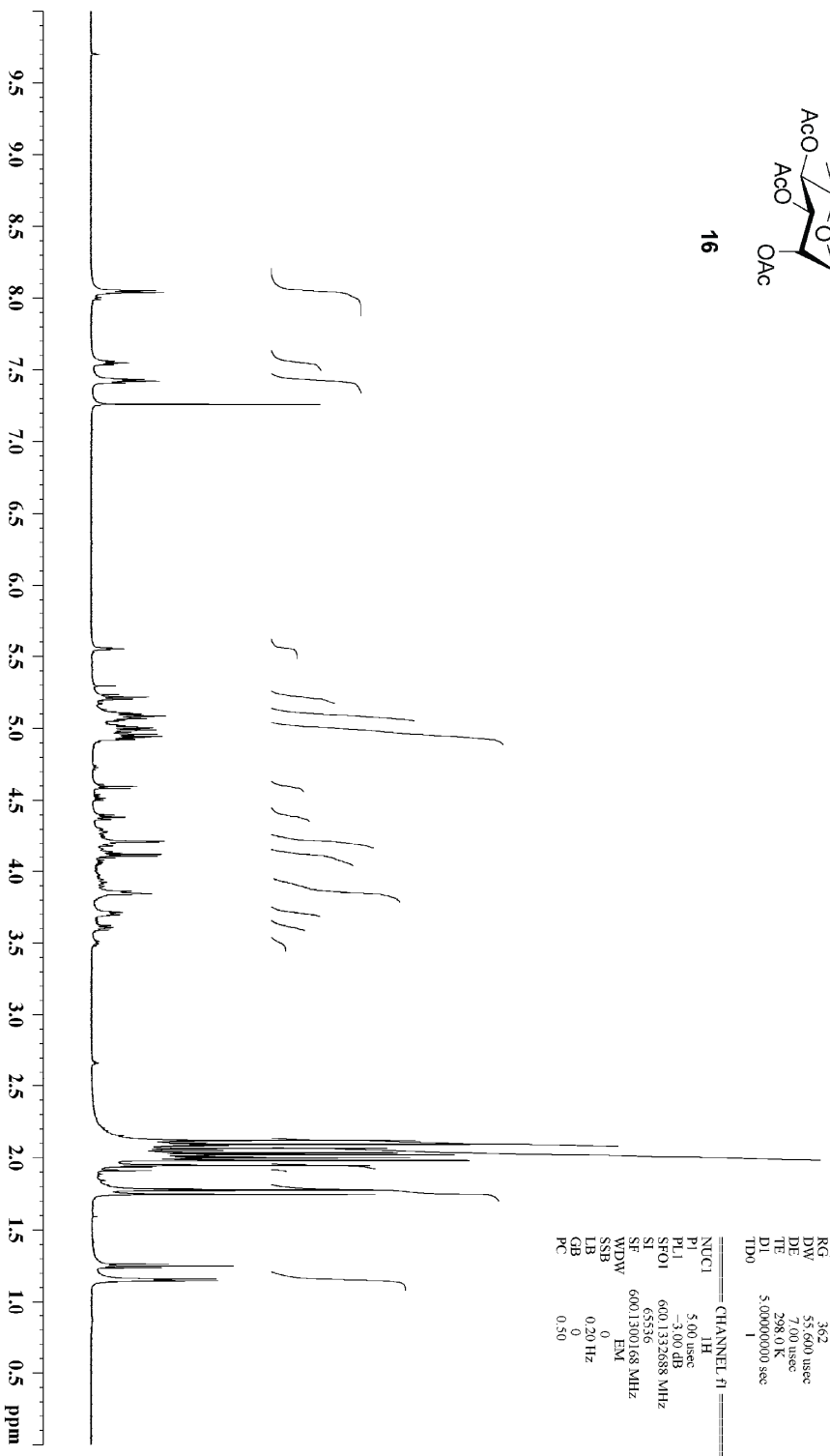
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NAME          EV31
EXPNO         3
PROCNO        1
Date_         20130605
Time          20.48
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       CDCl3
NS            12000
DS            4
SWMH          37593.984 Hz
FIDRES        0.573639 Hz
AQ            0.8716921 sec
RG            7298.2
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           10
===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1          150.9178076 MHz
===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2         100.00 usec
PL2           120.00 dB
PL12          8.30 dB
PL13          22.00 dB
SFO2          600.1324500 MHz
SI            65536
SF            150.9027899 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.00

```

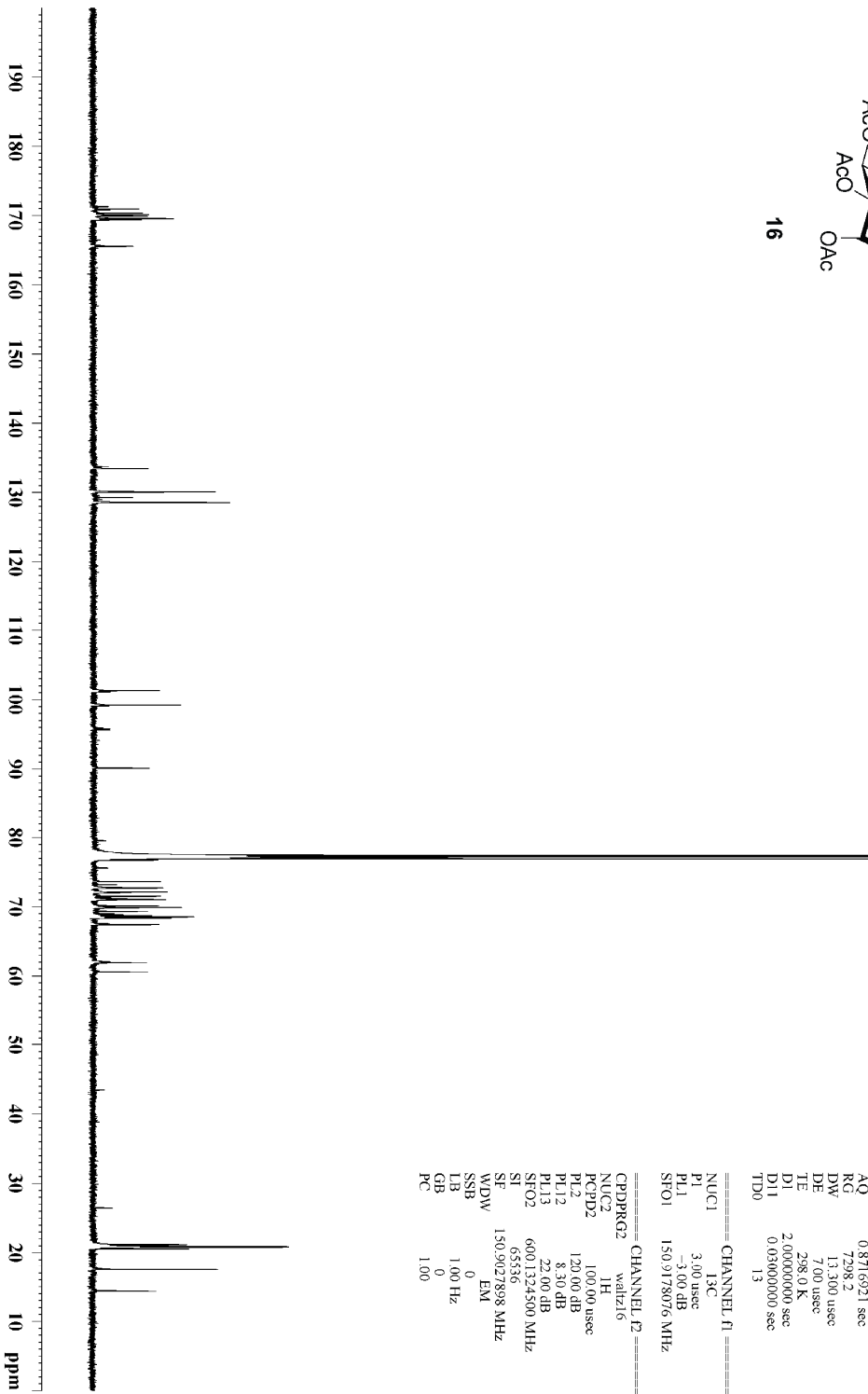
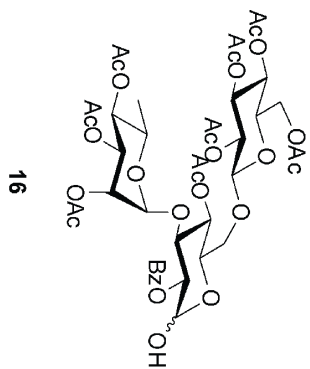


16



NAME mhartev0008
 EXPNO 2
 PROCNO 1
 Date_ 20131016
 Time 18:59
 INSTRUM spect
 PROBHD 5mm TBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 4
 DS 4
 SWH 892.806 Hz
 FIDRES 0.72179 Hz
 AQ 3.543073 sec
 RG 362
 AC 55.600 usec
 DW 7.00 usec
 DE 298.0 K
 TE 5.00000000 sec
 D1 1
 TDO

===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300168 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50

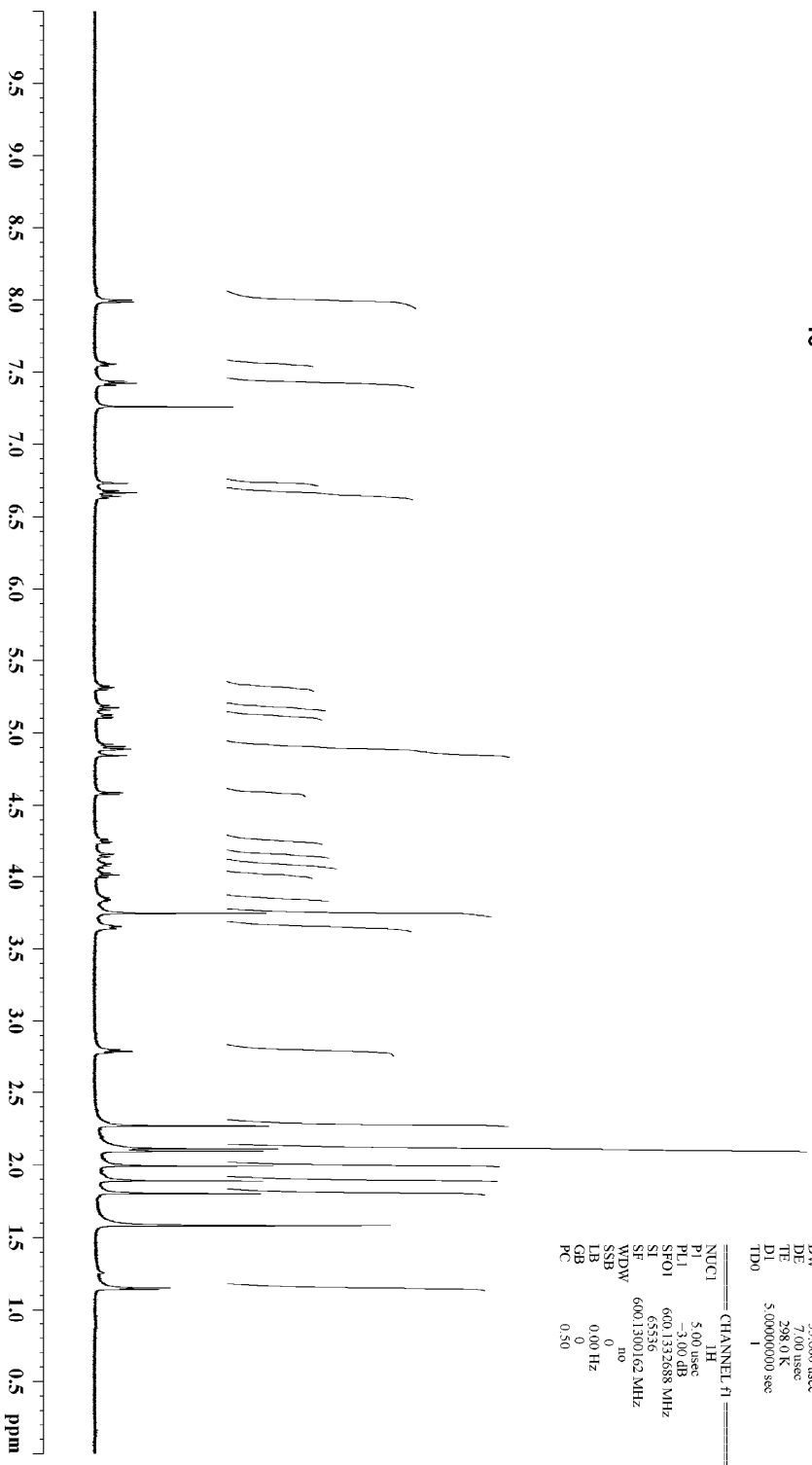
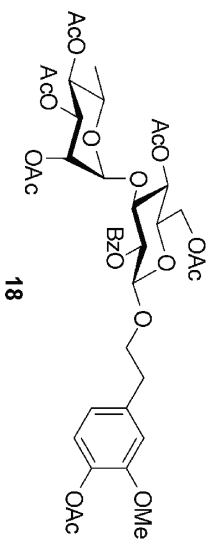


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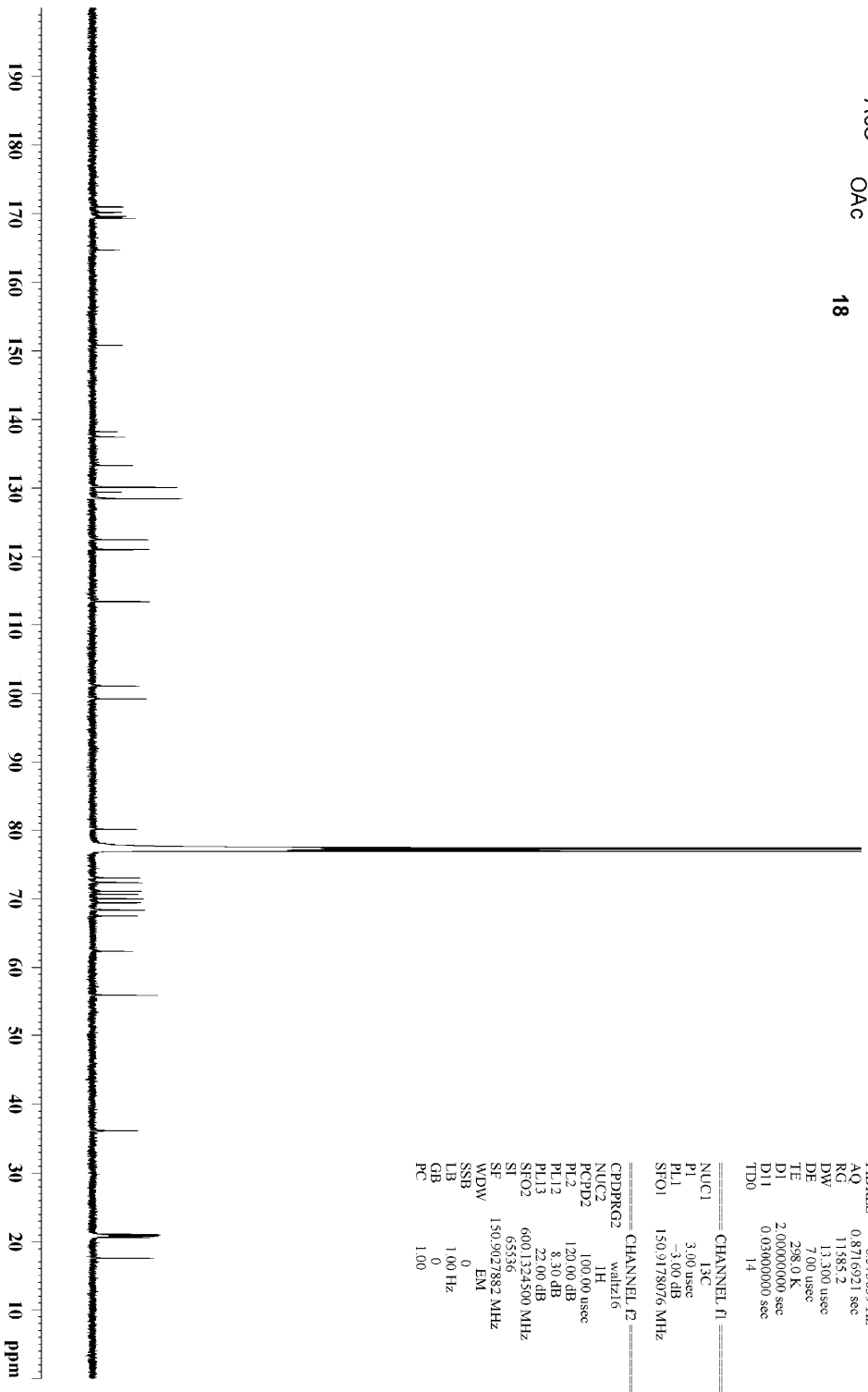
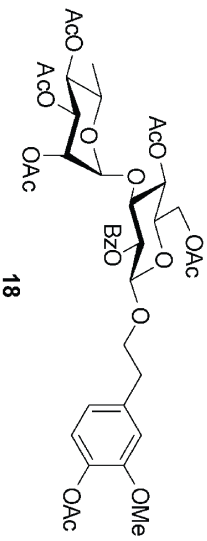
NAME      mharev0008
EXPNO     3
PROCNO    1
Date_     20131016
Time      19.59
INSTRUM   spect
PROBHD    5 mm TBO BB-1H
PULPROG   zgpg
TD         65536
SOLVENT   CDCl3
NS         15600
DS         4
SWMH      37593.984 Hz
FIDRES    0.573639 Hz
AQ         0.8716921 sec
RG         7298.2
DW         13.300 usec
DE         7.00 usec
TE         298.0 K
D1         2.00000000 sec
D11        0.03000000 sec
TD0        13

===== CHANNEL f1 =====
NUC1      13C
P1         3.00 usec
PL1        -5.00 dB
SFO1      150.9178076 MHz

===== CHANNEL f2 =====
CPDPRG2   waltz16
NUC2      1H
PCPD2     100.00 usec
PL2       120.00 dB
PL12      8.30 dB
PL13      22.00 dB
SFO2      600.1324500 MHz
SI         65536
SF         150.9027898 MHz
WDW        EM
SSB        0
LB         1.00 Hz
GB         0
PC         1.00
  
```

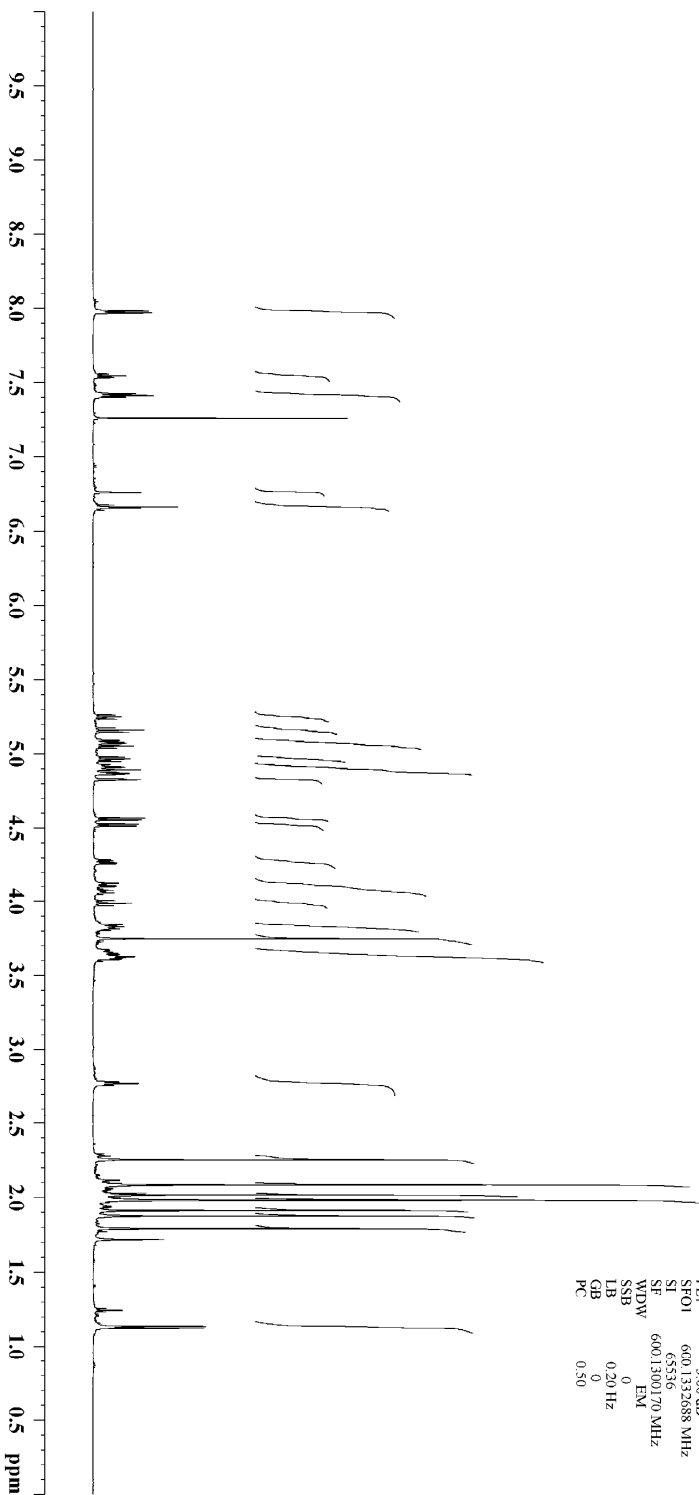
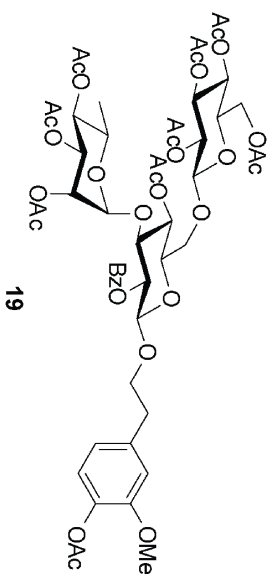


NAME EV33
 EXPNO 5
 PROCNO 1
 Date_ 20130929
 Time 17:02
 INSTRUM spect
 PROBHD 5mm TBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 4
 DS 4
 SWH 892.8061Hz
 FIDRES 0.37219 Hz
 AQ 3.543973 sec
 RG 8127
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1
 ===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300162 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 0.50



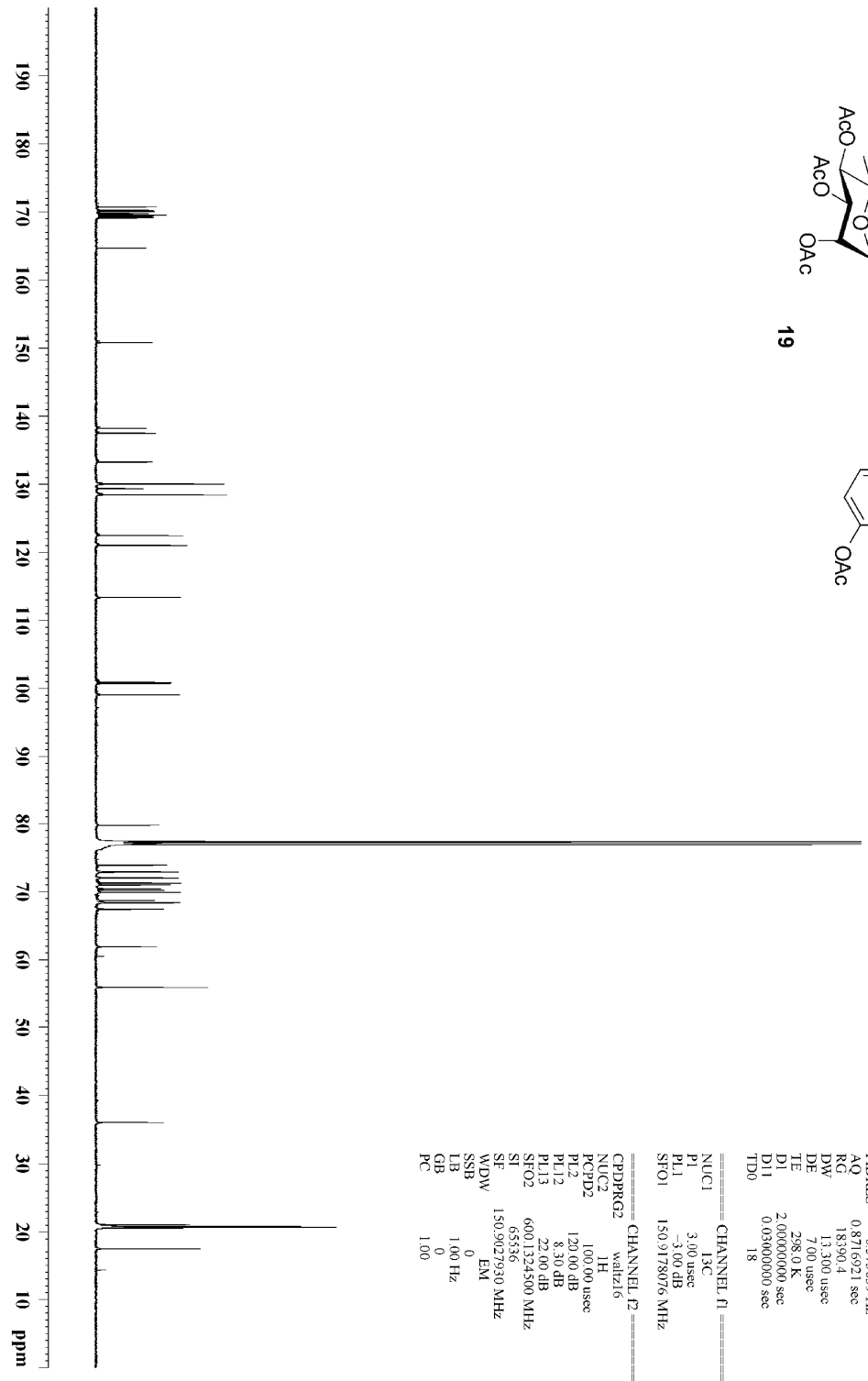
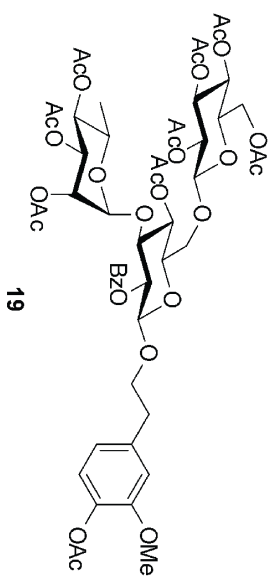
```

NAME          EV33
EXPNO         6
PROCNO        1
Date_         20130929
Time          17.09
INSTRUM      spect
PROBHD       5 mm TBO BB-1H
PULPROG      zgpg
TD            65536
SOLVENT      CDCl3
NS            16800
DS            4
SWMH         37593.984 Hz
FIDRES       0.573639 Hz
AQ           0.8716921 sec
RG           11585.2
DW           13.300 usec
DE           7.00 usec
TE           298.0 K
D1           2.00000000 sec
D11          0.03000000 sec
TD0          14
===== CHANNEL f1 =====
NUC1          13C
P1           3.00 usec
PL1          -3.00 dB
SFO1         150.9178076 MHz
===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        100.00 usec
PL2          120.00 dB
PL12         8.30 dB
PL13         22.00 dB
SFO2         600.1324500 MHz
SI           65536
SF           150.9027882 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.00
  
```



NAME mhairev00110
 EXPNO 2
 PROCNO 1
 Date_ 20131018
 Time 17:45
 INSTRUM spect
 PROBHID 5mm TBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT l6
 NS 4
 DS 4
 SWH 892.806142
 FIDRES 0.72179 Hz
 AQ 3.543073 sec
 RG 181
 AC 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 DL 5.00000000 sec
 TDO 1

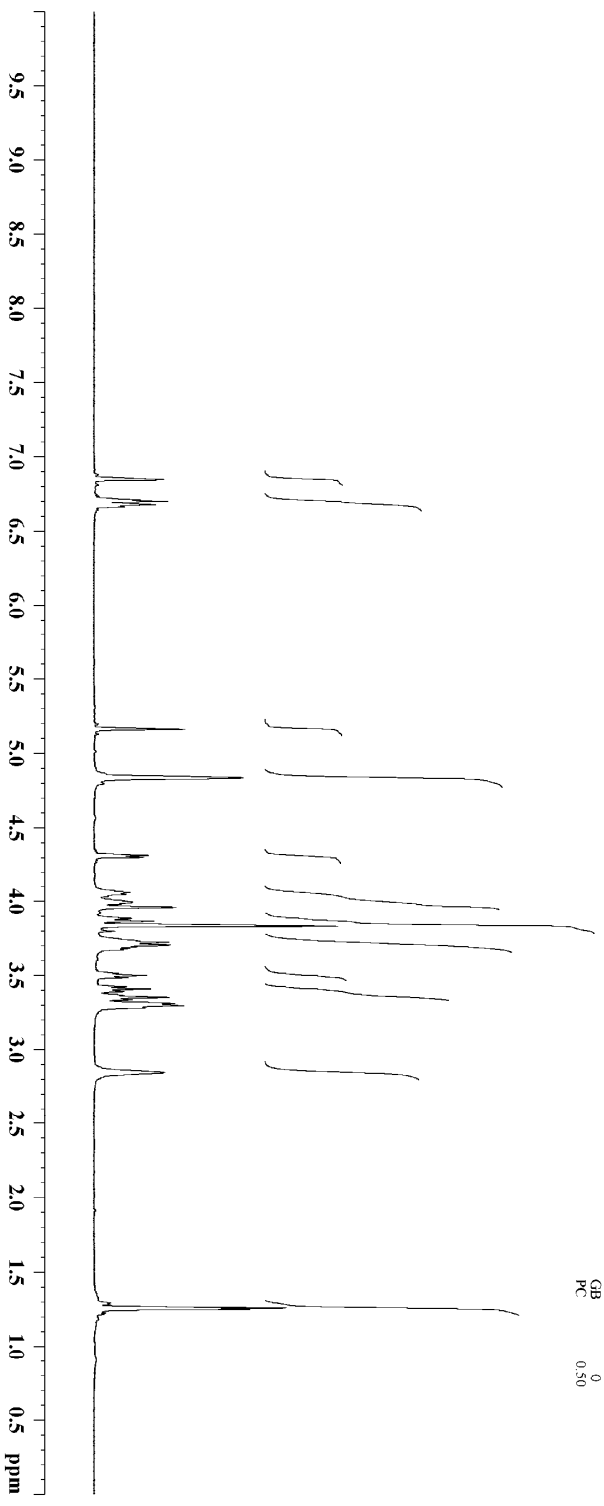
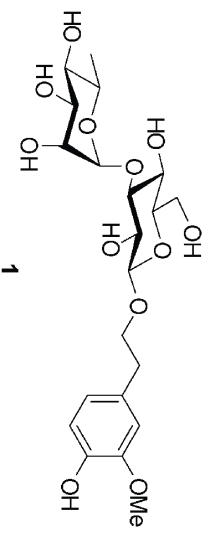
===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300170 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50



NAME mhterev0010
 EXPNO 3
 PROCNO 1
 Date_ 20131018
 Time 17:53
 INSTRUM spect
 PROBHD 5 mm TBO BB-1H
 PULPROG zgpg
 TD 65536
 SOLVENT CDCl3
 NS 21600
 DS 4
 SWH 37593.984 Hz
 FIDRES 0.573639 Hz
 AQ 0.8716921 sec
 RG 18390.4
 DW 13.300 usec
 DE 7.00 usec
 TE 298.0 K
 D1 2.00000000 sec
 D11 0.03000000 sec
 TD0 18

===== CHANNEL f1 =====
 NUC1 13C
 P1 3.00 usec
 PL1 -3.00 dB
 SFO1 150.9178076 MHz

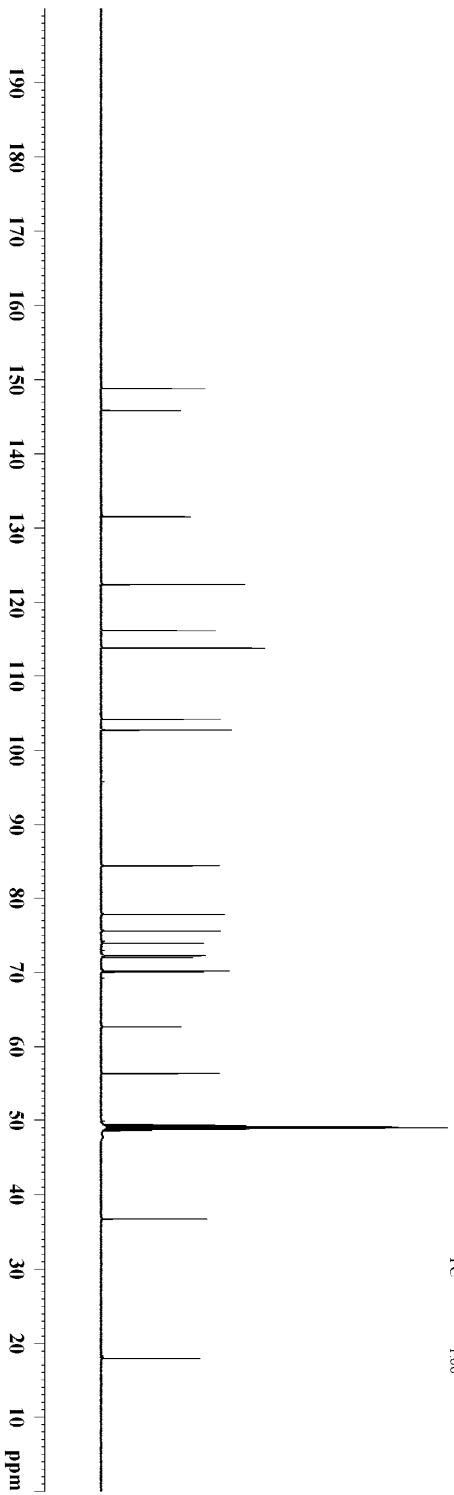
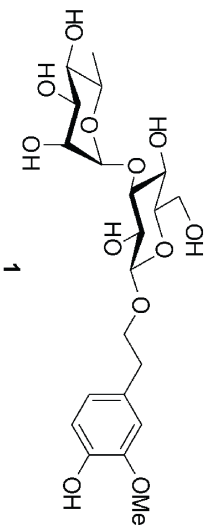
===== CHANNEL f2 =====
 CPDPRG2 waltz16
 NUC2 1H
 PCPD2 100.00 usec
 PL2 120.00 dB
 PL12 8.30 dB
 PL13 22.00 dB
 SFO2 600.1324500 MHz
 SF 65536
 SF 150.9027930 MHz
 WDW EM
 SSB 0
 LB 1.00 Hz
 GB 0
 PC 1.00



```

NAME          EV38
EXPNO         2
PROCNO        1
Date_         20130624
Time          12.43
INSTRUM       spect
PROBHD        5mm TBO BB-1H
PULPROG       zg
TD            65536
SOLVENT       MeOD
NS            16
DS            4
SWH           892.806 Hz
FIDRES        0.72179 Hz
AQ            3.542073 sec
RG            181
RG            181
DW            55.600 usec
DE            7.00 usec
TE            298.0 K
D1            5.00000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          1H
P1            5.00 usec
PL1          -3.00 dB
SFO1         600.132688 MHz
SI            65536
SF           600.1300125 MHz
WDW          no
SSB           0
LB            0.00 Hz
GB            0
PC            0.50
  
```



```

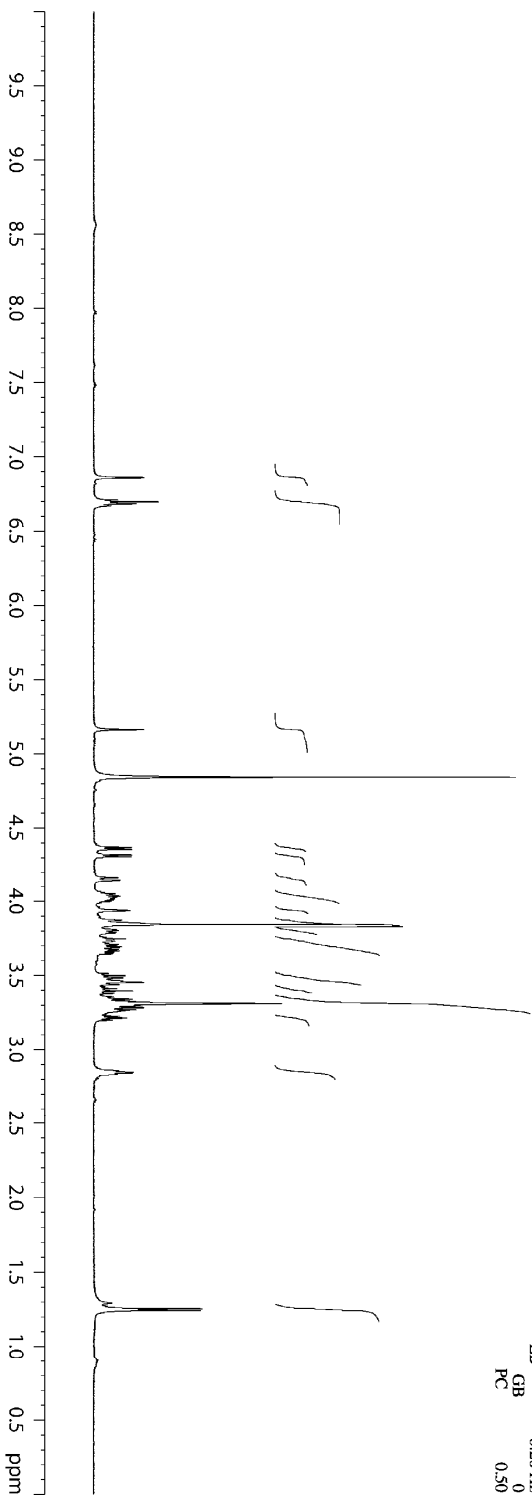
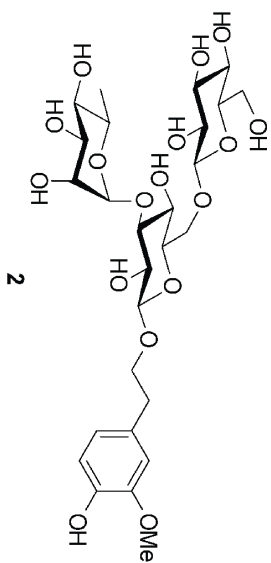
NAME          EV38
EXPNO         3
PROCNO        1
Date_         20130624
Time          17:50
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       MeOD
NS            12000
DS            4
SWMH          37593.984 Hz
FIDRES        0.5736391 Hz
AQ            0.8716921 sec
RG            18390.4
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           10
  
```

```

===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1         150.9178076 MHz
  
```

```

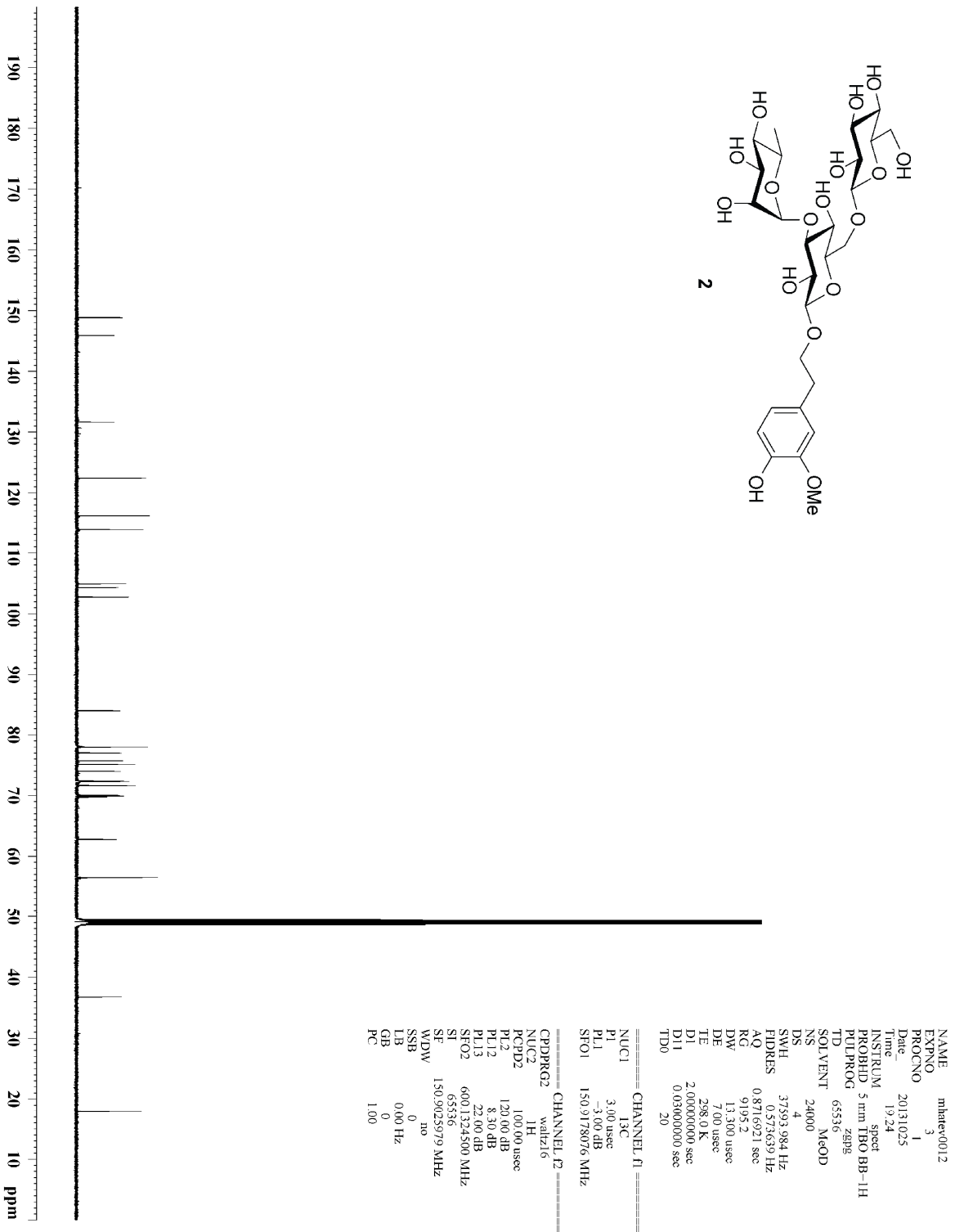
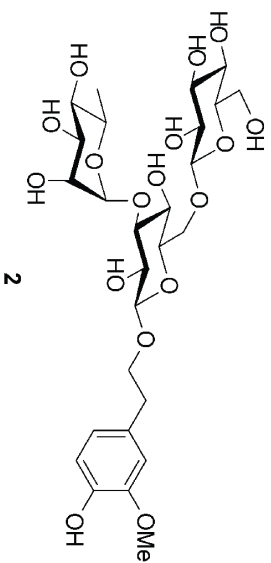
===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2         100.00 usec
PL2           120.00 dB
PL12          8.30 dB
PL13          22.00 dB
SFO2         600.1324500 MHz
SI            65536
SF           150.9026067 MHz
WDW           no
SSB           0
LB            0.00 Hz
GB            0
PC            1.00
  
```

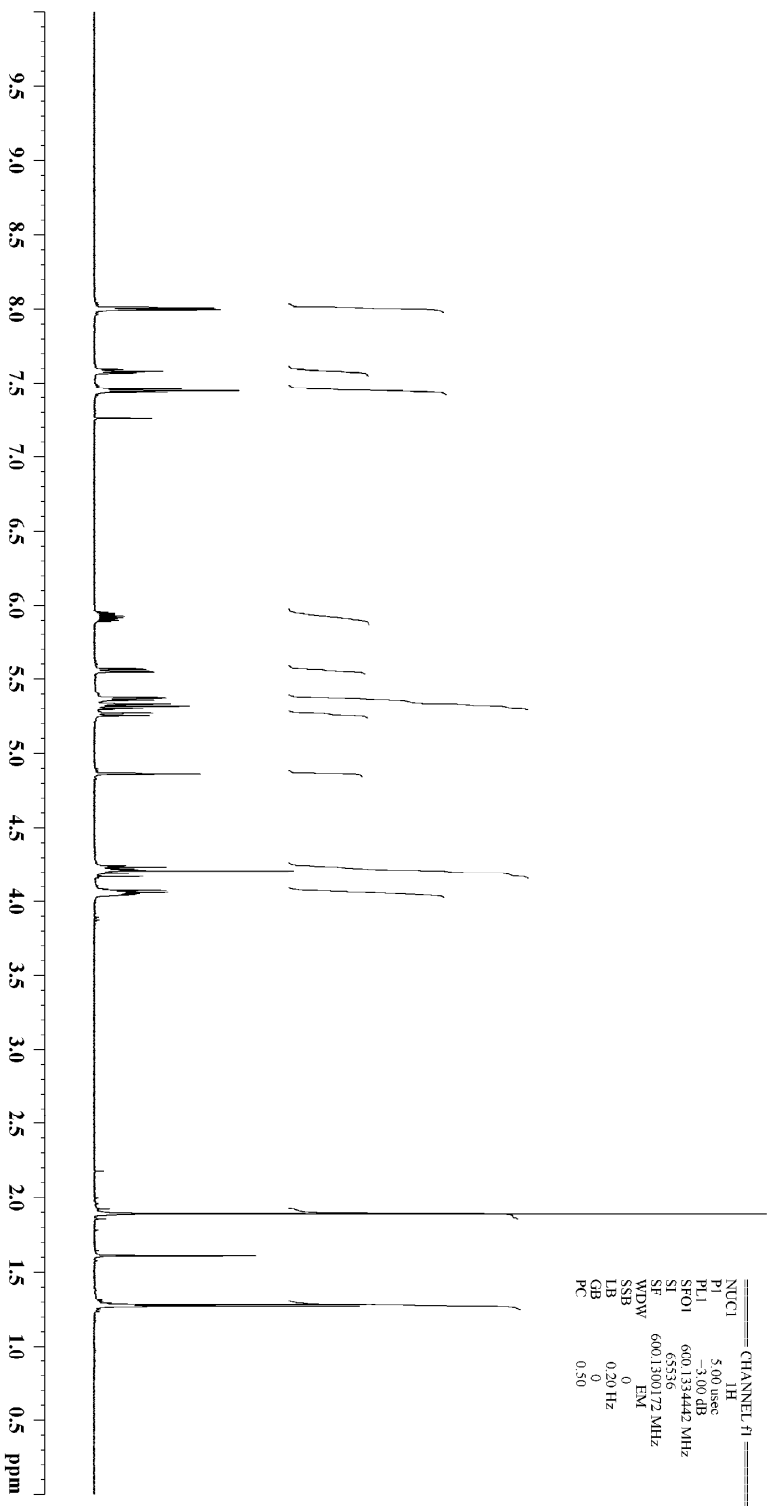
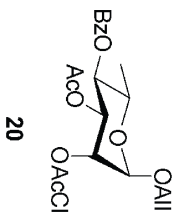


```

NAME mhaev0012
EXPNO 2
PROCNO 1
Date_ 20131025
Time 18.25
INSTRUM spect
PROBHD 5mm TBO BB-1H
PULPROG zg
TD 65536
SOLVENT MeOD
NS 16
DS 4
SWH 8992.806 Hz
FDRRES 0.137219 Hz
AQ 3.6439073 sec
RG 574.7
DW 55.600 usec
DE 7.00 usec
TE 298.0 K
D1 5.000000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 5.00 usec
PL1 -3.00 dB
SFO1 600.1332688 MHz
SI 65536
SF 600.1300138 MHz
WDW EM
SSB 0
LB 0.20 Hz
GB 0
PC 0.50
  
```

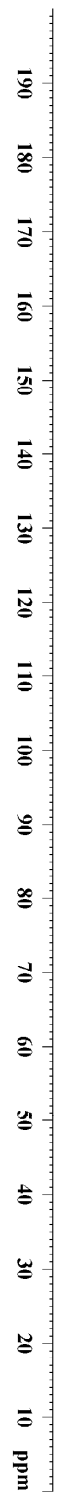
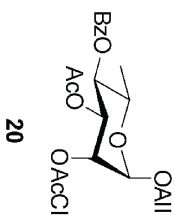


```

NAME          EV22
EXPNO         12
PROCNO        1
Date_         20130929
Time          16:10
INSTRUM       spect
PROBHD        5mm TBO BB-1H
PULPROG       zg
TD            32768
SOLVENT       1
SOLVENT       CDCl3
NS            0
DS            0
SWH           8922.806 Hz
FIDRES        0.274439 Hz
AQ            1.8220063 sec
RG            320
AQ            55.600 usec
DE            7.00 usec
TE            298.0 K
D1            0.50000000 sec
TD0           1
  
```

```

===== CHANNEL f1 =====
NUC1          1H
P1            5.00 usec
PL1          -3.00 dB
SFO1         600.134442 MHz
SI           65536
SF           600.1300172 MHz
WDW          EM
SSB          0
LB           0.20 Hz
GB           0
PC           0.50
  
```

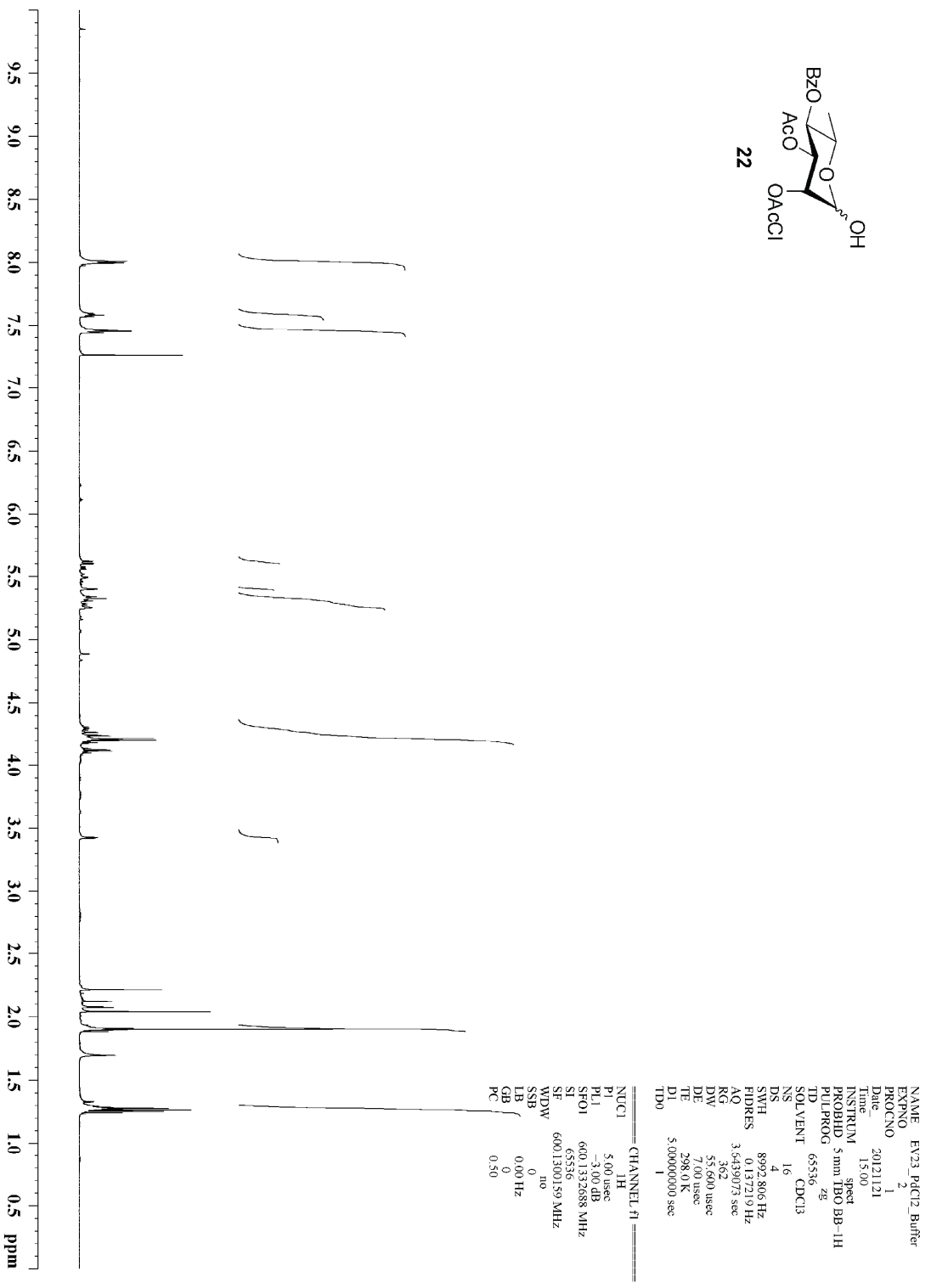
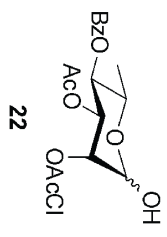


```

===== CHANNEL F1 =====
NAME          EV22
EXPNO         14
PROCNO        1
Date_         20130929
Time          15:14
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       CDCl3
NS           109
DS           4
SWMH         37593.984 Hz
FIDRES       0.573639 Hz
AQ           0.8716921 sec
RG           7298.2
DW           13.300 usec
DE           7.00 usec
TE           298.0 K
D1           2.00000000 sec
D11          0.03000000 sec
TD0          12

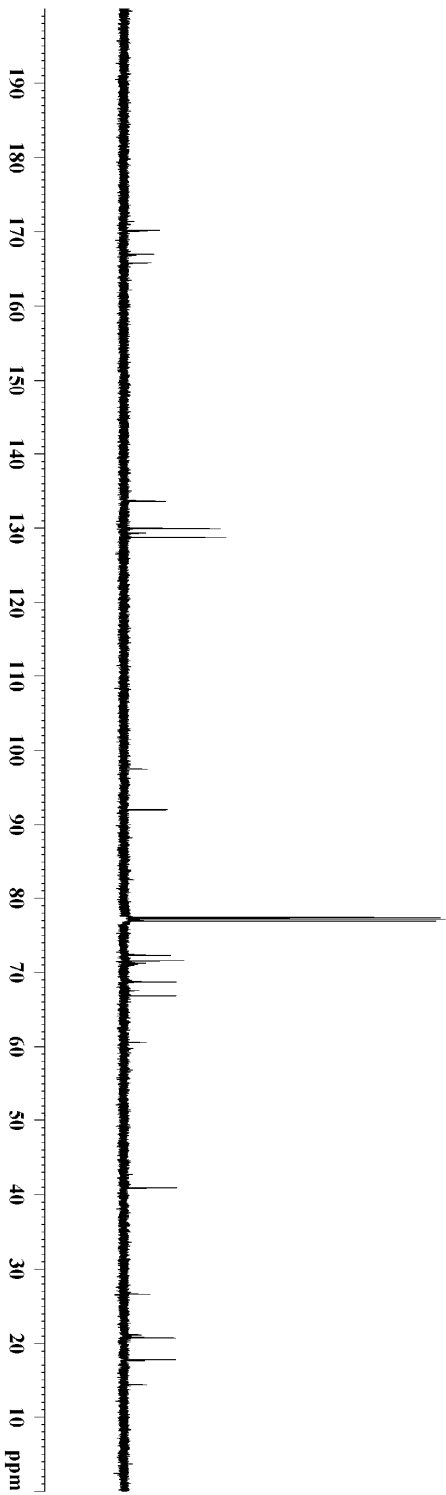
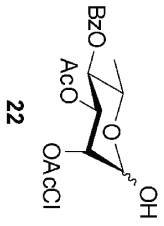
===== CHANNEL F2 =====
NUC1          13C
P1           3.00 usec
PL1          -3.00 dB
SFO1         150.9178076 MHz

===== CHANNEL F2 =====
CPDPRG2      waltz16
NUC2         1H
PCPD2        100.00 usec
PL2          120.00 dB
PL12         8.30 dB
PL13         22.00 dB
SFO2         600.1324500 MHz
SI           65536
SF           150.9027900 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.00
  
```



NAME EV23_PfCl2_Buffer
 EXPNO 2
 PROCNO 1
 Date 20121121
 Time 15:00
 INSTRUM spect
 PROBHHD 5mm TBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 4
 DS 4
 SWH 892.806142
 FIDRES 0.72179 Hz
 AQ 3.543073 sec
 RG 362
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300159 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 0.50



```

NAME EV23_P4C12_Buffer
EXPNO 3
PROCNO 1
Date_ 20121121
Time 15:13
INSTRUM spect
PROBHD 5 mm TBO BB-1H
PULPROG zgpg
TD 65536
SOLVENT CDCl3
NS 325
DS 4
SWH 37593.984 Hz
FIDRES 0.5736391 Hz
AQ 0.8716921 sec
RG 11585.2
DW 13.300 usec
DE 7.00 usec
TE 298.0 K
D1 2.00000000 sec
D11 0.03000000 sec
TDO 1

```

```

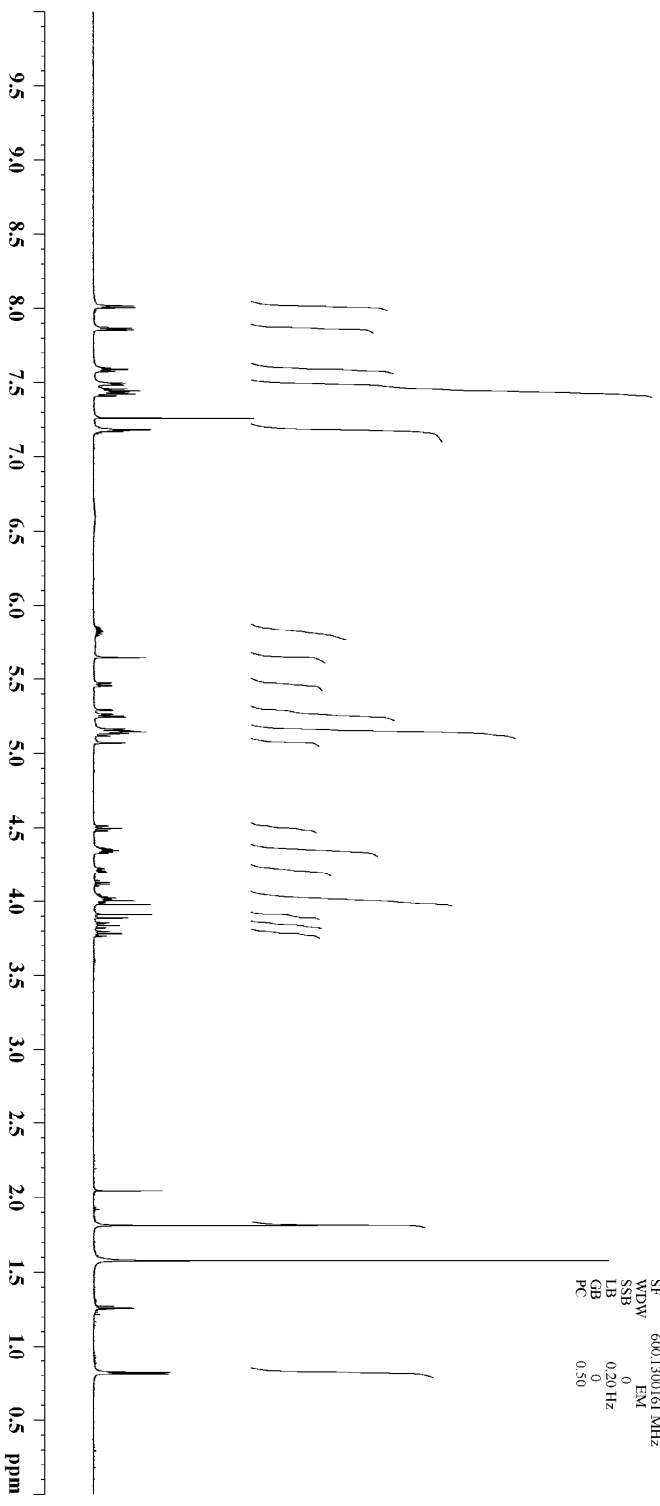
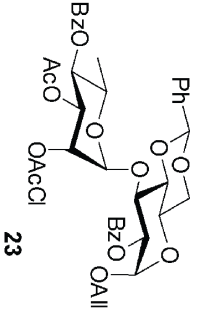
===== CHANNEL f1 =====
NUC1 13C
P1 3.00 usec
PL1 -3.00 dB
SFO1 150.9178076 MHz

```

```

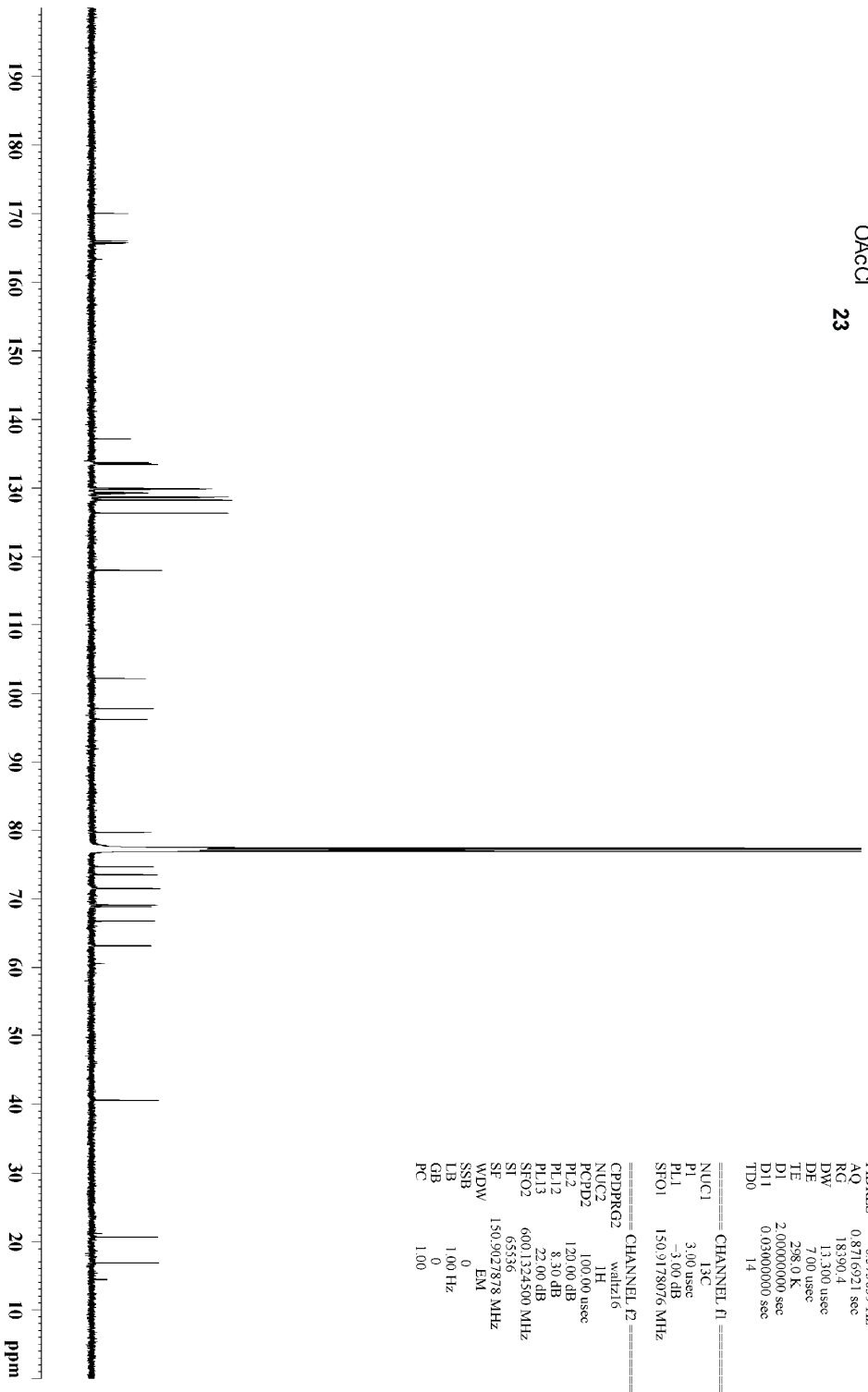
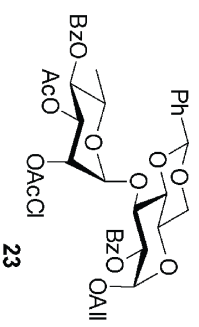
===== CHANNEL f2 =====
CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 120.00 dB
PL12 8.30 dB
PL13 22.00 dB
SFO2 600.1324500 MHz
SI 65536
SF 150.9027910 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

```



NAME EV25
 EXPNO 2
 PROCNO 1
 Date 20130521
 Time 17:37
 INSTRUM spect
 PROBHID 5mm TBO BB-1H
 PULPROG zg
 TD 65536
 SOLVENT CDCl3
 NS 4
 DS 16
 SWH 892.806142
 FIDRES 0.3721914
 AQ 3.543973 sec
 RG 8127
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1

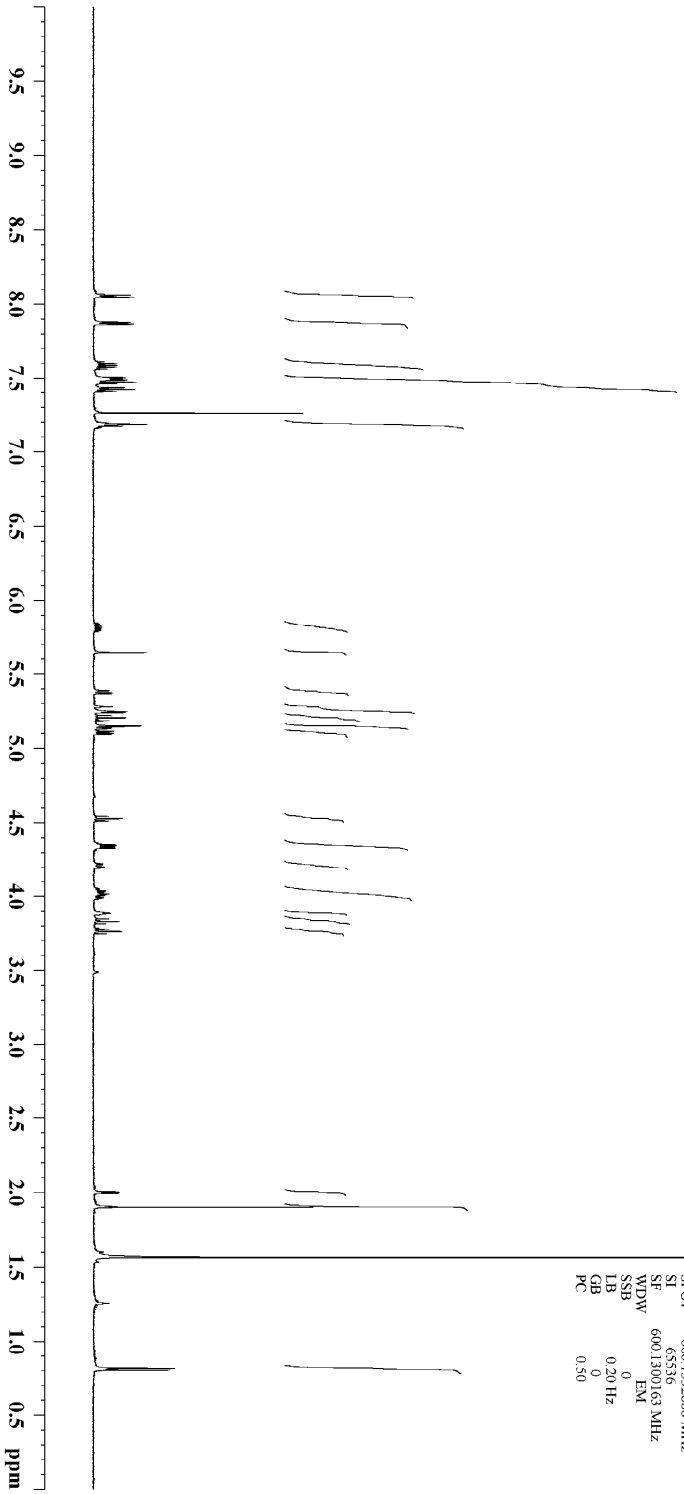
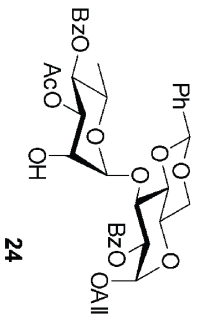
===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300161 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50



```

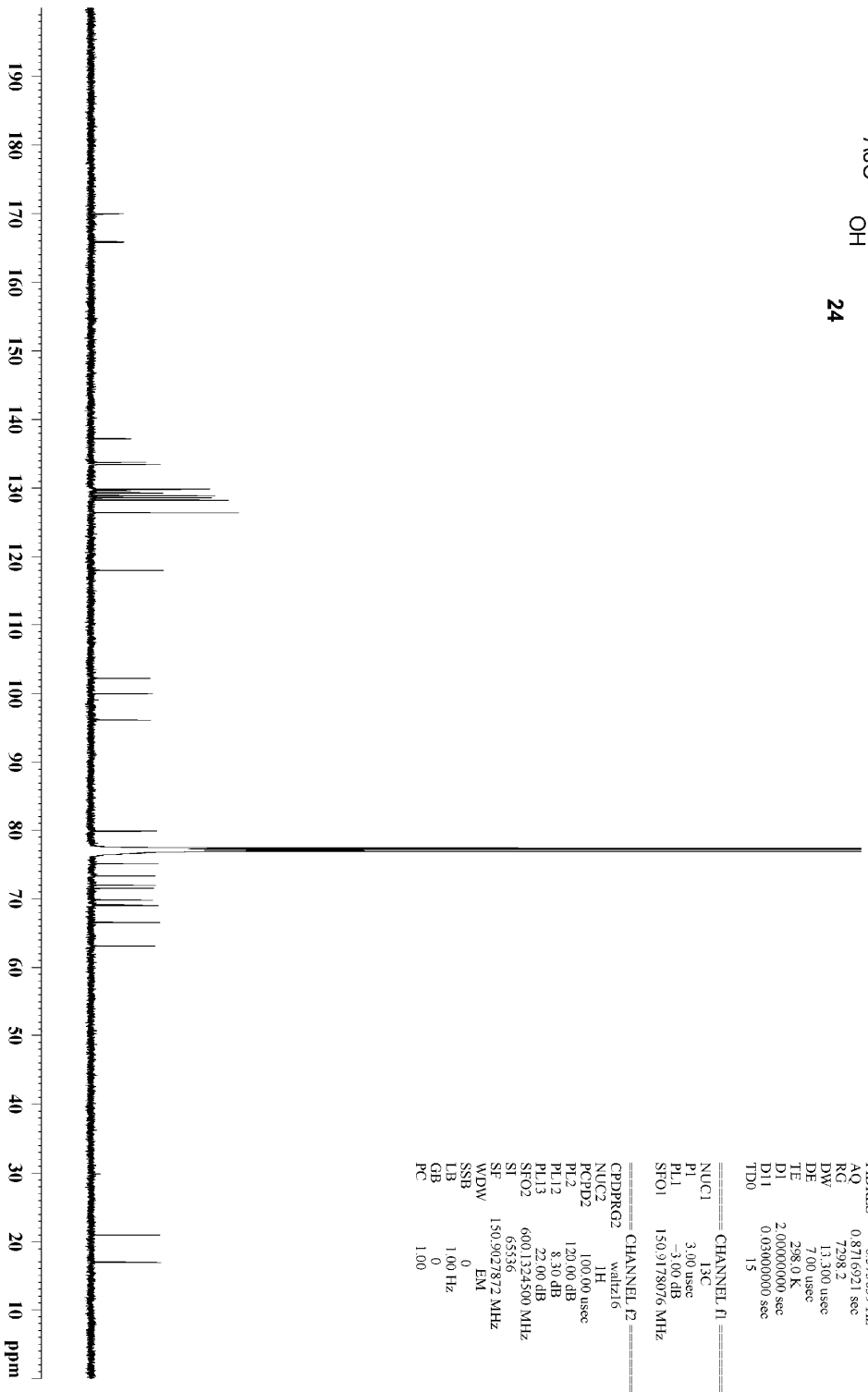
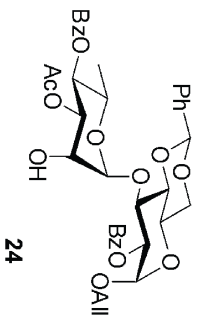
NAME          EV25
EXPNO         3
PROCNO        1
Date_         20130521
Time          20.31
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD             65536
SOLVENT       CDCl3
NS            16265
DS            4
SWMH          37593.984 Hz
FIDRES        0.5736391 Hz
AQ            0.8716921 sec
RG            18390.4
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           14
===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1          150.9178076 MHz
===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2         100.00 usec
PL2           120.00 dB
PL12          8.30 dB
PL13          22.00 dB
SFO2          600.1324500 MHz
SF            65536
SI            150.9027878 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.00

```



NAME EV26_2
 EXPNO 2
 PROCNO 1
 Date 20130527
 Time 16:21
 INSTRUM spect
 PROBHDD 5mm TBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT l6
 NS 4
 DS 16
 SWH 892.8061Hz
 FIDRES 0.372179 Hz
 AQRES 3.543873 sec
 RG 1024
 RC 1024
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1

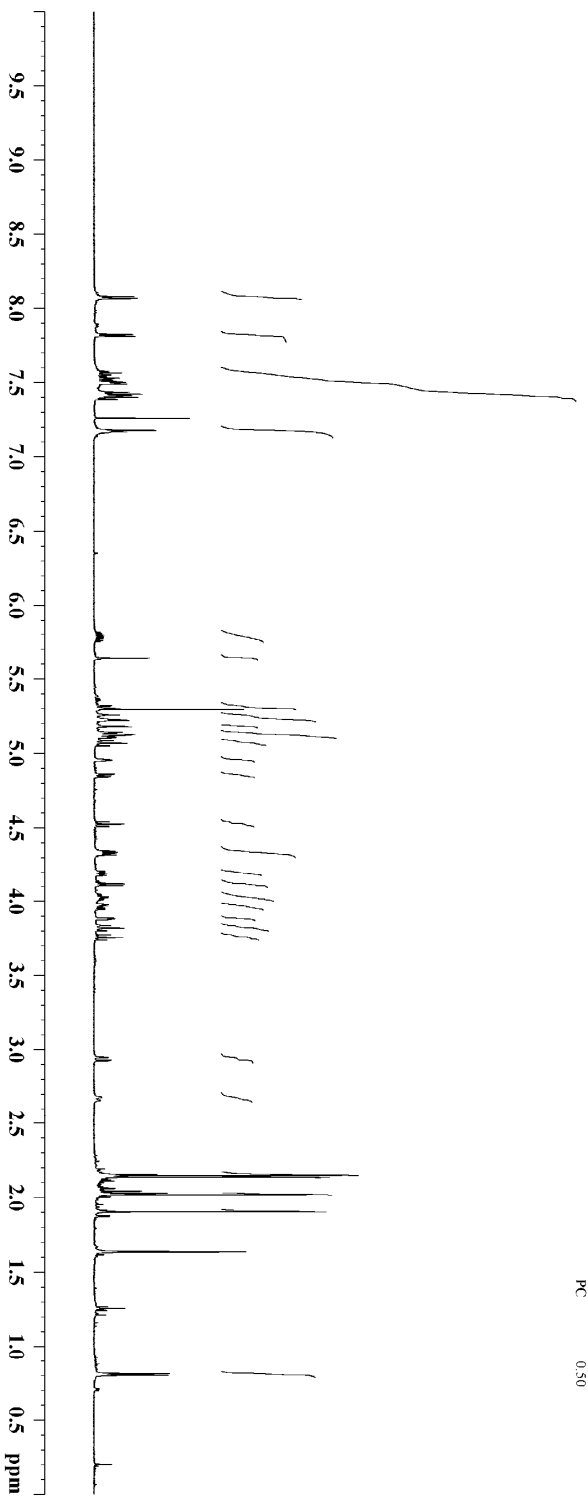
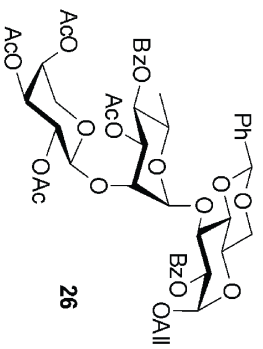
===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300163 MHz
 WDW EM
 SSB 0
 LB 0.20 Hz
 GB 0
 PC 0.50



```

NAME          EV26_2
EXPNO         3
PROCNO        1
Date_         20130527
Time          17:30
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       CDCl3
NS            18000
DS            4
SWH           37593.984 Hz
FIDRES        0.573639 Hz
AQ            0.8716921 sec
RG            7298.2
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           15
===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1          150.9178076 MHz
===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2         100.00 usec
PL2           120.00 dB
PL12          8.30 dB
PL13          22.00 dB
SFO2          600.1324500 MHz
SI            65536
SF            150.9027872 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.00

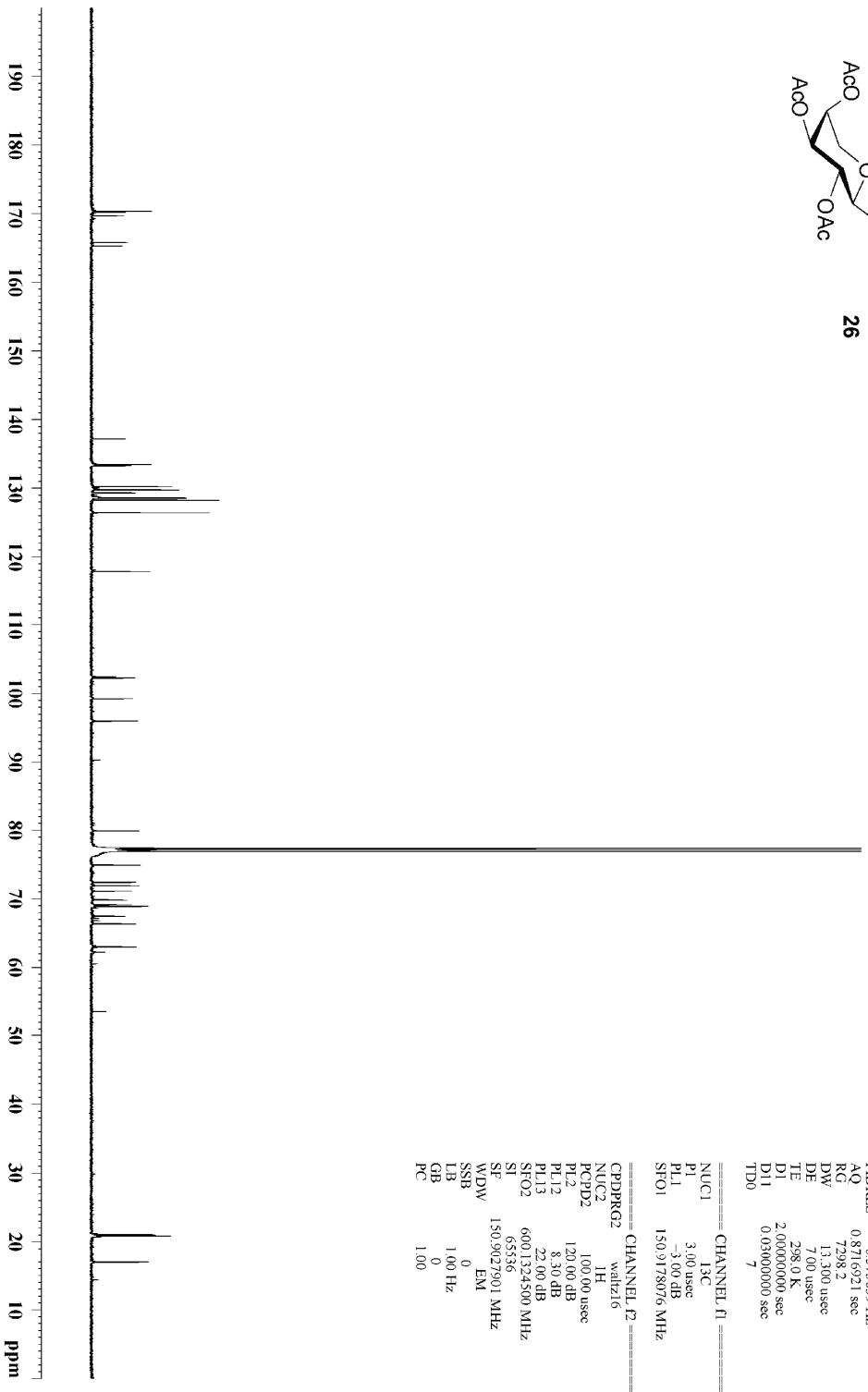
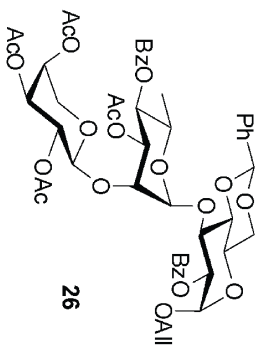
```



```

NAME          EV28
EXPNO         2
PROCNO        1
Date_         20130528
Time          14.26
INSTRUM       spect
PROBHD        5mm TBO BB-1H
PULPROG       zg
TD             65536
SOLVENT       CDCl3
NS            16
DS            4
SWH           892.806 Hz
FIDRES       0.72179 Hz
AQ           3.54357 sec
RG           362
DE           55.600 usec
TE           298.0 K
D1           7.00 usec
D11          5.00000000 sec
TD0          1

===== CHANNEL f1 =====
NUC1          1H
P1           5.00 usec
PL1          -3.00 dB
SFO1         600.132688 MHz
SI           65536
SF           600.1300162 MHz
WDW          no
SSB          0
LB           0.00 Hz
GB           0
PC           0.50
  
```



```

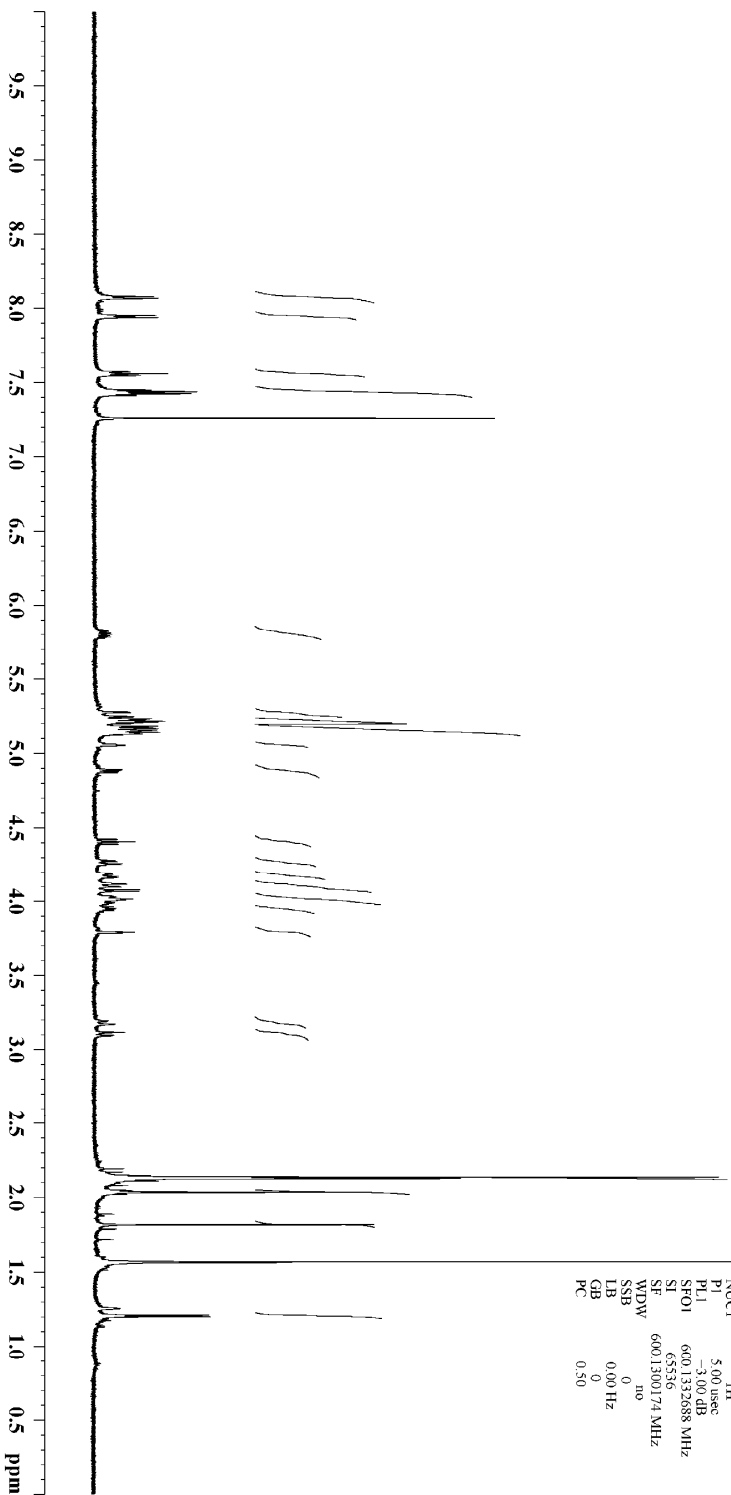
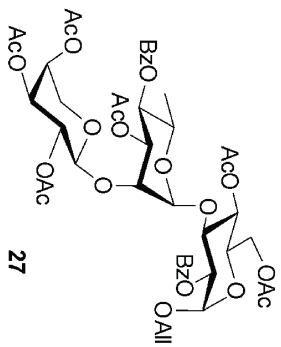
NAME          EV28
EXPNO         3
PROCNO        1
Date_         20130528
Time          13.19
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       CDCl3
NS            8400
DS            4
SWMH          37593.984 Hz
FIDRES        0.5736391 Hz
AQ            0.8716921 sec
RG            7298.2
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           7
===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1          150.9178076 MHz

```

```

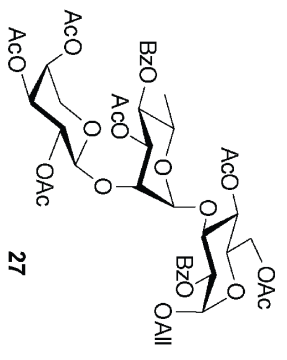
===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        100.00 usec
PL2           8.30 dB
PL12         22.00 dB
SFO2         600.1324500 MHz
SI           65536
SF           150.9027901 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.00

```

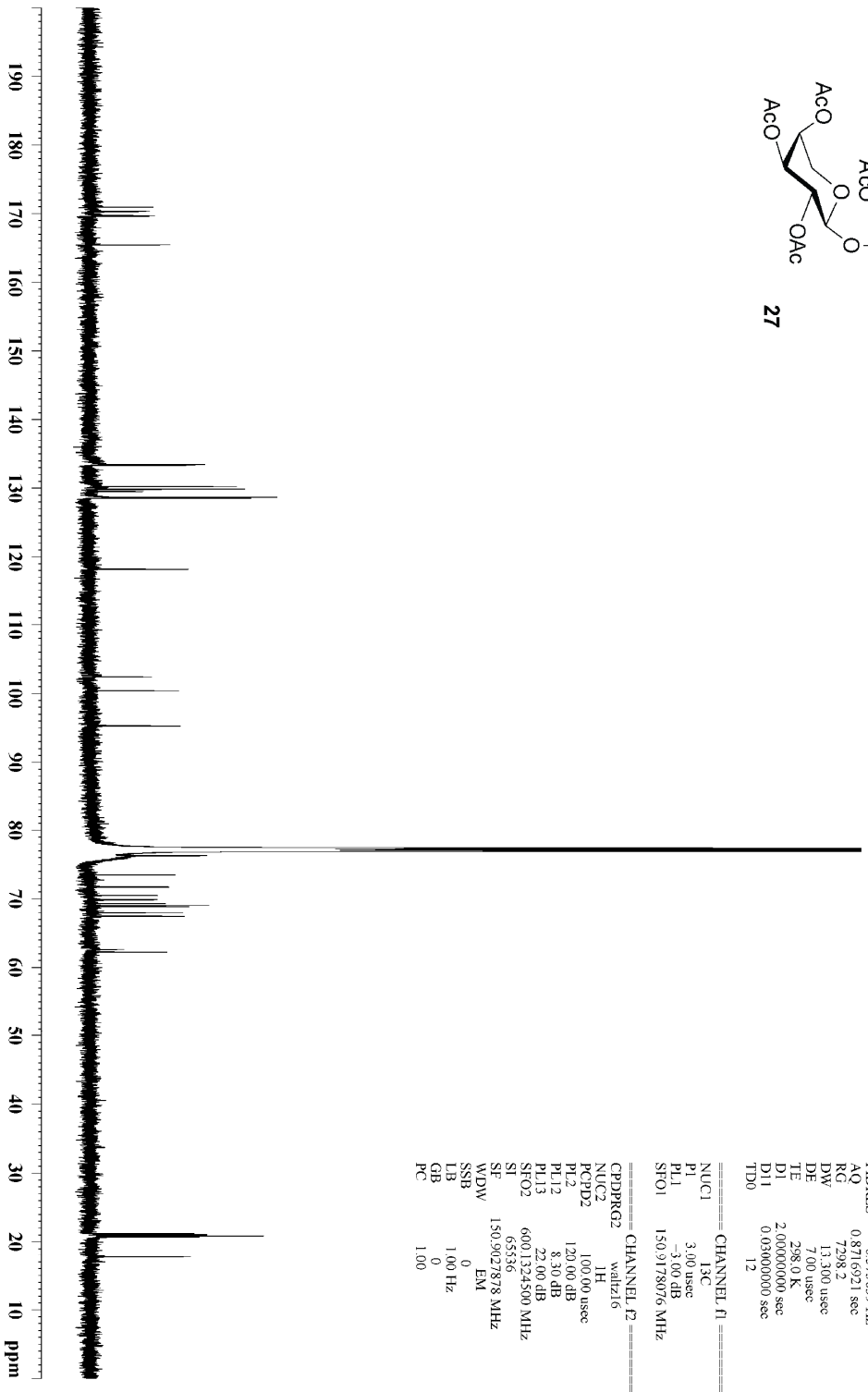


NAME EV30
 EXPNO 8
 PROCNO 1
 Date 20131024
 Time 17:14
 INSTRUM spect
 PROBHID 5mm TBO BB-1H
 PULPROG zgpg30
 TD 65536
 SOLVENT CDCl3
 NS 32
 DS 4
 SWH 892.8061Hz
 FIDRES 0.72179 Hz
 AQ 3.543873 sec
 RG 1024
 DW 55.600 usec
 DE 7.00 usec
 TE 298.0 K
 D1 5.00000000 sec
 TDO 1

===== CHANNEL f1 =====
 NUC1 1H
 P1 5.00 usec
 PL1 -3.00 dB
 SFO1 600.132688 MHz
 SI 65536
 SF 600.1300174 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 0.50



27

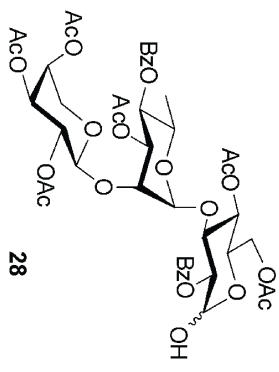


```

NAME          EV30
EXPNO         9
PROCNO        1
Date_         20131024
Time          17:19
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       CDCl3
NS            14400
DS            4
SWMH          37593.984 Hz
FIDRES        0.5736391 Hz
AQ            0.8716921 sec
RG            7298.2
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           12

===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1         150.9178076 MHz

===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2        100.00 usec
PL2           120.00 dB
PL12         8.30 dB
PL13         22.00 dB
SFO2         600.1324500 MHz
SI            65536
SF           150.9027878 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.00
  
```

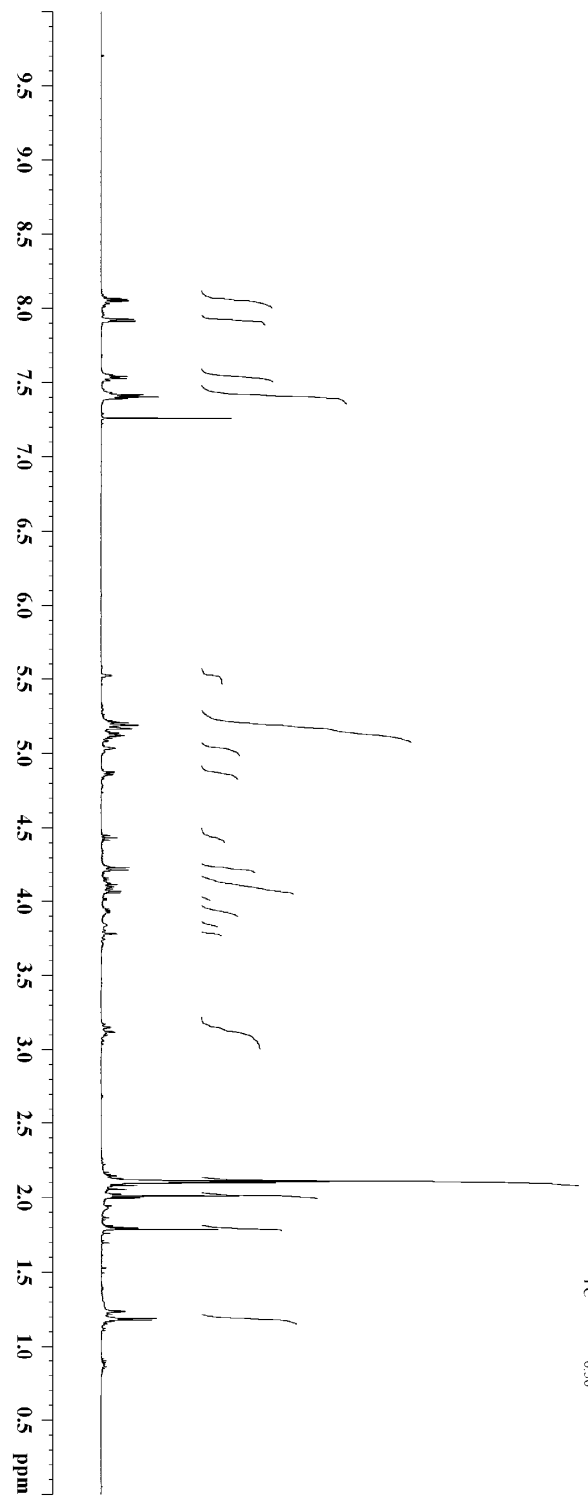


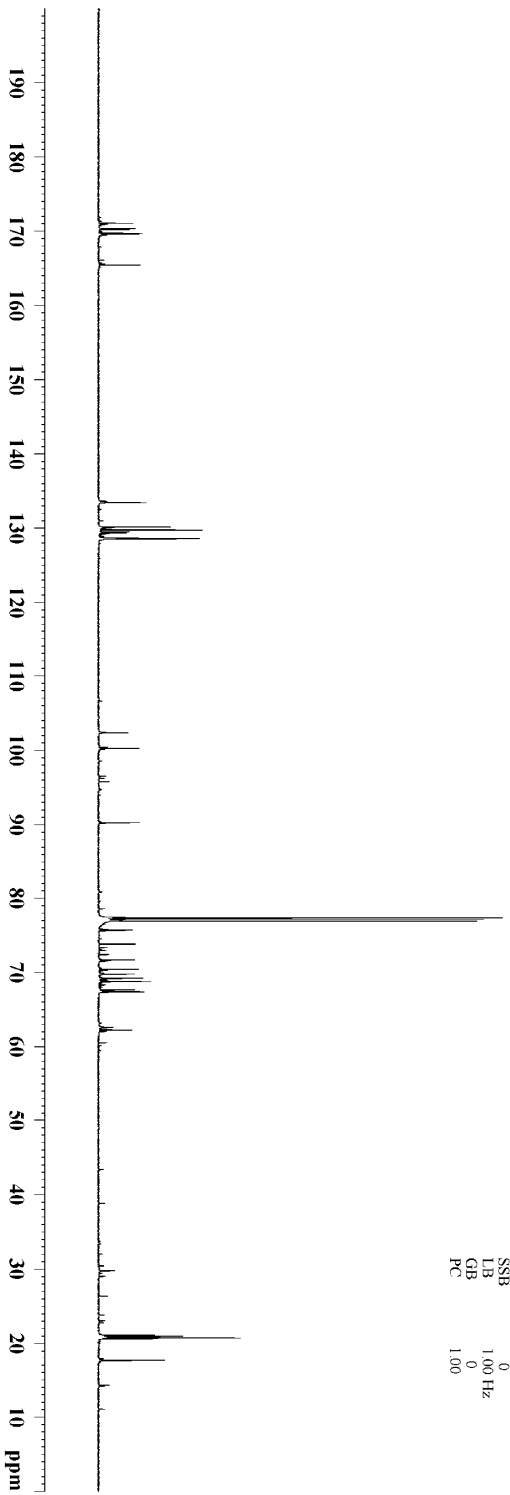
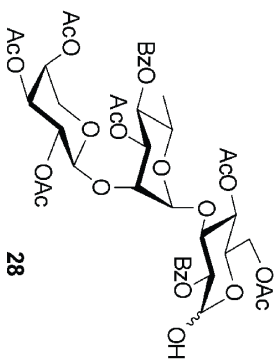
28

```

NAME          EV41
EXPNO         2
PROCNO        1
Date_         20130628
Time          17:32
INSTRUM       spect
PROBHD        5mm TBO BB-1H
PULPROG       zg
TD            65536
SOLVENT       CDCl3
NS            4
DS            4
SWH           892.806142
FIDRES        0.72179 Hz
AQ            3.549073 sec
RG            114
RG            114
DW            55.600 usec
DE            7.00 usec
TE            298.0 K
D1            5.00000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          1H
P1            5.00 usec
PL1           -3.00 dB
SFO1         600.132688 MHz
SI            65536
SF           600.1300161 MHz
WDW           no
SSB           0
LB            0.00 Hz
GB            0
PC            0.50
  
```





```

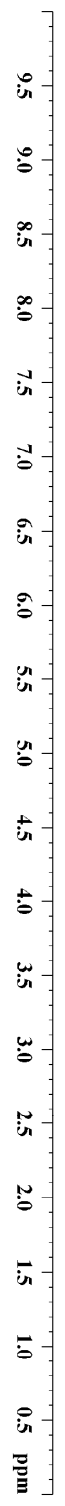
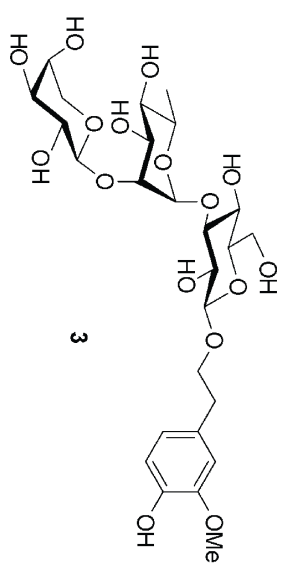
NAME          EV41
EXPNO         3
PROCNO        1
Date_         20130628
Time          17:34
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD             65536
SOLVENT       CDCl3
NS            14400
DS             4
SVMH          37593.984 Hz
FIDRES        0.573639 Hz
AQ            0.8716921 sec
RG            13004
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TD0           12
  
```

```

===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1         150.9178076 MHz
  
```

```

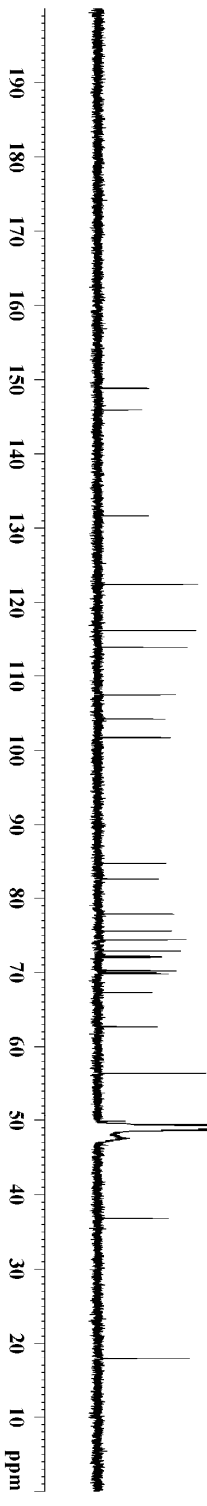
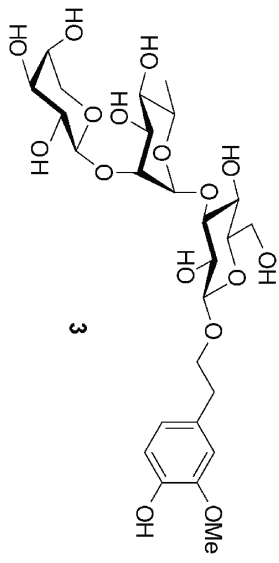
===== CHANNEL f2 =====
CPDPRG2      waltz16
NUC2          1H
PCPD2        100.00 usec
PL2          120.00 dB
PL12         8.30 dB
PL13         22.00 dB
SFO2         600.1324500 MHz
SI           65536
SF           150.9027967 MHz
WDW          EM
SSB          0
LB           1.00 Hz
GB           0
PC           1.00
  
```



```

NAME          EV45
EXPNO         2
PROCNO        1
Date_         20130708
Time          17:38
INSTRUM       spect
PROBHD        5mm TBO BB-1H
PULPROG       zg
TD            65536
SOLVENT       MeOD
NS            32
DS            4
SWH           8992.806 Hz
FIDRES       0.72179 Hz
AQ           3.543973 sec
RG            812.7
DE           55.600 usec
TE           298.0 K
D1           7.00 usec
DL           5.00000000 sec
TD0           1

===== CHANNEL f1 =====
NUC1          1H
P1            5.00 usec
PL1          -3.00 dB
SFO1         600.132688 MHz
SI           65536
SF           600.1300139 MHz
WDW          EM
SSB           0
LB           0.20 Hz
GB           0
PC           0.50
  
```

```

NAME          EV45
EXPNO         3
PROCNO        1
Date_         20130708
Time          17:41
INSTRUM       spect
PROBHD        5 mm TBO BB-1H
PULPROG       zgpg
TD            65536
SOLVENT       MeOD
NS            16800
DS            4
SWMH          37593.984 Hz
FIDRES        0.573639 Hz
AQ            0.8716921 sec
RG            7298.2
DW            13.300 usec
DE            7.00 usec
TE            298.0 K
D1            2.00000000 sec
D11           0.03000000 sec
TDO           9
===== CHANNEL f1 =====
NUC1          13C
P1            3.00 usec
PL1           -3.00 dB
SFO1         150.9178076 MHz
===== CHANNEL f2 =====
CPDPRG2       waltz16
NUC2          1H
PCPD2        100.00 usec
PL2           120.00 dB
PL12         8.30 dB
PL13         22.00 dB
SFO2         600.1324500 MHz
SI            65536
SF           150.9025972 MHz
WDW           EM
SSB           0
LB            1.00 Hz
GB            0
PC            1.00

```