



## Supporting Information

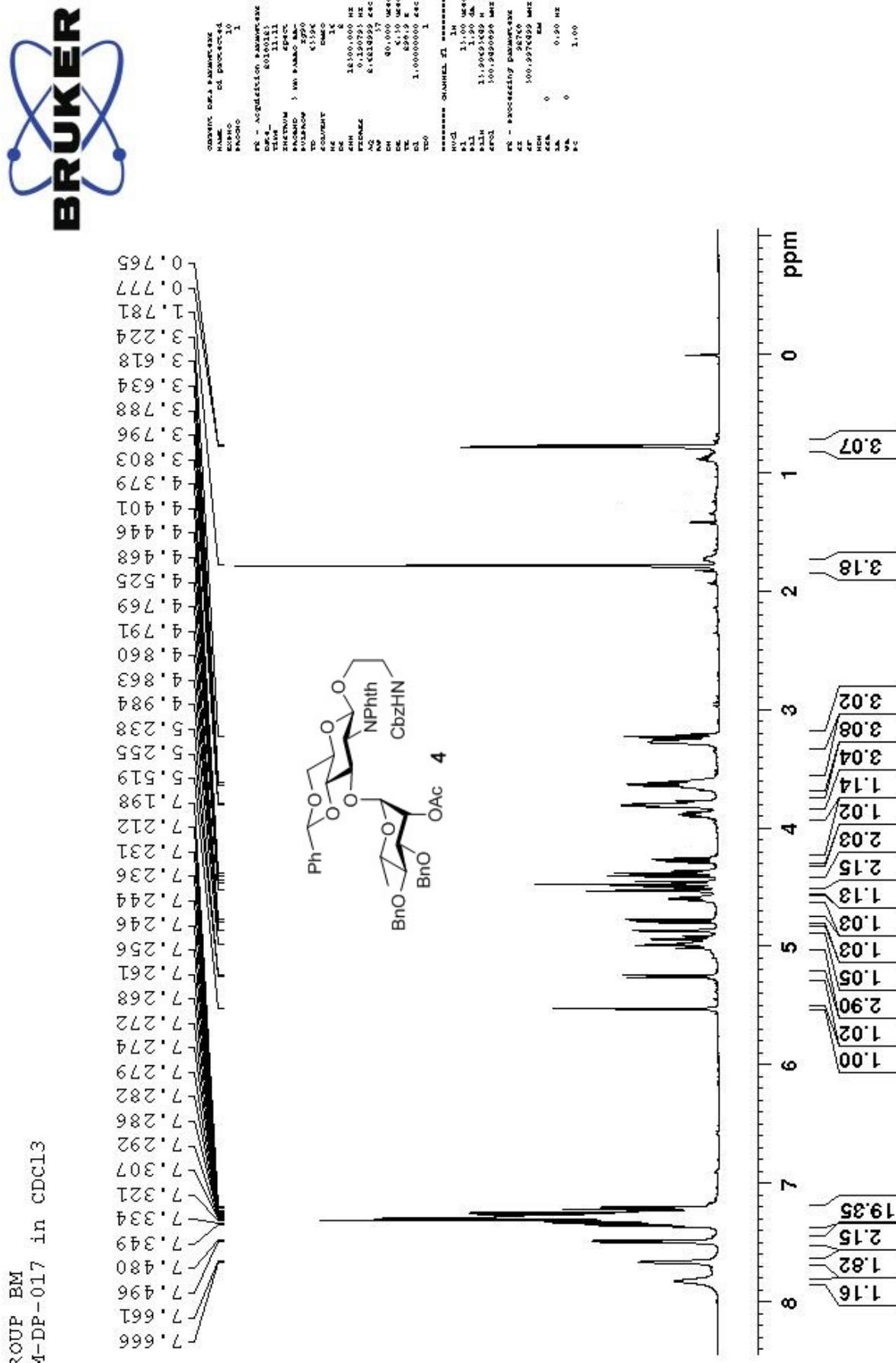
for

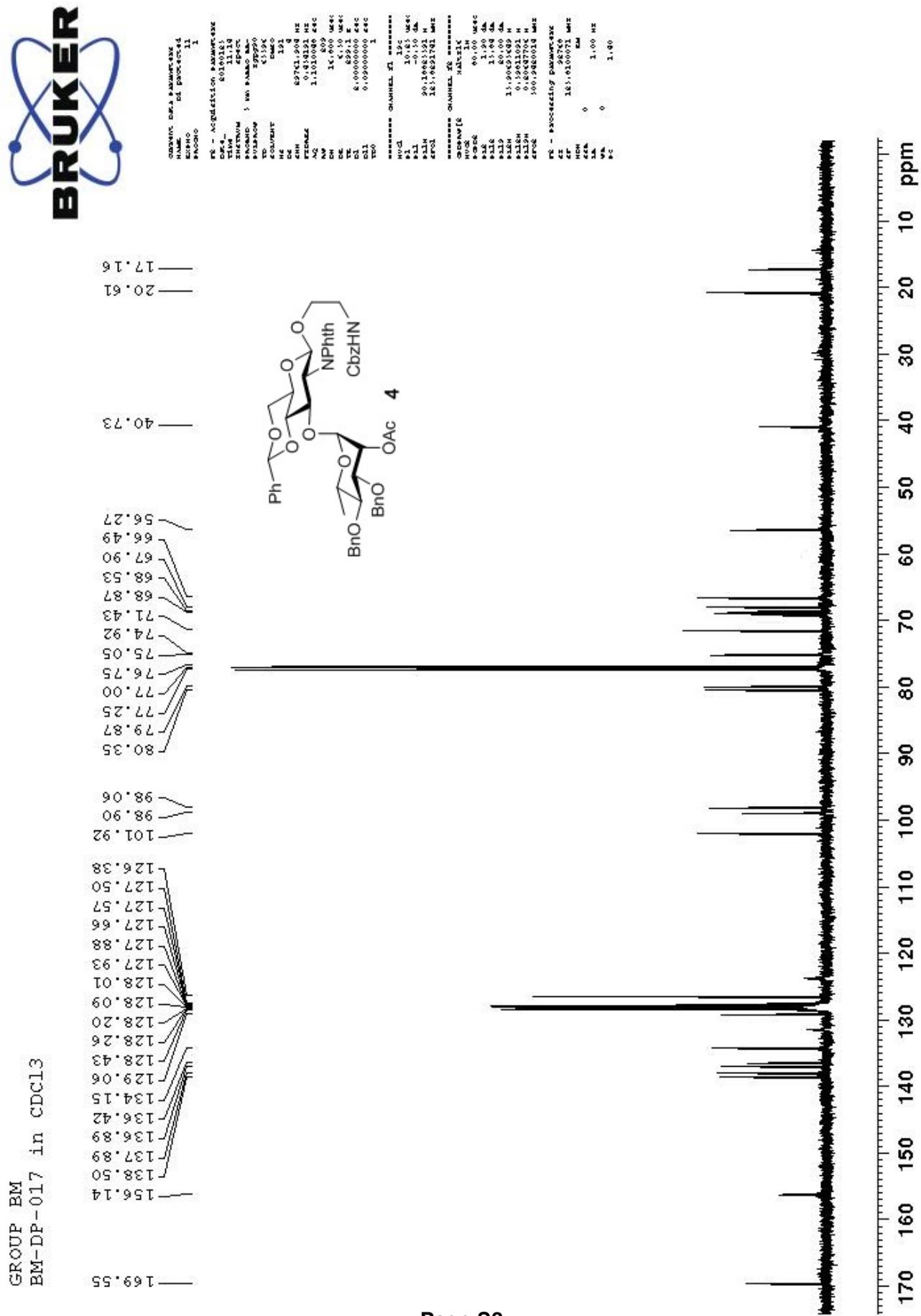
### **Chemical synthesis of the pentasaccharide repeating unit of the O-specific polysaccharide from *Escherichia coli* O132 in the form of its 2-aminoethyl glycoside**

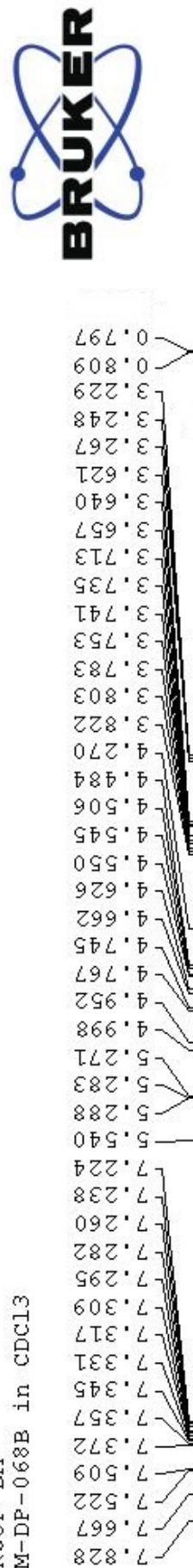
Debasish Pal and Balaram Mukhopadhyay

*Beilstein J. Org. Chem.* **2019**, *15*, 2563–2568. doi:10.3762/bjoc.15.249

**Copies of the  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of all new compounds**







## Current Data Parameters

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EXENO 20  
PROCCNO 1

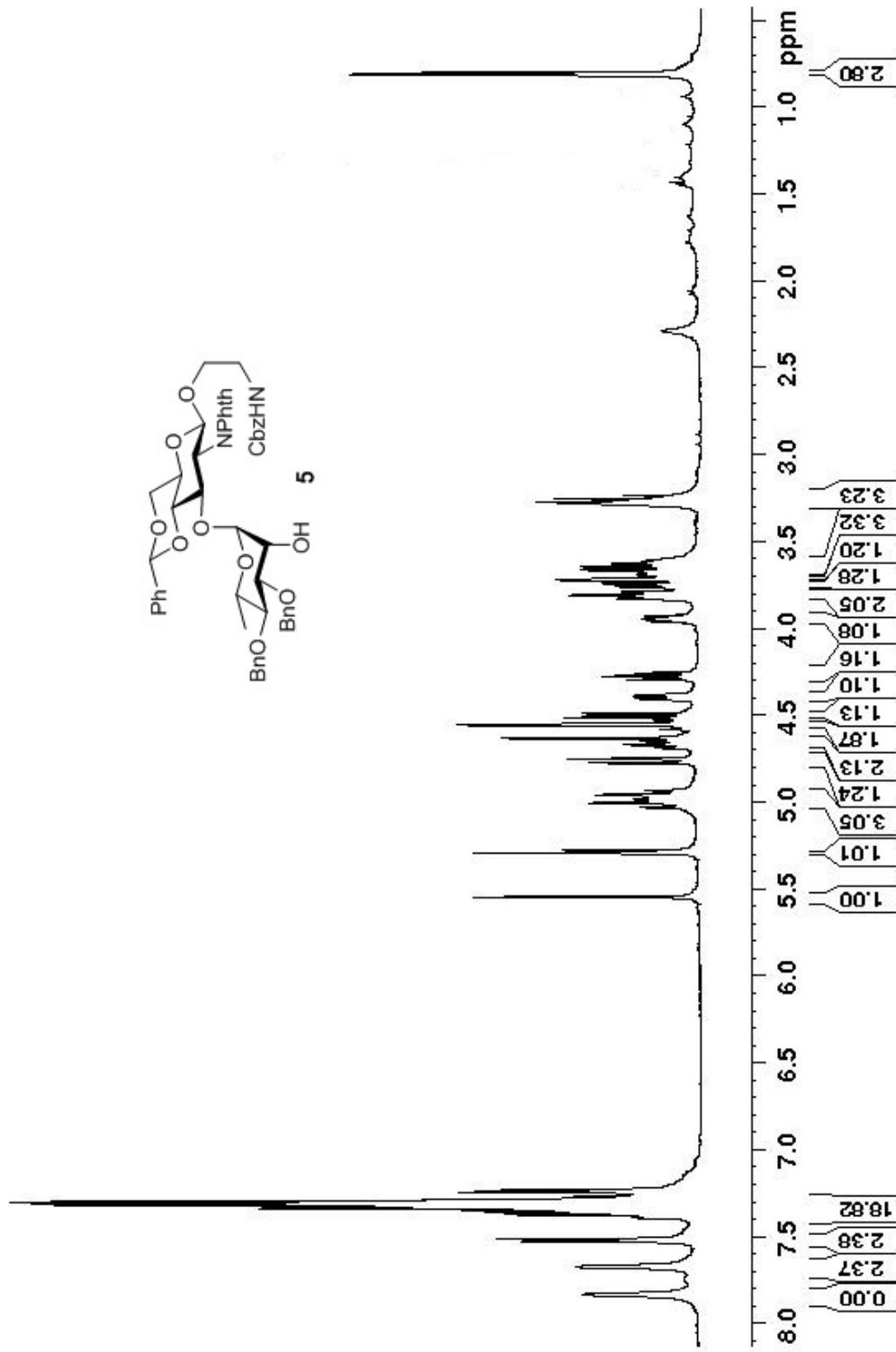
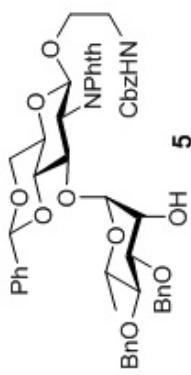
EF2 - Acquisition Parameters

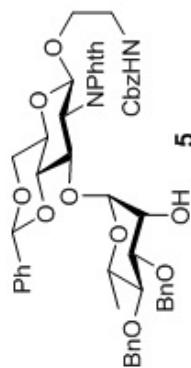
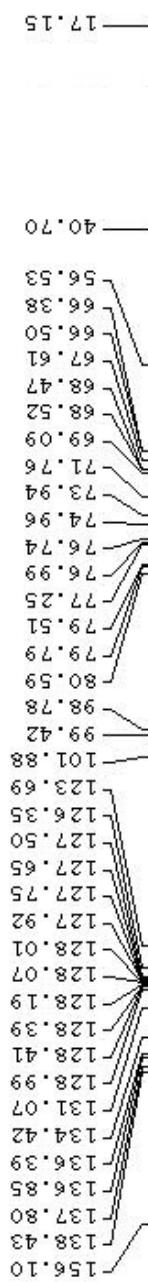
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Date_ 2016-07-30
Time_ 11:45
Instrument_ Bruker_default_av500
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      2930
      66560
      CDC13
      16
      2
      10000.000 Hz
      0.150240 Hz
      3.3280001 sec
      36
      50.000 usec
      6.50 usec
      2.98.2 K
      1.0000000 sec
      1

```

CHANNEL f1			
SF01	500..3430898	MHZ	
NC01	1H		
FP1	17.50	usec	
PLW1	10.00000000	W	
-----			
SF2 - Processing parameters			
SI	131072		
SF	500..3400125	MHZ	
WDDW	EM		
SSB	0		
LB	0		
GB	0		
SPC	1.00		





```

CURRENT Data Parameters
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EXPNO
PROCNO

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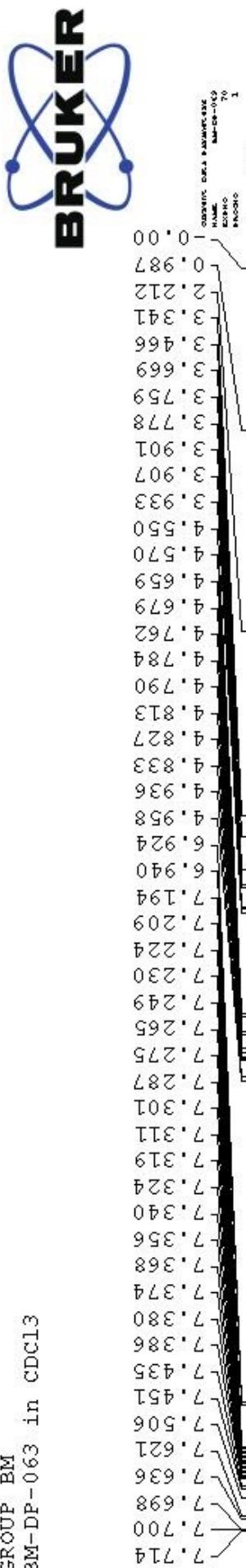
F2 - Acquisition Parameters  
Date\_ 20180730  
Time 11:50  
INSTRUM Bruker\_default\_av500

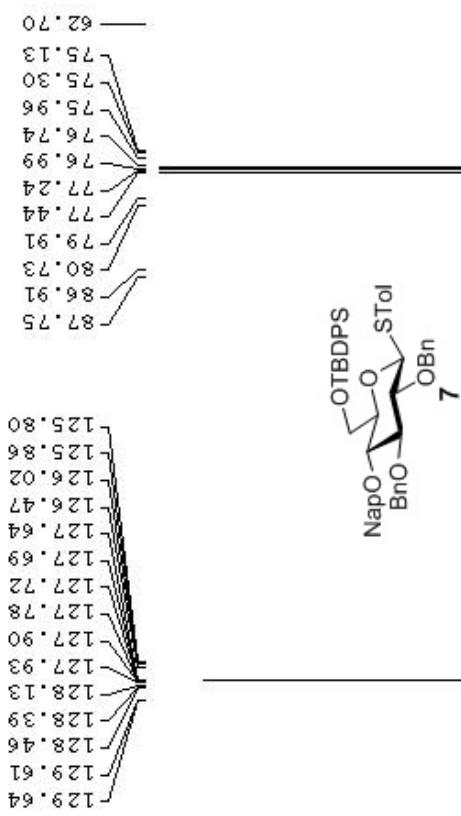
PULVEROG	zppg30
ID	65536
SOLVENT	CDCl <sub>3</sub>
NS	181
DS	4
SWH	43859.648
FIDRES	Hz
AQ	0.686945
RS	Hz
DW	0.747104
DE	sec
DE	203
DE	11.400
DE	usec
DE	6.50
TE	usec
TE	2.98.5
D1	K
D1	2.0000000
D1	sec
TRD	0.0300000
TRD	sec
	1

```
----- CHANNEL f1 -----
SF01      125.8294646 MHZ
NRCL      1.3C
P1        11.50  usec
PLWL      66.00000000 W
```

SI	32.768	32.768
SE	125, 8106068	MHZ
WW	EM	
SSB	0	
LSB	0	1.00 Hz
GB	0	1.40
PC		







Current Data Parameters  
NAME BM-DP-063  
EXPNO 72  
PROCNO 1

F2 - Acquisition Parameters

Date 20180723  
Time 12.48  
INSTRUM Bruker\_default\_ax50  
PROBHD 5 mm PABBO BB/  
PULPROG zg30  
TD 65536  
SOLVENT CDCl<sub>3</sub>  
NS 308  
DS 4  
SWH 43859.648 Hz  
FIDRES 0.669245 Hz  
AQ 0.7471104 sec  
RG 203  
DW 11.400 usec  
DE 6.50 usec  
TE 298.3 K  
D1 2.0000000 sec  
D11 0.03000000 sec  
TD0 1

CHANNEL f1

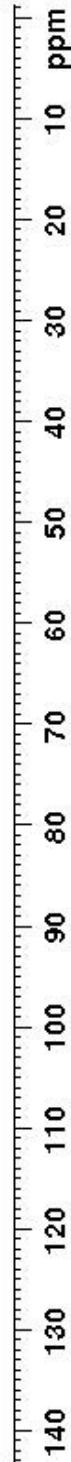
SFO1 125.8294646 MHz  
NUC1 13C  
P1 11.50 usec  
PLW1 66.00000000 W

CHANNEL f2

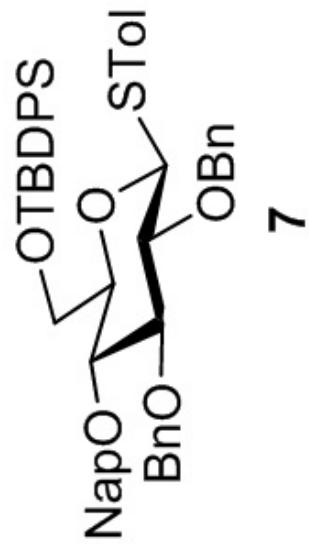
SFO2 500.3420014 MHz  
NUC2 1H  
CPDPFG [2  
PCPD2 80.00 usec  
PLW2 10.00000000 W  
PLW12 0.47052001 W  
PLW13 0.24068999 W

F2 - Processing parameters

SI 32768  
SF 125.8106021 MHz  
WDW 0  
SSB 1.00 Hz  
LB 0  
GB 0  
PC 1.40

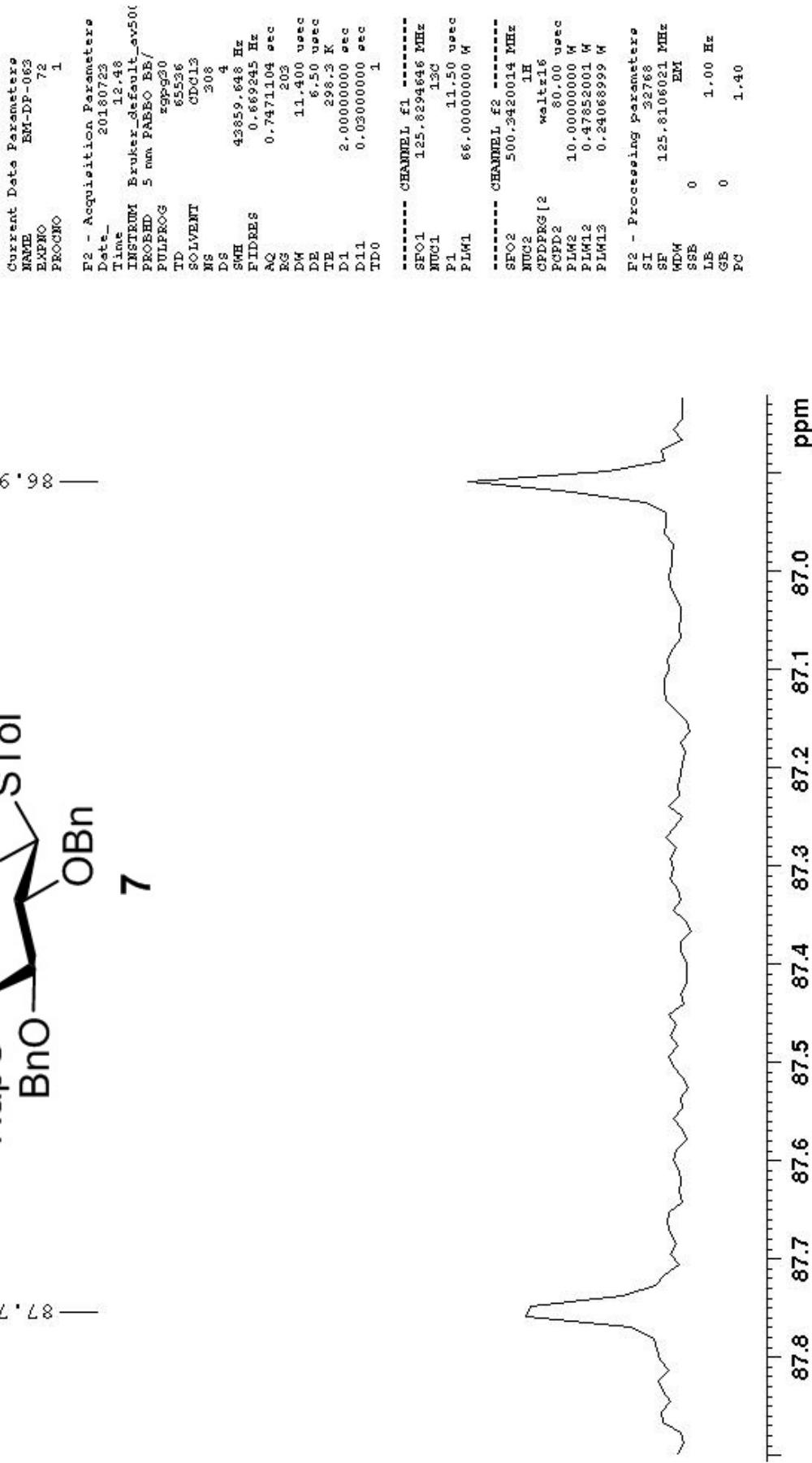


GROUP BM  
BM-DFP-0.63 in CDCl<sub>3</sub>

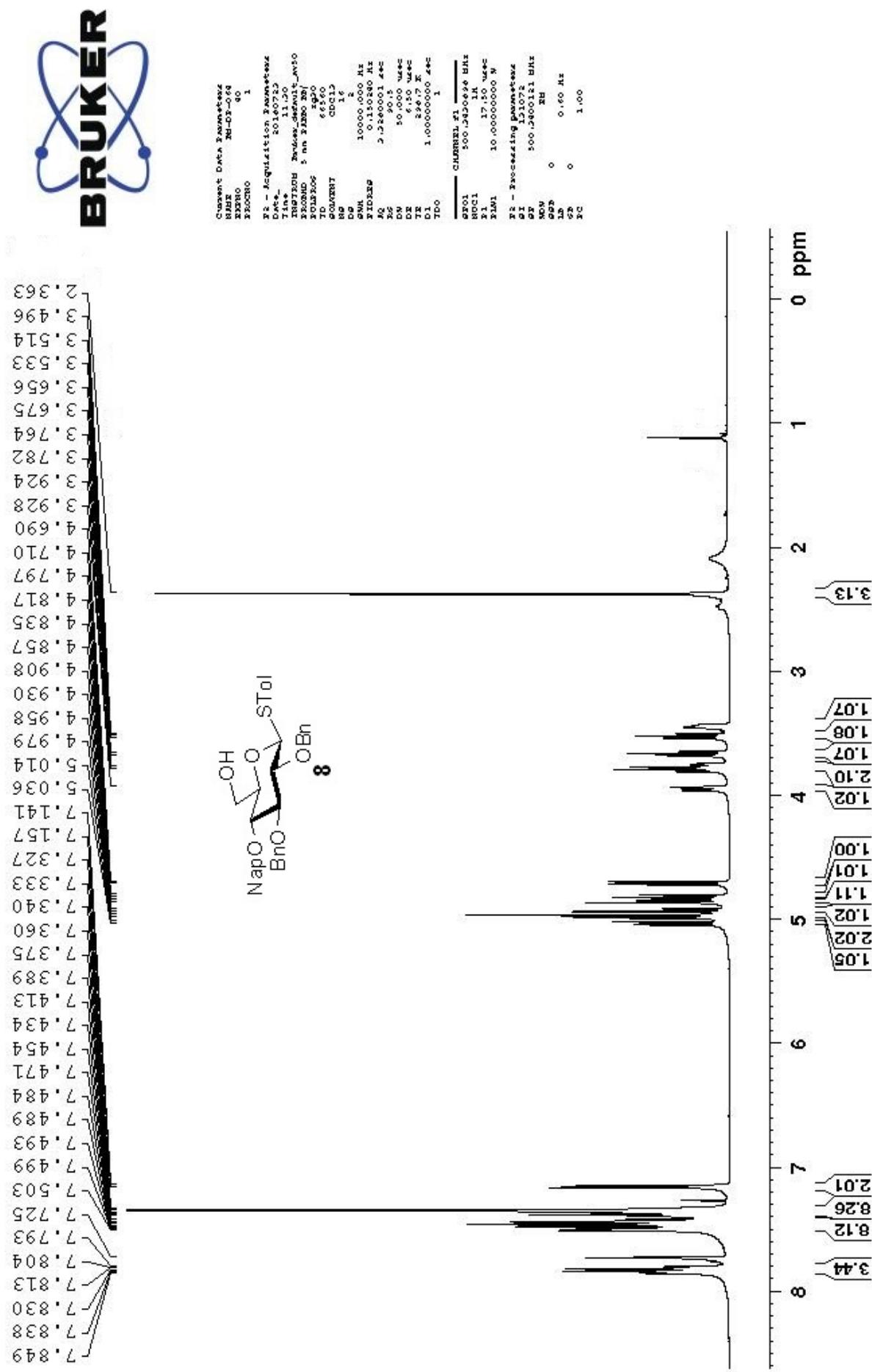


87.75

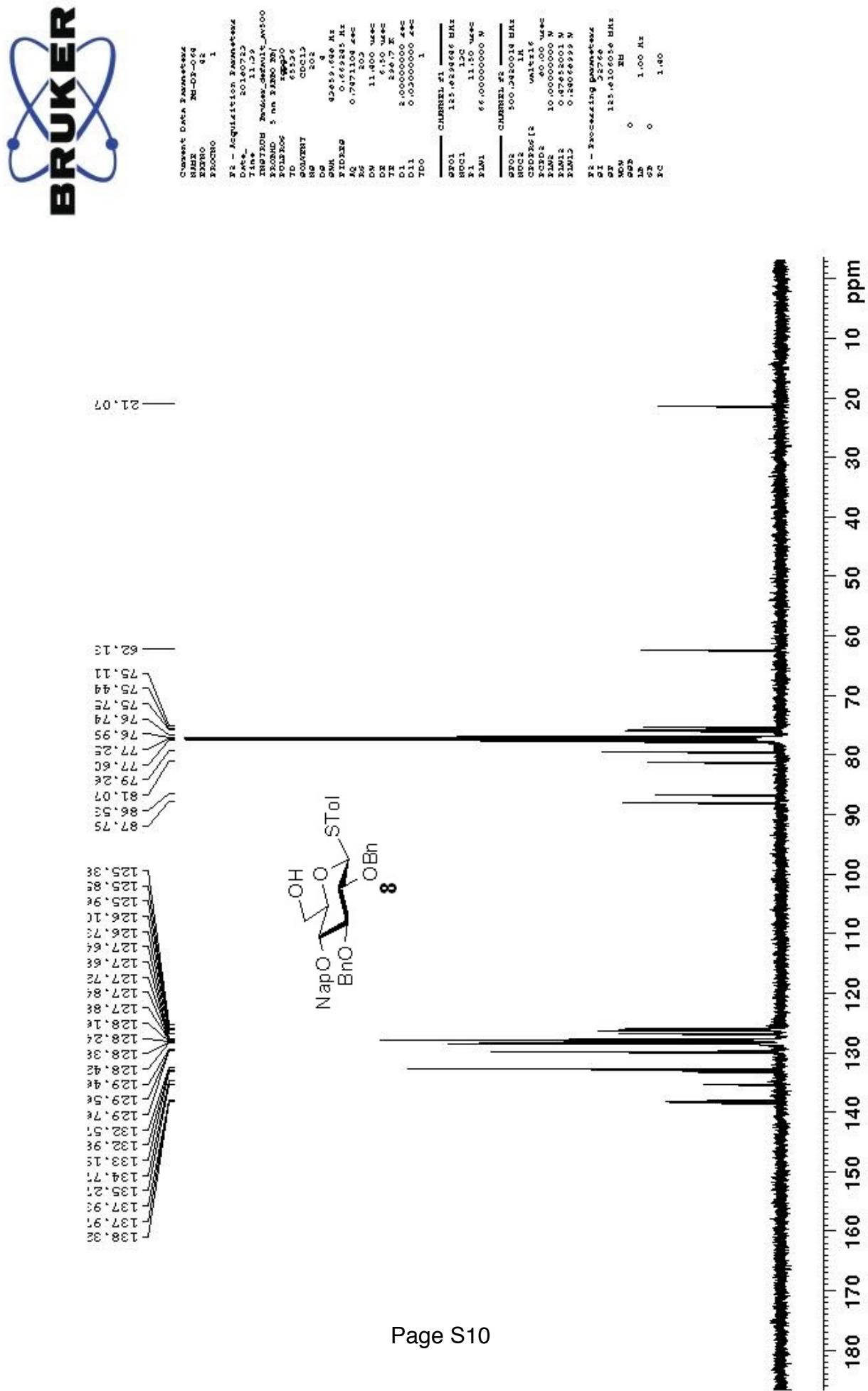
87.98

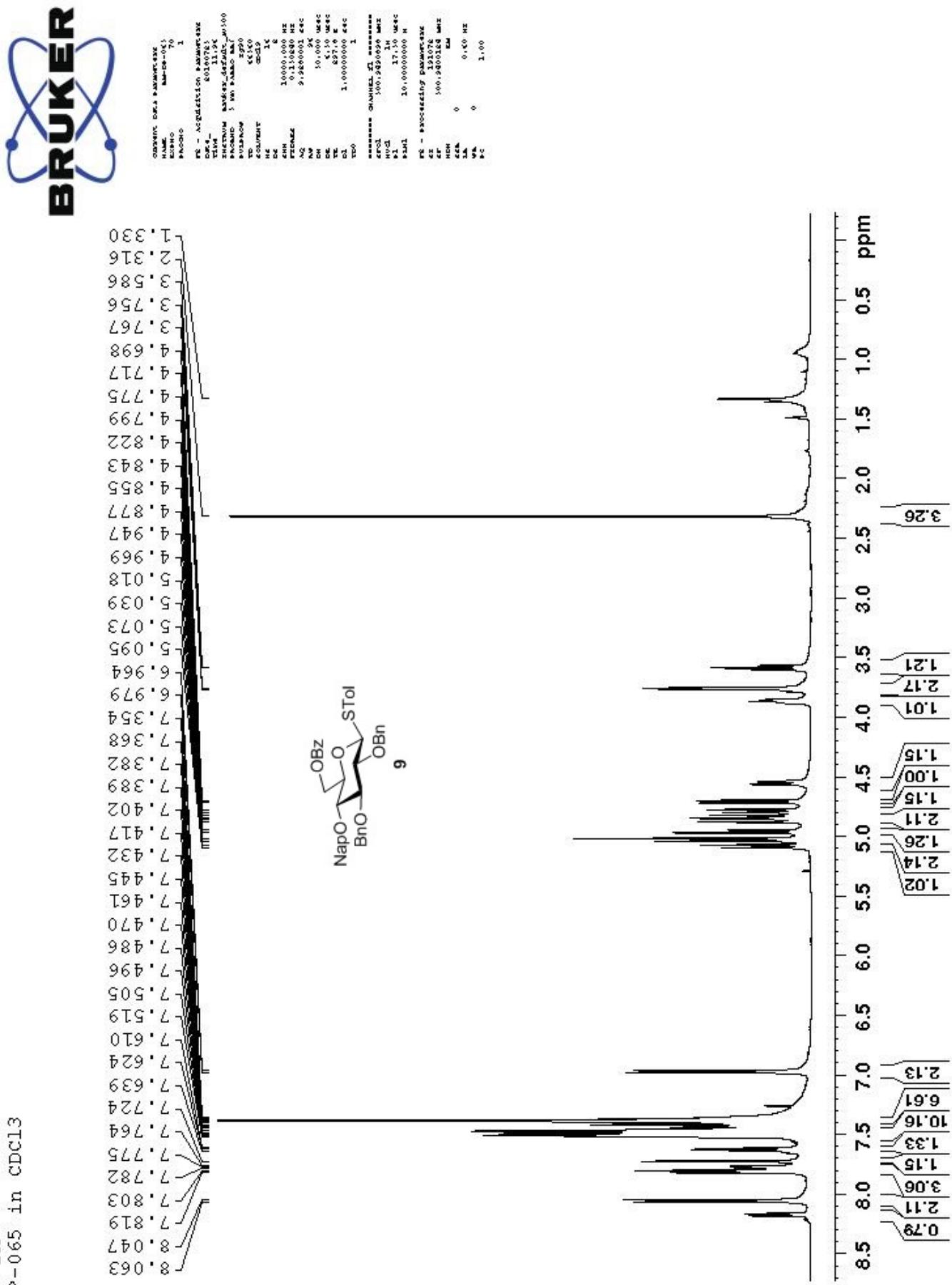


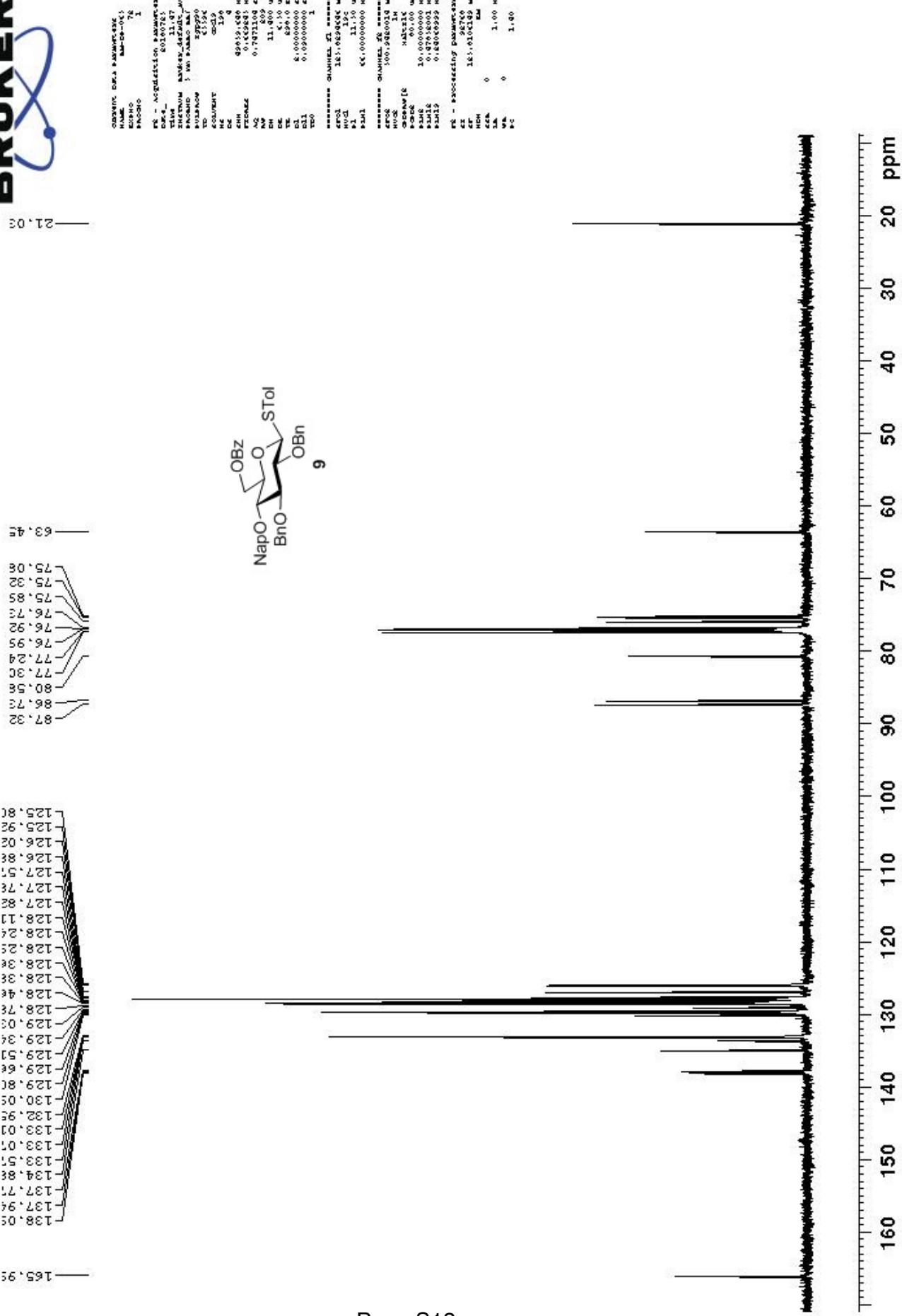
GROUP BM  
BM-DP-064 in CDCL3

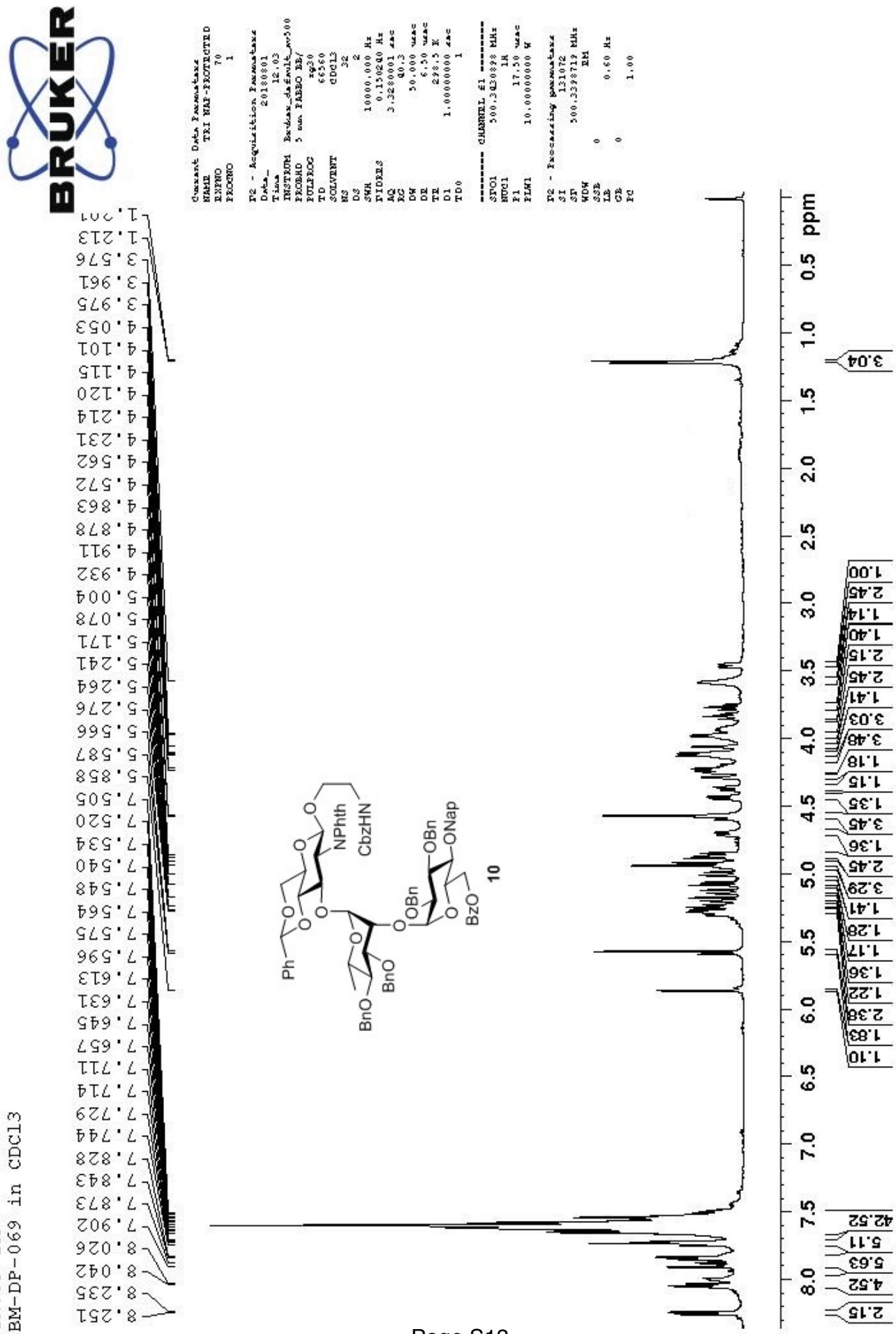


GROUP BM  
BM-DP-064 in cdc13











Current Data Parameters  
NAME TRI-ACCEPTOR

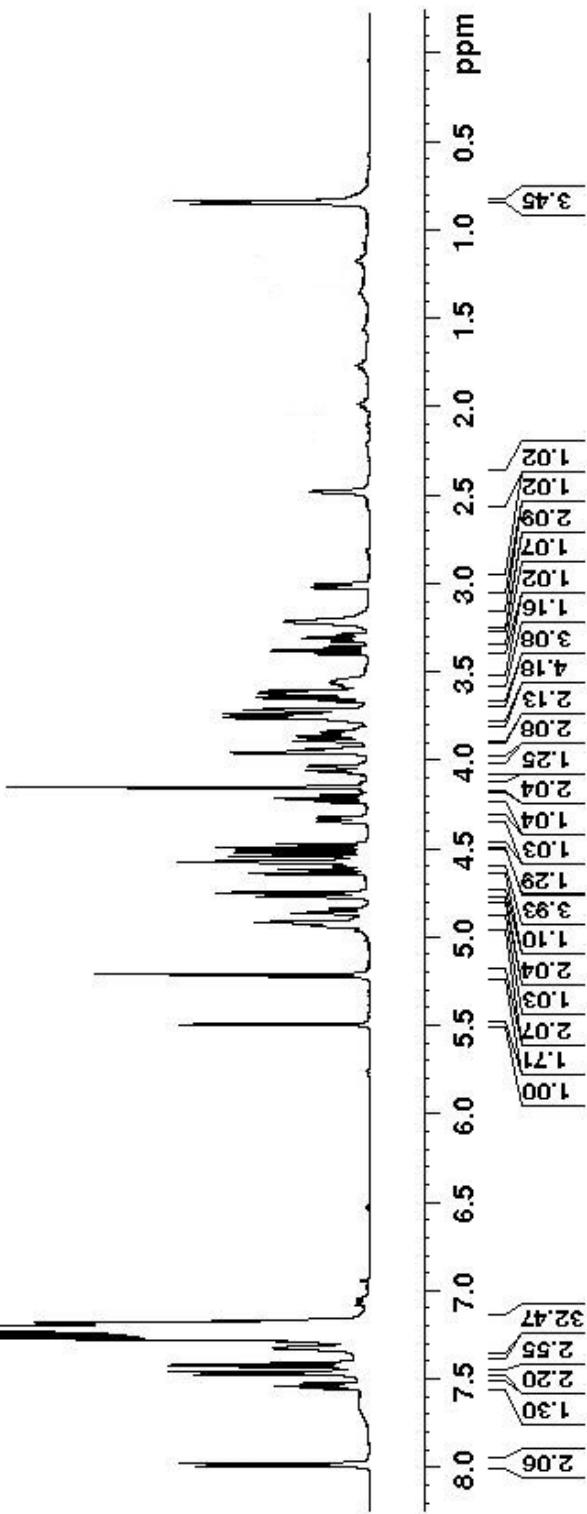
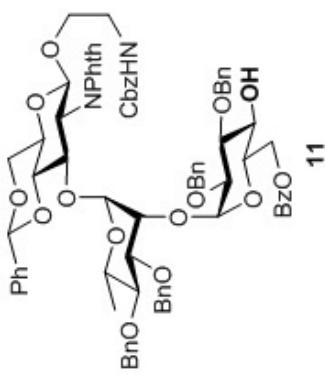
F2 - Acquisition Parameters					
Date	2018-01-01	Time	11.11	Instrument	Bruker default_sw500
PROFESSOR		5 mm PABCO BB/			
PULPROG		2980			
TD	66560				
SOLVENT	CDCl3				
NS	16				
DS	2				
SWB	10000.000 Hz				
FINRES	0.1150240 Hz				
ACQ	3.328001 sec				
RG5	50.8				
DW	50.000 usec				
DE	6.500 usec				
TE	226.6 K				
D1	1.0000000 sec				
TDO	1				

CHANNEL F1		
SPOL	500.9430398 MHz	
NUC1	1H	
F1	17.50 usec	
PL1	10.0000000 H	

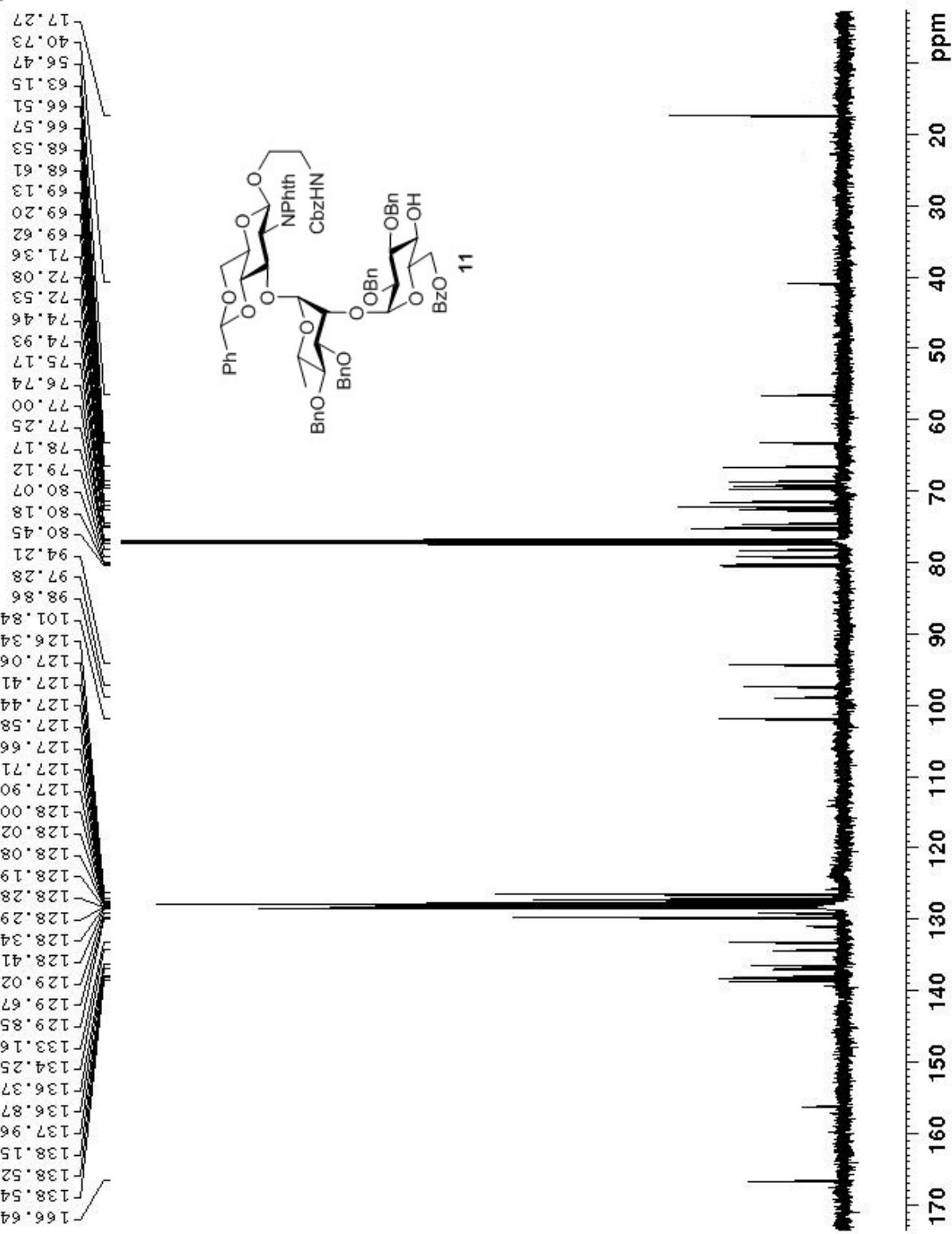
  

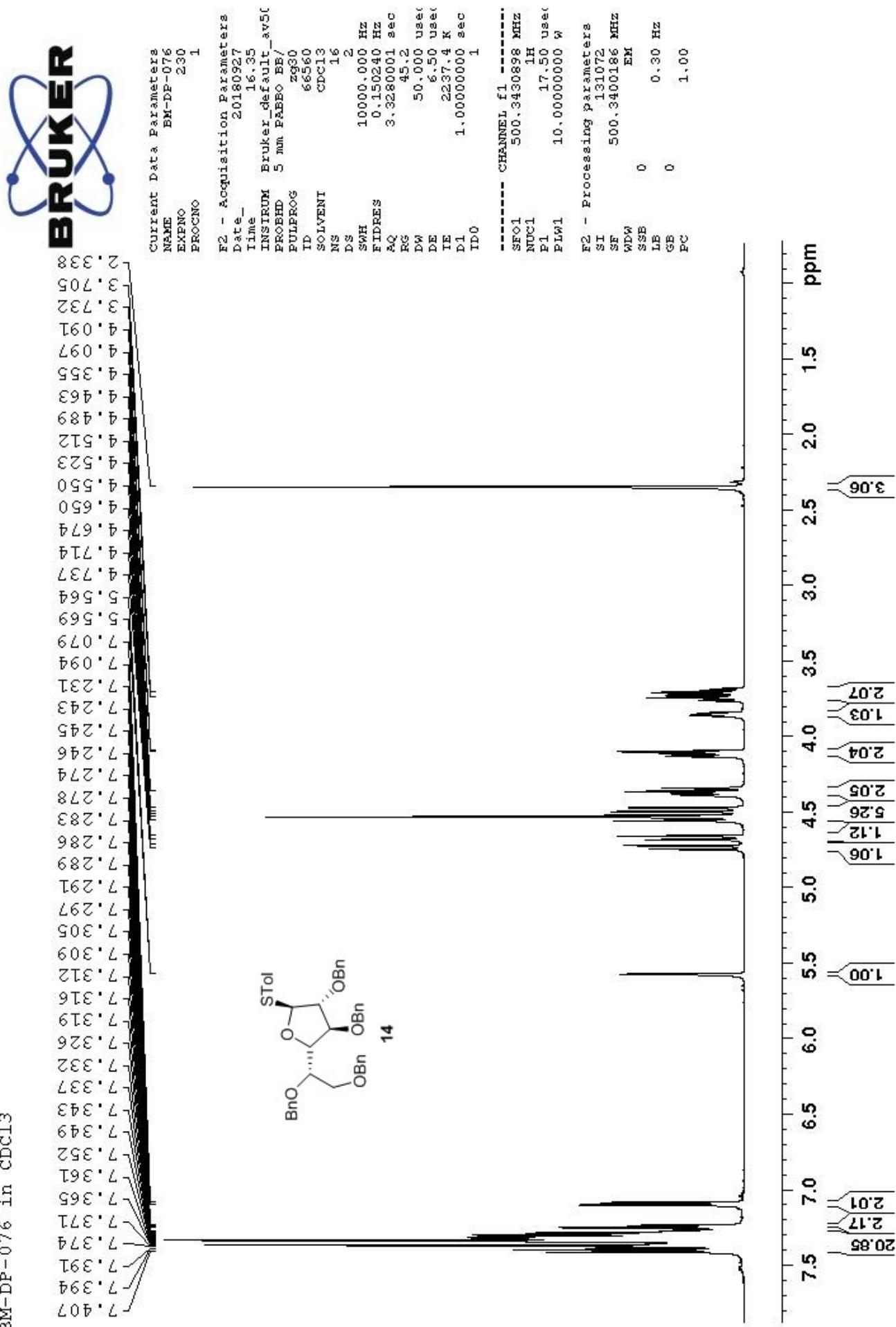
F2 - Processing Parameters		
SI	131.072	
SP	500.9430398 MHz	
WDW	0	
SSB	0	
LB	0.30 Hz	
PC	0	
FC	1.00	



GROUP BM  
BM-DP-082 in CDC13

**BRUKER**

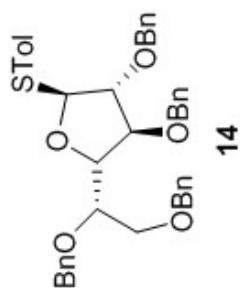






21.05

138.34 138.21 137.70 137.42 137.23 137.00 130.82 129.54 128.37 128.30 128.20 128.17 127.94 127.89 127.83 127.72 127.52 127.49 90.19 88.50 82.84 80.50 77.25 77.00 76.74 76.22 73.42 73.21 71.95 71.68 70.68



Current Data Parameters  
NAME EM-DP-076  
EXPNO 231  
PROCNO 1

F2 - Acquisition Parameters

Date 20180927  
Time 16:41  
INSTRUM Bruker default\_950  
PROBHD 5 mm PABBO BB/  
PULPROG zgpp90  
TD 65536  
SOLVENT CDCl<sub>3</sub>  
NS 51  
DS 4  
SWH 43859.648 Hz  
FIDRES 0.669245 Hz  
AQ 0.7471104 sec  
RG 203  
DW 1.400 usec  
DE 6.50 usec  
TP 2250.9 K  
D1 2.0000000 sec  
D11 0.03000000 sec  
TD0 1

CHANNEL f1

SPO1 125.8294646 MHz  
NUC1 13C  
P1 11.50 usec  
PLW1 66.00000000 Hz

CHANNEL f2

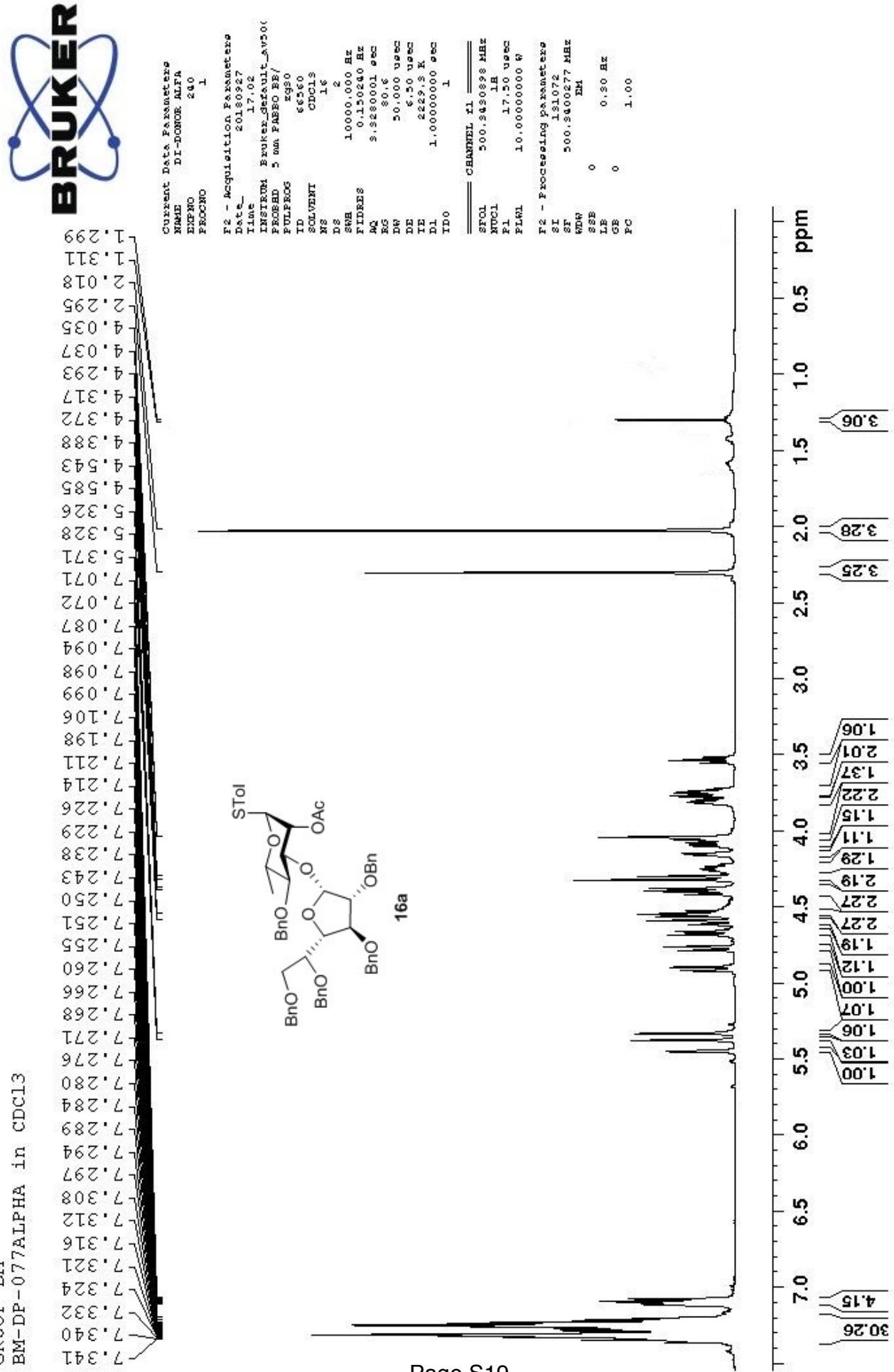
SPO2 500.3420014 MHz  
NUC2 1H  
CPDPFG[2  
PCPD2 80.00 usec  
PLW2 10.00000000 Hz  
PLW12 0.47852001 Hz  
PLW13 0.24066399 Hz

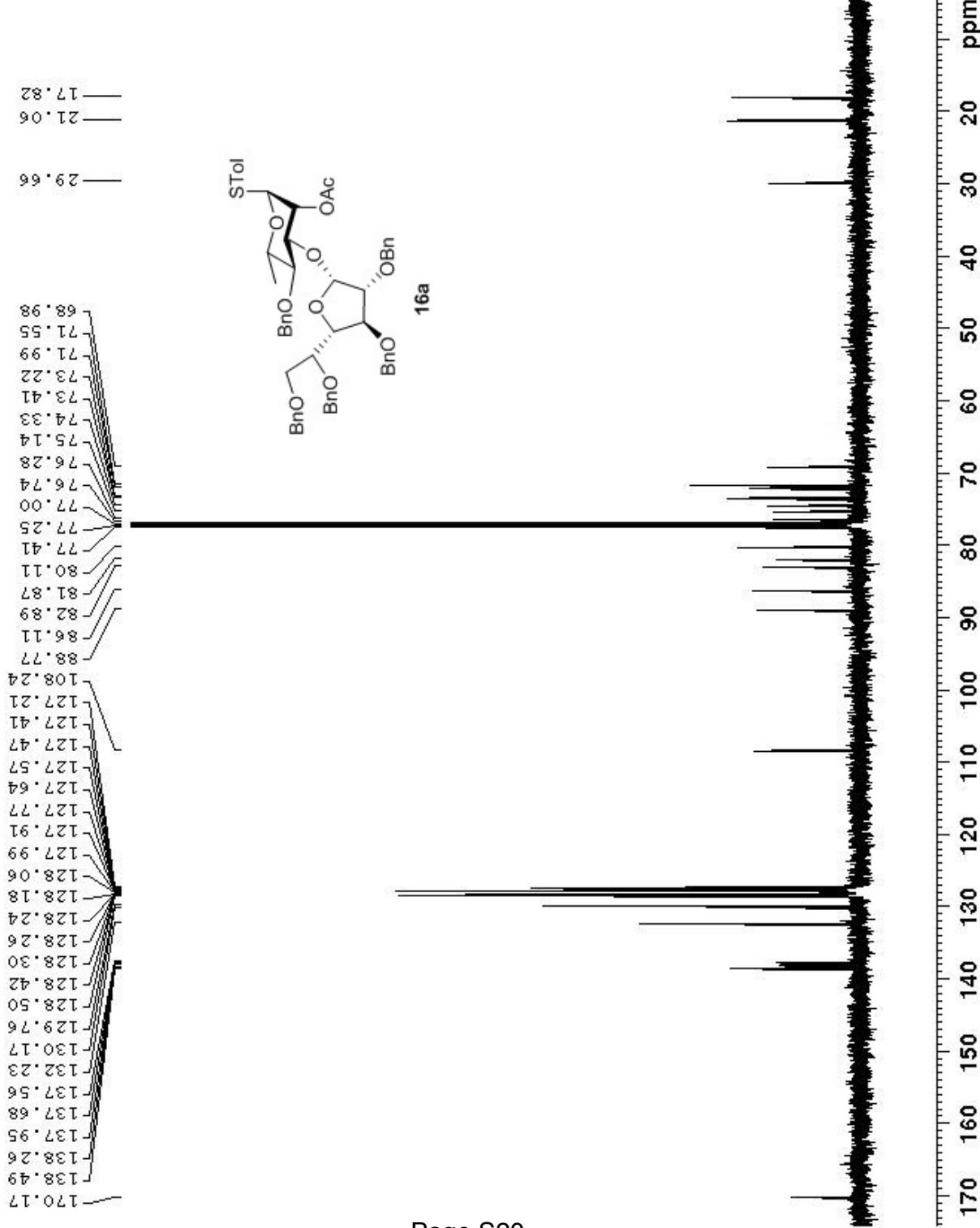
F2 - Processing Parameters

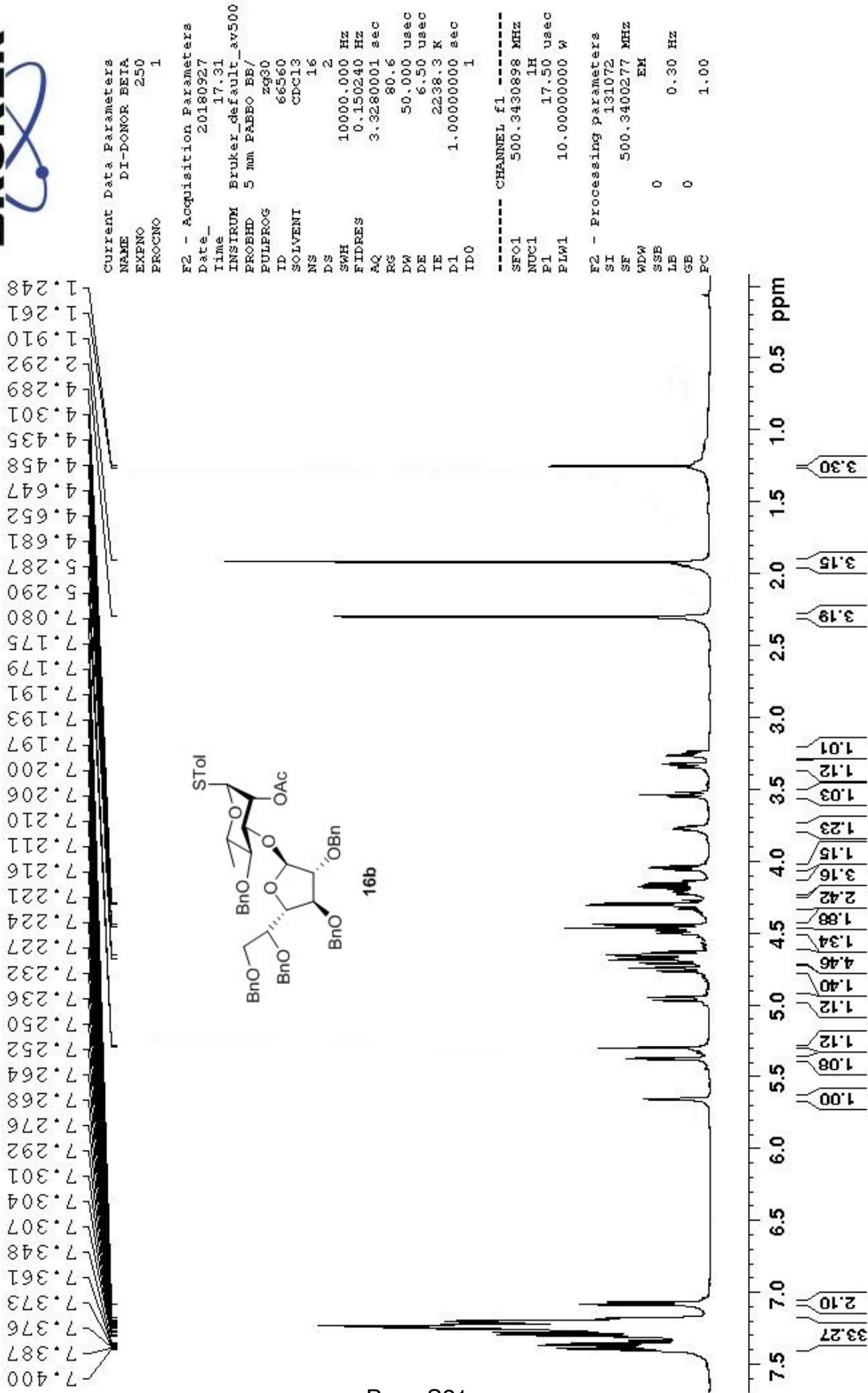
SI 32768  
SF 125.8106059 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.10



GROUP BM  
BM-DP-077ALPHA in CDC13

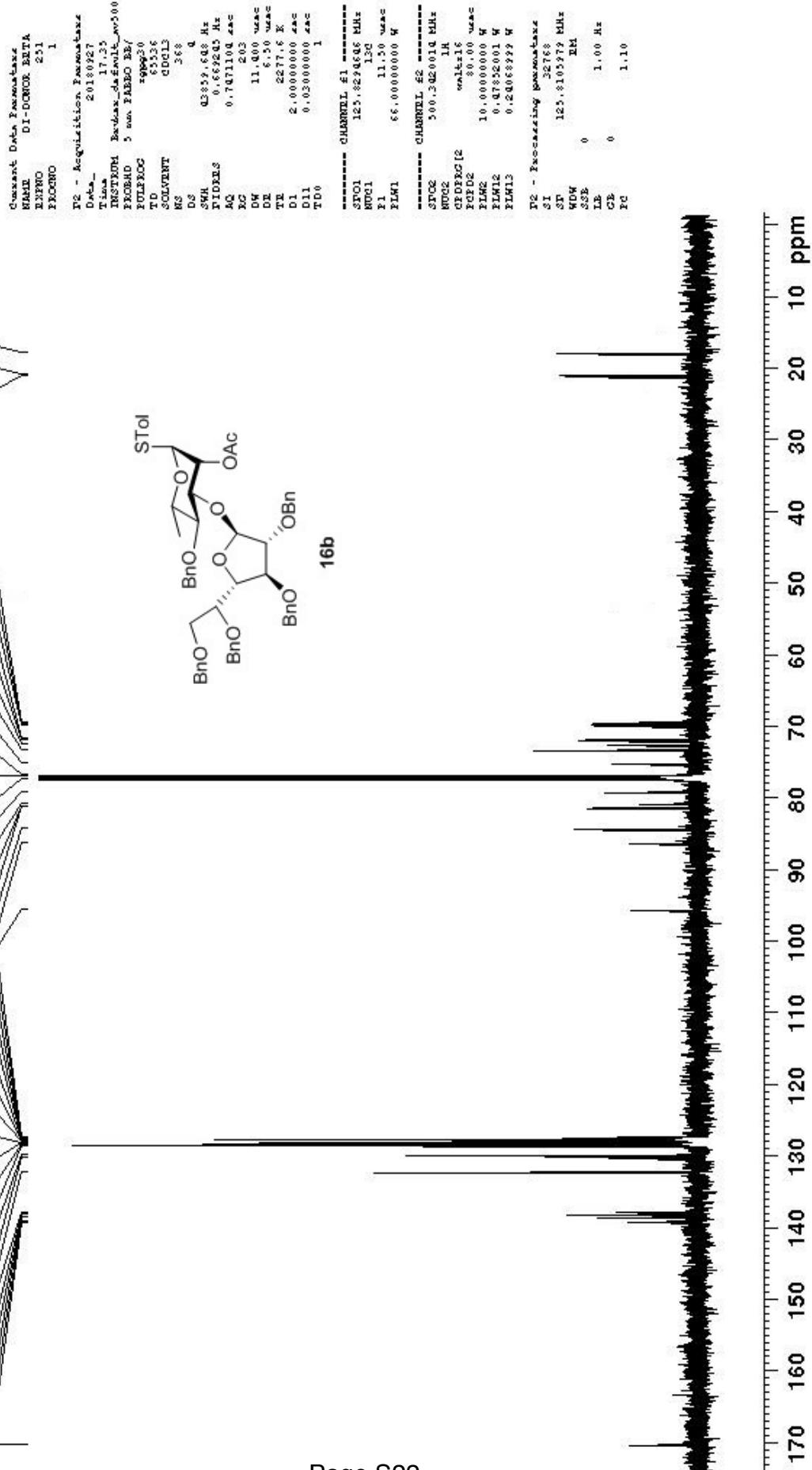






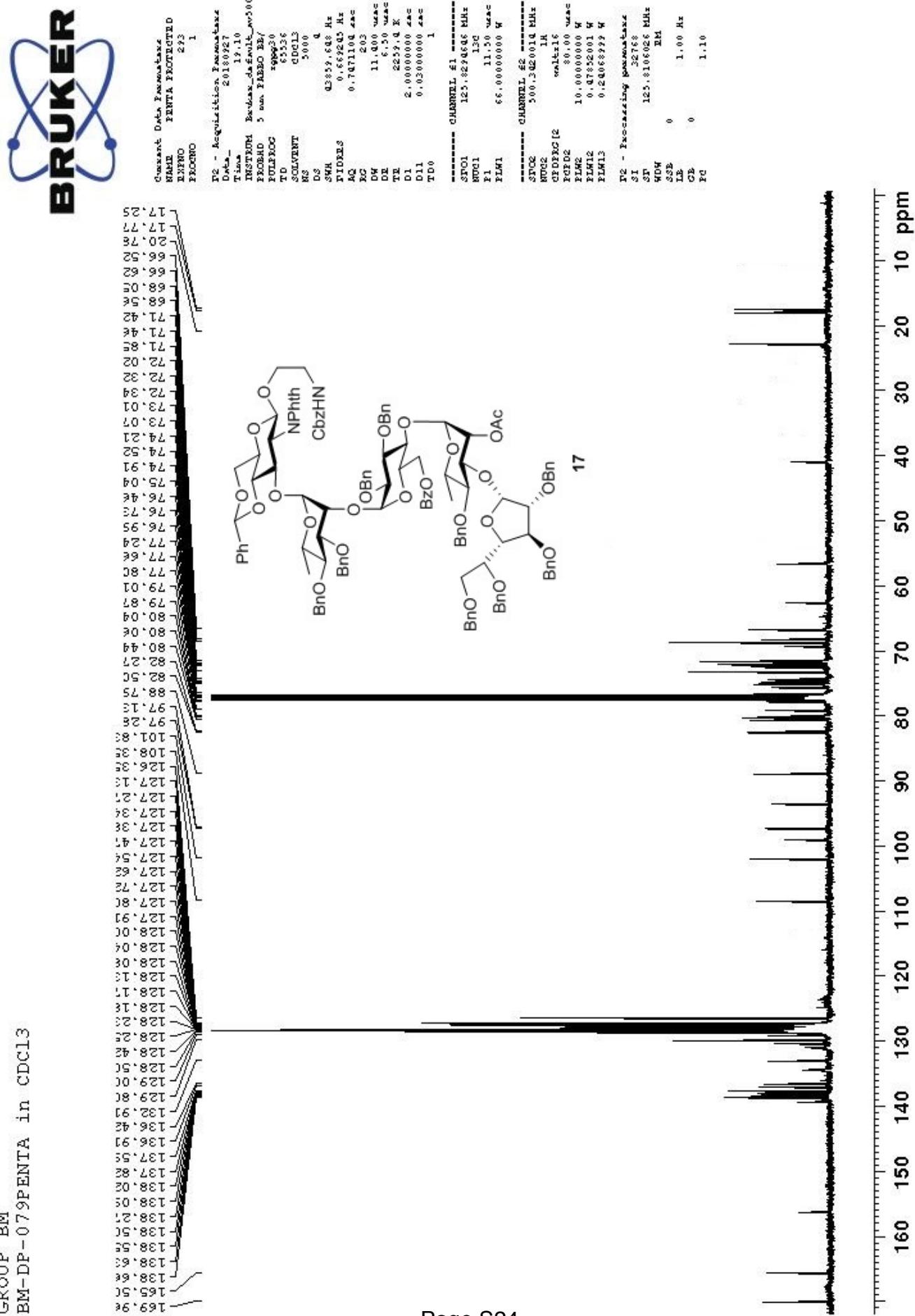


170.20  
170.07  
170.07  
170.86  
170.82



GROUP BM  
BM-DP-076PENTA in CDCl<sub>3</sub>





Current Data Parameters  
NAME BM-DP-090  
EXTNO 00

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F2 - Acquisition Parameters
Date _ 2018126
Time _ 15.32
INSTRUM Bruker_default_aw500
PROBHD 5 mm PABBO BB/
PULPROG zg30
TD 66560
SOLVENT MeD
NS 32
DS 2
SWH 10000.000 Hz
FIDRES 0.150240 Hz
AQ 3.328001 sec
RG 50.8
DW 50.000 usec
DE 6.50 usec
TE 280.0 K
D1 1.0000000 sec
TD0 1

----- CHANNEL f1 -----
SF01 500.3430898 MHz
NUC1 1H
P1 17.50 usec
PLW1 10.0000000 W

F2 - Processing parameters
SI 131072
SF 500.3400147 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PE 1.00

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