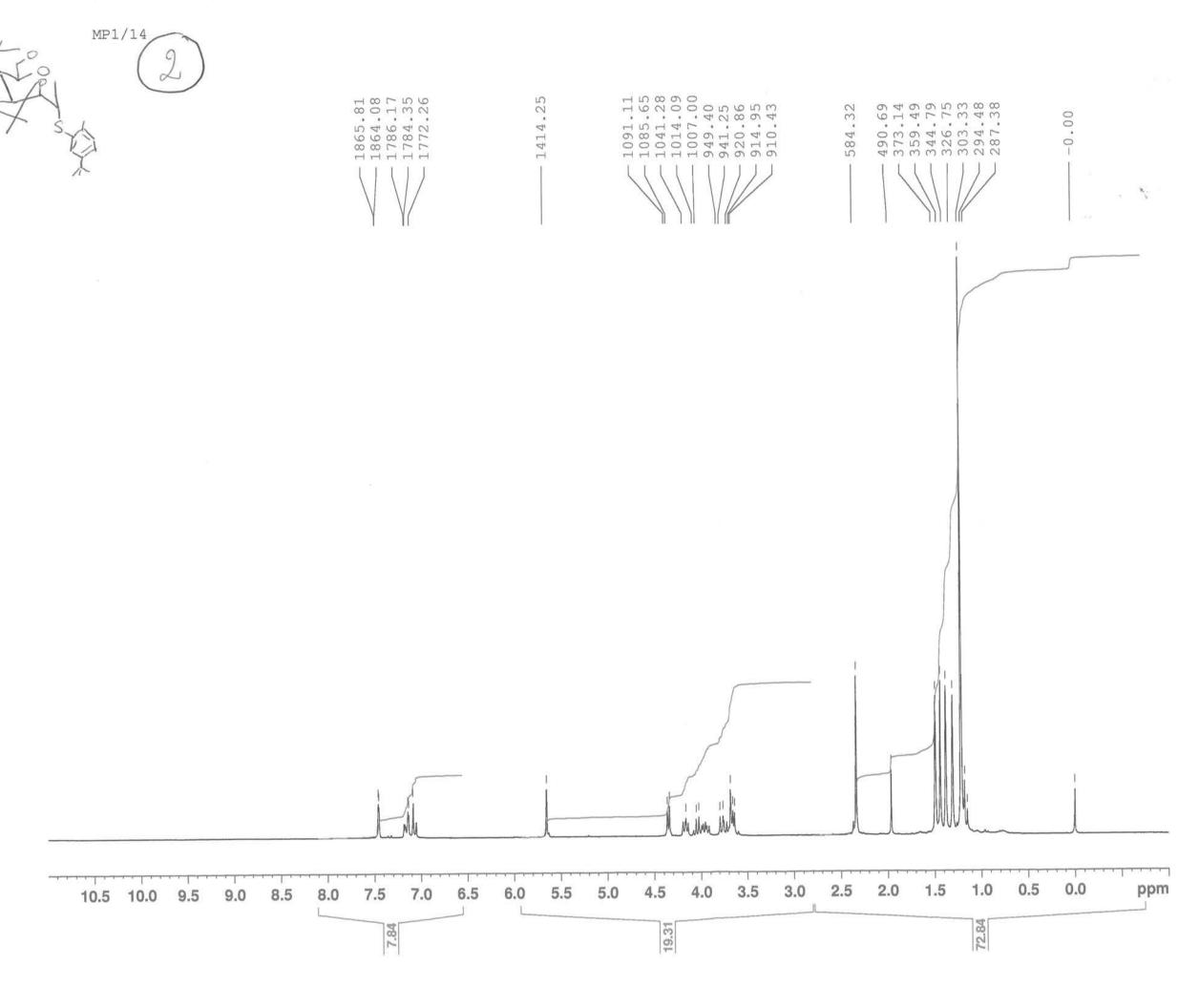
Mantyl tagged oligo α (1-> 2) mannosides as *Candida albicans* β -mannosyltransferases substrates: a comparison between synthetic strategies

Marilyne Pourcelot, Laurent Cattiaux, Ghenima	Sfihi-Loualia, Emeline Fabre,	Frédéric Krzewinski,
Chantal Fradin, Daniel Poulain, Florence Delp	lace , Yann Guérardel , Jean-Ma	aurice Mallet *

RSC Advances, 2013

Supplementary information:

¹H and ¹³ C NMR spectra of synthesized compounds





Current Da	ata Parameters
	May27-2011-JMM
EXPNO	60
PROCNO	1
11100110	
F2 - Acqu	isition Parameters
Date	20110527
Time	13.47
INSTRUM	spect
PROBHD	5 mm QNP 1H/1
PULPROG	zg30
TD	16384
SOLVENT	CDC13
NS	64
DS	2
SWH	5175.983 Hz
FIDRES	0.315917 Hz
AO	1.5827444 sec
RG	114
DW	96.600 used
DE	8.00 used
TE	300.0 K
D1	0.20000000 sec
TD0	1
	CHANNEL fl ======
NUC1	1H
P1	10.00 used
PL1	-3.00 dB
SFO1	250.1315446 MHz
SECT	230.131313 1111
F2 - Proc	essing parameters
SI	8192
SF	250.1300270 MHz
mr.	EM

EM

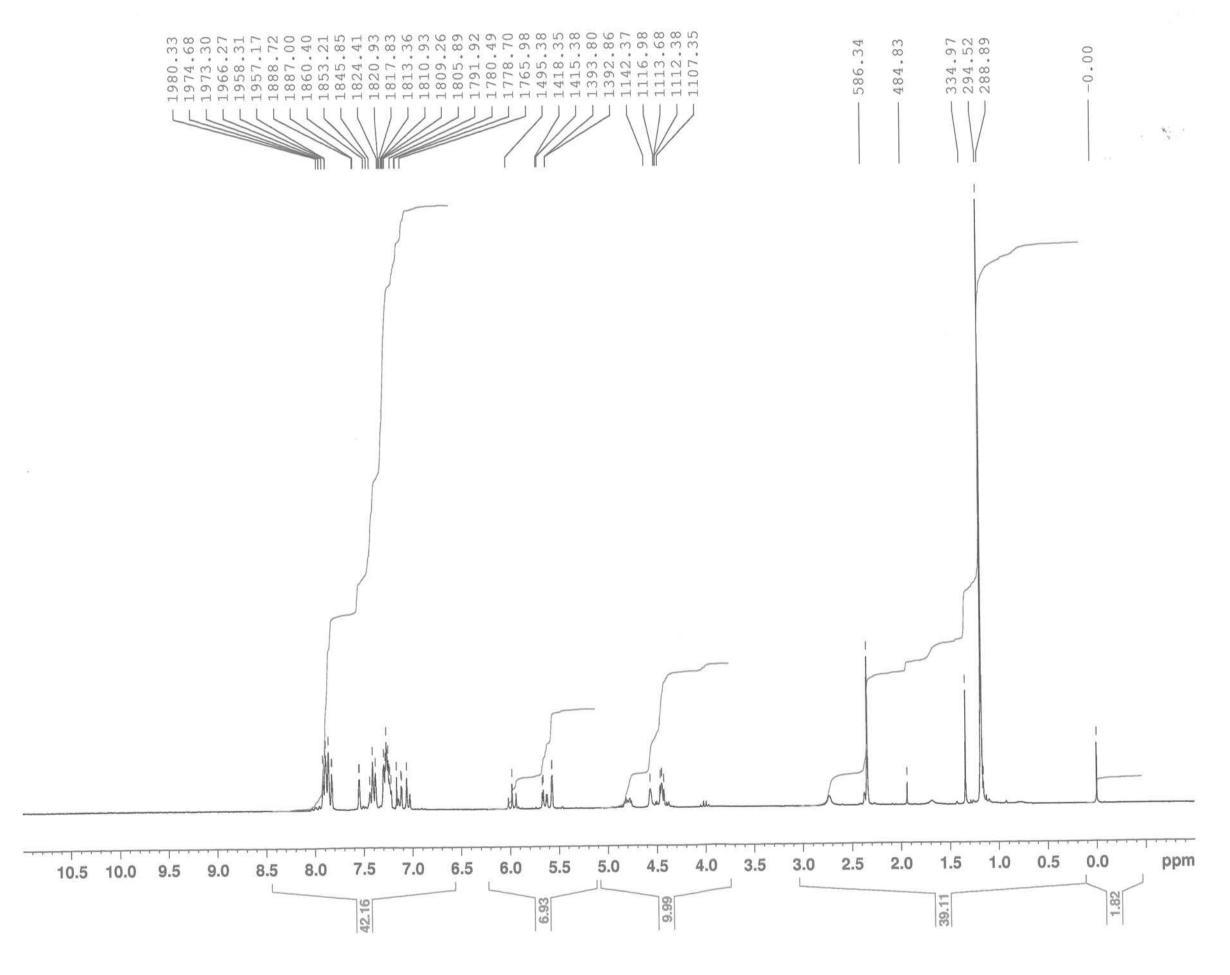
0.30 Hz 0 1.00

WDW

SSB LB GB PC MP1/19







Current	Data Parameters
NAME	Jun07-2011-JMM
EXPNO	60
PROCNO	1

F2 - Acqu	isition Paramet	ers
Date_	20110607	
Time	12.21	
INSTRUM	spect	
	5 mm QNP 1H/1	
PULPROG	zq30	
TD	16384	
SOLVENT	CDC13	
NS	64	
DS	2	
SWH	5175.983	Hz
FIDRES	0.315917	
AO	1.5827444	
RG	228.1	
DW	96.600	usec
DE	8.00	
TE	300.0	
D1	0.20000000	-
TDO	0.20000000	200
100	_	
	CHANNEL fl ====	
NUC1	1H	
	10.00	11000
P1 PL1	-3.00	
PLIT	-5.00	

SF01	250	.1315446	MHZ
F2 -	Processing	paramete 8192	ers
SF	250	.1300318	MHZ
WDW		EM 0	
LB		0.30	Hz
GB		1.00	
PC		1.00	



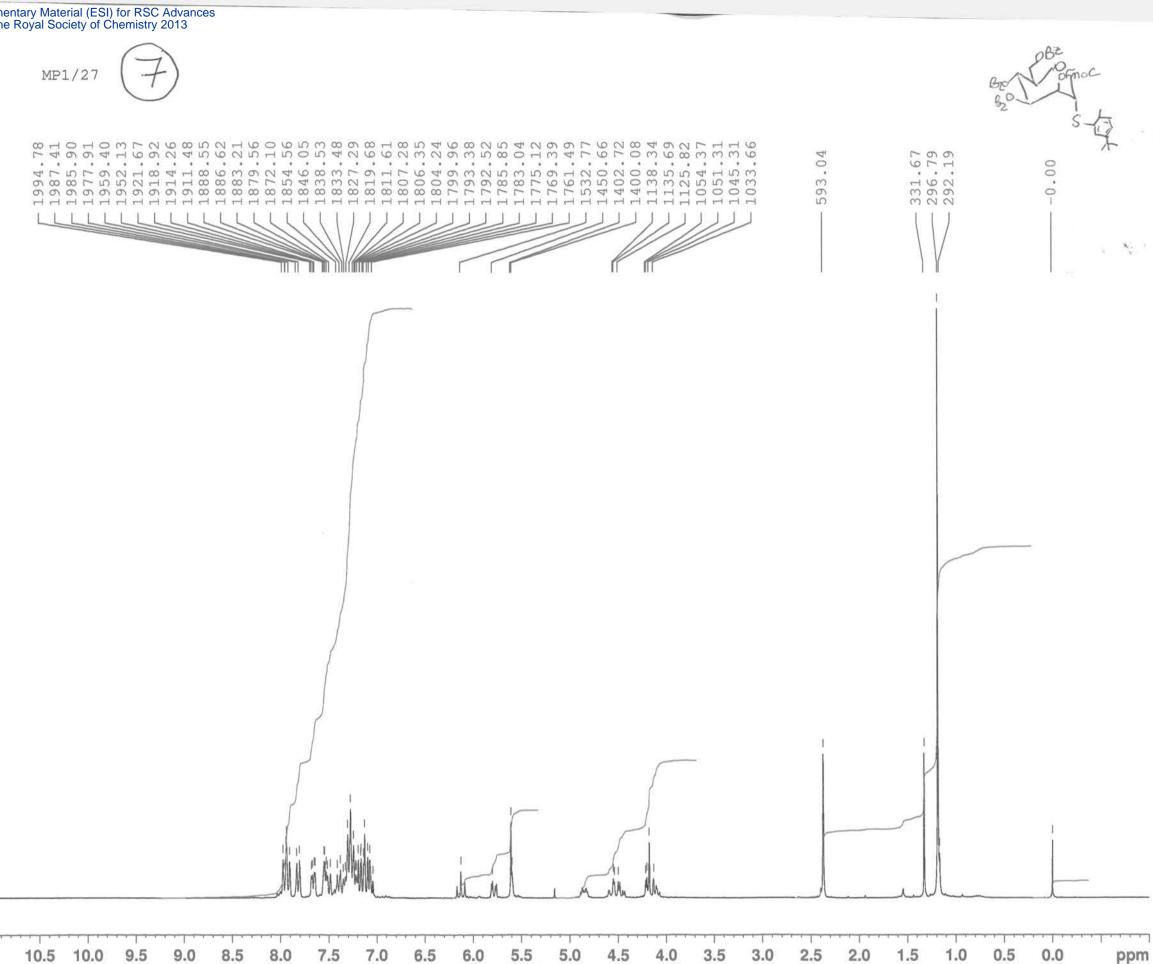
Current Data Parameters NAME Jun07-2011-JMM EXPNO 70 PROCNO F2 - Acquisition Parameters Date_ 20110607 Time 12.40 INSTRUM spect 5 mm QNP 1H/1 PROBHD PULPROG jmod TD

65536 SOLVENT CDC13 NS 256 15060.241 Hz SWH FIDRES 0.229801 Hz AQ 2.1758451 sec 16384 33.200 usec DW DE 8.00 usec TE 300.0 K 145.0000000 CNST2 CNST11 D1 2.00000000 sec d20 0.00689655 sec DELTA 0.00001019 sec TDO

NUC1 13C
P1 8.00 usec
p2 16.00 usec
PL1 -3.00 dB
SF01 62.9015280 MHz

CPDPRG2 waltz16
NUC2 1H
PCPD2 100.00 usec
PL2 -3.00 dB
PL12 19.00 dB
SF02 250.1310005 MHz

F2 - Processing parameters
SI 32768
SF 62.8952390 MHz
WDW EM
SSB 0
LB 1.00 Hz
GB 0
PC 1.40



11.61

29.71

7.41

49.80



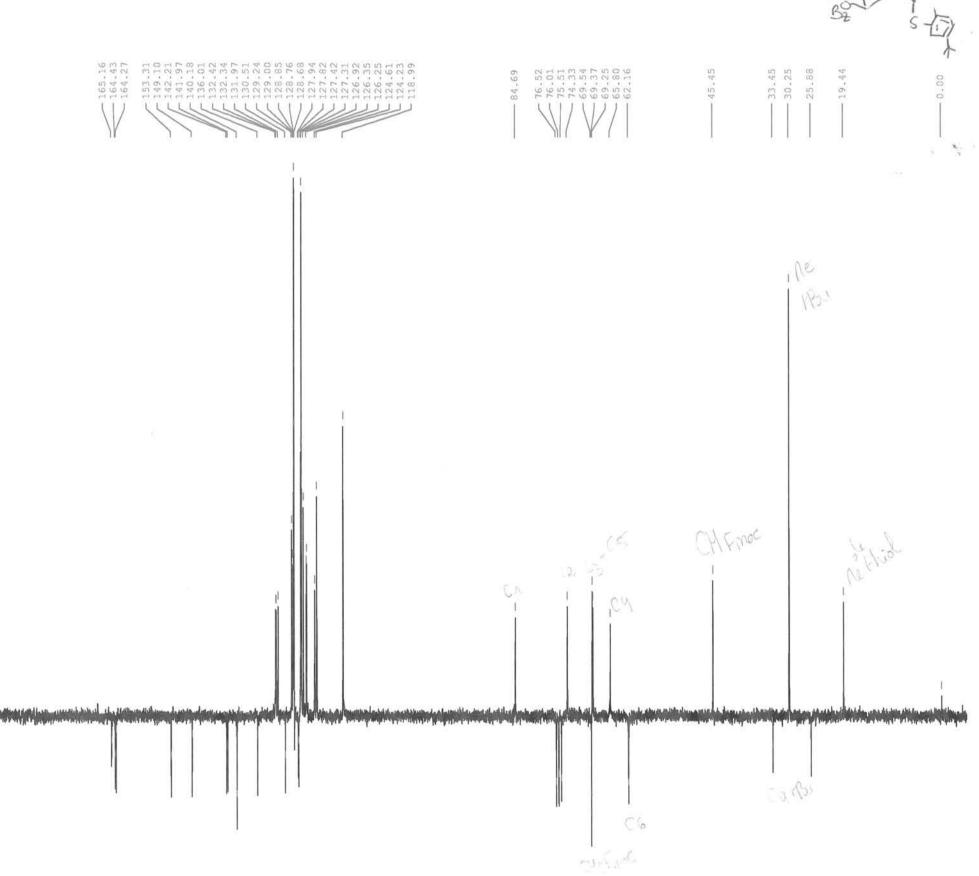
Current	Data	Parameters
NAME	Jun	22-2011-JMM
EXPNO		40
PROCNO		1

F2 - Acquis	sition Paramet	ers
Date_	20110622	
Time	12.30	
INSTRUM	spect	
PROBHD 5	mm QNP 1H/1	
PULPROG	zg30	
TD	16384	
SOLVENT	CDC13	
NS	64	
DS	2	
SWH	5175.983	Hz
FIDRES	0.315917	Hz
AQ	1.5827444	sec
RG	161.3	
DW	96.600	usec
DE	8.00	usec
TE	300.0	K
D1	0.20000000	sec
TD0	1	

	CHANNEL	f1	-	
NUC1			1H	
P1		10	00.0	used
PL1		-	3.00	dB
SF01	250.1	1315	446	MHz

F2 -	Processing	paramete	ers
SI		8192	
SF	250	.1300409	MHZ
WDW		EM	
SSB		0	
LB		0.30	Hz
GB		0	
PC		1.00	

MP1/27



70

210 200 190 180 170 160 150 140 130 120 110 100



Current NAME EXPNO PROCNO	Data Par Jun22-2	
F2 - Acq Date_ Time INSTRUM PROBHD PULPROG TD SOLVENT NS DS		Parameters 0110622 12.49 spect P 1H/1 jmod 65536 CDC13 256
SWH FIDRES AQ RG DW DE	0	060.241 Hz .229801 Hz 1758451 sec 16384 33.200 usec 8.00 usec
TE CNST2 CNST11 D1 d20 DELTA TD0	1. 2.0 0.0	300.0 K 0000000 0000000 0000000 sec 0689655 sec 0001019 sec
NUC1 P1 P2 PL1 SF01		f1 ====== 13C 8.00 usec 16.00 usec -3.00 dB 9015280 MHz
CPDPRG2 NUC2 PCPD2 PL2 PL12 SFO2	ontrales to	f2 ====================================
F2 - Pro SI SF WDW SSB LB		parameters 32768 8953078 MHz EM 0 1.00 Hz

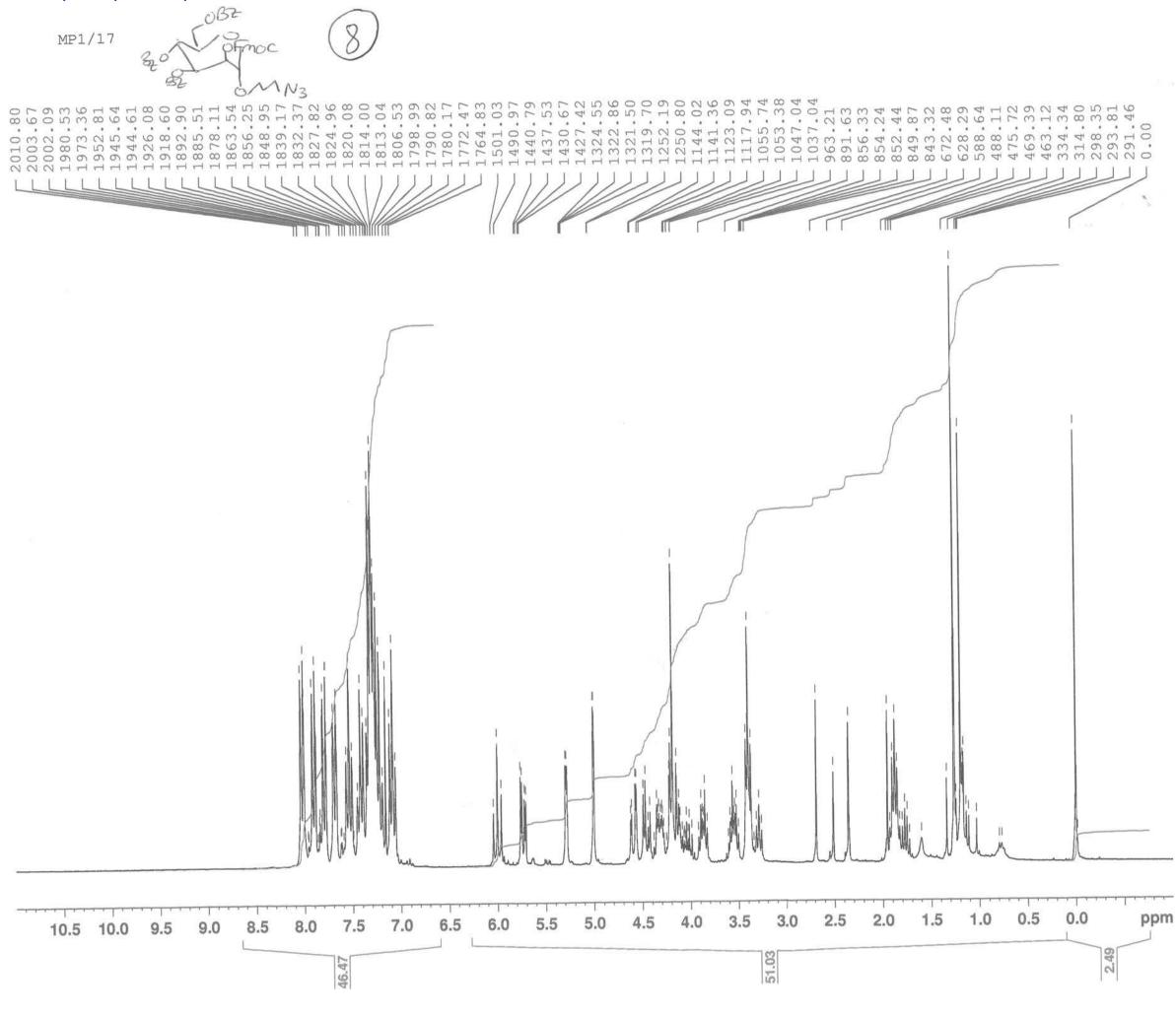
0

GB PC

20

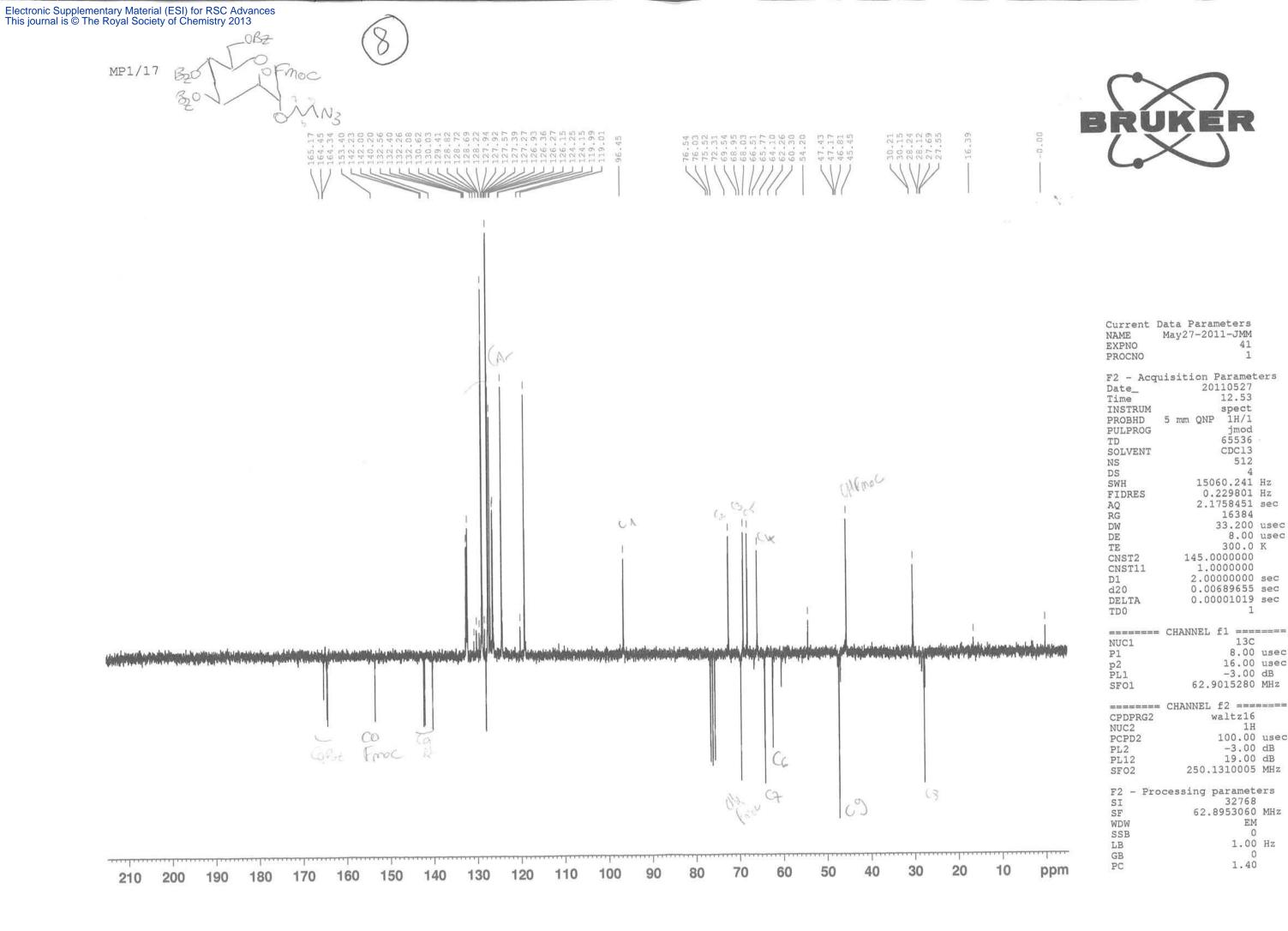
10

ppm





	Data Parameters	
NAME	May27-2011-JMM 40	
EXPNO	1	
PROCNO	1	
F2 - Acq	uisition Paramet	ers
Date_	20110527	
Time	12.16	
INSTRUM	spect	
PROBHD	5 mm QNP 1H/1	
PULPROG	zg30	
TD	16384	
SOLVENT	CDC13	
NS	64	
DS	2	
SWH	5175.983	Hz
FIDRES	0.315917	
AO	1.5827444	
RG	203.2	-
DW	96.600	usec
DE	8.00	
TE	300.0	
D1	0.20000000	
TD0	1	500
100	*	
	= CHANNEL fl ====	
NUC1	1H	
P1	10.00	
PL1	-3.00	
SF01	250.1315446	MHZ
F2 - Pro	ocessing paramete	ers
SI	8192	
SF	250.1300330	MHZ
WDW	EM	
SSB	0	
LB	0.30	Hz
GB	0.50	****
PC	1.00	
FC	1.00	



May27-2011-JMM

5 mm QNP 1H/1

41

20110527

12.53 spect

jmod 65536

CDC13

15060.241 Hz

0.229801 Hz 2.1758451 sec

16384

145.0000000

1.0000000 2.00000000 sec

0.00689655 sec

0.00001019 sec

waltz16

250.1310005 MHz

32768

0 1.00 Hz

0

1.40

62.8953060 MHz EM

1H

-3.00 dB

19.00 dB

100.00 usec

13C

8.00 usec

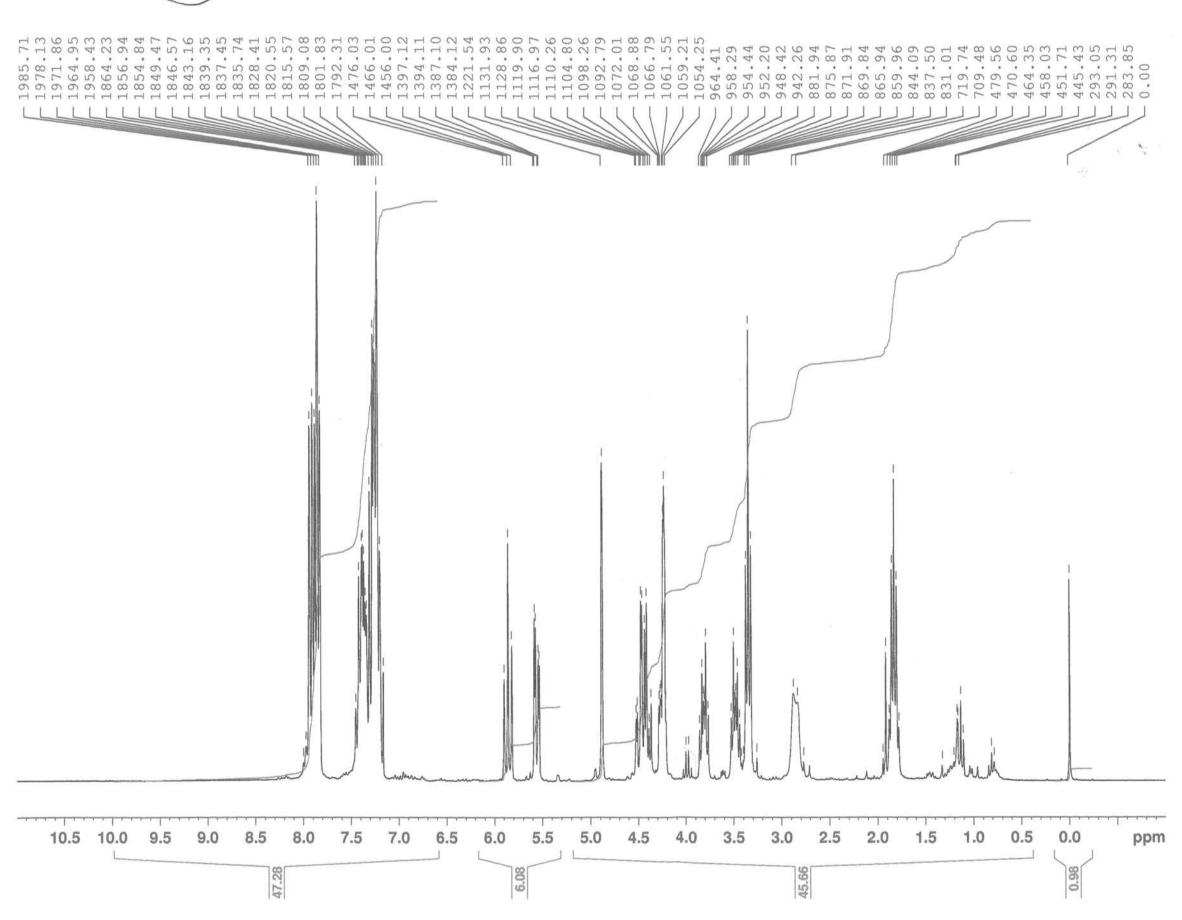
16.00 usec -3.00 dB 62.9015280 MHz

33.200 usec

8.00 usec 300.0 K

512

MP1/23C 9 0





Current	Data Parameters
NAME	Jun16-2011-JMM
EXPNO	30
PROCNO	1

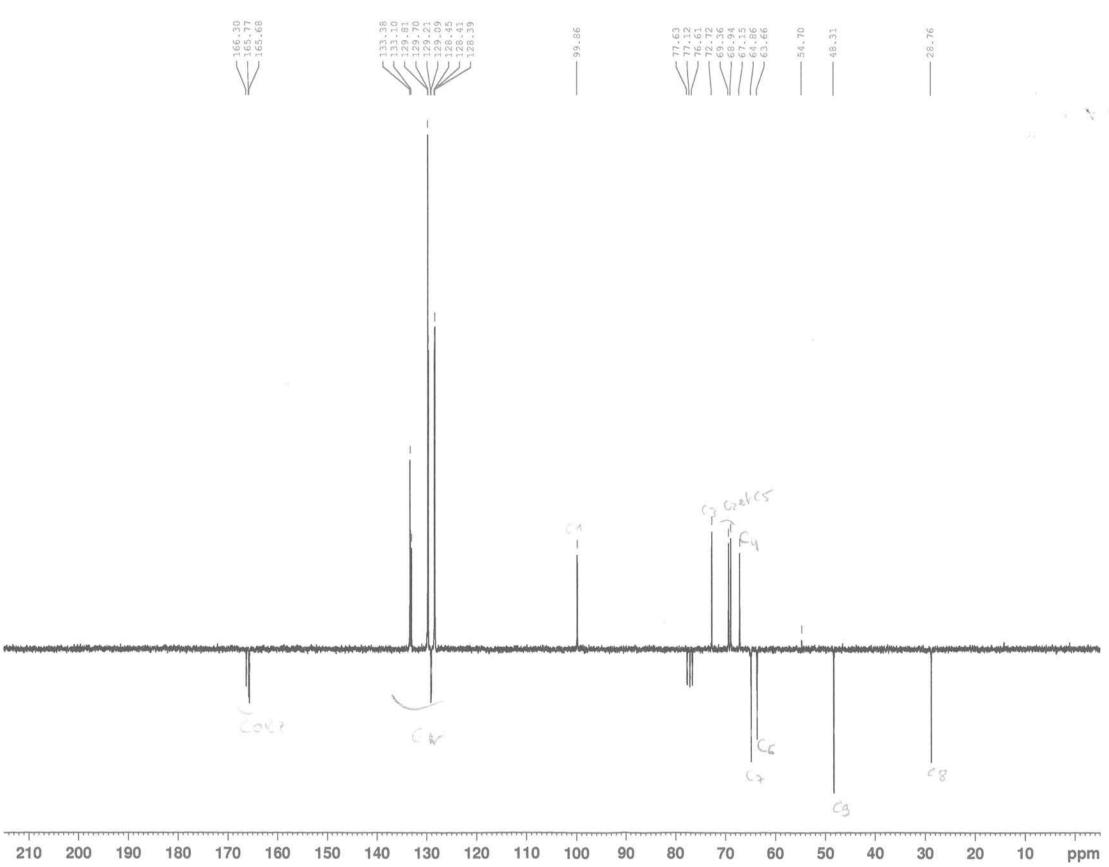
F2 - Acquisition Paramet	cers
Date_ 20110616	
Time 11.54	
INSTRUM spect	
PROBHD 5 mm QNP 1H/1	
PULPROG zg30	
TD 16384	
SOLVENT CDC13	
NS 64	
DS 2	
SWH 5175.983	Hz
FIDRES 0.315917	Hz
AQ 1.5827444	sec
RG 203.2	
DW 96.600	usec
DE 8.00	usec
TE 300.0	K
D1 0.20000000	sec
TDO 1	

AND SHE AND DESCRIPTION OF THE RESERVE AND DESCRIPTION OF THE	CHANNEL	f1		
NUC1			1H	
P1		10	00.0	use
PL1		-3	3.00	dB
SFO1	250.3	1315	5446	MHz

F2 -	Processing	paramete:	rs
SI		8192	
SF	250	.1300312	MHz
WDW		EM	
SSB		0	
LB		0.30	Hz
GB		0	
PC		1.00	

MP1/23C (9)





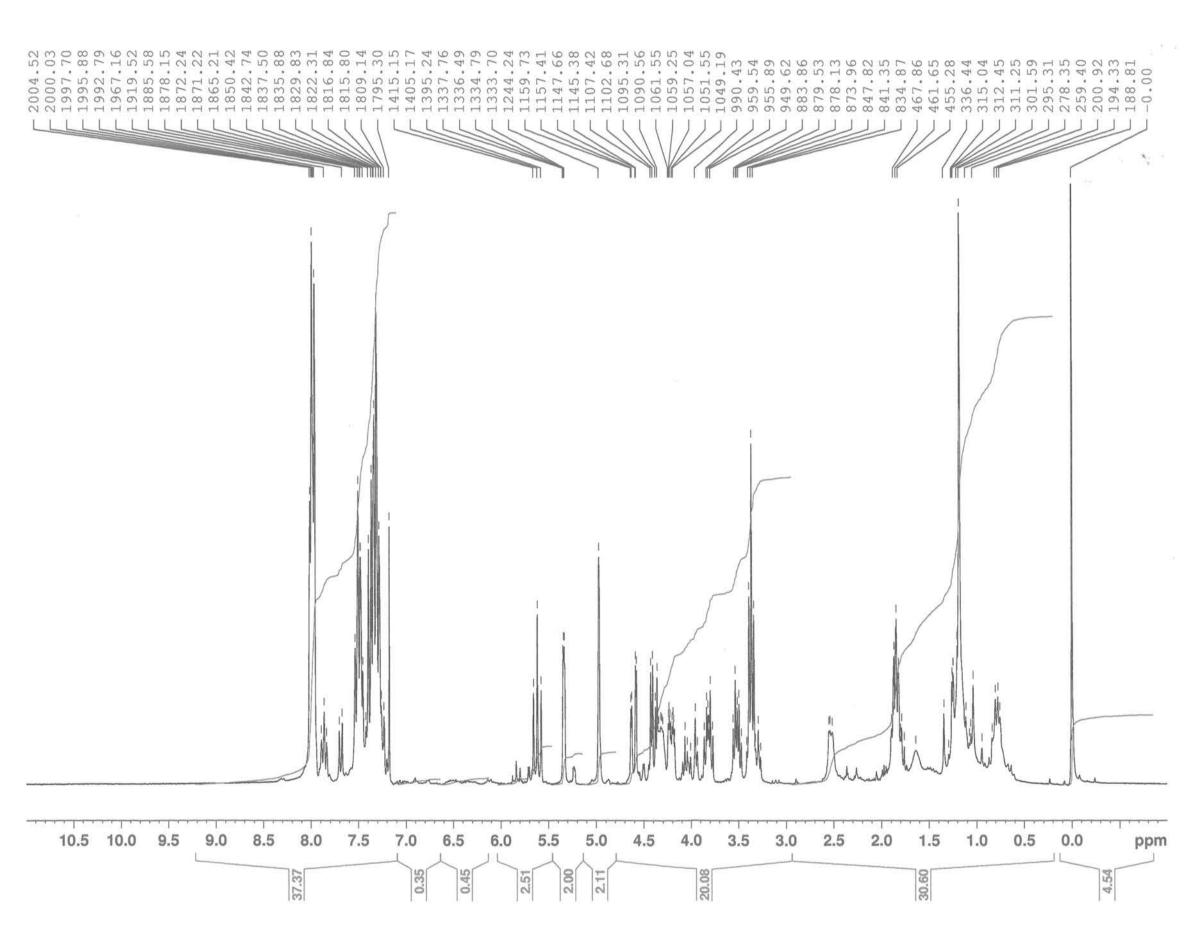
Current Data Parameters NAME Jun16-2011-JMM EXPNO 31 PROCNO 1	
F2 - Acquisition Parameter Date_ 20110616 Time 12.13 INSTRUM spect PROBHD 5 mm QNP 1H/1 PULPROG jmod TD 65536 SOLVENT CDC13 NS 256 DS 4	ers
SWH 15060.241 F FIDRES 0.229801 F AQ 2.1758451 S RG 16384 DW 33.200 U DE 8.00 U	lz sec sec
TE 300.0 F CNST2 145.0000000 CNST11 1.0000000 D1 2.00000000 s d20 0.00689655 s DELTA 0.00001019 s	sec
TD0 1 ====== CHANNEL f1 ===== NUC1 13C P1 8.00 to 16.00 to 16.0	isec
PL1 -3.00 c SF01 62.9015280 M	B
CPDPRG2 waltz16 NUC2 1H	===
PCPD2 100.00 to PL2 -3.00 co PL12 19.00 co SFO2 250.1310005 M	iB iB
F2 - Processing parameter SI 32768	
SF 62.8952390 N WDW EM SSB 0	MHZ
The state of the s	łz

1.40

PC



MP1/23A





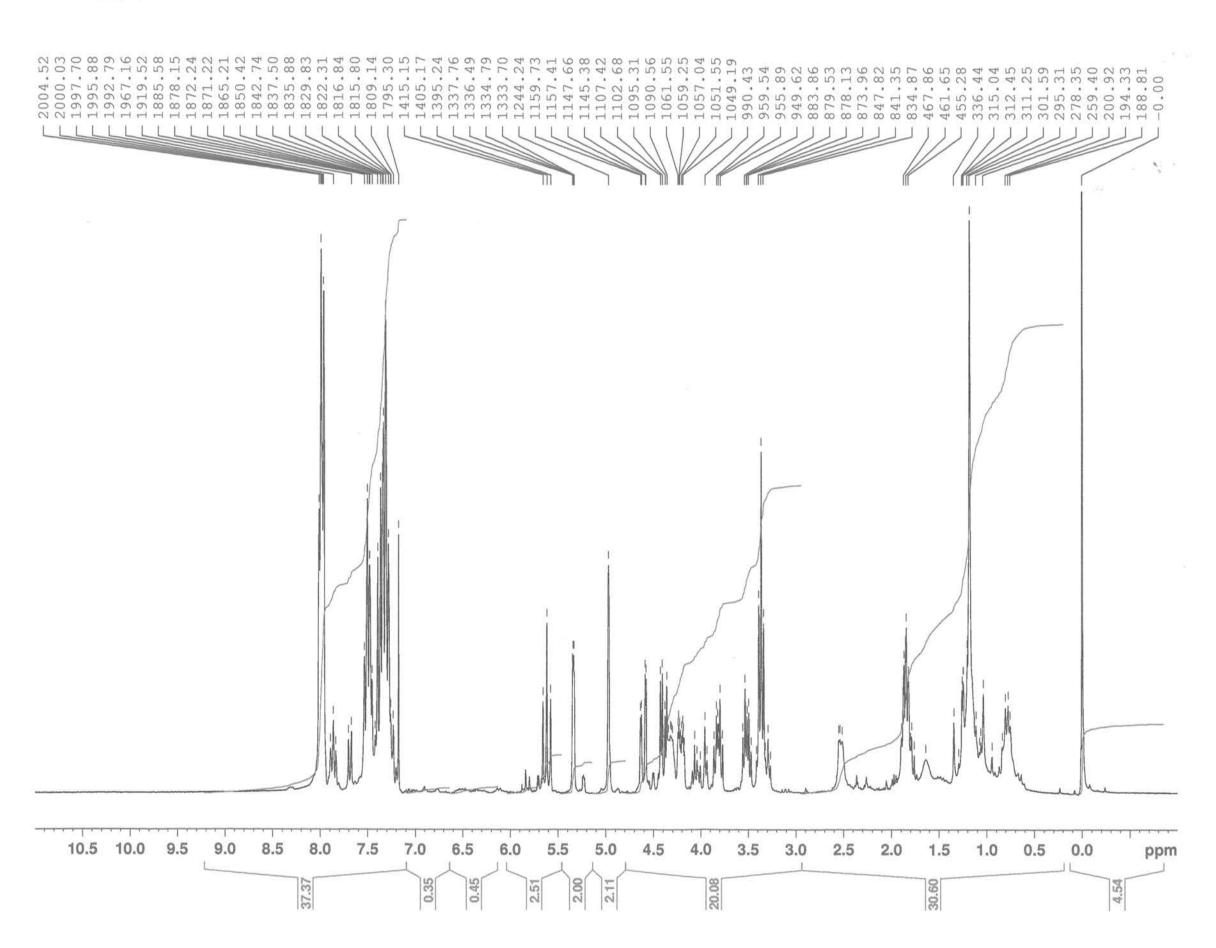
Current	Data	Parameters
NAME	Jun1	6-2011-JMM
EXPNO		40
PROCNO		1

F2 - Acquisi	tion Paramet	ers
Date_	20110616	
Time	12.22	
INSTRUM	spect	
PROBHD 5 m	m QNP 1H/1	
PULPROG	zg30	
TD	16384	
SOLVENT	CDC13	
NS	64	
DS	2	
SWH	5175.983	Hz
FIDRES	0.315917	Hz
AQ	1.5827444	sec
RG	406.4	
DW	96.600	use
DE	8.00	use
TE	300.0	K
D1	0.20000000	sec
TD0	1	

NUC1			1H	
P1		10	.00	usec
PL1		-3	.00	dB
SFO1	250.	1315	446	MHZ

F2 -	Processing	paramete	ers
SI		8192	
SF	250	.1300285	MHZ
WDW		EM	
SSB		0	
LB		0.30	Hz
GB		0	
PC		1.00	







Current	Data Parameters
NAME	Jun16-2011-JMM
EXPNO	40
PROCNO	1

F2 - Acqu Date_ Time INSTRUM PROBHD PULPROG	20110616 20110616 12.22 spect 5 mm QNP 1H/1 zg30	ers
TD	16384	
SOLVENT	CDC13	
NS	64	
DS	2	
SWH	5175.983	
FIDRES	0.315917	Hz
AQ	1.5827444	sec
RG	406.4	
DW	96.600	usec
DE	8.00	usec
TE	300.0	K
D1	0.20000000	sec
TDO	1	

	CHANNEL	f1	-	
NUC1			1H	
P1		10	.00	usec
PL1		-3	.00	dB
SFO1	250.	1315	446	MHZ

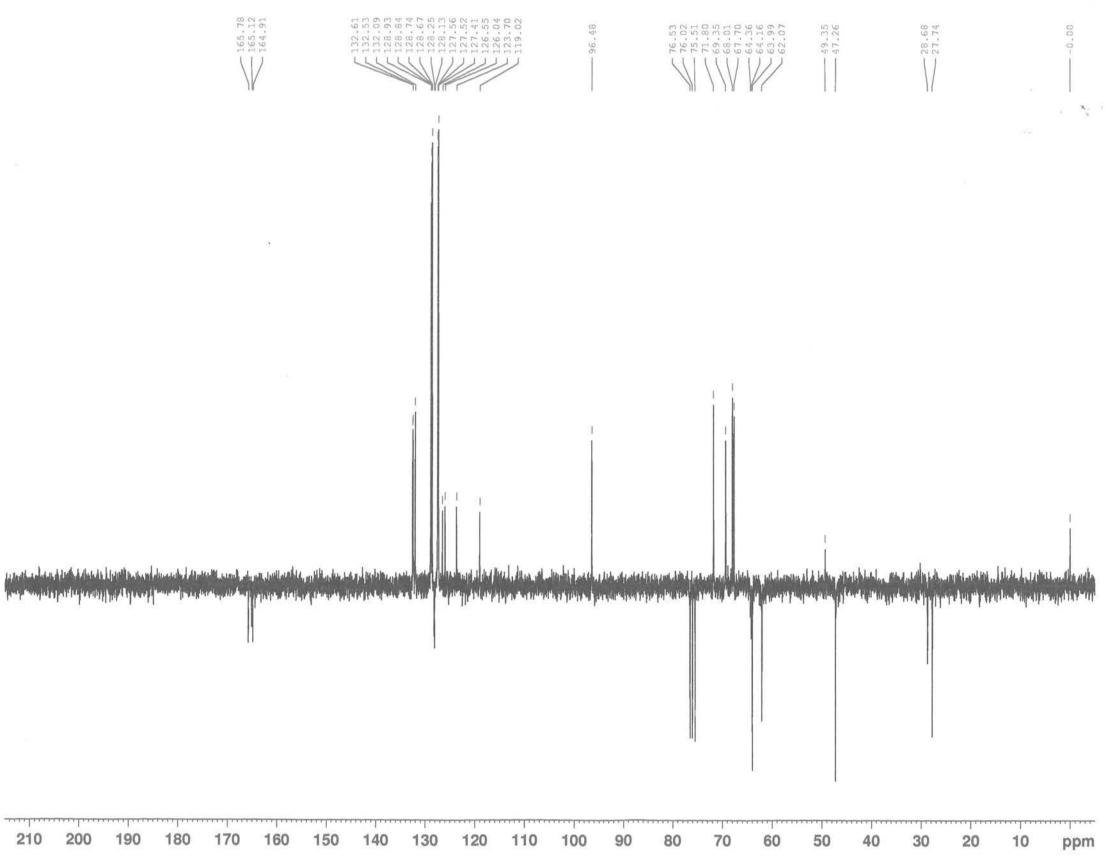
F2 -	Processing paramete	rs
SI	8192	
SF	250.1300285	MHz
WDW	EM	
SSB	0	
LB	0.30	Hz
GB	0	
PC	1.00	



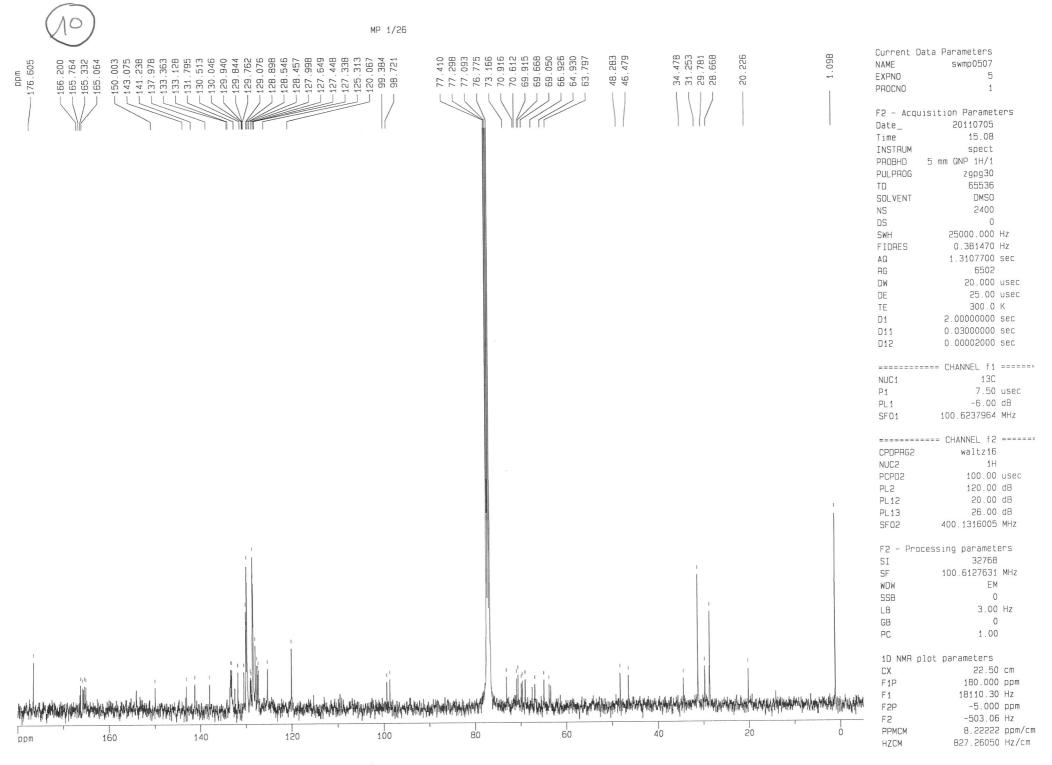
MP1/23A

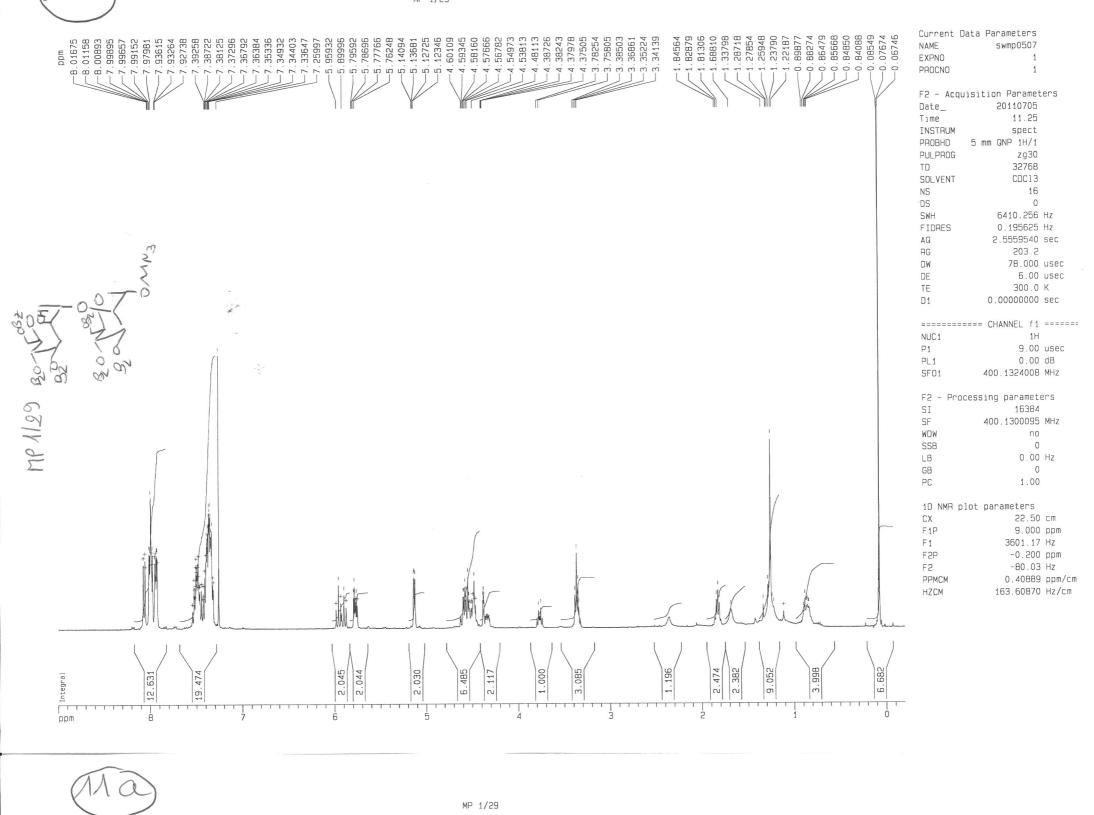






Currer														
NAME EXPNO		Jui	JTG	0 -	4	U	1	1	_		M 4			
PROCNO)											1		
F2 - P	lequ	isi	it:	Lo	n		P	a	r	a	m	et	ers	
Date_					2									
Time											4			
INSTRU		-				_					C			
PROBHI PULPRO		5 r	nm	Ç	N	P					10			
TD	JG										3			
SOLVEN	IT										1			
NS											5			
DS												4		
SWH				1	5	0	6	0		2	4	1	Hz	
FIDRES	5				0								Hz	
AQ				2		1							sec	
RG											8			
DW DE							3					253	usec	
TE													K	
CNST2			14	15	į.	0							10	
CNST11			-									0		
D1			1	2 .	0	0	0	0	0	0	0	0	sec	
d20				٥.									sec	
DELTA			().	0	0	0	0	1	0			sec	
TD0												1		
	==	CHA	INA	VE.	L		f	1						
NUC1												C		
P1													usec	
p2 PL1								_	0	•	0	0	usec dB	
SFO1			1.6	5 2		9							MHz	
		CHA	INA	VE.										
CPDPRO NUC2	14					W	a.	7	L		1	Н		
PCPD2							1	0	0				usec	
PL2													dB	
PL12													dB	
SFO2			25	50		1	3	1	0	0	0	5	MHz	
F2 - F	roc	ess	sir	10	ŗ.	p	a	r	a	m	e	te	rs	
SI								3	2	7	6	8		
SF			(52		8	9	5	3				MHz	
WDW											E			
SSB									4			0	77-	
LB GB									Т			0	Hz	
PC									1		4			
11000									-	•	-			





Current Data Parameters

F2 - Acquisition Parameters

swmp0507

20110705

5 mm GNP 1H/1

11.49

spect

zgpg30

65536 DMSO

25000.000 Hz

0.381470 Hz

1.3107700 sec

2.00000000 sec

0.03000000 sec

0.00002000 sec

====== CHANNEL f1 =====

======= CHANNEL f2 =====

F2 - Processing parameters

1D NMR plot parameters

6502

20.000 usec

300.0 K

25.00 usec

7.50 usec

-6.00 dB

100.6237964 MHz

waltz16

400.1316005 MHz

32768 100.6127631 MHz EM 0

3.00 Hz

1.00

22.50 cm

180.000 ppm 18110.30 Hz

-5.000 ppm -503.06 Hz

8.22222 ppm/c

827.26050 Hz/cm

1H 100.00 usec

120.00 dB

20.00 dB 26.00 dB

008 0

2

NAME

EXPNO

PROCNO

Date_

INSTRUM

PROBHD

PULPROG

SOLVENT NS

Time

TD

DS

SWH

AQ

RG

DW

DE

TE

D1

D11

P1

PL1

SF01

CPDPRG2

NUC2

PCPD2

PL2 PL12

PL13 SF02

SI

SSB

LB GB

PC

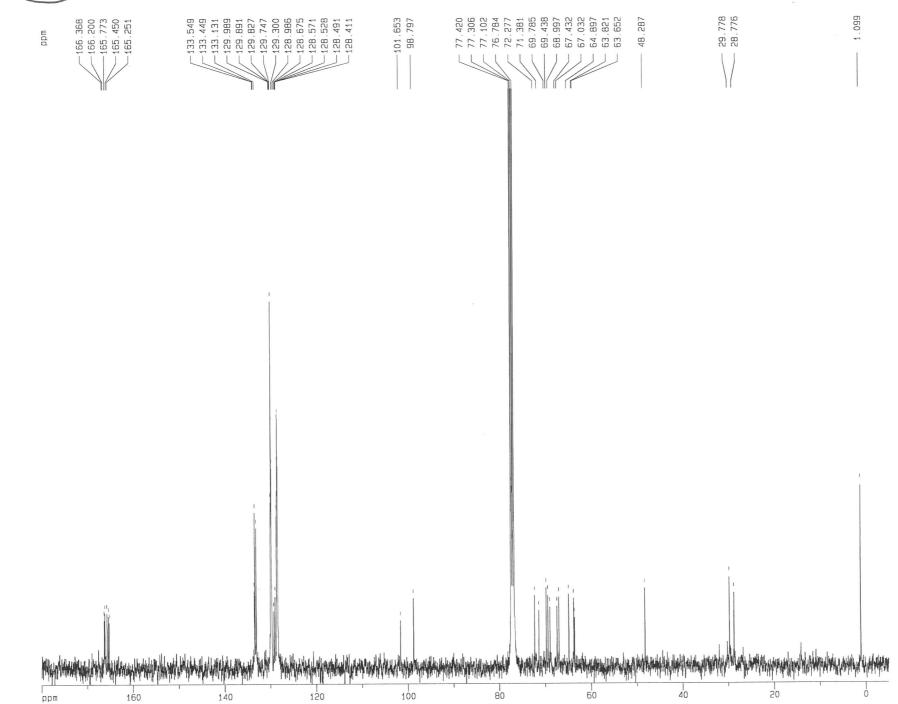
CX F1P

F1 F2P

F2 PPMCM

HZCM

FIDRES



-0.200 ppm

-80.03 Hz

163.60870 Hz/cm

0.40889 ppm/cm

F2P F2

PPMCM

HZCM

2.457

1.950

1.705

0.011

1.053

2.000

3.937

0.934

1.027

_ Integral

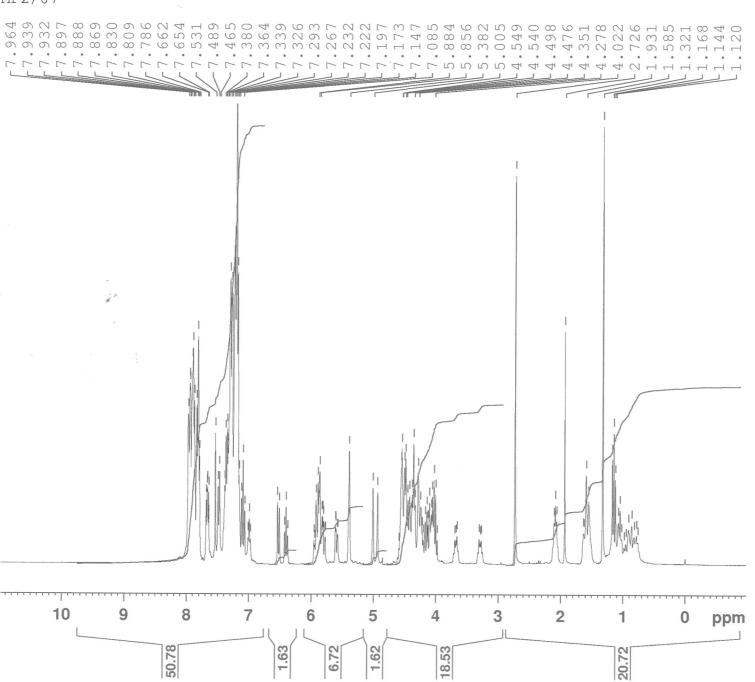
ppm

- 20.029

11.944

894.33569 Hz/cm

HZCM



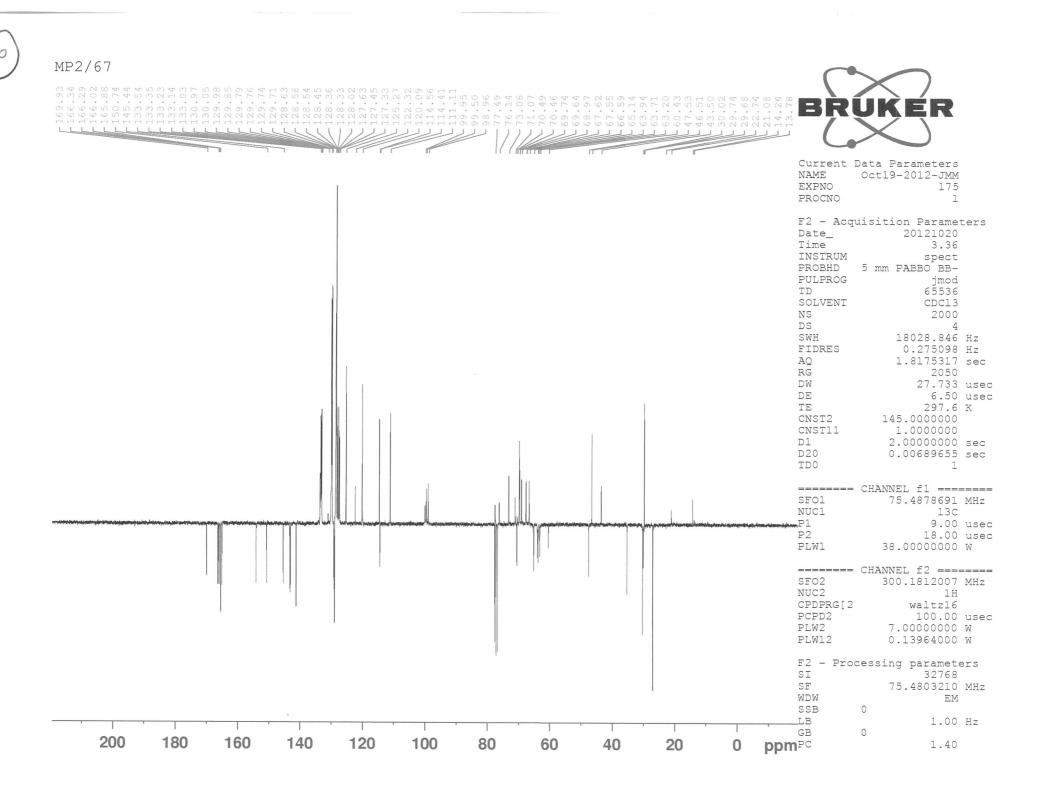


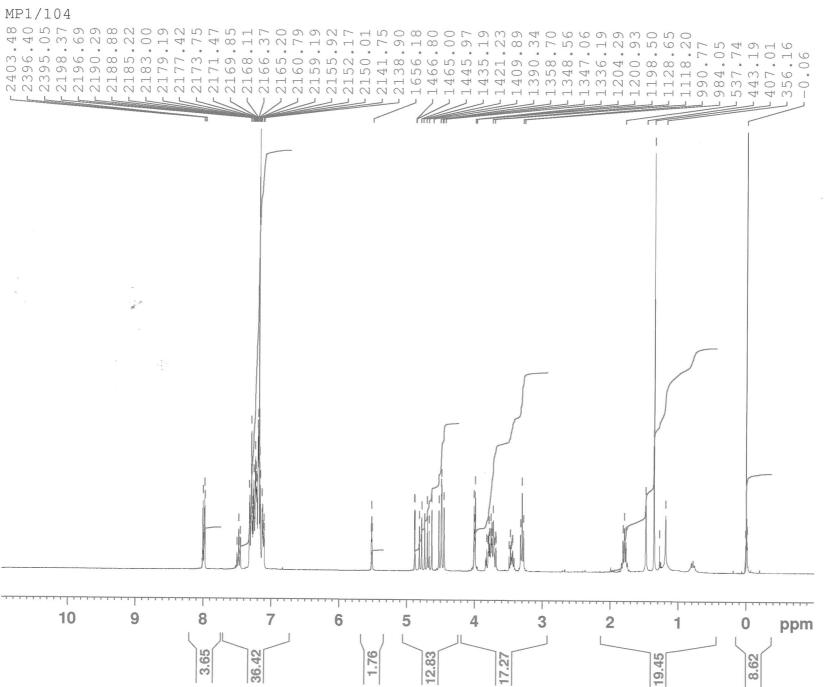
Current Data Parameters
NAME Oct19-2012-JMM
EXPNO 170
PROCNO 1

F2 - Acquisition Parameter: Date_ 20121019 Time 19.36 INSTRUM spect 5 mm PABBO BB-PROBHD zg30 43268 PULPROG SOLVENT CDC13 NS 32 DS SWH 6009.615 Hz FIDRES 0.138893 Hz AQ 3.5998976 sec RG 28.5 DW 83.200 use 6.50 use 296.4 K DE TE D1 1.00000000 sec TDO 1

====== CHANNEL f1 ====== SF01 300.1815009 MH:
NUC1 1H
P1 13.60 use
PLW1 7.00000000 W
F2 - Processing parameters
SI 65536

SF 300.1800442 MH;
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00







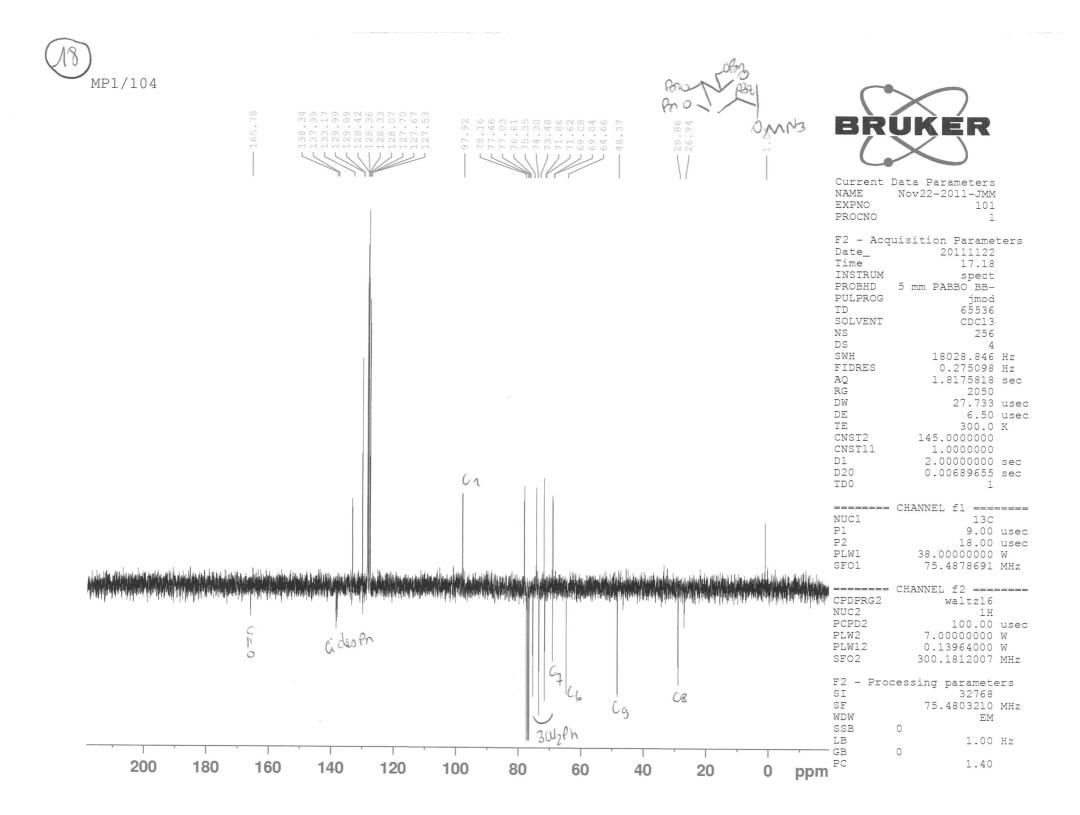


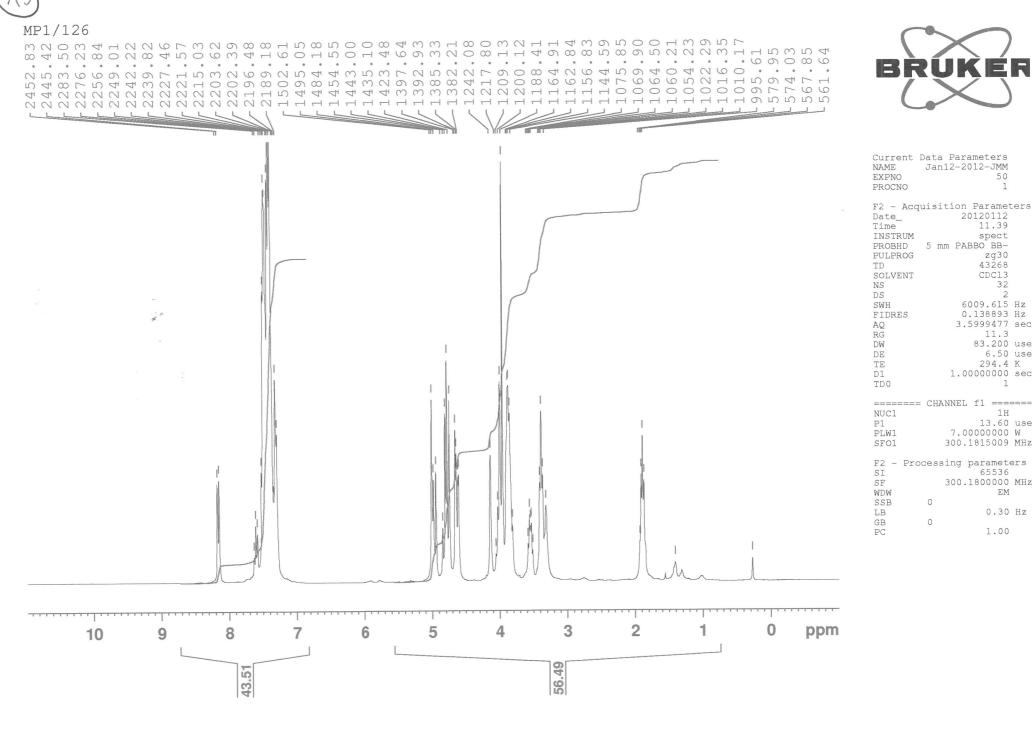
EM

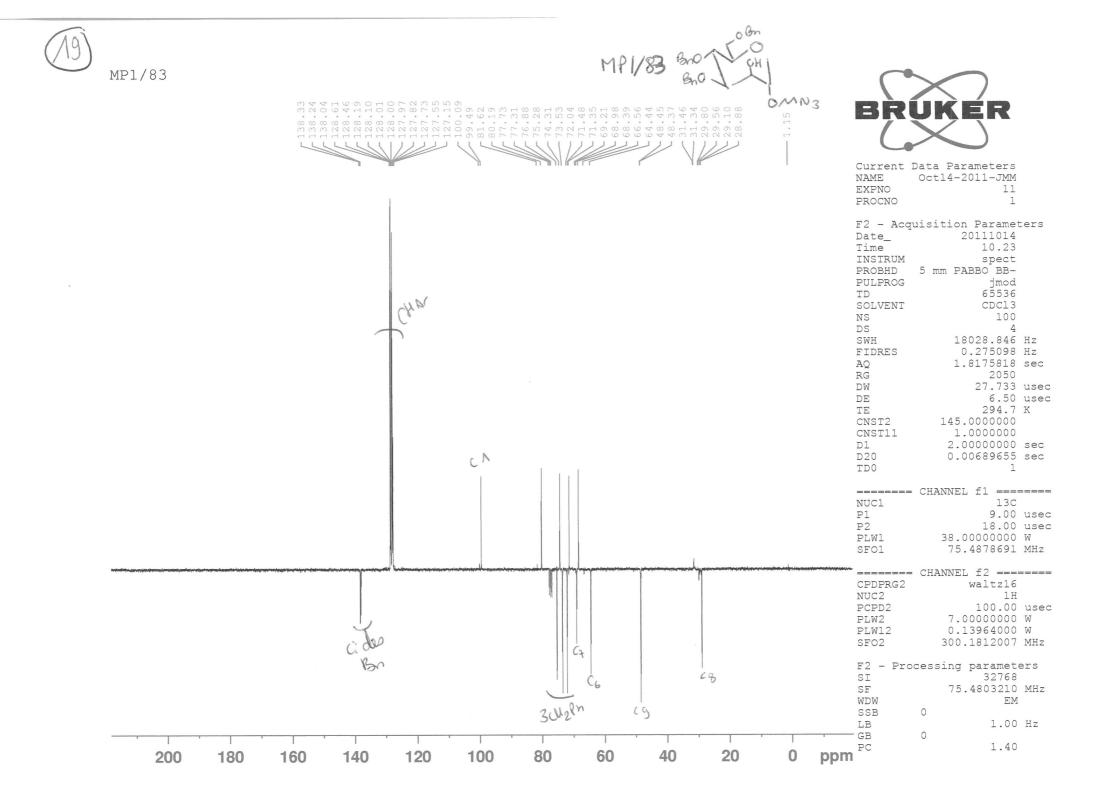
0.30 Hz 1.00

WDW

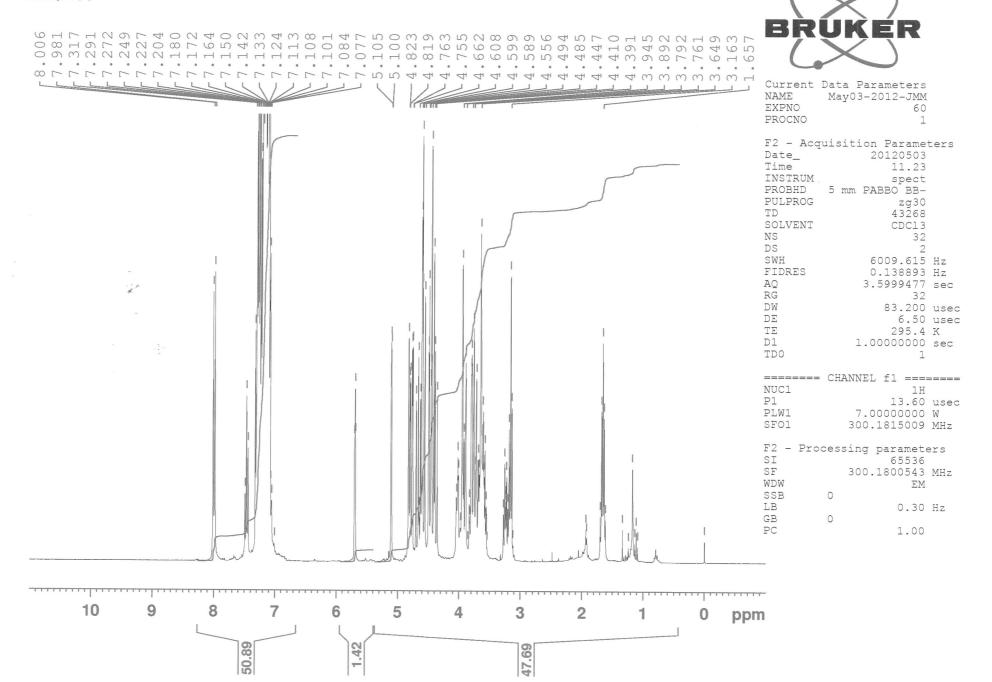
SSB LB

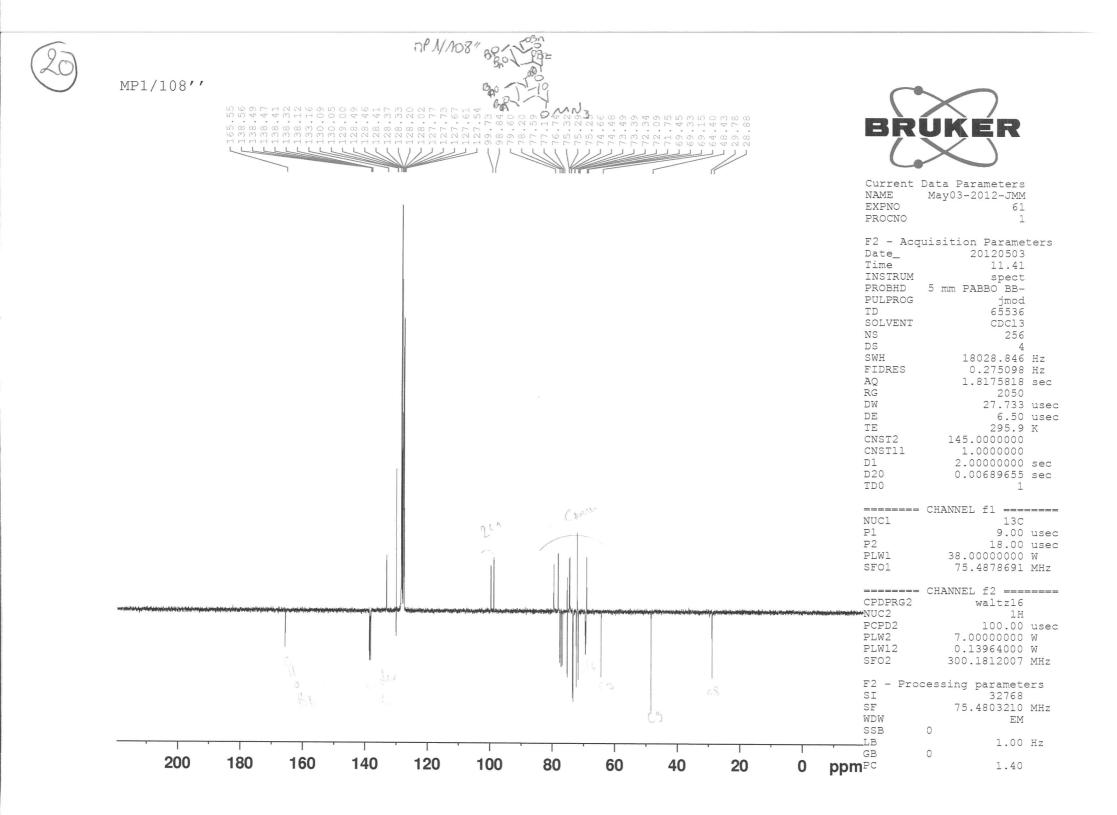




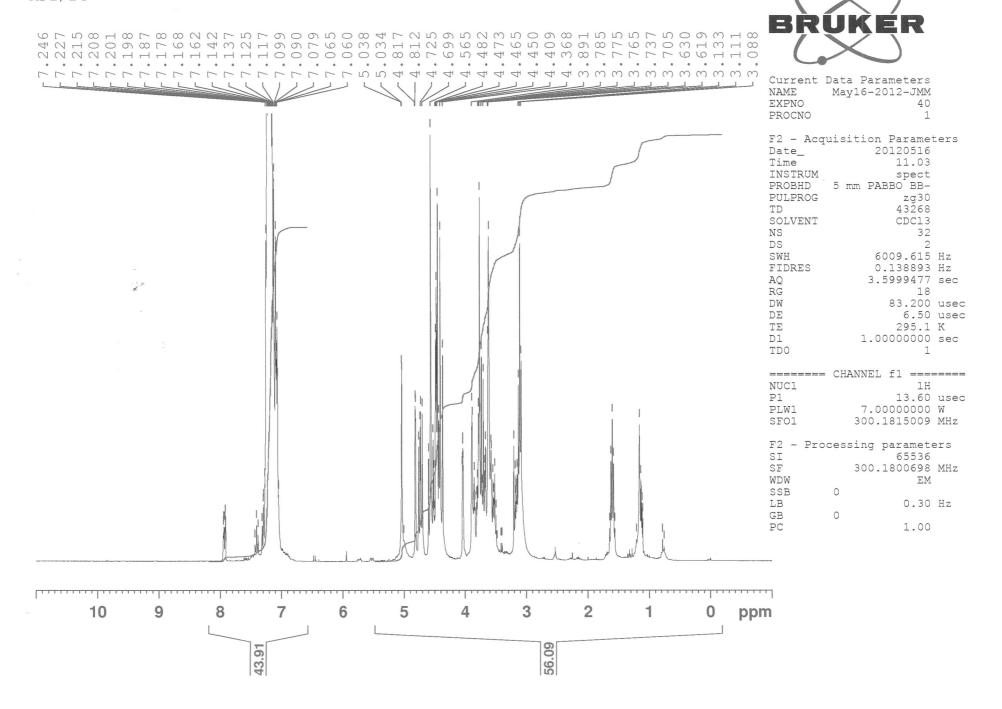


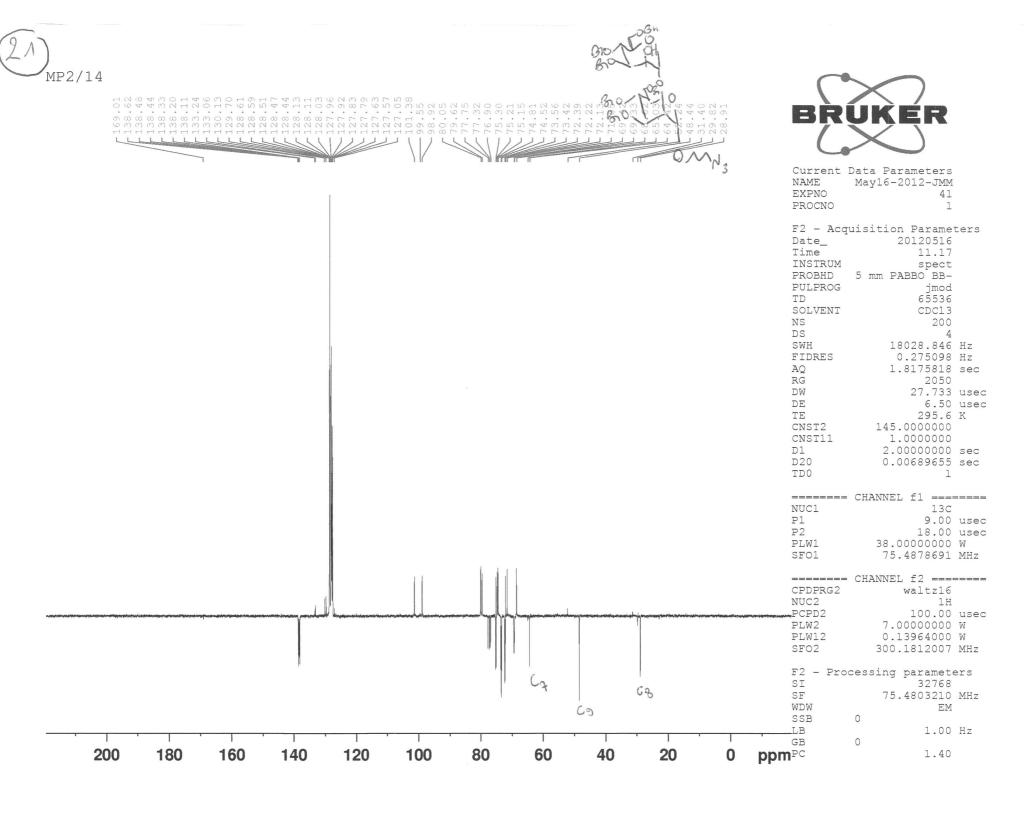
MP1/108''

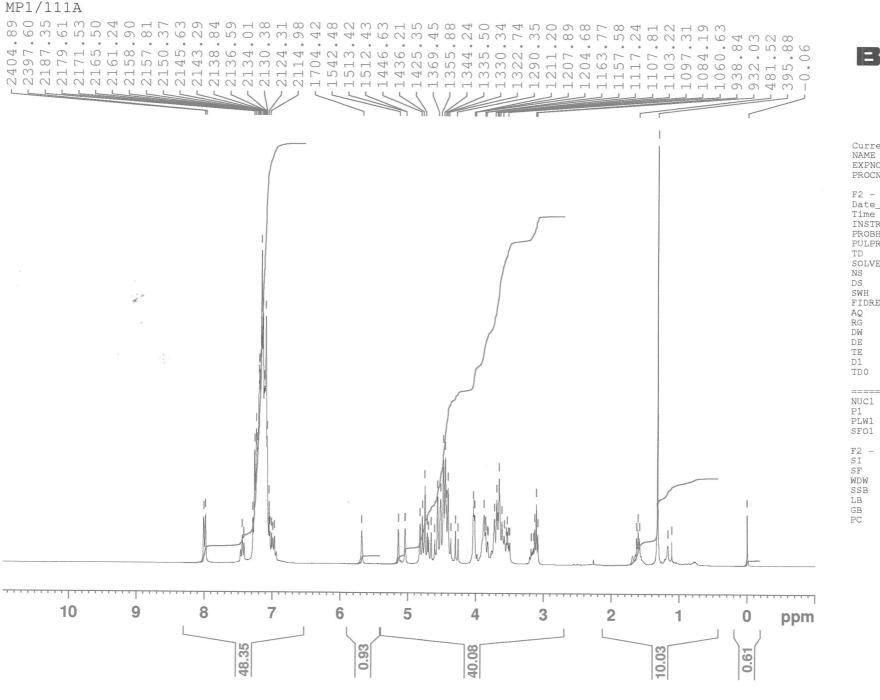


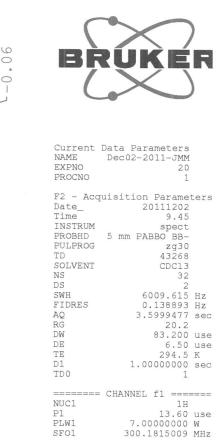


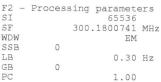
MP2/14

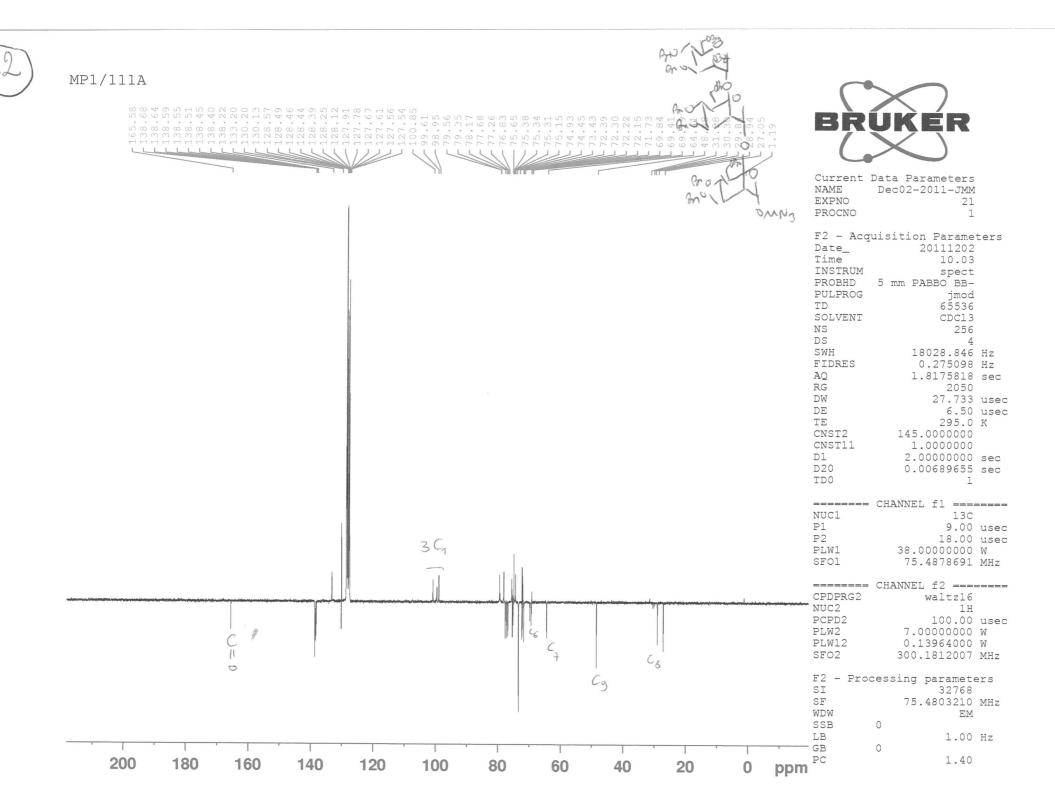


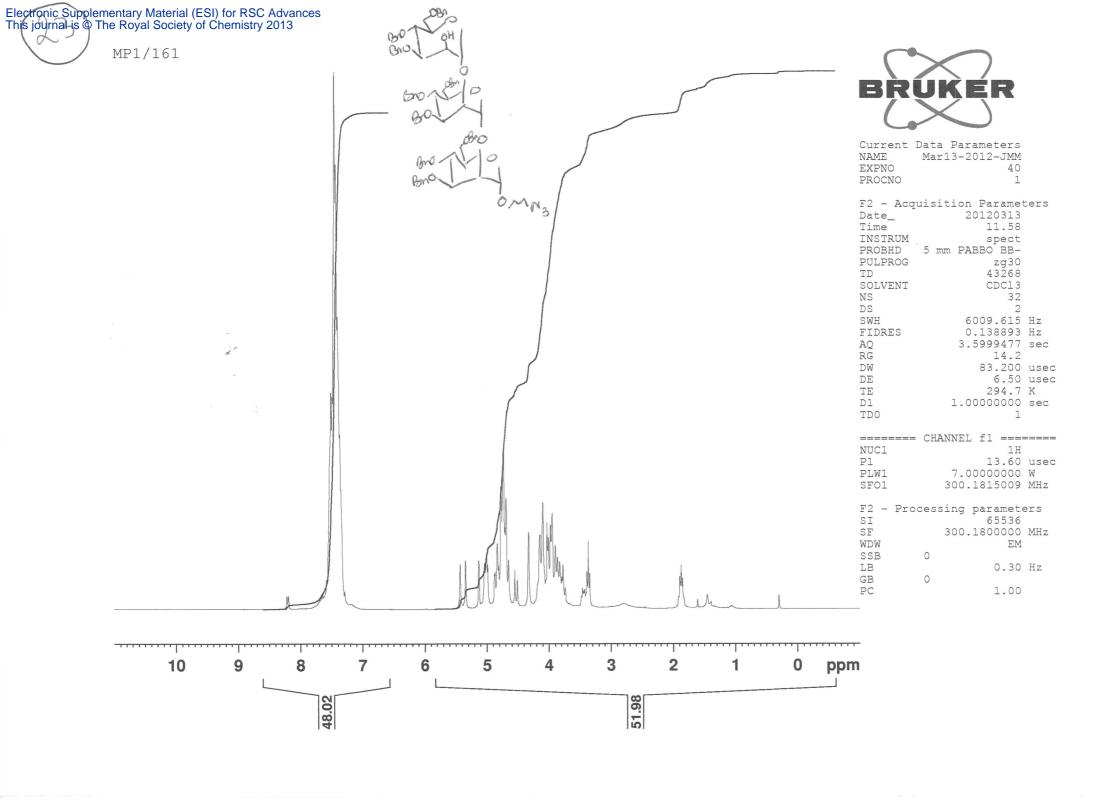


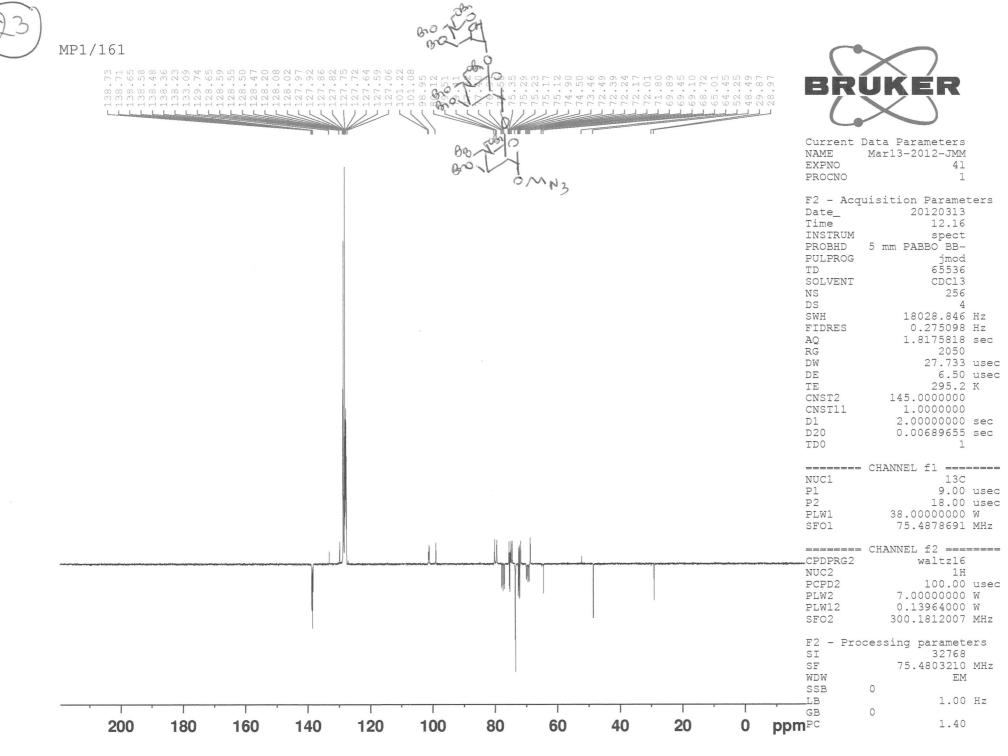


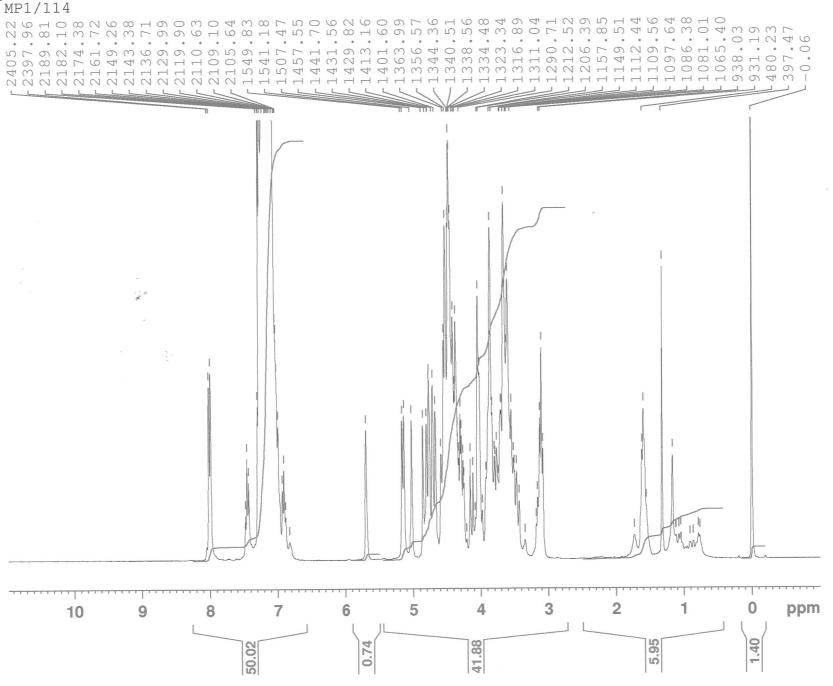


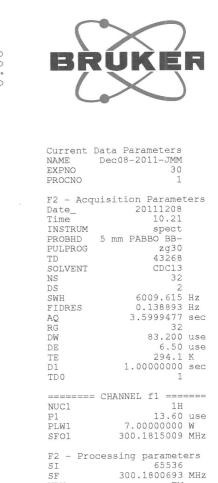












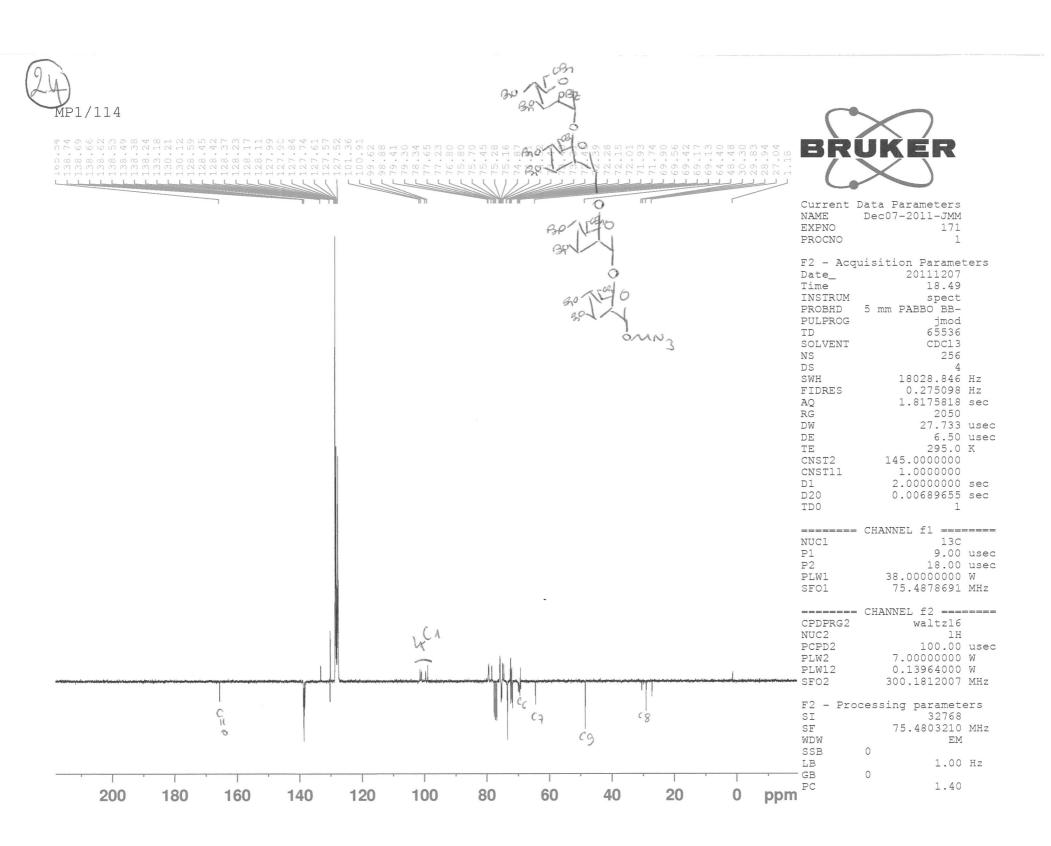
WDW

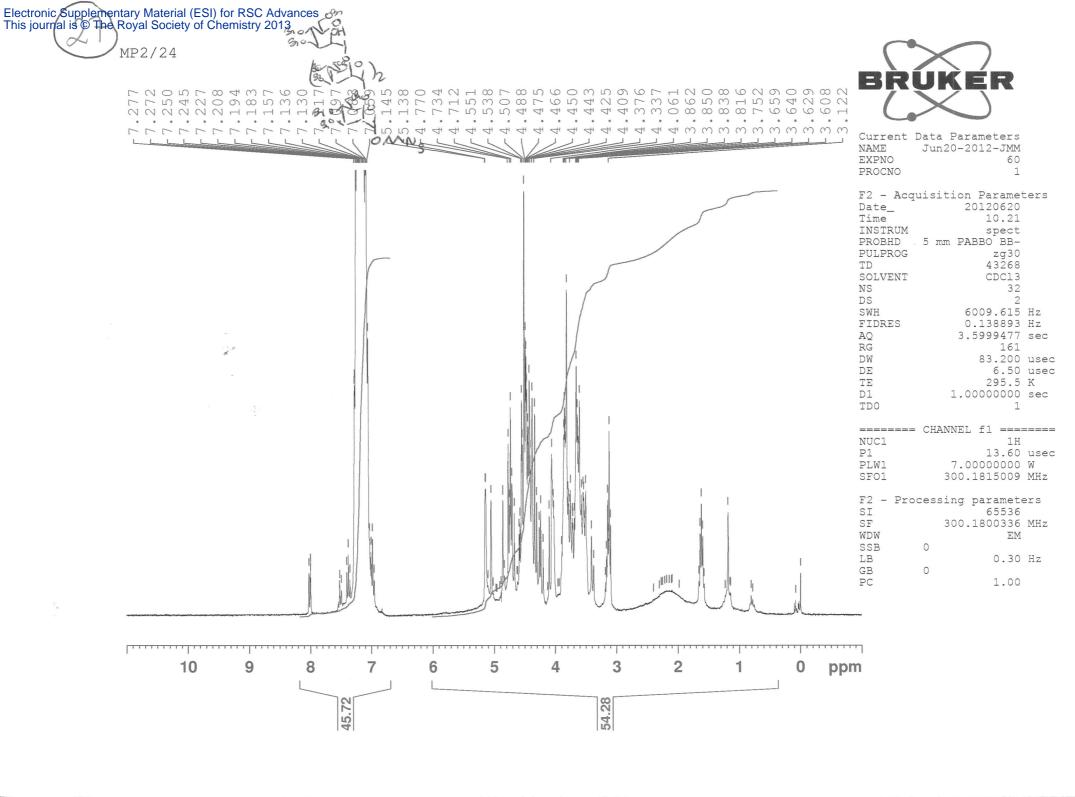
LB

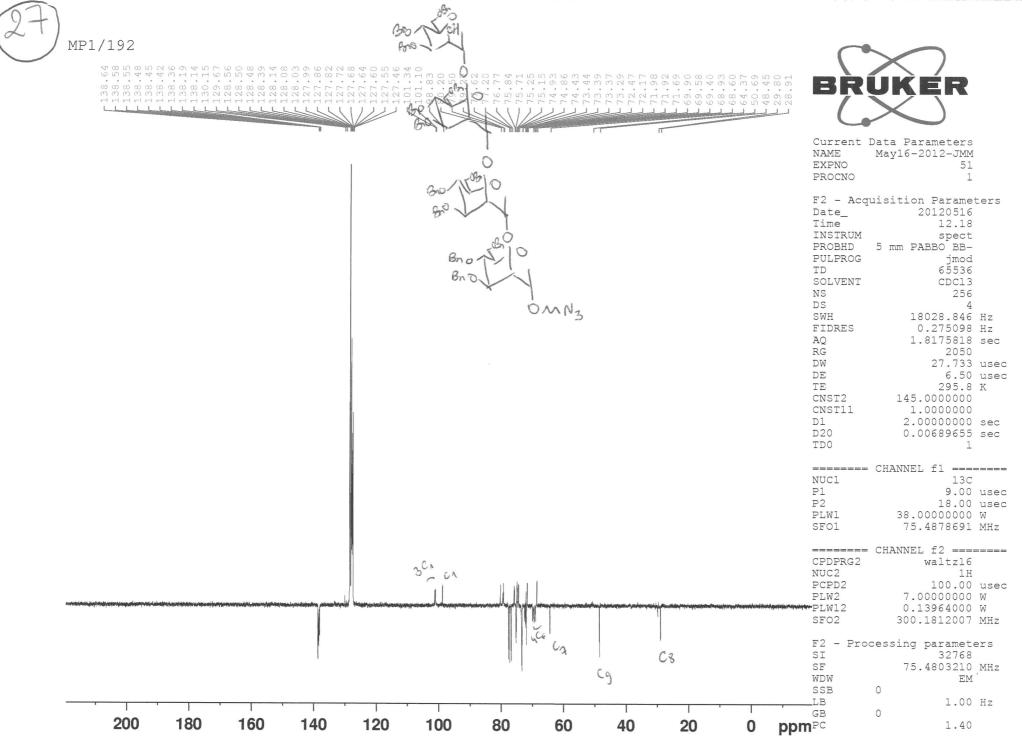
300.1800693 MHz

EM 0.30 Hz

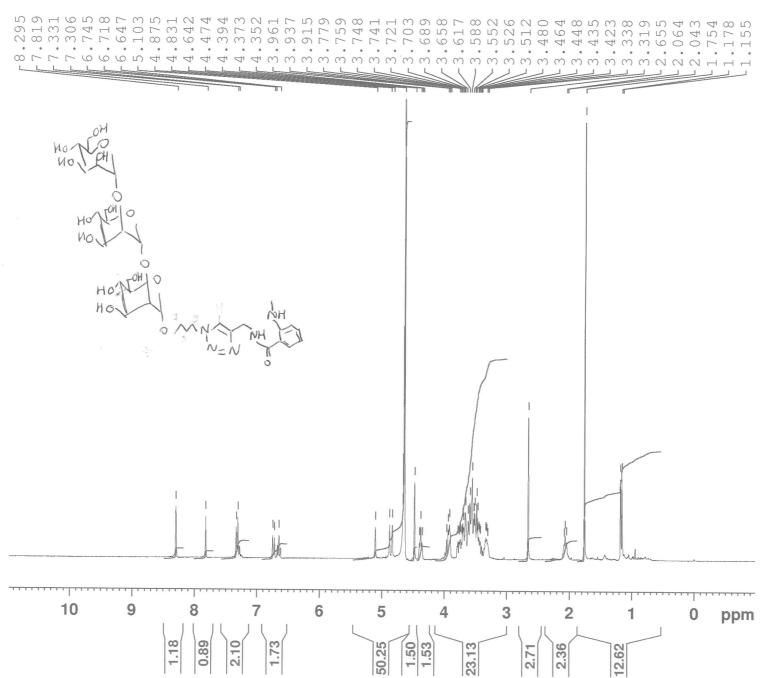
1.00











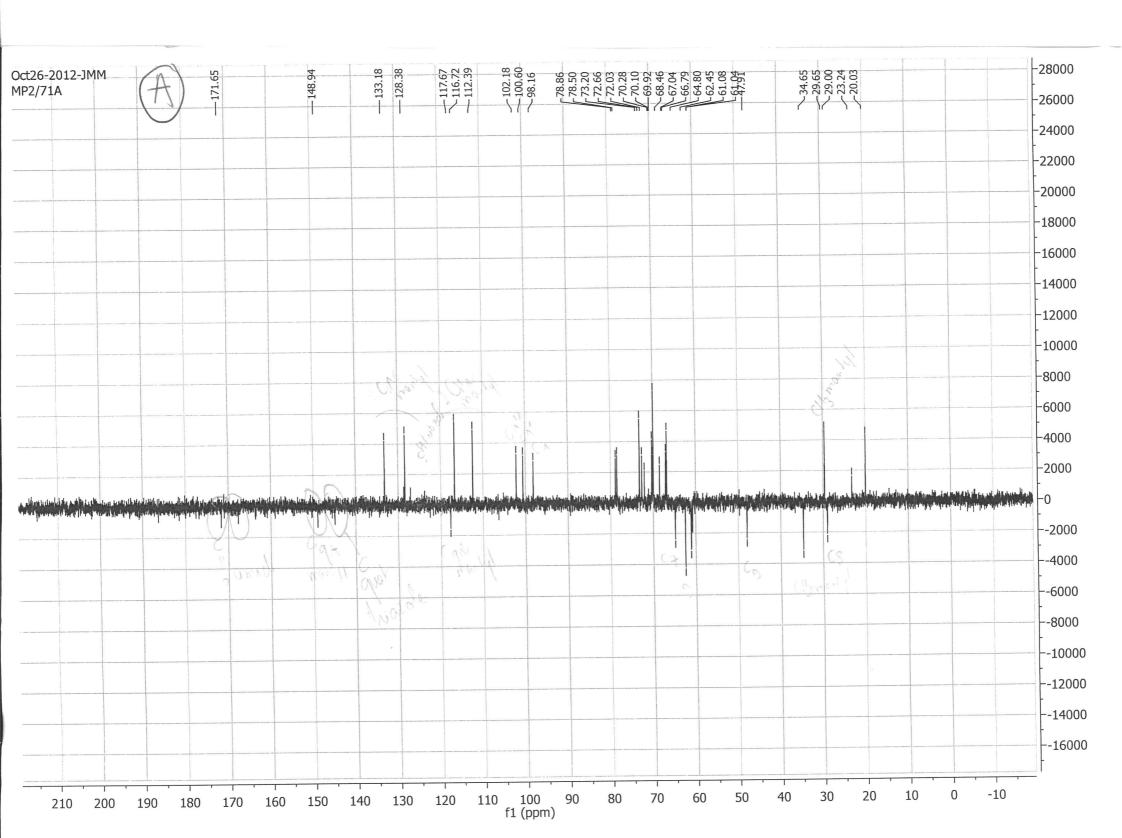


Current Data Parameters
NAME Oct26-2012-JMM
EXPNO 100
PROCNO 1

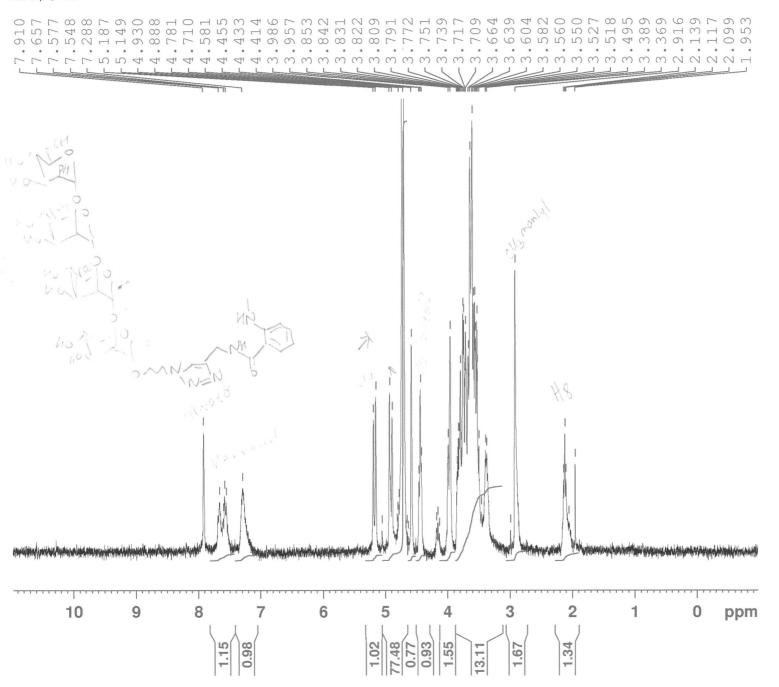
F2 - Acquisition Parameter: Date_ 20121026 Time INSTRUM spect PROBHD 5 mm PABBO BB-PULPROG zg30 TD 43268 SOLVENT D20 NS 32 DS SWH 6009.615 Hz 0.138893 Hz FIDRES AQ 3.5998976 sec RG 256 83.200 use 6.50 use 296.1 K D1 1.00000000 sec TDO

SFO1 300.1815009 MH:
NUC1 1H
P1 13.60 use
PLW1 7.000000000 W

F2 - Processing parameters
SI 65536
SF 300.1800208 MH:
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00



MP2/57A''



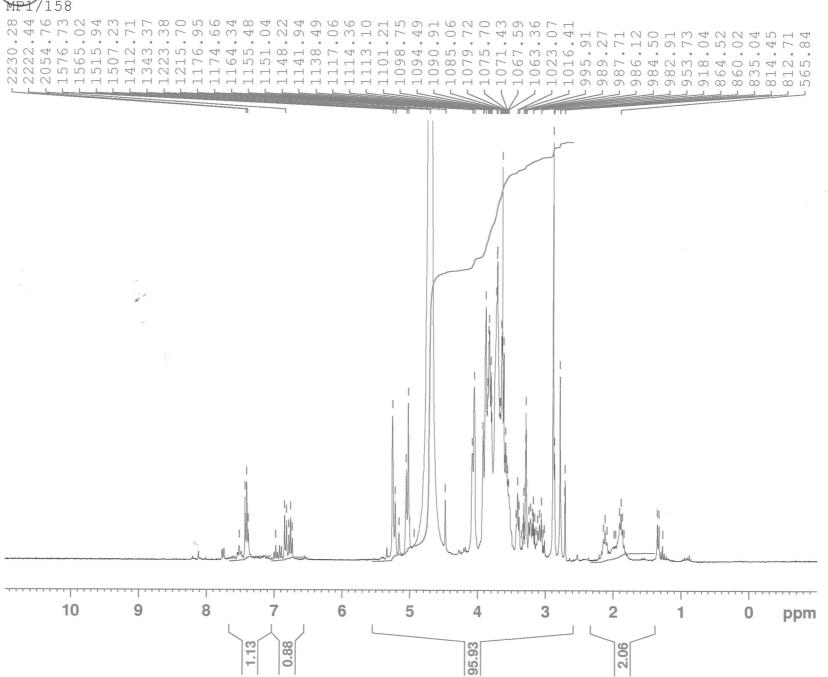


Current	Data Parameters
NAME	Nov23-2012-JMM
EXPNO	70
PROCNO	1

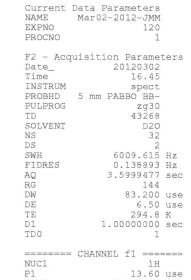
FZ - Acqu	113	siti	Lon	Pa	ar	ame:	tera
Date_			20	012	21	123	
Time				_	L 6	.29	
INSTRUM				5	gp	ect	
PROBHD	5	mm	PA	ВВ()	BB-	
PULPROG					Z	g30	
TD				4	13	268	
SOLVENT						D20	
NS						32	
DS						2	
SWH			6	200	9.	615	Hz
FIDRES			0	.13	38	893	Hz
AQ			3.5	599	86	976	sec
RG						362	
DW				83	3.	200	use
DE					6	.50	use
TE				2	29	4.8	K
D1		1	.00	000	00	000	sec
TDO						1	

=======	CHANNEL f1 ====	
SFO1	300.1815009	MH:
NUC1	1H	
P1	13.60	use
PLW1	7.00000000	W

F2 -	Processing	parameters 65536
SF	300.	.1800000 MH:
WDW		EM
SSB	0	
LB		0.30 Hz
GB	0	
PC		1.00







F2 - Processing parameters SI 65536 300.1800000 MHz WDW EM 0 0.30 Hz LB GB PC

7.00000000 W 300.1815009 MHz

1.00

P1 PLW1

