

SUPPORTING INFORMATION

Total Synthesis of (–)-Sacidumlignans B and D

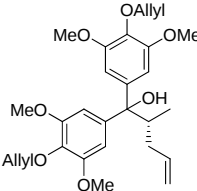
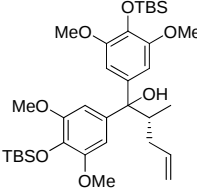
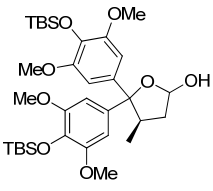
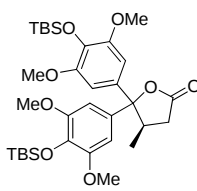
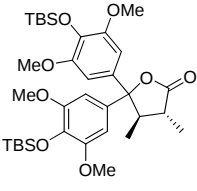
Jeetendra Kumar Rout and C. V. Ramana*

National Chemical Laboratory, Dr Homi Bhabha Road, Pune – 411 008, India

Tel: +91-20-25902577; fax: +91-20-25902455

E-mail: vr.chepuri@ncl.res.in

Table of Contents

S. No	Compound/Table	Data	Page No.
1	Table 1	Comparative ^1H & ^{13}C Coupling Constants (J) and/or Chemical Shifts for Natural and Synthetic Sacidumlignan A	S1
2	Table 2	Comparative ^1H & ^{13}C Coupling Constants (J) and/or Chemical Shifts for Natural and Synthetic Sacidumlignan B	S2
3	Table 3	Comparative ^1H & ^{13}C Coupling Constants (J) and/or Chemical Shifts for Natural and Synthetic Sacidumlignan C	S3
4	 13	^1H NMR Spectrum	S4
		^{13}C NMR Spectrum	S5
		DEPT Spectrum	S6
		Mass Spectra	S7, S8
5	 10	^1H NMR Spectrum	S9
		^{13}C NMR Spectrum	S10
		DEPT Spectrum	S11
		Mass Spectra	S12, S13
6	 15	^1H NMR Spectrum	S14
		^{13}C NMR Spectrum	S15
		DEPT Spectrum	S16
		Mass Spectra	S17, S18
7	 9	^1H NMR Spectrum	S19
		^{13}C NMR Spectrum	S20
		DEPT Spectrum	S21
		Mass Spectra	S22, S23
8	 6	^1H NMR Spectrum	S24
		^{13}C NMR Spectrum	S25
		DEPT Spectrum	S26
		Mass Spectra	S27, S28

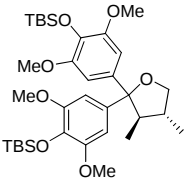
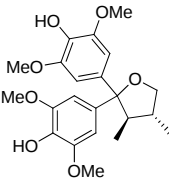
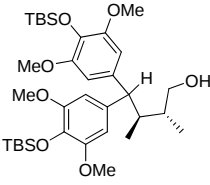
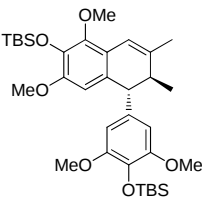
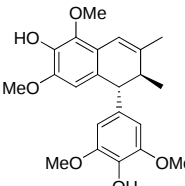
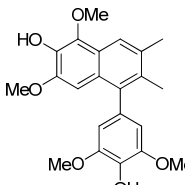
9	 16	¹ H NMR Spectrum	S29
		¹³ C NMR Spectrum	S30
		DEPT Spectrum	S31
		Mass Spectra	S32, S33
10	 4	¹ H NMR Spectrum	S34
		¹³ C NMR Spectrum	S35
		DEPT Spectrum	S36
		HPLC Chromatograms	S37- S38
		Mass Spectra	S39, S40
11	 7	¹ H NMR Spectrum	S41
		¹³ C NMR Spectrum	S42
		DEPT Spectrum	S43
		Mass Spectra	S44, S45
12	 8	¹ H NMR Spectrum	S46
		¹³ C NMR Spectrum	S47
		DEPT Spectrum	S48
		Mass Spectra	S49, S50
13	 2	¹ H NMR Spectrum	S51
		¹ H NMR (D ₂ O exchanged)	S52
		¹³ C NMR Spectrum	S53
		DEPT Spectrum	S54
		COSY Spectrum	S55
		NOEST Spectrum	S56
		Mass Spectra	S57, S58
14	 1	¹ H NMR Spectrum	S59
		¹³ C NMR Spectrum	S60
		DEPT Spectrum	S61
		Mass Spectra	S62, S63

TABLE 1: Comparative ^1H & ^{13}C Coupling Constants (J) and/or Chemical Shifts for Natural and Synthetic Sacidumlignan A

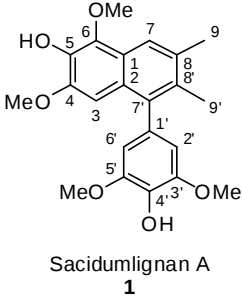
 Sacidumlignan A 1	<i>Natural</i>		<i>Synthetic</i>	
	δ_{H}, J (Hz)	δ_{C}	δ_{H}, J (Hz)	δ_{C}
1		123.9		123.9
2		127.4		127.4
3	6.56 (1H, s)	101.8	6.58 (1H, s)	101.8
4		149.1		149.1
5		138.0		138.1
6		140.6		140.7
7	7.74 (1H, s)	120.4	7.77 (1H, s)	120.5
8		133.7		133.7
9	2.43	21.3	2.45 (3H, s)	21.4
1'		131.7		131.7
2', 6'	6.47 (2H, s)	108.2	6.49 (2H, s)	108.2
3', 5'		148.8		148.9
4'		135.6		135.7
7'		138.6		138.7
8'		131.7		131.8
9'	2.09	17.5	2.11 (3H, s)	17.6
6-OMe	3.95	60.7	3.97 (3H, s)	60.7
3', 5'-OMe	3.82 (6H, s)	56.7	3.84 (6H, s)	56.7
4-OMe	3.66	55.9	3.67 (3H, s)	55.9
4', 5-OH	<i>Not observed</i>		7.32 (1H, s), 7.73 (1H, s)	

TABLE 2: Comparative ^1H & ^{13}C Coupling Constants (J) and/or Chemical Shifts for Natural and Synthetic Sacidumlignan B

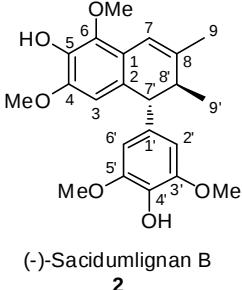
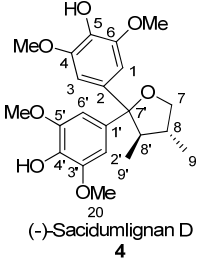
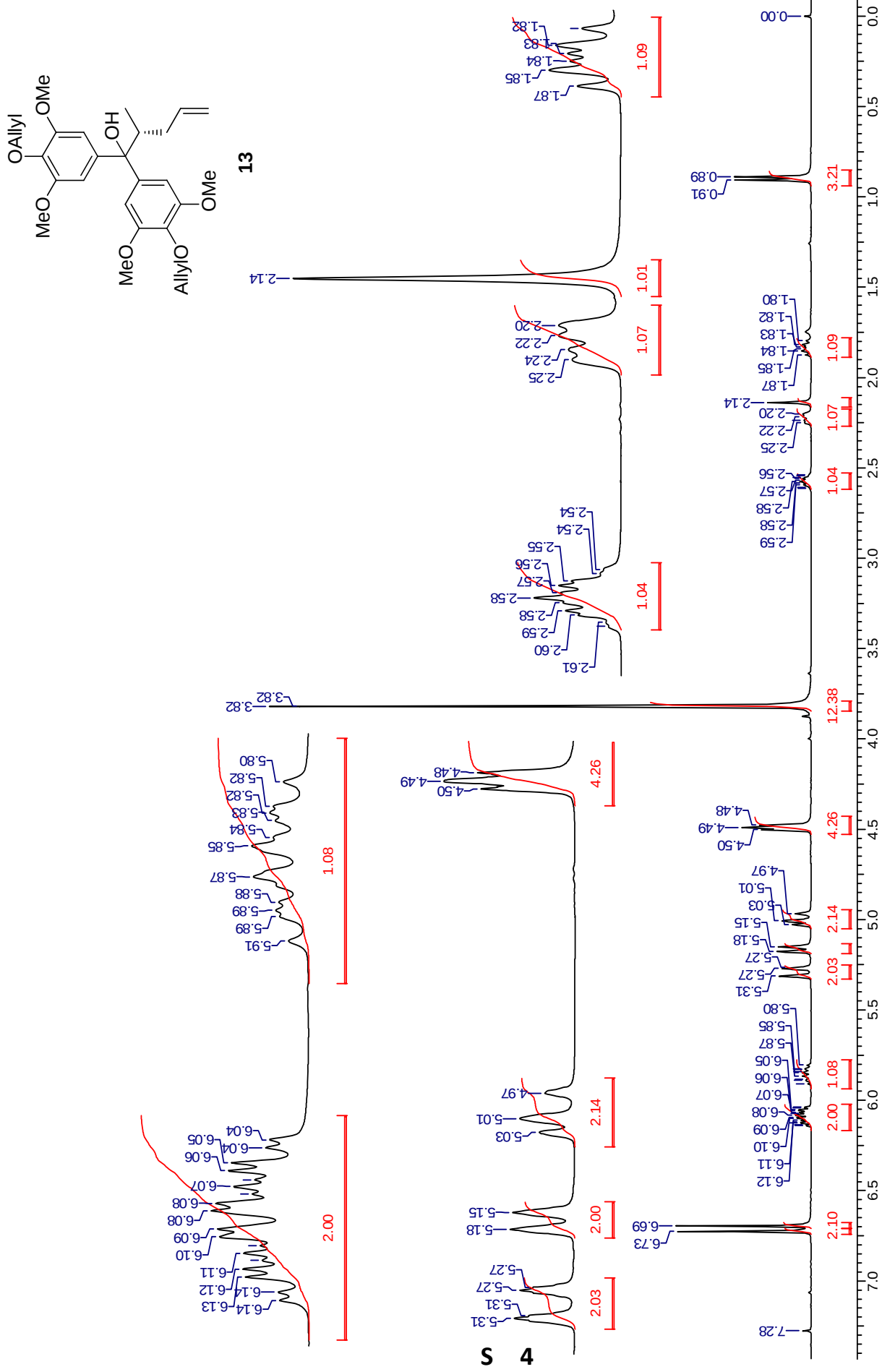
 (-)-Sacidumlignan B 2	<i>Natural</i>		<i>Synthetic</i>	
	δ_{H}, J (Hz)	δ_{C}	δ_{H}, J (Hz)	δ_{C}
1		121.3		121.4
2		127.1		127.1
3	6.47 (1H, s)	109.5	6.50 (1H, s)	109.4
4		147.8		147.8
5		138.7		138.8
6		143.9		143.9
7	6.43 (1H, d, 1.2)	116.0	6.46 (1H, d, 1.2)	116.1
8		139.1		139.1
9	1.80 (3H, d, 1.2)	22.6	1.82 (3H, d, 1.2)	22.7
1'		137.1		137.1
2', 6'	6.39 (2H, s)	106.0	6.42 (2H, s)	105.9
3', 5'		148.3		148.3
4'		135.0		135.1
7'	3.64 (1H, d, 3.0)	51.9	3.67 (1H, d, 3.0)	52.0
8'	2.04 (1H, dq, 7.0, 3.0)	42.4	2.41 (1H, dq, 7.0, 3.0)	42.5
9'	1.02 (3H, d, 7.0)	18.8	1.05 (3H, d, 7.0)	18.9
6-OMe	3.79 (3H, s)	60.9	3.81 (3H, s)	60.9
3', 5'-OMe	3.68 (6H, s)	56.5	3.71 (6H, s)	56.4
4-OMe	3.72 (3H, s)	51.9	3.74 (3H, s)	52.0
4', 5-OH	<i>Not observed</i>		6.95 (1H, s), 7.31(1H, s)	

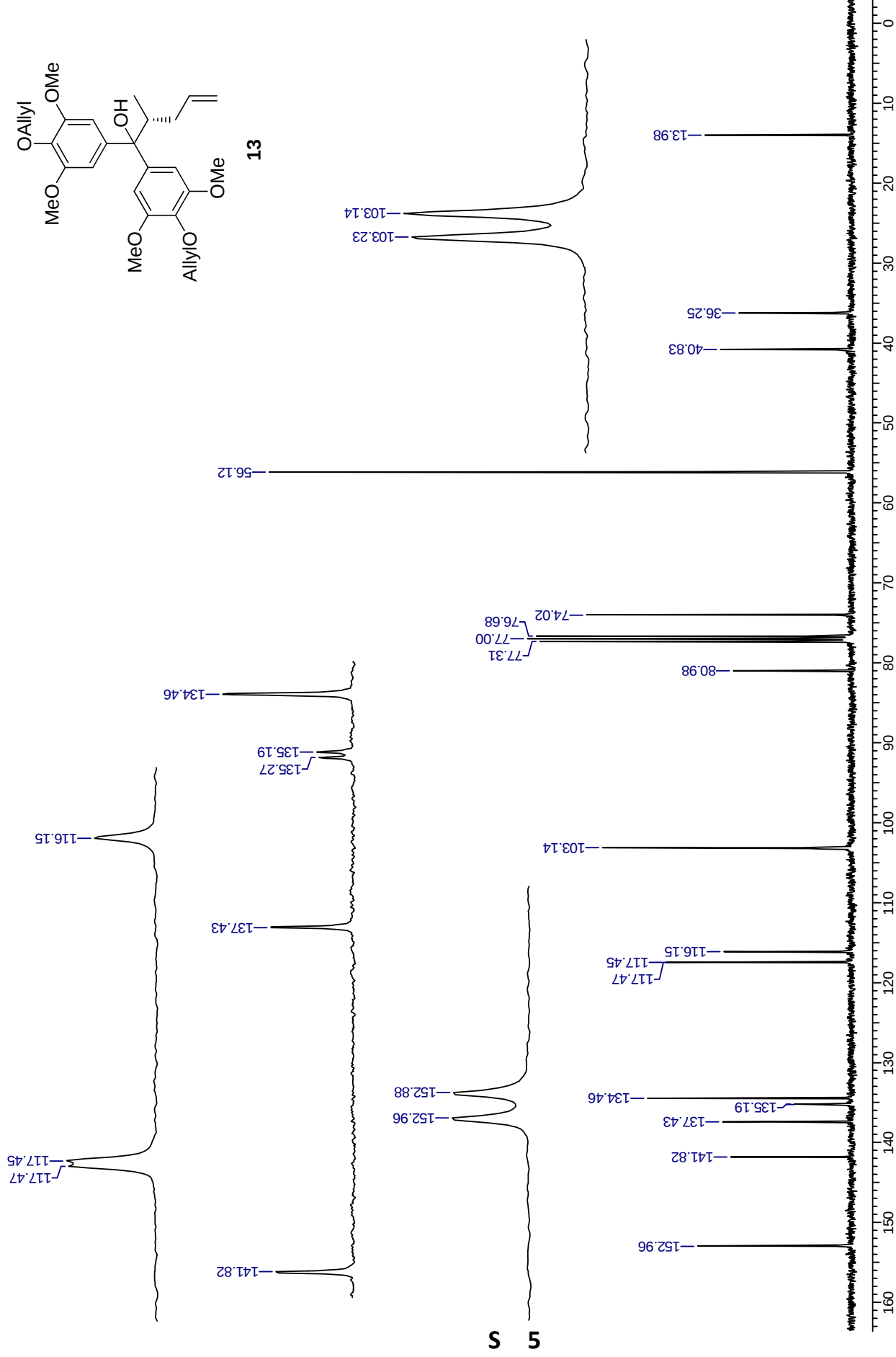
TABLE 3: Comparative ^1H & ^{13}C Coupling Constants (J) and/or Chemical Shifts for Natural and Synthetic Sacidumlignan D

 (-)-Sacidumlignan D 4	<i>Natural</i>		<i>Synthetic</i>	
	$\delta_{\text{H}}, J \text{ (Hz)}$	δ_{C}	$\delta_{\text{H}}, J \text{ (Hz)}$	δ_{C}
1,3	6.50 (2H, s)	106.6	6.53 (2H, s)	106.4
2		137.1		137.1
4, 6		148.1		148.0
5		135.8		135.7
7	7α : 3.20 (1H, dd, 10.0, 8.0) 7β : 4.25 (1H, dd, 8.0, 7.7)	74.3	7α : 3.33 (1H, dd, 10.1, 8.2) 7β : 4.26 (1H, t, 7.7)	74.2
8	2.00 (1H, m)	42.3	1.99 (1H, m)	42.3
9	0.96 (3H, d, 6.5)	15.4	0.98 (3H, d, 6.5)	15.4
1'		139.4		139.4
2', 6'	6.76 (2H, s)	106.3	6.78 (2H, s)	106.0
3', 5'		148.5		148.4
4'		136.2		136.2
7'		91.7		91.5
8'	2.40 (1H, dq, 9.6, 6.9)	51.2	2.42 (1H, dq, 9.6, 6.9)	51.2
9'	0.85 (3H, d, 6.9)	17.0	0.86 (3H, d, 6.9)	17.0
4,6-OMe	3.72 (6H, s)	57.0	3.73 (6H, s)	56.9
3', 5'-OMe	3.78 (6H, s)	57.2	3.80 (6H, s)	57.1
4', 5-OH	Not observed		7.06 (1H, s), 7.17 (1H, s)	

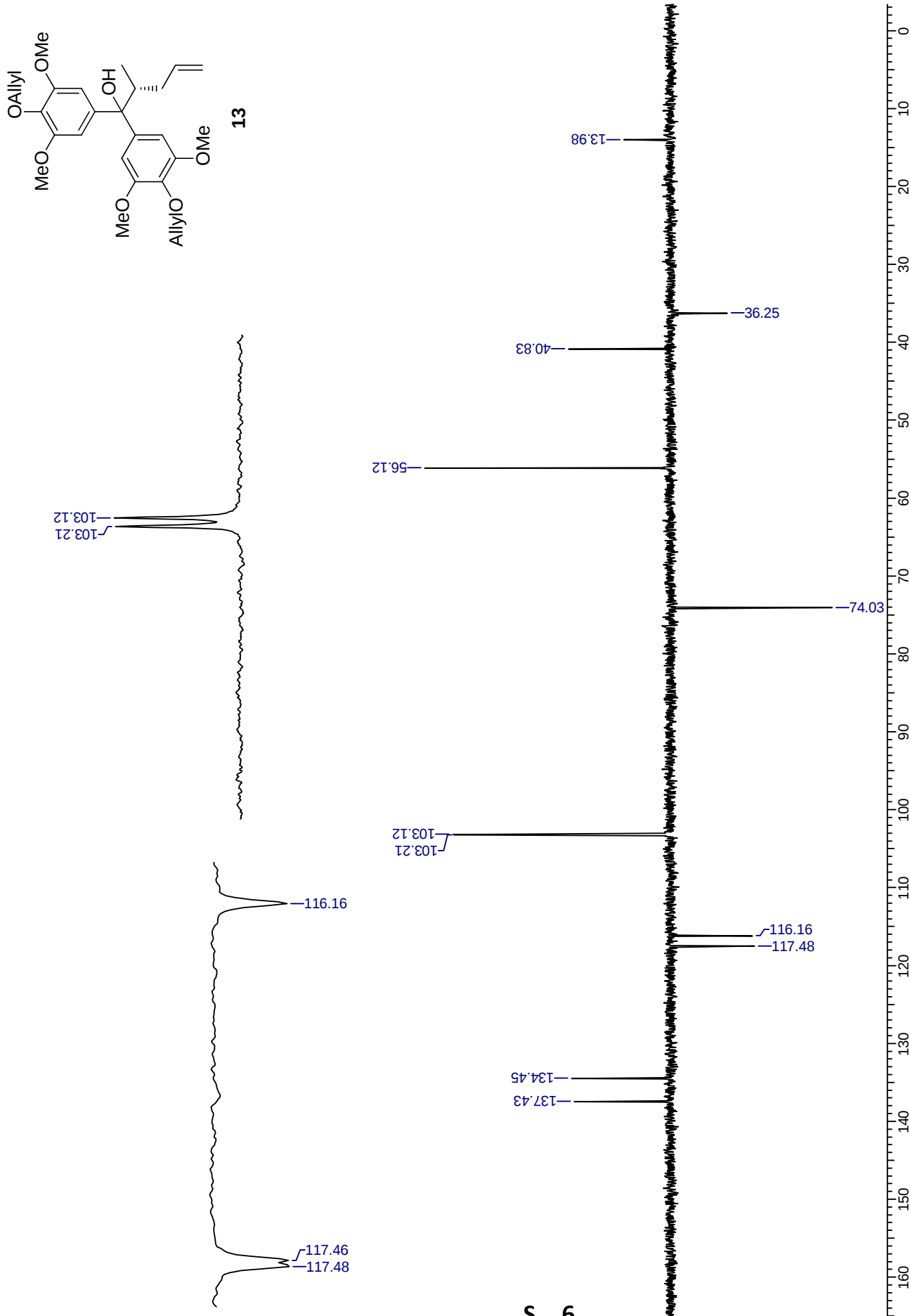
Acquisition Time (sec)	4.0894	Comment	Jeetendra	Date	11/05/2011 15:30:24
Frequency (MHz)	400.13	Nucleus	¹ H	Points Count	32768
Temperature (grad C)	0.000			Original Points Count	32768
				Sweep Width (Hz)	8012.82

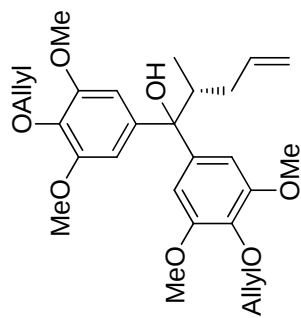
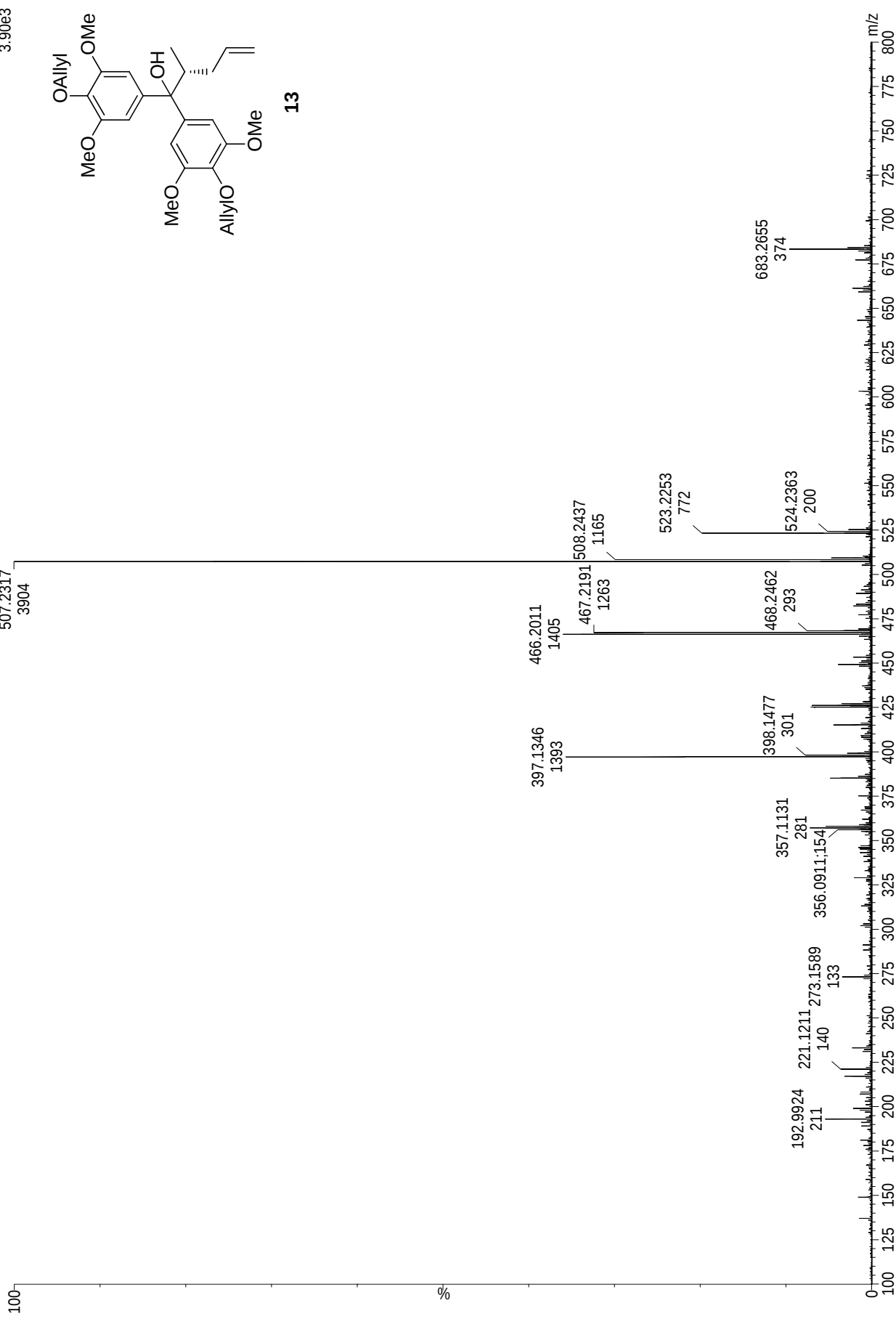


Acquisition Time (sec)	1.3631	Date	13/05/2011 16:44:36	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000



Acquisition Time (sec)	1.3631	Date	11/05/2011 15:33:40	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000

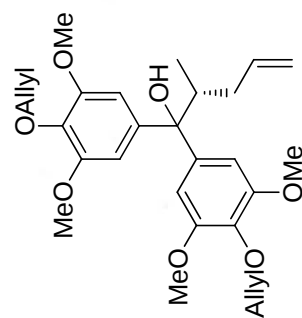
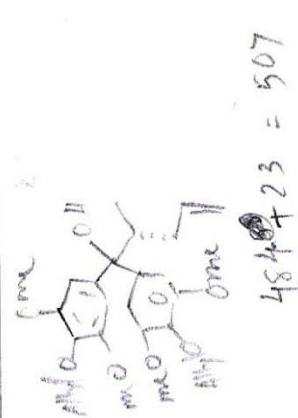




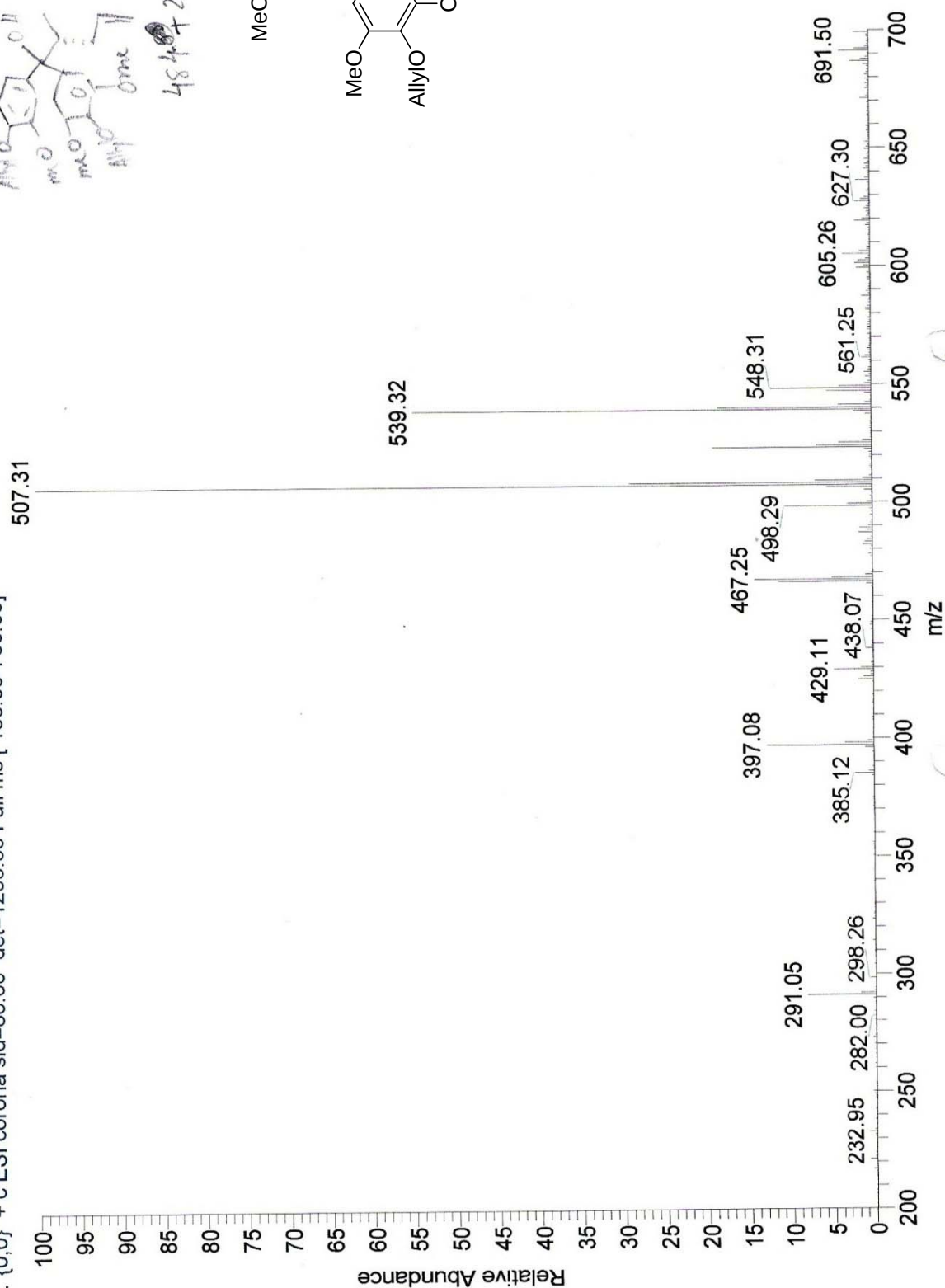
13

JR260-D #13-48 RT: 0.11-0.42 AV: 36 SB: 24 0.03-0.10, 0.55-0.67 NL: 2.00E6

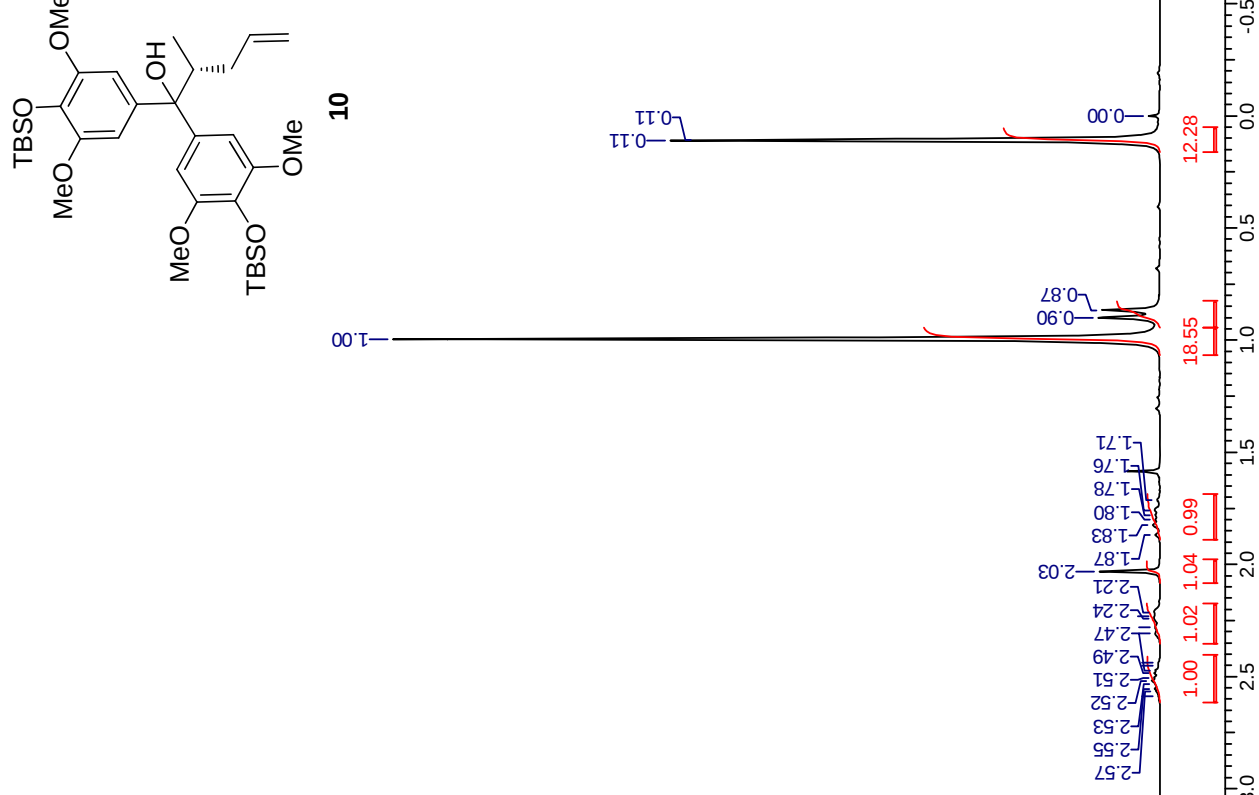
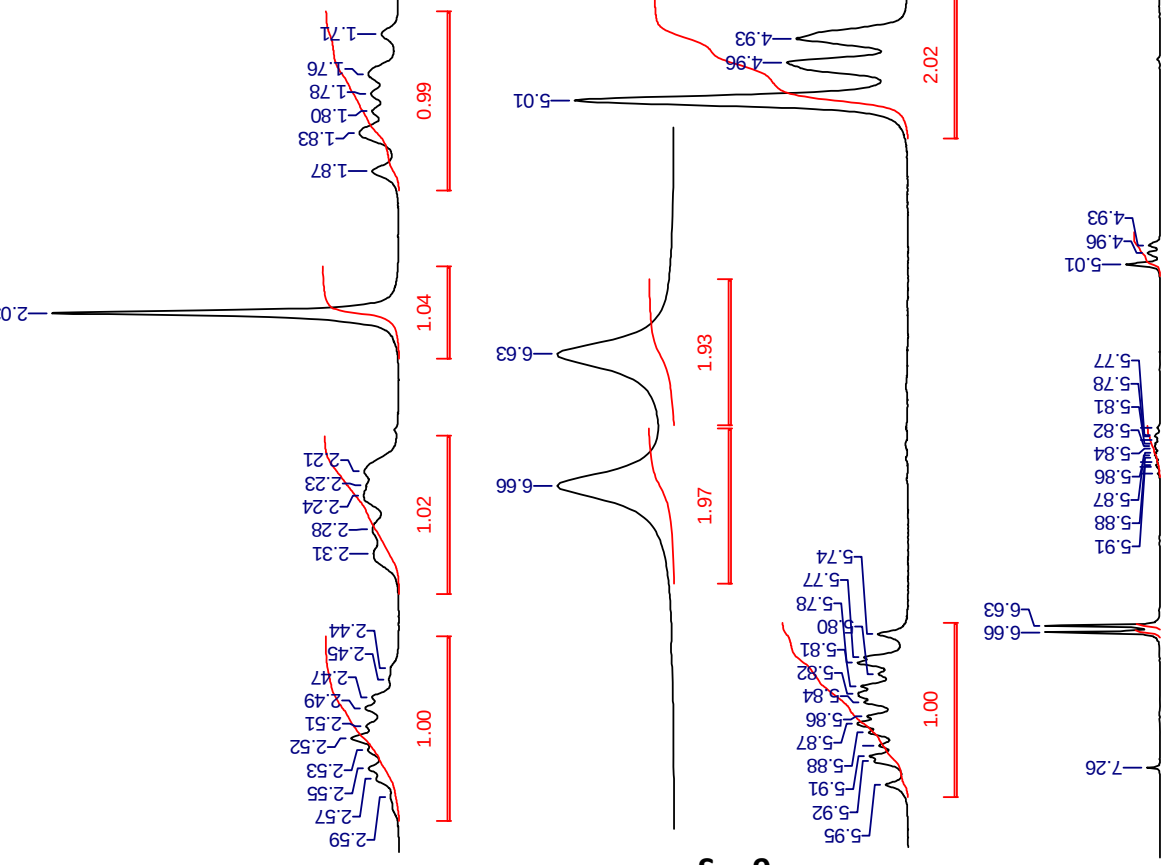
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [100.00-700.00]



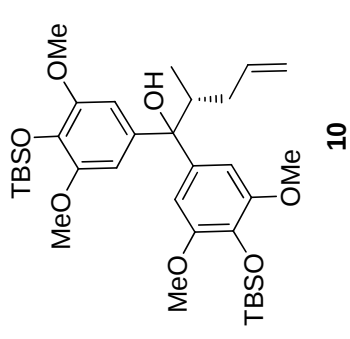
13



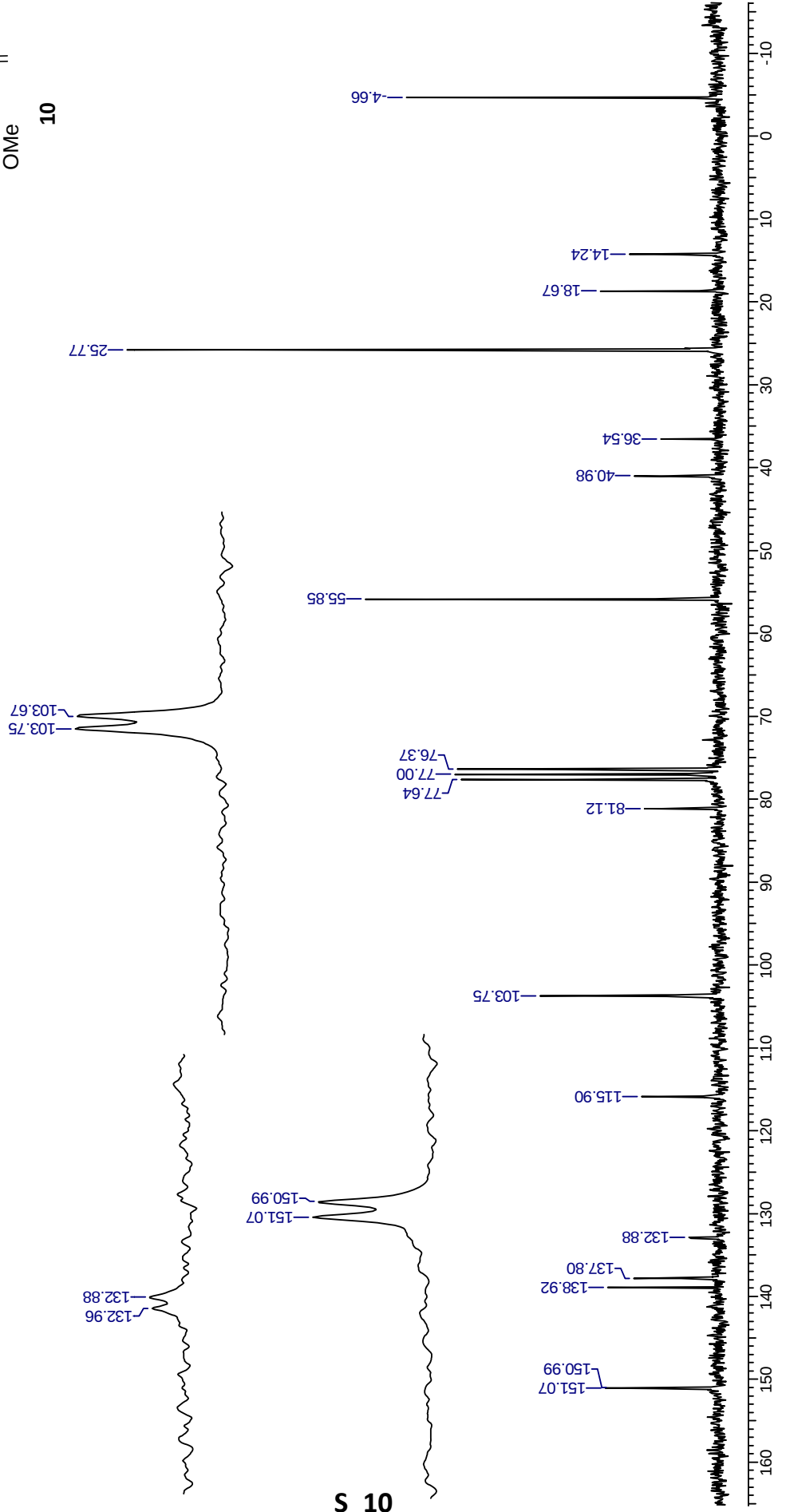
Acquisition Time (sec)	7.9167	Comment	Jeetendra10986	Date	07/04/2011	10:55:52
Frequency (MHz)	200.13	Nucleus	¹ H	Original Points Count	32768	Points Count
Temperature (grad C)	0.000				32768	Sweep Width (Hz)
					4139.07	



Acquisition Time (sec)	2.7329	Comment	Rout/10986	Date	04/04/2011	10:50:52
Frequency (MHz)	50.32	Nucleus	¹³ C	Original Points Count	32768	Points Count
Temperature (grad C)	0.000					11990.41
Sweep Width (Hz)						

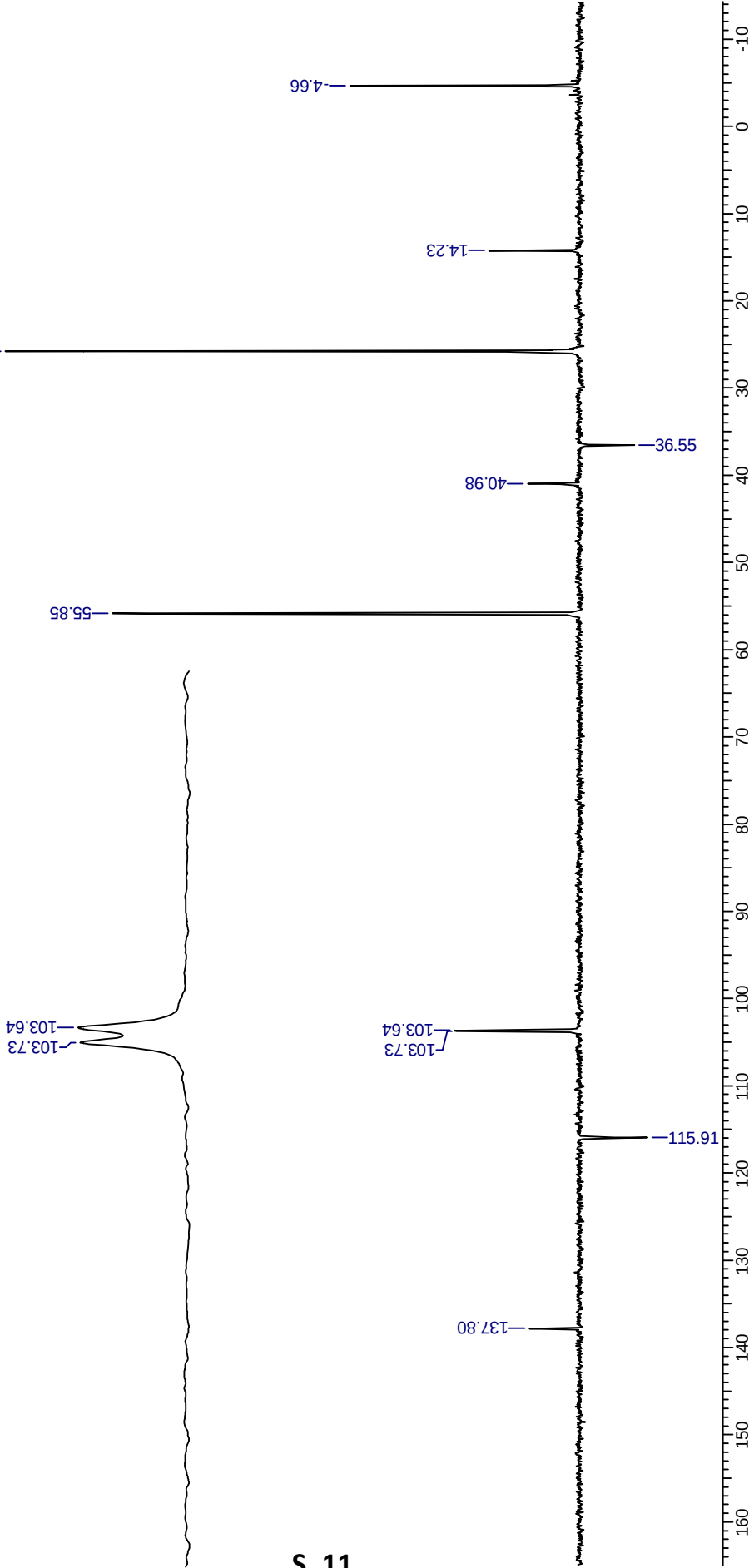
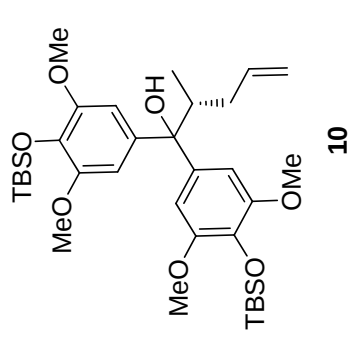


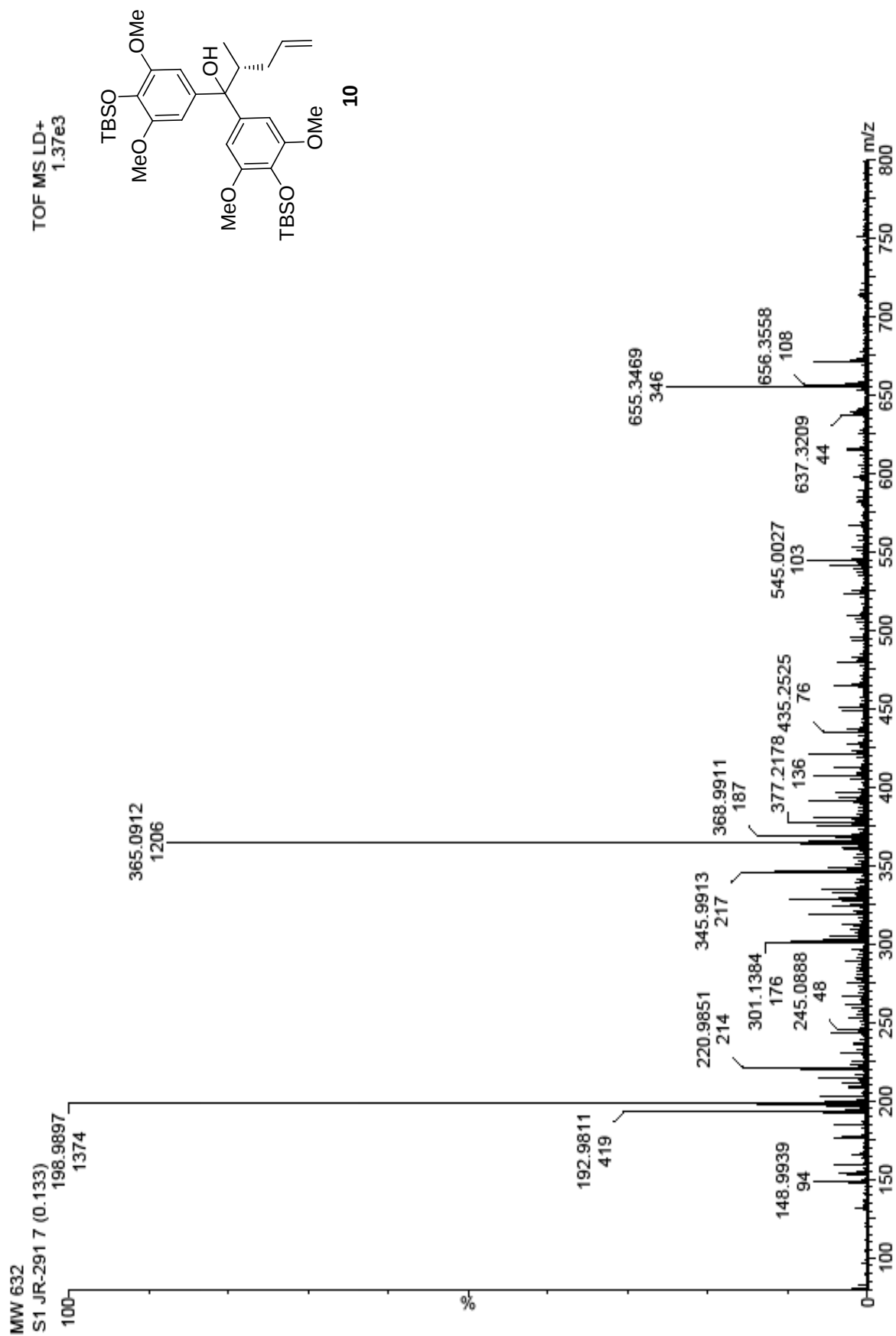
10



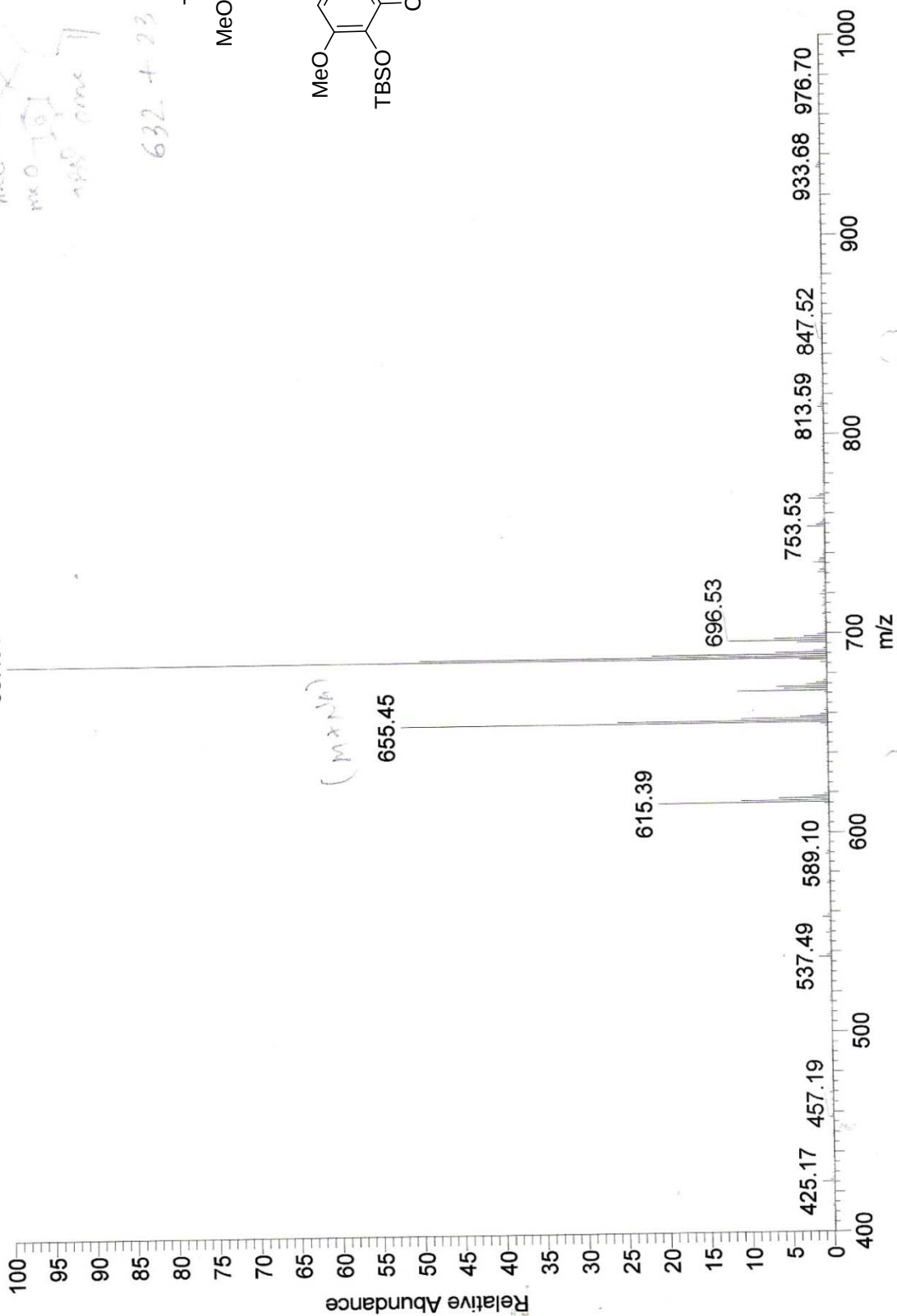
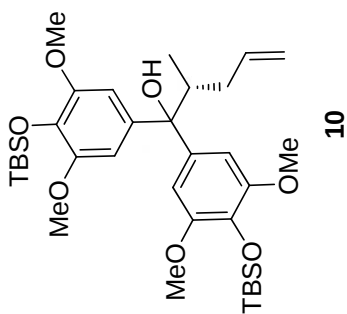
10 S

Acquisition Time (sec)	2.7329	Comment	Rout/10986	Date	04/04/2011	10:33:56
Frequency (MHz)	50.32	Nucleus	13C	Original Points Count	32768	Points Count
Temperature (grad C)	0.000				32768	Sweep Width (Hz)
						11990.41

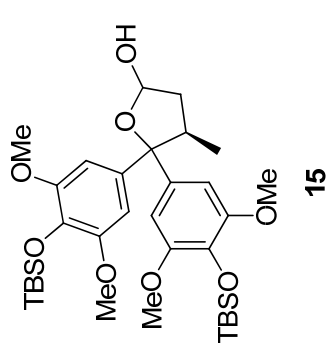




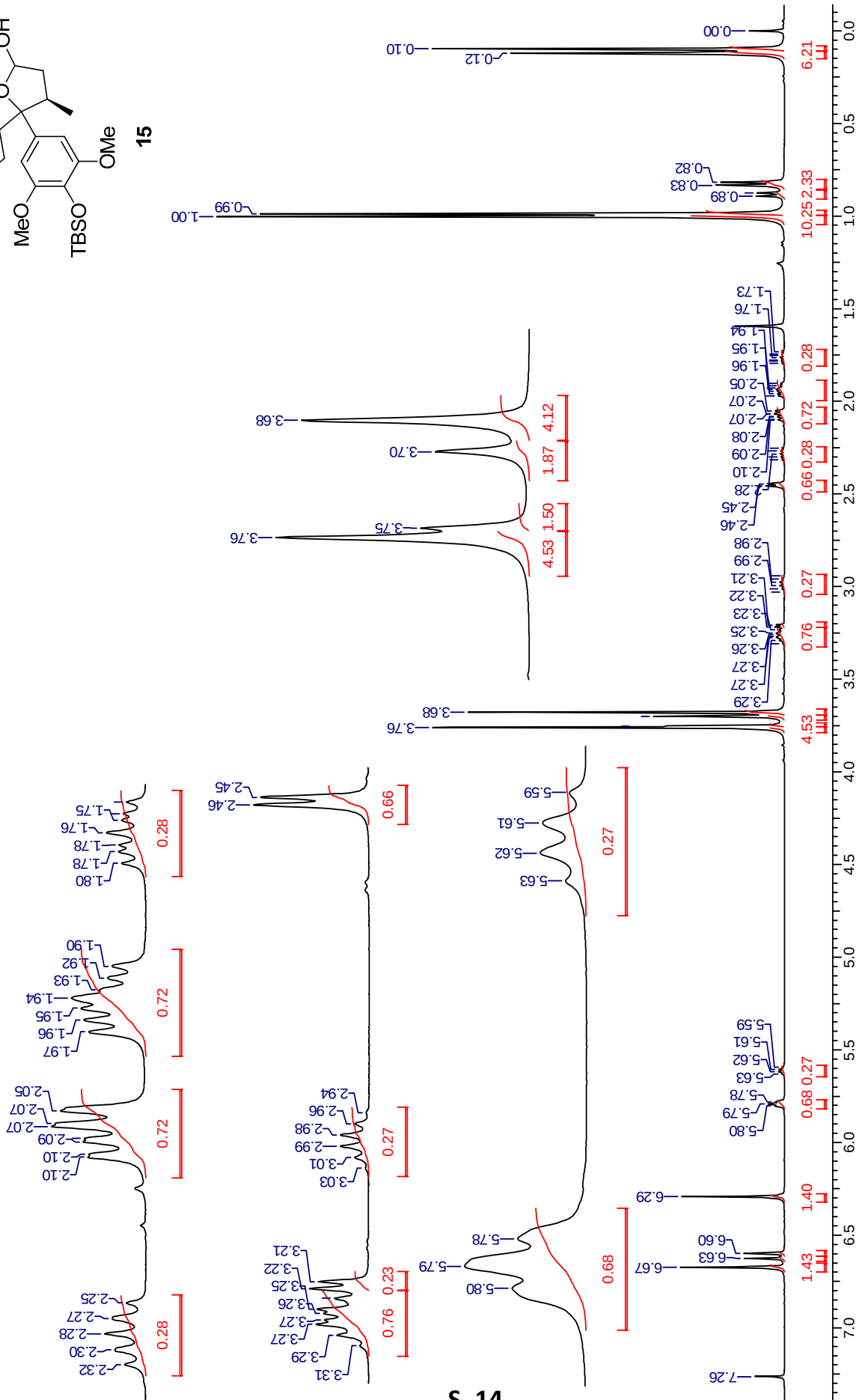
$\text{HO}-\text{C}_6\text{H}_4-\text{O}-\text{C}_6\text{H}_4-\text{OH}$

$$632 + 23 = 655$$


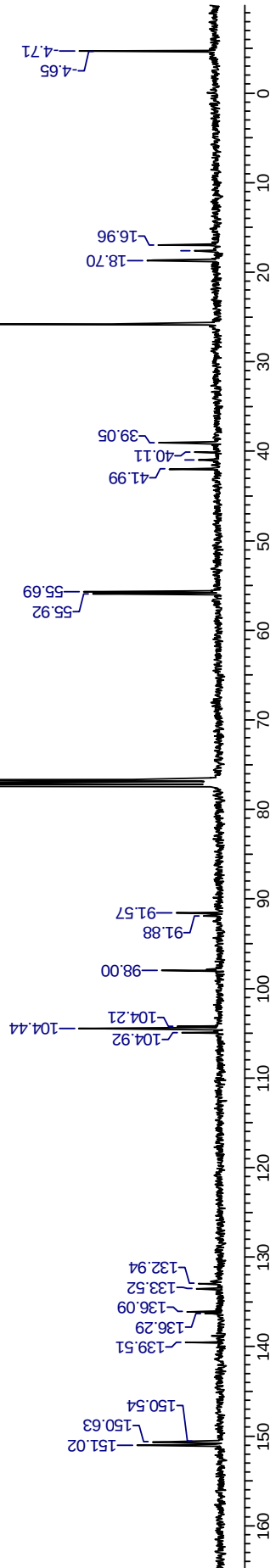
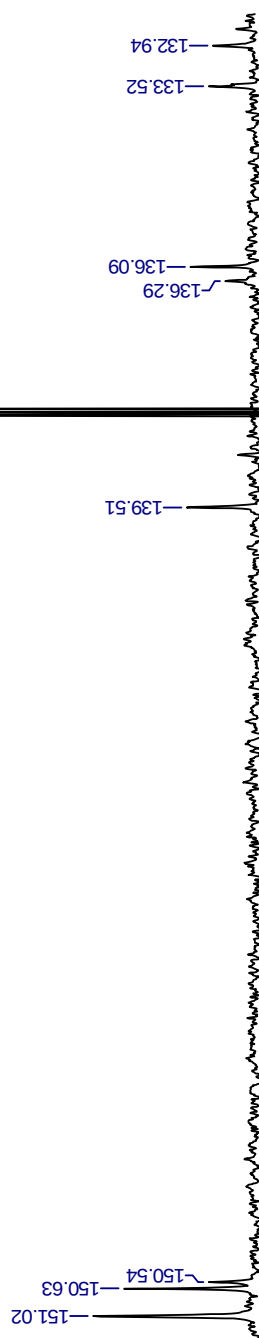
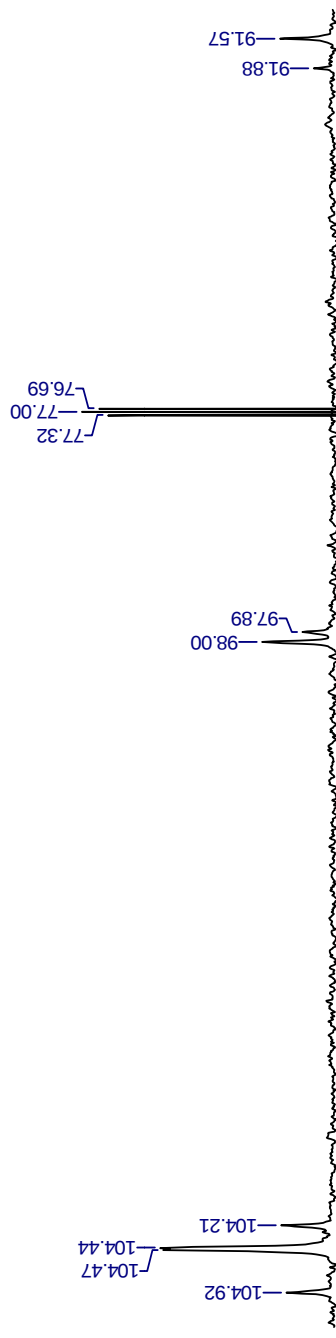
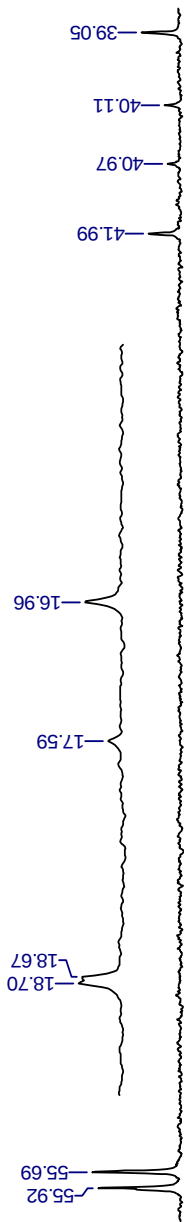
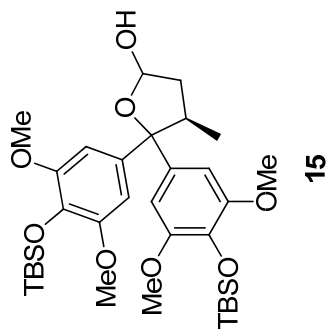
Acquisition Time (sec)	4.0894	Comment	1H/	Date	24/04/2011 21:50:22	Frequency (MHz)	400.13
Nucleus	1H	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	8012.82
Temperature (grad C)	0.000						



15

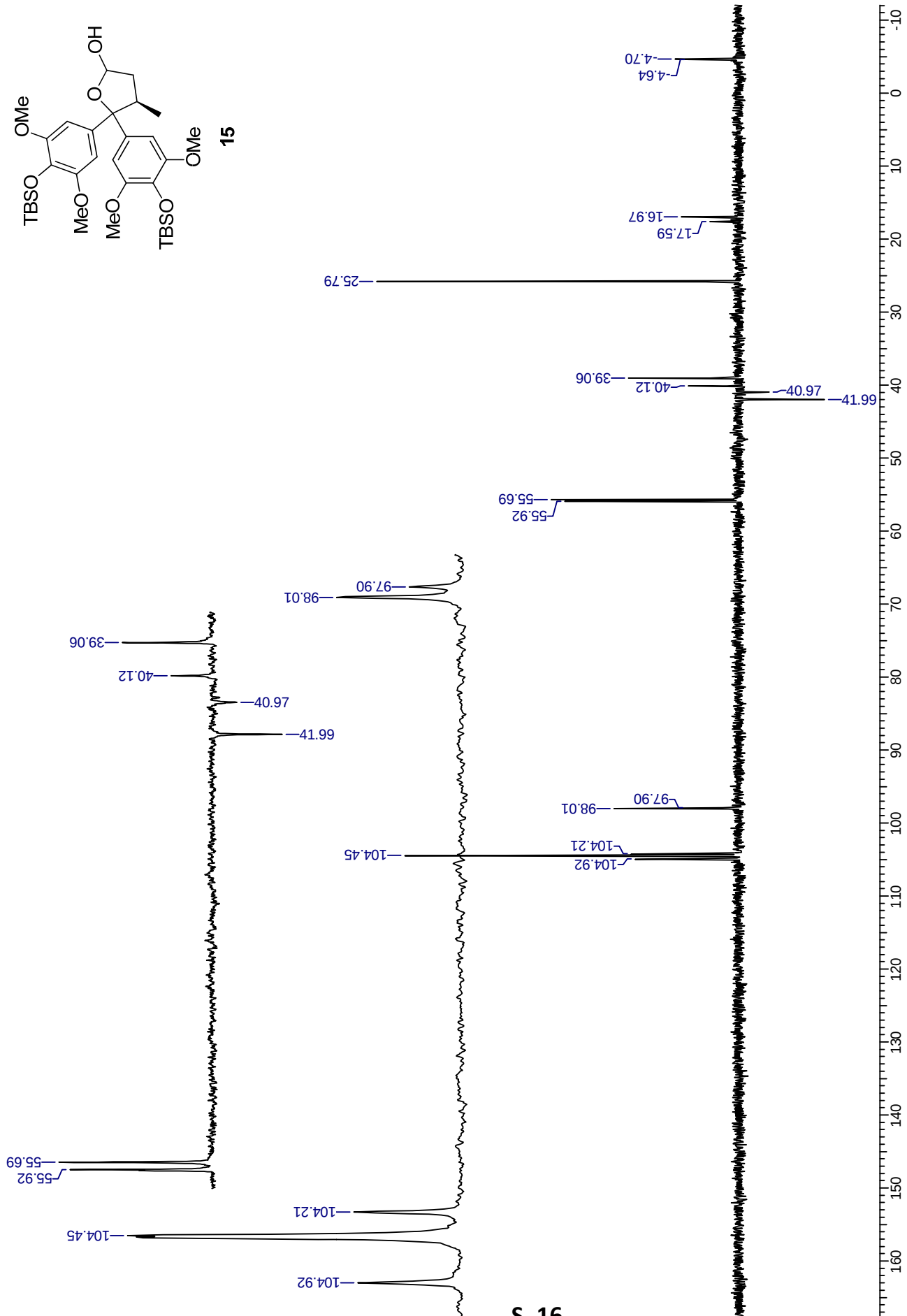


Acquisition Time (sec)	1.2976	Date	24/04/2011	21:56:06	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000	

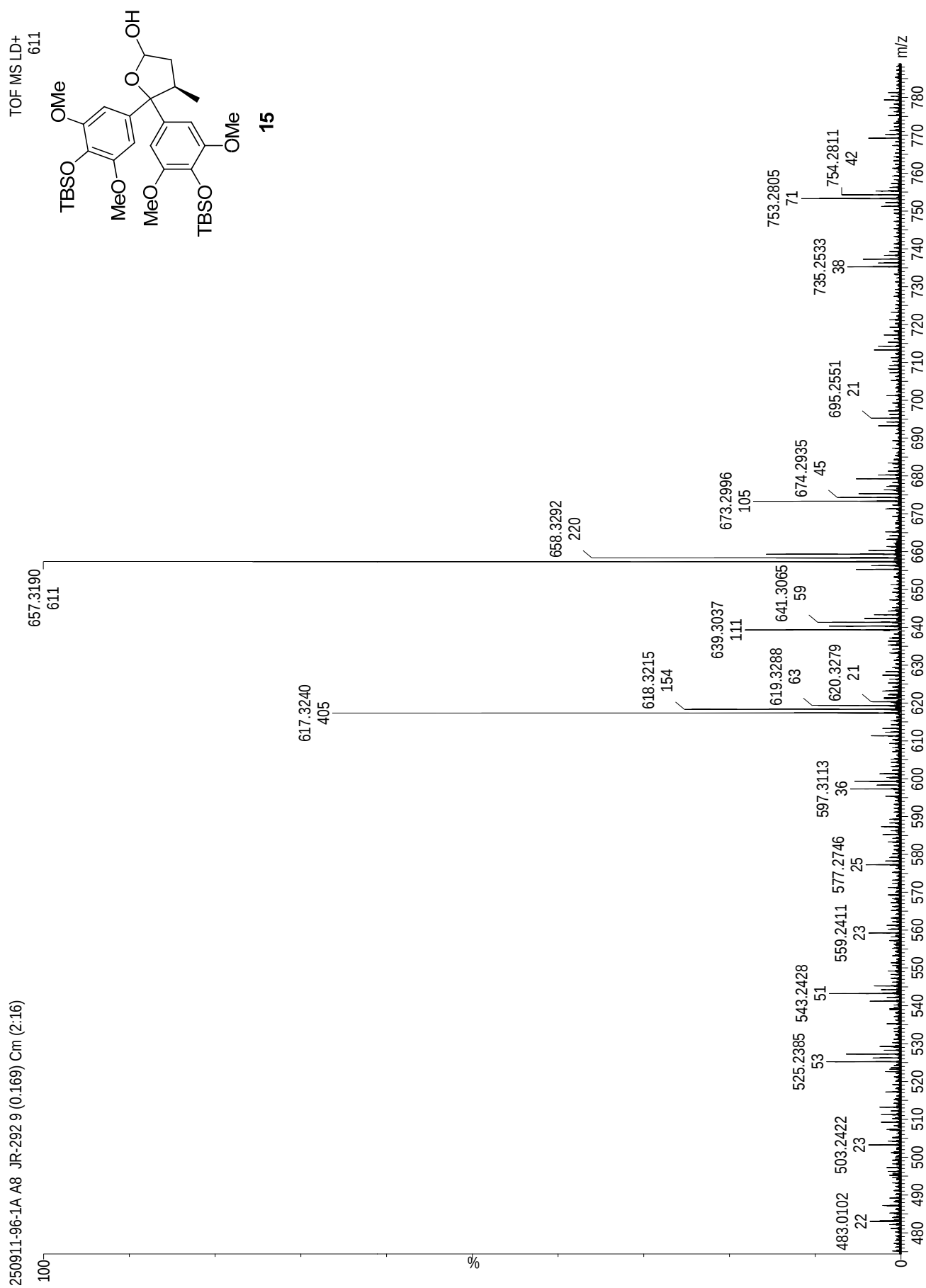


S 15

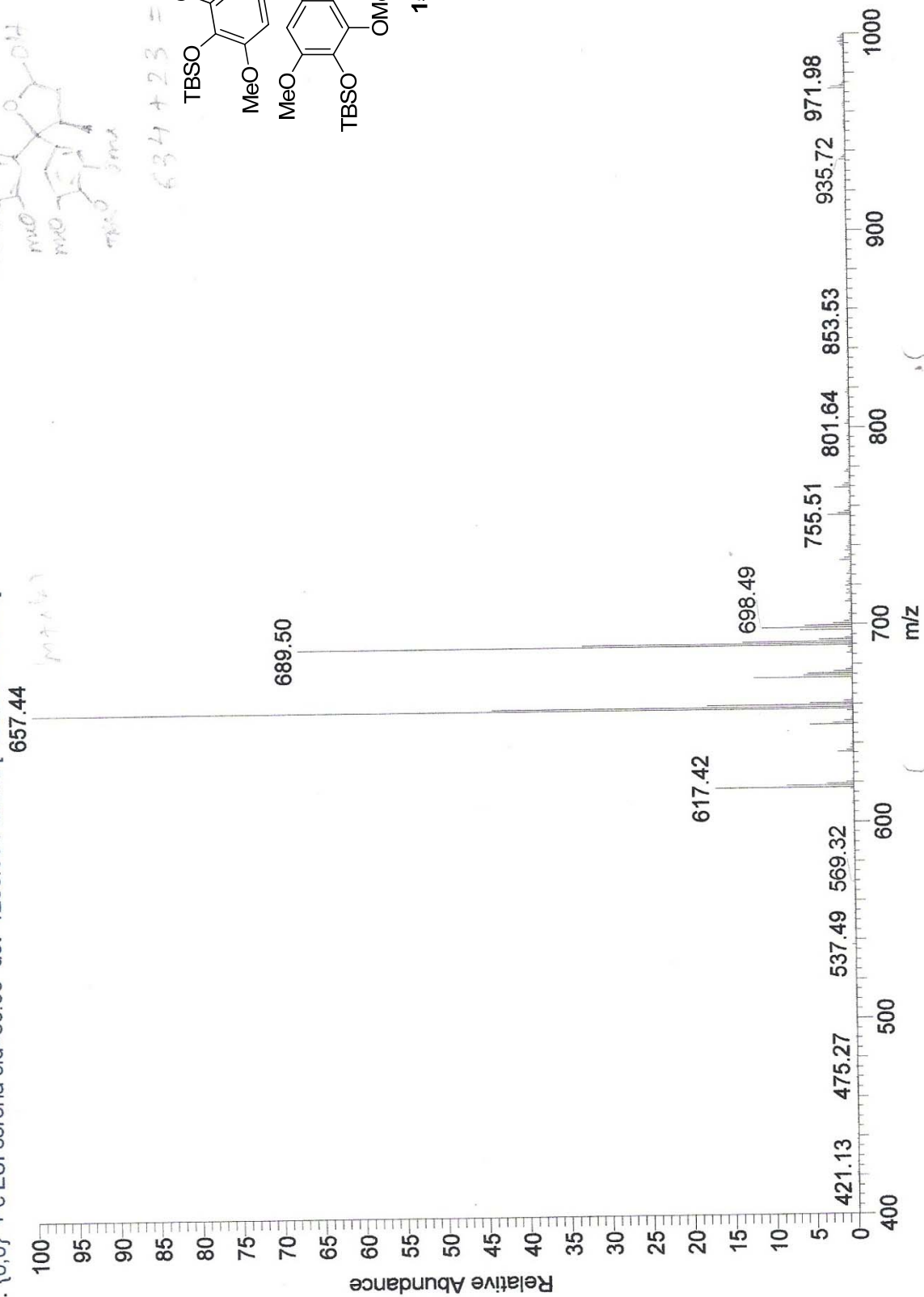
Acquisition Time (sec)	1.2976	Date	24/04/2011 21:51:26	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000



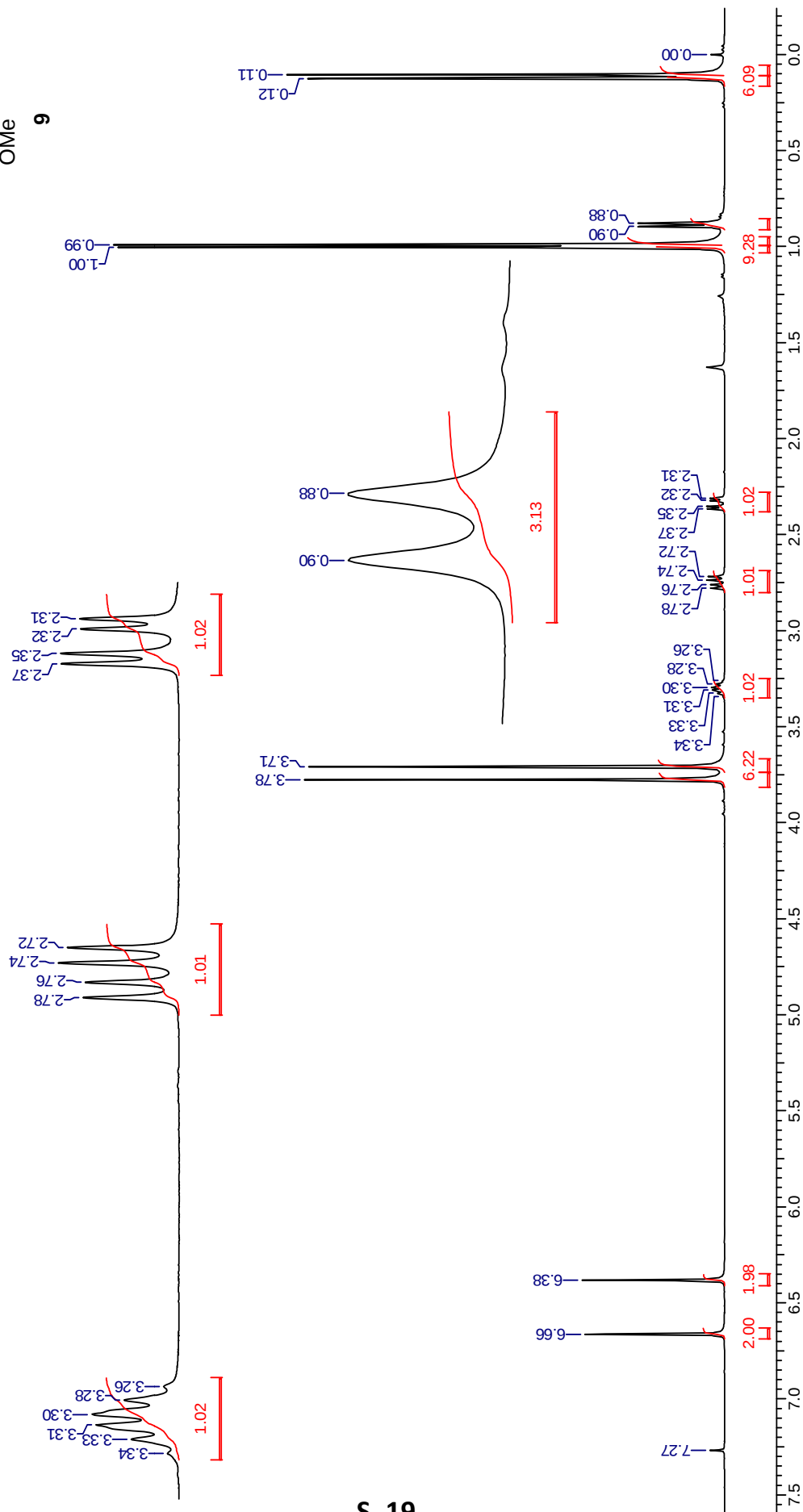
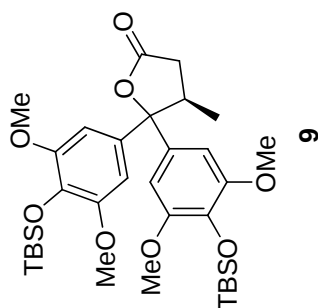
250911-96-1A A8 JR-292 9 (0.169) Cm (2:16)



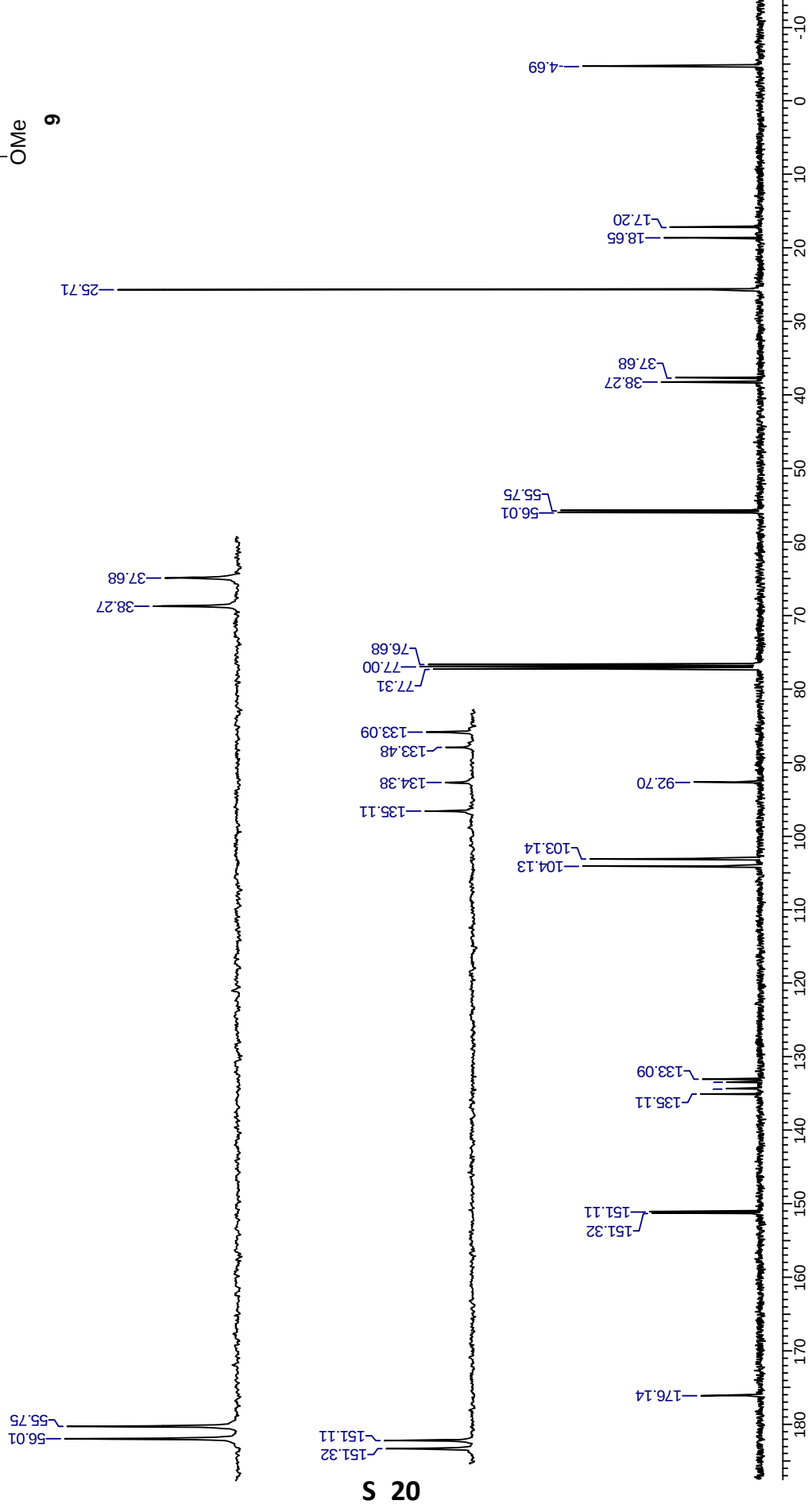
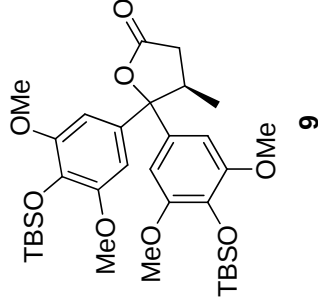
JR-292 #15-43 RT: 0.12-0.37 AV: 29 SB: 19 0.00-0.09, 0.51-0.57 NL: 2.98E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [400.00-1000.00]



Acquisition Time (sec)	4.0894	Comment	Jeetendra	Date	11/05/2011 15:54:28
Frequency (MHz)	400.13	Nucleus	¹ H	Original Points Count	32768
Temperature (grad C)	0.000			Points Count	32768
				Sweep Width (Hz)	8012.82



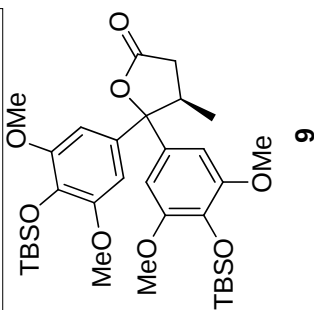
Acquisition Time (sec)	1.3631	Date	11/05/2011 16:23:34	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000



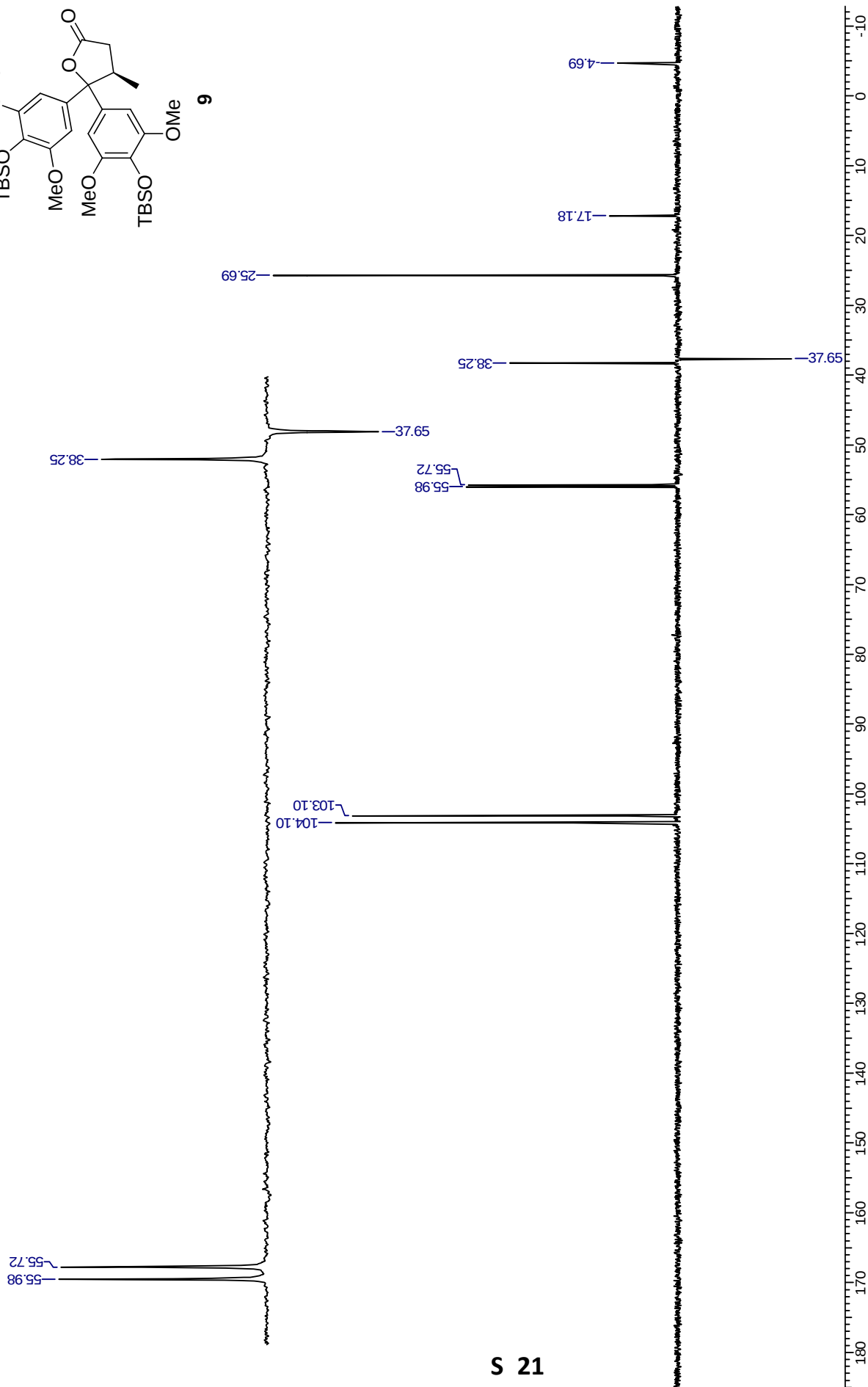
S 20

20 May 2011

Acquisition Time (sec)	1.3631	Date	11/05/2011 16:23:02	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000

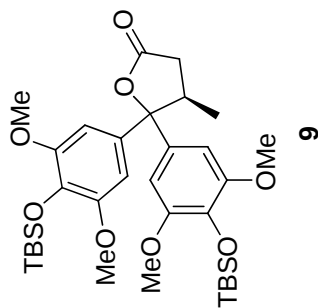
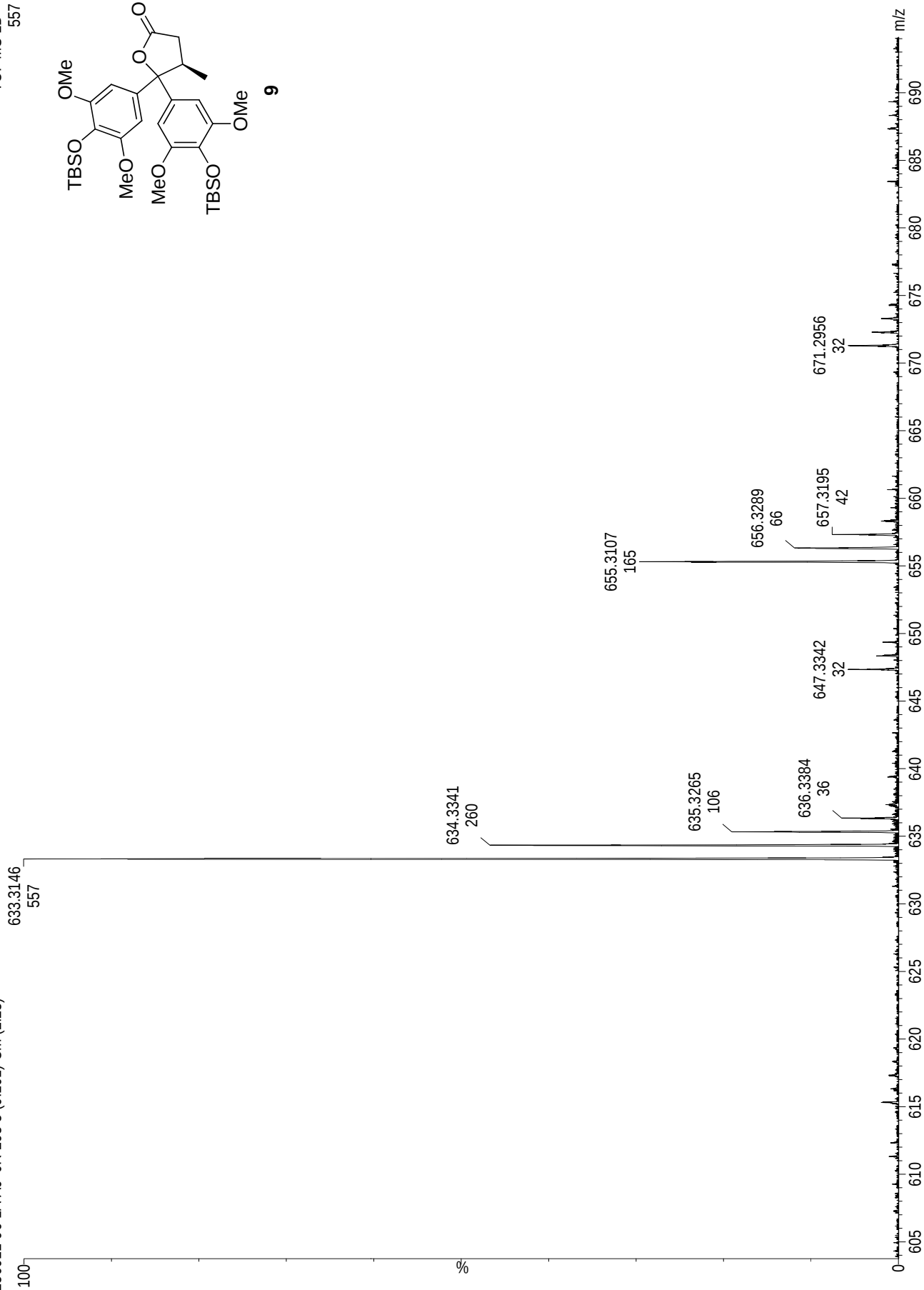


9

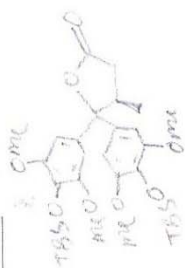
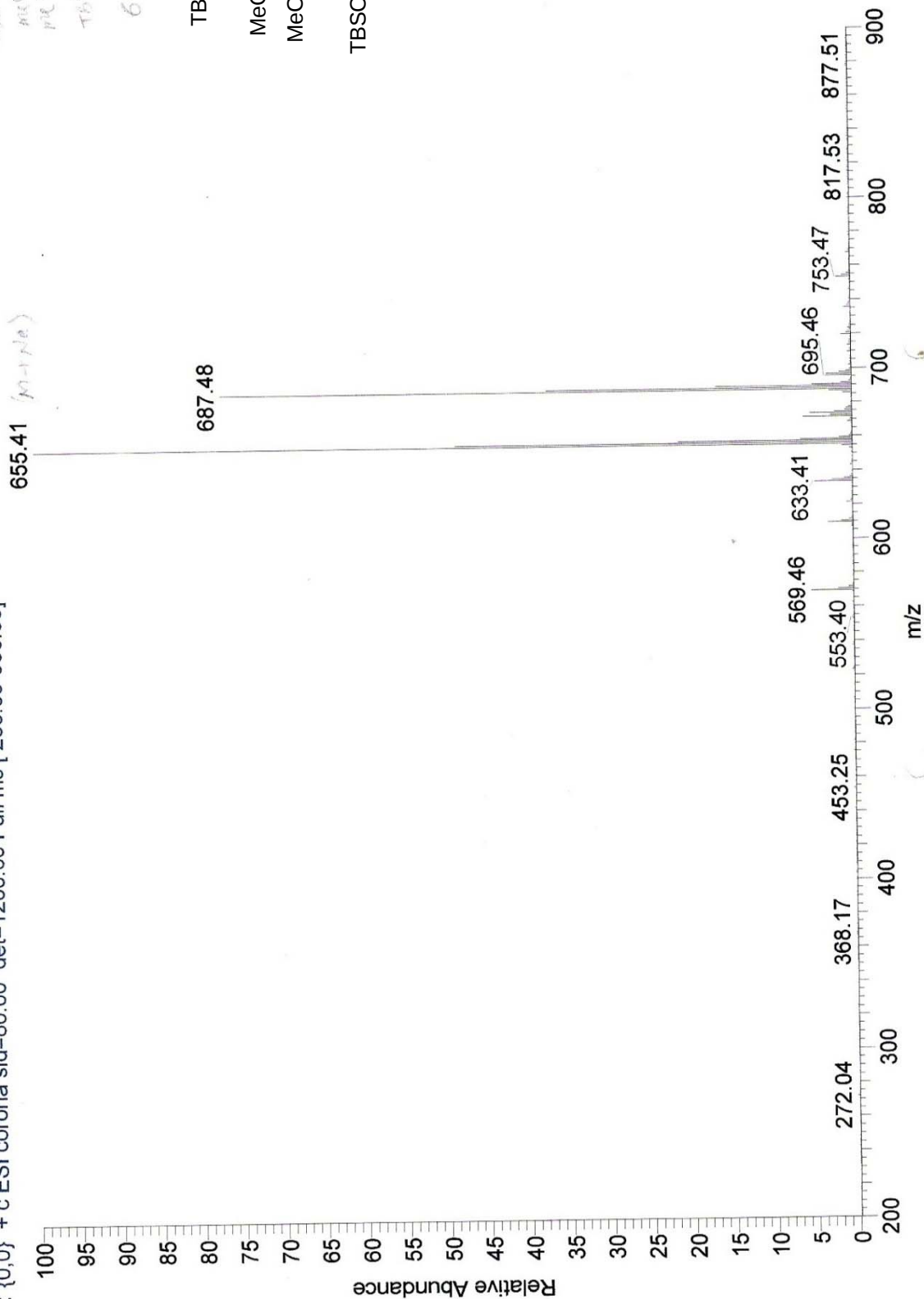


250911-96-1A A9 JR-293 5 (0.101) Cm (2:23)

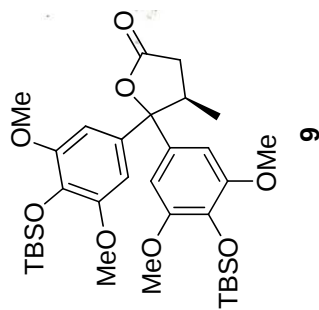
TOF MS LD+
557



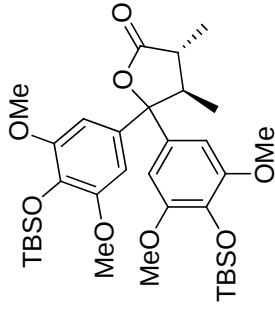
JR-293 #14-43 RT: 0.12-0.37 AV: 30 SB: 15 0.01-0.09, 0.47-0.51 NL: 4.18E6
T: {0,} + c ESI corona sid=80.00 det=1200.00 Full ms [200.00-900.00]



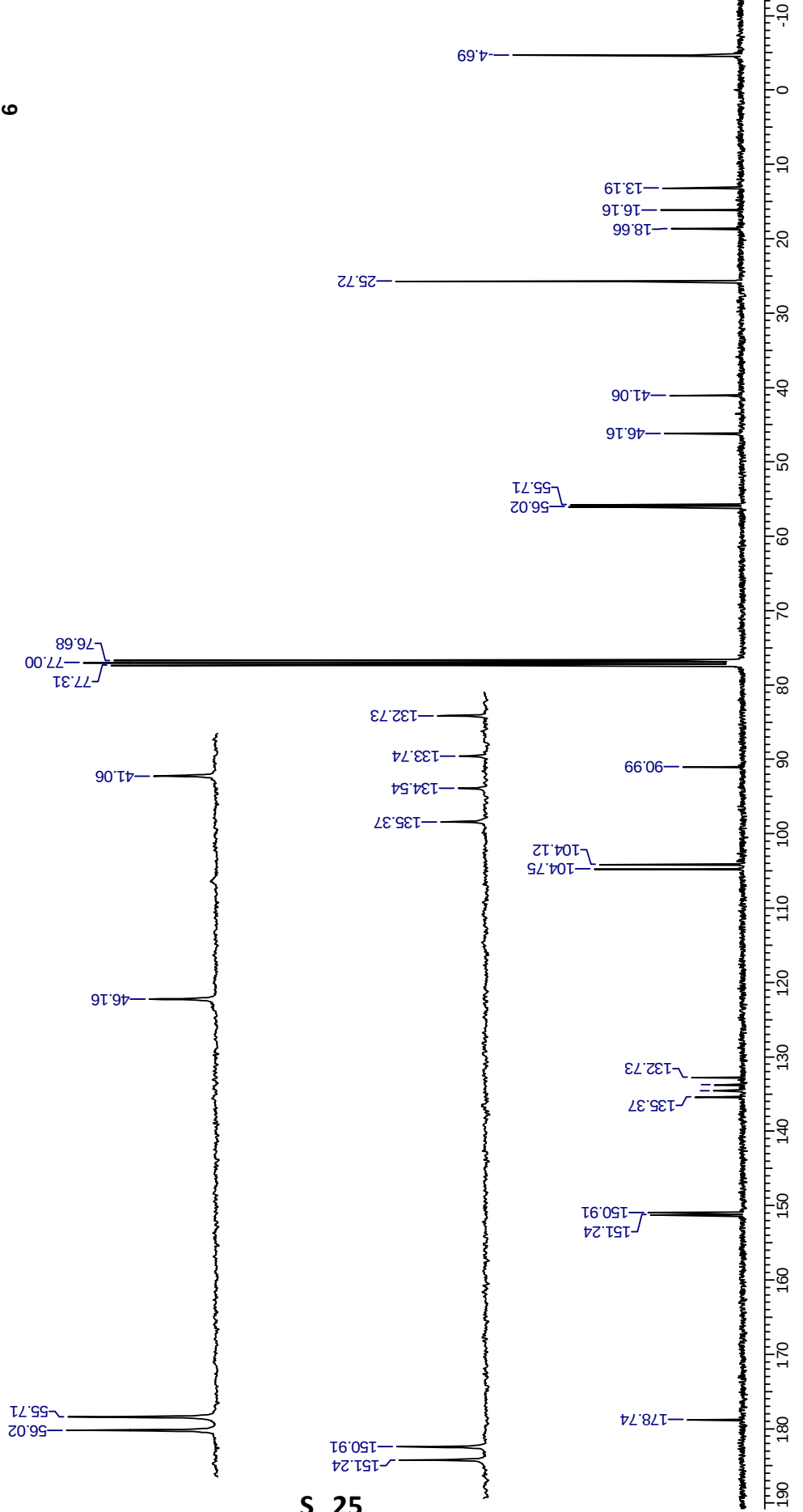
632 + 23 = 655



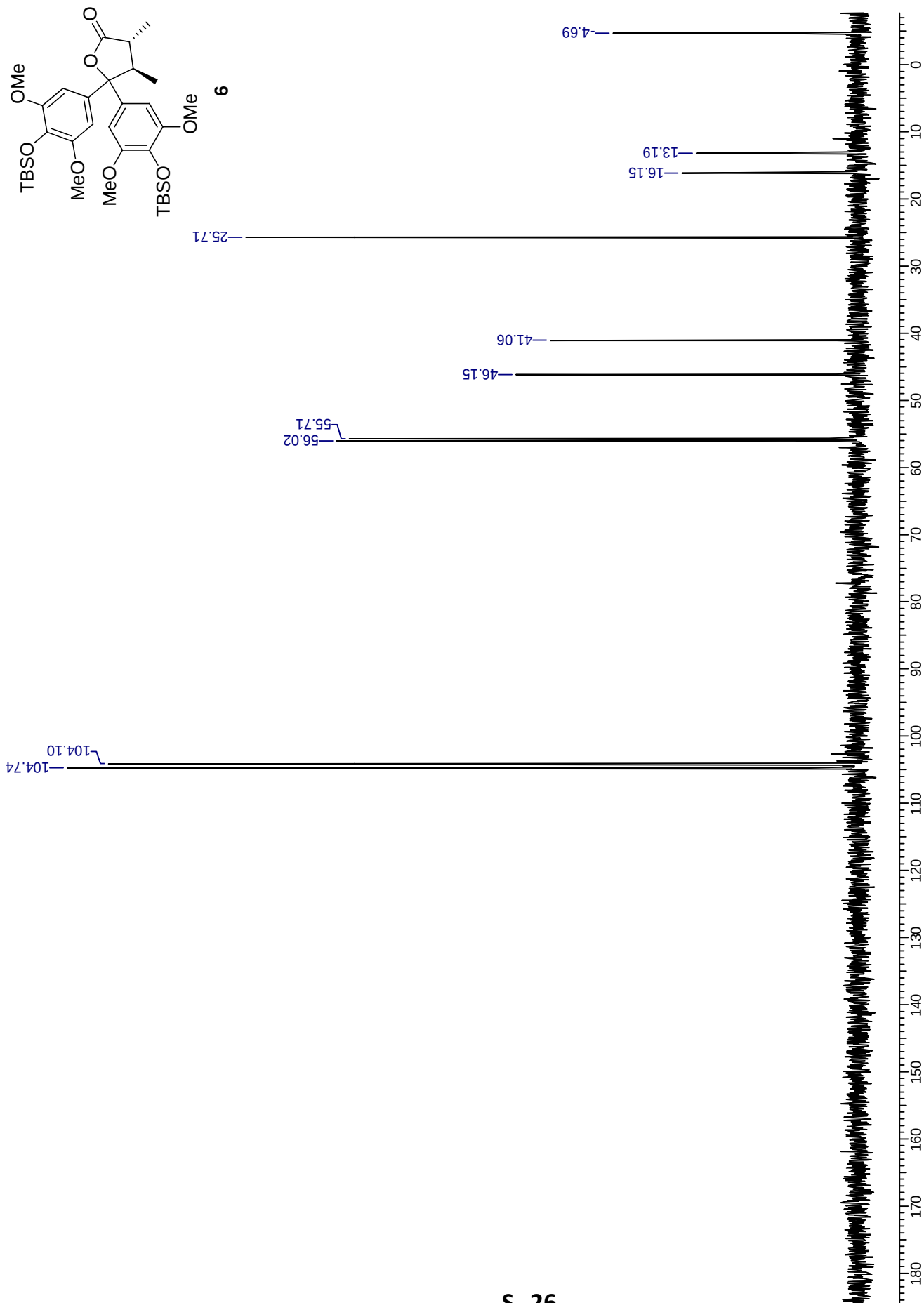
Acquisition Time (sec)	1.2976	Date	24/04/2011	13:49:42	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000	

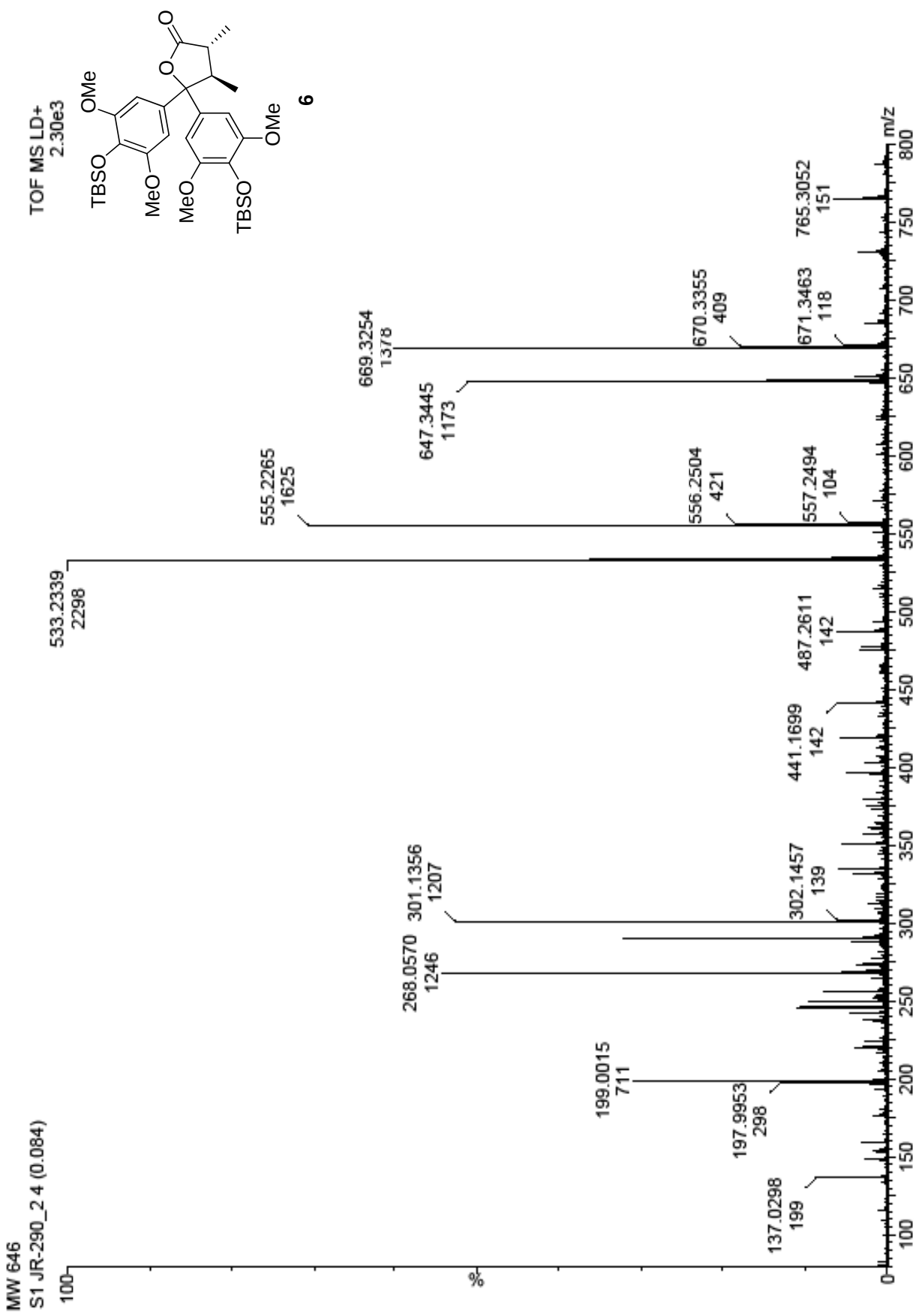


6



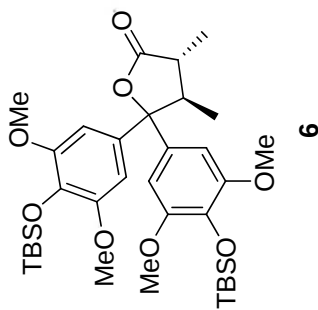
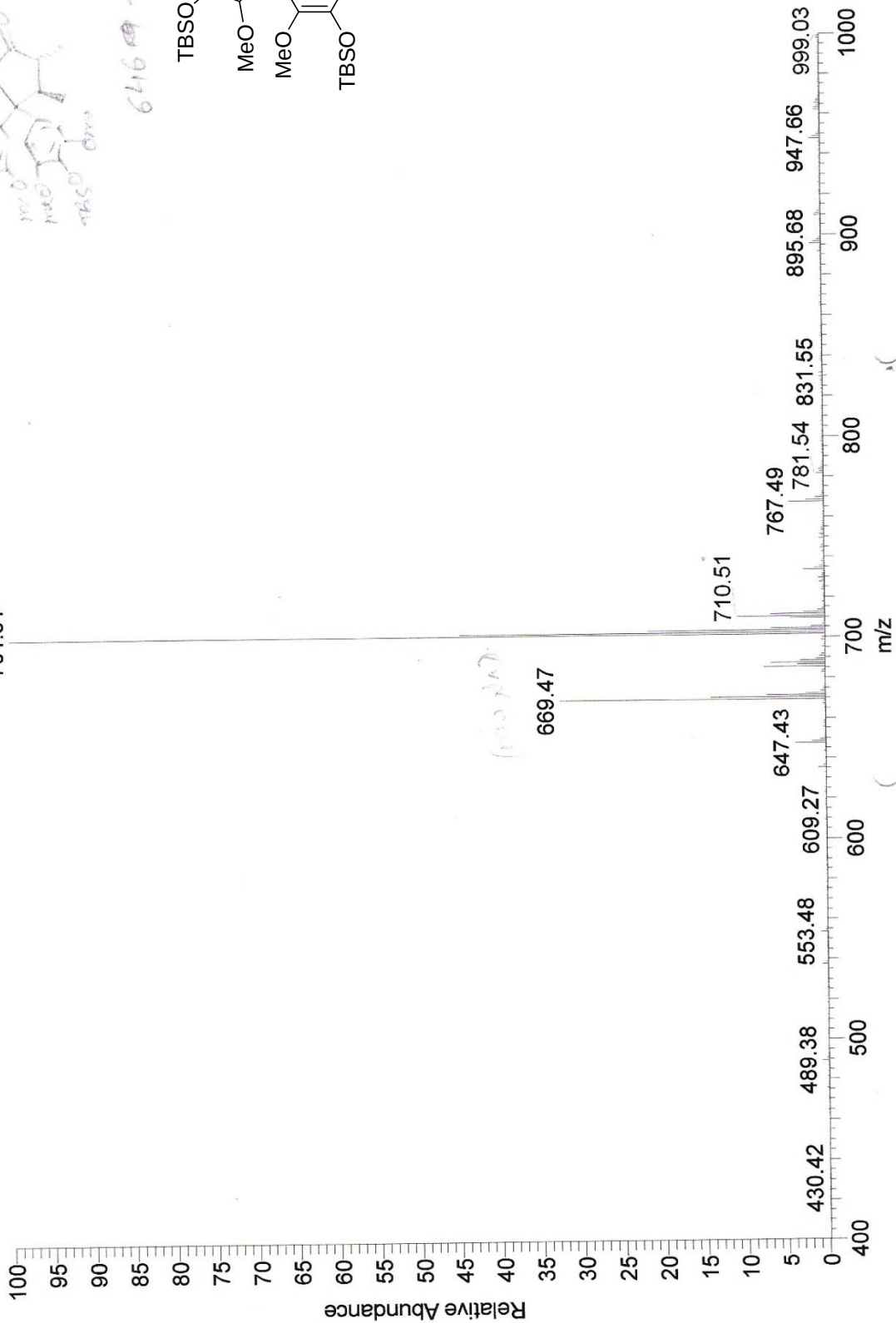
Acquisition Time (sec)	1.2976	Date	24/04/2011 13:47:54	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000



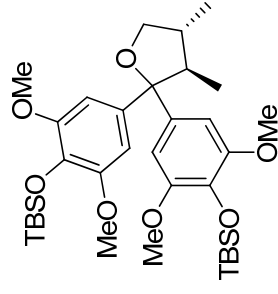


JR-290 #14-48 RT: 0.12-0.42 AV: 35 SB: 22 0.00-0.08, 0.52-0.62 NL: 3.23E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [400.00-1000.00]

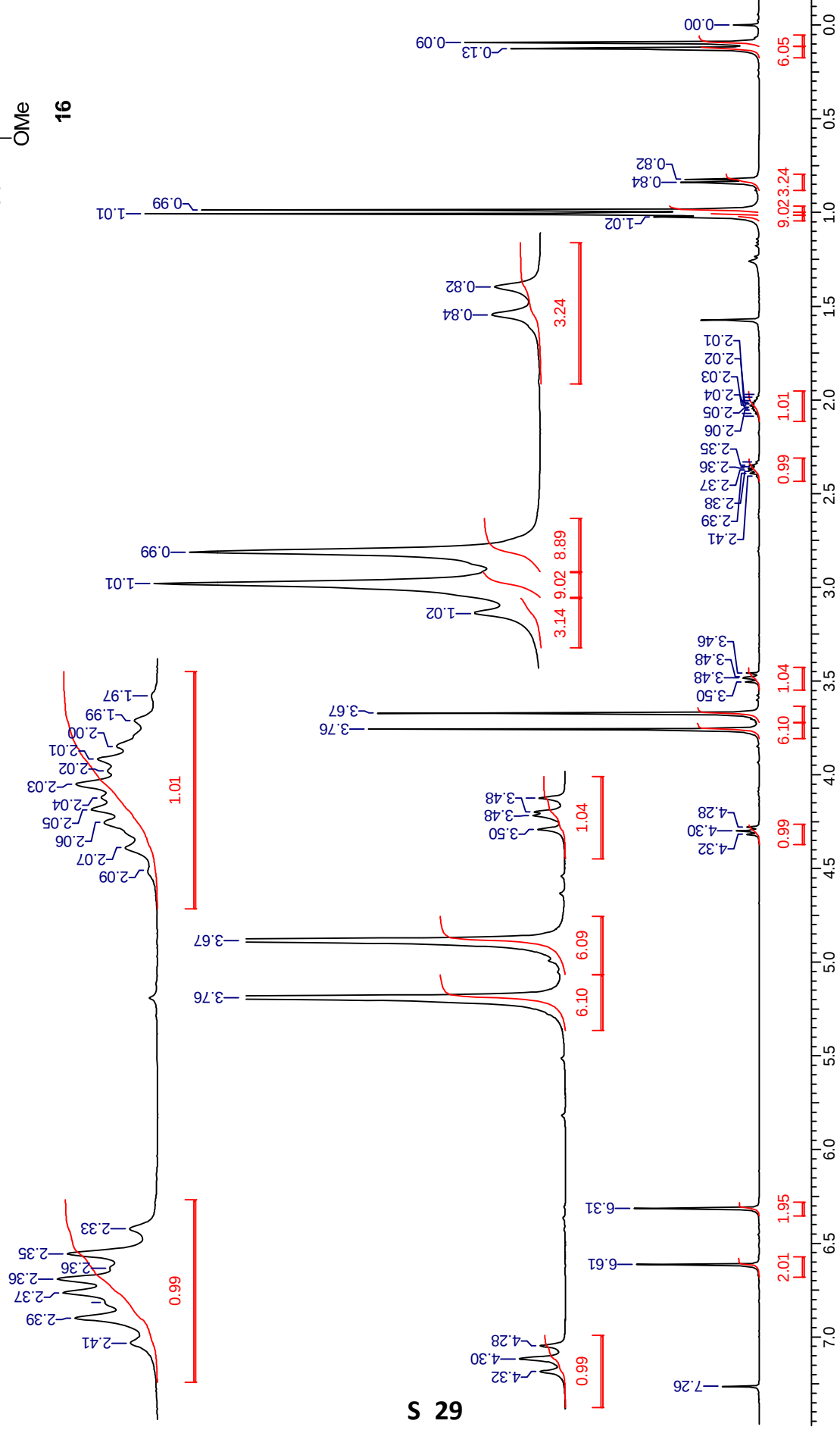
701.51



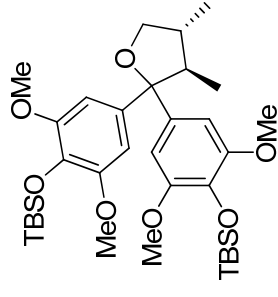
Acquisition Time (sec)	4.0894	Comment	¹ H/	Date	24/04/2011 20:55:00	Frequency (MHz)	400.13
Nucleus	¹ H	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	8012.82
Temperature (grad C)	0.000						



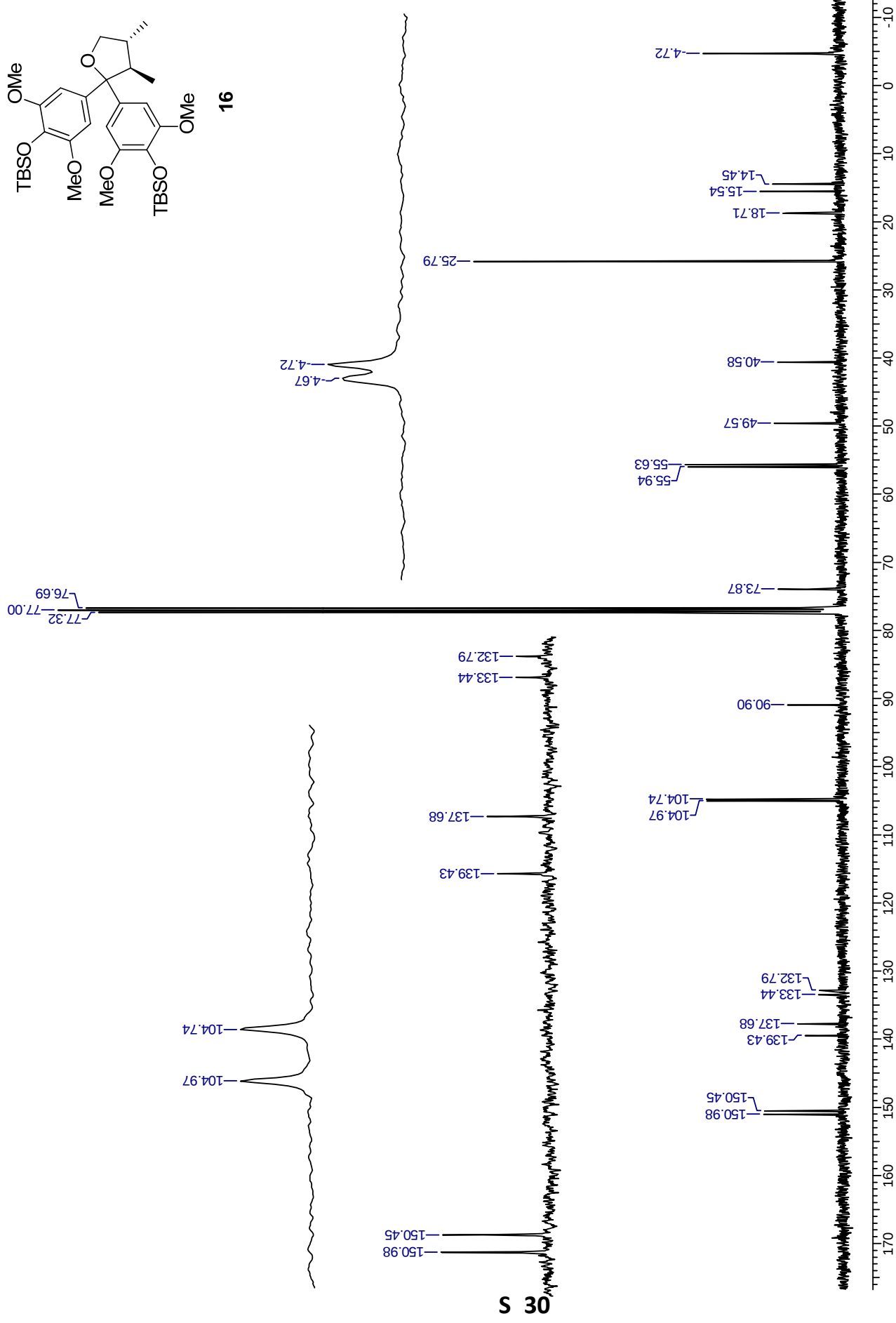
16



Acquisition Time (sec)	Date	Points Count	24/04/2011 20:57:28	Sweep Width (Hz)	25252.53	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	32768	32768	32768	32768	32768	32768	Temperature (grad C)	0.000

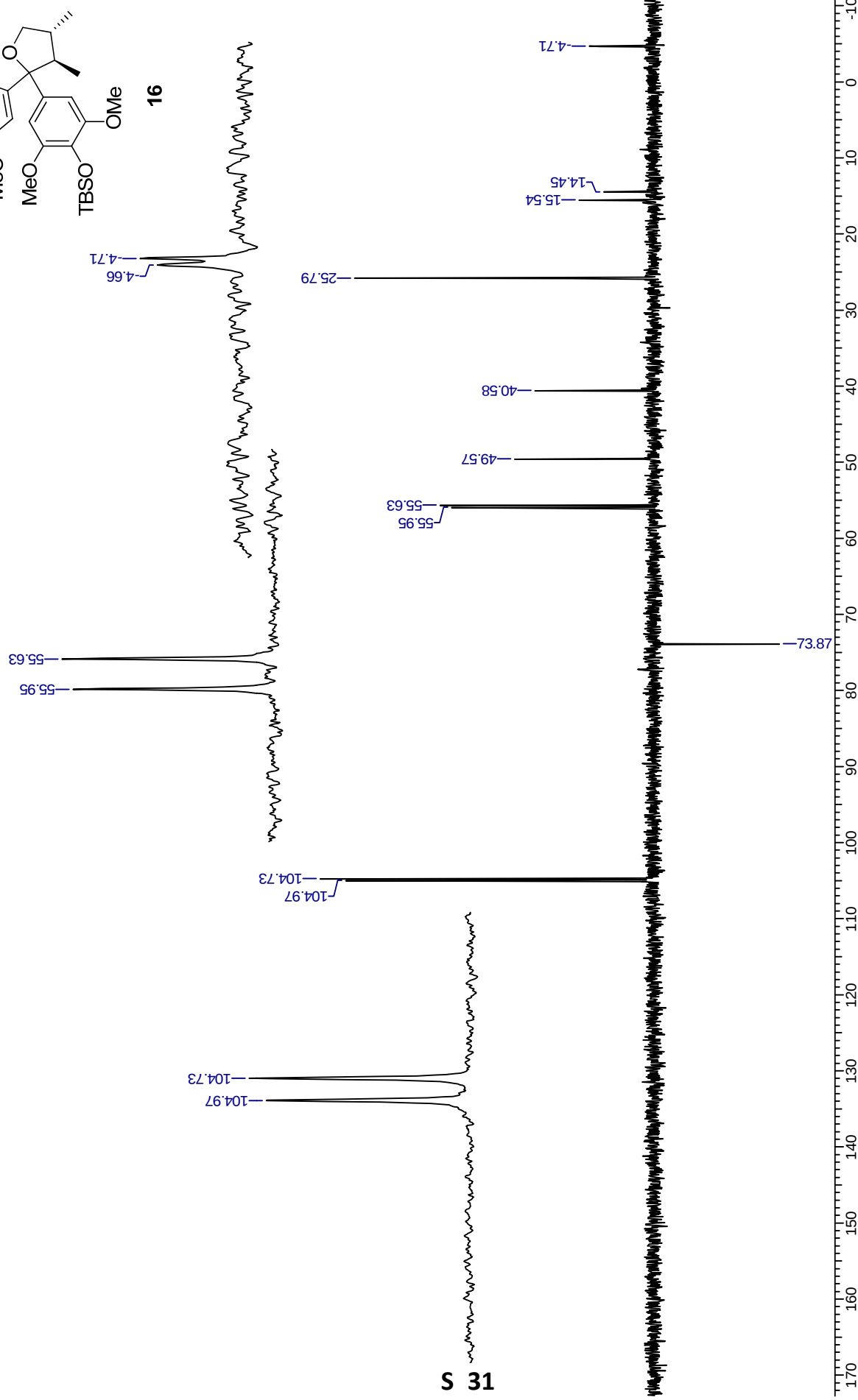
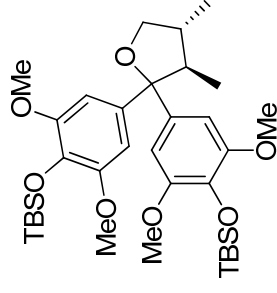


16



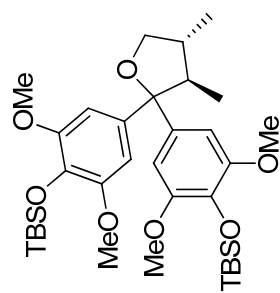
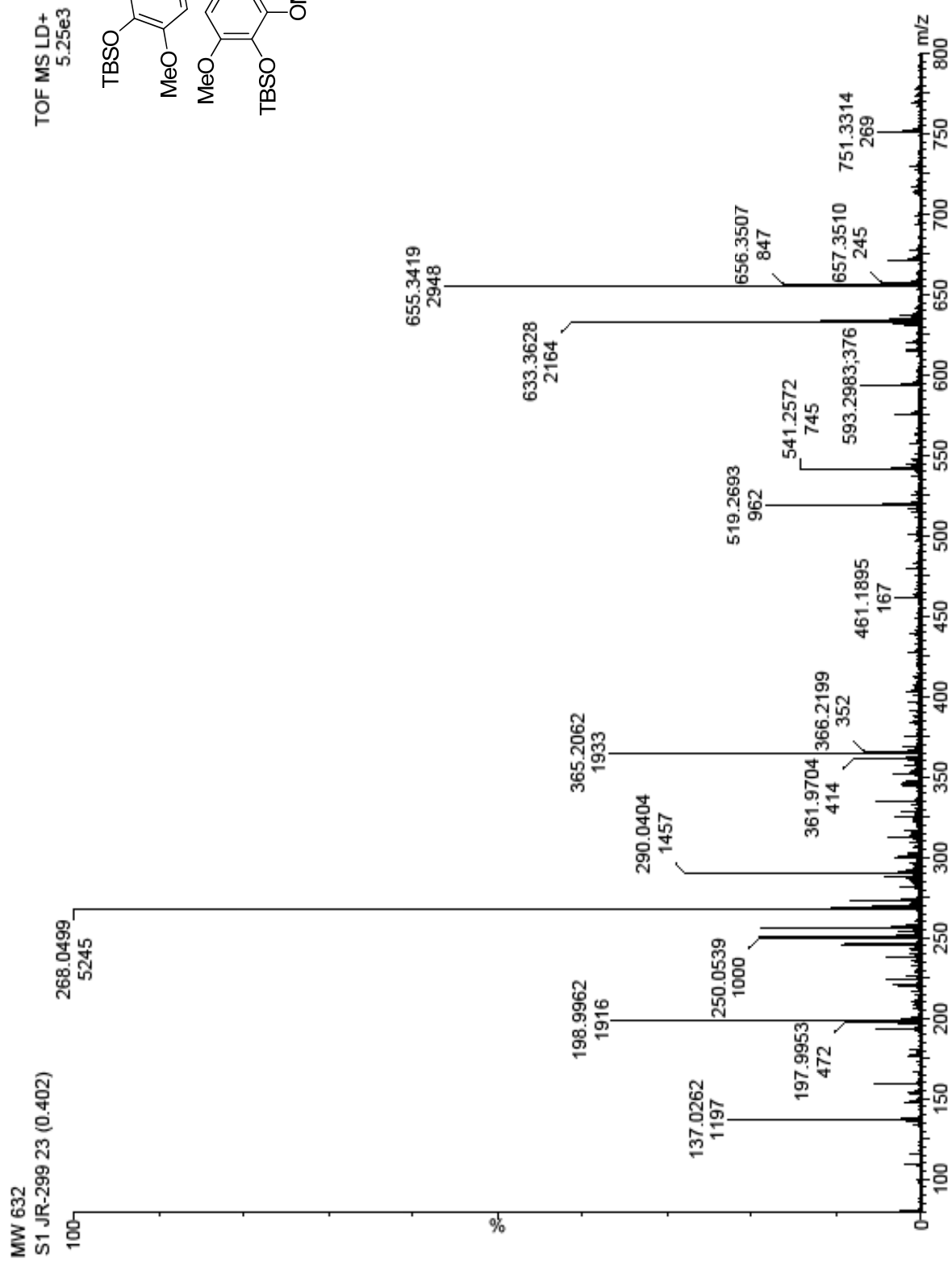
30 S

Acquisition Time (sec)	1.2976	Date	24/04/2011	20:55:26	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000	



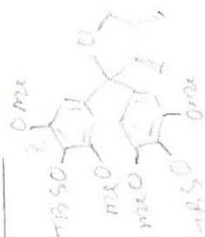
MW 632

S1 JR-299 23 (0.402)

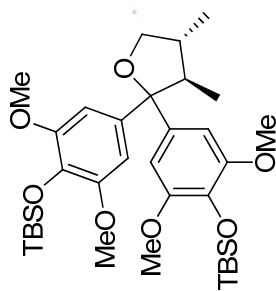


16

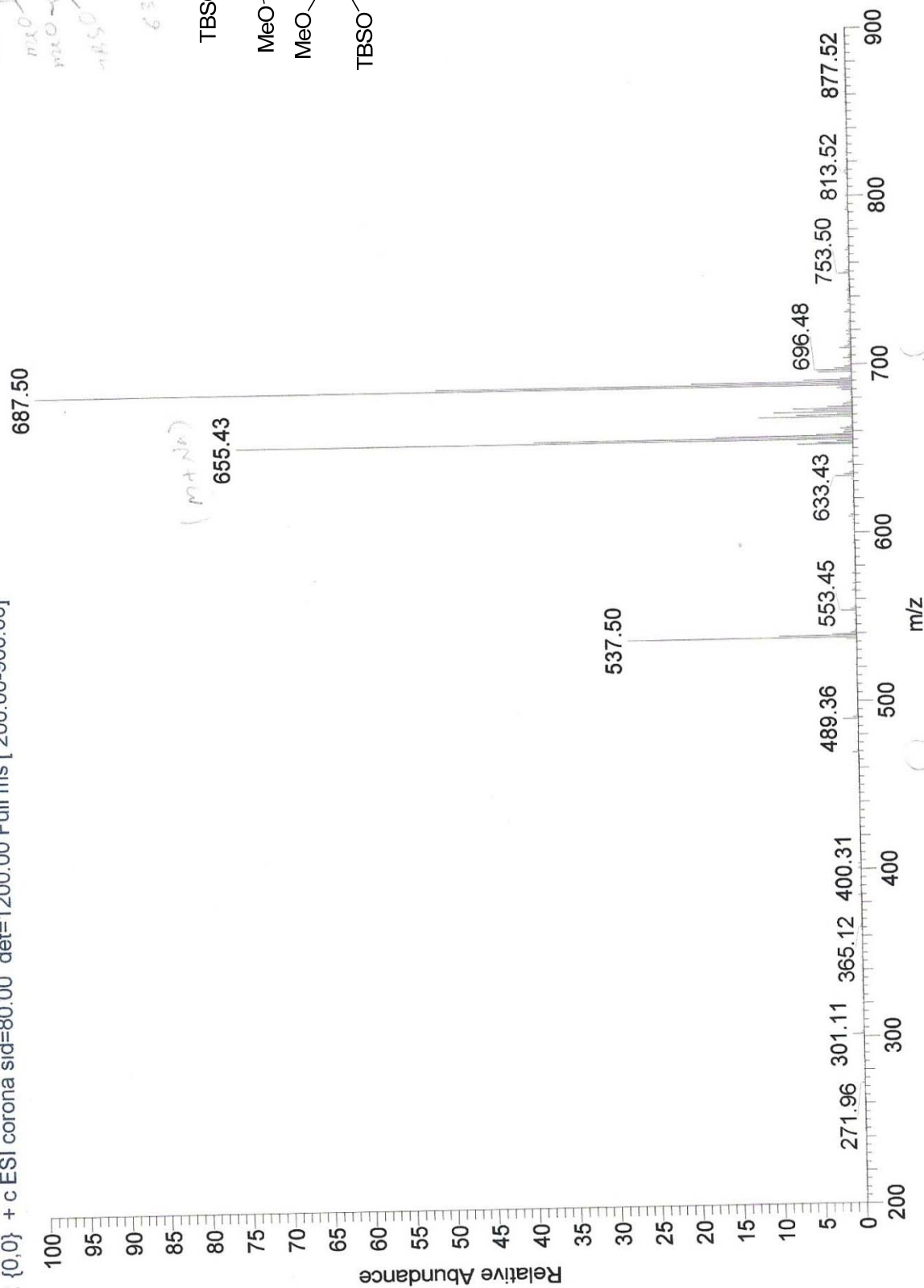
JR-299 #13-58 RT: 0.11-0.51 AV: 46 SB: 18 0.00-0.07, 0.59-0.66 NL: 3.59E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [200.00-900.00]



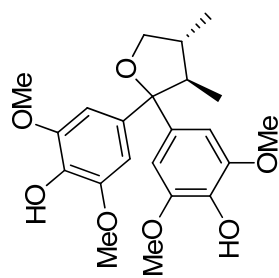
637 + 28 = 665



16

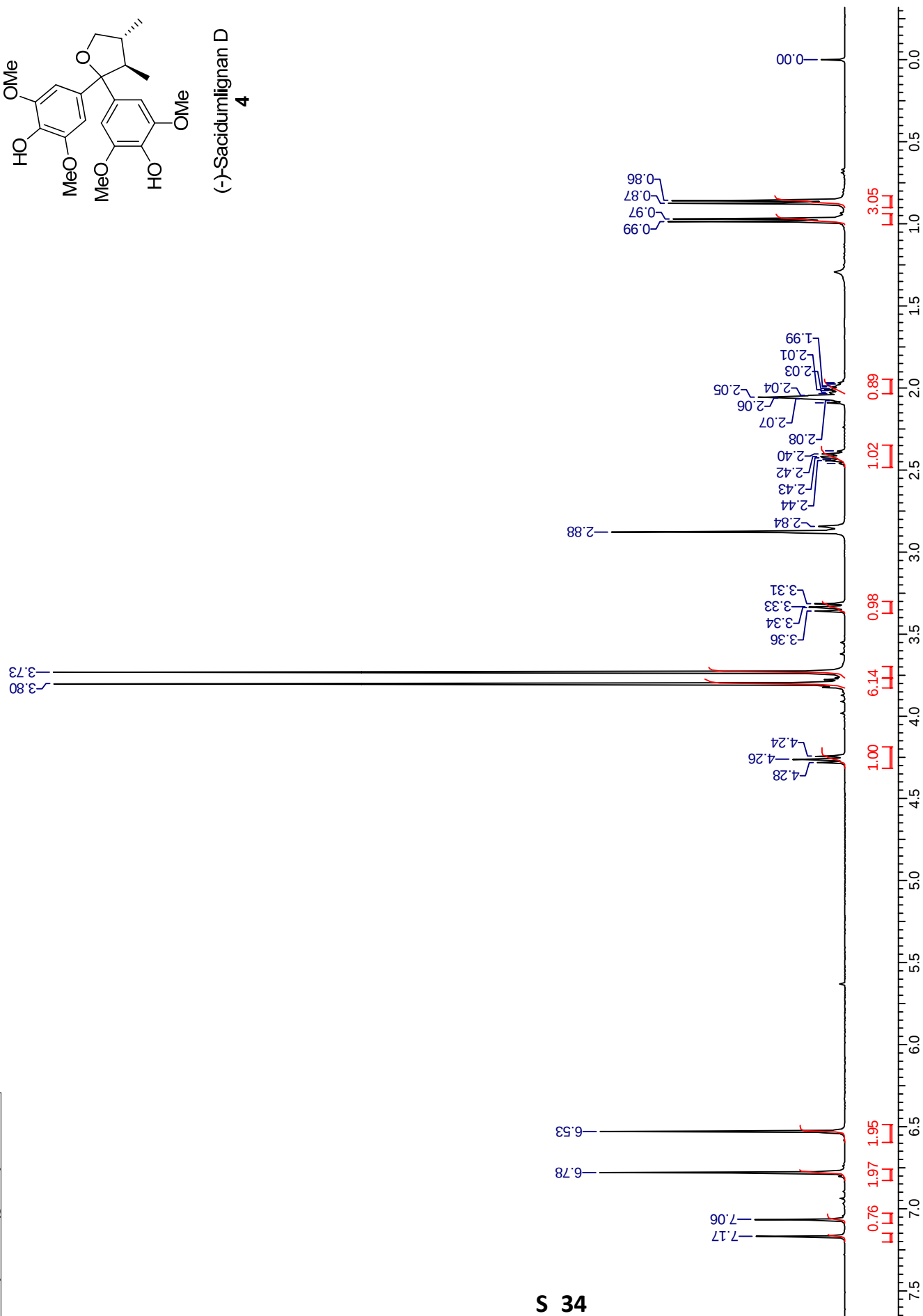


Acquisition Time (sec)	4.0894	Comment	Sunil	Date	23/04/2011 09:29:38	Frequency (MHz)	400.13
Nucleus	¹ H	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	8012.82
Temperature (grad C)	0.000						

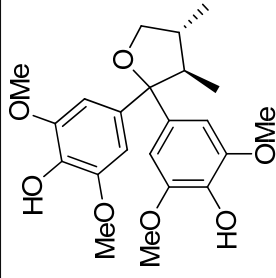


(-)-Sacidumignan D
4

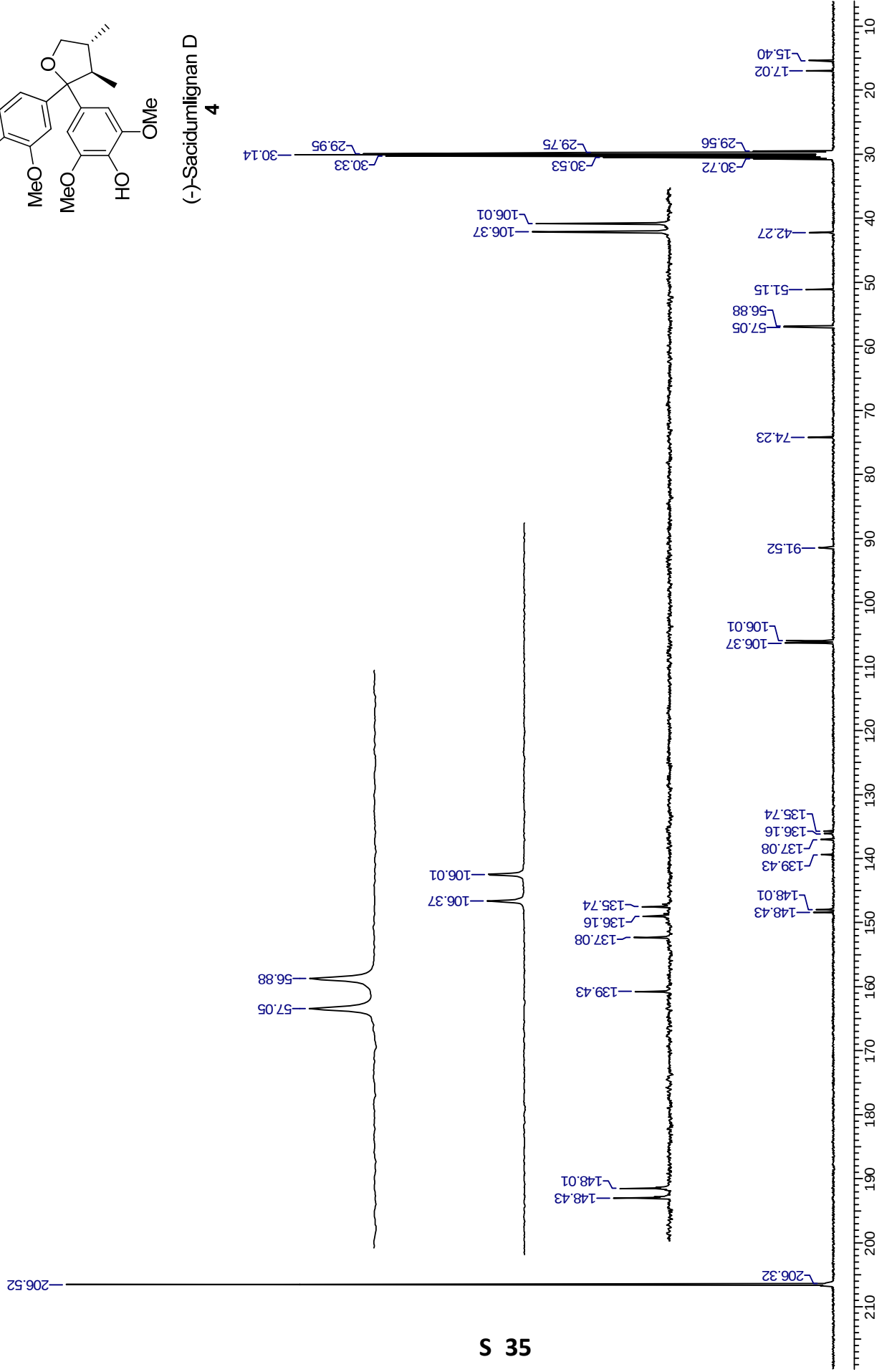
S 34



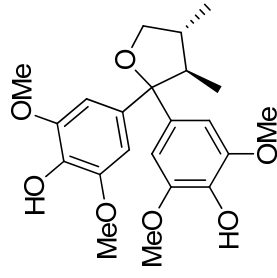
Acquisition Time (sec)	1.2976	13C	Comment	13C	Date	23/04/2011 10:44:06	Frequency (MHz)	100.61
Nucleus	13C	32768	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53
Temperature (grad C)	0.000							



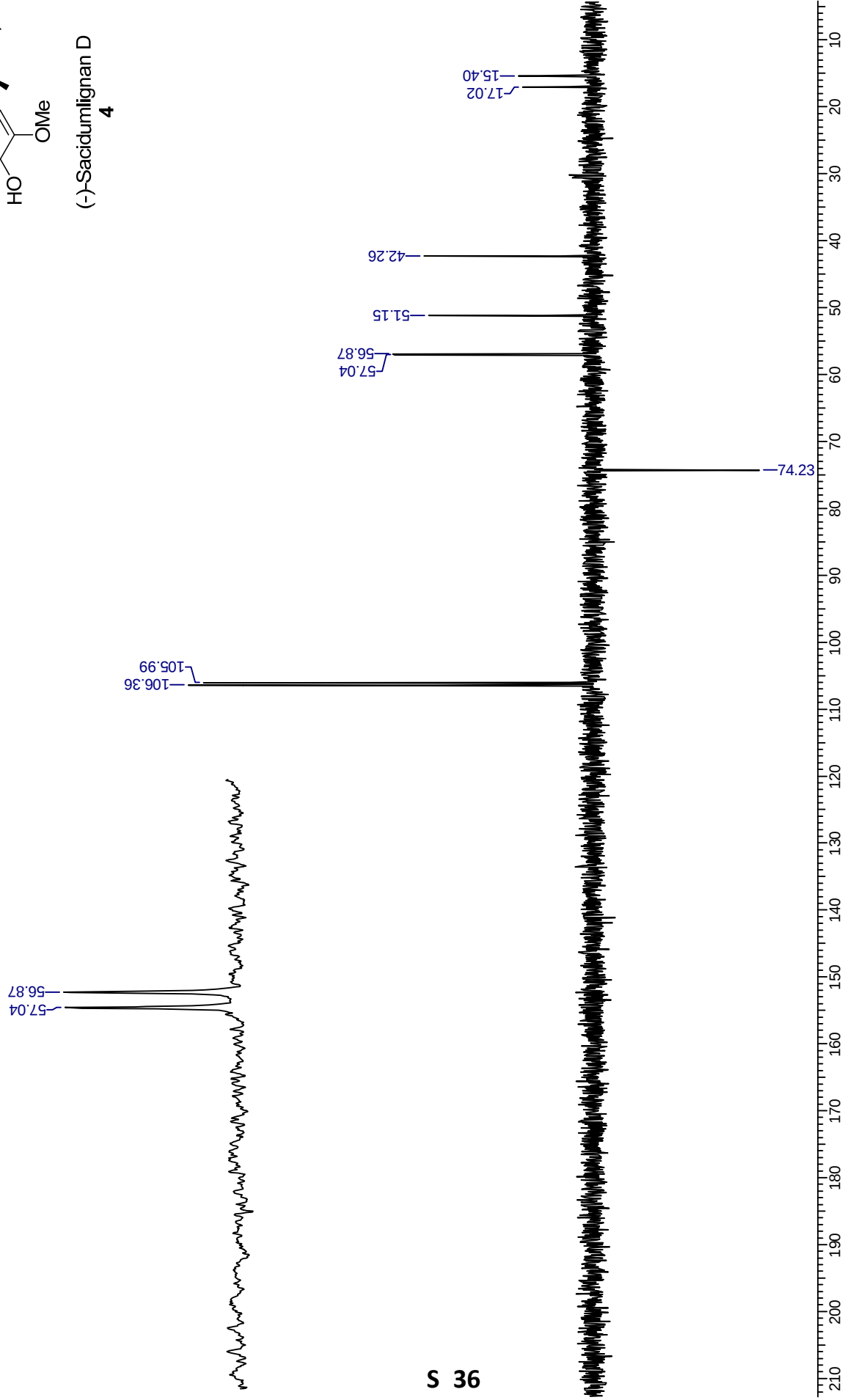
4
(-)-Sacidumignan D

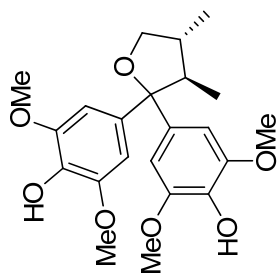


Acquisition Time (sec)	1.2976	Comment	Dept	Date	23/04/2011 09:38:50	Frequency (MHz)	100.61
Nucleus	¹³ C	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53
Temperature (grad C)	0.000						



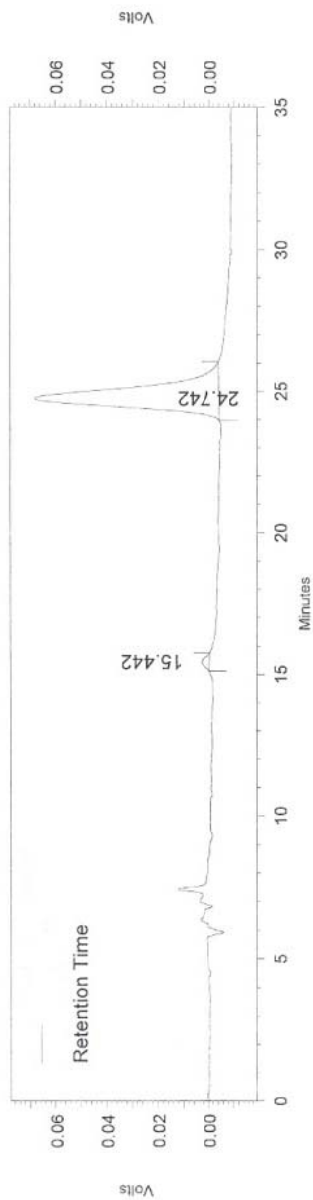
(-)-Sacidumignan D
4





(-)-Sacidumignan D
4

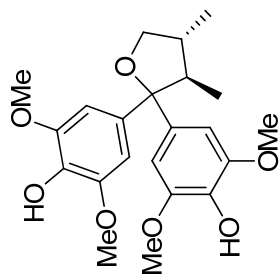
Shimadzu CLASS-VP V6.12 SP5
 Method Name: C:\CLASS-VP\Method ch 2.met
 Data Name: C:\CLASS-VP\Data\General\Gen1303
 User: System
 Acquired: 4/21/11 3:13:21 PM
 Printed: 4/21/11 3:54:34 PM
 Sample Name JR-303-Chiral



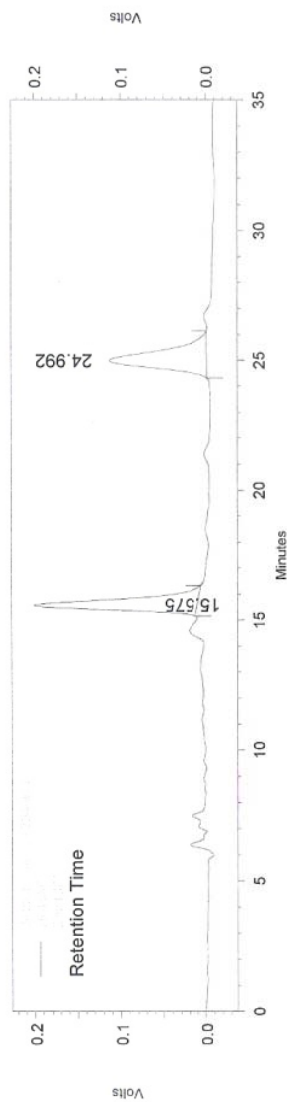
Detector A - 1 (254nm)		Retention Time	C Area	Area %
		15.442	69053	2.074
		24.742	3260147	97.926
Totals			3329200	100.000

Project Leader : Dr.C.V. RAMANA
 Column :Kromasil 5-AmyCoat (250x4.6mm)
 Mobile Phase :Ethanol:n-Hexane (40:60)
 Wavelength : 254nm
 Flow Rate : 0.5ml/min 44 kgf
 Inj vol- :5ul
 Kunte

Shimadzu CLASS-VP V6.12 SP5
 Method Name: C:\CLASS-VP\Method ch 2.met
 Data Name: C:\CLASS-VP\Data\General\Gen1302
 User: System
 Acquired: 4/21/11 2:35:49 PM
 Printed: 4/21/11 3:11:58 PM
 Sample Name JR-RAC



(±)-Sacidumignan D

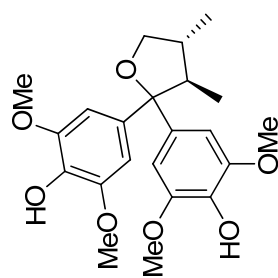


Detector A - 1 (254nm)		Retention Time	C Area	Area %
		15.575	5139051	50.498
		24.992	5037702	49.502
Totals			10176753	100.000

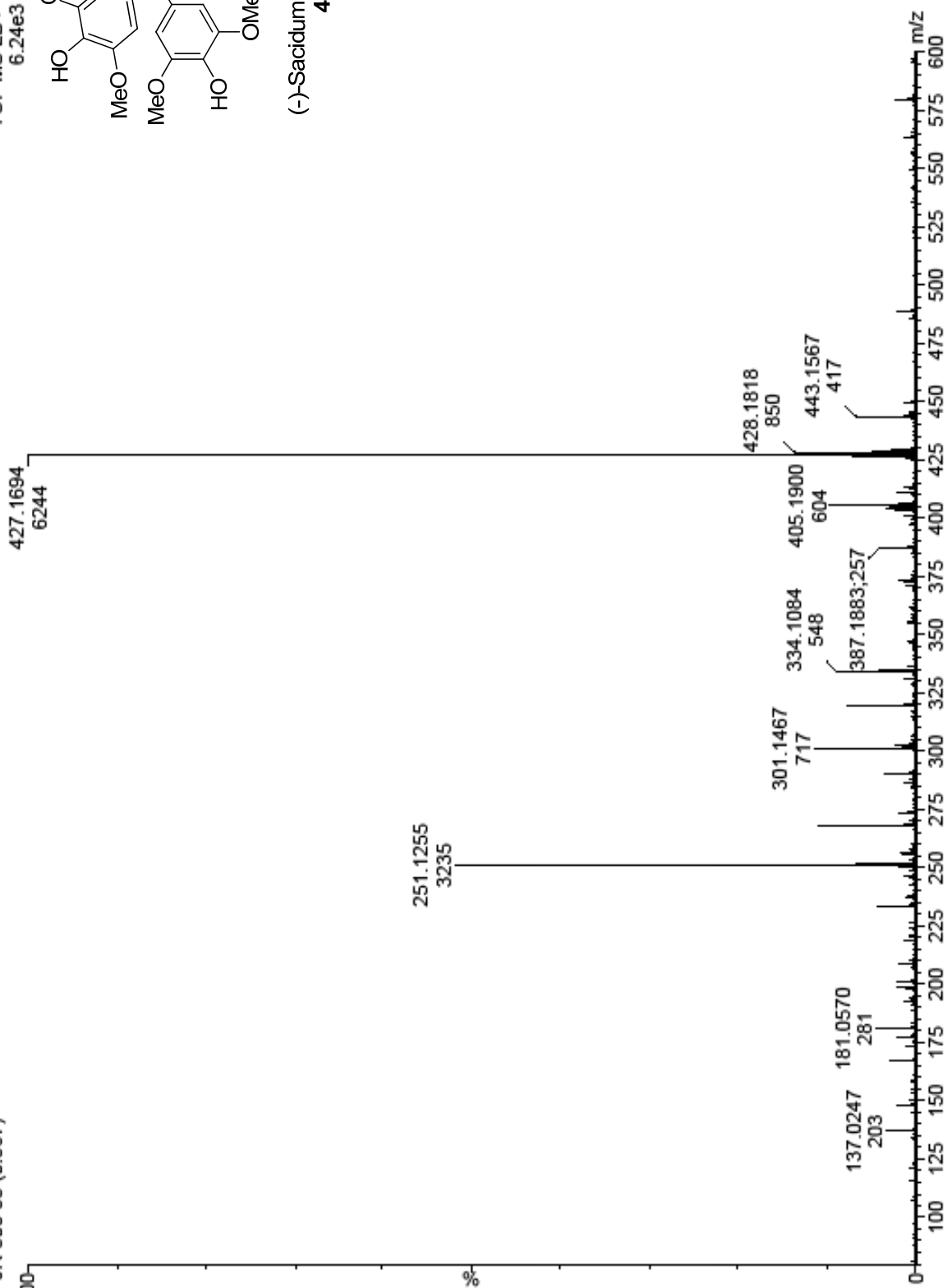
Project Leader : Dr.C.V. RAMANA
 Column :Kromasil 5-AmyCoat (250x4.6mm)
 Mobile Phase :Ethanol:n-Hexane (40:60)
 Wavelength : 254nm
 Flow Rate : 0.5ml/min 44 kgf
 Inj vol- :5ul
 Kunte

MW 404
S1 JR-303 33 (0.567)

TOF MS LD+
6.24e3

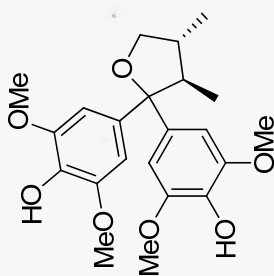
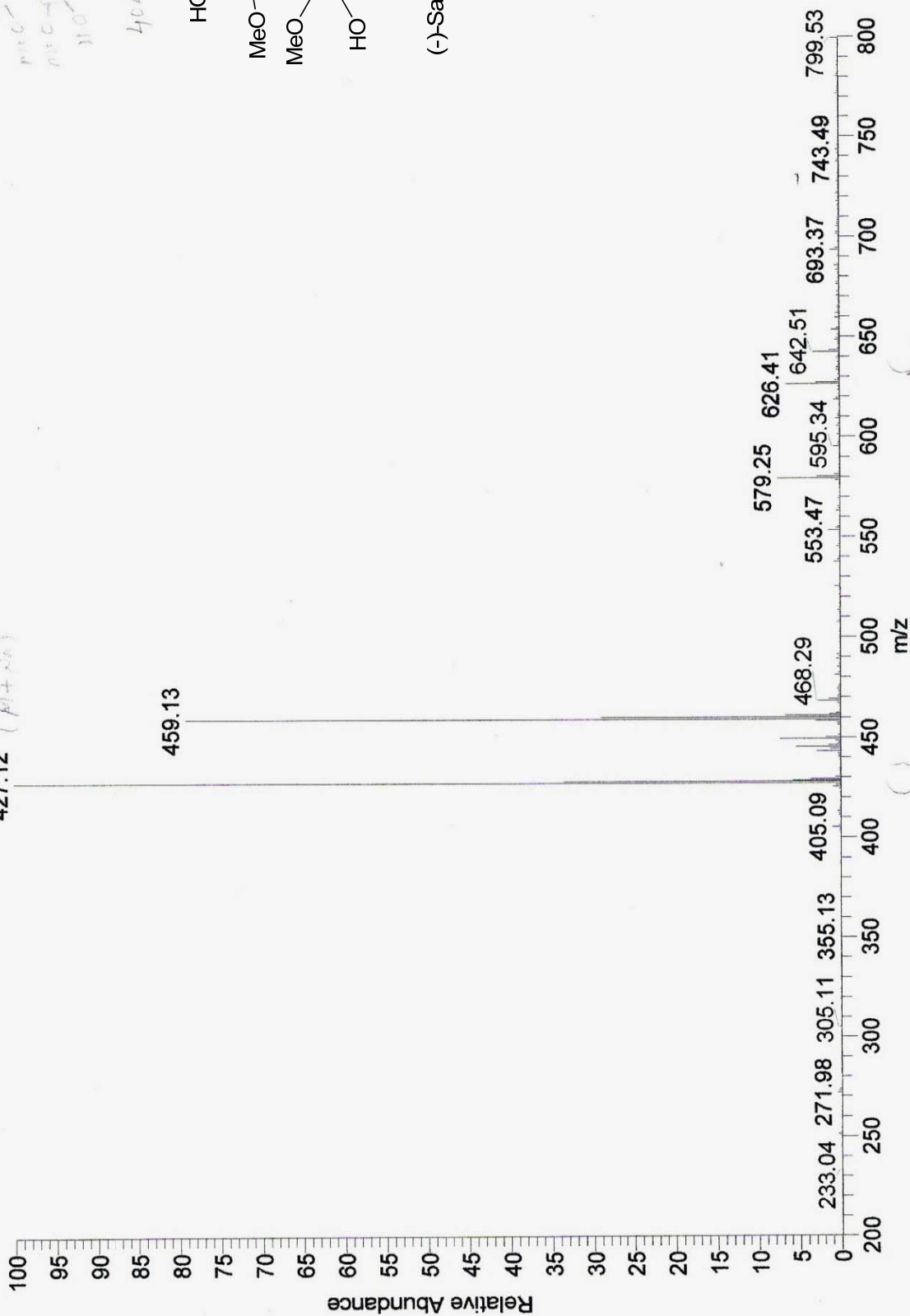


(-)-Sacidumlignan D
4



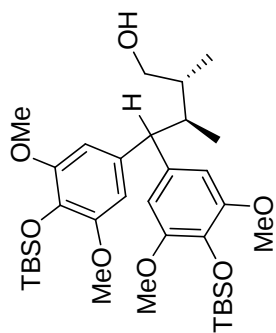
JR-303 #15-39 RT: 0.12-0.34 AV: 25 SB: 28 0.00-0.08, 0.54-0.69 NL: 4.44E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [200.00-900.00]

427.12 (M⁺ + H⁺)

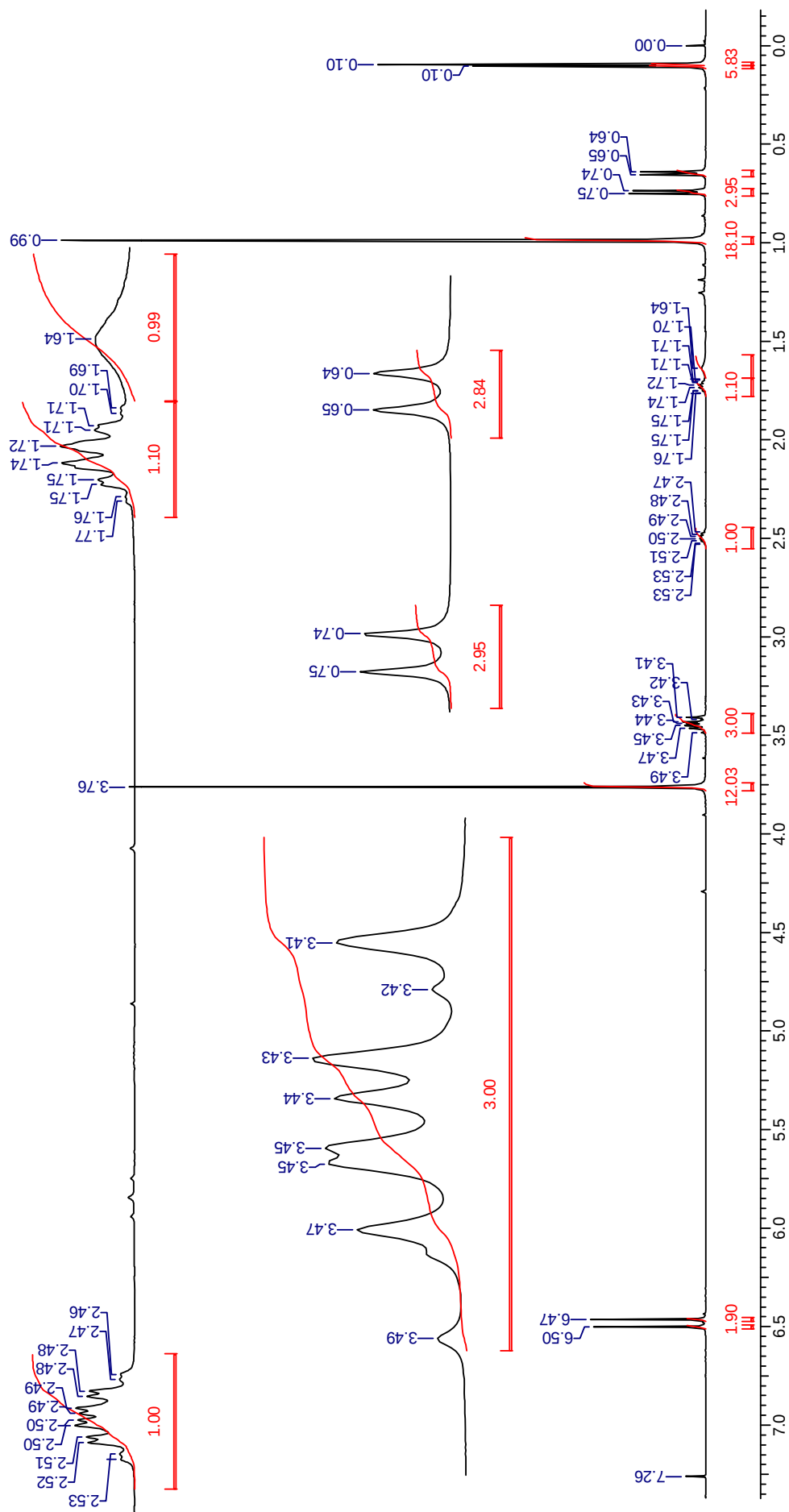


(-)-Sacidumignan D
4

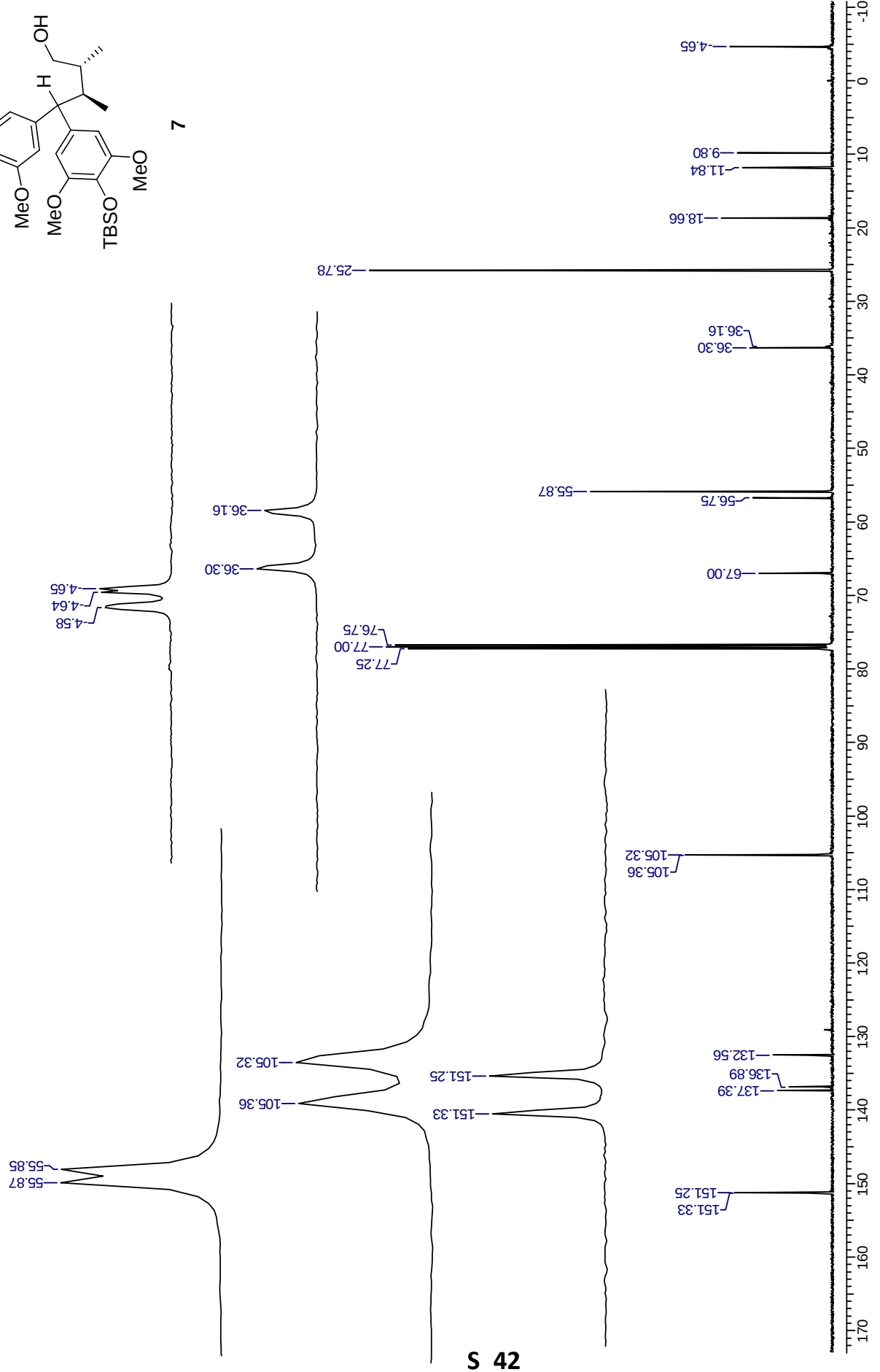
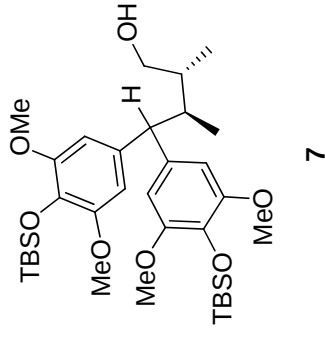
Acquisition Time (sec)	3.2768	Comment	1H	Date	19/07/2011 18:54:28	Frequency (MHz)	500.13
Nucleus	1H	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	10000.00
Temperature (grad C)	0.000						



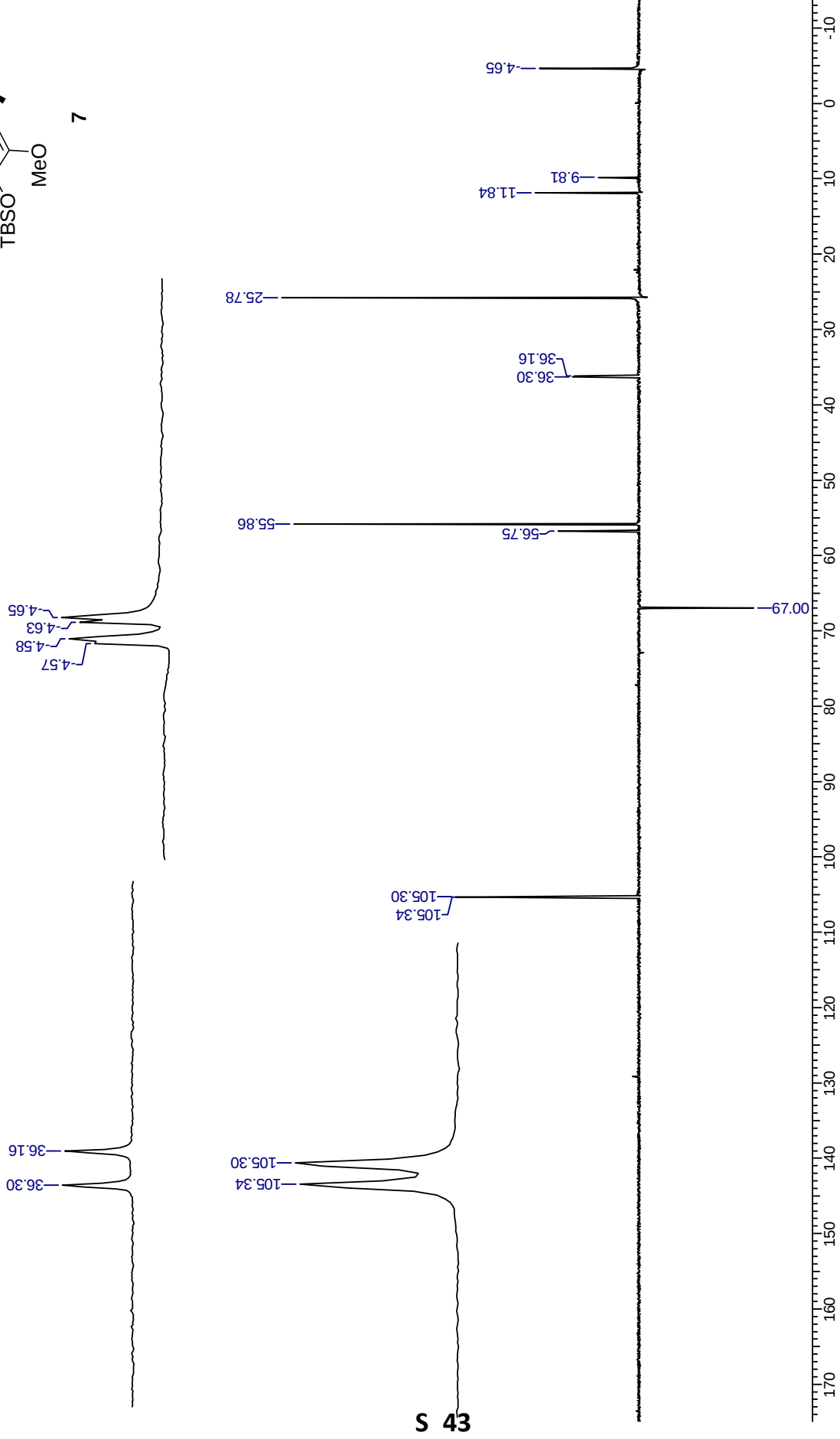
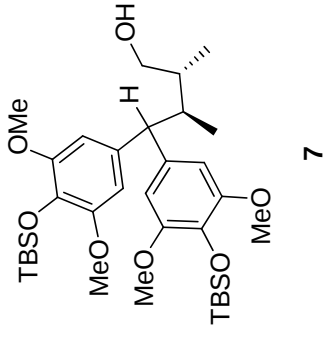
7



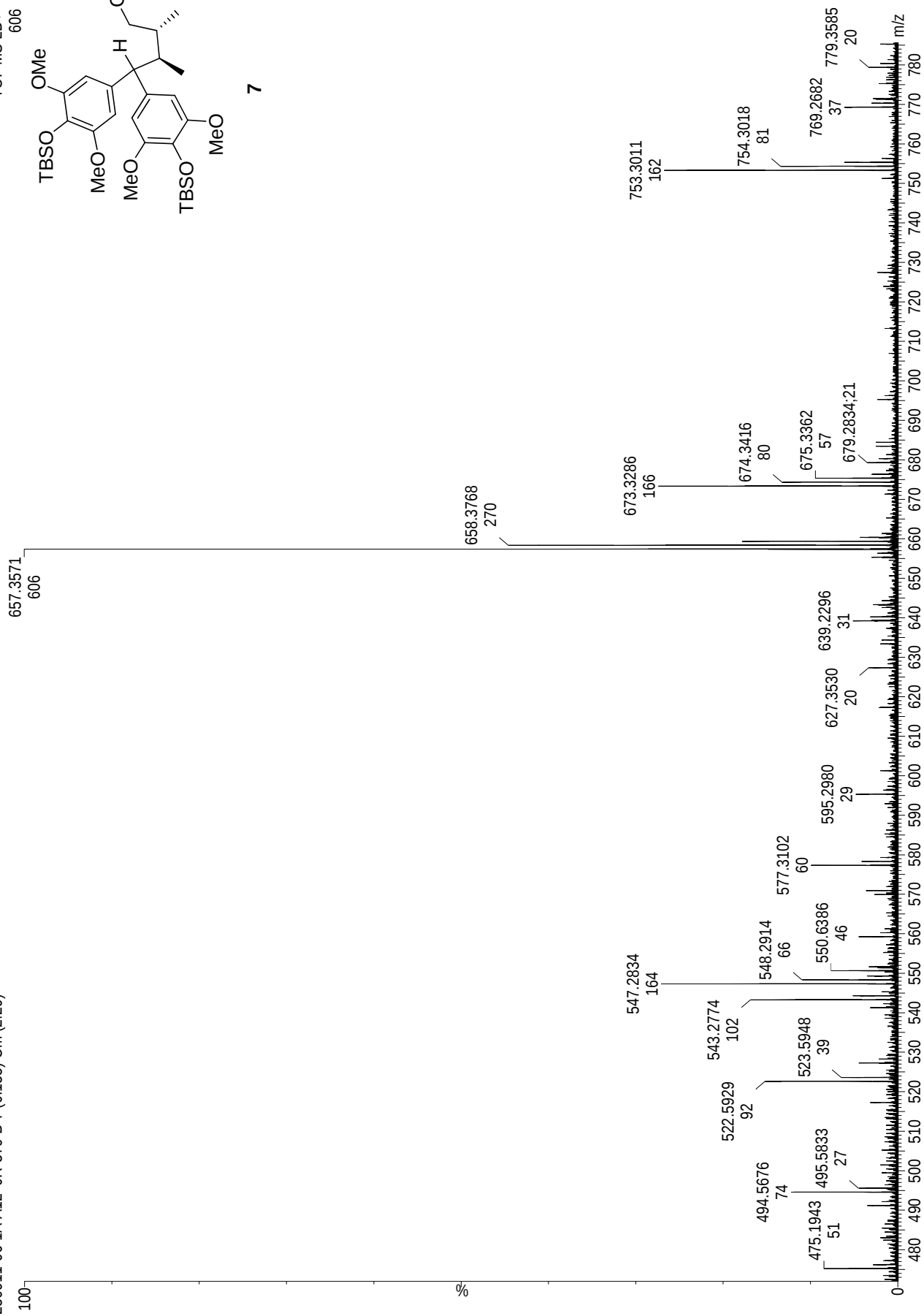
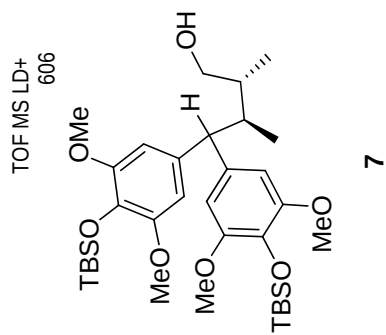
Acquisition Time (sec)	1.1010	Comment	13C	Date	19/07/2011 20:48:16	Frequency (MHz)	125.76
Nucleus	13C	Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	29761.90
Temperature (grad C)	0.000						



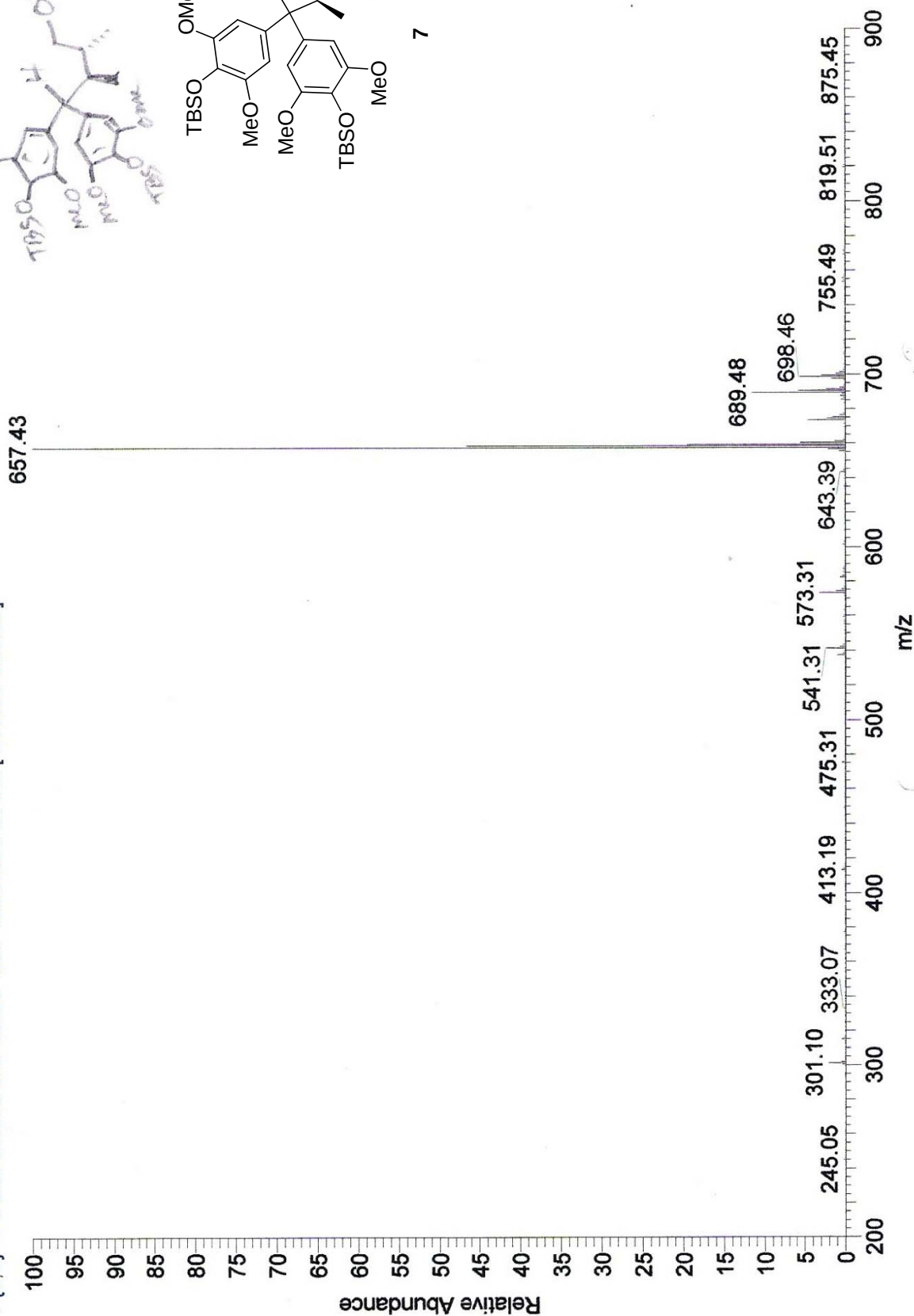
Acquisition Time (sec)	1.1010	Comment	DEPT135	Date	19/07/2011 20:47:58
Frequency (MHz)	125.76	Nucleus	¹³ C	Points Count	32768
Temperature (grad C)	0.000			Original Points Count	32768
				Sweep Width (Hz)	29761.90



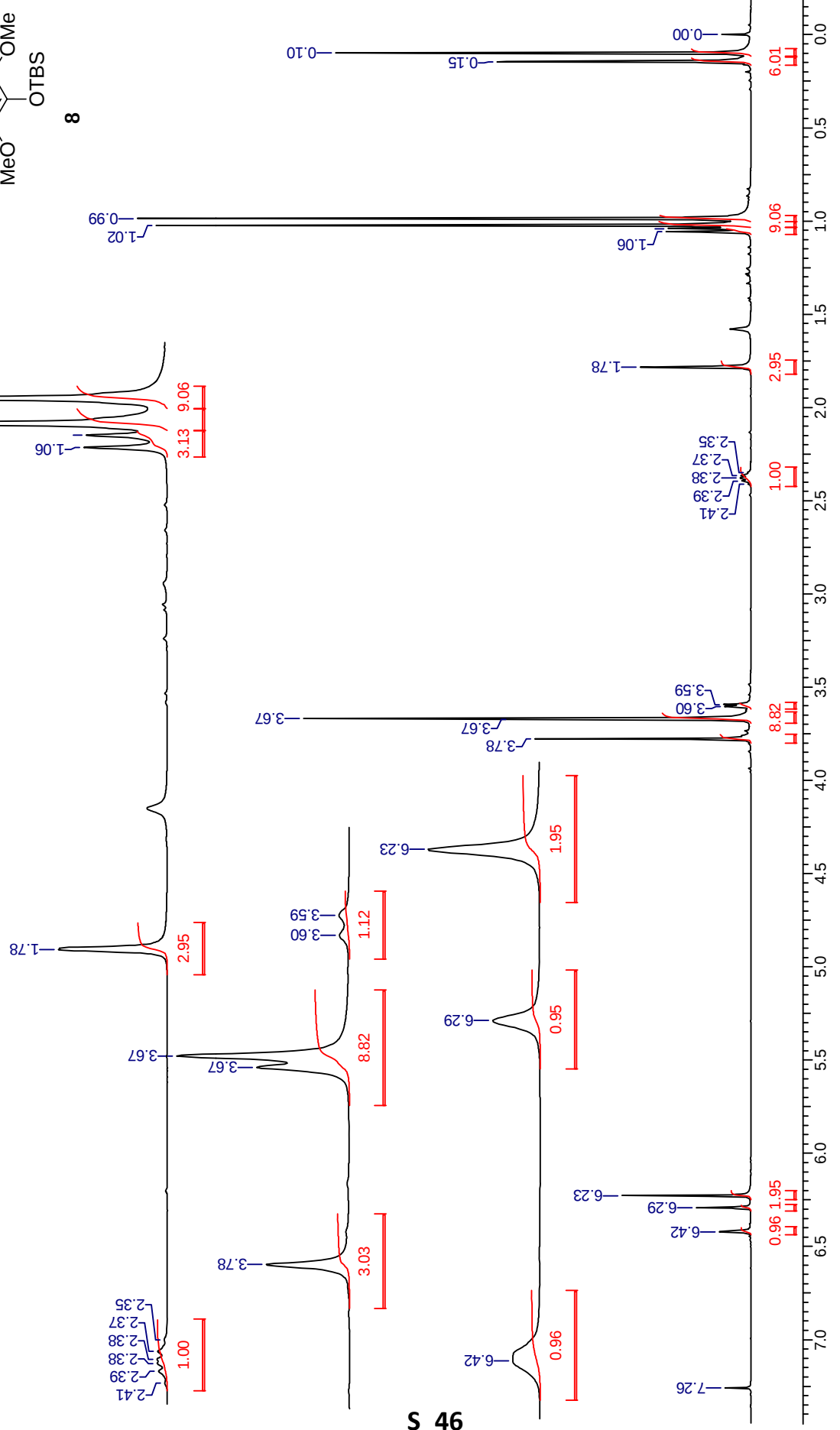
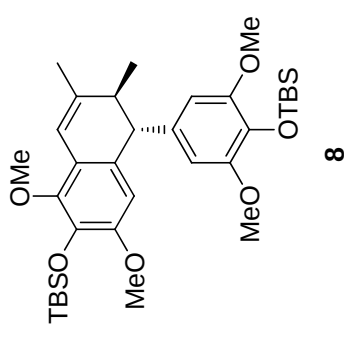
250911-96-1A A12 JR-379-B 7 (0.135) Cm (2:29)



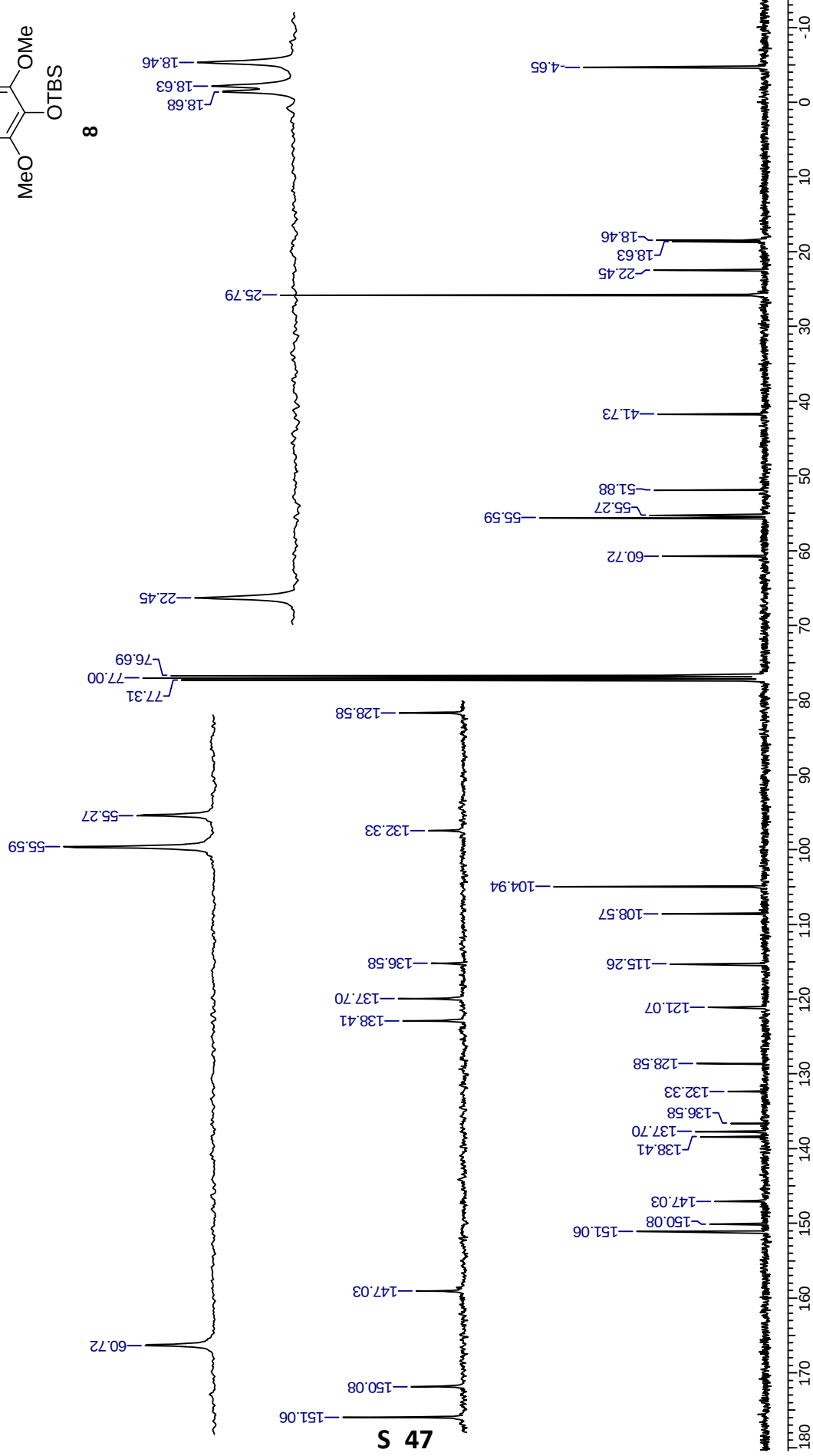
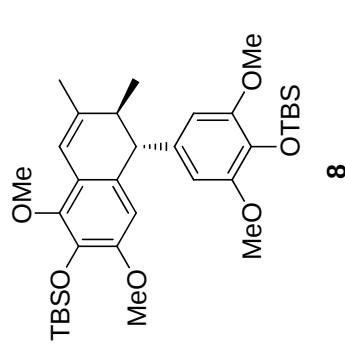
JR363 #14-47 RT: 0.12-0.41 AV: 34 SB: 18 0.00-0.08 0.52-0.58 NL: 5.28E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [200.00-900.00]



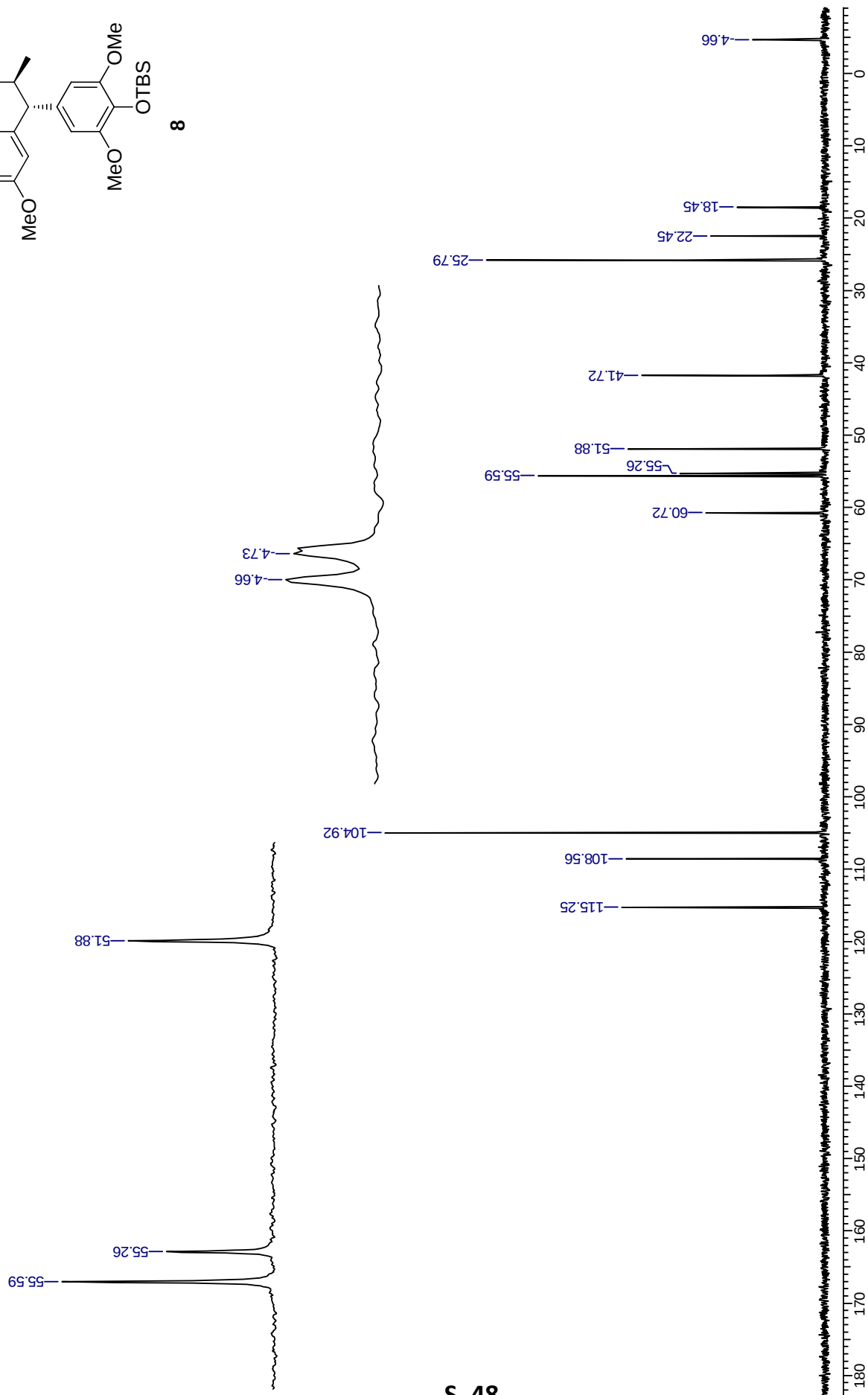
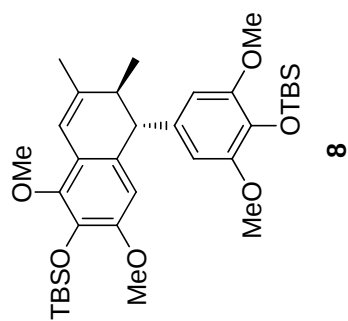
Acquisition Time (sec)	5.4526	Comment	Jeetendra	Date	21/07/2011 10:24:00
Frequency (MHz)	400.13	Nucleus	¹ H	Original Points Count	32768
Temperature (grad C)	0.000			Points Count	6009.62
				Sweep Width (Hz)	6009.62



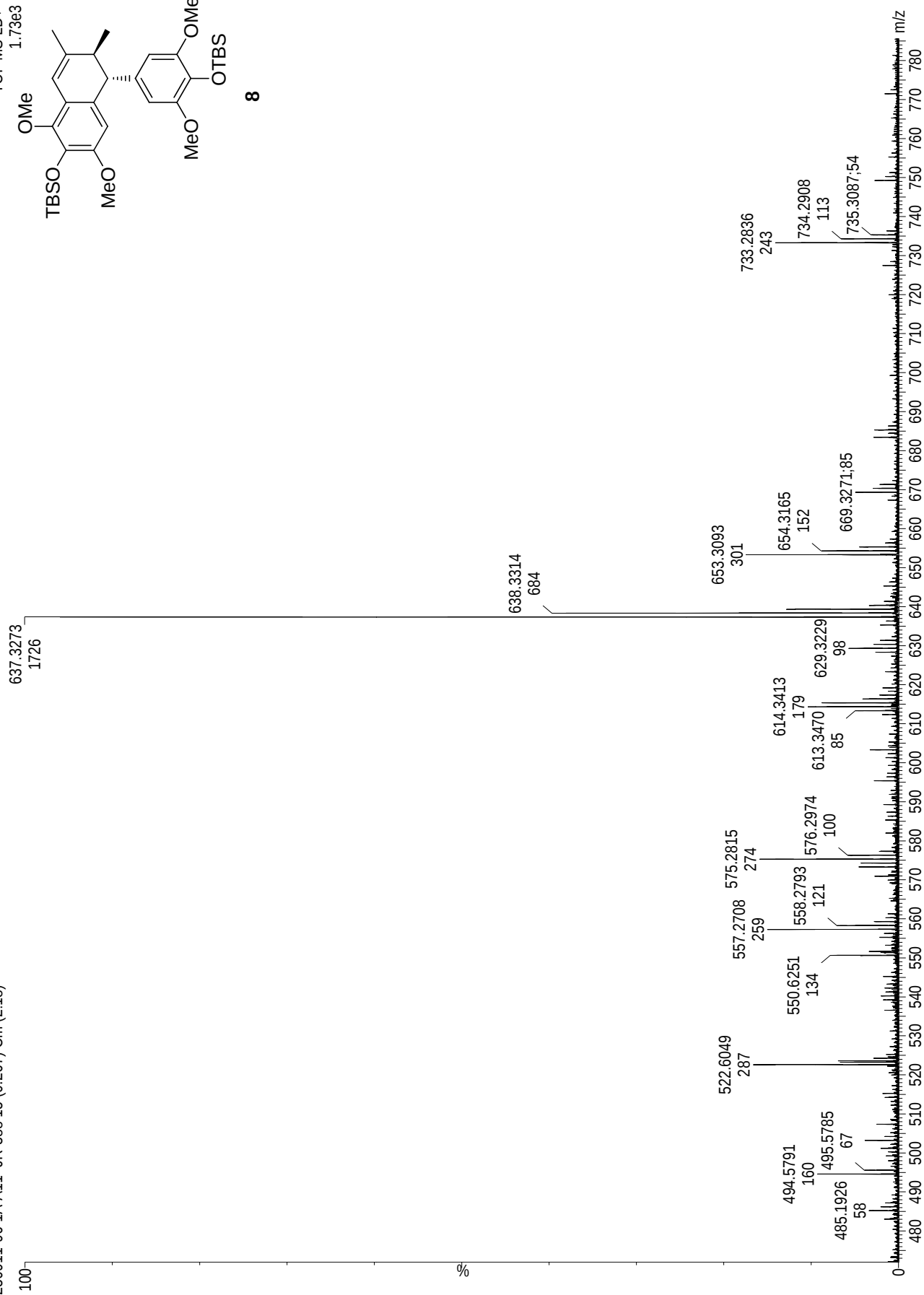
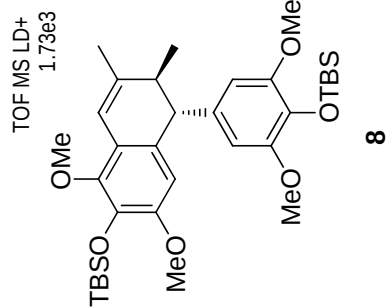
Acquisition Time (sec)	1.2976	Date	21/07/2011 11:33:38	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000



Acquisition Time (sec)	1.3631	Date	21/07/2011	10:58:52	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000	



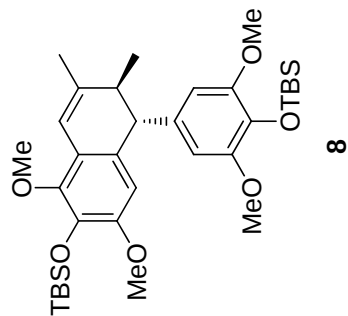
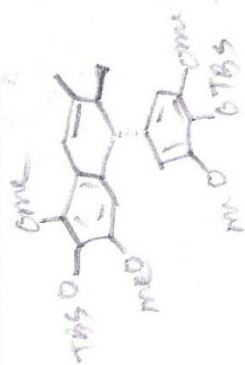
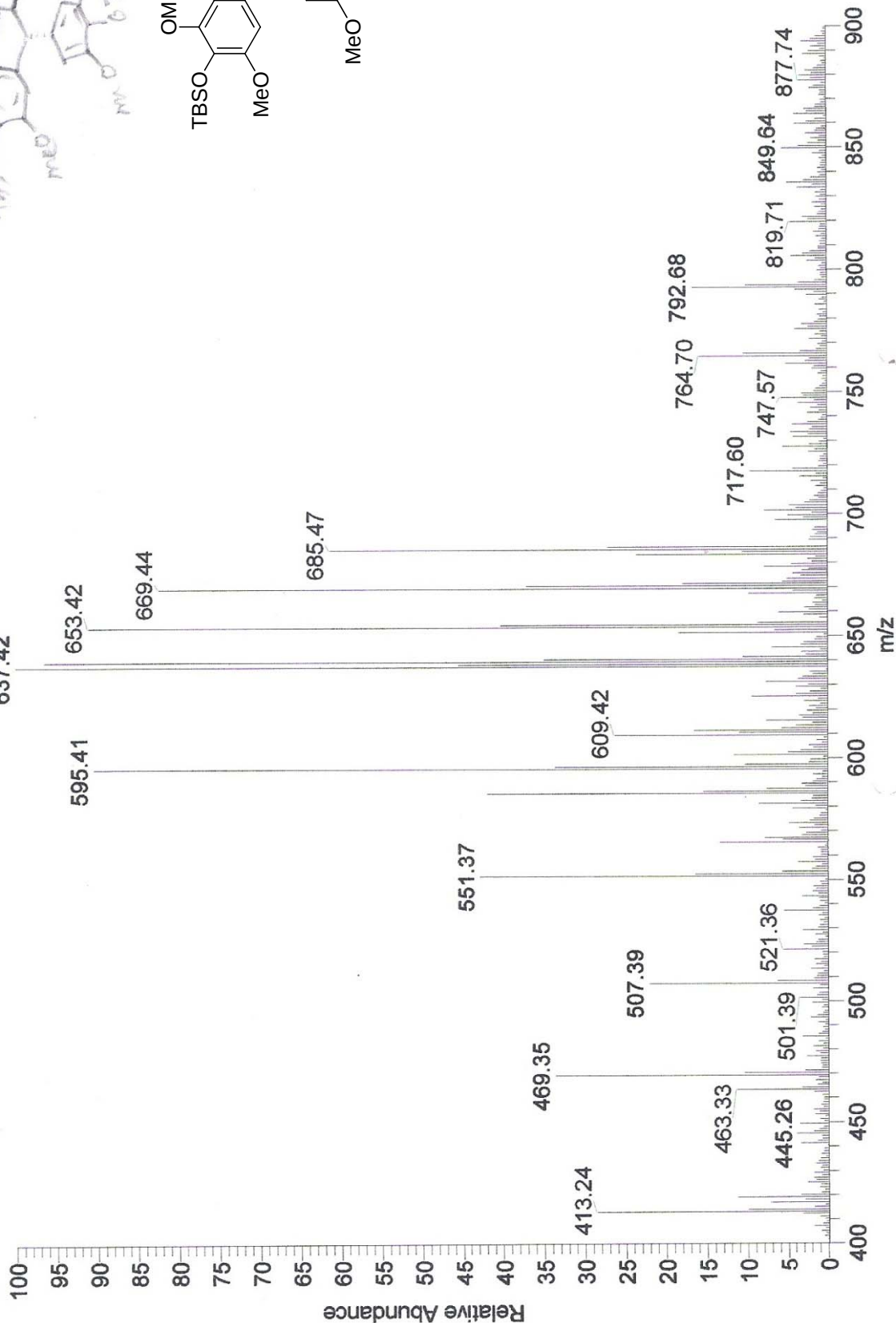
250911-96-1A A11 JR-388 15 (0.267) Cm (2:18)



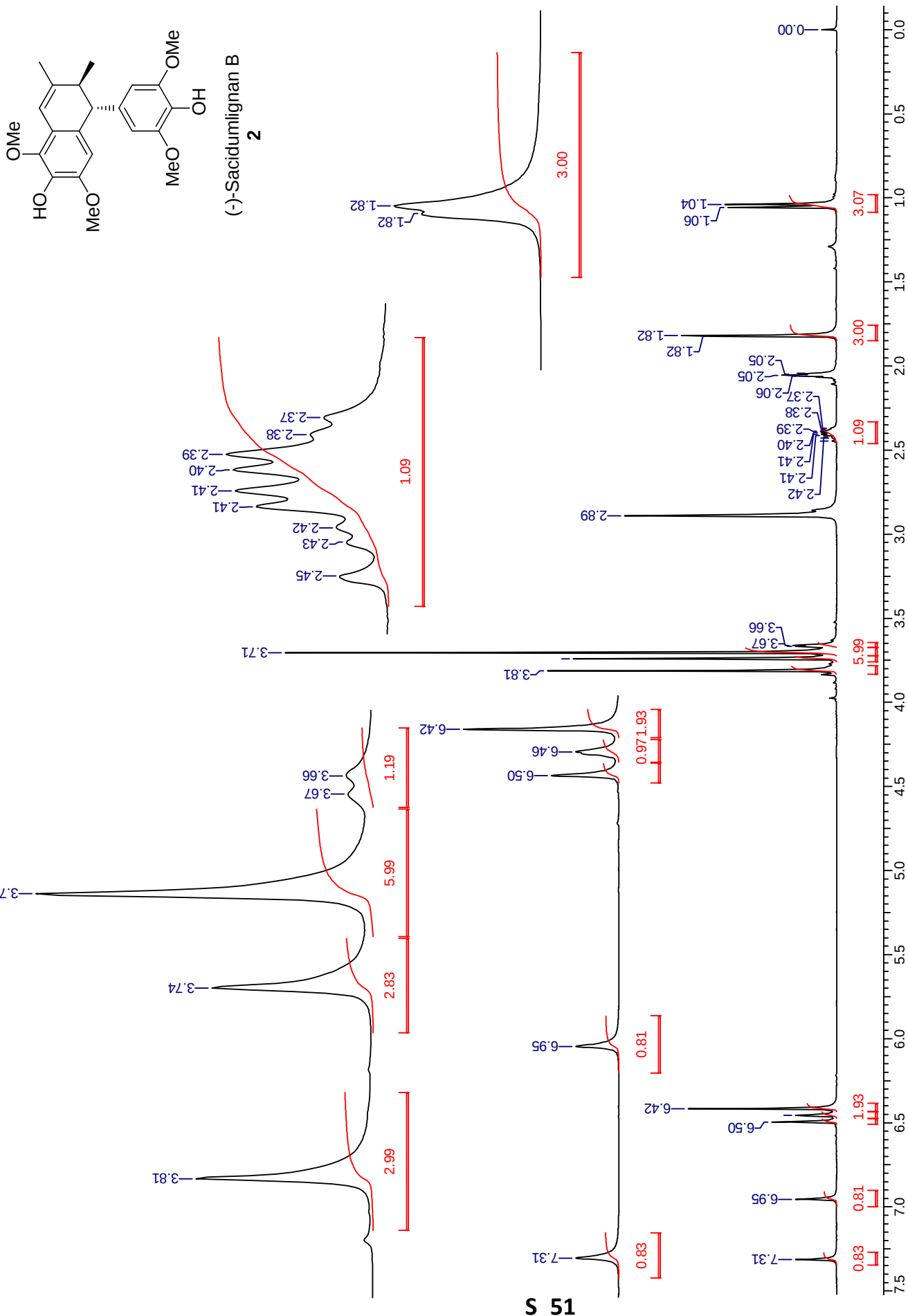
JR-366 #14-47 RT: 0.11-0.41 AV: 34 SB: 7 0.00-0.05 NL: 5.57E5

T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [400.00-900.00]

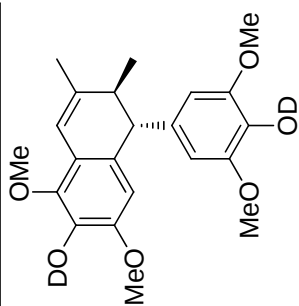
637.42



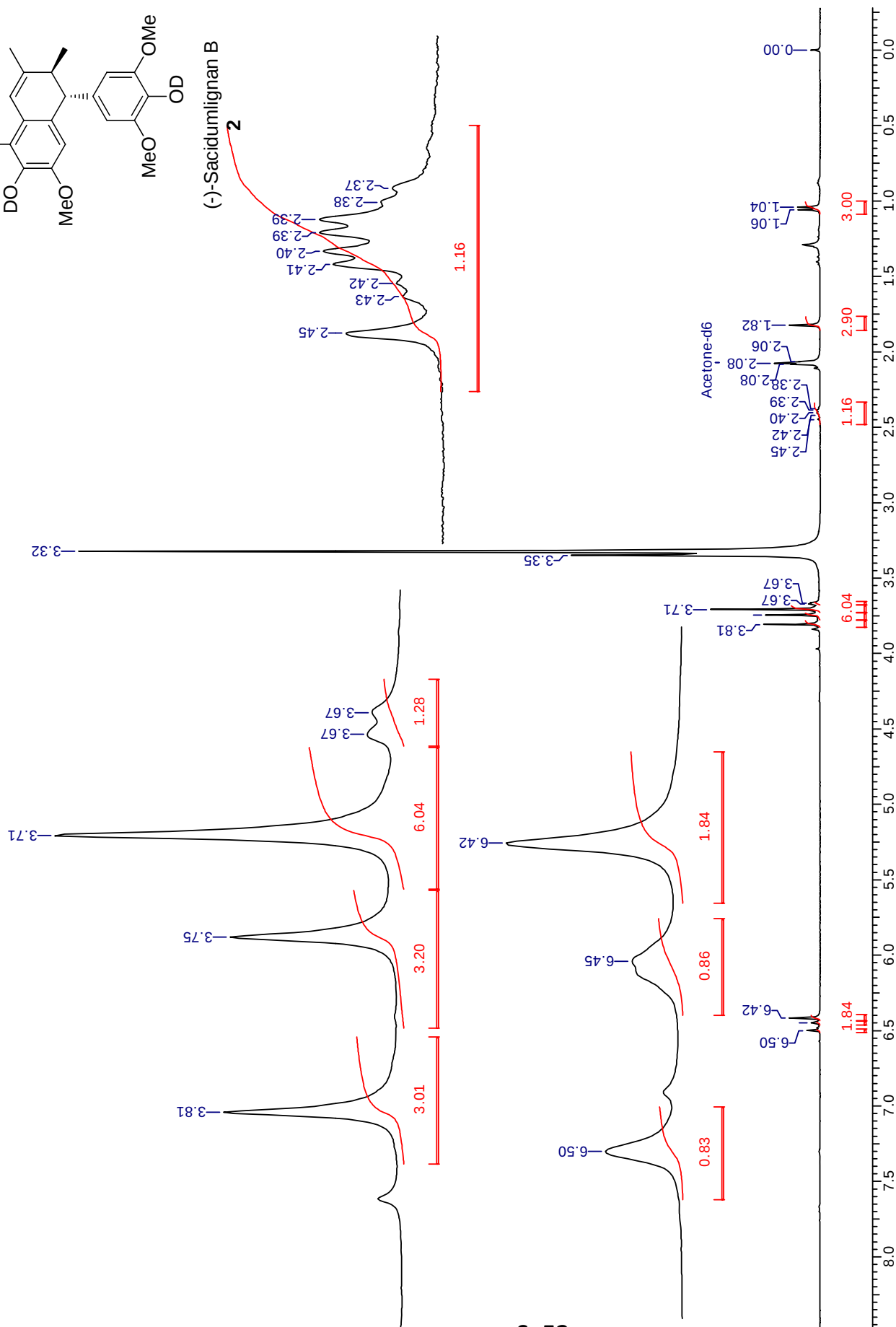
Acquisition Time (sec)	3.9846	Comment	Jeetendra	Date	24/07/2011 10:09:50
Frequency (MHz)	400.13	Nucleus	¹ H	Points Count	32768
Temperature (grad C)	0.000			Sweep Width (Hz)	8223.68



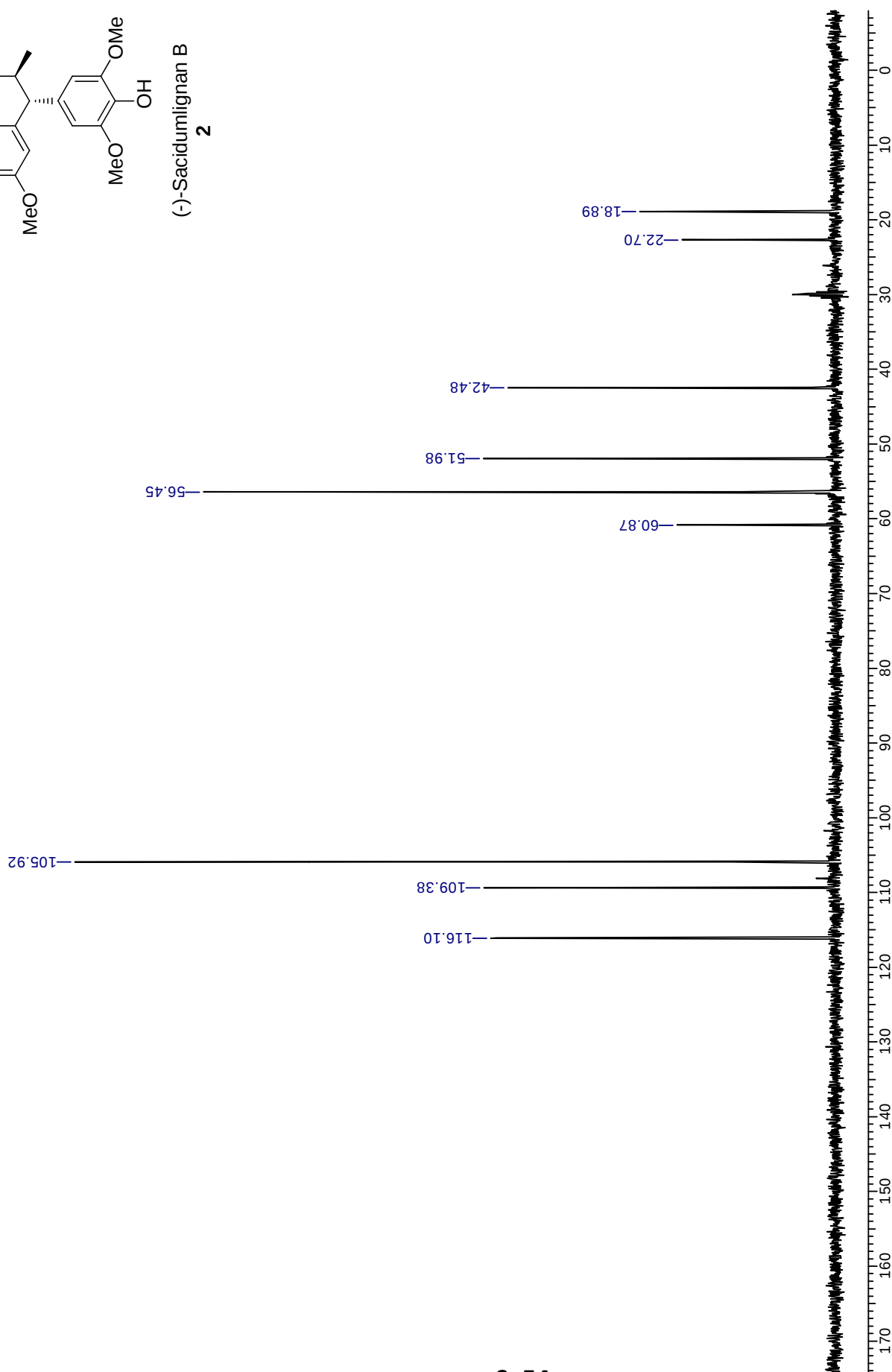
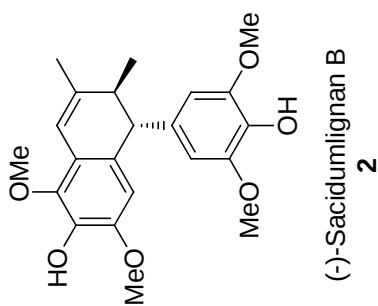
Acquisition Time (sec)	4.8234	Comment	Jeetendra	Date	27/07/2011 10:10:22
Frequency (MHz)	400.13	Nucleus	¹ H	Original Points Count	32768
Temperature (grad C)	0.000			Points Count	32768
				Sweep Width (Hz)	6793.48



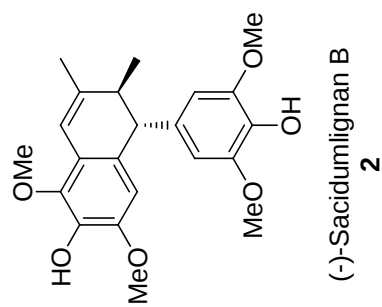
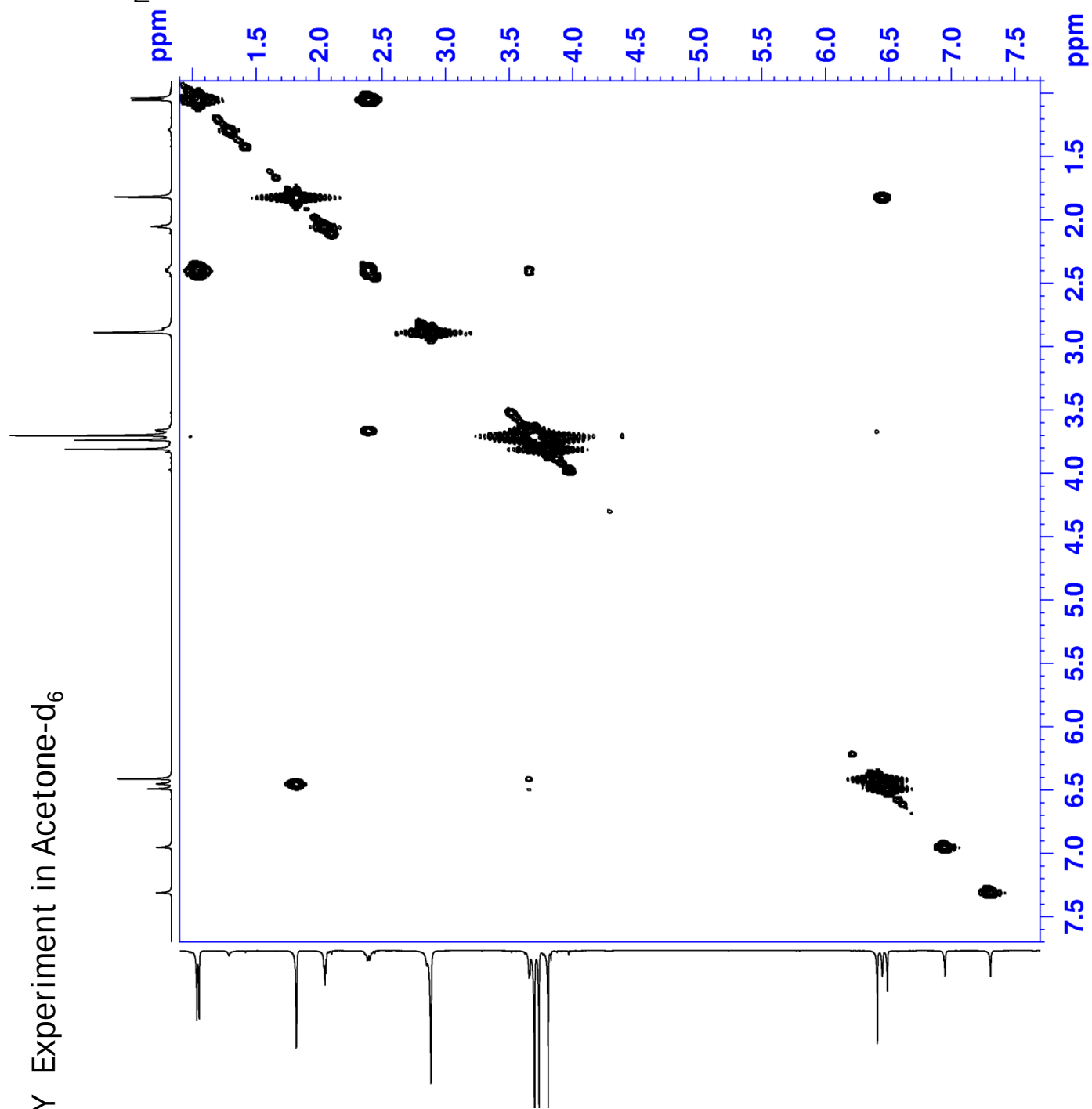
(-)-Sacidumignan B



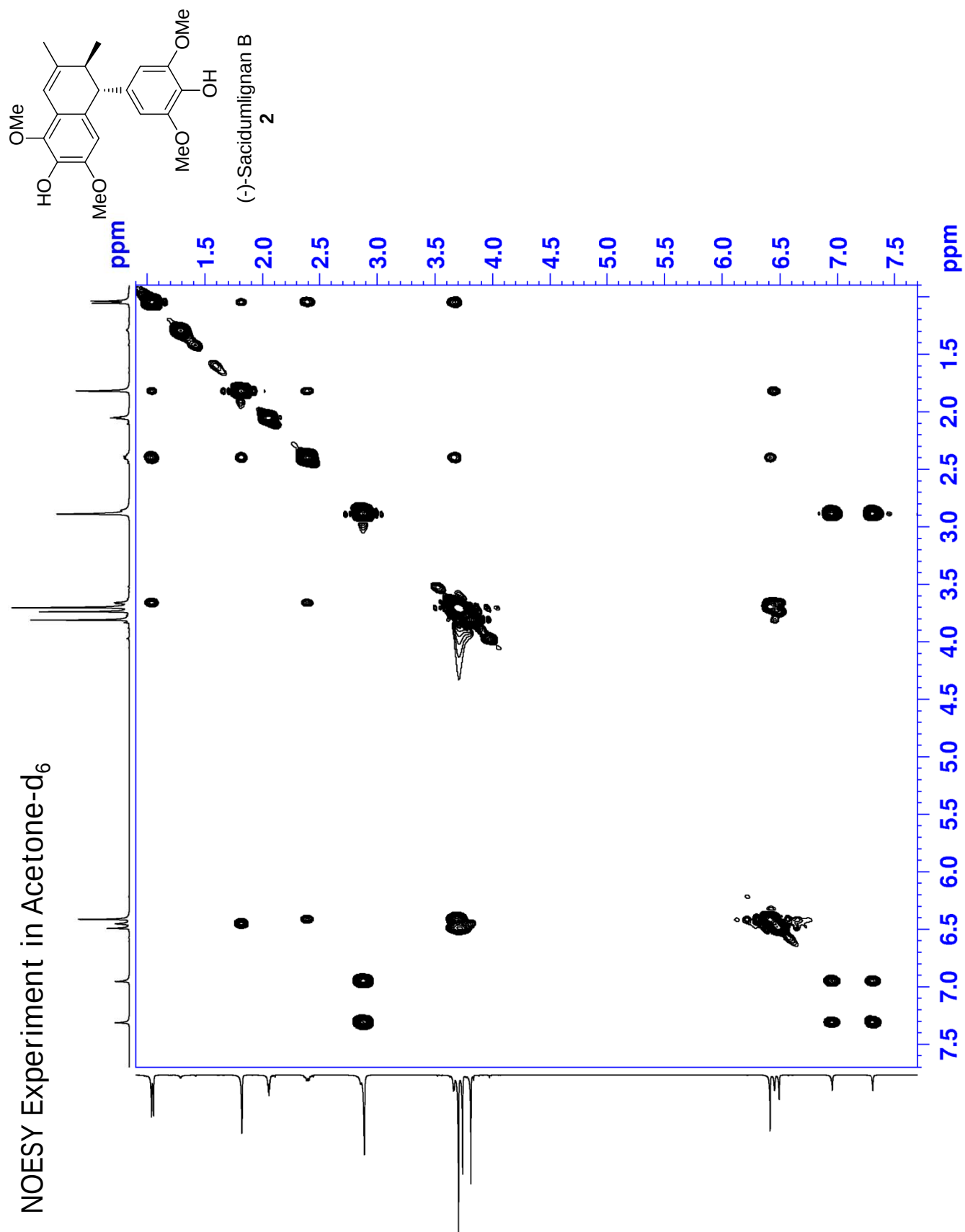
Acquisition Time (sec)	1.3631	Date	24/07/2011 18:36:12	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000



COSY Experiment in Acetone-d₆

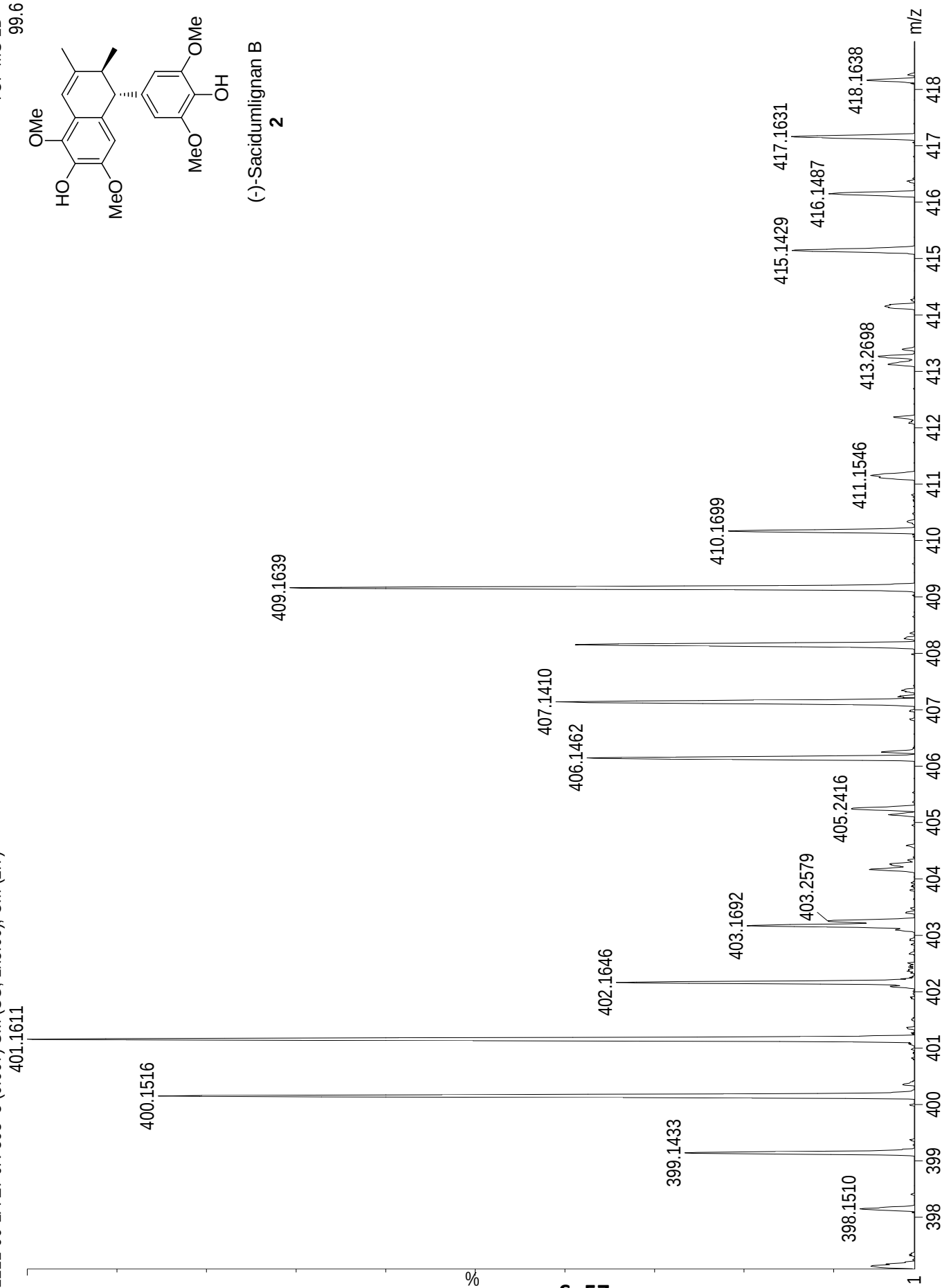
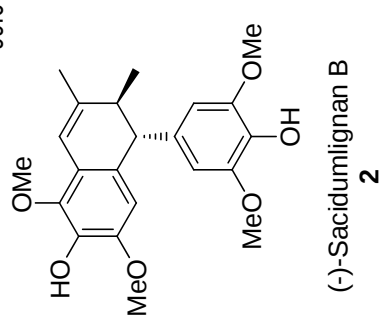


NOESY Experiment in Acetone-d₆

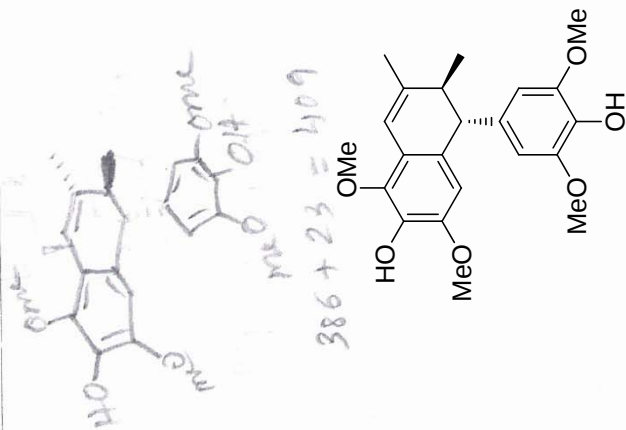
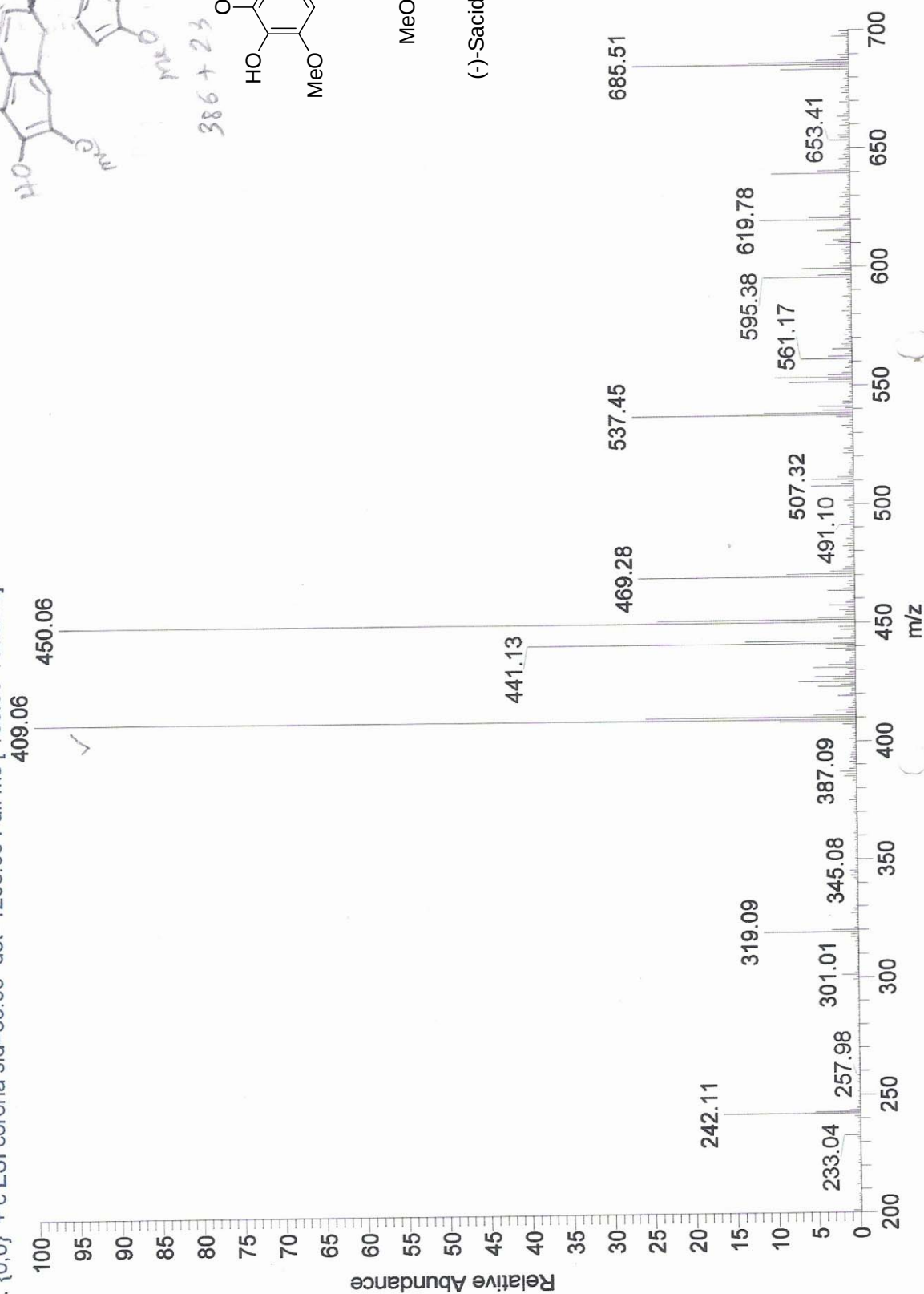


121211-96-1A E7 JR-393 3 (0.067) Sm (SG, 1x5.00); Cm (2:7)

TOF MS LD+
99.6

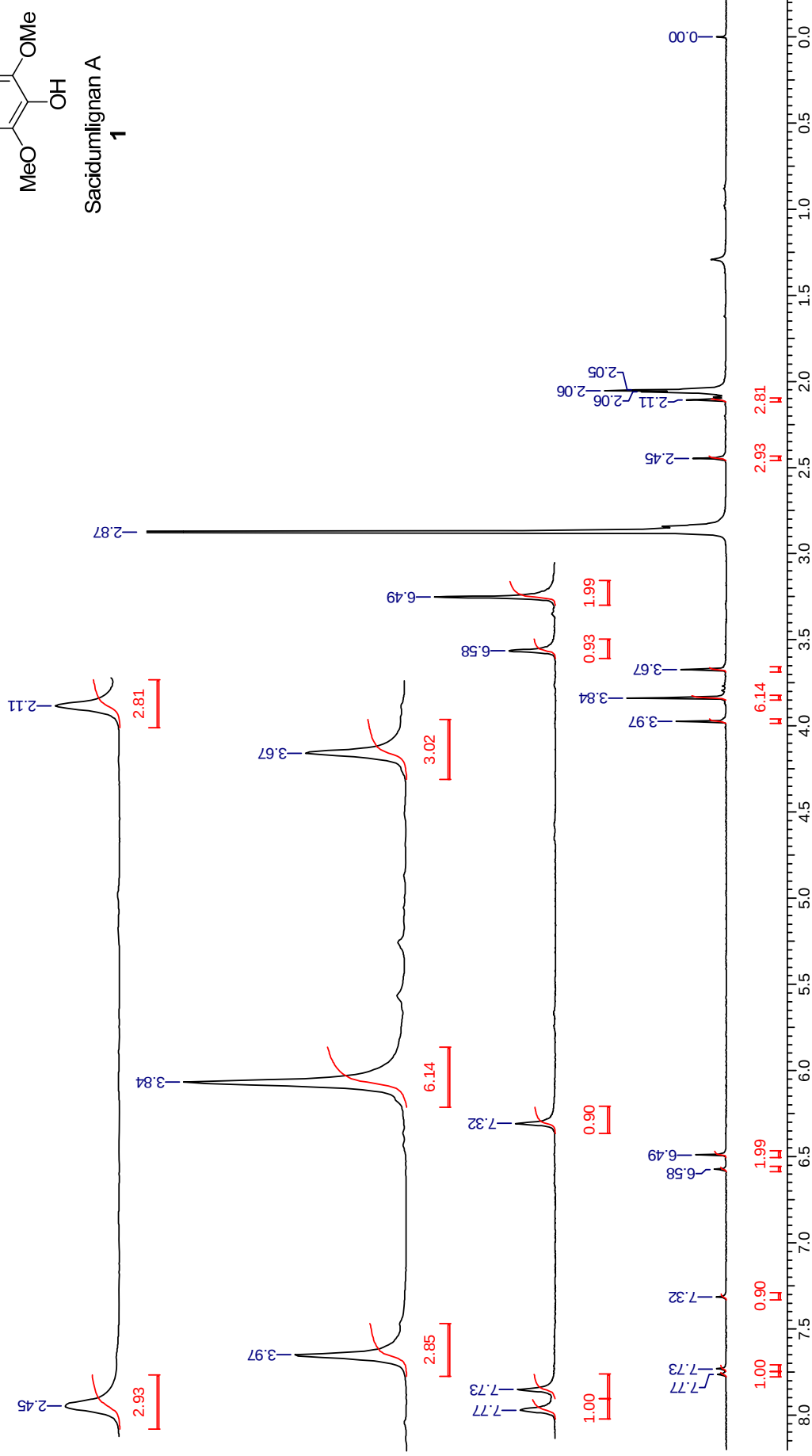
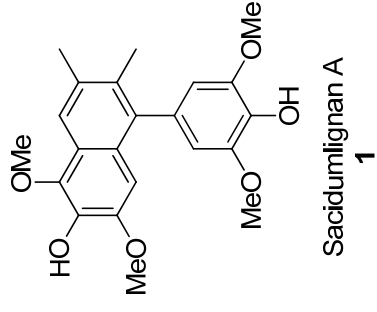


JR-393 #14-45 RT: 0.11-0.39 AV: 32 SB: 17 0.01-0.09, 0.47-0.52 NL: 1.12E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [100.00-1000.00]

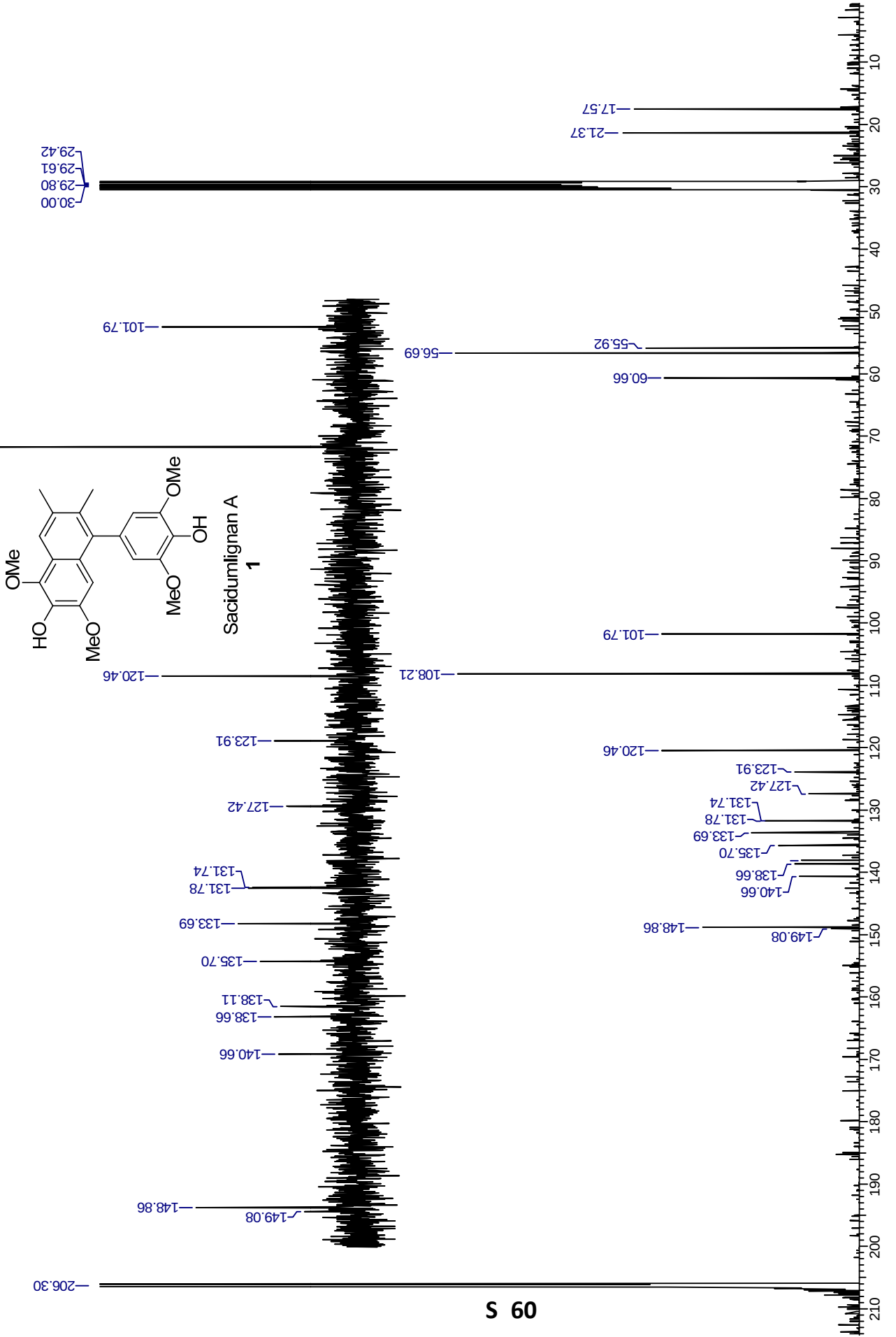


(-)-Sacidumignan B
2

Acquisition Time (sec) 3.9846		Comment		Date		13/08/2011 14:49:32	
Frequency (MHz) 400.13		Nucleus		1H		Original Points Count 32768	
Temperature (grad C) 0.000				Points Count		32768	
						Sweep Width (Hz)	
						8223.68	

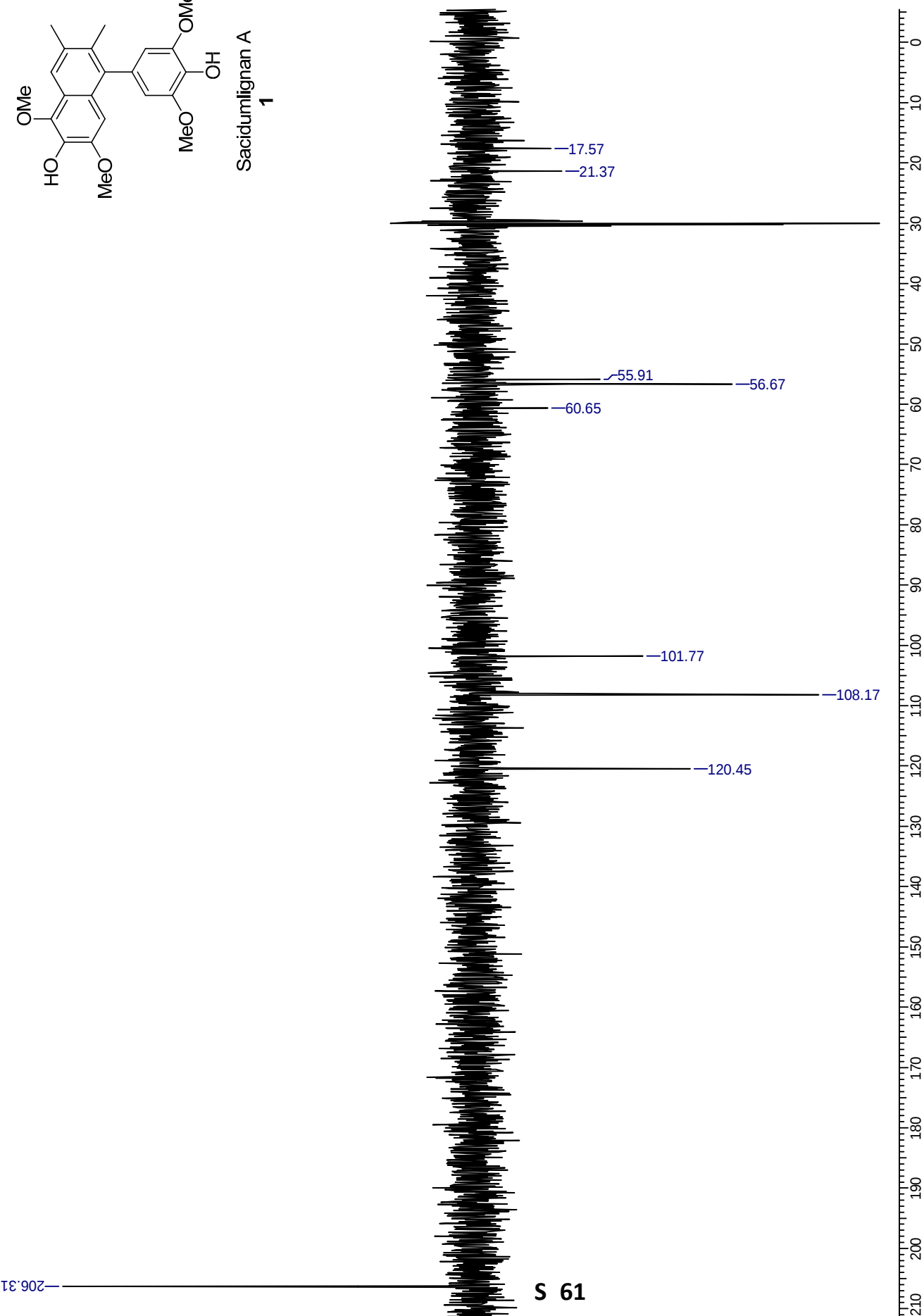
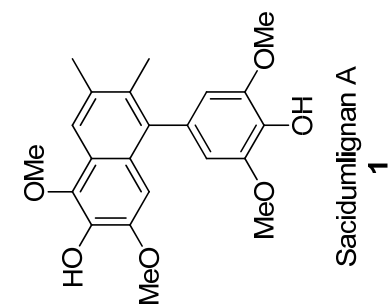


Acquisition Time (sec)	1.2976	Date	23/08/2011 09:57:58	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	25252.53	Temperature (grad C)	0.000



23 Aug 2011

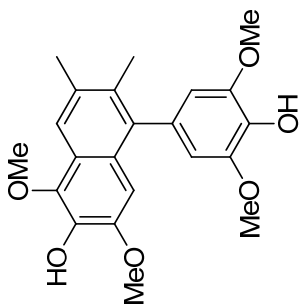
Acquisition Time (sec)	1.3631	Date	23/08/2011 09:58:22	Frequency (MHz)	100.61	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768	Sweep Width (Hz)	24038.46	Temperature (grad C)	0.000



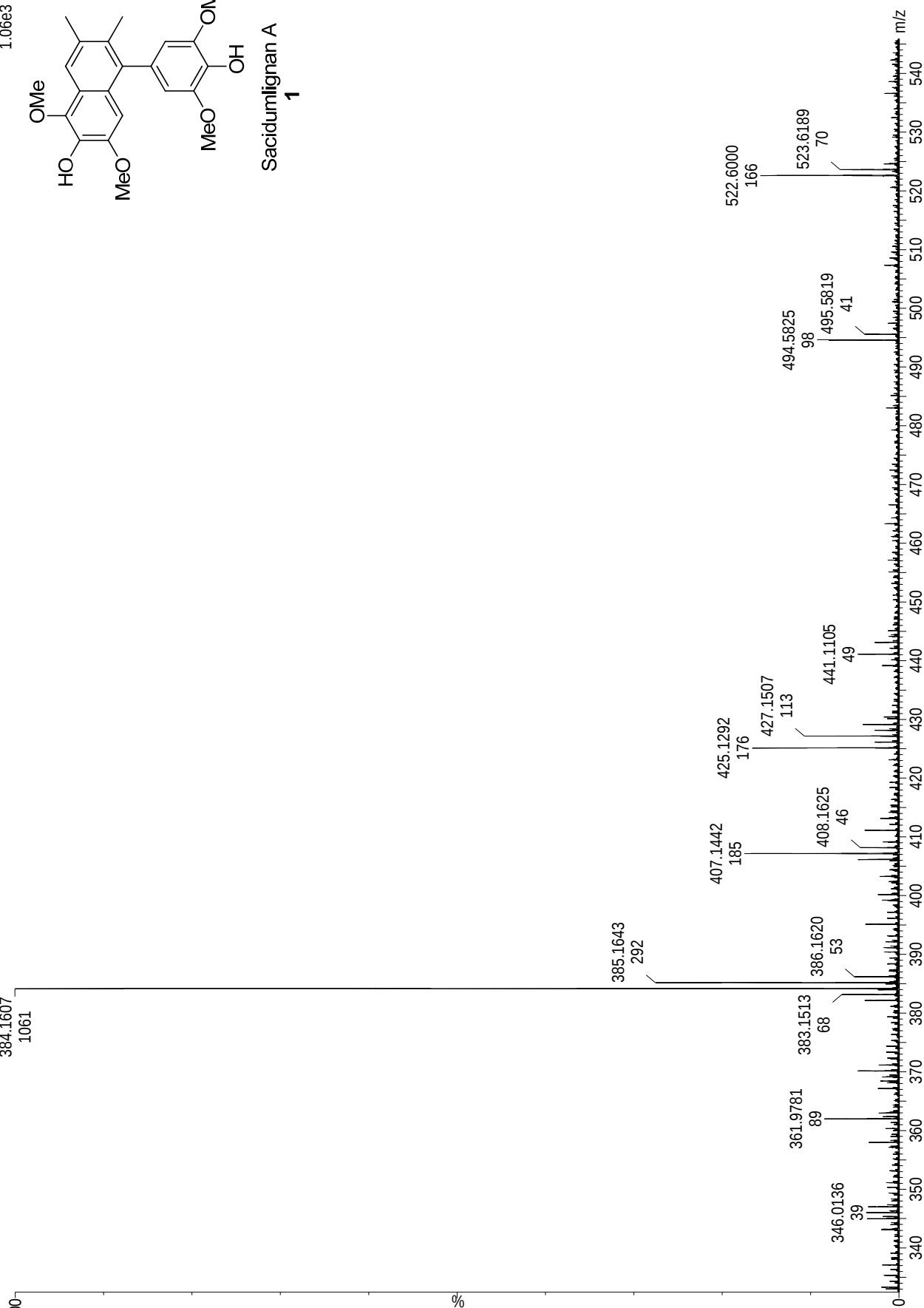
250911-96-1A A10 JR-398 10 (0.184) Cm (2:18)

TOF MS LD+
1.06e3

384.1607
1061

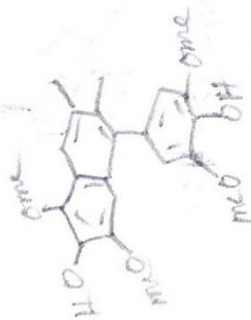
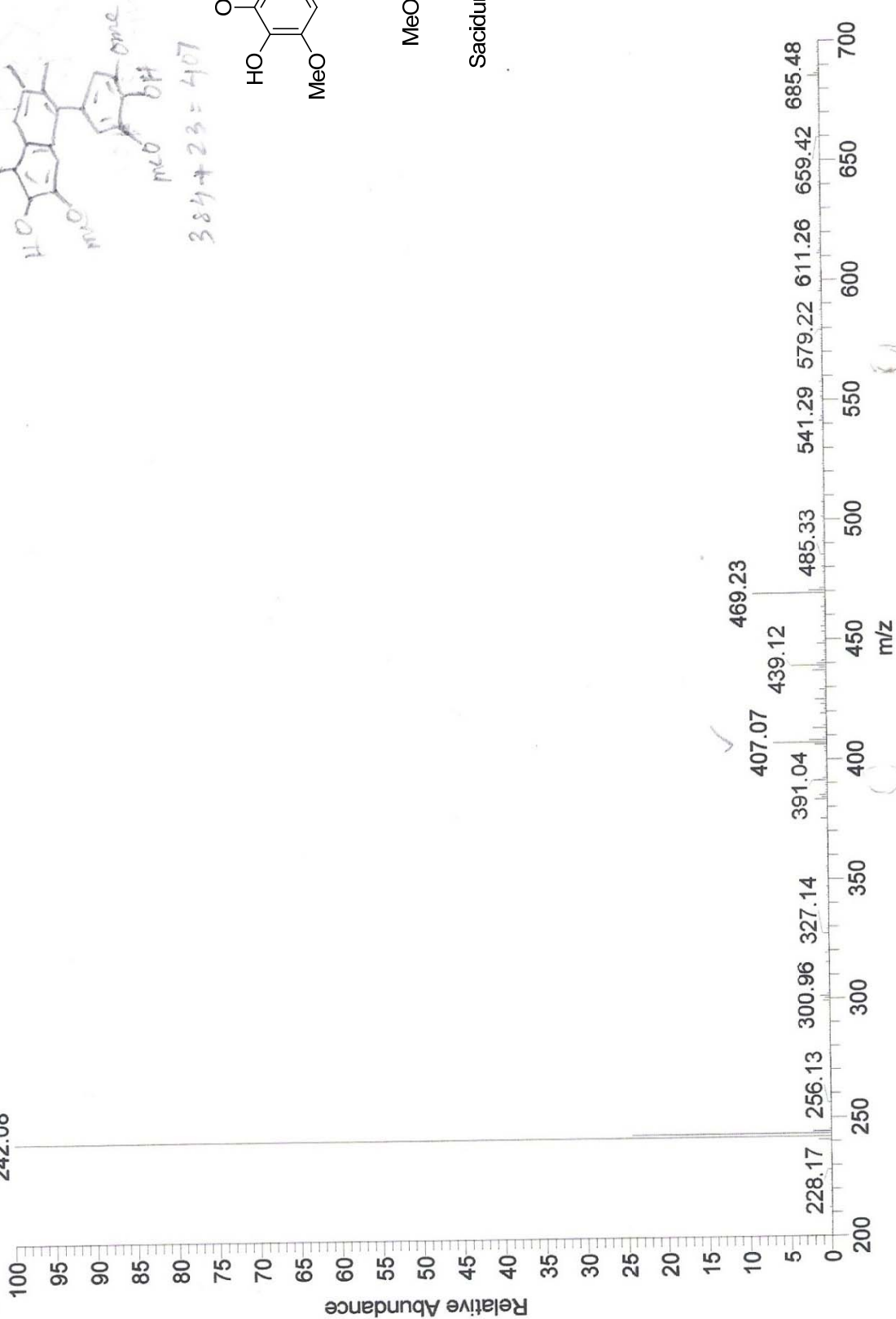


Sacidumlignan A
1

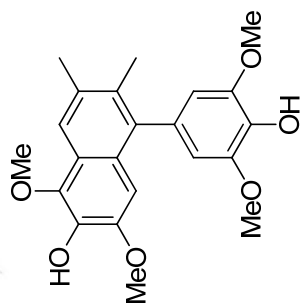


JR-395 #14-44 RT: 0.11-0.38 AV: 31 SB: 17 0.01-0.08, 0.46-0.52 NL: 2.11E6
T: {0,0} + c ESI corona sid=80.00 det=1200.00 Full ms [100.00-1000.00]

242.08



384 + 23 = 407



Sacidumignan A

1