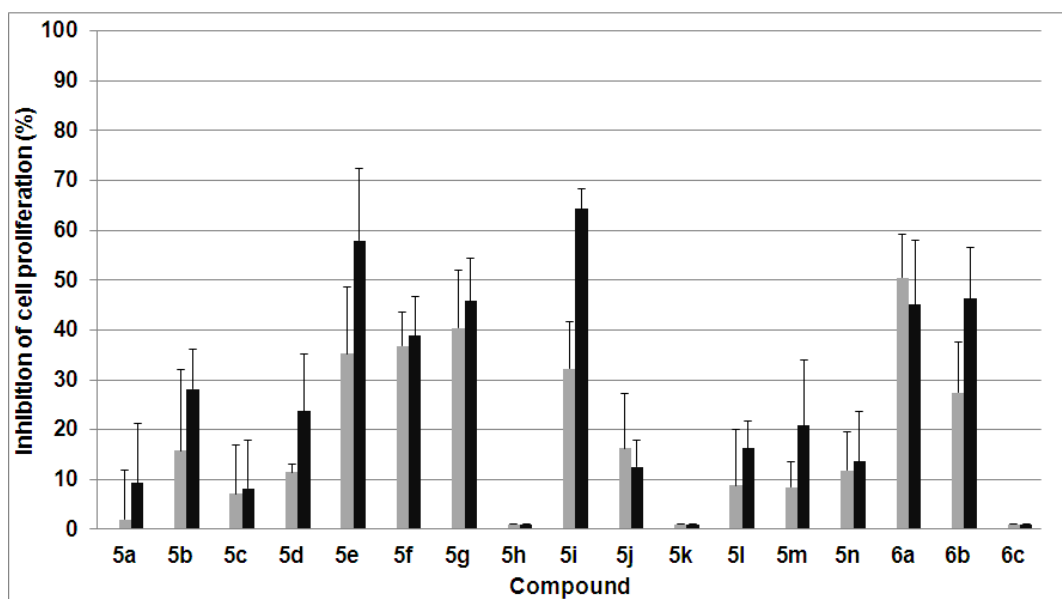


Supporting Information

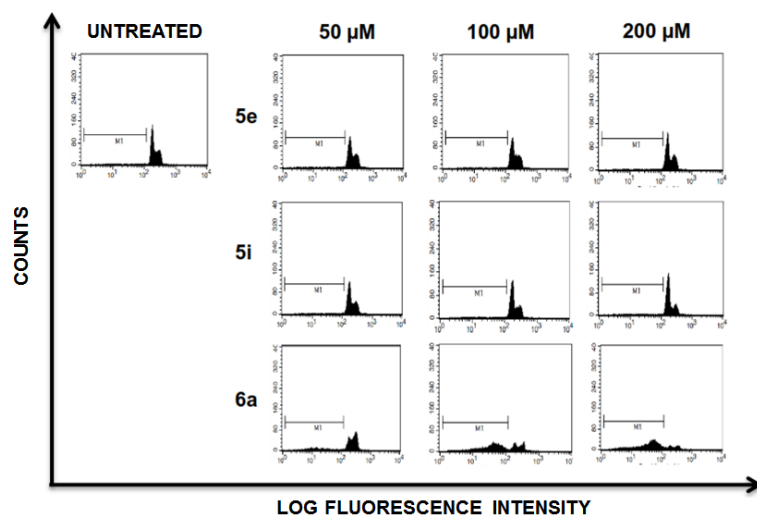
Synthesis of a Novel Purine Analogue Library as Pro-Apoptotic Inducers of Human Leukemic Lymphocytes and DAPK-1 Inhibitors.

AUTHORS: Maria J. Pineda de las Infantas^{†,*}, Sara Torres-Rusillo[§], Juan Diego Unciti-Broceta[‡], Pablo Fernandez-Rubio[§], Maria Angelica Luque Gonzalez, Miguel A. Gallo[†], Ignacio J. Molina^{§,*}, Asier Unciti-Broceta[¥] and Juan J. Diaz-Mochon^{†,‡,*}

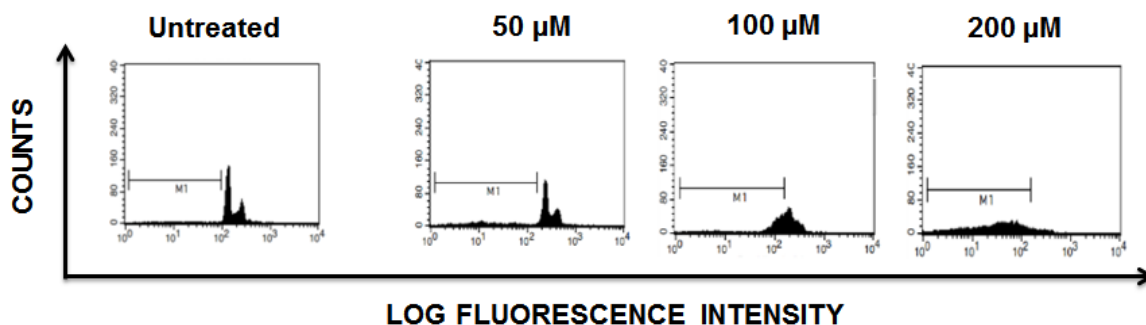
AFFILIATIONS: [†]Departamento de Química Farmacéutica y Orgánica. Facultad de Farmacia, Universidad de Granada, Campus de Cartuja s/n, 18011 Granada, Spain; [§] Instituto de Biopatología y Medicina Regenerativa, Centro de Investigación Biomédica, Universidad de Granada, Parque Tecnológico de Ciencias de la Salud (PTS), Avda. del Conocimiento s/n, 18016 Armilla, Granada, Spain; [¥]Edinburgh Cancer Research UK Centre, MRC Institute of Genetics and Molecular Medicine, University of Edinburgh, Crewe Road South, Edinburgh EH4 2XR, UK; [‡] Centro Pfizer - Universidad de Granada - Junta de Andalucía de Genómica e Investigación Oncológica (GENYO), Parque Tecnológico de Ciencias de la Salud (PTS), Avenida de la Ilustración 114, 18016 Granada, Spain.



SI Fig. 1. Antiproliferative effect of novel analogues on Jurkat cells after 48 h treatment at 50 μ M (grey bars) and 100 μ M (solid bars). Proliferation was determined by the MTT assay, results analyzed by spectrophotometry and expressed as percentage of inhibition relative to the untreated cells control. Equivalent amounts of DMSO was used for all doses and controls to exclude non-specific growth inhibition due to the drug solvent. Error bars (SEM).



SI Fig. 2. Effect of compounds, **5e**, **5i** and **6a** on cell cycle. K562 cells were incubated for 24h in the presence of indicated compounds and doses or their equivalent amounts of DMSO used as vehicle. Cell cycle subpopulations were analyzed by flow cytometry after permeabilization and staining of cells with propidium iodide. The percentages of cells gated within the sub-G1 peak are indicated in the figure.



SI Fig. 3. Effect of **6d** on the cell cycle of K562 cells. K562 cells were treated for 24 h with **6d** at indicated concentrations or their equivalent amounts of DMSO used as vehicle. Numbers indicate the percentage of cells contained within the sub-G1 region.

Kinase assay:

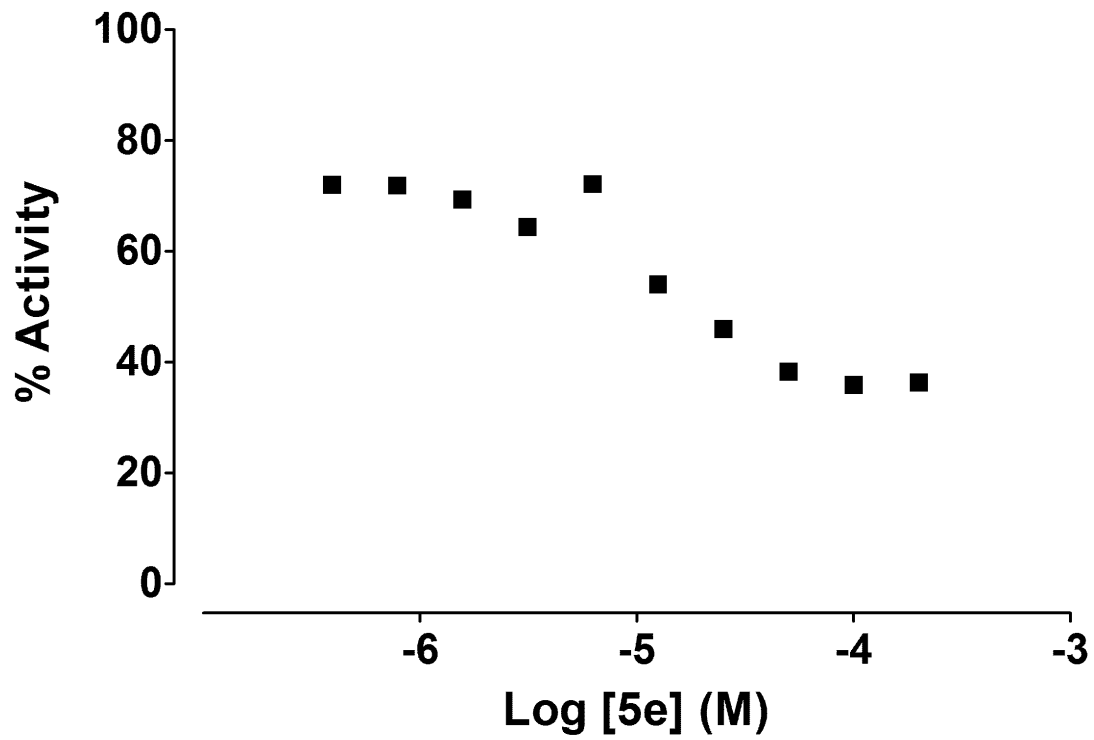
Originally, compound **5e** is encoded as **ASIMJ-5**, **5i** as **ASIMJ-11**, **6a** as **ASIMJ-6** and **6d** as **ASIMJ-27**. Therefore, in raw data files compounds are named with their original codes.

File *Cambridge BioSci_REPORT_20121003-CBL-UK-96KP-2cpds-RV01.xlsx* contains list of 96-kinases used and single-dose (10 μ M) mode P^{33} kinase radiolabeled assay raw data using **5e** and **6a**.

File *Cambridge Bioscience_REPORT_20130220-CBL-UK-ASIMJ-11-27.xlsx* contains IC_{50} mode P^{33} radiolabeled DAPK1 assay raw data using **5i** and **6d**

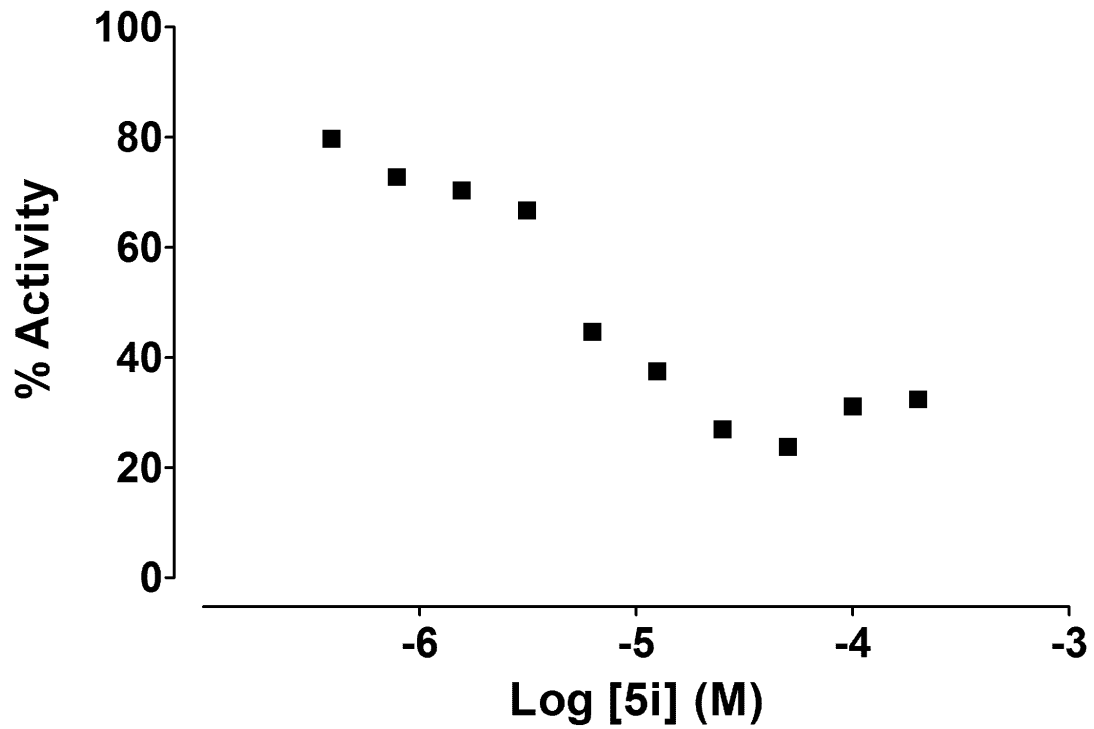
File *CBL_Report_20121115-CBL-UK-UGR.xls* contains IC_{50} mode P^{33} radiolabeled DAPK1 and DAPK2 assay raw data using **5e** and **6a**

Compound 5e IC50 Data for DAPK1

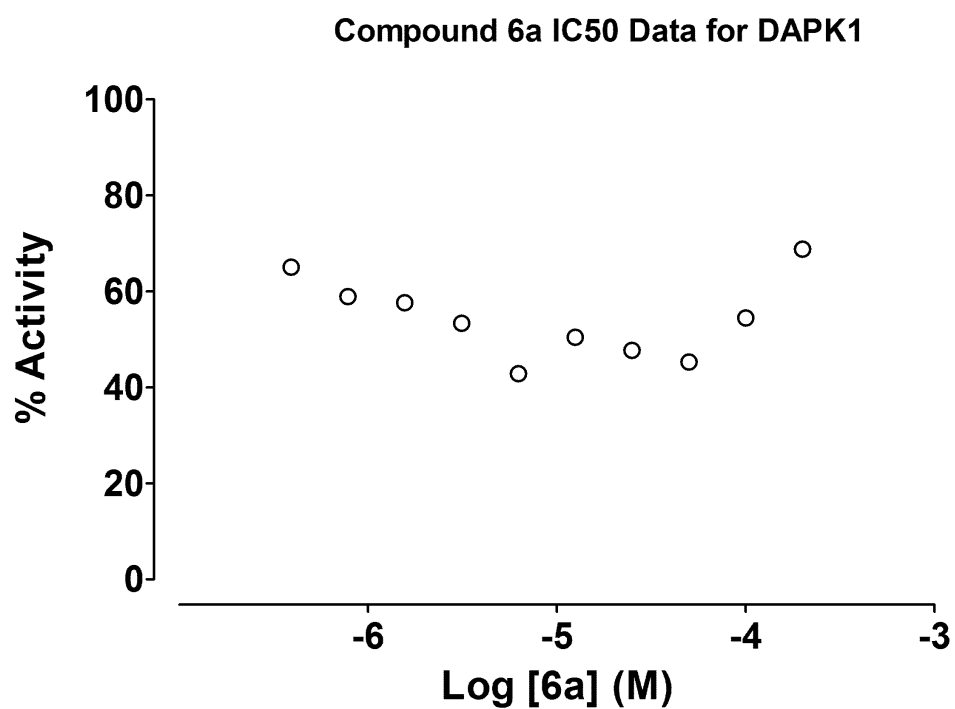


SI Fig.4 Dose-response curve of 5e against DAPK1. $IC_{50} = 2.301e-005M$ HILL SLOPE = -0.3121

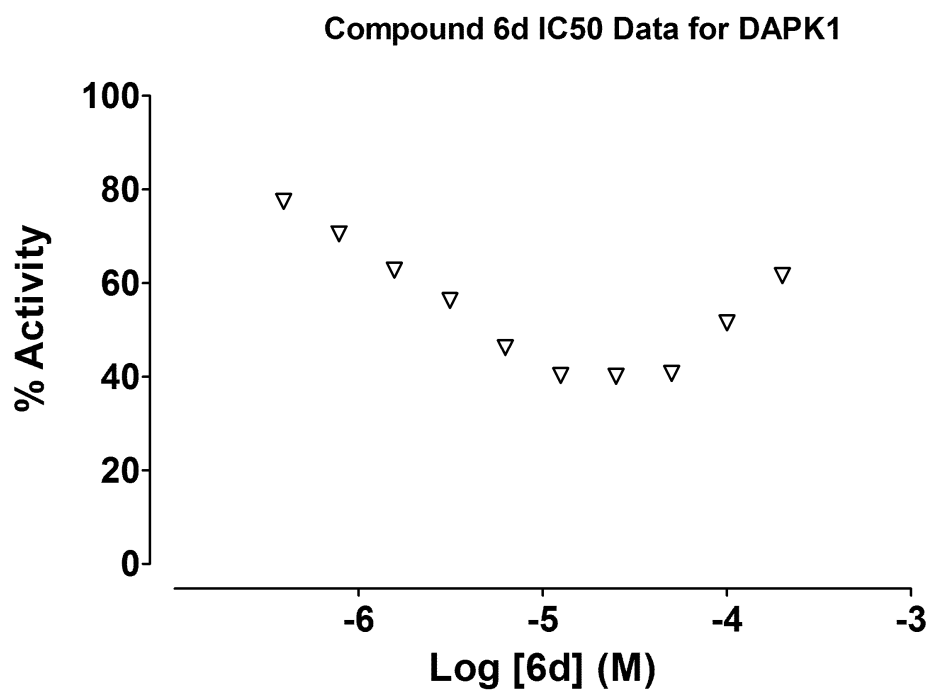
Compound 5i IC50 Data for DAPK1



SI Fig.5 Dose-response curve of **5i** against DAPK1. $IC_{50} = 5.979e-006$ M HILL SLOPE = -0.4186

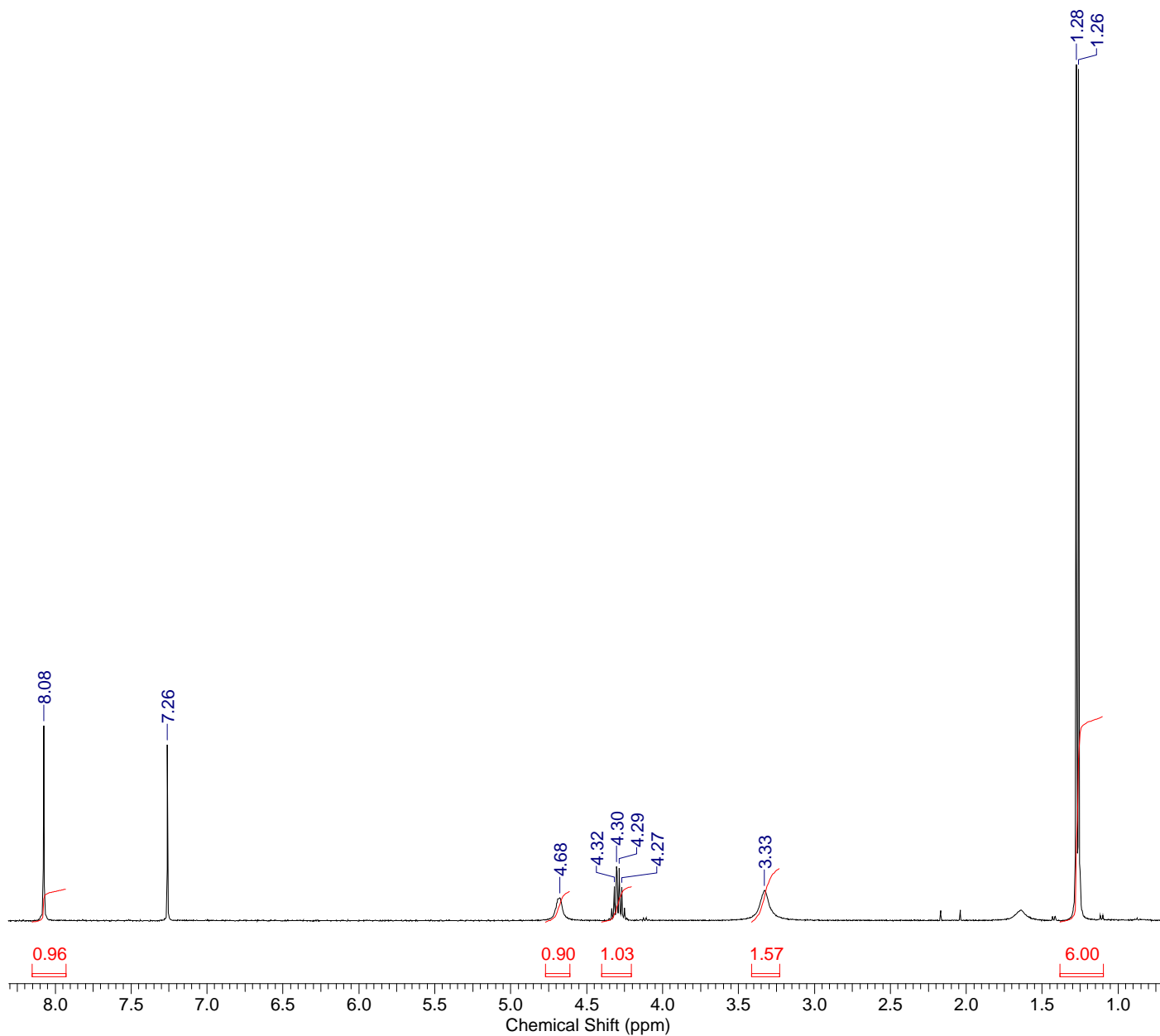


SI Fig.6 Dose-response curve of **6a** against DAPK1. $IC_{50} = ND$



SI Fig.7 Dose-response curve of **6d** against DAPK1. $IC_{50} = 2.54e-006$ M HILL SLOPE = -0.147

Acquisition Time (sec)	2.5559	Date	Jan 31 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\PRE-AM1	Frequency (MHz)	400.58
Nucleus	1H	Number of Transients	8
Points Count	16384	Pulse Sequence	s2pul
Sweep Width (Hz)	6410.26	Temperature (degree C)	25.000
		Original Points Count	16384
		Solvent	CHLOROFORM-D



No.	(ppm)	(Hz)	Height
1	1.26	504.8	0.9945
2	1.28	511.1	1.0000
3	3.33	1333.5	0.0371
4	4.27	1710.0	0.0404
5	4.29	1716.6	0.0631
6	4.30	1723.3	0.0649
7	4.32	1729.9	0.0412
8	4.68	1873.9	0.0284
9	7.26	2908.4	0.2072
10	8.08	3235.1	0.2294

No.	(ppm)	Value	Absolute Value
1	[1.10 .. 1.38]	6.000	2.66850e+7
2	[3.23 .. 3.41]	1.565	6.96065e+6
3	[4.21 .. 4.40]	1.026	4.56130e+6
4	[4.61 .. 4.77]	0.895	3.98062e+6
5	[7.93 .. 8.15]	0.964	4.28633e+6

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

960 formula(e) evaluated with 3 results within limits (up to 50 closest results for each mass)

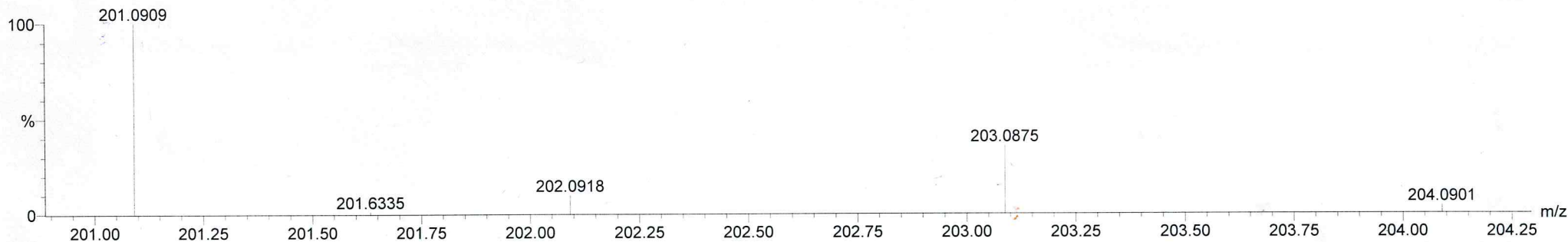
Elements Used:

C: 0-17 H: 0-1000 N: 0-10 O: 0-10 Na: 0-1 S: 0-1 Cl: 0-1

PRE-TB-F dilu 9 (0.217)

1: TOF MS ES+

4.10e+002



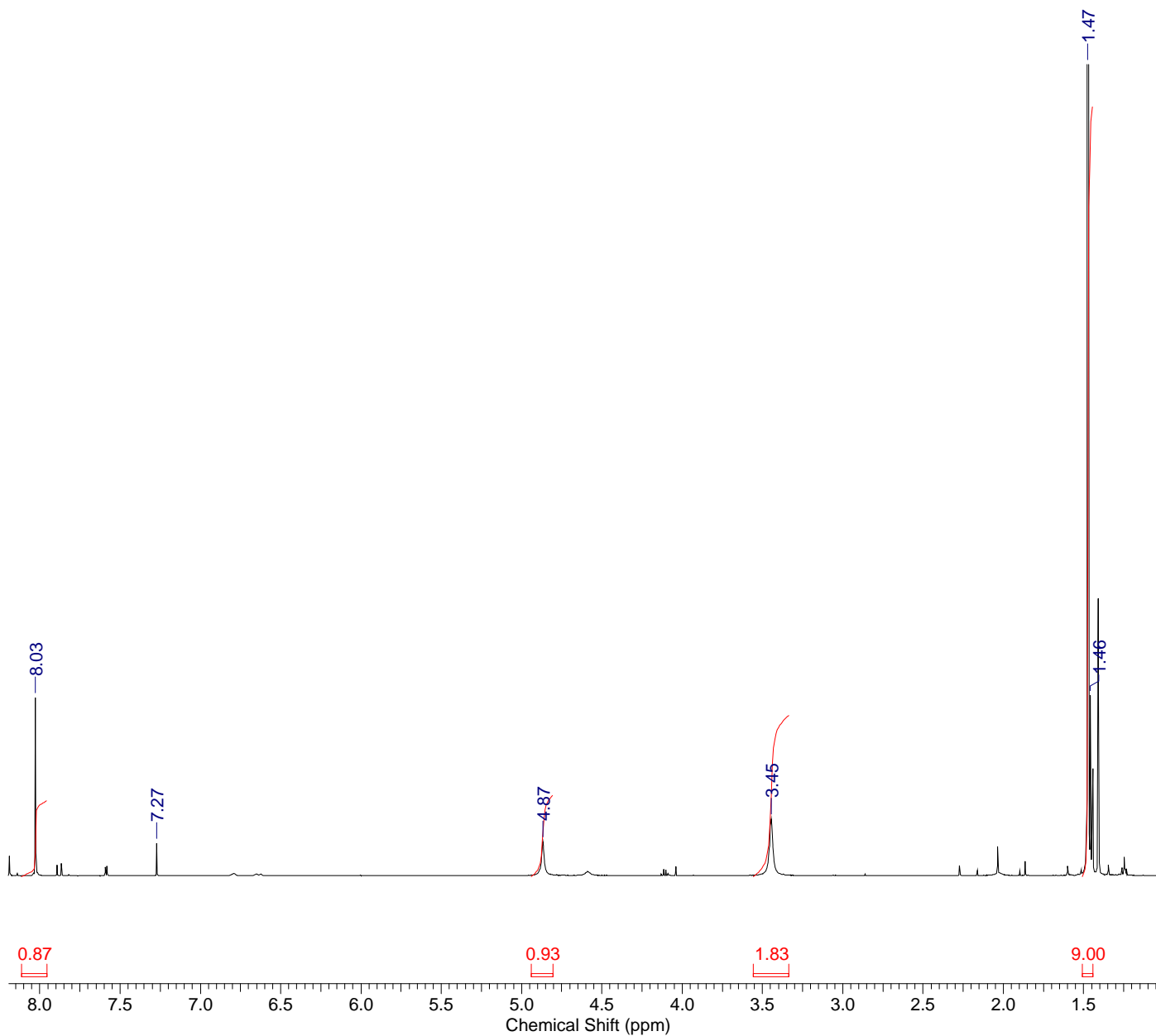
Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
201.0909	201.0907	0.2	1.0	3.5	0.6	C8 H14 N4 Cl
	201.0909	0.0	0.0	-1.5	52.4	C5 H17 N2 O4 S
	201.0916	-0.7	-3.5	7.5	72.7	C13 H13 O2

4b 5-Amino-4-tert-butylamino-6-chloropyrimidine (H-NMR)

11 Mar 2013

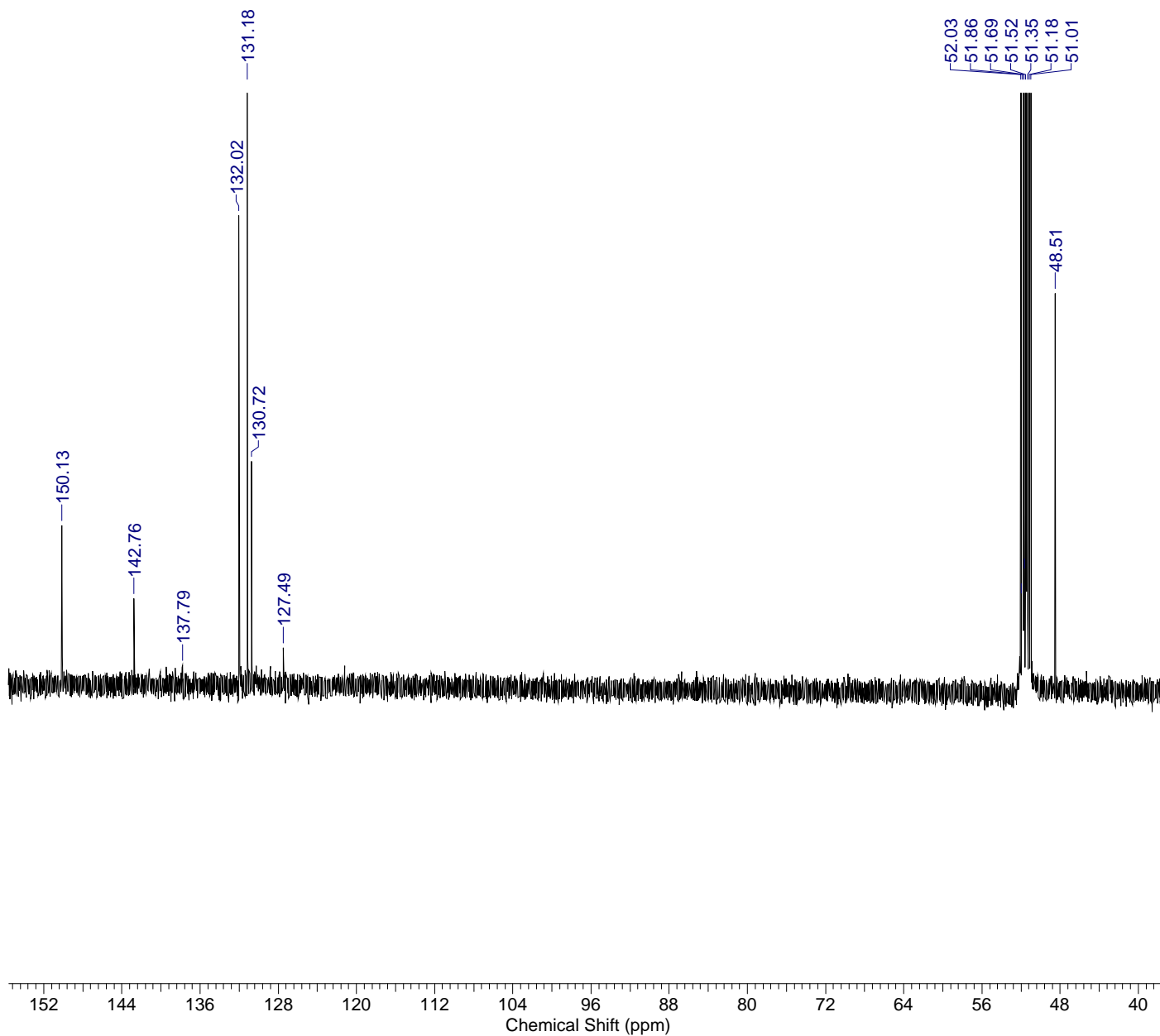
Acquisition Time (sec)	2.0447	Date	Jun 19 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\Pre-TB-1	Frequency (MHz)	499.79
Nucleus	1H	Number of Transients	1
Points Count	16384	Pulse Sequence	s2pul
Sweep Width (Hz)	8012.82	Temperature (degree C)	25.000
		Original Points Count	16384
		Solvent	CHLOROFORM-D



No.	(ppm)	(Hz)	Height
1	1.46	728.2	0.0677
2	1.47	736.5	1.0000
3	3.45	1722.5	0.0217
4	4.87	2433.1	0.0131
5	7.27	3635.3	0.0125
6	8.03	4011.9	0.0669

No.	(ppm)	Value	Absolute Value
1	[1.44 .. 1.51]	9.000	1.64609e+8
2	[3.34 .. 3.56]	1.831	3.34978e+7
3	[4.80 .. 4.94]	0.930	1.70182e+7
4	[7.95 .. 8.11]	0.867	1.58596e+7

Acquisition Time (sec)	1.0486	Date	Mar 6 2012	
File Name	C:\Users\usuario\Documents\Espectros Asier\12-511_Pre-2\carbono			
Frequency (MHz)	125.68	Nucleus	13C	Original Points Count 32768
Points Count	32768	Pulse Sequence	s2pul	Solvent CHLOROFORM-D
Sweep Width (Hz)	31250.00	Temperature (degree C)	25.000	

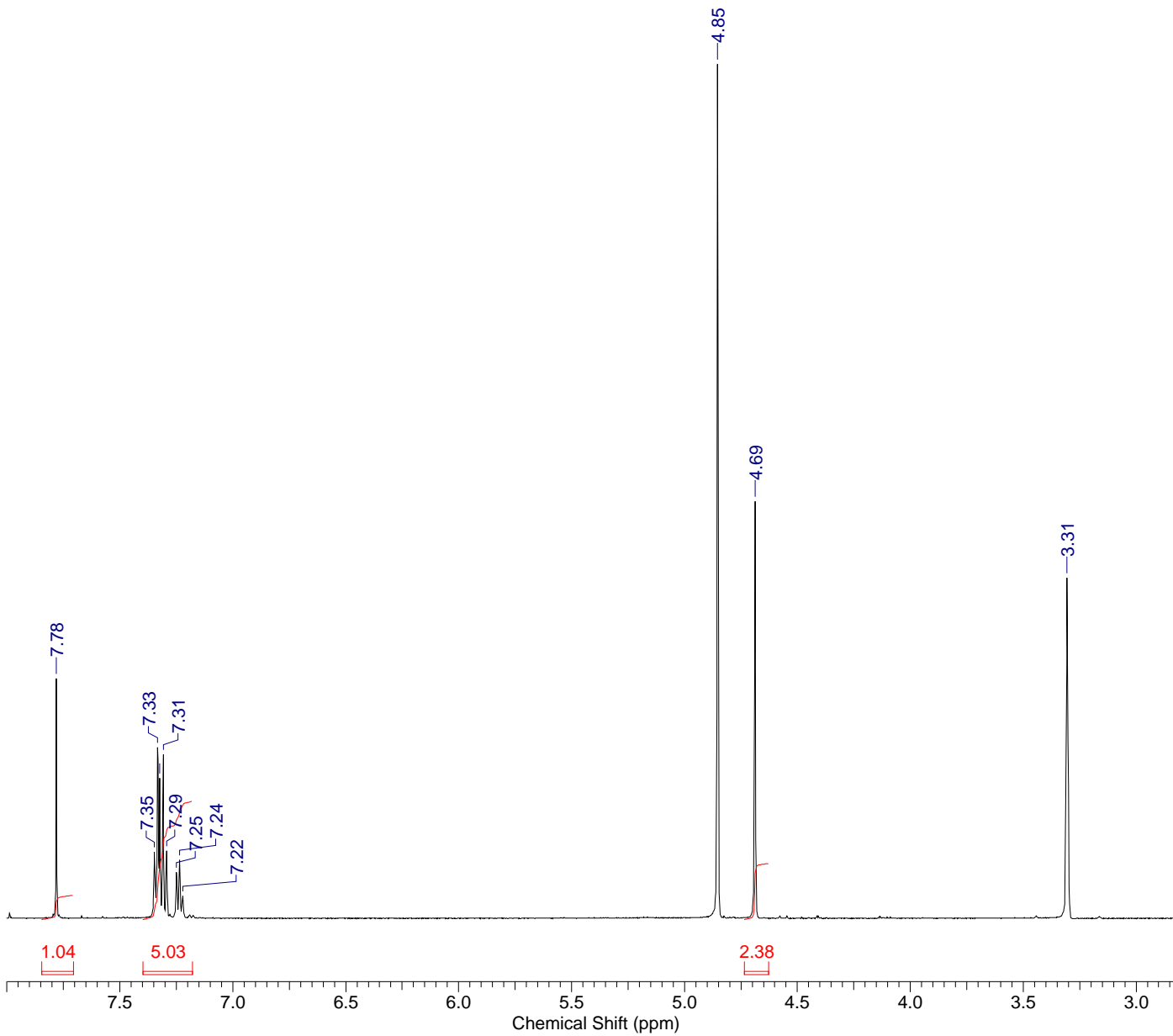


No.	(ppm)	(Hz)	Height
1	48.51	6096.4	0.0362
2	51.01	6411.1	0.1618
3	51.18	6432.1	0.3818
4	51.35	6454.0	0.8678
5	51.52	6475.0	1.0000
6	51.63	6489.3	0.0104
7	51.69	6496.9	0.7416
8	51.81	6511.3	0.0145
9	51.86	6517.9	0.4658
10	51.97	6532.2	0.0080
11	52.03	6539.9	0.1005
12	127.49	16023.5	0.0035
13	130.72	16429.8	0.0207
14	131.18	16487.0	0.0684
15	132.02	16592.8	0.0434
16	137.79	17318.6	0.0019
17	142.76	17943.3	0.0080
18	150.13	18869.3	0.0148

4c 5-amino-4-benzilamino-6-chloropyrimidine (H-NMR)

16 Jul 2012

Acquisition Time (sec)	1.7432	Date	Mar 6 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-511_Pre-2\proton				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	80
Original Points Count	13048	Points Count	16384	Pulse Sequence	s2pul
Solvent	METHANOL-D4		Sweep Width (Hz)	7485.03	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	3.31	1652.0	0.3992
2	4.69	2342.8	0.4889
3	4.85	2425.5	1.0000
4	7.22	3609.3	0.0275
5	7.24	3616.6	0.0695
6	7.25	3623.4	0.0555
7	7.29	3644.9	0.0804
8	7.31	3652.7	0.1928
9	7.32	3660.0	0.1651
10	7.33	3665.0	0.2014
11	7.35	3671.9	0.0790
12	7.78	3889.3	0.2820

No.	(ppm)	Value	Absolute Value
1	[4.63 .. 4.74]	2.382	5.73421e+7
2	[7.18 .. 7.40]	5.029	1.21055e+8
3	[7.71 .. 7.85]	1.037	2.49540e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 mDa / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

383 formula(e) evaluated with 7 results within limits (up to 50 best isotopic matches for each mass)

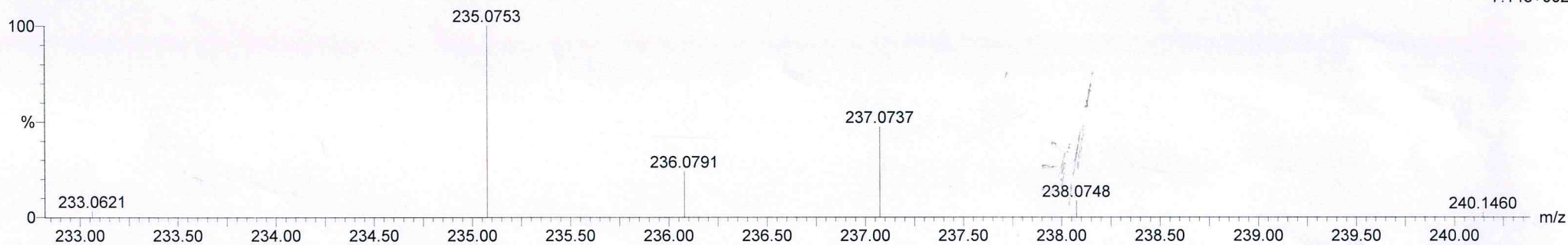
Elements Used:

C: 0-11 H: 0-1000 N: 0-9 O: 0-20 Cl: 0-1

MJ-2 89 (1.975)

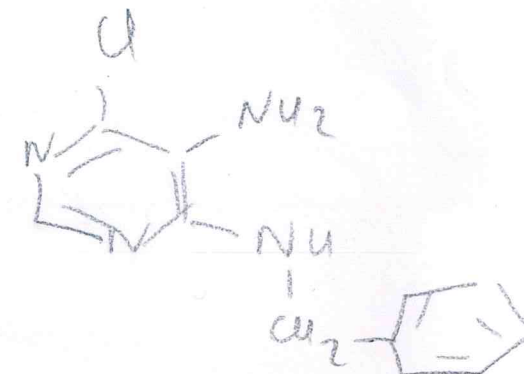
1: TOF MS ES+

7.14e+002



Minimum: -1.5
Maximum: 5.0 10.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
235.0753	235.0750	0.3	1.3	7.5	24.3	C11 H12 N4 Cl
	235.0737	1.6	6.8	2.5	31.4	C10 H16 O4 Cl
	235.0710	4.3	18.3	3.5	43.6	C6 H12 N6 O2 Cl
	235.0719	3.4	14.5	7.5	173.8	C11 H11 N2 O4
	235.0791	-3.8	-16.2	3.5	198.1	C5 H11 N6 O5
	235.0778	-2.5	-10.6	-1.5	205.2	C4 H15 N2 O9
	235.0751	0.2	0.9	-0.5	222.4	H11 N8 O7



Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

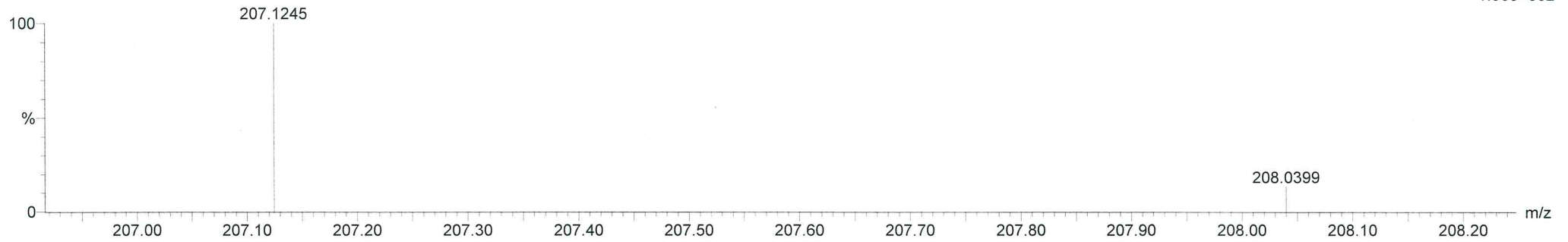
369 formula(e) evaluated with 1 results within limits (up to 50 best isotopic matches for each mass)

Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3289

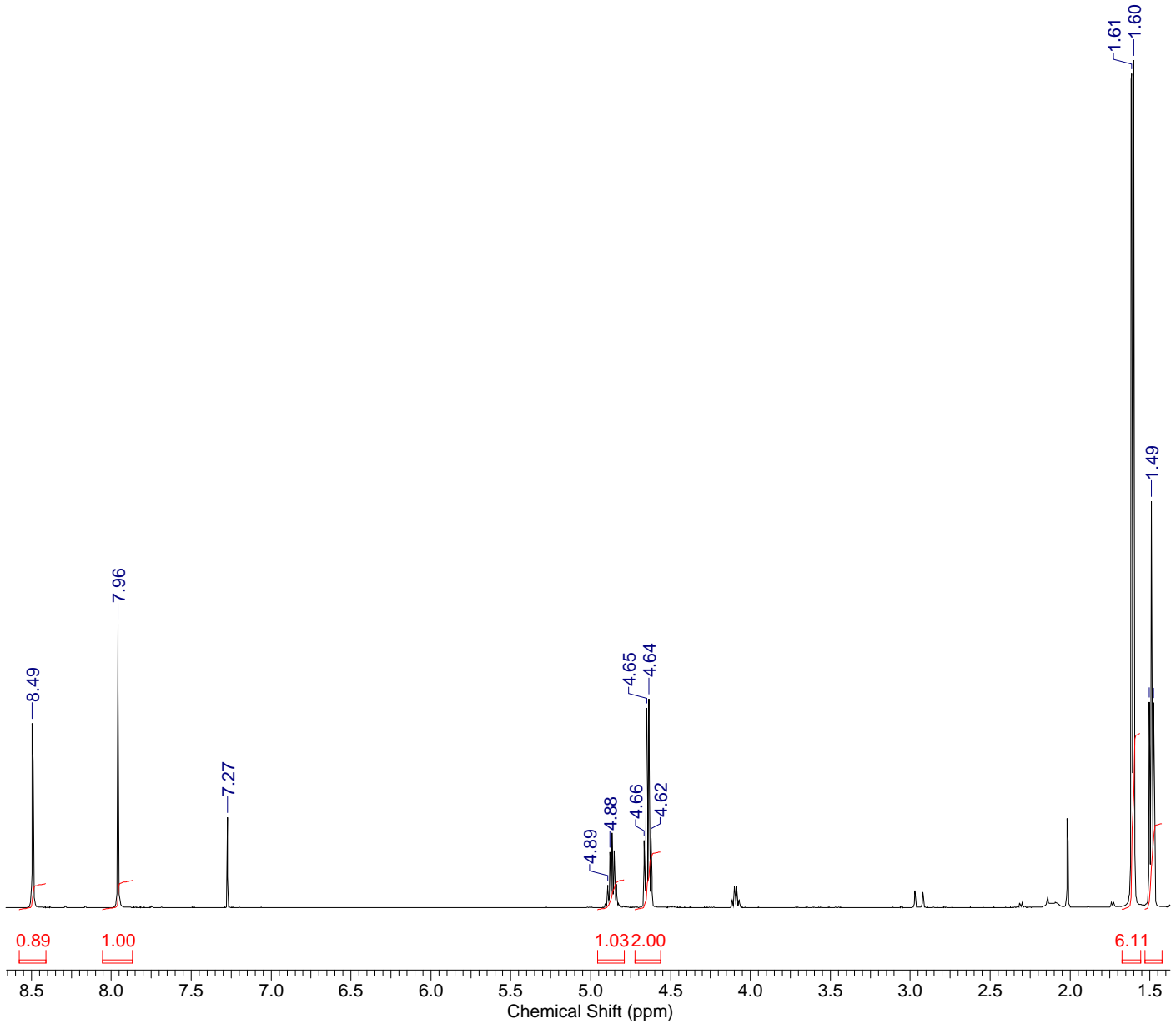
ASIMJ-1 40 (0.885)

1: TOF MS ES+
1.90e+002

Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
207.1245	207.1246	-0.1	-0.5	5.5	n/a	C10 H15 N4 O

Acquisition Time (sec)	2.0447	Date	Feb 4 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-99-12_ASIMJ-1\PROTON_01				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	8
Original Points Count	16384	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82		
Temperature (degree C)	25.000				



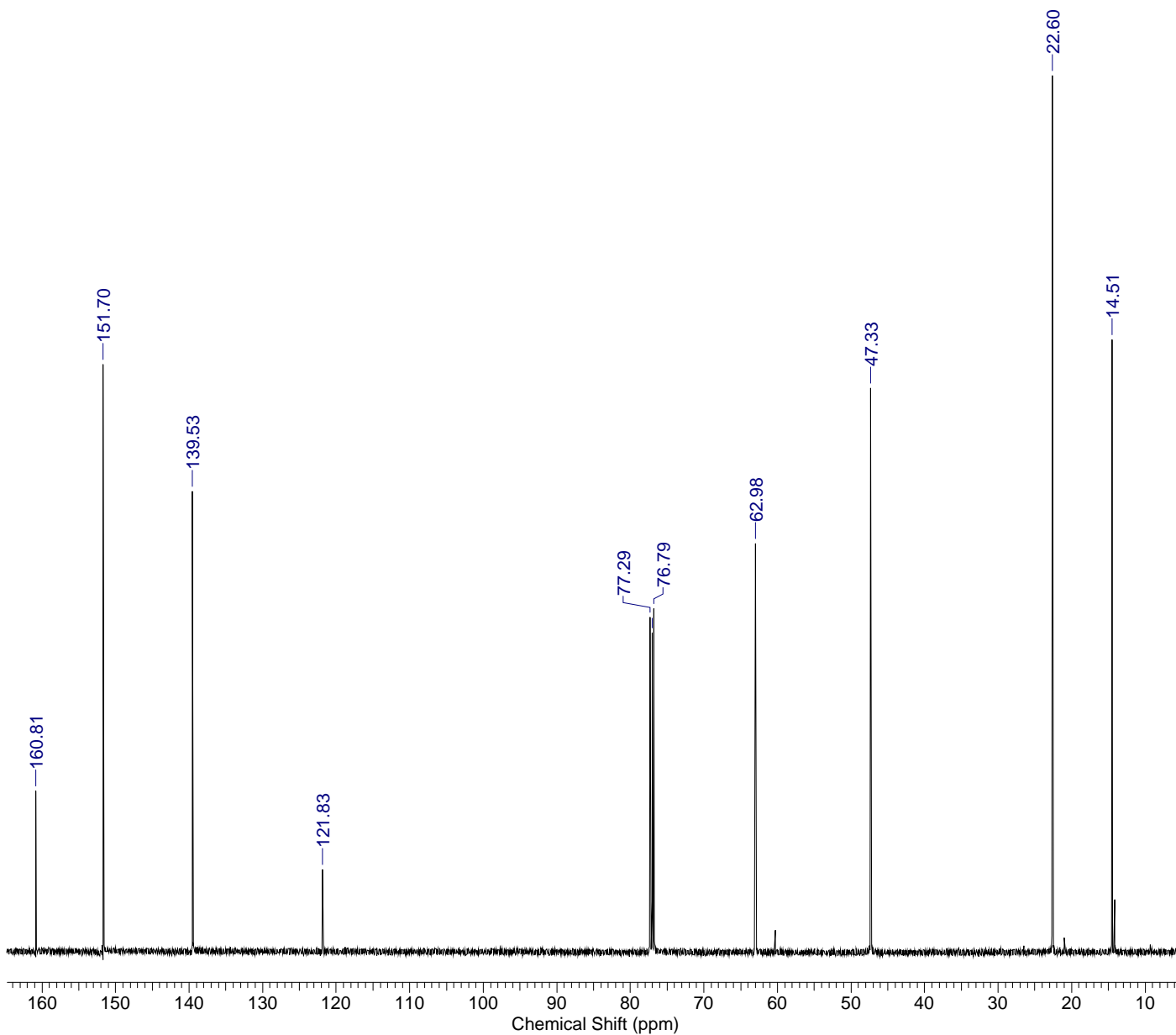
No.	(ppm)	(Hz)	Height
1	1.48	738.3	0.2434
2	1.49	745.2	0.4809
3	1.51	752.5	0.2440
4	1.60	800.9	1.0000
5	1.61	806.8	0.9840
6	4.62	2309.8	0.0837
7	4.64	2317.1	0.2483
8	4.65	2323.5	0.2373
9	4.66	2331.3	0.0814
10	4.88	2439.4	0.0676
11	4.89	2446.2	0.0283
12	7.27	3635.2	0.1085
13	7.96	3977.6	0.3363
14	8.49	4245.6	0.2190

No.	(ppm)	Value	Absolute Value
1	[1.42 .. 1.53]	2.979	1.74678e+8
2	[1.56 .. 1.67]	6.113	3.58379e+8
3	[4.56 .. 4.72]	2.000	1.17260e+8
4	[4.79 .. 4.96]	1.030	6.03864e+7
5	[7.87 .. 8.06]	1.002	5.87716e+7
6	[8.41 .. 8.58]	0.894	5.24249e+7

5a. - 6-Ethoxy-9-isopropyl-9H-purine (C-NMR)

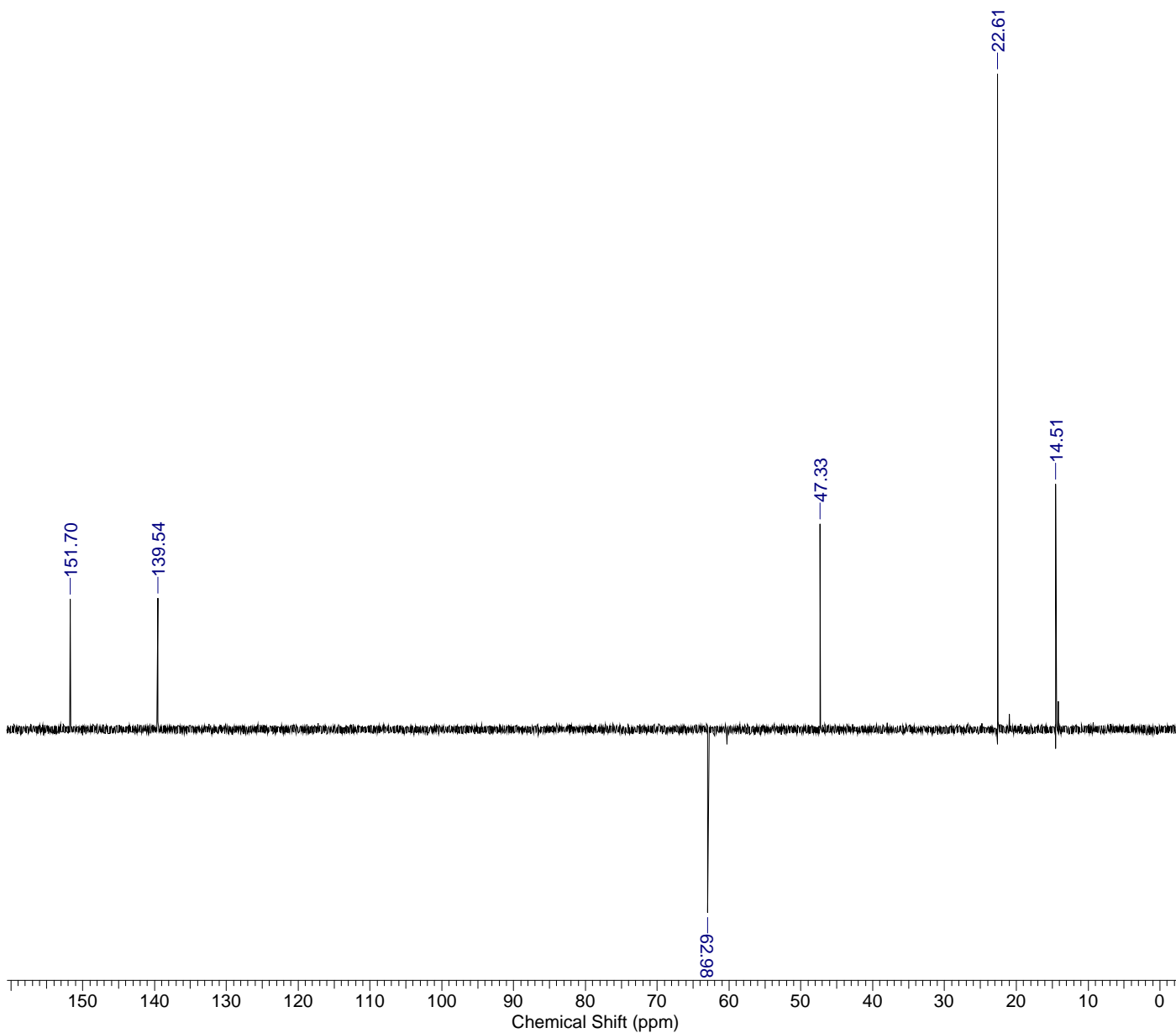
11 Jul 2012

Acquisition Time (sec)	1.0486	Date	Feb 4 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-99-12_ASIMJ-1\CARBON_01				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	3200
Original Points Count	32768	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.51	1823.8	0.6984
2	22.60	2840.4	1.0000
3	47.33	5948.6	0.6432
4	62.98	7915.1	0.4655
5	76.79	9650.8	0.3913
6	77.04	9683.3	0.3638
7	77.29	9714.7	0.3814
8	121.83	15312.0	0.0933
9	139.53	17537.0	0.5250
10	151.70	19066.8	0.6704
11	160.81	20211.2	0.1830

Acquisition Time (sec)	1.0486	Date	Feb 4 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-99-12_ASIMJ-1\DEPT_01				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	1200
Original Points Count	32768	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D		Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.51	1823.8	0.3743
2	22.61	2841.4	1.0000
3	47.33	5948.6	0.3133
4	62.98	7915.1	-0.2795
5	139.54	17538.0	0.2003
6	151.70	19066.8	0.1987

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

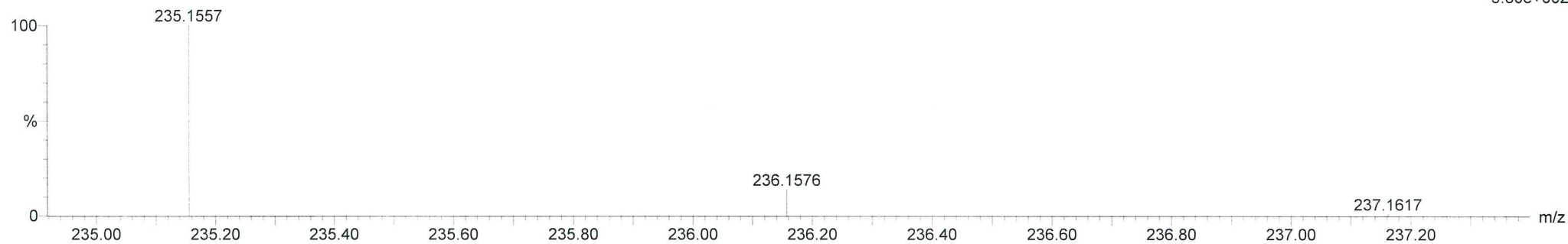
427 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass)

Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3290

ASIMJ-2 9 (0.217)

1: TOF MS ES+
5.80e+002

Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
235.1557	235.1559	-0.2	-0.9	5.5	0.3	C12 H19 N4 O
	235.1545	1.2	5.1	0.5	1.0	C11 H23 O5

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

398 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass)

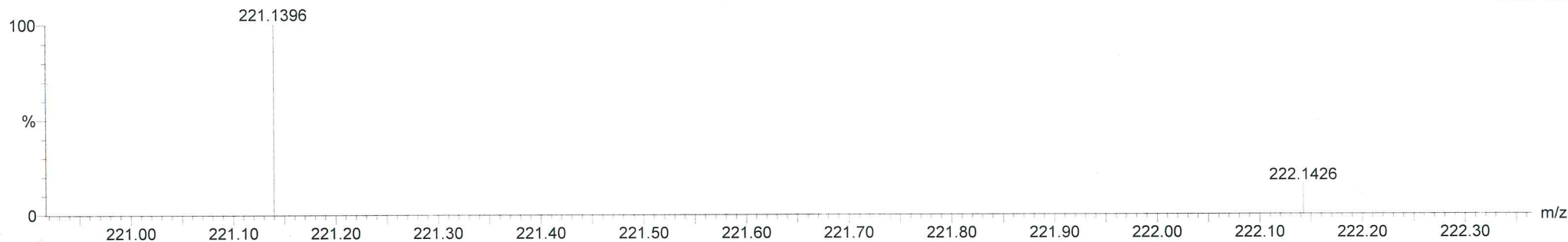
Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3291

ASIMJ-3 7 (0.163)

1: TOF MS ES+
4.26e+002



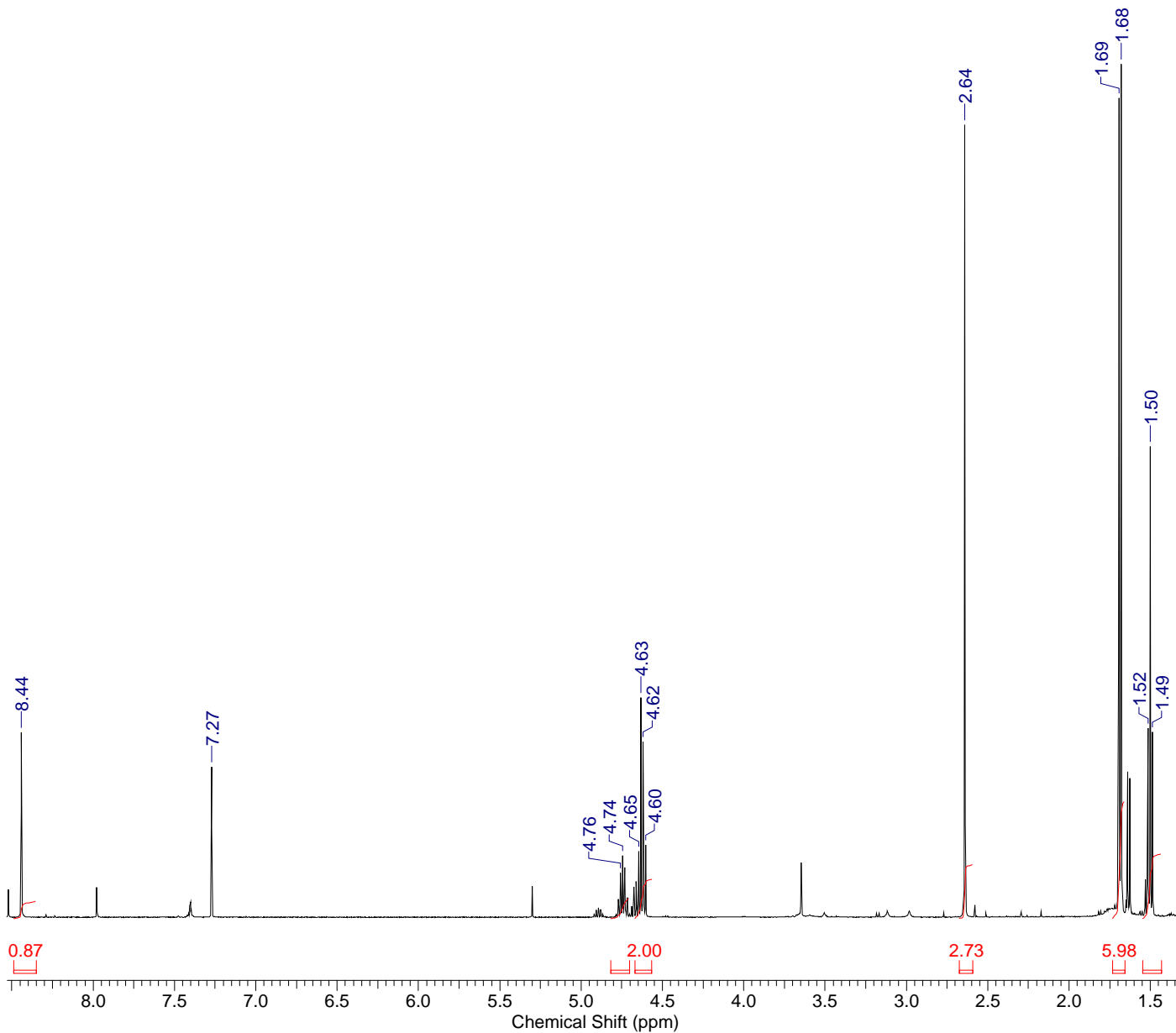
Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
221.1396	221.1402	-0.6	-2.7	5.5	n/a	C11 H17 N4 O
	221.1389	0.7	3.2	0.5	n/a	C10 H21 O5

5b. - 6-Ethoxy-9-isopropyl-8-methyl-9H-purine (H-NMR)

11 Jul 2012

Acquisition Time (sec)	2.0447	Date	Jun 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-11090_ASIMJ-3NP\PROTON_01				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	8
Original Points Count	16384	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82		
Temperature (degree C)	25.000				



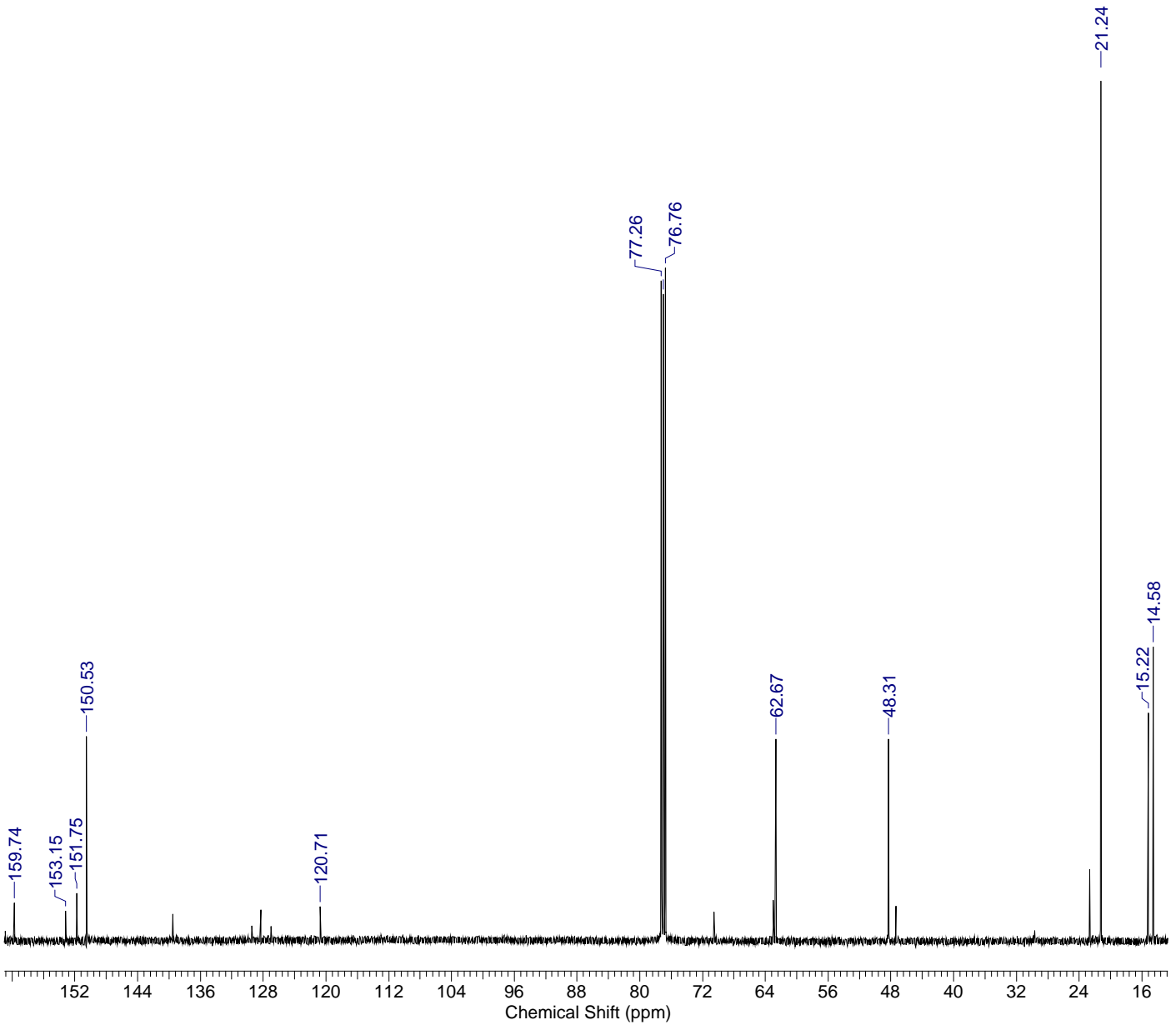
No.	(ppm)	(Hz)	Height
1	1.49	742.7	0.2185
2	1.50	750.1	0.5522
3	1.52	757.4	0.2229
4	1.68	839.6	1.0000
5	1.69	846.4	0.9601
6	2.64	1320.8	0.9286
7	4.60	2301.0	0.0863
8	4.62	2308.3	0.2071
9	4.63	2315.2	0.2585
10	4.65	2322.5	0.0785
11	4.74	2370.9	0.0736
12	4.76	2378.3	0.0532
13	7.27	3634.2	0.1774
14	8.44	4218.7	0.2174

No.	(ppm)	Value	Absolute Value
1	[1.43 .. 1.55]	3.299	1.98237e+8
2	[1.66 .. 1.73]	5.976	3.59083e+8
3	[2.59 .. 2.68]	2.732	1.64127e+8
4	[4.57 .. 4.67]	2.000	1.20171e+8
5	[4.70 .. 4.82]	1.034	6.21041e+7
6	[8.35 .. 8.49]	0.871	5.23202e+7

5b. - 6-Ethoxy-9-isopropyl-8-methyl-9H-purine (C-NMR)

11 Jul 2012

Acquisition Time (sec)	1.0486	Date	Jun 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-11090_ASIMJ-3NP\CARBON_01				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	9600
Original Points Count	32768	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00		
Temperature (degree C)	25.000				

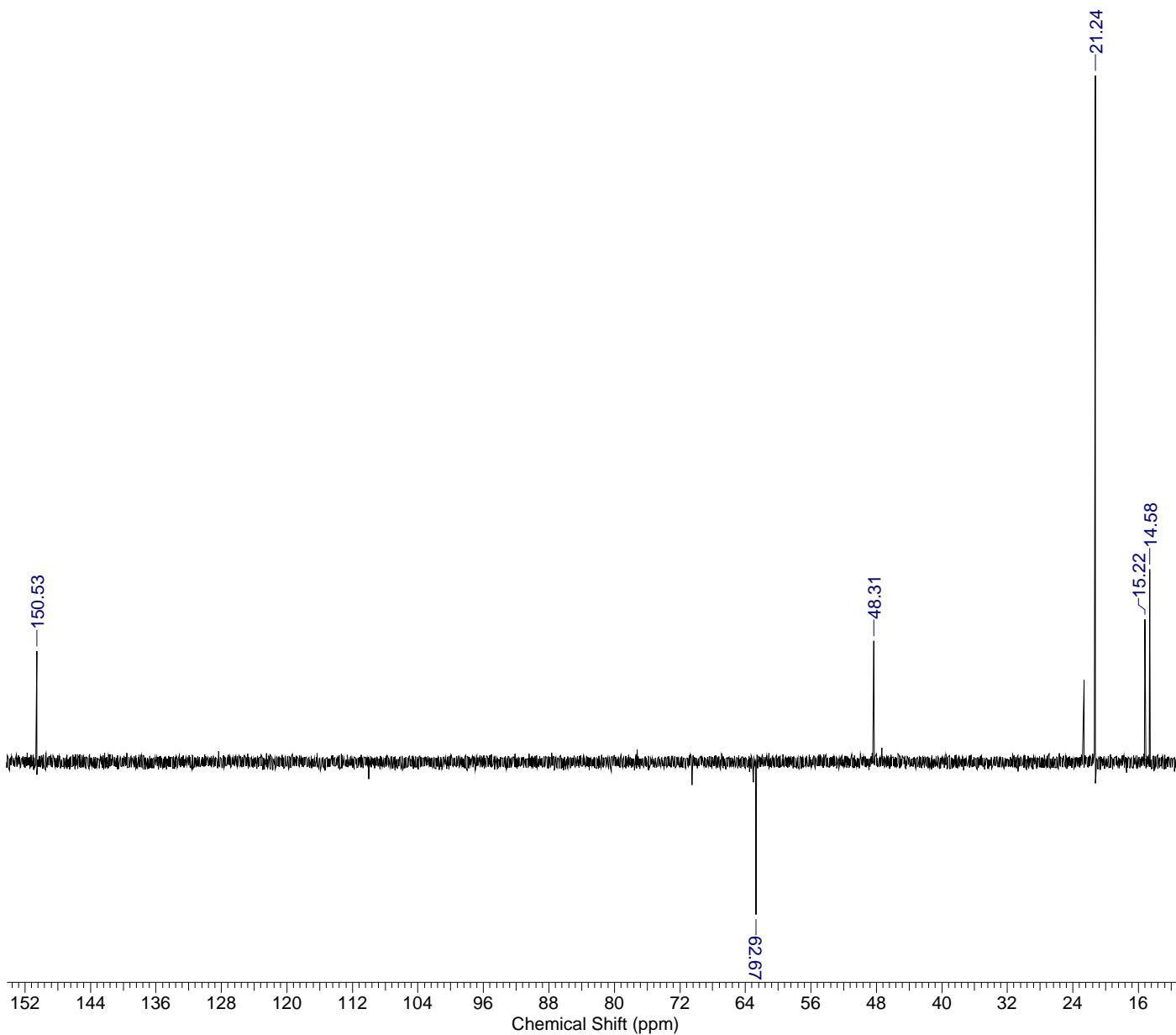


No.	(ppm)	(Hz)	Height
1	14.58	1832.4	0.3162
2	15.22	1912.5	0.2453
3	21.24	2669.7	1.0000
4	48.31	6071.6	0.2170
5	62.67	7877.0	0.2167
6	76.76	9647.0	0.7249
7	77.01	9678.5	0.6964
8	77.26	9710.9	0.7109
9	120.71	15171.8	0.0363
10	150.53	18918.9	0.2196
11	151.75	19072.5	0.0509
12	153.15	19248.9	0.0315
13	159.74	20076.7	0.0403

5b. - 6-Ethoxy-9-isopropyl-8-methyl-9H-purine (DEPT)

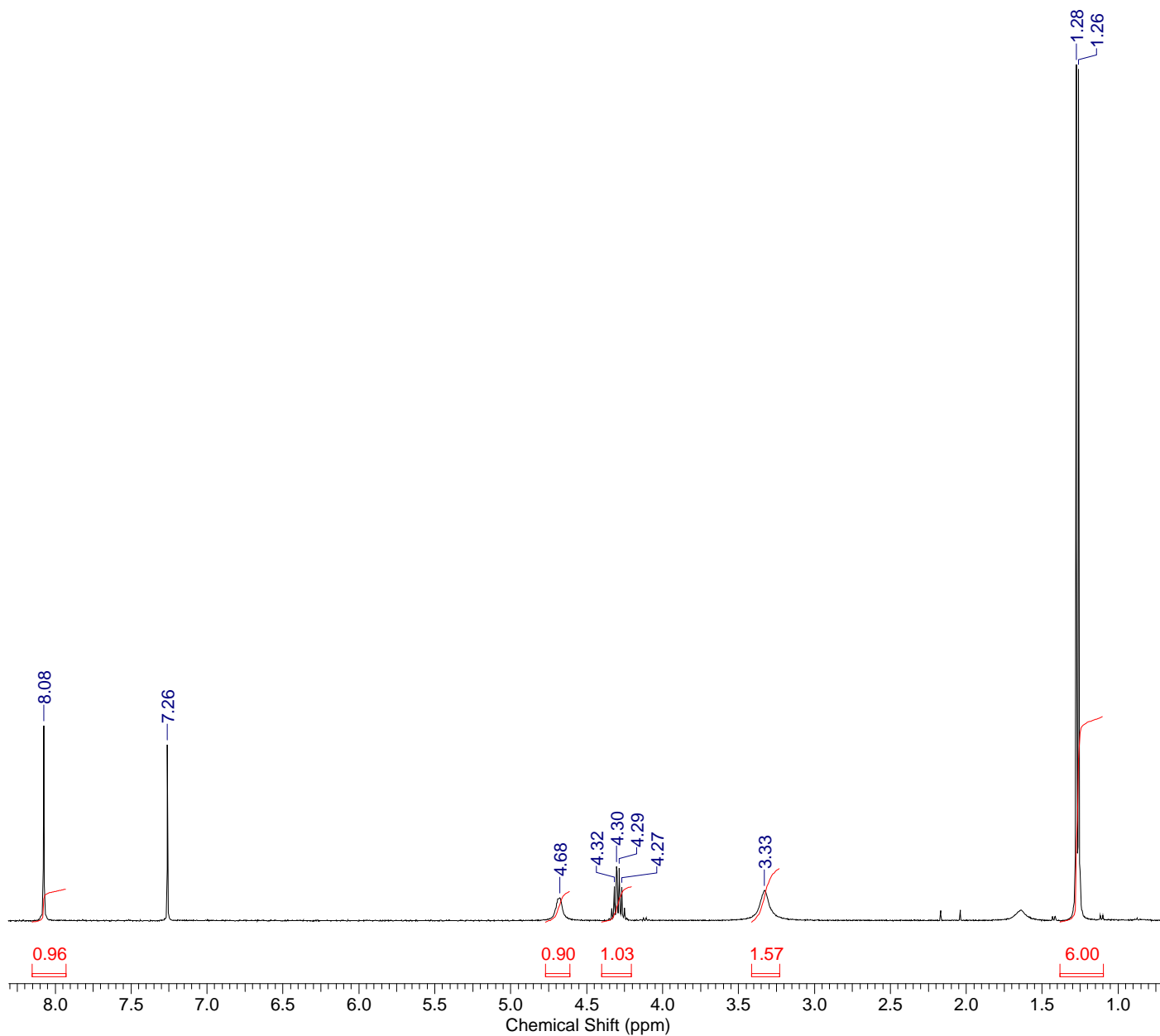
11 Jul 2012

Acquisition Time (sec)	1.0486	Date	Jun 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-11090_ASIMJ-3NP\DEPT_01				
Frequency (MHz)	125.68	Nucleus	¹³ C	Number of Transients	4800
Original Points Count	32768	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.58	1832.4	0.2804
2	15.22	1913.4	0.2078
3	21.24	2669.7	1.0000
4	48.31	6071.6	0.1761
5	62.67	7877.0	-0.2224
6	150.53	18918.9	0.1615

Acquisition Time (sec)	2.5559	Date	Jan 31 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\PRE-AM1	Frequency (MHz)	400.58
Nucleus	1H	Number of Transients	8
Points Count	16384	Pulse Sequence	s2pul
Sweep Width (Hz)	6410.26	Temperature (degree C)	25.000
		Original Points Count	16384
		Solvent	CHLOROFORM-D



No.	(ppm)	(Hz)	Height
1	1.26	504.8	0.9945
2	1.28	511.1	1.0000
3	3.33	1333.5	0.0371
4	4.27	1710.0	0.0404
5	4.29	1716.6	0.0631
6	4.30	1723.3	0.0649
7	4.32	1729.9	0.0412
8	4.68	1873.9	0.0284
9	7.26	2908.4	0.2072
10	8.08	3235.1	0.2294

No.	(ppm)	Value	Absolute Value
1	[1.10 .. 1.38]	6.000	2.66850e+7
2	[3.23 .. 3.41]	1.565	6.96065e+6
3	[4.21 .. 4.40]	1.026	4.56130e+6
4	[4.61 .. 4.77]	0.895	3.98062e+6
5	[7.93 .. 8.15]	0.964	4.28633e+6

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

960 formula(e) evaluated with 3 results within limits (up to 50 closest results for each mass)

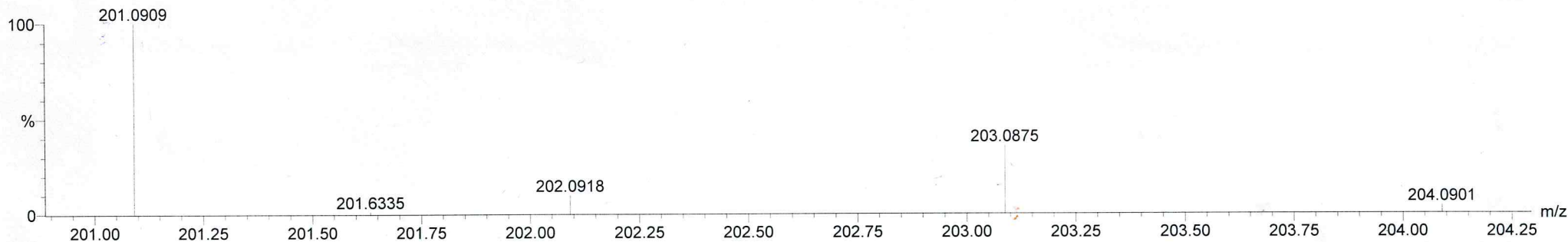
Elements Used:

C: 0-17 H: 0-1000 N: 0-10 O: 0-10 Na: 0-1 S: 0-1 Cl: 0-1

PRE-TB-F dilu 9 (0.217)

1: TOF MS ES+

4.10e+002



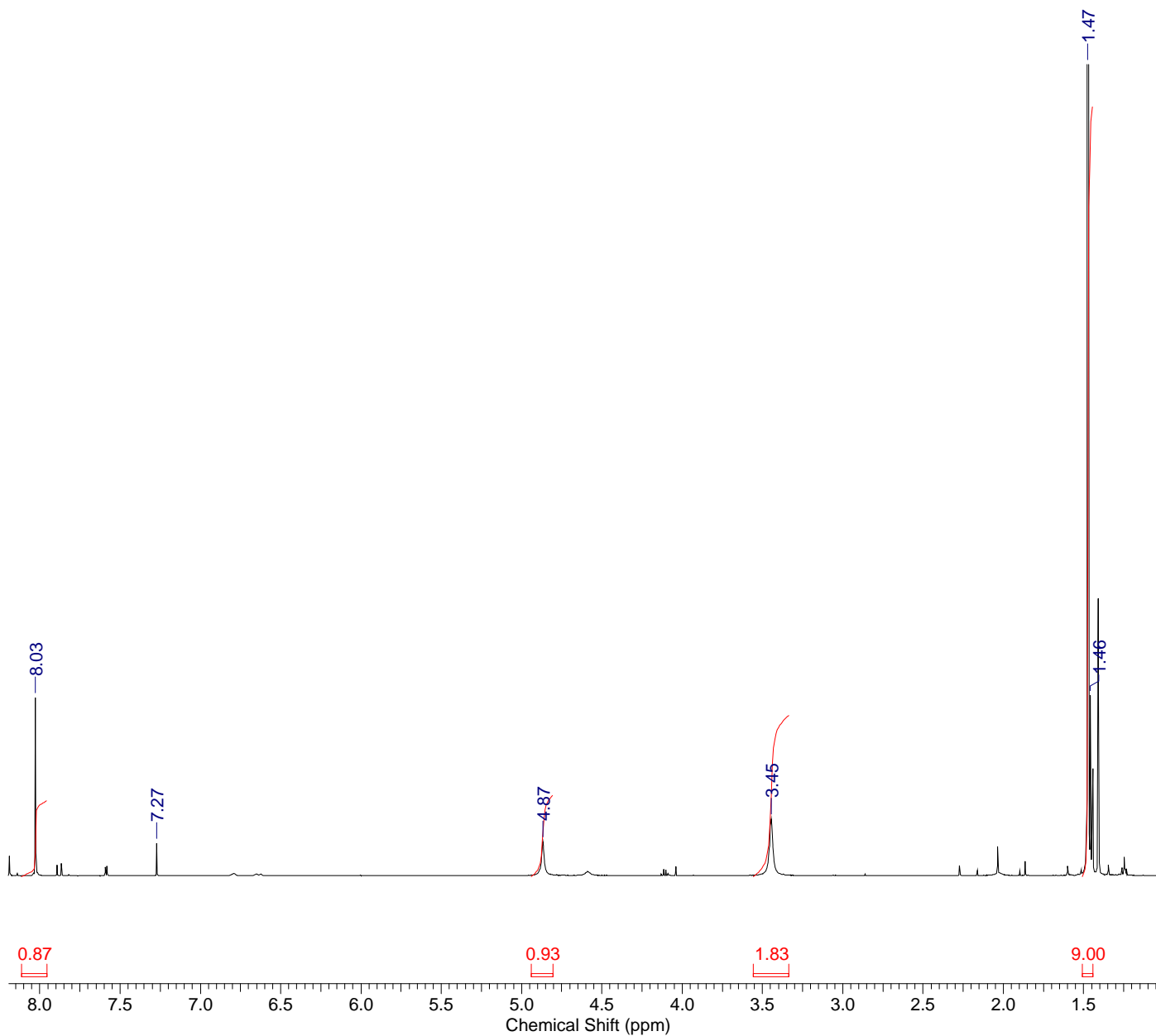
Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
201.0909	201.0907	0.2	1.0	3.5	0.6	C8 H14 N4 Cl
	201.0909	0.0	0.0	-1.5	52.4	C5 H17 N2 O4 S
	201.0916	-0.7	-3.5	7.5	72.7	C13 H13 O2

4b 5-Amino-4-tert-butylamino-6-chloropyrimidine (H-NMR)

11 Mar 2013

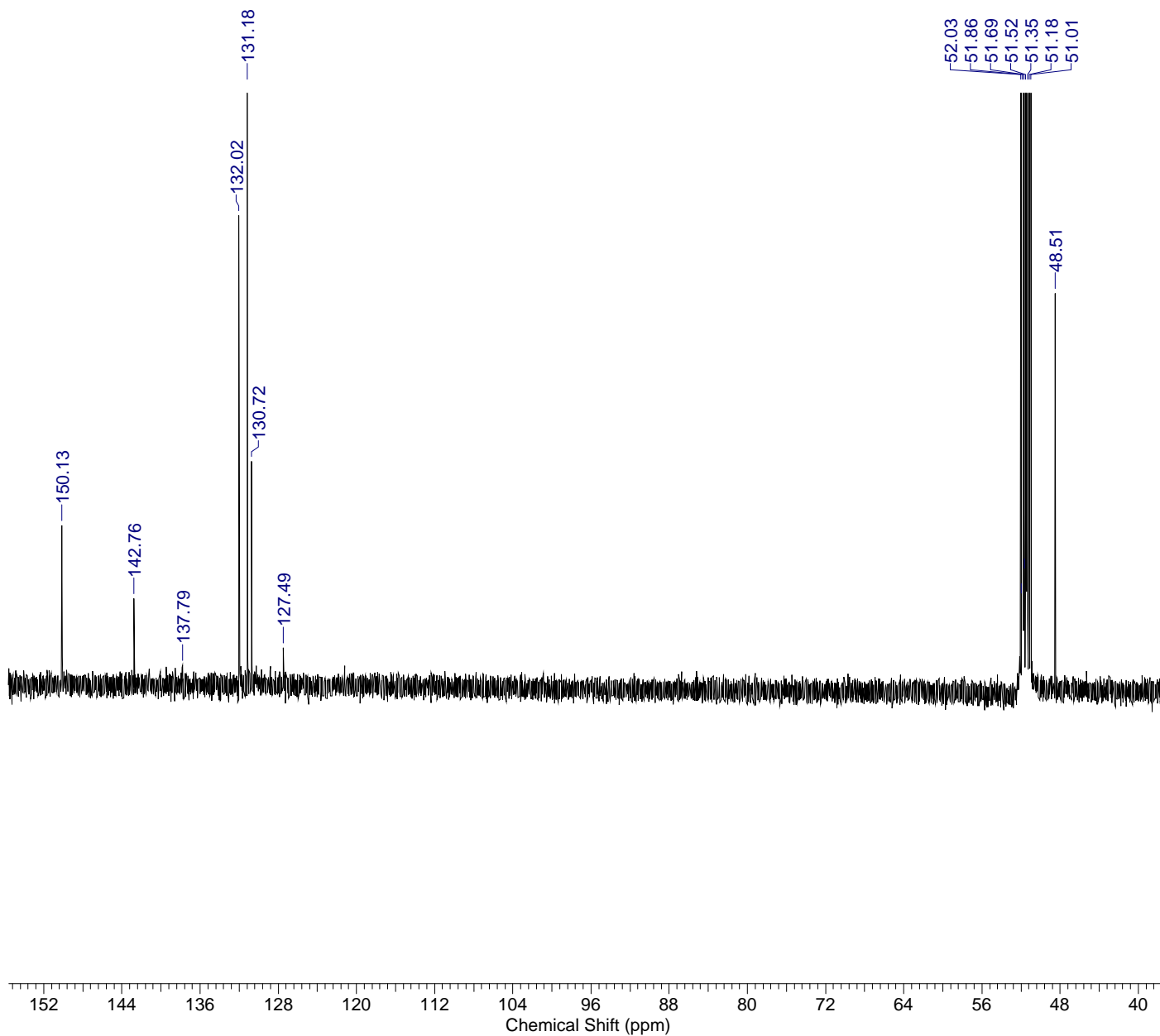
Acquisition Time (sec)	2.0447	Date	Jun 19 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\Pre-TB-1	Frequency (MHz)	499.79
Nucleus	1H	Number of Transients	1
Points Count	16384	Pulse Sequence	s2pul
Sweep Width (Hz)	8012.82	Temperature (degree C)	25.000
		Original Points Count	16384
		Solvent	CHLOROFORM-D



No.	(ppm)	(Hz)	Height
1	1.46	728.2	0.0677
2	1.47	736.5	1.0000
3	3.45	1722.5	0.0217
4	4.87	2433.1	0.0131
5	7.27	3635.3	0.0125
6	8.03	4011.9	0.0669

No.	(ppm)	Value	Absolute Value
1	[1.44 .. 1.51]	9.000	1.64609e+8
2	[3.34 .. 3.56]	1.831	3.34978e+7
3	[4.80 .. 4.94]	0.930	1.70182e+7
4	[7.95 .. 8.11]	0.867	1.58596e+7

Acquisition Time (sec)	1.0486	Date	Mar 6 2012	
File Name	C:\Users\usuario\Documents\Espectros Asier\12-511_Pre-2\carbono			
Frequency (MHz)	125.68	Nucleus	13C	Original Points Count 32768
Points Count	32768	Pulse Sequence	s2pul	Solvent CHLOROFORM-D
Sweep Width (Hz)	31250.00	Temperature (degree C)	25.000	

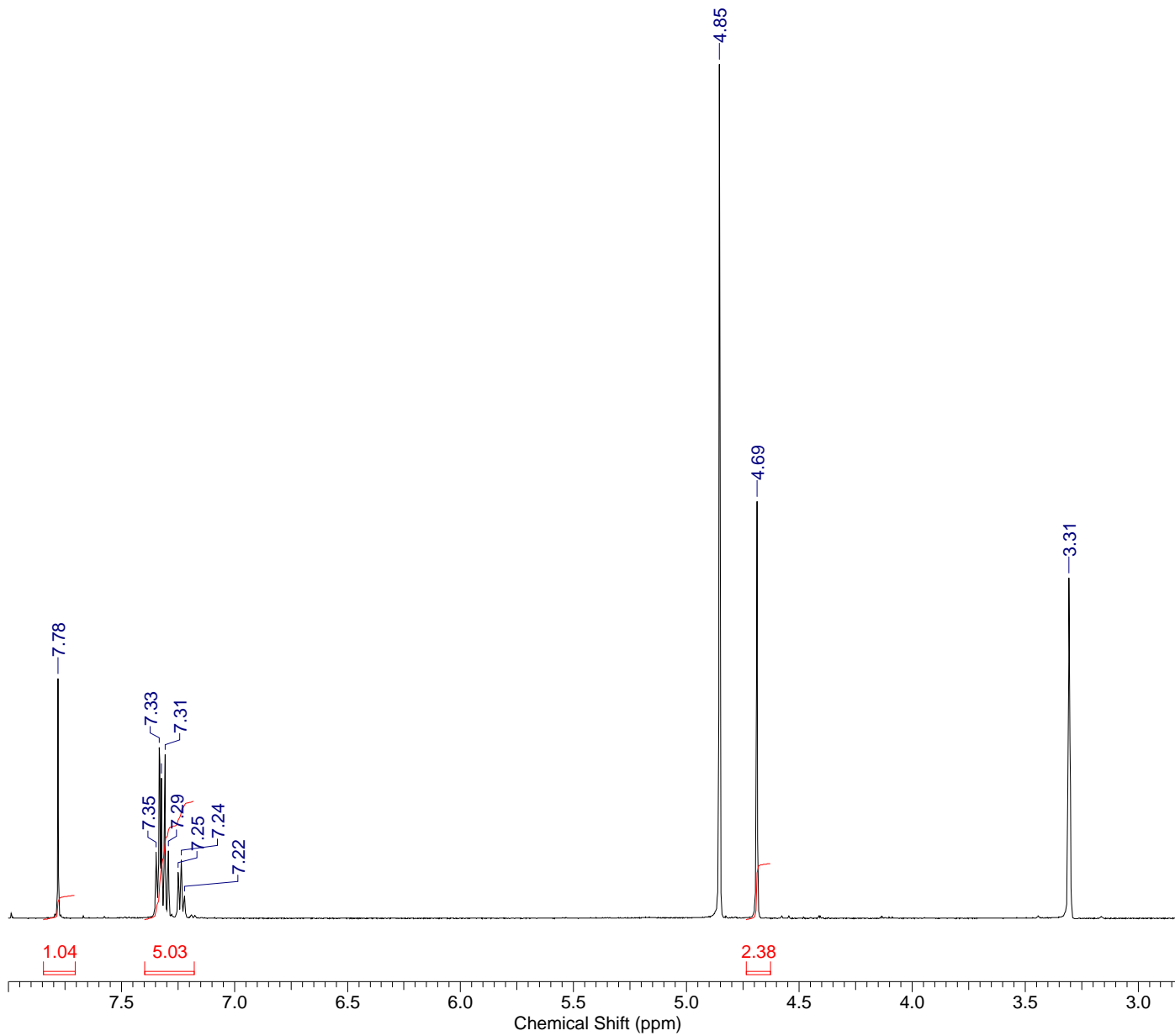


No.	(ppm)	(Hz)	Height
1	48.51	6096.4	0.0362
2	51.01	6411.1	0.1618
3	51.18	6432.1	0.3818
4	51.35	6454.0	0.8678
5	51.52	6475.0	1.0000
6	51.63	6489.3	0.0104
7	51.69	6496.9	0.7416
8	51.81	6511.3	0.0145
9	51.86	6517.9	0.4658
10	51.97	6532.2	0.0080
11	52.03	6539.9	0.1005
12	127.49	16023.5	0.0035
13	130.72	16429.8	0.0207
14	131.18	16487.0	0.0684
15	132.02	16592.8	0.0434
16	137.79	17318.6	0.0019
17	142.76	17943.3	0.0080
18	150.13	18869.3	0.0148

4c 5-amino-4-benzilamino-6-chloropyrimidine (H-NMR)

16 Jul 2012

Acquisition Time (sec)	1.7432	Date	Mar 6 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-511_Pre-2\proton				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	80
Original Points Count	13048	Points Count	16384	Pulse Sequence	s2pul
Solvent	METHANOL-D4		Sweep Width (Hz)	7485.03	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	3.31	1652.0	0.3992
2	4.69	2342.8	0.4889
3	4.85	2425.5	1.0000
4	7.22	3609.3	0.0275
5	7.24	3616.6	0.0695
6	7.25	3623.4	0.0555
7	7.29	3644.9	0.0804
8	7.31	3652.7	0.1928
9	7.32	3660.0	0.1651
10	7.33	3665.0	0.2014
11	7.35	3671.9	0.0790
12	7.78	3889.3	0.2820

No.	(ppm)	Value	Absolute Value
1	[4.63 .. 4.74]	2.382	5.73421e+7
2	[7.18 .. 7.40]	5.029	1.21055e+8
3	[7.71 .. 7.85]	1.037	2.49540e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 mDa / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

383 formula(e) evaluated with 7 results within limits (up to 50 best isotopic matches for each mass)

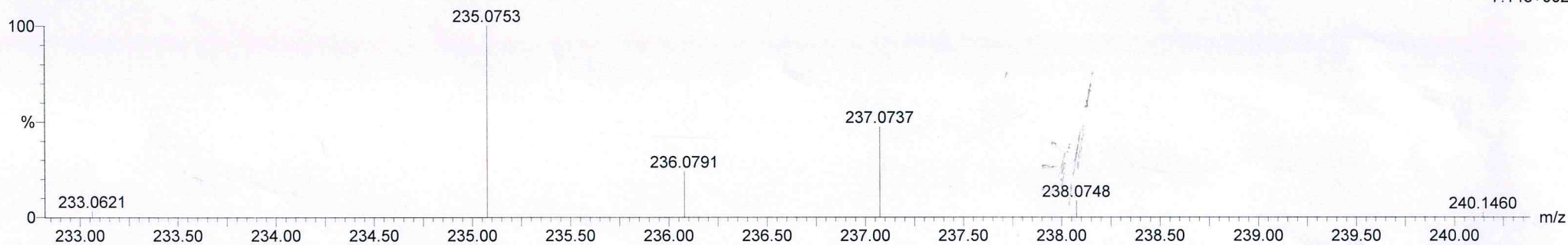
Elements Used:

C: 0-11 H: 0-1000 N: 0-9 O: 0-20 Cl: 0-1

MJ-2 89 (1.975)

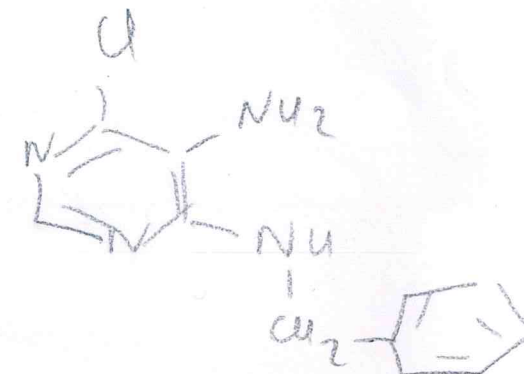
1: TOF MS ES+

7.14e+002



Minimum: -1.5
Maximum: 5.0 10.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
235.0753	235.0750	0.3	1.3	7.5	24.3	C11 H12 N4 Cl
	235.0737	1.6	6.8	2.5	31.4	C10 H16 O4 Cl
	235.0710	4.3	18.3	3.5	43.6	C6 H12 N6 O2 Cl
	235.0719	3.4	14.5	7.5	173.8	C11 H11 N2 O4
	235.0791	-3.8	-16.2	3.5	198.1	C5 H11 N6 O5
	235.0778	-2.5	-10.6	-1.5	205.2	C4 H15 N2 O9
	235.0751	0.2	0.9	-0.5	222.4	H11 N8 O7



Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

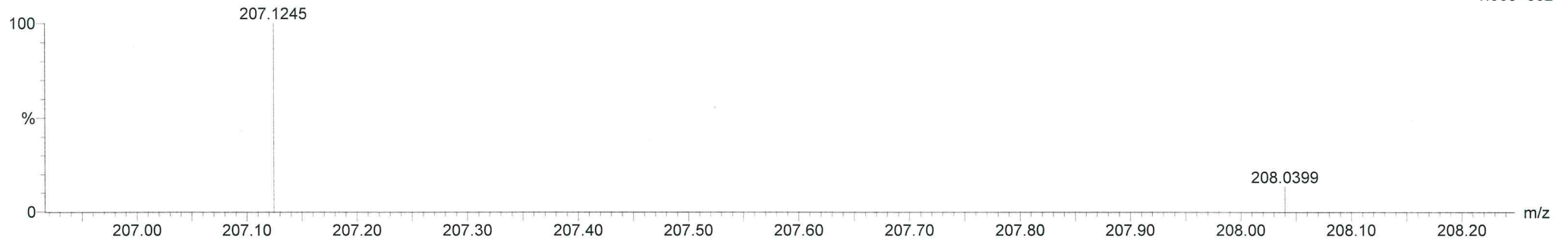
369 formula(e) evaluated with 1 results within limits (up to 50 best isotopic matches for each mass)

Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3289

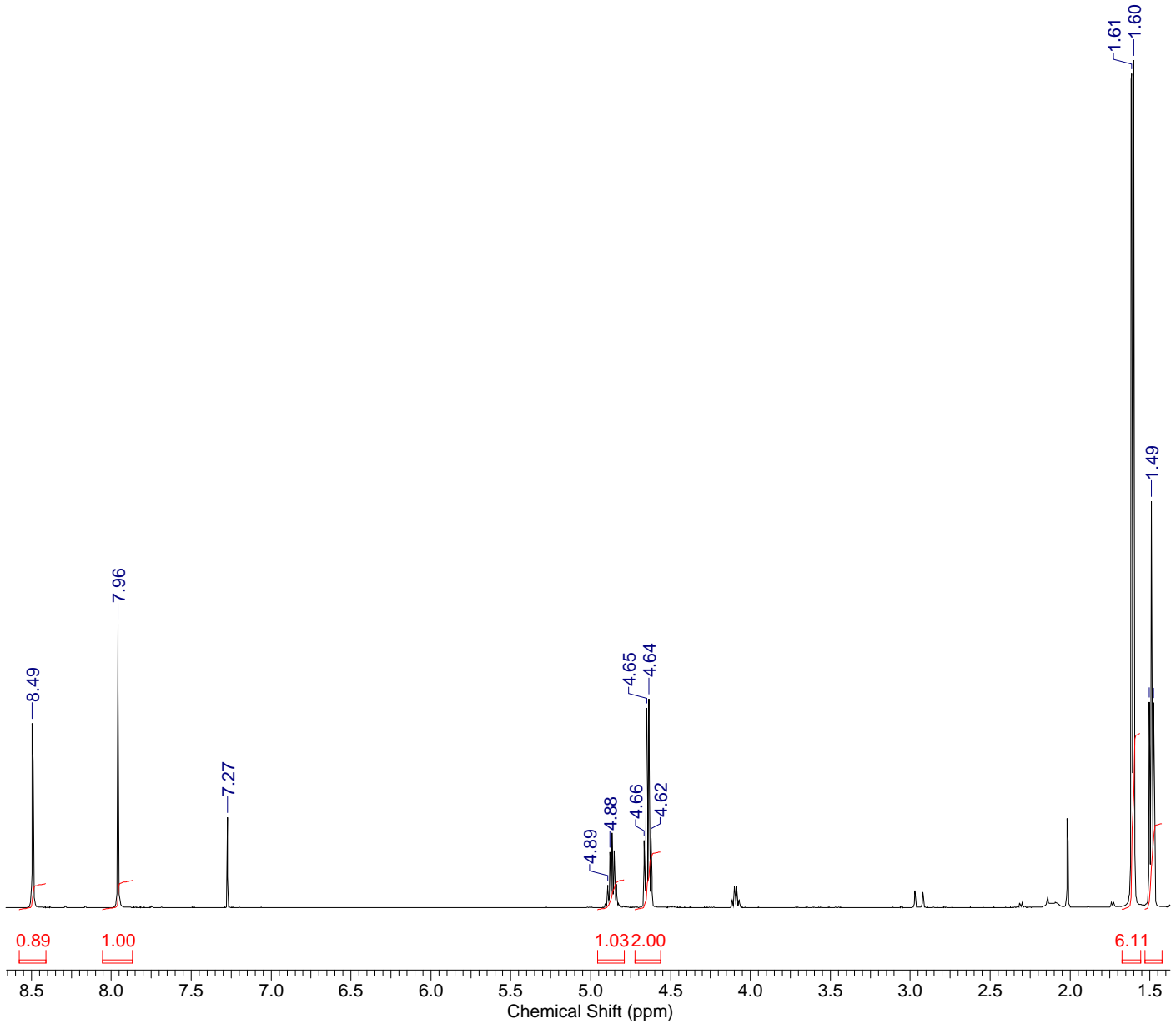
ASIMJ-1 40 (0.885)

1: TOF MS ES+
1.90e+002

Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
207.1245	207.1246	-0.1	-0.5	5.5	n/a	C10 H15 N4 O

Acquisition Time (sec)	2.0447	Date	Feb 4 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-99-12_ASIMJ-1\PROTON_01				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	8
Original Points Count	16384	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82		
Temperature (degree C)	25.000				



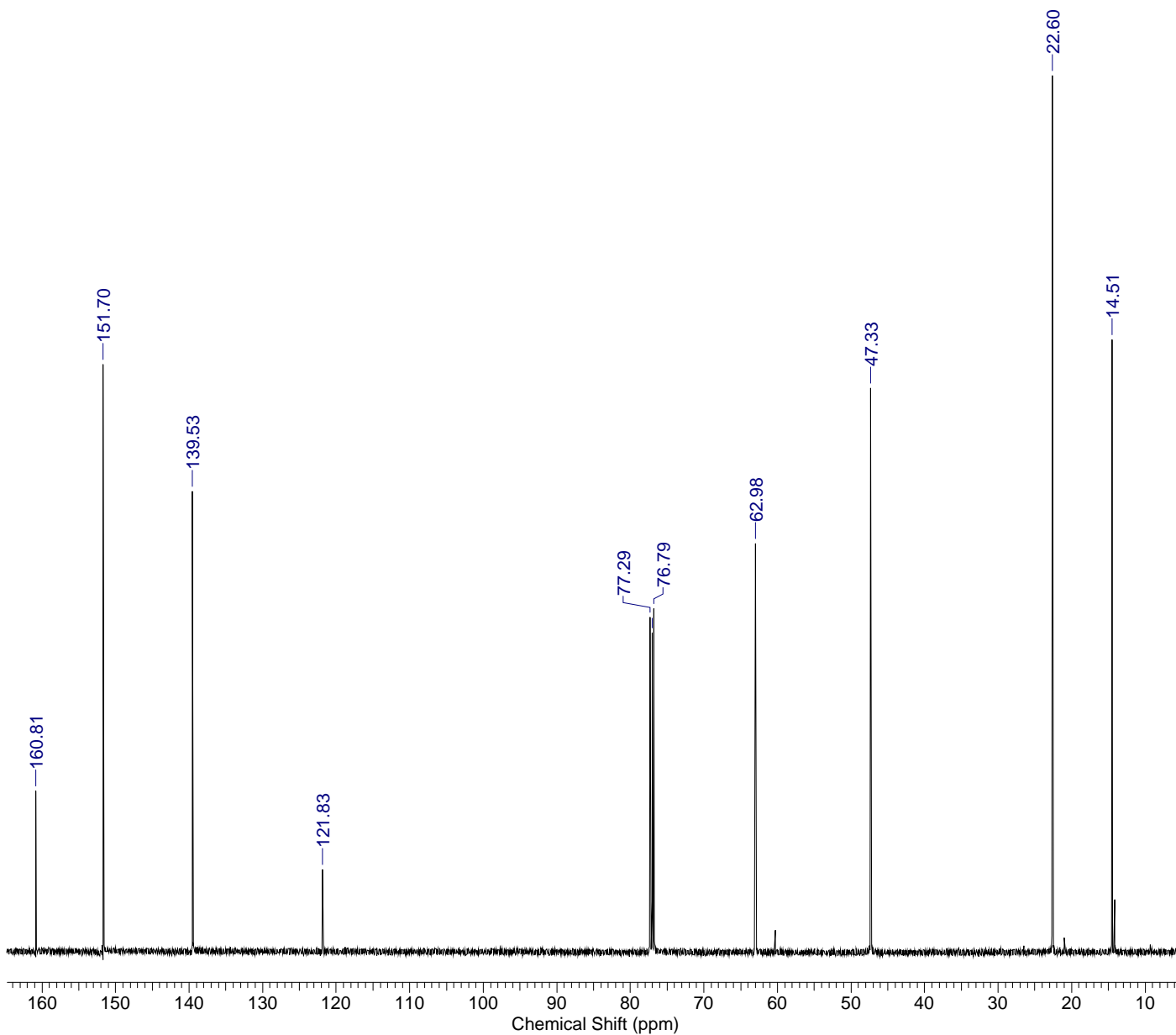
No.	(ppm)	(Hz)	Height
1	1.48	738.3	0.2434
2	1.49	745.2	0.4809
3	1.51	752.5	0.2440
4	1.60	800.9	1.0000
5	1.61	806.8	0.9840
6	4.62	2309.8	0.0837
7	4.64	2317.1	0.2483
8	4.65	2323.5	0.2373
9	4.66	2331.3	0.0814
10	4.88	2439.4	0.0676
11	4.89	2446.2	0.0283
12	7.27	3635.2	0.1085
13	7.96	3977.6	0.3363
14	8.49	4245.6	0.2190

No.	(ppm)	Value	Absolute Value
1	[1.42 .. 1.53]	2.979	1.74678e+8
2	[1.56 .. 1.67]	6.113	3.58379e+8
3	[4.56 .. 4.72]	2.000	1.17260e+8
4	[4.79 .. 4.96]	1.030	6.03864e+7
5	[7.87 .. 8.06]	1.002	5.87716e+7
6	[8.41 .. 8.58]	0.894	5.24249e+7

5a. - 6-Ethoxy-9-isopropyl-9H-purine (C-NMR)

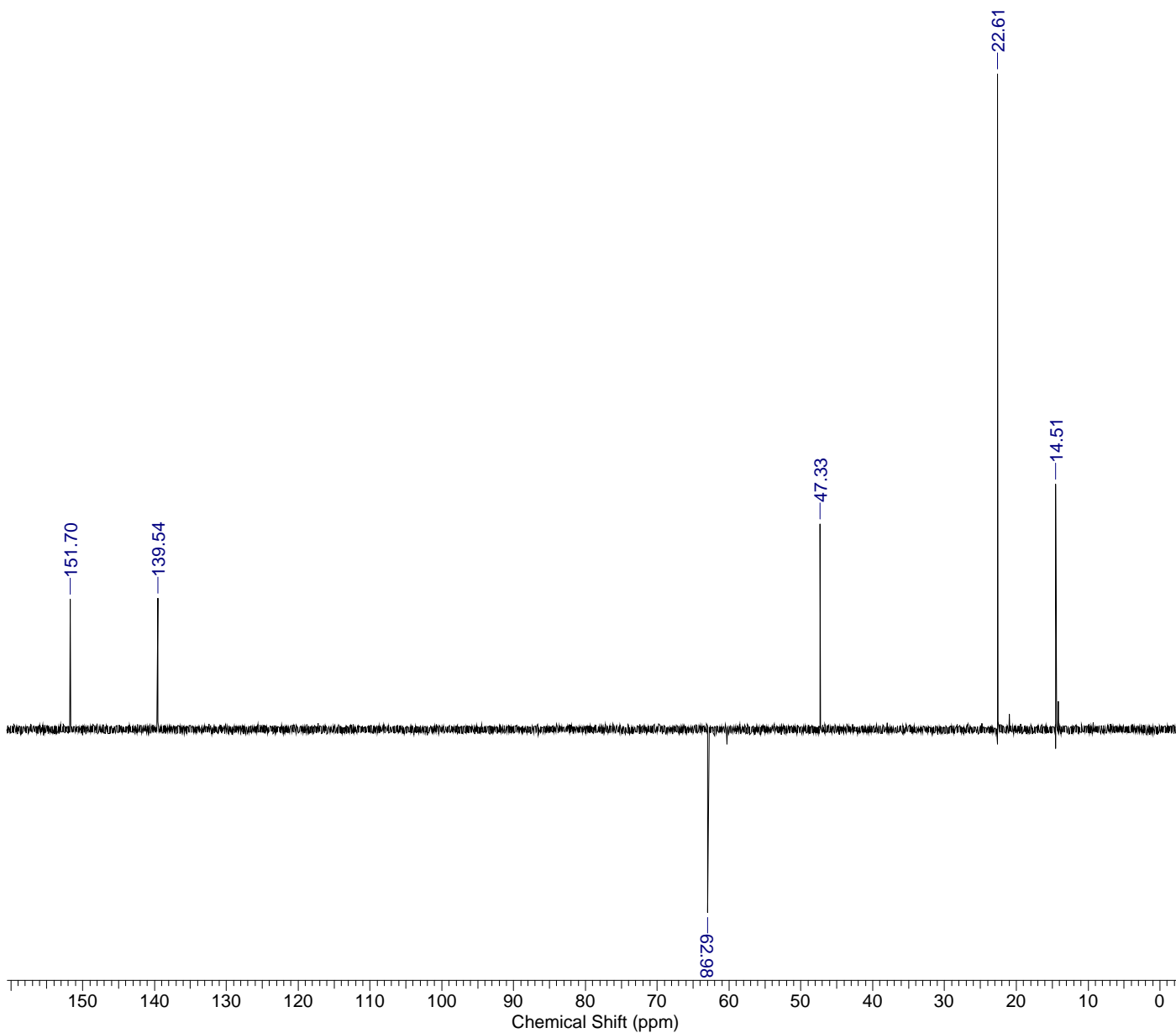
11 Jul 2012

Acquisition Time (sec)	1.0486	Date	Feb 4 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-99-12_ASIMJ-1\CARBON_01				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	3200
Original Points Count	32768	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D		Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.51	1823.8	0.6984
2	22.60	2840.4	1.0000
3	47.33	5948.6	0.6432
4	62.98	7915.1	0.4655
5	76.79	9650.8	0.3913
6	77.04	9683.3	0.3638
7	77.29	9714.7	0.3814
8	121.83	15312.0	0.0933
9	139.53	17537.0	0.5250
10	151.70	19066.8	0.6704
11	160.81	20211.2	0.1830

Acquisition Time (sec)	1.0486	Date	Feb 4 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-99-12_ASIMJ-1\DEPT_01				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	1200
Original Points Count	32768	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D		Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.51	1823.8	0.3743
2	22.61	2841.4	1.0000
3	47.33	5948.6	0.3133
4	62.98	7915.1	-0.2795
5	139.54	17538.0	0.2003
6	151.70	19066.8	0.1987

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

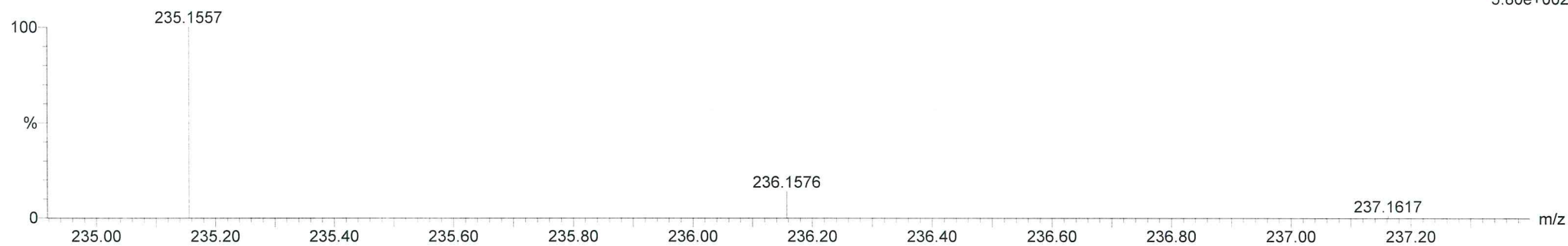
427 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass)

Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3290

ASIMJ-2 9 (0.217)

1: TOF MS ES+
5.80e+02

Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
235.1557	235.1559	-0.2	-0.9	5.5	0.3	C12 H19 N4 O
	235.1545	1.2	5.1	0.5	1.0	C11 H23 O5

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

398 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass)

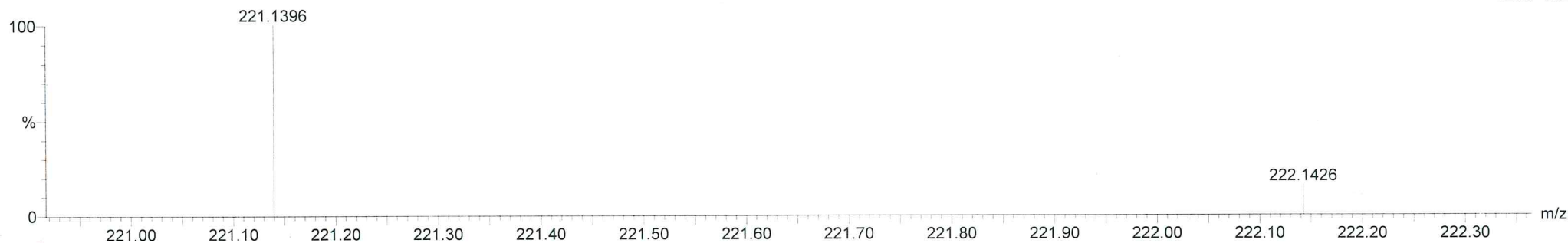
Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3291

ASIMJ-3 7 (0.163)

1: TOF MS ES+
4.26e+002



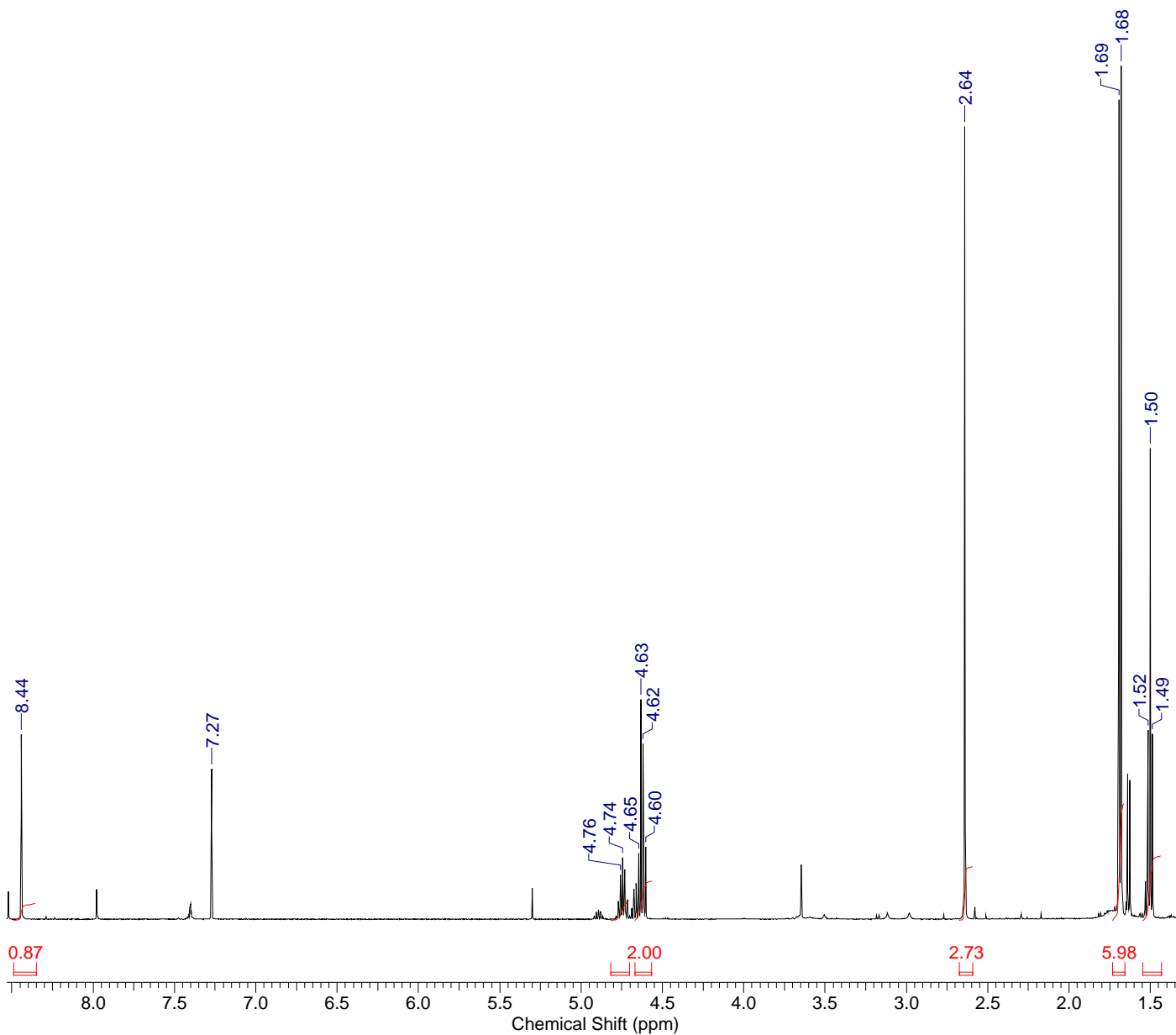
Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
221.1396	221.1402	-0.6	-2.7	5.5	n/a	C11 H17 N4 O
	221.1389	0.7	3.2	0.5	n/a	C10 H21 O5

5b. - 6-Ethoxy-9-isopropyl-8-methyl-9H-purine (H-NMR)

11 Jul 2012

Acquisition Time (sec)	2.0447	Date	Jun 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-11090_ASIMJ-3NP\PROTON_01				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	8
Original Points Count	16384	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82		
Temperature (degree C)	25.000				



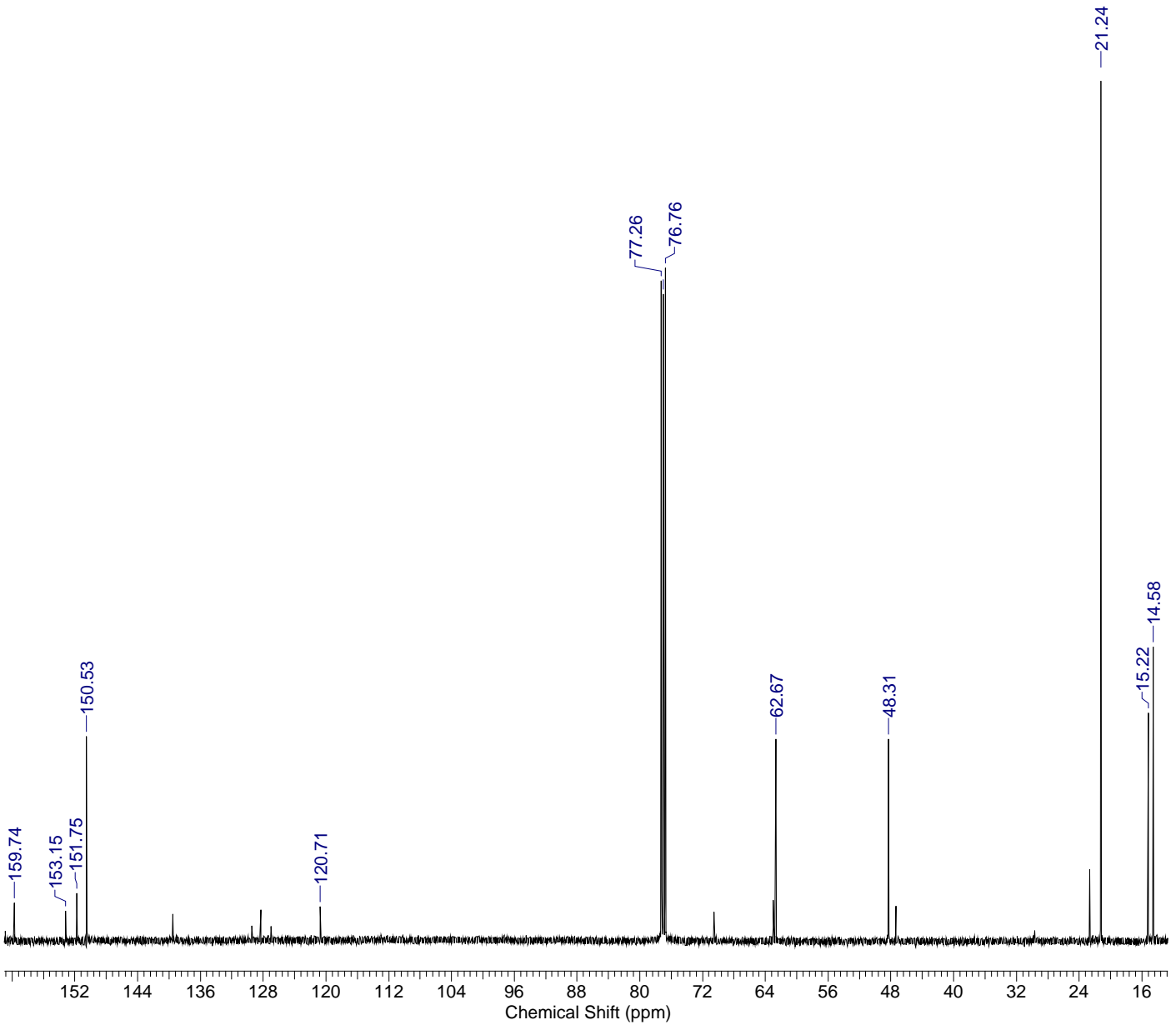
No.	(ppm)	(Hz)	Height
1	1.49	742.7	0.2185
2	1.50	750.1	0.5522
3	1.52	757.4	0.2229
4	1.68	839.6	1.0000
5	1.69	846.4	0.9601
6	2.64	1320.8	0.9286
7	4.60	2301.0	0.0863
8	4.62	2308.3	0.2071
9	4.63	2315.2	0.2585
10	4.65	2322.5	0.0785
11	4.74	2370.9	0.0736
12	4.76	2378.3	0.0532
13	7.27	3634.2	0.1774
14	8.44	4218.7	0.2174

No.	(ppm)	Value	Absolute Value
1	[1.43 .. 1.55]	3.299	1.98237e+8
2	[1.66 .. 1.73]	5.976	3.59083e+8
3	[2.59 .. 2.68]	2.732	1.64127e+8
4	[4.57 .. 4.67]	2.000	1.20171e+8
5	[4.70 .. 4.82]	1.034	6.21041e+7
6	[8.35 .. 8.49]	0.871	5.23202e+7

5b. - 6-Ethoxy-9-isopropyl-8-methyl-9H-purine (C-NMR)

11 Jul 2012

Acquisition Time (sec)	1.0486	Date	Jun 8 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-11090_ASIMJ-3NP\CARBON_01		
Frequency (MHz)	125.68	Nucleus	¹³ C
Original Points Count	32768	Points Count	32768
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00
Temperature (degree C)	25.000		

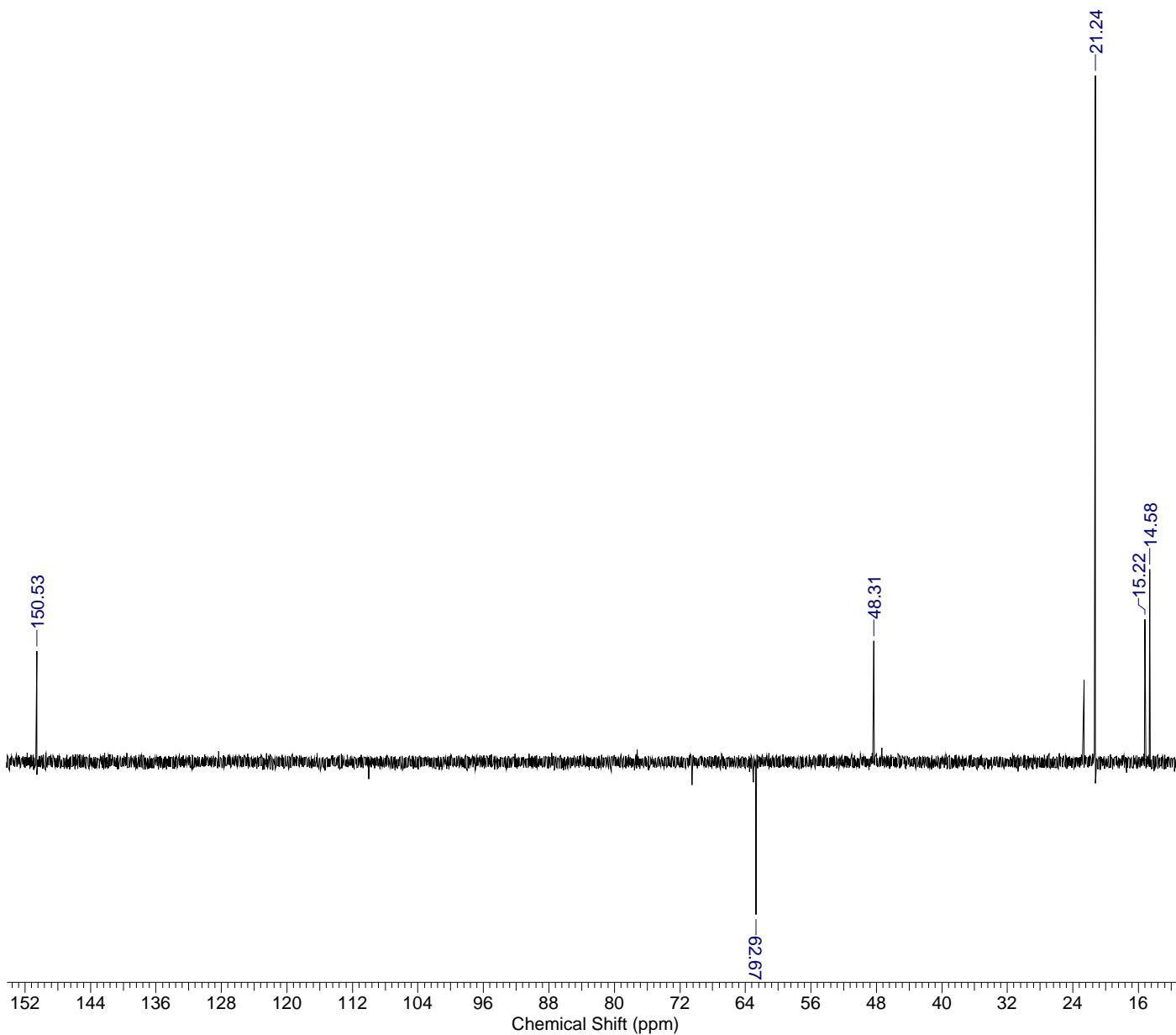


No.	(ppm)	(Hz)	Height
1	14.58	1832.4	0.3162
2	15.22	1912.5	0.2453
3	21.24	2669.7	1.0000
4	48.31	6071.6	0.2170
5	62.67	7877.0	0.2167
6	76.76	9647.0	0.7249
7	77.01	9678.5	0.6964
8	77.26	9710.9	0.7109
9	120.71	15171.8	0.0363
10	150.53	18918.9	0.2196
11	151.75	19072.5	0.0509
12	153.15	19248.9	0.0315
13	159.74	20076.7	0.0403

5b. - 6-Ethoxy-9-isopropyl-8-methyl-9H-purine (DEPT)

11 Jul 2012

Acquisition Time (sec)	1.0486	Date	Jun 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-11090_ASIMJ-3NP\DEPT_01				
Frequency (MHz)	125.68	Nucleus	¹³ C	Number of Transients	4800
Original Points Count	32768	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.58	1832.4	0.2804
2	15.22	1913.4	0.2078
3	21.24	2669.7	1.0000
4	48.31	6071.6	0.1761
5	62.67	7877.0	-0.2224
6	150.53	18918.9	0.1615

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

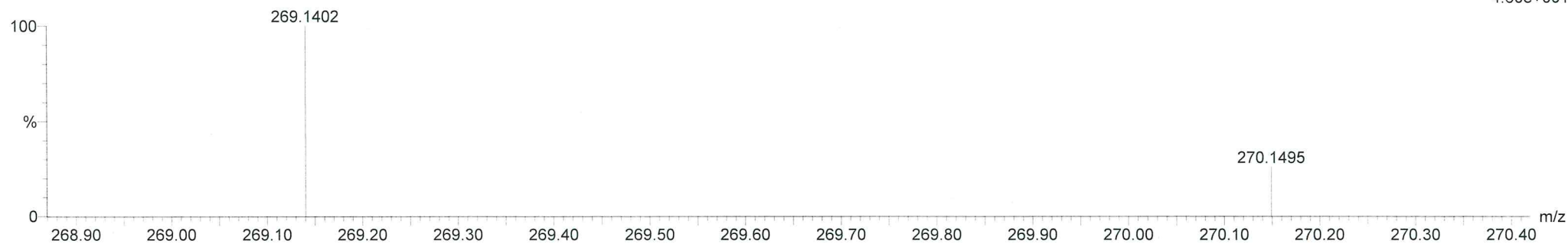
498 formula(e) evaluated with 4 results within limits (up to 50 best isotopic matches for each mass)

Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3292

ASIMJ-4 9 (0.217)

1: TOF MS ES+
4.60e+001

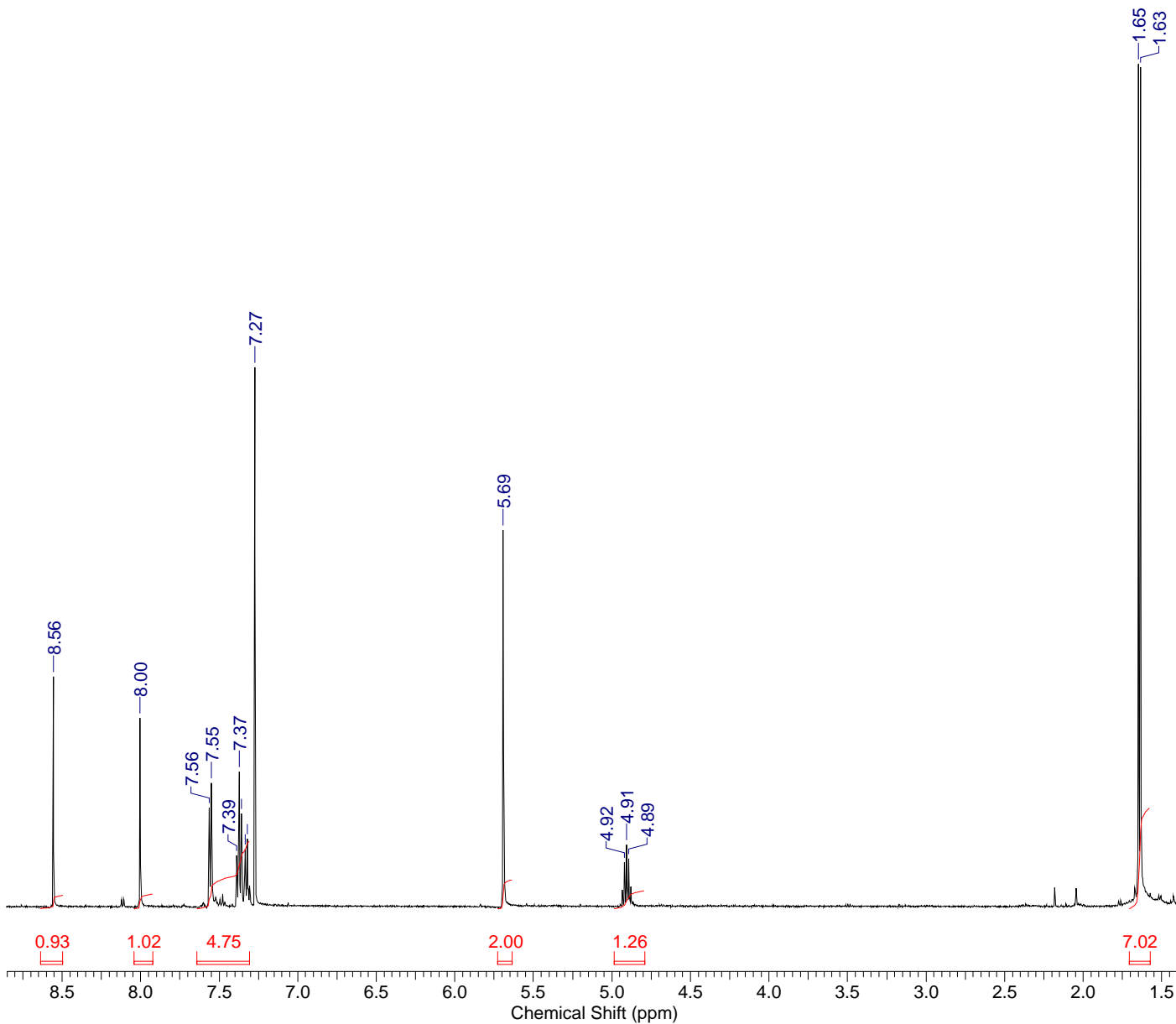
Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
269.1402	269.1402	0.0	0.0	9.5	n/a	C15 H17 N4 O
	269.1414	-1.2	-4.5	5.5	n/a	C12 H18 N4 O2 F
	269.1389	1.3	4.8	4.5	n/a	C14 H21 O5
	269.1400	0.2	0.7	0.5	n/a	C11 H22 O6 F

5d. - 6-(Benzyloxy)-9-isopropyl-9H-purine (H-NMR)

12 Jul 2012

Acquisition Time (sec)	1.9923	Date	Feb 20 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-145-12_ASIMJ-4\proton				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	8
Original Points Count	15964	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82		
Temperature (degree C)	25.000				



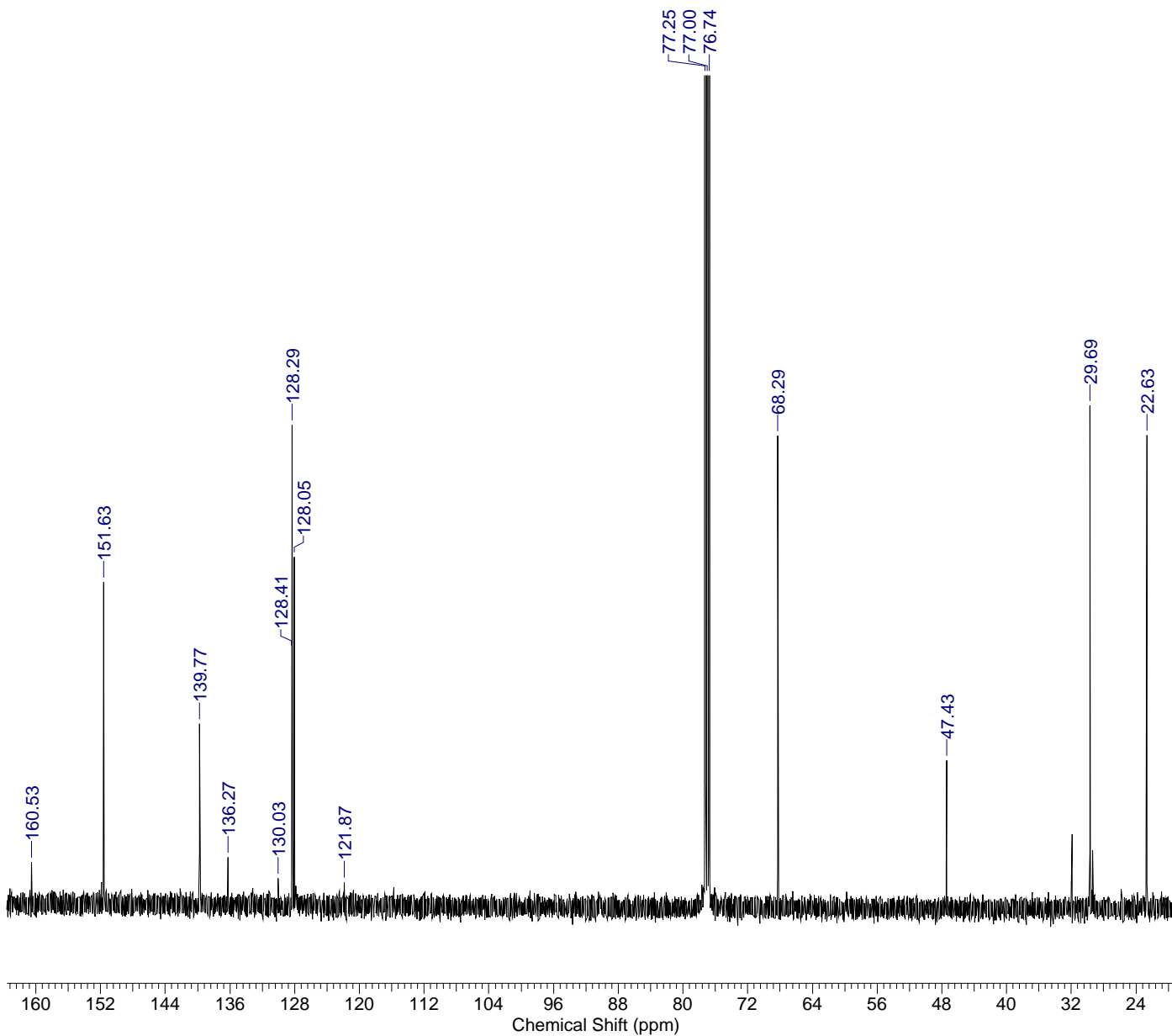
No.	(ppm)	(Hz)	Height
1	1.63	816.9	0.9483
2	1.65	823.8	0.9517
3	4.89	2445.1	0.0564
4	4.91	2452.0	0.0723
5	4.92	2458.8	0.0524
6	5.69	2845.2	0.4268
7	7.27	3634.6	0.6098
8	7.32	3658.6	0.0785
9	7.33	3665.9	0.0672
10	7.36	3677.6	0.1072
11	7.37	3685.0	0.1544
12	7.39	3692.3	0.0603
13	7.55	3773.0	0.1416
14	7.56	3780.4	0.1137
15	8.00	4000.0	0.2149
16	8.56	4276.3	0.2617

No.	(ppm)	Value	Absolute Value
1	[1.57 .. 1.71]	7.019	9.08332e+6
2	[4.79 .. 4.98]	1.259	1.62902e+6
3	[5.64 .. 5.73]	2.000	2.58826e+6
4	[7.31 .. 7.64]	4.745	6.14069e+6
5	[7.92 .. 8.04]	1.024	1.32578e+6
6	[8.50 .. 8.64]	0.932	1.20635e+6

5b.- 6-(Benzyloxy)-9-isopropyl-9H-purine (C-NMR)

12 Jul 2012

Acquisition Time (sec)	1.0486	Date	Feb 20 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-145-12_ASIMJ-4\carbono				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	32000
Original Points Count	32768	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D		Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	22.63	2844.3	0.2148
2	29.69	3731.2	0.2284
3	47.43	5961.0	0.0663
4	68.29	8582.7	0.2146
5	76.74	9645.1	1.0000
6	77.00	9677.5	0.9472
7	77.25	9709.0	0.9887
8	121.87	15316.8	0.0107
9	128.05	16094.1	0.1592
10	128.29	16124.6	0.2194
11	128.41	16138.9	0.1165
12	130.03	16343.0	0.0125
13	136.27	17126.9	0.0220
14	139.77	17567.5	0.0830
15	151.63	19057.2	0.1476
16	160.53	20175.9	0.0197

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

525 formula(e) evaluated with 4 results within limits (up to 50 best isotopic matches for each mass)

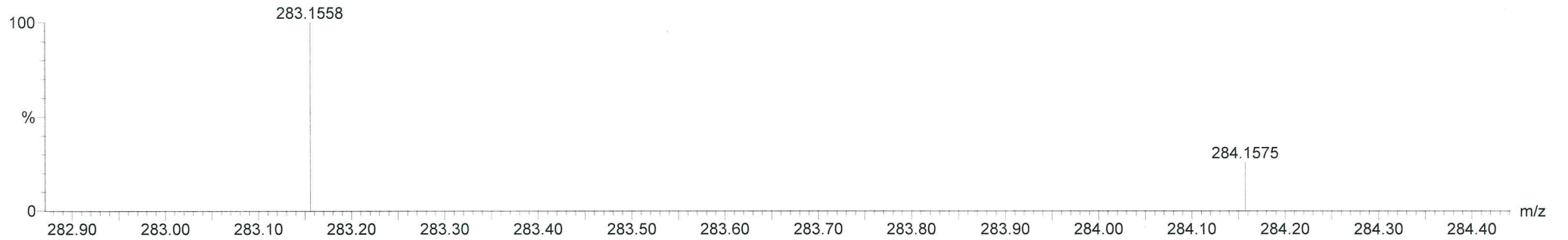
Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

12/3293

ASIMJ-5 9 (0.217)

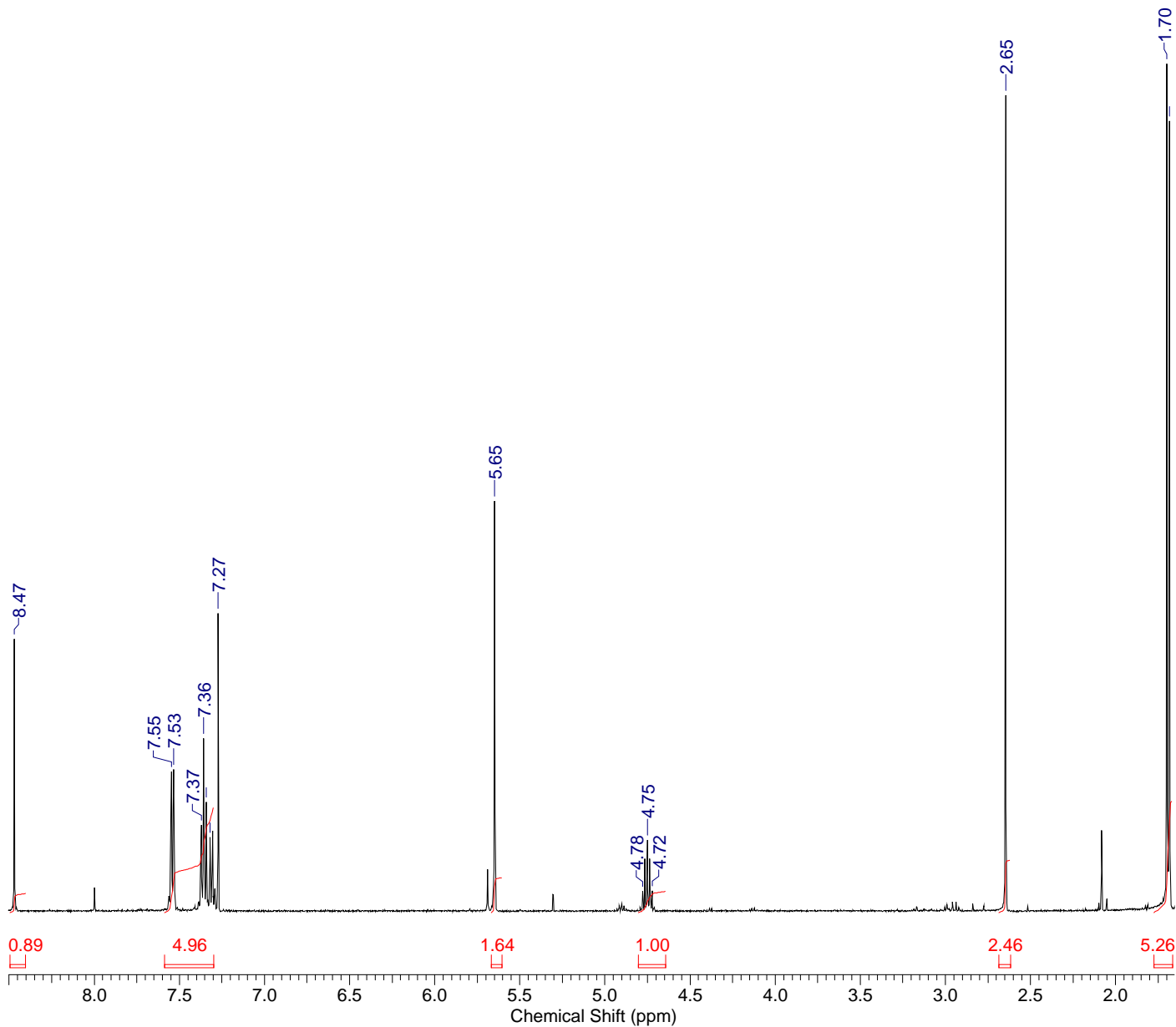
1: TOF MS ES+
9.28e+01



Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
283.1558	283.1559	-0.1	-0.4	9.5	n/a	C16 H19 N4 O
	283.1570	-1.2	-4.2	5.5	n/a	C13 H20 N4 O2 F
	283.1545	1.3	4.6	4.5	n/a	C15 H23 O5
	283.1557	0.1	0.4	0.5	n/a	C12 H24 O6 F

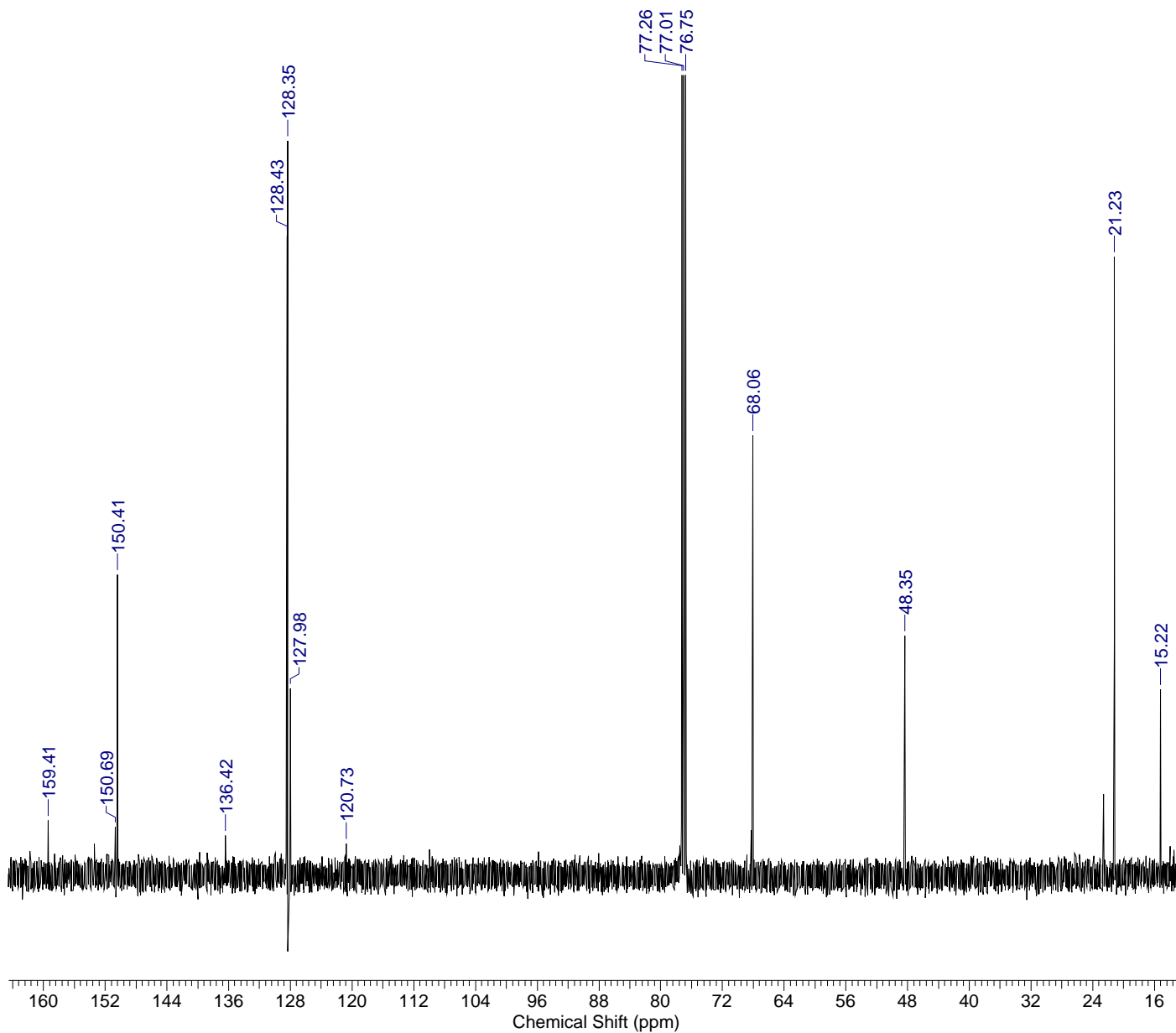
Acquisition Time (sec)	1.9923	Date	Feb 22 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-158-12_ASIMJ-5\proton				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	1
Original Points Count	15964	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	8012.82		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	1.68	841.9	0.9325
2	1.70	848.7	1.0000
3	2.65	1322.6	0.9626
4	4.72	2360.5	0.0255
5	4.75	2374.2	0.0857
6	4.78	2387.9	0.0253
7	5.65	2823.2	0.4849
8	7.27	3634.6	0.3526
9	7.32	3658.6	0.0886
10	7.34	3669.3	0.1299
11	7.36	3677.1	0.2053
12	7.37	3684.0	0.1032
13	7.53	3765.2	0.1687
14	7.55	3772.0	0.1659
15	8.47	4232.7	0.3220

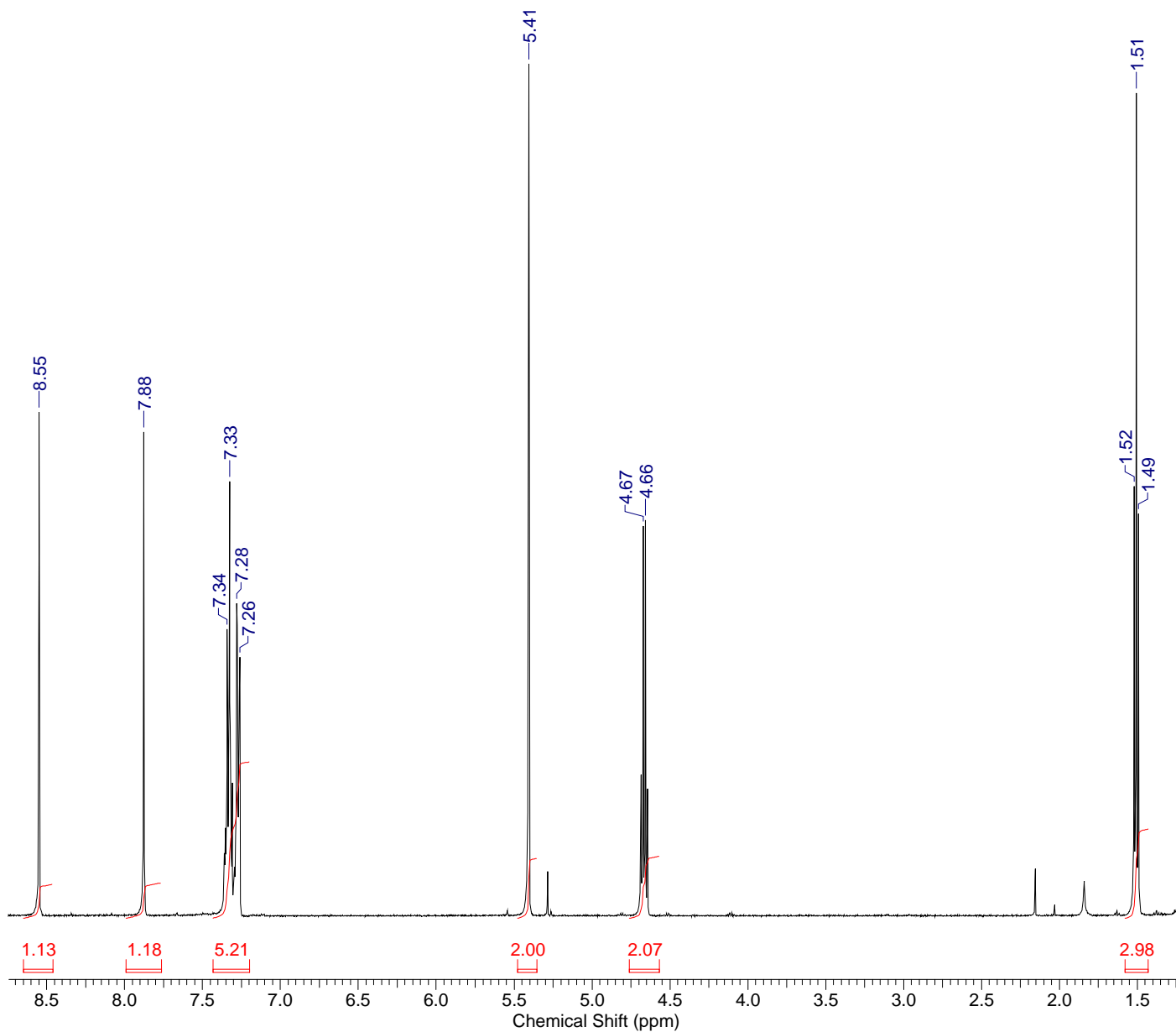
No.	(ppm)	Value	Absolute Value
1	[1.67 .. 1.77]	5.257	2.46703e+6
2	[2.62 .. 2.69]	2.457	1.15307e+6
3	[4.64 .. 4.80]	1.000	4.69325e+5
4	[5.61 .. 5.67]	1.637	7.68287e+5
5	[7.30 .. 7.59]	4.958	2.32686e+6
6	[8.41 .. 8.49]	0.894	4.19388e+5

Acquisition Time (sec)	1.0486	Date	Feb 22 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\RMN-158-12_ASIMJ-5\carbono				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	640
Original Points Count	32768	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	15.22	1913.4	0.1727
2	21.23	2667.8	0.5761
3	48.35	6077.3	0.2229
4	68.06	8554.1	0.4096
5	76.75	9646.1	0.8368
6	77.01	9678.5	1.0000
7	77.26	9710.0	0.8358
8	120.73	15173.7	0.0292
9	127.98	16085.5	0.1738
10	128.35	16132.2	0.6845
11	128.43	16141.7	0.5959
12	136.42	17146.0	0.0365
13	150.41	18903.7	0.2798
14	150.69	18939.9	0.0444
15	159.41	20035.7	0.0507

Acquisition Time (sec)	1.7432	Date	Mar 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-776_ASIMJ-7\proton				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	1
Original Points Count	13048	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D		Sweep Width (Hz)	7485.03	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	1.49	745.6	0.4736
2	1.51	752.9	0.9656
3	1.52	759.8	0.5060
4	4.66	2327.8	0.4660
5	4.67	2334.6	0.4591
6	5.41	2701.5	1.0000
7	7.26	3629.0	0.3060
8	7.28	3639.0	0.3686
9	7.33	3661.9	0.5110
10	7.34	3669.2	0.3384
11	7.88	3936.0	0.5694
12	8.55	4272.3	0.5924

No.	(ppm)	Value	Absolute Value
1	[1.43 .. 1.58]	2.977	1.96327e+7
2	[4.57 .. 4.76]	2.071	1.36568e+7
3	[5.35 .. 5.48]	2.000	1.31902e+7
4	[7.20 .. 7.43]	5.210	3.43629e+7
5	[7.76 .. 7.99]	1.182	7.79846e+6
6	[8.46 .. 8.65]	1.134	7.47657e+6

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

1456 formula(e) evaluated with 4 results within limits (up to 50 best isotopic matches for each mass)

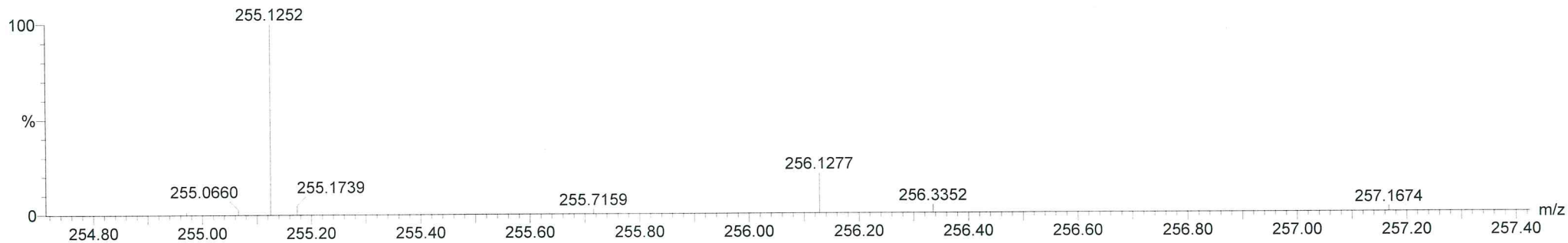
Elements Used:

C: 0-16 H: 0-1000 N: 0-5 O: 0-6 Na: 0-1 S: 0-1 Cl: 0-4

~~121776~~ 7

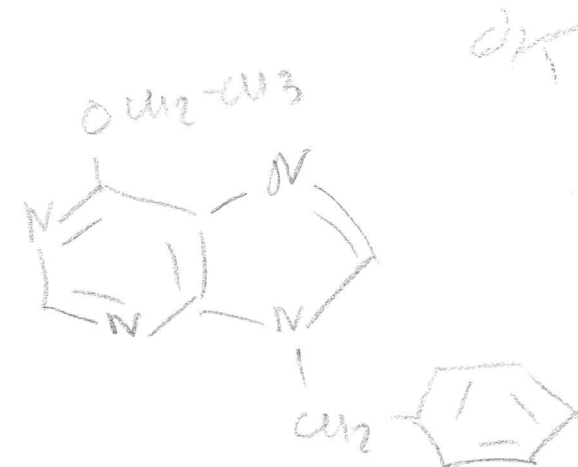
7 173 (3.827)

1: TOF MS ES+
8.63e+001

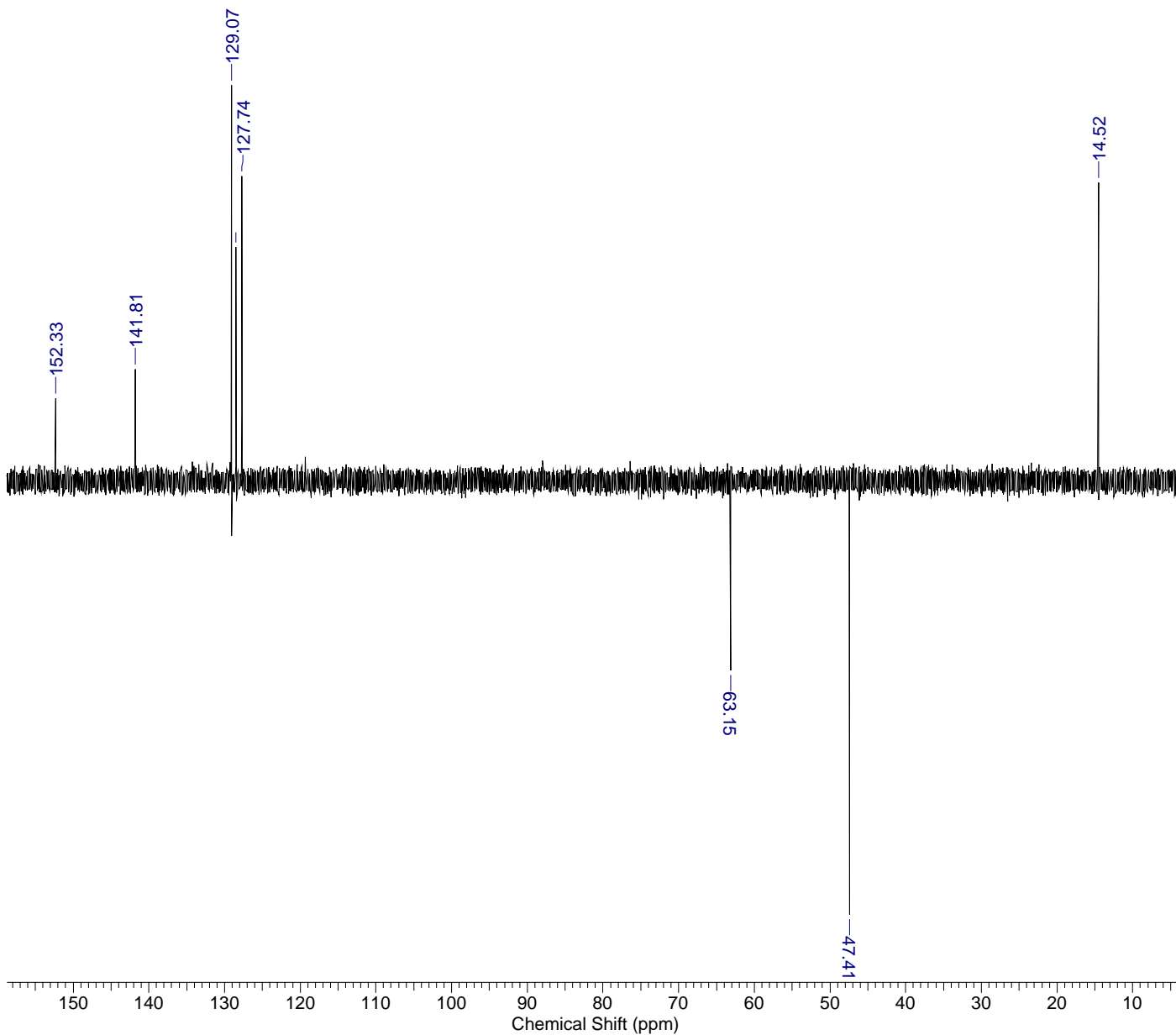


Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
255.1252	255.1246	0.6	2.4	9.5	n/a	C14 H15 N4 O
	255.1256	-0.4	-1.6	1.5	n/a	C9 H20 N4 O Na S
	255.1264	-1.2	-4.7	4.5	n/a	C13 H20 N2 O Cl
	255.1240	1.2	4.7	1.5	n/a	C11 H21 N2 O Na Cl

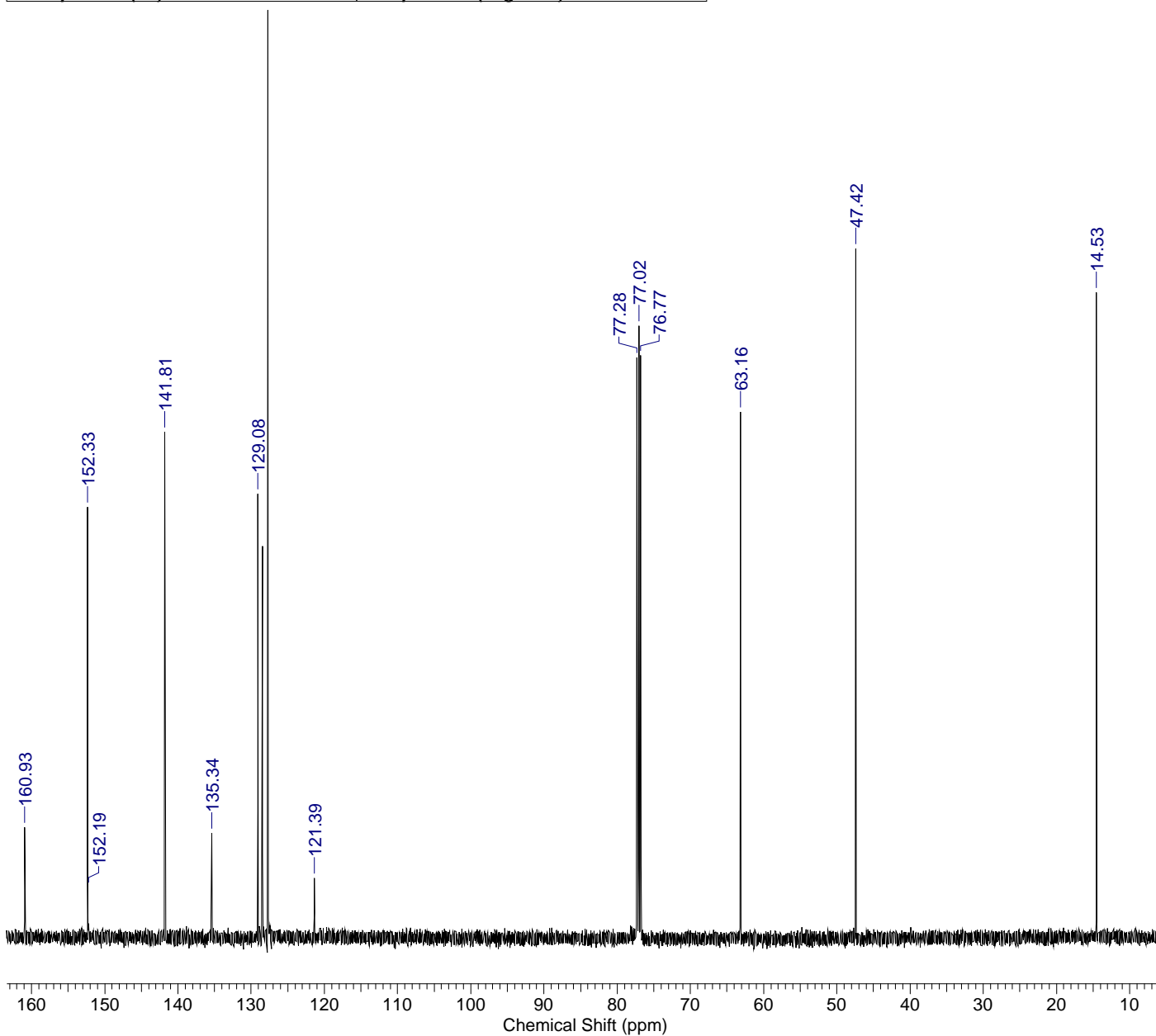


Acquisition Time (sec)	1.0486	Date	Mar 8 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-776_ASIMJ-7\dept				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	16000
Original Points Count	32768	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D		Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	14.52	1825.4	0.7533
2	47.41	5958.7	-1.0949
3	63.15	7936.7	-0.4780
4	127.74	16054.6	0.7700
5	128.47	16147.1	0.5904
6	129.07	16222.5	1.0000
7	141.81	17822.8	0.2828
8	152.33	19145.6	0.2094

Acquisition Time (sec)	1.0486	Date	Mar 8 2012	
File Name	C:\Users\usuario\Documents\Espectros Asier\12-776_ASIMJ-7\carbono			
Frequency (MHz)	125.68	Nucleus	13C	Original Points Count 32768
Points Count	32768	Pulse Sequence	s2pul	Solvent CHLOROFORM-D
Sweep Width (Hz)	31250.00	Temperature (degree C)	25.000	

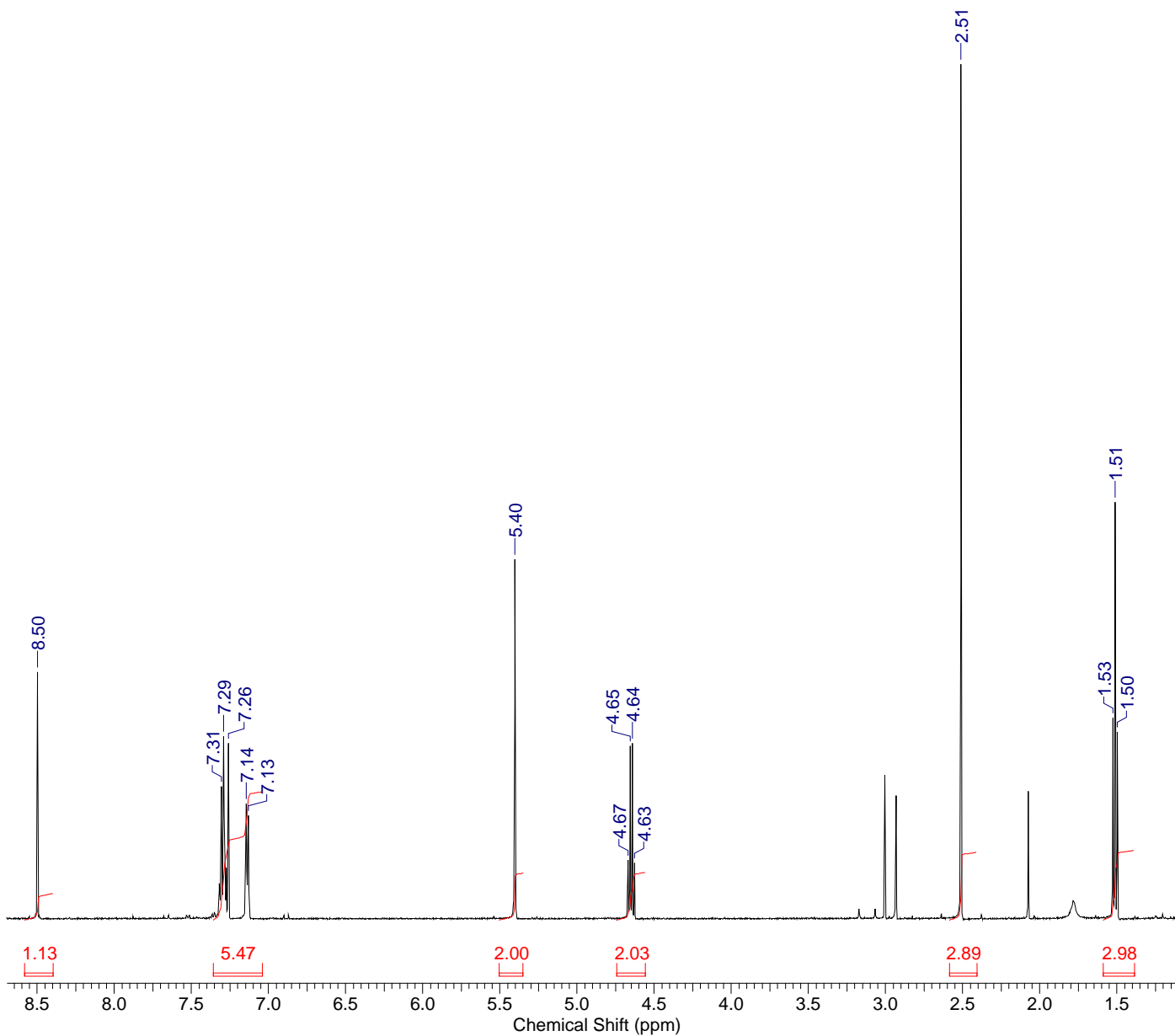


No.	(ppm)	(Hz)	Height
1	14.53	1825.7	0.5283
2	47.42	5960.0	0.5640
3	63.16	7938.0	0.4304
4	76.77	9648.9	0.4766
5	77.02	9680.4	0.5011
6	77.28	9712.8	0.4751
7	121.39	15256.7	0.0480
8	129.08	16223.8	0.3630
9	135.34	17010.6	0.0852
10	141.81	17823.1	0.4137
11	152.19	19127.8	0.0409
12	152.33	19145.9	0.3521
13	160.93	20226.5	0.0896

5g. - 9-Benzyl-6-ethoxy-8-methyl-9H-purine (H-NMR)

12 Jul 2012

Acquisition Time (sec)	1.7432	Comment	12-932_ASIMJ-8	
Date	Mar 9 2012	File Name	C:\Users\usuario\Documents\Espectros Asier\12-932_ASIMJ-8\proton	
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients 1
Original Points Count	13048	Points Count	16384	Pulse Sequence s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	7485.03	
Temperature (degree C)	25.000			



No.	(ppm)	(Hz)	Height
1	1.50	748.4	0.2200
2	1.51	755.2	0.4884
3	1.53	762.5	0.2364
4	2.51	1255.0	1.0000
5	4.63	2312.7	0.0667
6	4.64	2319.6	0.2066
7	4.65	2326.4	0.2036
8	4.67	2333.7	0.0700
9	5.40	2700.6	0.4217
10	7.13	3564.1	0.1221
11	7.14	3570.9	0.1359
12	7.26	3629.0	0.2067
13	7.29	3644.0	0.2149
14	7.31	3651.4	0.1564
15	8.50	4247.1	0.2897

No.	(ppm)	Value	Absolute Value
1	[1.39 .. 1.59]	2.976	8.15960e+6
2	[2.41 .. 2.59]	2.892	7.92848e+6
3	[4.56 .. 4.74]	2.033	5.57444e+6
4	[5.35 .. 5.51]	2.000	5.48381e+6
5	[7.04 .. 7.36]	5.470	1.49981e+7
6	[8.40 .. 8.58]	1.129	3.09530e+6

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

1585 formula(e) evaluated with 3 results within limits (up to 50 best isotopic matches for each mass)

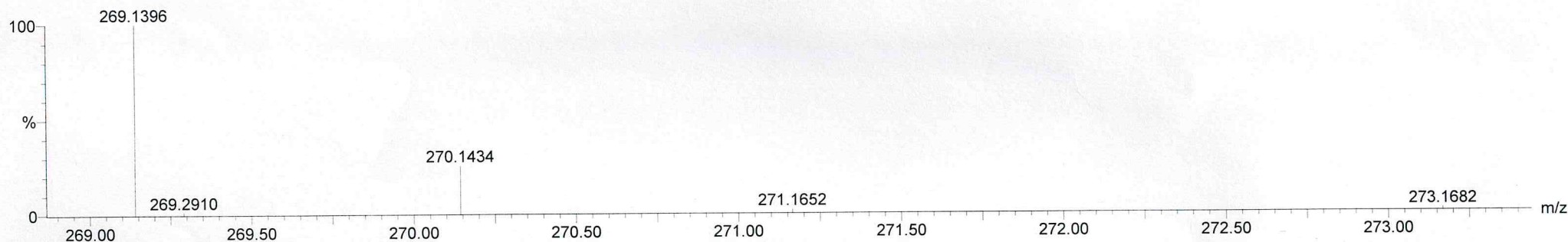
Elements Used:

C: 0-16 H: 0-1000 N: 0-5 O: 0-6 Na: 0-1 S: 0-1 Cl: 0-4

27932 B

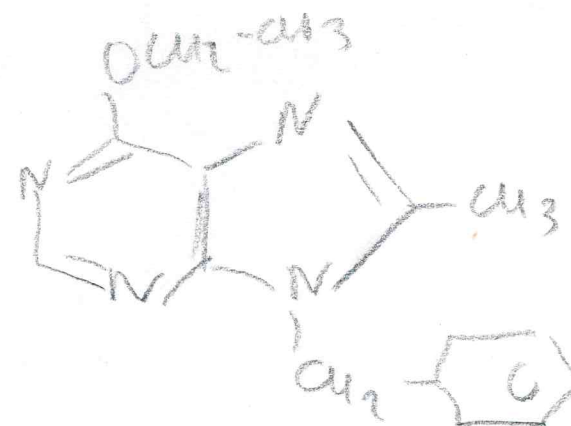
1: TOF MS ES+
6.73e+002

8.9 (0.212)

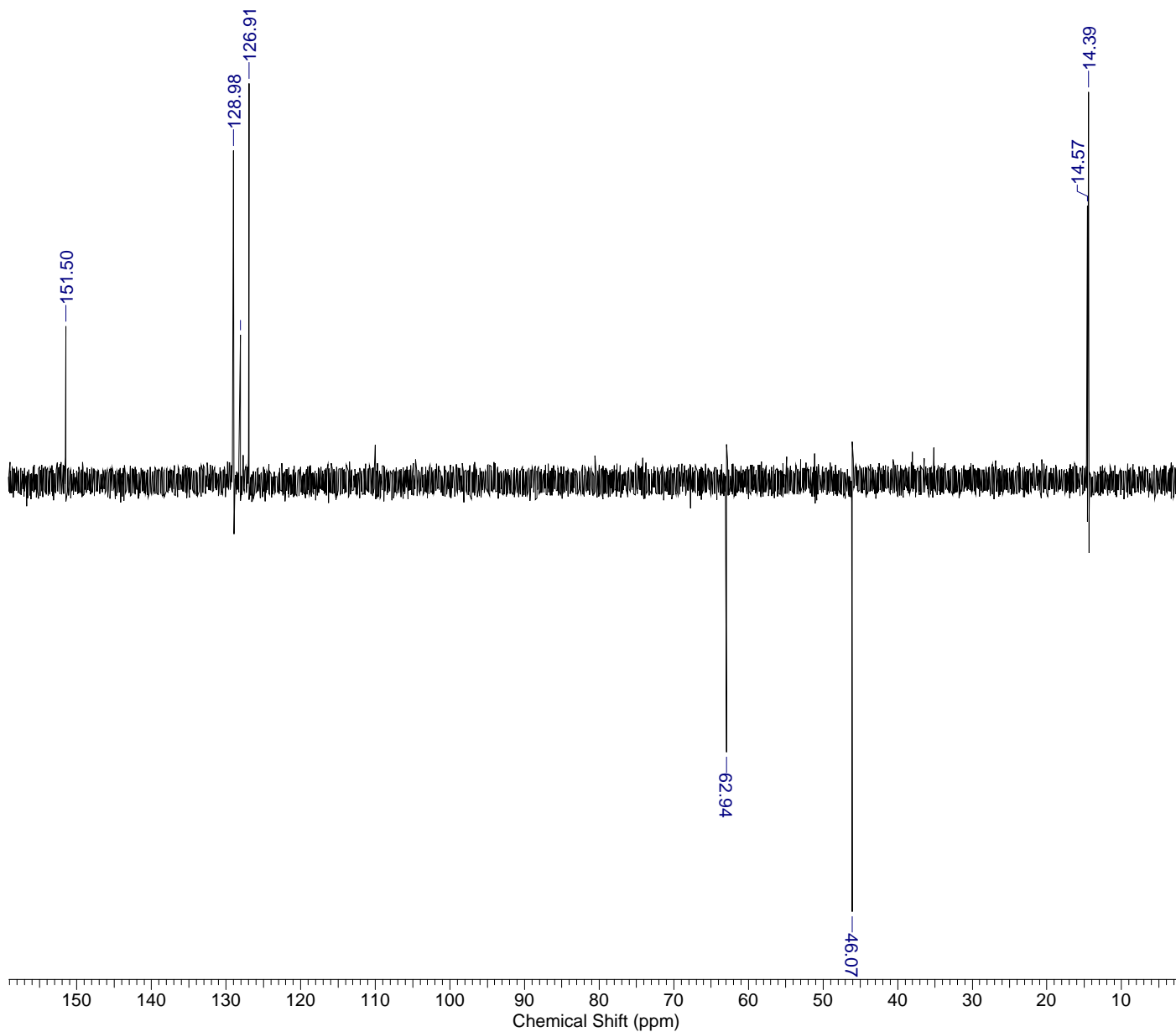


Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
269.1396	269.1402	-0.6	-2.2	9.5	6.0	C15 H17 N4 O
	269.1389	0.7	2.6	4.5	11.4	C14 H21 O5
	269.1397	-0.1	-0.4	1.5	n/a	C12 H23 N2 O Na Cl



Acquisition Time (sec)	1.0486	Date	Mar 9 2012	
File Name	C:\Users\usuario\Documents\Espectros Asier\12-932_ASIMJ-8\dept			
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients 16000
Original Points Count	32768	Points Count	32768	Pulse Sequence DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000			

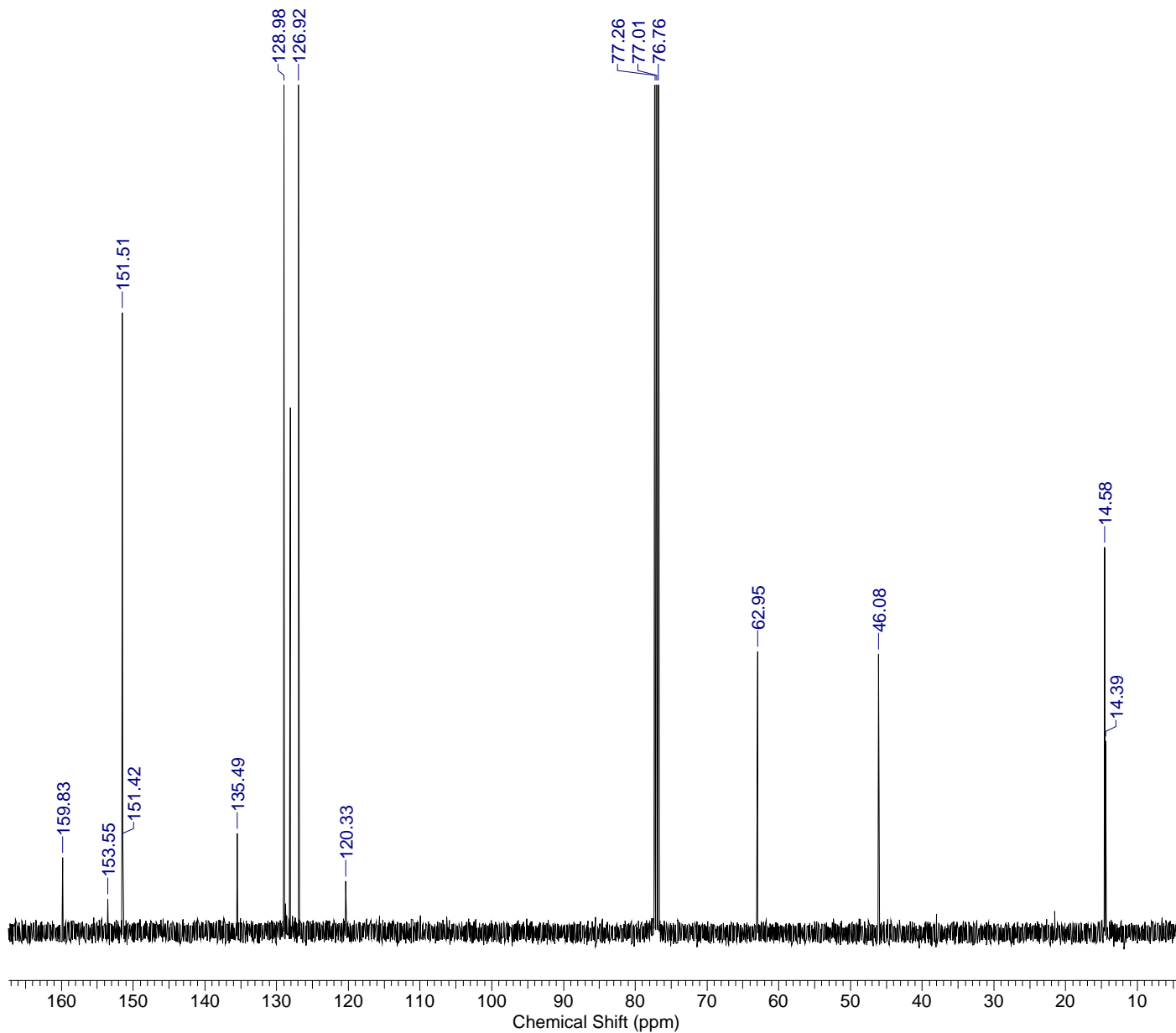


No.	(ppm)	(Hz)	Height
1	14.39	1808.2	0.9785
2	14.57	1831.1	0.6915
3	46.07	5790.8	-1.0822
4	62.94	7910.9	-0.6801
5	126.91	15950.7	1.0000
6	128.10	16100.4	0.3679
7	128.98	16211.0	0.8309
8	151.50	19040.7	0.3892

5g.- 9-Benzyl-6-ethoxy-8-methyl-9H-purine (C-NMR)

13 Jul 2012

Acquisition Time (sec)	1.0486	Date	Mar 9 2012	
File Name	C:\Users\usuario\Documents\Espectros Asier\12-932_ASIMJ-8\carbono			
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients 24000
Original Points Count	32768	Points Count	32768	Pulse Sequence s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00	
Temperature (degree C)	25.000			



No.	(ppm)	(Hz)	Height
1	14.39	1808.5	0.1595
2	14.58	1832.4	0.3217
3	46.08	5791.2	0.2324
4	62.95	7911.3	0.2345
5	76.76	9647.0	0.9961
6	77.01	9678.5	0.9284
7	77.26	9710.9	0.9758
8	120.33	15124.1	0.0419
9	126.92	15952.0	0.8726
10	128.98	16211.4	1.0000
11	135.49	17029.6	0.0823
12	151.42	19031.5	0.0738
13	151.51	19042.0	0.5181
14	153.55	19299.5	0.0270
15	159.83	20088.2	0.0619

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

1687 formula(e) evaluated with 3 results within limits (up to 50 best isotopic matches for each mass)

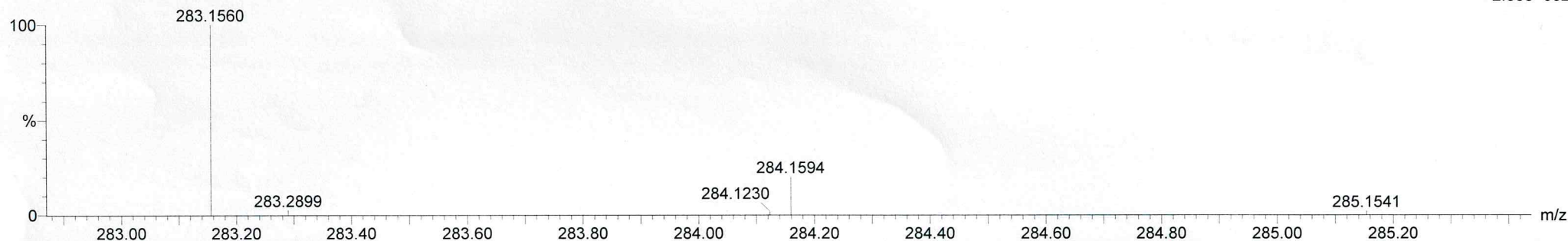
Elements Used:

C: 0-16 H: 0-1000 N: 0-5 O: 0-6 Na: 0-1 S: 0-1 Cl: 0-4

9-2 9 (0.212)

1: TOF MS ES+

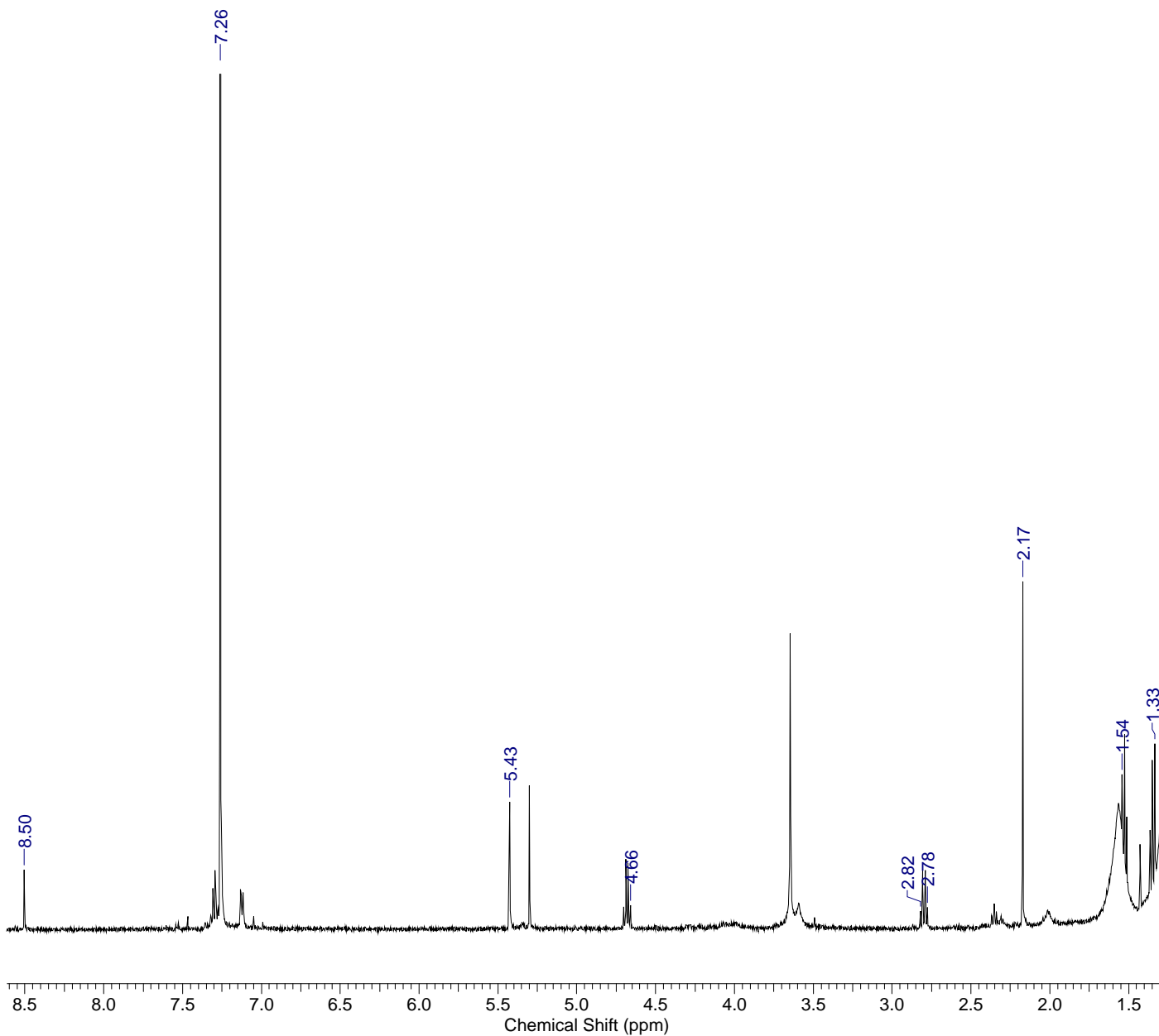
2.55e+002



Minimum: -1.5
 Maximum: 20.0 5.0 50.0

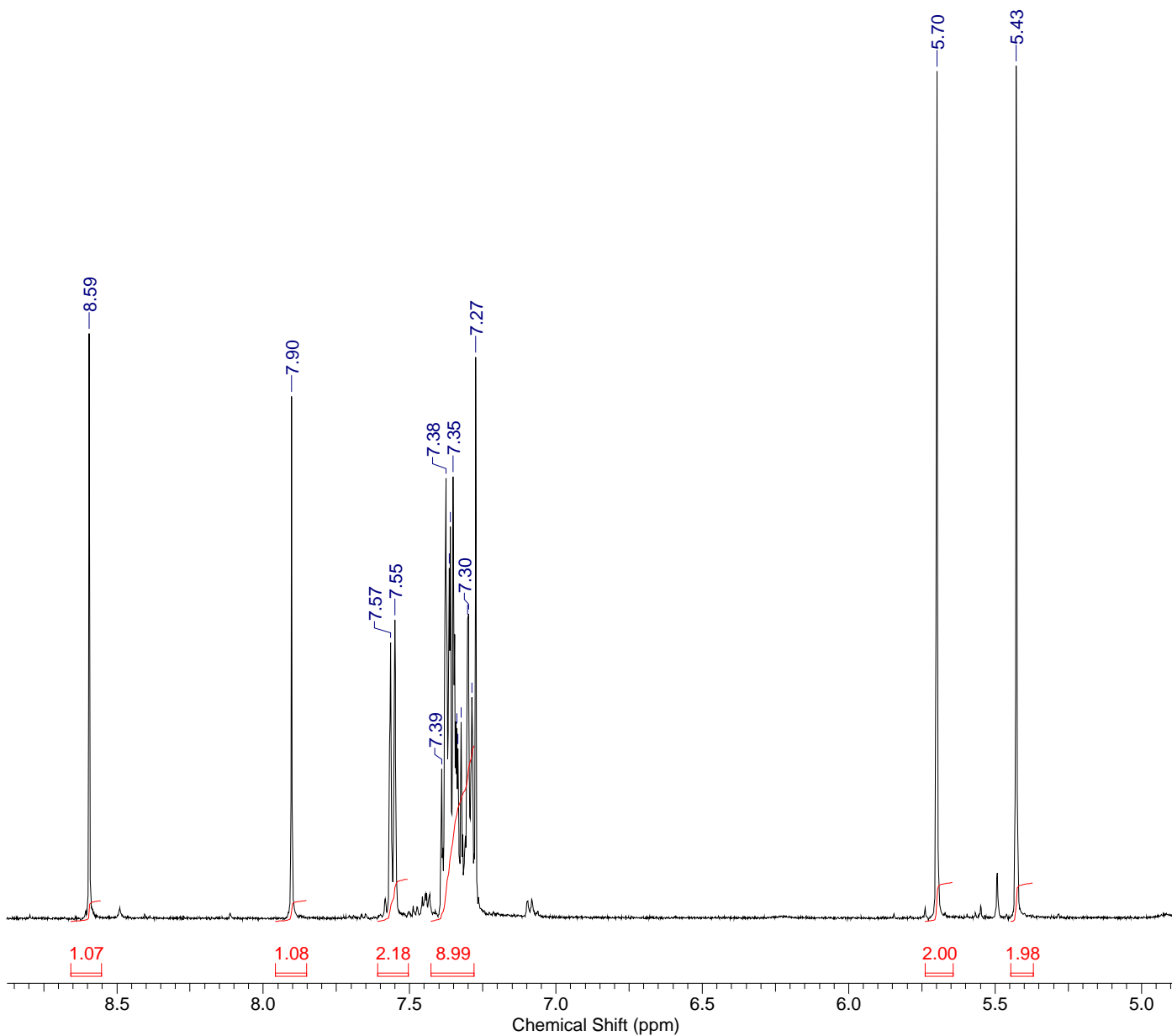
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
283.1560	283.1559	0.1	0.4	9.5	0.0	C16 H19 N4 O
	283.1569	-0.9	-3.2	1.5	10.1	C11 H24 N4 O Na S
	283.1553	0.7	2.5	1.5	113.7	C13 H25 N2 O Na Cl

Acquisition Time (sec)	1.7432	Date	Mar 16 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\ASIMJ-9-b	Frequency (MHz)	499.79
Nucleus	1H	Number of Transients	80
Points Count	16384	Pulse Sequence	s2pul
Sweep Width (Hz)	7485.03	Temperature (degree C)	25.000
		Original Points Count	13048
		Solvent	CHLOROFORM-D



No.	(ppm)	(Hz)	Height
1	1.33	666.6	0.0980
2	1.54	770.3	0.0824
3	2.17	1085.5	0.1798
4	2.78	1387.1	0.0154
5	2.82	1409.5	0.0133
6	4.66	2328.7	0.0164
7	5.43	2712.0	0.0685
8	7.26	3629.0	1.0000
9	8.50	4250.3	0.0342

Acquisition Time (sec)	1.7432	Date	Mar 22 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-2550_ASIMJ-11\proton				
Frequency (MHz)	499.79	Nucleus	1H	Number of Transients	1
Original Points Count	13048	Points Count	16384	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	7485.03		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	5.43	2712.3	1.0000
2	5.70	2848.0	0.9935
3	7.27	3635.2	0.6594
4	7.29	3642.1	0.2619
5	7.30	3648.0	0.3593
6	7.30	3649.8	0.3531
7	7.32	3660.8	0.2326
8	7.33	3665.8	0.2023
9	7.34	3668.1	0.2262
10	7.35	3674.1	0.5198
11	7.36	3679.1	0.4614
12	7.36	3680.9	0.4127
13	7.38	3686.4	0.5180
14	7.39	3693.2	0.1784
15	7.55	3773.7	0.3524
16	7.57	3781.0	0.3259
17	7.90	3950.0	0.6136
18	8.59	4295.4	0.6872

No.	(ppm)	Value	Absolute Value
1	[5.37 .. 5.45]	1.977	1.29501e+6
2	[5.64 .. 5.74]	2.000	1.30998e+6
3	[7.28 .. 7.43]	8.993	5.89047e+6
4	[7.50 .. 7.61]	2.181	1.42841e+6
5	[7.85 .. 7.96]	1.076	7.04517e+5
6	[8.55 .. 8.66]	1.066	6.97998e+5

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

573 formula(e) evaluated with 3 results within limits (up to 50 best isotopic matches for each mass)

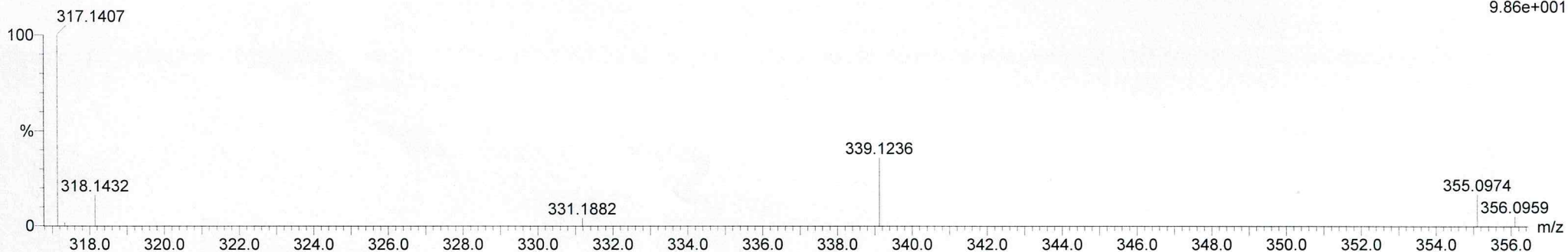
Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-6 F: 0-3

ASIMJ-11 9 (0.217)

1: TOF MS ES+

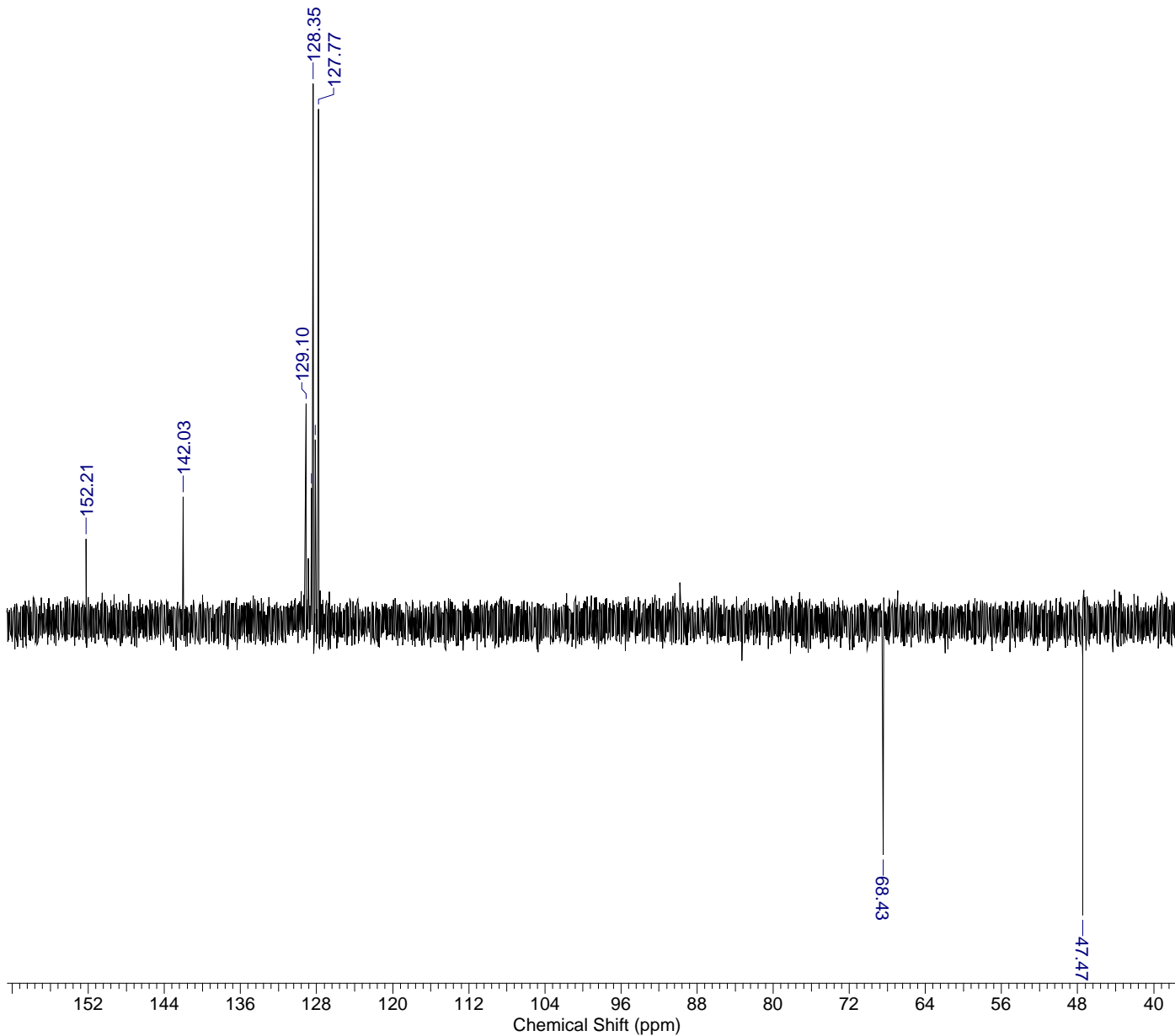
9.86e+001



Minimum: -1.5
 Maximum: 20.0 5.0 50.0

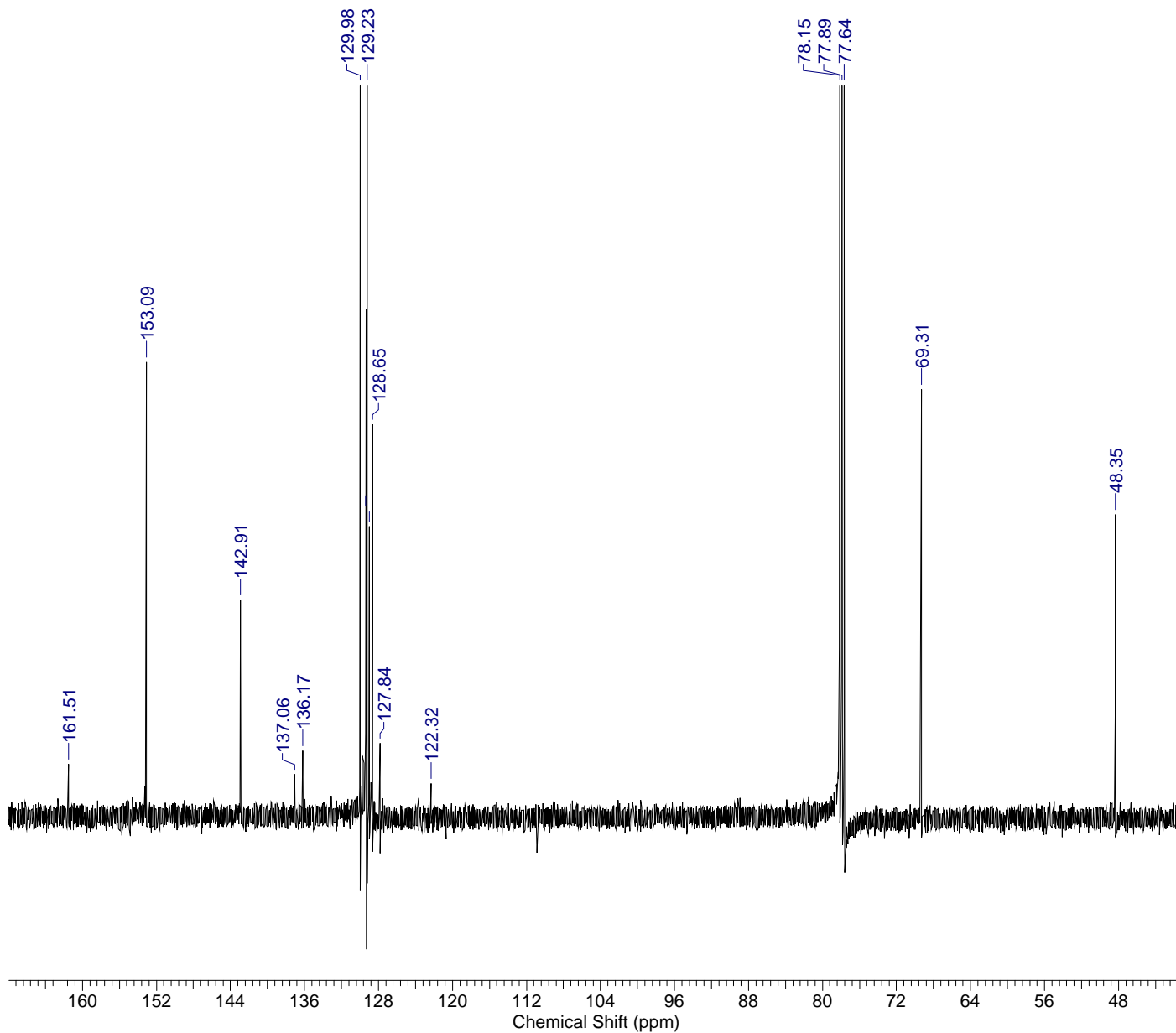
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
317.1407	317.1414	-0.7	-2.2	9.5	n/a	C16 H18 N4 O2 F
	317.1400	0.7	2.2	4.5	n/a	C15 H22 O6 F
	317.1402	0.5	1.6	13.5	n/a	C19 H17 N4 O

Acquisition Time (sec)	1.0486	Date	Mar 22 2012		
File Name	C:\Users\usuario\Documents\Espectros Asier\12-2550_ASIMJ-11\dept				
Frequency (MHz)	125.68	Nucleus	13C	Number of Transients	2400
Original Points Count	32768	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00		
Temperature (degree C)	25.000				



No.	(ppm)	(Hz)	Height
1	47.47	5966.3	-0.5445
2	68.43	8600.5	-0.4322
3	127.77	16058.4	0.9520
4	128.11	16101.3	0.3392
5	128.35	16131.9	1.0000
6	128.42	16140.4	0.3473
7	128.51	16151.9	0.2487
8	129.10	16226.3	0.4056
9	142.03	17850.4	0.2332
10	152.21	19130.3	0.1543

Acquisition Time (sec)	1.0486	Comment	12-2283 P-1192-2
Date	Mar 22 2012	File Name	C:\Users\usuario\Documents\Espectros Asier\12-2550_ASIMJ-11\carbono
Frequency (MHz)	125.68	Nucleus	13C
Original Points Count	32768	Points Count	32768
Solvent	CHLOROFORM-D	Sweep Width (Hz)	31250.00
Temperature (degree C)	25.000		

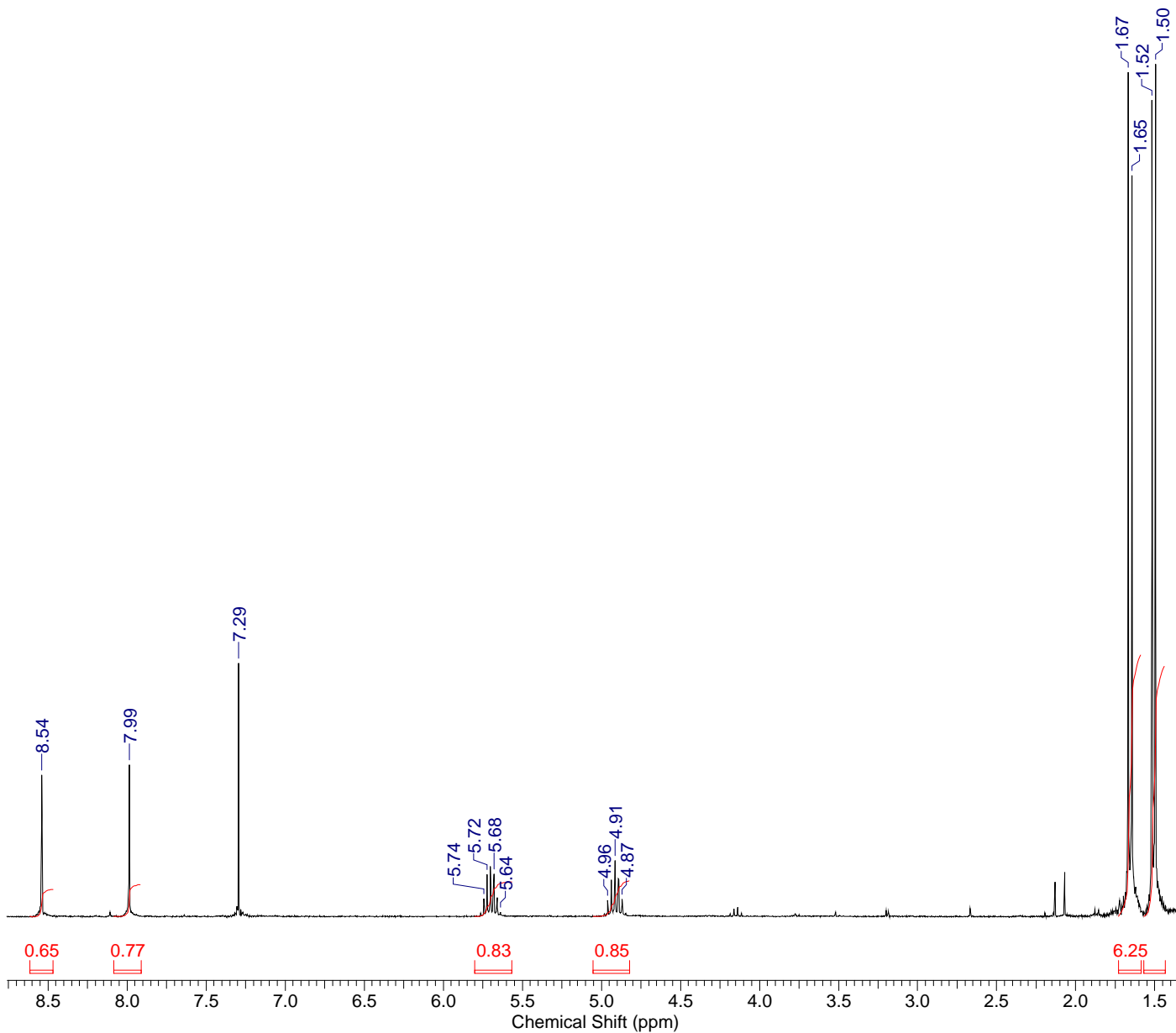


No.	(ppm)	(Hz)	Height
1	48.35	6076.9	0.2799
2	69.31	8711.0	0.3954
3	77.64	9758.2	0.9398
4	77.89	9789.7	1.0000
5	78.15	9822.1	0.9750
6	122.32	15373.6	0.0301
7	127.84	16067.9	0.0676
8	128.65	16170.0	0.3631
9	128.99	16211.9	0.2688
10	129.23	16242.4	0.7733
11	129.31	16252.0	0.4697
12	129.40	16263.4	0.2837
13	129.98	16336.9	0.6977
14	136.17	17115.1	0.0606
15	137.06	17226.7	0.0387
16	142.91	17961.0	0.2006
17	153.09	19240.9	0.4209
18	161.51	20299.5	0.0482

5j. - 6-Isopropoxy-9-isopropyl-9H-purine (H-NMR)

13 Jul 2012

Acquisition Time (sec)	2.0487	Comment	ASIMJ-16	Date	May 2 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-7088_ASIMJ-16\1H-ASI-MJ-16				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	3602.31		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	1.50	449.2	1.0000
2	1.52	455.4	0.9576
3	1.65	494.1	0.8691
4	1.67	500.7	0.9903
5	4.87	1461.6	0.0207
6	4.91	1475.3	0.0659
7	4.96	1488.9	0.0192
8	5.64	1693.0	0.0050
9	5.68	1705.3	0.0499
10	5.72	1718.0	0.0497
11	5.74	1724.2	0.0212
12	7.29	2189.5	0.2972
13	7.99	2397.5	0.1783
14	8.54	2563.3	0.1663

No.	(ppm)	Value	Absolute Value
1	[1.43 .. 1.57]	6.000	3.31244e+8
2	[1.59 .. 1.73]	6.250	3.45021e+8
3	[4.82 .. 5.05]	0.853	4.70811e+7
4	[5.57 .. 5.80]	0.833	4.59729e+7
5	[7.91 .. 8.08]	0.767	4.23590e+7
6	[8.47 .. 8.61]	0.650	3.58623e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

422 formula(e) evaluated with 1 results within limits (up to 50 closest results for each mass)

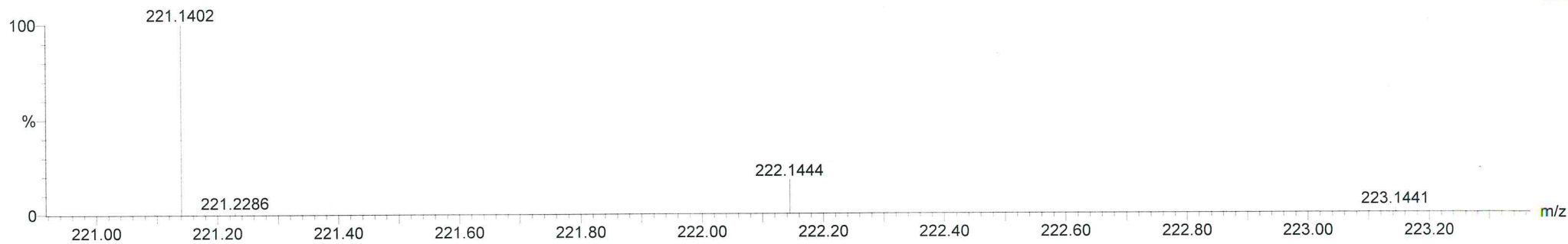
Elements Used:

C: 0-15 H: 0-1000 N: 0-10 O: 0-10 Na: 0-1

12/7270

ASIMJ-16 69 (1.534)

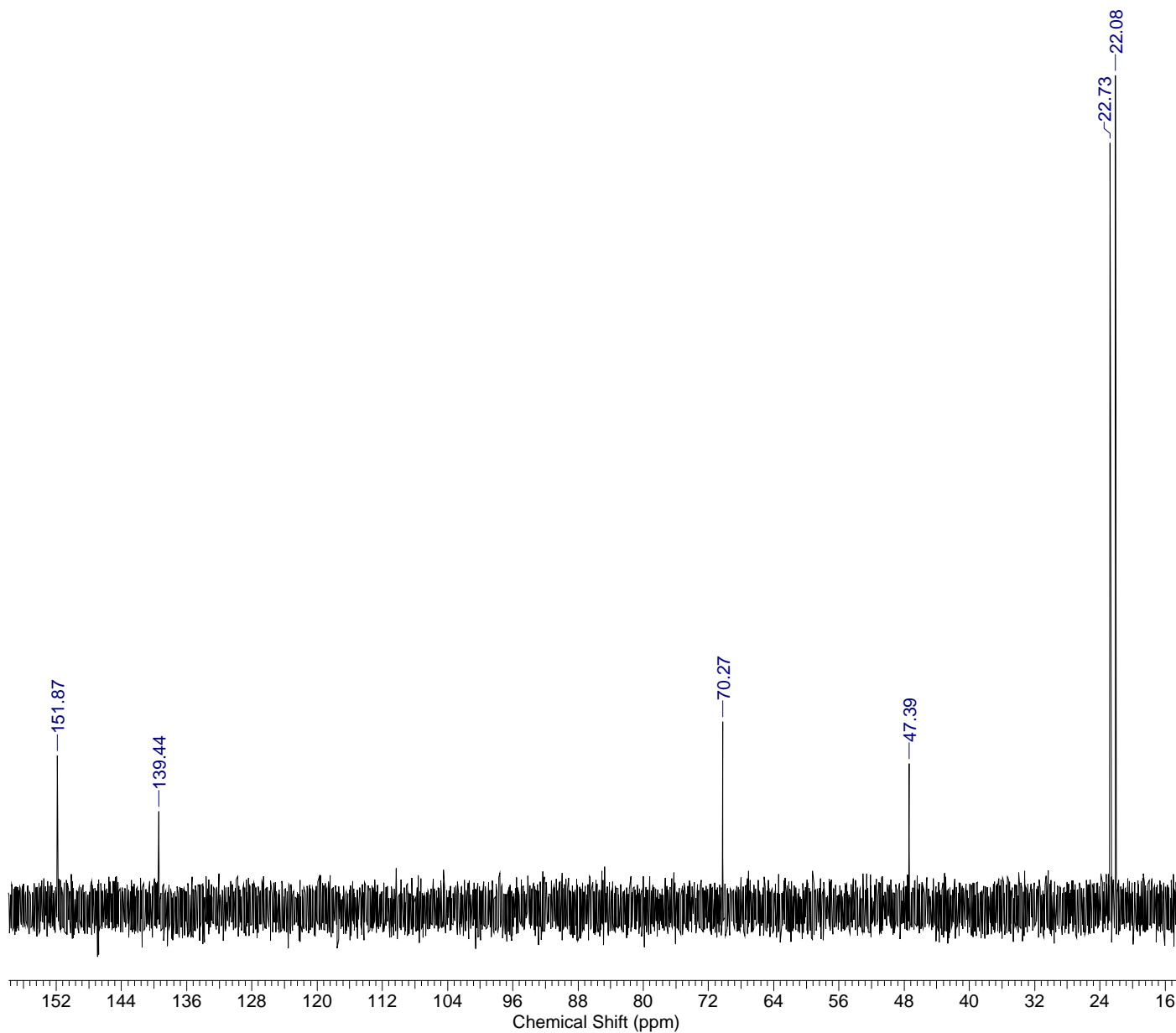
1: TOF MS ES+
3.64e+002



Minimum: -1.5
Maximum: 20.0 5.0 50.0

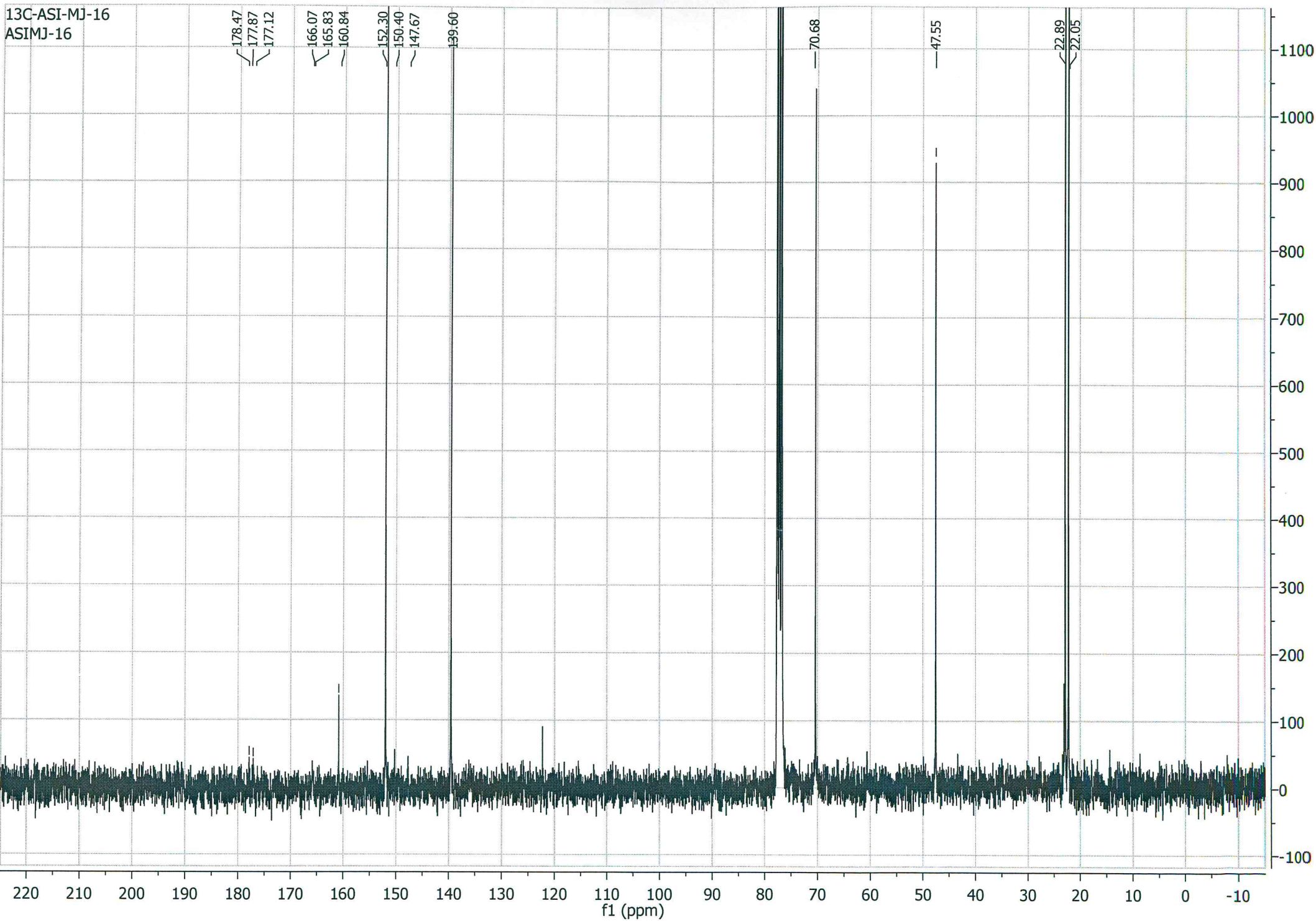
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
221.1402	221.1402	0.0	0.0	5.5	2.0	C11 H17 N4 O

Acquisition Time (sec)	1.0000	Comment	ASIMJ-16	Date	May 2 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-7088_ASIMJ-16\DEPT-ASI-MJ-16				
Frequency (MHz)	75.49	Nucleus	¹³ C	Number of Transients	2000
Original Points Count	18116	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	18115.94		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	22.08	1667.2	1.0000
2	22.73	1715.8	0.9186
3	47.39	3577.3	0.1738
4	70.27	5305.0	0.2243
5	139.44	10526.9	0.1162
6	151.87	11465.1	0.1832

5j. - 6-Isopropoxy-9-isopropyl-9H-purine (C-NMR)



Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

463 formula(e) evaluated with 2 results within limits (up to 50 closest results for each mass)

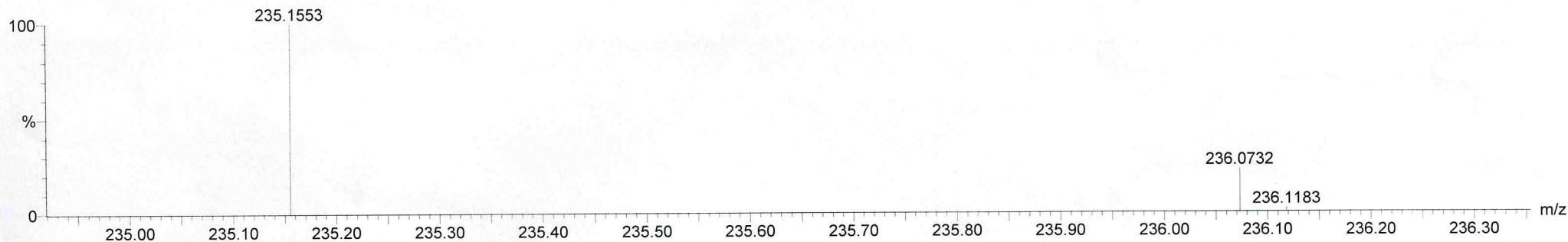
Elements Used:

C: 0-15 H: 0-1000 N: 0-10 O: 0-10 Na: 0-1

ASIMJ-17conc 243 (5.361)

1: TOF MS ES+

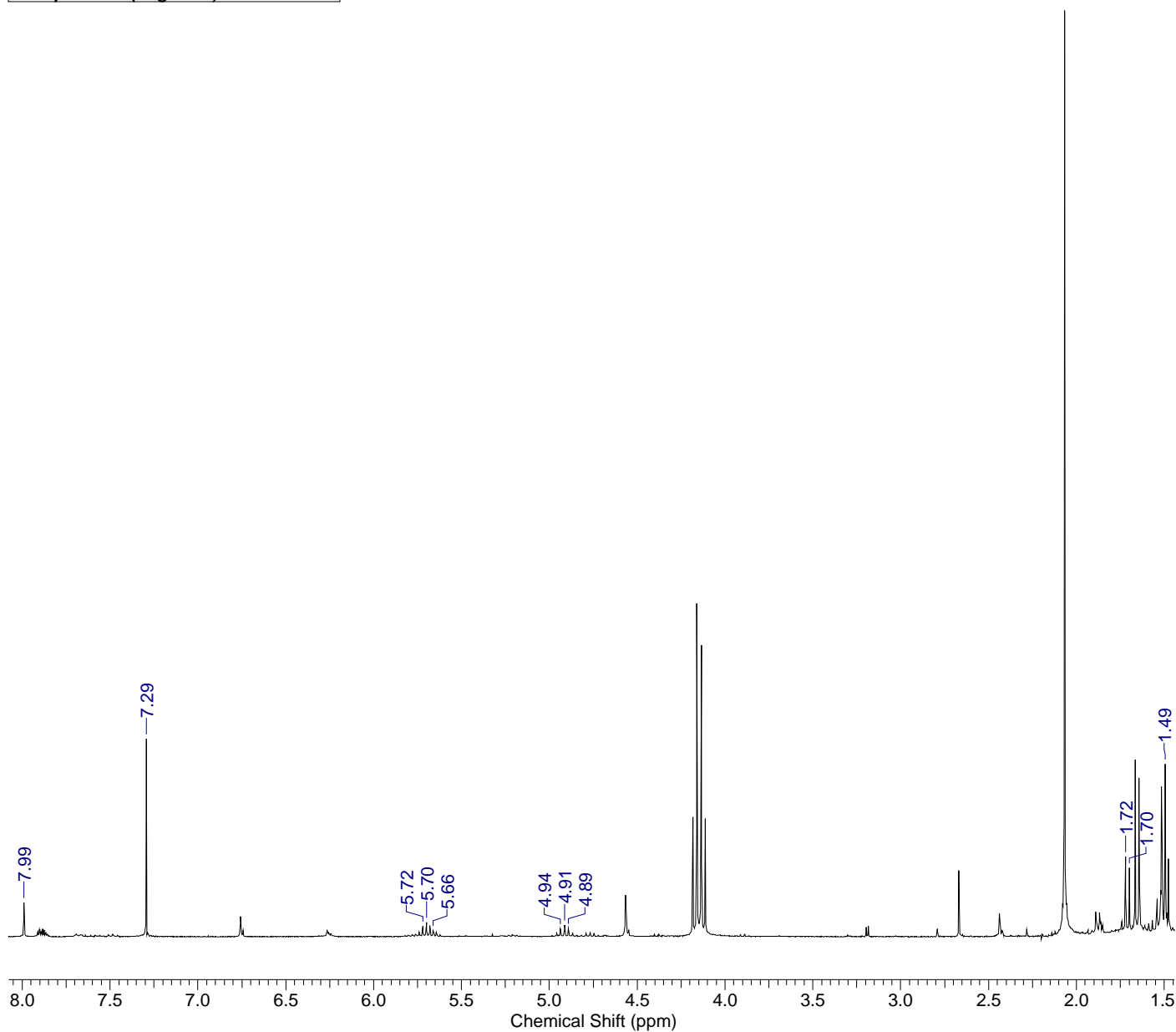
3.70e+002



Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
235.1553	235.1559	-0.6	-2.6	5.5	n/a	C12 H19 N4 O
	235.1545	0.8	3.4	0.5	n/a	C11 H23 O5

Acquisition Time (sec)	2.0487	Comment	ASIMJ-17	Date	May 4 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\1H-ASI-MJ-17				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	3602.31		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	1.49	448.4	0.1083
2	1.70	509.5	0.0433
3	1.72	516.5	0.0502
4	4.89	1468.2	0.0054
5	4.91	1474.8	0.0075
6	4.94	1481.9	0.0049
7	5.66	1700.0	0.0038
8	5.70	1711.0	0.0091
9	5.72	1717.1	0.0065
10	7.29	2189.5	0.1243
11	7.99	2398.4	0.0213

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

618 formula(e) evaluated with 1 results within limits (up to 50 closest results for each mass)

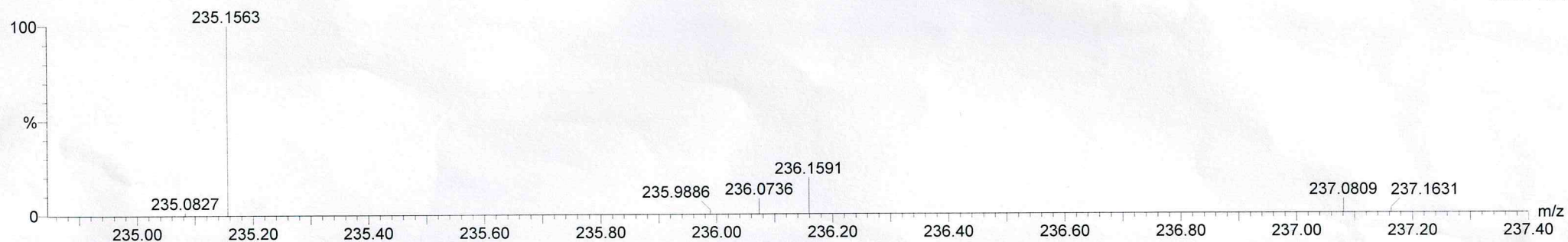
Elements Used:

C: 0-14 H: 0-1000 N: 0-5 O: 0-5 Na: 0-1 S: 0-1 Br: 0-2

ASIMJ-19 62 (1.375)

1: TOF MS ES+

6.92e+002



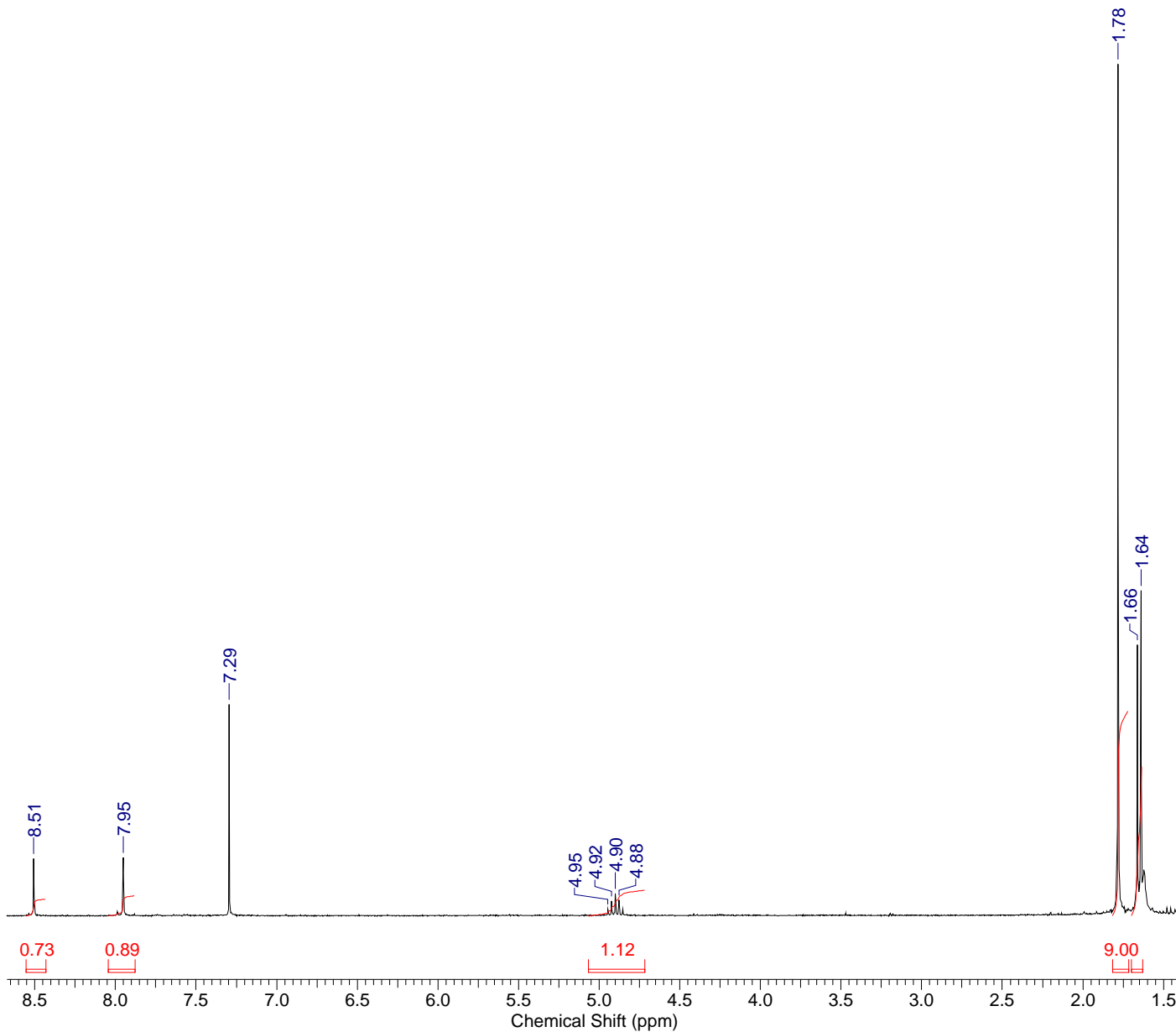
Minimum: -1.5
 Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
235.1563	235.1559	0.4	1.7	5.5	3.8	C12 H19 N4 O

51. - 6-tert-butoxy-9-isopropyl-9H-purine (H-NMR)

16 Jul 2012

Acquisition Time (sec)	2.0487	Comment	ASIMJ-19	Date	May 10 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\1H-ASI-MJ-19				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D			Sweep Width (Hz)	3602.31
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	1.64	492.3	0.3819
2	1.66	499.4	0.3184
3	1.78	535.0	1.0000
4	4.88	1464.3	0.0184
5	4.90	1470.9	0.0260
6	4.92	1477.9	0.0176
7	4.95	1484.5	0.0081
8	7.29	2189.5	0.2480
9	7.95	2387.4	0.0686
10	8.51	2554.1	0.0673

No.	(ppm)	Value	Absolute Value
1	[1.63 .. 1.70]	6.904	3.95374e+8
2	[1.72 .. 1.82]	9.000	5.15413e+8
3	[4.72 .. 5.07]	1.118	6.40499e+7
4	[7.88 .. 8.04]	0.889	5.09284e+7
5	[8.43 .. 8.55]	0.728	4.16779e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

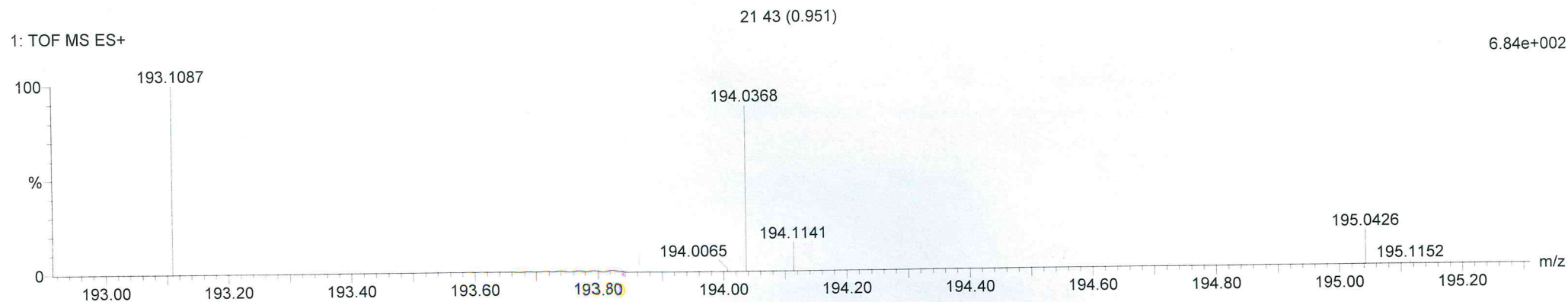
Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

729 formula(e) evaluated with 1 results within limits (up to 50 closest results for each mass)

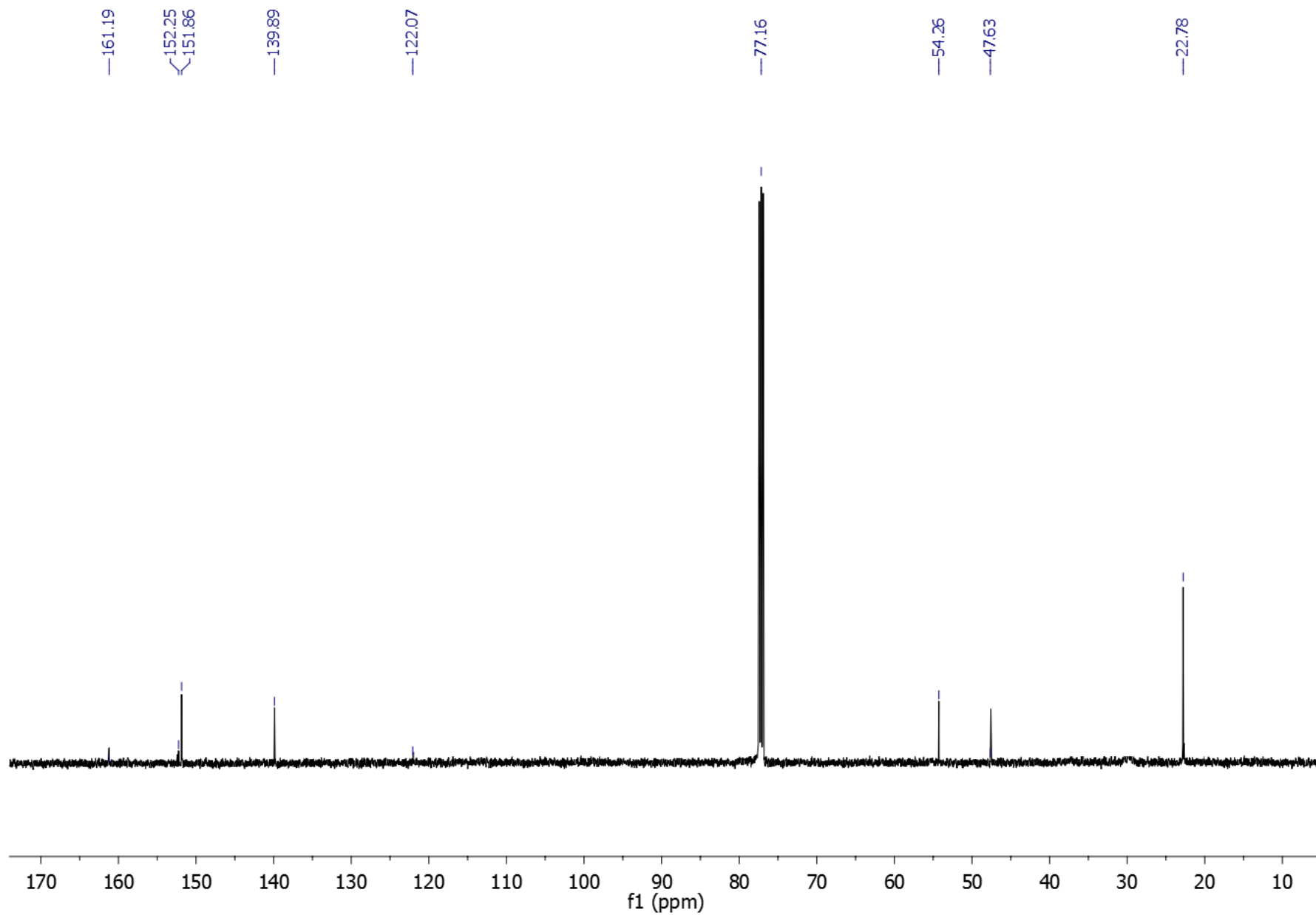
Elements Used:

C: 0-14 H: 0-1000 N: 0-5 O: 0-5 Na: 0-1 S: 0-1 Cl: 0-1 Br: 0-2

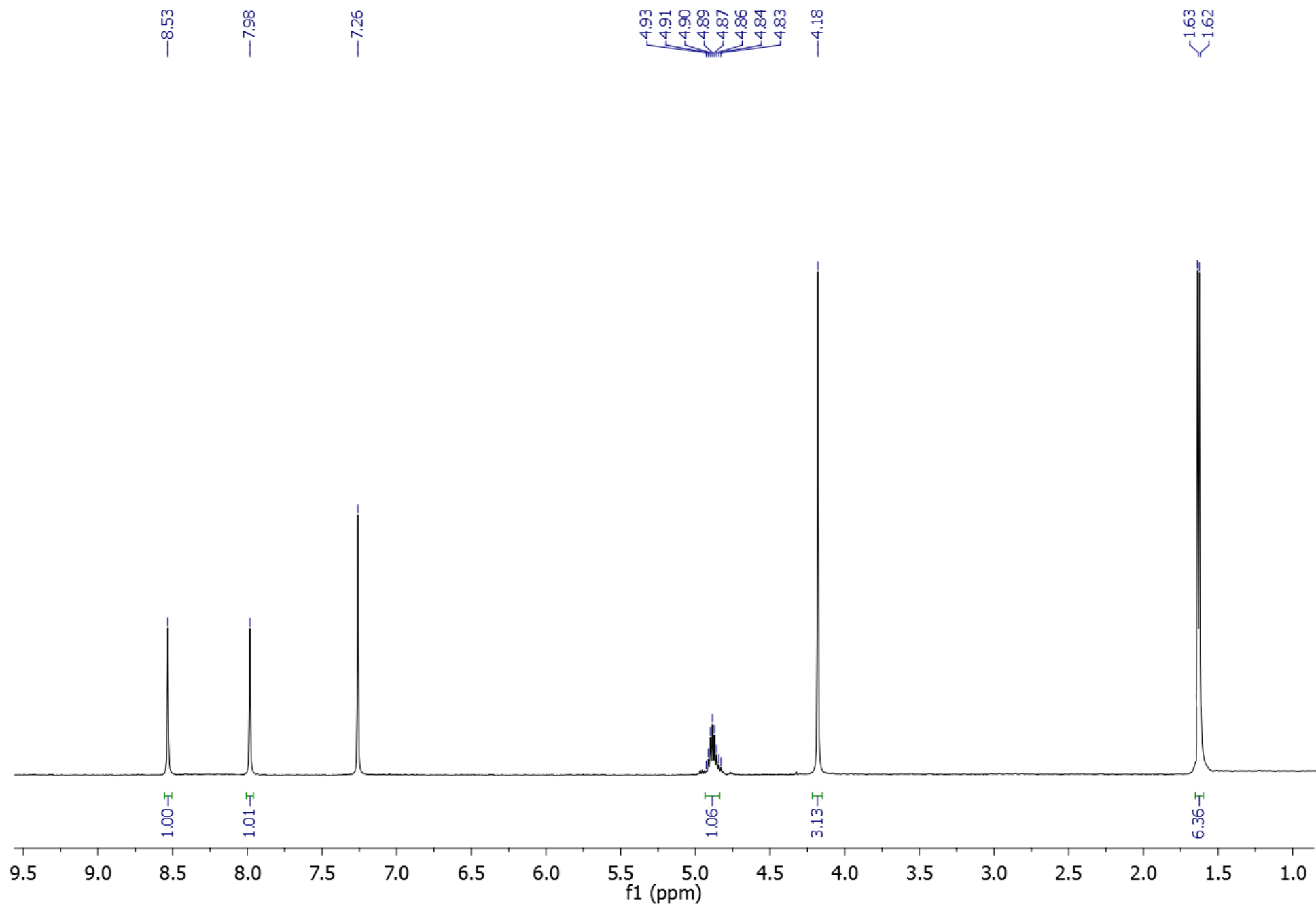


Minimum:				-1.5		
Maximum:	20.0	5.0		50.0		
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
193.1087	193.1089	-0.2	-1.0	5.5	2.7	C9 H13 N4 O

5m. - 9-isopropyl-6-methoxy-9H-purine (C-NMR)



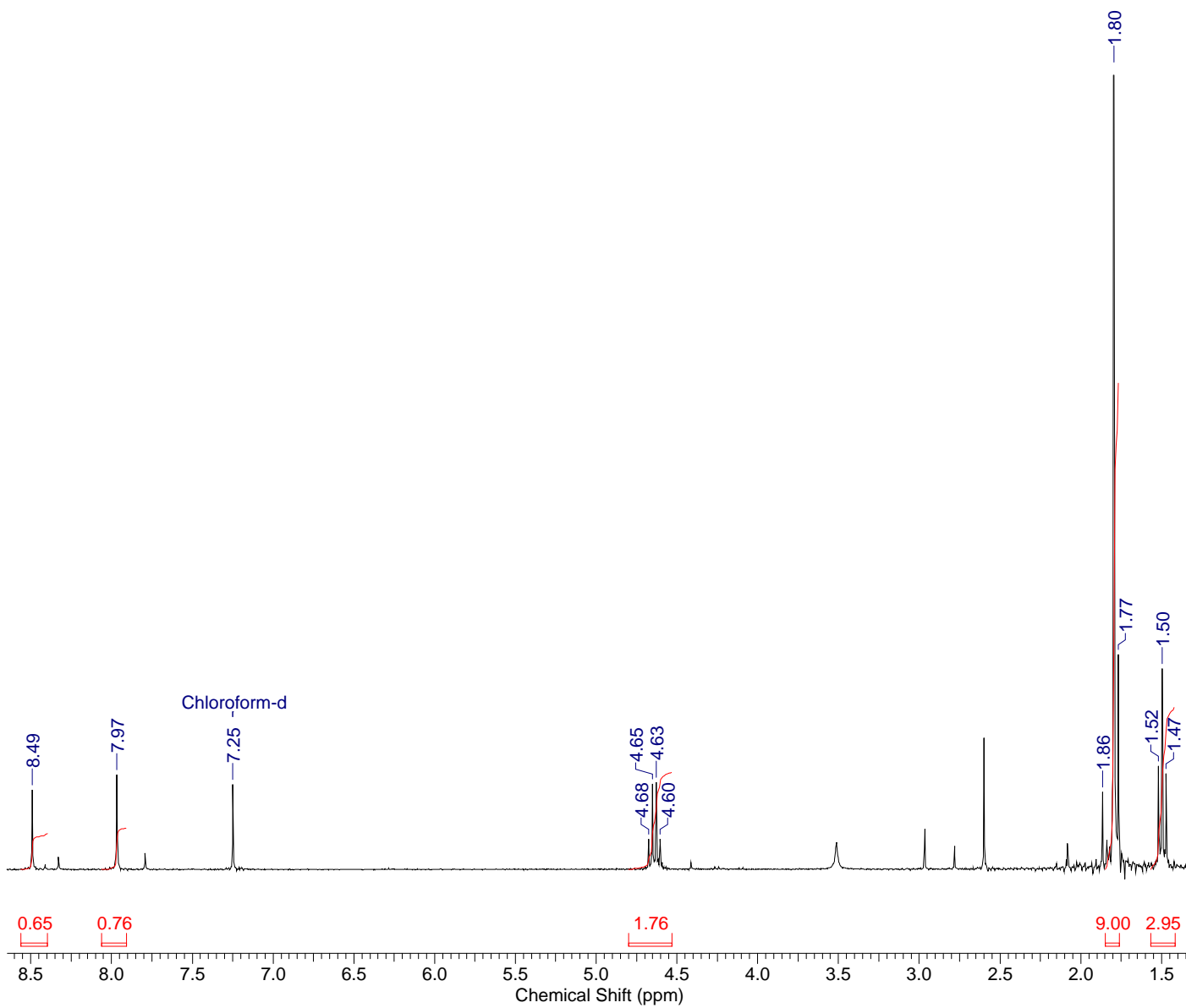
5m. - 9-isopropyl-6-methoxy-9H-purine (H-NMR)



5n. - 9-tert-butyl-6-ethoxy-9H-purine (H-NMR)

11 Mar 2013

Acquisition Time (sec)	2.0486	Comment	ASIMJ-24	Date	Jul 2 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-14413_ASIMJ-24\1H-ASIMJ-24				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	3602.47		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	1.47	441.8	0.0741
2	1.50	448.9	0.1551
3	1.52	455.9	0.0800
4	1.77	530.7	0.1656
5	1.80	539.0	1.0000
6	1.86	559.7	0.0599
7	4.60	1382.2	0.0235
8	4.63	1389.2	0.0674
9	4.65	1396.7	0.0659
10	4.68	1403.7	0.0234
11	7.25	2176.4	0.0657
12	7.97	2392.0	0.0729
13	8.49	2549.0	0.0616

No.	Annotation	(ppm)
1	Chloroform-d	7.25

No.	(ppm)	Value	Absolute Value
1	[1.42 .. 1.57]	2.952	1.25818e+8
2	[1.76 .. 1.85]	9.000	3.83645e+8
3	[4.53 .. 4.80]	1.761	7.50525e+7
4	[7.91 .. 8.06]	0.756	3.22197e+7
5	[8.40 .. 8.56]	0.653	2.78490e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

362 formula(e) evaluated with 2 results within limits (up to 50 best isotopic matches for each mass)

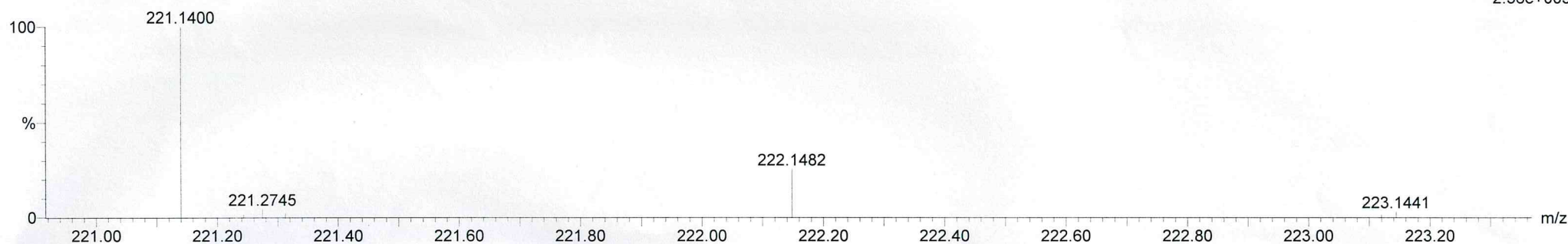
Elements Used:

C: 0-56 H: 0-1000 N: 0-4 O: 0-10 Na: 0-1 Br: 0-1

ASIMJ-24 8 (0.175)

1: TOF MS ES+

2.36e+003



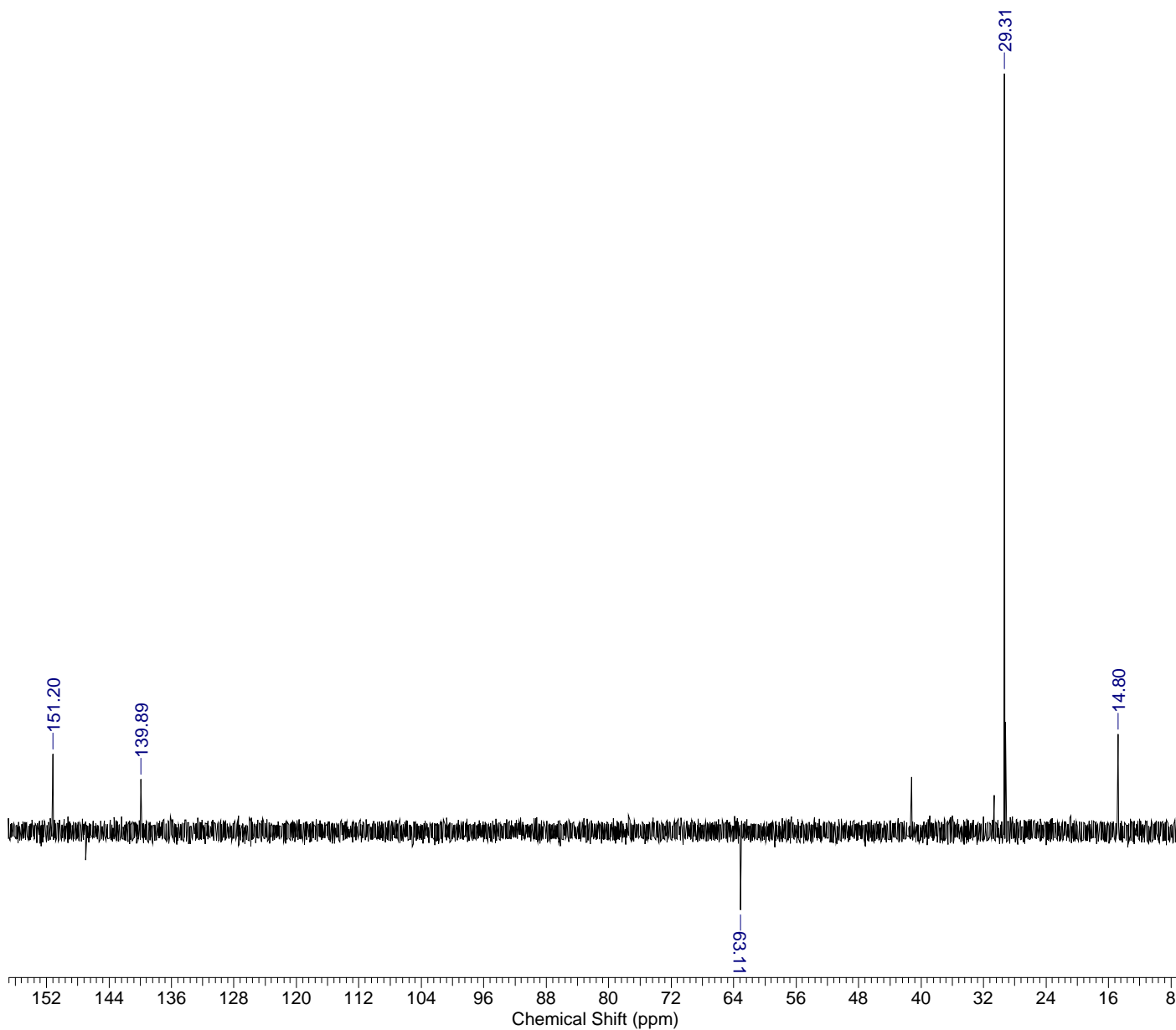
Minimum: -1.5
 Maximum: 5.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
221.1400	221.1402	-0.2	-0.9	5.5	66.8	C11 H17 N4 O
	221.1389	1.1	5.0	0.5	88.4	C10 H21 O5

5n. - 9-tert-butyl-6-ethoxy-9H-purine (DEPT)

11 Mar 2013

Acquisition Time (sec)	1.0000	Comment	ASIMJ-24	Date	Jul 2 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-14413_ASIMJ-24\DEPT-ASIMJ-24				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	3200
Original Points Count	18116	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	18115.94		
Temperature (degree C)	30.000				

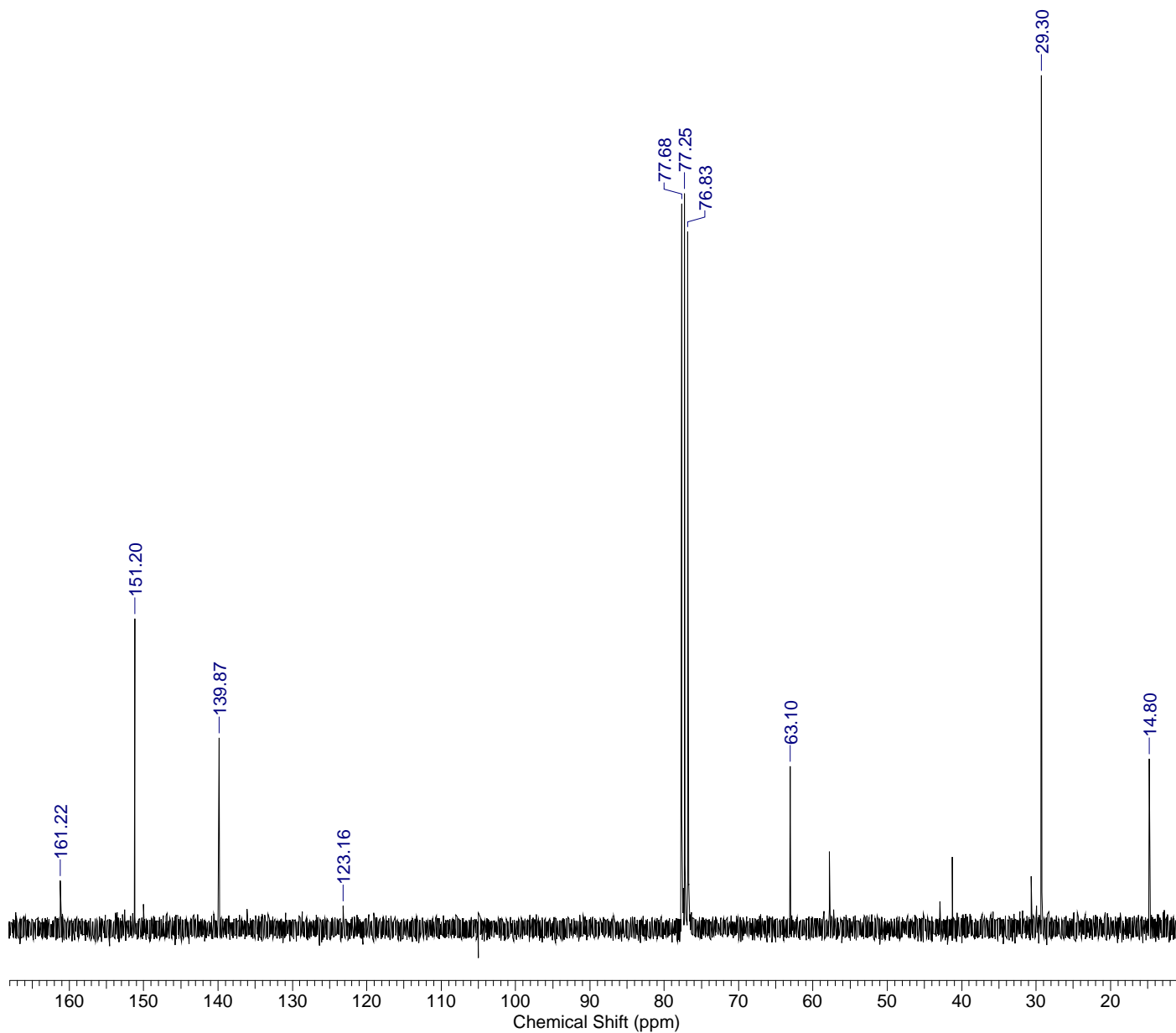


No.	(ppm)	(Hz)	Height
1	14.80	1117.3	0.1283
2	29.31	2212.5	1.0000
3	63.11	4764.0	-0.1038
4	139.89	10560.3	0.0691
5	151.20	11414.5	0.1018

5n. - 9-tert-butyl-6-ethoxy-9H-purine (C-NMR)

11 Mar 2013

Acquisition Time (sec)	1.3005	Comment	ASIMJ-24	Date	Jul 2 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-14413_ASIMJ-24\13C-ASIMJ-24				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	6400
Original Points Count	23559	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D			Sweep Width (Hz)	18115.94
Temperature (degree C)	30.000				

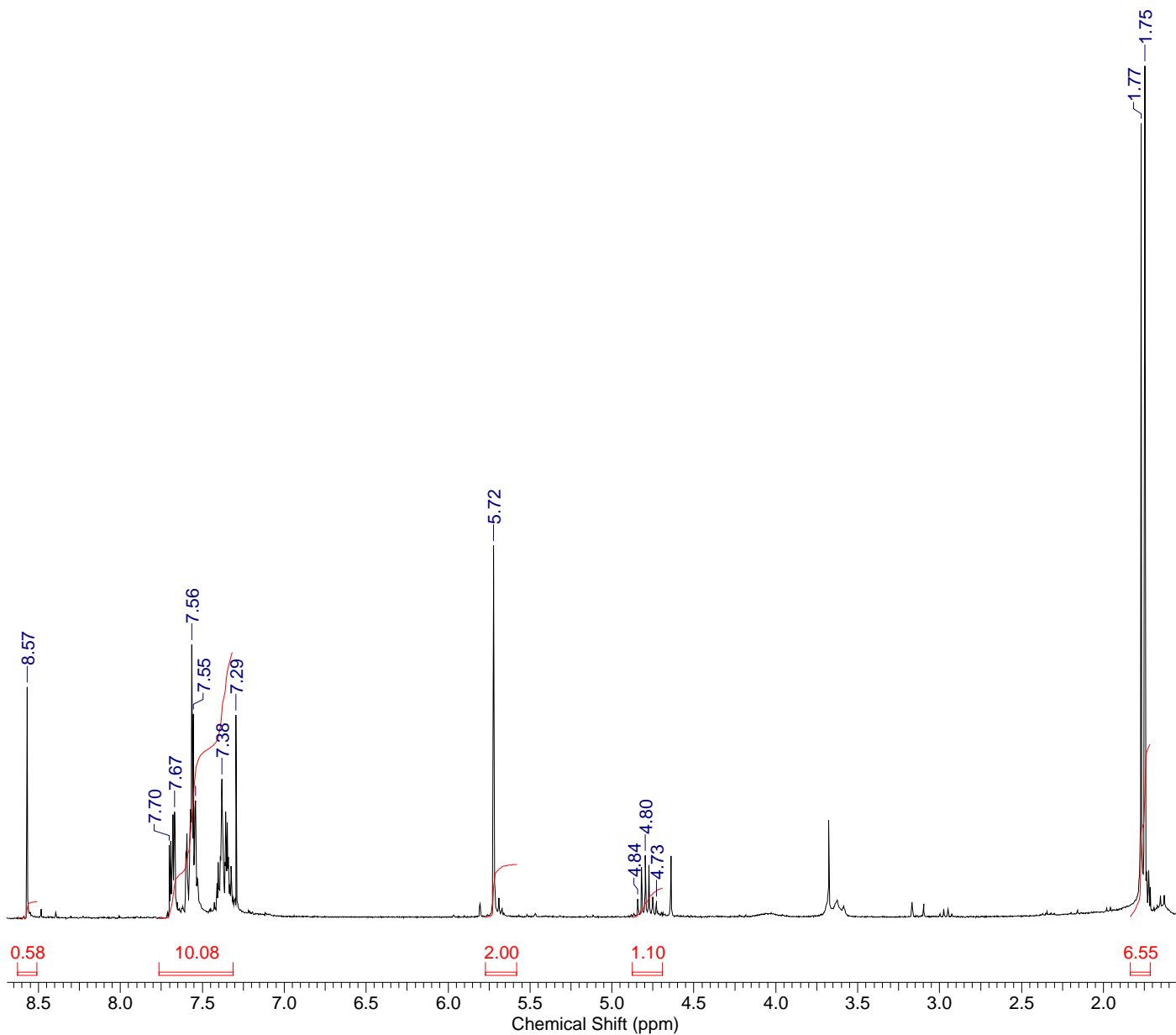


No.	(ppm)	(Hz)	Height
1	14.80	1117.1	0.1996
2	29.21	2205.1	0.1902
3	29.30	2212.3	1.0000
4	63.10	4763.8	0.1907
5	76.83	5799.9	0.8168
6	77.25	5832.0	0.8619
7	77.68	5864.0	0.8498
8	123.16	9297.9	0.0274
9	139.87	10559.6	0.2236
10	151.20	11414.3	0.3633
11	161.22	12170.6	0.0567

6a. - 6-Benzyloxy-9-isopropyl-8-phenyl-9H-purine (H-NMR)

12 Jul 2012

Acquisition Time (sec)	2.0487	Comment	ASIMJ-6p	Date	Apr 19 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-5265_ASIMJ-6p\1H-ASIMJ-6p				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	3602.31		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	1.75	524.4	1.0000
2	1.77	531.5	0.9324
3	4.73	1419.4	0.0187
4	4.80	1439.6	0.0729
5	4.84	1453.7	0.0214
6	5.72	1717.6	0.4364
7	7.29	2189.5	0.2378
8	7.38	2215.9	0.1621
9	7.54	2263.4	0.1369
10	7.55	2267.8	0.2390
11	7.56	2270.4	0.3199
12	7.67	2302.1	0.1240
13	7.70	2311.7	0.0844
14	8.57	2572.5	0.2705

No.	(ppm)	Value	Absolute Value
1	[1.72 .. 1.84]	6.555	2.56480e+8
2	[4.69 .. 4.88]	1.098	4.29797e+7
3	[5.58 .. 5.77]	2.000	7.82552e+7
4	[7.31 .. 7.76]	10.078	3.94315e+8
5	[8.51 .. 8.63]	0.583	2.28139e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

136 formula(e) evaluated with 1 results within limits (up to 50 best isotopic matches for each mass)

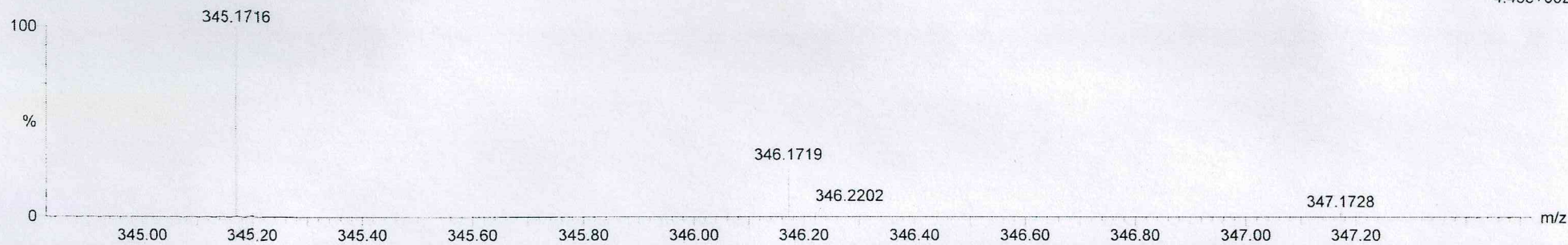
Elements Used:

C: 0-21 H: 0-1000 N: 0-4 O: 0-4 Na: 0-1

12/5473

ASIMJ-6 4 (0.087)

1: TOF MS ES+
4.45e+002



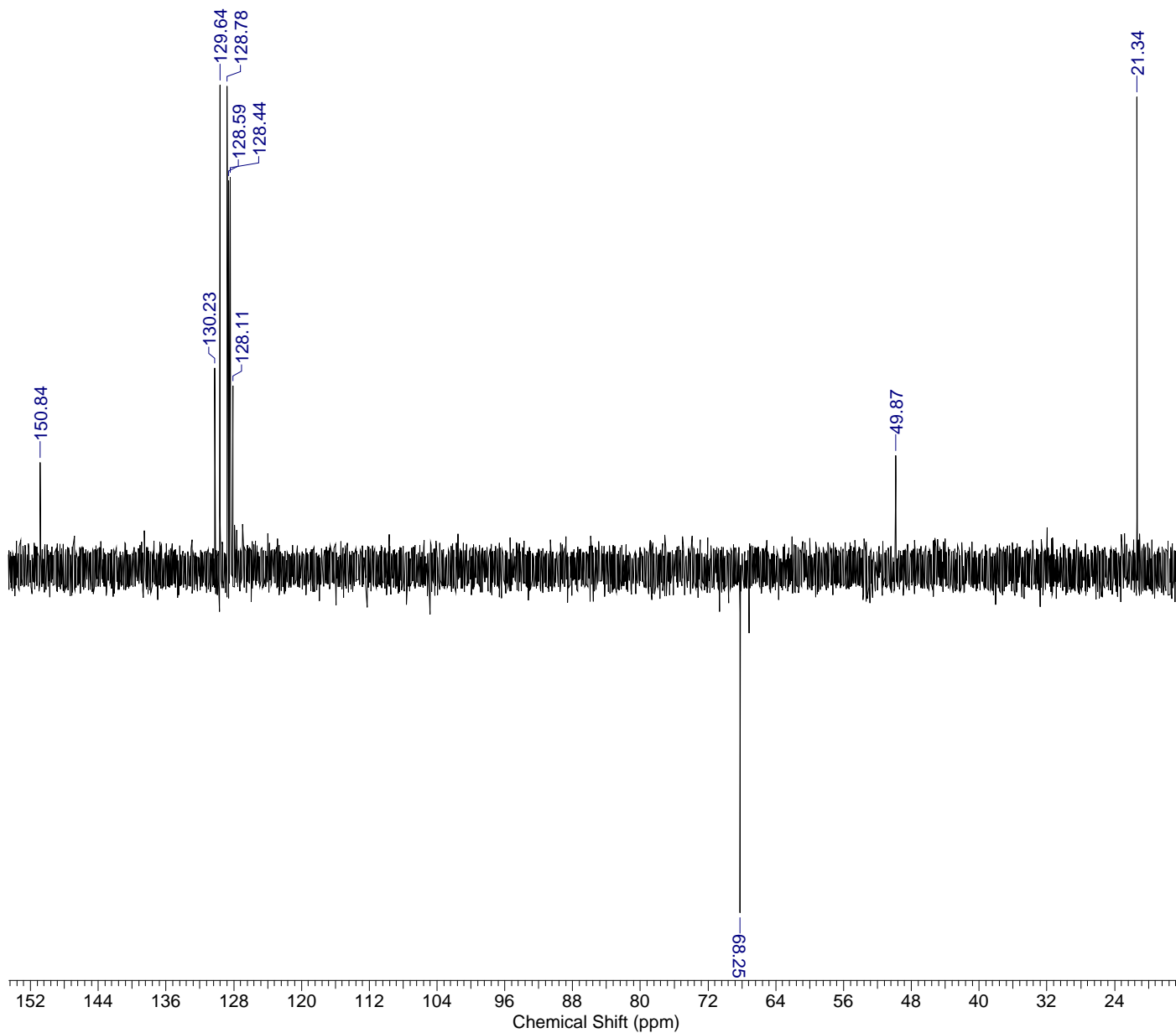
Minimum: -1.5
Maximum: 20.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
345.1716	345.1715	0.1	0.3	13.5	0.5	C21 H21 N4 O

6a. - 6-Benzyloxy-9-isopropyl-8-phenyl-9H-purine (DEPT)

12 Jul 2012

Acquisition Time (sec)	1.0000	Comment	ASIMJ-6p	Date	Apr 19 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-5265_ASIMJ-6p\DEPT-ASIMJ-6p				
Frequency (MHz)	75.49	Nucleus	¹³ C	Number of Transients	4800
Original Points Count	18116	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	18115.94		
Temperature (degree C)	30.000				

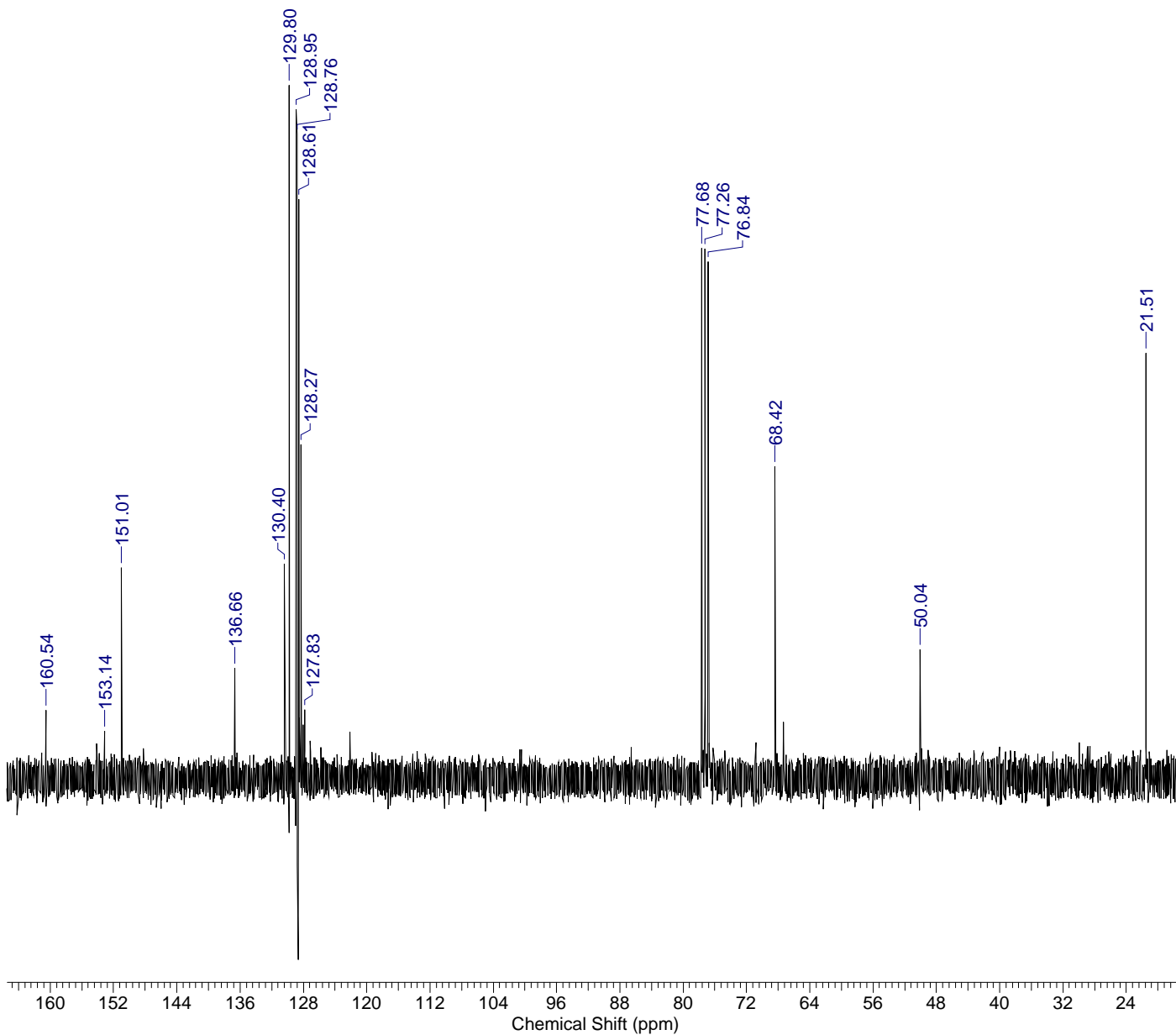


No.	(ppm)	(Hz)	Height
1	21.34	1611.3	0.9748
2	49.87	3764.7	0.2347
3	68.25	5152.5	-0.7110
4	128.11	9671.1	0.3783
5	128.44	9696.5	0.8089
6	128.47	9698.7	0.1493
7	128.59	9707.6	0.8026
8	128.78	9721.9	0.9972
9	129.64	9786.6	1.0000
10	130.23	9831.4	0.4147
11	150.84	11387.2	0.2201

6a. - 6-Benzyloxy-9-isopropyl-8-phenyl-9H-purine (C-NMR)

12 Jul 2012

Acquisition Time (sec)	1.3005	Comment	ASIMJ-6p	Date	Apr 19 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-5265_ASIMJ-6p\13C-ASIMJ-6p				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	6400
Original Points Count	23559	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	18115.94		
Temperature (degree C)	30.000				

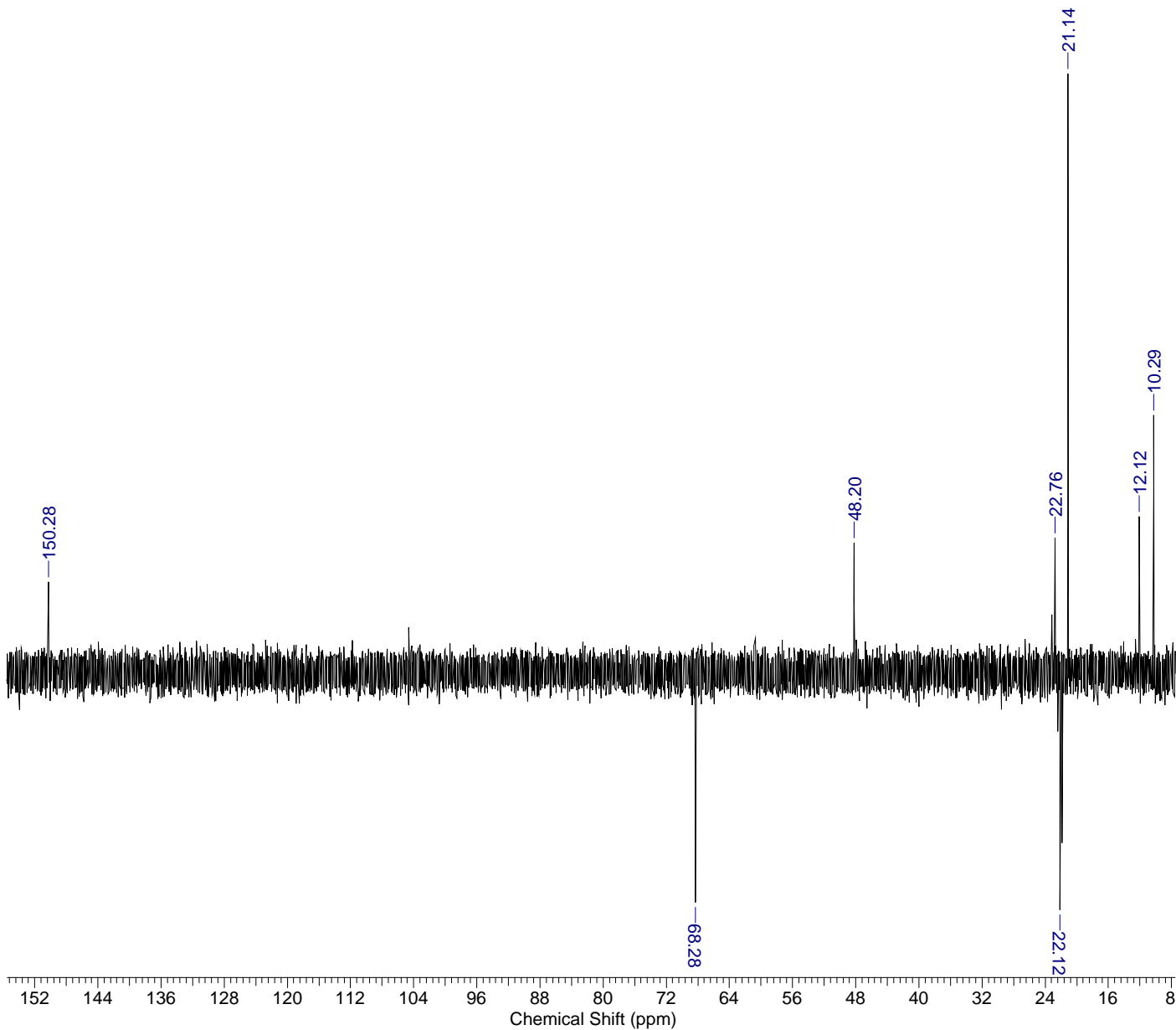


No.	(ppm)	(Hz)	Height
1	21.51	1624.0	0.6139
2	50.04	3777.4	0.1866
3	68.42	5165.1	0.4500
4	76.84	5800.9	0.7455
5	77.26	5832.4	0.7640
6	77.68	5864.5	0.7647
7	127.83	9650.0	0.0998
8	128.27	9683.8	0.4819
9	128.61	9709.2	0.8357
10	128.76	9720.2	0.9293
11	128.95	9734.6	0.9649
12	129.80	9799.3	1.0000
13	130.40	9844.1	0.3097
14	136.66	10316.8	0.1588
15	151.01	11399.9	0.3044
16	153.14	11560.8	0.0682
17	160.54	12119.7	0.0983

6b. - 8-Ethyl-9-isopropyl-6-propoxy-9H-purine (DEPT)

12 Nov 2012

Acquisition Time (sec)	1.0000	Comment	MJ-A2	Date	Sep 20 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-20186_MJ-A2\DEPT-MJ-A2				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	8000
Original Points Count	18116	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D	Sweep Width (Hz)	18115.94		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	10.29	776.7	0.4301
2	12.12	914.9	0.2606
3	21.14	1596.0	1.0000
4	22.12	1669.6	-0.3966
5	22.76	1718.2	0.2249
6	48.20	3638.9	0.2167
7	68.28	5154.9	-0.3837
8	150.28	11344.8	0.1510

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

875 formula(e) evaluated with 1 results within limits (up to 50 closest results for each mass)

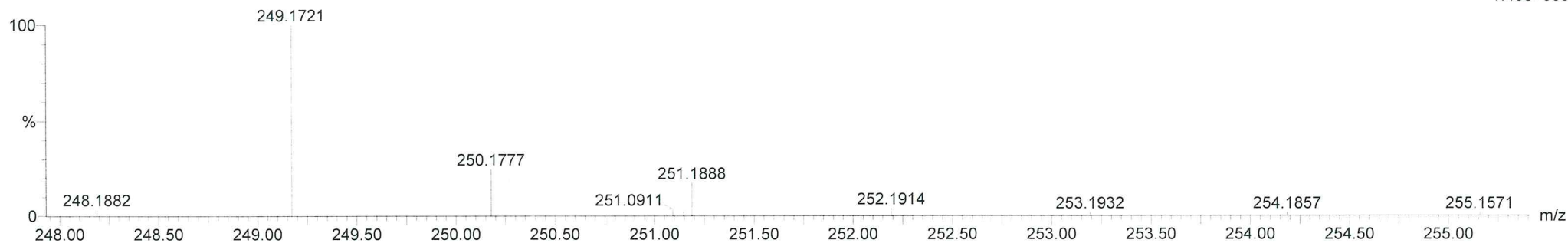
Elements Used:

C: 0-14 H: 0-1000 N: 0-10 O: 0-20 S: 0-1 Cl: 0-1

MJ-P4 8 (0.175)

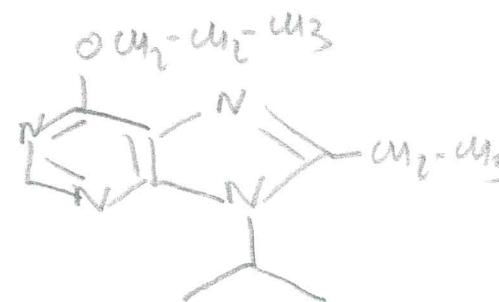
1: TOF MS ES+

1.40e+003



Minimum: -1.5
 Maximum: 5.0 5.0 50.0

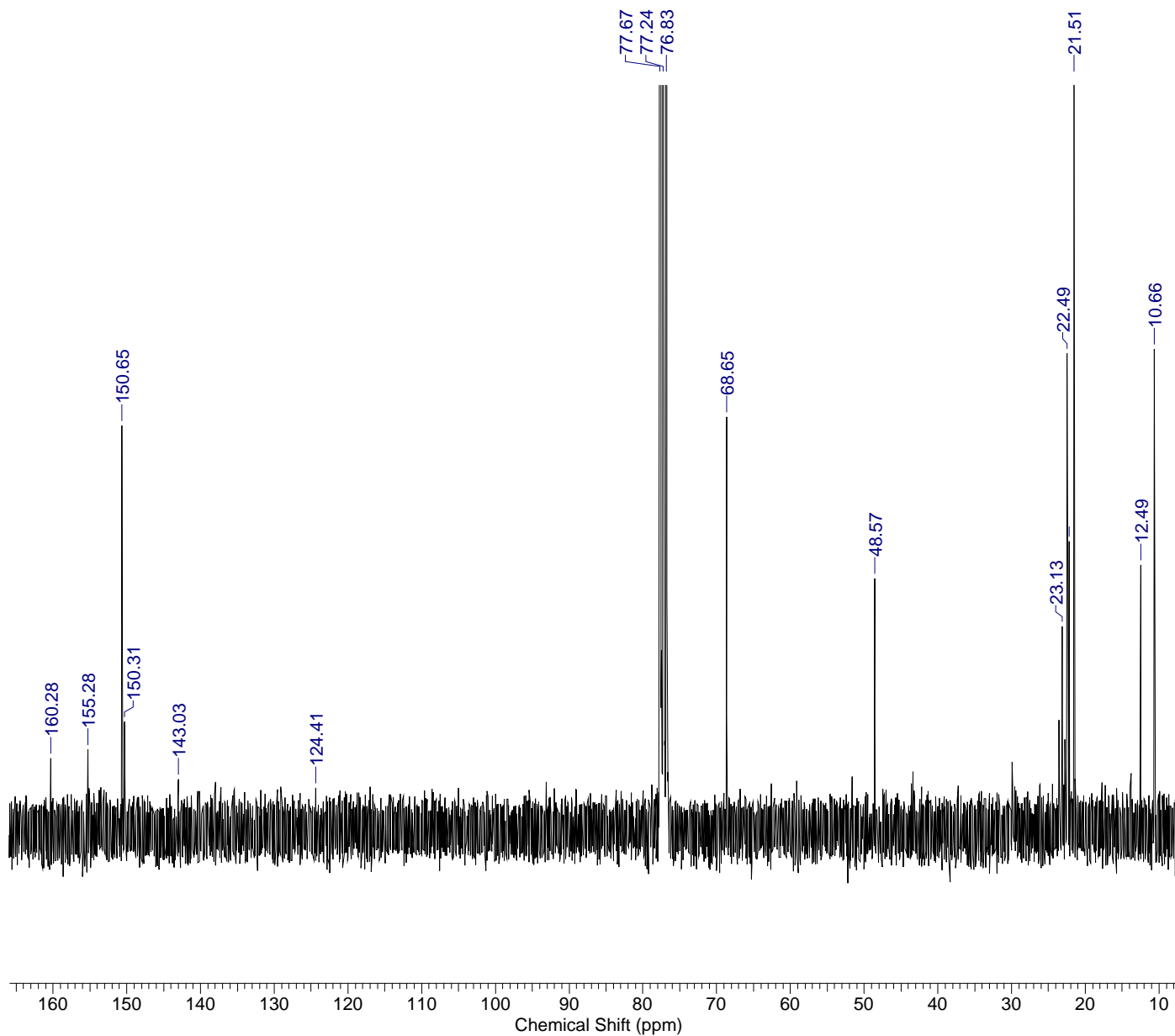
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
249.1721	249.1715	0.6	2.4	5.5	119.6	C13 H21 N4 O



6b. - 8-Ethyl-9-isopropyl-6-propoxy-9H-purine (C-NMR)

12 Nov 2012

Acquisition Time (sec)	1.3005	Comment	MJ-A2	Date	Sep 20 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-20186_MJ-A2\13C-MJ-A2				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	16000
Original Points Count	23559	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	18115.94		
Temperature (degree C)	30.000				

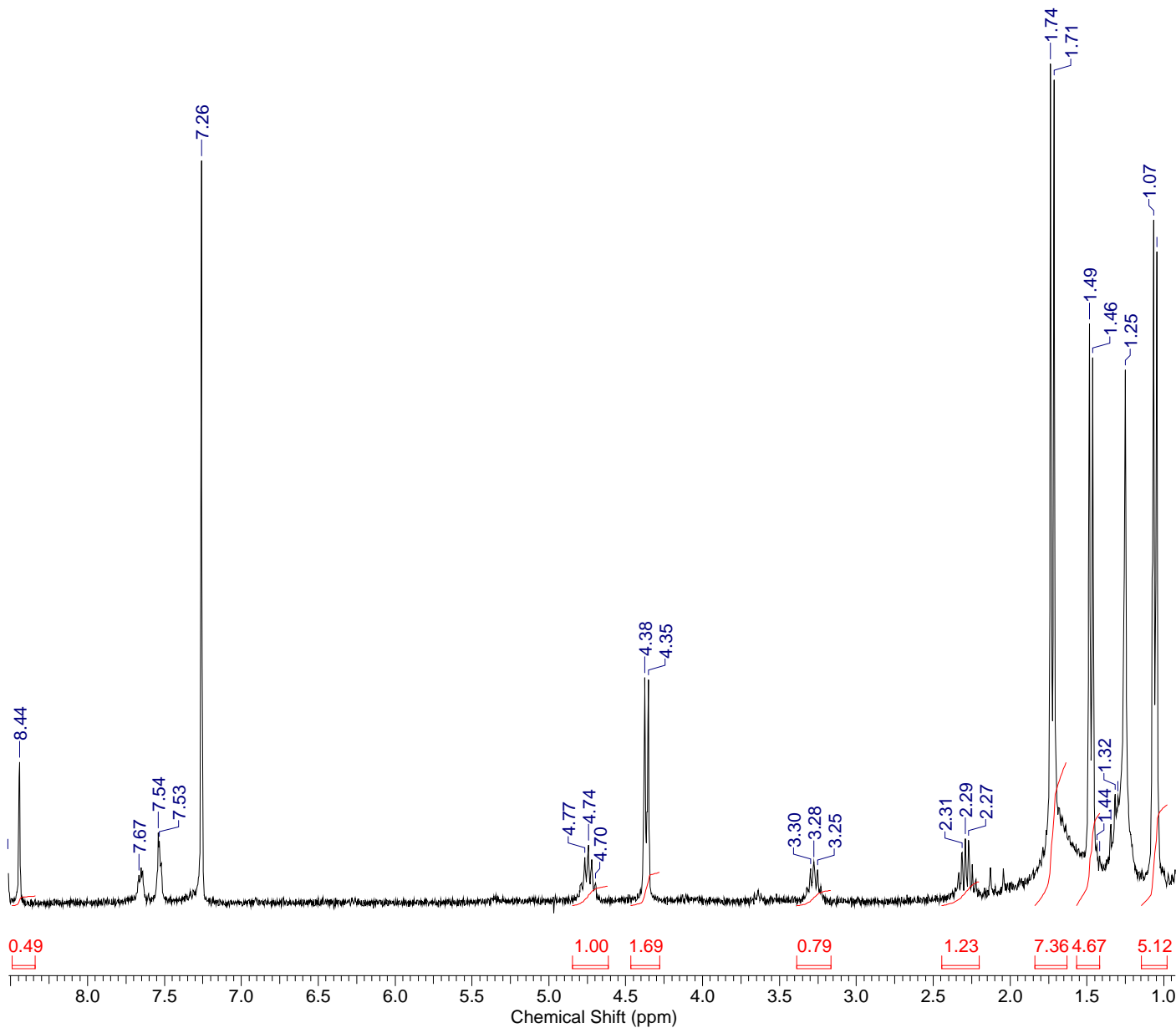


No.	(ppm)	(Hz)	Height
1	10.66	804.6	0.1251
2	12.49	942.9	0.0691
3	21.51	1624.0	0.2337
4	22.20	1676.0	0.0753
5	22.49	1697.5	0.1240
6	23.13	1746.2	0.0532
7	48.57	3666.9	0.0657
8	68.65	5182.8	0.1075
9	76.83	5799.8	0.9759
10	77.24	5831.4	0.9895
11	77.67	5863.4	1.0000
12	124.41	9391.8	0.0113
13	143.03	10797.8	0.0137
14	150.31	11347.4	0.0285
15	150.65	11372.8	0.1053
16	155.28	11722.8	0.0213
17	160.28	12099.8	0.0190

6c. - 6-Isobutoxy-8,9-diisopropyl-9H-purine (H-NMR)

2 Jul 2013

Acquisition Time (sec)	2.0487	Comment	ASIMJ-28	Date	Nov 8 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-22927_ASIMJ-28\1H-ASIMJ-28				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	3602.31		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	0.90	270.8	0.0616
2	1.05	313.9	0.7765
3	1.07	320.5	0.8141
4	1.25	375.9	0.6365
5	1.30	390.4	0.1307
6	1.32	395.2	0.1323
7	1.35	404.0	0.0966
8	1.42	426.0	0.0595
9	1.44	431.3	0.0728
10	1.46	438.8	0.6506
11	1.49	445.8	0.6911
12	1.71	514.4	0.9806
13	1.74	521.4	1.0000
14	2.27	681.1	0.0776
15	2.29	687.7	0.0800

No.	(ppm)	(Hz)	Height
16	2.31	694.3	0.0634
17	3.25	976.6	0.0428
18	3.28	983.7	0.0524
19	3.30	990.3	0.0439
20	4.35	1306.5	0.2686
21	4.38	1313.5	0.2709
22	4.70	1410.3	0.0271
23	4.74	1423.9	0.0719
24	4.77	1430.5	0.0572
25	7.26	2179.5	0.8846
26	7.53	2261.3	0.0765
27	7.54	2263.9	0.0865
28	7.67	2301.3	0.0365
29	8.44	2534.8	0.1705
30	8.52	2557.2	0.0618

No.	(ppm)	Value	Absolute Value
1	[0.98 .. 1.15]	5.125	3.00038e+8
2	[1.42 .. 1.57]	4.671	2.73462e+8
3	[1.63 .. 1.84]	7.357	4.30721e+8
4	[2.20 .. 2.44]	1.231	7.20844e+7
5	[3.16 .. 3.39]	0.786	4.60005e+7
6	[4.28 .. 4.47]	1.692	9.90542e+7
7	[4.61 .. 4.85]	1.000	5.85494e+7
8	[8.34 .. 8.49]	0.490	2.86777e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

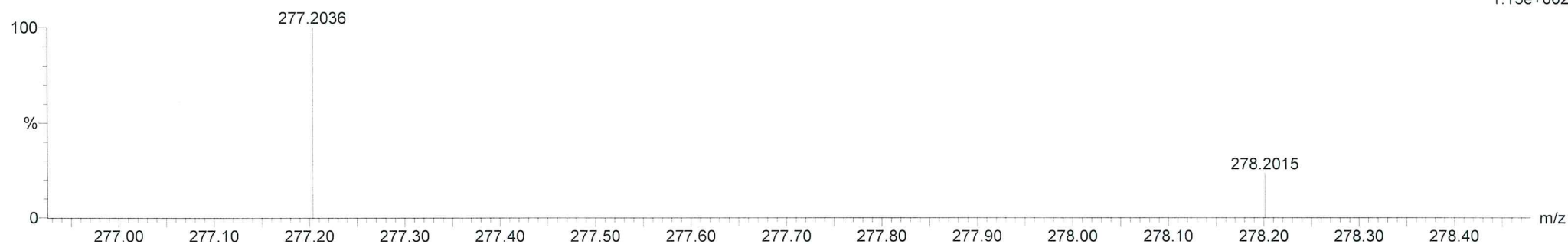
910 formula(e) evaluated with 2 results within limits (up to 50 closest results for each mass)

Elements Used:

C: 0-23 H: 0-1000 N: 0-10 O: 0-10 Cl: 0-1 Br: 0-1

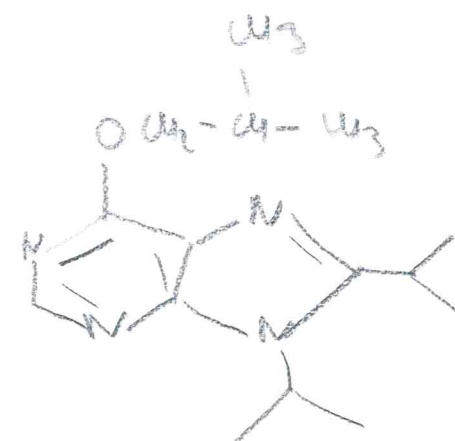
12/22452

MJ-28 96 (2.120)

1: TOF MS ES+
1.15e+002

Minimum: -1.5
 Maximum: 5.0 5.0 50.0

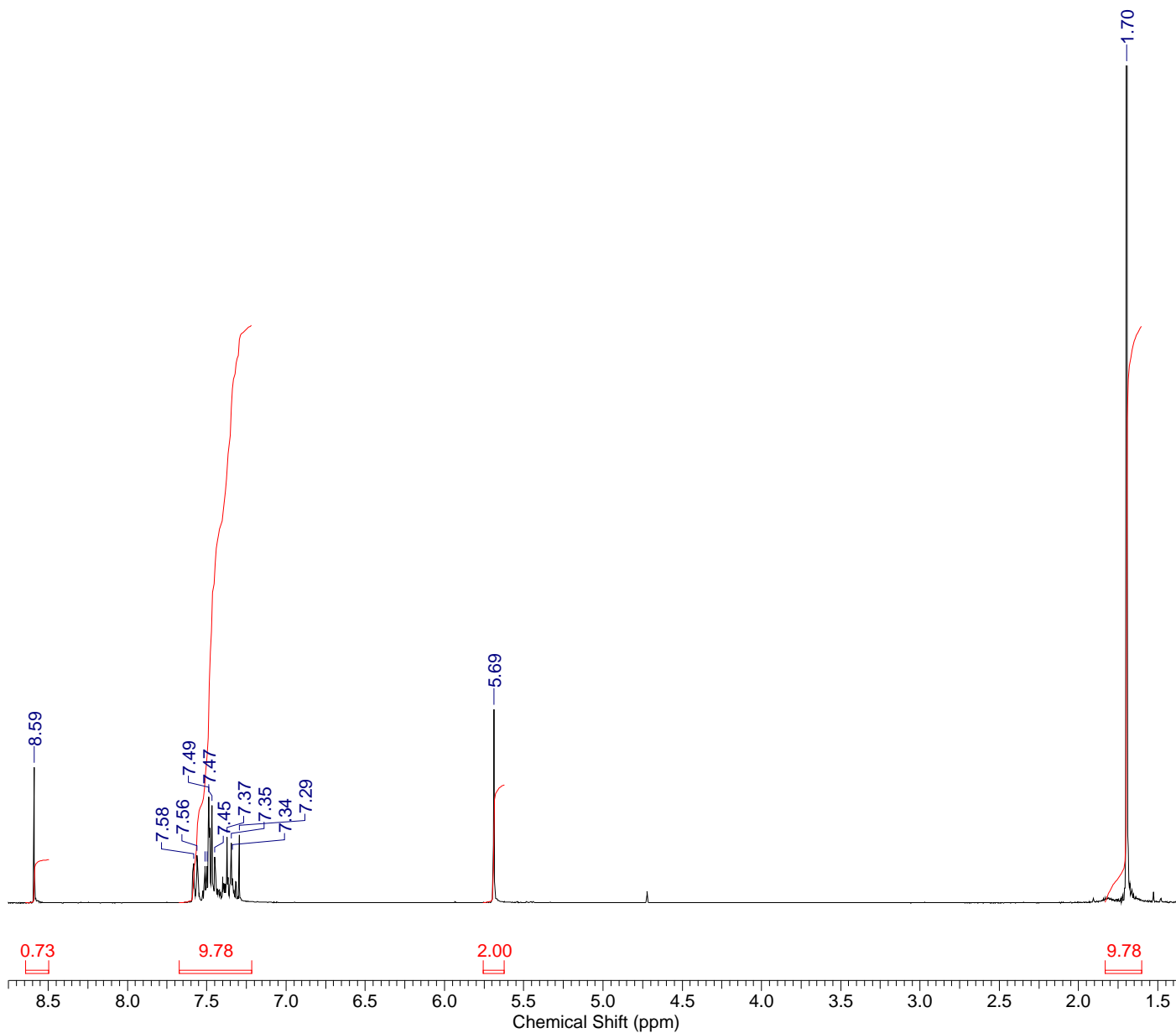
Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
277.2036	277.2028	0.8	2.9	5.5	n/a	C15 H25 N4 O
	277.2047	-1.1	-4.0	0.5	n/a	C14 H30 N2 O Cl



6d. - 9-tert-butyl-6-(benzyloxy)-8-phenyl-9H-purine (H-NMR)

12 Mar 2013

Acquisition Time (sec)	2.0487	Comment	ASIMJ-27-P2-P	Date	Oct 19 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-21939_ASIMJ-27-P2-P\1H-ASIMJ-27-P2-P				
Frequency (MHz)	300.20	Nucleus	1H	Number of Transients	64
Original Points Count	7380	Points Count	8192	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D	Sweep Width (Hz)	3602.31		
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height
1	1.70	509.0	1.0000
2	5.69	1707.9	0.1344
3	7.29	2189.9	0.0470
4	7.34	2203.1	0.0338
5	7.35	2205.3	0.0415
6	7.37	2212.8	0.0455
7	7.45	2236.1	0.0317
8	7.47	2241.4	0.0675
9	7.49	2247.5	0.0736
10	7.50	2251.0	0.0253
11	7.51	2254.6	0.0254
12	7.56	2269.5	0.0329
13	7.58	2276.1	0.0273
14	8.59	2578.2	0.0940

No.	(ppm)	Value	Absolute Value
1	[1.60 .. 1.83]	9.778	8.16565e+8
2	[5.62 .. 5.76]	2.000	1.67019e+8
3	[7.22 .. 7.67]	9.780	8.16722e+8
4	[8.50 .. 8.64]	0.727	6.07282e+7

Elemental Composition Report

Single Mass Analysis

Tolerance = 5.0 PPM / DBE: min = -1.5, max = 50.0

Element prediction: Off

Number of isotope peaks used for i-FIT = 3

Monoisotopic Mass, Even Electron Ions

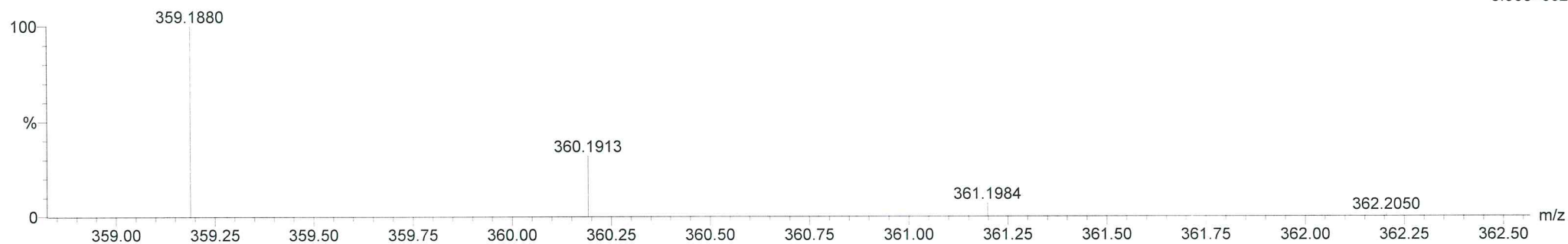
635 formula(e) evaluated with 1 results within limits (up to 50 closest results for each mass)

Elements Used:

C: 0-22 H: 0-1000 N: 0-5 O: 0-20 Na: 0-1

12/21702

ASIMJ-27P3 14 (0.317)

1: TOF MS ES+
8.90e+002

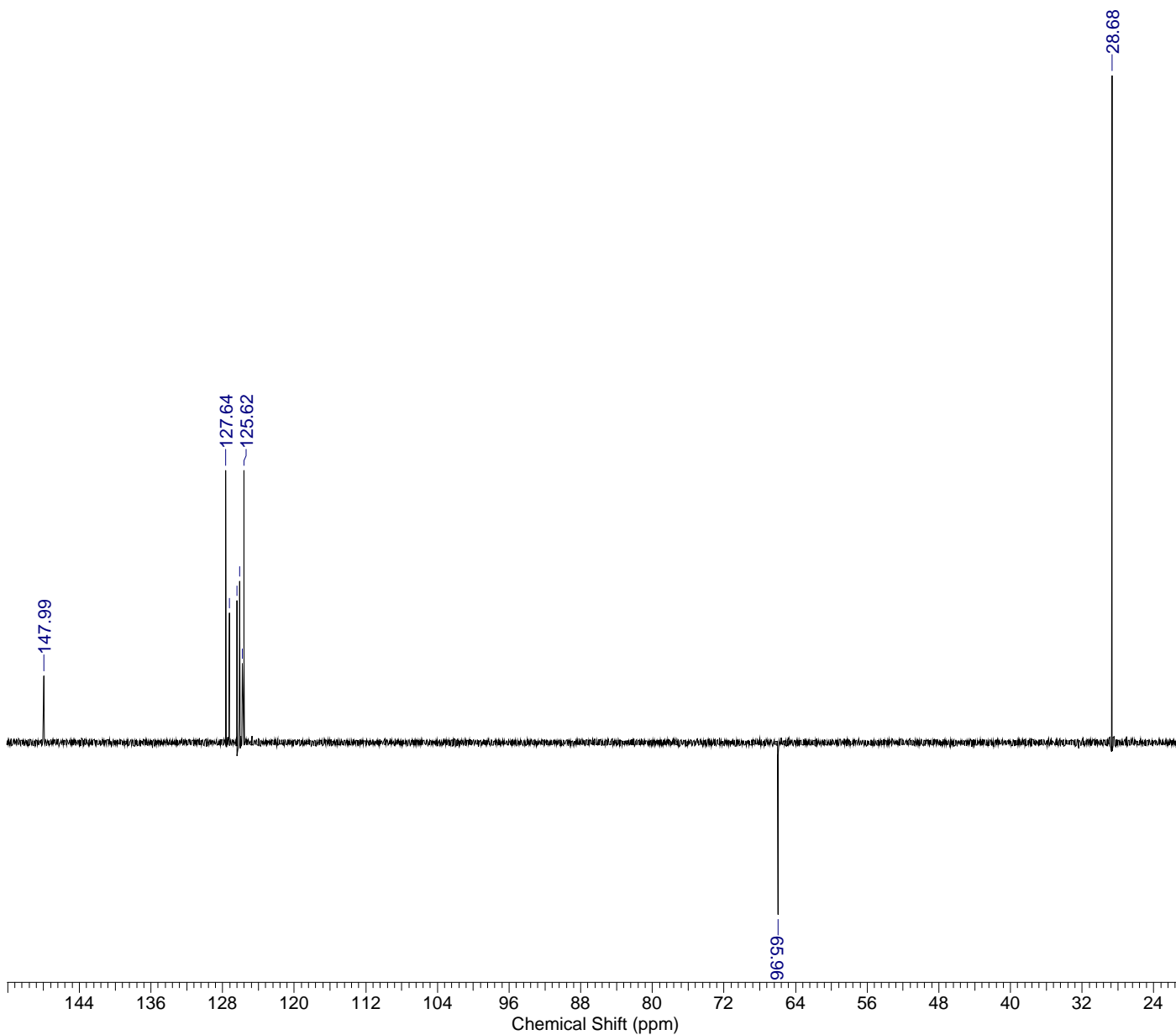
Minimum: -1.5
Maximum: 5.0 5.0 50.0

Mass	Calc. Mass	mDa	PPM	DBE	i-FIT	Formula
359.1880	359.1872	0.8	2.2	13.5	10.3	C22 H23 N4 O

6d. - 9-tert-butyl-6-(benzyloxy)-8-phenyl-9H-purine (DEPT)

12 Nov 2012

Acquisition Time (sec)	1.0000	Comment	ASIMJ-27-P2-P	Date	Oct 22 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-21939_ASIMJ-27-P2-P\DEPT-ASIMJ-27-P2-P				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	5000
Original Points Count	18116	Points Count	32768	Pulse Sequence	DEPT135
Solvent	CHLOROFORM-D			Sweep Width (Hz)	18115.94
Temperature (degree C)	30.000				

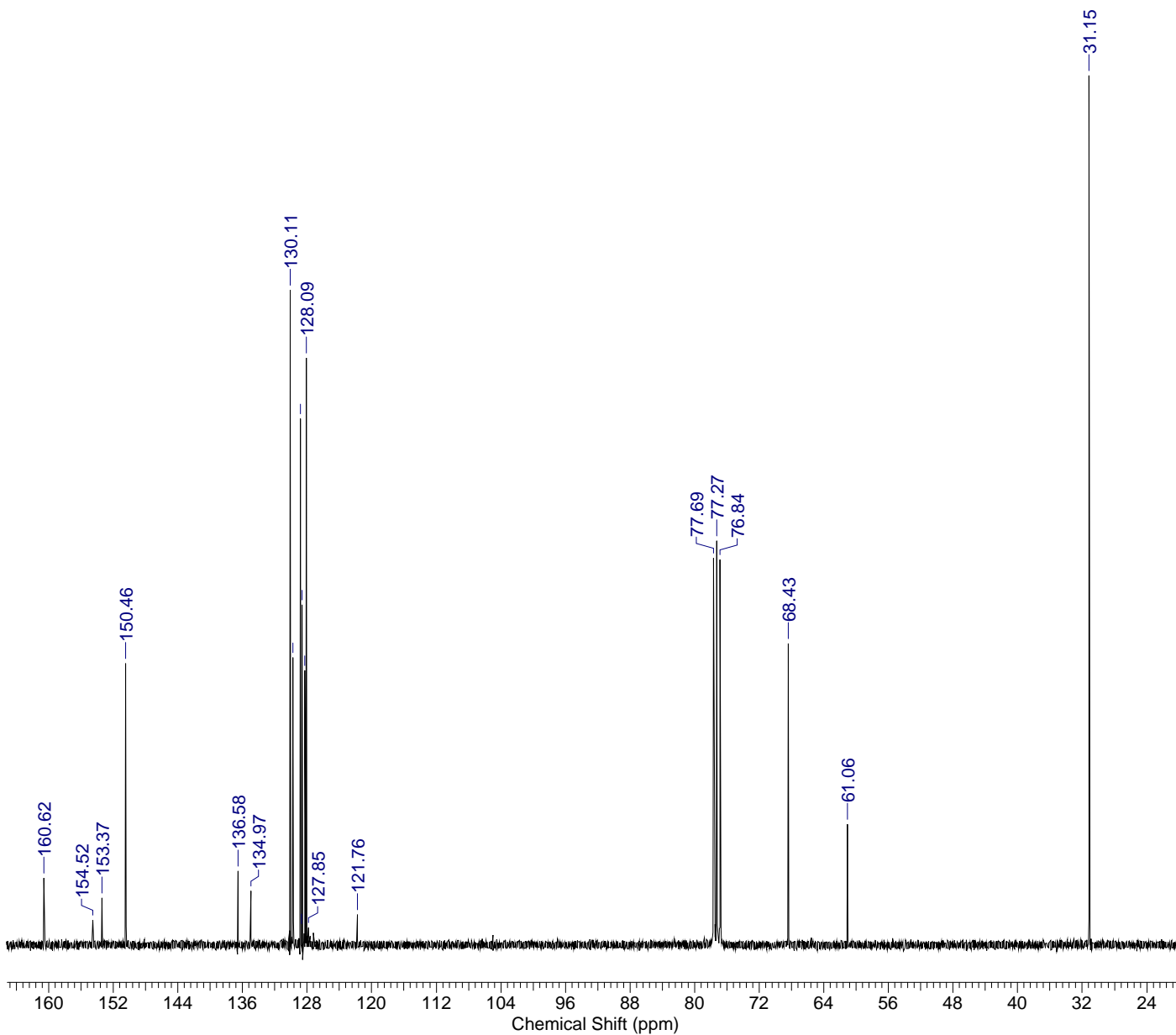


No.	(ppm)	(Hz)	Height
1	28.68	2165.1	1.0000
2	65.96	4979.8	-0.2578
3	125.62	9483.5	0.4080
4	125.81	9497.8	0.1184
5	126.12	9521.1	0.2422
6	126.38	9541.0	0.2129
7	127.25	9606.8	0.1947
8	127.64	9636.1	0.4085
9	147.99	11171.9	0.1000

6d. - 9-tert-butyl-6-(benzyloxy)-8-phenyl-9H-purine (C-NMR)

12 Mar 2013

Acquisition Time (sec)	1.3005	Comment	ASIMJ-27-P2-P	Date	Oct 22 2012
File Name	C:\Users\usuario\Documents\Espectros Asier\12-21939_ASIMJ-27-P2-P\13C-ASIMJ-27-P2-P				
Frequency (MHz)	75.49	Nucleus	13C	Number of Transients	10000
Original Points Count	23559	Points Count	32768	Pulse Sequence	s2pul
Solvent	CHLOROFORM-D			Sweep Width (Hz)	18115.94
Temperature (degree C)	30.000				



No.	(ppm)	(Hz)	Height	No.	(ppm)	(Hz)	Height
1	31.15	2351.6	1.0000	12	128.67	9713.6	0.0190
2	61.06	4609.5	0.1388	13	128.78	9721.9	0.0381
3	68.43	5166.3	0.3470	14	128.85	9727.4	0.6056
4	76.84	5800.9	0.4431	15	129.72	9793.2	0.3308
5	77.27	5833.0	0.4649	16	130.11	9822.5	0.7535
6	77.69	5865.1	0.4451	17	134.97	10189.6	0.0624
7	121.76	9192.3	0.0353	18	136.58	10310.7	0.0852
8	127.85	9651.7	0.0204	19	150.46	11358.4	0.3239
9	128.09	9669.9	0.6750	20	153.37	11578.5	0.0544
10	128.27	9683.8	0.3159	21	154.52	11665.3	0.0286
11	128.59	9707.5	0.3914	22	160.62	12125.8	0.0769