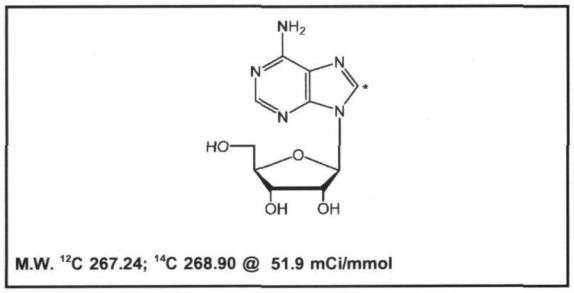
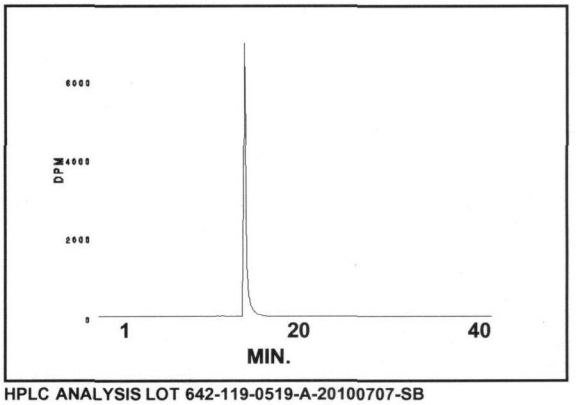
Product Data Sheet

MC-151

Adenosine, [8-^{14}C]-



M.W. ^{12}C 267.24; ^{14}C 268.90 @ 51.9 mCi/mmol



HPLC ANALYSIS LOT 642-119-0519-A-20100707-SB
File Name: int20671 Date and Time: 8/23/2010 3:37:47 PM
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.93	12.65330	118.80868
2	0.19	14.21330	23.60499
3	98.88	14.86670	12602.43257
Totals	100.00		12744.84624

Lot #: 642-119-0519-A-20100707-SB

Specific Activity: 51.9 mCi/mmol

Concentration: 0.1 mCi/ml; 518.12 μg/ml

Packaged in: Sterile water solution

Date of Analysis: August 23, 2010

Radiochemical Purity: 98.8%

Stability and Storage Recommendation: The rate of decomposition is approximately 0.1%/month for the first six months after purification when stored at 0-5°C.

Product Warranty: Stated on the reverse side of this Product Data Sheet.

Caution: Not For Use In Humans Or Clinical Diagnosis. This product is intended for investigational or manufacturing use only. It is pharmaceutically unrefined and is not intended for use in humans. Responsibility for its use in humans, as a diagnostic reagent, and compliance with federal laws rests solely with the purchaser.

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MC-151

Adenosine, [8-^{14}C]-

Lot 642-119-0519-A-20100707-SB

A) All chromatograms were run using the HPLC method described on the Product Data Sheet.

Concentrations and volumes:

Standard solution concentration was 0.5 mg/ml.

Adenosine, [8-^{14}C]- concentration was 50.0 µCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **Adenosine, [8-^{14}C]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **Adenosine, [8-^{14}C]-** + 2.0 µl standard.

Volume of co-injection was 4.0 µl.

Volume of blank injection was 2.0 µl.

B) Mass spectrometry – Positive mode

C) NMR

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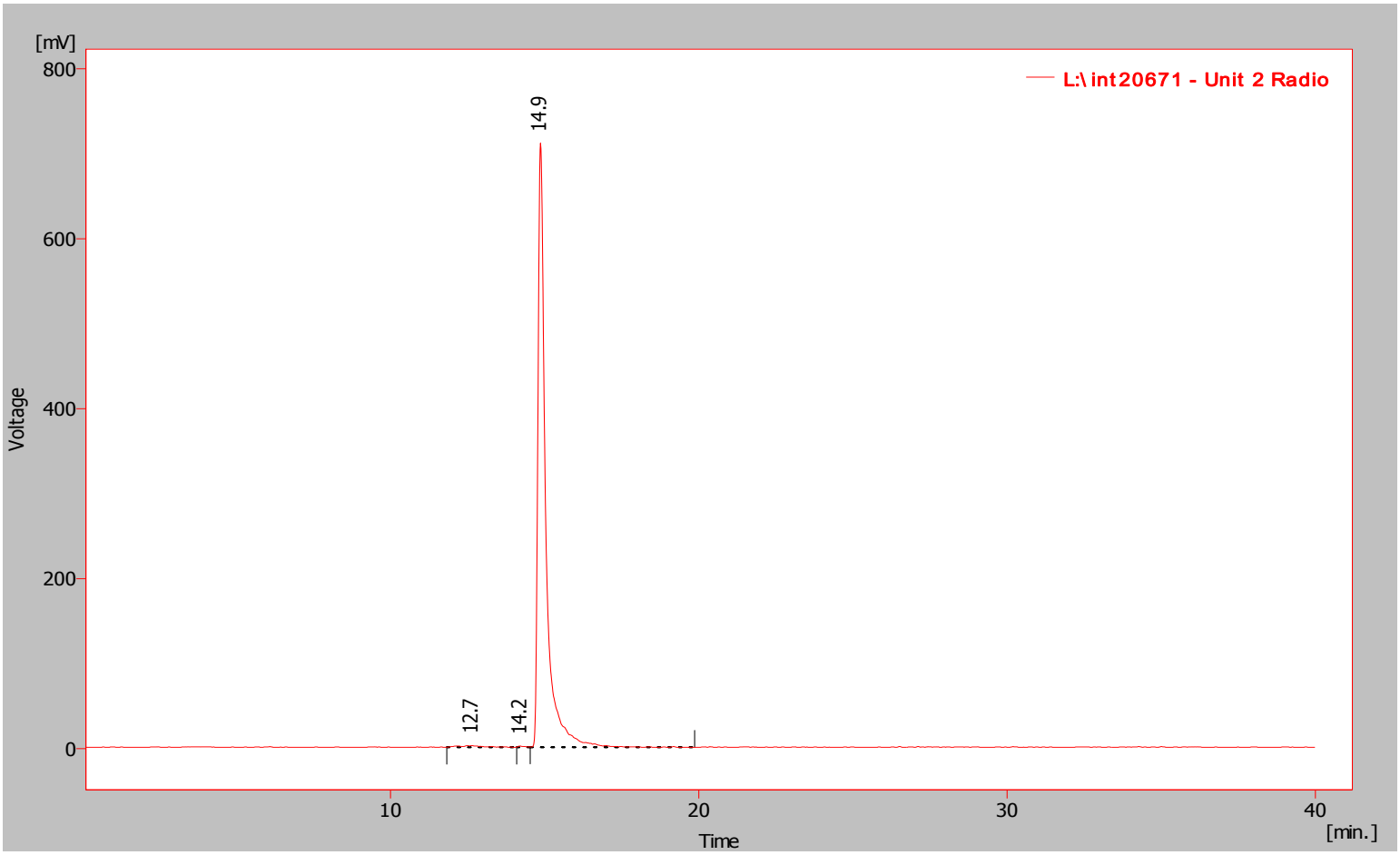
Adenosine, [8-14C]-
Lot 642-119-0519-A-20100707-SB

Chromatogram Info:

File Name	: L:\int20671	File Created	: 10/18/2013 10:45:22 AM
Origin	: Acquired, Acquisition started 8/23/2010 2:57:48 PM	Acquired Date	: 8/23/2010 3:37:47 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 14C material alone		
Created	: 6/16/2007 8:19 AM	Modified	: 10/18/2013 11:00 AM
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



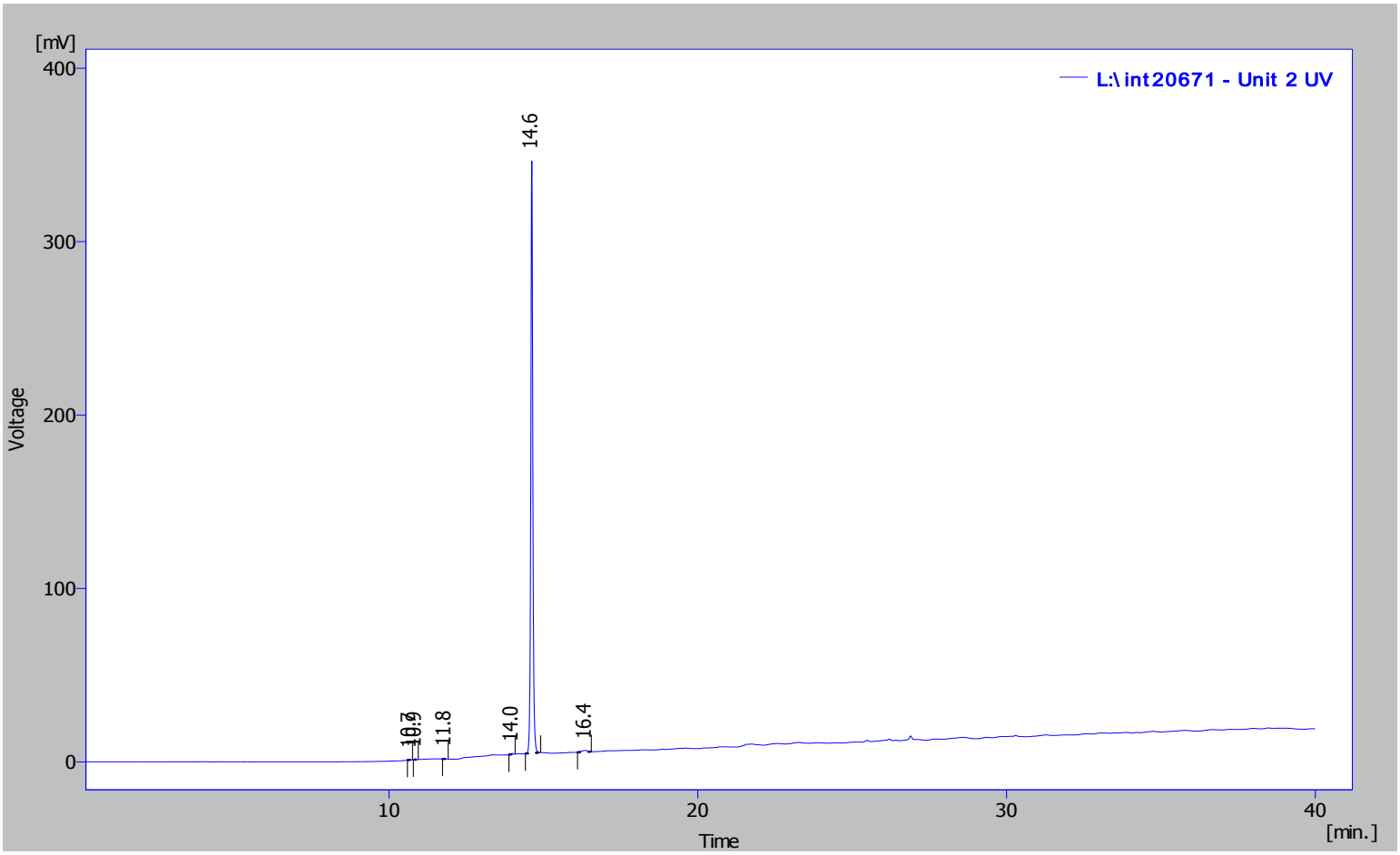
Result Table (Uncal - L:\int20671 - Unit 2 Radio)

	Compound Name	Reten. Time [min]	Area [%]	Area [mV.s]	Height [mV]	Height [%]	Efficiency [th.pl]
1		12.653	0.932	118.809	2.017	0.282	3455.214
2		14.227	0.182	23.213	1.489	0.208	14302.107
3		14.867	98.886	12602.824	710.946	99.509	21257.613
		Total	100.000	12744.846	714.452	100.000	

MC-151
Adenosine, [8-14C]-
Lot 642-119-0519-A-20100707-SB

Chromatogram Info:

File Name	: L:\int20671	File Created	: 10/18/2013 10:45:22 AM
Origin	: Acquired, Acquisition started 8/23/2010 2:57:48 PM	Acquired Date	: 8/23/2010 3:37:47 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 14C material alone		
Created	: 6/16/2007 8:19 AM	Modified	: 10/18/2013 11:02 AM
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int20671 - Unit 2 UV)

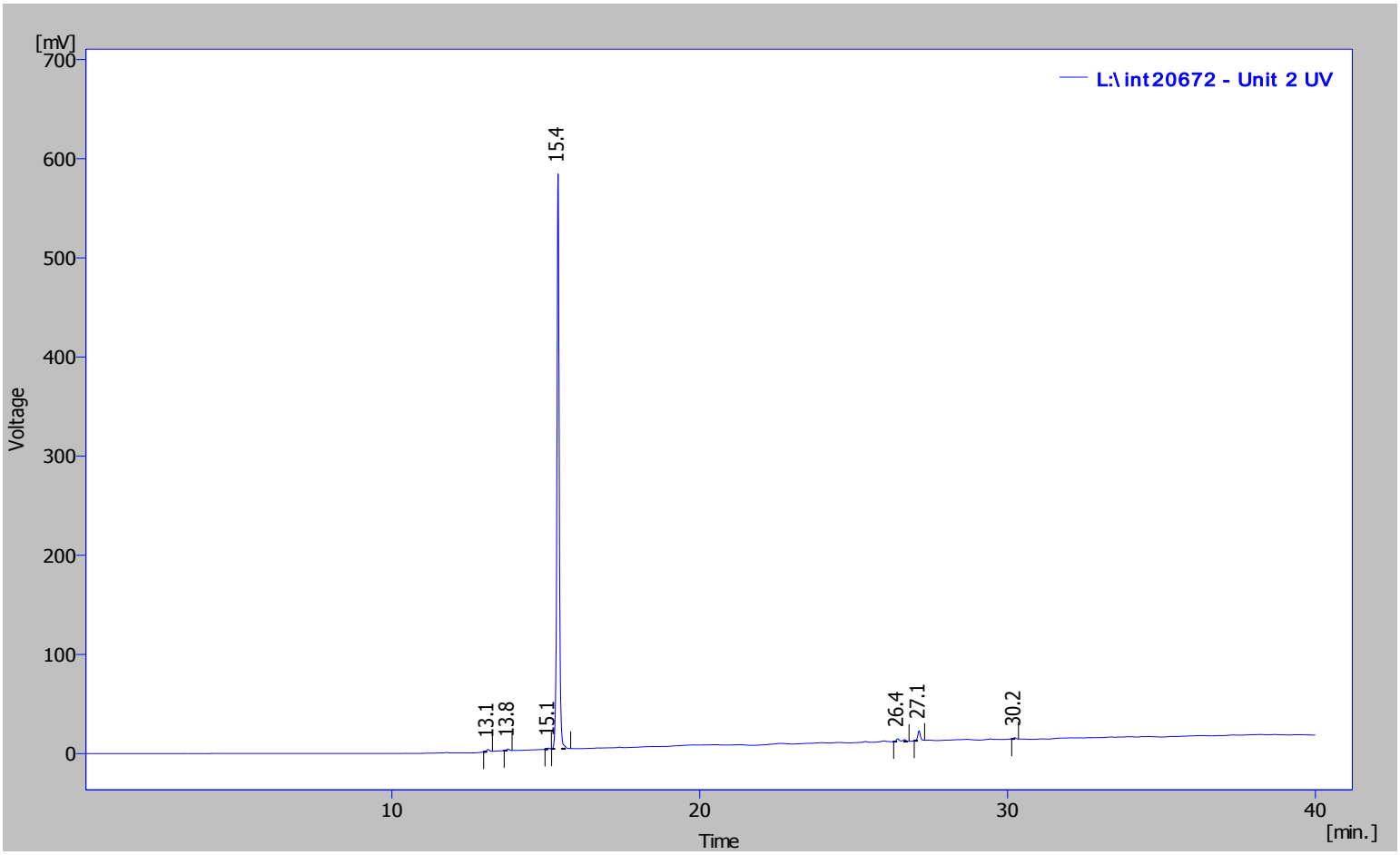
	Compound Name	Reten. Time [min]	Area [%]	Area [mV.s]	Height [mV]	Height [%]	Efficiency [th.pl]
1		10.680	0.122	1.912	0.402	0.117	98735.265
2		10.853	0.128	2.003	0.559	0.162	181273.177
3		11.810	0.136	2.124	0.552	0.160	192639.289
4		13.990	0.152	2.384	0.599	0.174	243965.105
5		14.623	98.737	1545.075	341.506	99.141	241772.245
6		16.357	0.725	11.346	0.847	0.246	30623.442
		Total	100.000	1564.844	344.465	100.000	

MC-151
Adenosine, [8-14C]-
Lot 642-119-0519-A-20100707-SB

Chromatogram Info:

File Name	: L:\int20672	File Created	: 10/18/2013 10:45:22 AM
Origin	: Acquired, Acquisition started 8/24/2010 9:05:26 AM	Acquired Date	: 8/24/2010 9:45:25 AM
Project	: Test	By	: Administrator

Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of standard material alone		
Created	: 6/16/2007 8:19 AM	Modified	: 10/18/2013 11:02 AM
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



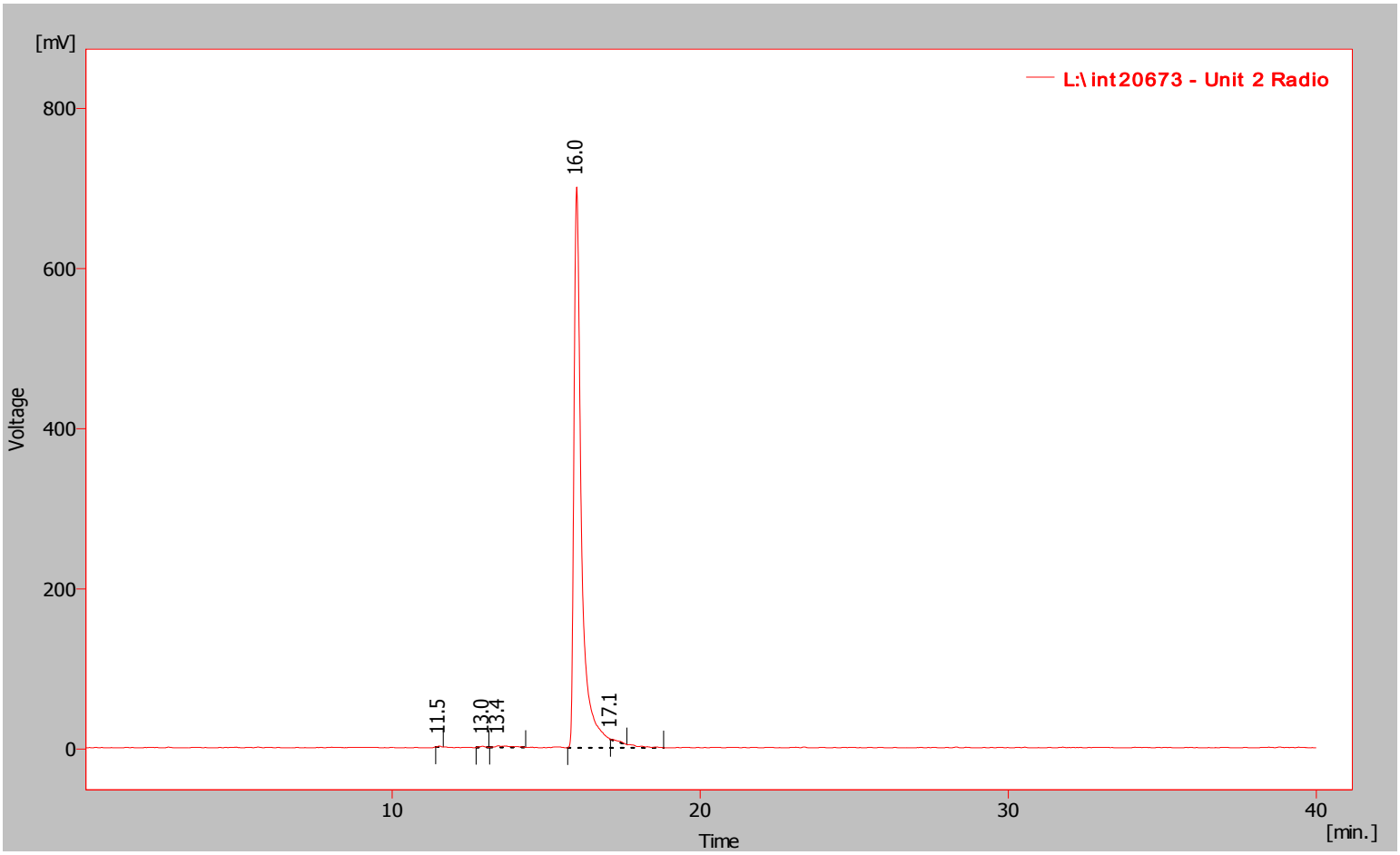
Result Table (Uncal - L:\int20672 - Unit 2 UV)

	Compound Name	Reten. Time [min]	Area [%]	Area [mV.s]	Height [mV]	Height [%]	Efficiency [th.pl]
1		13.120	0.452	14.321	2.226	0.372	89309.274
2		13.777	0.267	8.445	1.583	0.264	151412.091
3		15.090	0.178	5.641	1.099	0.184	181656.414
4		15.397	96.114	3044.179	579.813	96.852	223434.389
5		26.430	0.931	29.490	2.792	0.466	386993.875
6		27.123	1.831	58.004	9.915	1.656	503165.515
7		30.230	0.227	7.183	1.234	0.206	541791.981
		Total	100.000	3167.263	598.662	100.000	

MC-151
Adenosine, [8-14C]-
Lot 642-119-0519-A-20100707-SB

Chromatogram Info:

File Name	: L:\int20673	File Created	: 10/18/2013 10:45:22 AM
Origin	: Acquired, Acquisition started 8/24/2010 10:45:15 AM	Acquired Date	: 8/24/2010 11:25:14 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard		
Created	: 6/16/2007 8:19 AM	Modified	: 10/18/2013 11:03 AM
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



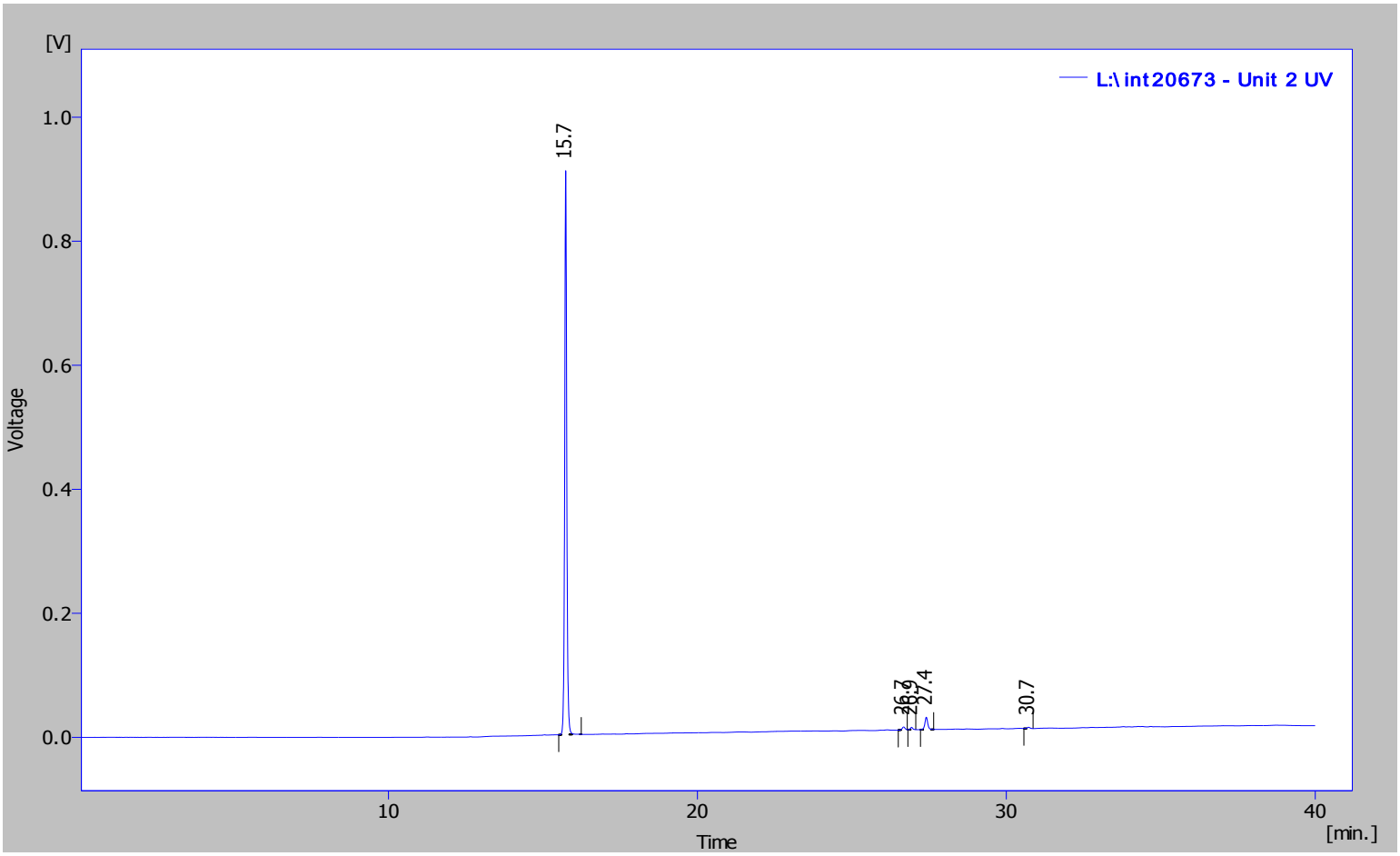
Result Table (Uncal - L:\int20673 - Unit 2 Radio)

	Compound Name	Reten. Time [min]	Area [%]	Area [mV.s]	Height [mV]	Height [%]	Efficiency [th.pl]
1		11.520	0.066	8.208	1.317	0.187	51056.640
2		12.953	0.146	18.138	1.479	0.210	30939.171
3		13.447	0.553	68.540	2.010	0.285	5020.789
4		15.993	98.989	12274.503	700.393	99.251	27581.154
5		17.107	0.245	30.427	0.479	0.068	1459093.290
		Total	100.000	12399.815	705.679	100.000	

MC-151
Adenosine, [8-14C]-
Lot 642-119-0519-A-20100707-SB

Chromatogram Info:

File Name	: L:\int20673	File Created	: 10/18/2013 10:45:22 AM
Origin	: Acquired, Acquisition started 8/24/2010 10:45:15 AM	Acquired Date	: 8/24/2010 11:25:14 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 14C material co-injected with standard		
Created	: 6/16/2007 8:19 AM	Modified	: 10/18/2013 11:05 AM
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	: The impurities came from standard material.		



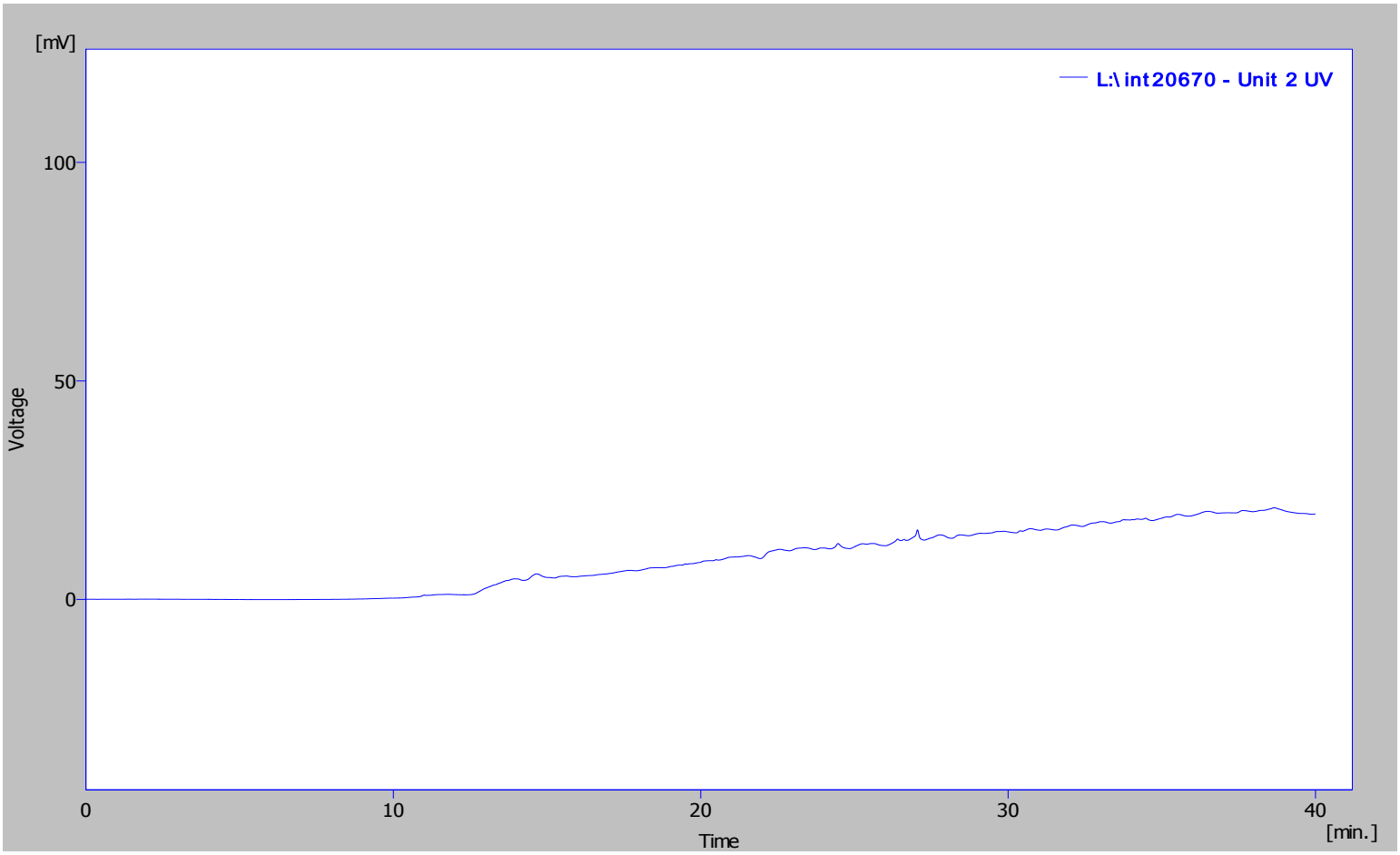
Result Table (Uncal - L:\int20673 - Unit 2 UV)

	Compound Name	Reten. Time [min]	Area [%]	Area [mV.s]	Height [mV]	Height [%]	Efficiency [th.pl]
1		15.737	95.756	4243.776	909.482	96.770	279987.844
2		26.677	0.660	29.229	4.693	0.499	394251.078
3		26.933	0.428	18.981	3.755	0.399	627928.222
4		27.410	2.870	127.191	19.896	2.117	445424.755
5		30.717	0.286	12.692	2.010	0.214	522706.541
		Total	100.000	4431.869	939.835	100.000	

MC-151
Adenosine, [8-14C]-
Lot 642-119-0519-A-20100707-SB

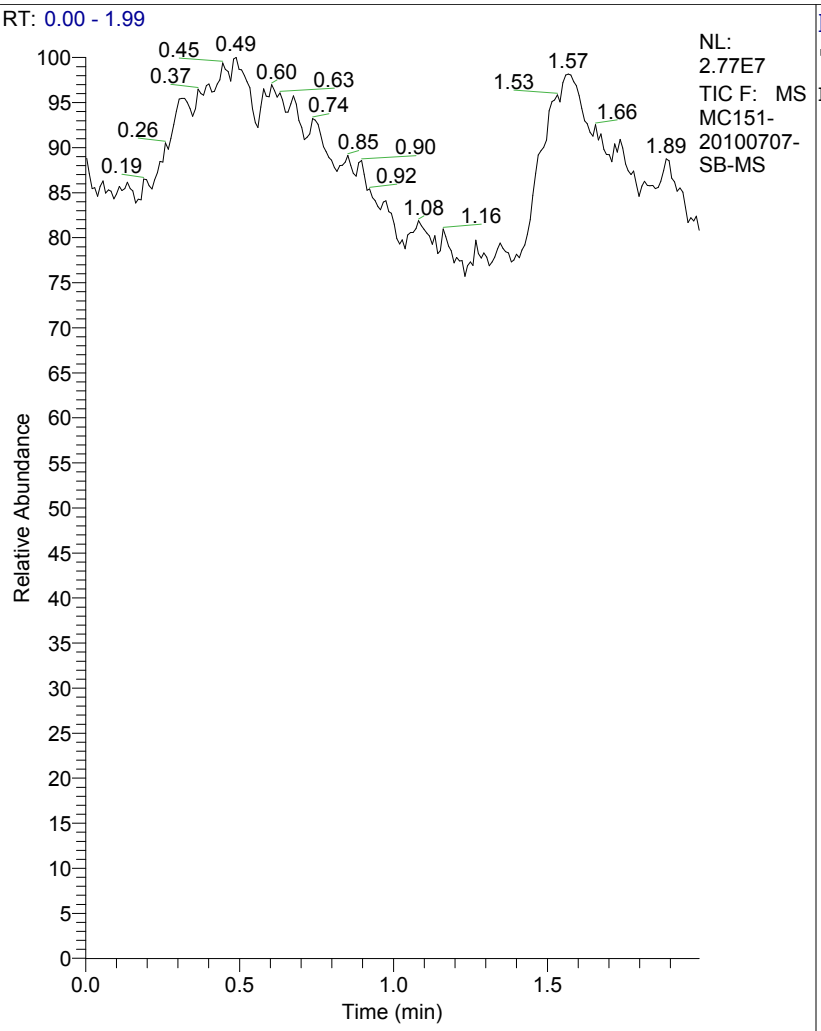
Chromatogram Info:

File Name	: L:\int20670	File Created	: 10/18/2013 10:45:22 AM
Origin	: Acquired, Acquisition started 8/23/2010 1:32:19 PM	Acquired Date	: 8/23/2010 2:12:18 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of blank injection		
Created	: 6/16/2007 8:19 AM	Modified	: 10/18/2013 11:06 AM
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



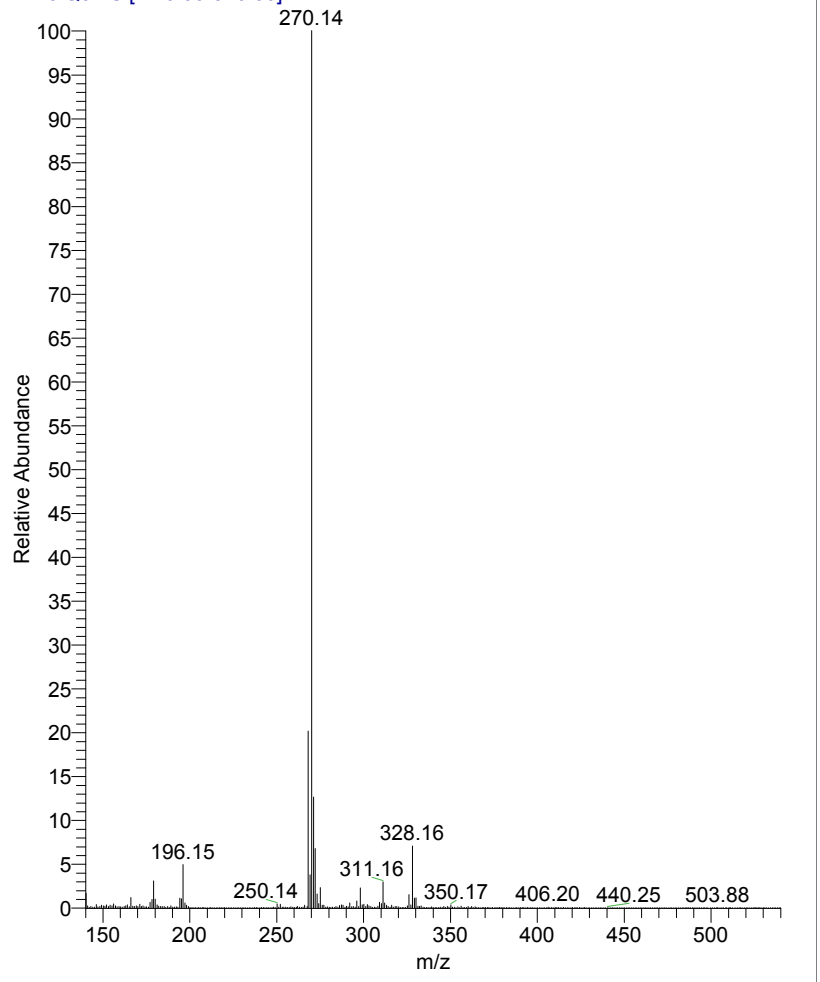
Result Table (Uncal - L:\int20670 - Unit 2 UV)

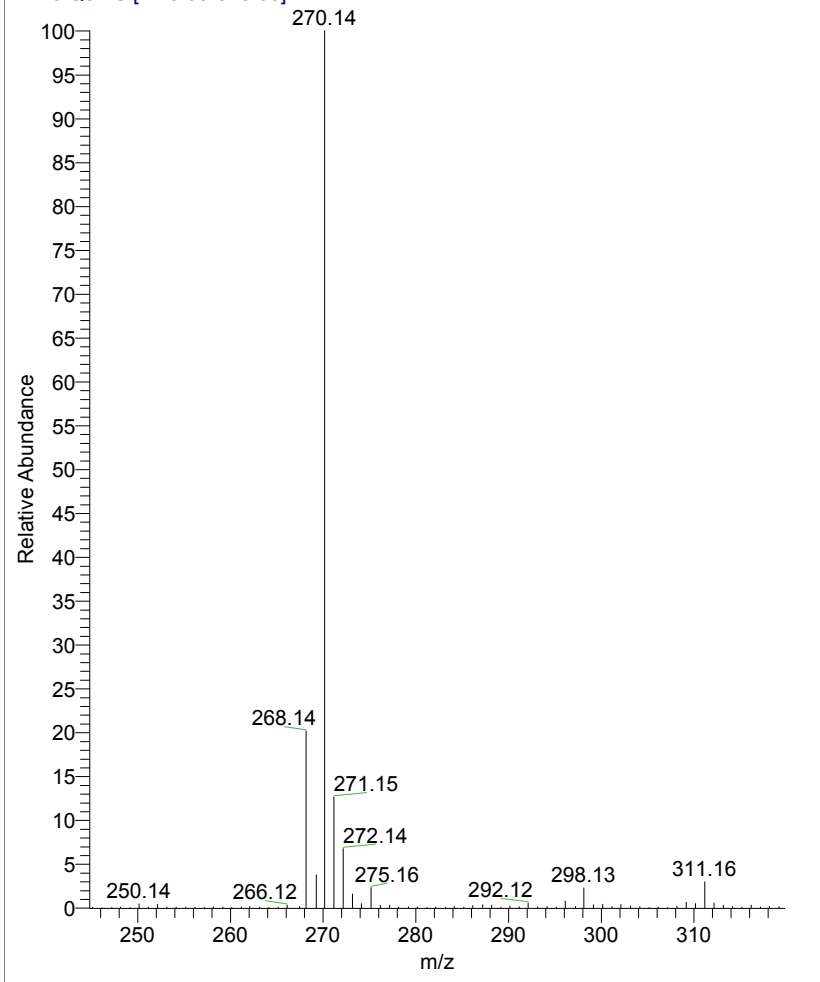
Compound Name	Reten. Time [min]	Area [%]	Area [mV.s]	Height [mV]	Height [%]	Efficiency [th.pl]
No peak to report						



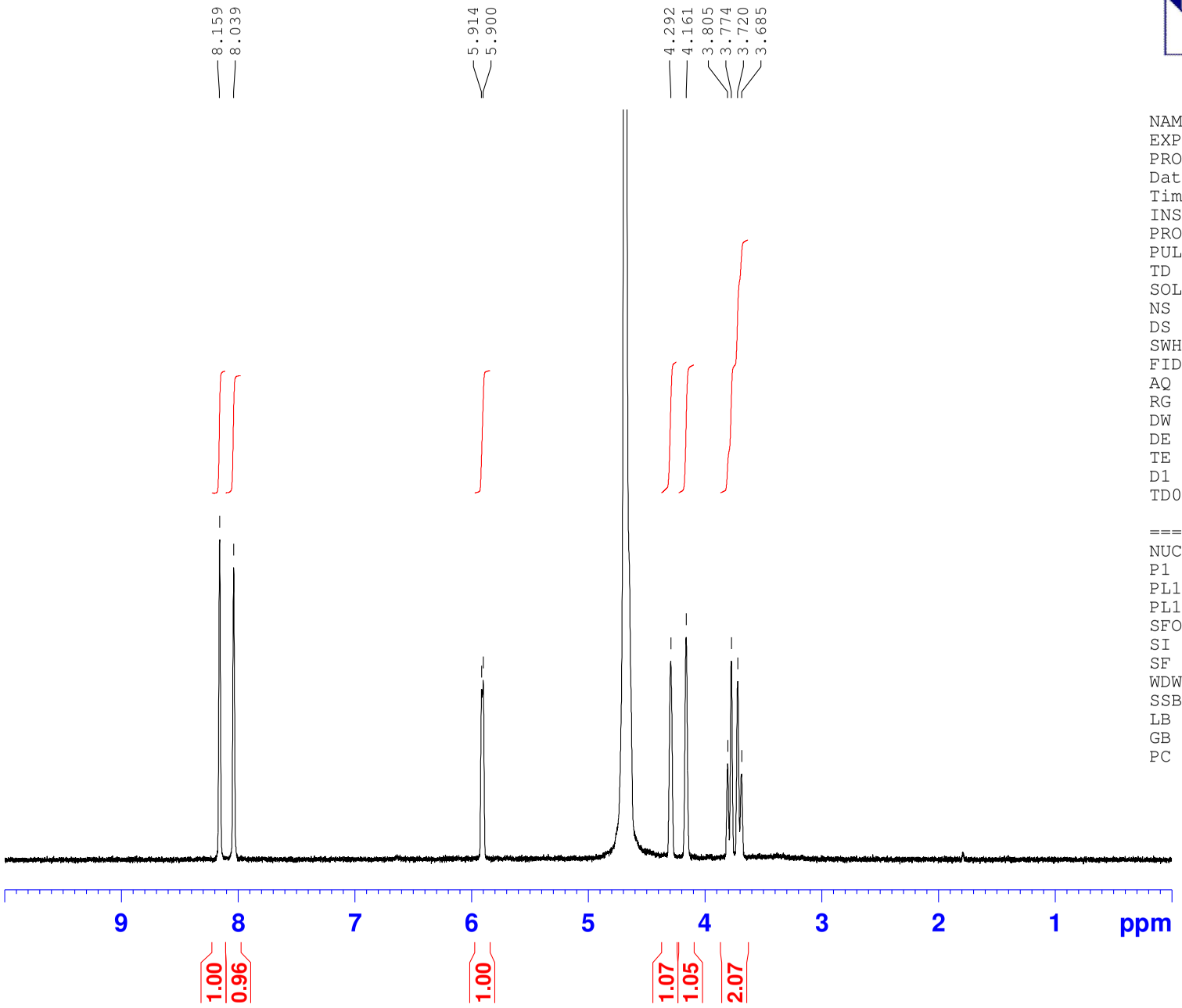
MC151-20100707-SB-MS#1-226 RT: 0.00-1.99
T: + c Q3MS [140.00-540.00]
m/z= 261.47-284.96

m/z	Intensity	Relative
265.17	10538.9	0.09
266.12	36212.7	0.32
267.46	19970.3	0.17
268.14	2308337.4	20.15
269.25	432963.5	3.78
270.14	11454918.2	100.00
271.15	1446507.8	12.63
272.14	773478.3	6.75
273.15	181183.9	1.58
274.11	55927.9	0.49
275.16	264650.9	2.31
276.16	34701.2	0.30
277.17	35447.6	0.31
278.14	10265.2	0.09
279.19	15495.3	0.14
280.18	9283.4	0.08
282.14	9631.0	0.08
284.14	19542.6	0.17





MC151 1H NMR in D2O
Batch 20100707-SB



NAME	MC151-20100707-SB
EXPNO	1
PROCNO	1
Date_	20100825
Time	14.14
INSTRUM	spect
PROBHD	5 mm PABBO BB-
PULPROG	zg30
TD	65536
SOLVENT	D2O
NS	512
DS	2
SWH	8278.146 Hz
FIDRES	0.126314 Hz
AQ	3.9584243 sec
RG	4
DW	60.400 usec
DE	6.50 usec
TE	294.8 K
D1	1.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	14.50 usec
PL1	-0.70 dB
PL1W	10.03411102 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300062 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00