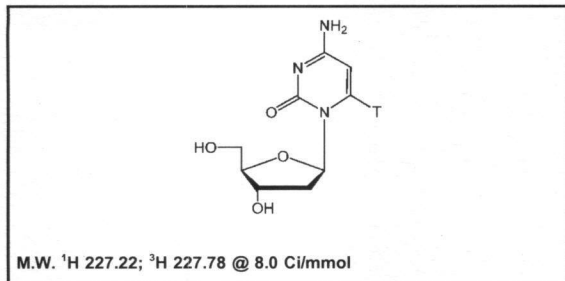




Product Data Sheet

MT-732

2'-Deoxycytidine, [6-³H]-



Lot #: 137-174-008-A-20081028-NT

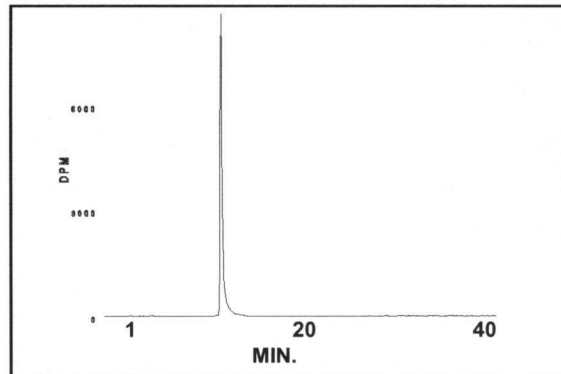
Specific Activity: 8.0 Ci/mmol

Concentration: 1.0 mCi/ml; 28.47 µg/ml

Packaged in: Ethanol : water (1 : 1) solution

Date of Analysis: December 08, 2009

Radiochemical Purity: 99.1%



HPLC ANALYSIS LOT 137-174-008-A-20081028-NT
File Name: int20316 Date and Time: 12/8/2009 1:38:10 PM
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.27	5.00670	39.73499
2	0.27	11.54000	40.21688
3	99.14	11.97330	14753.64931
4	0.17	13.40670	24.63171
5	0.16	14.22330	23.52701
Totals	100.00		14881.75990

Stability and Storage Recommendation: The rate of decomposition is approximately 1% / month for the first six months after purification when stored at -20°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.

MT-732

2'-Deoxycytidine, [6-³H]-

Lot 137-174-008-A-20081028-NT

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

Concentrations and volumes:

Standard solution concentration was 1.0 mg/mL.

2'-Deoxycytidine, [6-³H]- concentration was 0.1 mCi/mL.

Volume of standard alone injection was 2.0 µL.

Volume of **2'-Deoxycytidine, [6-³H]-** alone injection was 2.0 µL.

Co-injection solution consisted of 2.0 µL **2'-Deoxycytidine, [6-³H]-** + 2.0 µL standard.

Volume of co-injection was 4.0 µL.

Volume of blank injection was 2.0 µL.

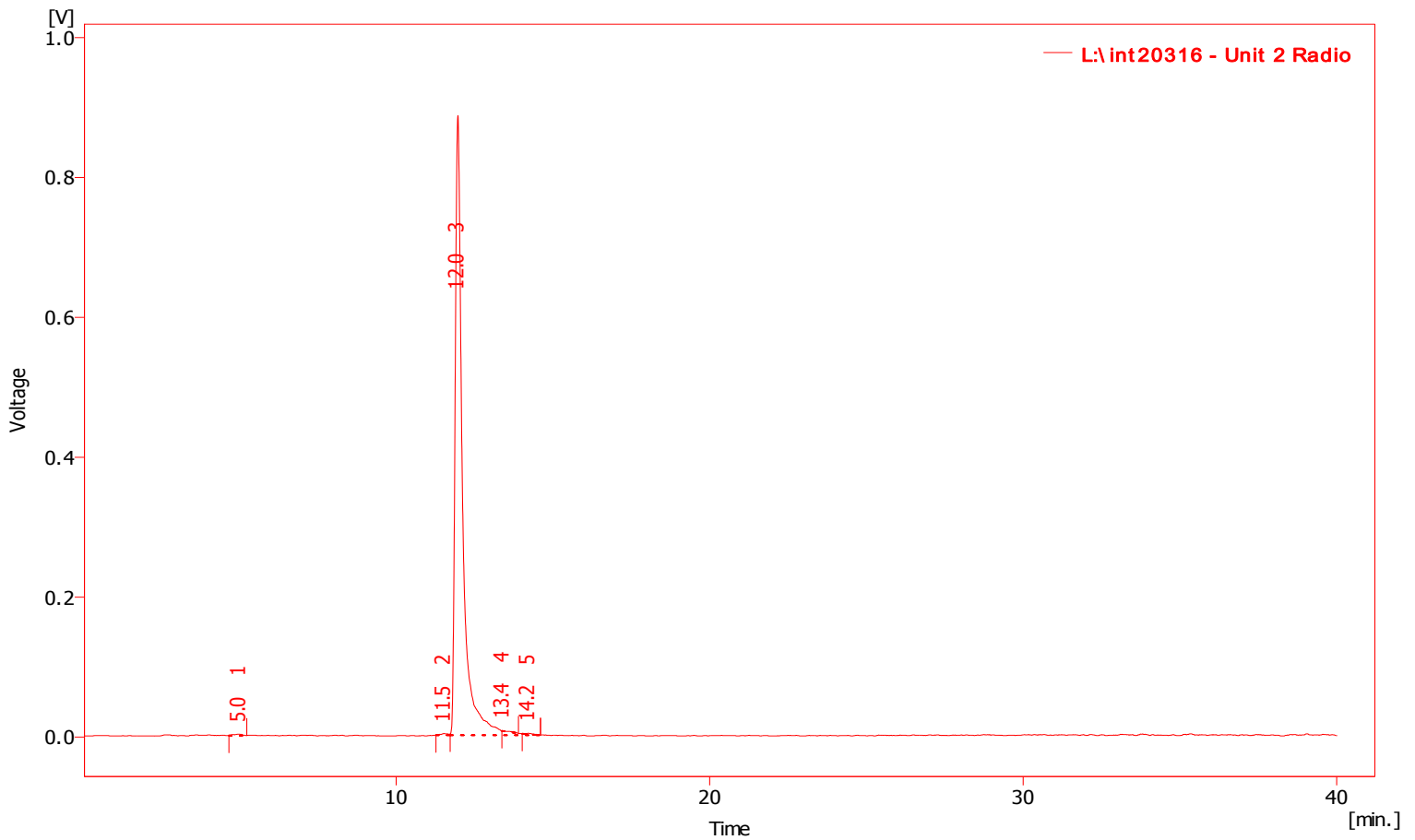
B) Mass spectrometry - Positive mode

C) NMR

MT-732
2'-Deoxycytidine, [6-3H]-
Lot 137-174-008-A-20081028-NT

Chromatogram Info:

File Name	: L:\int20316	File Created	: 3/10/2014 8:40:03 AM
Origin	: Acquired, Acquisition started 12/8/2009 12:58:11 PM	Acquired Date	: 12/8/2009 1:38:10 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 3/10/2014 8:51 AM
Created	: 6/16/2007 8:19 AM	Detection	: Radiochemical
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



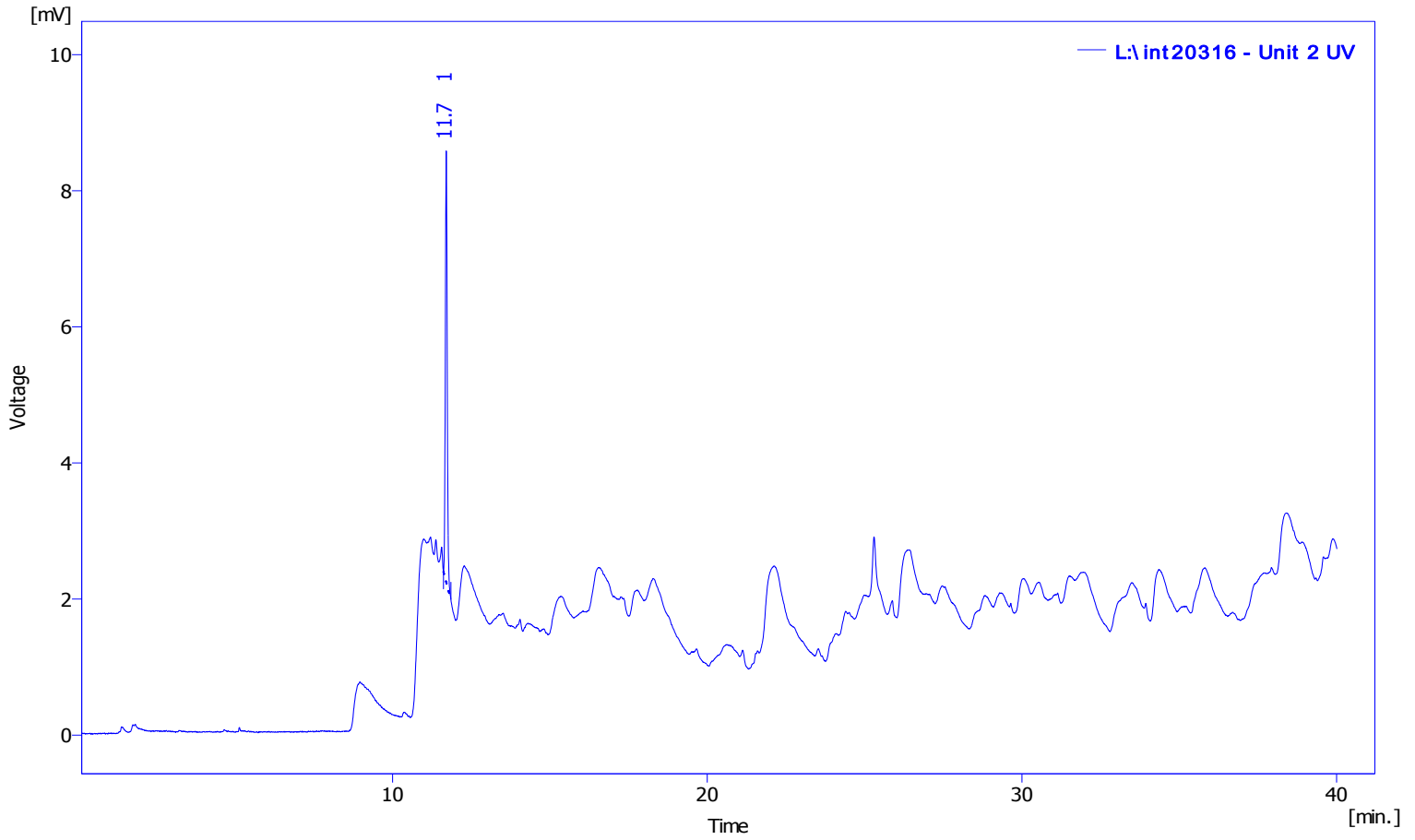
Result Table (Uncal - L:\int20316 - Unit 2 Radio)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		5.01	39.735	1.96	0.27	0.22	1091.65	21832.93	0.80		
2		11.54	40.217	2.47	0.27	0.28	12125.52	242510.44	0.88		12.8
3		11.97	14753.649	885.90	99.14	99.27	16918.26	338365.21	5.76		1.1
4		13.41	24.632	0.55	0.17	0.06	622345.29	12446905.74	7.75		6.6
5		14.22	23.527	1.57	0.16	0.18	34591.35	691827.03	1.40		4.4
		Total	14881.760	892.45	100.00	100.00					

MT-732
2'-Deoxycytidine, [6-3H]-
Lot 137-174-008-A-20081028-NT

Chromatogram Info:

File Name	: L:\int20316	File Created	: 3/10/2014 8:40:03 AM
Origin	: Acquired, Acquisition started 12/8/2009 12:58:11 PM	Acquired Date	: 12/8/2009 1:38:10 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 3/10/2014 8:50 AM
Created	: 6/16/2007 8:19 AM	Detection	: UV 271nm
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



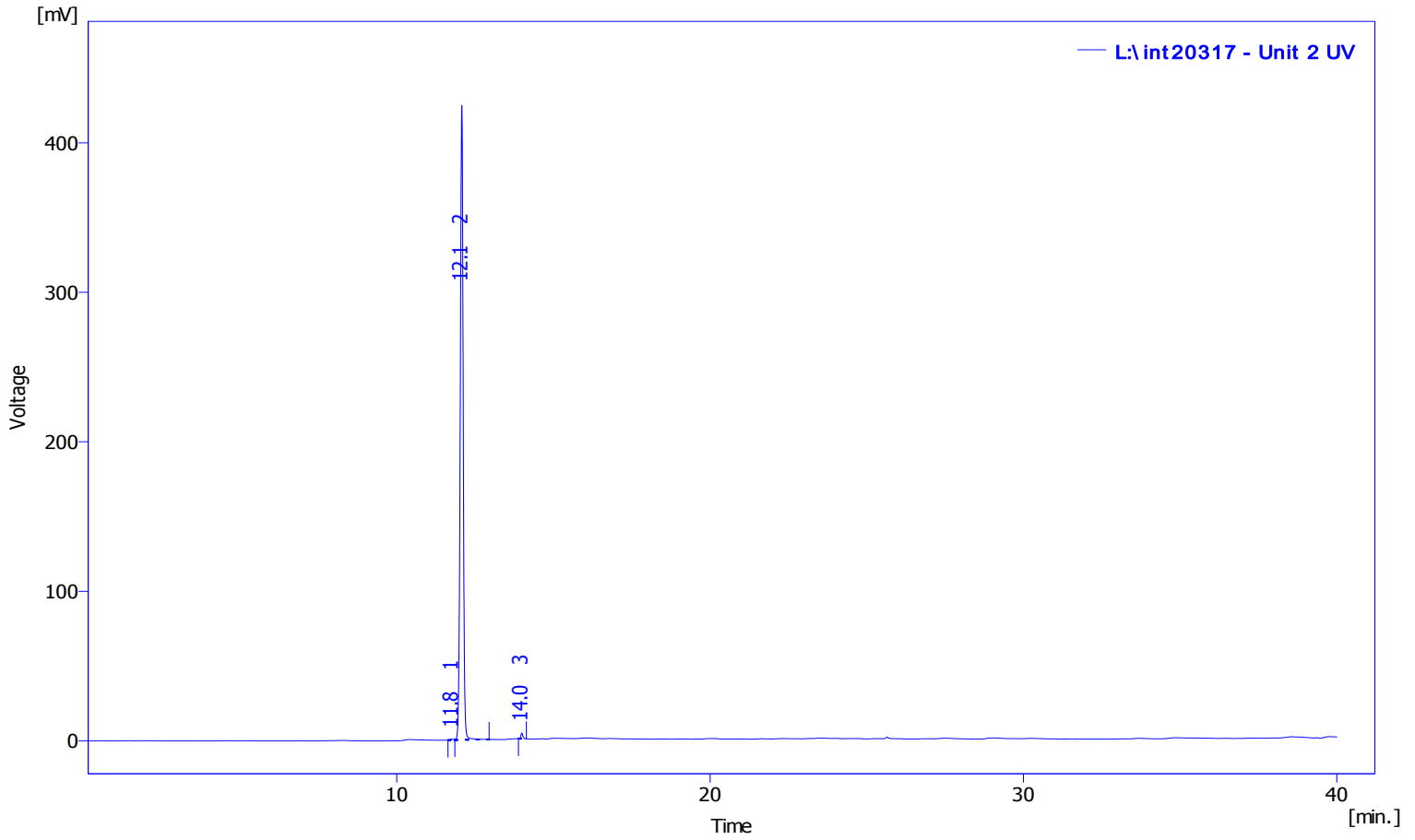
Result Table (Uncal - L:\int20316 - Unit 2 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		11.71	26.735	6.34	100.00	100.00	170827.89	3416557.89	1.10		
		Total	26.735	6.34	100.00	100.00					

MT-732
2'-Deoxycytidine, [6-3H]-
Lot 137-174-008-A-20081028-NT

Chromatogram Info:

File Name	: L:\int20317	File Created	: 3/10/2014 8:40:03 AM
Origin	: Acquired, Acquisition started 12/8/2009 2:14:13 PM	Acquired Date	: 12/8/2009 2:54:12 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 3/10/2014 8:52 AM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 271nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



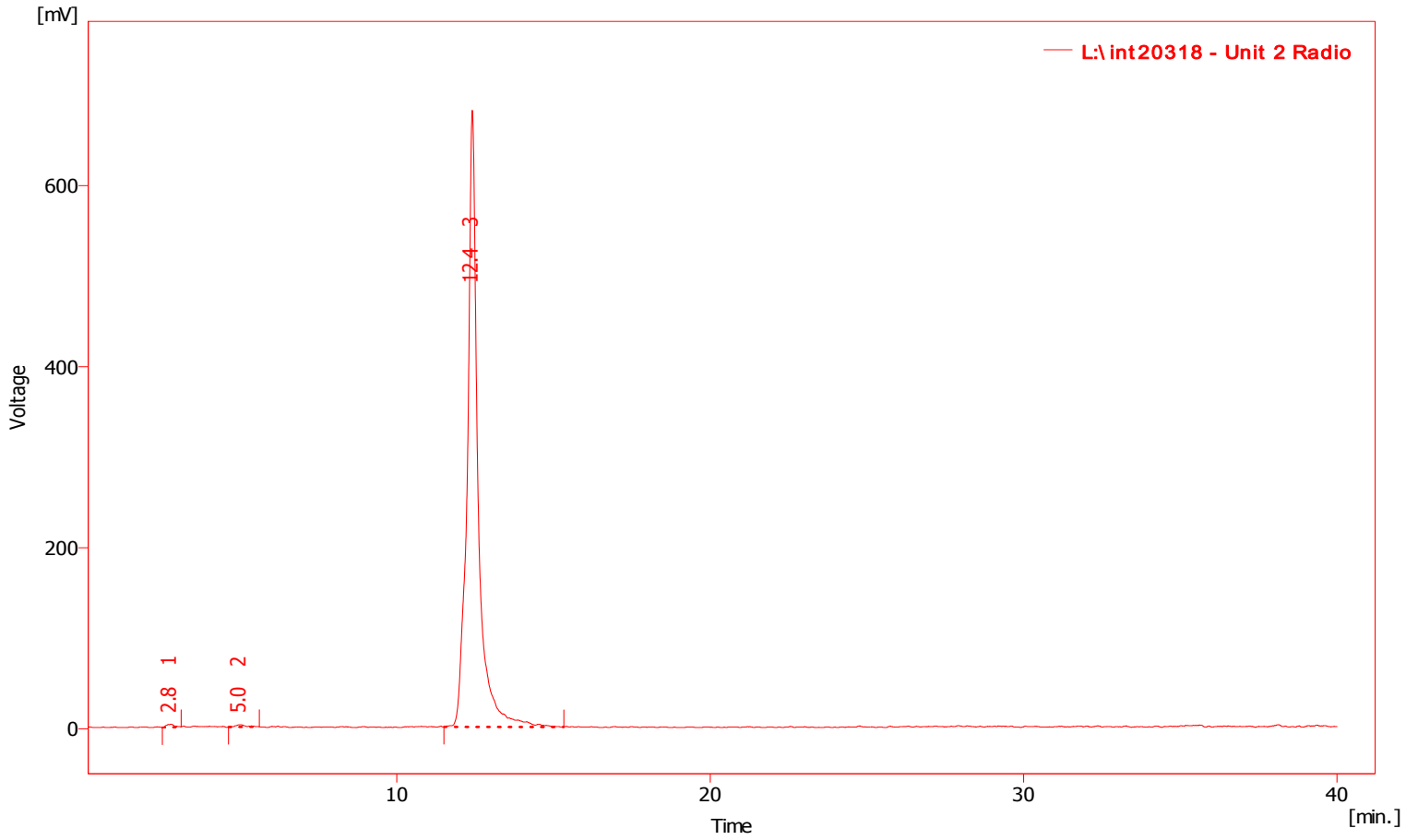
Result Table (Uncal - L:\int20317 - Unit 2 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		11.77	4.358	0.59	0.16	0.14	45438.29	908765.72	0.85		
2		12.08	2761.879	424.19	99.25	98.97	80798.62	1615972.33	0.96		1.6
3		13.99	16.546	3.82	0.59	0.89	221283.54	4425670.83	1.15		13.3
		Total	2782.783	428.60	100.00	100.00					

MT-732
2'-Deoxycytidine, [6-3H]-
Lot 137-174-008-A-20081028-NT

Chromatogram Info:

File Name	: L:\int20318	File Created	: 3/10/2014 8:40:03 AM
Origin	: Acquired, Acquisition started 12/8/2009 3:34:03 PM	Acquired Date	: 12/8/2009 4:14:01 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 3/10/2014 8:56 AM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



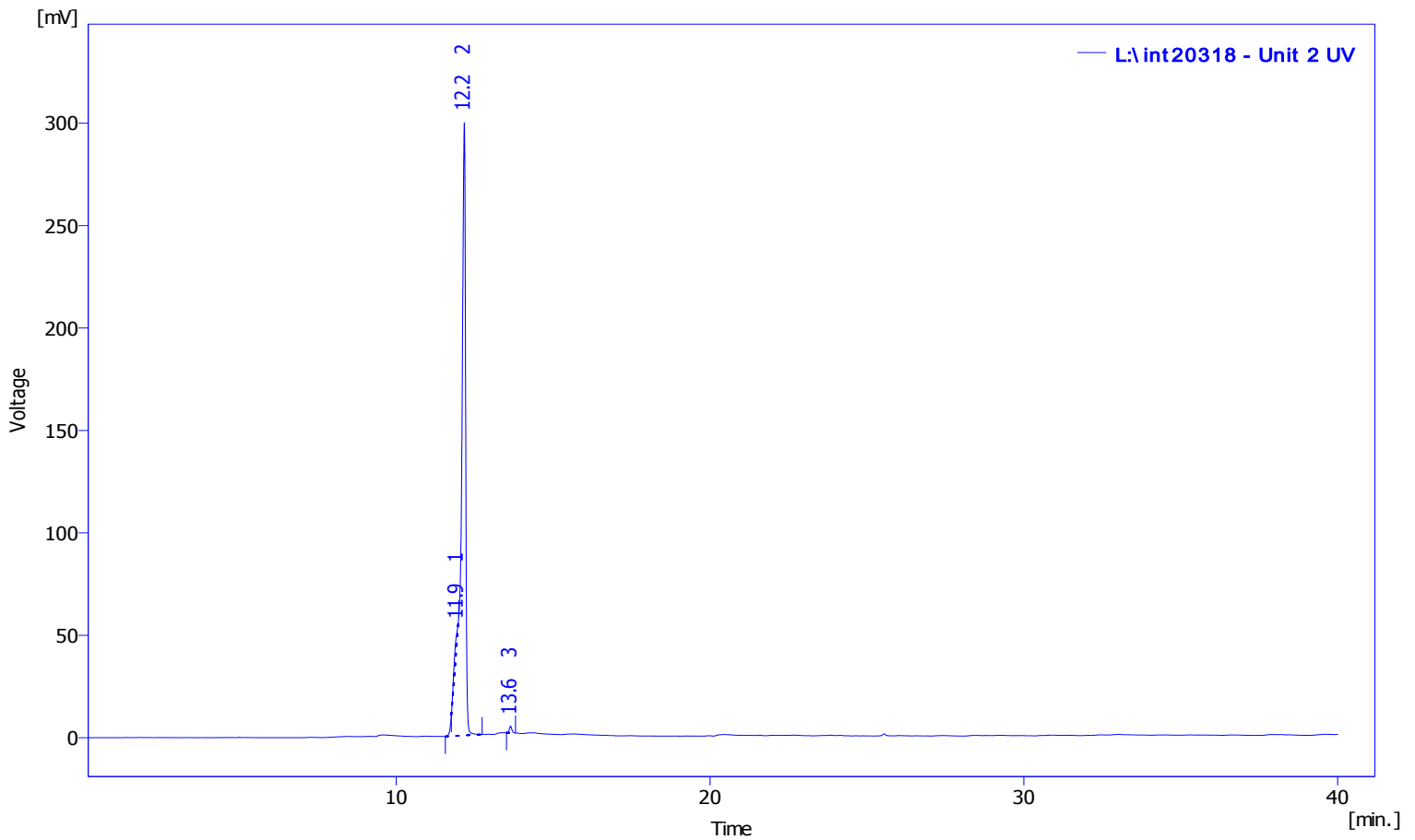
Result Table (Uncal - L:\int20318 - Unit 2 Radio)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/I [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		2.77	59.004	3.27	0.36	0.48	568.96	11379.26	1.15		
2		4.99	60.862	2.52	0.37	0.37	1433.53	28670.62	1.66		4.5
3		12.41	16141.402	680.99	99.26	99.16	10622.45	212448.98	1.24		14.8
		Total	16261.269	686.79	100.00	100.00					

MT-732
2'-Deoxycytidine, [6-3H]-
Lot 137-174-008-A-20081028-NT

Chromatogram Info:

File Name	: L:\int20318	File Created	: 3/10/2014 8:40:03 AM
Origin	: Acquired, Acquisition started 12/8/2009 3:34:03 PM	Acquired Date	: 12/8/2009 4:14:01 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 3/10/2014 8:54 AM
Created	: 6/16/2007 8:19 AM	Detection	: UV 271nm
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



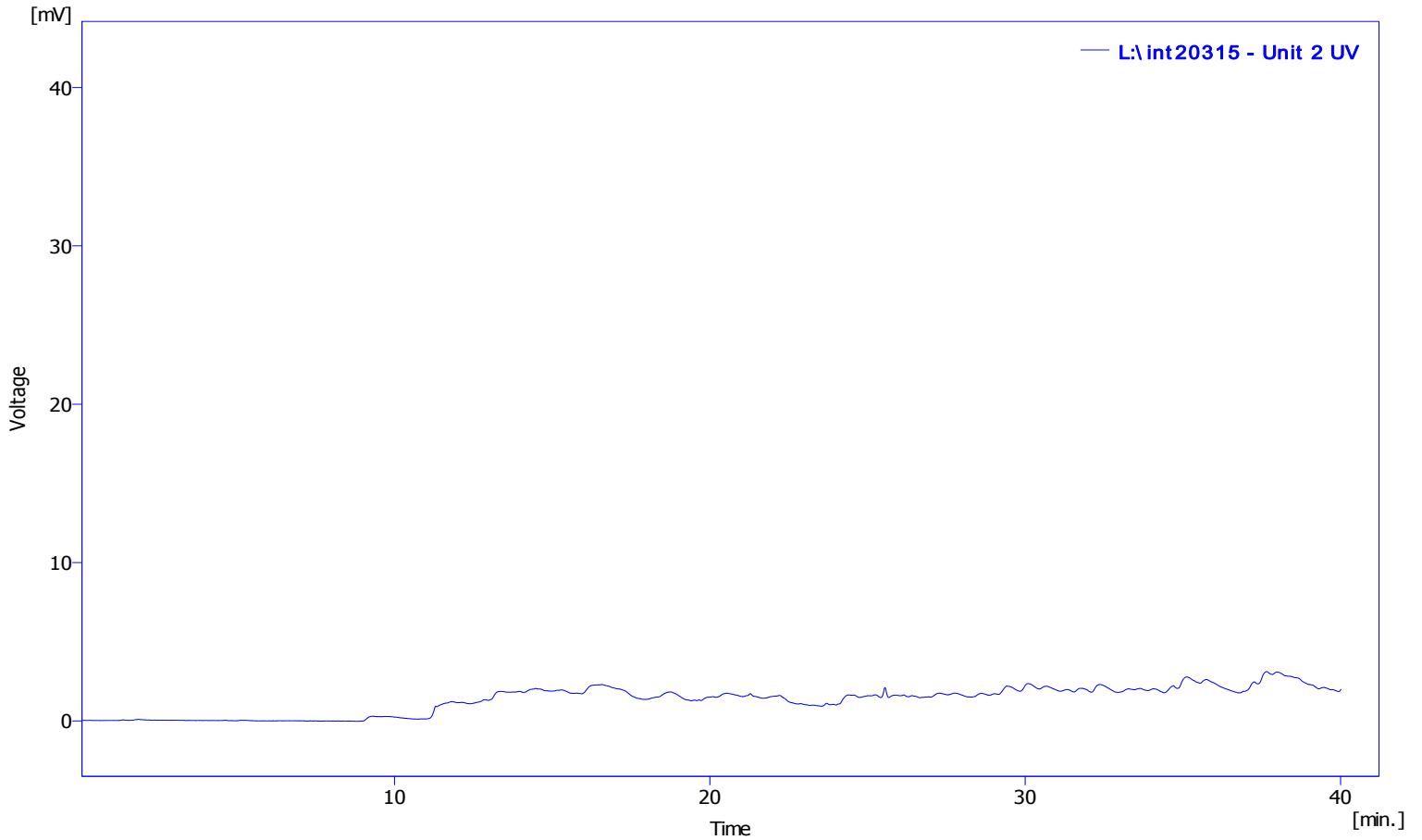
Result Table (Uncal - L:\int20318 - Unit 2 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		11.94	54.528	3.54	1.78	1.16	161184.15	3223683.04	0.63		
2		12.17	2991.402	299.09	97.64	97.78	56980.79	1139615.70	0.97		1.4
3		13.64	17.781	3.27	0.58	1.07	137292.42	2745848.39	1.04		8.4
		Total	3063.711	305.89	100.00	100.00					

MT-732
2'-Deoxycytidine, [6-3H]-
Lot 137-174-008-A-20081028-NT

Chromatogram Info:

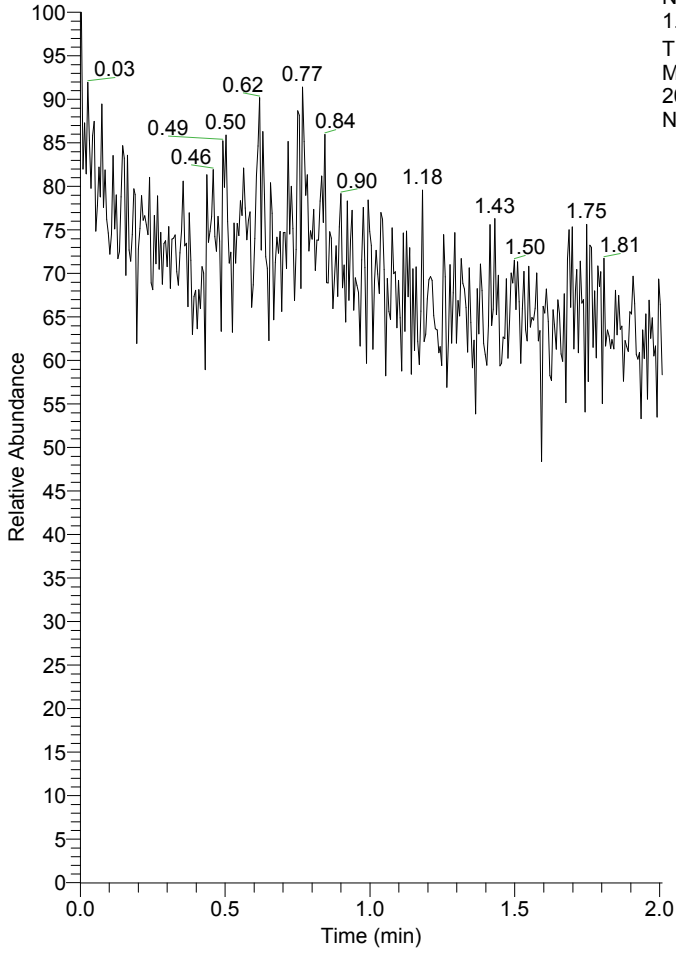
File Name	: L:\int20315	File Created	: 3/10/2014 8:40:03 AM
Origin	: Acquired, Acquisition started 12/8/2009 11:48:39 AM	Acquired Date	: 12/8/2009 12:28:37 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 3/10/2014 8:57 AM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 271nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int20315 - Unit 2 UV)

Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
No peak to report										

RT: 0.00 - 2.01



NL:
1.17E7
TIC MS
MT732-
20081028-
NT

MT732-20081028-NT#1-364 RT: 0.00-2.01 AV:

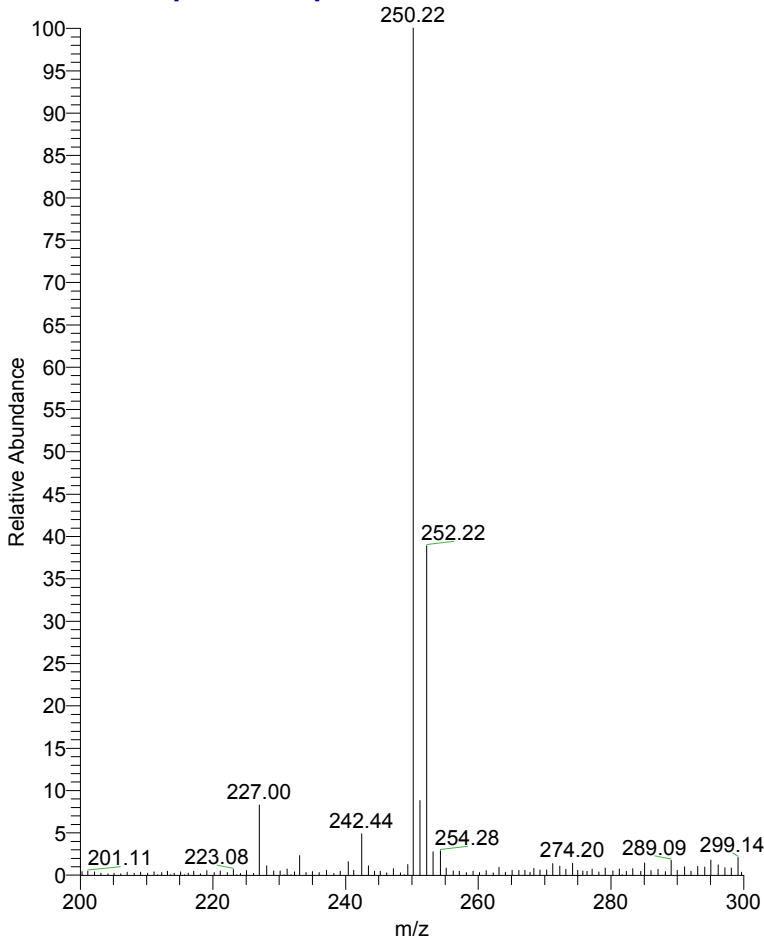
T: + c NSI Full ms [200.00-300.00]

m/z = 246.93-256.26

m/z	Intensity	Relative
247.22	27331.1	0.74
248.24	8529.0	0.23
248.85	199.6	0.01
249.35	45325.6	1.23
250.22	3683664.3	100.00
251.23	323742.7	8.79
252.22	1432360.8	38.88
253.19	100949.6	2.74
254.28	104836.3	2.85
255.18	29756.1	0.81
256.22	17531.3	0.48

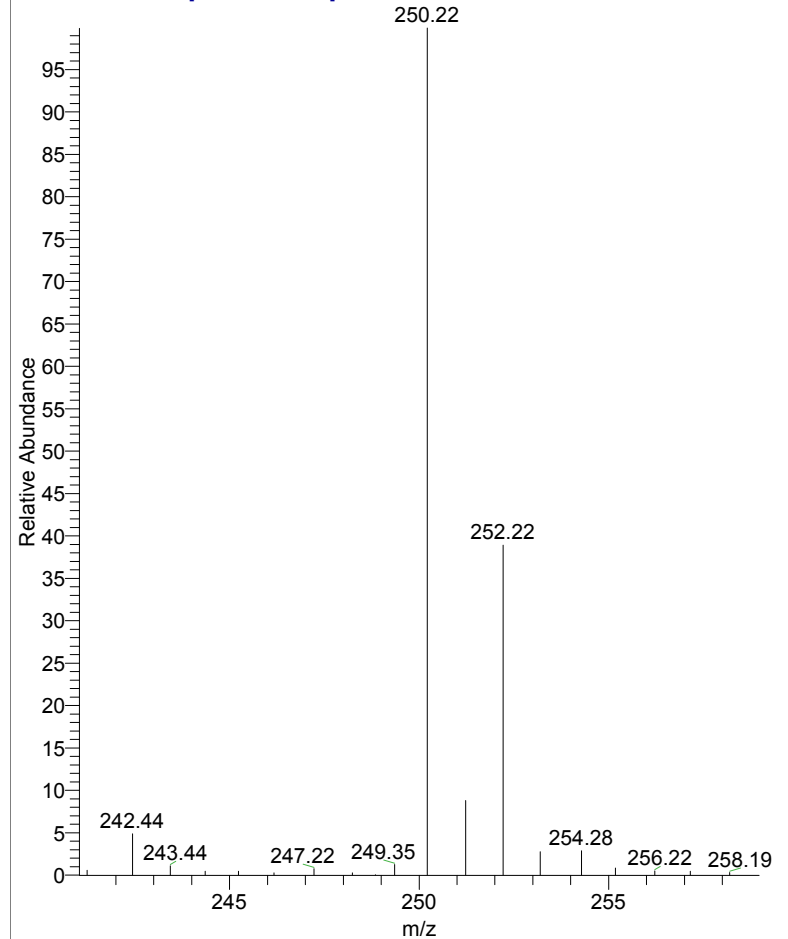
MT732-20081028-NT #1-364 RT: 0.00-2.01 AV: 364 NL: 3.68E6

T: + c NSI Full ms [200.00-300.00]



MT732-20081028-NT #1-364 RT: 0.00-2.01 AV: 364 NL: 3.68E6

T: + c NSI Full ms [200.00-300.00]



MT732 3H NMR in D2O
Batch 20081028-NT

7.731
7.706



NAME MT732
EXPNO 1
PROCNO 1
Date_ 20091208
Time_ 21.26
INSTRUM spect
PROBHD 5 mm DUX 3H-1H
PULPROG zg
TD 16384
SOLVENT D2O
NS 5000
DS 2
SWH 6172.839 Hz
FIDRES 0.376760 Hz
AQ 1.3271540 sec
RG 46341
DW 81.000 usec
DE 6.00 usec
TE 300.0 K
D1 2.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 3H
P1 10.00 usec
PL1 2.00 dB
SF01 320.1321857 MHz
SI 32768
SF 320.1305850 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

