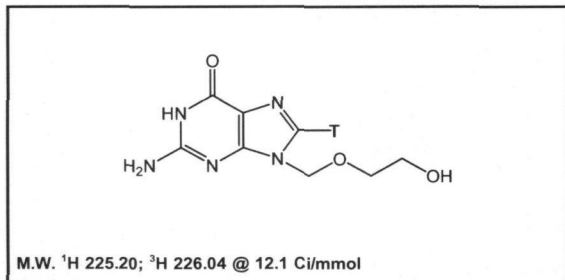




## Product Data Sheet

**MT-508**

**Acyclovir, [8-<sup>3</sup>H]-**



**Lot #:** 194-068-0121-A-20100315-DG

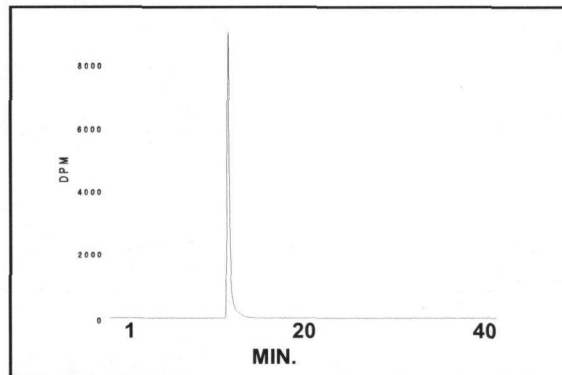
**Specific Activity:** 12.1 Ci/mmol

**Concentration:** 1.0 mCi/ml; 18.68 µg/ml

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

**Date of Analysis:** April 06, 2010

**Radiochemical Purity:** 99.7%



HPLC ANALYSIS LOT 194-068-0121-A-20100315-DG

File Name: int20483 Date and Time: 4/6/2010 3:15:52 PM

Unit 2 Radio

Peak #	Area %	Time	Area
1	99.77	12.25000	16669.03922
2	0.23	13.51000	38.09538
Totals	100.00		16707.13460

**Stability and Storage Recommendation:** The rate of decomposition is approximately 0.5-1% /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-508**

**Acyclovir, [8-<sup>3</sup>H]-**

**Lot 194-068-0121-A-20100315-DG**

**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.

**Acyclovir, [8-<sup>3</sup>H]-** concentration was 0.1 mCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **Acyclovir, [8-<sup>3</sup>H]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **Acyclovir, [8-<sup>3</sup>H]-** + 2.0 µl standard.

Volume of co-injection was 4.0 µl.

Volume of blank injection was 2.0 µl.

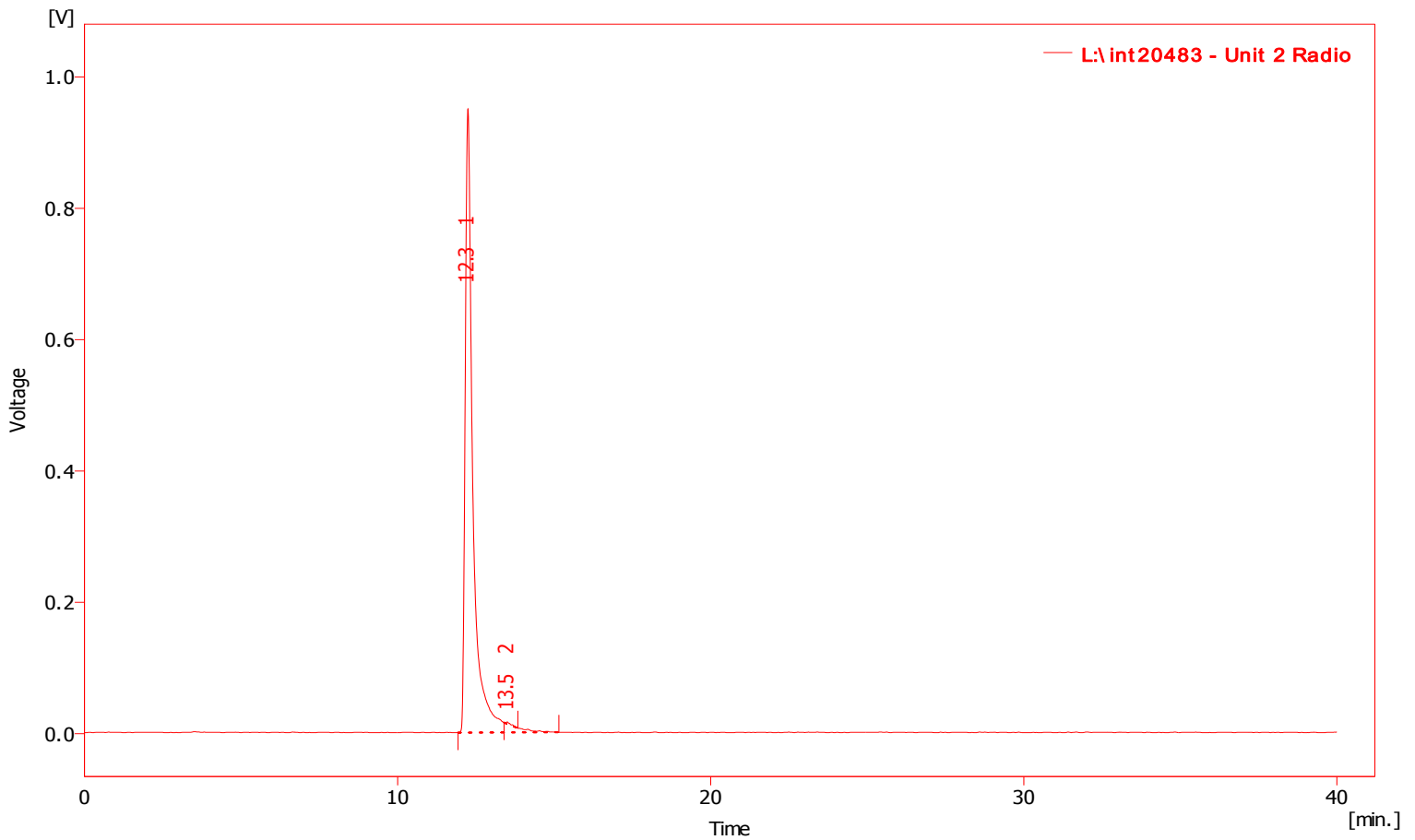
**B) Mass spectrometry – Negative mode**

**C) NMR**

**MT-508**  
**Acyclovir, [8-3H]-**  
**Lot 194-068-0121-A-20100315-DG**

Chromatogram Info:

File Name	: L:\int20483	File Created	: 2/20/2014 9:18:01 AM
Origin	: Acquired, Acquisition started 4/6/2010 2:35:54 PM	Acquired Date	: 4/6/2010 3:15:52 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 2/20/2014 9:31 AM
Created	: 6/16/2007 8:19 AM	Detection	: Radiochemical
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



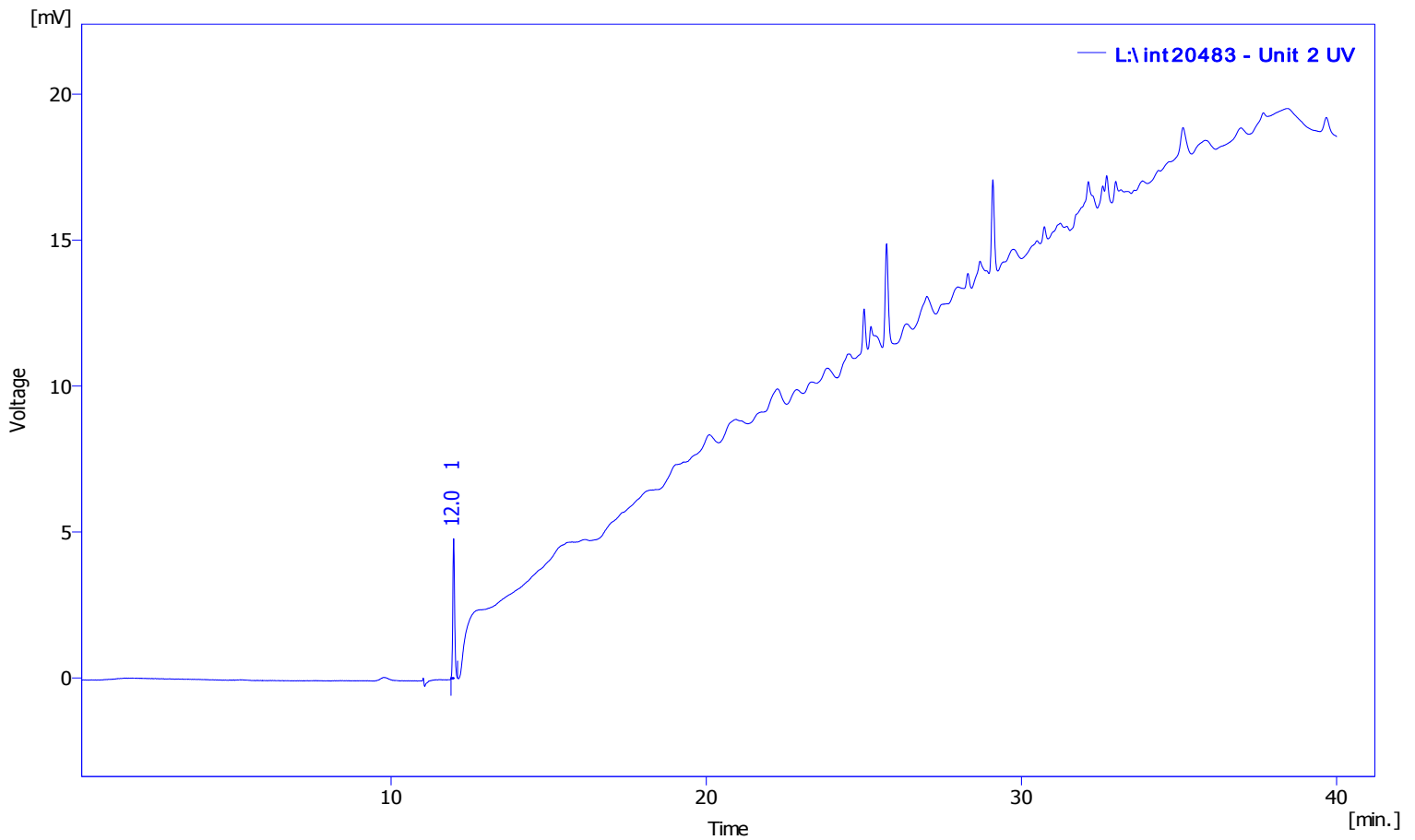
Result Table (Uncal - L:\int20483 - Unit 2 Radio)

	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		12.25	16669.039	950.25	99.77	99.66	15715.43	314308.60	4.97		
2		13.51	38.095	3.25	0.23	0.34	51589.86	1031797.30	1.73		4.0
		Total	16707.135	953.51	100.00	100.00					

**MT-508**  
**Acyclovir, [8-3H]-**  
**Lot 194-068-0121-A-20100315-DG**

Chromatogram Info:

File Name	: L:\int20483	File Created	: 2/20/2014 9:18:01 AM
Origin	: Acquired, Acquisition started 4/6/2010 2:35:54 PM	Acquired Date	: 4/6/2010 3:15:52 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 2/20/2014 9:29 AM
Created	: 6/16/2007 8:19 AM	Detection	: UV 251nm
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



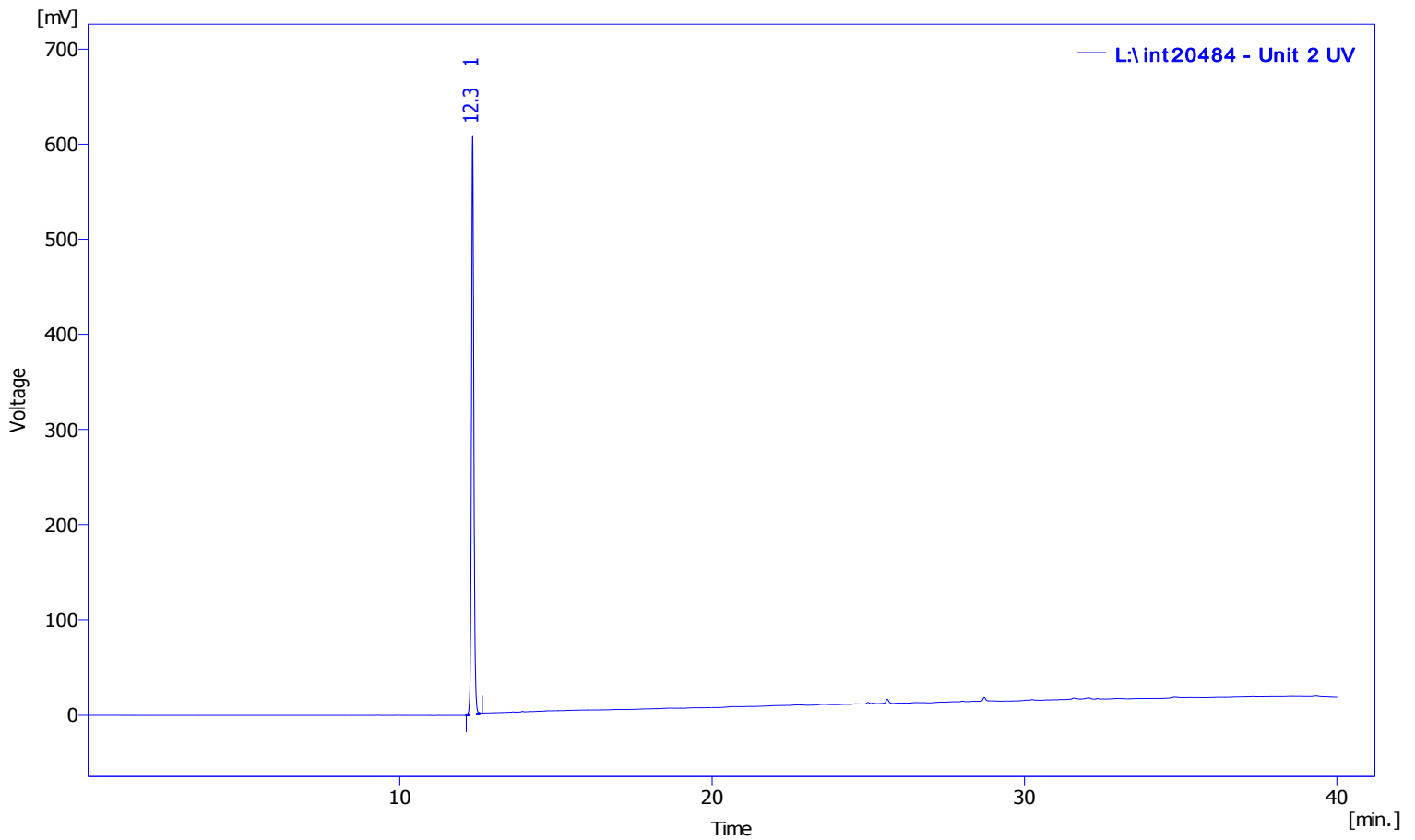
Result Table (Uncal - L:\int20483 - Unit 2 UV)

	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		11.98	19.346	4.78	100.00	100.00	198335.45	3966709.06	1.13		
		Total	19.346	4.78	100.00	100.00					

**MT-508**  
**Acyclovir, [8-3H]-**  
**Lot 194-068-0121-A-20100315-DG**

Chromatogram Info:

File Name	: L:\int20484	File Created	: 2/20/2014 9:18:01 AM
Origin	: Acquired, Acquisition started 4/6/2010 3:41:49 PM	Acquired Date	: 4/6/2010 4:21:48 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 2/20/2014 9:32 AM
Created	: 6/16/2007 8:19 AM	Detection	: UV 251nm
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



Result Table (Uncal - L:\int20484 - Unit 2 UV)

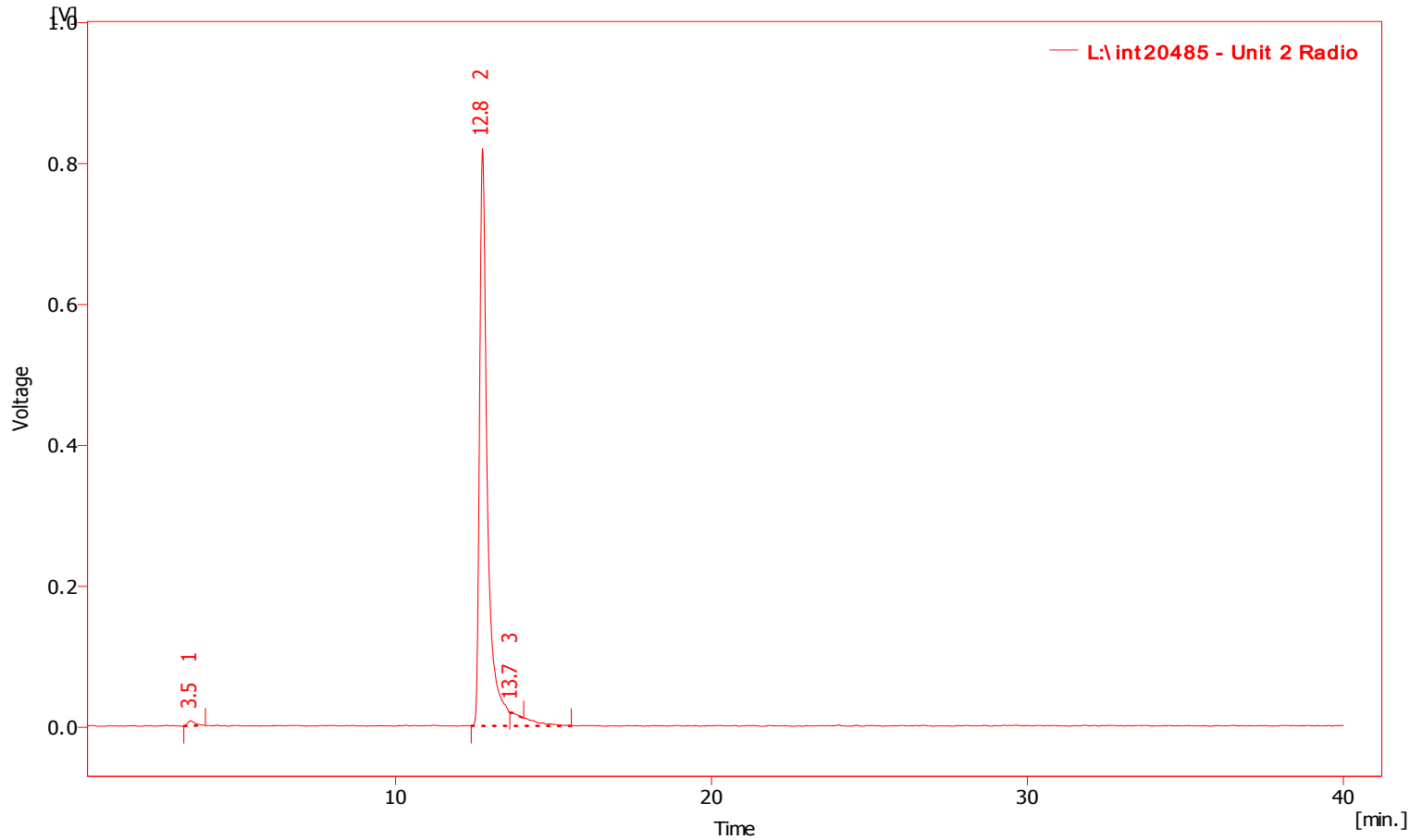
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		12.33	3195.556	608.57	100.00	100.00	121348.16	2426963.20	1.10		
		Total	3195.556	608.57	100.00	100.00					



**MT-508**  
**Acyclovir, [8-3H]-**  
**Lot 194-068-0121-A-20100315-DG**

Chromatogram Info:

File Name	: L:\int20485	File Created	: 2/20/2014 9:18:01 AM
Origin	: Acquired, Acquisition started 4/7/2010 9:27:13 AM	Acquired Date	: 4/7/2010 10:07:12 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 2/20/2014 9:33 AM
Created	: 6/16/2007 8:19 AM	Detection	: Radiochemical
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



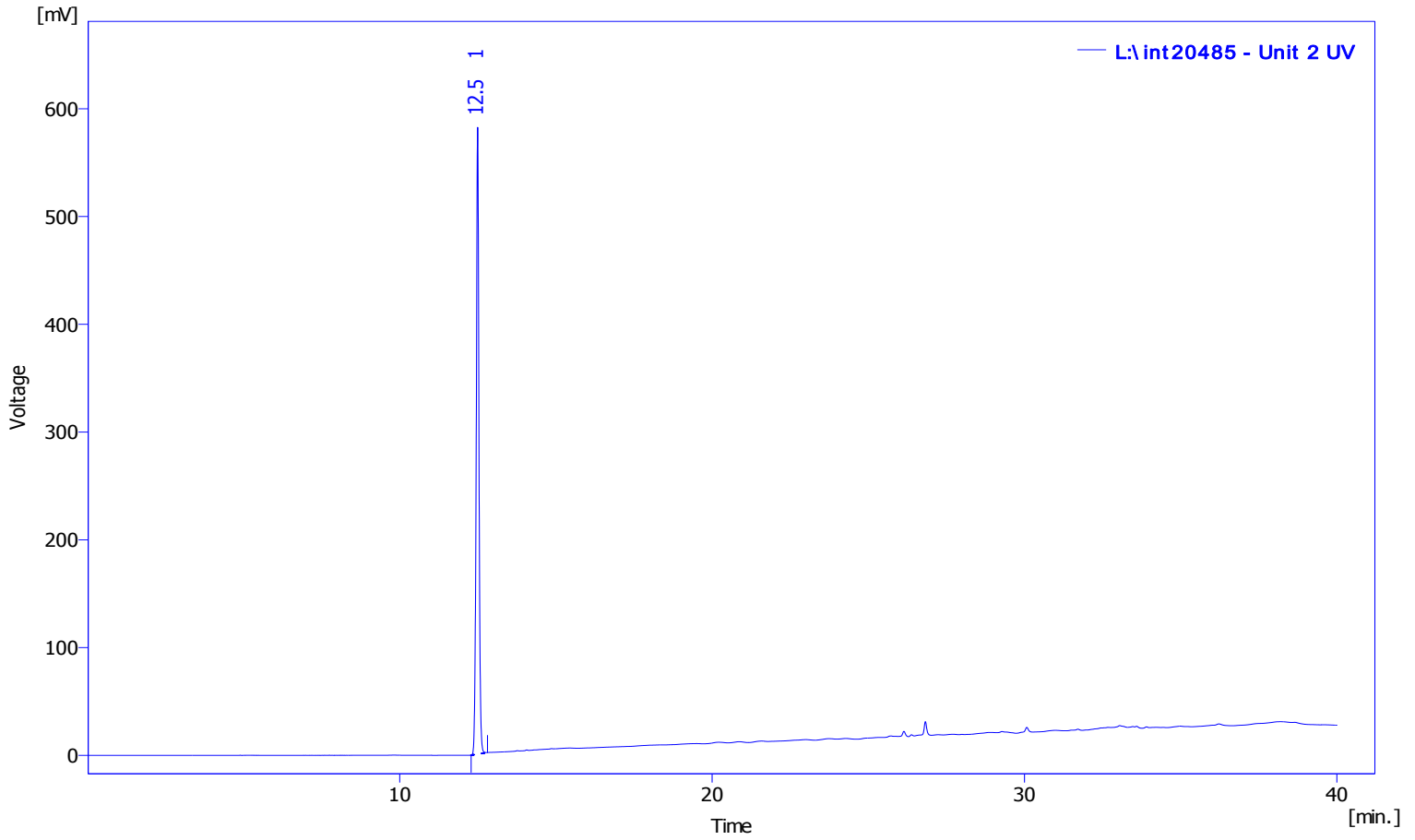
Result Table (Uncal - L:\int20485 - Unit 2 Radio)

	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		3.51	117.357	7.26	0.78	0.88	1184.95	23699.08	1.56		
2		12.75	14893.342	819.48	99.06	98.94	16541.56	330831.28	4.43		23.0
3		13.66	23.567	1.55	0.16	0.19	90900.37	1818007.37	5.00		3.2
		Total	15034.267	828.30	100.00	100.00					

**MT-508**  
**Acyclovir, [8-3H]-**  
**Lot 194-068-0121-A-20100315-DG**

Chromatogram Info:

File Name	: L:\int20485	File Created	: 2/20/2014 9:18:01 AM
Origin	: Acquired, Acquisition started 4/7/2010 9:27:13 AM	Acquired Date	: 4/7/2010 10:07:12 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 2/20/2014 9:33 AM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 251nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



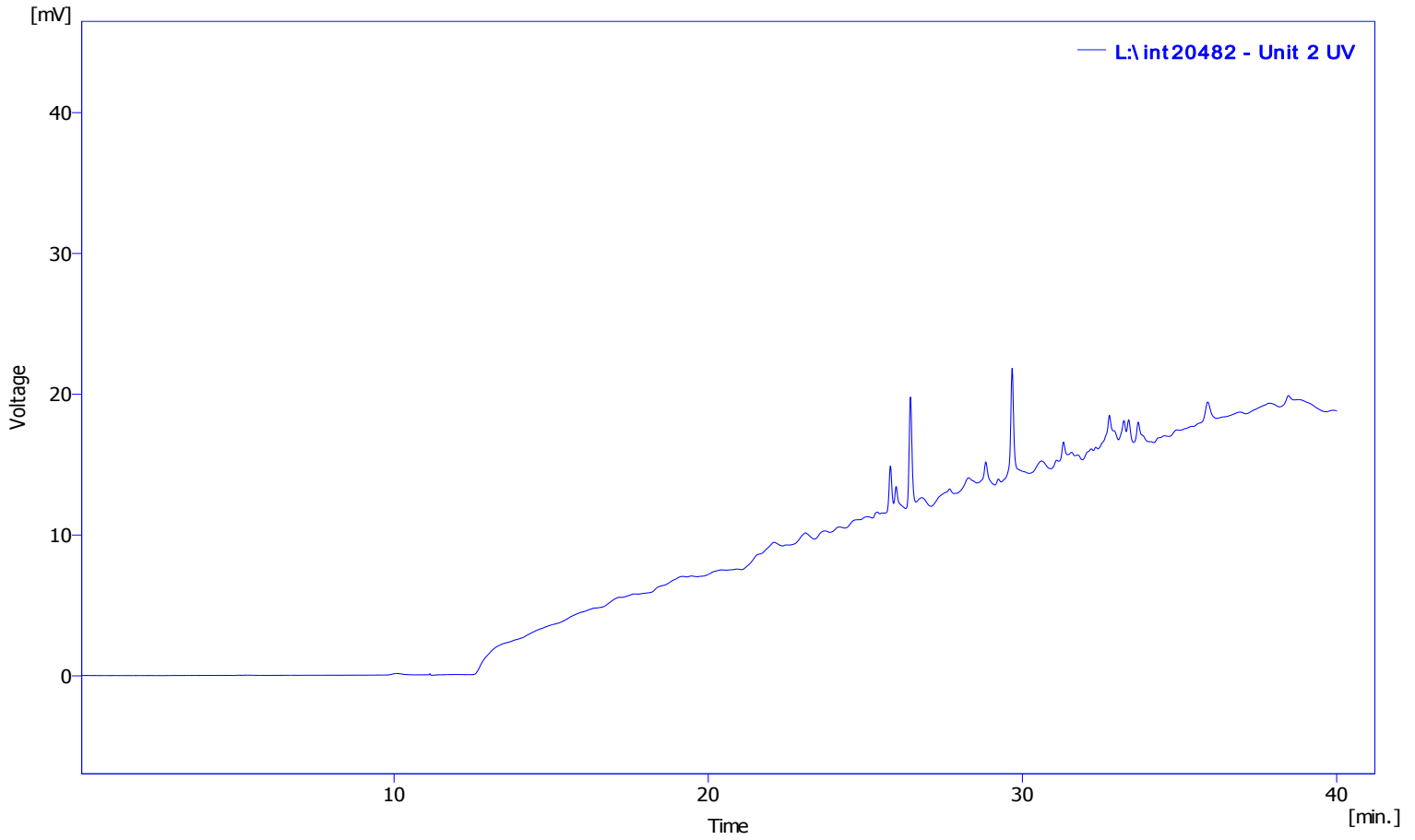
Result Table (Uncal - L:\int20485 - Unit 2 UV)

	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		12.49	3489.208	581.64	100.00	100.00	99264.25	1985285.00	1.00		
		Total	3489.208	581.64	100.00	100.00					

**MT-508**  
**Acyclovir, [8-3H]-**  
**Lot 194-068-0121-A-20100315-DG**

Chromatogram Info:

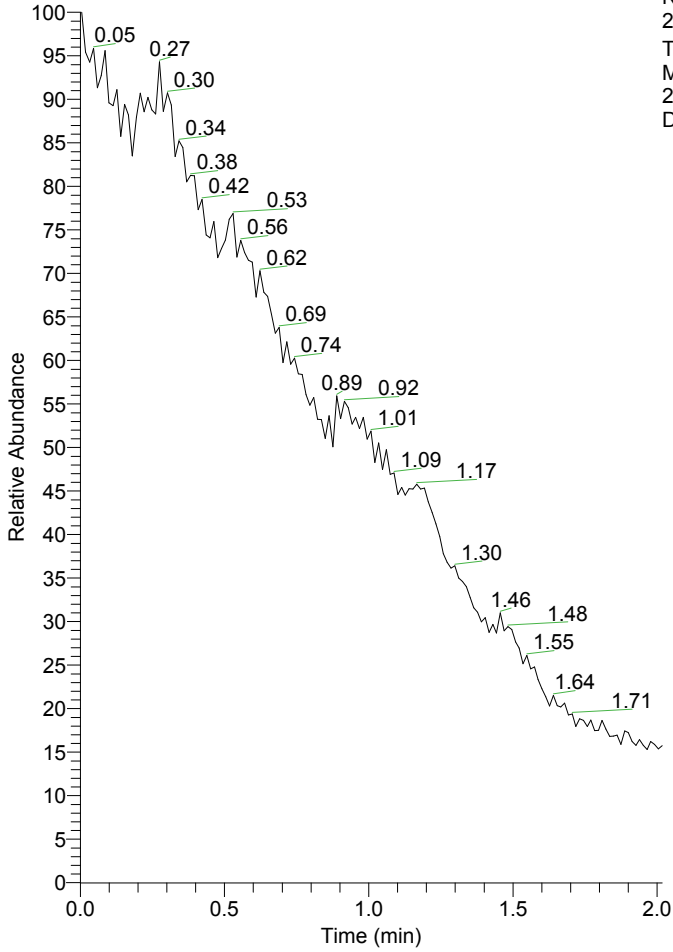
File Name	: L:\int20482	File Created	: 2/20/2014 9:18:02 AM
Origin	: Acquired, Acquisition started 4/6/2010 1:29:56 PM	Acquired Date	: 4/6/2010 2:09:54 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 2/20/2014 9:34 AM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 251nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



*Result Table (Uncal - L:\int20482 - Unit 2 UV)*

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 [-]
No peak to report										

RT: 0.00 - 2.02



NL:  
2.58E6  
TIC MS  
MT508-  
20100315-  
DG

MT508-20100315-DG#1-153 RT: 0.01-2.02 AV:

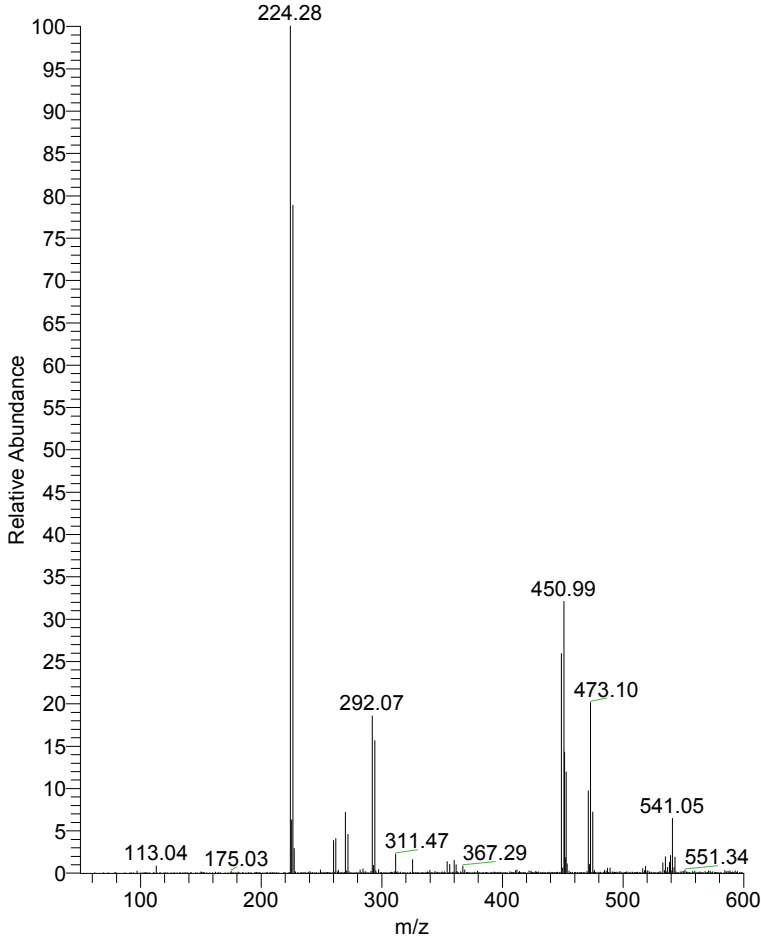
T: - c NSI Full ms [50.00-600.00]

m/z= 221.12-235.74

m/z	Intensity	Relative
222.20	47.4	0.02
223.47	232.3	0.08
224.28	309101.0	100.00
225.37	19348.4	6.26
226.34	243696.8	78.84
227.31	8881.2	2.87
228.37	445.2	0.14
229.99	26.8	0.01
231.18	22.2	0.01
232.72	21.6	0.01
233.28	58.0	0.02
234.05	11.9	0.00
234.93	34.8	0.01

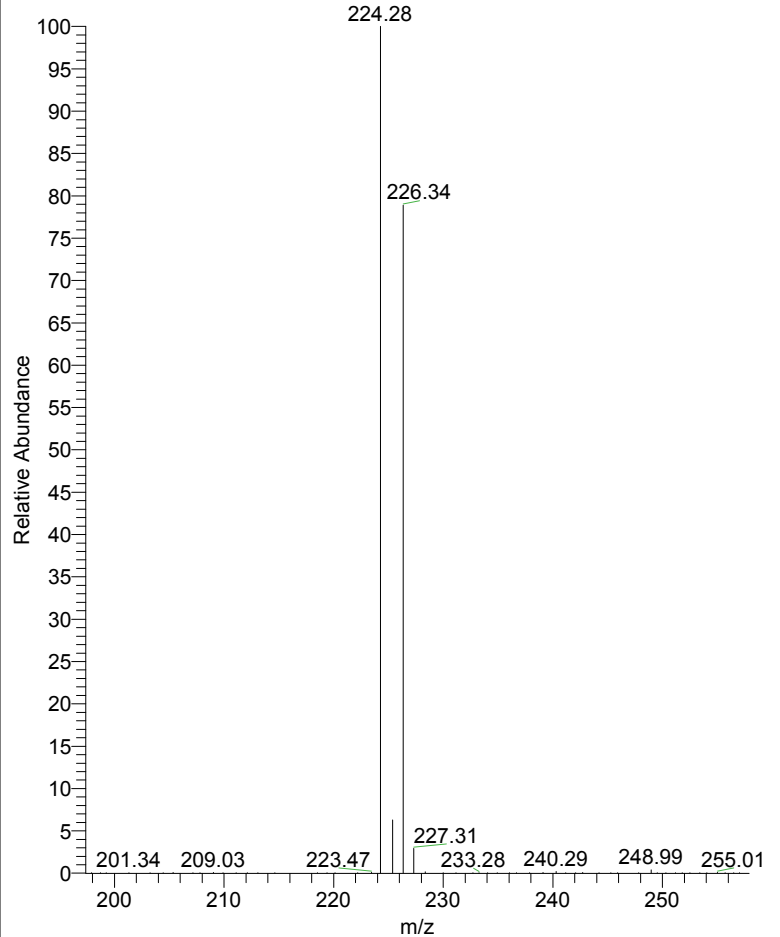
MT508-20100315-DG #1-153 RT: 0.01-2.02 AV: 153 NL: 3.09E5

T: - c NSI Full ms [50.00-600.00]



MT508-20100315-DG #1-153 RT: 0.01-2.02 AV: 153 NL: 3.09E5

T: - c NSI Full ms [50.00-600.00]



MT508 3H NMR in MeOD  
Batch 20100315-DG



7.934  
7.898

NAME MT508  
EXPNO 1  
PROCNO 1  
Date\_ 20100507  
Time\_ 12.36  
INSTRUM spect  
PROBHD 5 mm DUX 3H-1H  
PULPROG zg  
TD 16384  
SOLVENT MeOD  
NS 2922  
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

