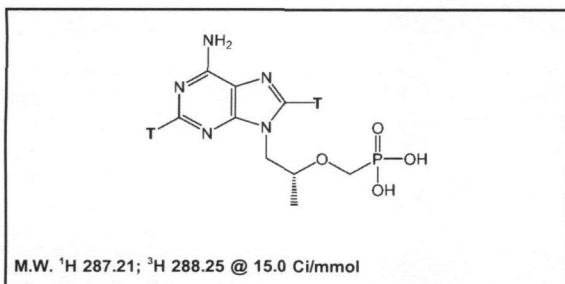




Product Data Sheet

MT-1502

Tenofovir, [adenine-2,8-³H]-



Lot #: 234-152-015-A-20100216-DG

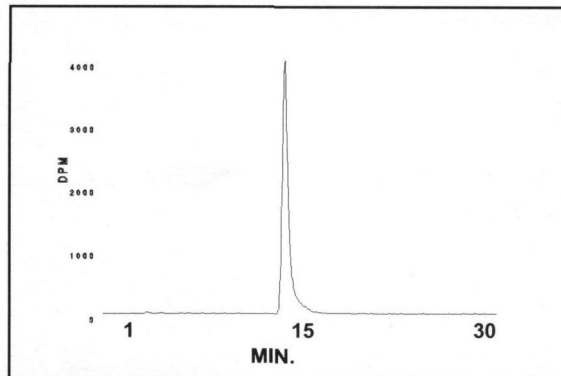
Specific Activity: 15.0 Ci/mmol

Concentration: 1.0 mCi/ml; 19.22 µg/ml

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

Date of Analysis: April 09, 2010

Radiochemical Purity: 99.2%



HPLC ANALYSIS LOT 234-152-015-A-20100216-DG
File Name: int20493 Date and Time: 4/9/2010 10:18:24 AM
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.35	3.40330	47.93315
2	99.20	13.93000	13548.09902
3	0.08	14.82330	10.51753
4	0.34	15.52330	46.43684
5	0.04	16.09330	4.84966
Totals	100.00		13657.83620

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-1502

Tenofovir, [adenine-2,8-³H]-

Lot 234-152-015-A-20100216-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.

Tenofovir, [adenine-2,8-³H]- concentration was 0.1 mCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **Tenofovir, [adenine-2,8-³H]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **Tenofovir, [adenine-2,8-³H]-** + 8.0 µl standard.

Volume of co-injection was 10.0 µl.

Volume of blank injection was 2.0 µl.

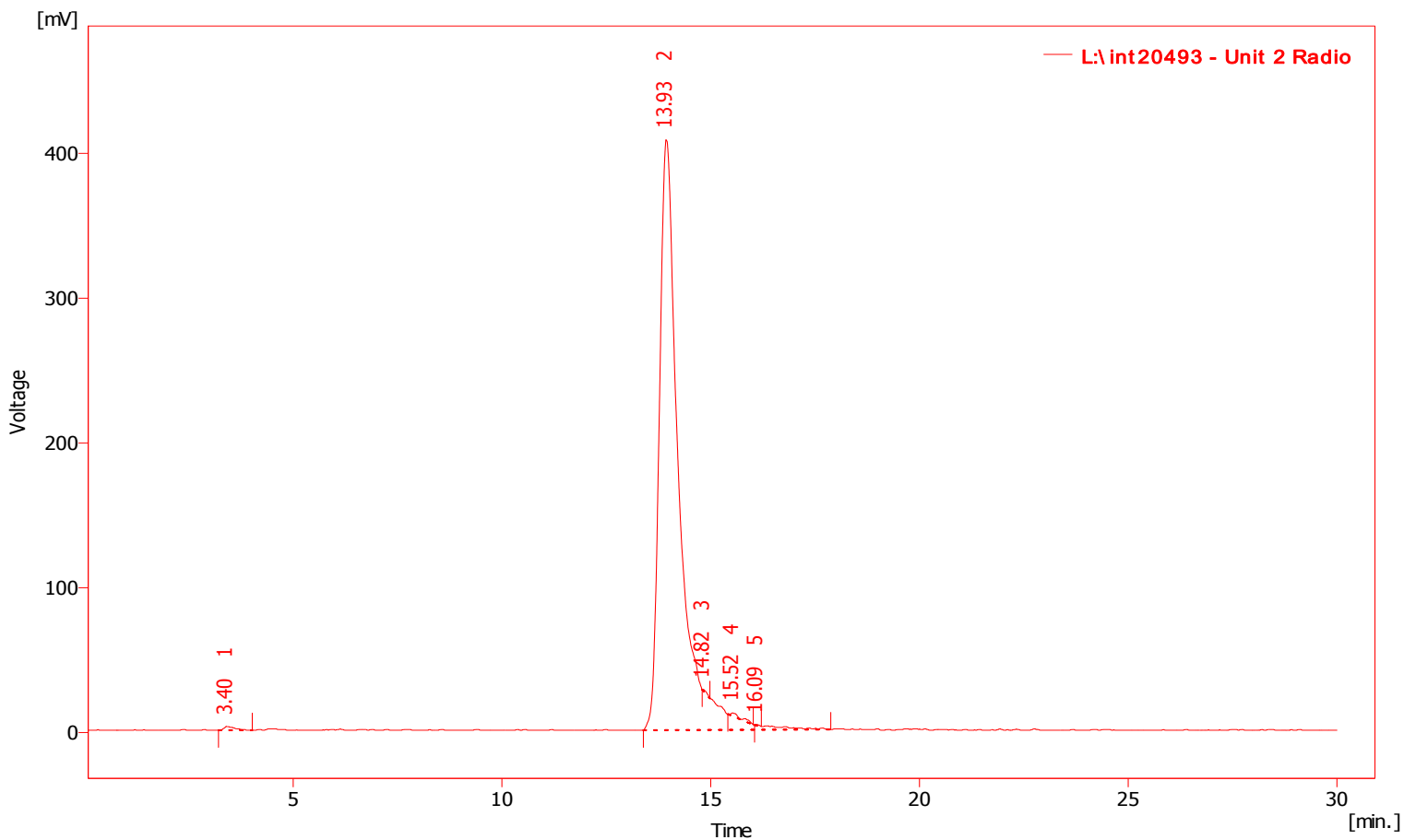
B) Mass spectrometry – Positive mode

C) NMR

MT-1502
Tenofovir, [adenine-2,8-3H]-
Lot 234-152-015-A-20100216-DG

Chromatogram Info:

File Name	: L:\int20493	File Created	: 3/24/2014 12:16:06 PM
Origin	: Acquired, Acquisition started 4/9/2010 9:48:26 AM	Acquired Date	: 4/9/2010 10:18:24 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 3/24/2014 12:33 PM
Created	: 7/20/2007 9:39 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



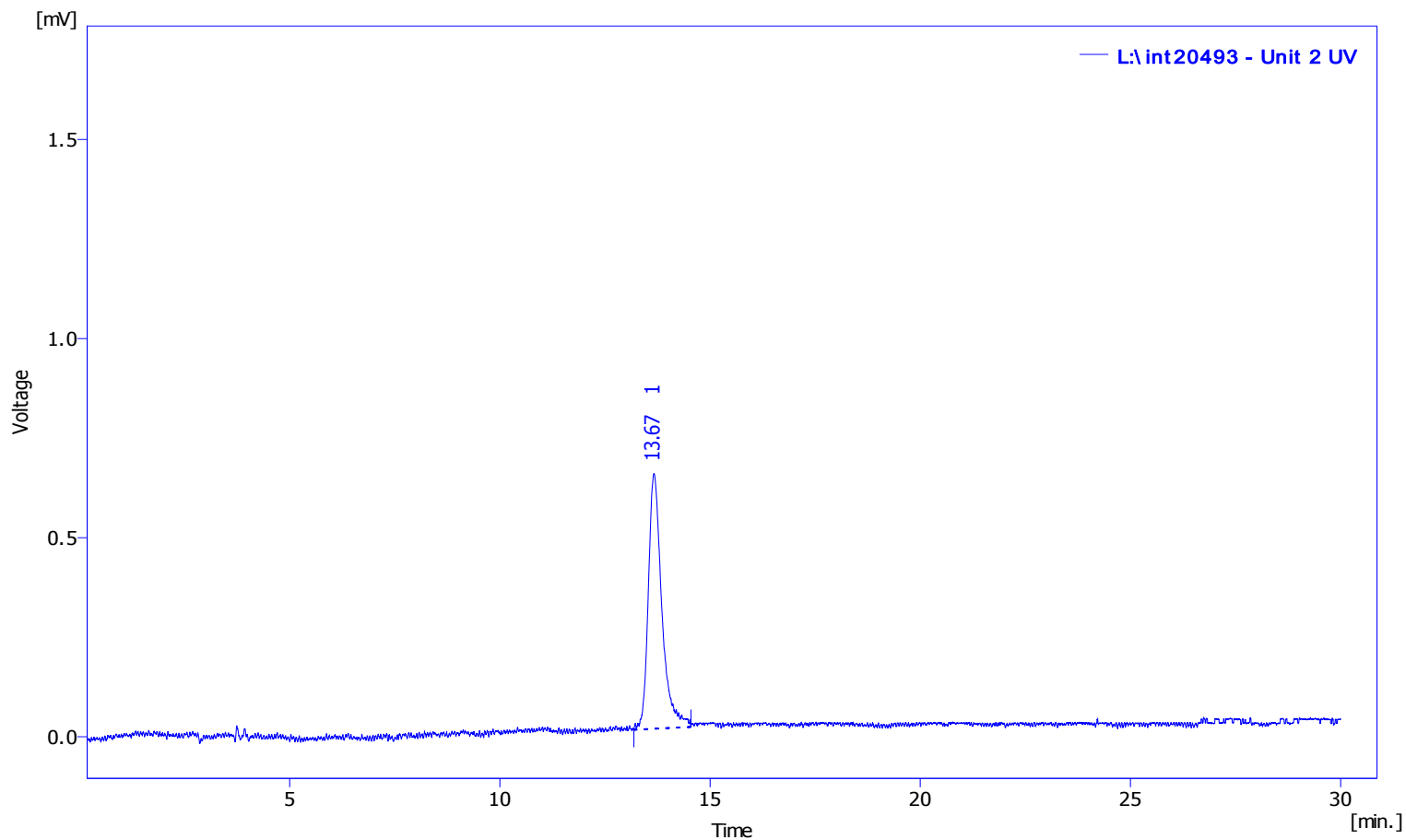
Result Table (Uncal - L:\int20493 - Unit 2 Radio)

	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		3.40	47.933	2.77	0.35	0.67	925.35	18507.04	2.25		
2		13.93	13548.099	407.78	99.20	98.38	5637.83	112756.58	4.13		17.7
3		14.82	10.518	0.93	0.08	0.23	427960.87	8559217.33	3.79		2.2
4		15.52	46.437	2.27	0.34	0.55	32289.59	645791.86	1.27		3.2
5		16.09	4.850	0.74	0.04	0.18	244111.71	4882234.23	1.83		2.4
		Total	13657.836	414.49	100.00	100.00					

MT-1502
Tenofovir, [adenine-2,8-3H]-
Lot 234-152-015-A-20100216-DG

Chromatogram Info:

File Name	: L:\int20493	File Created	: 3/24/2014 12:16:06 PM
Origin	: Acquired, Acquisition started 4/9/2010 9:48:26 AM	Acquired Date	: 4/9/2010 10:18:24 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 3/24/2014 12:32 PM
Created	: 7/20/2007 9:39 AM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



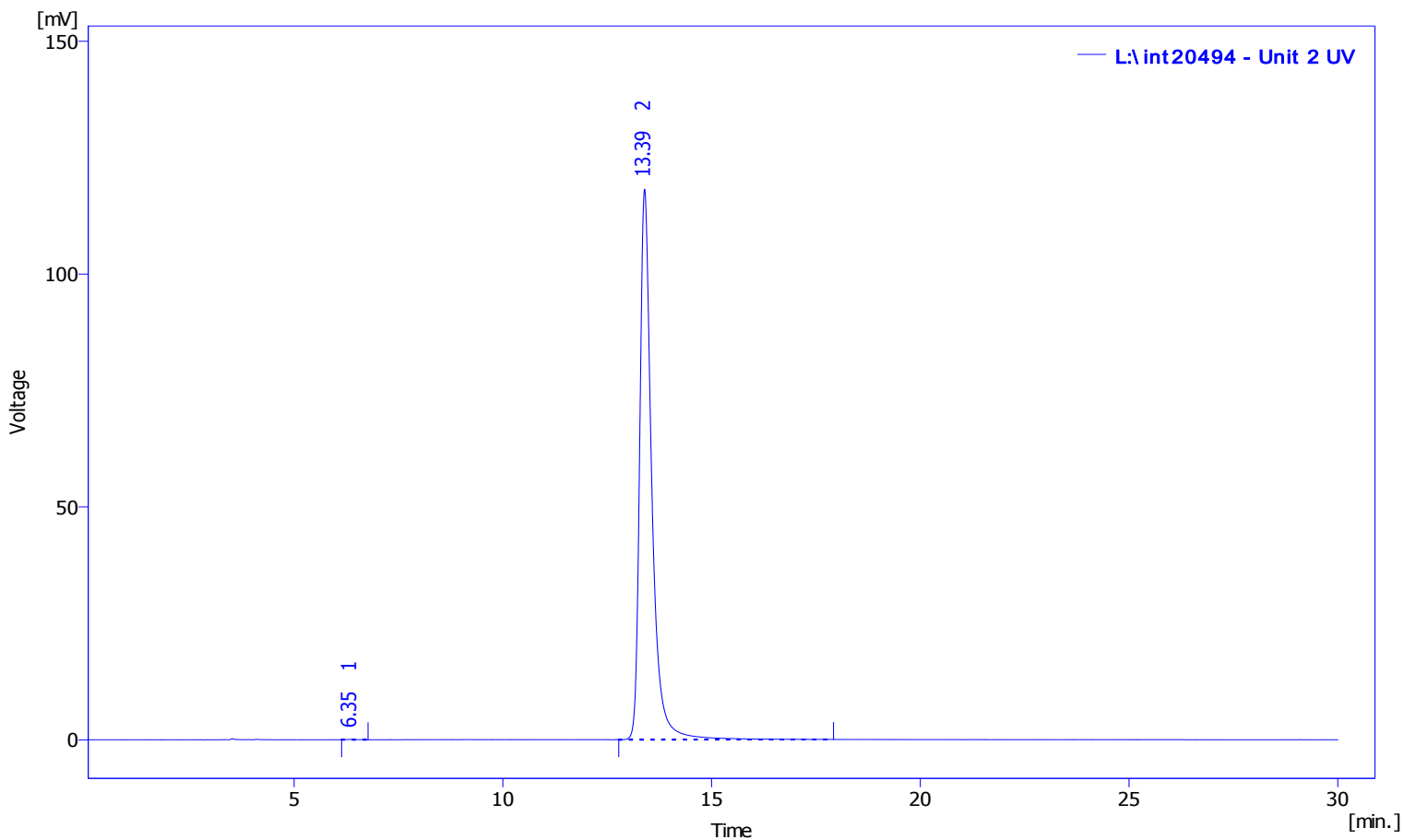
Result Table (Uncal - L:\int20493 - Unit 2 UV)

	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		13.67	14.368	0.64	100.00	100.00	10104.97	202099.39	1.44		
		Total	14.368	0.64	100.00	100.00					

MT-1502
Tenofovir, [adenine-2,8-3H]-
Lot 234-152-015-A-20100216-DG

Chromatogram Info:

File Name	: L:\int20494	File Created	: 3/24/2014 12:16:06 PM
Origin	: Acquired, Acquisition started 4/9/2010 10:36:35 AM	Acquired Date	: 4/9/2010 11:06:34 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 3/24/2014 12:34 PM
Created	: 7/20/2007 9:39 AM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



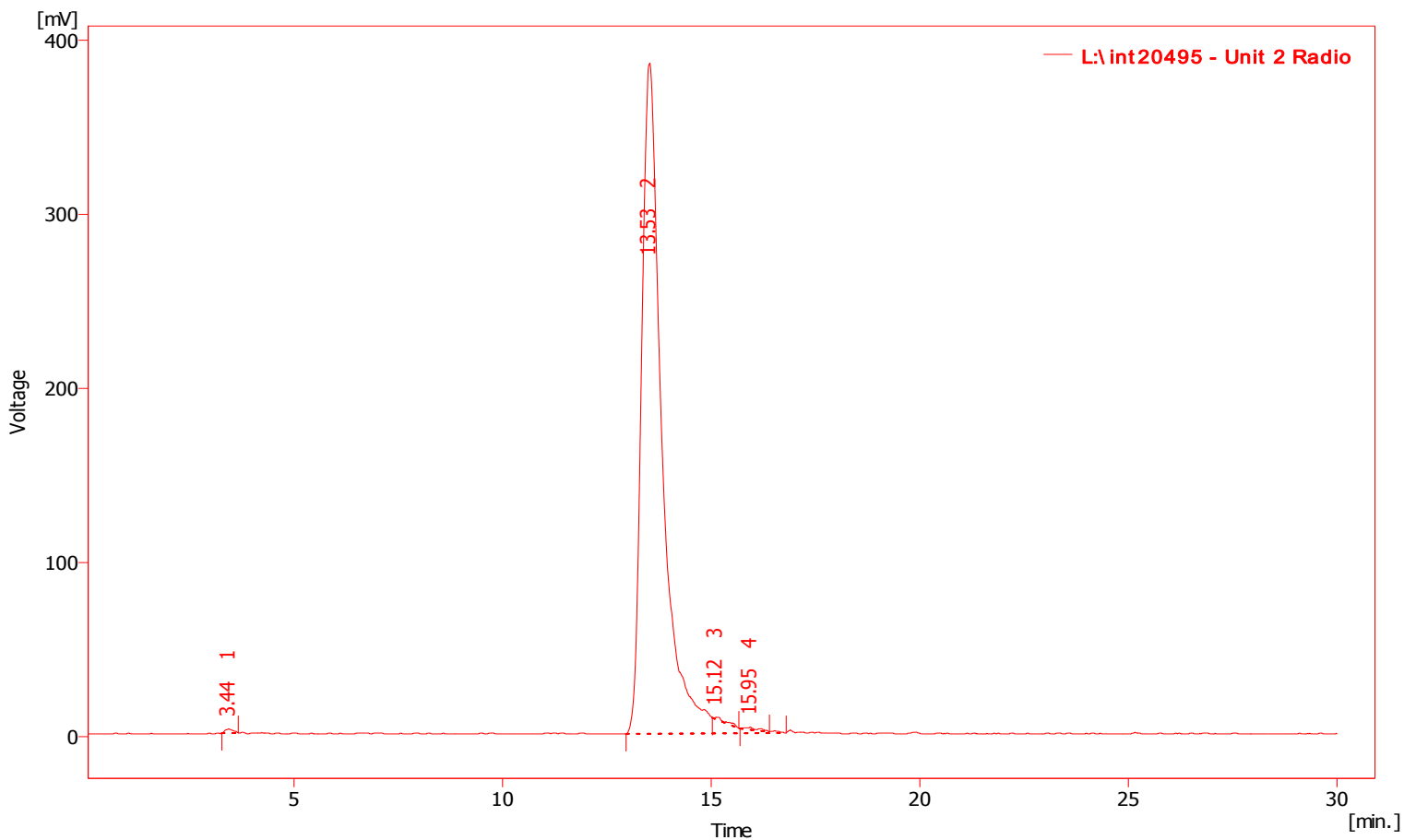
Result Table (Uncal - L:\int20494 - Unit 2 UV)

	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		6.35	1.103	0.08	0.05	0.06	4483.38	89667.68	1.70		
2		13.39	2383.212	118.19	99.95	99.94	12092.96	241859.26	1.48		16.3
		Total	2384.315	118.26	100.00	100.00					

MT-1502
Tenofovir, [adenine-2,8-3H]-
Lot 234-152-015-A-20100216-DG

Chromatogram Info:

File Name	: L:\int20495	File Created	: 3/24/2014 12:16:06 PM
Origin	: Acquired, Acquisition started 4/9/2010 11:08:49 AM	Acquired Date	: 4/9/2010 11:38:47 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 3/24/2014 12:35 PM
Created	: 7/20/2007 9:39 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



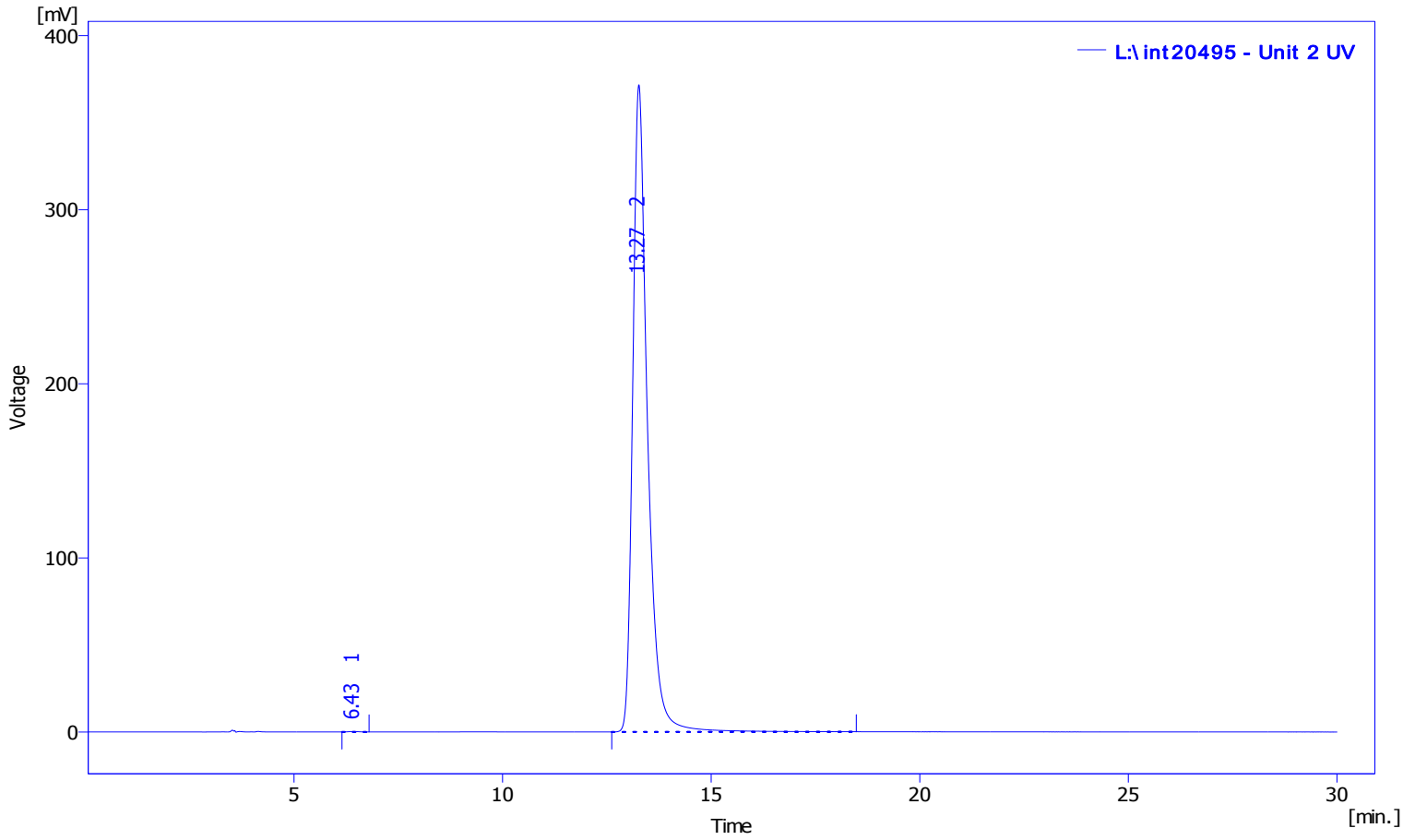
Result Table (Uncal - L:\int20495 - Unit 2 Radio)

	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		3.44	32.404	2.47	0.24	0.63	1357.13	27142.67	1.16		
2		13.53	13333.875	385.20	99.23	98.62	4526.59	90531.80	3.36		17.2
3		15.12	35.630	1.31	0.27	0.34	37665.09	753301.73	1.48		2.9
4		15.95	35.255	1.61	0.26	0.41	16751.50	335029.92	1.37		2.1
		Total	13437.165	390.59	100.00	100.00					

MT-1502
Tenofovir, [adenine-2,8-3H]-
Lot 234-152-015-A-20100216-DG

Chromatogram Info:

File Name	: L:\int20495	File Created	: 3/24/2014 12:16:06 PM
Origin	: Acquired, Acquisition started 4/9/2010 11:08:49 AM	Acquired Date	: 4/9/2010 11:38:47 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 3/24/2014 12:34 PM
Created	: 7/20/2007 9:39 AM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



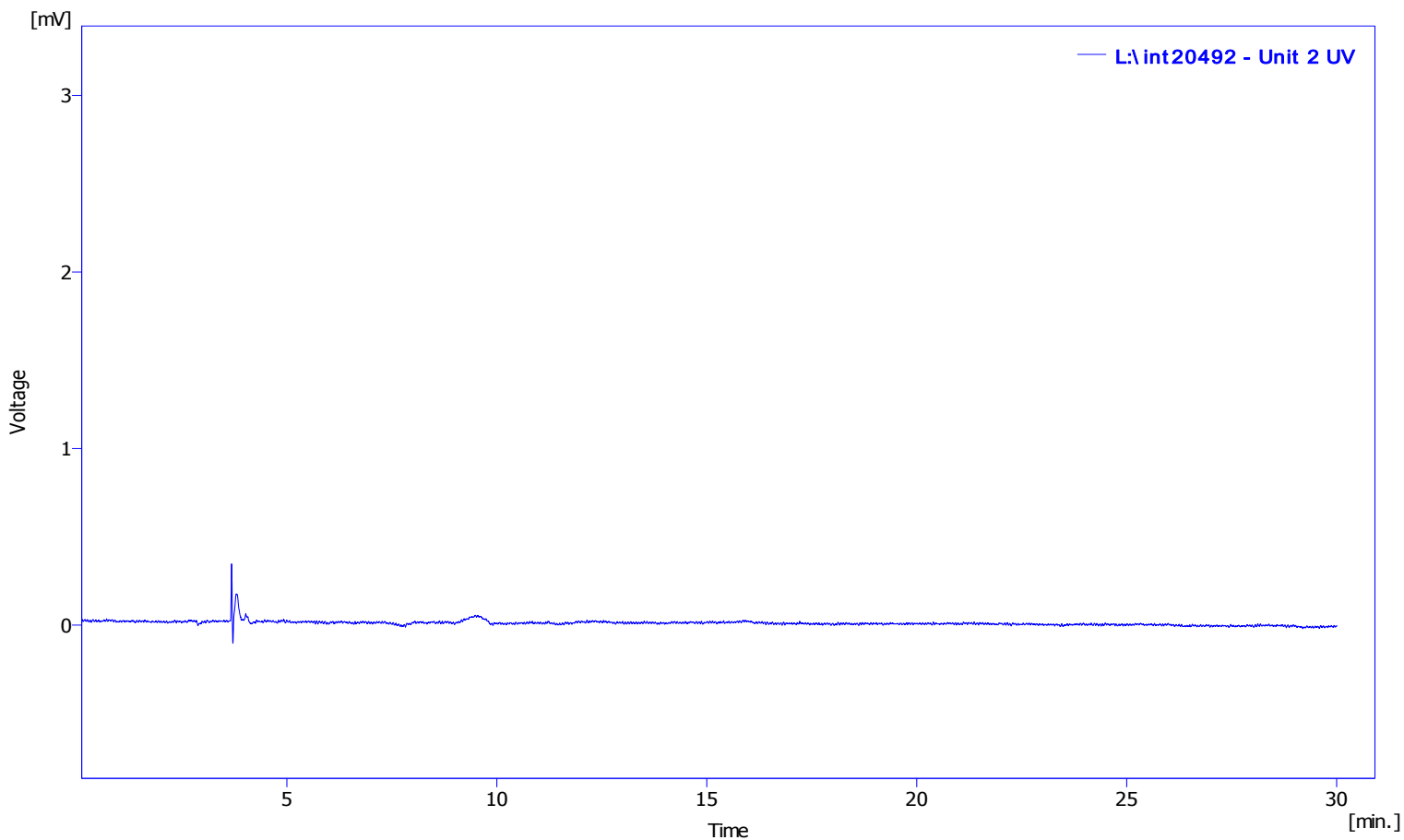
Result Table (Uncal - L:\int20495 - Unit 2 UV)

	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		6.43	3.893	0.24	0.04	0.07	3473.30	69466.01	1.20		
2		13.27	9145.311	371.71	99.96	99.93	7664.93	153298.66	1.42		13.2
		Total	9149.204	371.96	100.00	100.00					

MT-1502
Tenofovir, [adenine-2,8-3H]-
Lot 234-152-015-A-20100216-DG

Chromatogram Info:

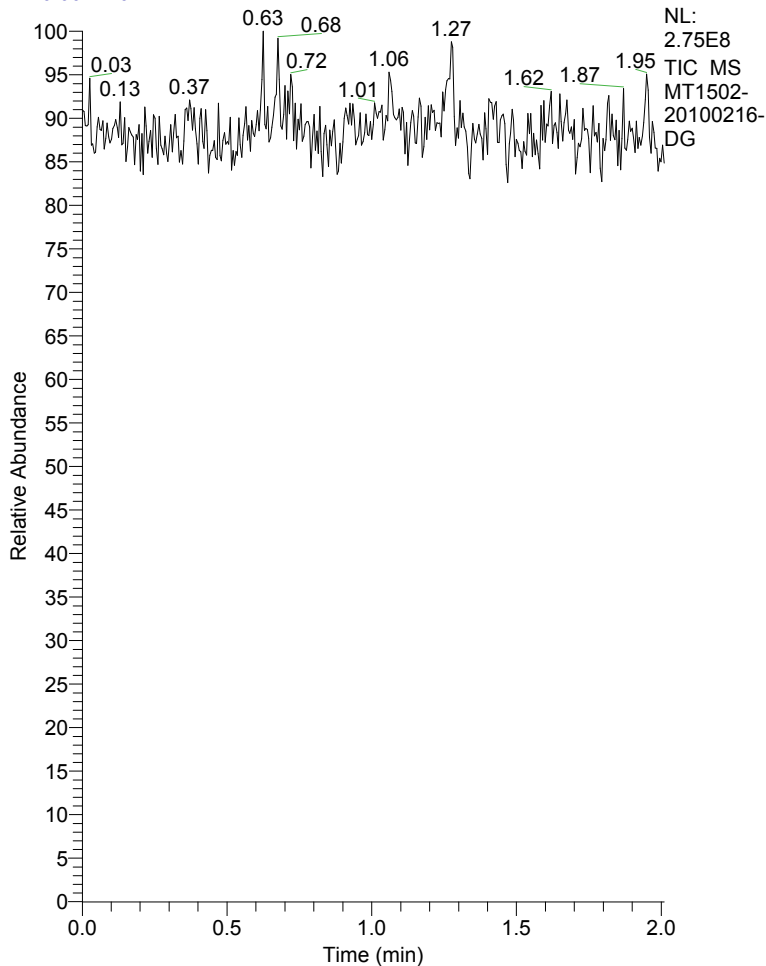
File Name	: L:\int20492	File Created	: 3/24/2014 12:16:06 PM
Origin	: Acquired, Acquisition started 4/9/2010 9:17:29 AM	Acquired Date	: 4/9/2010 9:47:28 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 3/24/2014 12:36 PM
Created	: 7/20/2007 9:39 AM		
Column	:	Detection	: UV 260nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int20492 - 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: 2.75E8
TIC MS
MT1502-20100216-DG

MT1502-20100216-DG#1-403 RT: 0.00-2.01

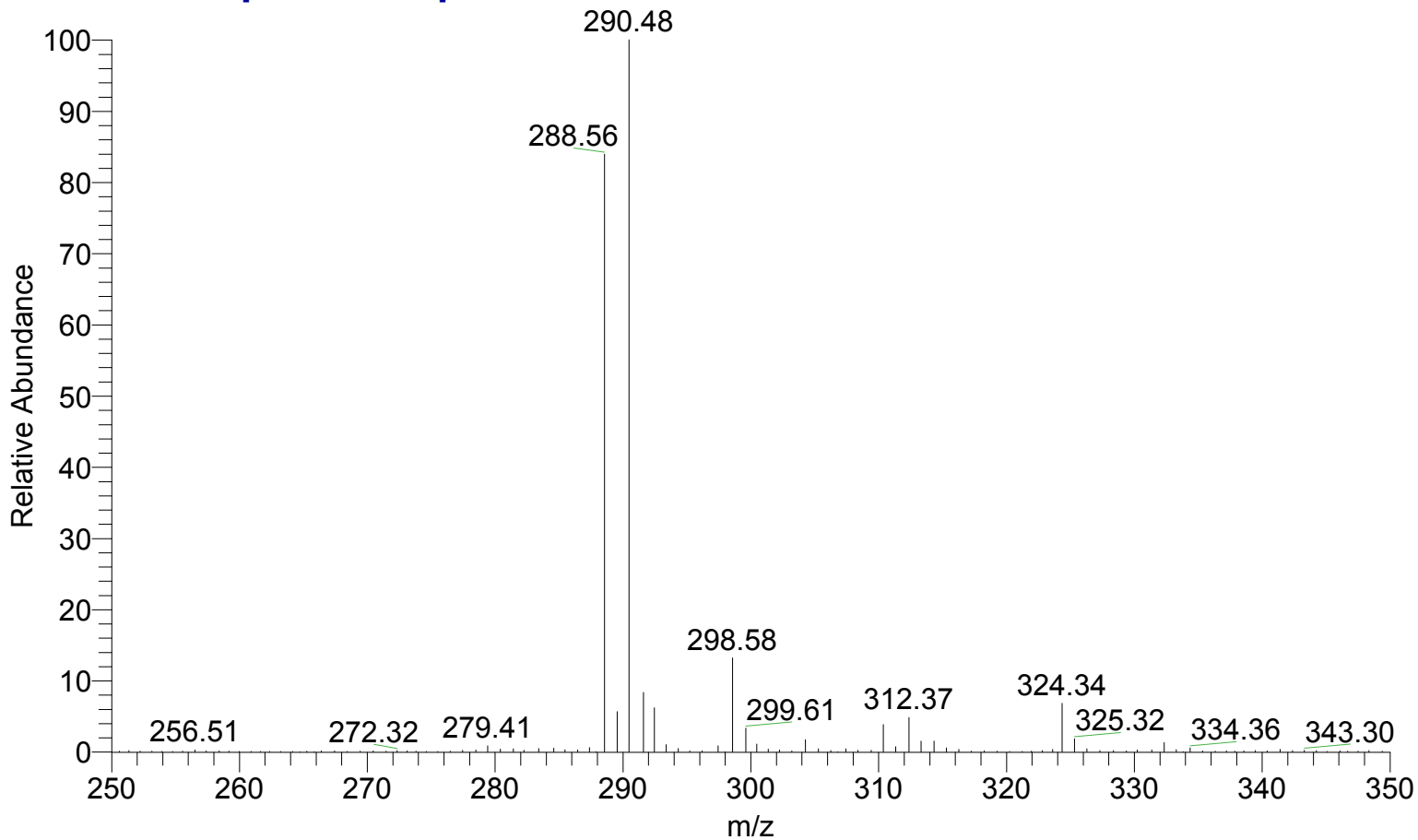
T: + c NSI Full ms [250.00-350.00]

m/z = 285.58-297.70

m/z	Intensity	Relative
287.37	535914.8	0.58
287.89	18511.5	0.02
288.56	76993050.4	83.95
289.54	5186647.9	5.66
290.48	91715075.9	100.00
291.59	7651203.8	8.34
292.45	5674483.8	6.19
293.37	934563.4	1.02
294.31	423572.1	0.46
295.23	144641.3	0.16
296.18	134574.7	0.15
297.45	773763.3	0.84

MT1502-20100216-DG #1-403 RT: 0.00-2.01 AV: 403 NL: 9.17E7

T: + c NSI Full ms [250.00-350.00]



MT1502 3H NMR in D2O
Batch 20100216-DG



8.062

NAME MT1502
EXPNO 1
PROCNO 1
Date_ 20100511
Time_ 14.11
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

