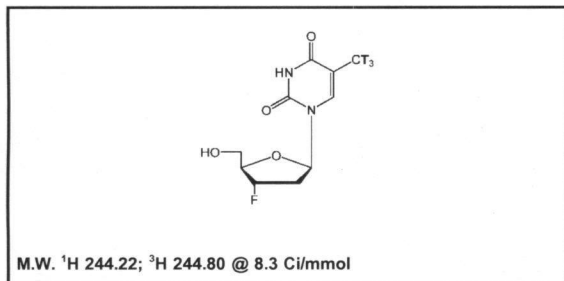




Product Data Sheet

MT-645

3'-Fluoro 3'-deoxythymidine, [methyl-³H]-



Lot #: 217-015-0083-A-20110419-TN

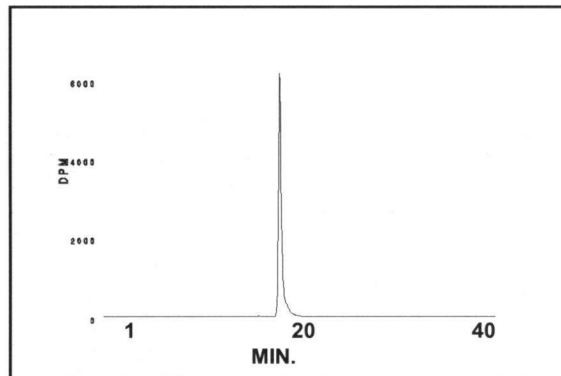
Specific Activity: 8.3 Ci/mmol

Concentration: 1.0 mCi/ml; 29.49 µg/ml

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

Date of Analysis: July 28, 2011

Radiochemical Purity: 99.5%



HPLC ANALYSIS LOT 217-015-0083-A-20110419-TN
File Name: int21246 Date and Time: 7/28/2011 9:49:07 AM
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.30	15.96670	41.12389
2	99.51	18.05330	13573.88248
3	0.04	19.52670	5.57053
4	0.15	19.85330	20.67293
Totals	100.00		13641.24983

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- 645

3'-Fluoro-3'-deoxythymidine, [methyl-³H(N)]-

Lot 217-015-0083-A-20110419-TN

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.

3'-Fluoro-3'-deoxythymidine, [methyl-³H(N)]- concentration was 0.2 mCi/ml.

Volume of standard alone injection was 1.0 µl.

Volume of **3'-Fluoro-3'-deoxythymidine, [methyl-³H(N)]-** alone injection was 1.0 µl.

Co-injection solution consisted of 1.0 µl **3'-Fluoro-3'-deoxythymidine, [methyl-³H(N)]-** + 1.0 µl standard.

Volume of co-injection was 2.0 µl.

Volume of blank injection was 1.0 µl.

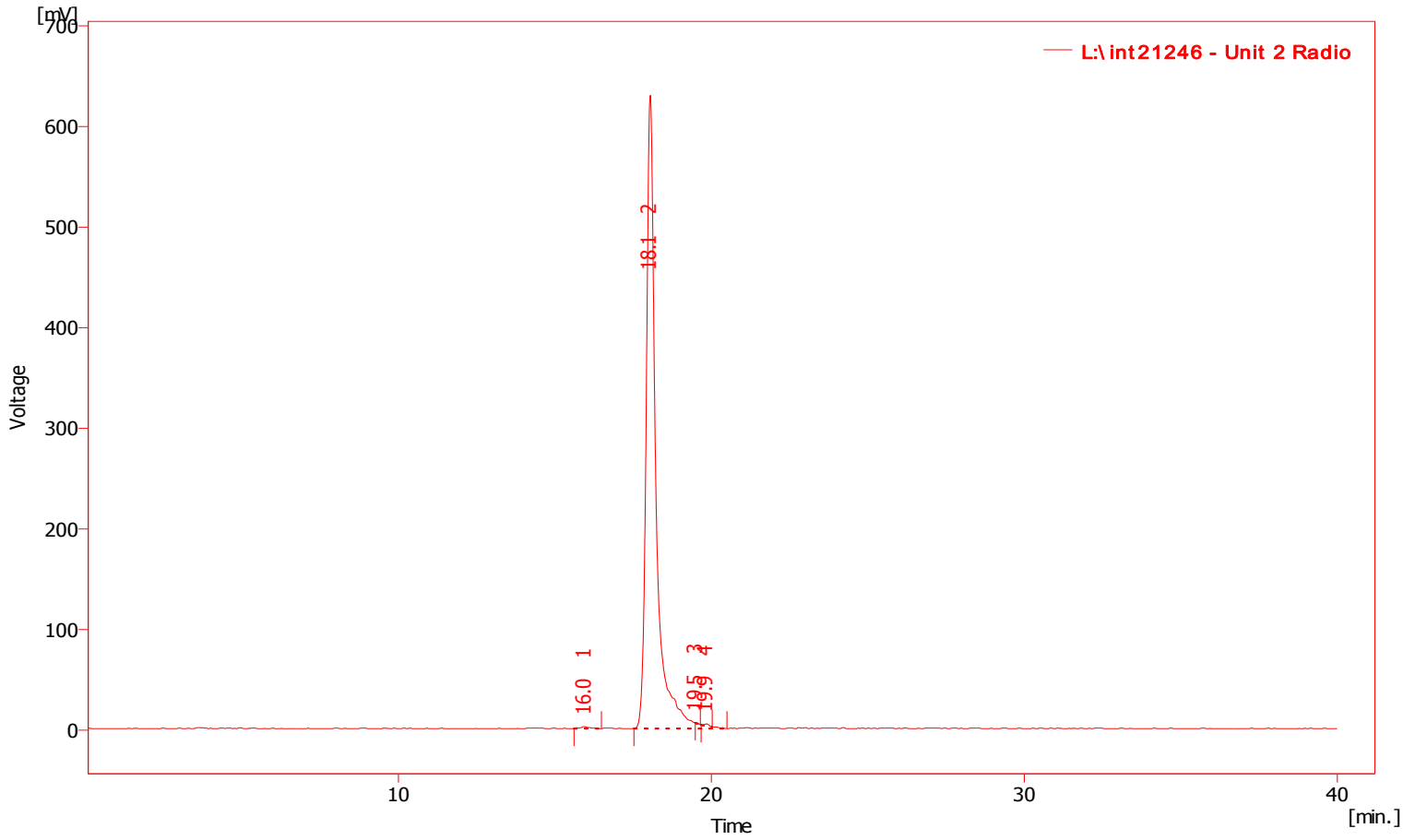
B) Mass spectrometry – Negative mode

C) NMR

MT- 645
3'-Fluoro-3'-deoxythymidine, [methyl-3H(N)]-
Lot 217-015-0083-A-20110419-TN

Chromatogram Info:

File Name	: L:\int21246	File Created	: 2/27/2014 12:33:14 PM
Origin	: Acquired, Acquisition started 7/28/2011 9:09:08 AM	Acquired Date	: 7/28/2011 9:49:07 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 2/27/2014 12:46 PM
Created	: 6/16/2007 8:19 AM	Detection	: Radiochemical
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



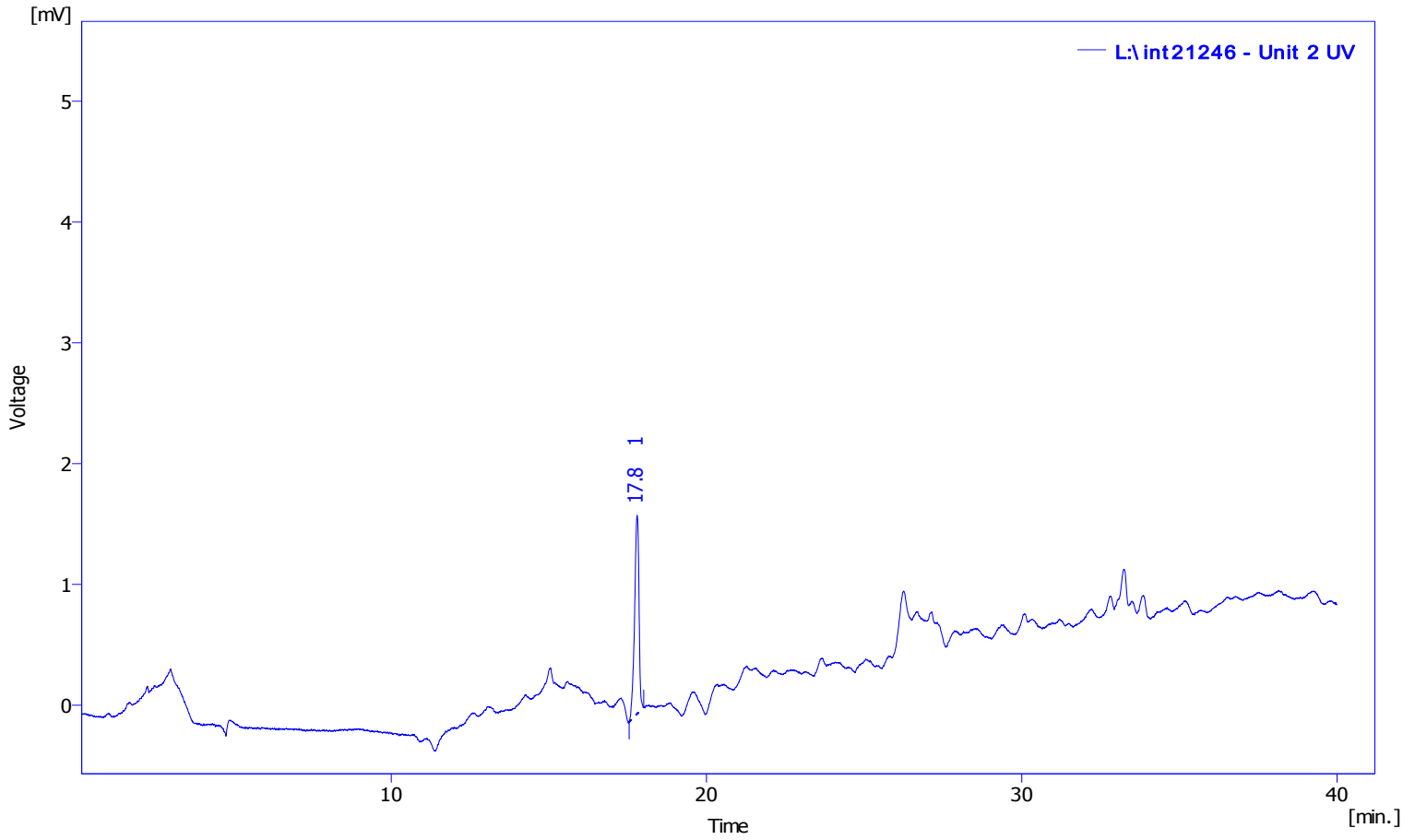
Result Table (Uncal - L:\int21246 - Unit 2 Radio)

	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		15.97	41.124	1.98	0.30	0.31	18903.97	378079.46	1.12		
2		18.05	13573.882	629.28	99.51	99.19	23030.77	460615.45	2.85		4.4
3		19.53	5.571	0.88	0.04	0.14	330054.77	6601095.44	1.92		4.8
4		19.85	20.673	2.27	0.15	0.36	72679.59	1453591.76	0.98		1.5
		Total	13641.250	634.41	100.00	100.00					

MT- 645
3'-Fluoro-3'-deoxythymidine, [methyl-3H(N)]-
Lot 217-015-0083-A-20110419-TN

Chromatogram Info:

File Name	: L:\int21246	File Created	: 2/27/2014 12:33:14 PM
Origin	: Acquired, Acquisition started 7/28/2011 9:09:08 AM	Acquired Date	: 7/28/2011 9:49:07 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 2/27/2014 12:45 PM
Created	: 6/16/2007 8:19 AM	Detection	: UV 266nm
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



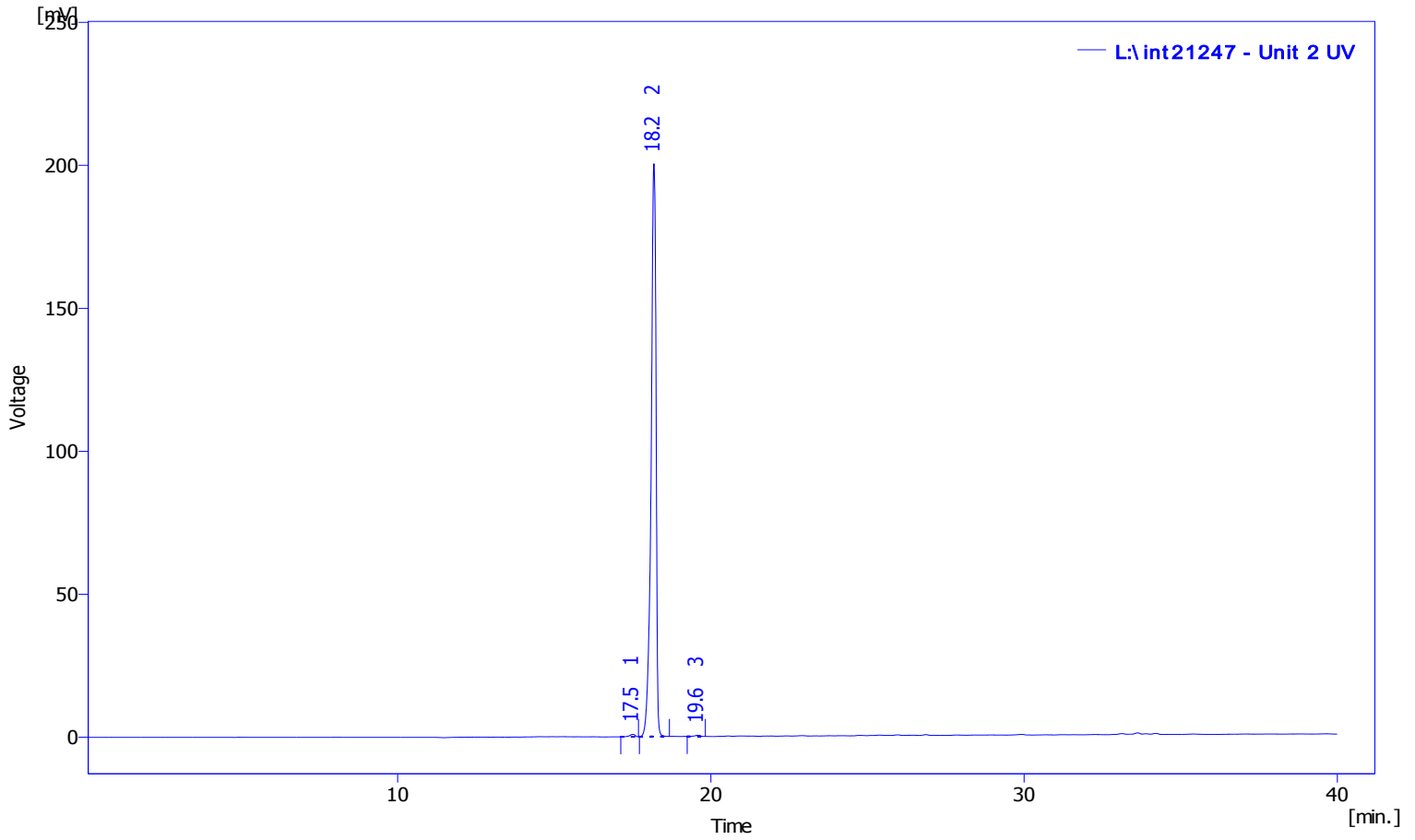
Result Table (Uncal - L:\int21246 - Unit 2 UV)

	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		17.80	15.988	1.64	100.00	100.00	78013.05	1560260.98	0.82		
		Total	15.988	1.64	100.00	100.00					

MT- 645
3'-Fluoro-3'-deoxythymidine, [methyl-3H(N)]-
Lot 217-015-0083-A-20110419-TN

Chromatogram Info:

File Name	: L:\int21247	File Created	: 2/27/2014 12:33:14 PM
Origin	: Acquired, Acquisition started 7/28/2011 11:00:17 AM	Acquired Date	: 7/28/2011 11:40:17 AM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 2/27/2014 12:47 PM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 266nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



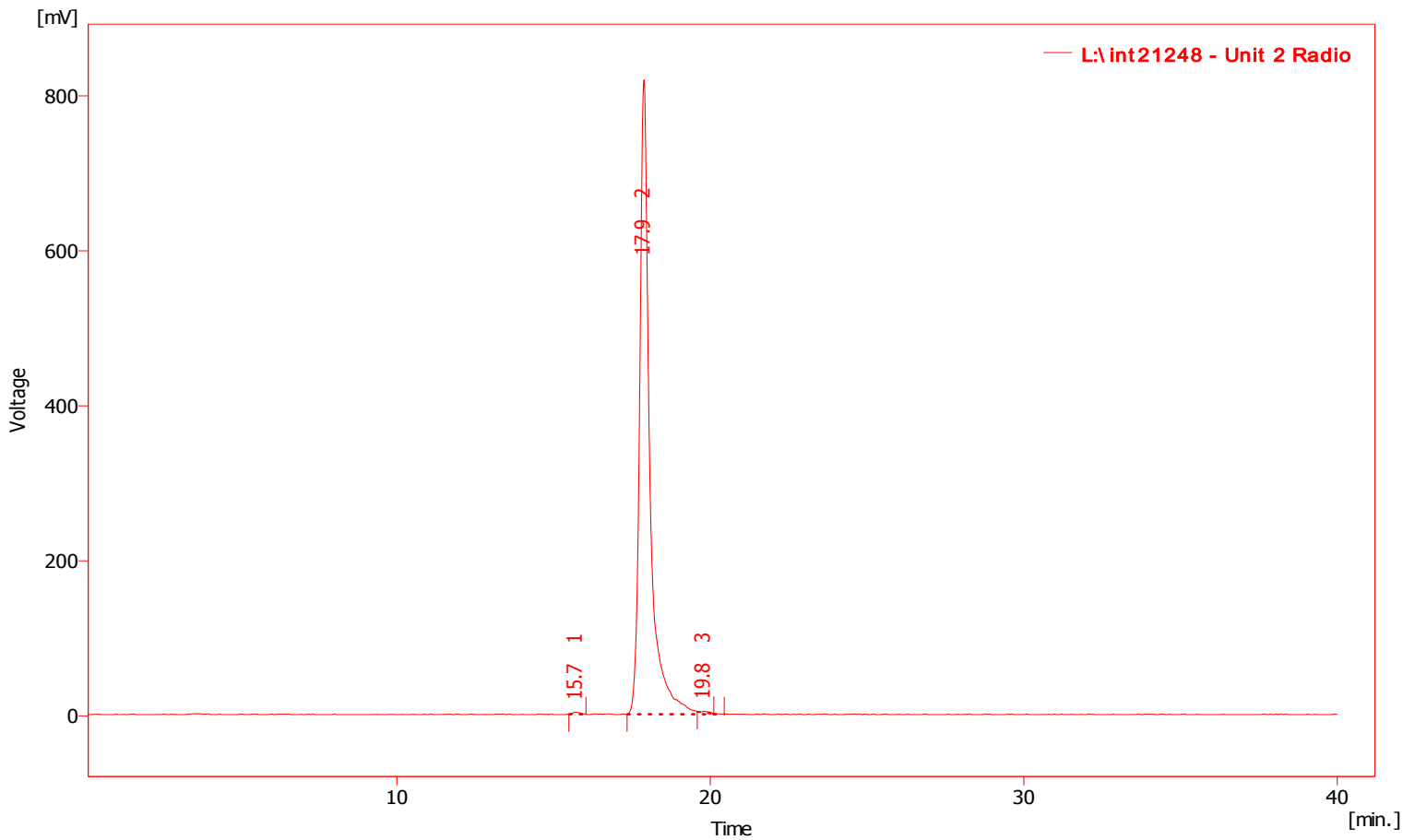
Result Table (Uncal - L:\int21247 - Unit 2 UV)

	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		17.50	10.008	0.85	0.45	0.42	52345.02	1046900.45	0.80		
2		18.18	2197.939	200.31	99.32	99.38	68635.35	1372707.06	0.79		2.3
3		19.57	5.147	0.40	0.23	0.20	60870.93	1217418.53	0.83		4.7
		Total	2213.093	201.56	100.00	100.00					

MT- 645
3'-Fluoro-3'-deoxythymidine, [methyl-3H(N)]-
Lot 217-015-0083-A-20110419-TN

Chromatogram Info:

File Name	: L:\int21248	File Created	: 2/27/2014 12:33:14 PM
Origin	: Acquired, Acquisition started 7/28/2011 12:10:26 PM	Acquired Date	: 7/28/2011 12:50:25 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 2/27/2014 12:48 PM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



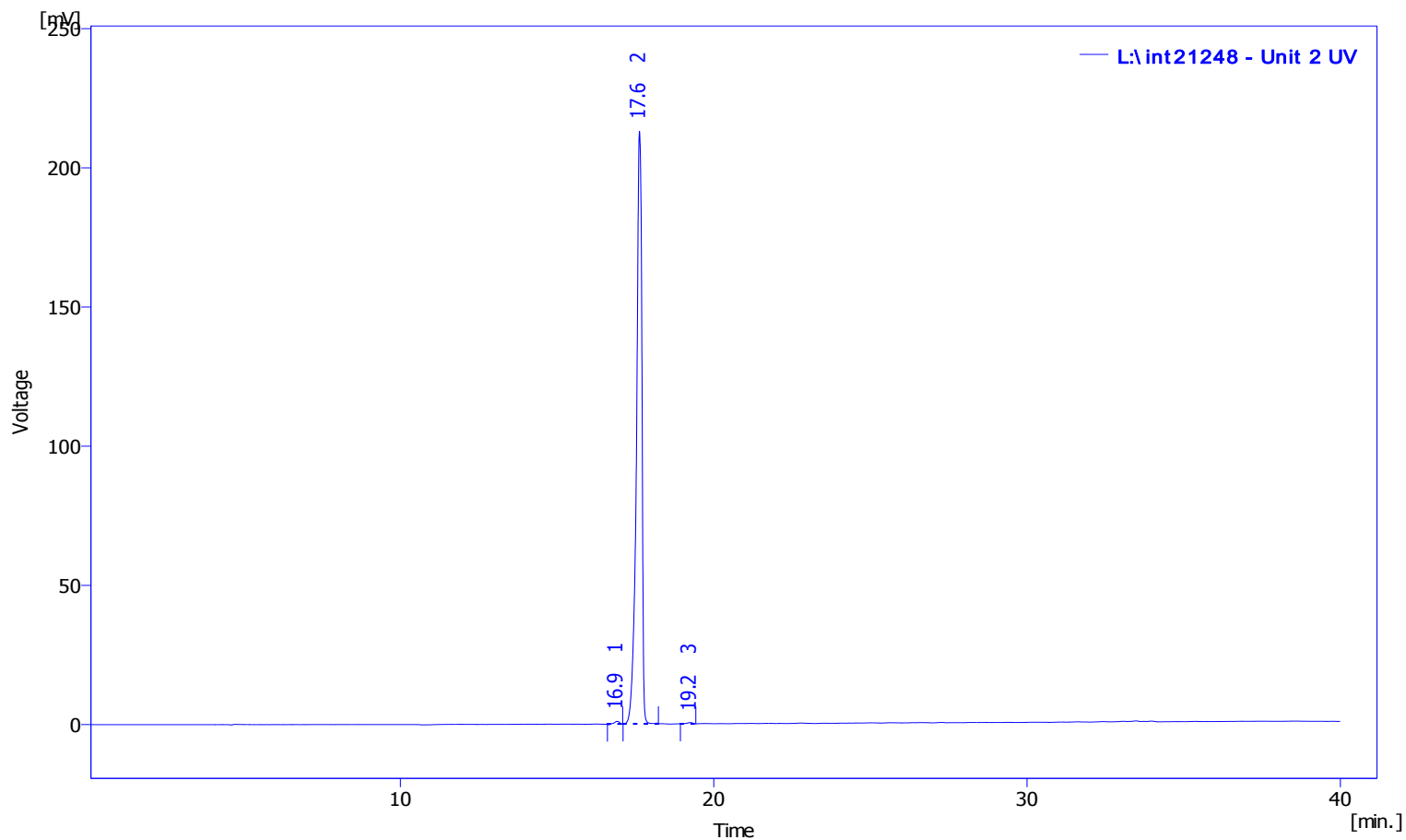
Result Table (Uncal - L:\int21248 - Unit 2 Radio)

	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		15.72	42.838	2.59	0.23	0.32	17462.19	349243.86	1.25		
2		17.89	18419.996	818.51	99.60	99.46	21075.24	421504.87	2.84		4.5
3		19.80	30.910	1.82	0.17	0.22	60163.48	1203269.58	1.17		4.7
		Total	18493.744	822.92	100.00	100.00					

MT- 645
3'-Fluoro-3'-deoxythymidine, [methyl-3H(N)]-
Lot 217-015-0083-A-20110419-TN

Chromatogram Info:

File Name	: L:\int21248	File Created	: 2/27/2014 12:33:14 PM
Origin	: Acquired, Acquisition started 7/28/2011 12:10:26 PM	Acquired Date	: 7/28/2011 12:50:25 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 2/27/2014 12:48 PM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 266nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



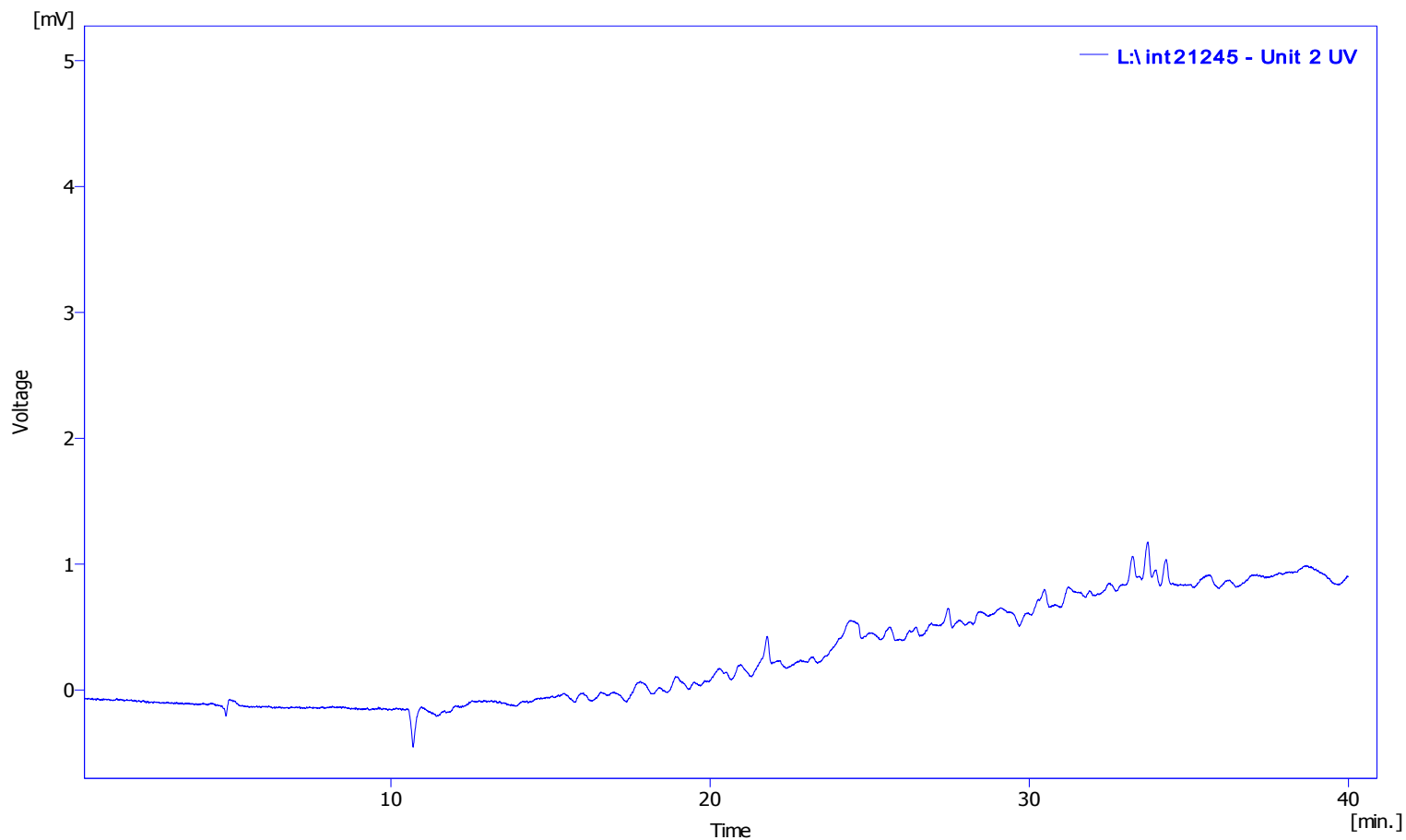
Result Table (Uncal - L:\int21248 - Unit 2 UV)

	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		16.91	10.591	0.94	0.41	0.44	50756.04	1015120.84	0.81		
2		17.63	2564.488	212.82	99.40	99.37	53145.85	1062917.05	0.77		2.4
3		19.25	4.963	0.42	0.19	0.20	61057.35	1221146.98	0.78		5.3
		Total	2580.042	214.18	100.00	100.00					

MT- 645
3'-Fluoro-3'-deoxythymidine, [methyl-3H(N)]-
Lot 217-015-0083-A-20110419-TN

Chromatogram Info:

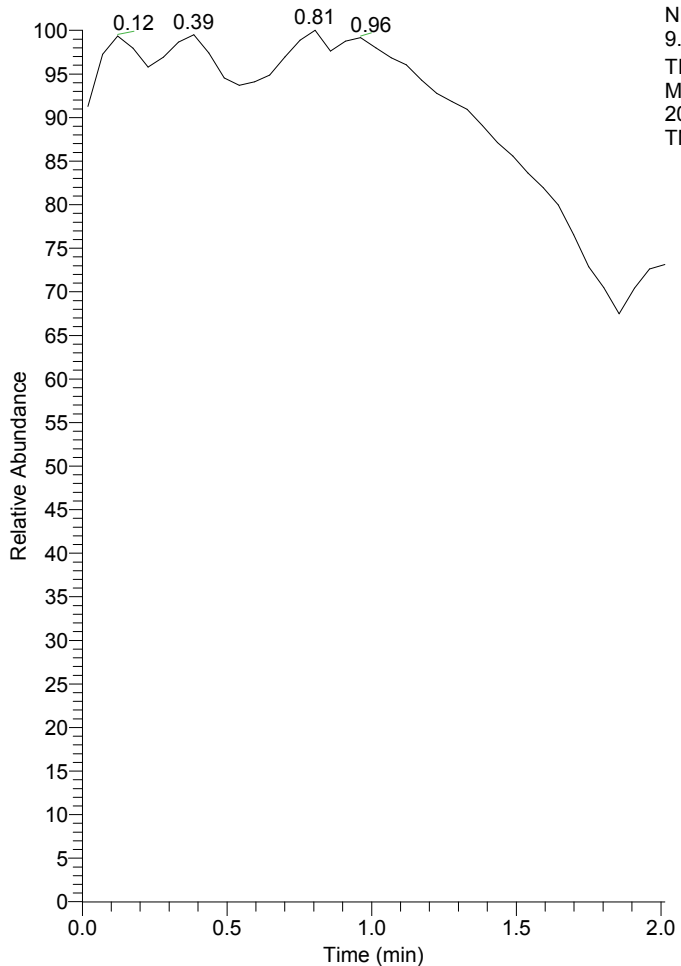
File Name	: L:\int21245	File Created	: 2/27/2014 12:33:14 PM
Origin	: Acquired, Acquisition started 7/27/2011 2:59:19 PM	Acquired Date	: 7/27/2011 3:39:16 PM
Project	: Test	By	: Administrator
Method	: Unit2-40minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 2/27/2014 12:50 PM
Created	: 6/16/2007 8:19 AM		
Column	:	Detection	: UV 266nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int21245 - 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:
9.16E5
TIC MS
MT645-
20110419-
TN

MT645-20110419-TN#1-39 RT: 0.02-2.01 AV:

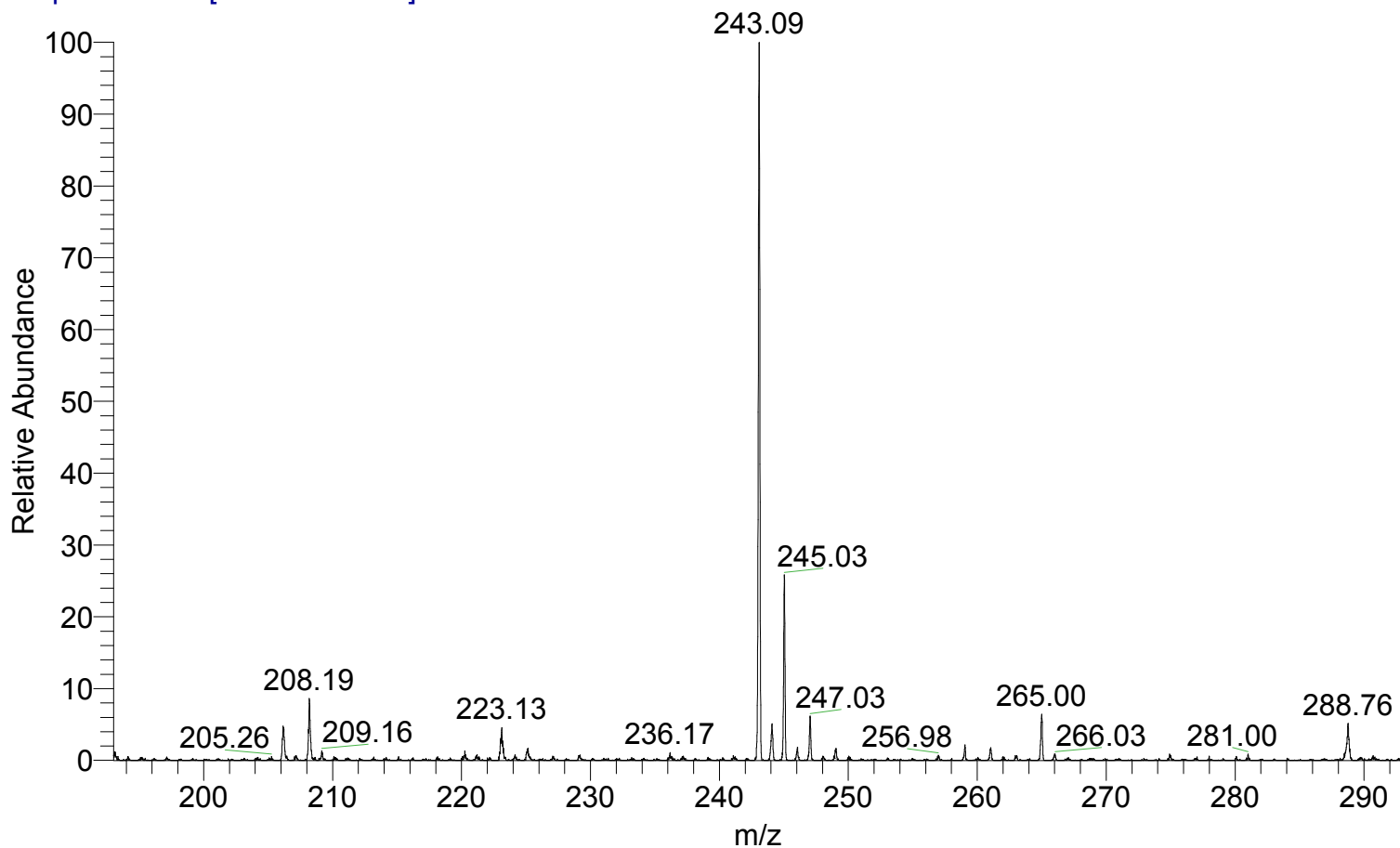
T: - p NSI Z ms [193.00-293.00]

m/z = 239.06-254.09

m/z	Intensity	Relative
242.15	853.5	0.23
243.07	377389.5	100.00
244.06	22188.6	5.88
245.03	85721.7	22.71
246.03	6522.4	1.73
247.03	22337.1	5.92
248.06	2428.8	0.64
249.01	7244.2	1.92
250.06	2074.8	0.55
251.03	659.6	0.17
251.94	883.0	0.23
253.04	1013.0	0.27
253.88	811.7	0.22

MT645-20110419-TN #1-39 RT: 0.02-2.01 AV: 39 NL: 1.34E4

T: - p NSI Z ms [193.00-293.00]



MT645 3H NMR in D2O
Batch 20110419-TN



BRUKER

1.789
1.741
1.691
1.668
1.663

NAME MT645-20110419-TN
EXPNO 1
PROCNO 1
Date_ 20110729
Time_ 15.49
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

