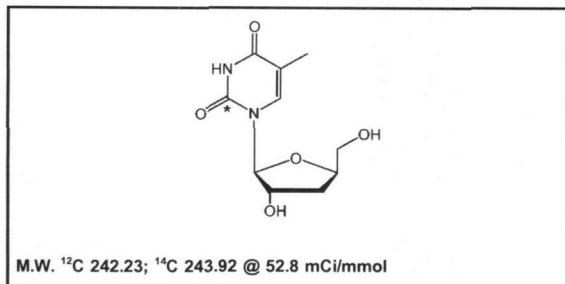




# Product Data Sheet

**MC-2096**

**L-Thymidine, [2-<sup>14</sup>C]-**



**Lot #:** 167-086-0528-A-20020109-GI

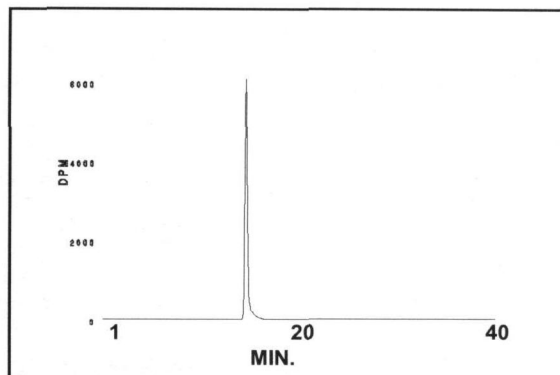
**Specific Activity:** 52.8 mCi/mmol

**Concentration:** 0.1 mCi/ml; 461.97 µg/ml

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

**Date of Analysis:** April 15, 2009

**Radiochemical Purity:** 98.9%



HPLC ANALYSIS LOT 167-086-0528-A-20020109-GI  
File Name: intrn1108 Date and Time: 4/15/2009 3:35:17 PM  
Unit 21 Radio

Peak #	Area %	Time	Area
1	0.17	9.37670	19.41139
2	0.37	13.56670	42.77073
3	98.91	14.68330	11299.73449
4	0.07	16.06670	8.40553
5	0.09	16.68330	10.18810
6	0.38	21.30000	43.53403
Totals	100.00		11424.04427

**Stability and Storage Recommendation:** Store 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.

**MC-2096**

**L-Thymidine, [2-<sup>14</sup>C]-**

**Lot 167-086-0528-A-20020109-GI**

**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.

**L-Thymidine, [2-<sup>14</sup>C]-** concentration was 50.0 µCi/mL.

Volume of standard alone injection was 1.0 µL

Volume of **L-Thymidine, [2-<sup>14</sup>C]-** alone injection was 1.0 µL.

Co-injection solution consisted of 1.0 µL **L-Thymidine, [2-<sup>14</sup>C]-** + 1.0 µL standard.

Volume of co-injection was 2.0 µL.

Volume of blank injection was 1.0 µL.

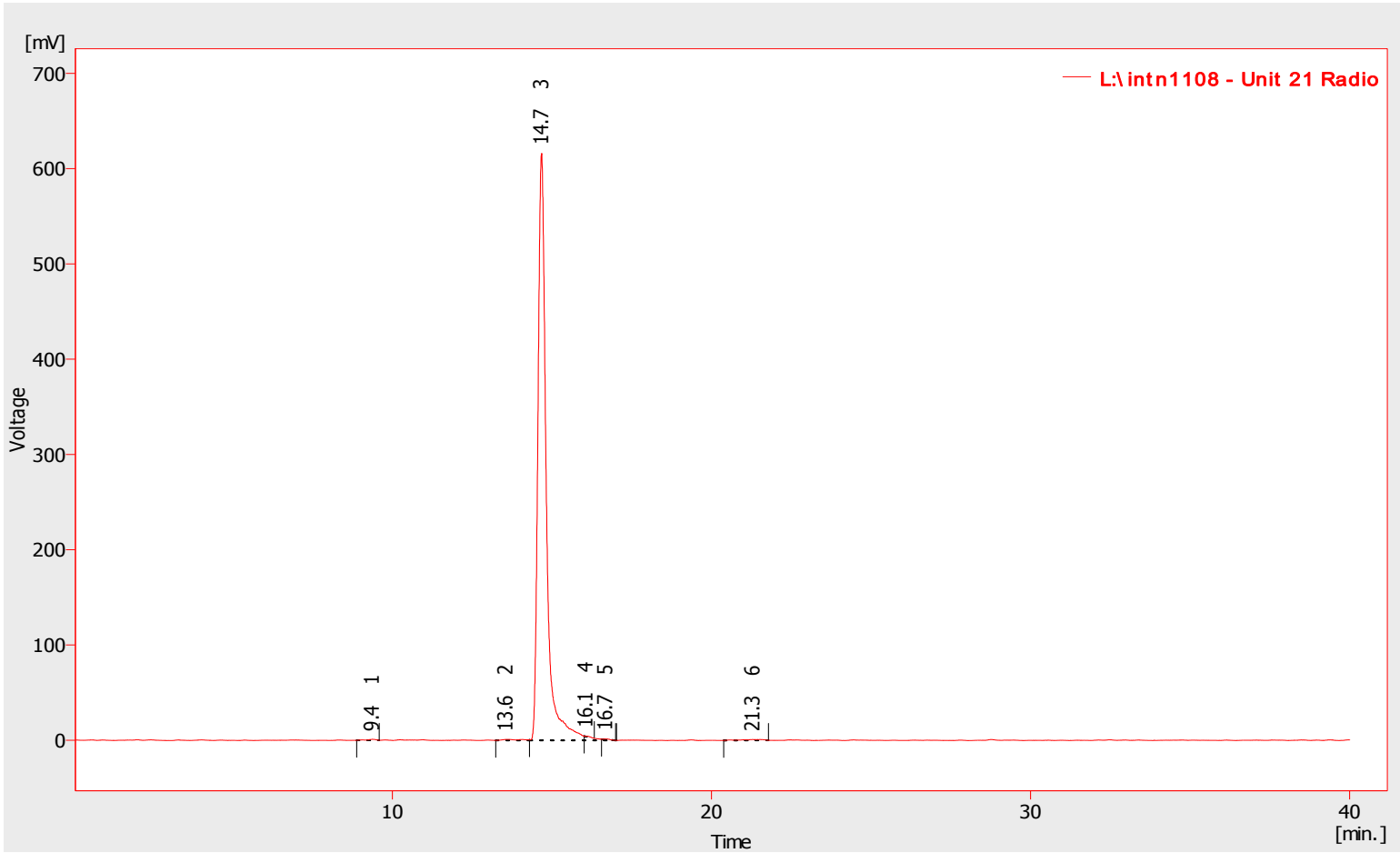
**B) Mass spectrometry – Positive mode**

**C) NMR**

**MC-2096**  
**L-Thymidine, [2-14C]-**  
**Lot 167-086-0528-A-20020109-GI**

Chromatogram Info:

File Name	: L:\intn1108.PRM	File Created	: 2/13/2014 11:19:55 AM
Origin	: Acquired, Acquisition started 4/15/2009 2:55:18 PM	Acquired Date	: 4/15/2009 3:35:17 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material alone	Modified	: 2/13/2014 11:32 AM
Created	: 4/17/2008 10:27 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



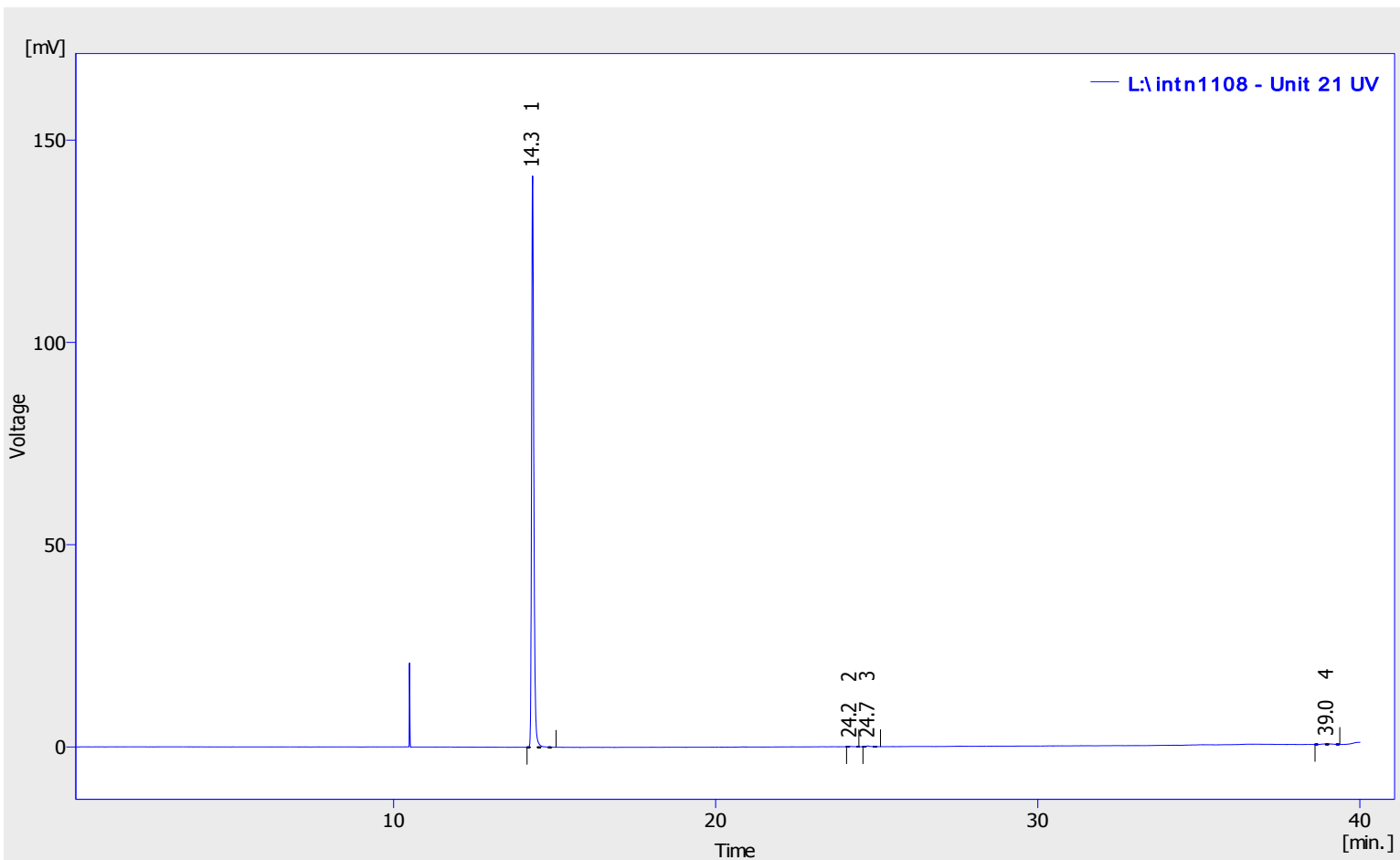
Result Table (Uncal - L:\intn1108 - Unit 21 Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Resolution [-]
1	9.377	19.411	1.049	0.17	0.17	
2	13.567	42.771	1.066	0.37	0.17	7.890
3	14.683	11299.734	616.307	98.91	99.28	2.007
4	16.067	8.406	0.533	0.07	0.09	4.222
5	16.683	10.188	0.862	0.09	0.14	2.481
6	21.300	43.534	0.959	0.38	0.15	7.933
	Total	11424.044	620.777	100.00	100.00	

**MC-2096**  
**L-Thymidine, [2-14C]-**  
**Lot 167-086-0528-A-20020109-GI**

Chromatogram Info:

File Name	: L:\intn1108.PRM	File Created	: 2/13/2014 11:19:55 AM
Origin	: Acquired, Acquisition started 4/15/2009 2:55:18 PM	Acquired Date	: 4/15/2009 3:35:17 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: UV trace of 14C material alone	Modified	: 2/13/2014 11:33 AM
Created	: 4/17/2008 10:27 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



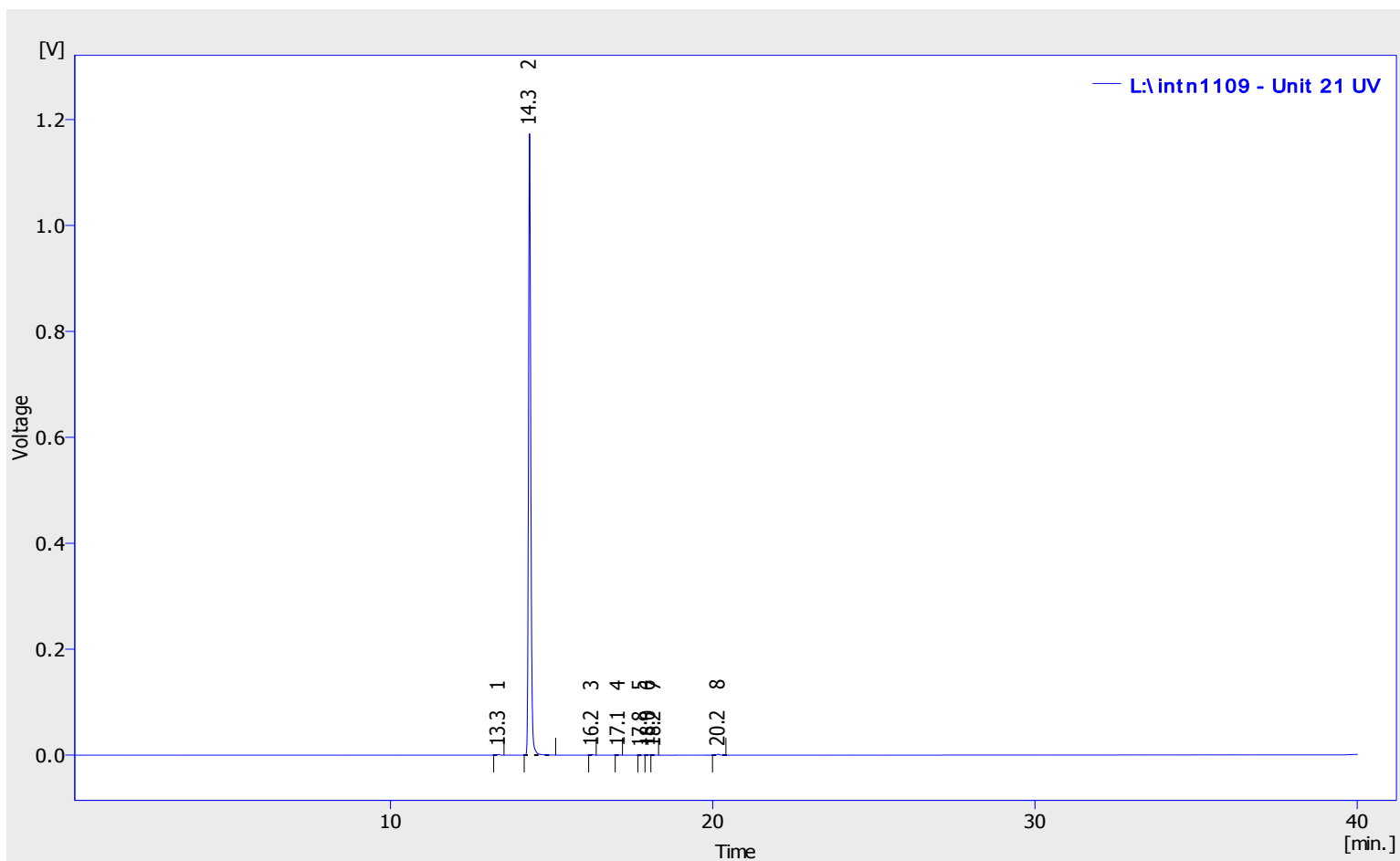
Result Table (Uncal - L:\intn1108 - Unit 21 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Resolution [-]
1	14.317	680.474	141.209	99.15	99.69	
2	24.163	0.735	0.075	0.11	0.05	52.814
3	24.723	1.572	0.199	0.23	0.14	2.716
4	38.973	3.503	0.164	0.51	0.12	37.367
	Total	686.283	141.647	100.00	100.00	

**MC-2096**  
**L-Thymidine, [2-14C]-**  
**Lot 167-086-0528-A-20020109-GI**

Chromatogram Info:

File Name	: L:\intn1109.PRM	File Created	: 2/13/2014 11:21:47 AM
Origin	: Acquired, Acquisition started 4/15/2009 3:39:46 PM	Acquired Date	: 4/15/2009 4:19:45 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: UV trace of standard alone	Modified	: 2/13/2014 11:34 AM
Created	: 4/17/2008 10:27 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intn1109 - Unit 21 UV)

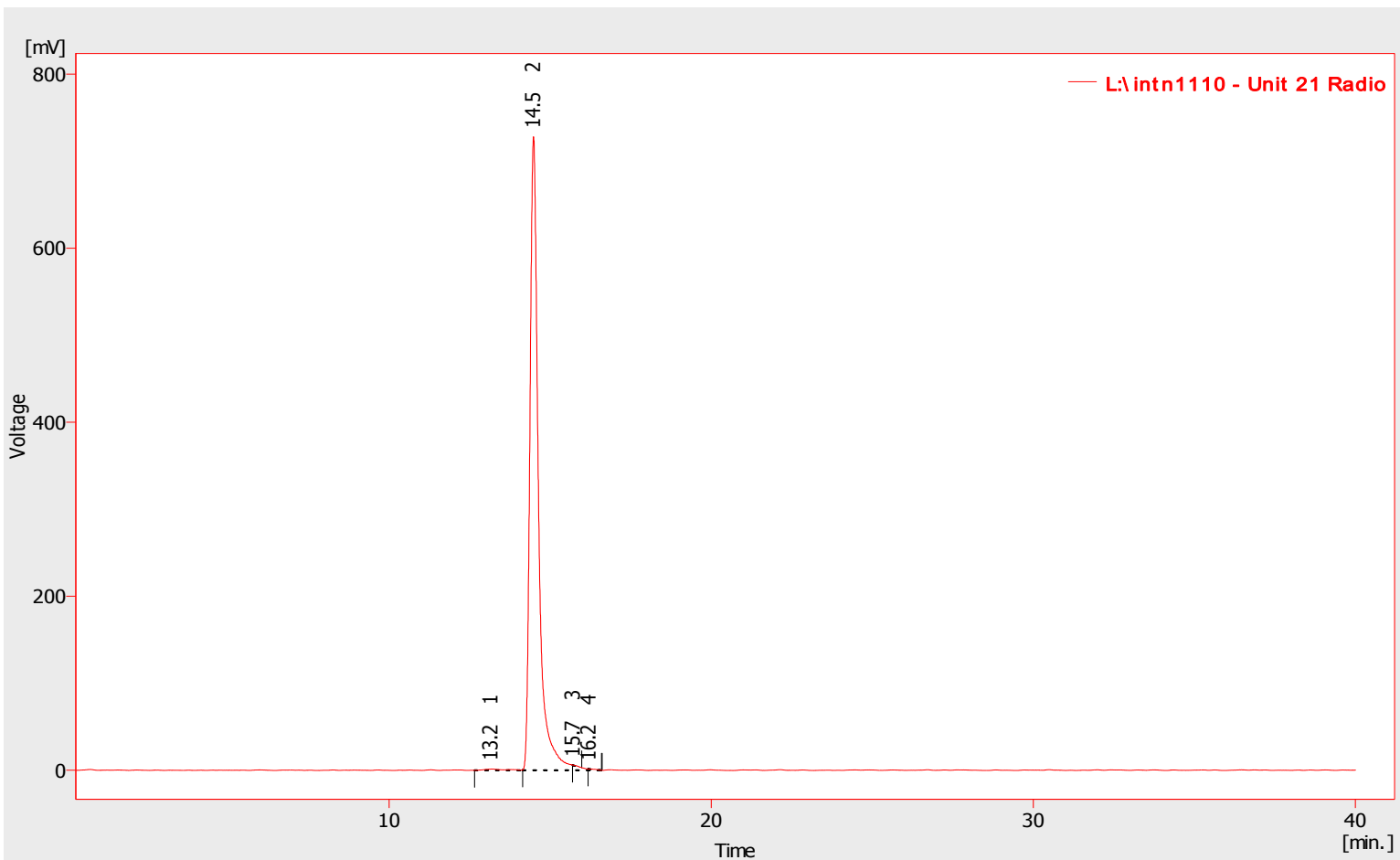
	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Resolution [-]
1	13.347	6.906	1.430	0.12	0.12	
2	14.317	5766.736	1173.294	99.37	99.41	7.465
3	16.247	6.360	1.453	0.11	0.12	15.528
4	17.073	3.360	0.763	0.06	0.06	6.806
5	17.760	1.017	0.228	0.02	0.02	5.788
6	18.003	3.822	0.801	0.07	0.07	2.003
7	18.170	3.570	0.480	0.06	0.04	0.967
8	20.170	11.501	1.848	0.20	0.16	10.727
	Total	5803.272	1180.297	100.00	100.00	



**MC-2096**  
**L-Thymidine, [2-14C]-**  
**Lot 167-086-0528-A-20020109-GI**

Chromatogram Info:

File Name	: L:\intn1110.PRM	File Created	: 2/13/2014 11:19:55 AM
Origin	: Acquired, Acquisition started 4/15/2009 4:22:43 PM	Acquired Date	: 4/15/2009 5:02:42 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard	Modified	: 2/13/2014 11:35 AM
Created	: 4/17/2008 10:27 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



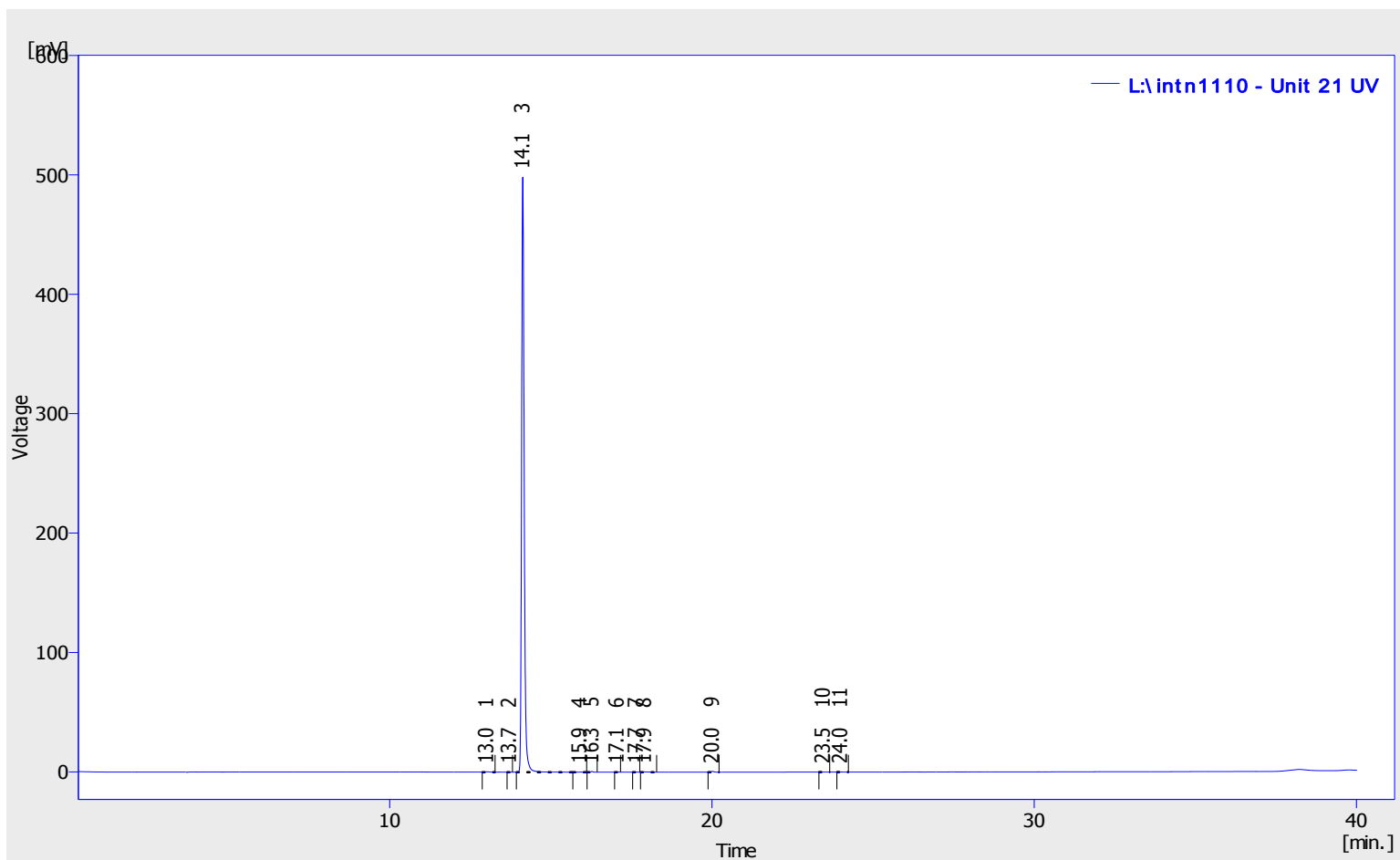
Result Table (Uncal - L:\intrn1110 - Unit 21 Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Resolution [-]
1	13.163	64.067	1.523	0.47	0.21	
2	14.483	13580.809	728.303	99.44	99.67	2.163
3	15.717	7.360	0.685	0.05	0.09	5.077
4	16.210	5.448	0.190	0.04	0.03	7.938
	Total	13657.685	730.701	100.00	100.00	

**MC-2096**  
**L-Thymidine, [2-14C]-**  
**Lot 167-086-0528-A-20020109-GI**

Chromatogram Info:

File Name	: L:\intn1110.PRM	File Created	: 2/13/2014 11:19:55 AM
Origin	: Acquired, Acquisition started 4/15/2009 4:22:43 PM	Acquired Date	: 4/15/2009 5:02:42 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: UV trace of 14C material co-injected with standard	Modified	: 2/13/2014 11:37 AM
Created	: 4/17/2008 10:27 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



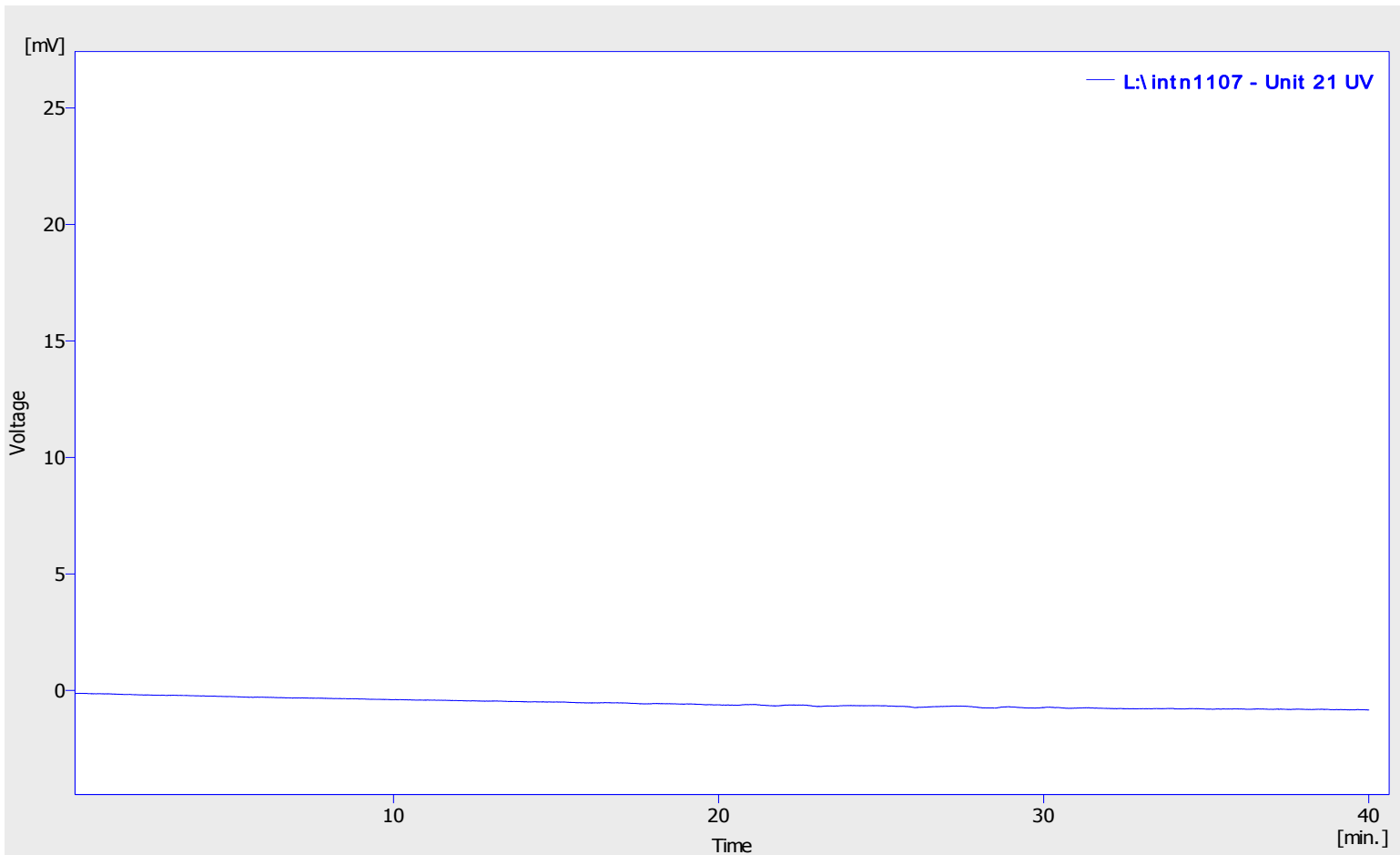
Result Table (Uncal - L:\intn1110 - Unit 21 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Resolution [-]
1	13.010	2.535	0.287	0.09	0.06	
2	13.723	0.173	0.037	0.01	0.01	3.826
3	14.130	2778.633	498.186	99.44	99.51	2.938
4	15.910	0.716	0.078	0.03	0.02	13.128
5	16.273	2.435	0.554	0.09	0.11	3.062
6	17.060	1.196	0.282	0.04	0.06	6.792
7	17.657	0.393	0.084	0.01	0.02	5.152
8	17.910	2.902	0.293	0.10	0.06	1.950
9	20.010	4.162	0.672	0.15	0.13	13.767
10	23.453	0.446	0.058	0.02	0.01	19.983
11	23.993	0.795	0.107	0.03	0.02	2.896
	Total	2794.386	500.639	100.00	100.00	

**MC-2096**  
**L-Thymidine, [2-14C]-**  
**Lot 167-086-0528-A-20020109-GI**

Chromatogram Info:

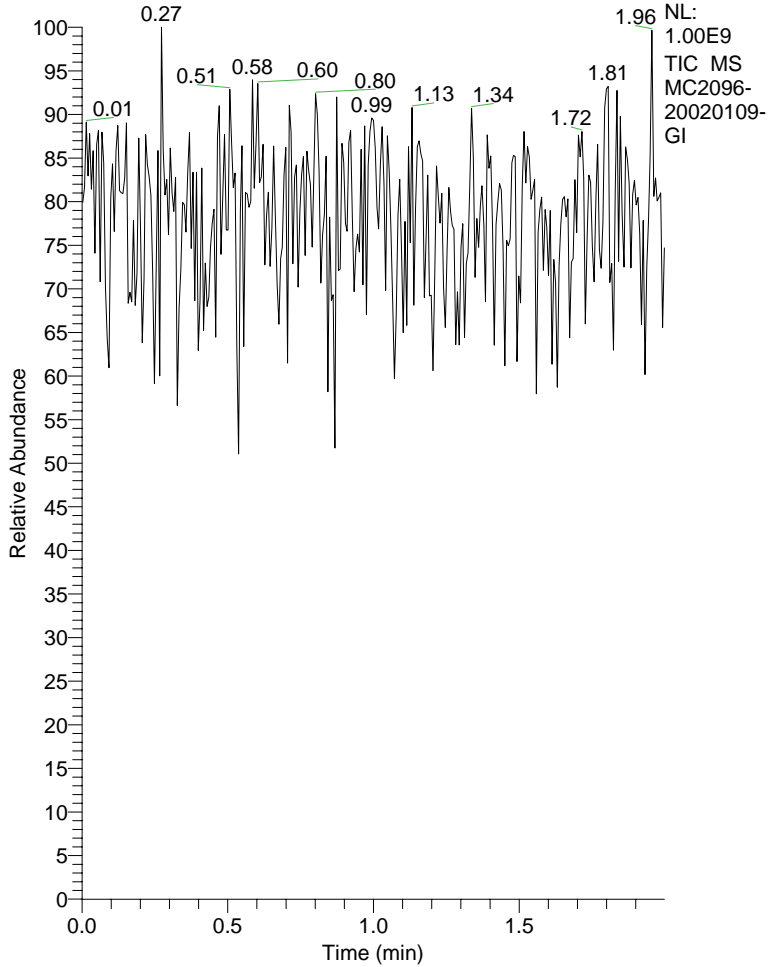
File Name	: L:\intn1107.PRM	File Created	: 2/13/2014 11:19:54 AM
Origin	: Acquired, Acquisition started 4/15/2009 10:42:55 AM	Acquired Date	: 4/15/2009 11:22:54 AM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: UV trace of blank injection		
Created	: 4/17/2008 10:27 AM	Modified	: 2/13/2014 11:38 AM
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



*Result Table (Uncal - L:\intn1107 - Unit 21 UV)*

Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Resolution [-]
No peak to report					

RT: 0.00 - 2.00



MC2096-20020109-GI#1-333 RT: 0.00-2.00

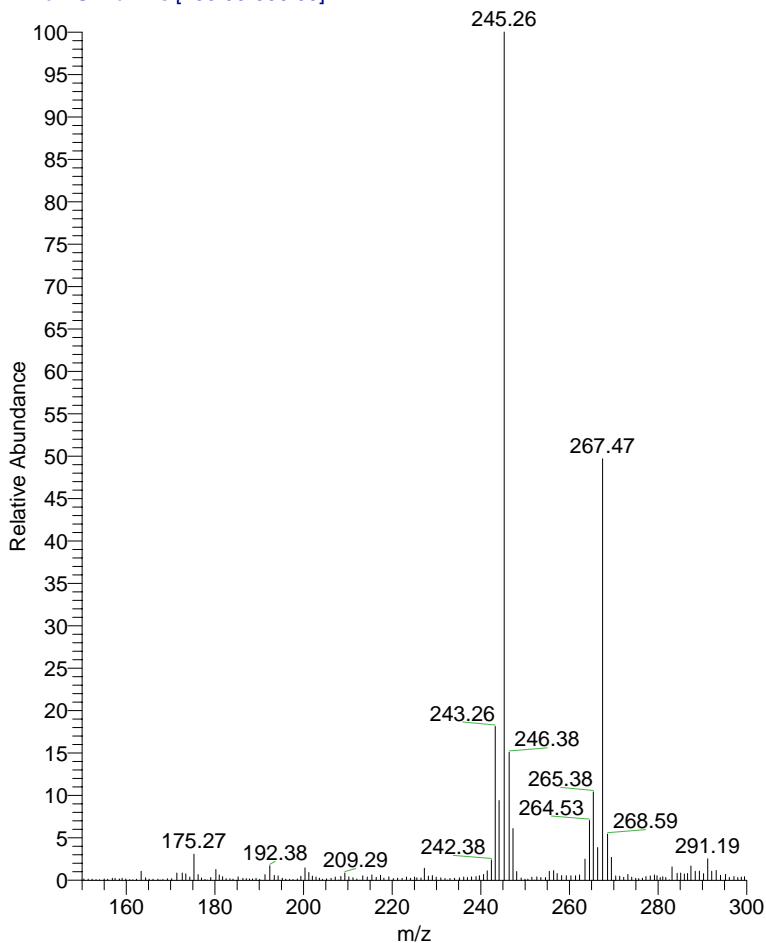
T: + c NSI Full ms [150.00-300.00]

m/z = 242.42-248.68

m/z	Intensity	Relative
243.26	46645414.9	18.13
244.13	24142835.7	9.38
245.26	257288723.3	100.00
246.38	38773111.7	15.07
247.27	15657686.9	6.09
248.10	2615593.3	1.02

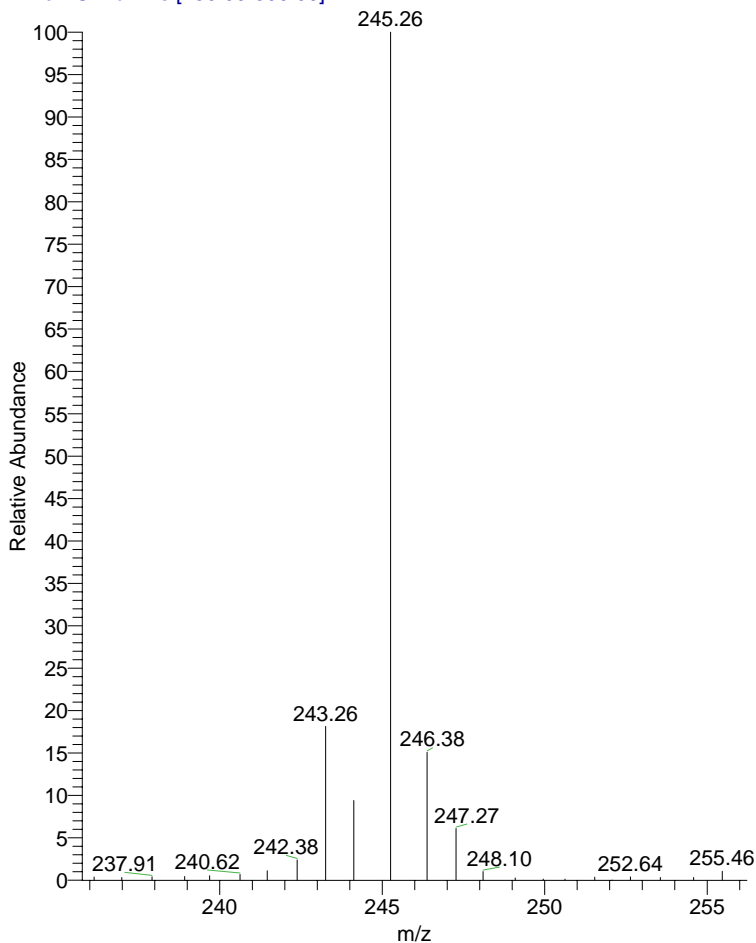
MC2096-20020109-GI #1-333 RT: 0.00-2.00 AV: 333 NL: 2.57E8

T: + c NSI Full ms [150.00-300.00]

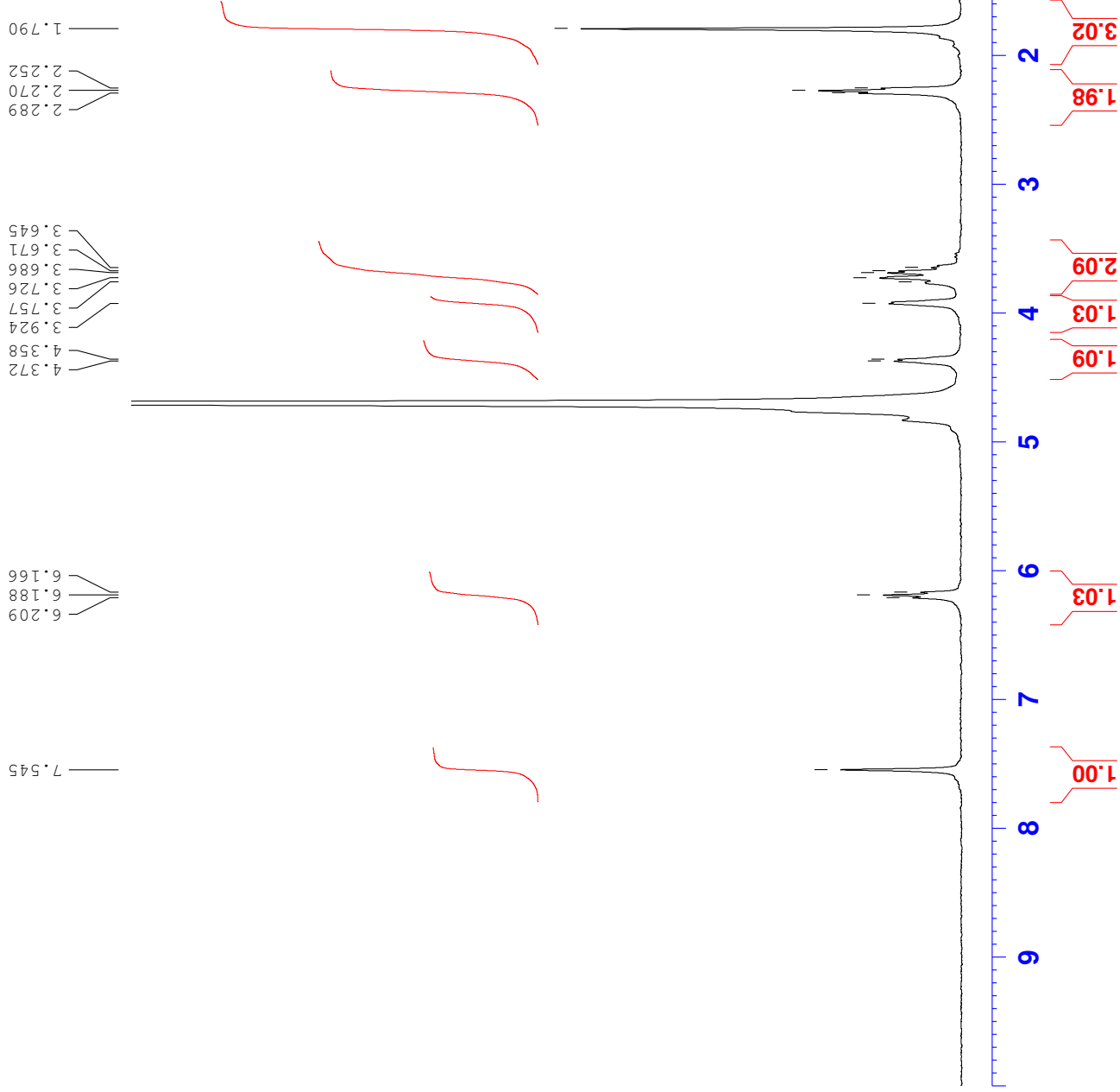


MC2096-20020109-GI #1-333 RT: 0.00-2.00 AV: 333 NL: 2.57E8

T: + c NSI Full ms [150.00-300.00]



MC2096 1H NMR in D2O  
Batch 20020109-GI



Current Data Parameters  
NAME MC2096  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameter  
Date\_ 20090427  
Time 13.00  
INSTRUM spect  
PROBHD 5 mm DUX 3H-1H  
PULPROG zg30  
TD 65536  
SOLVENT D2O  
NS 412  
DS 1  
SWH 3591.954 Hz  
FIDRES 0.054809 Hz  
AQ 9.1226616 se  
RG 362  
DW 139.200 us  
DE 6.00 us  
TE 300.0 K  
D1 1.00000000 se  
TD0 1

==== CHANNEL f1 =====  
NUC1 1H  
P1 10.25 us  
PL1 0.00 dB  
SF01 300.1318534 MH

F2 - Processing parameters  
SI 32768  
SF 300.1300000 MH  
WDW EM  
SSB 0  
LB 3.00 Hz  
GB 0  
PC 1.00