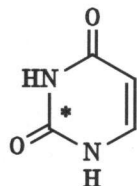




Product Data Sheet

MC-124

Uracil, [2-¹⁴C]-



M.W. ¹²C 112.09; ¹⁴C 113.87 @ 55.6 mCi/mmol

Lot #: 748-176-0556-A-20130703-JHO

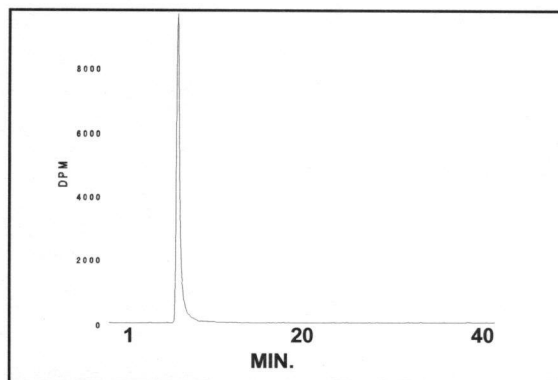
Specific Activity: 55.6 mCi/mmol

Concentration: 0.1 mCi/ml; 204.81 µg/ml

Packaged in: Sterile water solution

Date of Analysis: July 11, 2013

Radiochemical Purity: 98.9%



HPLC ANALYSIS LOT 748-176-0556-A-20130703-JHO
File Name: intg1202 Date and Time: 7/11/2013 9:36:51 PM
Unit O Radio

Peak #	Area %	Time	Area
1	98.99	7.16400	26033.02863
2	0.11	8.30800	27.98154
3	0.14	8.61600	37.30756
4	0.51	9.61600	133.16732
5	0.06	11.29600	16.25380
6	0.10	12.00000	27.02300
7	0.09	12.76400	22.87510
Totals	100.00		26297.63695

Stability and Storage Recommendation: The rate of decomposition is approximately 0.5%/month for the first six months after purification when stored at 0-5°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.

MC124

Uracil, [2-¹⁴C]-

748-176-0556-A-20130703-JHO

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.

Uracil, [2-¹⁴C]- concentration was 10.4 µCi/ml.

Volume of standard alone injection was 3.0 µl.

Volume of **Uracil, [2-¹⁴C]-** alone injection was 3.0 µl.

Co-injection solution consisted of 3.0 µl **Uracil, [2-¹⁴C]-** + 3.0 µl standard.

Volume of co-injection was 6.0 µl.

Volume of blank injection was 3.0 µl.

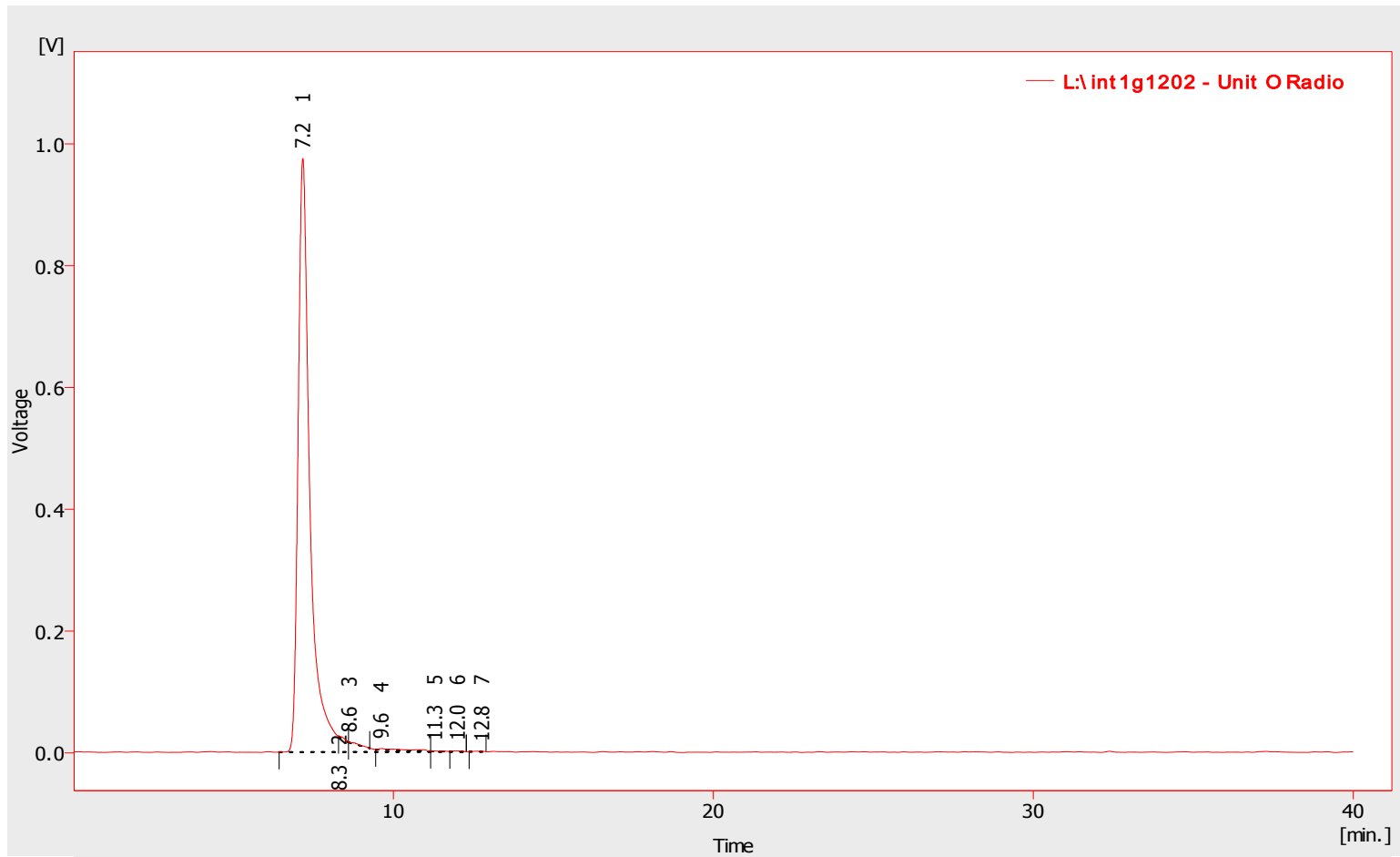
B) Mass spectrometry – Negative mode

C) NMR

MC124
Uracil, [2-¹⁴C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1202.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 8:56:50 PM	Acquired Date	: 7/11/2013 9:36:51 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: Radiochemical trace of ¹⁴ C material alone	Modified	: 7/12/2013 10:42 AM
Created	: 7/11/2013 1:54 PM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

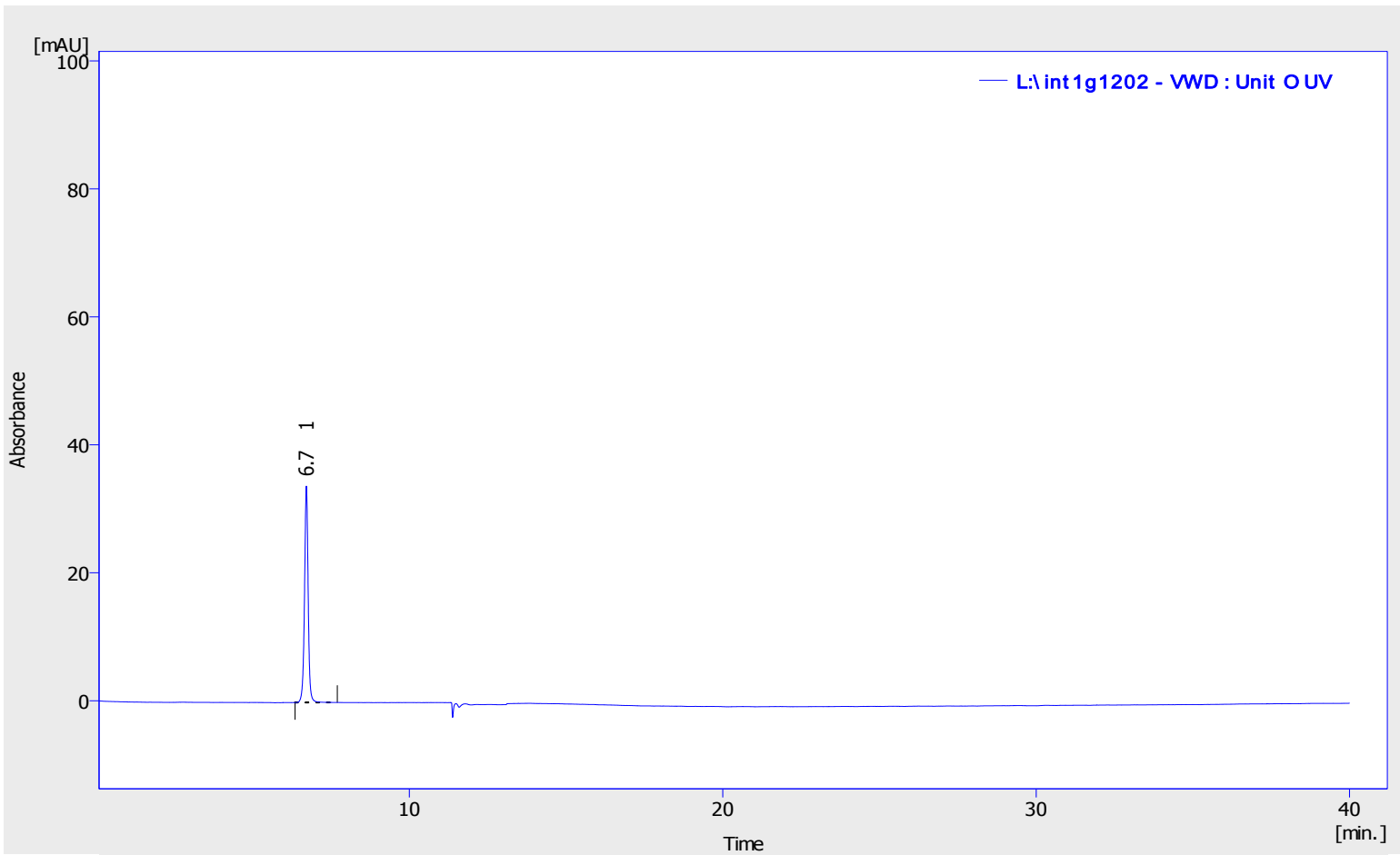
Result Table (Uncal - L: \int1g1202 - Unit O Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	7.164	26033.029	974.746	98.99	99.3	0.34
2	8.308	27.982	0.740	0.11	0.1	0.05
3	8.616	37.308	0.448	0.14	0.0	0.04
4	9.616	133.167	1.930	0.51	0.2	0.22
5	11.296	16.254	0.783	0.06	0.1	0.14
6	12.000	27.023	1.490	0.10	0.2	0.30
7	12.764	22.875	1.117	0.09	0.1	0.40
	Total	26297.637	981.254	100.00	100.0	

MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1202.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 8:56:50 PM	Acquired Date	: 7/11/2013 9:36:51 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: UV trace of 14C material alone		
Created	: 7/11/2013 1:54 PM	Modified	: 7/12/2013 10:43 AM
Column	:	Detection	: 259 nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

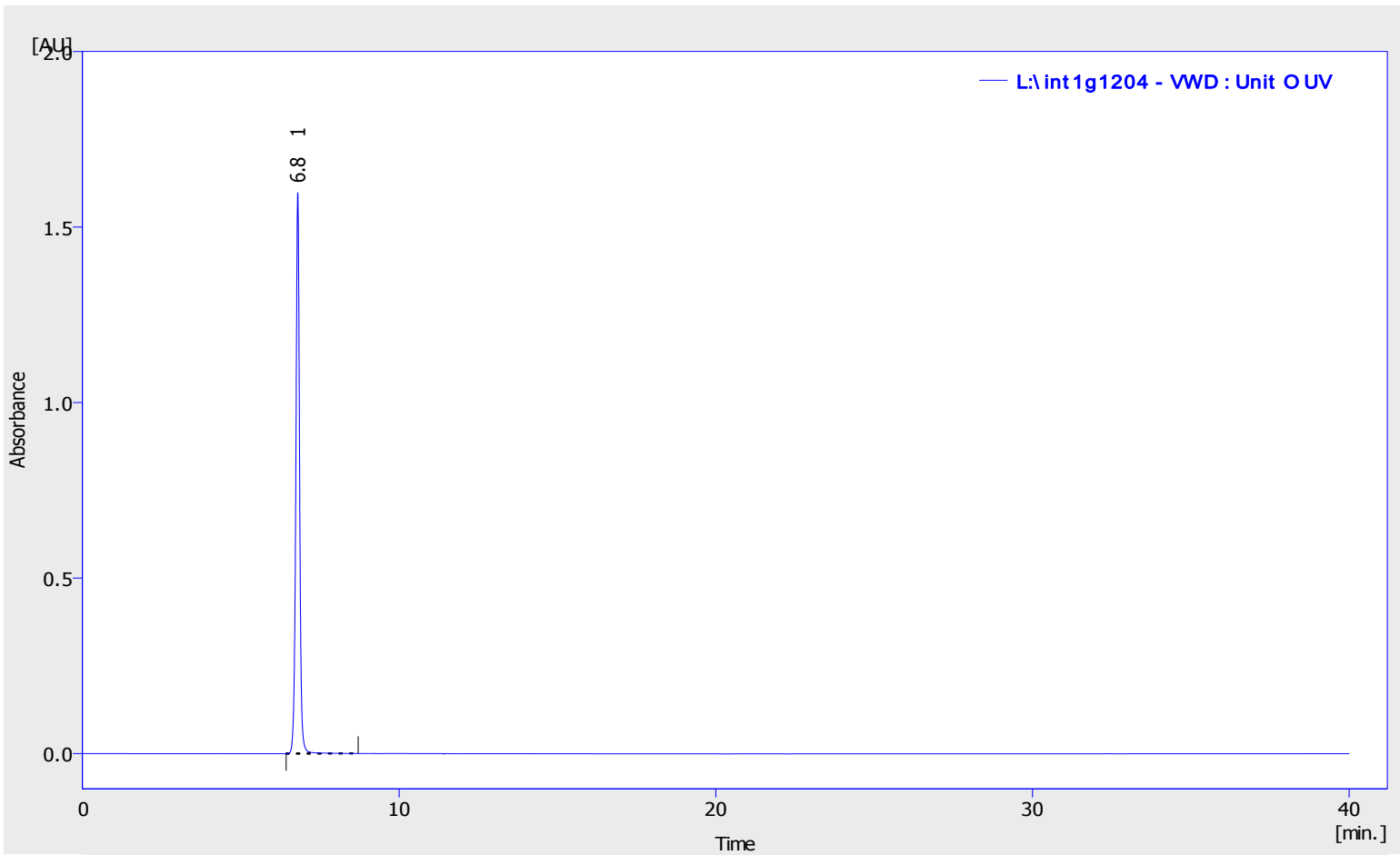
Result Table (Uncal - L:\int1g1202 - VWD : Unit O UV)

	Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
1	6.715	274.395	33.826	100.00	100.0	0.12
	Total	274.395	33.826	100.00	100.0	

MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1204.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 10:29:11 PM	Acquired Date	: 7/11/2013 11:09:12 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: UV trace of standard material		
Created	: 7/11/2013 1:54 PM	Modified	: 7/12/2013 9:17 AM
Column	:	Detection	: 259 nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

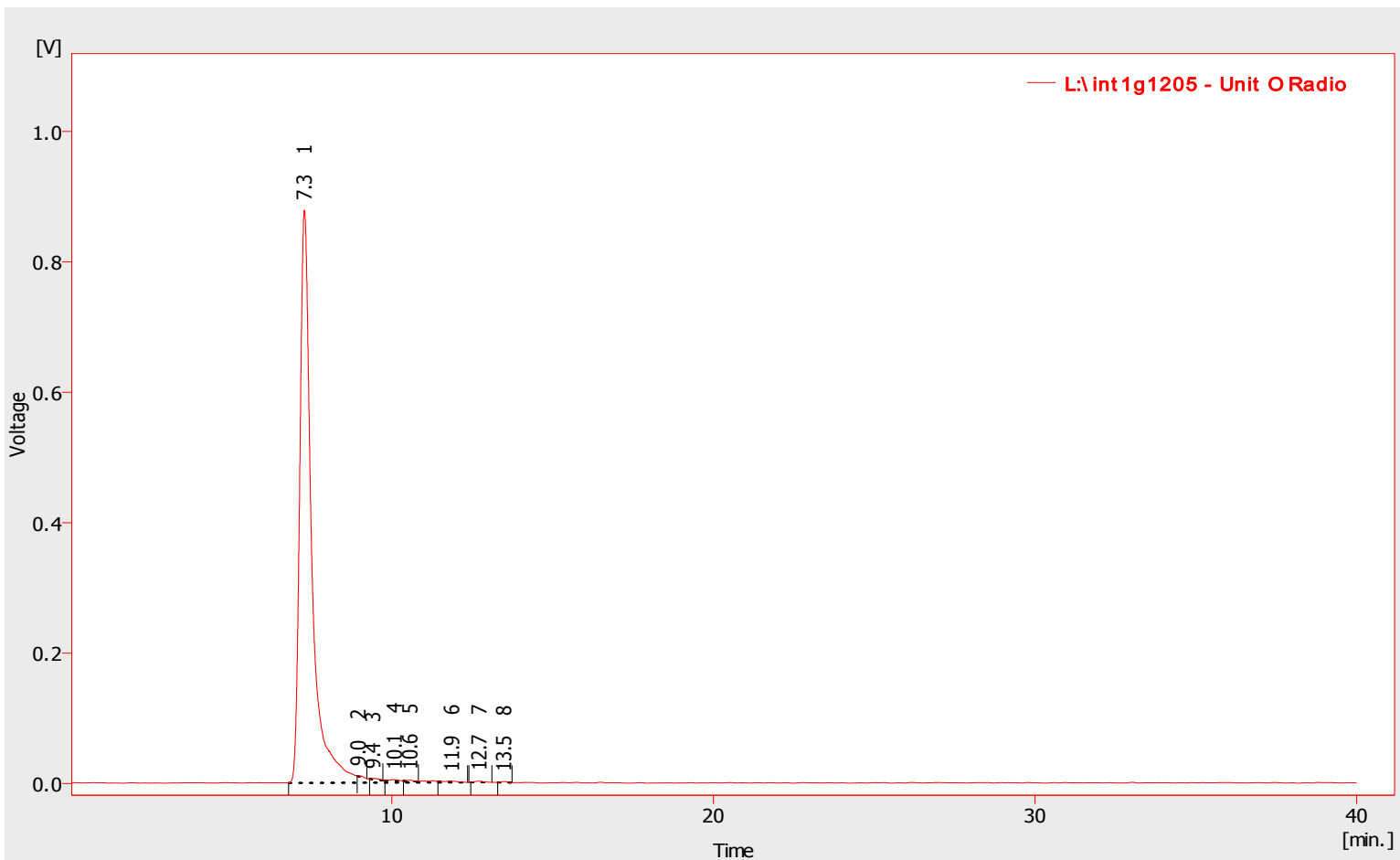
Result Table (Uncal - L:\int1g1204 - VWD : Unit O UV)

	Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
1	6.798	13216.536	1598.024	100.00	100.0	0.12
	Total	13216.536	1598.024	100.00	100.0	

MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1205.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 11:15:22 PM	Acquired Date	: 7/11/2013 11:55:22 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard	Modified	: 7/12/2013 11:08 AM
Created	: 7/11/2013 1:54 PM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

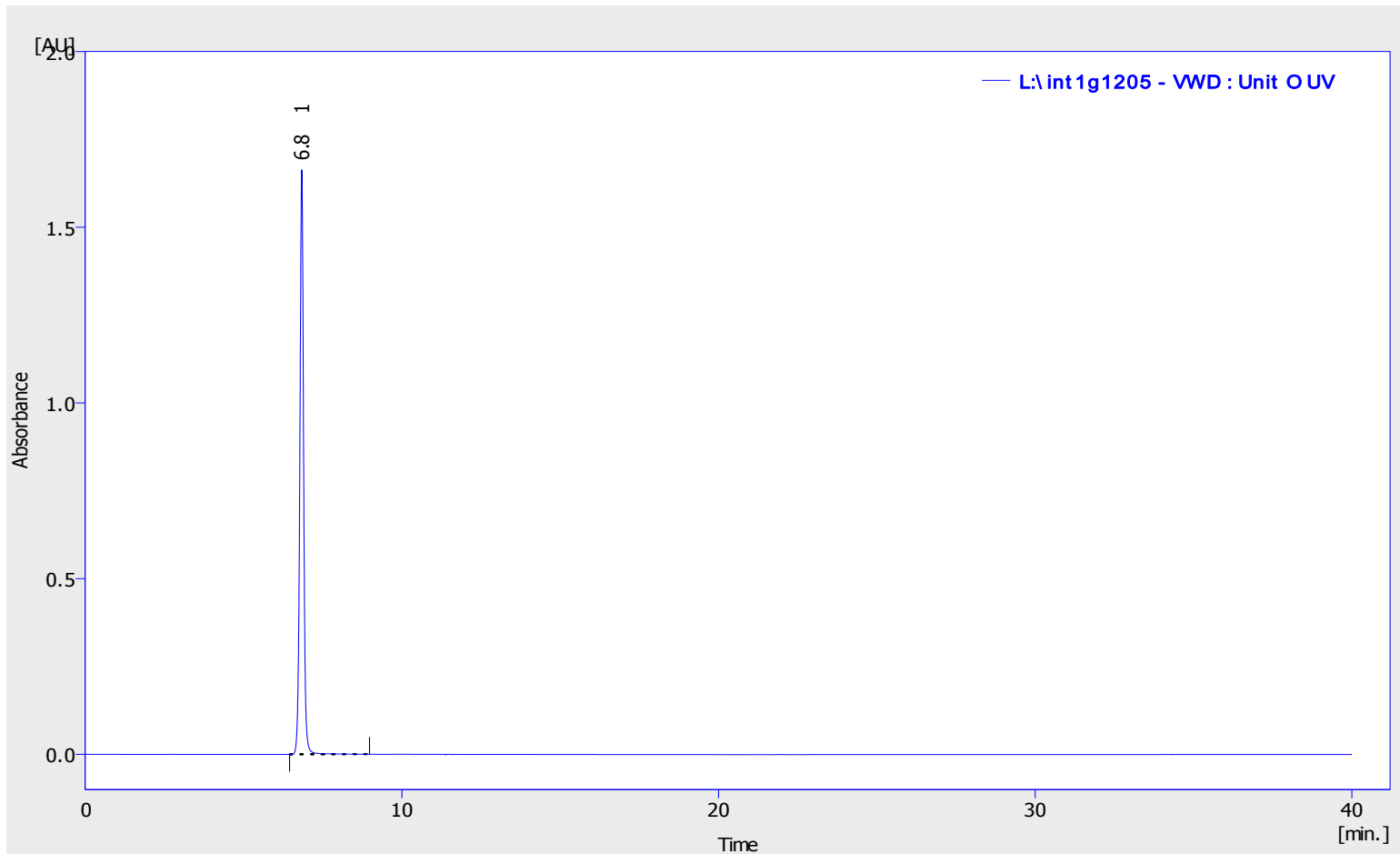
Result Table (Uncal - L: \int1g1205 - Unit O Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	7.280	23147.545	878.344	99.13	98.7	0.34
2	8.960	18.599	1.067	0.08	0.1	0.12
3	9.412	26.567	1.509	0.11	0.2	0.22
4	10.080	36.056	2.119	0.15	0.2	0.28
5	10.564	25.240	1.793	0.11	0.2	0.26
6	11.860	35.818	1.362	0.15	0.2	0.50
7	12.712	37.693	2.035	0.16	0.2	0.30
8	13.484	22.621	1.630	0.10	0.2	0.23
	Total	23350.140	889.860	100.00	100.0	

MC124
Uracil, [2-¹⁴C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1205.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 11:15:22 PM	Acquired Date	: 7/11/2013 11:55:22 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: UV trace of ¹⁴ C material co-injected with standard	Modified	: 7/12/2013 11:09 AM
Created	: 7/11/2013 1:54 PM		
Column	:	Detection	: 259 nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

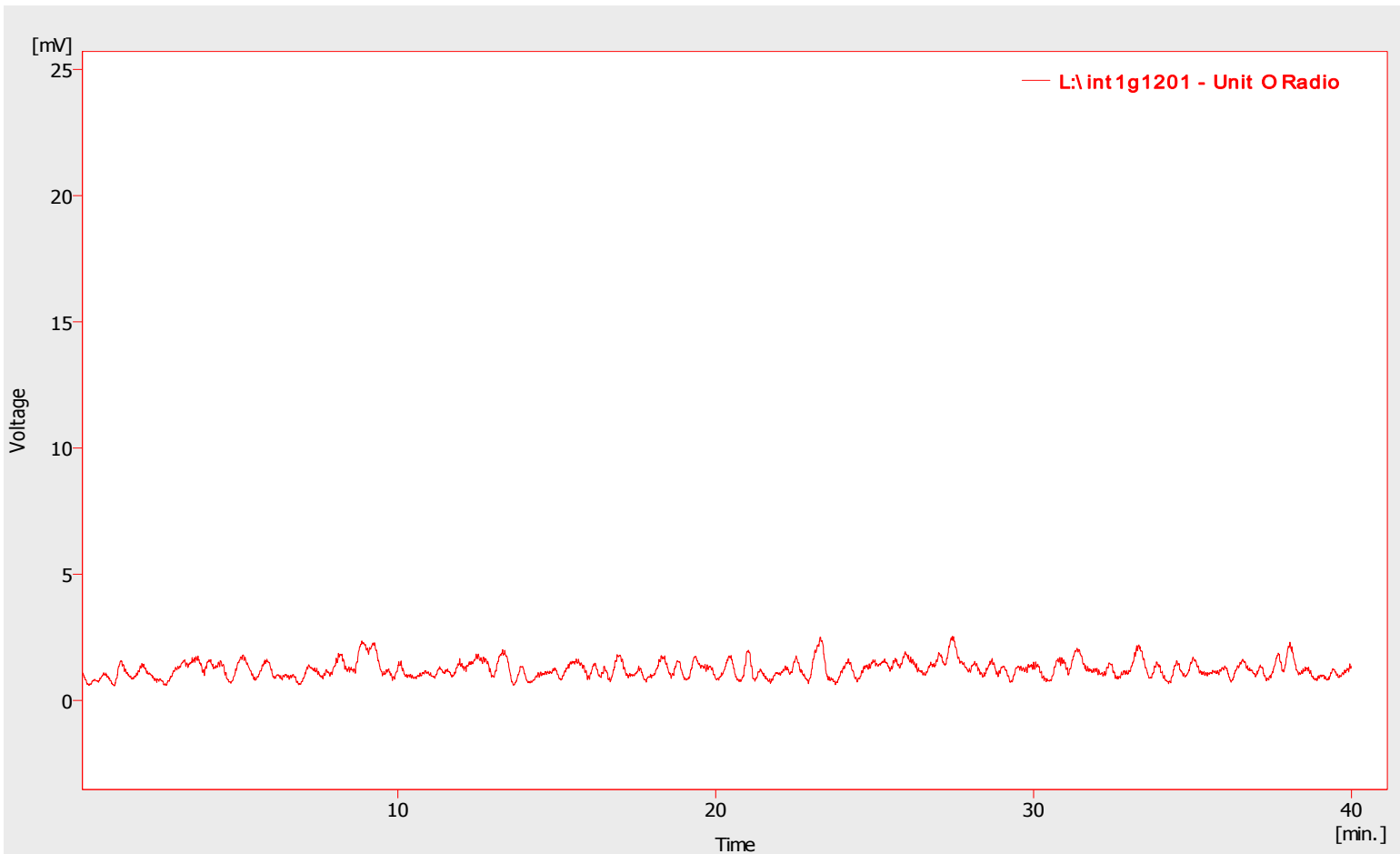
Result Table (Uncal - L:\int1g1205 - VWD : Unit O UV)

	Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
1	6.839	13818.130	1663.747	100.00	100.0	0.12
	Total	13818.130	1663.747	100.00	100.0	

MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1201.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 8:10:36 PM	Acquired Date	: 7/11/2013 8:50:37 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: Radiochemical trace of blank injection	Modified	: 7/12/2013 10:42 AM
Created	: 7/11/2013 1:54 PM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

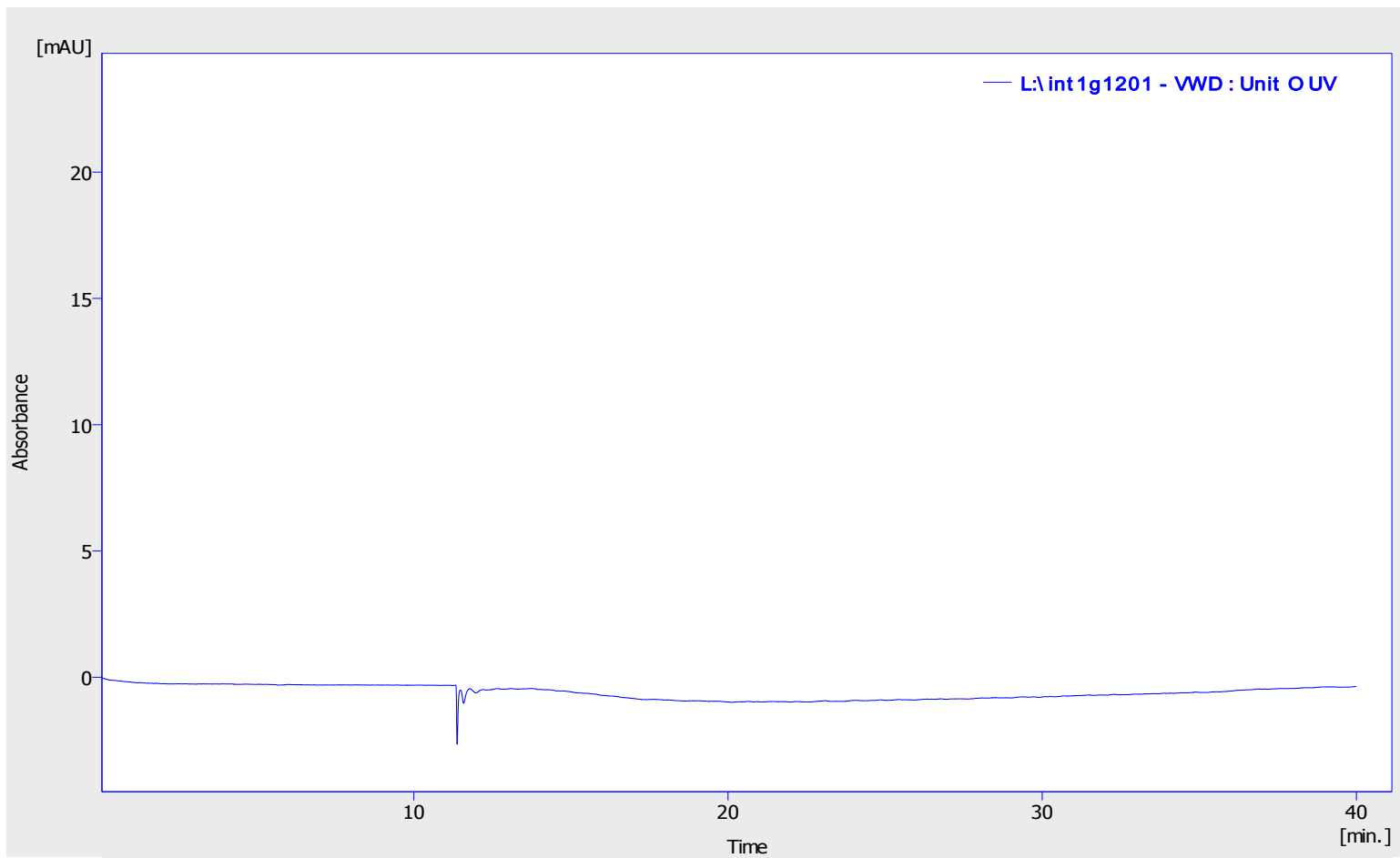
Result Table (Uncal - L:\int1g1201 - Unit O Radio)

Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
No peak to report					

MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

Chromatogram Info:

File Name	: L:\int1g1201.PRM	File Created	: 7/12/2013 8:27:25 AM
Origin	: Acquired, Acquisition started 7/11/2013 8:10:36 PM	Acquired Date	: 7/11/2013 8:50:37 PM
Project	: c:\Clarity\Projects\Test.PRJ	By	: Administrator
Method	: uracil	By	: Administrator
Description	: UV trace of blank injection		
Created	: 7/11/2013 1:54 PM	Modified	: 7/12/2013 8:51 AM
Column	:	Detection	: 259 nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		

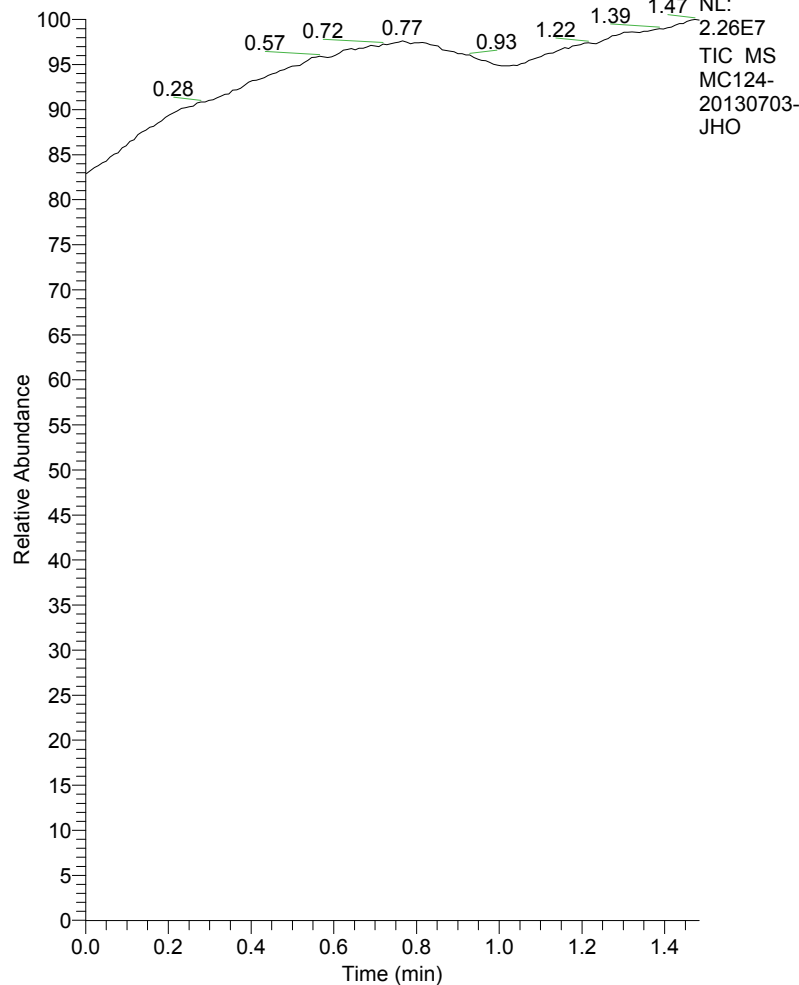


MC124
Uracil, [2-14C]-
748-176-0556-A-20130703-JHO

Result Table (Uncal - L:\int1g1201 - VWD : Unit O UV)

Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
No peak to report					

RT: 0.00 - 1.48



MC124-20130703-JHO#1-156 RT: 0.00-1.48 AV:

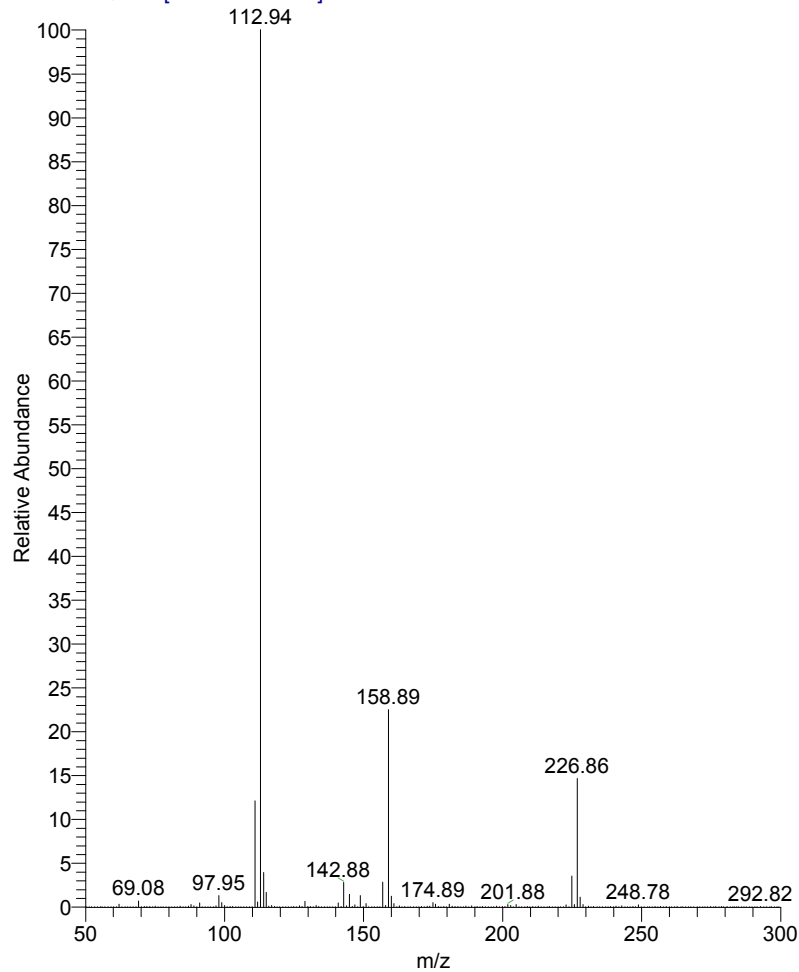
T: - c ESI Q3MS [50.000-300.000]

m/z = 109.20-120.53

m/z	Intensity	Relative
109.88	478.9	0.00
110.95	1400585.2	12.09
111.92	66660.3	0.58
112.94	11586668.2	100.00
114.00	454266.6	3.92
114.96	191859.5	1.66
115.94	9416.2	0.08
116.94	18118.2	0.16
117.91	6195.8	0.05
118.90	1267.0	0.01
119.85	629.9	0.01

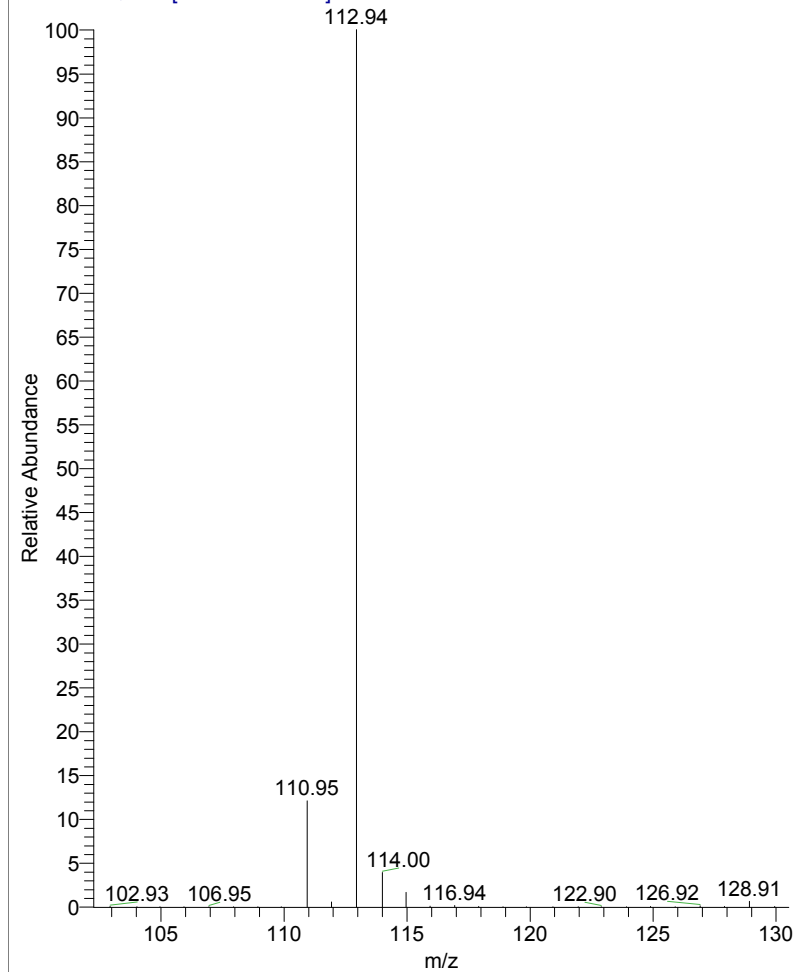
MC124-20130703-JHO #1-156 RT: 0.00-1.48 AV: 156 NL: 1.16E7

T: - c ESI Q3MS [50.000-300.000]



MC124-20130703-JHO #1-156 RT: 0.00-1.48 AV: 156 NL: 1.16E7

T: - c ESI Q3MS [50.000-300.000]



MC124 1H NMR in D2O
Batch 20130703-JHO



7.421
7.403
5.689
5.671

NAME MC124-20130703-JHO
EXPNO 1
PROCNO 1
Date_ 20130711
Time 14.19
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT D2O
NS 128
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 456.1
DW 60.400 usec
DE 6.50 usec
TE 295.2 K
D1 1.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 14.00 usec
PL1 -1.00 dB
PL1W 10.75174427 W
SF01 400.1324710 MHz
SI 32768
SF 400.1300019 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

