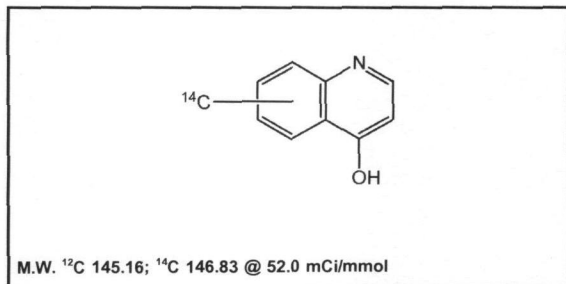




## Product Data Sheet

**MC-2071**

### 4-Hydroxyquinoline, [benzene ring-<sup>14</sup>C]-



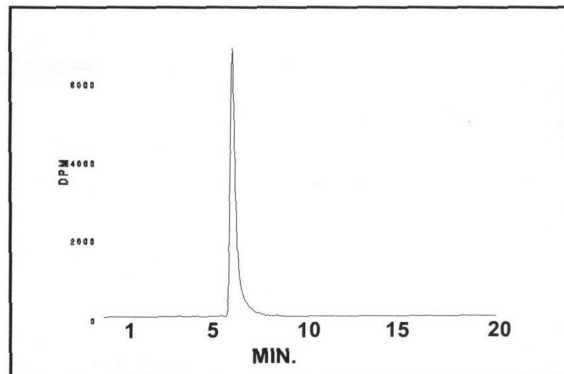
**Lot #:** 223-279-052-A-20010402-MC

**Specific Activity:** 52.0 mCi/mmol

**Packaged as:** Solid

**Date of Analysis:** March 10, 2010

**Radiochemical Purity:** 98.9%



HPLC ANALYSIS LOT 223-279-052-A-20010402-MC  
File Name: int20432 Date and Time: 3/10/2010 9:42:18 AM  
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.10	3.88670	14.21829
2	0.12	4.56330	17.83738
3	0.12	6.06330	17.22994
4	98.98	6.61670	14780.11589
5	0.17	8.84000	26.09710
6	0.06	11.69670	9.03928
7	0.09	12.92330	12.96213
8	0.12	16.01670	18.09420
9	0.25	16.59330	36.82588
Totals	100.00		14932.42009

**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-2071**

**4-Hydroxyquinoline, [benzene ring-<sup>14</sup>C]-**

**Lot 223-279-052-A-20010402-MC**

**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.

**4-Hydroxyquinoline, [benzene ring-<sup>14</sup>C]-** concentration was 50.0 µCi/ml.

Volume of standard alone injection was 1.0 µl.

Volume of **4-Hydroxyquinoline, [benzene ring-<sup>14</sup>C]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **4-Hydroxyquinoline, [benzene ring-<sup>14</sup>C]-** + 0.5 µl standard.

Volume of co-injection was 2.5 µl.

Volume of blank injection was 2.0 µl.

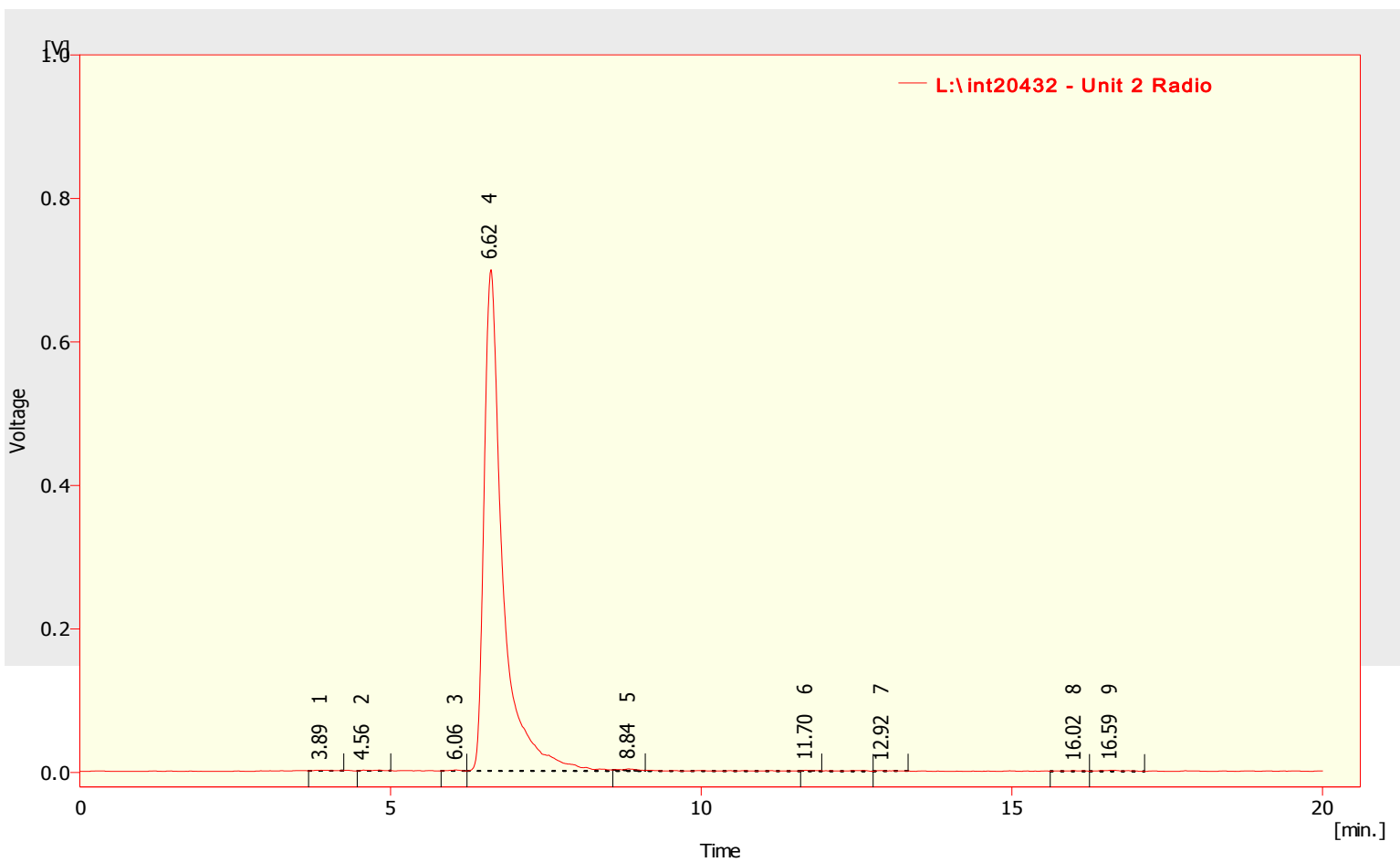
**B) Mass spectrometry – Positive mode**

**C) NMR**

**MC-2071**  
**4-Hydroxyquinoline, [benzene ring-14C]-**  
**Lot 223-279-052-A-20010402-MC**

Chromatogram Info:

File Name	: L:\int20432	File Created	: 3/10/2010 9:44:57 AM
Origin	: Acquired	Acquired Date	: 3/10/2010 9:42:18 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: Radiochemical trace of 14C material alone	Modified	: 3/12/2010 4:10 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



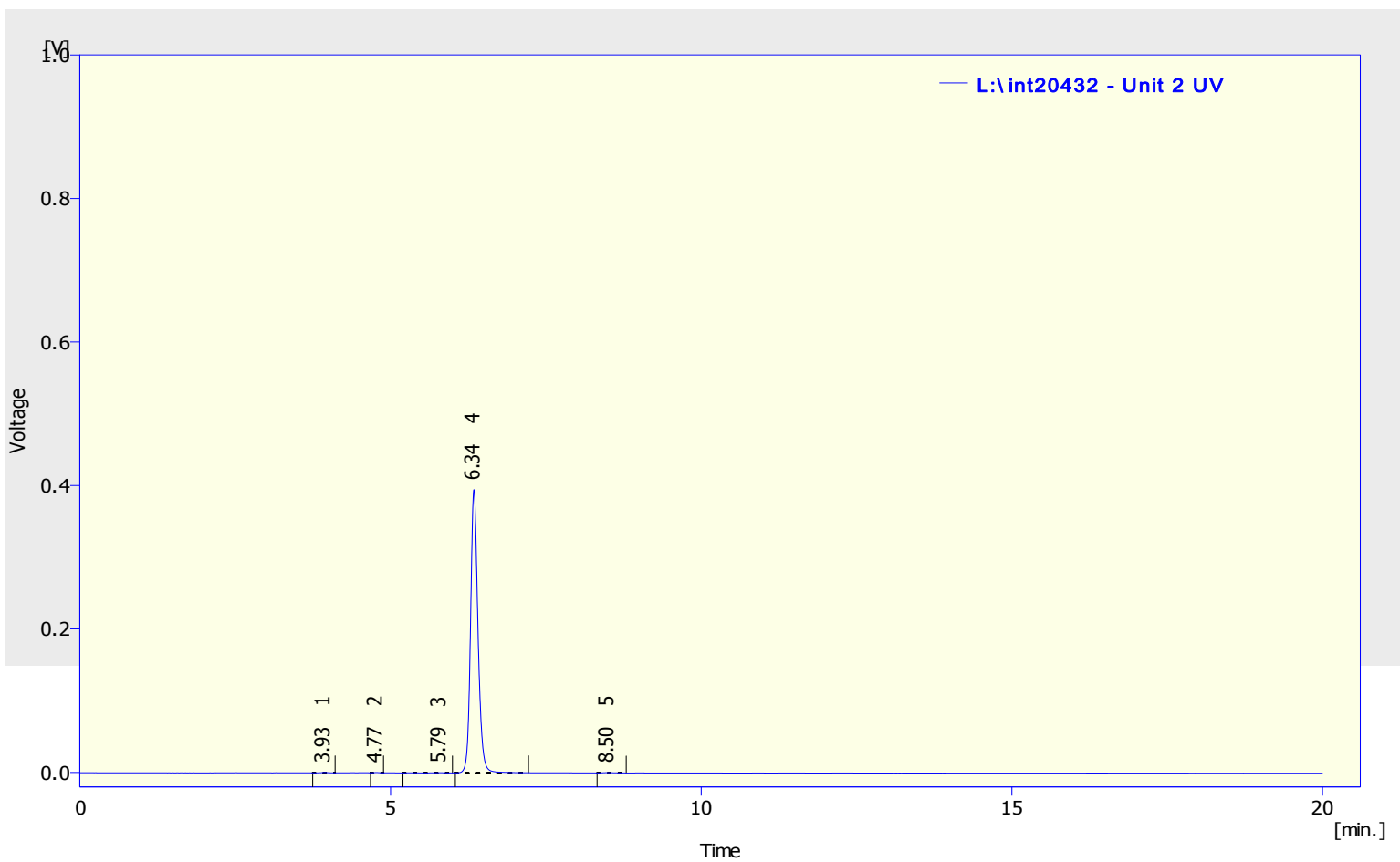
Result Table (Uncal - L:\int20432 - Unit 2 Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	3.887	14.218	0.872	0.10	0.1	0.25
2	4.563	17.837	1.231	0.12	0.2	0.16
3	6.063	17.230	1.447	0.12	0.2	0.19
4	6.617	14780.116	698.671	98.98	98.7	0.27
5	8.840	26.097	1.932	0.17	0.3	0.16
6	11.697	9.039	0.916	0.06	0.1	0.11
7	12.923	12.962	0.823	0.09	0.1	0.16
8	16.017	18.094	0.894	0.12	0.1	0.12
9	16.593	36.826	1.426	0.25	0.2	0.34
	Total	14932.420	708.212	100.00	100.0	

**MC-2071**  
**4-Hydroxyquinoline, [benzene ring-14C]-**  
**Lot 223-279-052-A-20010402-MC**

Chromatogram Info:

File Name	: L:\int20432	File Created	: 3/10/2010 9:44:57 AM
Origin	: Acquired	Acquired Date	: 3/10/2010 9:42:18 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of 14C material alone	Modified	: 3/12/2010 4:11 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: 230nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



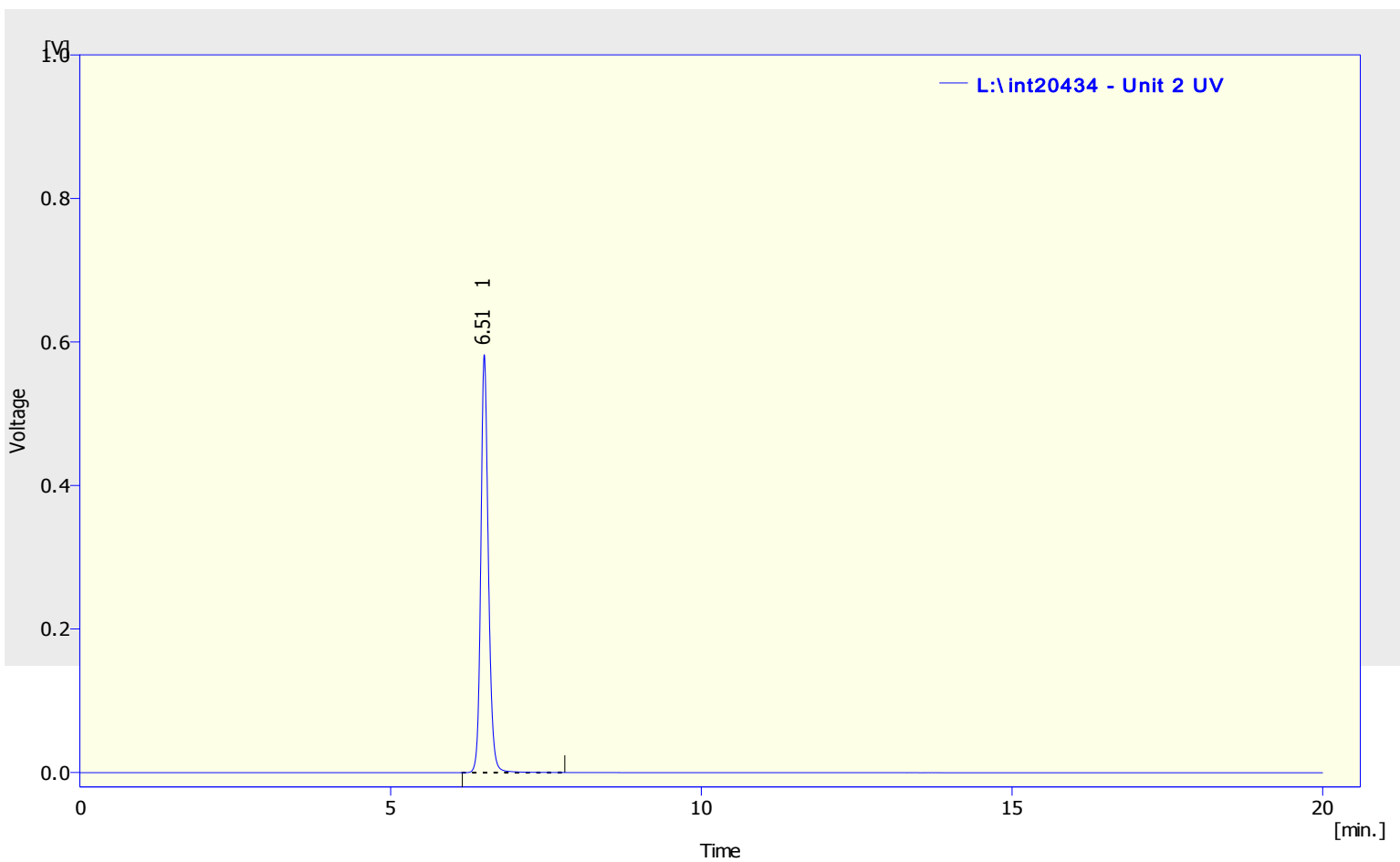
Result Table (Uncal - L:\int20432 - Unit 2 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	3.930	3.548	0.540	0.11	0.1	0.09
2	4.770	2.001	0.357	0.06	0.1	0.09
3	5.793	2.507	0.216	0.08	0.1	0.12
4	6.340	3283.394	394.705	99.62	99.6	0.13
5	8.497	4.629	0.375	0.14	0.1	0.18
	Total	3296.079	396.193	100.00	100.0	

**MC-2071**  
**4-Hydroxyquinoline, [benzene ring-14C]-**  
**Lot 223-279-052-A-20010402-MC**

Chromatogram Info:

File Name	: L:\int20434	File Created	: 3/10/2010 10:47:25 AM
Origin	: Acquired	Acquired Date	: 3/10/2010 10:45:18 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 3/12/2010 4:13 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: 230nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int20434 - Unit 2 UV)

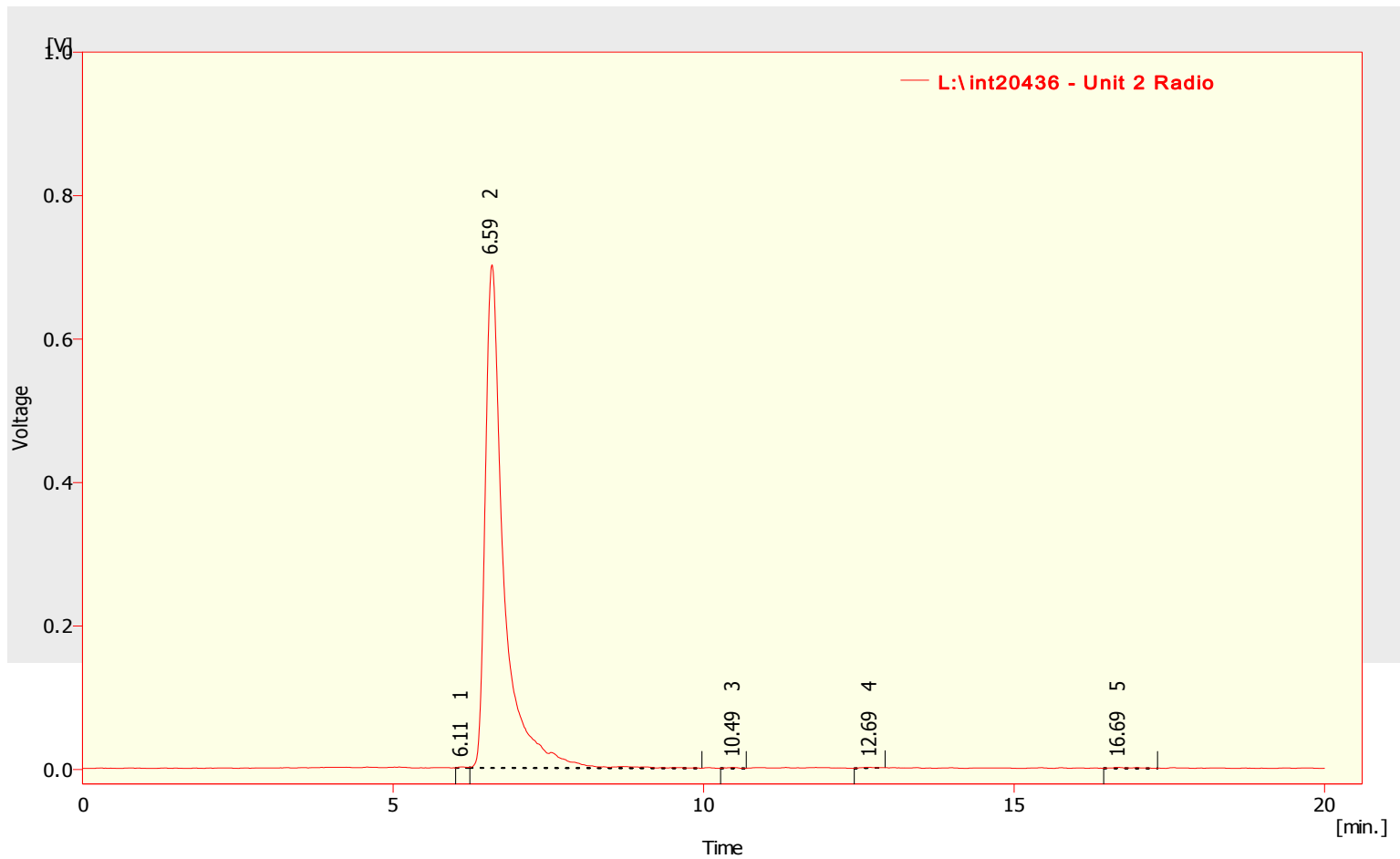
	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	6.507	4943.575	582.448	100.00	100.0	0.13
	Total	4943.575	582.448	100.00	100.0	



**MC-2071**  
**4-Hydroxyquinoline, [benzene ring-14C]-**  
**Lot 223-279-052-A-20010402-MC**

## Chromatogram Info:

File Name	: L:\int20436	File Created	: 3/10/2010 11:28:55 AM
Origin	: Acquired	Acquired Date	: 3/10/2010 11:28:13 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard	Modified	: 3/12/2010 4:15 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



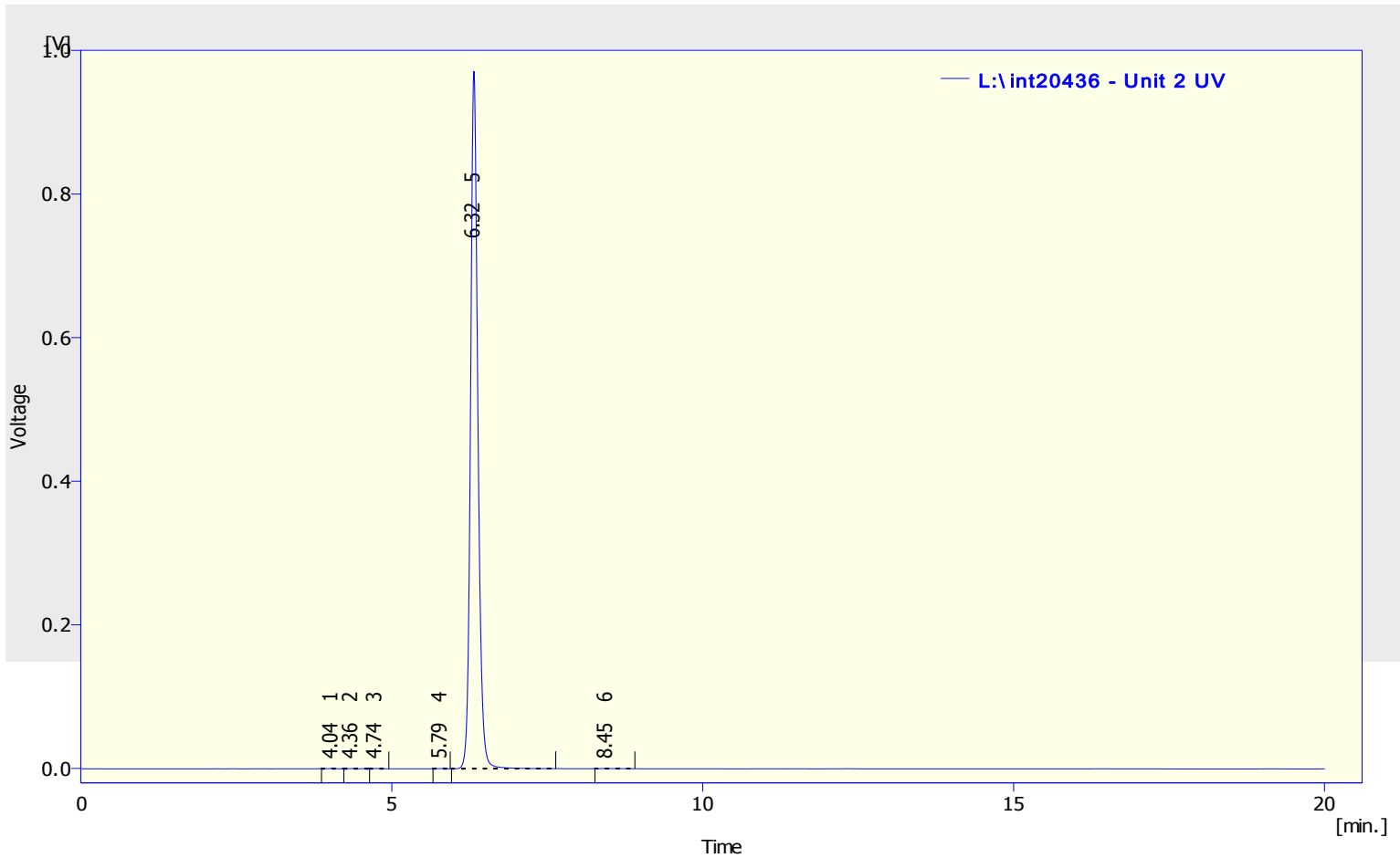
Result Table (Uncal - L:\int20436 - Unit 2 Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	6.113	15.129	1.531	0.10	0.2	0.20
2	6.593	14598.255	701.396	99.48	99.3	0.27
3	10.490	14.818	1.342	0.10	0.2	0.18
4	12.690	15.383	0.975	0.10	0.1	0.17
5	16.693	31.237	1.422	0.21	0.2	0.16
	Total	14674.821	706.666	100.00	100.0	

**MC-2071**  
**4-Hydroxyquinoline, [benzene ring-14C]-**  
**Lot 223-279-052-A-20010402-MC**

## Chromatogram Info:

File Name	: L:\int20436	File Created	: 3/10/2010 11:28:55 AM
Origin	: Acquired	Acquired Date	: 3/10/2010 11:28:13 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of 14C material co-injected with standard		
Created	: 8/8/2007 9:12 AM	Modified	: 3/12/2010 4:17 PM
Column	:	Detection	: 230nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



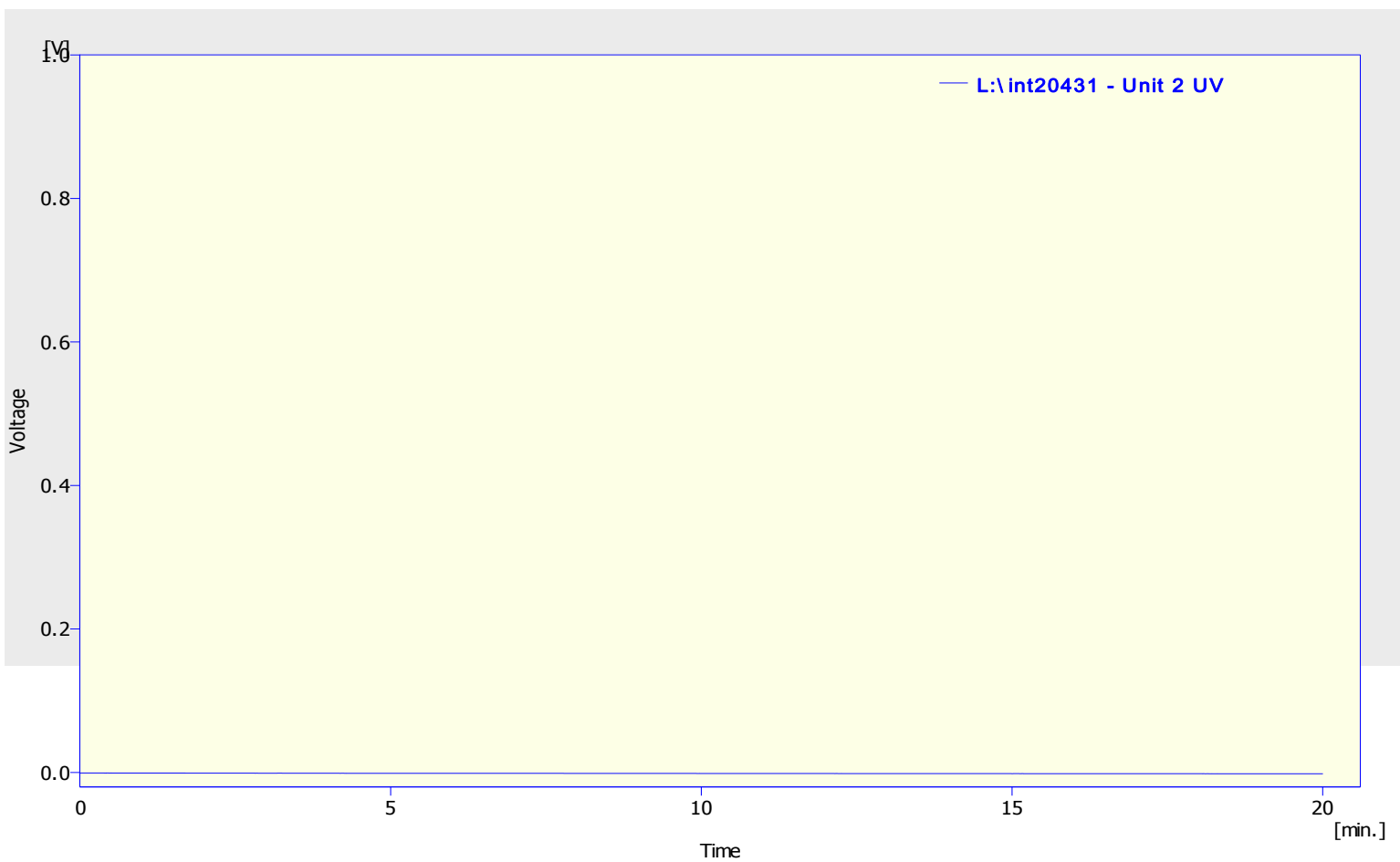
Result Table (Uncal - L:\int20436 - Unit 2 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	4.037	3.887	0.546	0.05	0.1	0.10
2	4.357	3.363	0.318	0.04	0.0	0.11
3	4.743	2.988	0.395	0.04	0.0	0.11
4	5.787	1.648	0.237	0.02	0.0	0.11
5	6.320	8002.915	971.402	99.80	99.8	0.12
6	8.453	4.445	0.364	0.06	0.0	0.17
	Total	8019.245	973.263	100.00	100.0	

**MC-2071**  
**4-Hydroxyquinoline, [benzene ring-14C]-**  
**Lot 223-279-052-A-20010402-MC**

Chromatogram Info:

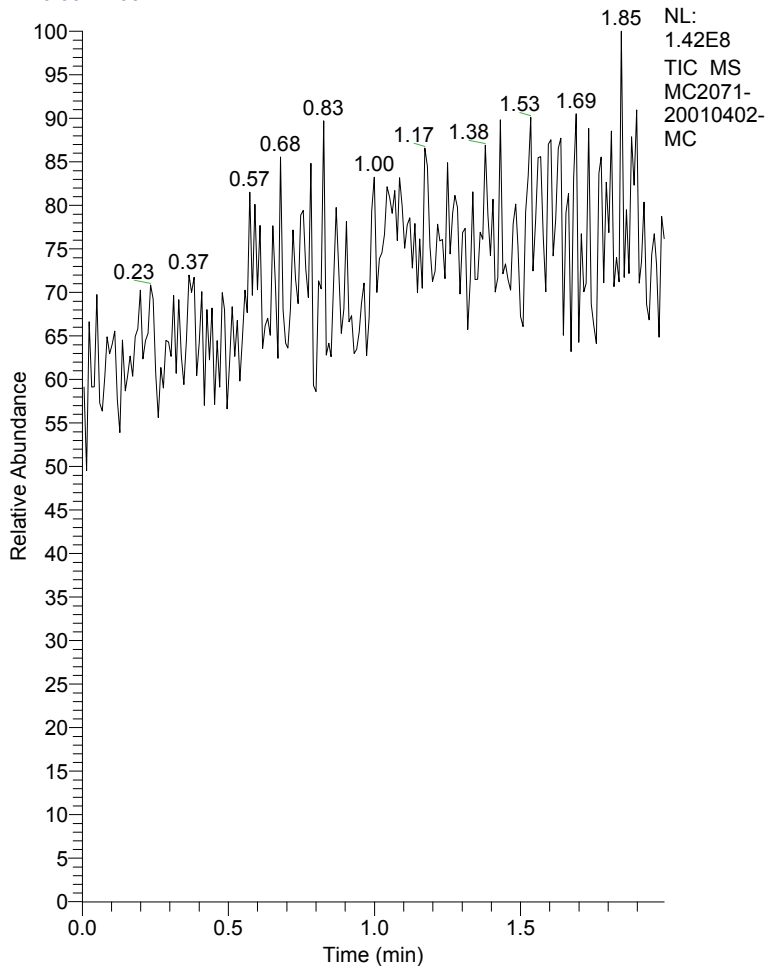
File Name	: L:\int20431	File Created	: 3/9/2010 4:13:46 PM
Origin	: Acquired	Acquired Date	: 3/9/2010 4:11:17 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 3/12/2010 4:19 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: 230nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



*Result Table (Uncal - L:\int20431 - Unit 2 UV)*

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

RT: 0.00 - 1.99



MC2071-20010402-MC#1-230 RT: 0.01-1.99

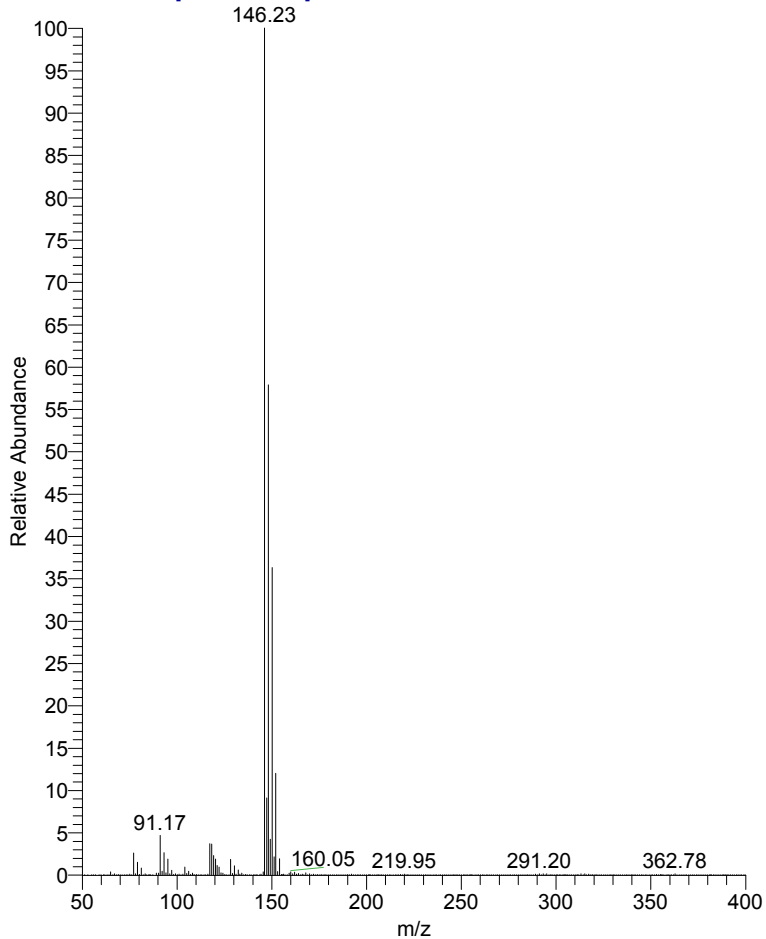
T: + c NSI Full ms [50.00-400.00]

m/z= 142.45-167.42

m/z	Intensity	Relative
145.51	132789.5	0.35
146.23	37796018.7	100.00
147.28	3434832.9	9.09
148.18	21879445.7	57.89
149.24	1592467.2	4.21
150.15	13721368.1	36.30
151.22	807471.5	2.14
152.14	4540532.9	12.01
153.15	156215.3	0.41
154.12	716746.4	1.90
155.08	19113.3	0.05
155.58	81.2	0.00
156.12	34652.7	0.09
157.00	3840.2	0.01
158.11	7931.4	0.02
159.09	72762.2	0.19
160.05	133291.6	0.35
161.09	49122.9	0.13
162.08	124704.4	0.33
163.08	31929.7	0.08
164.06	69004.5	0.18
165.01	12198.1	0.03
166.07	33557.7	0.09
166.90	4246.2	0.01

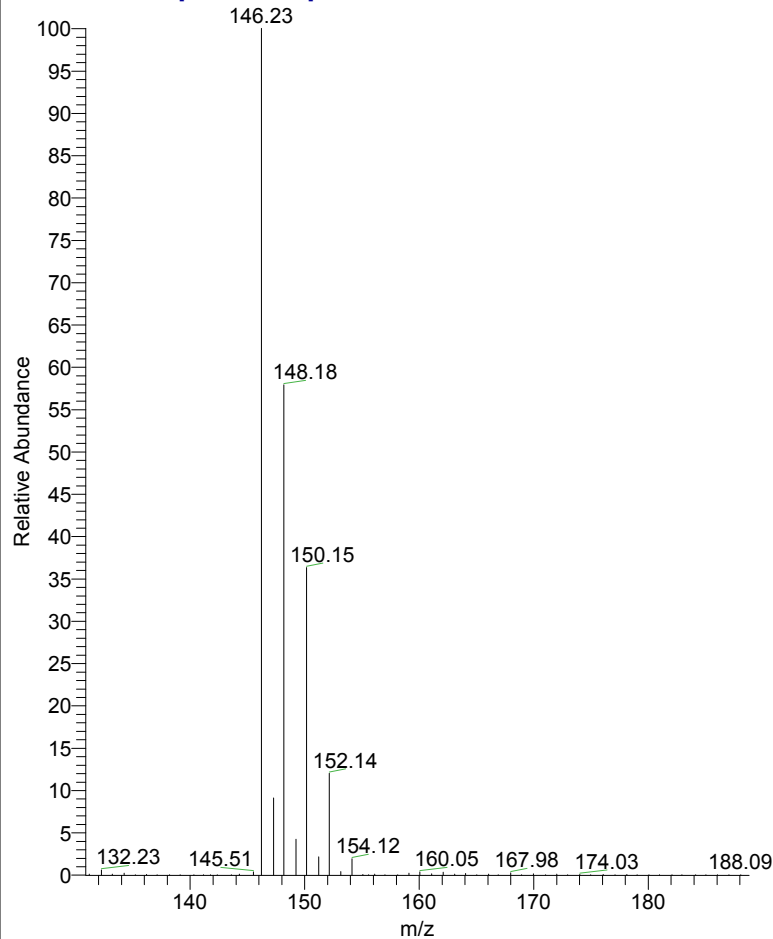
MC2071-20010402-MC #1-230 RT: 0.01-1.99 AV: 230 NL: 3.78E7

T: + c NSI Full ms [50.00-400.00]



MC2071-20010402-MC #1-230 RT: 0.01-1.99 AV: 230 NL: 3.78E7

T: + c NSI Full ms [50.00-400.00]



MC2071 1H NMR in MeOD  
Batch 20010402-MC



8.272  
8.251  
7.999  
7.981  
7.745  
7.726  
7.707  
7.603  
7.582  
7.452  
7.434  
7.414  
6.365  
6.347

NAME MC2071  
EXPNO 1  
PROCNO 1  
Date\_ 20091130  
Time 15.09  
INSTRUM spect  
PROBHD 5 mm PABBO BB-  
PULPROG zg30  
TD 65536  
SOLVENT MeOD  
NS 718  
DS 0  
SWH 8278.146 Hz  
FIDRES 0.126314 Hz  
AQ 3.9584243 sec  
RG 181  
DW 60.400 usec  
DE 6.50 usec  
TE 294.7 K  
D1 2.00000000 sec  
TD0 1

==== CHANNEL f1 =====  
NUC1 1H  
P1 14.50 usec  
PL1 -0.70 dB  
PL1W 10.03411102 W  
SF01 400.1324710 MHz  
SI 32768  
SF 400.1300062 MHz  
WDW no  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.00

