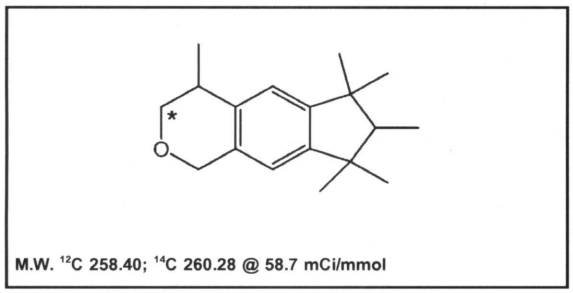
Product Data Sheet

MC-2301

1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[*g*]-2-benzopyran, [3-^{14}C]-



M.W. ^{12}C 258.40; ^{14}C 260.28 @ 58.7 mCi/mmol

Lot #: 211-036-0587-A-20060515-JI

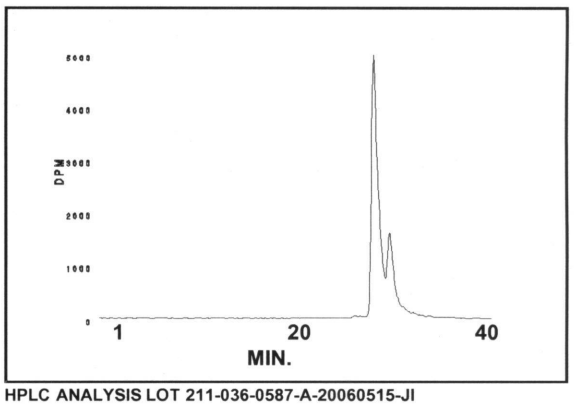
Specific Activity: 58.7 mCi/mmol

Concentration: 0.1 mCi/ml; 443.41 *µ*g/ml

Packaged in: Ethanol solution

Date of Analysis: October 21, 2010

Radiochemical Purity: 99.2%



HPLC ANALYSIS LOT 211-036-0587-A-20060515-JI
File Name: intn2764 Date and Time: 10/21/2010 11:25:28
Unit 21 Radio

Peak #	Area %	Time	Area
1	0.79	26.18670	272.62670
2	69.57	27.99000	23943.39095
3	29.64	29.60670	10201.11761
Totals	100.00		34417.13526

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.

Moravek Biochemicals, Inc. 577 Mercury Lane, Brea, California 92821 www.moravek.com info@moravek.com Phone (714) 990-2018 Fax (714) 990-1824

MC-2301

1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-^{14}C]-

Lot 211-036-0587-A-20060515-JI

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.

^{14}C Material concentration was 0.1 mCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **^{14}C Material** alone injection was 1.0 µl.

Co-injection solution consisted of 1.0 µl **^{14}C Material** + 2.0 µl standard.

Volume of co-injection was 3.0 µl.

Volume of blank injection was 1.0 µl.

B) Mass spectrometry - Positive mode

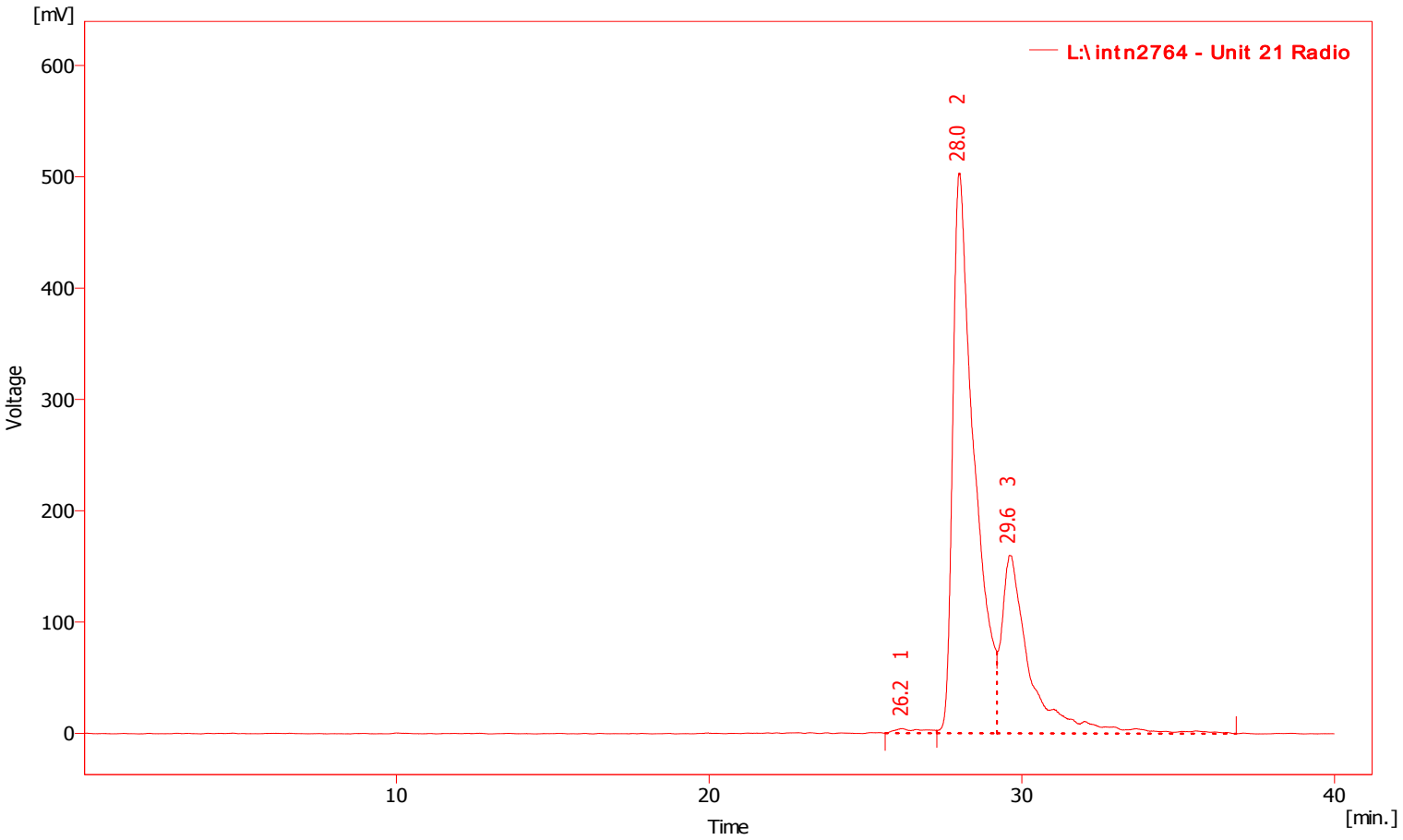
C) NMR

MC-2301
1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-14C]-
Lot 211-036-0587-A-20060515-JI

Chromatogram Info:

File Name	: L:\intn2764	File Created	: 2/17/2014 4:41:24 PM
Origin	: Acquired, Acquisition started 10/21/2010 10:45:29 AM	Acquired Date	: 10/21/2010 11:25:28 AM
Project	: Test	By	: Administrator

Method	: Unit_21_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material alone		
Created	: 4/17/2008 10:21 AM	Modified	: 2/17/2014 4:56 PM
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intn2764 - Unit 21 Radio)

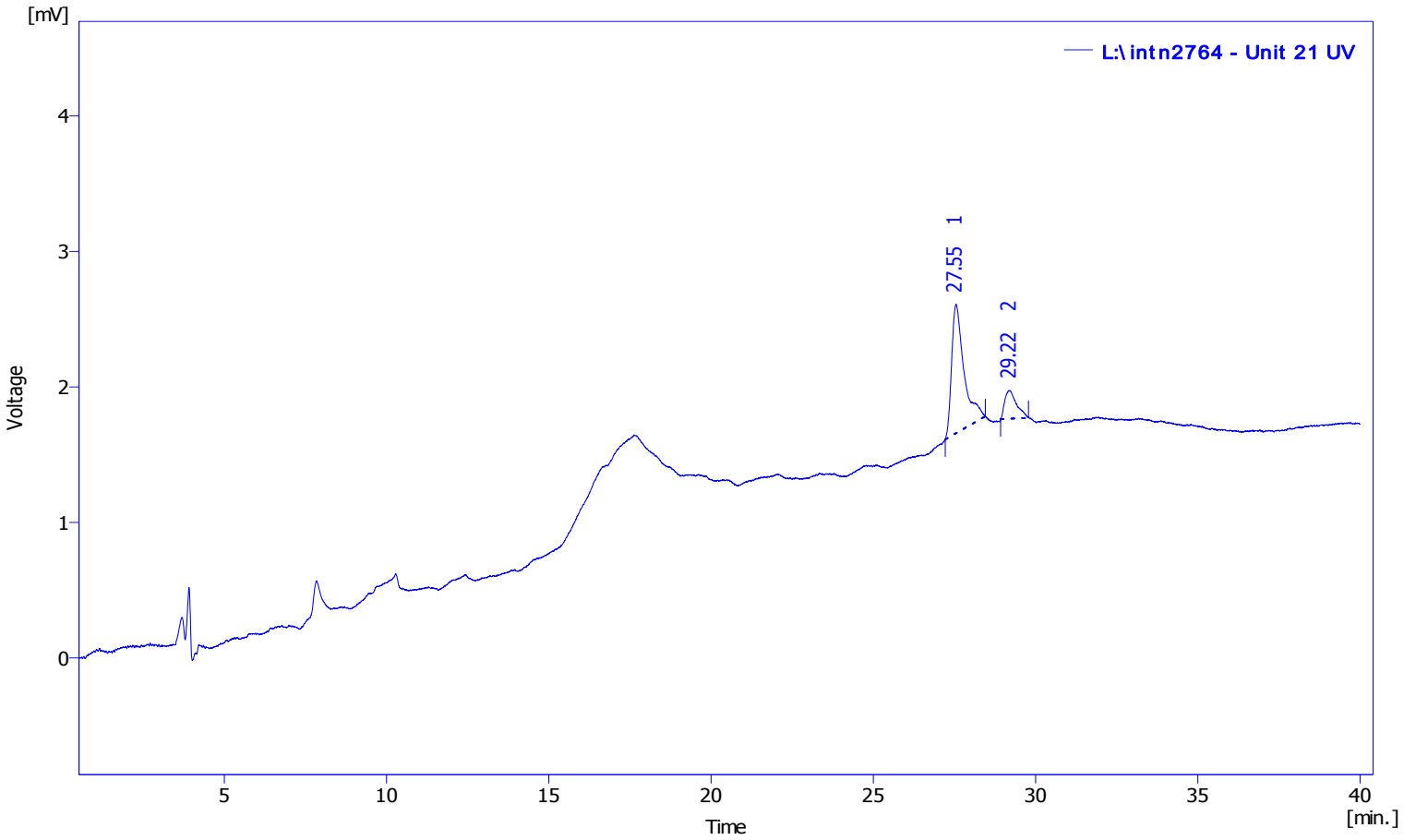
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		26.19	272.627	4.23	0.79	0.63	1910.87	38217.47	1.60		
2		27.99	23943.391	503.35	69.57	75.39	9116.27	182325.48	1.91		1.0
3		29.61	10201.118	160.04	29.64	23.97	7462.78	149255.58	3.87		1.3
		Total	34417.135	667.63	100.00	100.00					

MC-2301
1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-14C]-
Lot 211-036-0587-A-20060515-JI

Chromatogram Info:

File Name	: L:\intn2764	File Created	: 2/17/2014 4:41:24 PM
Origin	: Acquired, Acquisition started 10/21/2010 10:45:29 AM	Acquired Date	: 10/21/2010 11:25:28 AM
Project	: Test	By	: Administrator

Method	: Unit_21_40_min_run	By	: Administrator
Description	: UV trace of 14C material alone		
Created	: 4/17/2008 10:21 AM	Modified	: 2/17/2014 4:49 PM
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intn2764 - Unit 21 UV)

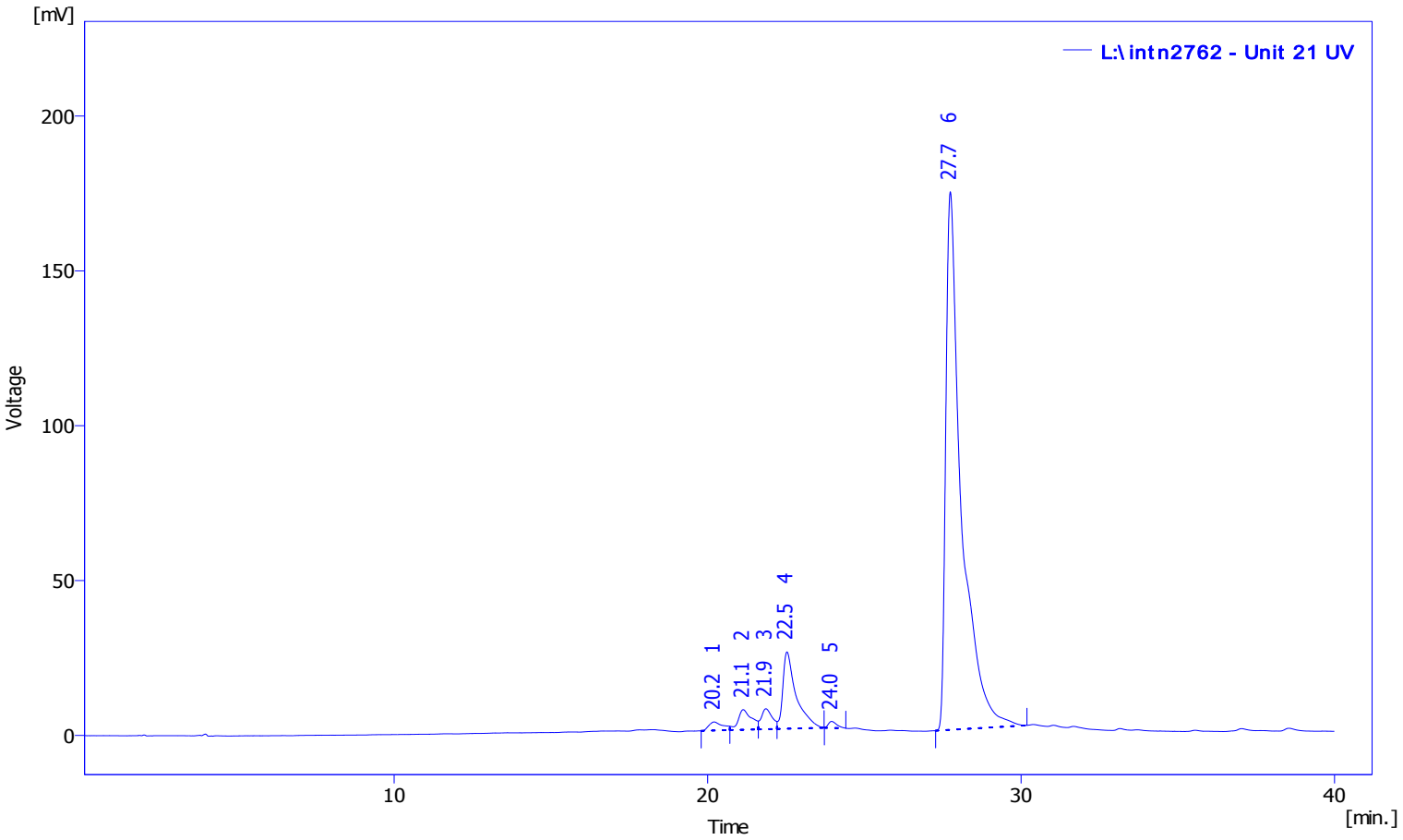
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		27.55	25.110	0.95	82.70	82.03	29126.67	582533.44	1.89		
2		29.22	5.253	0.21	17.30	17.97	29076.49	581529.77	1.43		2.5
		Total	30.363	1.16	100.00	100.00					

MC-2301
1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-14C]-
Lot 211-036-0587-A-20060515-JI

Chromatogram Info:

File Name	: L:\intn2762	File Created	: 2/17/2014 4:41:25 PM
Origin	: Acquired	Acquired Date	: 10/21/2010 9:44:33 AM
Project	: Test	By	: Administrator

Method	: Unit_21_40_min_run	By	: Administrator
Description	: UV trace of standard alone		
Created	: 4/17/2008 10:21 AM	Modified	: 2/17/2014 5:01 PM
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intn2762 - Unit 21 UV)

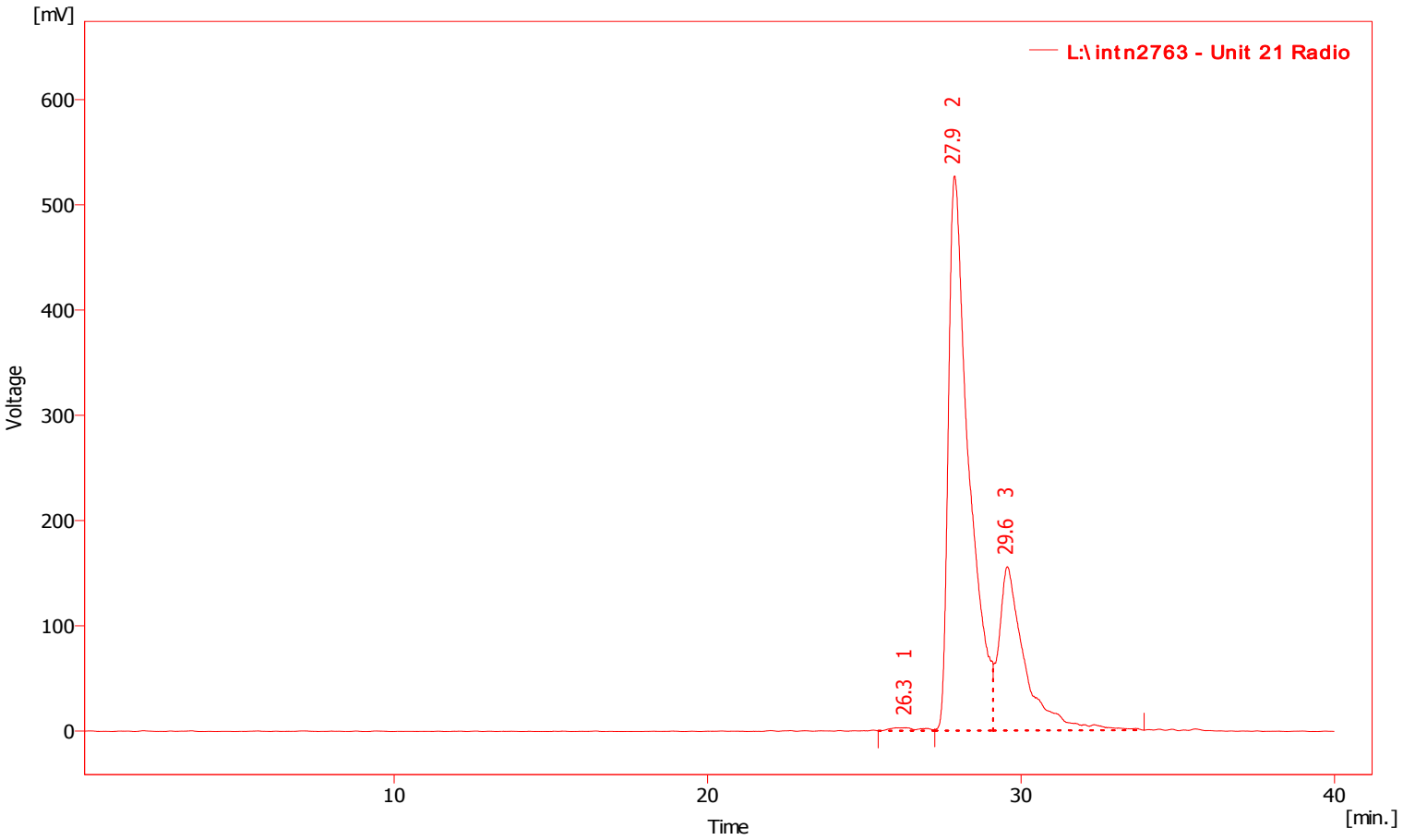
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		20.21	86.284	2.78	1.19	1.28	4844.33	96886.64	1.27		
2		21.14	195.860	6.52	2.70	3.01	8593.57	171871.36	1.06		0.9
3		21.86	159.443	6.61	2.20	3.05	15490.90	309818.08	1.24		0.9
4		22.53	728.831	24.80	10.06	11.45	18808.70	376173.91	1.95		1.0
5		23.96	38.597	2.10	0.53	0.97	37806.51	756130.13	1.51		2.5
6		27.74	6033.694	173.75	83.31	80.24	22025.29	440505.86	2.56		6.1
		Total	7242.709	216.55	100.00	100.00					

MC-2301
1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-14C]-
Lot 211-036-0587-A-20060515-JI

Chromatogram Info:

File Name	: L:\intn2763	File Created	: 2/17/2014 4:41:25 PM
Origin	: Acquired, Acquisition started 10/21/2010 9:55:11 AM	Acquired Date	: 10/21/2010 10:35:10 AM
Project	: Test	By	: Administrator

Method	: Unit_21_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard		
Created	: 4/17/2008 10:21 AM	Modified	: 2/17/2014 5:00 PM
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intn2763 - Unit 21 Radio)

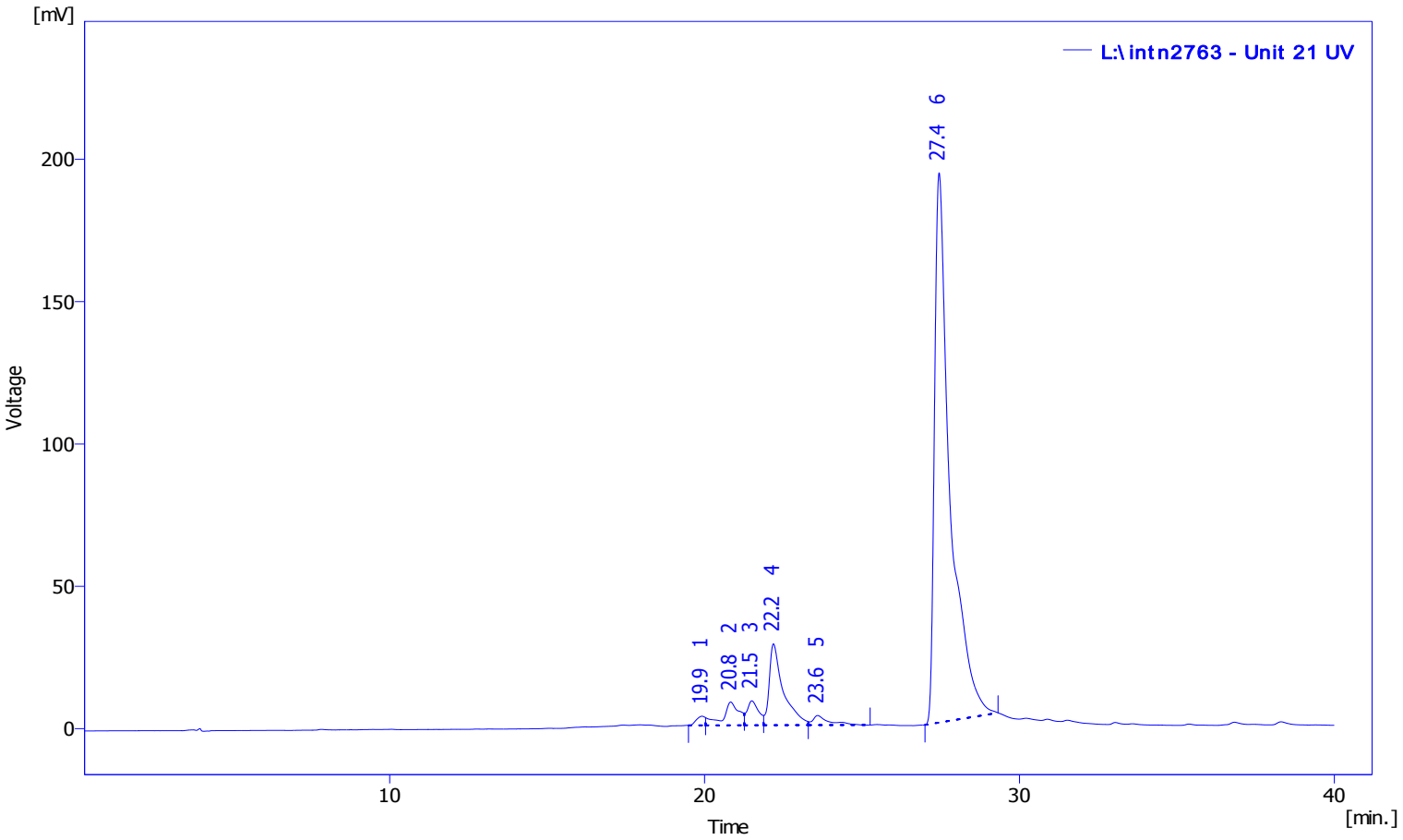
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		26.33	191.562	2.97	0.58	0.43	6204.69	124093.78	1.11		
2		27.88	23910.117	526.96	72.13	76.86	10510.70	210213.93	2.03		1.3
3		29.56	9047.108	155.70	27.29	22.71	8164.64	163292.85	2.58		1.4
		Total	33148.787	685.63	100.00	100.00					

MC-2301
1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-14C]-
Lot 211-036-0587-A-20060515-JI

Chromatogram Info:

File Name	: L:\intn2763	File Created	: 2/17/2014 4:41:25 PM
Origin	: Acquired, Acquisition started 10/21/2010 9:55:11 AM	Acquired Date	: 10/21/2010 10:35:10 AM
Project	: Test	By	: Administrator

Method	: Unit_21_40_min_run	By	: Administrator
Description	: UV trace of 14C material co-injected with standard		
Created	: 4/17/2008 10:21 AM	Modified	: 2/17/2014 4:59 PM
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	: Impurities were from the standard material.		



Result Table (Uncal - L:\intn2763 - Unit 21 UV)

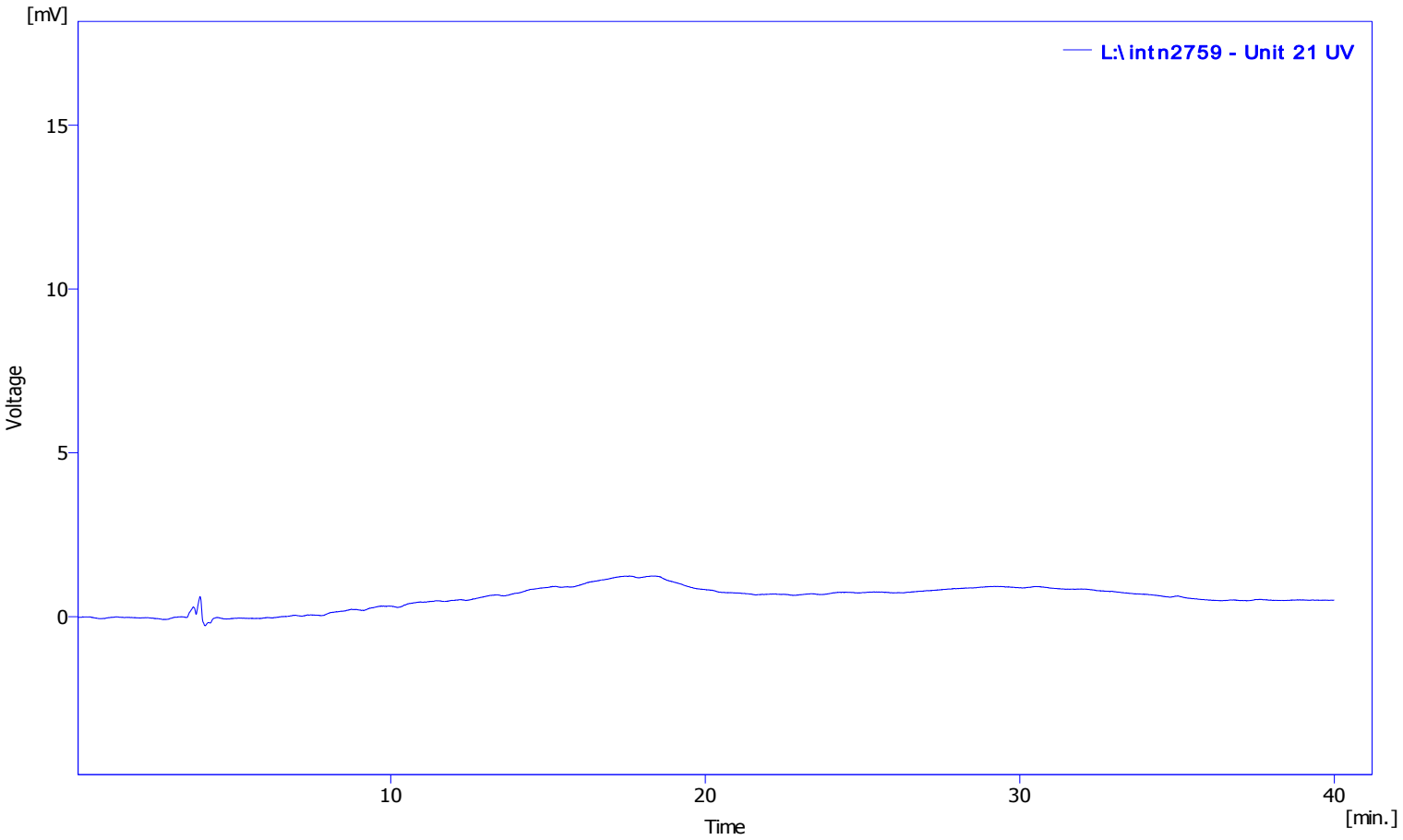
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		19.92	59.740	3.21	0.73	1.31	21020.46	420409.10	0.67		
2		20.83	289.918	8.18	3.53	3.34	6825.77	136515.45	0.78		1.2
3		21.50	217.564	8.59	2.65	3.50	11928.88	238577.56	1.30		0.8
4		22.19	887.284	28.59	10.81	11.66	17626.76	352535.11	2.22		0.9
5		23.59	124.398	3.39	1.52	1.38	18956.59	379131.73	2.61		2.1
6		27.45	6629.675	193.12	80.77	78.80	21562.00	431240.07	2.50		5.4
		Total	8208.579	245.07	100.00	100.00					

MC-2301
1,3,4,6,7,8-Hexahydro-4,6,6,8,8-hexamethylcyclopenta[g]-2-benzopyran, [3-14C]-
Lot 211-036-0587-A-20060515-JI

Chromatogram Info:

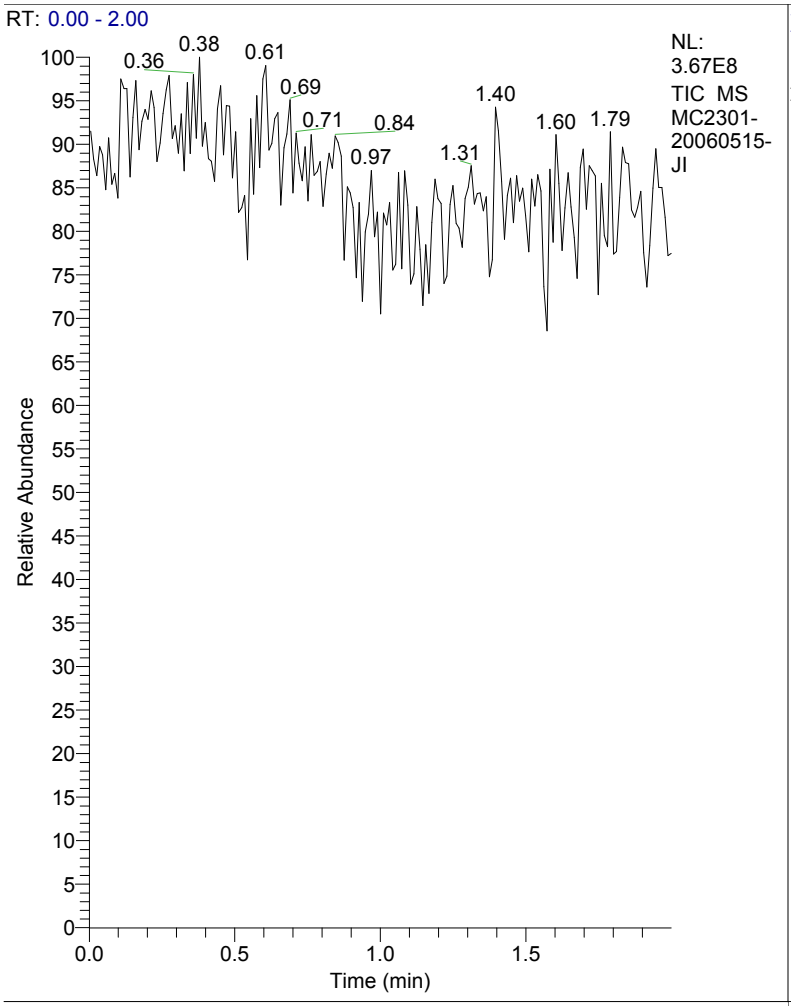
File Name	: L:\intn2759	File Created	: 2/17/2014 4:41:25 PM
Origin	: Acquired, Acquisition started 10/21/2010 6:33:32 AM	Acquired Date	: 10/21/2010 7:13:31 AM
Project	: Test	By	: Administrator

Method	: Unit_21_40_min_run	By	: Administrator
Description	: UV trace of blank injection		
Created	: 4/17/2008 10:21 AM	Modified	: 2/17/2014 4:42 PM
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



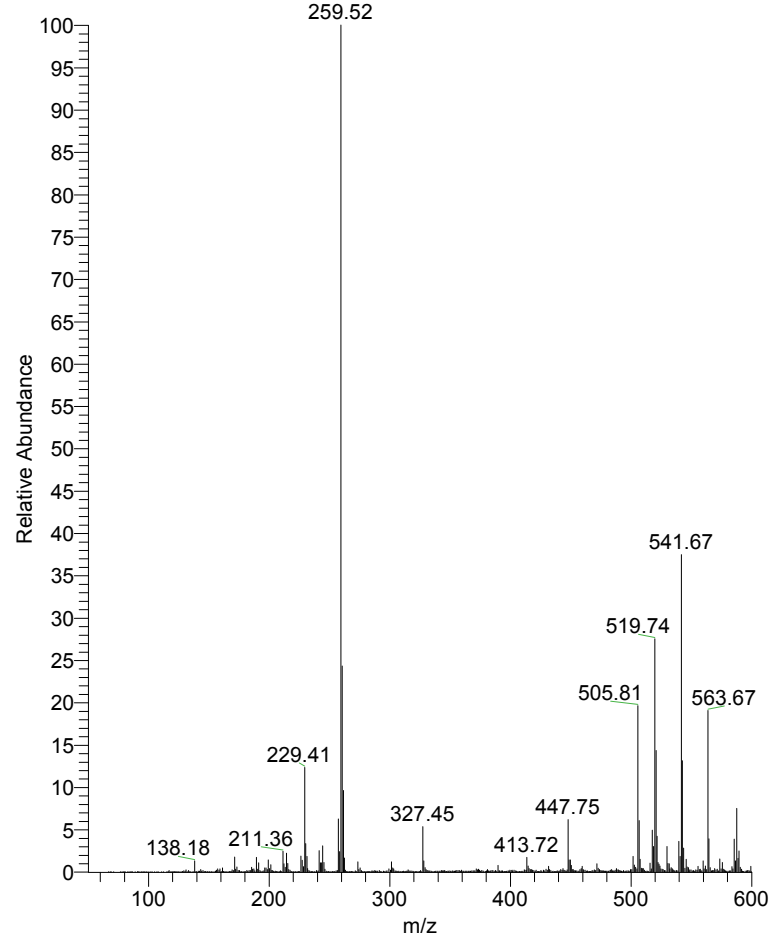
Result Table (Uncal - L:\intn2759 - Unit 21 UV)

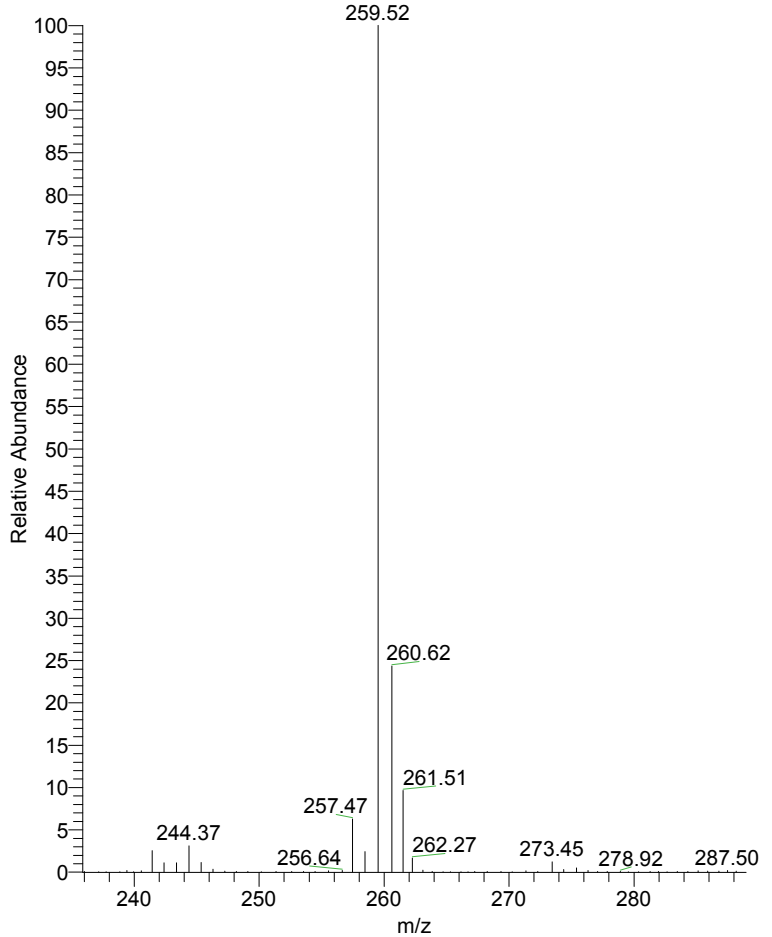
Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
No peak to report										



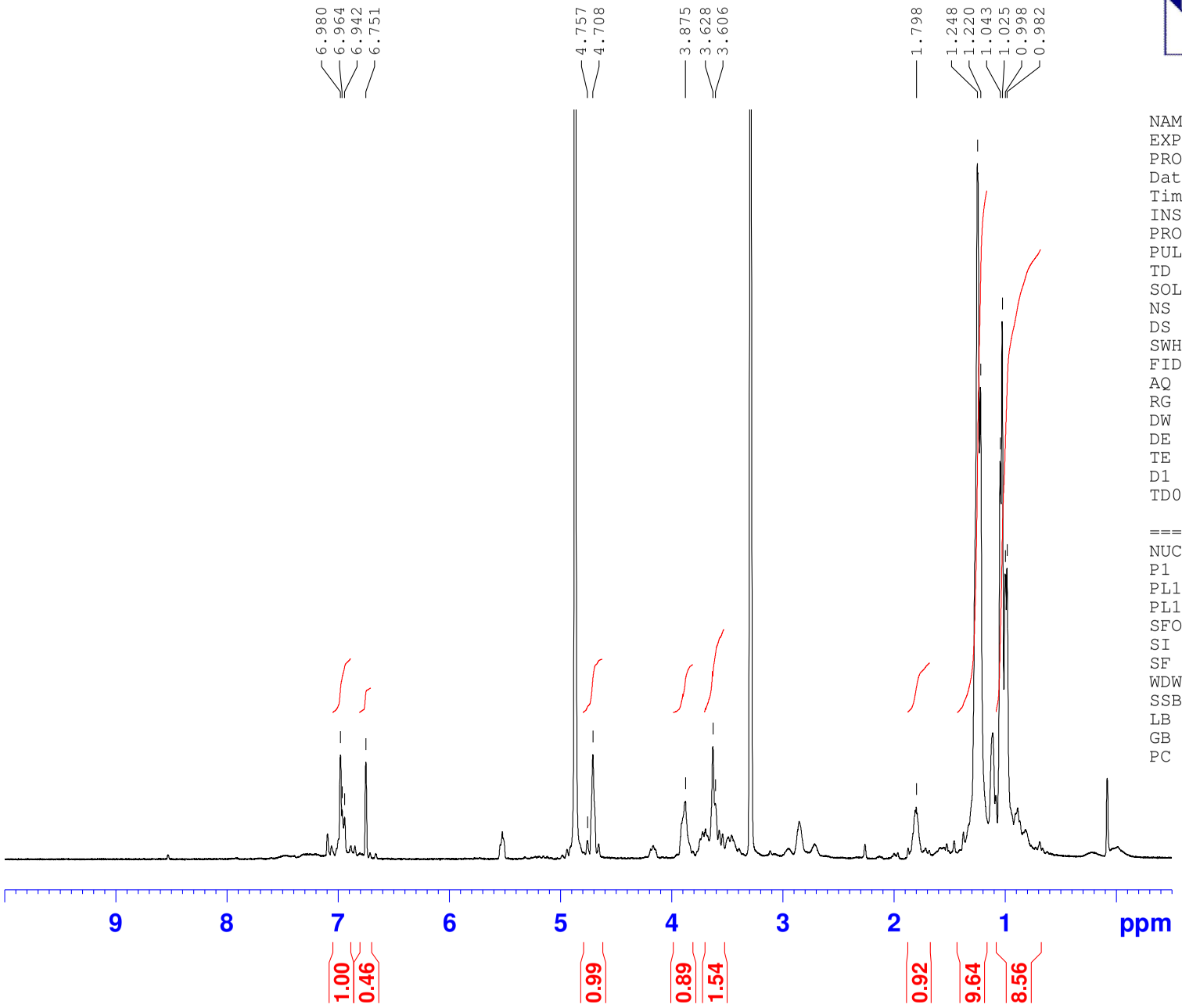
MC2301-20060515-JI#1-193 RT: 0.00-2.00
T: + c NSI Full ms [50.00-600.00]
m/z= 251.24-266.08

m/z	Intensity	Relative
256.64	119694.9	0.18
257.47	4086835.3	6.24
258.48	1570573.6	2.40
259.52	65514105.8	100.00
260.62	15940023.4	24.33
261.51	6298007.6	9.61
262.27	1079455.4	1.65
263.11	125618.4	0.19
263.86	34905.1	0.05
264.72	21719.2	0.03
265.31	3566.7	0.01





MC2301 1H NMR in MeOD
Batch 20060515-JI



NAME	MC2301-20060515-JI
EXPNO	2
PROCNO	1
Date_	20101022
Time	8.49
INSTRUM	spect
PROBHD	5 mm PABBO BB-
PULPROG	zg30
TD	65536
SOLVENT	MeOD
NS	256
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	293.8 K
D1	2.00000000 sec
TD0	1
======== CHANNEL f1 ========	
NUC1	1H
P1	14.50 usec
PL1	-0.70 dB
PL1W	10.03411102 W
SFO1	400.1324710 MHz
SI	32768
SF	400.1300163 MHz
WDW	no
SSB	0
LB	0.00 Hz
GB	0
PC	1.00