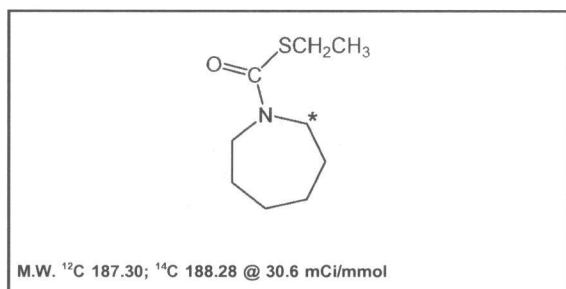




Product Data Sheet

MC-2376

Molinate, [hexahydroazepine-2-¹⁴C]



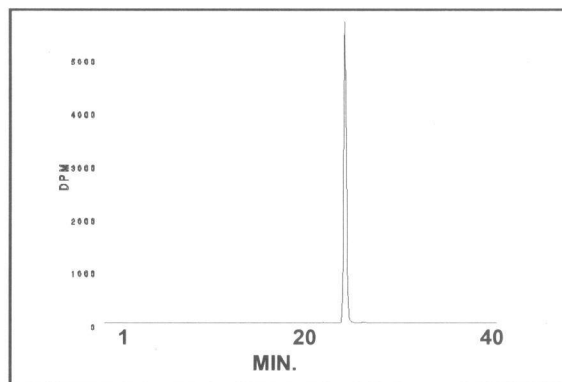
Lot #: 177-039-0306-A-20080612-JI

Specific Activity: 30.6 mCi/mmol

Packaged as: Neat liquid

Date of Analysis: June 12, 2008

Radiochemical Purity: 99.9%



HPLC ANALYSIS LOT 177-039-0306-A-20080612-JI
File Name: intk232 Date and Time: 6/12/2008 2:16:55 PM
Unit 20 Radio

Peak #	Area %	Time	Area
1	99.93	24.57000	10966.08174
2	0.07	26.32000	7.23574
Totals	100.00		10973.31748

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-2376

Molinate, [hexahydroazepine-2-¹⁴C]-

Lot 177-039-0306-A-20080612-JI

A) All chromatograms were run using the HPLC method described on the Product Data Sheet.

Concentrations and volumes:

Standard solution concentration was unknown.

Molinate, [hexahydroazepine-2-¹⁴C]- concentration was 49.0 µCi/ml.

Volume of standard alone injection was 3.0 µl.

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

Co-injection solution consisted of 3.0 µl **Molinate, [hexahydroazepine-2-¹⁴C]-** + 1.5 µl standard.

Volume of co-injection was 4.5 µl.

Volume of blank injection was 3.0 µl.

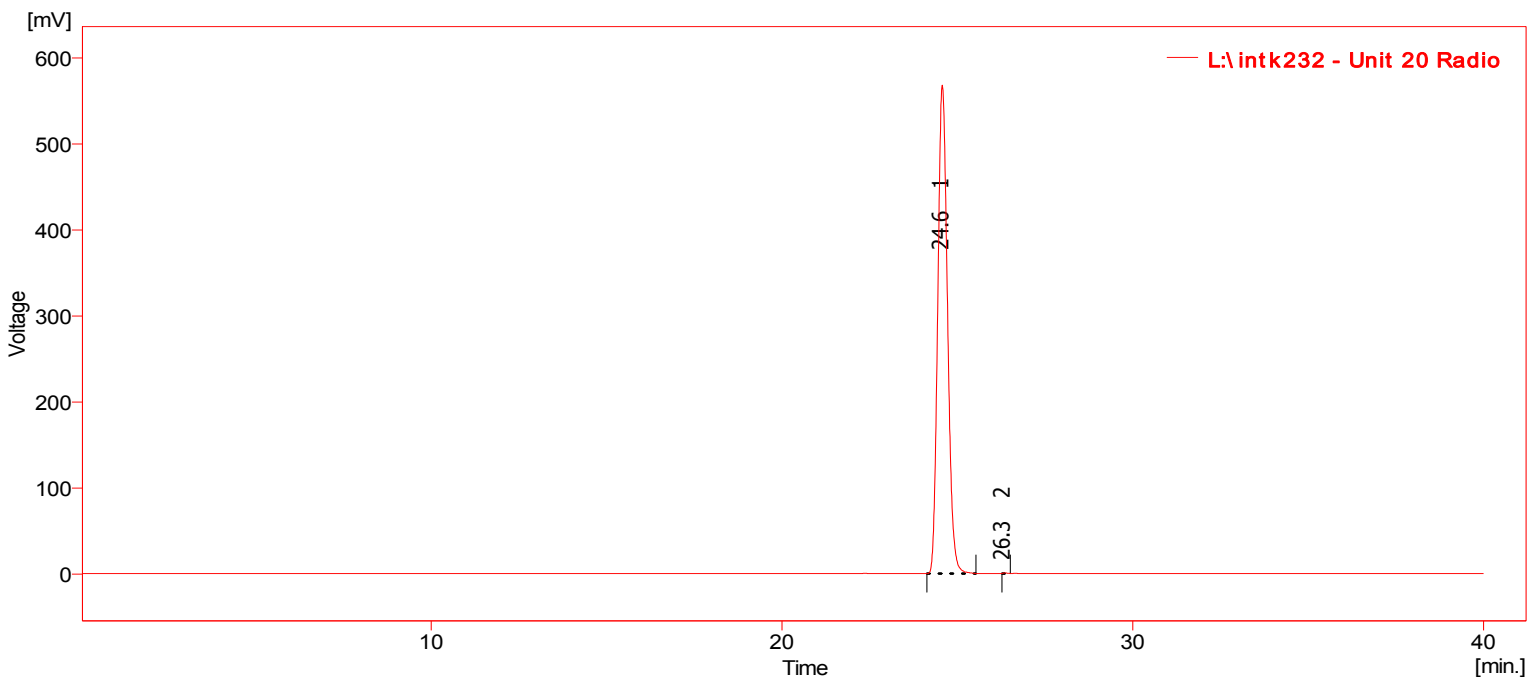
B) Mass spectrometry – Positive mode

C) NMR

MC-2376
Molinate, [hexahydroazepine-2-14C]-
Lot 177-039-0306-A-20080612-JI

Chromatogram Info:

File Name	: L:\intk232	File Created	: 5/28/2014 3:53:55 PM
Origin	: Acquired, Acquisition started 6/12/2008 1:36:56 PM	Acquired Date	: 6/12/2008 2:16:55 PM
Project	: Work1	By	: Administrator
Method	: Unit20_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material alone	Modified	: 5/28/2014 3:55 PM
Created	: 4/9/2008 10:56 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



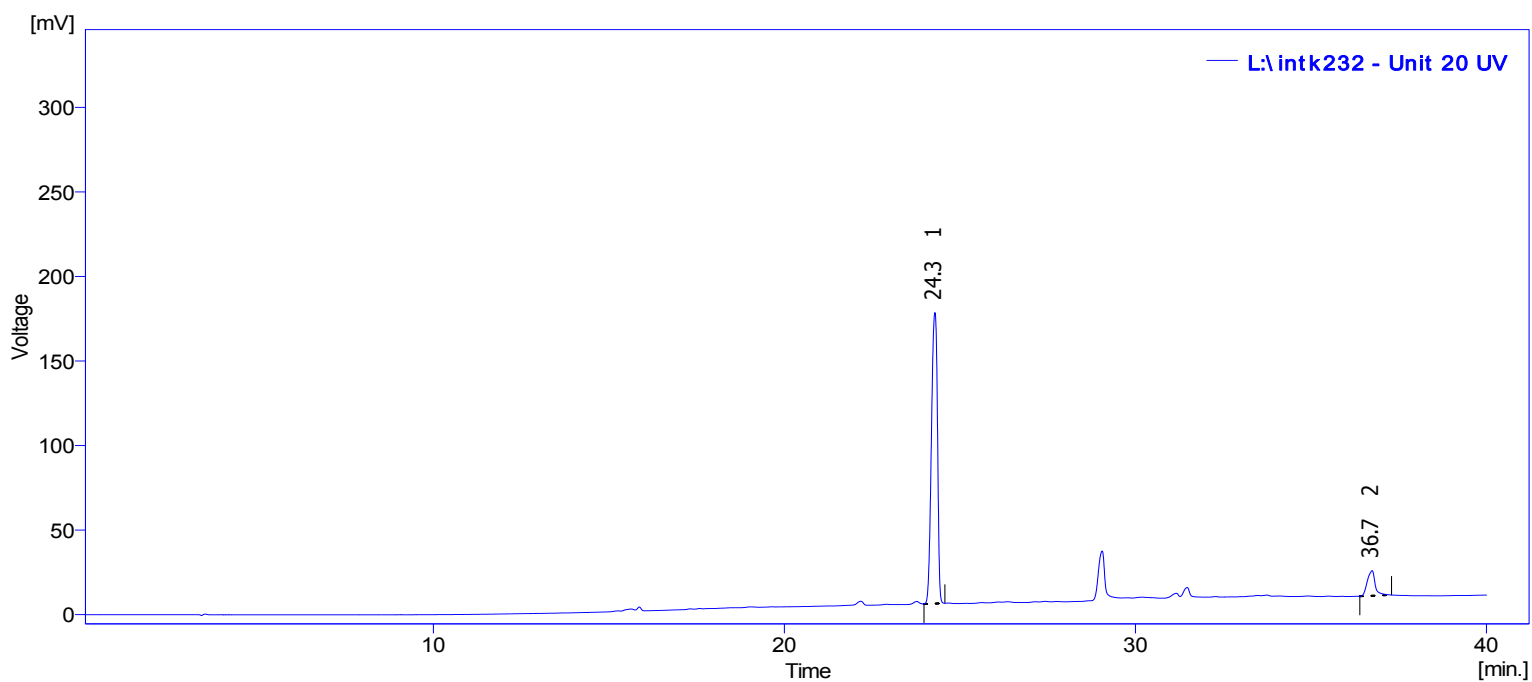
Result Table (Uncal - L:\intk232 - Unit 20 Radio)

Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]	Efficiency [th.pl]	Eff/I [t.p./m]	Resolution [-]	Symmetry/Tailing [-]	Response Factor
1	24.57	10966.082	567.77	99.93	99.9	0.31	34801	696028		1.16	
2	26.32	7.236	0.80	0.07	0.1	0.12	266513	5330268	4.80	2.30	
Total		10973.317	568.57	100.00	100.0						

MC-2376
Molinate, [hexahydroazepine-2-14C]-
Lot 177-039-0306-A-20080612-JI

Chromatogram Info:

File Name	: L:\intk232	File Created	: 5/28/2014 3:53:55 PM
Origin	: Acquired, Acquisition started 6/12/2008 1:36:56 PM	Acquired Date	: 6/12/2008 2:16:55 PM
Project	: Work1	By	: Administrator
Method	: Unit20_40_min_run	By	: Administrator
Description	: UV trace of 14C material alone		
Created	: 4/9/2008 10:56 AM	Modified	: 5/28/2014 3:21 PM
Column	:	Detection	: UV 212nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intk232 - Unit 20 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]	Efficiency [th.pl]	Eff/I [t.p./m]	Resolution [-]	Symmetry/Tailing [-]	Response Factor
1		24.29	2052.660	172.17	89.85	92.0	0.20	84486	1689717		0.87	
2		36.74	231.846	14.89	10.15	8.0	0.24	133534	2670685	33.92	1.11	
	Total		2284.507	187.06	100.00	100.0						

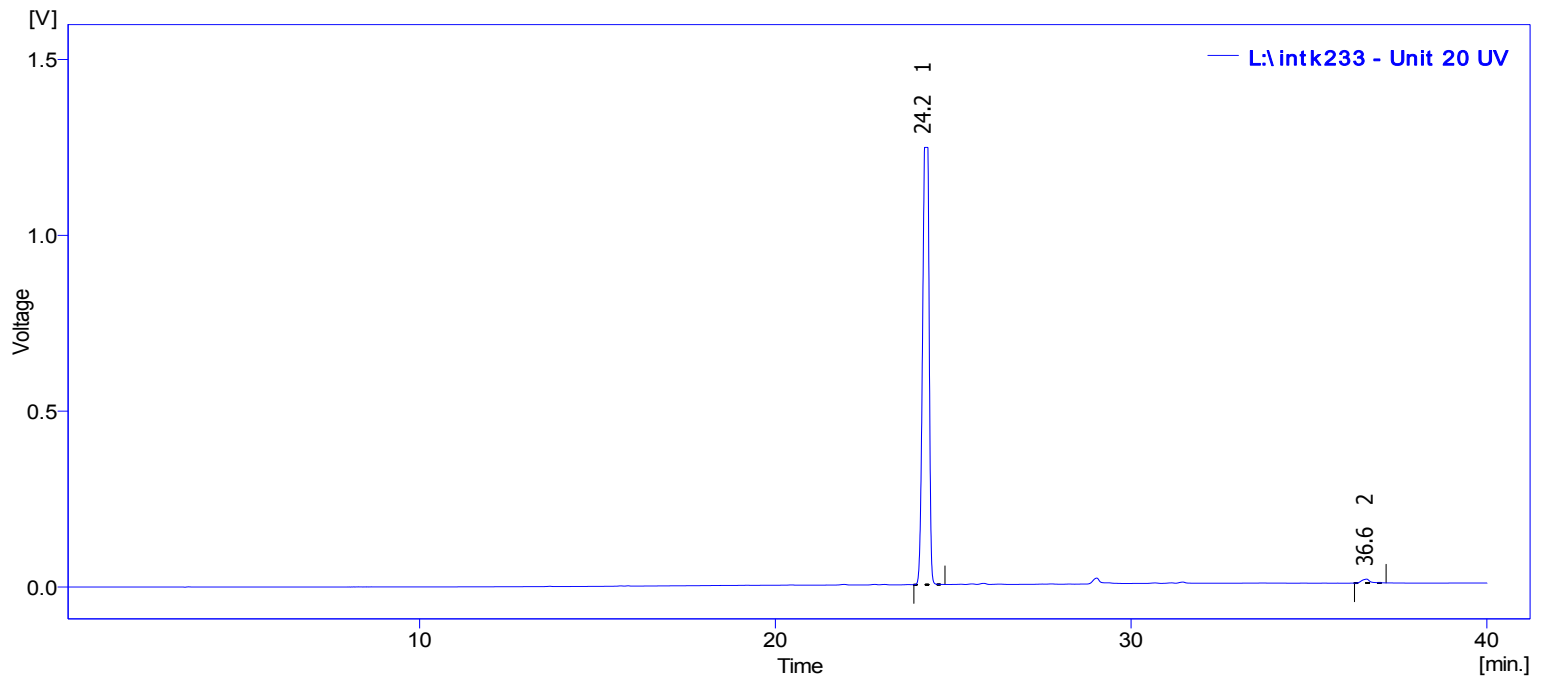
MC-2376
Molinate, [hexahydroazepine-2-14C]-
Lot 177-039-0306-A-20080612-JI

Chromatogram Info:

File Name : L:\intk233 File Created : 5/28/2014 3:53:54 PM
 Origin : Acquired, Acquisition started 6/12/2008 2:37:28 PM Acquired Date : 6/12/2008 3:17:27 PM
 Project : Work1 By : Administrator

Method : Unit20_40_min_run By : Administrator
 Description : UV trace of standard material alone
 Created : 4/9/2008 10:56 AM Modified : 5/28/2014 3:22 PM

Column : Detection : UV 212nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



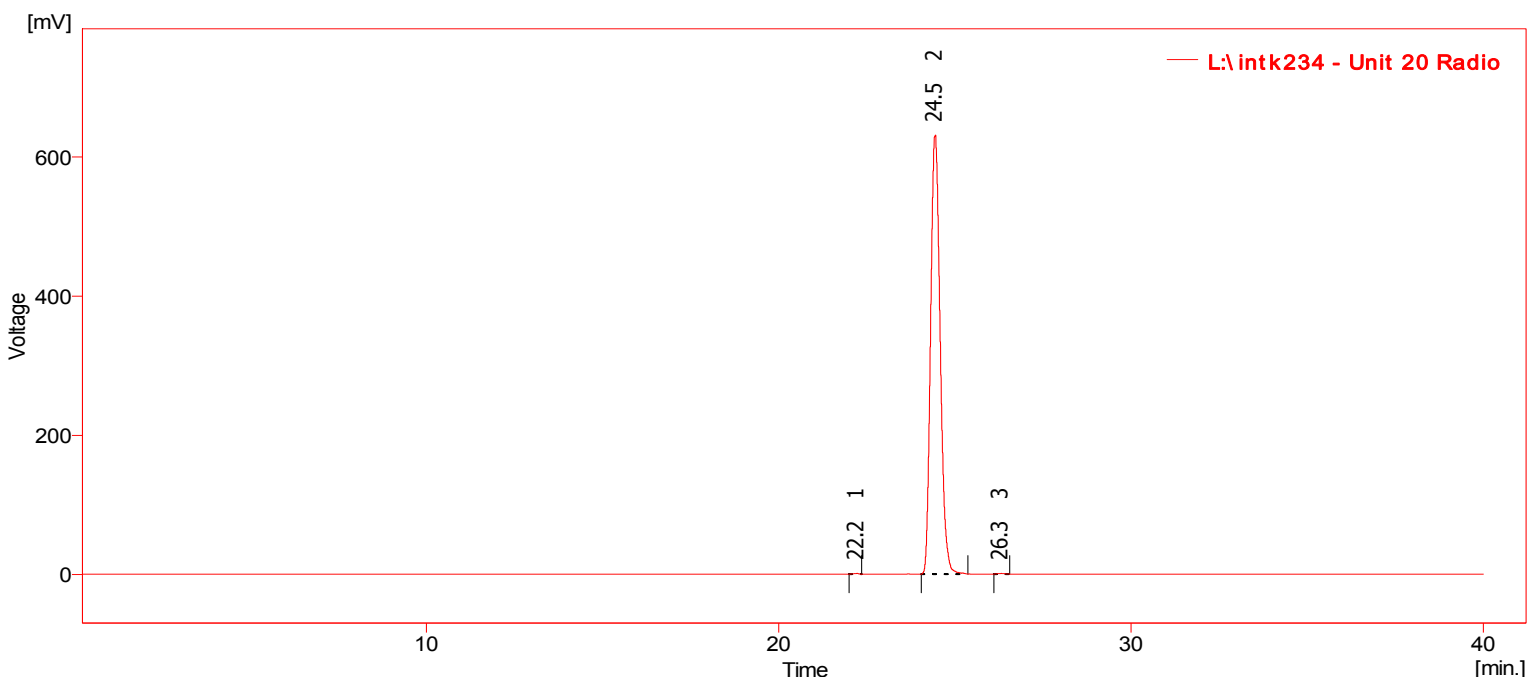
Result Table (Uncal - L:\intk233 - Unit 20 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]	Efficiency [th.pl]	Eff/I [t.p./m]	Resolution [-]	Symmetry/Tailing [-]	Response Factor
1		24.19	15932.624	1243.38	98.88	99.1	0.21	75921	1518414		1.16	
2		36.62	180.012	11.22	1.12	0.9	0.24	128980	2579609	32.83	1.21	
	Total		16112.637	1254.60	100.00	100.0						

MC-2376
Molinate, [hexahydroazepine-2-14C]-
Lot 177-039-0306-A-20080612-JI

Chromatogram Info:

File Name	: L:\intk234	File Created	: 5/28/2014 3:53:55 PM
Origin	: Acquired, Acquisition started 6/12/2008 3:31:24 PM	Acquired Date	: 6/12/2008 4:11:23 PM
Project	: Work1	By	: Administrator
Method	: Unit20_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material co-injected with standard		
Created	: 4/9/2008 10:56 AM	Modified	: 5/28/2014 3:57 PM
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intk234 - Unit 20 Radio)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]	Efficiency [th.pl]	Eff/I [t.p./m]	Resolution [-]	Symmetry/Tailing [-]	Response Factor
1		22.23	10.402	1.23	0.09	0.2	0.14	146620	2932403		0.69	
2		24.45	11934.905	630.84	99.78	99.6	0.30	36004	720071	5.95	1.13	
3		26.32	15.818	1.23	0.13	0.2	0.24	68501	1370021	4.07	1.06	
		Total	11961.124	633.29	100.00	100.0						

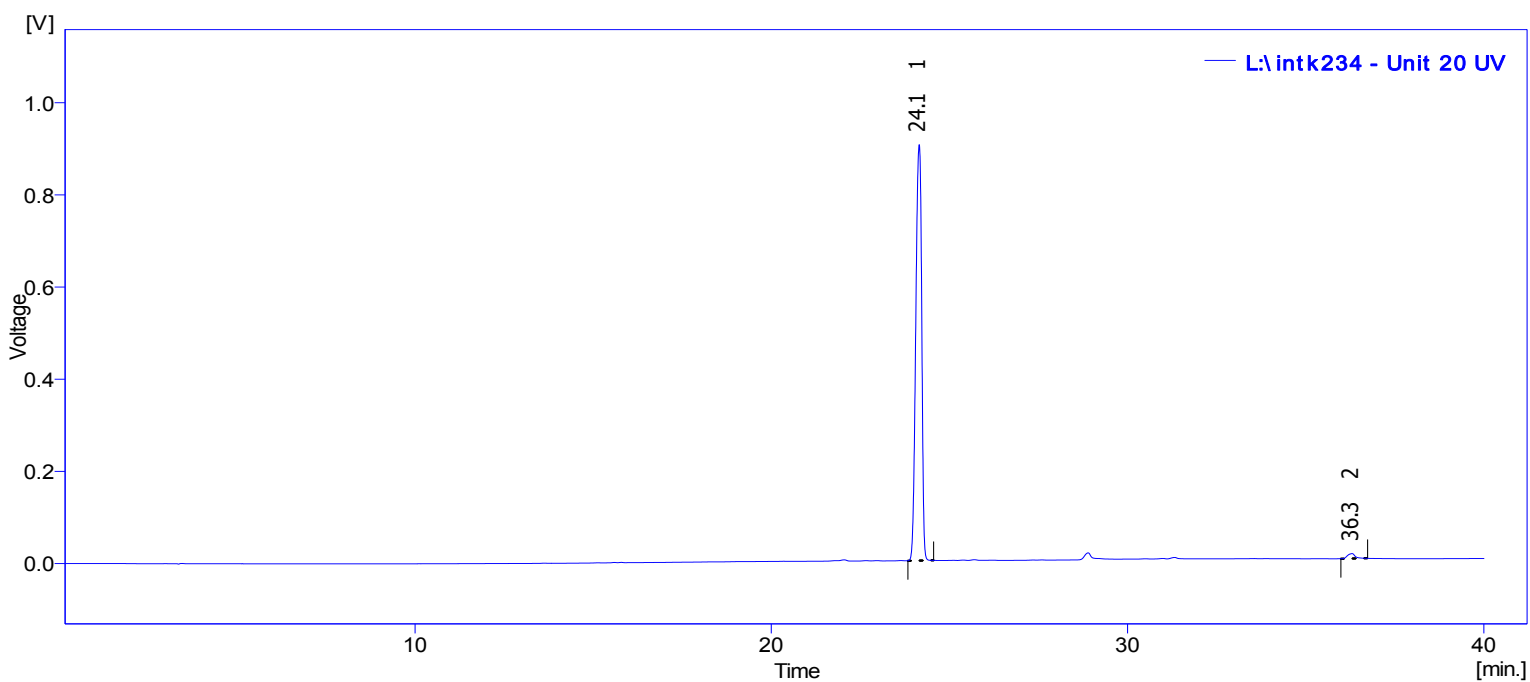
MC-2376
Molinate, [hexahydroazepine-2-14C]-
Lot 177-039-0306-A-20080612-JI

Chromatogram Info:

File Name : L:\intk234 File Created : 5/28/2014 3:53:55 PM
 Origin : Acquired, Acquisition started 6/12/2008 3:31:24 PM Acquired Date : 6/12/2008 4:11:23 PM
 Project : Work1 By : Administrator

Method : Unit20_40_min_run By : Administrator
 Description : UV trace of 14C material co-injected with standard
 Created : 4/9/2008 10:56 AM Modified : 5/28/2014 3:24 PM

Column : Detection : UV 212nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



Result Table (Uncal - L:\intk234 - Unit 20 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]	Efficiency [th.pl]	Eff/I [t.p./m]	Resolution [-]	Symmetry/ Tailing [-]	Response Factor
1		24.15	10387.235	902.57	98.46	98.8	0.19	89503	1790057		0.88	
2		36.30	162.140	10.86	1.54	1.2	0.23	142085	2841697	34.41	1.15	
	Total		10549.376	913.43	100.00	100.0						

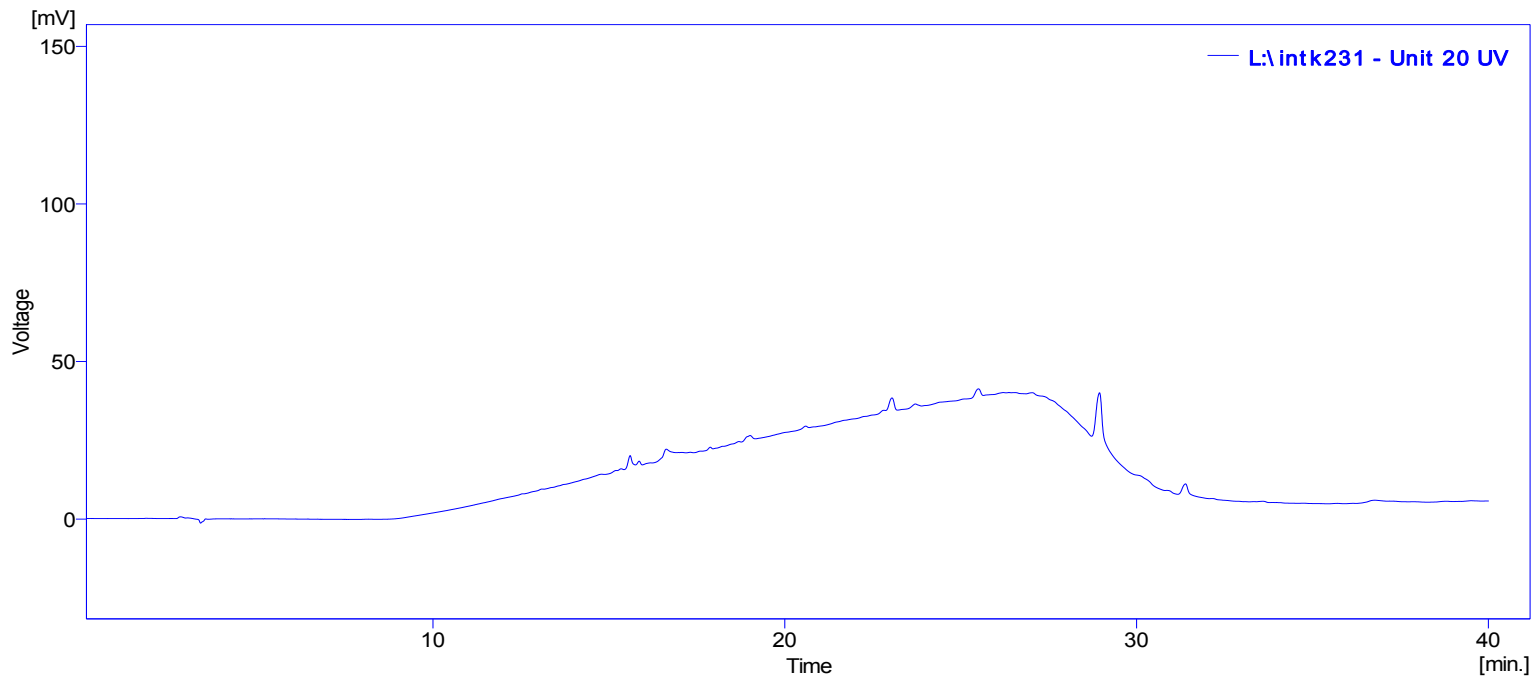
MC-2376
Molinate, [hexahydroazepine-2-14C]-
Lot 177-039-0306-A-20080612-JI

Chromatogram Info:

File Name : L:\intk231 File Created : 5/28/2014 3:53:55 PM
 Origin : Acquired, Acquisition started 6/12/2008 11:48:16 AM Acquired Date : 6/12/2008 12:28:14 PM
 Project : Work1 By : Administrator

Method : Unit20_40_min_run By : Administrator
 Description : UV trace of blank injection
 Created : 4/9/2008 10:56 AM Modified : 5/28/2014 3:25 PM

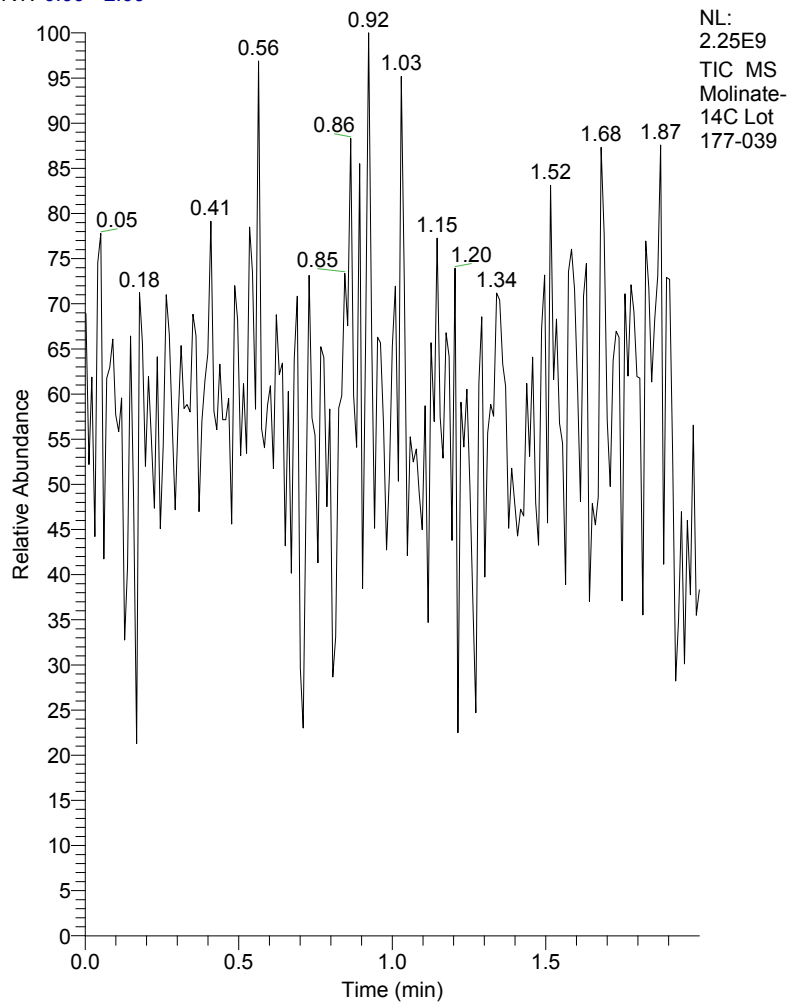
Column : Detection : UV 212nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



Result Table (Uncal - L:\intk231 - Unit 20 UV)

Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]	Efficiency [th.pl]	Eff/l [t.p./m]	Resolution [-]	Symmetry/Tailing [-]	Response Factor
No peak to report											

RT: 0.00 - 2.00



Molinate-14C Lot 177-039#1-207 RT:

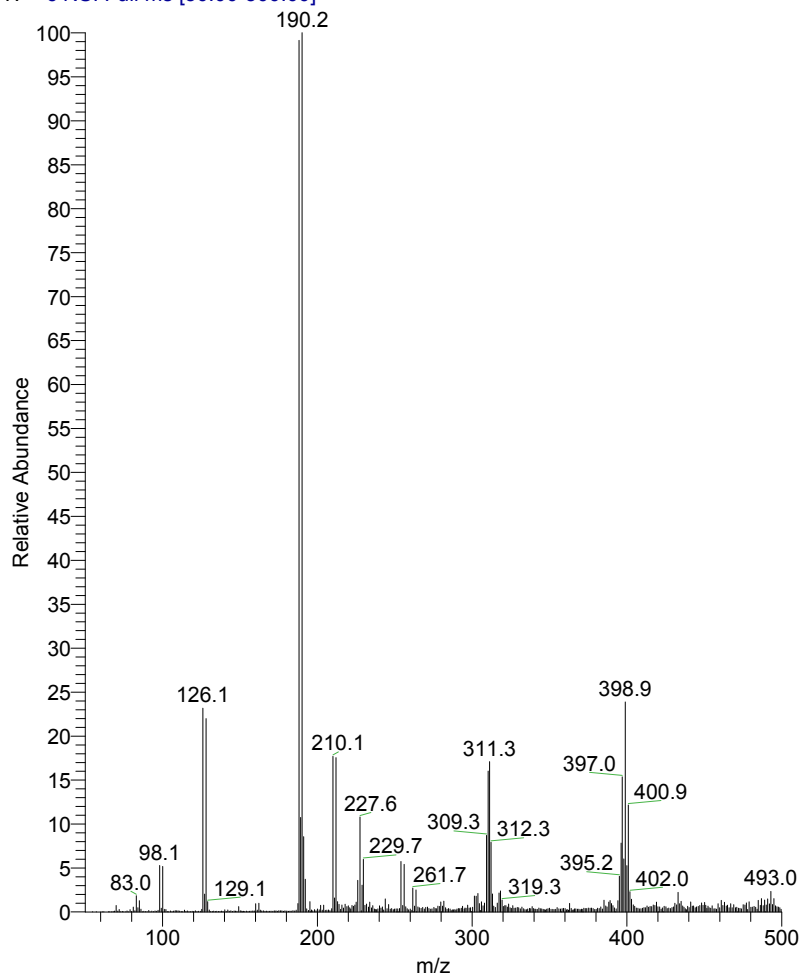
T: + c NSI Full ms [50.00-500.00]

m/z = 167.3-207.5

m/z	Intensity	Relative
184.3	247837.2	0.13
185.4	203271.4	0.11
186.3	366056.7	0.19
187.4	1811167.1	0.94
188.2	191098472.3	99.14
189.2	20676766.5	10.73
190.2	192754277.3	100.00
191.2	16470846.1	8.54
192.2	7126661.6	3.70
193.1	654128.9	0.34
194.2	308009.8	0.16
195.2	2232602.2	1.16
195.7	1.9	0.00
196.2	419928.0	0.22
197.1	240682.3	0.12
198.2	483084.5	0.25
199.1	225135.0	0.12
200.1	610661.8	0.32
201.2	432697.1	0.22
202.1	1417851.1	0.74
203.1	362756.4	0.19
204.1	1443751.1	0.75
205.1	347436.5	0.18
206.2	355333.8	0.18
207.2	406037.2	0.21

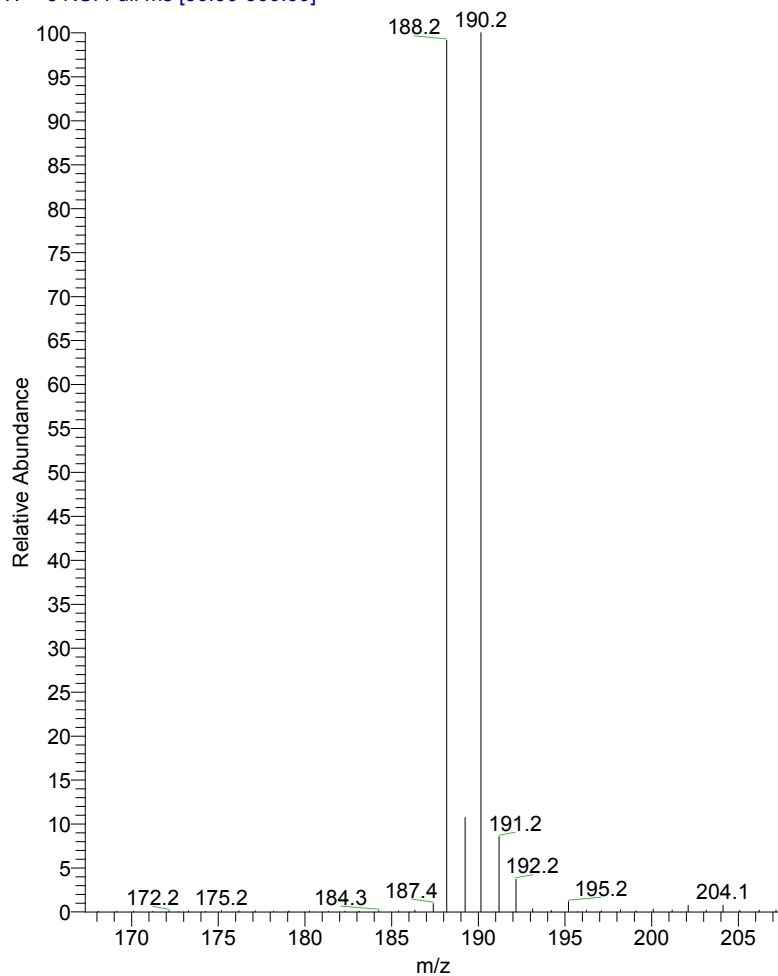
Molinate-14C Lot 177-039 #1-207 RT: 0.00-2.00 AV: 207 NL: 1.93E8

T: + c NSI Full ms [50.00-500.00]



Molinate-14C Lot 177-039 #1-207 RT: 0.00-2.00 AV: 207 NL: 1.93E8

T: + c NSI Full ms [50.00-500.00]



MC2376 1H NMR in CD2C12
Batch 20080612-JI



1.743
1.727
1.604
1.589
1.580
1.573
1.569
1.558
1.549
1.301
1.293
1.276
1.255
1.252
1.230

2.920
2.895
2.871
2.846

3.561
3.542
3.522
3.471
3.451
3.432

NAME MC2376
EXPNO 1
PROCNO 1
Date_ 20090610
Time_ 12.13
INSTRUM spect
PROBHD 5 mm DUX 3H-1H
PULPROG zg30
TD 65536
SOLVENT CD2C12
NS 256
DS 2
SWH 6172.839 Hz
FIDRES 0.094190 Hz
AQ 5.3084660 sec
RG 362
DW 81.000 usec
DE 6.50 usec
TE 300.0 K
D1 1.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 10.25 usec
PL1 0.00 dB
SFO1 300.1318534 MHz
SI 32768
SF 300.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

