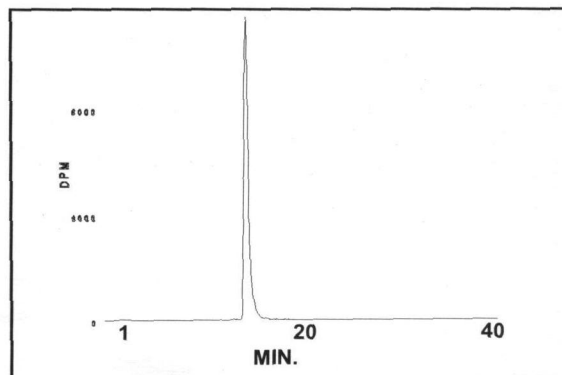
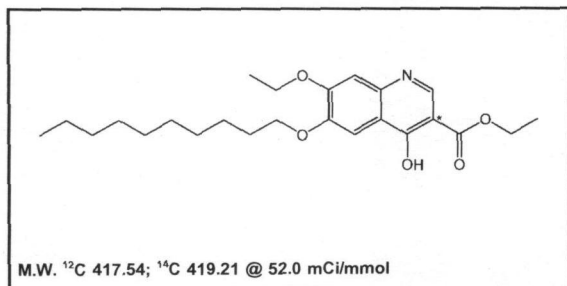




Product Data Sheet

MC-2343

Decoquinatate, [quinoline-3-¹⁴C]-



Lot #: 645-192-052-A-20100201-ZX

Packaged as: Solid

Date of Analysis: February 15, 2010

Radiochemical Purity: 99.0%

HPLC ANALYSIS LOT 645-192-052-A-20100201-ZX
File Name: inf11640 Date and Time: 2/15/2010 6:03:47 PM
Unit 21 Radio

Peak #	Area %	Time	Area
1	0.40	1.80000	113.93057
2	0.26	13.10330	73.02058
3	99.01	14.48670	28149.87376
4	0.24	16.44000	68.32200
5	0.09	18.37000	25.11790
Totals	100.00		28430.26481

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-2343

Decoquinate, [quinoline-3-¹⁴C]-

Lot 645-192-052-A-20100201-ZX

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.

Decoquinate, [quinoline-3-¹⁴C]- concentration was 0.1 mCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **Decoquinate, [quinoline-3-¹⁴C]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **Decoquinate, [quinoline-3-¹⁴C]-** + 2.0 µl standard.

Volume of co-injection was 4.0 µl.

Volume of blank injection was 2.0 µl.

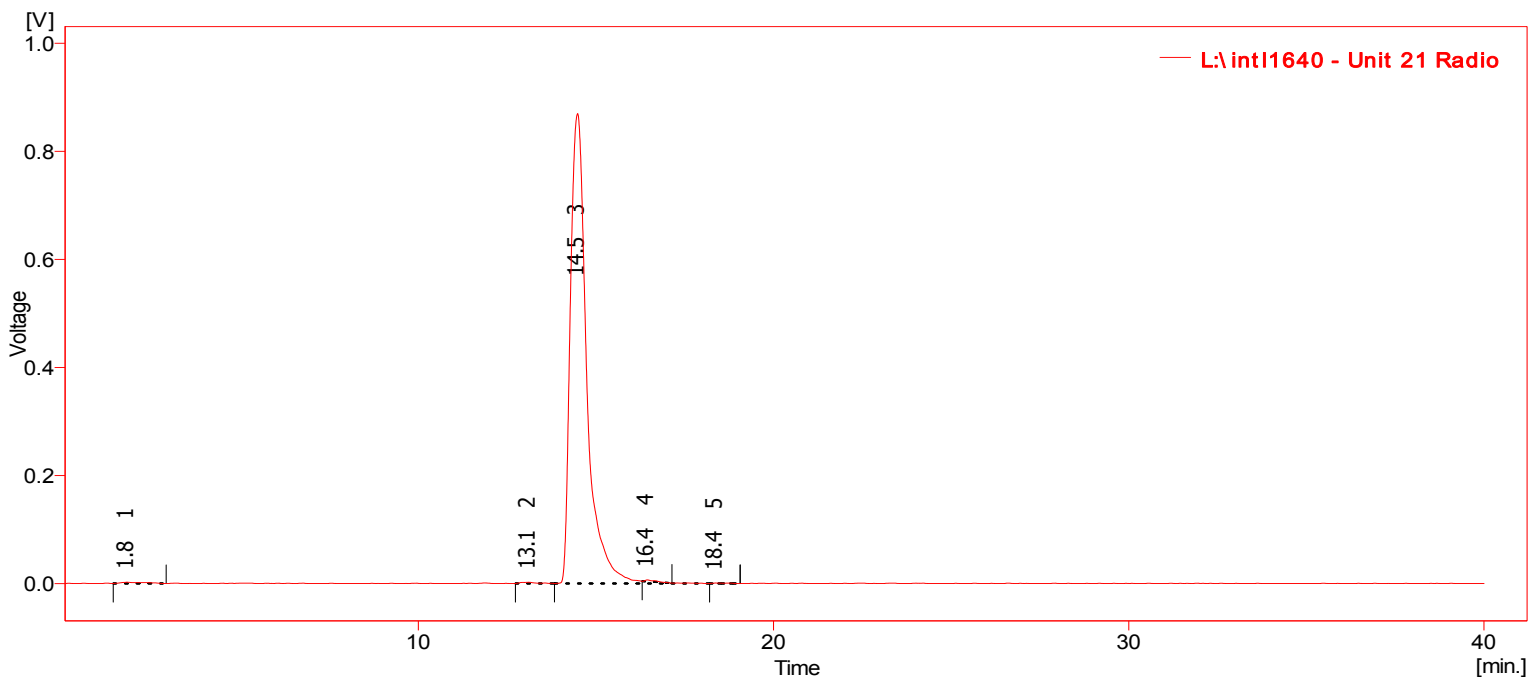
B) Mass spectrometry – Positive mode

C) NMR

MC-2343
Decoquinat, [quinoline-3-14C]-
Lot 645-192-052-A-20100201-ZX

Chromatogram Info:

File Name	: L:\intl1640	File Created	: 5/13/2014 3:08:53 PM
Origin	: Acquired, Acquisition started 2/15/2010 5:23:49 PM	Acquired Date	: 2/15/2010 6:03:47 PM
Project	: Work1	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: Radiochemical trace of 14C material alone	Modified	: 5/13/2014 3:16 PM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



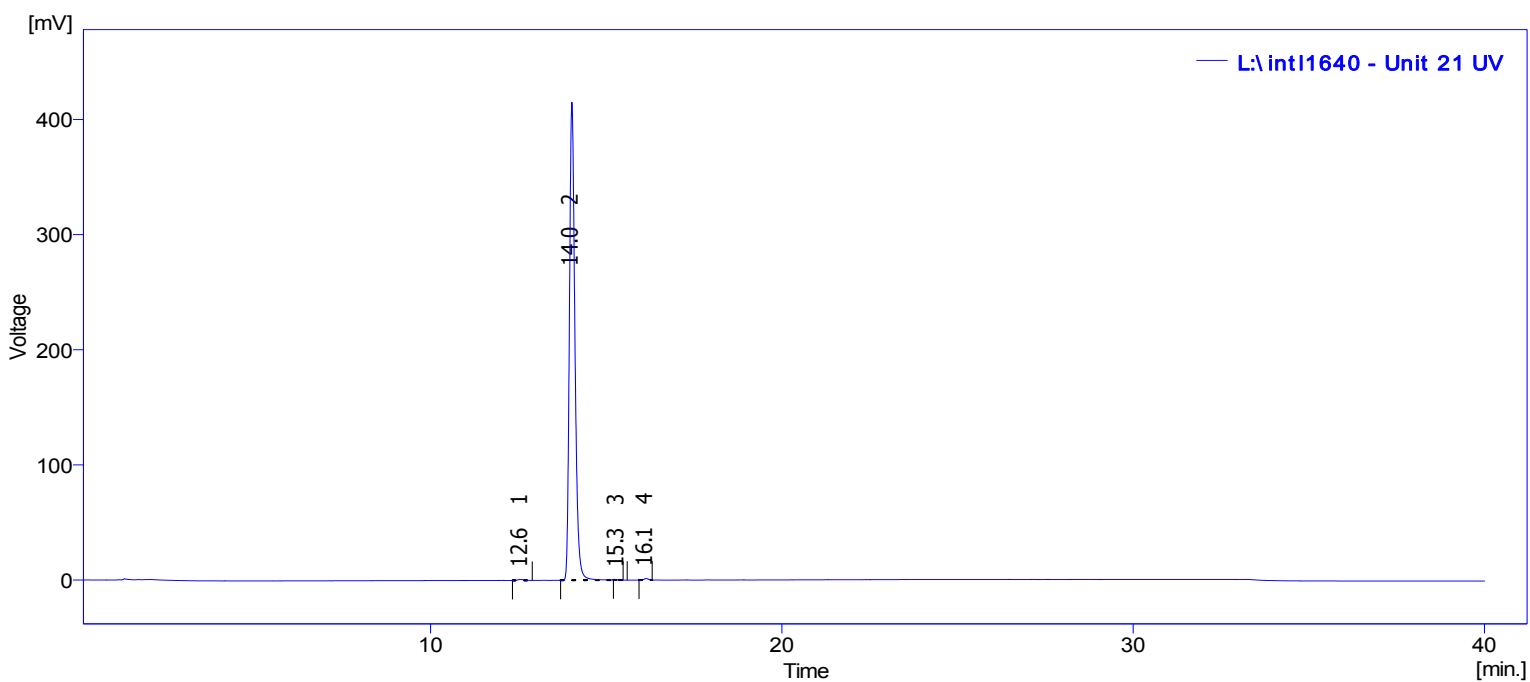
Result Table (Uncal - L:\intl1640 - Unit 21 Radio)

	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		1.80	113.931	2.49	0.40	0.3	0.86	41	810		1.78	
2		13.10	73.021	2.34	0.26	0.3	0.42	2709	54190	10.37	1.51	
3		14.49	28149.874	869.70	99.01	99.0	0.47	0	0	1.83	3.76	
4		16.44	68.322	3.17	0.24	0.4	0.18	10231	204619	3.58	3.09	
5		18.37	25.118	0.95	0.09	0.1	0.30	9871	197427	4.74	2.23	
	Total		28430.265	878.65	100.00	100.0						

MC-2343
Decoquinat, [quinoline-3-14C]-
Lot 645-192-052-A-20100201-ZX

Chromatogram Info:

File Name	: L:\intl1640	File Created	: 5/13/2014 3:08:53 PM
Origin	: Acquired, Acquisition started 2/15/2010 5:23:49 PM	Acquired Date	: 2/15/2010 6:03:47 PM
Project	: Work1	By	: Administrator
Method	: Unit21_40_min_run	By	: Administrator
Description	: UV trace of 14C material alone	Modified	: 5/13/2014 3:17 PM
Created	: 8/9/2007 1:12 PM		
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intl1640 - Unit 21 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		12.57	10.429	0.79	0.23	0.2	0.21	20096	401928		1.15	
2		14.02	4539.105	415.20	99.51	99.5	0.17	0	0	4.58	3.22	
3		15.31	1.108	0.14	0.02	0.0	0.13	96681	1933629	5.09	1.24	
4		16.14	10.946	1.27	0.24	0.3	0.14	81323	1626464	3.55	1.02	
	Total		4561.589	417.40	100.00	100.0						

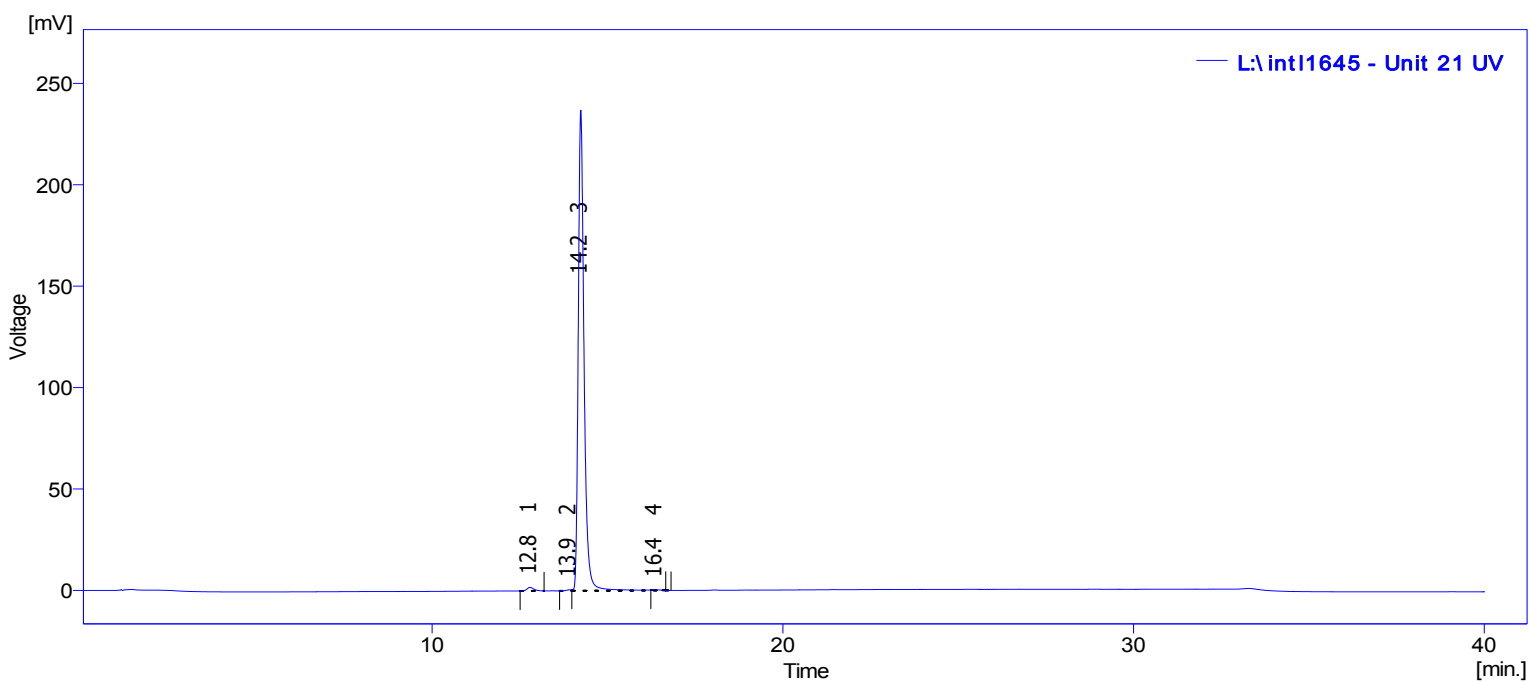
MC-2343
Decoquinatate, [quinoline-3-14C]-
Lot 645-192-052-A-20100201-ZX

Chromatogram Info:

File Name : L:\intl1645 File Created : 5/13/2014 3:08:53 PM
 Origin : Acquired, Acquisition started 2/18/2010 10:57:19 AM Acquired Date : 2/18/2010 11:37:18 AM
 Project : Work1 By : Administrator

Method : Unit21_40_min_run By : Administrator
 Description : UV trace of standard material alone
 Created : 8/9/2007 1:12 PM Modified : 5/13/2014 3:18 PM

Column : Detection : UV 254nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



Result Table (Uncal - L:\intl1645 - Unit 21 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		12.79	23.489	1.75	0.85	0.7	0.20	17509	350172		1.28	
2		13.91	4.716	0.52	0.17	0.2	0.15	52189	1043776	3.72	0.69	
3		14.24	2724.753	236.96	98.87	98.9	0.17	0	0	1.19	5.57	
4		16.36	3.014	0.26	0.11	0.1	0.15	36637	732740	7.84	1.67	
	Total		2755.972	239.49	100.00	100.0						

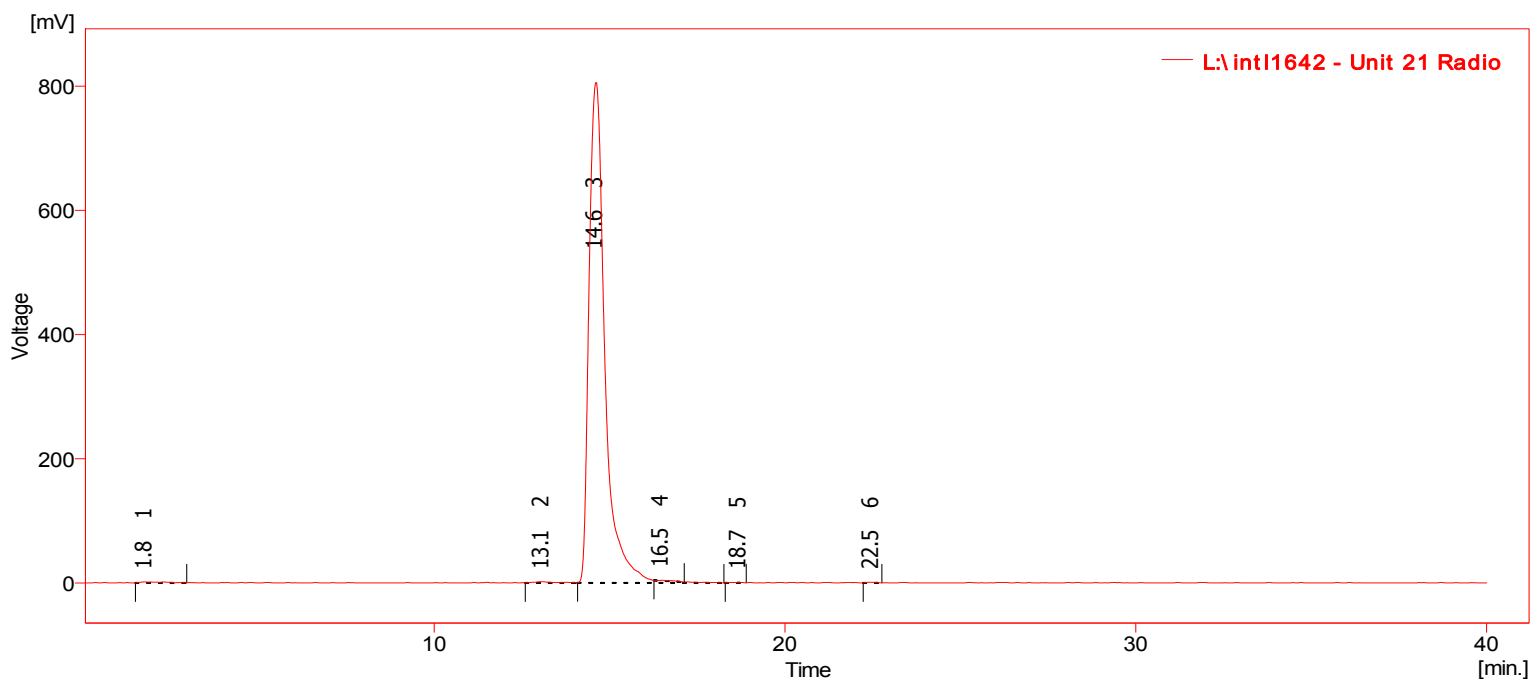
MC-2343
Decoquinat, [quinoline-3-14C]-
Lot 645-192-052-A-20100201-ZX

Chromatogram Info:

File Name : L:\intl1642 File Created : 5/13/2014 3:08:53 PM
 Origin : Acquired, Acquisition started 2/16/2010 10:58:35 AM Acquired Date : 2/16/2010 11:38:32 AM
 Project : Work1 By : Administrator

Method : Unit21_40_min_run By : Administrator
 Description : Radiochemical trace of 14C material co-injected with standard
 Created : 8/9/2007 1:12 PM Modified : 5/13/2014 3:19 PM

Column : Detection : Radiochemical
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



Result Table (Uncal - L:\intl1642 - Unit 21 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	1.76	77.491	1.61	0.30	0.2	0.59	37	731		2.12	
2	13.08	76.992	1.94	0.30	0.2	0.49	1240	24795	12.41	1.56	
3	14.61	25442.720	805.71	99.10	99.2	0.45	0	0	1.92	3.92	
4	16.48	37.626	0.96	0.15	0.1	0.36	7852	157034	2.72	1.95	
5	18.70	18.999	0.98	0.07	0.1	0.43	16858	337164	3.31	0.72	
6	22.48	21.249	1.07	0.08	0.1	0.35	38211	764228	5.72	1.02	
Total		25675.076	812.27	100.00	100.0						

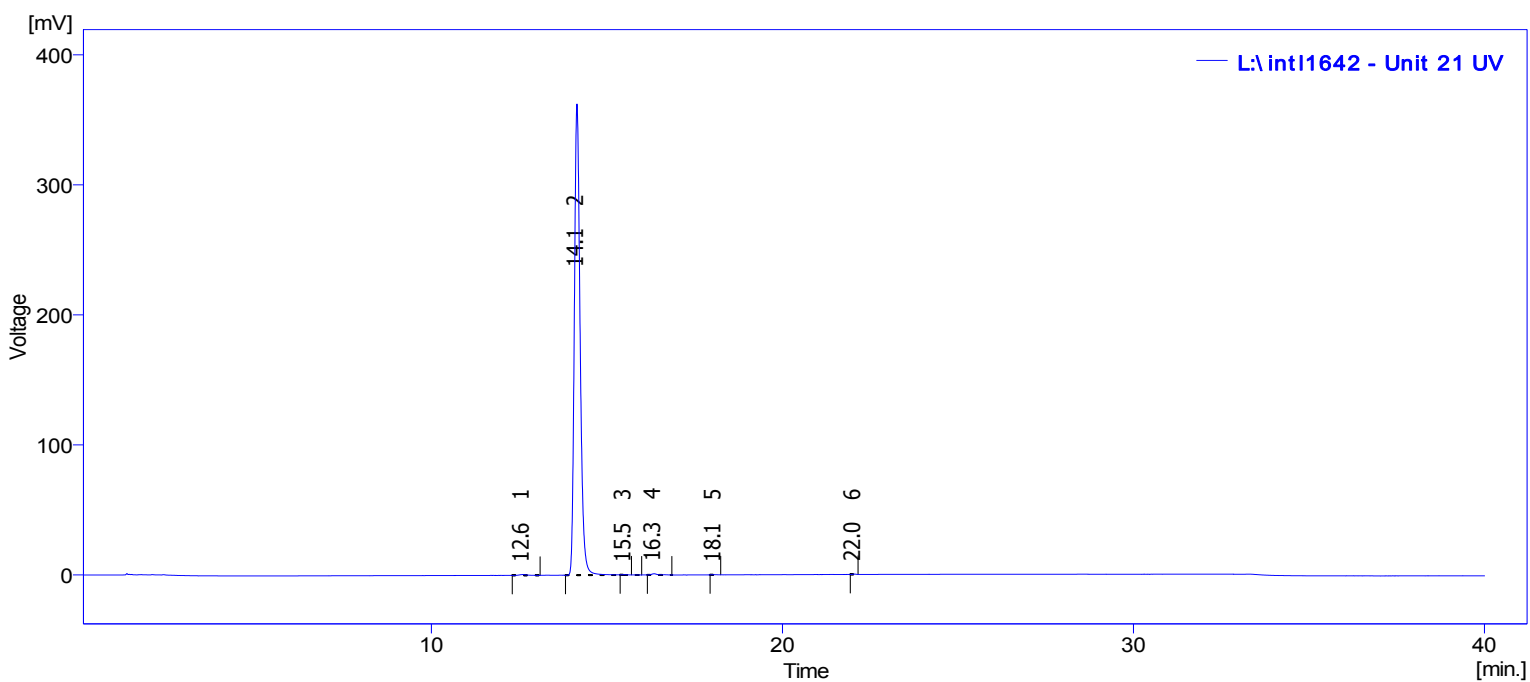
MC-2343
Decoquinatate, [quinoline-3-14C]-
Lot 645-192-052-A-20100201-ZX

Chromatogram Info:

File Name : L:\intl1642 File Created : 5/13/2014 3:08:53 PM
 Origin : Acquired, Acquisition started 2/16/2010 10:58:35 AM Acquired Date : 2/16/2010 11:38:32 AM
 Project : Work1 By : Administrator

Method : Unit21_40_min_run By : Administrator
 Description : UV trace of 14C material co-injected with standard
 Created : 8/9/2007 1:12 PM Modified : 5/13/2014 3:20 PM

Column : Detection : UV 254nm
 Mobile Phase : Temperature :
 Flow Rate : Pressure :
 Note :



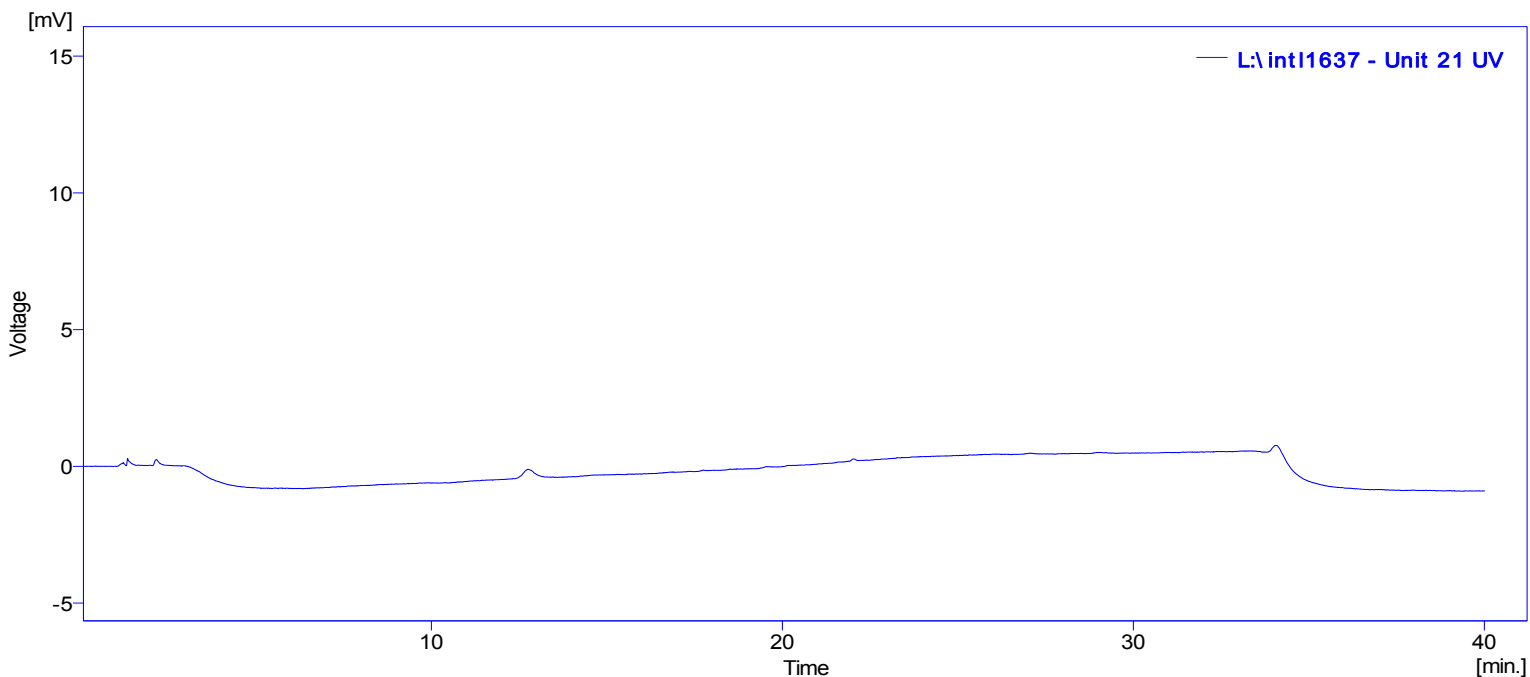
Result Table (Uncal - L:\intl1642 - Unit 21 UV)

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	12.60	9.064	0.62	0.22	0.2	0.23	13613	272255		1.25	
2	14.15	4157.066	362.40	99.43	99.4	0.18	0	0	4.52	3.32	
3	15.50	1.423	0.15	0.03	0.0	0.14	63985	1279708	4.98	1.40	
4	16.34	10.352	0.92	0.25	0.3	0.15	16812	336249	3.41	1.88	
5	18.06	1.209	0.14	0.03	0.0	0.14	97624	1952482	6.99	1.23	
6	22.04	1.676	0.28	0.04	0.1	0.10	330594	6611889	19.86	1.02	
Total		4180.791	364.50	100.00	100.0						

MC-2343
Decoquinat, [quinoline-3-14C]-
Lot 645-192-052-A-20100201-ZX

Chromatogram Info:

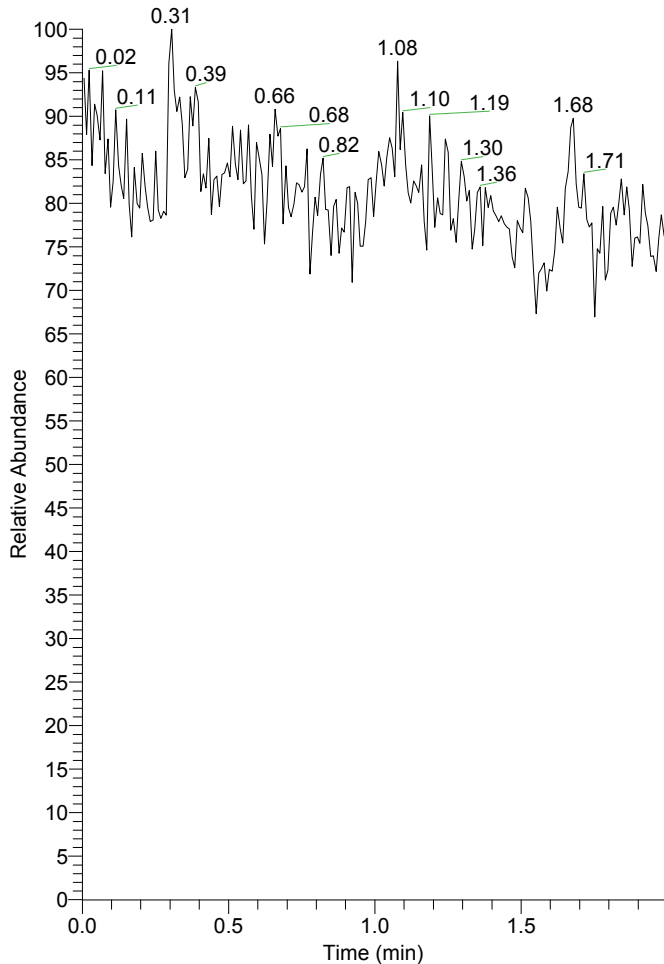
File Name : L:\intl1637 File Created : 5/13/2014 3:08:53 PM
Origin : Acquired, Acquisition started 2/15/2010 2:26:40 PM Acquired Date : 2/15/2010 3:06:38 PM
Project : Work1 By : Administrator
Method : Unit21_40_min_run By : Administrator
Description : UV trace of blank injection
Created : 8/9/2007 1:12 PM Modified : 5/13/2014 3:13 PM
Column : Detection : UV 254nm
Mobile Phase : Temperature :
Flow Rate : Pressure :
Note :



Result Table (Uncal - L:\intl1637 - Unit 21 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 - 1.99



NL:
3.86E8
TIC MS
MC2343
20100201-
ZX-MS

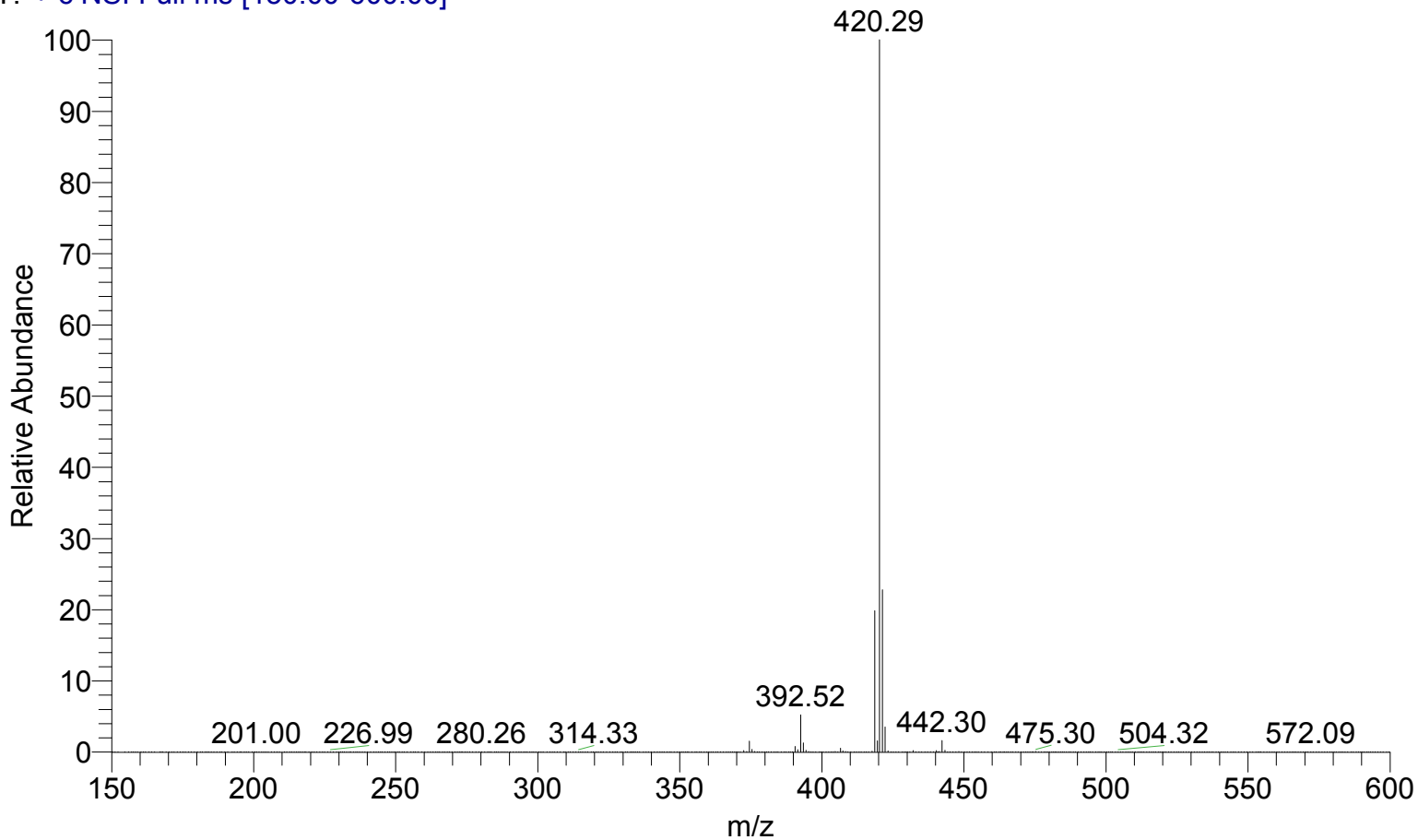
MC2343-20100201-ZX-MS#1-219 RT:
T: + c NSI Full ms [150.00-600.00]

m/z = 406.06-460.58

m/z	Intensity	Relative
416.42	12445.9	0.01
417.72	236911.4	0.12
418.57	37945285.8	19.81
419.54	2937617.4	1.53
420.29	191515444.6	100.00
421.29	43583337.6	22.76
422.27	6687764.4	3.49
423.28	312875.2	0.16
424.37	28795.5	0.02
425.19	12553.6	0.01
426.09	8527.3	0.00
427.05	21942.2	0.01
428.24	10133.2	0.01
428.99	19401.6	0.01
429.58	993.4	0.00
430.13	71413.2	0.04
430.99	41868.3	0.02
432.10	395158.0	0.21
433.08	74133.5	0.04
434.18	67668.2	0.04
435.12	26523.9	0.01
436.29	54349.3	0.03
437.23	26453.7	0.01
438.26	32149.9	0.02

MC2343-20100201-ZX-MS #1-219 RT: 0.01-1.99 AV: 219 NL: 1.92E8

T: + c NSI Full ms [150.00-600.00]



MC2343 1H NMR in CDCl3
 Batch 20100201-ZX



12.118
 8.949
 7.583
 7.352
 4.499
 4.484
 4.266
 4.251
 4.172
 1.928
 1.543
 1.472
 1.457
 1.421
 1.311
 0.911

NAME MC2343
 EXPNO 1
 PROCNO 1
 Date_ 20100216
 Time 15.23
 INSTRUM spect
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65536
 SOLVENT CDCl3
 NS 949
 DS 2
 SWH 8278.146 Hz
 FIDRES 0.126314 Hz
 AQ 3.9584243 sec
 RG 181
 DW 60.400 usec
 DE 6.50 usec
 TE 315.0 K
 D1 1.00000000 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 400.1300000 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

