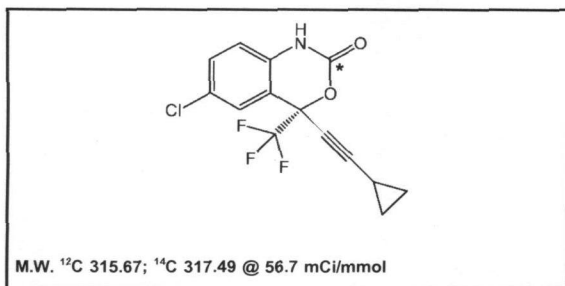




Product Data Sheet

MC-2408

Efavirenz, [carbonyl-¹⁴C]-



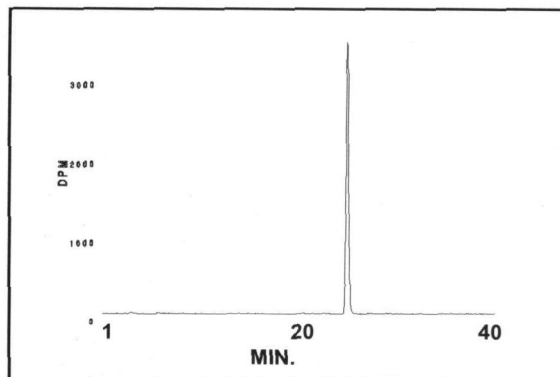
Lot #: 198-127-0567-A-20110901-DRE

Specific Activity: 56.7 mCi/mmol

Packaged as: Solid

Date of Analysis: October 24, 2011

Radiochemical Purity: 98.9%



HPLC ANALYSIS LOT 198-127-0567-A-20110901-DRE
File Name: int21354 Date and Time: 10/24/2011 11:07:09
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.89	3.02000	57.67560
2	0.14	20.41000	8.97594
3	98.97	24.99000	6412.68431
Totals	100.00		6479.33585

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-2408

Efavirenz, [carbonyl-¹⁴C]-

Lot 198-127-0567-A-20110901-DRE

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.

Efavirenz, [carbonyl-¹⁴C]- concentration was 100 µCi/mL.

Volume of standard alone injection was 1.0 µL.

Volume of **Efavirenz, [carbonyl-¹⁴C]-** alone injection was 1.0 µL.

Co-injection solution consisted of 0.5 µL **Efavirenz, [carbonyl-¹⁴C]-** + 0.5 µL standard.

Volume of co-injection was 1.0 µL.

Volume of blank injection was 1.0 µL.

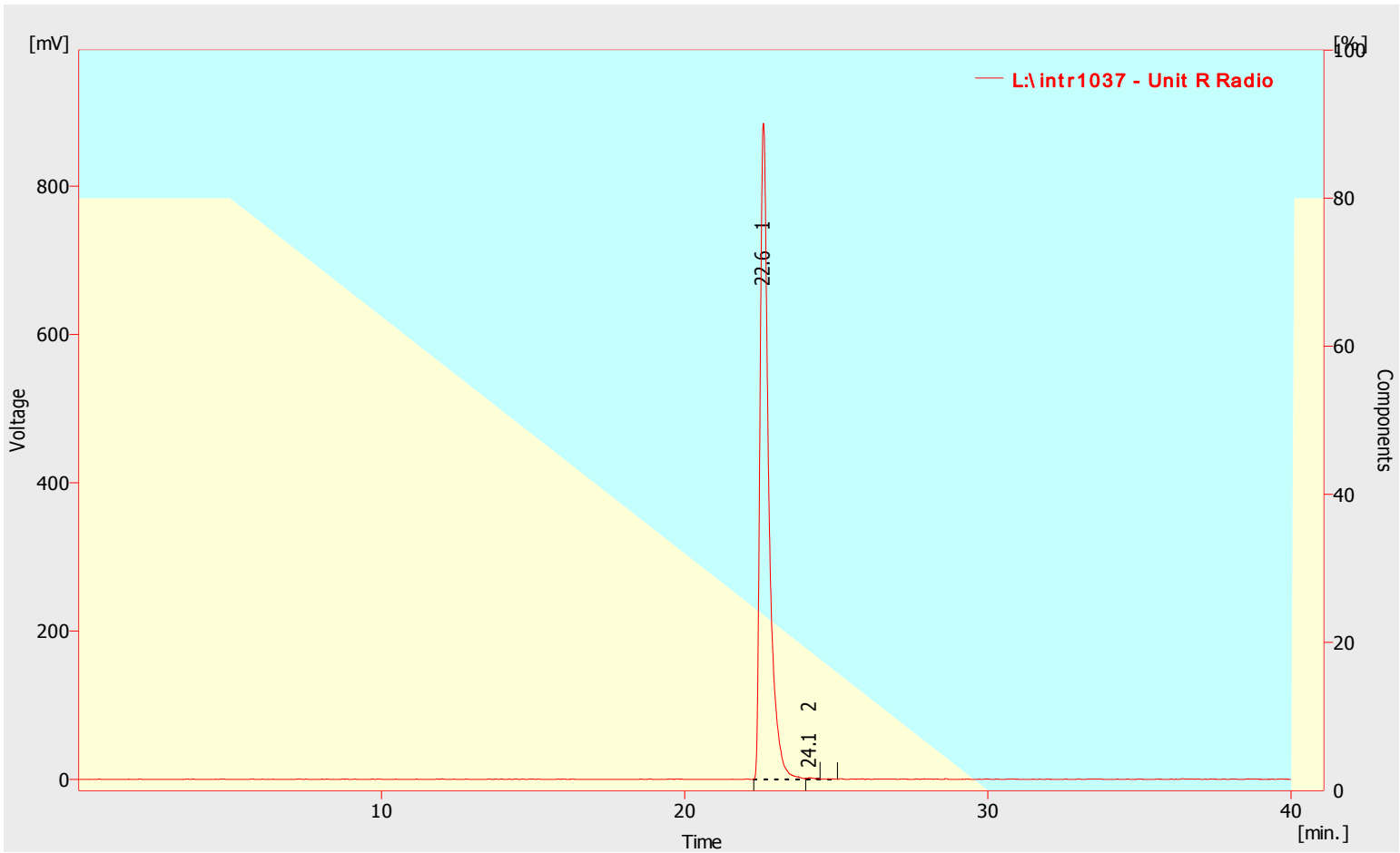
B) Mass spectrometry- Positive mode

C) NMR

MC-2408
Efavirenz, [carbonyl-14C]-
Lot 198-127-0567-A-20110901-DRE

Chromatogram Info:

File Name	: L:\intr1037	File Created	: 9/9/2011 2:29:06 PM
Origin	: Acquired	Acquired Date	: 9/9/2011 2:28:53 PM
Project	: Test	By	: Lab
Method	: Efavirenz	By	: Lab
Description	: Radiochemical trace of 14C material alone	Modified	: 9/13/2011 11:52 AM
Created	: 9/8/2011 11:51 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



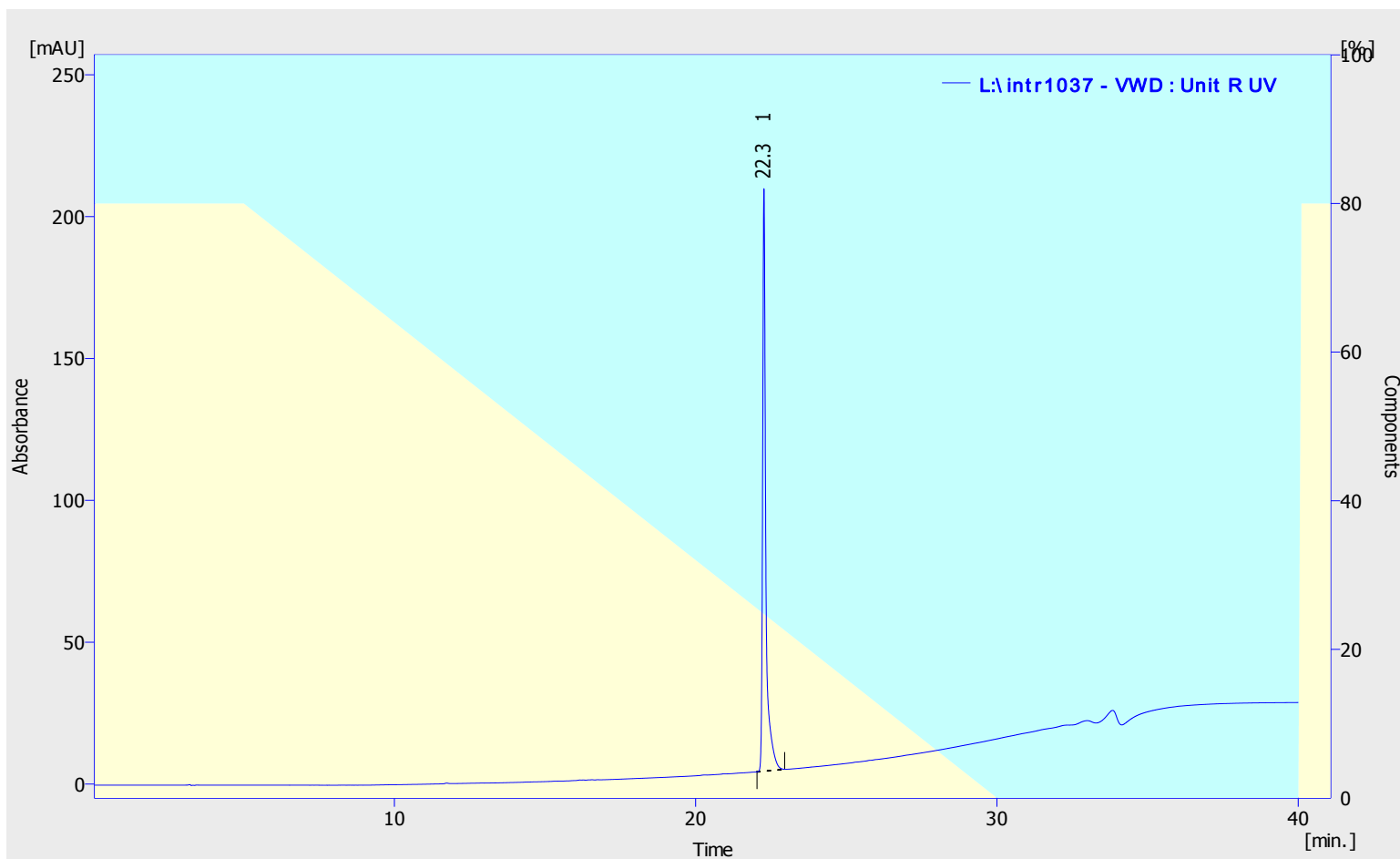
Result Table (Uncal - L:\intr1037 - Unit R Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	22.597	17768.904	884.979	99.89	99.8	0.28
2	24.117	20.093	1.638	0.11	0.2	0.12
	Total	17788.997	886.618	100.00	100.0	

MC-2408
Efavirenz, [carbonyl-14C]-
Lot 198-127-0567-A-20110901-DRE

Chromatogram Info:

File Name	: L:\intr1037	File Created	: 9/9/2011 2:29:06 PM
Origin	: Acquired	Acquired Date	: 9/9/2011 2:28:53 PM
Project	: Test	By	: Lab
Method	: Efavirenz	By	: Lab
Description	: UV trace of 14C material alone	Modified	: 9/13/2011 11:56 AM
Created	: 9/8/2011 11:51 AM		
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



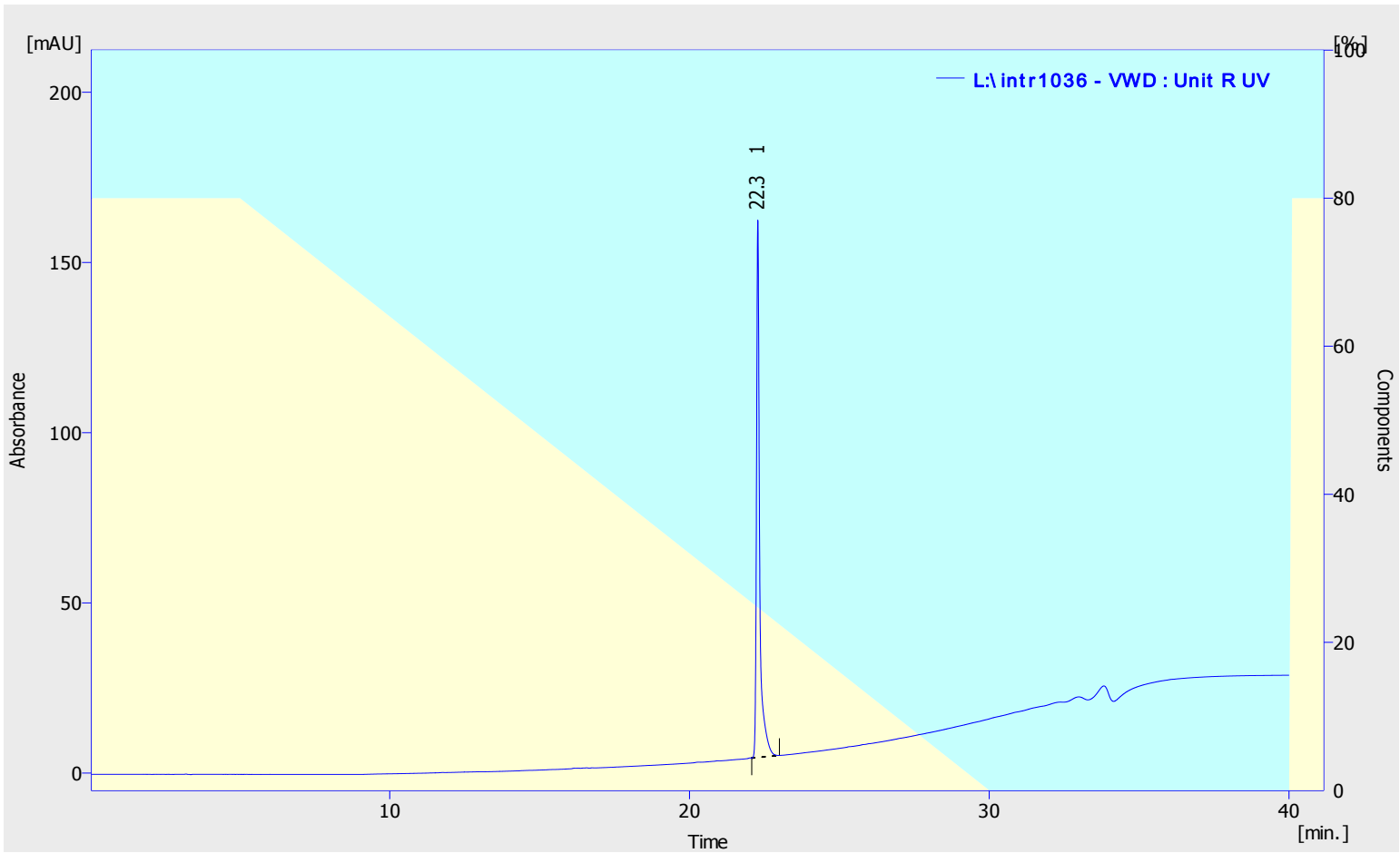
Result Table (Uncal - L:\intr1037 - VWD : Unit R UV)

	Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
1	22.266	1529.358	205.324	100.00	100.0	0.10
	Total	1529.358	205.324	100.00	100.0	

MC-2408
Efavirenz, [carbonyl-14C]-
Lot 198-127-0567-A-20110901-DRE

Chromatogram Info:

File Name	: L:\intr1036	File Created	: 9/9/2011 1:38:24 PM
Origin	: Acquired	Acquired Date	: 9/9/2011 1:38:05 PM
Project	: Test	By	: Lab
Method	: Efavirenz	By	: Lab
Description	: UV trace of standard alone	Modified	: 9/13/2011 11:57 AM
Created	: 9/8/2011 11:51 AM		
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



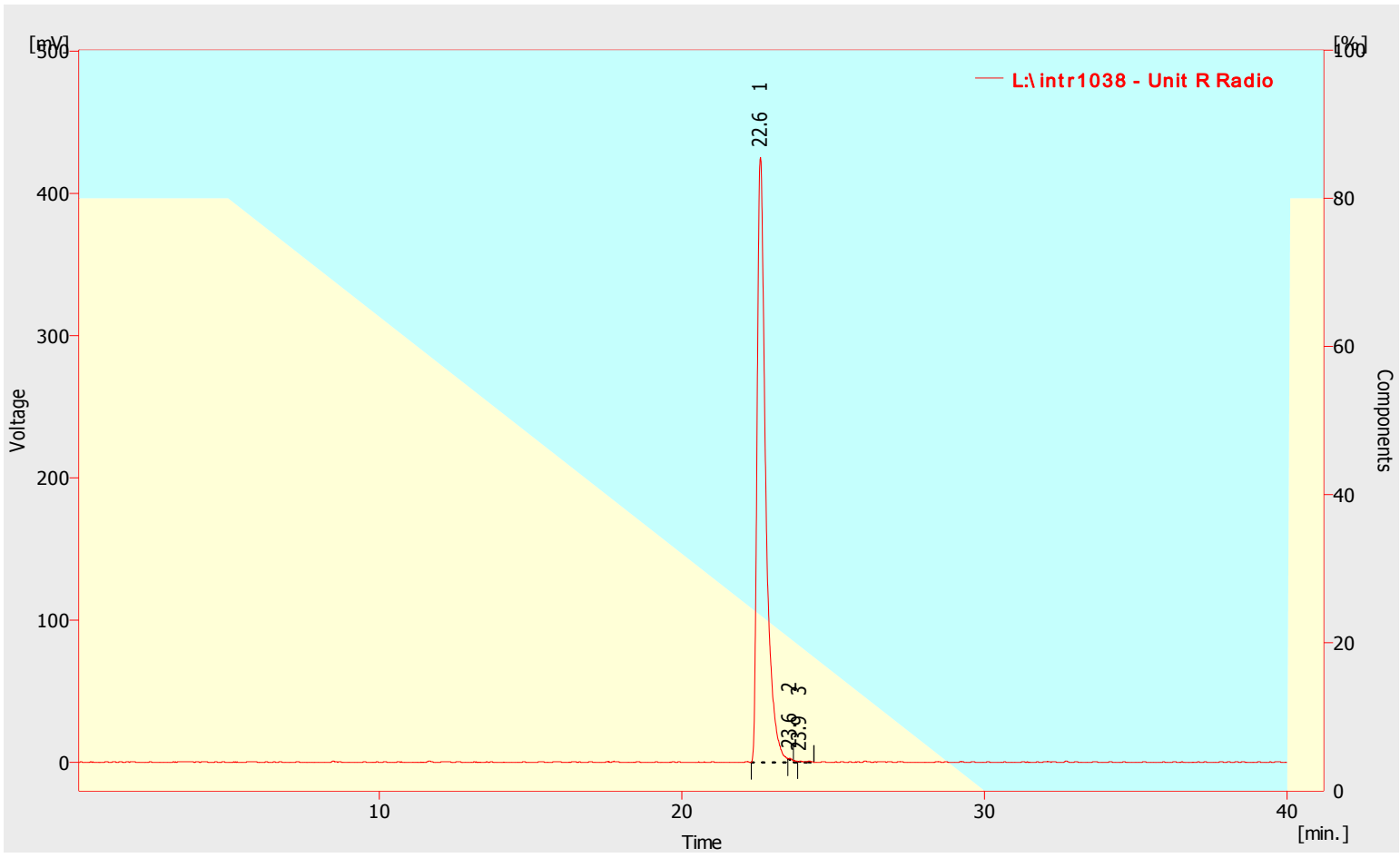
Result Table (Uncal - L:\intr1036 - VWD : Unit R UV)

	Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
1	22.278	1171.343	157.842	100.00	100.0	0.10
	Total	1171.343	157.842	100.00	100.0	

MC-2408
Efavirenz, [carbonyl-14C]-
Lot 198-127-0567-A-20110901-DRE

Chromatogram Info:

File Name	: L:\intr1038	File Created	: 9/9/2011 3:31:27 PM
Origin	: Acquired	Acquired Date	: 9/9/2011 3:31:13 PM
Project	: Test	By	: Lab
Method	: Efavirenz	By	: Lab
Description	: Radiochemical trace of 14C material co-injected with standard	Modified	: 9/13/2011 11:58 AM
Created	: 9/8/2011 11:51 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



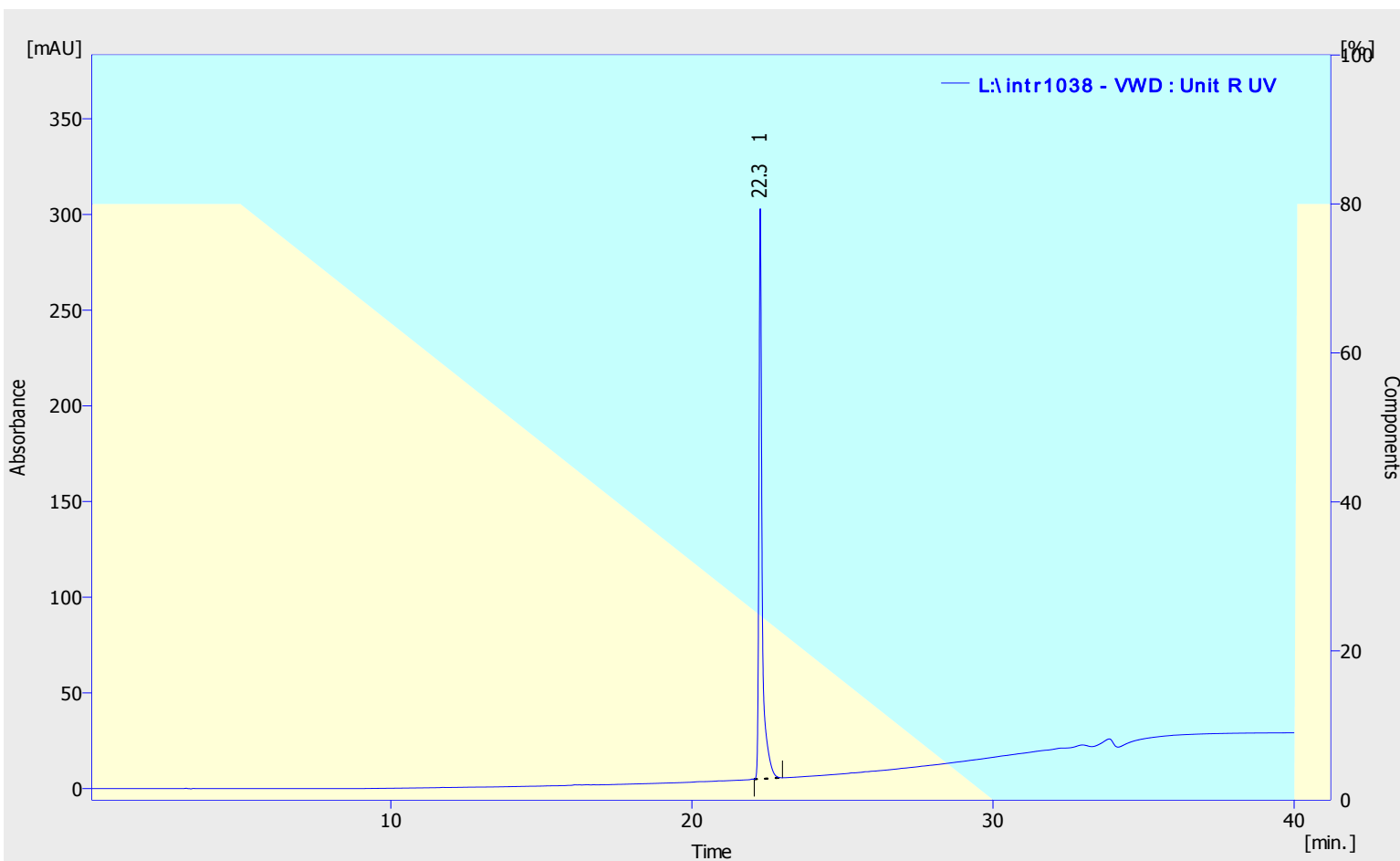
Result Table (Uncal - L:\intr1038 - Unit R Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	22.600	8486.758	425.407	99.78	99.6	0.29
2	23.573	6.731	1.084	0.08	0.3	0.13
3	23.890	12.338	0.567	0.15	0.1	0.07
	Total	8505.828	427.057	100.00	100.0	

MC-2408
Efavirenz, [carbonyl-14C]-
Lot 198-127-0567-A-20110901-DRE

Chromatogram Info:

File Name	: L:\intr1038	File Created	: 9/9/2011 3:31:27 PM
Origin	: Acquired	Acquired Date	: 9/9/2011 3:31:13 PM
Project	: Test	By	: Lab
Method	: Efavirenz	By	: Lab
Description	: UV trace of 14C material co-injected with standard		
Created	: 9/8/2011 11:51 AM	Modified	: 9/13/2011 11:59 AM
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



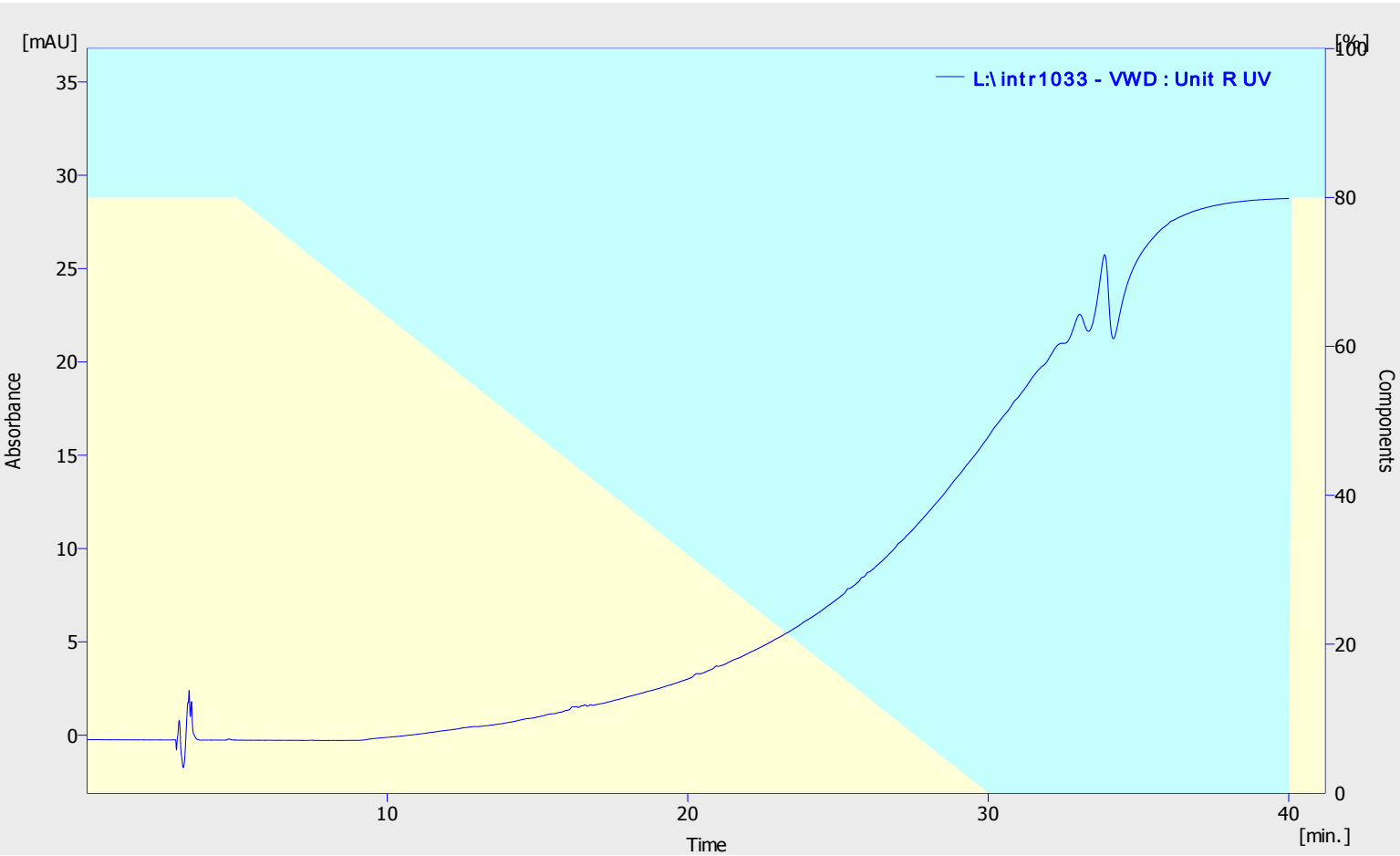
Result Table (Uncal - L:\intr1038 - VWD : Unit R UV)

	Reten. Time [min]	Area [mAU.s]	Height [mAU]	Area [%]	Height [%]	W05 [min]
1	22.268	2213.980	297.963	100.00	100.0	0.10
	Total	2213.980	297.963	100.00	100.0	

MC-2408
Efavirenz, [carbonyl-14C]-
Lot 198-127-0567-A-20110901-DRE

Chromatogram Info:

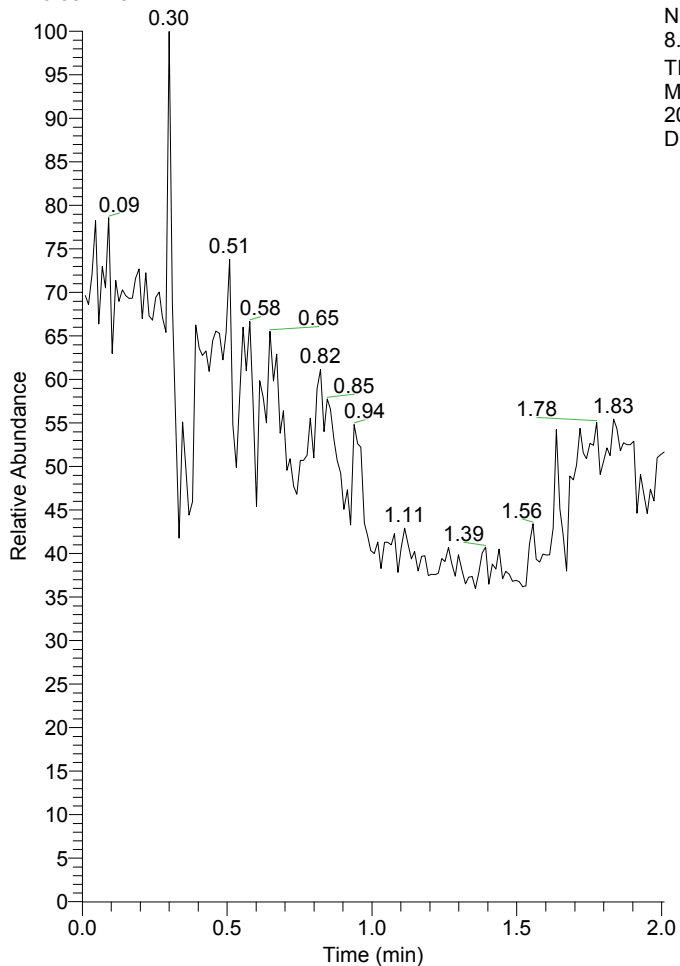
File Name	: L:\intr1033	File Created	: 9/9/2011 11:05:47 AM
Origin	: Acquired	Acquired Date	: 9/9/2011 11:05:30 AM
Project	: Test	By	: Lab
Method	: Efavirenz	By	: Lab
Description	: UV trace of blank injection	Modified	: 9/13/2011 12:03 PM
Created	: 9/8/2011 11:51 AM		
Column	:	Detection	: UV 254nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\intr1033 - VWD : Unit R UV)

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

RT: 0.00 - 2.01



NL:
8.27E9
TIC MS
MC2408-
20110901-
DRE

MC2408-20110901-DRE#1-173 RT: 0.01-2.01

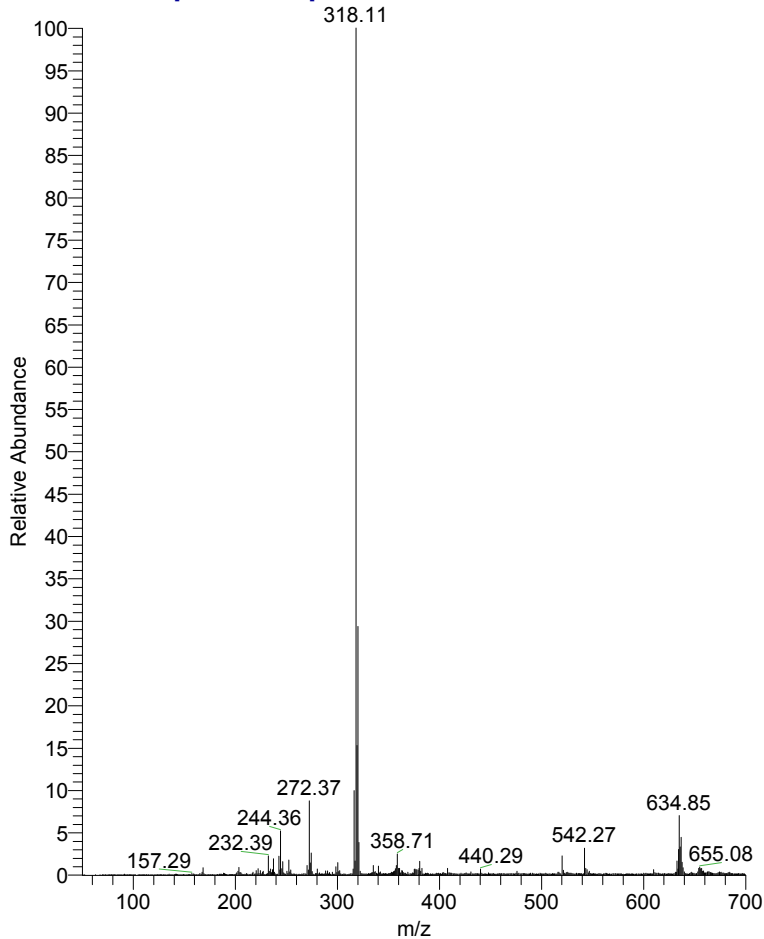
T: + c ESI Full ms [50.00-700.00]

m/z = 308.98-333.47

m/z	Intensity	Relative
315.40	9021009.1	0.70
316.22	128132464.8	9.95
317.19	21043197.8	1.63
318.11	1287888508.3	100.00
319.22	197123623.3	15.31
320.15	378020012.0	29.35
321.16	49304064.2	3.83
322.17	5809145.7	0.45
323.22	2213700.5	0.17
324.26	1535745.2	0.12
325.15	1685189.5	0.13
327.08	1494617.8	0.12
328.98	1649551.8	0.13
330.46	2071066.3	0.16
331.32	1862984.1	0.14
332.41	2390725.7	0.19
333.23	3120421.5	0.24

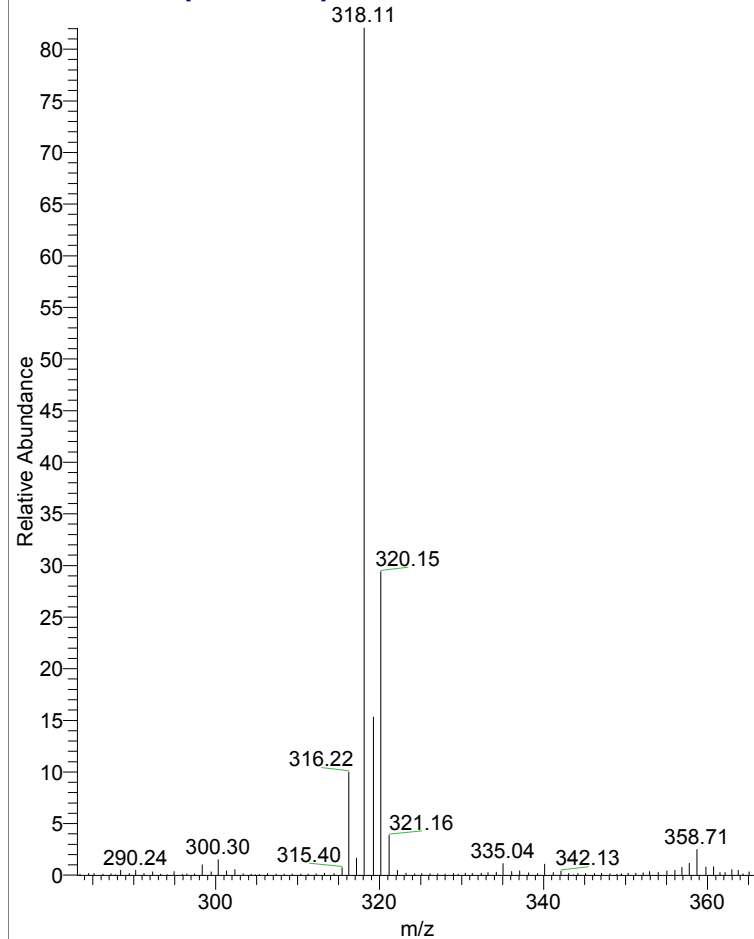
MC2408-20110901-DRE #1-173 RT: 0.01-2.01 AV: 173 NL: 1.29E9

T: + c ESI Full ms [50.00-700.00]



MC2408-20110901-DRE #1-173 RT: 0.01-2.01 AV: 173 NL: 1.29E9

T: + c ESI Full ms [50.00-700.00]



MC2408 1H NMR in CD2Cl2
 Batch 20110901-DRE



1.456
1.444
1.434
1.428
1.411
0.965
0.954
0.946
0.915
0.872

8.739
7.544
7.411
7.390
6.875
6.854

NAME MC2408-20110901-DF
 EXPNO 1
 PROCNO 1
 Date_ 20110912
 Time 9.53
 INSTRUM spect
 PROBHD 5 mm PABBO BB-
 PULPROG zg30
 TD 65536
 SOLVENT CD2Cl2
 NS 256
 DS 2
 SWH 8012.820 Hz
 FIDRES 0.122266 Hz
 AQ 4.0894966 sec
 RG 181
 DW 62.400 use
 DE 6.50 use
 TE 294.0 K
 D1 1.00000000 sec
 TD0 1

==== CHANNEL f1 =====
 NUC1 1H
 P1 14.50 use
 PL1 -0.70 dB
 PL1W 10.03411102 W
 SF01 400.1324710 MHz
 SI 32768
 SF 400.1300045 MHz
 WDW no
 SSB 0
 LB 0.00 Hz
 GB 0
 PC 1.00

