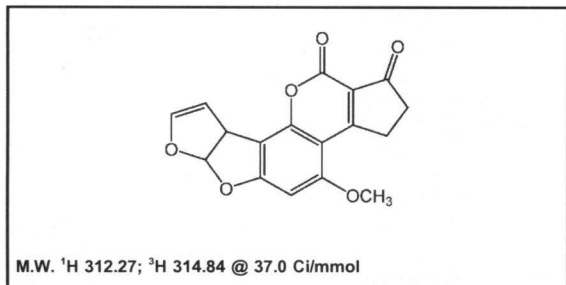




## Product Data Sheet

**MT-601**

**Aflatoxin B<sub>1</sub>, [<sup>3</sup>H]-**



**Lot #:** 221-044-037-A-20090402-JP

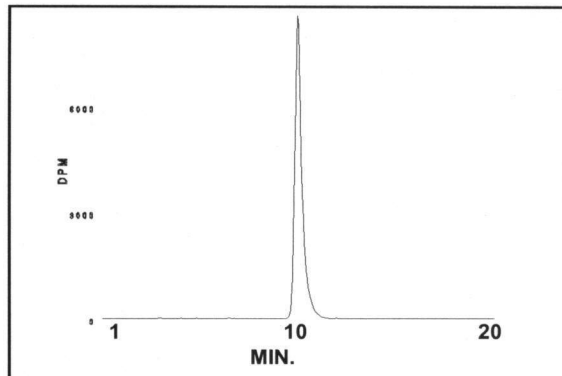
**Specific Activity:** 37.0 Ci/mmol

**Concentration:** 1.0 mCi/ml; 8.51  $\mu$ g/ml

**Packaged in:** Methanol solution

**Date of Analysis:** December 12, 2011

**Radiochemical Purity:** 99.9%



HPLC ANALYSIS LOT 221-044-037-A-20090402-JP  
File Name: int21423 Date and Time: 12/12/2011 3:34:38 P  
Unit 2 Radio

Peak #	Area %	Time	Area
1	100.00	9.98000	22376.75396
Totals	100.00		22376.75396

**Stability and Storage Recommendation:** The rate of decomposition is approximately 0.5-1%/month for the first six months after purification when stored 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.

**MT-601**

**Aflatoxin B<sub>1</sub>, [<sup>3</sup>H]-**

**Lot 221-044-037-A-20090402-JP**

**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.

**Aflatoxin B<sub>1</sub>, [<sup>3</sup>H]-** concentration was 0.2 mCi/ml.

Volume of standard alone injection was 1.0 µl.

Volume of **Aflatoxin B<sub>1</sub>, [<sup>3</sup>H]-** alone injection was 1.0 µl.

Co-injection solution consisted of 1.0 µl **Aflatoxin B<sub>1</sub>, [<sup>3</sup>H]-** + 1.0 µl standard.

Volume of co-injection was 2.0 µl.

Volume of blank injection was 1.0 µl.

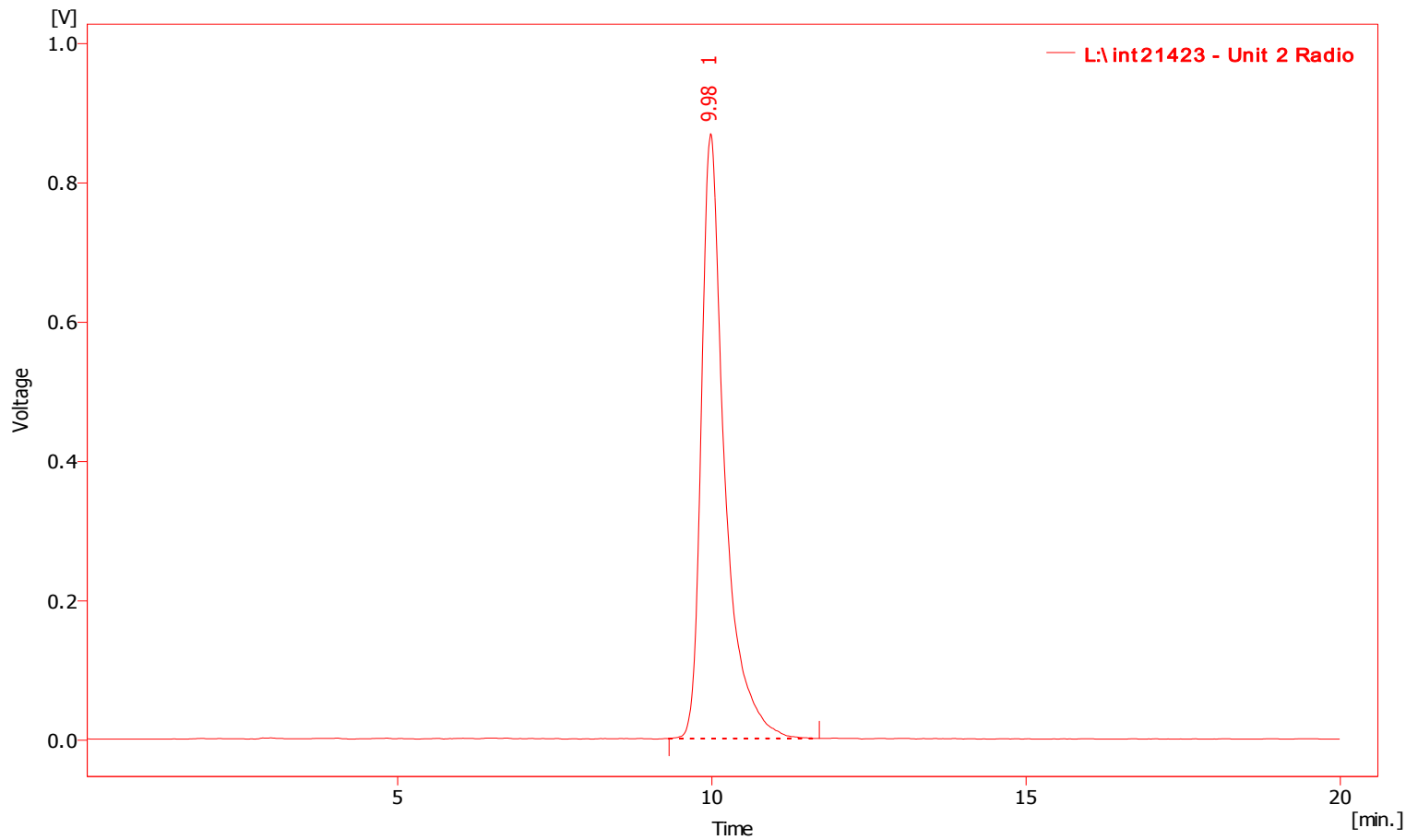
**B) Mass spectrometry – Positive mode**

**C) NMR**

**MT-601**  
**Aflatoxin B1, [3H]-**  
**Lot 221-044-037-A-20090402-JP**

Chromatogram Info:

File Name	: L:\int21423	File Created	: 2/24/2014 3:47:25 PM
Origin	: Acquired, Acquisition started 12/12/2011 3:14:39 PM	Acquired Date	: 12/12/2011 3:34:38 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 2/24/2014 4:03 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



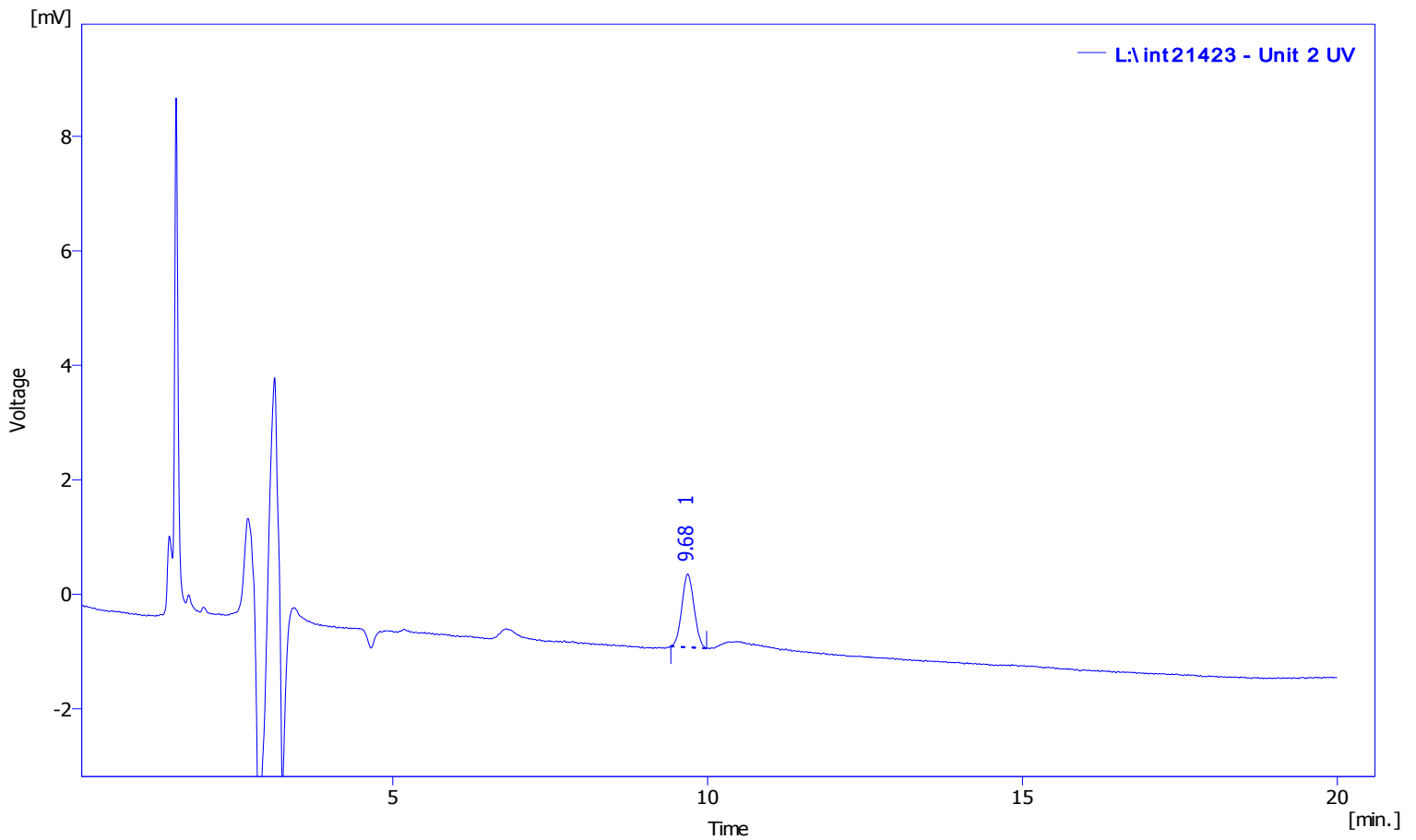
Result Table (Uncal - L:\int21423 - Unit 2 Radio)

	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		9.98	22376.754	868.52	100.00	100.00	4257.61	85152.19	1.64		
		Total	22376.754	868.52	100.00	100.00					

**MT-601**  
**Aflatoxin B1, [3H]-**  
**Lot 221-044-037-A-20090402-JP**

Chromatogram Info:

File Name	: L:\int21423	File Created	: 2/24/2014 3:47:25 PM
Origin	: Acquired, Acquisition started 12/12/2011 3:14:39 PM	Acquired Date	: 12/12/2011 3:34:38 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 2/24/2014 4:02 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 223nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



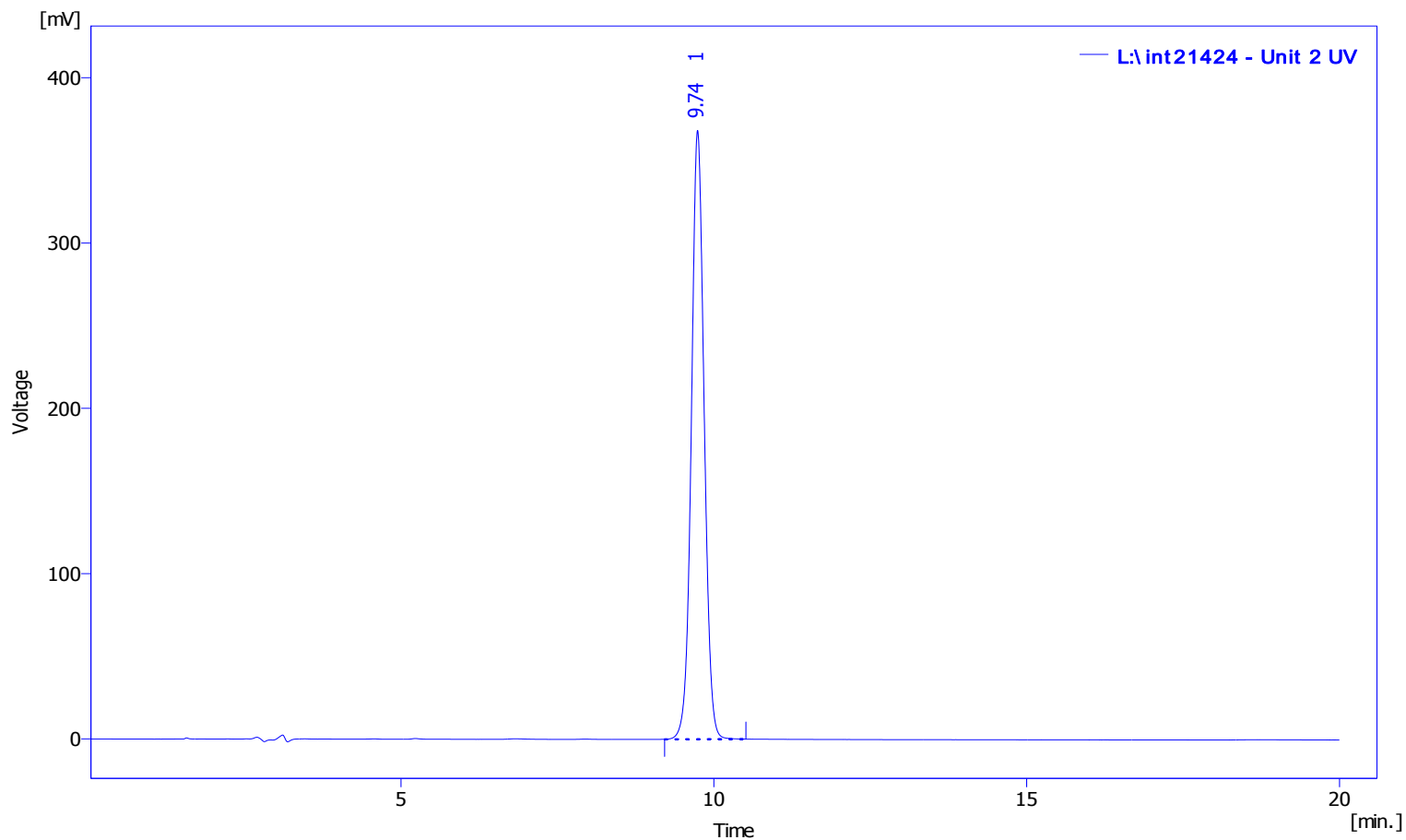
Result Table (Uncal - L:\int21423 - Unit 2 UV)

	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		9.68	17.264	1.28	100.00	100.00	11414.11	228282.22	1.05		
		Total	17.264	1.28	100.00	100.00					

**MT-601**  
**Aflatoxin B1, [3H]-**  
**Lot 221-044-037-A-20090402-JP**

Chromatogram Info:

File Name	: L:\int21424	File Created	: 2/24/2014 3:47:25 PM
Origin	: Acquired, Acquisition started 12/12/2011 3:50:20 PM	Acquired Date	: 12/12/2011 4:10:20 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 2/24/2014 4:04 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 223nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int21424 - Unit 2 UV)

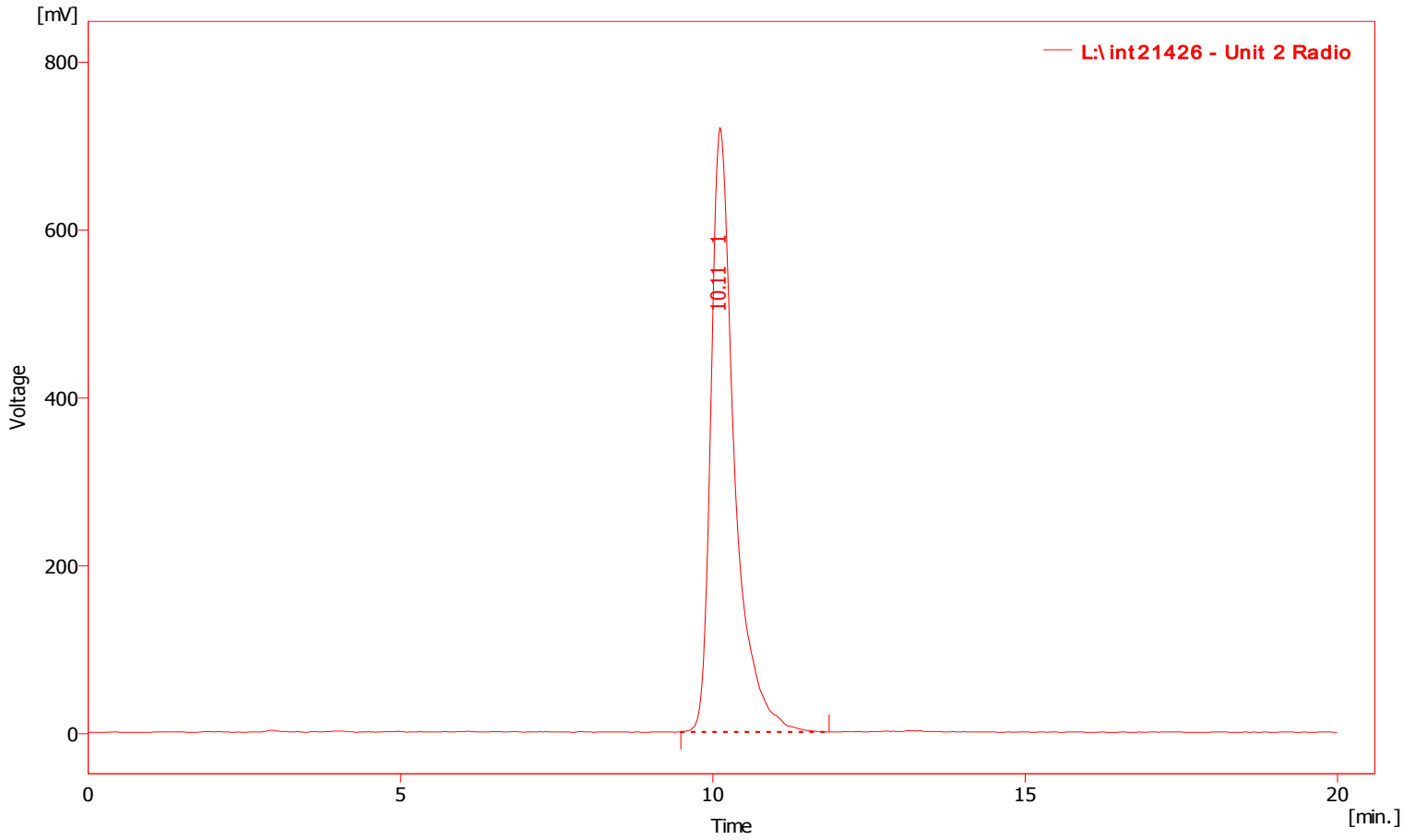
	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/l [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		9.74	5237.002	368.31	100.00	100.00	11195.50	223909.99	1.04		
		Total	5237.002	368.31	100.00	100.00					



**MT-601**  
**Aflatoxin B1, [3H]-**  
**Lot 221-044-037-A-20090402-JP**

Chromatogram Info:

File Name	: L:\int21426	File Created	: 2/24/2014 3:47:25 PM
Origin	: Acquired, Acquisition started 12/13/2011 10:58:54 AM	Acquired Date	: 12/13/2011 11:18:53 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 2/24/2014 4:06 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



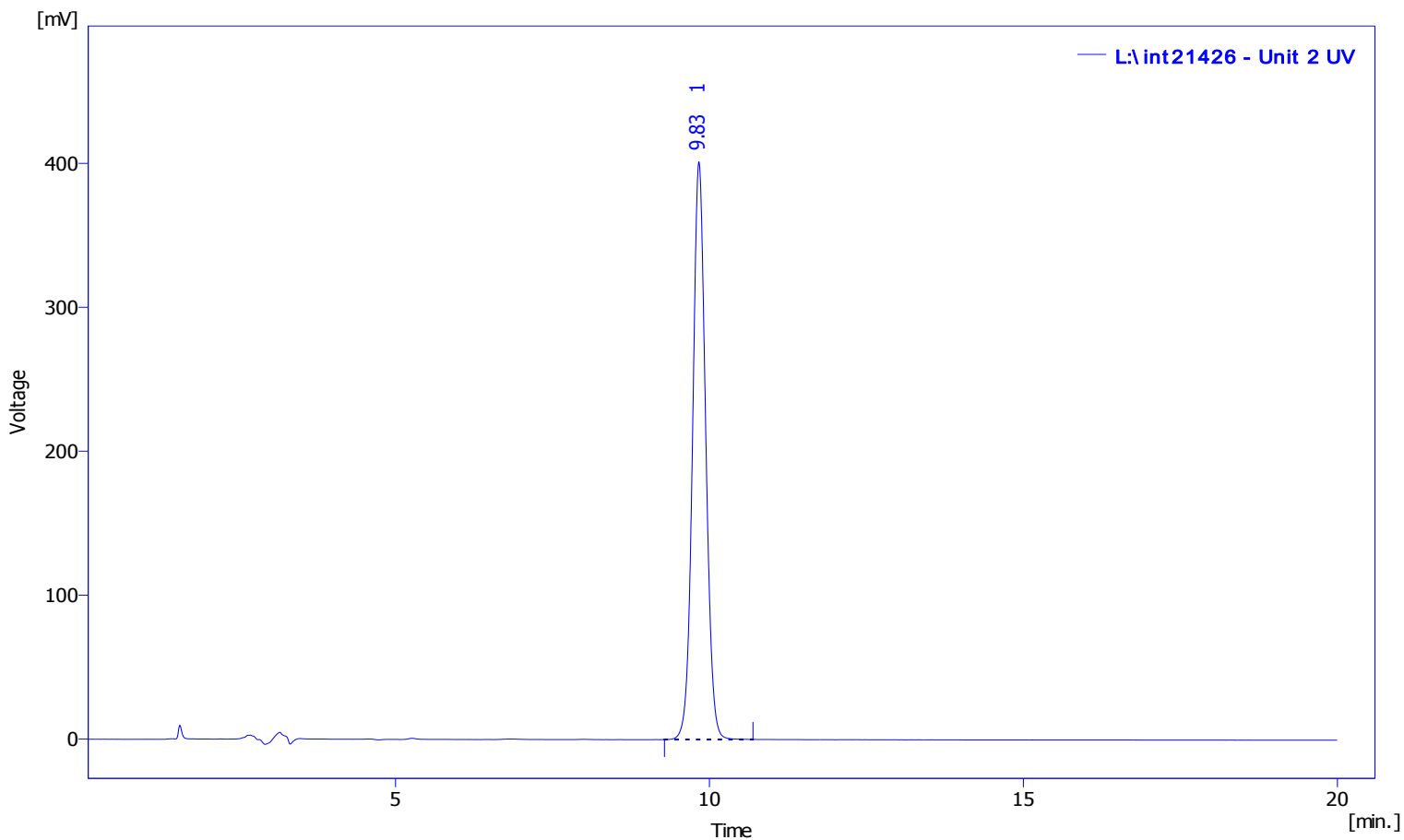
Result Table (Uncal - L:\int21426 - Unit 2 Radio)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/I [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		10.11	18902.257	719.99	100.00	100.00	4065.41	81308.30	1.64		
		Total	18902.257	719.99	100.00	100.00					

**MT-601**  
**Aflatoxin B1, [3H]-**  
**Lot 221-044-037-A-20090402-JP**

Chromatogram Info:

File Name	: L:\int21426	File Created	: 2/24/2014 3:47:25 PM
Origin	: Acquired, Acquisition started 12/13/2011 10:58:54 AM	Acquired Date	: 12/13/2011 11:18:53 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 2/24/2014 4:05 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 223nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



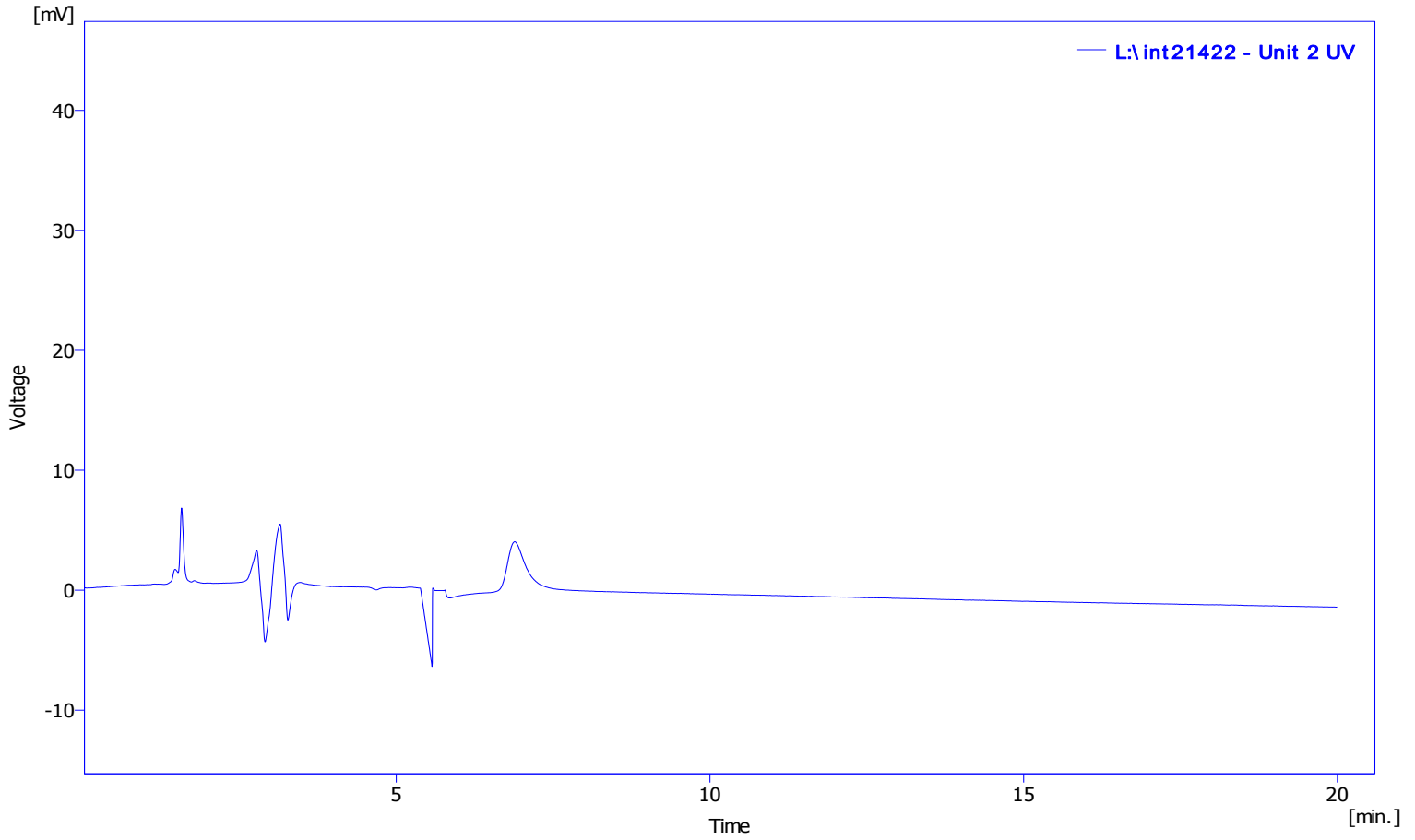
Result Table (Uncal - L:\int21426 - Unit 2 UV)

	Compound Name	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	Efficiency [th.pl]	Eff/I [t.p./m]	Symmetry/Tailing [-]	Response Factor	Resolution [-]
1		9.83	5816.383	401.42	100.00	100.00	10740.00	214799.96	1.05		
		Total	5816.383	401.42	100.00	100.00					

**MT-601**  
**Aflatoxin B1, [3H]-**  
**Lot 221-044-037-A-20090402-JP**

Chromatogram Info:

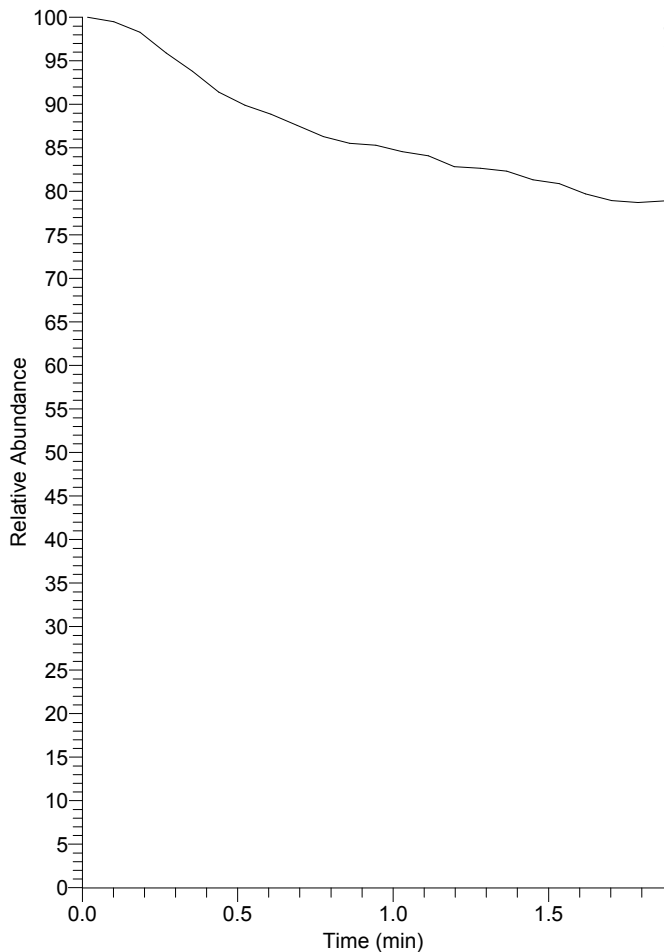
File Name	: L:\int21422	File Created	: 2/24/2014 3:47:25 PM
Origin	: Acquired, Acquisition started 12/12/2011 2:47:57 PM	Acquired Date	: 12/12/2011 3:07:57 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 2/24/2014 4:07 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 223nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



*Result Table (Uncal - L:\int21422 - Unit 2 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										

RT: 0.00 - 1.87



NL:  
4.13E8  
TIC MS  
MT601-  
20090402-  
JP

MT601-20090402-JP#1-23 RT: 0.02-1.87 AV:

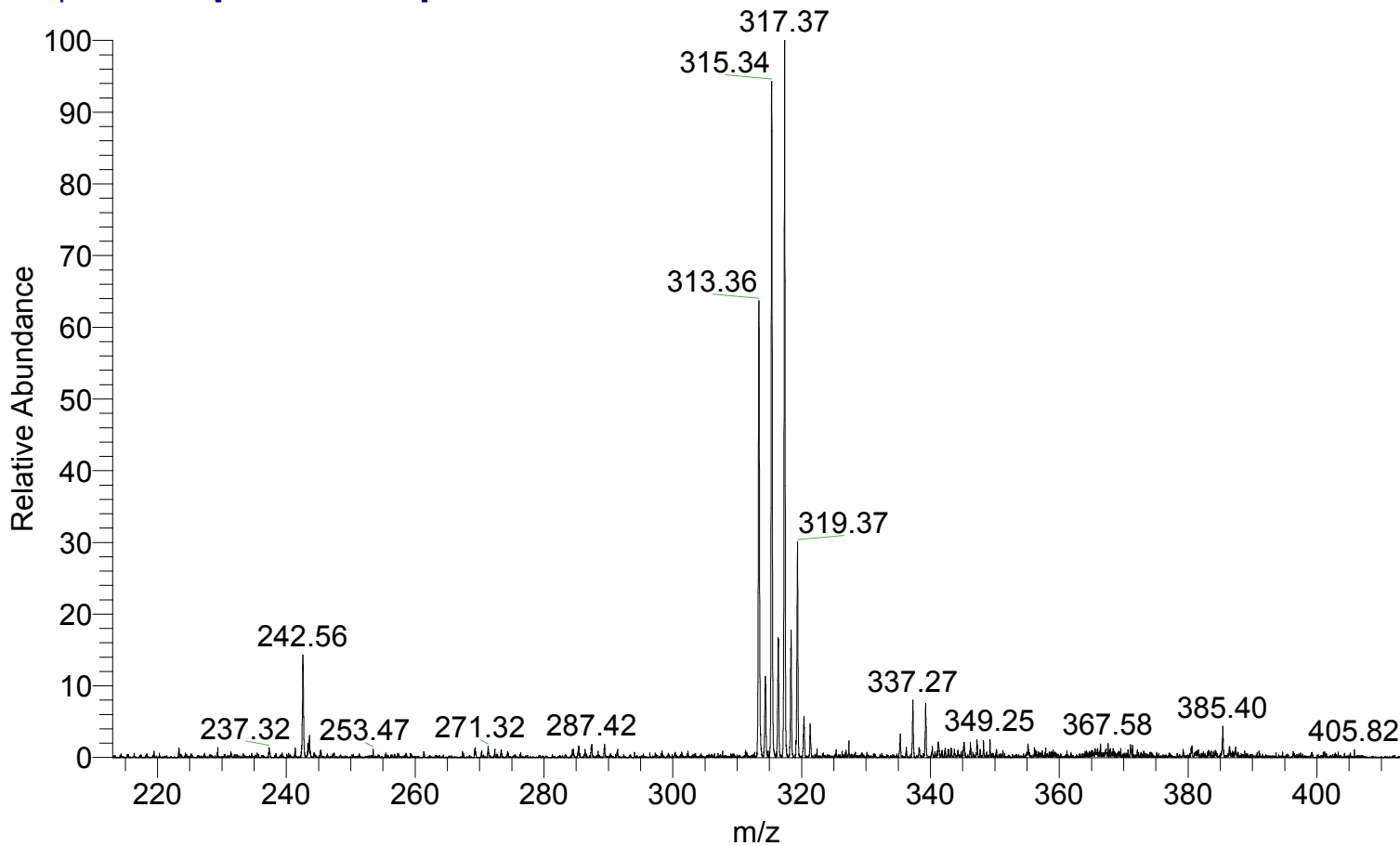
T: + p ESI Z ms [ 213.00-413.00]

m/z= 301.65-332.33

m/z	Intensity	Relative
311.39	799565.9	1.24
313.38	46575456.0	72.10
314.36	8931872.0	13.83
315.36	64596620.0	100.00
316.36	11959977.0	18.51
317.35	60953144.0	94.36
318.34	10775867.0	16.68
319.34	19583604.0	30.32
320.35	3735311.8	5.78
321.35	2664967.8	4.13
322.35	595074.8	0.92
323.38	502878.1	0.78
325.34	626321.8	0.97
327.25	1171778.3	1.81
328.27	594716.4	0.92
329.28	698450.4	1.08
331.24	463497.9	0.72

MT601-20090402-JP #1-23 RT: 0.02-1.87 AV: 23 NL: 1.74E6

T: + p ESI Z ms [ 213.00-413.00]



MT601 3H NMR in MeOD  
Batch 20090402-JP



**BRUKER**

2.5511  
3.511  
3.503  
3.495  
3.487  
3.476  
3.469  
3.442  
3.425  
3.420  
3.408  
2.651  
2.632  
2.624  
2.612  
2.605  
2.595  
2.587  
2.569  
2.551

NAME MT601-20090402-JP  
EXPNO 2  
PROCNO 1  
Date\_ 20111213  
Time\_ 22.34  
INSTRUM spect  
PROBHD 5 mm DUX 3H-1H  
PULPROG zg  
TD 16384  
SOLVENT MeOD  
NS 5000  
DS 2  
SWH 6172.839 Hz  
FIDRES 0.376760 Hz  
AQ 1.3271540 sec  
RG 46341  
DW 81.000 usec  
DE 6.00 usec  
TE 300.0 K  
D1 2.00000000 sec  
TD0 1

==== CHANNEL f1 =====  
NUC1 3H  
P1 10.00 usec  
PL1 2.00 dB  
SFO1 320.1321857 MHz  
SI 32768  
SF 320.1305850 MHz  
WDW no  
SSB 0  
LB 0.00 Hz  
GB 0  
PC 1.00

