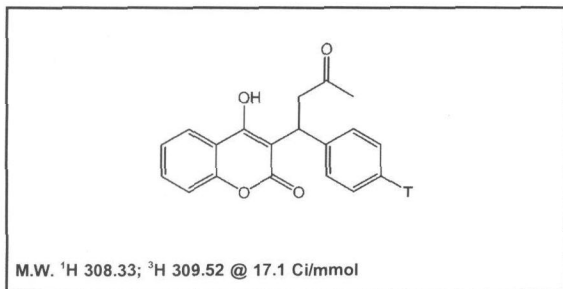




Product Data Sheet

MT-1620

(R,S)-Warfarin, [phenyl-4-³H]-



Lot #: 194-090-0171-A-20090715-JG

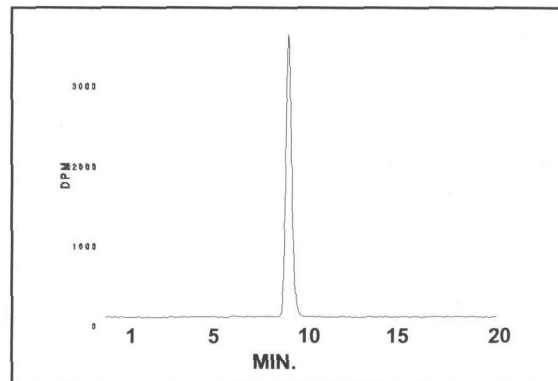
Specific Activity: 17.1 Ci/mmol

Concentration: 1.0 mCi/ml; 18.10 µg/ml

Packaged in: Ethanol solution

Date of Analysis: June 02, 2010

Radiochemical Purity: 99.6%



HPLC ANALYSIS LOT 194-090-0171-A-20090715-JG
File Name: int20532 Date and Time: 6/2/2010 11:22:02 AM
Unit 2 Radio

Peak #	Area %	Time	Area
1	0.31	6.54000	24.04749
2	99.69	9.43330	7739.46704
Totals	100.00		7763.51453

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.

MT-1620

(R,S)-Warfarin, [phenyl-4-³H]-

Lot 194-090-0171-A-20090715-JG

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

Concentrations and volumes:

Standard solution concentration was 0.5 mg/ml.

(R,S)-Warfarin, [phenyl-4-³H]- concentration was 0.1 mCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **(R,S)-Warfarin, [phenyl-4-³H]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **(R,S)-Warfarin, [phenyl-4-³H]-** + 2.0 µl standard.

Volume of co-injection was 4.0 µl.

Volume of blank injection was 2.0 µl.

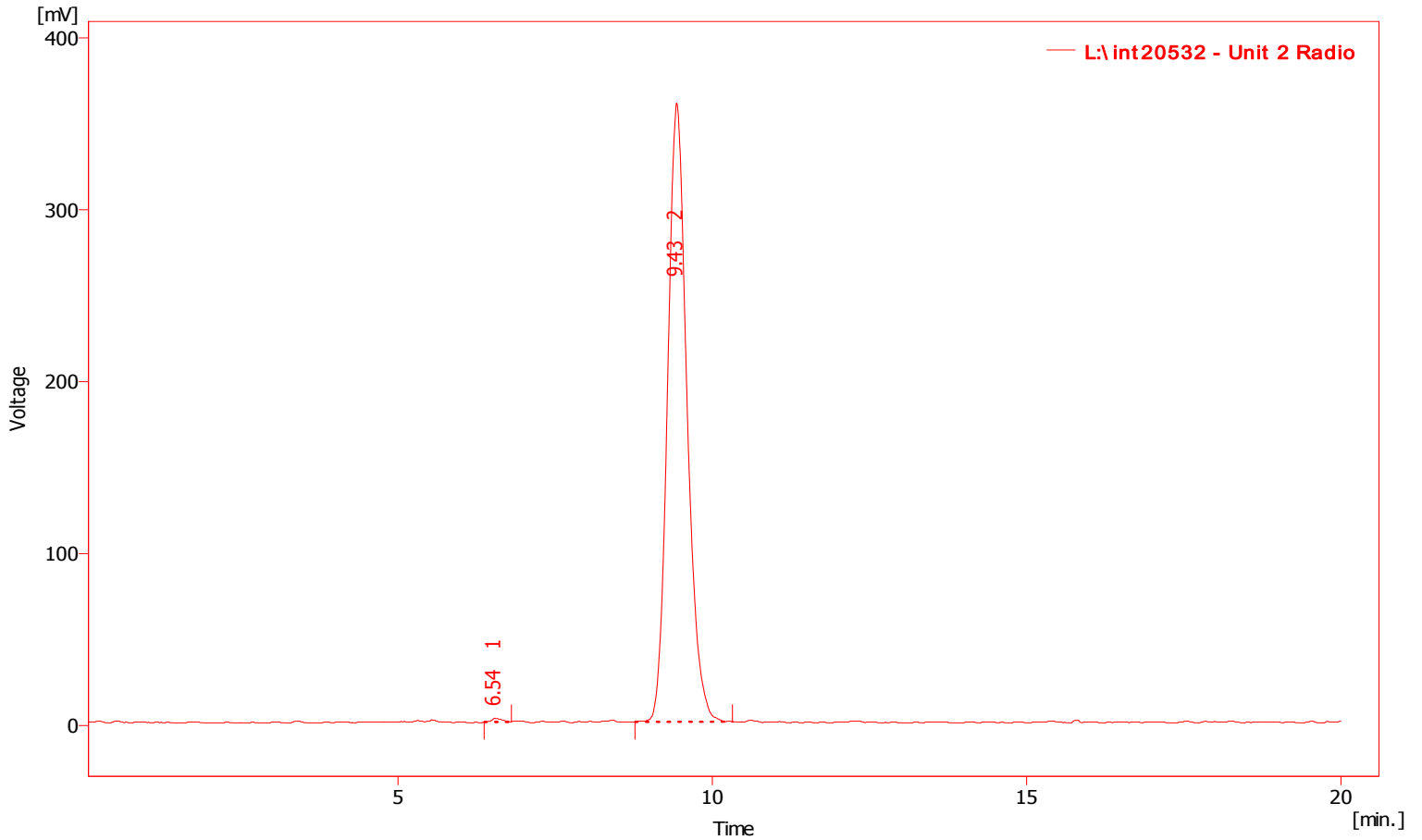
B) Mass spectrometry – Negative mode

C) NMR

MT-1620
(R,S)-Warfarin, [phenyl-4-3H]-
Lot 194-090-0171-A-20090715-JG

Chromatogram Info:

File Name	: L:\int20532	File Created	: 3/26/2014 4:26:33 PM
Origin	: Acquired, Acquisition started 6/2/2010 11:02:04 AM	Acquired Date	: 6/2/2010 11:22:02 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 3/26/2014 4:35 PM
Created	: 8/8/2007 9:12 AM	Detection	: Radiochemical
Column	:	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



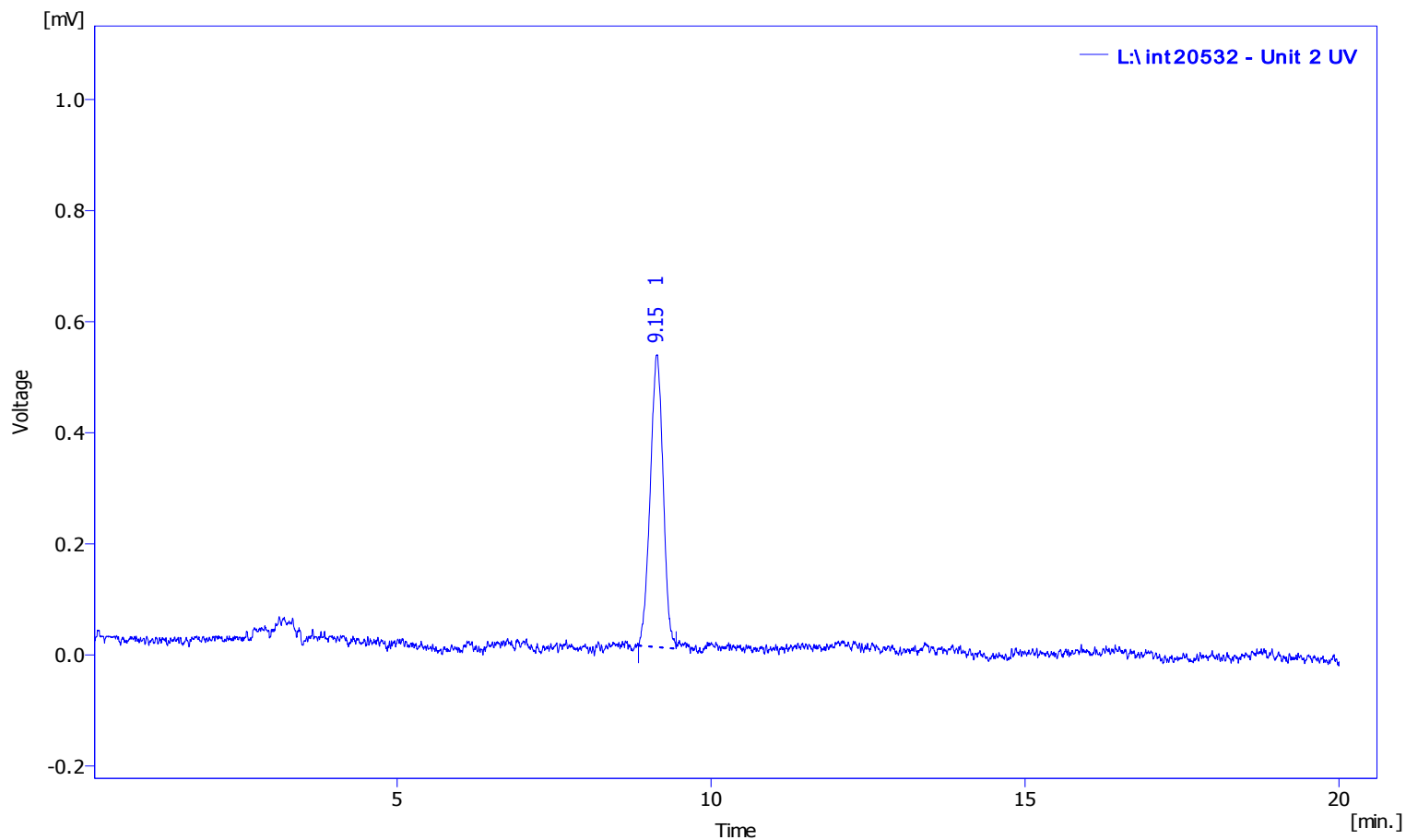
Result Table (Uncal - L:\int20532 - Unit 2 Radio)

	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		6.54	24.047	2.32	0.31	0.64	8199.12	163982.47	1.44		
2		9.43	7739.467	359.96	99.69	99.36	4619.88	92397.56	1.18		6.9
		Total	7763.515	362.28	100.00	100.00					

MT-1620
(R,S)-Warfarin, [phenyl-4-3H]-
Lot 194-090-0171-A-20090715-JG

Chromatogram Info:

File Name	: L:\int20532	File Created	: 3/26/2014 4:26:33 PM
Origin	: Acquired, Acquisition started 6/2/2010 11:02:04 AM	Acquired Date	: 6/2/2010 11:22:02 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 3/26/2014 4:34 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: 308nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



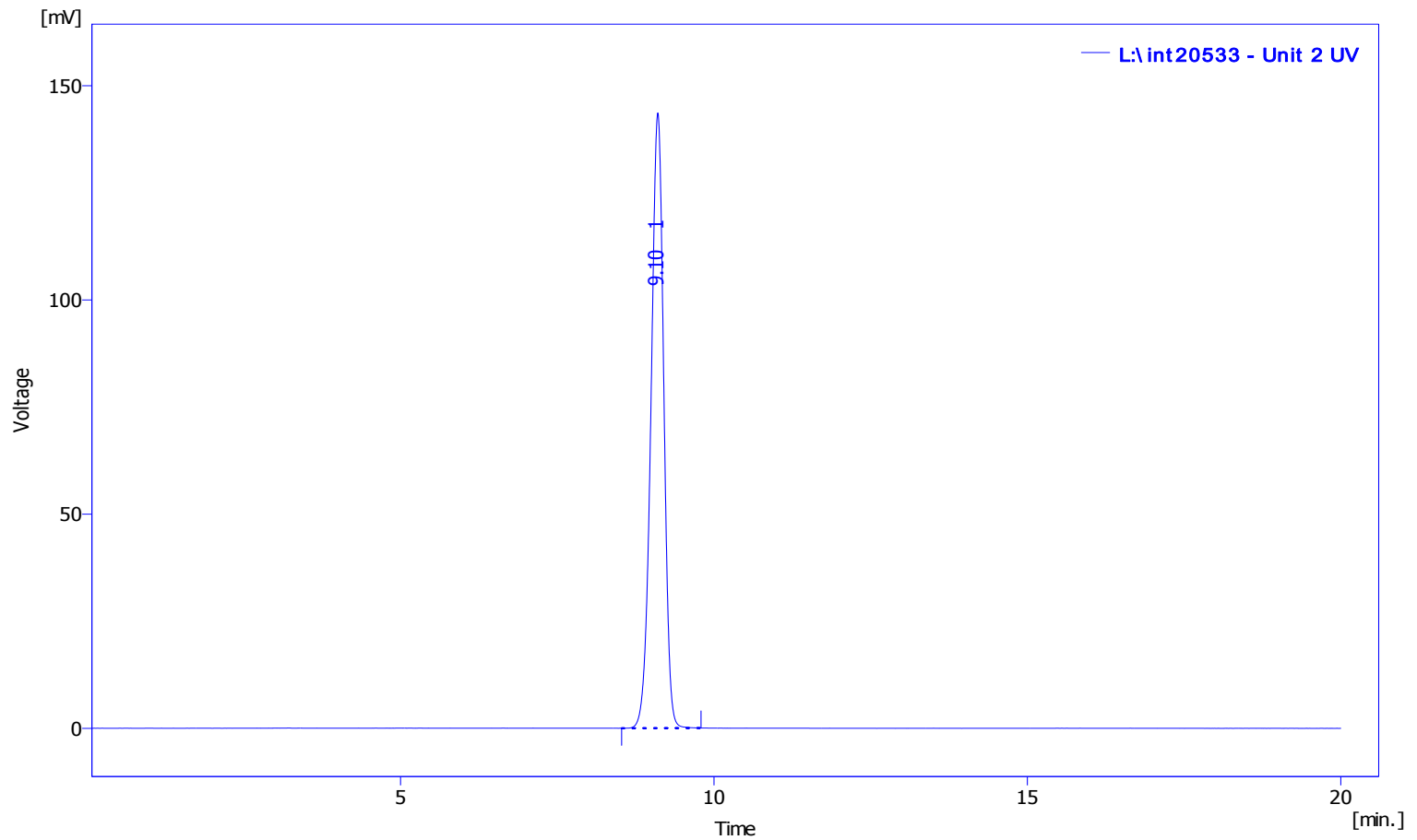
Result Table (Uncal - L:\int20532 - Unit 2 UV)

	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		9.15	7.540	0.53	100.00	100.00	9021.11	180422.27	0.95		
		Total	7.540	0.53	100.00	100.00					

MT-1620
(R,S)-Warfarin, [phenyl-4-3H]-
Lot 194-090-0171-A-20090715-JG

Chromatogram Info:

File Name	: L:\int20533	File Created	: 3/26/2014 4:26:33 PM
Origin	: Acquired, Acquisition started 6/2/2010 11:36:33 AM	Acquired Date	: 6/2/2010 11:56:32 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of standard material alone	Modified	: 3/26/2014 4:35 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 308nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



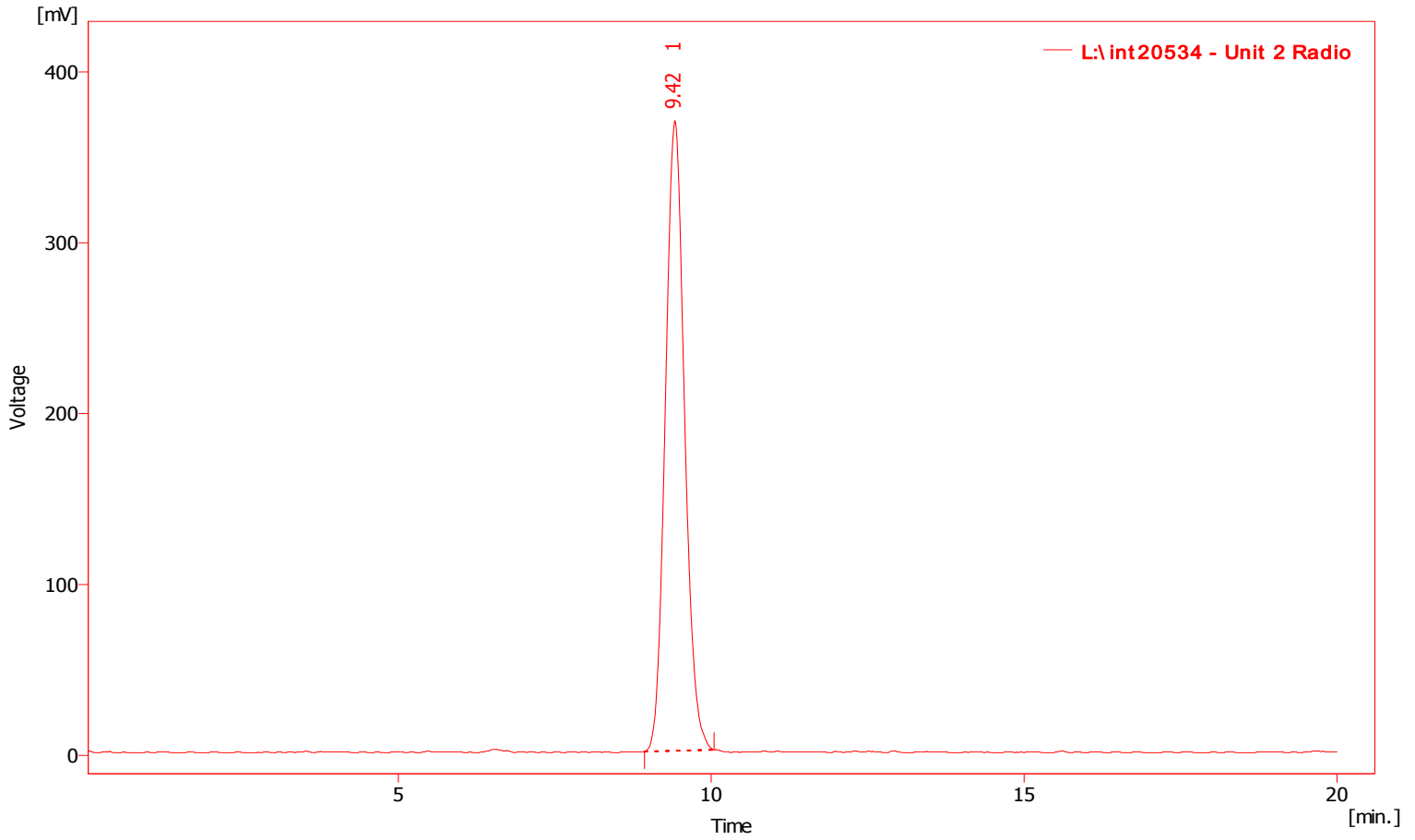
Result Table (Uncal - L:\int20533 - Unit 2 UV)

	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		9.10	2035.613	143.59	100.00	100.00	9485.61	189712.21	0.94		
		Total	2035.613	143.59	100.00	100.00					

MT-1620
(R,S)-Warfarin, [phenyl-4-3H]-
Lot 194-090-0171-A-20090715-JG

Chromatogram Info:

File Name	: L:\int20534	File Created	: 3/26/2014 4:26:33 PM
Origin	: Acquired, Acquisition started 6/2/2010 12:00:09 PM	Acquired Date	: 6/2/2010 12:20:07 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 3/26/2014 4:37 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



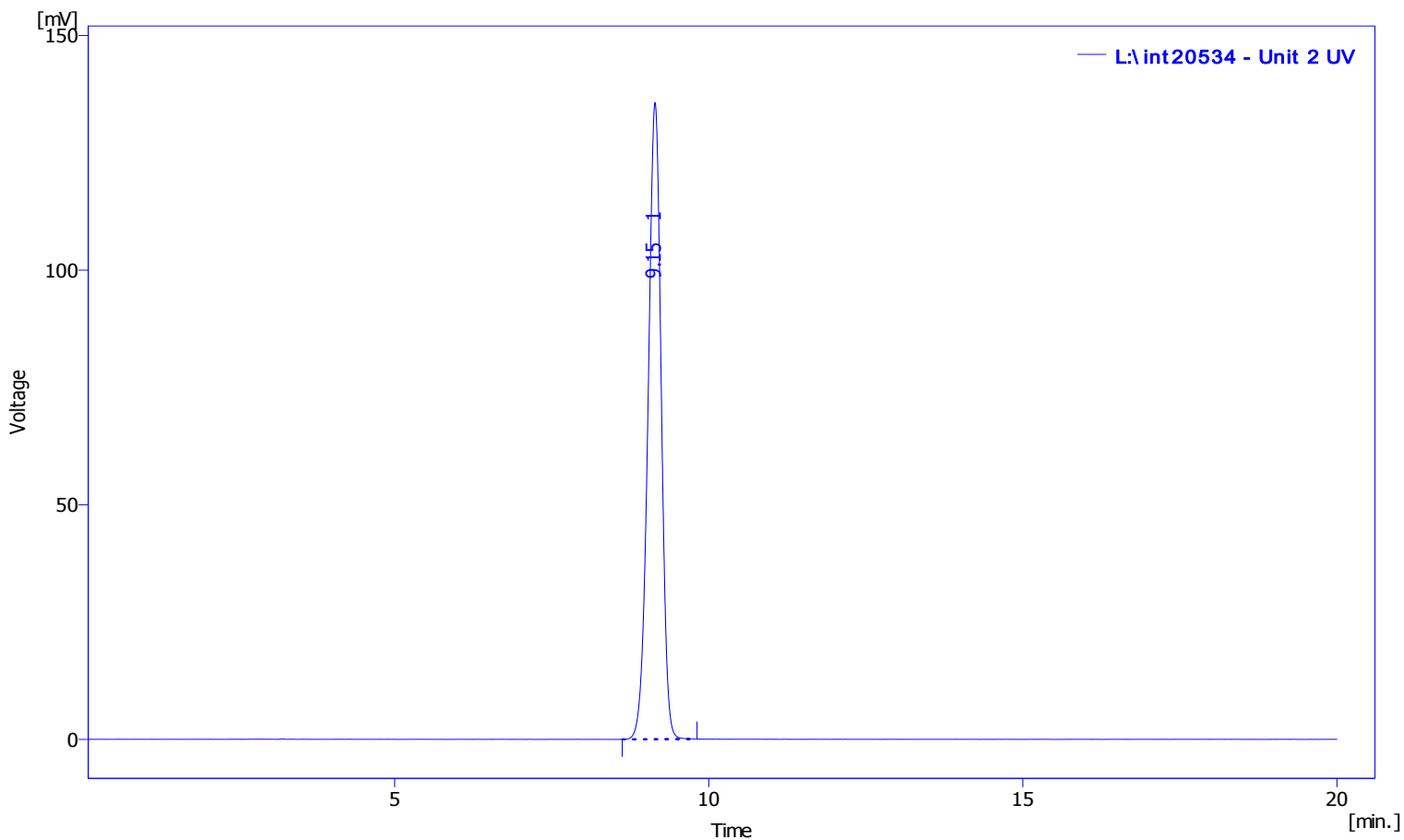
Result Table (Uncal - L:\int20534 - Unit 2 Radio)

	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		9.42	7863.387	368.90	100.00	100.00	4424.40	88487.94	1.10		
		Total	7863.387	368.90	100.00	100.00					

MT-1620
(R,S)-Warfarin, [phenyl-4-3H]-
Lot 194-090-0171-A-20090715-JG

Chromatogram Info:

File Name	: L:\int20534	File Created	: 3/26/2014 4:26:33 PM
Origin	: Acquired, Acquisition started 6/2/2010 12:00:09 PM	Acquired Date	: 6/2/2010 12:20:07 PM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 3/26/2014 4:38 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 308nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



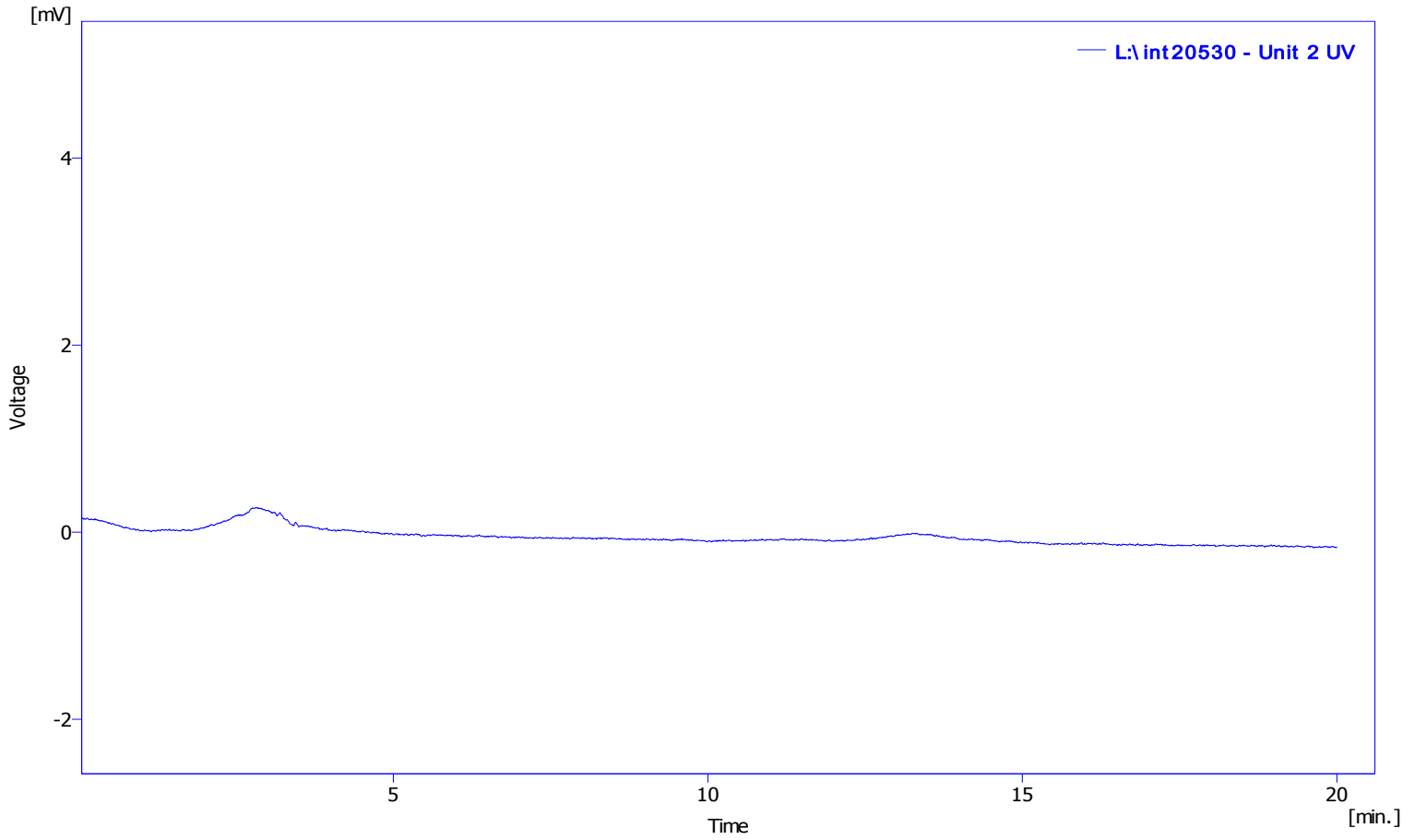
Result Table (Uncal - L:\int20534 - Unit 2 UV)

	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		9.15	1971.051	135.68	100.00	100.00	9021.11	180422.27	0.94		
		Total	1971.051	135.68	100.00	100.00					

MT-1620
(R,S)-Warfarin, [phenyl-4-3H]-
Lot 194-090-0171-A-20090715-JG

Chromatogram Info:

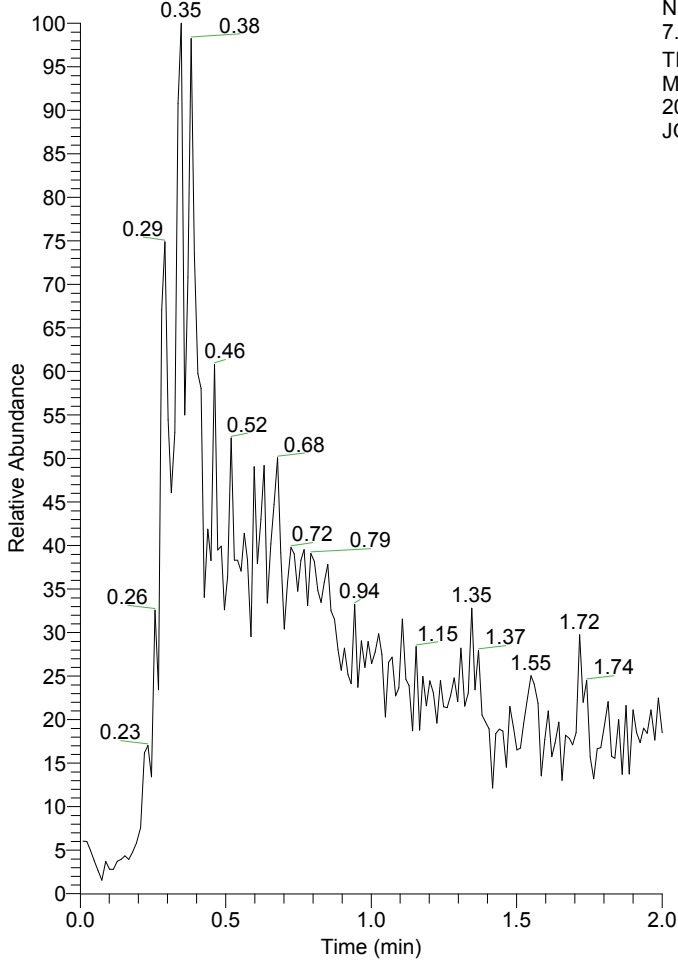
File Name	: L:\int20530	File Created	: 3/26/2014 4:26:33 PM
Origin	: Acquired, Acquisition started 6/2/2010 9:46:26 AM	Acquired Date	: 6/2/2010 10:06:25 AM
Project	: Test	By	: Administrator
Method	: unit2-20minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 3/26/2014 4:38 PM
Created	: 8/8/2007 9:12 AM		
Column	:	Detection	: UV 308nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\int20530 - 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 - 2.00



NL:
7.67E7
TIC MS
MT1620-
20090715-
JG-MS

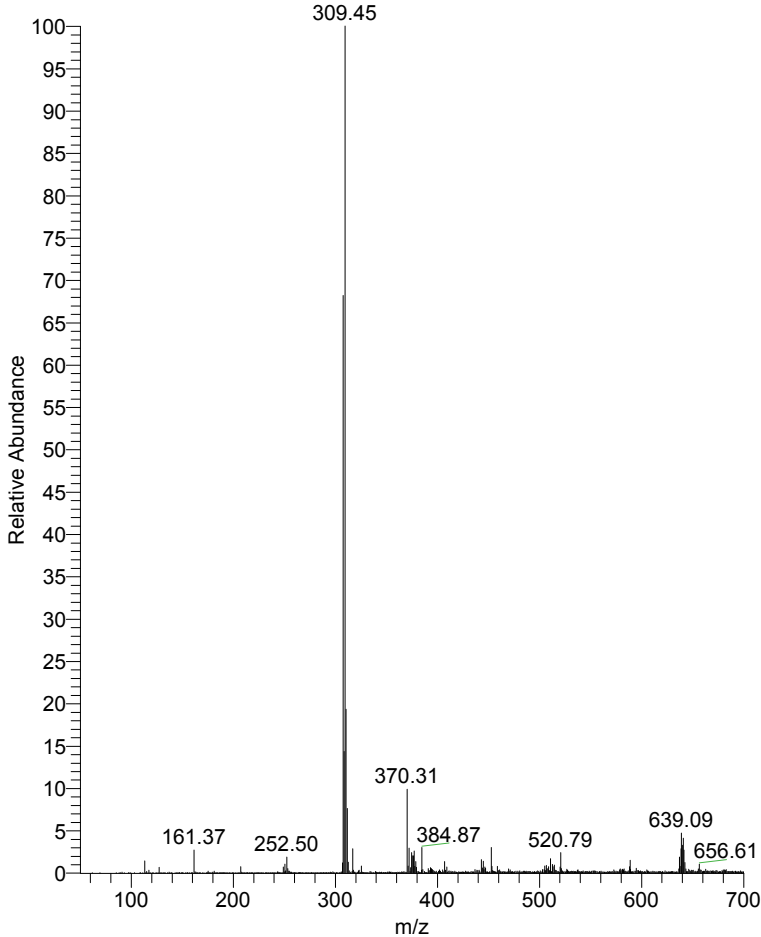
MT1620-20090715-JG-MS#1-168 RT: 0.01-2.00

T: - c NSI Full ms [50.00-700.00]

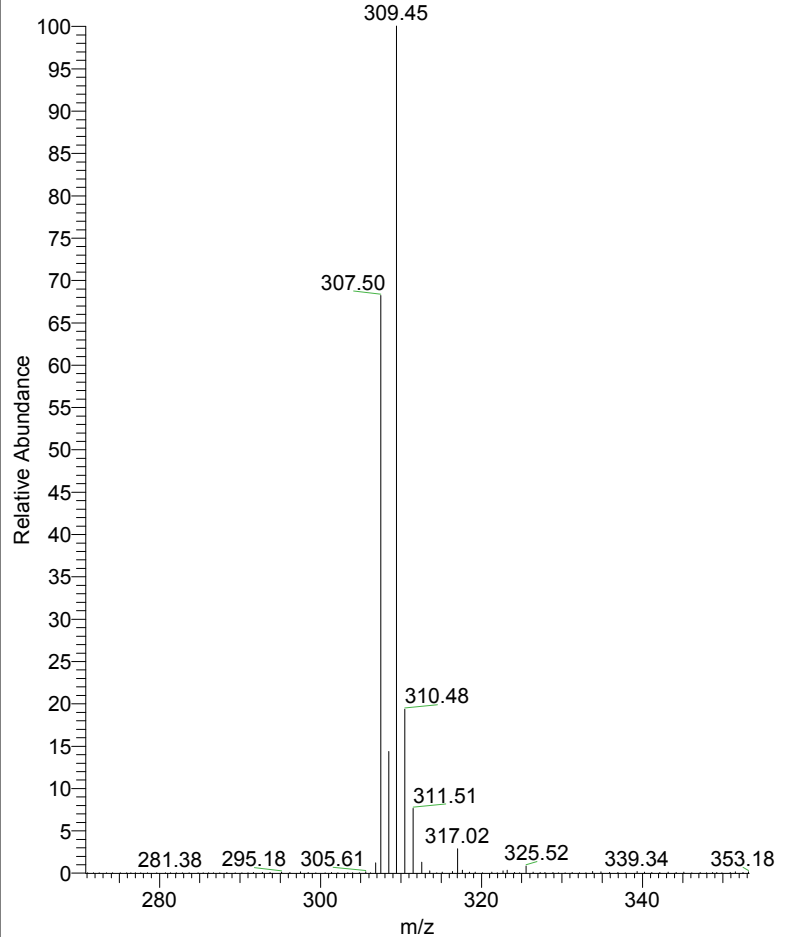
m/z= 299.01-324.05

m/z	Intensity	Relative
306.85	67381.4	1.19
307.50	3859424.0	68.19
308.49	812116.9	14.35
309.45	5660192.4	100.00
310.48	1093874.5	19.33
311.51	430810.6	7.61
312.56	72463.1	1.28
313.59	14640.9	0.26
314.44	1961.1	0.03
315.12	5551.7	0.10
316.40	8922.3	0.16
317.02	161202.1	2.85
317.63	18955.6	0.33
318.49	6293.0	0.11
319.22	4349.9	0.08
321.28	5031.4	0.09
322.69	13896.8	0.25
323.20	18746.8	0.33

MT1620-20090715-JG-MS #1-168 RT: 0.01-2.00 AV: 168 NL: 5.66E6
T: - c NSI Full ms [50.00-700.00]



MT1620-20090715-JG-MS #1-168 RT: 0.01-2.00 AV: 168 NL: 5.66E6
T: - c NSI Full ms [50.00-700.00]



MT1620 3H NMR in MeOD
Batch 20090715-JG



BRUKER

7.263
7.239
7.215

NAME MT1620-20090715-JG
EXPNO 1
PROCNO 1
Date_ 20090717
Time_ 10.35
INSTRUM spect
PROBHD 5 mm DUX 3H-1H
PULPROG zg
TD 16384
SOLVENT MeOD
NS 2549
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
SF01 320.1321857 MHz
SI 32768
SF 320.1305850 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00

