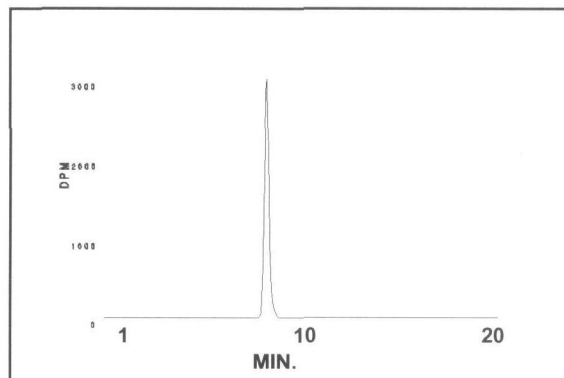
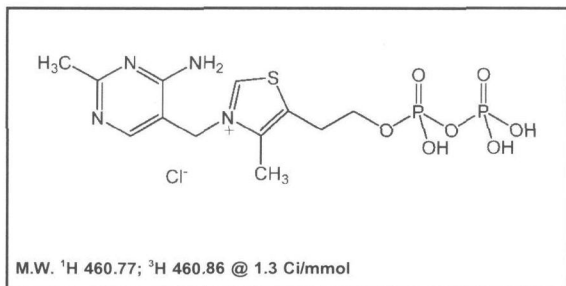




## Product Data Sheet

**MT-1697**

### Thiamine pyrophosphate, [<sup>3</sup>H]-



HPLC ANALYSIS LOT 846-131-0013-A-20110601-JP  
File Name: INTS454 Date and Time: 6/2/2011 2:03:08 PM  
Unit S Radio

Peak #	Area %	Time	Area
1	100.00	8.27000	5082.16175
Totals	100.00		5082.16175

**Lot #:** 846-131-0013-A-20110601-JP

**Specific Activity:** 1.3 Ci/mmol

**Concentration:** 1.0 mCi/ml; 354.51 µg/ml

**Packaged in:** Sterile water solution

**Date of Analysis:** June 2, 2011

**Radiochemical Purity:** 99.9%

**Storage Recommendation:** Store at 0-5°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-1697**

**Thiamine pyrophosphate, [<sup>3</sup>H]-**

**Lot 846-131-0013-A-20110601-JP**

**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.

**Thiamine pyrophosphate, [<sup>3</sup>H]-** concentration was 100 µCi/ml.

Volume of standard alone injection was 5.0 µl.

Volume of **Thiamine pyrophosphate, [<sup>3</sup>H]-** alone injection was 2.0 µl.

Co-injection solution consisted of 1.5 µl **Thiamine pyrophosphate, [<sup>3</sup>H]-** + 5.0 µl standard.

Volume of co-injection was 6.5 µl.

Volume of blank injection was 1.5 µl.

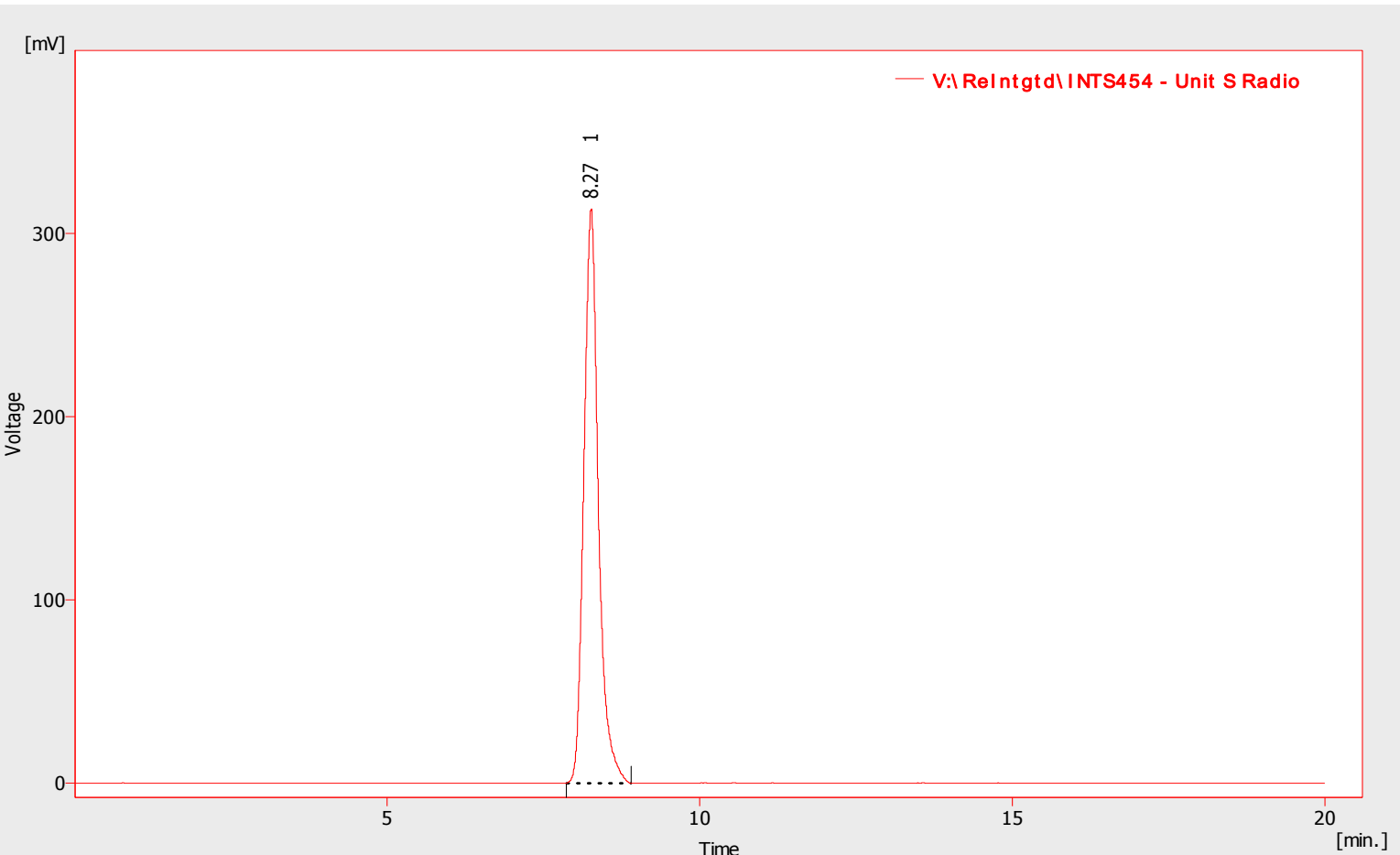
**B) Mass spectrometry - Positive mode**

**C) NMR**

**MT-1697**  
**Thiamine pyrophosphate, [3H]-**  
**Lot 846-131-0013-A-20110601-JP**

Chromatogram Info:

File Name	: V:\ReIntgtd\INTS454	File Created	: 6/6/2011 11:52:08 AM
Origin	: Acquired	Acquired Date	: 6/2/2011 2:03:08 PM
Project	: Test	By	: Administrator
Method	: UnitS_20_min_run	By	: Administrator
Description	: Radiochemical trace of 3H material alone	Modified	: 6/6/2011 1:36 PM
Created	: 11/2/2009 11:15 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



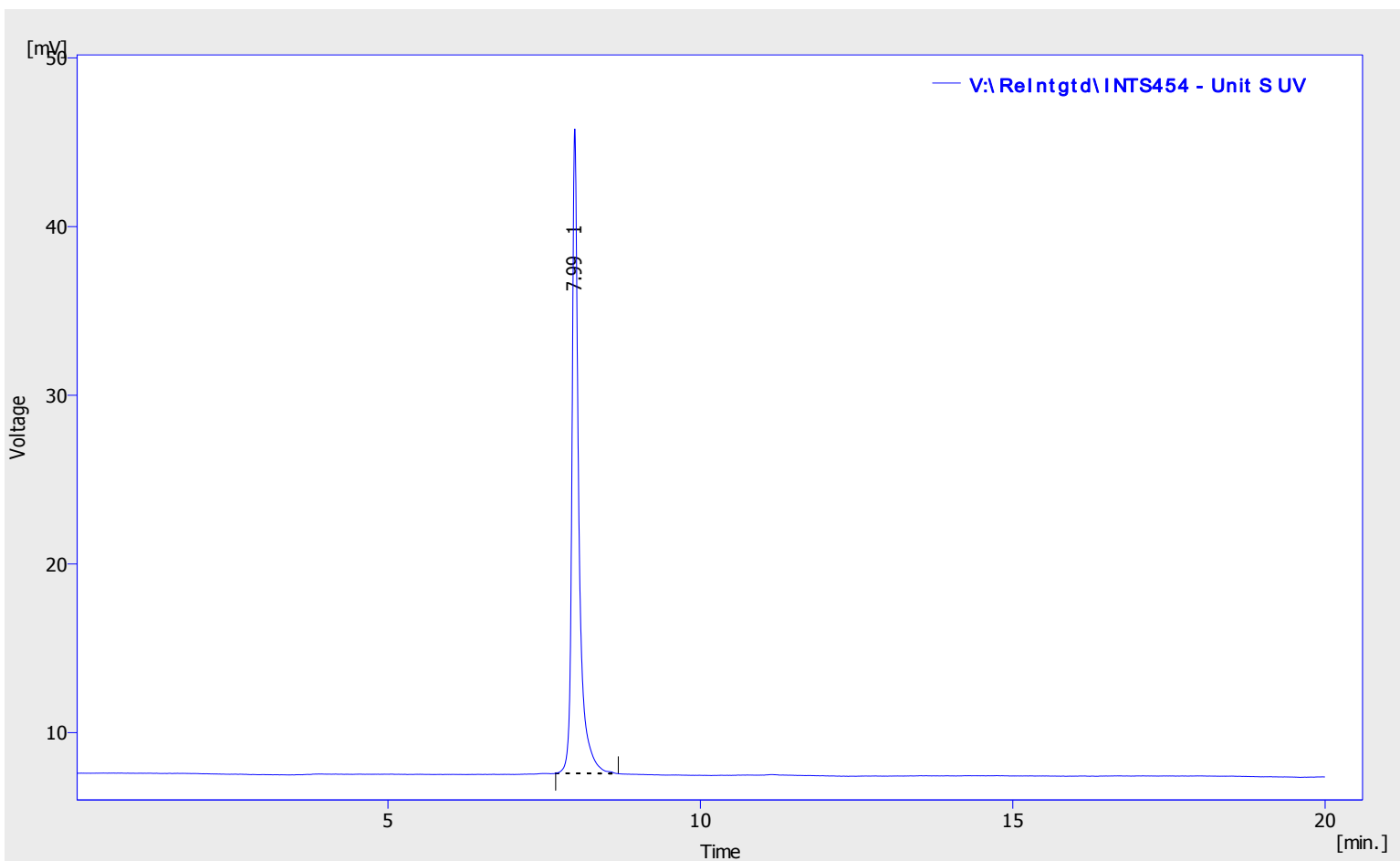
*Result Table (Uncal - V:\ReIntgtd\INTS454 - Unit S Radio)*

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	8.270	5082.162	313.432	100.00	100.0	0.24
	Total	5082.162	313.432	100.00	100.0	

**MT-1697**  
**Thiamine pyrophosphate, [3H]-**  
**Lot 846-131-0013-A-20110601-JP**

Chromatogram Info:

File Name	: V:\ReIntgtd\INTS454	File Created	: 6/6/2011 11:52:08 AM
Origin	: Acquired	Acquired Date	: 6/2/2011 2:03:08 PM
Project	: Test	By	: Administrator
Method	: UnitS_20_min_run	By	: Administrator
Description	: UV trace of 3H material alone	Modified	: 6/6/2011 1:40 PM
Created	: 11/2/2009 11:15 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



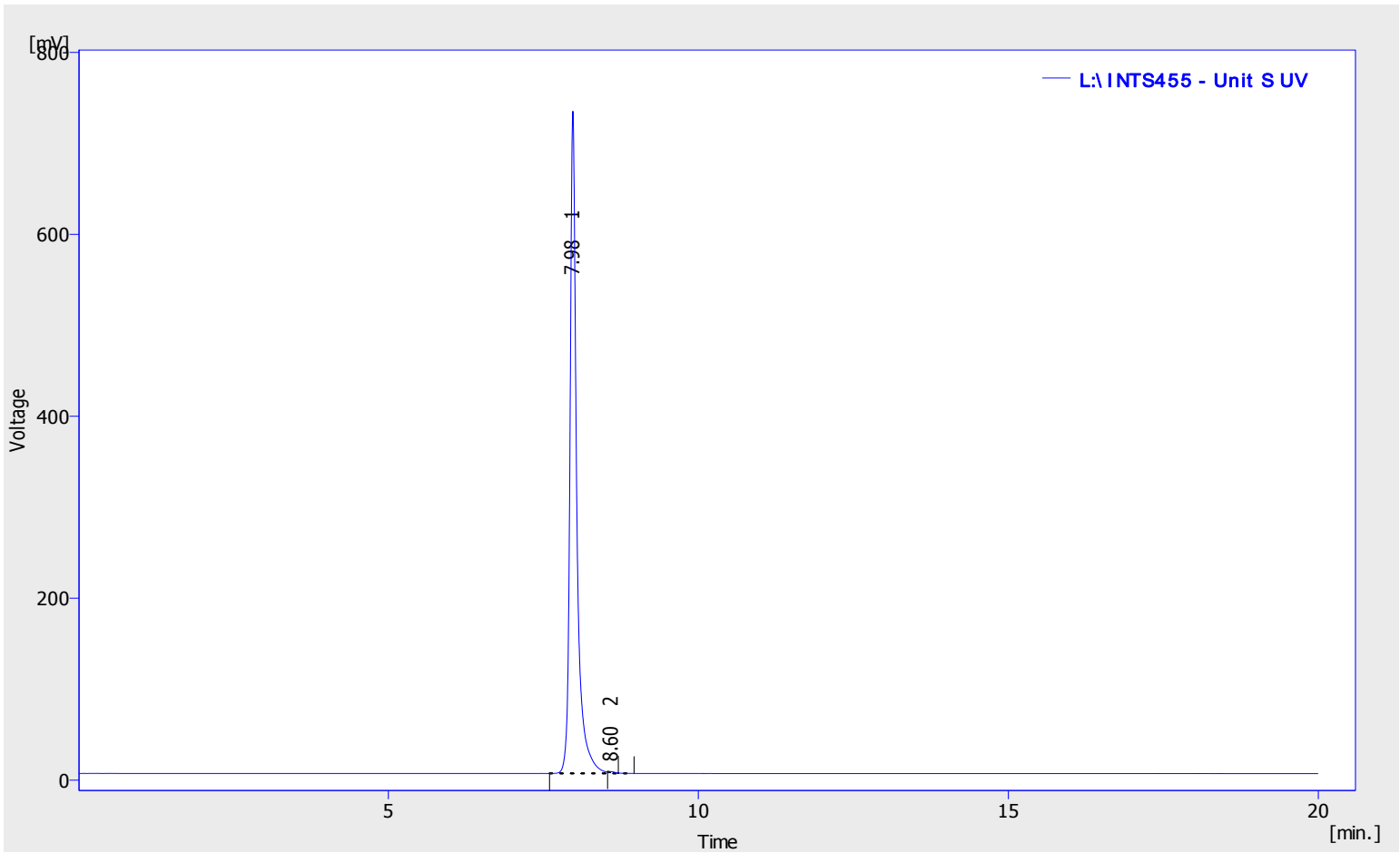
*Result Table (Uncal - V:\ReIntgtd\INTS454 - Unit S UV)*

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	7.990	290.029	38.197	100.00	100.0	0.10
	Total	290.029	38.197	100.00	100.0	

**MT-1697**  
**Thiamine pyrophosphate, [3H]-**  
**Lot 846-131-0013-A-20110601-JP**

Chromatogram Info:

File Name	: L:\INTS455	File Created	: 6/3/2011 11:16:06 AM
Origin	: Acquired	Acquired Date	: 6/2/2011 2:24:35 PM
Project	: Test	By	: Administrator
Method	: UnitS_20_min_run	By	: Administrator
Description	: UV trace of standard alone	Modified	: 6/6/2011 1:41 PM
Created	: 11/2/2009 11:15 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\INTS455 - Unit S UV)

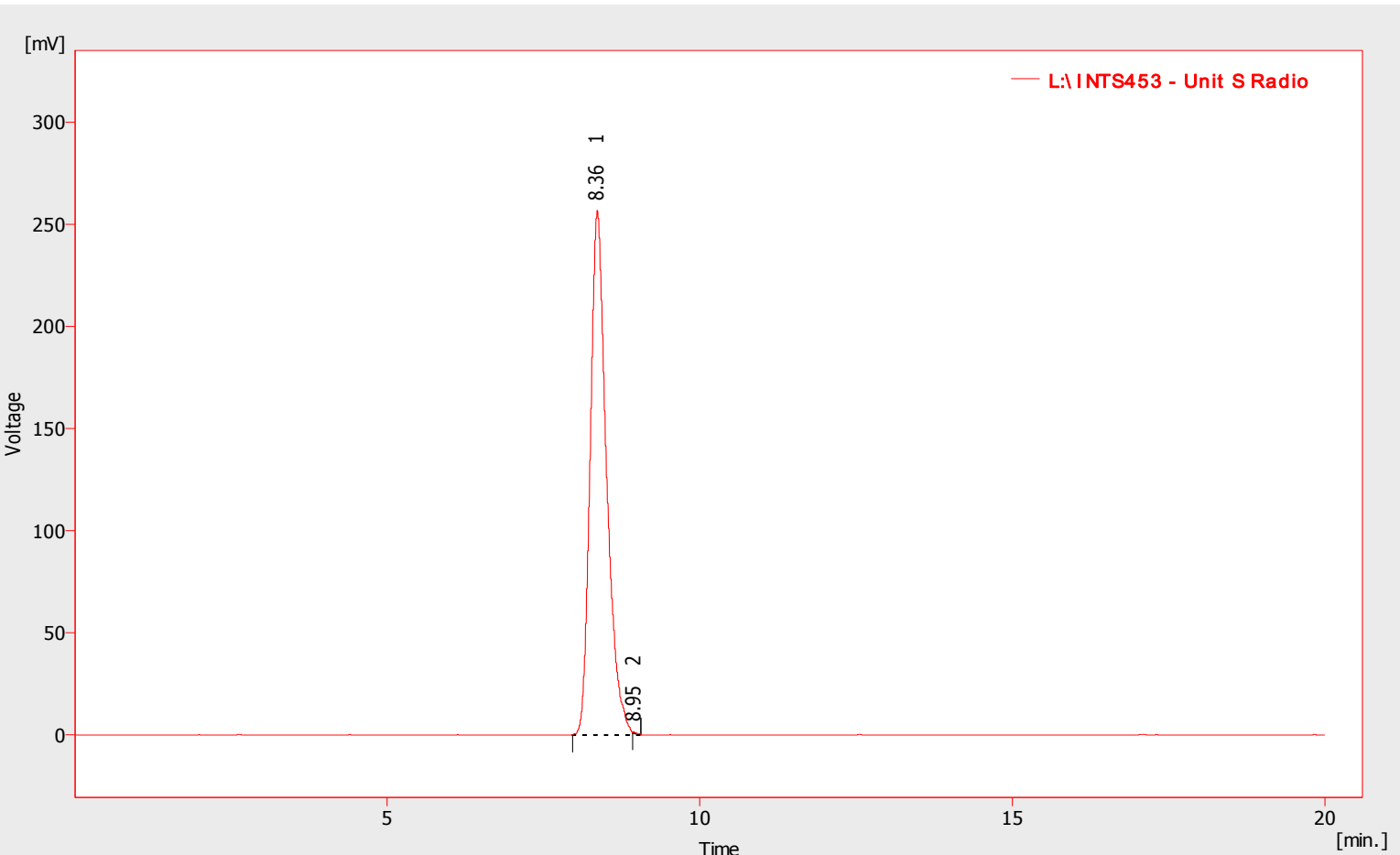
	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	7.977	5545.942	727.983	99.93	99.9	0.11
2	8.597	4.072	0.763	0.07	0.1	0.10
	Total	5550.014	728.746	100.00	100.0	



**MT-1697**  
**Thiamine pyrophosphate, [3H]-**  
**Lot 846-131-0013-A-20110601-JP**

Chromatogram Info:

File Name	: L:\INTS453	File Created	: 6/3/2011 11:16:06 AM
Origin	: Acquired	Acquired Date	: 6/2/2011 1:24:52 PM
Project	: Test	By	: Administrator
Method	: UnitS_20_min_run	By	: Administrator
Description	: Radiochemical trace of 3H material co-injected with standard	Modified	: 6/6/2011 1:43 PM
Created	: 11/2/2009 11:15 AM		
Column	:	Detection	: Radiochemical
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



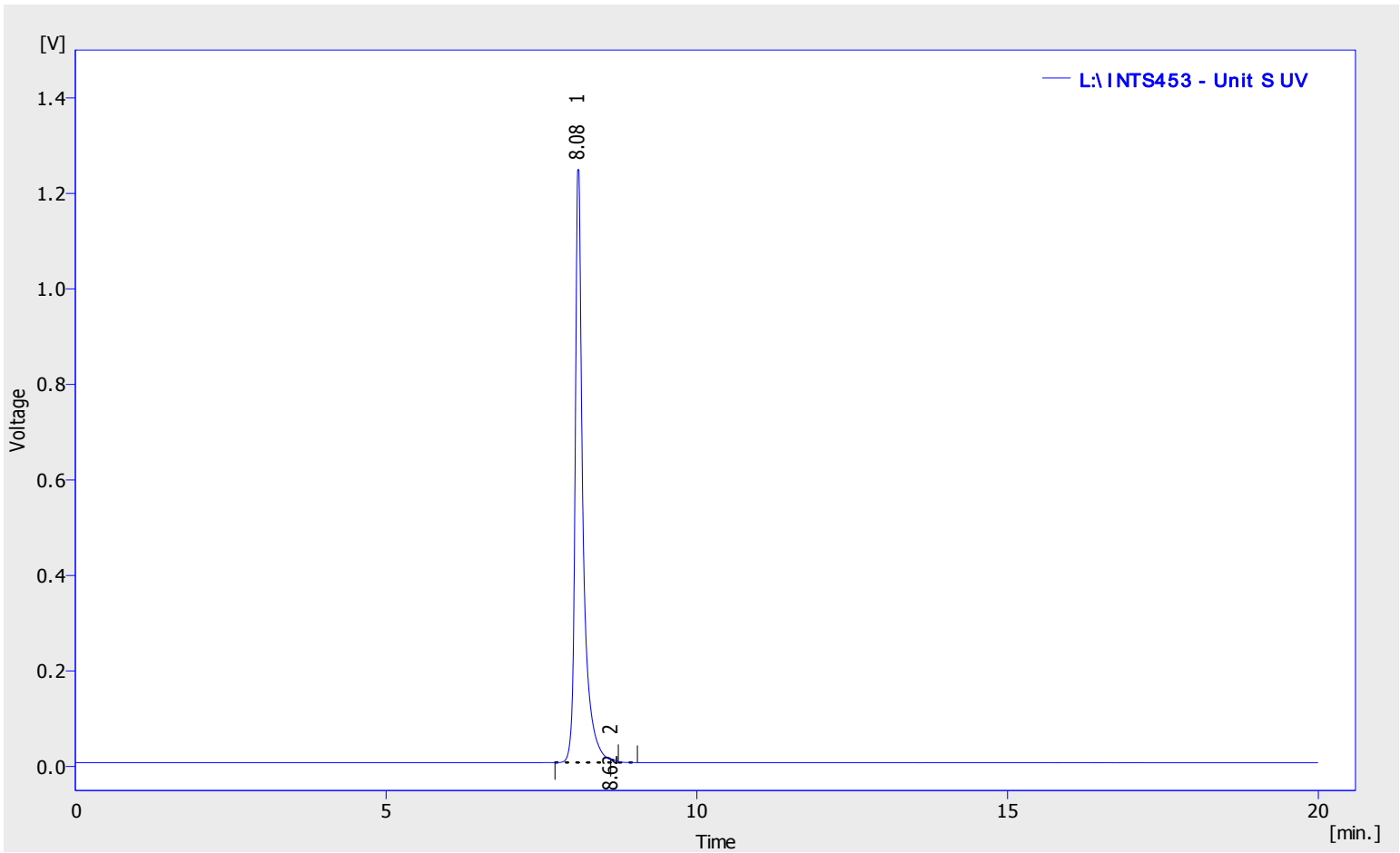
Result Table (Uncal - L:\INTS453 - Unit S Radio)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	8.360	4678.572	256.904	99.93	99.7	0.27
2	8.950	3.235	0.762	0.07	0.3	0.02
	Total	4681.807	257.666	100.00	100.0	

**MT-1697**  
**Thiamine pyrophosphate, [3H]-**  
**Lot 846-131-0013-A-20110601-JP**

Chromatogram Info:

File Name	: L:\INTS453	File Created	: 6/3/2011 11:16:06 AM
Origin	: Acquired	Acquired Date	: 6/2/2011 1:24:52 PM
Project	: Test	By	: Administrator
Method	: UnitS_20_min_run	By	: Administrator
Description	: UV trace of 3H material co-injected with standard	Modified	: 6/6/2011 1:44 PM
Created	: 11/2/2009 11:15 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



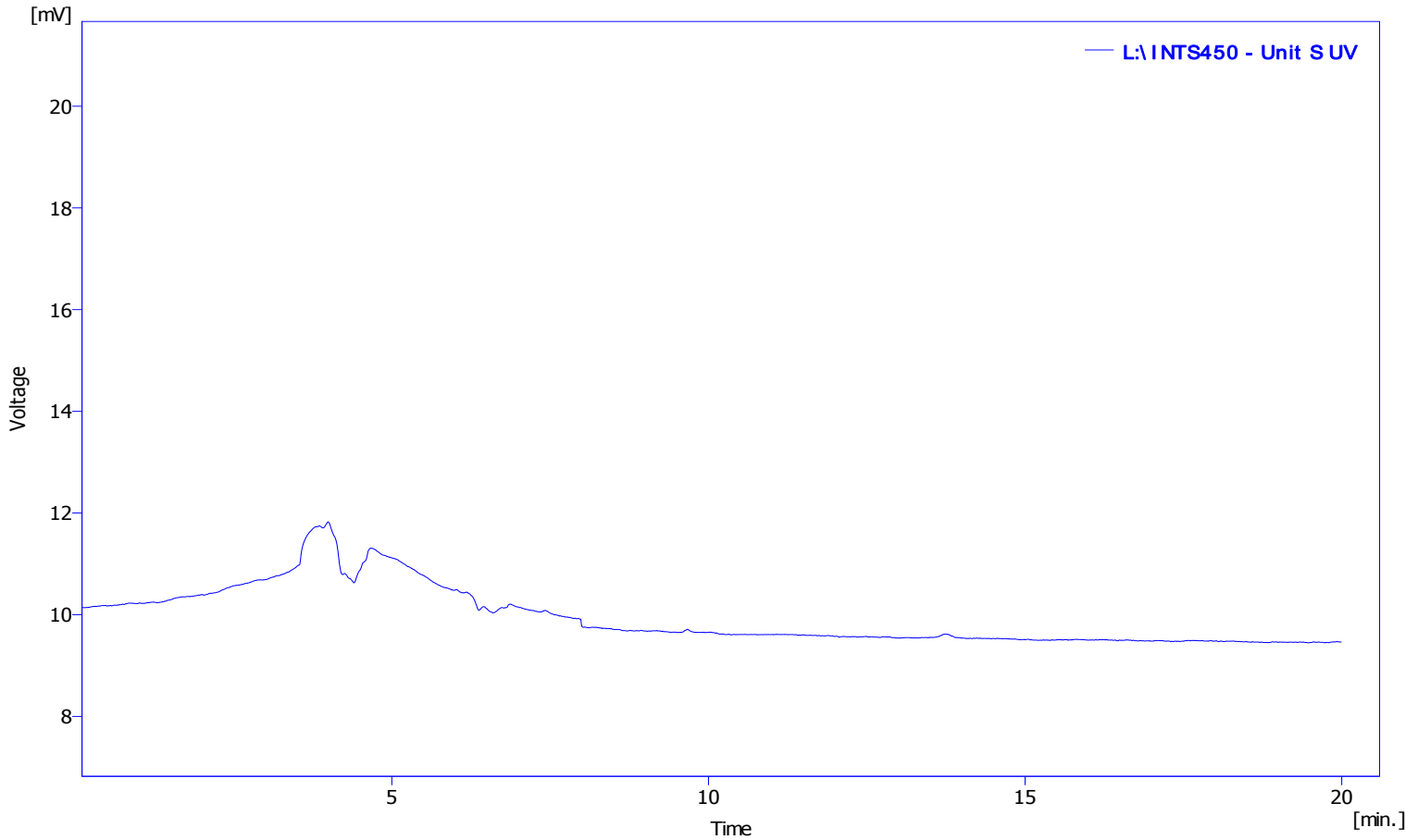
Result Table (Uncal - L:\INTS453 - Unit S UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	8.083	11109.158	1241.919	99.96	100.0	0.12
2	8.617	4.032	0.059	0.04	0.0	0.01
	Total	11113.190	1241.978	100.00	100.0	

**MT-1697**  
**Thiamine pyrophosphate, [3H]-**  
**Lot 846-131-0013-A-20110601-JP**

Chromatogram Info:

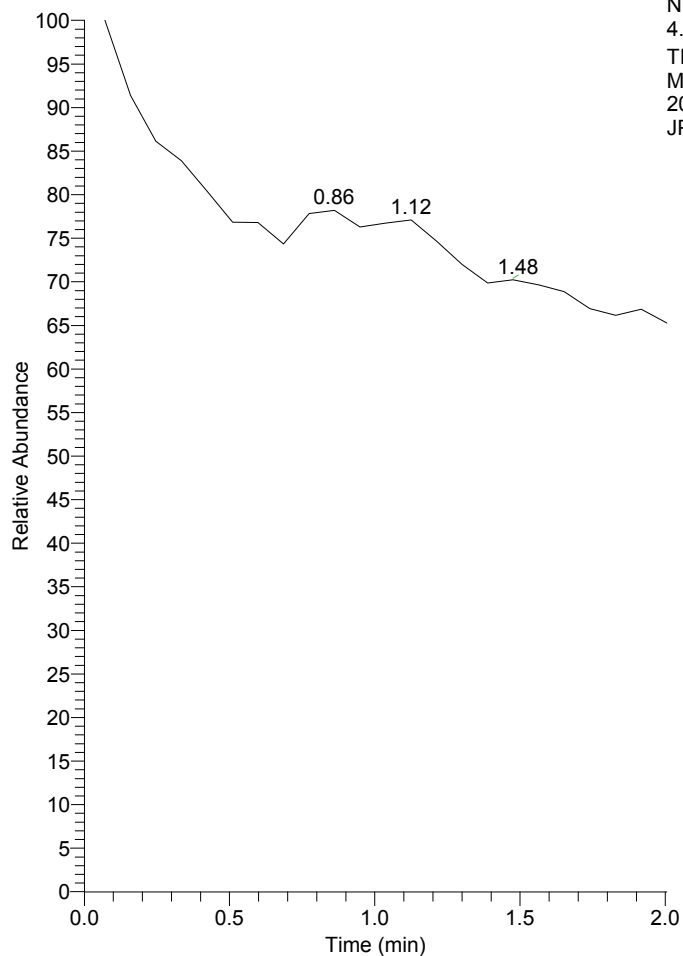
File Name	: L:\INTS450	File Created	: 3/31/2014 9:37:26 AM
Origin	: Acquired, Acquisition started 6/2/2011 11:09:47 AM	Acquired Date	: 6/2/2011 11:29:47 AM
Project	: Test	By	: Administrator
Method	: UnitS_20_min_run	By	: Administrator
Description	: UV trace of blank injection	Modified	: 3/31/2014 9:38 AM
Created	: 11/2/2009 11:15 AM		
Column	:	Detection	: UV 267nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - L:\INTS450 - Unit S 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:  
4.69E6  
TIC MS  
MT1697-  
20110601-  
JP

MT1697-20110601-JP#1-23 RT: 0.07-2.00 AV:

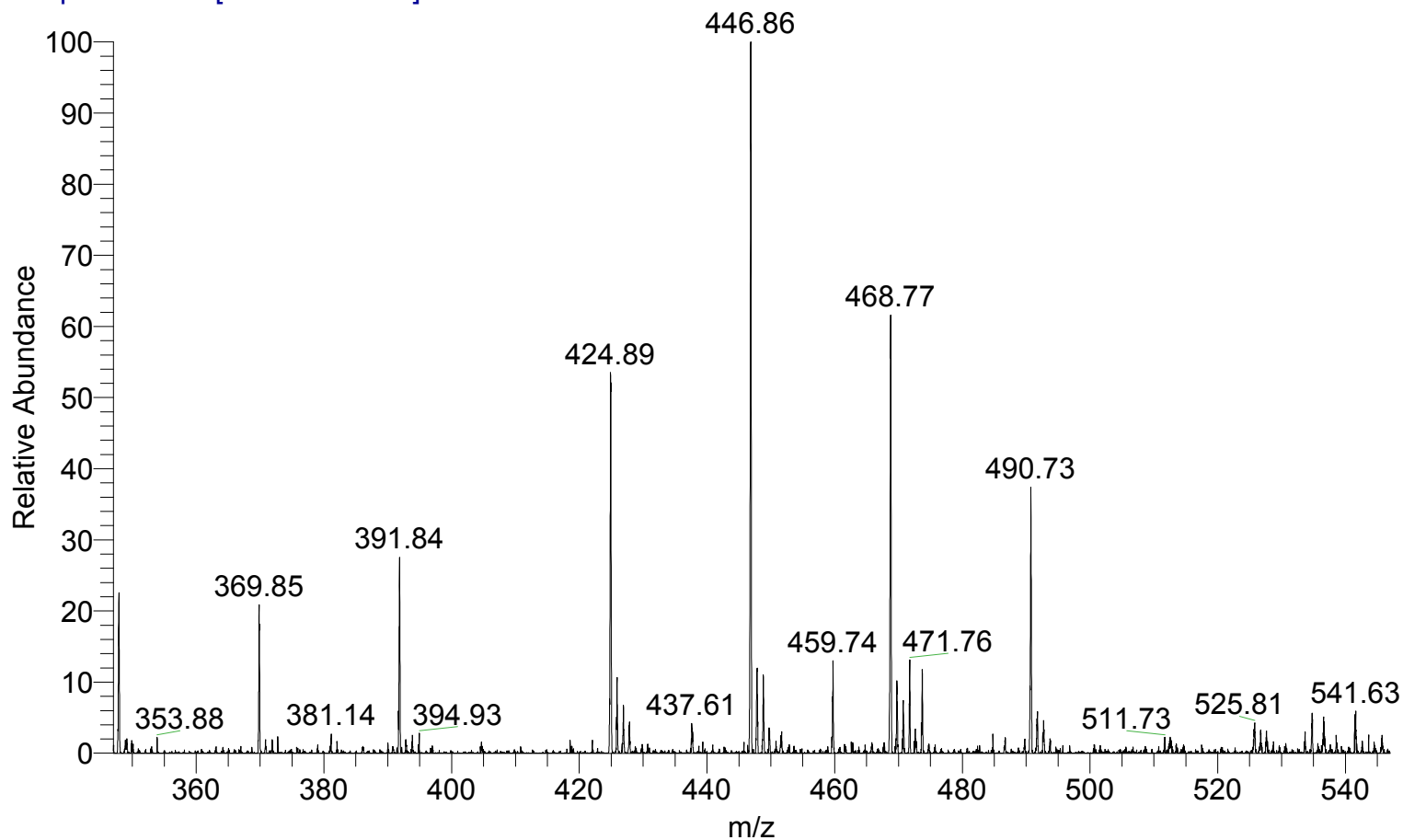
T: + p NSI Z ms [347.00-547.00]

m/z= 414.24-458.09

m/z	Intensity	Relative
423.64	524.8	0.08
424.90	345705.5	54.47
425.91	50308.0	7.93
426.90	36727.2	5.79
427.84	24084.3	3.79
428.78	5057.6	0.80
429.82	5201.1	0.82
430.81	6797.7	1.07
431.85	2986.7	0.47
432.88	2372.5	0.37
433.40	330.7	0.05
433.94	799.3	0.13
434.79	1990.7	0.31
435.77	929.1	0.15
436.82	1374.4	0.22
437.66	27625.6	4.35
438.69	3967.9	0.63
439.56	4051.4	0.64
440.89	4855.4	0.77
441.89	1309.2	0.21
442.85	4099.3	0.65
443.86	1127.5	0.18
444.77	1346.2	0.21
445.77	3943.6	0.62

MT1697-20110601-JP #1-23 RT: 0.07-2.00 AV: 23 NL: 1.79E4

T: + p NSI Z ms [347.00-547.00]



MT1697 3H NMR in MeOD  
Batch 20110601-JP

8.269  
8.211



1.335  
1.291

NAME MT1697-20110601-JP  
EXPNO 2  
PROCNO 1  
Date\_ 20110602  
Time 15.57  
INSTRUM spect  
PROBHD 5 mm DUX 3H-IH  
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

