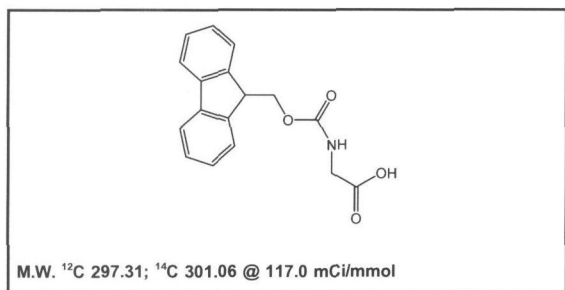




Product Data Sheet

MC-464

***n*-FMOC-glycine, [glycine-¹⁴C(U)]-**



Lot #: 642-129-117-A-20100729-SB

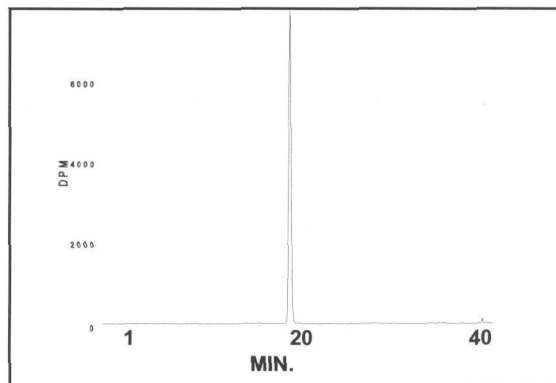
Specific Activity: 117.0 mCi/mmol

Concentration: 0.1 mCi/ml; 257.32 μ g/ml

Packaged in: Ethanol solution

Date of Analysis: August 31, 2010

Radiochemical Purity: 99.1%



HPLC ANALYSIS LOT 642-129-117-A-20100729-SB
File Name: int20679 Date and Time: 8/31/2010 1:44:39 PM
Unit 2 Radio

| Peak # | Area % | Time | Area |
|--------|--------|----------|-------------|
| 1 | 99.11 | 19.20670 | 13453.93505 |
| 2 | 0.08 | 20.07330 | 10.58210 |
| 3 | 0.17 | 20.33330 | 23.00267 |
| 4 | 0.64 | 38.99330 | 86.94887 |
| Totals | 100.00 | | 13574.46869 |

Stability and Storage Recommendation: The rate of decomposition is approximately 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.

MC-464

N-FMOC-glycine, [¹⁴C(U)]-

Lot 642-129-117-A-20100729-SB

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.

N-FMOC-glycine, [¹⁴C(U)]- concentration was 50.0 µCi/ml.

Volume of standard alone injection was 2.0 µl.

Volume of **N-FMOC-glycine, [¹⁴C(U)]-** alone injection was 2.0 µl.

Co-injection solution consisted of 2.0 µl **N-FMOC-glycine, [¹⁴C(U)]-** + 2.0 µl standard.

Volume of co-injection was 4.0 µl.

Volume of blank injection was 2.0 µl.

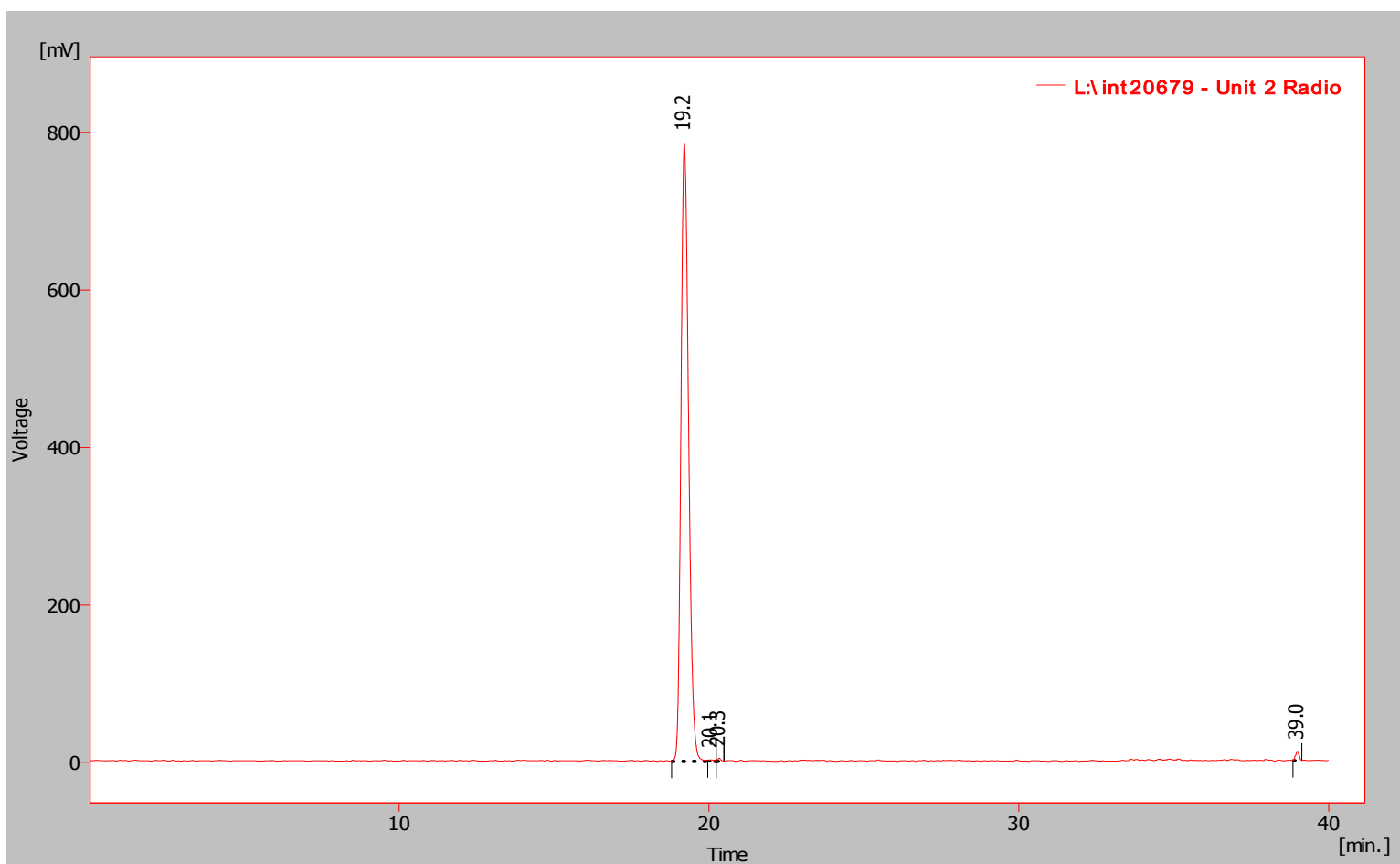
B) Mass spectrometry – Positive mode

C) NMR

MC-464
N-FMOC-glycine, [14C(U)]-
Lot 642-129-117-A-20100729-SB

Chromatogram Info:

| | | | |
|--------------|--|---------------|--------------------------|
| File Name | : L:\int20679 | File Created | : 10/29/2013 11:56:27 AM |
| Origin | : Acquired, Acquisition started 8/31/2010 1:04:40 PM | Acquired Date | : 8/31/2010 1:44:39 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : Radiochemical trace of 14C material alone | Modified | : 10/29/2013 12:12 PM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : Radiochemical |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



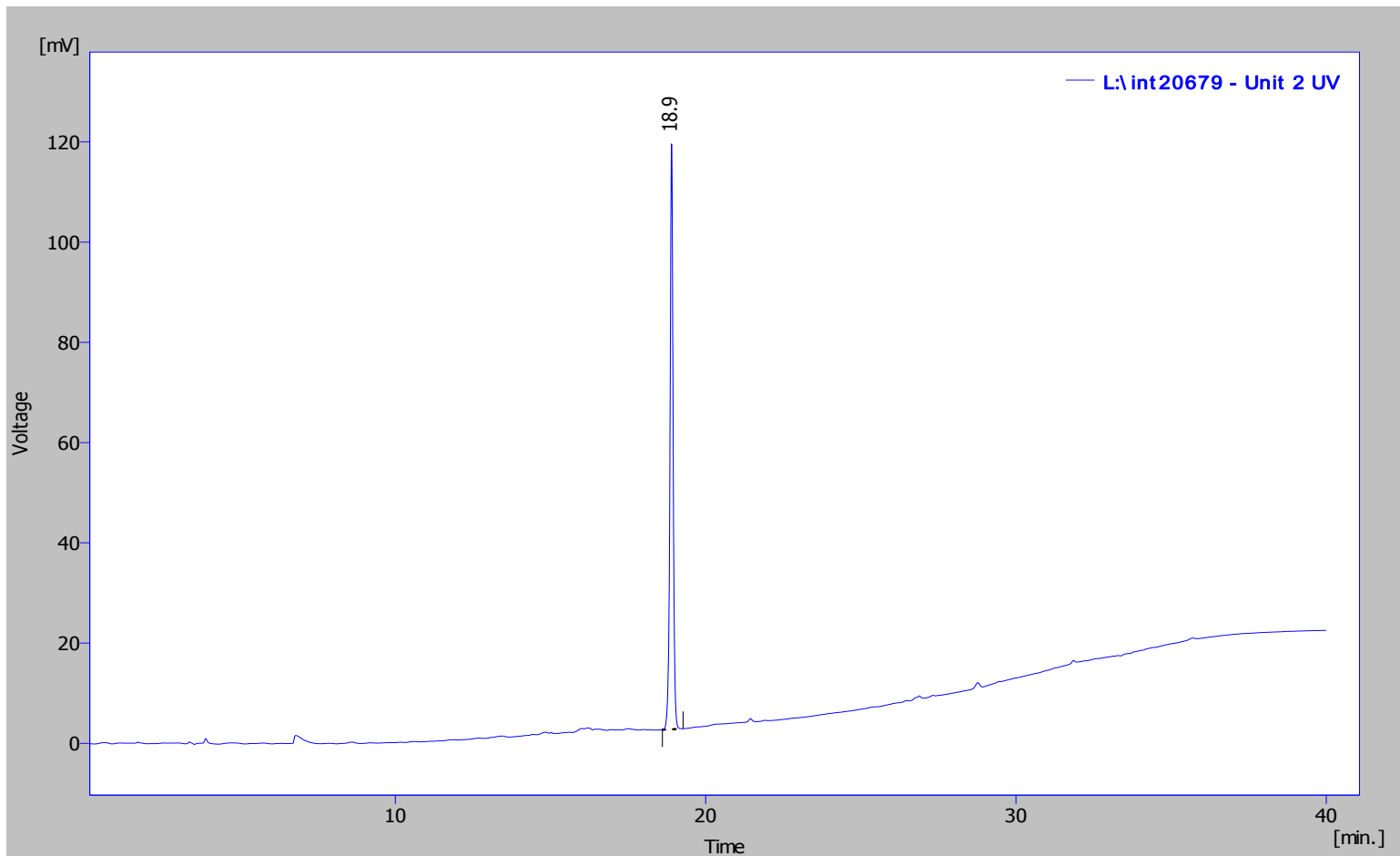
Result Table (Uncal - L:\int20679 - Unit 2 Radio)

| | Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.pl] |
|---|---------------|-------------------|----------|-------------|-------------|------------|--------------------|
| 1 | | 19.207 | 99.112 | 13453.935 | 784.394 | 97.950 | 27354.487 |
| 2 | | 20.073 | 0.078 | 10.582 | 1.128 | 0.141 | 68897.545 |
| 3 | | 20.333 | 0.169 | 23.003 | 3.664 | 0.458 | 159061.265 |
| 4 | | 38.993 | 0.641 | 86.949 | 11.627 | 1.452 | 429768.339 |
| | | Total | 100.000 | 13574.469 | 800.813 | 100.000 | |

MC-464
N-FMOC-glycine, [14C(U)]-
Lot 642-129-117-A-20100729-SB

Chromatogram Info:

| | | | |
|--------------|--|---------------|--------------------------|
| File Name | : L:\int20679 | File Created | : 10/29/2013 11:56:27 AM |
| Origin | : Acquired, Acquisition started 8/31/2010 1:04:40 PM | Acquired Date | : 8/31/2010 1:44:39 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : UV trace of 14C material alone | Modified | : 10/29/2013 12:14 PM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : UV 254nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



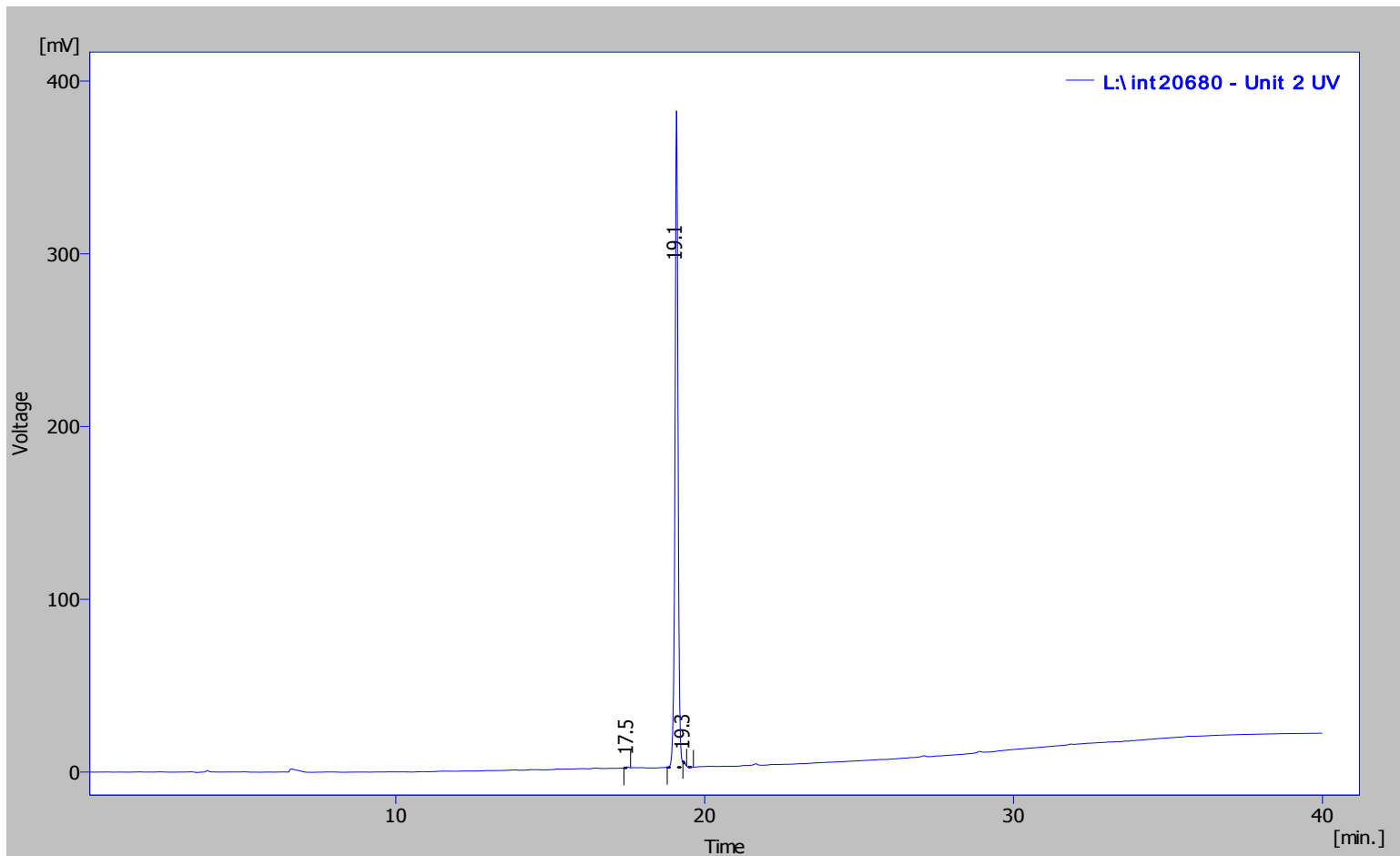
Result Table (Uncal - L:\int20679 - Unit 2 UV)

| | Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.pl] |
|---|---------------|-------------------|----------|-------------|-------------|------------|--------------------|
| 1 | | 18.900 | 100.000 | 812.479 | 116.819 | 100.000 | 154069.988 |
| | | Total | 100.000 | 812.479 | 116.819 | 100.000 | |

MC-464
N-FMOC-glycine, [14C(U)]-
Lot 642-129-117-A-20100729-SB

Chromatogram Info:

| | | | |
|--------------|--|---------------|--------------------------|
| File Name | : L:\int20680 | File Created | : 10/29/2013 11:56:27 AM |
| Origin | : Acquired, Acquisition started 8/31/2010 2:07:00 PM | Acquired Date | : 8/31/2010 2:47:00 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : UV trace of standard material alone | Modified | : 10/29/2013 12:15 PM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : UV 254nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



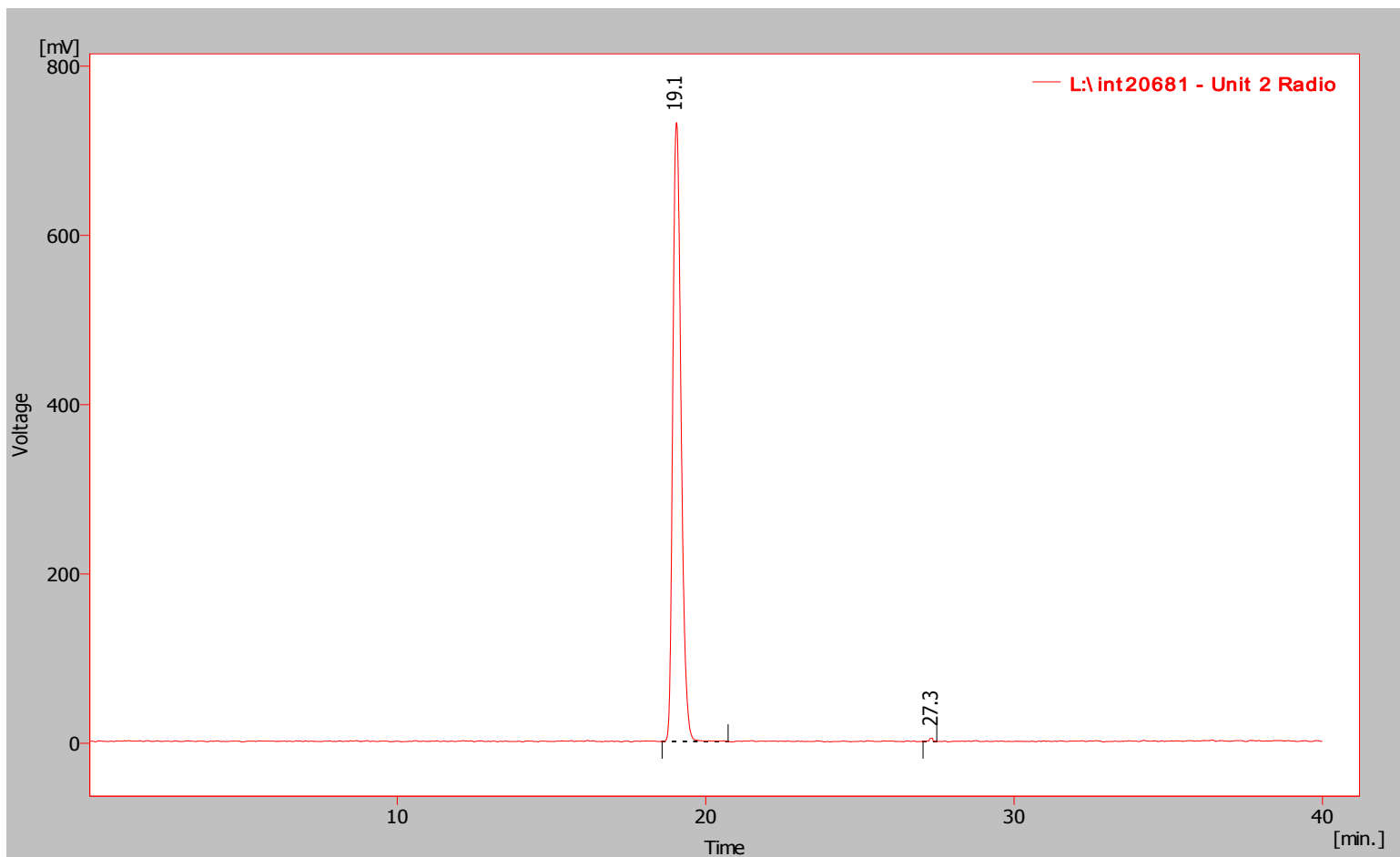
Result Table (Uncal - L:\int20680 - Unit 2 UV)

| | Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.pl] |
|---|---------------|-------------------|----------|-------------|-------------|------------|--------------------|
| 1 | | 17.500 | 0.126 | 3.281 | 0.660 | 0.173 | 225882.027 |
| 2 | | 19.087 | 99.691 | 2599.913 | 379.950 | 99.537 | 177383.204 |
| 3 | | 19.327 | 0.183 | 4.781 | 1.106 | 0.290 | 574805.846 |
| | | Total | 100.000 | 2607.975 | 381.716 | 100.000 | |

MC-464
N-FMOC-glycine, [14C(U)]-
Lot 642-129-117-A-20100729-SB

Chromatogram Info:

| | | | |
|--------------|---|---------------|--------------------------|
| File Name | : L:\int20681 | File Created | : 10/29/2013 11:56:27 AM |
| Origin | : Acquired, Acquisition started 8/31/2010 3:08:48 PM | Acquired Date | : 8/31/2010 3:48:47 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : Radiochemical trace of 14C material co-injected with standard | Modified | : 10/29/2013 12:18 PM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : Radiochemical |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



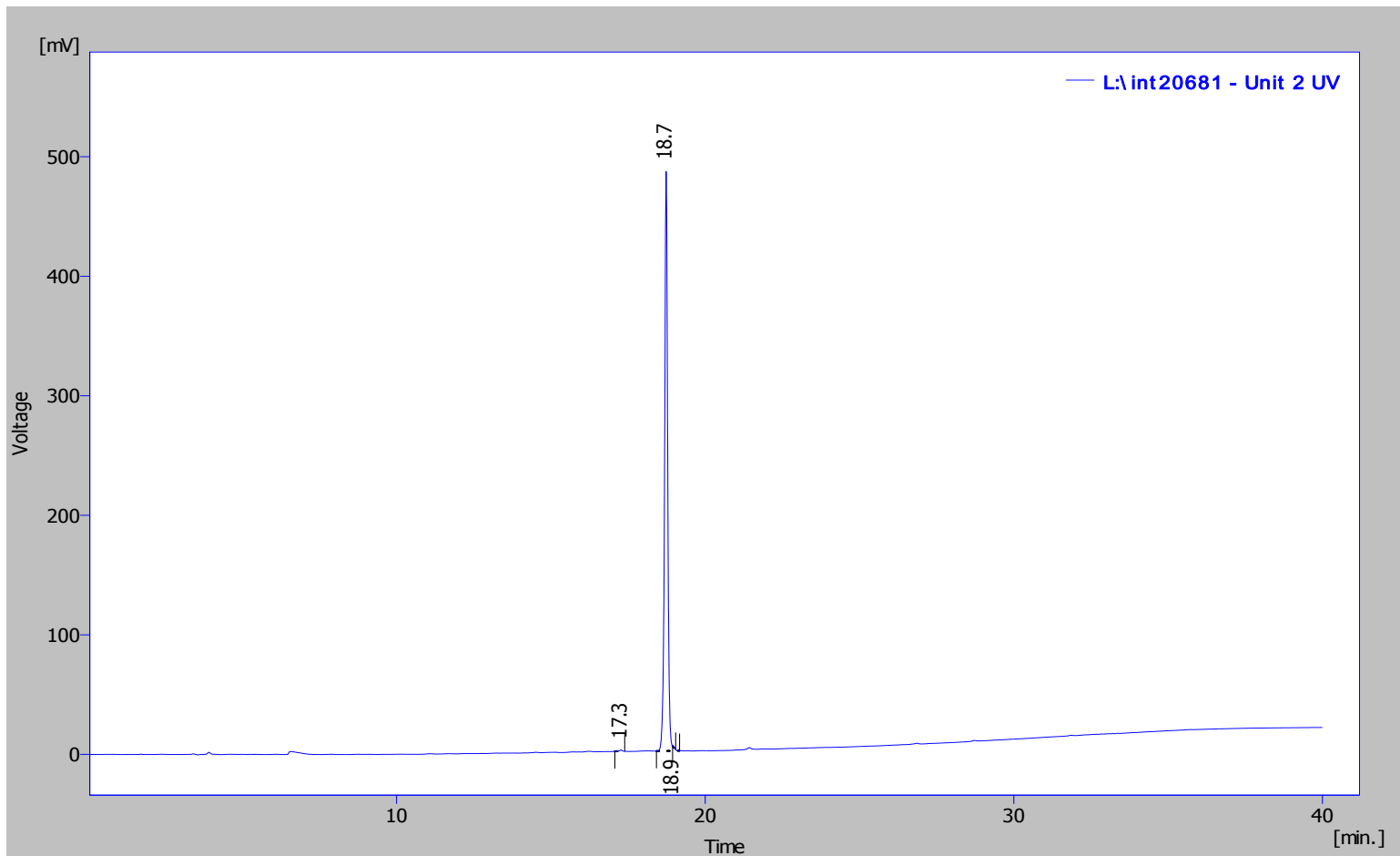
Result Table (Uncal - L:\int20681 - Unit 2 Radio)

| | Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.pl] |
|---|---------------|-------------------|----------|-------------|-------------|------------|--------------------|
| 1 | | 19.053 | 99.748 | 13671.908 | 731.227 | 99.453 | 23373.775 |
| 2 | | 27.347 | 0.252 | 34.573 | 4.025 | 0.547 | 25822.377 |
| | | Total | 100.000 | 13706.481 | 735.253 | 100.000 | |

MC-464
N-FMOC-glycine, [14C(U)]-
Lot 642-129-117-A-20100729-SB

Chromatogram Info:

| | | | |
|--------------|--|---------------|--------------------------|
| File Name | : L:\int20681 | File Created | : 10/29/2013 11:56:27 AM |
| Origin | : Acquired, Acquisition started 8/31/2010 3:08:48 PM | Acquired Date | : 8/31/2010 3:48:47 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : UV trace of 14C material co-injected with standard | Modified | : 10/29/2013 12:19 PM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : UV 254nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



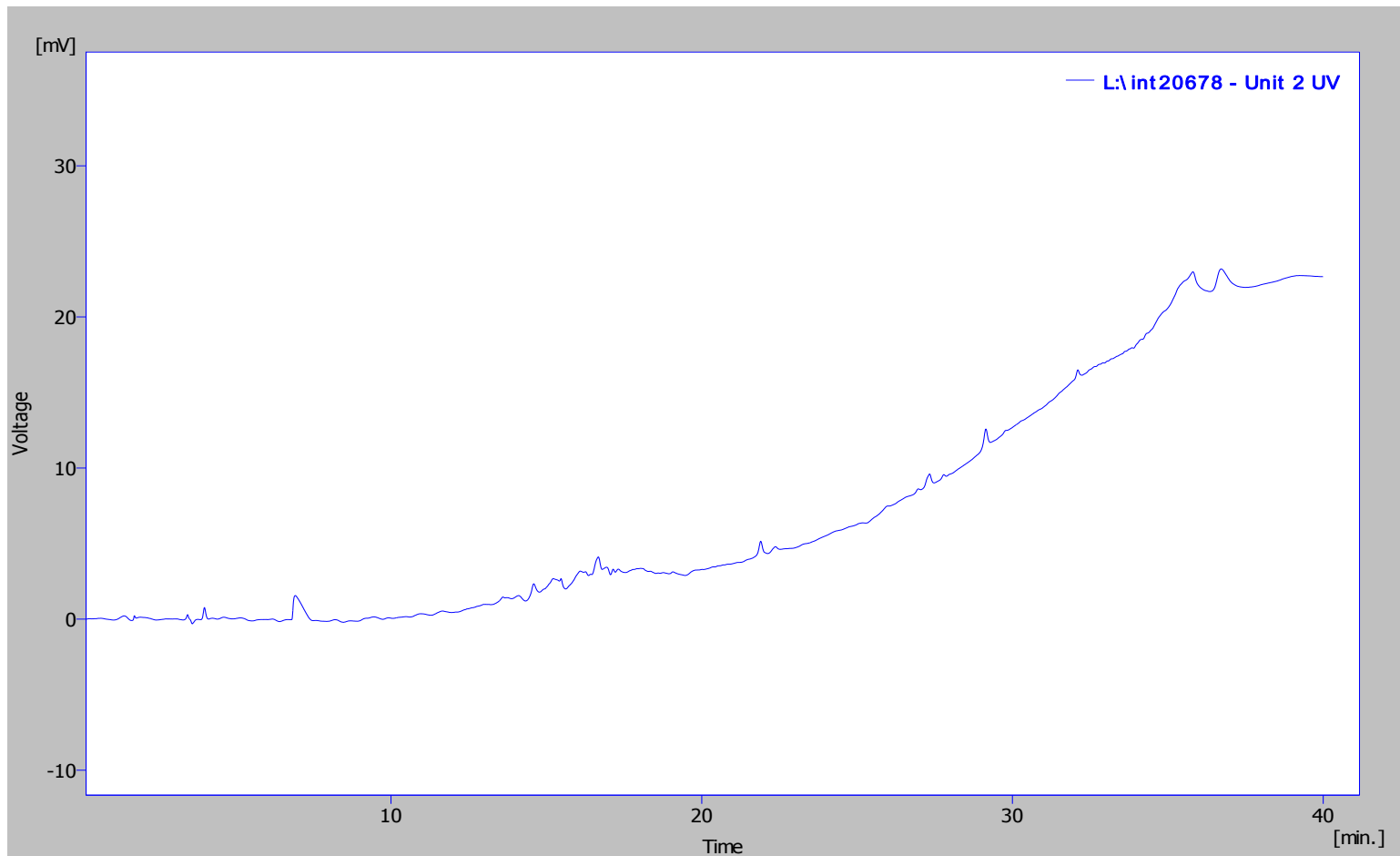
Result Table (Uncal - L:\int20681 - Unit 2 UV)

| | Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.pl] |
|---|---------------|-------------------|----------|-------------|-------------|------------|--------------------|
| 1 | | 17.273 | 0.190 | 6.449 | 1.109 | 0.228 | 238026.091 |
| 2 | | 18.733 | 99.741 | 3393.855 | 484.786 | 99.743 | 182078.643 |
| 3 | | 18.950 | 0.069 | 2.359 | 0.139 | 0.029 | 7161940.260 |
| | | Total | 100.000 | 3402.663 | 486.034 | 100.000 | |

MC-464
N-FMOC-glycine, [14C(U)]-
Lot 642-129-117-A-20100729-SB

Chromatogram Info:

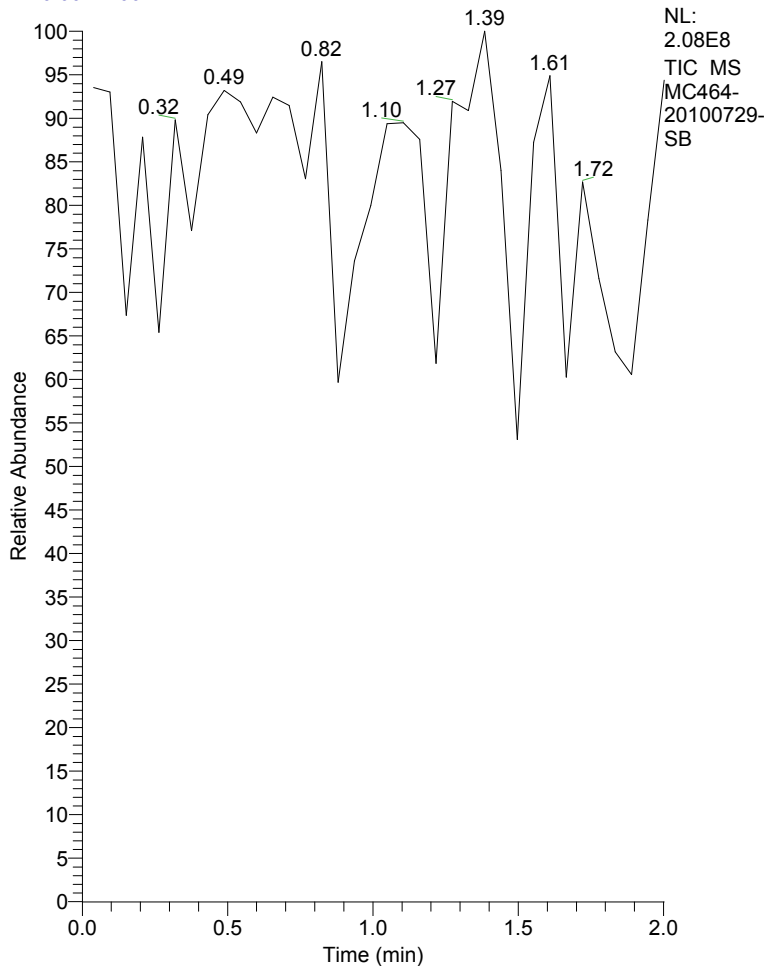
| | | | |
|--------------|---|---------------|--------------------------|
| File Name | : L:\int20678 | File Created | : 10/29/2013 11:56:27 AM |
| Origin | : Acquired, Acquisition started 8/31/2010 11:30:44 AM | Acquired Date | : 8/31/2010 12:10:43 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : UV trace of blank injection | Modified | : 10/29/2013 12:20 PM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : UV 254nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



Result Table (Uncal - L:\int20678 - Unit 2 UV)

| Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.p] |
|-------------------|-------------------|----------|-------------|-------------|------------|-------------------|
| No peak to report | | | | | | |

RT: 0.00 - 2.00



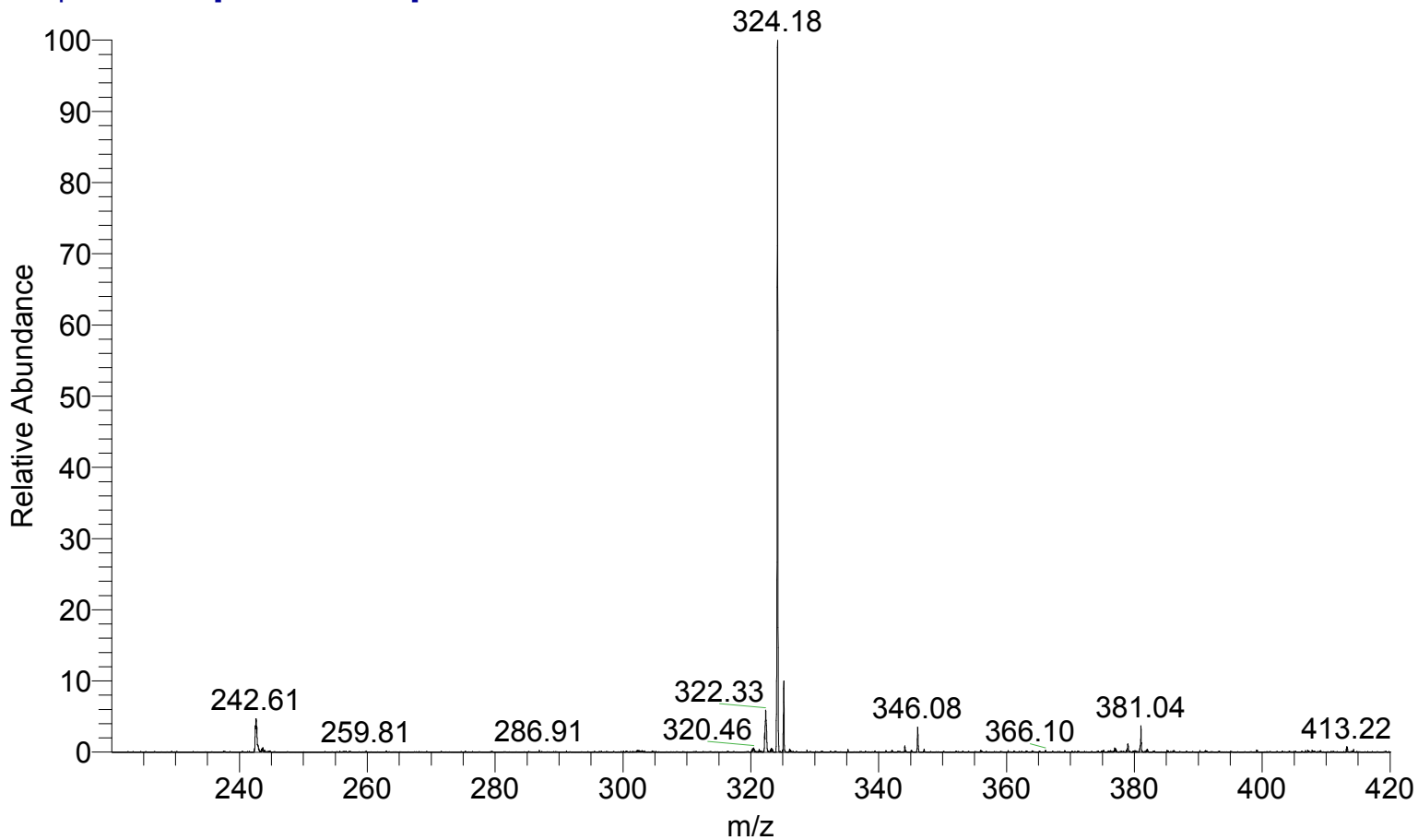
MC464-20100729-SB#1-36 RT: 0.04-2.00 AV:

T: + p NSI Z ms [220.00-420.00]

| m/z | Intensity | Relative |
|--------|-------------|----------|
| 302.40 | 519589.5 | 0.48 |
| 320.38 | 1297162.1 | 1.21 |
| 321.36 | 408034.6 | 0.38 |
| 322.34 | 11632557.0 | 10.85 |
| 323.22 | 927959.2 | 0.87 |
| 324.17 | 107200736.0 | 100.00 |
| 325.15 | 9624791.0 | 8.98 |
| 326.18 | 490537.2 | 0.46 |
| 344.11 | 774674.3 | 0.72 |
| 346.11 | 3781158.0 | 3.53 |
| 347.12 | 316169.9 | 0.29 |
| 377.00 | 888526.5 | 0.83 |
| 378.99 | 1604219.1 | 1.50 |
| 380.05 | 324099.0 | 0.30 |
| 381.00 | 3643398.3 | 3.40 |
| 381.96 | 593897.4 | 0.55 |
| 413.26 | 966427.3 | 0.90 |
| 414.17 | 335941.7 | 0.31 |

MC464-20100729-SB #1-36 RT: 0.04-2.00 AV: 36 NL: 3.92E6

T: + p NSI Z ms [220.00-420.00]



MC464 1H NMR in MeOD
Batch 20100729-SB

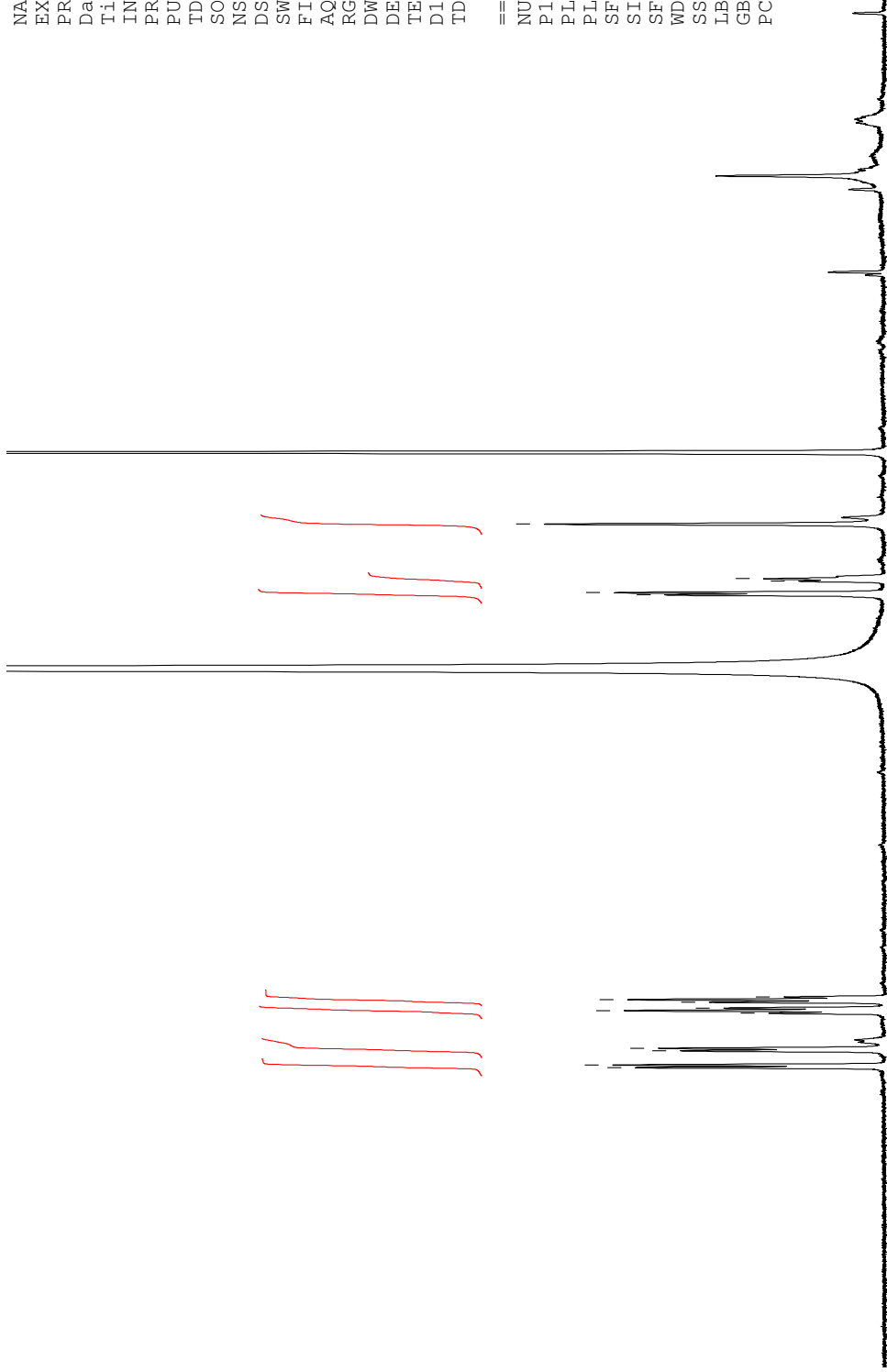


7.810
7.791
7.686
7.669
7.411
7.394
7.375
7.332
7.313
7.293

4.354
4.338
4.254
4.236
3.837

NAME MC464-20100729-SB
EXPNO 1
PROCNO 1
Date_ 20100827
Time 15.49
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT MeOD
NS 512
DS 2
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 4
DW 60.400 usec
DE 6.50 usec
TE 294.9 K
D1 1.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 14.50 usec
PL1 -0.70 dB
PL1W 10.03411102 W
SF01 400.1324710 MHz
SI 32768
SF 400.1300062 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00



9 8 7 6 5 4 3 2 1 ppm

2.00
2.00
2.03
1.97

2.03
1.03
2.01