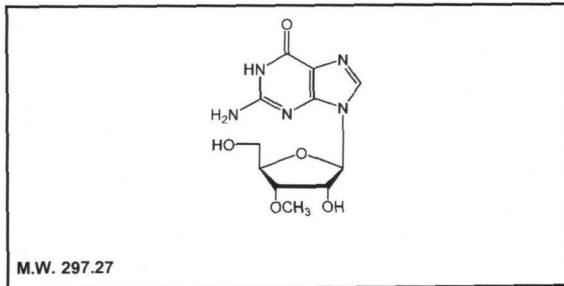




Product Data Sheet

M-1743

3'-(O-Methyl)-guanosine

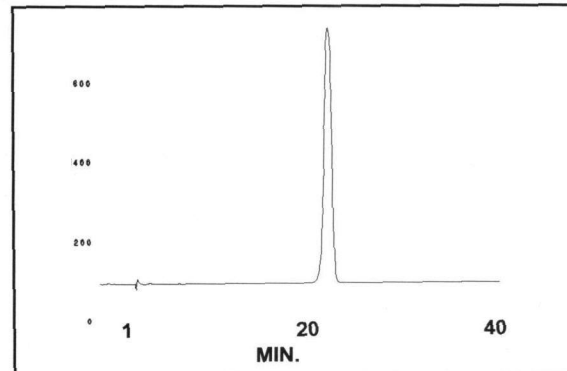


Lot #: 308-001-000-A-20110707-RTO

Packaged as: Solid

Date of Analysis: August 25, 2011

Chemical Purity @ 260nm: 99.9%



HPLC ANALYSIS LOT 308-001-000-A-20110707-RTO
File Name: int21277 Date and Time: 8/25/2011 3:40:19 PM
Unit 2 UV

| Peak # | Area % | Time | Area |
|--------|--------|----------|------------|
| 1 | 100.00 | 22.86330 | 3399.78446 |
| Totals | 100.00 | | 3399.78446 |

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.

M-1743

3'-(O-Methyl)guanosine

Lot 308-001-000-A-20110707-RTO

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

Concentrations and volumes:

3'-(O-Methyl)guanosine solution concentration was 2.0 mg/ml.

Volume of **3'-(O-Methyl)guanosine** injection was 1.0 μ l.

Volume of blank injection was 1.0 μ l.

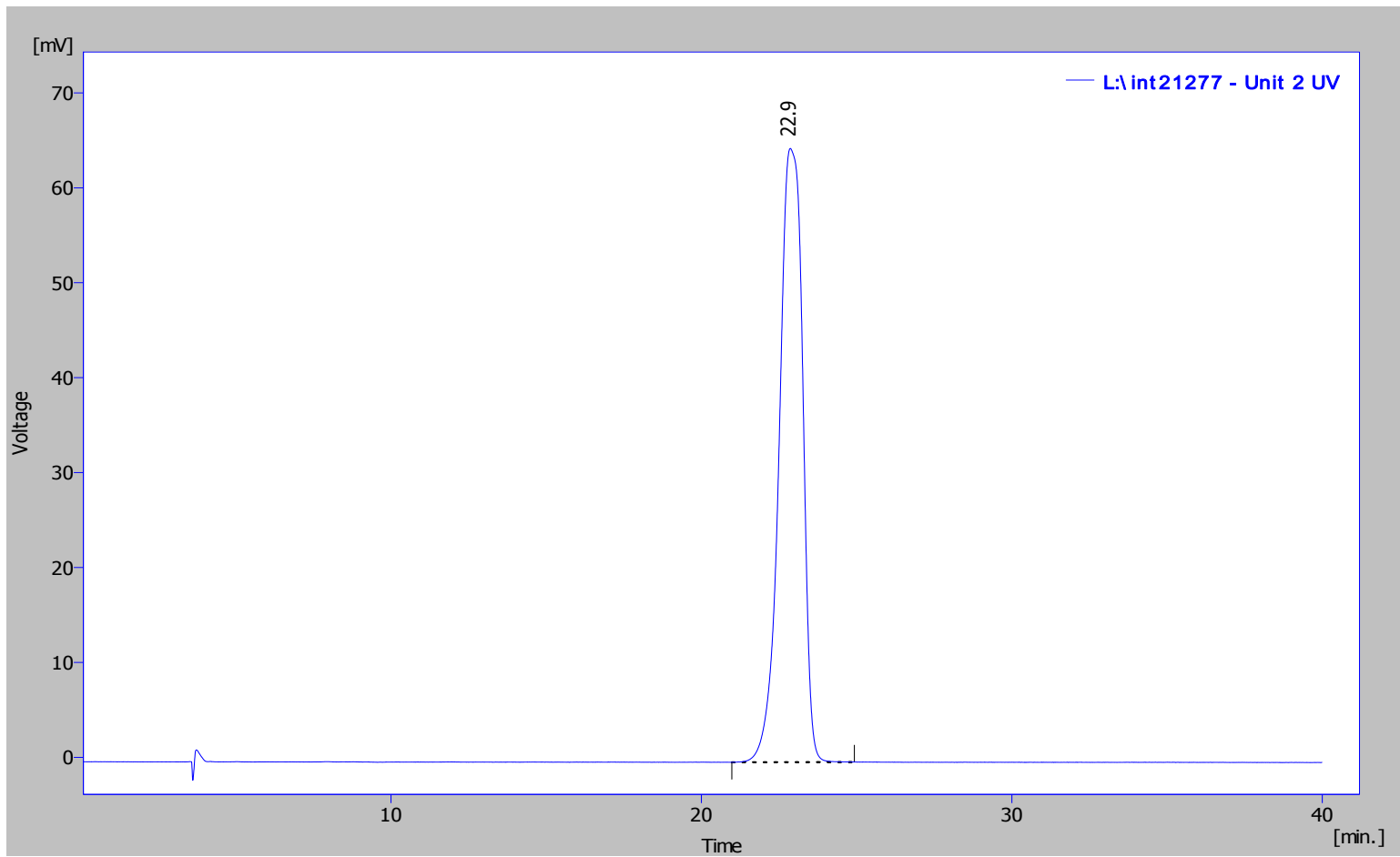
B) Mass spectrometry – Negative mode

C) NMR

M-1743
3'-(O-Methyl)guanosine
Lot 308-001-000-A-20110707-RTO

Chromatogram Info:

| | | | |
|--------------|--|---------------|-------------------------|
| File Name | : L:\int21277 | File Created | : 11/15/2013 8:53:21 AM |
| Origin | : Acquired, Acquisition started 8/25/2011 3:00:20 PM | Acquired Date | : 8/25/2011 3:40:19 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : UV trace of 3'-(O-Methyl)guanosine | Modified | : 11/15/2013 8:56 AM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : UV 260nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



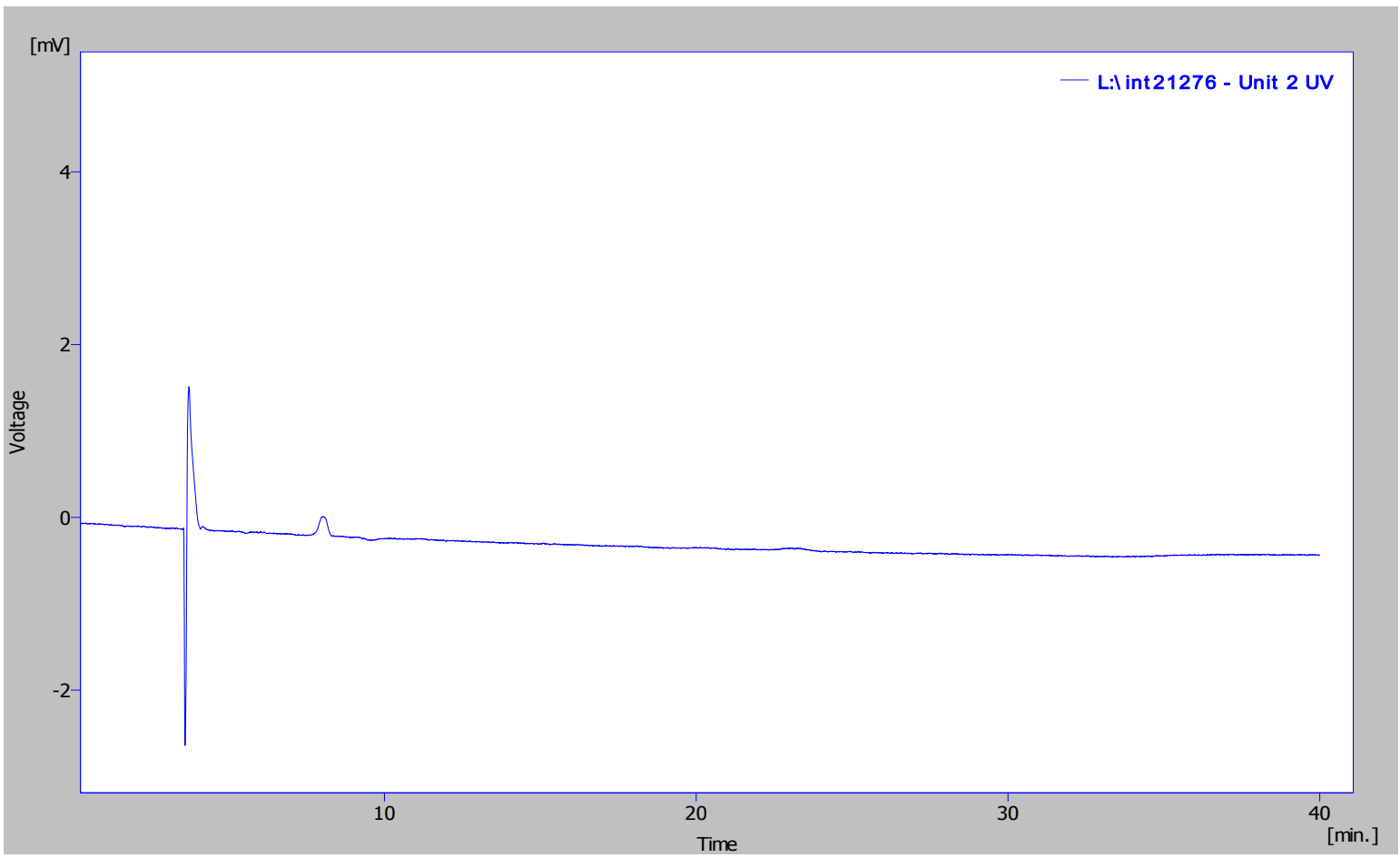
Result Table (Uncal - L:\int21277 - Unit 2 UV)

| | Compound Name | Reten. Time [min] | Area [%] | Area [mV.s] | Height [mV] | Height [%] | Efficiency [th.pl] |
|---|---------------|-------------------|----------|-------------|-------------|------------|--------------------|
| 1 | | 22.863 | 100.00 | 3399.784 | 64.659 | 100.000 | 4306.864 |
| | | Total | 100.00 | 3399.784 | 64.659 | 100.000 | |

M-1743
3'-(O-Methyl)guanosine
Lot 308-001-000-A-20110707-RTO

Chromatogram Info:

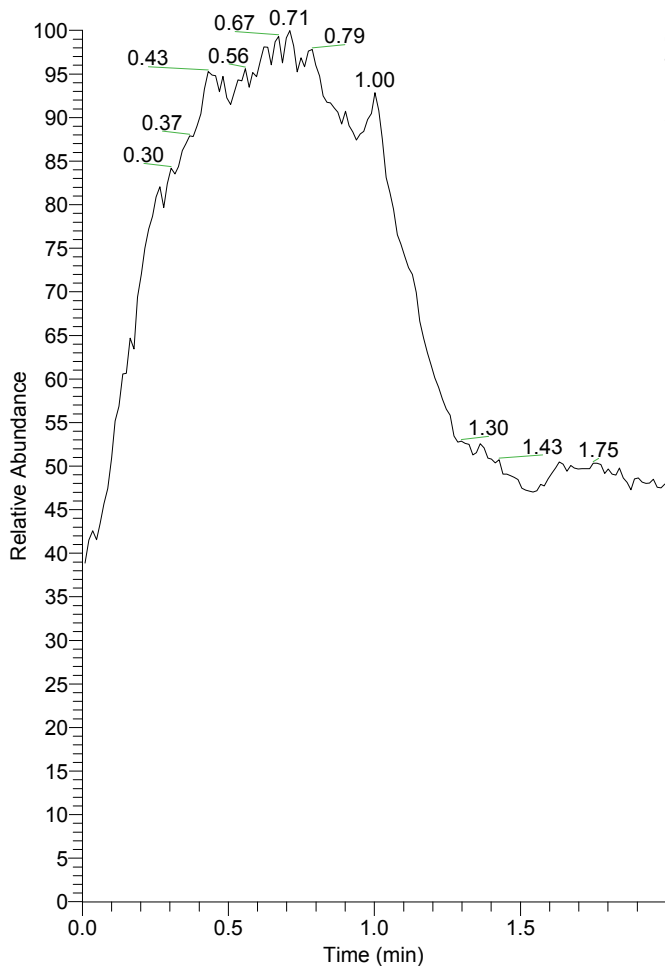
| | | | |
|--------------|--|---------------|-------------------------|
| File Name | : L:\int21276 | File Created | : 11/15/2013 8:53:21 AM |
| Origin | : Acquired, Acquisition started 8/25/2011 2:13:08 PM | Acquired Date | : 8/25/2011 2:53:08 PM |
| Project | : Test | By | : Administrator |
| Method | : Unit2-40minrun | By | : Administrator |
| Description | : UV trace of blank injection | Modified | : 11/15/2013 8:59 AM |
| Created | : 6/16/2007 8:19 AM | | |
| Column | : | Detection | : UV 260nm |
| Mobile Phase | : | Temperature | : |
| Flow Rate | : | Pressure | : |
| Note | : | | |



Result Table (Uncal - L:\int21276 - 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 - 1.99



NL:
6.60E7
TIC MS
M1743-
20110707-
RTO-MS

M1743-20110707-RTO-MS#1-156 RT: 0.01-1.99

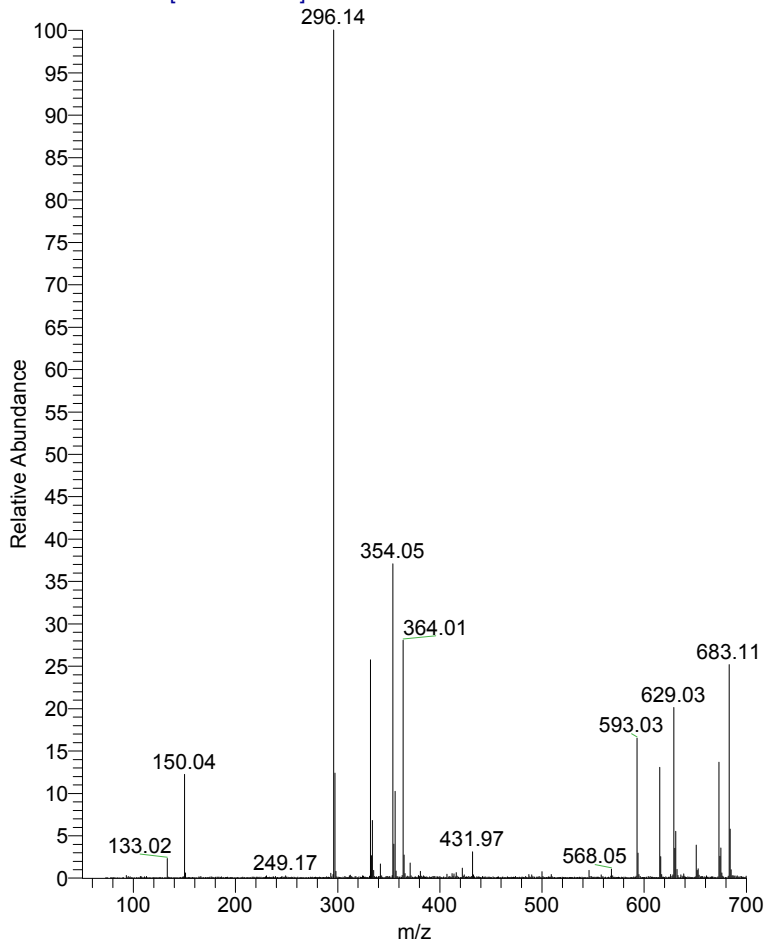
T: - c NSI Full ms [50.00-700.00]

m/z = 292.92-306.53

| m/z | Intensity | Relative |
|--------|------------|----------|
| 295.44 | 43104.5 | 0.41 |
| 296.14 | 10544138.8 | 100.00 |
| 297.17 | 1302594.2 | 12.35 |
| 298.18 | 81097.4 | 0.77 |
| 299.10 | 15125.1 | 0.14 |
| 299.98 | 1994.3 | 0.02 |
| 301.08 | 9877.2 | 0.09 |
| 301.82 | 4154.7 | 0.04 |
| 302.94 | 6777.8 | 0.06 |
| 303.84 | 1958.2 | 0.02 |
| 305.01 | 10922.4 | 0.10 |
| 306.10 | 1693.4 | 0.02 |

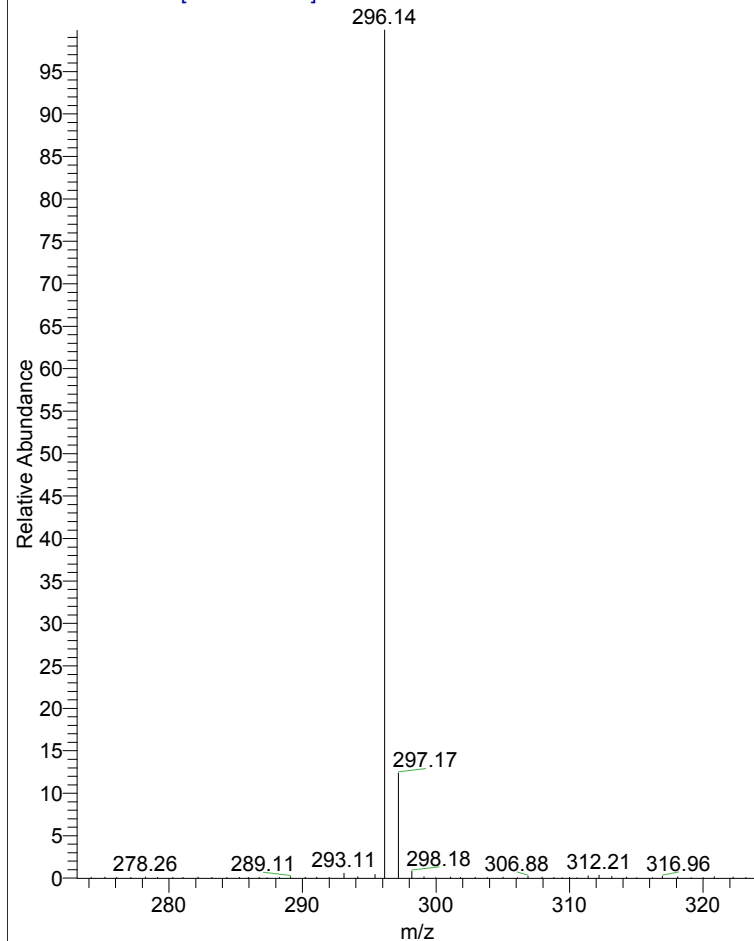
M1743-20110707-RTO-MS #1-156 RT: 0.01-1.99 AV: 156 NL: 1.05E7

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

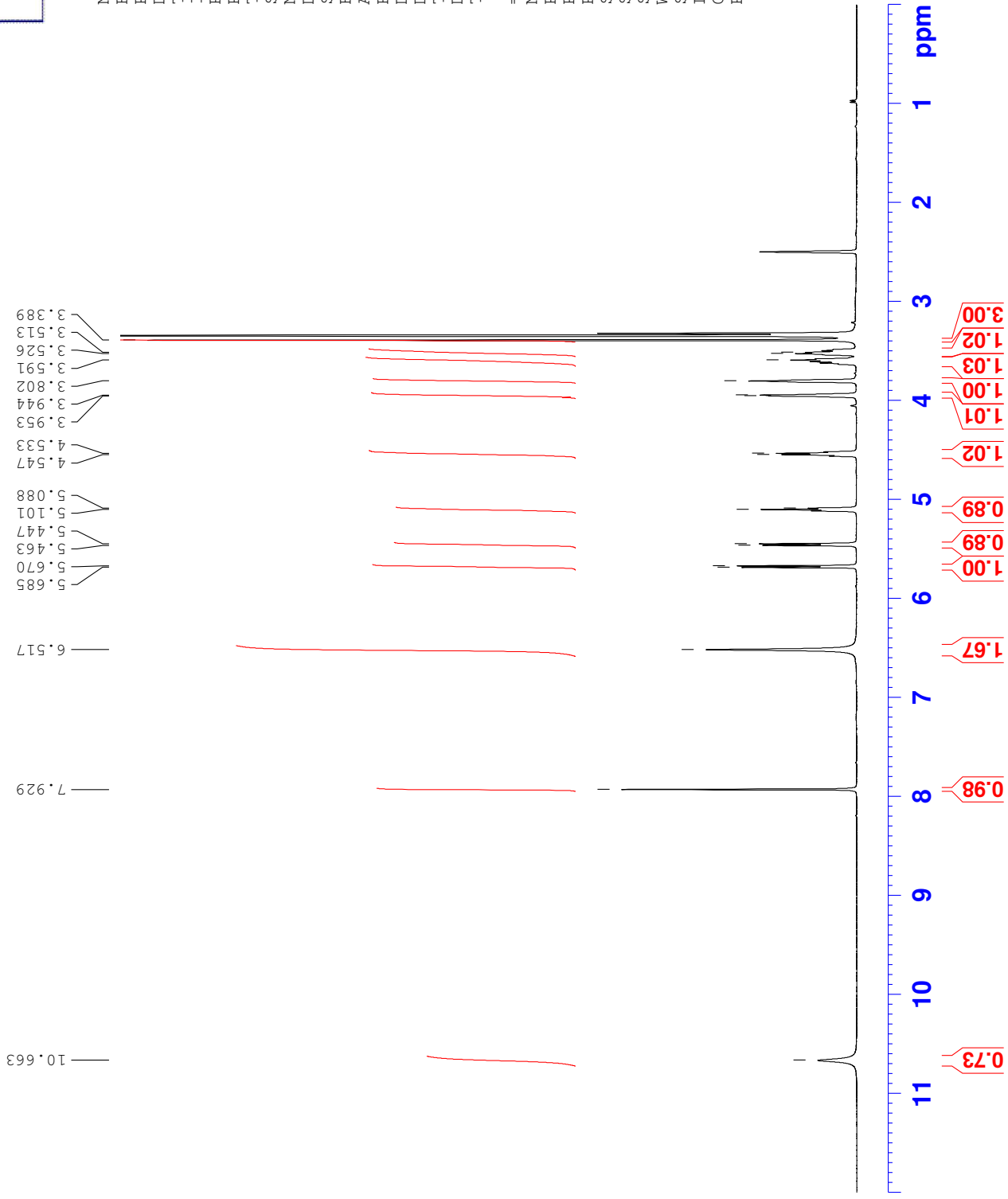


M1743-20110707-RTO-MS #1-156 RT: 0.01-1.99 AV: 156 NL: 1.05E7

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



M1743 1H NMR in DMSO
Batch 20110707-R10



NAME M1743-20110707-R10
EXPNO 3
PROCNO 1
Date_ 20110825
Time 12.39
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 512
DS 2
SWH 8012.820 Hz
FIDRES 0.122266 Hz
AQ 4.0894966 sec
RG 574.7
DW 62.400 use
DE 6.50 use
TE 294.6 K
D1 1.00000000 sec
TD0 1

==== CHANNEL f1 =====
NUC1 1H
P1 14.50 use
PL1 -0.70 dB
PL1W 10.03411102 W
SFO1 400.1324710 MHz
SI 32768
SF 400.1300042 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00