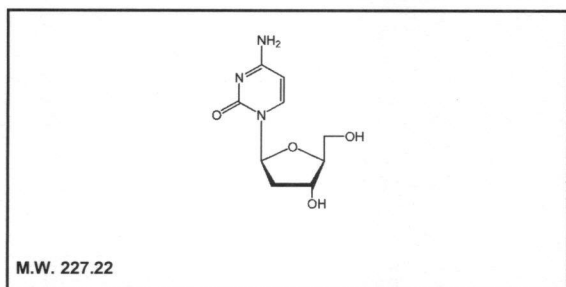




Product Data Sheet

M-325

β -L-2'-Deoxycytidine

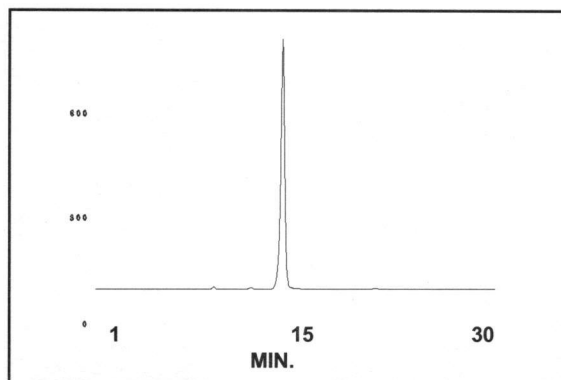


Lot #: 208-135-000-HEH-20010703-Q

Packaged as: Lyophilized solid

Date of Analysis: November 14, 2011

Chemical Purity @ 270nm: 99.0%



HPLC ANALYSIS LOT 208-135-000-HEH-20010703-Q
File Name: int21382 Date and Time: 11/14/2011 2:55:52 P
Unit 2 UV

Peak #	Area %	Time	Area
1	0.54	8.87000	8.33474
2	0.38	11.67000	5.82523
3	99.09	14.08000	1535.64572
Totals	100.00		1549.80569

Stability and Storage Recommendation: The rate of decomposition is approximately 0.1% for the first six months after purification when stored 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.

M-325

β -L-2'-Deoxycytidine

Lot 208-135-000-HEH-20010703-Q

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

Concentrations and volumes:

β -L-2'-Deoxycytidine concentration was 1.7 mg/ml.

Volume of **β -L-2'-Deoxycytidine** injection was 1.0 μ l.

Volume of blank injection was 1.0 μ l.

B) Mass spectrometry- Positive mode

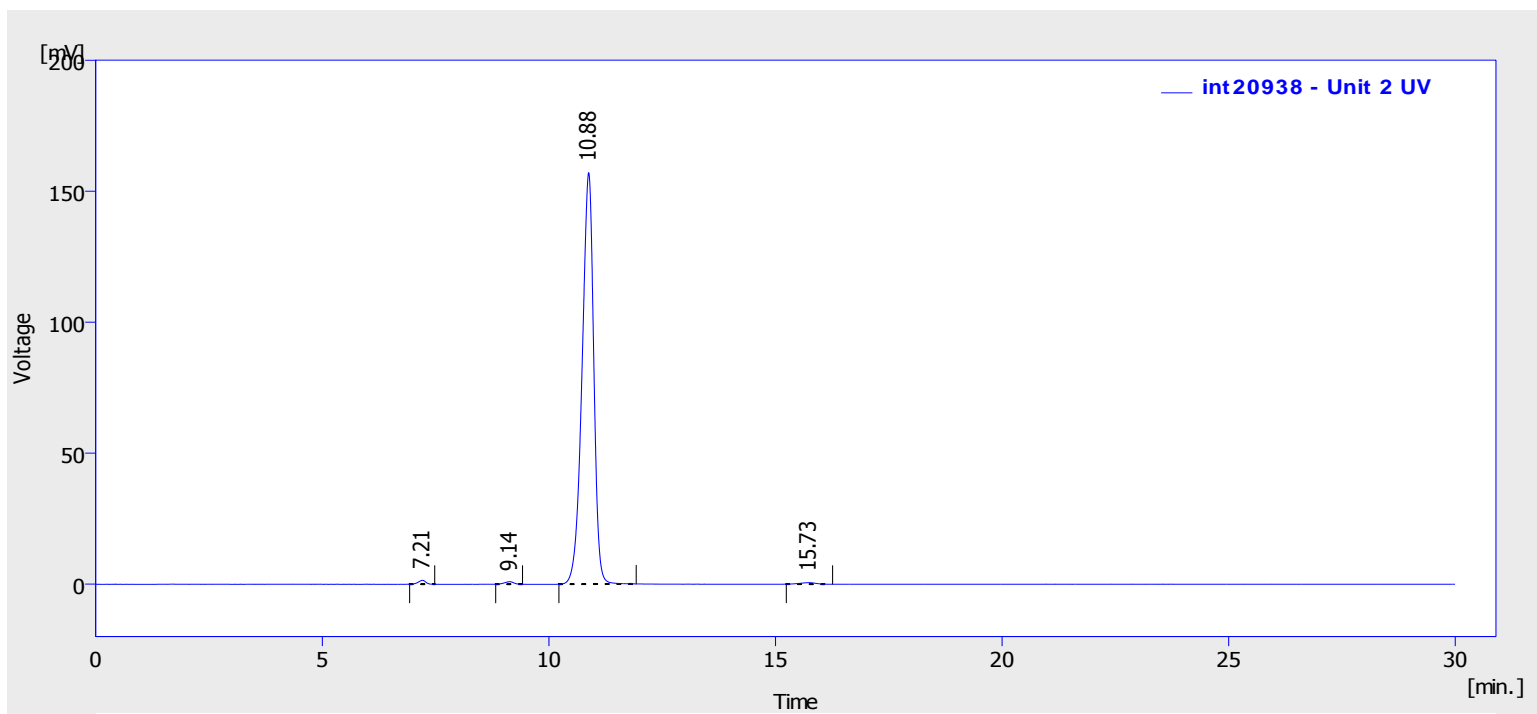
C) NMR

D) UV spectrum

M-325
β-L-2'-Deoxycytidine
Lot 208-135-000-HEH-20010703-Q

Chromatogram Info:

File Name	: int20938	File Created	: 2/9/2011 12:09:13 PM
Origin	: Acquired	Acquired Date	: 2/9/2011 12:09:12 PM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of β-L-2'-Deoxycytidine	Modified	: 2/10/2011 4:11 PM
Created	: 7/20/2007 9:39 AM	Detection	: 270nm
Column	: Supelco Discovery C18 4.6 x 250mm	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



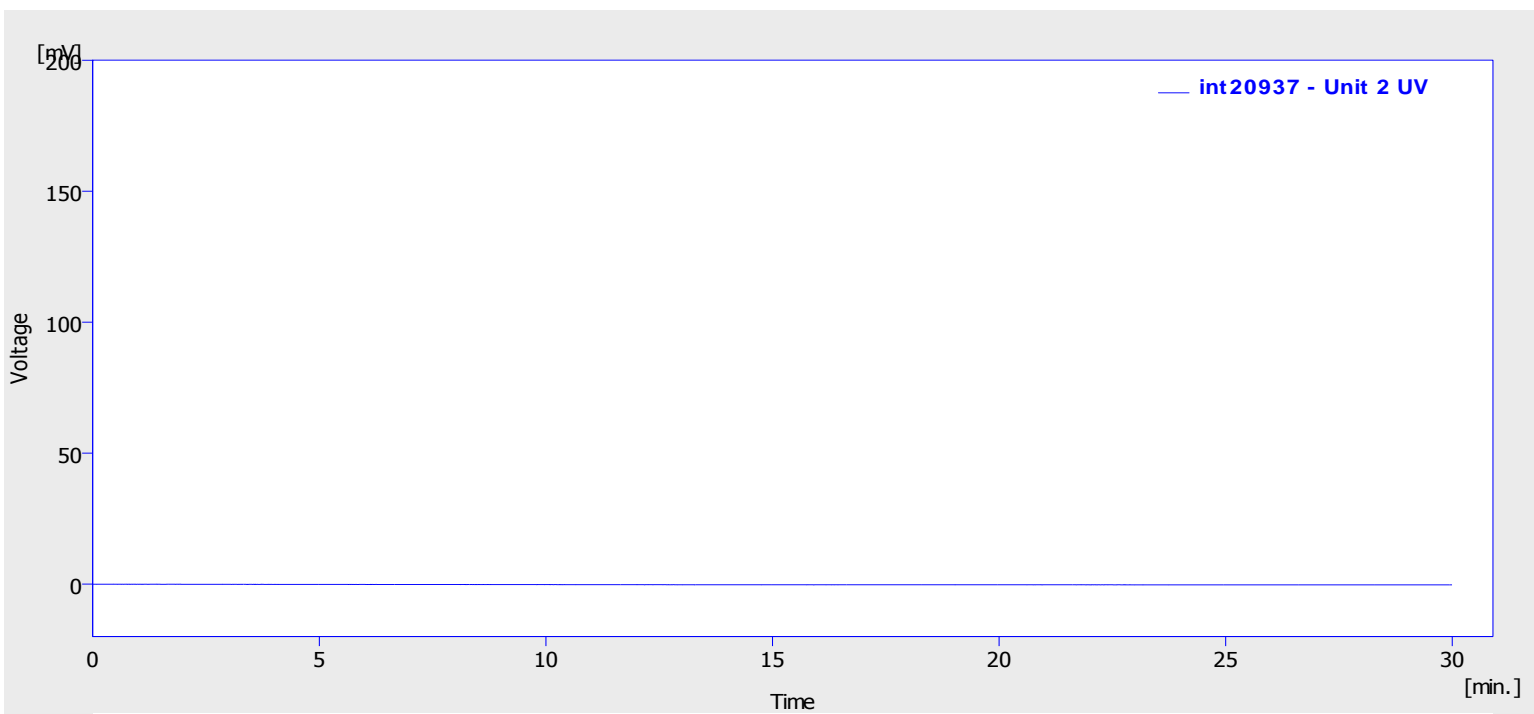
Result Table (Uncal - int20938 - Unit 2 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	7.207	17.120	1.484	0.60	0.9	0.18
2	9.137	13.589	0.970	0.48	0.6	0.22
3	10.877	2814.472	157.101	98.43	98.1	0.28
4	15.730	14.235	0.579	0.50	0.4	0.40
	Total	2859.417	160.134	100.00	100.0	

M-325
β-L-2'-Deoxycytidine
Lot 208-135-000-HEH-20010703-Q

Chromatogram Info:

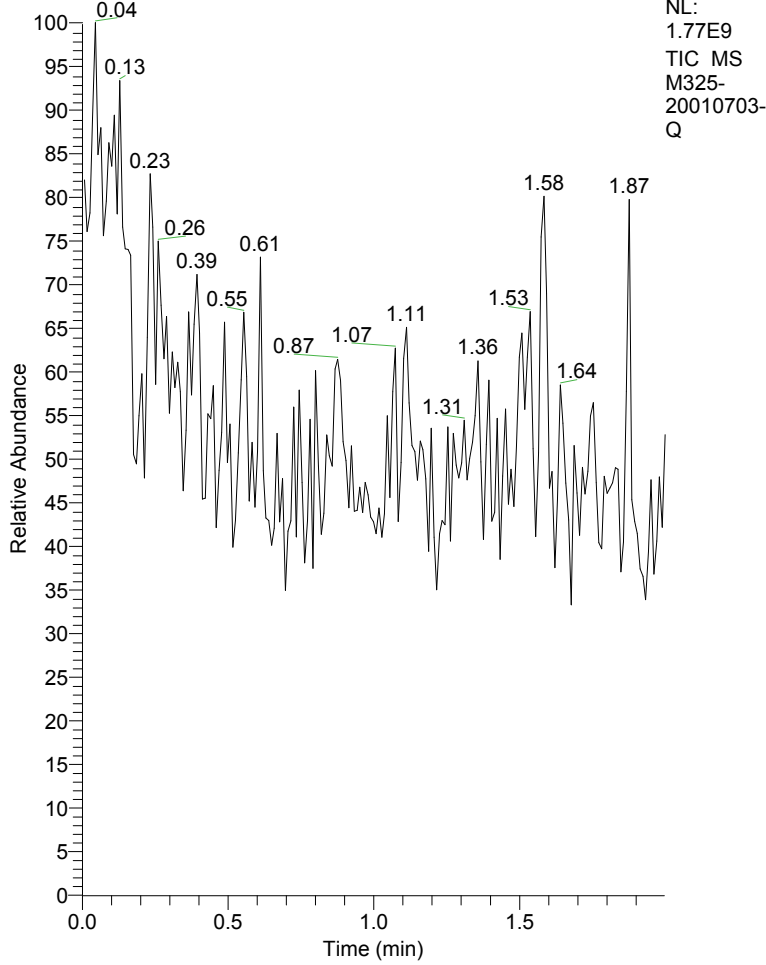
File Name	: int20937	File Created	: 2/9/2011 11:24:00 AM
Origin	: Acquired	Acquired Date	: 2/9/2011 11:24:00 AM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of blank injection	Modified	: 2/10/2011 4:12 PM
Created	: 7/20/2007 9:39 AM	Detection	: 270nm
Column	: Supelco Discovery C18 4.6 x 250mm	Temperature	:
Mobile Phase	:	Pressure	:
Flow Rate	:	Note	:



Result Table (Uncal - int20937 - Unit 2 UV)

Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
No peak to report					

RT: 0.00 - 2.00



NL:
1.77E9
TIC MS
M325-
20010703-
Q

M325-20010703-Q#1-212 RT: 0.01-2.00 AV:

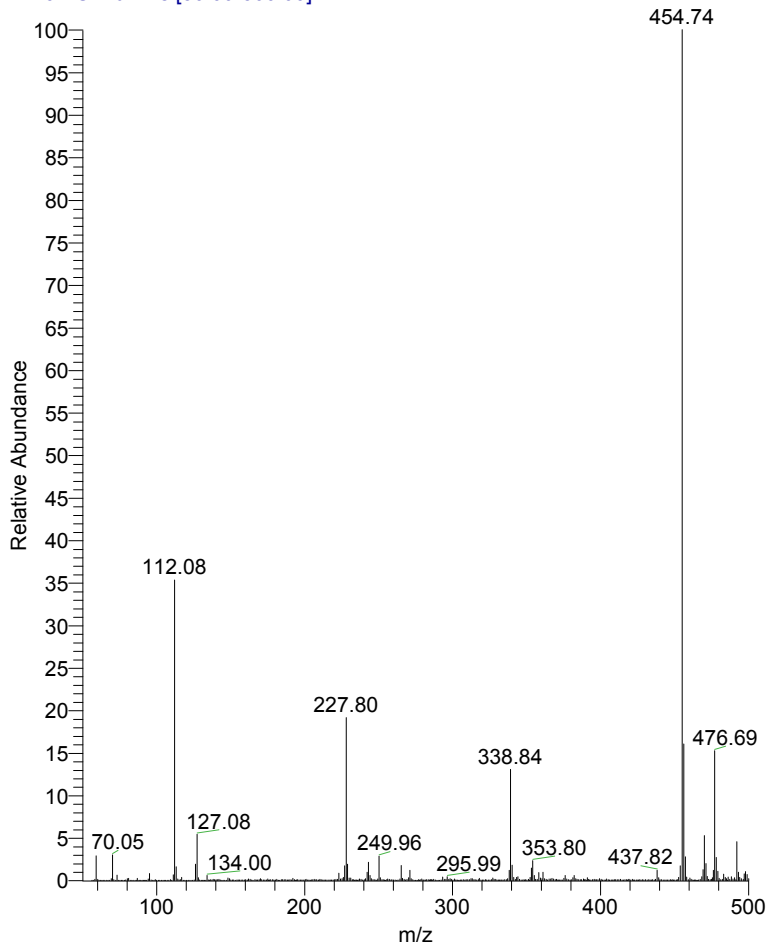
T: + c NSI Full ms [50.00-500.00]

m/z = 223.66-240.99

m/z	Intensity	Relative
223.98	572162.3	0.99
224.97	675219.0	1.16
225.88	1119631.9	1.93
226.82	5255169.9	9.06
227.80	58013778.4	100.00
228.87	5781782.3	9.97
229.90	815203.5	1.41
230.89	862851.6	1.49
231.93	256369.7	0.44
232.84	306238.5	0.53
233.45	6704.5	0.01
233.97	149850.4	0.26
234.94	173033.8	0.30
235.44	0.2	0.00
235.98	164490.1	0.28
236.87	493923.5	0.85
237.85	436289.5	0.75
238.92	221873.7	0.38
240.06	312114.4	0.54

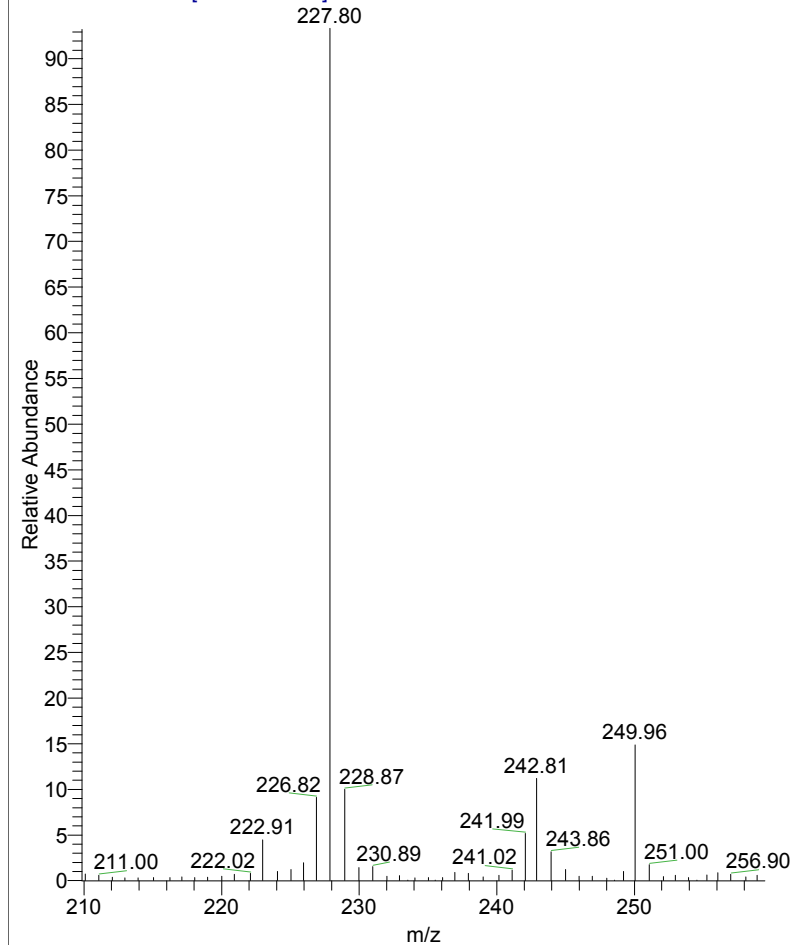
M325-20010703-Q #1-212 RT: 0.01-2.00 AV: 212 NL: 3.03E8

T: + c NSI Full ms [50.00-500.00]



M325-20010703-Q #1-212 RT: 0.01-2.00 AV: 212 NL: 5.80E7

T: + c NSI Full ms [50.00-500.00]



M325 1H NMR in D2O
Batch 20010703-Q

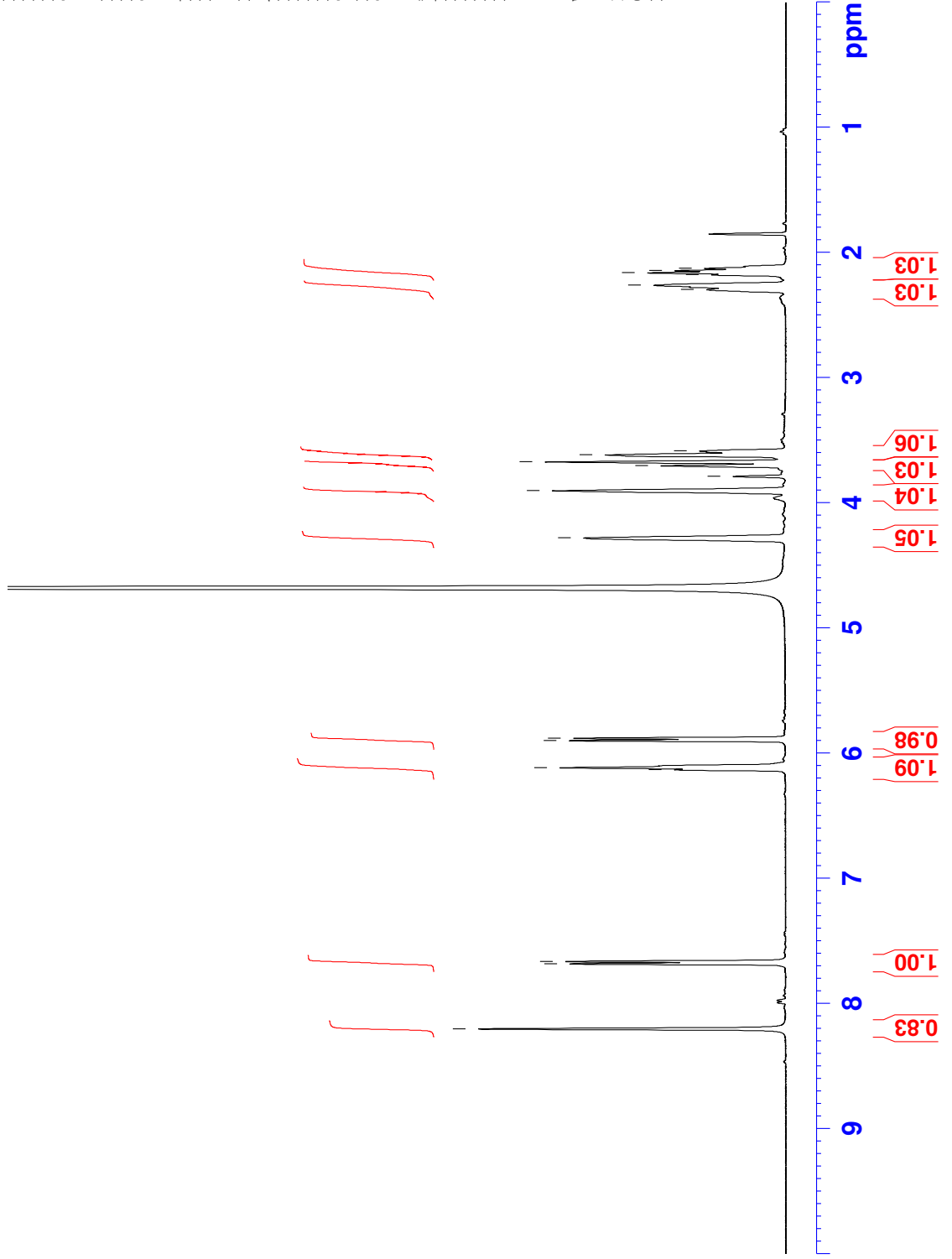


8.204
7.684
7.665
6.133
6.117
5.900
5.882
4.280
3.903
3.789
3.704
3.672
3.616
3.585
2.296
2.261
2.177
2.161
2.144
2.127

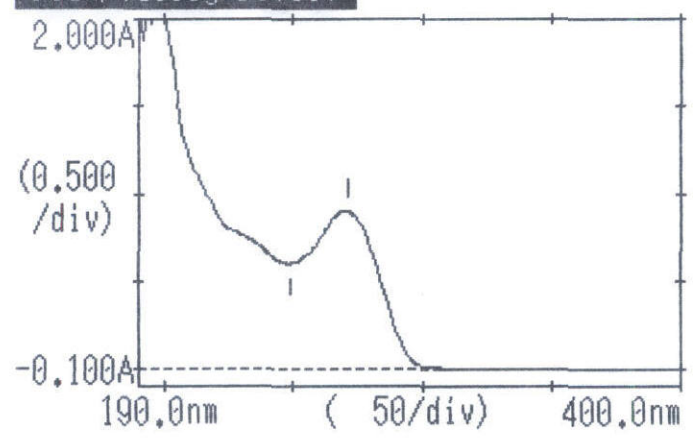
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NAME M325
EXPNO 1
PROCNO 1
Date_ 20110210
Time 10.15
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT D2O
NS 512
DS 2
SWH 7183.908 Hz
FIDRES 0.109618 Hz
AQ 4.5613556 sec
RG 71.8
DW 69.600 use
DE 6.50 use
TE 293.7 K
D1 1.00000000 sec
TD0 1

===== CHANNEL f1 =====
NUC1 1H
P1 14.50 use
PL1 -0.70 dB
PL1W 10.03411102 W
SF01 400.1324710 MHz
SI 32768
SF 400.1300091 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00
  
```



Peak/Valley Detect



Date: 2011/02/10 11:25:46
Measure mode: Abs
Scan range / nm: 400.0 - 190.0
Scan pitch / nm: 1.0
Scan speed: Fast
Slit width / nm: 1.0

Peak
271.00 0.903
Valley
249.00 0.605