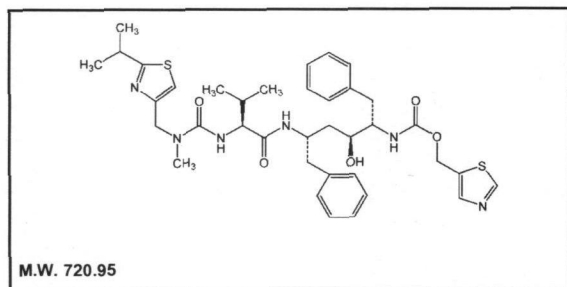




Product Data Sheet

M-1535

Ritonavir standard

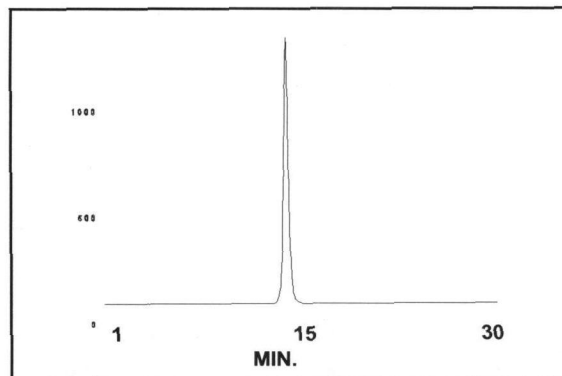


Lot #: 169-025-000-A-20050920-PV

Packaged as: Solid

Date of Analysis: June 22, 2011

Chemical Purity @ 240nm: 99.9%



HPLC ANALYSIS LOT 169-025-000-A-20050920-PV
File Name: int21180 Date and Time: 6/22/2011 3:35:01 PM
Unit 2 UV

Peak #	Area %	Time	Area
1	0.07	3.35000	2.15507
2	99.93	13.88670	3251.71995
Totals	100.00		3253.87502

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-1535

Ritonavir standard

Lot 169-025-000-A-20050920-PV

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

Concentrations and volumes:

Ritonavir standard solution concentration was 1.0 mg/ml.

Volume of **Ritonavir standard** injection was 1.0 µl.

Volume of blank injection was 1.0 µl.

B) Mass spectrometry – Positive mode

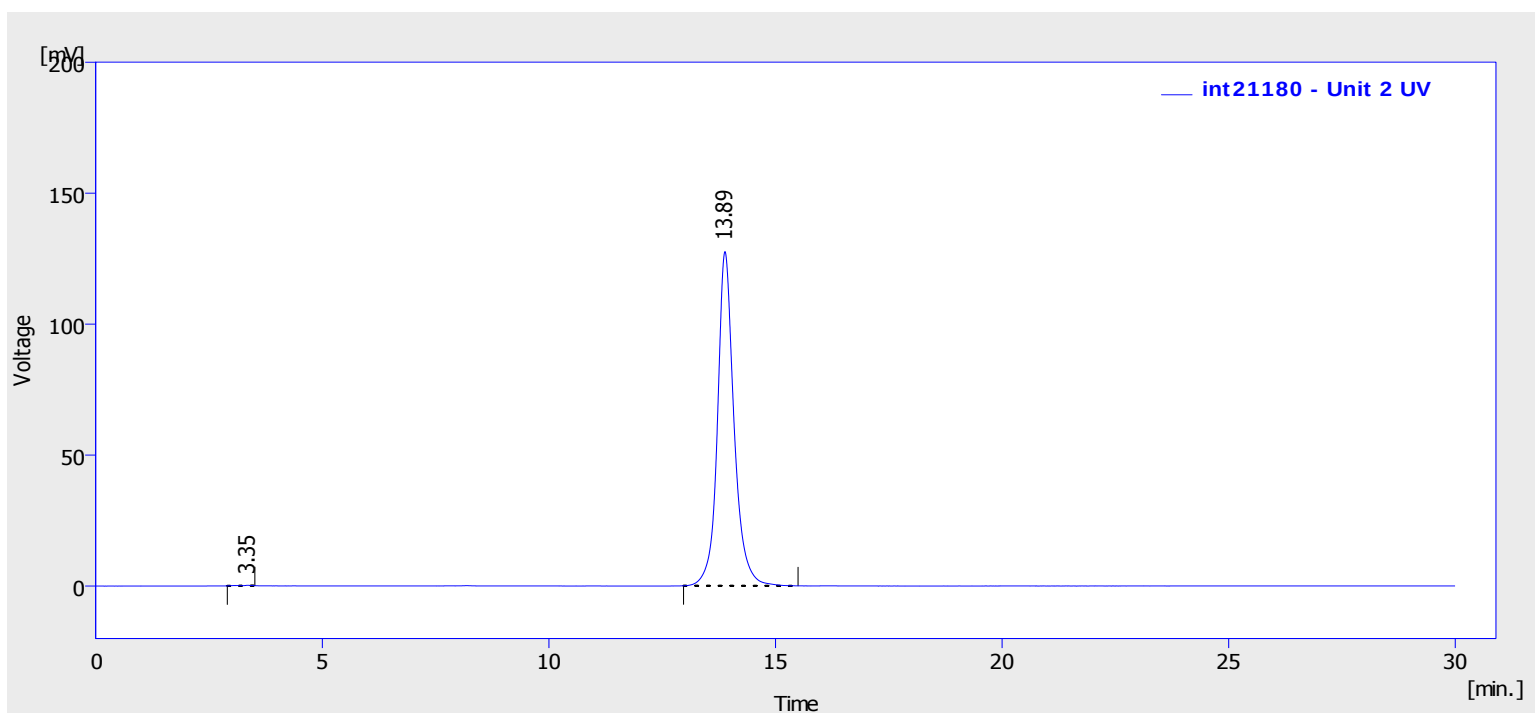
C) NMR

D) UV Spectrum

M-1535
Ritonavir standard
Lot 169-025-000-A-20050920-PV

Chromatogram Info:

File Name	: int21180	File Created	: 6/22/2011 3:35:01 PM
Origin	: Acquired	Acquired Date	: 6/22/2011 3:35:01 PM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of Ritonavir standard		
Created	: 7/20/2007 9:39 AM	Modified	: 6/24/2011 3:58 PM
Column	:	Detection	: 240nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



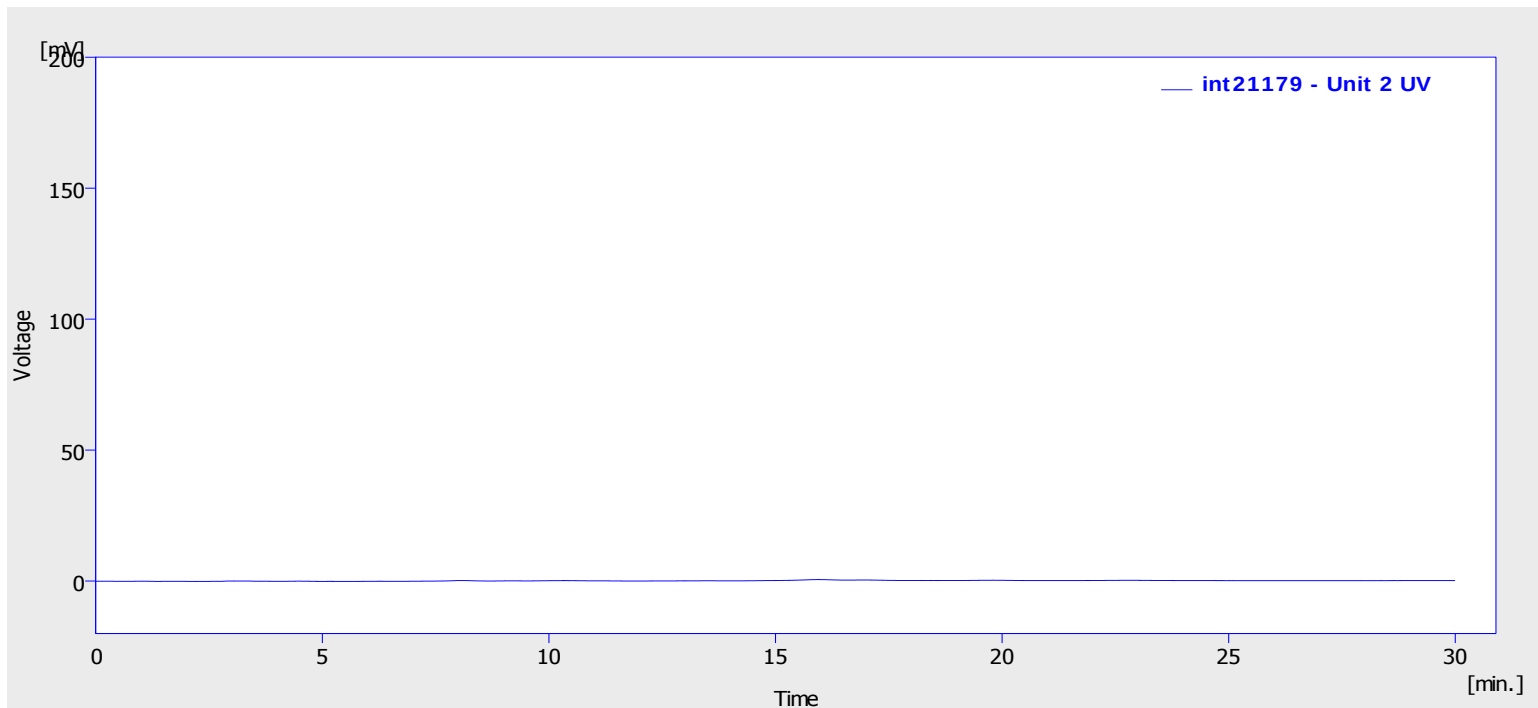
Result Table (Uncal - int21180 - Unit 2 UV)

	Reten. Time [min]	Area [mV.s]	Height [mV]	Area [%]	Height [%]	W05 [min]
1	3.350	2.155	0.158	0.07	0.1	0.12
2	13.887	3251.720	127.620	99.93	99.9	0.36
	Total	3253.875	127.778	100.00	100.0	

M-1535
Ritonavir standard
Lot 169-025-000-A-20050920-PV

Chromatogram Info:

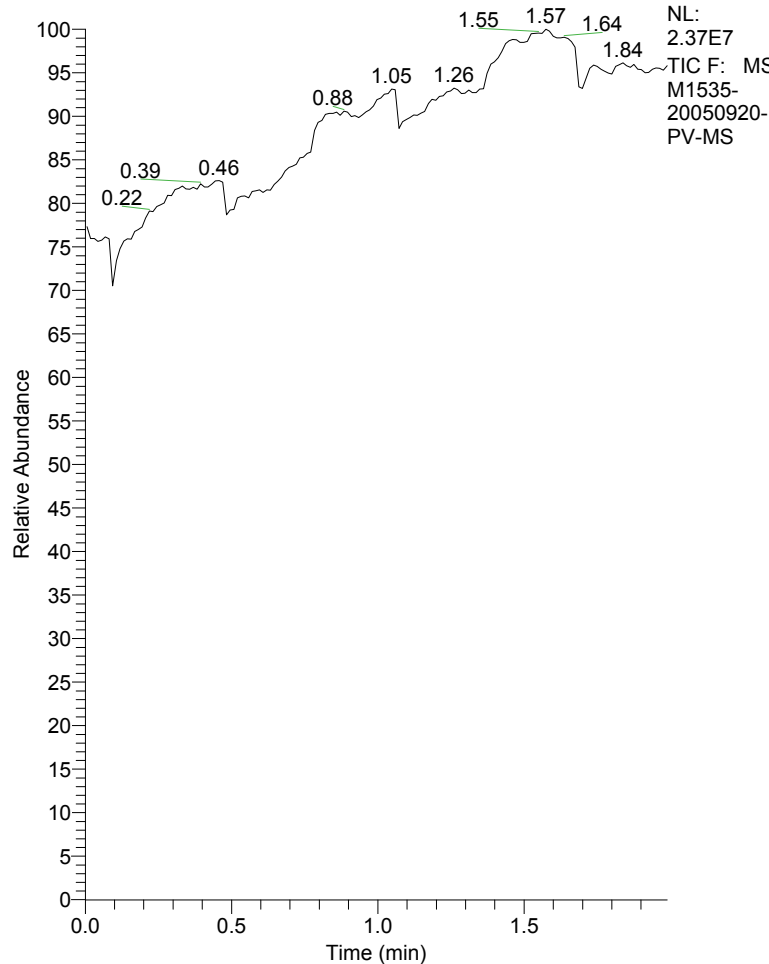
File Name	: int21179	File Created	: 6/22/2011 2:30:16 PM
Origin	: Acquired	Acquired Date	: 6/22/2011 2:30:16 PM
Project	: Test	By	: Administrator
Method	: Unit2-30minrun	By	: Administrator
Description	: UV trace of blank injection		
Created	: 7/20/2007 9:39 AM	Modified	: 6/24/2011 3:59 PM
Column	:	Detection	: 240nm
Mobile Phase	:	Temperature	:
Flow Rate	:	Pressure	:
Note	:		



Result Table (Uncal - int21179 - Unit 2 UV)

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

RT: 0.00 - 1.99



M1535-20050920-PV-MS#1-159 RT: 0.01-1.99

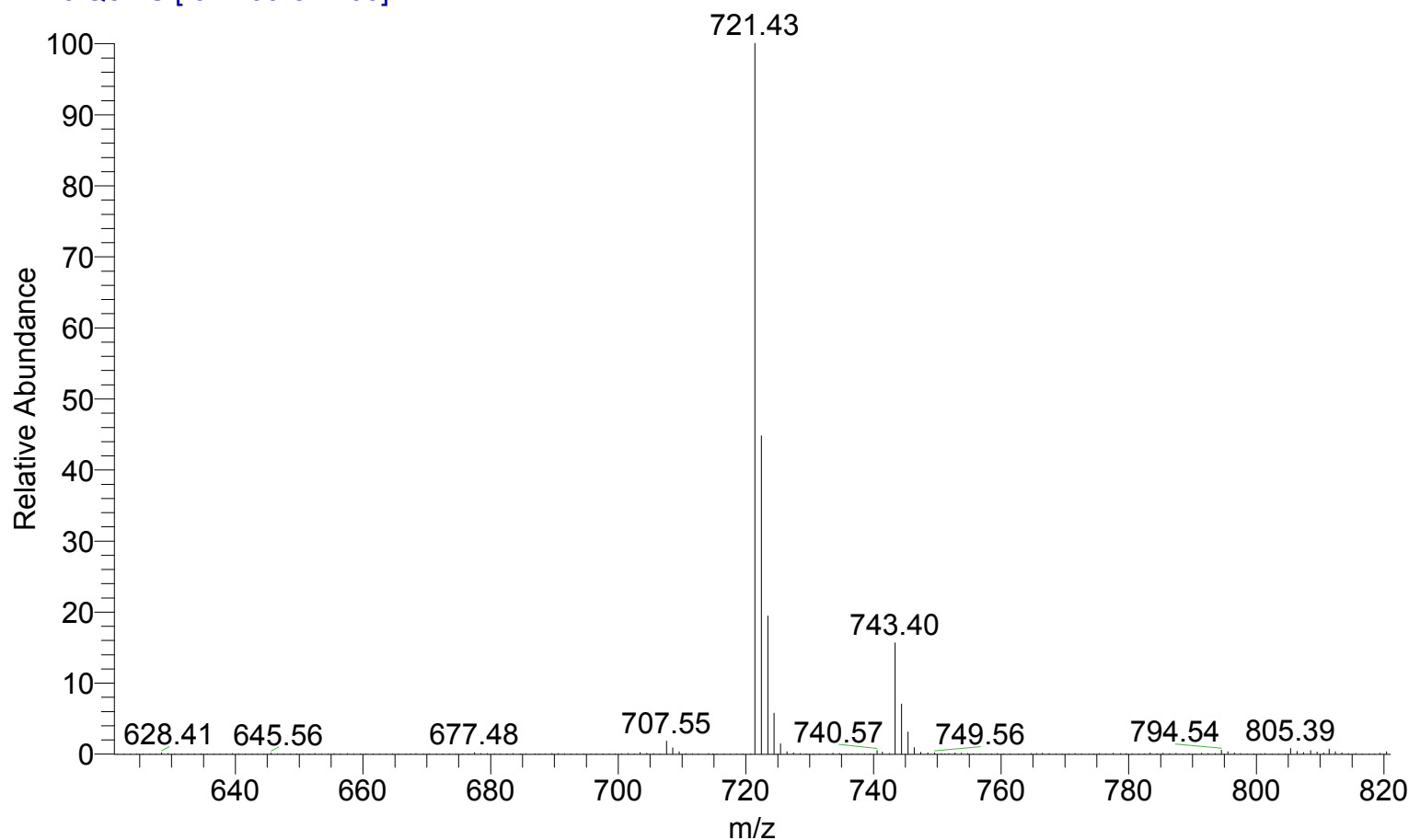
T: + c Q3MS [621.00-821.00]

m/z = 716.59-762.84

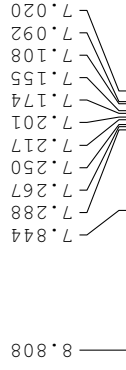
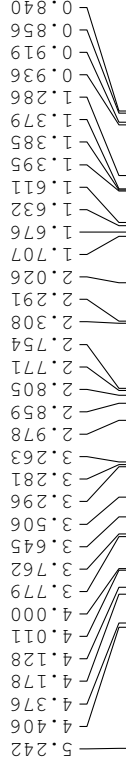
m/z	Intensity	Relative
721.43	9822246.3	100.00
722.44	4398012.5	44.78
723.43	1906638.2	19.41
724.43	565709.8	5.76
725.43	142451.0	1.45
726.43	29823.3	0.30
727.48	16197.6	0.16
733.63	9140.2	0.09
740.57	45260.0	0.46
741.41	25708.3	0.26
743.40	1536142.5	15.64
744.41	689356.5	7.02
745.41	301836.8	3.07
746.40	87237.1	0.89
747.42	23434.9	0.24
748.50	12521.5	0.13
749.56	14620.0	0.15
751.81	7608.1	0.08
752.79	14013.8	0.14
753.79	11841.8	0.12

M1535-20050920-PV-MS #1-159 RT: 0.01-1.99 AV: 159 NL: 9.82E6

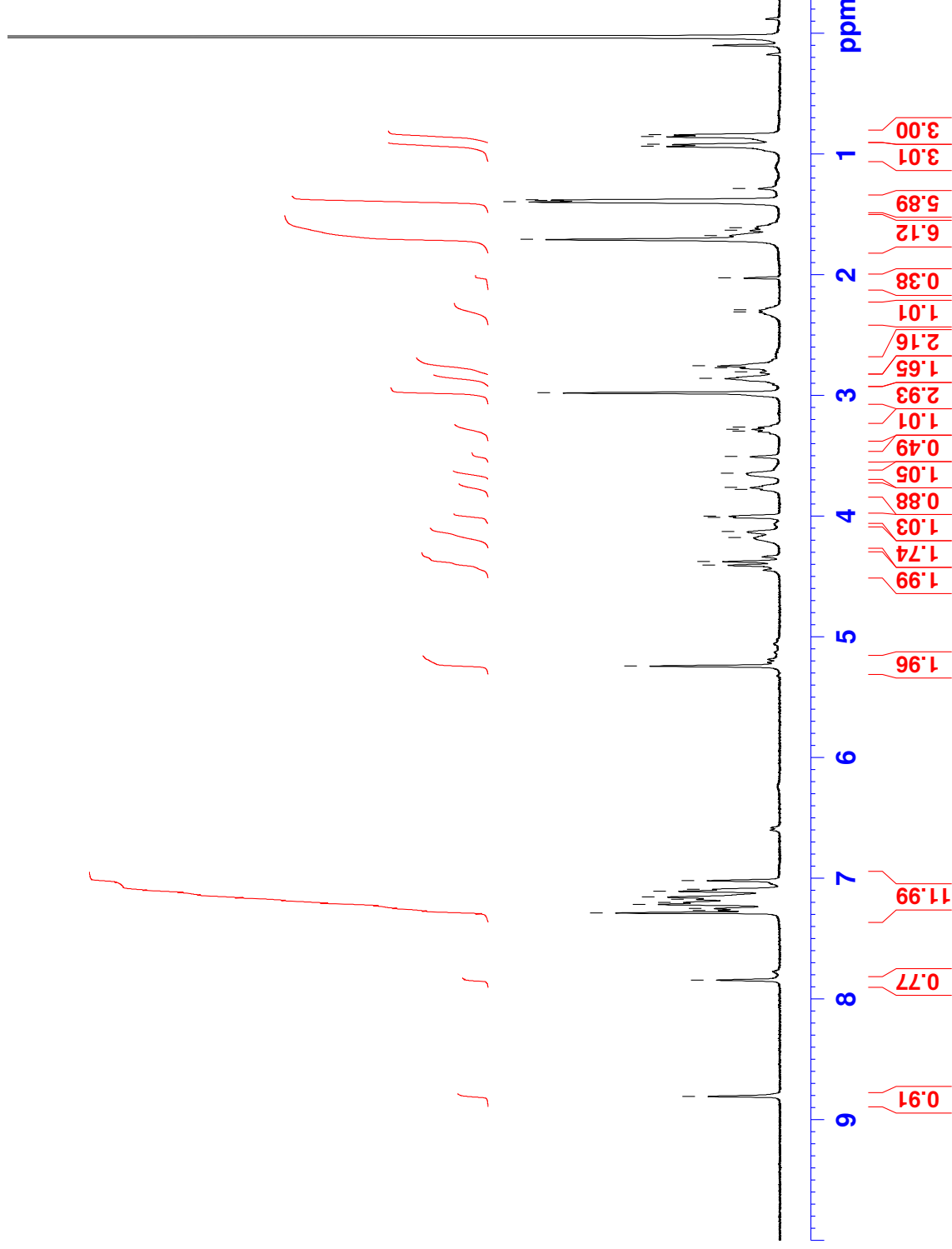
T: + c Q3MS [621.00-821.00]

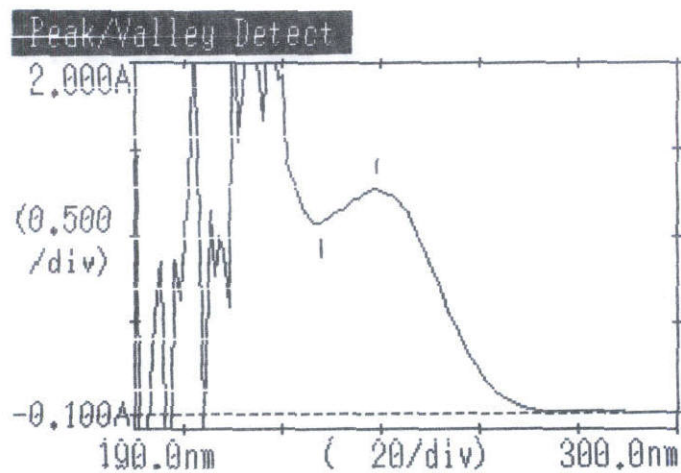


M1535 1H NMR in CDCl3
Batch 20050920-PV



NAME M1535-20050920-PV
EXPNO 1
PROCNO 1
Date_ 20110622
Time 10.50
INSTRUM spect
PROBHD 5 mm PABBO BB-
PULPROG zg30
TD 65536
SOLVENT CDCl3
NS 512
DS 0
SWH 8278.146 Hz
FIDRES 0.126314 Hz
AQ 3.9584243 sec
RG 4
DW 60.400 use
DE 6.50 use
TE 300.0 K
D1 2.00000000 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 400.1300000 MHz
WDW no
SSB 0
LB 0.00 Hz
GB 0
PC 1.00





Date: 2011/06/23 08:55:04
Measure mode: Abs
Scan range / nm: 300.0 - 190.0
Scan pitch / nm: 1.0
Scan speed: Fast
Slit width / nm: 1.0

Peak
239.00 1.270
Valley
228.00 1.070