Instrument - BRUKER

Condition - 400MHz DMSO

Proton Assignment	Chemical Shift δ	Multipli-city	No. of Proton
a	1.390 & 1.515	s & s	6
b	3.985	s	1
c	4.702	s	1
d	5.274-5.284	d	1
e	5.374-5.404	dd	1
f	5.597-5.615	d	1
g	6.687-6.759	dd	4
h	7.190-7.256	dd	4
i	8.830-8.939	dd	2
j	9.639	bs	2

Proton Assignment	Chemical Shift (δ)	Multipli-city	No. of Proton

Chemical Formula - C24H26N4O7S

Total Number of Proton - 23

Remarks - Two -NH2 and one acid protons are dueterated.

Conclusion - The structure is confirmed with the signals of the spectrum and their interpretation

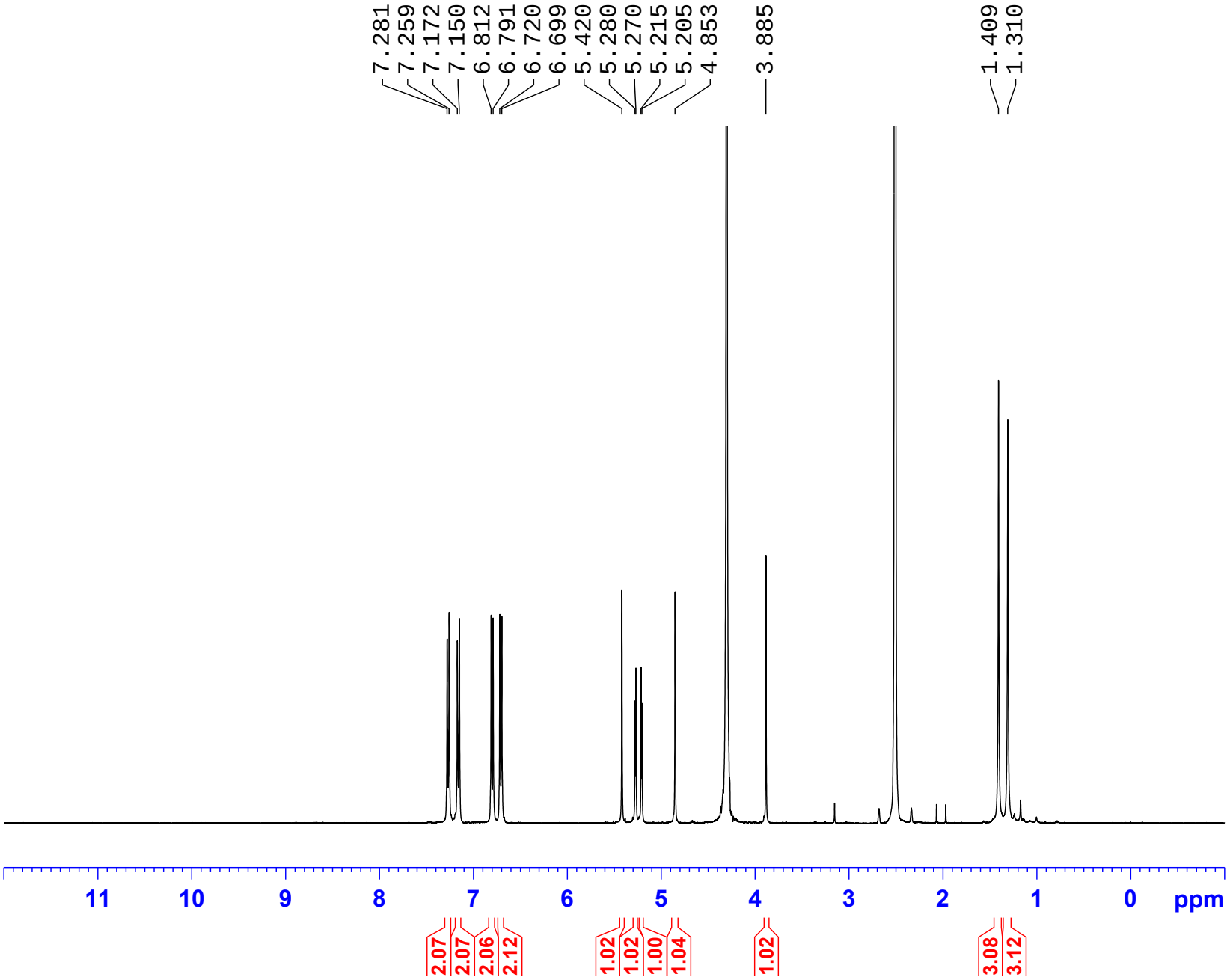
Instrument - ESI

Method - 1.5 kV Ionization Voltage; vaporization temperature: 350 °C, direct inlet

Sr. No.	M/Z	Fragments
1	515	M+1
2	513	M-1
3	1030	M +M
4	1027	M +M
5	498	M - H2O

Conclusion - The signals of the mass spectrum and their interpretation are consistent with the structural formula.

SynZeal Research Pvt. Ltd.
1H D2O_Exchange SRL-449-49



Current Data Parameters

NAME	SRL-449-49
EXPNO	2
PROCNO	1

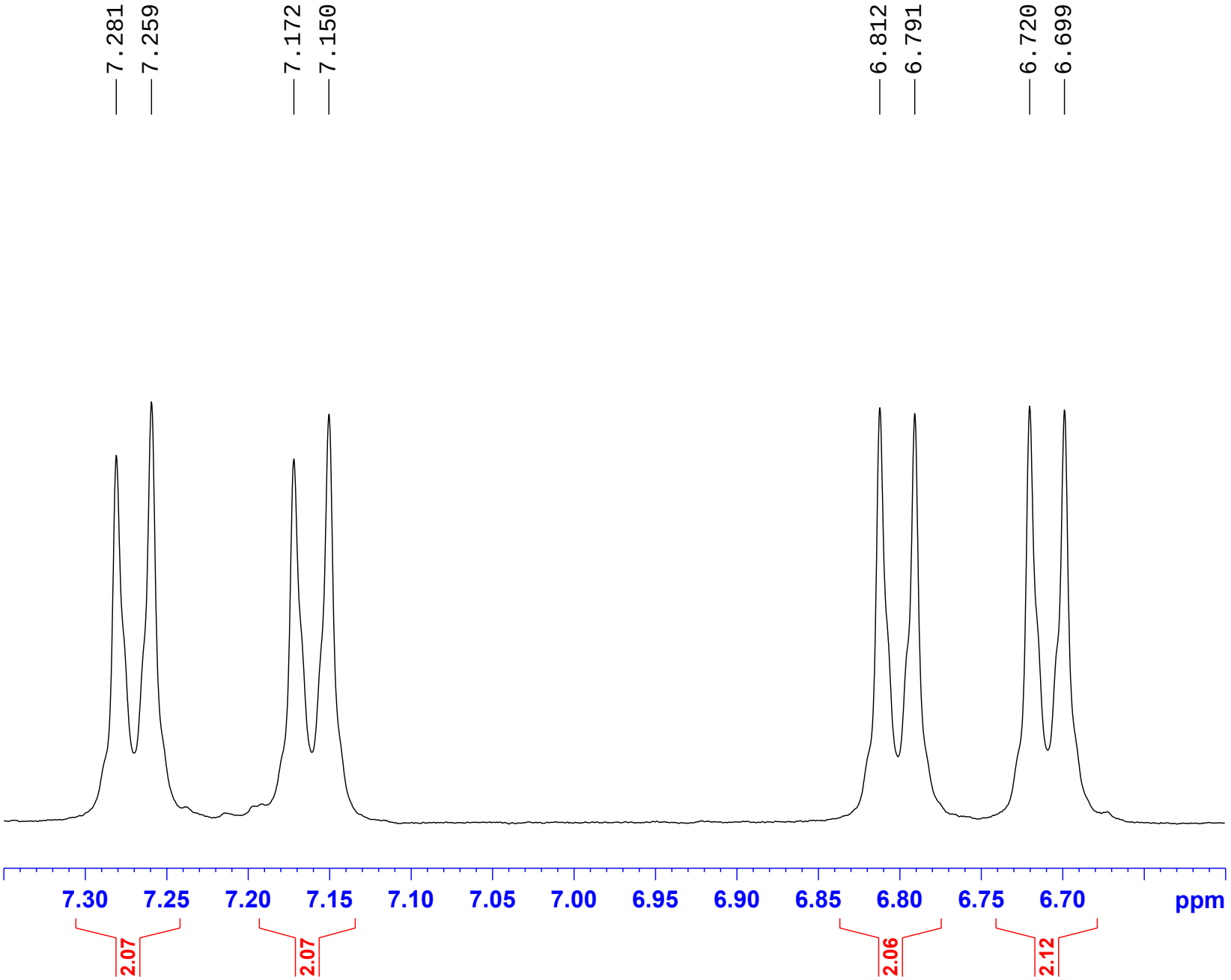
F2 - Acquisition Parameters

Date_	20210107
Time	19.20 h
INSTRUM	Avance NEO 400
PROBHD	Z163739_0060 (
PULPROG	zg30
TD	65536
SOLVENT	DMSO
NS	24
DS	2
SWH	8196.722 Hz
FIDRES	0.250144 Hz
AQ	3.9976959 sec
RG	101
DW	61.000 usec
DE	13.54 usec
TE	293.8 K
D1	1.00000000 sec
TD0	1
SFO1	400.1324708 MHz
NUC1	1H
P0	3.33 usec
P1	10.00 usec
PLW1	14.61900043 W

F2 - Processing parameters

SI	65536
SF	400.1300000 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

SynZeal Research Pvt. Ltd.
1H D2O_Exchange SRL-449-49



Current Data Parameters

NAME	SRL-449-49
EXPNO	2
PROCNO	1

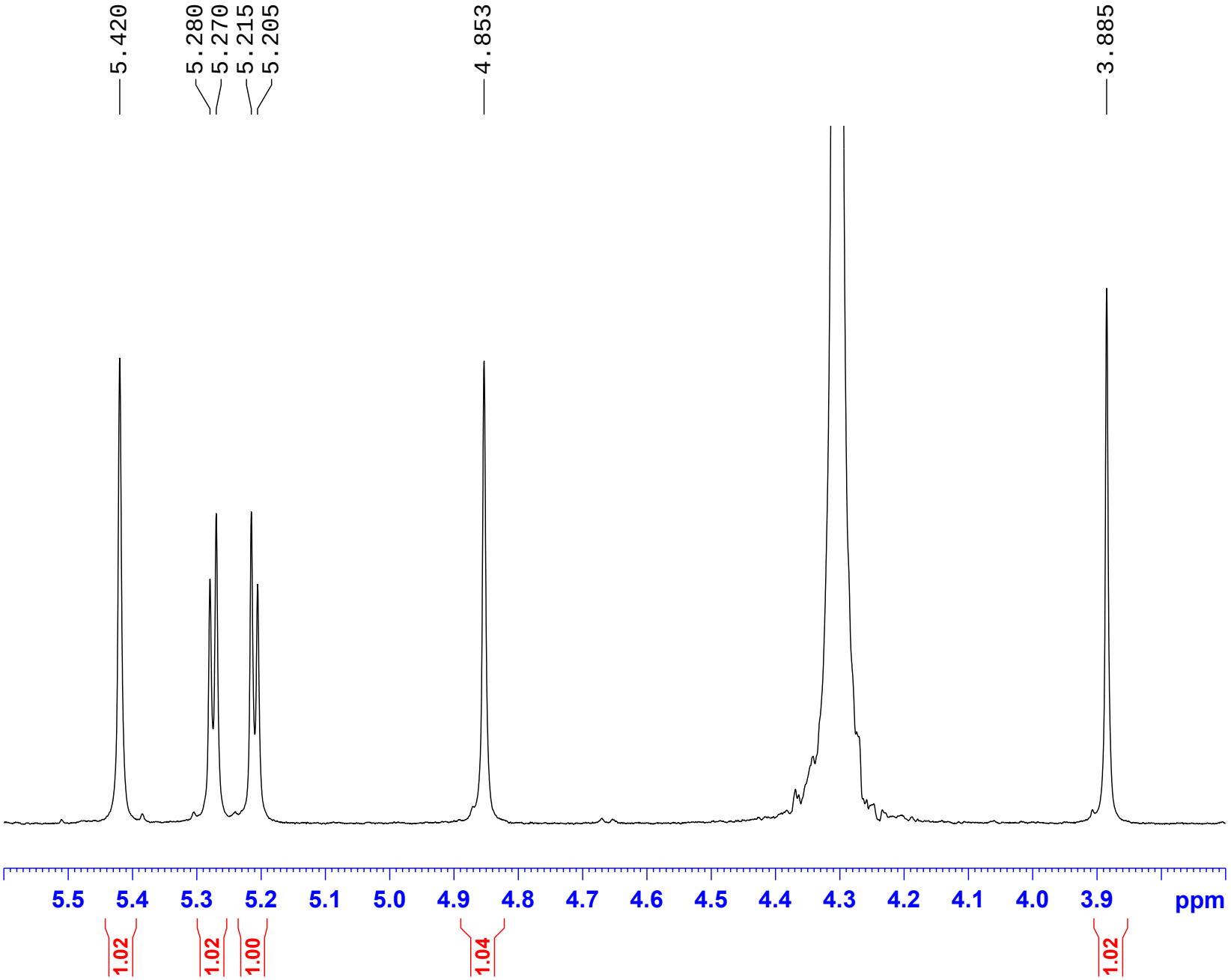
F2 - Acquisition Parameters

Date_	20210107
Time	19.20 h
INSTRUM	Avance NEO 400
PROBHD	Z163739_0060 (
PULPROG	zg30
TD	65536
SOLVENT	DMSO
NS	24
DS	2
SWH	8196.722 Hz
FIDRES	0.250144 Hz
AQ	3.9976959 sec
RG	101
DW	61.000 usec
DE	13.54 usec
TE	293.8 K
D1	1.00000000 sec
TD0	1
SFO1	400.1324708 MHz
NUC1	1H
P0	3.33 usec
P1	10.00 usec
PLW1	14.61900043 W

F2 - Processing parameters

SI	65536
SF	400.1300000 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

SynZeal Research Pvt. Ltd.
1H D2O_Exchange SRL-449-49



Current Data Parameters

NAME	SRL-449-49
EXPNO	2
PROCNO	1

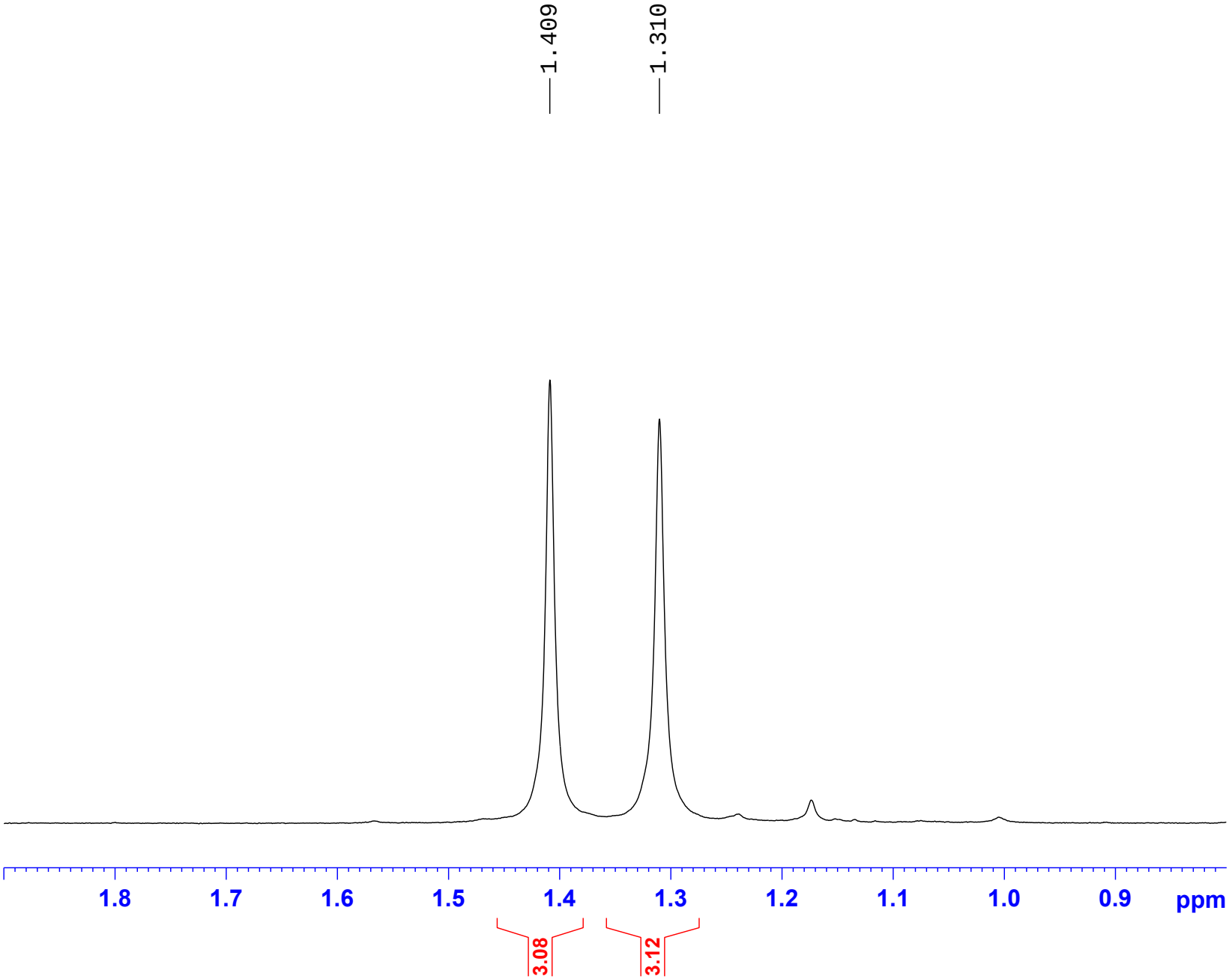
F2 - Acquisition Parameters

Date_	20210107
Time	19.20 h
INSTRUM	Avance NEO 400
PROBHD	Z163739_0060 (
PULPROG	zg30
TD	65536
SOLVENT	DMSO
NS	24
DS	2
SWH	8196.722 Hz
FIDRES	0.250144 Hz
AQ	3.9976959 sec
RG	101
DW	61.000 usec
DE	13.54 usec
TE	293.8 K
D1	1.00000000 sec
TD0	1
SFO1	400.1324708 MHz
NUC1	1H
P0	3.33 usec
P1	10.00 usec
PLW1	14.61900043 W

F2 - Processing parameters

SI	65536
SF	400.1300000 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

SynZeal Research Pvt. Ltd.
1H D2O_Exchange SRL-449-49



Current Data Parameters
NAME SRL-449-49
EXPNO 2
PROCNO 1

F2 - Acquisition Parameters
Date_ 20210107
Time 19.20 h
INSTRUM Avance NEO 400
PROBHD Z163739_0060 (
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 24
DS 2
SWH 8196.722 Hz
FIDRES 0.250144 Hz
AQ 3.9976959 sec
RG 101
DW 61.000 usec
DE 13.54 usec
TE 293.8 K
D1 1.00000000 sec
TD0 1
SFO1 400.1324708 MHz
NUC1 1H
P0 3.33 usec
P1 10.00 usec
PLW1 14.61900043 W

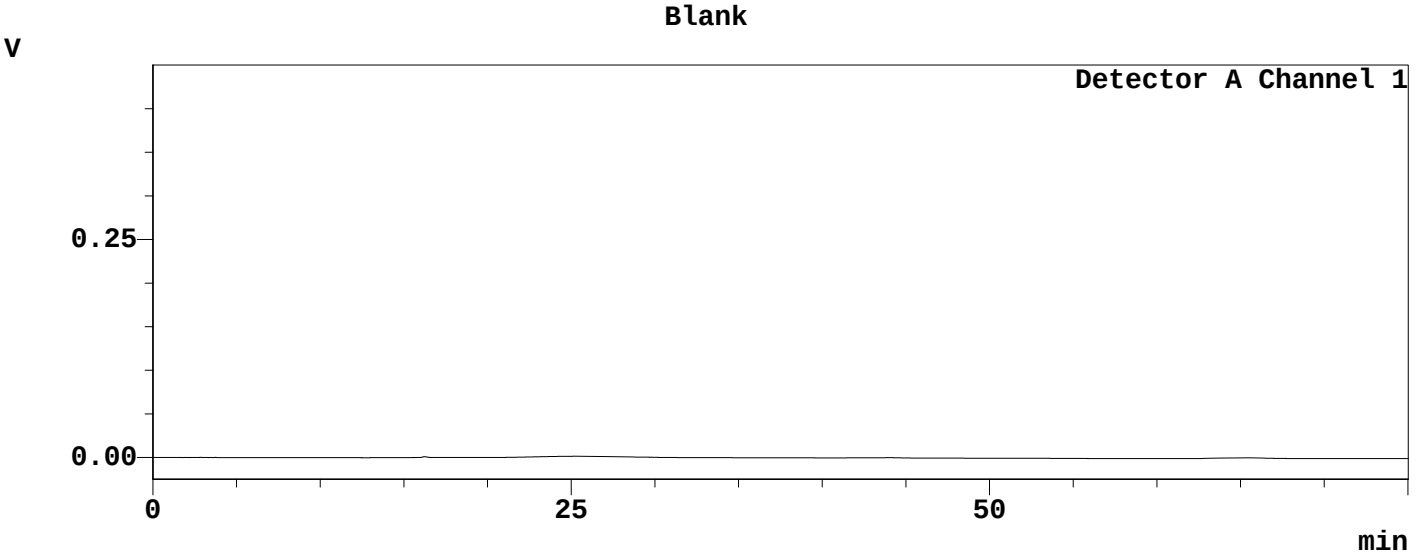
F2 - Processing parameters
SI 65536
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

==== SynZeal HPLC Report ====

Sample Name	: Blank	Flow Rate	: 1.0 mL/min
Project Name	: Diluent	Program	: Gradient
Column	: Thermo ODS Hypersil - C18	Column Temp.	: 40 °C
Column ID	: SRL/C18/2020/106	Vial #	: 4
Column Description	: 250 mm x 4.6 ; 5 micron	Injection Volume	: 2 uL
Diluent	: Mobile phase A	Sample Concentration:	-

Mobile Phase A : 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN (99:01)
Mobile Phase B : 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN (80:20)
Method File Name : SZ-HPLC-EP-AMX-01.lcm
Gradient :
T(min)/%B
0.01-8/8 -> 8-33/8-100 -> 33-48/100 -> 48-63/100-8 -> 63-75/8
Data File Name : 2021_01_07_HPLC-10_04.lcd
Batch File Name : 2021_01_07.lcb
Data Acquired : 1/7/2021 5:35:15 PM
Acquired by : Sayan Mathakiya

Chromatogram



1 Detector A Channel 1 / 230nm

Results

PeakTable

Detector A Channel 1 230nm

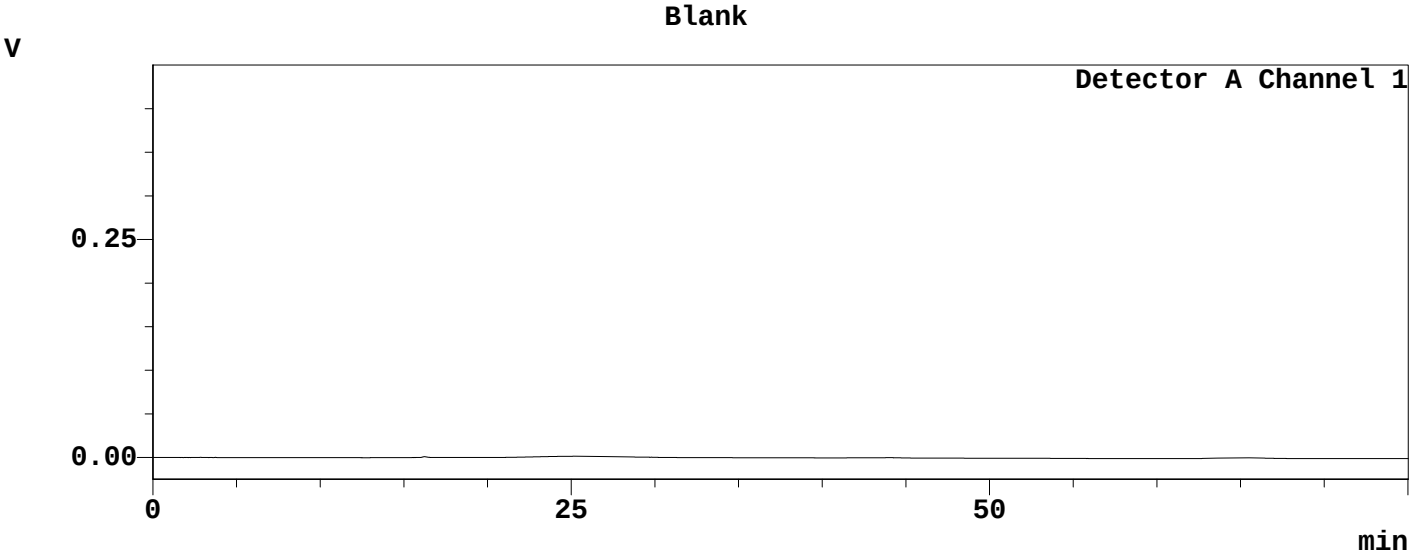
Peak#	Ret. Time	Area	Height	Tailing Factor(10%)	Area %
Total					

==== SynZeal HPLC Report ====

Sample Name	: Blank	Flow Rate	: 1.0 mL/min
Project Name	: Diluent	Program	: Gradient
Column	: Thermo ODS Hypersil - C18	Column Temp.	: 40 °C
Column ID	: SRL/C18/2020/106	Vial #	: 4
Column Description	: 250 mm x 4.6 ; 5 micron	Injection Volume	: 2 uL
Diluent	: Mobile phase A	Sample Concentration:	-

Mobile Phase A : 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN (99:01)
Mobile Phase B : 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN (80:20)
Method File Name : SZ-HPLC-EP-AMX-01.lcm
Gradient :
T(min)/%B
0.01-8/8 -> 8-33/8-100 -> 33-48/100 -> 48-63/100-8 -> 63-75/8
Data File Name : 2021_01_07_HPLC-10_04.lcd
Batch File Name : 2021_01_07.lcb
Data Acquired : 1/7/2021 5:35:15 PM
Acquired by : Sayan Mathakiya

Chromatogram



1 Detector A Channel 1 / 230nm

Results

PeakTable

Detector A Channel 1 230nm

Peak#	Ret. Time	Area	Height	Tailing Factor(10%)	Area %
Total					

==== SynZeal HPLC Report ====

Sample Name	: SRL-449-49	Flow Rate	: 1.0 mL/min
Project Name	: Amoxicillin	Program	: Gradient
Column	: Thermo ODS Hypersil - C18	Column Temp.	: 40 °C
Column ID	: SRL/C18/2020/106	Vial #	: 3
Column Description	: 250 mm x 4.6 ; 5 micron	Injection Volume	: 2 uL
Diluent	: Mobile phase A	Sample Concentration: 1200 ppm	
Mobile Phase A	: 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN		
Mobile Phase B	: 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN		
Method File Name	: SZ-HPLC-EP-AMX-01.lcm		
Gradient	:		

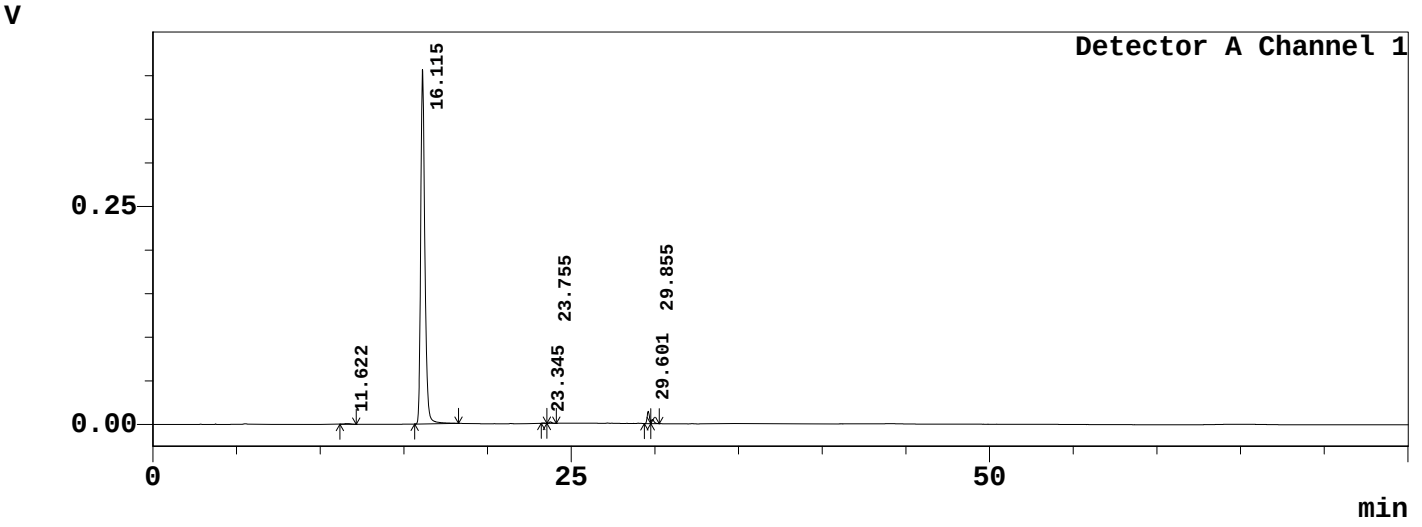
T(min)/%B

0.01-8/8 -> 8-33/8-100 -> 33-48/100 -> 48-63/100-8 -> 63-75/8

Data File Name	: 2021_01_07_HPLC-10_06_SRL-449-49.lcd
Batch File Name	: 2021_01_07.lcb
Data Acquired	: 1/7/2021 8:07:54 PM
Acquired by	: Sayan Mathakiya

Chromatogram

SRL-449-49



1 Detector A Channel 1 / 230nm

Results

PeakTable

Detector A Channel 1 230nm

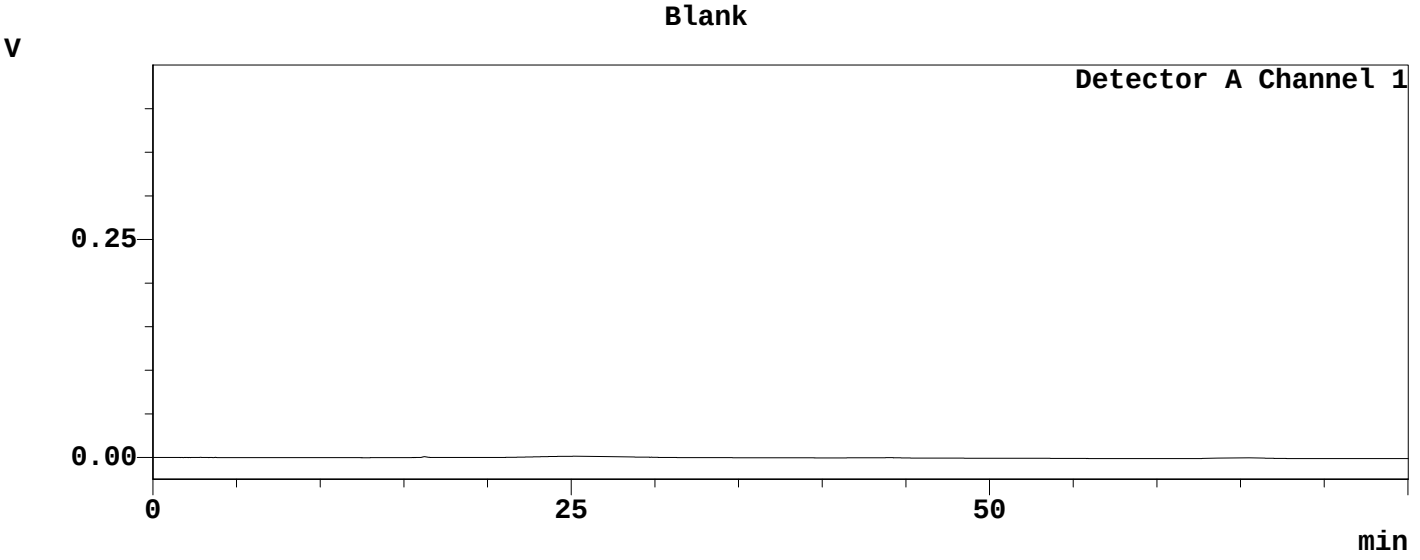
Peak#	Ret. Time	Area	Height	Tailing Factor(10%)	Area %
1	11.622	20637	810	1.11	0.28
2	16.115	7081402	406525	1.23	96.82
3	23.345	4659	470	1.19	0.06
4	23.755	16984	1615	1.18	0.23
5	29.601	137074	14150	--	1.87
6	29.855	53379	4768	--	0.73
Total		7314135			100.00

==== SynZeal HPLC Report ====

Sample Name	: Blank	Flow Rate	: 1.0 mL/min
Project Name	: Diluent	Program	: Gradient
Column	: Thermo ODS Hypersil - C18	Column Temp.	: 40 °C
Column ID	: SRL/C18/2020/106	Vial #	: 4
Column Description	: 250 mm x 4.6 ; 5 micron	Injection Volume	: 2 uL
Diluent	: Mobile phase A	Sample Concentration:	-

Mobile Phase A : 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN (99:01)
Mobile Phase B : 25 % v/v of 0.2 M KH2PO4 in pH-5.0:ACN (80:20)
Method File Name : SZ-HPLC-EP-AMX-01.lcm
Gradient :
T(min)/%B
0.01-8/8 -> 8-33/8-100 -> 33-48/100 -> 48-63/100-8 -> 63-75/8
Data File Name : 2021_01_07_HPLC-10_04.lcd
Batch File Name : 2021_01_07.lcb
Data Acquired : 1/7/2021 5:35:15 PM
Acquired by : Sayan Mathakiya

Chromatogram



1 Detector A Channel 1 / 230nm

Results

PeakTable

Detector A Channel 1 230nm

Peak#	Ret. Time	Area	Height	Tailing Factor(10%)	Area %
Total					

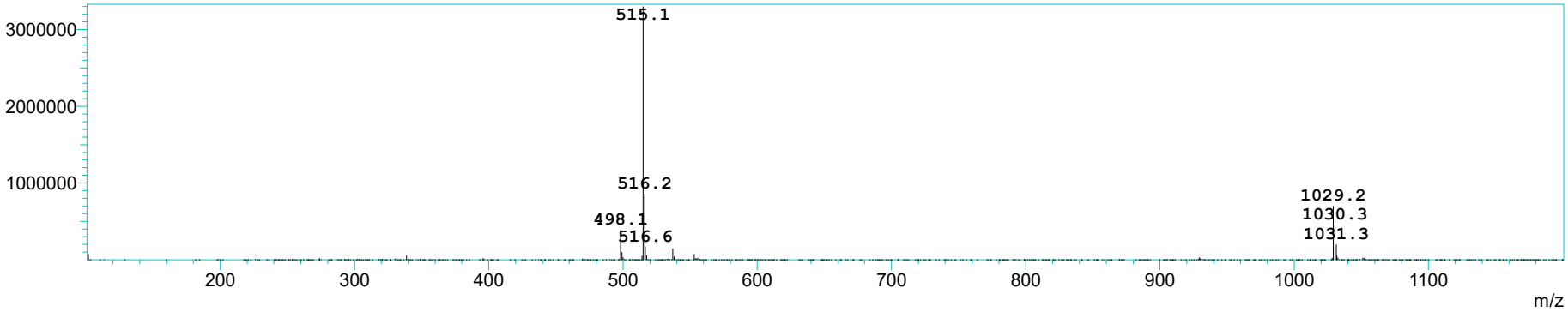
SynZeal Research Pvt. Ltd.

Sample Information

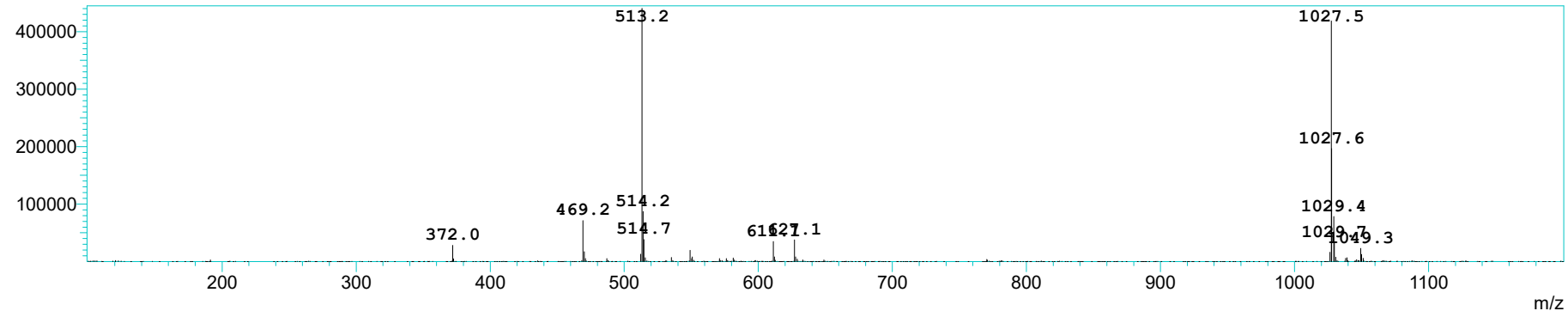
Sample Name : **SRL-449-49**
Date Acquired : **1/7/2021 5:46:49 PM**

Mass Analysis

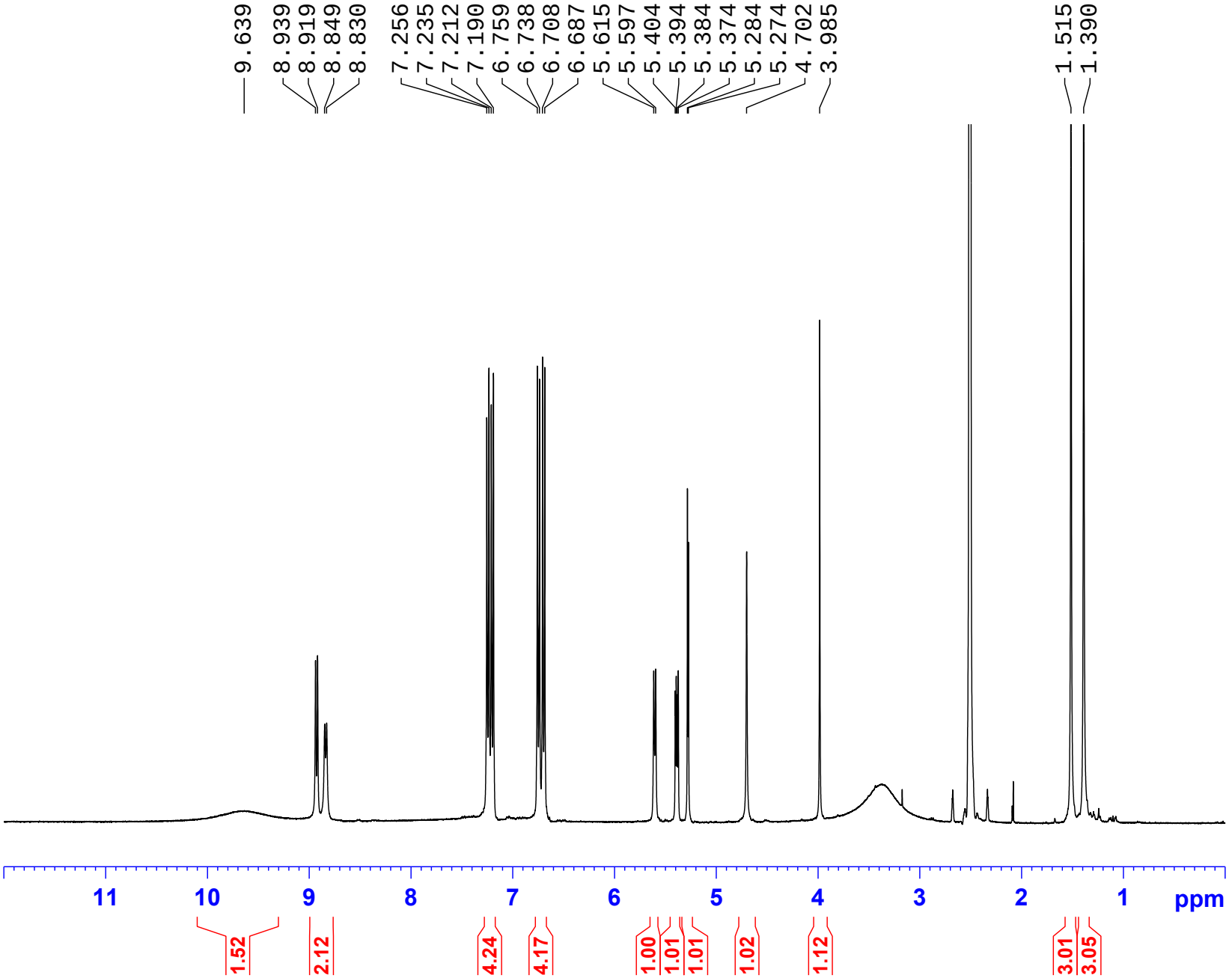
ESI
+



ESI
-



SynZeal Research Pvt. Ltd.
1H SRL-449-49/DMSO-D6



Current Data Parameters

NAME	SRL-449-49
EXPNO	1
PROCNO	1

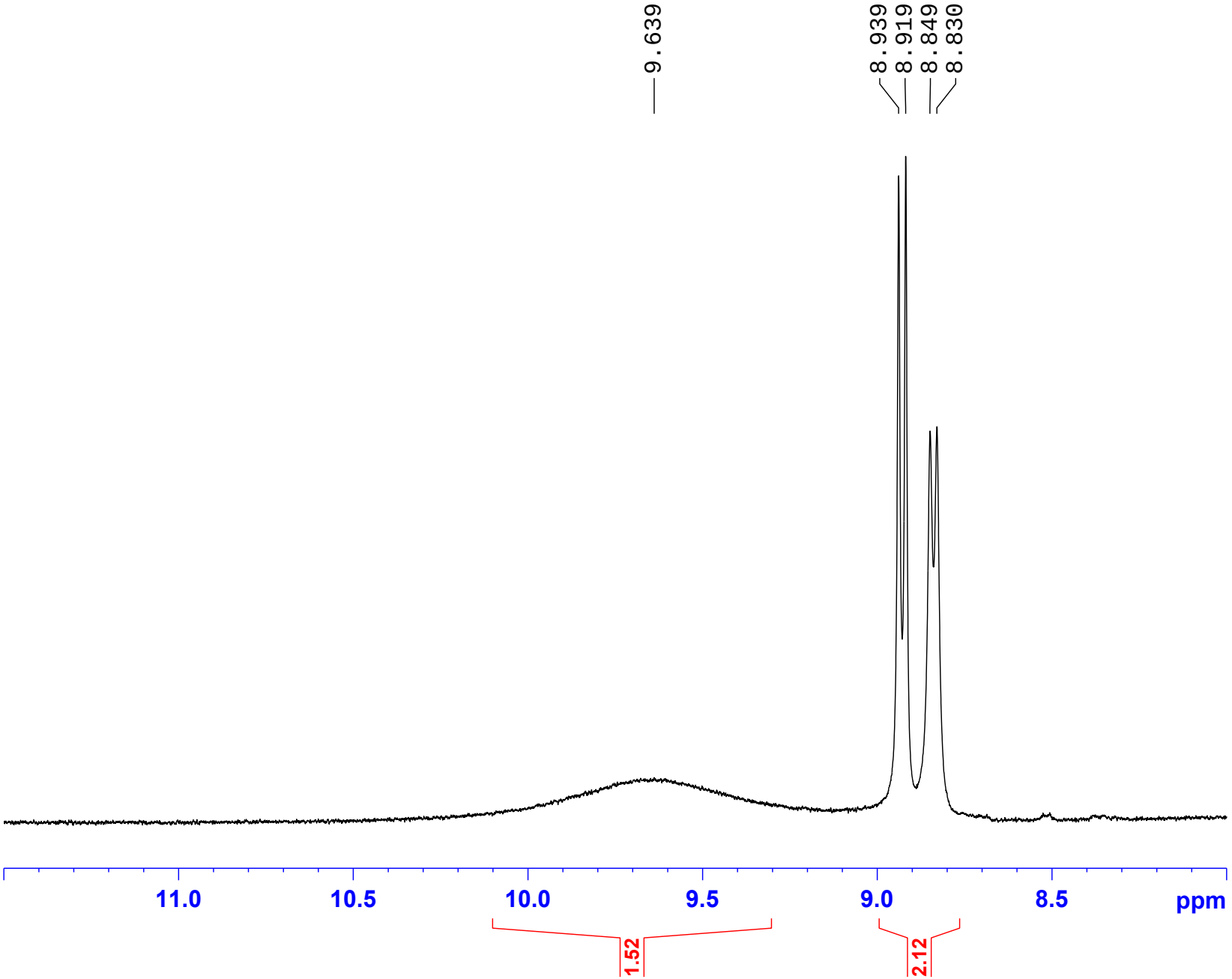
F2 - Acquisition Parameters

Date_	20210107
Time	15.37 h
INSTRUM	Avance NEO 400
PROBHD	Z163739_0060 (
PULPROG	zg30
TD	65536
SOLVENT	DMSO
NS	24
DS	2
SWH	8196.722 Hz
FIDRES	0.250144 Hz
AQ	3.9976959 sec
RG	101
DW	61.000 usec
DE	13.54 usec
TE	294.9 K
D1	1.00000000 sec
TD0	1
SFO1	400.1324708 MHz
NUC1	1H
P0	3.33 usec
P1	10.00 usec
PLW1	14.61900043 W

F2 - Processing parameters

SI	65536
SF	400.1300000 MHz
WDW	EM
SSB	0
LB	0.30 Hz
GB	0
PC	1.00

SynZeal Research Pvt. Ltd.
1H SRL-449-49/DMSO-D6



Current Data Parameters
NAME SRL-449-49
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
Date_ 20210107
Time 15.37 h
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PROBHD Z163739_0060 (
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 24
DS 2
SWH 8196.722 Hz
FIDRES 0.250144 Hz
AQ 3.9976959 sec
RG 101
DW 61.000 usec
DE 13.54 usec
TE 294.9 K
D1 1.00000000 sec
TD0 1
SFO1 400.1324708 MHz
NUC1 1H
P0 3.33 usec
P1 10.00 usec
PLW1 14.61900043 W

F2 - Processing parameters
SI 65536
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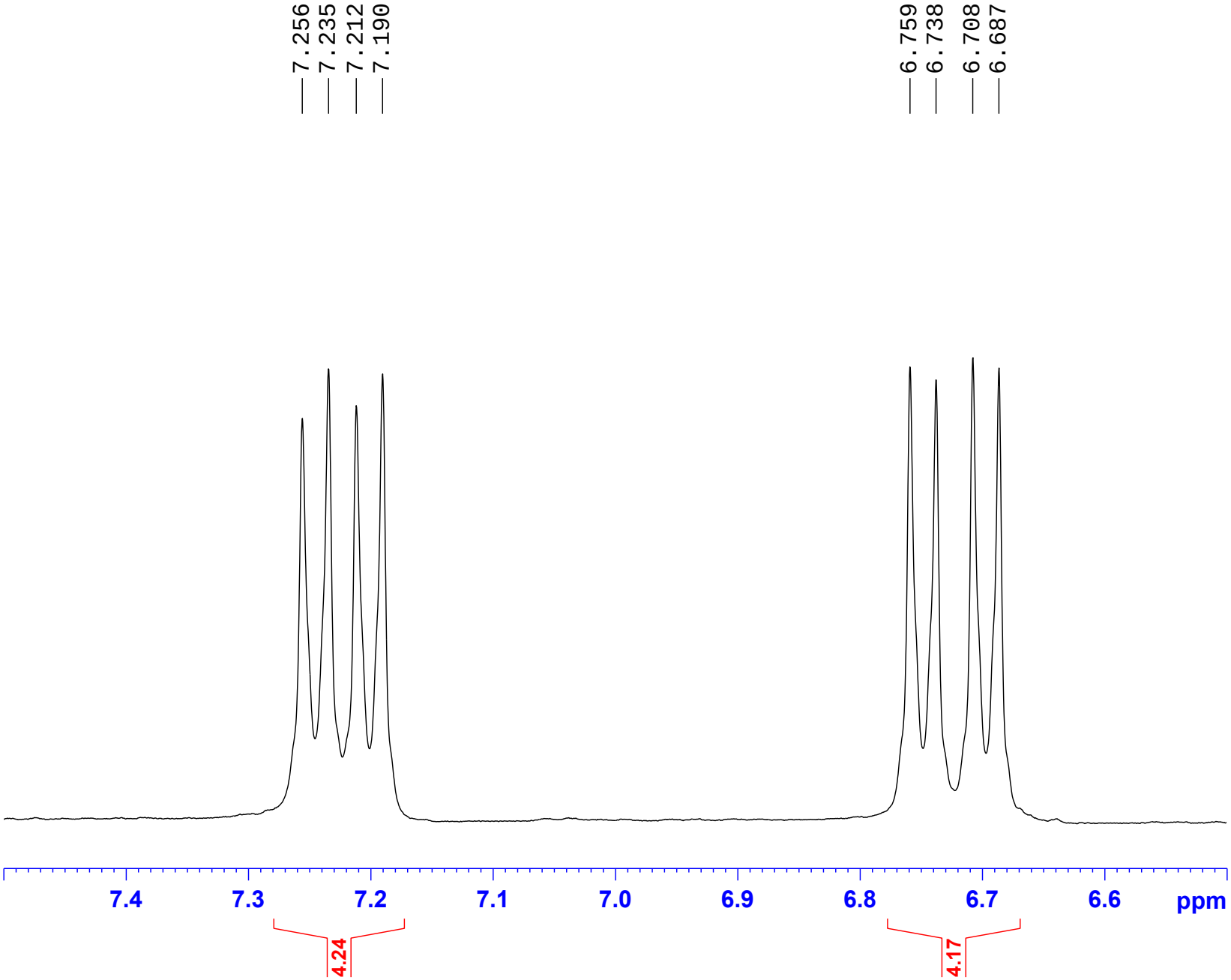
LB 0.30 Hz
GB 0
PC 1.00

SynZeal Research Pvt. Ltd.
1H SRL-449-49/DMSO-D6



Current Data Parameters
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EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
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TD 65536
SOLVENT DMSO
NS 24
DS 2
SWH 8196.722 Hz
FIDRES 0.250144 Hz
AQ 3.9976959 sec
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DW 61.000 usec
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TE 294.9 K
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SFO1 400.1324708 MHz
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P1 10.00 usec
PLW1 14.61900043 W

F2 - Processing parameters
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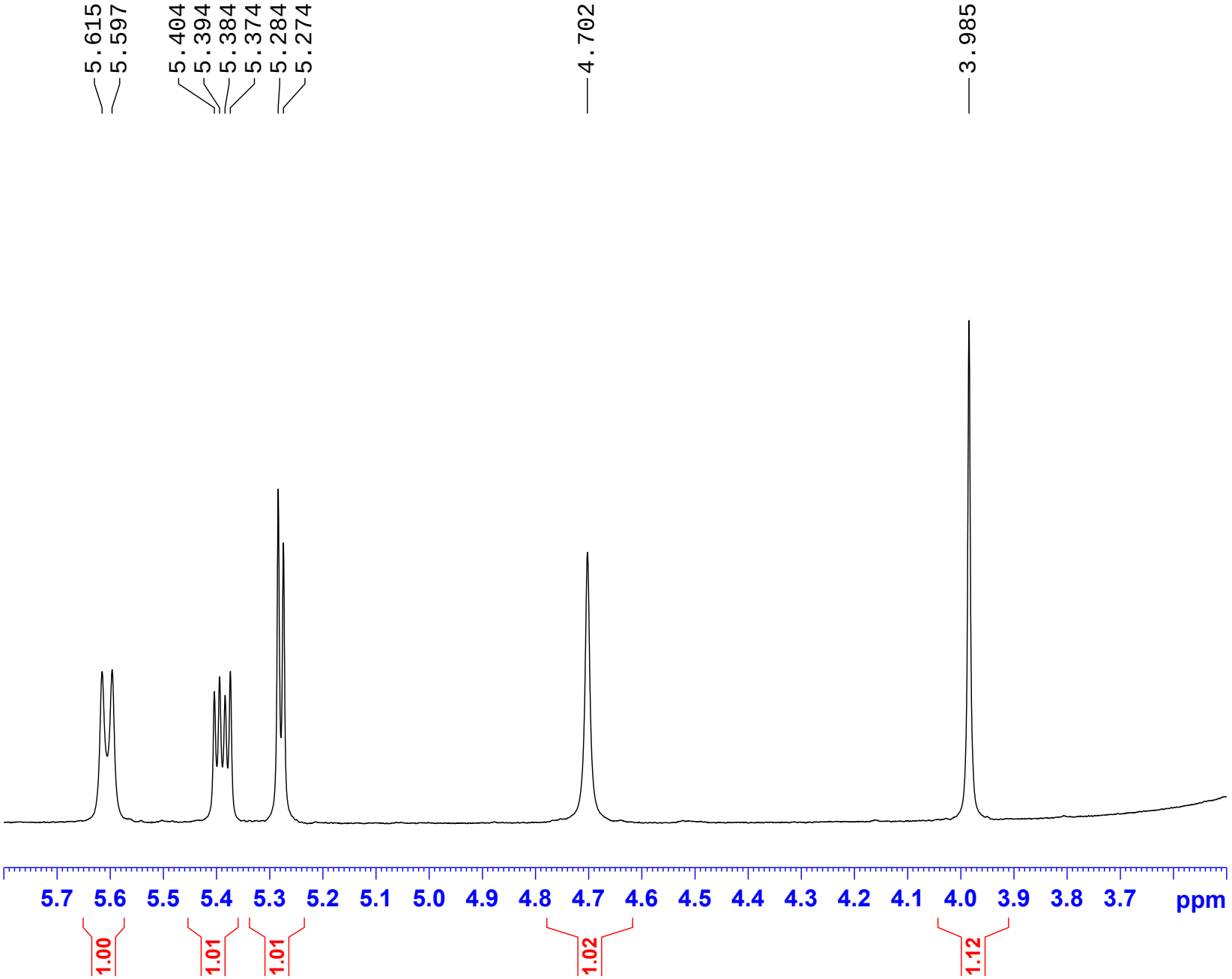
SynZeal Research Pvt. Ltd.
1H SRL-449-49/DMSO-D6



Current Data Parameters
NAME SRL-449-49
EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
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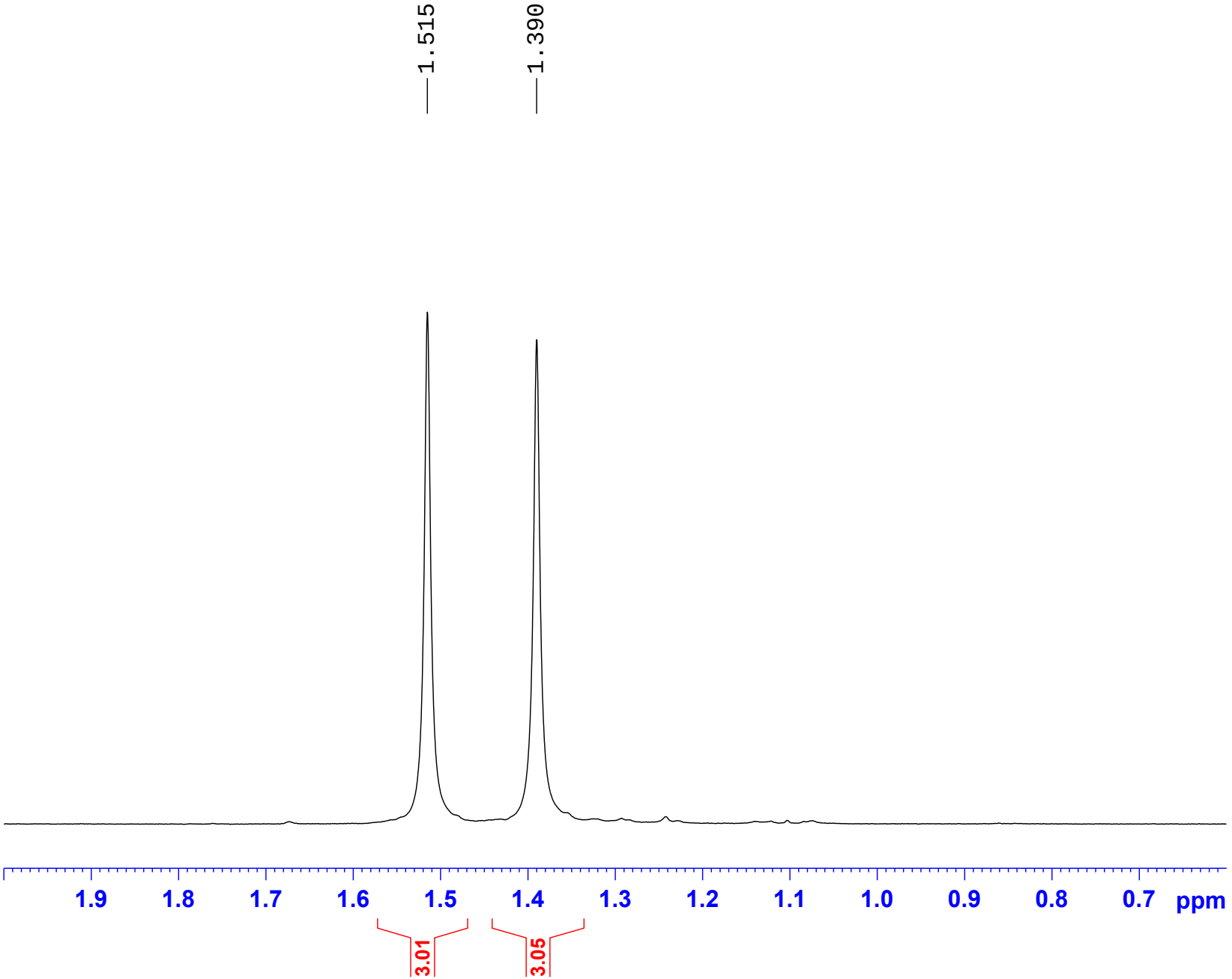
PROBHD Z163739_0060 (
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 24
DS 2
SWH 8196.722 Hz
FIDRES 0.250144 Hz
AQ 3.9976959 sec
RG 101
DW 61.000 usec
DE 13.54 usec
TE 294.9 K
D1 1.00000000 sec
TD0 1
SFO1 400.1324708 MHz
NUC1 1H
P0 3.33 usec
P1 10.00 usec
PLW1 14.61900043 W

F2 - Processing parameters
SI 65536
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

SynZeal Research Pvt. Ltd.
1H SRL-449-49/DMSO-D6



Current Data Parameters
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EXPNO 1
PROCNO 1

F2 - Acquisition Parameters
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Time 15.37 h
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PROBHD Z163739_0060 (
PULPROG zg30
TD 65536
SOLVENT DMSO
NS 24
DS 2
SWH 8196.722 Hz
FIDRES 0.250144 Hz
AQ 3.9976959 sec
RG 101
DW 61.000 usec
DE 13.54 usec
TE 294.9 K
D1 1.00000000 sec
TD0 1
SFO1 400.1324708 MHz
NUC1 1H
P0 3.33 usec
P1 10.00 usec
PLW1 14.61900043 W

F2 - Processing parameters
SI 65536
SF 400.1300000 MHz
WDW EM
SSB 0
LB 0.30 Hz
GB 0
PC 1.00

SRL-449-49

SZ-TGA-SA-ROI-950-ISO
SynZeal Research Pvt Ltd
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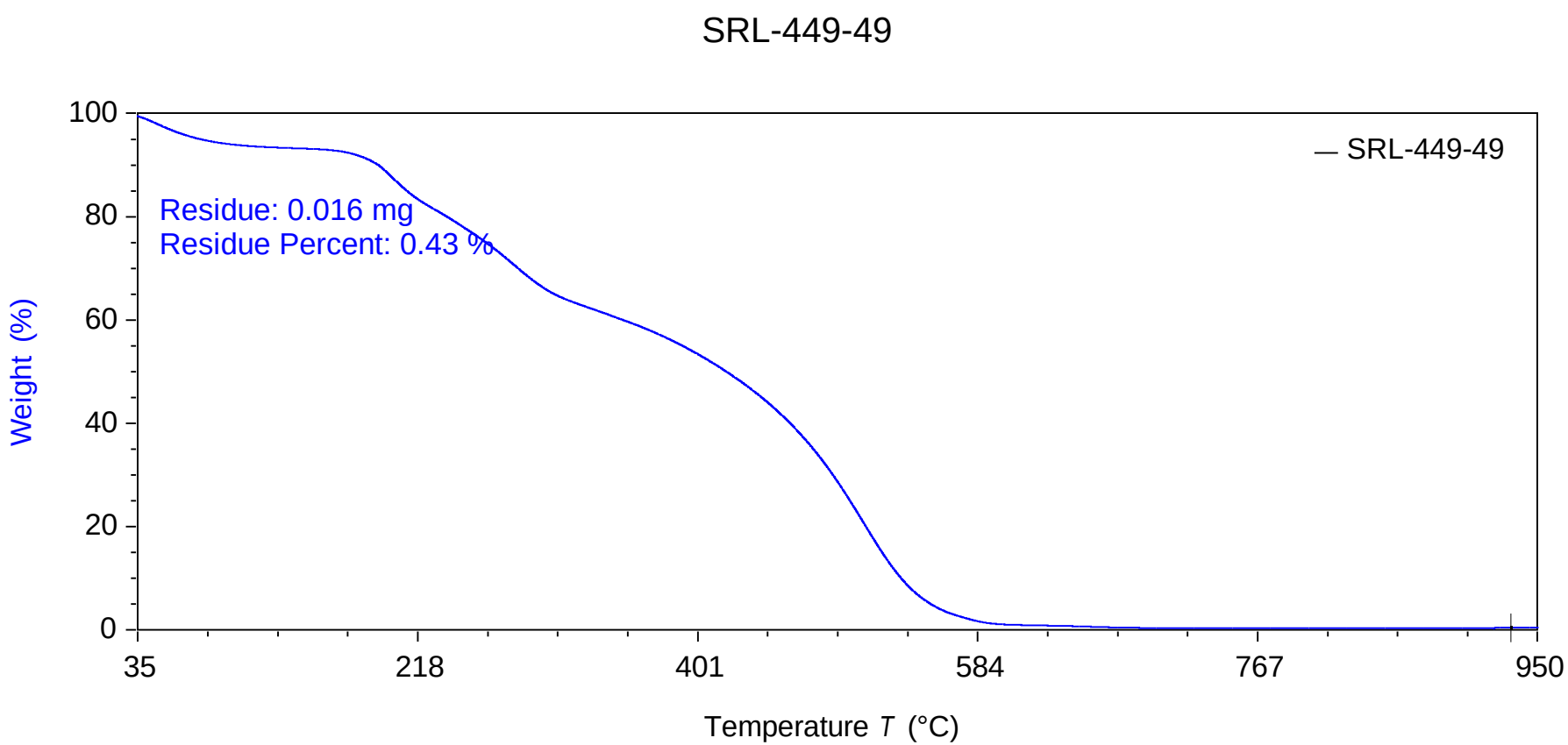
3.791 mg
Platinum HT



TA Instruments Trios V5.1.0.46403

SRL-449-49

SZ-TGA-SA-ROI-950-ISO
SynZeal Research Pvt Ltd
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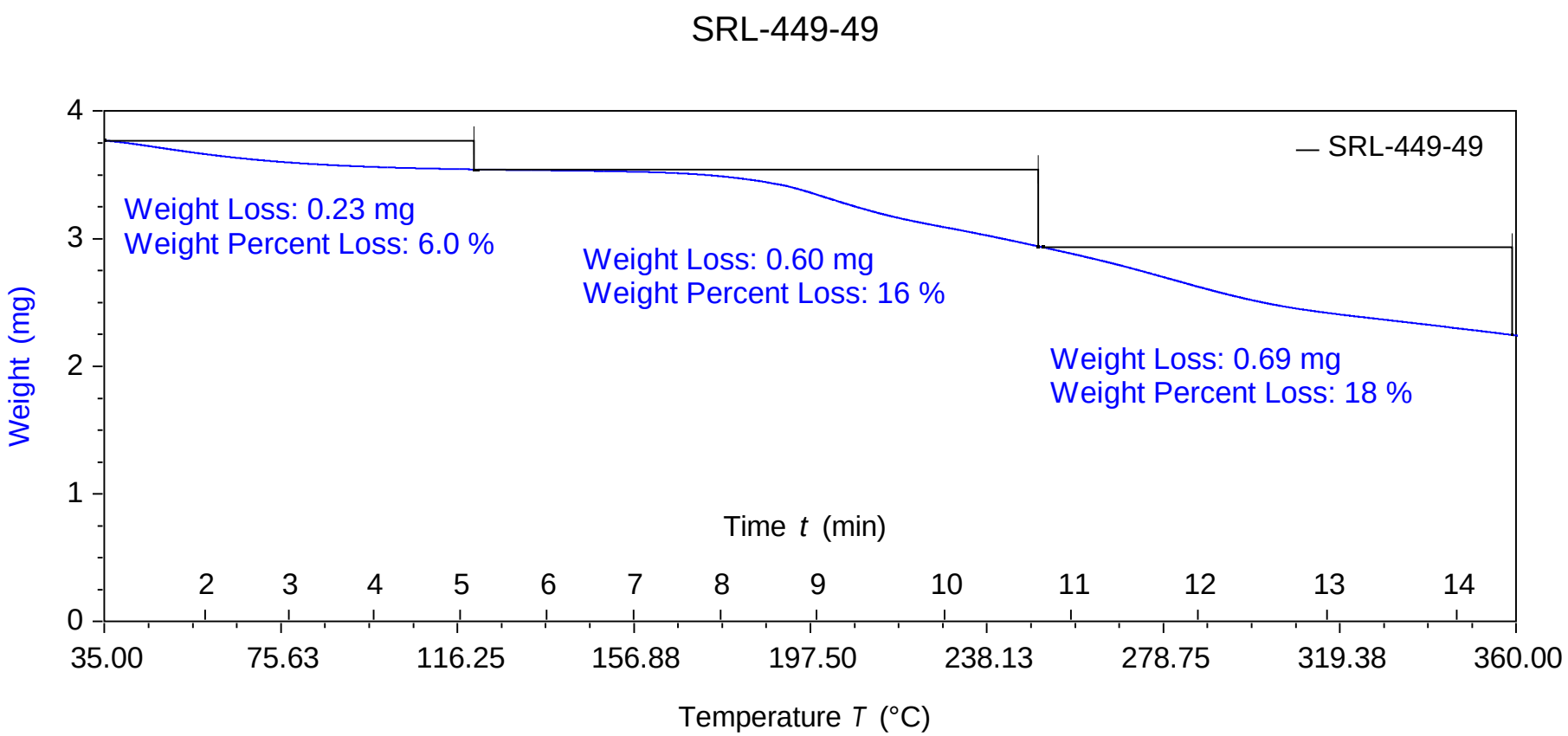
3.791 mg
Platinum HT



TA Instruments Trios V5.1.0.46403