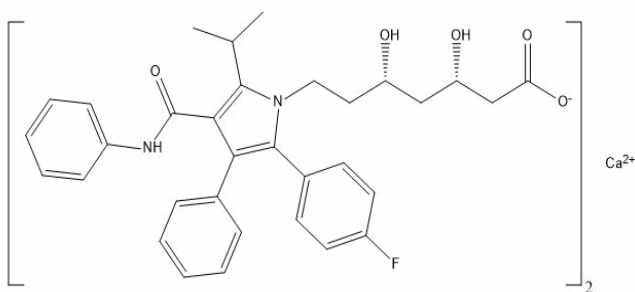


Quality Accreditations : ISO 9001:2015 | ISO 14001:2015 | OHSAS 18001:2007 | ISO 17034:2016 | ISO/IEC 17025:2017 | DSIR Recognition  
 Only for R&D & Analytical purpose. Not meant for Human Consumption.

### CERTIFICATE OF ANALYSIS

<b>Product Name</b>	<b>(3S,5S)-Atorvastatin Calcium Salt</b>		
<b>IUPAC Name</b>	(3S,5S)-7-[3-(phenylcarbamoyl)-5-(4-fluorophenyl)-2-isopropyl-4-phenyl-1H-pyrrol-1-yl]-3,5-dihydroxyheptanoic acid, calcium salt		
<b>Synonyms</b>	Atorvastatin Related Compound E		
<b>CAS #</b>	1105067-88-6		
<b>Catalog #</b>	CS-T-48403	<b>Batch #</b>	CRC-AAA-2654-01
<b>Molecular Formula</b>	C <sub>66</sub> H <sub>68</sub> CaF <sub>2</sub> N <sub>4</sub> O <sub>10</sub>	<b>Molecular weight</b>	1155.34
<b>Date of Analysis</b>	13/07/2022	<b>Retest Date</b>	13/07/2022
<b>Longterm Storage Conditions</b>	Store at refrigerator (2-8°C) for long term storage		
<b>Shipping Conditions</b>	Product is stable to be shipped at room temperature		

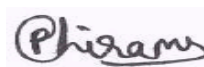


Test	Specification	Result
Appearance	White to off white solid	Off white solid
Solubility	Soluble in DMSO	In DMSO
Mass Spectrum	Conform molecular weight	Confirms
<sup>1</sup> H NMR spectrum	Conform Structure	Confirms
Purity by HPLC-c	Not less than 90%	96.27%
Volatiles content % (by TGA) - b	Not specified	2.33% (w/w)
Ash content % (by TGA) - a	Not specified	4.23% (w/w)
Potency based on Mass balance {[100 - (b+a)] x (c/100)}	Not specified	89.95%

This Material Complies.



13/07/2022  
 Reviewed & Approved by  
 ( QC Analytical )



13/07/2022  
 Reviewed & Approved by  
 ( Quality Assurance )

All dates are mentioned in the format of DD/MM/YYYY

The re-test data is assigned based on the literature available. The balances used are calibrated with weights traceable to the National standards NIST.

sales@clearsynth.com | www.clearsynth.com | Worldwide Helpline No:- +1(415) 685 -4395 | CIN :- U24100MH2010PLC201433

"The 'Catalyst' in making your research work"



# Injection Summary Report 01

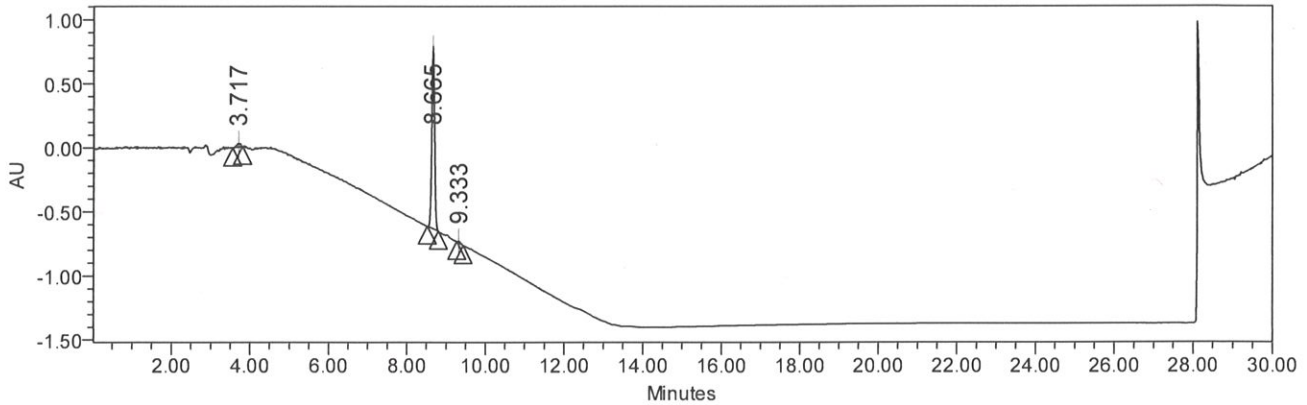
CLEARSYNTH RESEARCH CENTRE  
INST ID: HPLC-05

Sample Name:	CRC-AAA-2654-01	Acquired By:	Prabhakar
Sample Type:	Unknown	Sample Set Name:	29062022
Vial:	45	Acq. Method Set:	GENERAL METHOD 30MIN
Injection #:	1	Processing Method:	2654_01
Injection Volume:	5.00 ul	Channel Name:	200.0nm
Run Time:	30.0 Minutes	Proc. Chnl. Descr.:	PDA 200.0 nm
Date Acquired:	6/30/2022 2:29:38 AM IST		
Date Processed:	6/30/2022 6:22:03 AM IST		

SampleName: CRC-AAA-2654-01

AR.no.: CRC-290622-109

MOA MP-A: 10mM NH4OAC IN WATER:MP-B:ACN  
T%B:0/10,10/90,25/9,25.1/10,30/10, FLOW: 1.0ML/MIN, Phenomenix-C18\*250\*4.6\*5µm (QC-COL-154)



	RT	Area	% Area	Height
1	3.717	206132	2.84	25494
2	8.665	6991906	96.27	1405363
3	9.333	65027	0.90	11880

ANALYSED BY: *P.R.*  
*30/06/2022*

CHECKED BY: *Prabhakar*  
*30/06/2022*

Sample ID: CRC-270622/109  
Sample Name: Atorvastatin calcium related compound  
E-CRC-AAA-2654-01

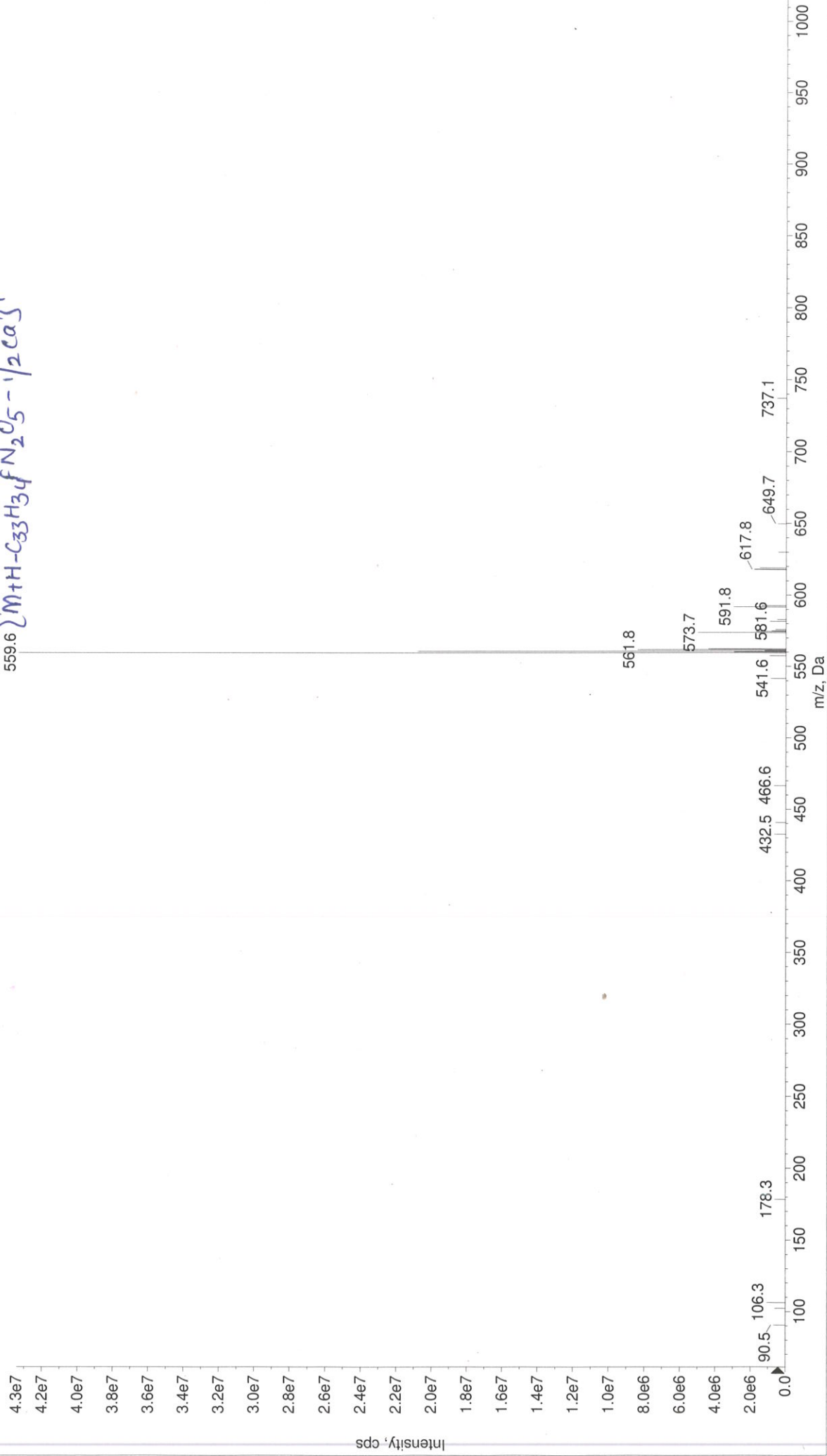
Acq. Date: Tuesday, June 28, 2022  
Acq. Time: 07:54

Acq. File: Atorvastatin calcium related compound  
E-CRC-AAA-2654-01.wiff  
Operator: suresh cherukunee

■ +Q1: Exp 1, 0.456 to 0.547 min from Sample 2 (Atorvastatin calcium related compound E-CRC-AAA-2654-01) of Atorvastatin calcium related compo...

Max. 4.3e7 cps.

559.6  $[M+H-C_{33}H_{34}FN_2O_5-1/2Ca]^{+}$



CHS  
28/06/2023

MS  
28/06/2022

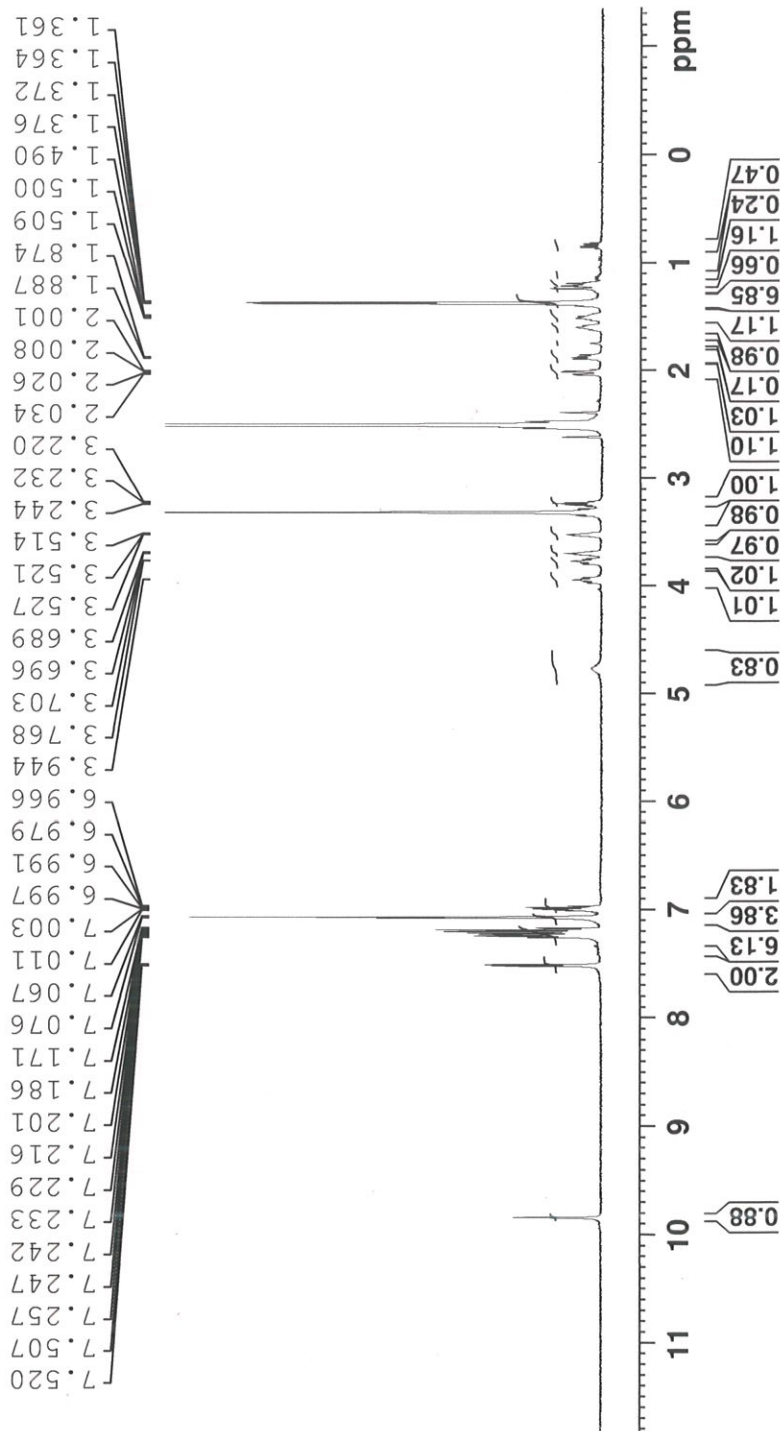


CRC-AAA-2654-01  
 1H-NMR \ DMSO  
 CRC-270622/109

Current Data Parameters  
 NAME CRC-AAA-2654-01  
 EXPNO 1  
 PROCNO 1

F2 - Acquisition Parameters  
 Date\_ 20220628  
 Time 12.07 h  
 INSTRUM spect  
 PROBD Z114607\_0866 (  
 PULPROG zg30  
 TD 65536  
 SOLVENT DMSO  
 NS 16  
 DS 2  
 SWH 12019.230 Hz  
 FIDRES 0.366798 Hz  
 AQ 2.7262976 sec  
 RG 139.77  
 DW 41.600 usec  
 DE 6.50 usec  
 TE 301.6 K  
 D1 1.0000000 sec  
 TD0 1  
 SF01 600.3037069 MHz  
 NUC1 1H  
 P1 10.00 usec  
 PLW1 25.92499924 W

F2 - Processing parameters  
 SI 65536  
 SF 600.3000039 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00



Reviewed By: *[Signature]*  
 30/06/2022

Analysed By: *[Signature]*  
 30/06/2022

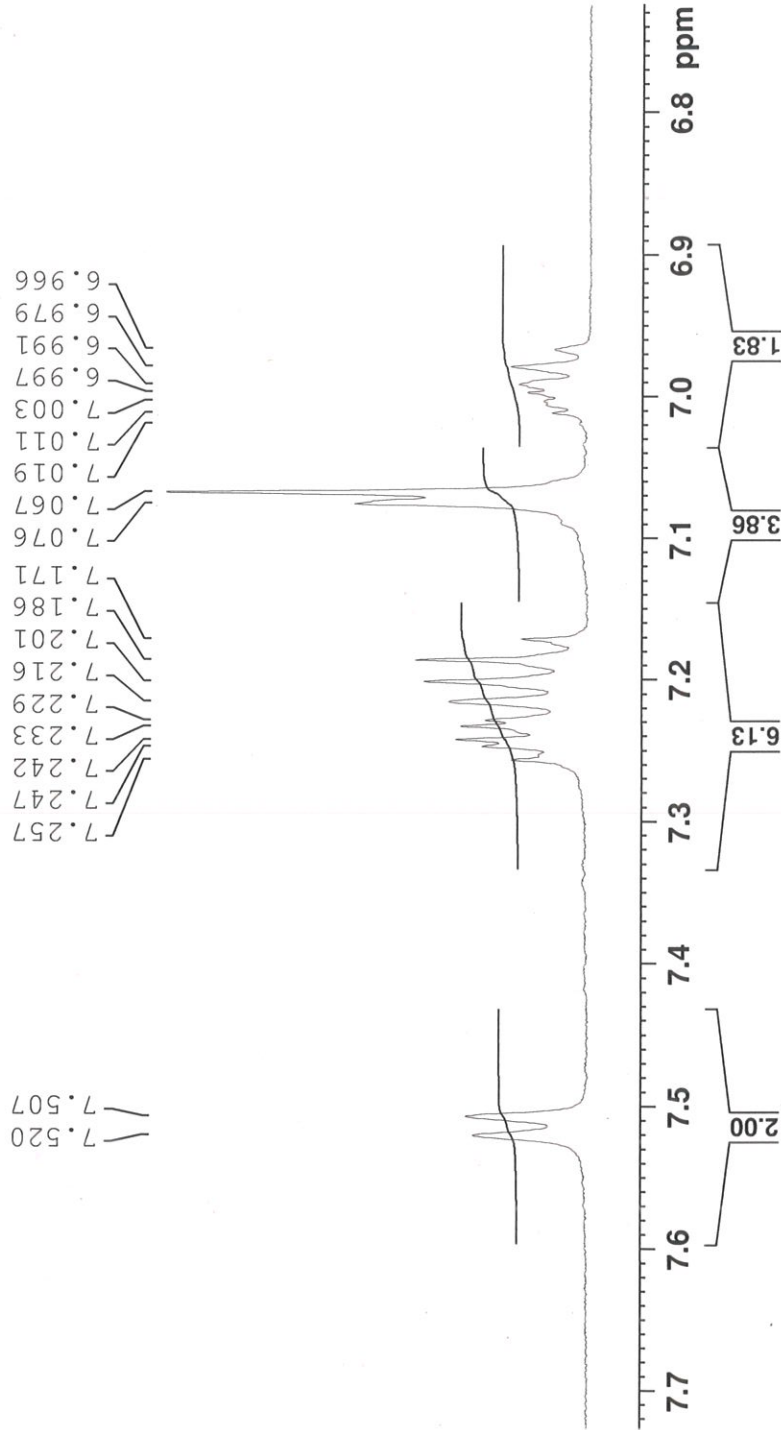


CRC-AAA-2654-01  
1H-NMR \ DMSO  
CRC-270622/109

Current Data Parameters  
NAME CRC-AAA-2654-01  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20220628  
Time 12.07 h  
INSTRUM spect  
PROBHD Z114607\_0866 (   
PULPROG zg30  
TD 65536  
SOLVENT DMSO  
NS 16  
DS 2  
SWH 12019.230 Hz  
FIDRES 0.366798 Hz  
AQ 2.7262976 sec  
RG 139.77  
DW 41.600 usec  
DE 6.50 usec  
TE 301.6 K  
D1 1.0000000 sec  
TD0 1  
SF01 600.3037069 MHz  
NUC1 1H  
P1 10.00 usec  
PLW1 25.92499924 W

F2 - Processing parameters  
SI 65536  
SF 600.3000039 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



Reviewed By: *JF*  
30/06/2022

Analysed By: *My*  
30/06/2022

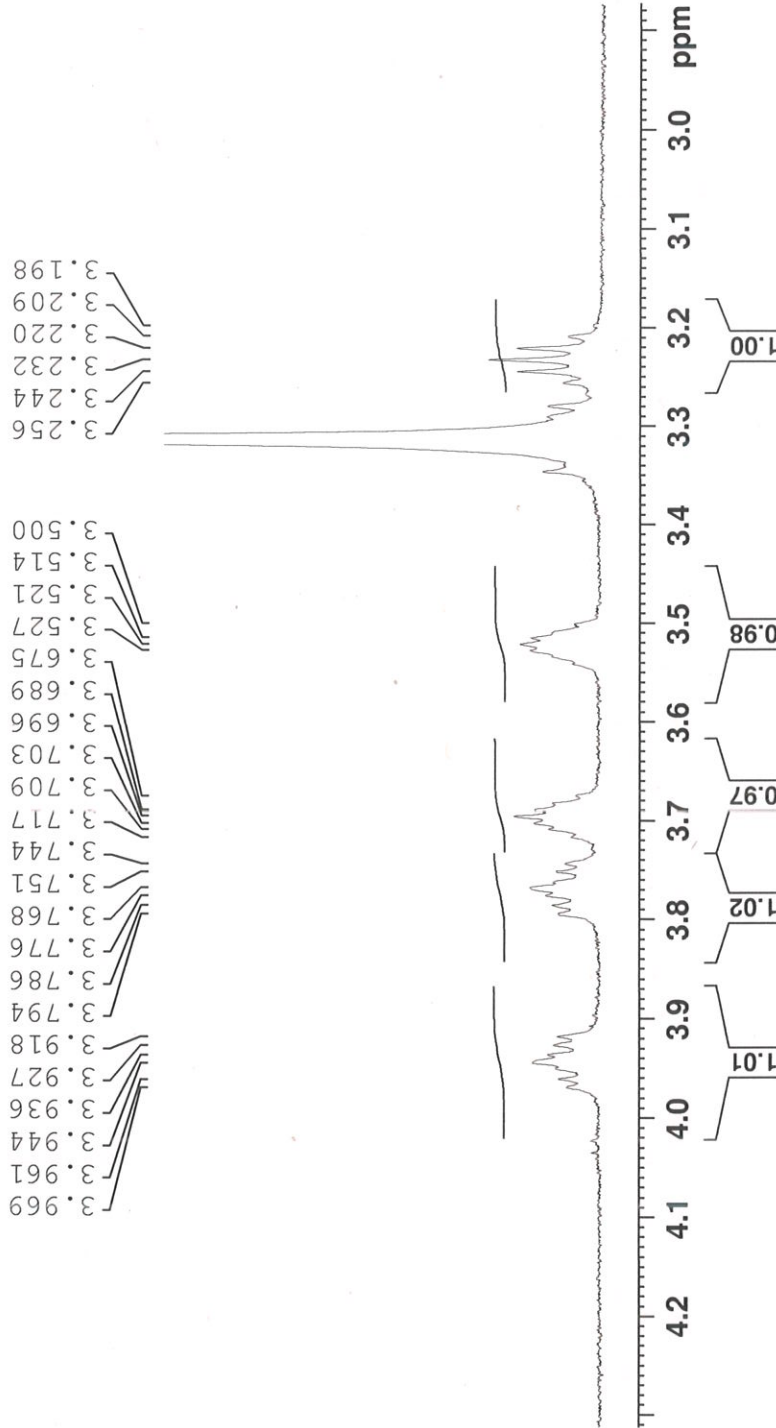


CRC-AAA-2654-01  
1H-NMR\DMISO  
CRC-270622/109

Current Data Parameters  
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EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
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Time 12.07 h  
INSTRUM spect  
PROBHD Z114607\_0866 (  
PULPROG zg30  
TD 65536  
SOLVENT DMSO  
NS 16  
DS 2  
SWH 12019.230 Hz  
FIDRES 0.366798 Hz  
AQ 2.7262976 sec  
RG 139.77  
DW 41.600 usec  
DE 6.50 usec  
TE 301.6 K  
D1 1.0000000 sec  
TD0 1  
SF01 600.3037069 MHz  
NUC1 1H  
P1 10.00 usec  
PLW1 25.92499924 W

F2 - Processing parameters  
SI 65536  
SF 600.3000039 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



Reviewed By: *[Signature]*  
30/06/2022

Analysed By: *[Signature]*  
30/06/2022

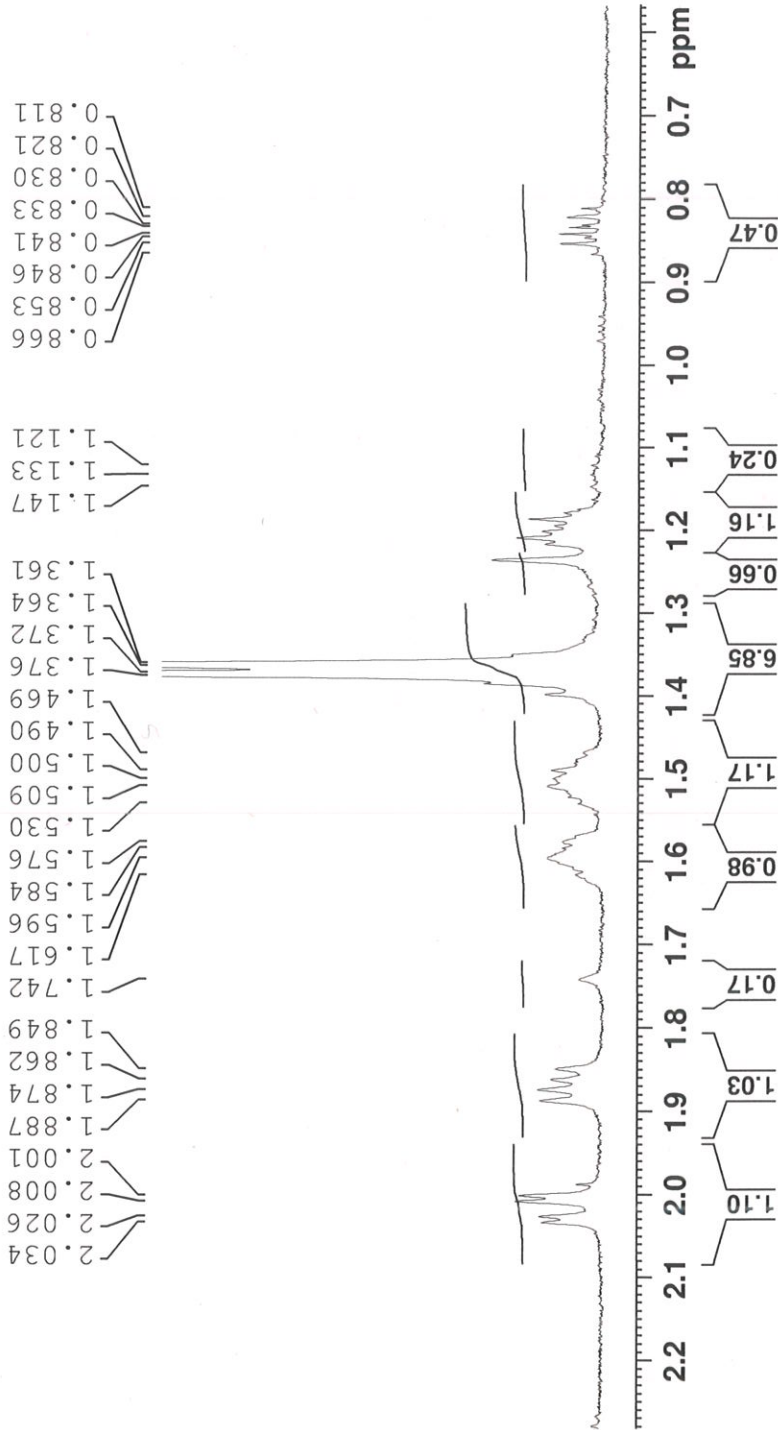


CRC-AAA-2654-01  
1H-NMR\ DMSO  
CRC-270622/109

Current Data Parameters  
NAME CRC-AAA-2654-01  
EXPNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date\_ 20220628  
Time 12.07 h  
INSTRUM spect  
PROBHD Z114607\_0866 (  
PULPROG zg30  
TD 65536  
SOLVENT DMSO  
NS 16  
DS 2  
SWH 12019.230 Hz  
FIDRES 0.366798 Hz  
AQ 2.7262976 sec  
RG 139.77  
DW 41.600 usec  
DE 6.50 usec  
TE 301.6 K  
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NUC1 1H  
P1 10.00 usec  
PLW1 25.92499924 W

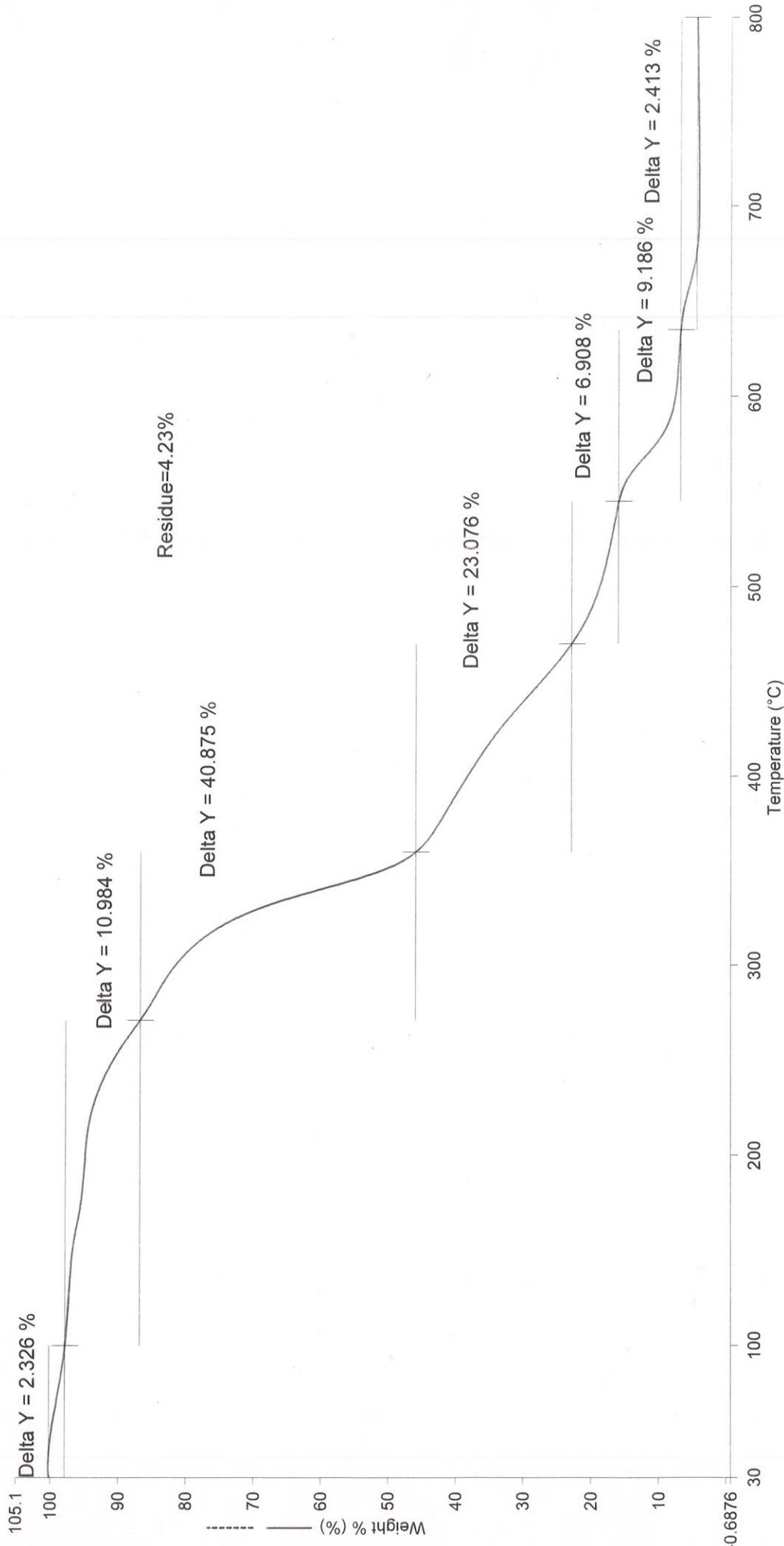
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SF 600.3000039 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00



Reviewed By: *[Signature]*  
30/06/2022

Analysed By: *[Signature]*  
30/06/2022

Filename: E:\TGA ANALYSIS\TGA ... \CRC-AAA-2654-01.t6d  
 Data Collected: 13/07/2022 13:20:27  
 Operator ID: Radhika bherde  
 Sample ID: CRC-AAA-2654-01# AR.NO.CRC-080722/058  
 Sample Weight: 2.243 mg  
 Comment: CLEARSYNTH RESEARCH CENTRE



13/07/2022 14:23:32

3) Hold for 5.0 min at 800.00°C

- 1) Heat from 30.00°C to 550.00°C at 20.00°C/min
- 2) Heat from 550.00°C to 800.00°C at 20.00°C/min

Analysed By: Radhika  
 13/07/2022

Reviewed by: Gay 13/07/2022