

Name:	Tacrolimus-13C, D2 (major)
Lot#:	GR-15-141
Test Date:	04/23/2024 (re-test date: 04/23/2029)
CAS No.:	1356841-89-8
MF:	C ₄₃ ¹³ CH ₆₇ D ₂ NO ₁₂
MW:	807.02
Appearance:	Pale yellow solid
Purity:	98.4% by HPLC (sum of three isomers; average of two sample preparations); 99% atom ¹³ C; >85%atom D
¹H-NMR:	Conforms (shows a trace of ACN)
MALDI (+)	Conforms (shows peak at m/z = 829.49 [M+Na] ⁺ for the major ¹³ C, D2 form)
Storage	Store at -20°C in a dry place away from direct sunlight under nitrogen

Approved by:

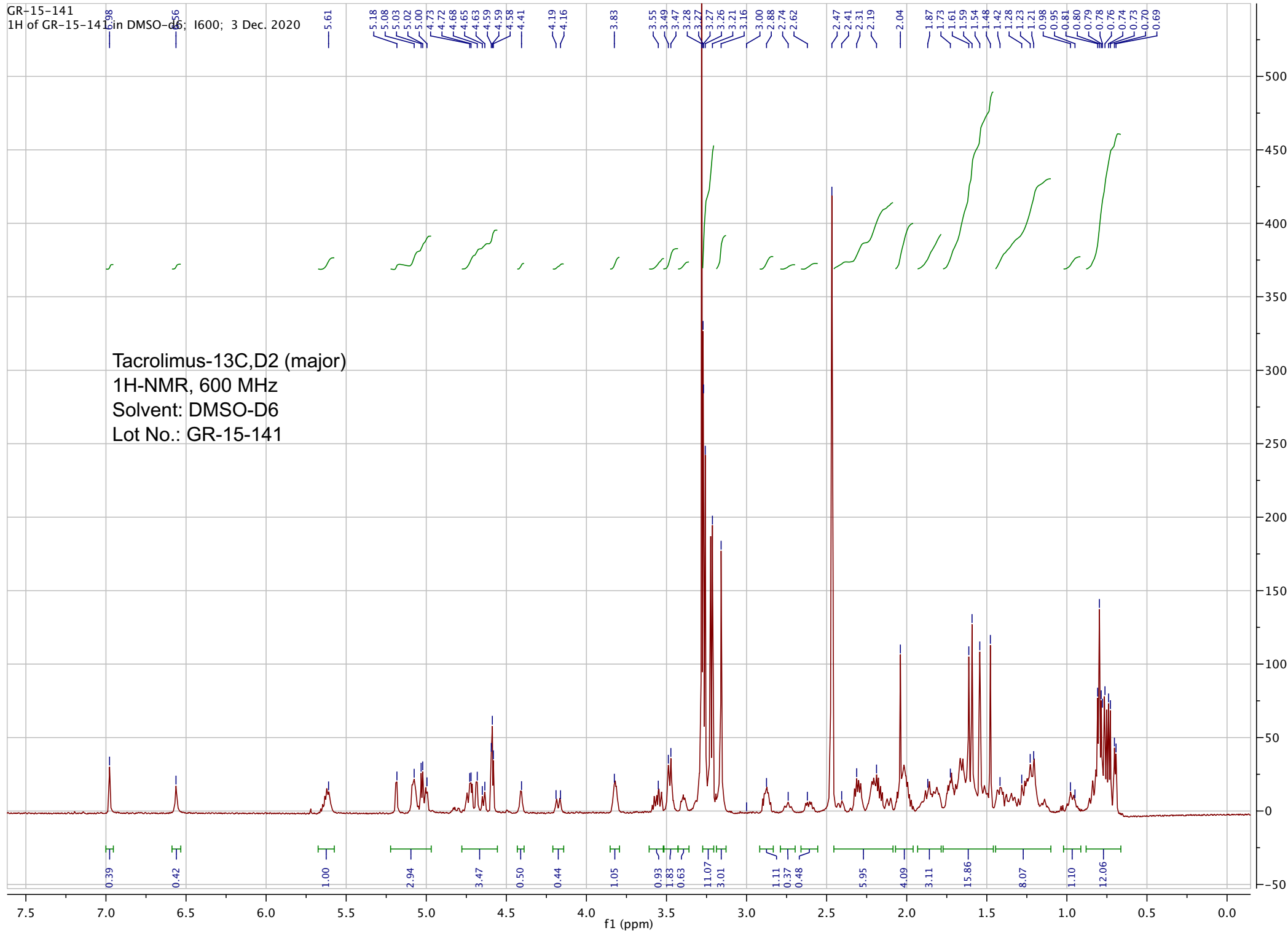
Date: 04/23/2024

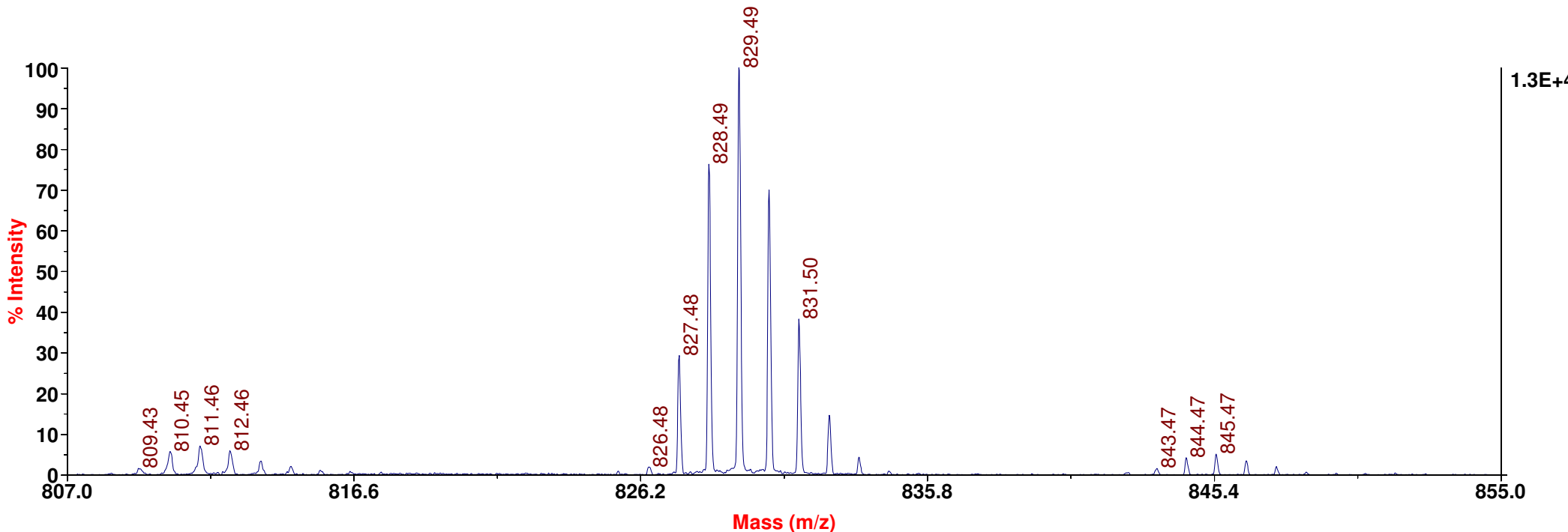


Viorica Rusu, QC/QA Manager

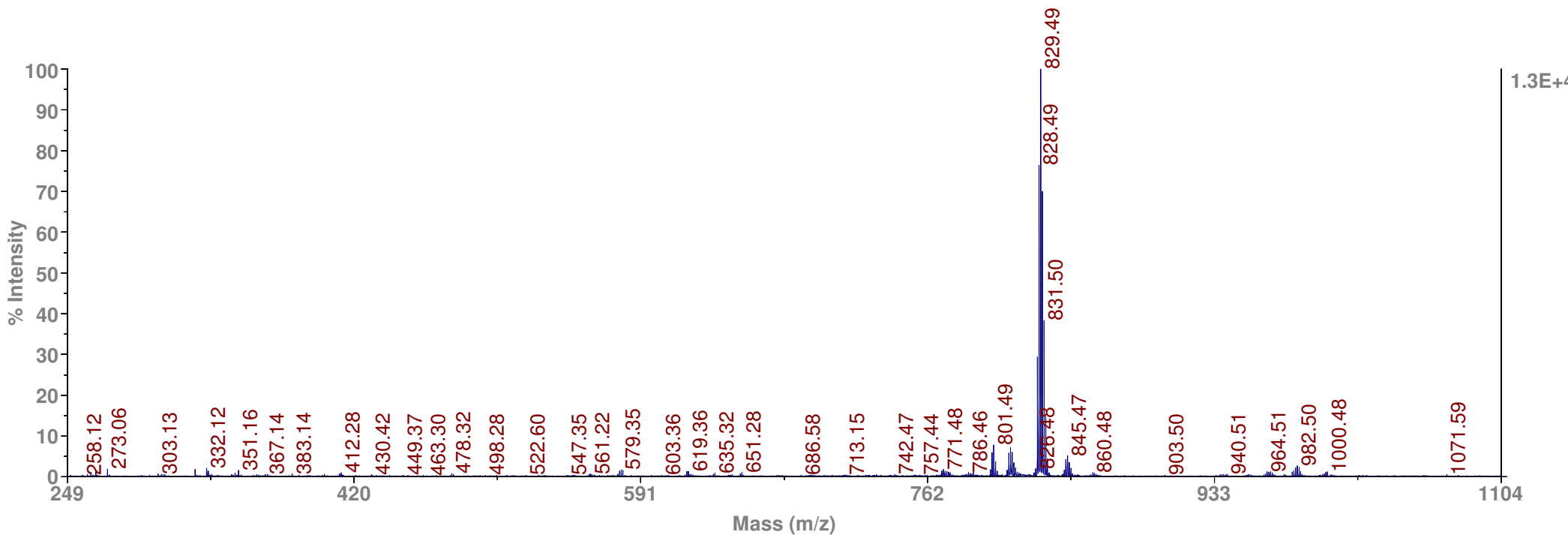
GR-15-141
1H of GR-15-141 in DMSO-d6; I600; 3 Dec. 2020

Tacrolimus-13C,D2 (major)
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-15-141



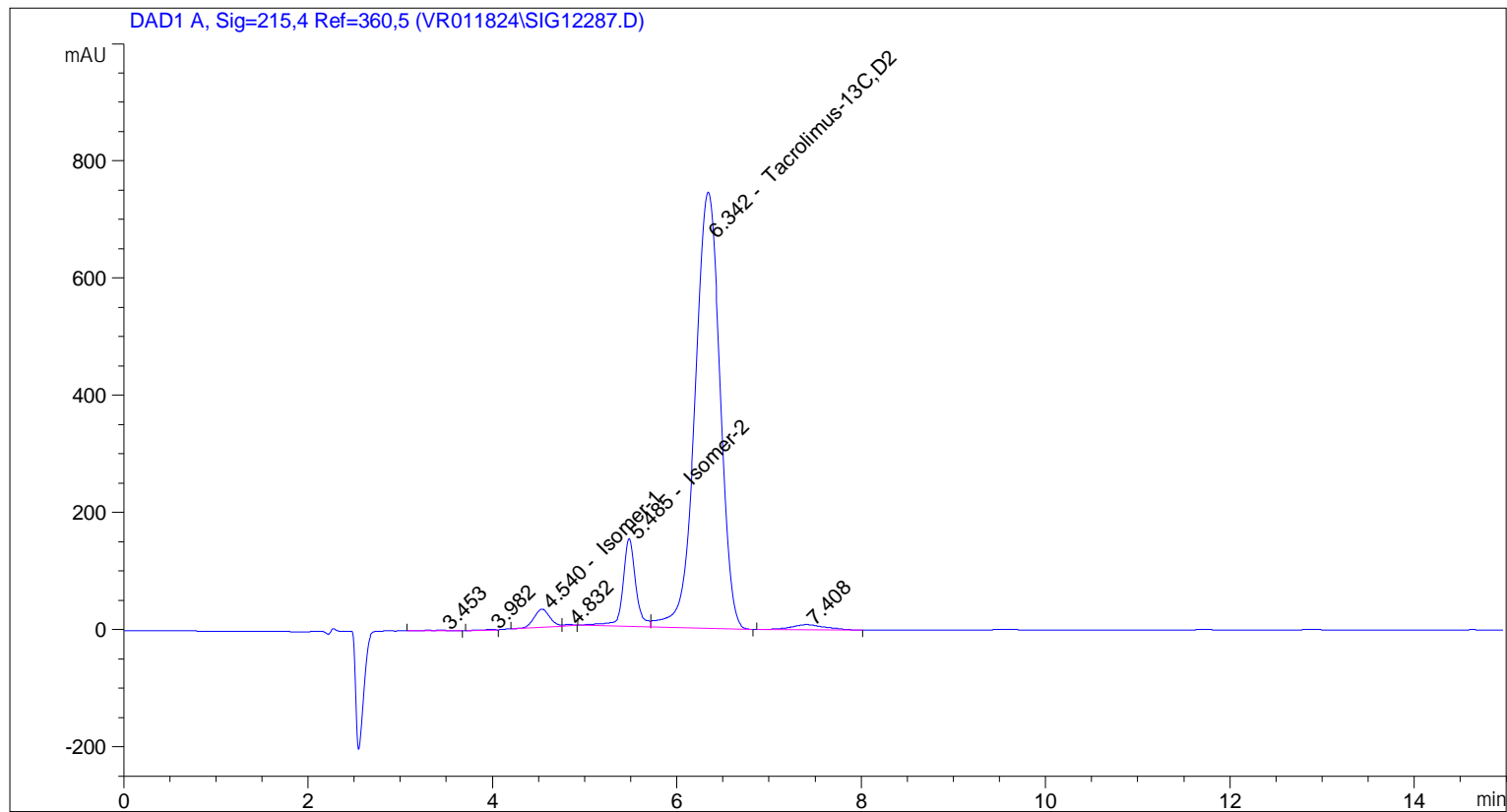


TOF/TOF™ Reflector Spec #1 MC[BP = 829.5, 12942]



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Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 49
Injection Date  : 4/23/2024 10:09:34 AM
                                           Inj Volume : 50.0 µl
Acq. Method    : C:\CHEM32\1\METHODS\VR042324_141.M
Last changed   : 4/23/2024 10:07:37 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR042324_141PM.M
Last changed   : 4/23/2024 10:46:12 AM by vrusu
  
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 Area Percent Report
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Sorted By      : Signal
Calib. Data Modified : 4/23/2024 10:45:51 AM
Multiplier:    : 1.0000
Dilution:     : 1.0000
Use Multiplier & Dilution Factor with ISTDs
  
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Signal 1: DAD1 A, Sig=215,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.453	BB	0.1914	19.95207	0.1243	?
2	3.982	BB	0.1068	11.44099	0.0713	?
3	4.540	BV	0.1860	367.07141	2.2863	Isomer-1
4	4.832	VB	0.1119	13.94779	0.0869	?
5	5.485	BV	0.1418	1412.74231	8.7991	Isomer-2
6	6.342	VB	0.2936	1.40106e4	87.2635	Tacrolimus-13C,D2
7	7.408	BB	0.3534	219.76080	1.3688	?

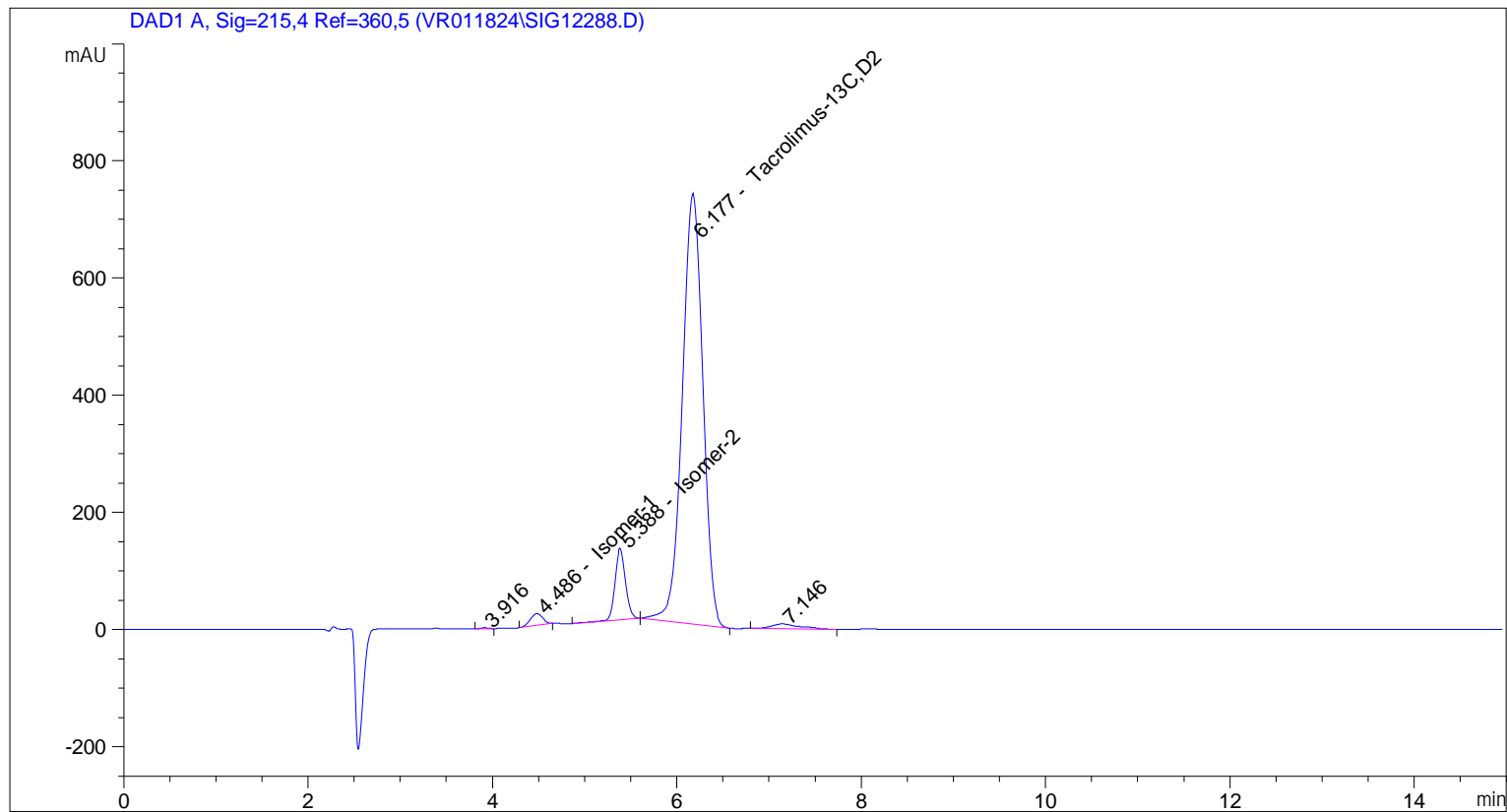
Sample Name: GR-15-141

Totals : 1.60555e4

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*** End of Report ***

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 50
Injection Date : 4/23/2024 10:27:14 AM Inj Volume : 50.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR042324_141.M
Last changed : 4/23/2024 10:25:17 AM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR042324_141PM.M
Last changed : 4/23/2024 10:46:12 AM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 4/23/2024 10:45:51 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=215,4 Ref=360,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	3.916	BB	0.0877	9.65530	0.0757	?
2	4.486	BB	0.1487	187.90750	1.4736	Isomer-1
3	5.388	BB	0.1226	969.77240	7.6049	Isomer-2
4	6.177	BB	0.2428	1.14016e4	89.4102	Tacrolimus-13C,D2
5	7.146	BB	0.3076	183.08029	1.4357	?

Totals : 1.27520e4

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*** End of Report ***