


Name:	9α-Chloro Triamcinolone Acetonide
Lot#:	GR-18-083
Test Date:	03/22/2023 (re-test date: 03/22/2028)
CAS No.:	10392-74-2
MF:	C ₂₄ H ₃₁ ClO ₆
MW:	450.95
Appearance:	Beige Solid
Purity:	98.2% by HPLC (average of two sample preparations)
¹H-NMR:	Conforms
MS-ESI (+)	Conforms (shows peaks at m/z = 451.19 & 453.19 [M+H] ⁺ , exhibits the expected isotope pattern for mono-chloro compounds)
Storage	Store at -18°C in a dry place away from direct sunlight

Approved by:

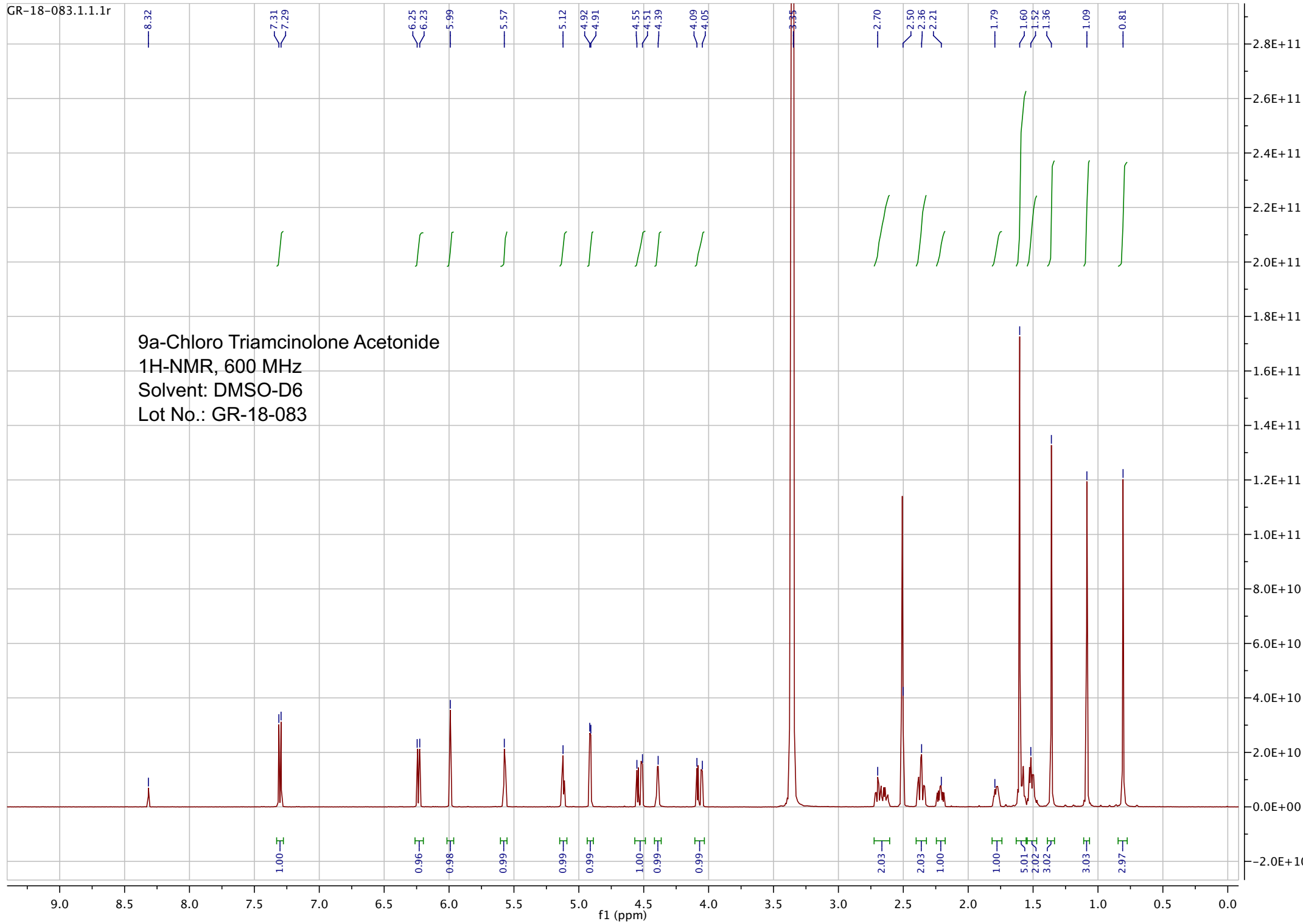
Date: 04/05/2023



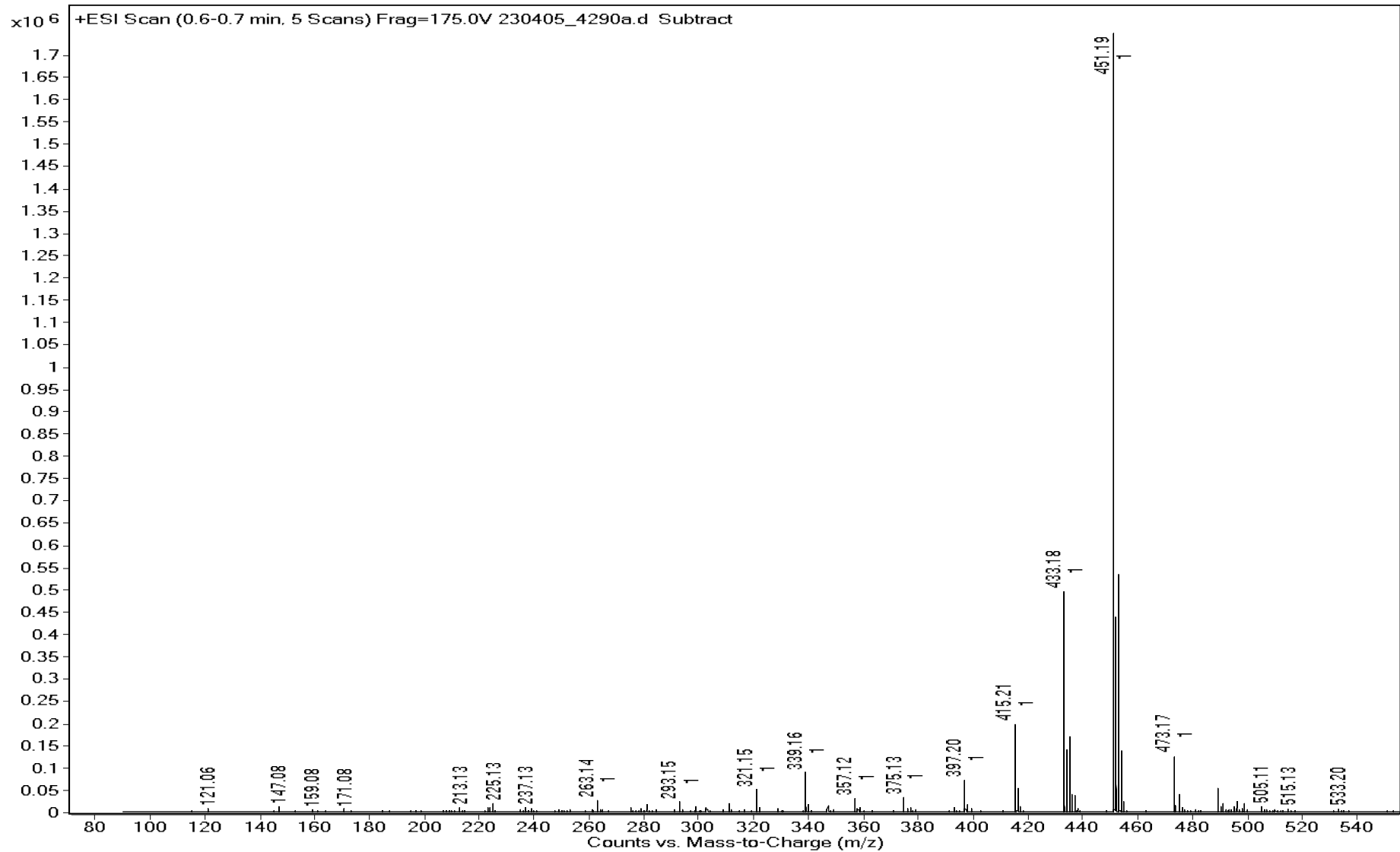
Viorica Rusu, QC/QA Manager

GR-18-083.1.1.1r

9a-Chloro Triamcinolone Acetonide
1H-NMR, 600 MHz
Solvent: DMSO-D6
Lot No.: GR-18-083



Sample Name	GR-18-083	Data File	230405_4290a.d	Acq Method	HRMS.m
DA Method	AIMS_Accurate_Mass.m	Instrument	Agilent 6538 UHD	Acq Date, Time	05/04/2023 11:08:25 AM
Comment	ESI+				



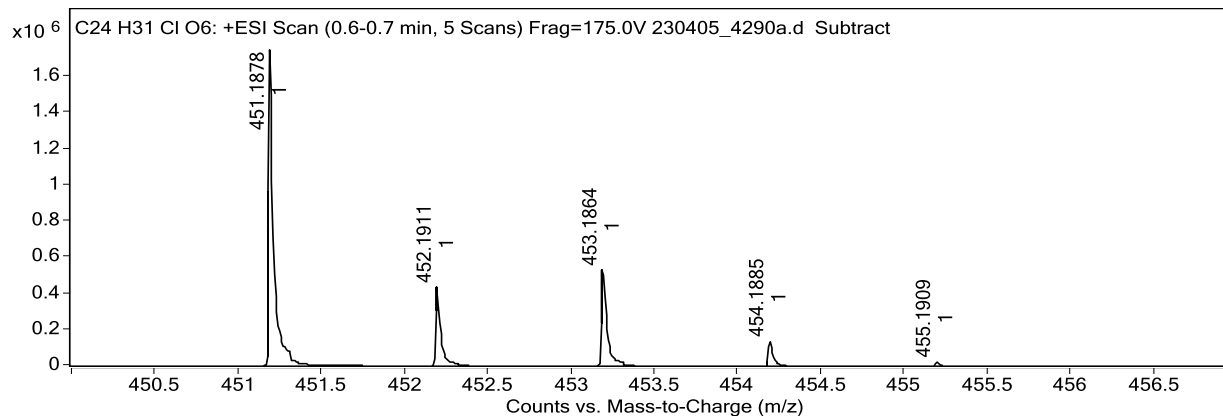
Sample Name	GR-18-083	Data File	230405_4290a.d
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Instrument	Agilent 6538 UHD	Acq Date, Time	05/04/2023 11:08:25 AM
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Target Ion Species

Ion Species	m/z	Ionic Formula
(M+H) ⁺	451.1878	C ₂₄ H ₃₂ C ₁ O ₆

MFG Calculator Results

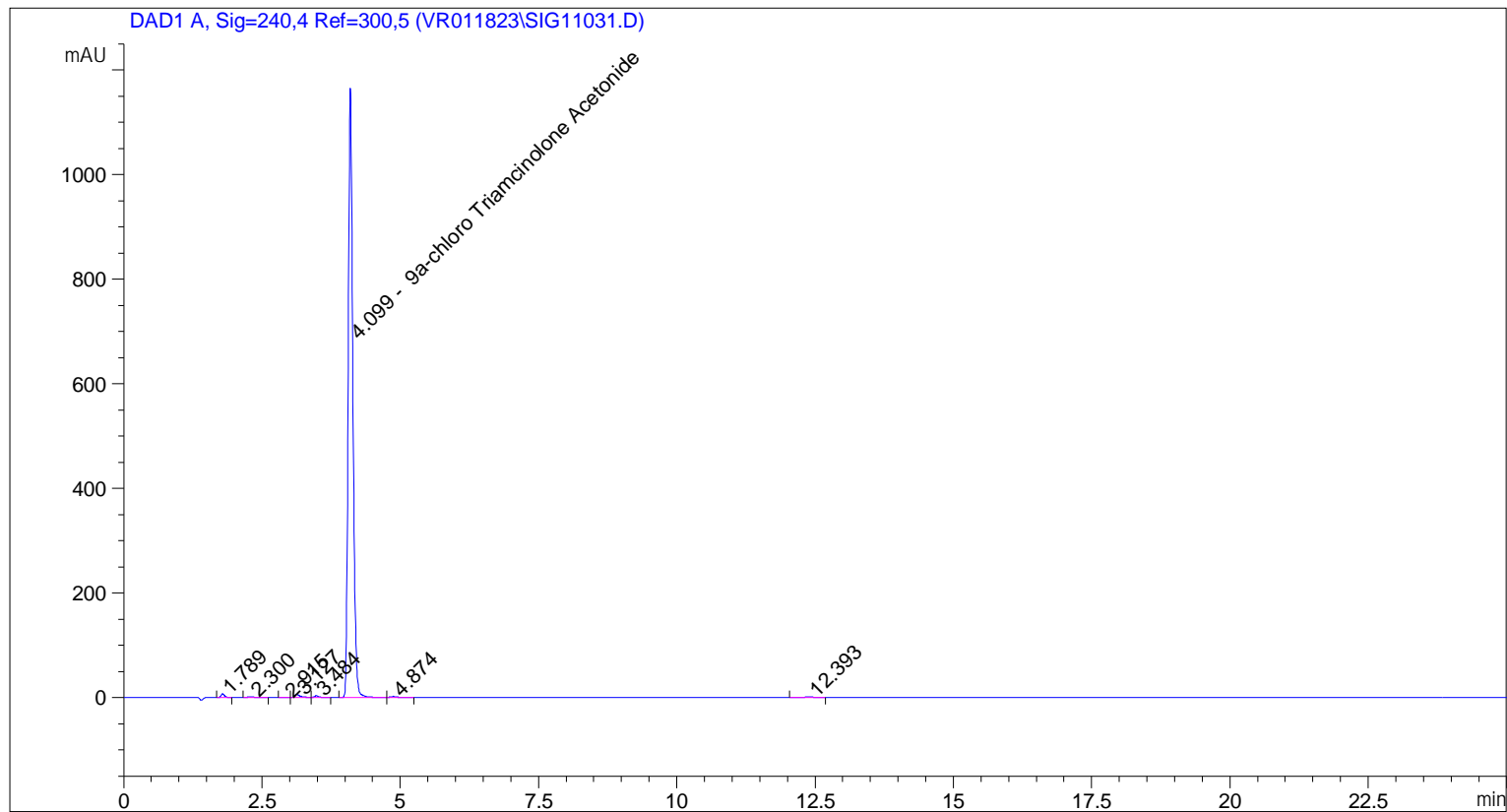
Target m/z	Ionic Formula	Calc m/z	+/- (mDa)	+/- (ppm)	DBE	MFG Score
451.1878	C ₂₄ H ₃₂ C ₁ O ₆	451.1882	-0.4	-0.9	9.0	97.46
451.1878	C ₂₁ H ₂₄ C ₁ N ₁₀	451.1868	1.0	2.2	15.0	94.24
451.1878	C ₂₅ H ₂₈ C ₁ N ₄ O ₂	451.1895	-1.7	-3.8	14.0	91.56
451.1878	C ₂₀ H ₂₈ C ₁ N ₆ O ₄	451.1855	2.3	5.1	10.0	84.99
451.1878	C ₁₉ H ₃₂ C ₁ N ₂ O ₈	451.1842	3.6	8.0	5.0	72.00
451.1878	C ₁₃ H ₃₂ C ₁ N ₆ O ₉	451.1914	-3.6	-8.0	1.0	68.44



Predicted Isotope Match Table

Isotope	m/z	Calc m/z	Diff (mDa)	Abund (%)	Calc Abund (%)	+/-
1	451.1878	451.1882	-0.4	100.0	100.0	0.0
2	452.1911	452.1916	-0.5	24.5	26.6	2.1
3	453.1864	453.1864	0.0	31.5	36.6	5.1
4	454.1885	454.1892	-0.7	7.7	9.1	1.4
5	455.1909	455.1917	-0.8	1.3	1.5	0.2

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 23
Injection Date : 3/17/2023 1:56:13 PM Inj Volume : 10.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR031823_083.M
Last changed : 3/17/2023 1:55:04 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR032223_083PM.M
Last changed : 3/22/2023 7:31:42 AM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 3/22/2023 7:30:38 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=240,4 Ref=300,5

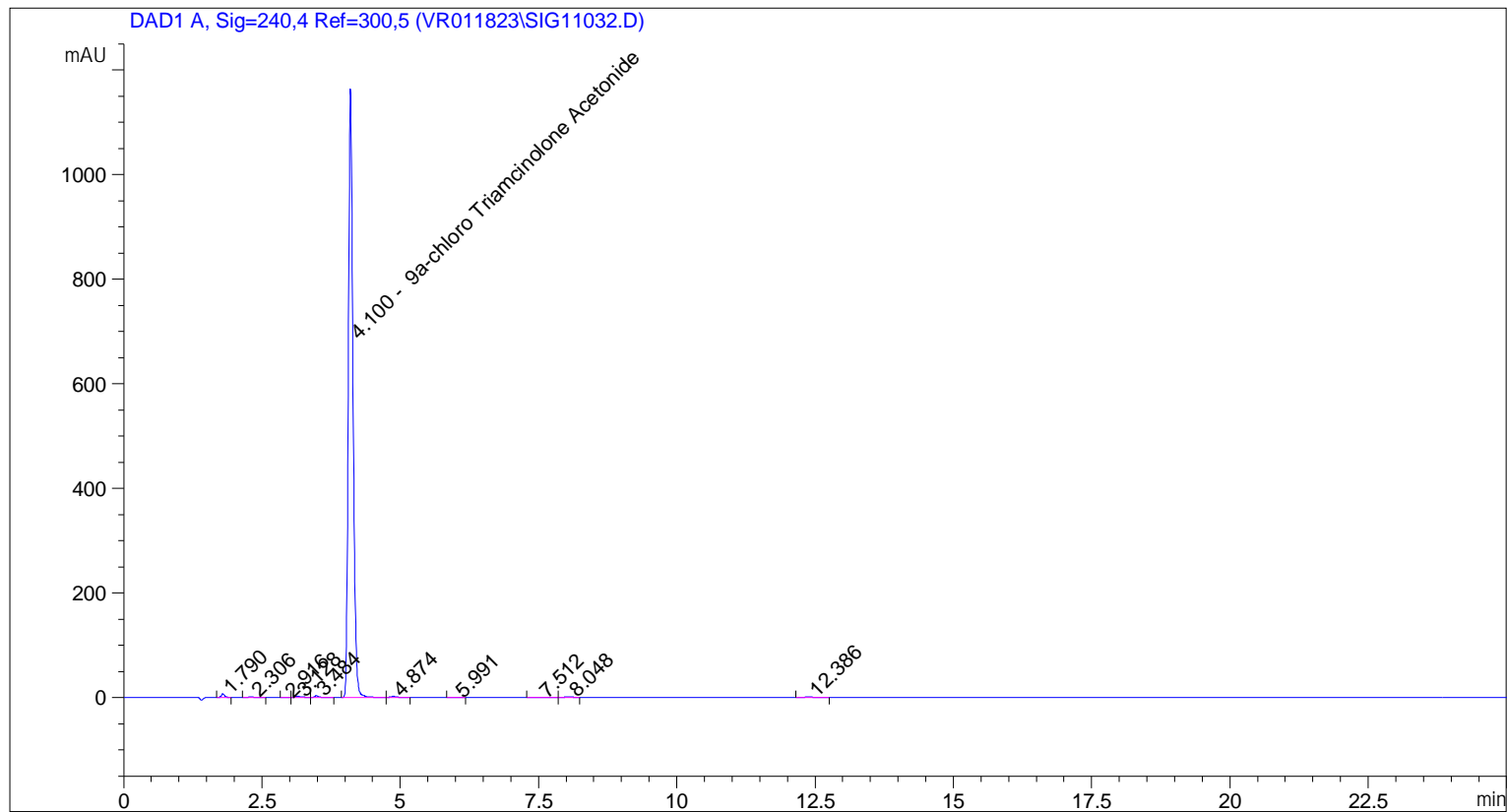
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.789	BB	0.0621	28.59745	0.4145	?
2	2.300	BB	0.1242	9.17320	0.1329	?
3	2.915	BV	0.0850	1.38510	0.0201	?
4	3.127	VV	0.1064	42.22322	0.6119	?
5	3.484	VB	0.0846	17.16572	0.2488	?
6	4.099	BV	0.0898	6772.77393	98.1559	9a-chloro Triamcinolone Acetonide
7	4.874	VB	0.1251	15.37559	0.2228	?
8	12.393	BB	0.2128	13.32302	0.1931	?

Sample Name: GR-18-083

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
Totals :				6900.01723		

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*** End of Report ***

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Acq. Operator : vrusu
Acq. Instrument : Instrument 1 Location : Vial 24
Injection Date : 3/17/2023 2:25:14 PM Inj Volume : 10.0 µl
Acq. Method : C:\CHEM32\1\METHODS\VR031823_083.M
Last changed : 3/17/2023 2:24:11 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR032223_083PM.M
Last changed : 3/22/2023 7:31:42 AM by vrusu



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Area Percent Report
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Sorted By : Signal
Calib. Data Modified : 3/22/2023 7:30:38 AM
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=240,4 Ref=300,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.790	BB	0.0638	28.29132	0.4116	?
2	2.306	BB	0.1067	6.90041	0.1004	?
3	2.916	BV	0.0855	1.06292	0.0155	?
4	3.128	VV	0.1103	20.91032	0.3042	?
5	3.484	VB	0.0855	17.81882	0.2592	?
6	4.100	BV	0.0897	6750.82471	98.2136	9a-chloro Triamcinolone Acetonide
7	4.874	VB	0.1214	14.87002	0.2163	?
8	5.991	BB	0.1039	2.60897	0.0380	?

Sample Name: GR-18-083 spl-2

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
9	7.512	BB	0.1901	5.72376	0.0833	?
10	8.048	BB	0.1332	13.18531	0.1918	?
11	12.386	BB	0.1967	11.42006	0.1661	?

Totals : 6873.61661

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*** End of Report ***