

<b>Name:</b>	<b>Febuxostat-D9</b> (2-[3-Cyano-4-(2-methylpropoxy-d9)phenyl]-4-methyl-5-thiazolecarboxylic Acid)
<b>Lot#:</b>	GR-8-193
<b>Test Date:</b>	08/23/2021 (re-test date: 08/23/2026)
<b>CAS No.:</b>	1246819-50-0
<b>MF:</b>	C <sub>16</sub> H <sub>7</sub> D <sub>9</sub> N <sub>2</sub> O <sub>3</sub> S
<b>MW:</b>	325.43
<b>Appearance:</b>	White solid
<b>Purity:</b>	98.5% by HPLC (average of two sample preparations); 99% atom D
<b><sup>1</sup>H-NMR:</b>	Conforms
<b>MS-ESI (+)</b>	Conforms (shows peak at m/z = 326.15 [M+H] <sup>+</sup> )
<b>Storage</b>	Store at -18°C in a dry place away from direct sunlight

Approved by:

Date: 08/23/2021



Viorica Rusu, QC/QA Manager

8.24  
8.19  
8.17

7.33  
7.32

3.28

2.62

2.46

Febuxostat-D9  
1H-NMR, 600 MHz  
Solvent: DMSO-D6  
Lot No.: GR-8-193

0.72  
0.98

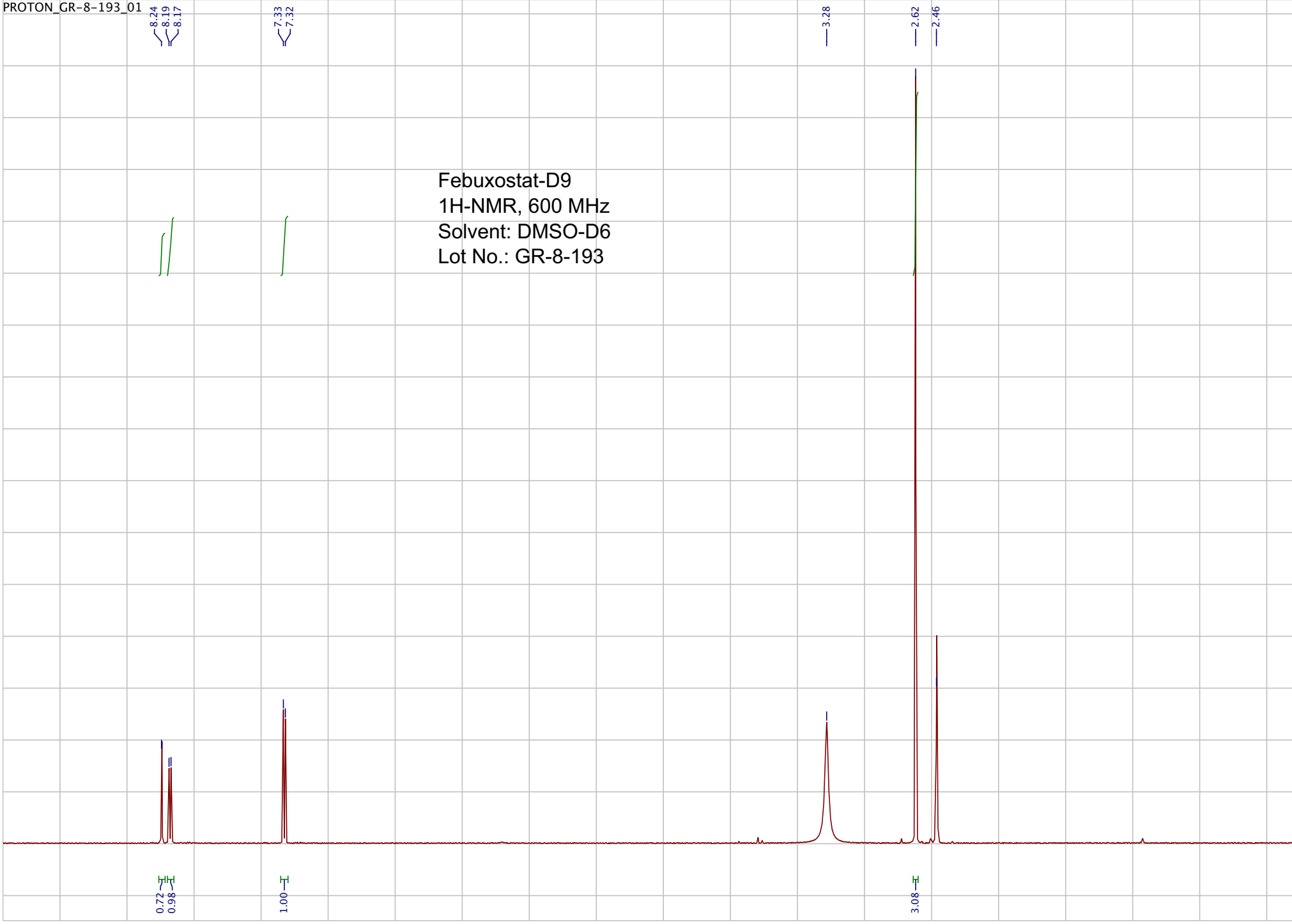
1.00

3.08

9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0

f1 (ppm)

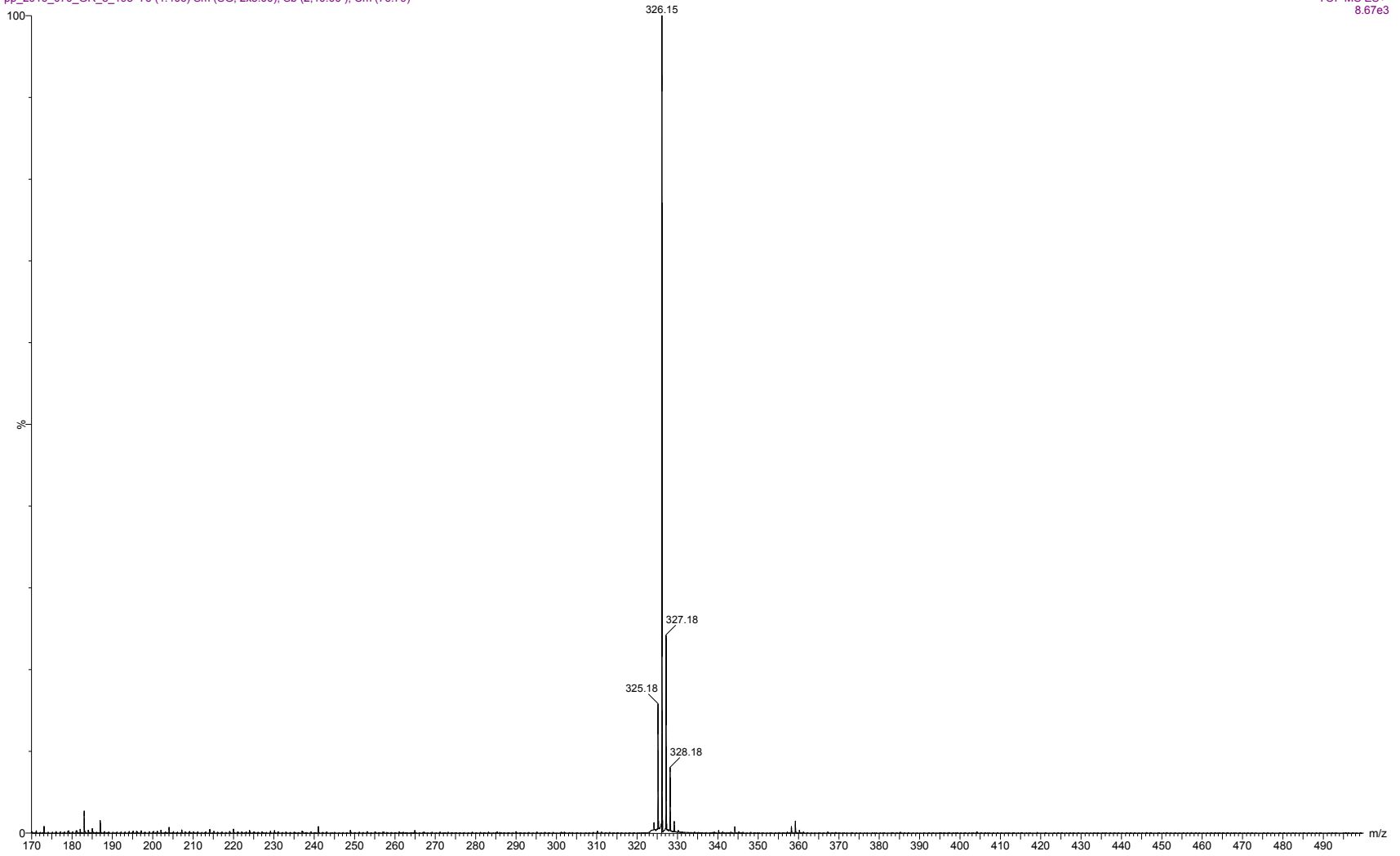
8000  
7500  
7000  
6500  
6000  
5500  
5000  
4500  
4000  
3500  
3000  
2500  
2000  
1500  
1000  
500  
0  
-500

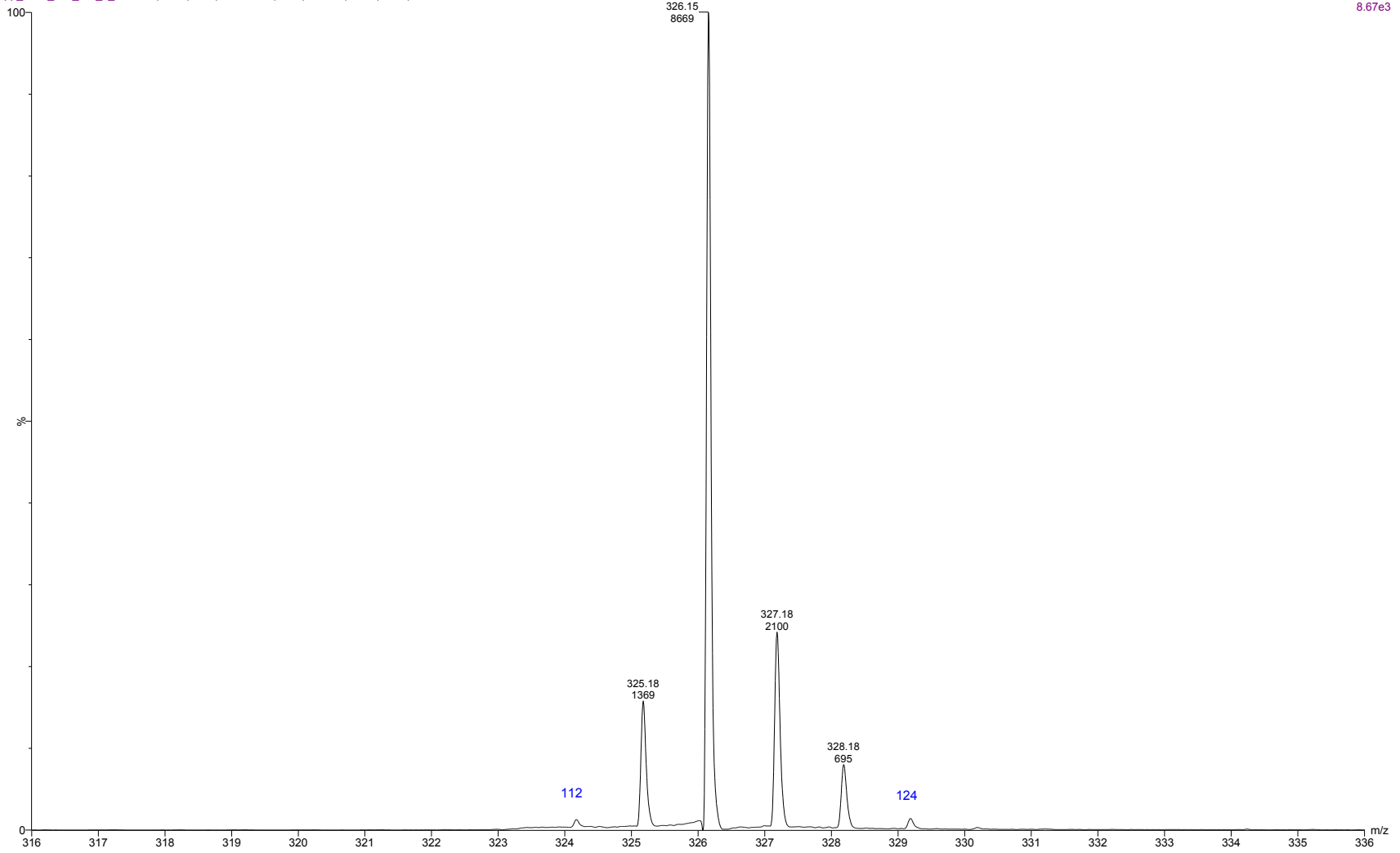


pp\_2016\_070\_GR\_8\_193 76 (1.406) Sm (SG, 2x5.00); Sb (2,10.00 ); Cm (76.79)

7.00000000

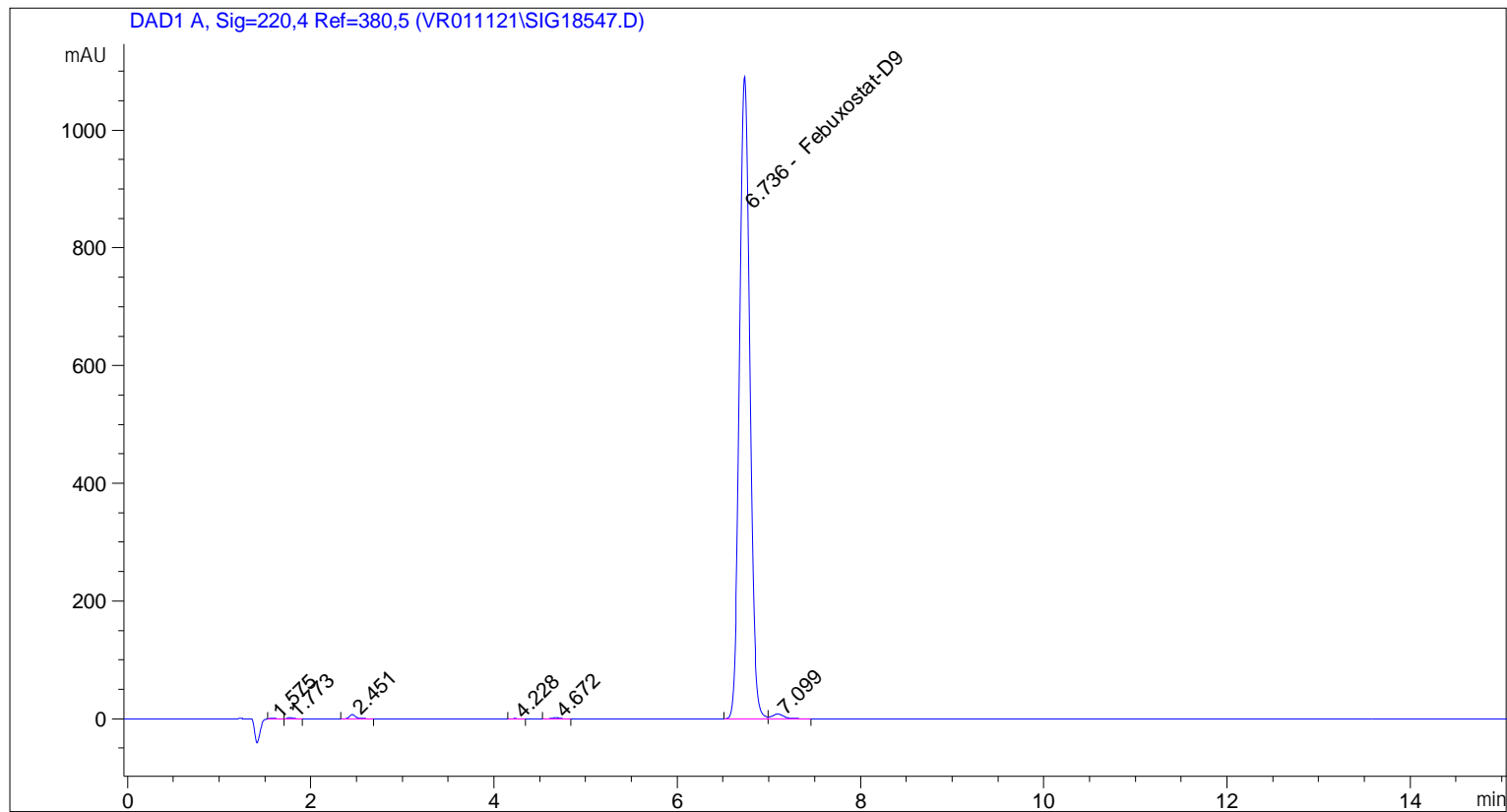
08-Aug-2016, 15:45:45  
TOF MS ES+  
8.67e3





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=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 62
Injection Date  : 8/23/2021 2:26:49 PM
                                           Inj Volume : 10.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR_081821_177.M
Last changed    : 8/23/2021 2:25:42 PM by vrusu
Analysis Method : C:\CHEM32\1\METHODS\VR_082321_233PM.M
Last changed    : 8/23/2021 3:08:58 PM by vrusu
  
```



Area Percent Report

```

Sorted By           : Signal
Calib. Data Modified : 8/23/2021 3:06:41 PM
Multiplier:         : 1.0000
Dilution:           : 1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=220,4 Ref=380,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.575	BV	0.0654	5.79250	0.0670	?
2	1.773	VB	0.0649	8.89511	0.1028	?
3	2.451	BB	0.0727	33.45252	0.3867	?
4	4.228	BB	0.0778	2.39817	0.0277	?
5	4.672	BB	0.0910	10.71528	0.1239	?
6	6.736	BV	0.1231	8519.07715	98.4686	Febuxostat-D9
7	7.099	VB	0.1312	71.23426	0.8234	?

Sample Name: GR-8-193

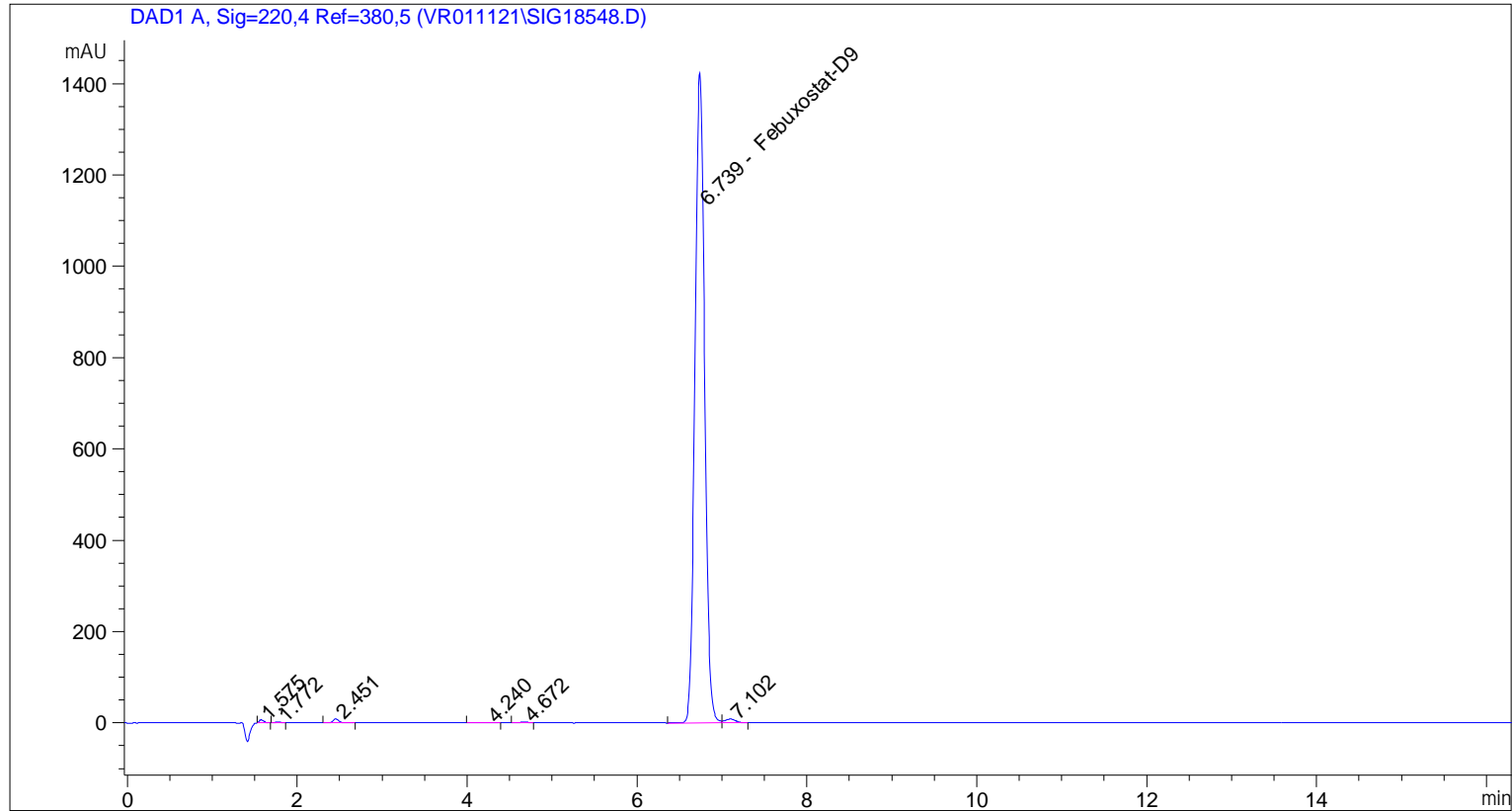
Totals : 8651.56500

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\*\*\* End of Report \*\*\*

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=====
Acq. Operator   : vrusu
Acq. Instrument : Instrument 1                Location : Vial 63
Injection Date  : 8/23/2021 2:43:43 PM
                                           Inj Volume : 10.0 µl
Acq. Method     : C:\CHEM32\1\METHODS\VR_081821_177.M
Last changed    : 8/23/2021 2:42:37 PM by vrusu
Analysis Method  : C:\CHEM32\1\METHODS\VR_082321_233PM.M
Last changed    : 8/23/2021 3:08:58 PM by vrusu
  
```



=====  
 Area Percent Report  
 =====

```

Sorted By           :      Signal
Calib. Data Modified :      8/23/2021 3:06:41 PM
Multiplier:         :      1.0000
Dilution:           :      1.0000
Use Multiplier & Dilution Factor with ISTDs
  
```

Signal 1: DAD1 A, Sig=220,4 Ref=380,5

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Area %	Name
1	1.575	BB	0.0598	24.48368	0.2144	?
2	1.772	BB	0.0611	9.74485	0.0853	?
3	2.451	BV	0.0710	45.16608	0.3956	?
4	4.240	BV	0.1122	5.74229	0.0503	?
5	4.672	BV	0.0911	14.28737	0.1251	?
6	6.739	BV	0.1242	1.12476e4	98.5101	Febuxostat-D9
7	7.102	VB	0.1306	70.69153	0.6191	?

Sample Name: GR-8-193 spl-2

Totals : 1.14177e4

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\*\*\* End of Report \*\*\*