

Synthesis and biological evaluation of novel artemisone-piperazine-tetronamide hybrids

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Si-Si Zhang and Yu He

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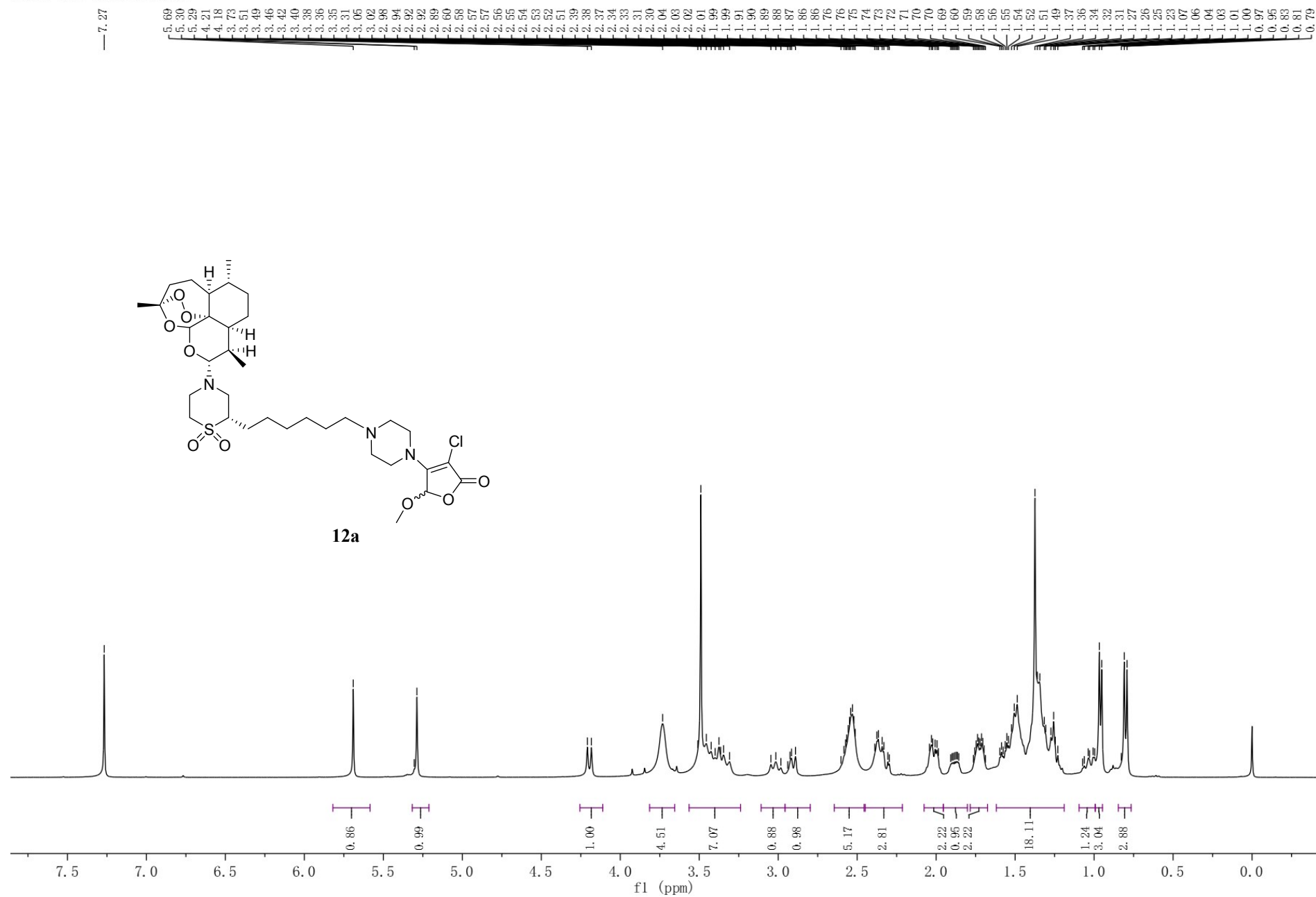
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¹ H NMR, ¹³ C NMR, IR spectra, HRMS and HPLC for products 12a-f	S2

General remarks

All starting materials and reagents were purchased from commercially available sources and used without further purification, unless otherwise indicated. ¹H NMR spectra were recorded on a Bruker Avance III 400 MHz spectrometer. Chemical shifts (in ppm) were calibrated with CDCl₃. ¹³C NMR spectra were obtained by using the same NMR spectrometers and were calibrated with CDCl₃. Infrared (IR) spectra of compounds dispersed in potassium bromide were recorded using a FTIR-8400S spectrometer, and values are reported as ν in cm⁻¹. High resolution mass spectrums (HRMS) of targets were recorded on a Thermo Fisher LTQ Orbitrap XL. The biological activity test was performed by Wuhan Bafeier Biotechnology Service Co., Ltd.

¹H NMR, ¹³C NMR, IR spectra, HRMS and HPLC for products 12a-f

Feb24-2021-12A-P. 10. fid —



12A-P. 20. fid — 12a-p

— 171.3
— 167.9
— 153.6

— 104.3

— 97.5

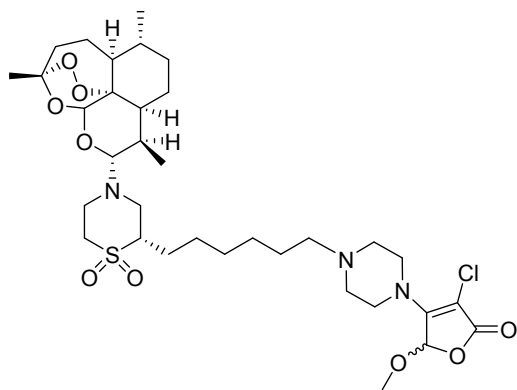
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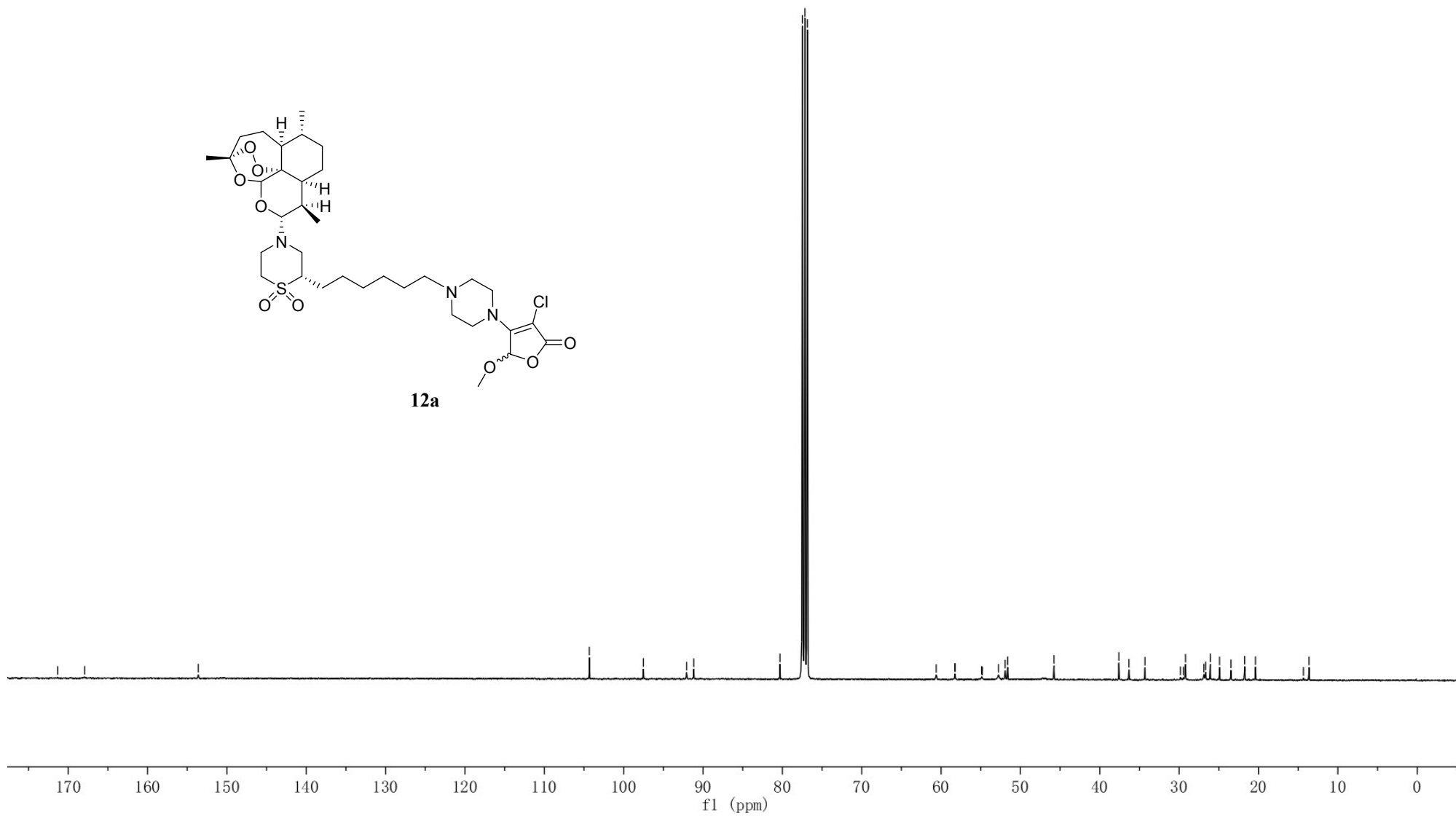
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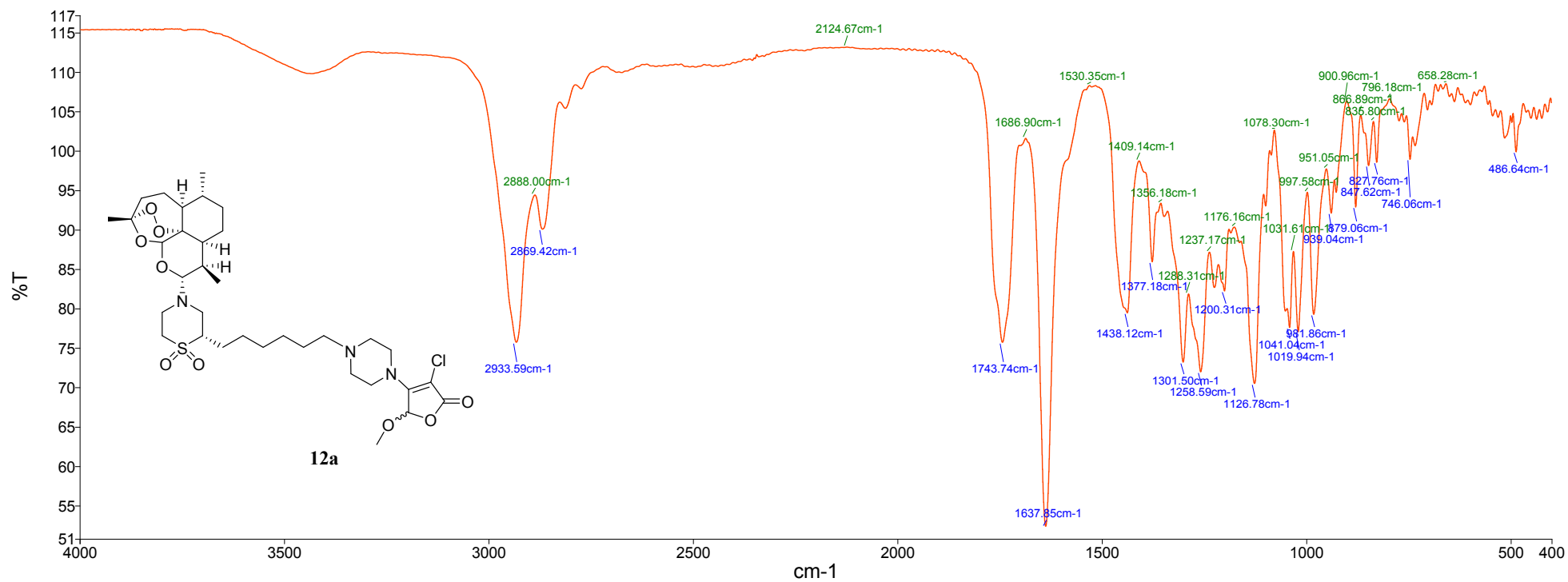
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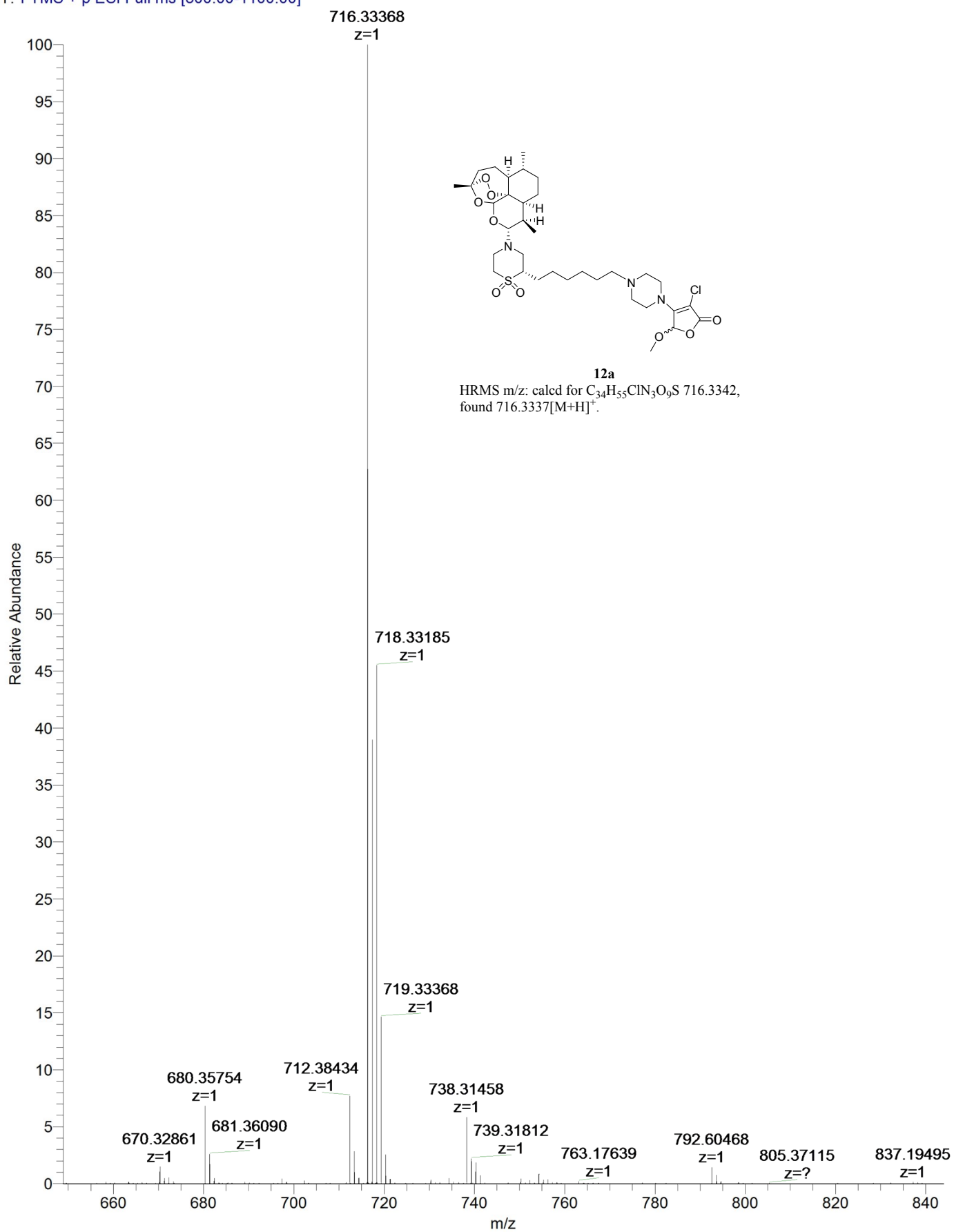
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— 26.7
— 26.1
— 24.9
— 23.5
— 21.7
— 20.4
— 14.3
— 13.6



12a







Sample Name: 12A-P

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Acq. Operator : 系统 Seq. Line : 2

Sample Operator : 系统

Acq. Instrument : QQ Location : P2-F1

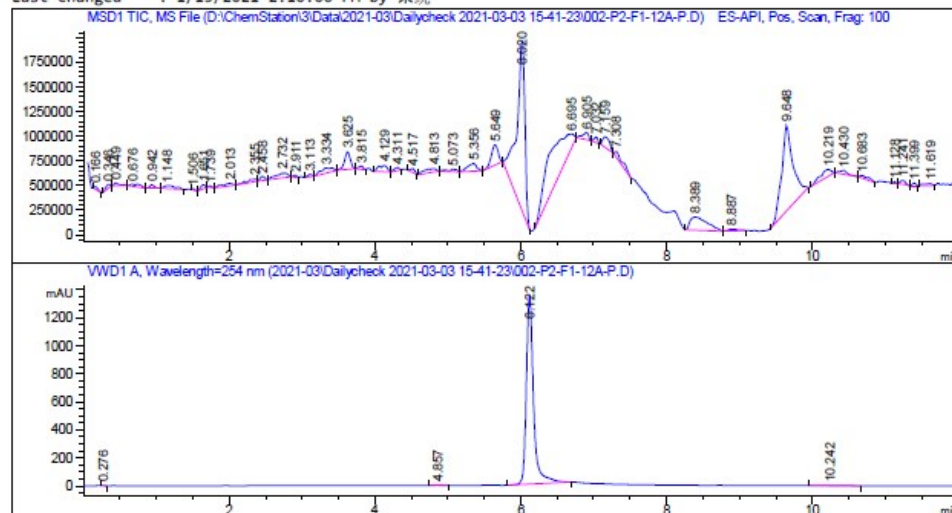
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Inj Volume : 0.500 µl

Different Inj Volume from Sample Entry! Actual Inj Volume : 3.000 µl

Method : D:\ChemStation\3\Data\2021-03\Dailycheck 2021-03-03 15-41-23\Positive-SCAN-10min.M (Sequence Method)

Last changed : 1/15/2021 2:10:06 PM by 系统



Area Percent Report

Sorted By : Signal

Multiplier : 1.0000

Dilution : 1.0000

Use Multiplier & Dilution Factor with ISTDs

Signal 1: MSD1 TIC, MS File

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
1	0.166	BB	0.0572	1.00704e5	2.91741e4	0.2251
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3	0.449	BB	0.0734	1.45887e5	3.01289e4	0.3261
4	0.676	BB	0.1422	2.44685e5	2.18064e4	0.5469
5	0.942	BB	0.0755	1.61639e5	3.56667e4	0.3613
6	1.148	BB	0.1717	3.70654e5	2.90060e4	0.8284
7	1.506	BB	0.0413	3.63770e4	1.46814e4	0.0813
8	1.651	BB	0.0763	1.66968e5	3.62581e4	0.3732

Sample Name: 12A-P

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
9	1.739	BB	0.0508	4.72654e4	1.55036e4	0.1056
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11	2.355	BB	0.1476	2.57110e5	2.64670e4	0.5746
12	2.458	BB	0.0729	1.64838e5	3.82062e4	0.3684
13	2.732	BB	0.1416	5.26381e5	4.71407e4	1.1765
14	2.911	BB	0.0502	5.46258e4	1.91407e4	0.1221
15	3.113	BB	0.0658	8.92888e4	2.41033e4	0.1996
16	3.334	BB	0.1450	5.70082e5	5.18198e4	1.2741
17	3.625	BB	0.0859	9.89199e5	1.82429e5	2.2109
18	3.815	BB	0.0570	1.36841e5	3.49029e4	0.3058
19	4.129	BB	0.1195	5.11662e5	6.15757e4	1.1436
20	4.311	BB	0.0847	1.39617e5	3.03448e4	0.3120
21	4.517	BB	0.0716	1.56917e5	3.65181e4	0.3507
22	4.813	BB	0.1677	4.56099e5	3.52899e4	1.0194
23	5.073	BB	0.1070	1.99214e5	2.42772e4	0.4452
24	5.356	BB	0.1375	6.83083e5	7.69448e4	1.5267
25	5.649	BB	0.1035	1.33781e6	2.07398e5	2.9900
26	6.020	BB	0.1093	1.30436e7	1.75581e6	29.1526
27	6.695	BB	0.7089	8.51516e6	1.47178e5	19.0315
28	6.905	BB	0.0820	4.35004e5	7.79966e4	0.9722
29	7.032	BB	0.0592	1.92598e5	5.41928e4	0.4305
30	7.159	BB	0.1171	7.20093e5	1.08405e5	1.6094
31	7.308	BB	0.1316	4.80922e5	5.14687e4	1.0749
32	8.389	BB	0.2373	2.16545e6	1.31499e5	4.8398
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34	9.648	BB	0.1413	9.24357e6	8.67265e5	20.6595
35	10.219	BB	0.1771	8.13948e5	6.90208e4	1.8192
36	10.430	BB	0.0837	2.52168e5	4.06320e4	0.5636
37	10.683	BB	0.1552	2.45081e5	2.63268e4	0.5478
38	11.128	BB	0.0381	3.16660e4	1.37704e4	0.0708
39	11.241	BB	0.0800	1.85090e5	3.76059e4	0.4137
40	11.399	BB	0.0552	9.93142e4	3.03105e4	0.2220
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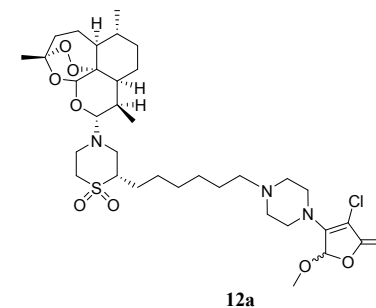
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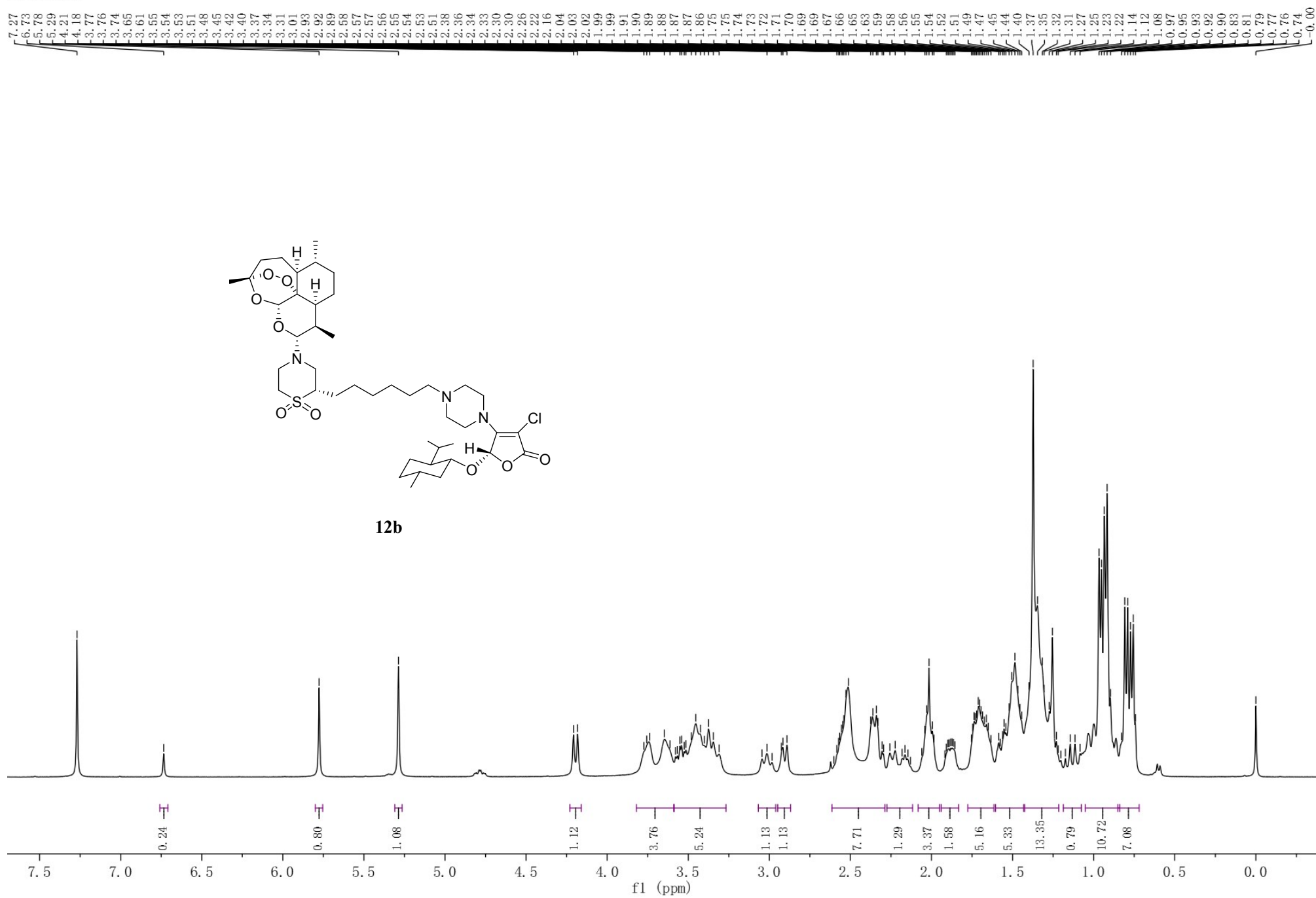
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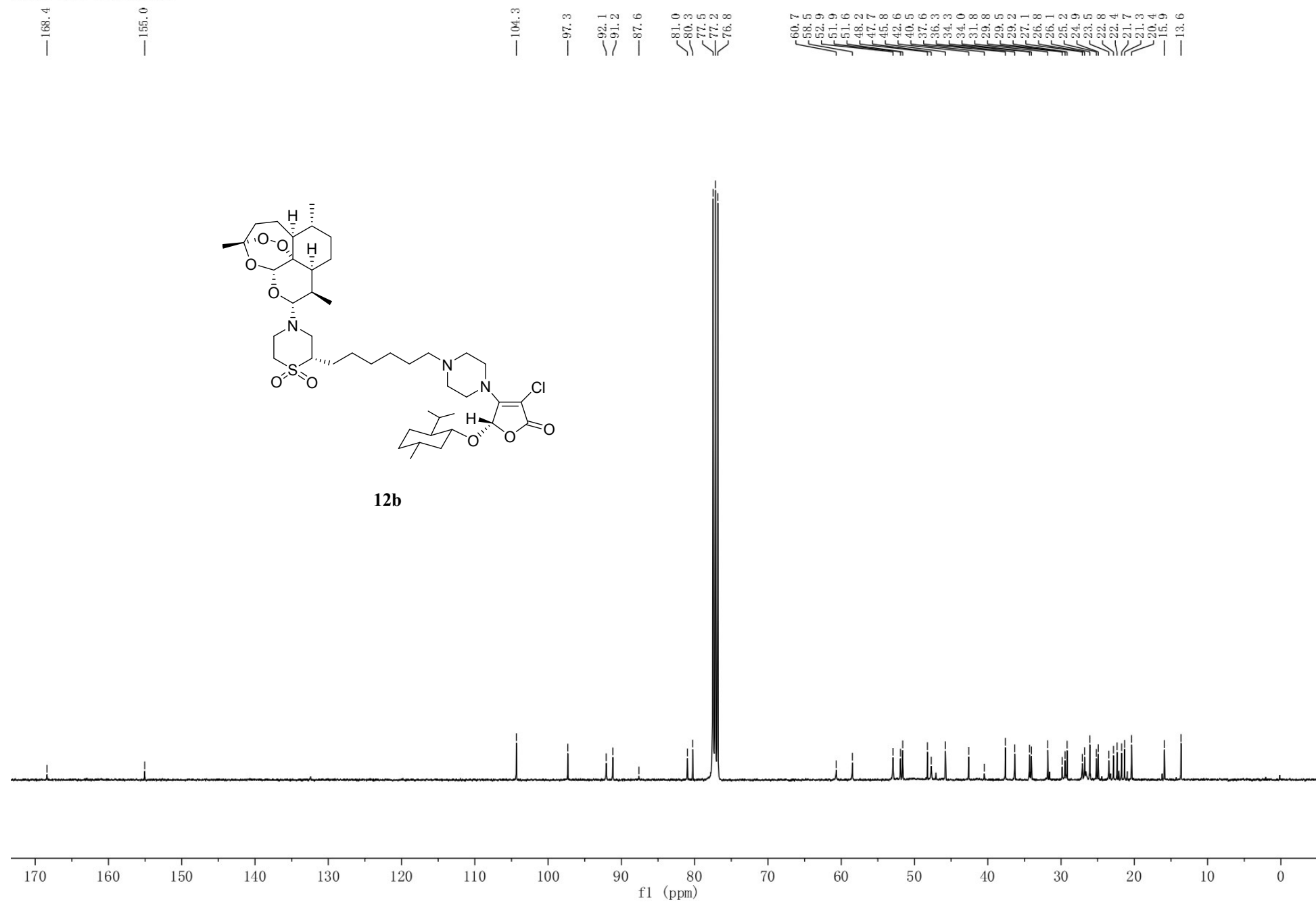
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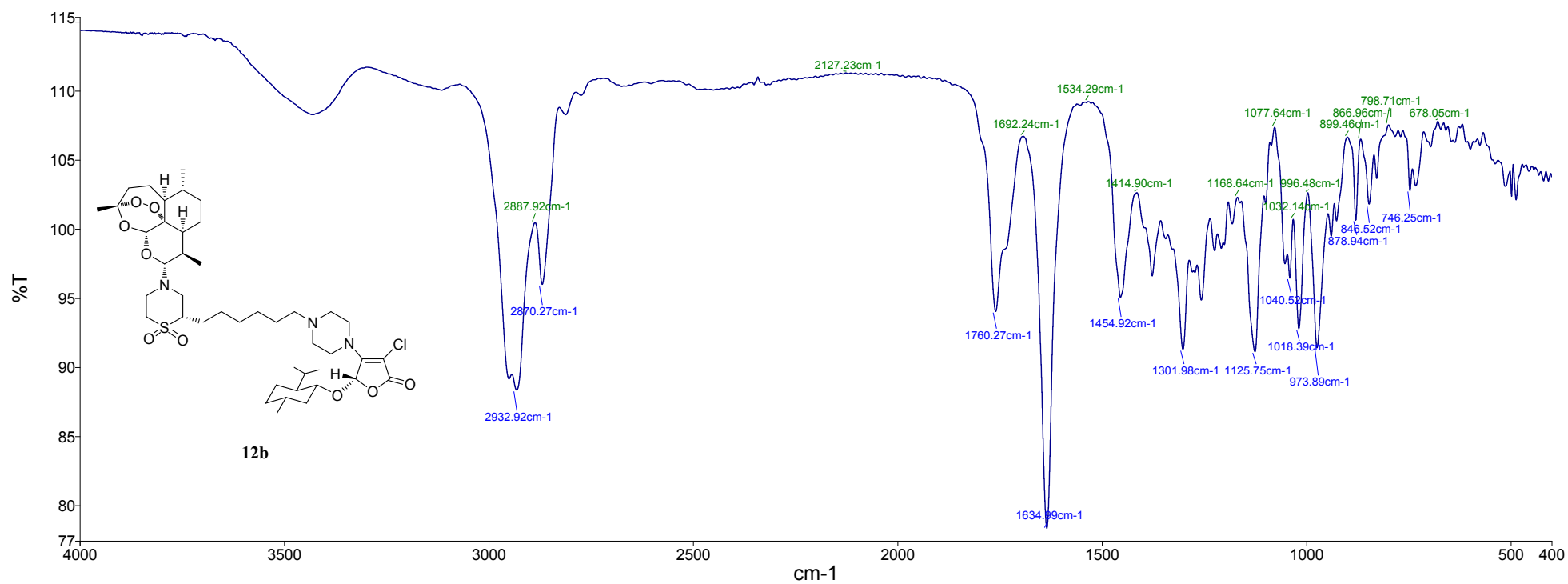
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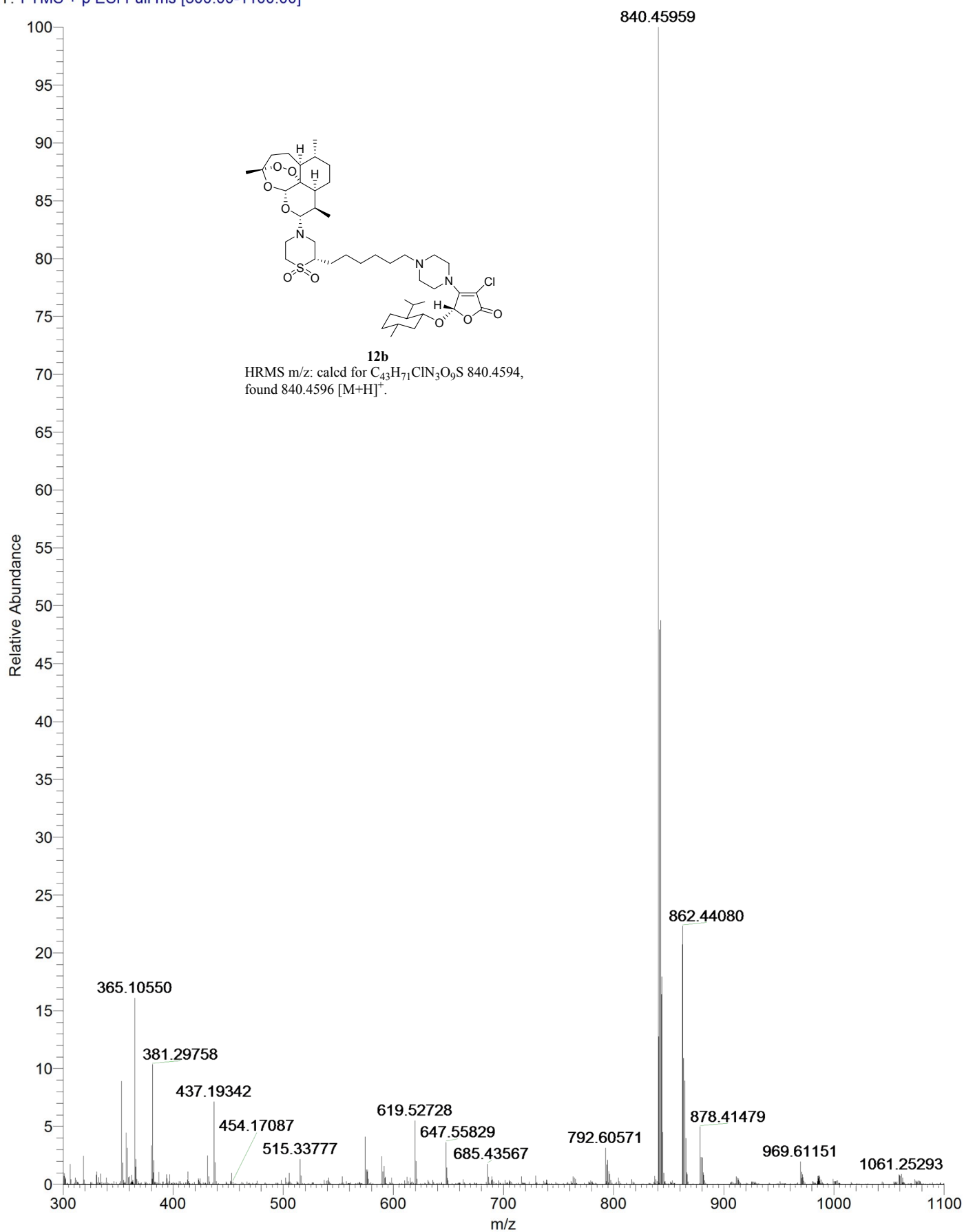
12B. 10. fid —







9_4 #20 RT: 0.30 AV: 1 NL: 9.82E5
T: FTMS + p ESI Full ms [300.00-1100.00]



Sample Name: 12B

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Acq. Operator : 系统 Seq. Line : 3

Sample Operator : 系统

Acq. Instrument : QQ Location : P2-F1

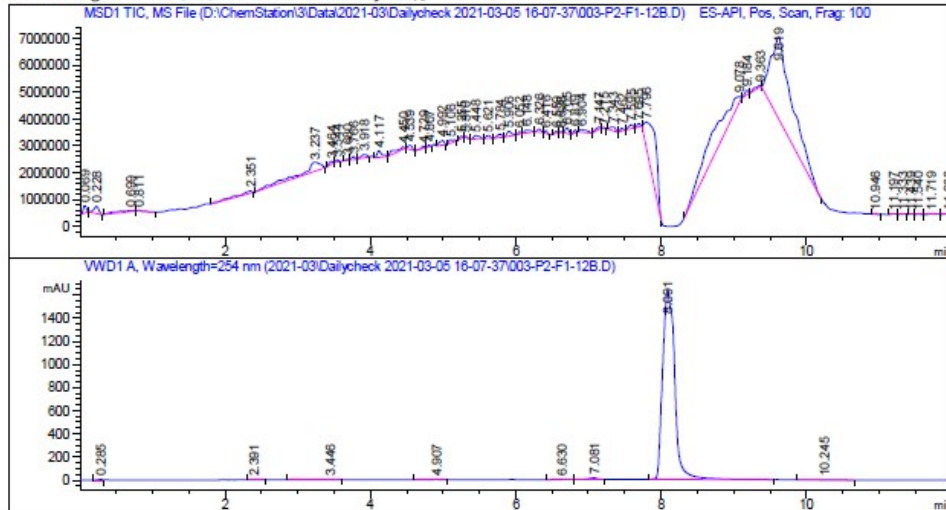
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Inj Volume : 0.500 µl

Different Inj Volume from Sample Entry! Actual Inj Volume : 5.000 µl

Method : D:\ChemStation\3\Data\2021-03\Dailycheck 2021-03-05 16-07-37\Positive-SCAN-10min.M (Sequence Method)

Last changed : 1/15/2021 2:10:06 PM by 系统



Area Percent Report

Sorted By : Signal

Multiplier : 1.0000

Dilution : 1.0000

Use Multiplier & Dilution Factor with ISTDs

Signal 1: MSD1 TIC, MS File

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
1	0.069	BB	0.0461	8.71509e5	2.92272e5	0.6536
2	0.228	BB	0.0714	1.25332e6	2.68363e5	0.9400
3	0.699	BB	0.3348	1.01878e6	3.73965e4	0.7641
4	0.811	BB	0.0965	1.84955e5	2.79135e4	0.1387
5	2.351	BB	0.2296	1.42308e6	8.24696e4	1.0673
6	3.237	BB	0.2501	6.01906e6	3.28538e5	4.5144
7	3.464	BB	0.0607	3.71742e5	9.91235e4	0.2788
8	3.544	BB	0.0465	2.00206e5	8.32187e4	0.1502

Sample Name: 12B

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
9	3.680	BB	0.0474	6.31509e4	2.97284e4	0.0474
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11	3.918	BB	0.0896	6.94928e5	1.21091e5	0.5212
12	4.117	BB	0.0619	1.06497e6	2.45772e5	0.7987
13	4.450	BB	0.2030	1.07897e6	7.41028e4	0.8092
14	4.539	BB	0.0742	6.36068e5	1.43967e5	0.4771
15	4.729	BB	0.0480	2.28521e5	8.40991e4	0.1714
16	4.807	BB	0.0373	1.47424e5	6.62672e4	0.1106
17	4.992	BB	0.0816	7.56356e5	1.65495e5	0.5673
18	5.106	BB	0.0673	5.49894e5	1.14542e5	0.4124
19	5.255	BB	0.0464	1.91744e5	6.56034e4	0.1438
20	5.310	BB	0.0428	1.58725e5	6.18523e4	0.1190
21	5.448	BB	0.0737	6.80161e5	1.27096e5	0.5101
22	5.621	BB	0.0695	5.05838e5	1.25738e5	0.3794
23	5.784	BB	0.0788	5.90941e5	1.22651e5	0.4432
24	5.906	BB	0.0670	7.55346e5	1.87800e5	0.5665
25	6.052	BB	0.0479	2.31251e5	8.88469e4	0.1734
26	6.148	BB	0.0807	6.14495e5	1.03290e5	0.4609
27	6.326	BB	0.0556	3.97591e5	1.20130e5	0.2982
28	6.416	BB	0.0414	2.72425e5	1.05765e5	0.2043
29	6.559	BB	0.0488	1.98610e5	7.29883e4	0.1490
30	6.628	BB	0.0323	4.83079e4	2.62795e4	0.0362
31	6.705	BB	0.0586	7.10032e5	1.98655e5	0.5325
32	6.819	BB	0.0374	2.43492e5	1.08711e5	0.1826
33	6.904	BB	0.0963	7.12943e5	1.04813e5	0.5347
34	7.147	BB	0.0843	4.33660e5	9.02326e4	0.3252
35	7.215	BB	0.0332	7.47020e4	3.74623e4	0.0560
36	7.343	BB	0.0978	7.62511e5	1.43239e5	0.5719
37	7.462	BB	0.0510	2.98157e5	1.02154e5	0.2236
38	7.595	BB	0.0805	6.51716e5	1.45556e5	0.4888
39	7.695	BB	0.0475	3.16816e5	1.11258e5	0.2376
40	7.796	BB	0.2476	1.85347e7	9.15150e5	13.9012
41	9.078	BB	1.3564	2.62838e7	2.27965e5	19.7132
42	9.184	BB	0.0504	5.42429e5	1.61875e5	0.4068
43	9.363	BB	0.1109	4.95189e5	5.82478e4	0.3714
44	9.619	BB	0.2624	6.11554e7	3.04697e6	45.8672
45	10.946	BB	0.0523	7.23825e4	2.38687e4	0.0543
46	11.197	BB	0.0710	9.02486e4	2.17728e4	0.0677
47	11.333	BB	0.0579	4.73910e4	1.34942e4	0.0355
48	11.439	BB	0.0525	4.60679e4	1.46385e4	0.0346
49	11.540	BB	0.0778	5.01154e4	1.20473e4	0.0376
50	11.719	BB	0.0842	1.38391e5	2.21334e4	0.1038
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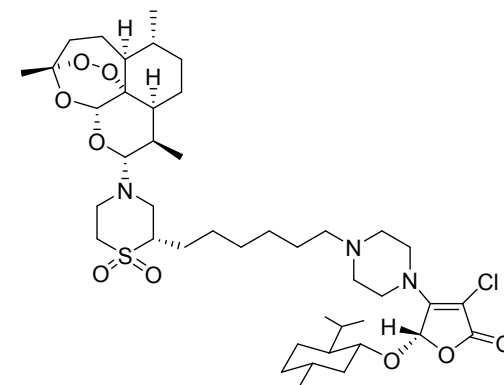
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Signal 2: WVD1 A, Wavelength=254 nm

Sample Name: 12B

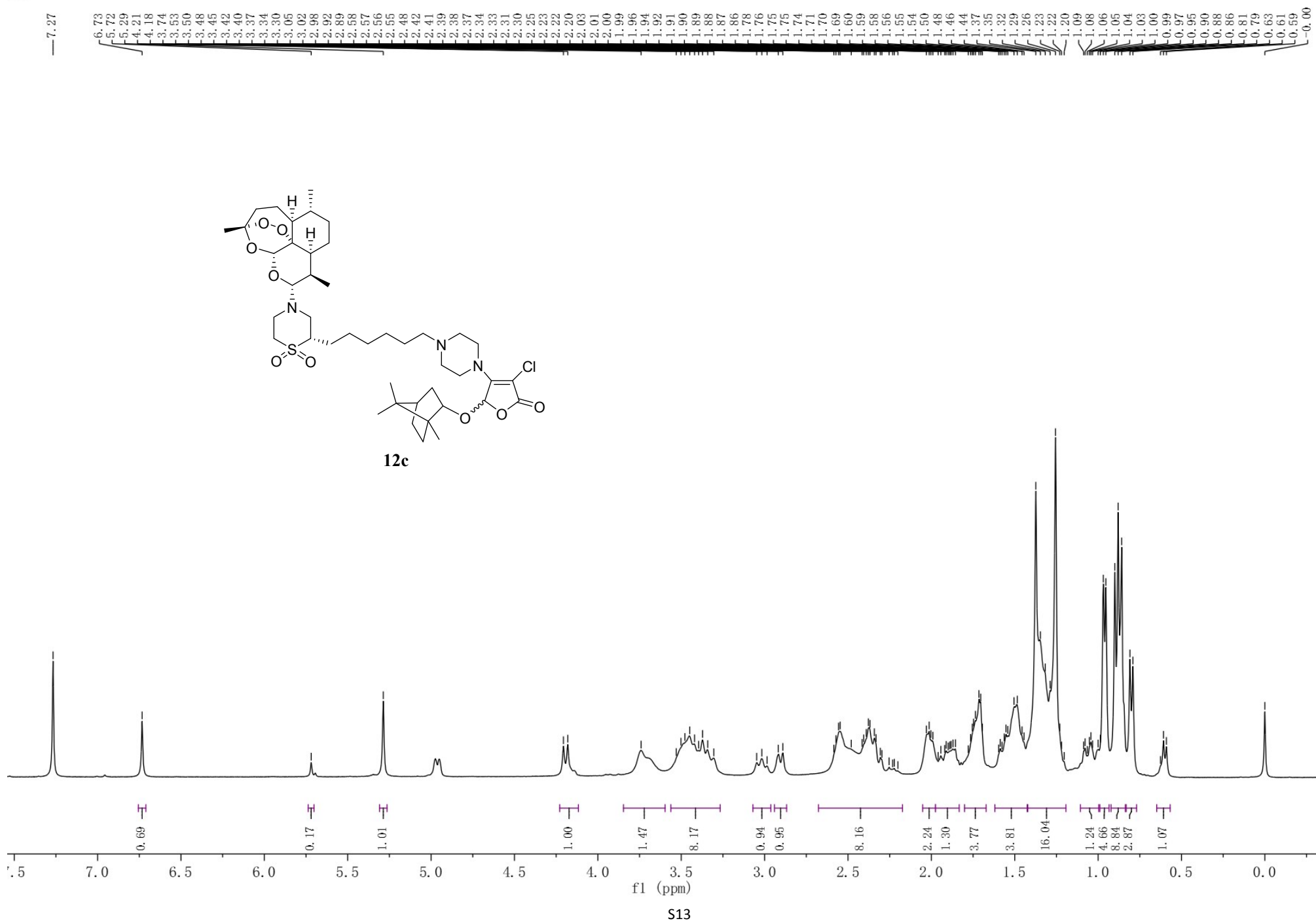
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3	3.446	BB	0.1656	34.34824	2.67956	0.1796
4	4.907	BB	0.0942	18.14193	2.77633	0.0948
5	6.630	BB	0.1237	28.56381	3.09431	0.1493
6	7.081	BB	0.1284	113.05849	14.11537	0.5911
7	8.091	BB	0.1697	1.88615e4	1633.13965	98.6084
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Totals : 1.91277e4 1666.33360

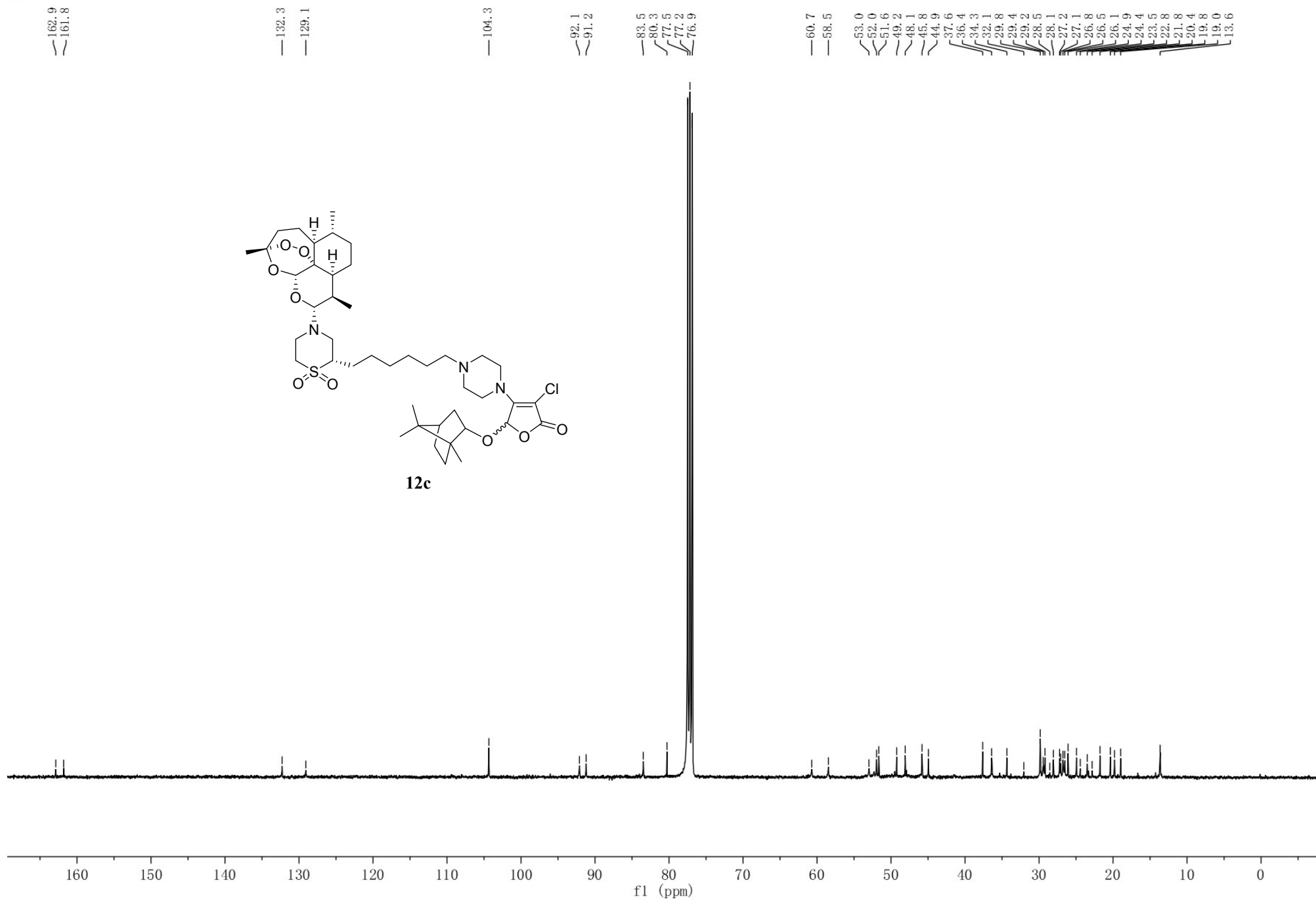
**12b**

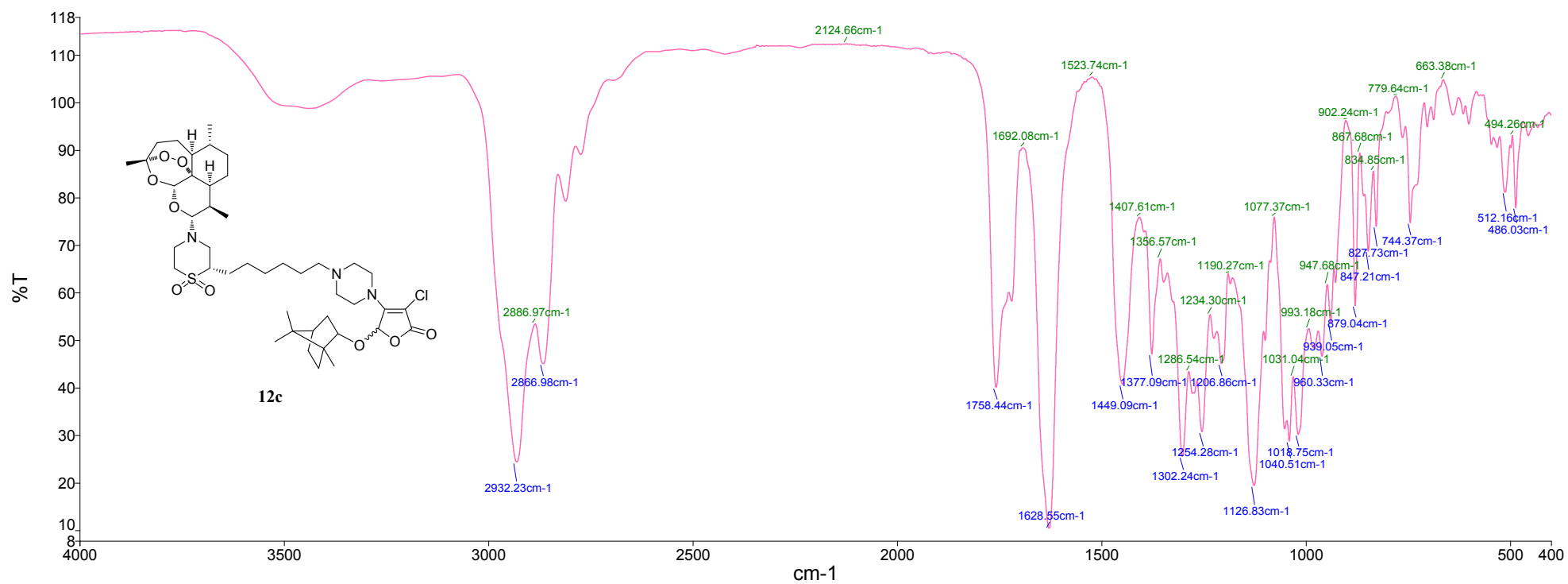
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12C

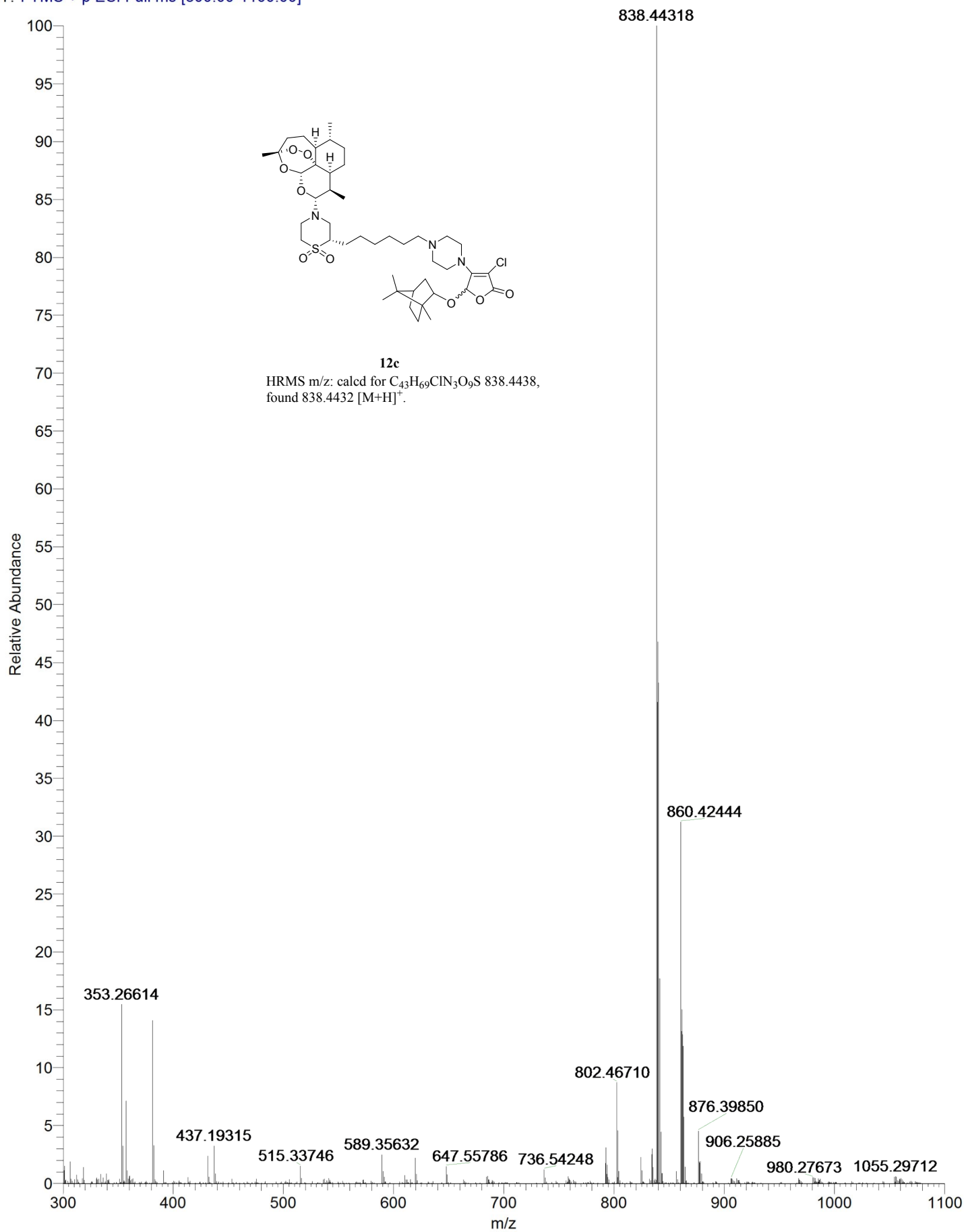


12C





10_1 #20 RT: 0.31 AV: 1 NL: 9.71E5
T: FTMS + p ESI Full ms [300.00-1100.00]



Sample Name: 12C

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Acq. Operator : 系统 Seq. Line : 1

Sample Operator : 系统

Acq. Instrument : QQ Location : P2-F1

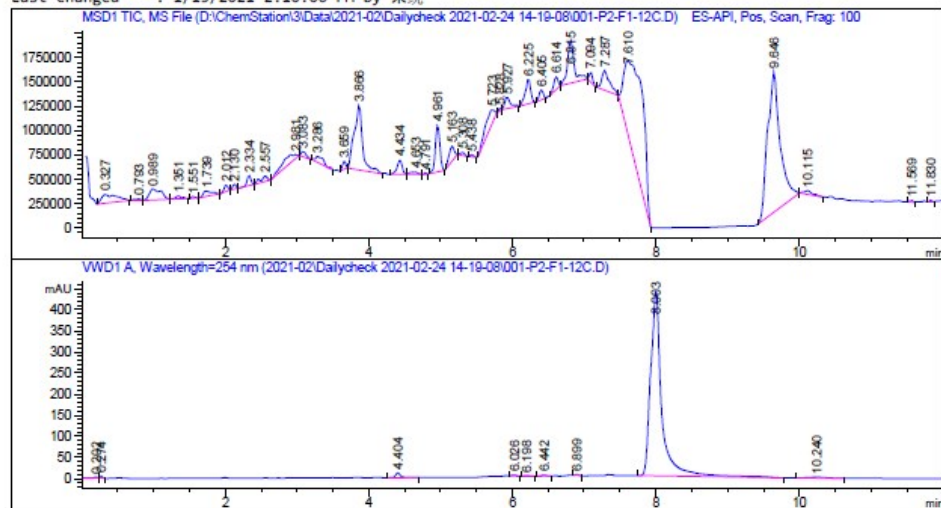
Injection Date : 2/24/2021 2:20:09 PM Inj : 1

Inj Volume : 0.500 µl

Different Inj Volume from Sample Entry! Actual Inj Volume : 1.000 µl

Method : D:\ChemStation\3\Data\2021-02\Dailycheck 2021-02-24 14-19-08\Positive-SCAN-10min.M (Sequence Method)

Last changed : 1/15/2021 2:10:06 PM by 系统



Area Percent Report

Sorted By : Signal

Multiplier : 1.0000

Dilution : 1.0000

Use Multiplier & Dilution Factor with ISTDs

Signal 1: MSD1 TIC, MS File

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
1	0.327	BB	0.2101	1.30452e6	8.92503e4	2.1462
2	0.793	BB	0.0820	8.51476e4	1.52809e4	0.1401
3	0.989	BB	0.1474	1.26414e6	1.13051e5	2.0798
4	1.351	BB	0.0787	1.70421e5	2.94917e4	0.2804
5	1.551	BB	0.0617	7.21506e4	1.87981e4	0.1187
6	1.739	BB	0.1229	4.79319e5	5.57382e4	0.7886
7	2.012	BB	0.0607	2.38821e5	6.36435e4	0.3929
8	2.130	BB	0.0560	1.53803e5	4.59780e4	0.2530

Sample Name: 12C

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
9	2.334	BB	0.0609	3.83263e5	1.01698e5	0.6306
10	2.557	BB	0.0936	3.80401e5	5.39220e4	0.6258
11	2.981	BB	0.3631	1.12860e6	4.21750e4	1.8568
12	3.083	BB	0.0729	2.67463e5	5.57840e4	0.4400
13	3.286	BB	0.1369	5.77809e5	6.34345e4	0.9506
14	3.659	BB	0.0538	2.50775e5	7.94420e4	0.4126
15	3.866	BB	0.1406	5.43773e6	6.64830e5	8.9463
16	4.434	BB	0.0724	7.01109e5	1.47424e5	1.1535
17	4.653	BB	0.1195	1.50912e5	2.20241e4	0.2483
18	4.791	BB	0.0369	2.63719e4	1.19096e4	0.0434
19	4.961	BB	0.0675	2.09398e6	4.82920e5	3.4451
20	5.163	BB	0.0820	7.70051e5	1.51159e5	1.2669
21	5.308	BB	0.0720	1.29308e5	3.05267e4	0.2127
22	5.438	BB	0.0587	8.68963e4	2.43065e4	0.1430
23	5.723	BB	0.1525	1.49037e6	1.33897e5	2.4520
24	5.828	BB	0.0358	5.21688e4	2.43039e4	0.0858
25	5.927	BB	0.0866	6.32454e5	1.15374e5	1.0405
26	6.225	BB	0.0996	1.30528e6	2.53417e5	2.1475
27	6.405	BB	0.0618	3.94695e5	1.02754e5	0.6494
28	6.614	BB	0.0731	5.55582e5	1.28347e5	0.9141
29	6.815	BB	0.0983	2.85317e6	4.39713e5	4.6941
30	7.094	BB	0.0544	3.24862e5	1.01142e5	0.5345
31	7.287	BB	0.1047	1.54612e6	2.05547e5	2.5437
32	7.610	BB	0.3062	1.77429e7	7.44842e5	29.1912
33	9.646	BB	0.1576	1.73484e7	1.43939e6	28.5422
34	10.115	BB	0.1100	3.06530e5	3.84349e4	0.5043
35	11.569	BB	0.0522	4.93496e4	1.57442e4	0.0812
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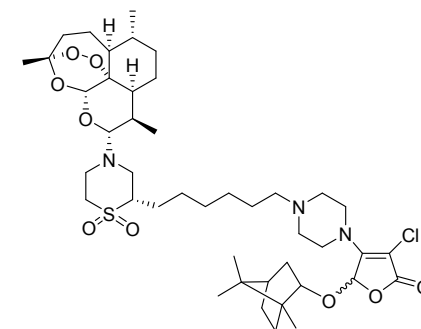
Totals : 6.07817e7 6.12006e6

Signal 2: Vwd1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.202	BB	0.0505	9.21872	2.72375	0.1874
2	0.274	BB	0.0343	9.12222	4.20139	0.1854
3	4.404	BB	0.0701	53.50673	11.53983	1.0876
4	6.026	BB	0.0838	10.69857	2.12259	0.2175
5	6.198	BB	0.0783	9.71039	1.87831	0.1974
6	6.442	BB	0.0794	12.65298	2.36632	0.2572
7	6.899	BB	0.0457	7.68678	2.65815	0.1562
8	8.003	BB	0.1471	4770.50488	437.83783	96.9691
9	10.240	BB	0.2697	36.51031	2.14351	0.7421

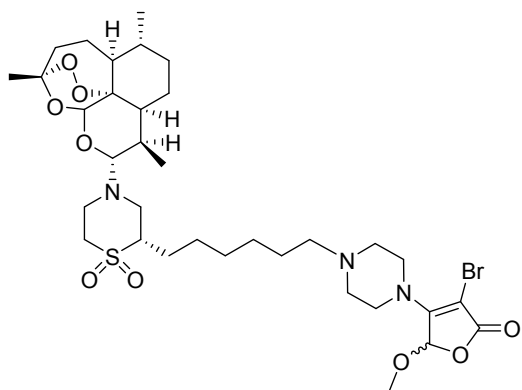
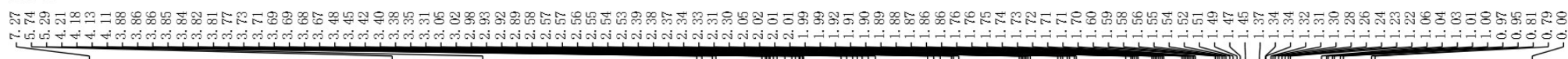
Totals : 4919.61157 467.47168

*** End of Report ***

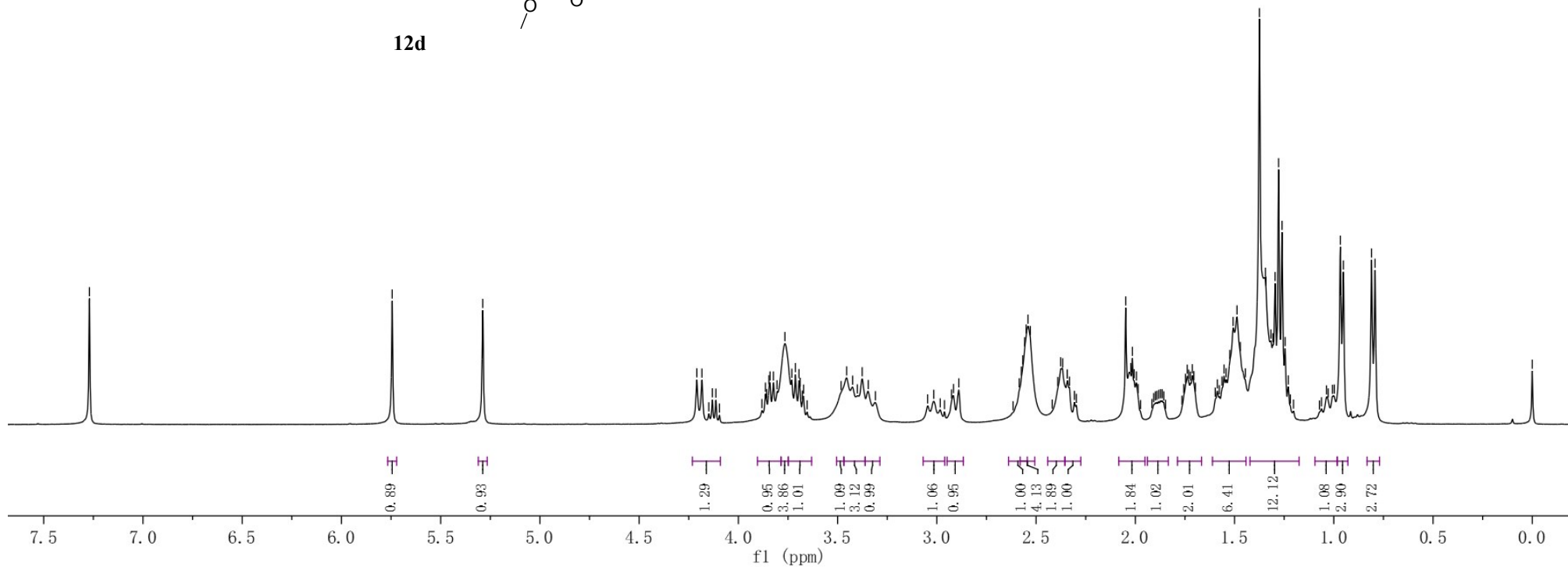


12c

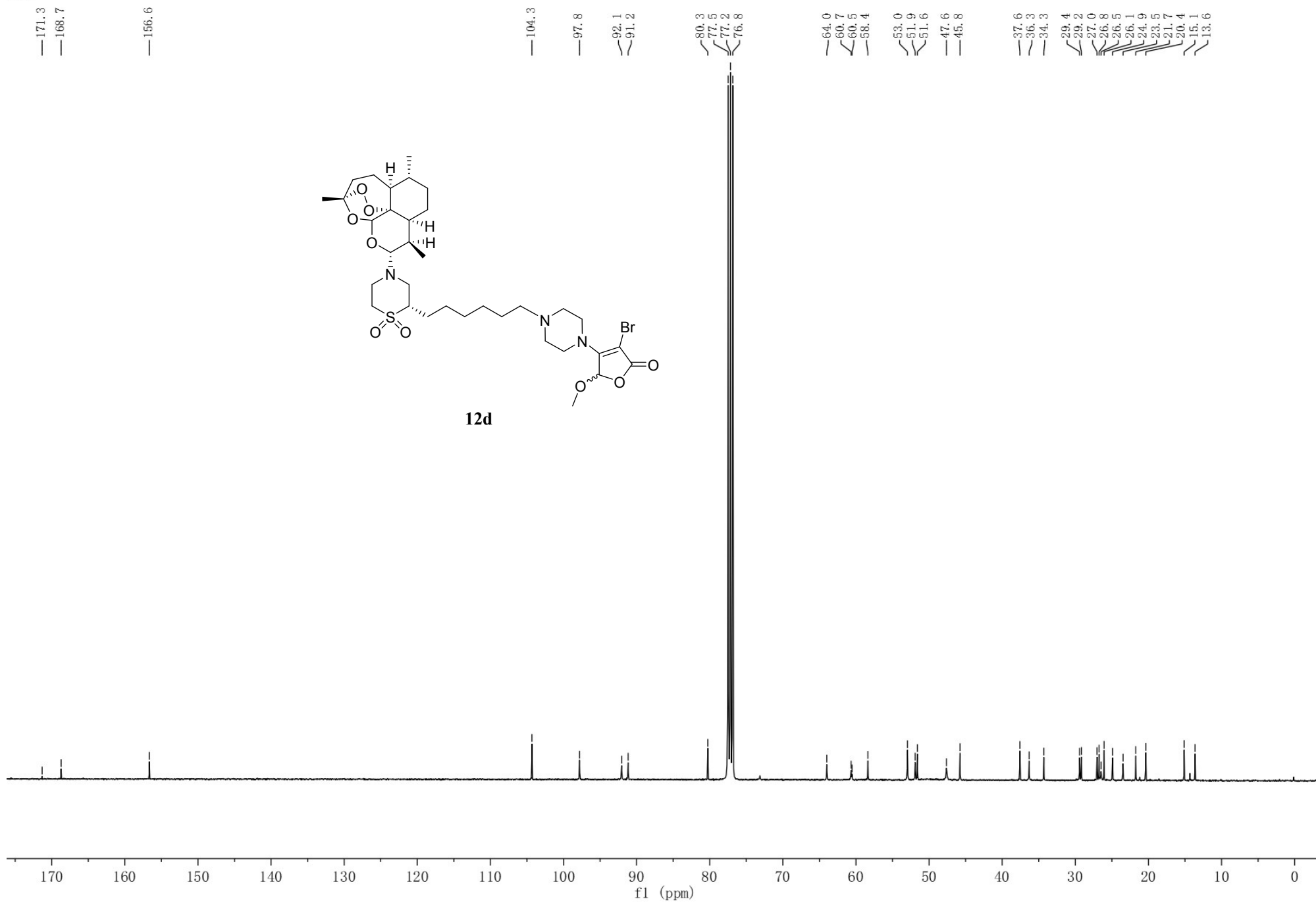
12D-2

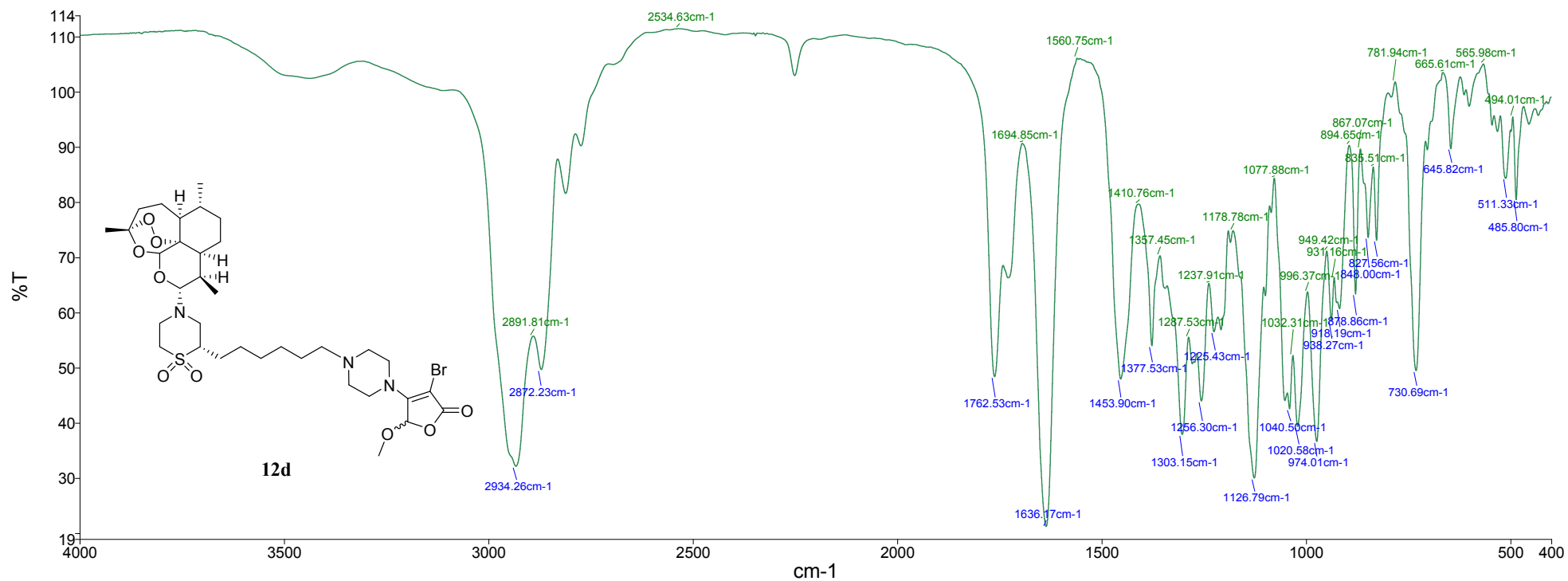


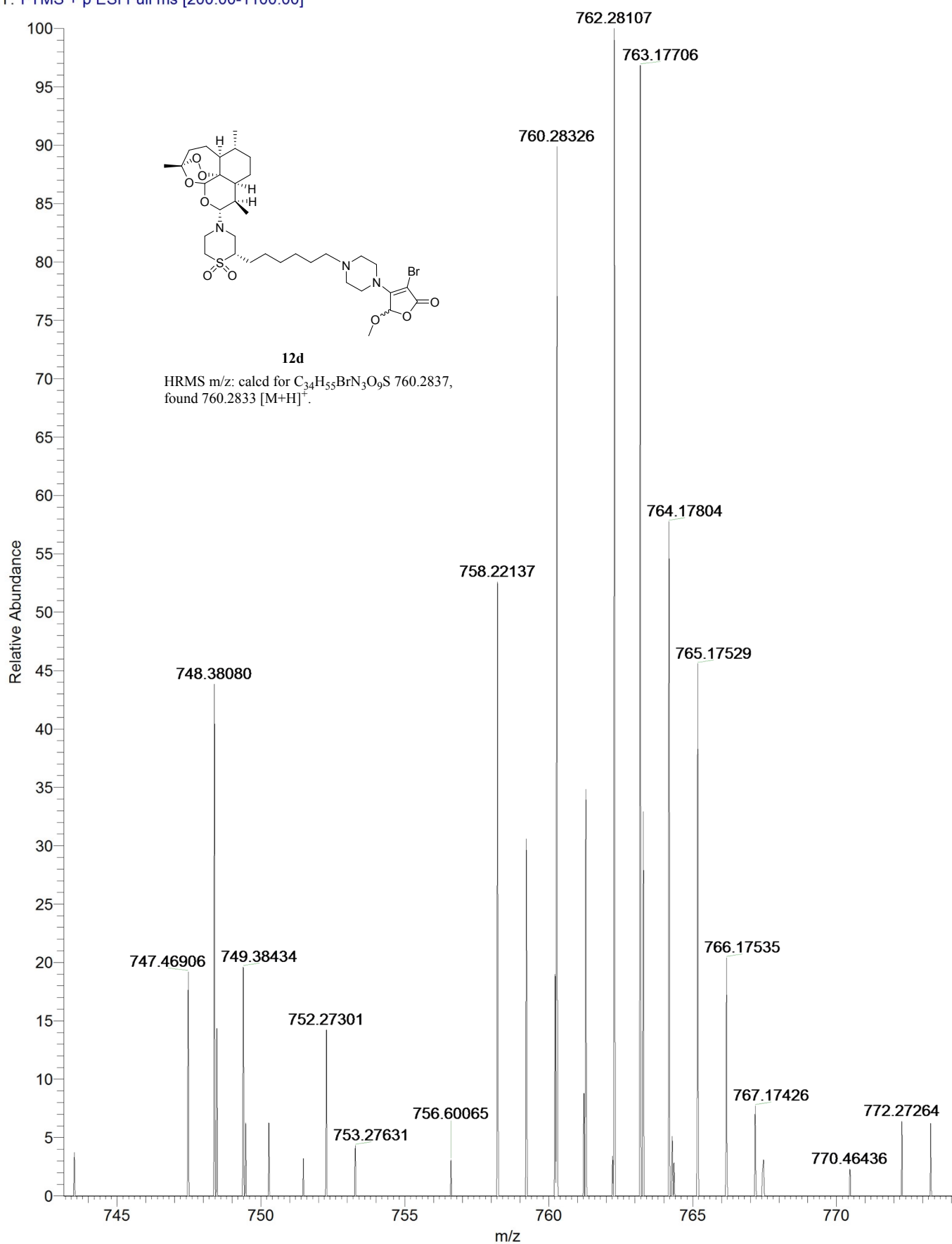
12d



12D2







Sample Name: 12D-2

=====

Acq. Operator : 系统 Seq. Line : 2

Sample Operator : 系统

Acq. Instrument : QQ Location : P2-F1

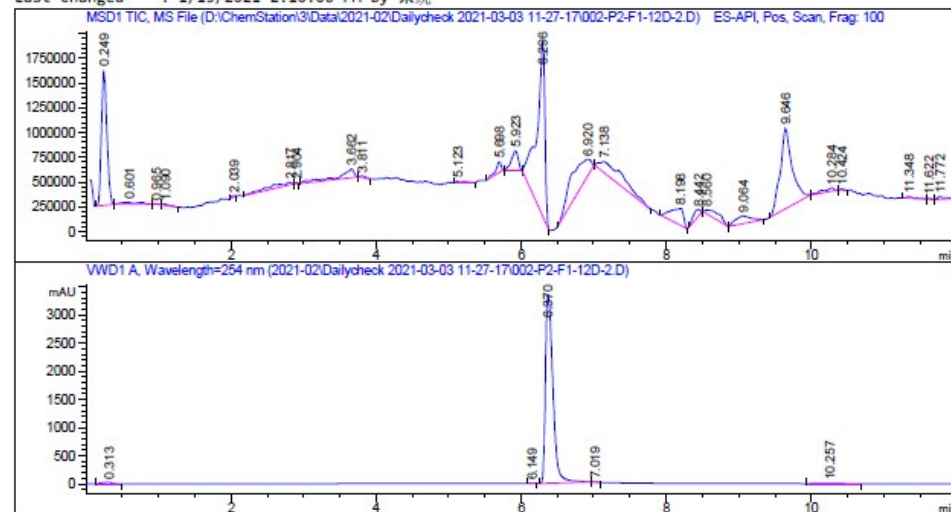
Injection Date : 3/3/2021 11:41:32 AM Inj : 1

Inj Volume : 0.500 µl

Different Inj Volume from Sample Entry! Actual Inj Volume : 30.000 µl

Method : D:\ChemStation\3\Data\2021-02\Dailycheck 2021-03-03 11-27-17\Positive-SCAN-10min.M (Sequence Method)

Last changed : 1/15/2021 2:10:06 PM by 系统



Area Percent Report

Sorted By : Signal

Multiplier : 1.0000

Dilution : 1.0000

Use Multiplier & Dilution Factor with ISTDs

Signal 1: MSD1 TIC, MS File

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
1	0.249	BB	0.0765	7.00296e6	1.37238e6	14.4370
2	0.601	BB	0.2673	4.07618e5	2.03735e4	0.8403
3	0.965	BB	0.0512	3.72127e4	1.21105e4	0.0767
4	1.090	BB	0.0806	8.65145e4	1.45721e4	0.1784
5	2.039	BB	0.0672	6.64402e4	1.76495e4	0.1370
6	2.817	BB	0.4095	7.95323e5	2.39837e4	1.6396
7	2.904	BB	0.0484	2.98506e4	1.15848e4	0.0615
8	3.662	BB	0.1947	1.27741e6	8.95370e4	2.6335

Sample Name: 12D-2

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
9	3.811	BB	0.0792	1.01047e5	1.89500e4	0.2083
10	5.123	BB	0.1196	1.77760e5	2.02085e4	0.3665
11	5.698	BB	0.1038	5.55239e5	1.10562e5	1.1447
12	5.923	BB	0.0972	1.24293e6	1.94300e5	2.5624
13	6.296	BB	0.1112	1.34567e7	1.77225e6	27.7419
14	6.920	BB	0.3842	5.11669e6	1.67696e5	10.5484
15	7.138	BB	0.4022	3.35781e6	1.08013e5	6.9223
16	8.198	BB	0.1864	1.99180e6	1.71485e5	4.1062
17	8.442	BB	0.1311	5.64656e5	7.19395e4	1.1641
18	8.560	BB	0.2984	9.79249e5	4.14204e4	2.0188
19	9.064	BB	0.1907	1.14186e6	7.66872e4	2.3540
20	9.646	BB	0.1508	9.33439e6	8.13804e5	19.2434
21	10.284	BB	0.1530	3.70480e5	3.24145e4	0.7638
22	10.424	BB	0.0600	4.82968e4	1.34075e4	0.0996
23	11.348	BB	0.1211	1.36104e5	1.61219e4	0.2806
24	11.622	BB	0.0656	3.12637e4	8475.00586	0.0645
25	11.772	BB	0.0968	1.97258e5	2.69047e4	0.4067

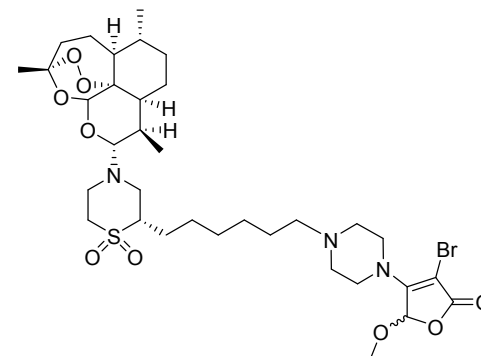
Totals : 4.85069e7 5.22683e6

Signal 2: VWD1 A, Wavelength=254 nm

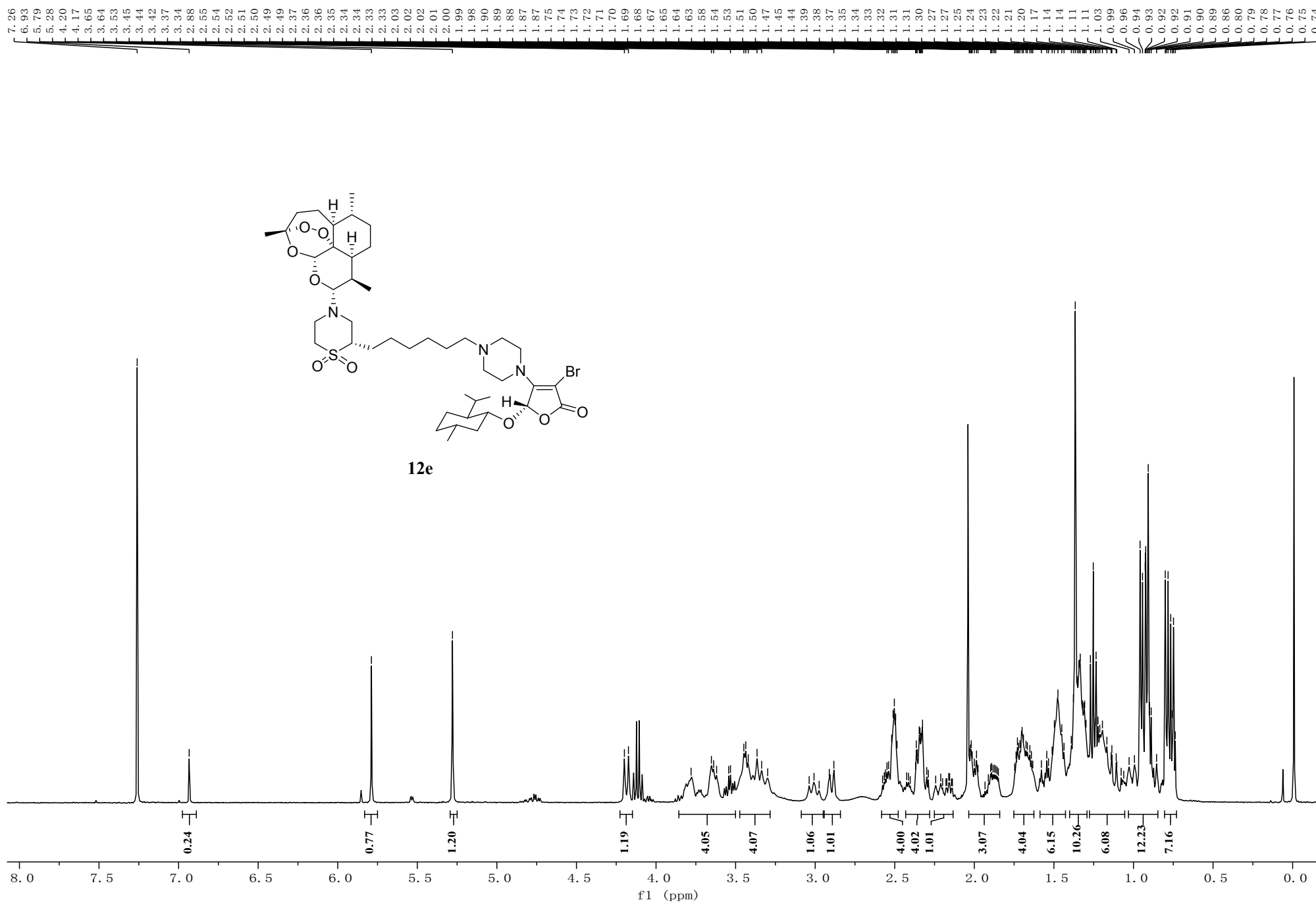
Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.313	BB	0.1042	214.86305	28.09772	0.8809
2	6.149	BB	0.0557	6.59791	1.84547	0.0270
3	6.370	BB	0.1139	2.41144e4	3353.68726	98.8621
4	7.019	BB	0.0558	12.08343	3.37190	0.0495
5	10.257	BB	0.2765	44.01236	2.48643	0.1804

Totals : 2.43919e4 3389.48878

*** End of Report ***



12d



yujiaying.373.fid — D-S-Br-bohe

— 168.72

— 157.59

— 104.21

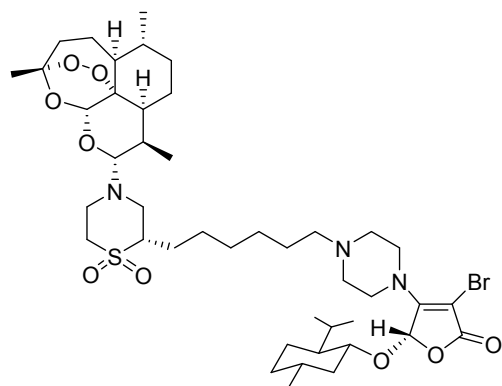
— 98.16

(91.96
91.06

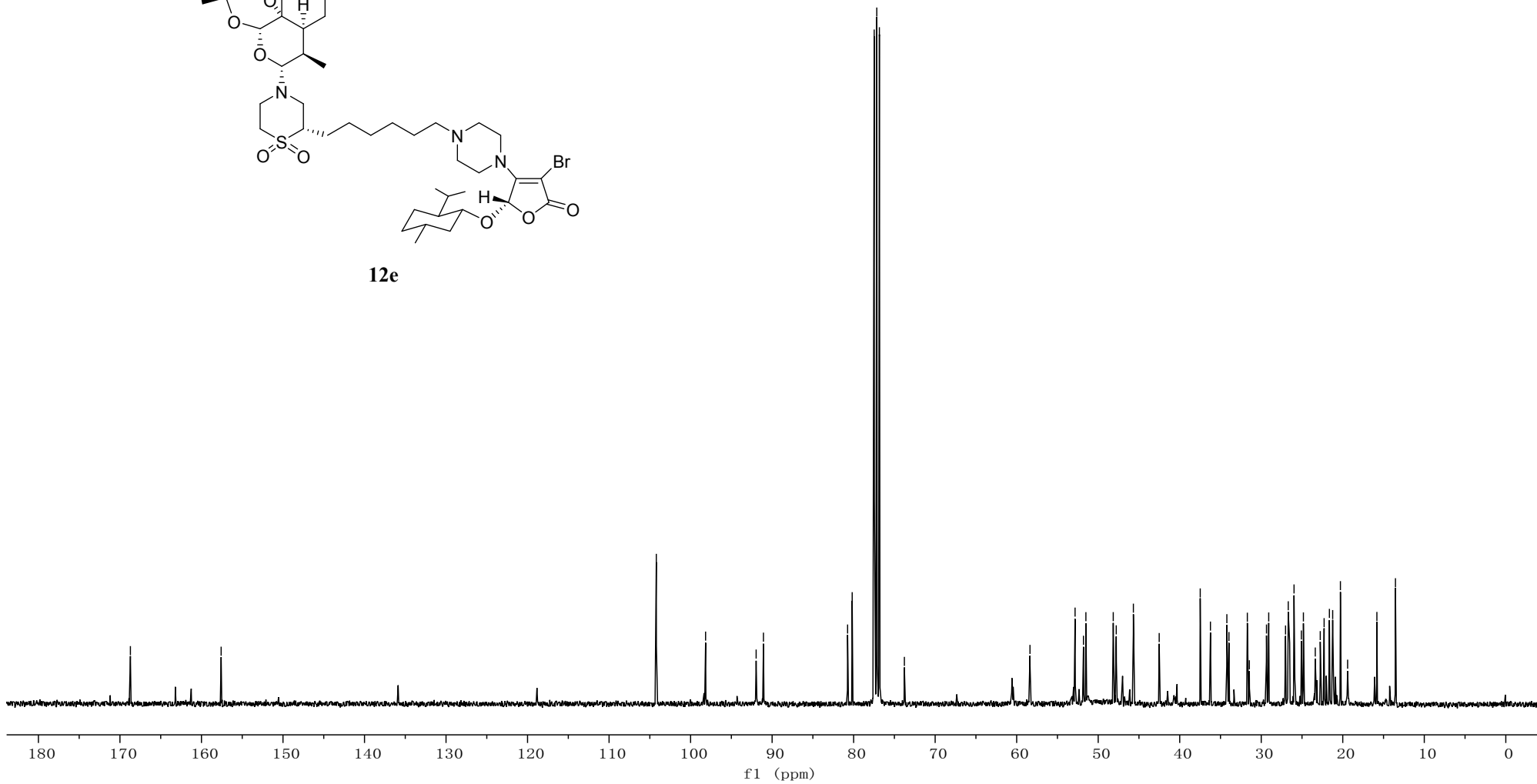
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80.18
77.48
77.16
76.84
73.78

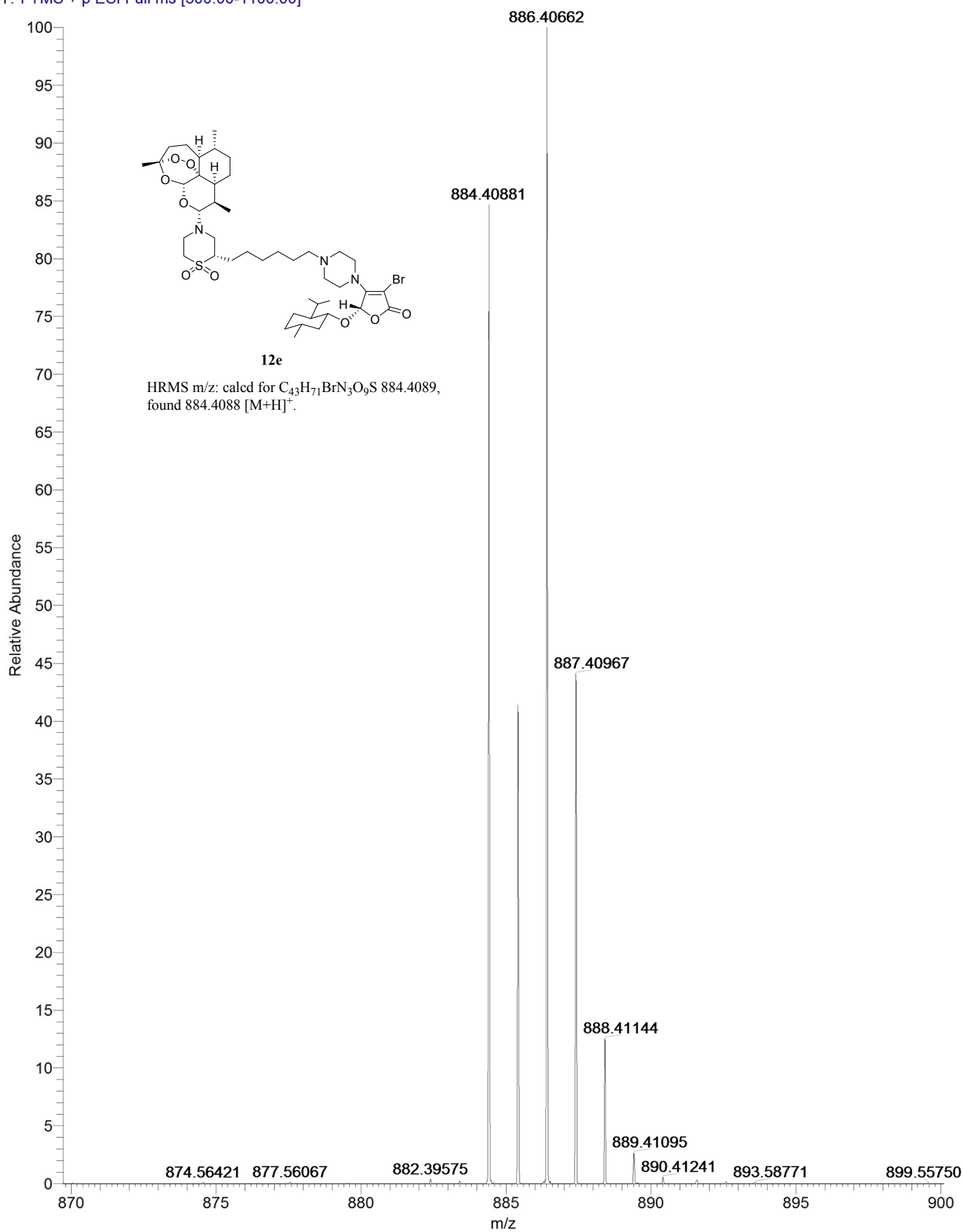
— 58.37

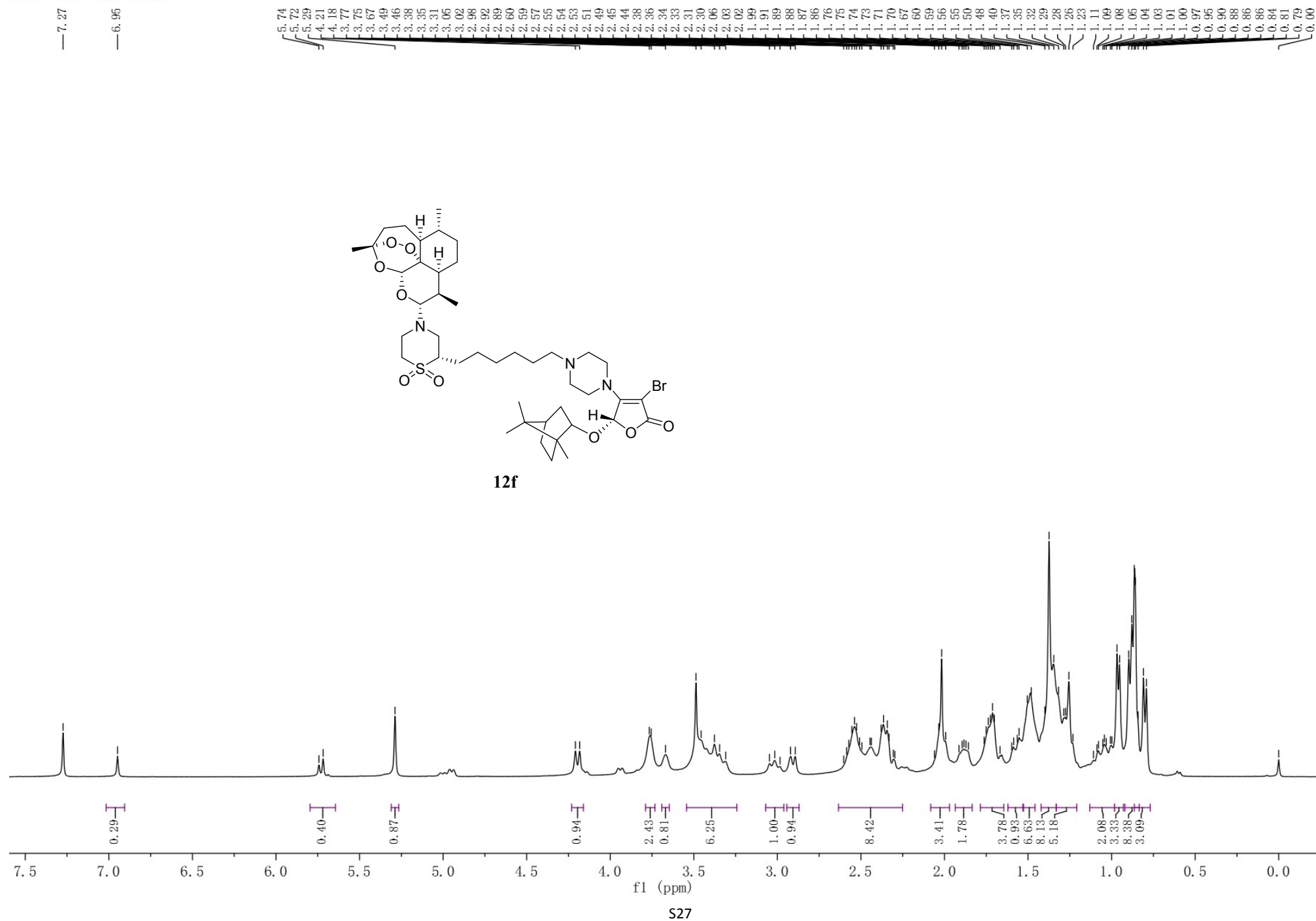
(52.84
51.81
51.51
48.15
47.79
45.68
42.52
37.48
36.23
34.22
33.96
31.70
31.46
29.35
29.08
27.02
26.69
25.98
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22.29
21.64
21.24
20.29
19.40
15.81
13.54



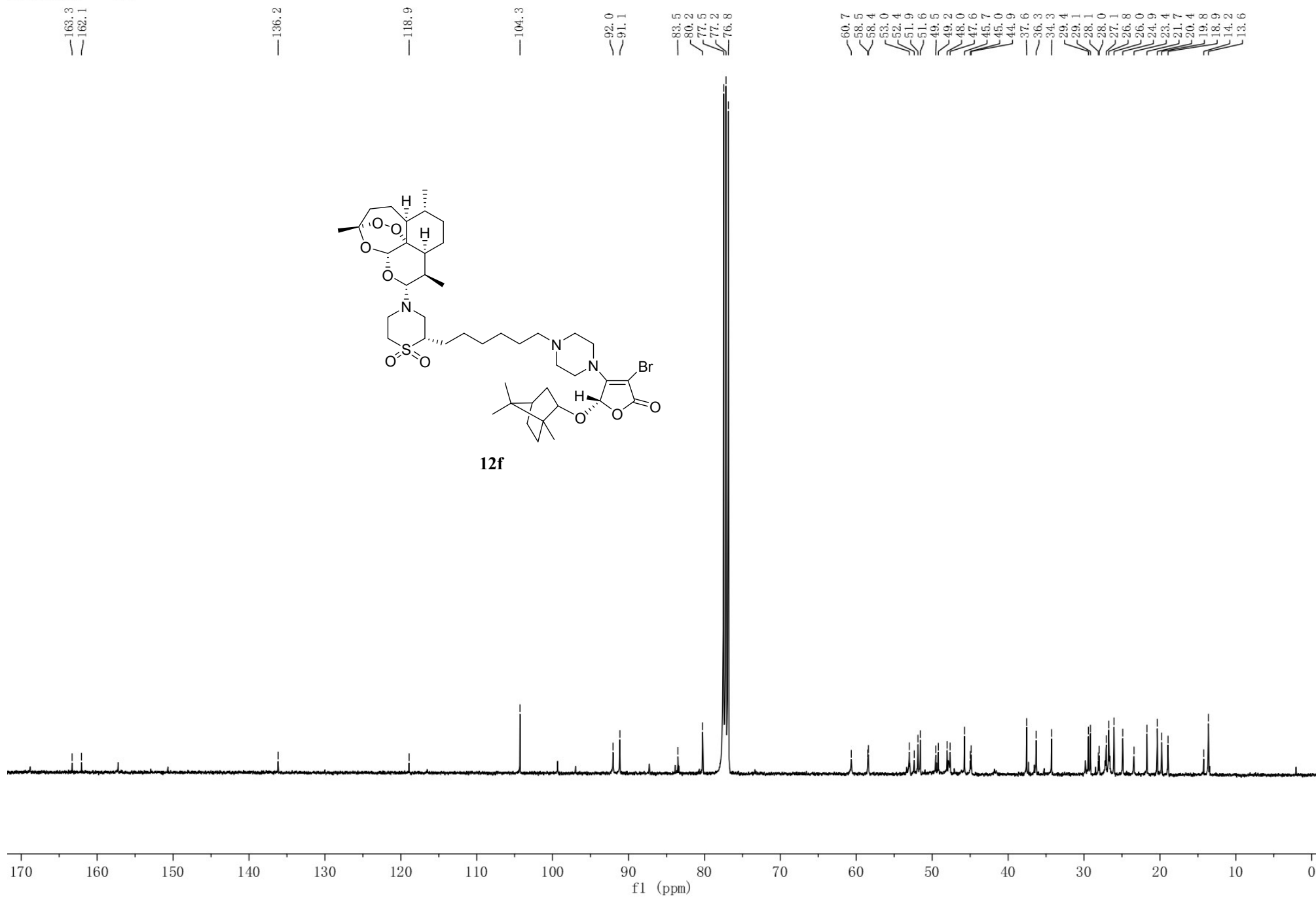
12e

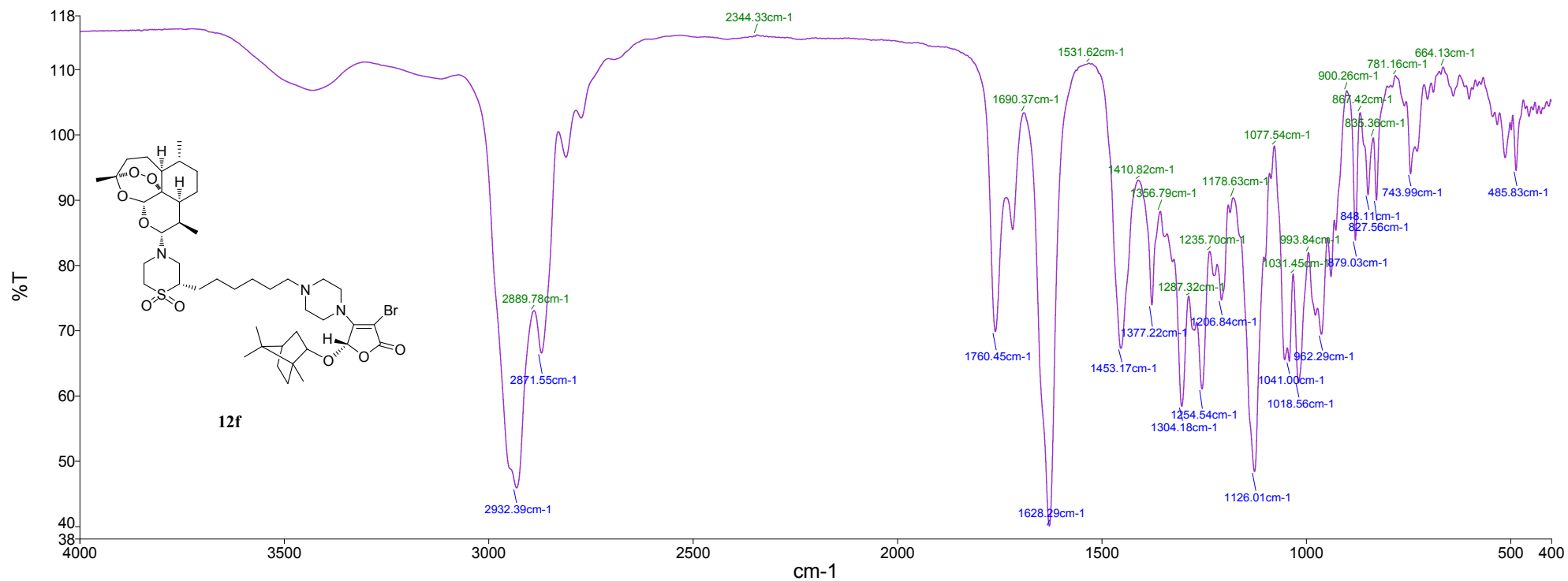


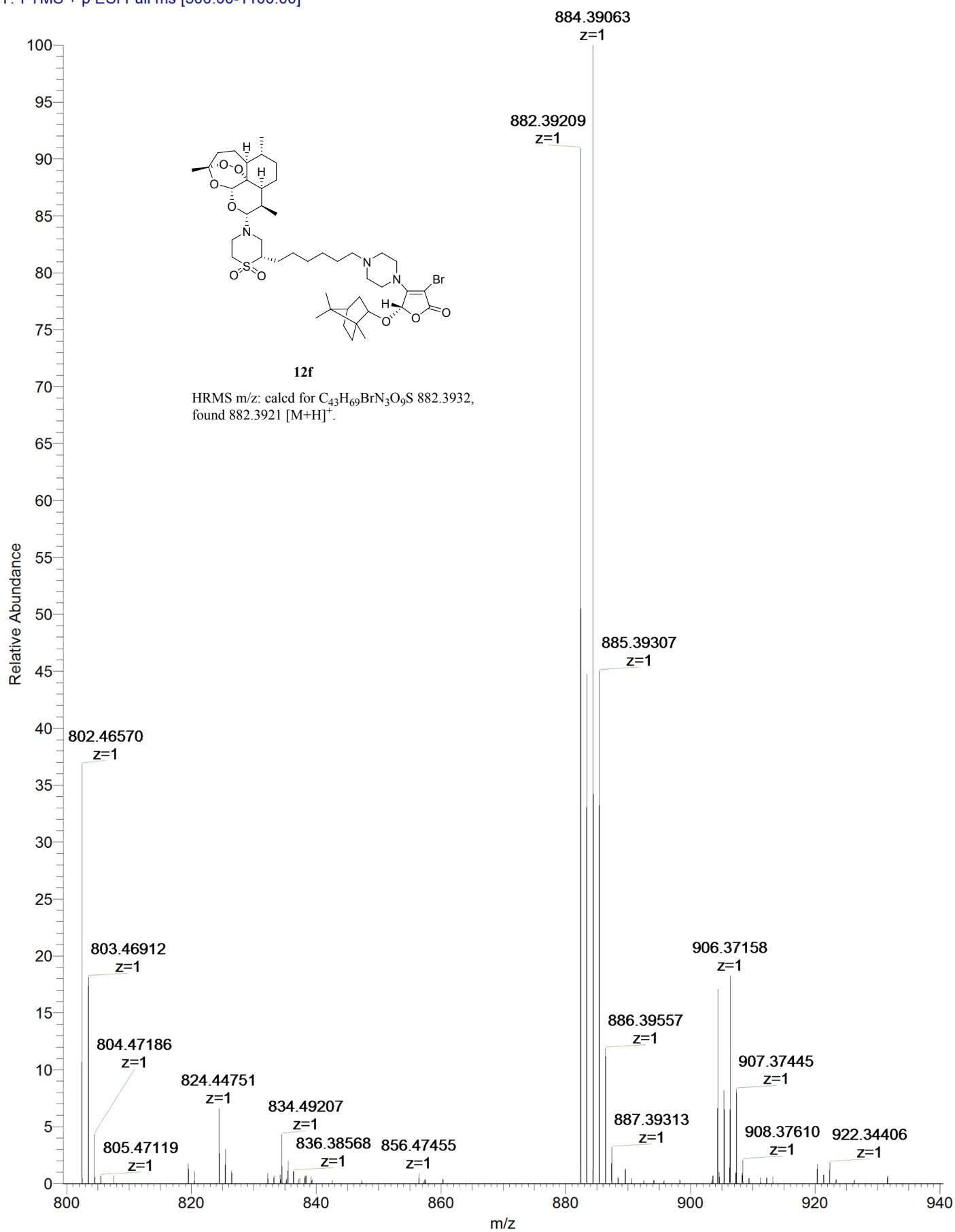




12F. 10.fid — 12f







Sample Name: 12F

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Acq. Operator : 系统 Seq. Line : 1

Sample Operator : 系统

Acq. Instrument : QQ Location : P2-F1

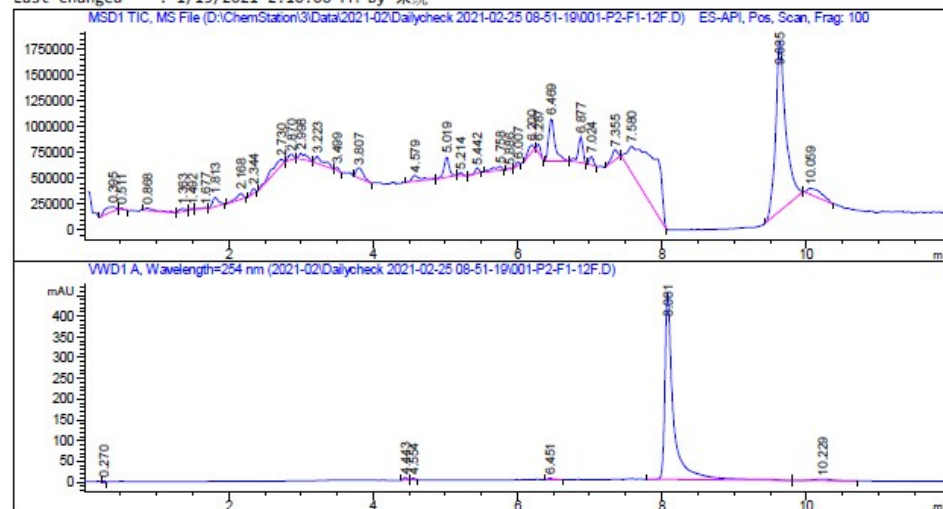
Injection Date : 2/25/2021 8:53:13 AM Inj : 1

Inj Volume : 0.500 µl

Different Inj Volume from Sample Entry! Actual Inj Volume : 1.000 µl

Method : D:\ChemStation\3\Data\2021-02\Dailycheck 2021-02-25 08-51-19\Positive-SCAN-10min.M (Sequence Method)

Last changed : 1/15/2021 2:10:06 PM by 系统



Area Percent Report

Sorted By : Signal

Multiplier : 1.0000

Dilution : 1.0000

Use Multiplier & Dilution Factor with ISTDs

Signal 1: MSD1 TIC, MS File

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
1	0.395	BB	0.1784	5.82895e5	4.52955e4	1.4078
2	0.511	BB	0.0704	5.46142e4	1.29375e4	0.1319
3	0.868	BB	0.1386	2.37380e5	2.27676e4	0.5733
4	1.363	BB	0.1001	1.72193e5	2.79517e4	0.4159
5	1.492	BB	0.0531	3.19825e4	1.06438e4	0.0772
6	1.677	BB	0.0657	4.38638e4	1.04720e4	0.1059
7	1.813	BB	0.0837	5.13171e5	8.96709e4	1.2394
8	2.168	BB	0.0984	3.45225e5	5.31188e4	0.8338

Sample Name: 12F

Peak #	RetTime [min]	Type	Width [min]	Area	Height	Area %
9	2.344	BB	0.0600	1.80648e5	4.89646e4	0.4363
10	2.730	BB	0.2041	9.14002e5	6.10712e4	2.2074
11	2.870	BB	0.0810	2.66000e5	5.31847e4	0.6424
12	2.998	BB	0.1112	4.38716e5	5.42277e4	1.0596
13	3.223	BB	0.1330	6.17598e5	6.52736e4	1.4916
14	3.499	BB	0.0556	1.00945e5	3.04852e4	0.2438
15	3.807	BB	0.1133	6.66324e5	9.79463e4	1.6093
16	4.579	BB	0.1228	5.02494e5	5.85172e4	1.2136
17	5.019	BB	0.0737	9.68135e5	1.98926e5	2.3382
18	5.214	BB	0.0509	1.08521e5	3.19964e4	0.2621
19	5.442	BB	0.0652	2.13452e5	5.15783e4	0.5155
20	5.758	BB	0.1248	3.42126e5	3.70005e4	0.8263
21	5.886	BB	0.0522	4.16305e4	1.32933e4	0.1005
22	6.007	BB	0.0601	1.21922e5	3.29310e4	0.2945
23	6.200	BB	0.1043	4.15861e5	6.89480e4	1.0044
24	6.287	BB	0.0585	2.92434e5	8.20659e4	0.7063
25	6.469	BB	0.0924	2.45757e6	4.10961e5	5.9353
26	6.877	BB	0.0697	1.12047e6	2.47658e5	2.7061
27	7.024	BB	0.0609	3.16329e5	8.39953e4	0.7640
28	7.355	BB	0.0856	5.83538e5	9.92072e4	1.4093
29	7.580	BB	0.5695	1.17904e7	2.52691e5	28.4753
30	9.635	BB	0.1333	1.59395e7	1.67970e6	38.4959
31	10.059	BB	0.2154	1.02576e6	6.02951e4	2.4773

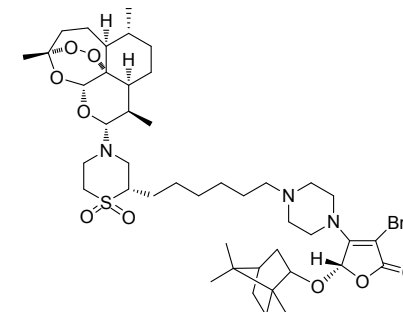
Totals : 4.14057e7 4.09377e6

Signal 2: WVD1 A, Wavelength=254 nm

Peak #	RetTime [min]	Type	Width [min]	Area [mAU*s]	Height [mAU]	Area %
1	0.270	BB	0.0327	4.96144	2.44705	0.1285
2	4.443	BB	0.0472	18.25191	6.04429	0.4725
3	4.554	BB	0.0477	11.33409	3.70137	0.2934
4	6.451	BB	0.0668	17.03849	3.76777	0.4411
5	8.081	BB	0.1184	3740.53491	448.23956	96.8438
6	10.229	BBA	0.3076	70.31895	3.57383	1.8206

Totals : 3862.43980 467.77387

*** End of Report ***



12f