Supporting Information Available

2-Pyridinyl-*N*-(2,4-difluorobenzyl)aminoethyl Group As Thermocontrolled Implement for Protection of Carboxylic Acids

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General remarks

All reagents were of analytical grade, obtained from commercial resources and used without further purification. For synthesis, solvents with quality pro analysis were used. Solvents were dried and distilled following standard methods and kept over molecular sieve. All reactions were carried at room temperature unless described otherwise. Column chromatography was performed with silica gel (Merck, 200−630 mesh) and TLC was carried out on pre-coated plates (Merck silica gel 60, F_{254}). All NMR spectra were obtained at Bruker spectrometer (400 or 500 MHz for ^{1}H and 100 or 125 MHz for ^{13}C). Chemical shifts δ are reported in parts per million (ppm). The residual protonated solvent as internal standard (CDCl3 at 7.26 ppm, methanol-d6 at 3.31 ppm and DMSO-d6 at 2.50 ppm) were used. *J* values are given in Hz. Abbreviations used in the description of resonances are: s (single), d (doublet), t (triplet), br (broad), dd (double doublet), ddd (double double doublet) and m (multiplet). Mass spectra were recorded on the MicroTofQ mass spectrometer with electrospray ionization (ESI) sources (ESI source voltage of 3.2 kV, nebulization with nitrogen at 0.4 bar, dry gas flow of 4.0 L/min at lowered temperature 80°C). NMR and MS spectra are available in Supplementary.

Procedure for HPLC Analysis. Analytical HPLC chromatography was achieved using 150x4.6 mm column Synergi 4u Fusion-RP 80Å, according to the following conditions: gradient elution with mobile phase A: 0.01M triethylammonium acetate buffer pH 7 and mobile phase B: 0.01M triethylammonium acetate buffer containing 40% (v/v) CH_3CN; gradient: 0−100% B in 43 min. The flow rate adopted was 1 mL/min at 25 °C, detection was performed at 254 nm and 338 nm for cyclic byproduct. In order to evaluate the results from the synthesis optimization in a quick manner without purifying each batch, we experimentally determined the linear relationship presented between the chromatographic peak area and the compound quantity for compound 1.

General procedure for esters preparation

The carboxylic acids (1 eq) (**1a-e**) was dissolved in anhydrous DCM and cooled to 0°C. Then *N*-(3-Dimethylaminopropyl)-*N'*-ethylcarbodiimide hydrochloride (2 eq) followed by DMAP (0.3 eq) were added. After 3 minutes whole mixture was charged with 2-((2,4-difluorobenzyl)(pyridin-2-yl)amino)ethanol (1.2 eq) and stirred at room temperature for 1.5-6 hours. Reaction was monitored by TLC analysis. The reaction was ended with water (50 ml) and extracted three times with DCM (3x 40 ml). Combined organic layers were dried over anhydrous Na_2SO_4 and evaporated under reduced pressure. Crude product was purified by column chromatography over silica gel or preparative layer chromatography (PLC) with the eluent hexane/AcOEt (1:1) obtaining pure product (**2a-e**).

5'-*O*-(4,4'-dimethoxytriphenylmethyl)thymidine-3'-*O*-(2-((2,4-difluorobenzyl)(pyridin-2-yl)amino)ethyl) succinate (2a)

2a, as a white solid, was obtained from 5'-*O*-(4,4'-dimethoxytriphenylmethyl)thymidine-3'-*O*-succinate **1a** (0.15 mmol, 100 mg) with 48% (62 mg) yield following general procedure.

^{1}H NMR (500 MHz, $CDCl_3$) δ (ppm) 8.45 (bs, 1H), 8.13 (dd, *J* = 19.3, 9.6 Hz, 1H), 7.58 (s, 1H), 7.39 (m, 1H), 7.31 – 7.19 (m, 8H), 7.09 (dd, *J* = 15.1, 8.6 Hz, 1H), 6.85 (d, *J* = 8.9 Hz, 4H), 6.79-6.73 (m, 2H), 6.56 (dd, *J* = 6.8, 5.2 Hz, 1H), 6.43 (d, *J* = 8.6 Hz, 1H), 6.41 (dd, *J* = 8.6, 6.0 Hz, 1H), 5.49 – 5.42 (m, 1H), 4.75 (s, 2H), 4.3 (t, *J* = 5.9 Hz, 2H), 4.11 (m, 1H), 3.86 – 3.8 (m, 4H), 3.78 (m, 6H), 3.48 – 3.38 (m, 2H), 2.62 – 2.51 (m, 4H), 2.45-2.41 (m, 2H), 1.35 (s, 3H); **^{13}C NMR** (100 MHz, $CDCl_3$) δ (ppm) 171.9, 171.6, 163.4, 163.0, 161.6, 161.1, 159.7, 158. 8, 157.6, 156.8, 150. 5, 148.0, 144.2, 137.4, 135.4, 135.2, 130.1, 128.1, 127.9,127.2, 113.4, 112.7, 111.6, 111.2, 105.8, 87.2, 84.3, 83.9, 75.8, 63.7, 62.7, 55.3, 47.4, 46.1, 37.8, 28.9, 28.7, 11.5; **HRMS** (ESI-q-TOF) calc for $C_{49}H_{49}F_2N_4O_{10}$ (M+H) 891.3417, found 891.3410 m/z; calc for $C_{49}H_{48}F_2N_4NaO_{10}$ (M+Na) 913.3236, found 913.3237 m/z

2-[(2,4-difluorobenzyl)(pyridin-2-yl)amino]ethyl {[(9*H*-fluoren-9-yl)methoxy]carbonyl}-D-phenylalaninate (2b)

2b, as a whitish oil, was obtained from [(9*H*-fluoren-9-yl)methoxy]carbonyl-D-phenylalaninate **1b** (0.21 mmol, 80 mg) with 84% (110 mg) yield following general procedure.
^{1}H NMR (500 MHz, $CDCl_3$) δ 8.06 (dd, *J* = 5.0, 1.8 Hz, 1H), 7.66 (d, *J* = 7.6 Hz, 2H), 7.46 (t, *J* = 7.9 Hz, 2H), 7.29 (m, 3H), 7.20 (tt, *J* = 7.4, 1.4 Hz, 2H), 7.16 – 7.07 (m, 3H), 6.99 (td, *J* = 8.5, 6.3 Hz, 1H), 6.95 (d, *J* = 6.2 Hz, 2H), 6.71 (ddd, *J* = 10.6, 8.8, 2.5 Hz, 1H), 6.66 (td, *J* = 8.4, 2.5 Hz, 1H), 6.49 (dd, *J* = 7.1, 4.9 Hz, 1H), 6.32 (d, *J* = 8.6 Hz, 1H), 5.13 (d, *J* = 8.3 Hz, 1H), 4.58 (s, 2H), 4.50 (dt, *J* = 8.3, 6.1 Hz, 1H) , 4.34 (dd, *J* = 10.7, 7.0 Hz, 1H), 4.24 (ddt, *J* = 21.0, 10.8, 5.4 Hz, 3H), 4.10 (t, *J* = 7.0 Hz, 1H), 3.69 (t, *J* = 5.8 Hz, 2H), 2.95 (dp, *J* = 13.8, 7.7, 6.9 Hz, 2H); **^{13}C NMR** (125 MHz, $CDCl_3$) δ 171.4 , 162.3, 160.4, 155.4 , 147.9 , 143.7 , 141.3 , 137.5 , 135.6, 129.2, 128.5, 128.3, 127.7, 127.1, 127.0, 125.0, 121.1, 120.8, 119.9, 112.8, 111.2, 105.8, 103.8, 66.8, 63.3, 54.8, 47.1, 46.0, 38.3; **HRMS** (ESI-q-TOF) calcd for $C_{38}H_{34}F_2N_3O_4$ $(M+H)^+$ 634.2517, found 634.2517 m/z; calc for $C_{38}H_{33}F_2N_3NaO_4$ (M+Na) 656.2337, found 656.2330 m/z.

2-[(2,4-difluorobenzyl)(pyridin-2-yl)amino]ethyl 4-(methylamino)benzoate (2c)

2c, as a yellowish oil, was obtained from 4-(methylamino)benzoic acid **1c** (0.4 mmol, 60 mg) with 92% (145 mg) yield following general procedure.
^{1}H NMR (500 MHz, CD_2Cl_2) δ 8.26 (dd, *J* = 5.6, 1.9 Hz, 1H), 7.89 (d, *J* = 8.8 Hz, 2H), 7.57 – 7.51 (m, 1H), 7.29 (dd, *J* = 15.2, 8.6 Hz, 1H), 6.93 (ddd, *J* = 10.4, 9.0, 2.5 Hz, 1H), 6.86 (td, *J* = 8.3, 2.1 Hz, 1H), 6.70 (t, *J* = 3.5 Hz, 1H), 6.69 (s, 1H), 6.62 (d, *J* = 8.8 Hz, 2H), 4.97 (s, 2H), 4.58 (t, *J* = 5.9 Hz, 2H), 4.56 (s, 1H), 4.05 (t, *J* = 5.9 Hz, 2H), 2.92 (d, *J* = 5.2 Hz, 3H). **^{13}C NMR** (100 MHz, CD_2Cl_2) δ 166.6, 162.9, 161.1, 159.9, 153.3, 148.0, 137.4, 131.7, 129.6, 121.7, 117.6, 112.6, 111.4, 111.0, 106.0, 103.6, 62.1, 47.9 46.2, 29.9. **HRMS** (ESI-q-TOF) calcd for $C_{22}H_{22}F_2N_3O_2$ $(M+H)^+$ 398.168, found 398.1686 m/z; calc for $C_{22}H_{21}F_2N_3NaO_2$ (M+Na) 420,15, found 420.1515 m/z.

2-[(2,4-difluorobenzyl)(pyridin-2-yl)amino]ethyl 4-nitrobenzoate (2d)

2d, as a yellowish oil, was obtained from 4-nitrobenzoic acid **1d** (0.36 mmol, 60 mg) with 90% (138 mg) yield following general procedure.
^{1}H NMR (500 MHz, CD_2Cl_2) δ 8.24 (d, *J* = 8.9 Hz, 2H), 8.15 (dd, *J* = 4.9, 1.2 Hz, 1H), 8.09 (d, *J* = 8.9 Hz, 2H), 7.46 (ddd, *J* = 8.8, 7.2, 2.0 Hz, 1H), 7.20 (dd, *J* = 15.2, 8.6 Hz, 1H), 6.86 – 6.80 (m, 1H), 6.77 (td, *J* = 8.3, 1.8 Hz, 1H), 6.62 (dd, *J* = 7.0, 5.0 Hz, 1H), 6.58 (d, *J* = 8.6 Hz, 1H), 4.86 (s, 2H), 4.63 (t, *J* = 5.7 Hz, 2H), 4.07 (t, *J* = 5.7 Hz, 2H). **^{13}C NMR** (100 MHz, CD_2Cl_2) δ 164.8,163.2, 162.1, 160.7, 158.1, 150.8, 148.3, 137.8, 135.8, 130.9, 129.8, 123.7, 121.8, 113.1, 111.5, 106.3, 104.0, 64.2, 47.9, 46.6; **HRMS** (ESI-q-TOF) calcd for $C_{21}H_{18}F_2N_3O_4$ $(M+H)^+$ 414.1265, found: 414.1264 m/z; calc for $C_{21}H_{17}F_2N_3NaO_4$ (M+Na) 436.1085, found 436.1091 m/z.

2-[(2,4-difluorobenzyl)(pyridin-2-yl)amino]ethyl myristate (2e)

2e, as a yellowish oil was obtained from myristic acid **1e** (0.2 mmol, 46 mg) with 98% (96 mg) yield following general procedure.
^{1}H NMR (400 MHz, CD_2Cl_2) δ 8.18 (dd, *J* = 5.1, 1.9 Hz, 1H), 7.47 (ddd, *J* = 8.8, 7.1, 2.0 Hz, 1H), 7.22 (td, *J* = 8.5, 6.4 Hz, 1H), 6.89 (ddd, *J* = 10.6, 9.0, 2.5 Hz, 1H), 6.83 (td, *J* = 8.4, 2.6 Hz, 1H), 6.63 (dd, *J* = 7.1, 5.0 Hz, 1H), 6.57 (d, *J* = 8.6 Hz, 1H), 4.84 (s, 2H), 4.33 (t, *J* = 5.9 Hz, 2H), 3.88 (t, *J* = 5.9 Hz, 2H), 2.26 (t, J = 7.5 Hz, 2H), 1.59 (p, *J* = 6.9 Hz, 2H), 1.32 (s, 20H), 0.93 (t, *J* = 6.6 Hz, 3H).**^{13}C NMR** (100 MHz, CD_2Cl_2) δ 173.8, 163.0, 160.6, 158.2, 148.4, 137.8, 130.0, 122.0, 113.0, 111.4, 106.2, 104.0, 62.4, 48.0, 46.5, 34.5, 32.4, 30.1, 29.9, 29.6, 25.3, 23.2, 14.3. **HRMS** (ESI-q-TOF) calc for $C_{28}H_{41}F_2N_2O_2$ $(M+H)^+$ 475.3136, found: 475.3136 m/z; calc for $C_{28}H_{40}F_2N_2NaO_2$ (M+Na) 497.2956, found 497.2956 m/z.

1-(2,4-difluorobenzyl)-2,3-dihydro-1H-imidazo[1,2-a]pyridin-4-ium (3)

2a (50 mg) was dissolved in acetonitrile/buffer pH=7.2 (1:1, 10 ml). Deprotection was performed at 90ºC temperature for 4 hours. The mixture was evaporated and purified on PLC plate with eluent DCM/MeOH 6:4. Cyclic product **3** was eluted from silica gel (5x 20 ml H_2O), three times evaporated with water and obtained **as a yellowish oil,** with 80% yield (13.8 mg).
^{1}H NMR (400 MHz, DMSO-d_6) δ (ppm) 8.28 (d, *J* = 6.4 Hz, 1H), 8.07 (ddd, *J* = 8.7, 7.2, 1.3 Hz, 1H), 7.60 (td, *J* = 8.7, 6.7 Hz, 1H), 7.43 (d, *J* = 9.0 Hz, 1H), 7.35 (ddd, *J* = 10.6, 9.5, 2.6 Hz, 1H), 7.15 (td, *J* = 8.7, 2.1 Hz, 1H), 6.99 (t, *J* = 6.4 Hz, 1H), 4.79 (s, 2H), 4.67 (t, *J* = 9.9 Hz, 2H), 3.88 (t, 2H). **HRMS** (ESI-q-TOF) calc for $C_{14}H_{13}F_2N_2^+$ (M) 247.1041, found 247.1043 m/z.

Procedure for DMT hydrolysis

Compound **2a** (3 mg) was dissolved in 3% DCA/DCM solution. The reaction was mixed 25 minutes until deprotection was completed. The mixture was washed with $NaHCO_3$ (3x 1 ml), organic layer dried and solvent evaporated. The mixture was purified by PLC (hex/AcOEt

7:3). Pure product (**4**), **as a white foam,** was confirmed by HPLC analysis. The **4** was dissolved in a mixture of CH_3CN/phosphate buffer 7.2 and analyzed by HPLC.
^{1}H NMR (400 MHz, $CDCl_3$) δ (ppm) 8.15 (d, *J* = 3.6 Hz, 1H), 7.48 (s, 1H), 7.44 – 7.40 (m, 1H), 7.13 (dd, *J* = 15.1, 8.4 Hz, 1H), 6.80 (dt, *J* = 16.1, 5.4 Hz, 2H), 6.60 (dd, *J* = 6.9, 5.1 Hz, 1H), 6.47 (d, *J* = 8.6 Hz, 1H), 6.21 (dd, *J* = 8.0, 6.2 Hz, 1H), 5.36 – 5.35 (m, 1H), 4.76 (s, 2H), 4.34 (t, *J* = 5.9 Hz, 2H), 4.07 (d, *J* = 2.3 Hz 1H), 3.89 (dd, *J* = 6.4, 2.5 Hz, 2H), 3.85 (t, *J* = 5.9 Hz, 2H), 2.60 – 2.55 (m, 4H), 2.46-2.33 (m, 2H), 1.91 (s, 3H); **^{13}C NMR** (100 MHz, $CDCl_3$) δ (ppm) 172.1, 171.9, 163.4, 163.2, 161.9, 160.8, 159.5, 157.6, 150. 3, 147.9, 137.5, 136.3, 129.4, 121.1, 112.8, 111.4, 111.1, 105.9, 103.8, 86.1, 84.9, 74.9, 62.3, 47.4, 46.2, 37.1, 28.9, 12.6; **MS** (ESI-TQMS) calc for $C_{28}H_{31}F_2N_4O_8$ (M+H) 589.211, found 589.200 m/z; calc for $C_{28}H_{30}F_2N_4NaO_8$ (M+Na) 611.1929, found 611.25 m/z; calc for $C_{28}H_{29}F_2N_4O_8$ (M-H) 587.1953 found 587.20 m/z; calc for $C_{28}H_{29}ClF_2N_4O_8$ (M+Cl) 623.172 found 623.150 m/z.

Procedure for Fmoc hydrolysis

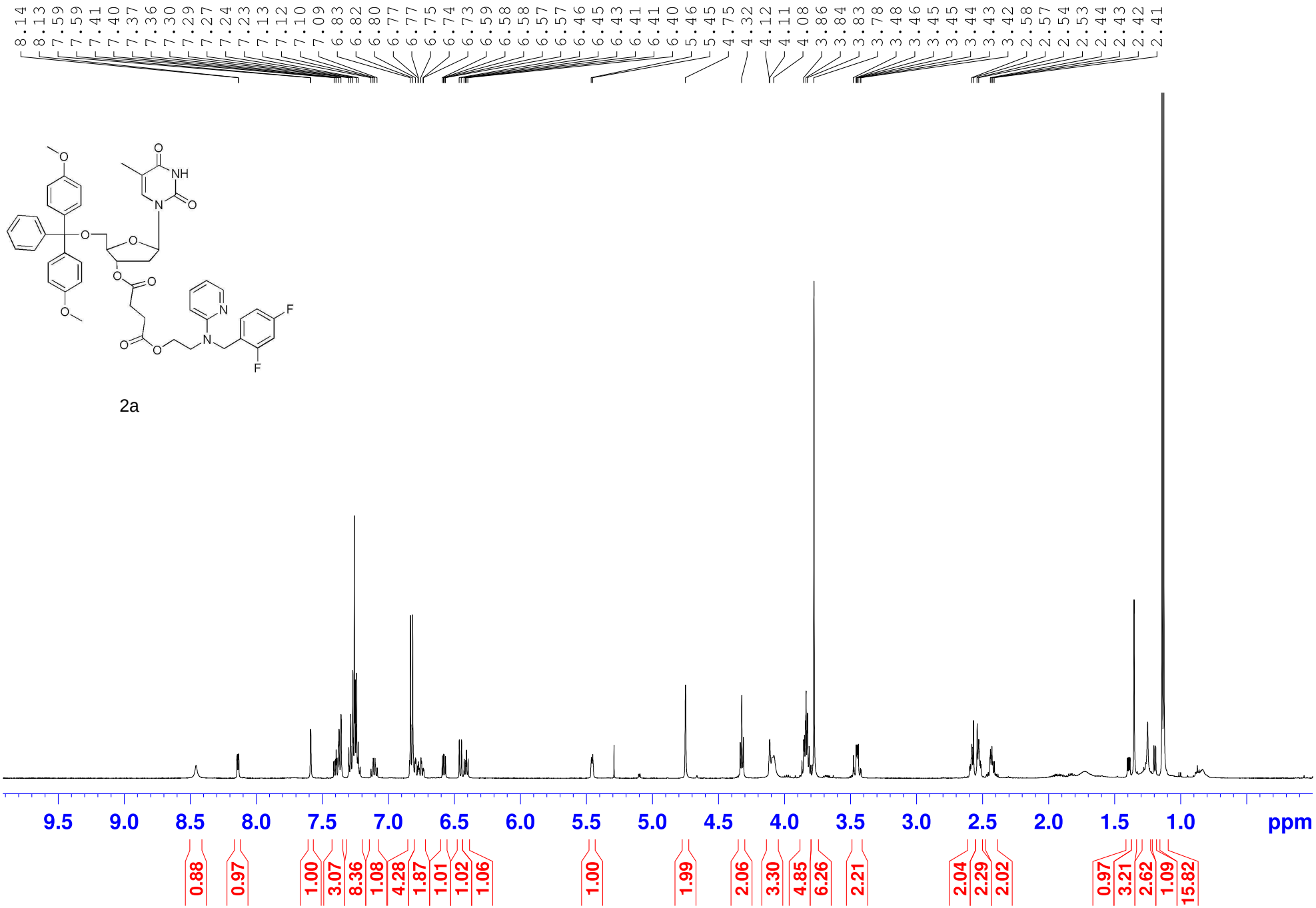
2b (10 mg) was dilluted in 50% solution of morpholine in DMF. Reaction was conducted in room temperature in inert atmosphere and monitored by TLC analysis (hex/AcOEt 7:3). The mixture was evaporated and purified by PLC (hex/AcOEt 7:3). The pure product (**6**) **, as a whitish oil,** was dissolved in a mixture of CH3CN/phosphate buffer 7.2 and analyzed by HPLC.

Base	**deprotection time**	**pKa**
Morpholine	< 5 min.	8.36
N-methylmorpholine	> 24 h	7.38

^{1}H NMR (500 MHz, CD_2Cl_2) δ 8.09 (dd, *J* = 5.0, 1.8 Hz, 1H), 7.34 (ddd, *J* = 8.9, 7.1, 2.0 Hz, 1H), 7.21 – 7.15 (m, 2H), 7.14 – 7.09 (m, 1H), 7.08 – 6.99 (m, 3H), 6.75 (ddd, *J* = 10.7, 8.9, 2.5 Hz, 1H), 6.70 (td, *J* = 8.4, 2.5 Hz, 1H), 6.53 (dd, *J* = 7.1, 4.9 Hz, 1H), 6.38 (d, *J* = 8.5 Hz, 1H), 4.63 (s, 2H), 4.31 – 4.20 (m, 2H), 3.72 (dt, *J* = 9.0, 5.9 Hz, 2H), 3.57 (dd, *J* = 7.8, 5.5 Hz, 1H), 2.92 (dd, *J* = 13.5, 5.5 Hz, 1H), 2.74 (dd, *J* = 13.5, 7.8 Hz, 1H); **^{13}C NMR (125 MHz**, **CD_2Cl_2**) δ 175.0, 162.4, 160.4, 157.6, 148.0, 137.5, 137.2, 129.4, 129.2, 128.5, 126.8, 121.1, 112.8, 111.2, 105.9, 103.8, 62.7, 55.9, 47.2, 46.0, 41.1; **HRMS (ESI-q-TOF)** calc for $C_{23}H_{24}F_2N_3O_2$ $(M+H)^+$ 412.1837, found 412.1843 m/z.

Procedure for thermal deprotection

Compounds **2a-2e** (1mg) was dissolved in acetonitrile/buffer (1/1.5, pH 7.2). Deprotection was performed at room temperature or at 90ºC (period time: from 15 to 120 minutes; analysis every 10 or 15 minutes) or from 30 to 90ºC (each experiment performed every 10 degree) for 2h.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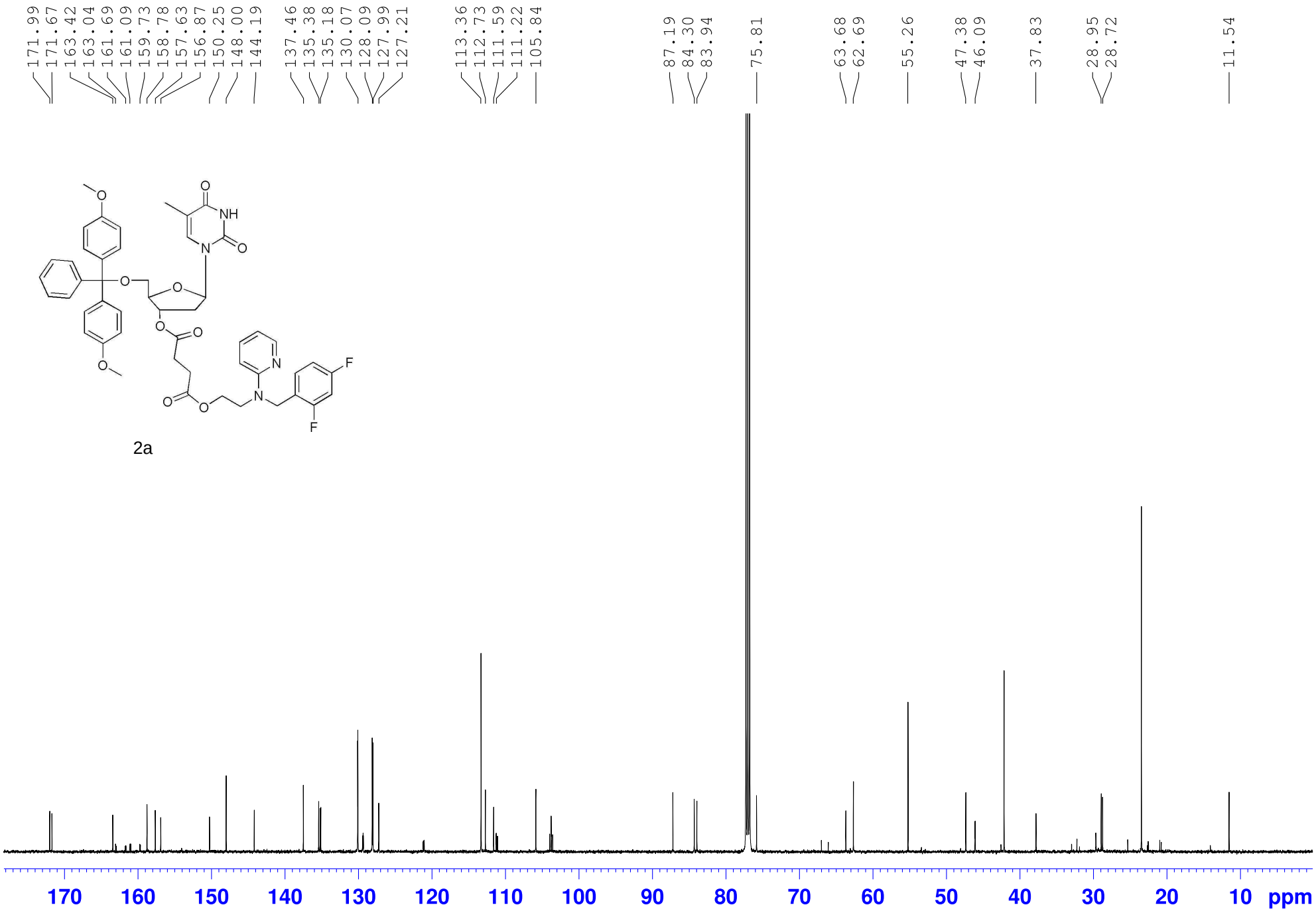
2a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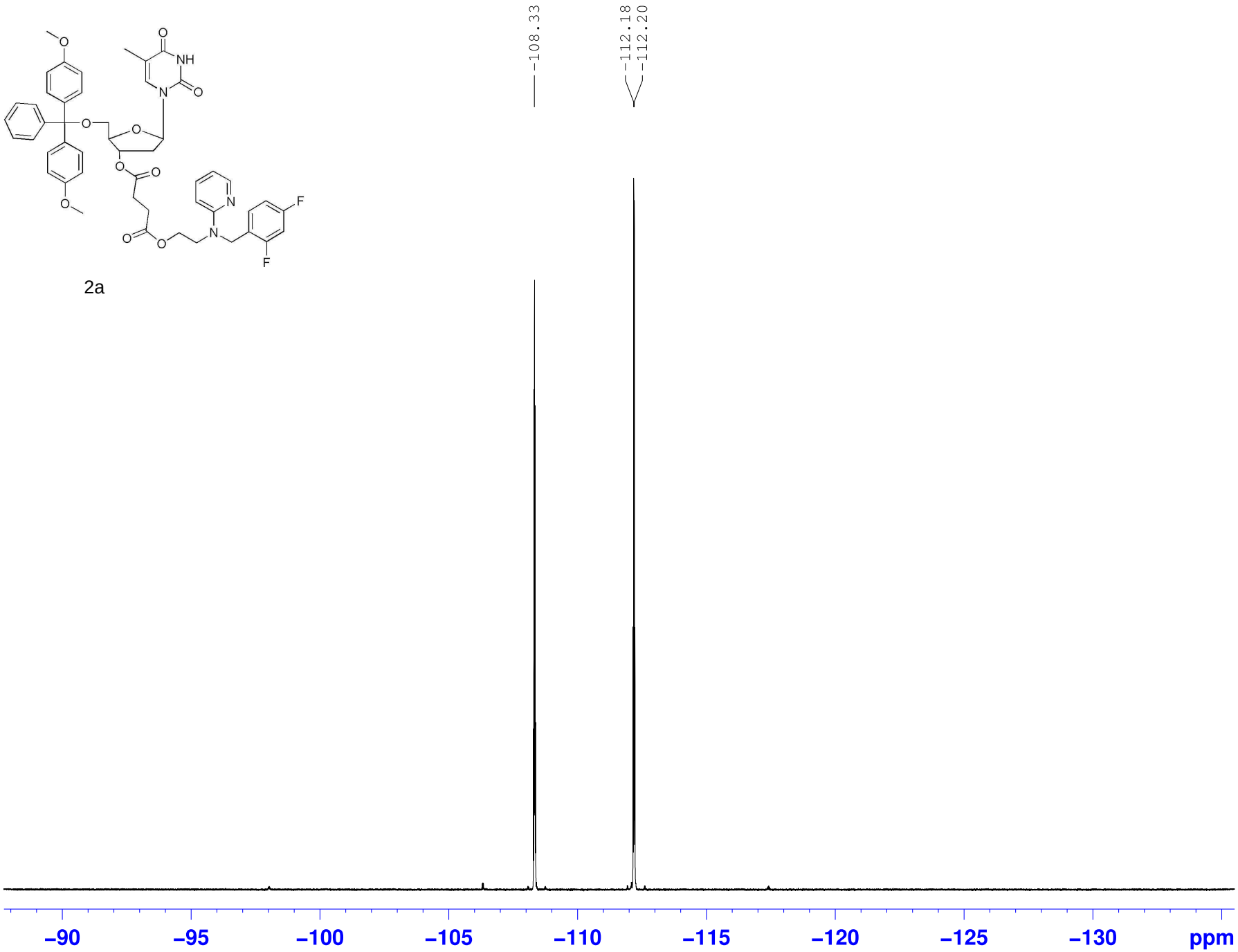
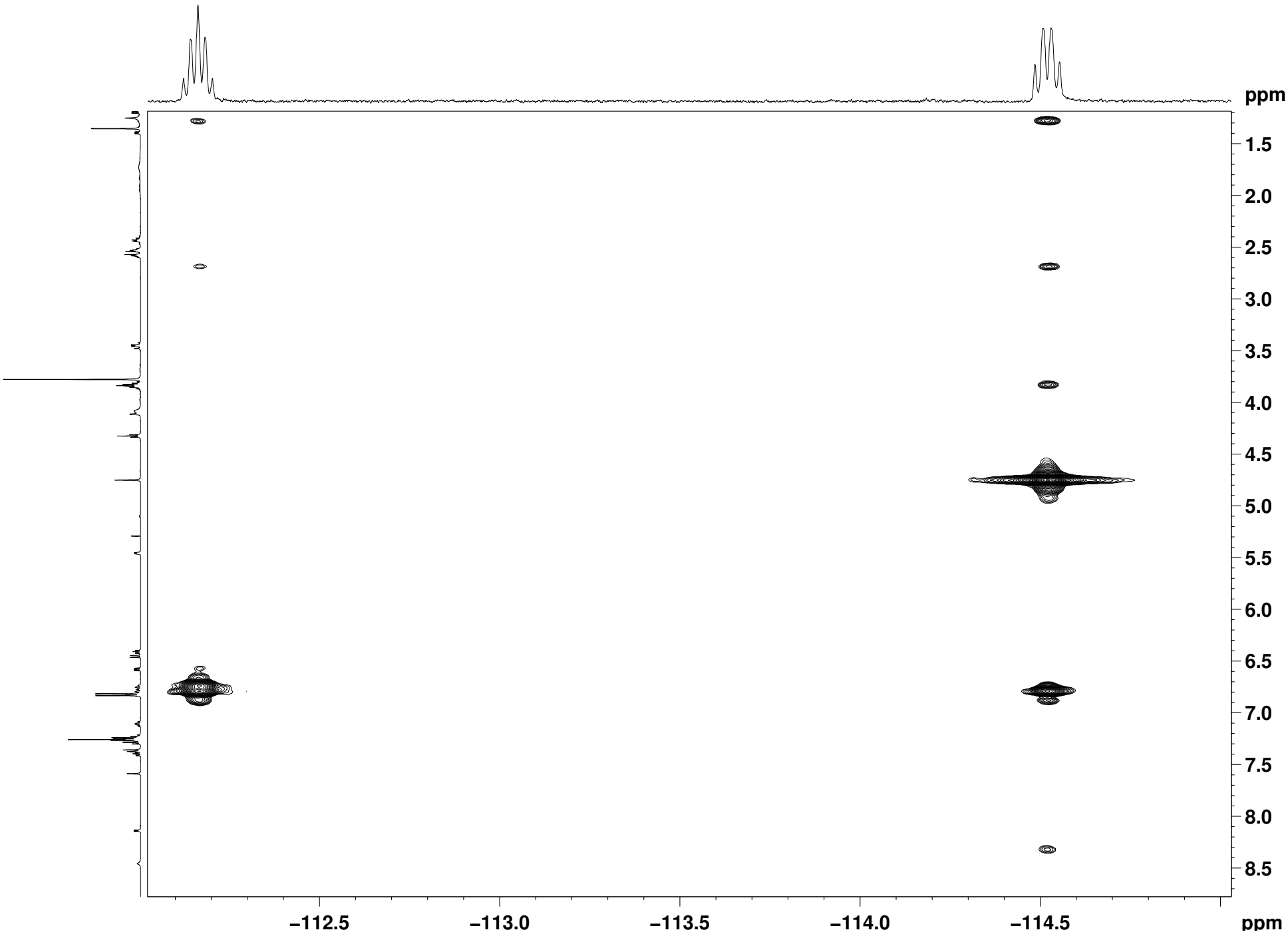
2a

2a

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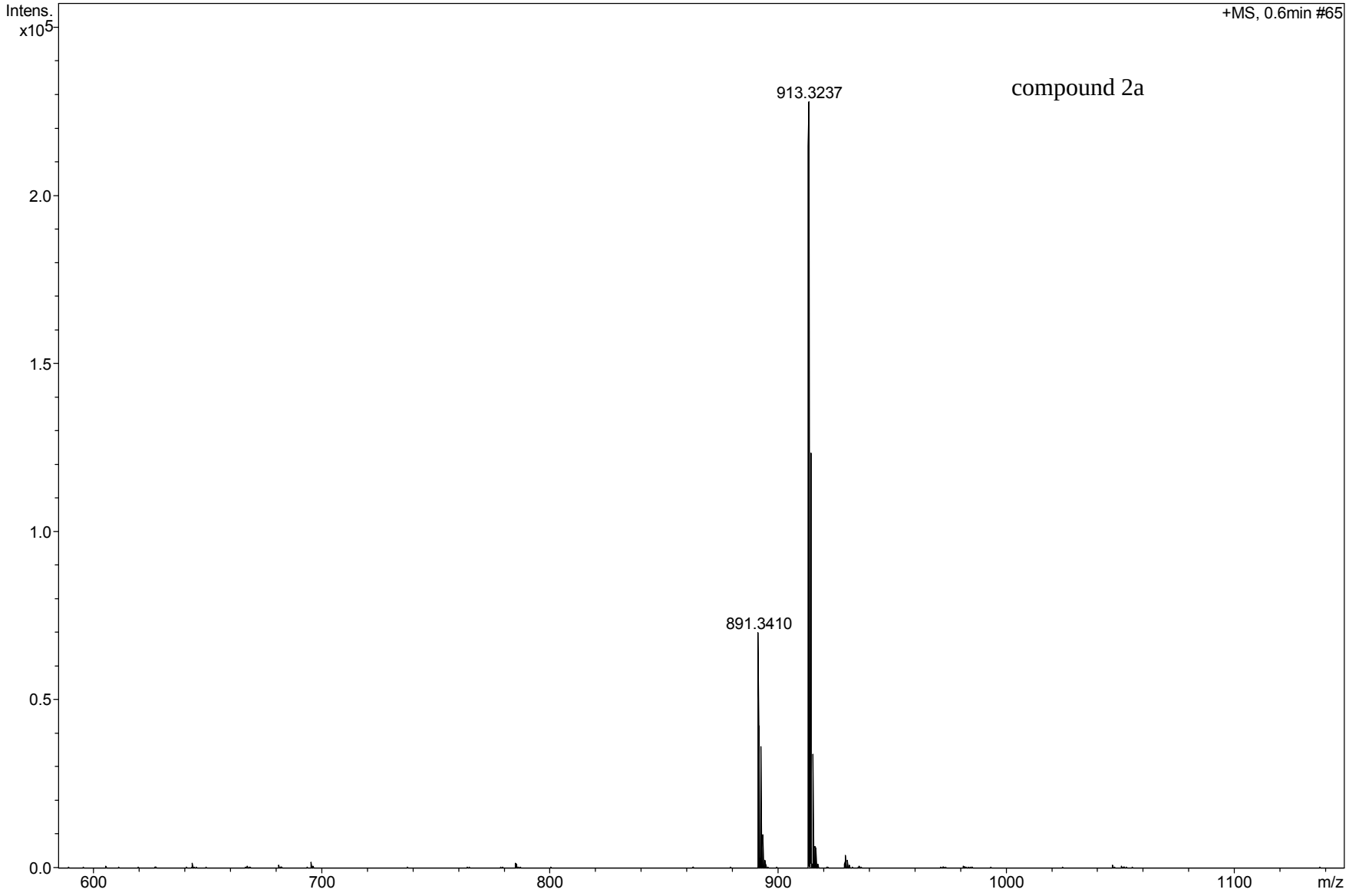

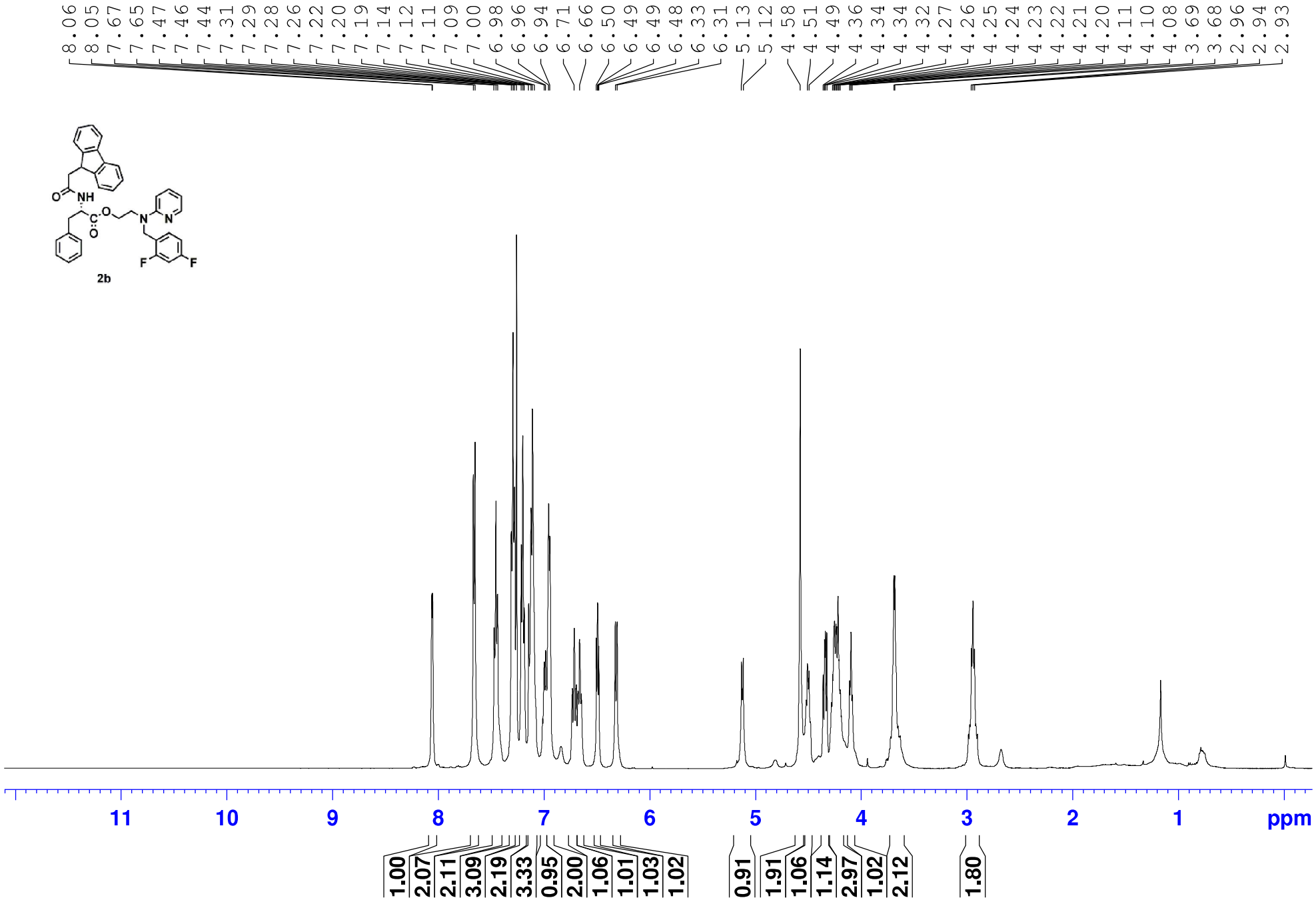
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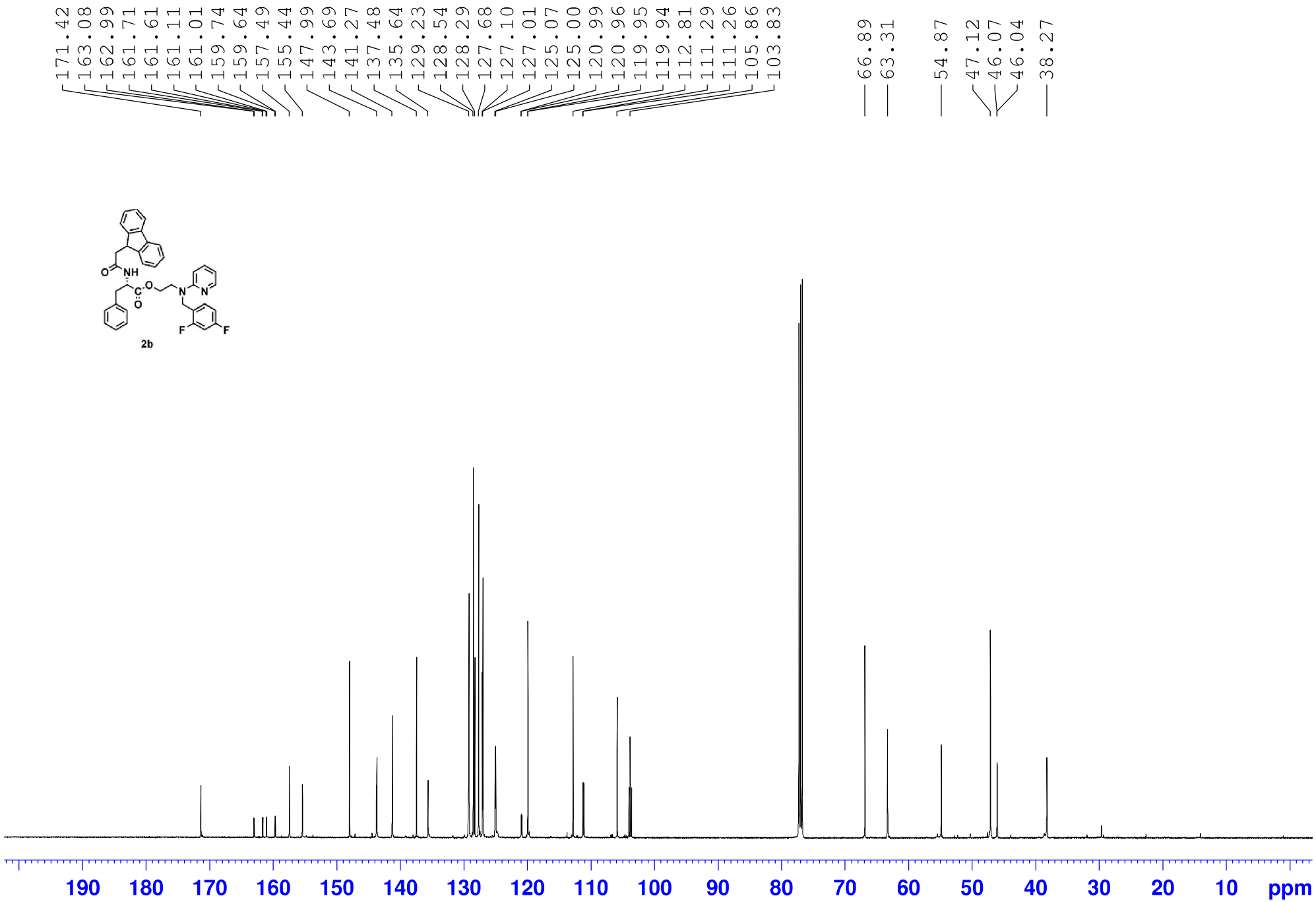
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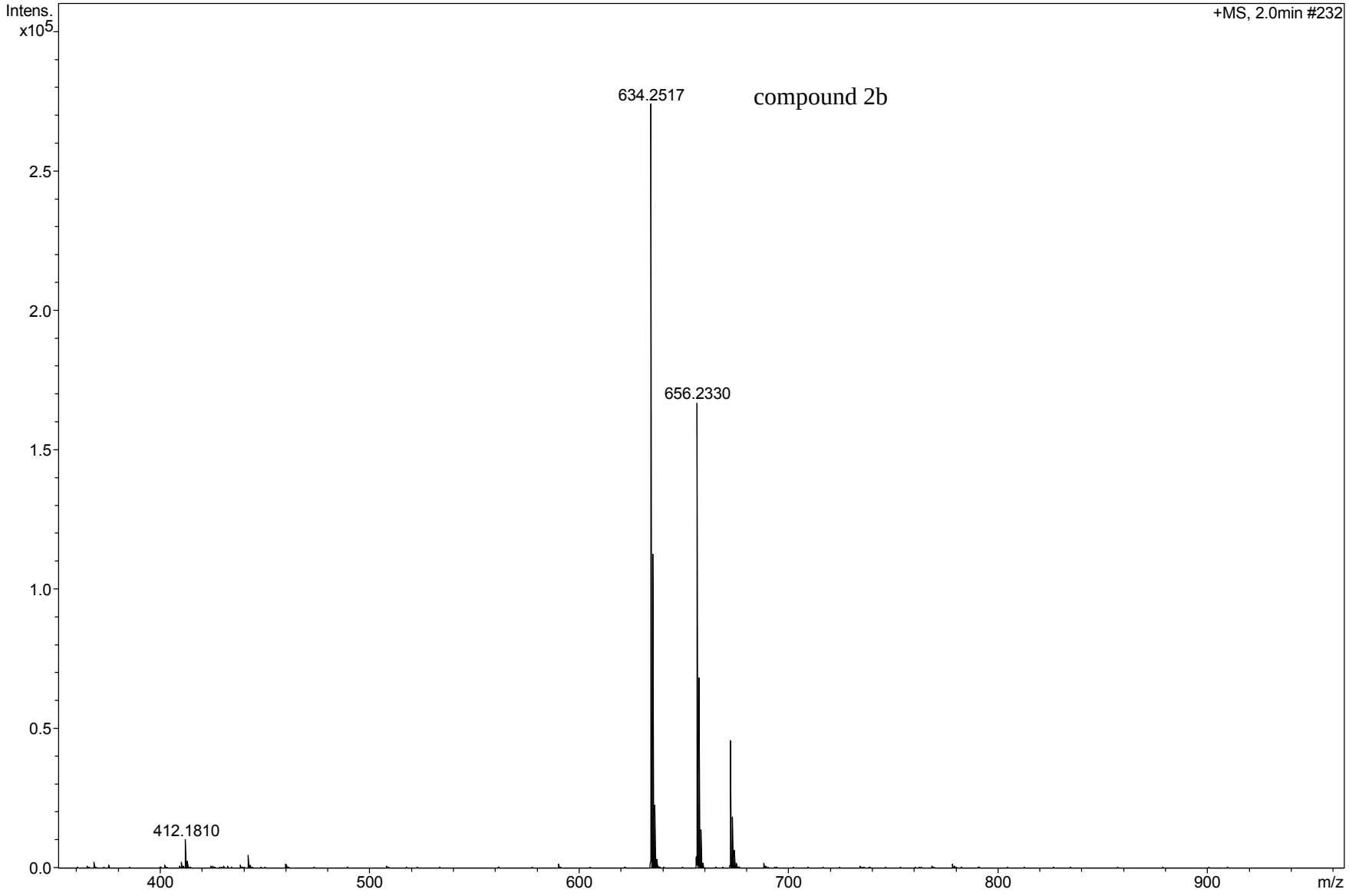

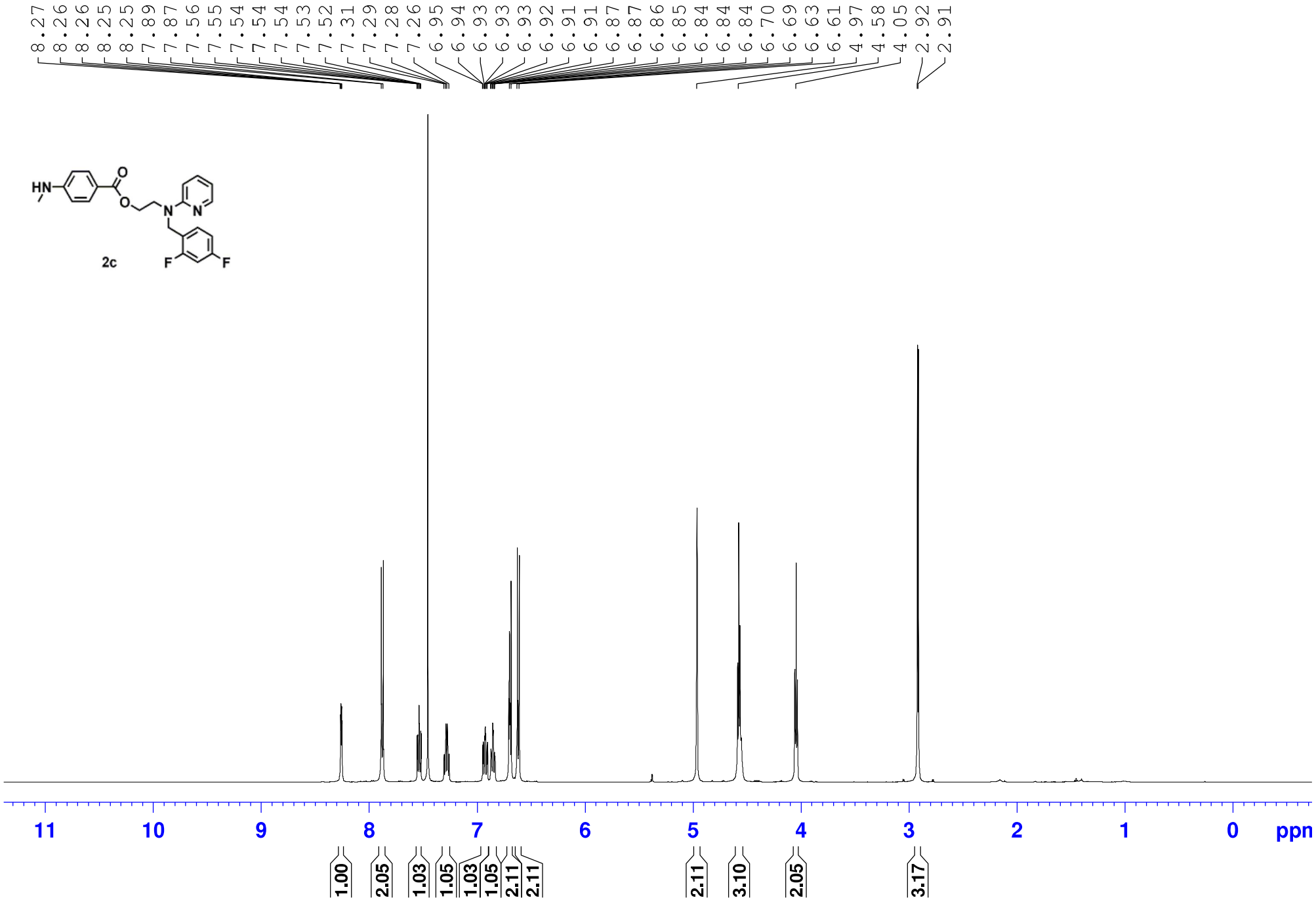
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7.29
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6.93
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6.63
6.61
4.97
4.58
4.05
2.92
2.91
HN
O
O
N
N
F
F
2c
11
10
9
8
7
6
5
4
3
2
1
0
ppn
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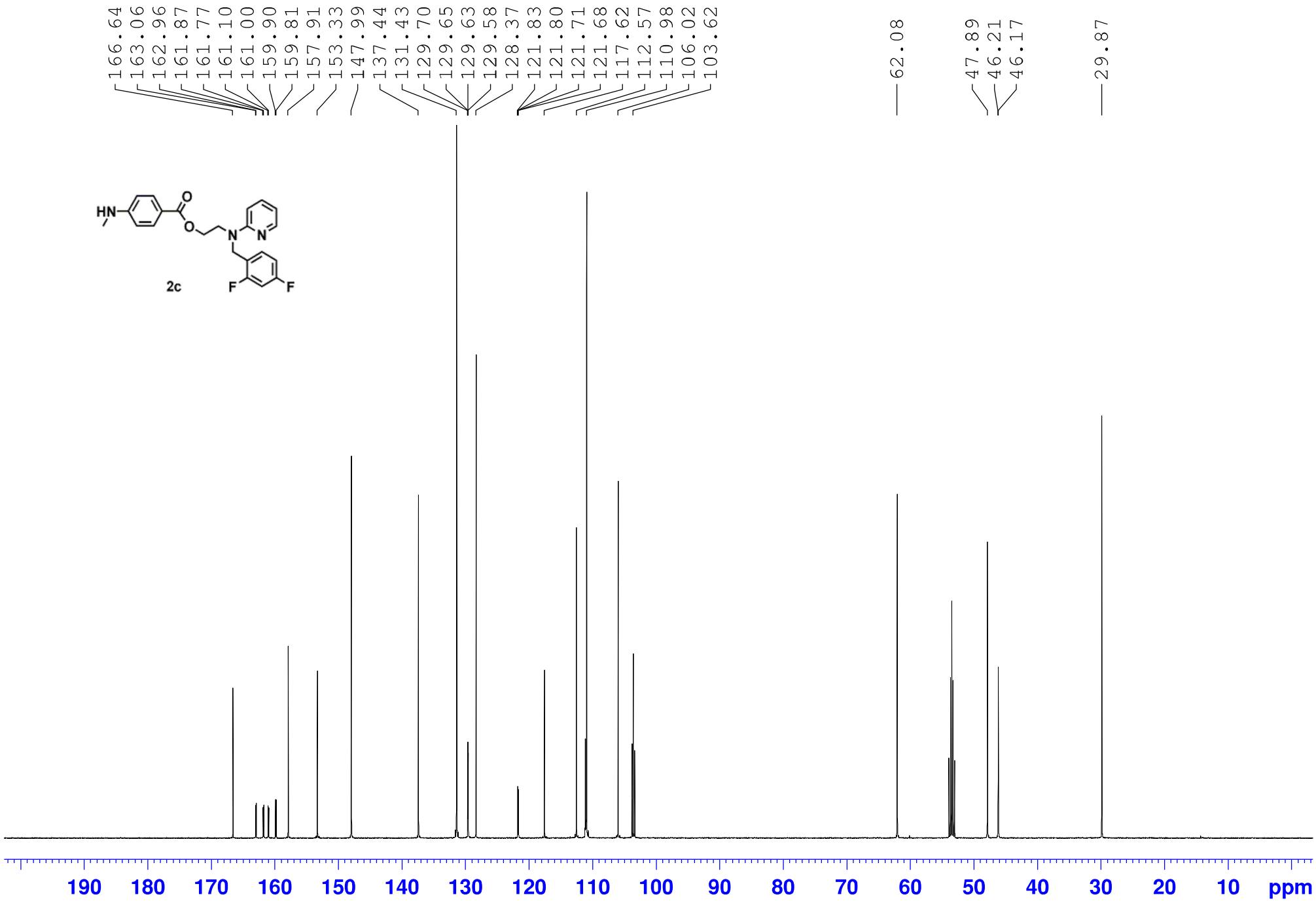
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131.43
129.70
129.65
129.63
129.58
128.37
121.83
121.80
121.71
121.68
117.62
112.57
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103.62
62.08
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46.17
29.87
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O
N
N
F
F
2c
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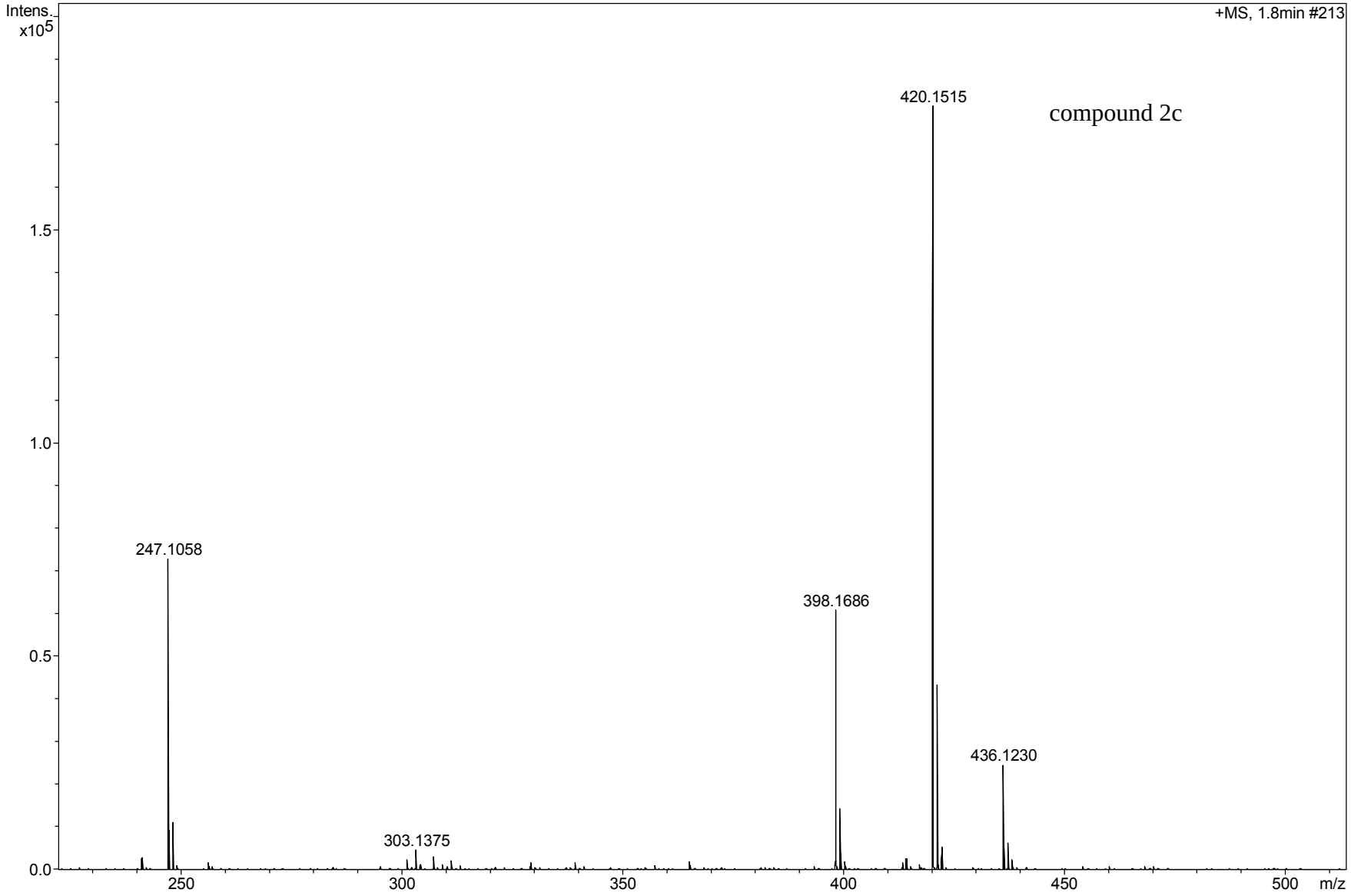

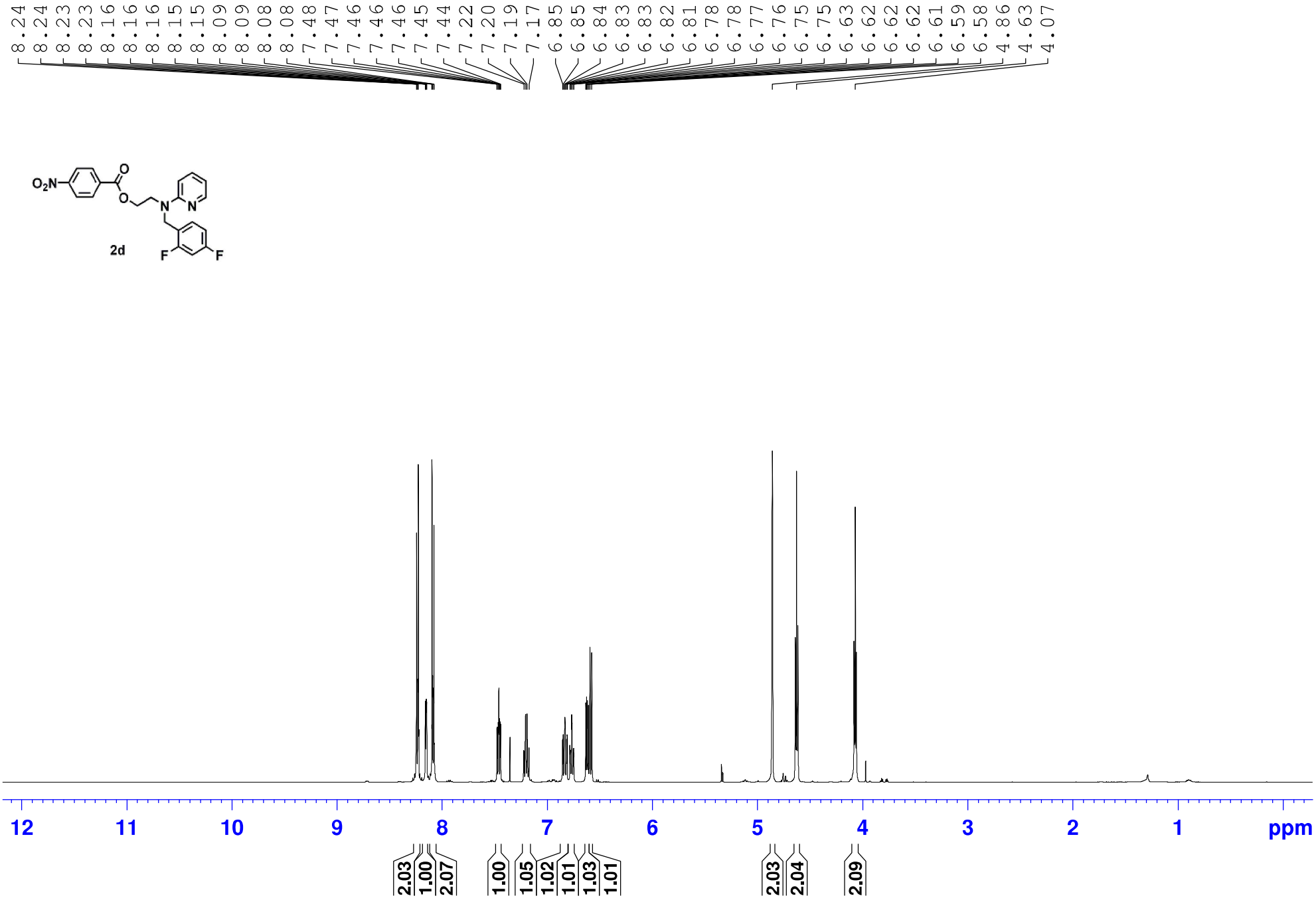
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8.08
8.08
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7.47
7.46
7.46
7.46
7.45
7.44
7.22
7.20
7.19
7.17
6.85
6.85
6.84
6.83
6.83
6.82
6.81
6.78
6.78
6.77
6.76
6.75
6.75
6.63
6.62
6.62
6.62
6.61
6.59
6.58
4.86
4.63
4.07
O2N
O
O
N
N
F
F
2d
12
11
10
9
8
7
6
5
4
3
2
1
ppm
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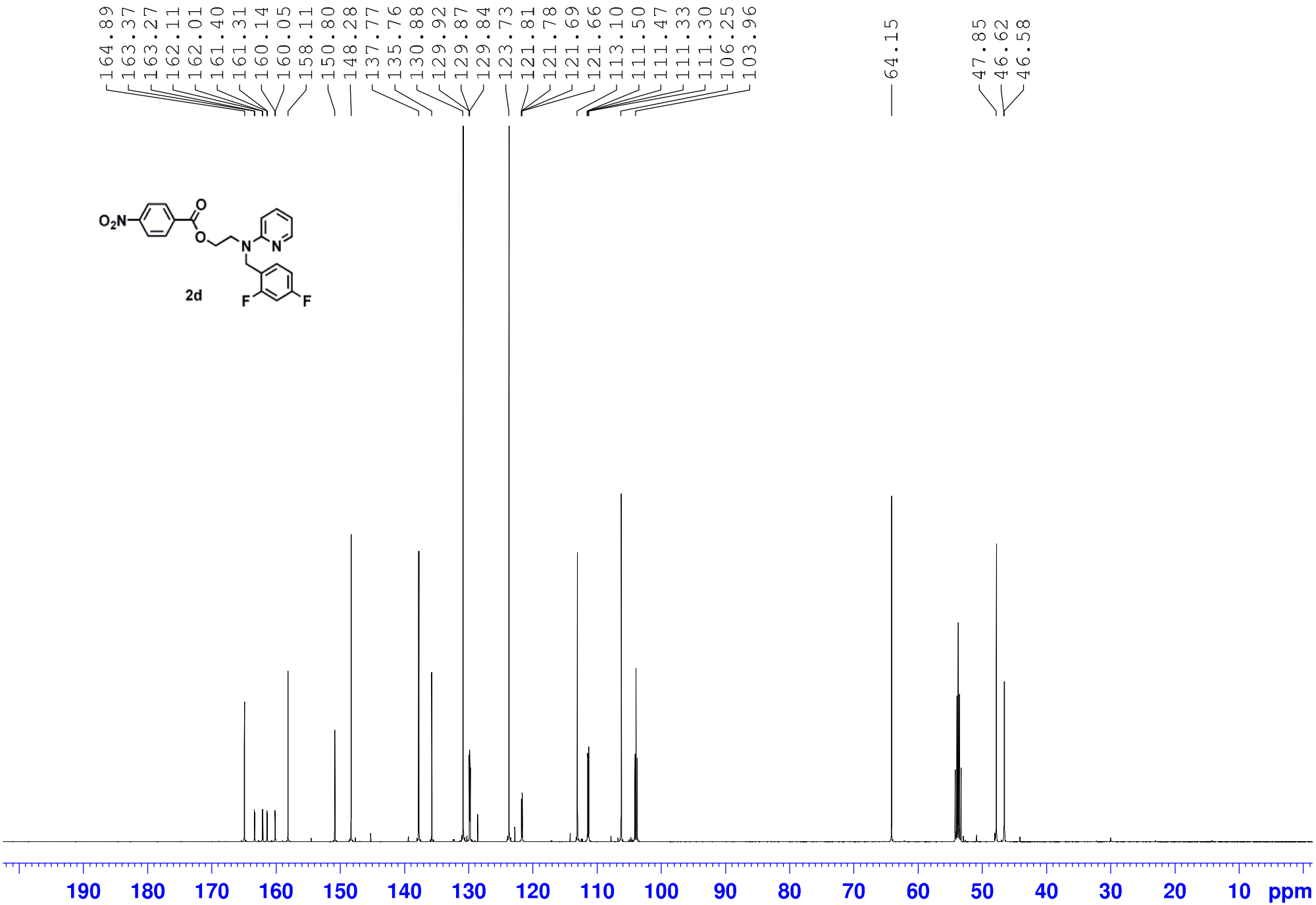
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135.76
130.88
129.92
129.87
129.84
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121.69
121.66
113.10
111.50
111.47
111.33
111.30
106.25
103.96
64.15
47.85
46.62
46.58
O2N
O
O
N
N
F
F
2d
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ppm

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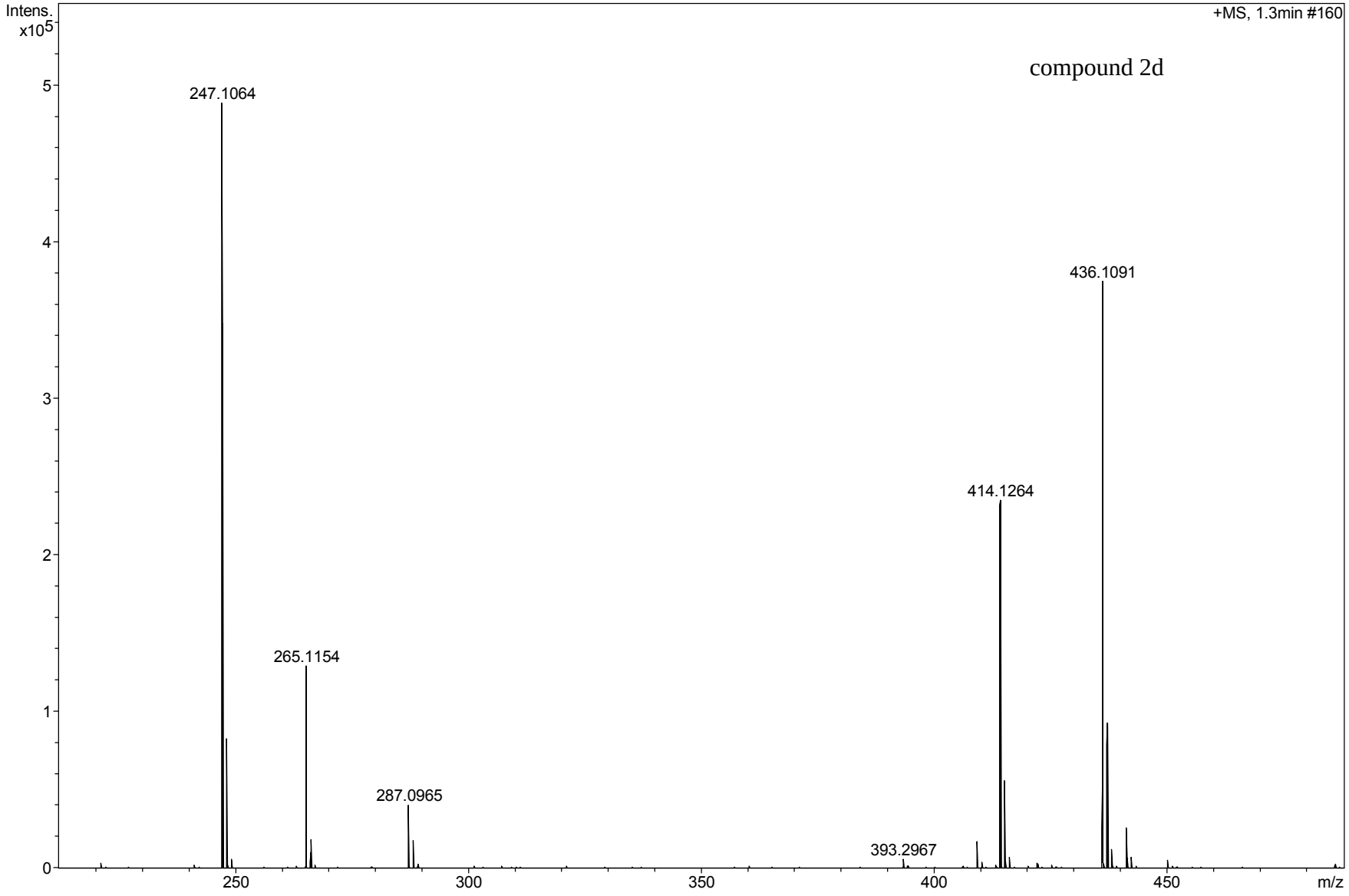

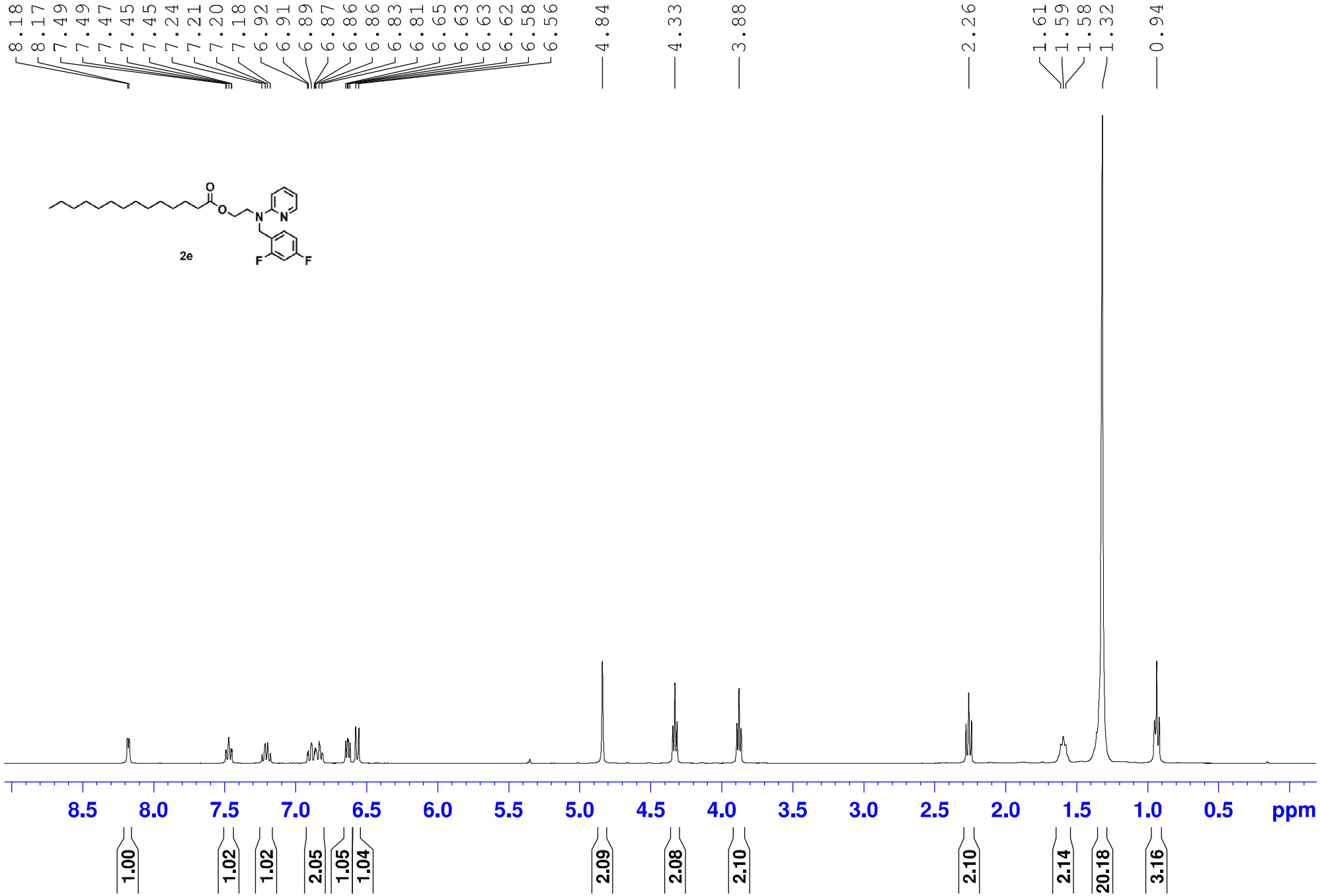
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6.89
6.87
6.86
6.86
6.83
6.81
6.65
6.63
6.63
6.62
6.58
6.56
4.84
4.33
3.88
2.26
1.61
1.59
1.58
1.32
0.94
O
O
N
N
F
F
2e
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
ppm
1.00
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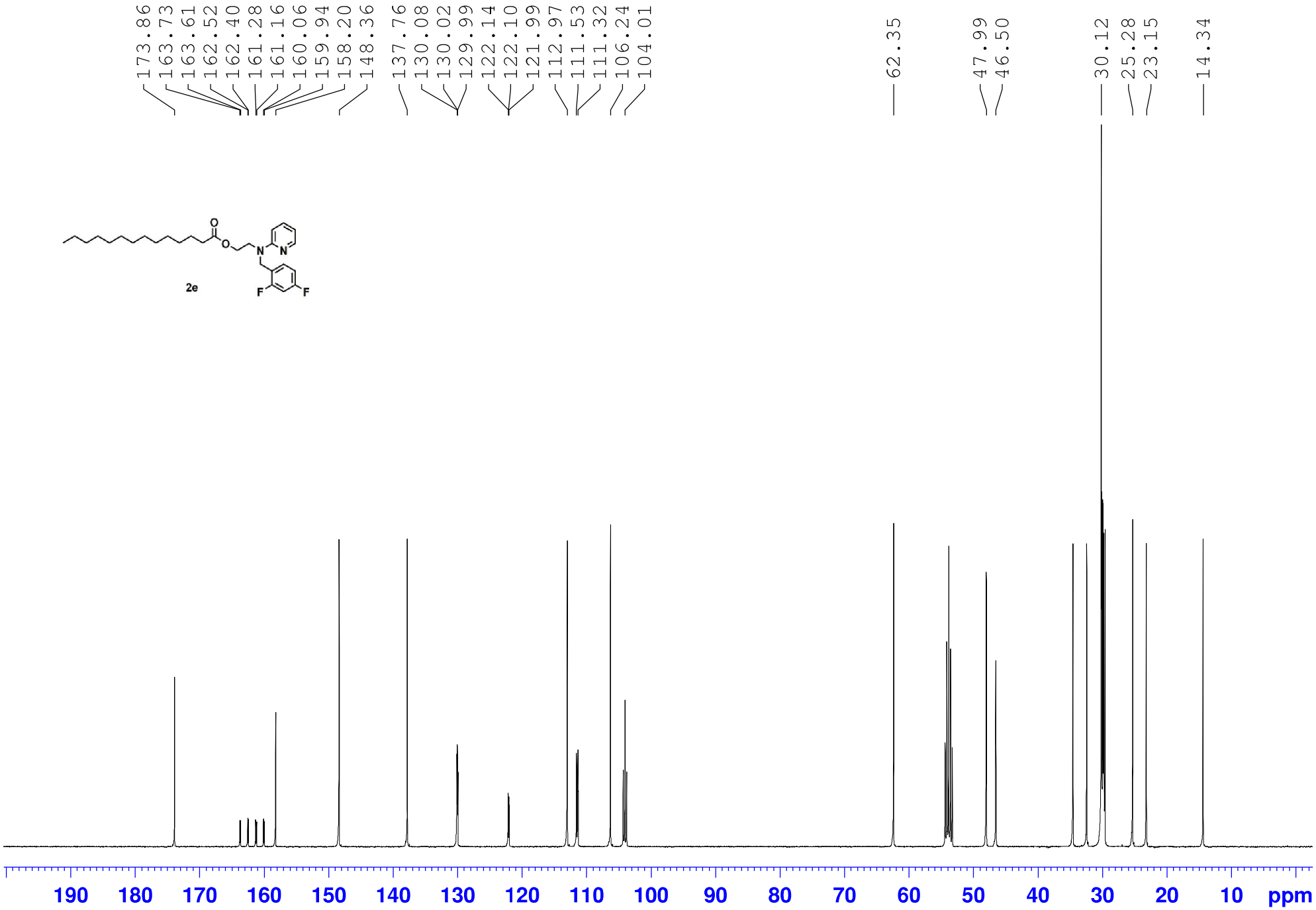
1.05
1.04
2.09
2.08
2.10
2.10
2.14
20.18
3.16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160.06
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158.20
148.36
137.76
130.08
130.02
129.99
122.14
122.10
121.99
112.97
111.53
111.32
106.24
104.01
62.35
47.99
46.50
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25.28
23.15
14.34
2e
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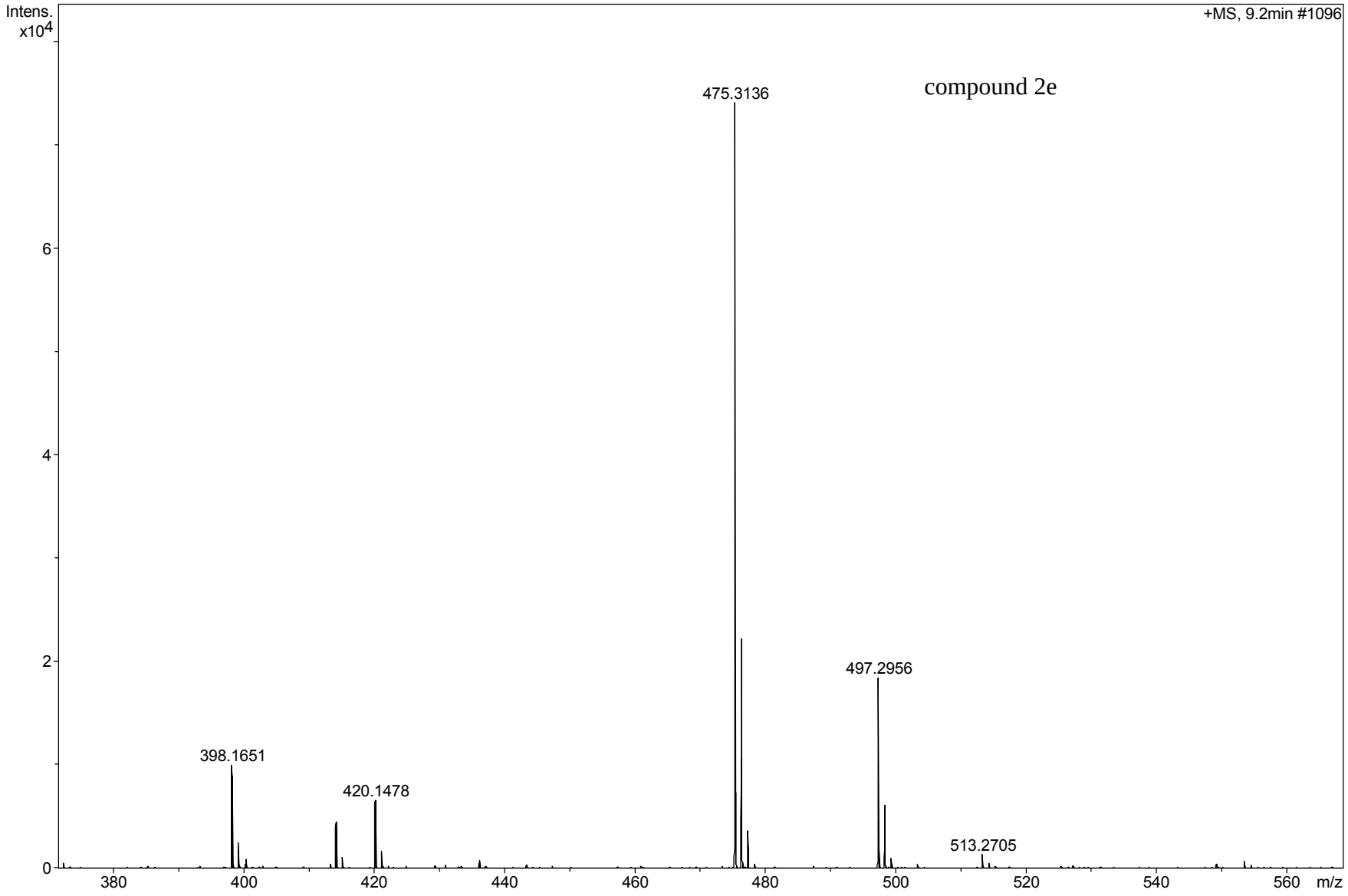
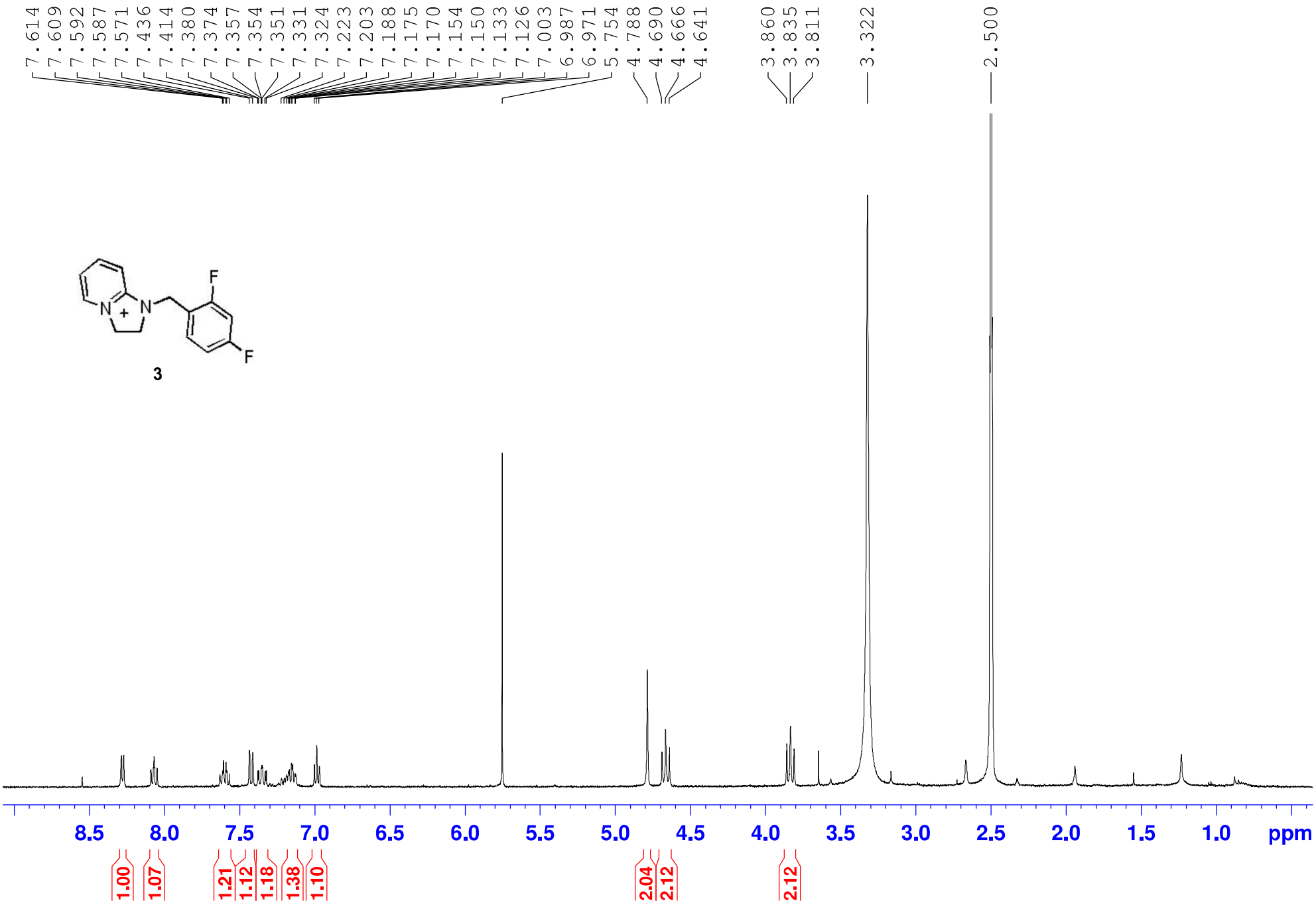
Generic Display Report (all)

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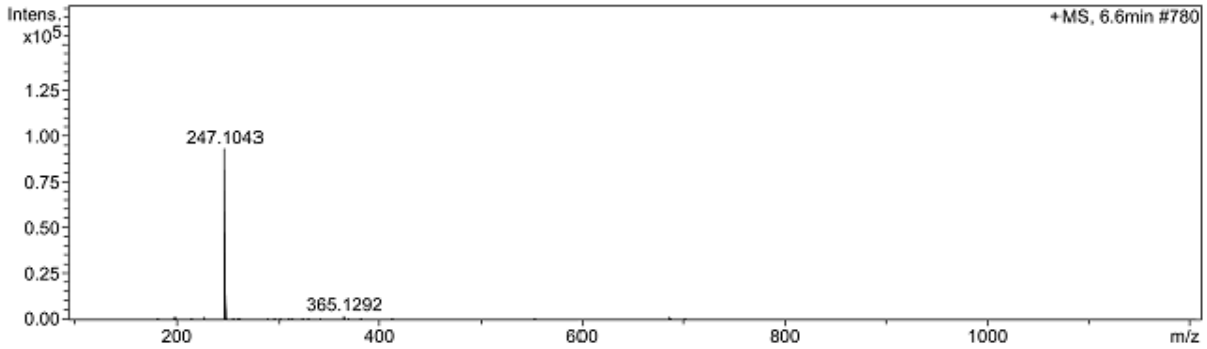
7.331
7.324
7.223
7.203
7.188
7.175
7.170
7.154
7.150
7.133
7.126
7.003
6.987
6.971
5.754
4.788
4.690
4.666
4.641
3.860
3.835
3.811
3.322
2.500
F
F
N
N
+
3
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
ppm
1.00
1.07
1.21
1.12
1.18
1.38
1.10
2.04
2.12
2.12

compound 3

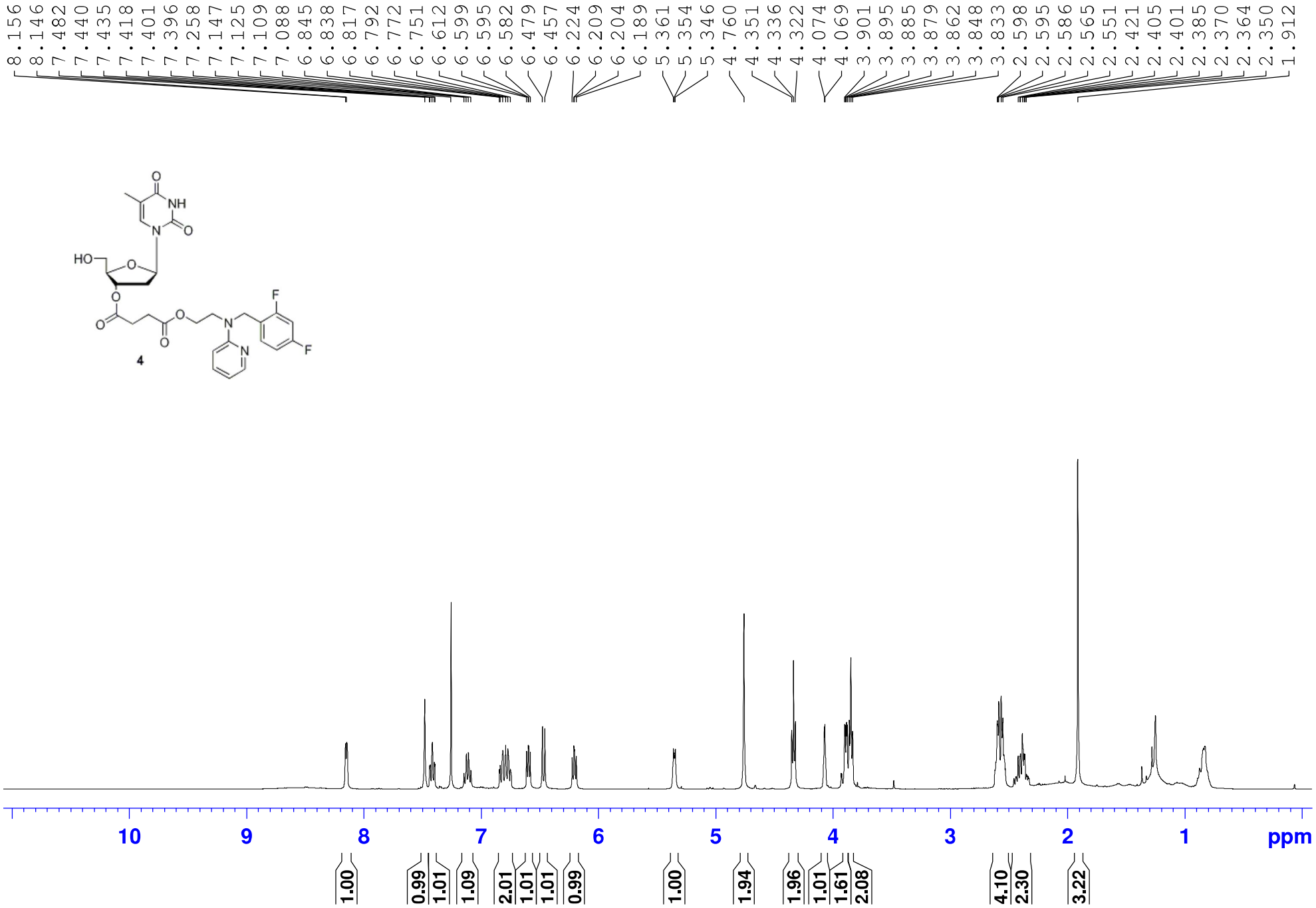
Acquisition Parameter

Source Type	ESI	Ion Polarity	Positive	Set Nebulizer	0.4 Bar
Focus	Not active	Set Capillary	4500 V	Set Dry Heater	220 °C
Scan Begin	100 m/z	Set End Plate Offset	-500 V	Set Dry Gas	4.0 l/min
Scan End	1200 m/z	Set Collision Cell RF	200.0 Vpp	Set Divert Valve	Waste



Meas. m/z	#	Formula	m/z	err [ppm]	Mean err [ppm]	rdb	N-Rule	e⁻ Conf	mSigma	Std I	Std Mean m/z	Std I Var Norm	Std m/z Diff	Std Comb Dev
247.1043	1	C 14 H 13 F 2 N 2	247.1041	-0.5	-0.3	8.5	ok	even	1.2	1.8	0.2	1.0	0.4	842.7

Bruker Compass DataAnalysis 4.0 printed: 10/29/2015 2:12:36 PM Page 1 of 1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6.845
6.838
6.817
6.792
6.772
6.751
6.612
6.599
6.595
6.582
6.479
6.457
6.224
6.209
6.204
6.189
5.361
5.354
5.346
4.760
4.351
4.336
4.322
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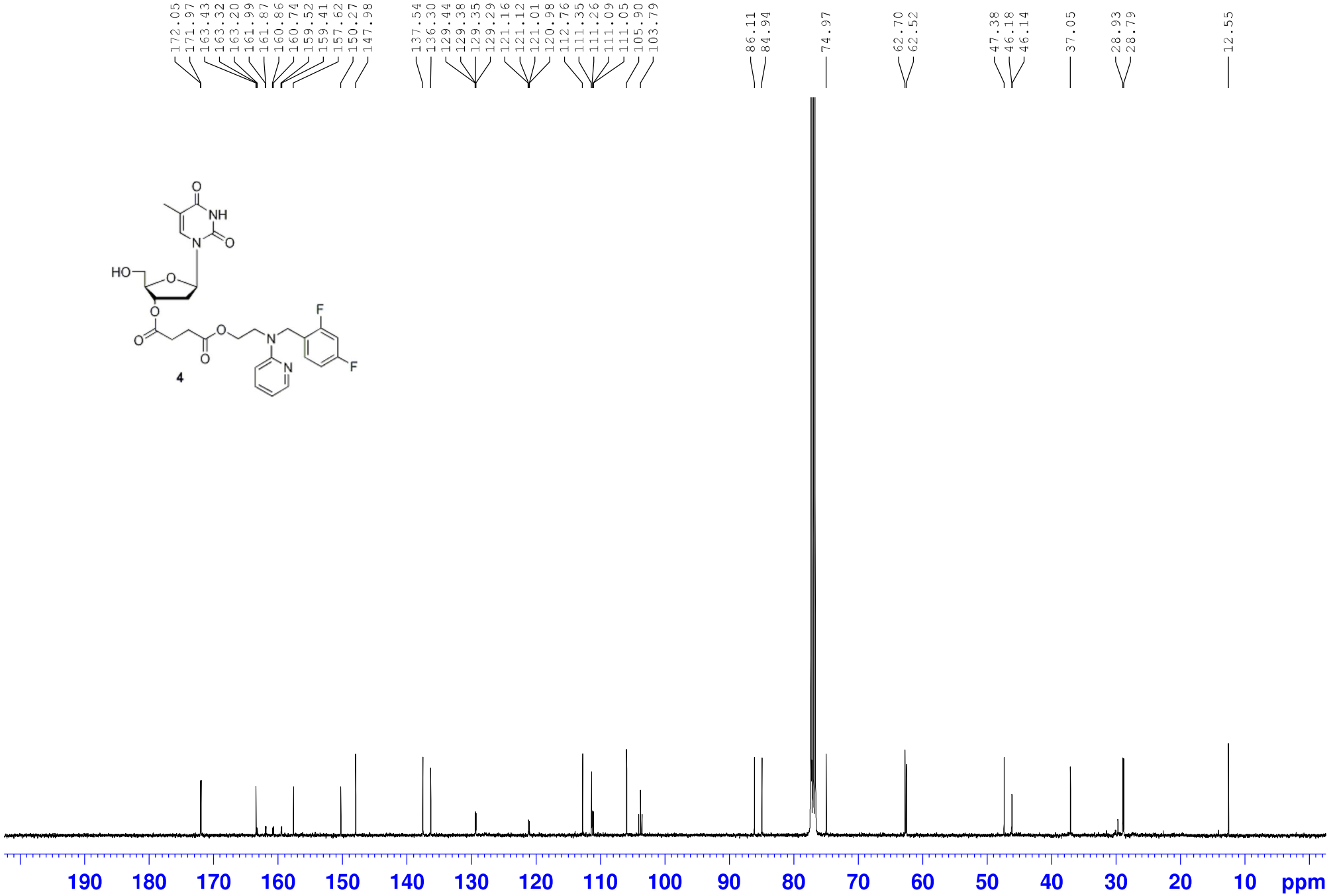
4.069
3.901
3.895
3.885
3.879
3.862
3.848
3.833
2.598
2.595
2.586
2.565
2.551
2.421
2.405
2.401
2.385
2.370
2.364
2.350
1.912
NH
O
N
HO
F
4
10
9
8
7
6
5
4
3
2
1
ppm
1.00
0.99
1.01
1.09
2.01
1.01
1.01
0.99
1.00
1.94
1.96
1.01
1.61
2.08
4.10
2.30
3.22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157.62
150.27
147.98
137.54
136.30
129.44
129.38
129.35
129.29
121.16
121.12
121.01
120.98
112.76
111.35
111.26
111.09
111.05
105.90
103.79
86.11
84.94
74.97
62.70
62.52
47.38
46.18
46.14
37.05
28.93
28.79
12.55
O
NH
N
O
HO
O
O
O
O
O
N
F
F
N
4
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
ppm

==== LabSolutions Data Report ====

Positive
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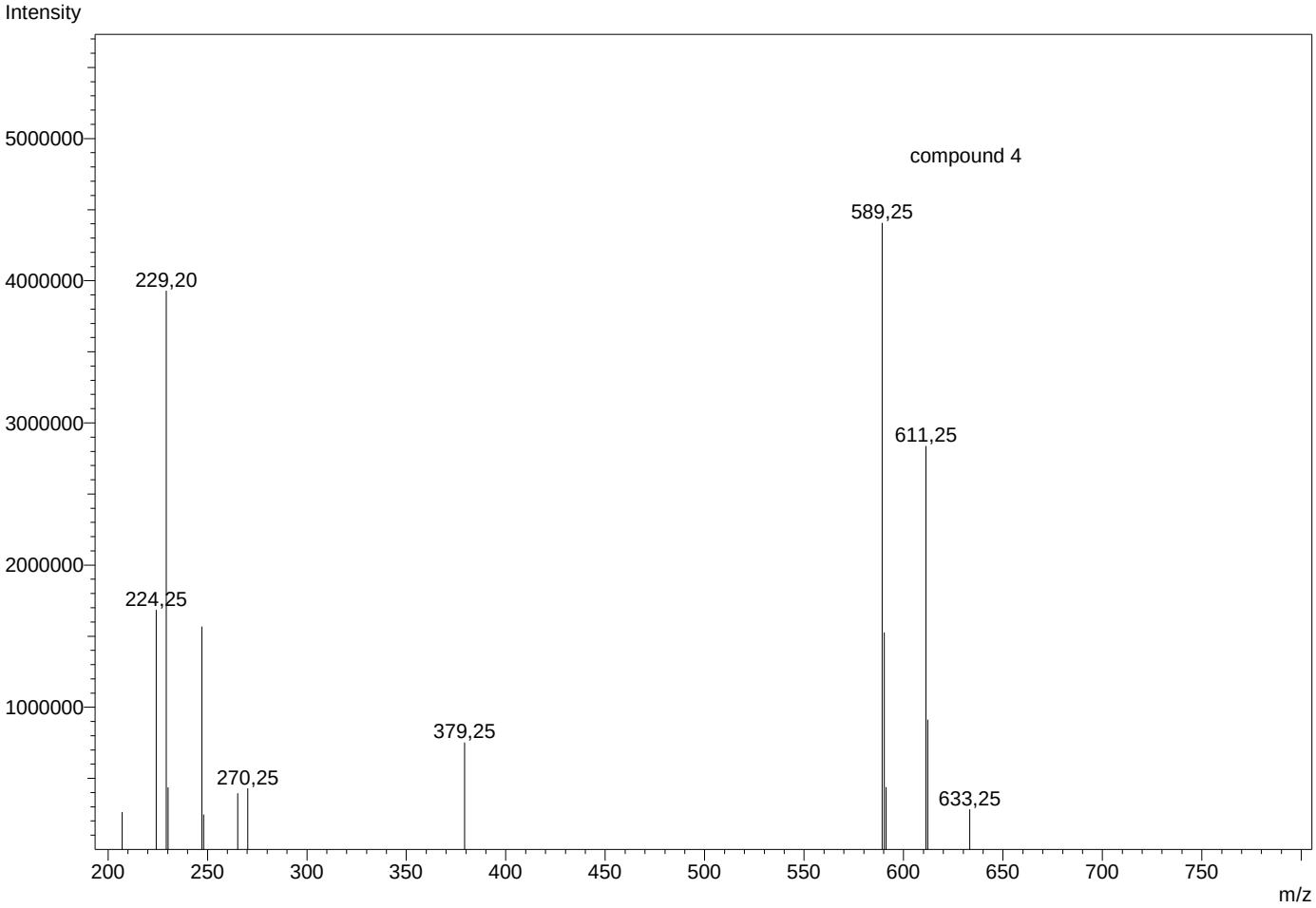
BG Mode:Averaged 0,000-1,155(1-221) Segment 1 - Event 1



==== LabSolutions Data Report ====

Negative
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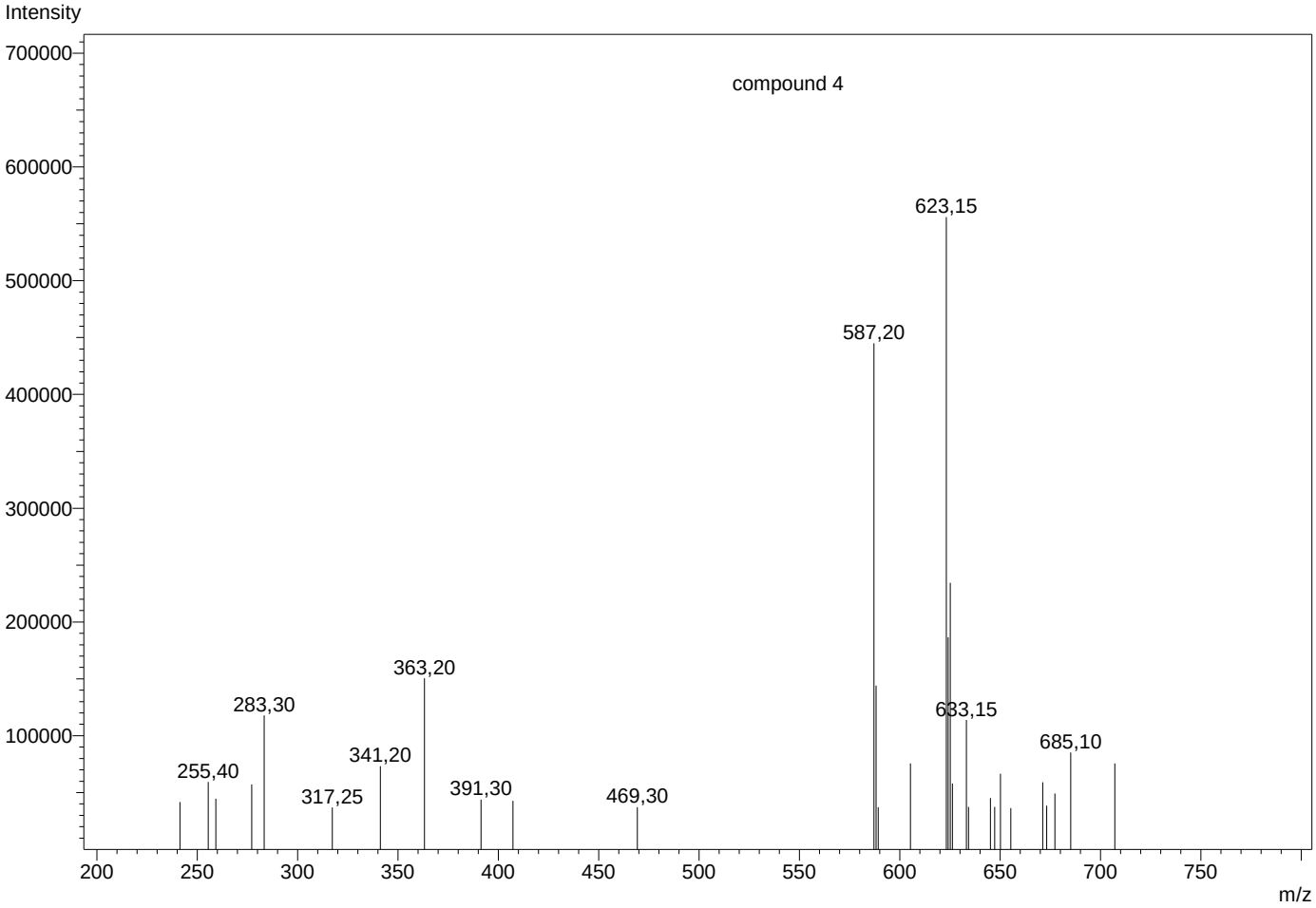
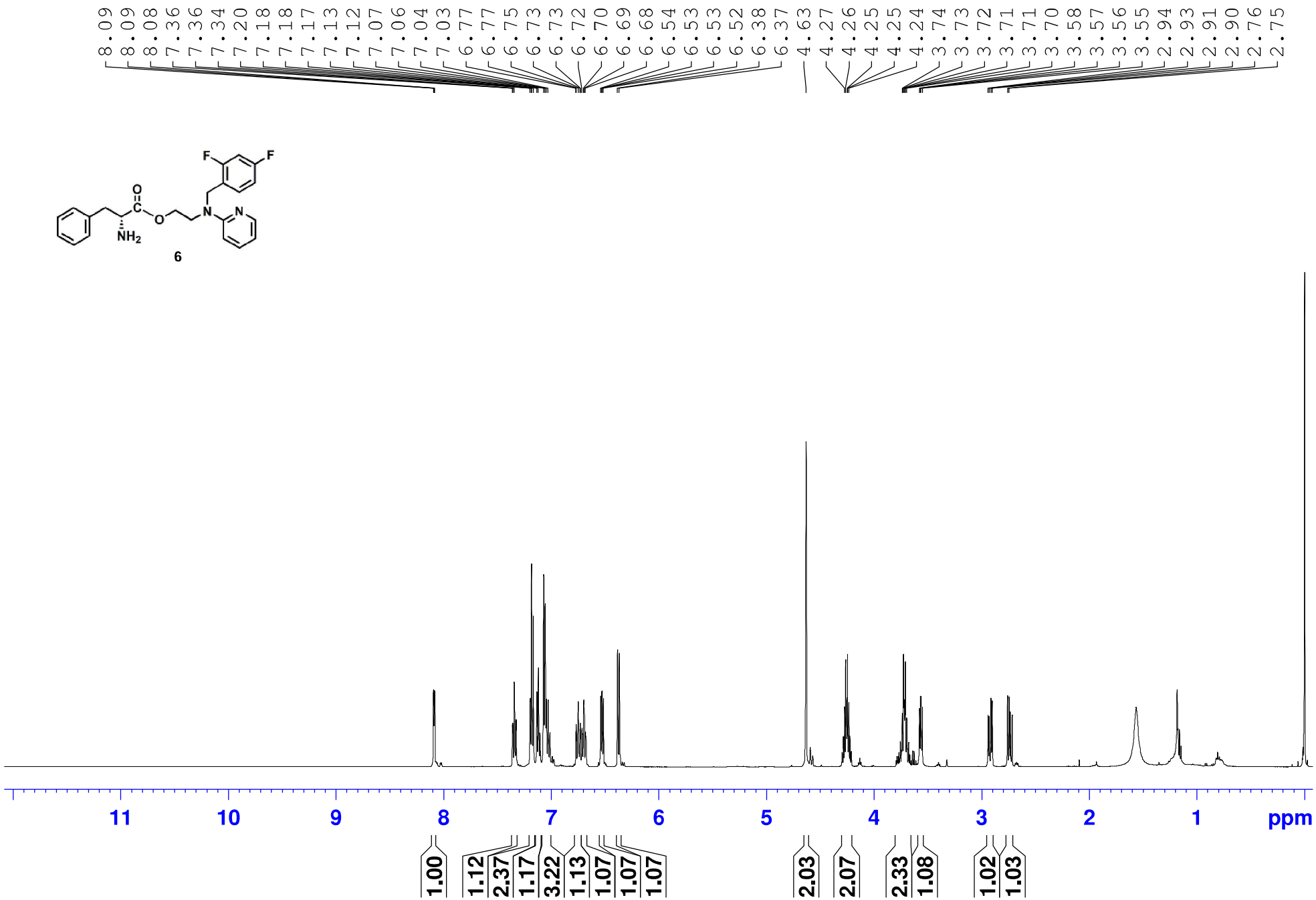
BG Mode:Averaged 0,005-1,160(2-222) Segment 1 - Event 2

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7.04
7.03
6.77
6.77
6.75
6.73
6.73
6.72
6.70
6.69
6.68
6.54
6.53
6.53
6.52
6.38
6.37
4.63
4.27
4.26
4.25
4.25
4.24
3.74
3.73
3.72
3.71
3.71
3.70
3.58
3.57
3.56
3.55
2.94
2.93
2.91
2.90
2.76
2.75
F
F
O
C
O
N
N
NH2
6
11
10
9
8
7
6
5
4
3
2
1
ppm
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2.37
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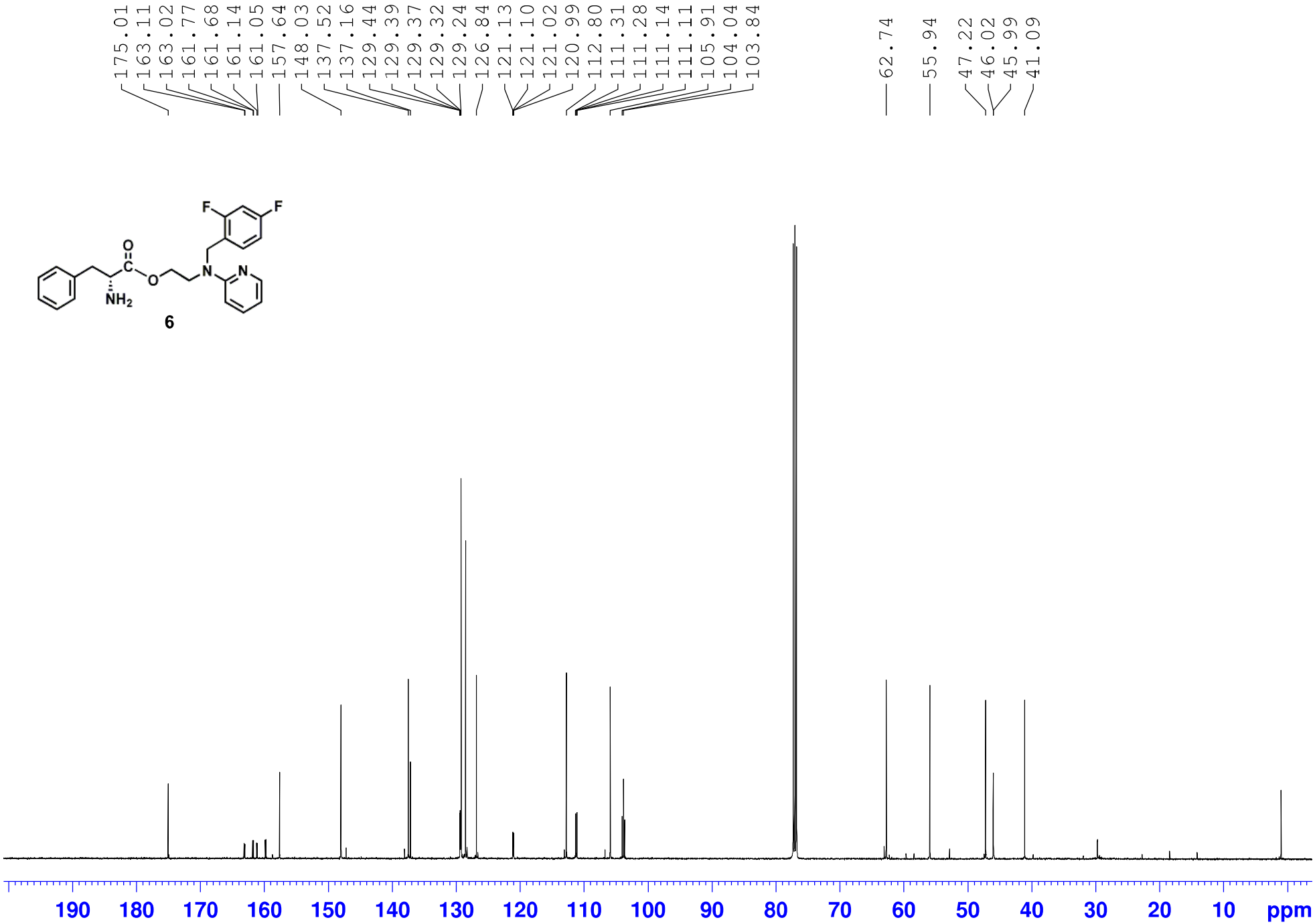
1.03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129.24
126.84
121.13
121.10
121.02
120.99
112.80
111.31
111.28
111.14
111.11
105.91
104.04
103.84
62.74
55.94
47.22
46.02
45.99
41.09
F
F
O
C
O
N
N
NH2
6
190
180
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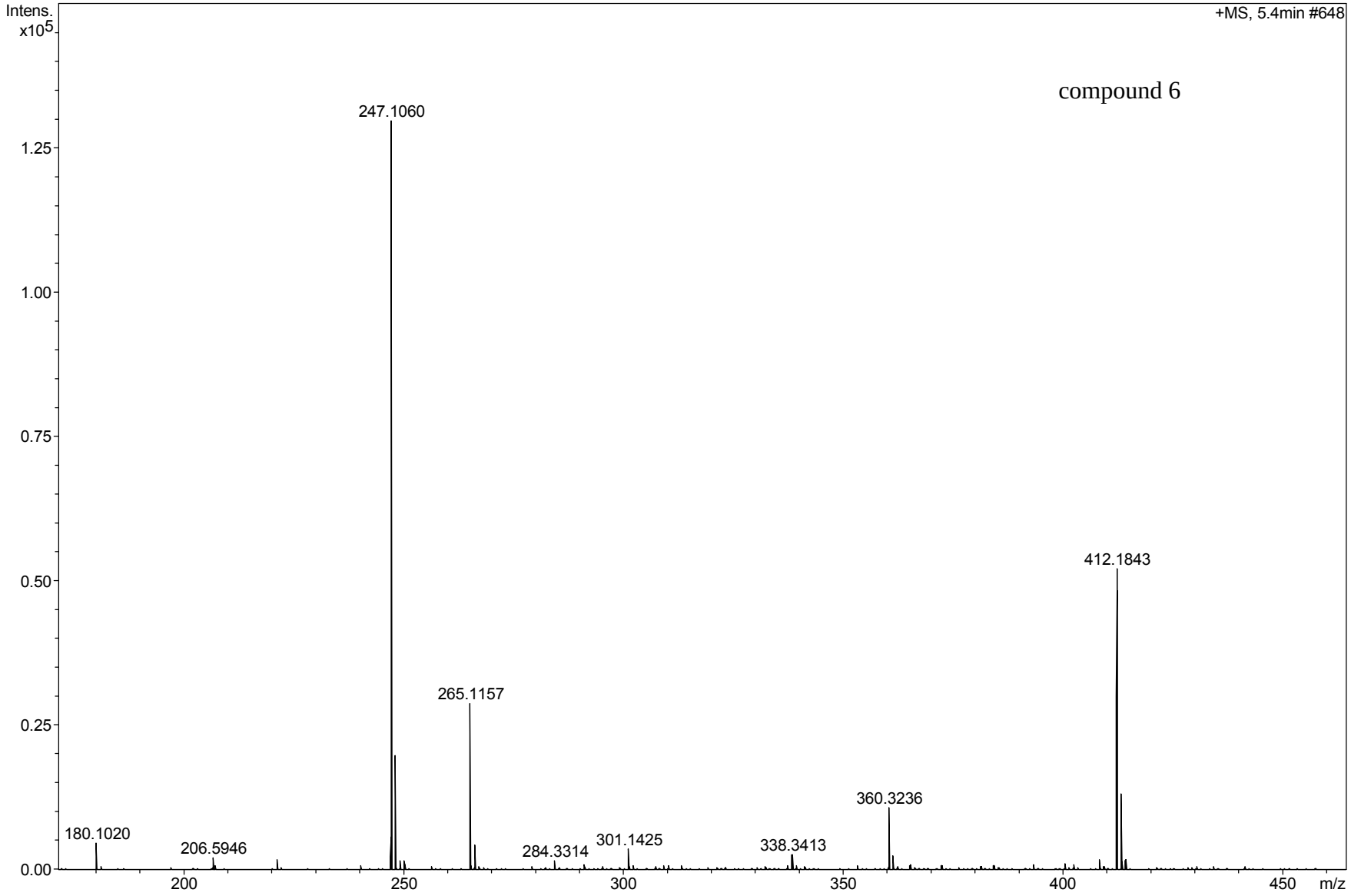
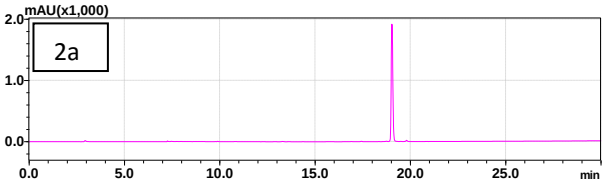
50
40
30
20
10
ppm

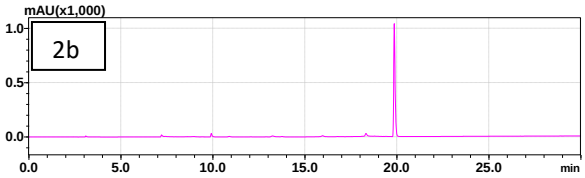
Generic Display Report (all)

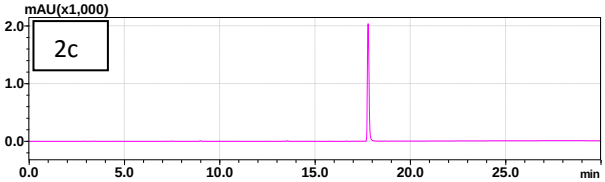


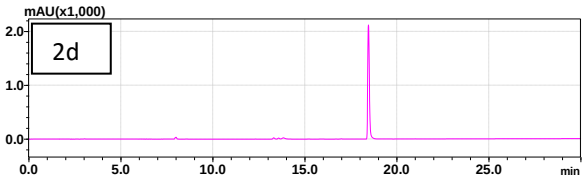
		25°C/2h	60°C/2h	90°C/1h	90°C/2h
a	AREA%	96.12	87.90	46.09	30.01
b	AREA%	80.48	60.67	0	0
c	AREA%	97.13	96.50	76.00	60.25
d	AREA%	93.52	68.54	1.68	0
e	AREA%	99.36	95.98	81.10	52.35

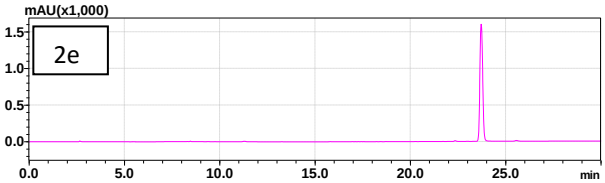
25°C/2h



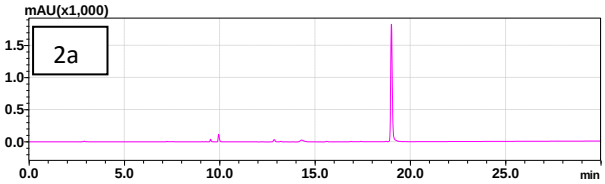


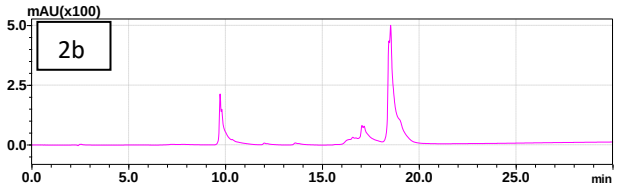


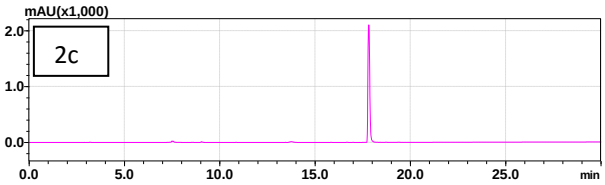


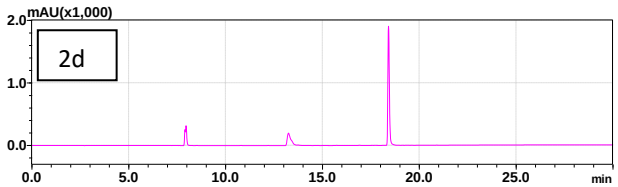


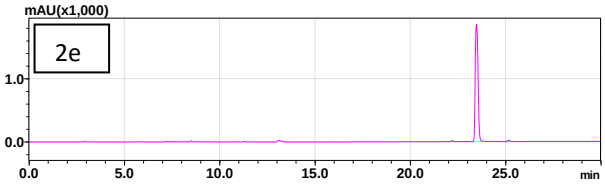
60°C/2h



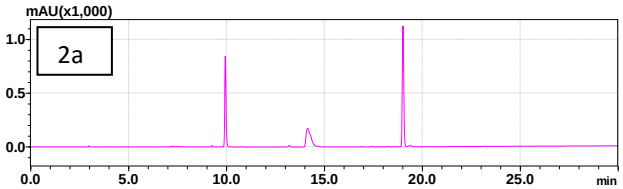








90°C/1h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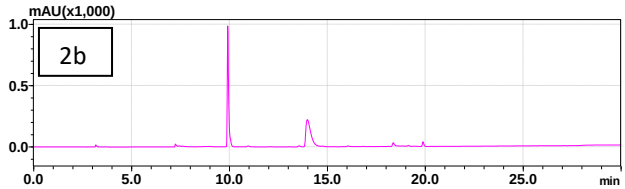
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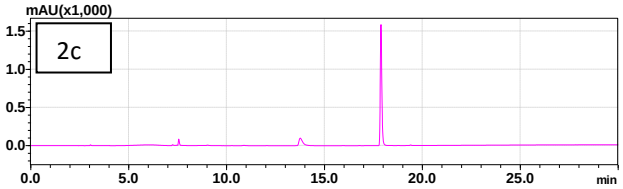
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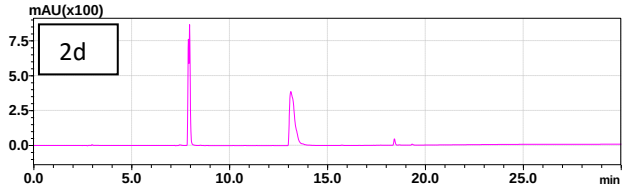
min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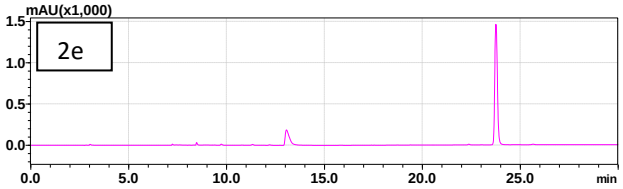
min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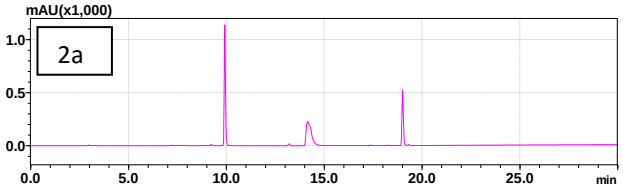
min

90°C/2h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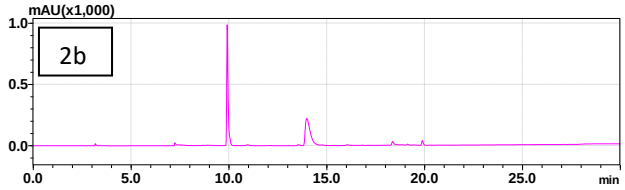
min


mAU(x1,000)
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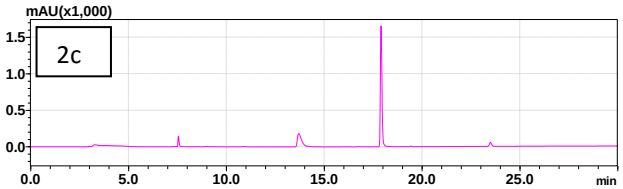
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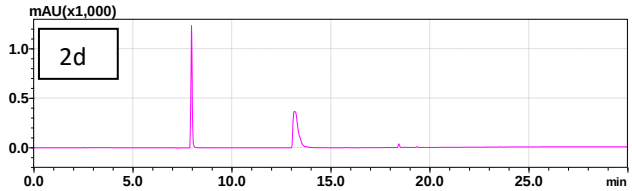
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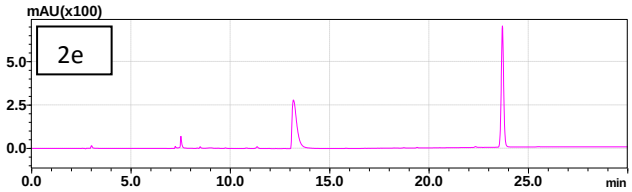
mAU(x100)
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min