Supporting Information for

Stable TEMPO and ABNO Reagent Solutions for User-Friendly (bpy)Cu/Nitroxyl-Catalyzed Aerobic Alcohol Oxidation

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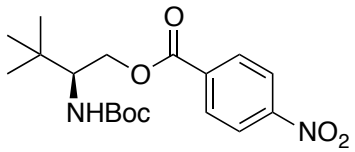
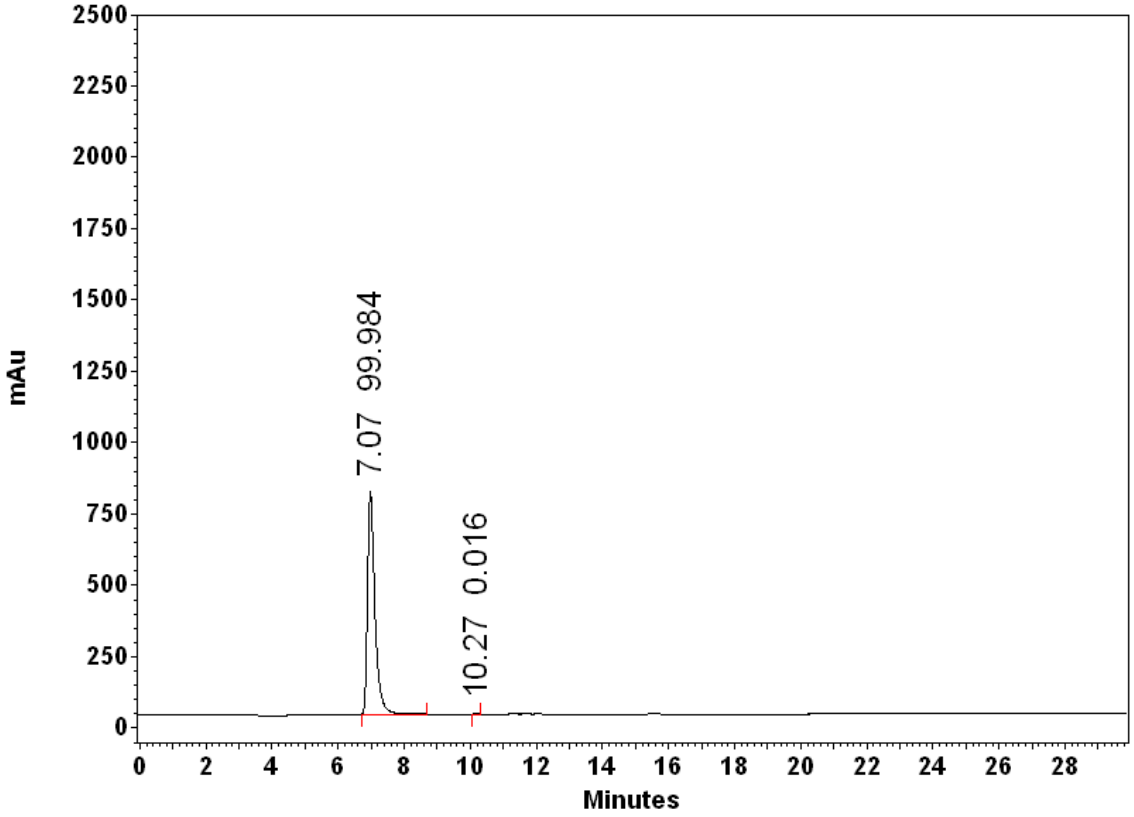


(*S*)-2-((Boc)amino)-3,3-dimethylbutyl-4-nitrobenzoate.
The product was prepared according to literature procedure described in the manuscript.

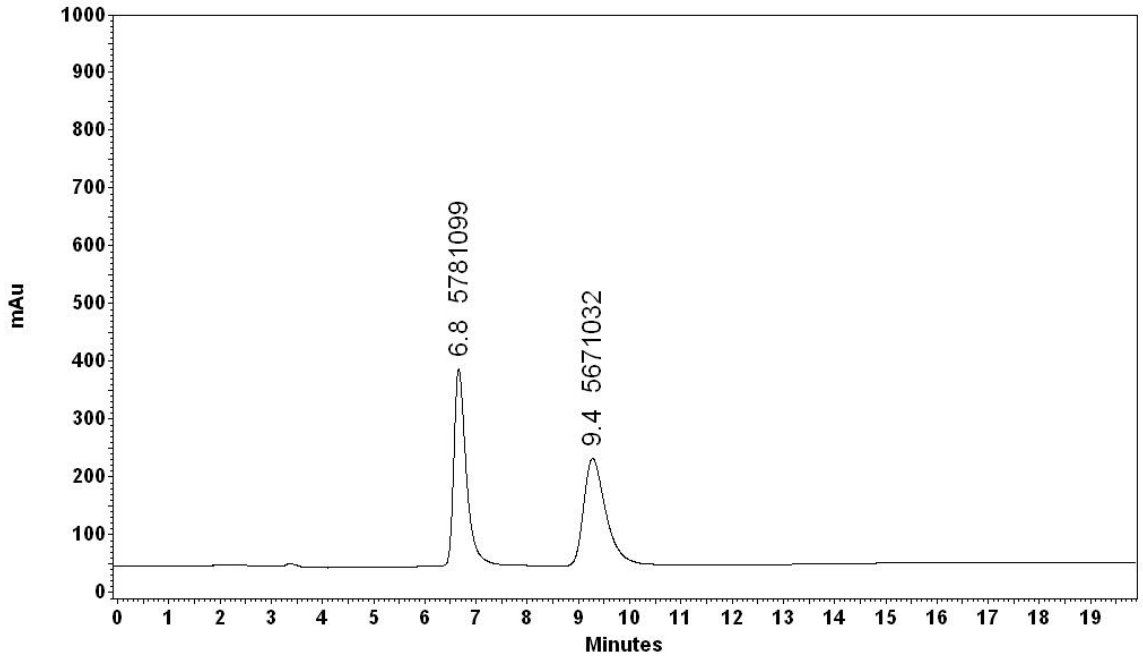
Analysis of (*S*)-2-((Boc)amino)-3,3-dimethylbutyl-4-nitrobenzoate from 1 mmol scale oxidation of *N*-Boc-L-*tert*-leucinol.

Chiralcel OJ-*H*, 5-25% iPrOH, 1 mL/min, 254 nm, >99% ee

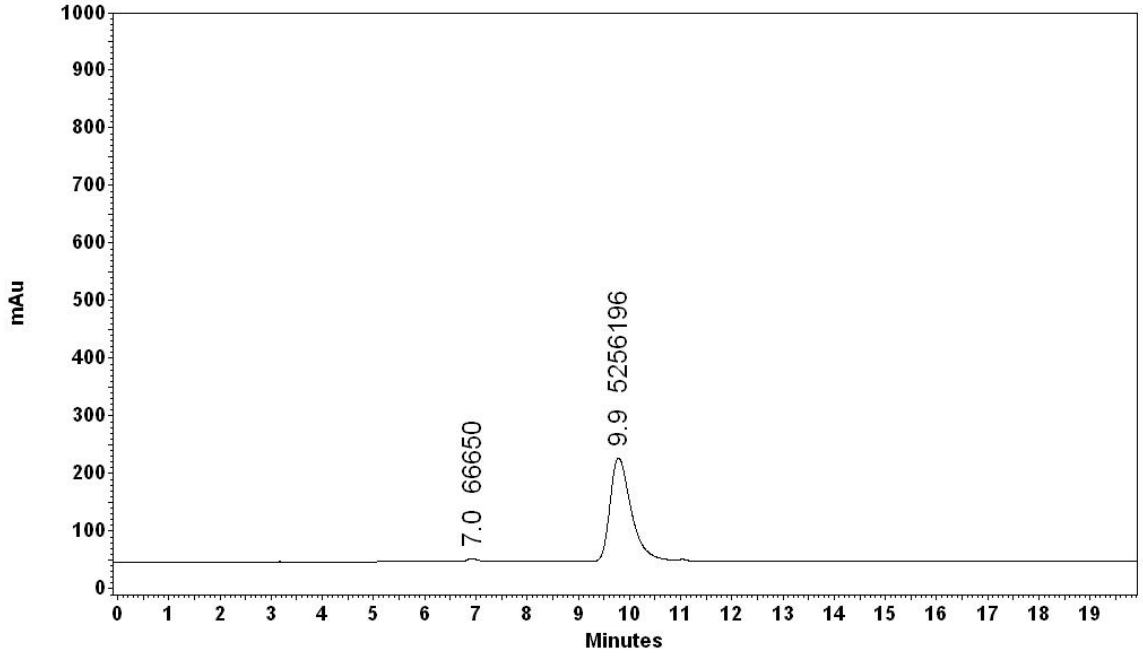


Reference HPLC Traces for Enantiomeric Assignment.
Reference HPLC traces were obtained with racemic ester derived from commercially obtained *tert*-leucinol and with independent samples of the esters derived from D- and L-*tert*-leucinol. The following data and the method for independent preparation of the nitrobenzyl esters can be found in our previously published work.

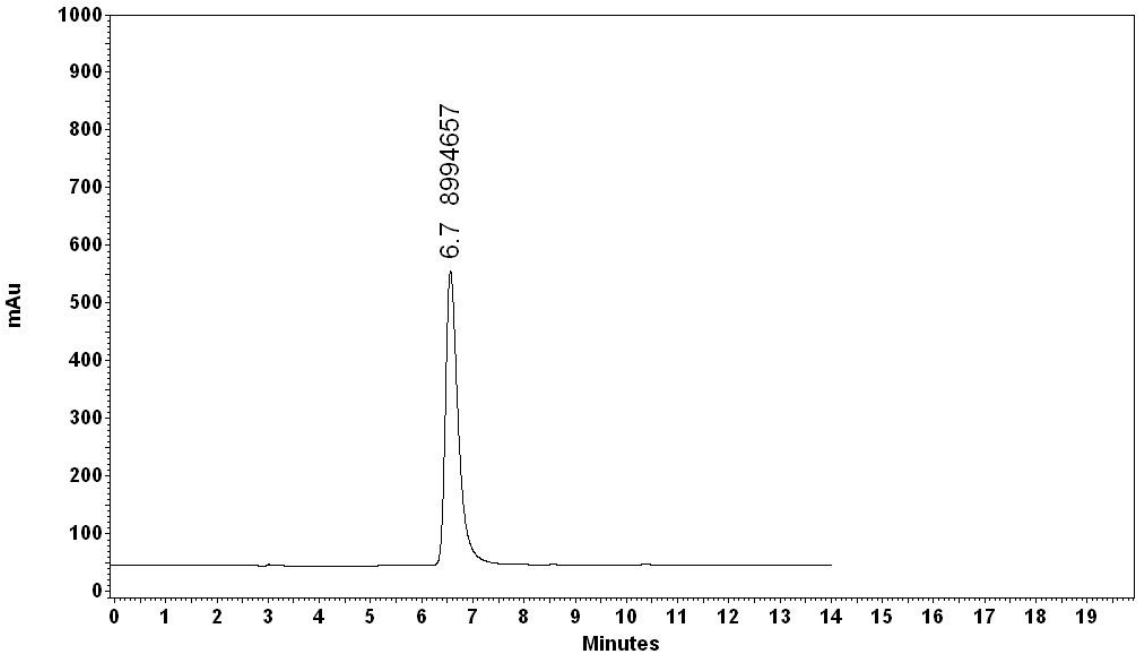
HPLC trace of racemic 2-((Boc)amino)-3,3-dimethylbutyl-4-nitrobenzoate. Chiralcel OJ-*H*, 5-25% iPrOH, 1 mL/min, 254 nm



HPLC trace of (*R*)-2-((Boc)amino)-3,3-dimethylbutyl-4-nitrobenzoate**.** 97% ee. Chiralcel OJ-*H*, 5-25% iPrOH, 1 mL/min, 254 nm



HPLC trace of (*S*)-2-((Boc)amino)-3,3-dimethylbutyl-4-nitrobenzoate**.** >99% ee. Chiralcel OJ-*H*, 5-25% iPrOH, 1 mL/min, 254 nm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800
700
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500
400
300
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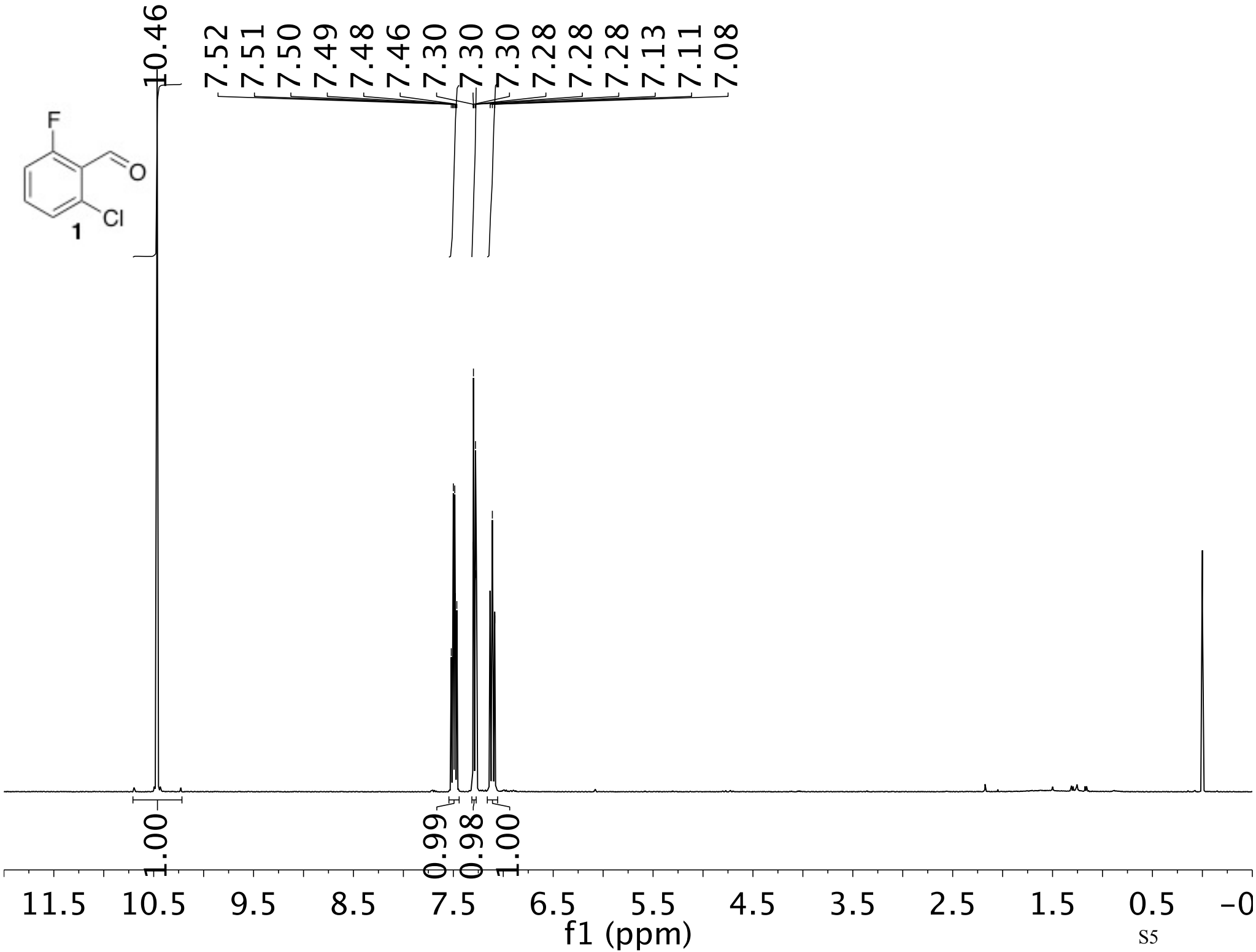
mAu
6.7 8994657
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
Minutes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7.50
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7.28
7.28
7.13
7.11
7.08
F
O
Cl
1
1.00
0.99
0.98
1.00
11.5
10.5
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7.5
6.5
5.5
4.5
3.5
2.5
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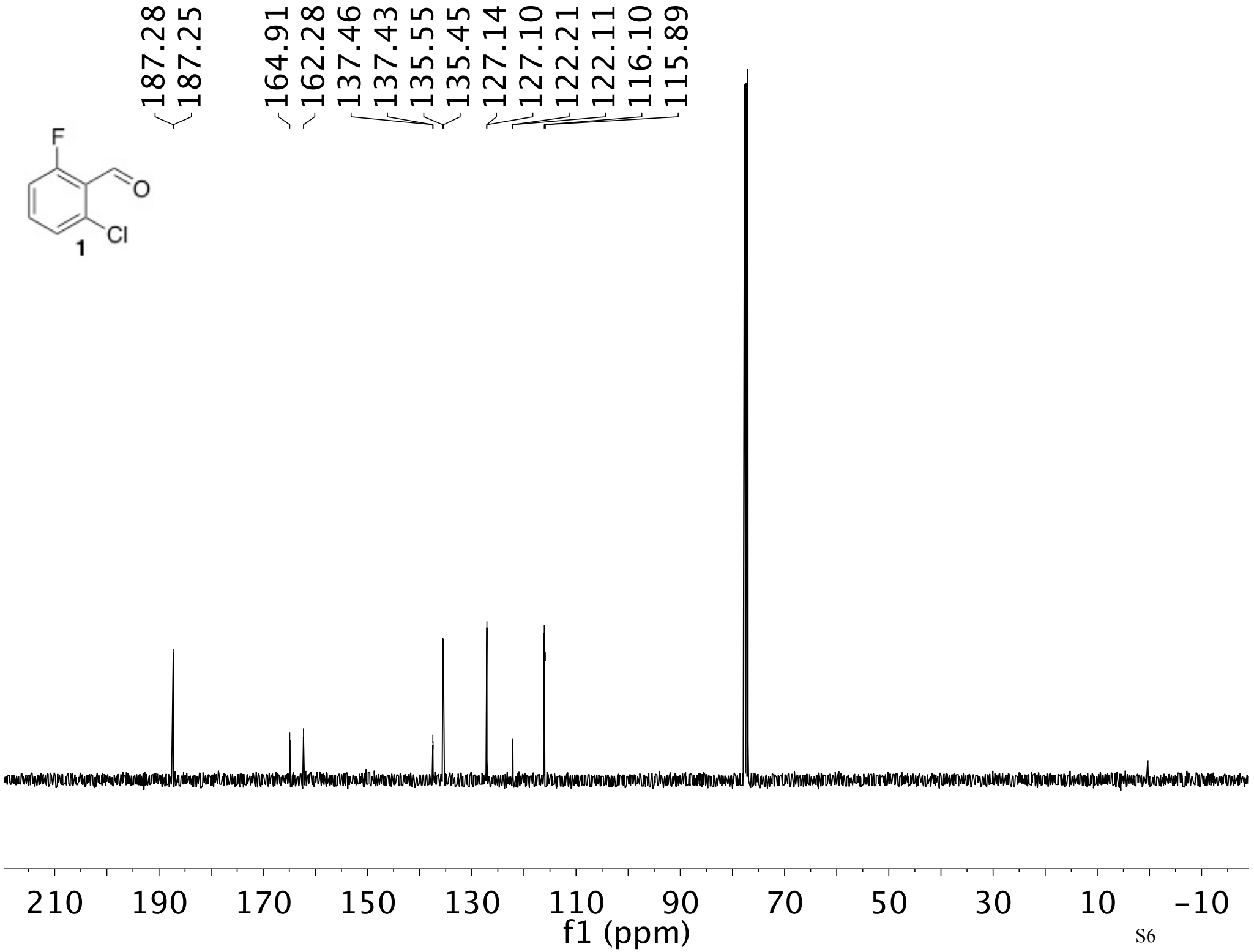
0.5
f1 (ppm)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135.55
135.45
127.14
127.10
122.21
122.11
116.10
115.89
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O
Cl
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110
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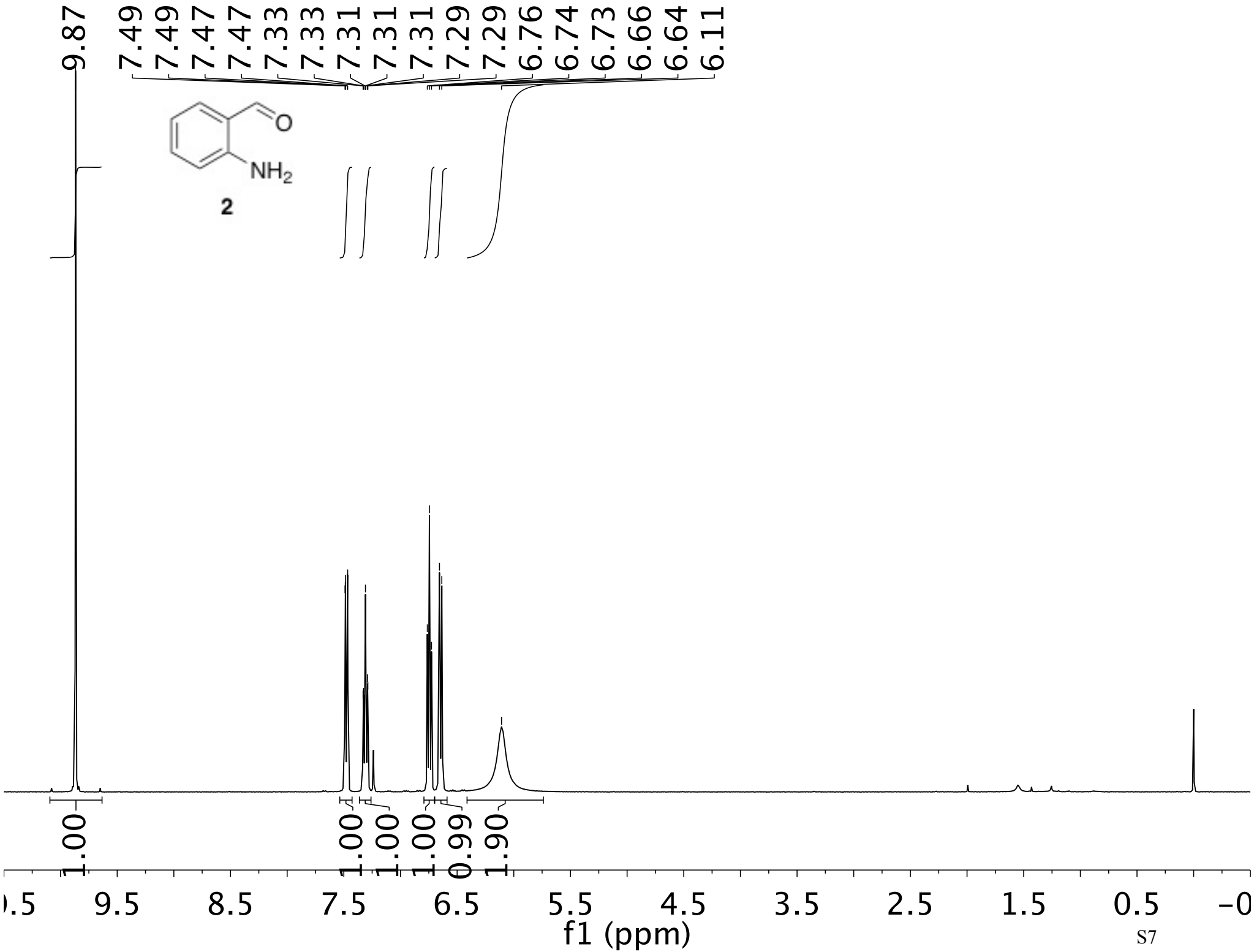
70
50
30
10
-10
f1 (ppm)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6.74
6.73
6.66
6.64
6.11
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NH2
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1.00
1.00
1.00
1.00
0.99
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3.5
2.5
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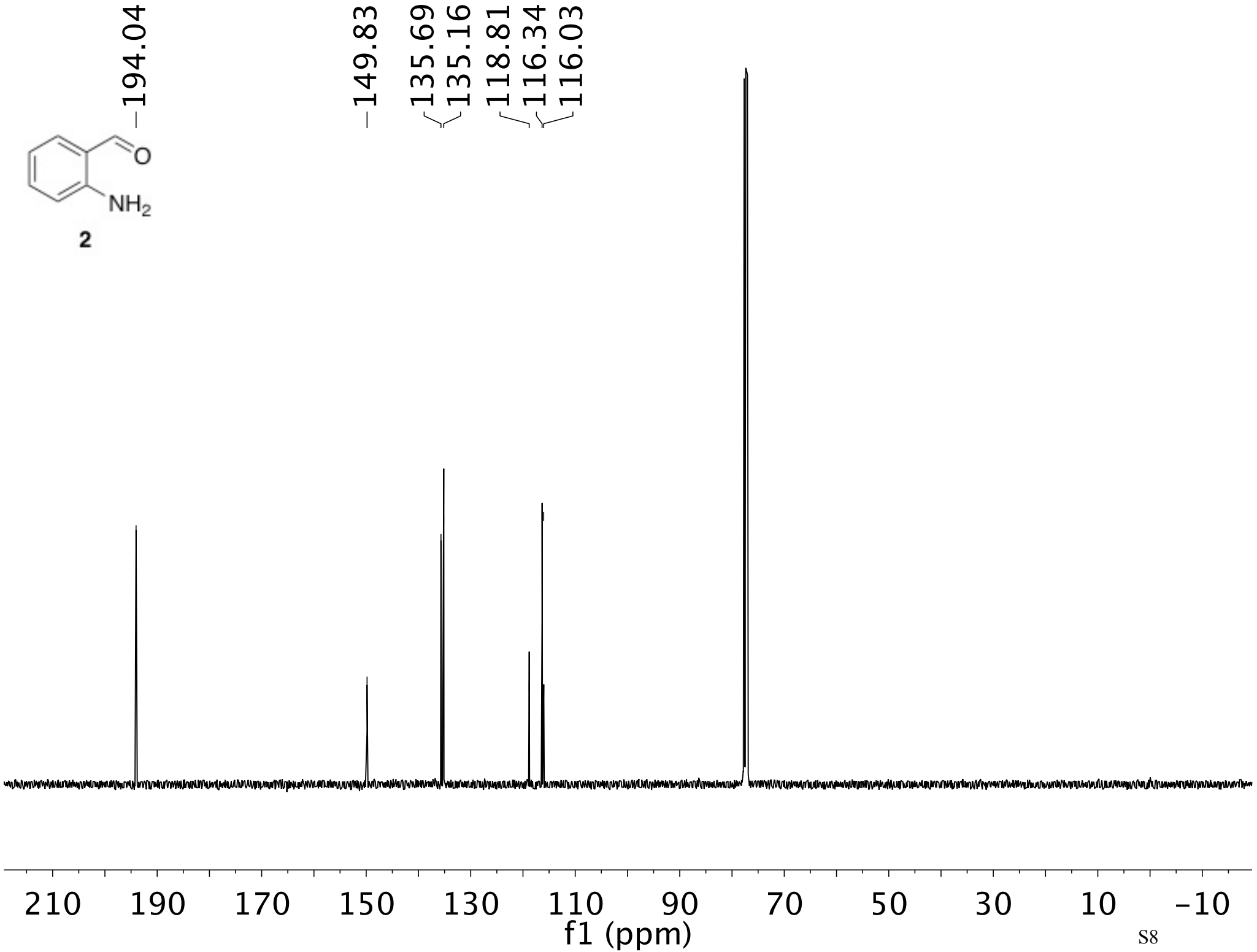
f1 (ppm)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116.34
116.03
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NH2
2
210
190
170
150
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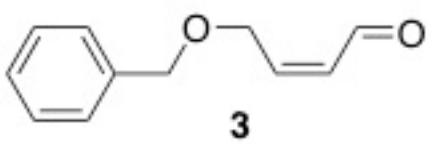
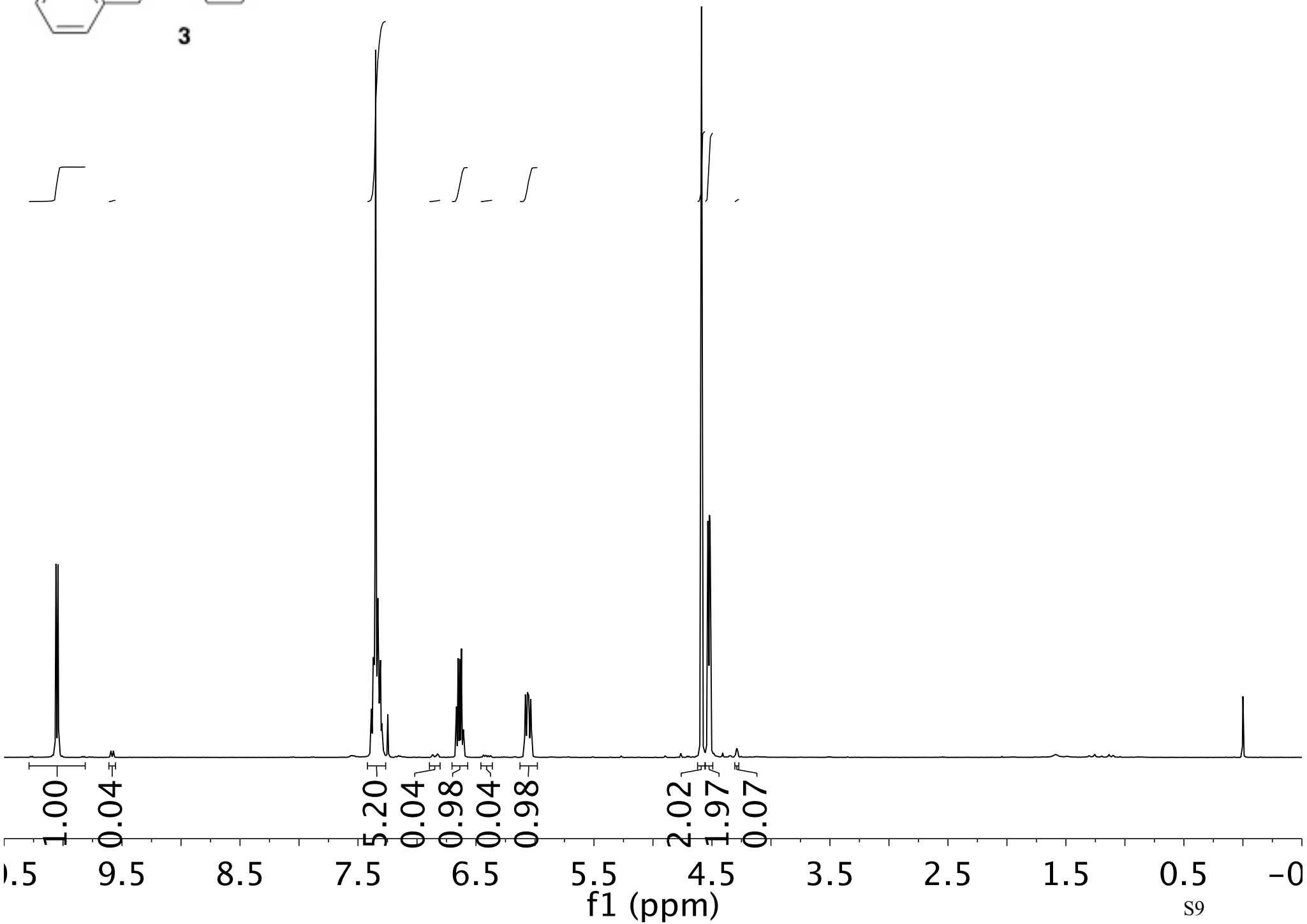
110
90
70
50
30
10
−10
f1 (ppm)


O
O

3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4.5
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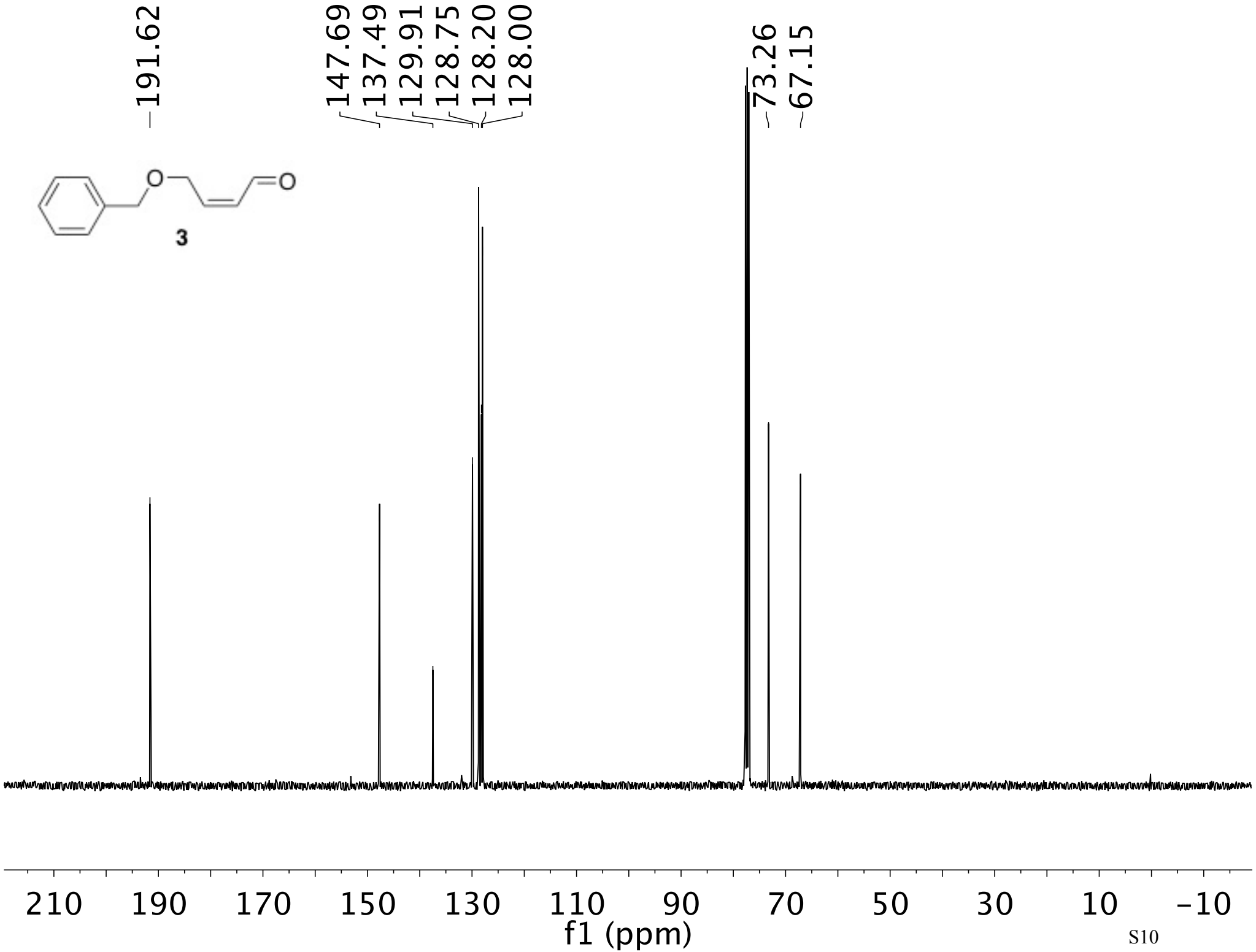
f1 (ppm)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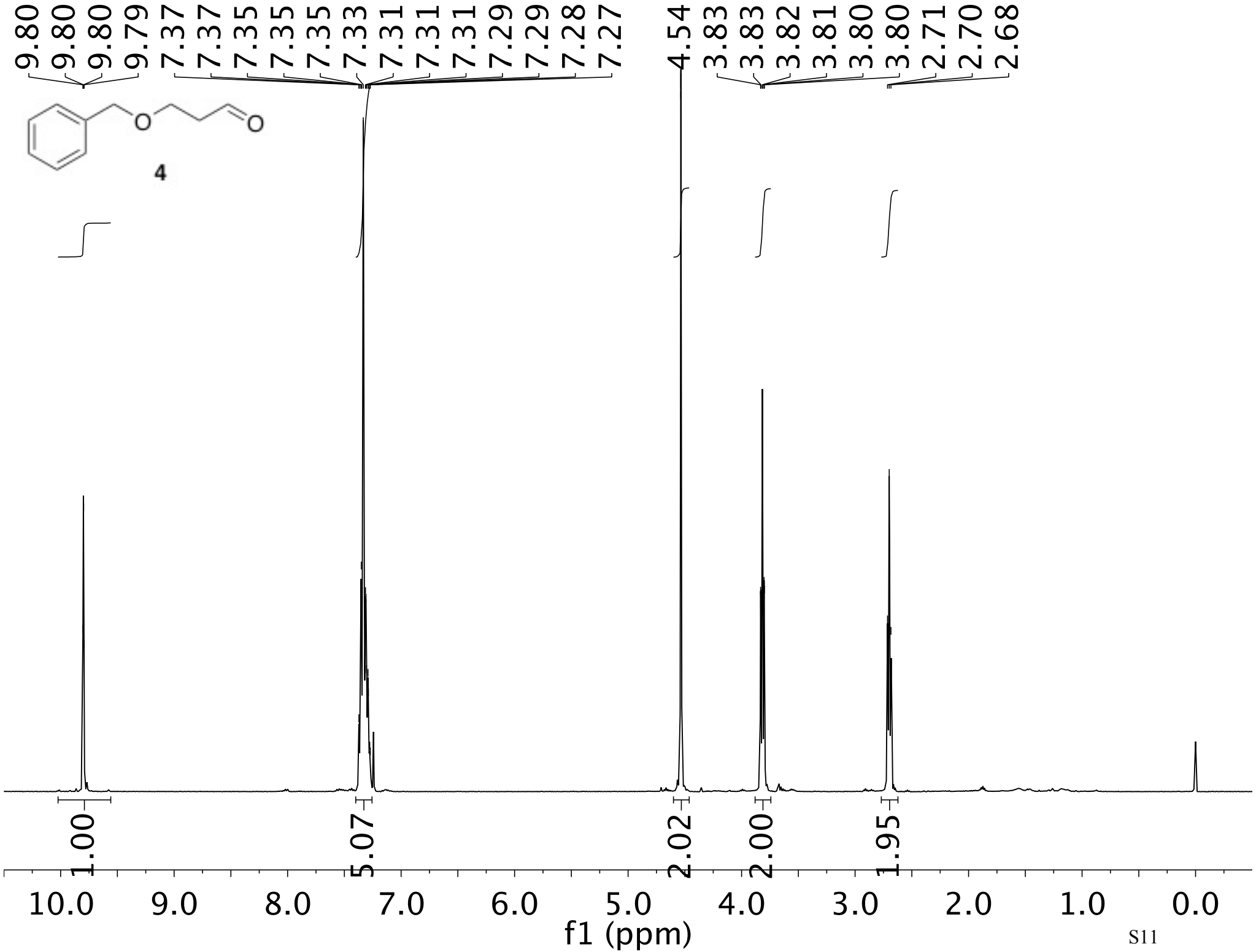
30
10
-10
f1 (ppm)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7.31
7.29
7.29
7.28
7.27
4.54
3.83
3.83
3.82
3.81
3.80
3.80
2.71
2.70
2.68
O
O
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2.00
1.95
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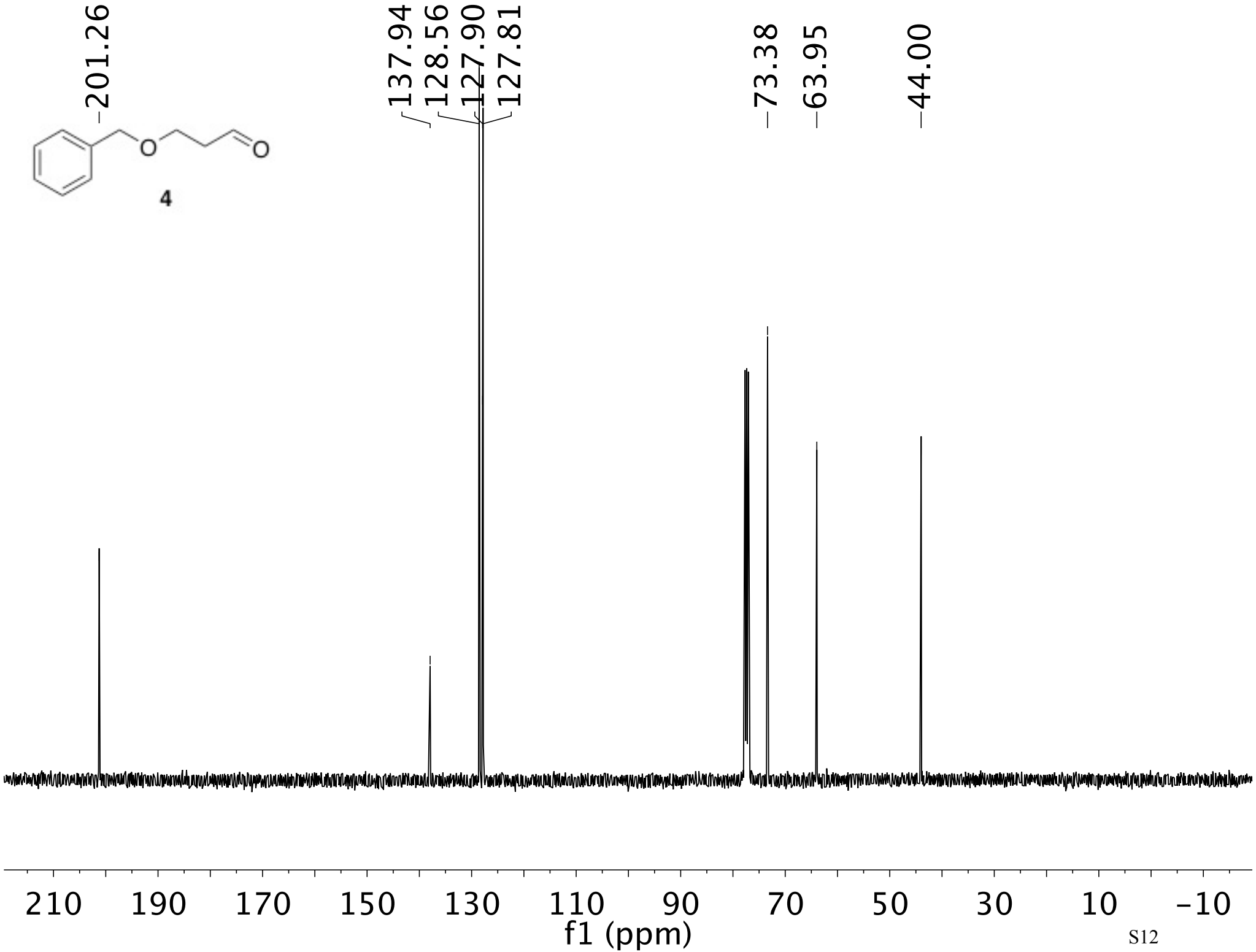
f1 (ppm)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O
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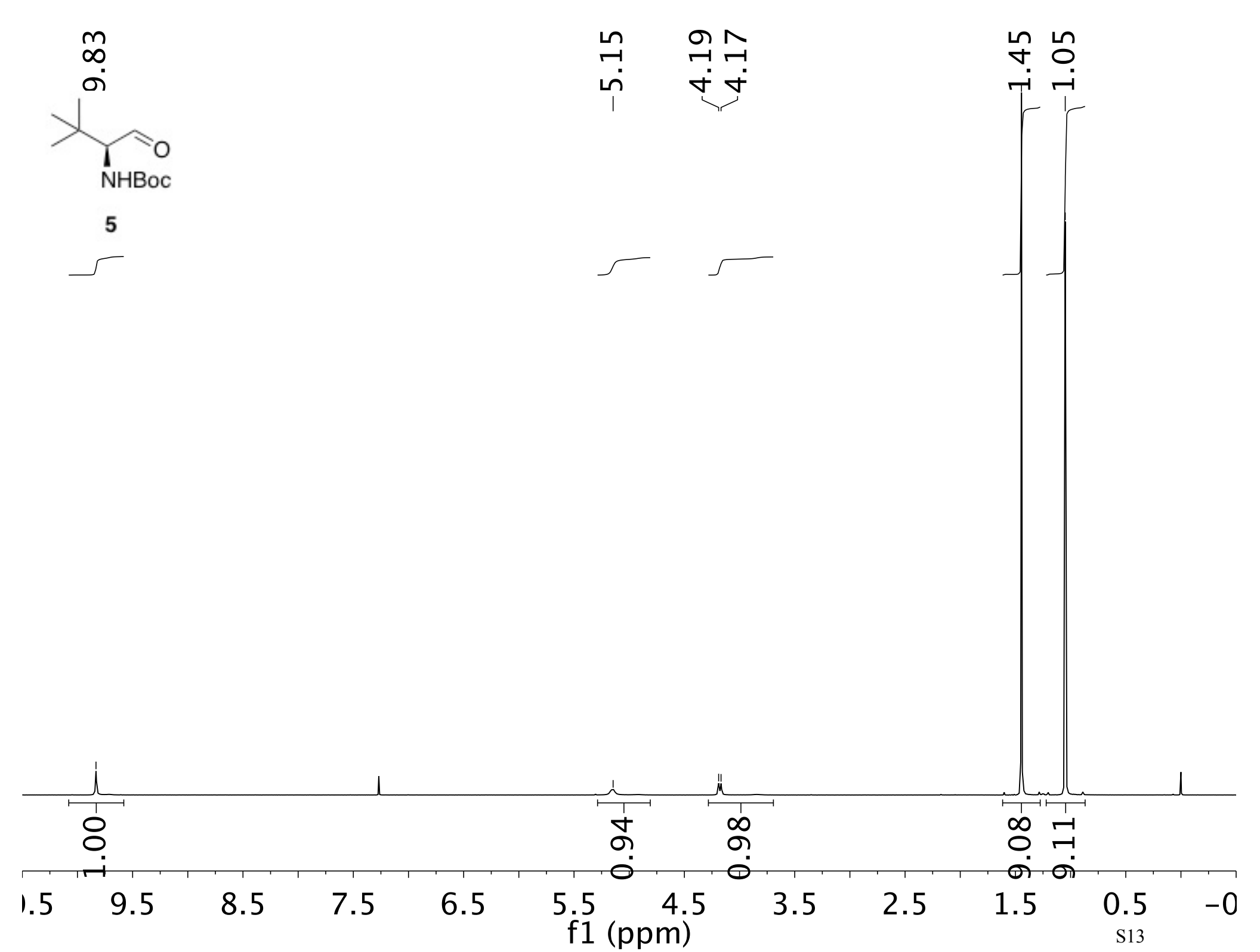
90
70
50
30
10
-10
f1 (ppm)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4.5
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1.5
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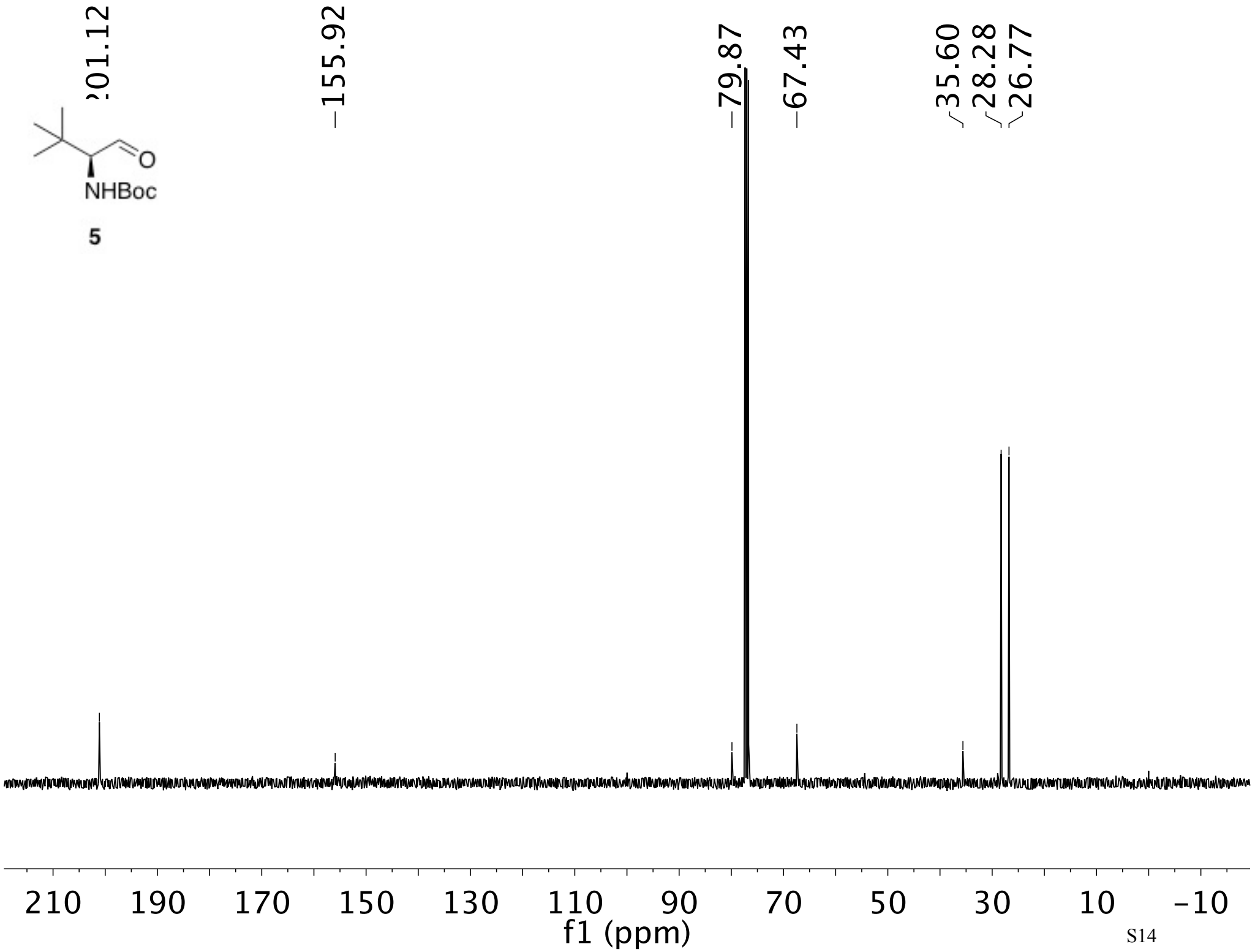
f1 (ppm)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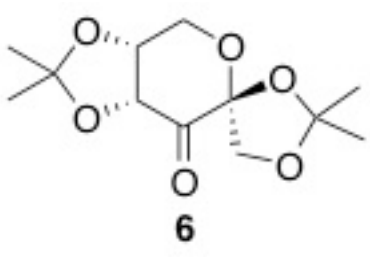
10
-10
f1 (ppm)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4.41
4.38
4.37
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1.00
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1.01
3.05
3.04
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2.5
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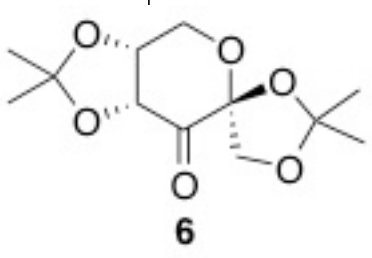
f1 (ppm)



6

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26.53
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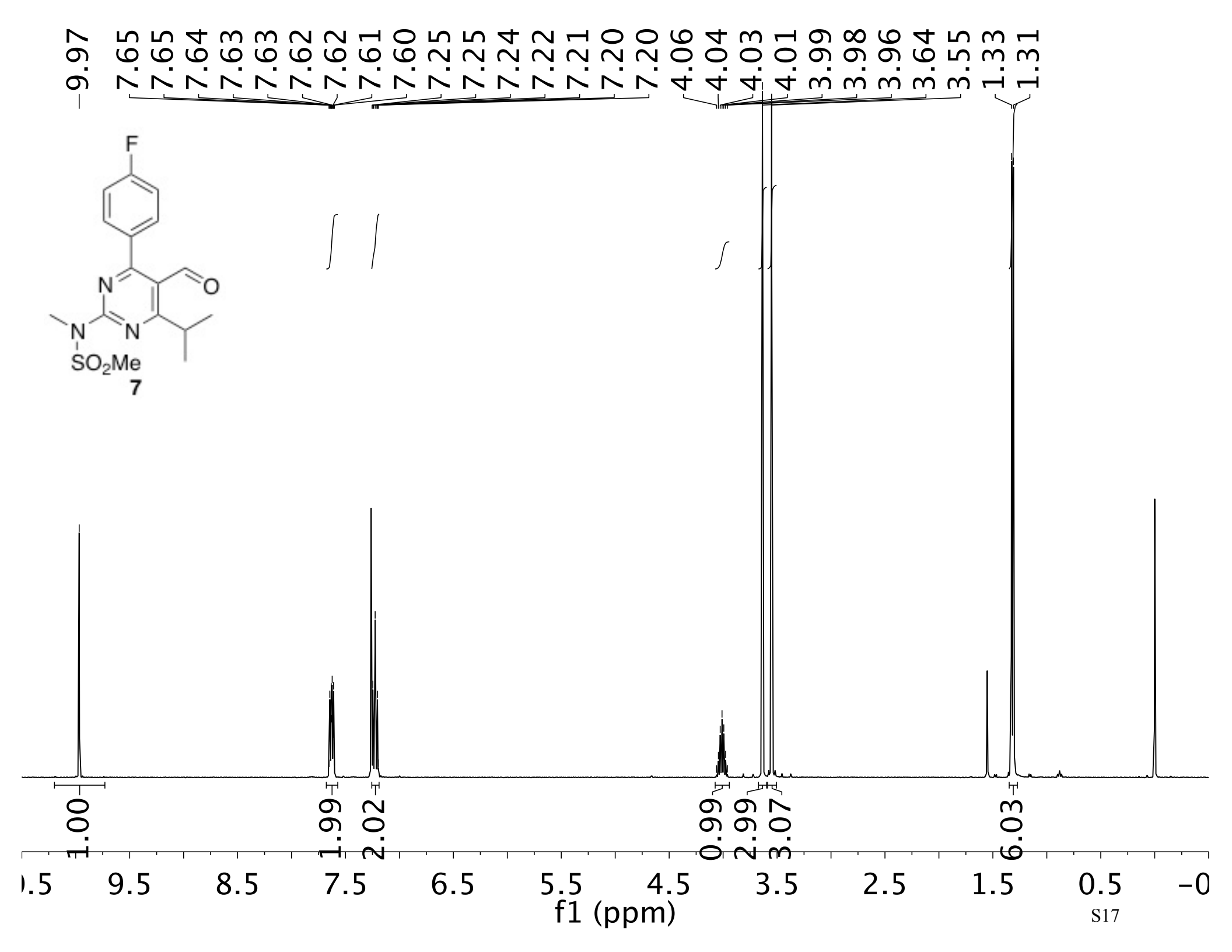
26.02

210 190 170 150 130 110 90 70 50 30 10 -10

f1 (ppm)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7.20
4.06
4.04
4.03
4.01
3.99
3.98
3.96
3.64
3.55
1.33
1.31
F
N
O
N
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SO2Me
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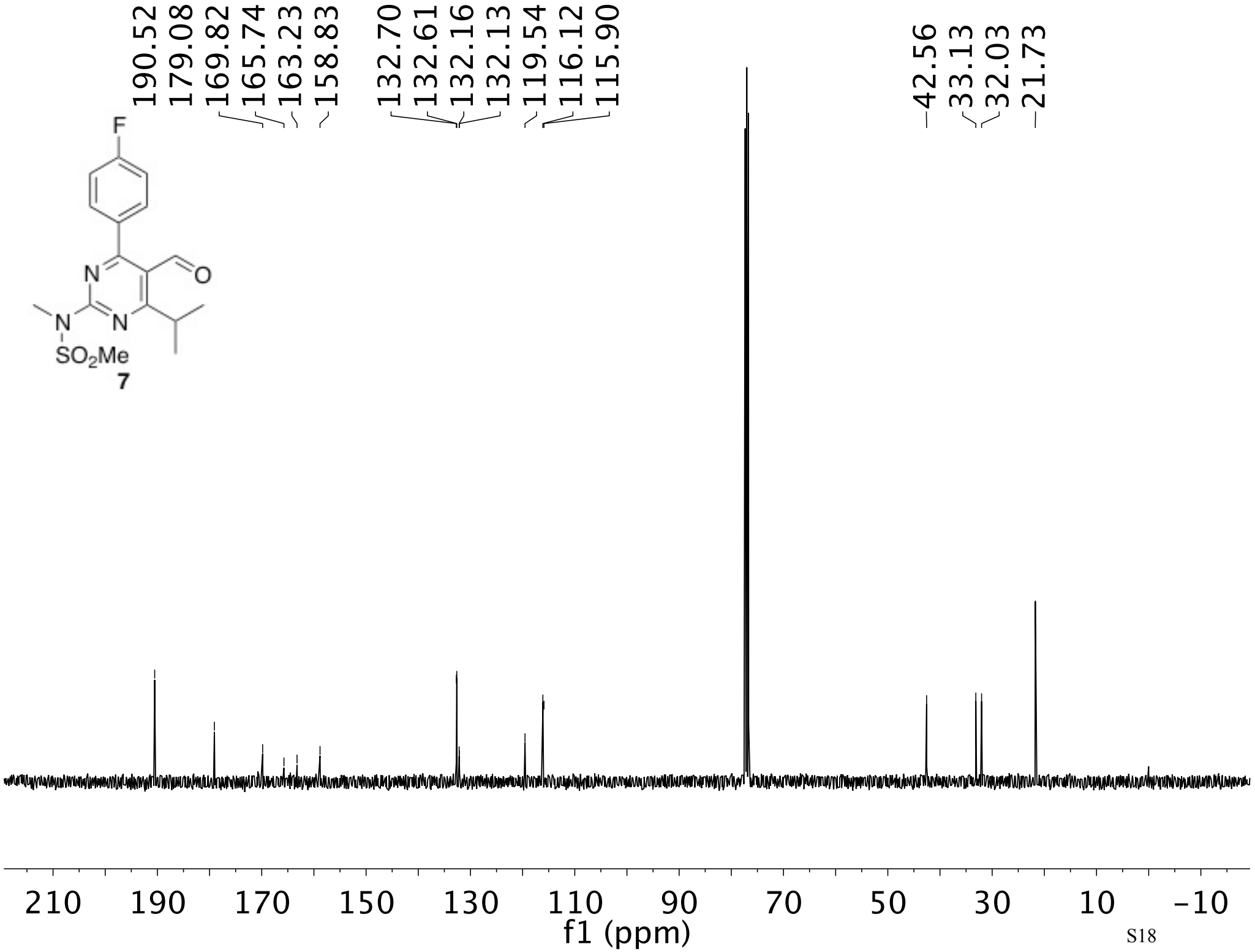
6.03
f1 (ppm)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32.03
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N
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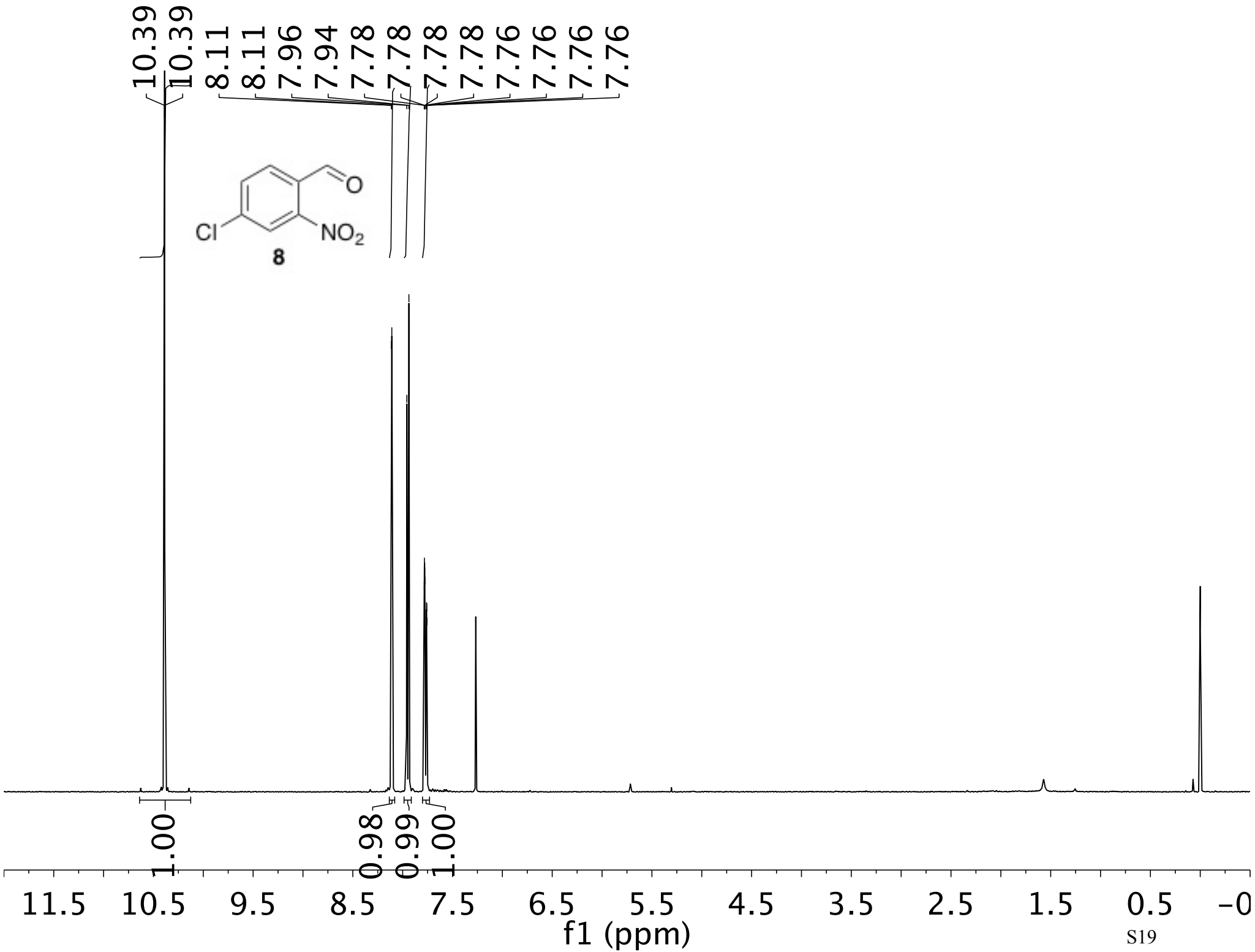
-10
f1 (ppm)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7.76
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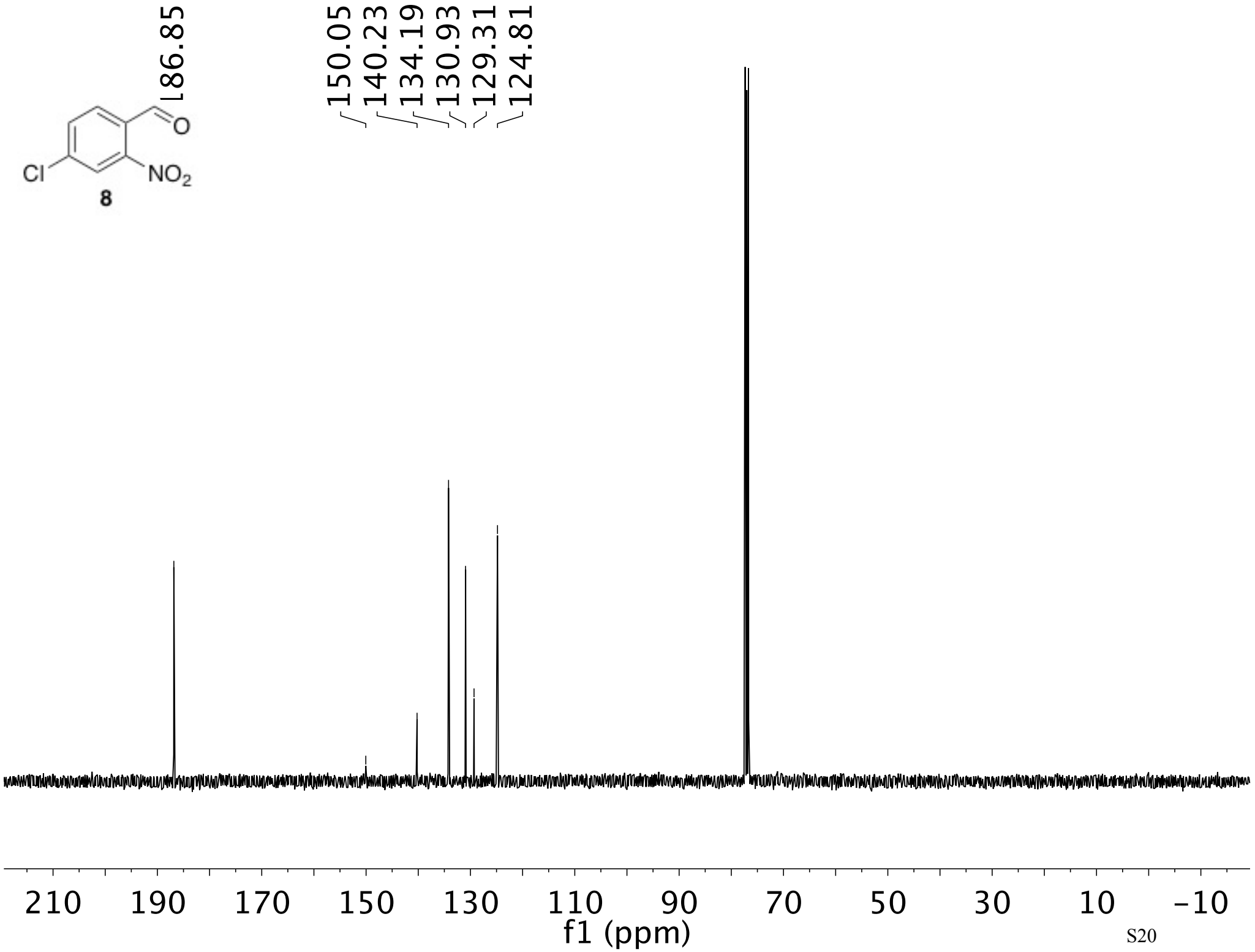
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110
90
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50
30
10
-10
f1 (ppm)