

Supporting Information

Highly Active Nickel Catalysts for Enantioselective Reductive Alkenylation of *N*-Sulfonyl Aldimines

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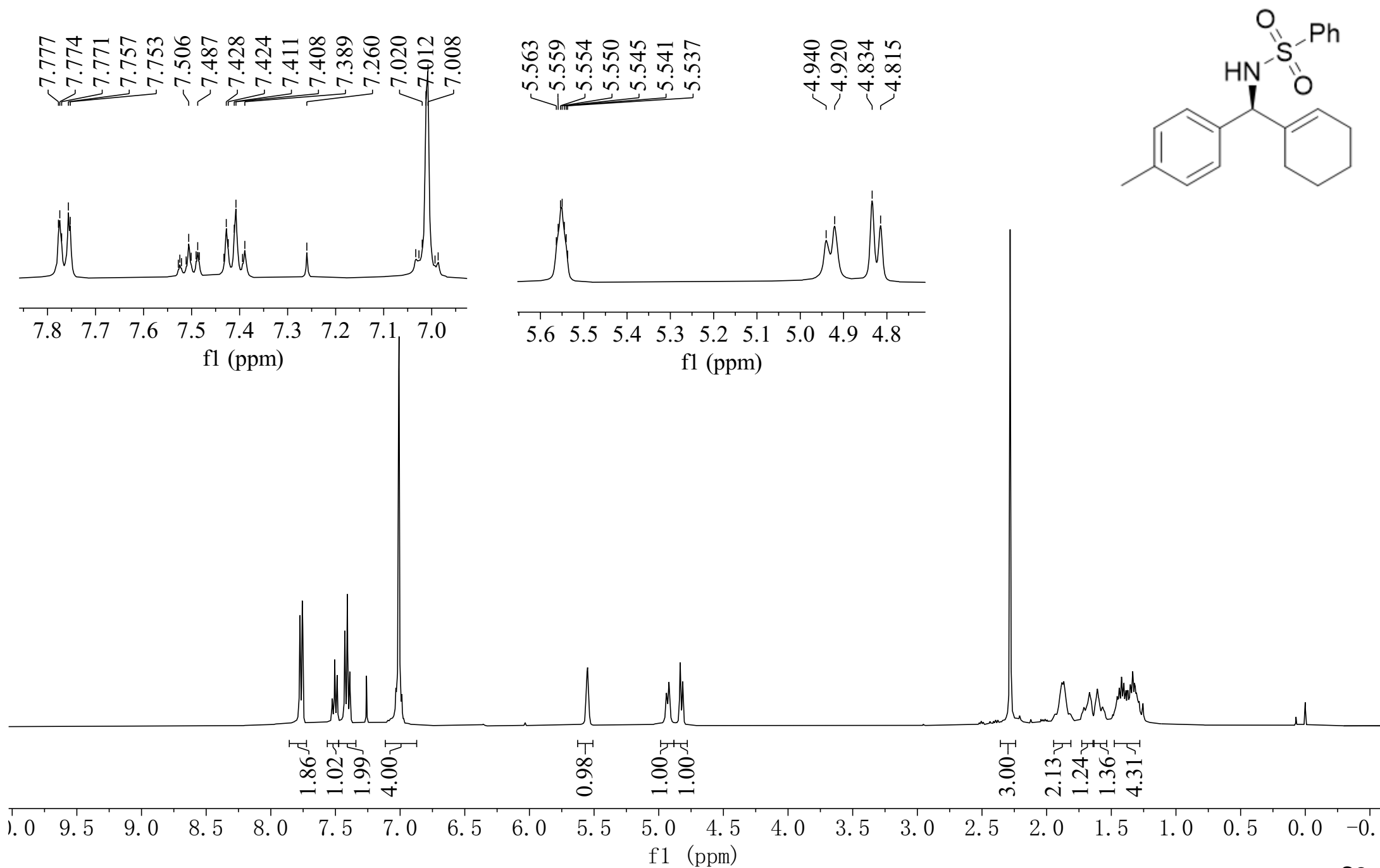
[‡]Lab of Computational Chemistry and Drug Design, State Key Laboratory of Chemical Oncogenomics, Shenzhen Key Laboratory of Chemical Genomics, Peking University Shenzhen Graduate School, Shenzhen 518055, China.

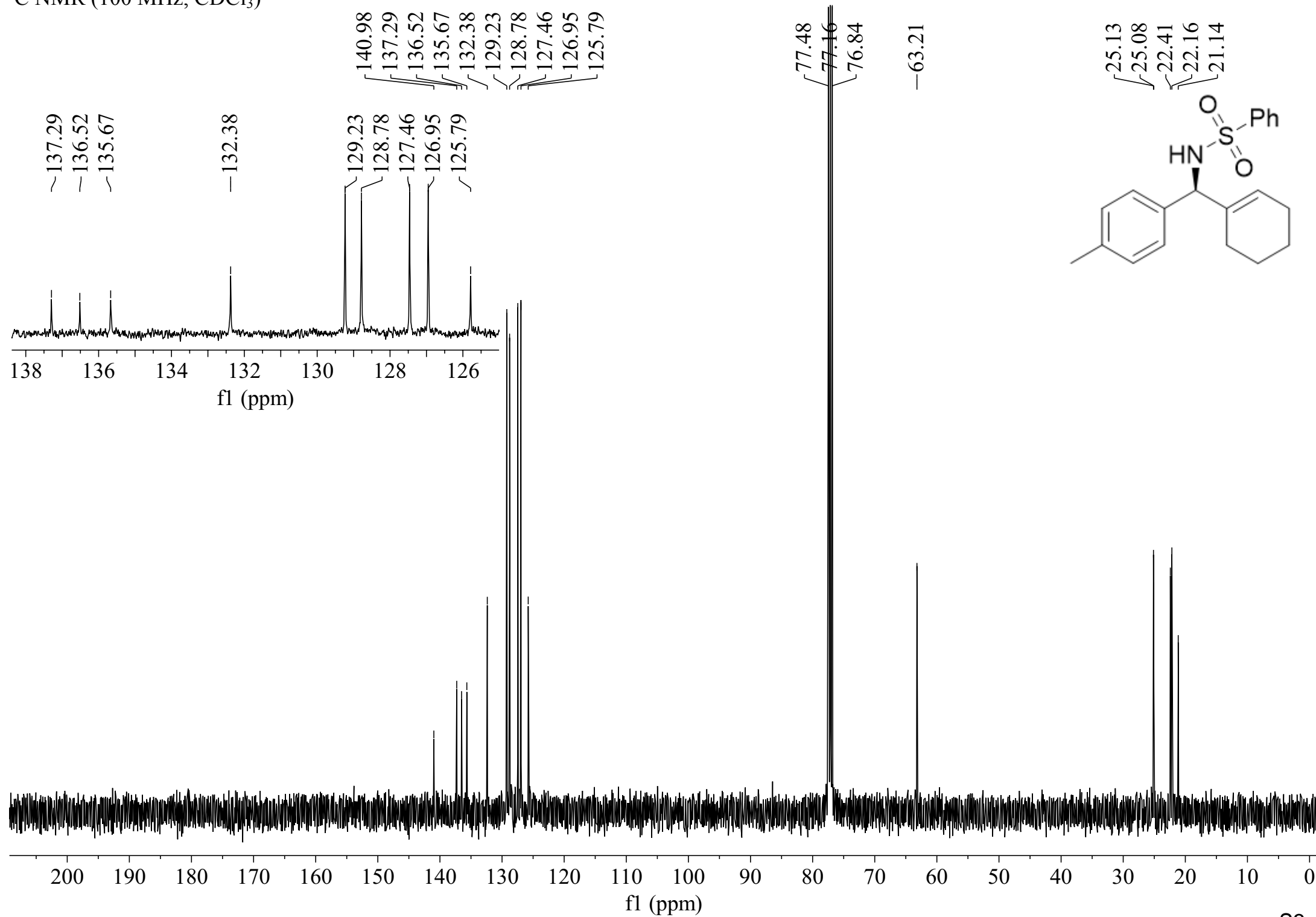
[§]Hoffmann Institute of Advanced Materials, School of Food and Drug, Shenzhen Polytechnic University, Shenzhen 518055, China.

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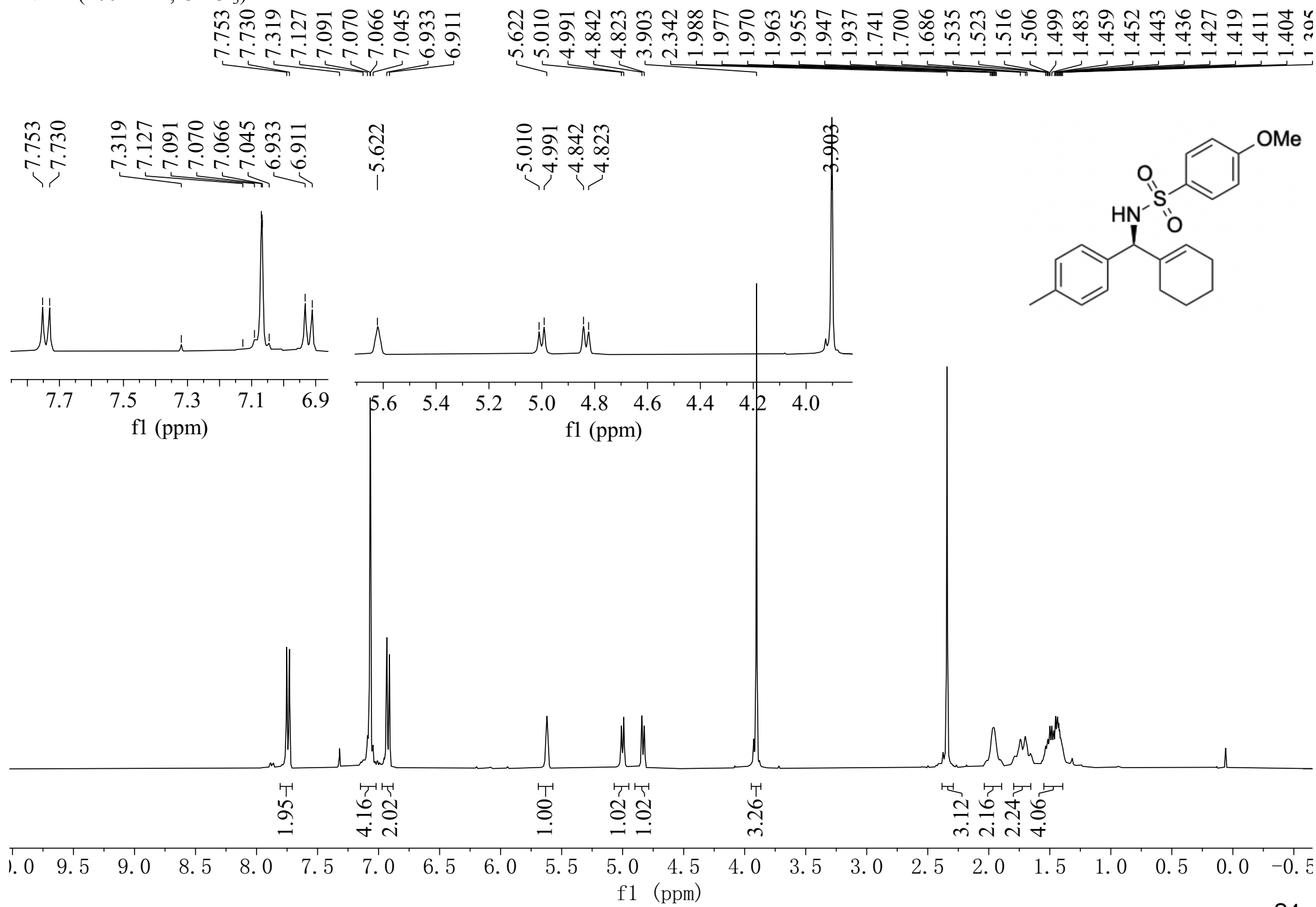
NMR spectra

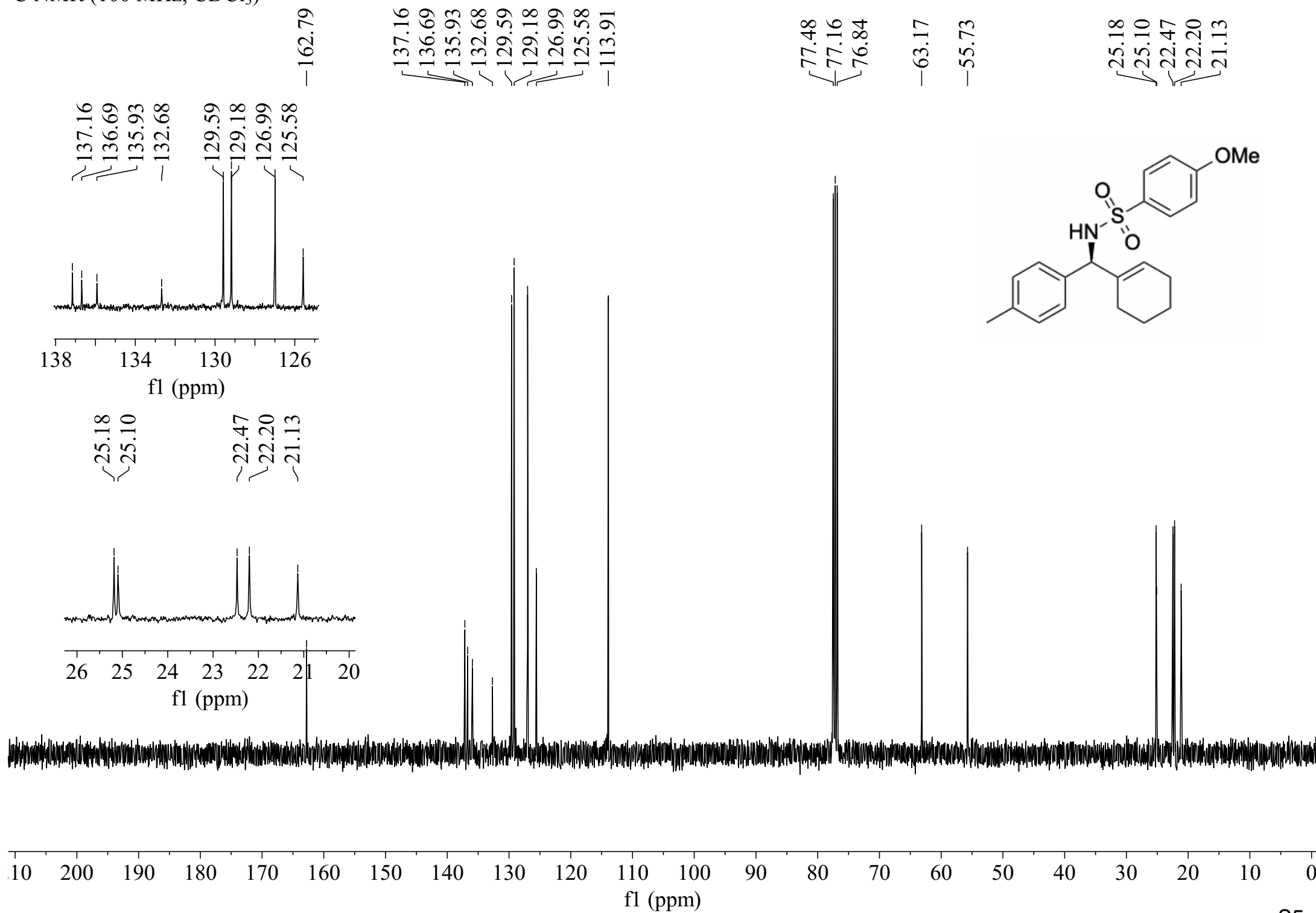
¹H NMR (400 MHz, CDCl₃)



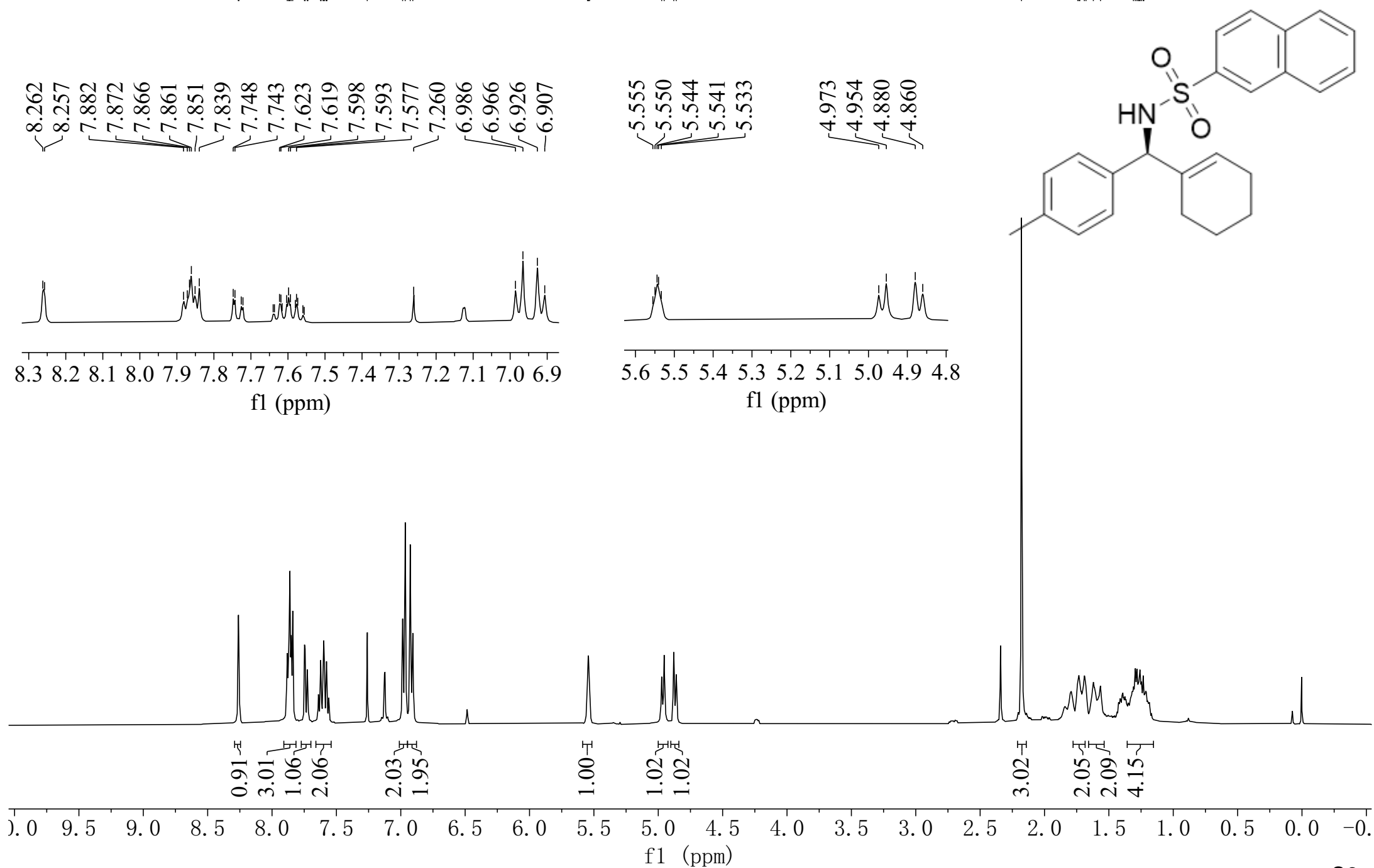


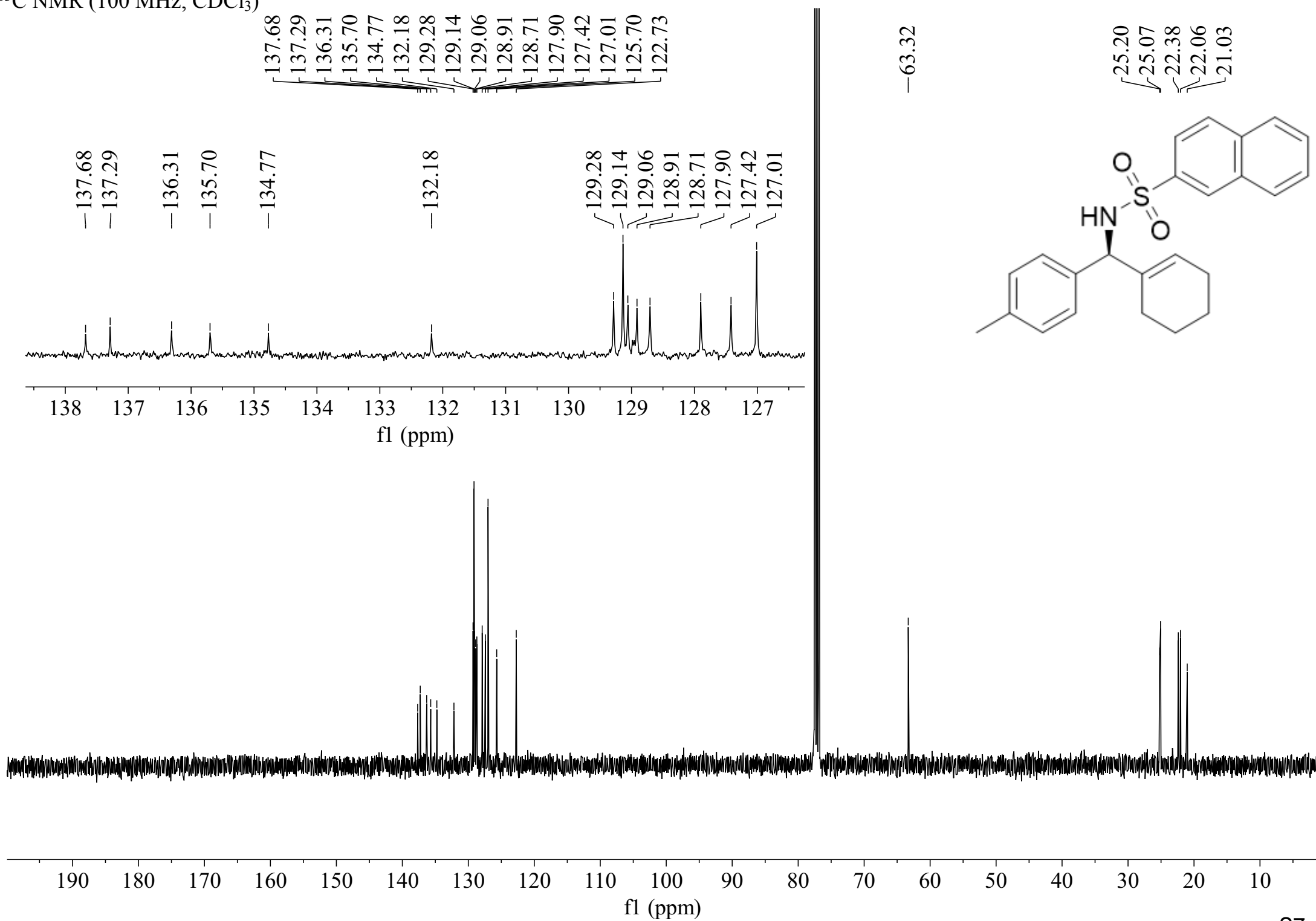
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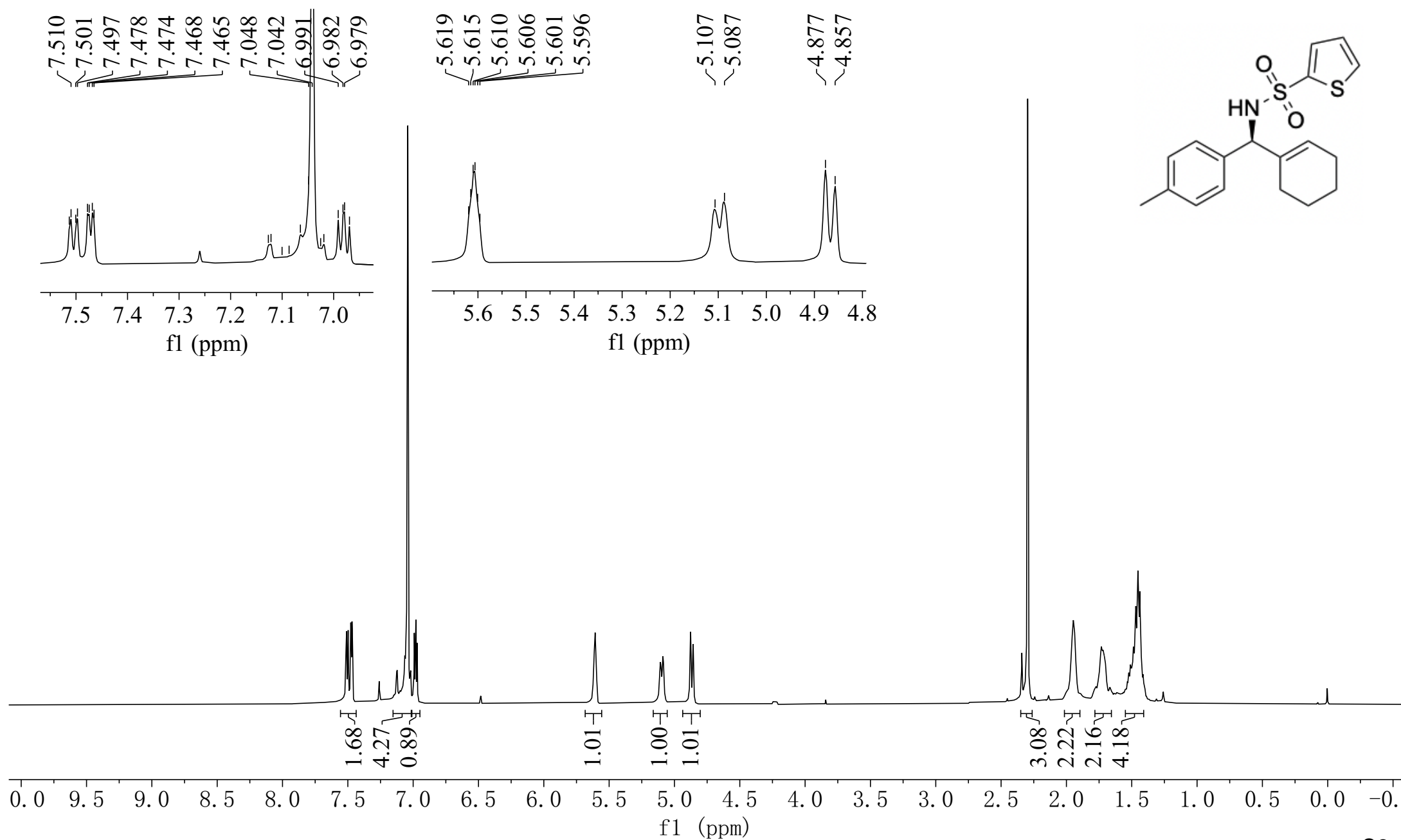


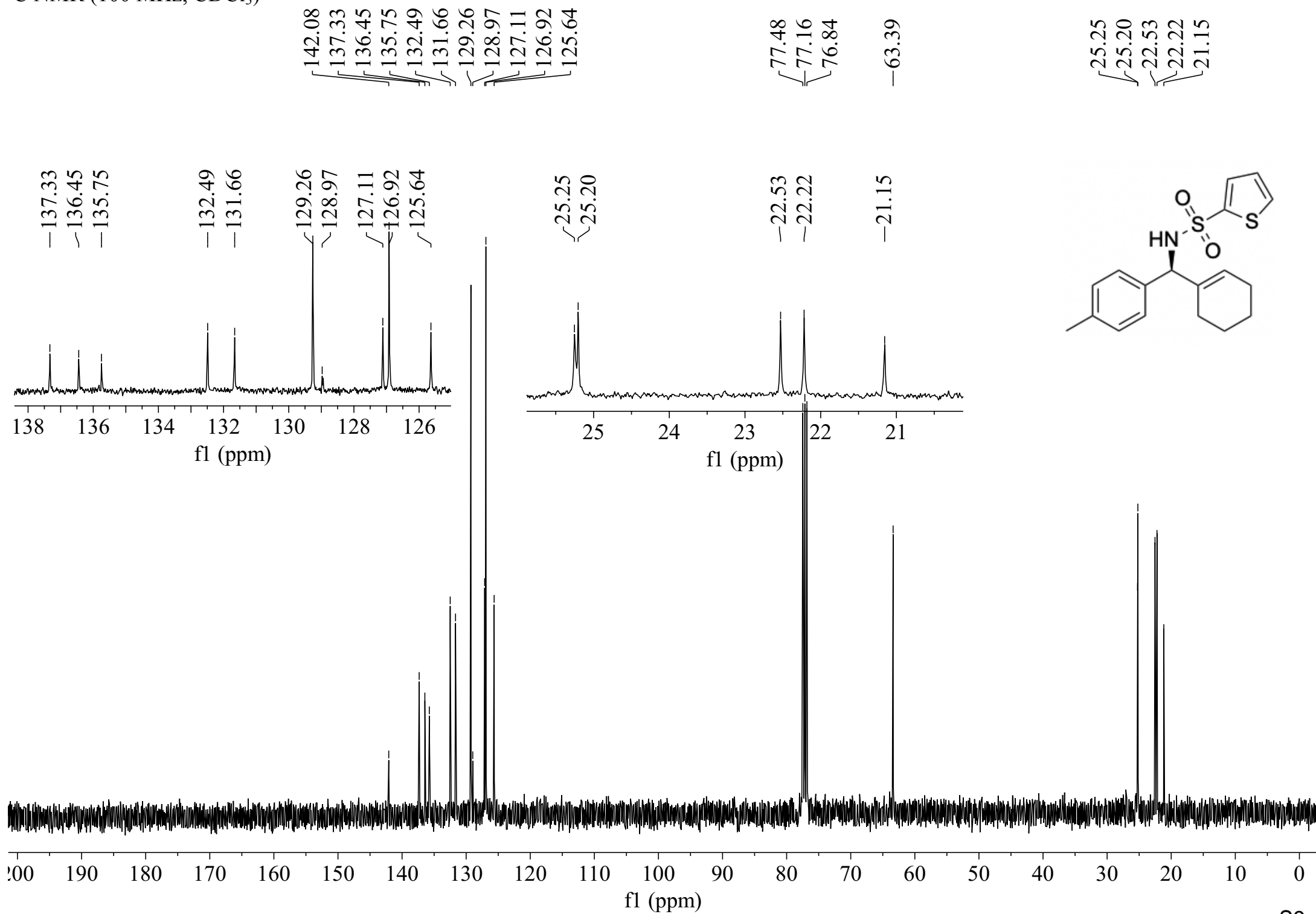
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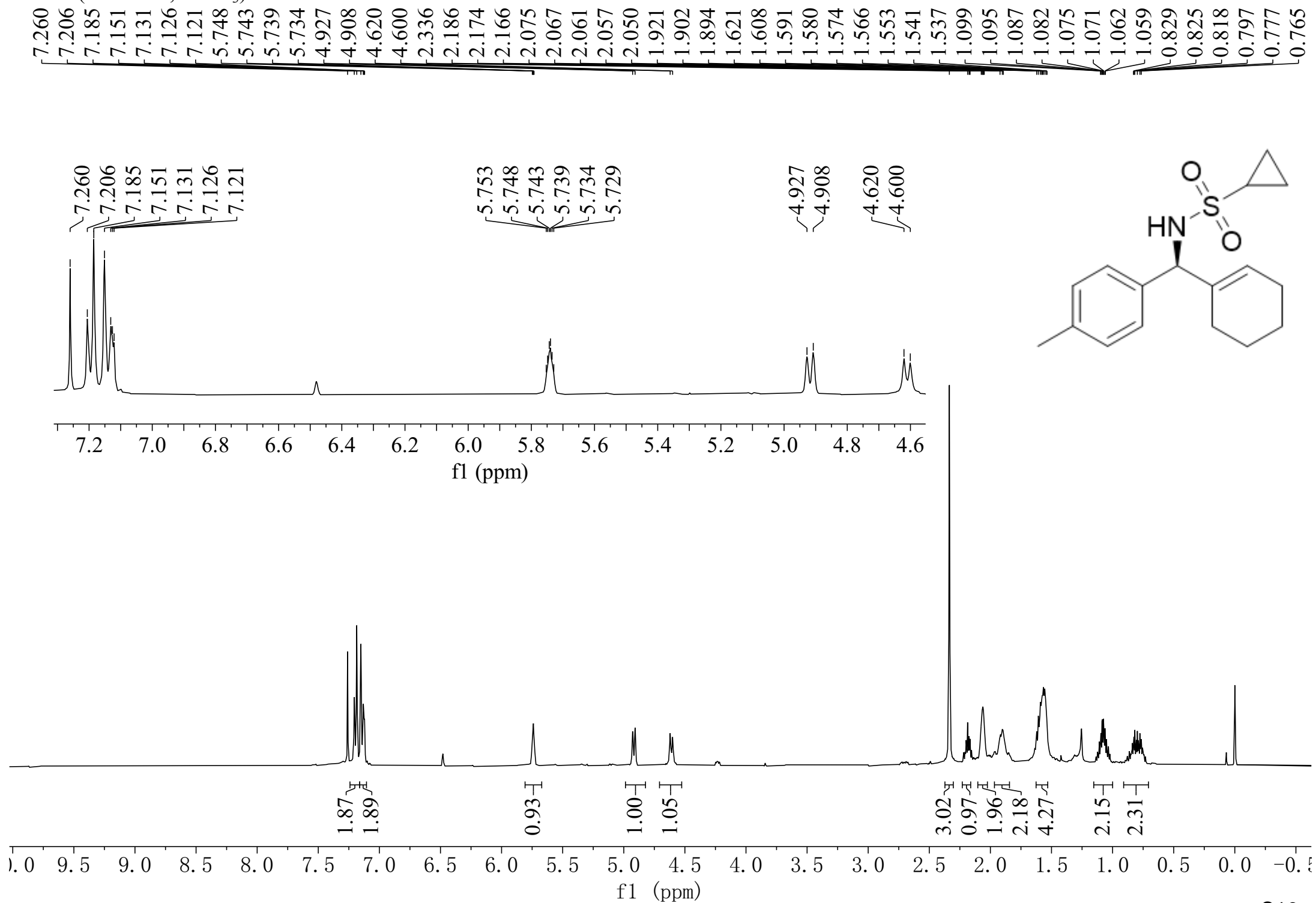


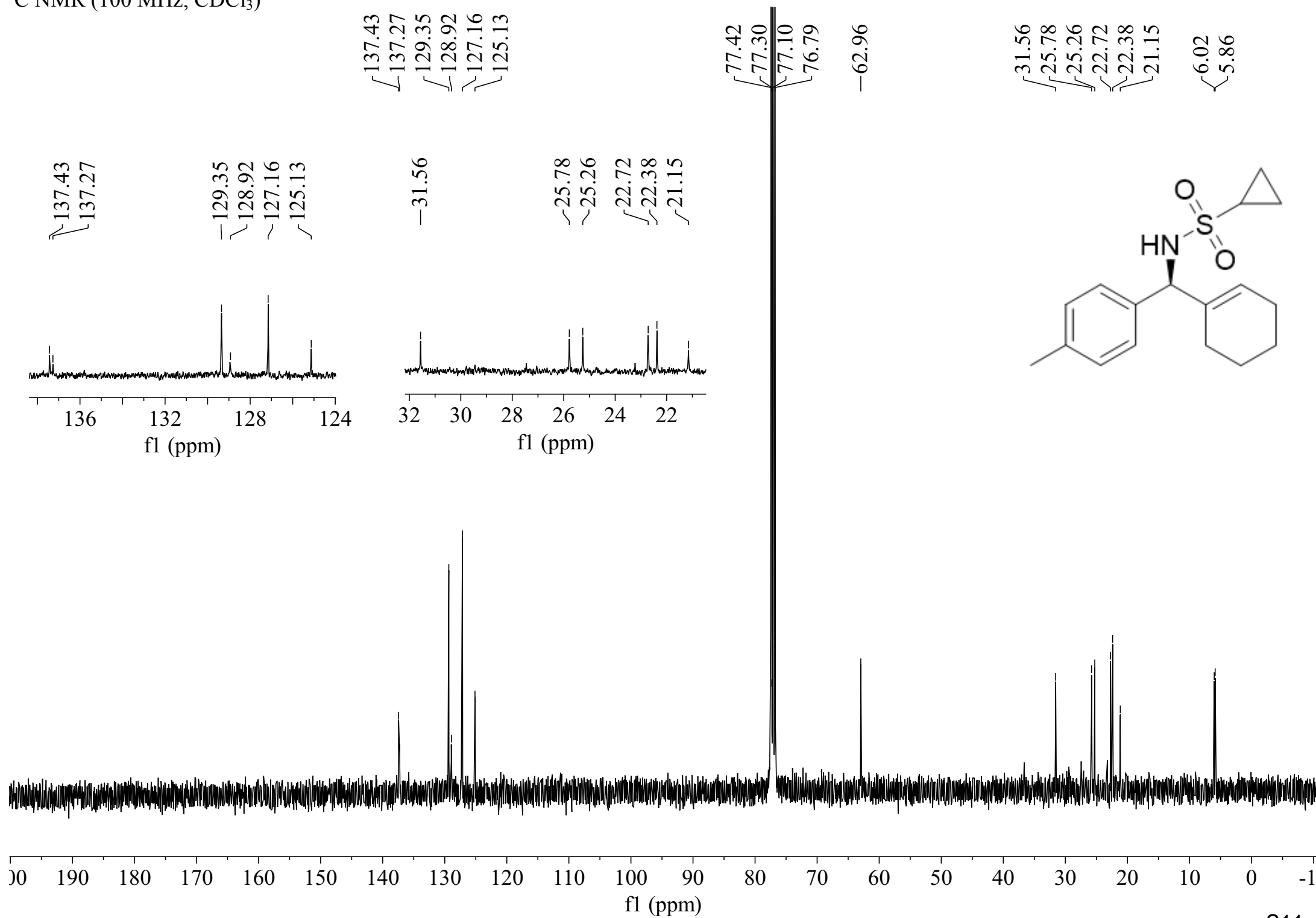
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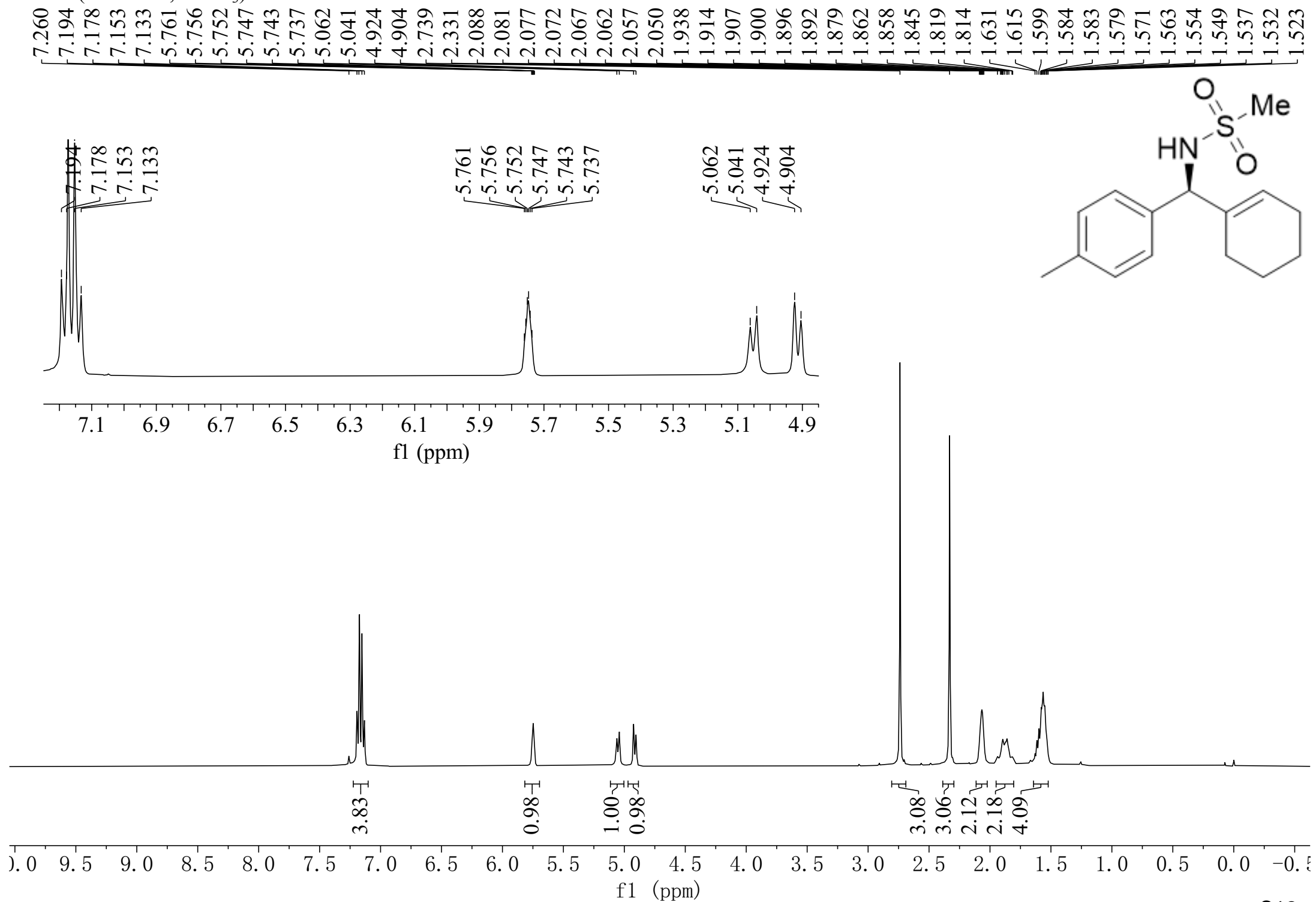


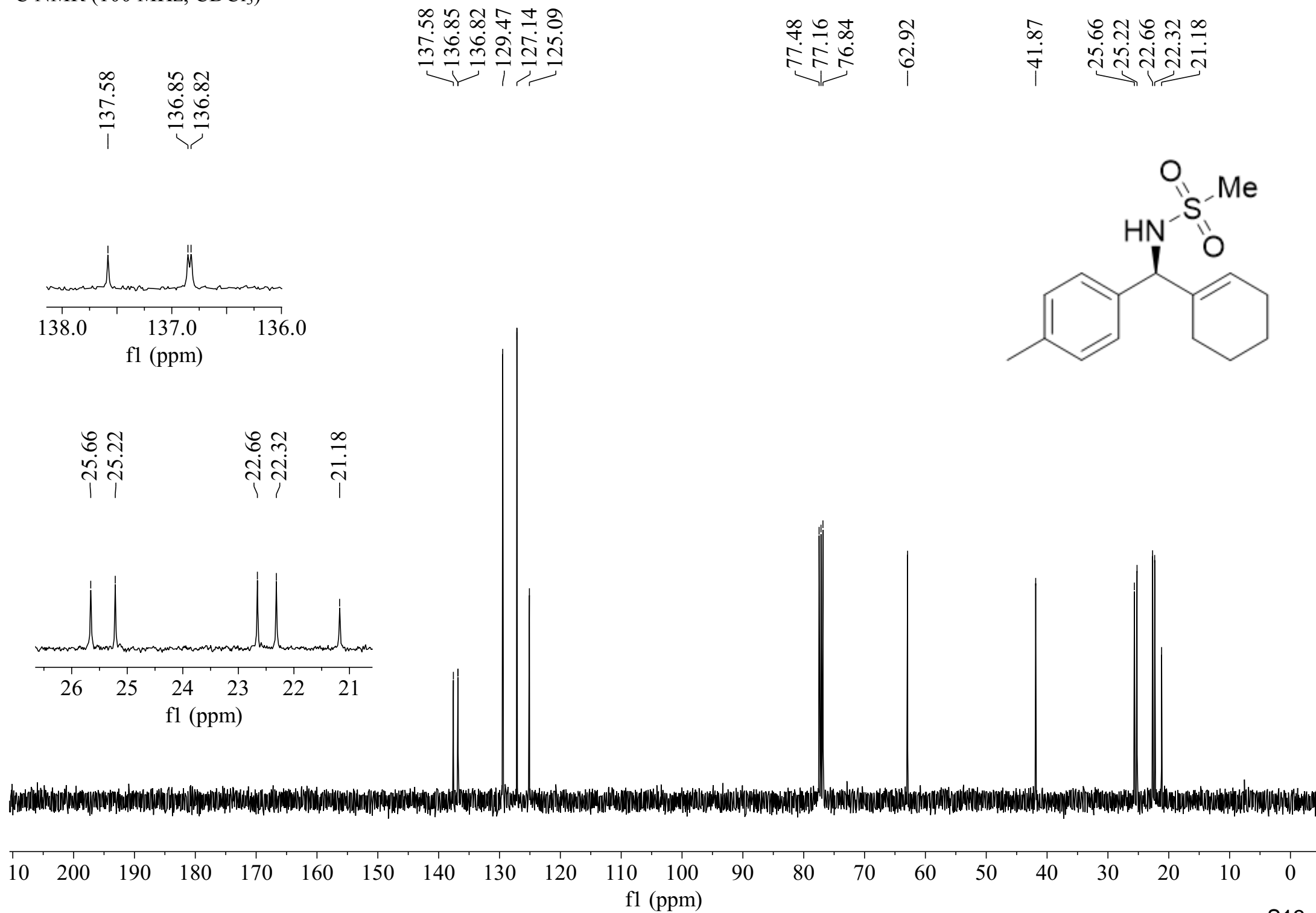
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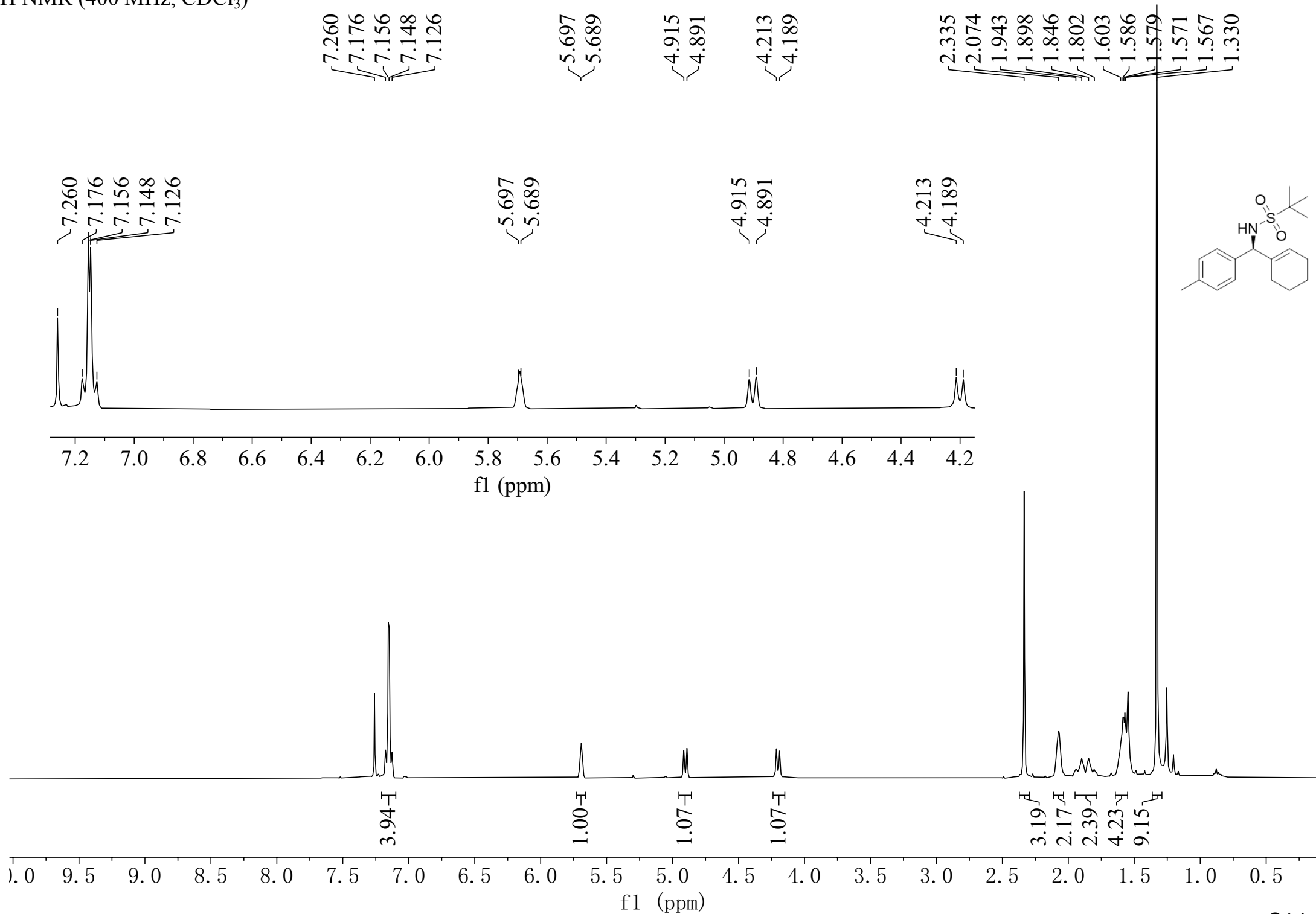


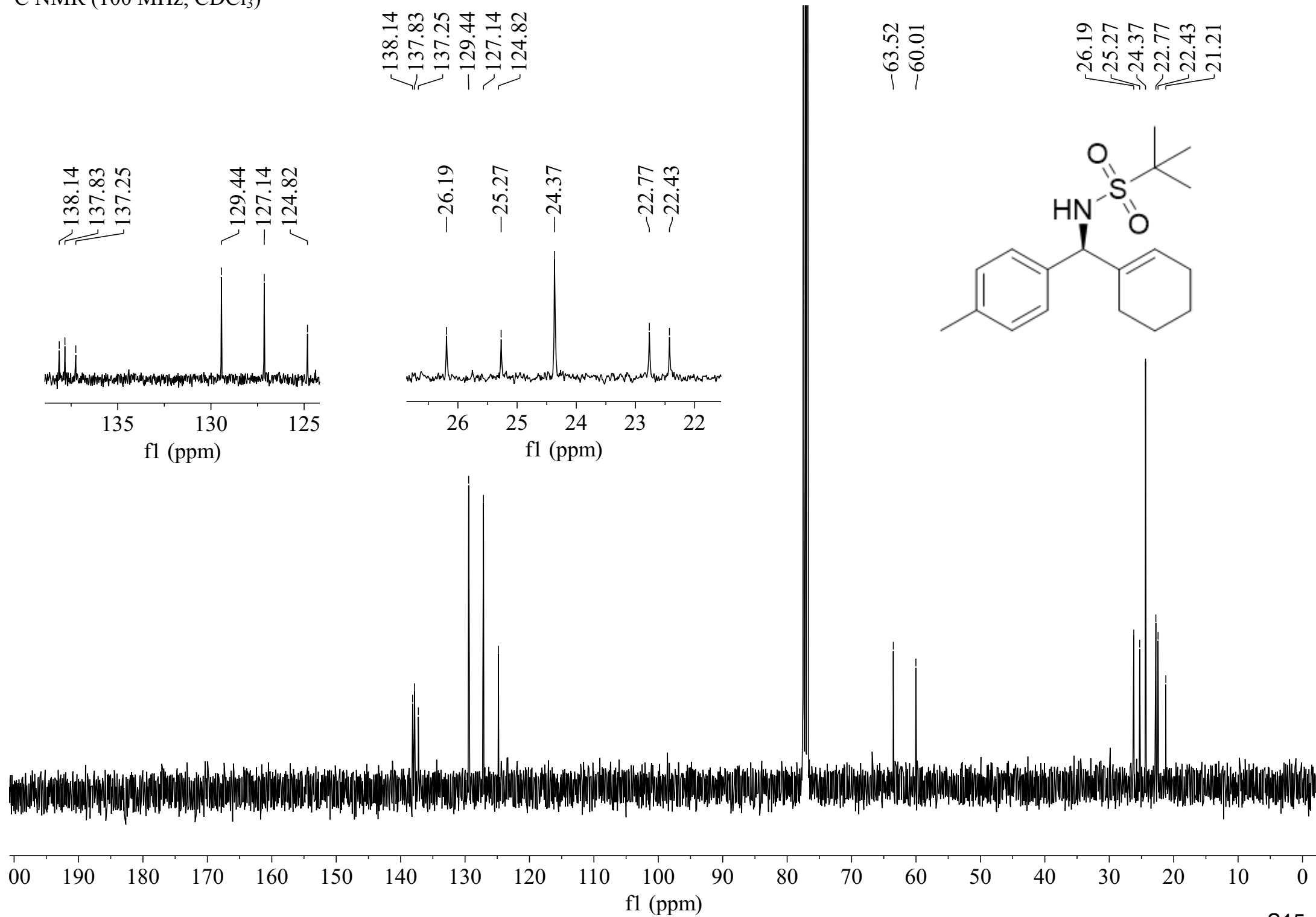
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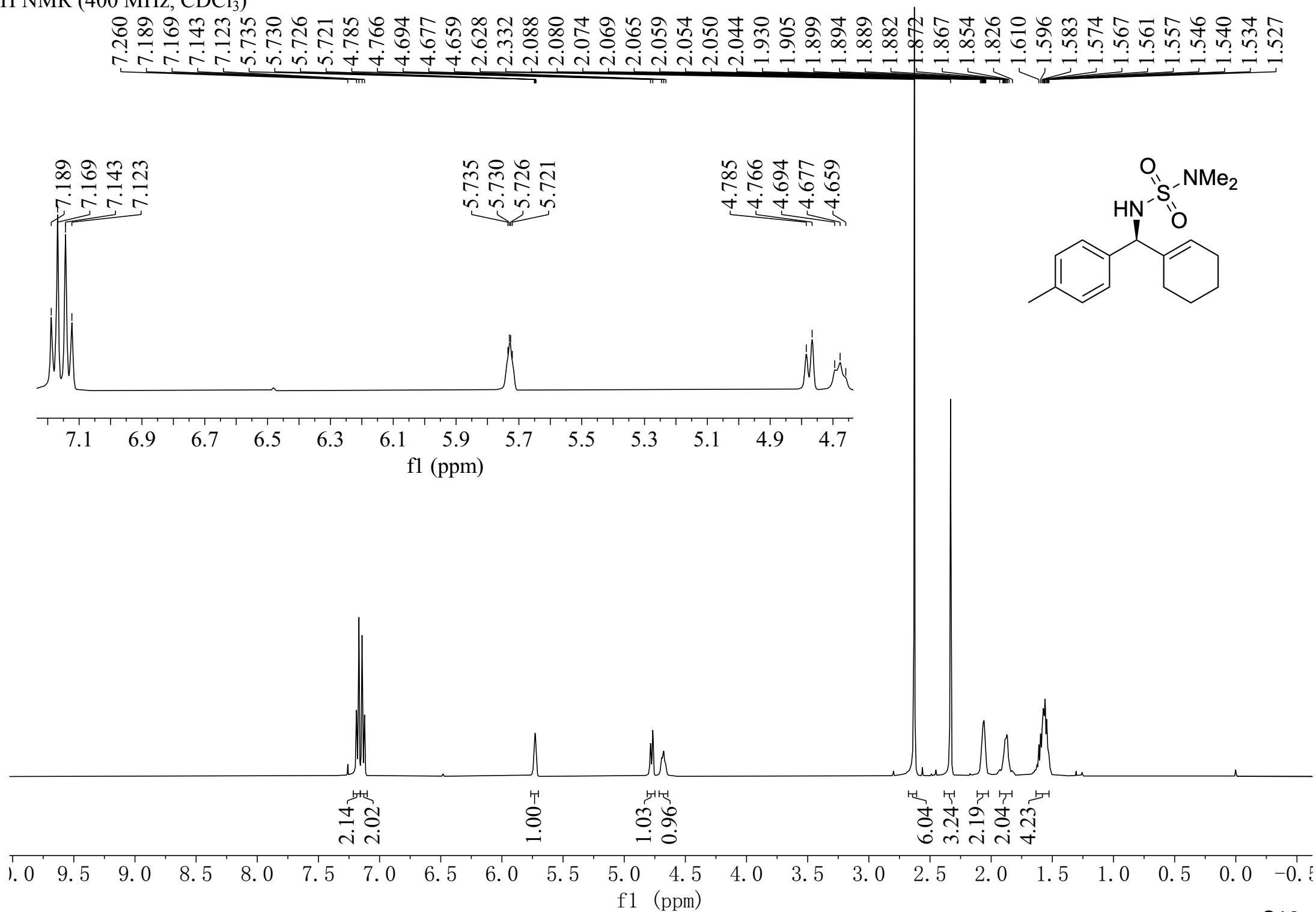


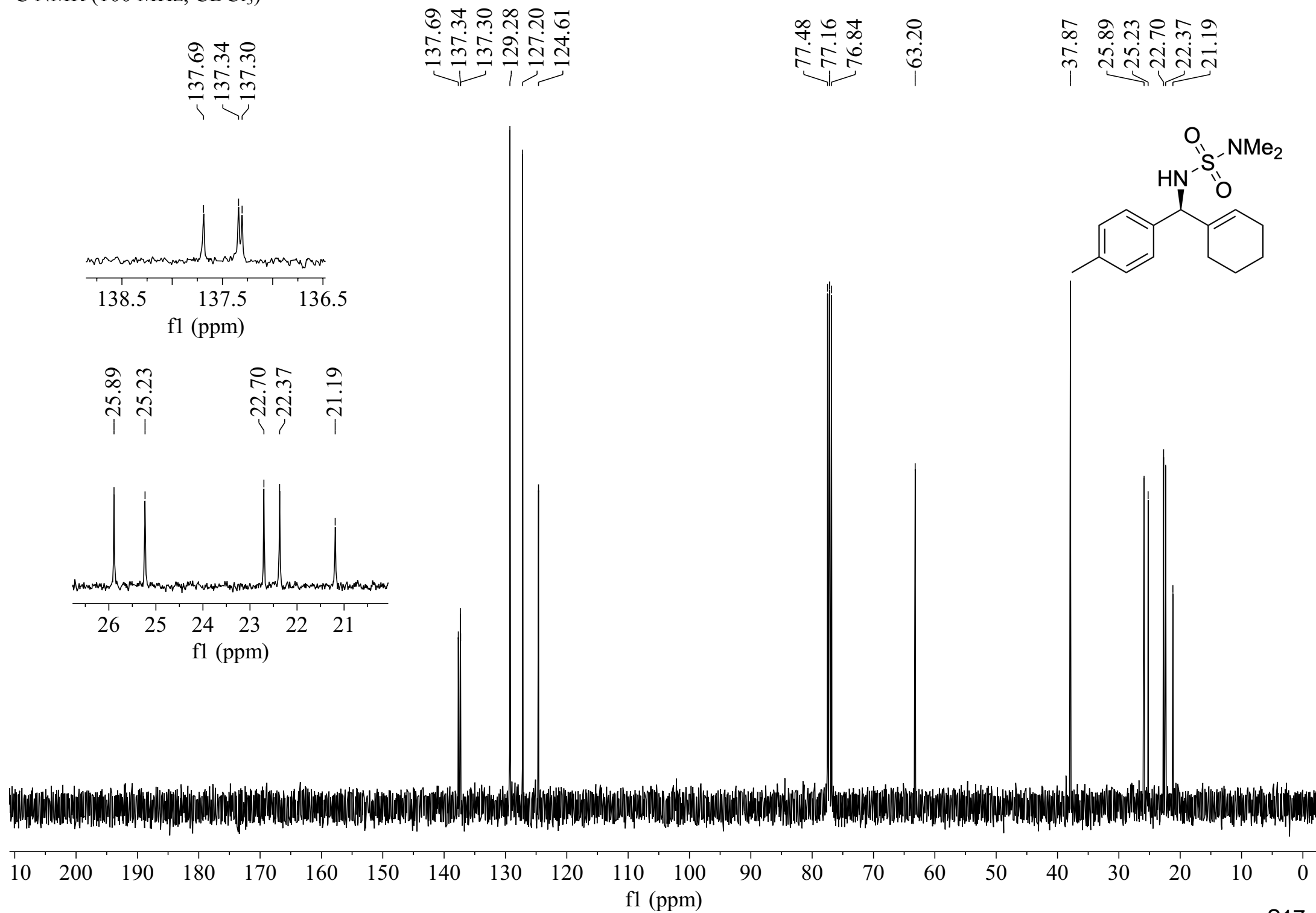


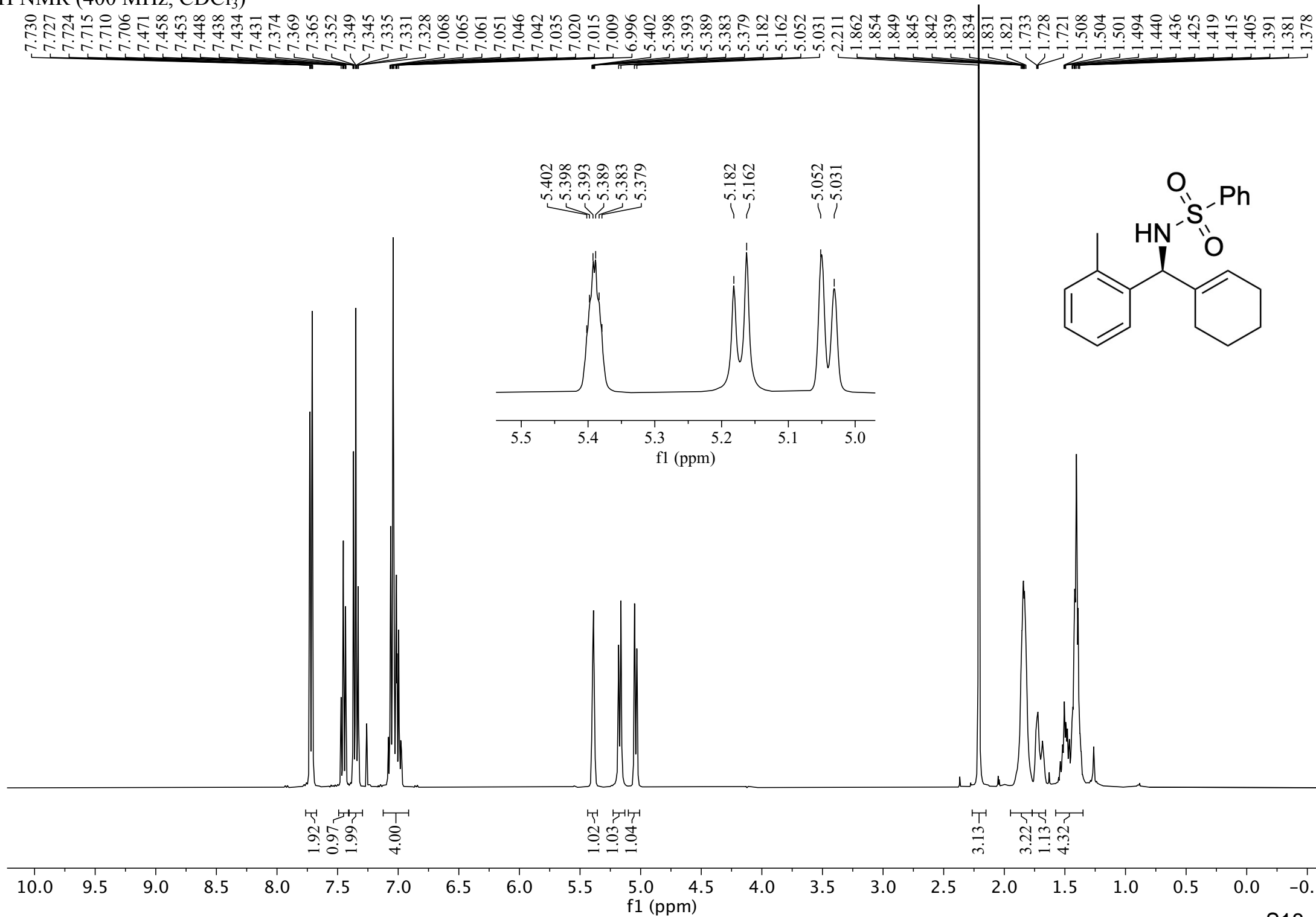
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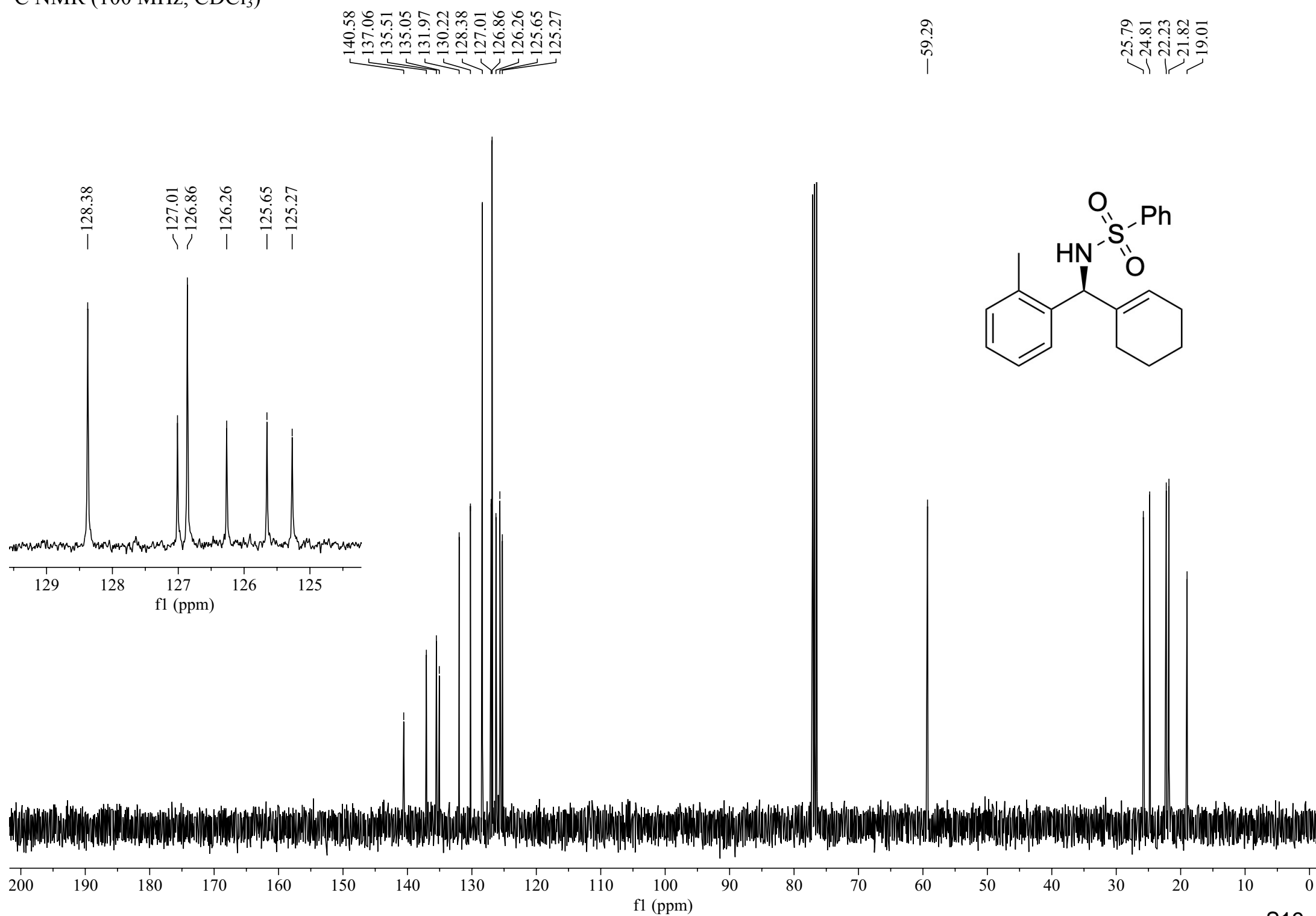




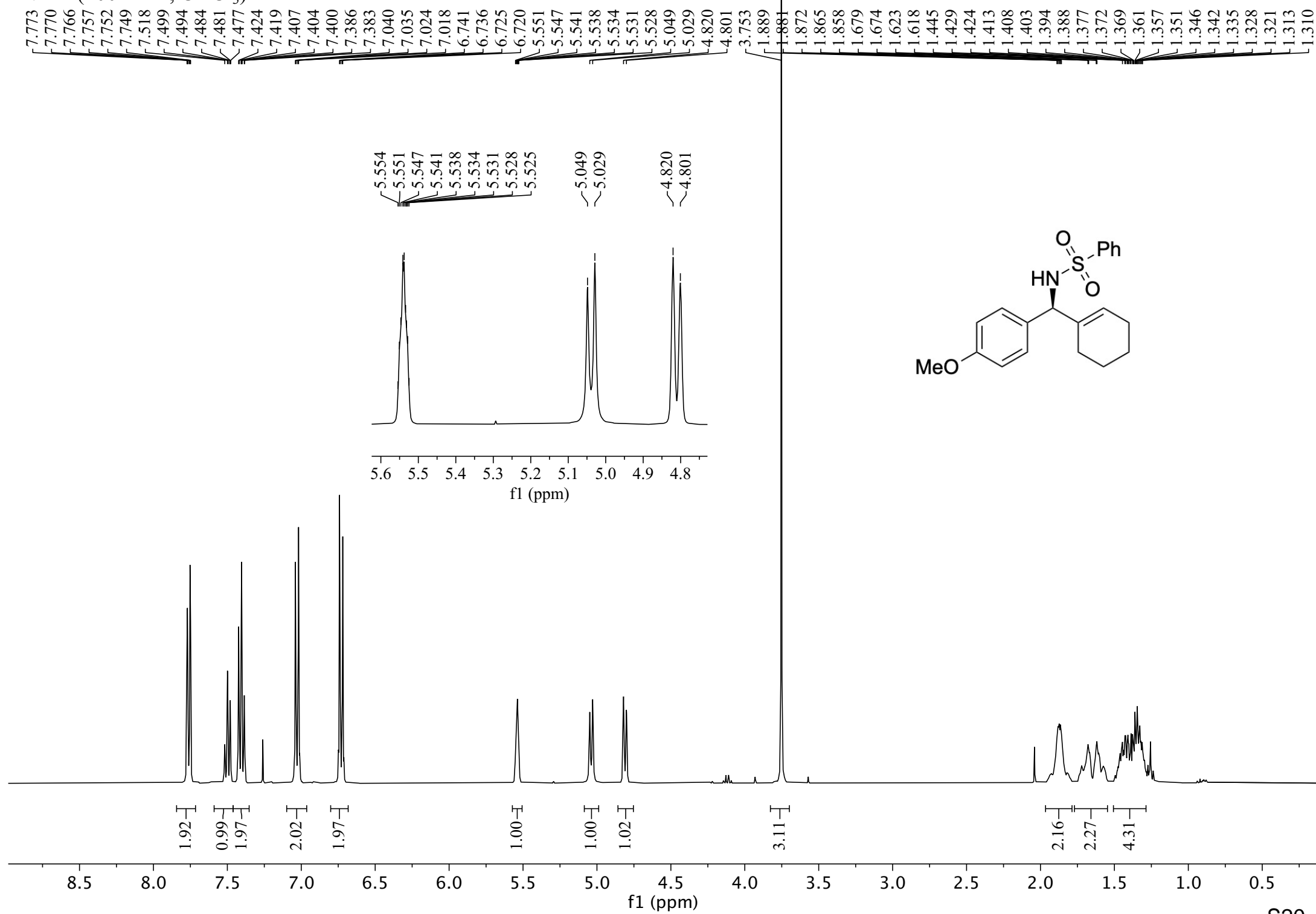


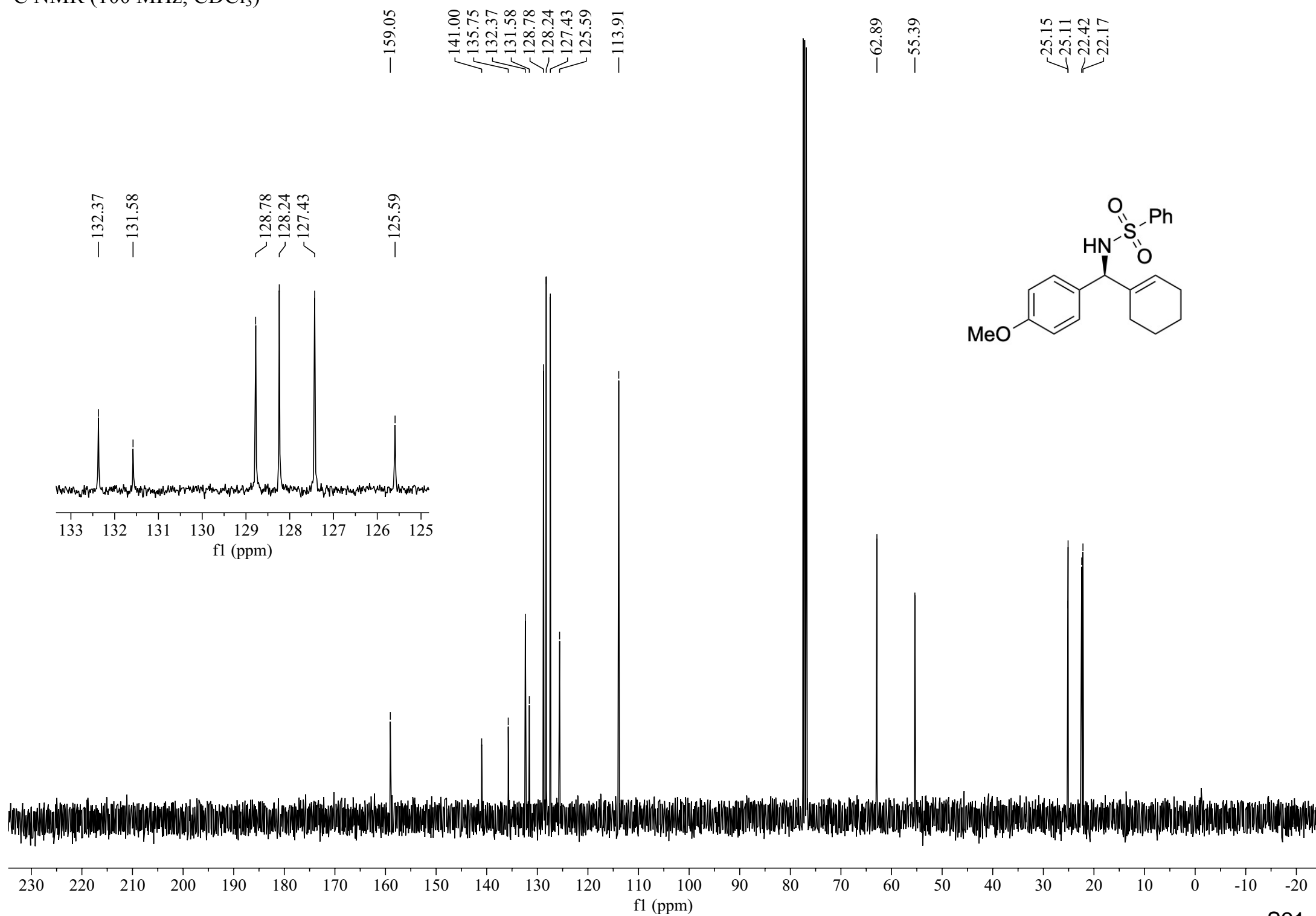




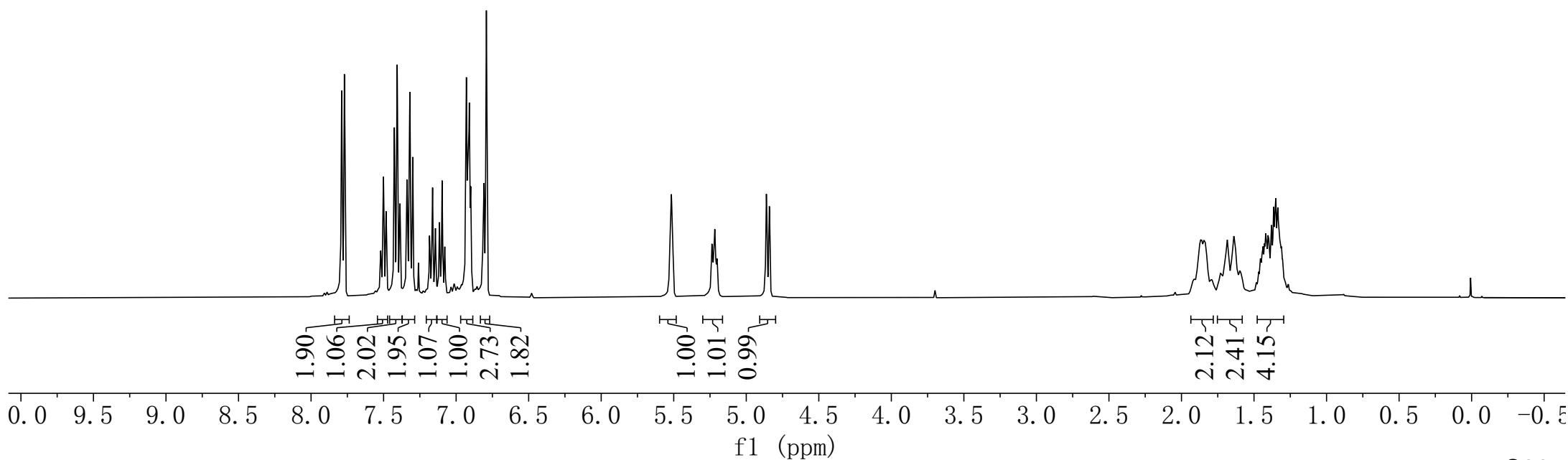
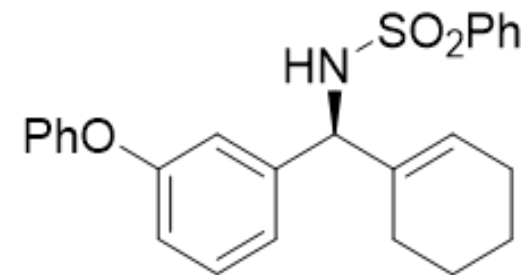
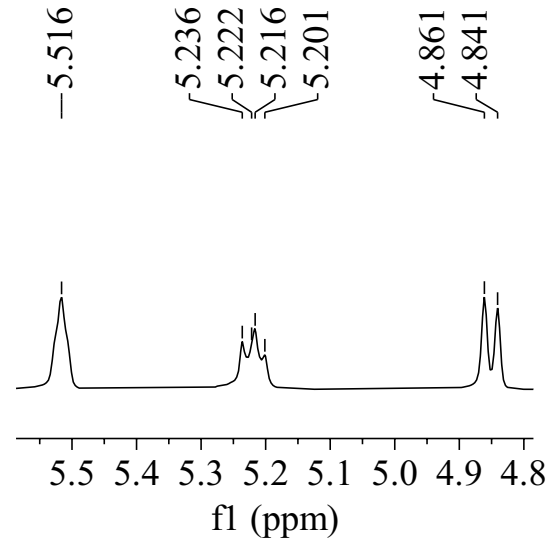
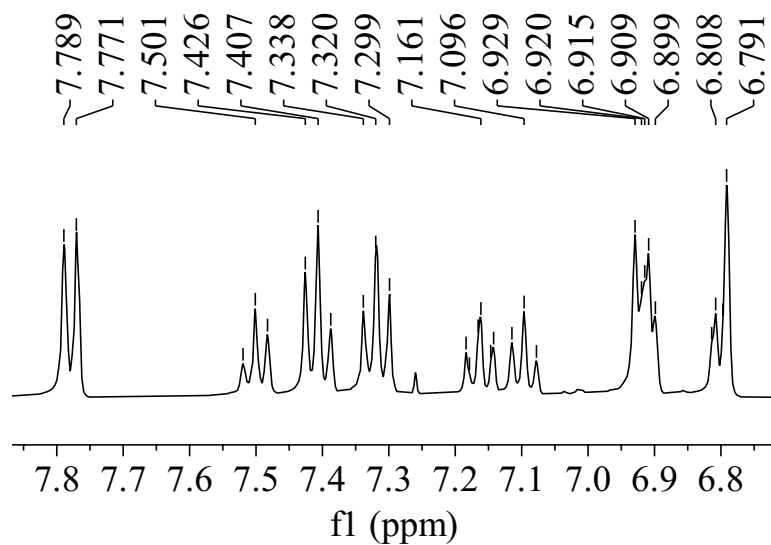


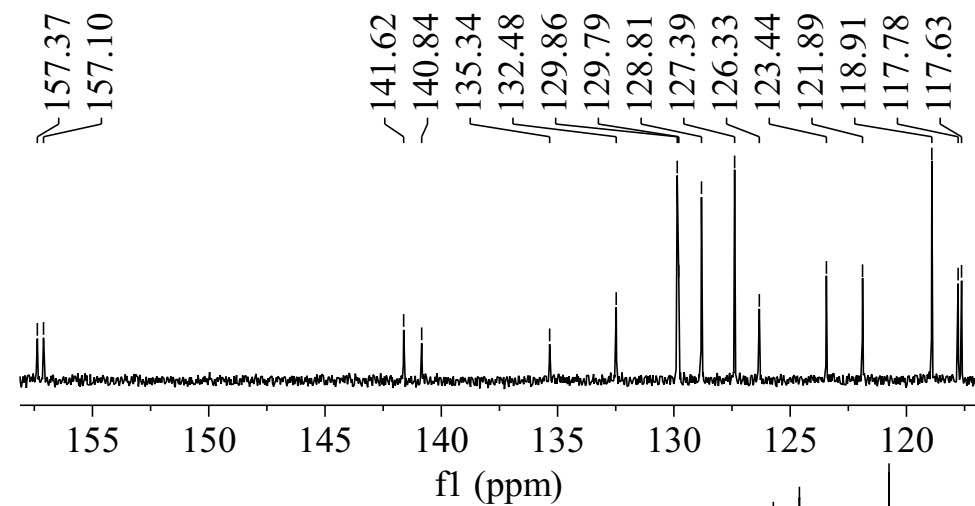
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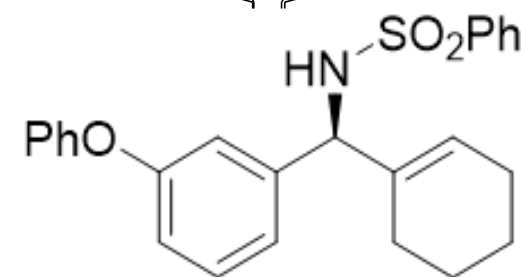


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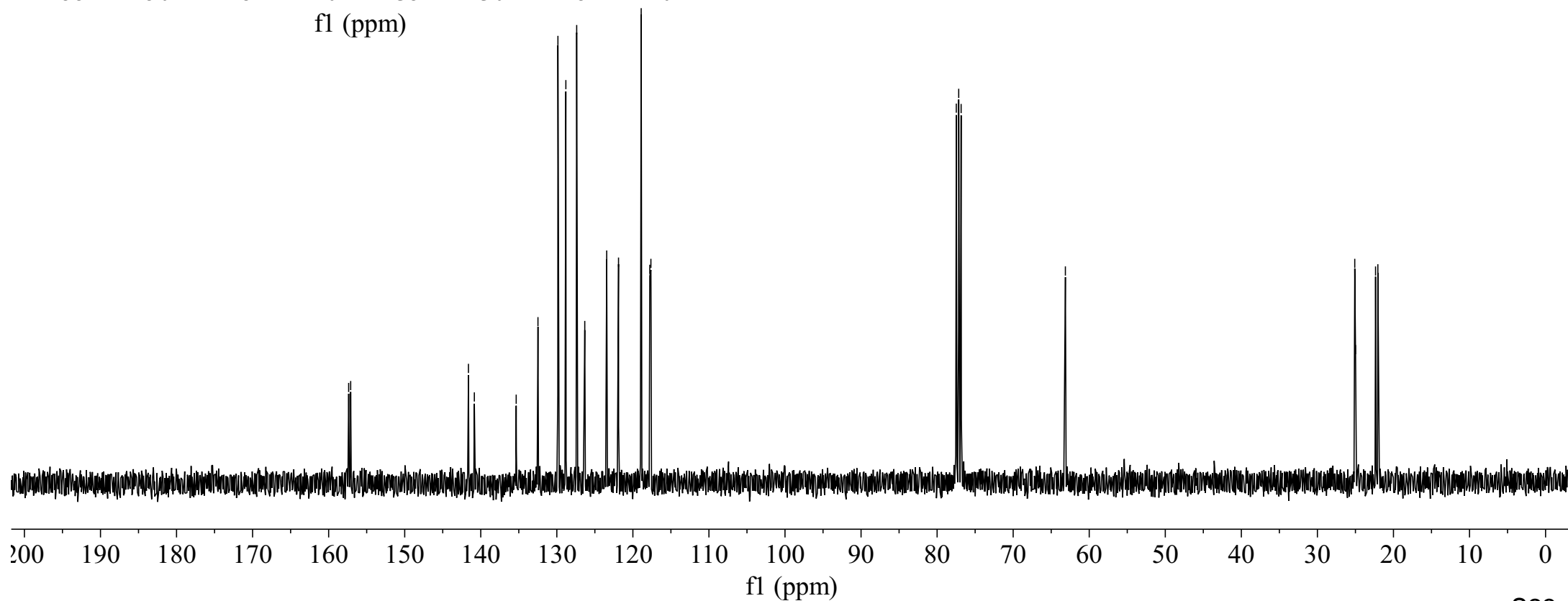




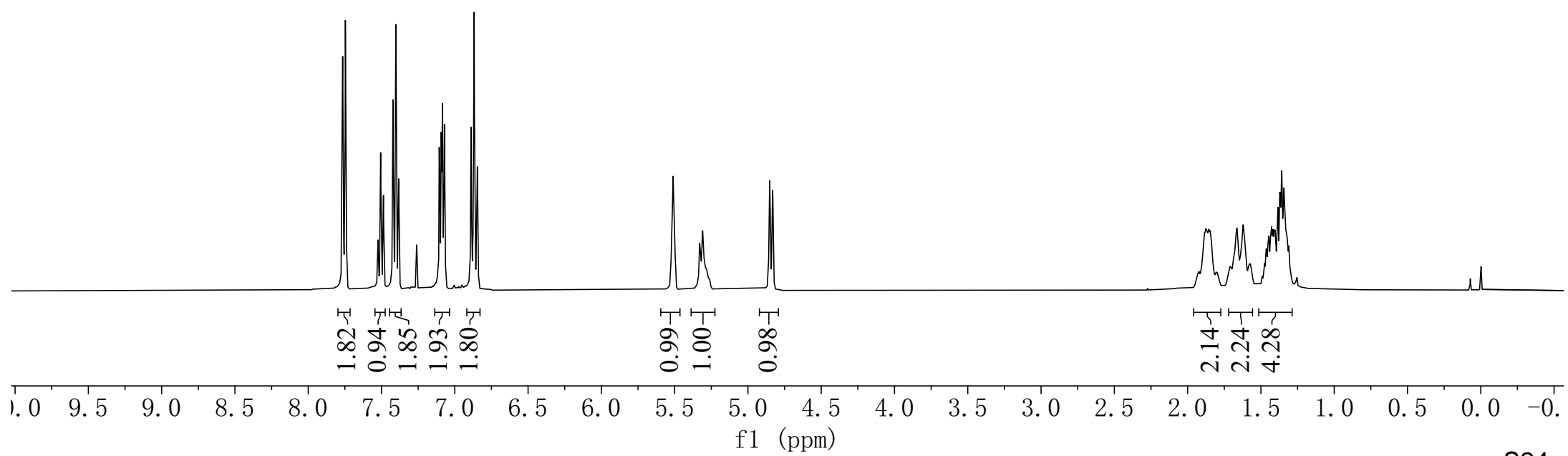
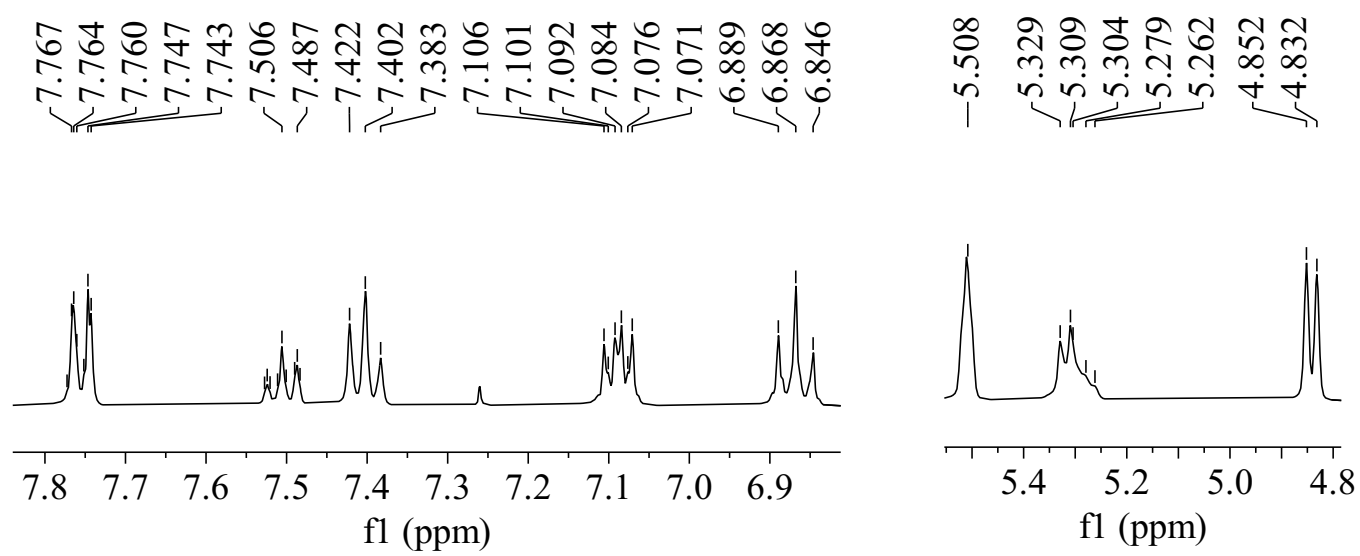
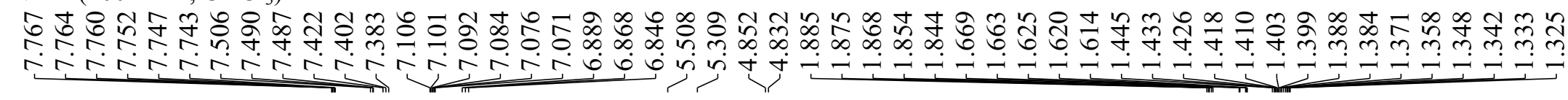
77.48
77.16
76.84
—63.14



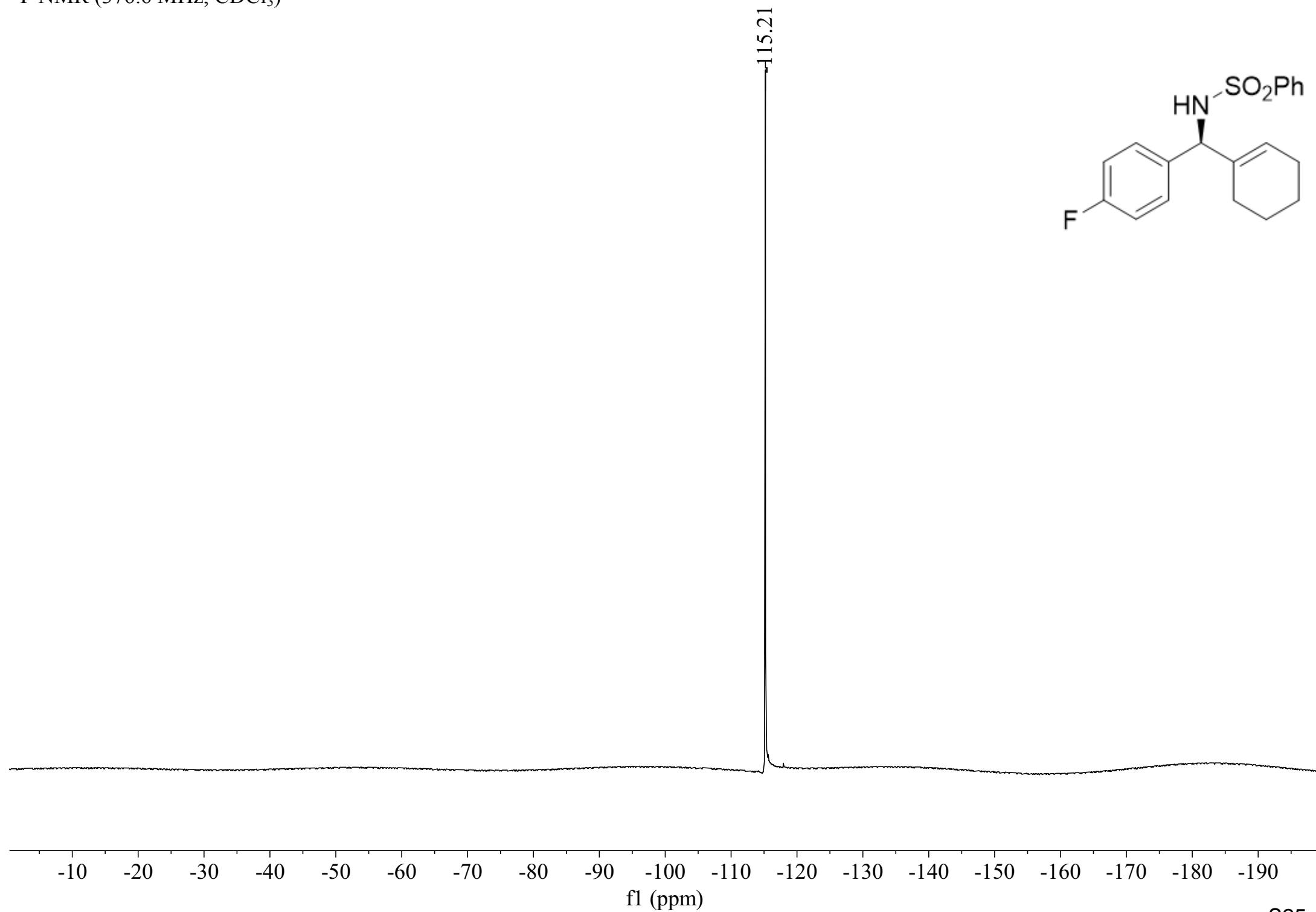
25.09
24.98
22.35
22.05

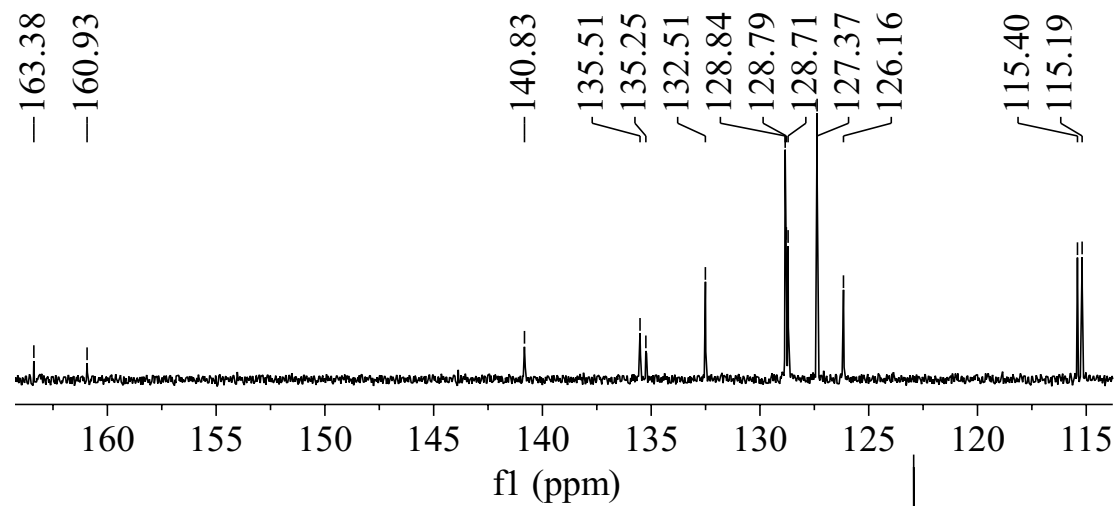


¹H NMR (400 MHz, CDCl₃)



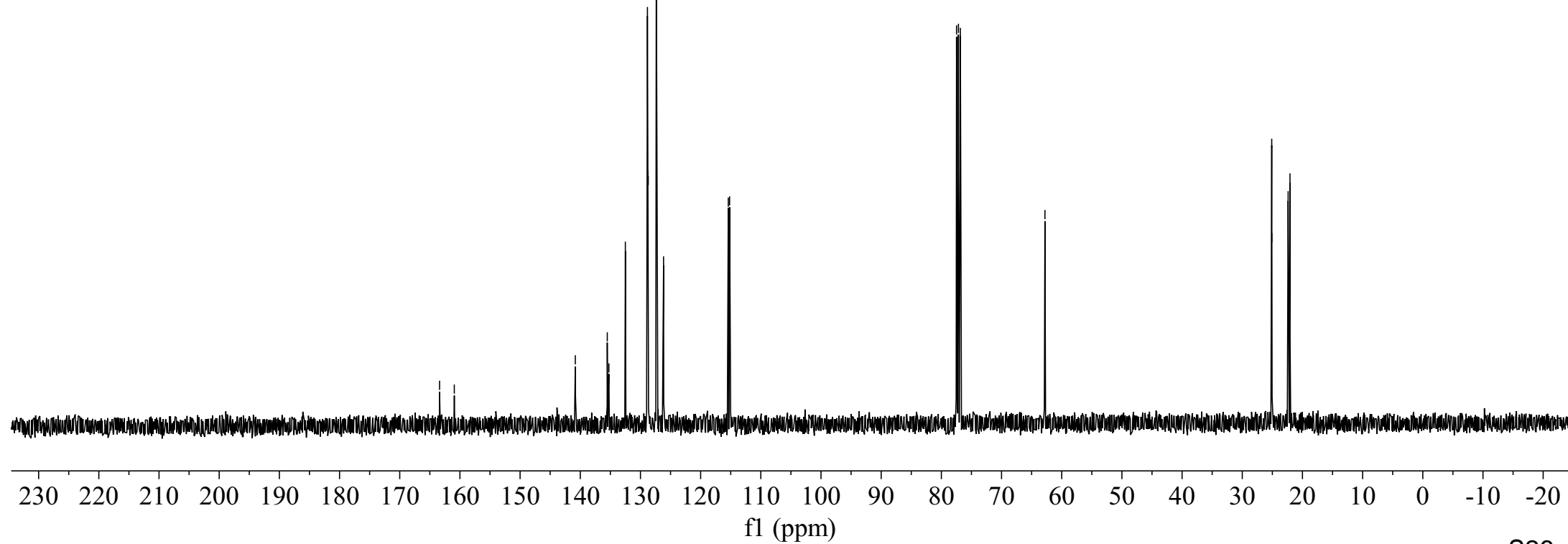
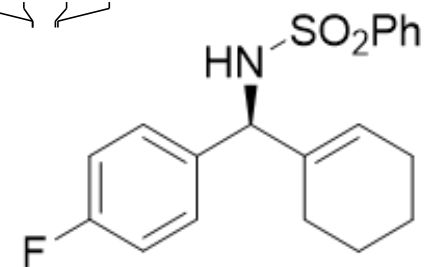
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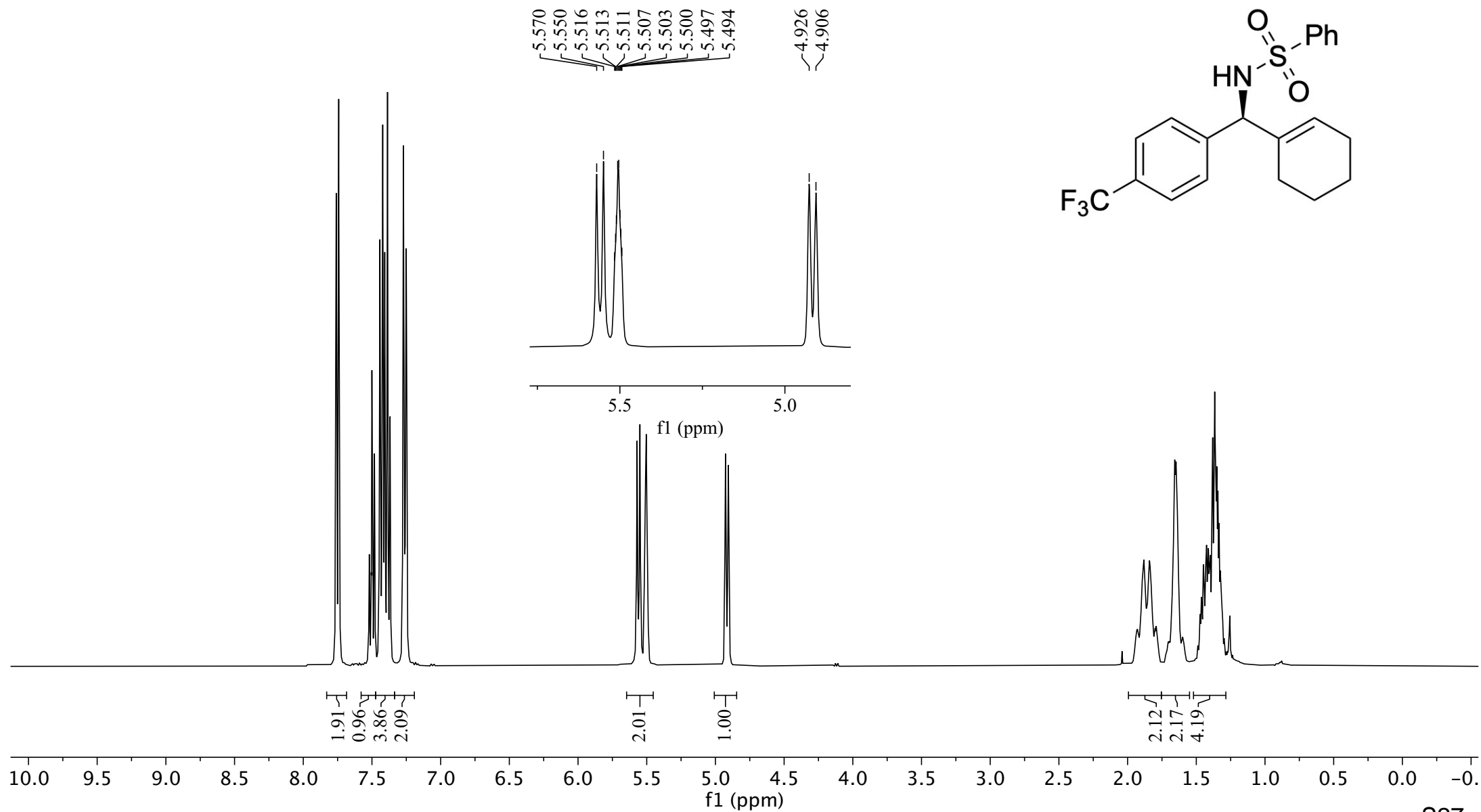


77.48
77.16
76.84
62.79

25.10
25.08
22.38
22.07

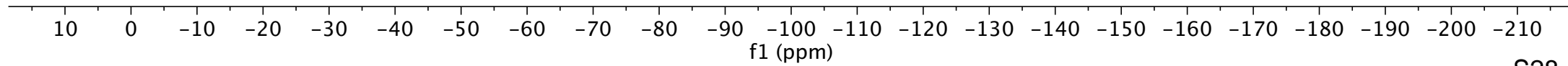
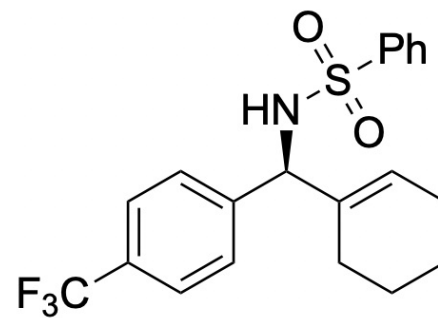


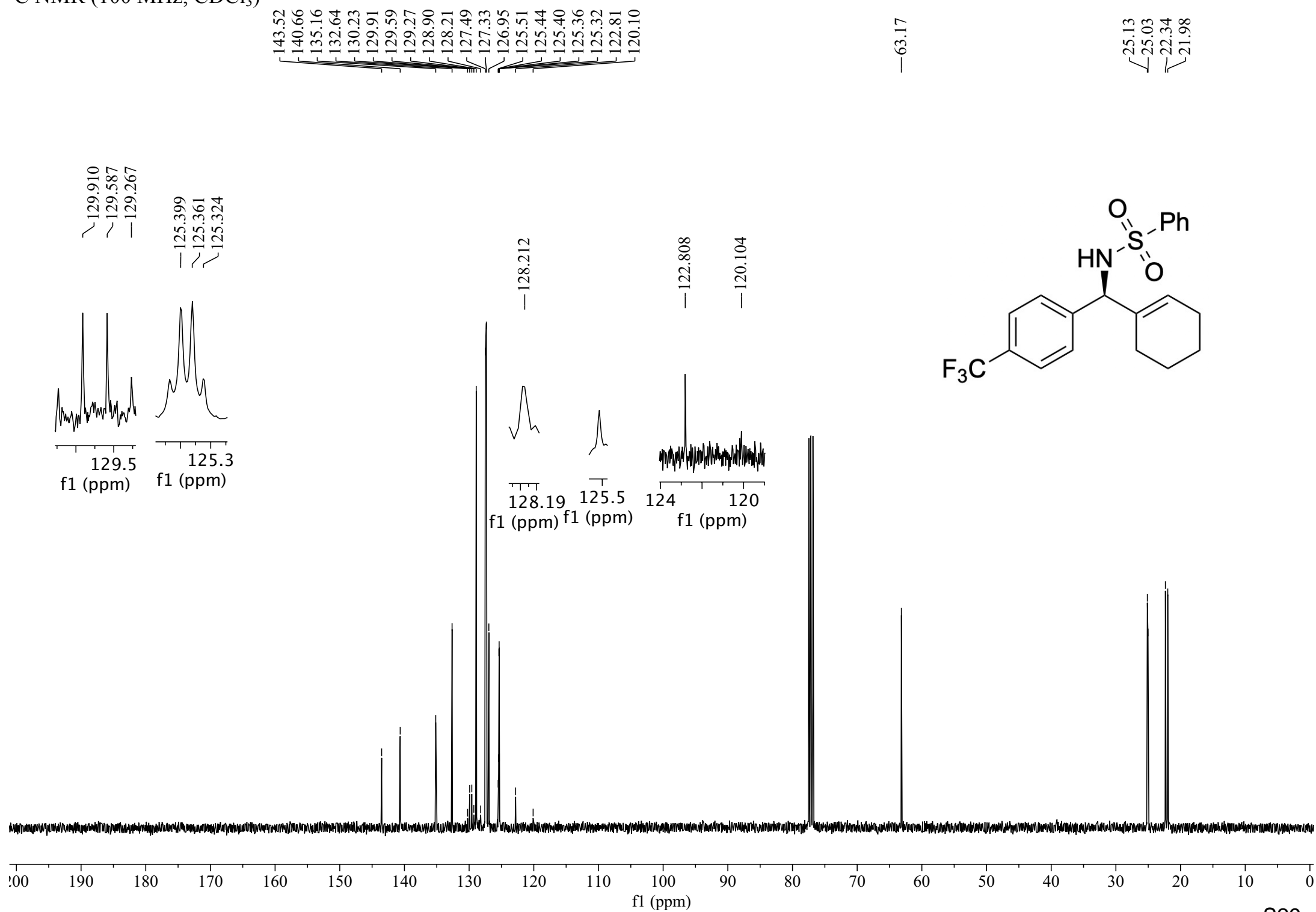
¹H NMR (400 MHz, CDCl₃)



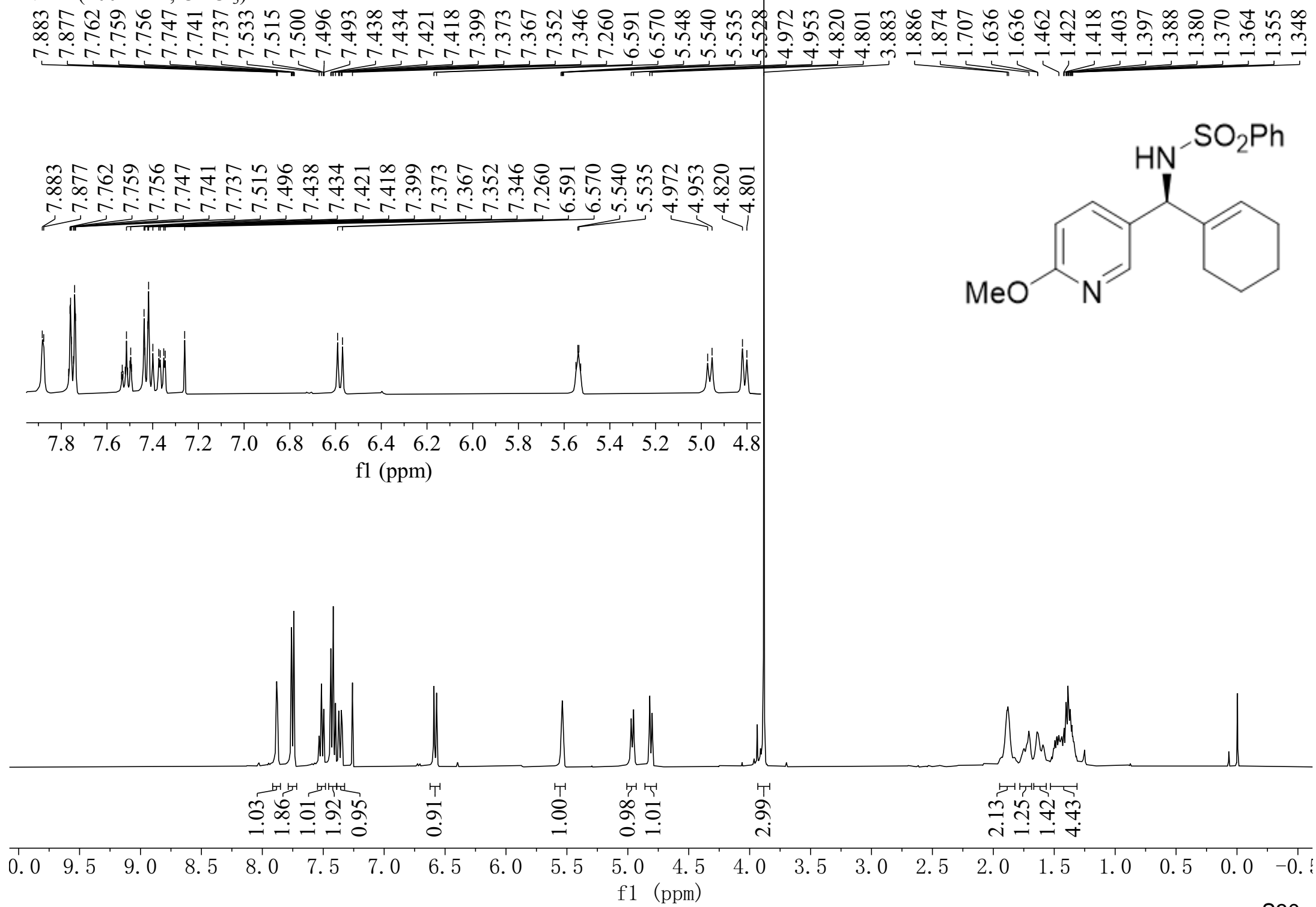
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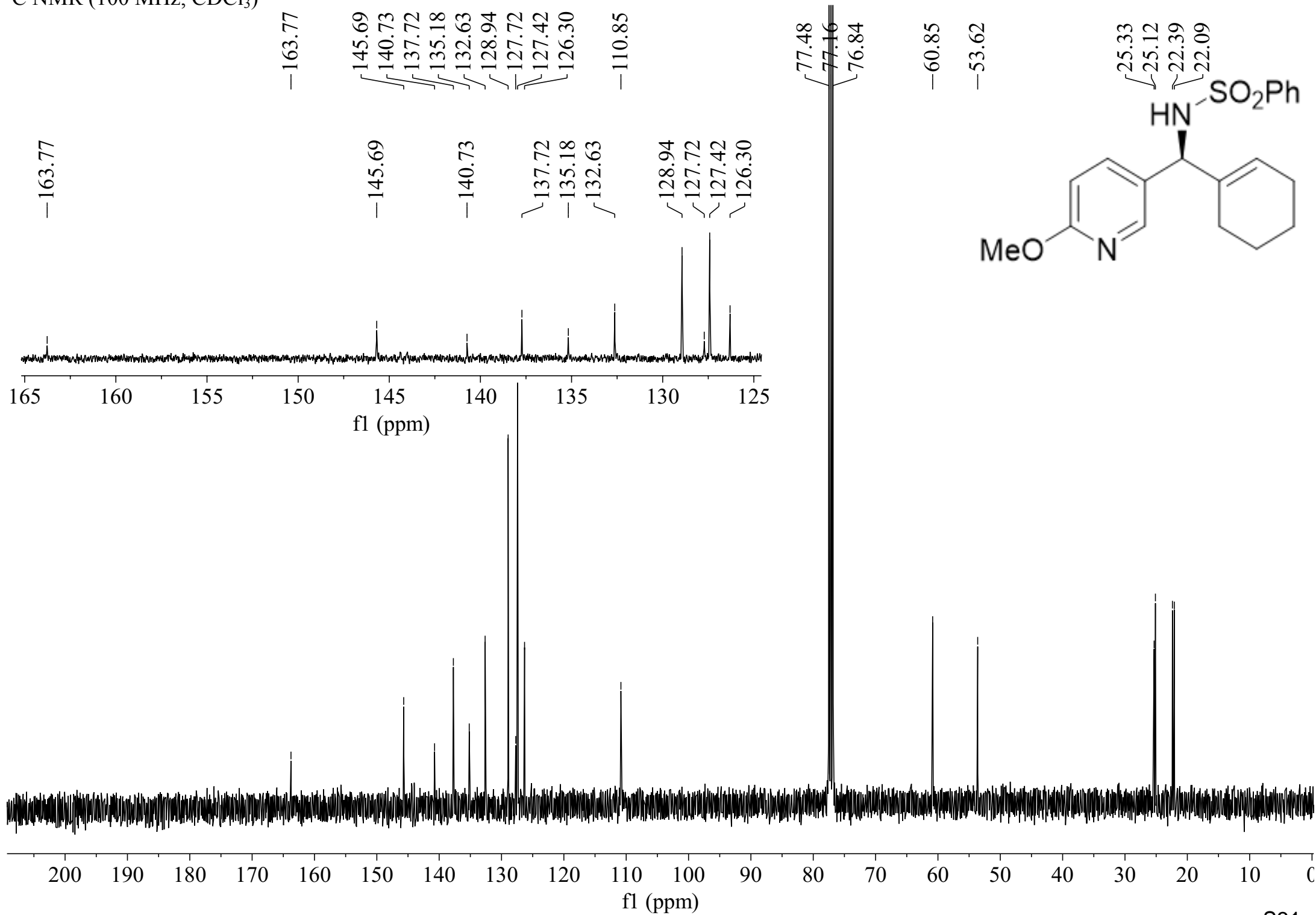
—62.594



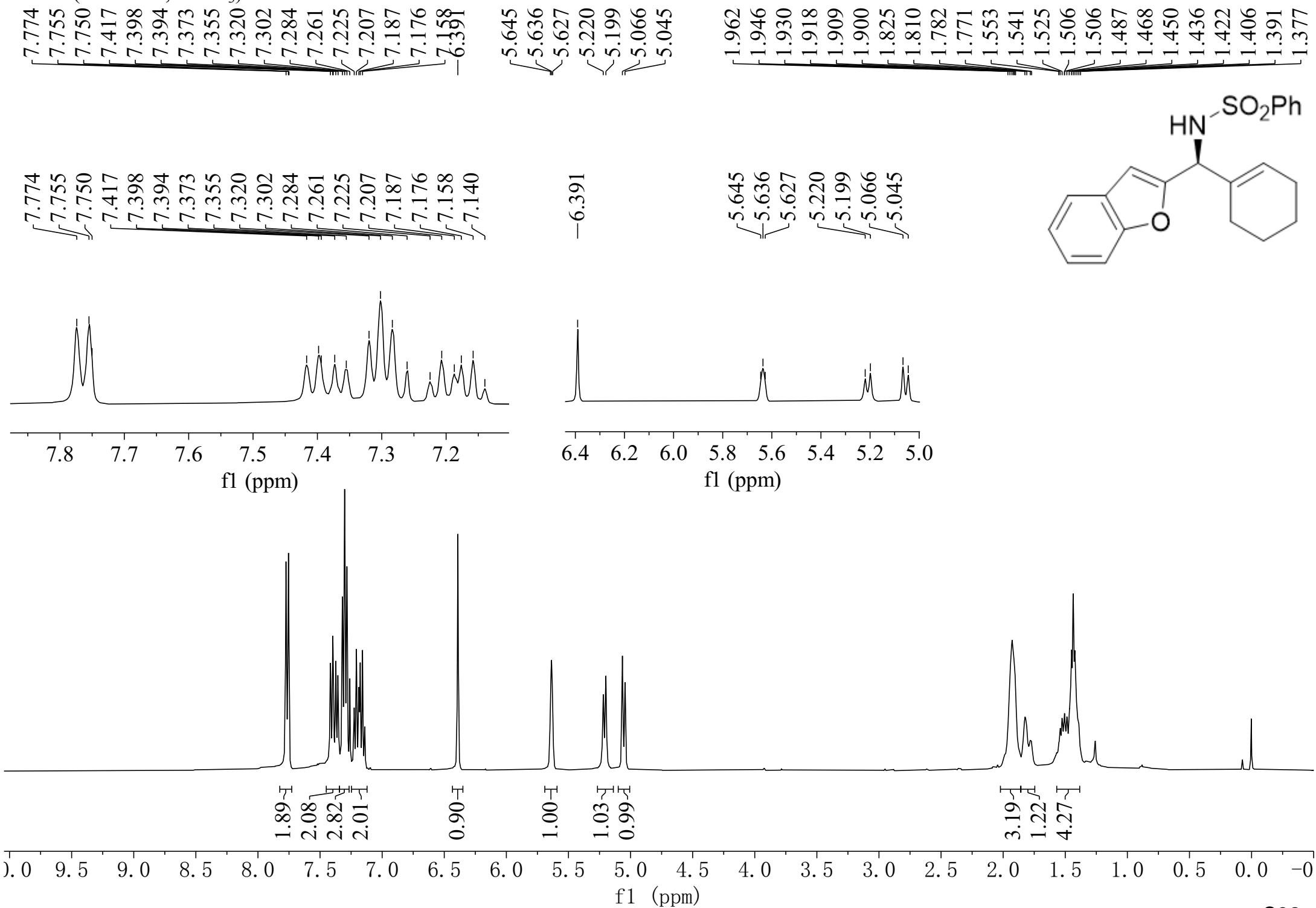


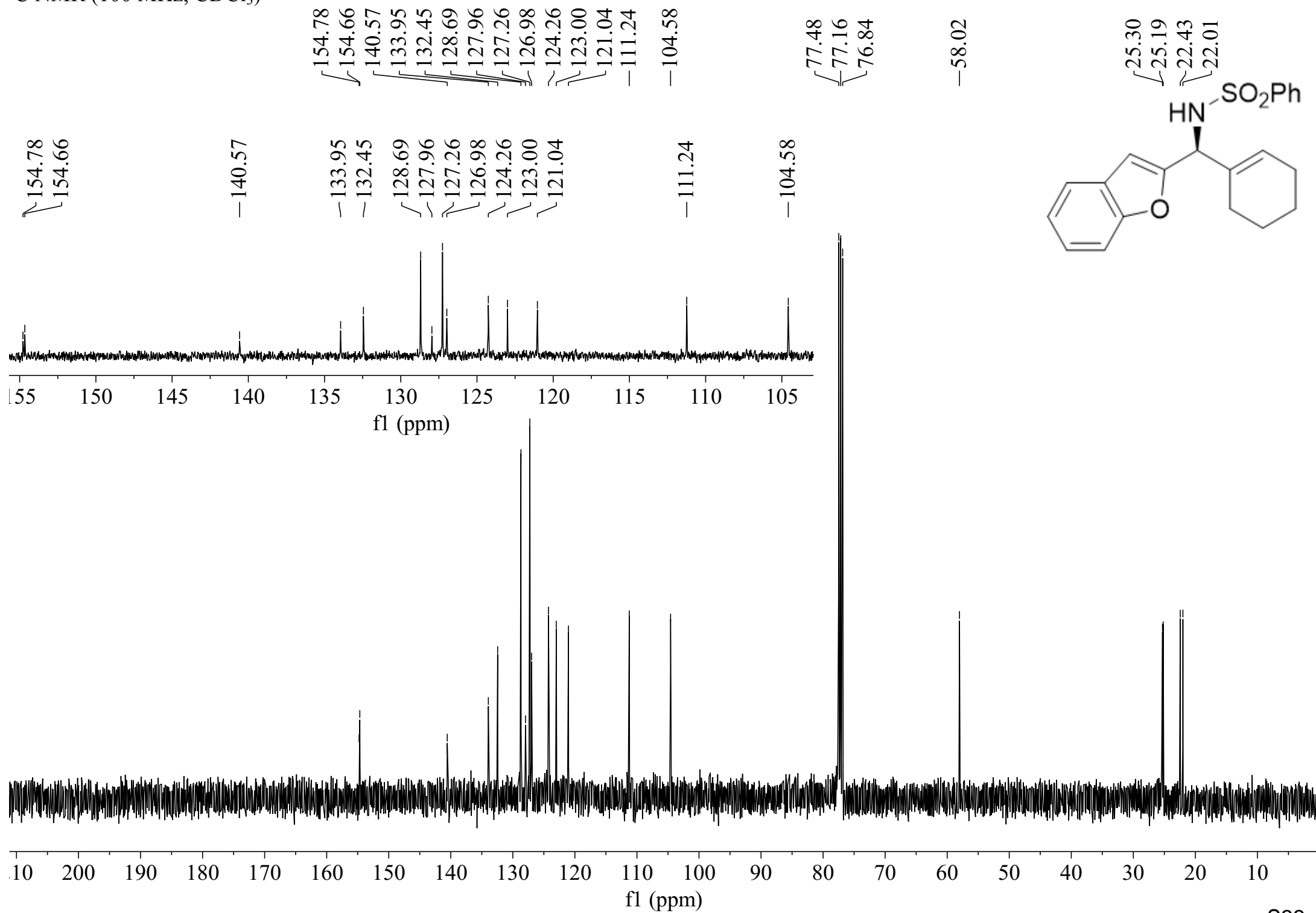
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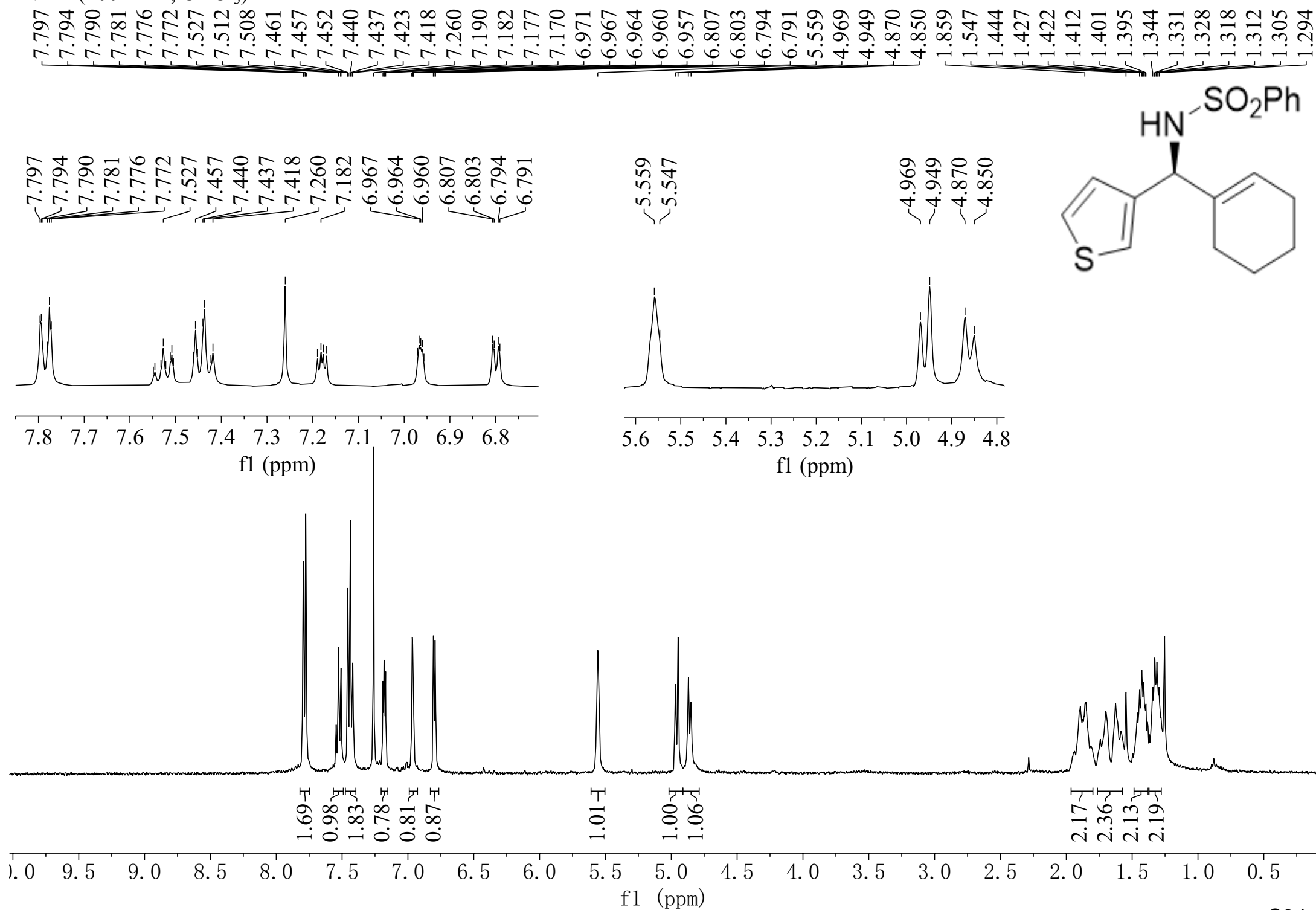


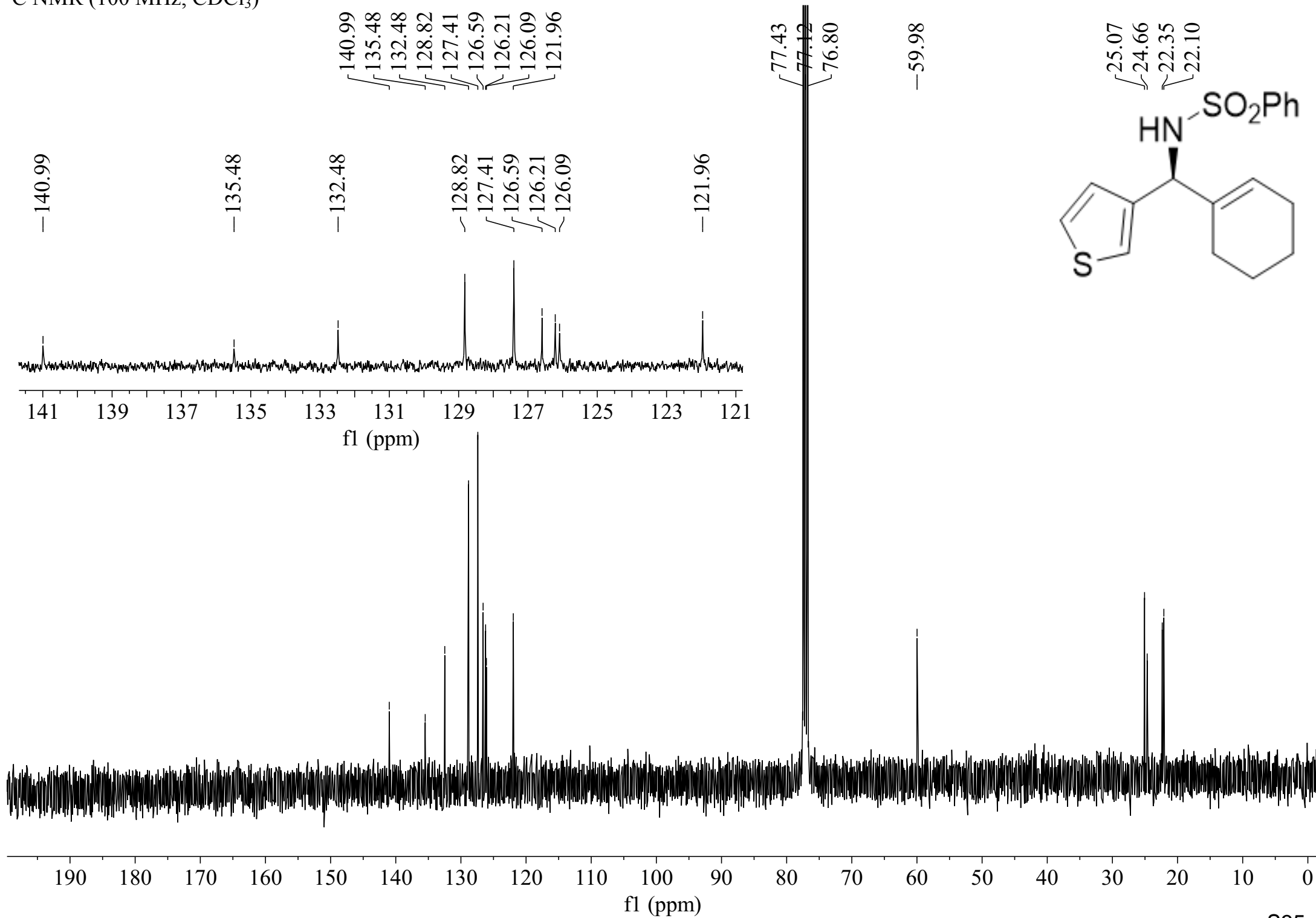
¹H NMR (400 MHz, CDCl₃)



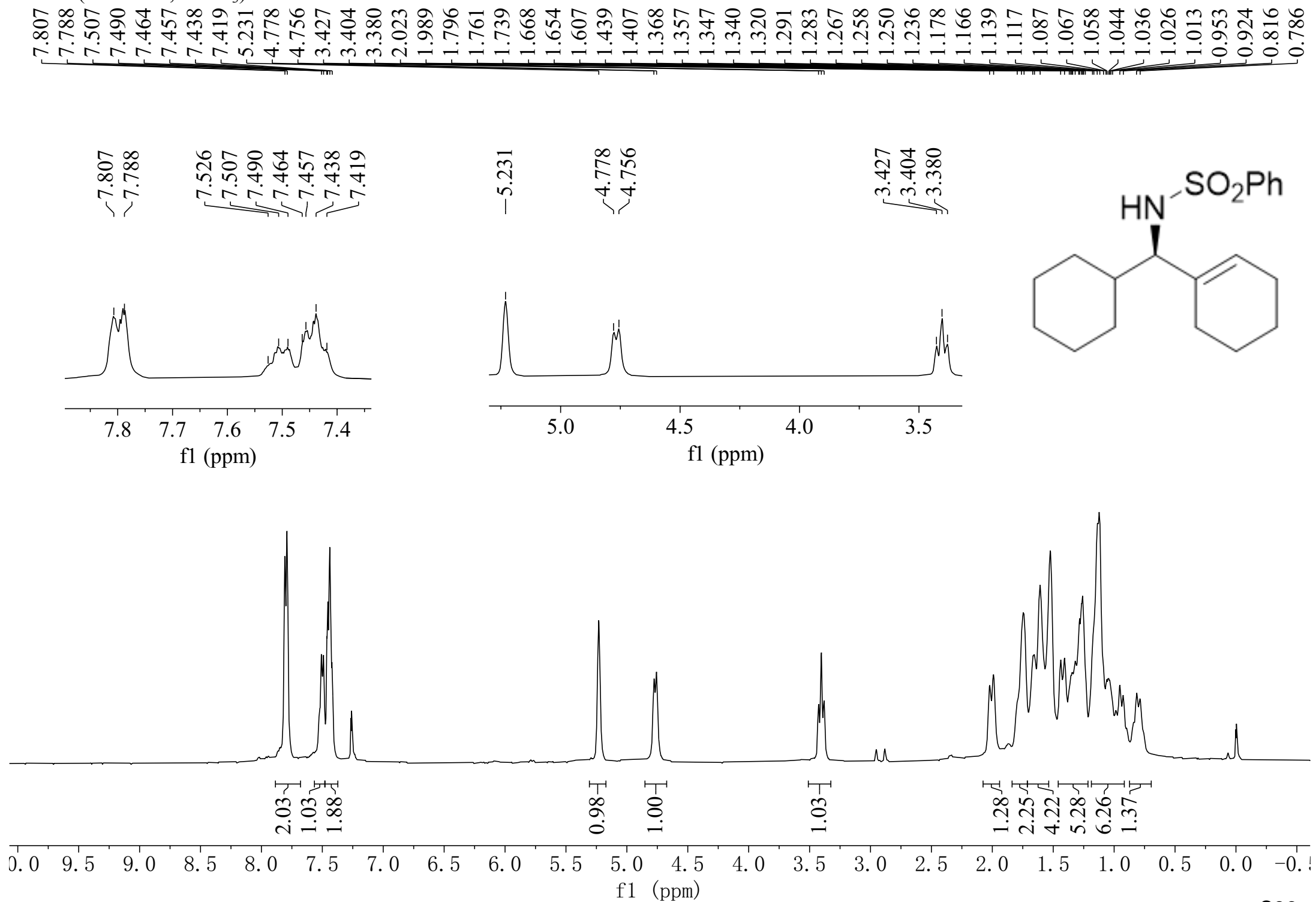


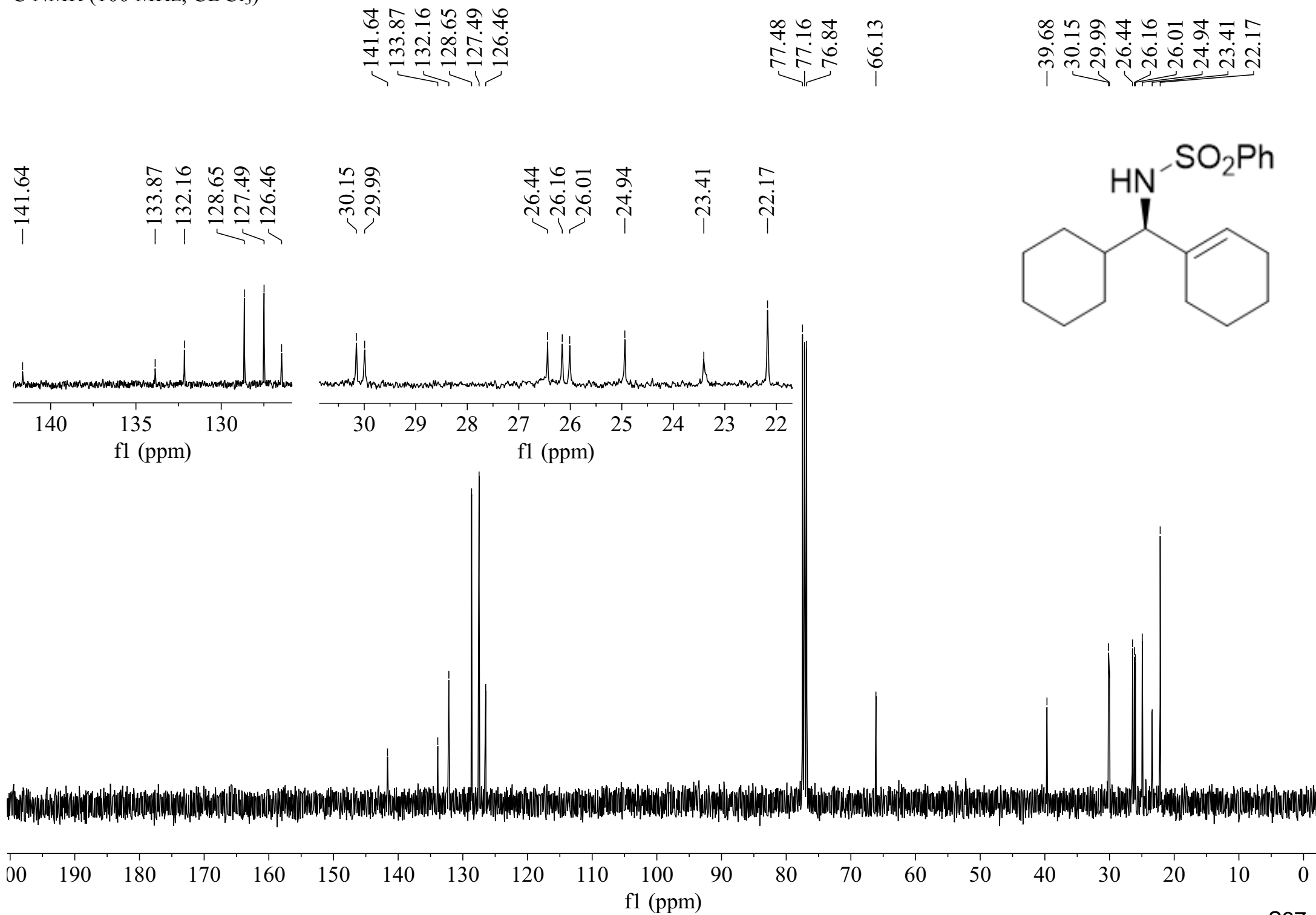
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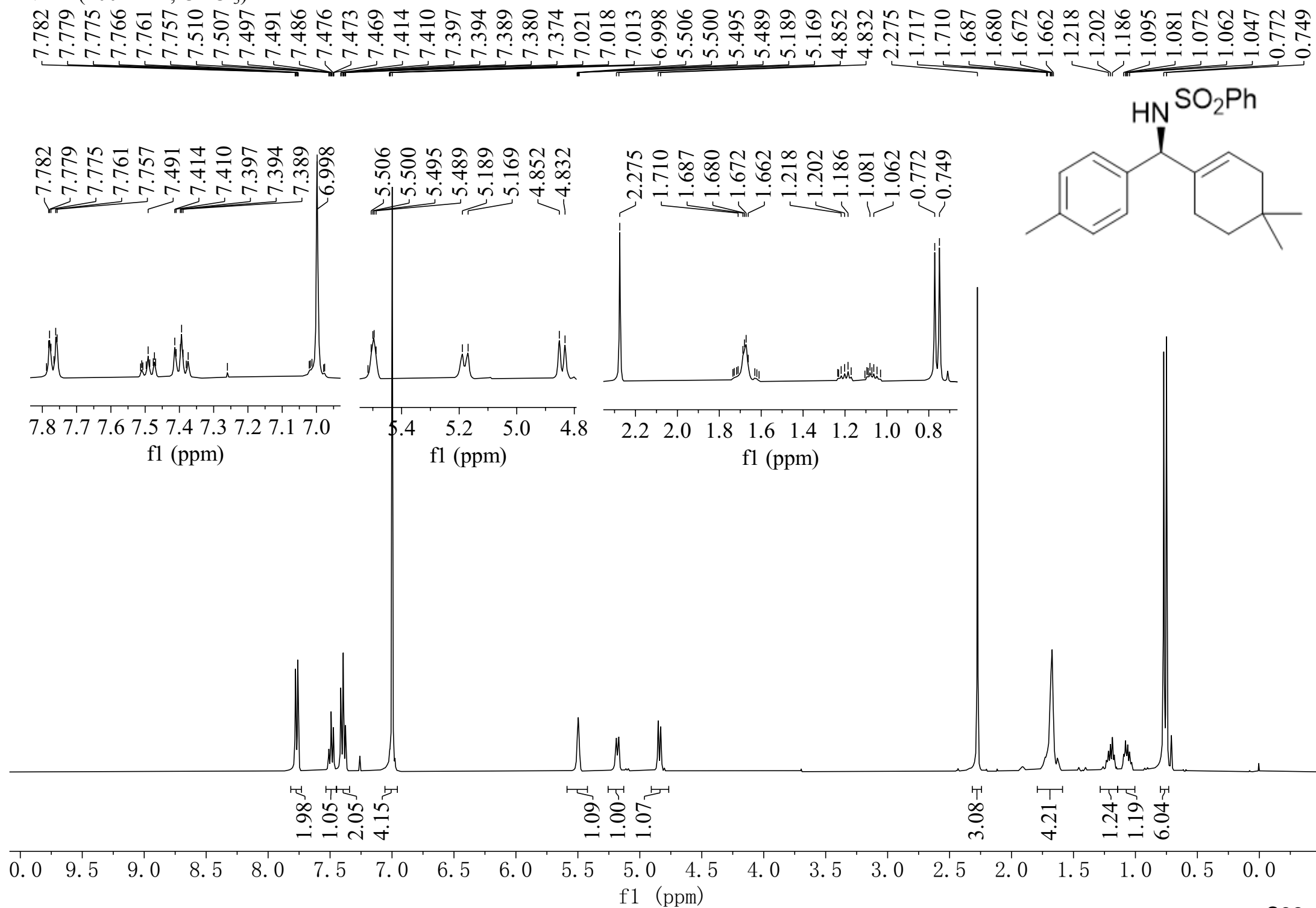


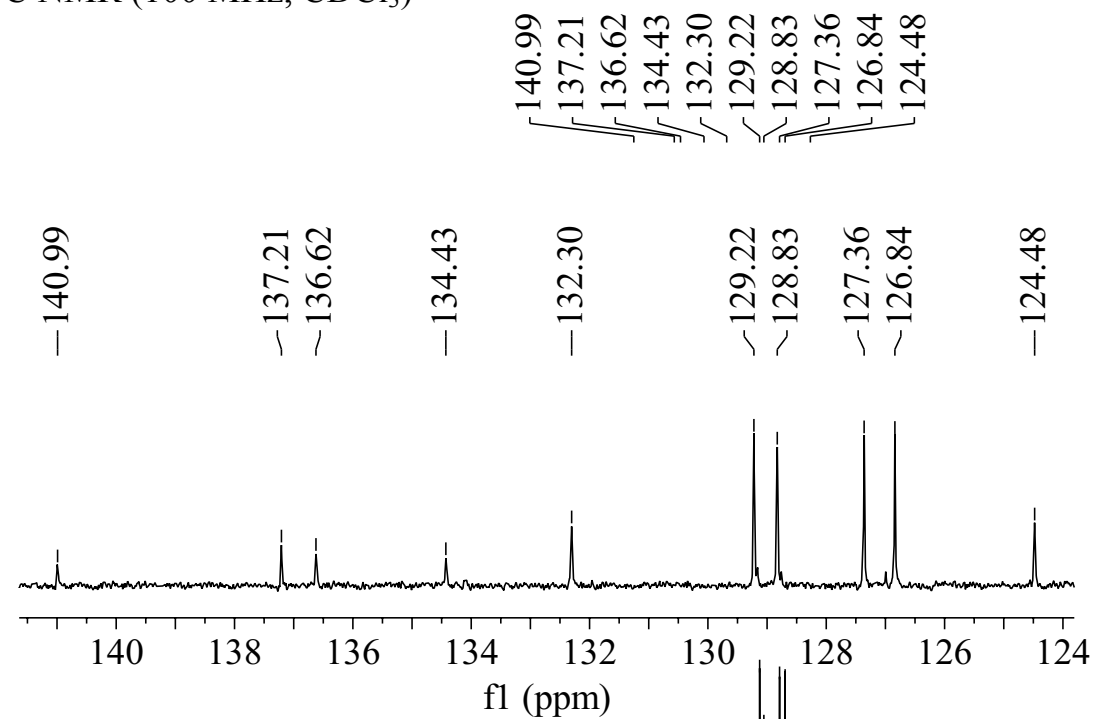
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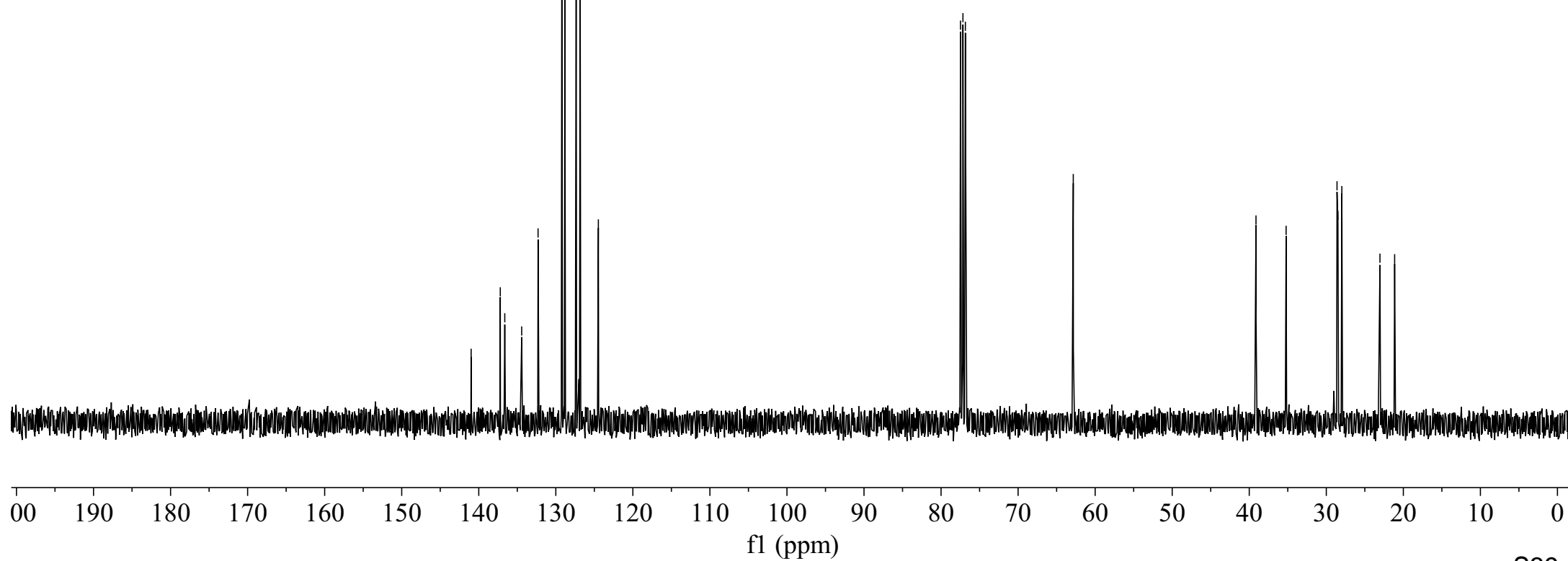
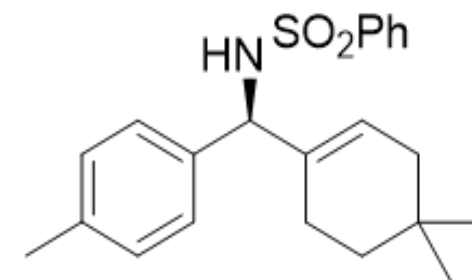


¹H NMR (400 MHz, CDCl₃)

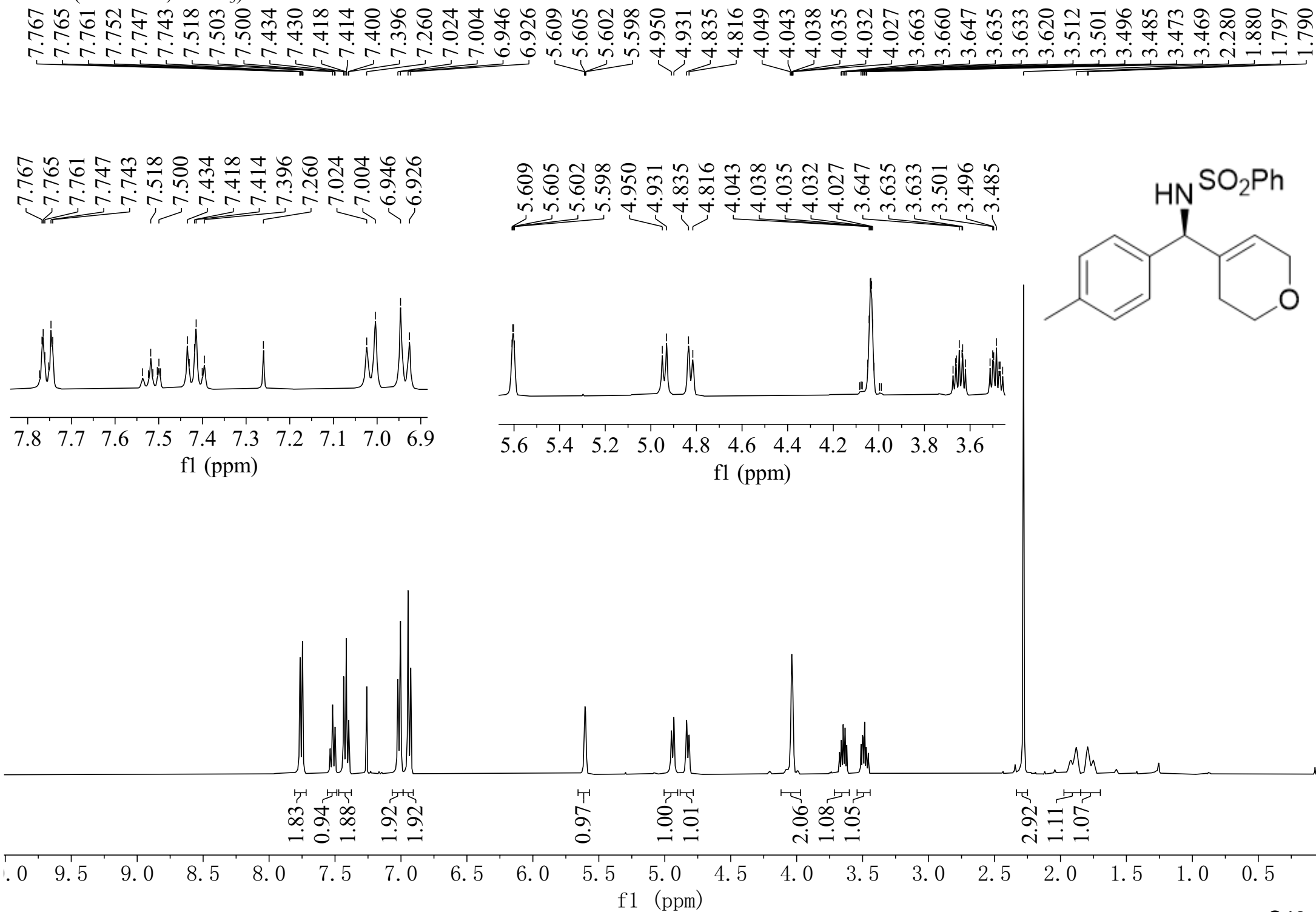


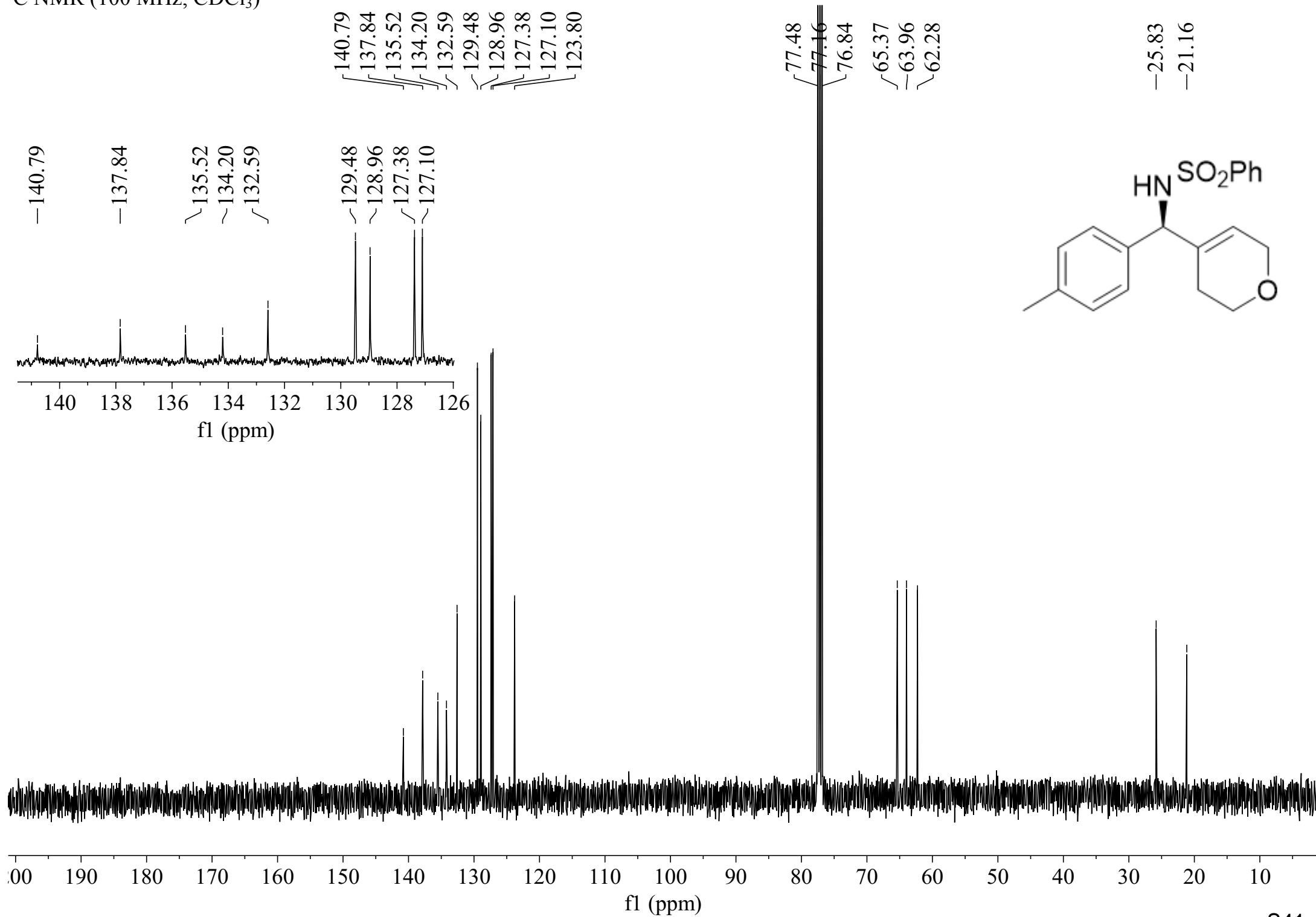


77.48
77.16
76.84
—62.84
39.13
35.22
28.61
28.49
27.98
23.04
21.13

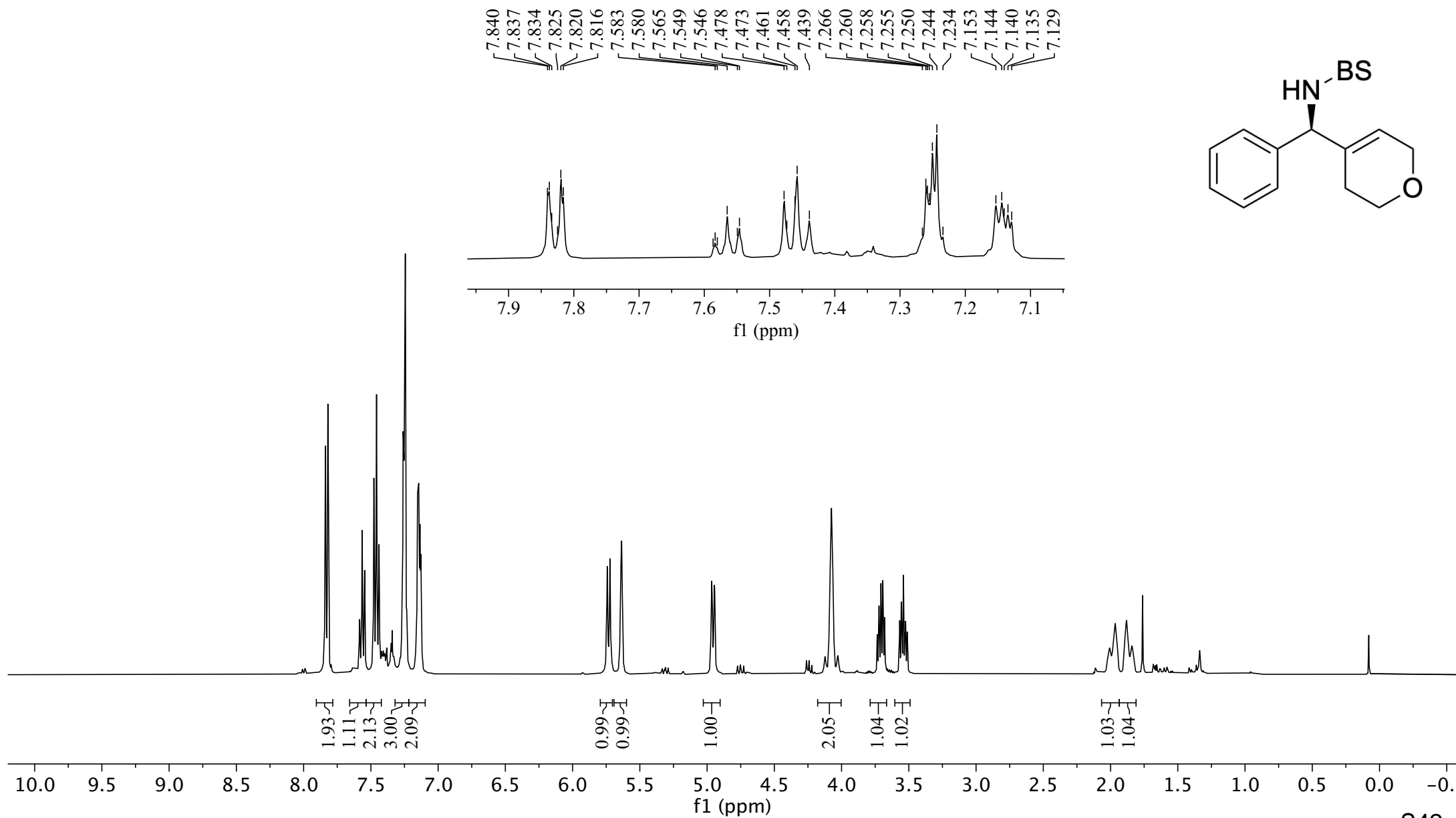


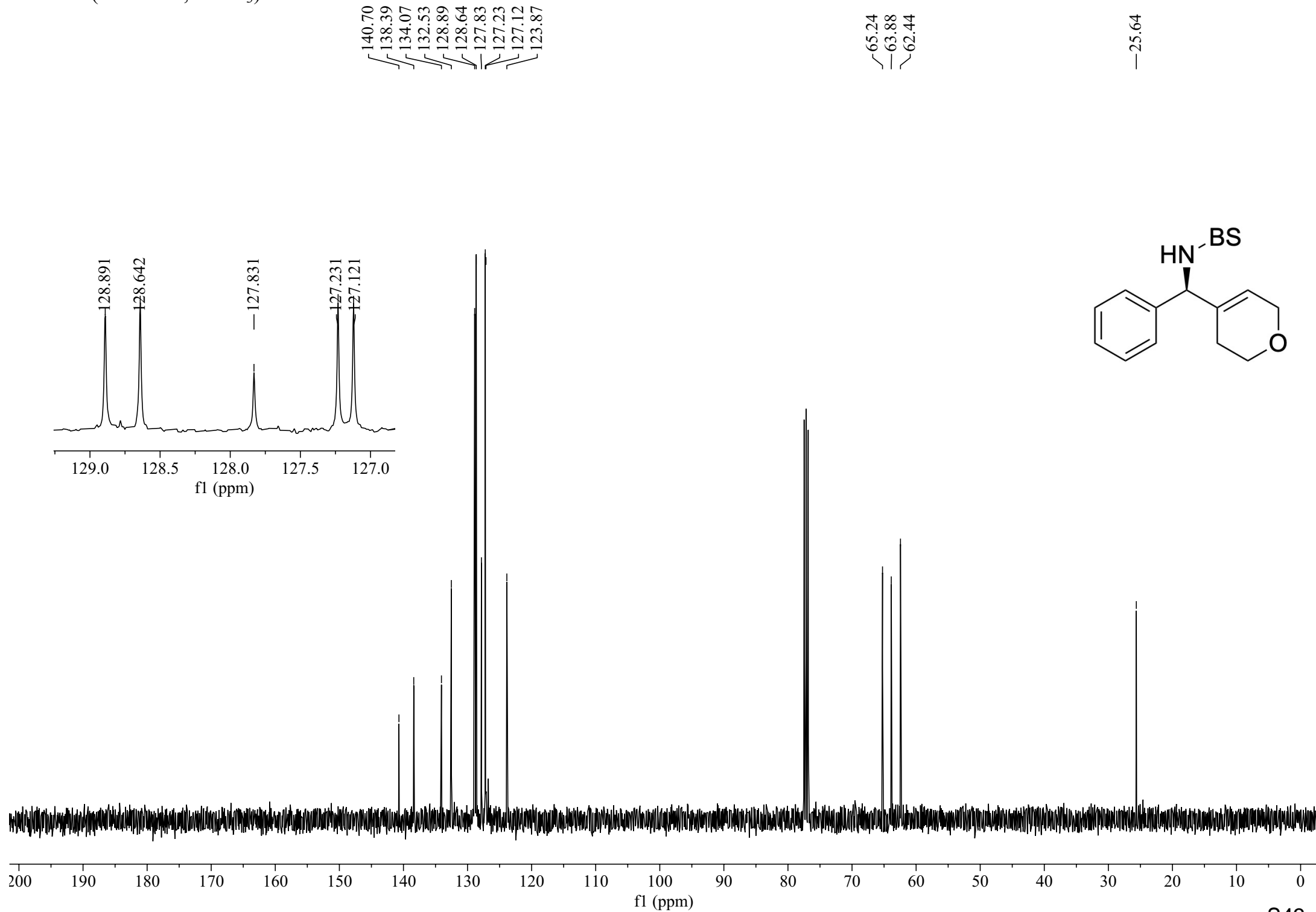
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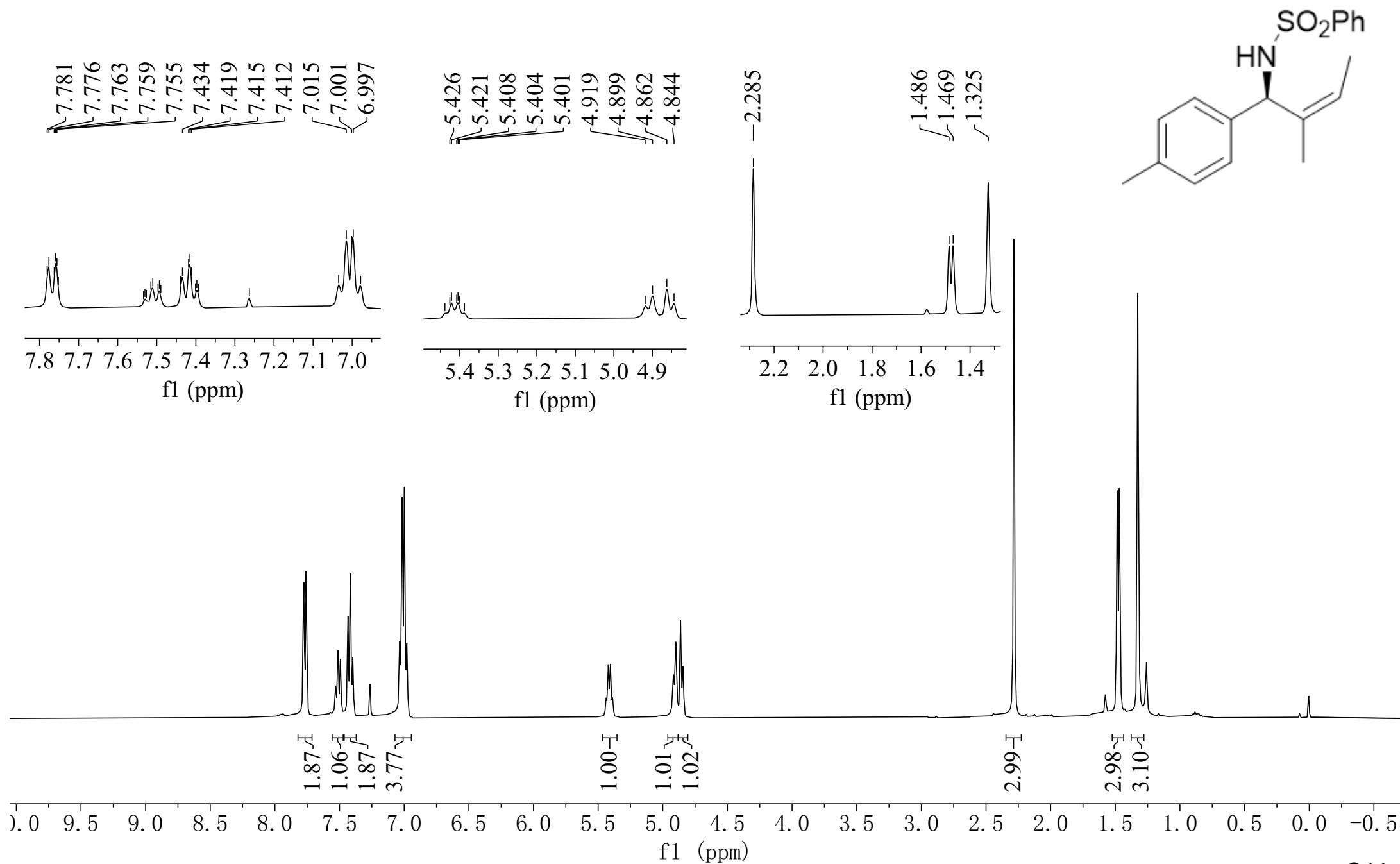


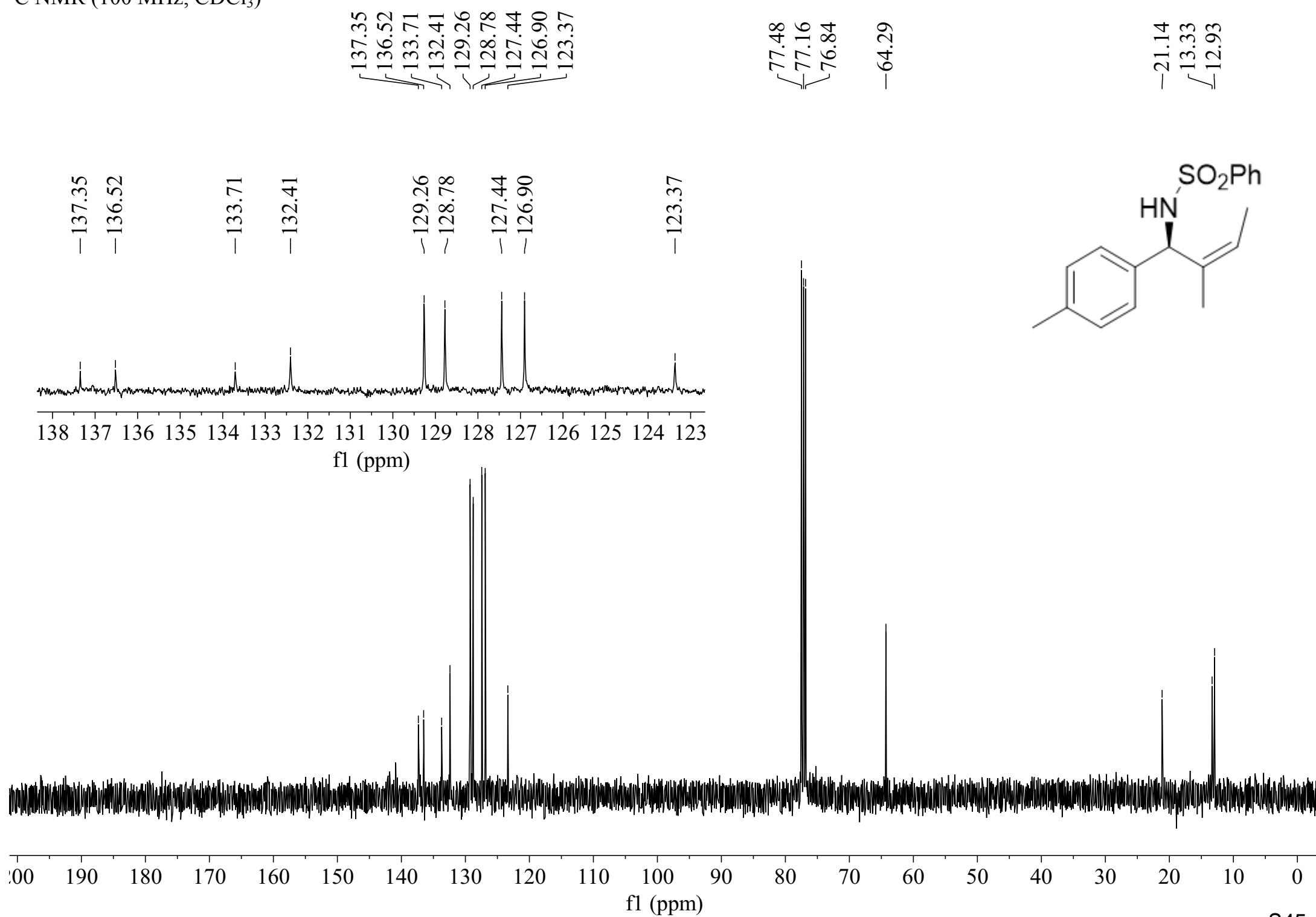
¹H NMR (400 MHz, CDCl₃)





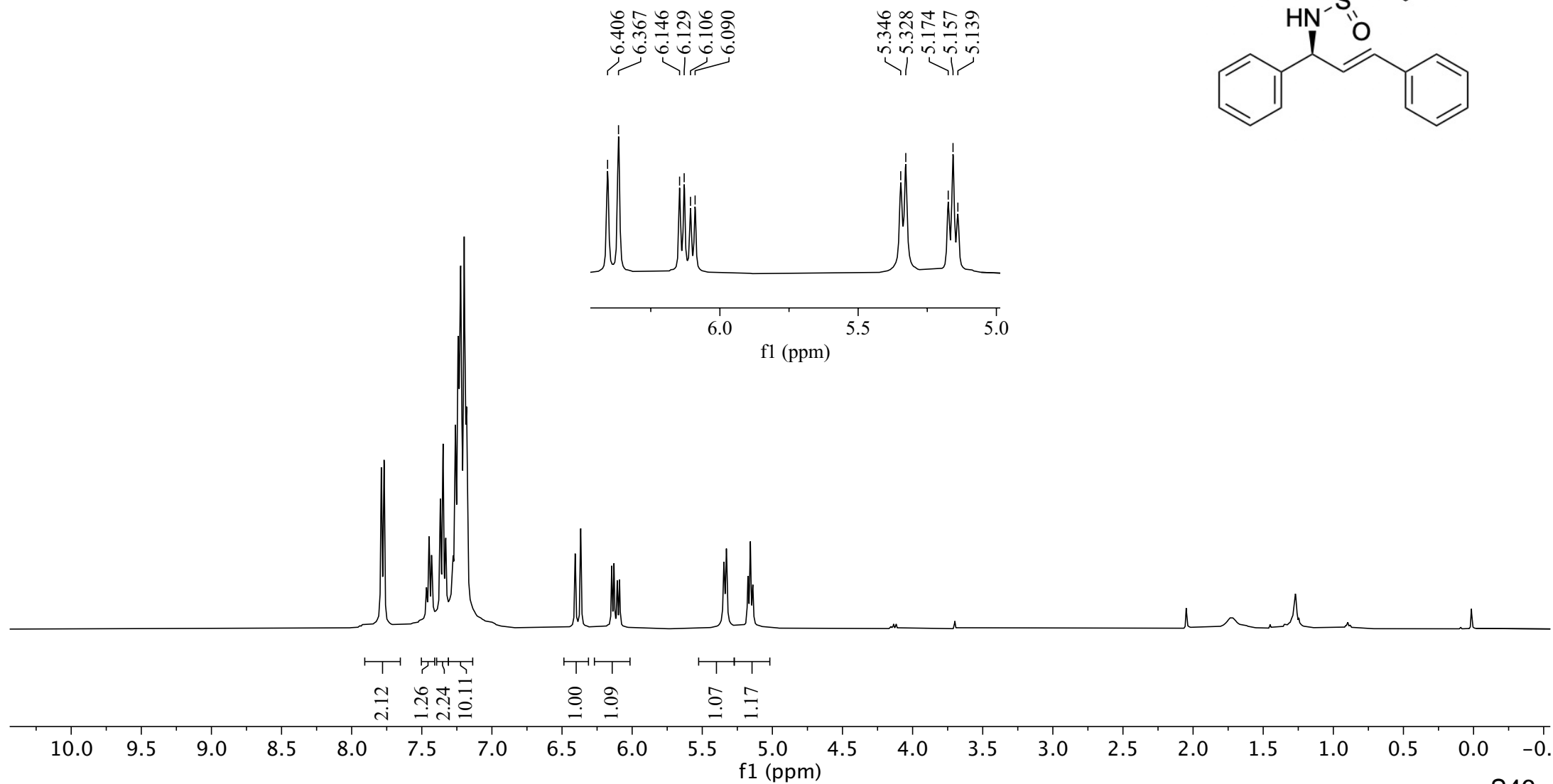
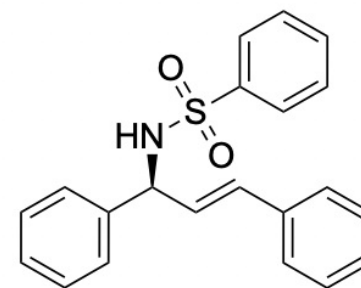
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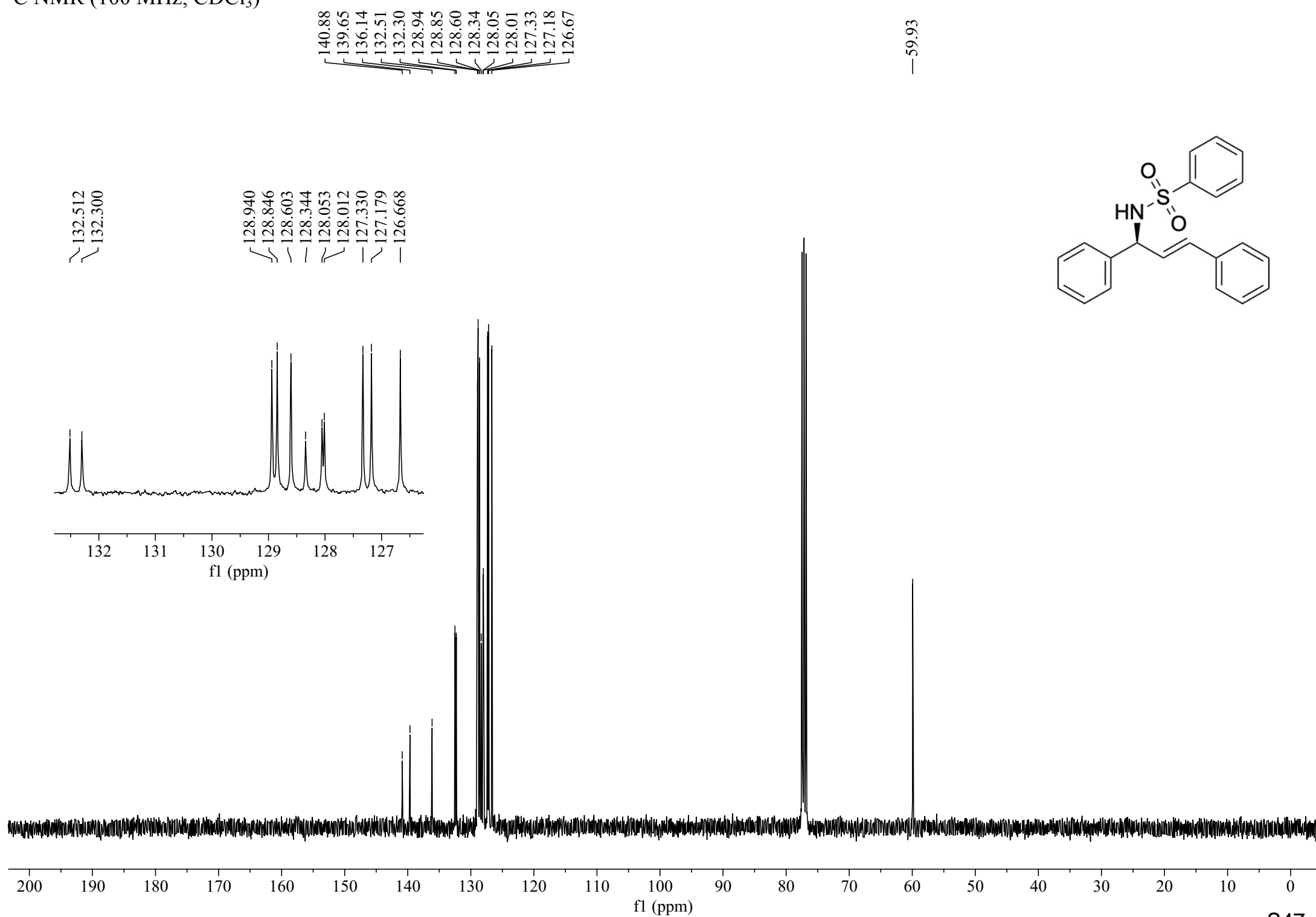




¹H NMR (400 MHz, CDCl₃)

7.789
7.769
7.467
7.448
7.430
7.367
7.348
7.329
7.282
7.277
7.260
7.241
7.223
7.197
7.179
6.406
6.367
6.146
6.129
6.106
6.090
5.346
5.328
5.174
5.157
5.139



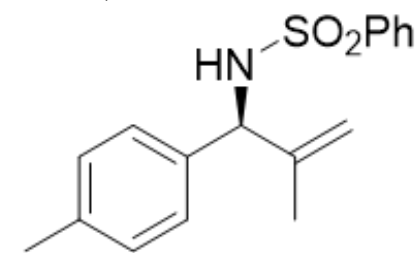


¹H NMR (400 MHz, CDCl₃)

7.768
7.753
7.748
7.744
7.531
7.527
7.513
7.508
7.494
7.490
7.427
7.423
7.407
7.403
7.389
7.385
7.262
7.019
6.999
6.957
6.941
4.981
4.905
4.892
4.822
4.804

2.280

1.540



7.768
7.753
7.748
7.744
7.531
7.527
7.513
7.508
7.494
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6.999
6.957
6.941

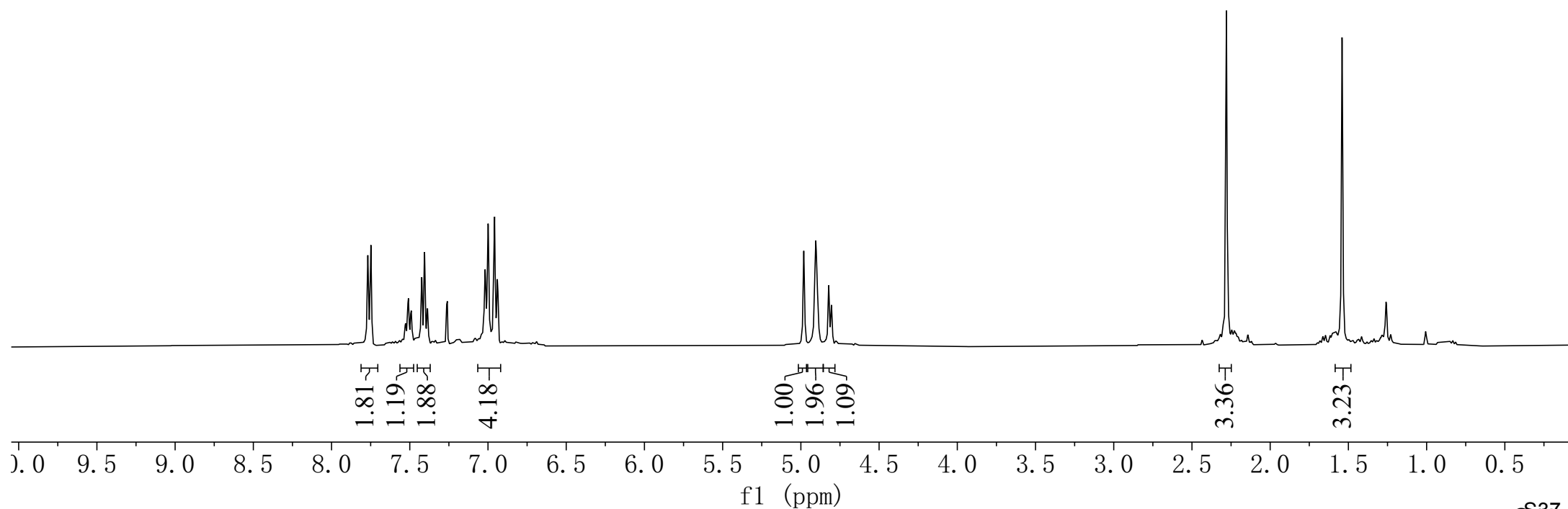
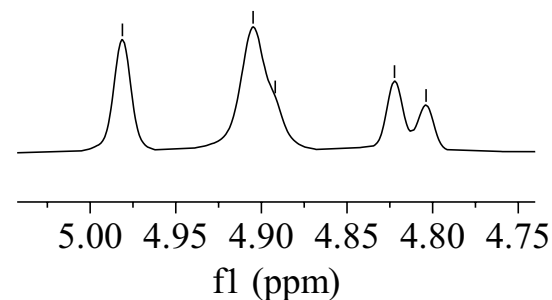
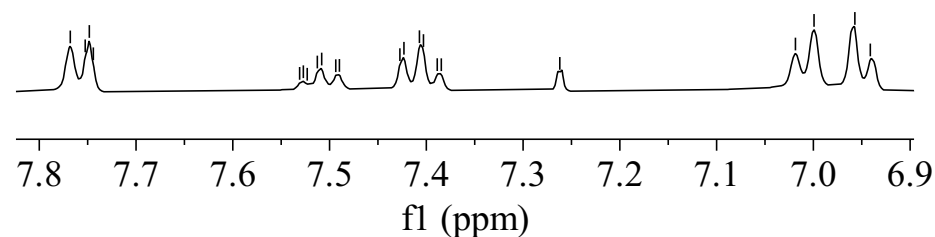
4.981

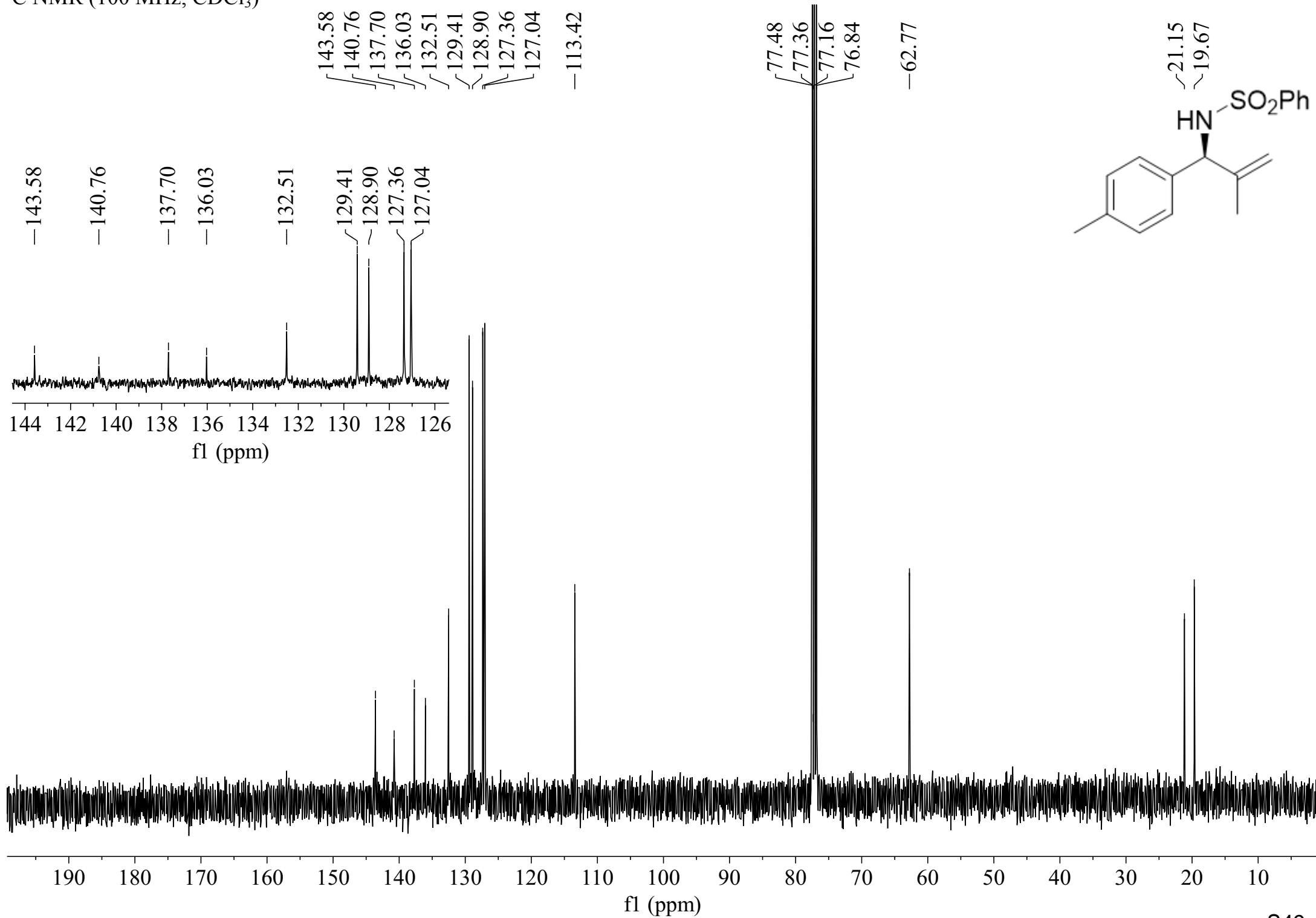
4.905

4.892

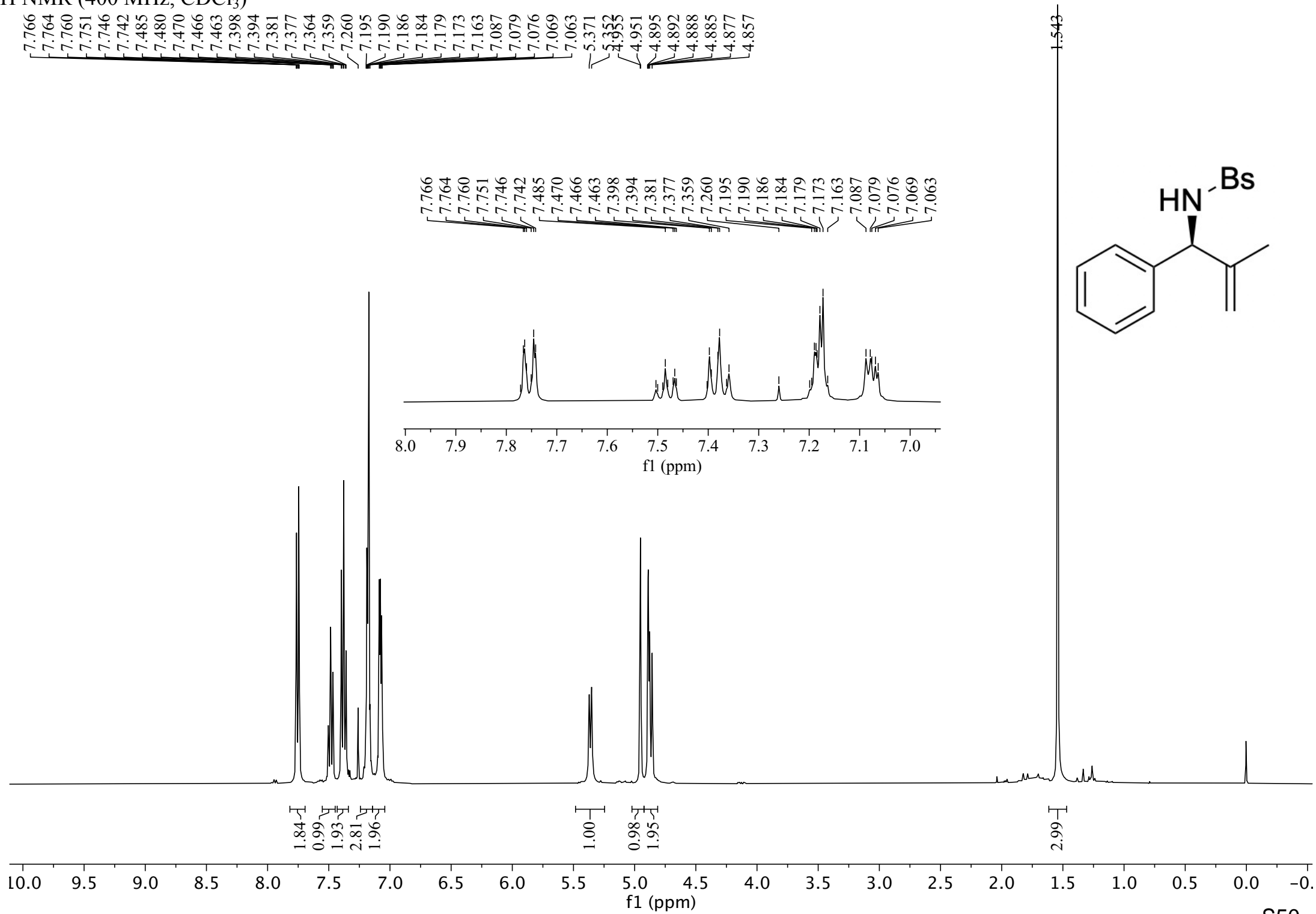
4.822

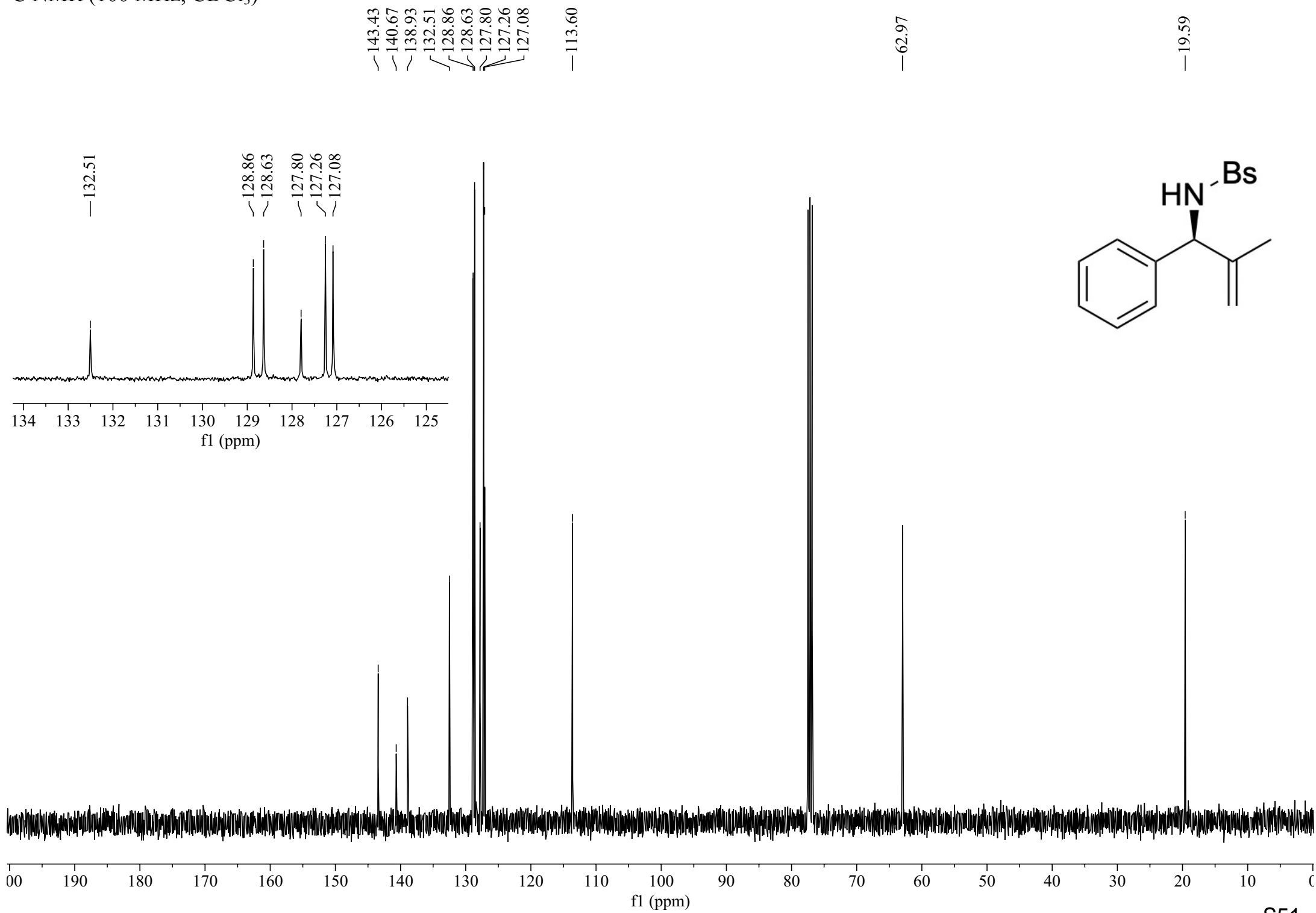
4.804



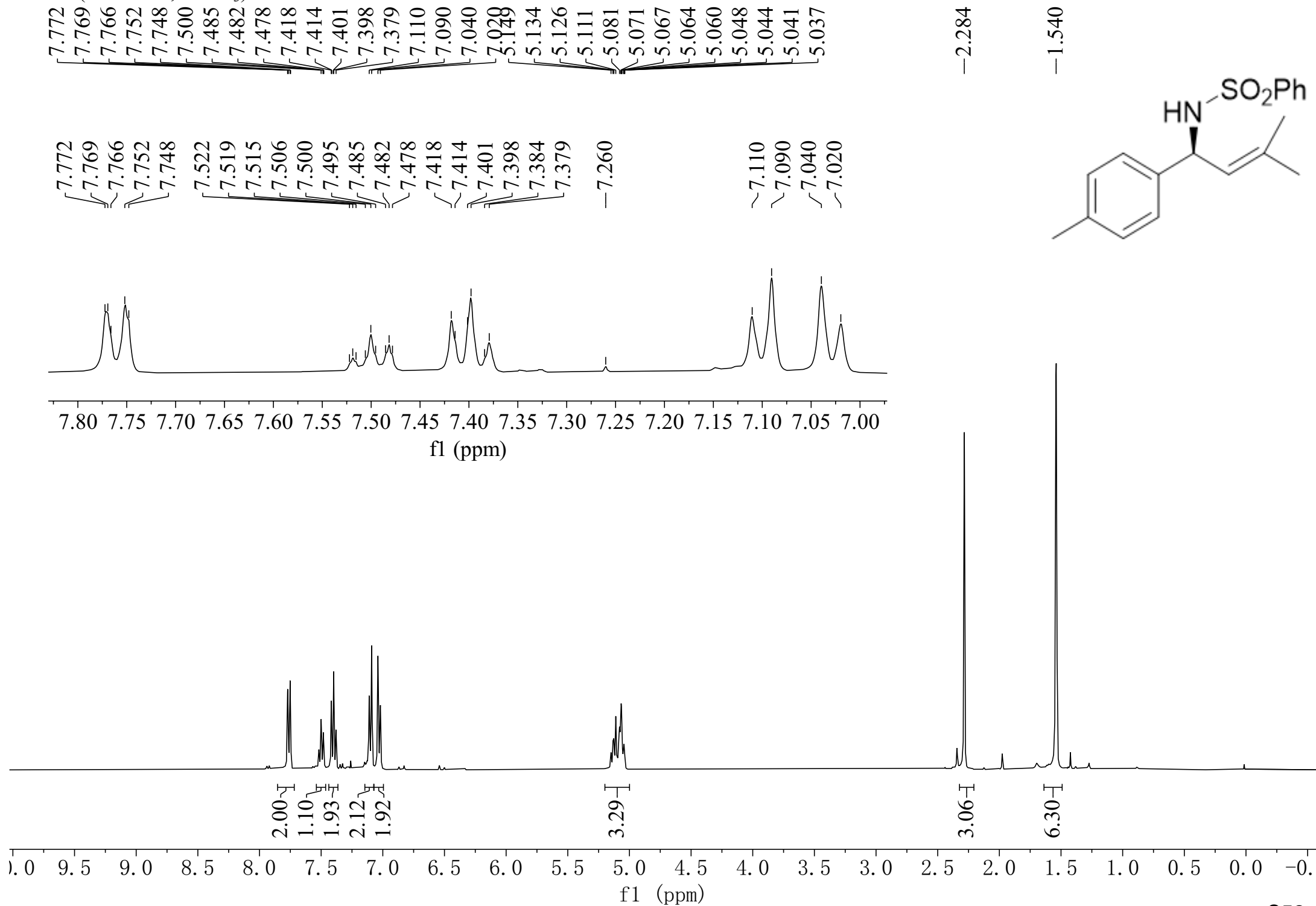


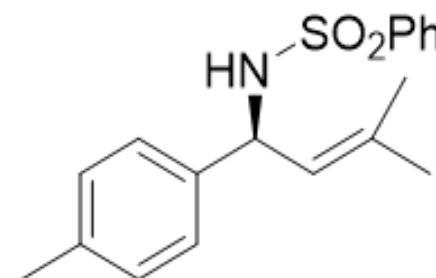
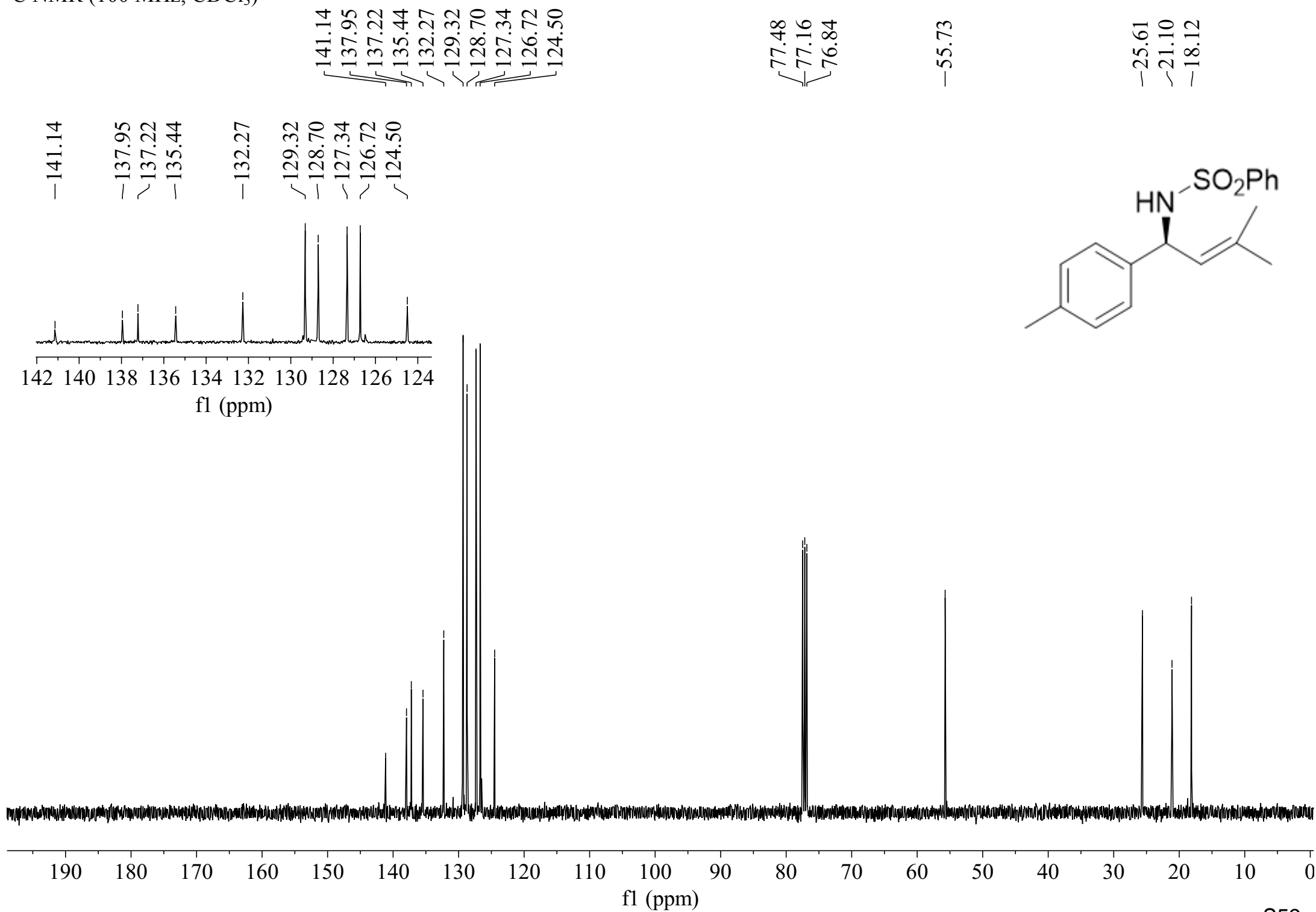
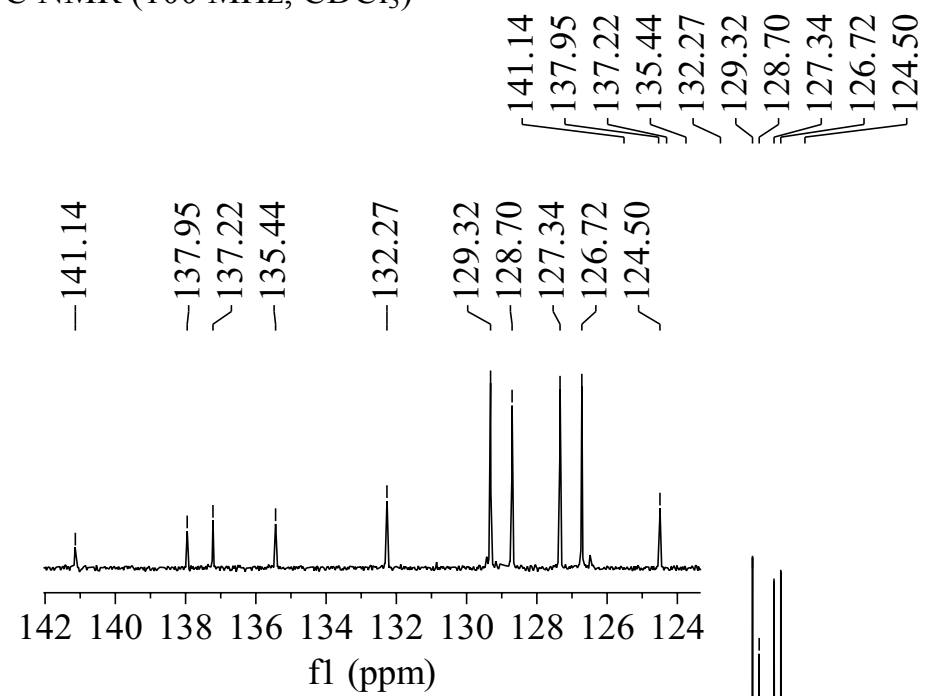
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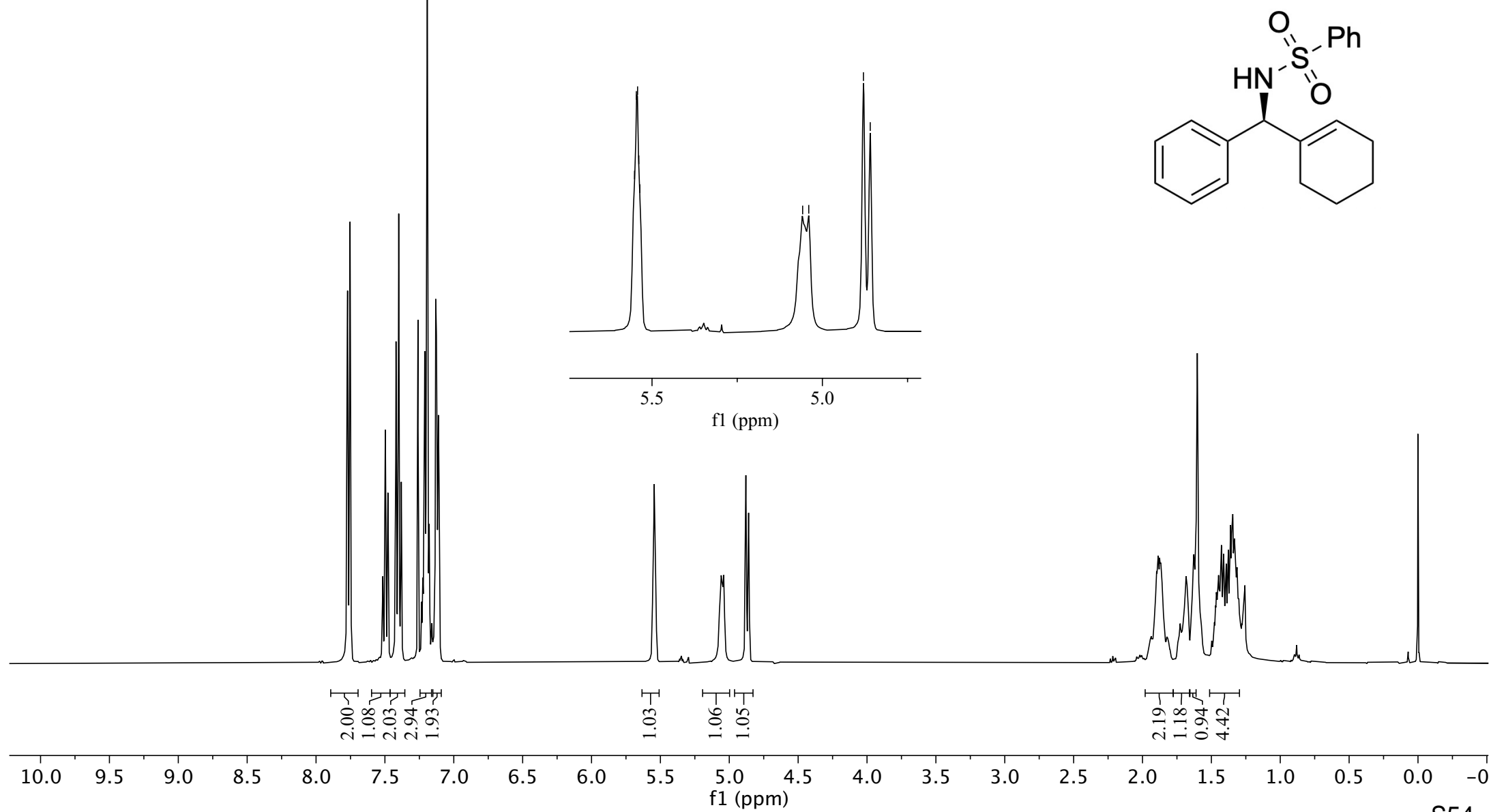


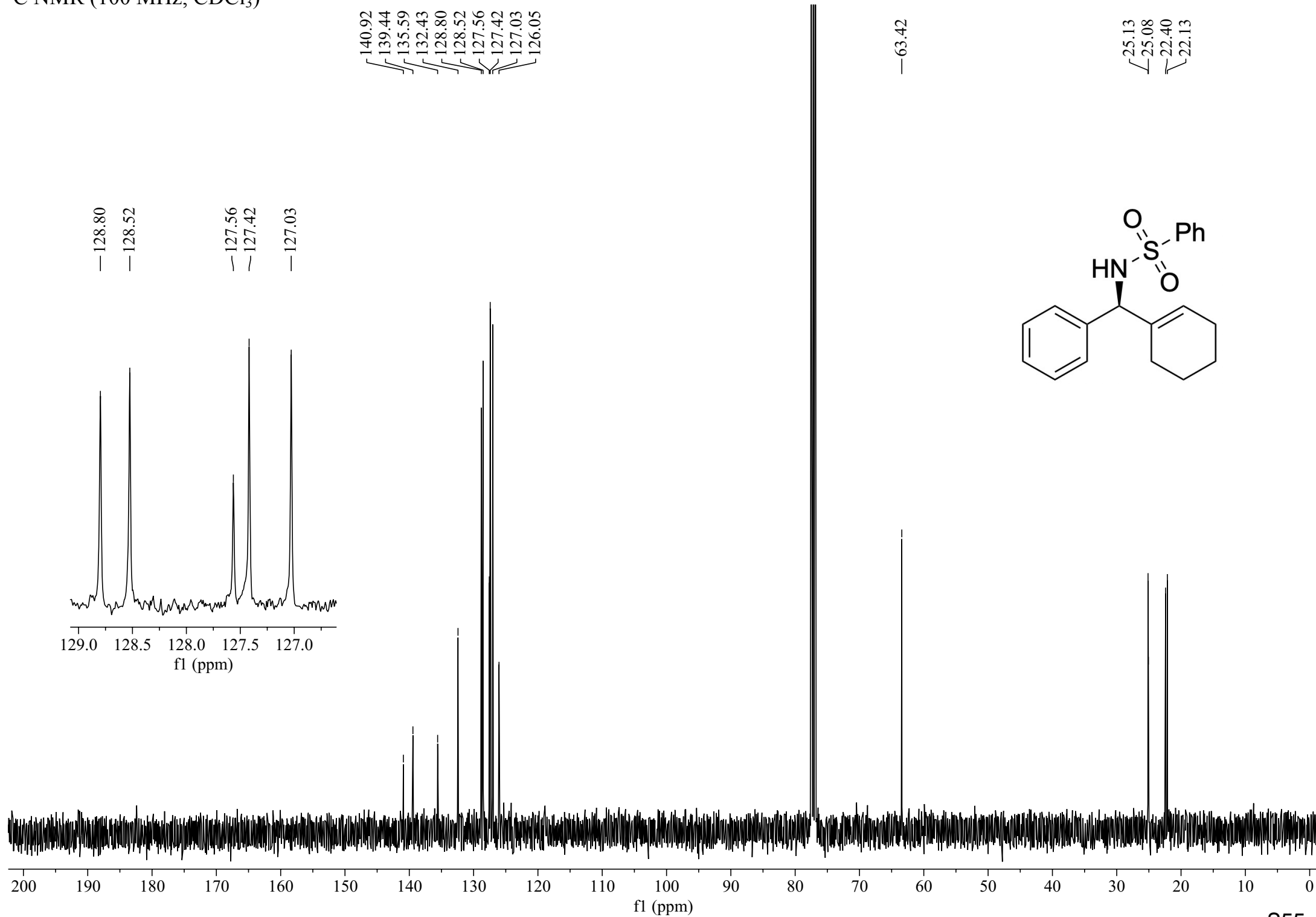
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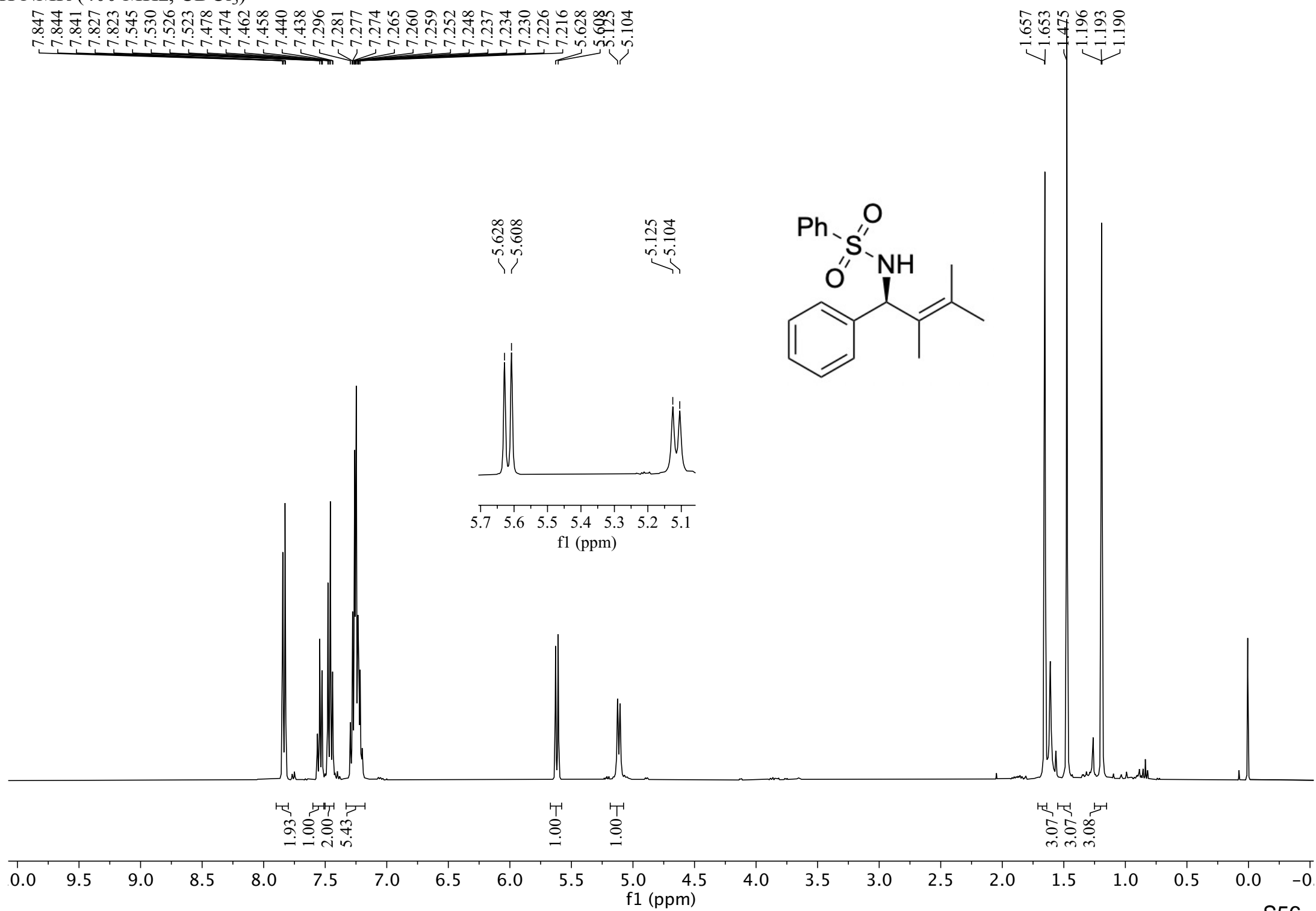


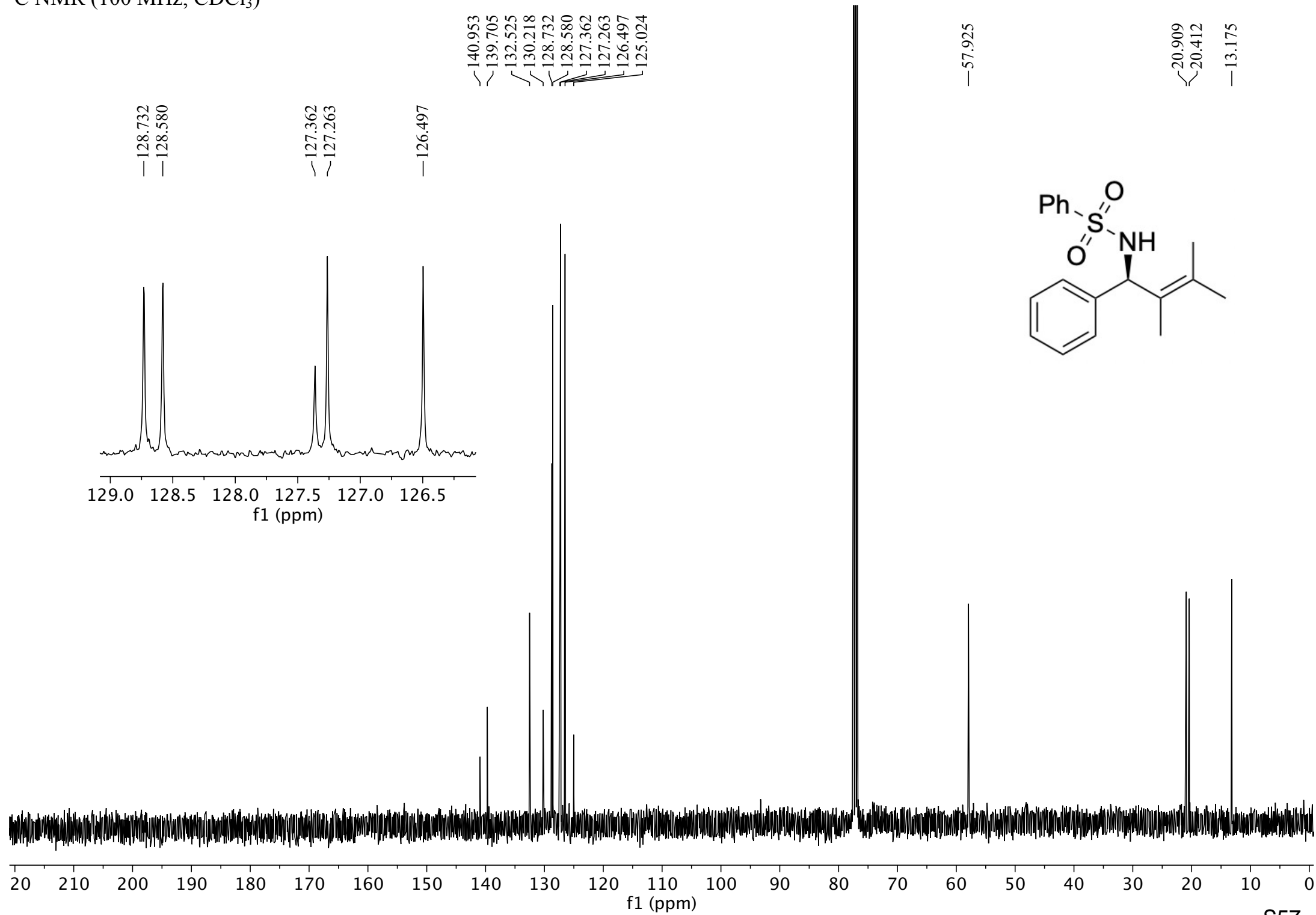
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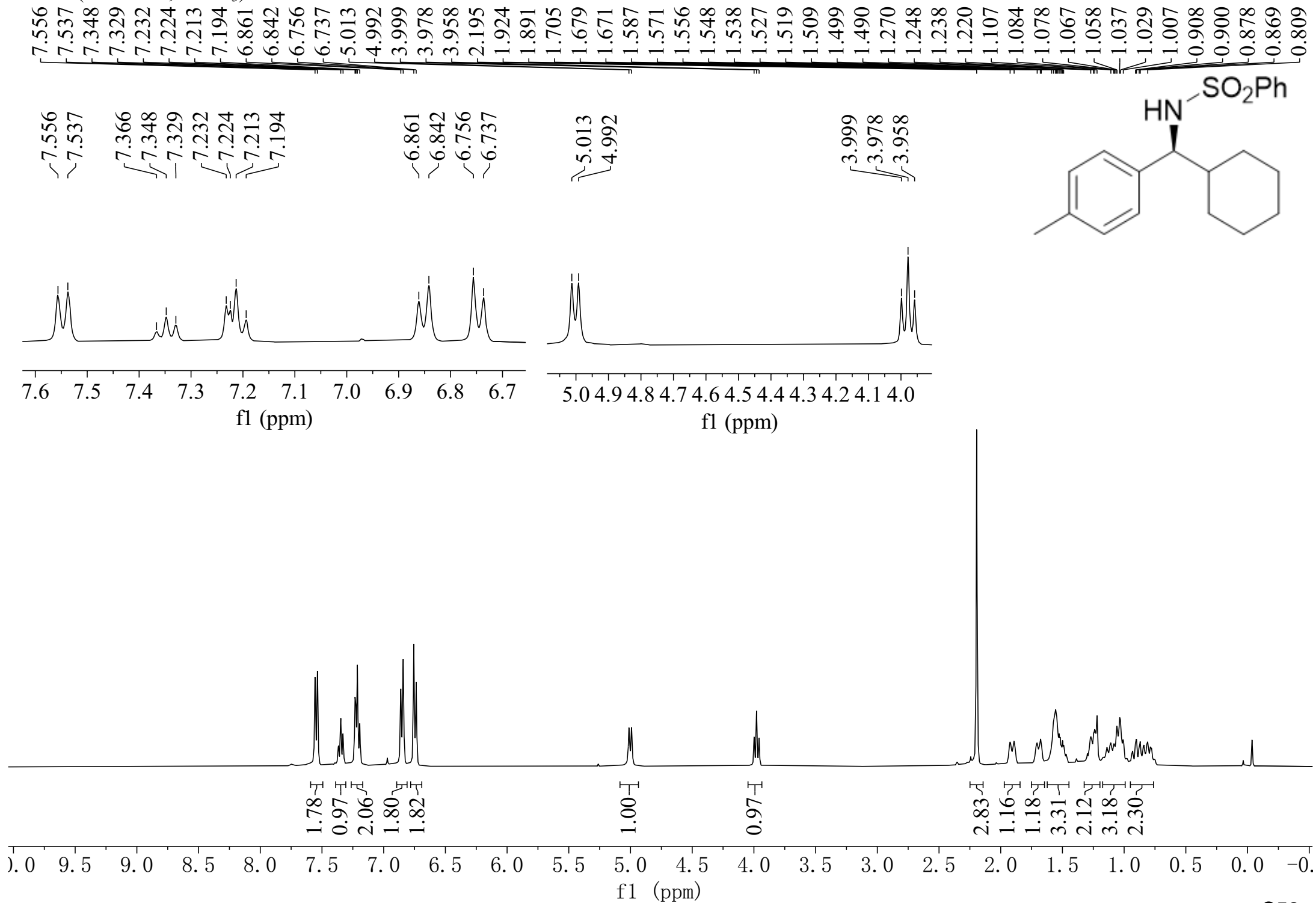


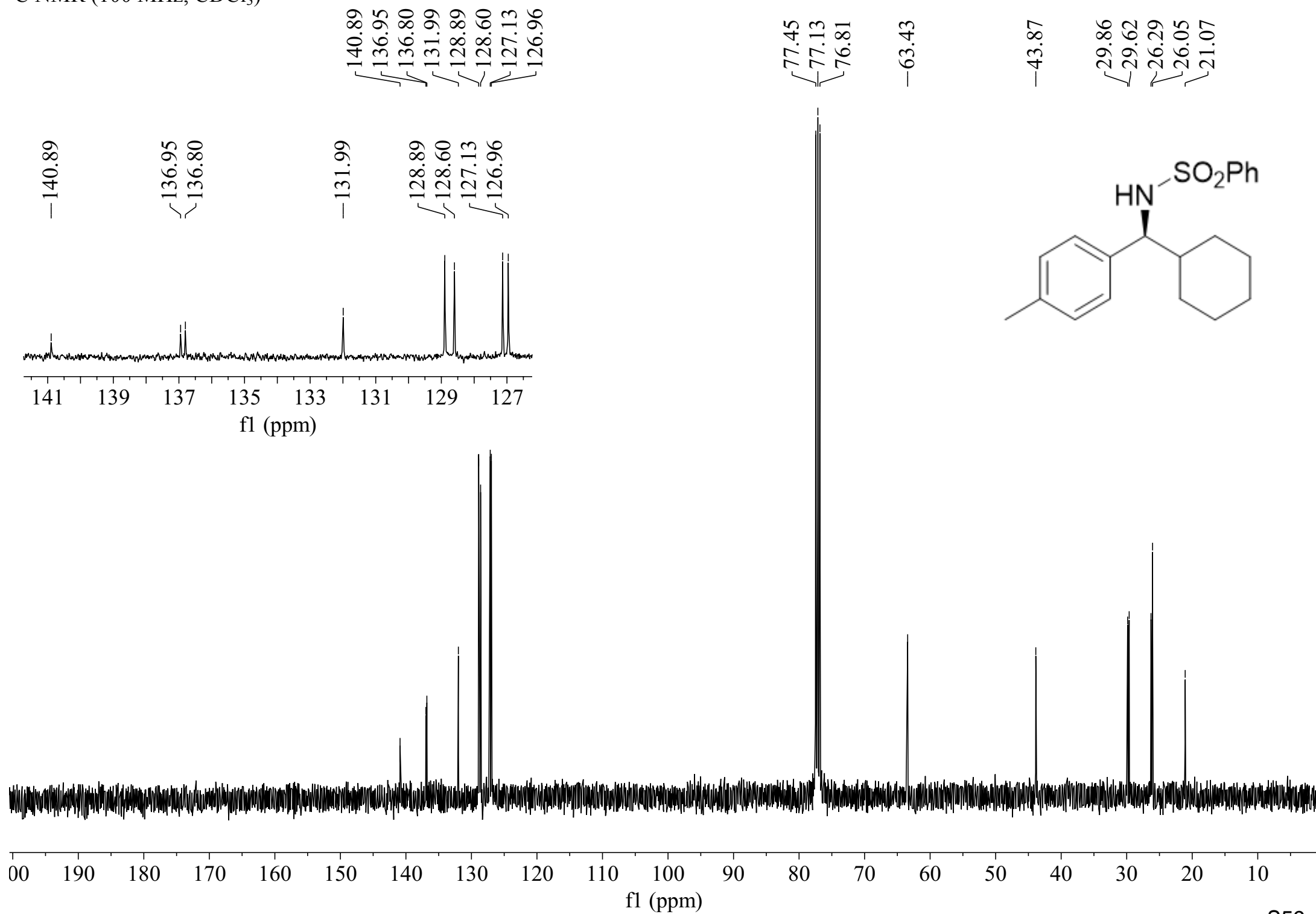
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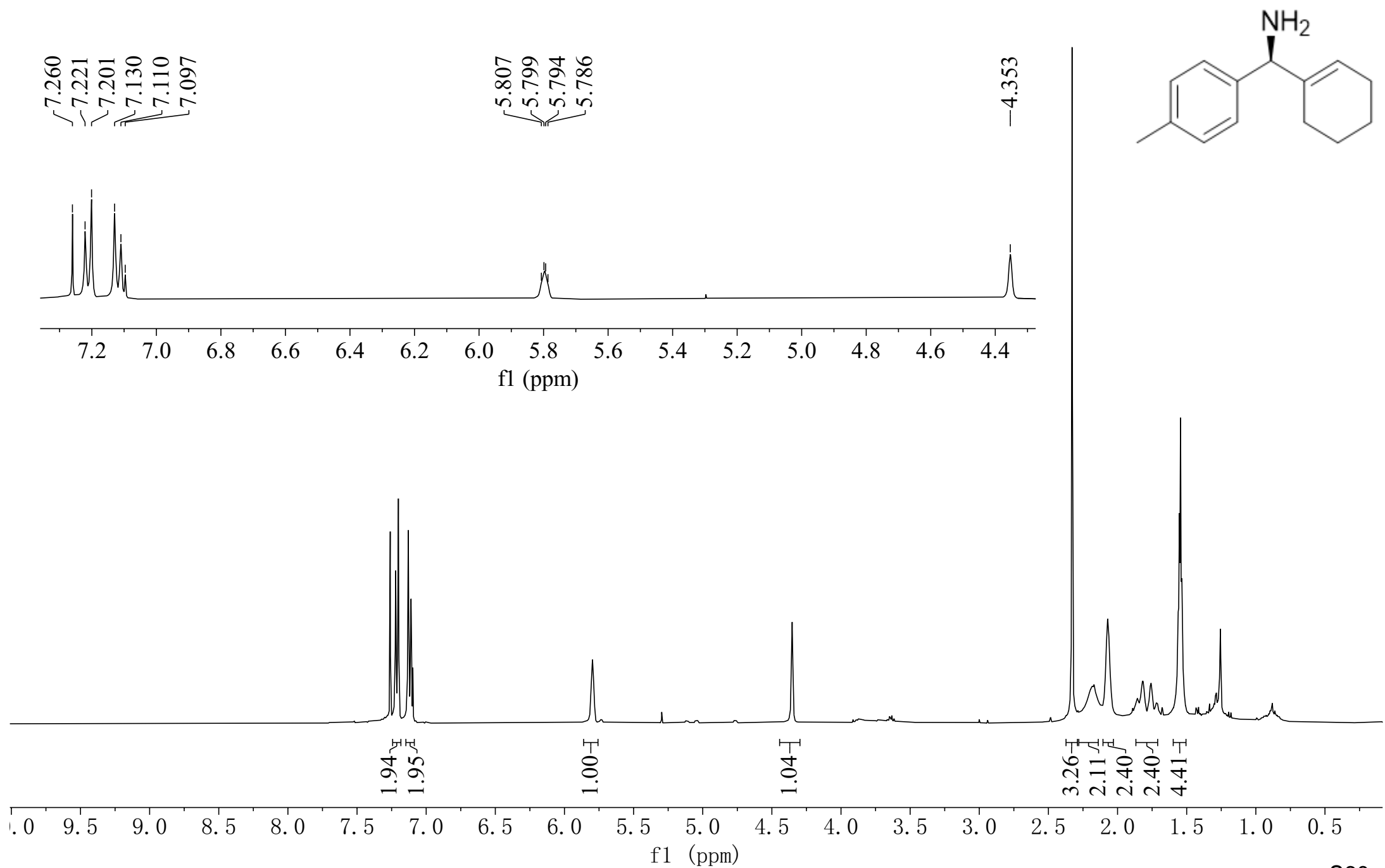


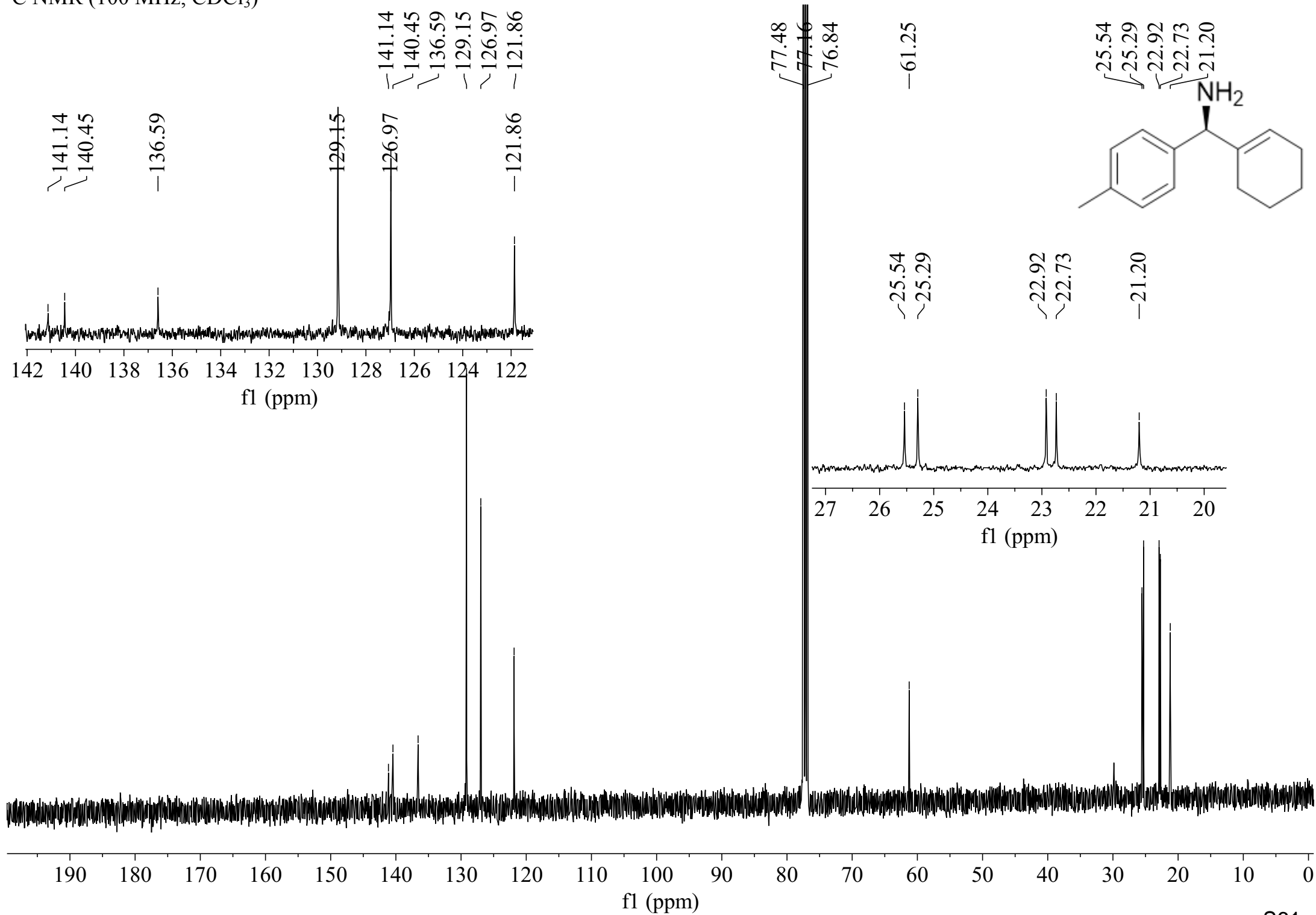
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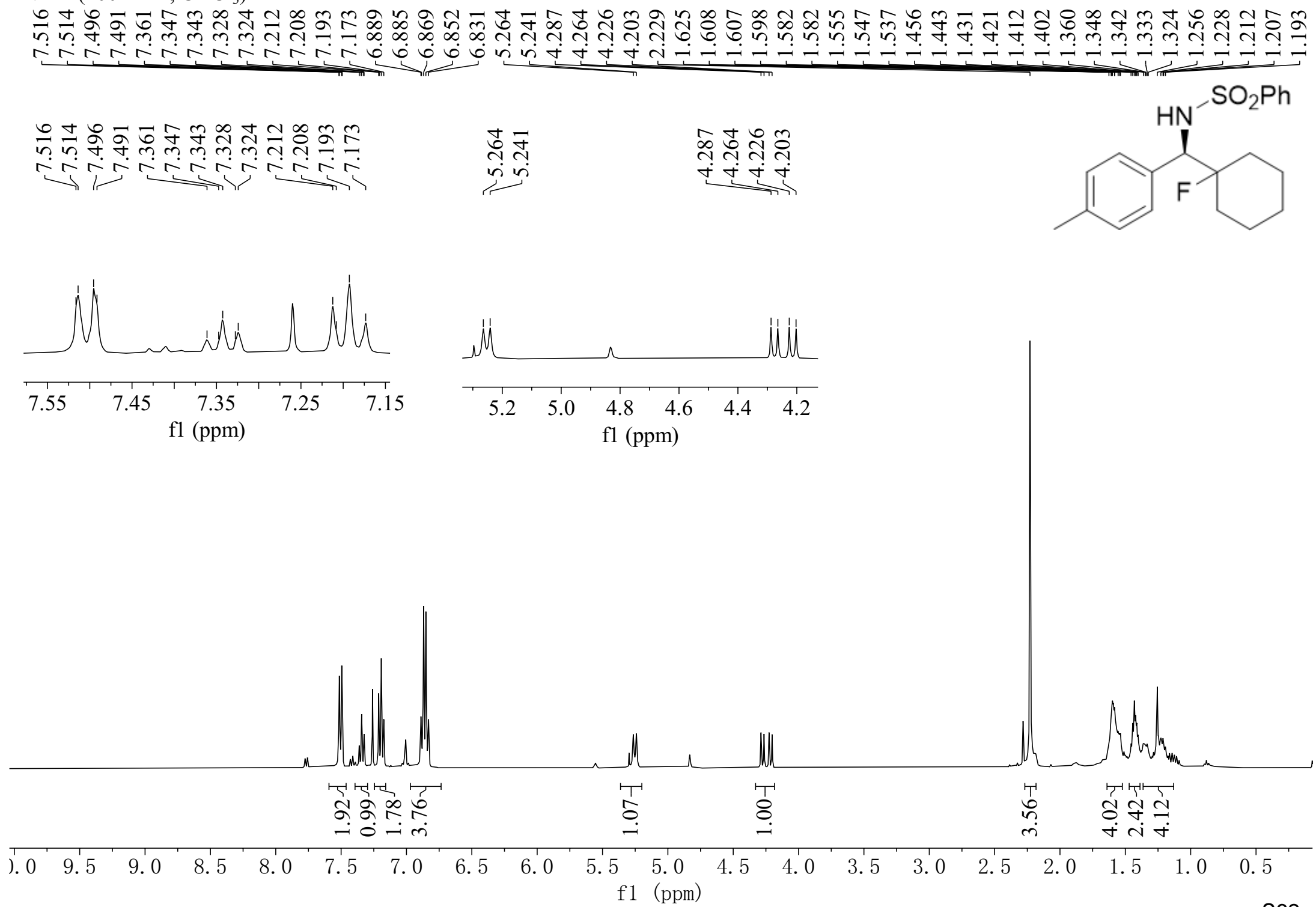


¹H NMR (400 MHz, CDCl₃)



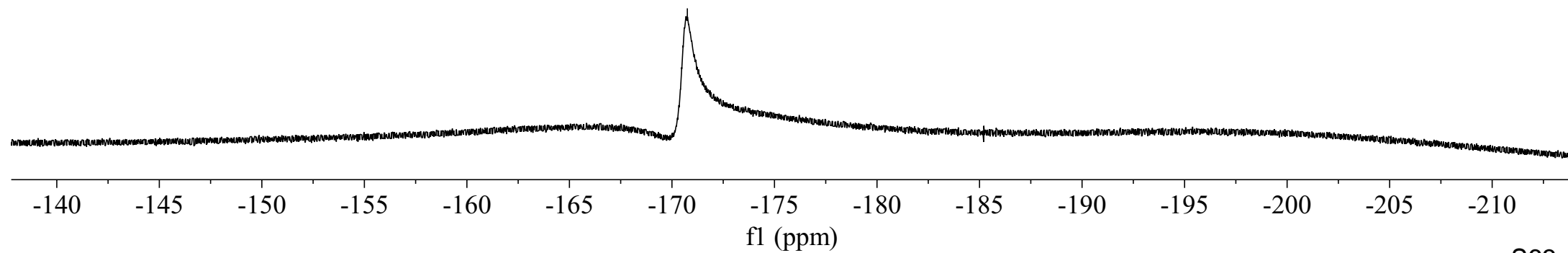
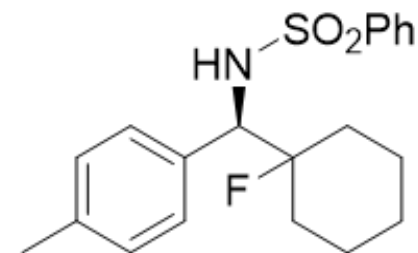


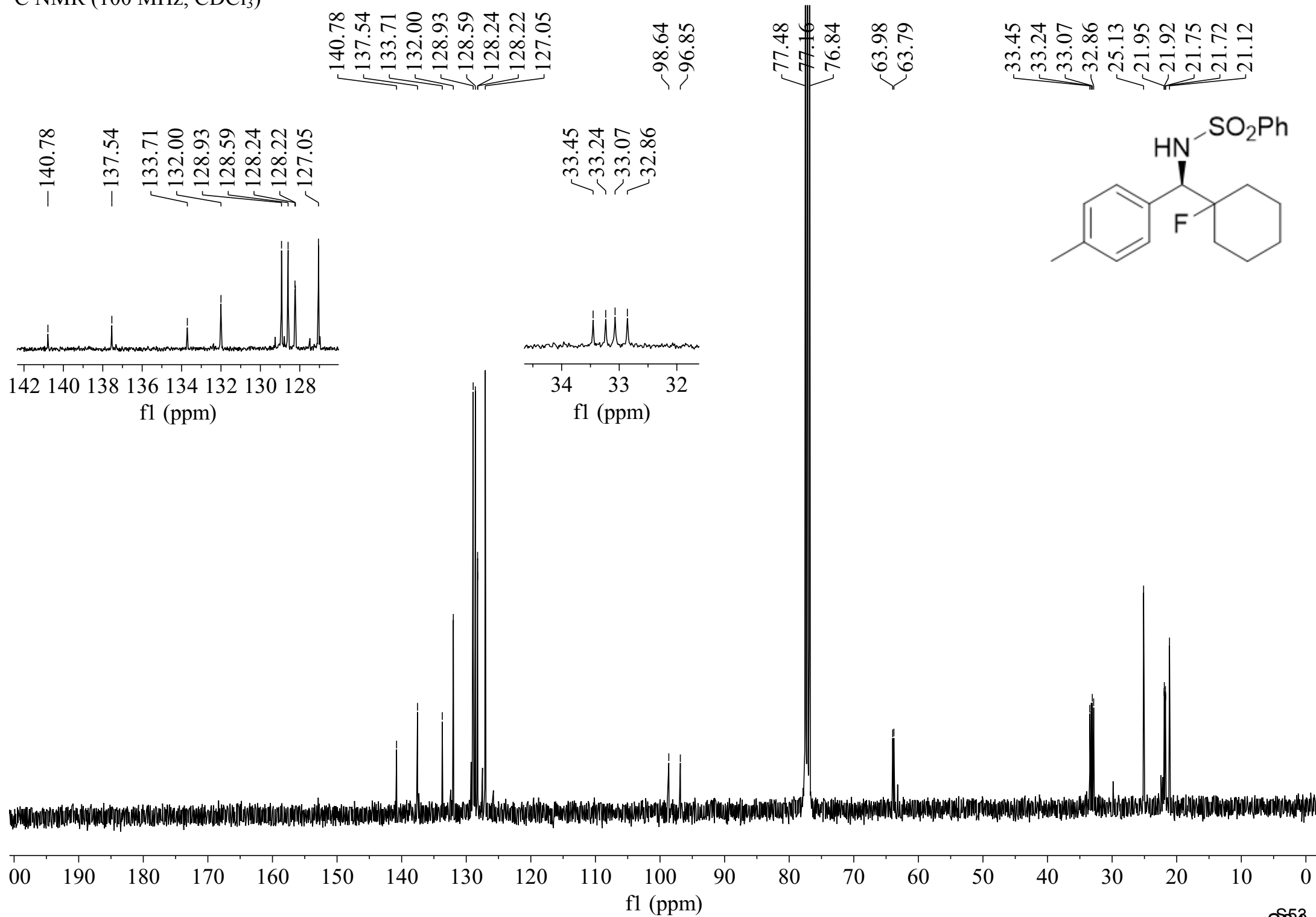
¹H NMR (400 MHz, CDCl₃)



^{19}F NMR (376.6 MHz, CDCl_3)

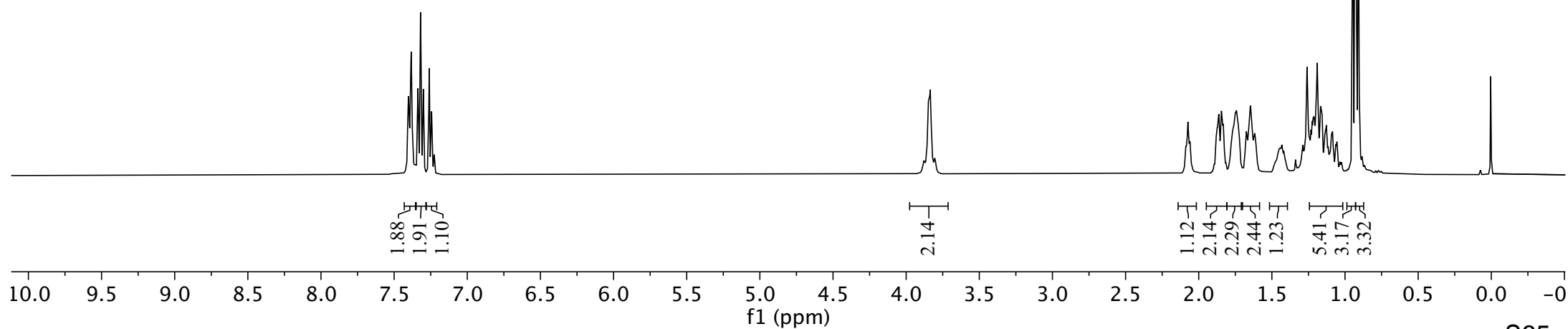
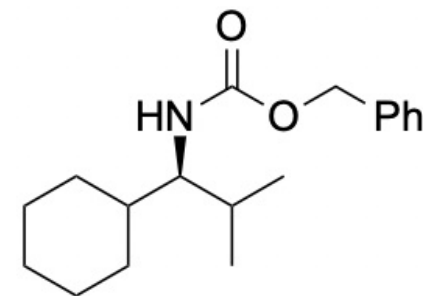
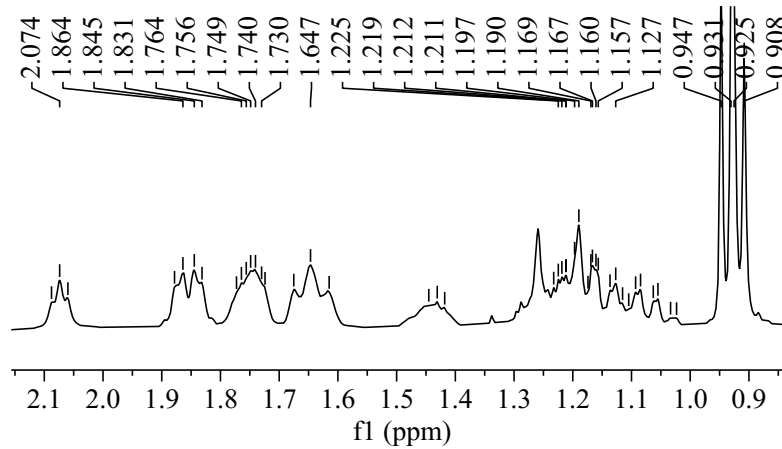
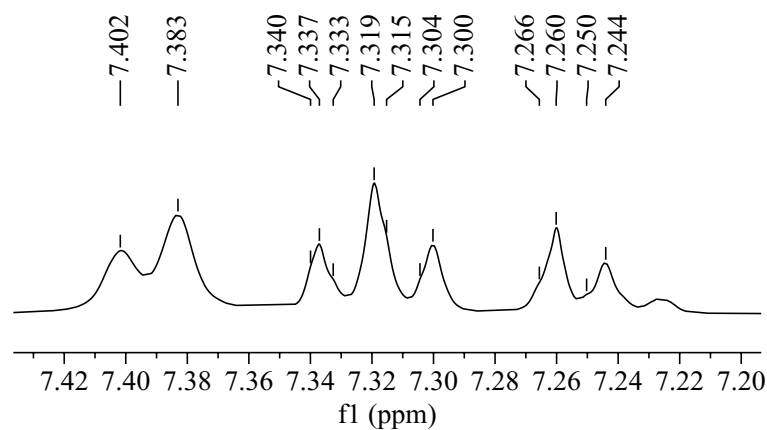
—170.75

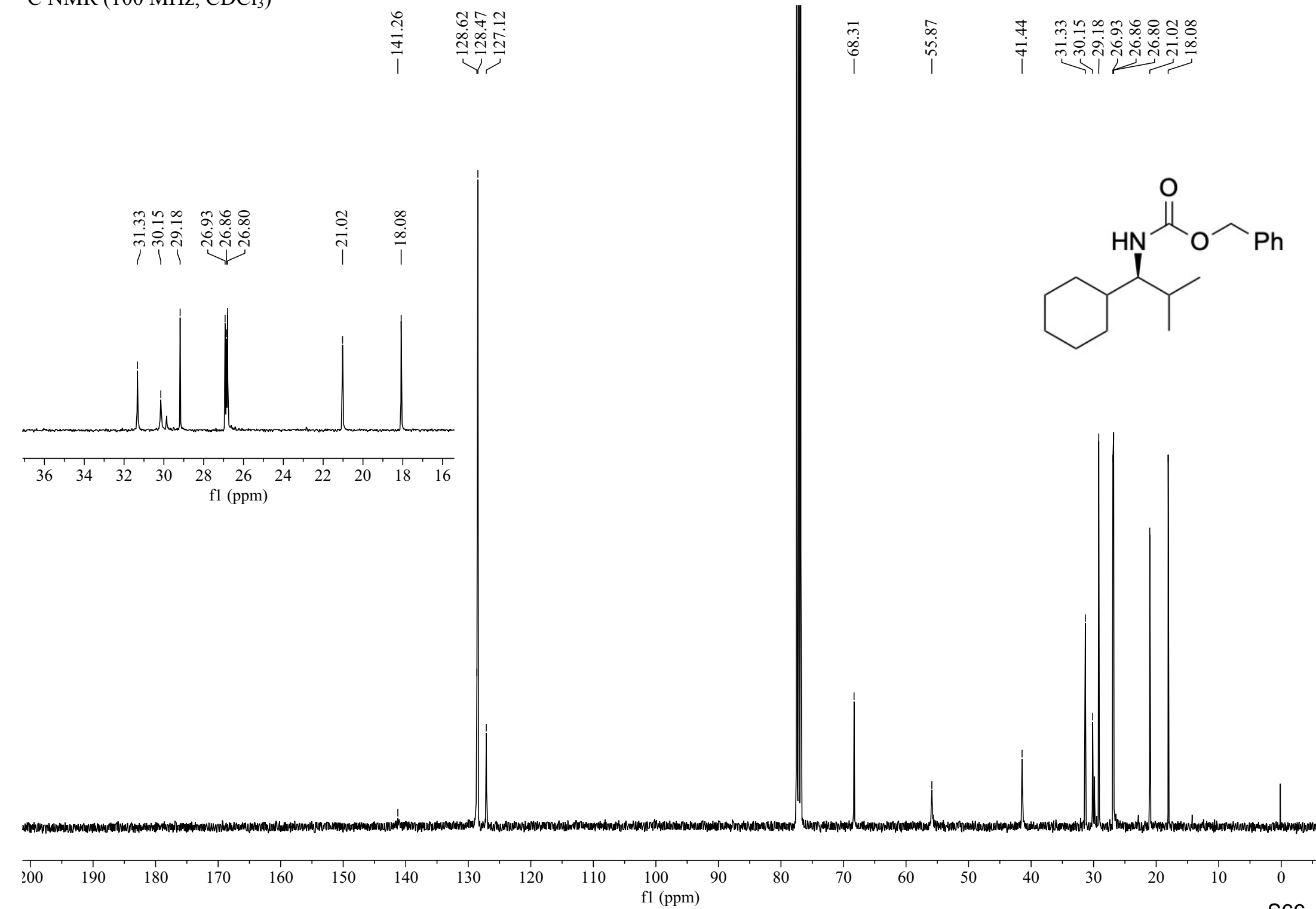


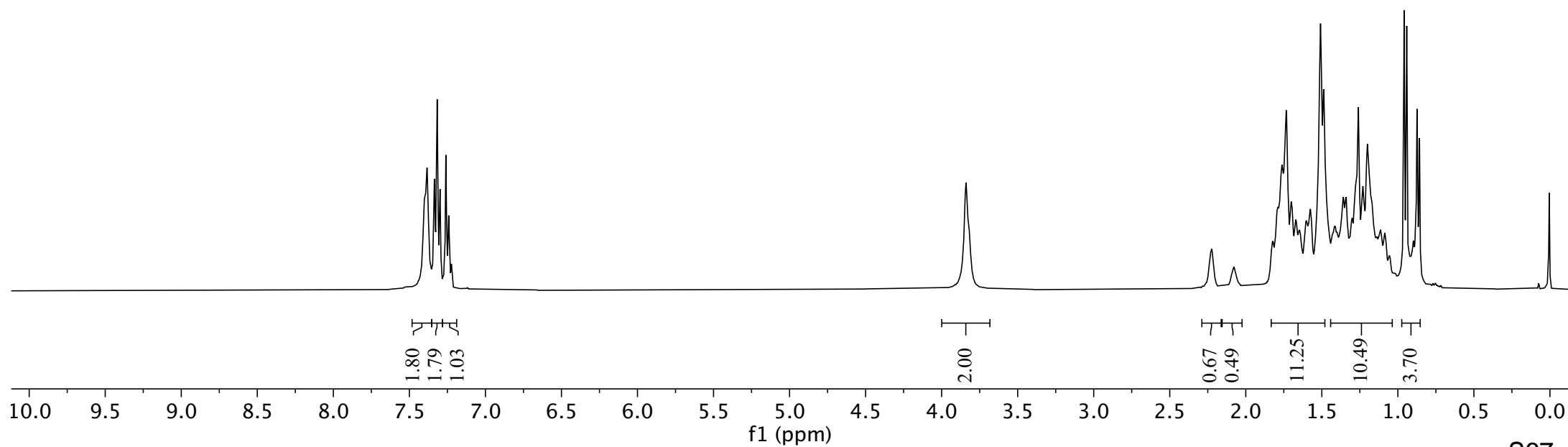
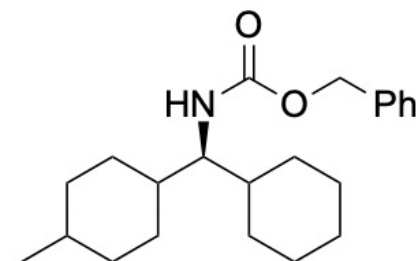
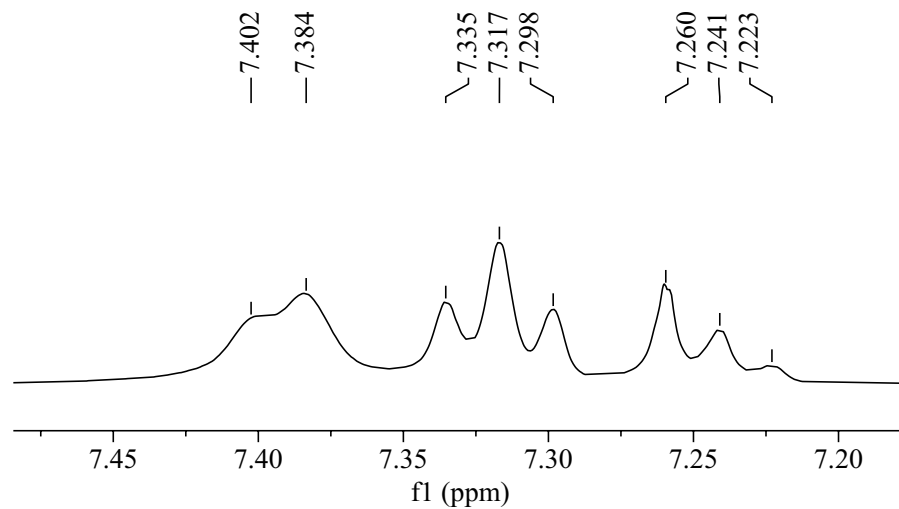
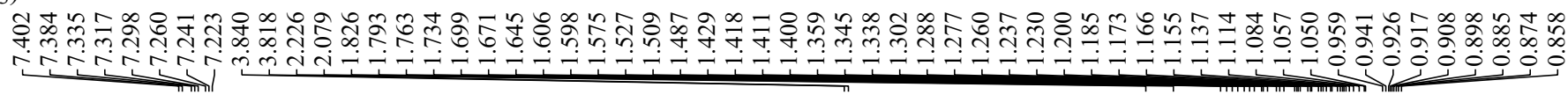


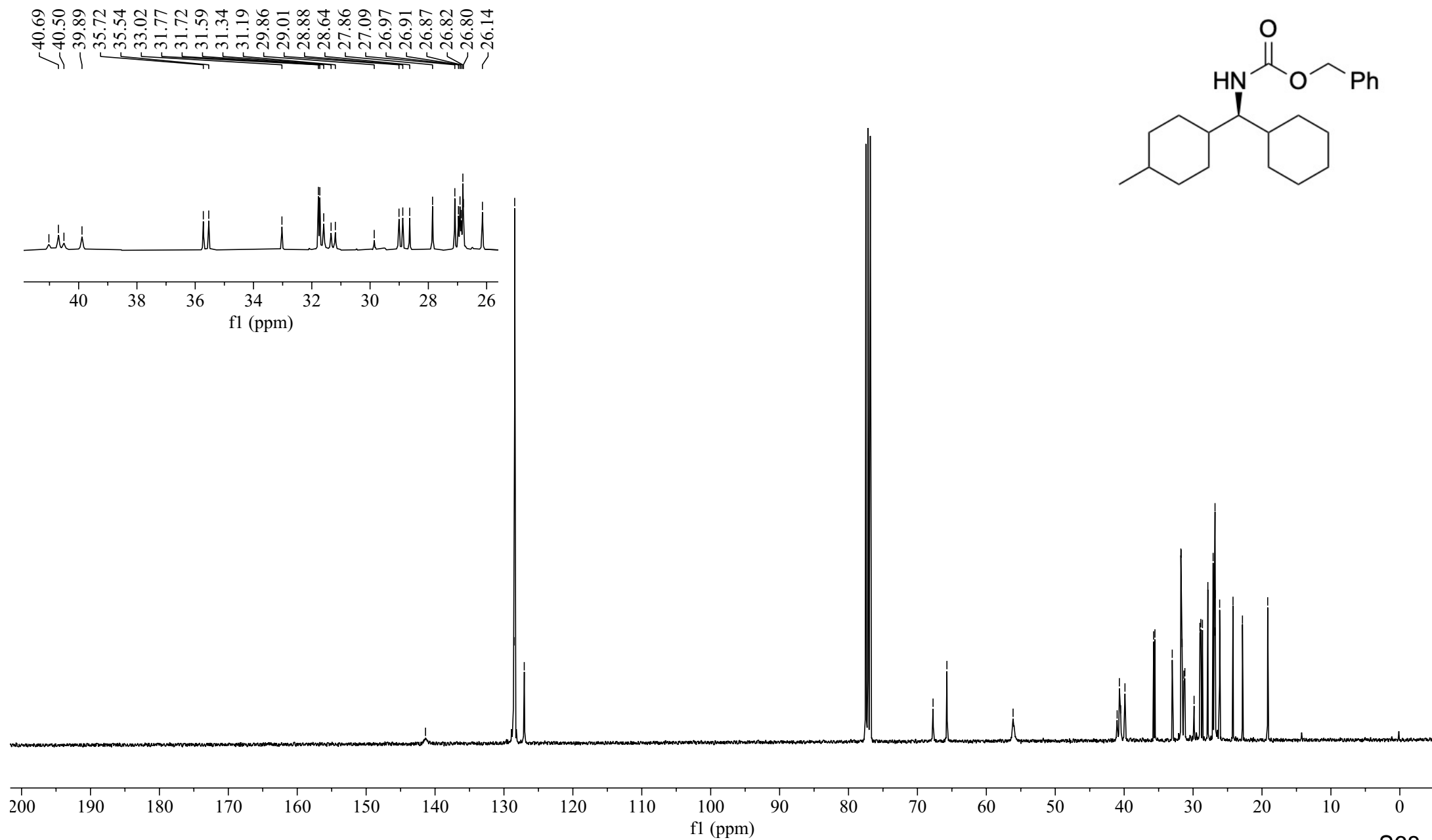
¹H NMR (400 MHz, CDCl₃)

7.402 7.383 7.340 7.337 7.333 7.319 7.315 7.304 7.300 7.266 7.260 7.250 7.244 3.879 3.847 3.834 3.803 2.088 2.074 2.060 1.878 1.864 1.845 1.831 1.773 1.764 1.756 1.749 1.740 1.730 1.724 1.675 1.647 1.615 1.445 1.431 1.418 1.418 1.233 1.225 1.219 1.212 1.211 1.197 1.190 1.174 1.169 1.167 1.160 1.157 1.137 1.127 1.115 1.105 1.093 1.085 1.063 1.055 1.033 1.023 0.947 0.931 0.925 0.908

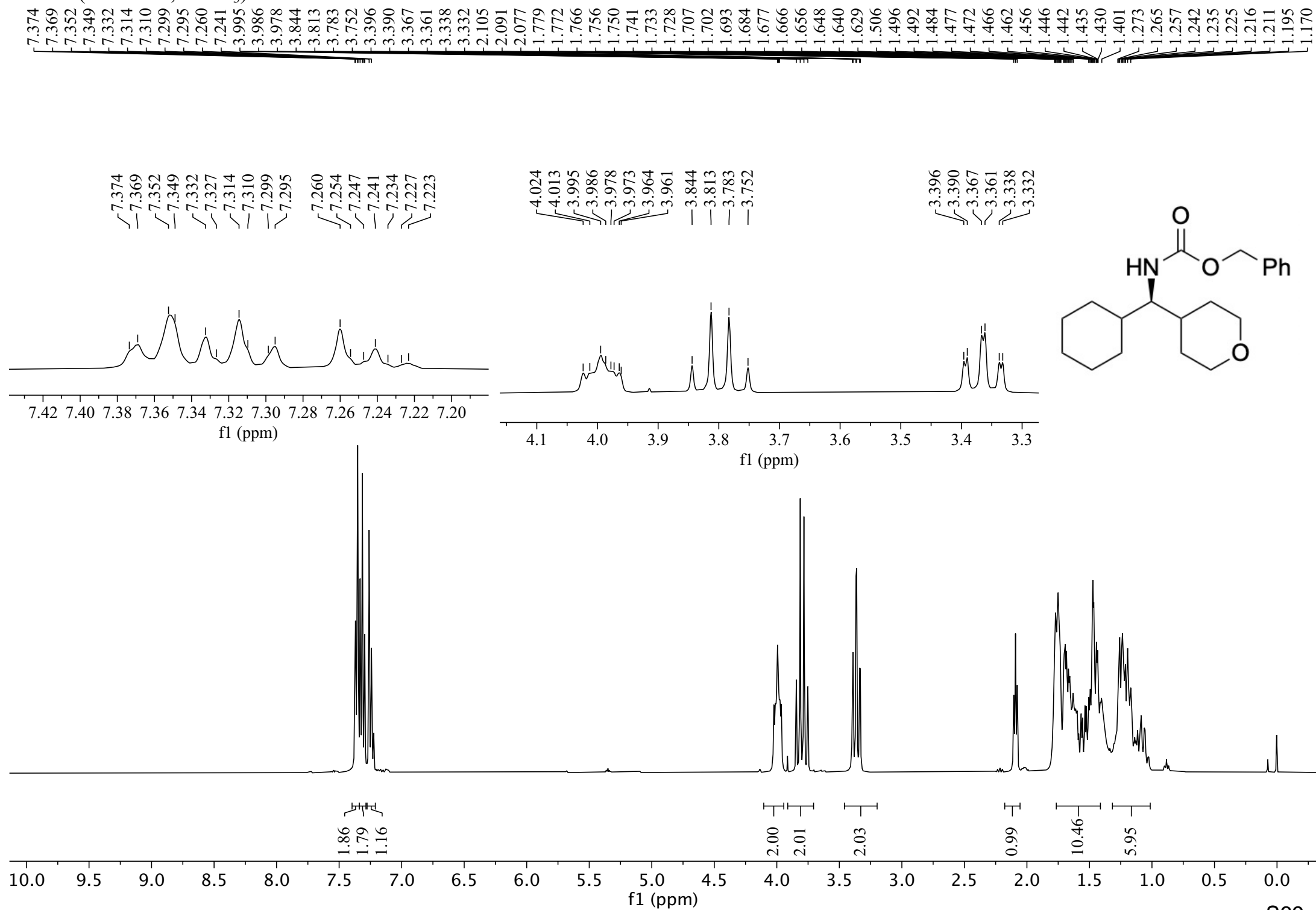


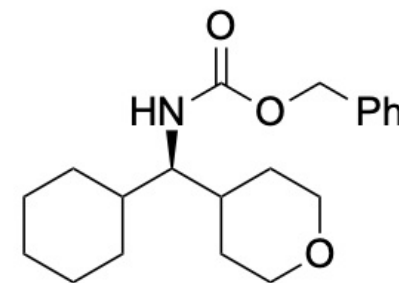
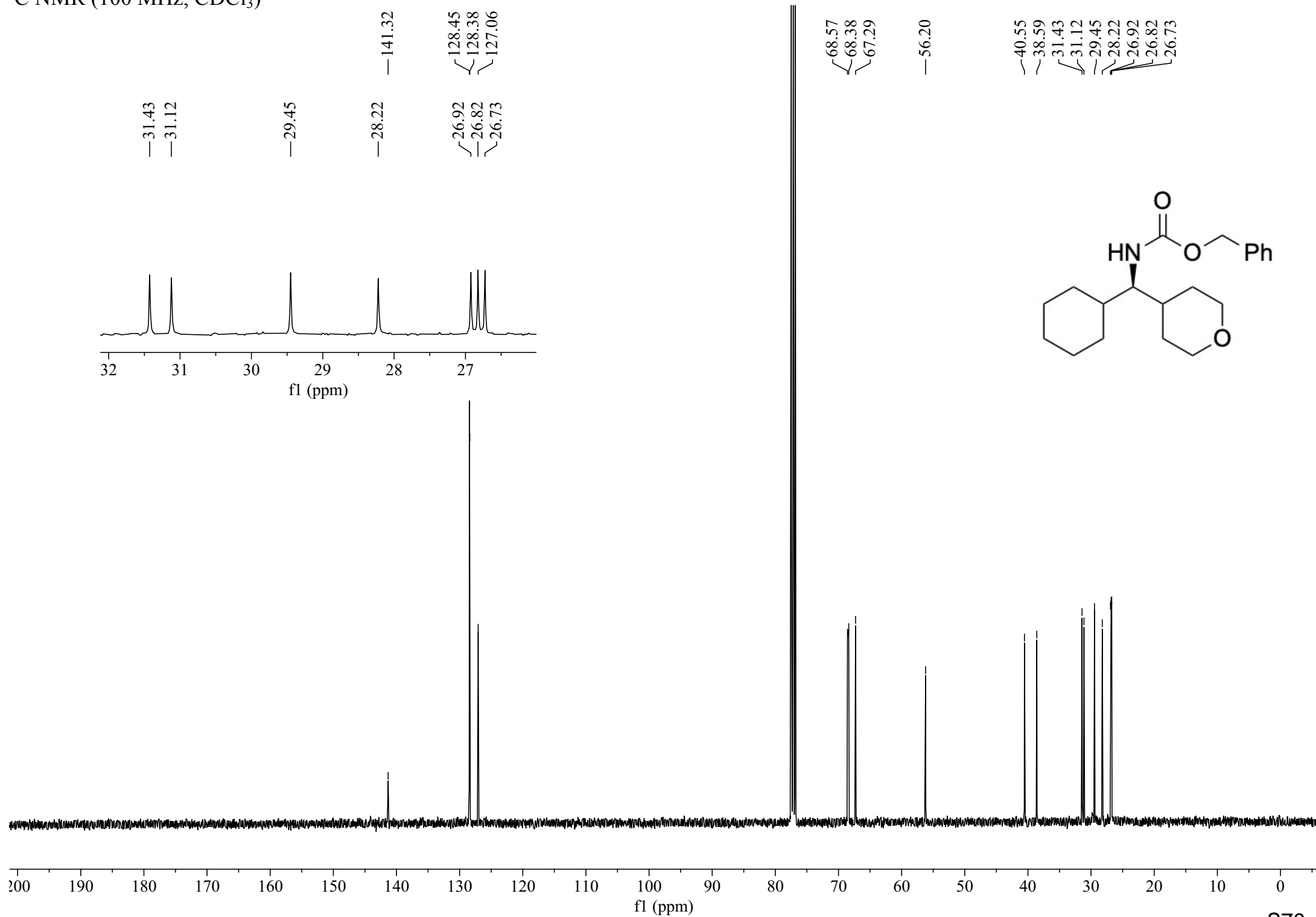
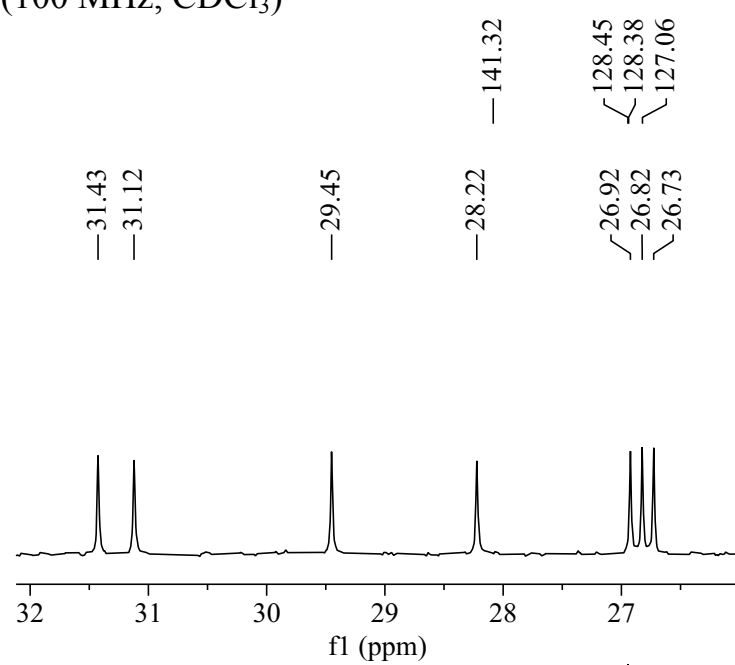






¹H NMR (400 MHz, CDCl₃)





¹H NMR (400 MHz, CDCl₃)

