

Supporting Information

Synthesis of α -Aminooxy Amides through [3+3] Cycloaddition and Sc(OTf)₃-Catalyzed Double C-N Bond Cleavage in One-Pot Reaction

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Contents

1.	X-ray structures for compounds 3al and 6aa	S2
2.	NMR spectra of compounds 3 , 5 , and 6	S3

1. X-ray structures for compounds **3al** and **6aa**

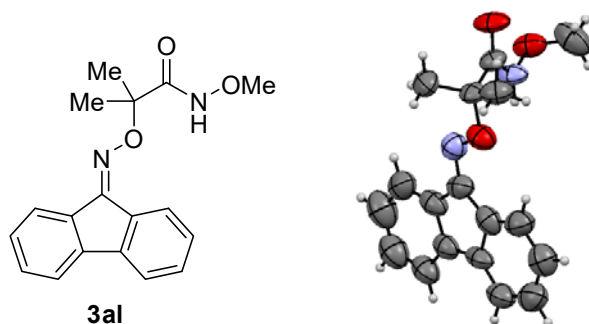


Figure S1: ORTEP diagram of **3al** at 50% ellipsoid probability

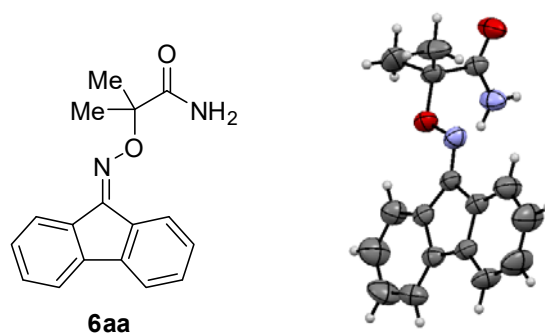
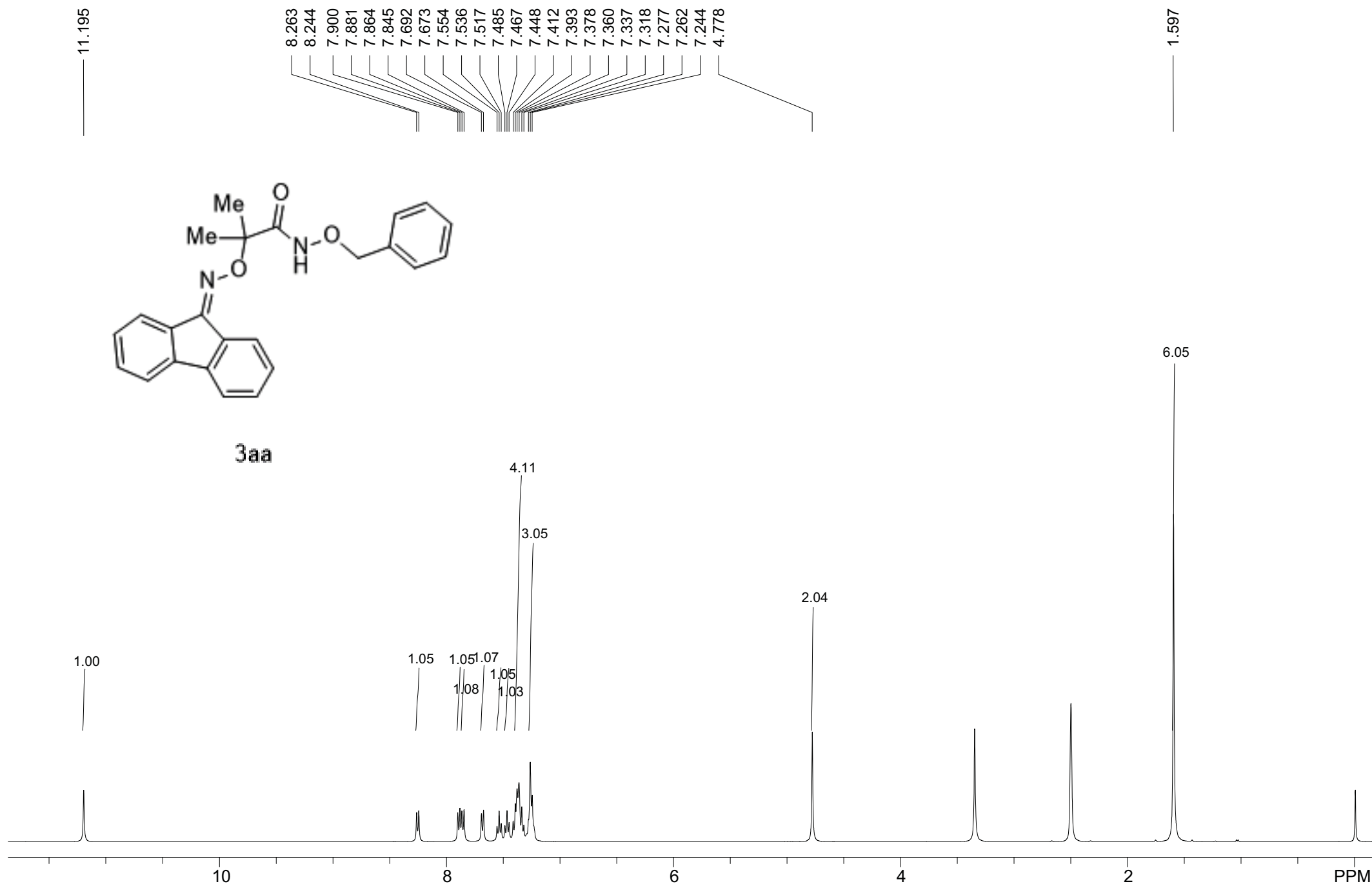
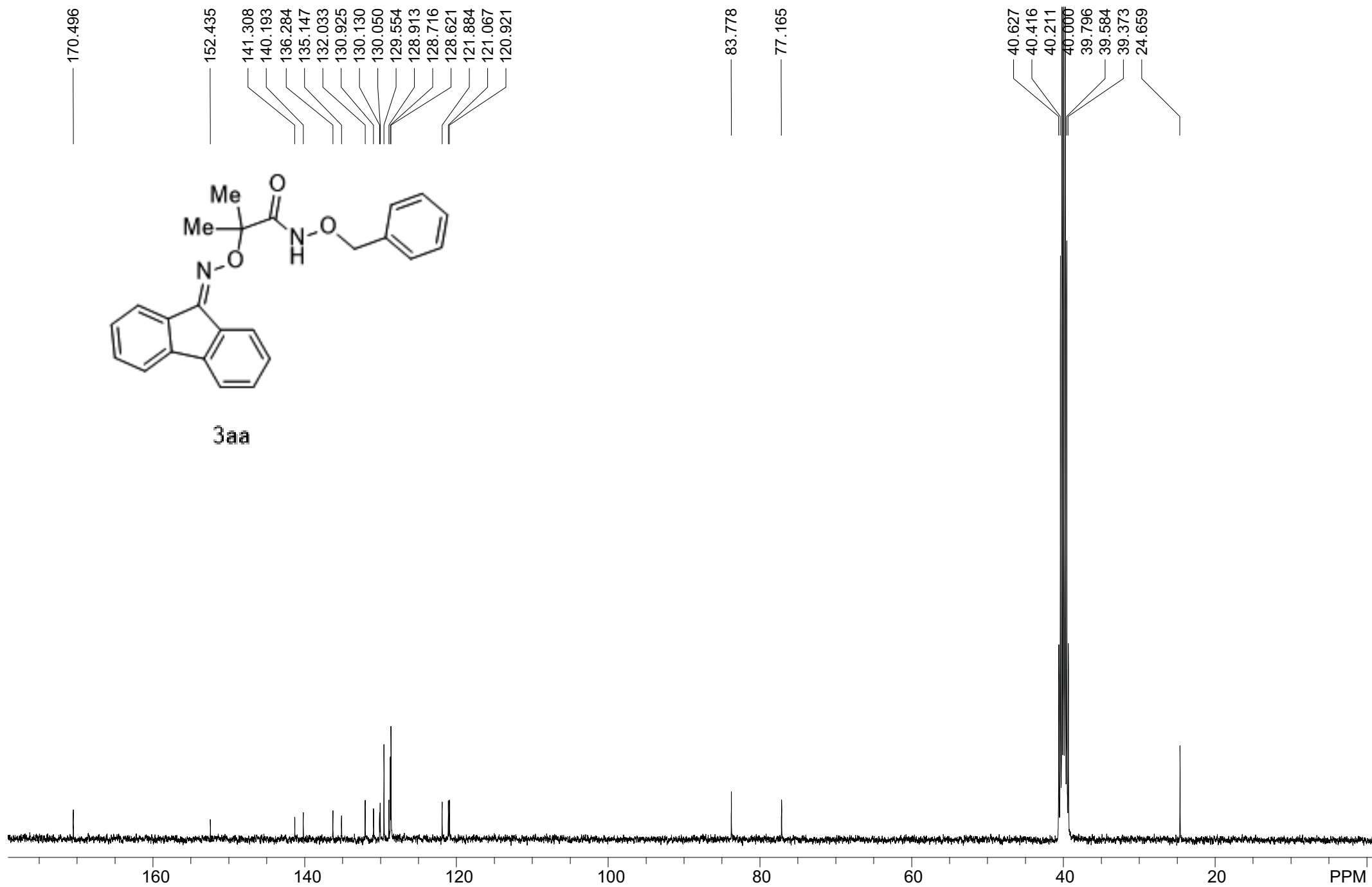


Figure S2: ORTEP diagram of **6aa** at 50% ellipsoid probability

2. NMR spectra of compounds **3**, **5**, and **6**





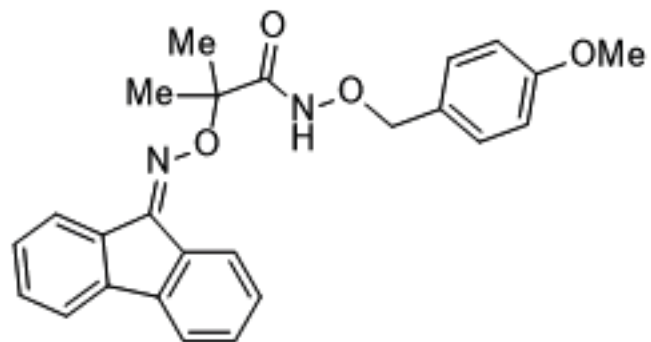
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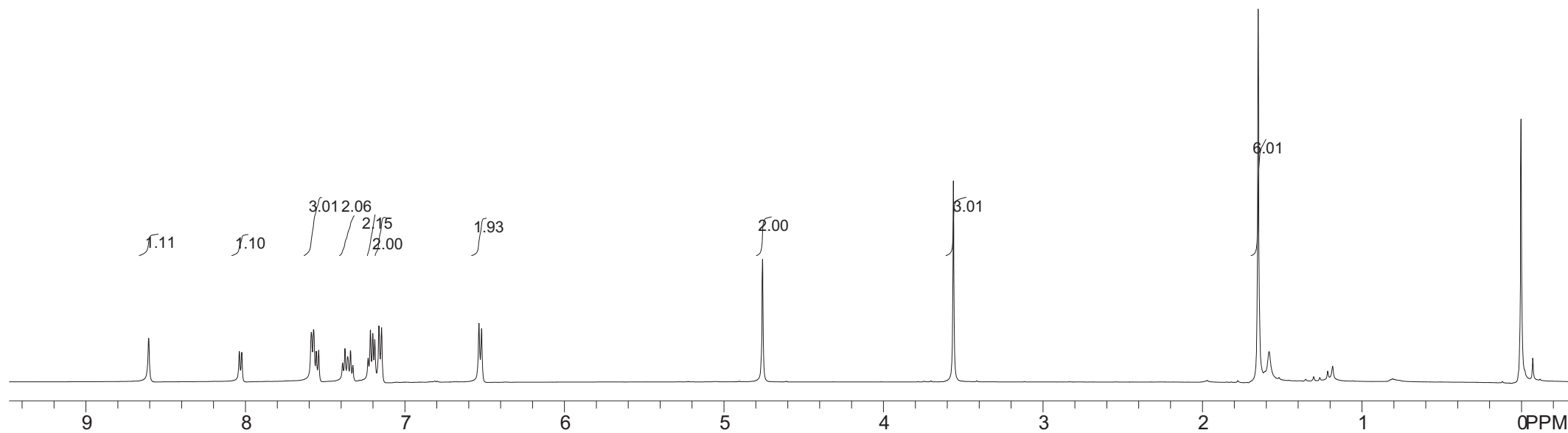
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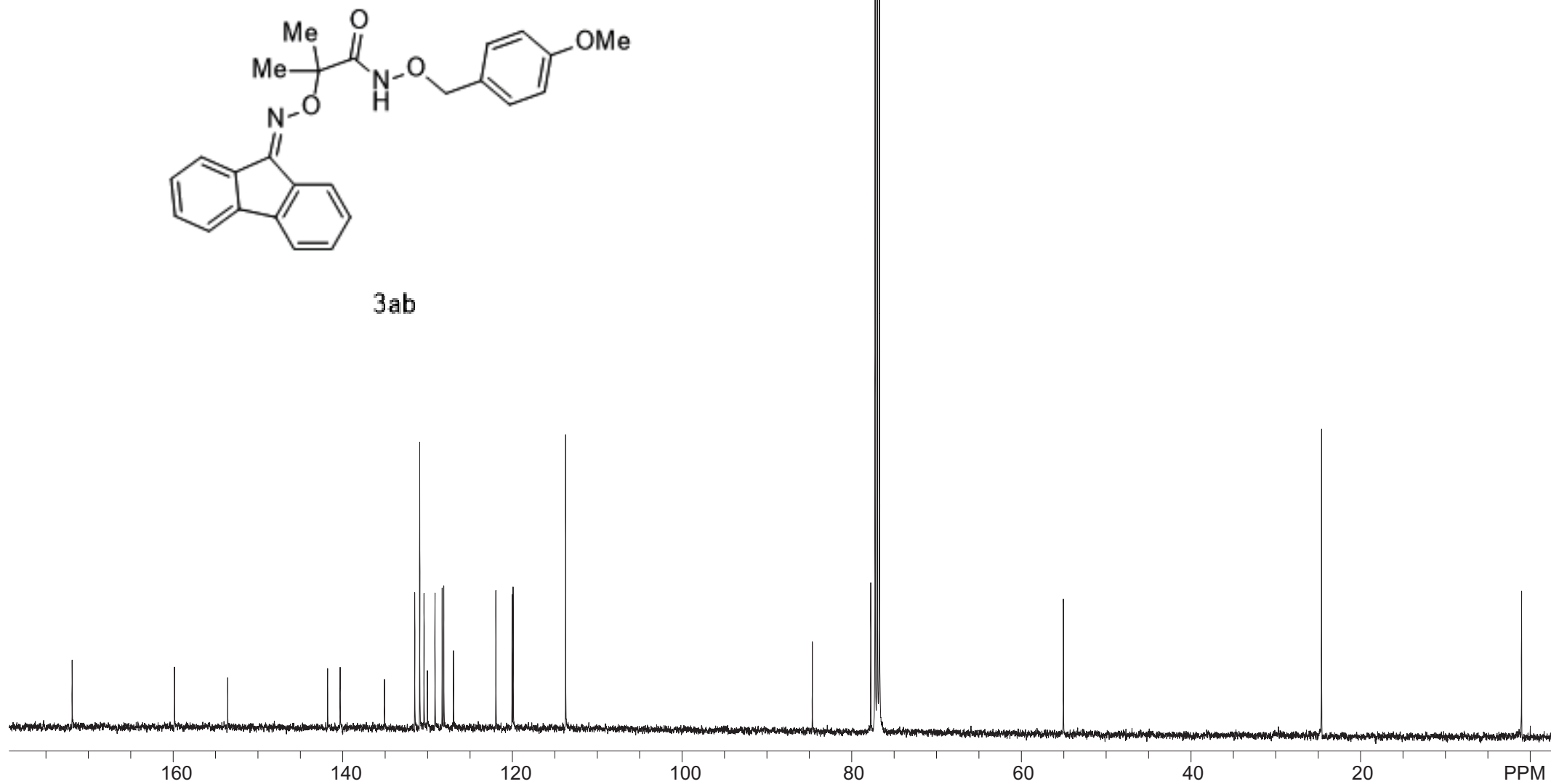
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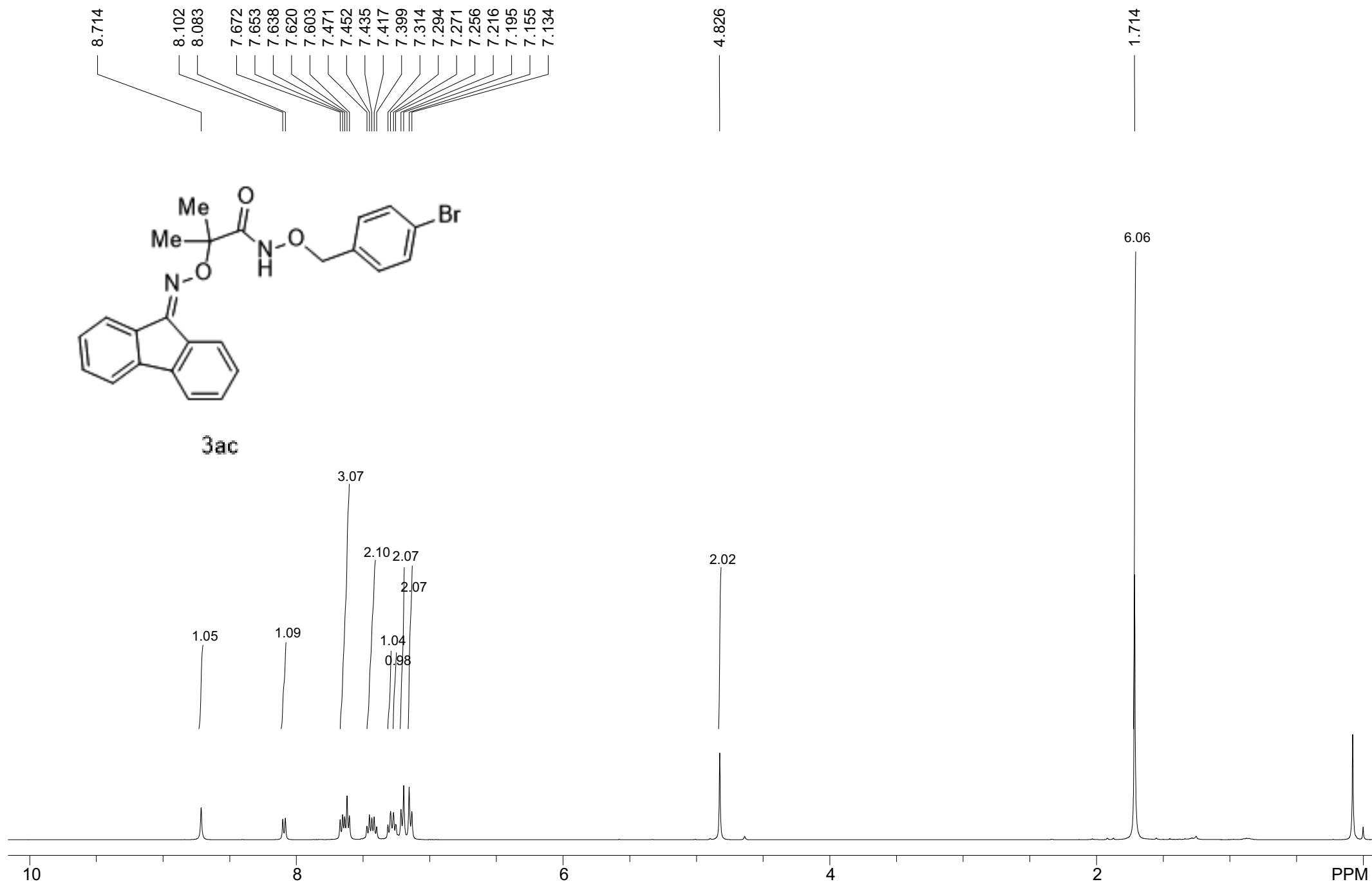
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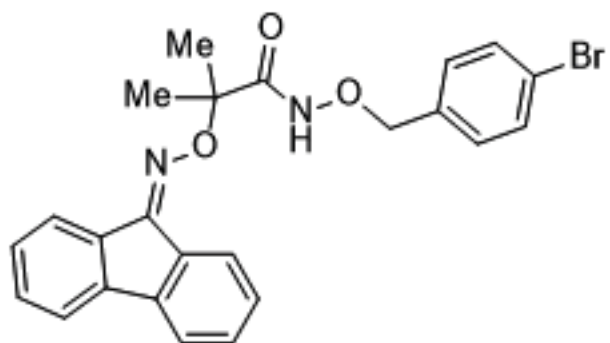


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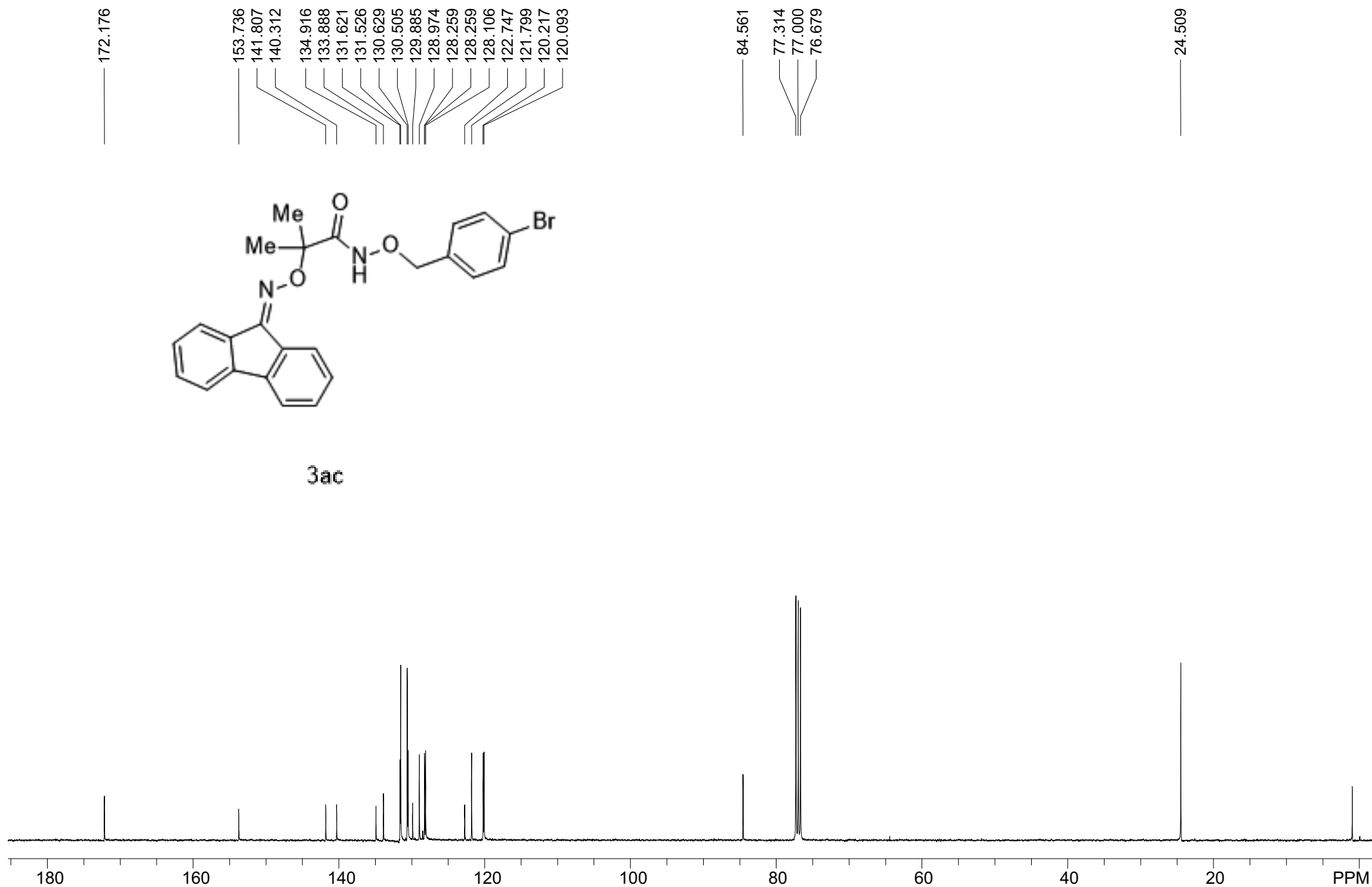








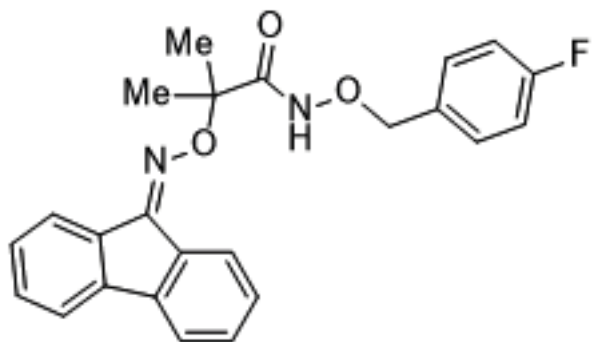
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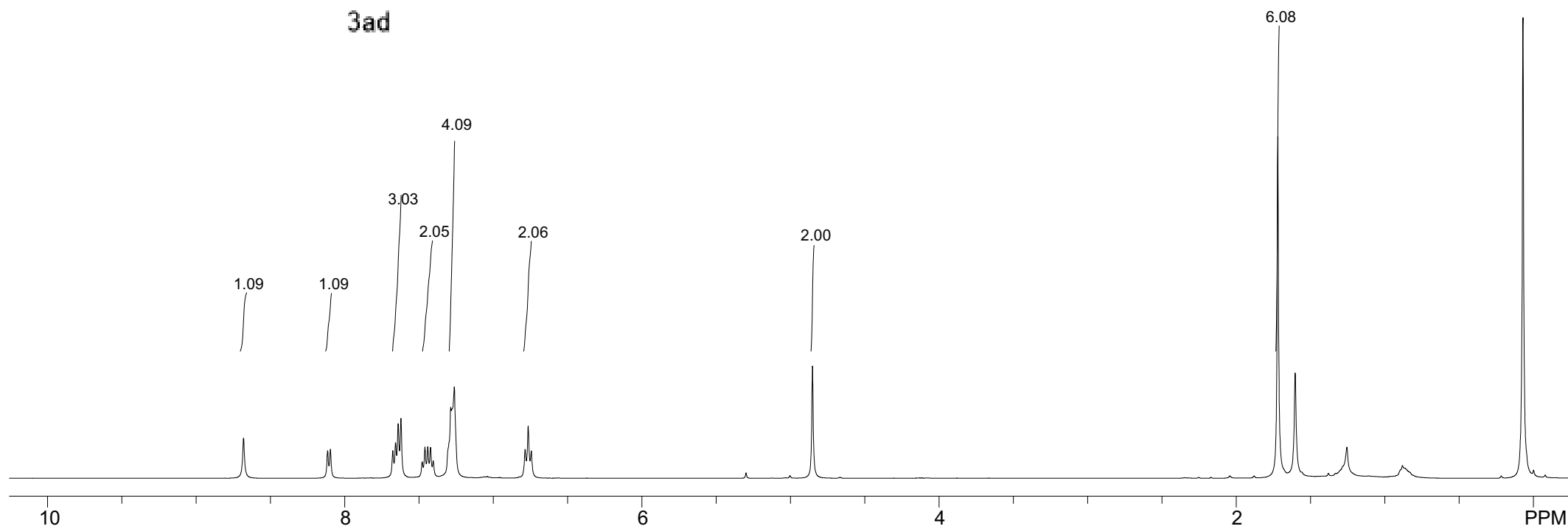
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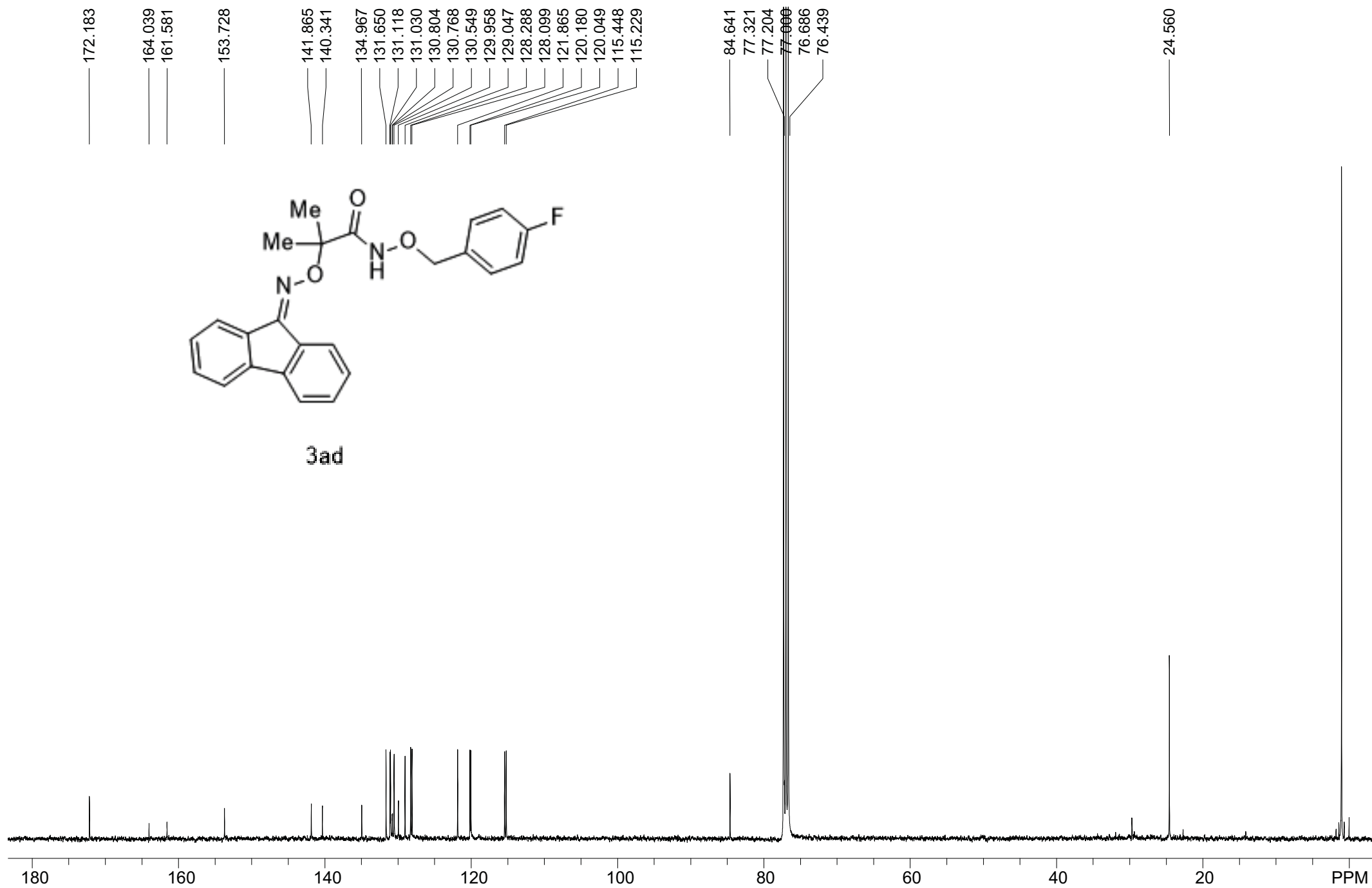
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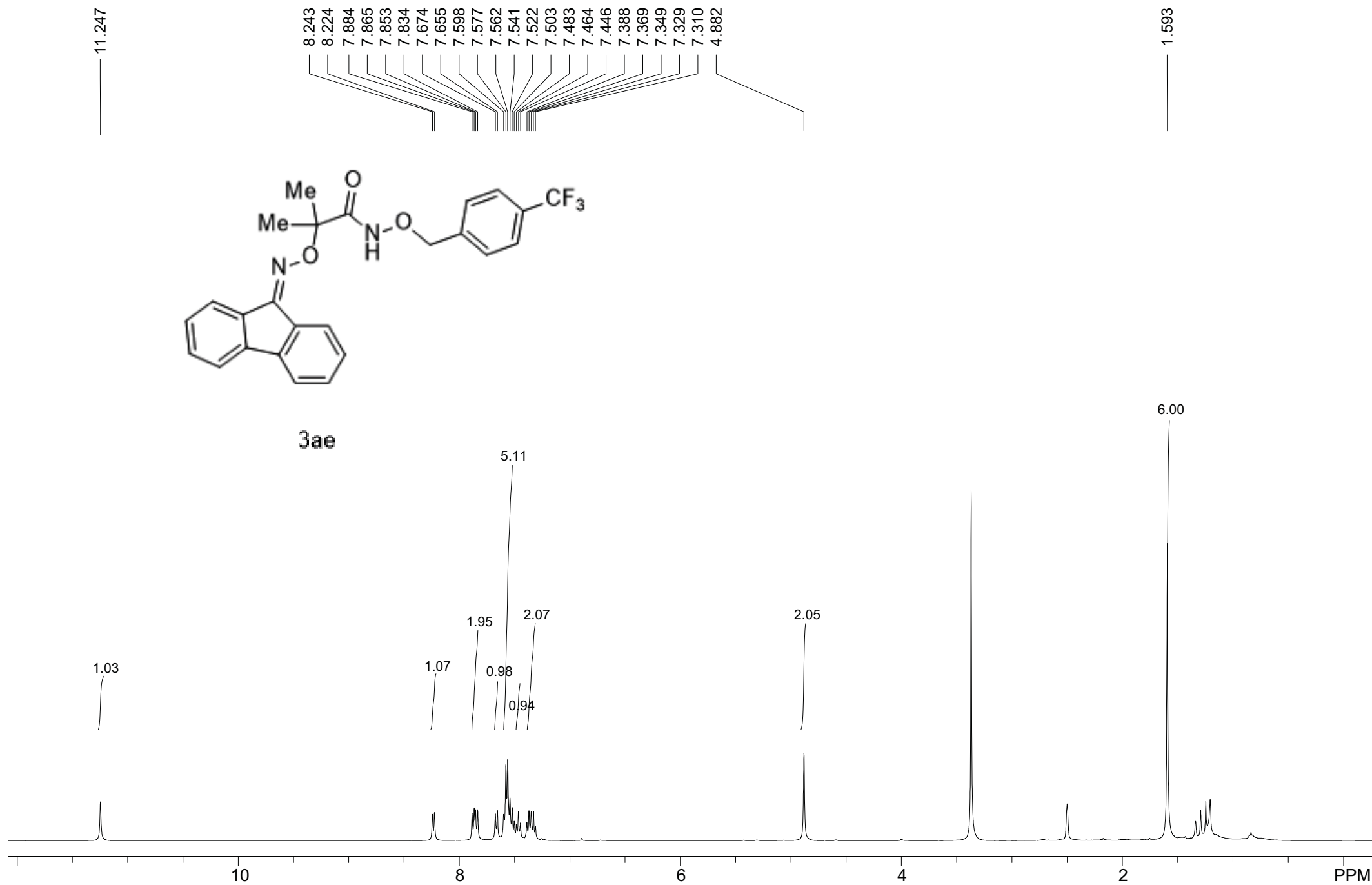
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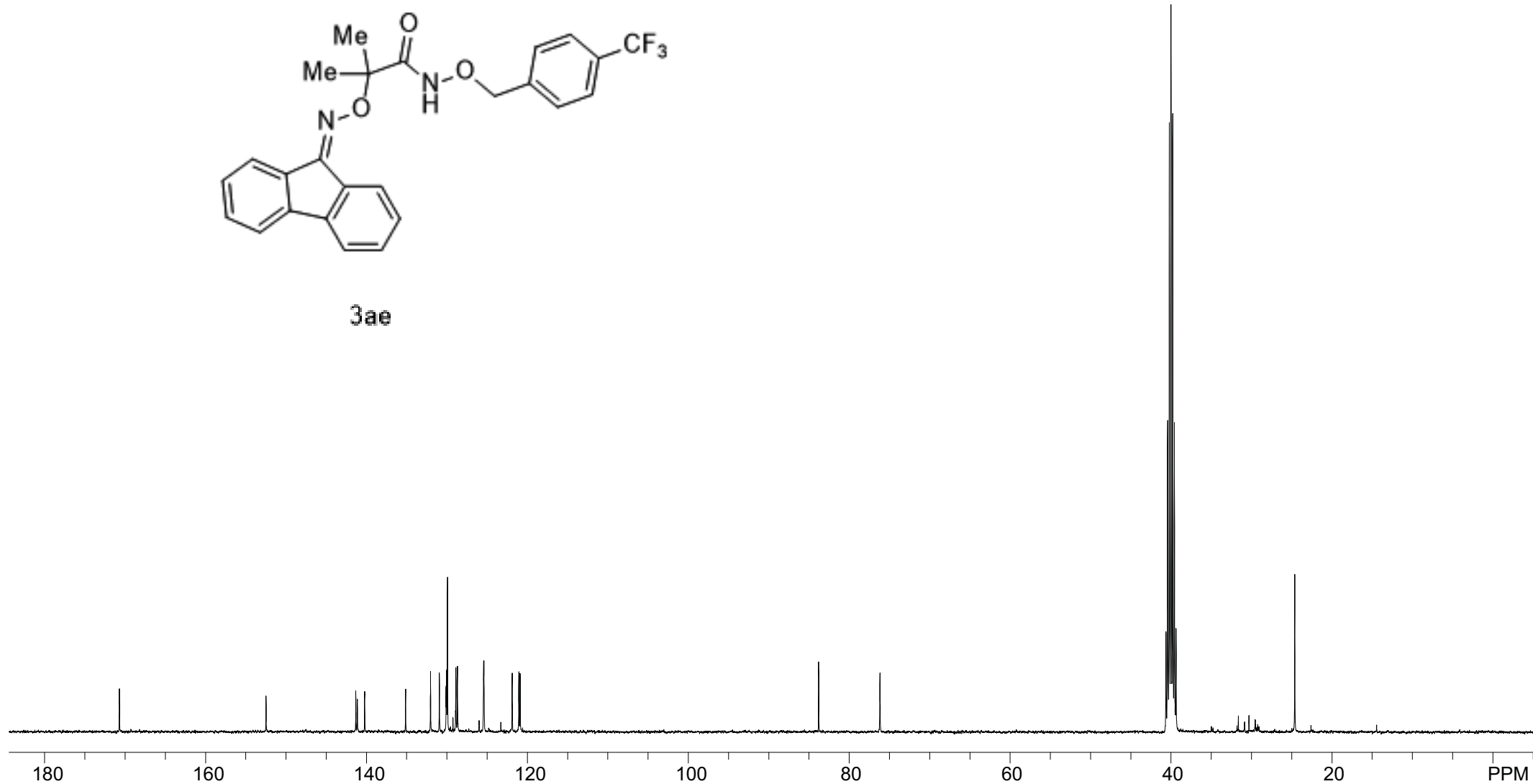


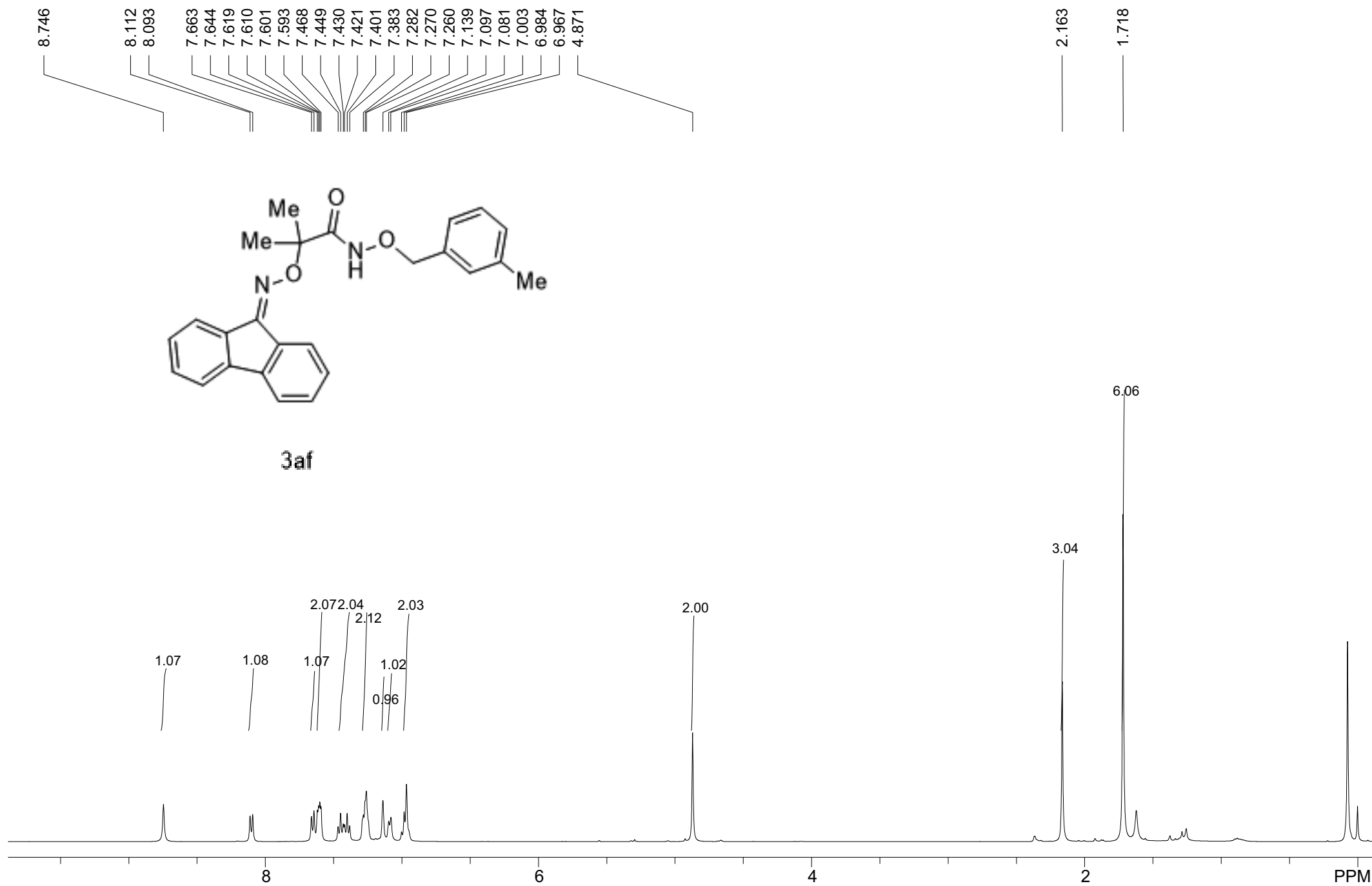
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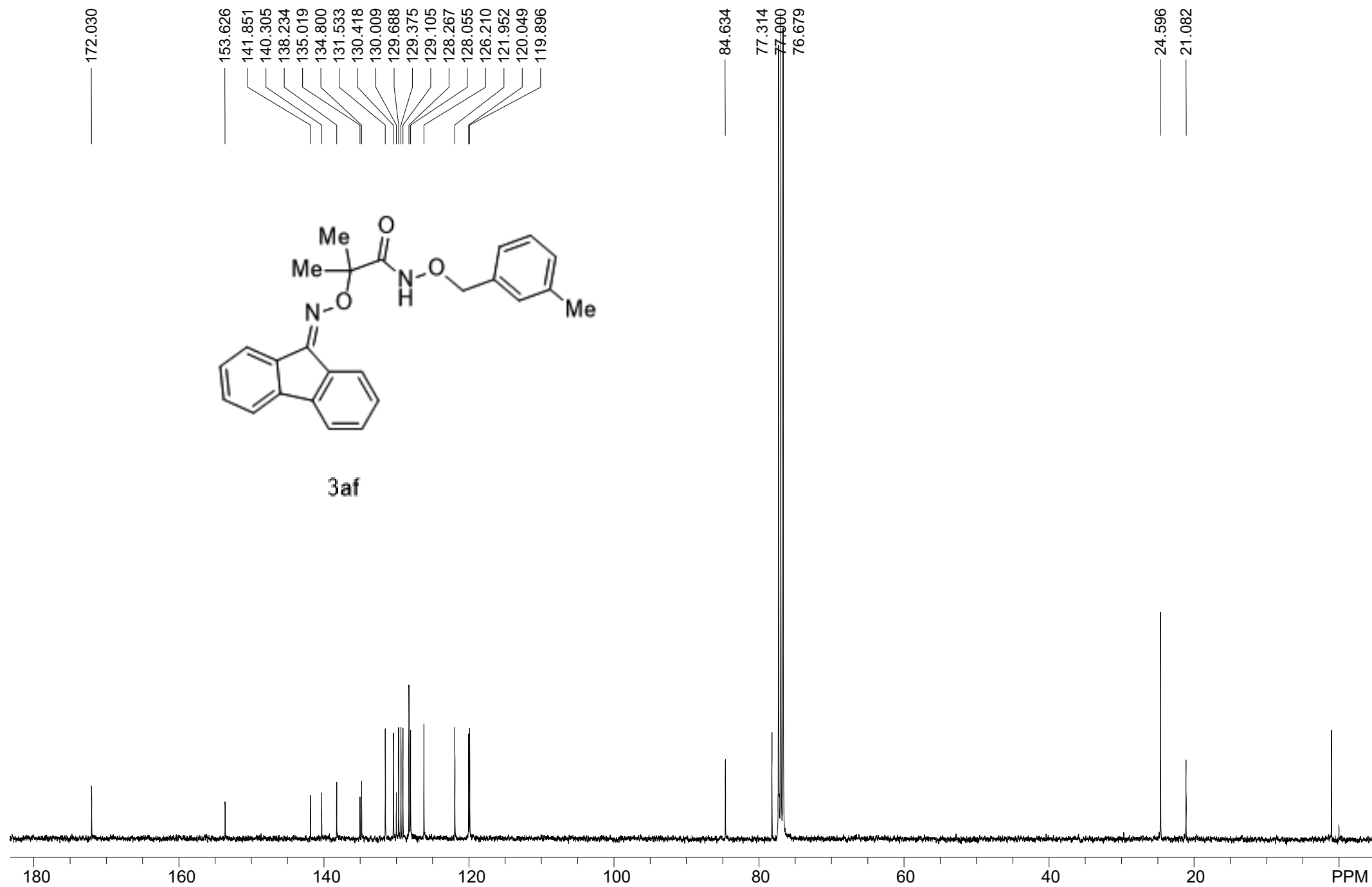










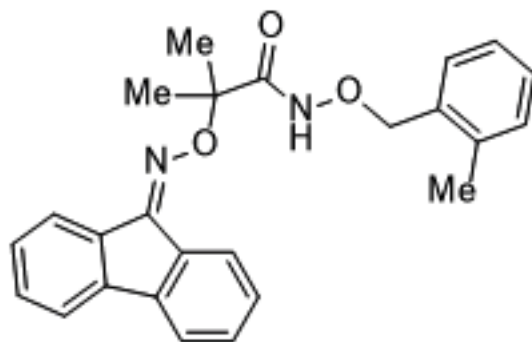


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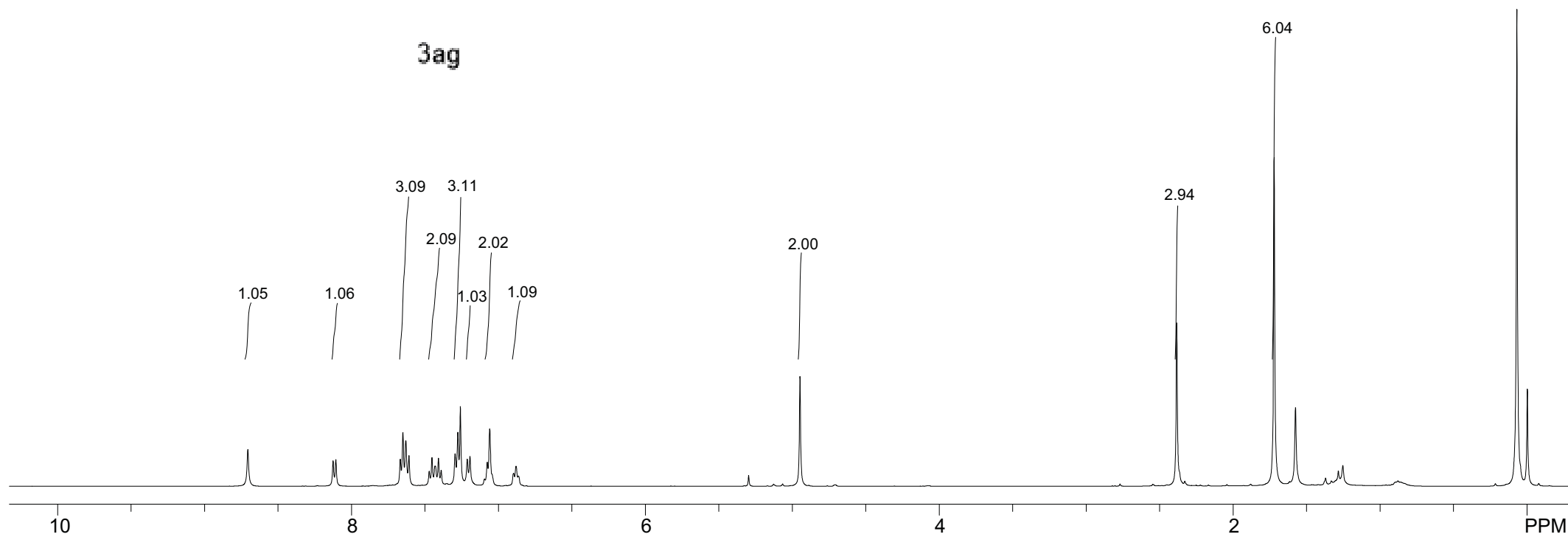
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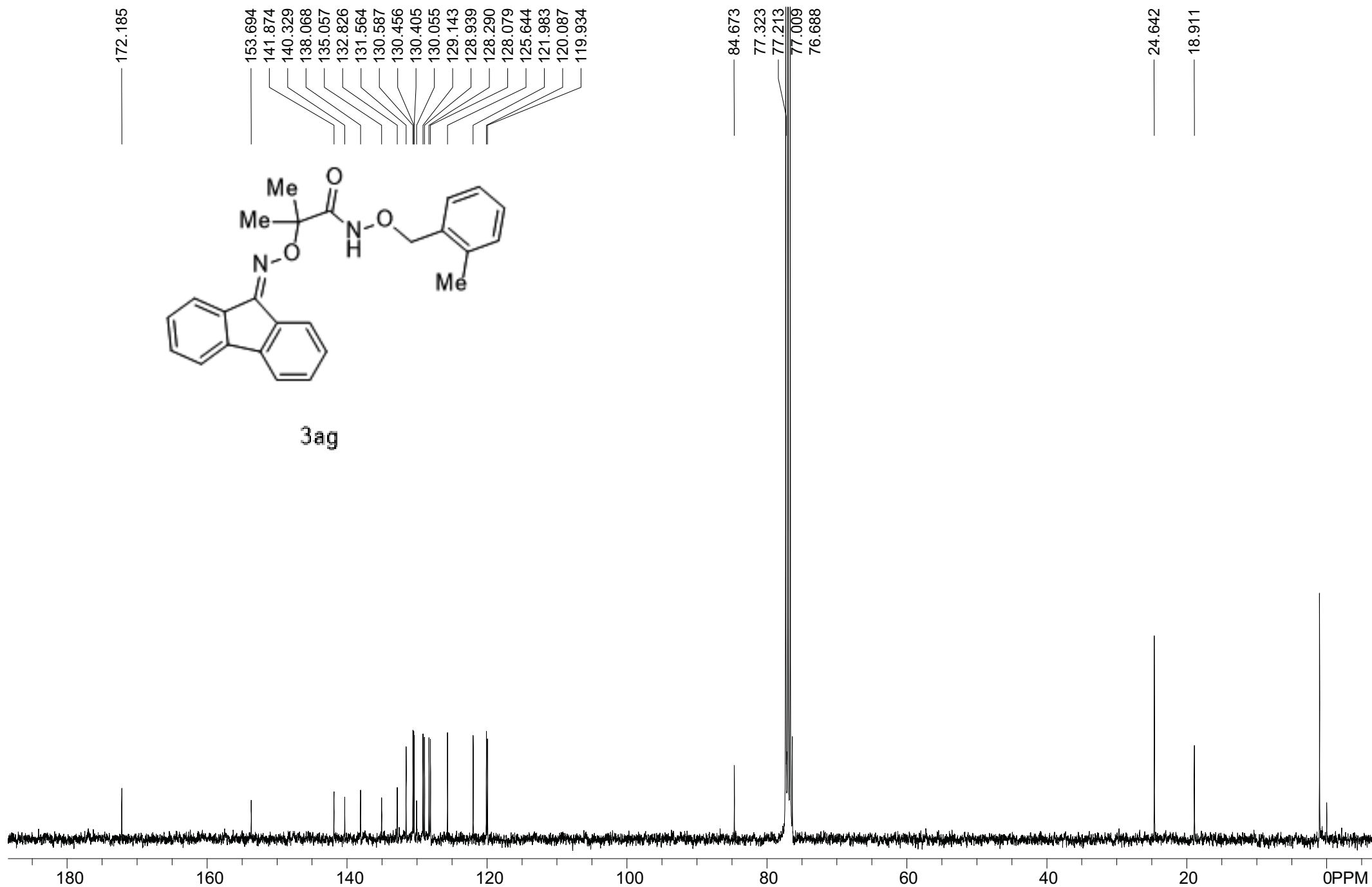
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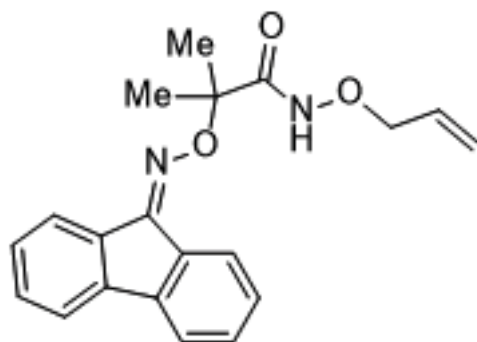


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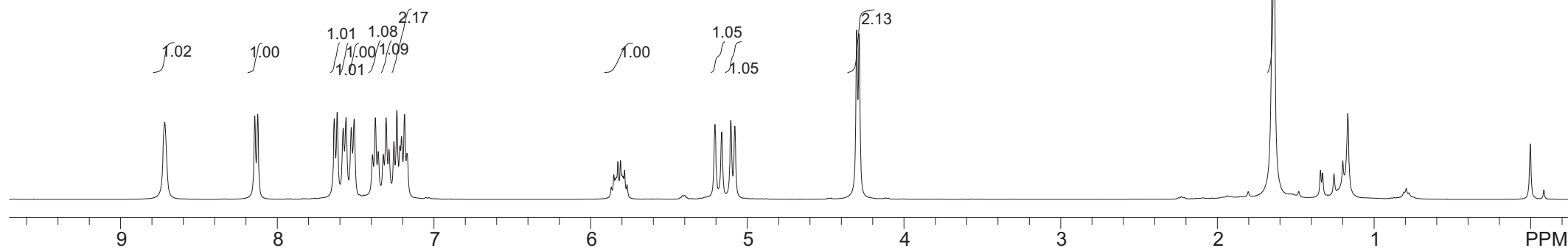


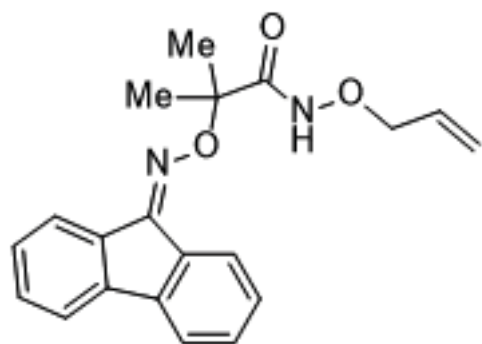


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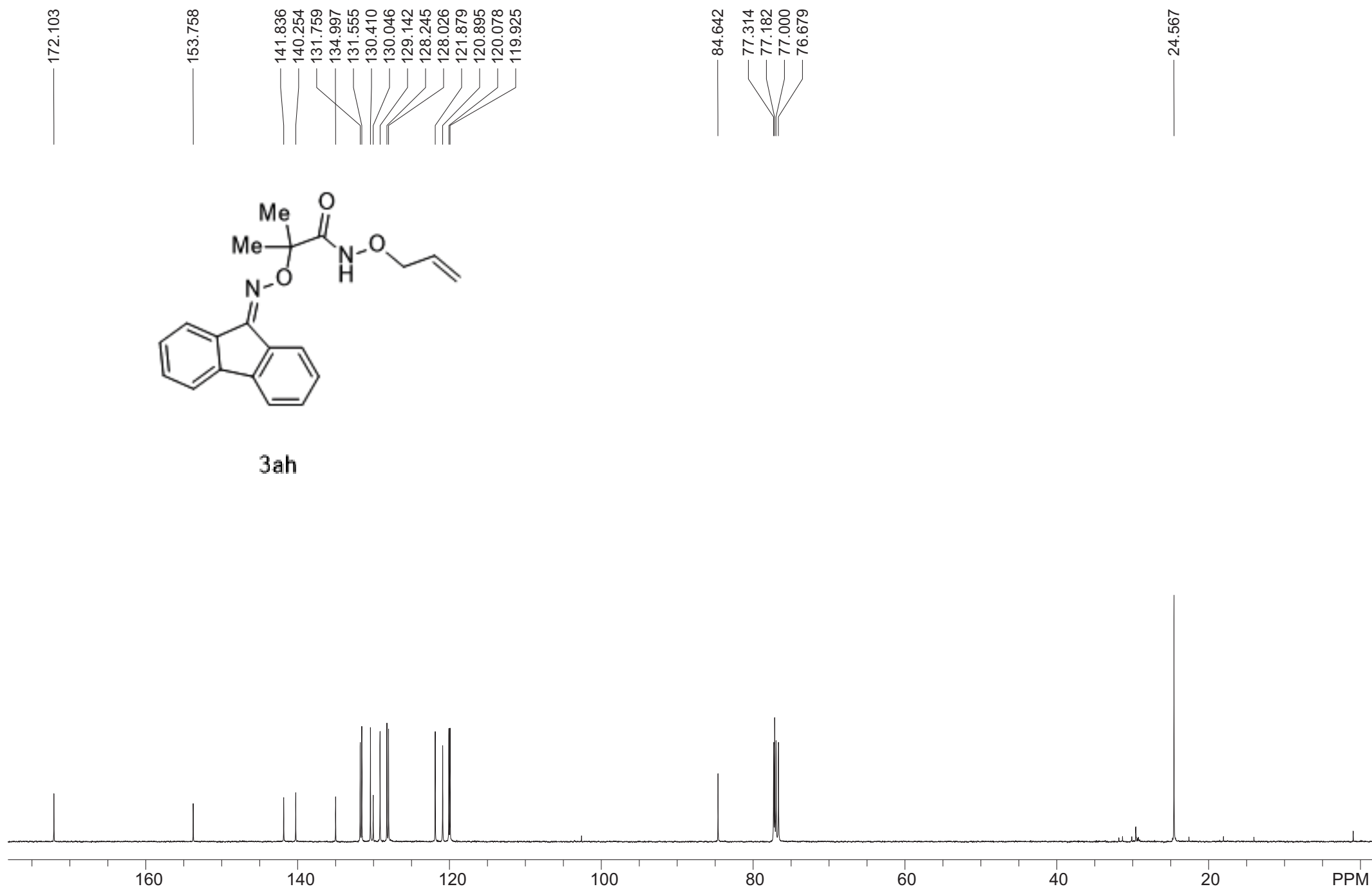


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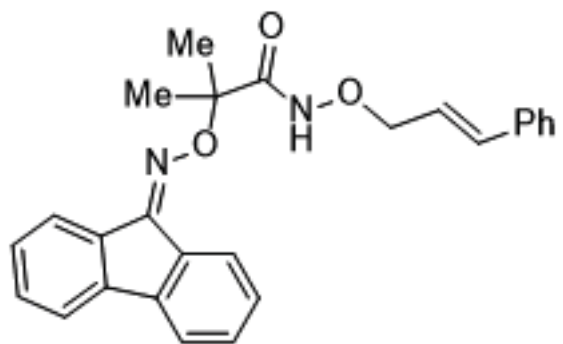




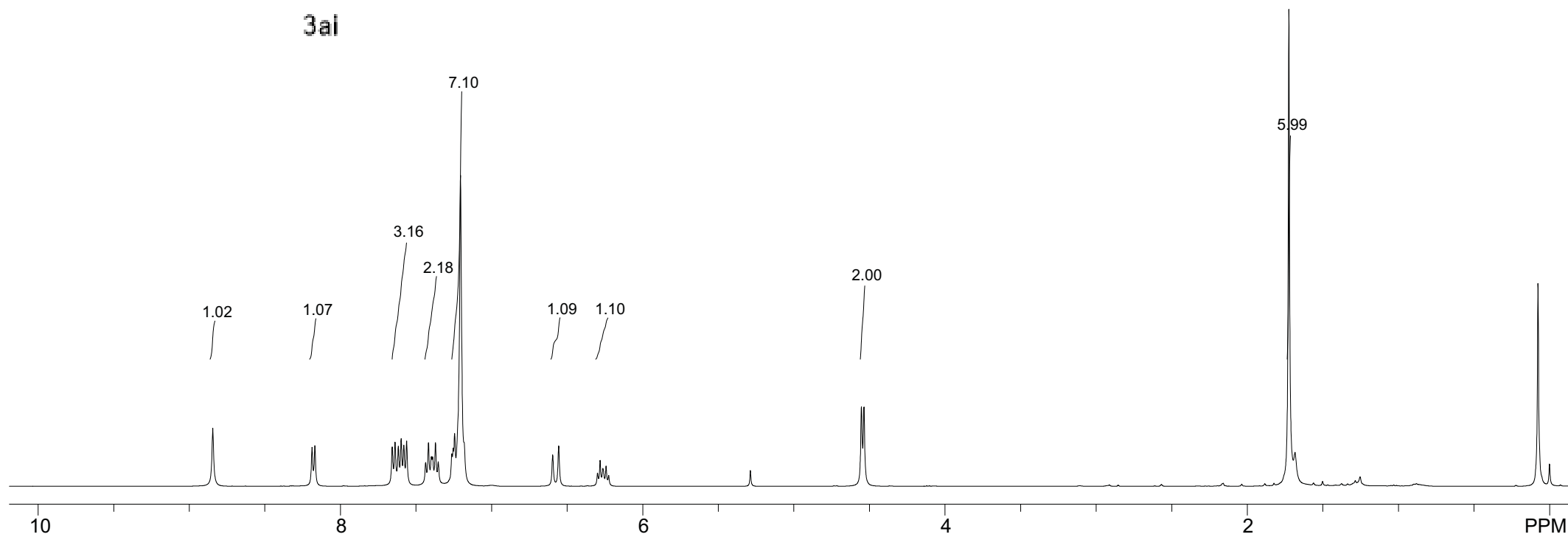
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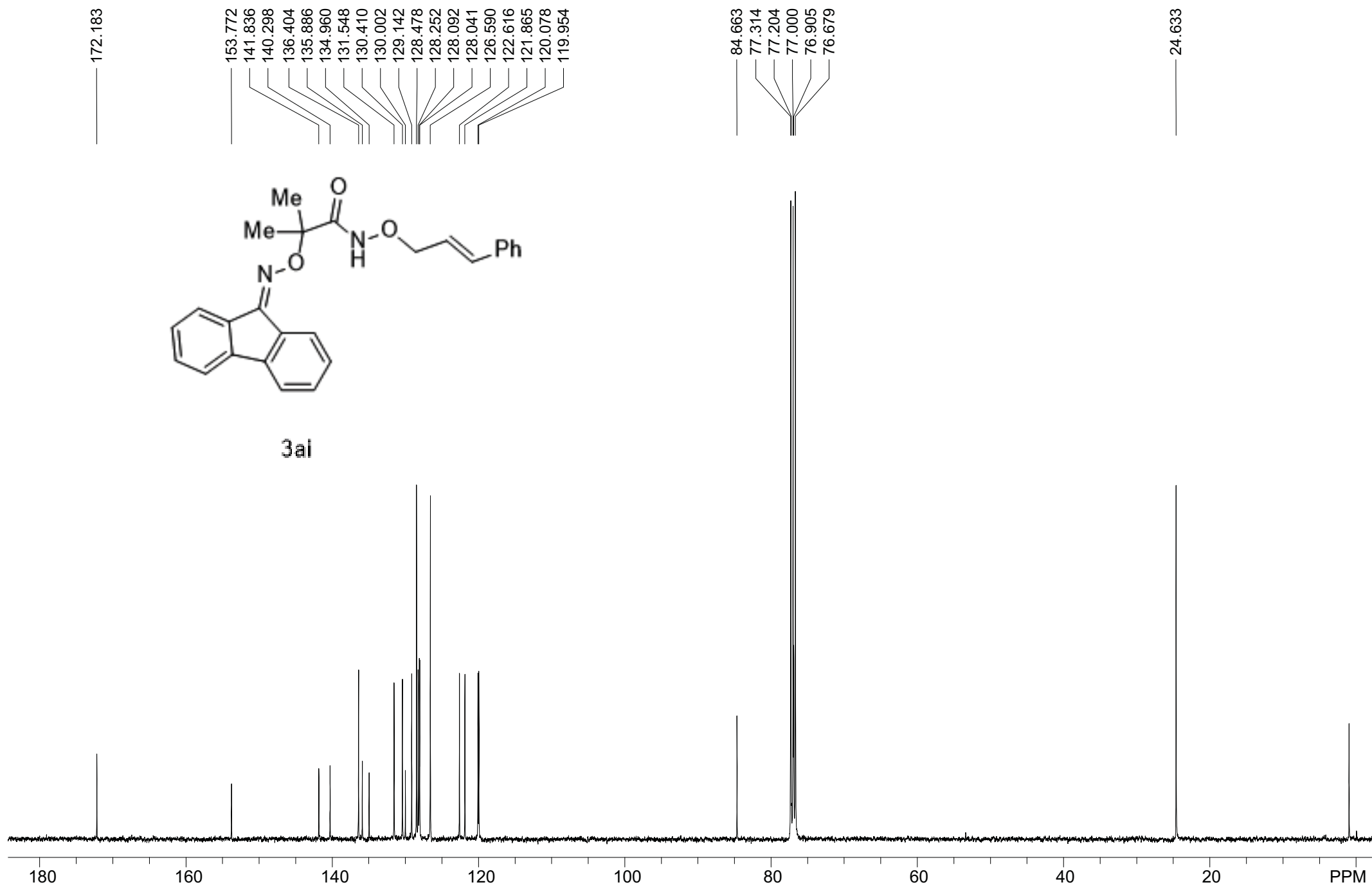


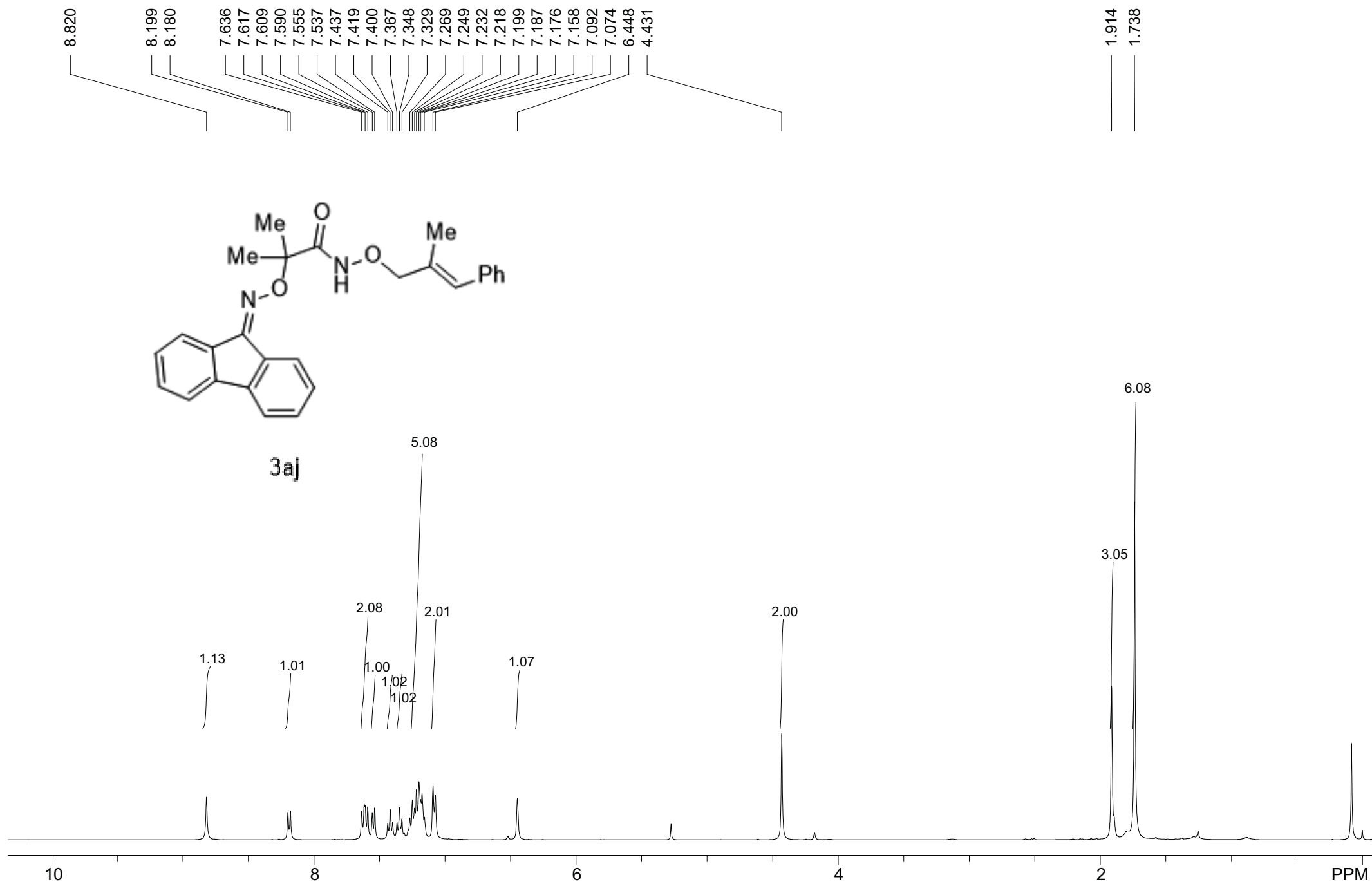
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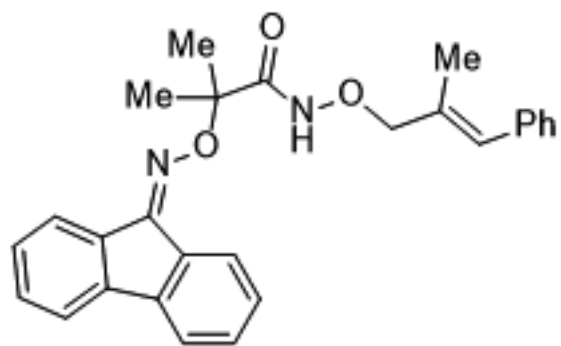


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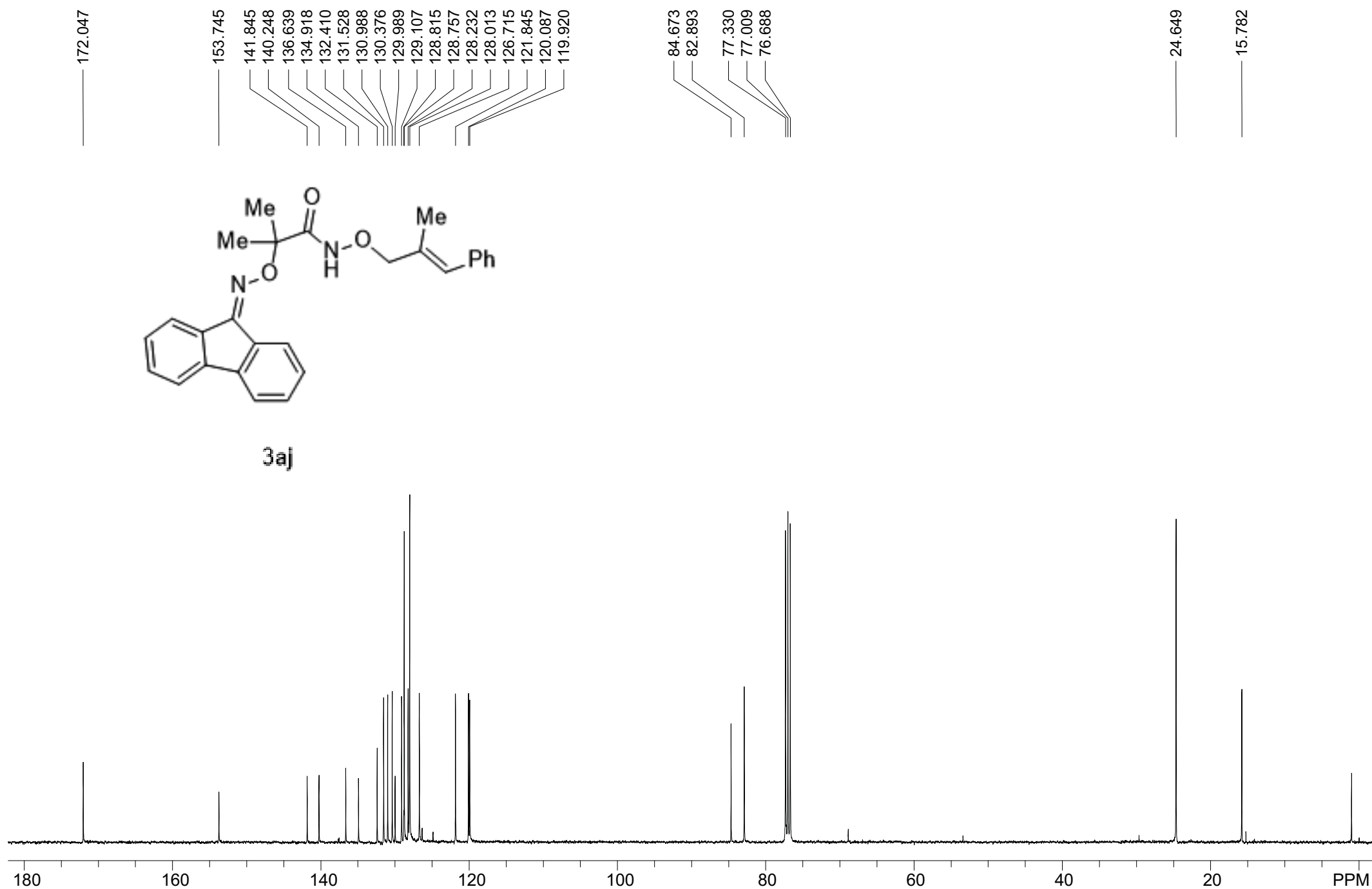


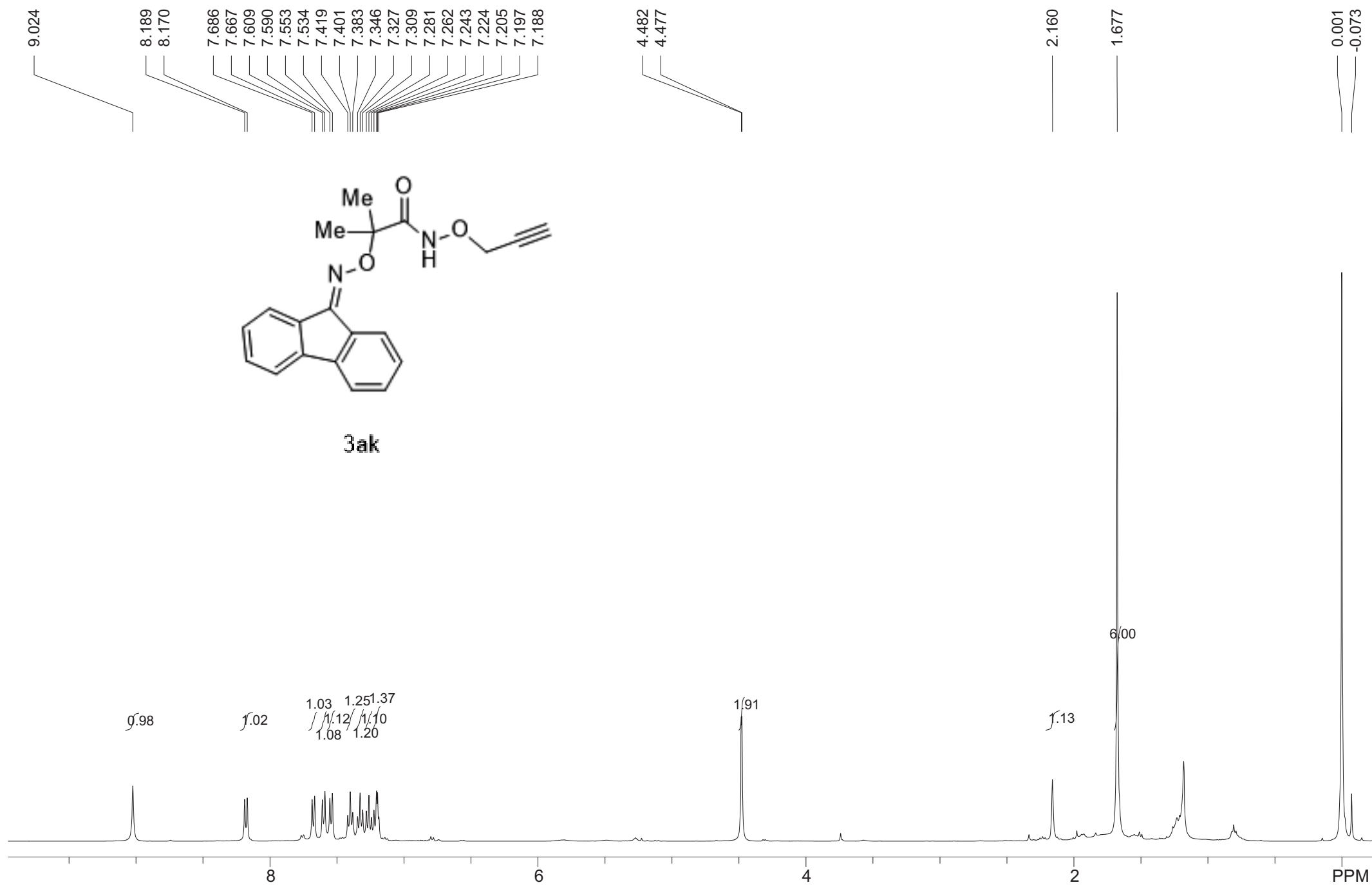


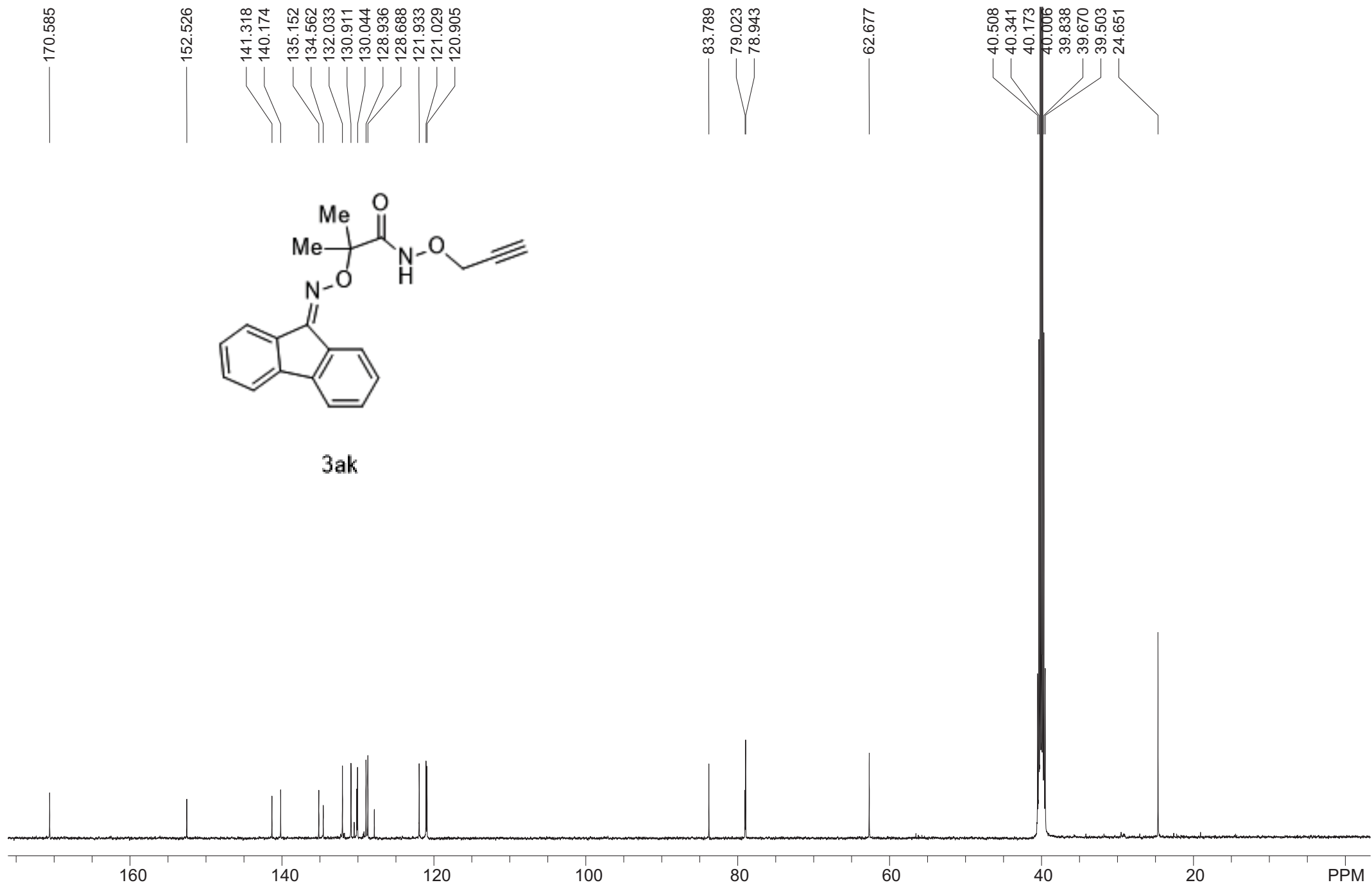


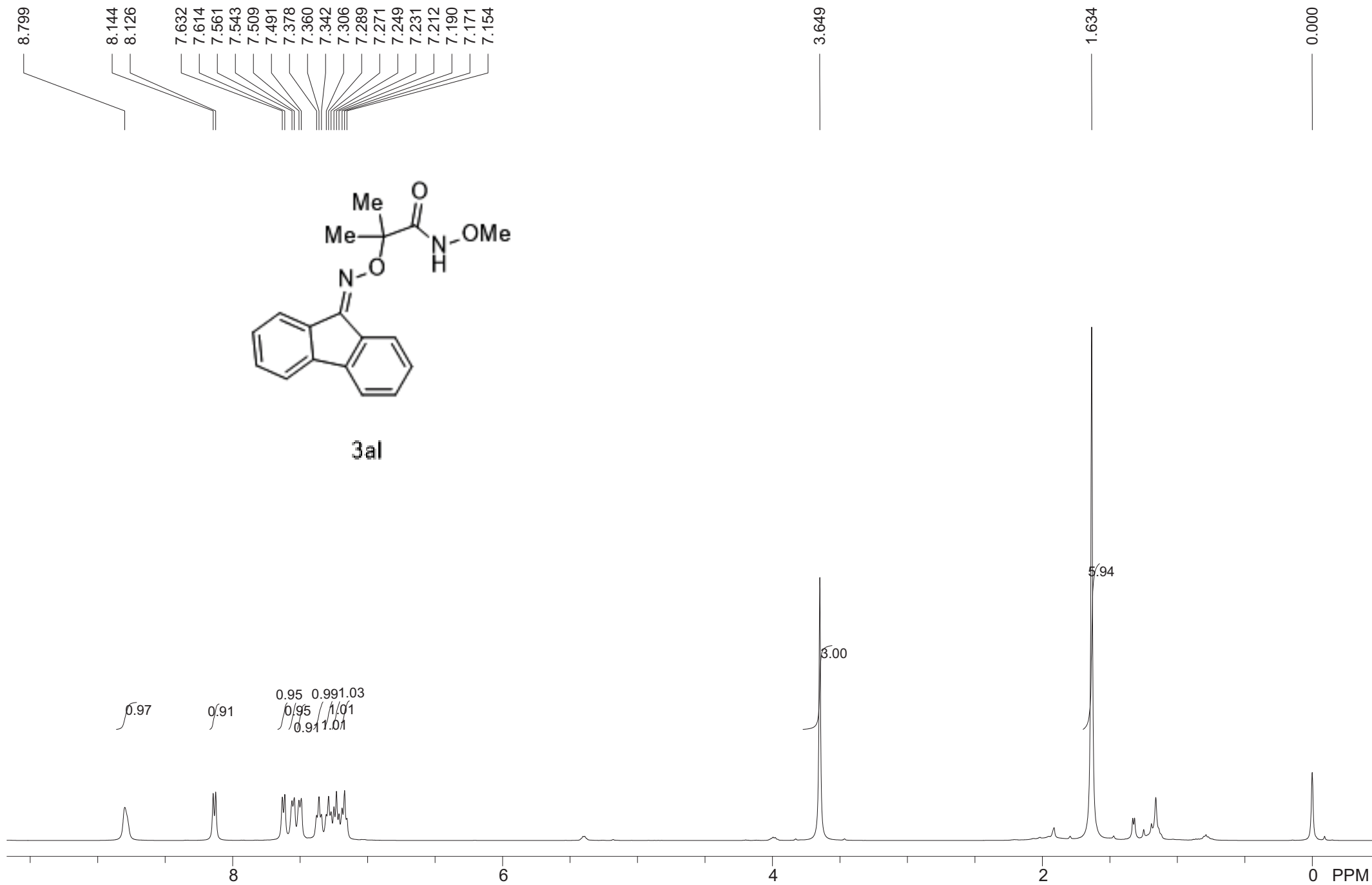


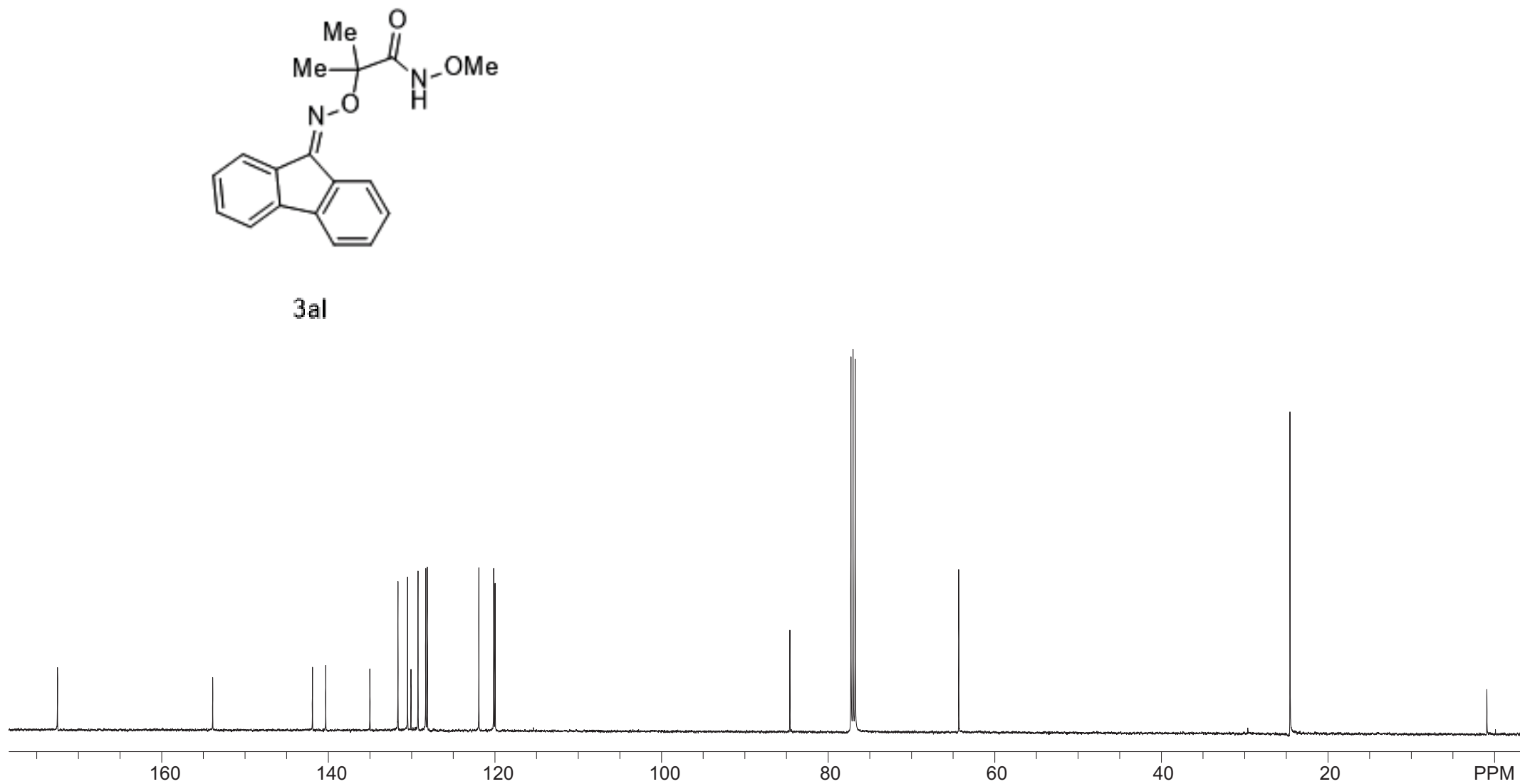
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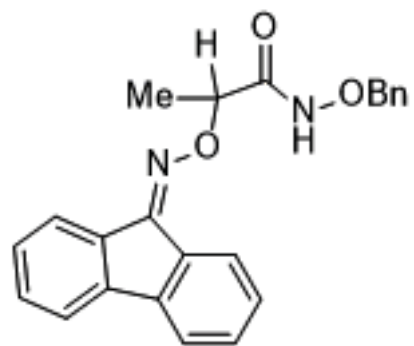




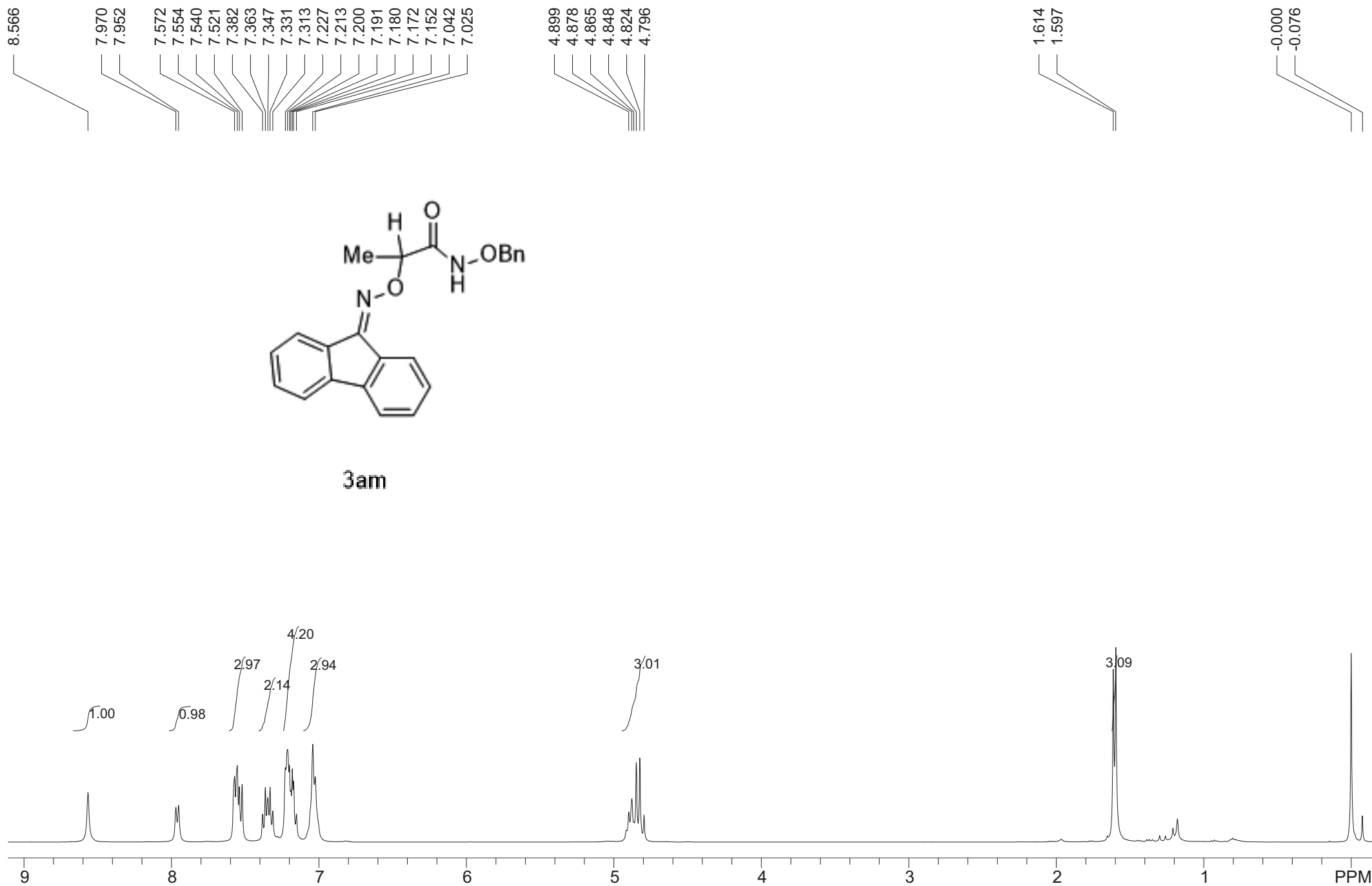


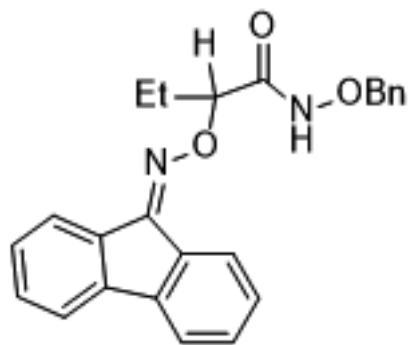
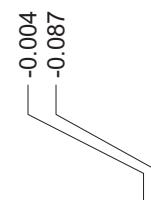
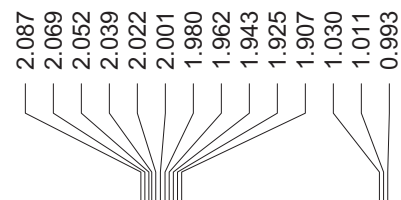
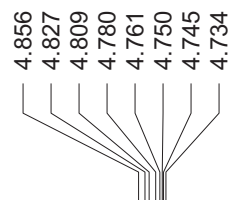
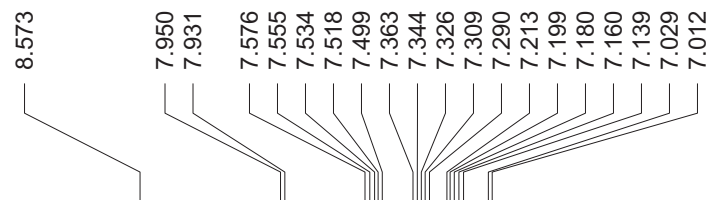




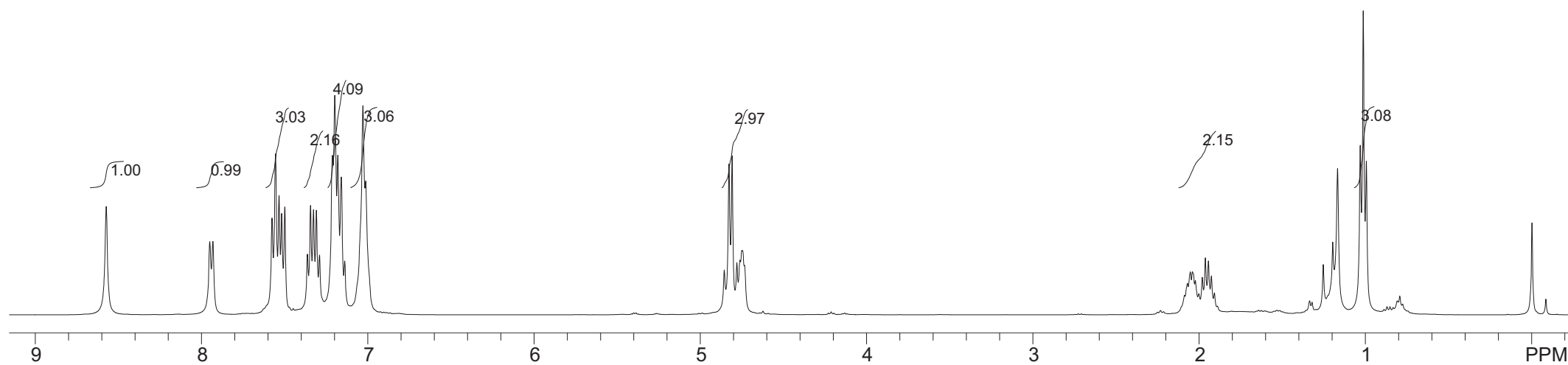


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3an



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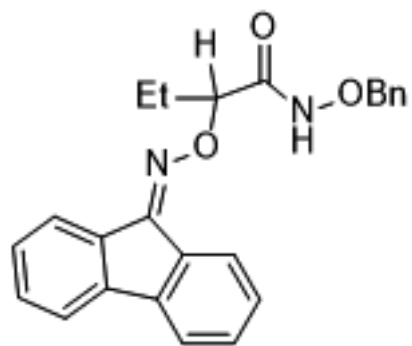
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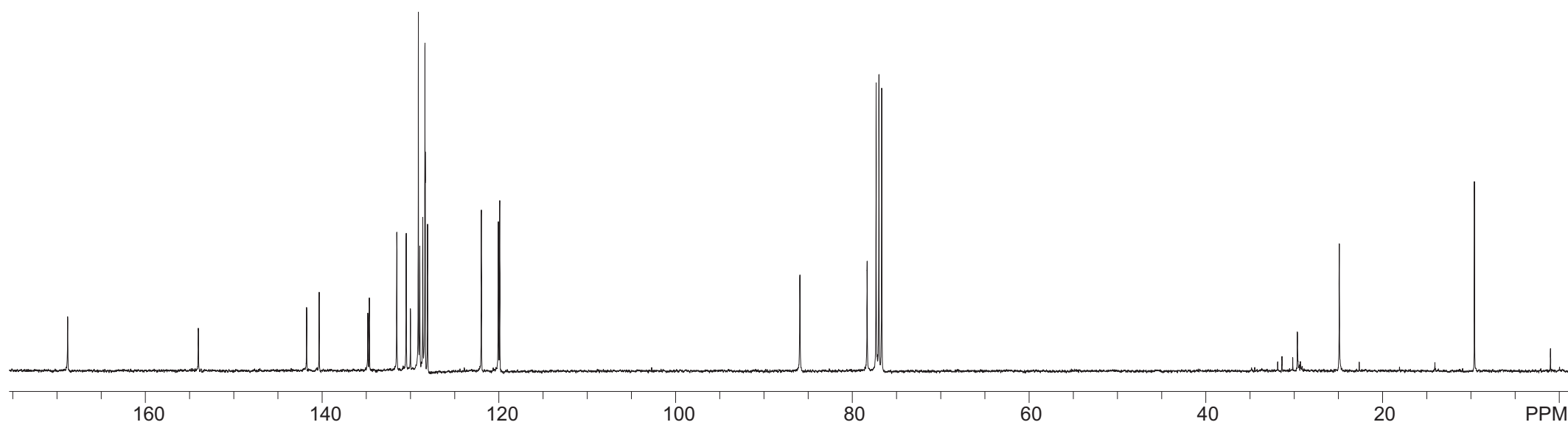
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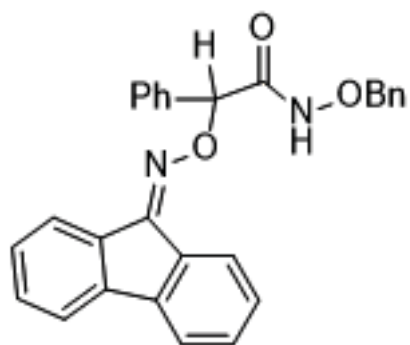
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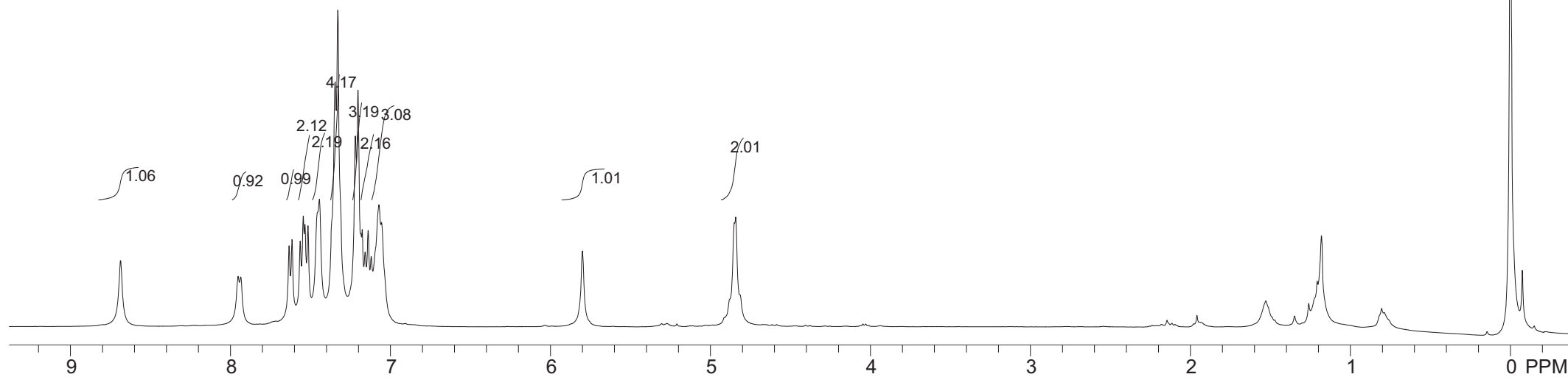


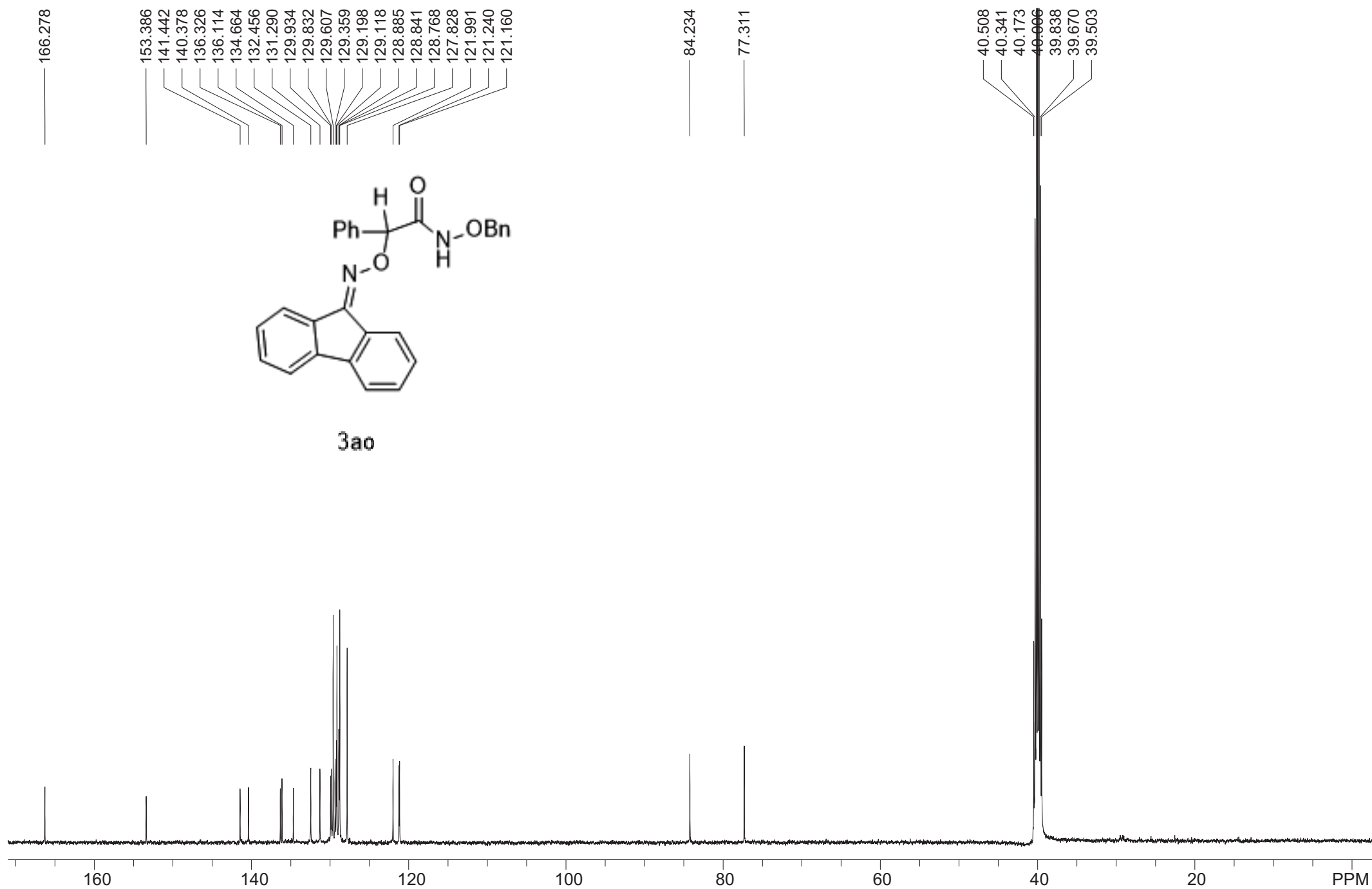
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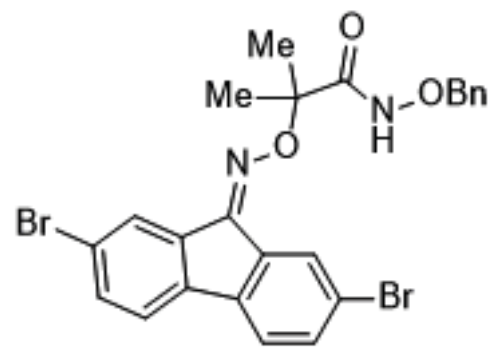




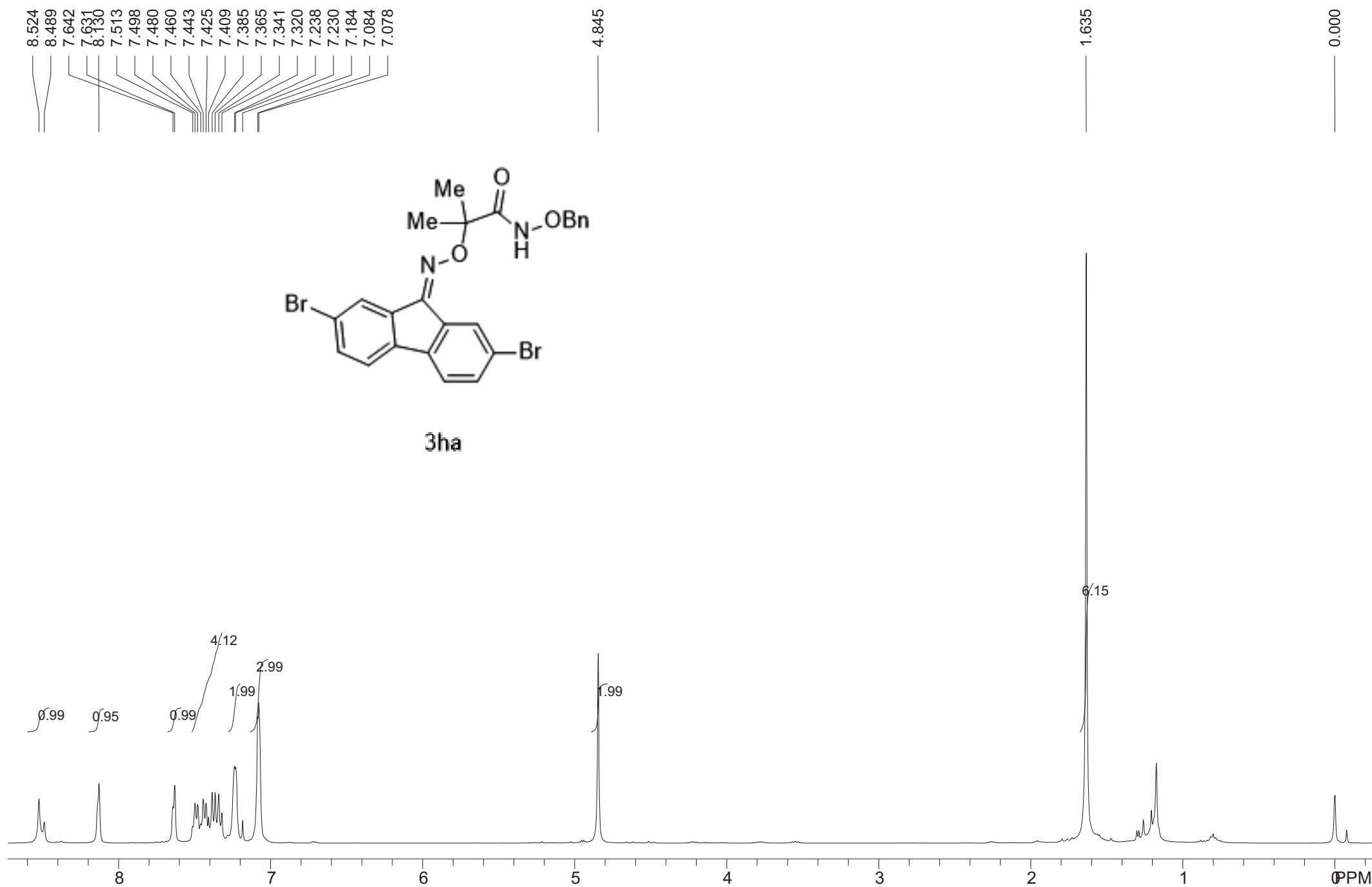
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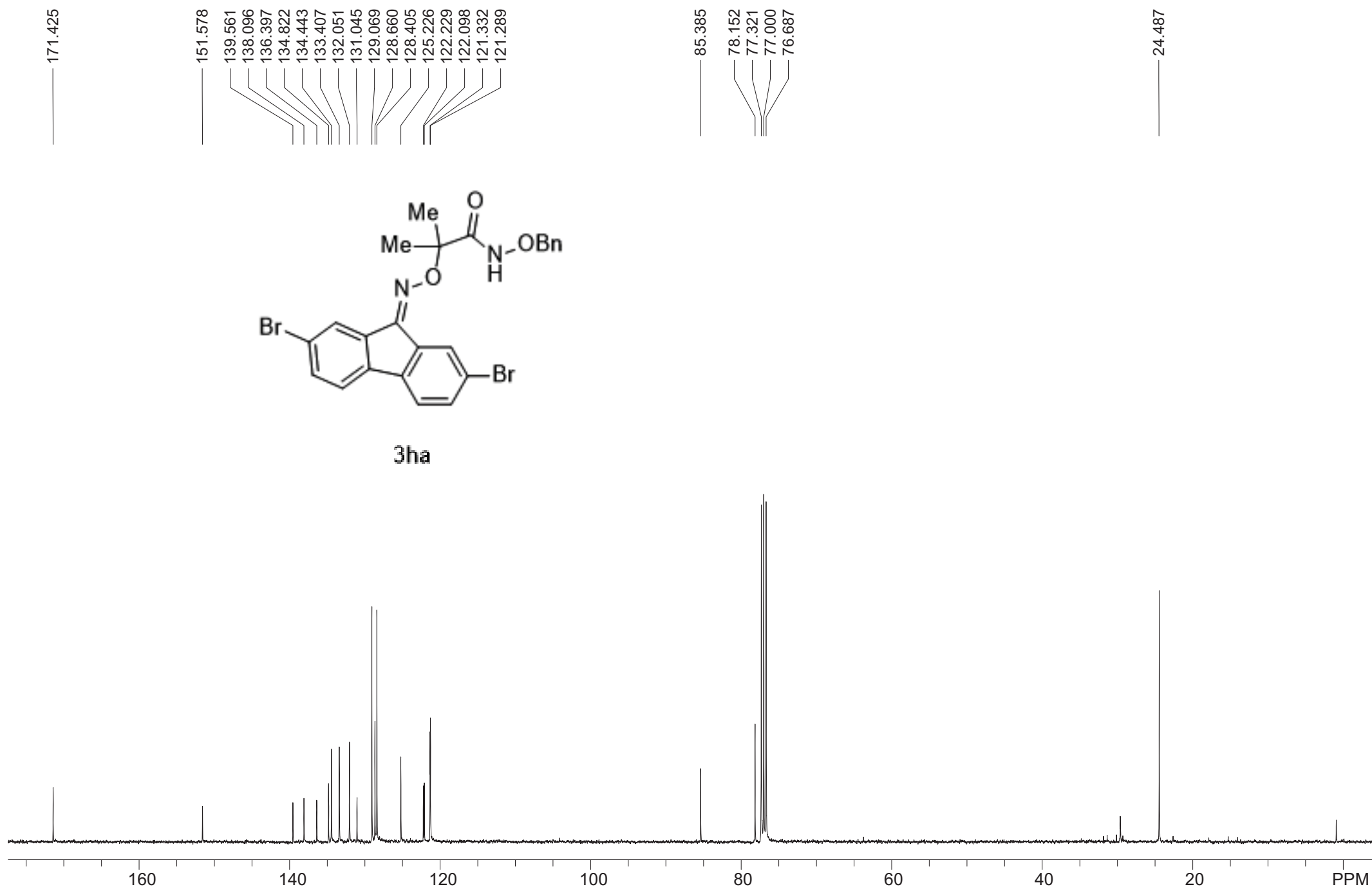


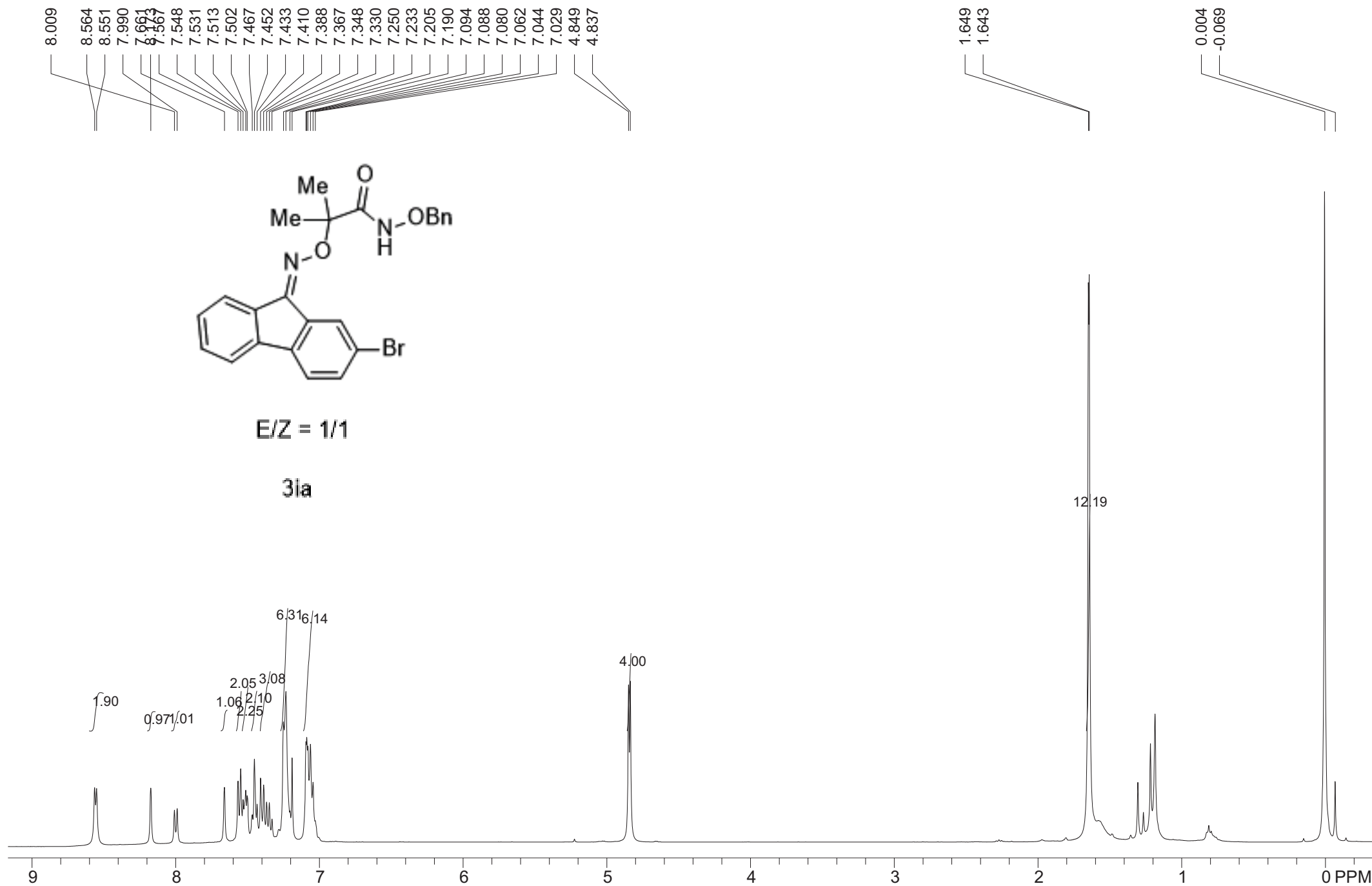


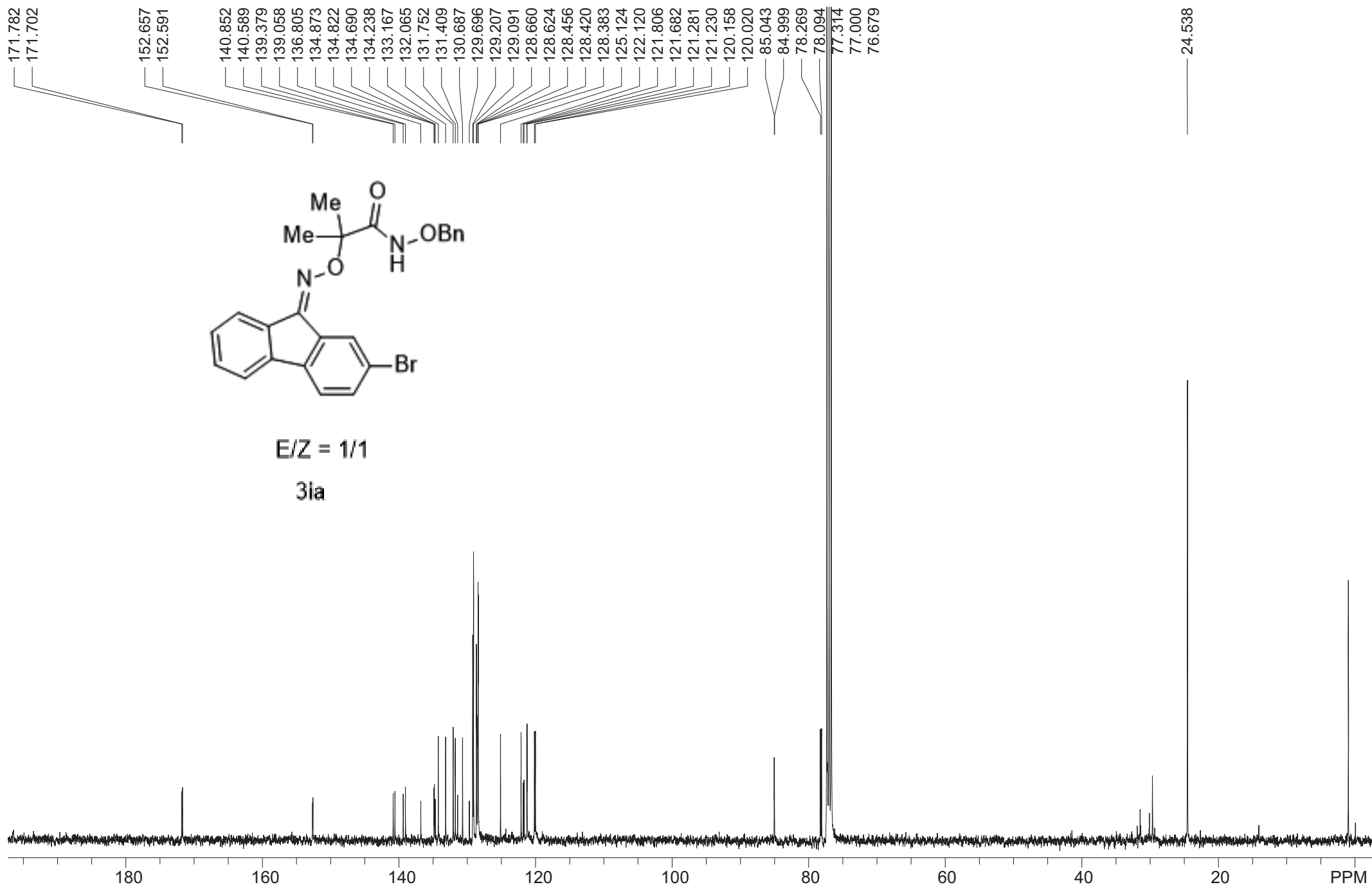


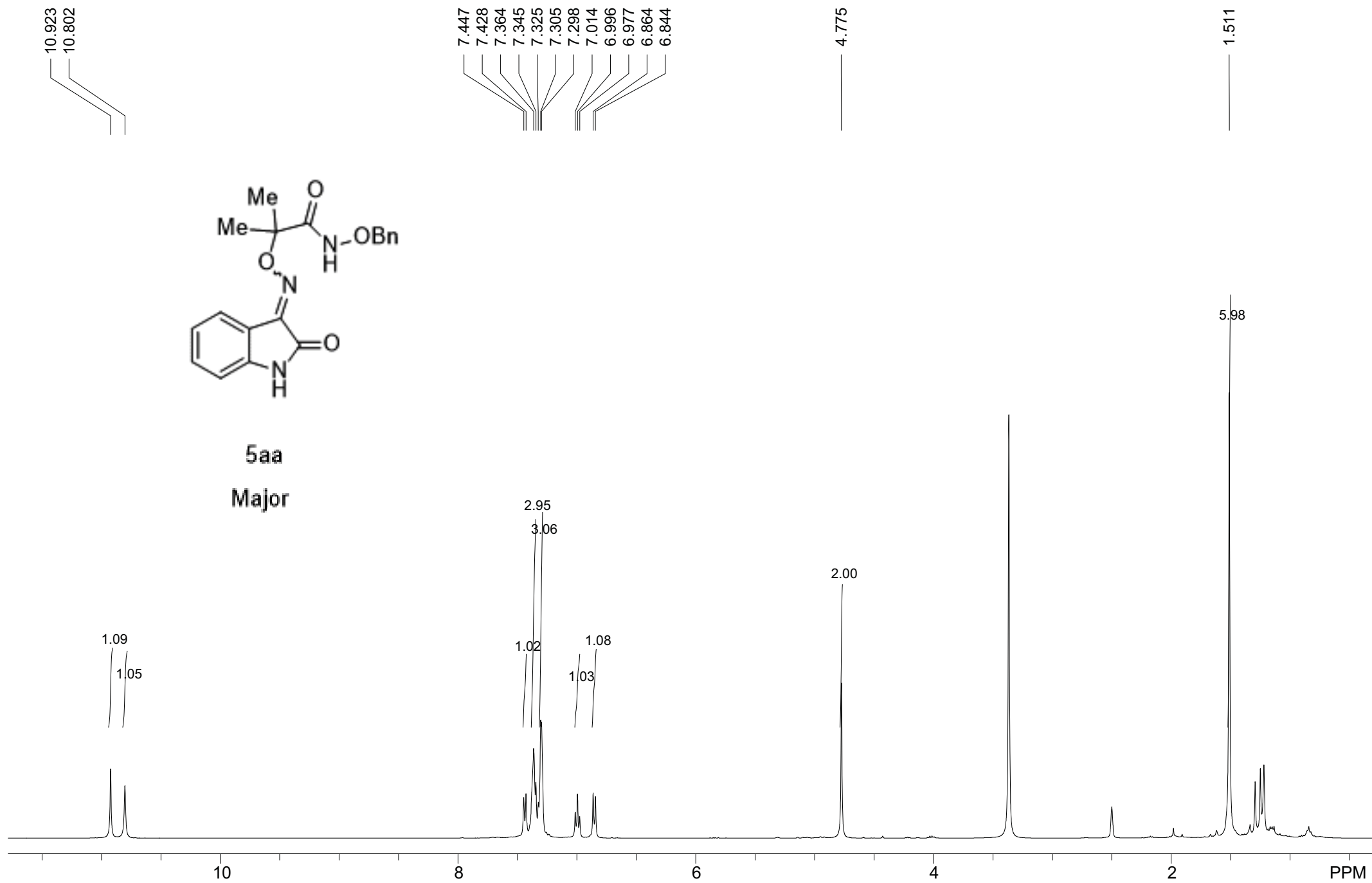
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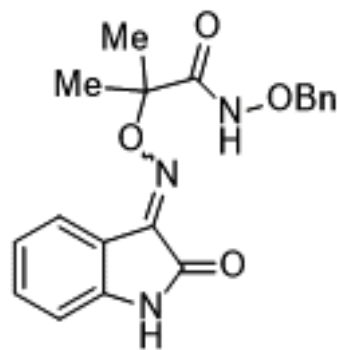






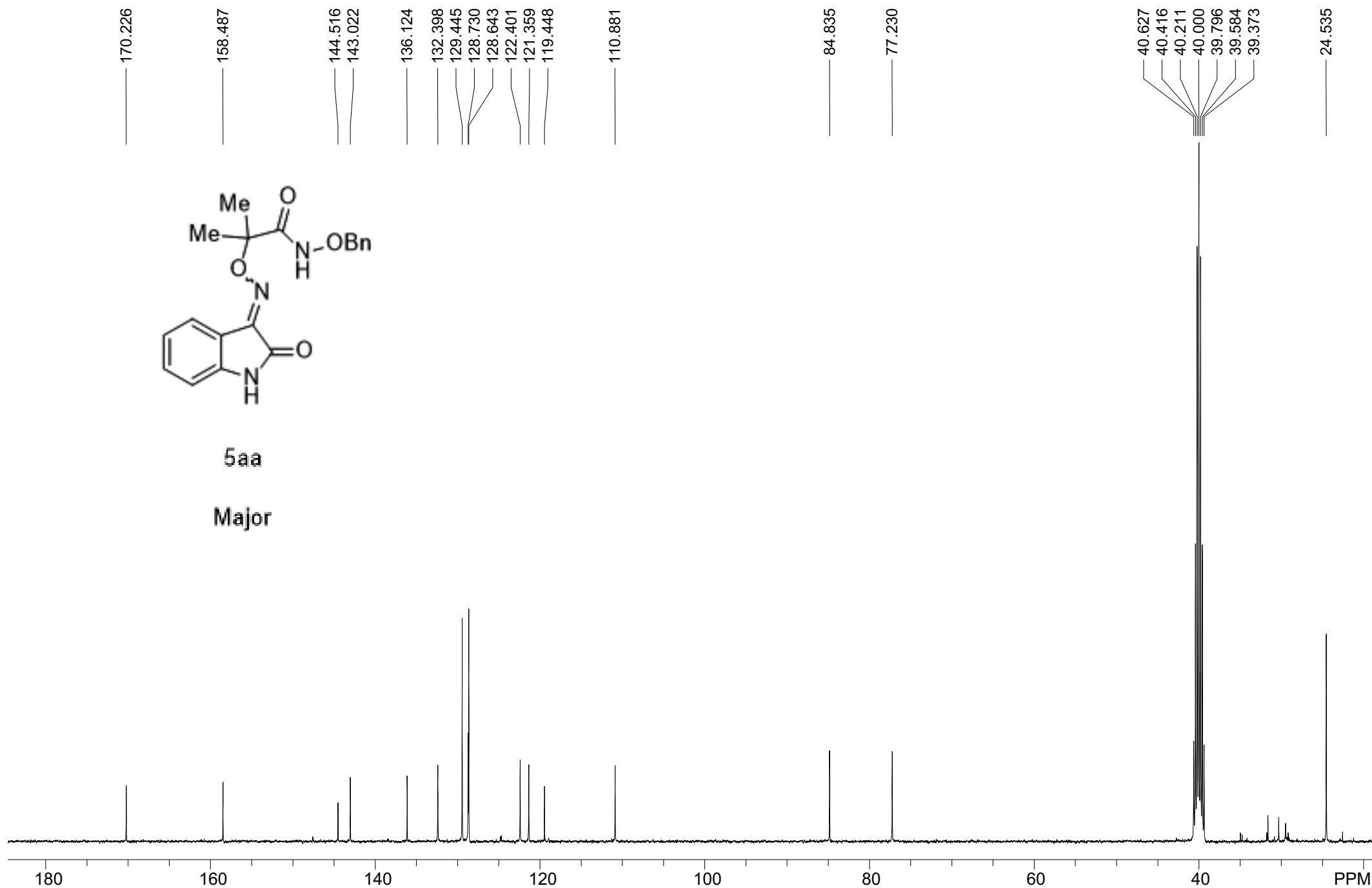


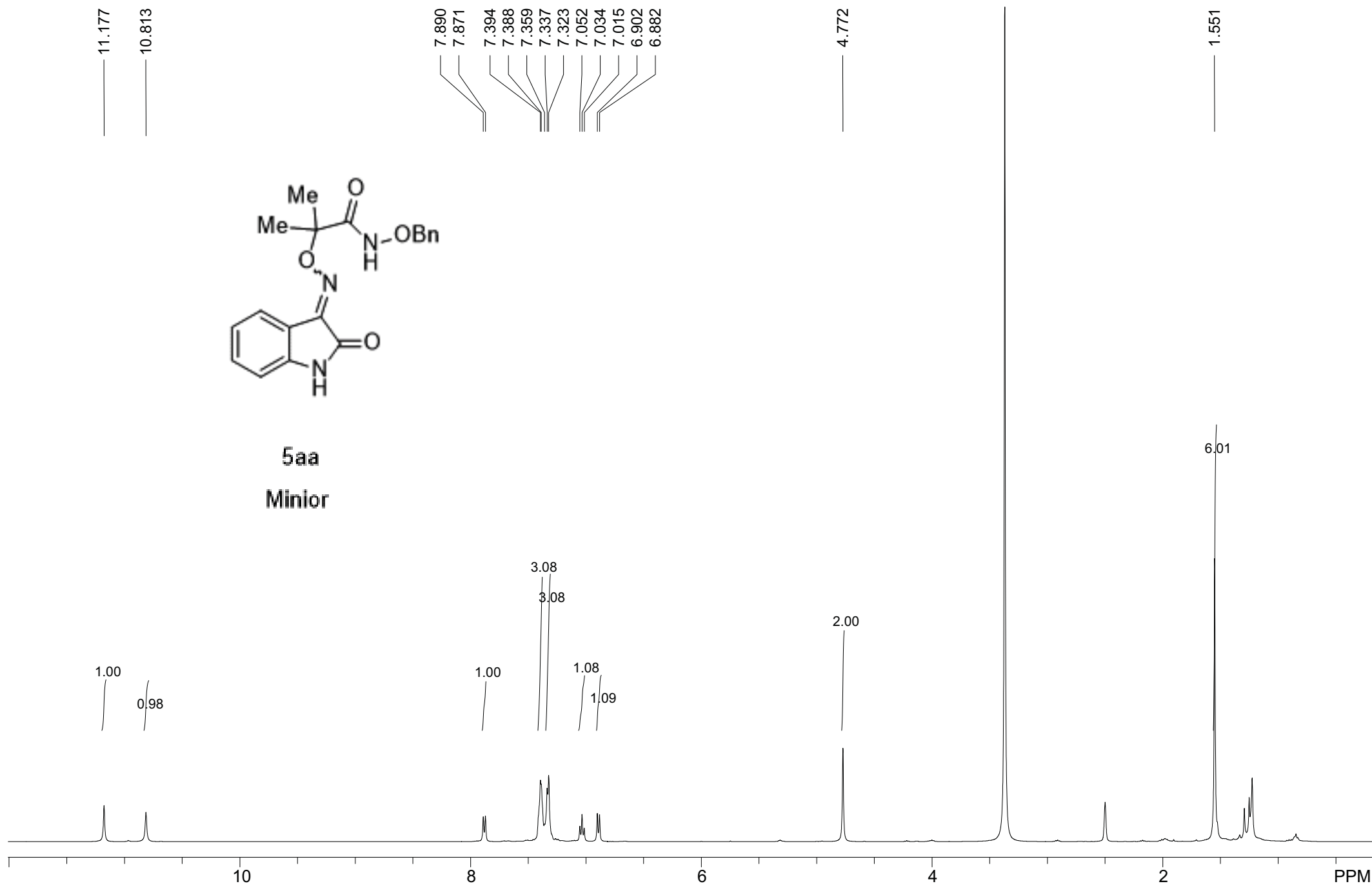


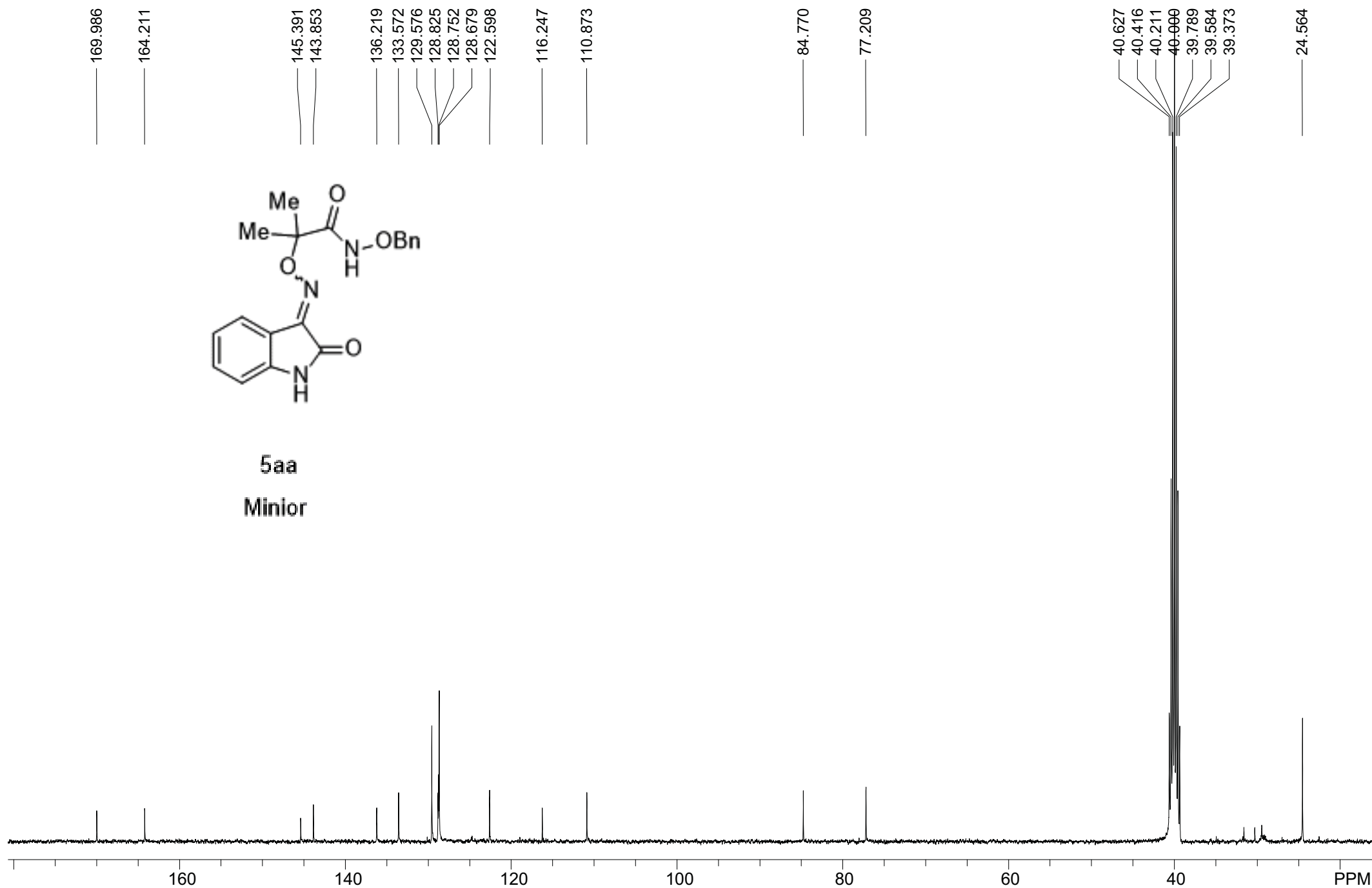


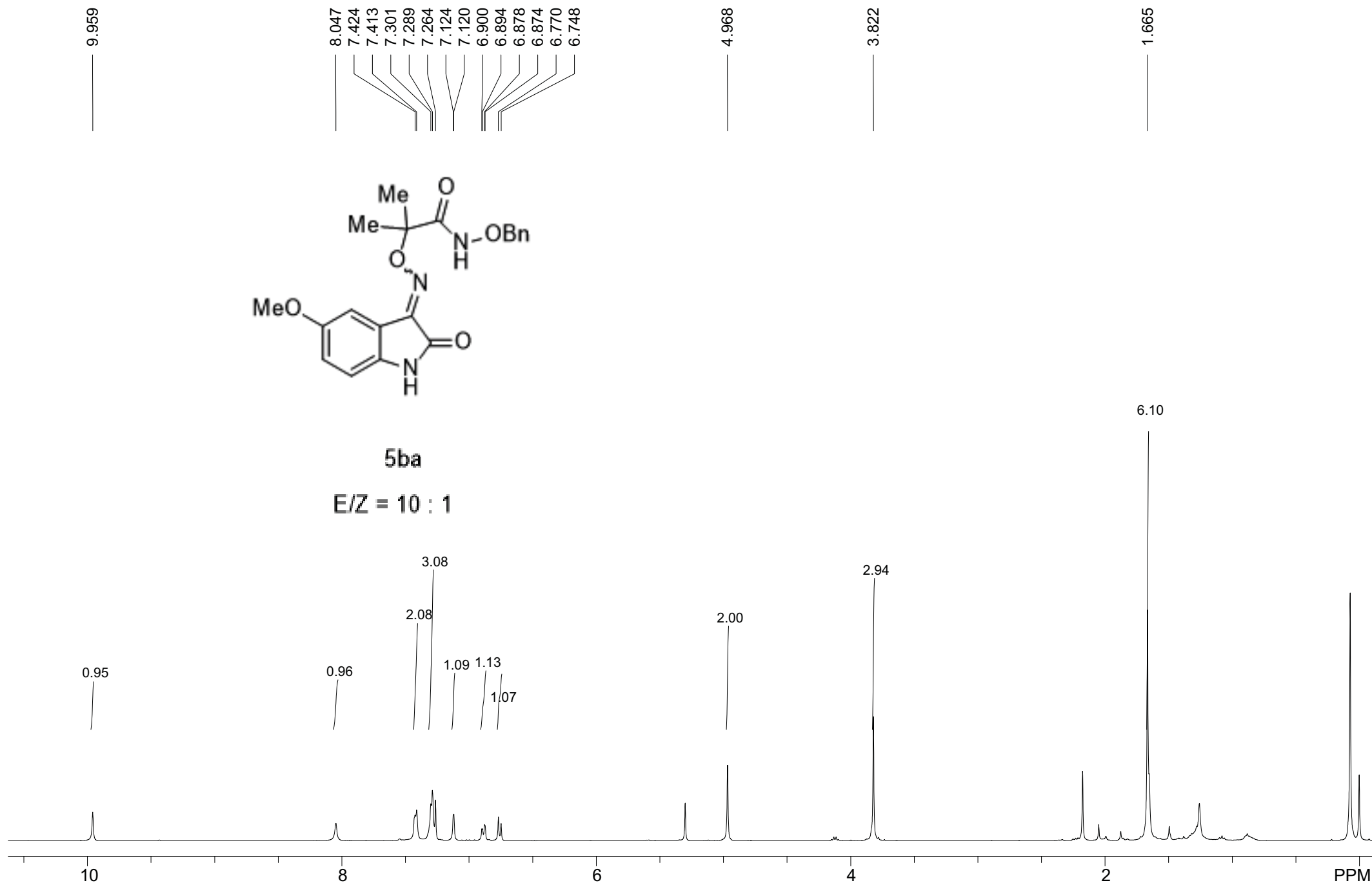
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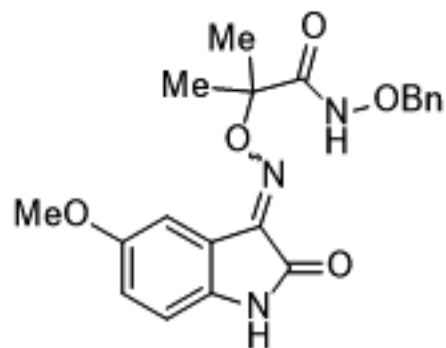
Major





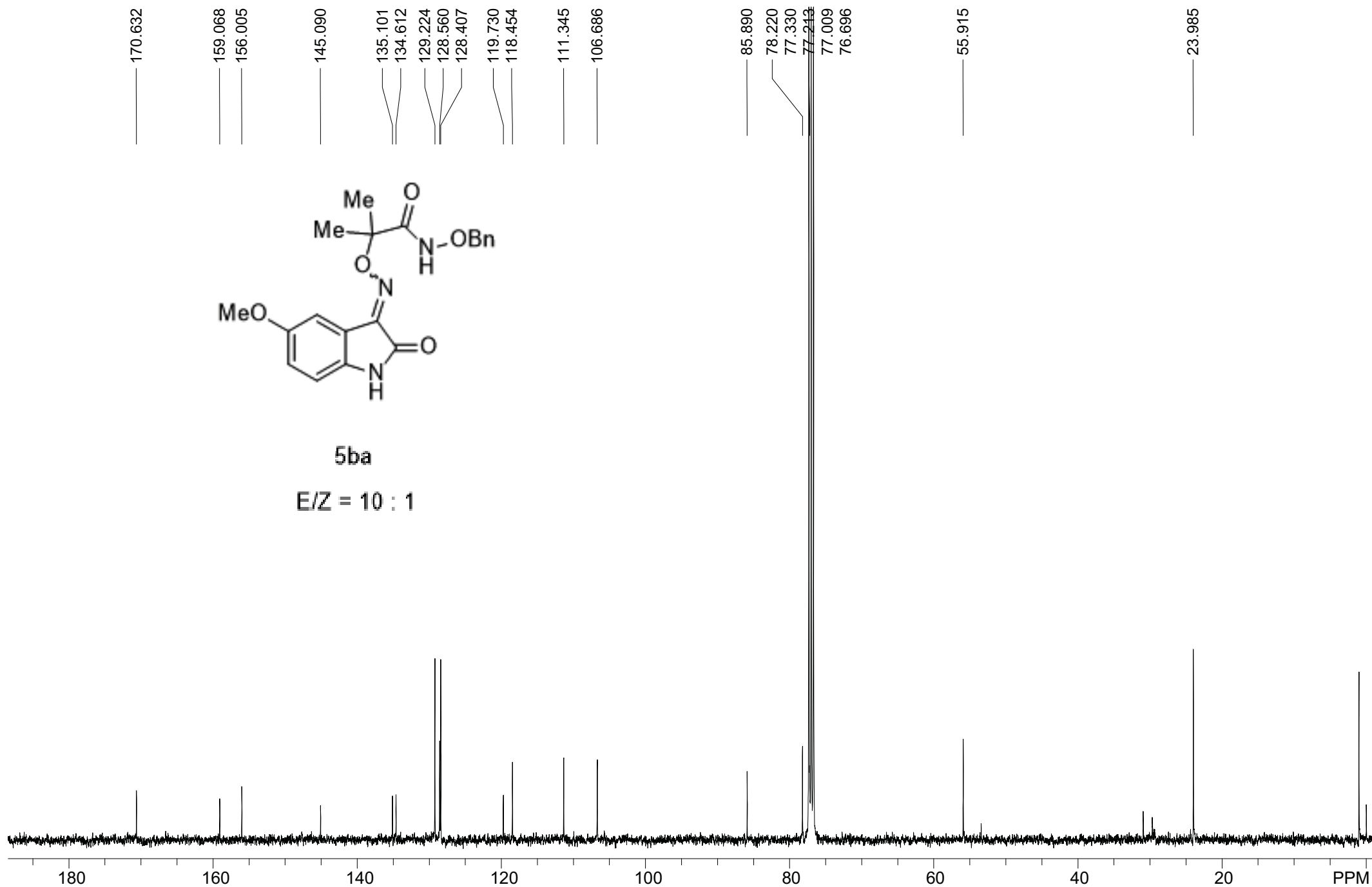






5ba

E/Z = 10 : 1



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7.414

7.399

7.284

7.276

7.125

7.105

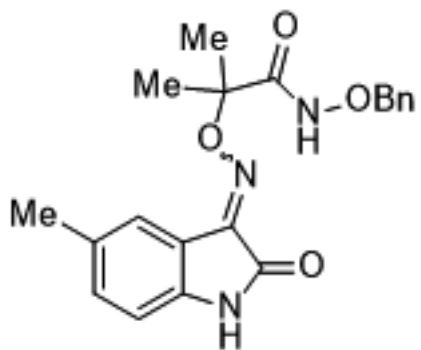
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6.737

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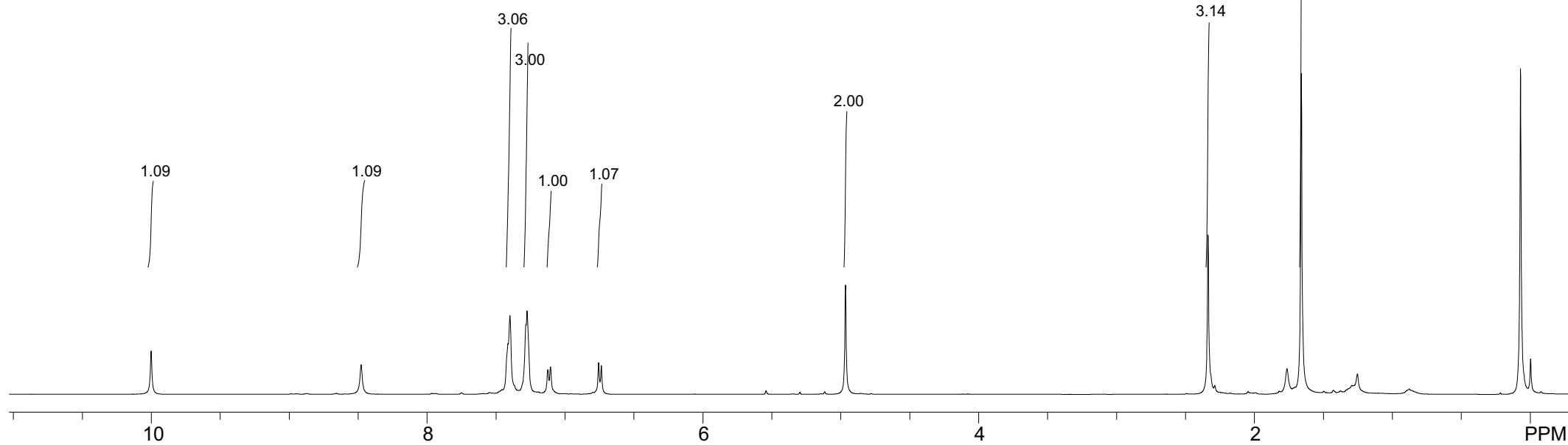
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1.662



5ca

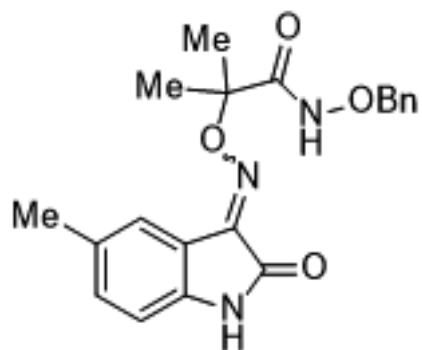
E/Z = 10 : 1



170.734
159.235
144.973
138.717
135.071
132.607
132.556
129.224
128.546
128.385
122.093
118.972
110.419

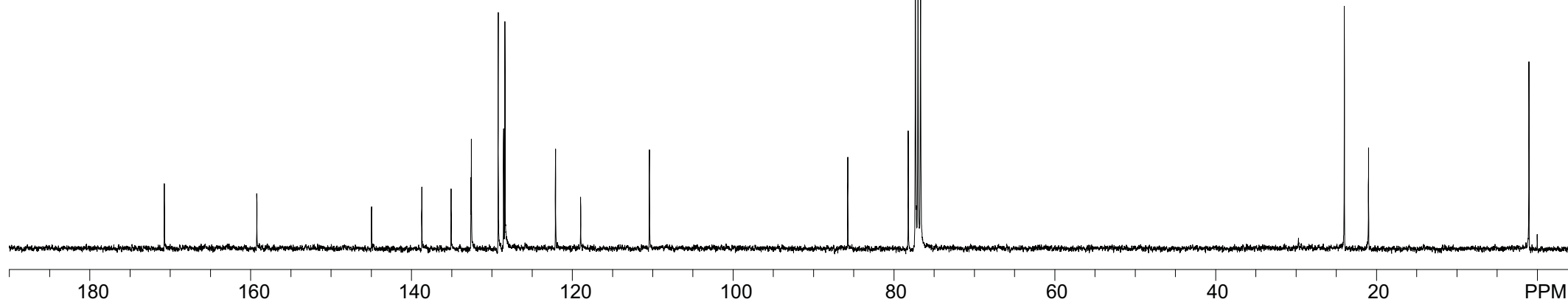
85.737
78.212
77.323
77.213
77.009
76.688

23.964
20.959



5ca

E/Z = 10 : 1



9.869

8.137

7.434

7.416

7.404

7.289

7.281

7.264

7.177

7.158

7.014

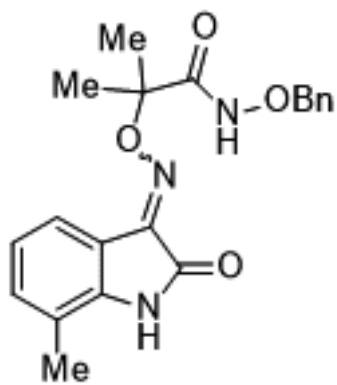
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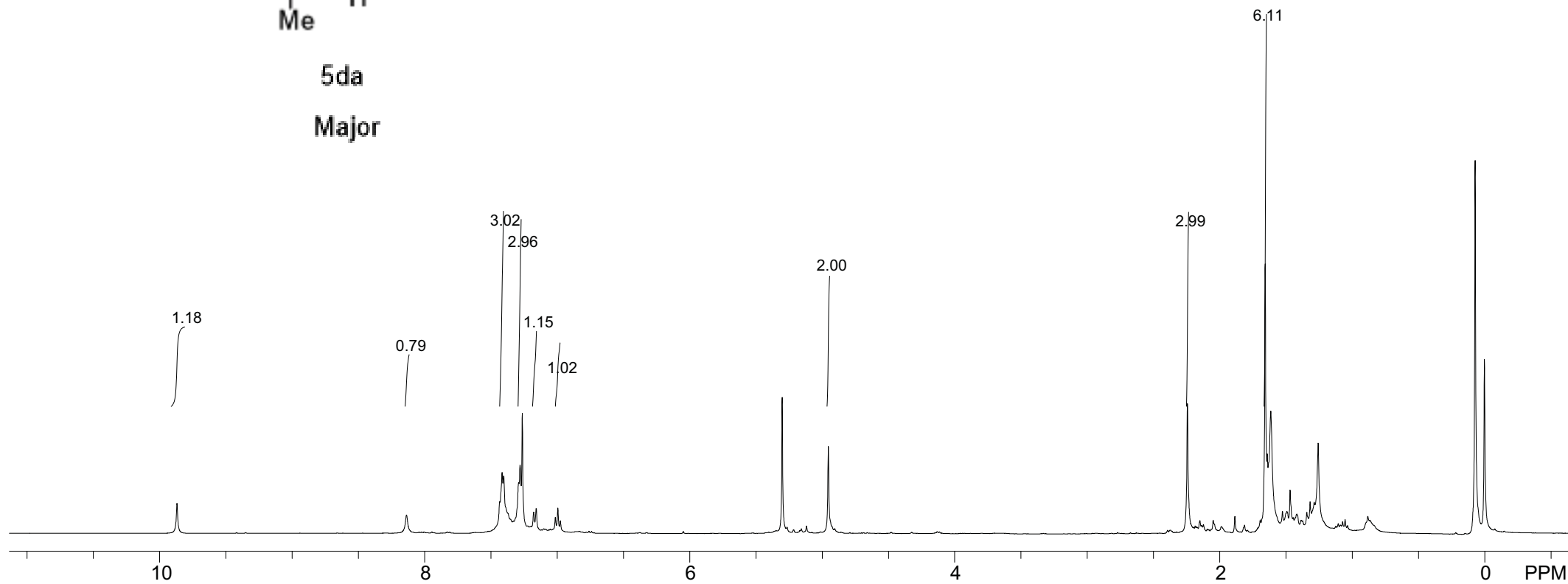
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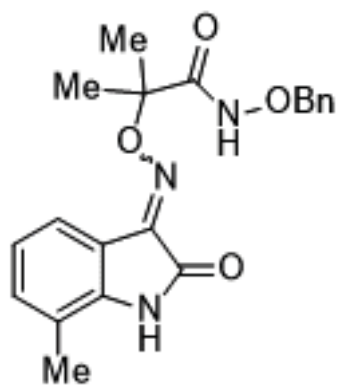
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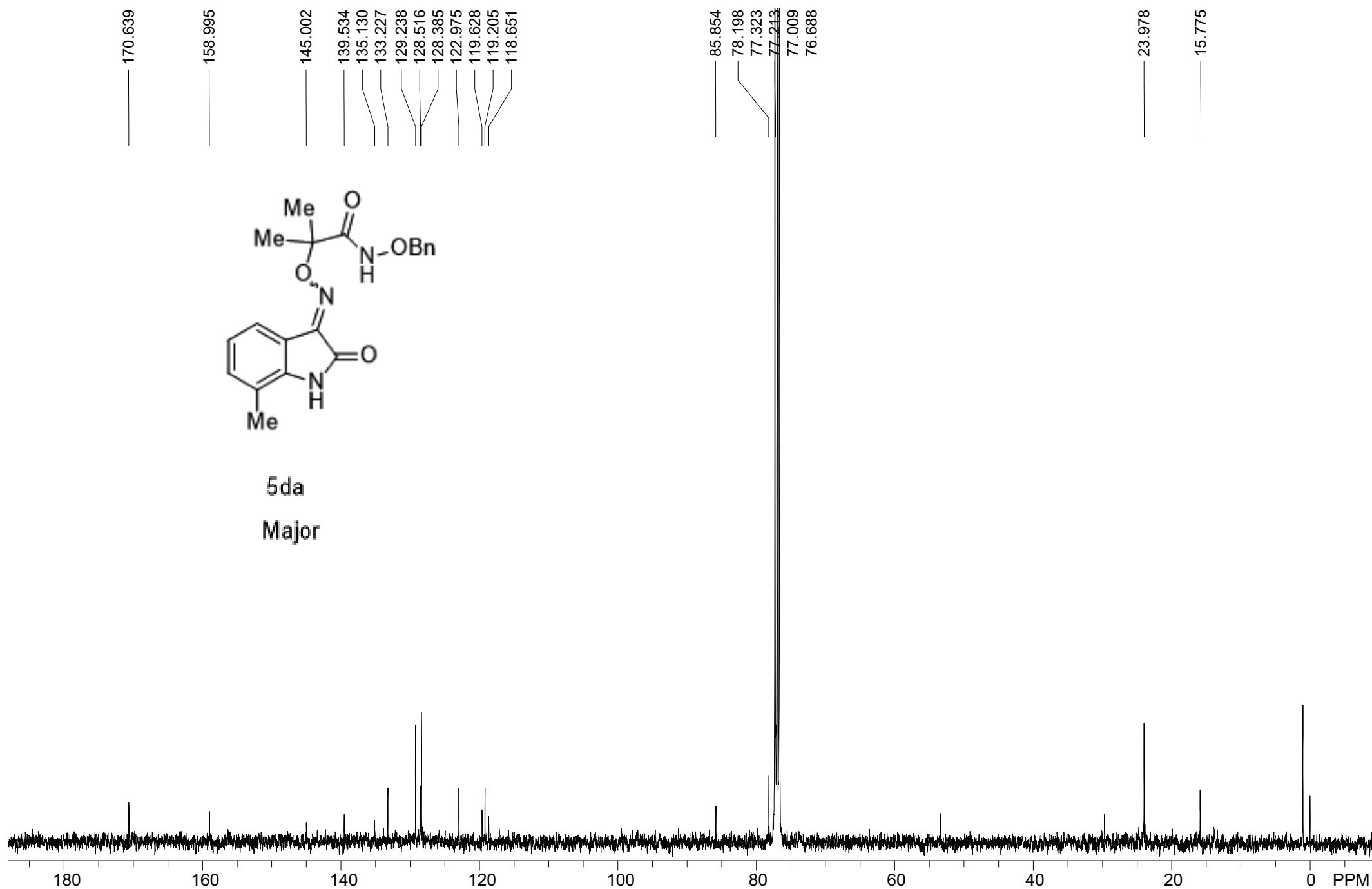
Major





5da

Major

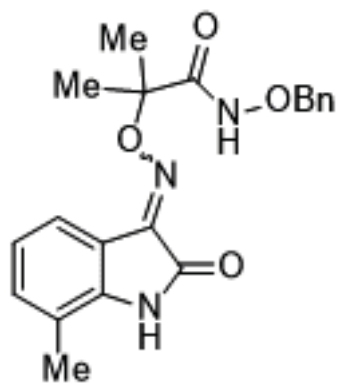


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7.603
7.584
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7.163
6.947
6.928
6.909

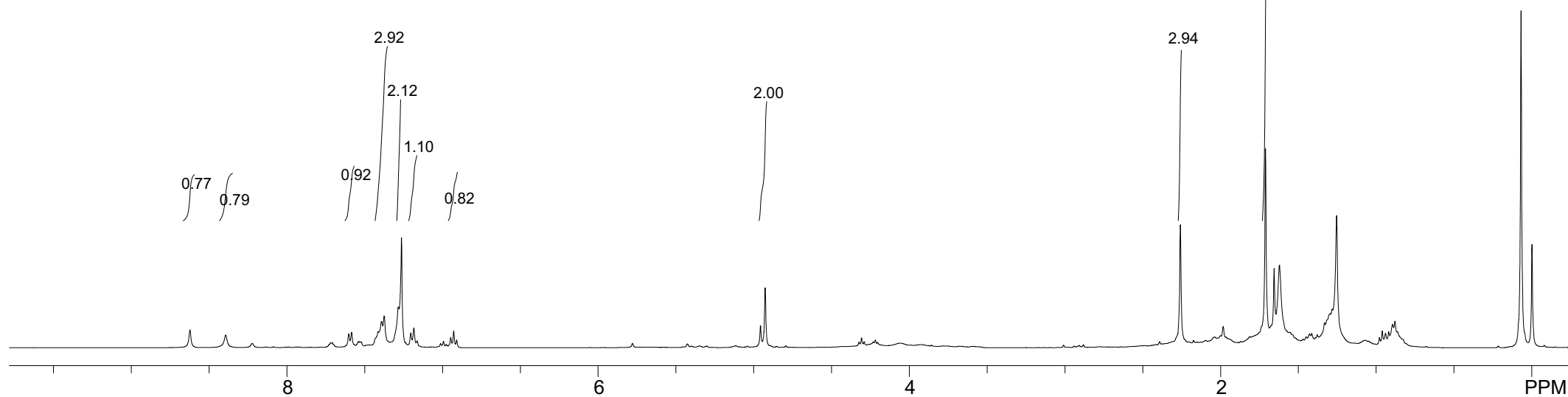
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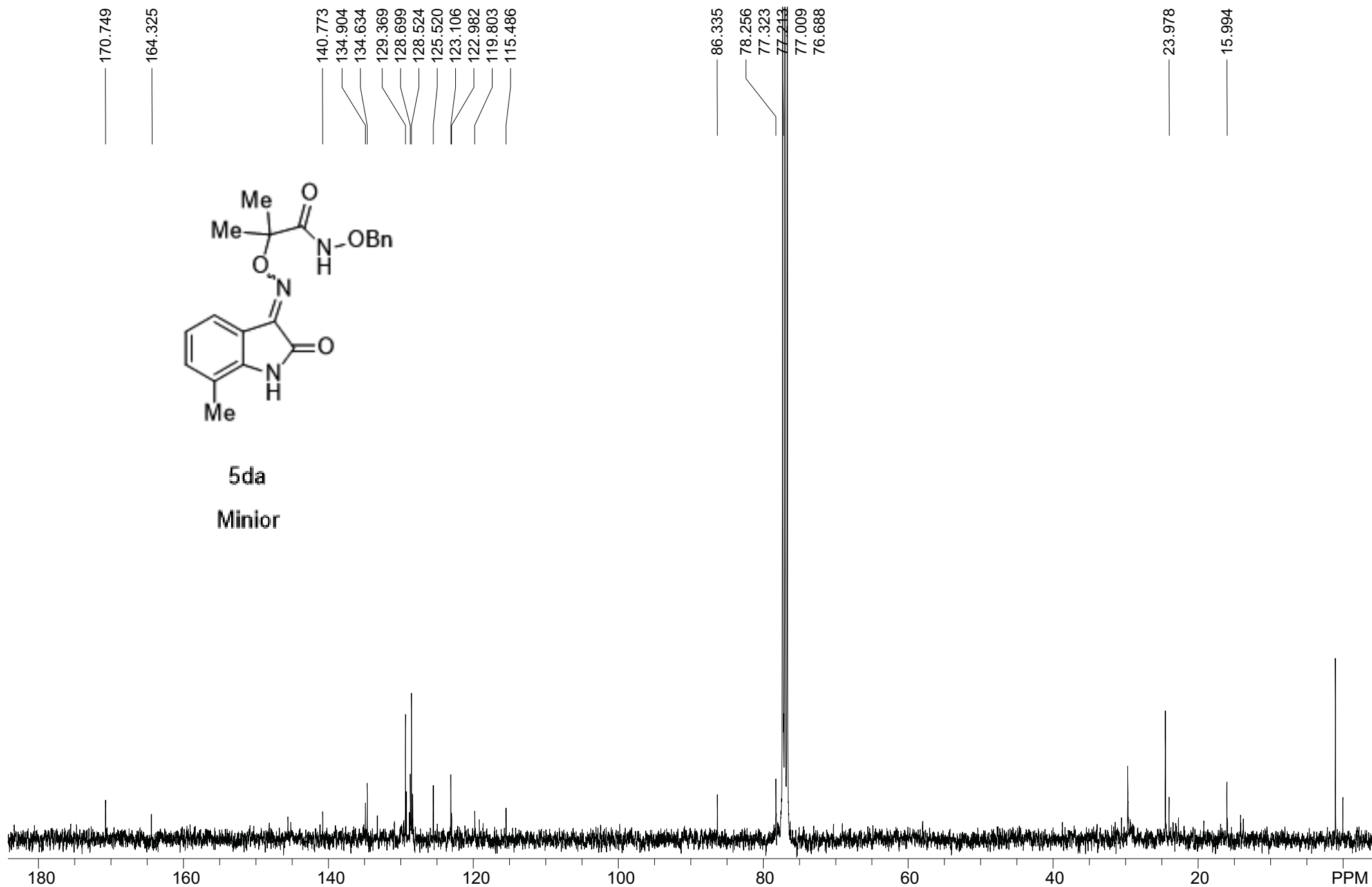
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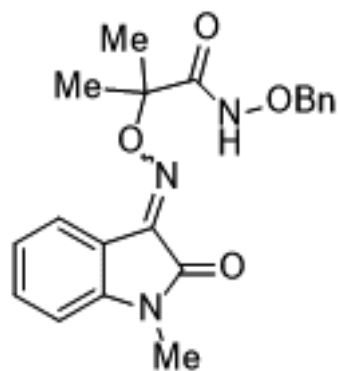
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5da
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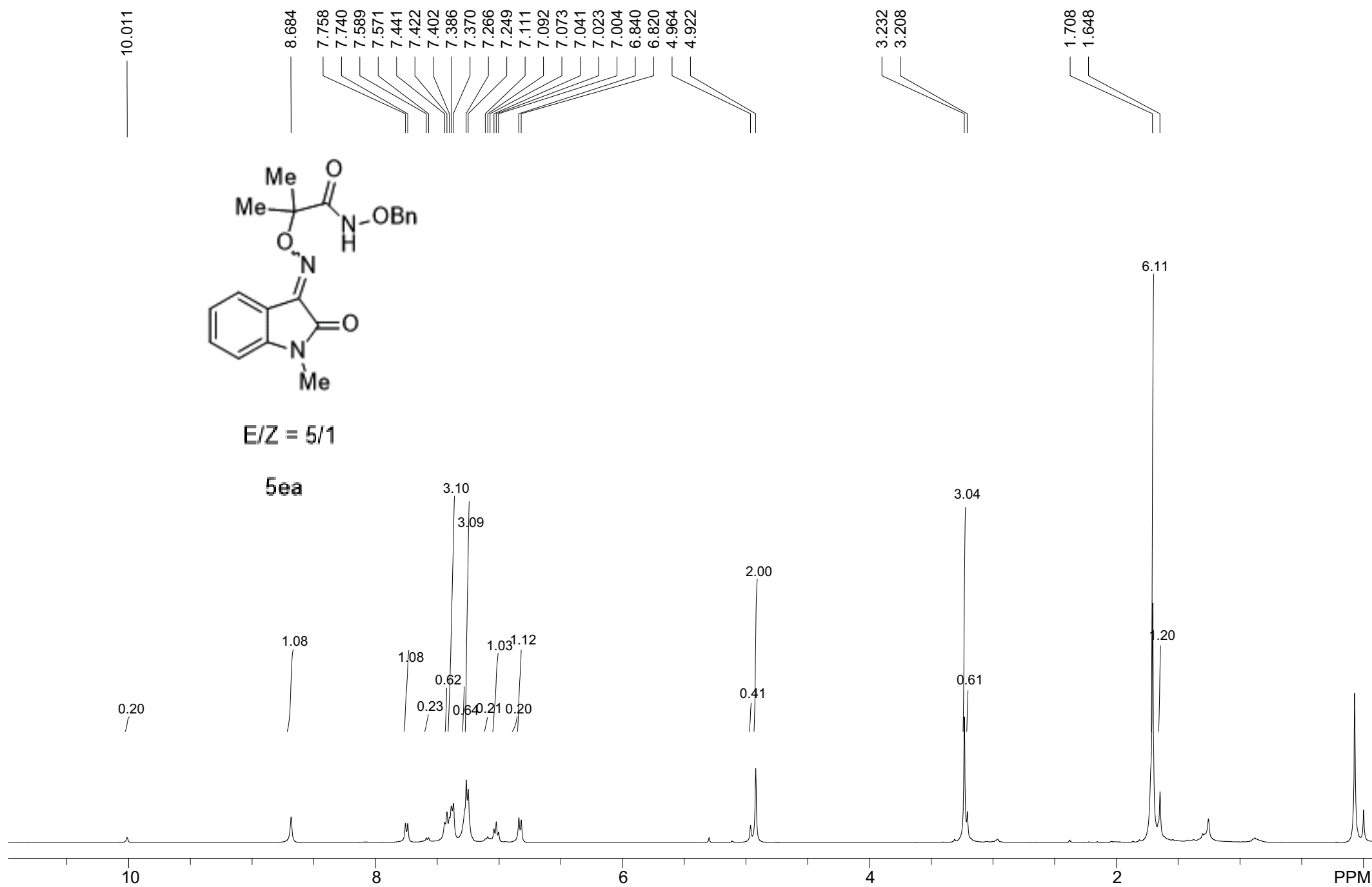


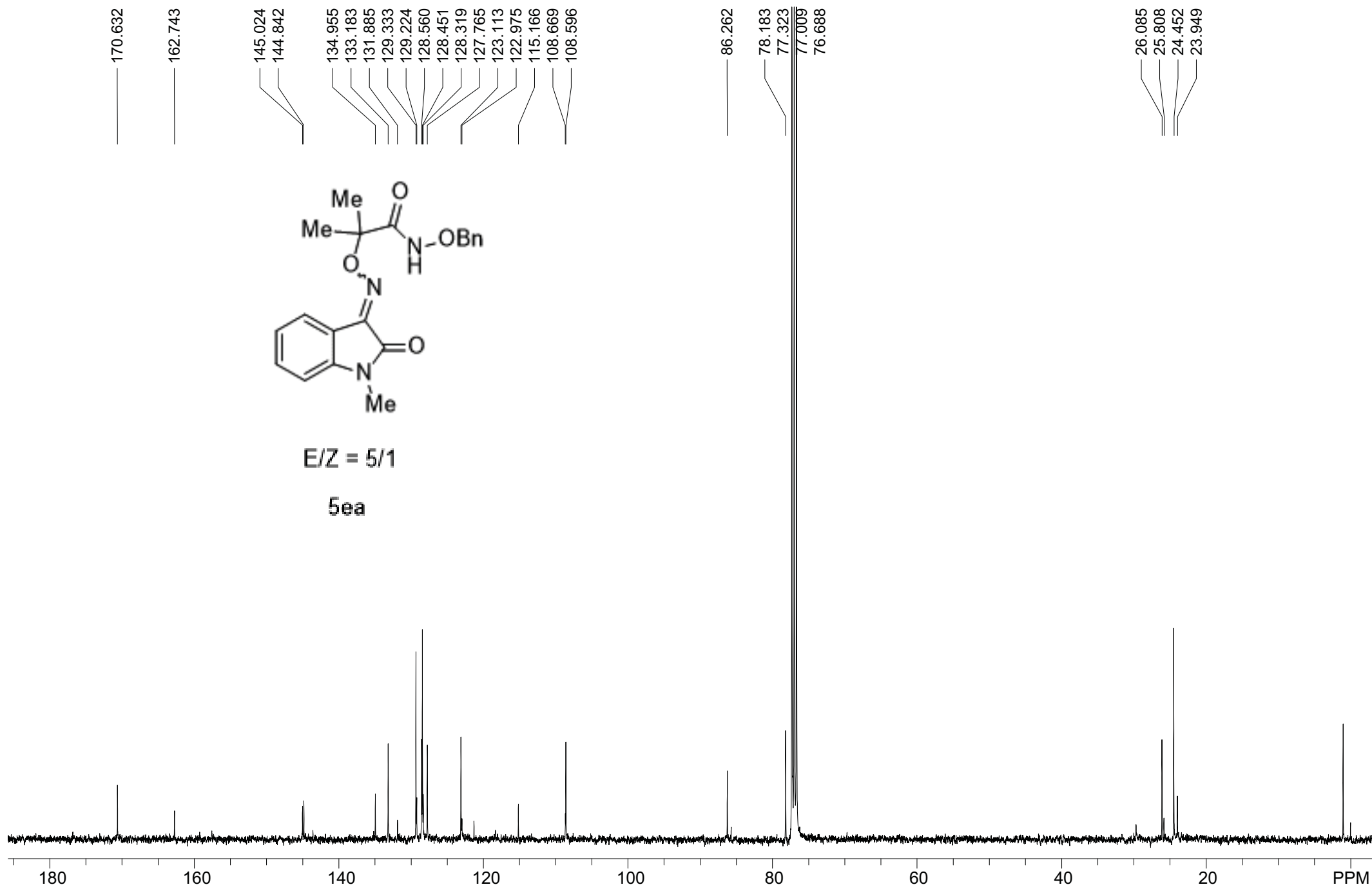


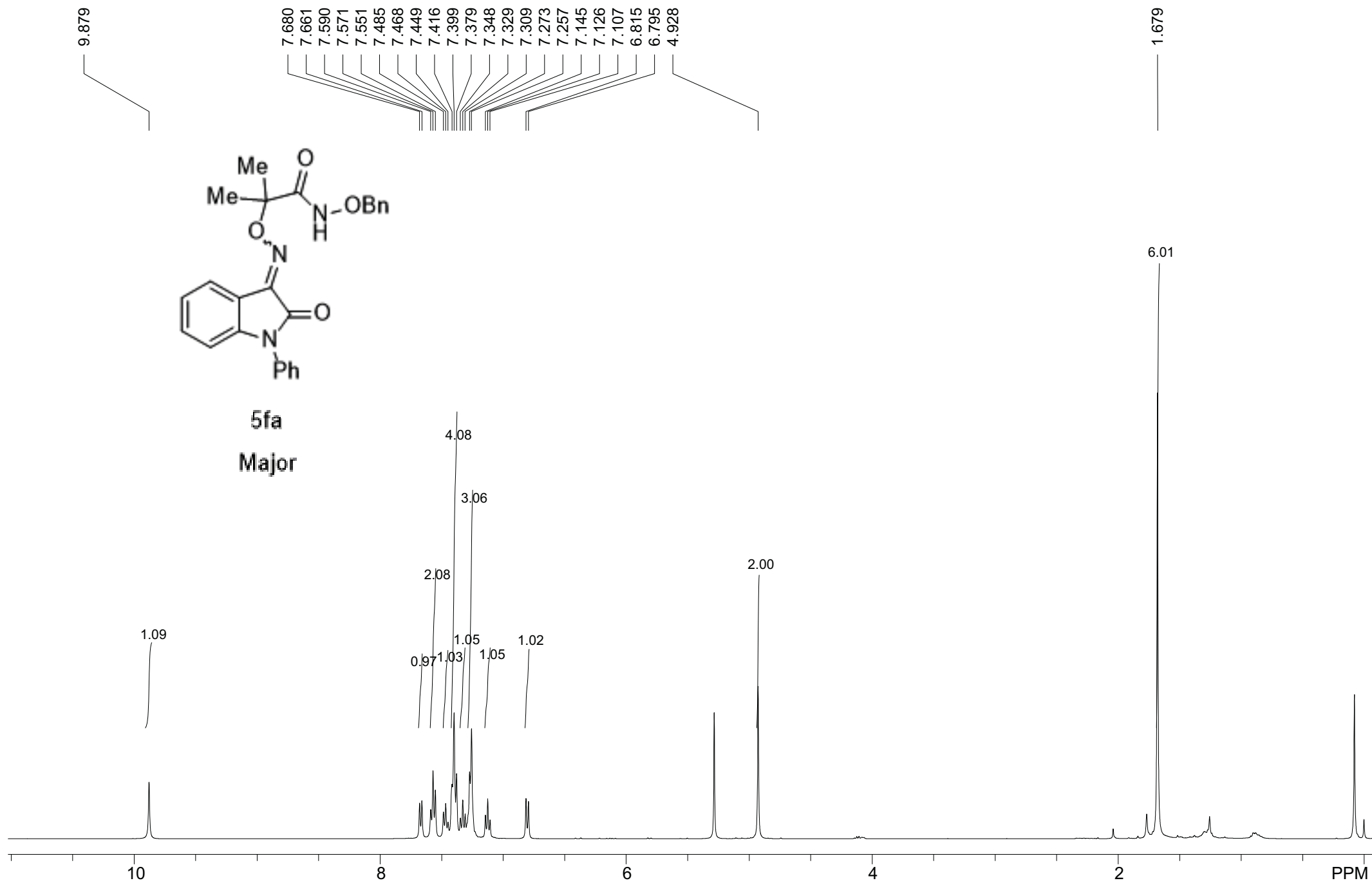


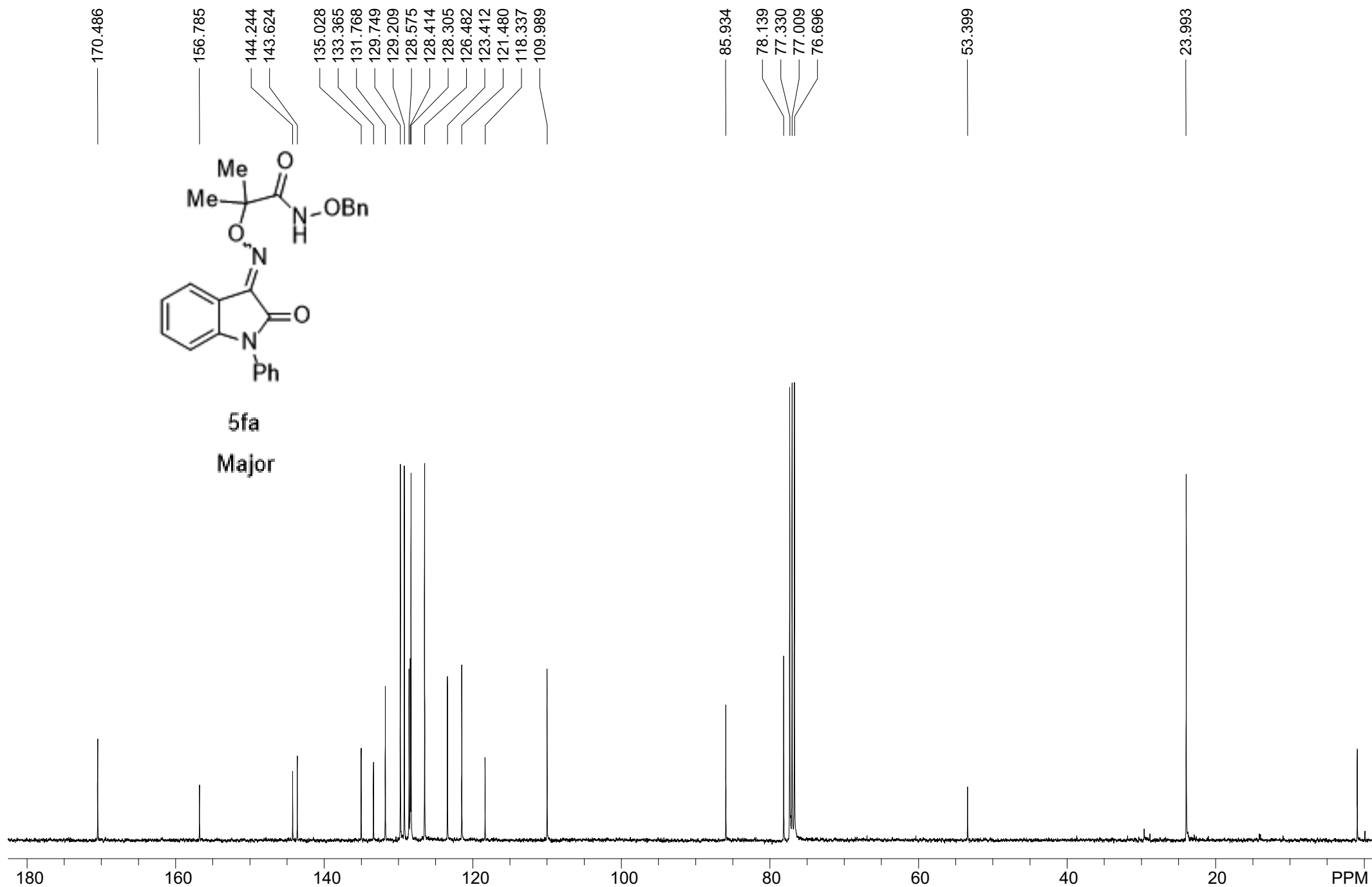
E/Z = 5/1

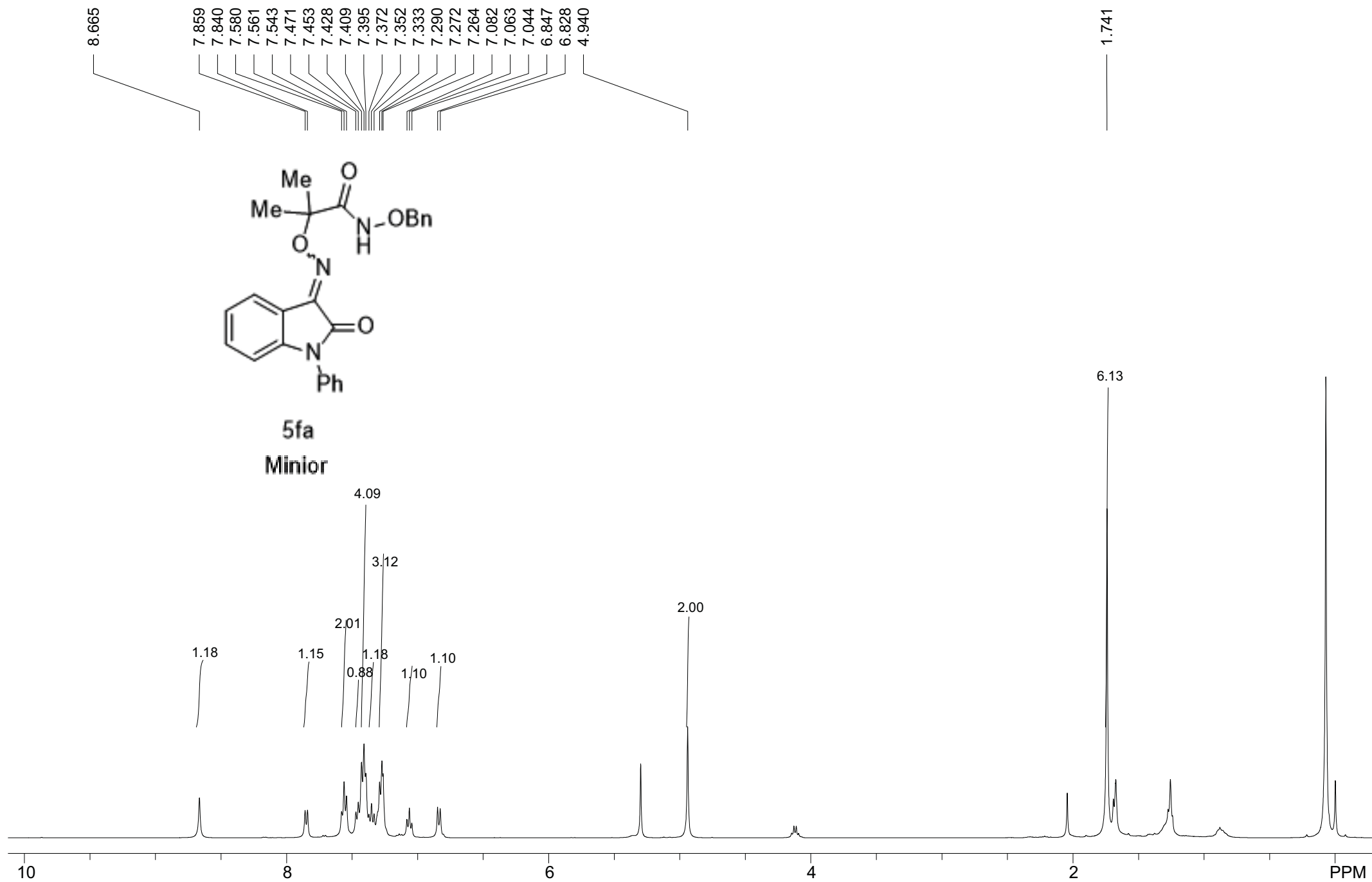
5ea

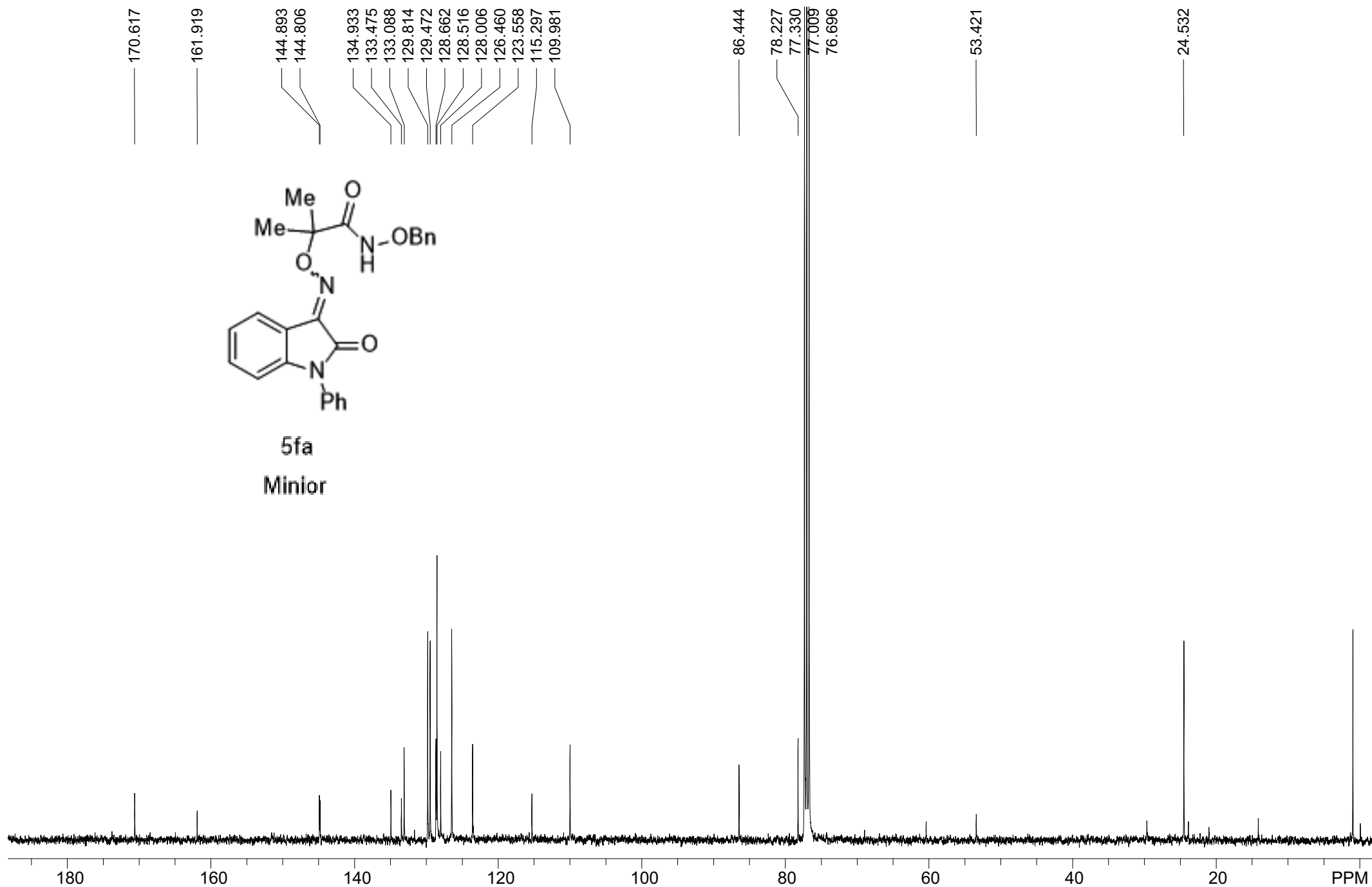




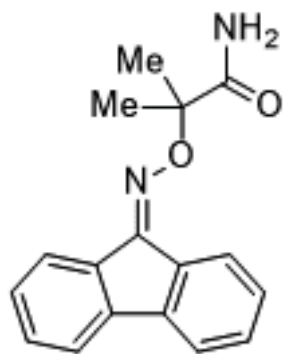




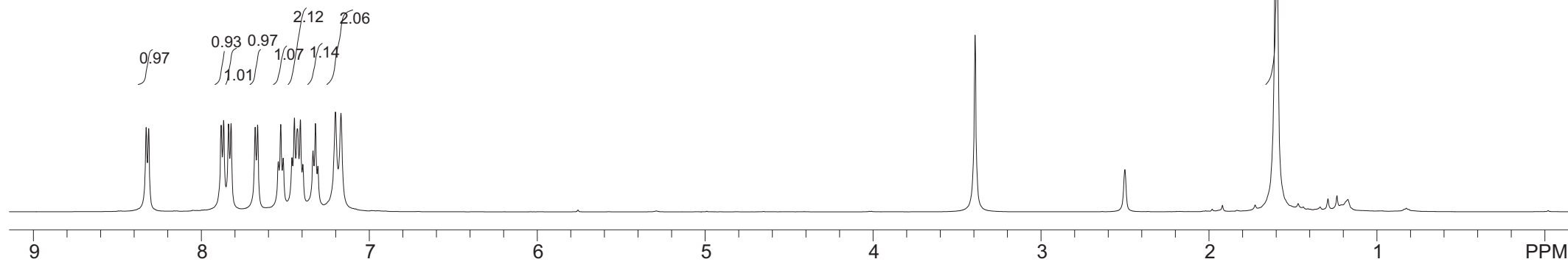


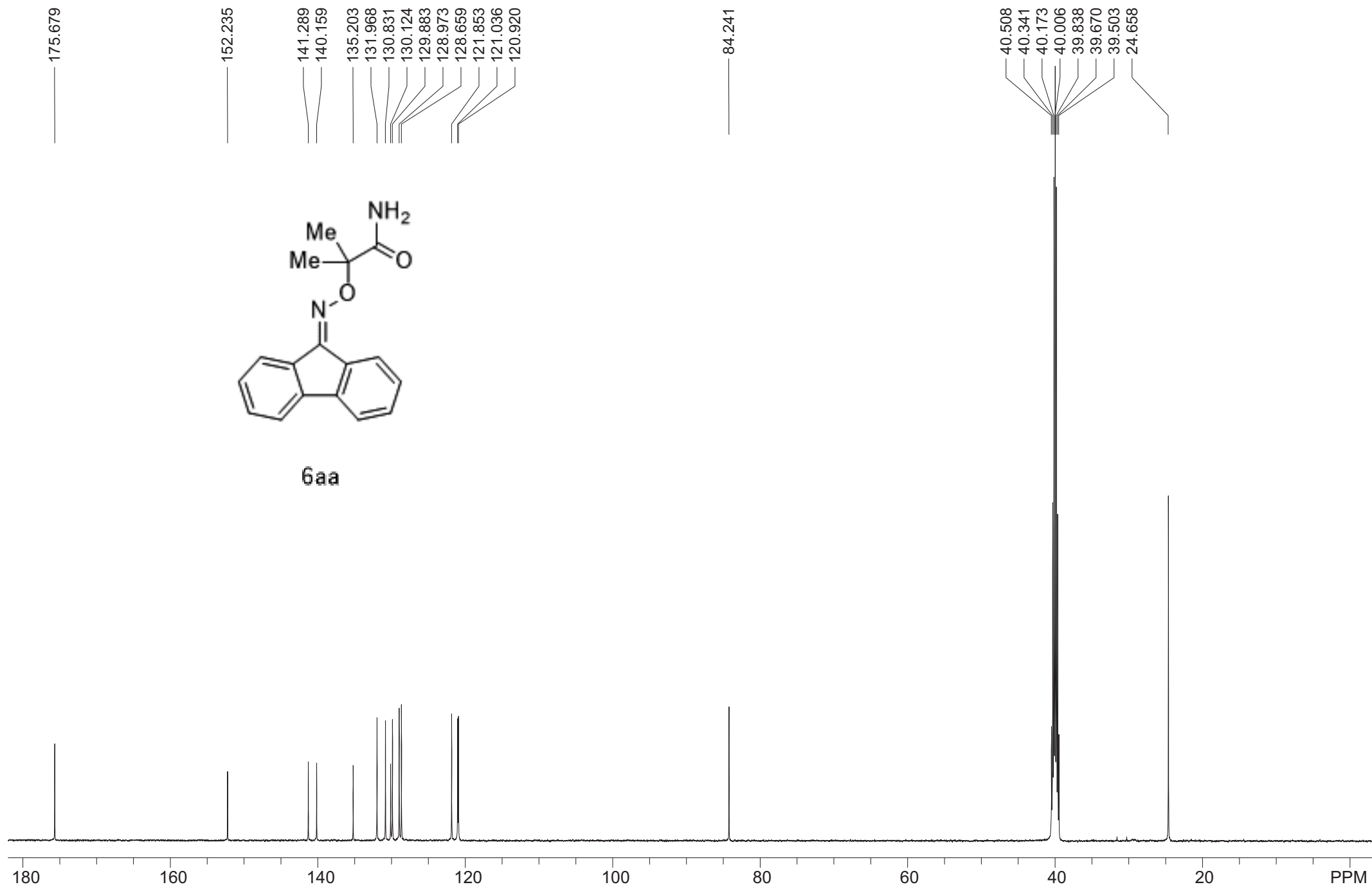


8.329
8.314
7.882
7.867
7.838
7.823
7.680
7.665
7.542
7.527
7.513
7.460
7.446
7.428
7.410
7.396
7.335
7.321
7.306
7.201
7.169



6aa



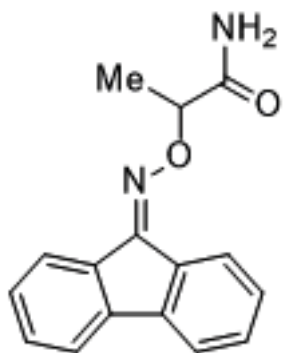


8.307
8.292
7.895
7.881
7.854
7.839
7.662
7.647
7.554
7.539
7.524
7.475
7.460
7.445
7.426
7.410
7.394
7.371
7.361
7.352
7.341
7.327
7.312
7.256

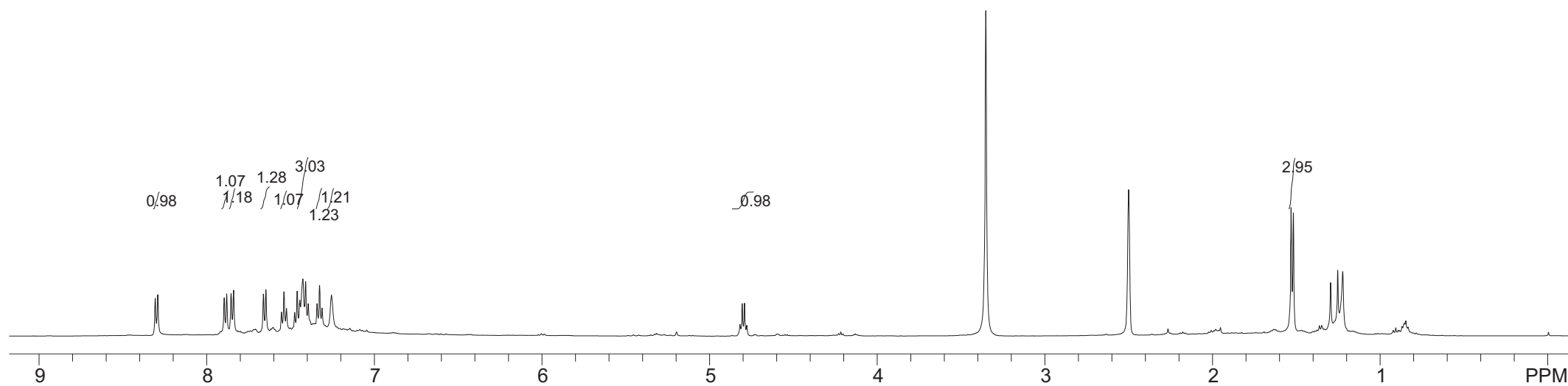
4.819
4.806
4.792
4.778

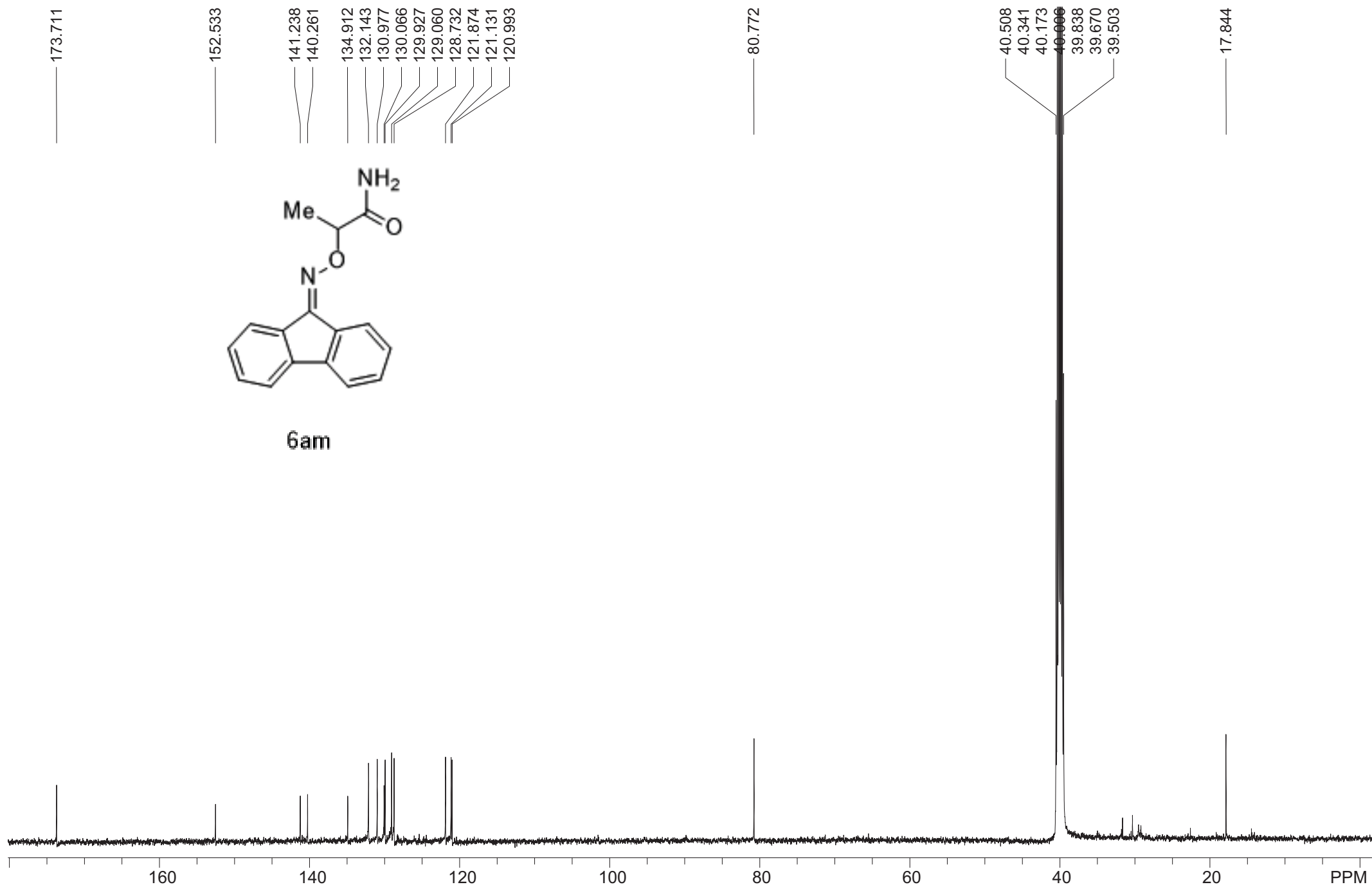
2.500

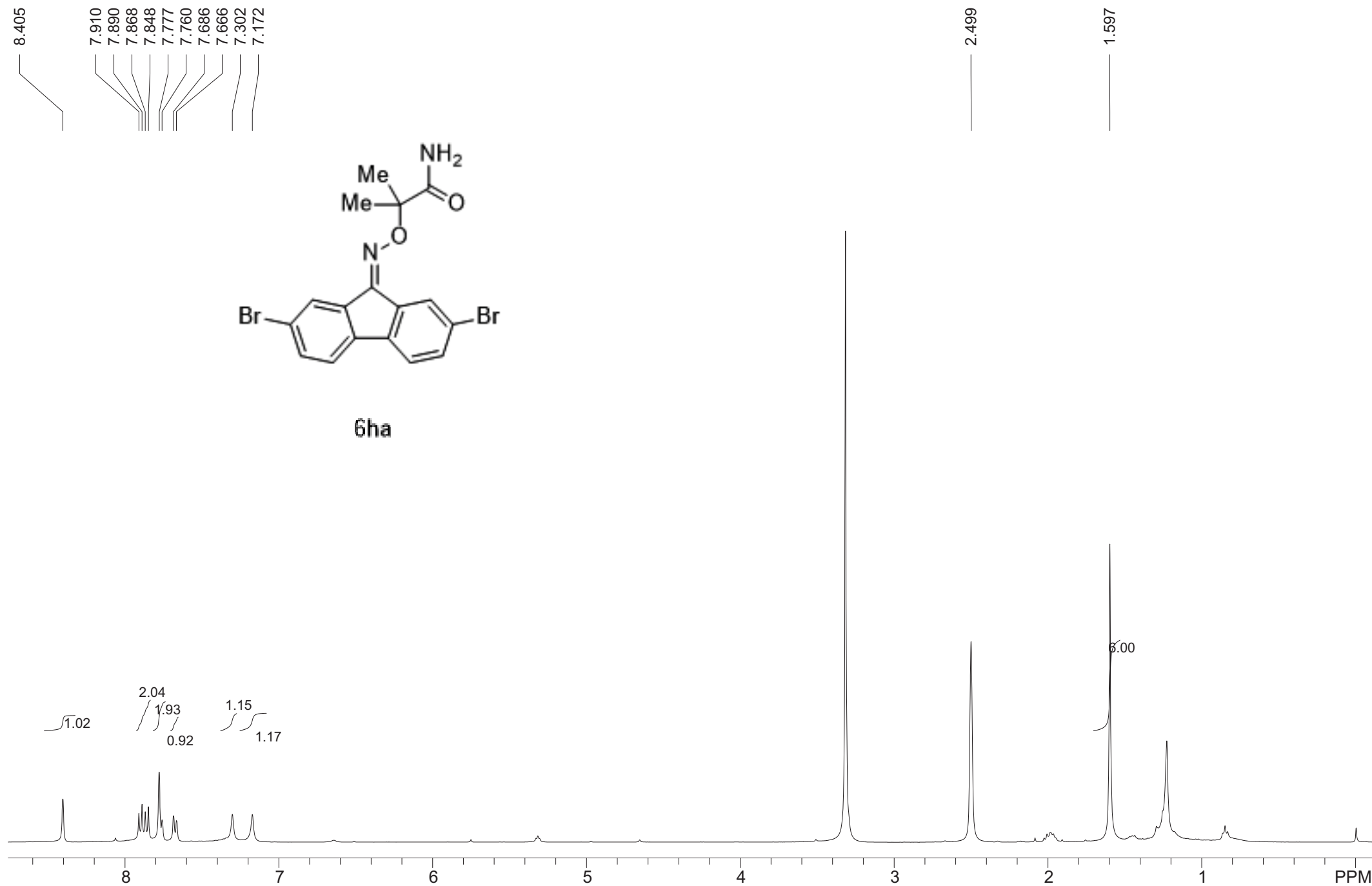
1.530
1.517

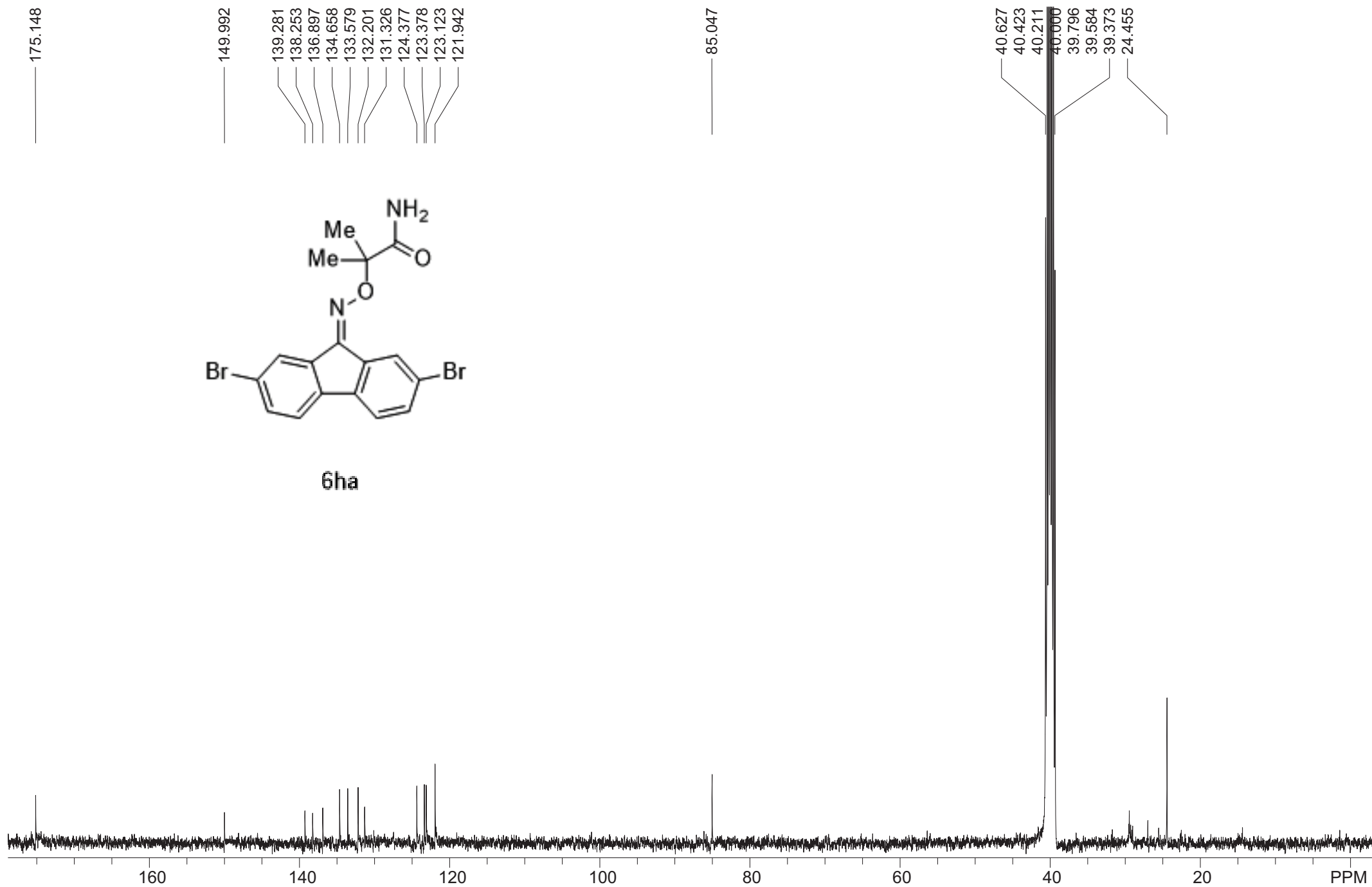


6am

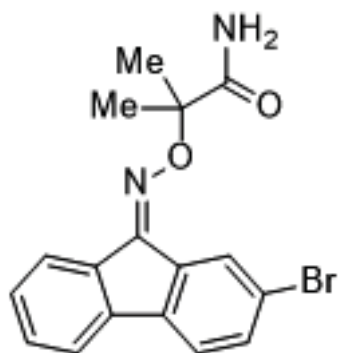








8.429
8.302
8.283
7.929
7.910
7.879
7.873
7.861
7.853
7.837
7.817
7.770
7.754
7.734
7.686
7.665
7.643
7.574
7.556
7.537
7.491
7.472
7.452
7.432
7.381
7.362
7.344
7.283
7.167



6la

E/Z = 1:1

2.501

1.597

