

C-H Bond Functionalization via Hydride Transfer: Direct Coupling of Unactivated Alkynes and sp^3 C-H Bonds Catalyzed by Platinum Tetraiodide

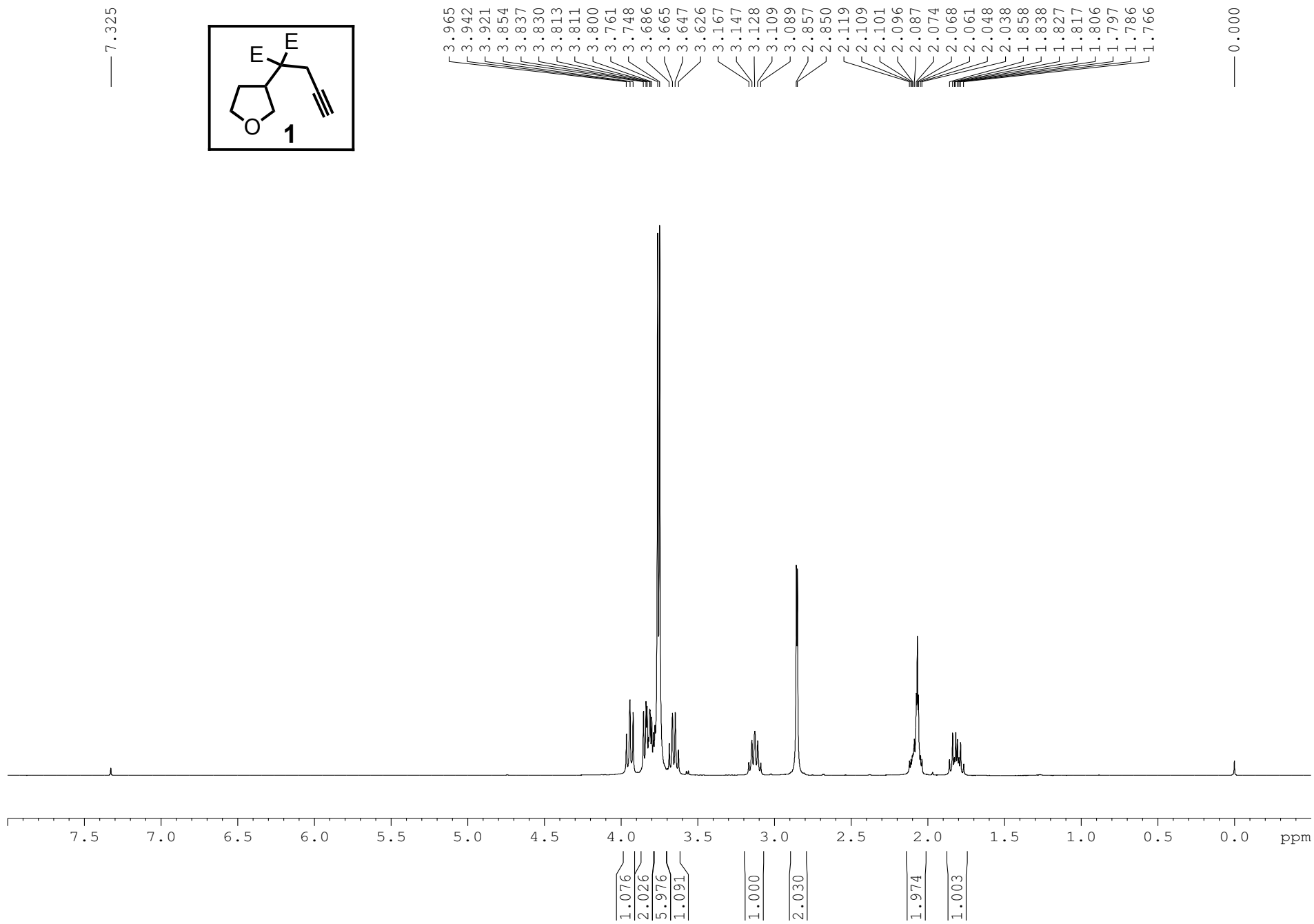
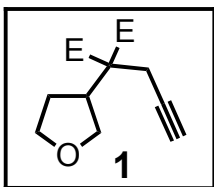
Paul A. Vadola and Dalibor Sames*

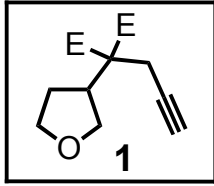
Department of Chemistry, Columbia University,

3000 Broadway, New York, New York, 10027

Supporting Information

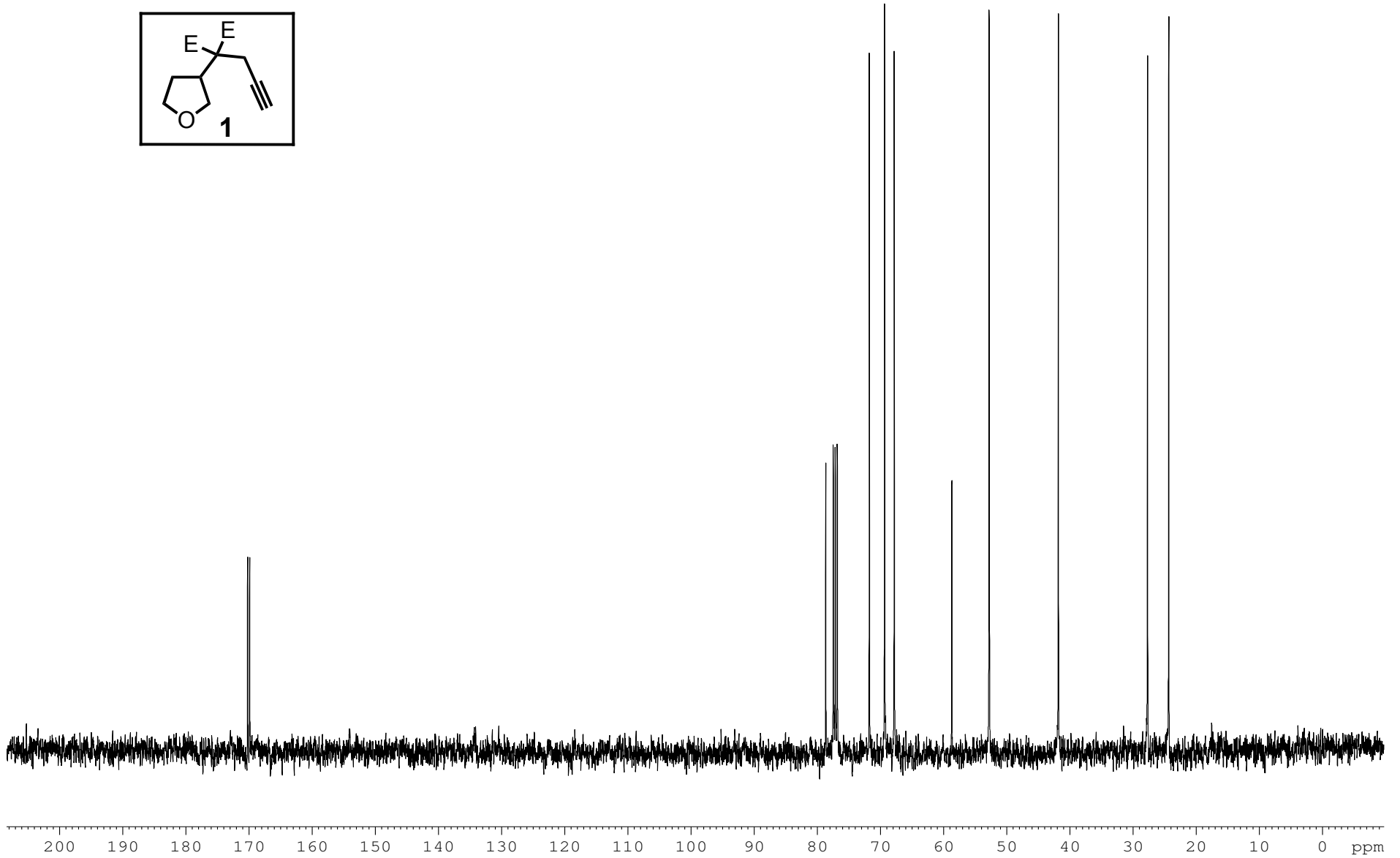
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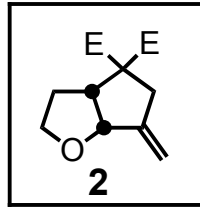




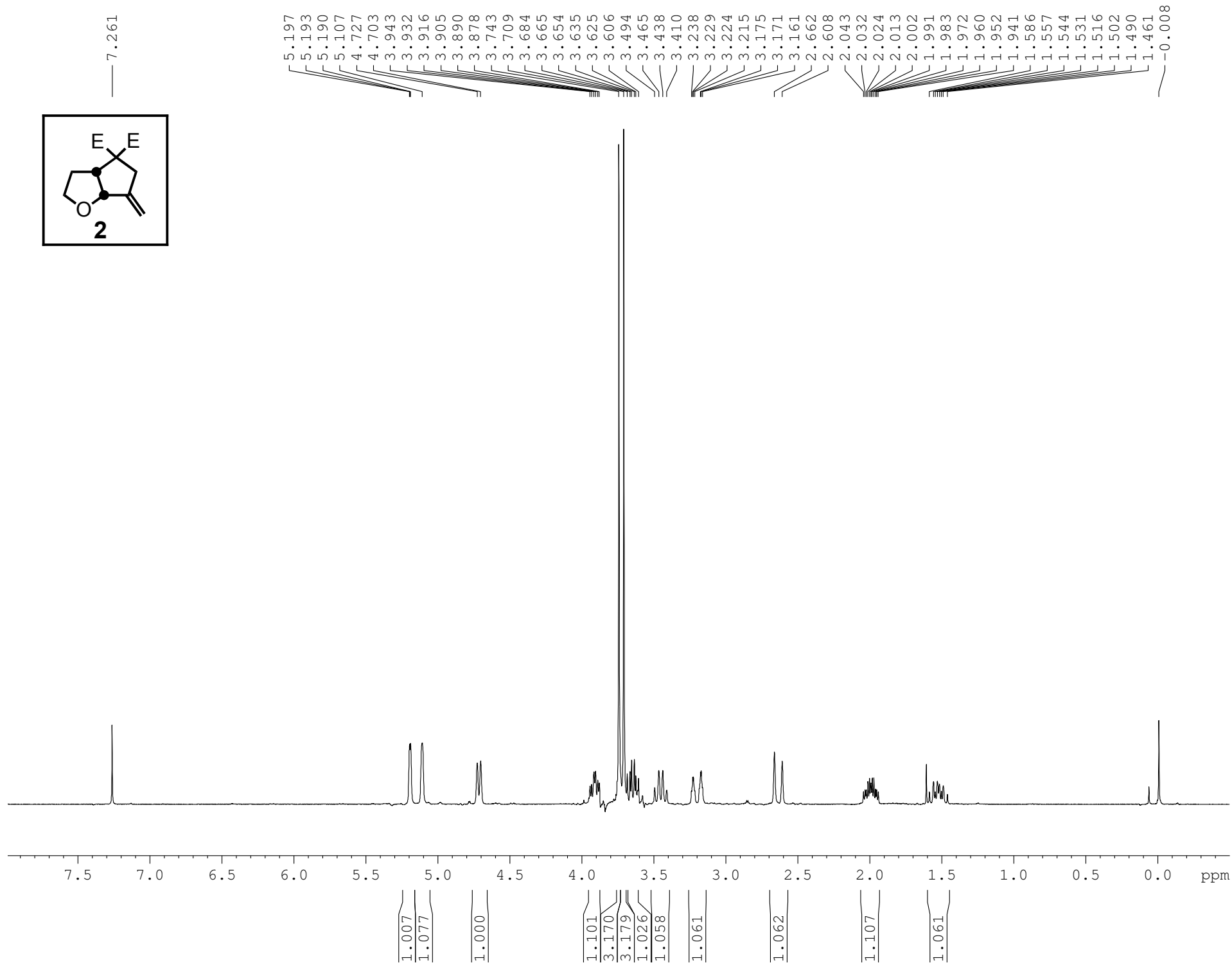
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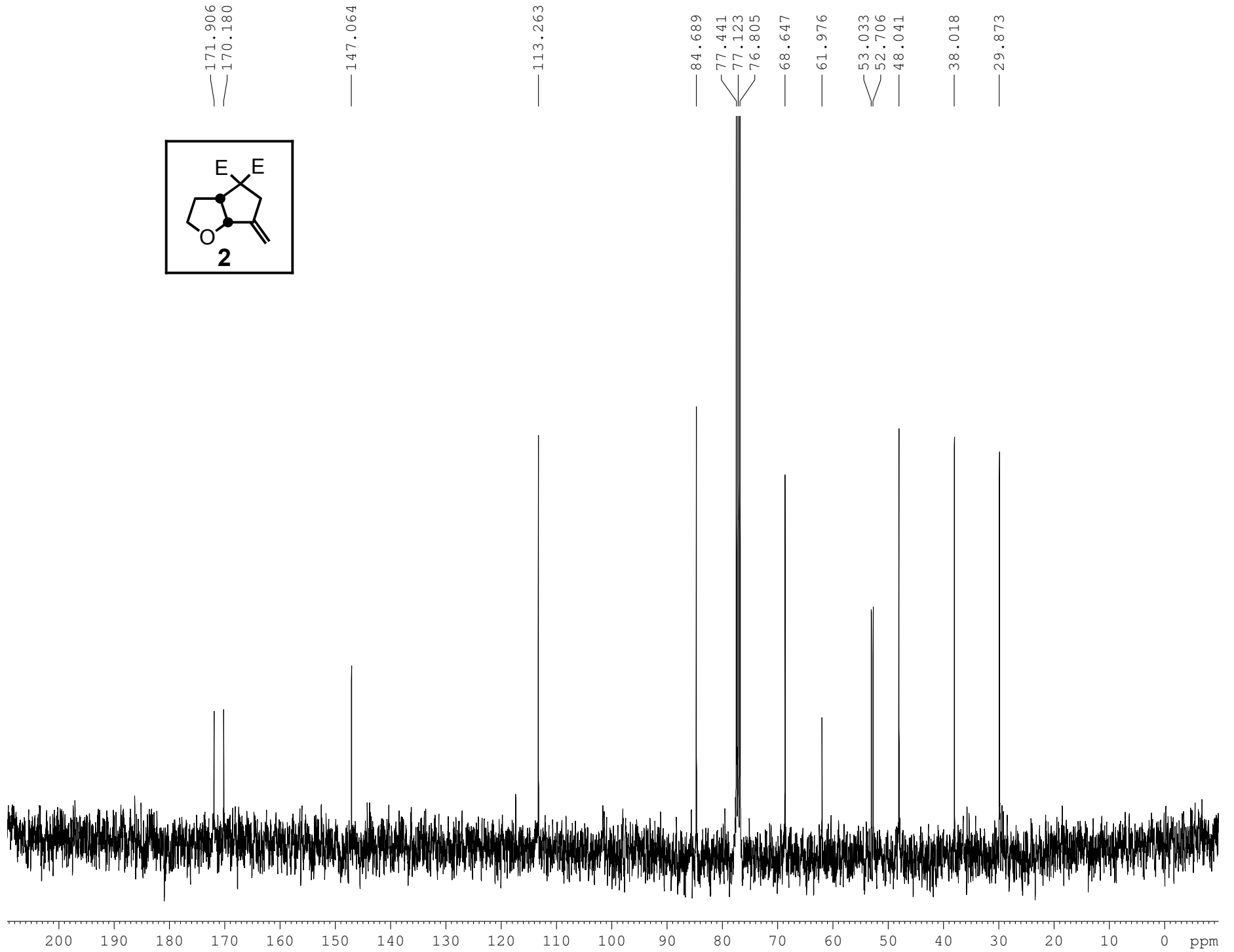
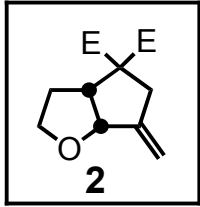
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24.337

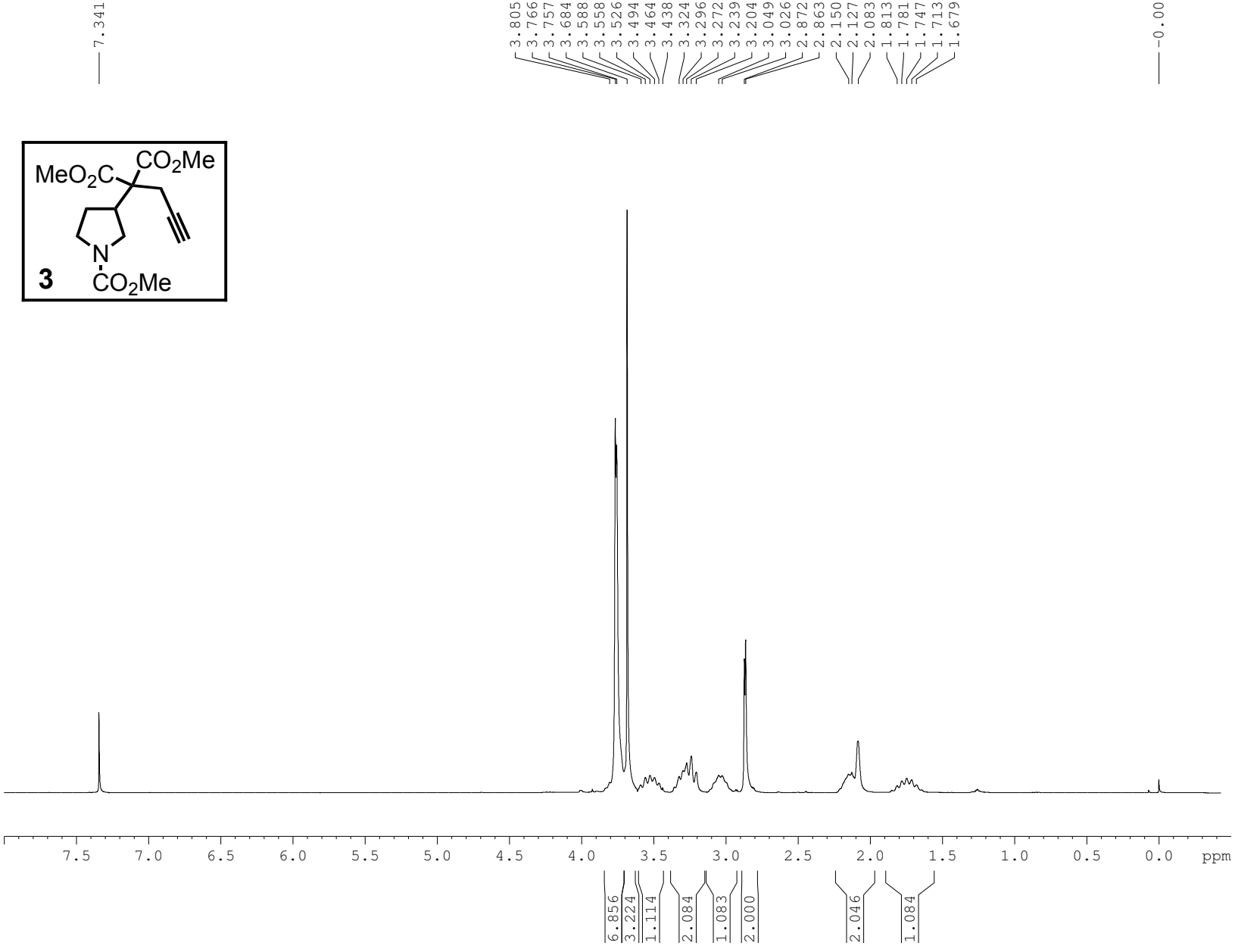


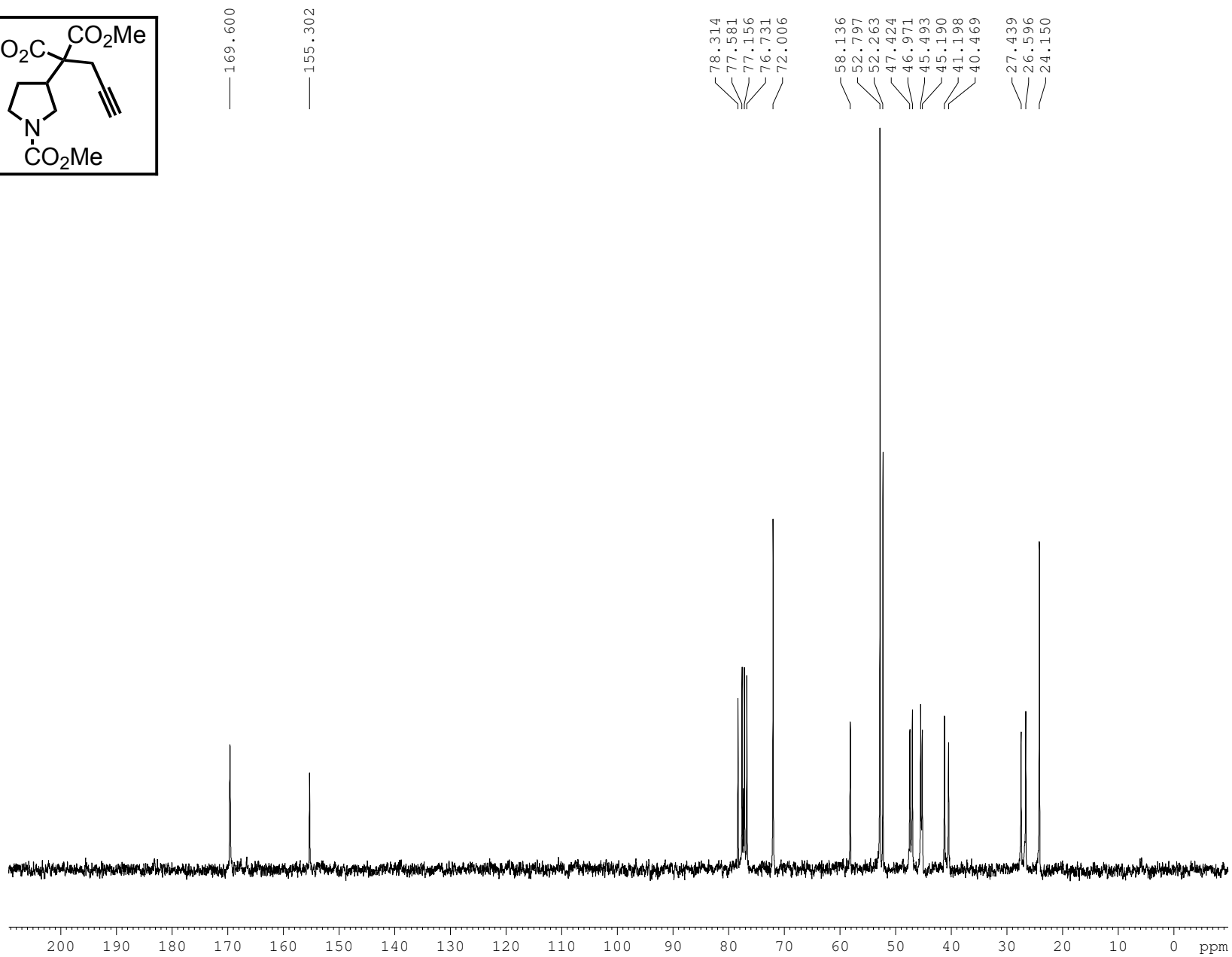
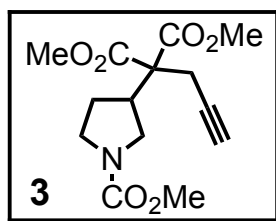


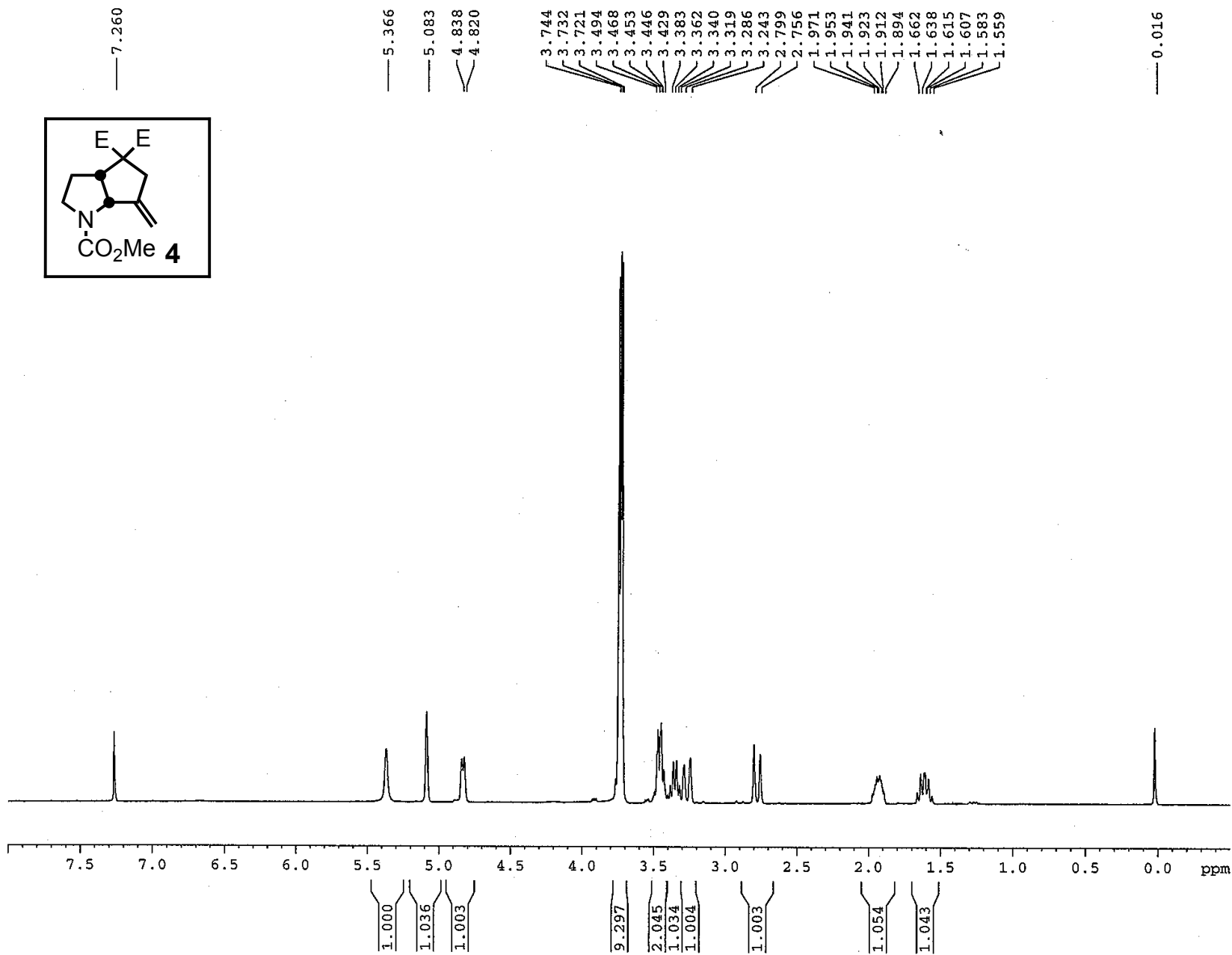
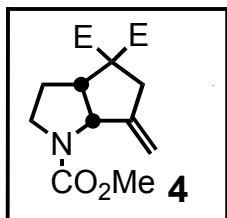
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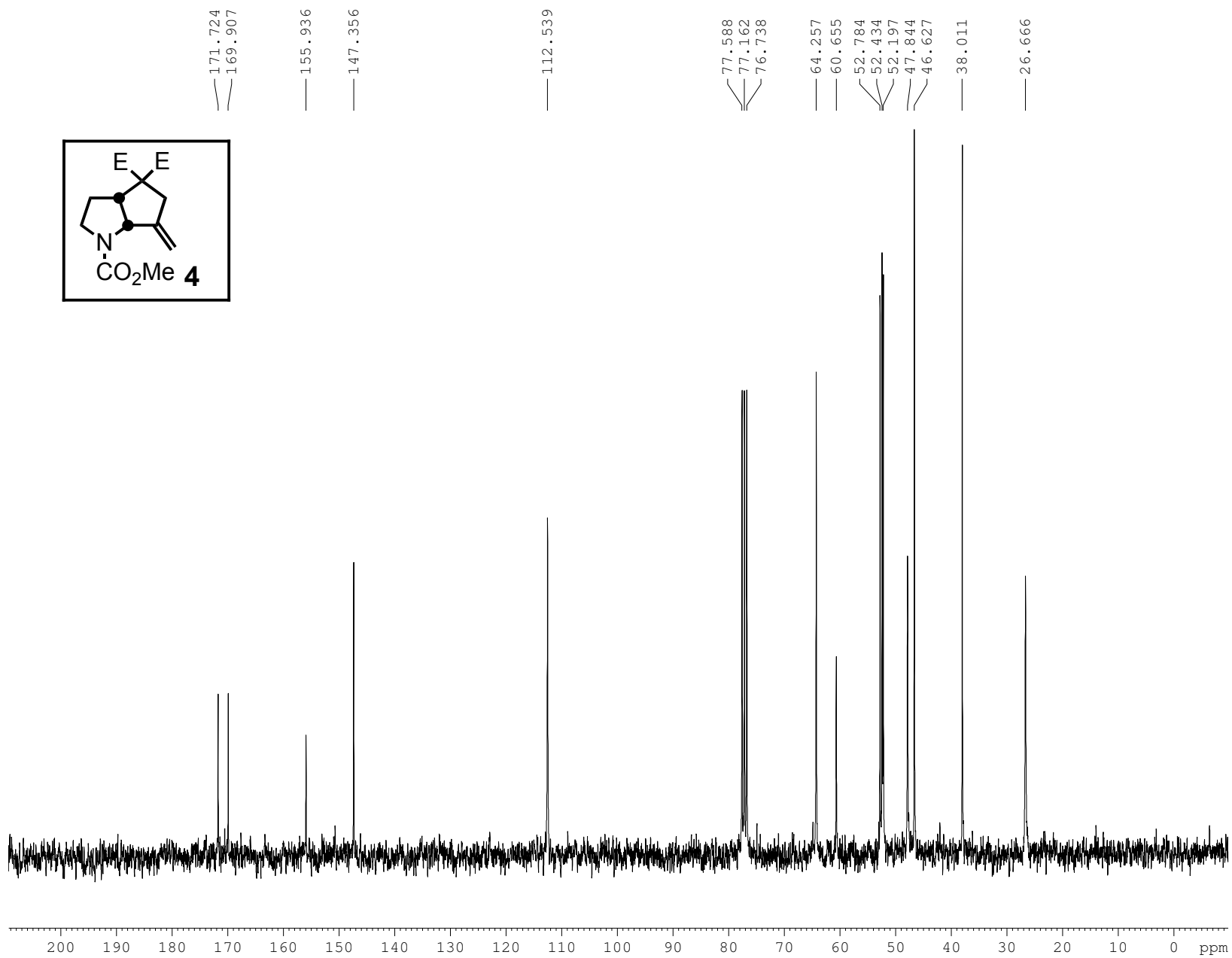
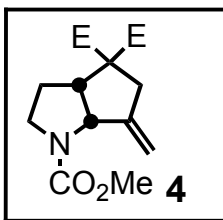


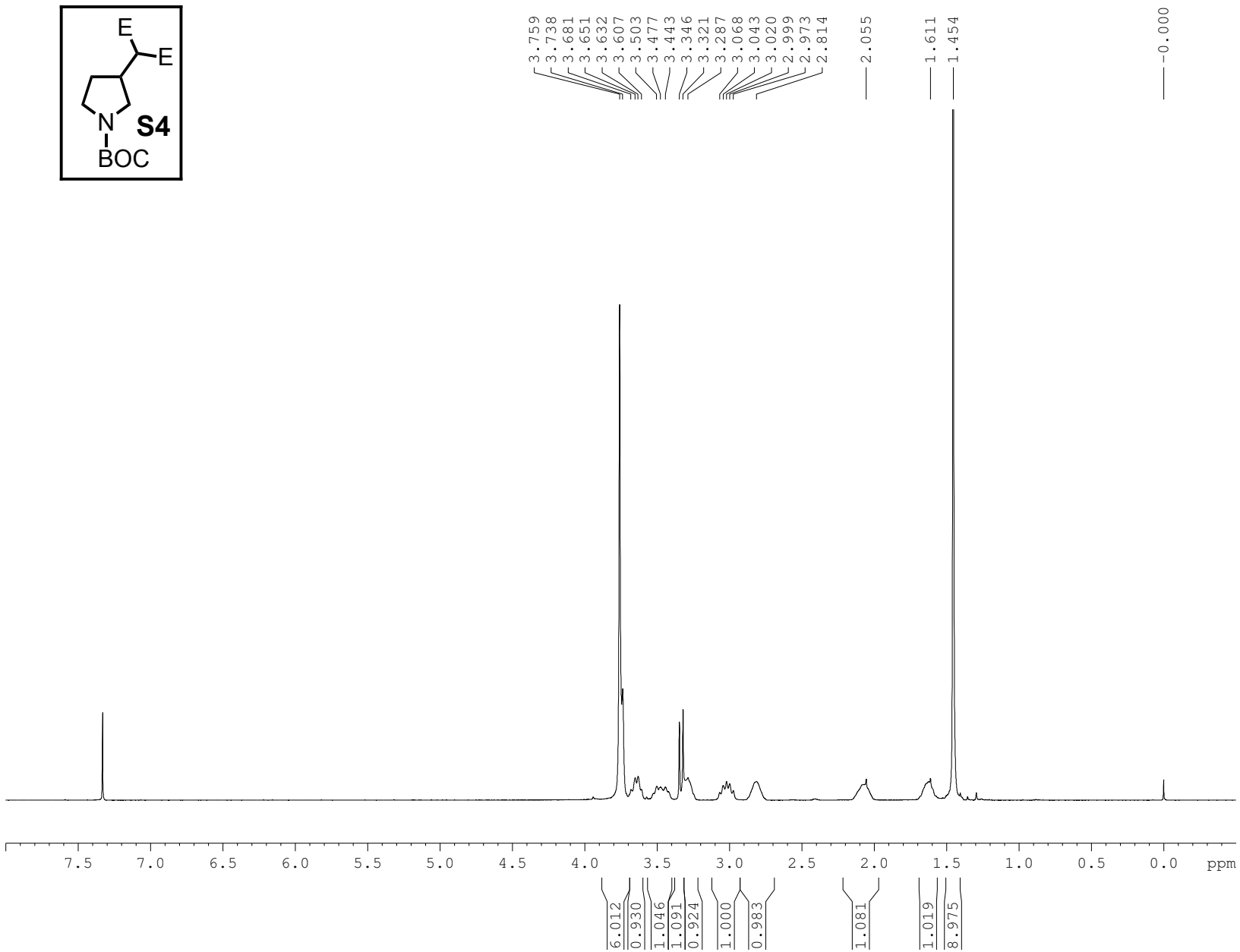
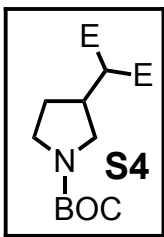


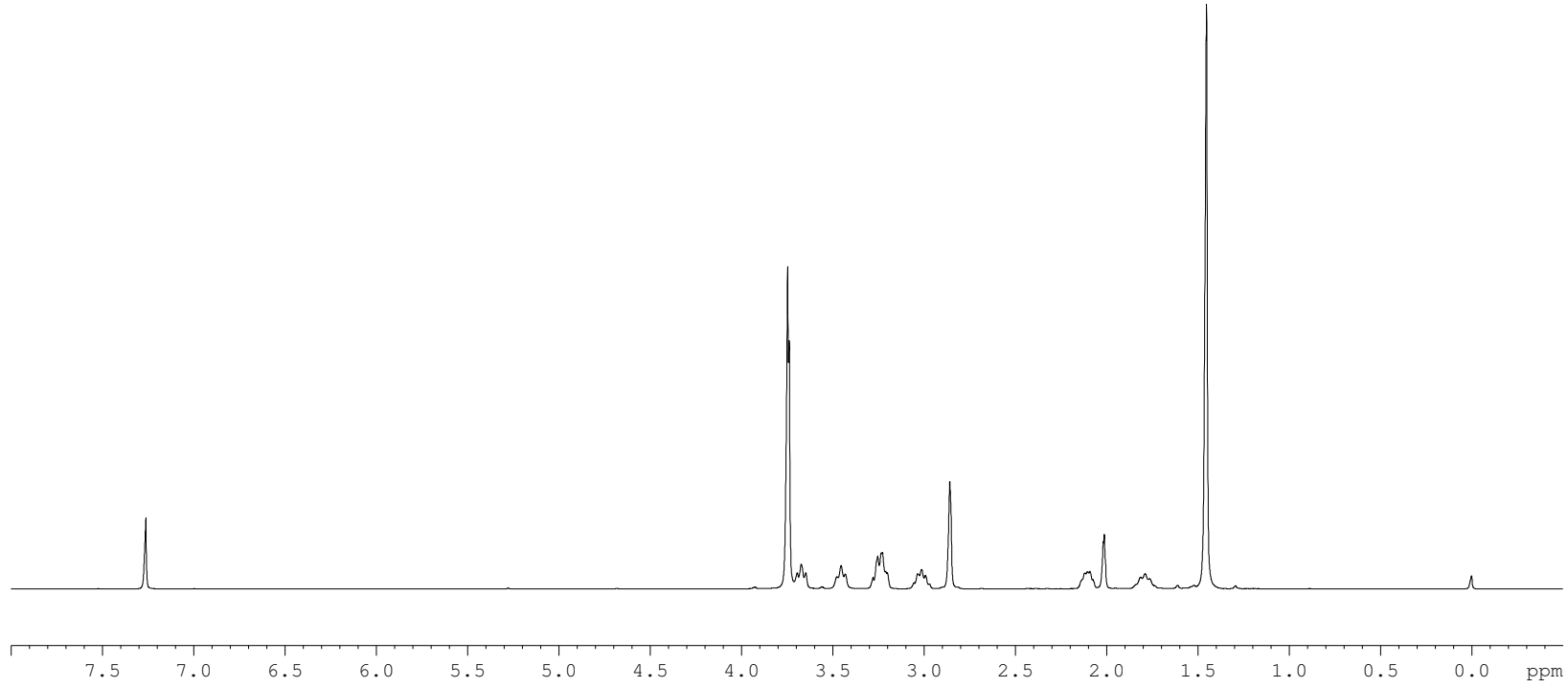










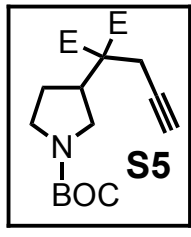


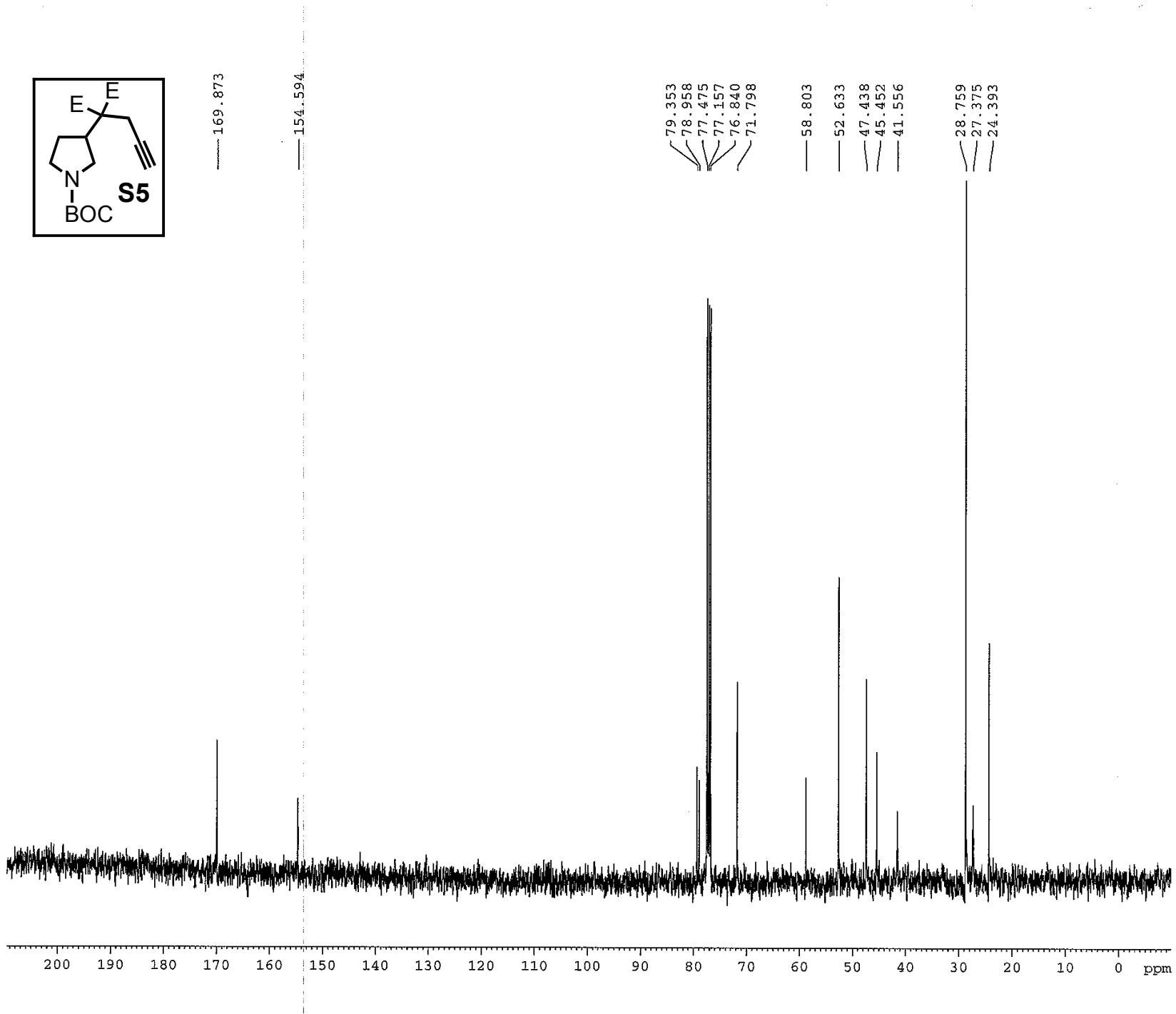
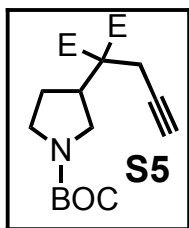
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2.003
1.018
2.000
1.010
0.975
0.985
8.985

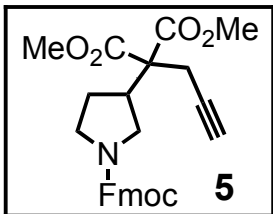
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3.673
3.648
3.478
3.454
3.432
3.279
3.254
3.235
3.228
3.202
3.055
3.035
3.013
2.993
2.859
2.117
2.105
2.092
2.018
2.013
1.815
1.790
1.765
1.453

7.260

0.002



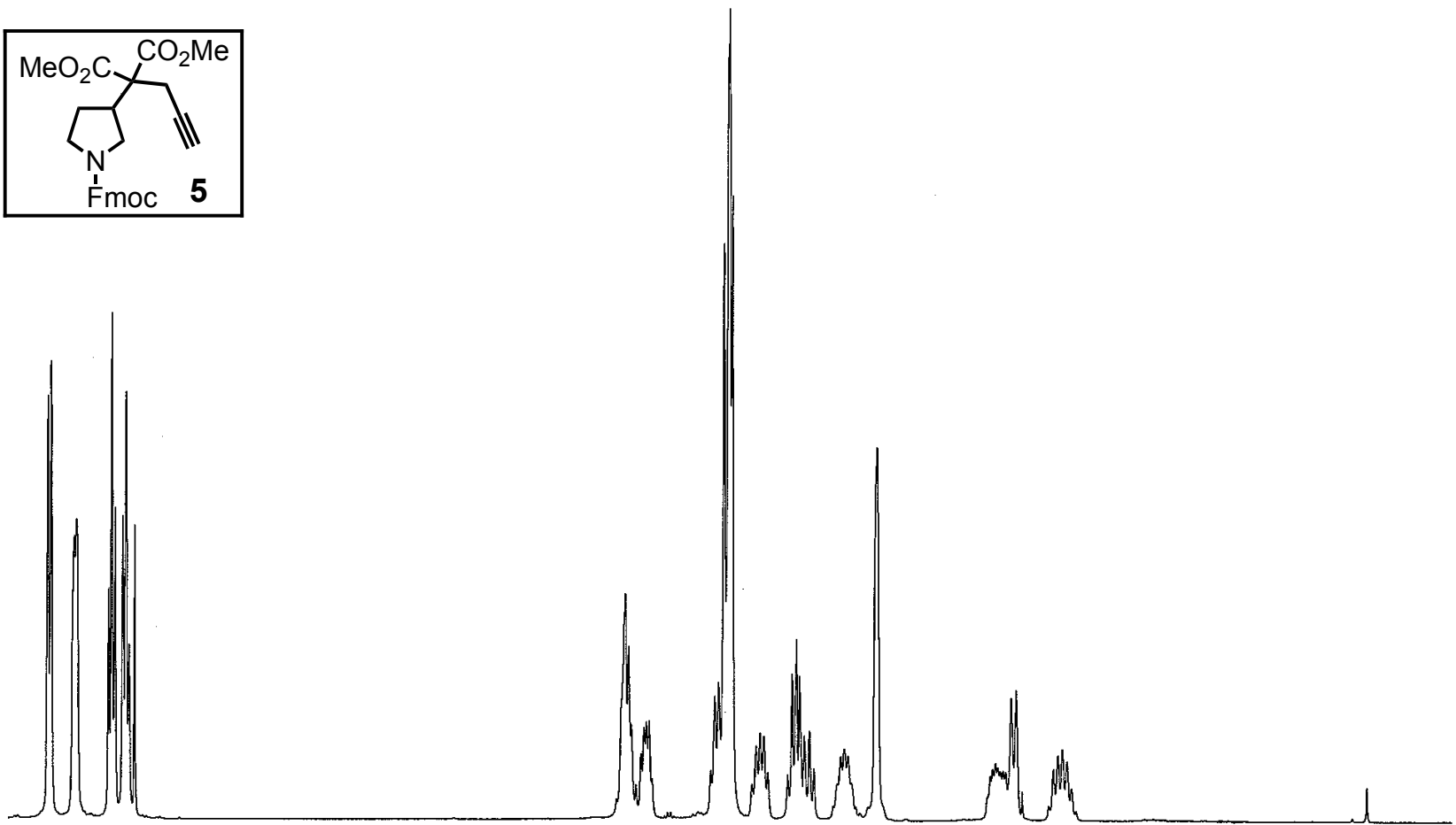




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7.597
7.405
7.387
7.368
7.322
7.303
7.285
7.253

4.389
4.365
4.346
4.330
4.303
4.274
4.256
4.241
4.225
4.208
3.864
3.839
3.817
3.786
3.760
3.753
3.737
3.620
3.596
3.573
3.550
3.527
3.410
3.384
3.358
3.340
3.313
3.282
3.256
3.098
3.077
3.054
2.885
2.216
2.201
2.186
2.171
2.157
2.141
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1.817
1.790
1.764
1.737

— 0.002

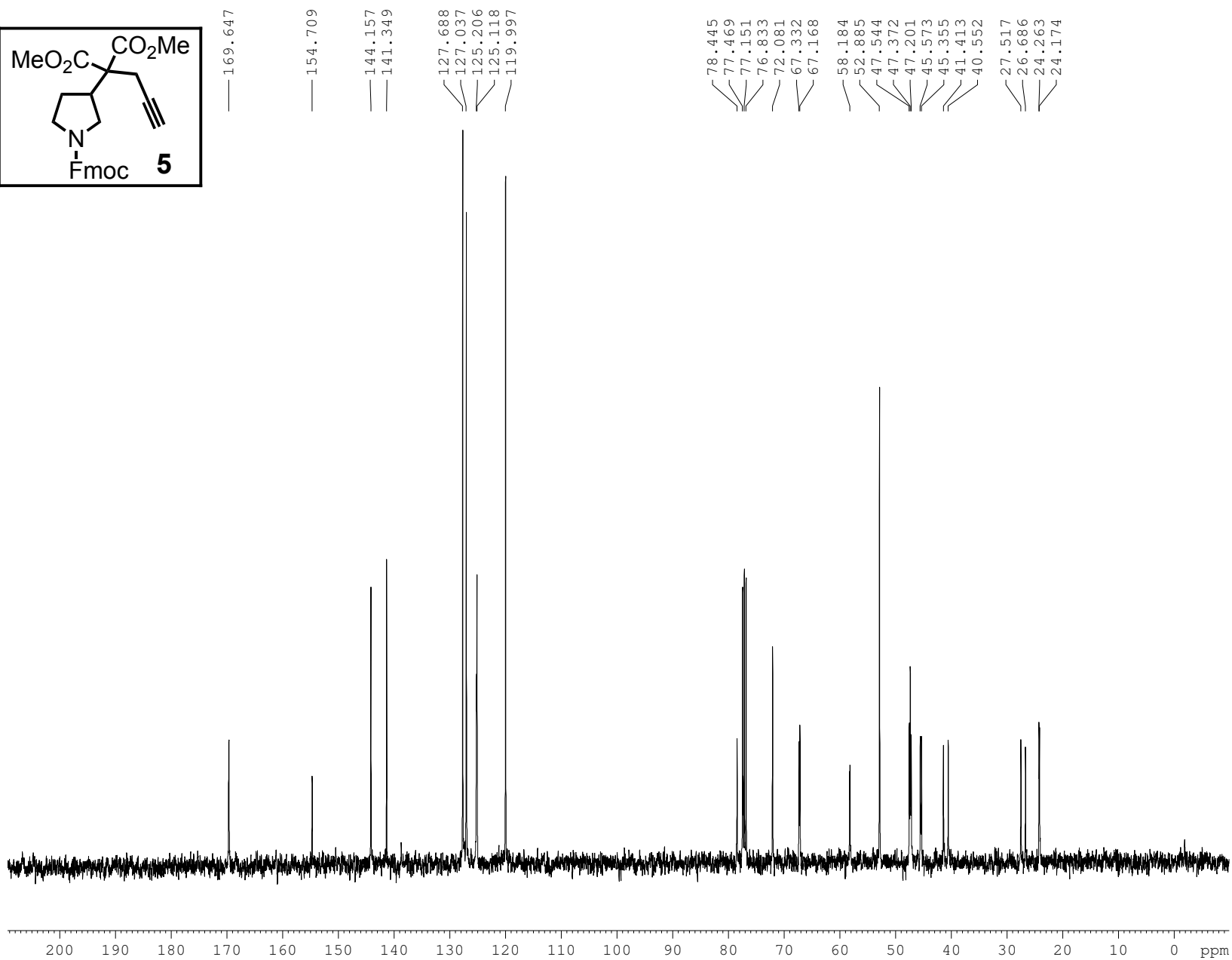
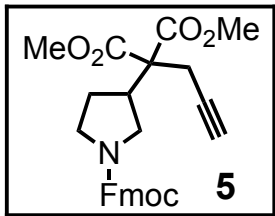


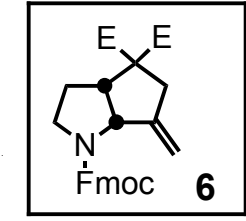
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7.048
1.052
2.007
1.032
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1.941
1.006



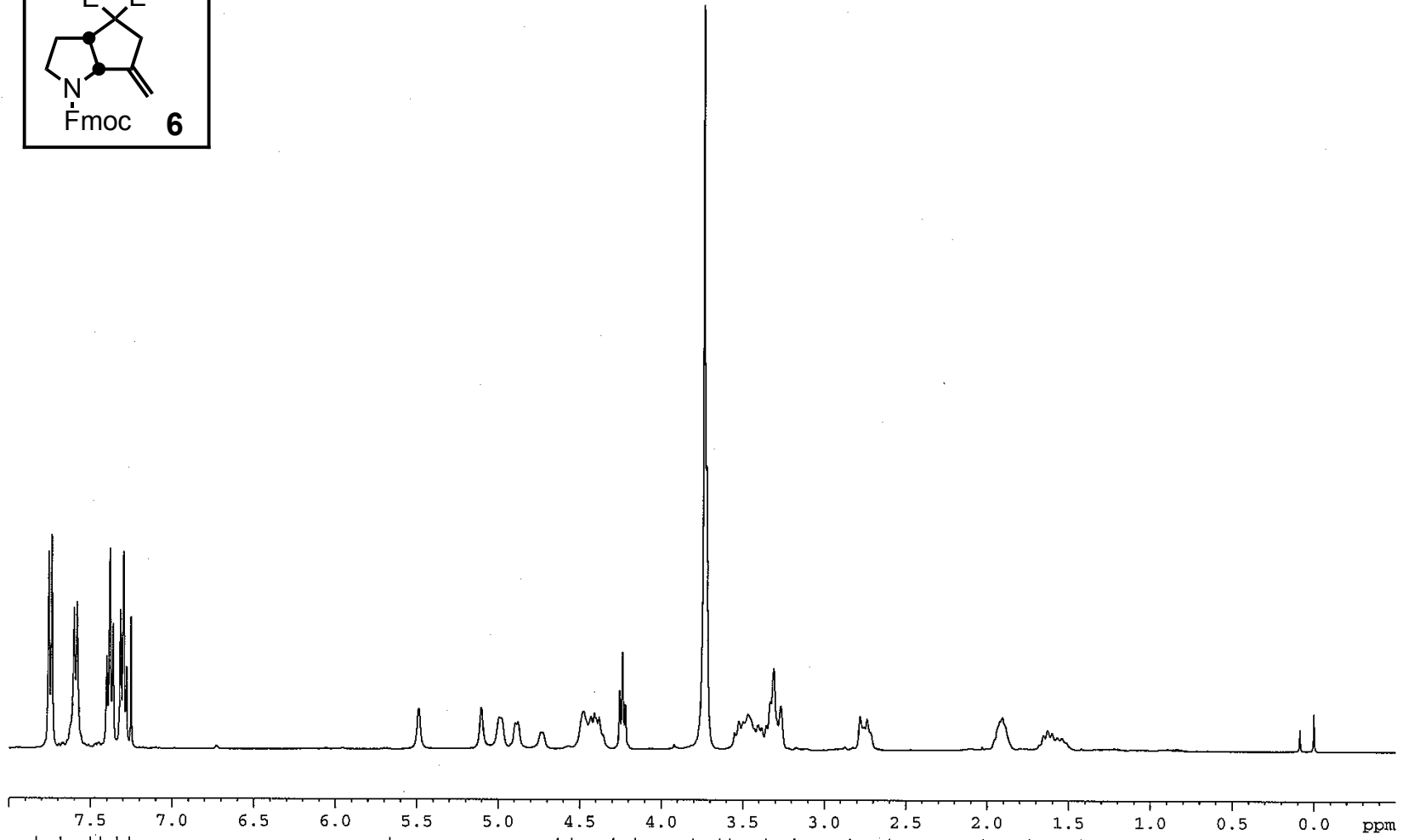


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7.582
7.398
7.380
7.361
7.315
7.296
7.278
7.250

5.487
5.104
4.994
4.894
4.879
4.737
4.477
4.429
4.410
4.381
4.254
4.237
4.220
3.739
3.550
3.522
3.497
3.467
3.404
3.385
3.356
3.331
3.311
3.267
2.780
2.737

1.906
1.654
1.627
1.600
1.569
1.540
1.256

0.001



2.000
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2.030
1.957

2.964

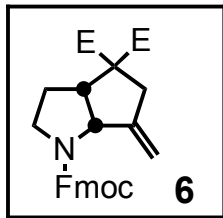
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2.007
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0.946

1.042
0.993

ppm



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155.377

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144.389
141.623

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127.130
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112.762

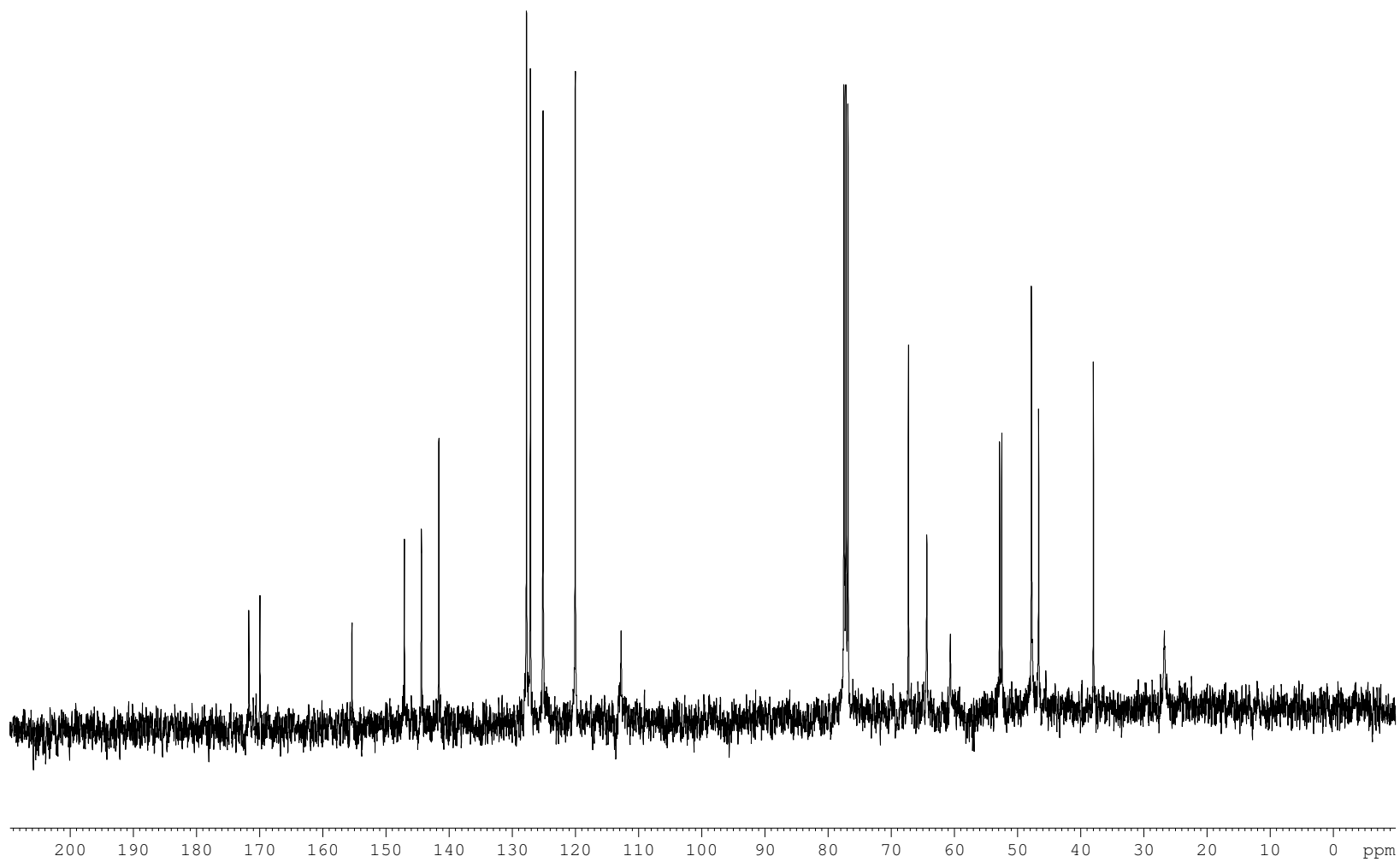
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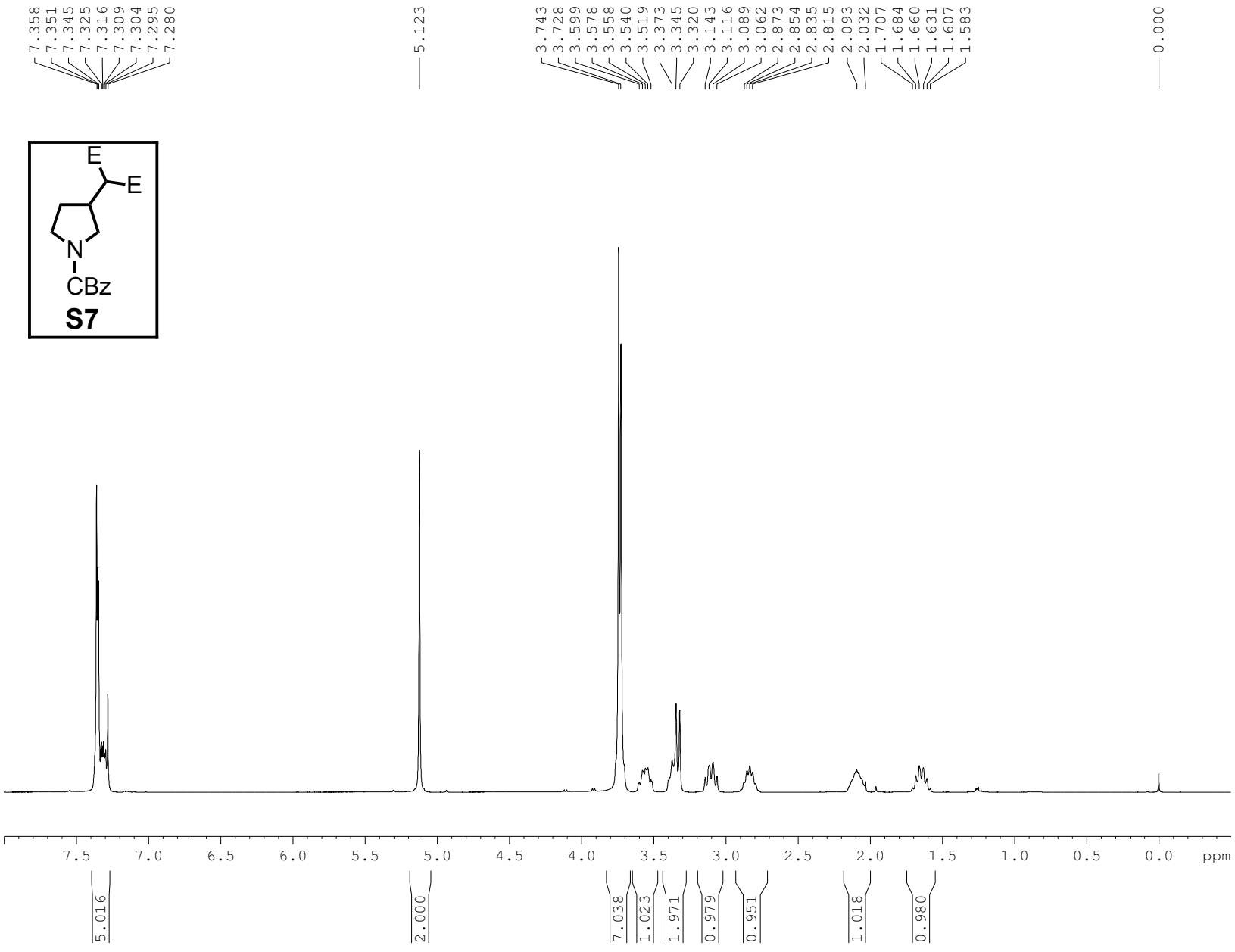
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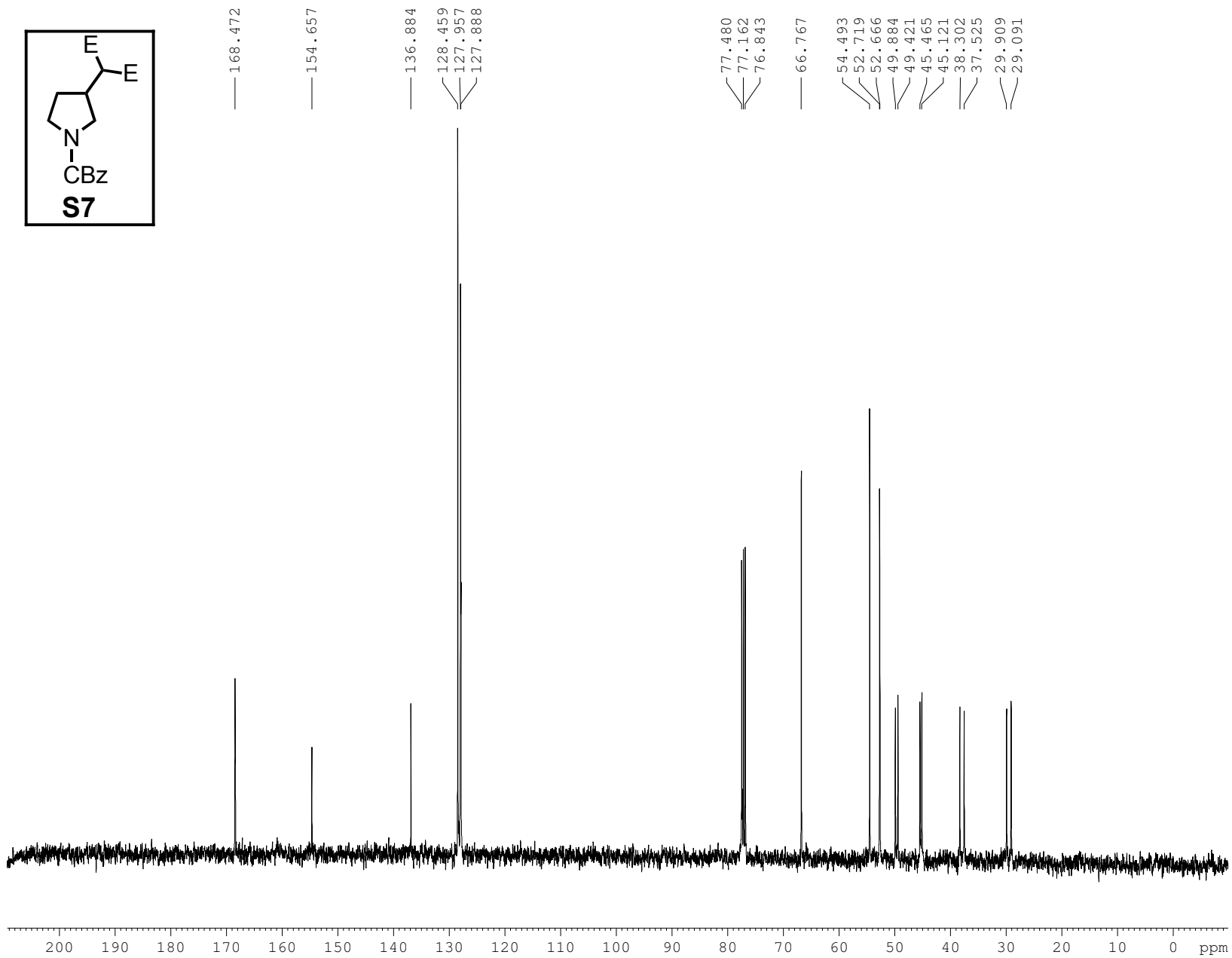
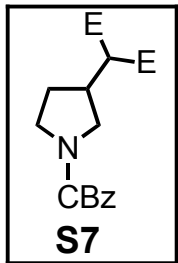
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37.987

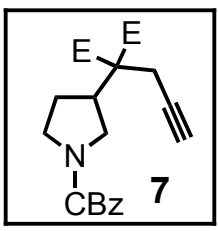
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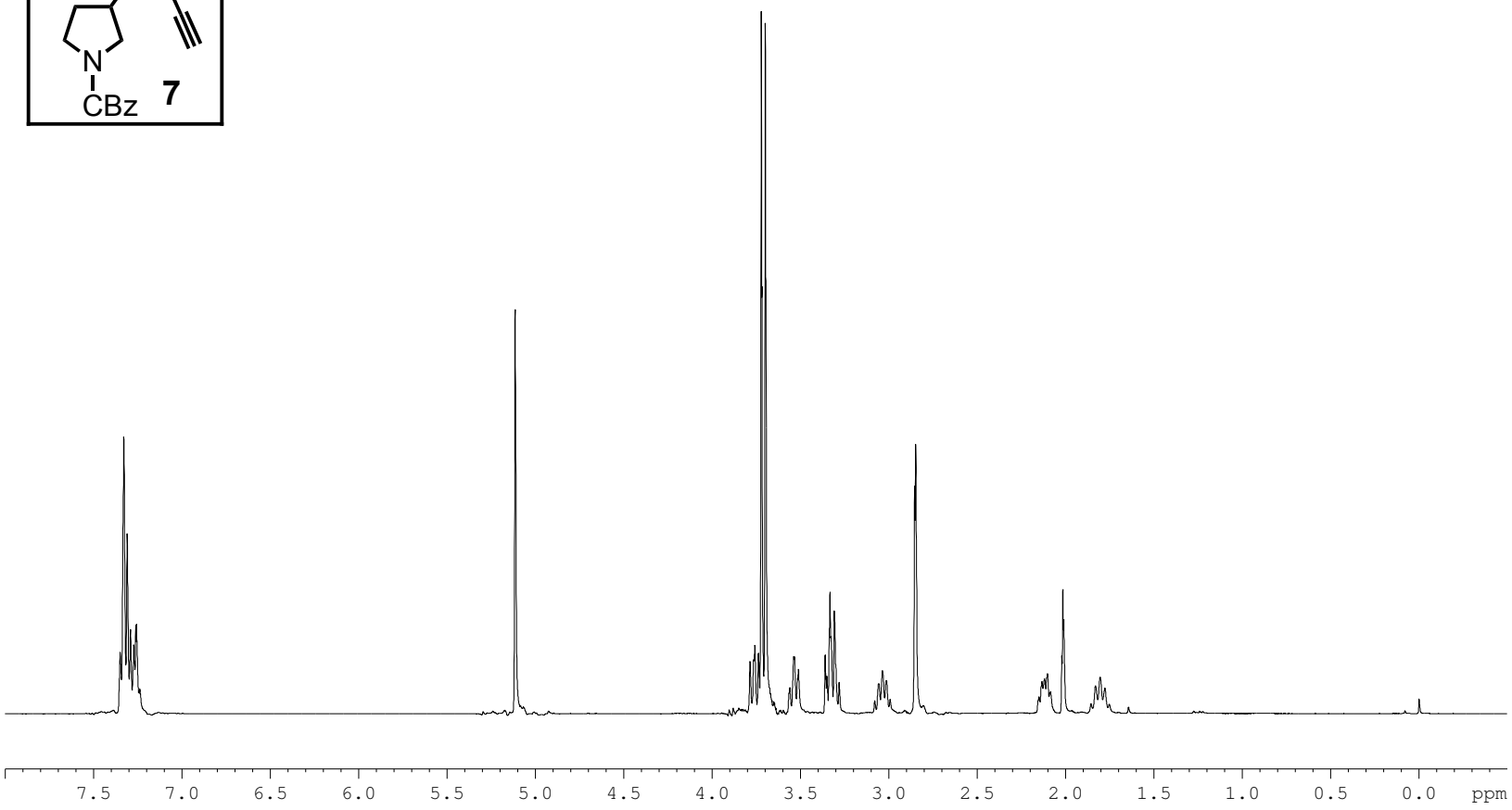




7.348
7.327
7.308
7.288
7.270
7.266
7.259
7.254
7.241
7.236



5.115
3.785
3.765
3.758
3.738
3.722
3.717
3.699
3.695
3.560
3.538
3.534
3.511
3.360
3.350
3.333
3.328
3.308
3.281
3.080
3.057
3.036
3.014
2.993
2.854
2.848
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5.010

2.000

7.069

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2.056

1.032

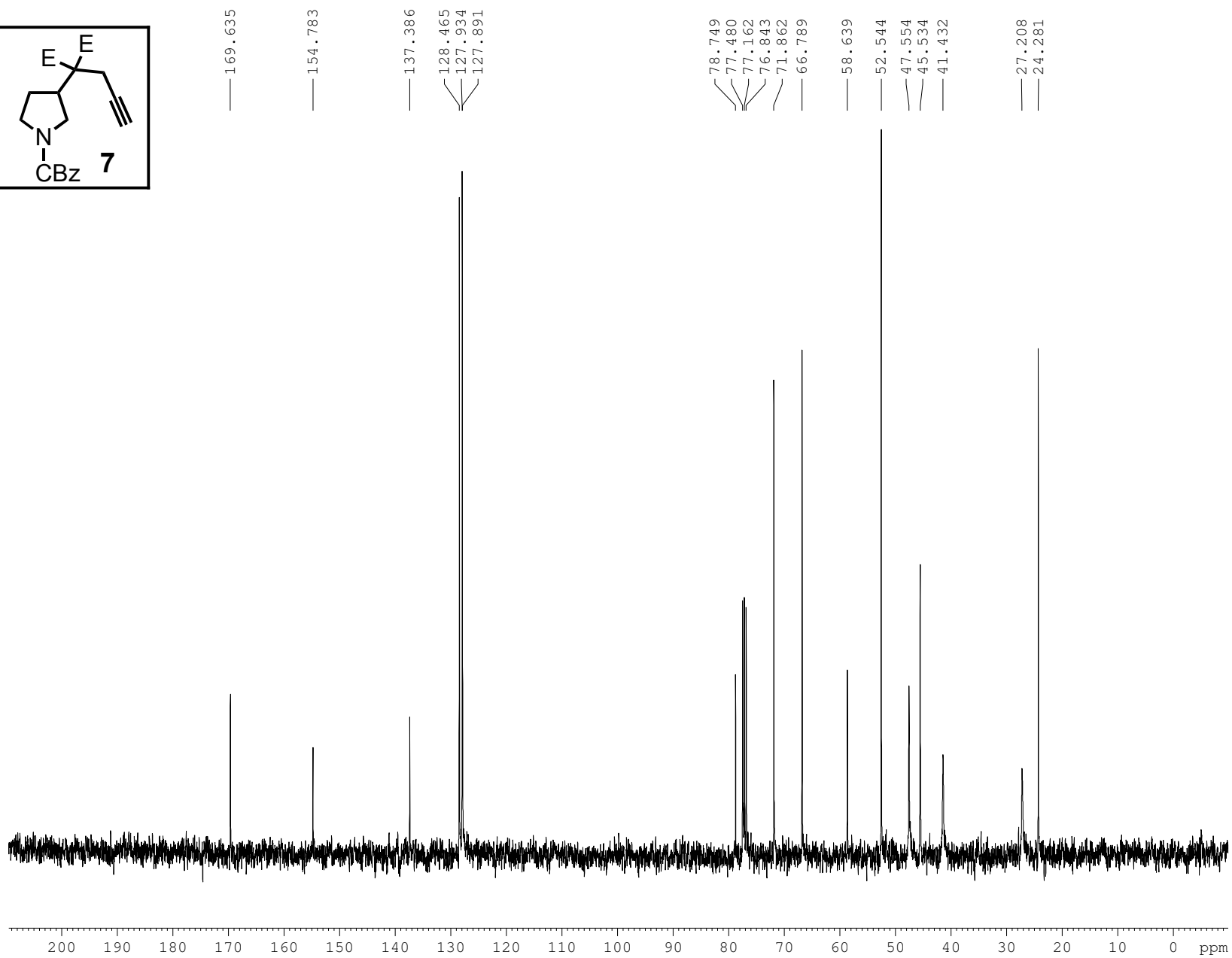
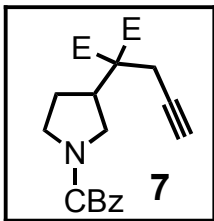
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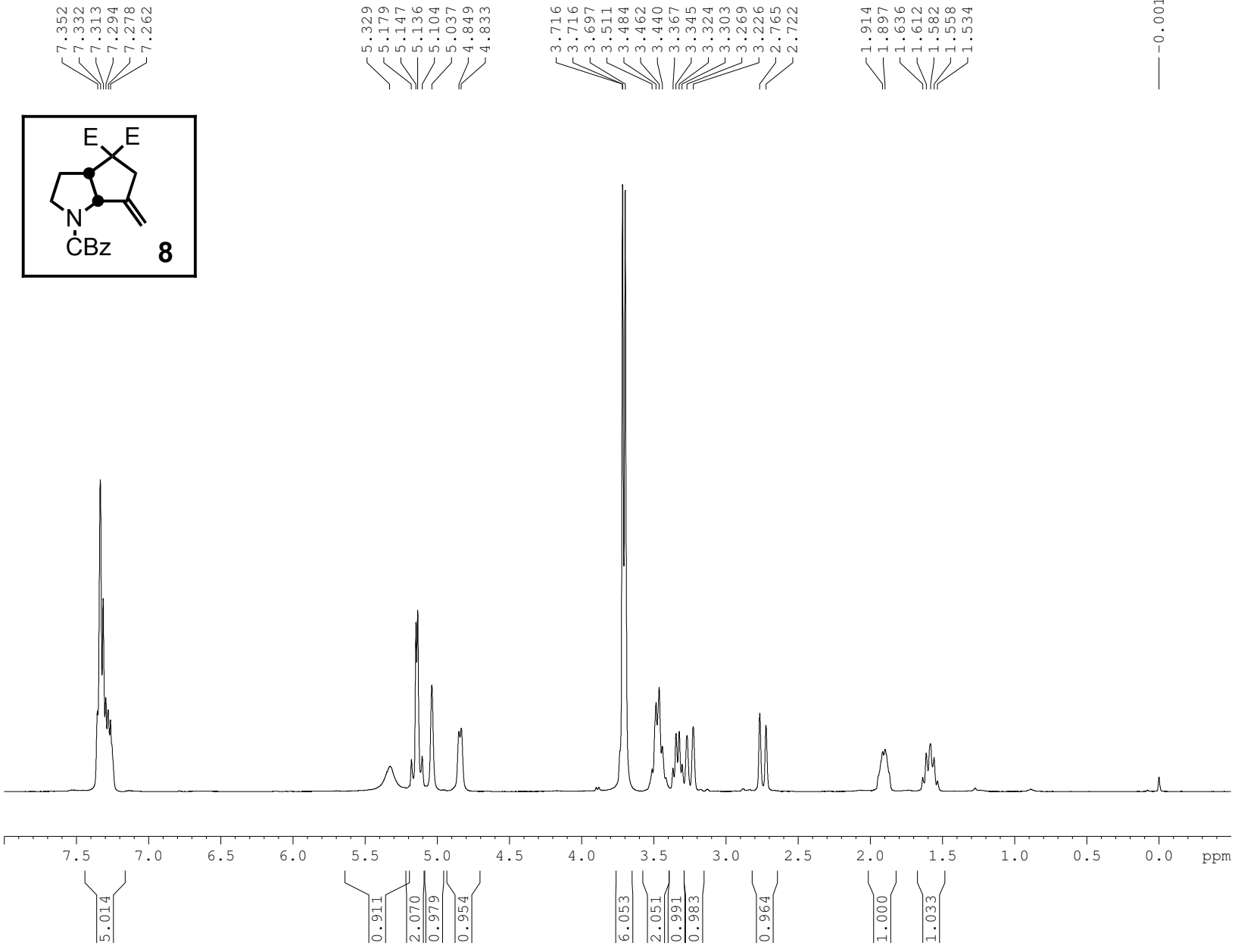
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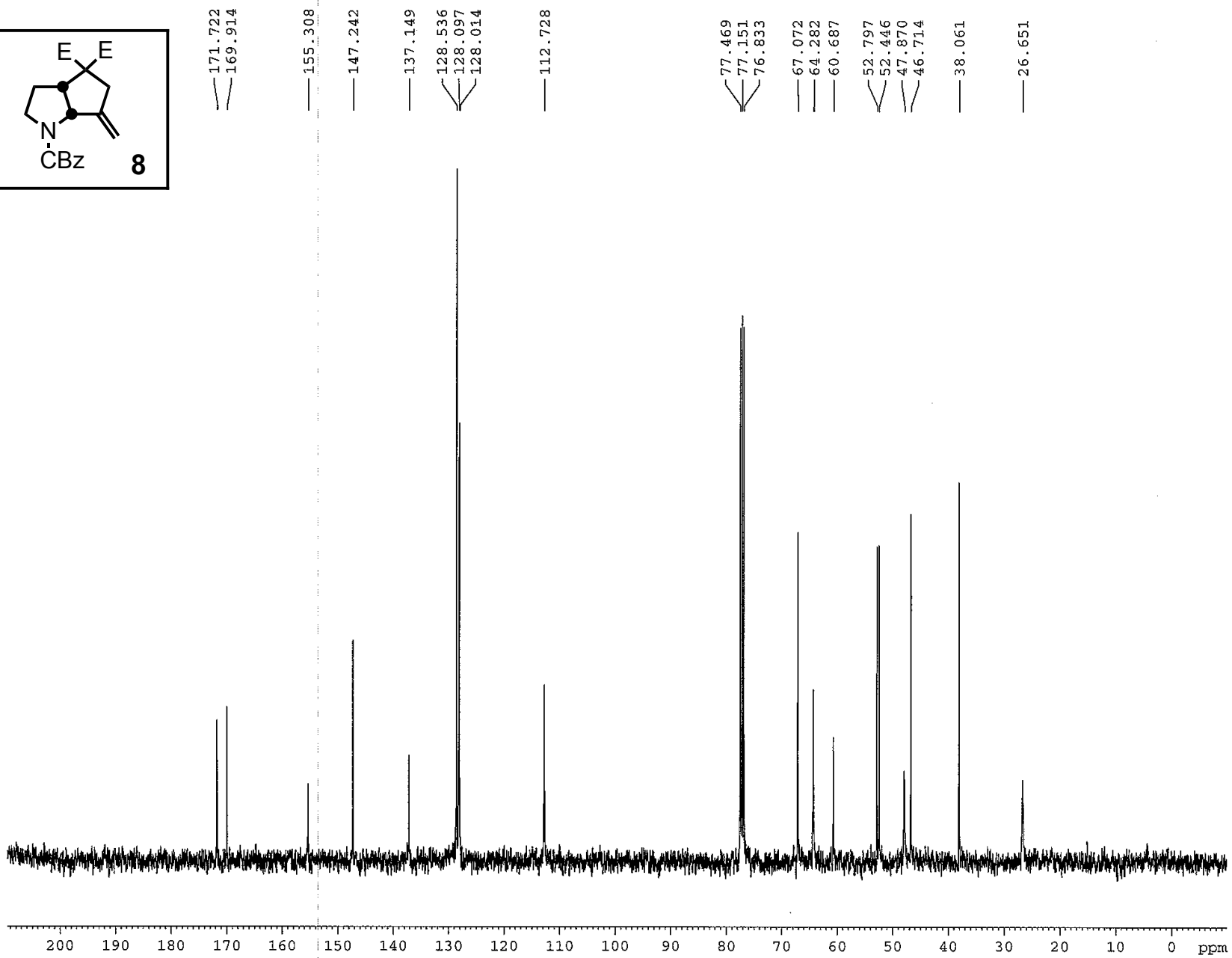
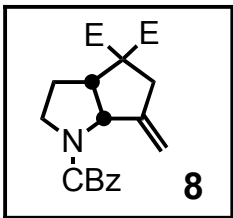
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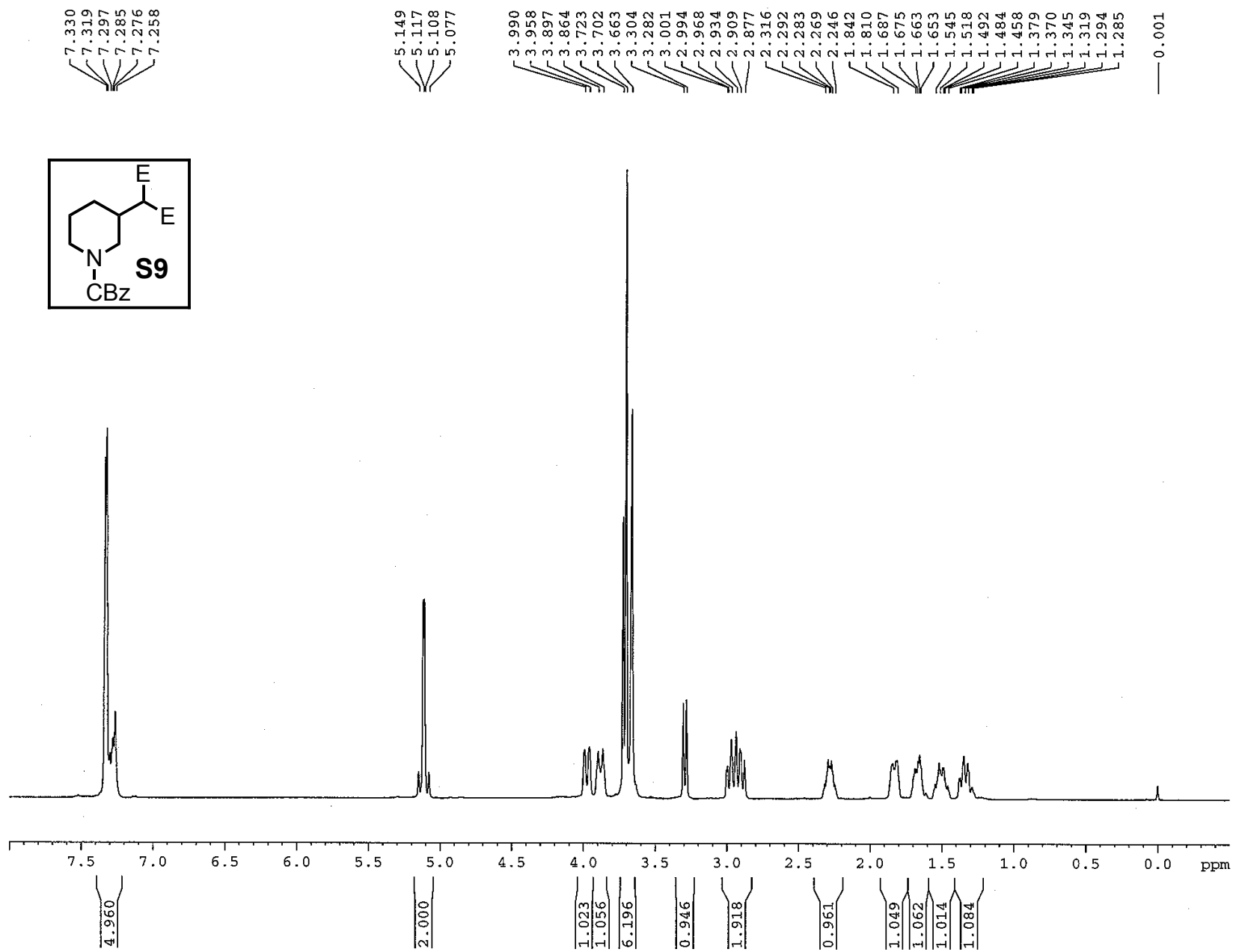
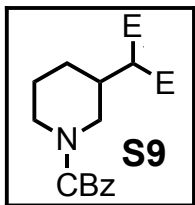
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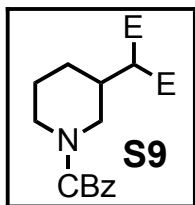
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168.452
168.339

155.364

137.202

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127.957
127.850

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76.855

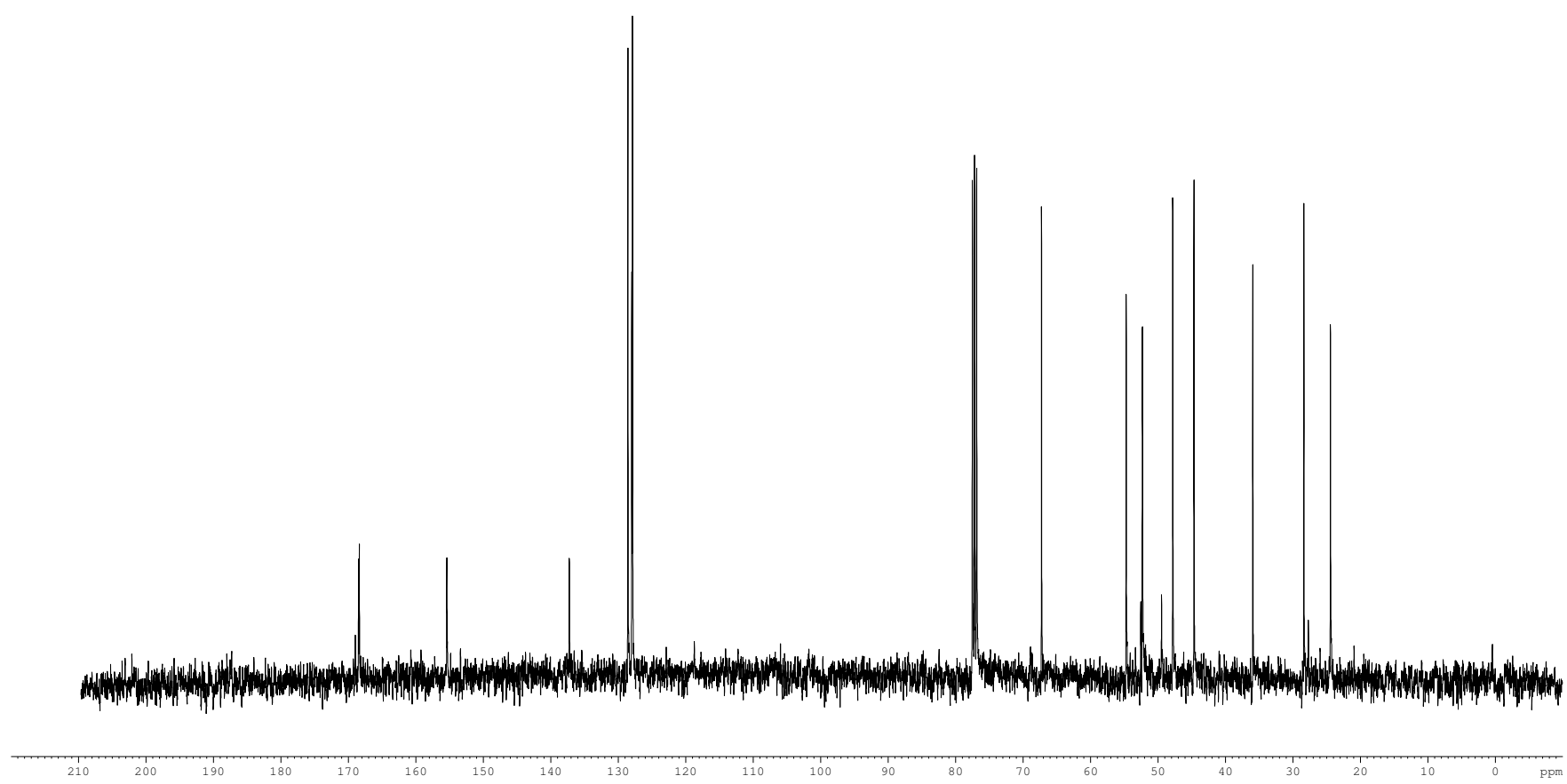
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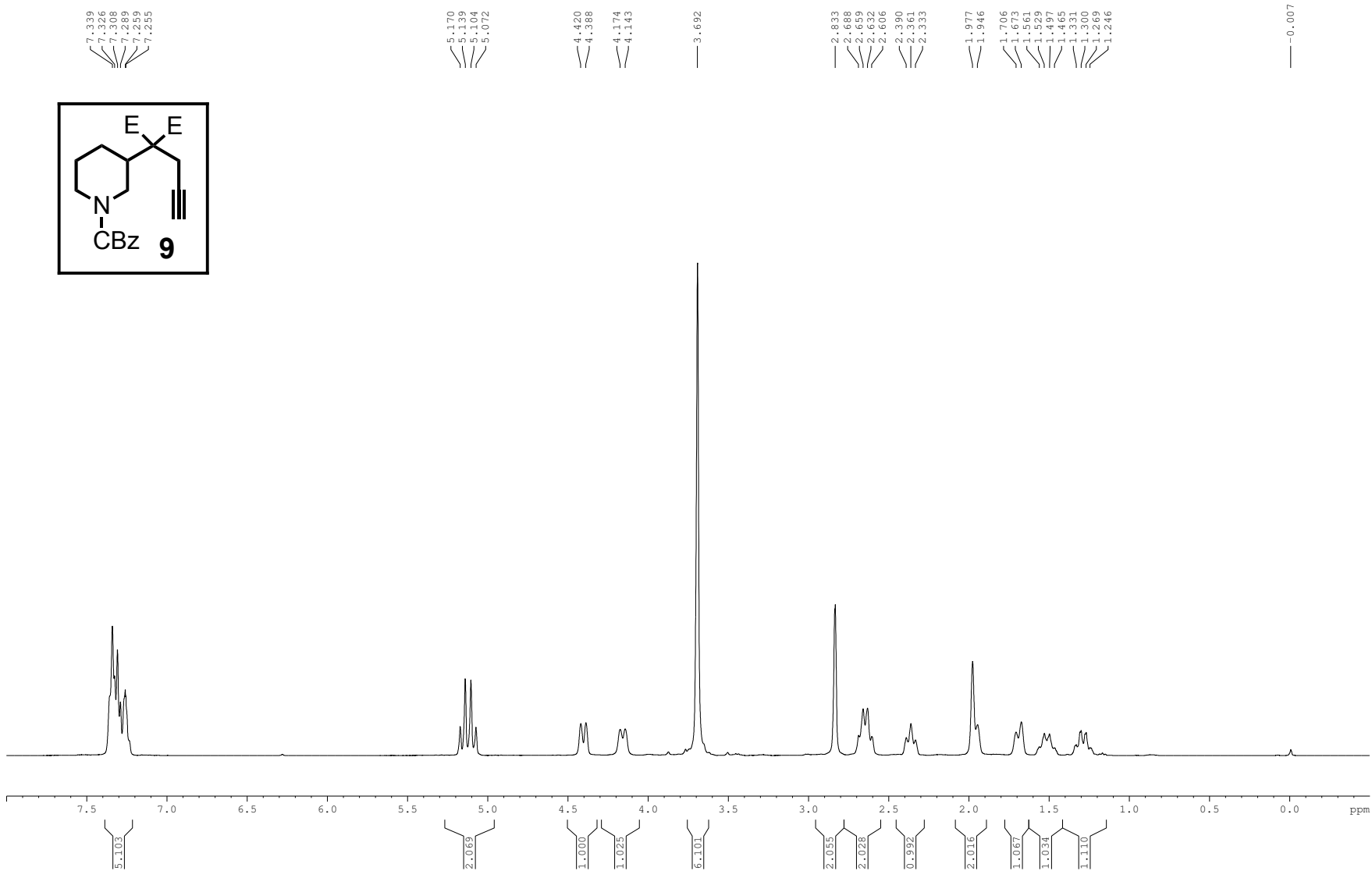
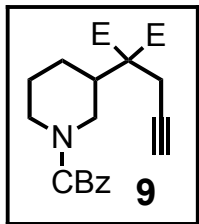
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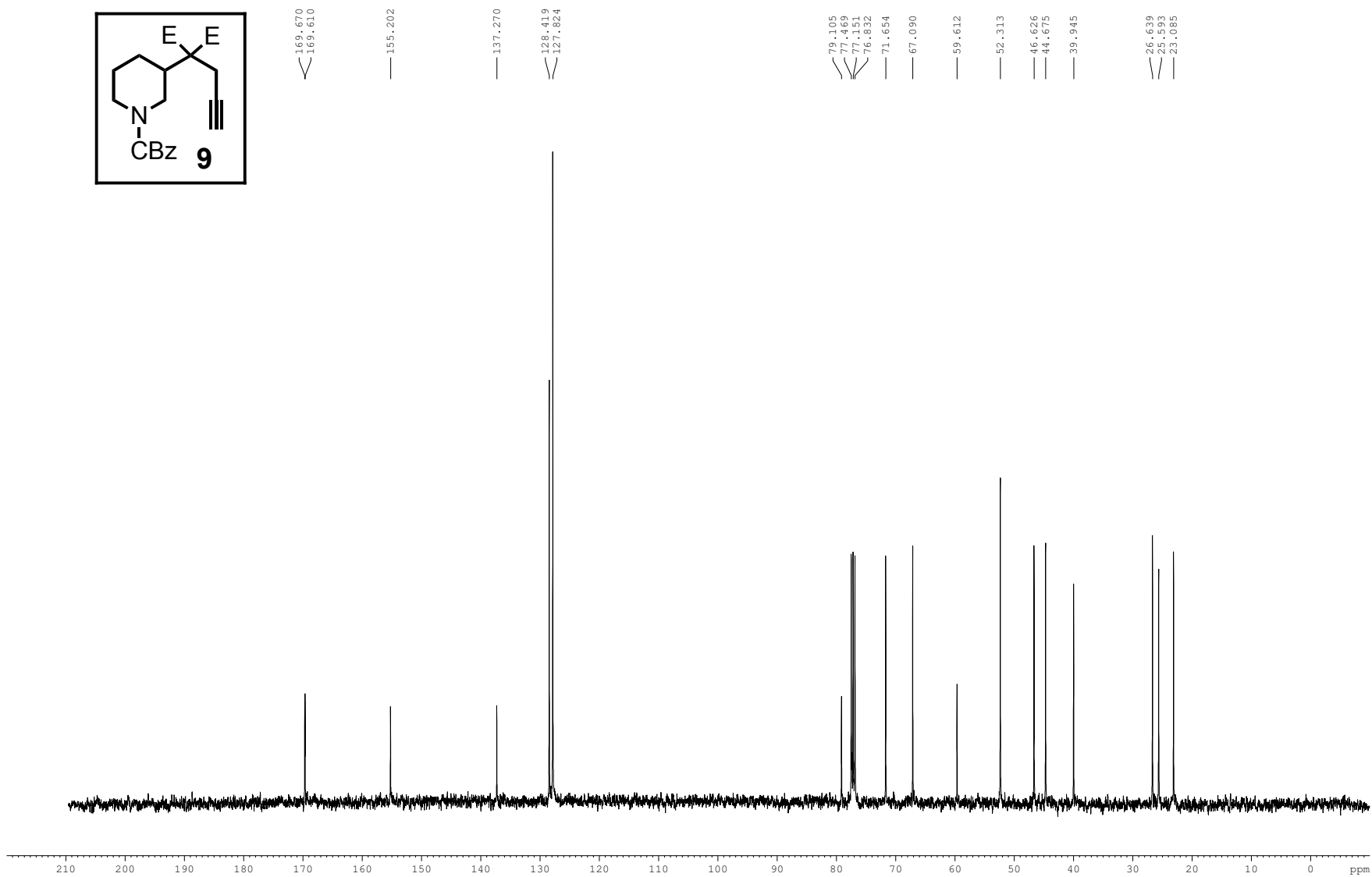
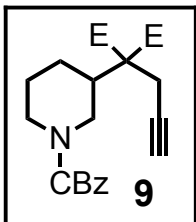
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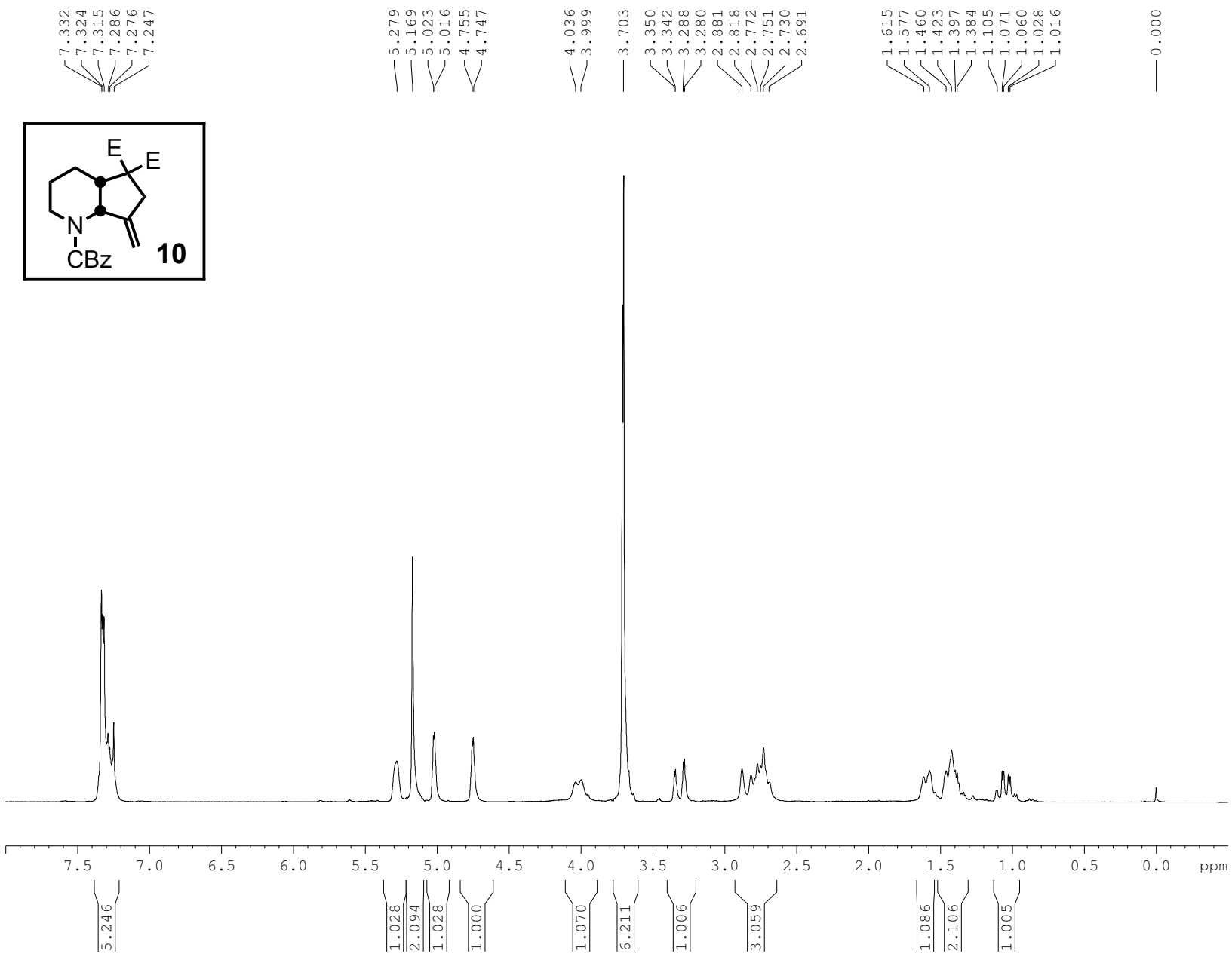
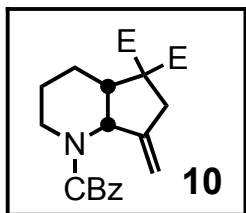
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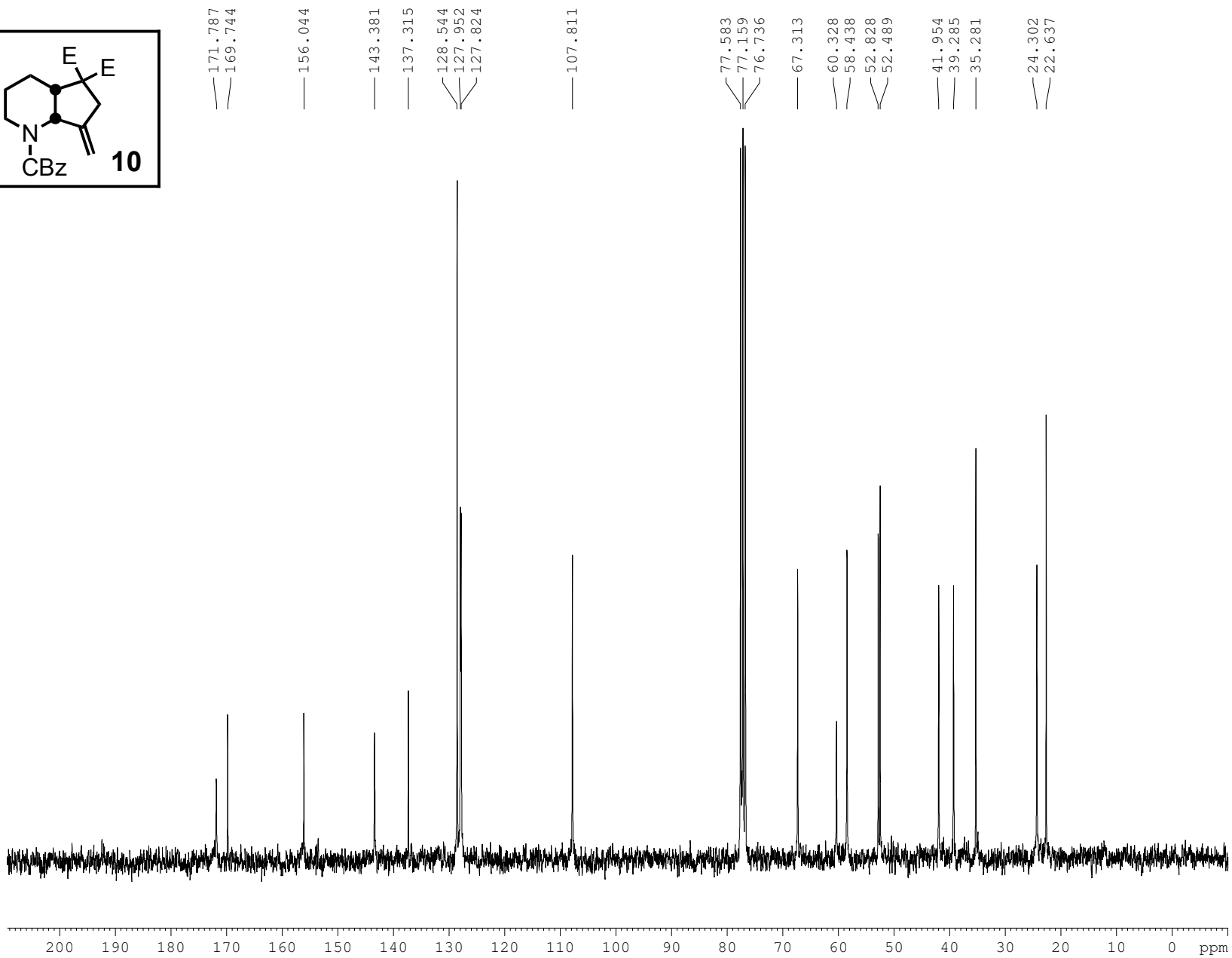
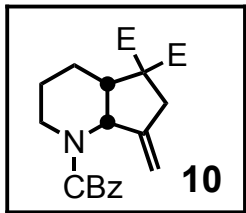
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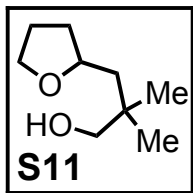




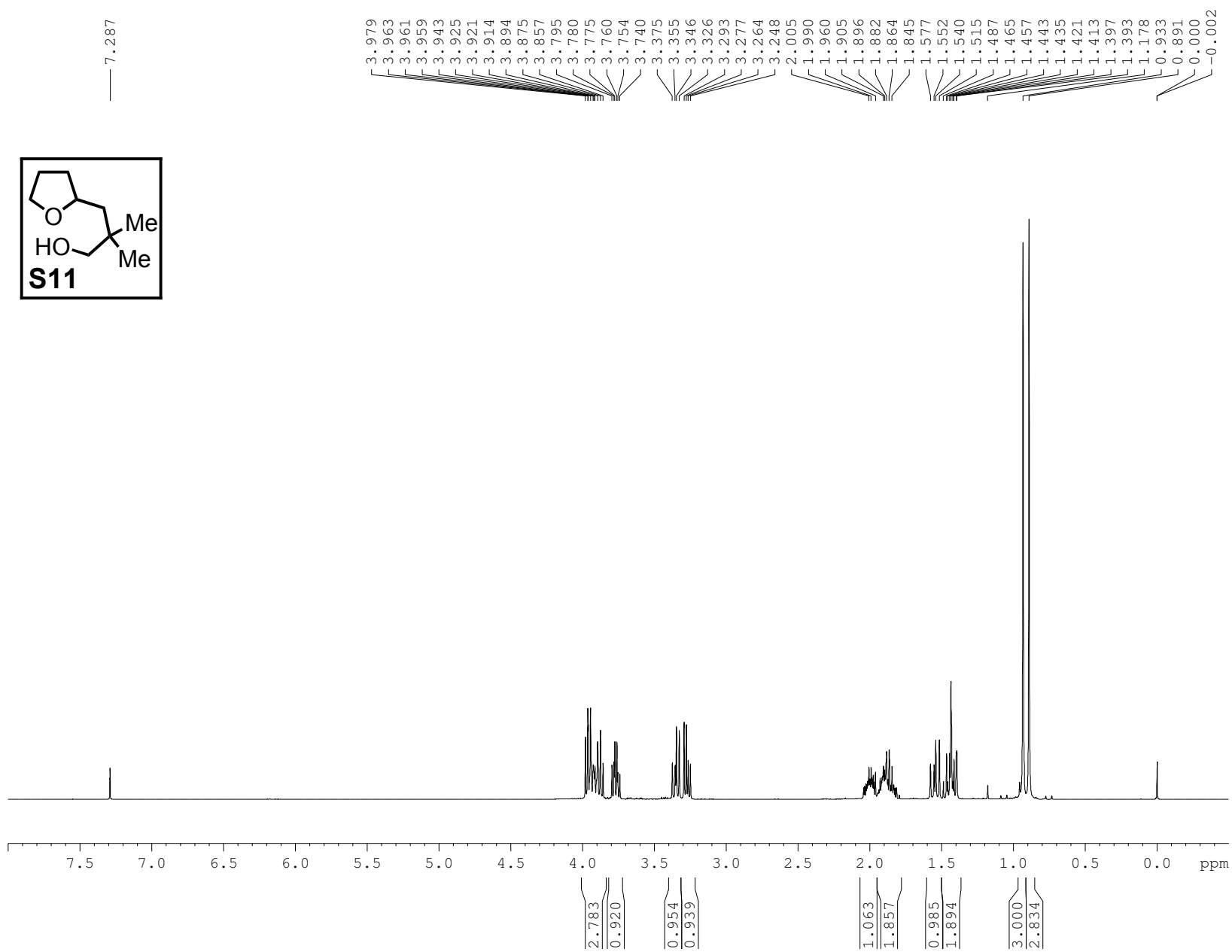


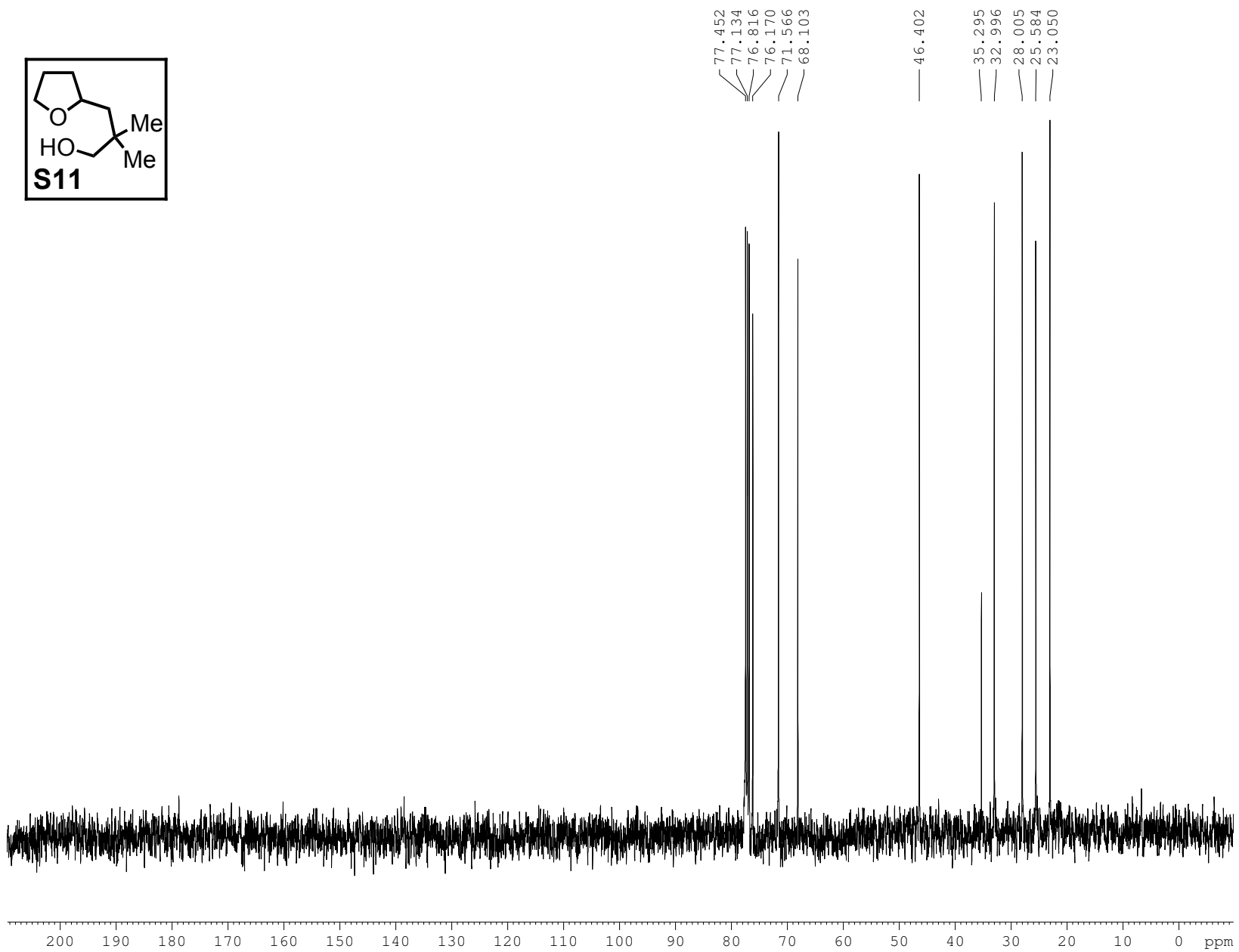
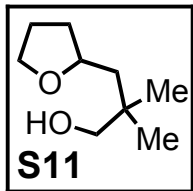


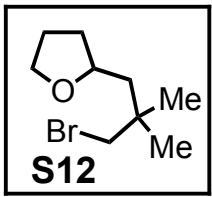




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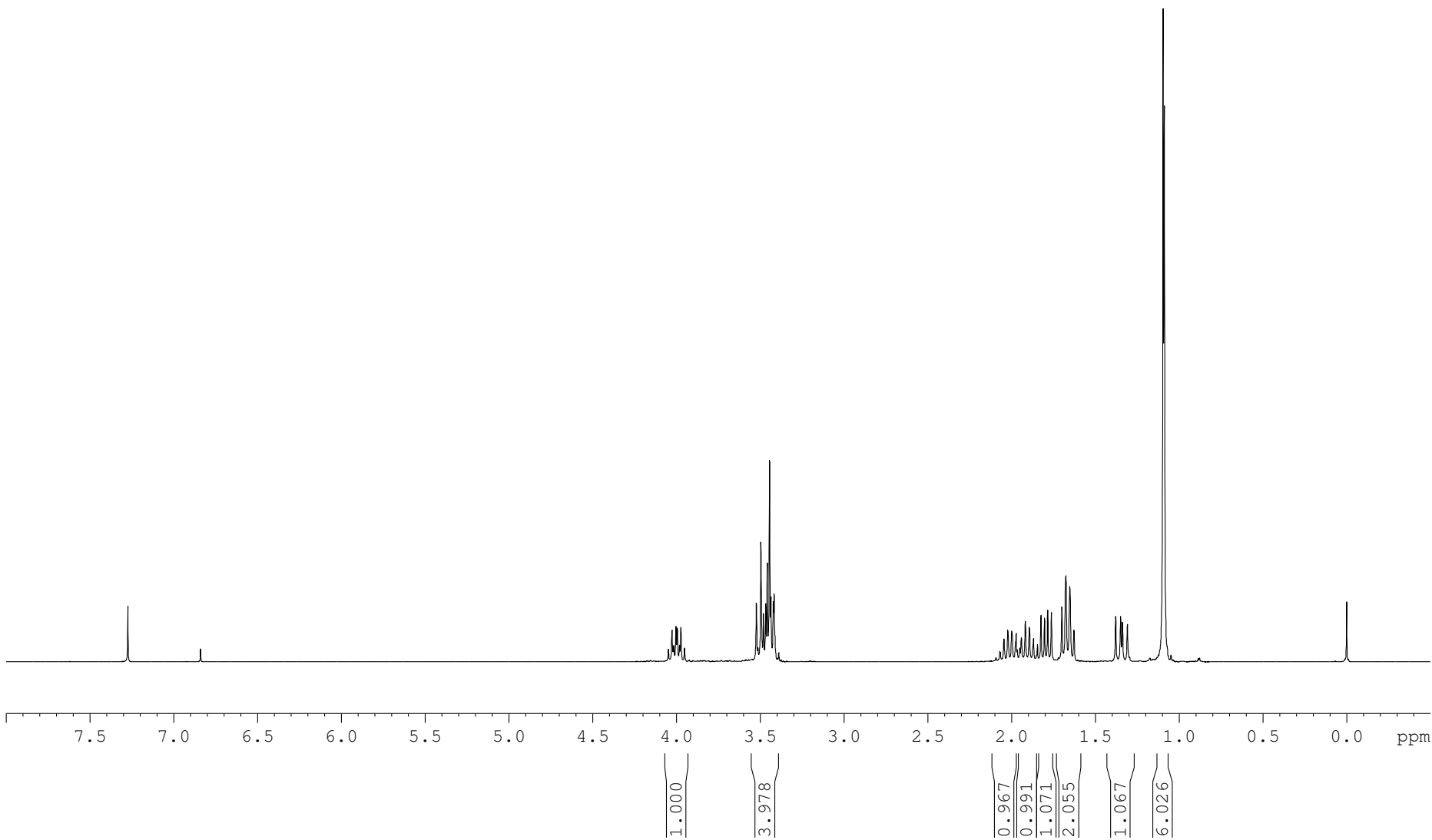


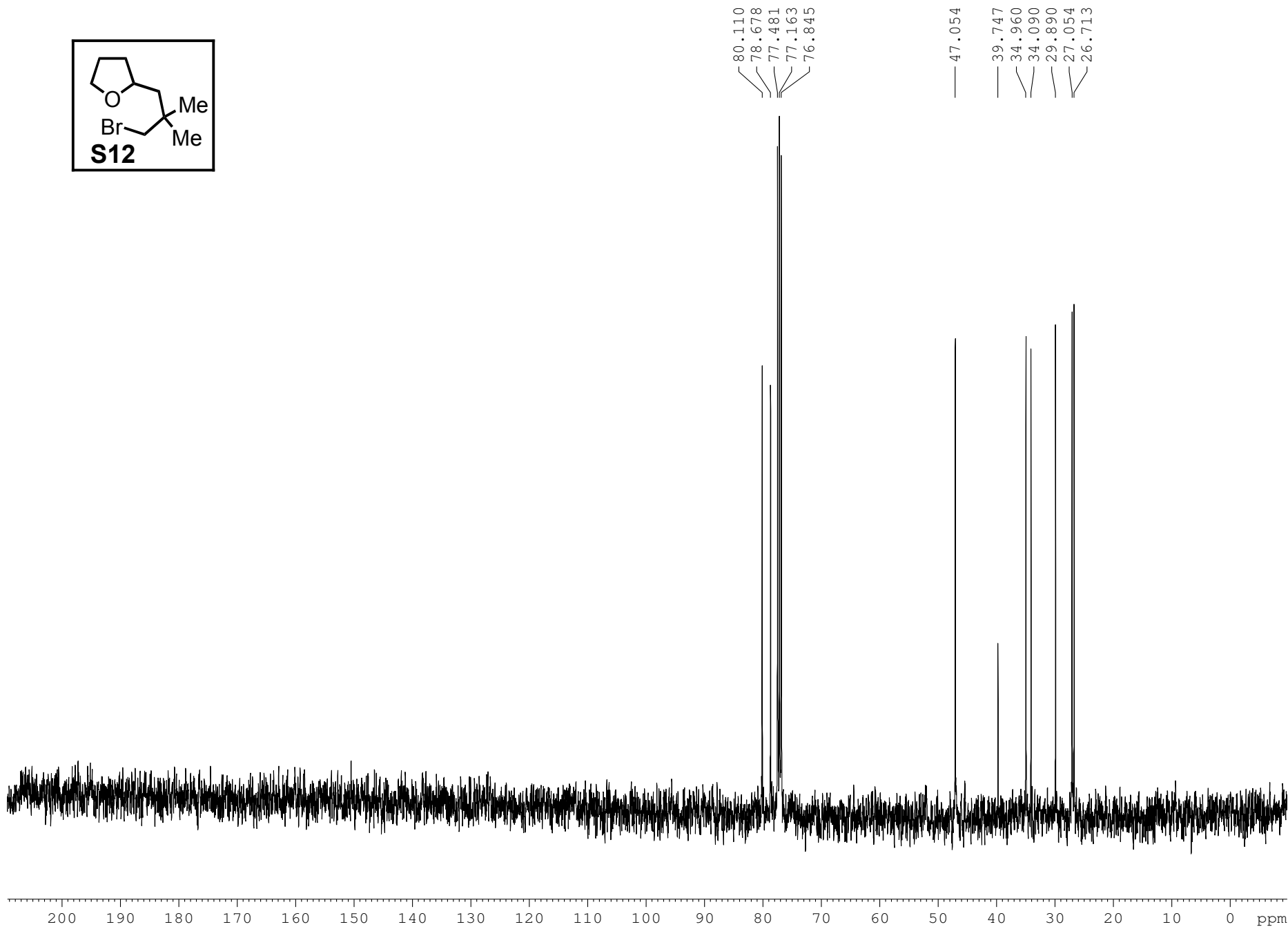
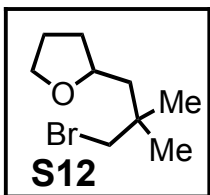


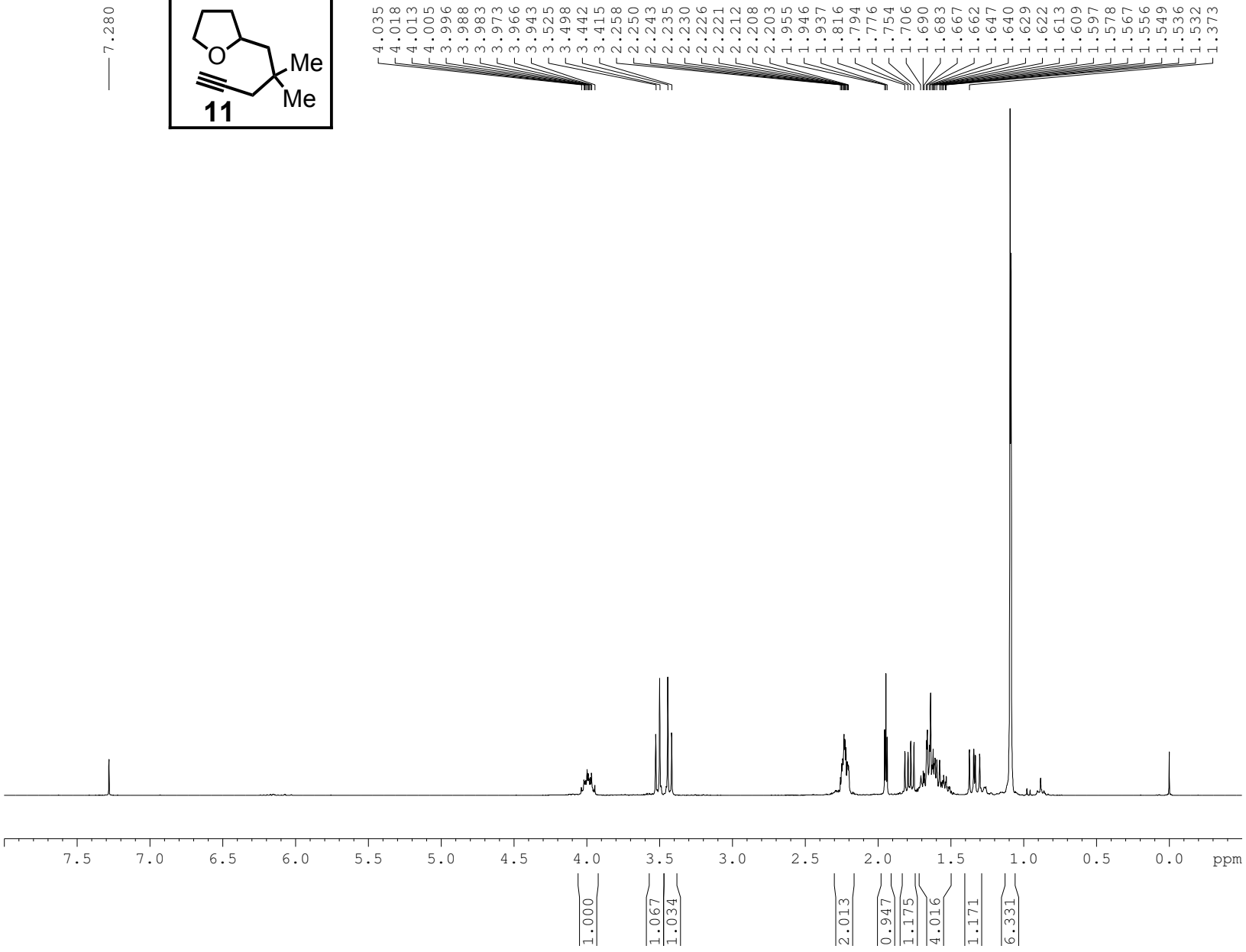


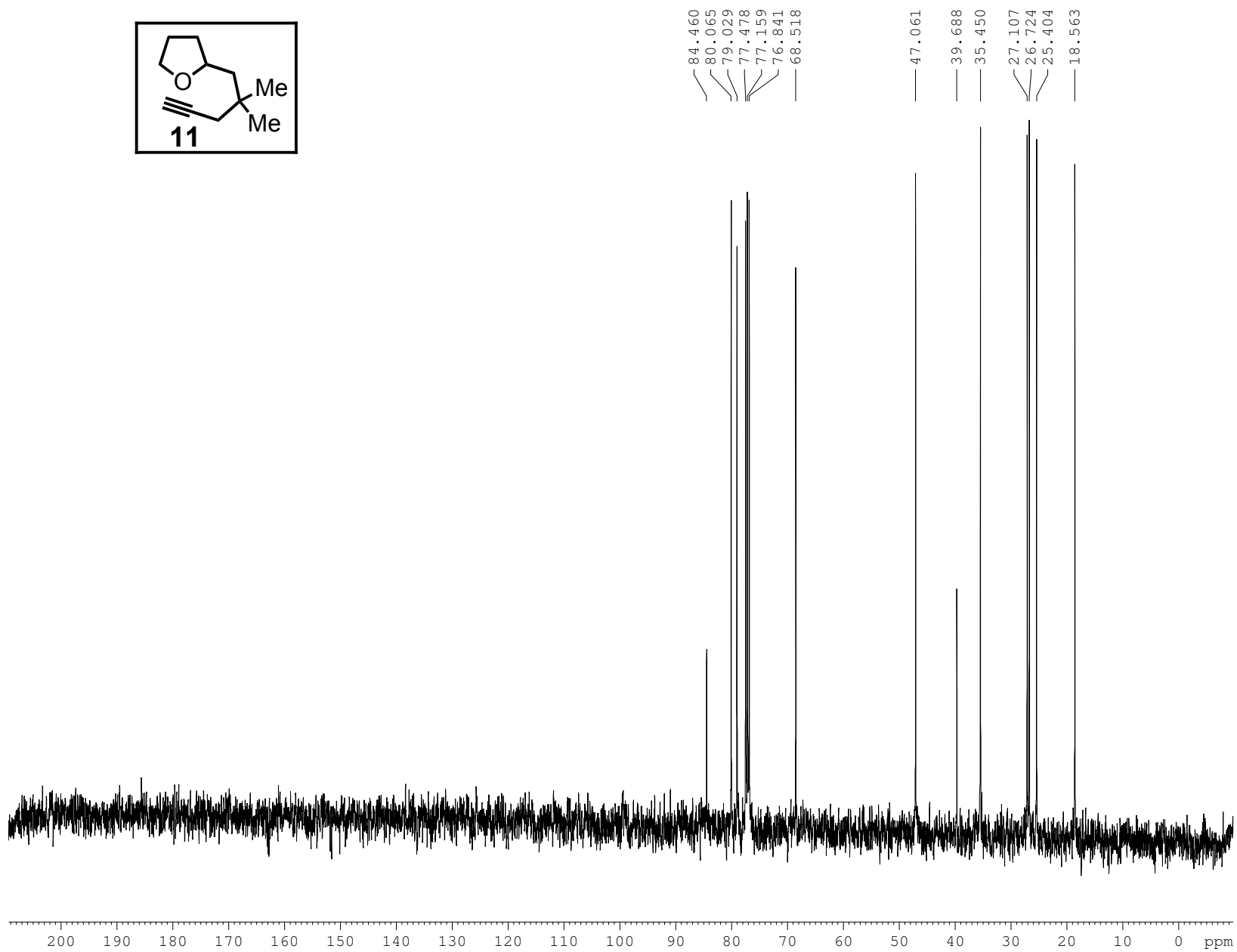
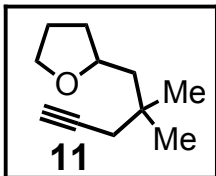
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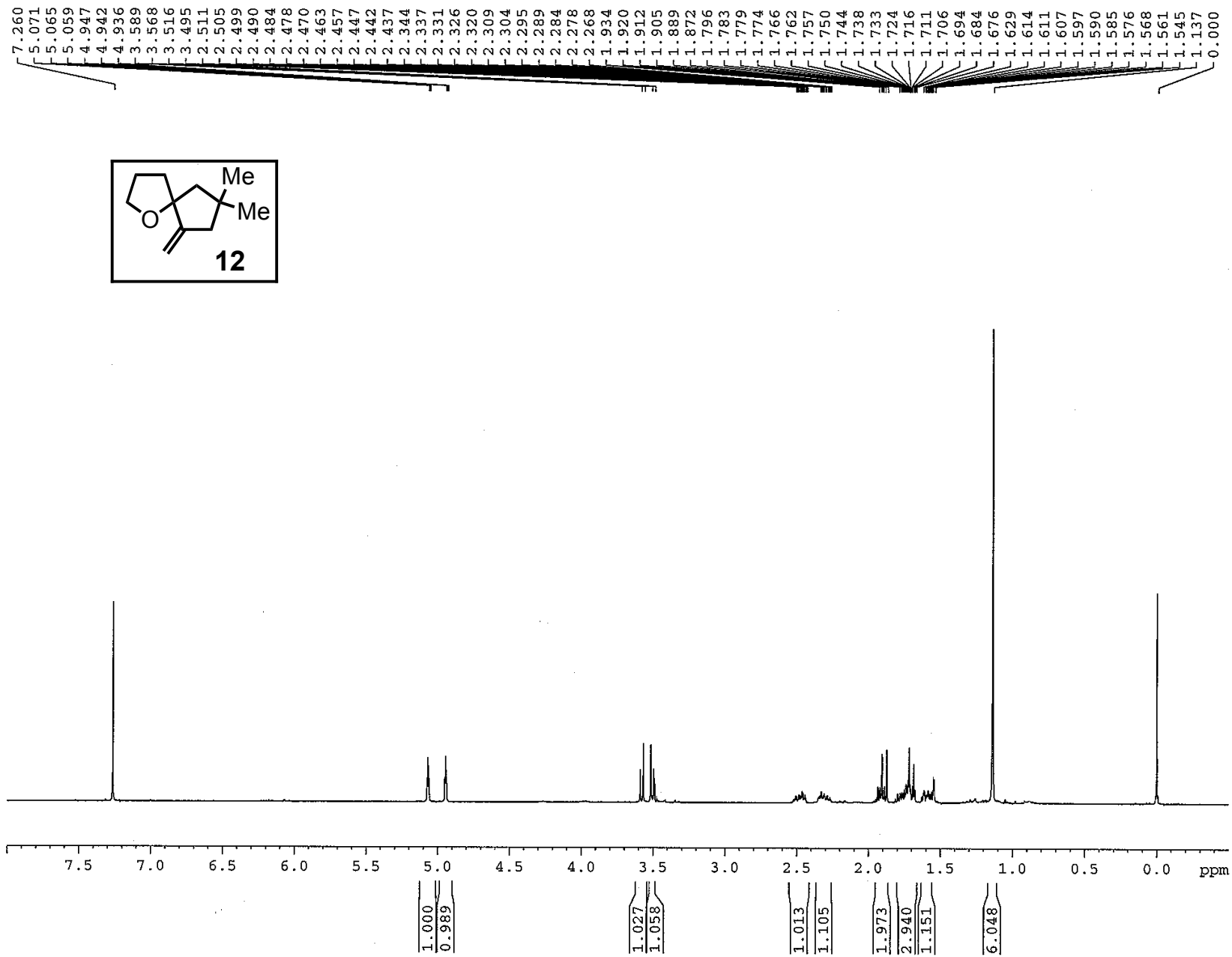
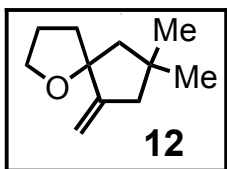
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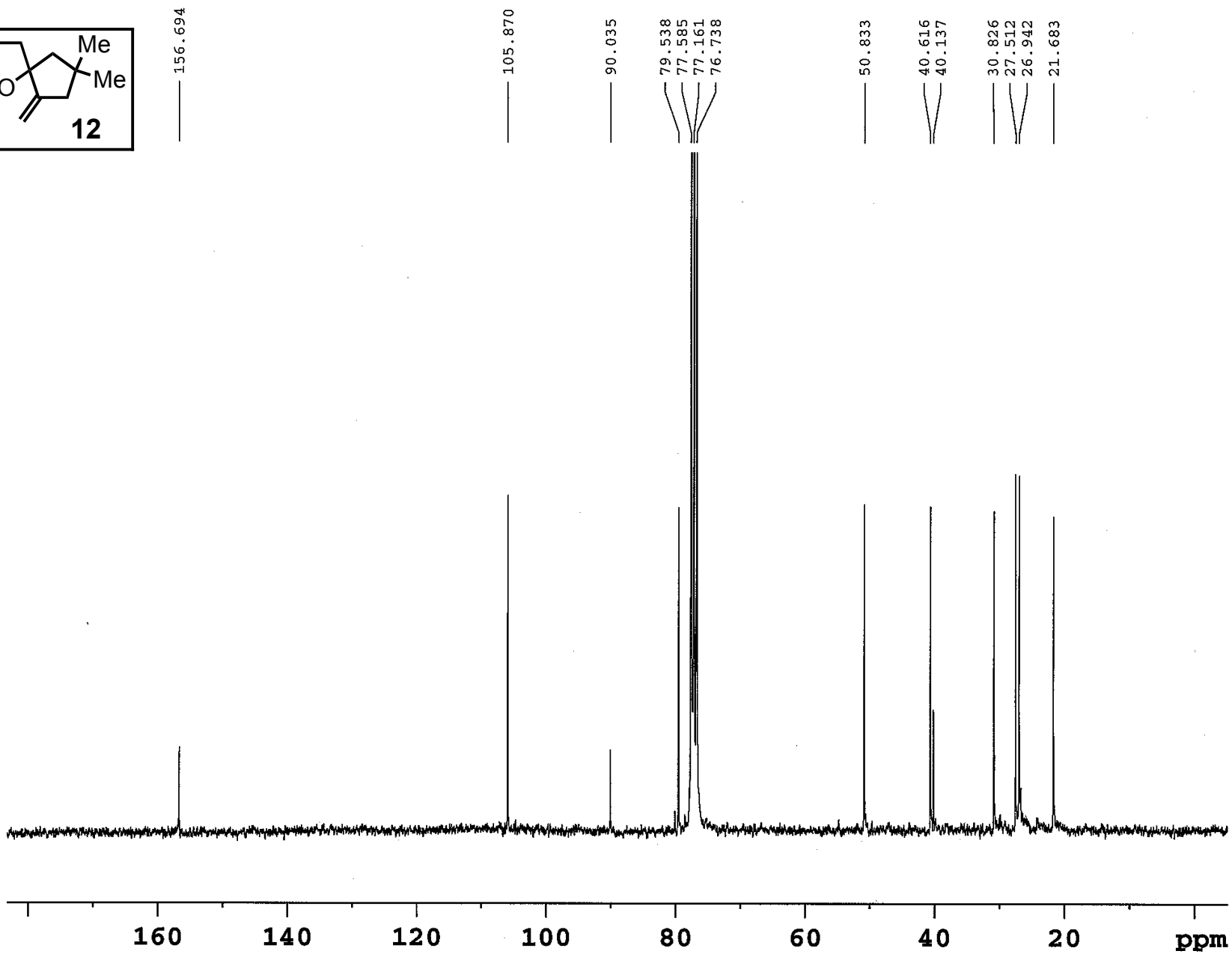
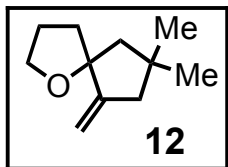


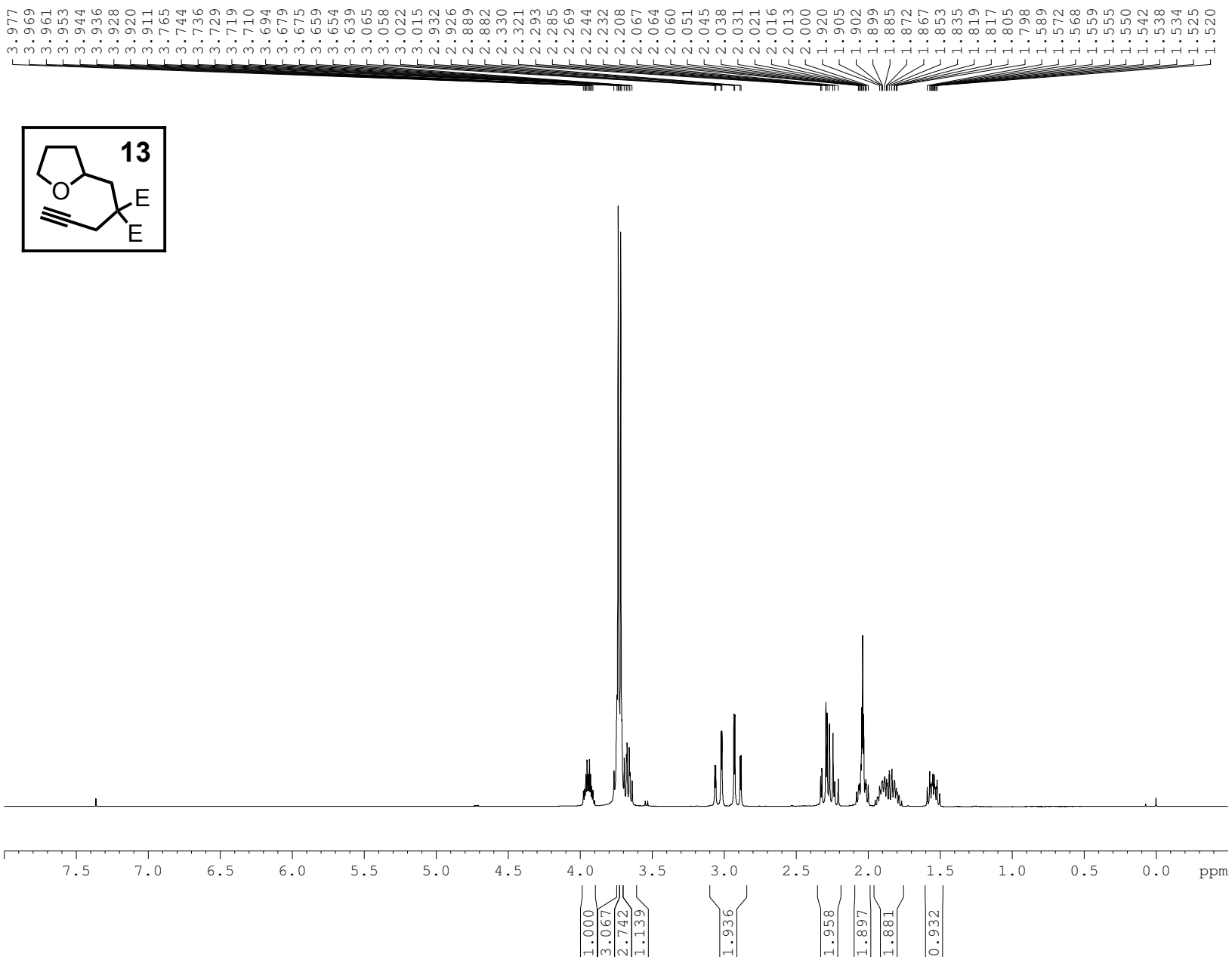


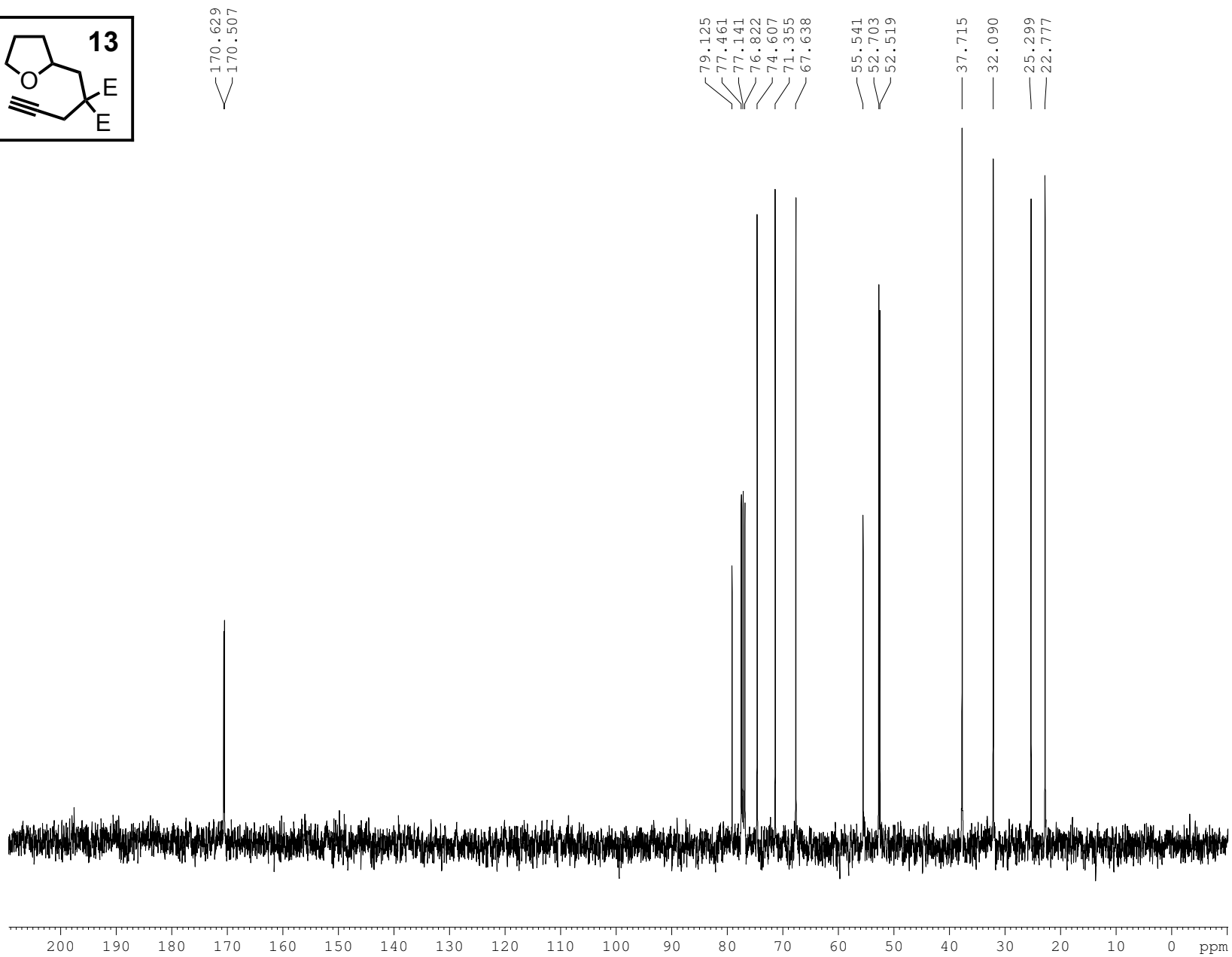
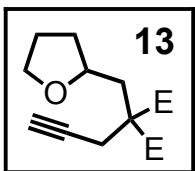


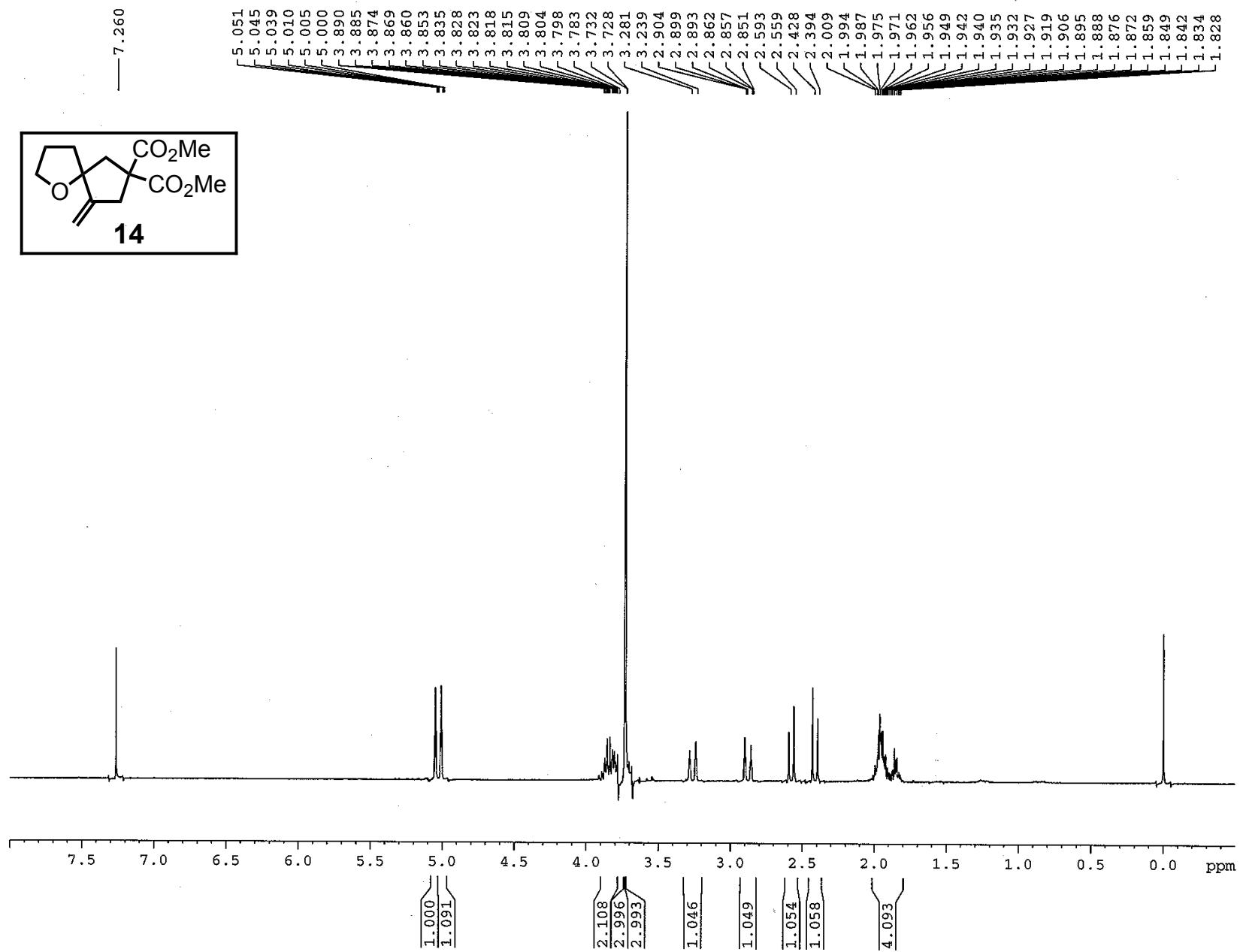
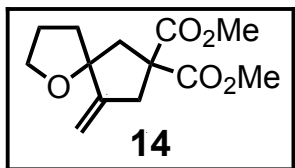


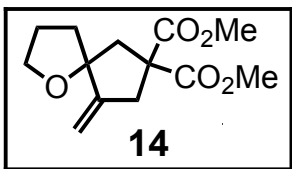












172.551
171.912

151.803

107.615

88.247

67.568

56.747

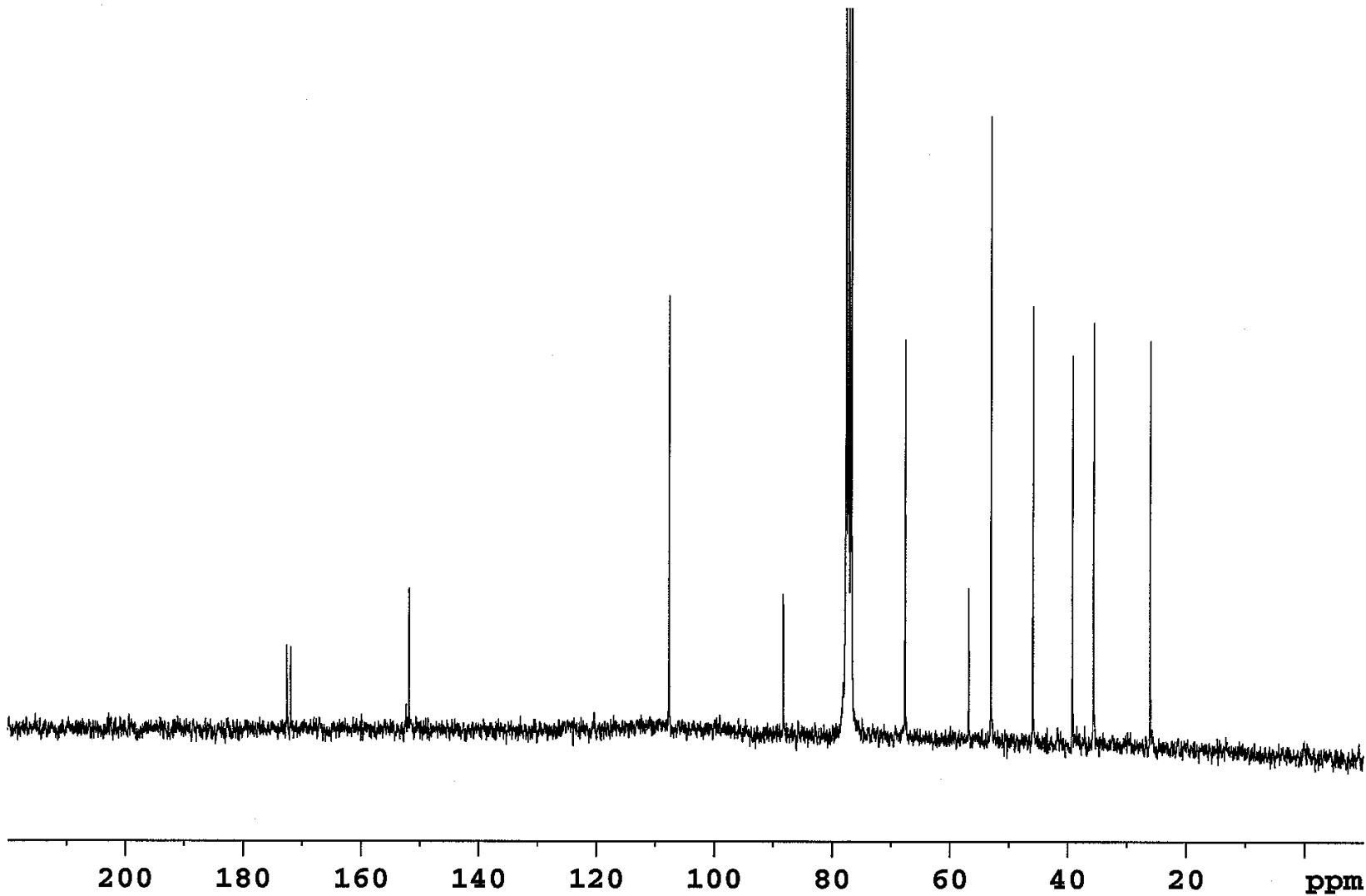
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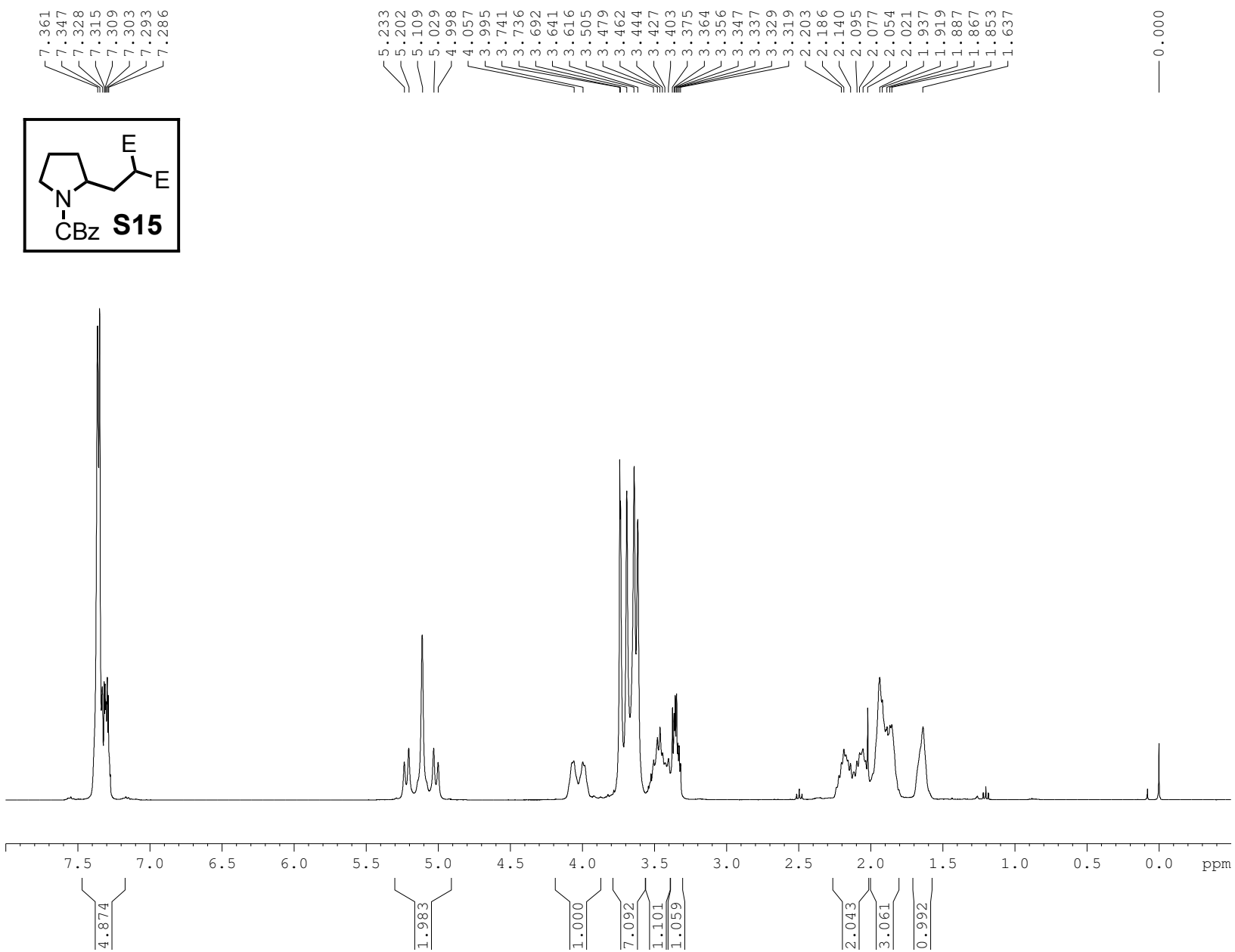
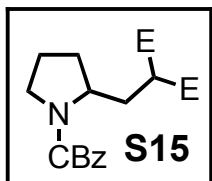
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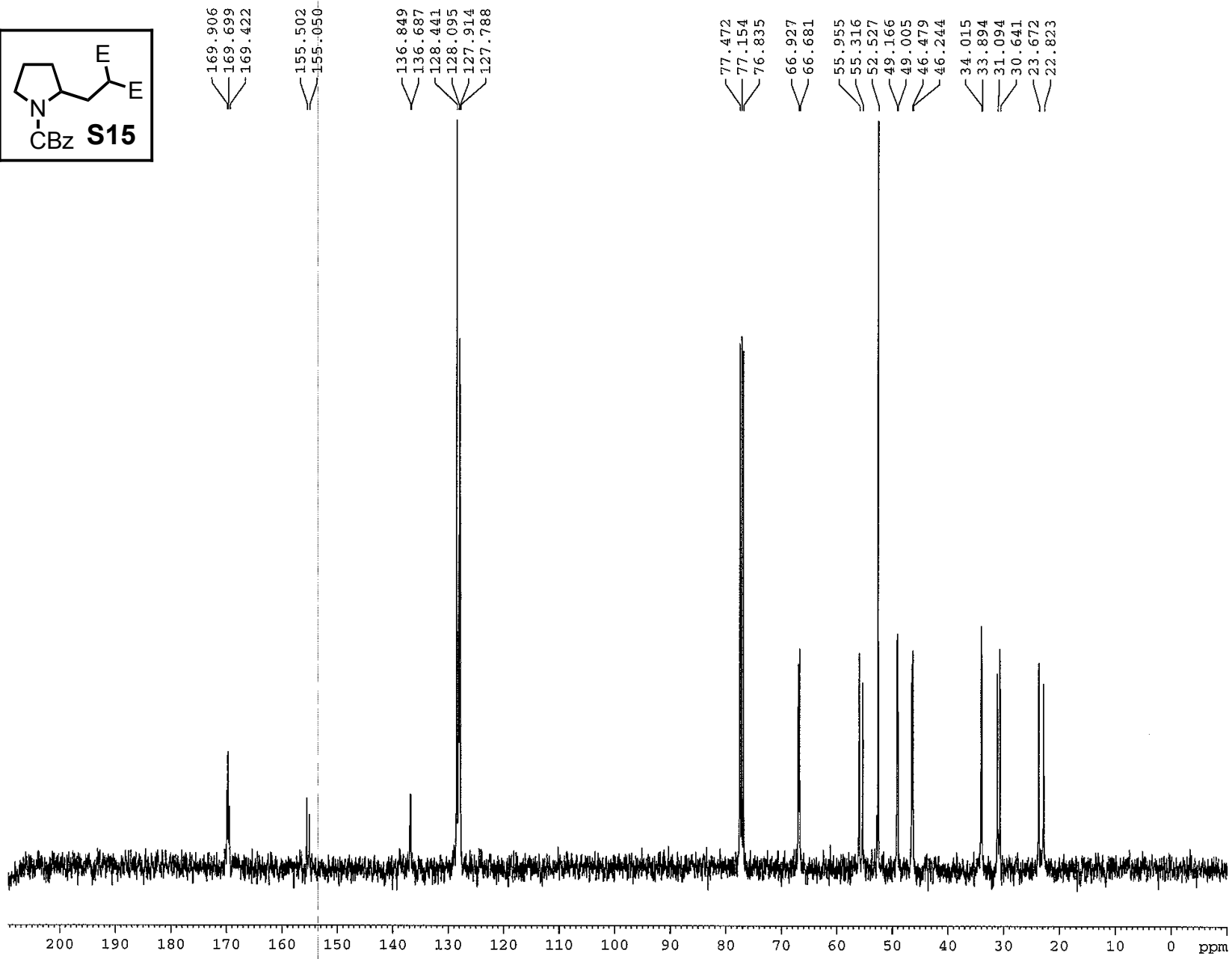
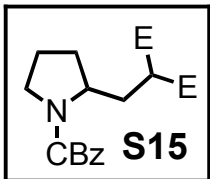
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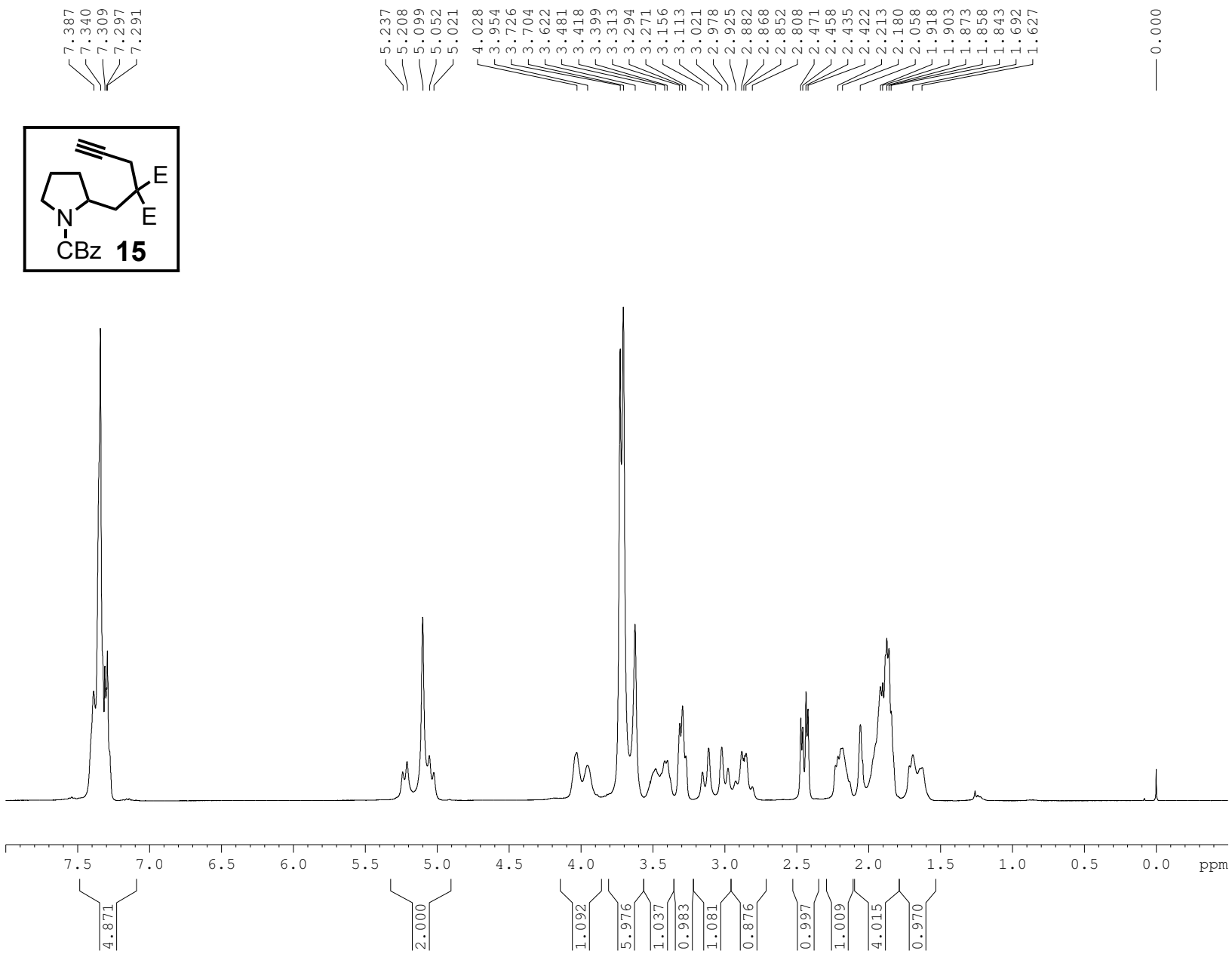
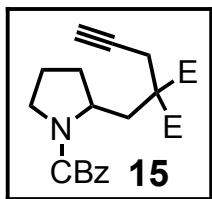
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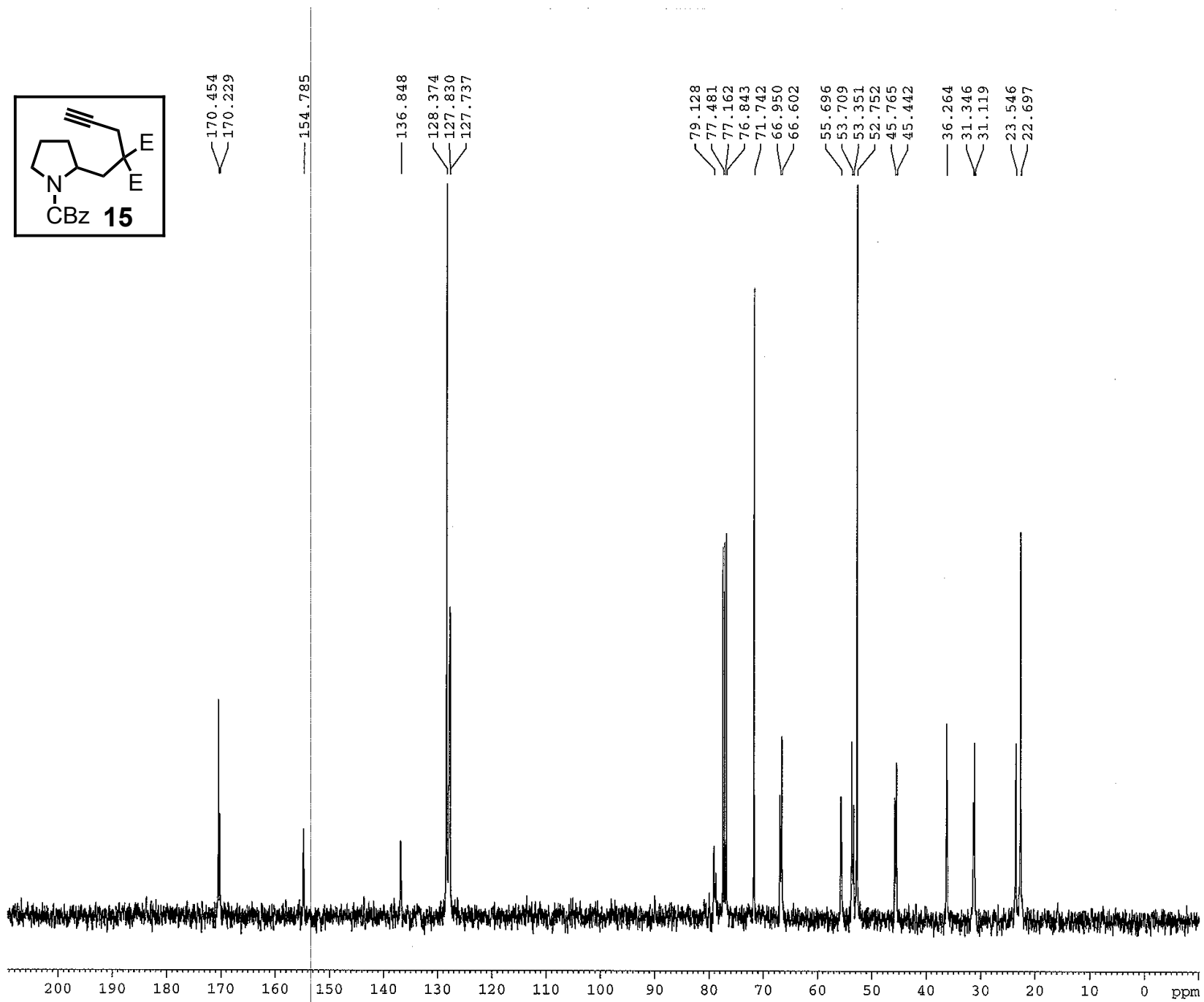
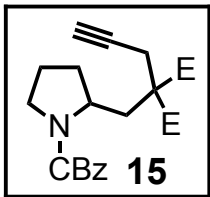
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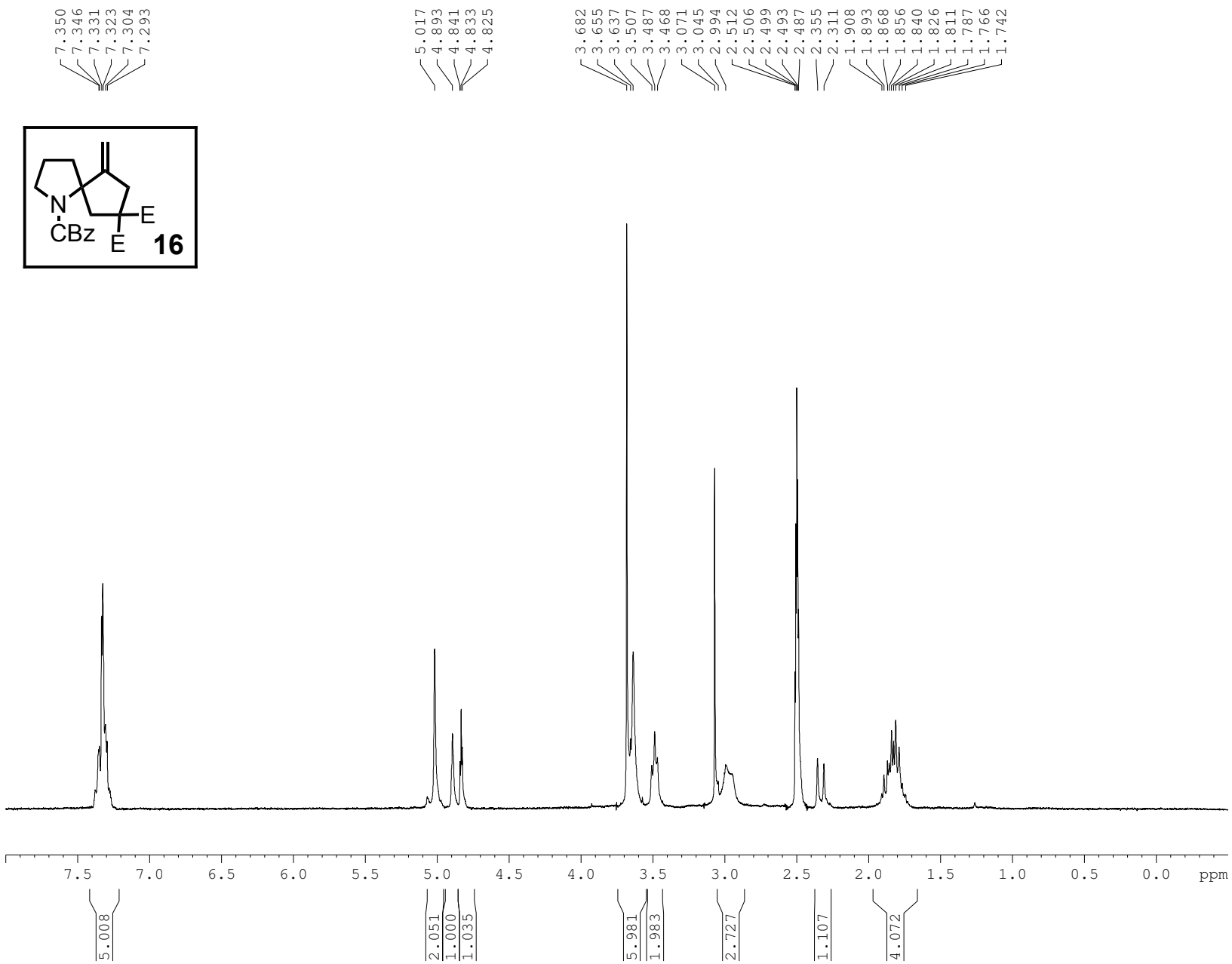
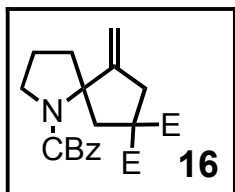


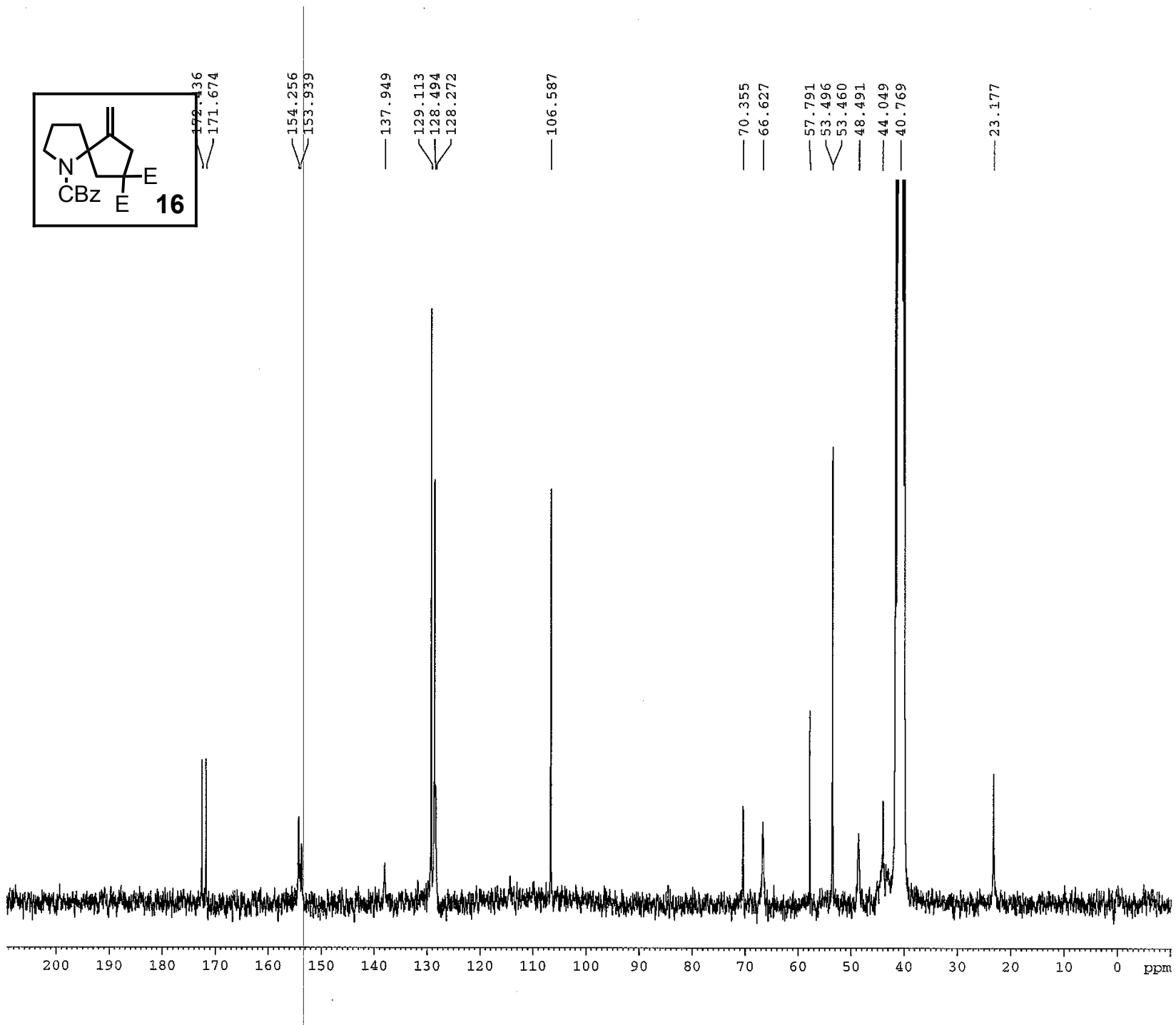
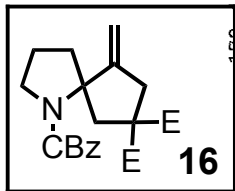


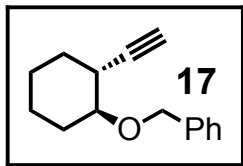








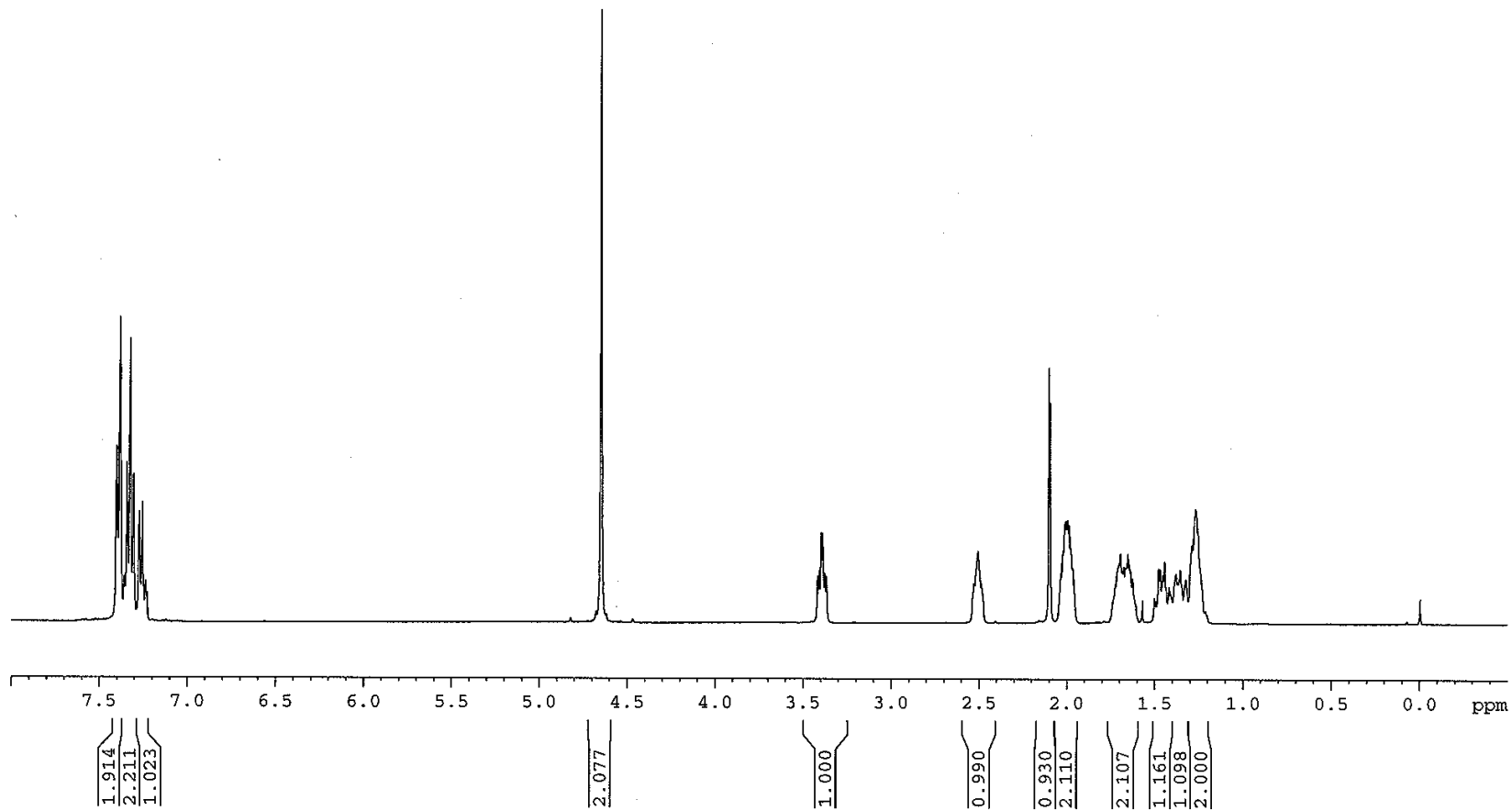


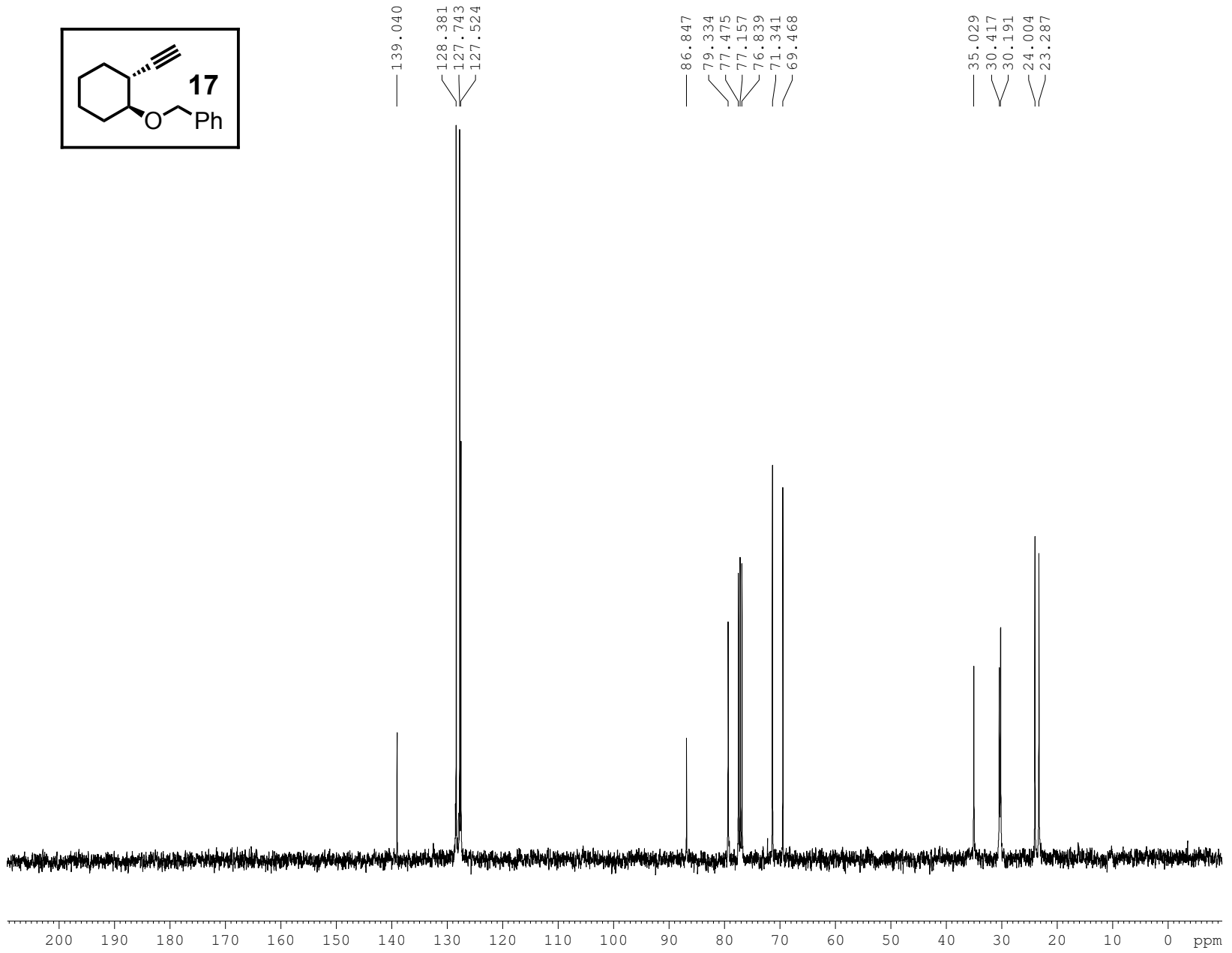
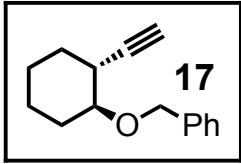


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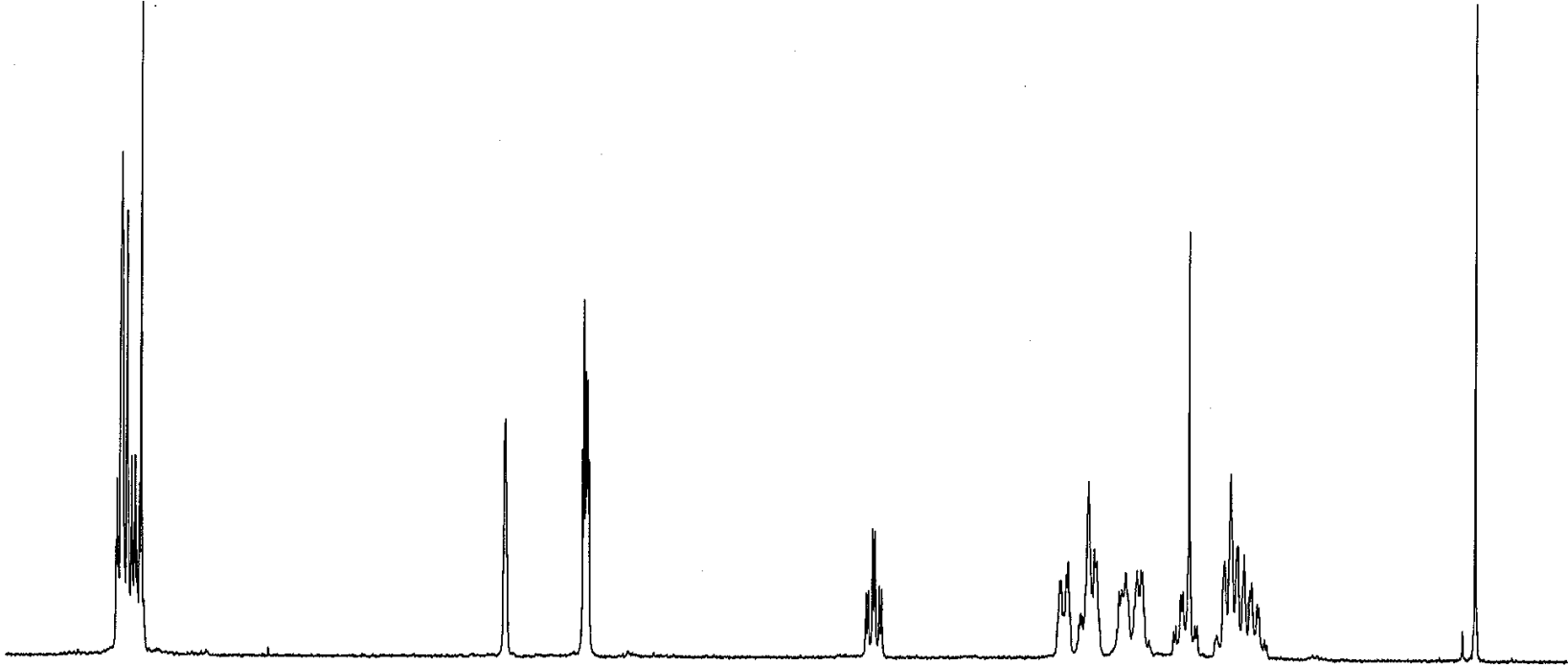
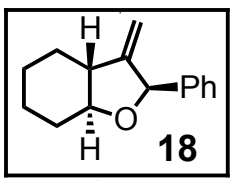
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1.252
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1.181



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 0.0 ppm

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1.077

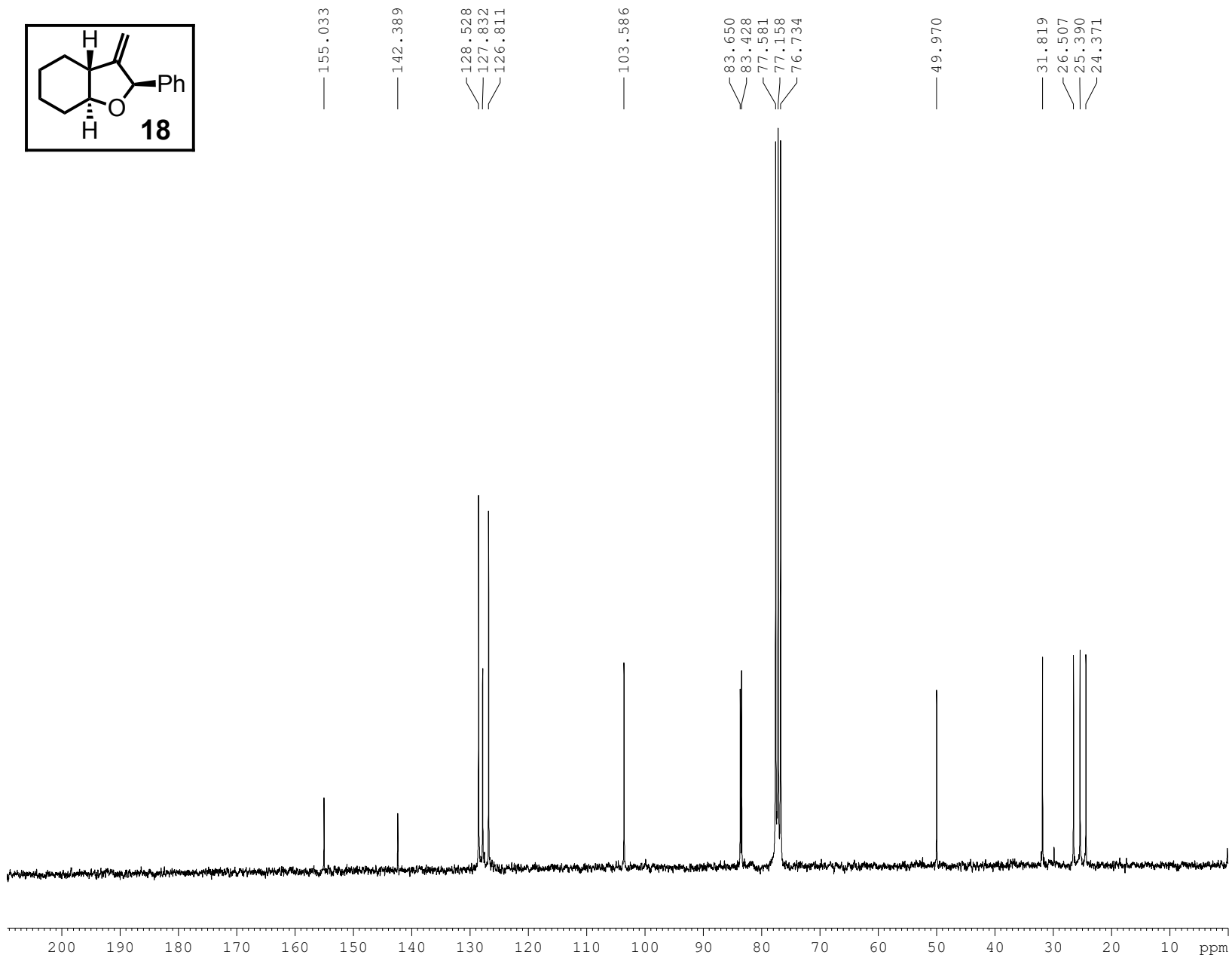
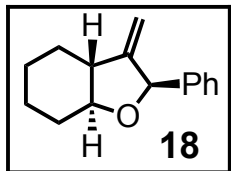
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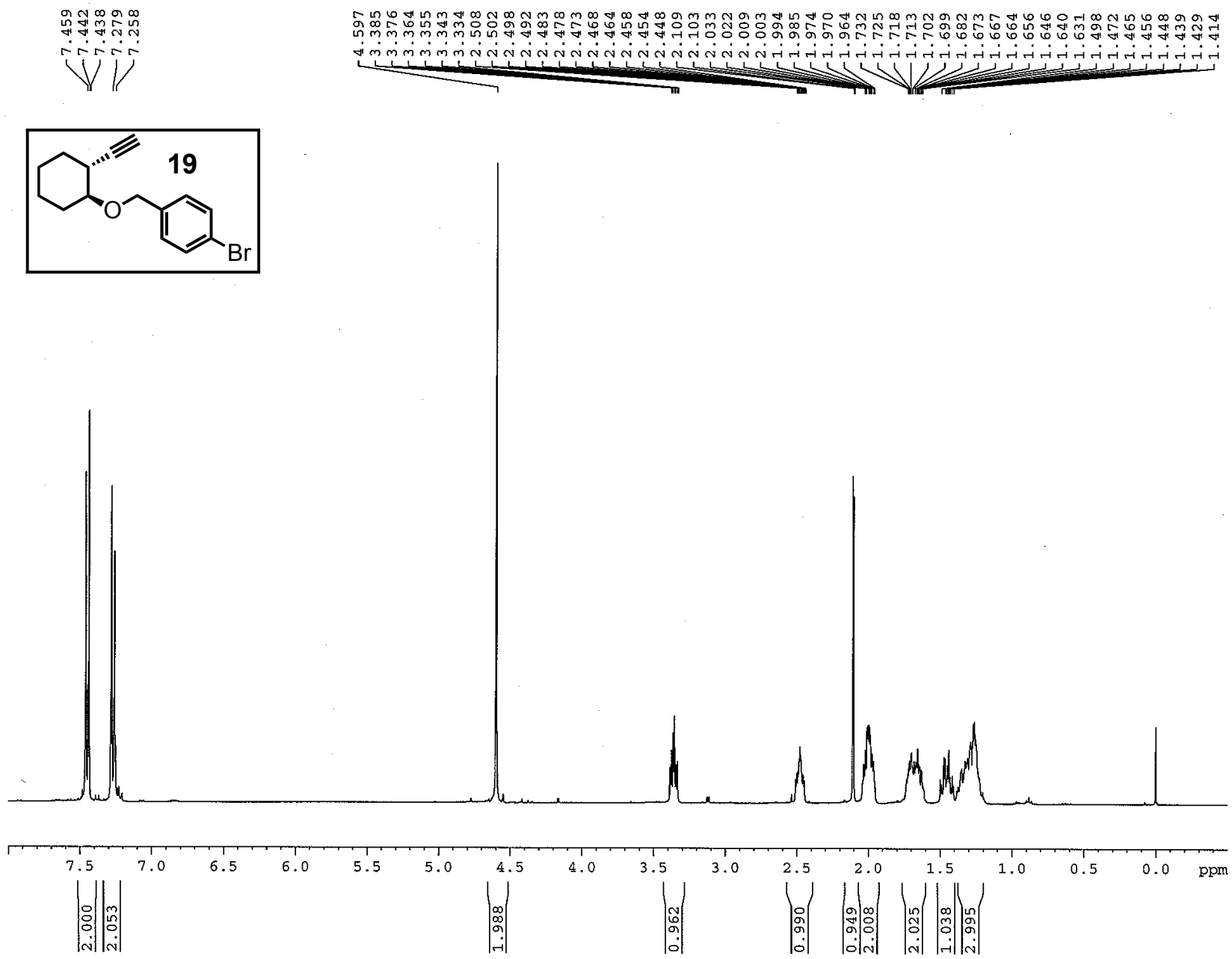
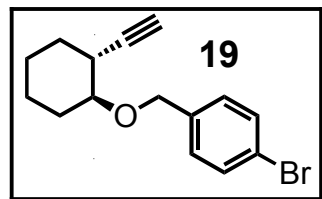
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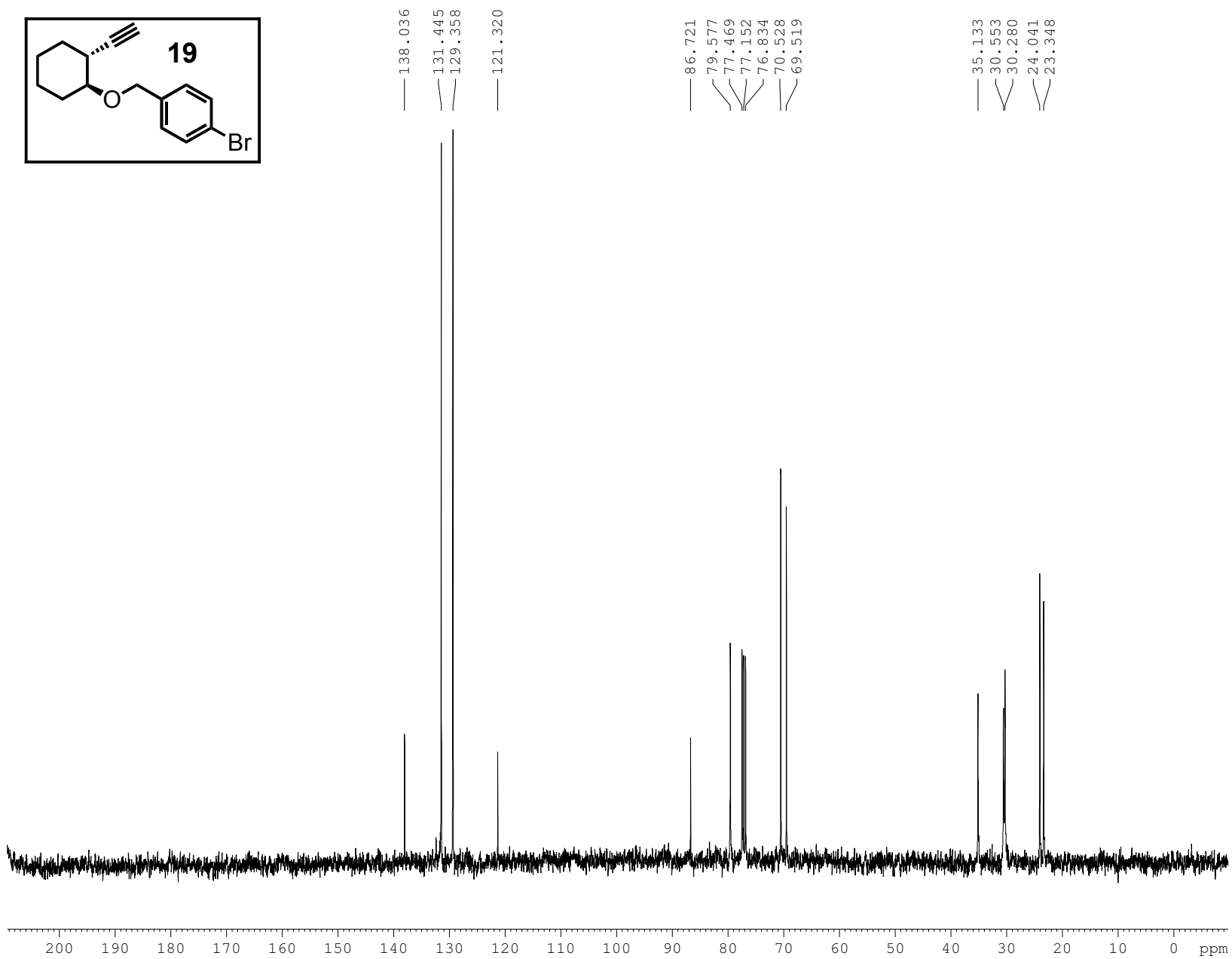
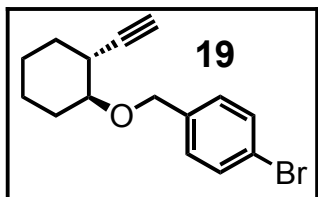
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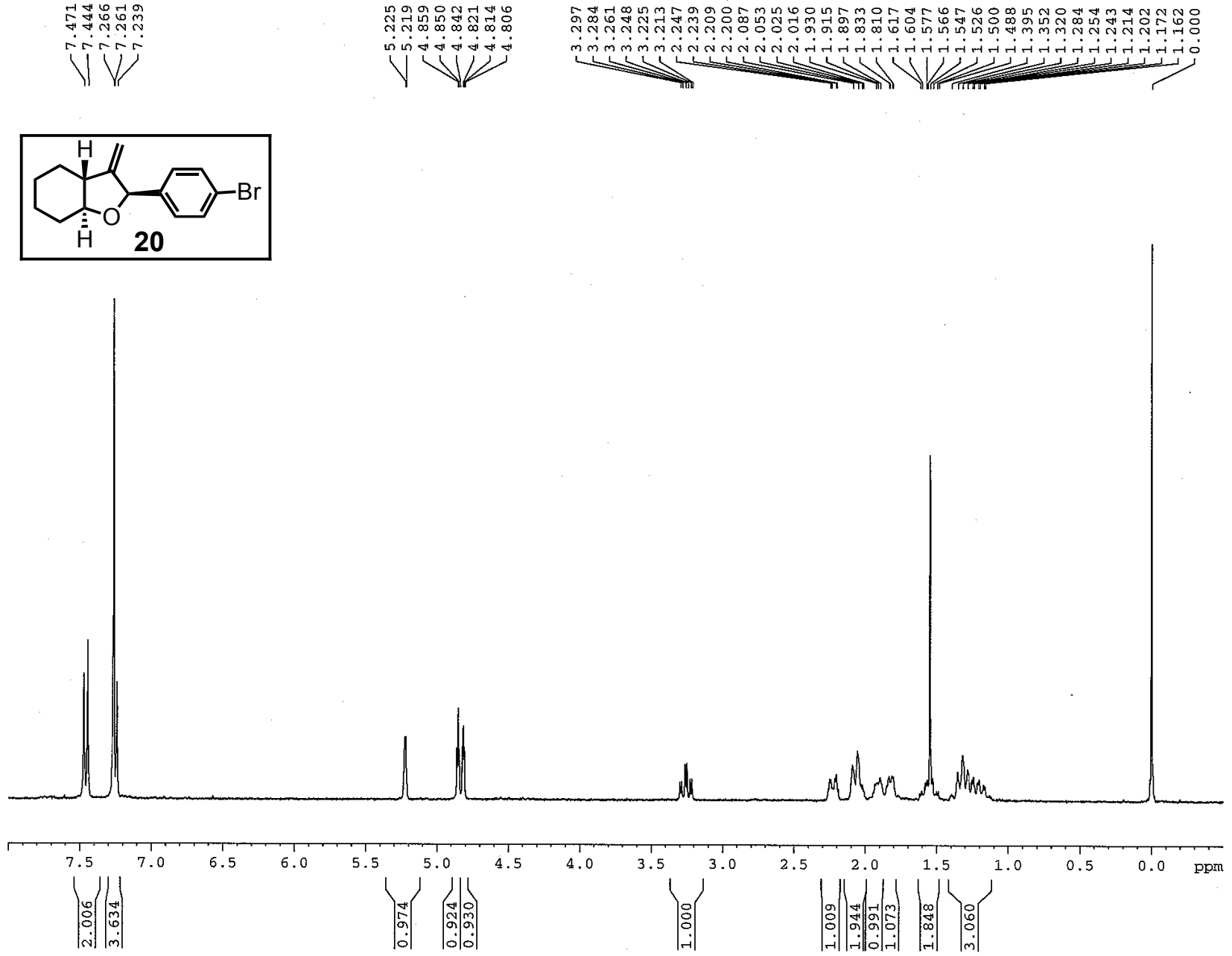
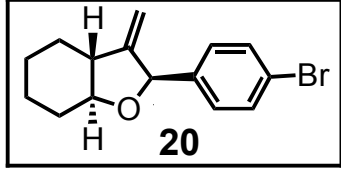
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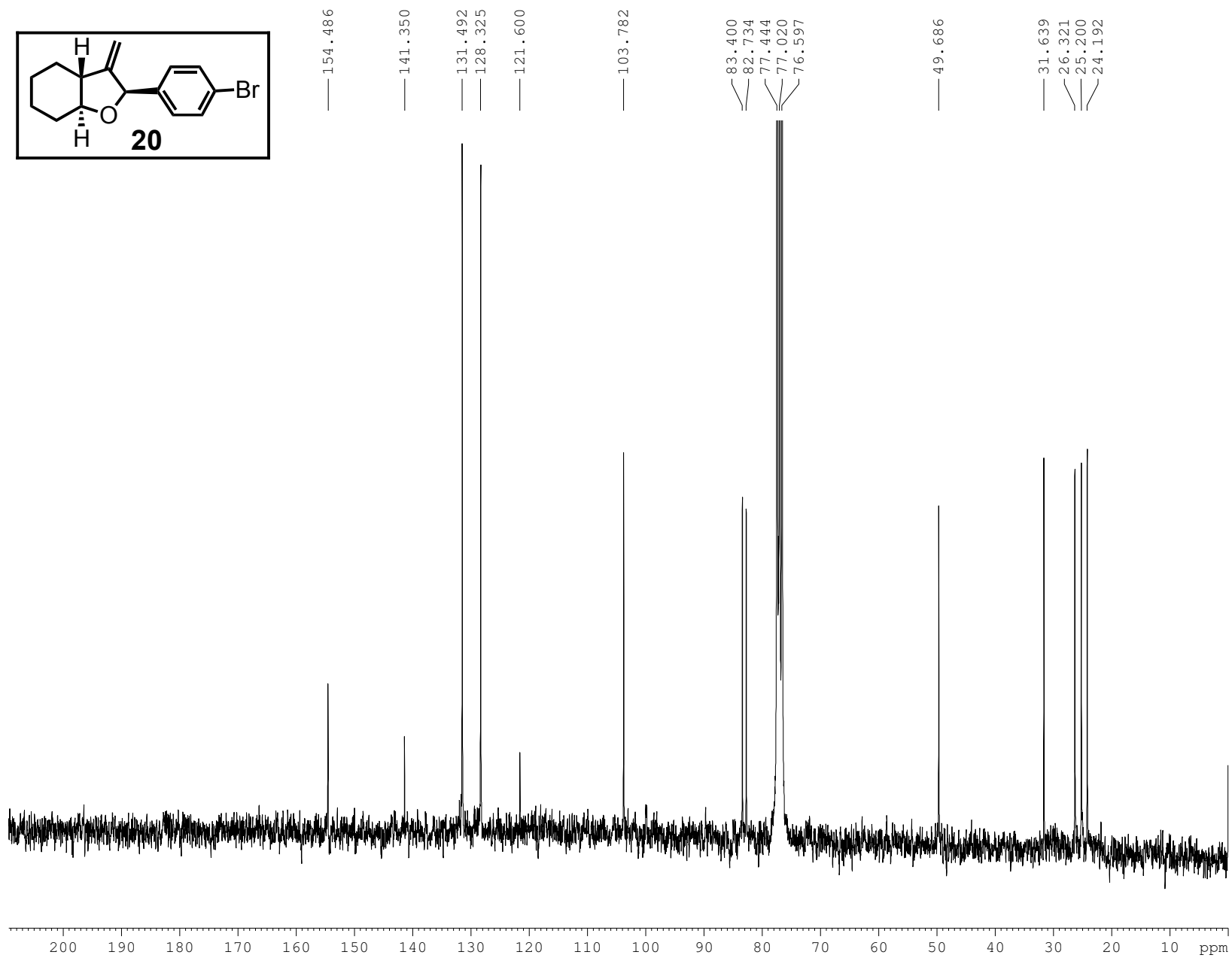
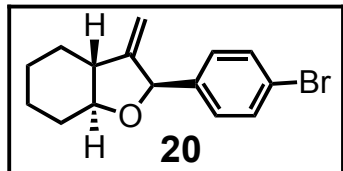
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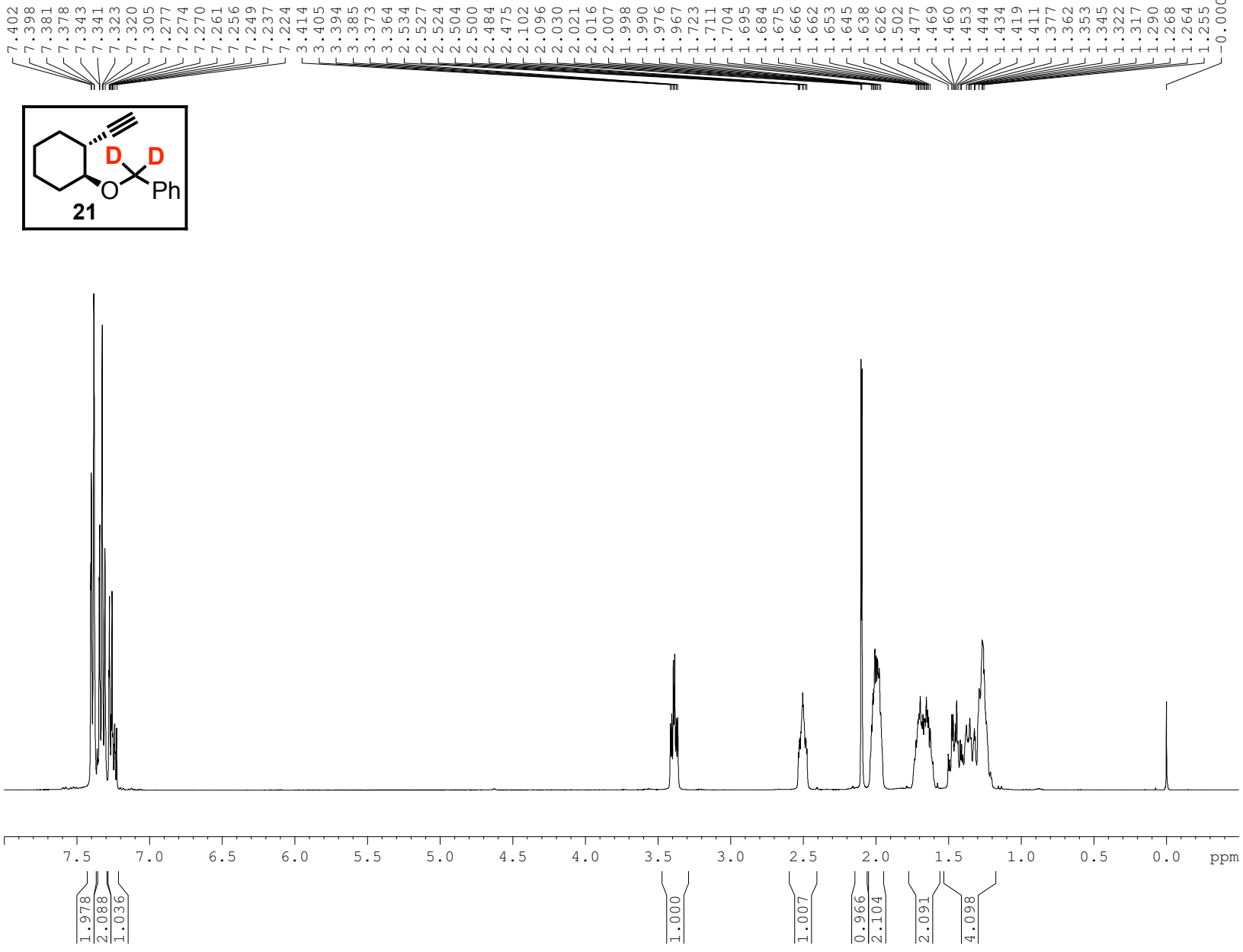


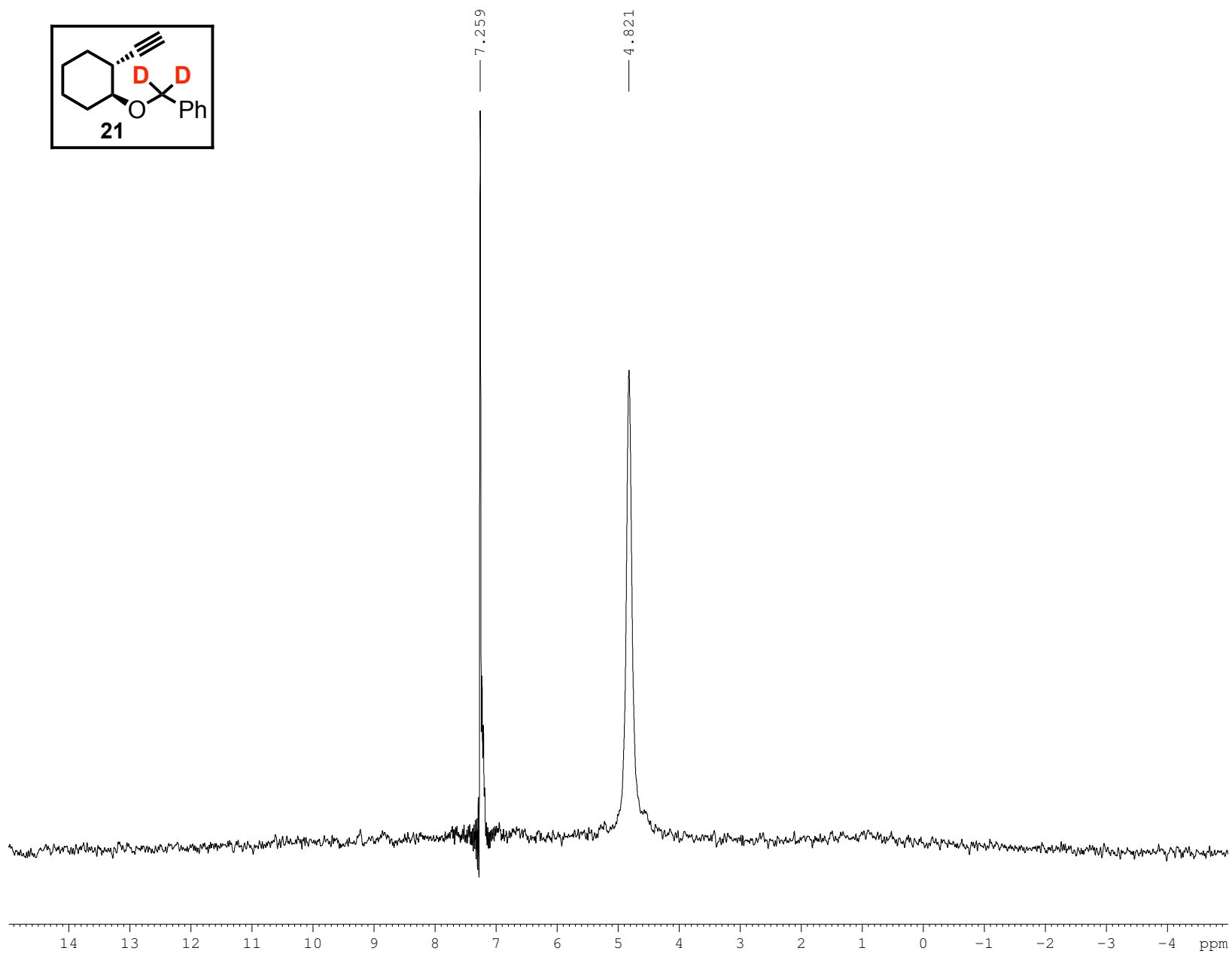
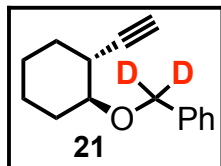


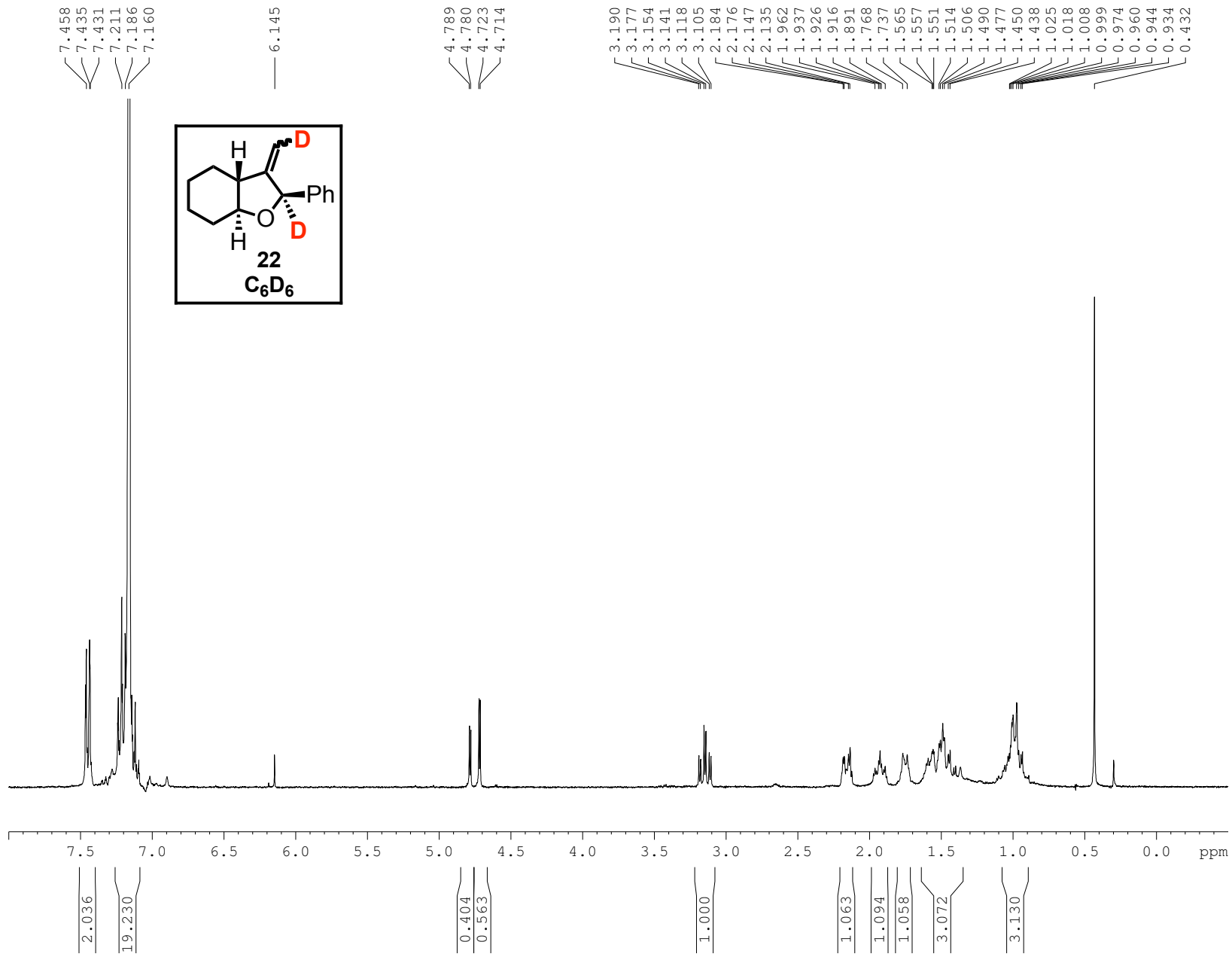


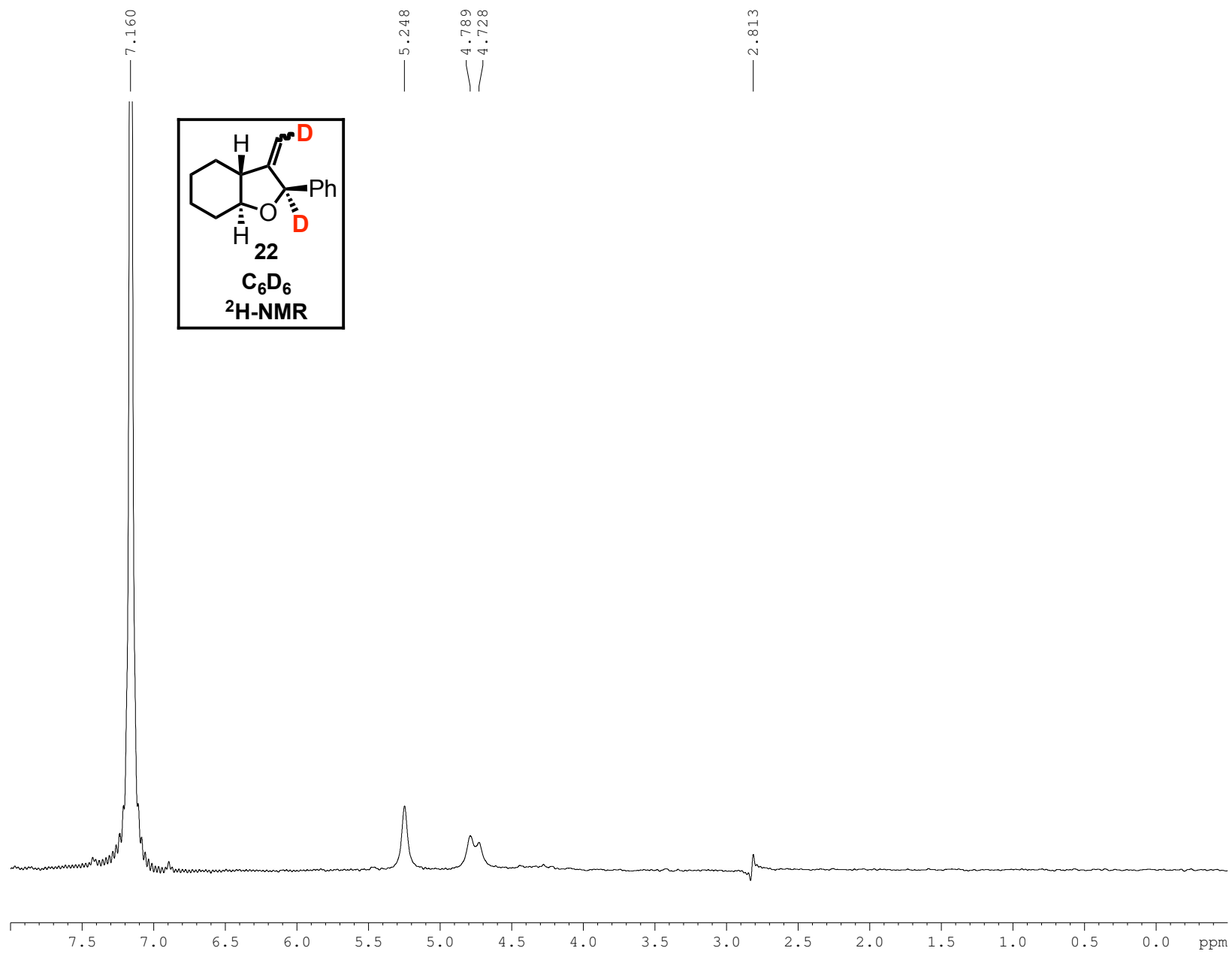


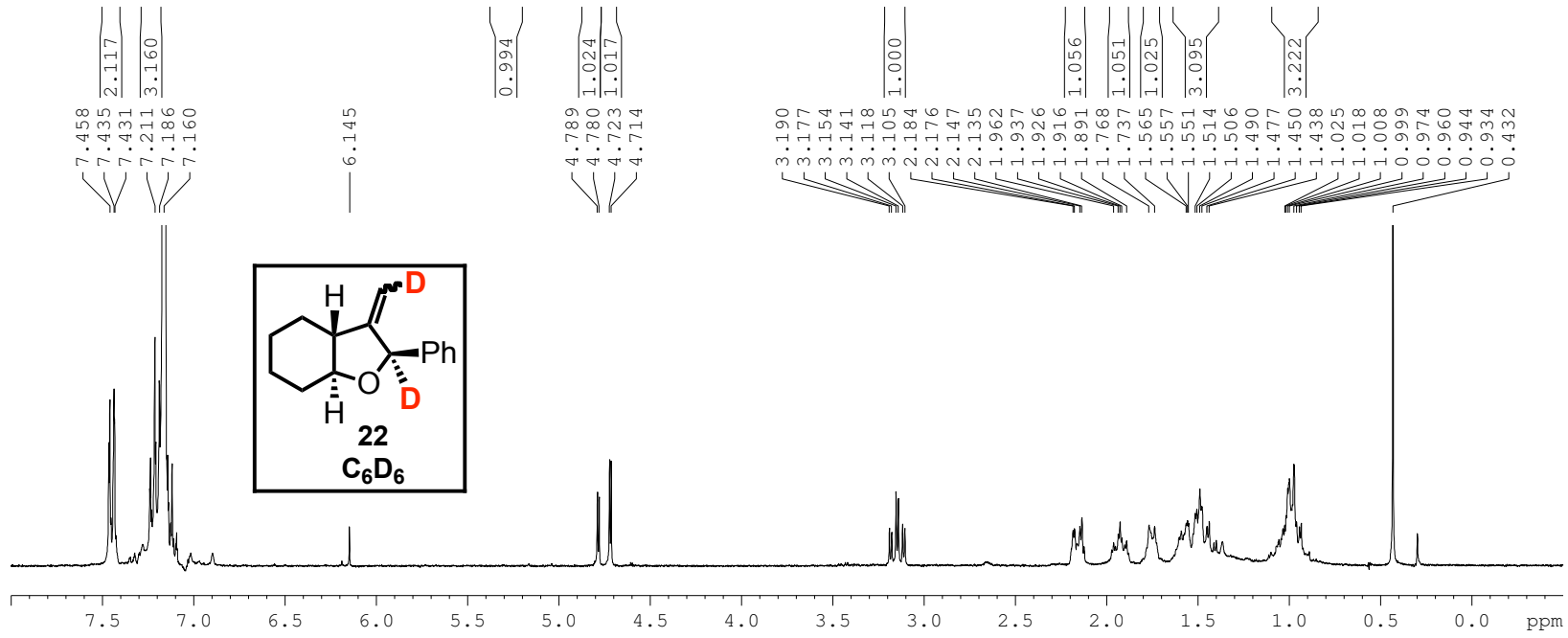
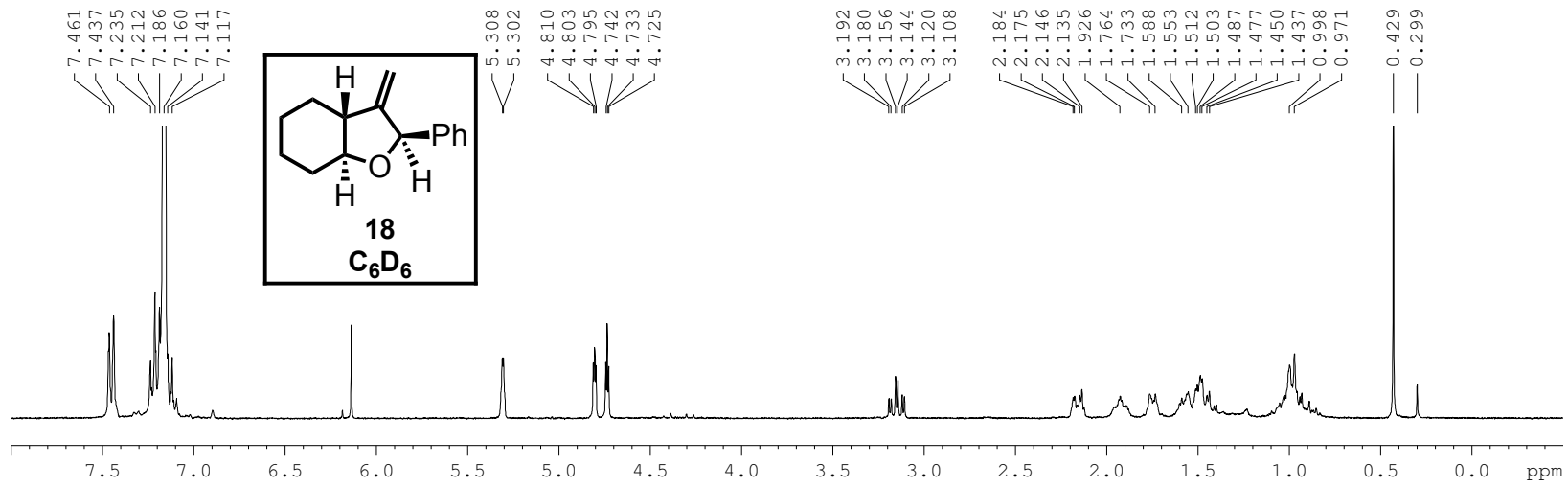




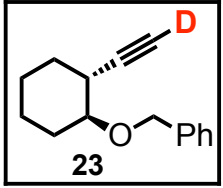








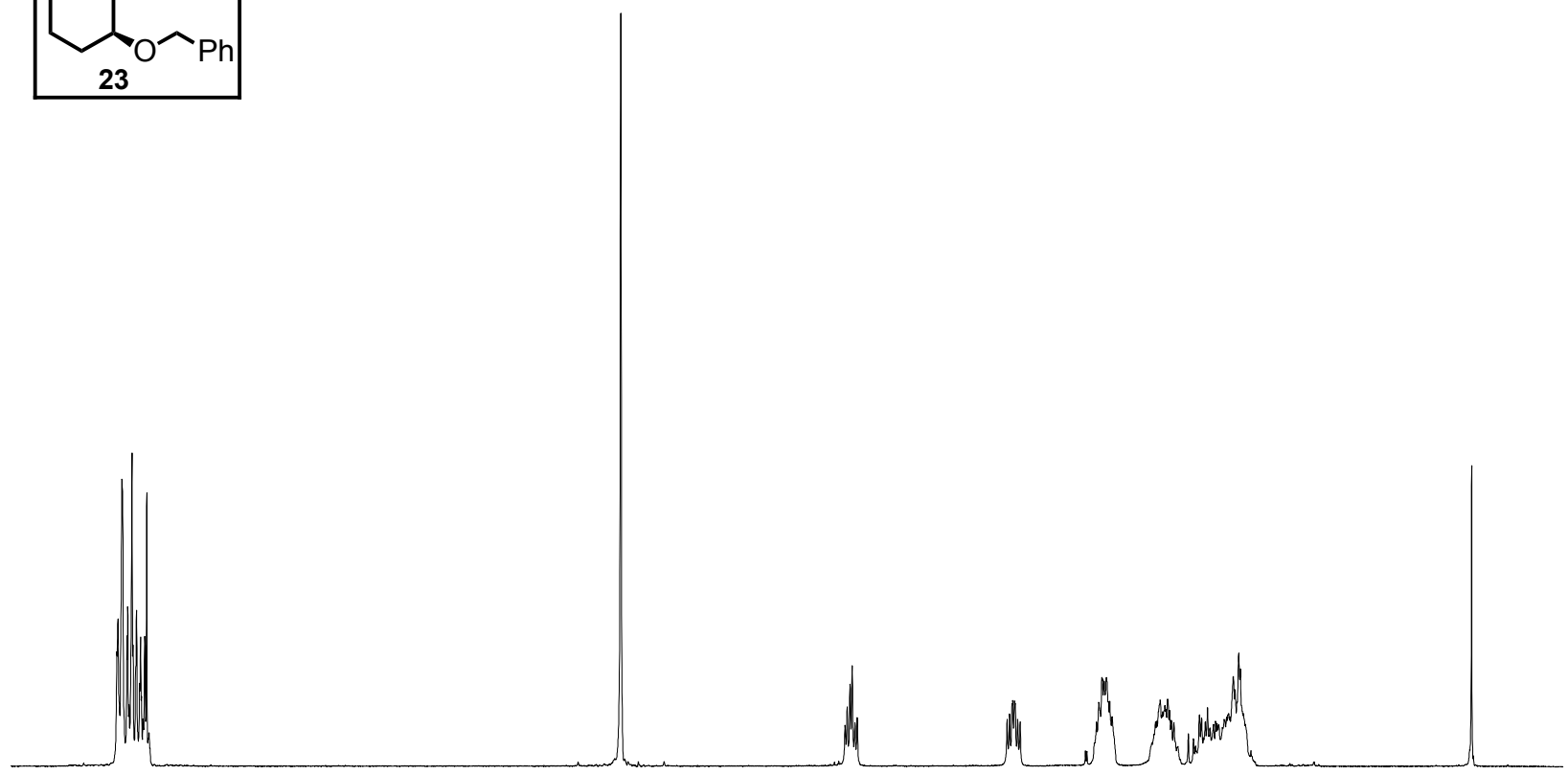
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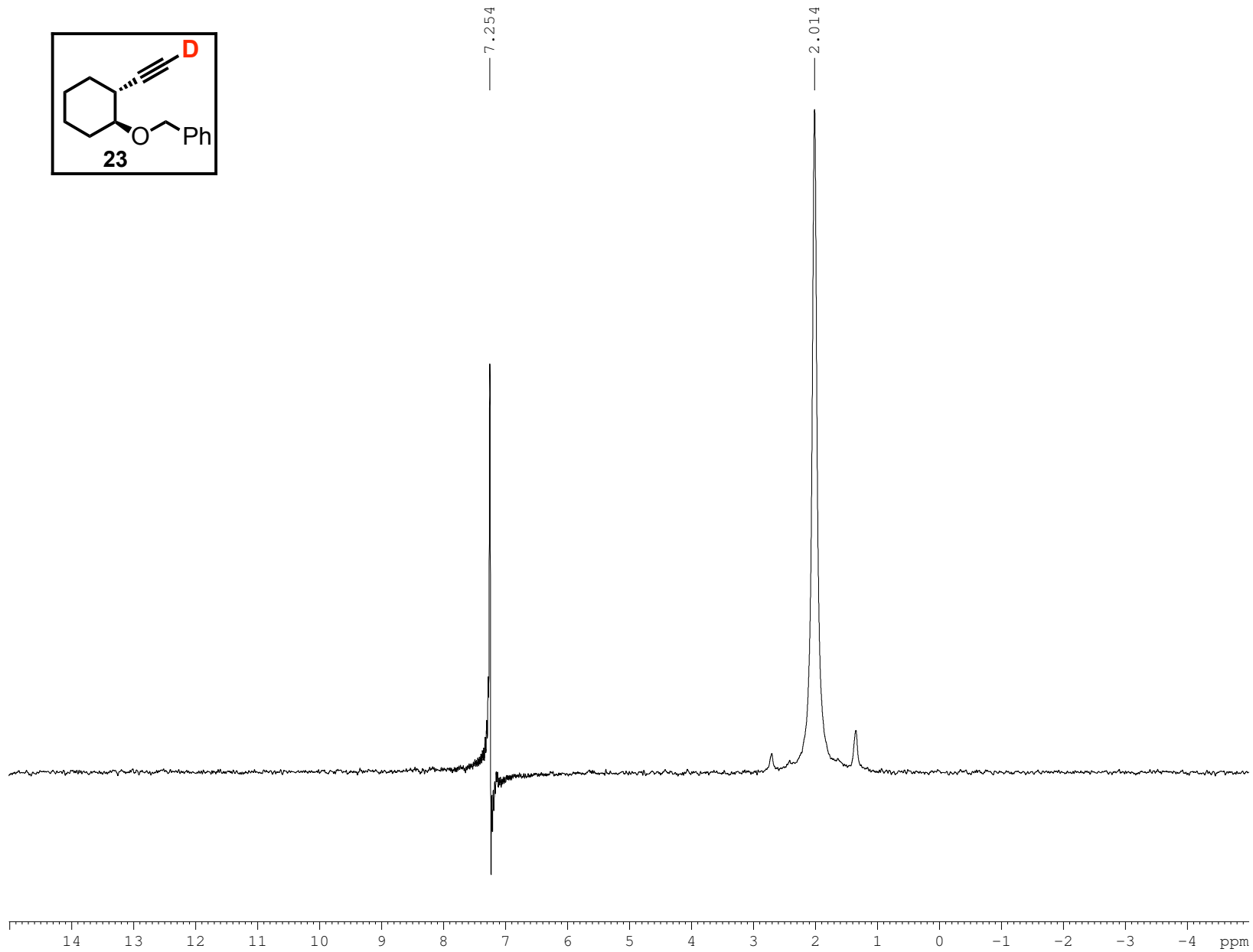
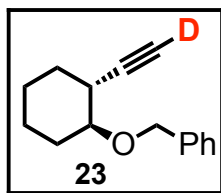
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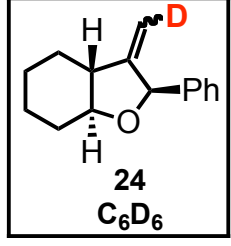
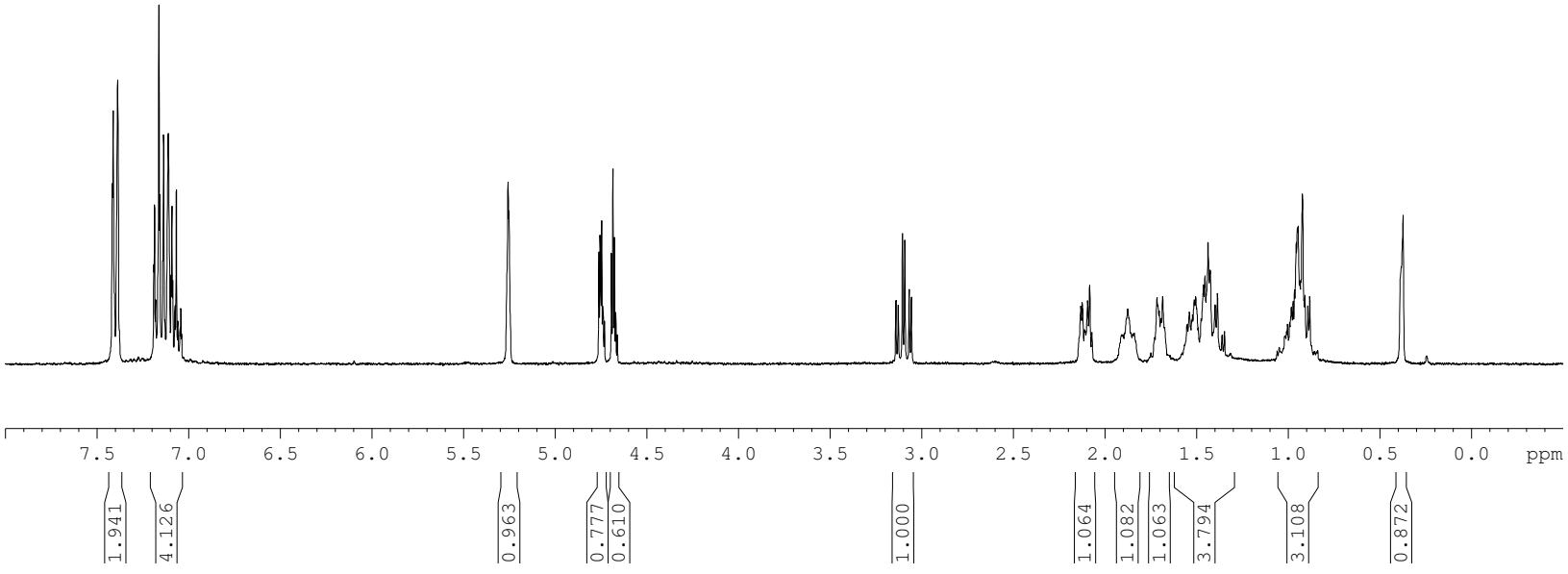
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ppm





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