

SUPPORTING INFORMATION

Synthesis of the conjugation-ready β -D-rhamnose and β -D-mannose containing trisaccharide O-antigen from *Serratia spp.* Strains 10.1WK and 1XS

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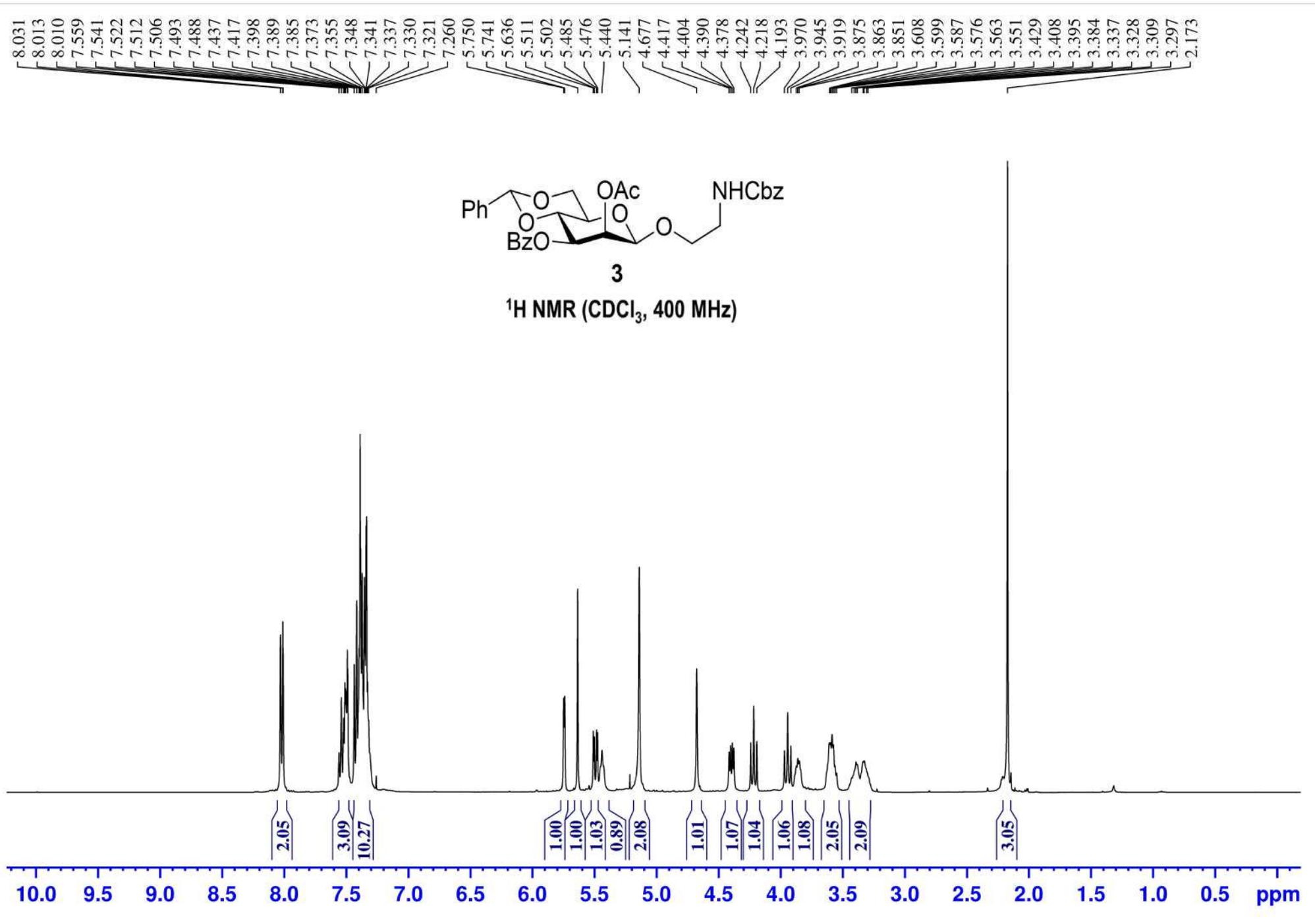
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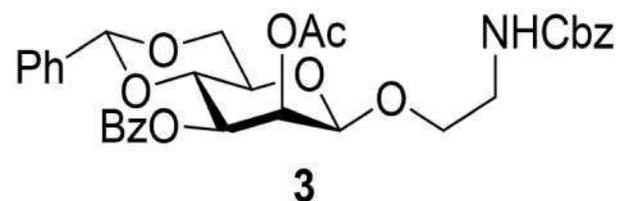
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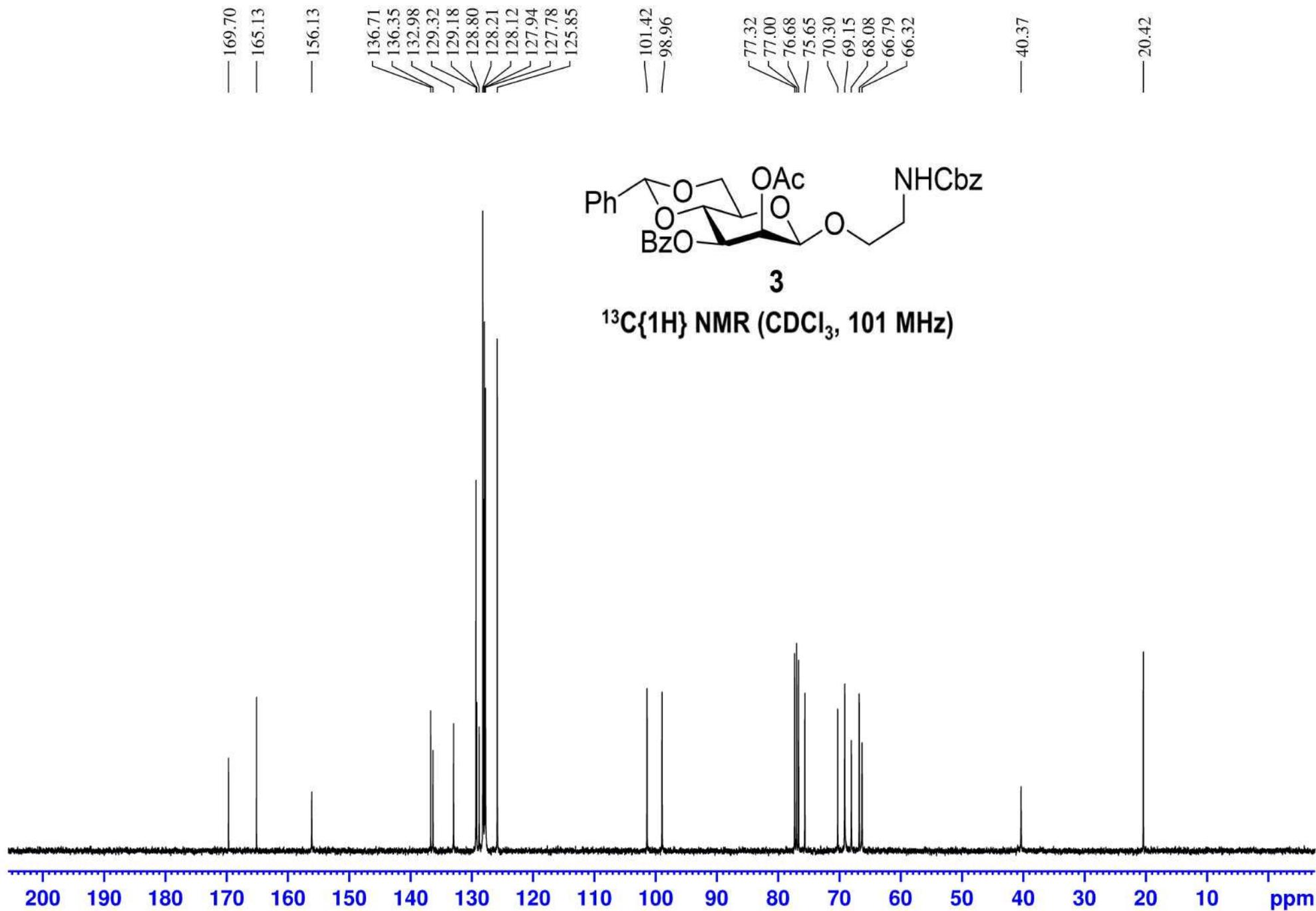
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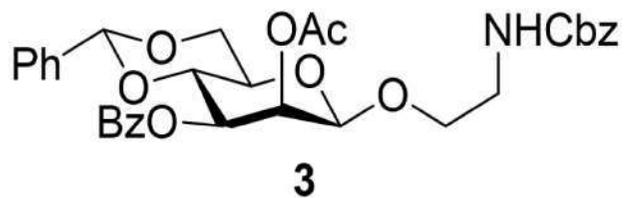
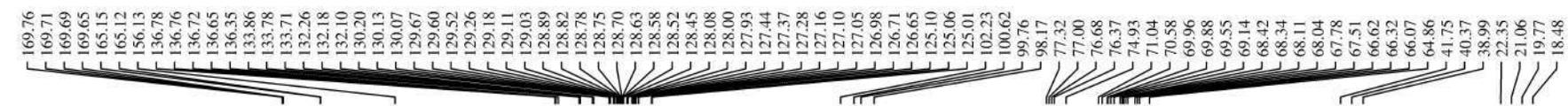
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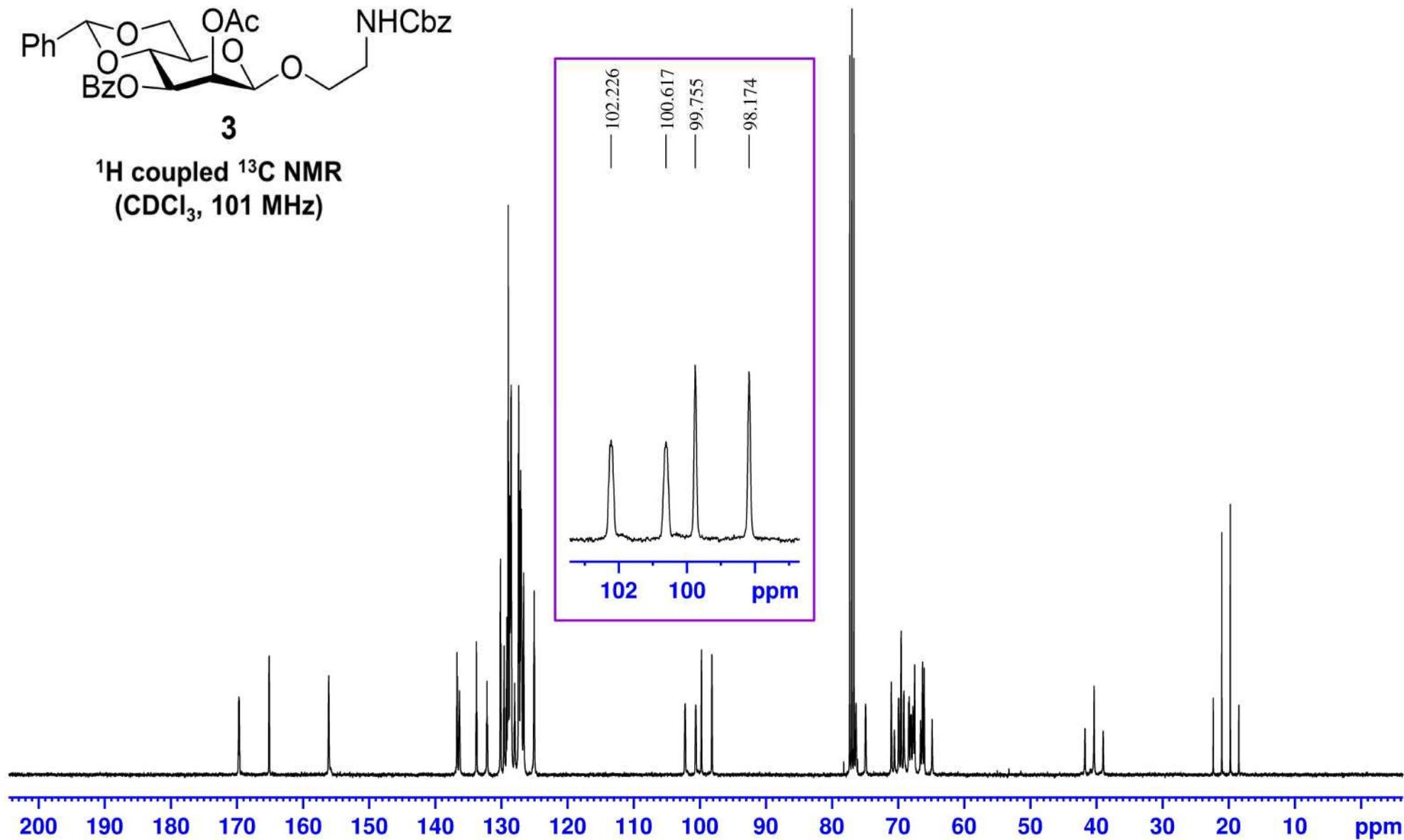
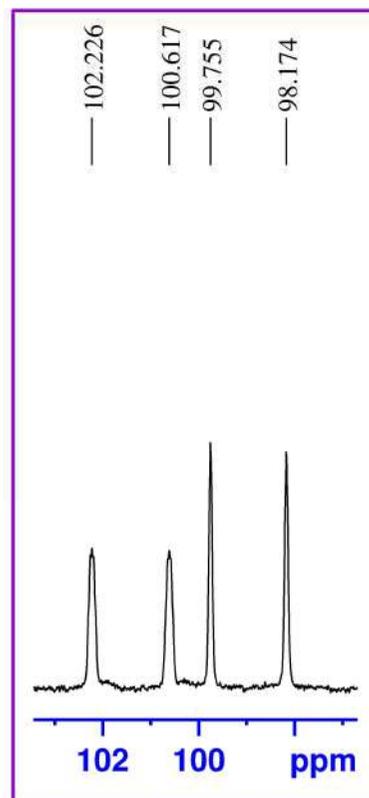


¹³C{¹H} NMR (CDCl₃, 101 MHz)



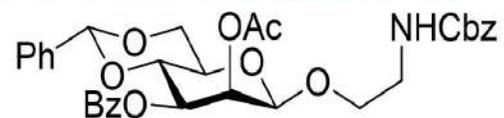


**¹H coupled ¹³C NMR
(CDCl₃, 101 MHz)**



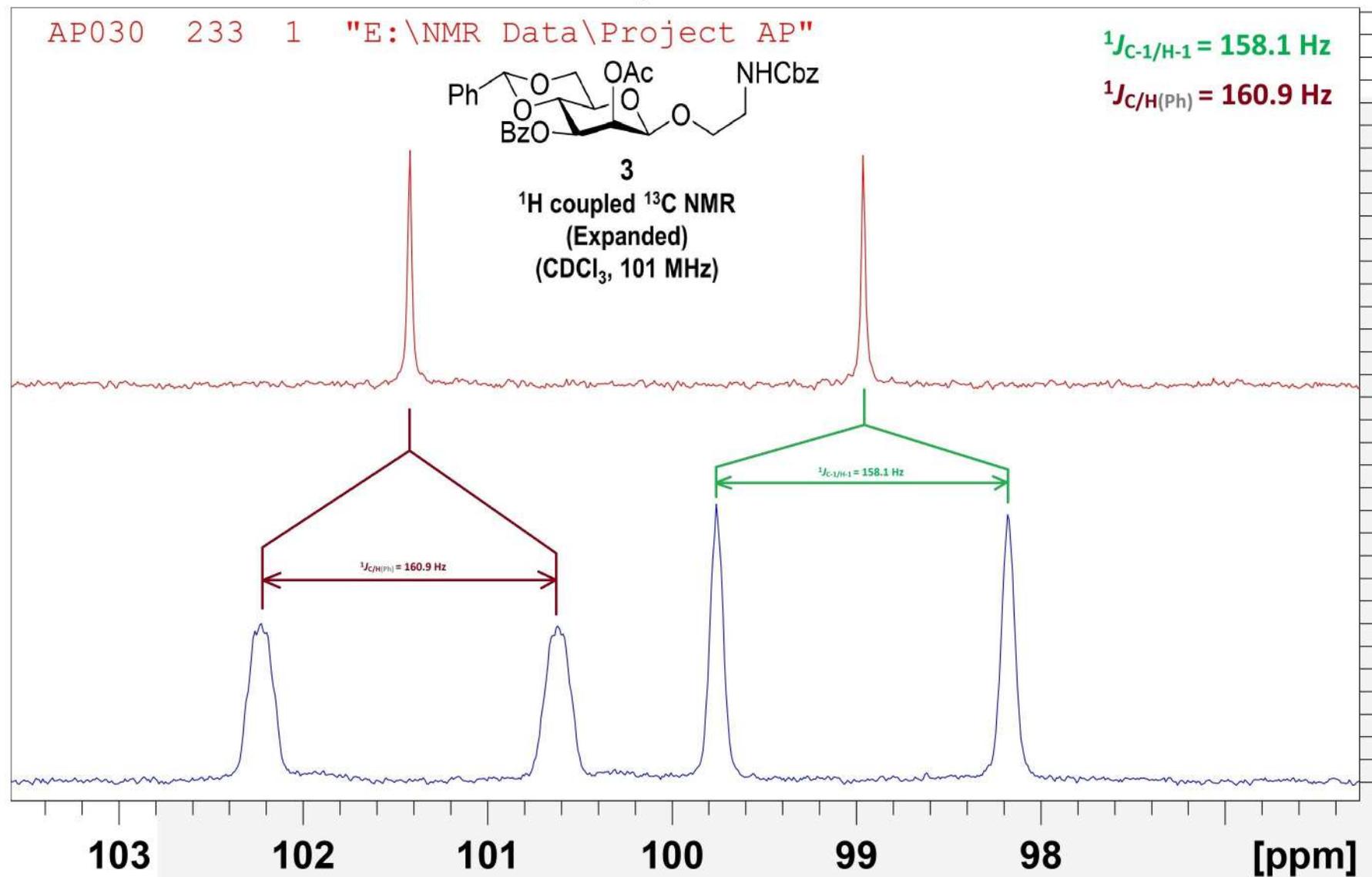
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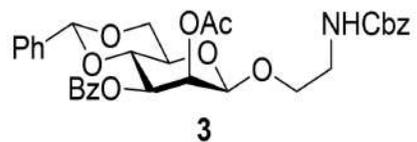
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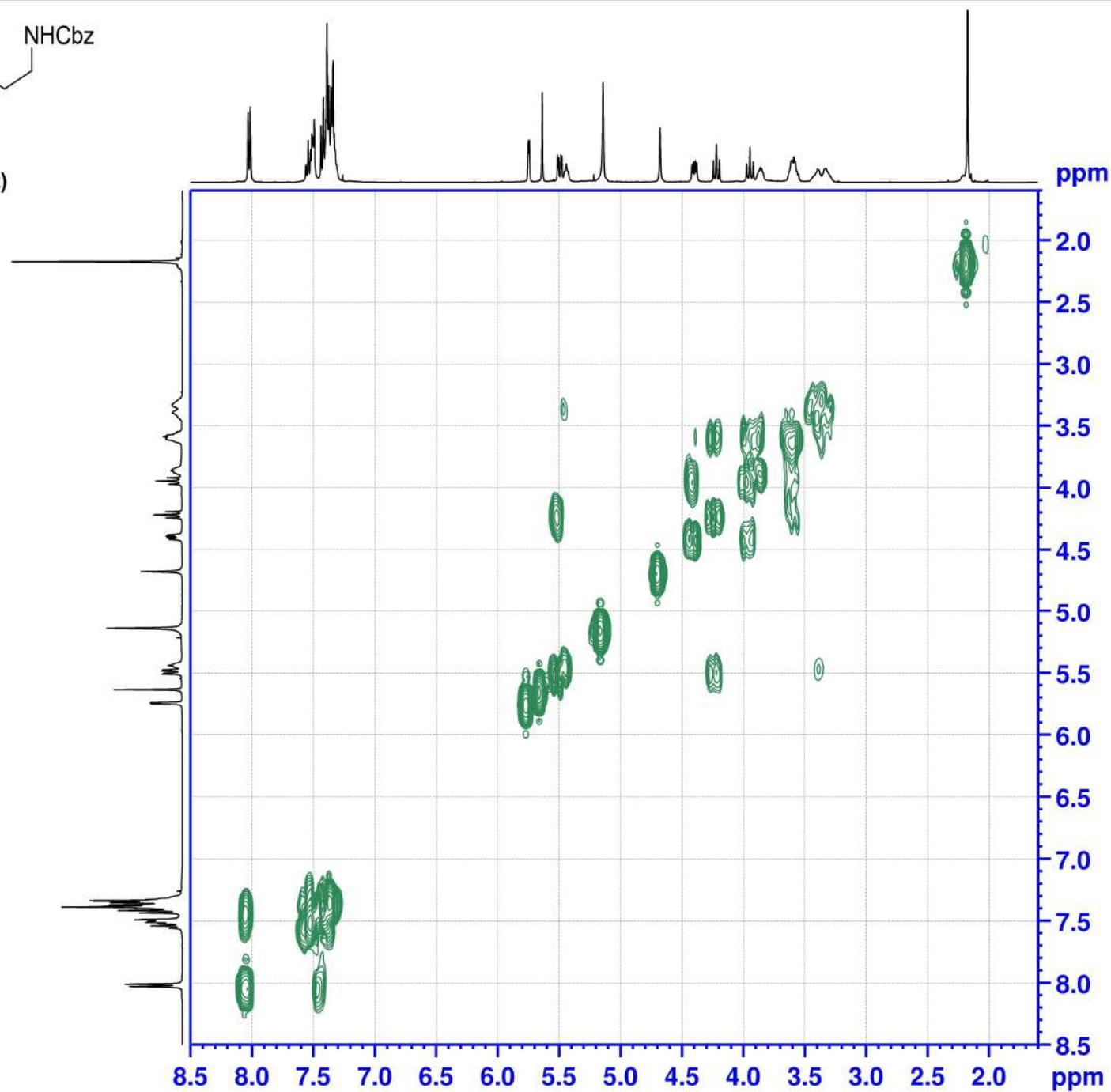
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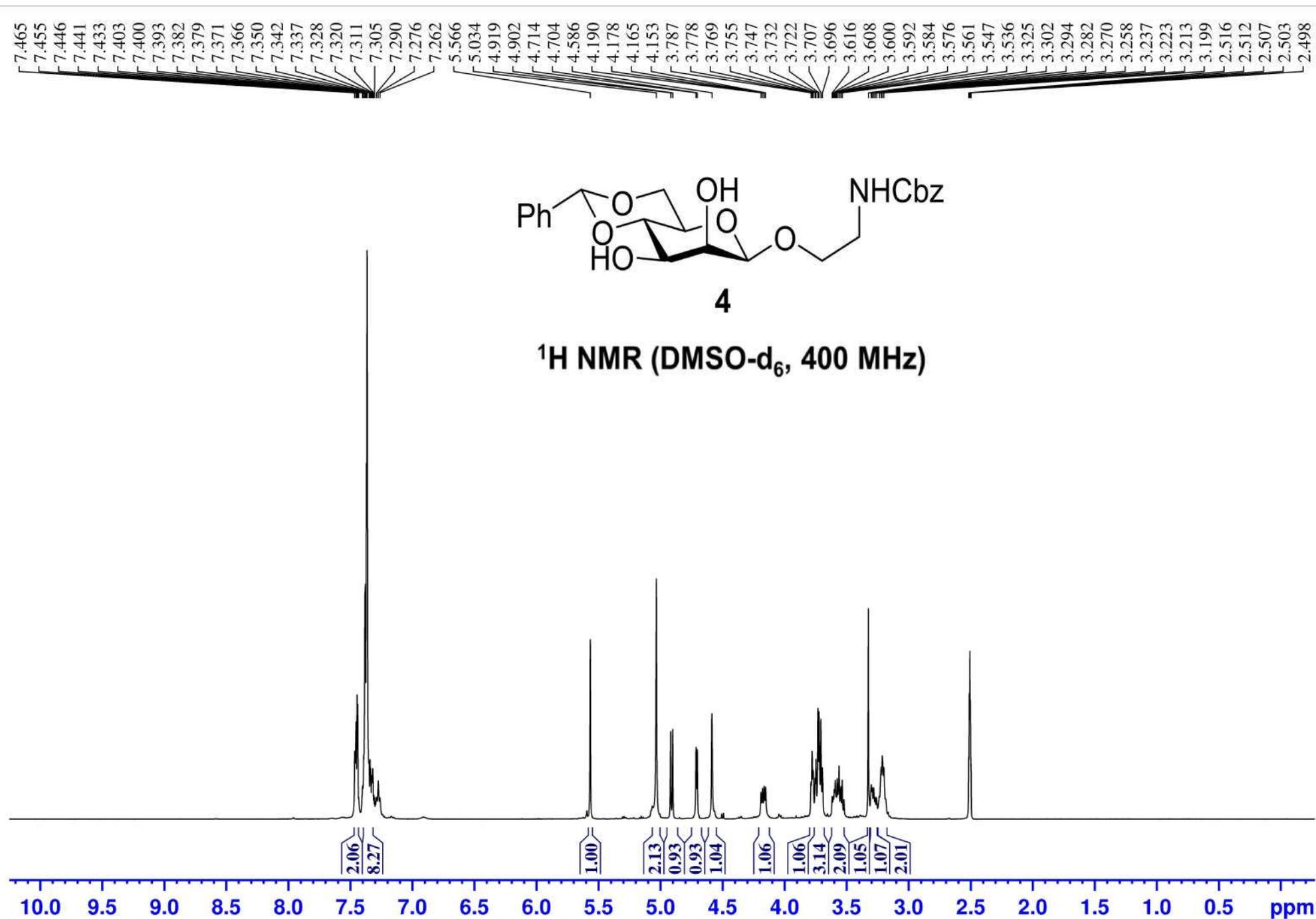
^1H coupled ^{13}C NMR
(Expanded)
(CDCl_3 , 101 MHz)

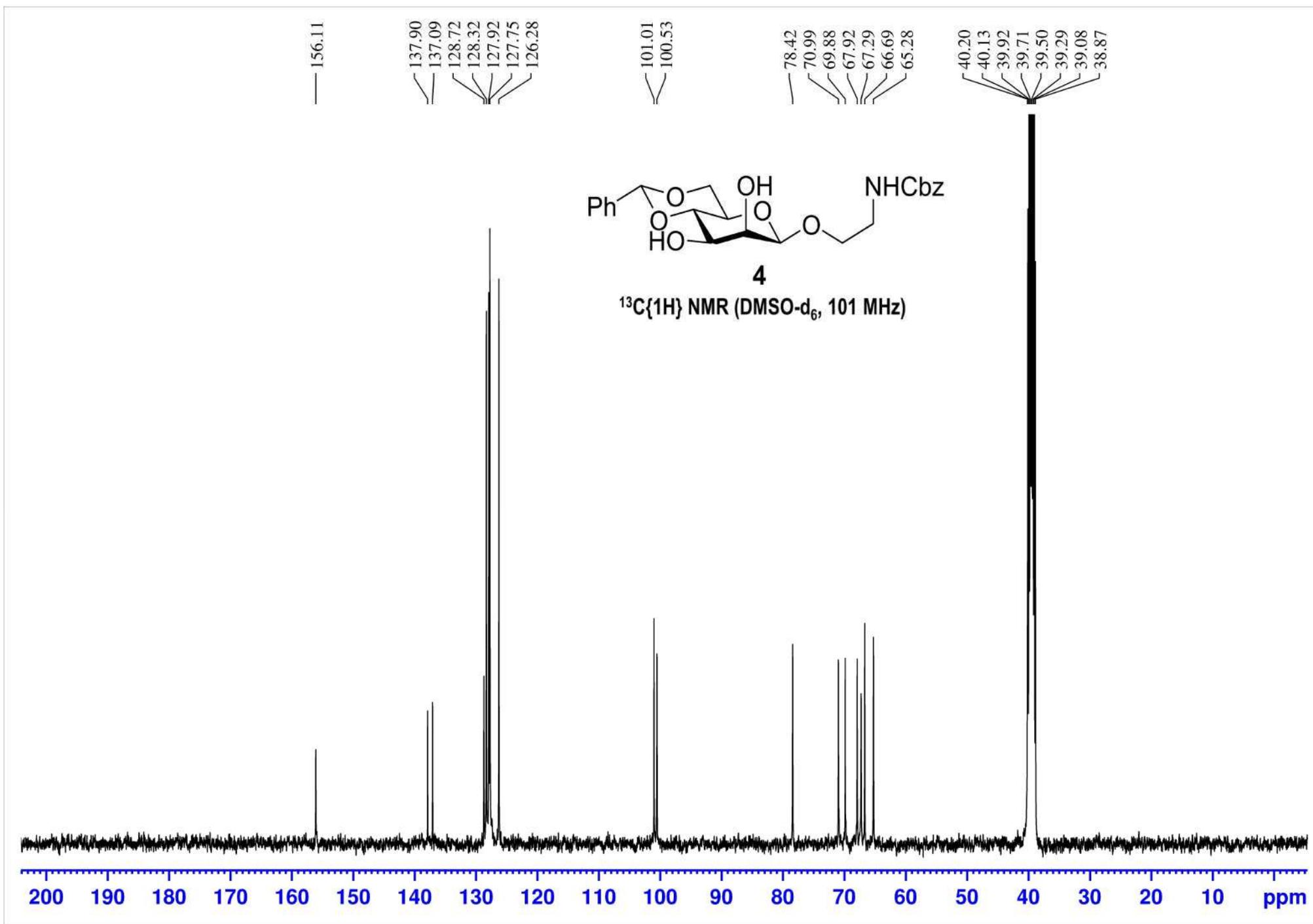
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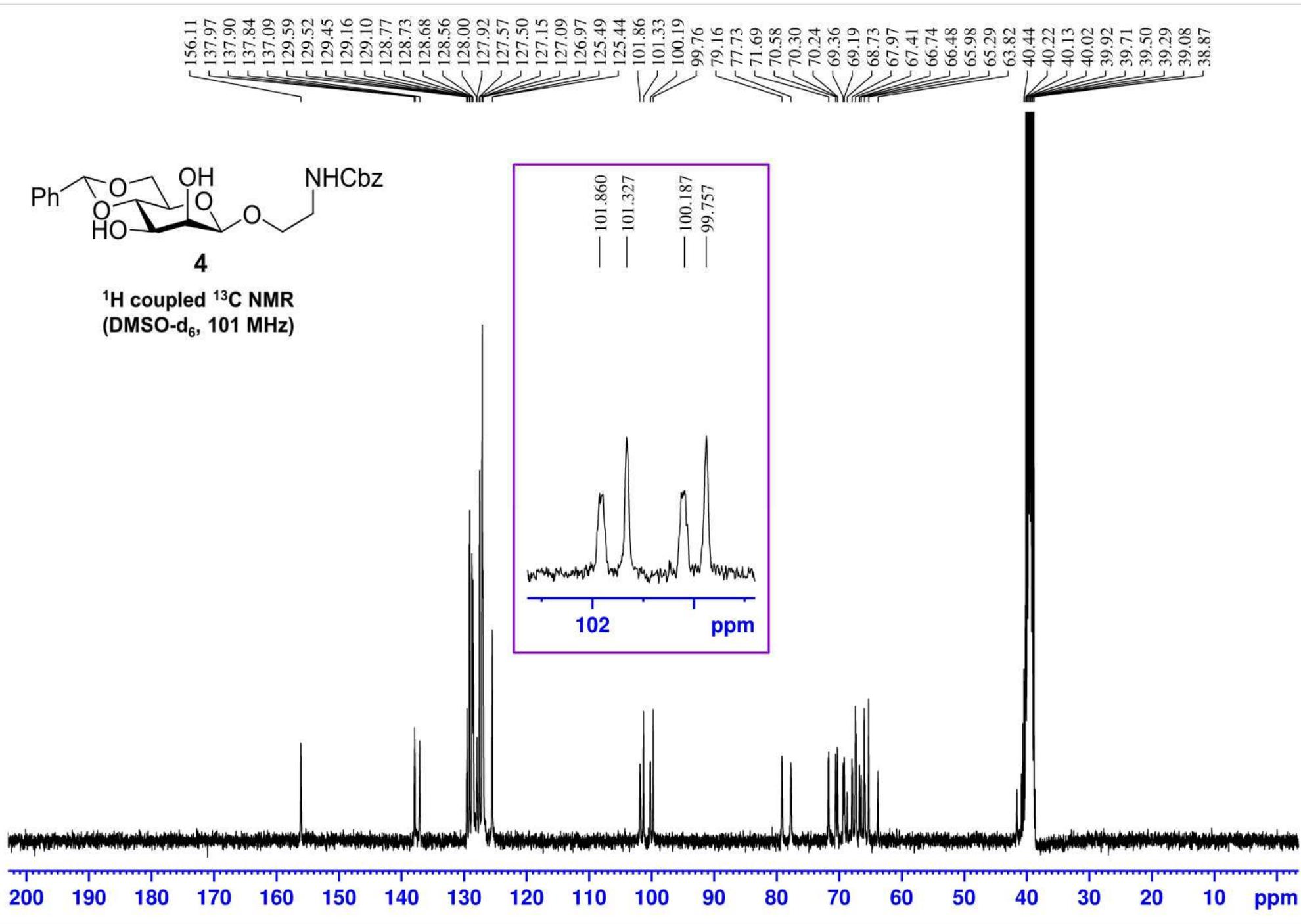


COSY NMR
(CDCl₃, 400 MHz)



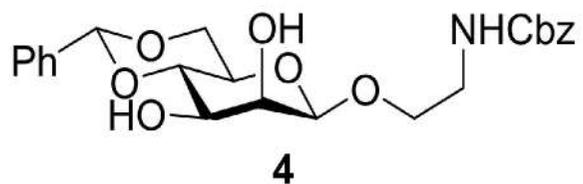




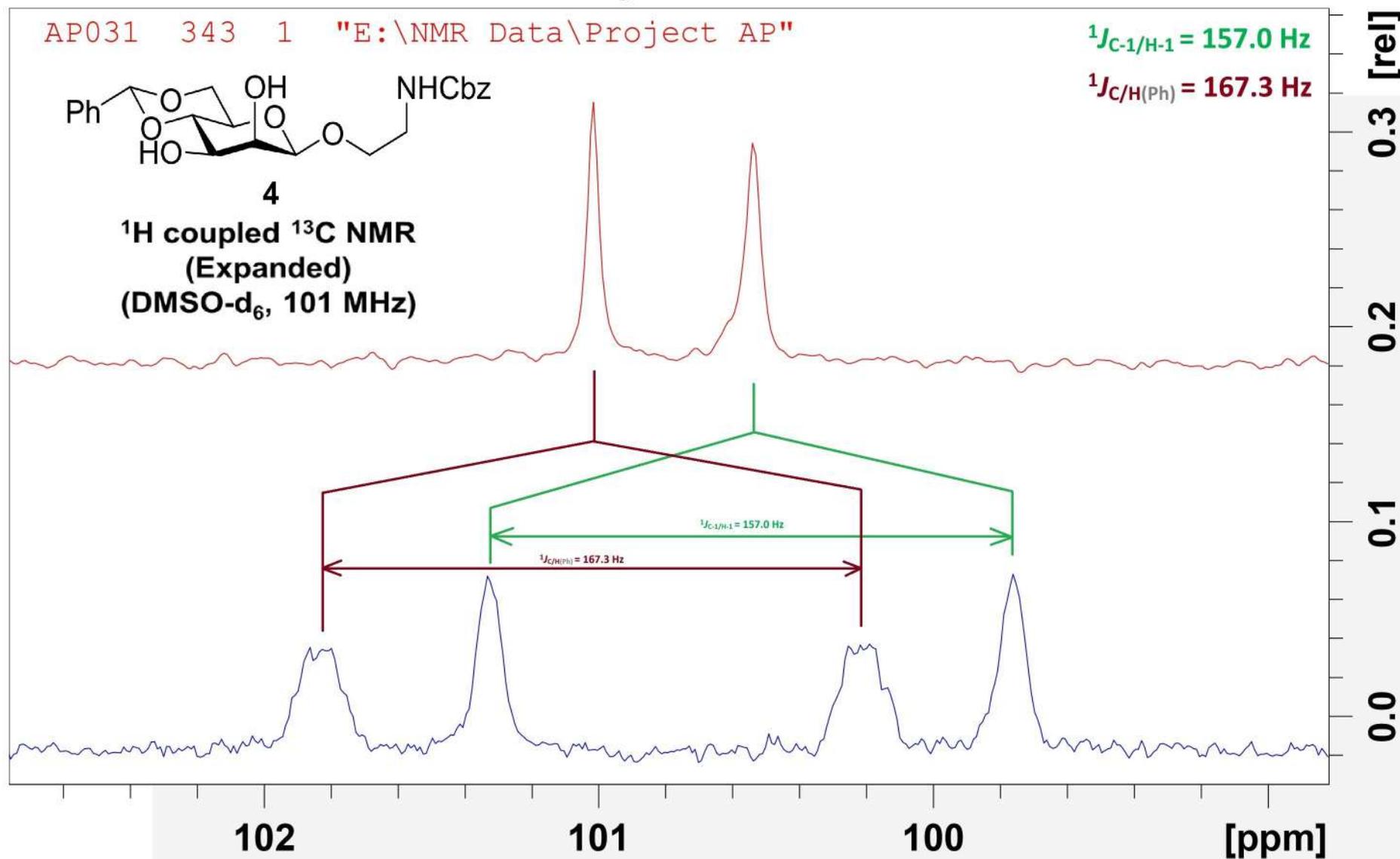


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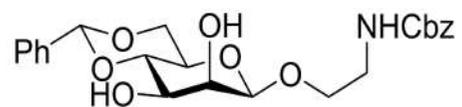
AP031 343 1 "E:\NMR Data\Project AP"



^1H coupled ^{13}C NMR
(Expanded)
(DMSO- d_6 , 101 MHz)

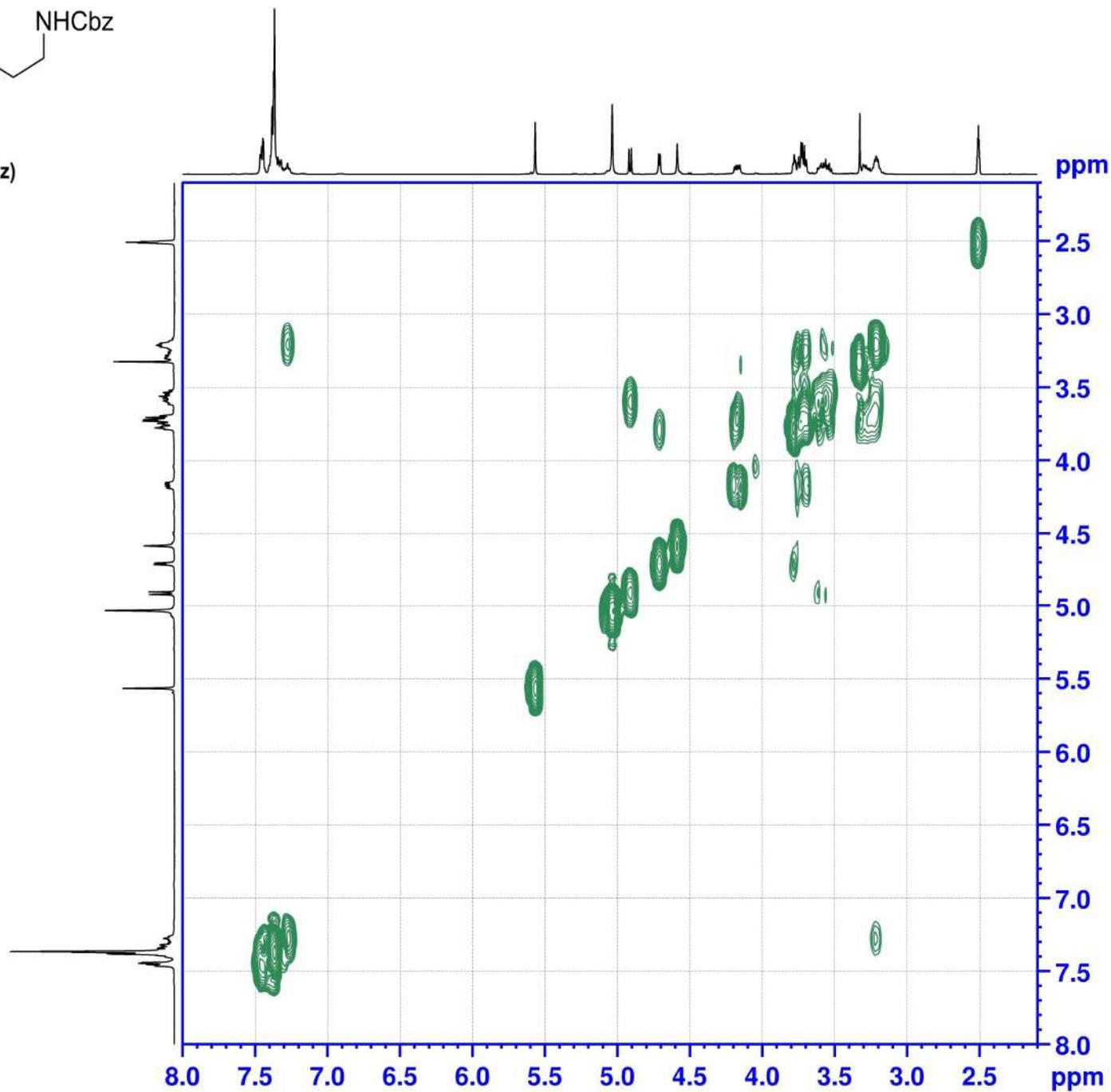
 $^1J_{\text{C-1/H-1}} = 157.0 \text{ Hz}$ $^1J_{\text{C/H(Ph)}} = 167.3 \text{ Hz}$ 

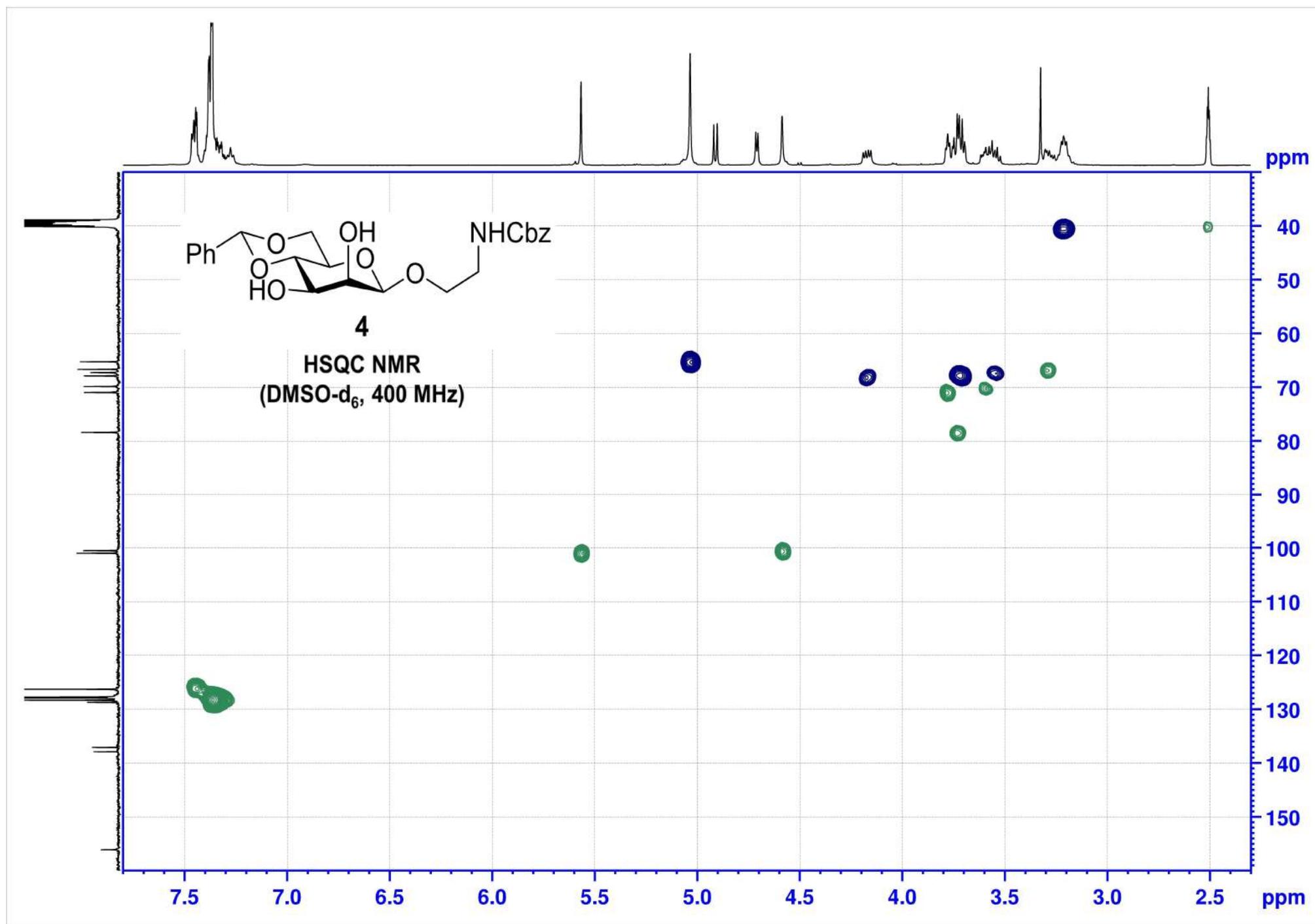
GROUP BM
BM-SNM-AP031 in DMSO-d₆

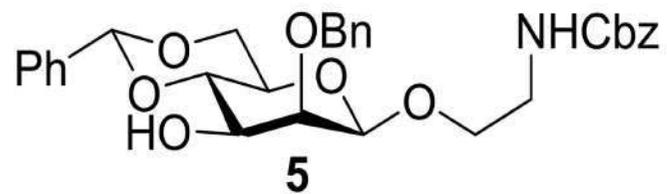


4

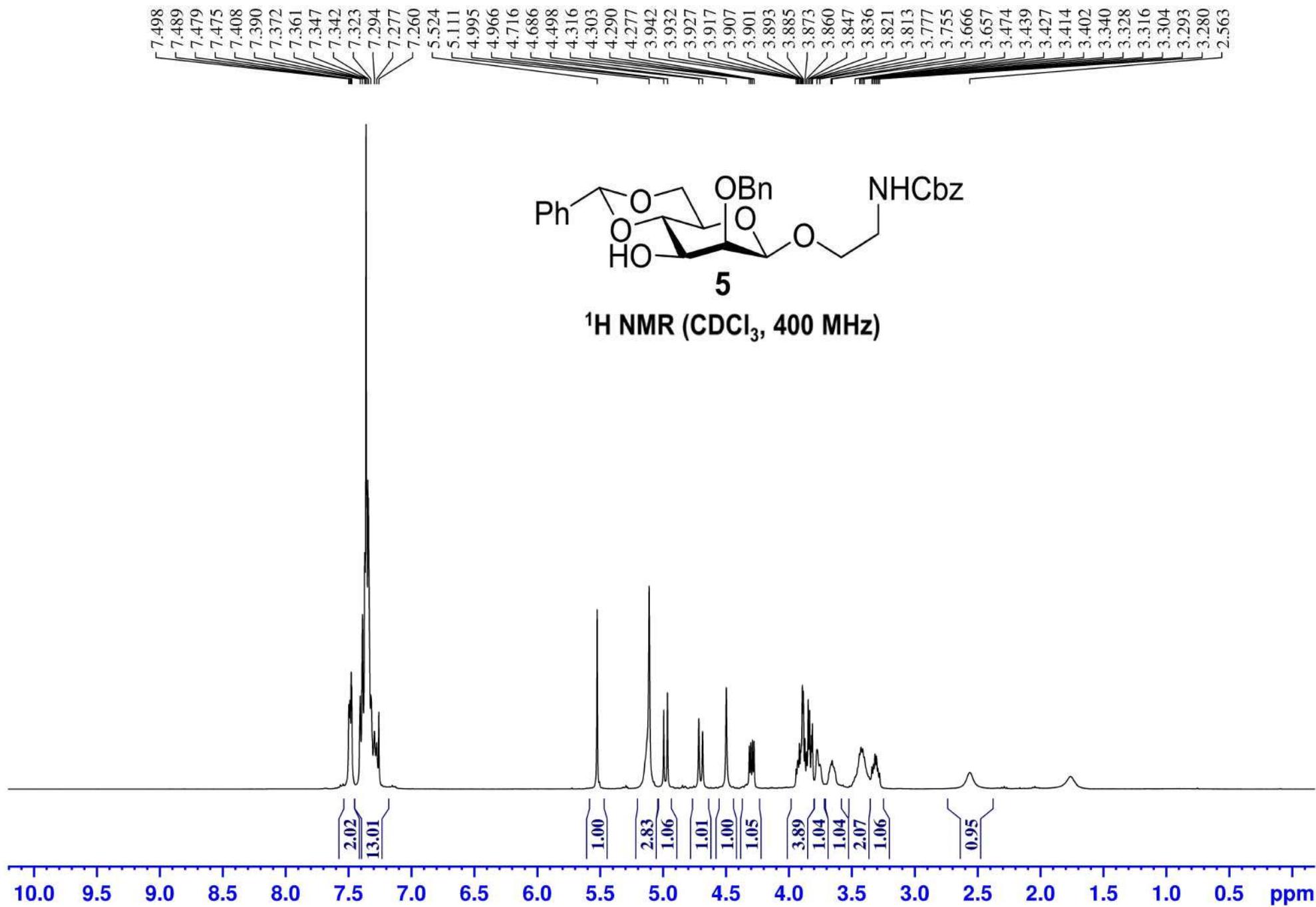
COSY NMR
(DMSO-d₆, 400 MHz)

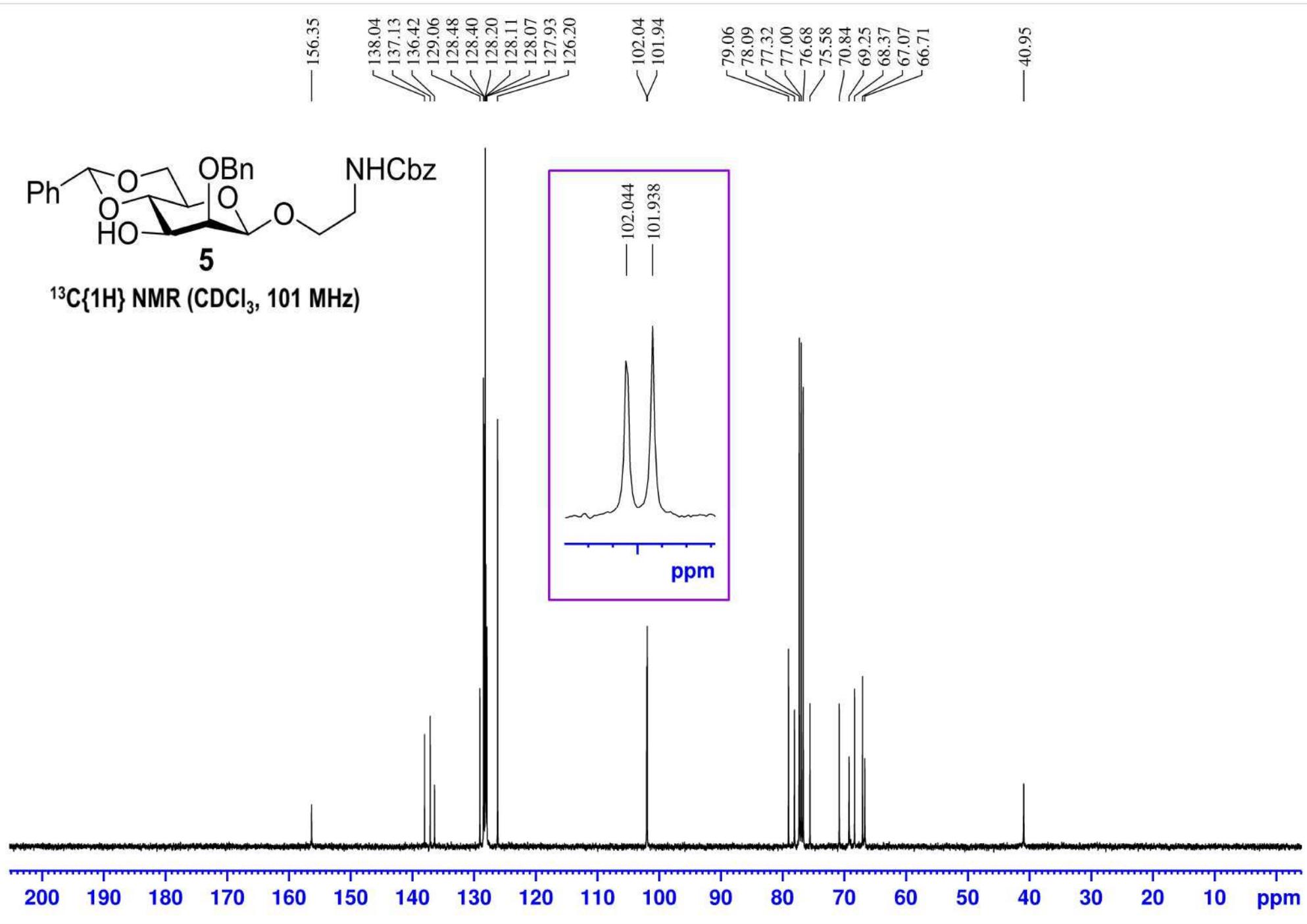


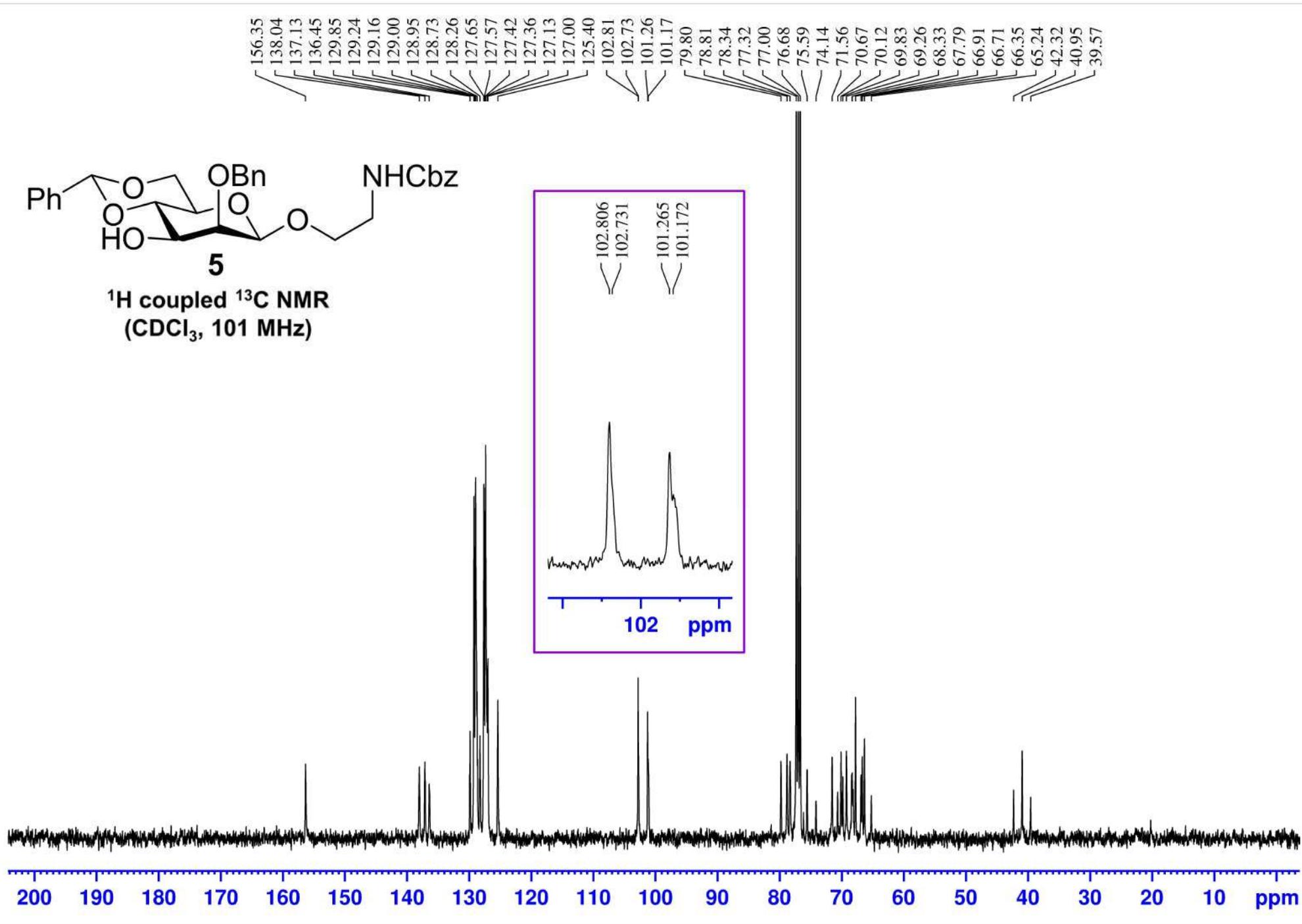




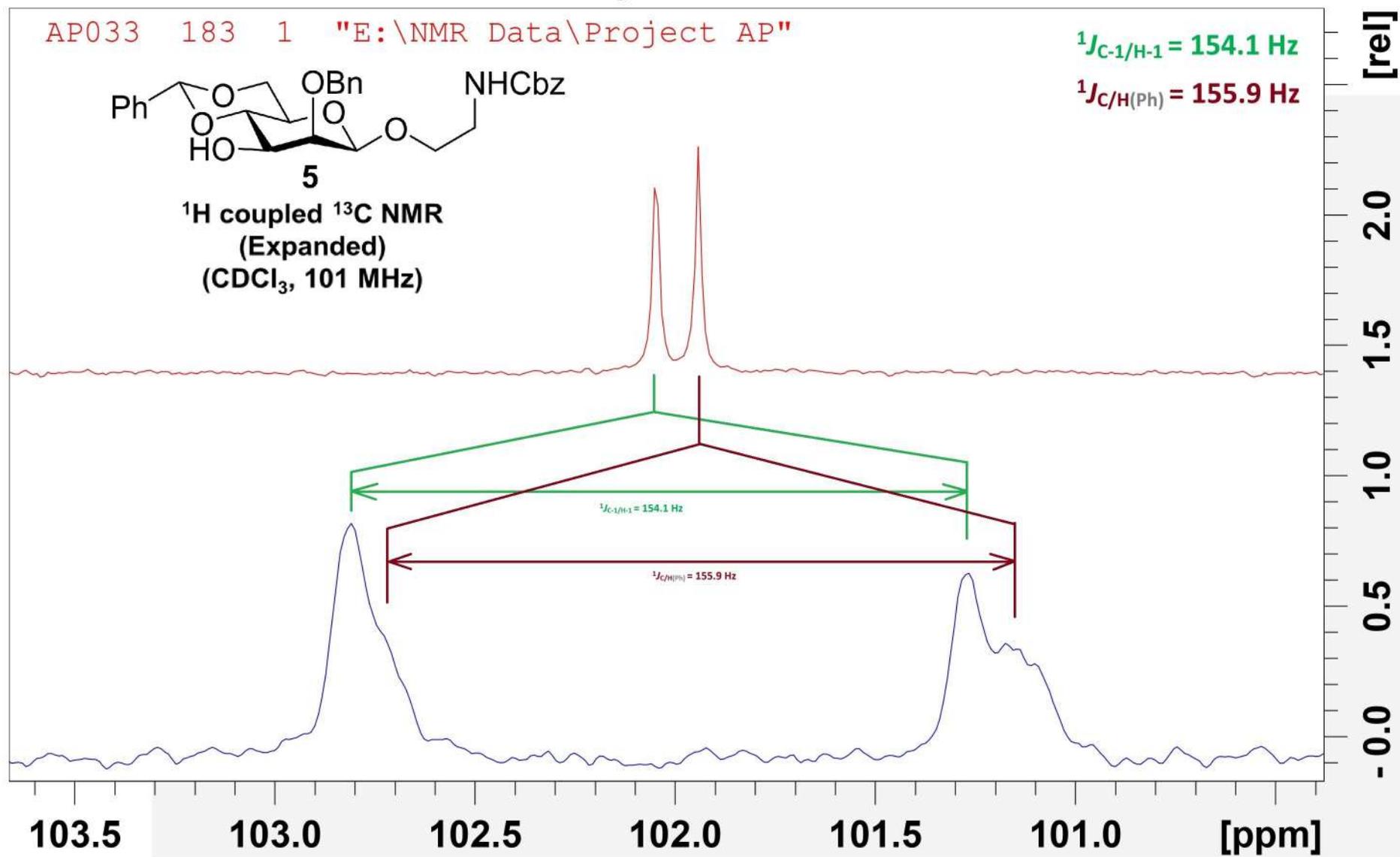
¹H NMR (CDCl₃, 400 MHz)

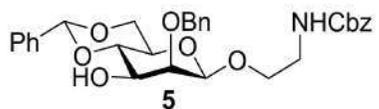




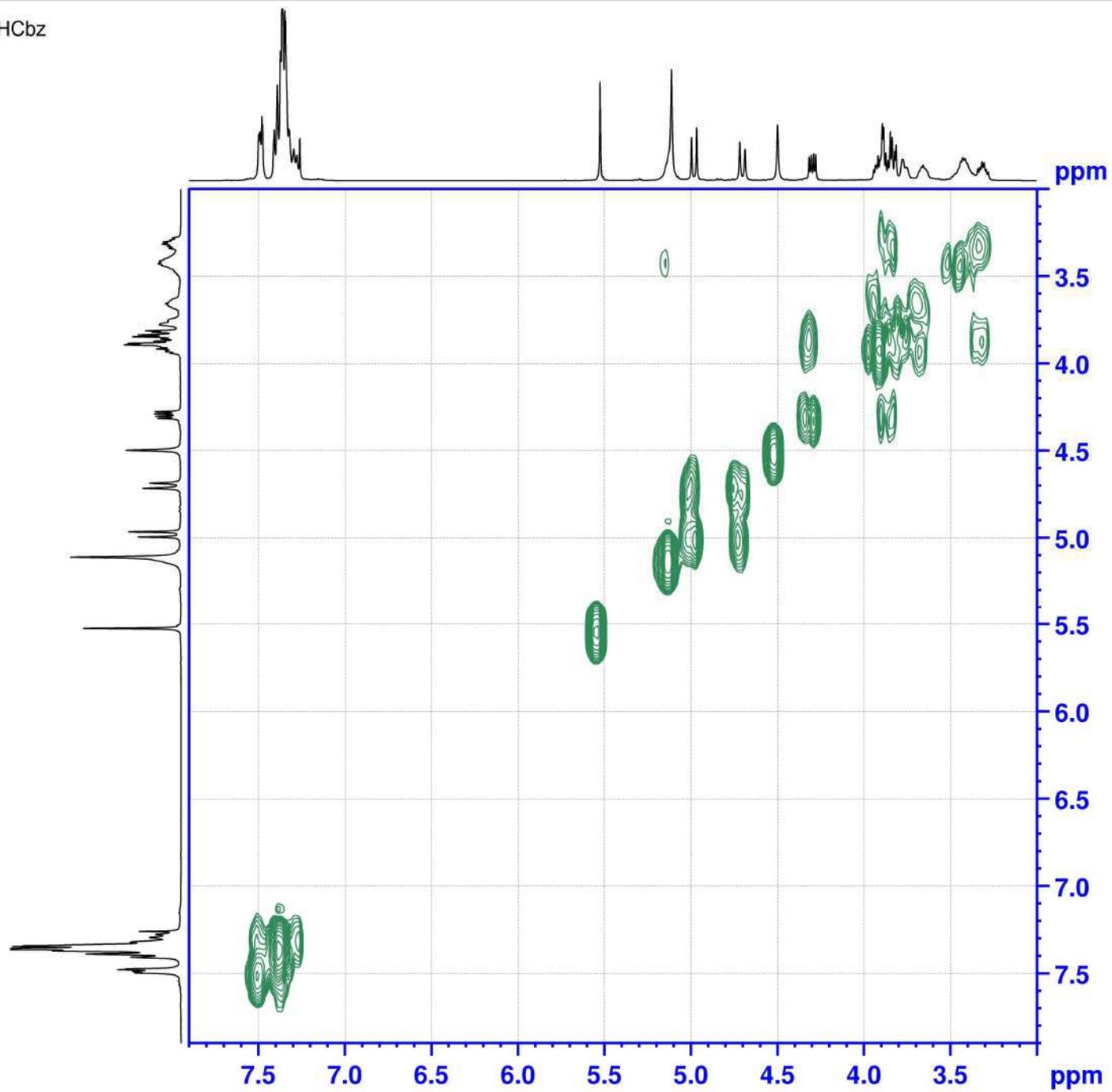


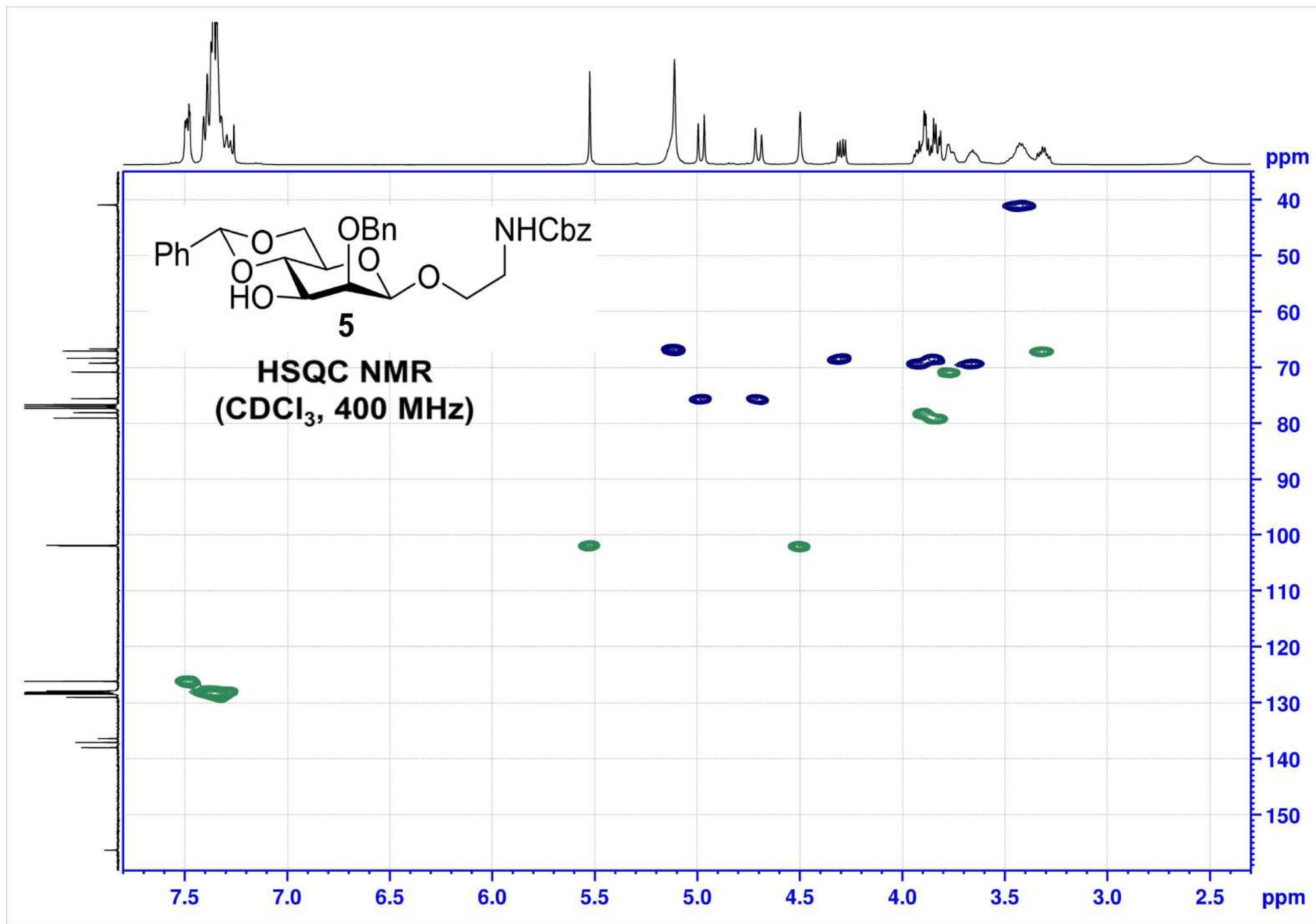
AP033 184 1 "E:\NMR Data\Project AP"





COSY NMR
(CDCl₃, 400 MHz)

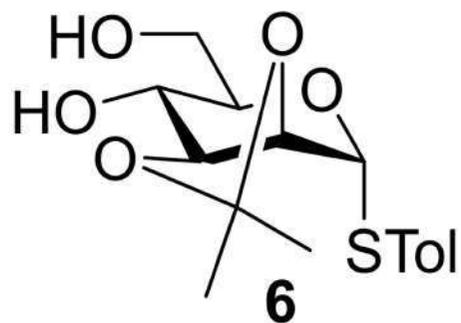




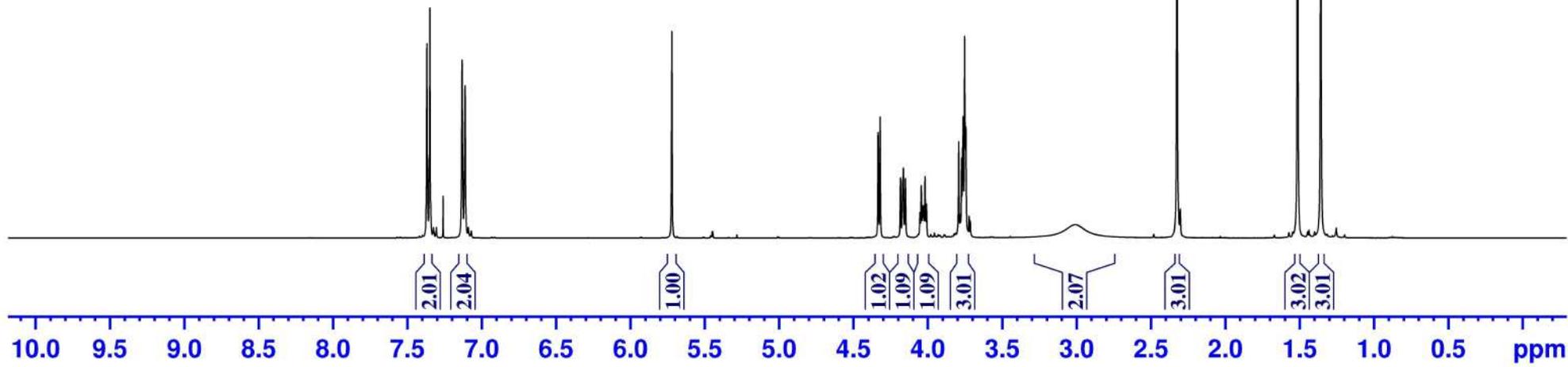
7.369
7.365
7.353
7.349
7.260
7.133
7.113

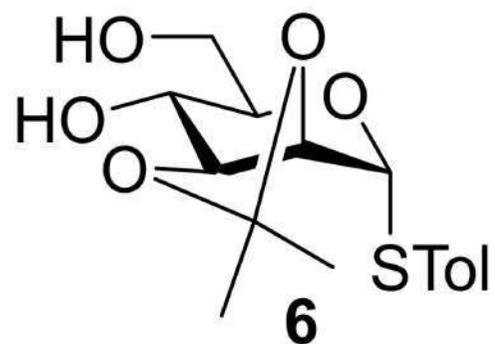
5.722
4.335
4.322
4.184
4.170
4.165
4.151
4.054
4.045
4.035
4.029
4.019
4.010
3.793
3.774
3.767
3.763
3.753
3.744
3.723
3.714
3.012
2.325

1.515
1.358

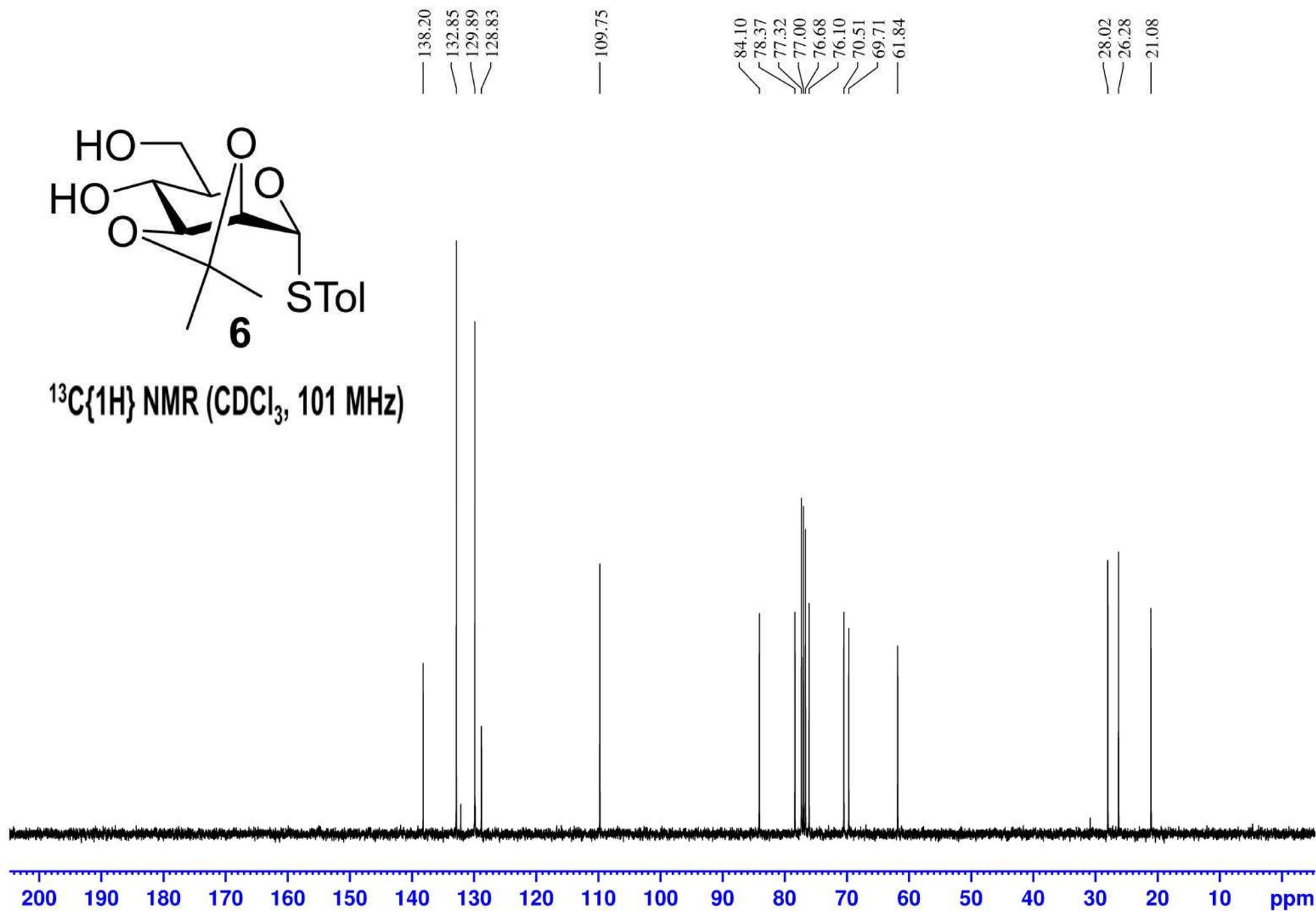


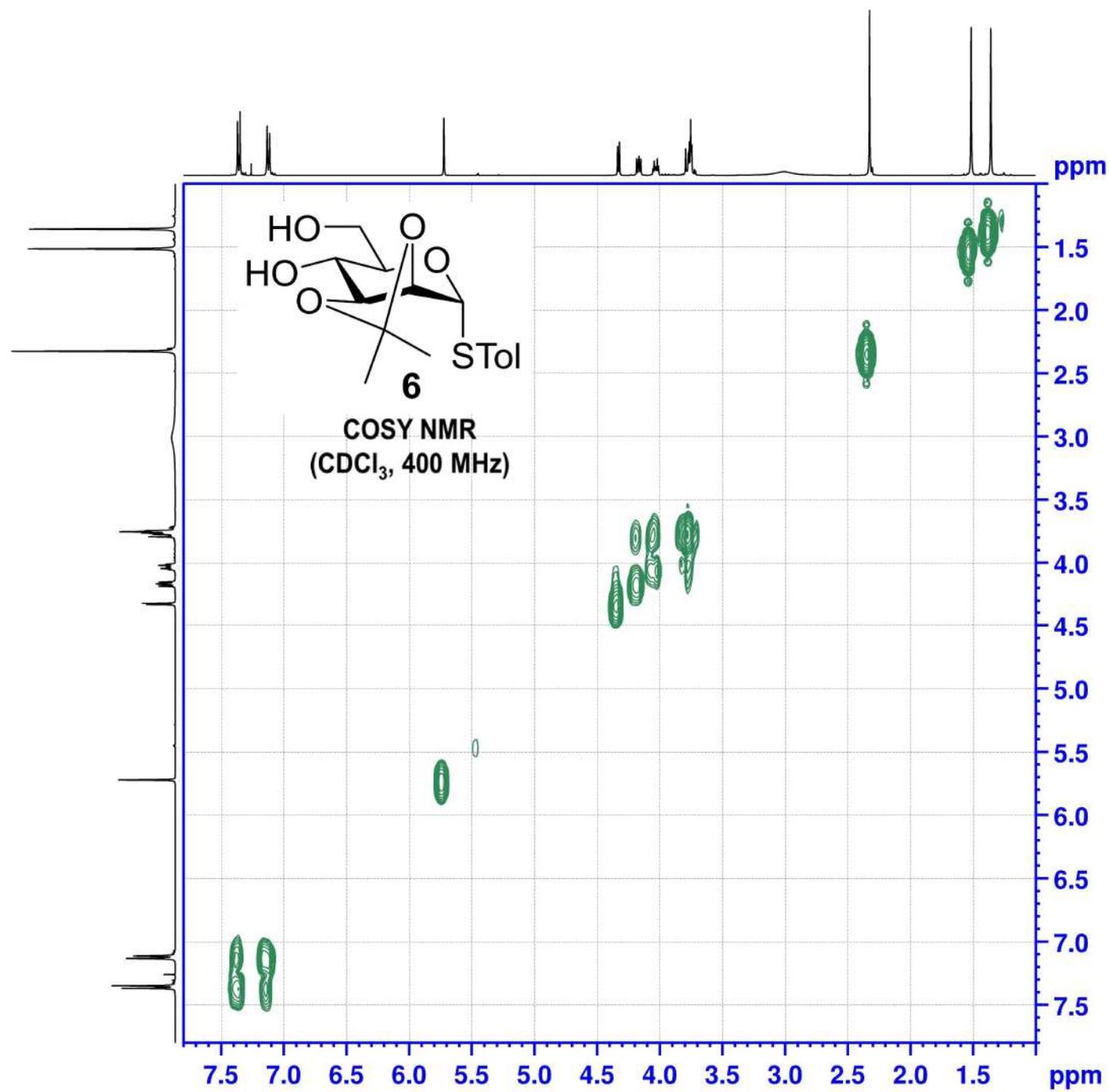
¹H NMR (CDCl₃, 400 MHz)

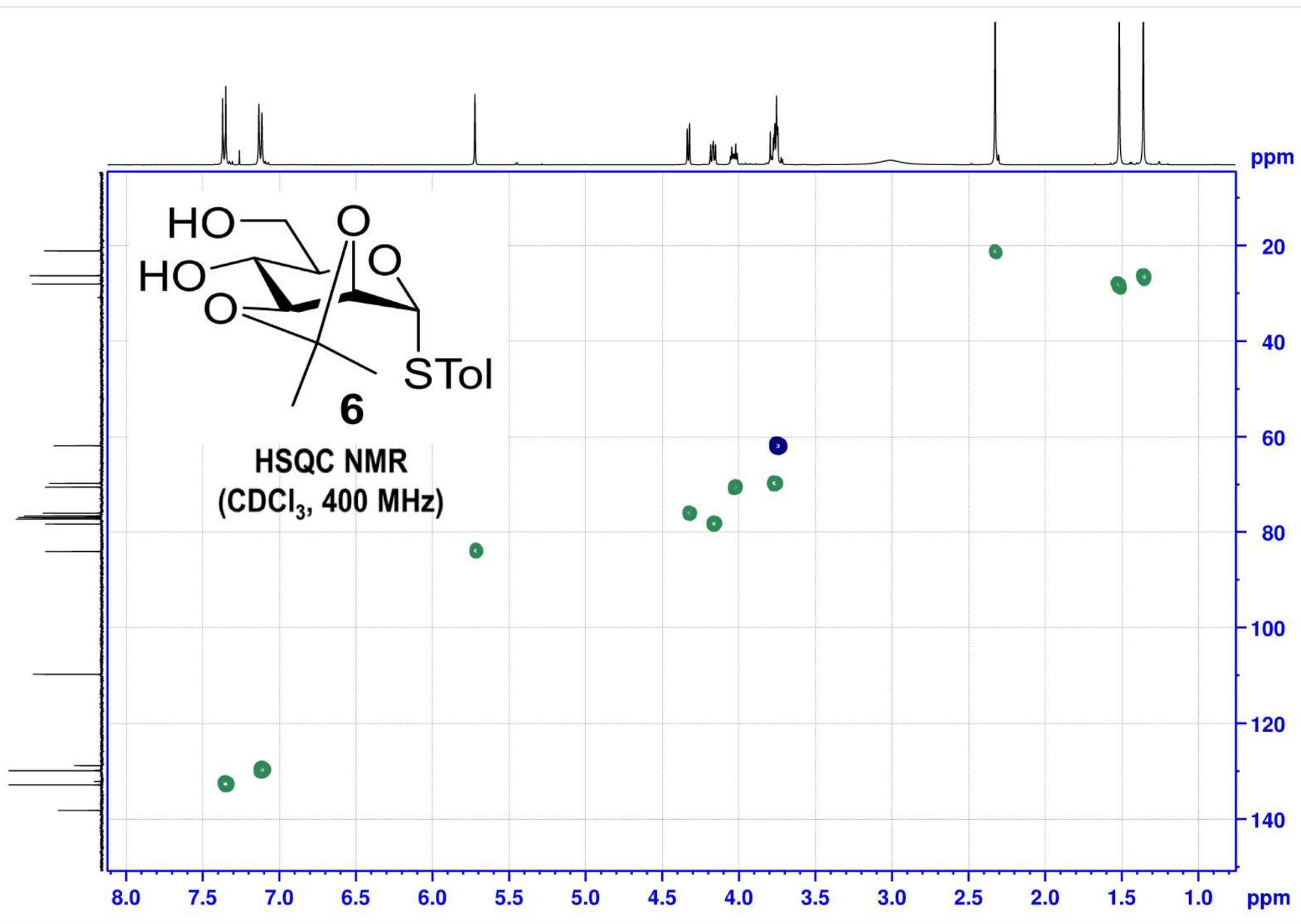


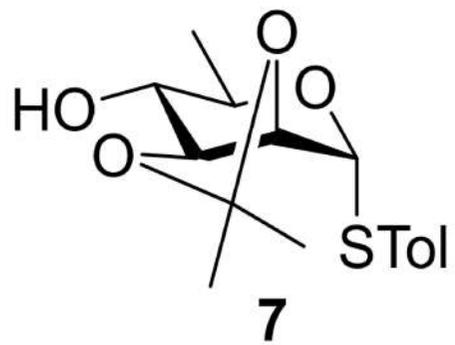


¹³C{¹H} NMR (CDCl₃, 101 MHz)

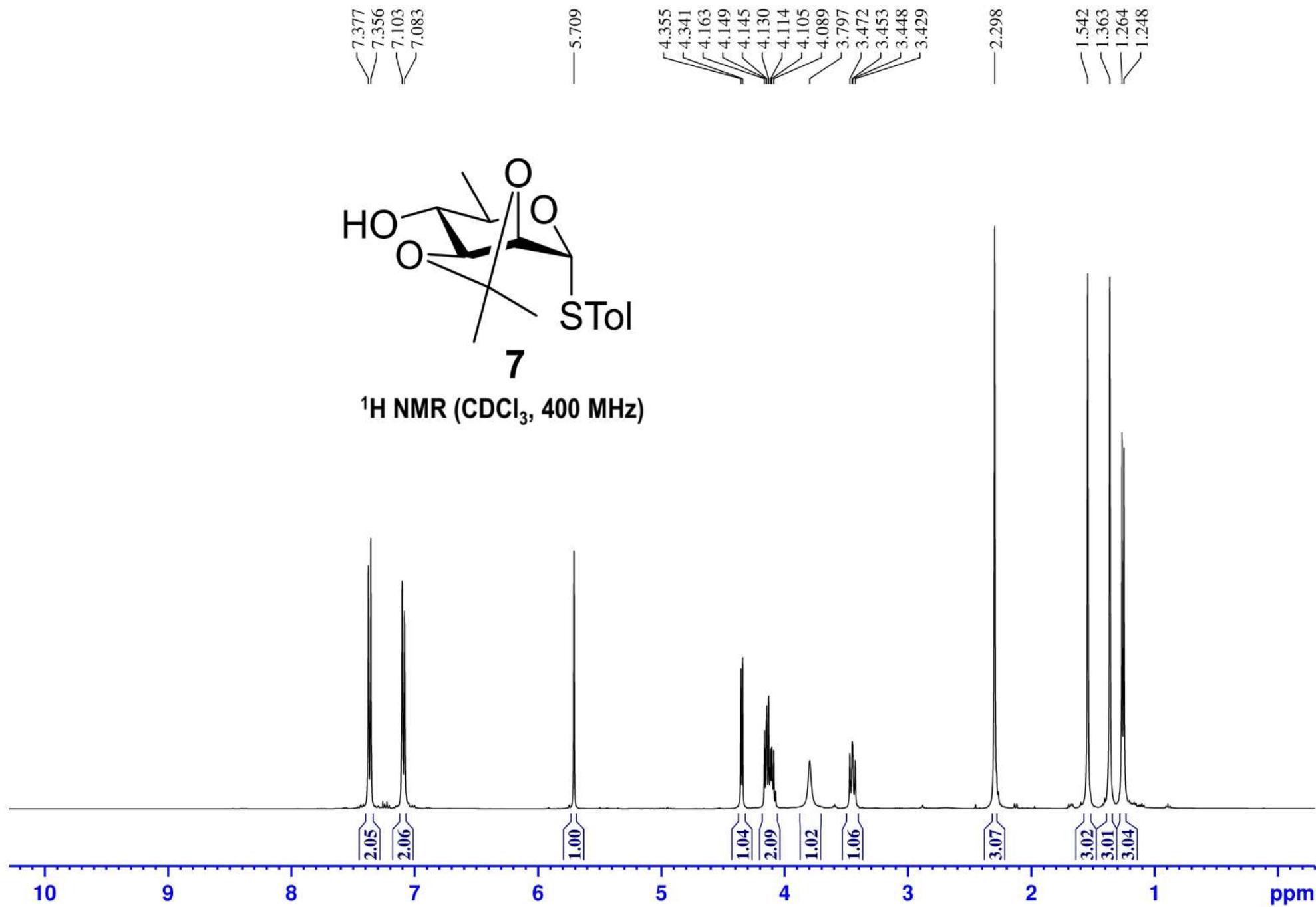


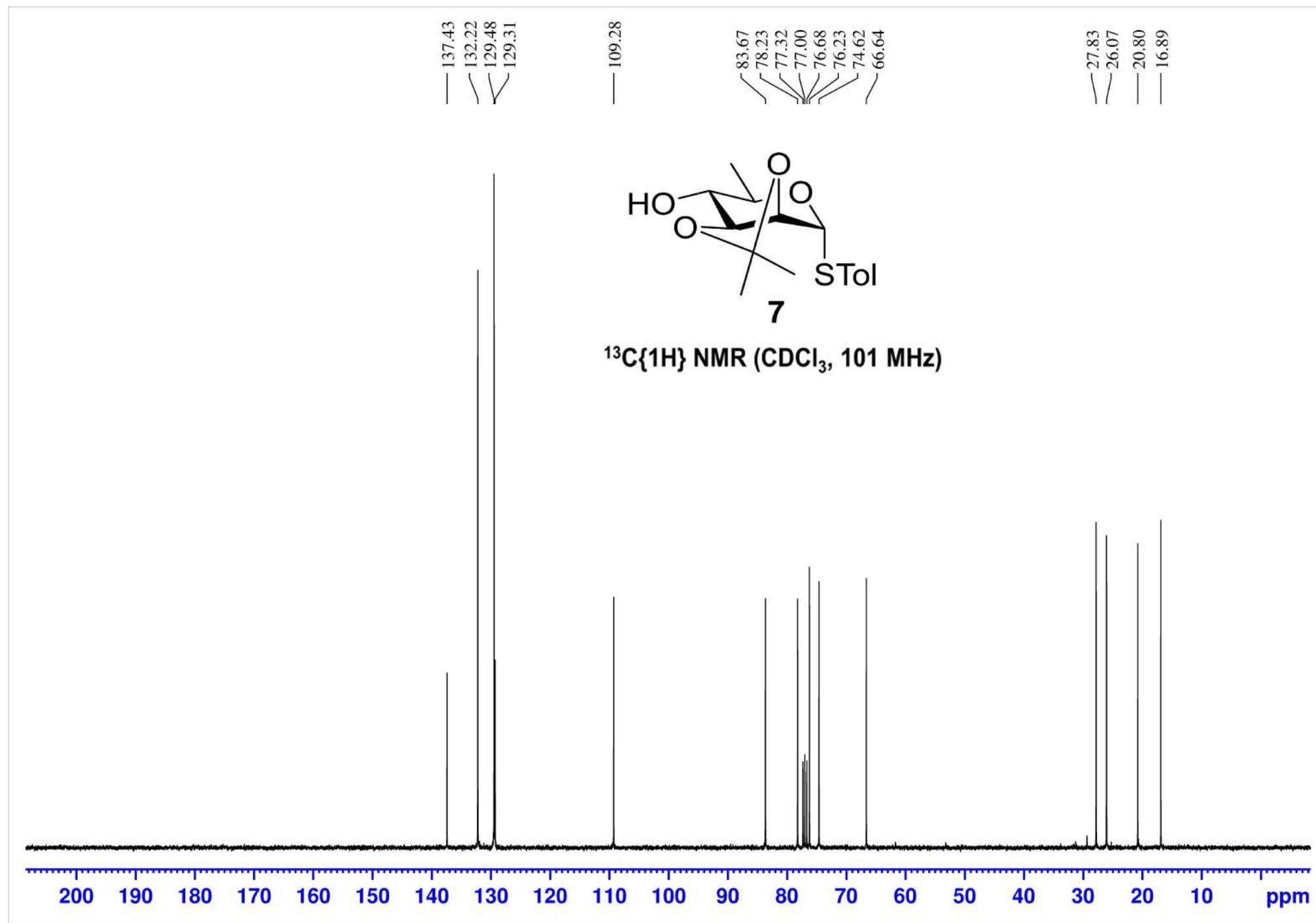


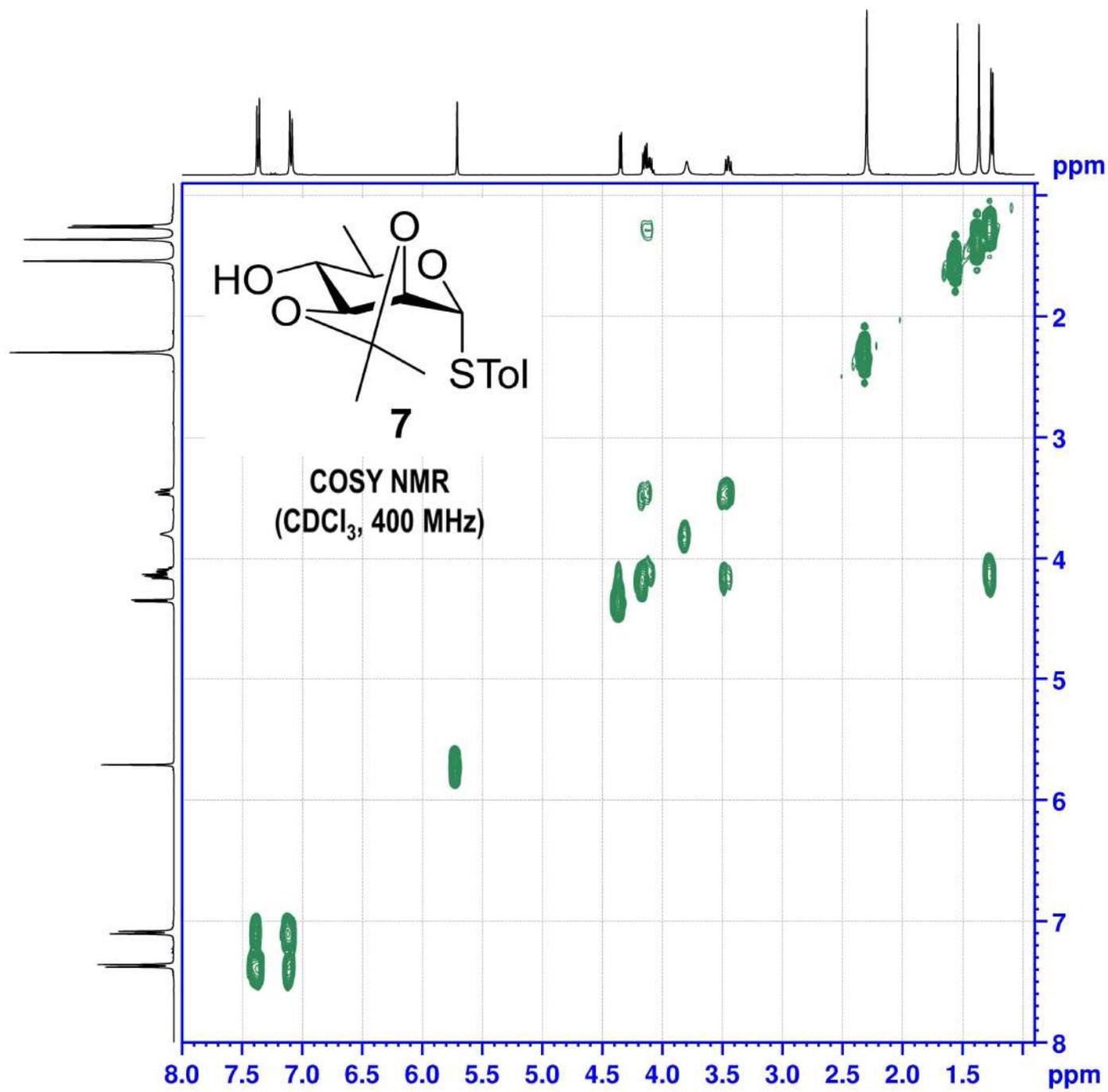


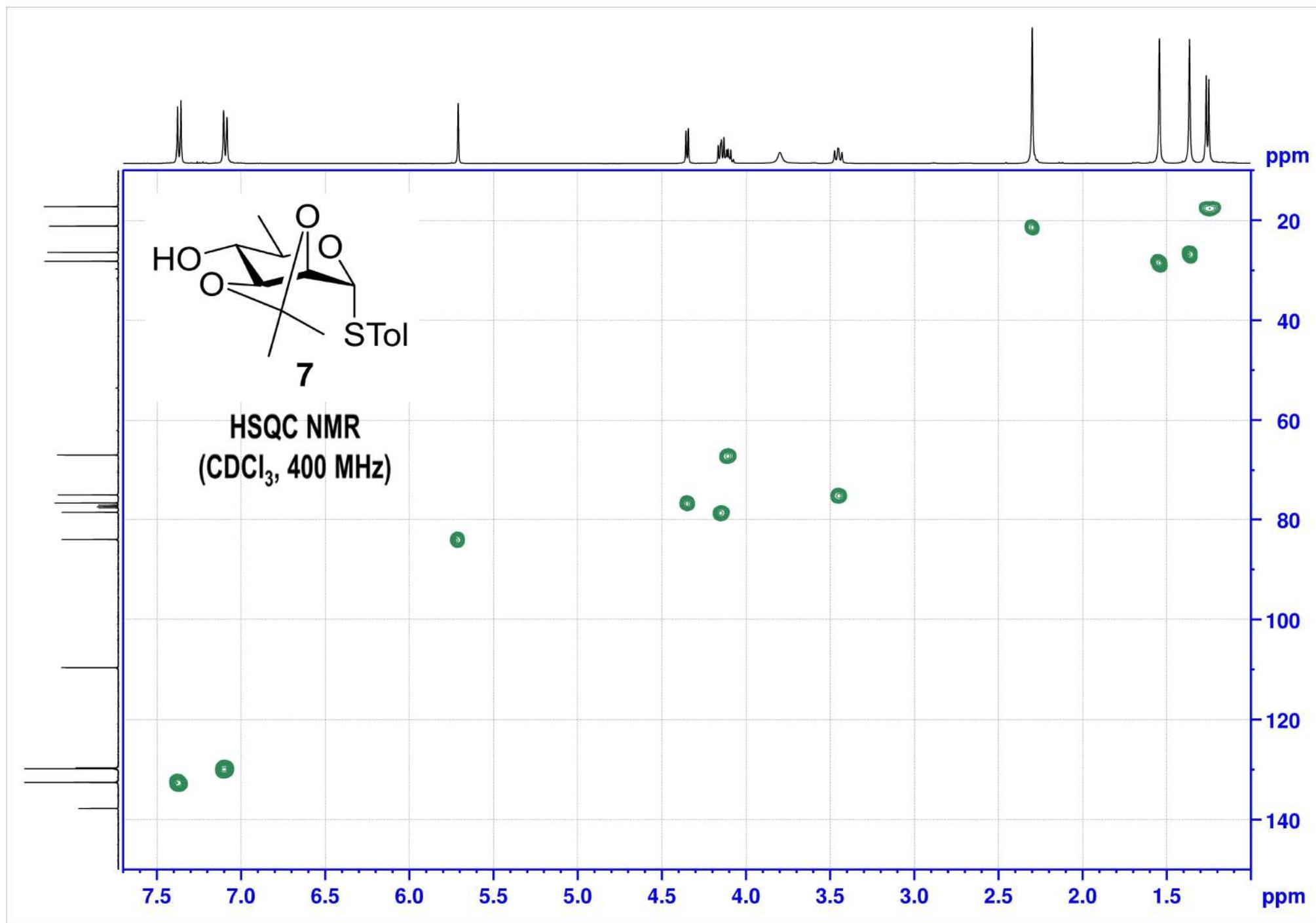


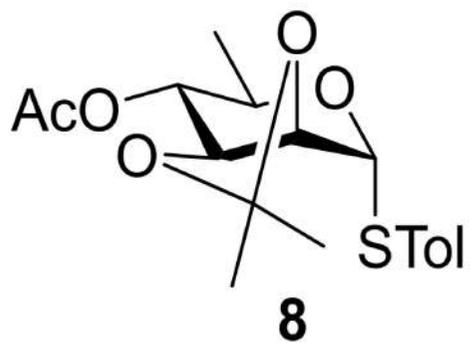
¹H NMR (CDCl₃, 400 MHz)



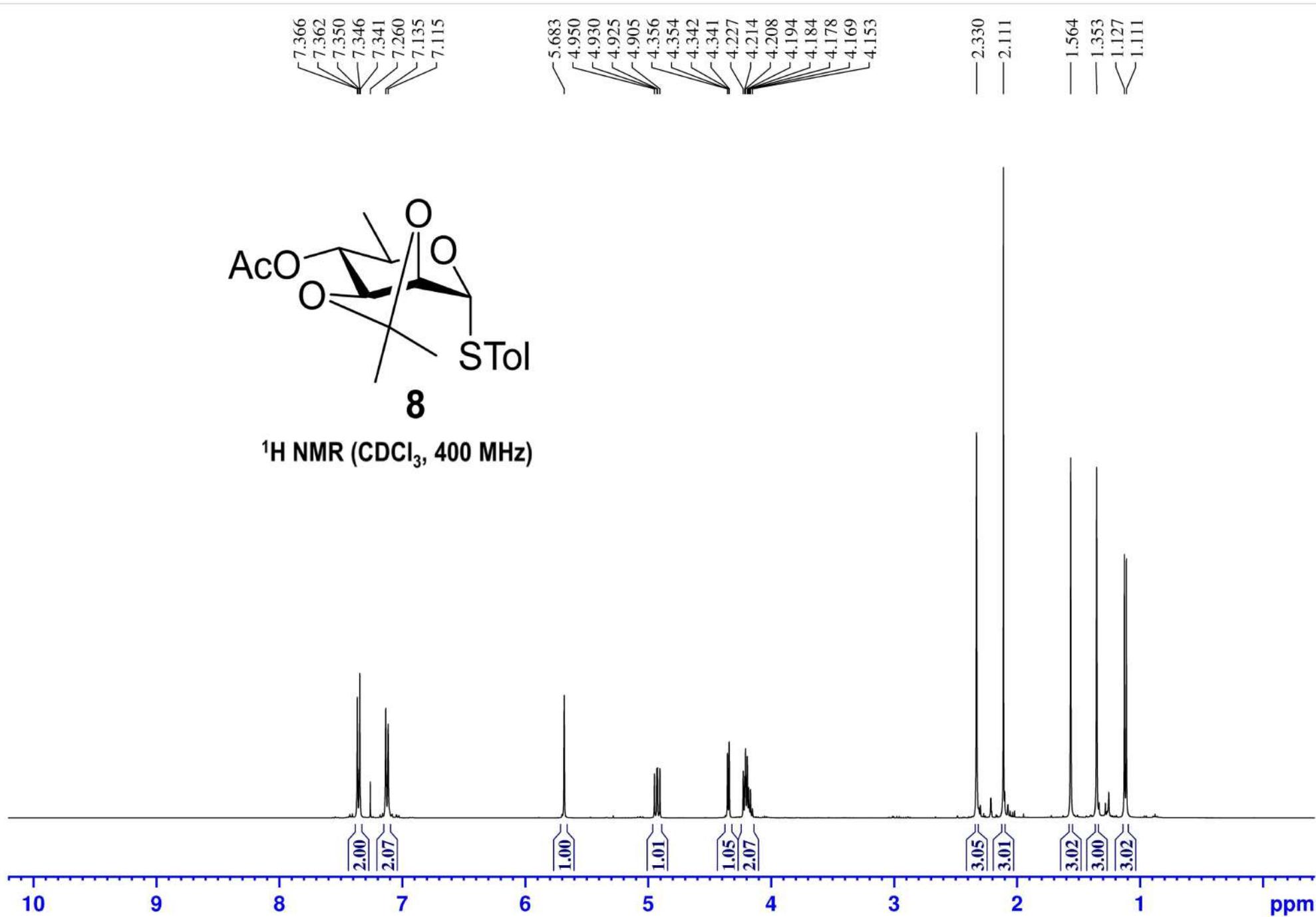


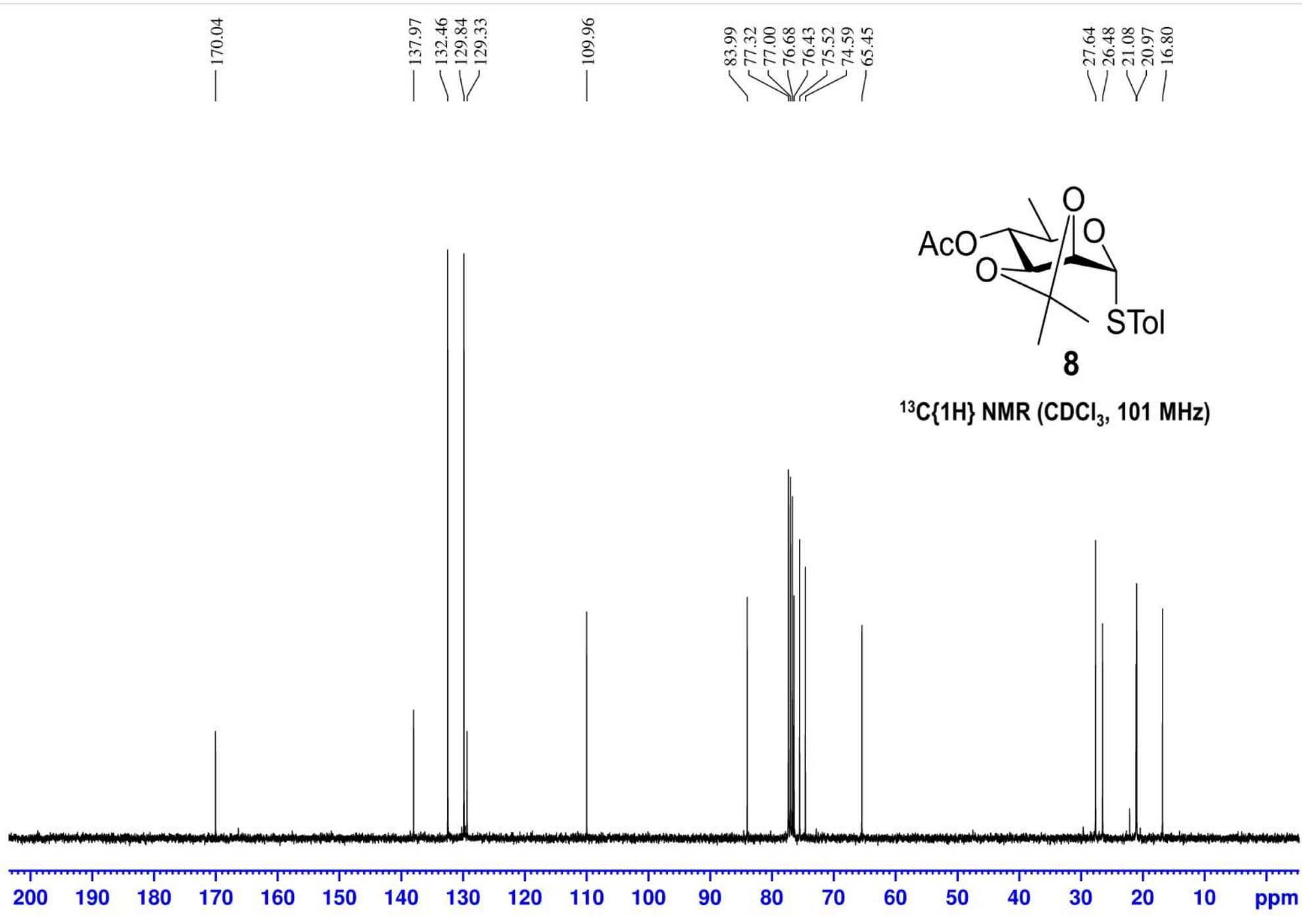


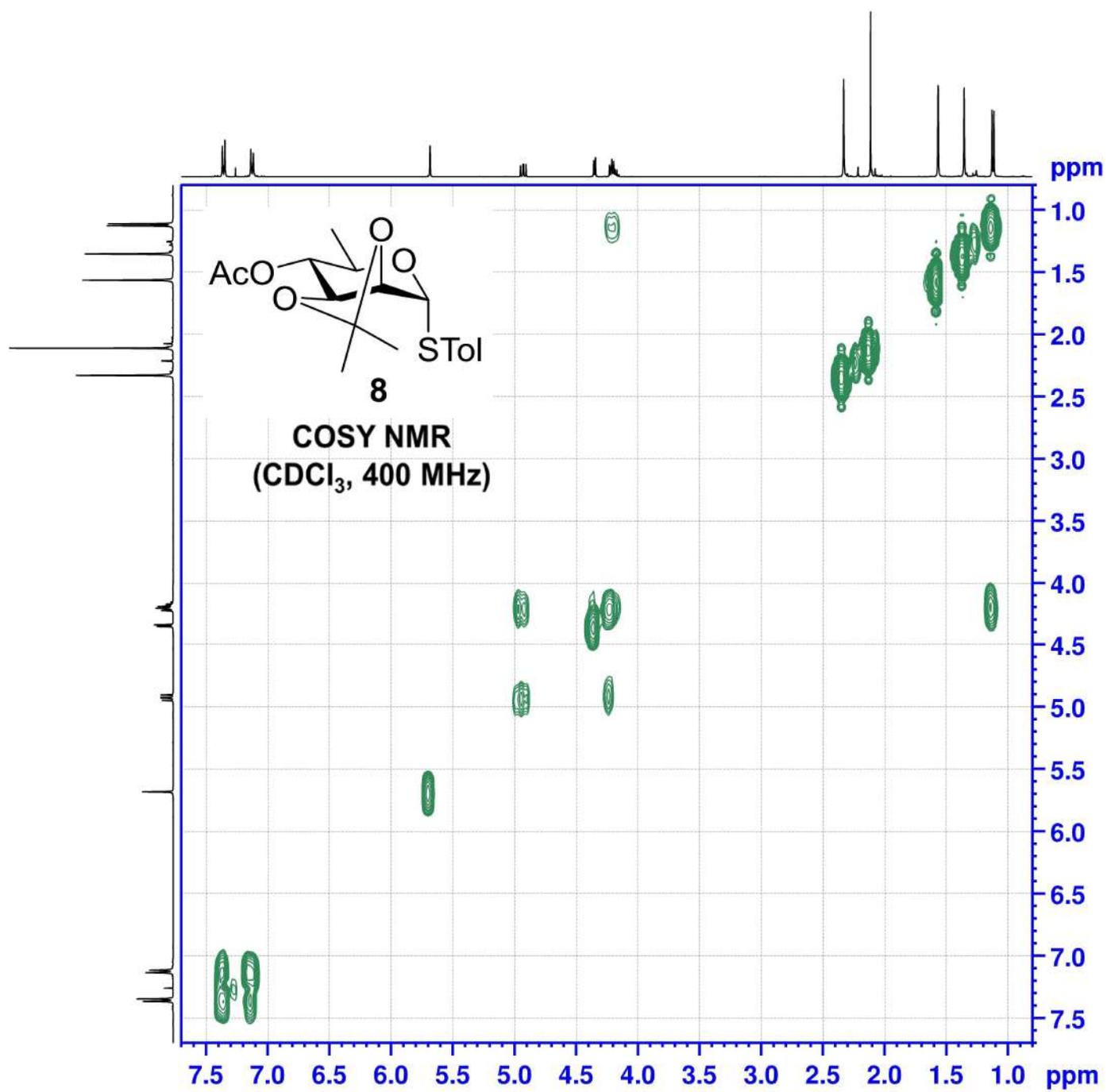


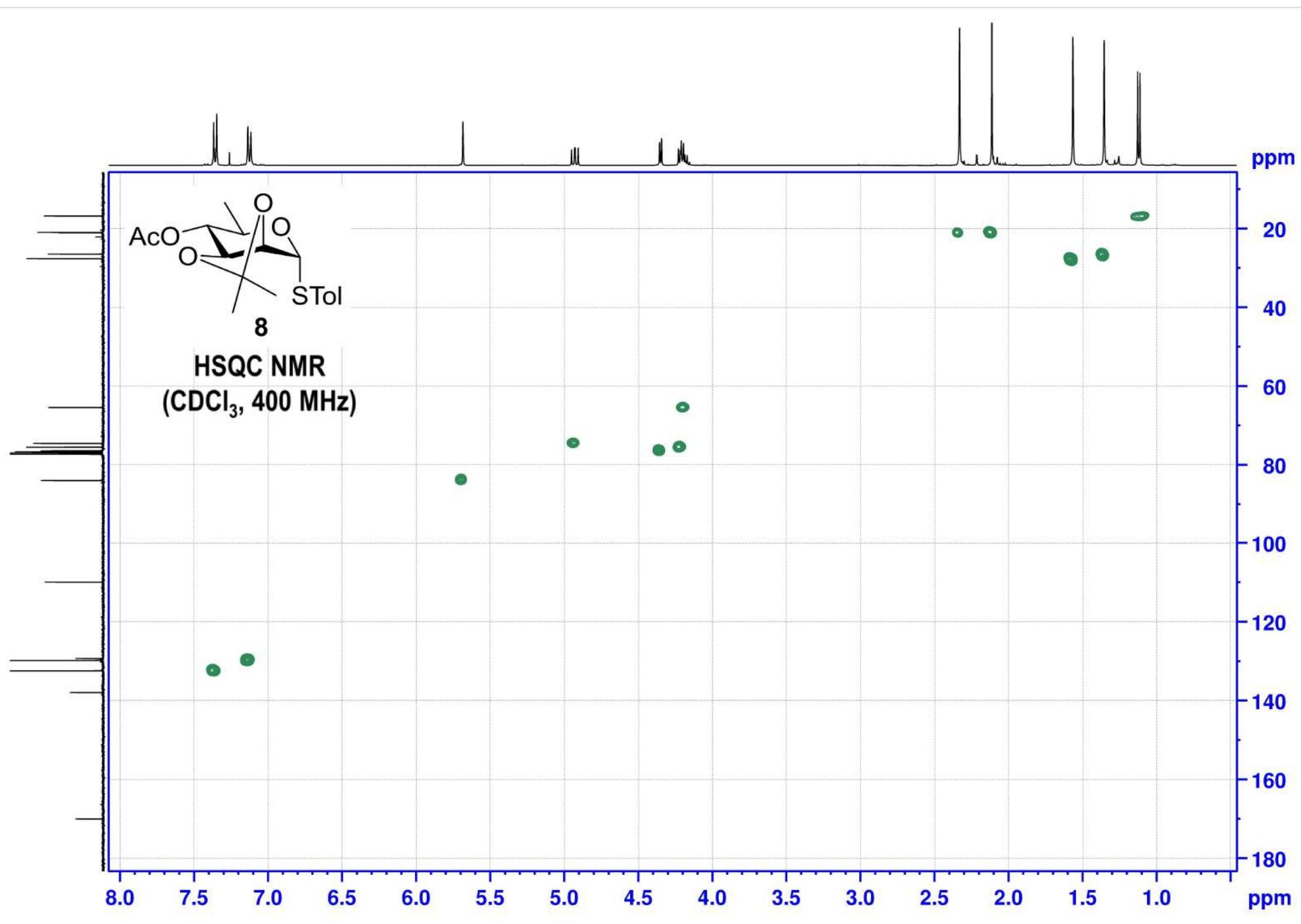


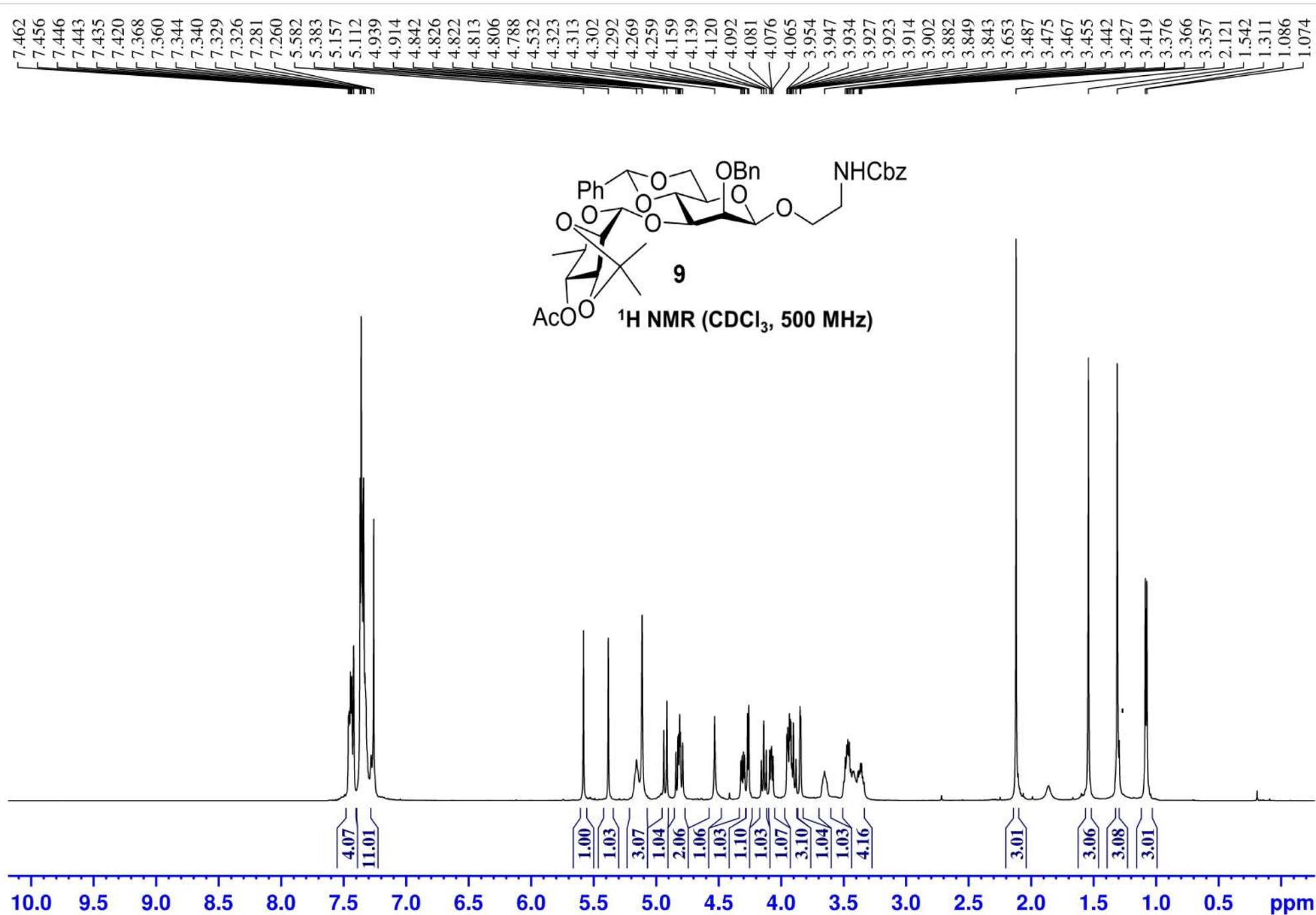
¹H NMR (CDCl₃, 400 MHz)

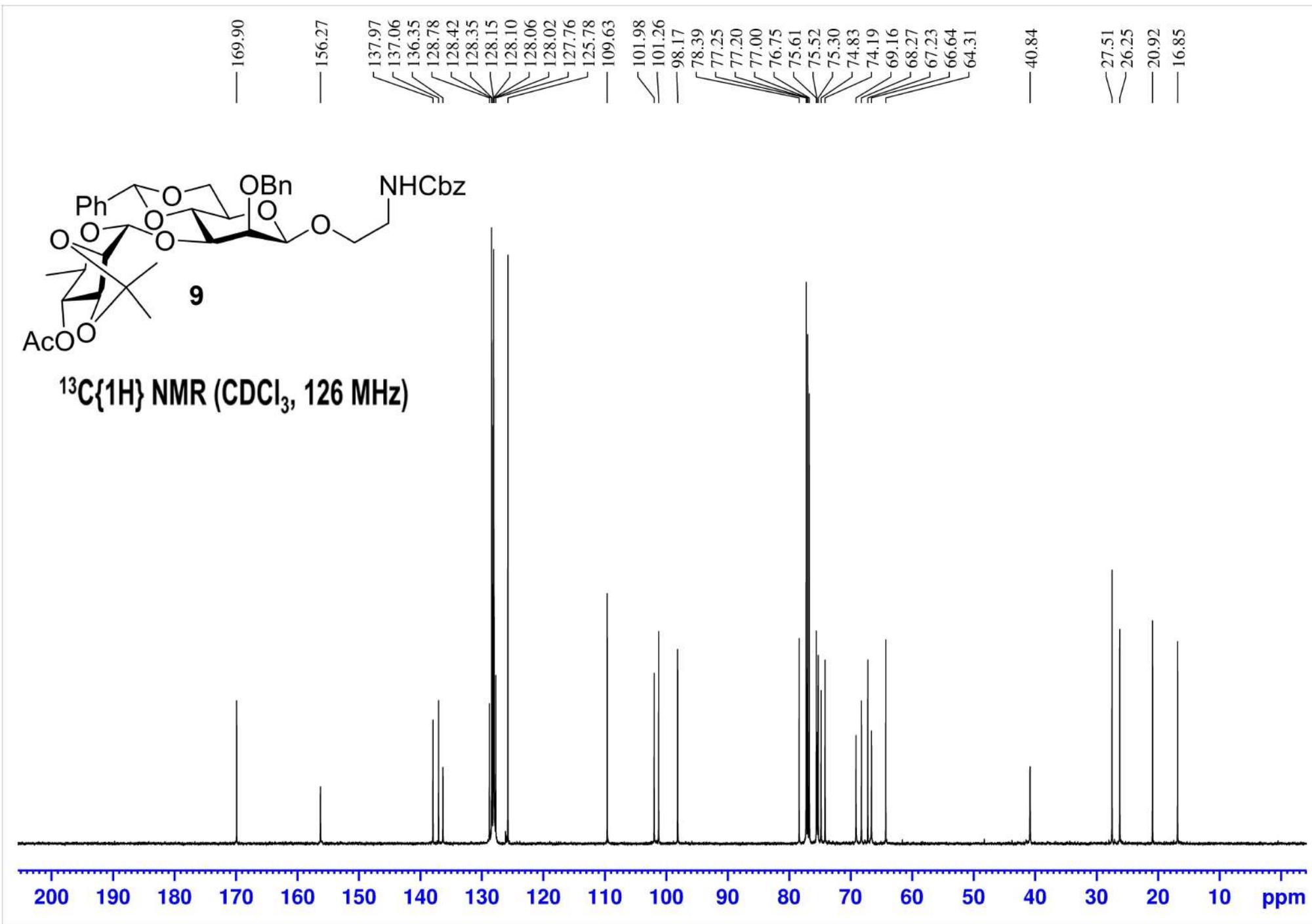


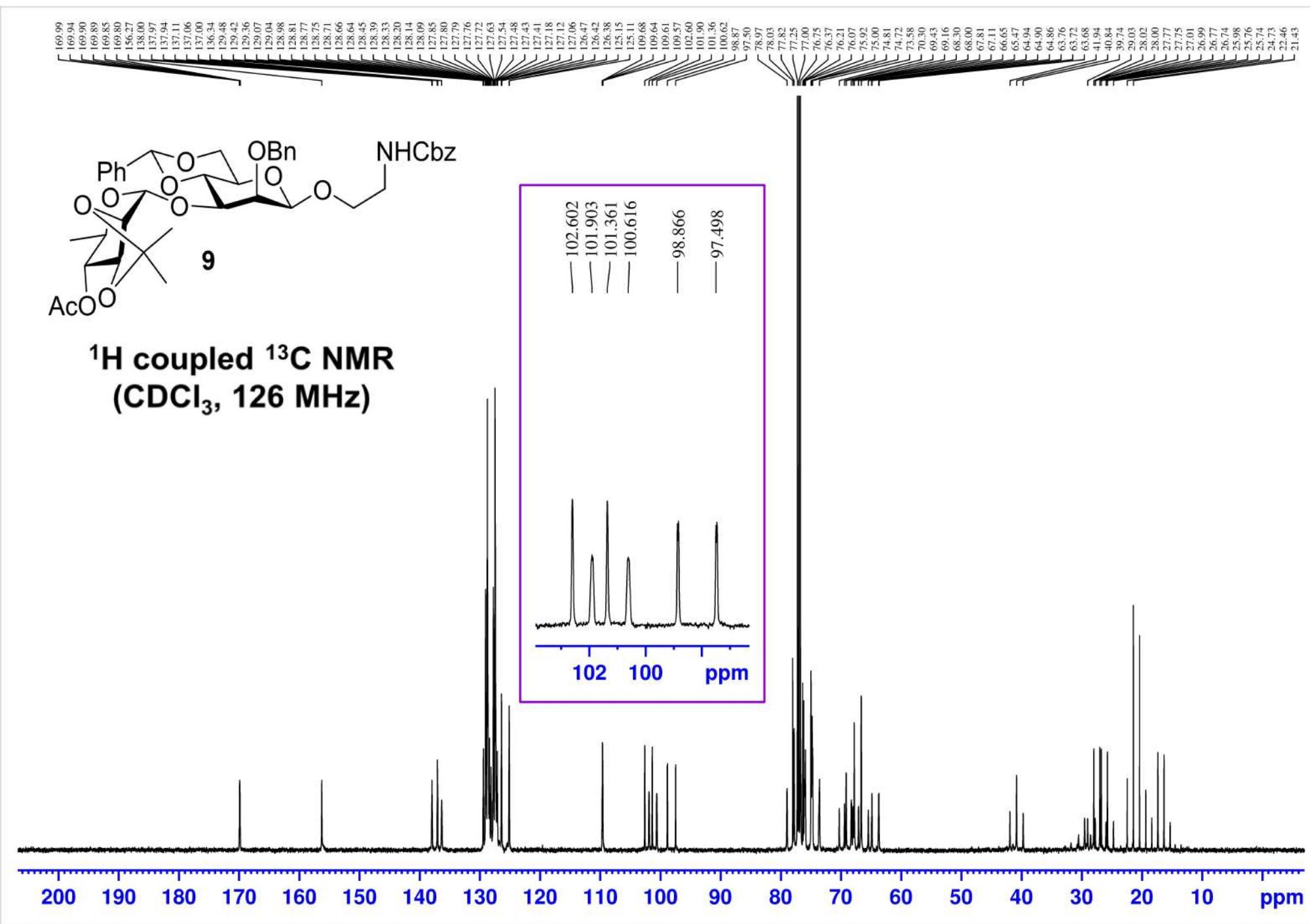




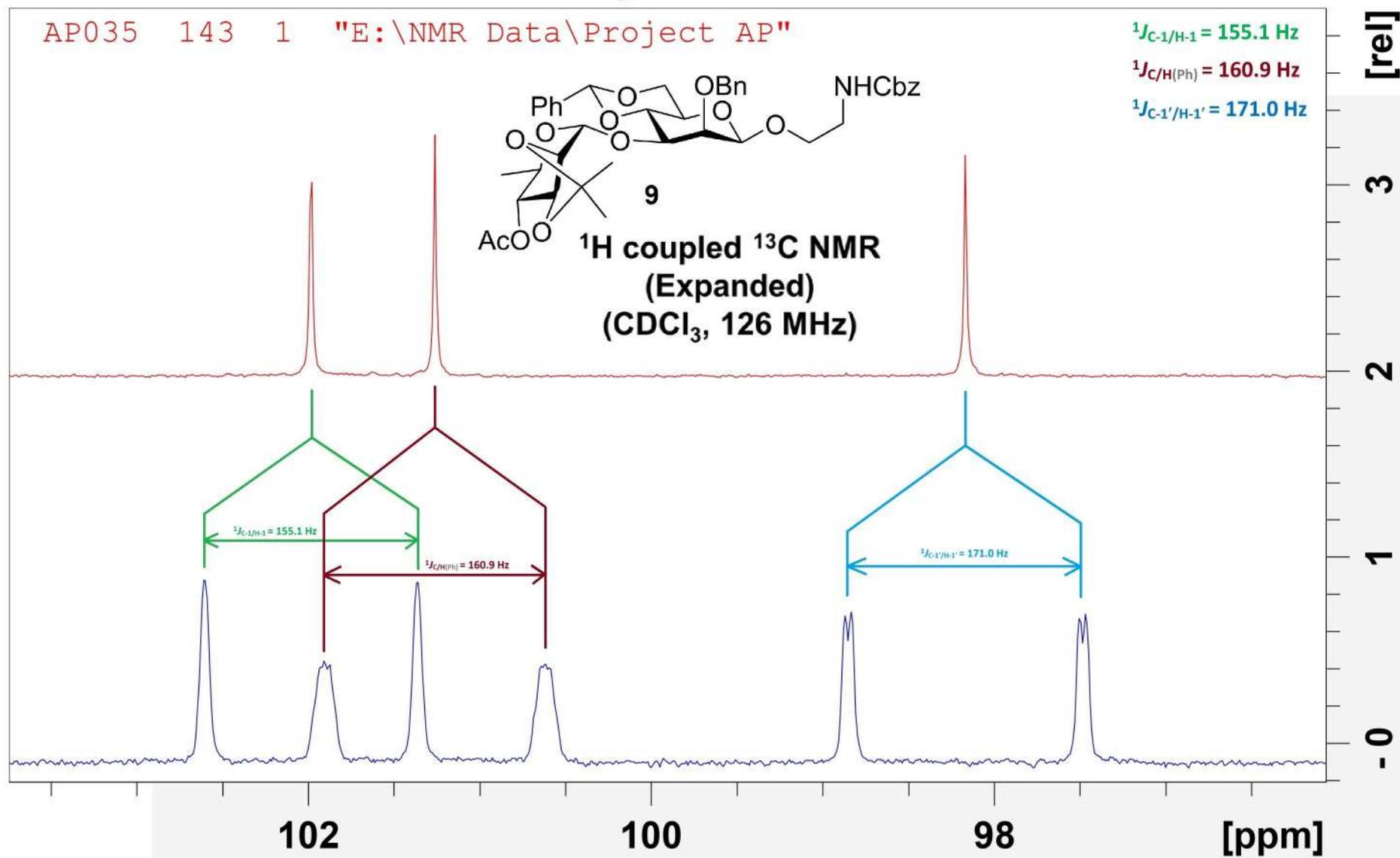


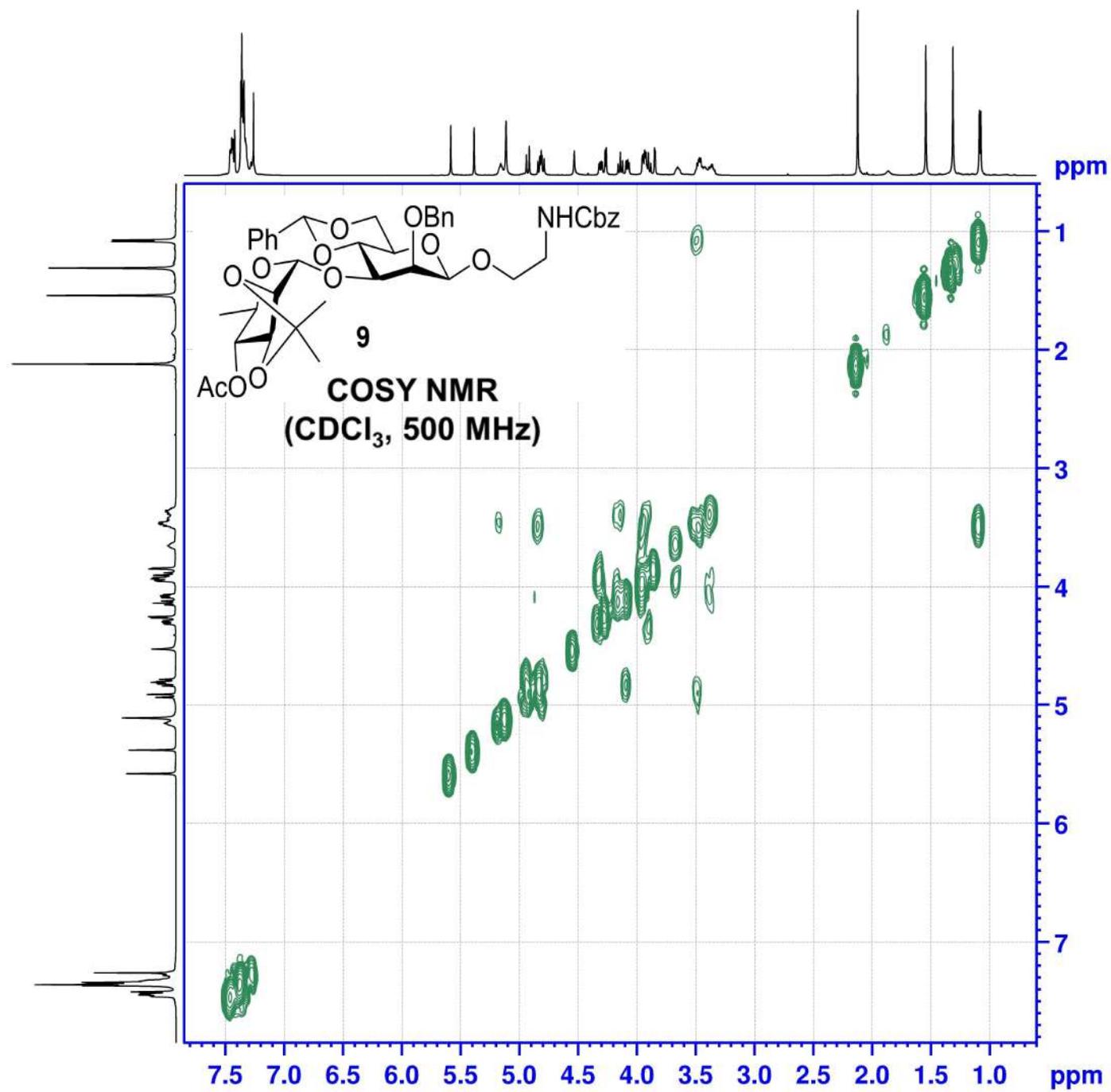
GROUP BM
BM-SNM-AP035 in CDCl₃

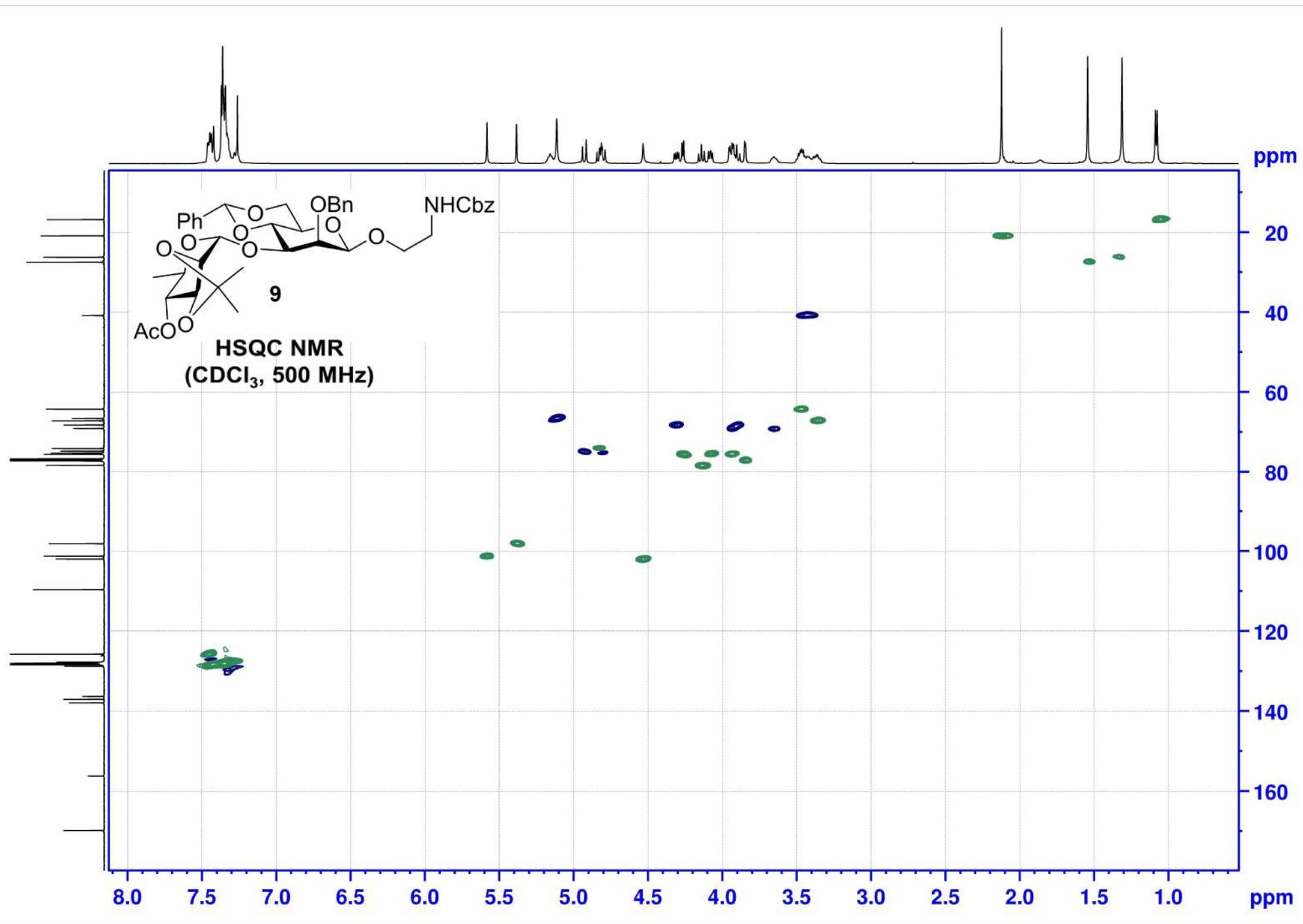


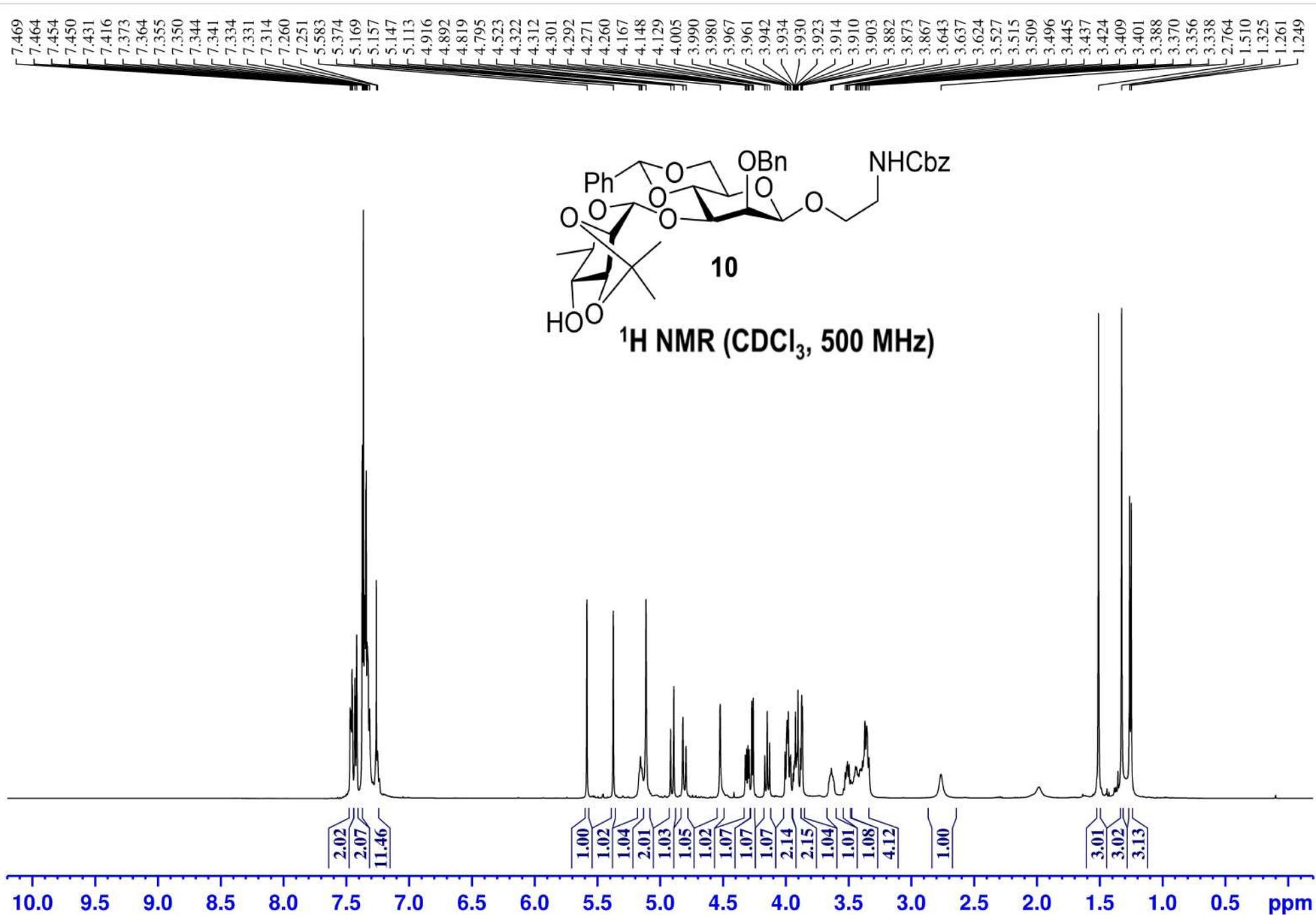


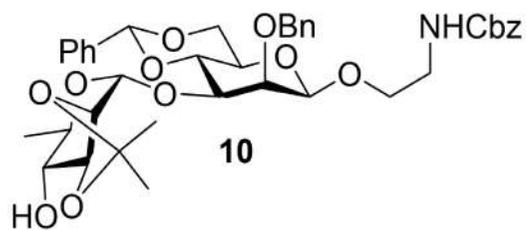
AP035 144 1 "E:\NMR Data\Project AP"



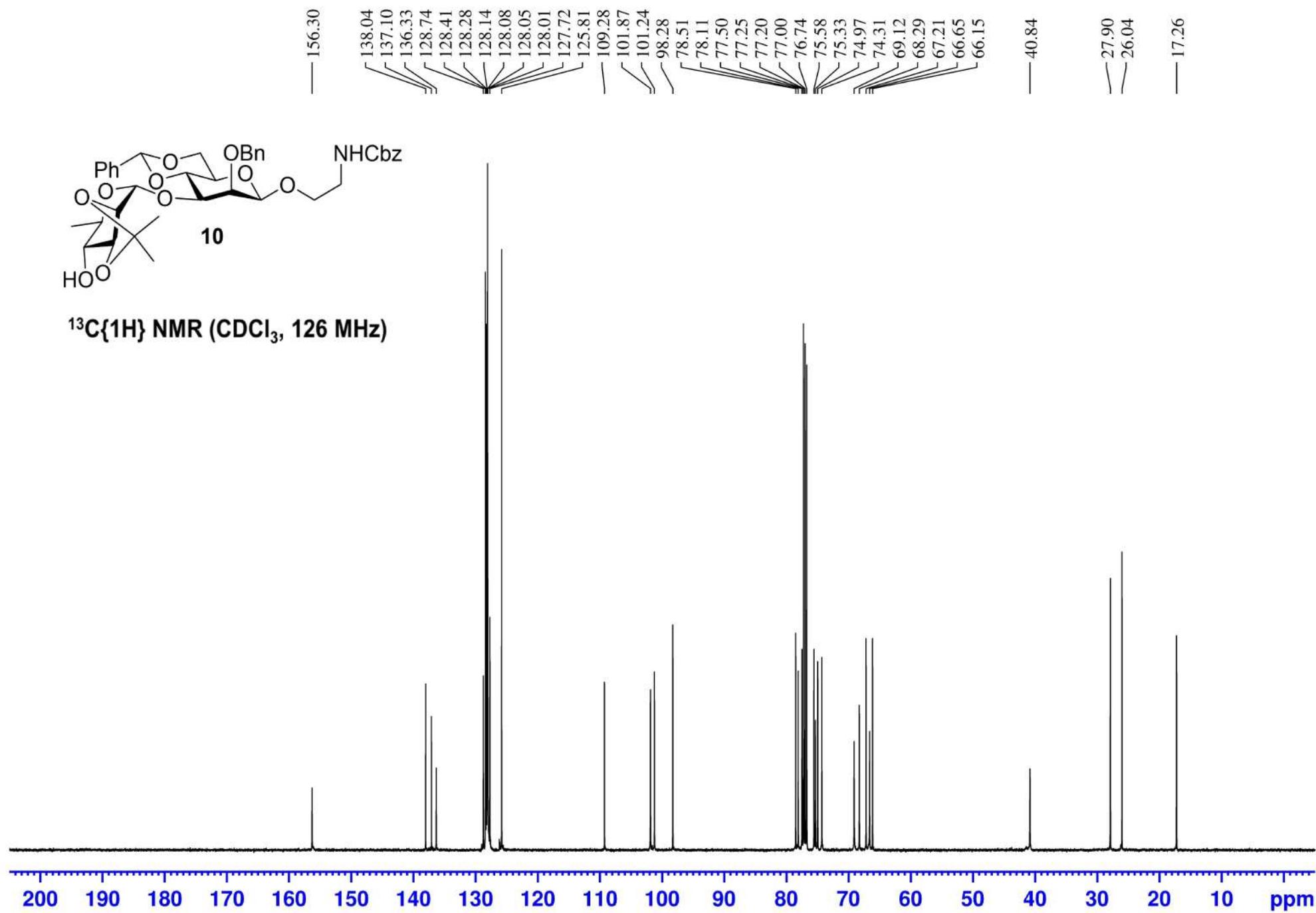


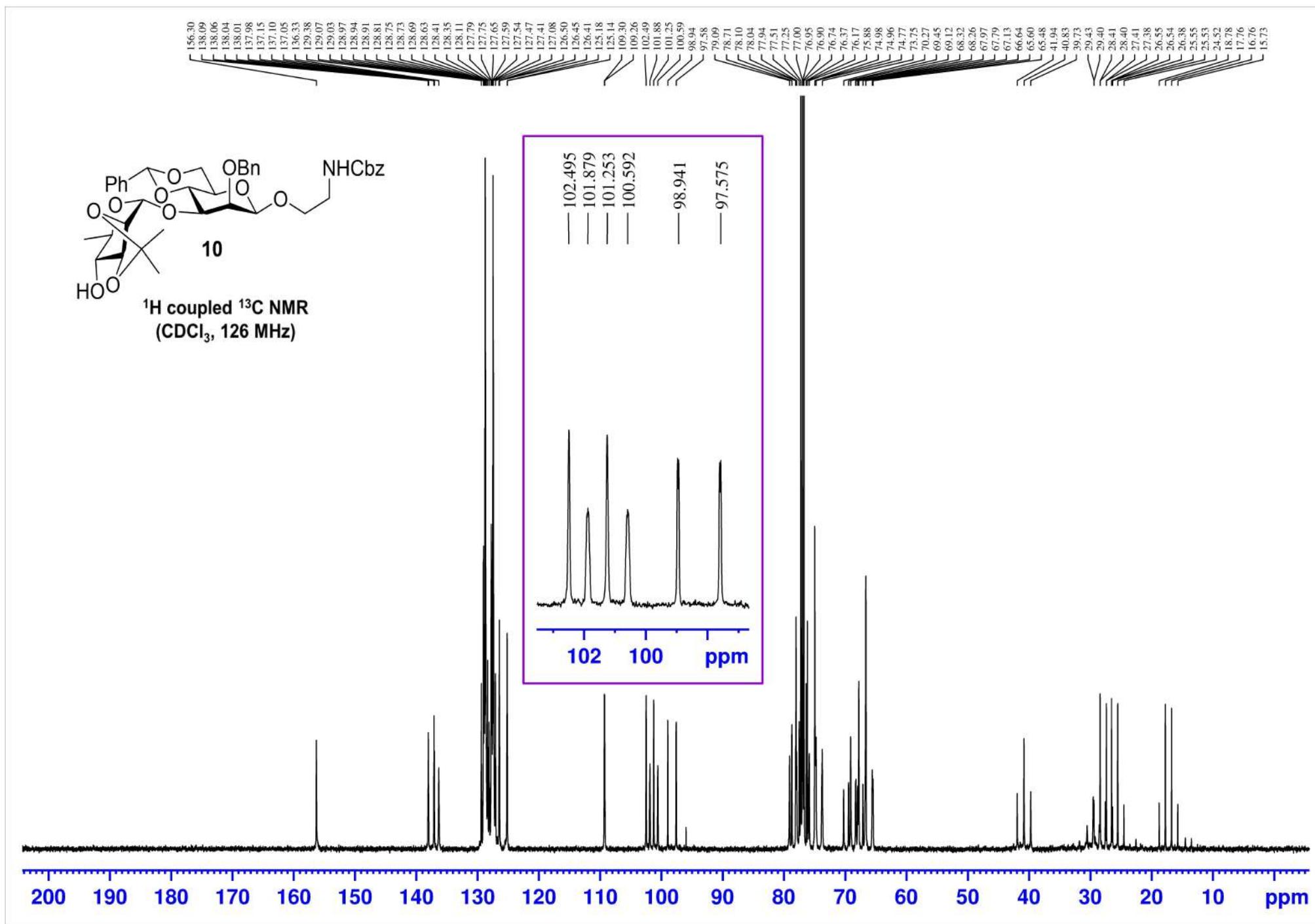




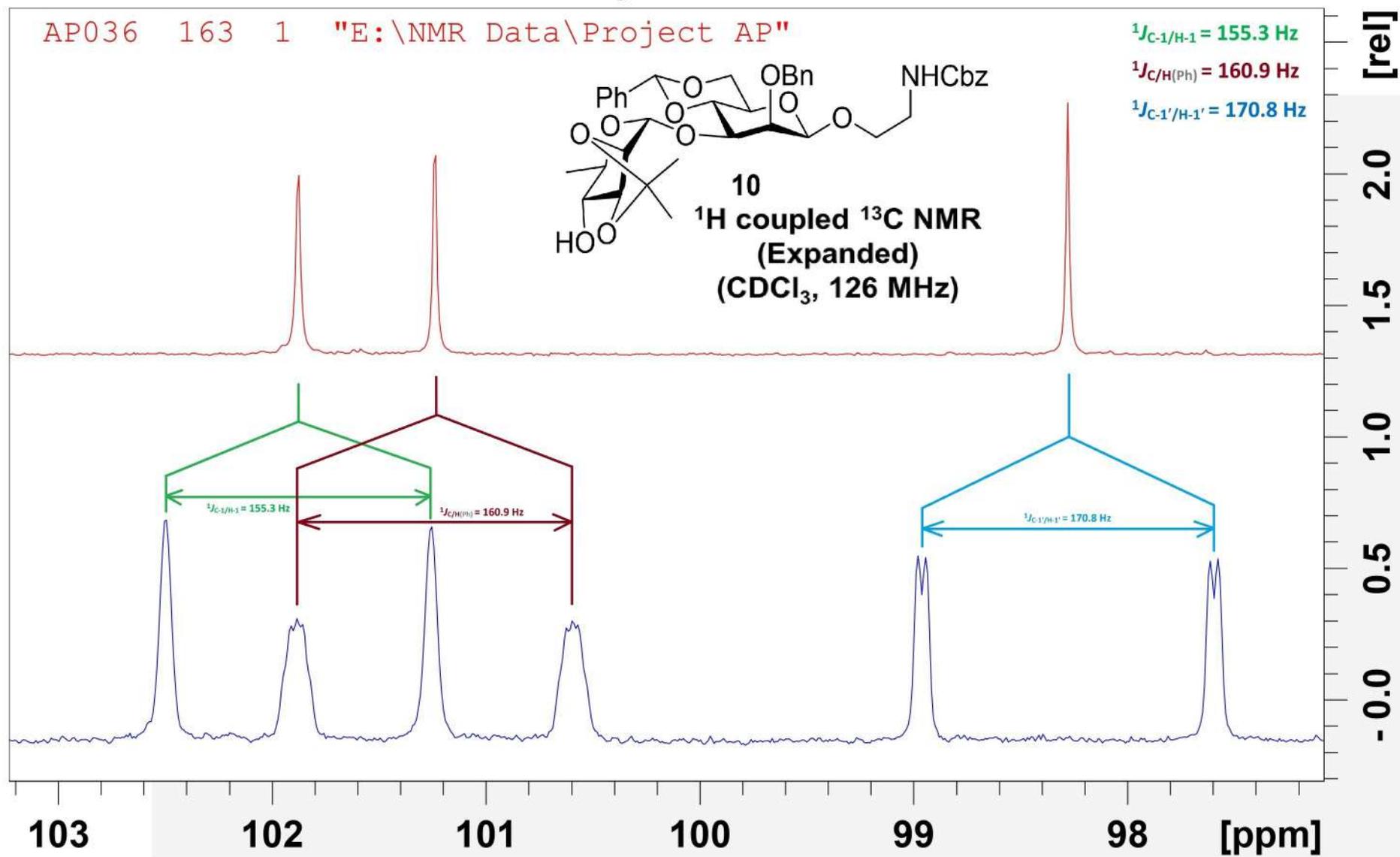


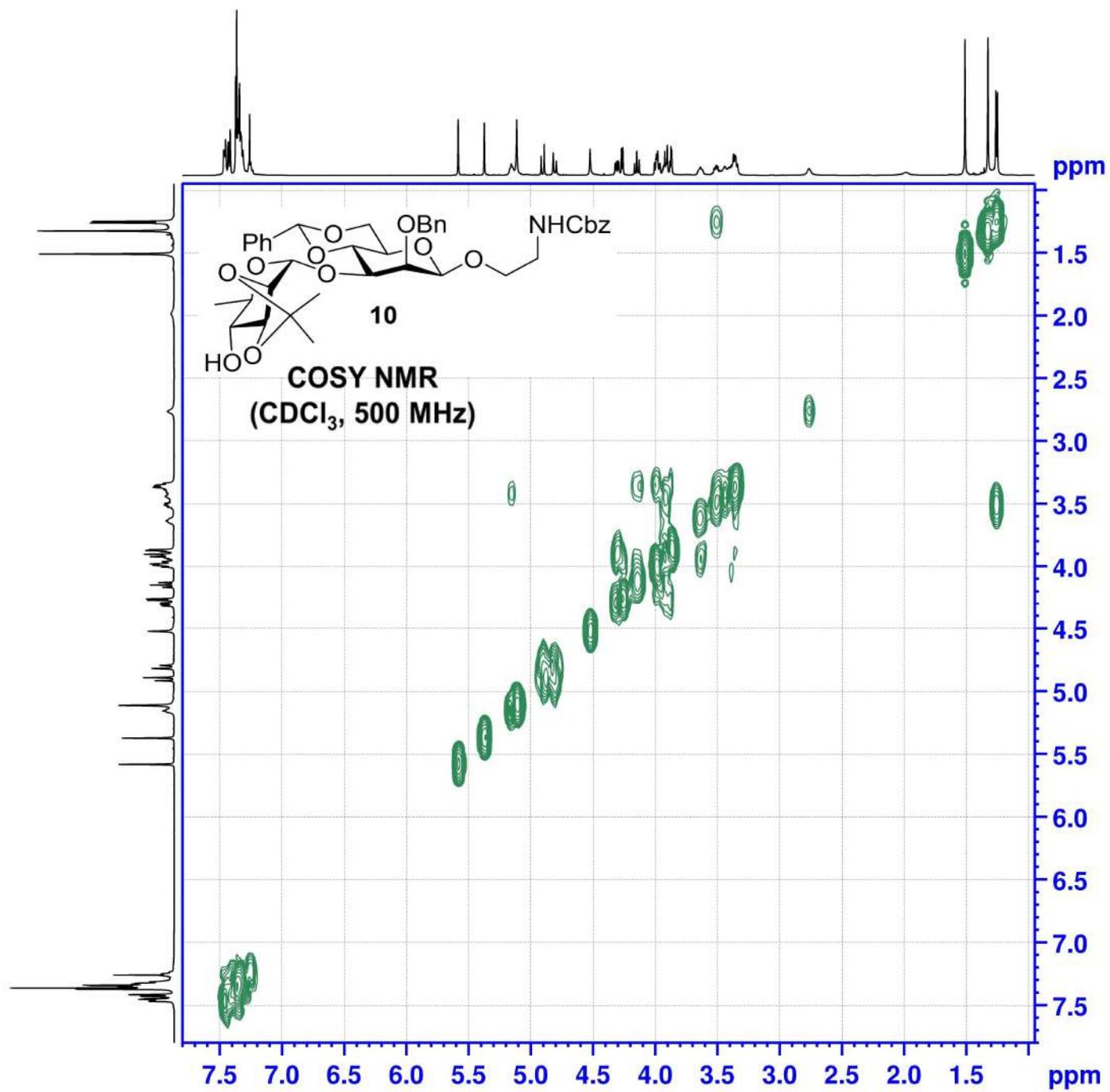
¹³C{¹H} NMR (CDCl₃, 126 MHz)

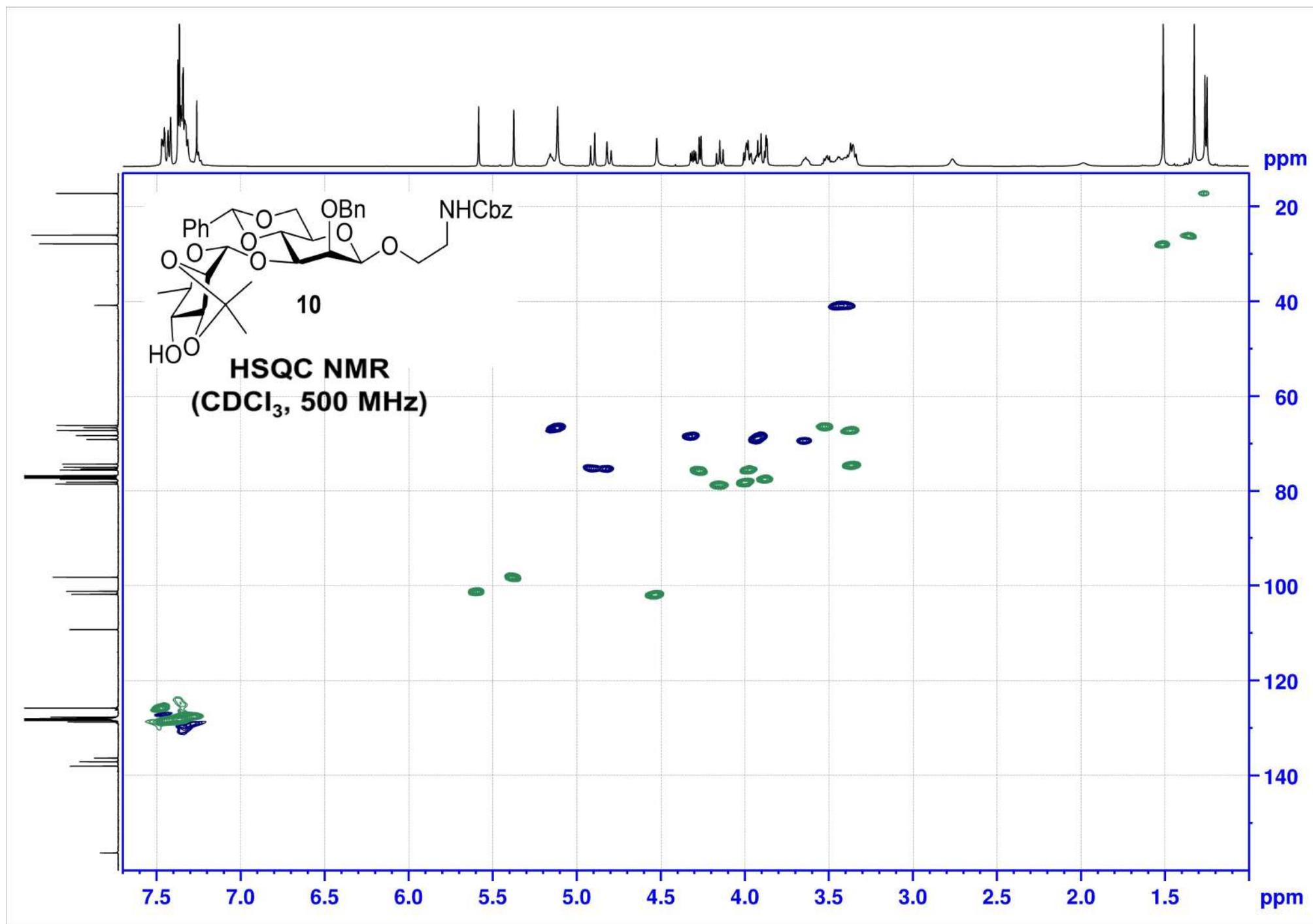




AP036 164 1 "E:\NMR Data\Project AP"

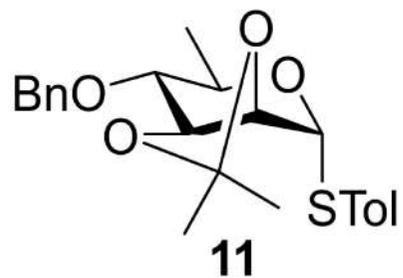




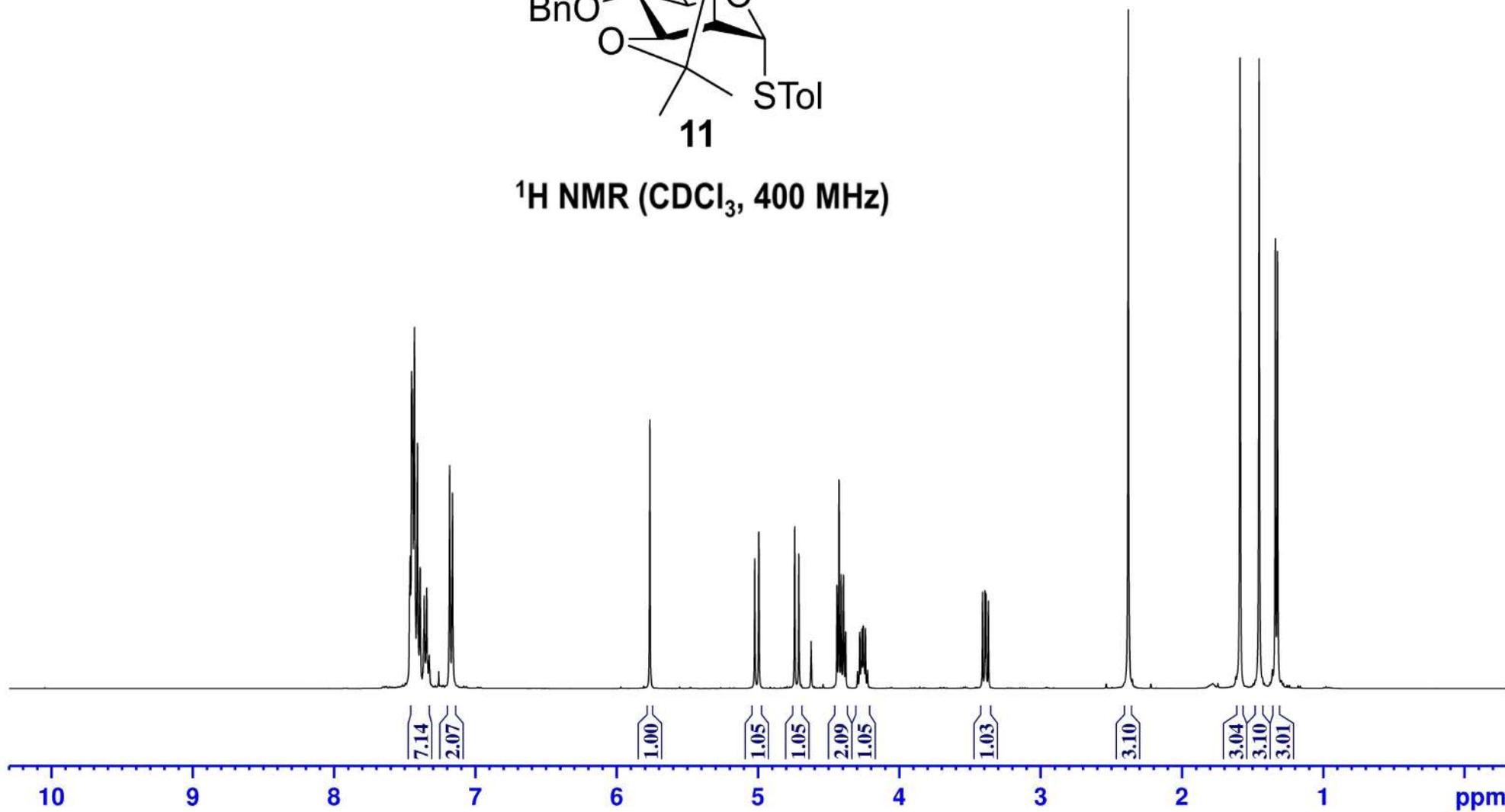


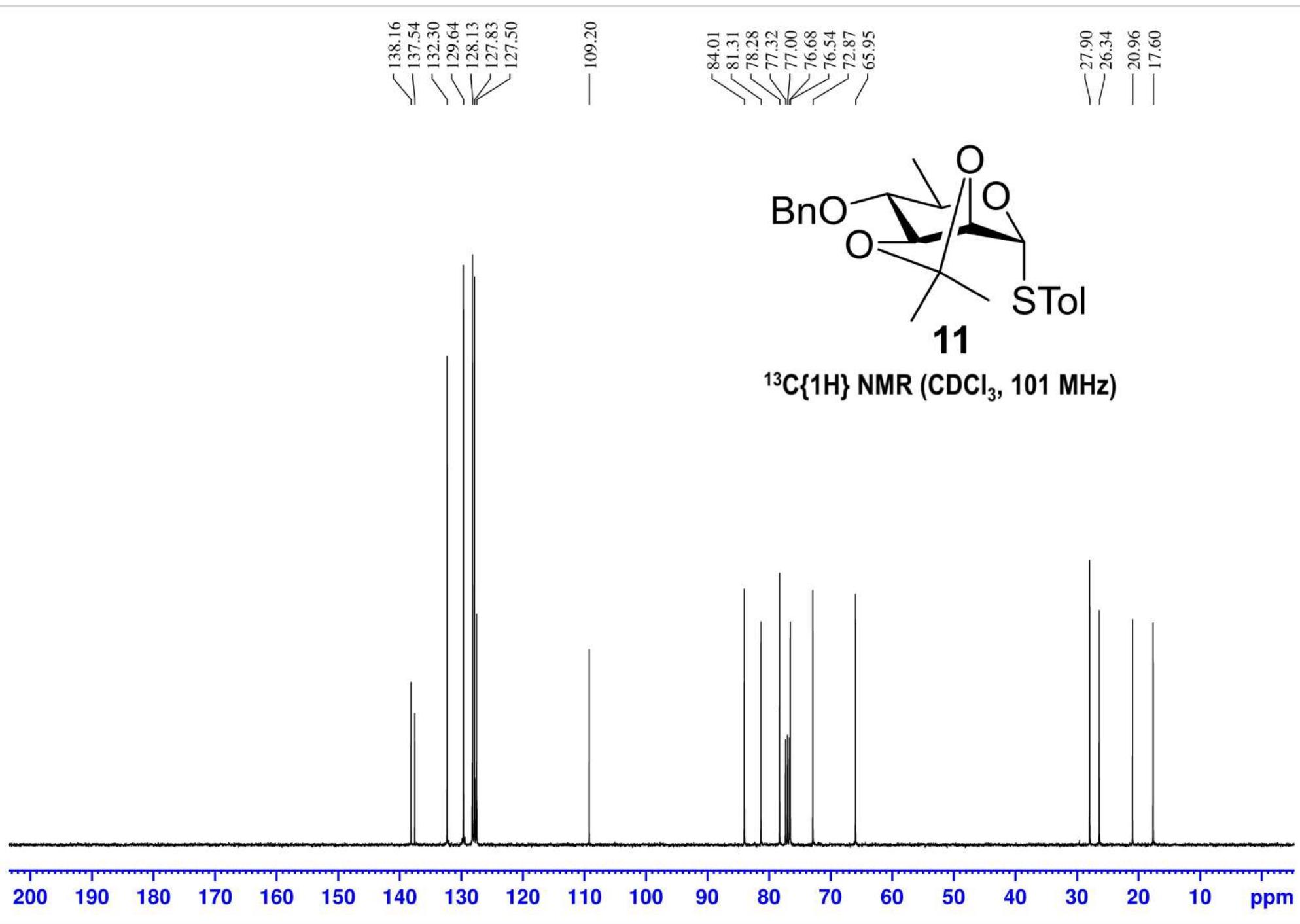
7.466
7.462
7.457
7.451
7.446
7.431
7.428
7.410
7.406
7.391
7.372
7.366
7.362
7.358
7.351
7.344
7.338
7.330
7.327
7.323
7.260
7.183
7.163
5.765
5.023
4.994
4.740
4.711
4.442
4.428
4.412
4.395
4.380
4.296
4.280
4.271
4.265
4.256
4.250
4.240
4.225
3.411
3.394
3.387
3.369
2.380

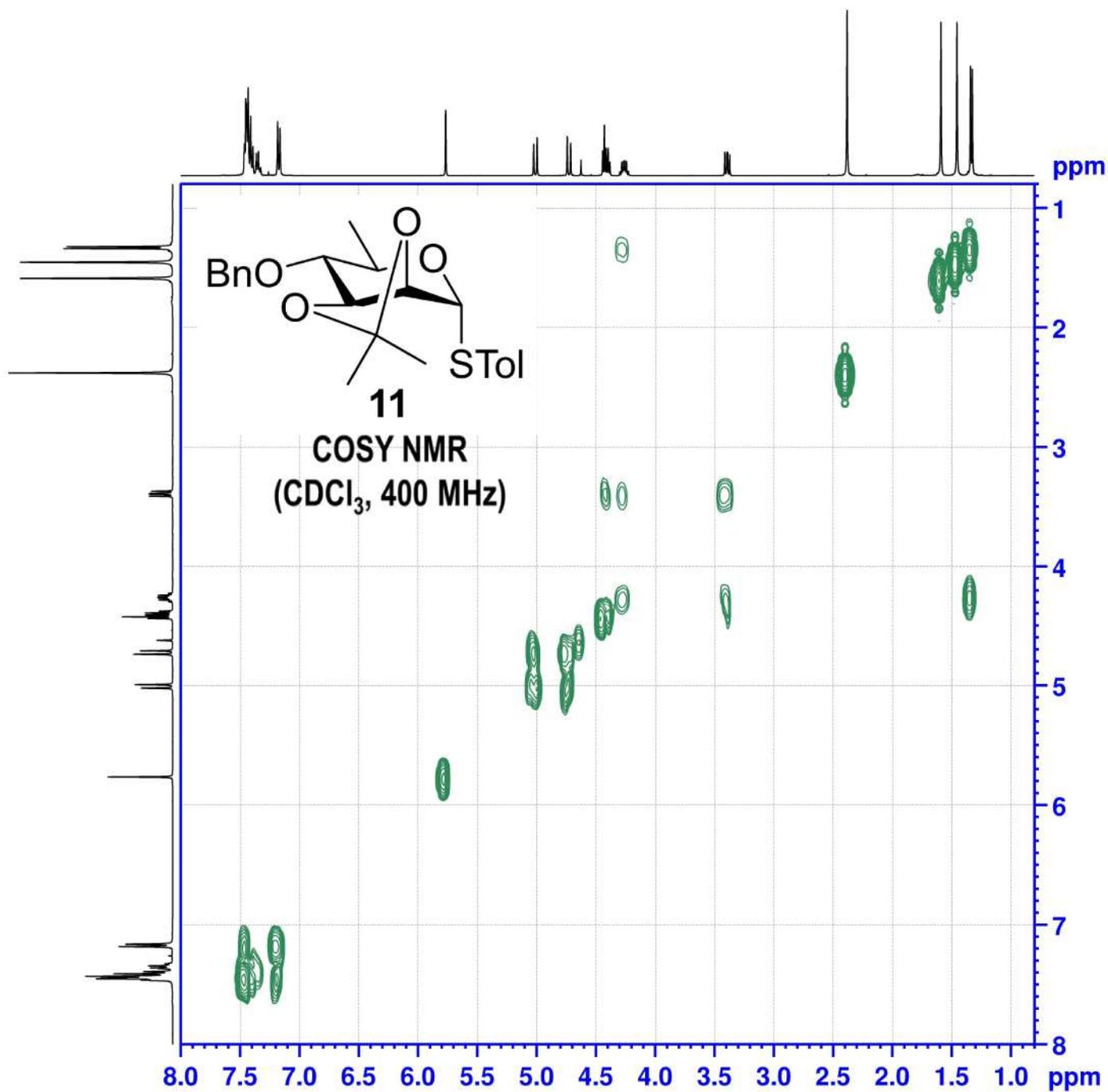
1.589
1.454
1.339
1.324

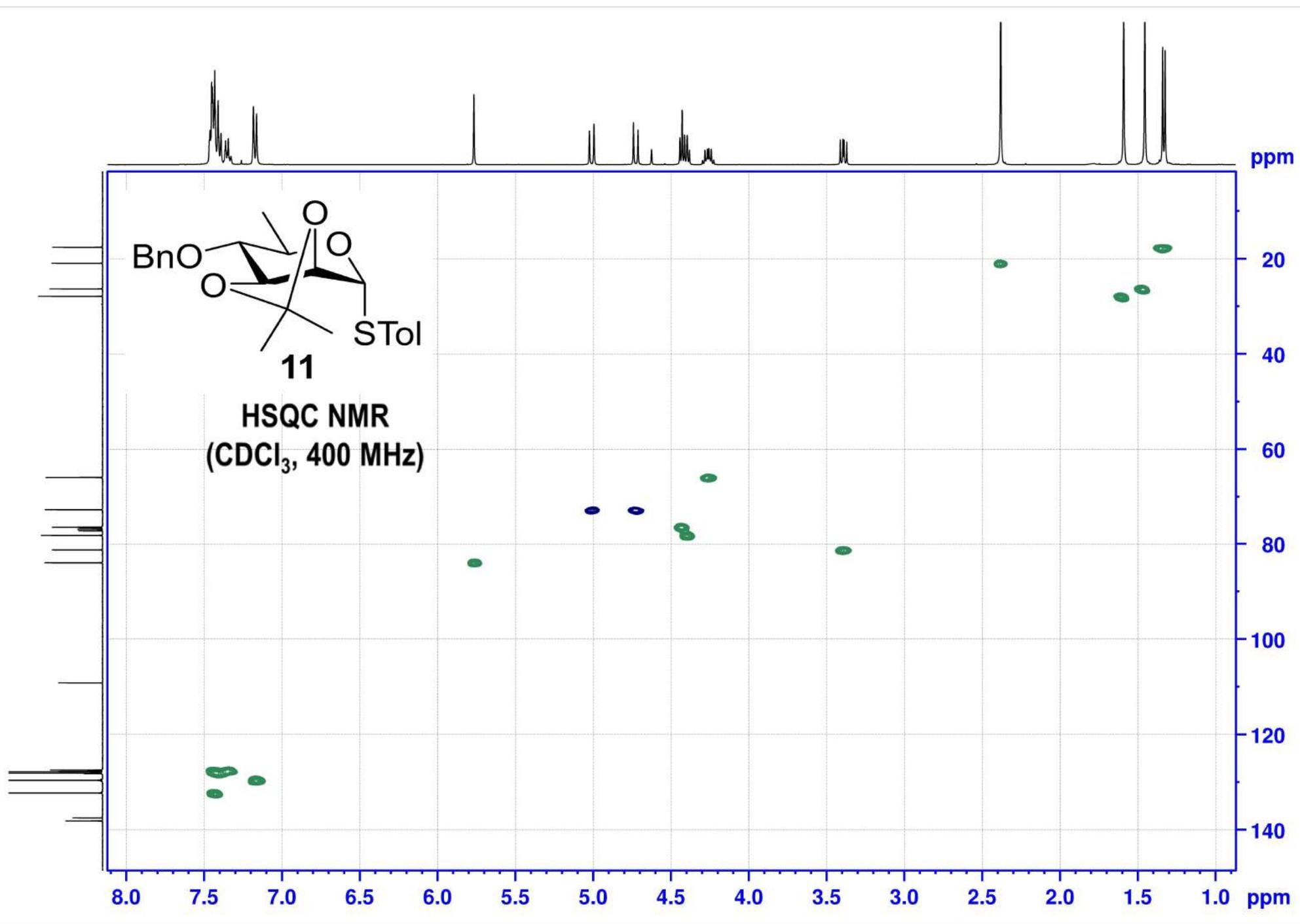


¹H NMR (CDCl₃, 400 MHz)

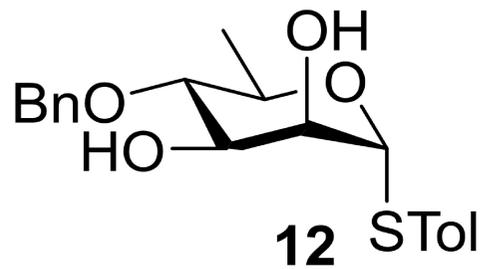




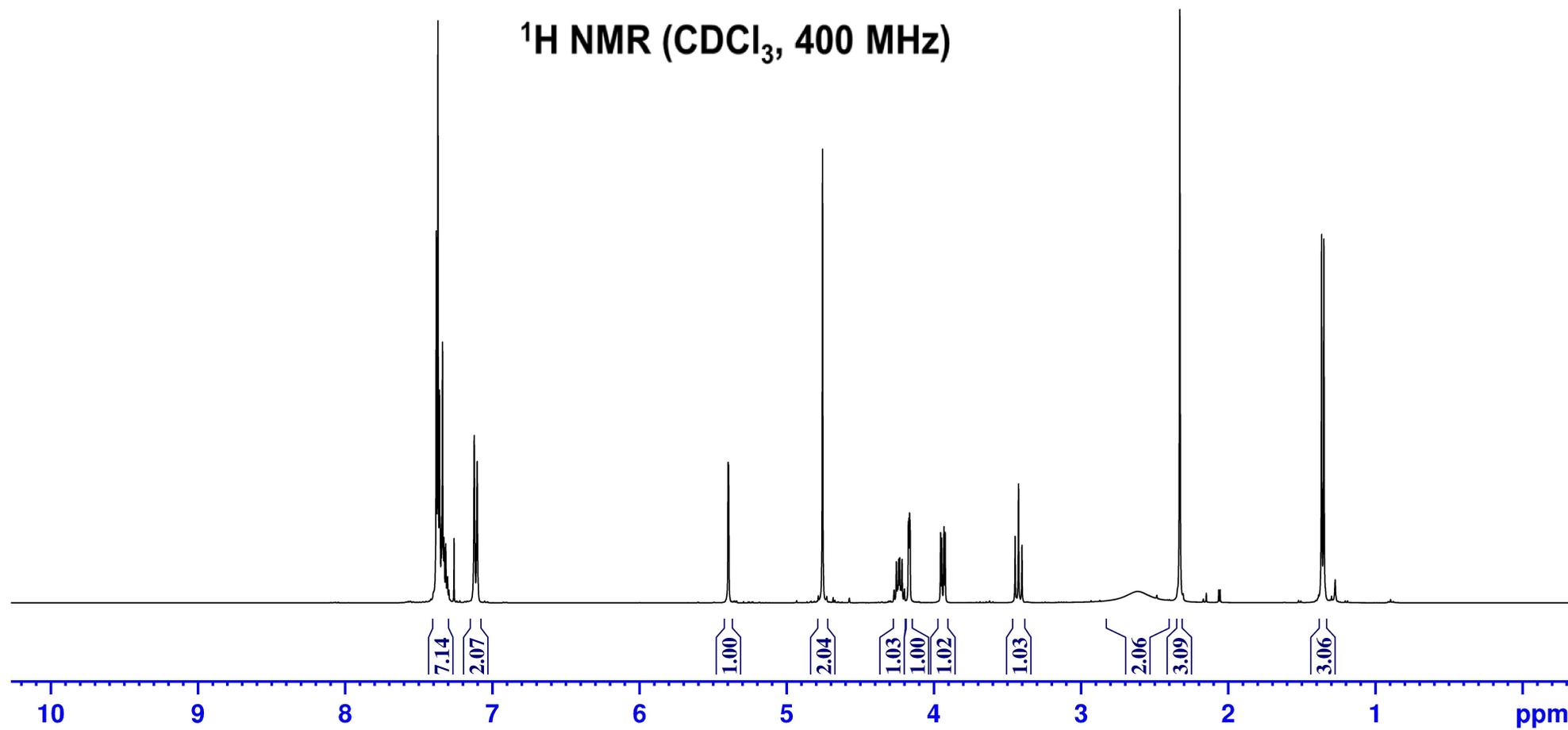


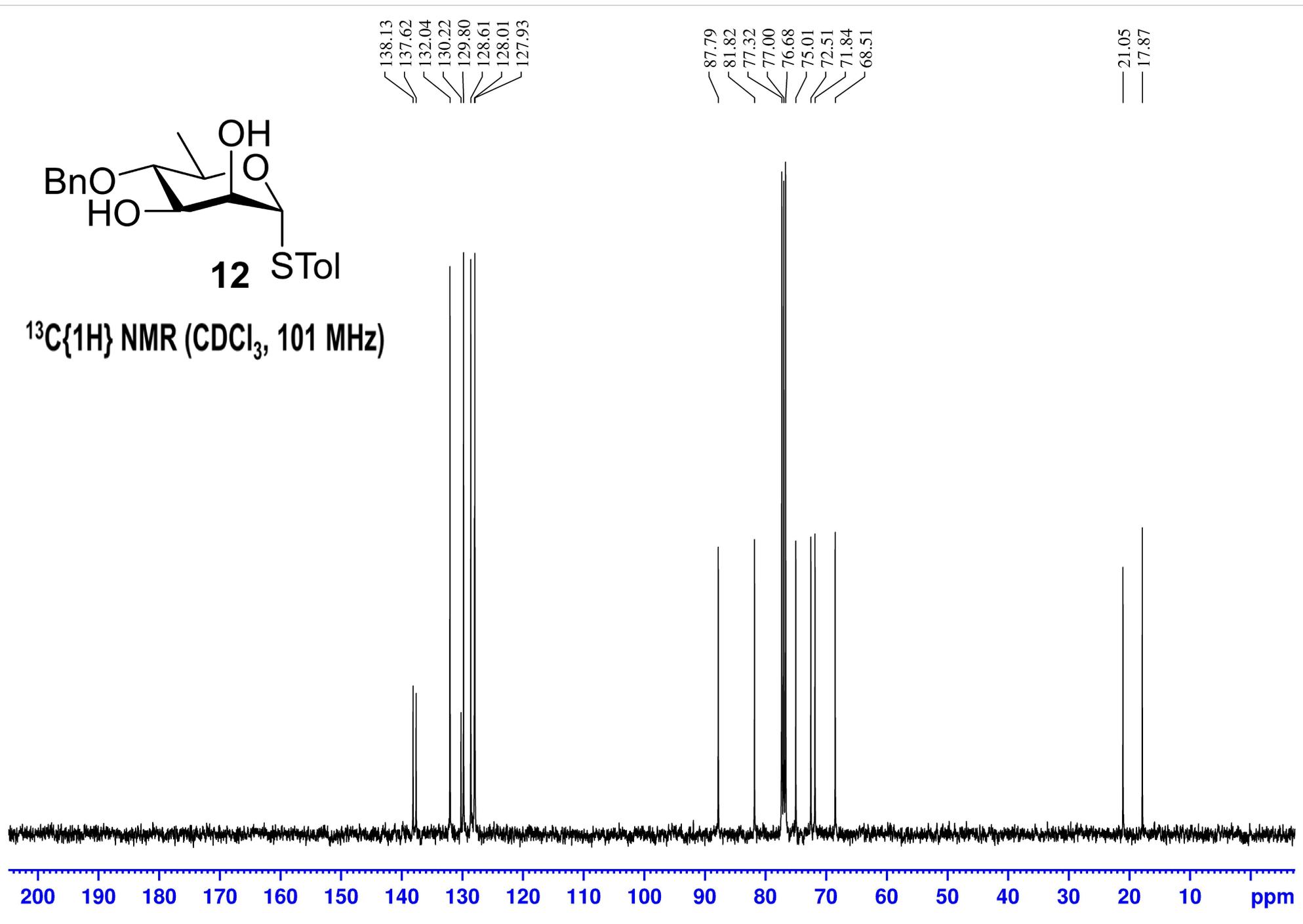


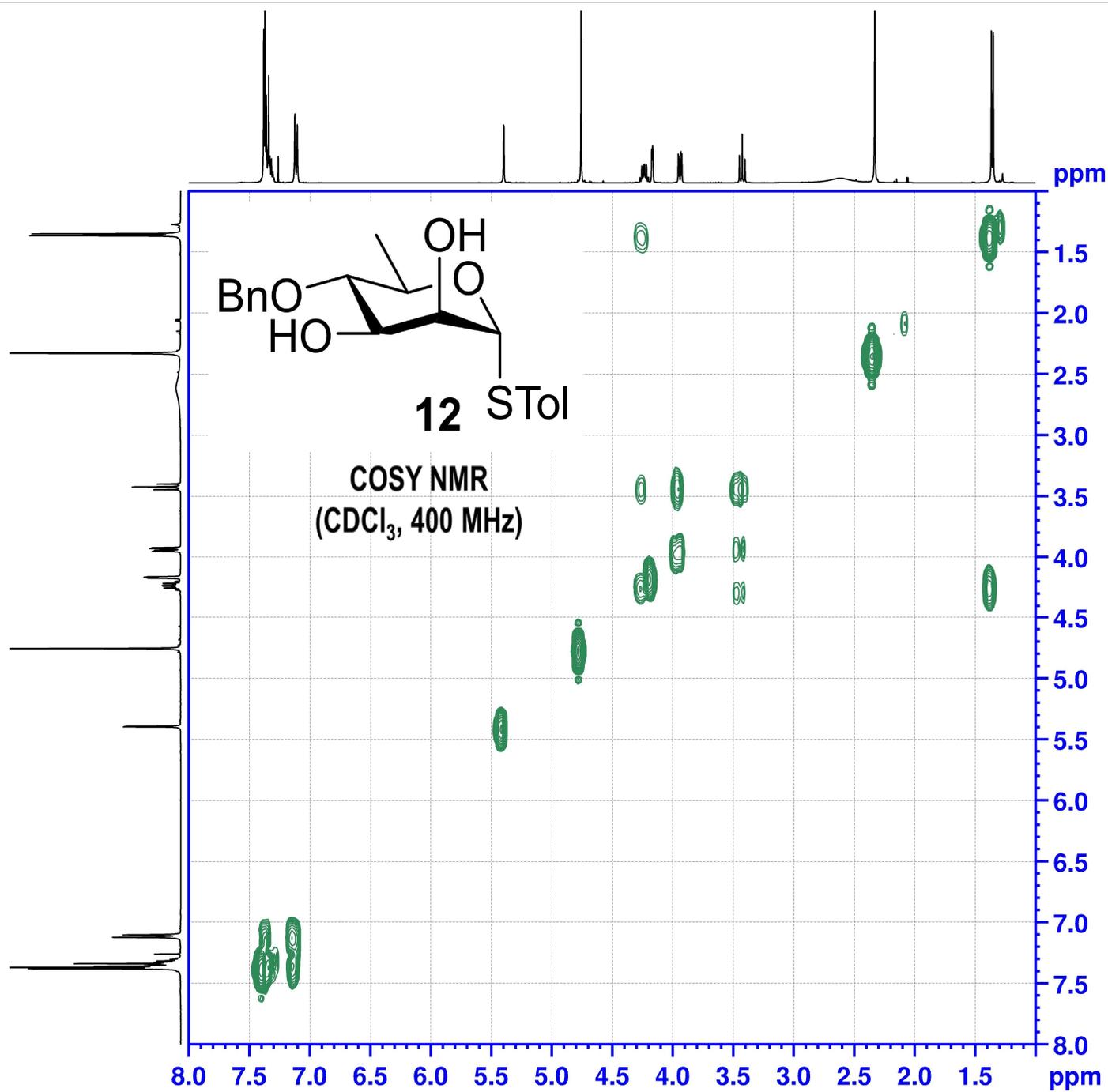
7.381
7.370
7.359
7.347
7.338
7.329
7.316
7.308
7.304
7.295
7.260
7.123
7.103
5.397
5.394
4.756
4.270
4.255
4.247
4.239
4.231
4.223
4.216
4.200
4.173
4.169
4.165
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3.401
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2.328
1.365
1.349

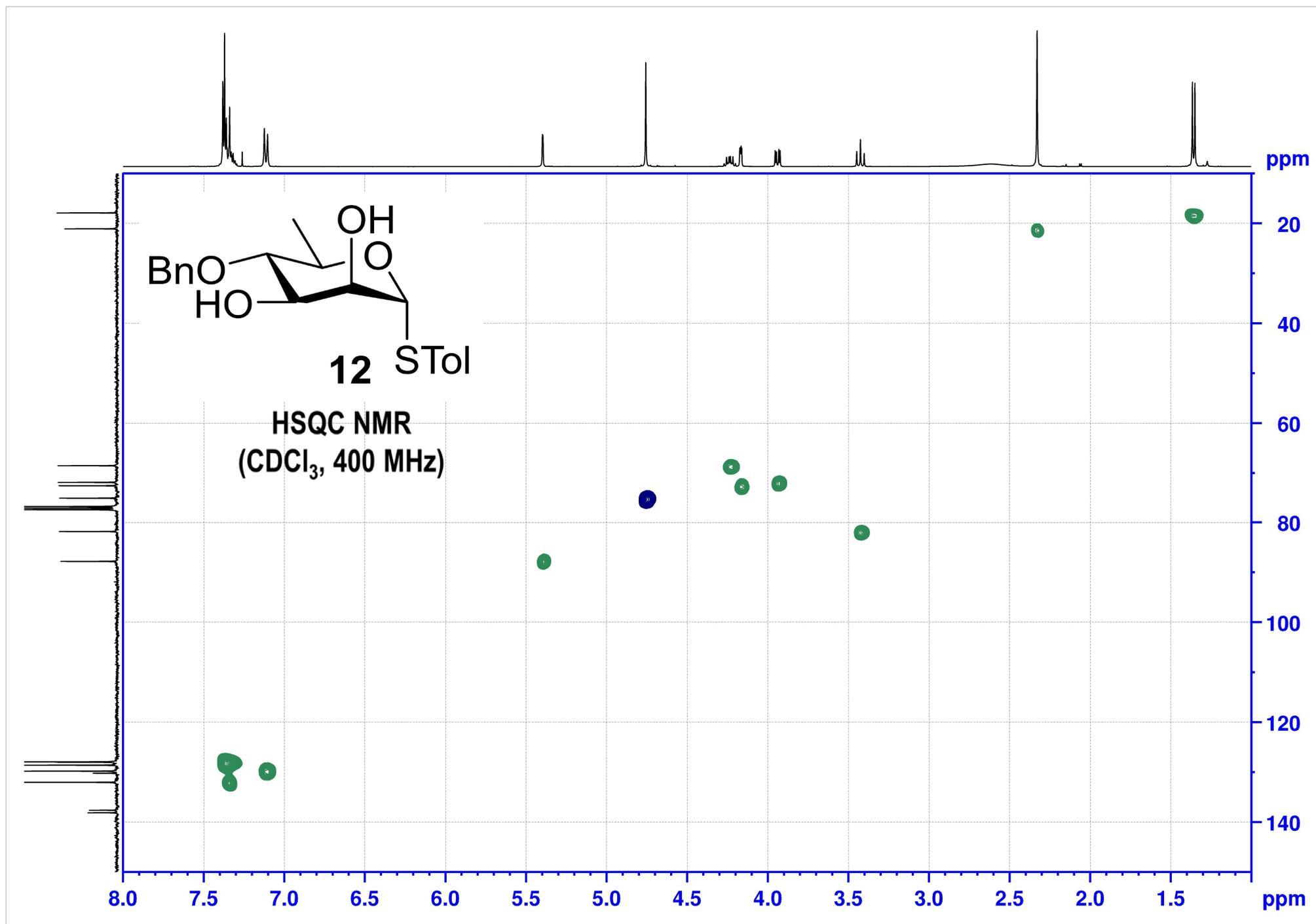


¹H NMR (CDCl₃, 400 MHz)



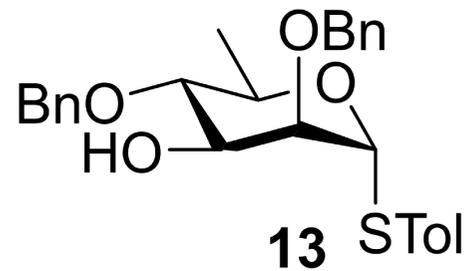




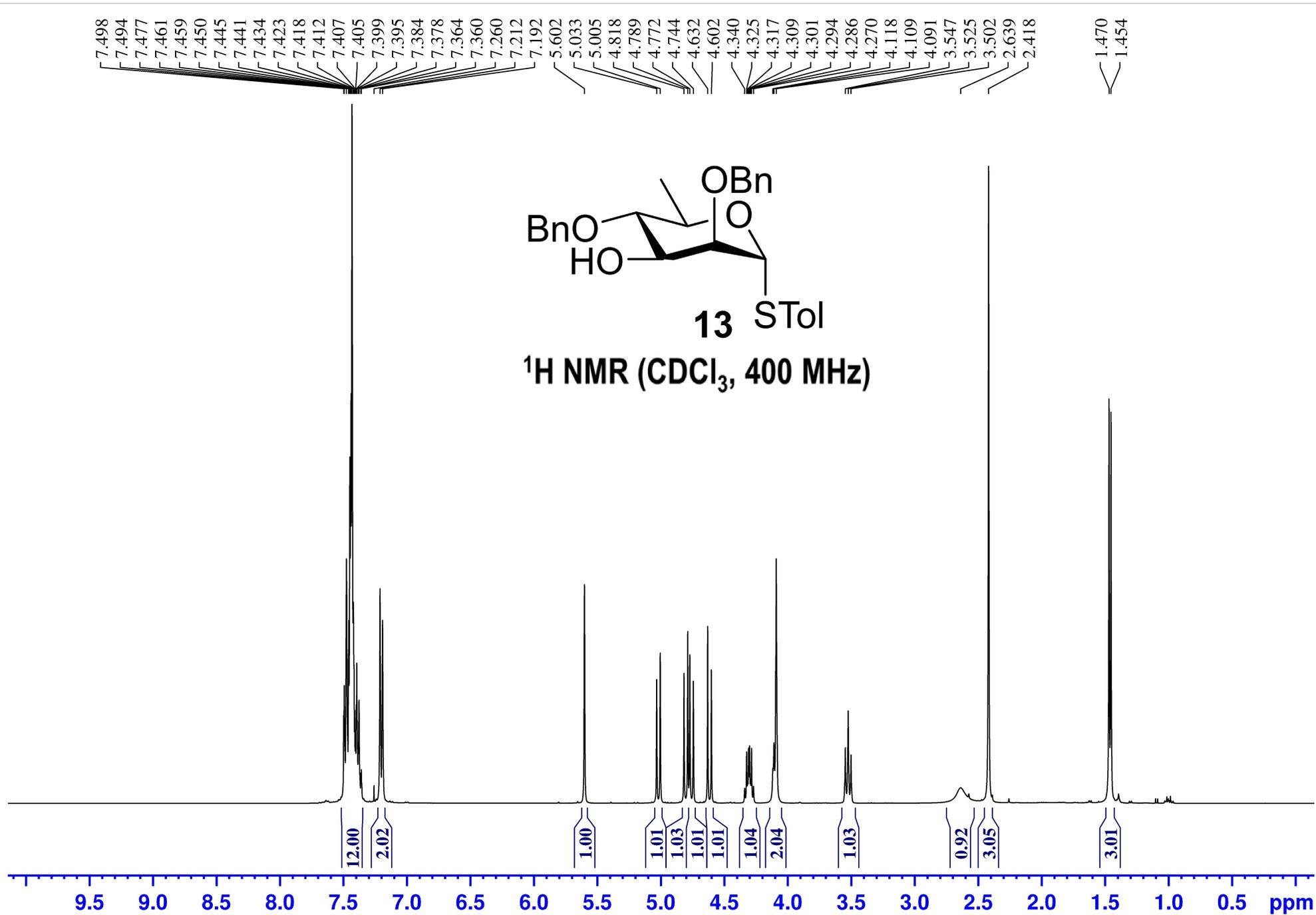


GROUP BM
BM-SNM-AP028 in CDCl₁

S-55



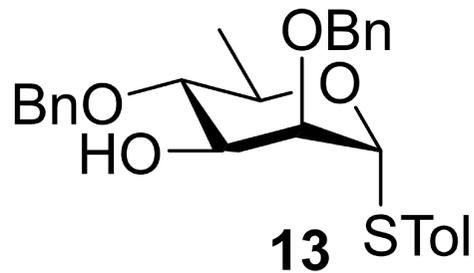
¹H NMR (CDCl₃, 400 MHz)



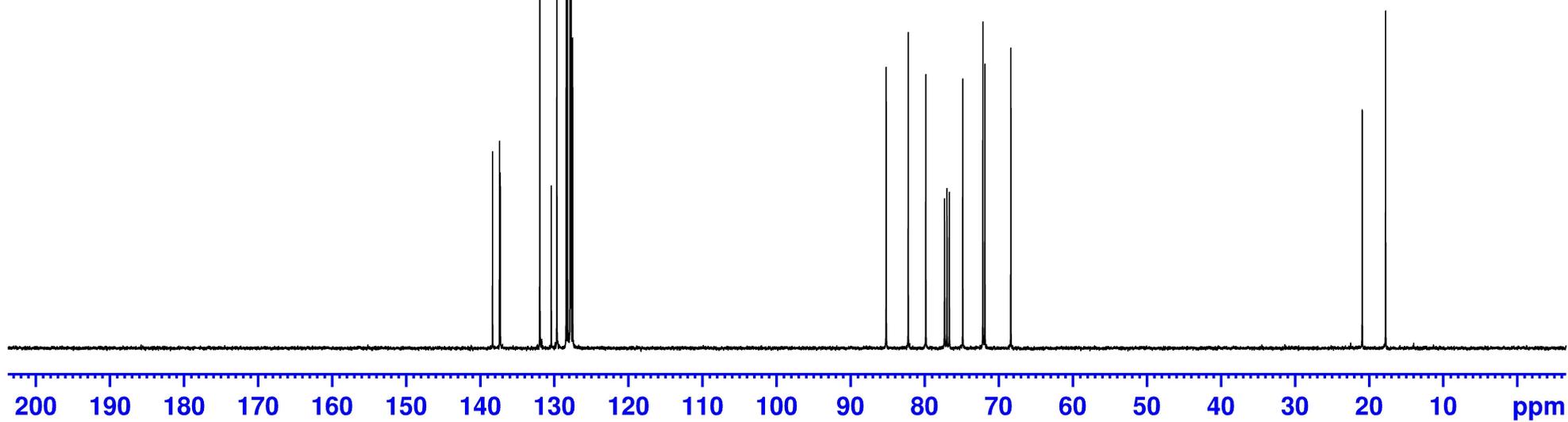
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131.96
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129.66
128.40
128.22
127.89
127.82
127.73
127.53

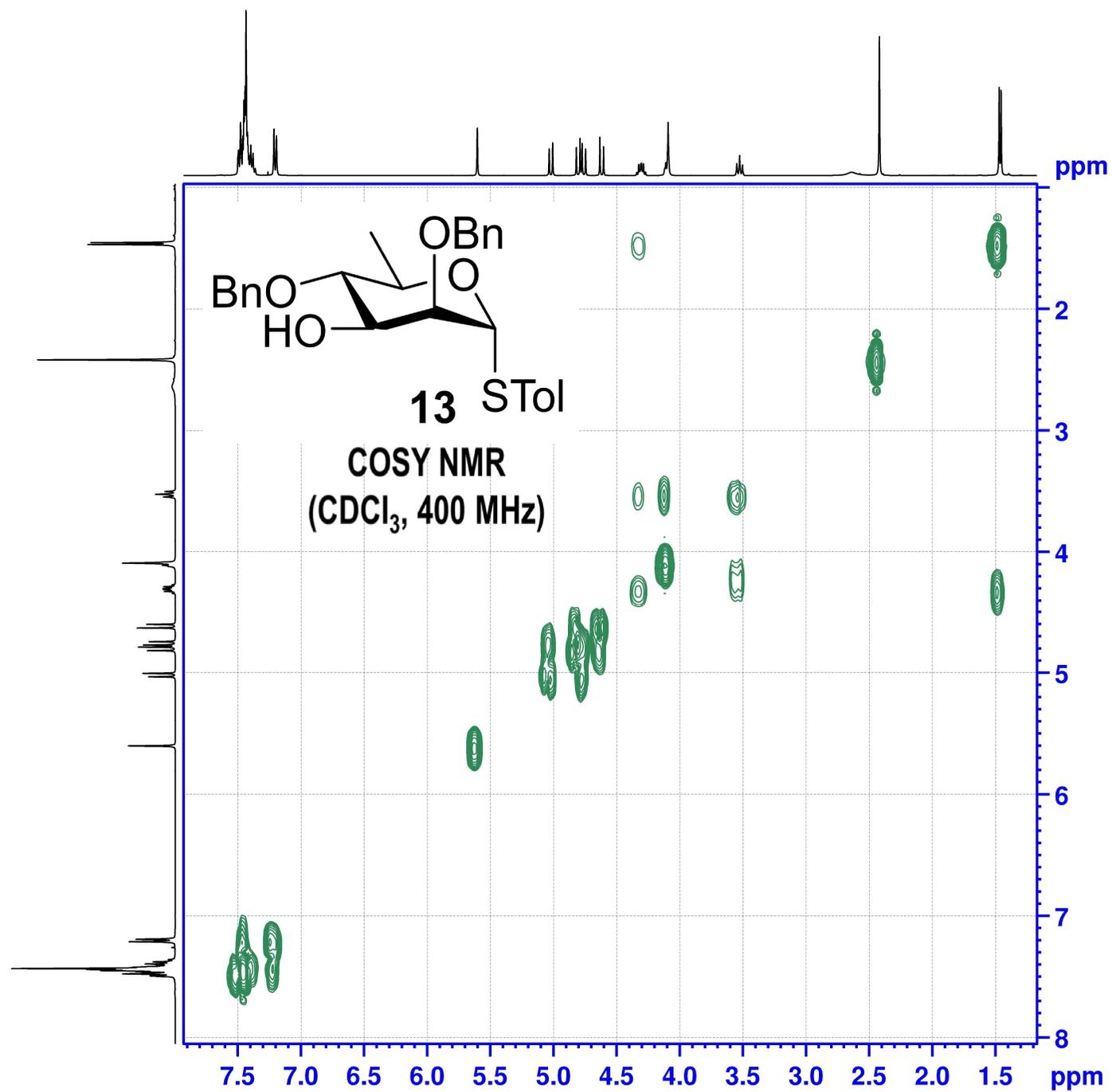
85.20
82.22
79.85
77.32
77.00
76.68
74.86
72.14
71.87
68.37

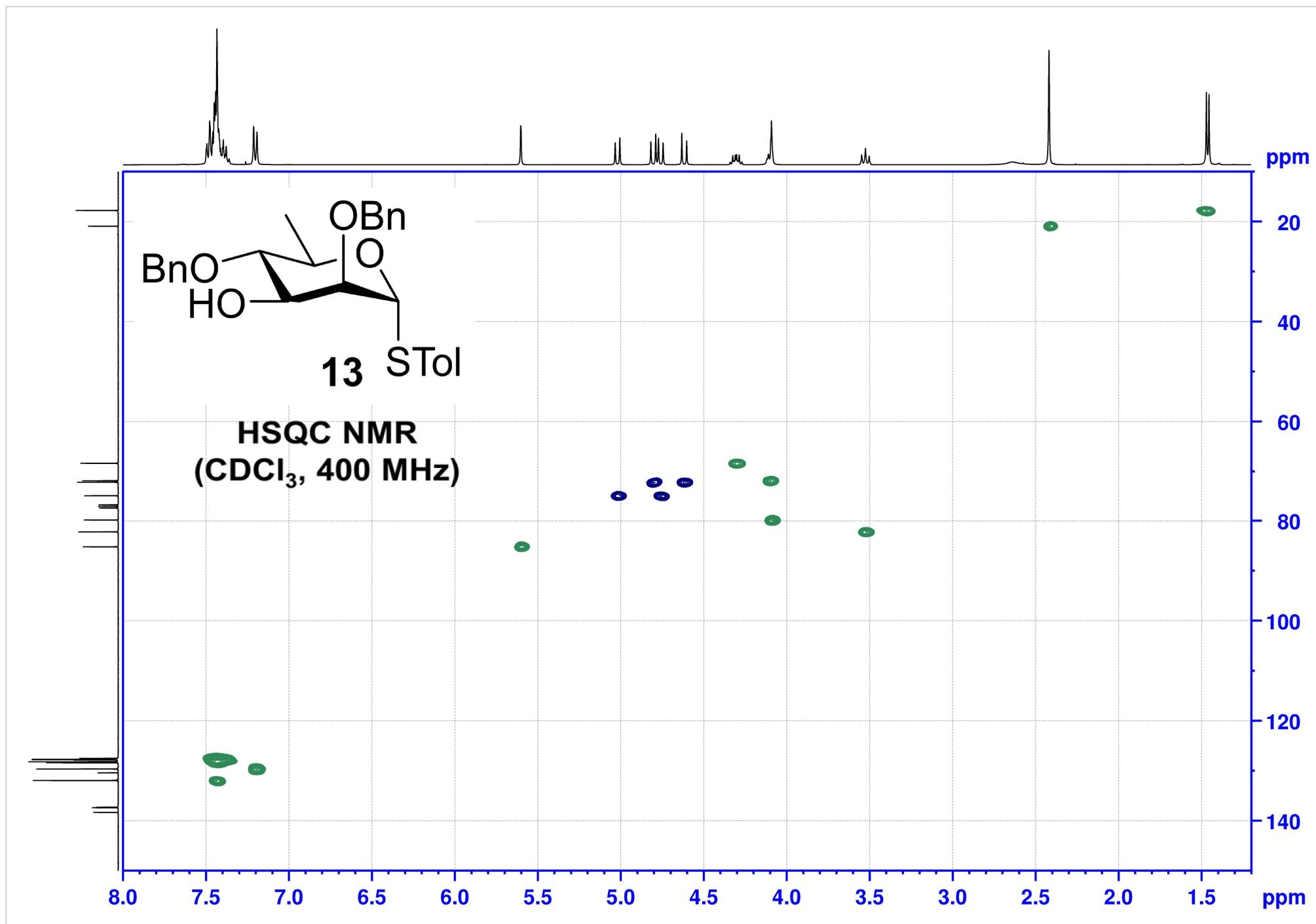
20.93
17.77

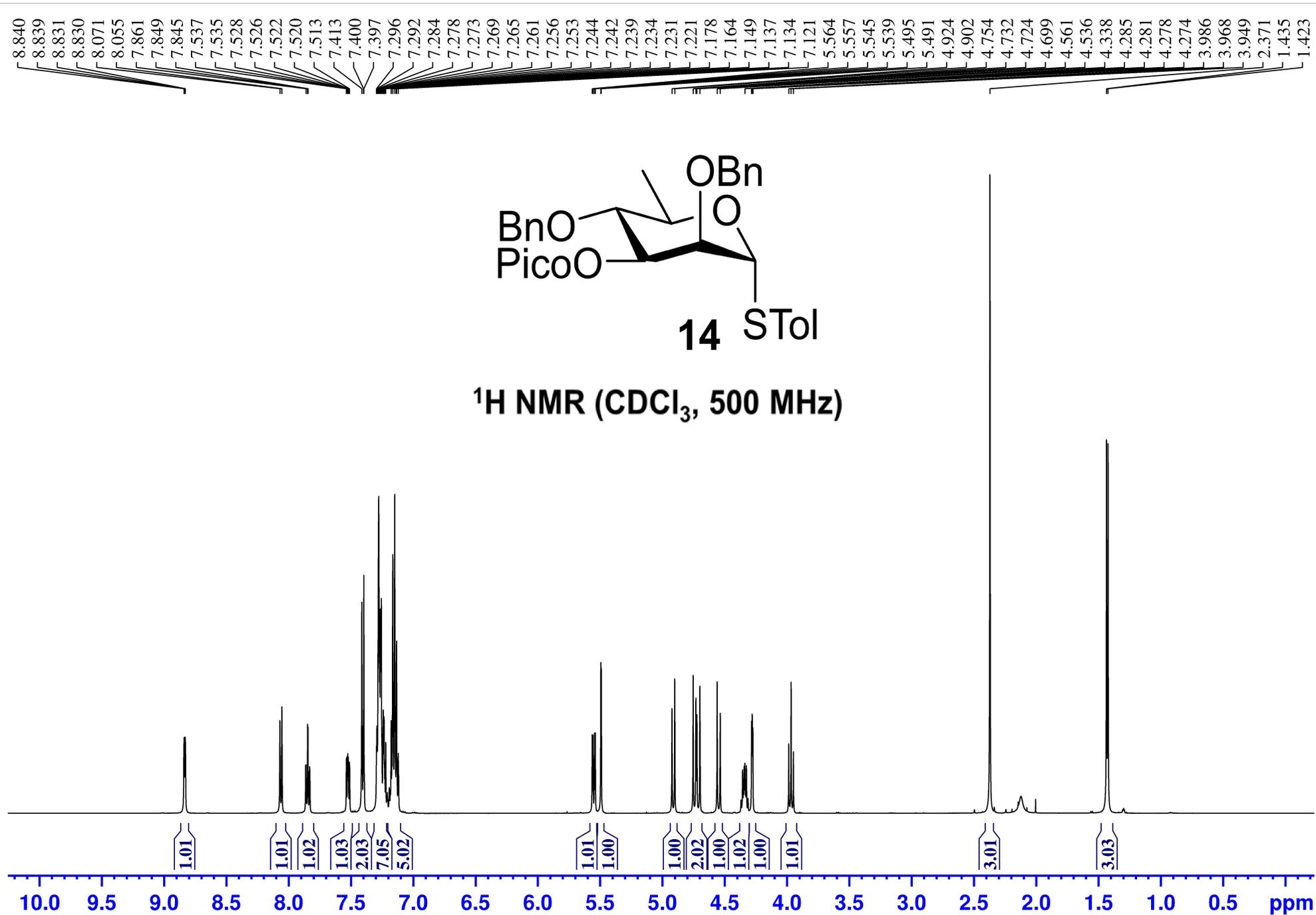


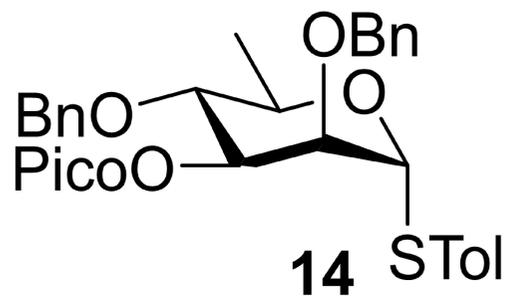
¹³C{¹H} NMR (CDCl₃, 101 MHz)



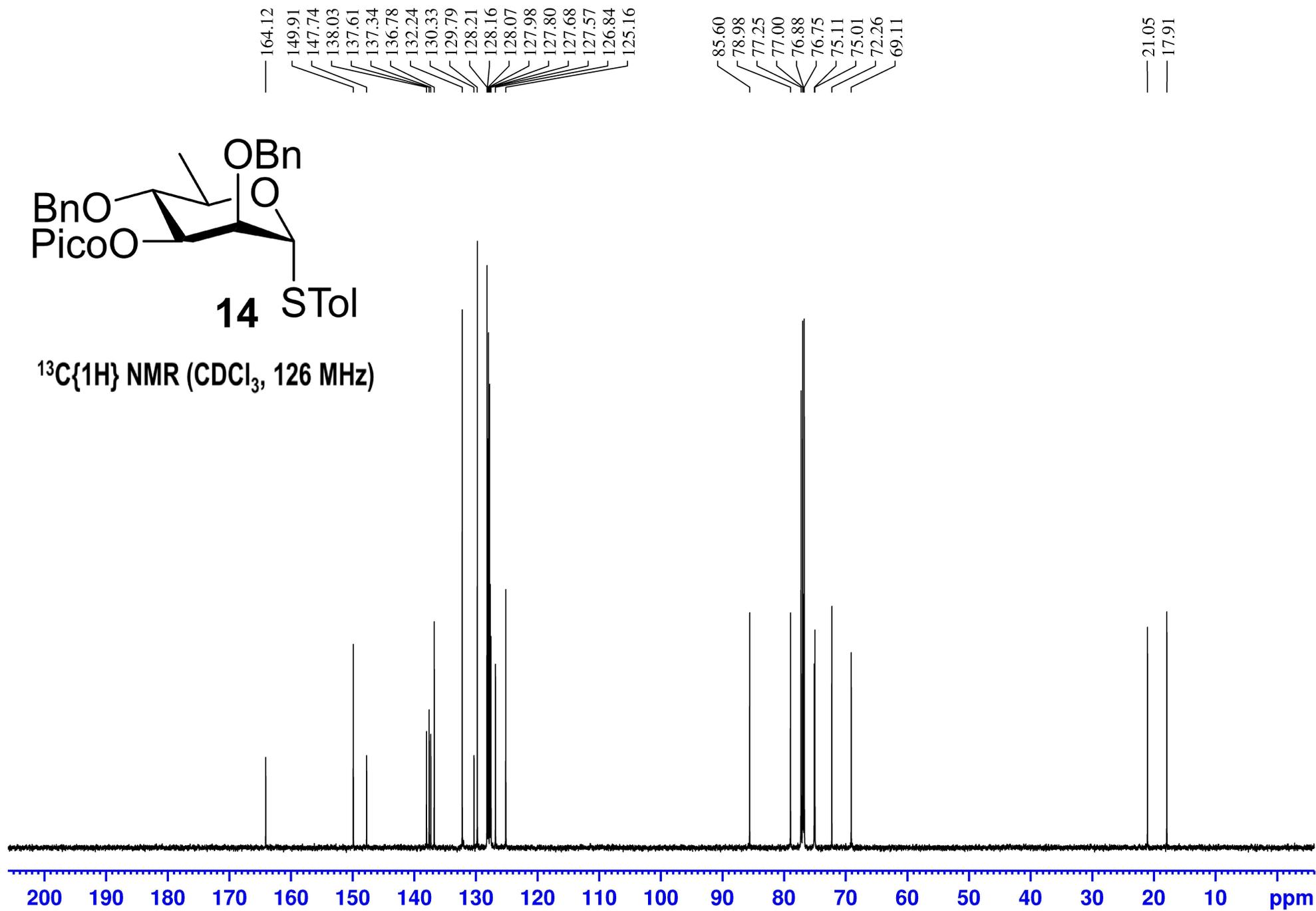


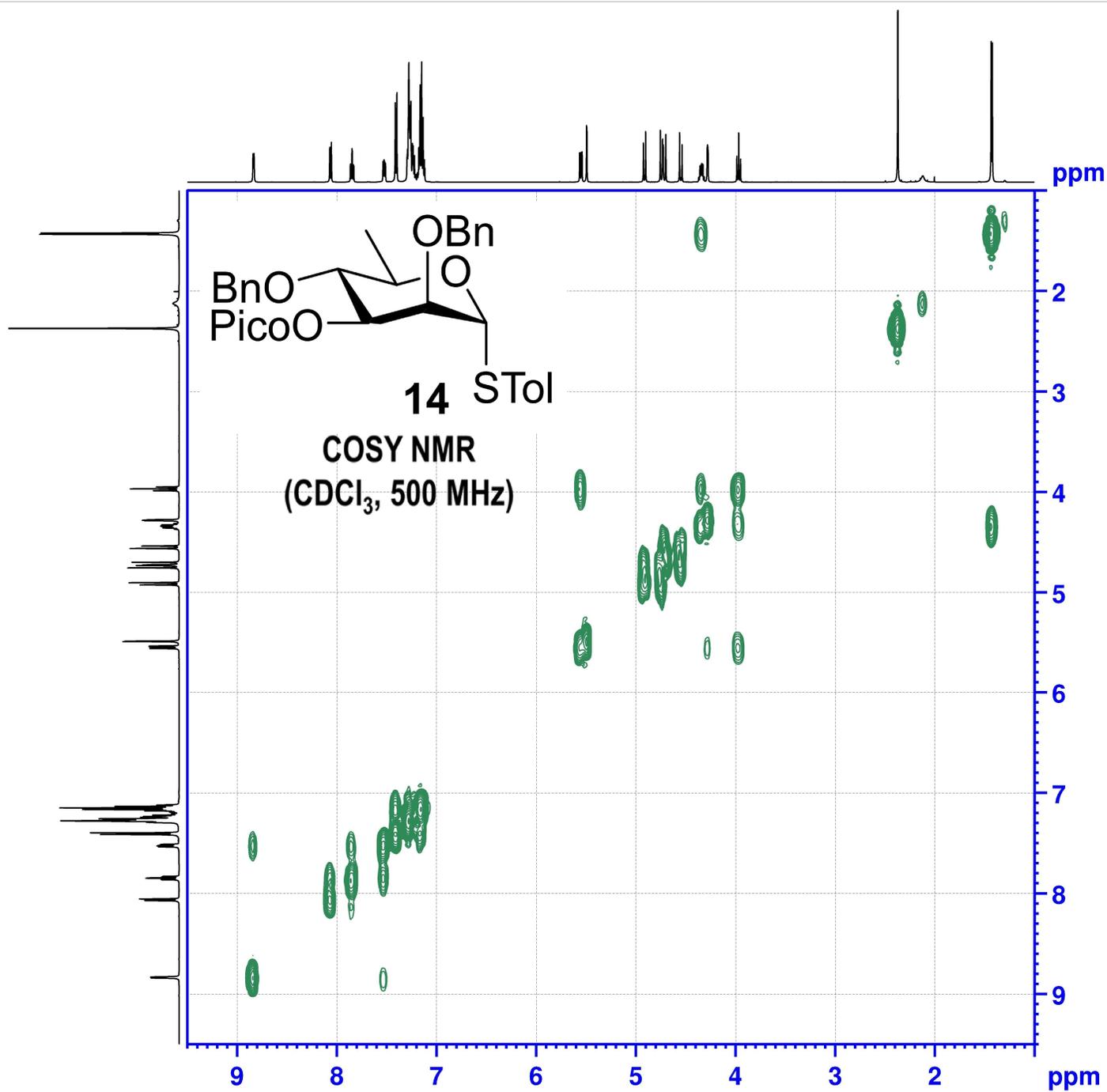


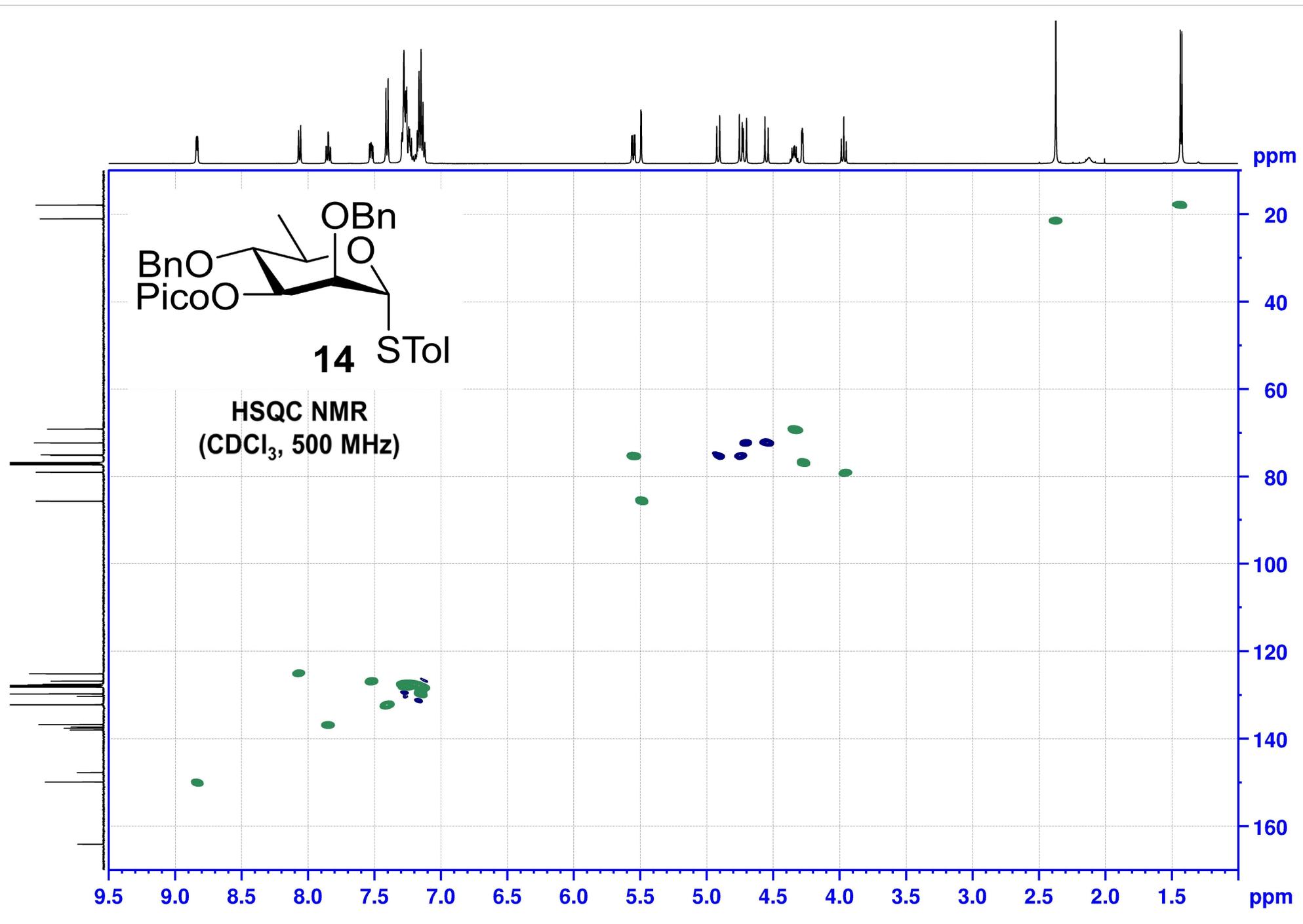


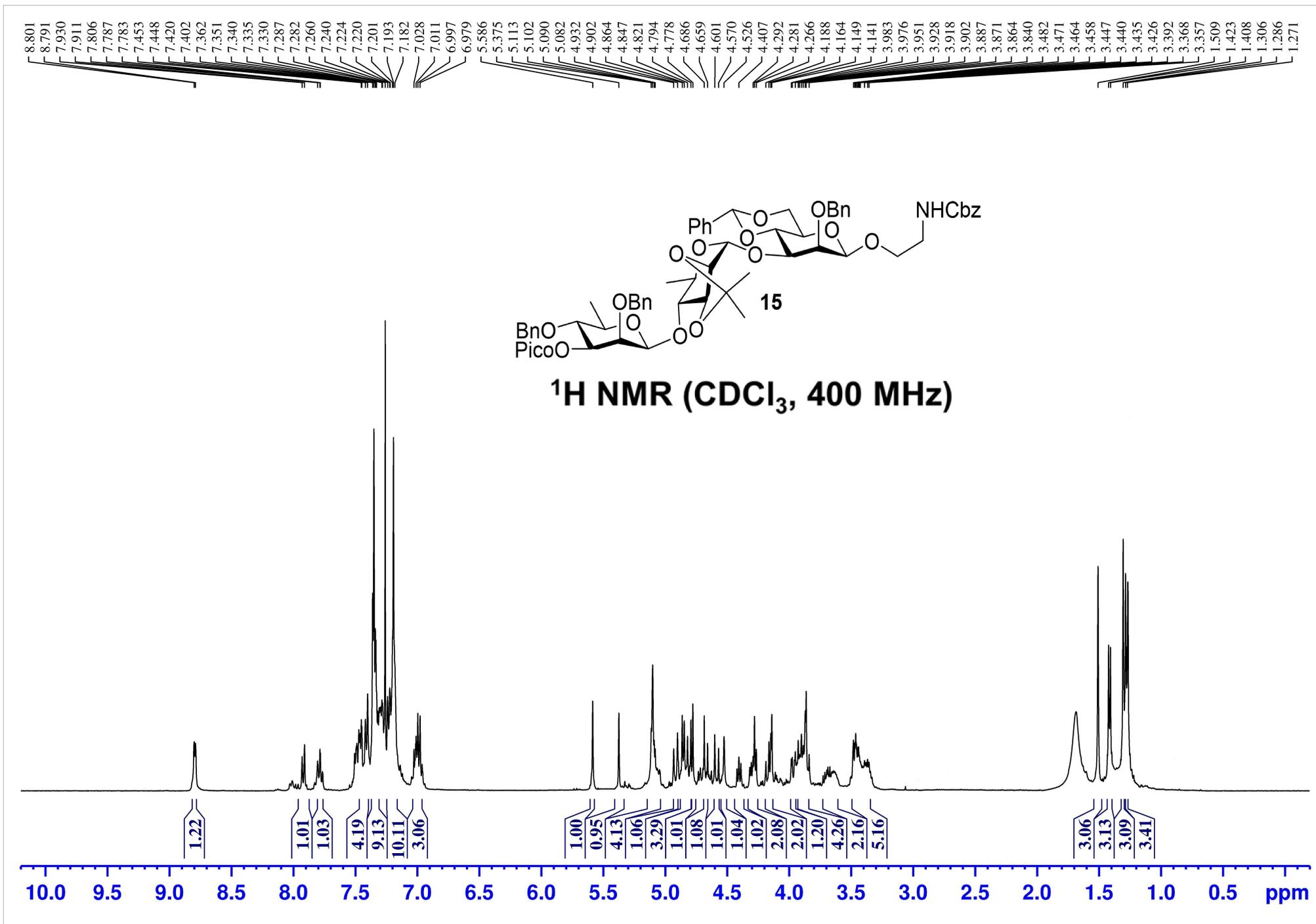


¹³C{¹H} NMR (CDCl₃, 126 MHz)



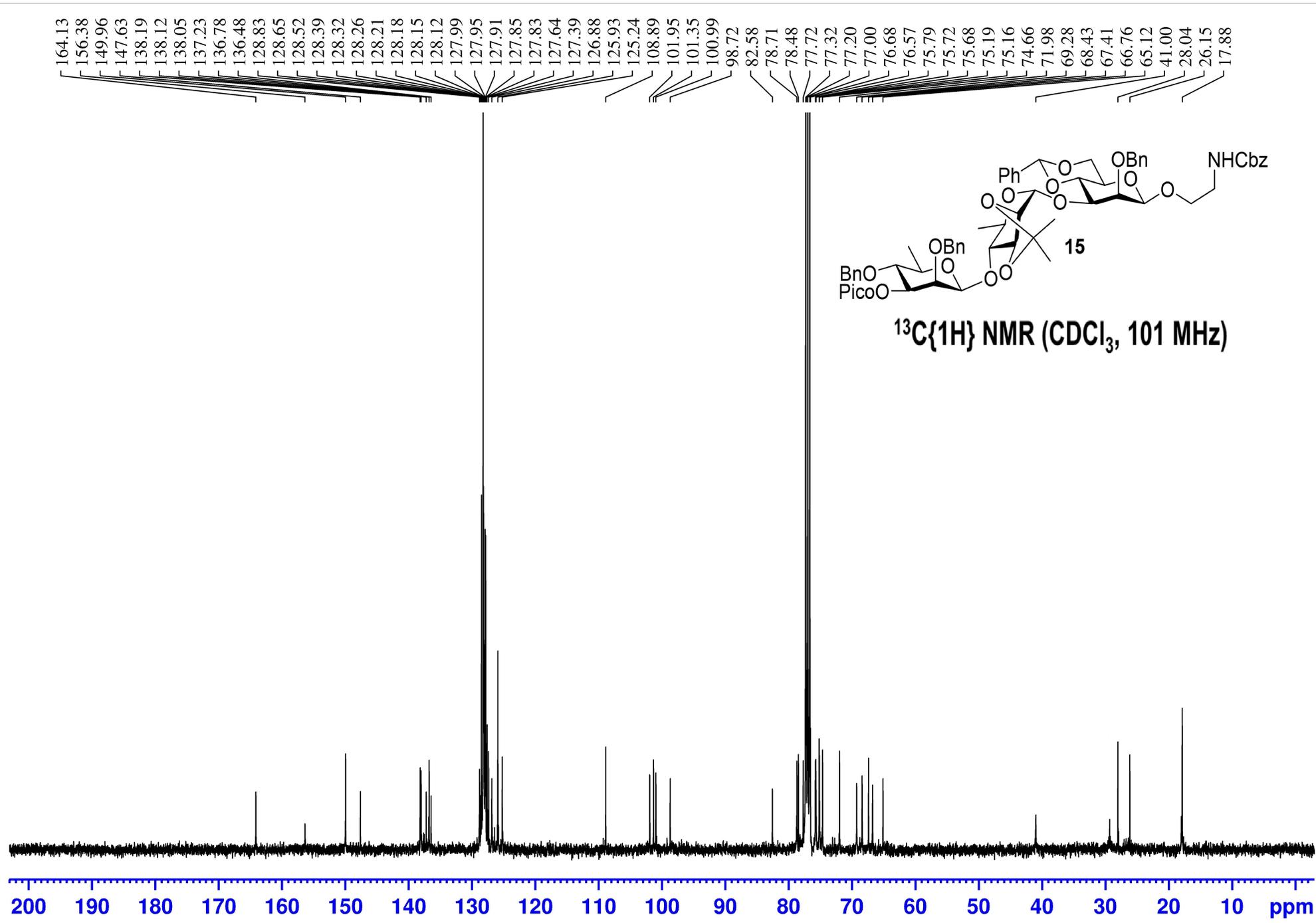


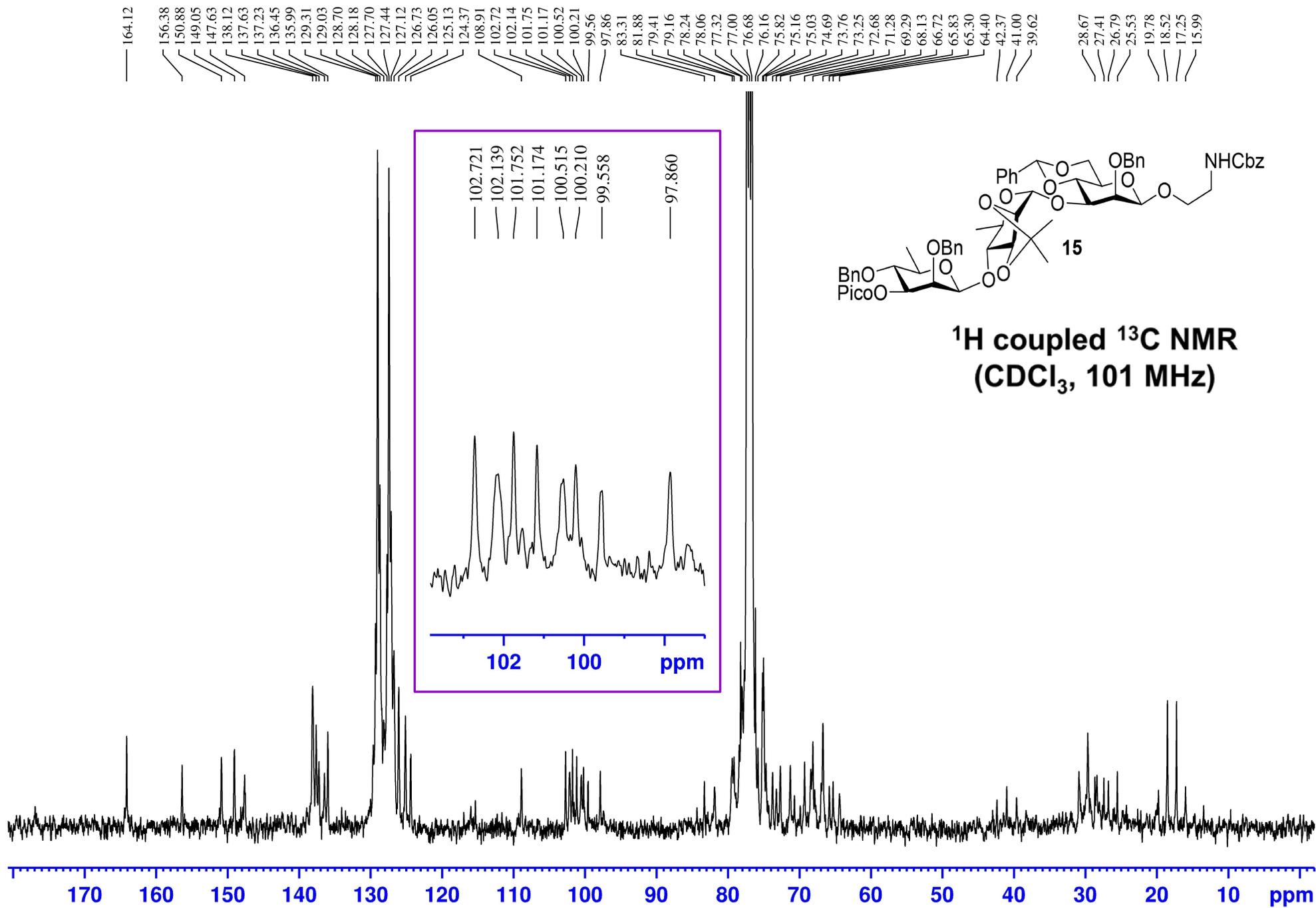




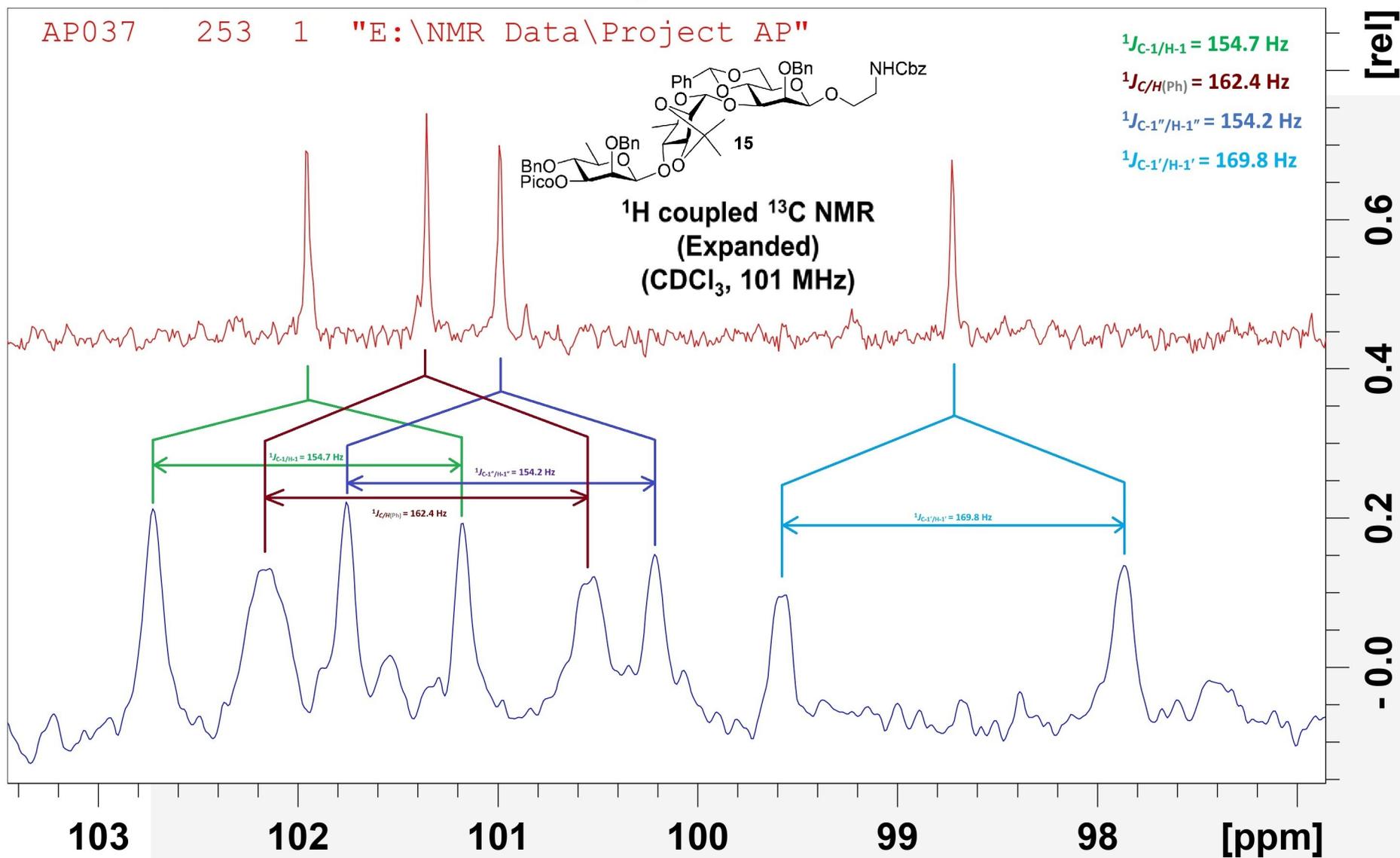
GROUP BM
BM-SNM-AP037 in CDCl₃

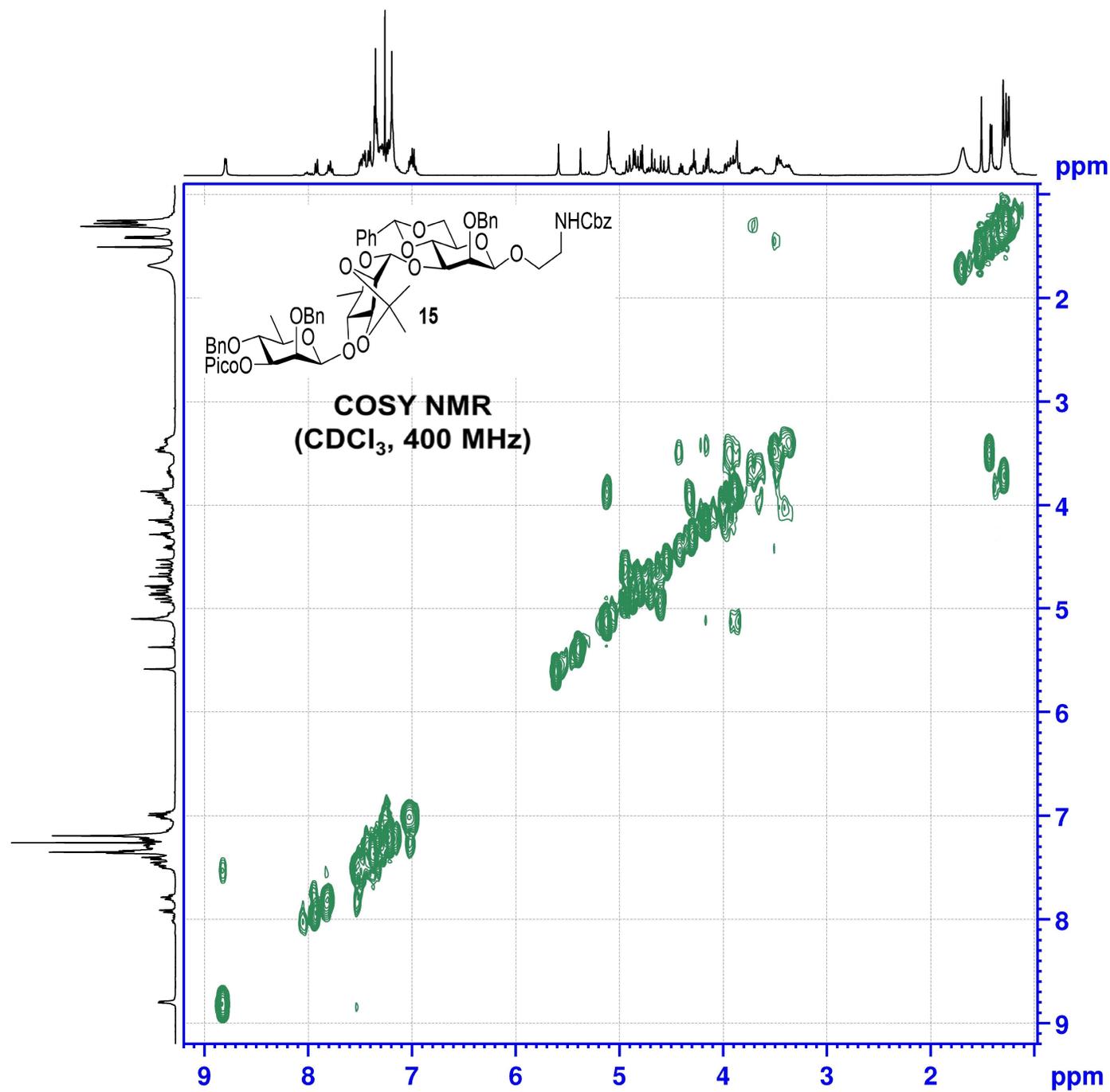
S-64

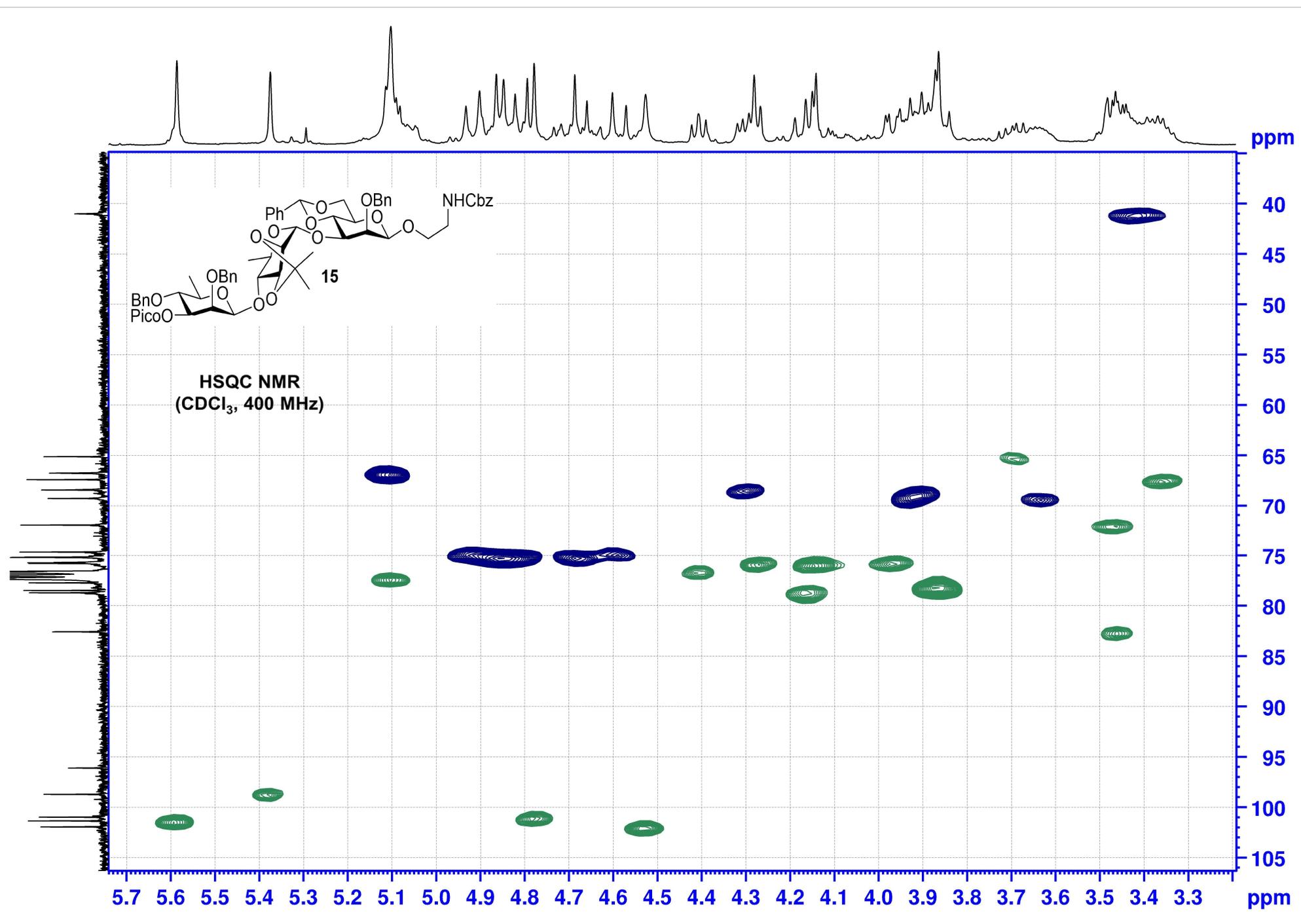


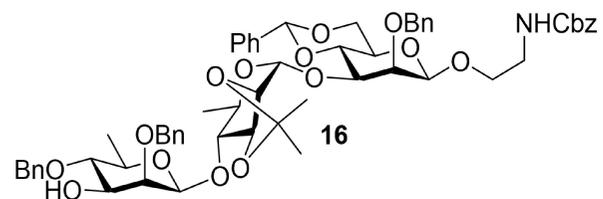


AP037 254 1 "E:\NMR Data\Project AP"

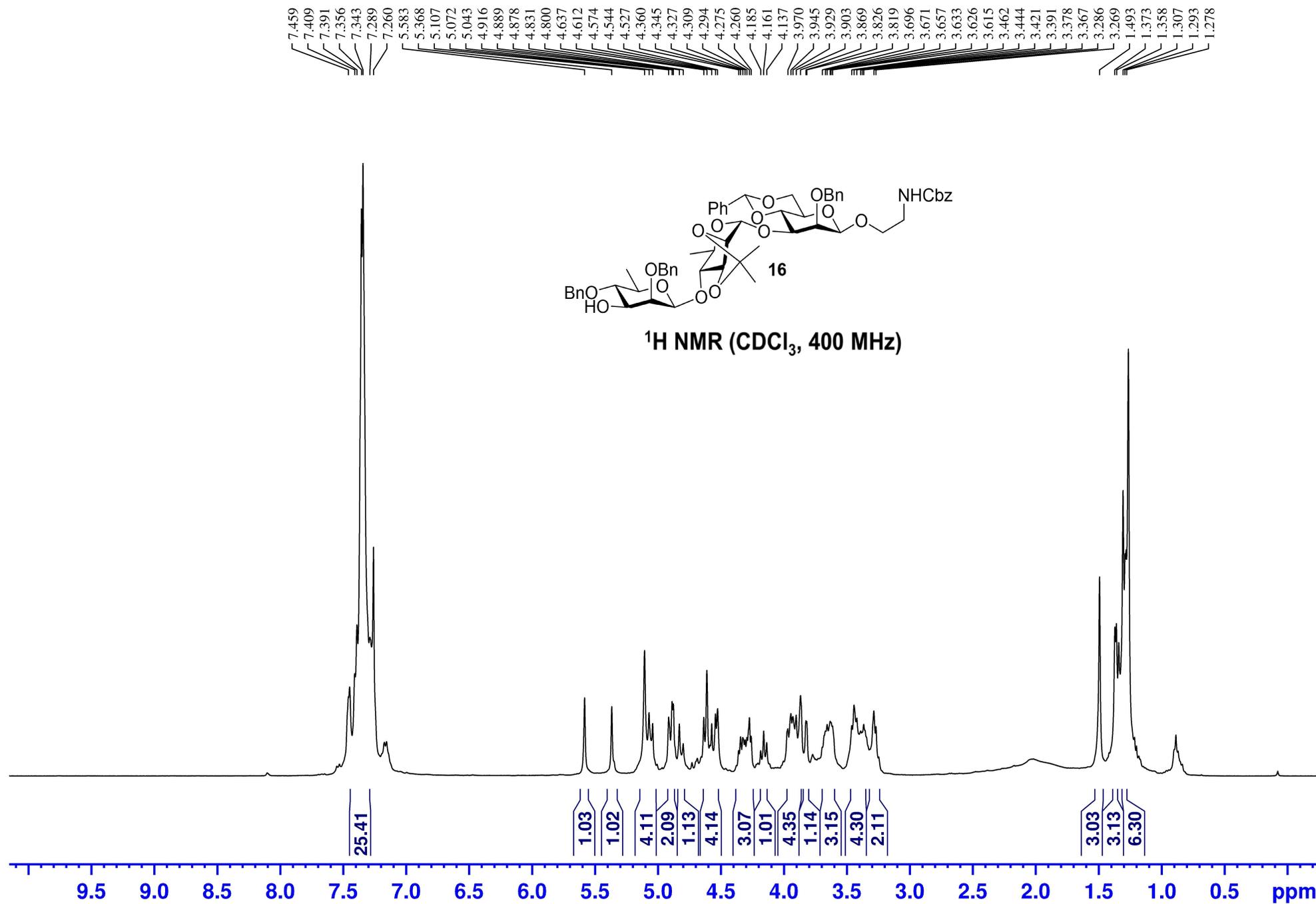


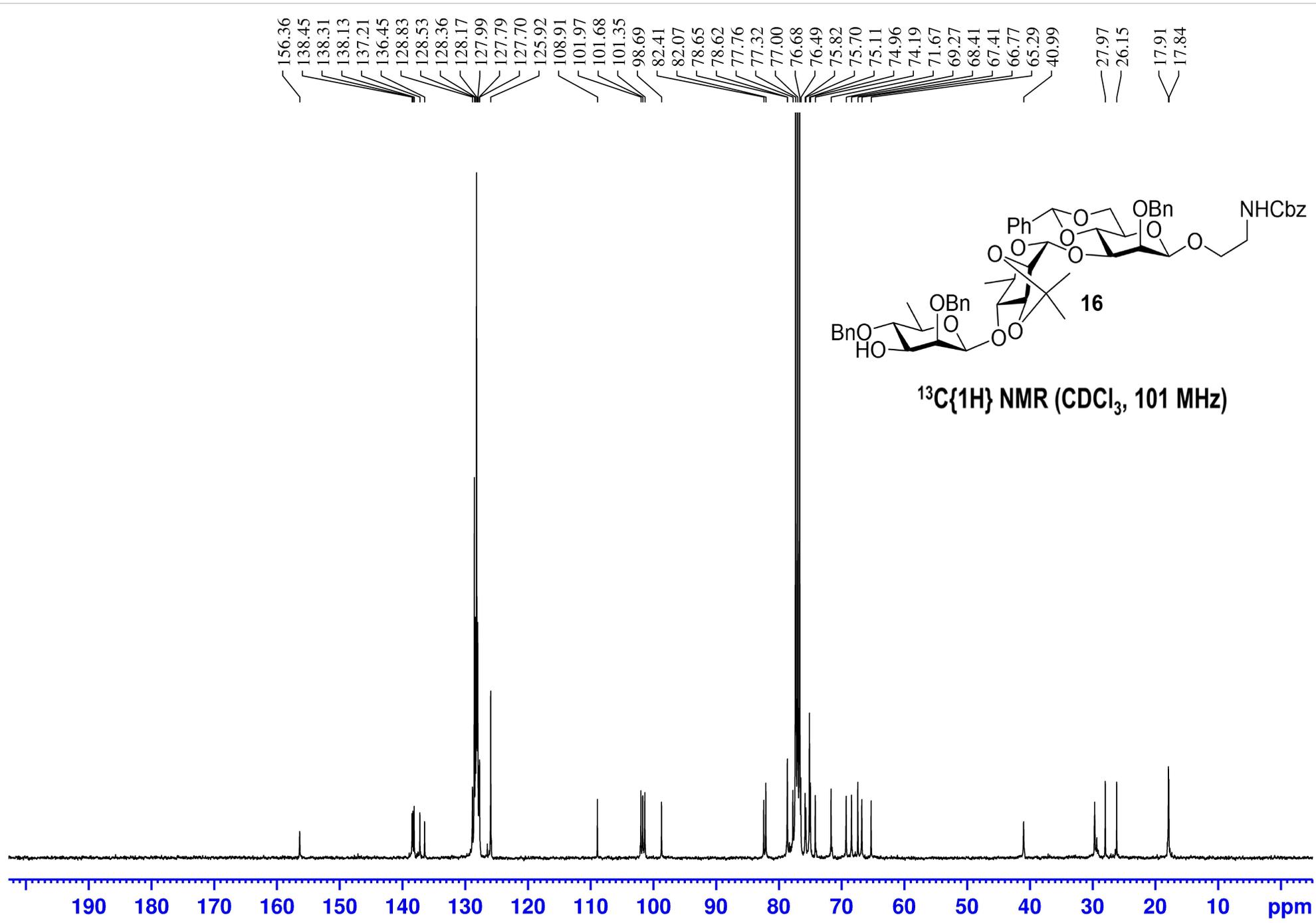


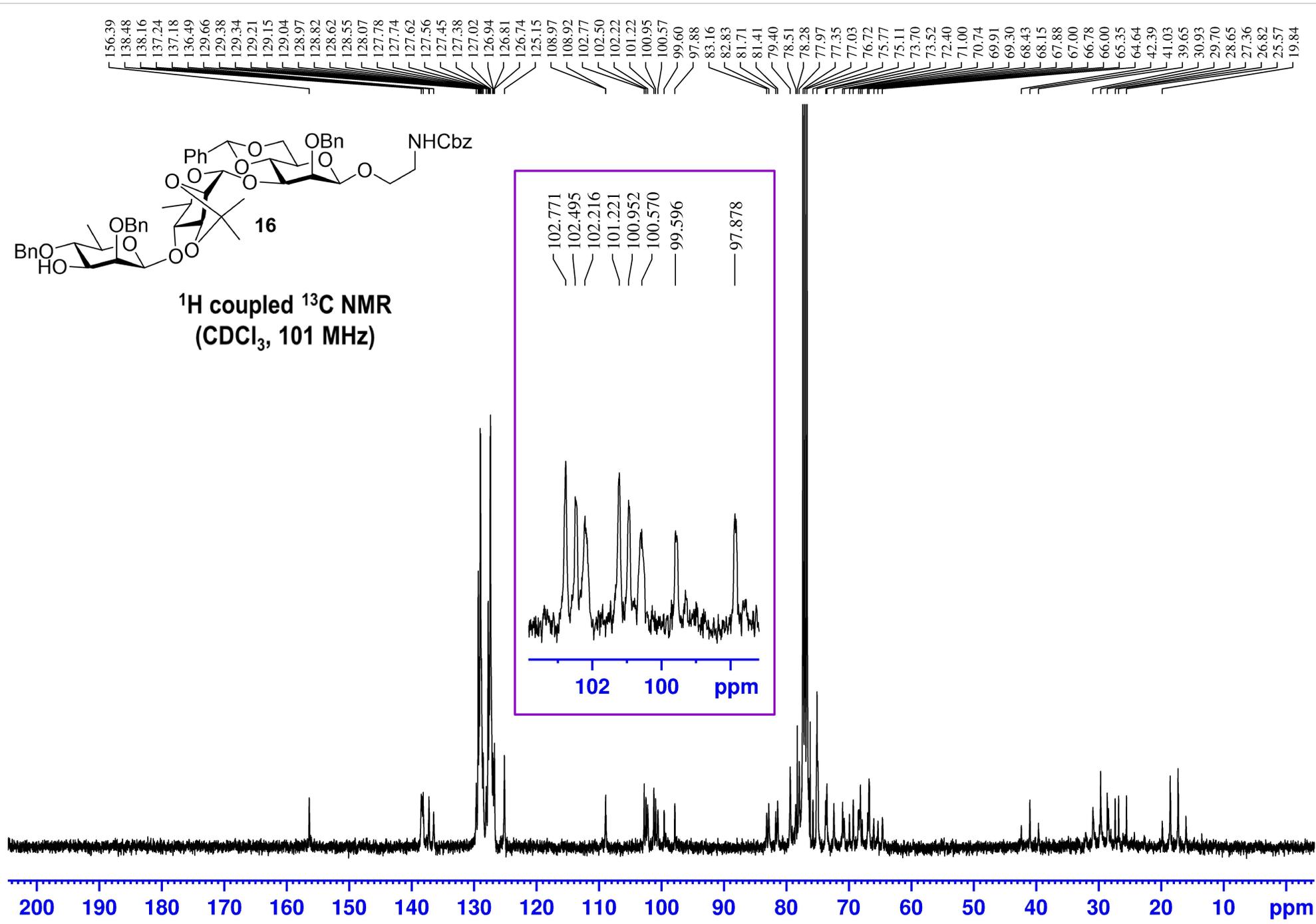




¹H NMR (CDCl₃, 400 MHz)

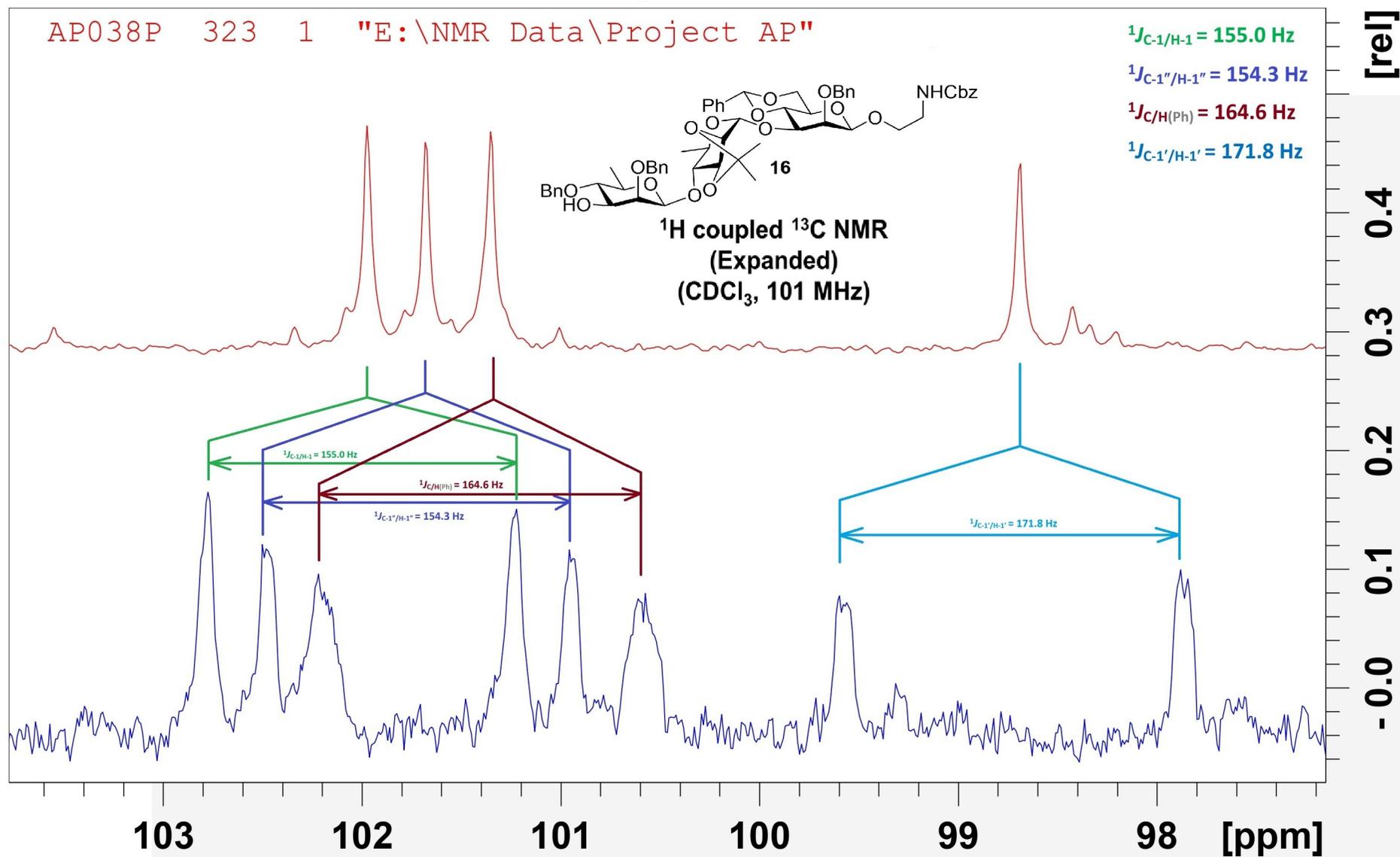


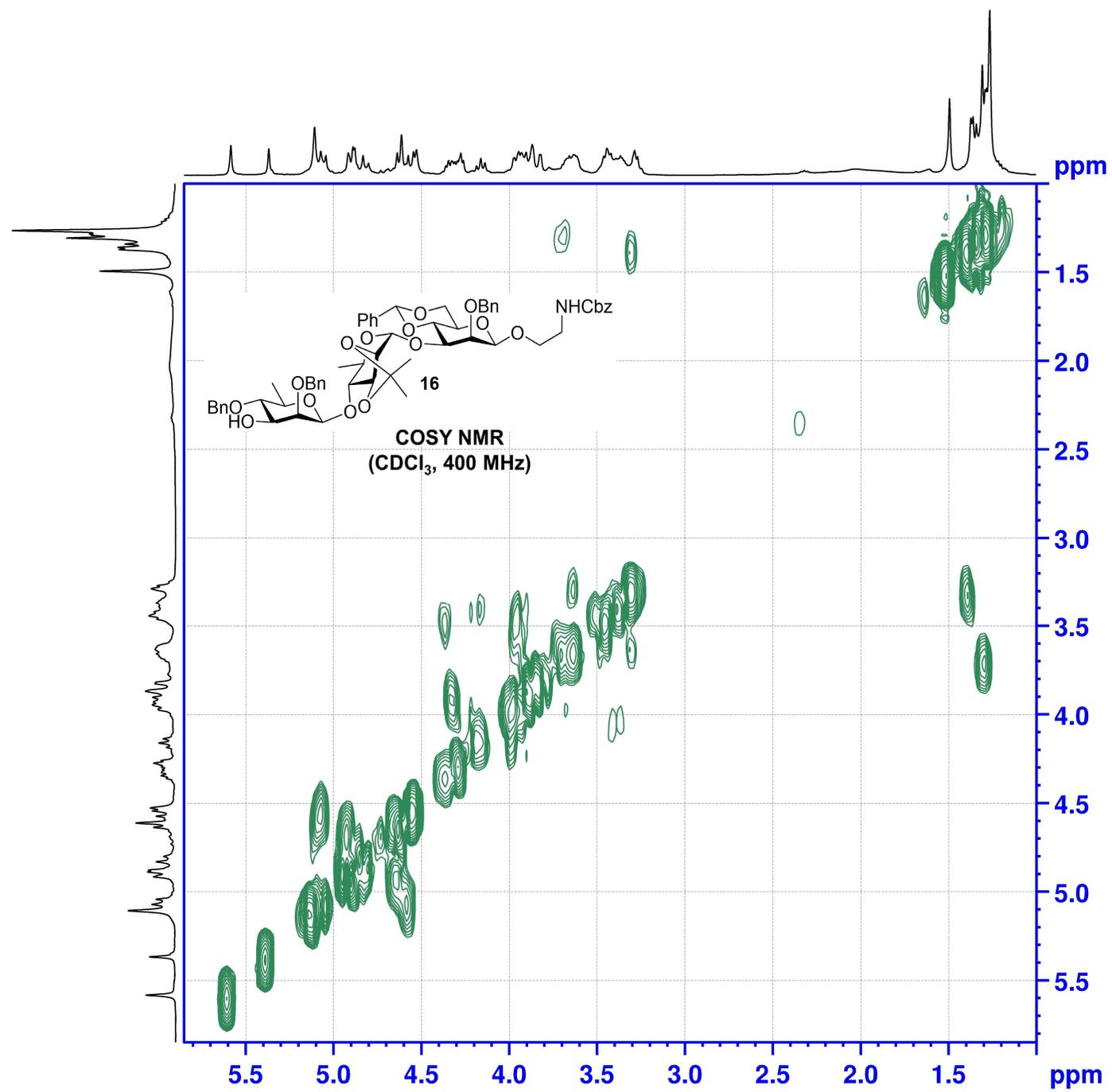


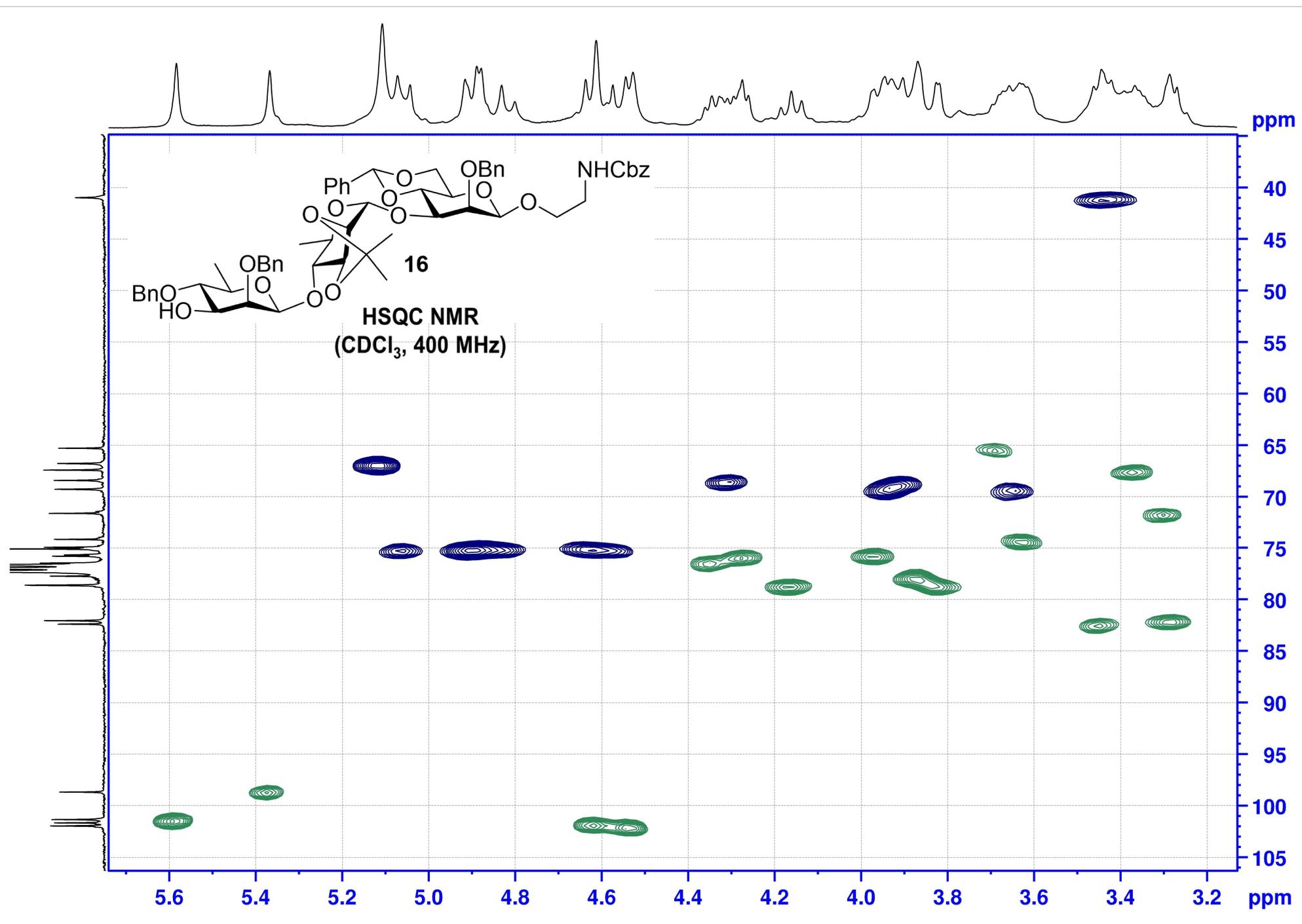


AP038P 210 1 "E:\NMR Data\Project AP"

AP038P 323 1 "E:\NMR Data\Project AP"

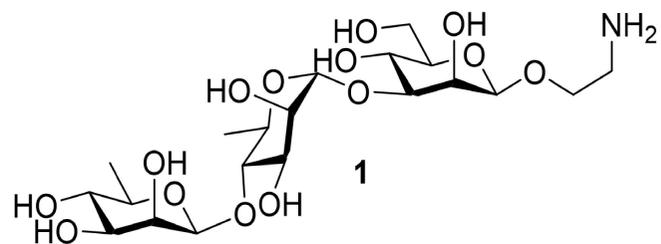




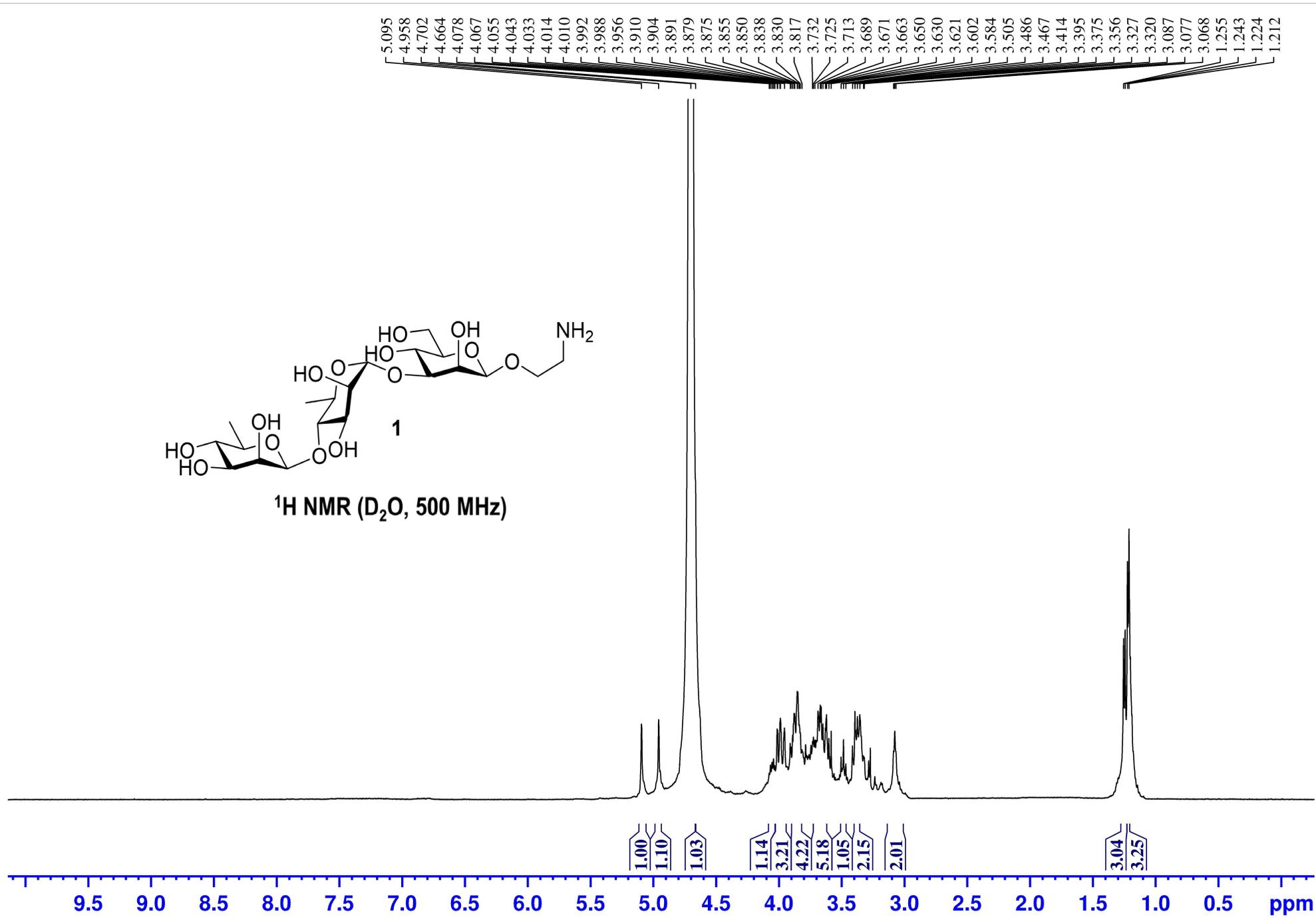


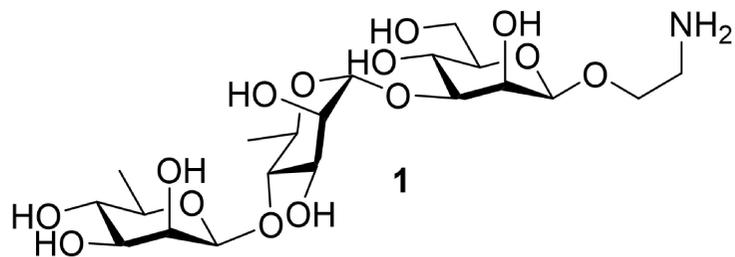
GROUP BM
BM-SNM-AP041F in D₂O

S-75



¹H NMR (D₂O, 500 MHz)





¹³C{¹H} NMR (D₂O, 126 MHz)

102.44
101.66
99.51

80.51
79.74
76.02
71.77
70.72
70.63
70.28
70.10
69.40
67.56
66.03
63.98
60.90
57.09

17.30
16.42

