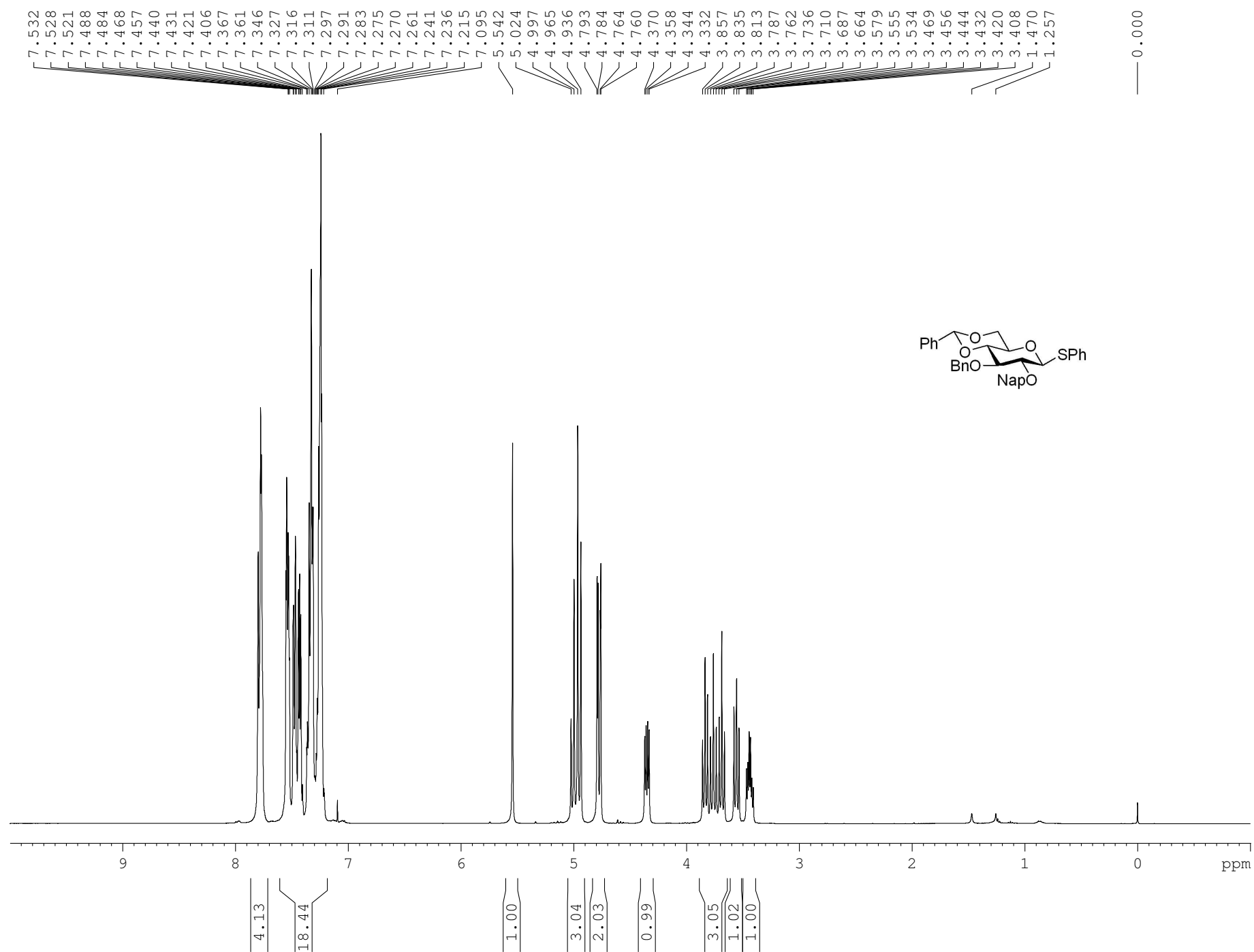
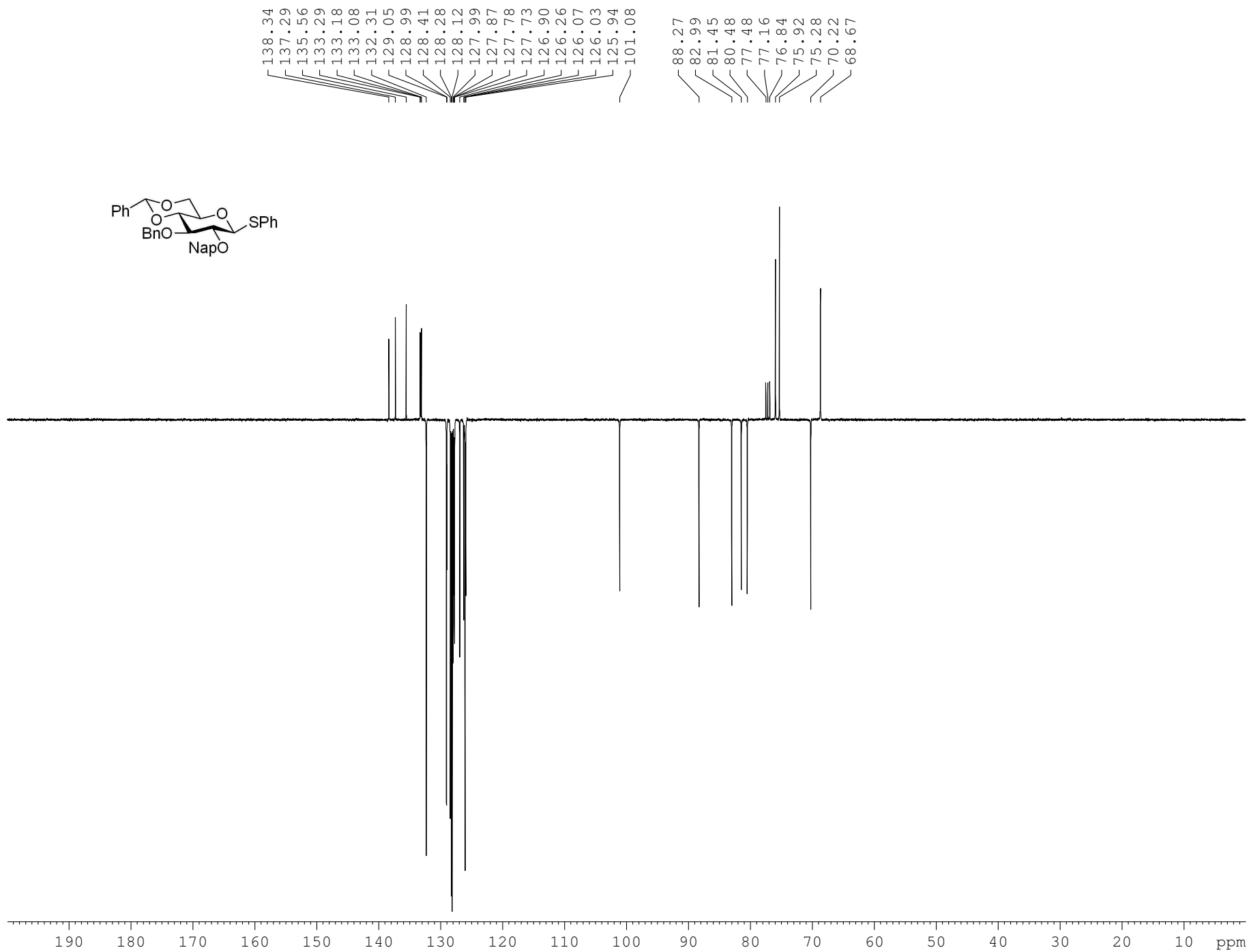
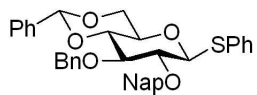
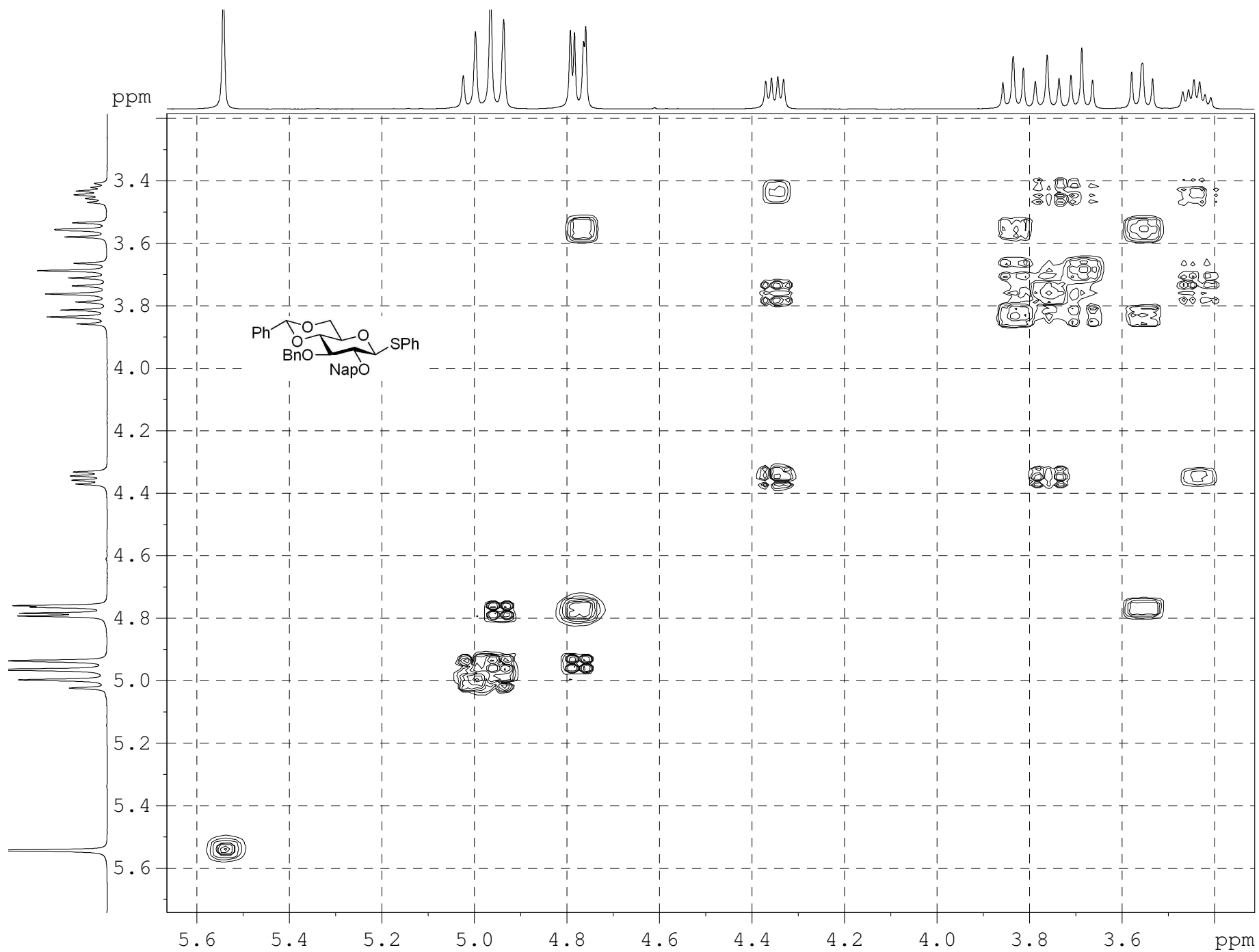
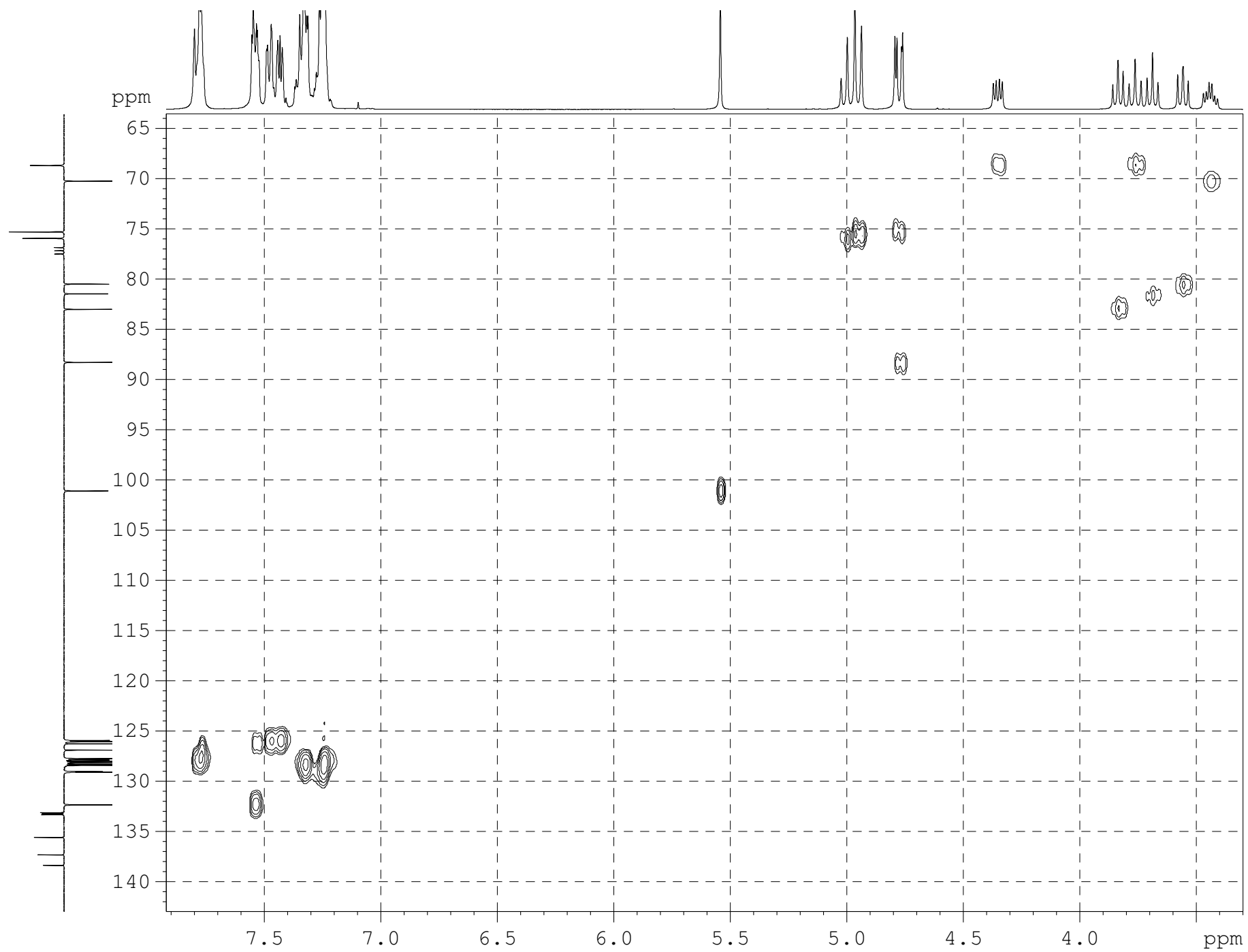


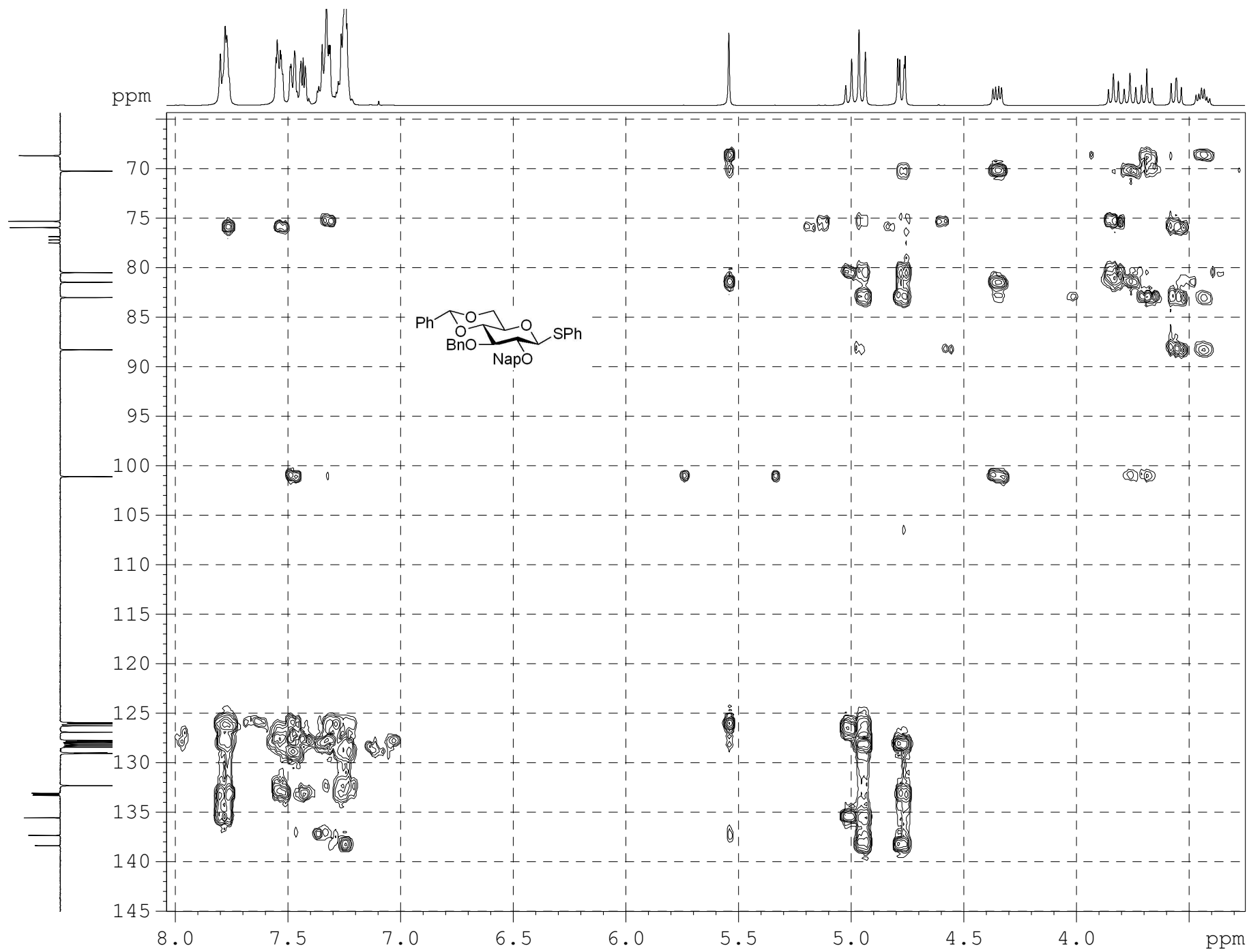
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC of **3**



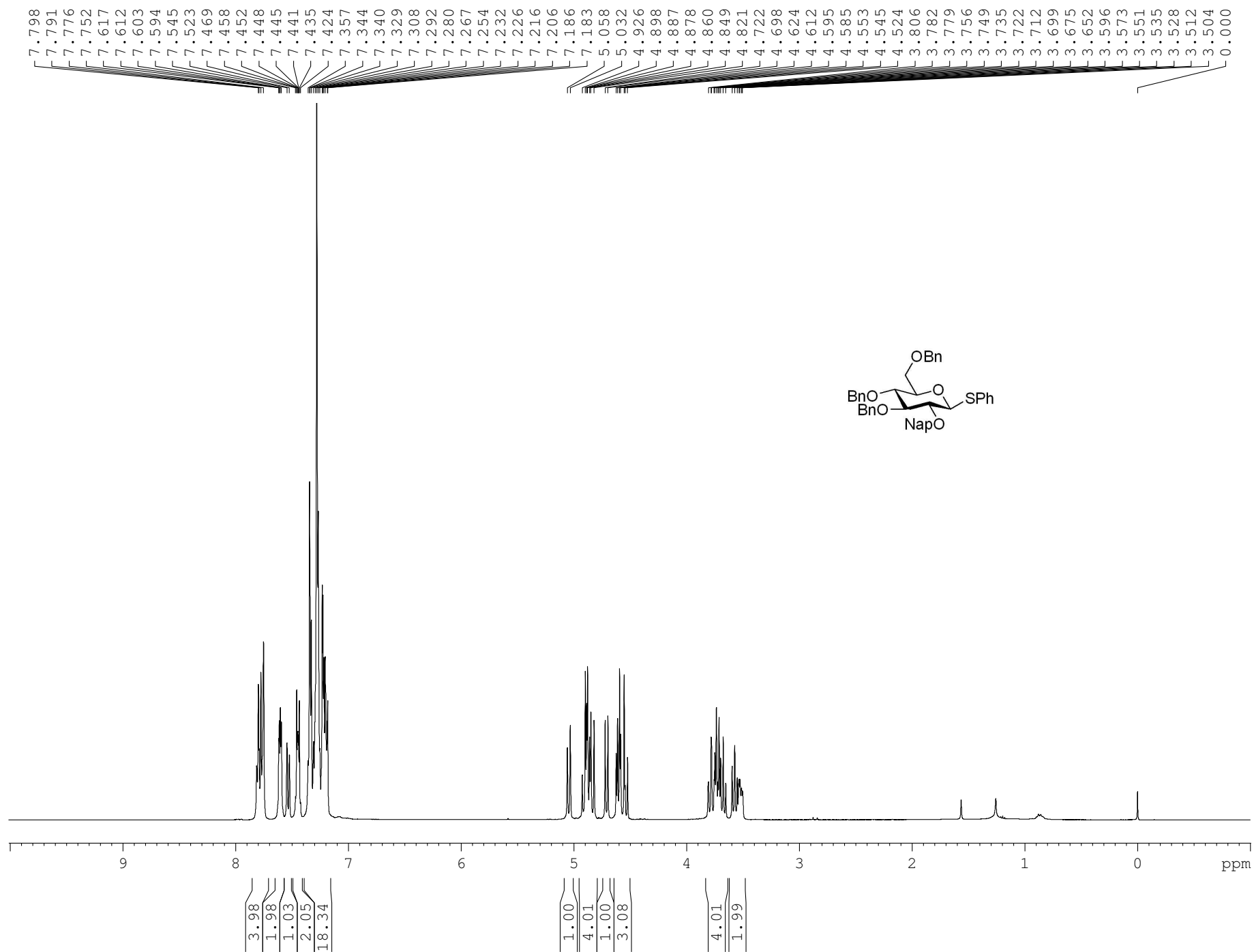


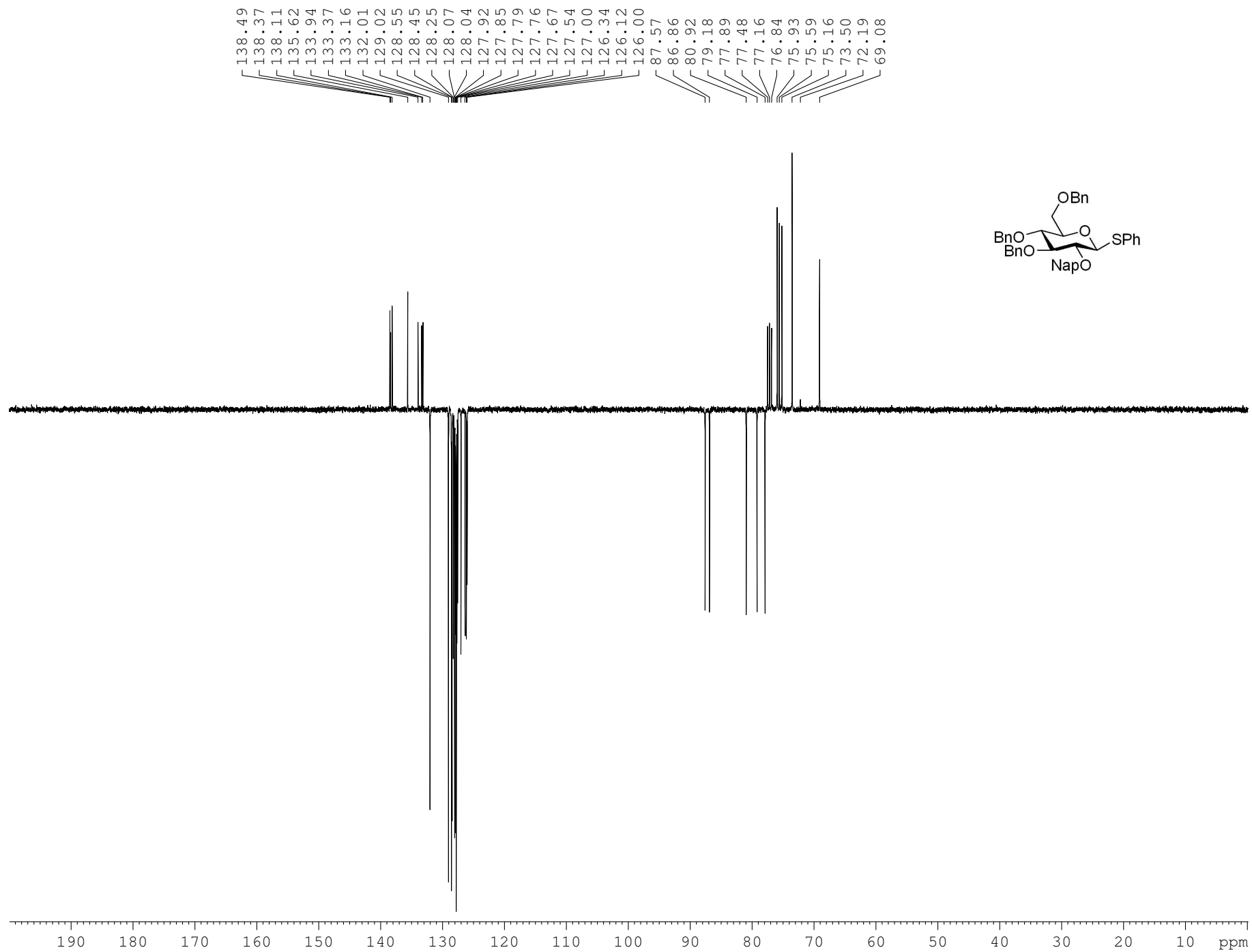


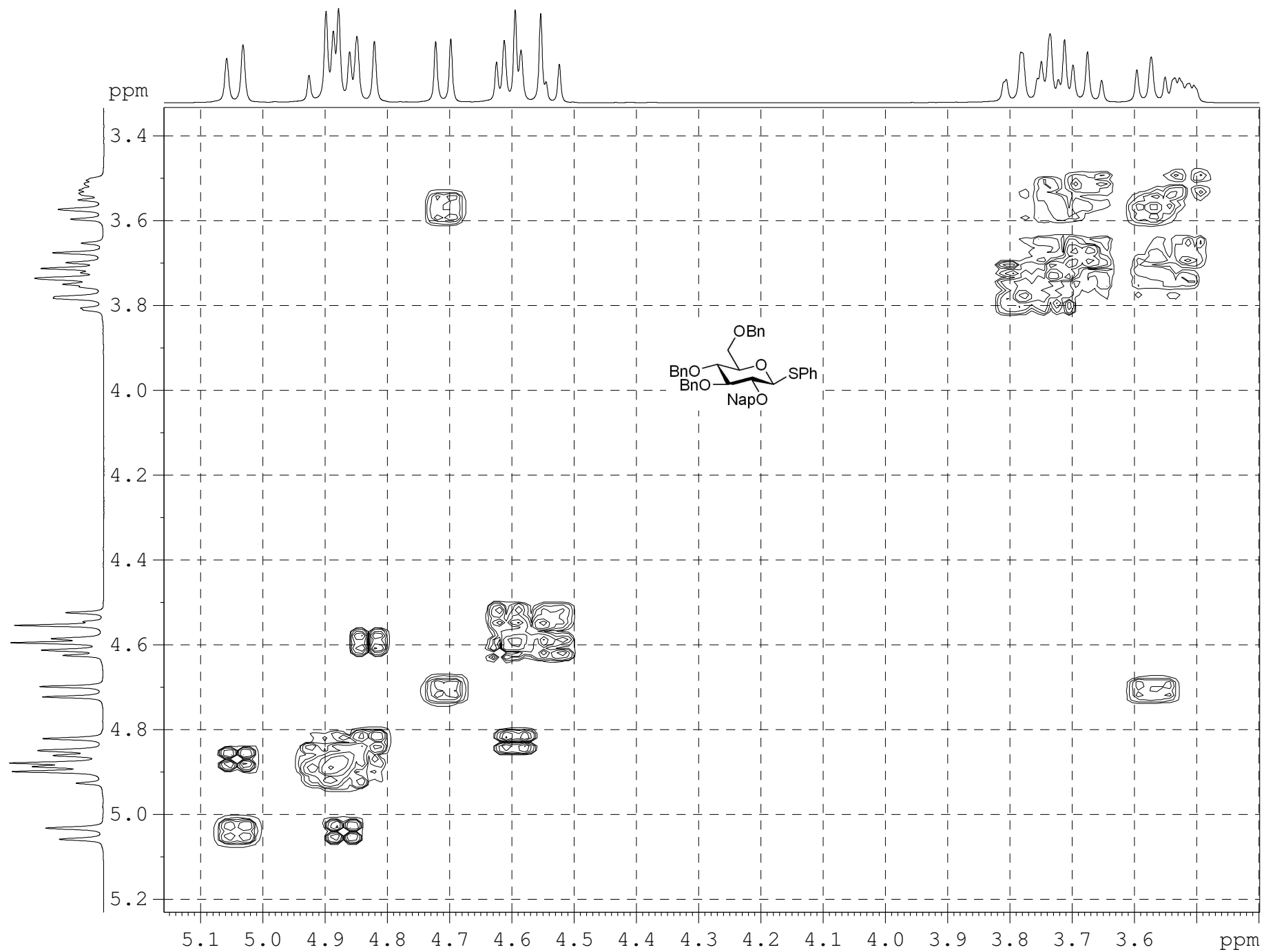


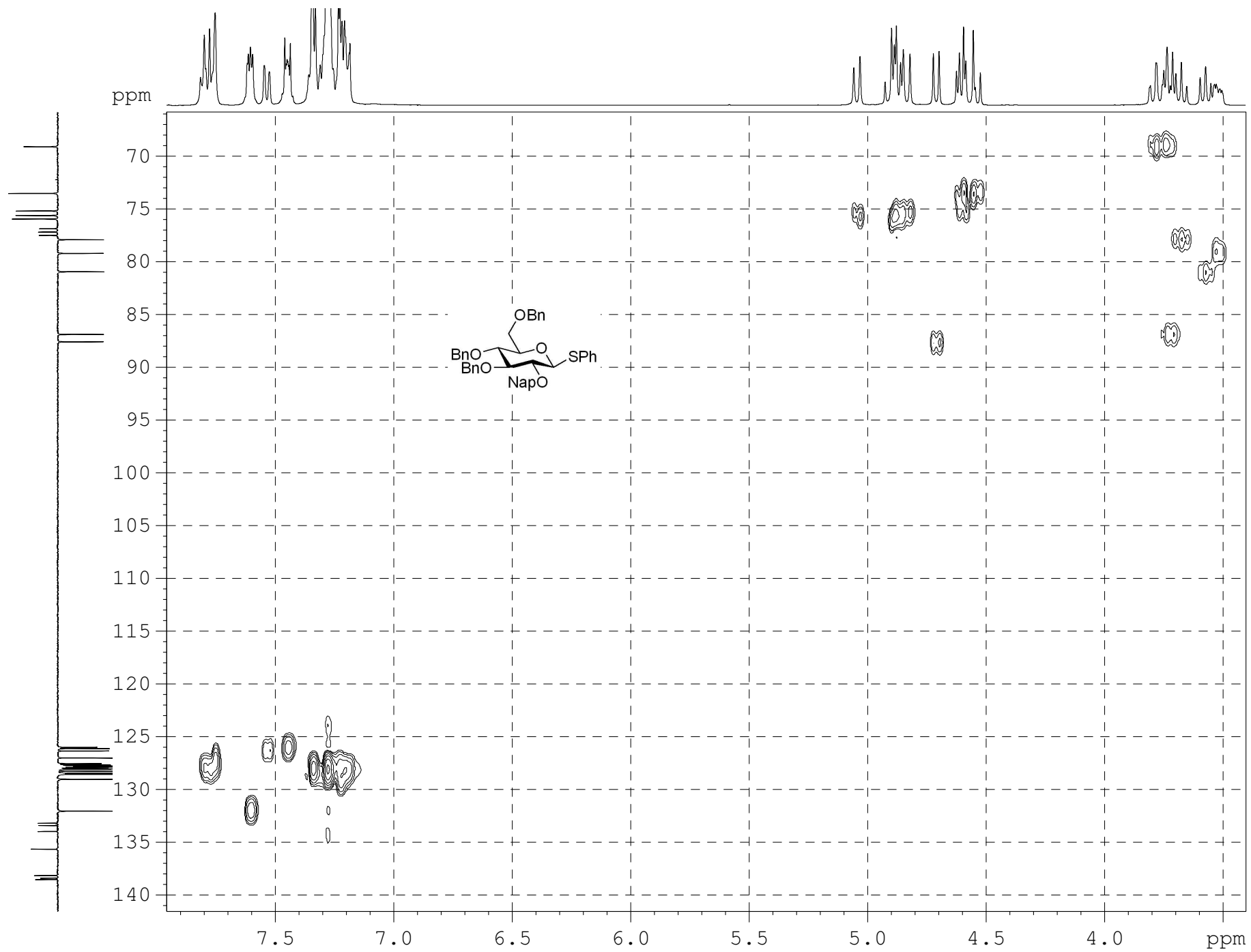


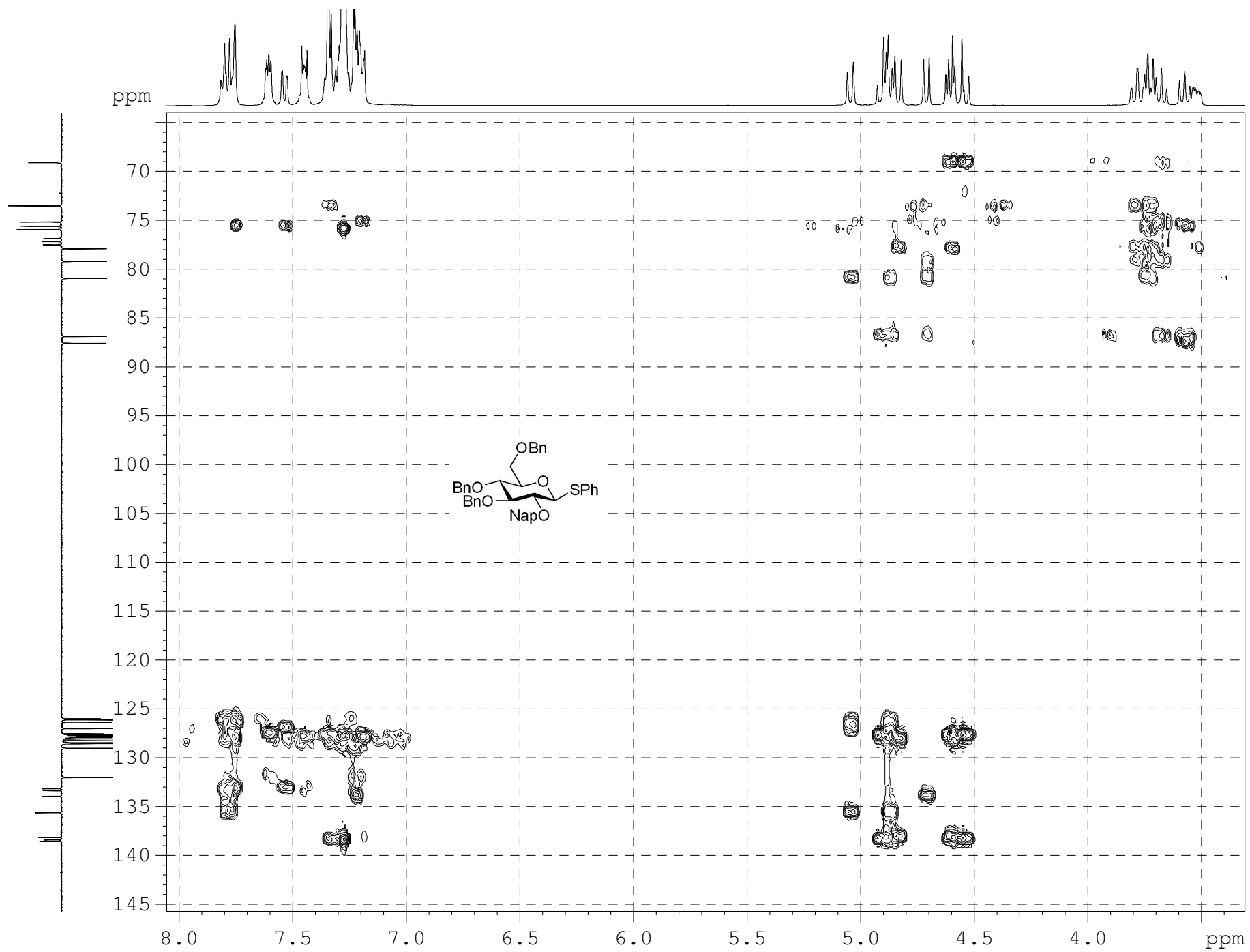
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC of **5**



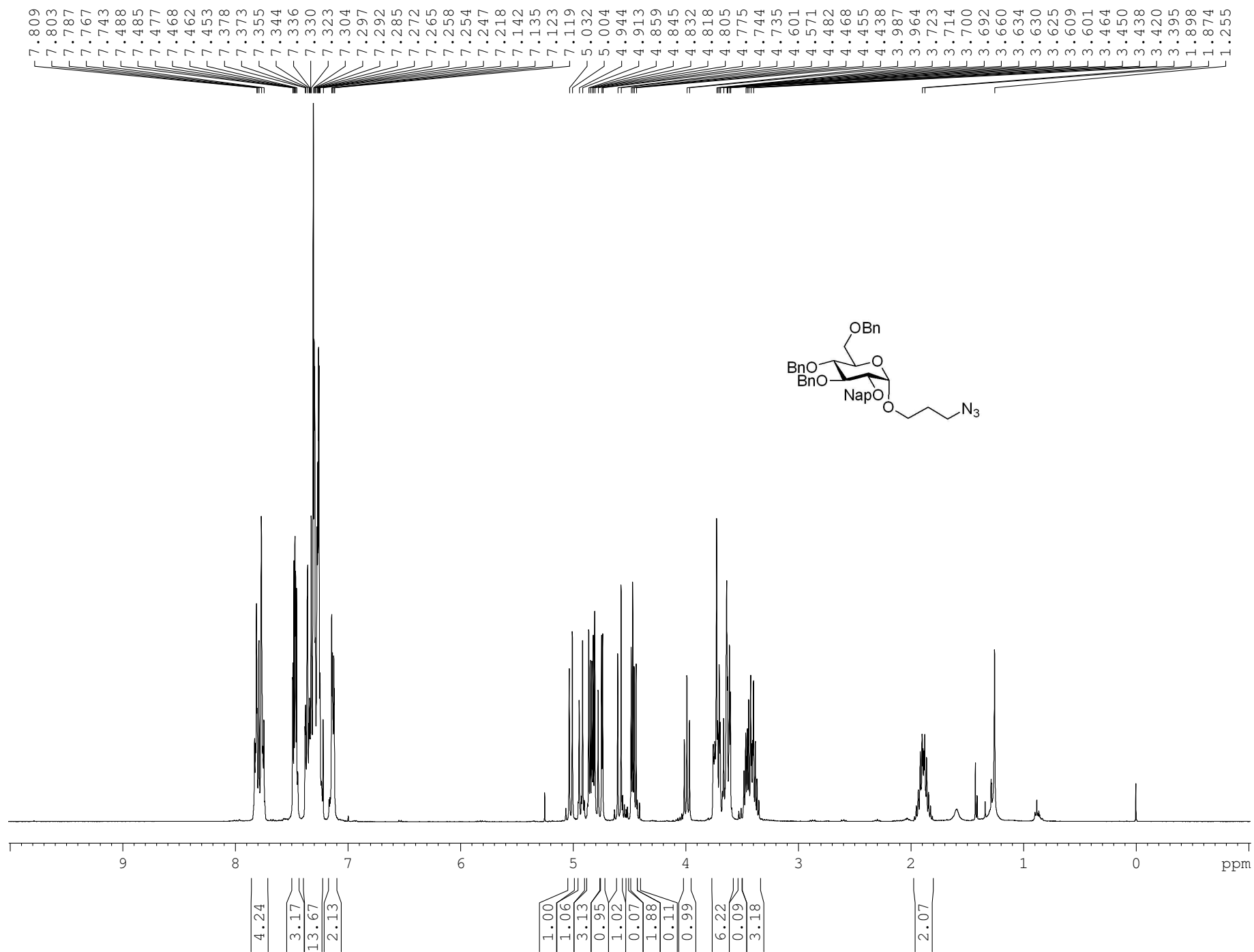


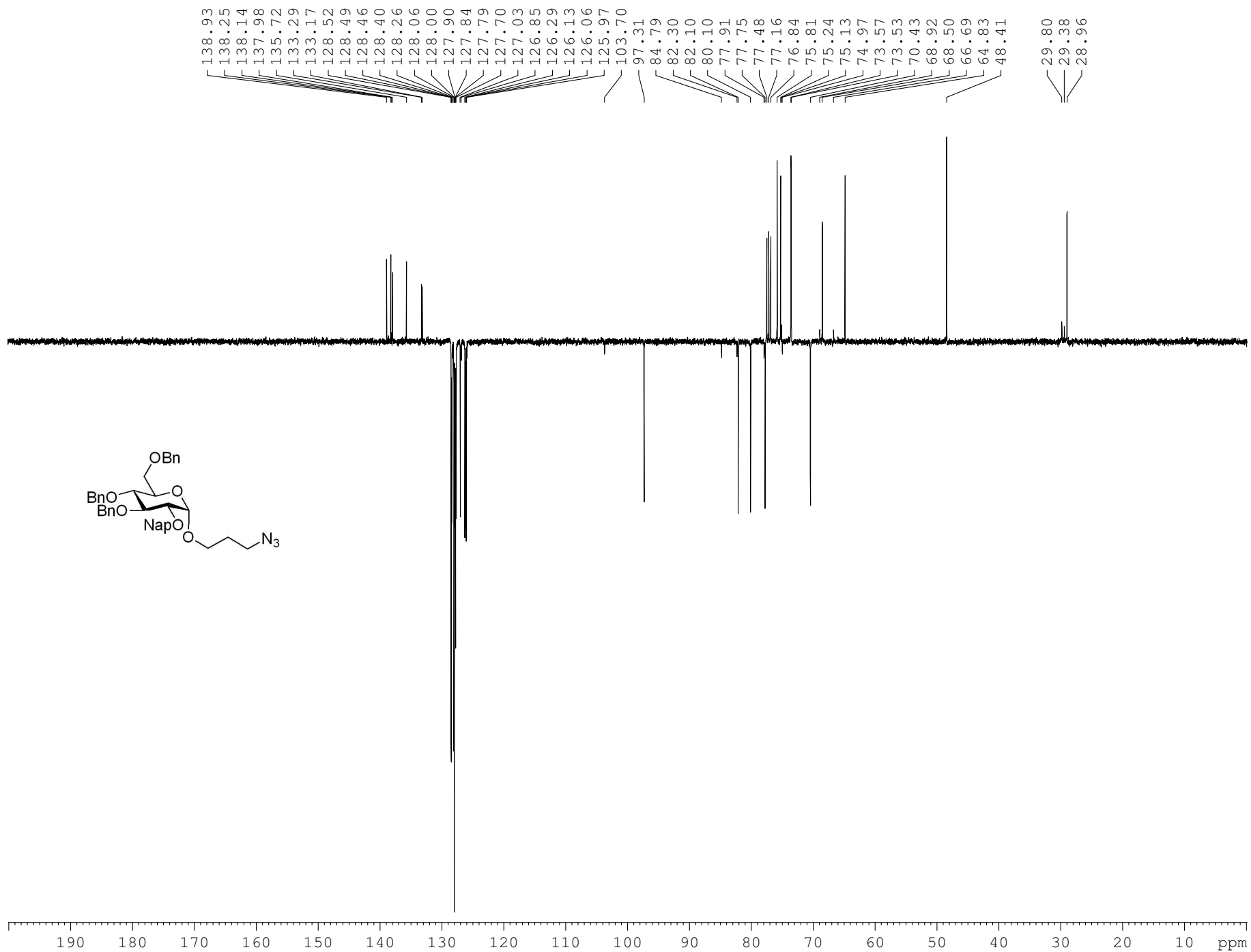
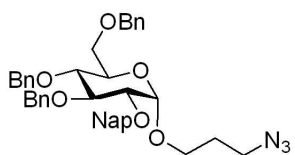


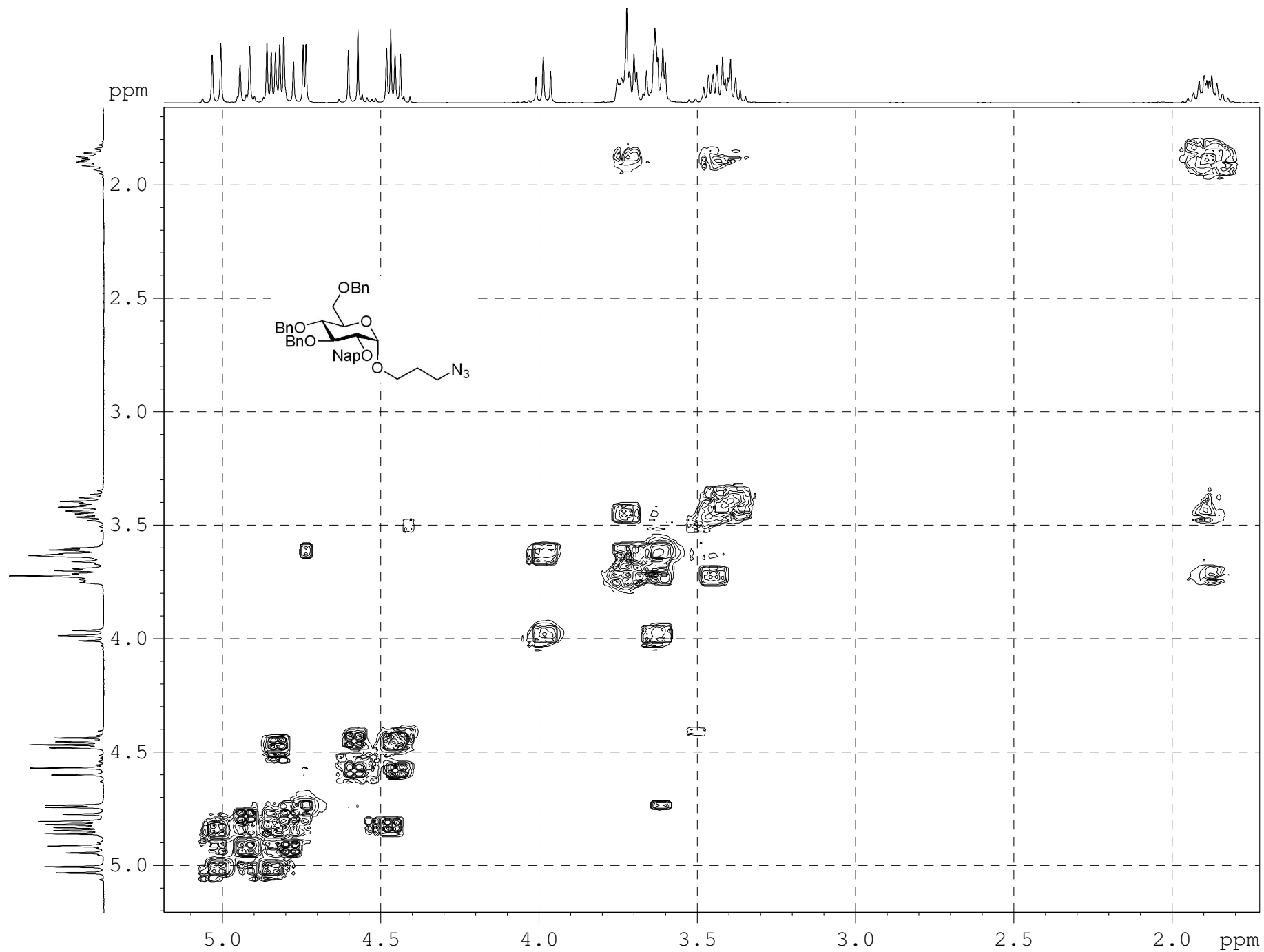


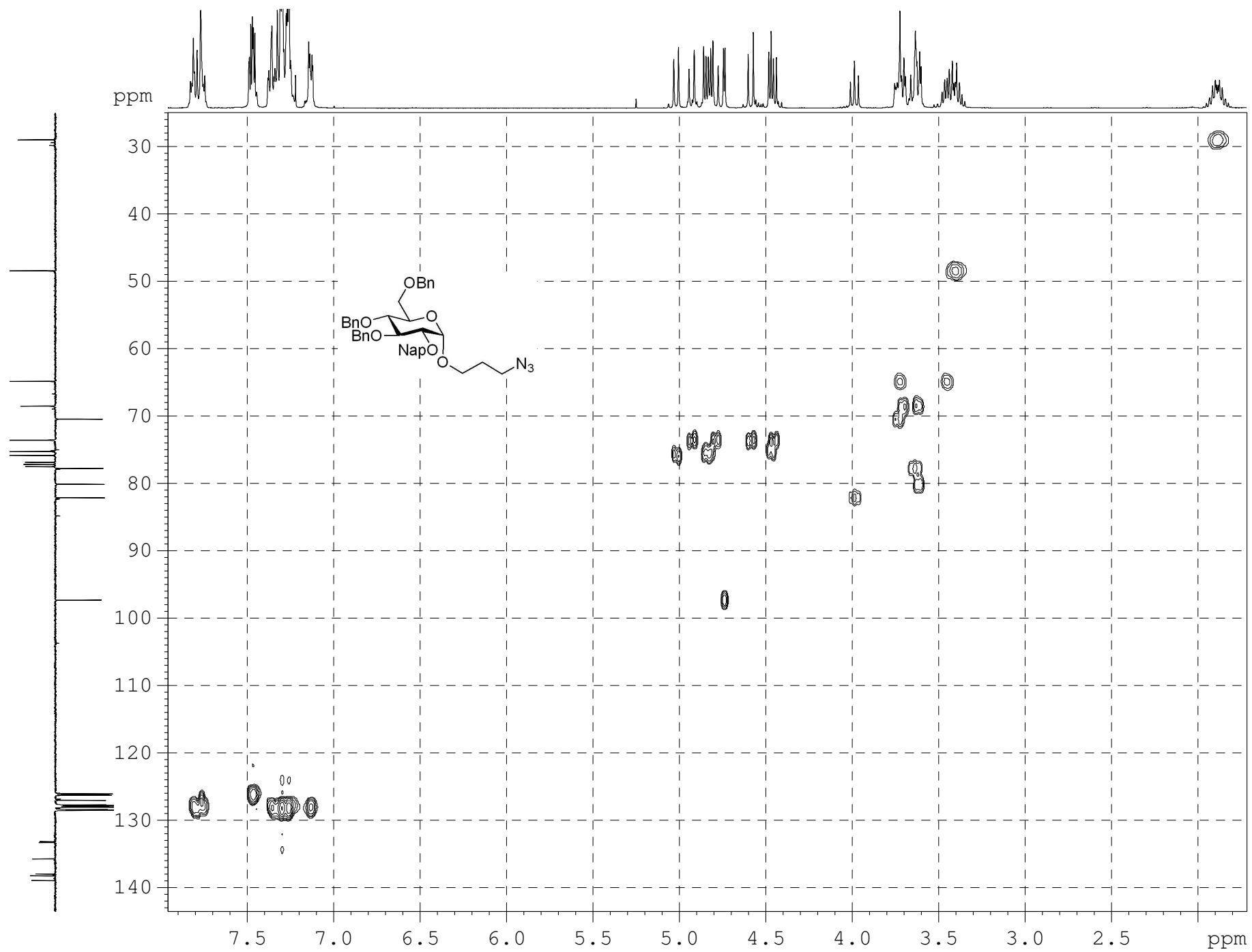


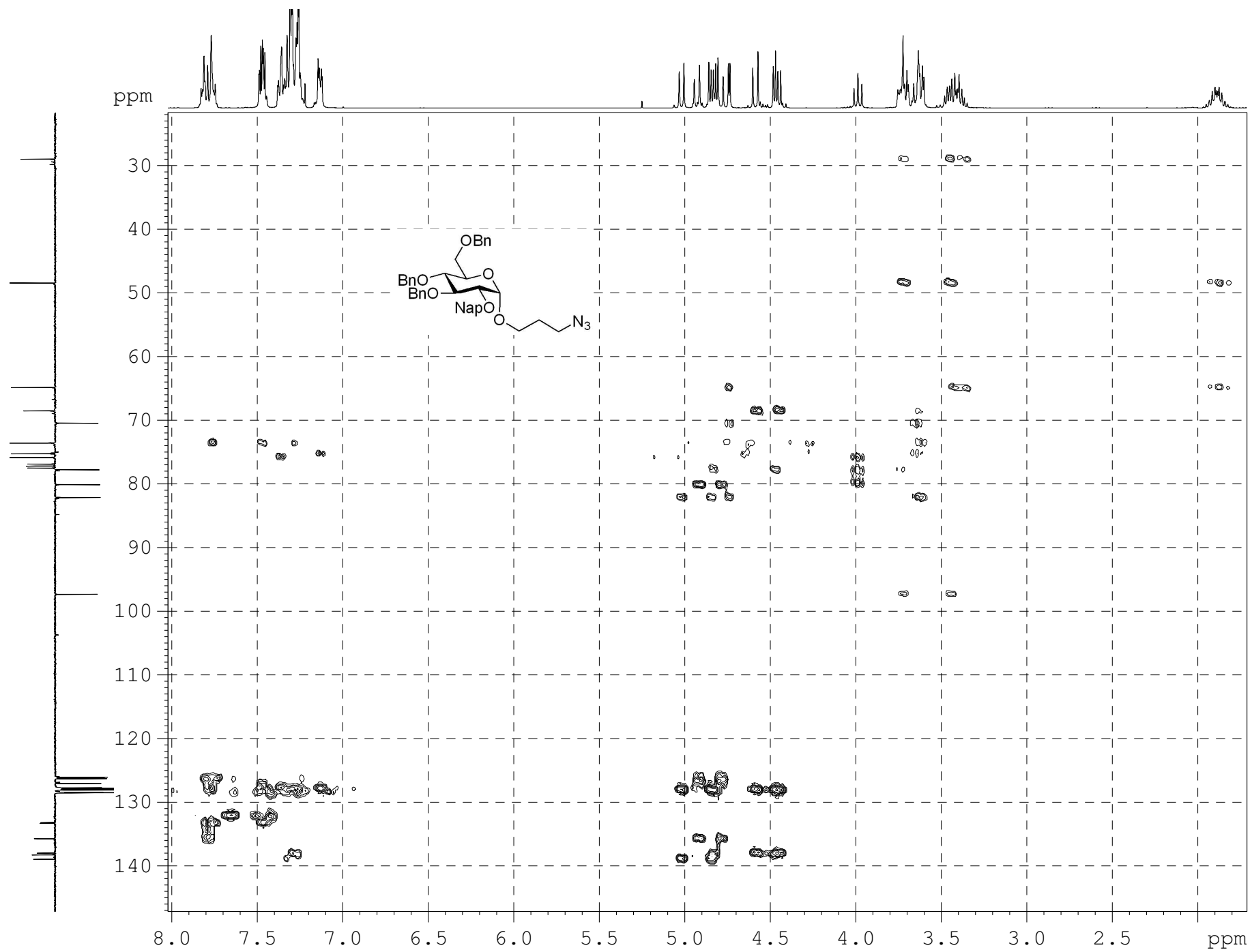
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC, Gated of 7

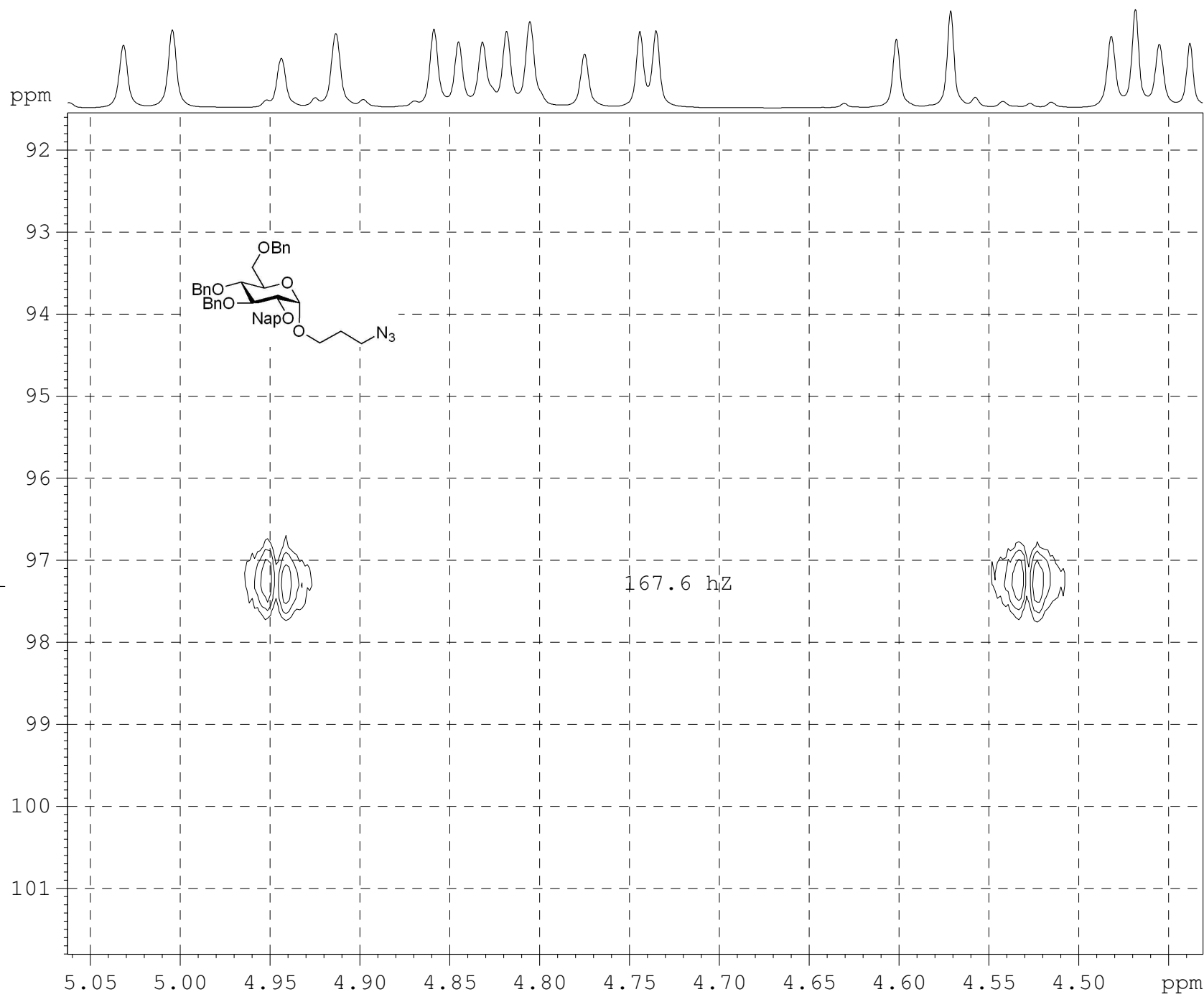






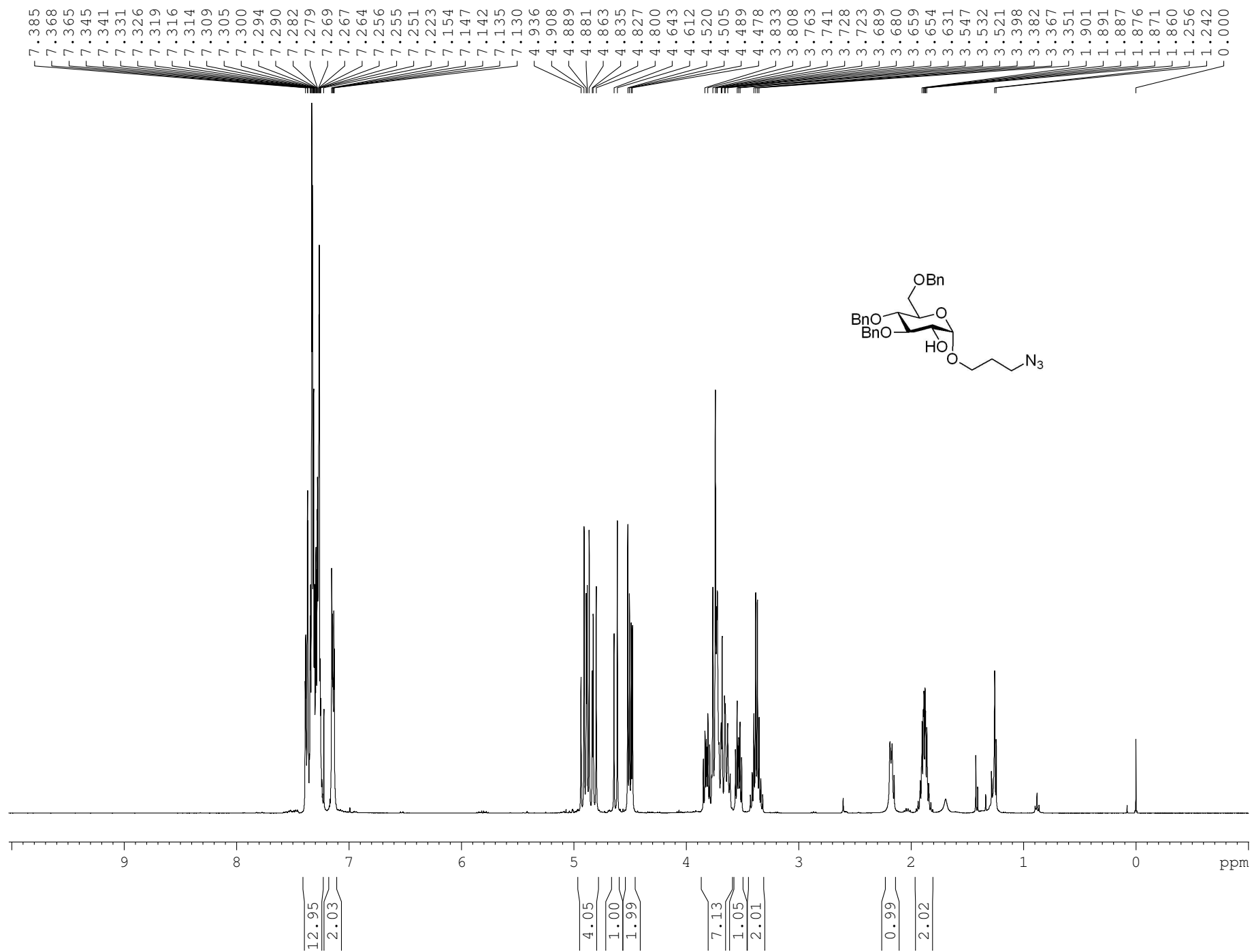


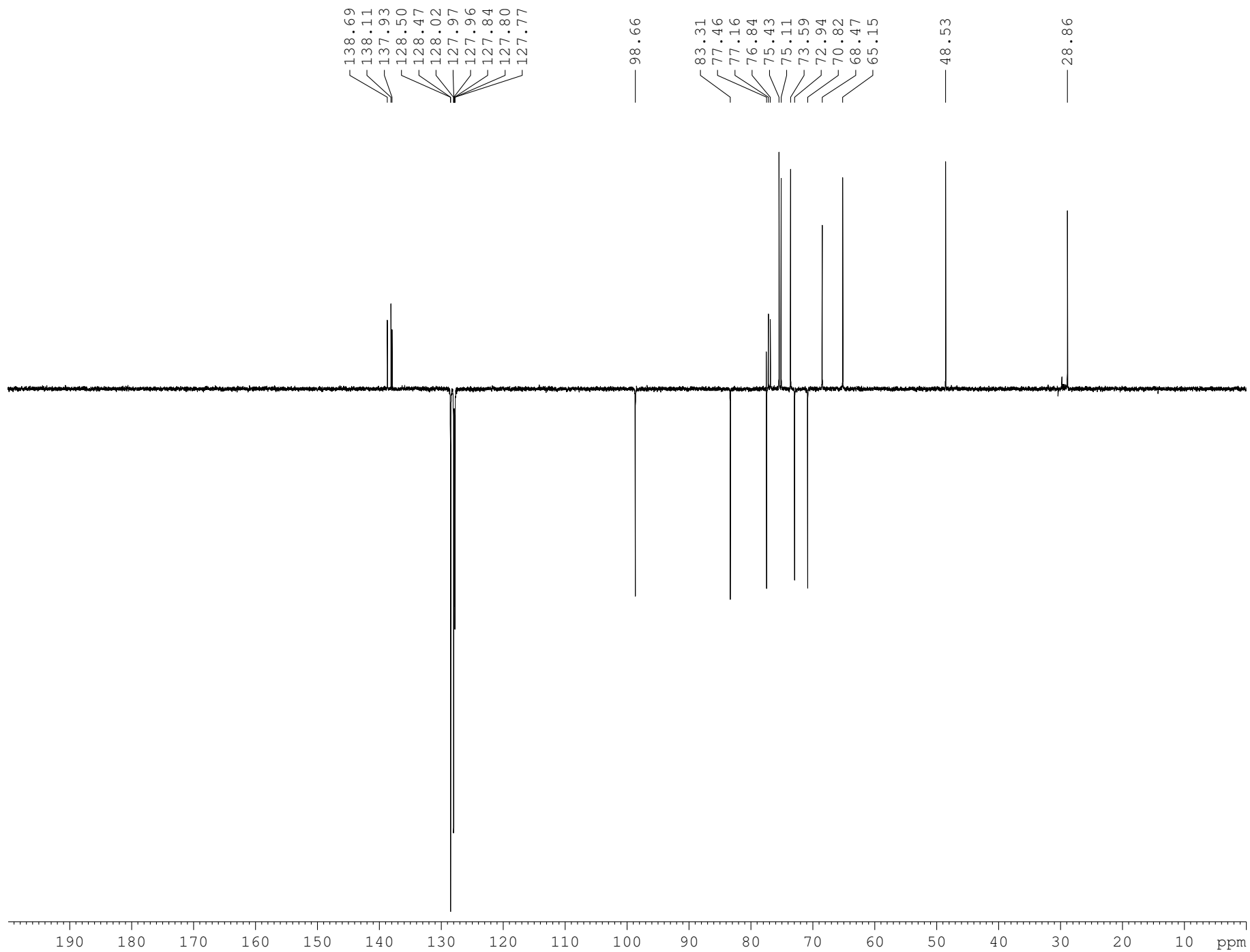


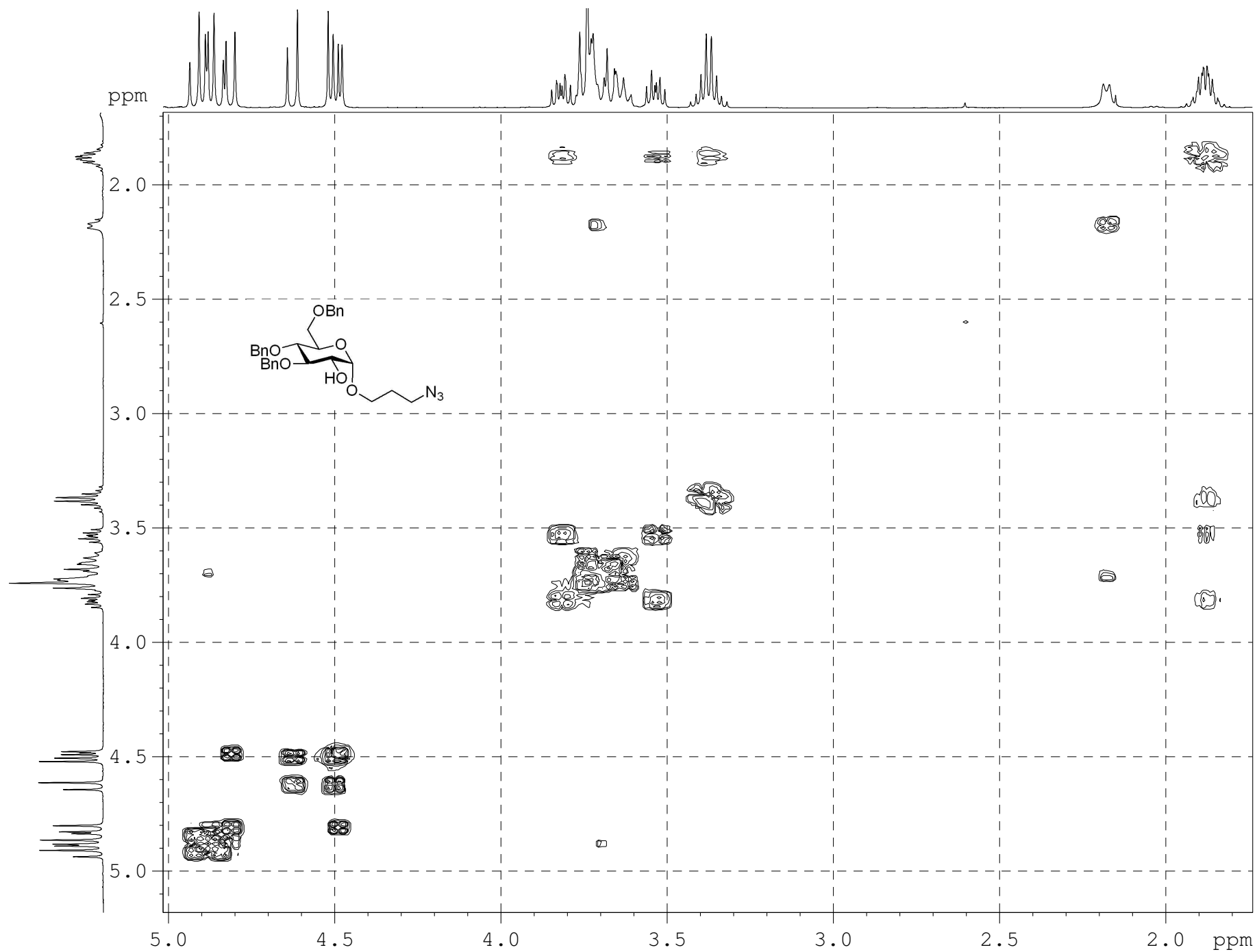


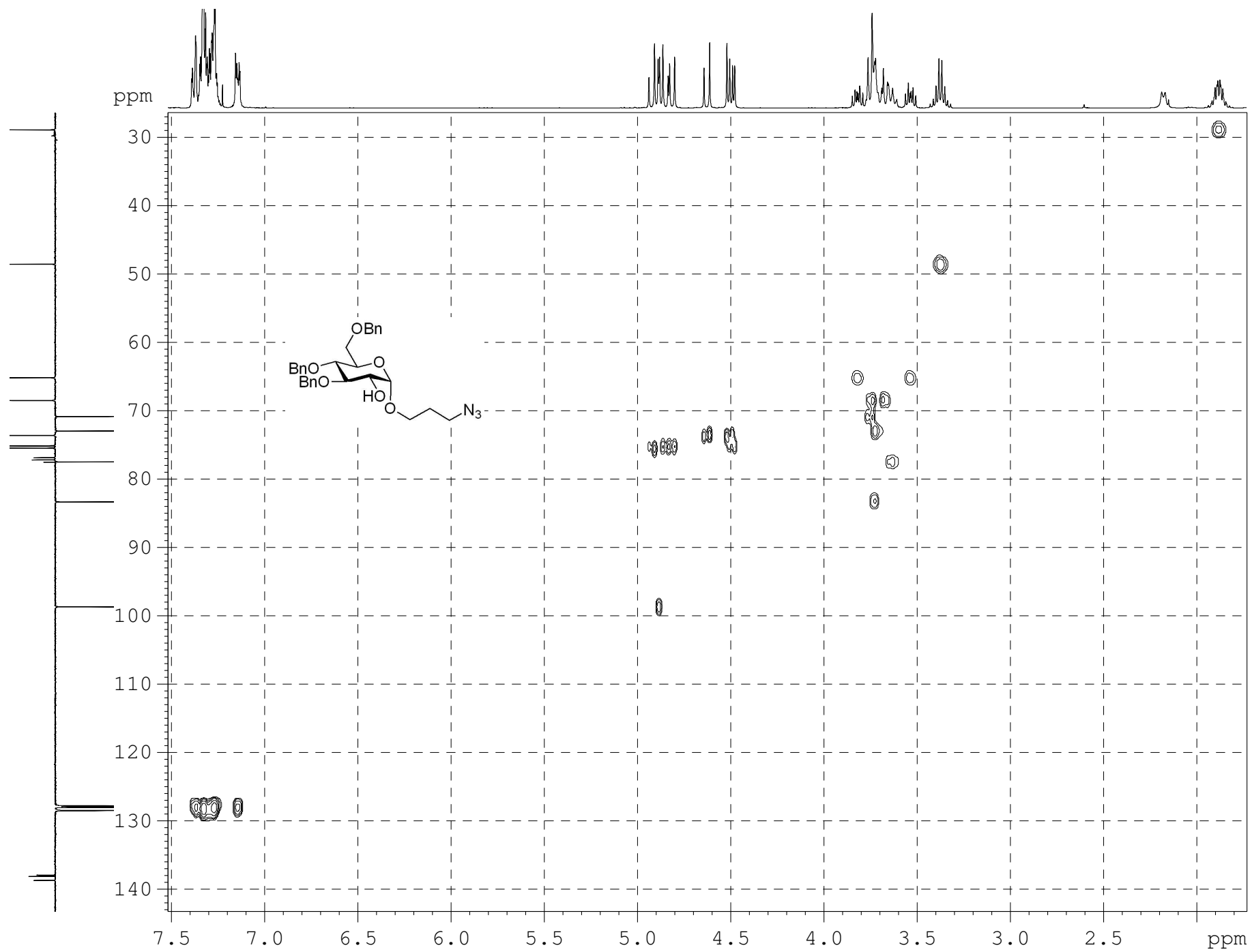
167.6 hZ

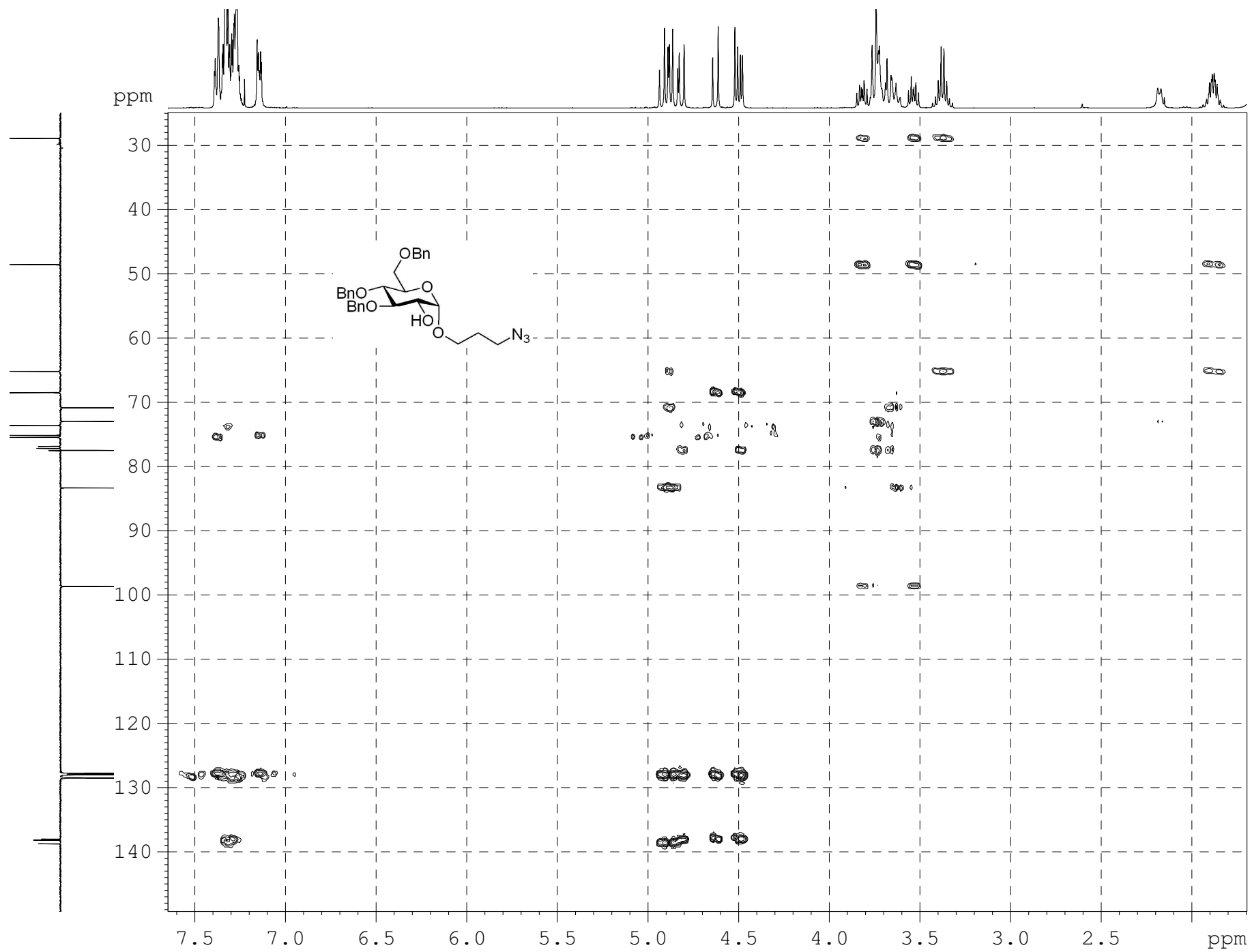
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC of **8**



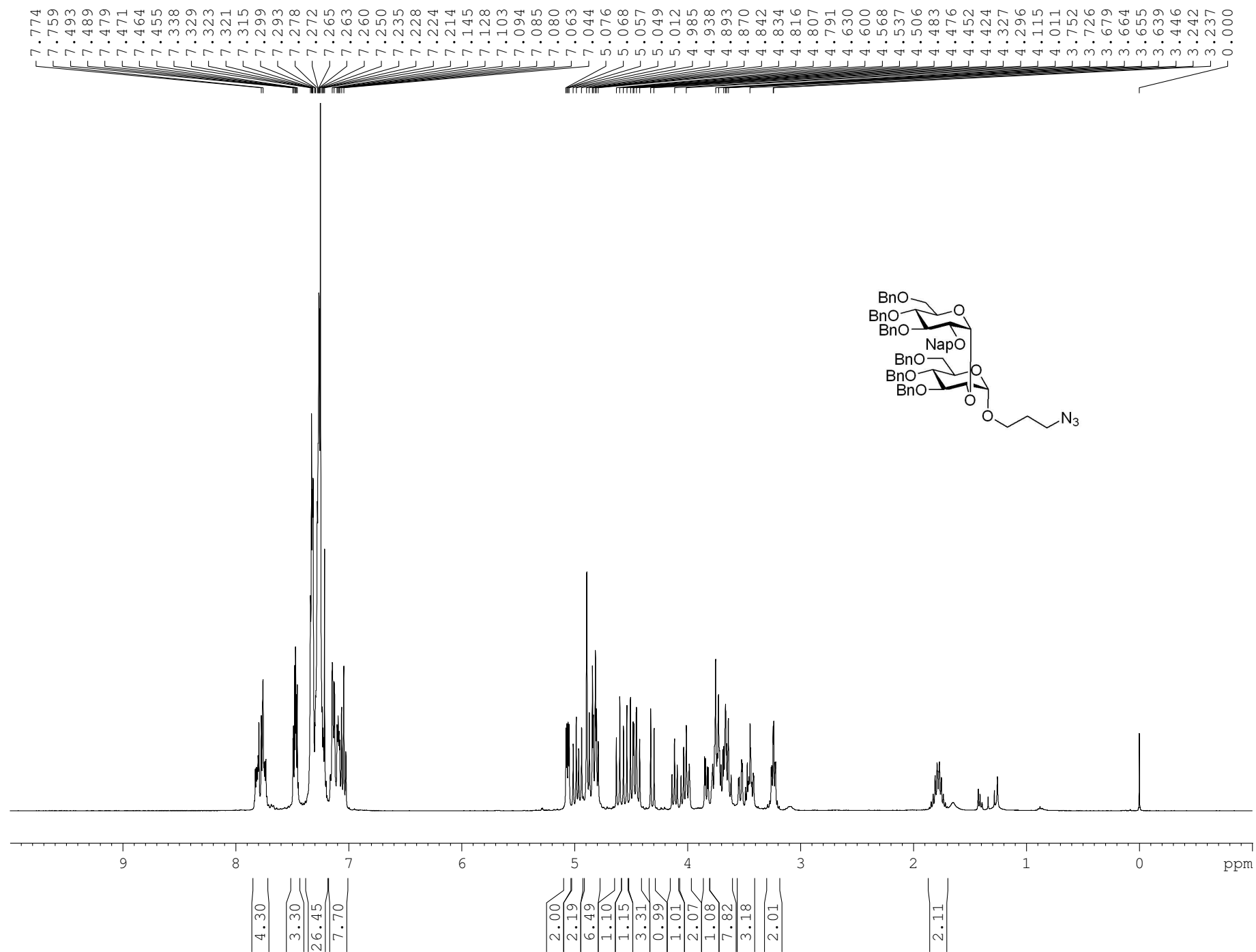


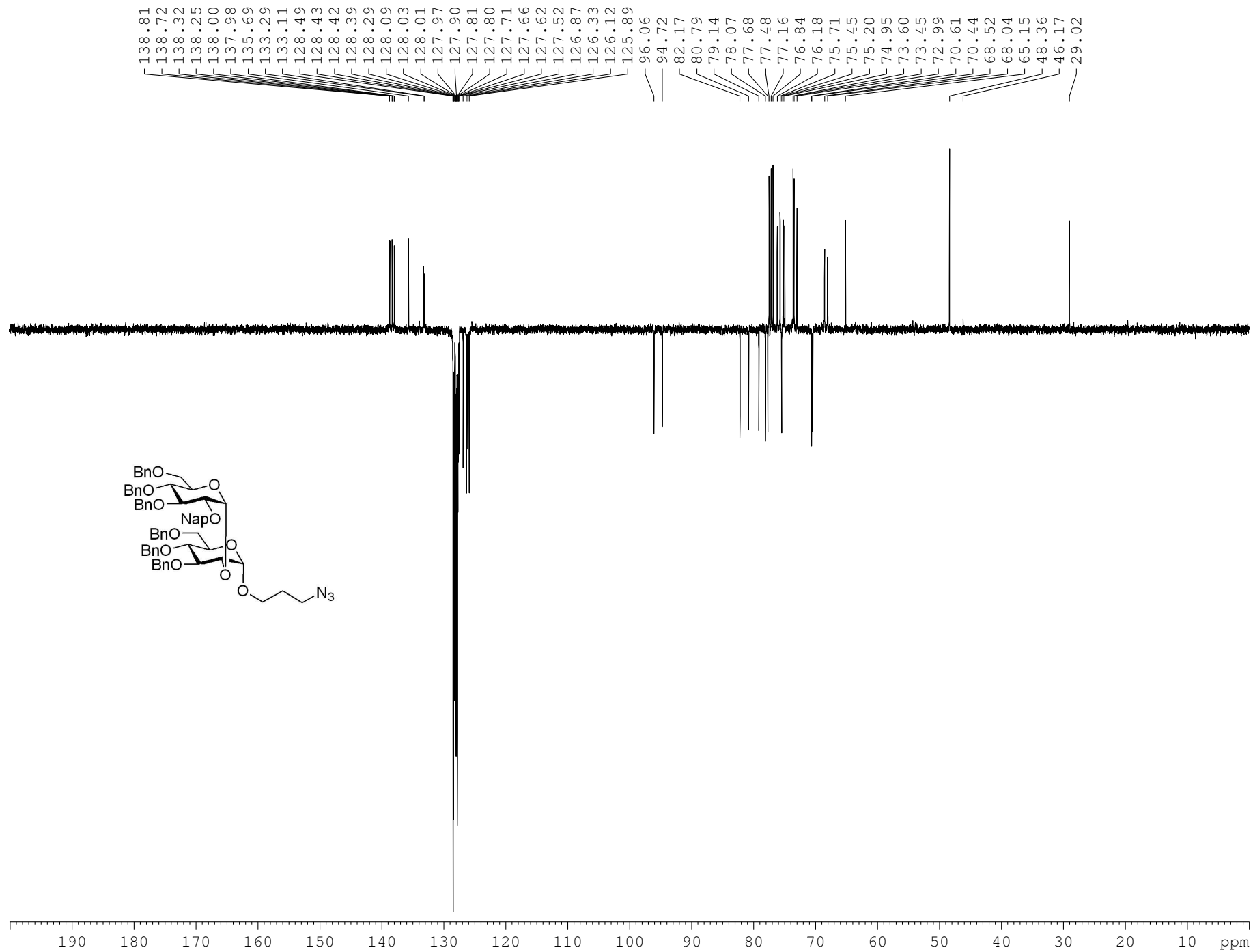


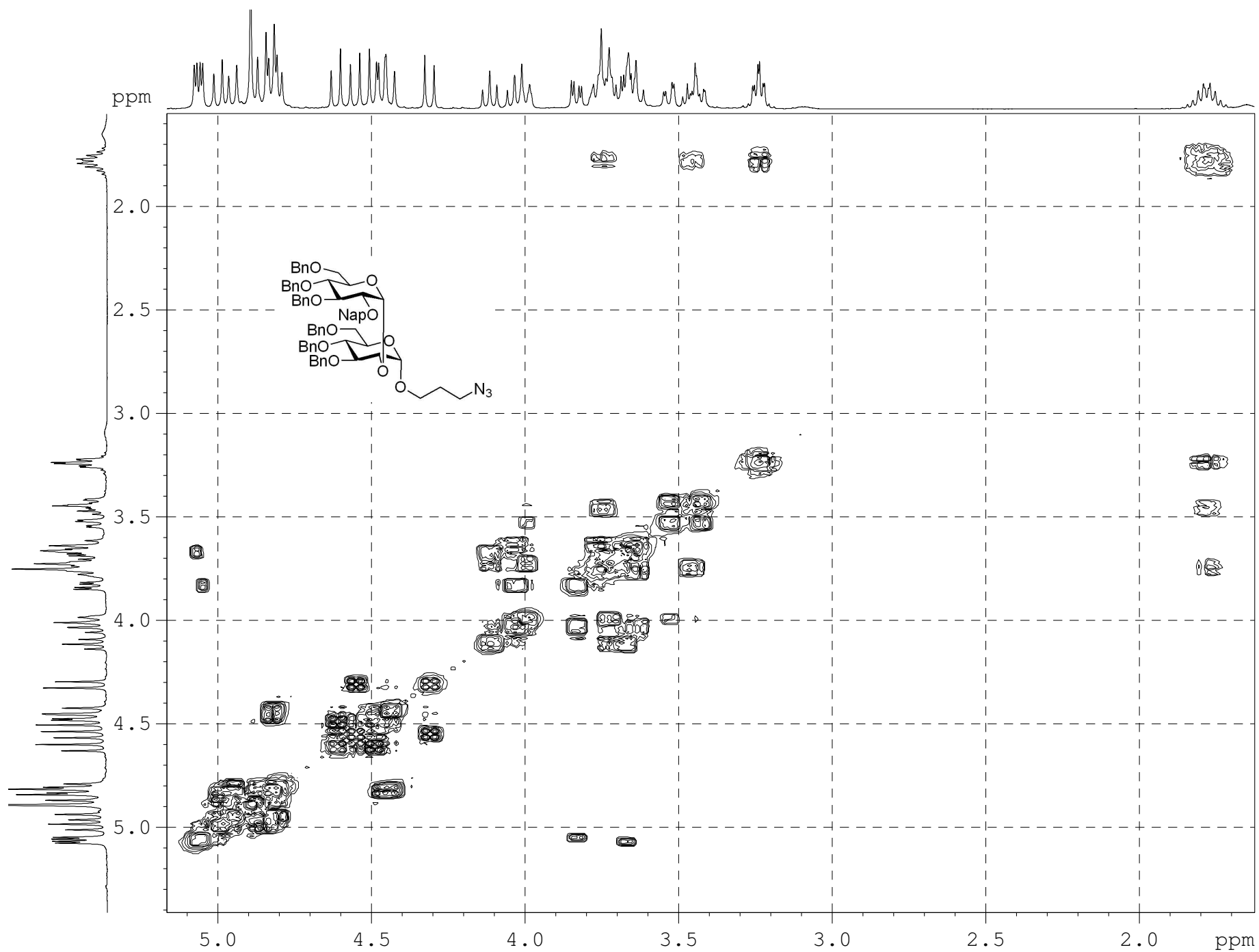


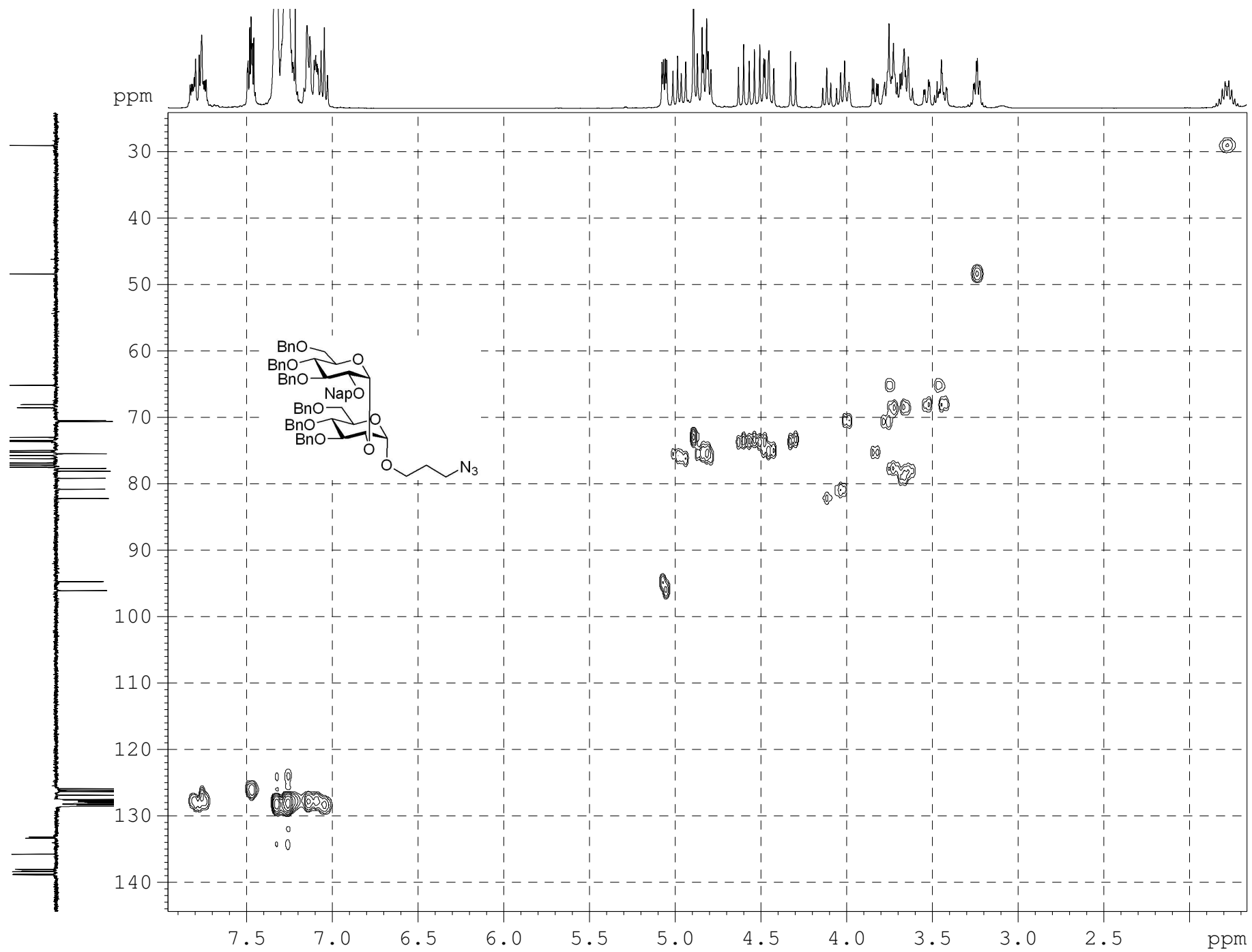


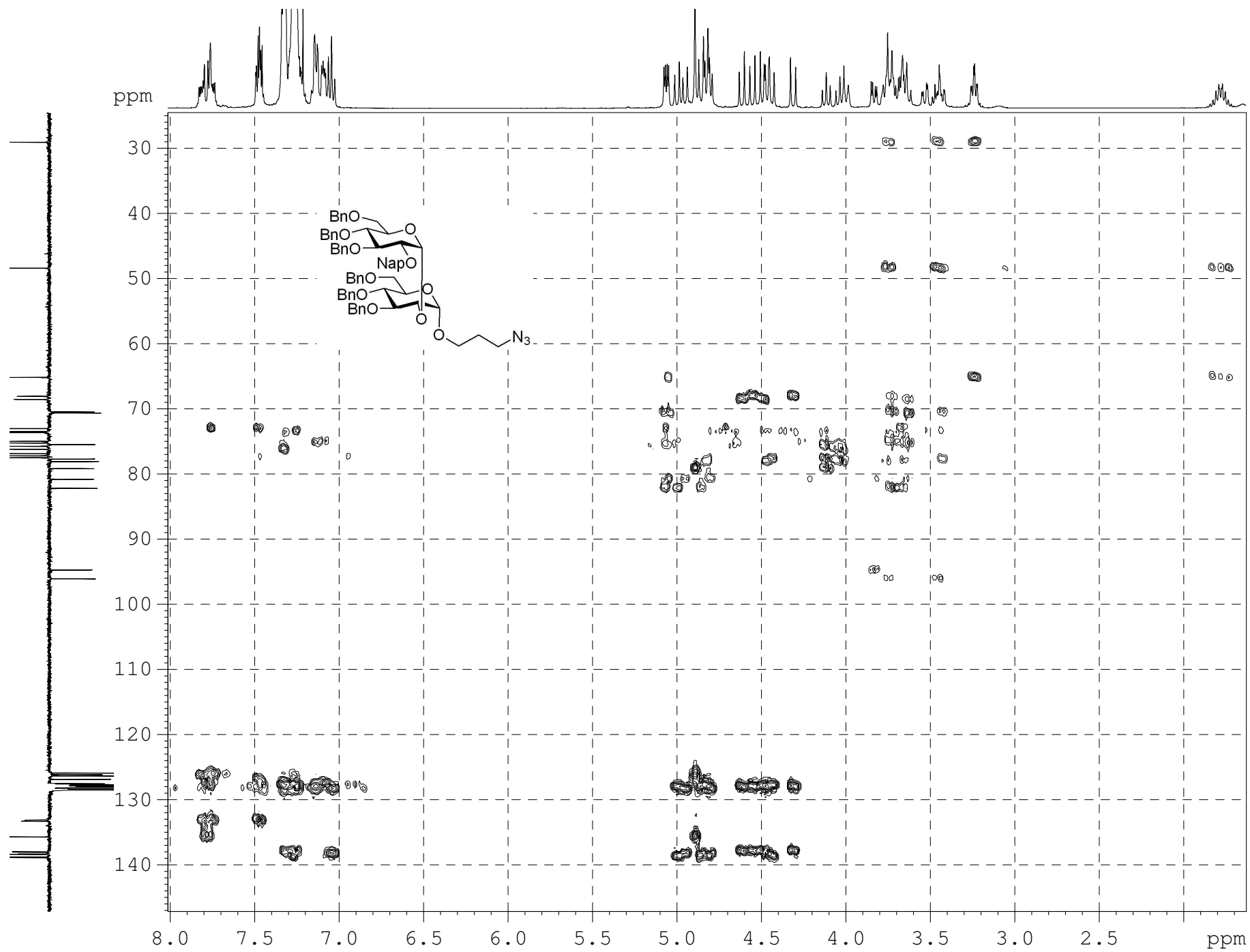
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC, Gated of 9

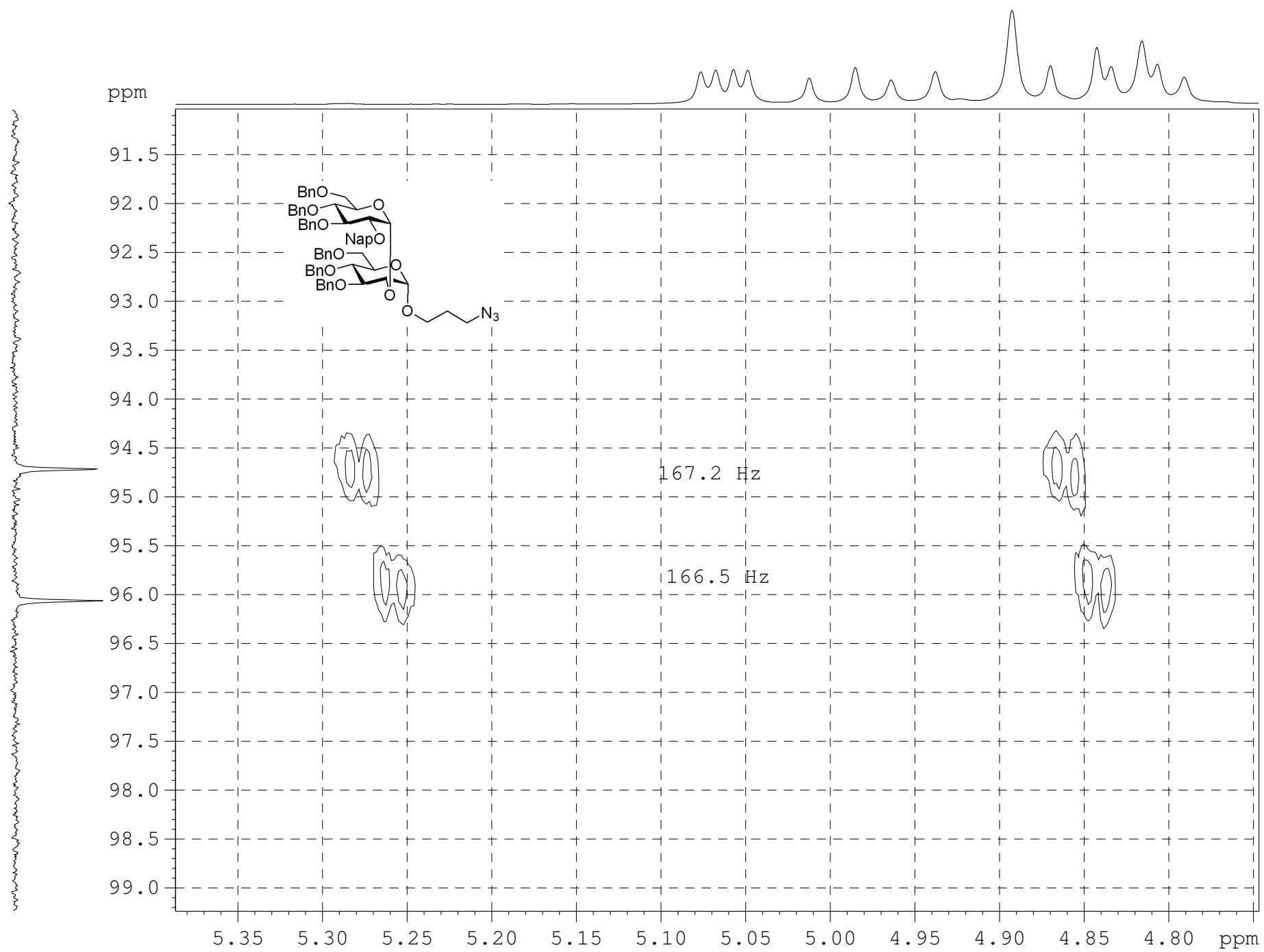


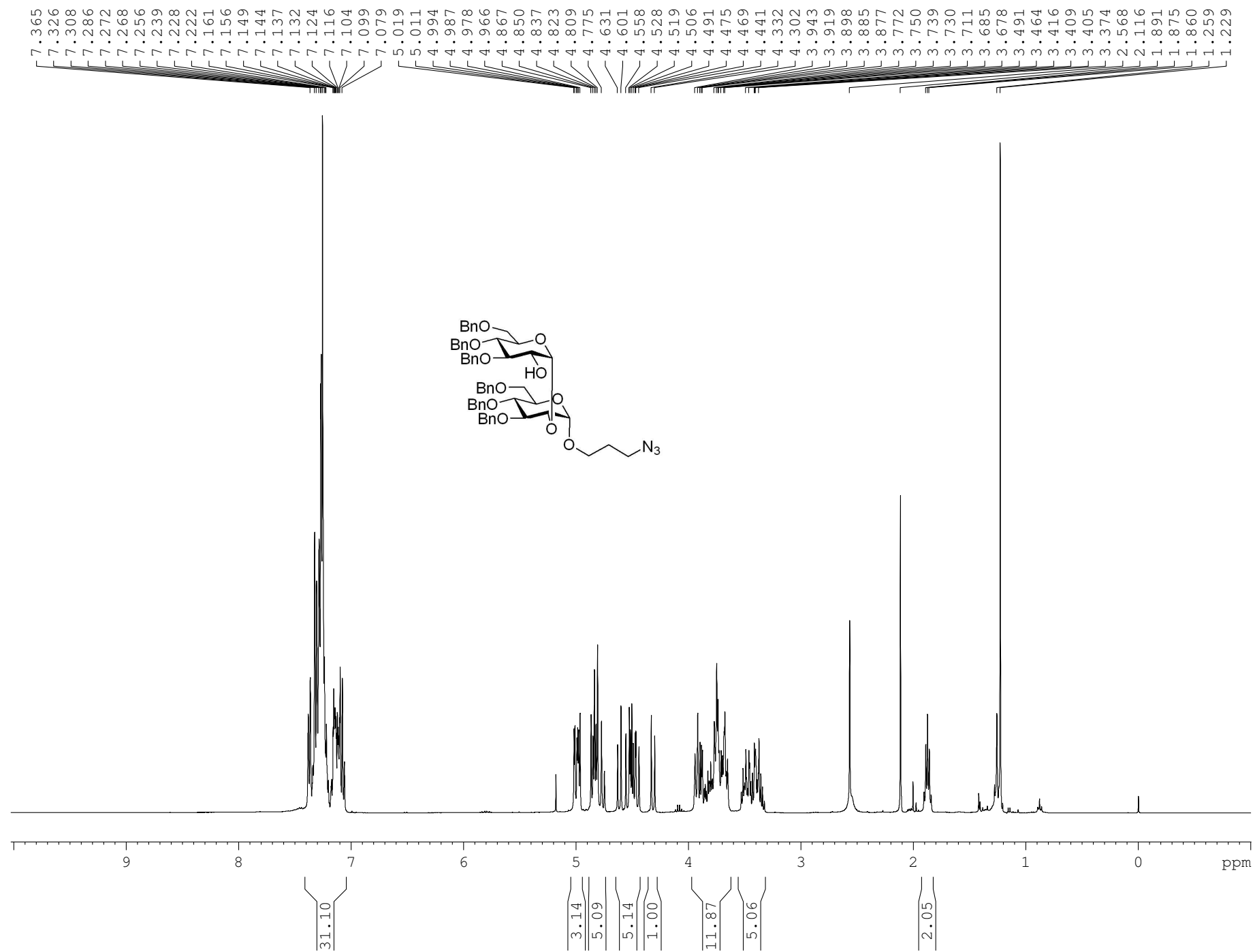




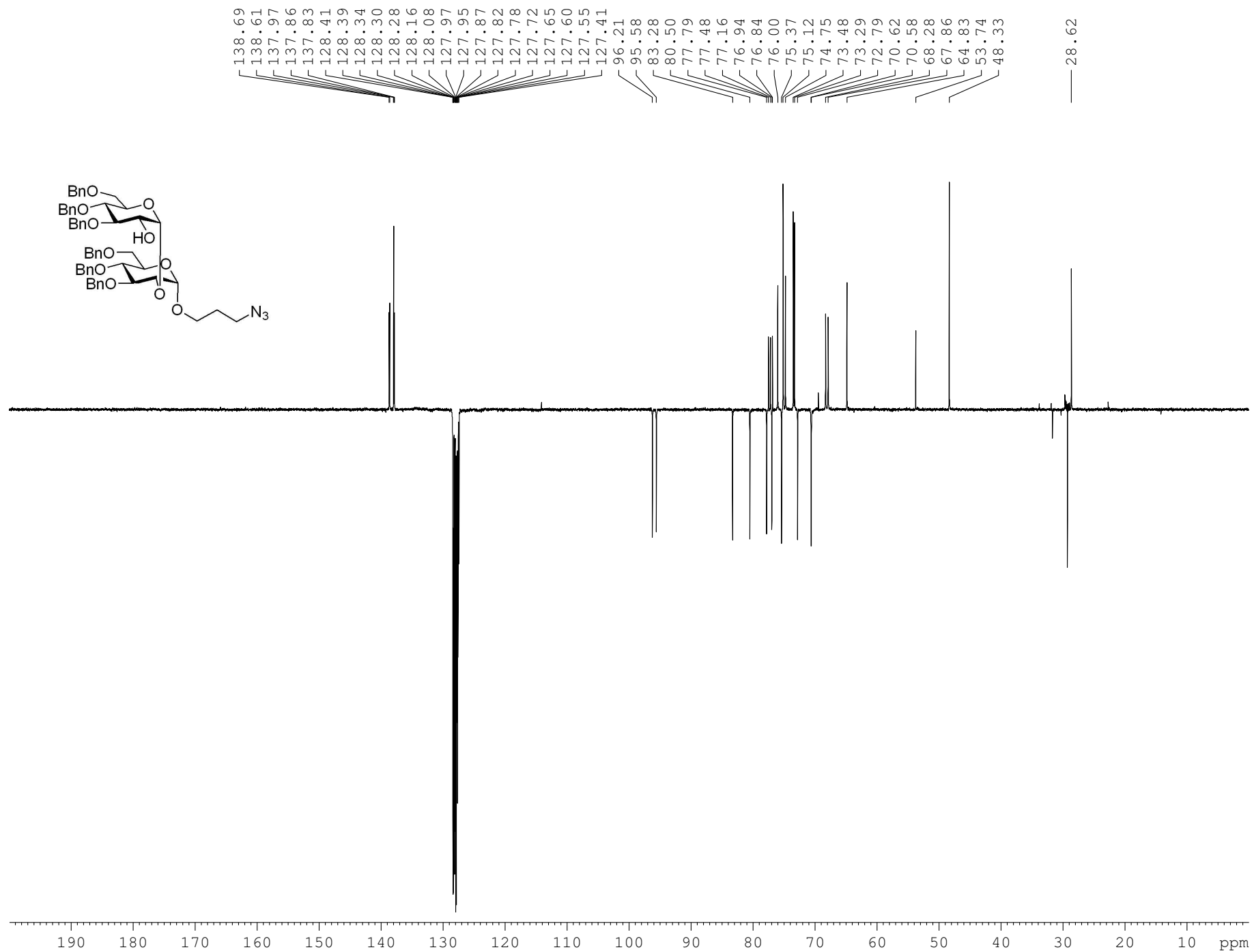


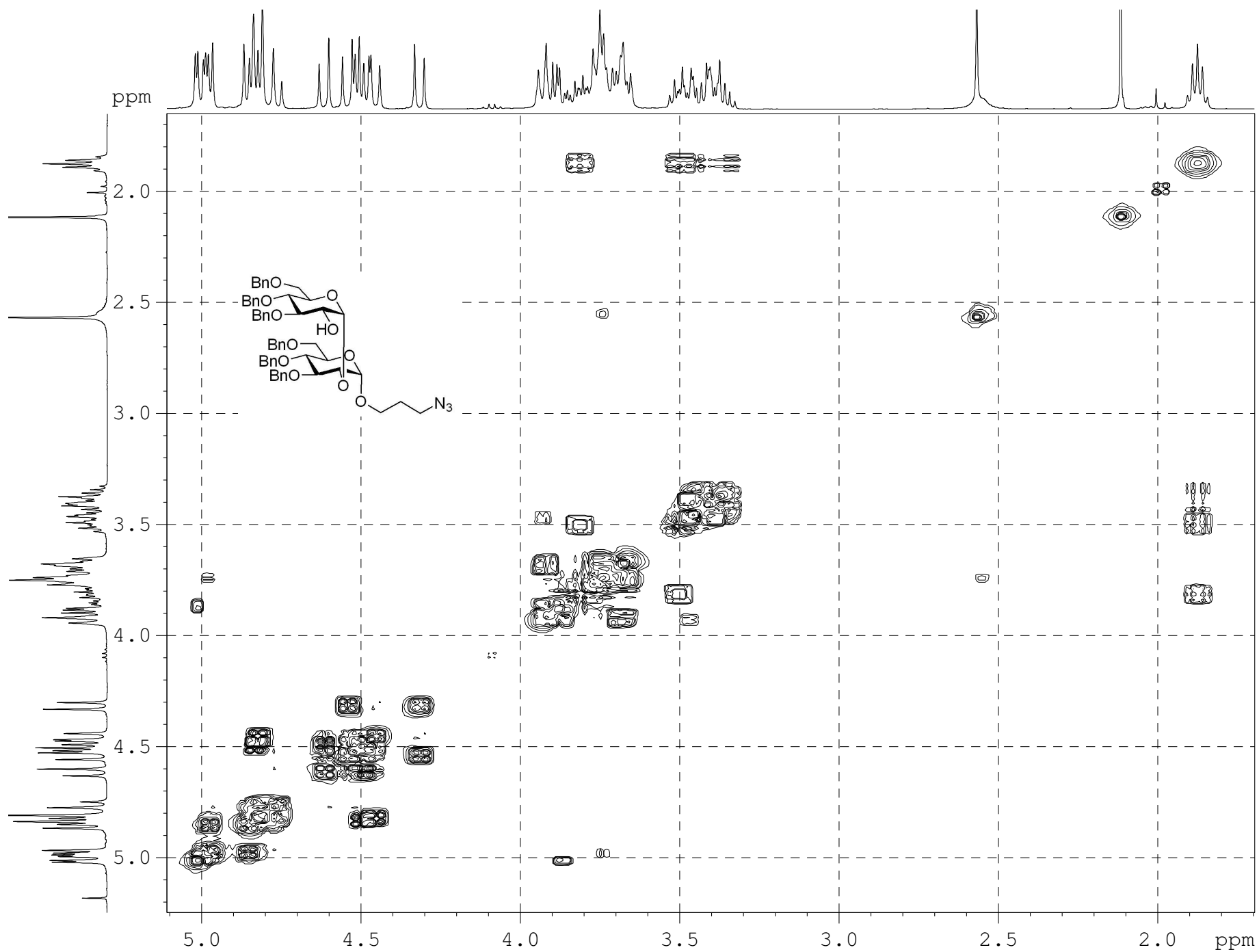


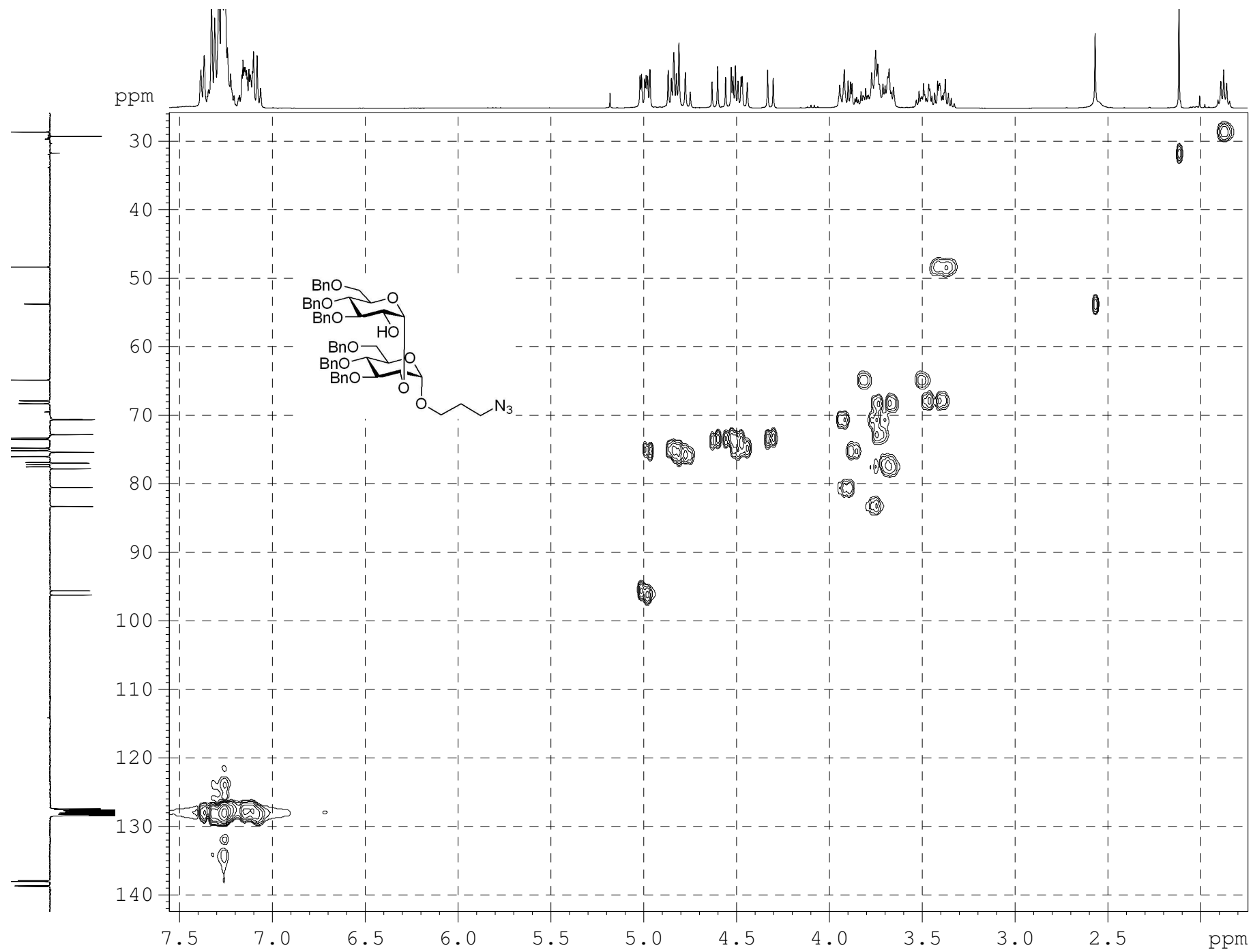


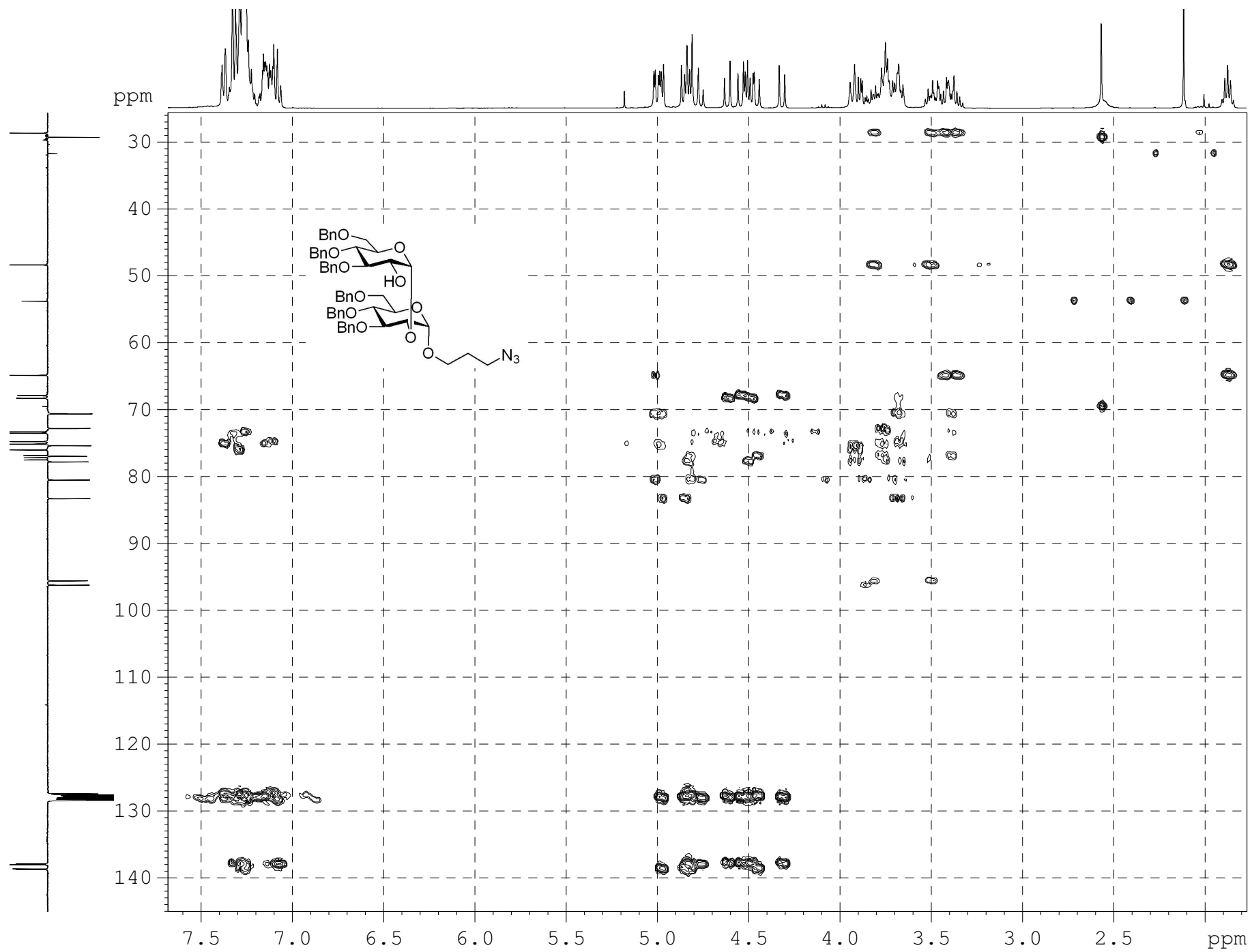


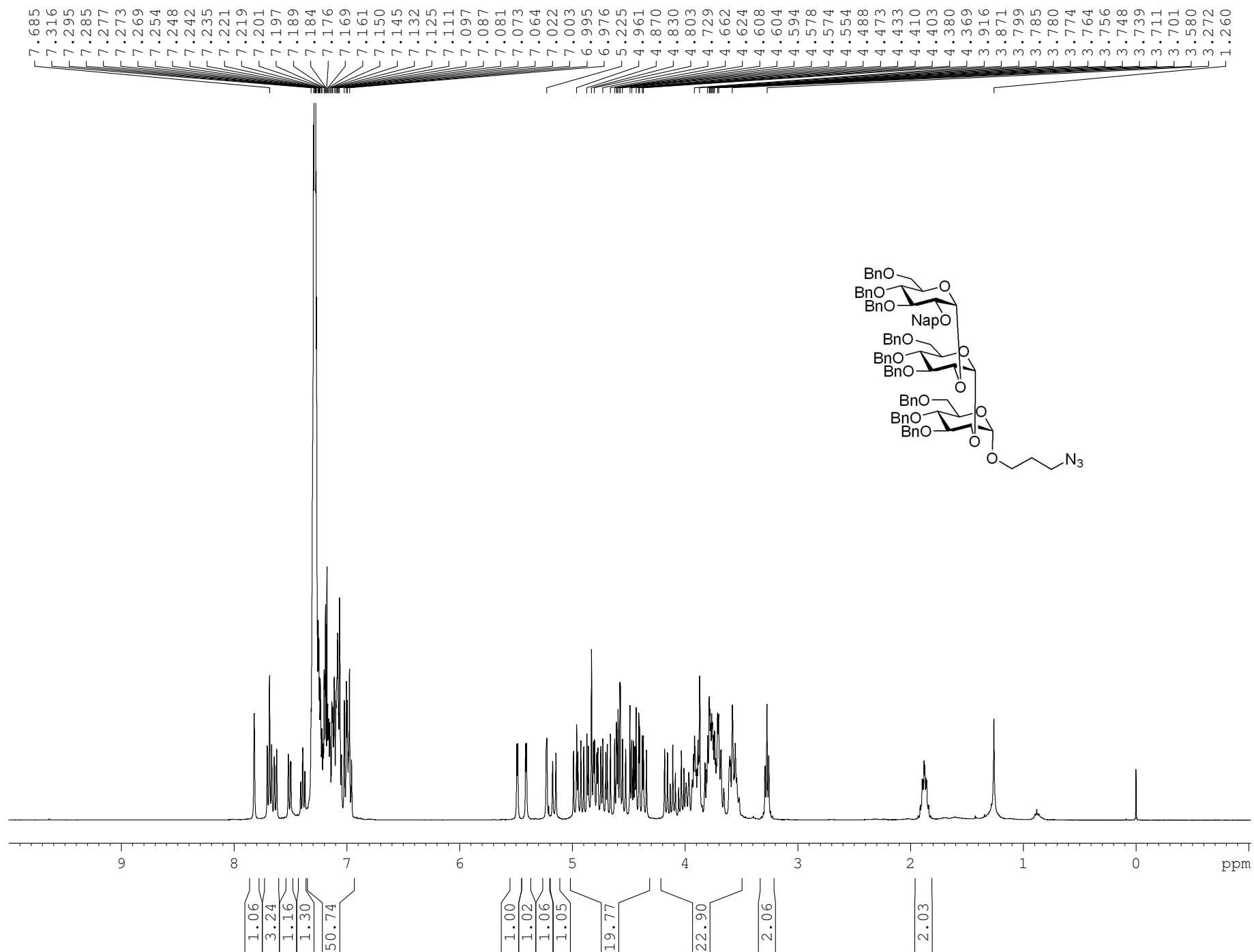
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC of **10**

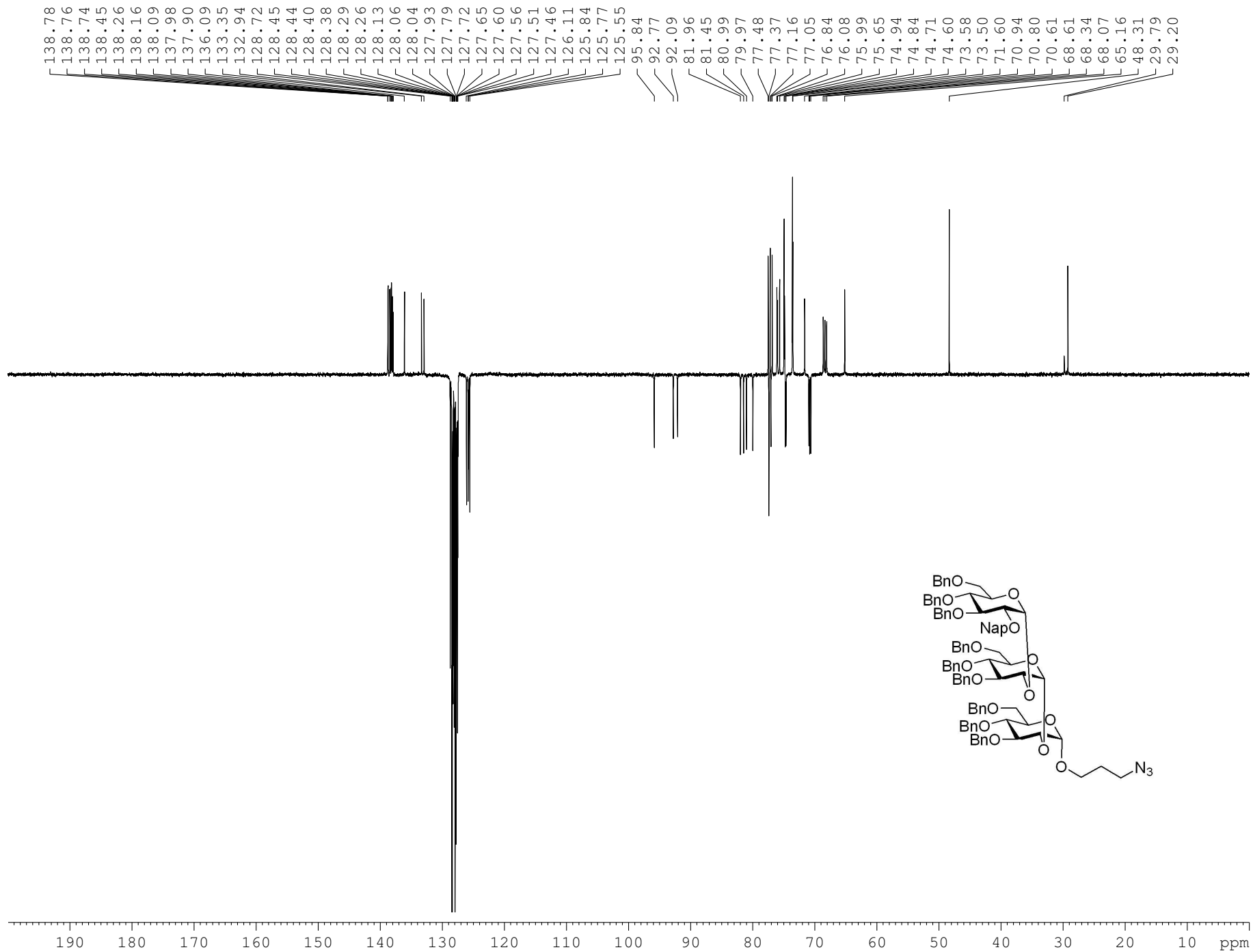


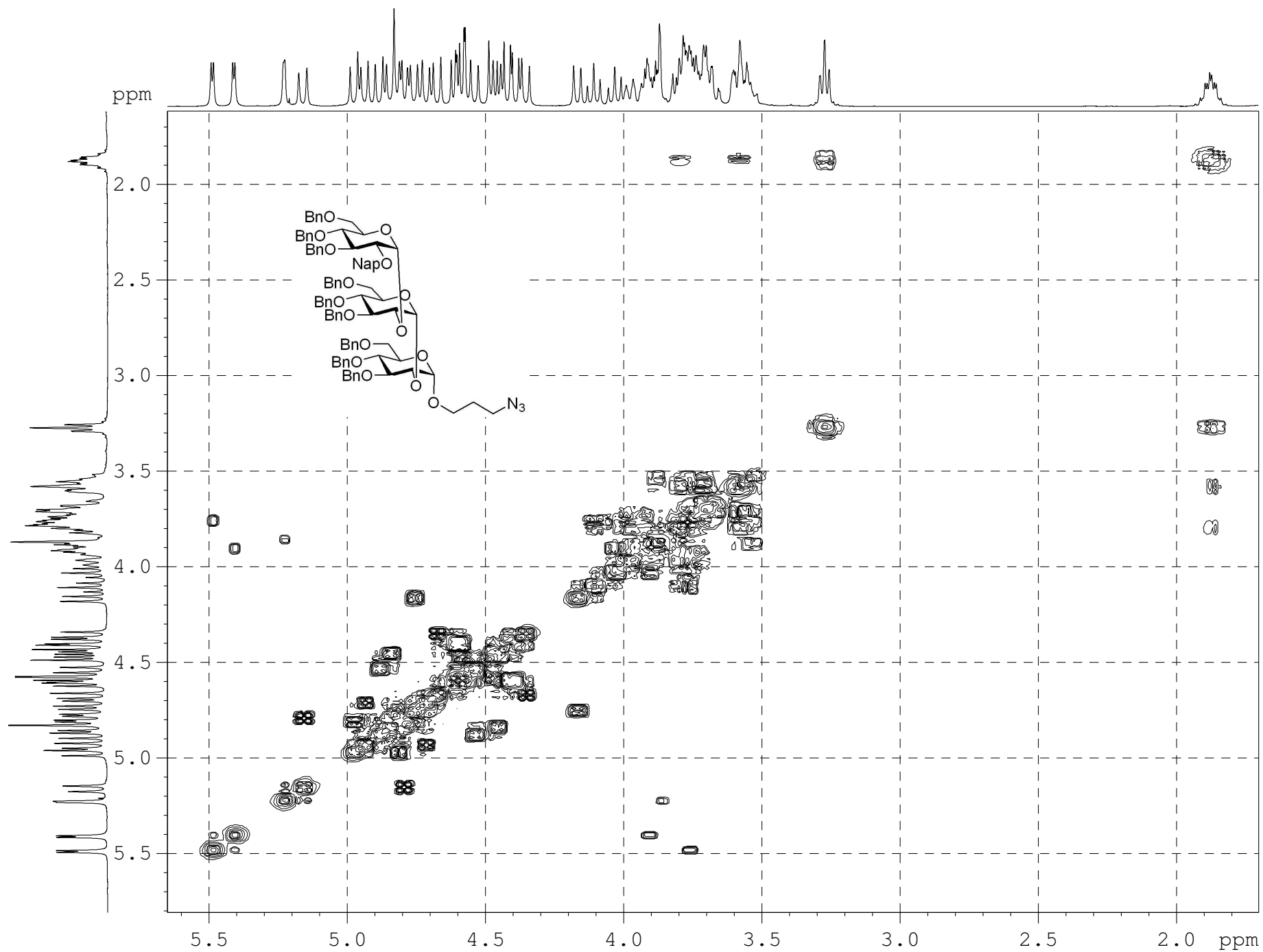


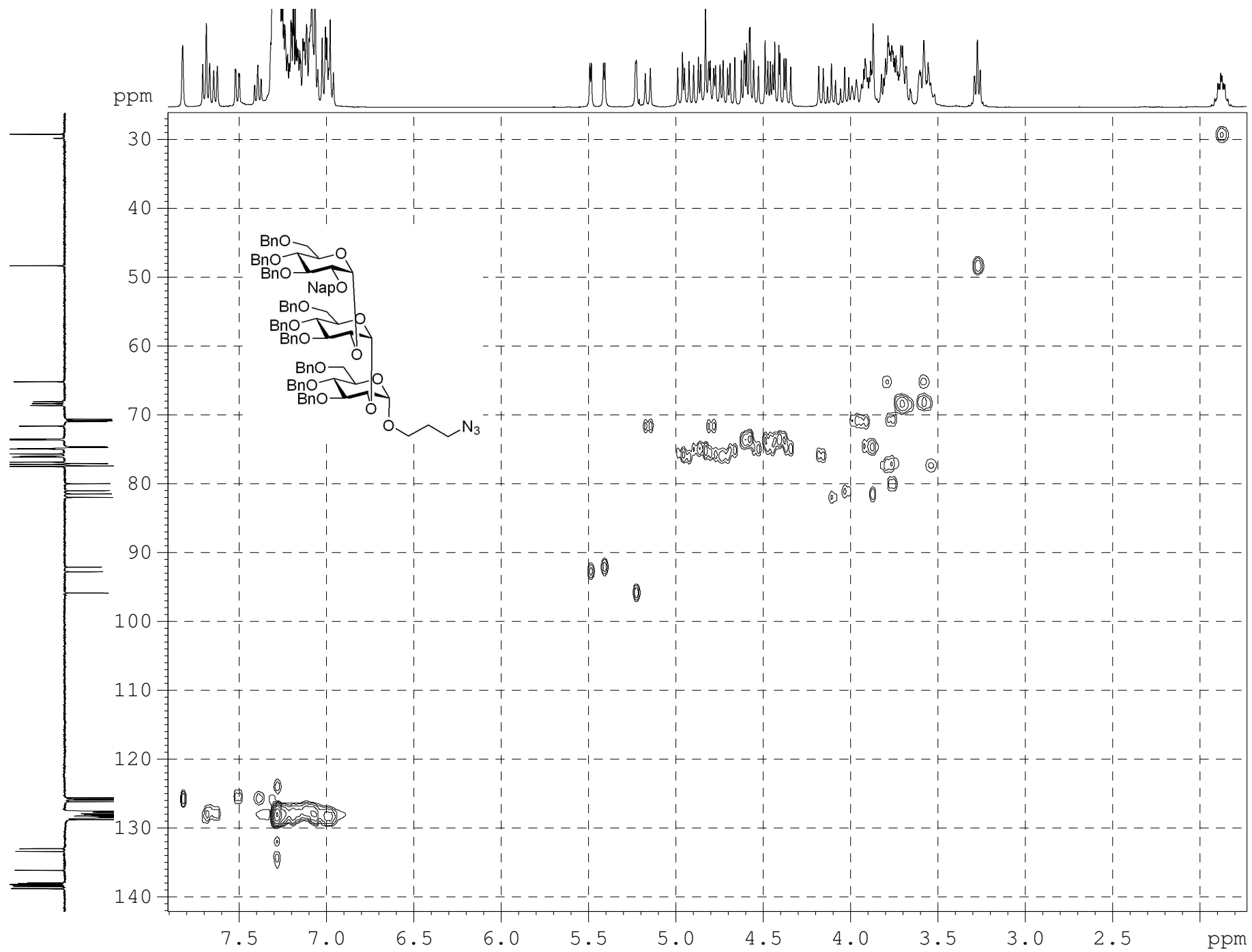


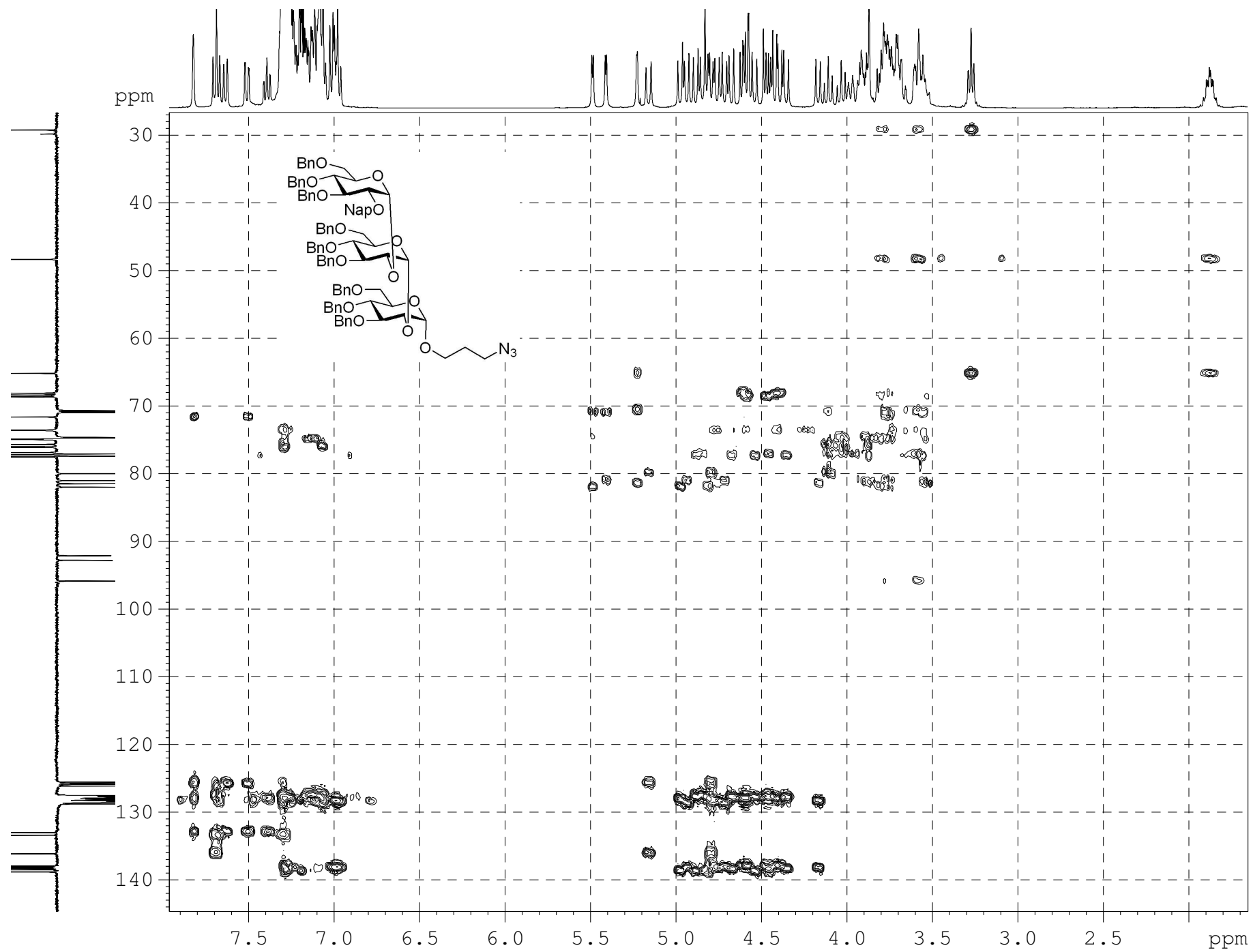


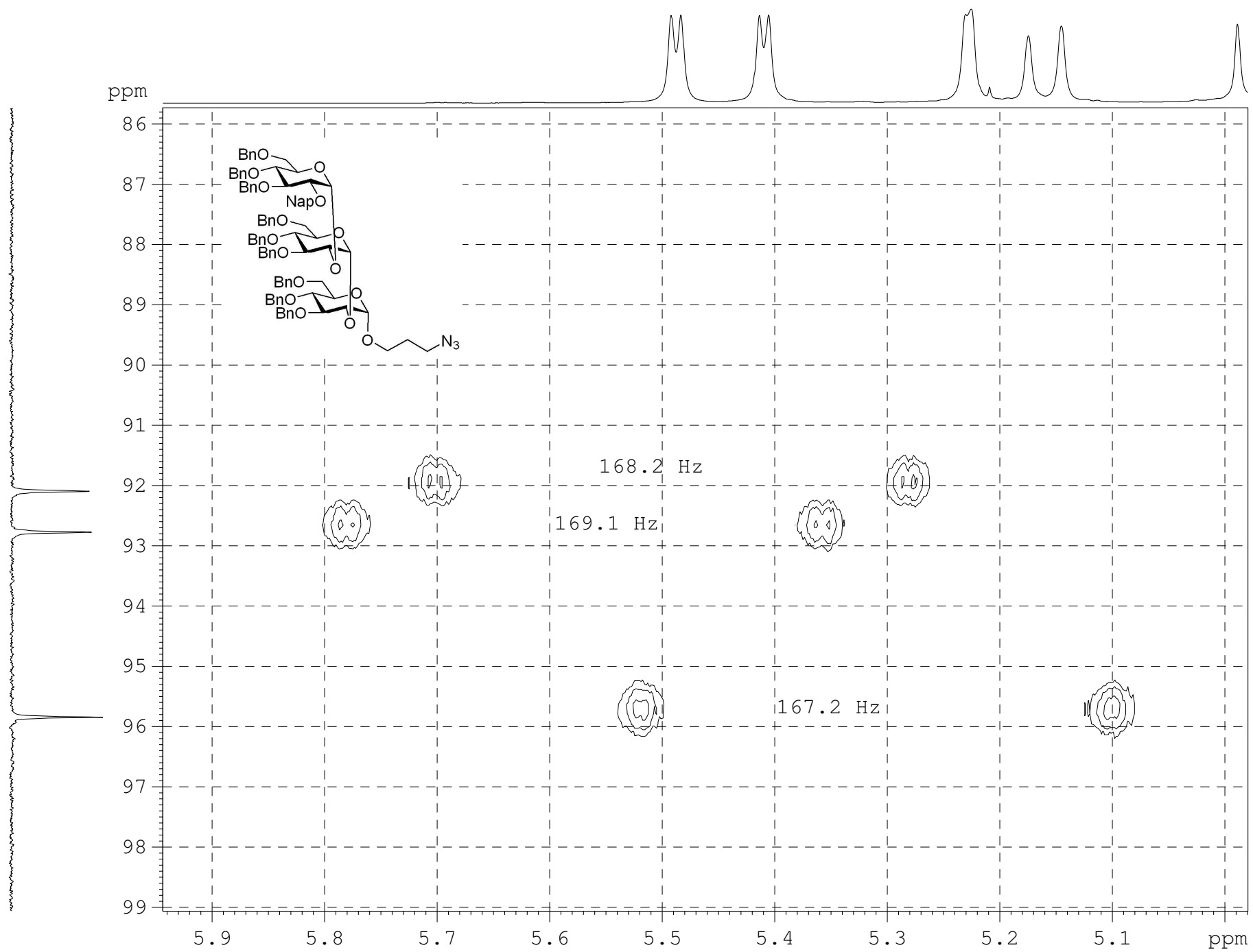
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC, Gated of **11**



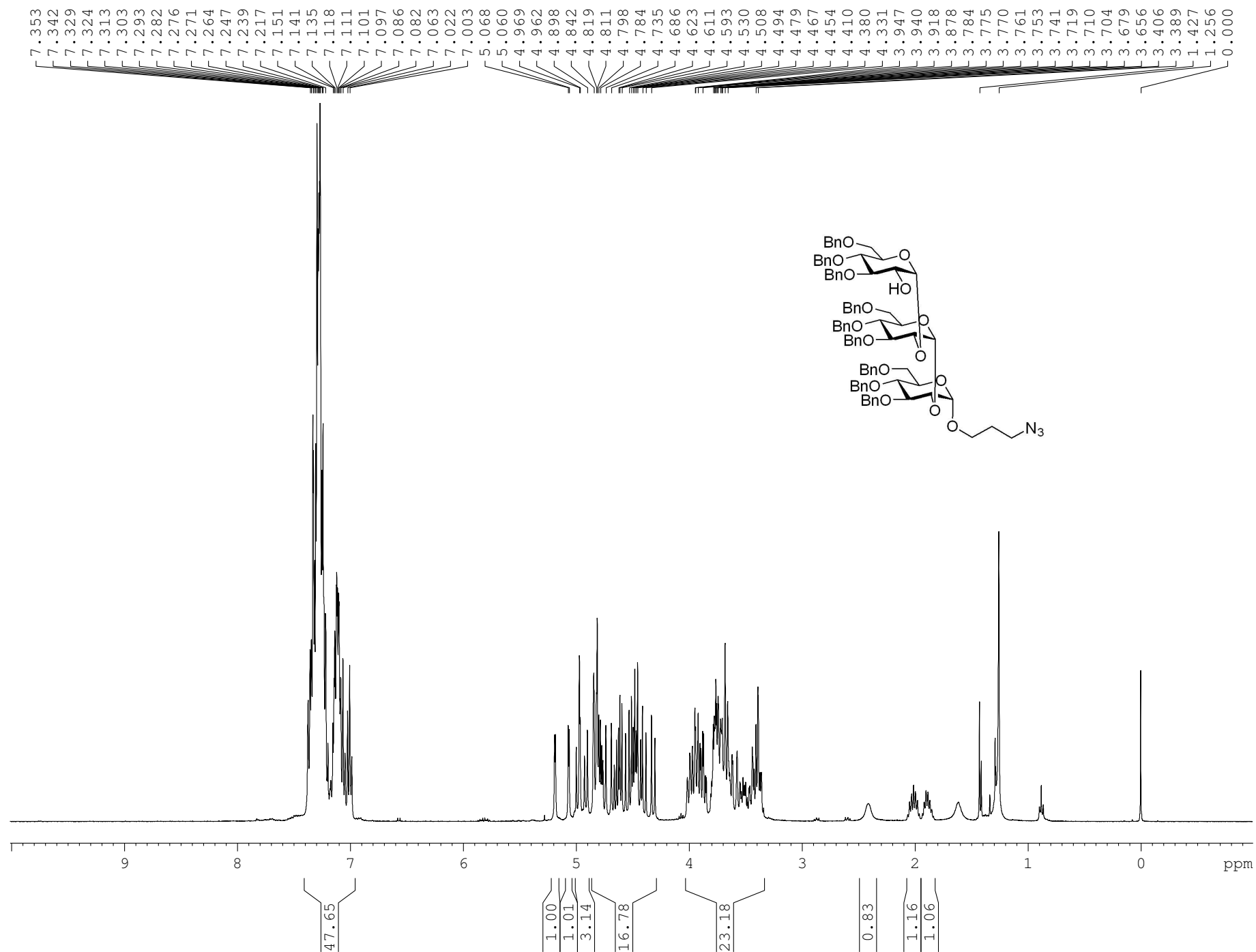


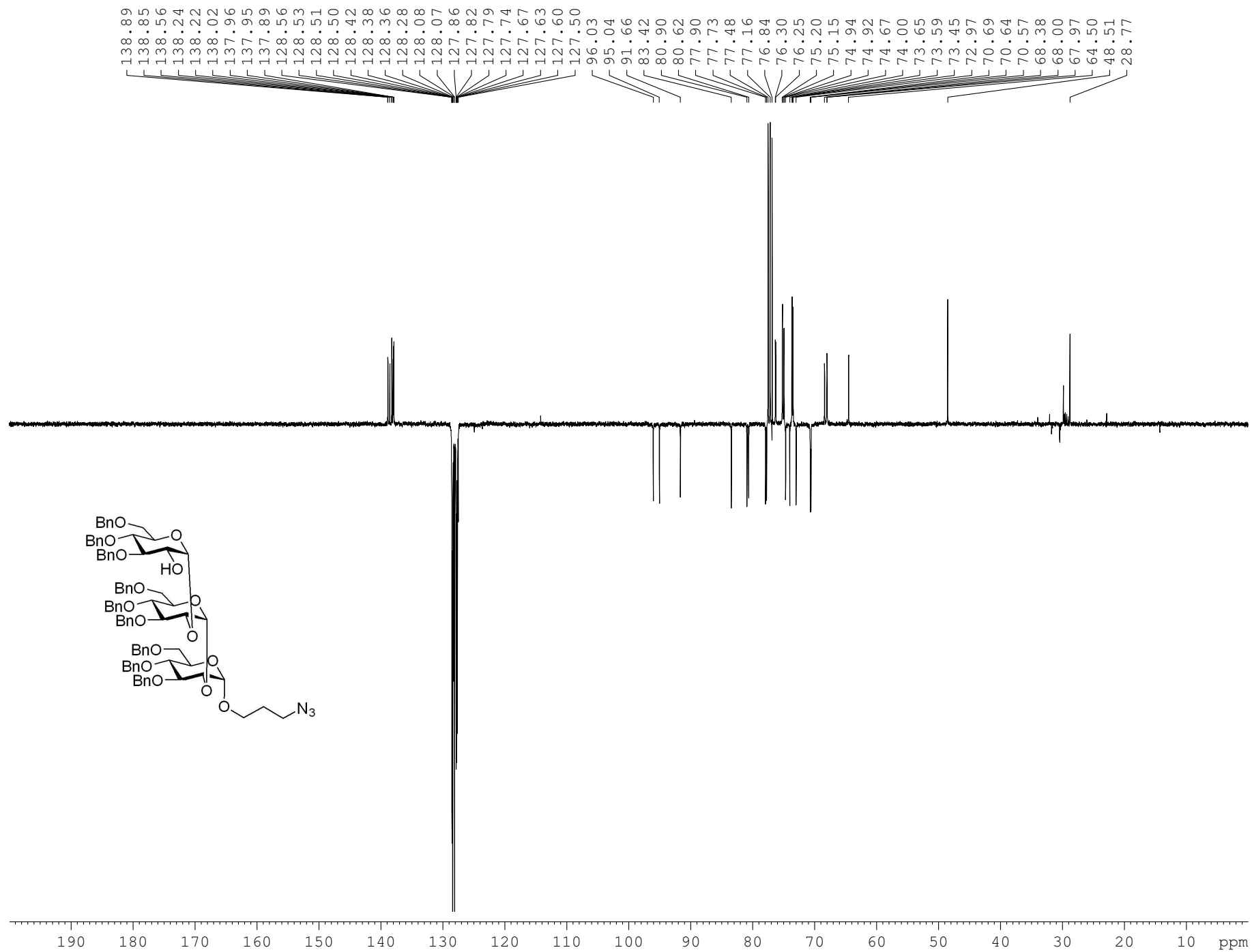


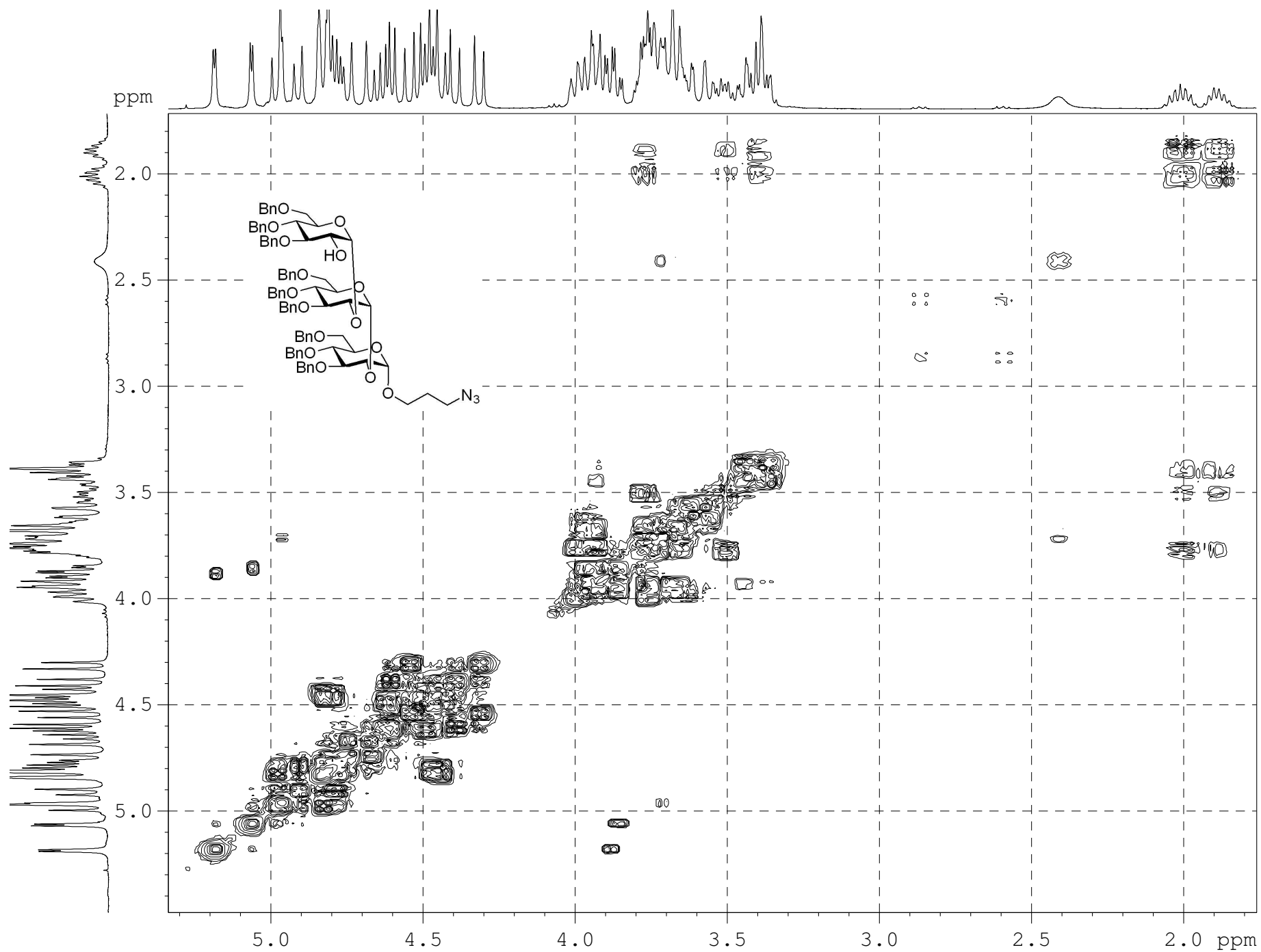


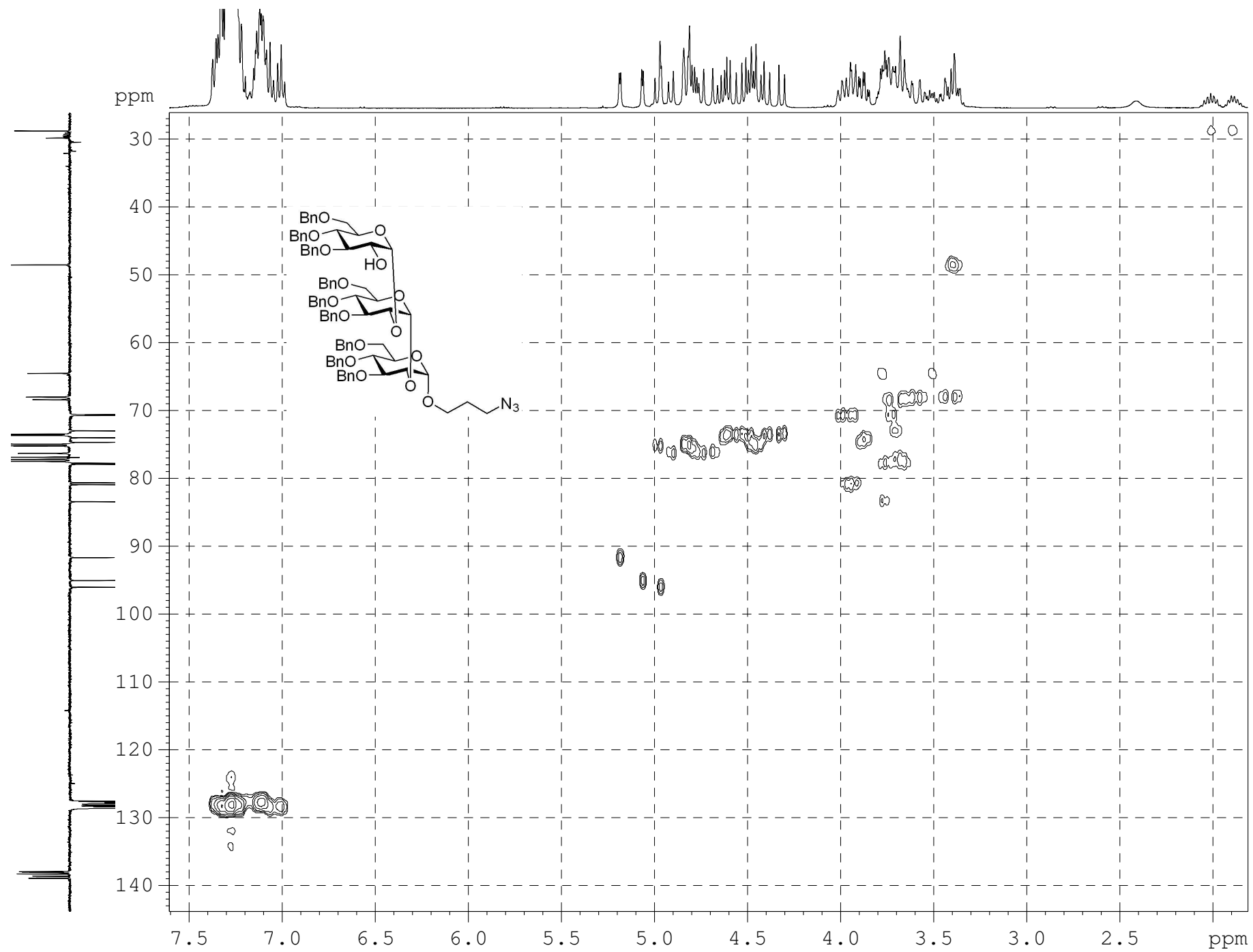


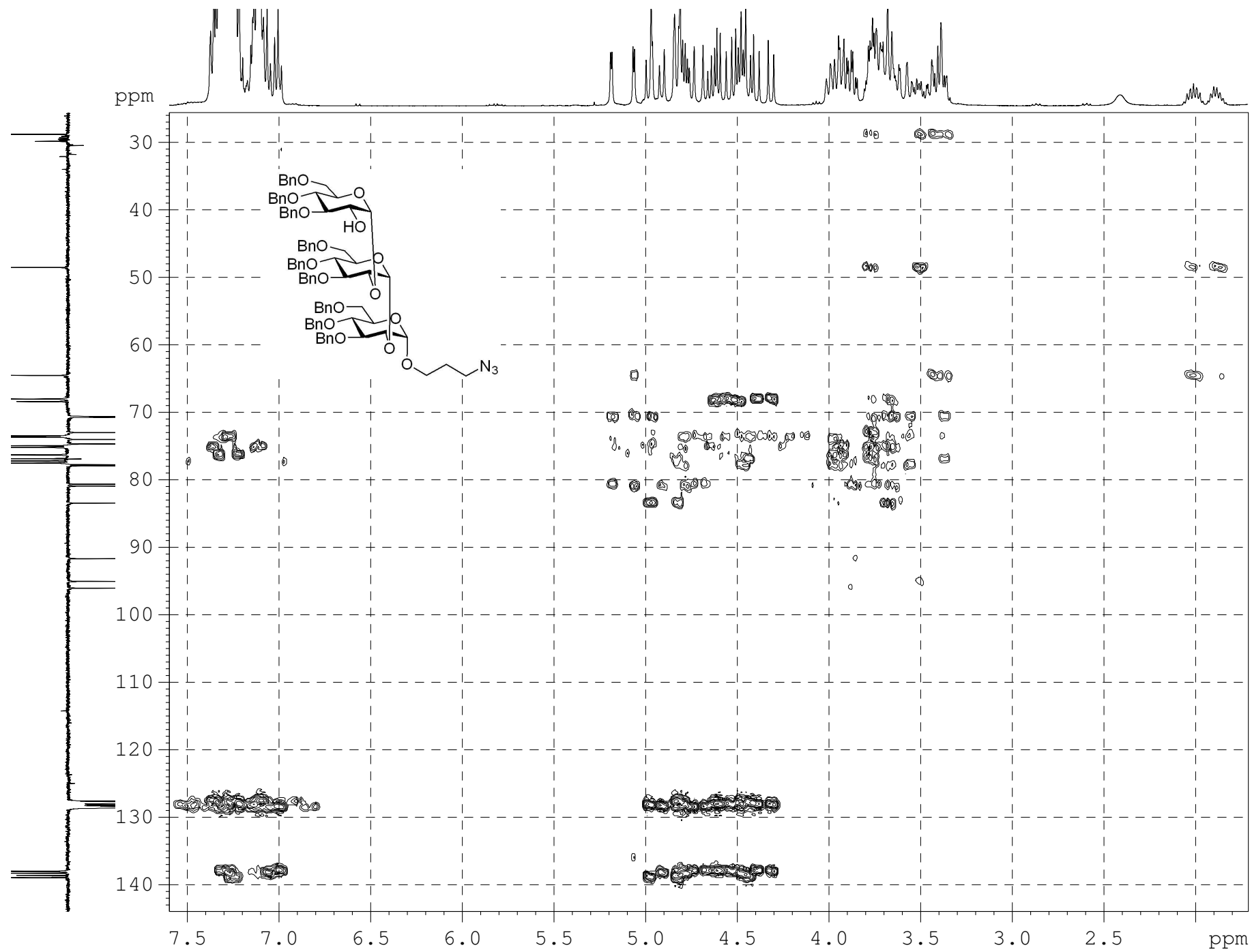
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC of **12**



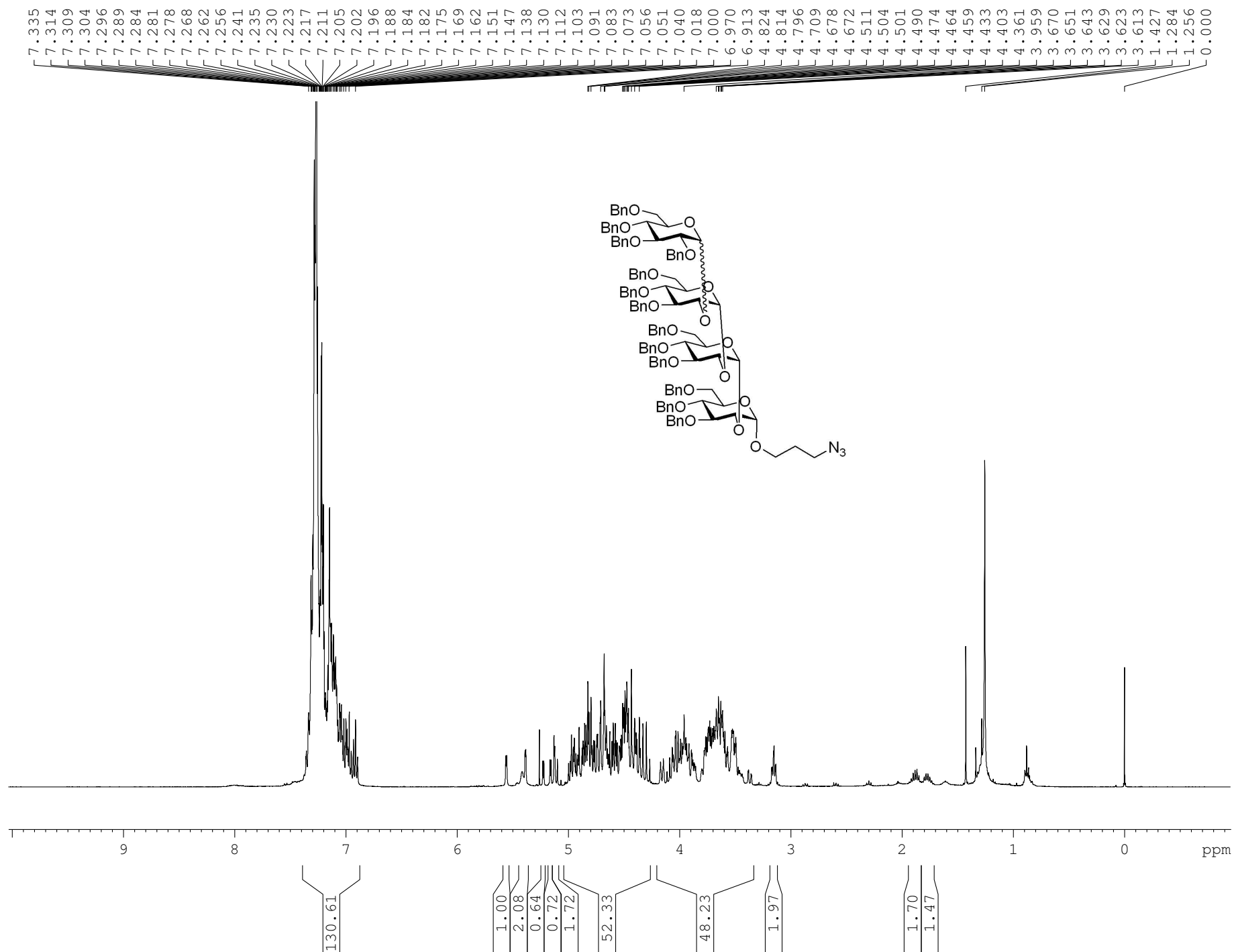


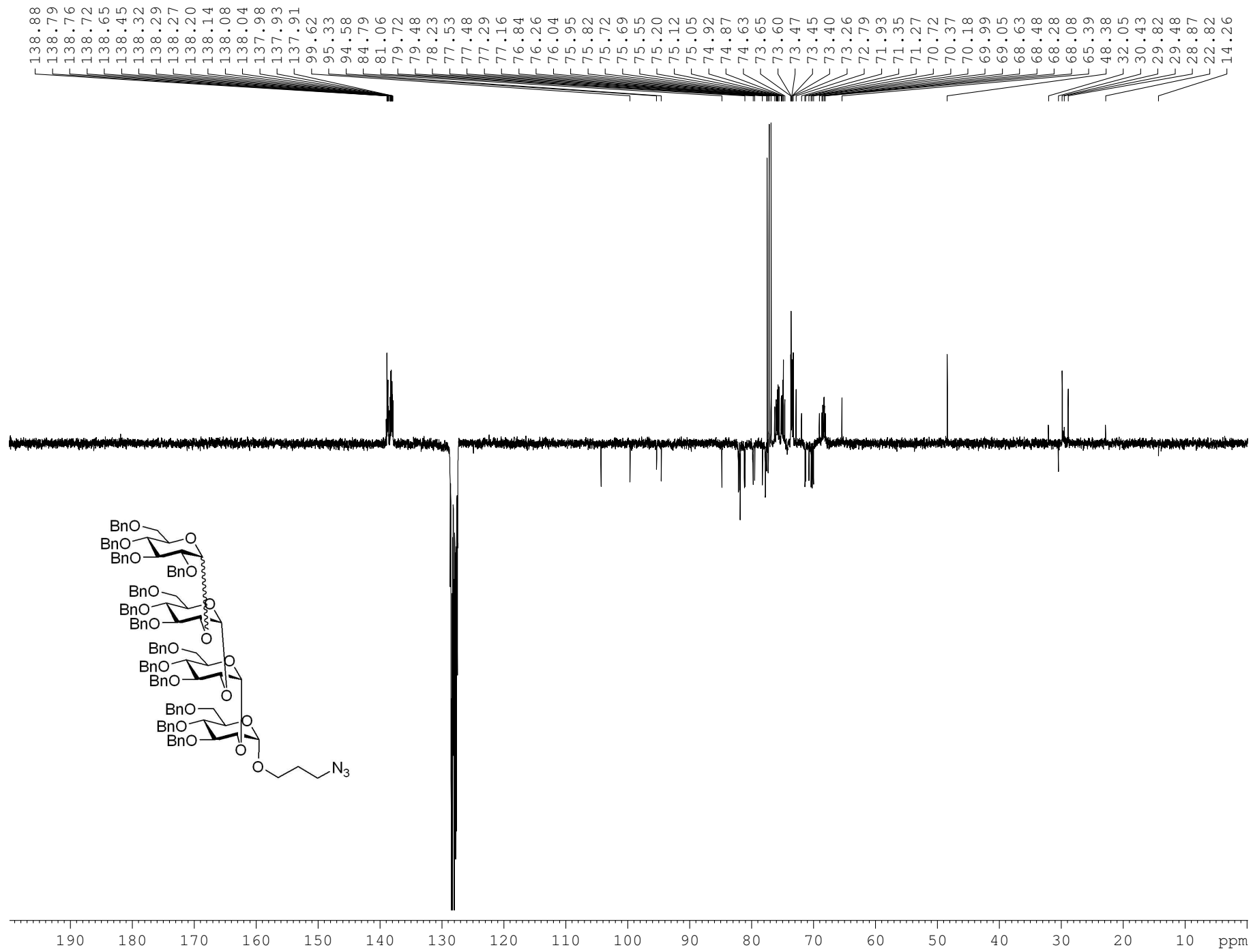


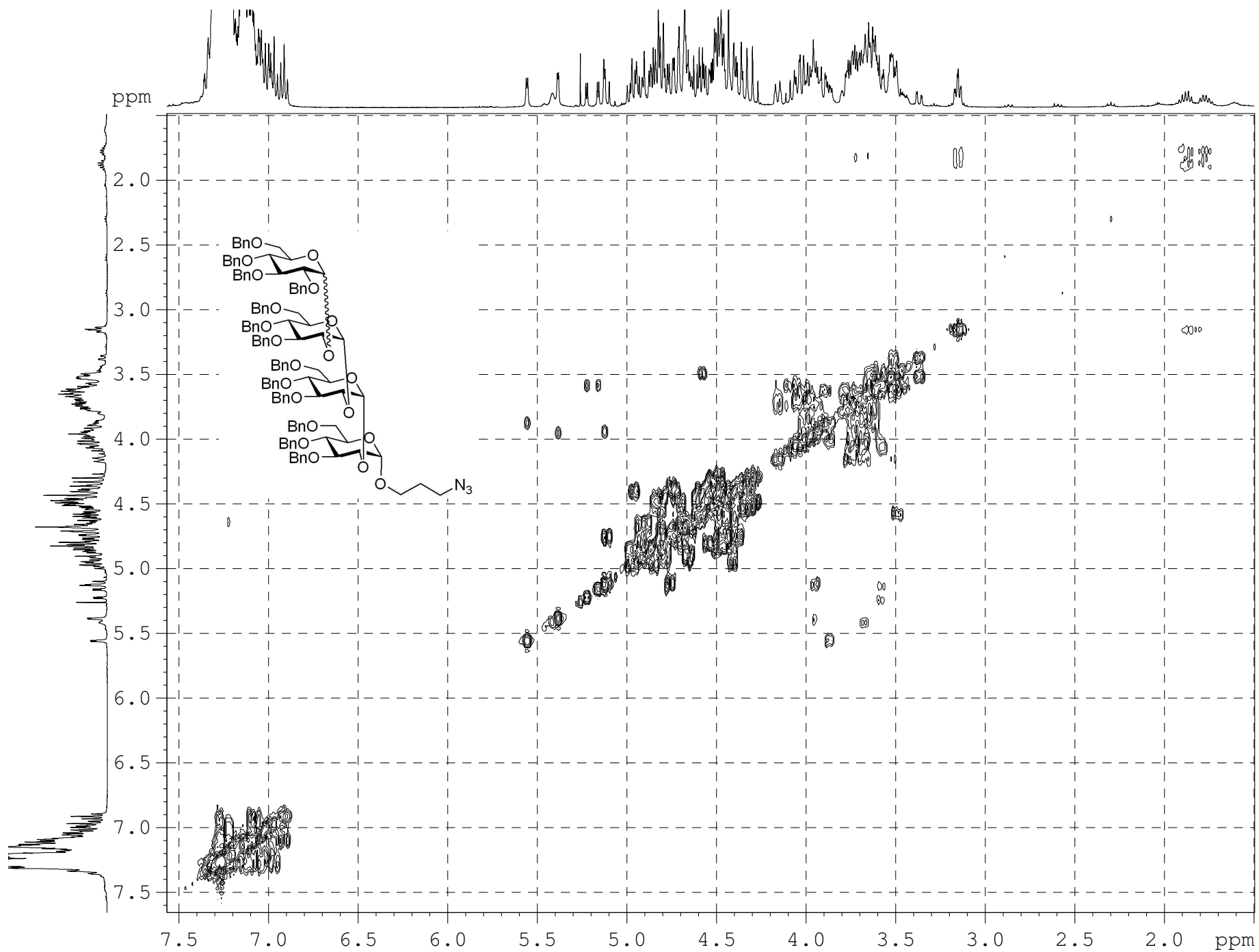


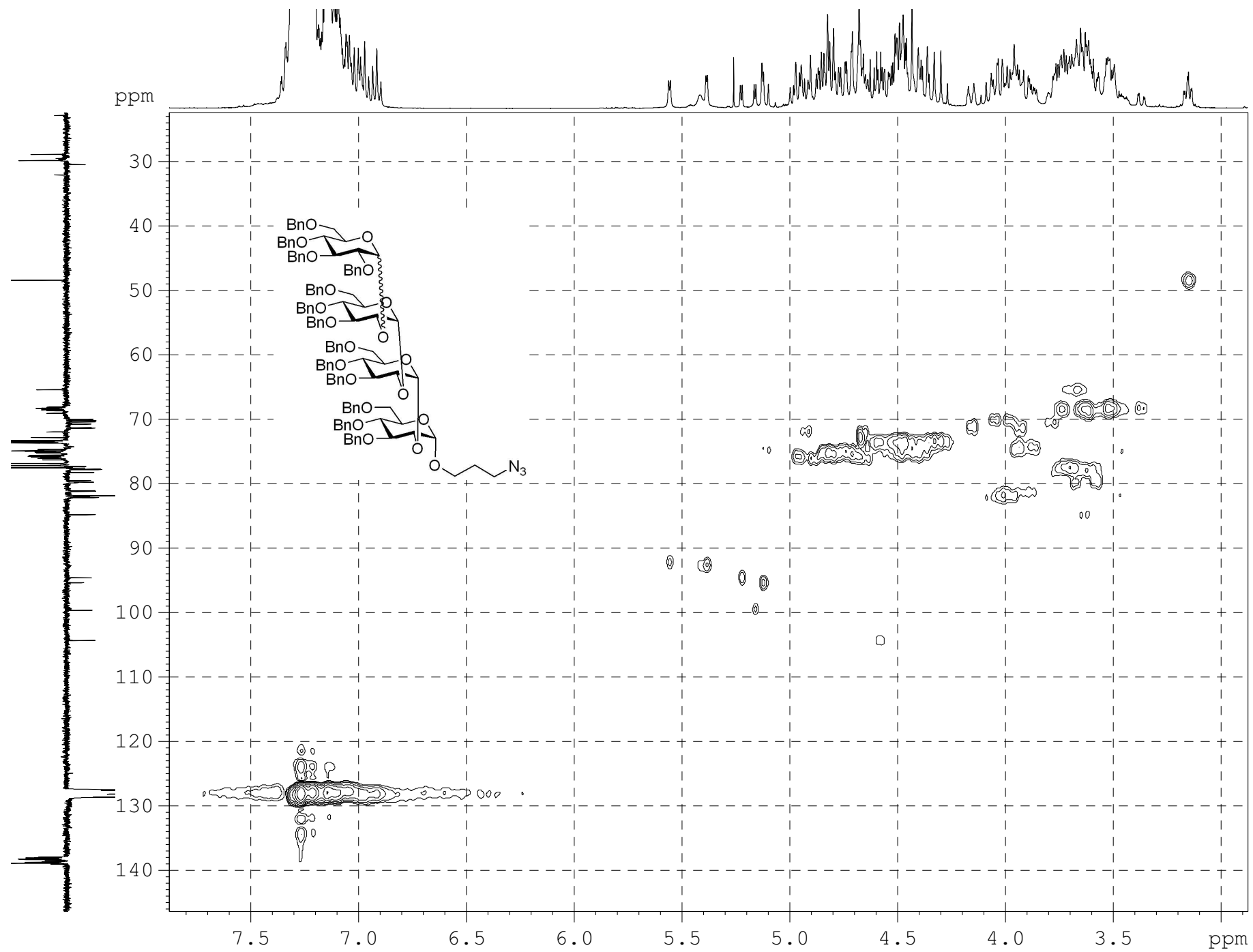


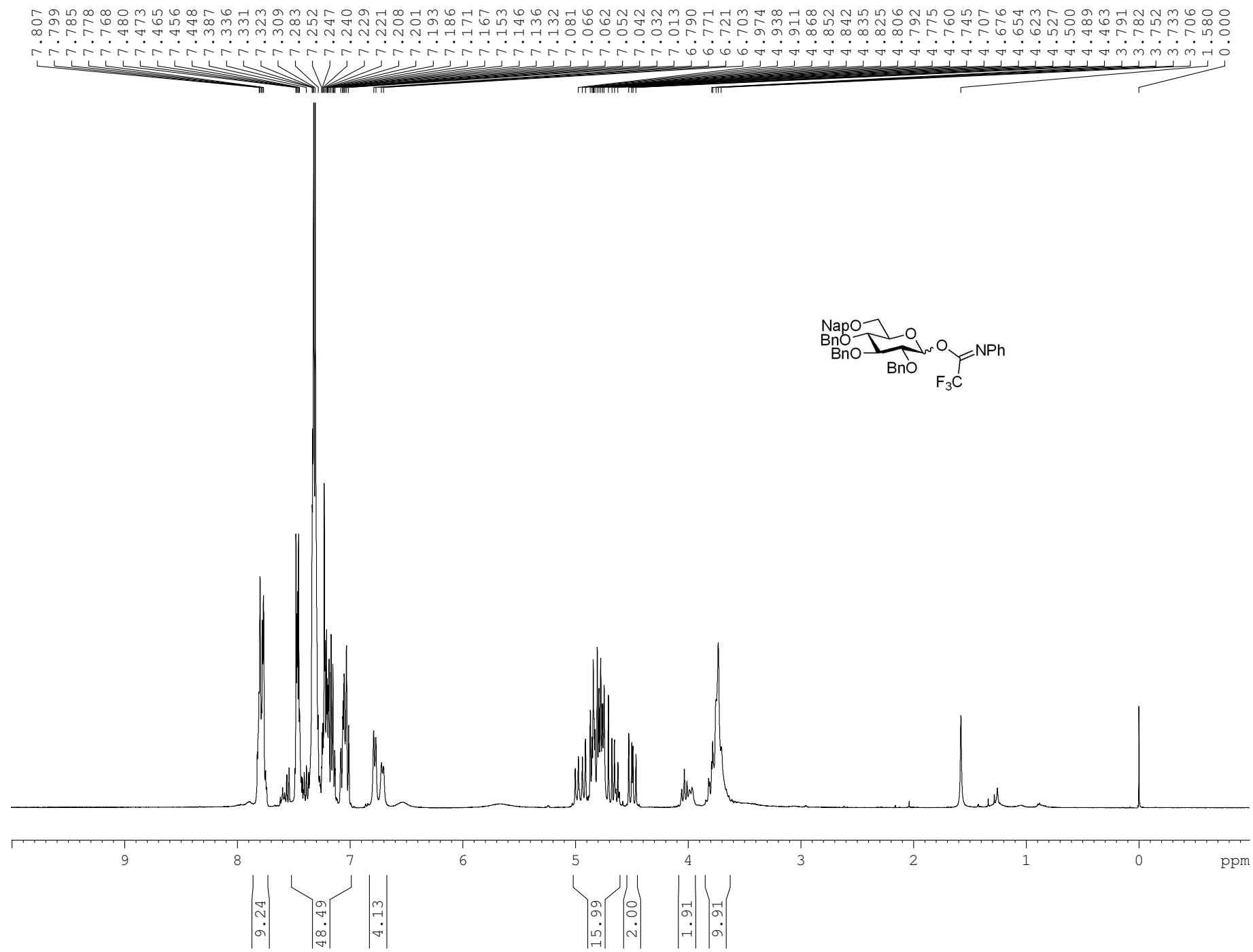
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC of **14**



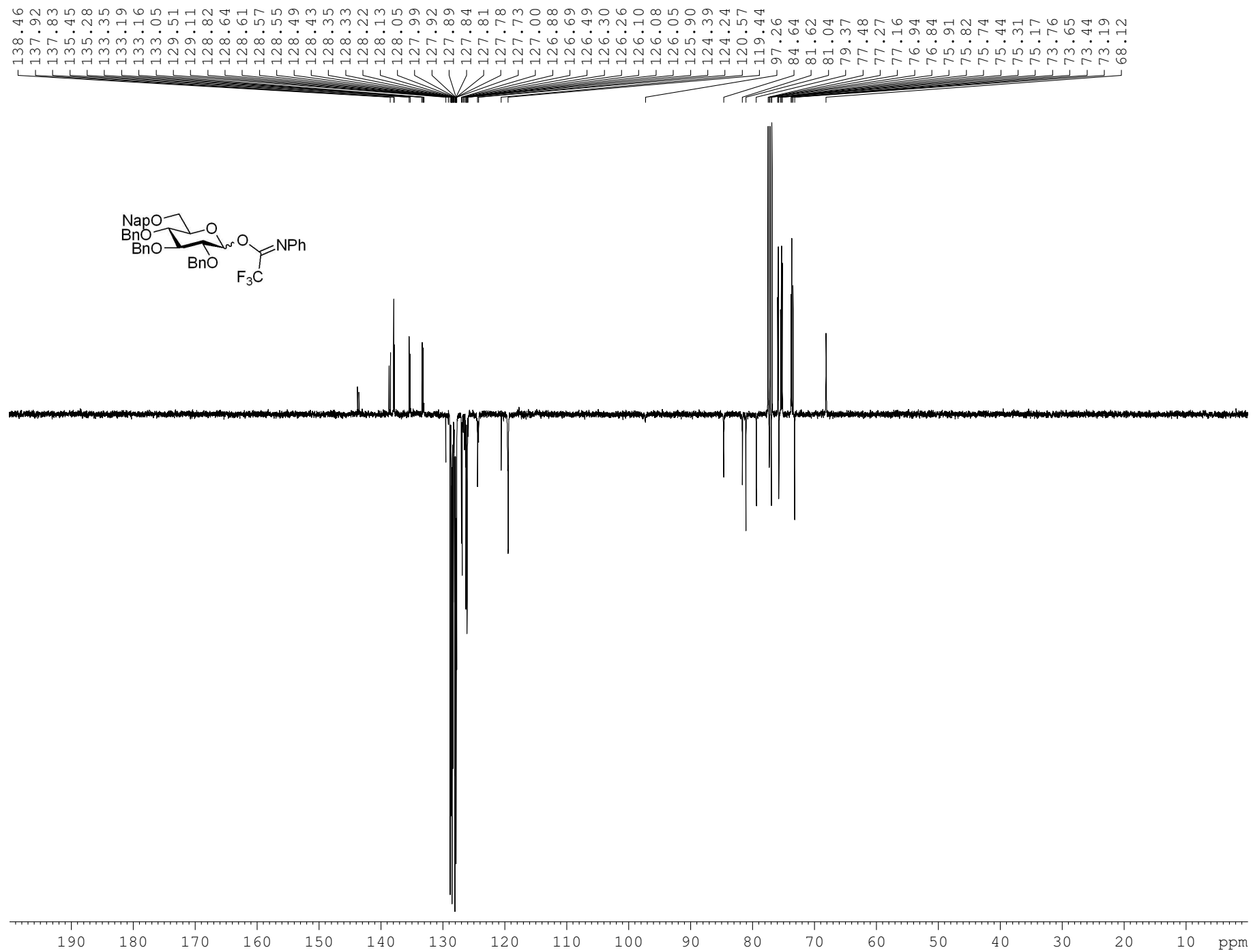


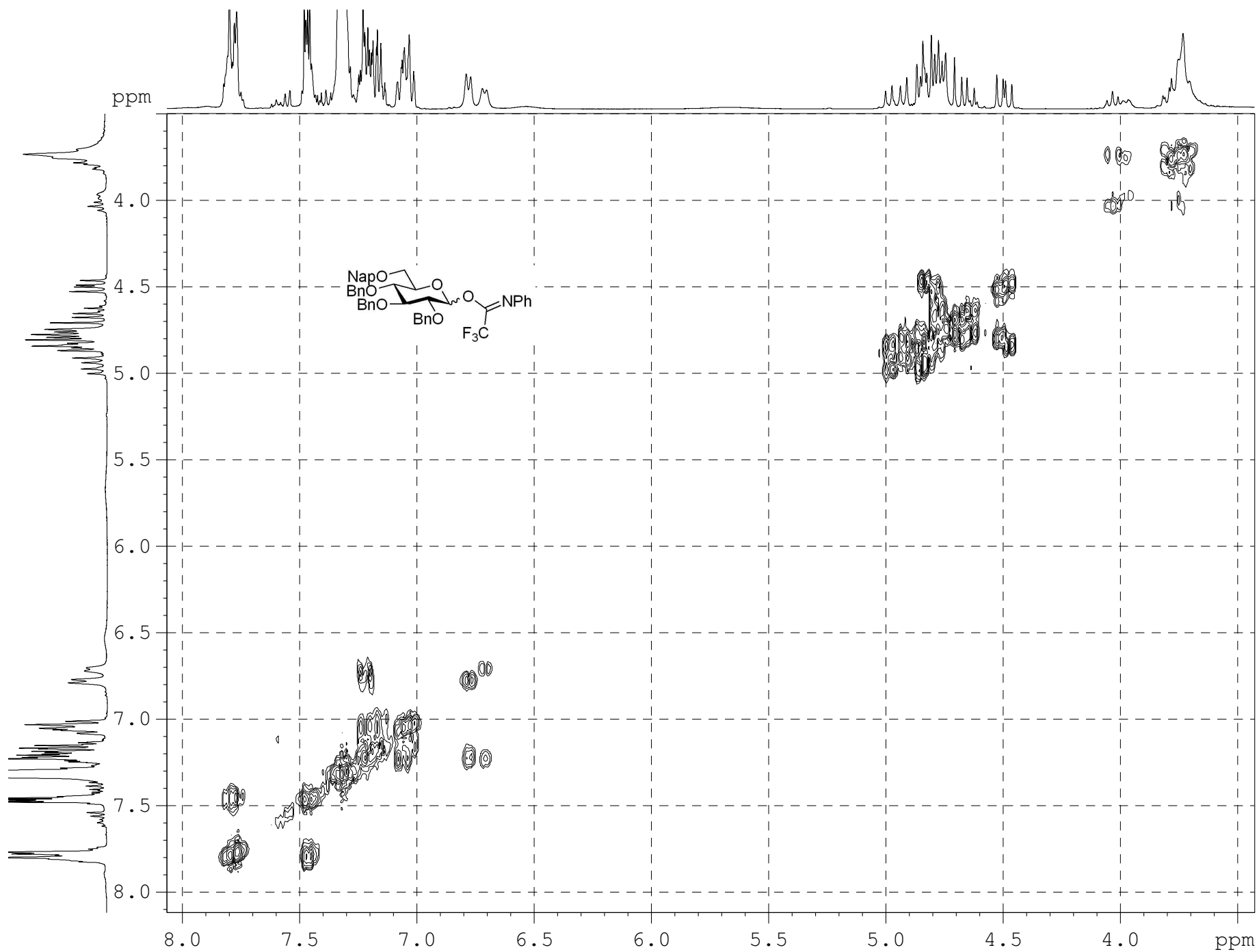


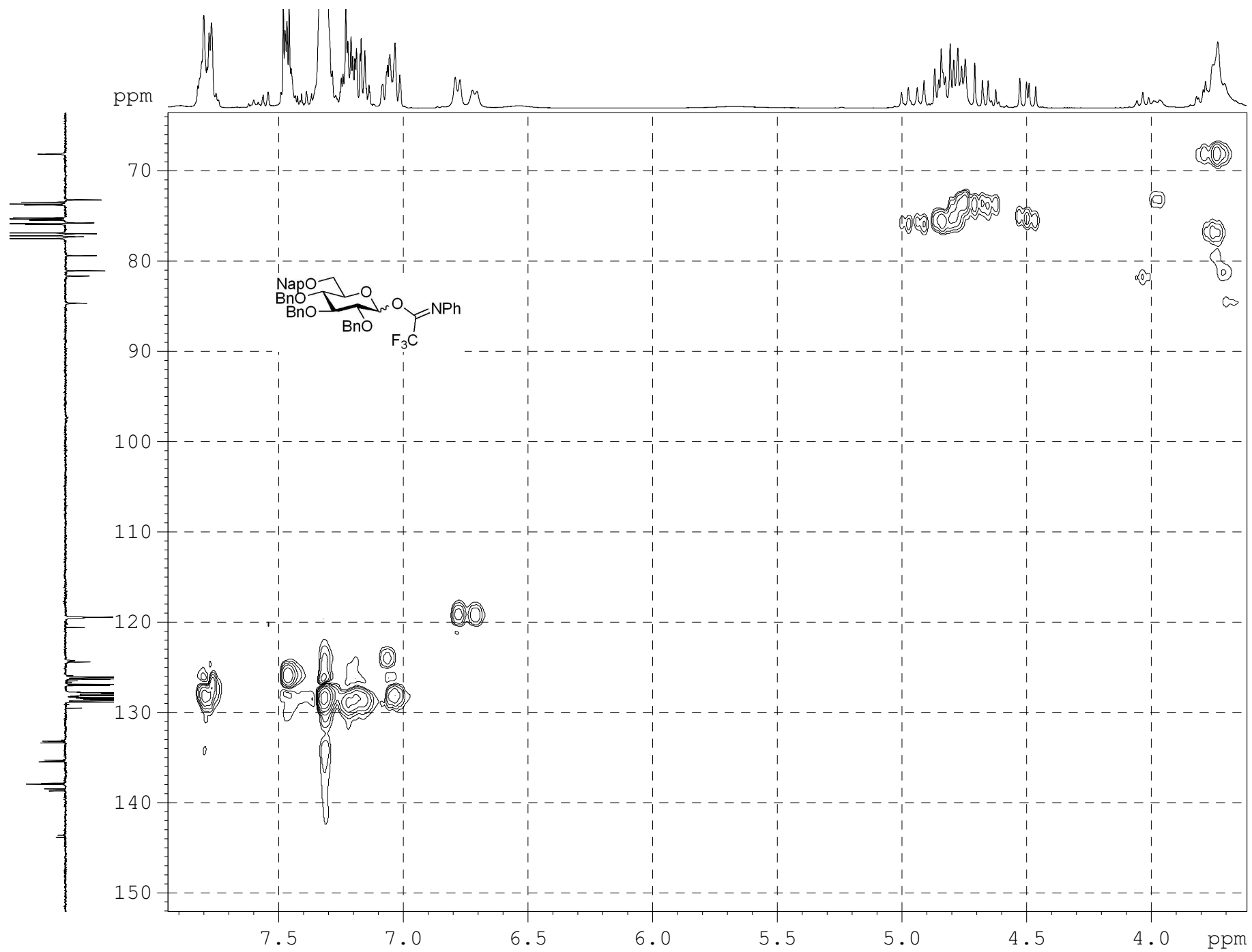




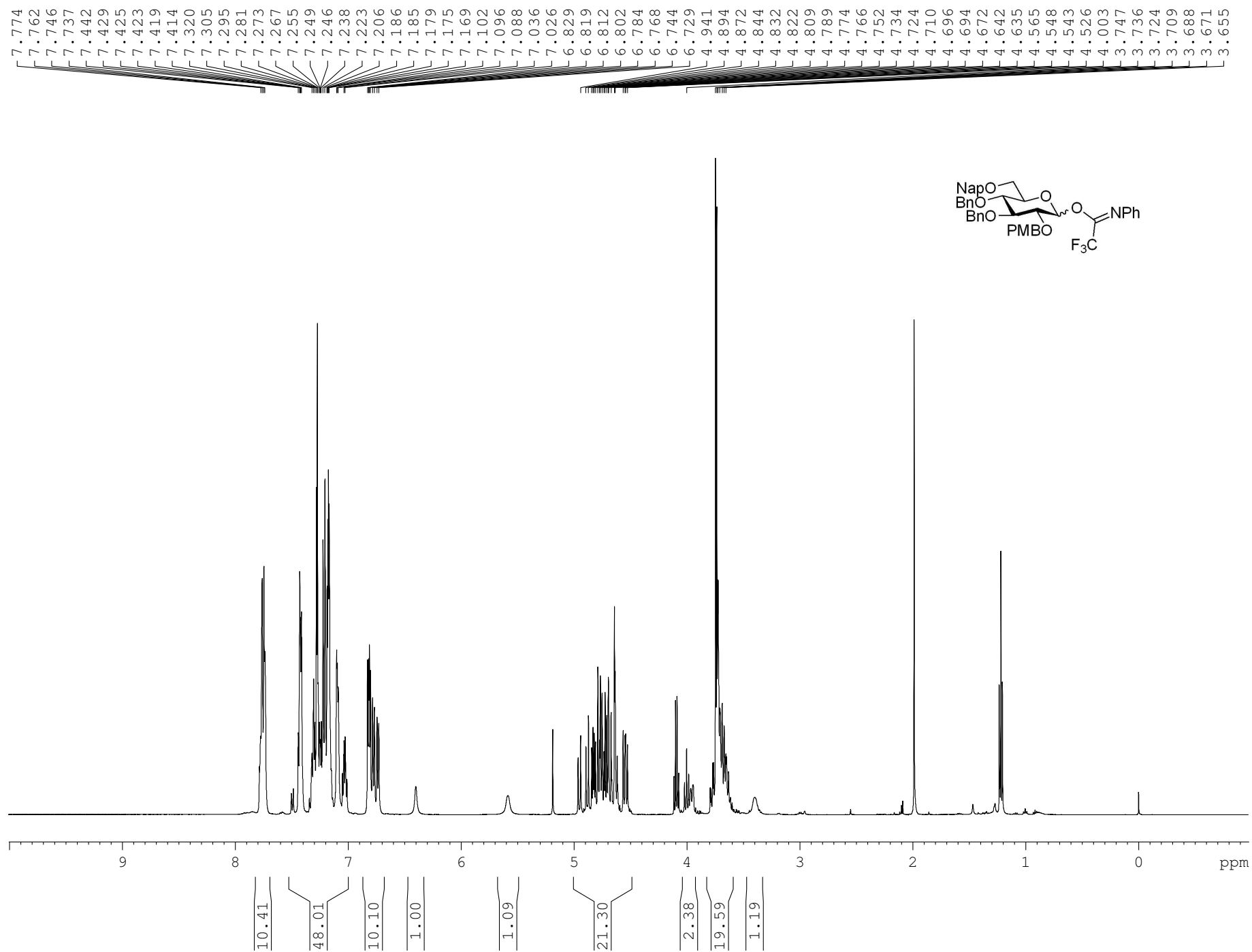
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC of **15**

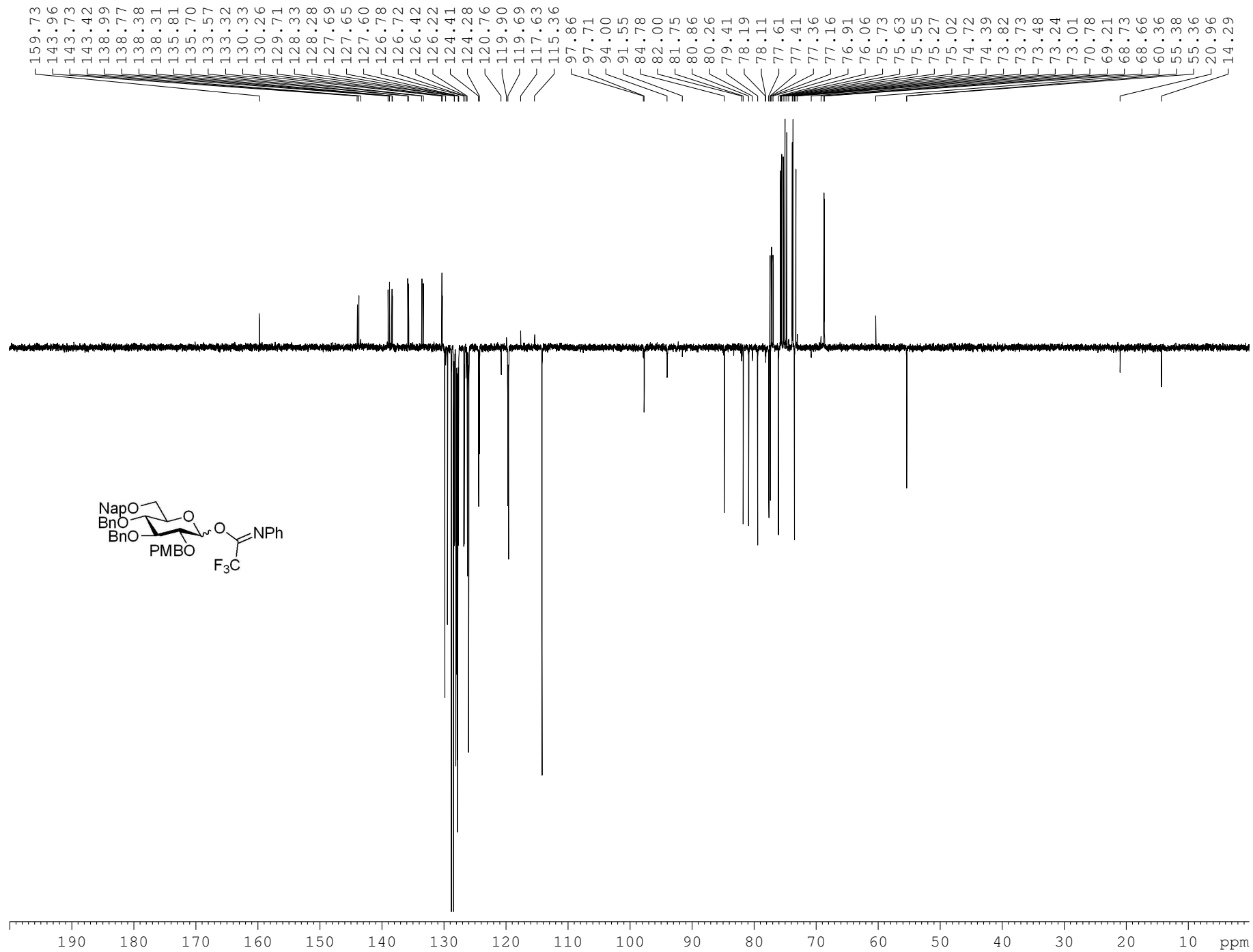


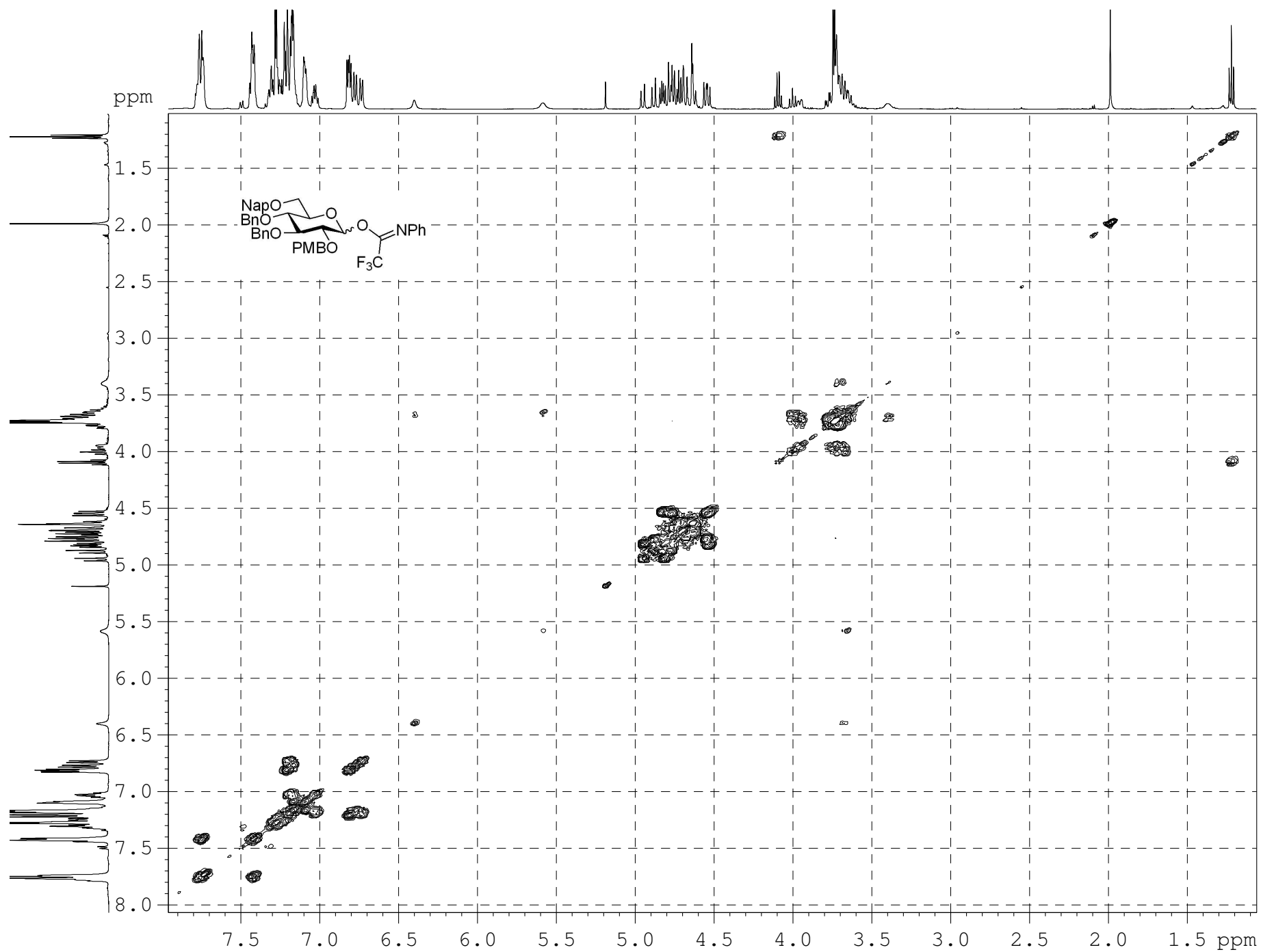


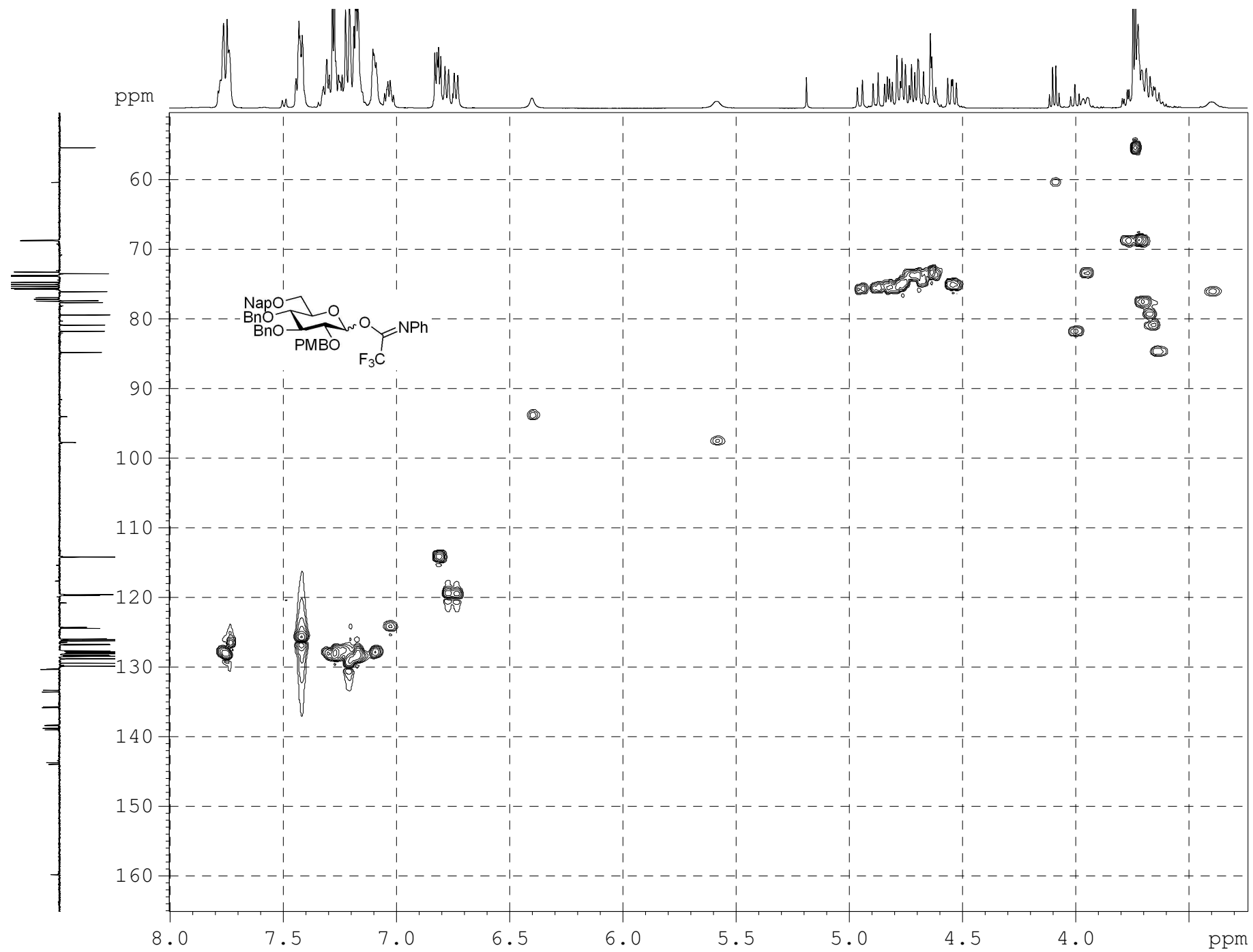


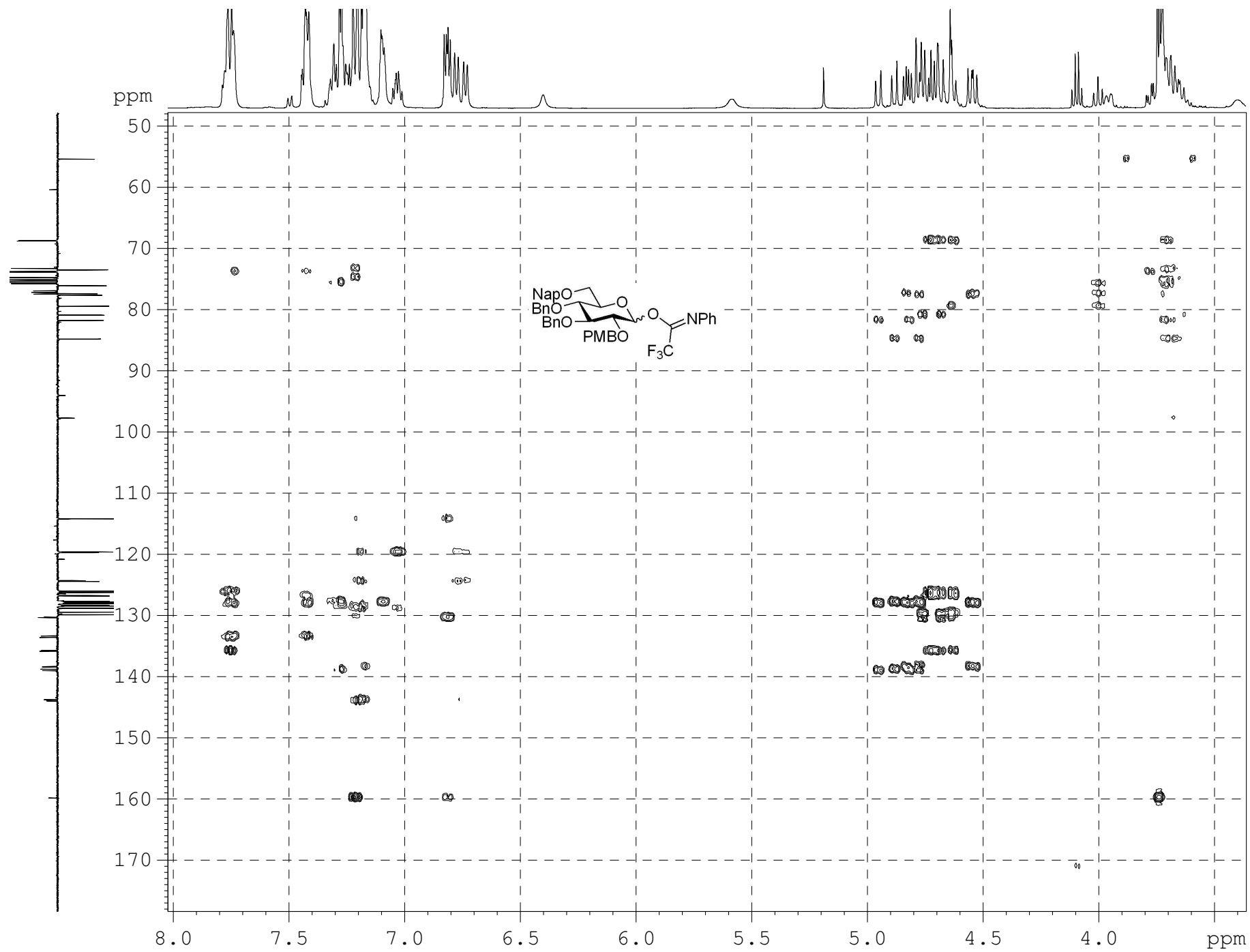
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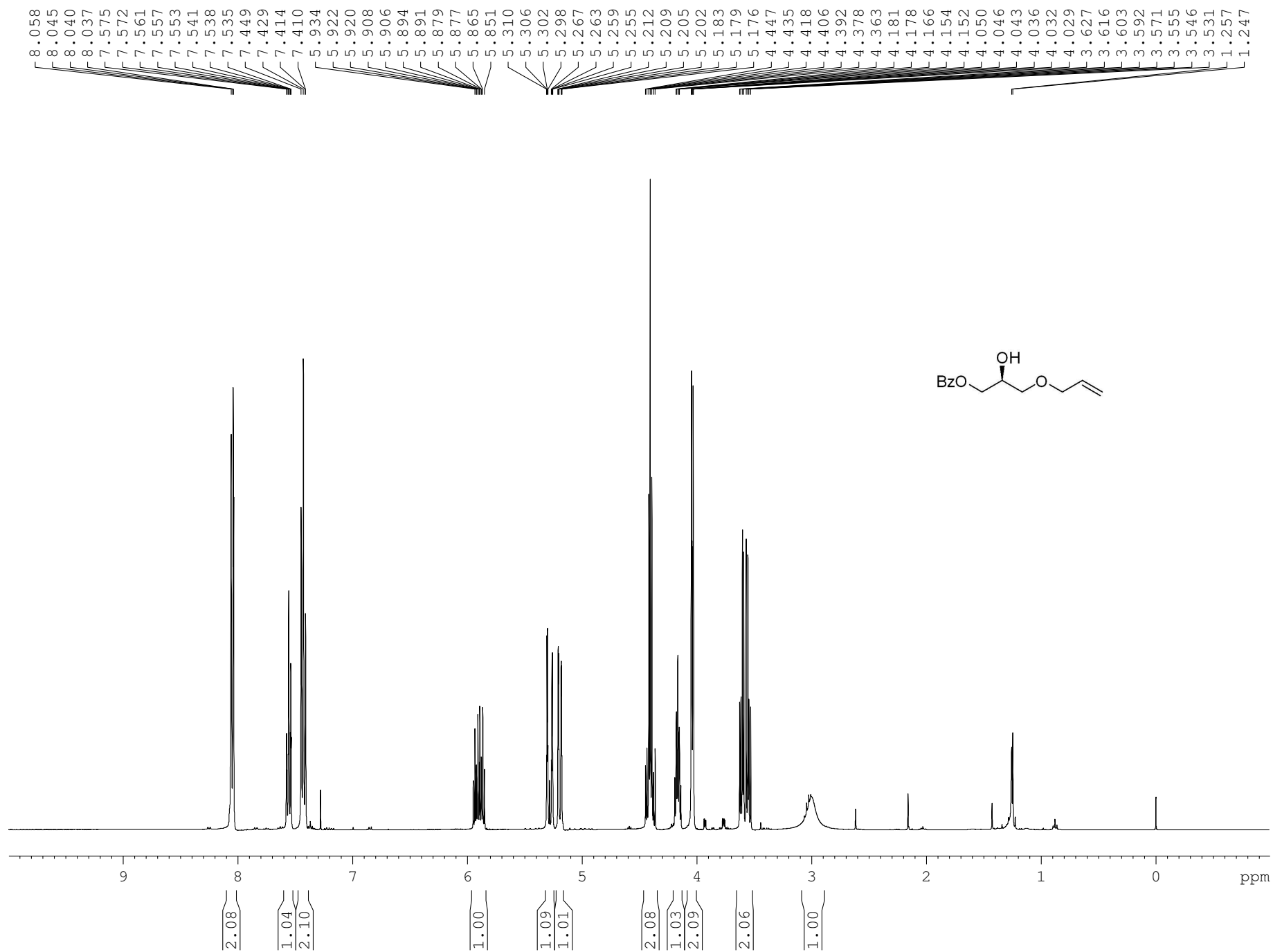


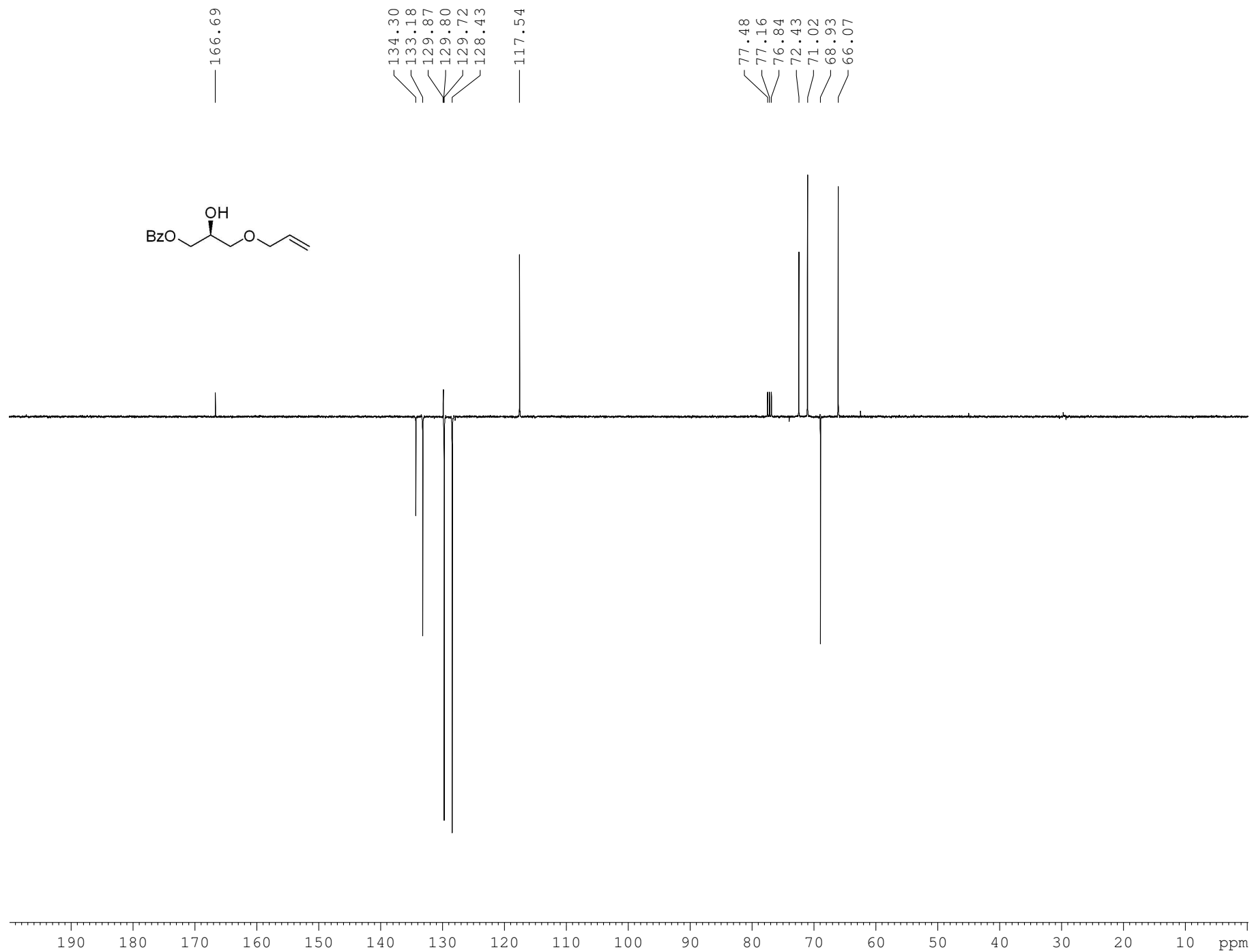
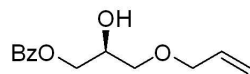




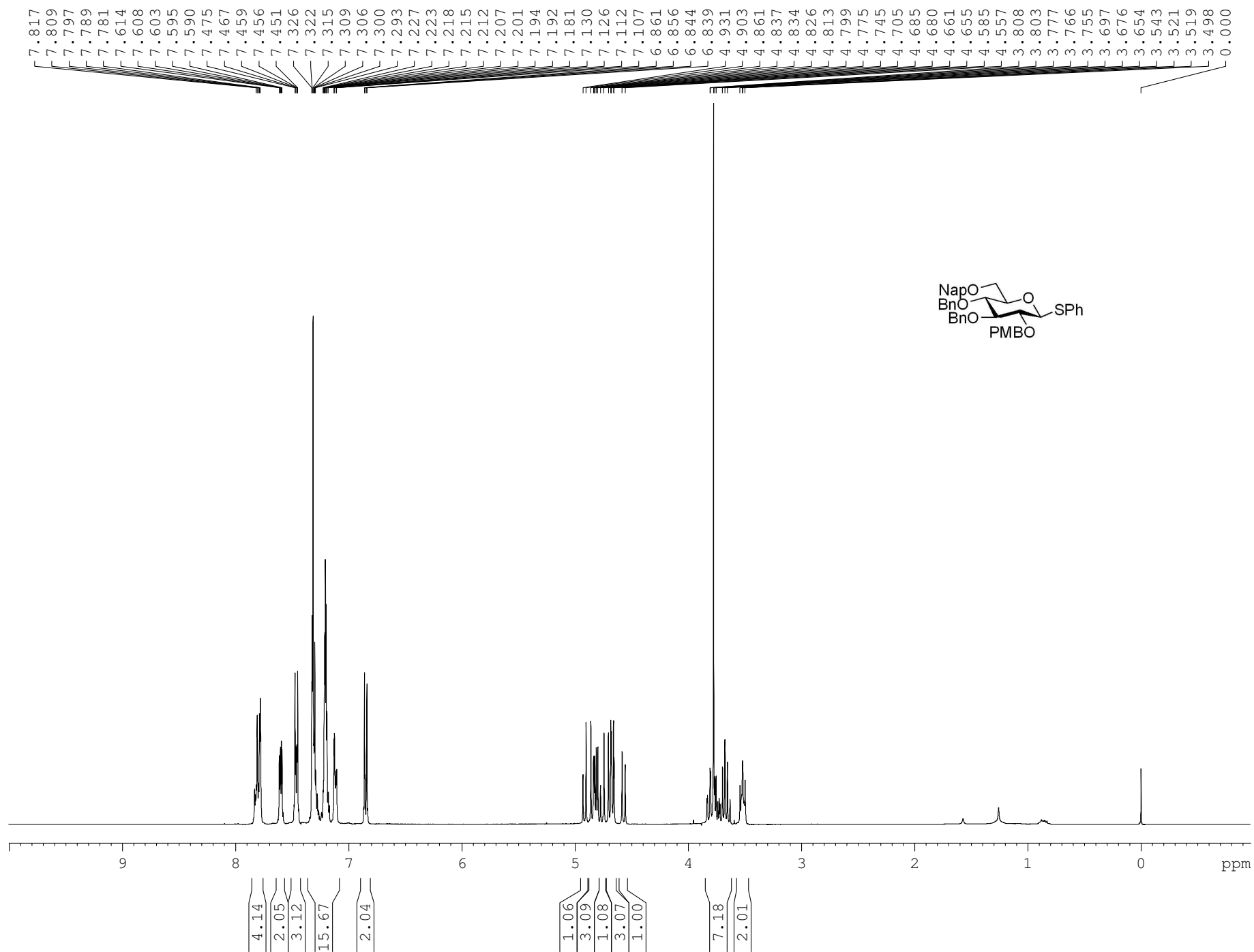


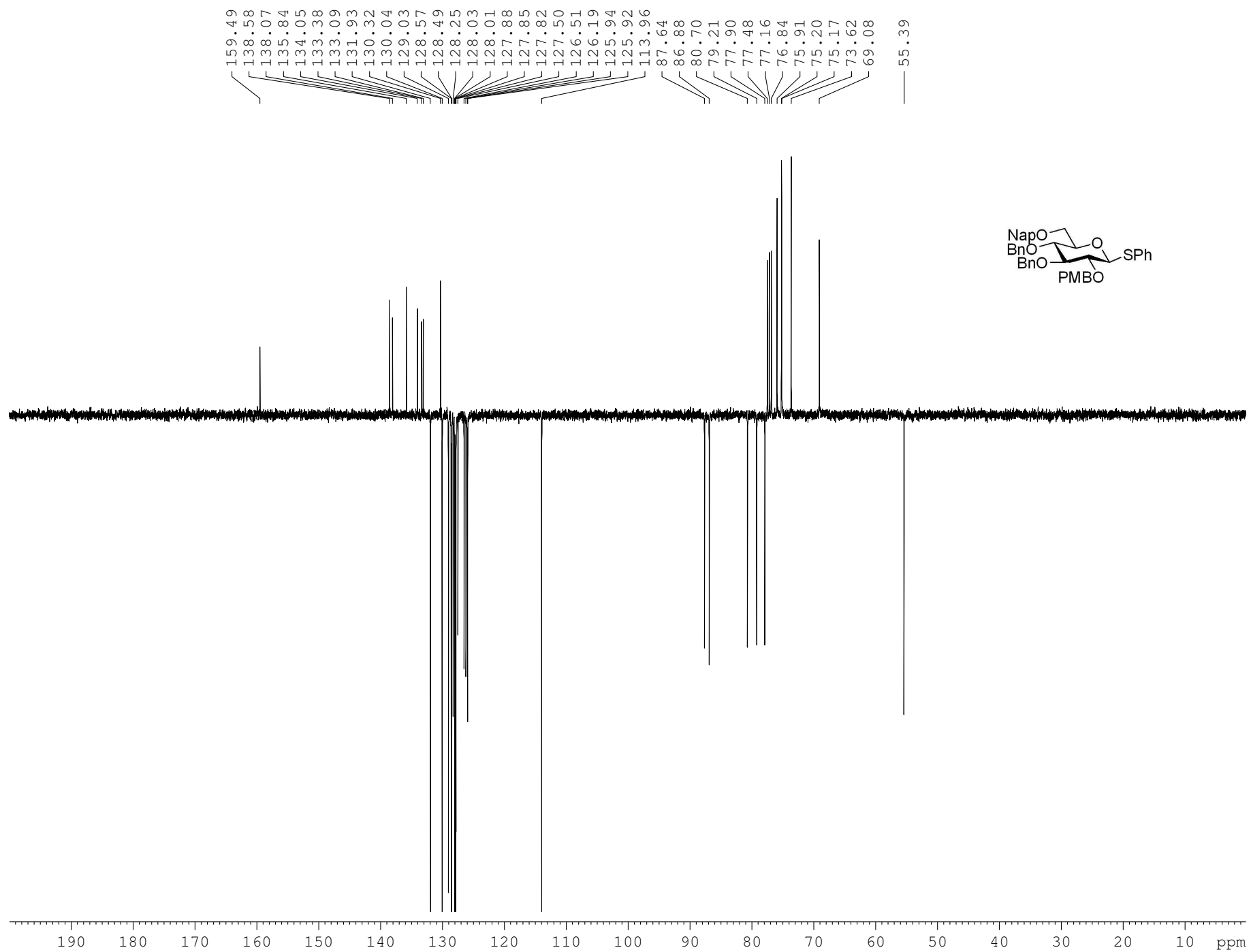
<sup>1</sup>H-NMR, <sup>13</sup>C-APT of 17

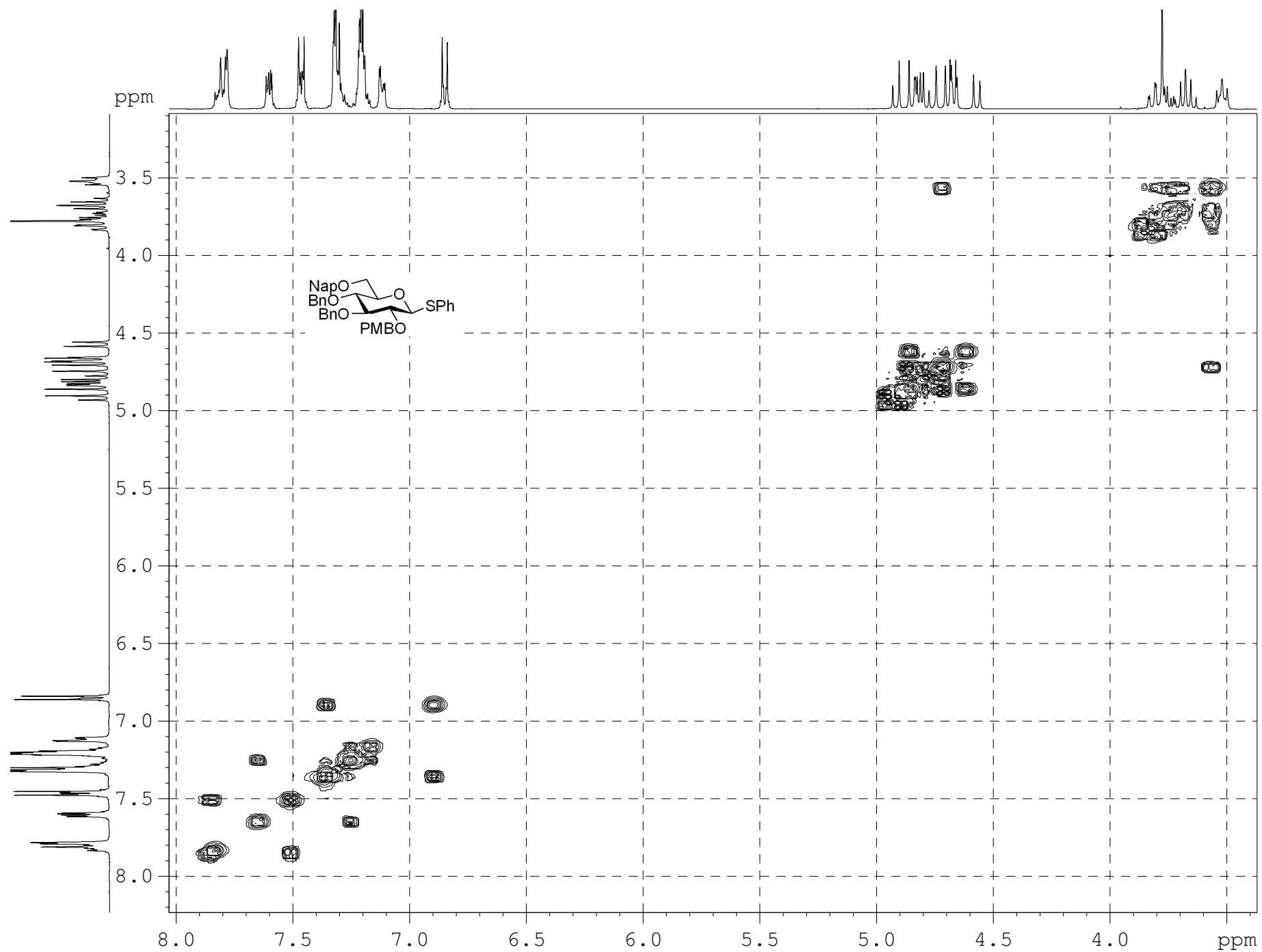


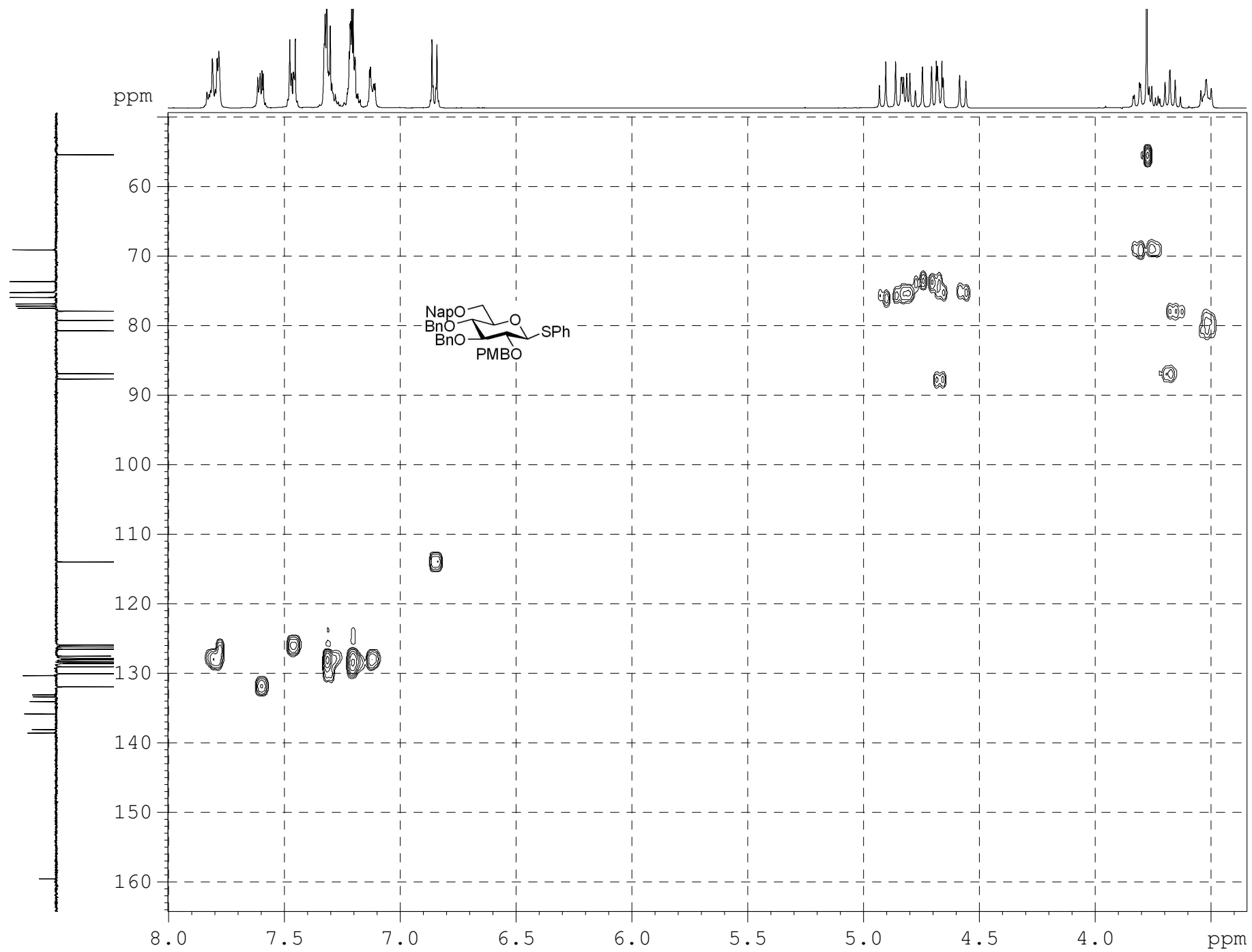


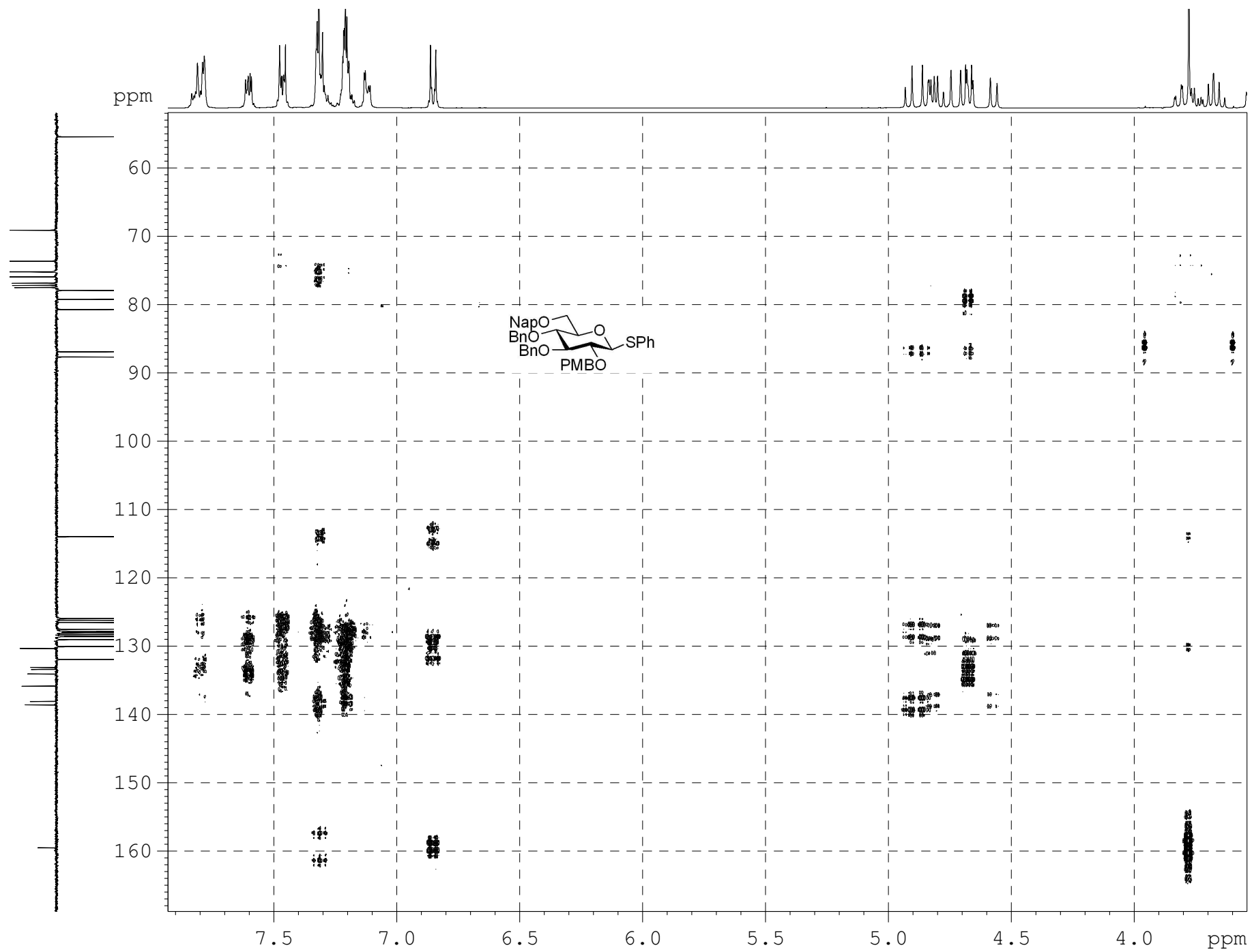
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC of 25



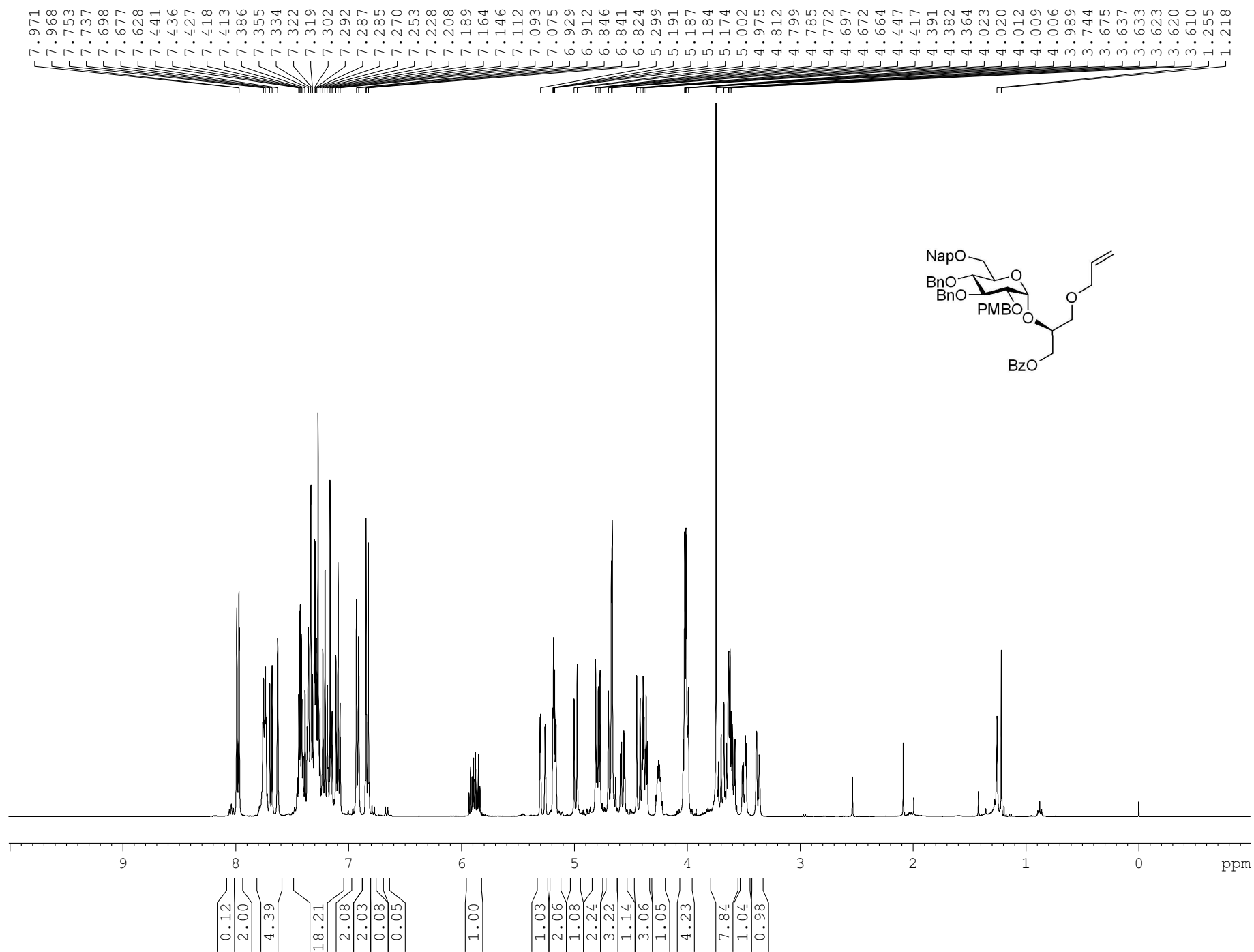


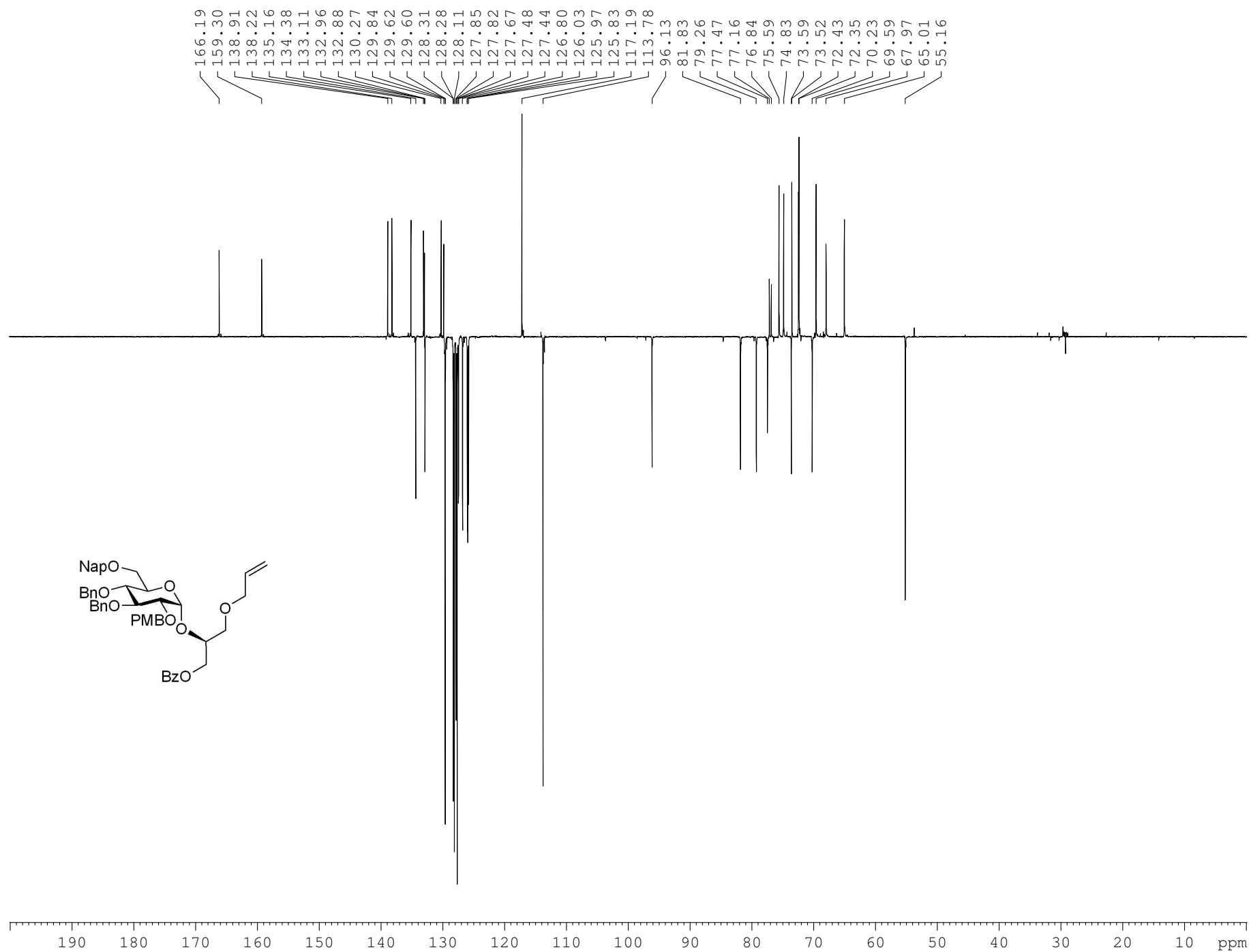


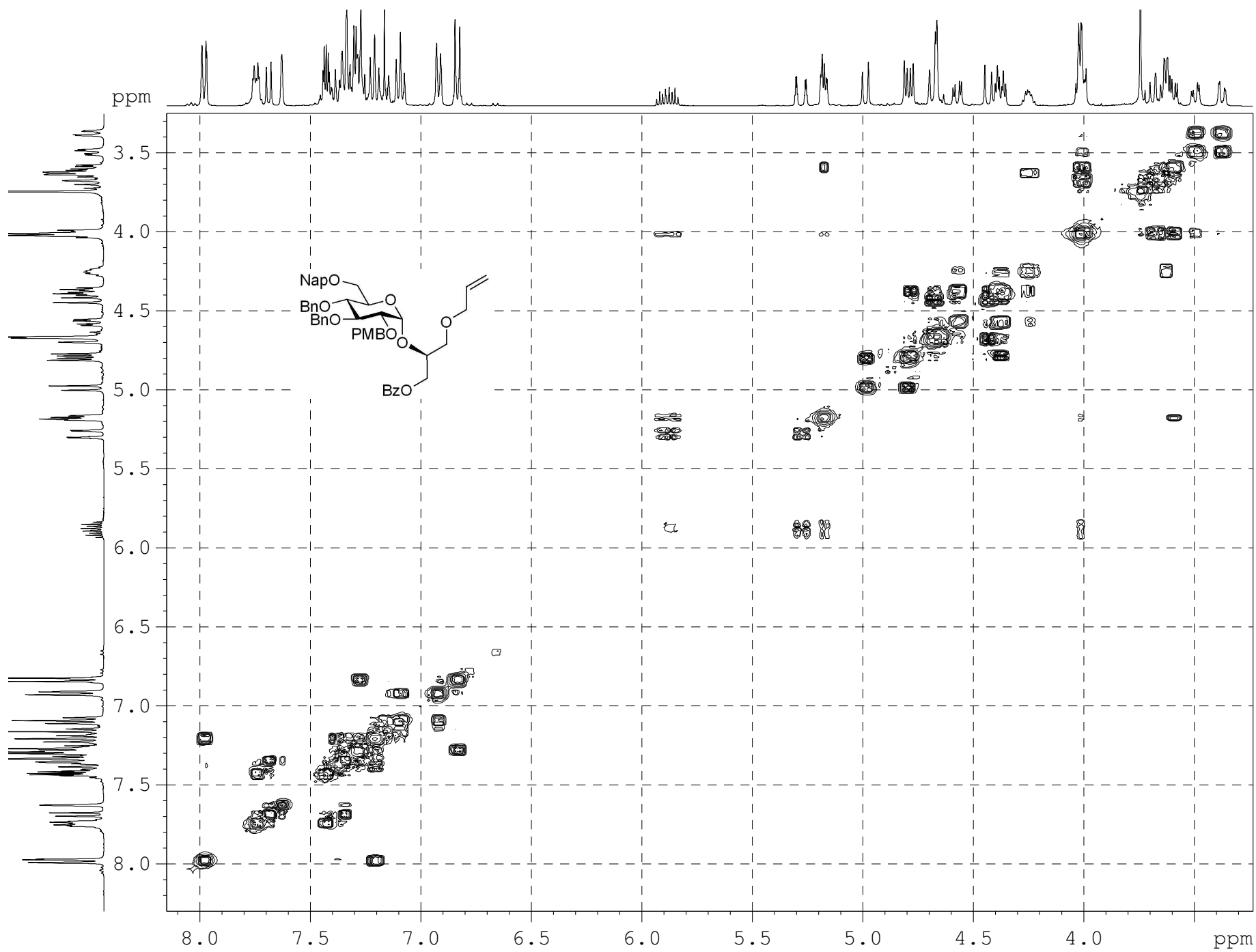


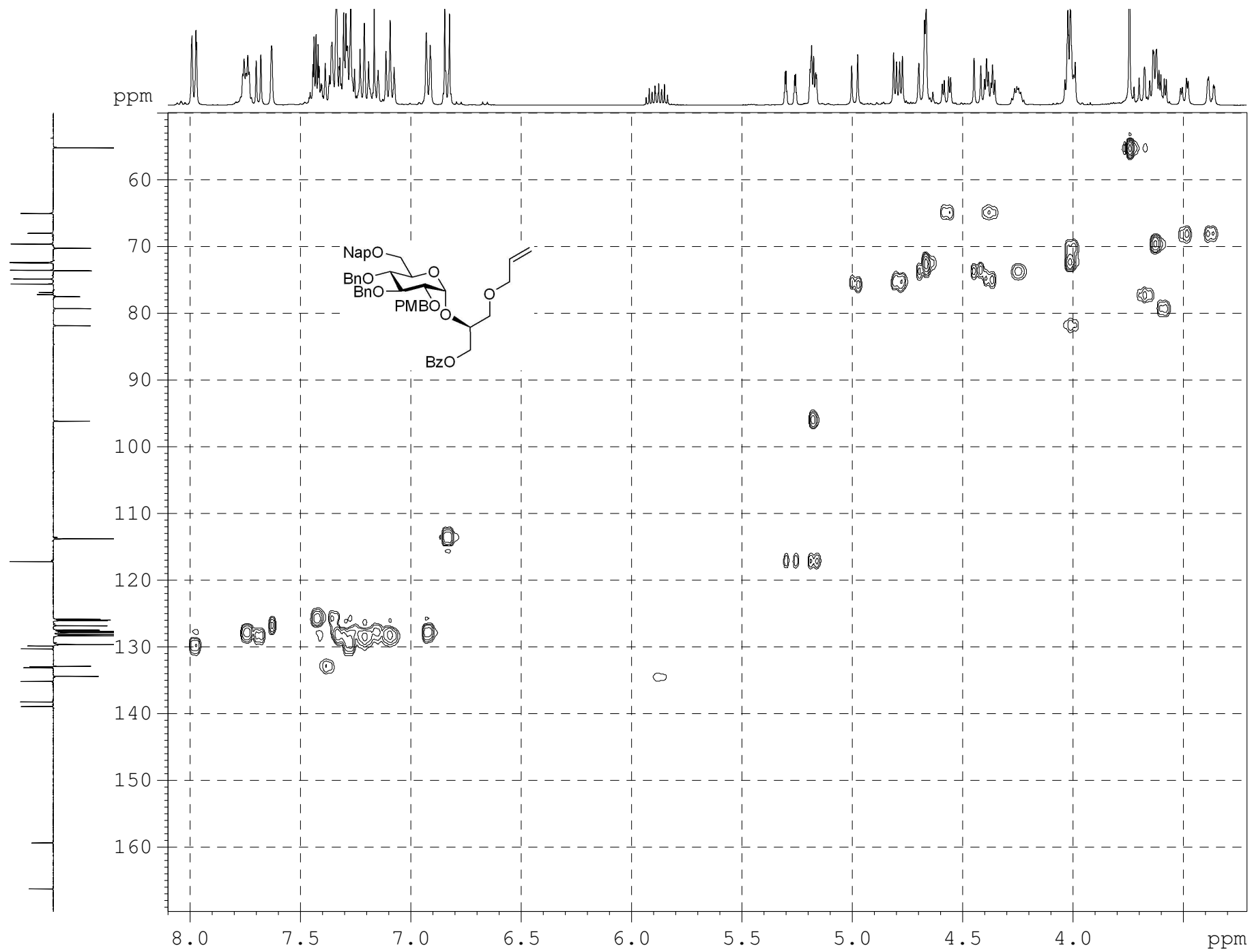


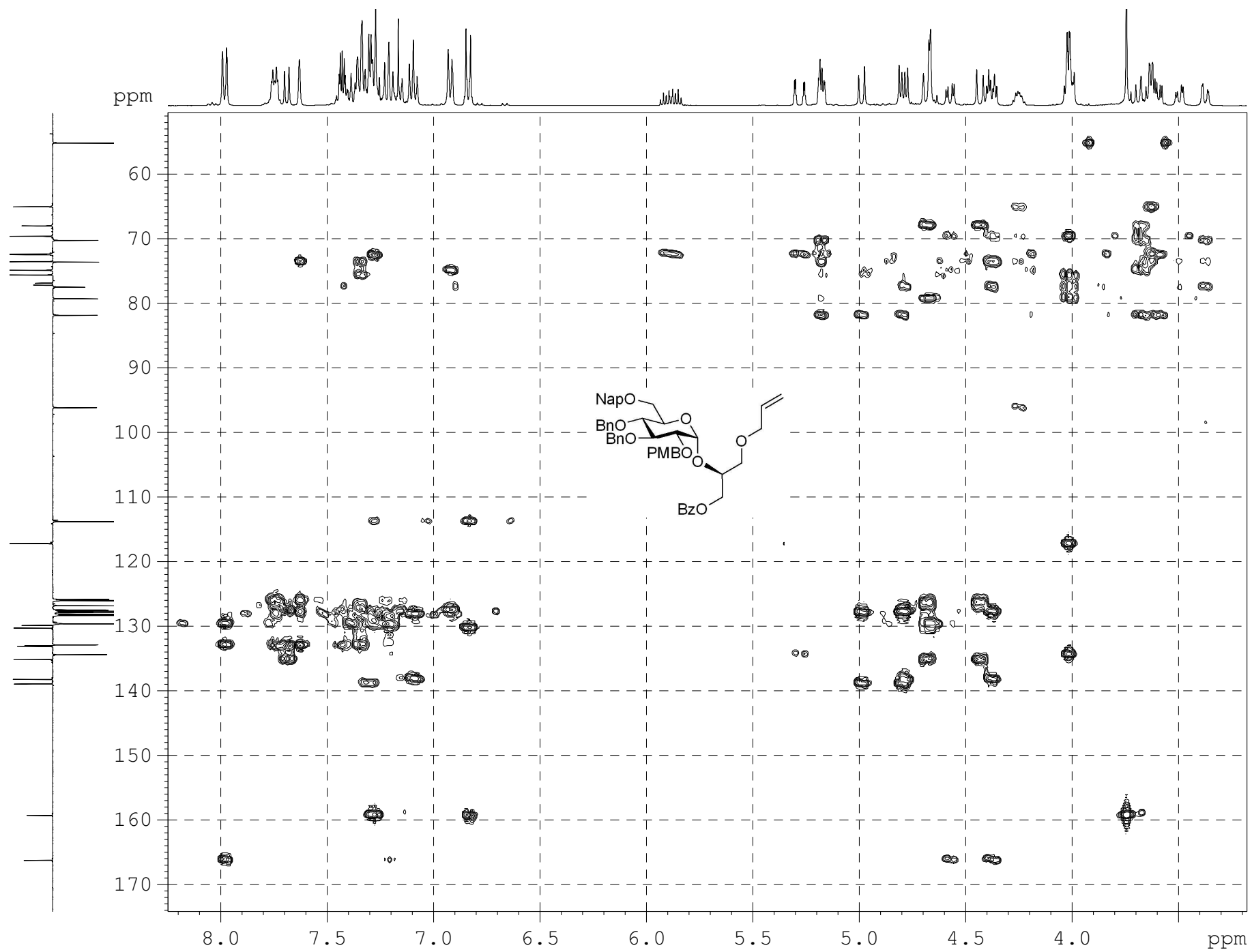
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC, Gated of 26

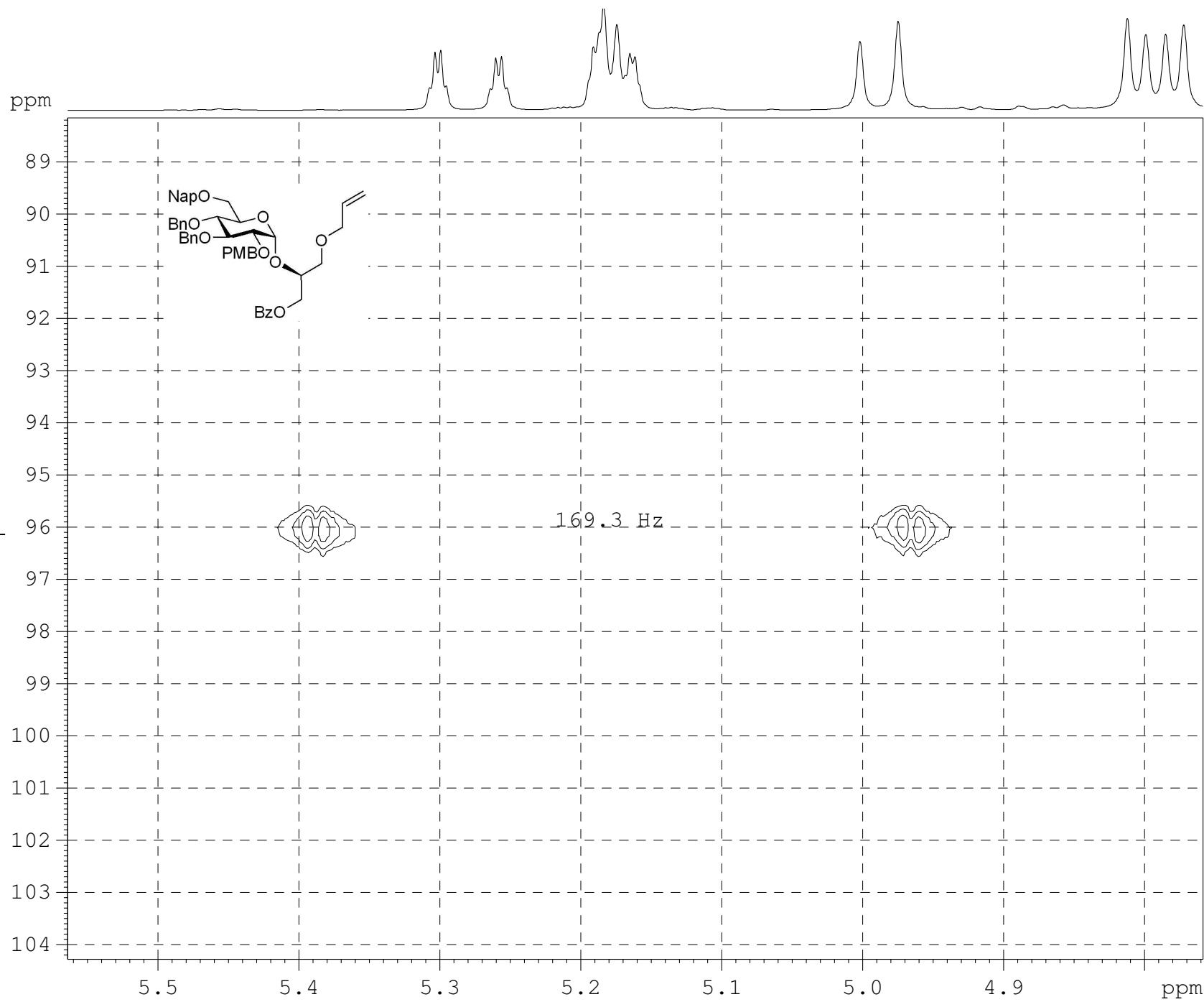




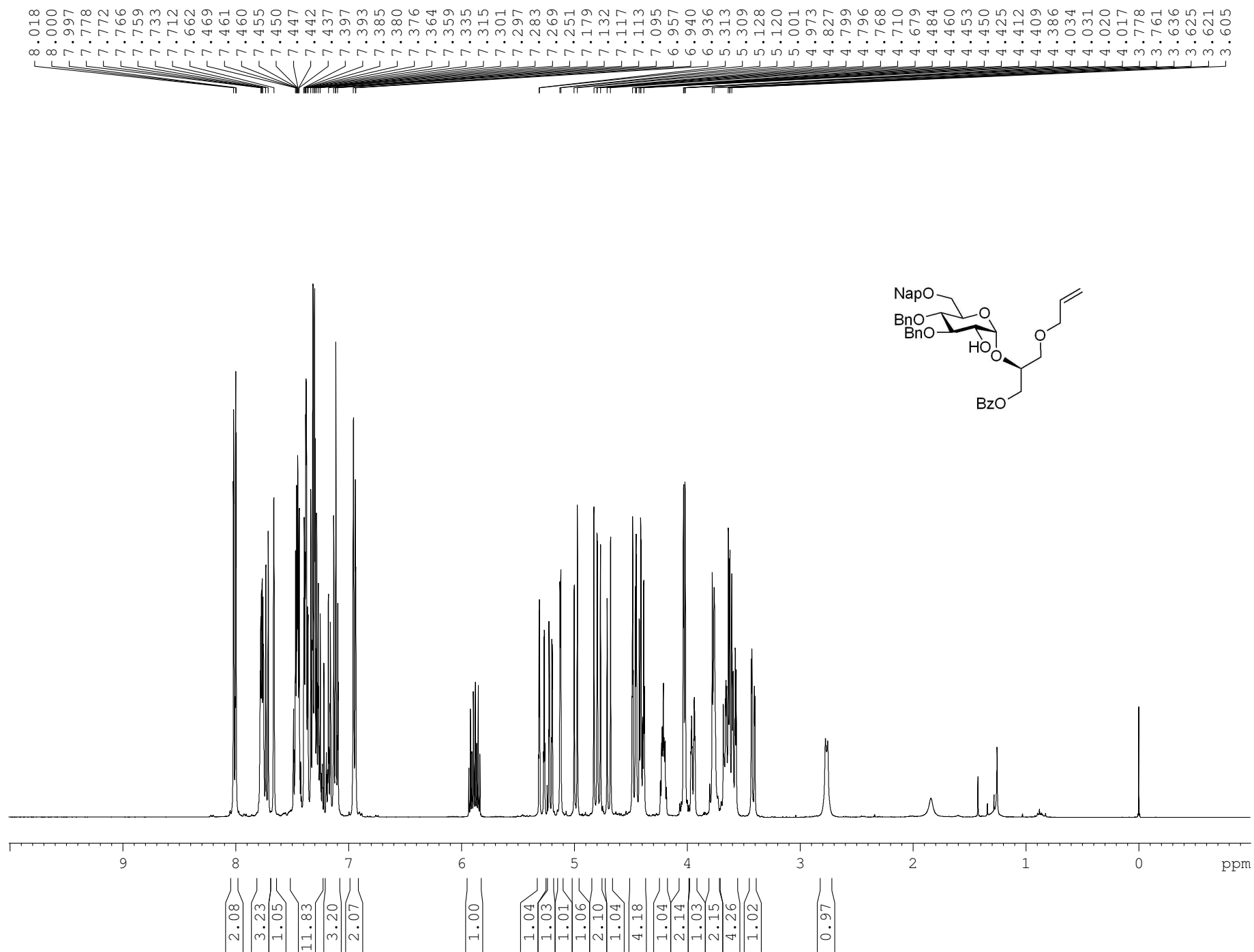


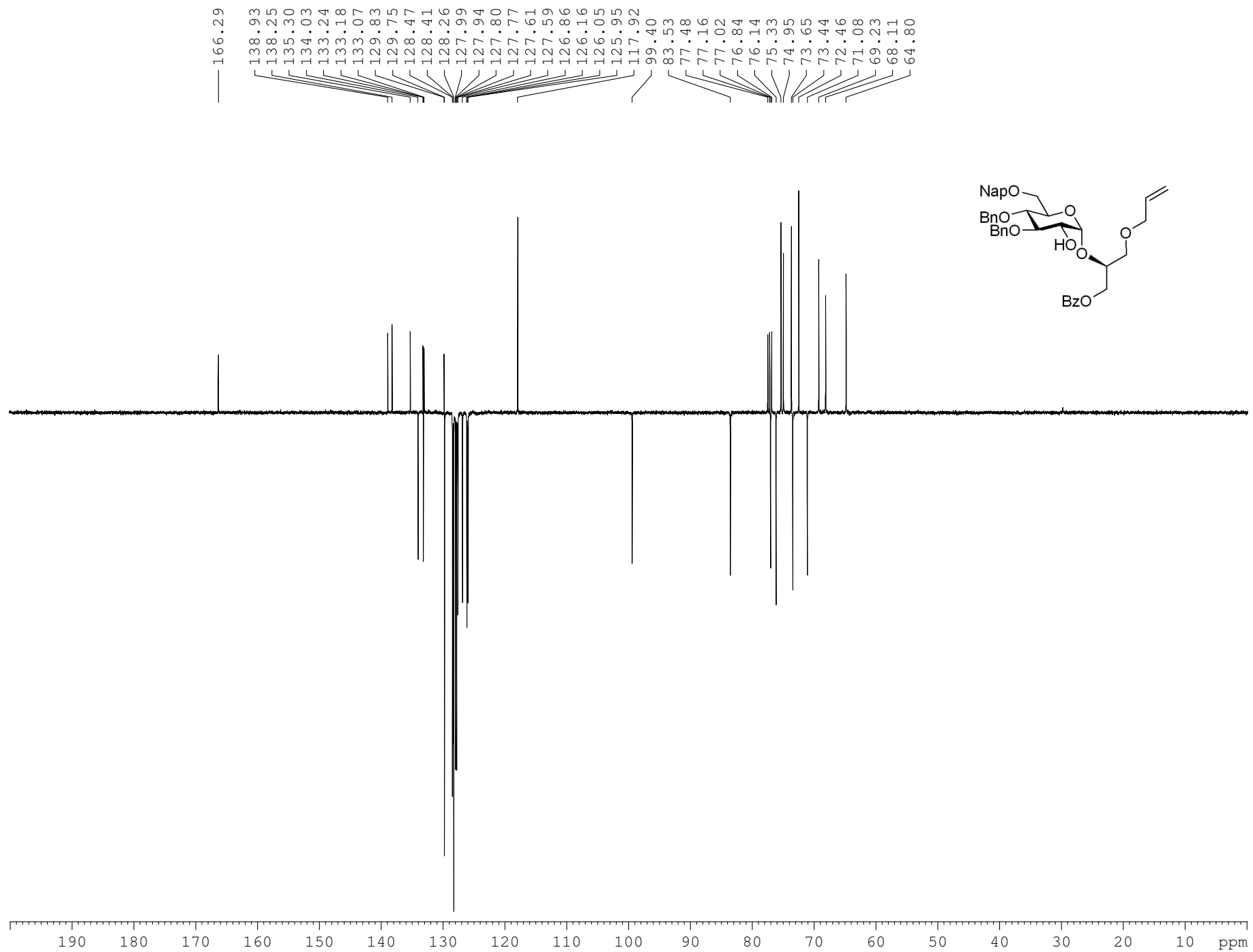


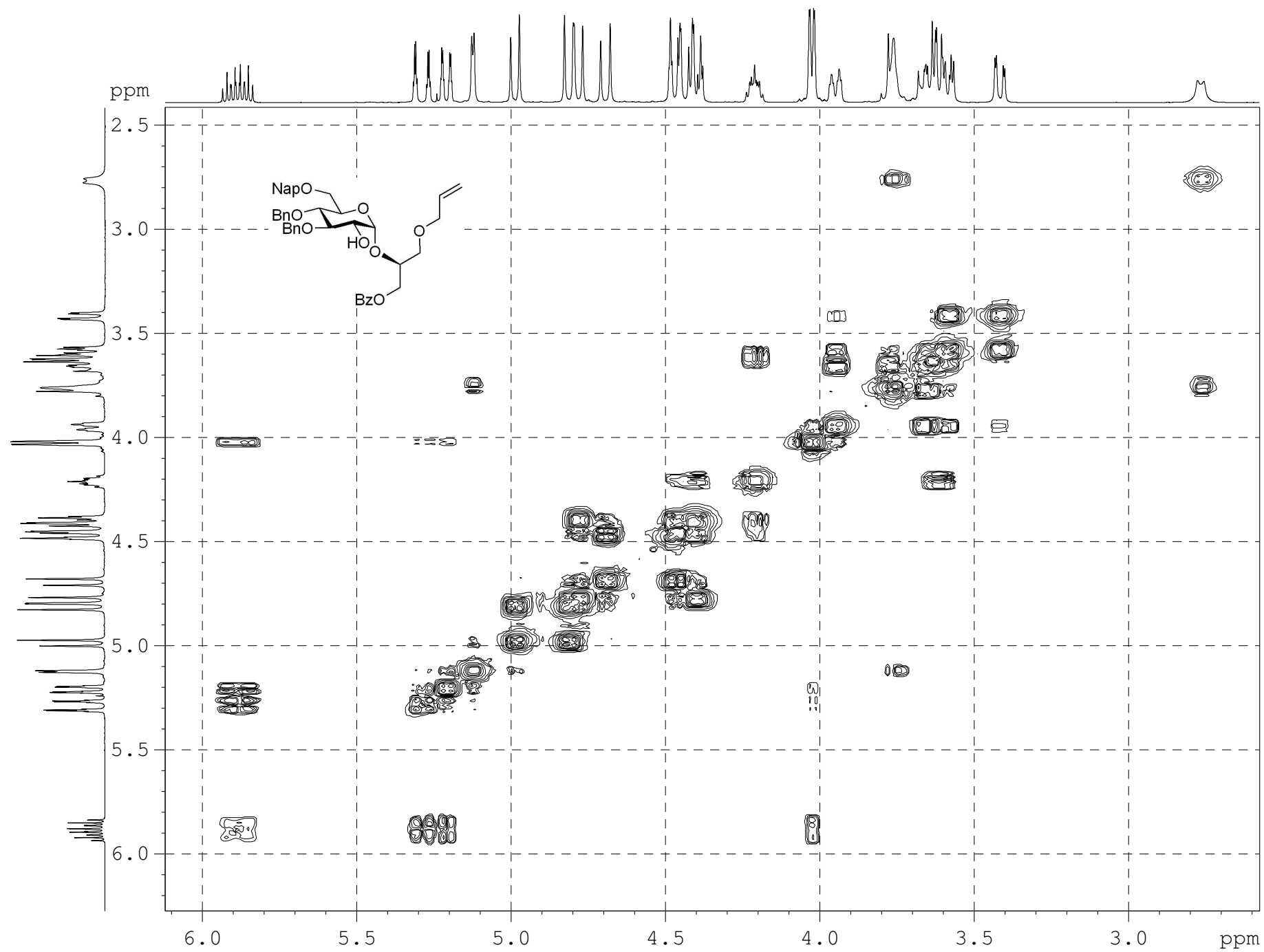


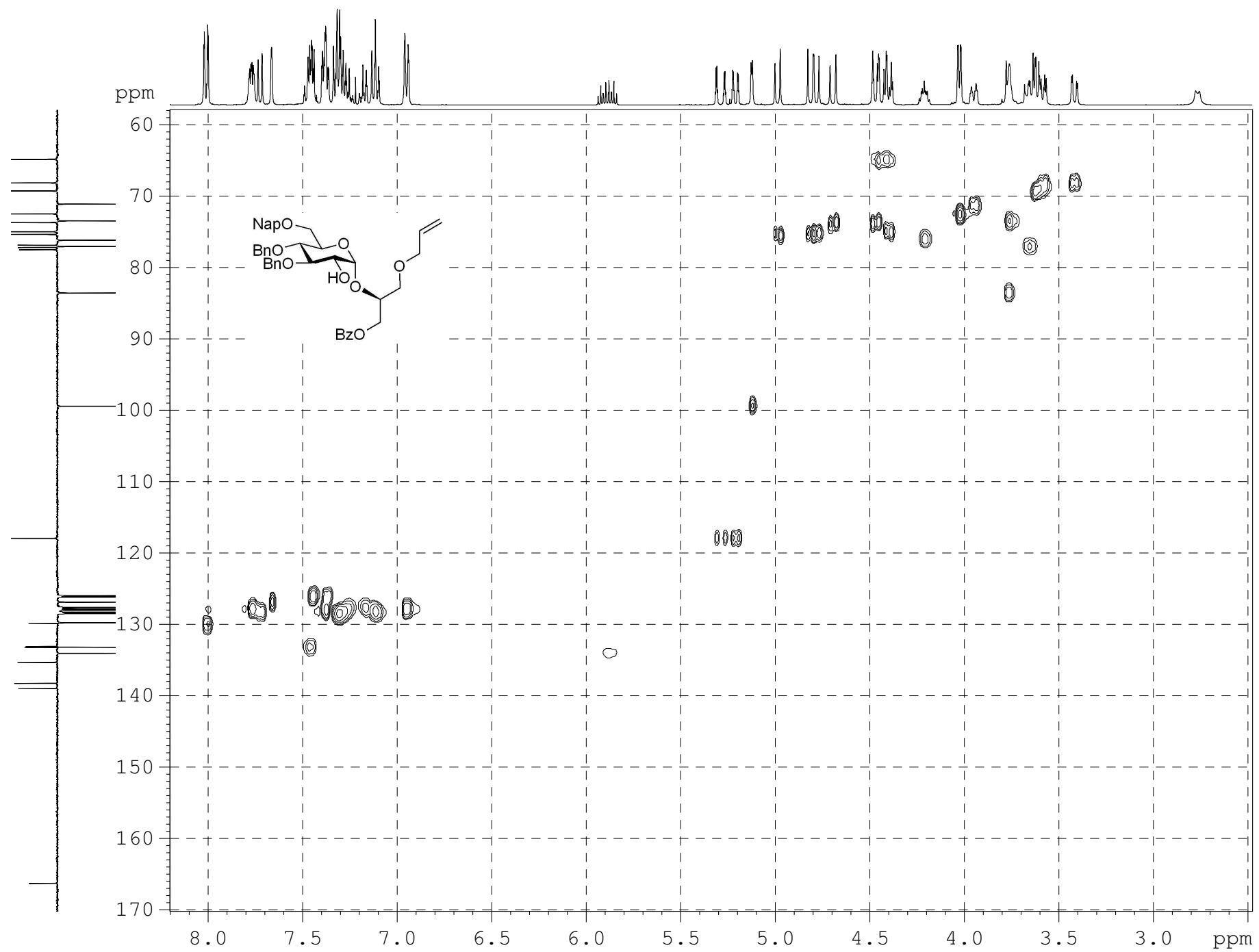


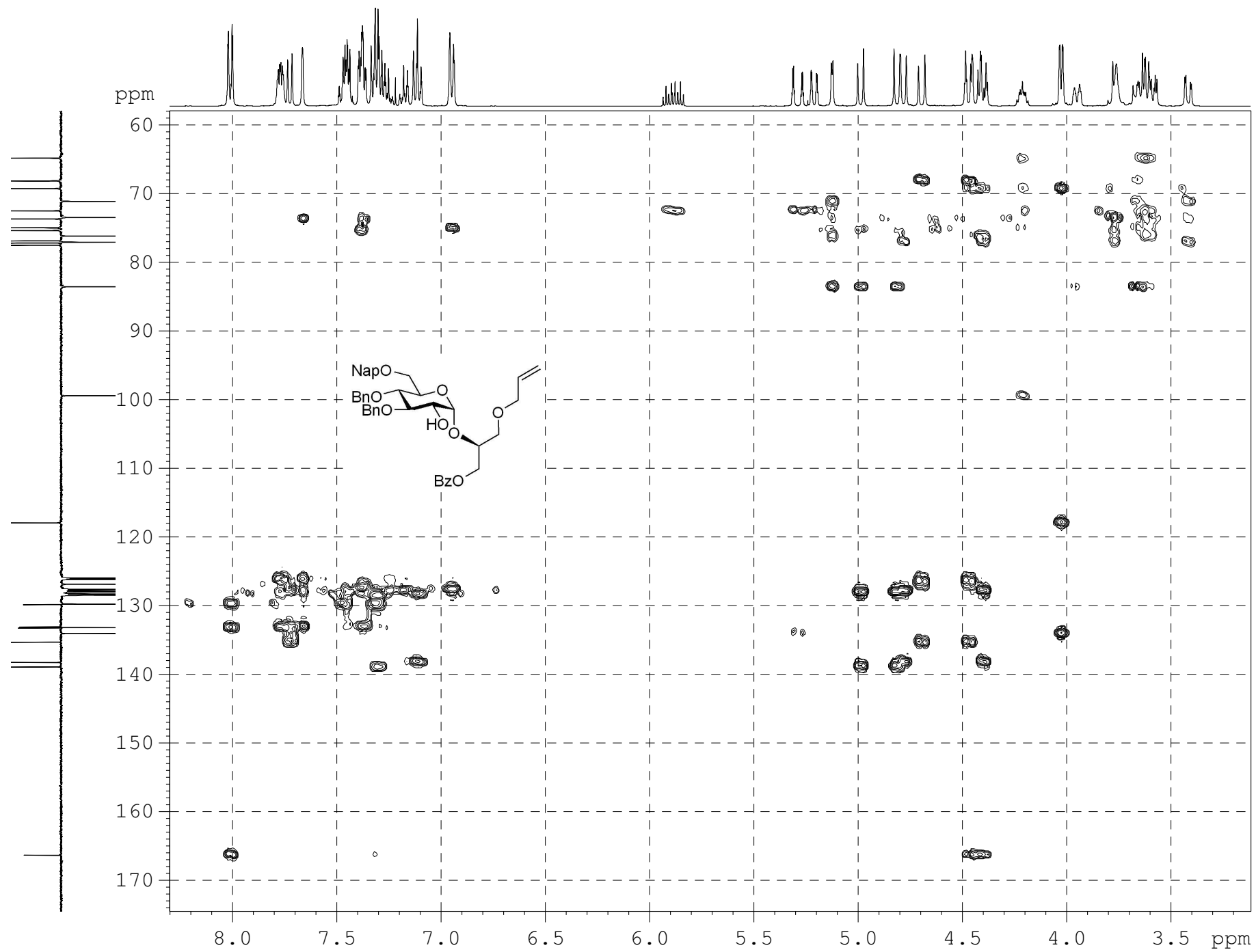
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC, Gated of **27**











ppm

92

93

94

95

96

97

98

99

100

101

102

103

104

NapO

BnO

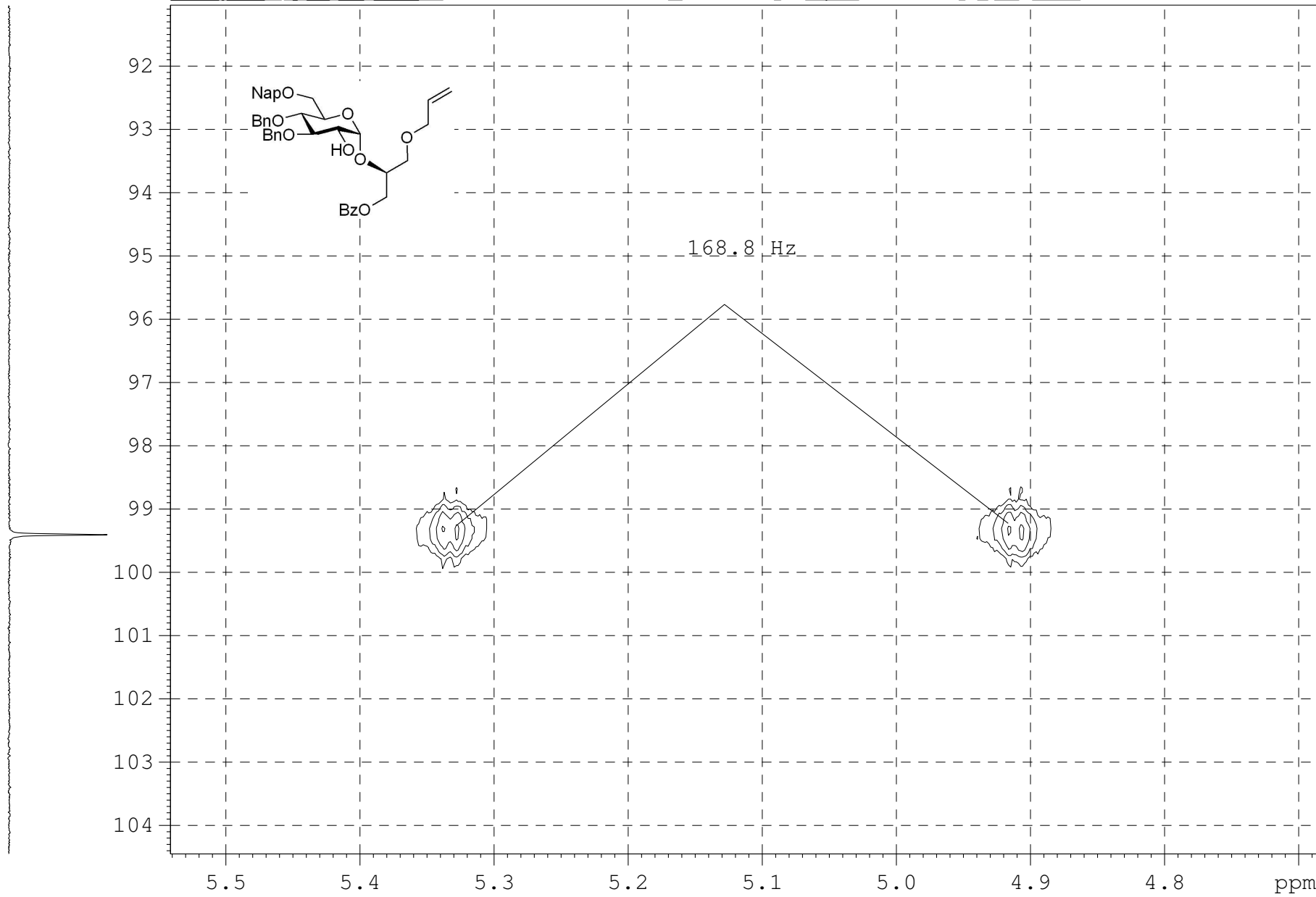
BnO

HO

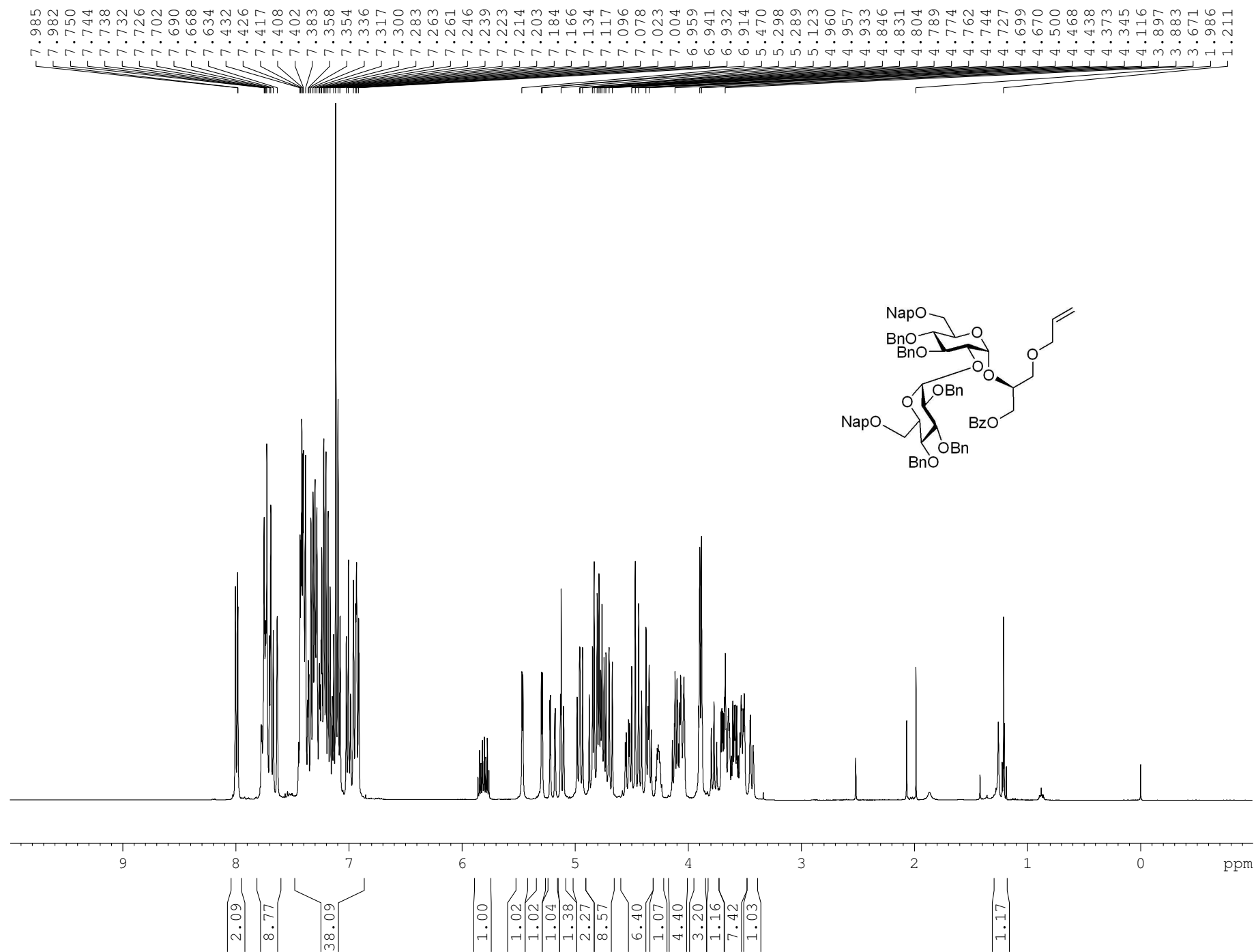
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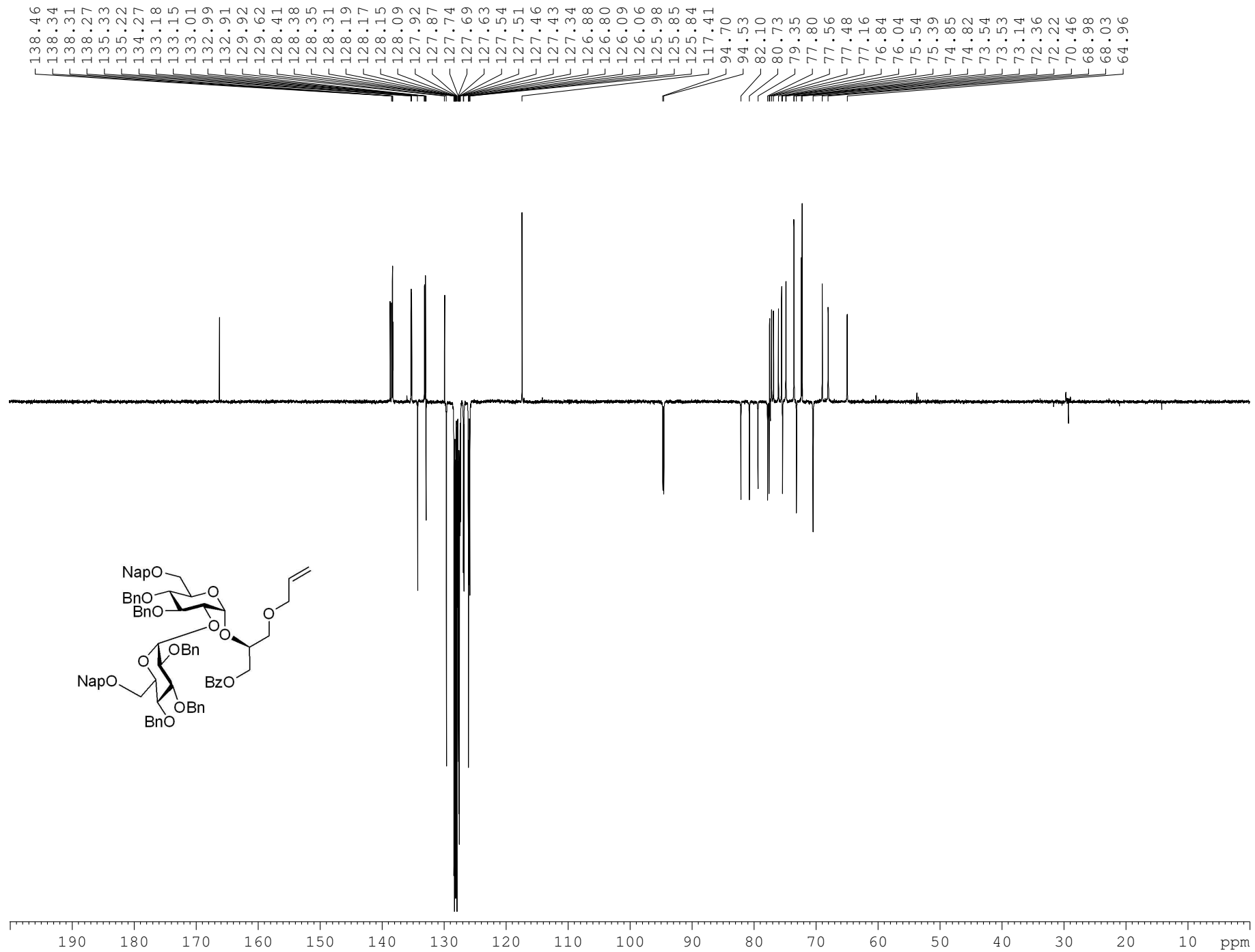
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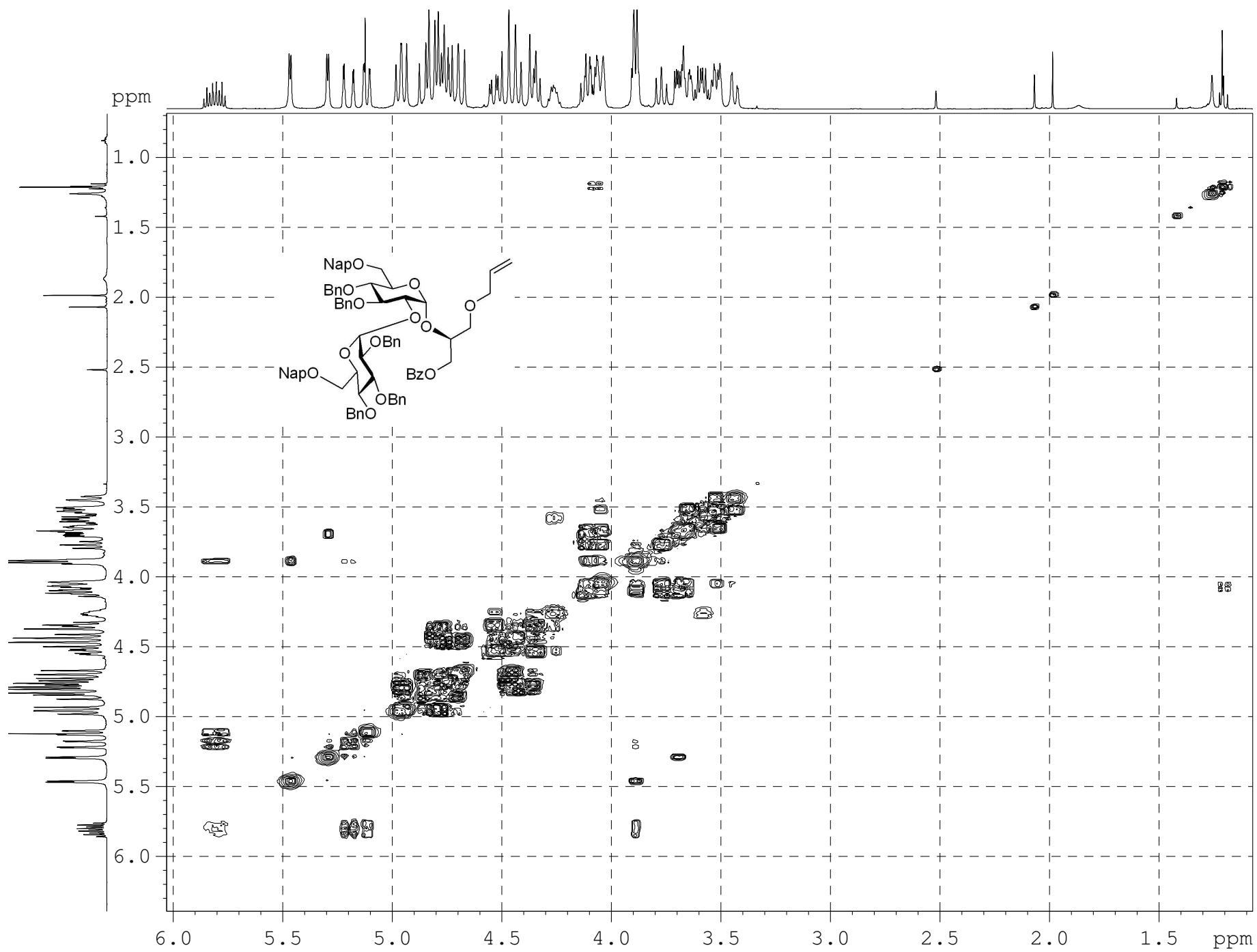
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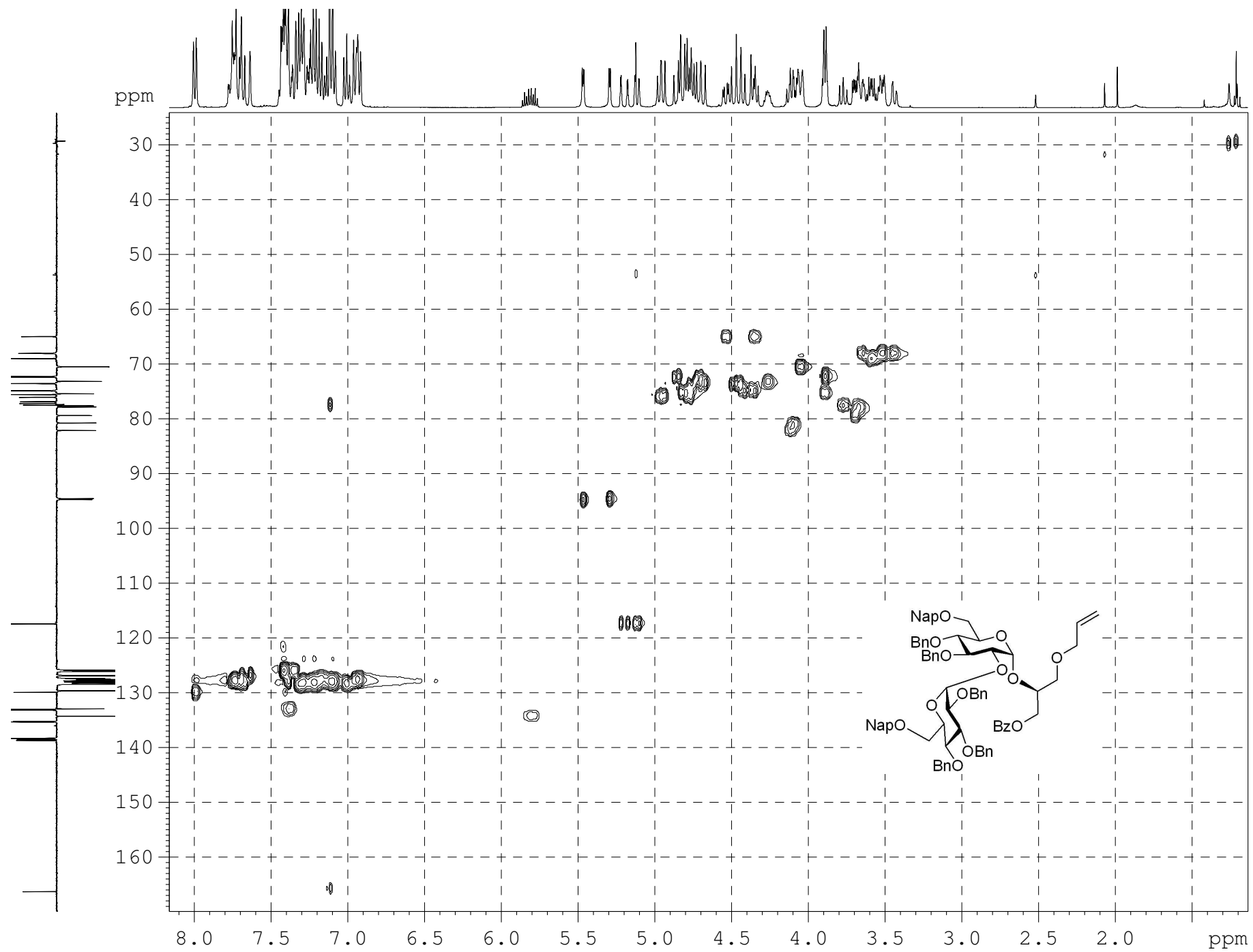


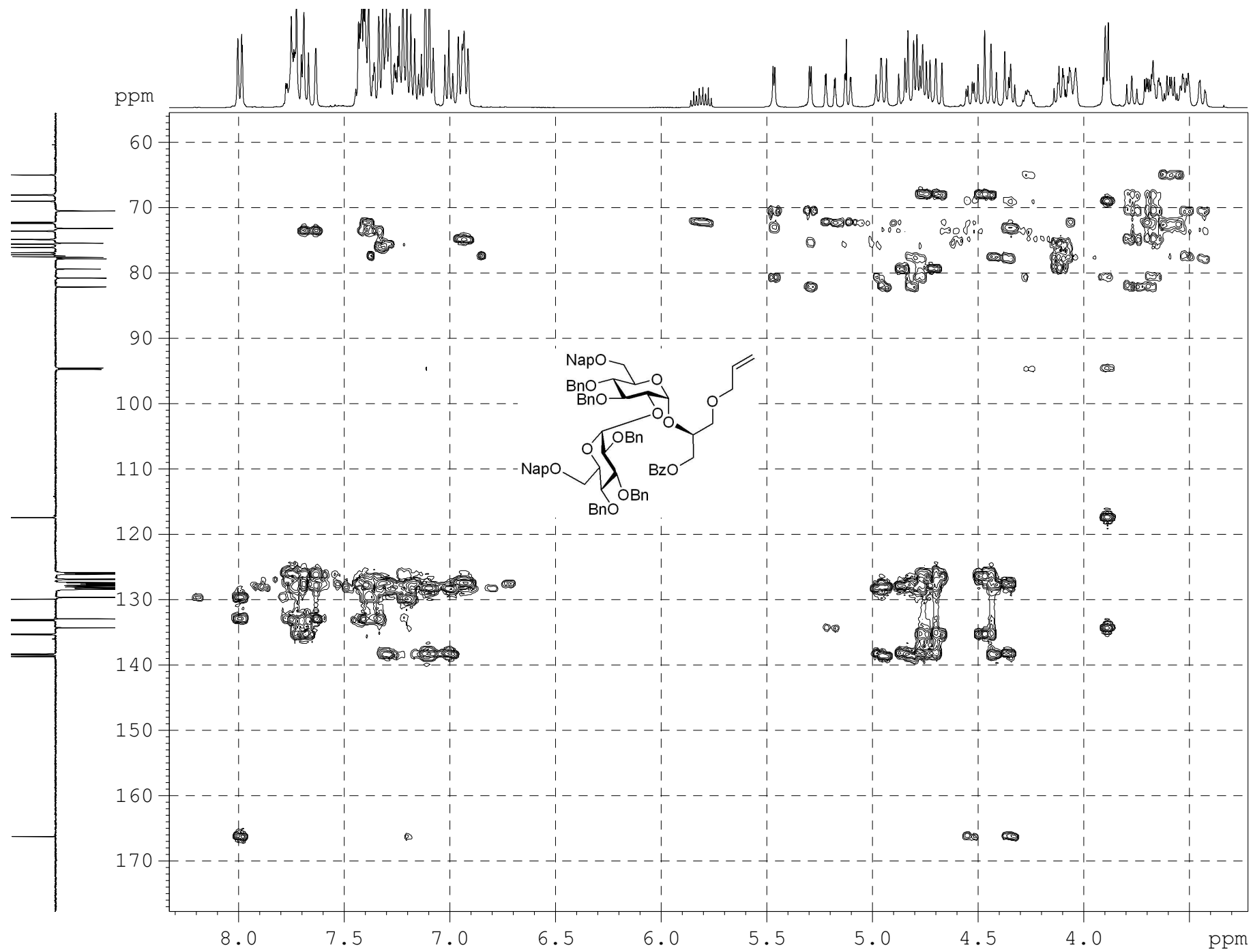
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC, Gated of **28**

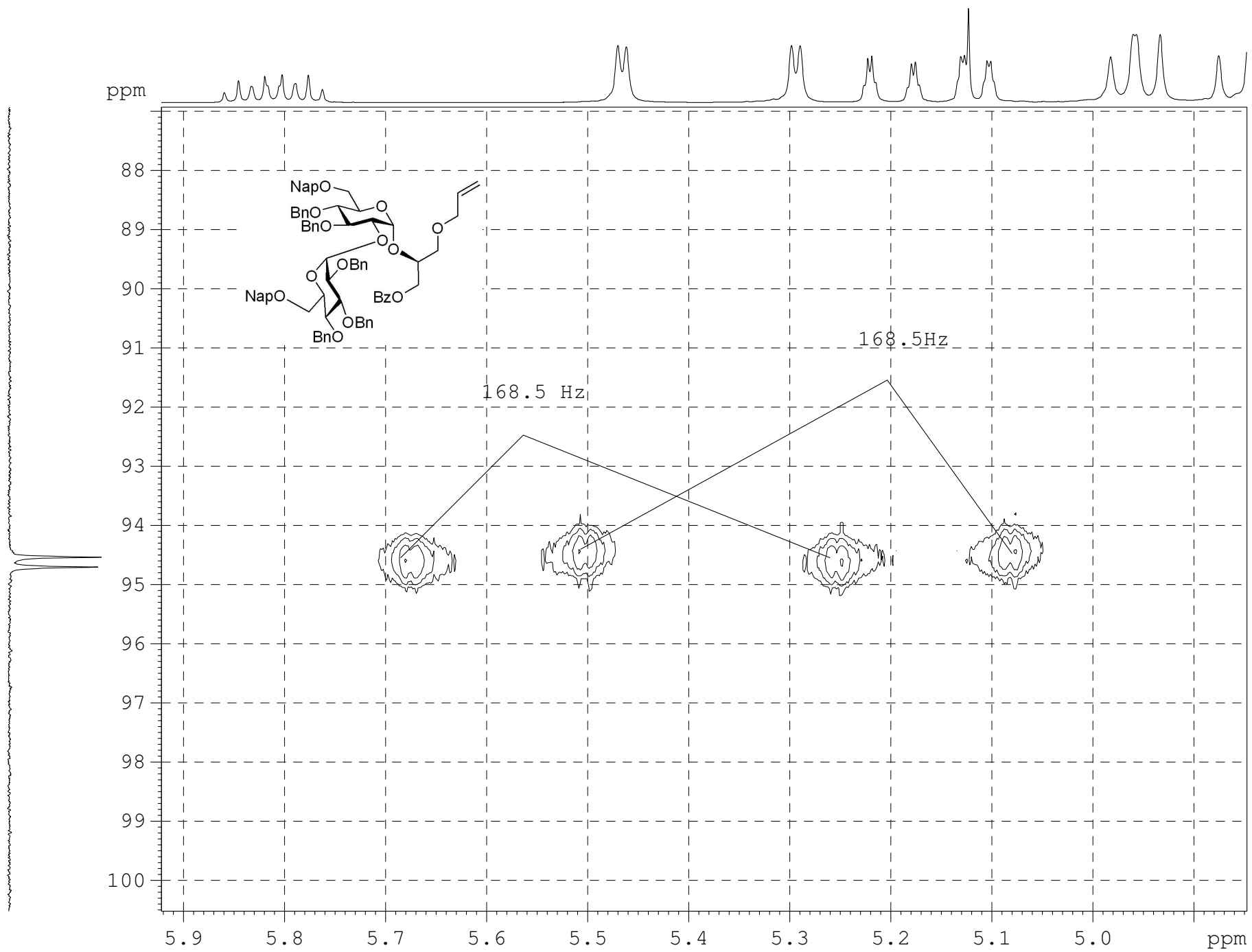




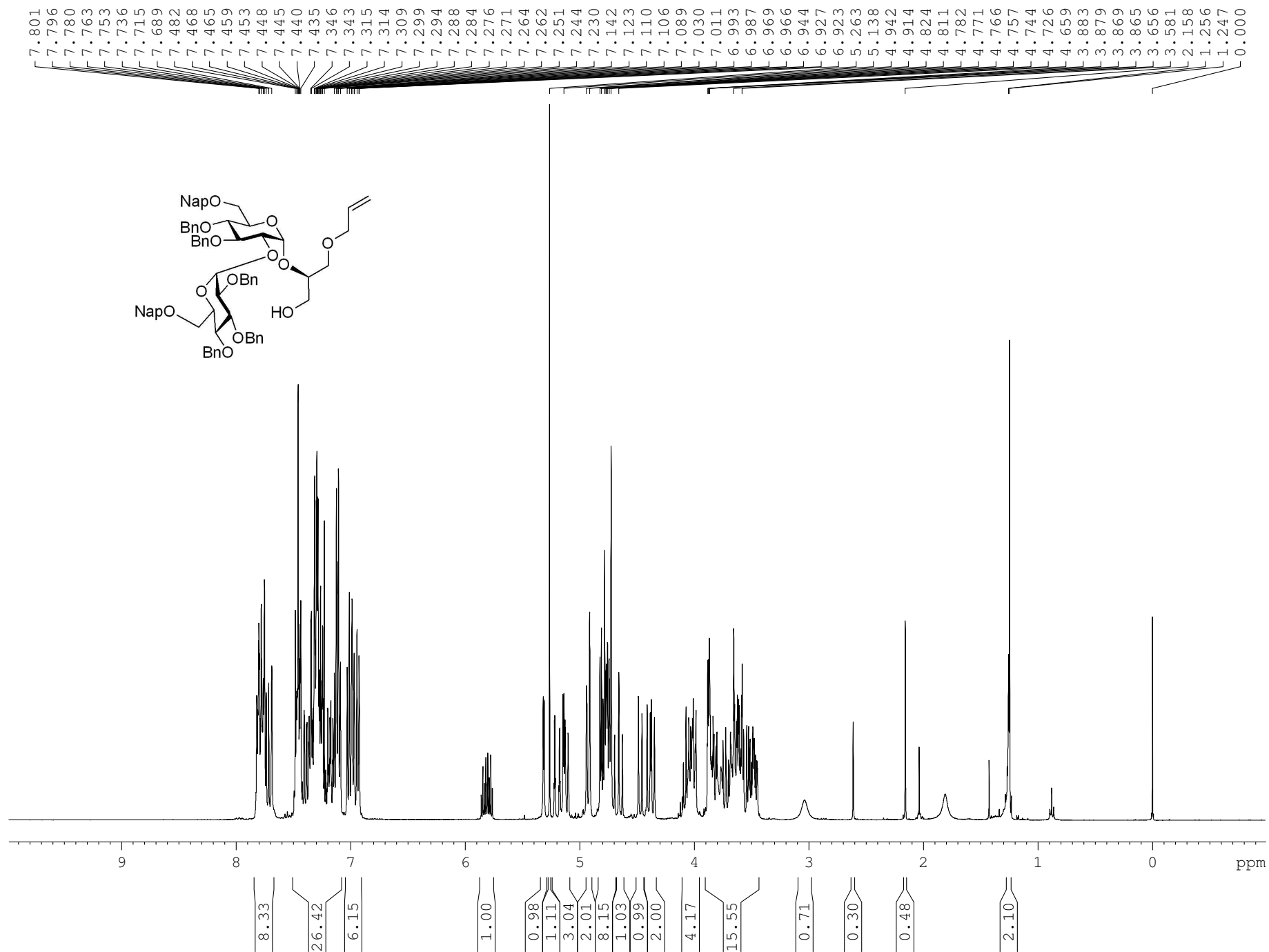


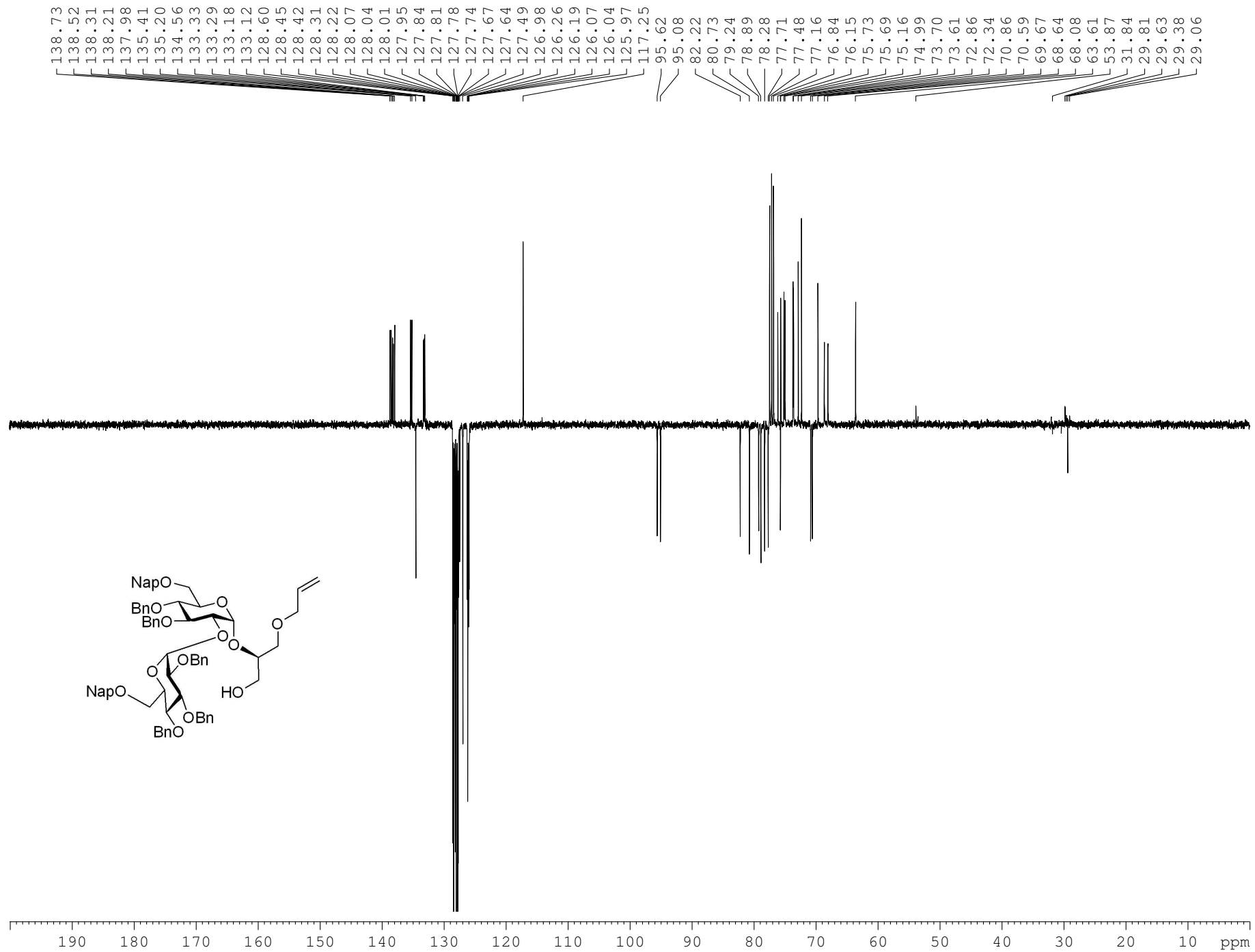


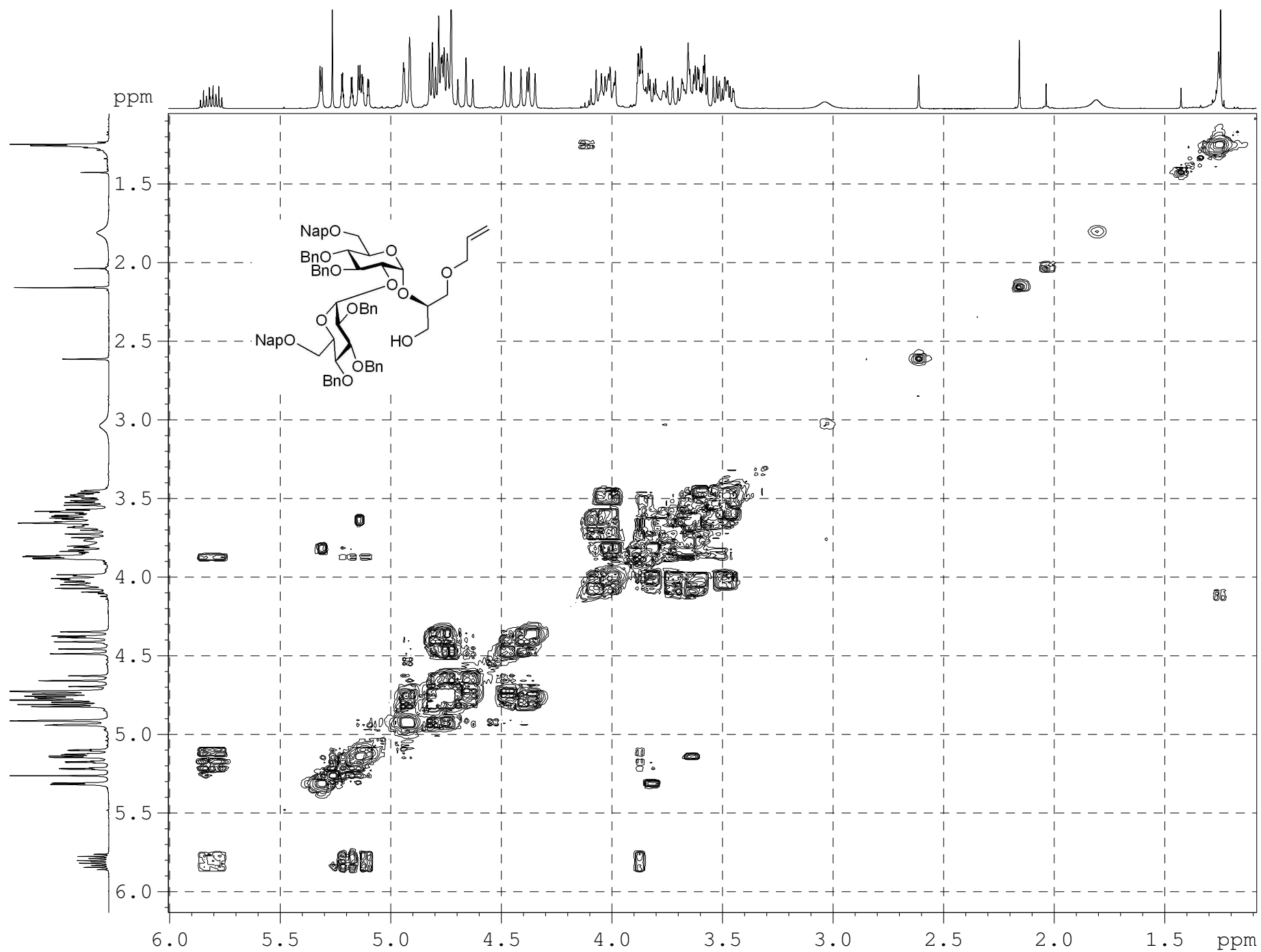


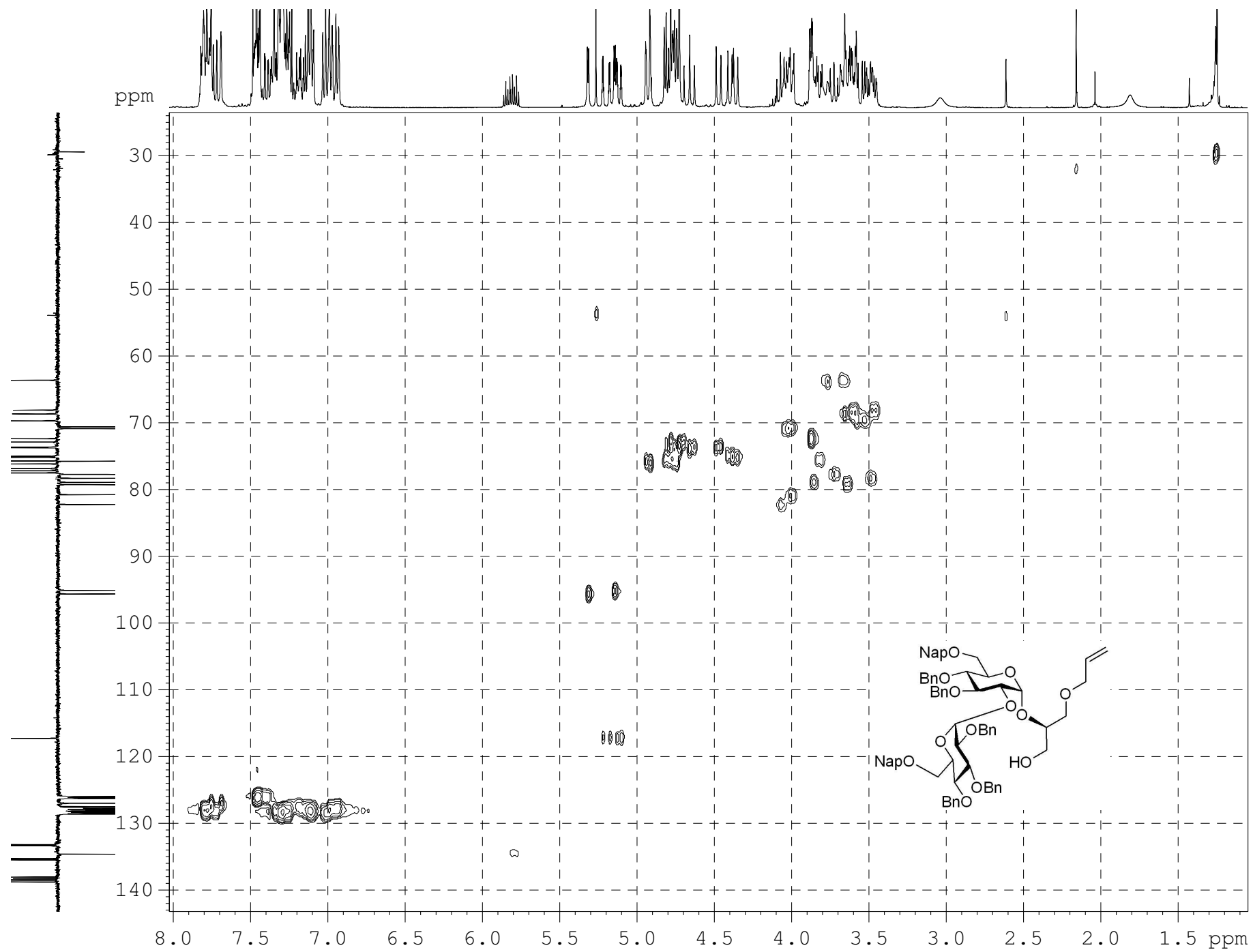


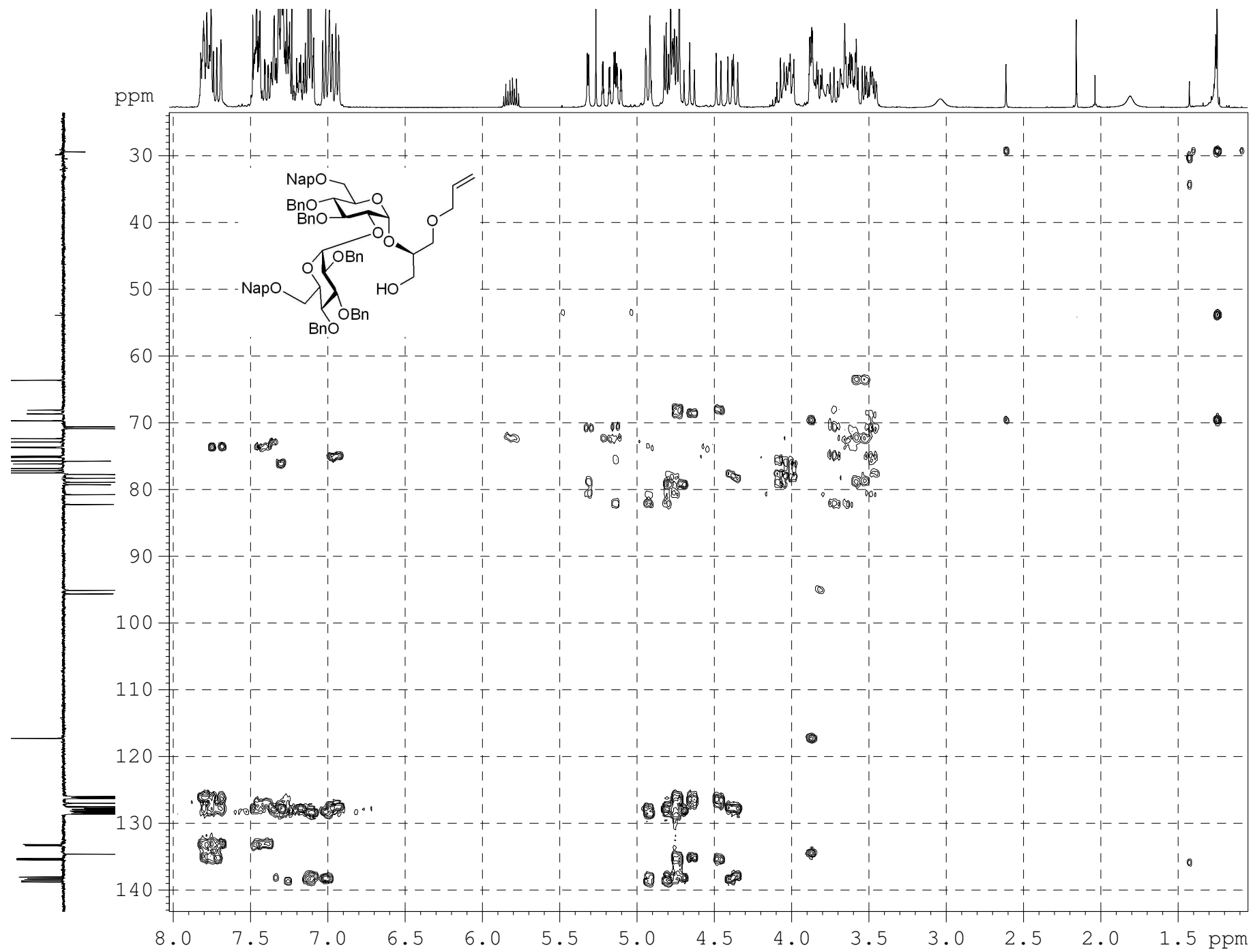
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC of **29**



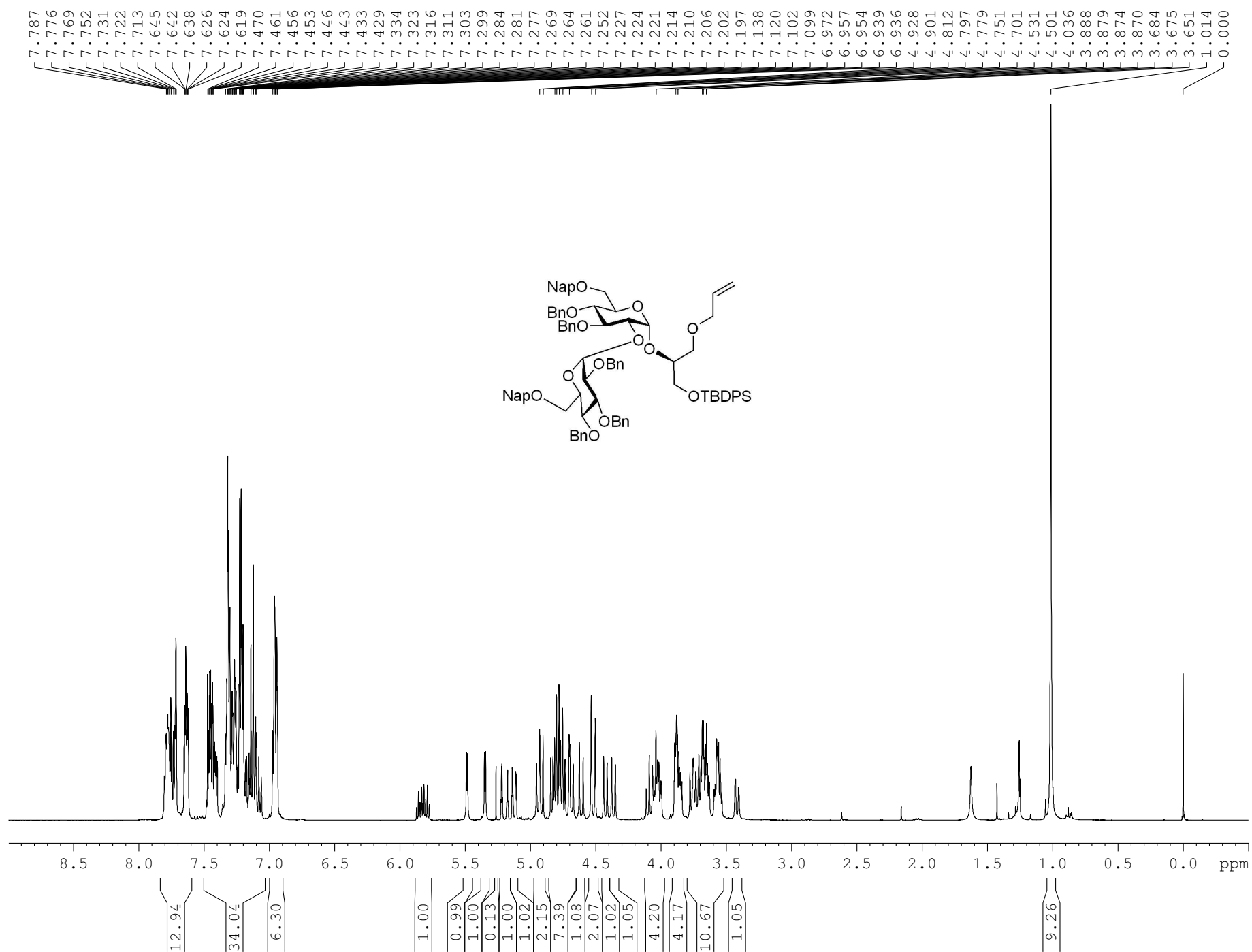


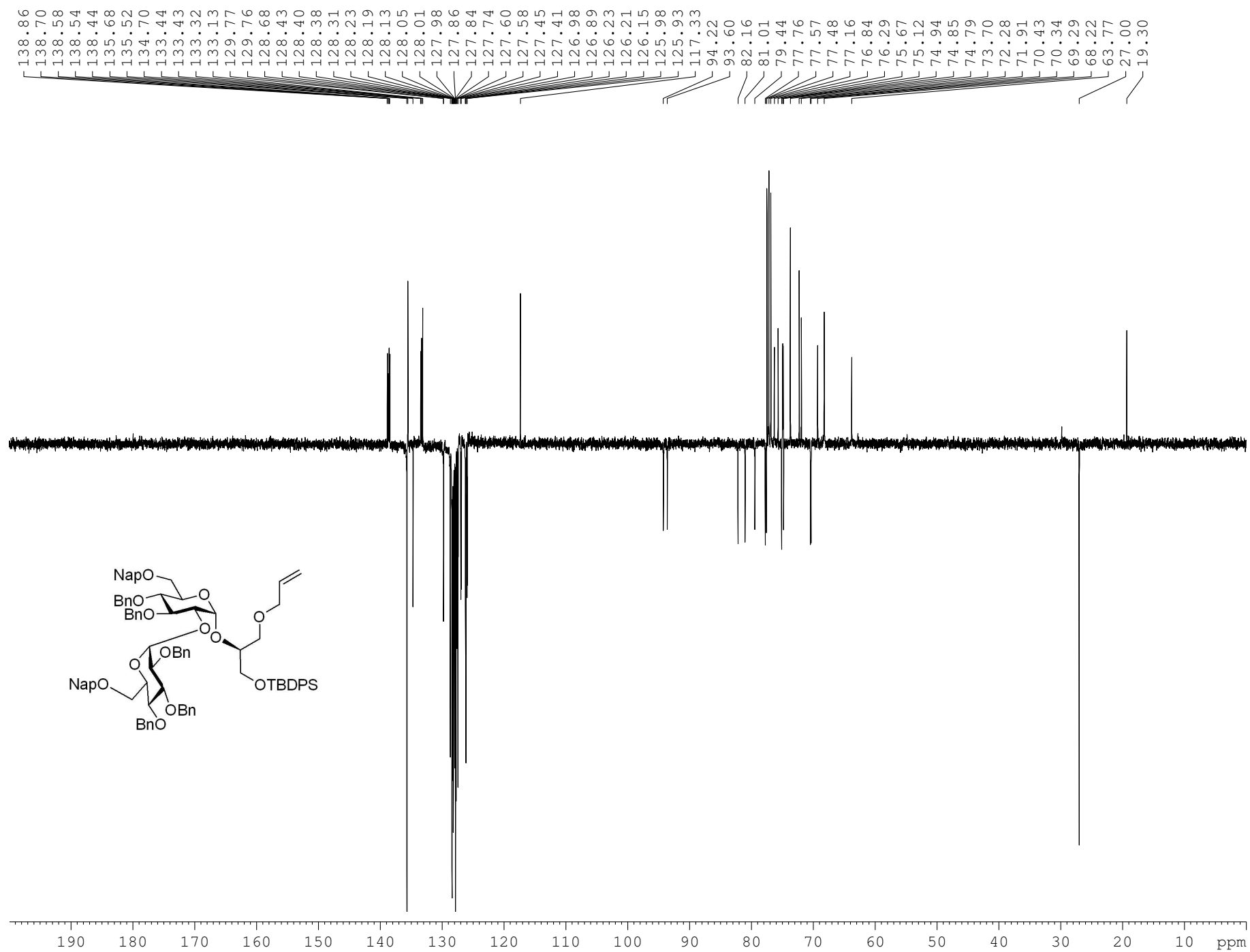


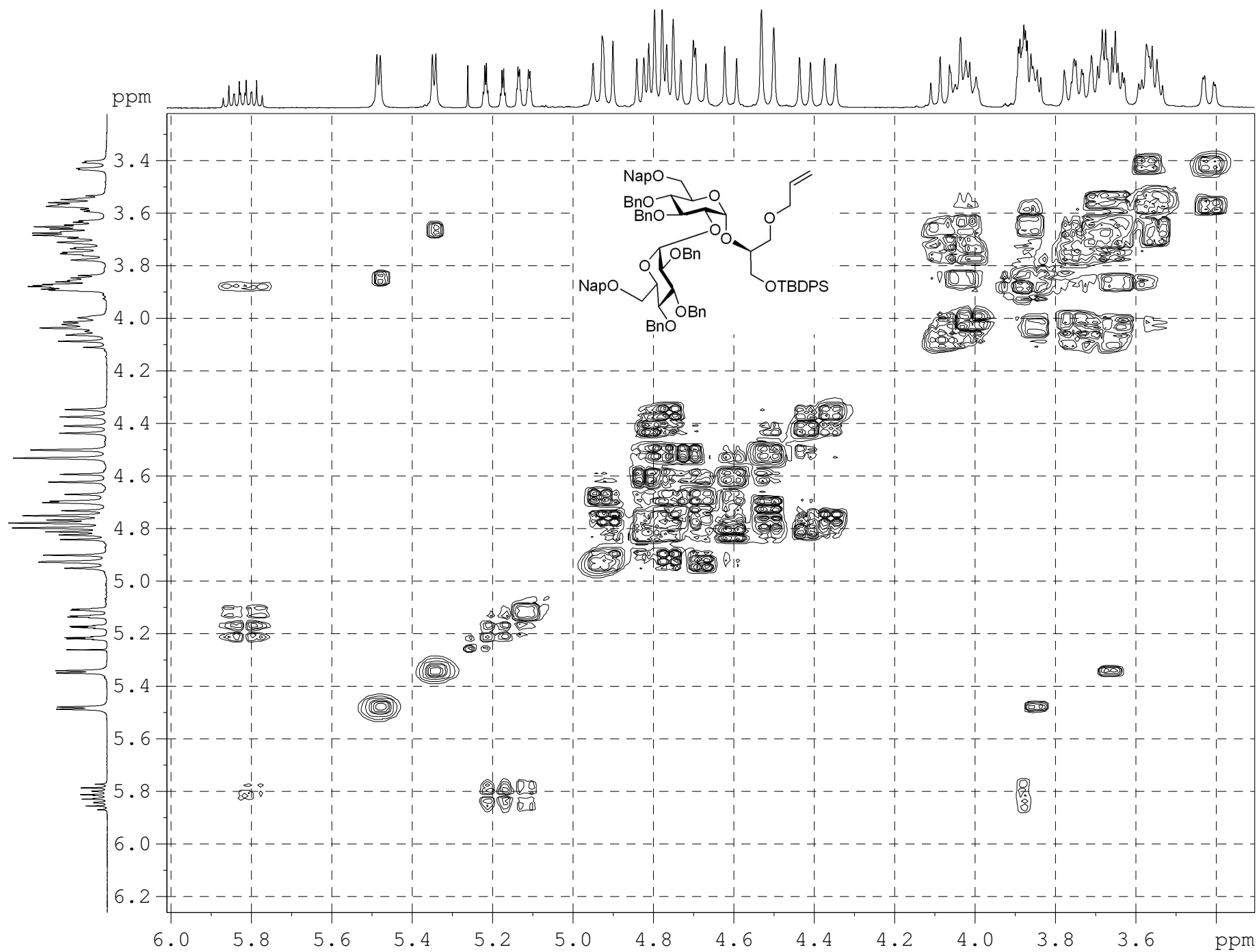


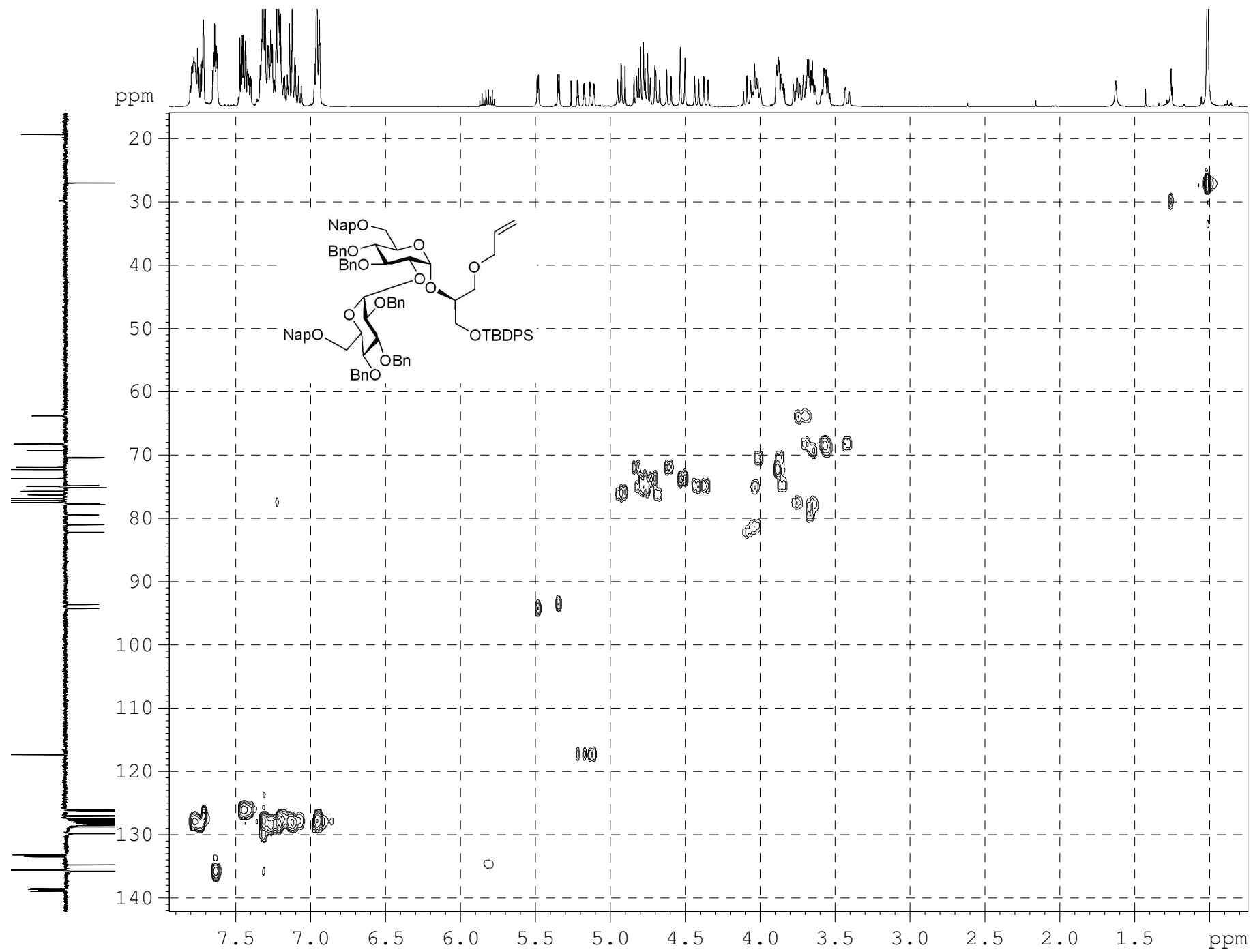


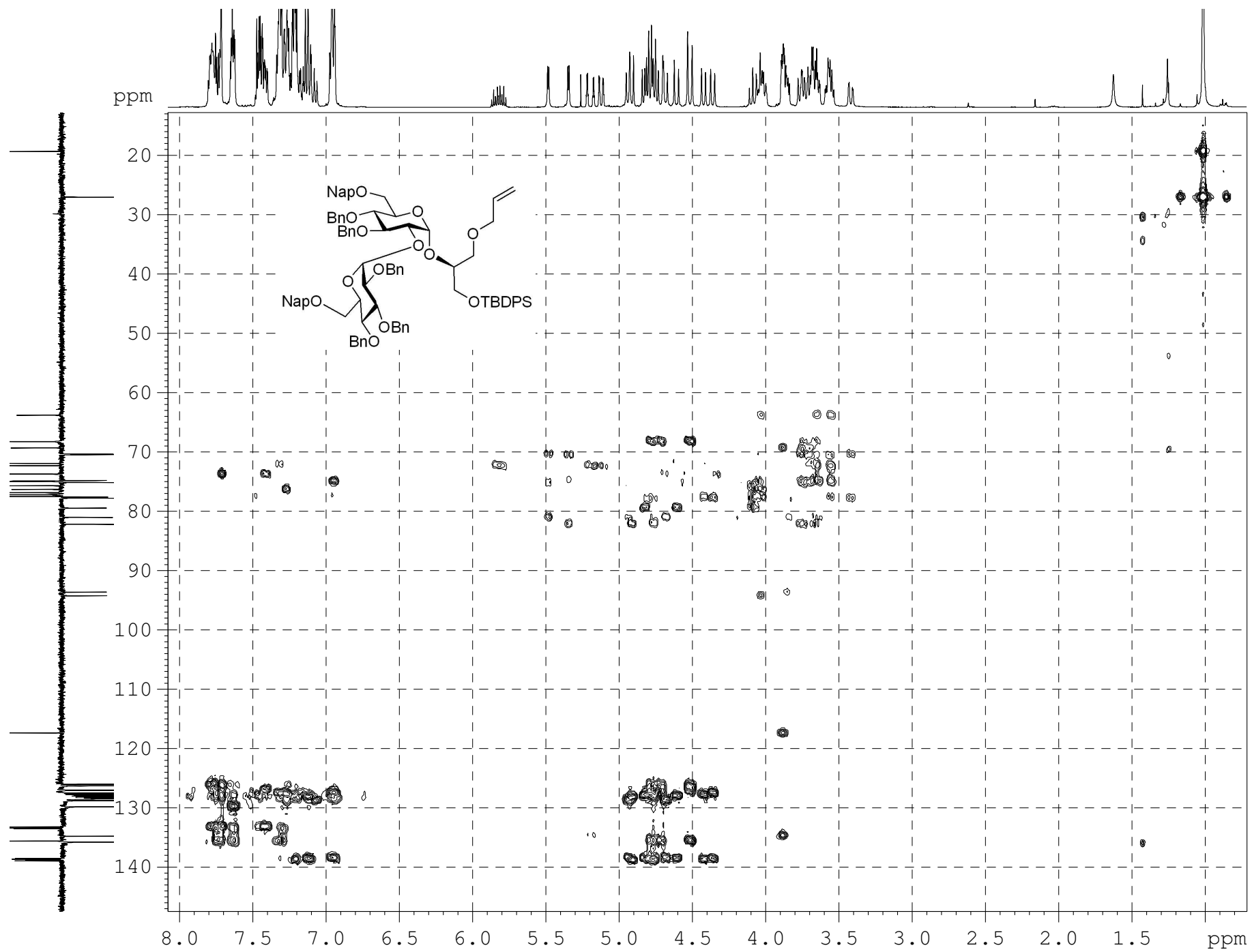
<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC of **30**



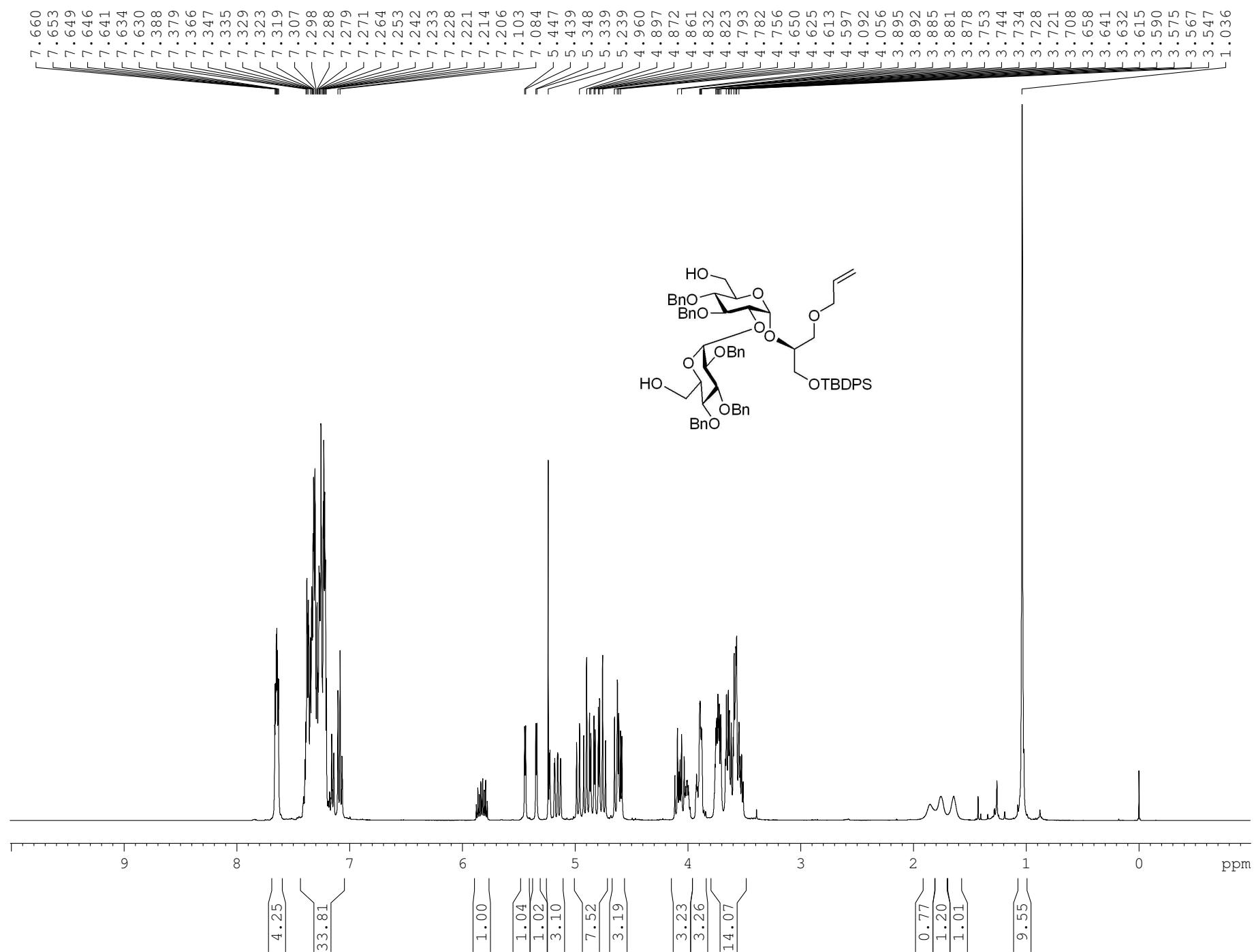


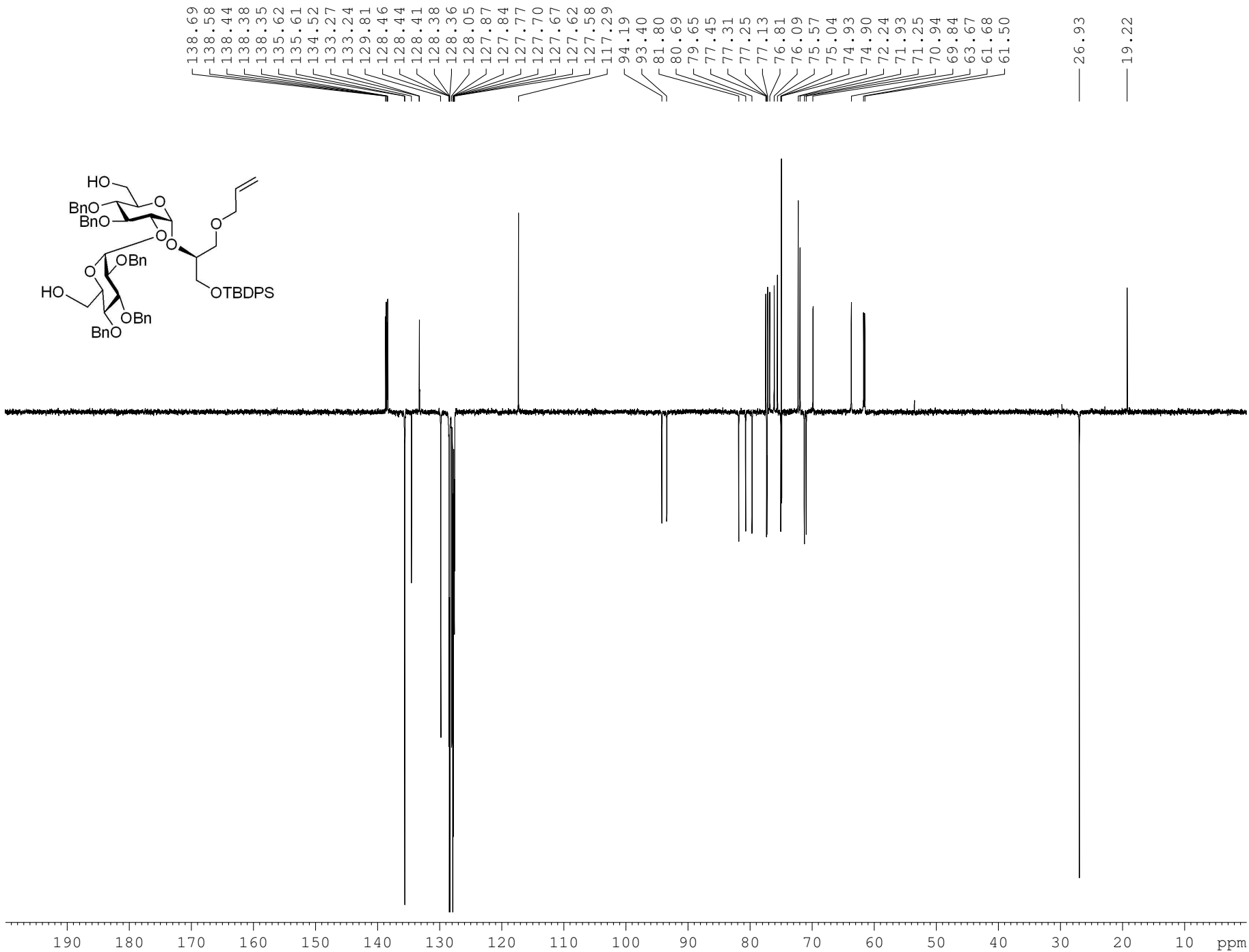


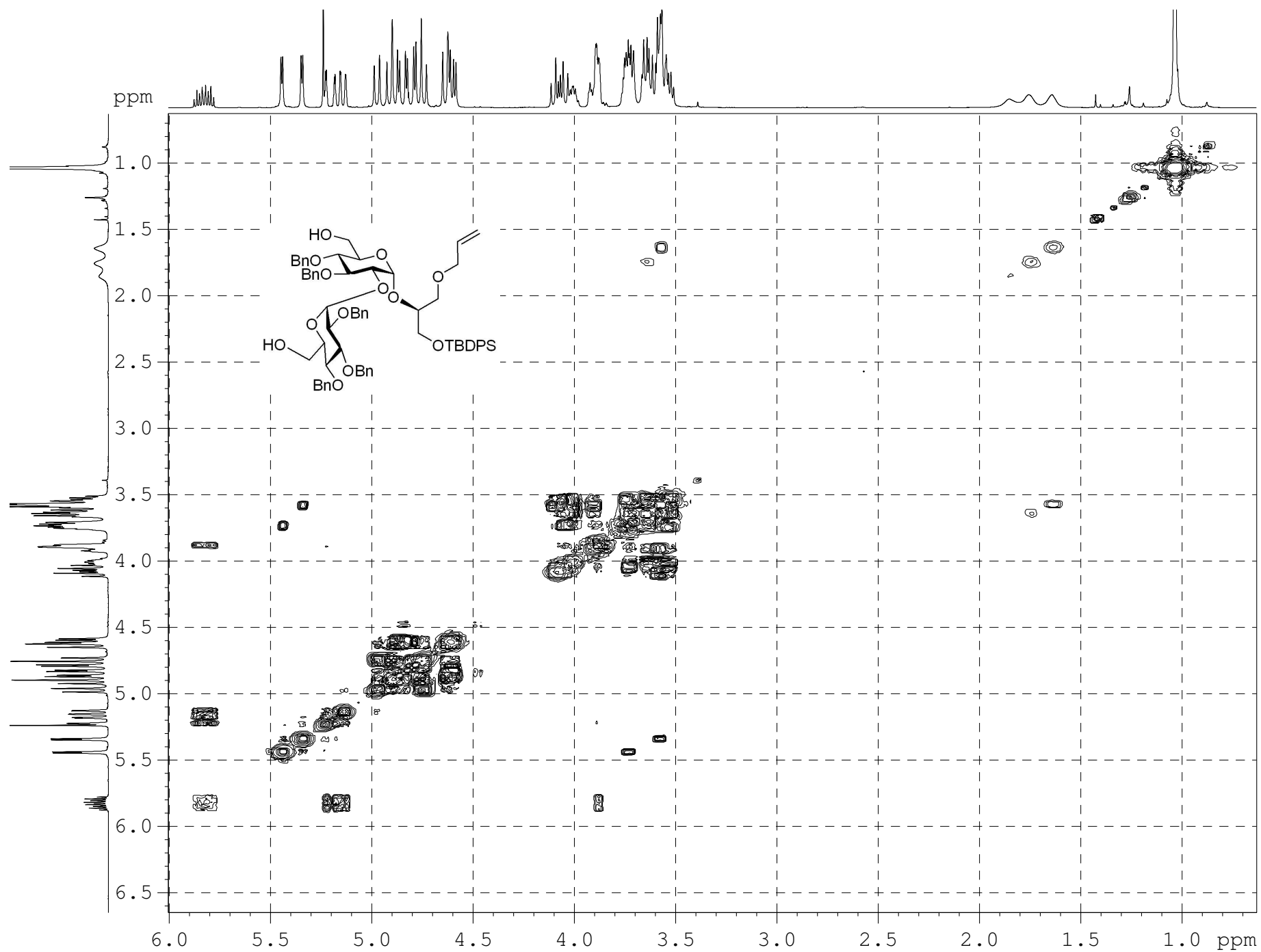


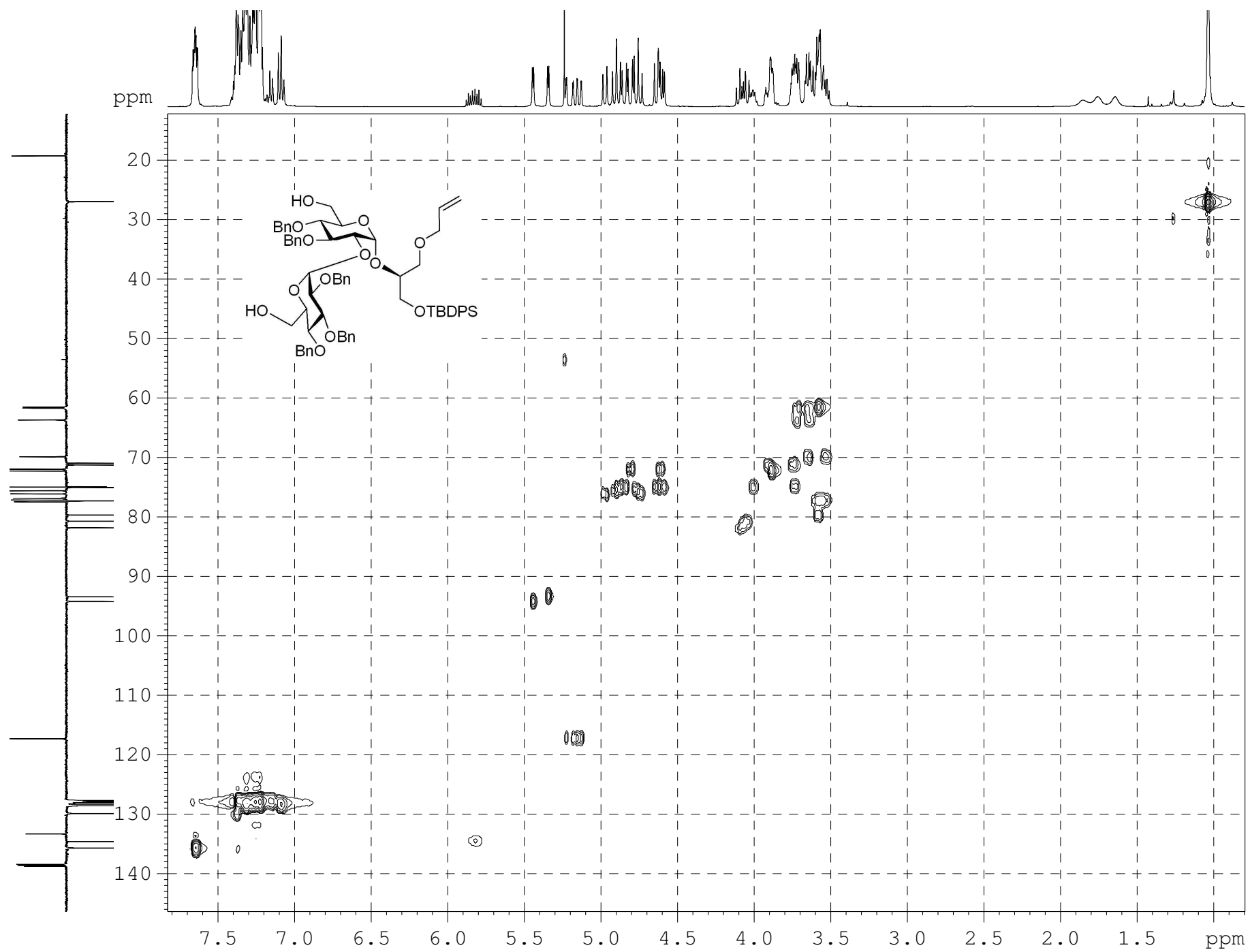


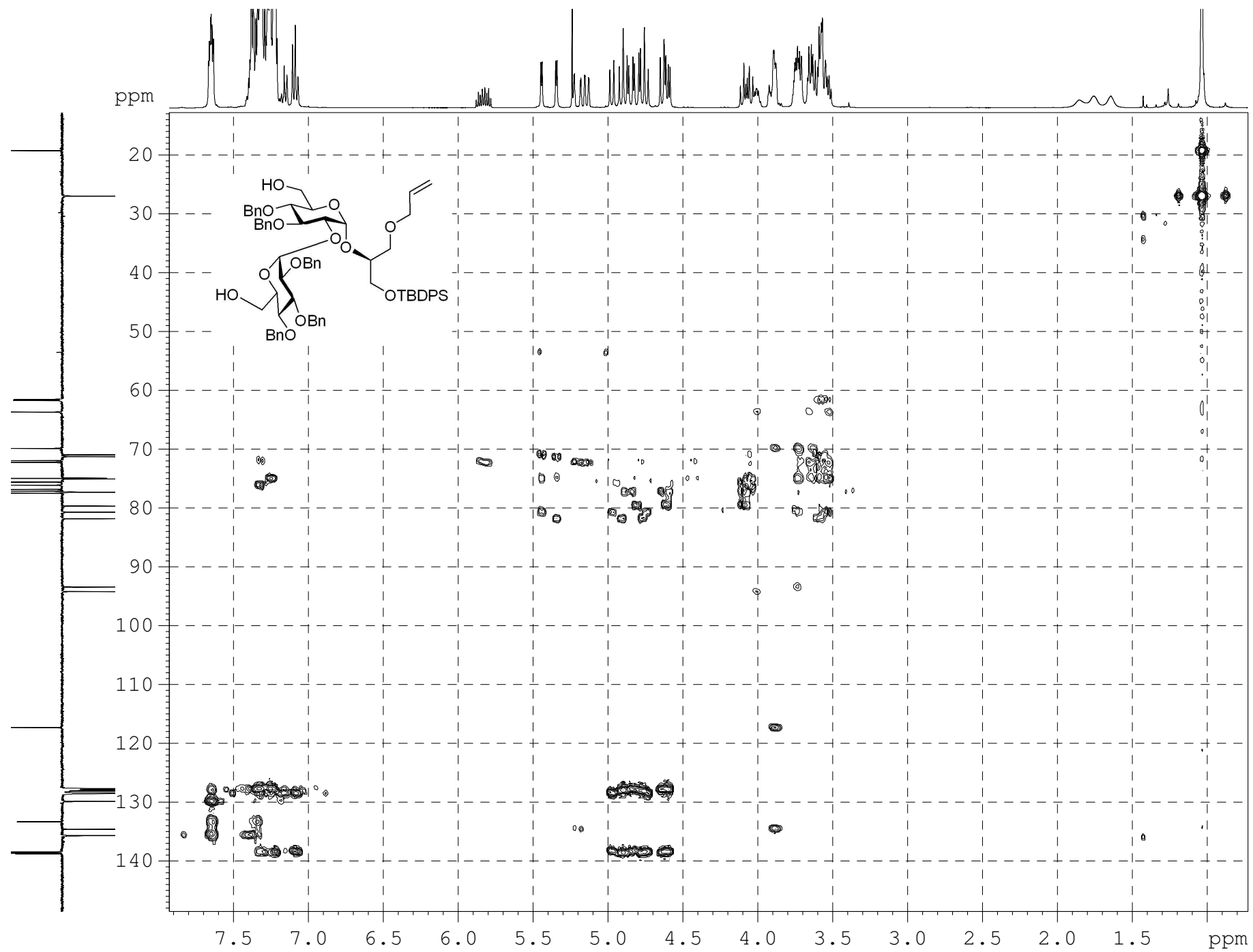
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC, HMBC of **31**



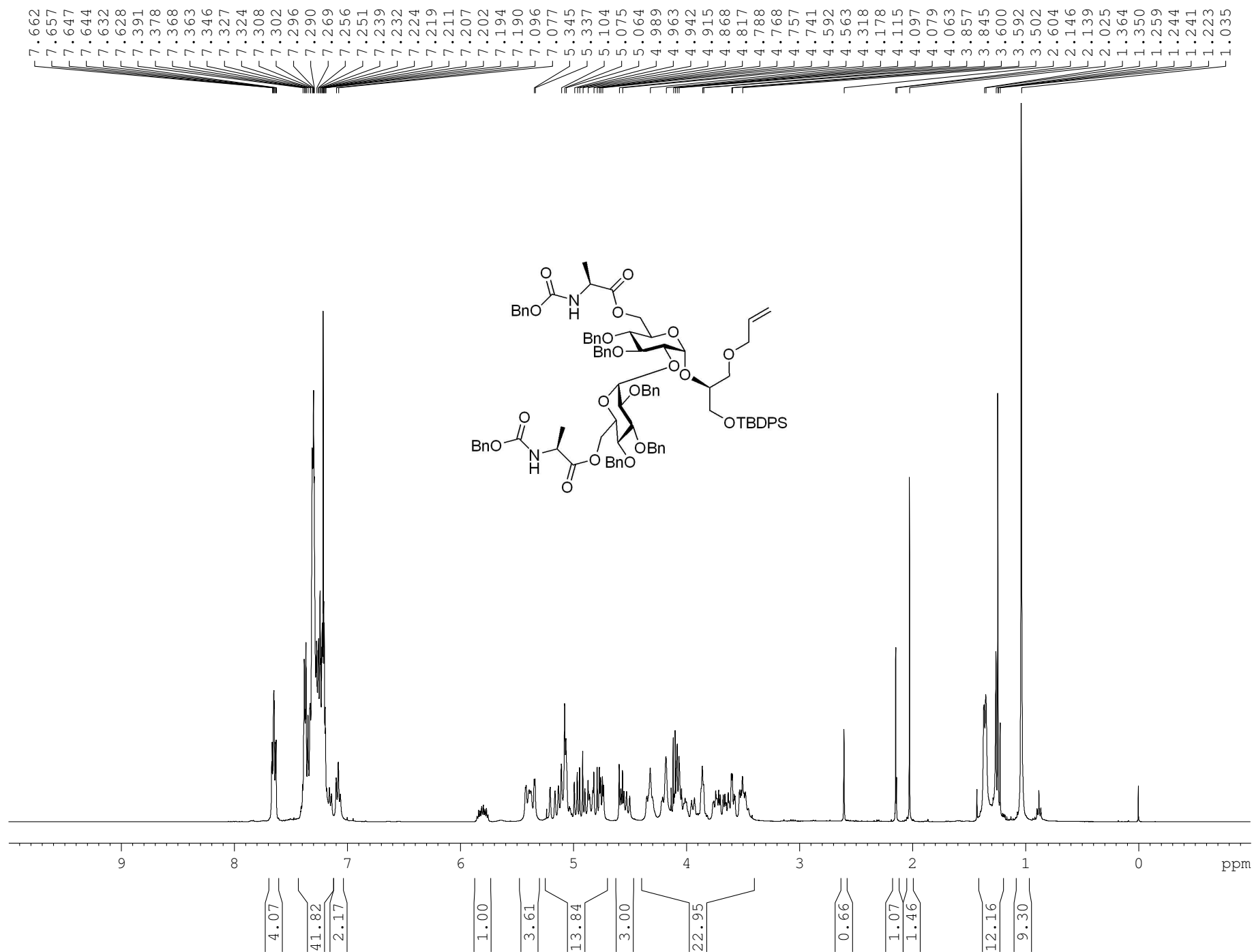


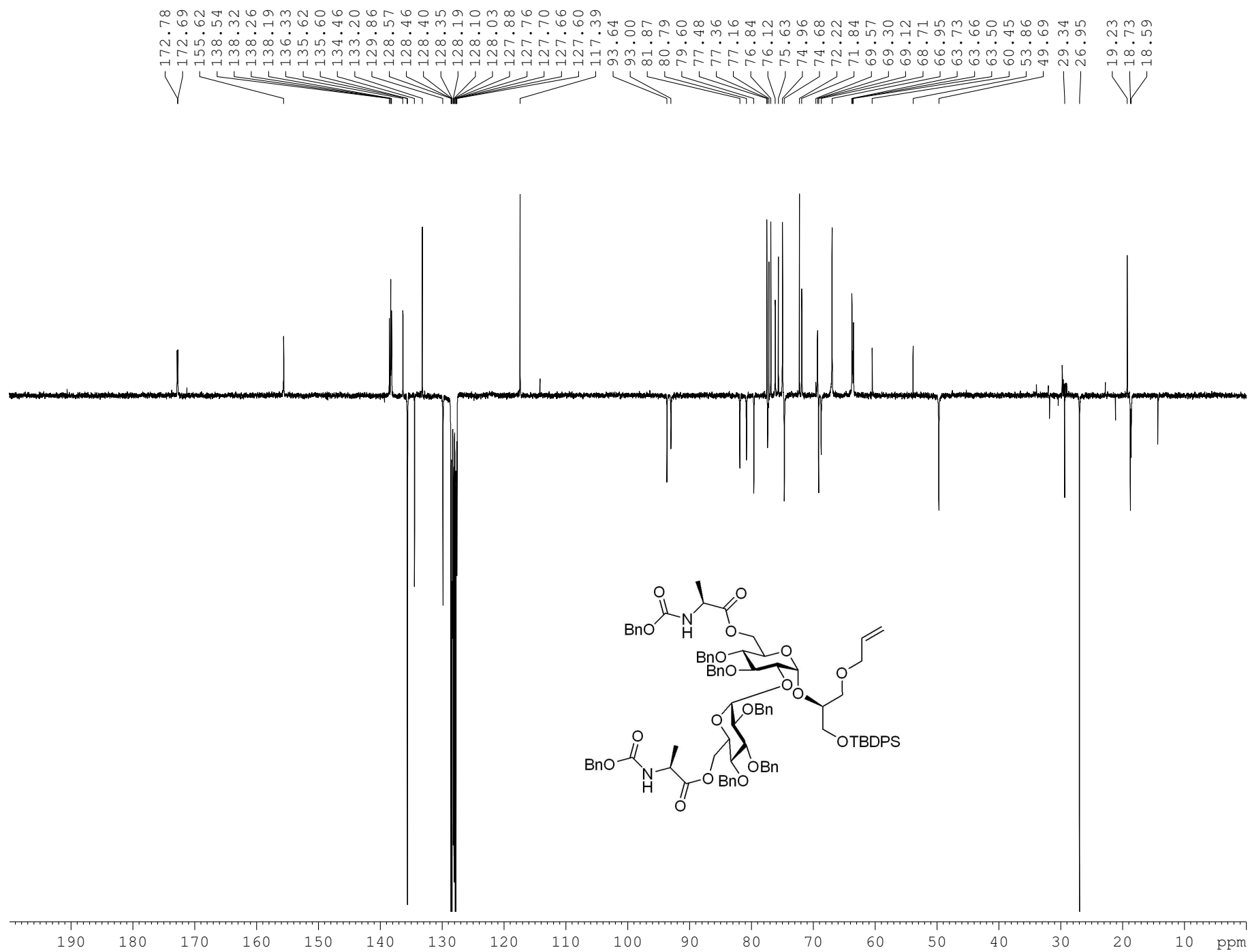


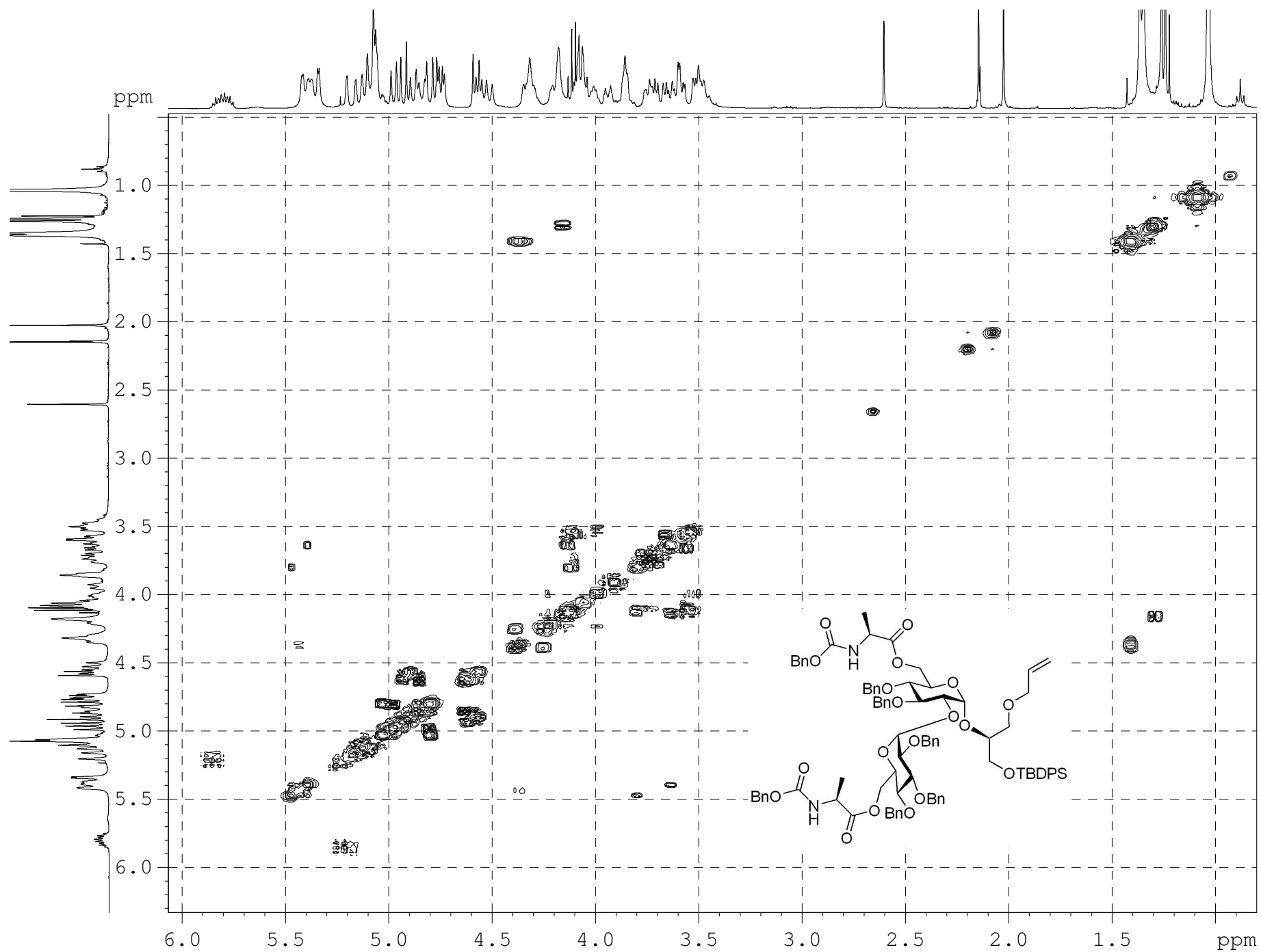


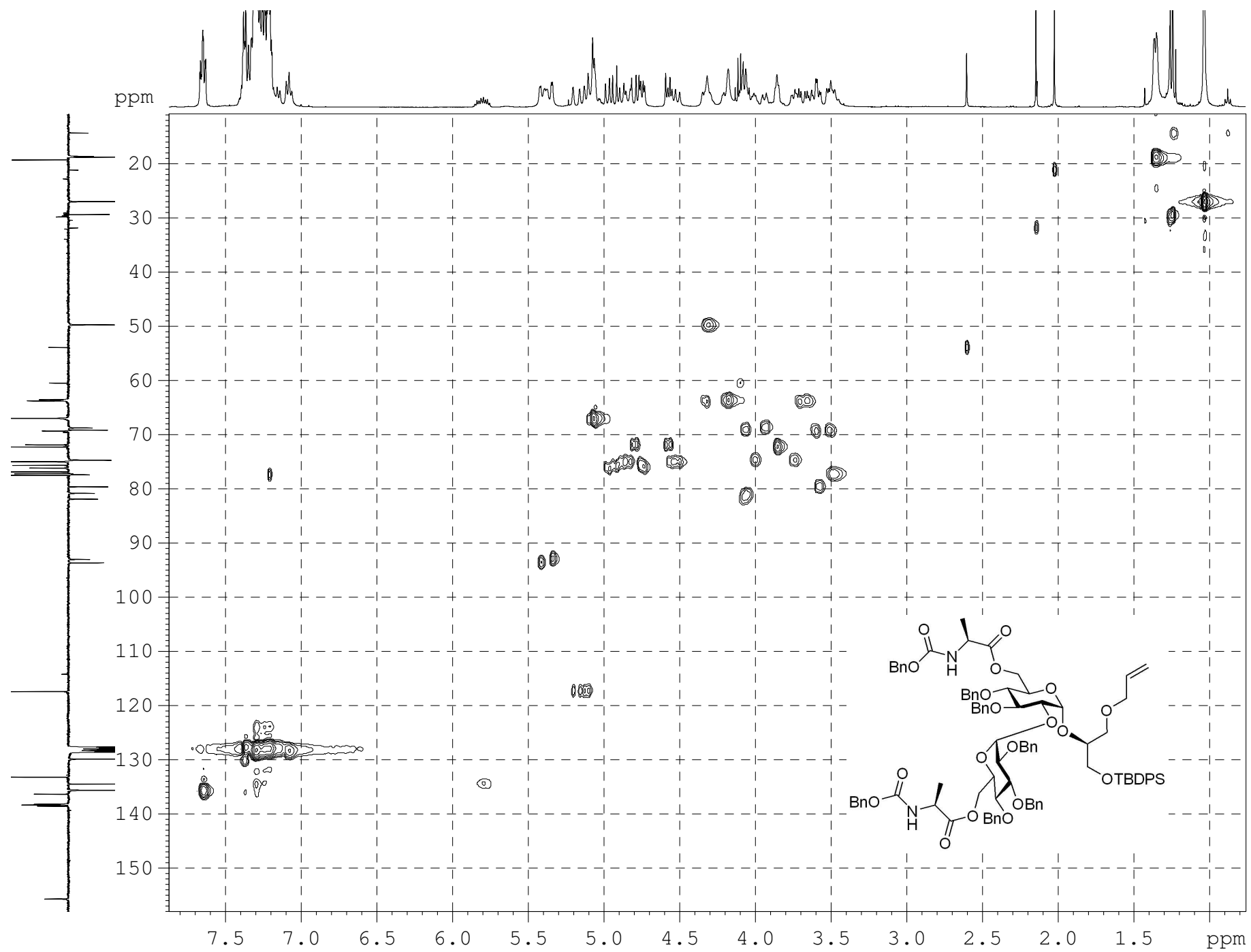


$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY of **32**

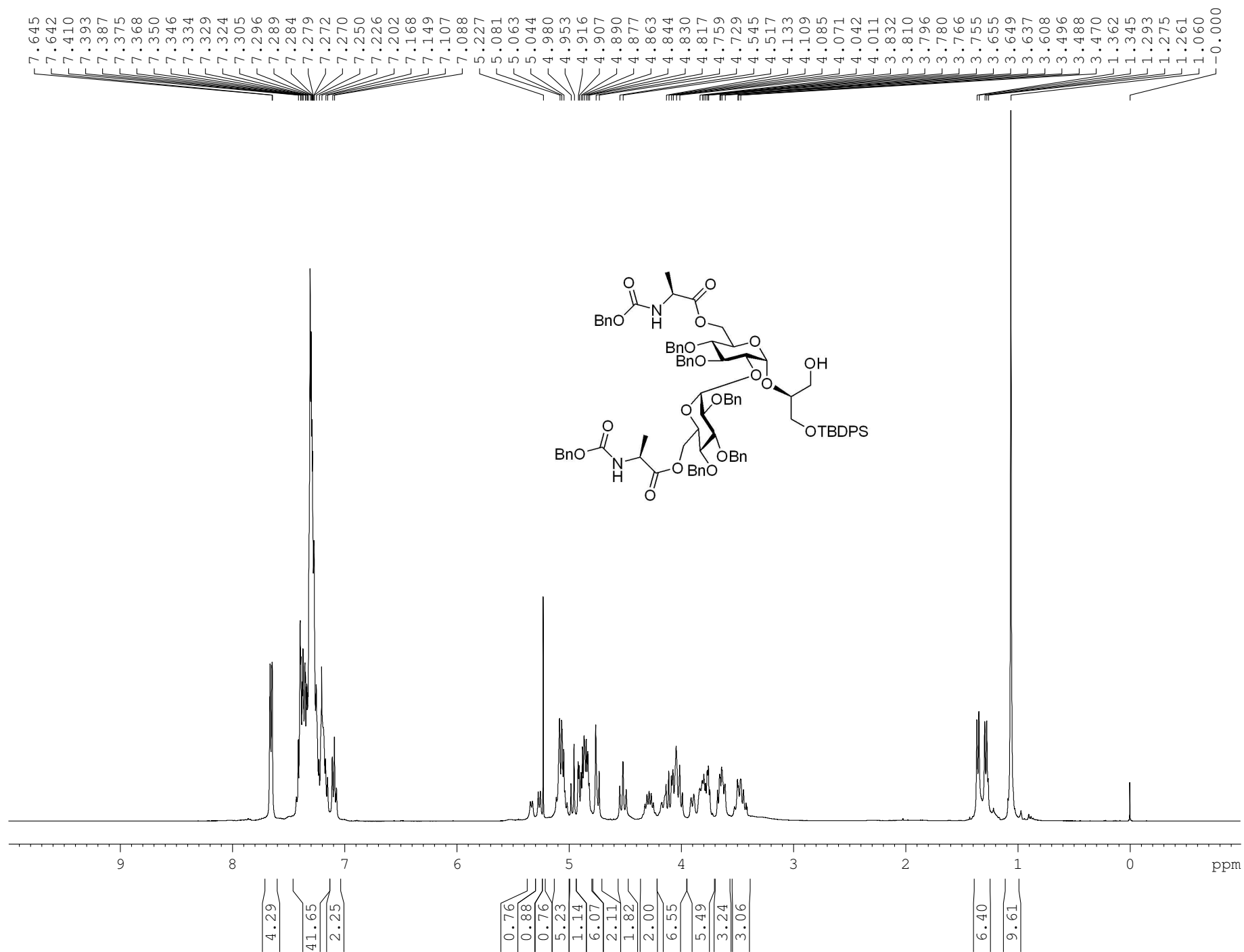


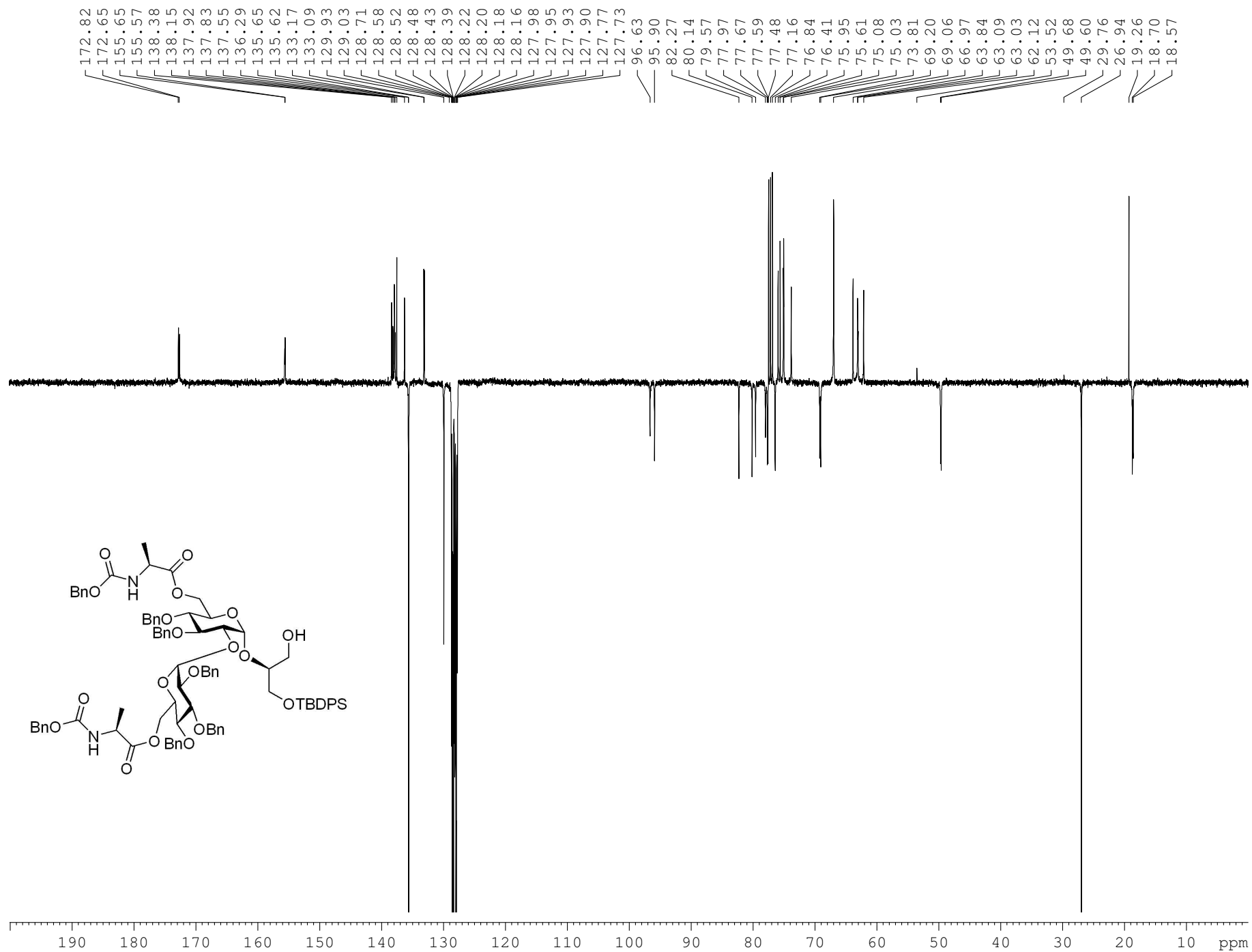


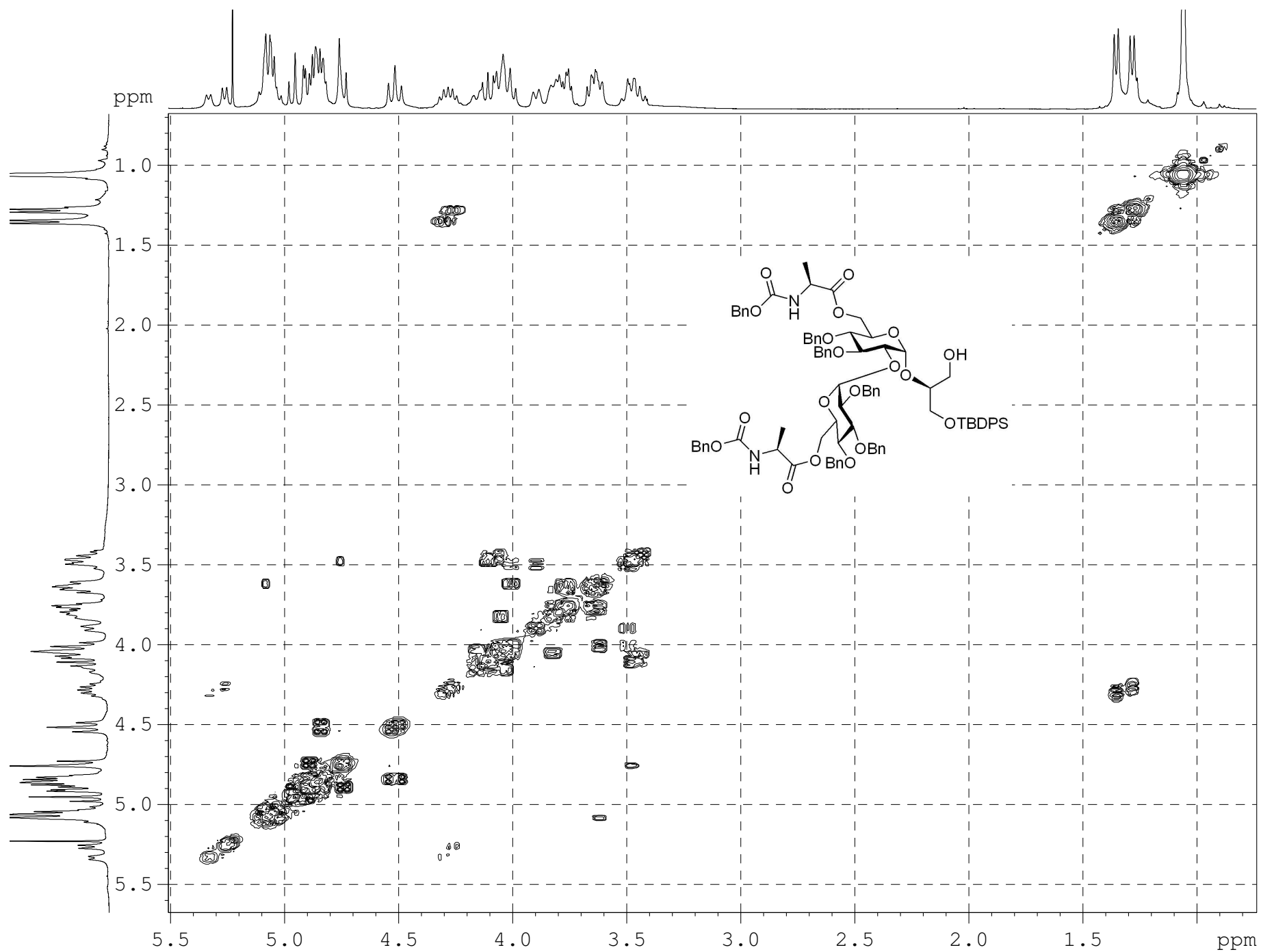


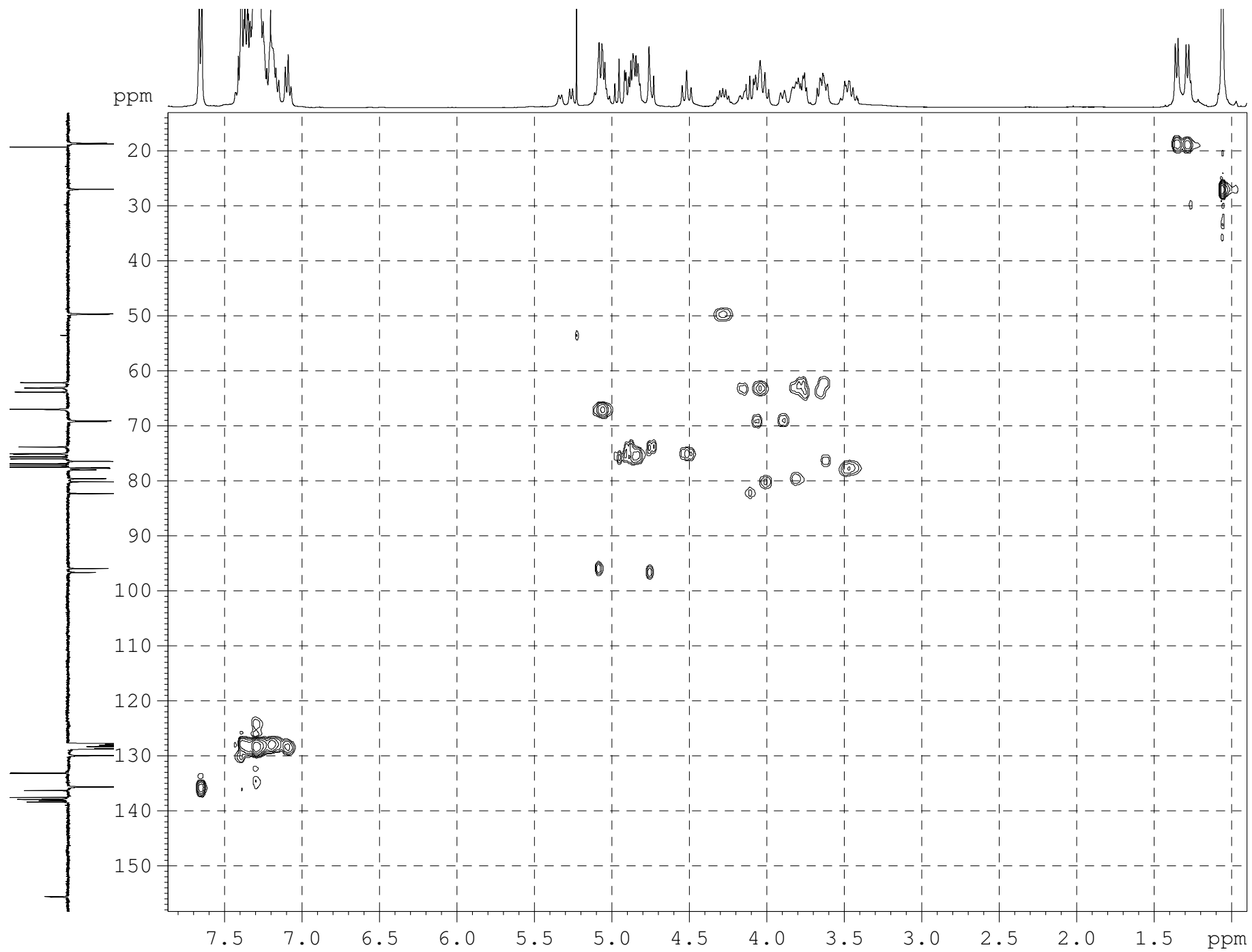


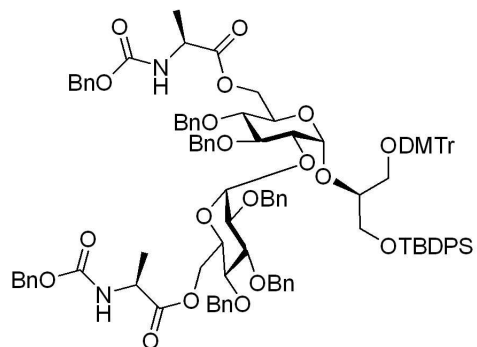
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC of **33**

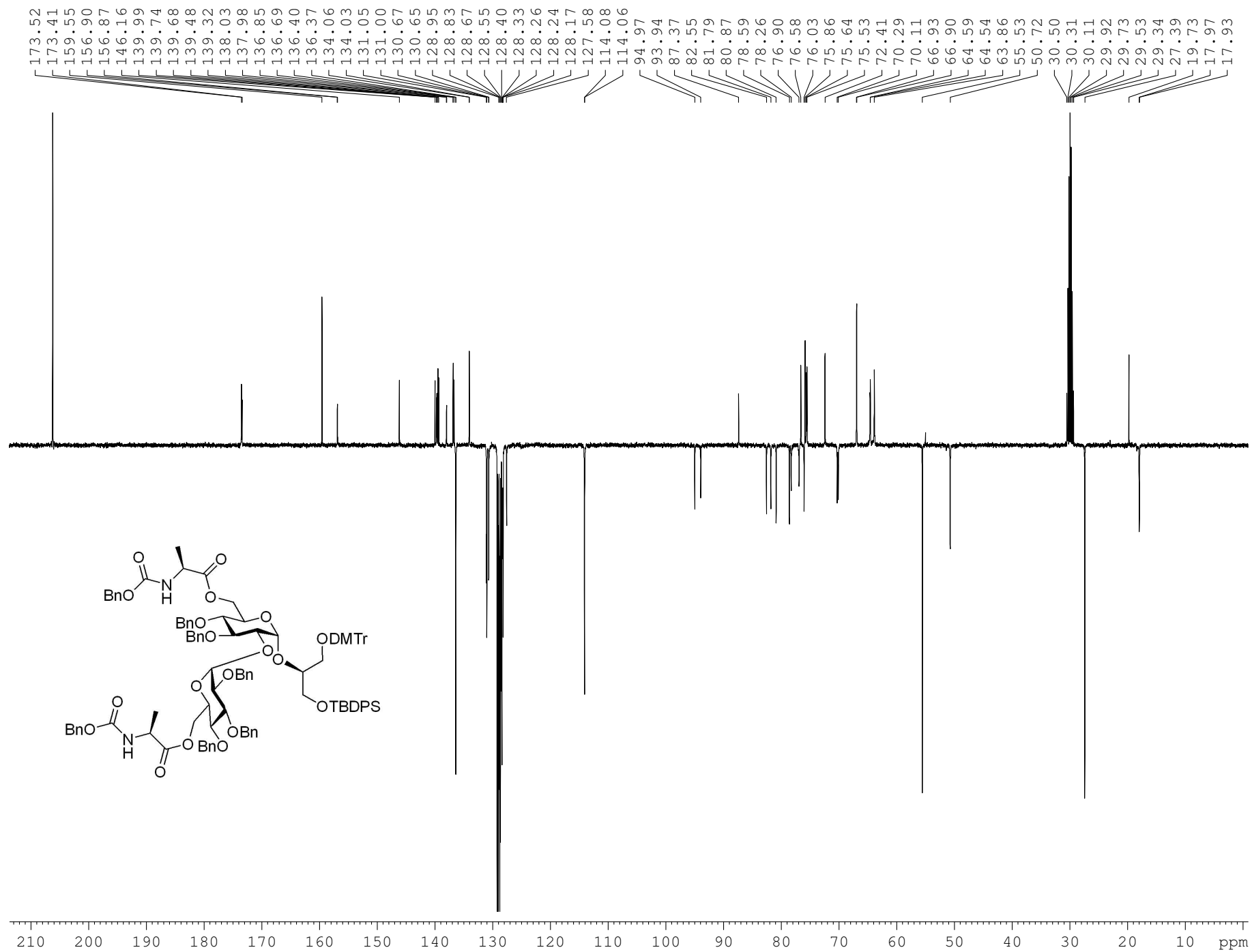


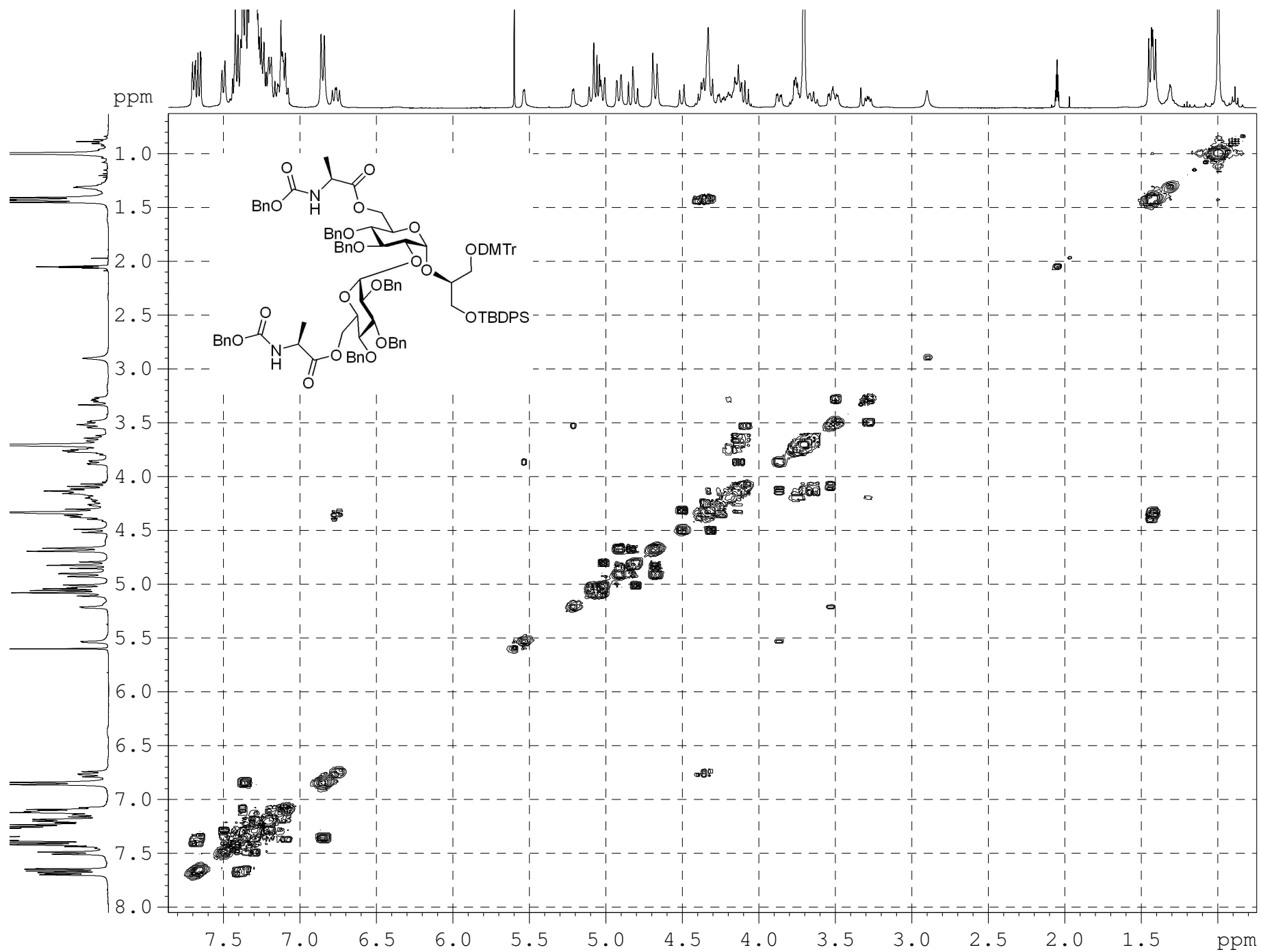


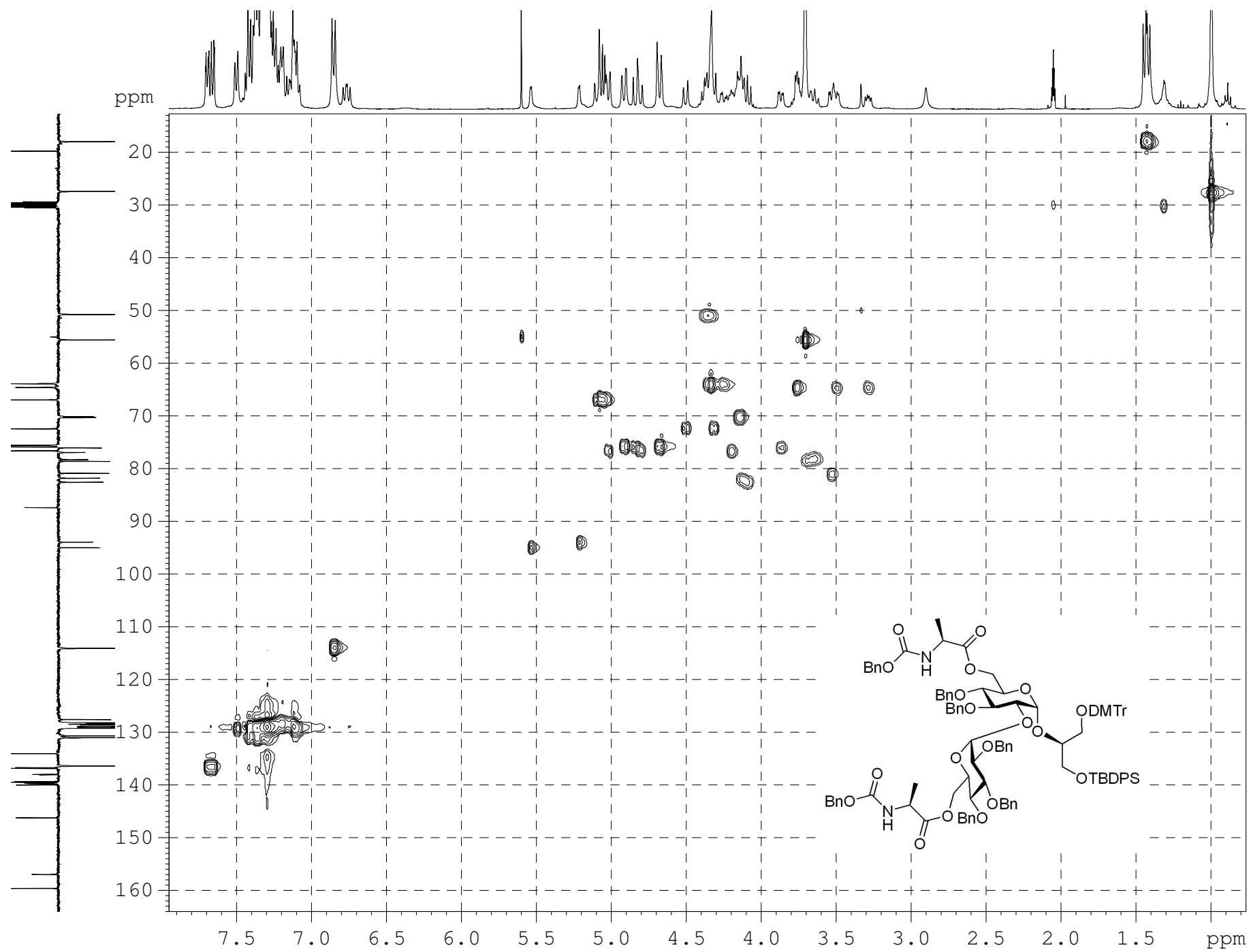


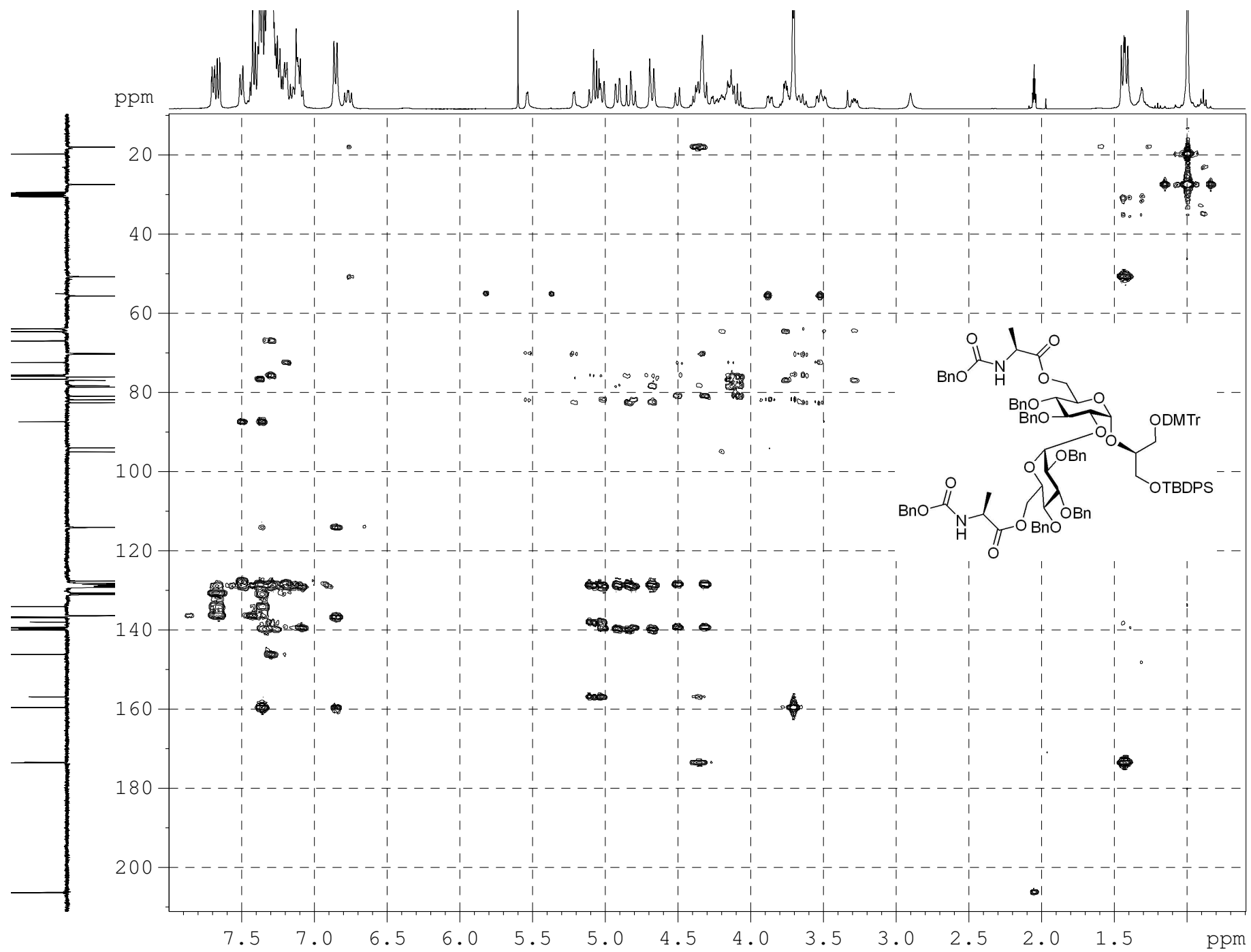


[illegible]

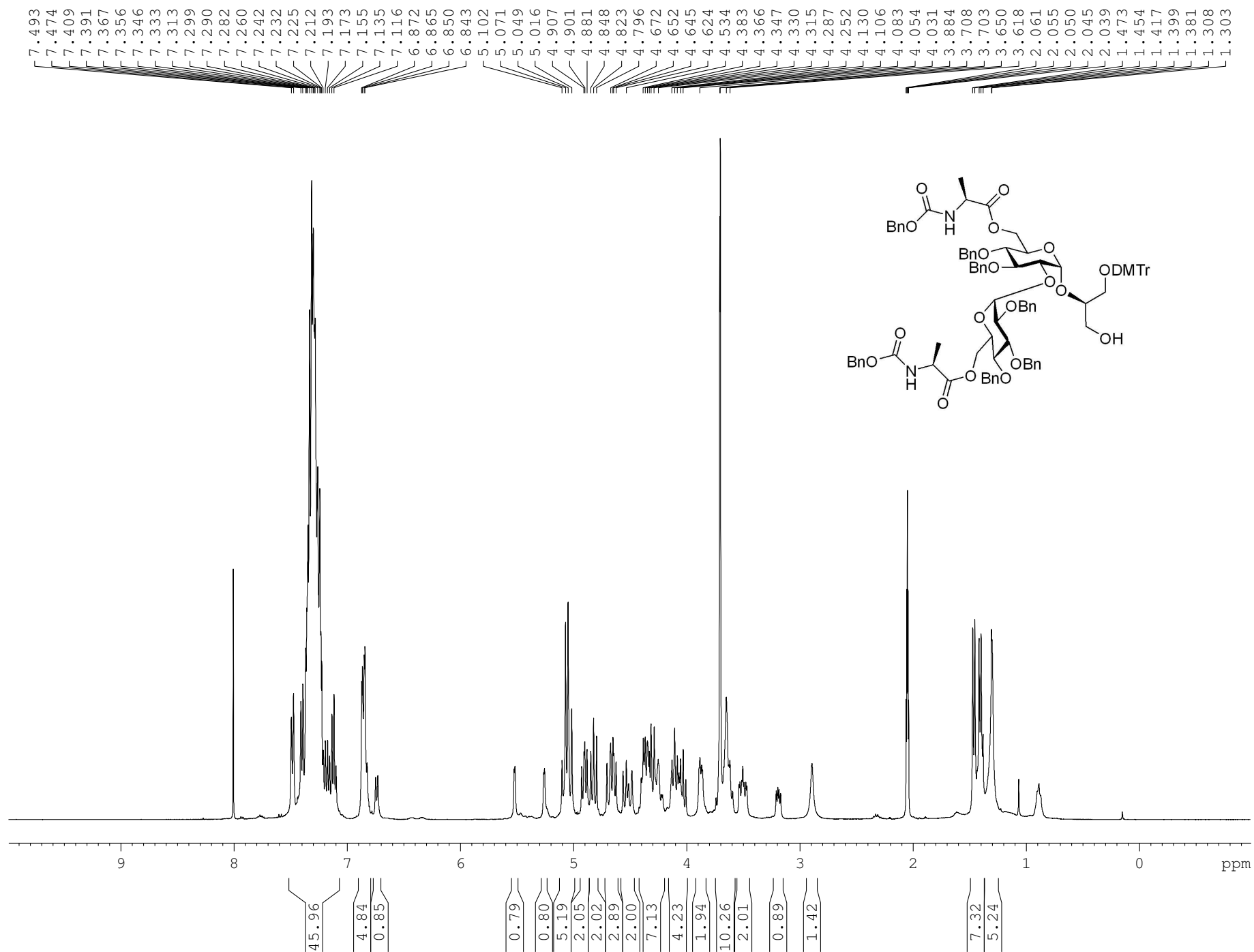








<sup>1</sup>H-NMR, <sup>13</sup>C-APT, <sup>1</sup>H-<sup>1</sup>H COSY, HSQC, HMBC of **19**



7.493  
7.474  
7.409  
7.391  
7.367  
7.356  
7.346  
7.333  
7.313  
7.299  
7.290  
7.282  
7.260  
7.242  
7.232  
7.225  
7.212  
7.193  
7.173  
7.155  
7.135  
7.116  
6.872  
6.865  
6.850  
6.843  
5.102  
5.071  
5.049  
5.016  
4.907  
4.901  
4.881  
4.848  
4.823  
4.796  
4.672  
4.652  
4.645  
4.624  
4.534  
4.383  
4.366  
4.347  
4.330  
4.315  
4.287  
4.252  
4.130  
4.106  
4.083  
4.054  
4.031  
3.884  
3.708  
3.703  
3.650  
3.618  
2.061  
2.055  
2.050  
2.045  
2.039  
1.473  
1.454  
1.417  
1.399  
1.381  
1.308  
1.303

45.96

4.84

0.85

0.79

0.80

5.19

2.05

2.02

2.89

2.00

7.13

4.23

1.94

10.26

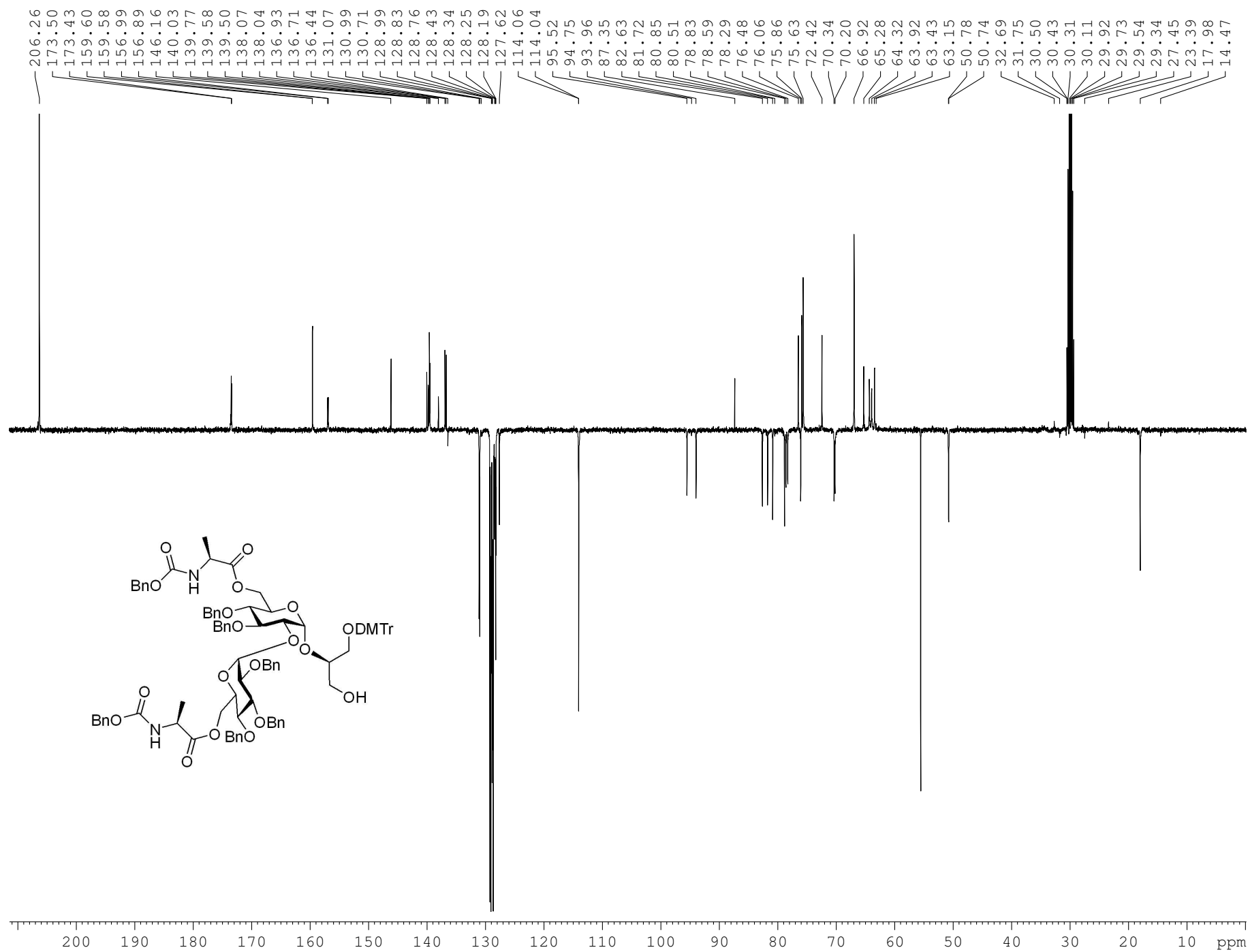
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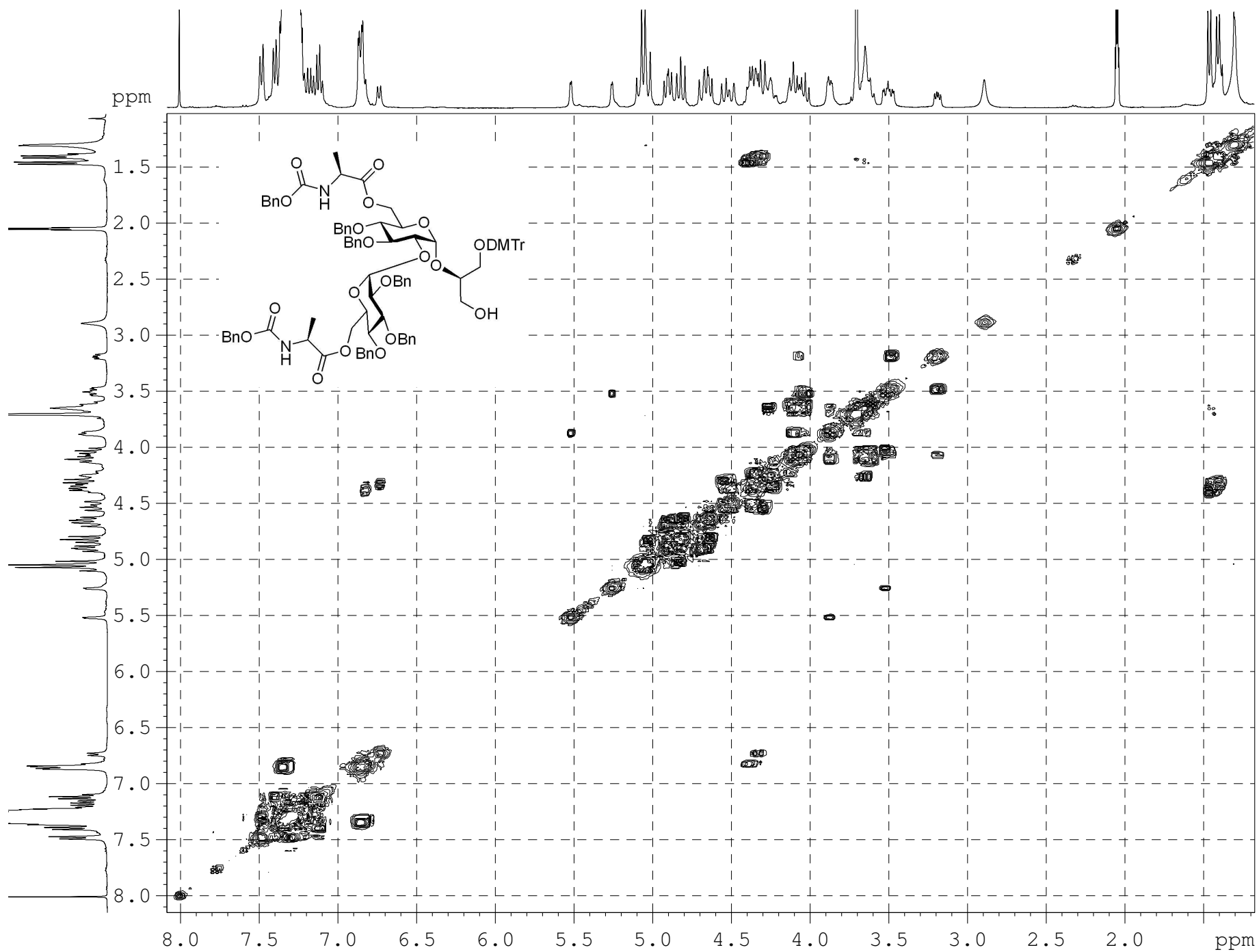
0.89

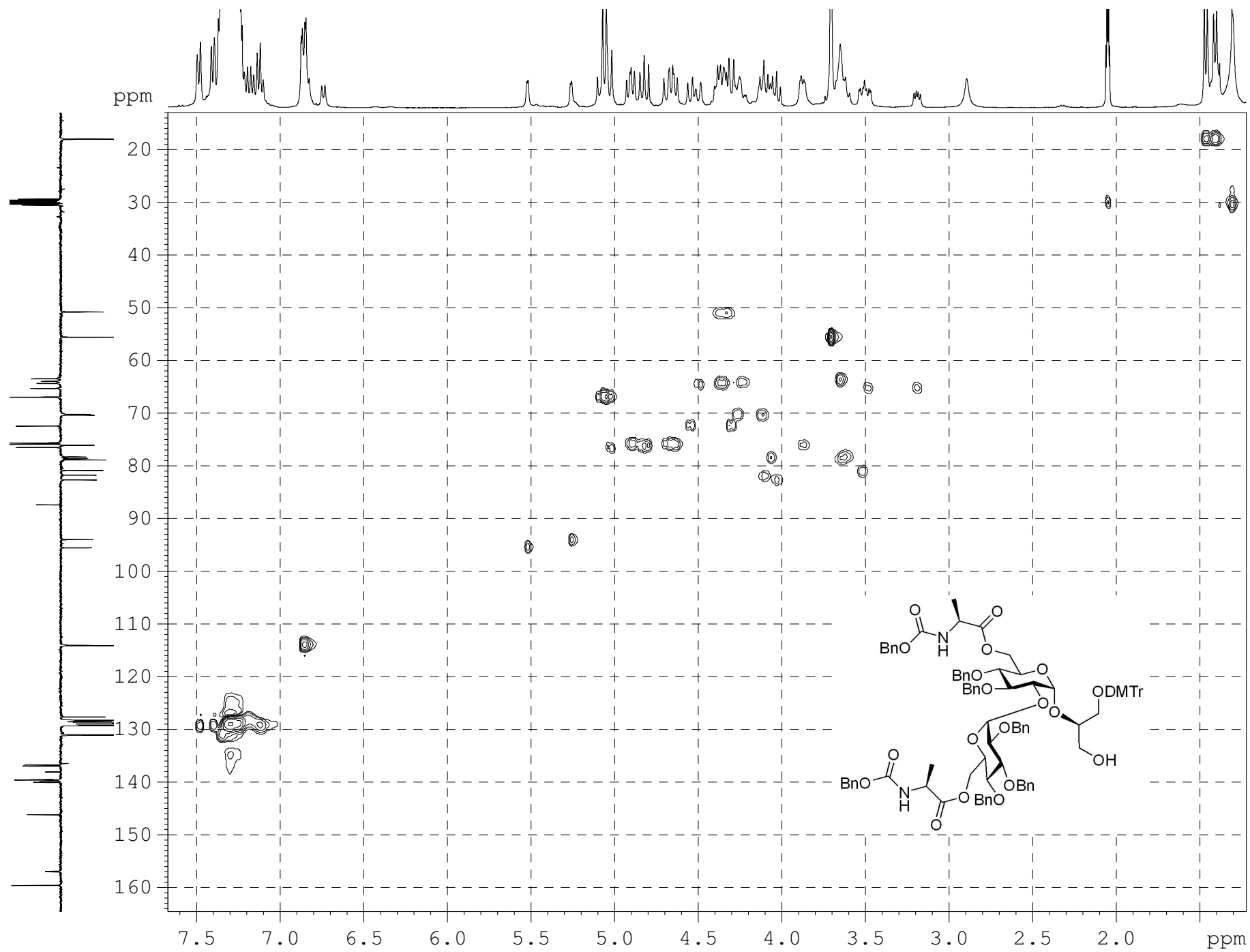
1.42

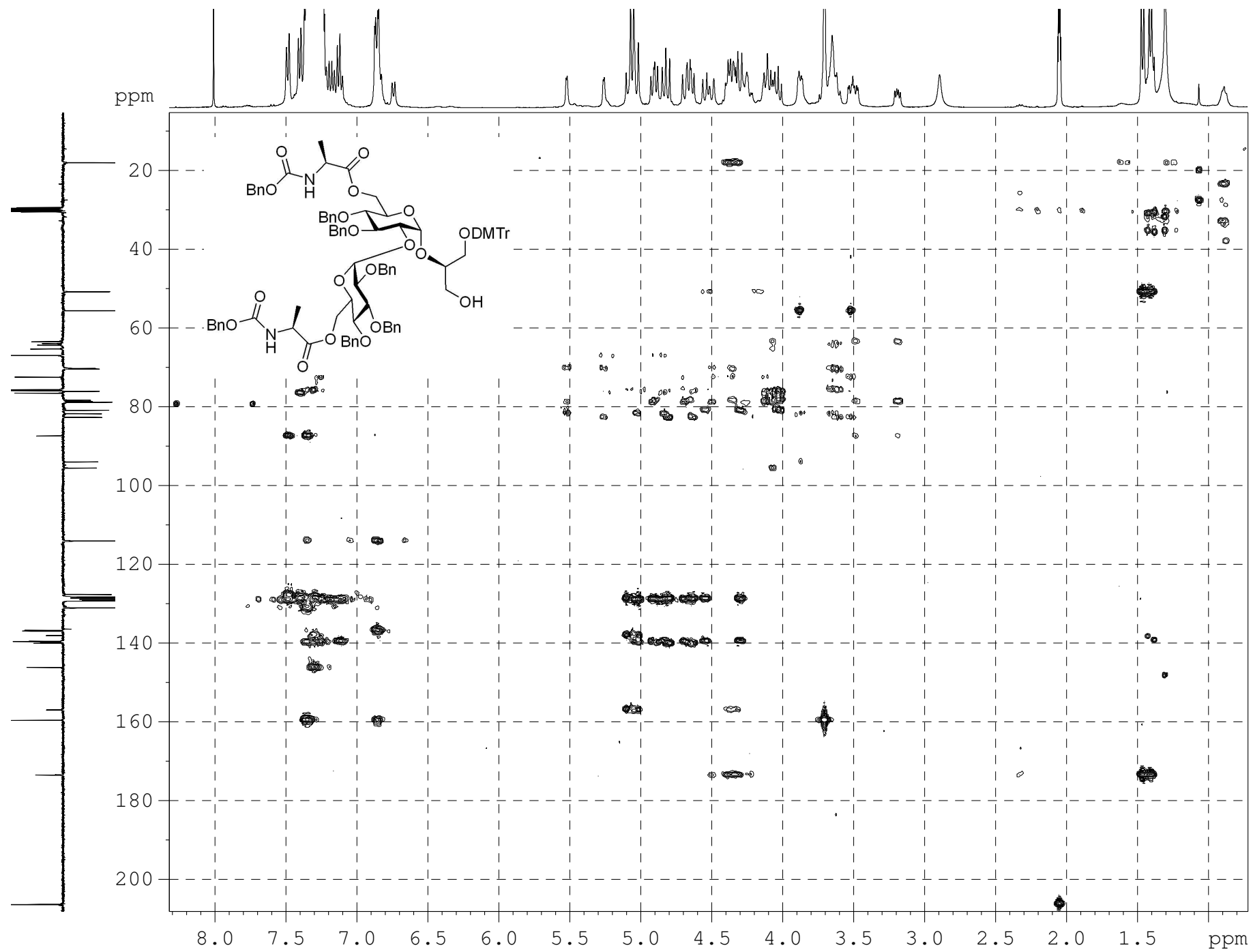
7.32

5.24

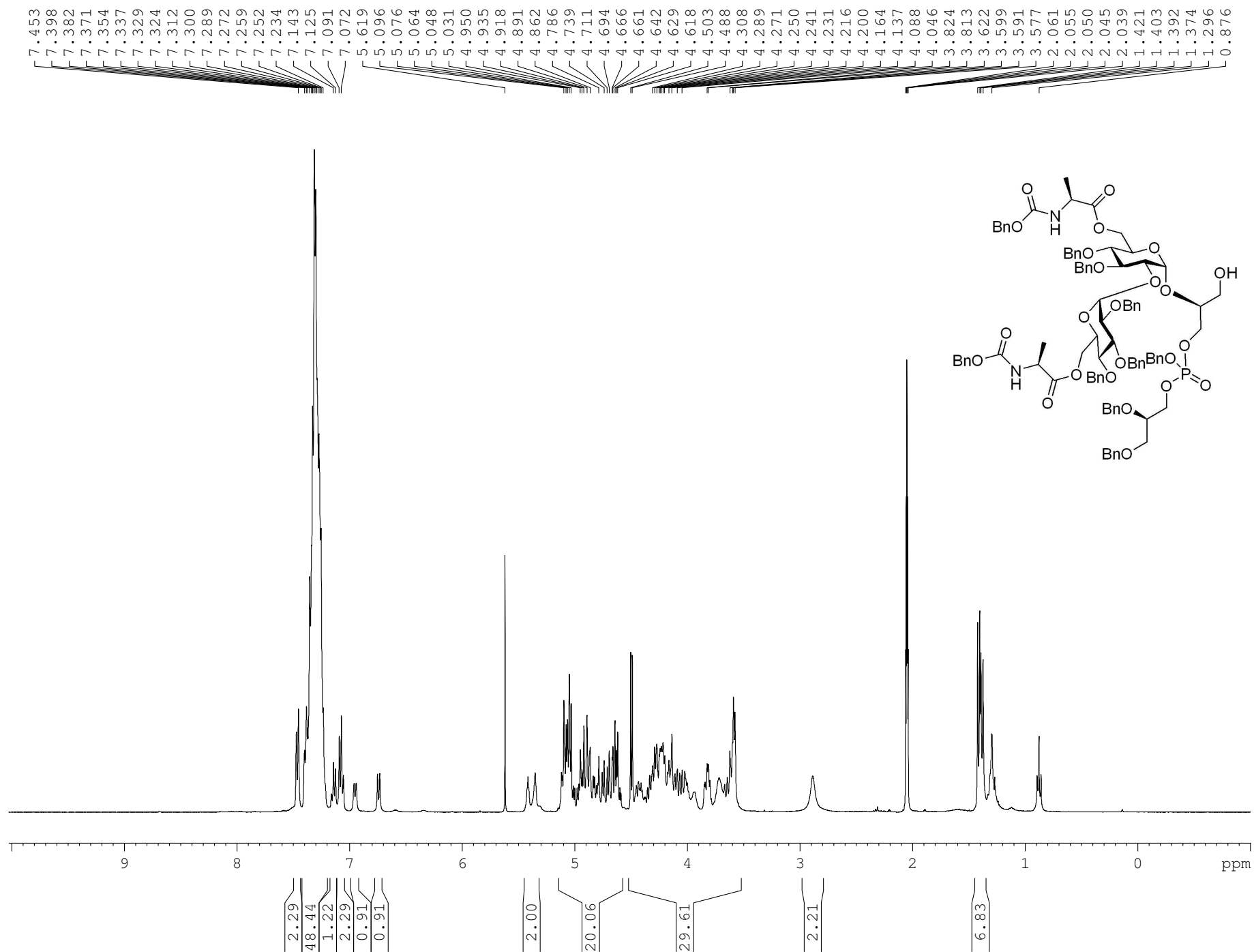


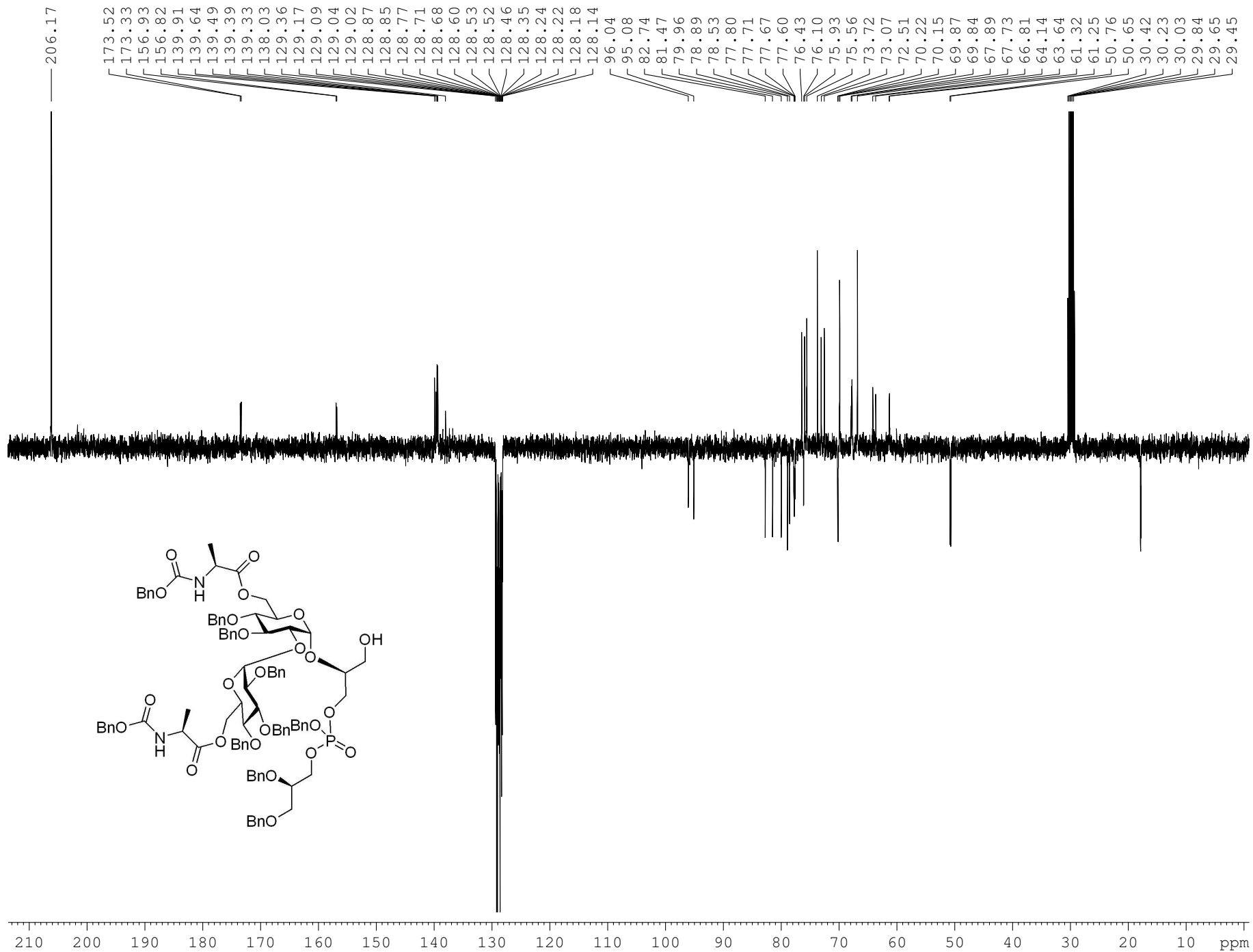


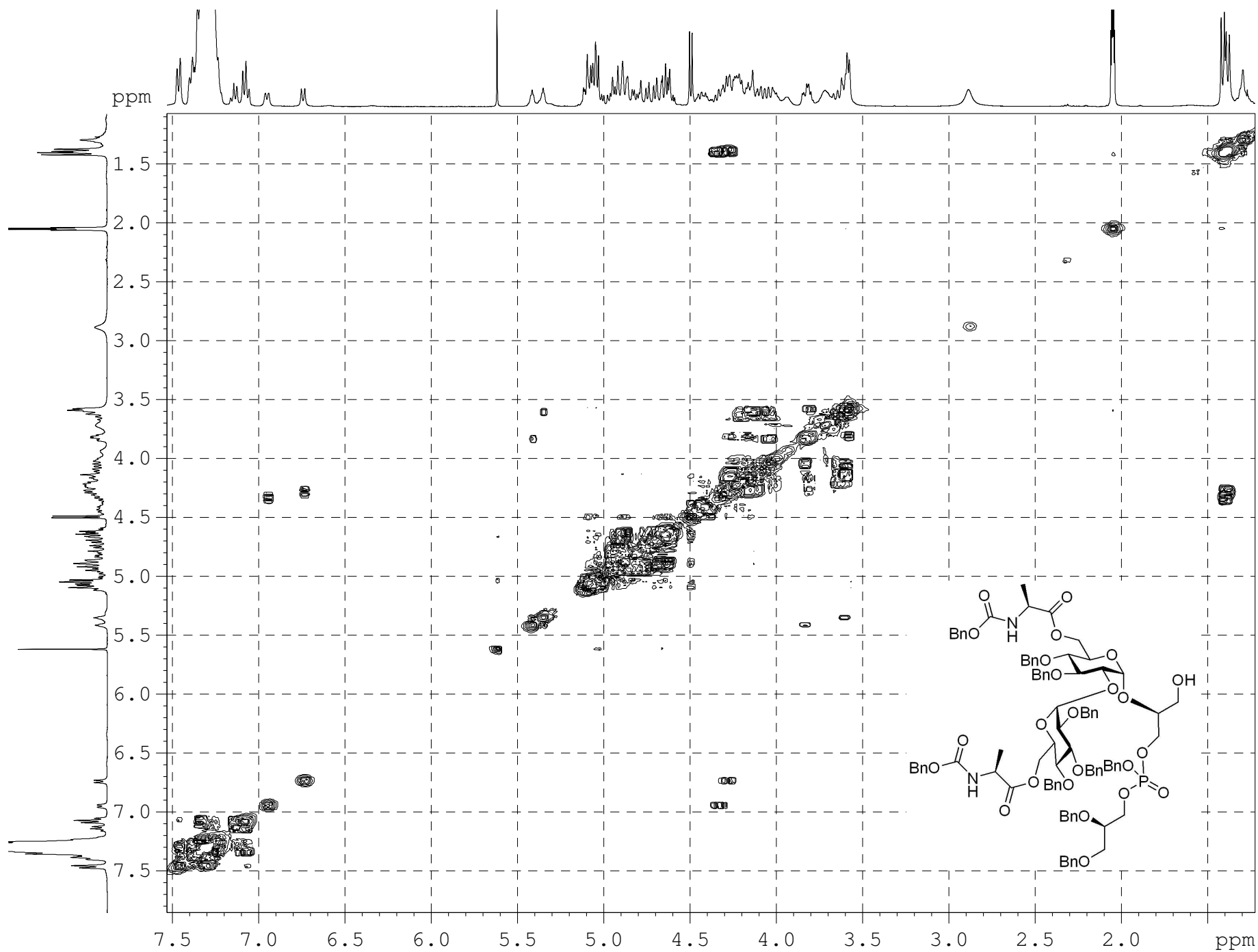


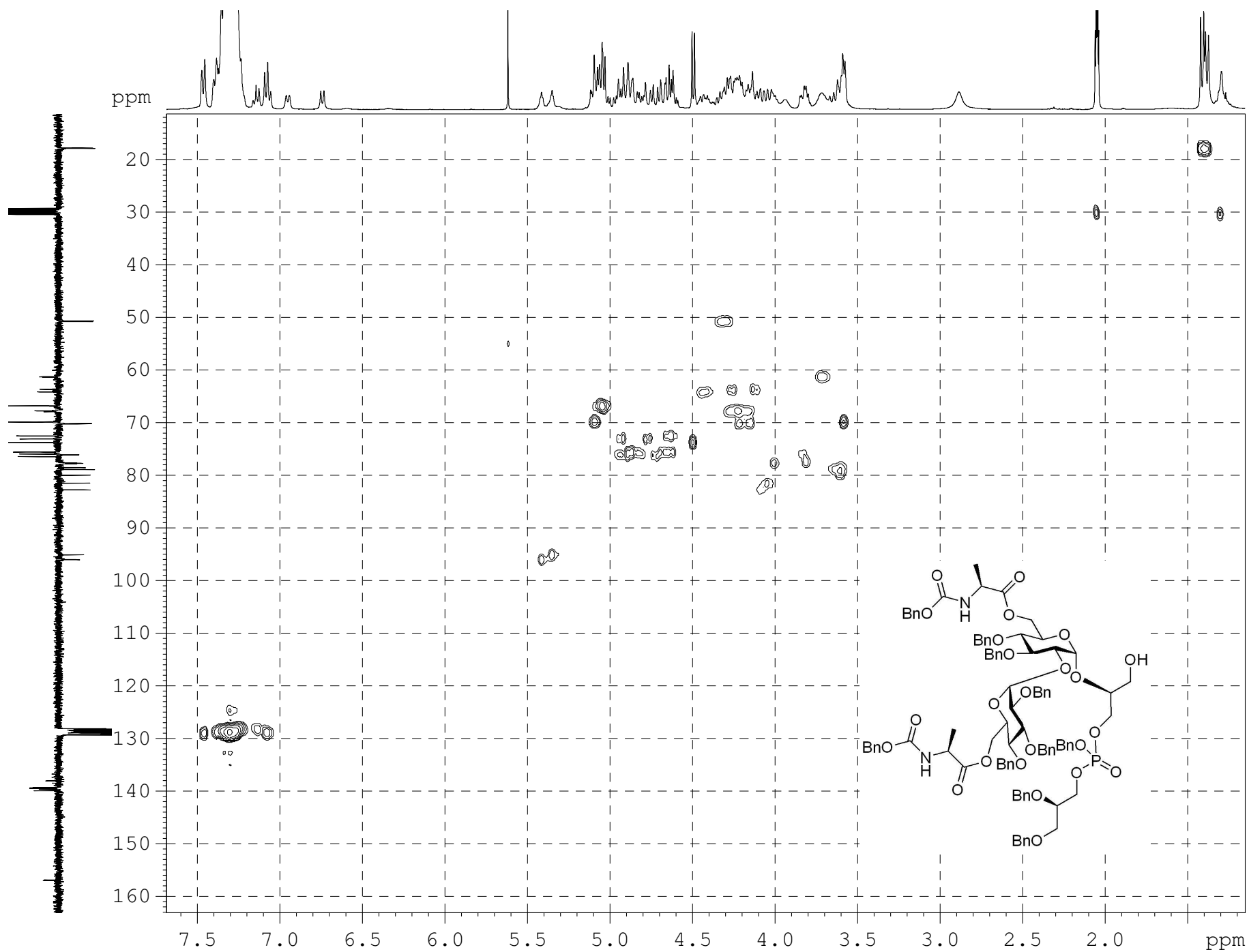


$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC,  $^{31}\text{P}$  of **37**

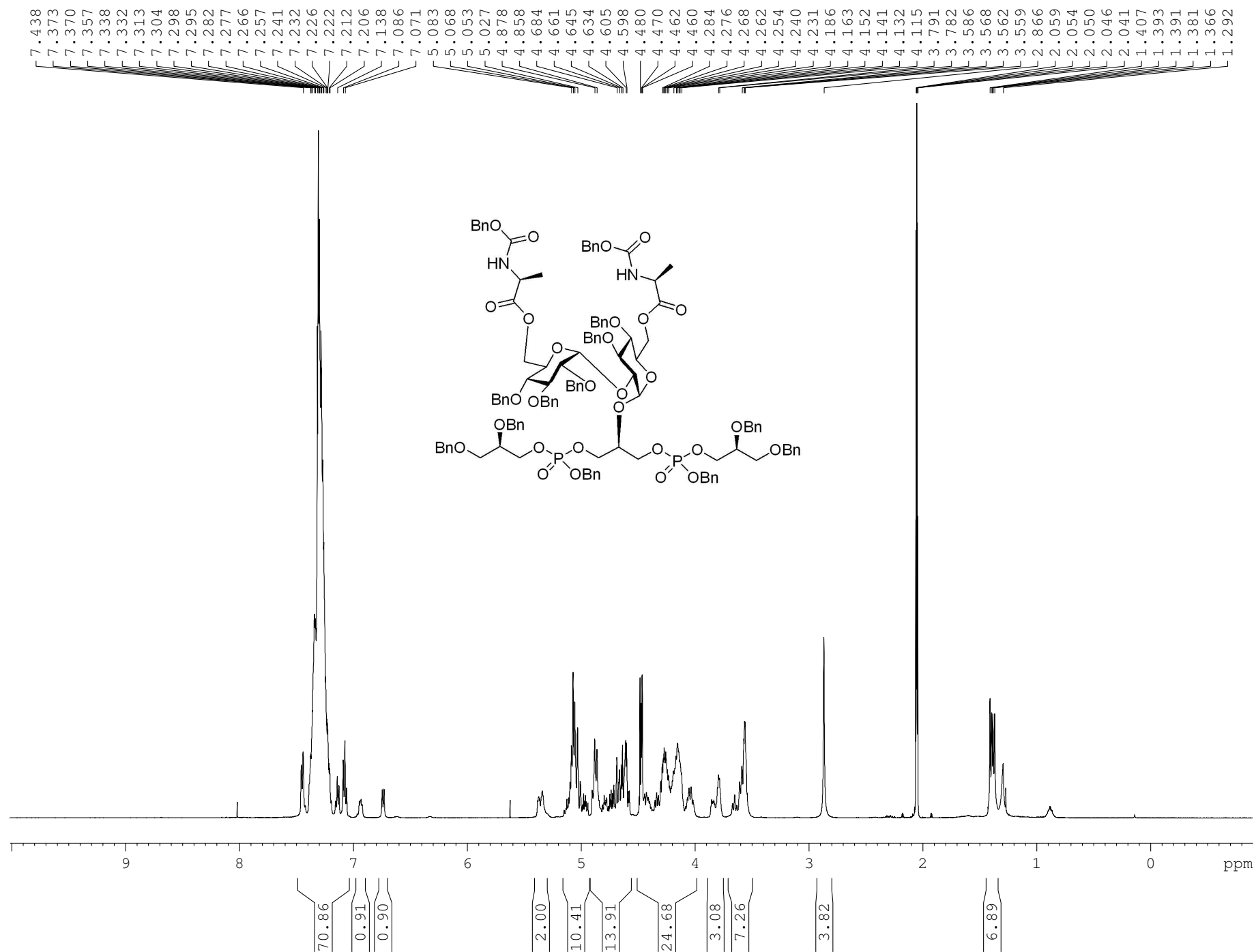


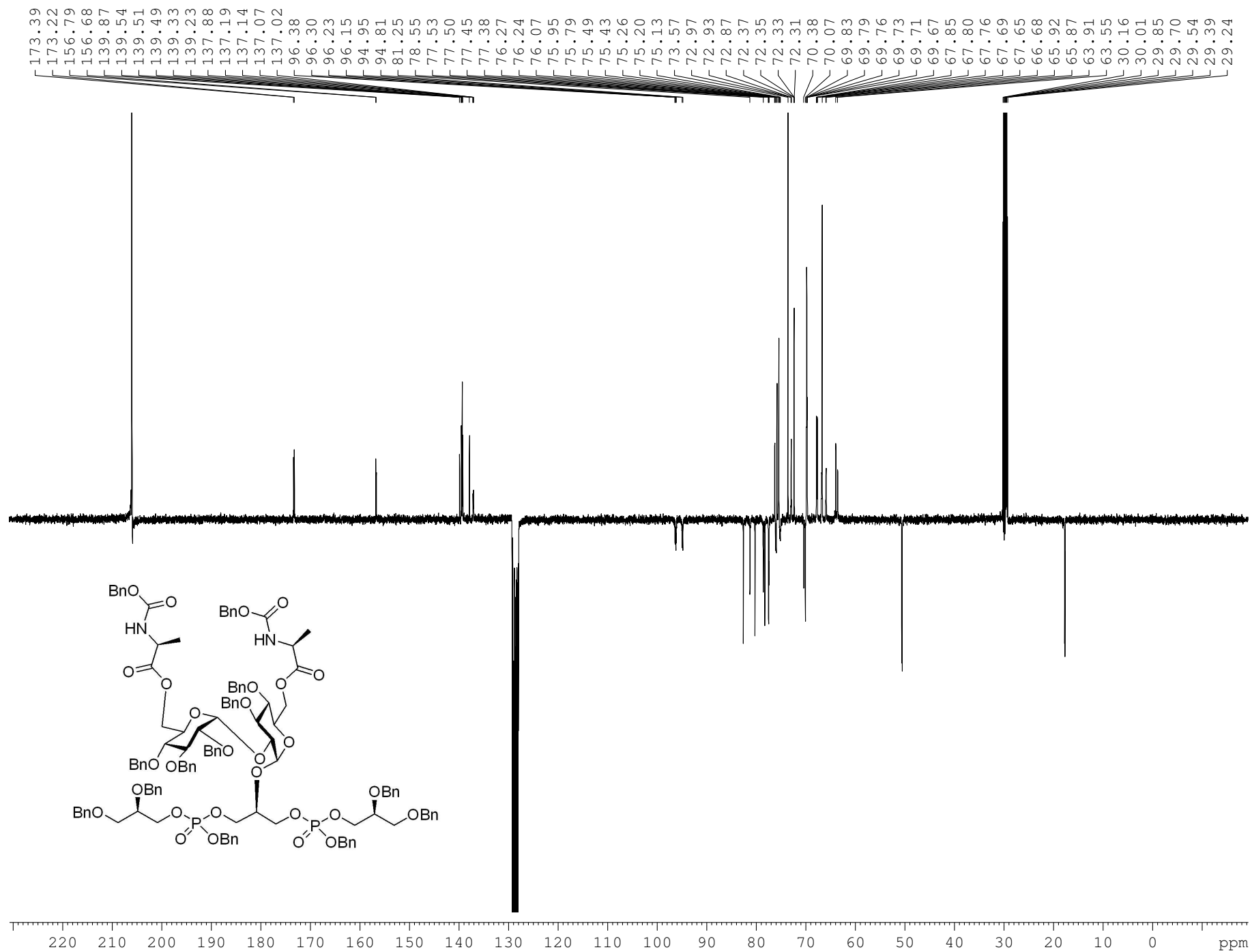


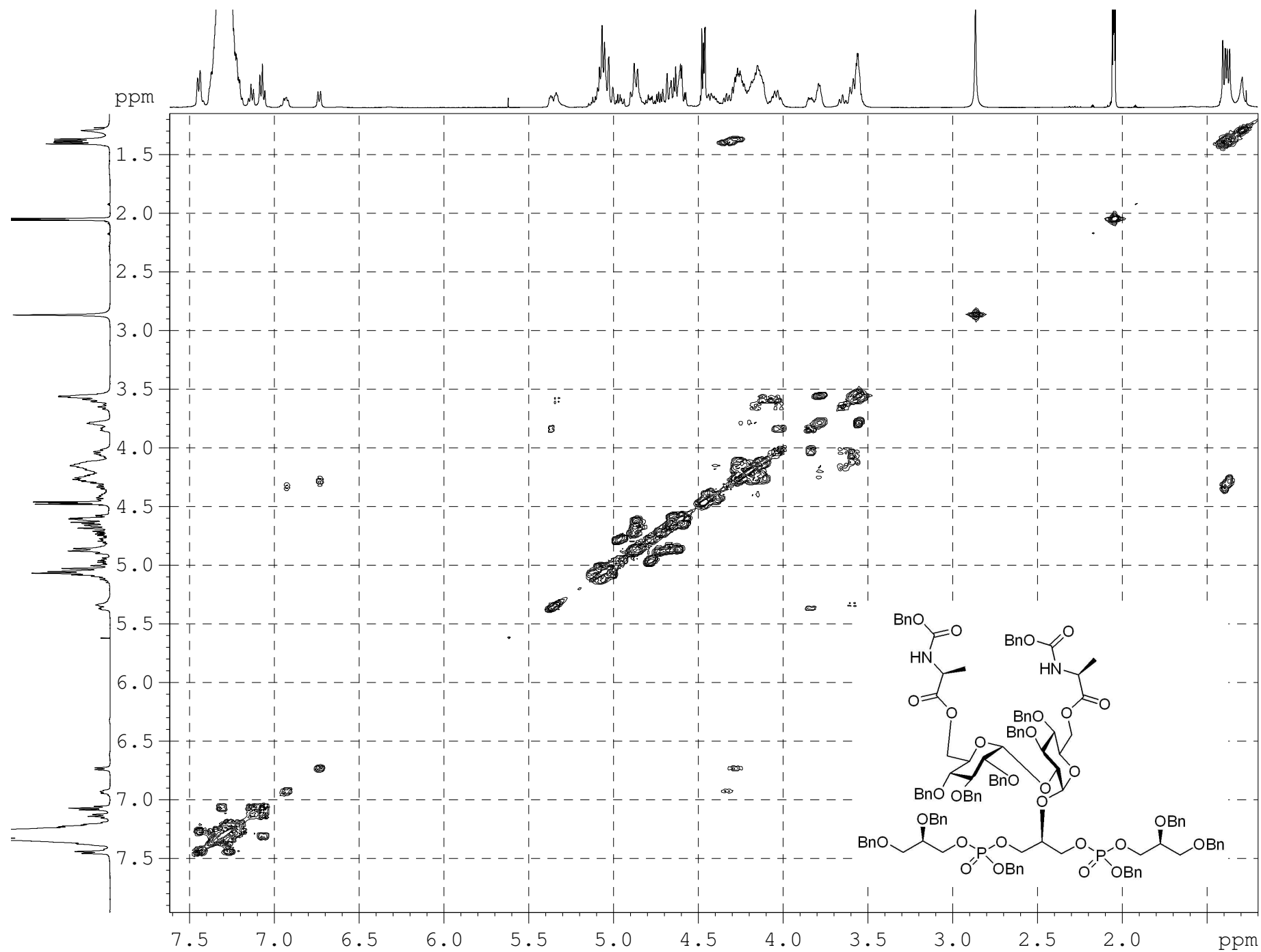


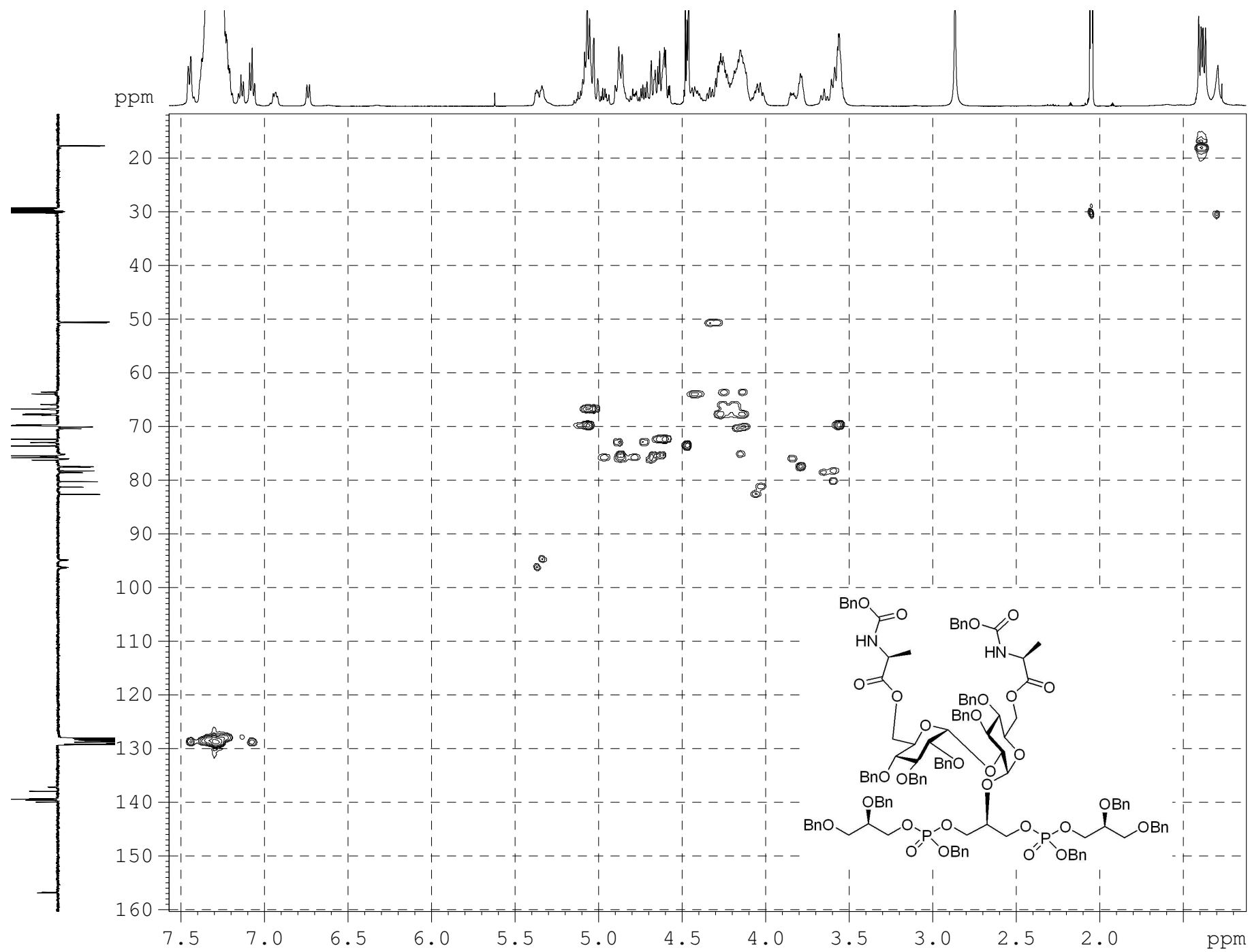


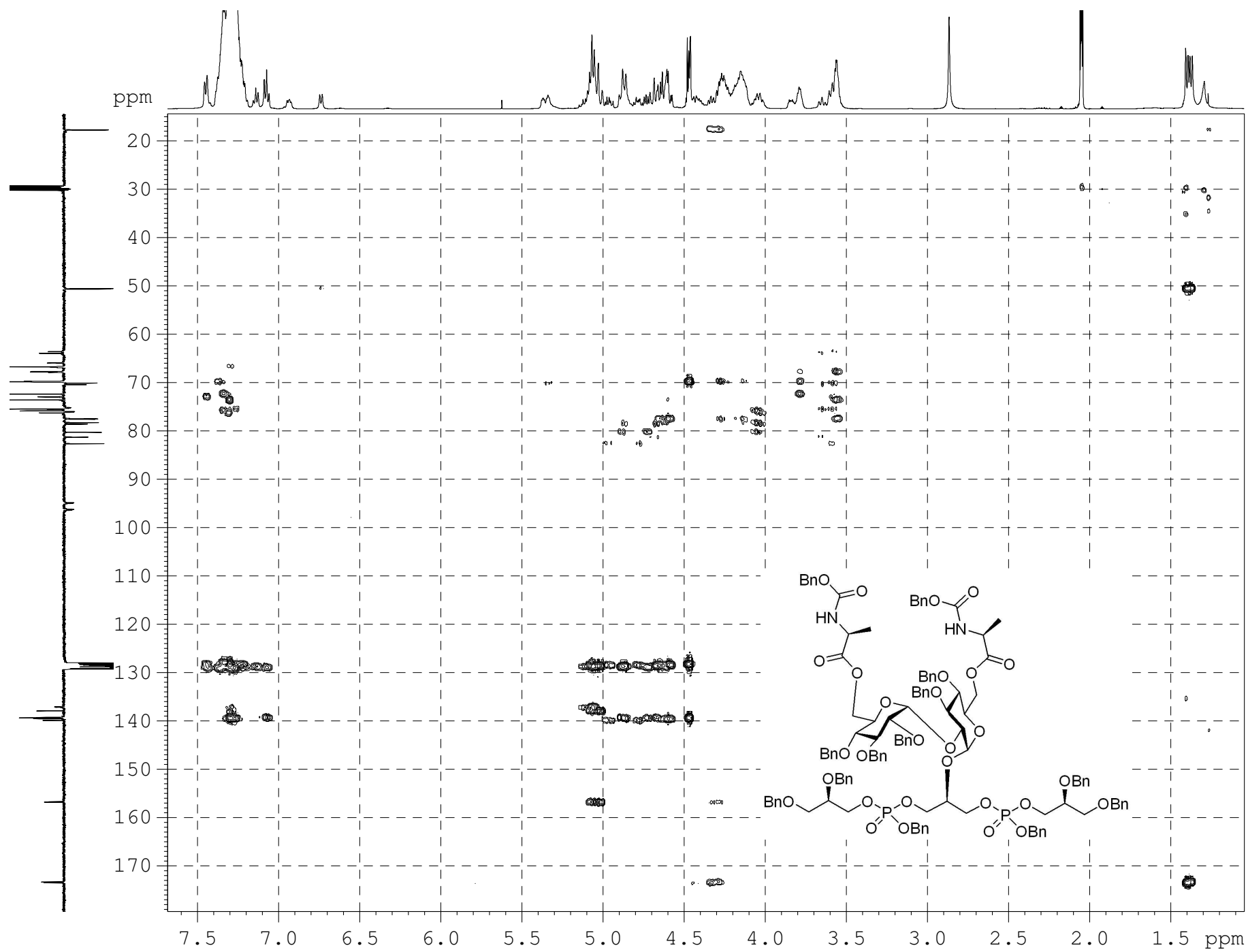


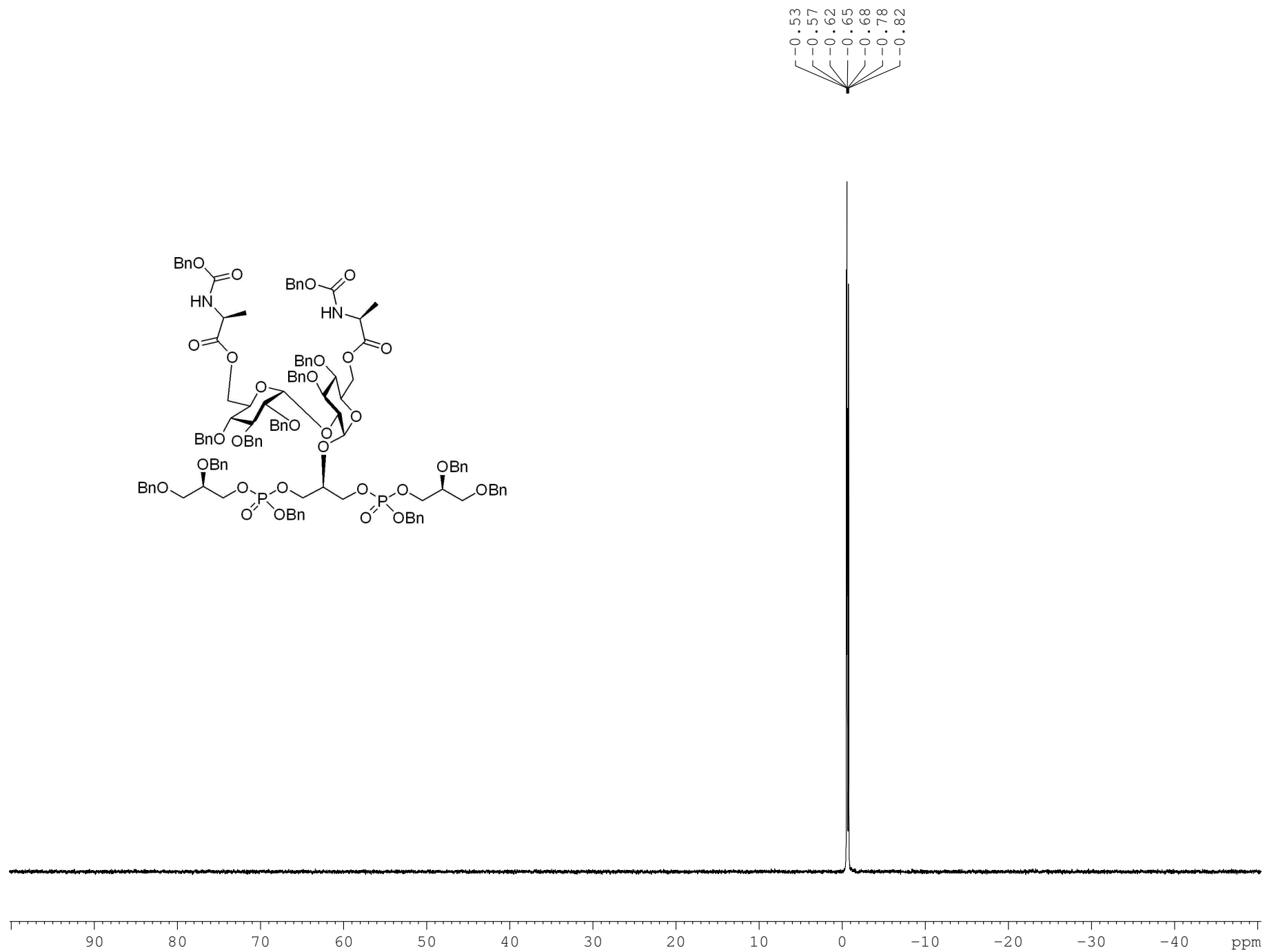
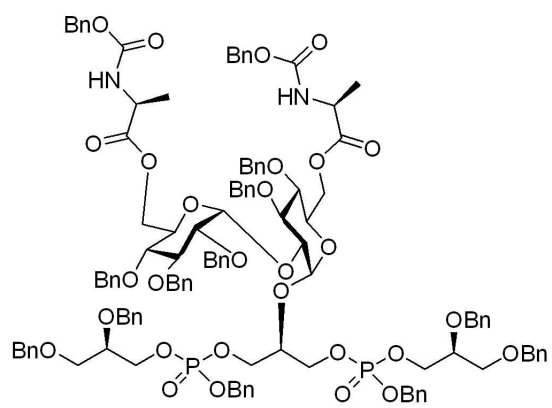




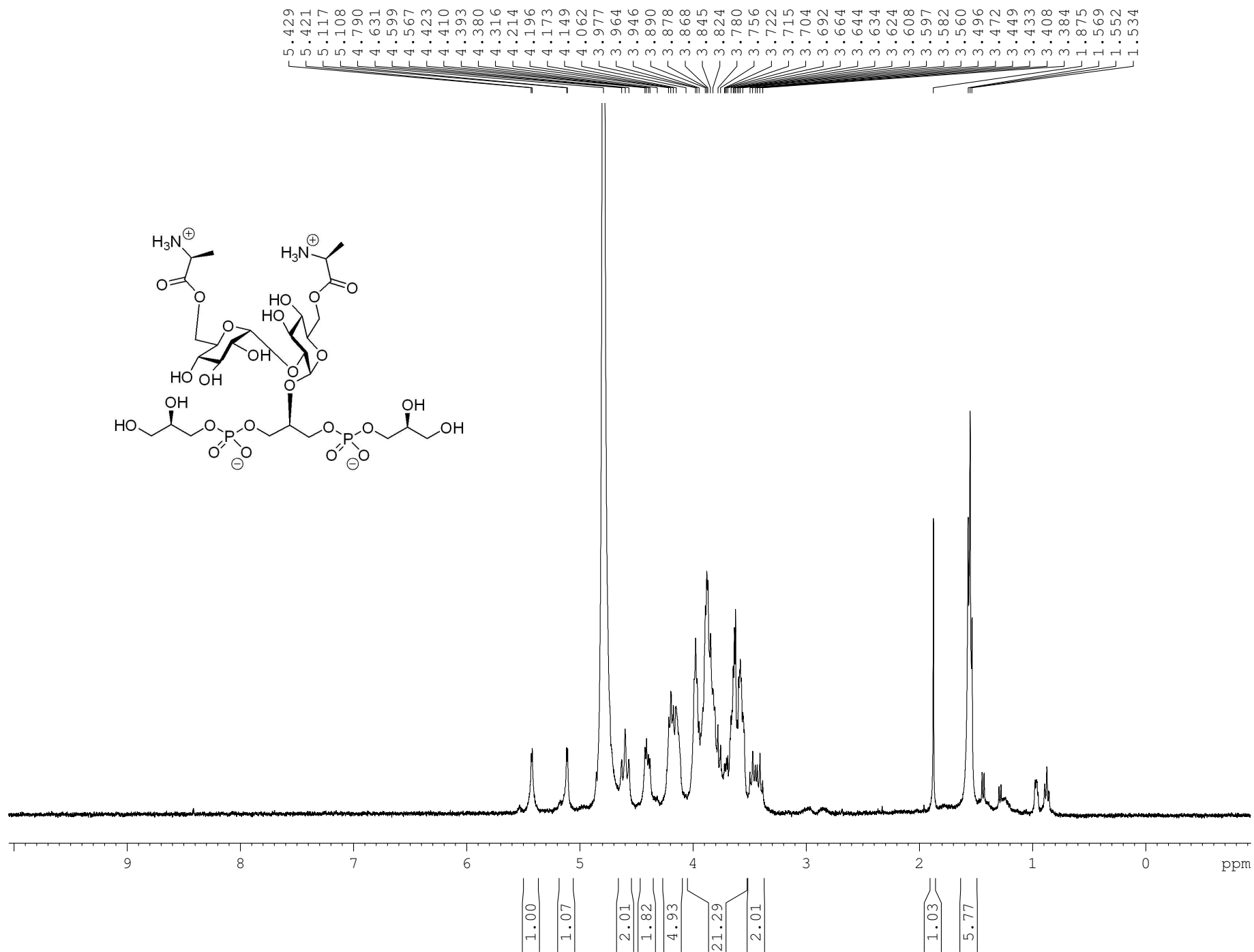


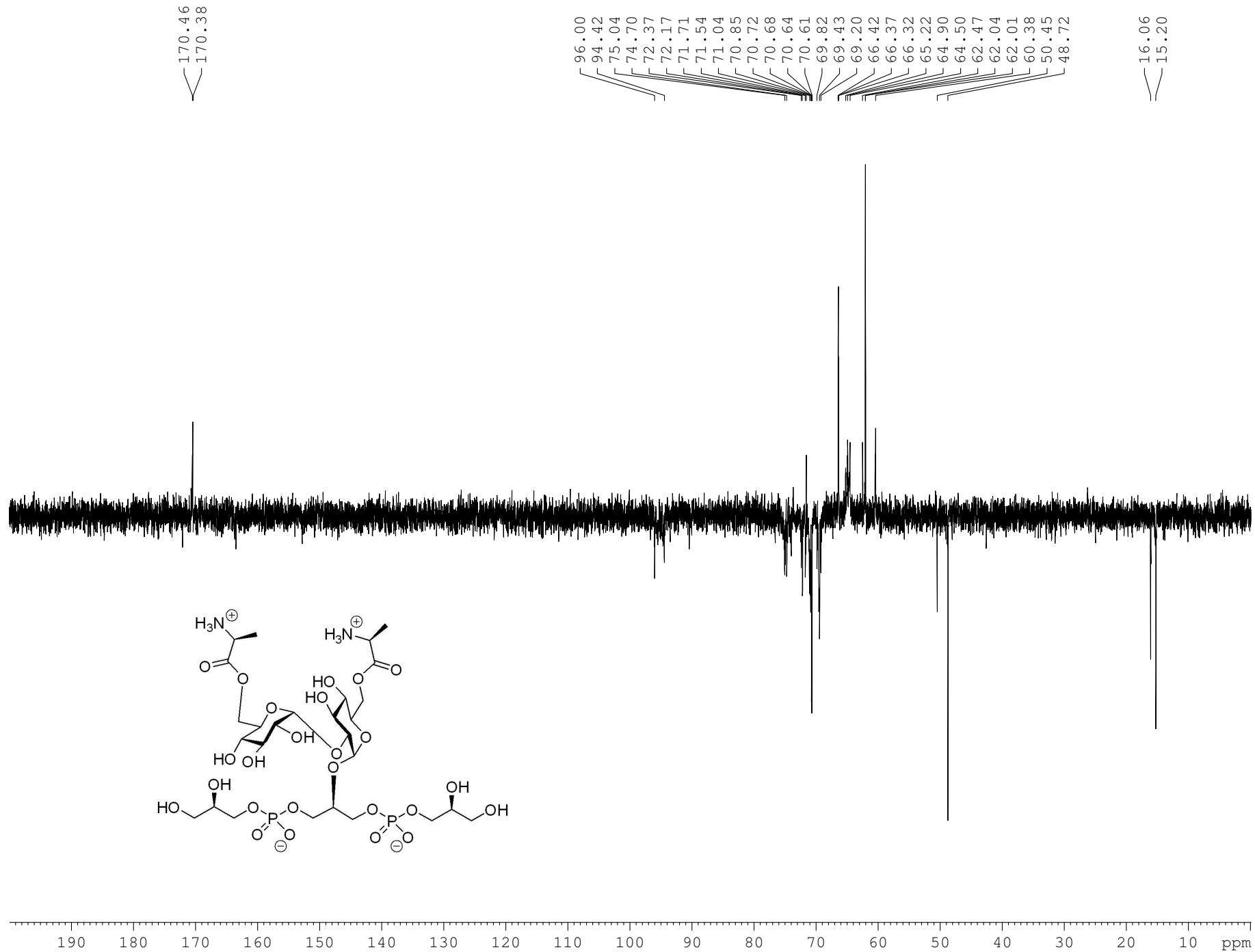


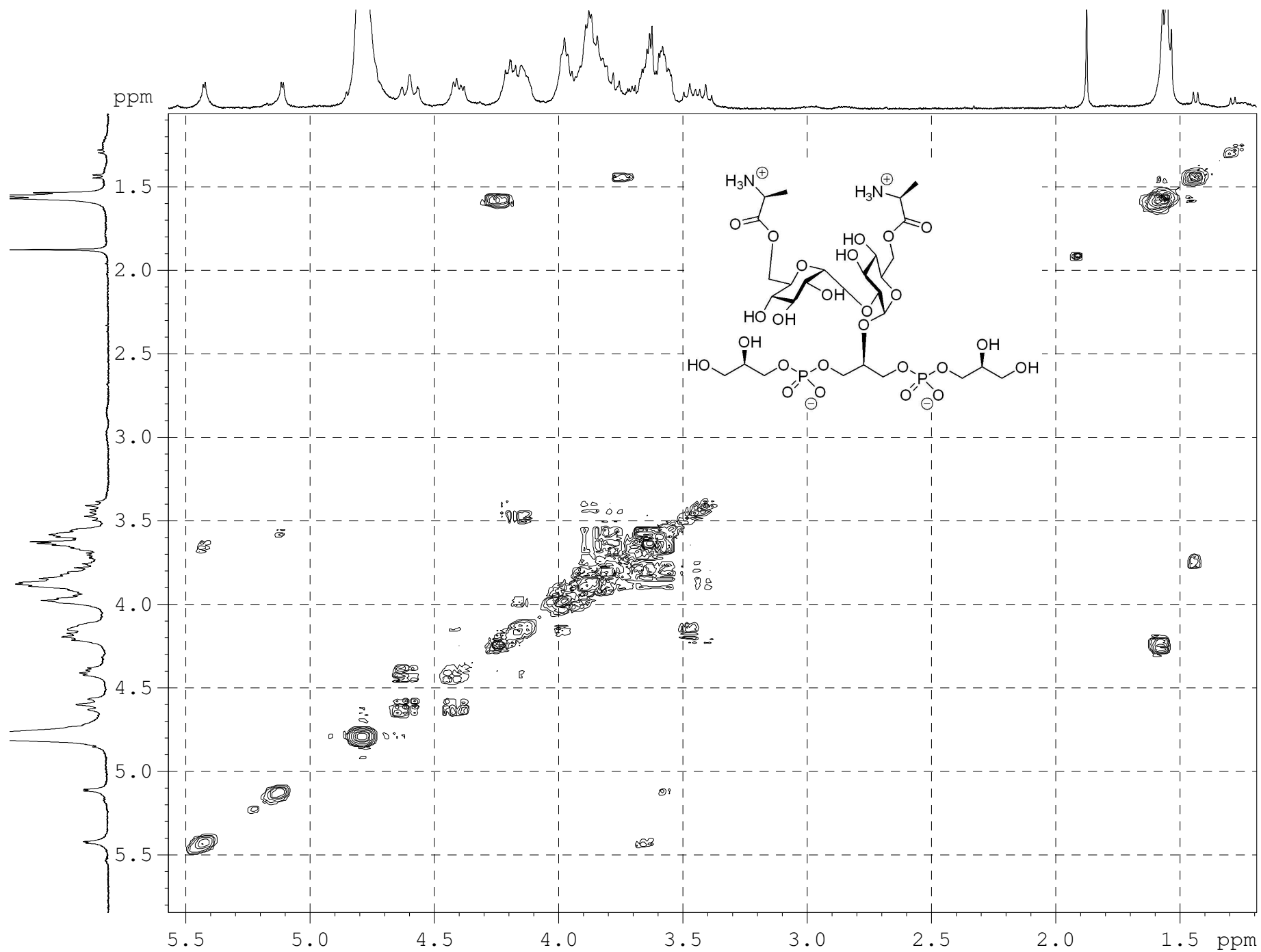


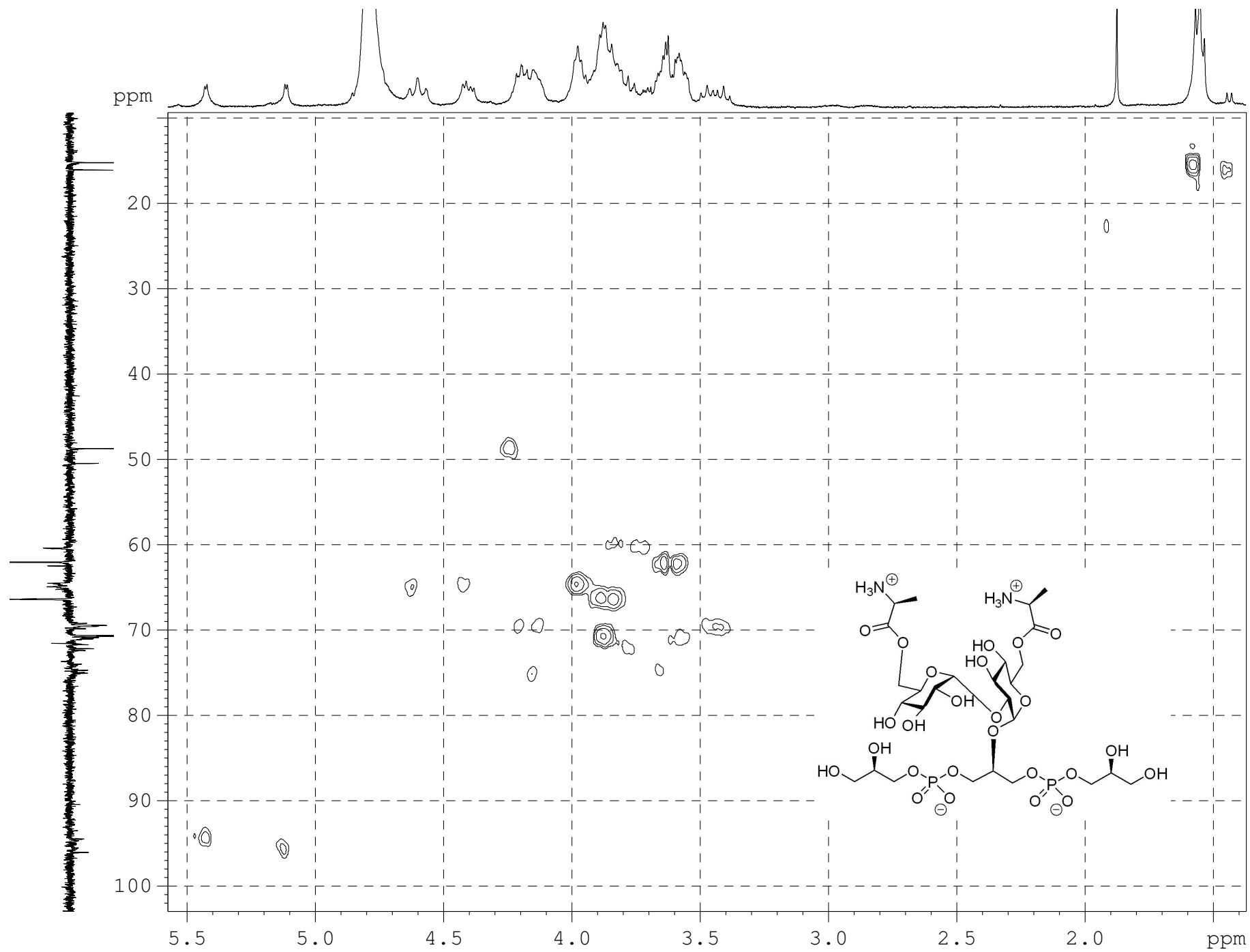


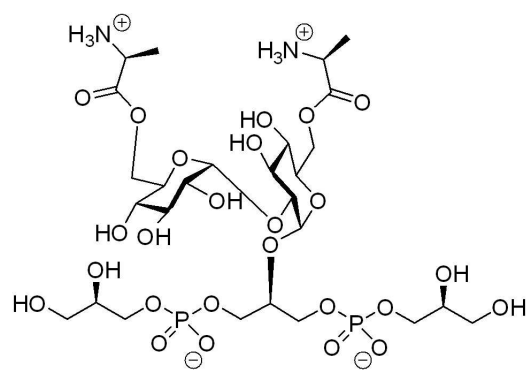
$^1\text{H}$ -NMR,  $^{13}\text{C}$ -APT,  $^1\text{H}$ - $^1\text{H}$  COSY, HSQC,  $^{31}\text{P}$  of 40











1.22  
1.13

