

## *Supporting Information*

*for*

### **Stereoselective Synthesis of a Branched $\alpha$ -Decaglucon**

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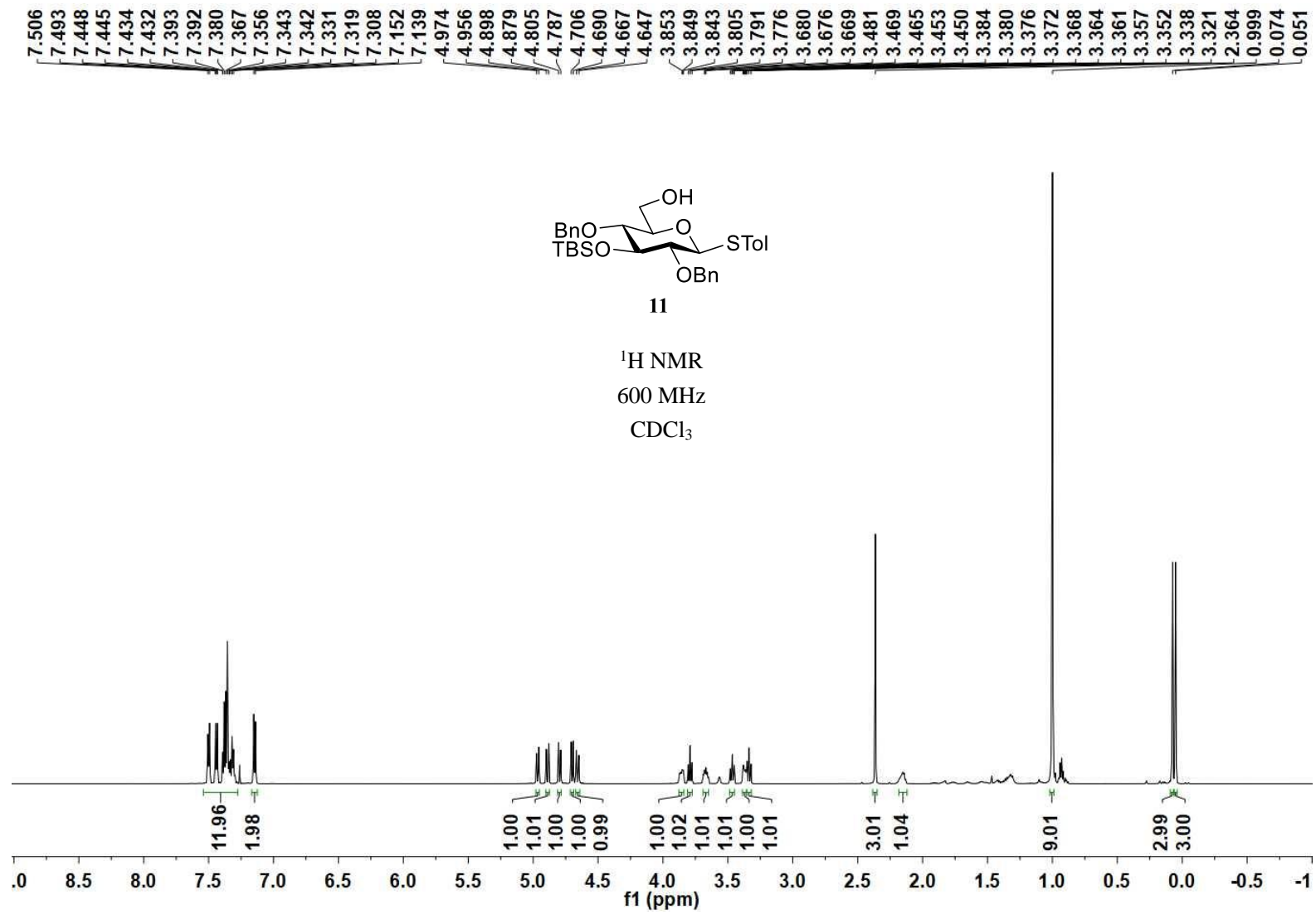
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### **Table of Contents**

<b>NMR and HR MS Spectra</b> -----	Page S2-39
<sup>1</sup> H, <sup>13</sup> C NMR and HR MS spectra of compound <b>11</b> -----	Page S2-4
<sup>1</sup> H, <sup>13</sup> C NMR and HR MS spectra of compound <b>8</b> -----	Page S5-7
<sup>1</sup> H, <sup>13</sup> C NMR and HR MS spectra of compound <b>9</b> -----	Page S8-10
1D, 2D NMR and HR MS spectra of compound <b>3</b> -----	Page S11-15
1D, 2D NMR and HR MS spectra of compound <b>4</b> -----	Page S16-20
1D, 2D NMR and HR MS spectra of compound <b>5</b> -----	Page S21-25
1D, 2D NMR and HR MS spectra of compound <b>19</b> -----	Page S26-30
1D, 2D NMR and HR MS spectra of compound <b>2</b> -----	Page S31-35
1D, 2D NMR and HR MS spectra of compound <b>1</b> -----	Page S36-39



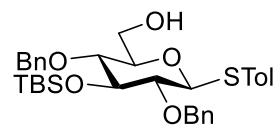
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127.57  
127.54

88.22  
81.68  
79.26  
78.47  
78.42  
75.29  
74.96

62.08

26.13  
21.16  
18.01

-3.91  
-3.97

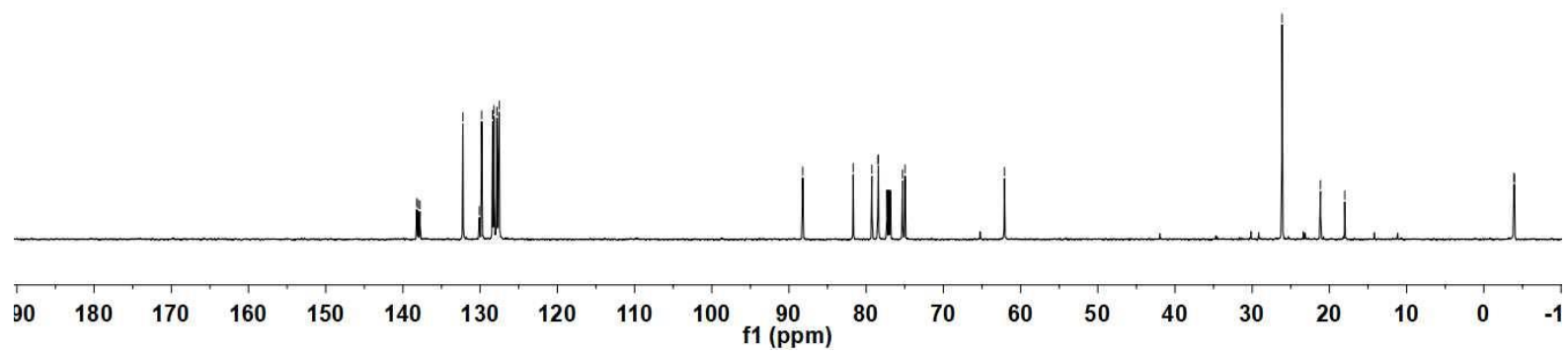


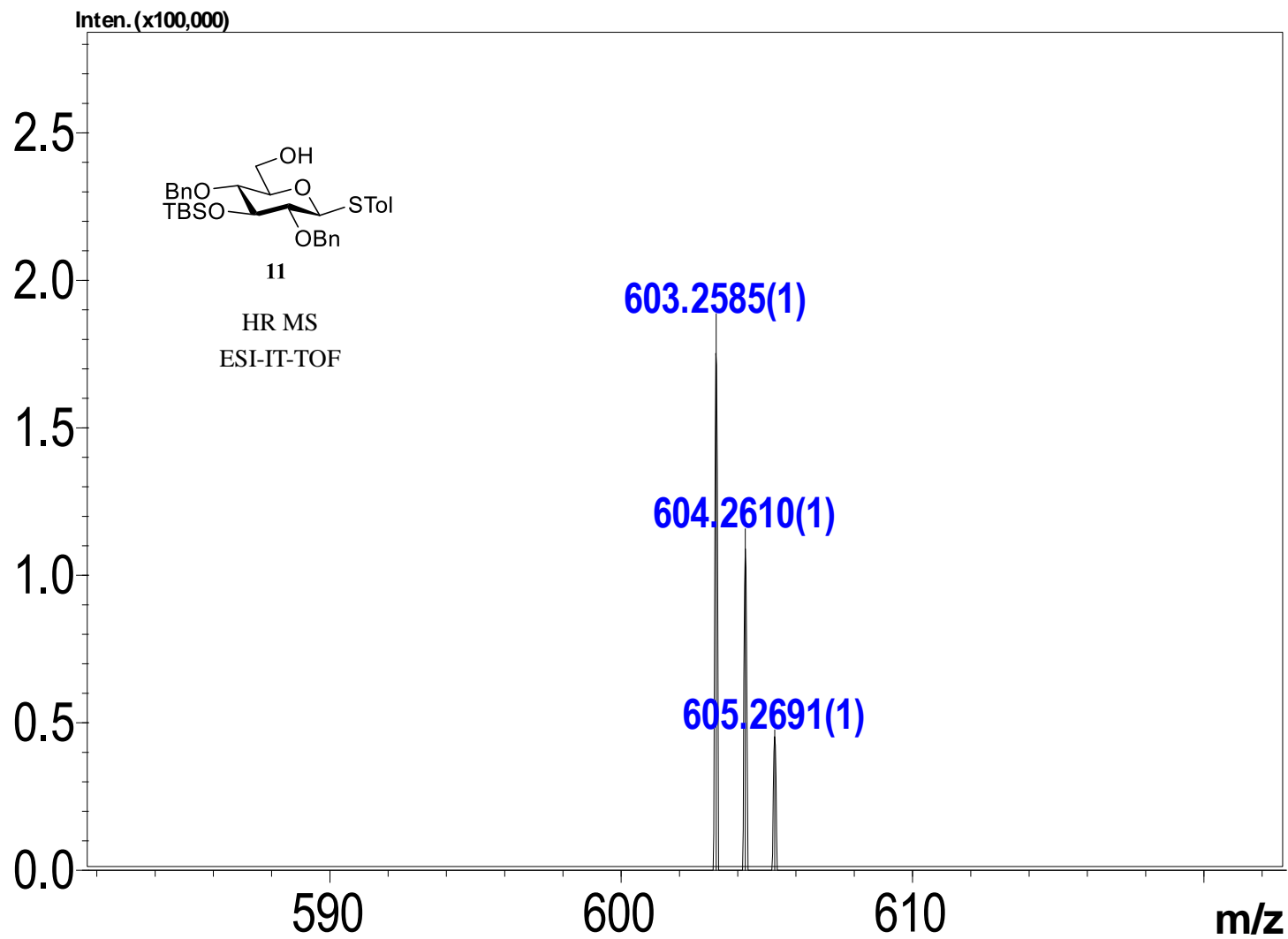
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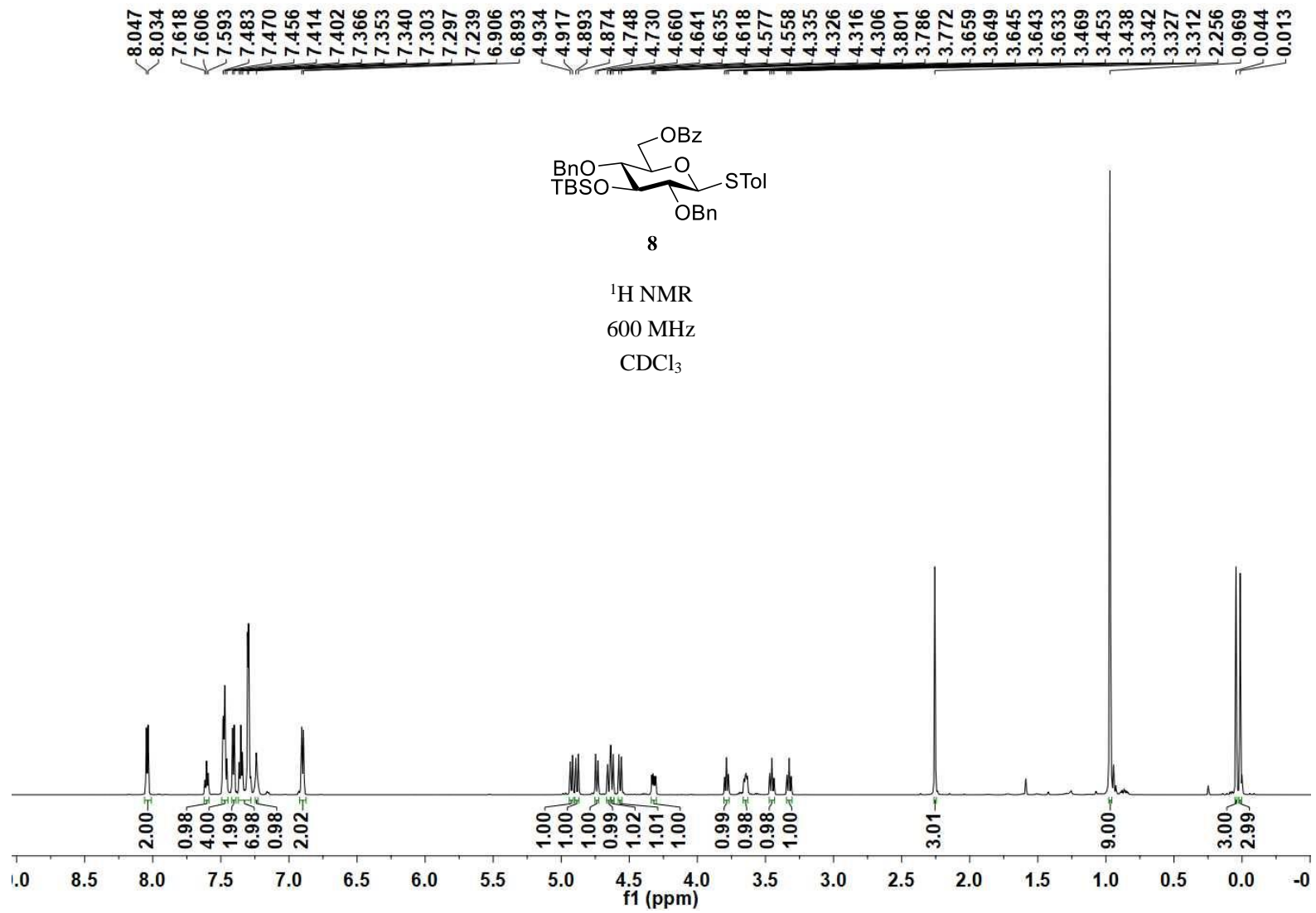
$^{13}\text{C}$  NMR

150 MHz

$\text{CDCl}_3$





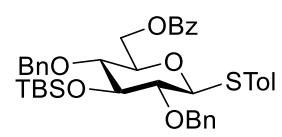


166.08  
138.20  
137.60  
137.53  
133.05  
132.55  
130.01  
129.83  
129.80  
129.58  
128.44  
128.36  
128.23  
127.83  
127.69  
127.59

87.90  
81.15  
78.80  
78.67  
76.97  
75.25  
75.19  
63.82

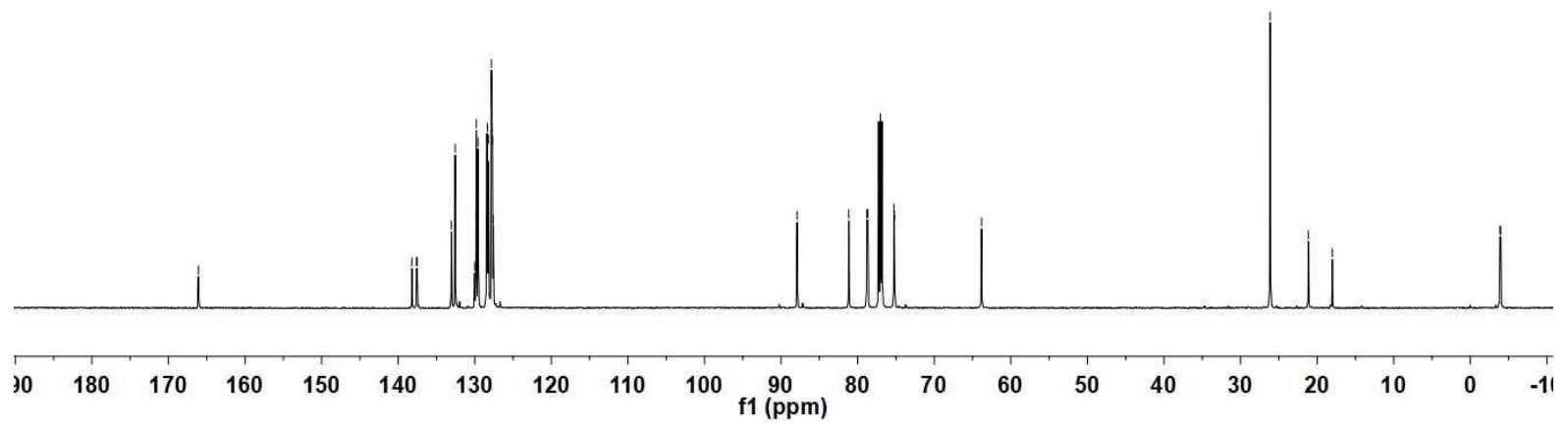
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21.14  
18.02

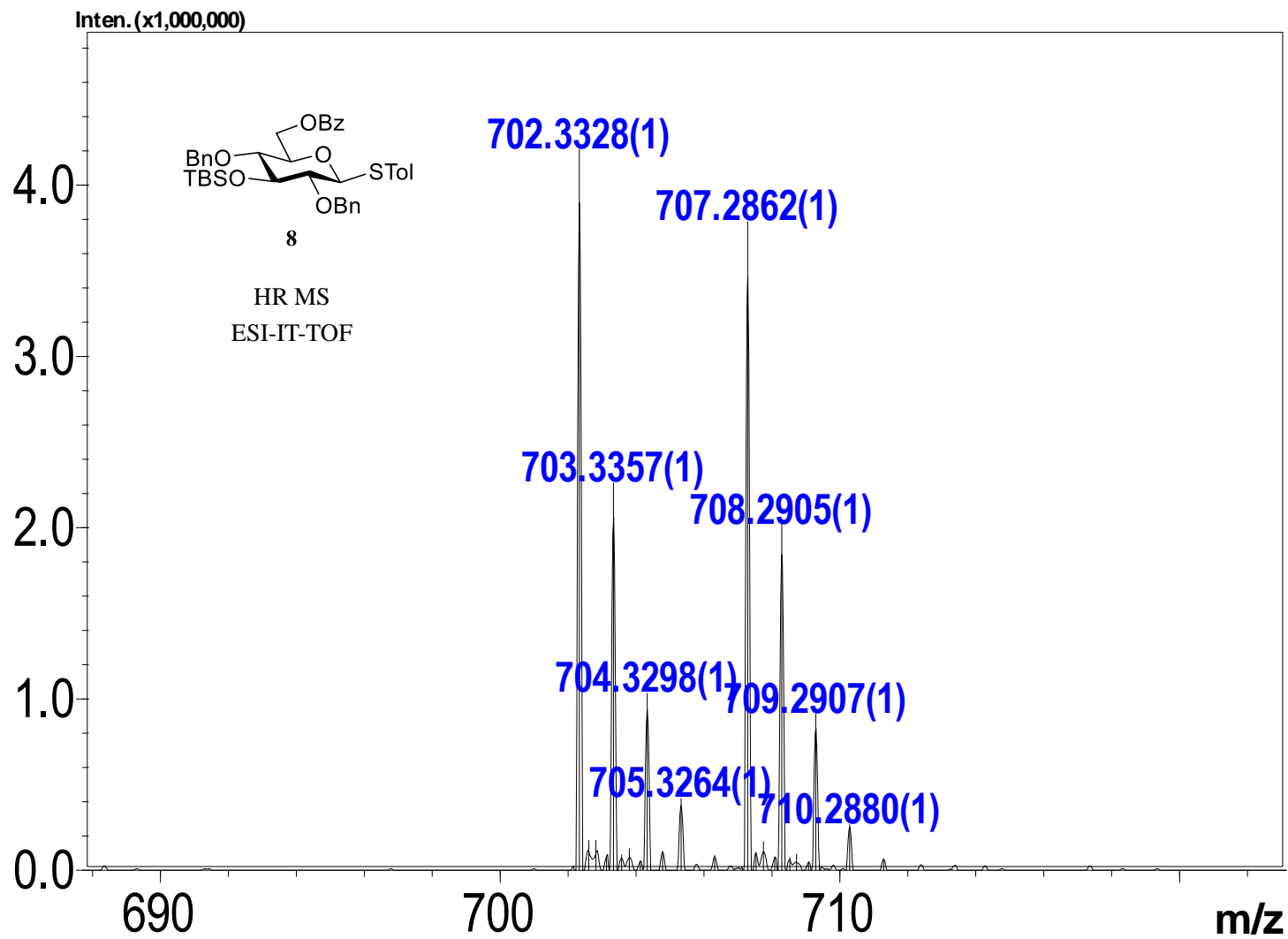
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-3.99

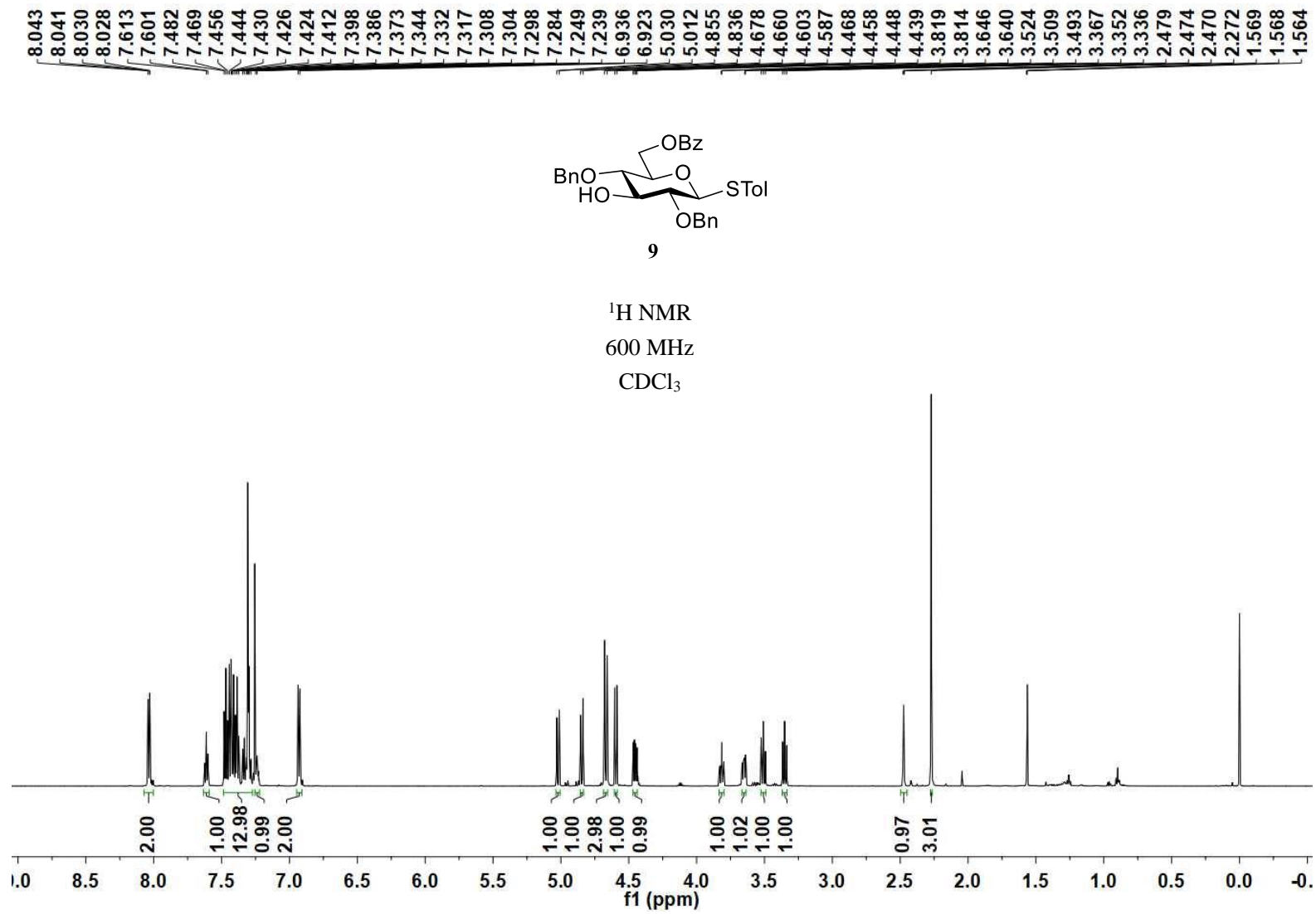


8

<sup>13</sup>C NMR  
150 MHz  
CDCl<sub>3</sub>





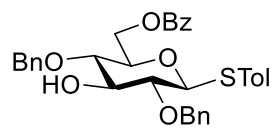




166.12  
138.01  
137.86  
137.73  
133.06  
132.82  
129.96  
129.78  
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129.20  
128.66  
128.53  
128.34  
128.18  
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128.11  
128.01

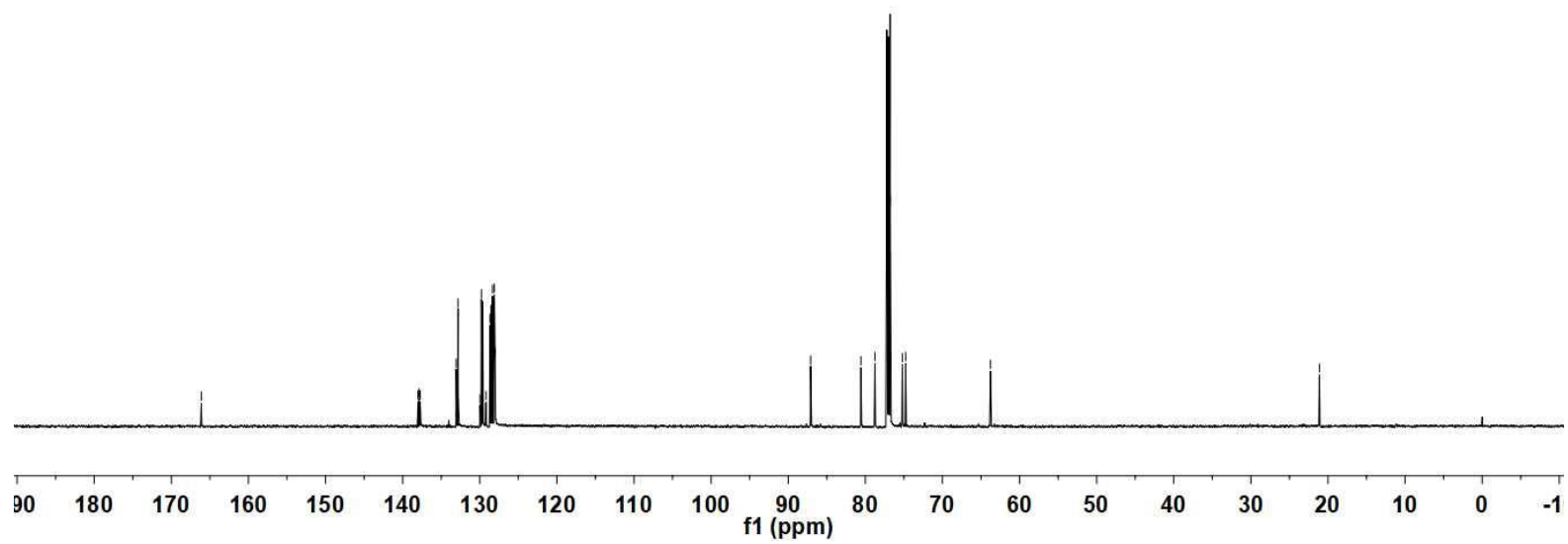
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74.77  
63.77

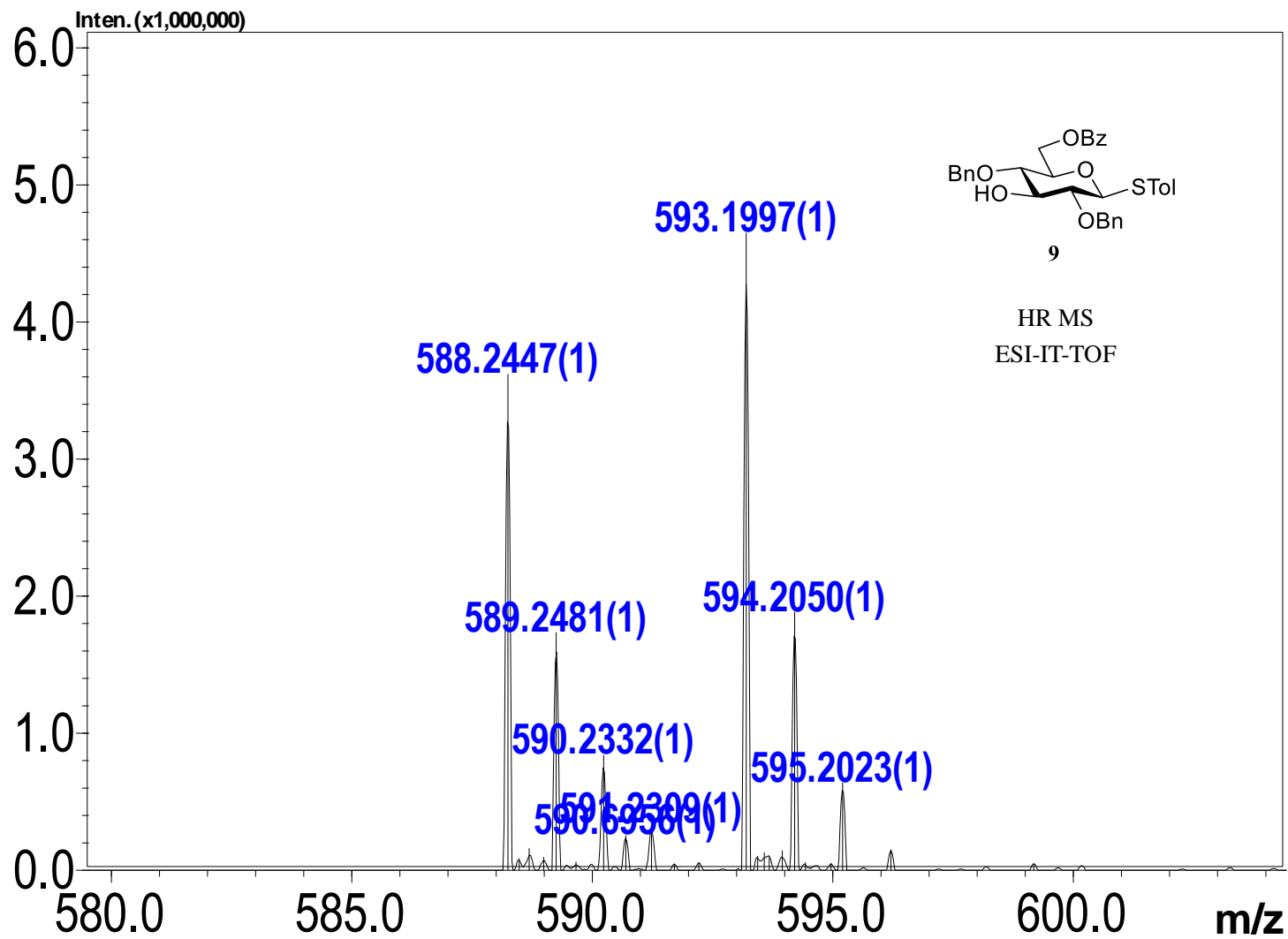
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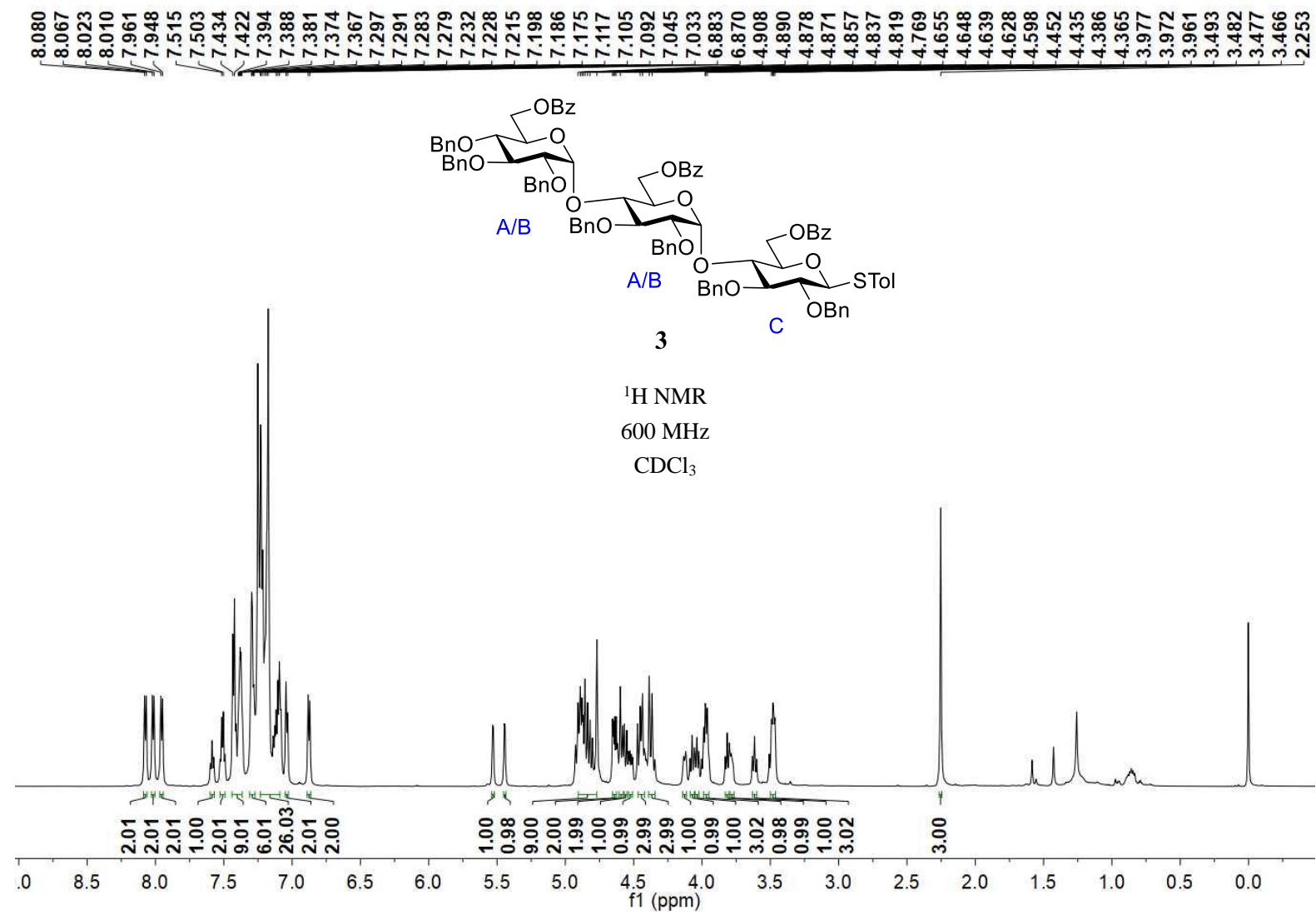


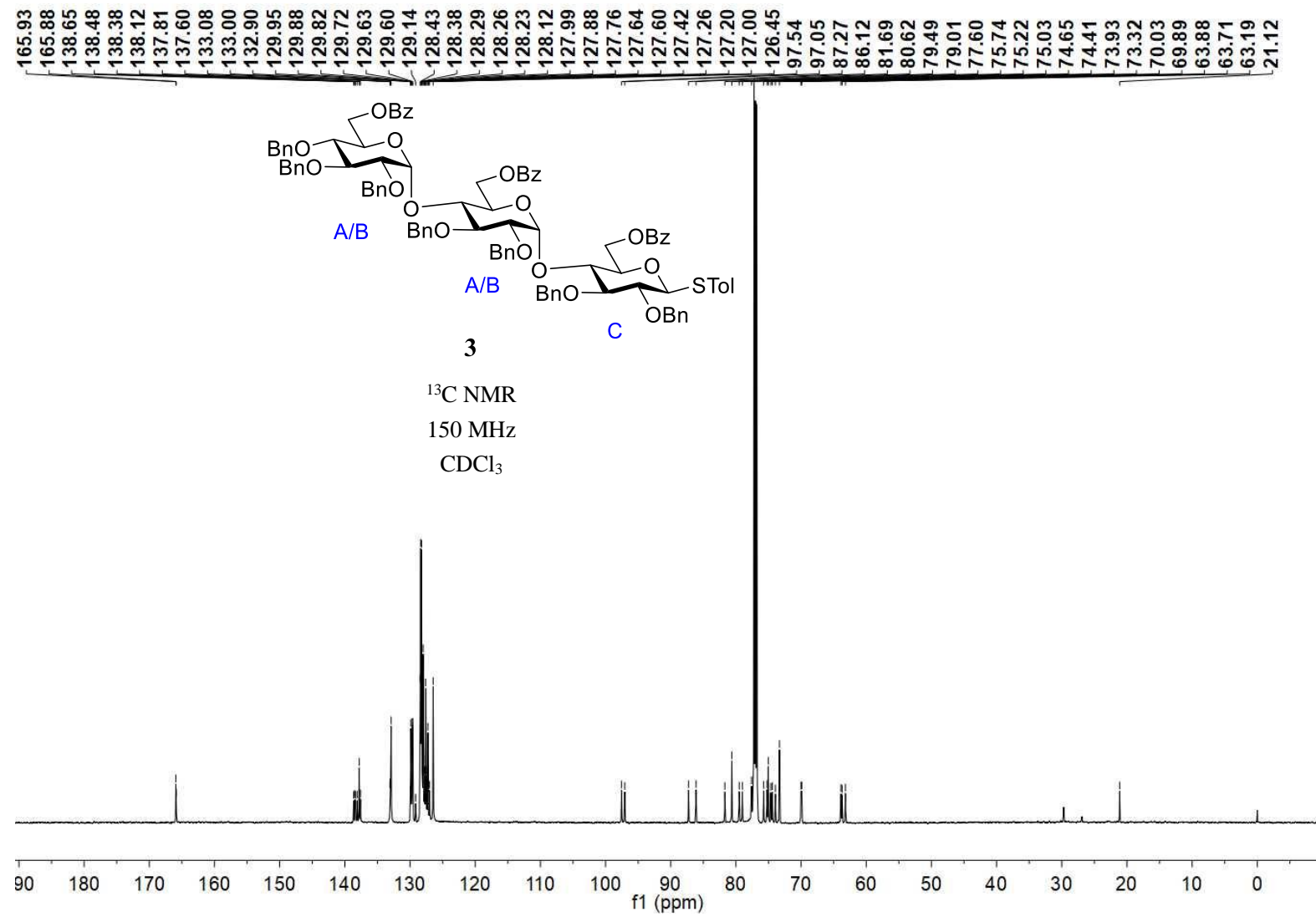
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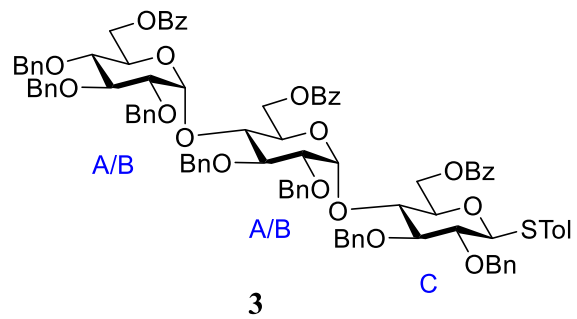
<sup>13</sup>C NMR  
150 MHz  
CDCl<sub>3</sub>



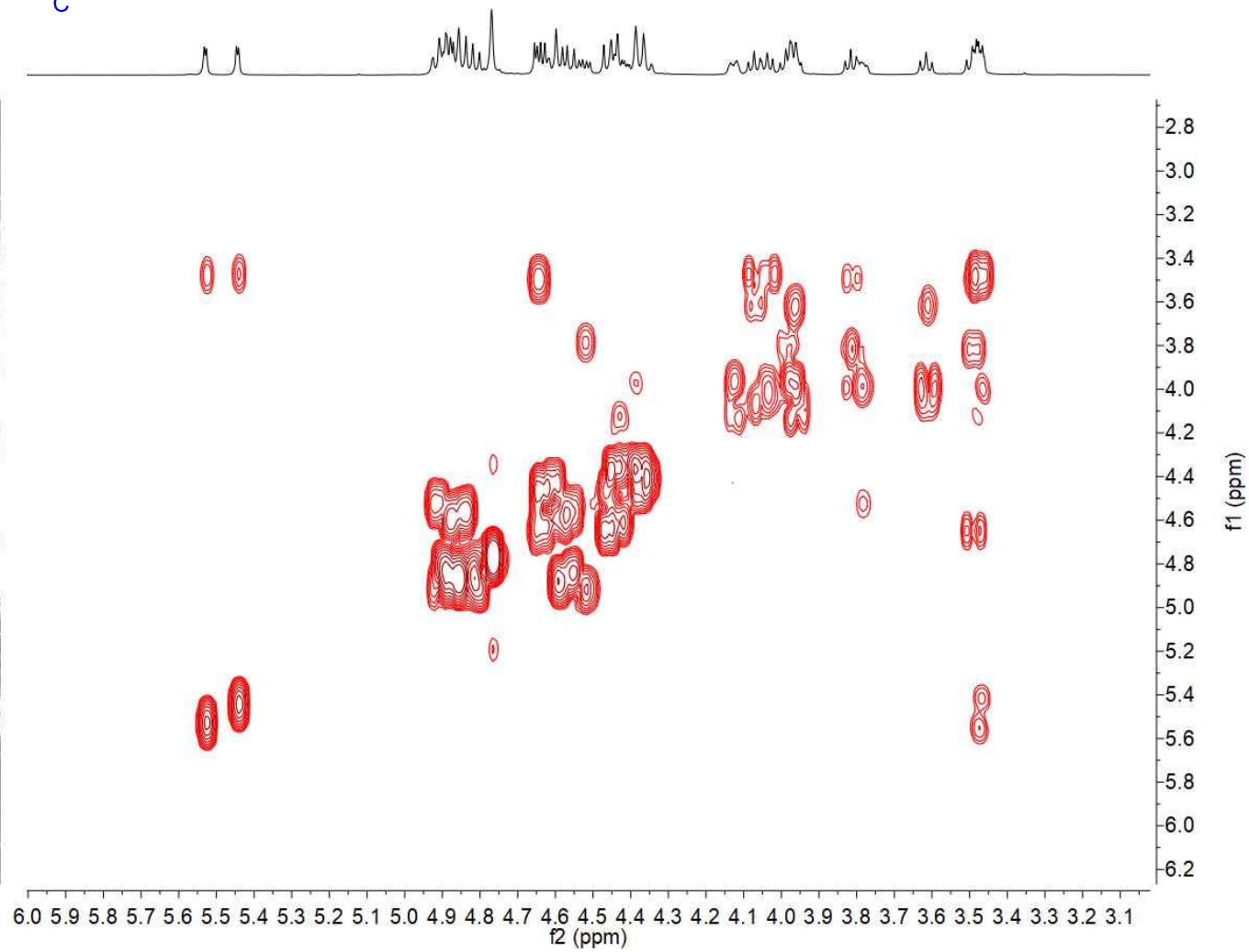


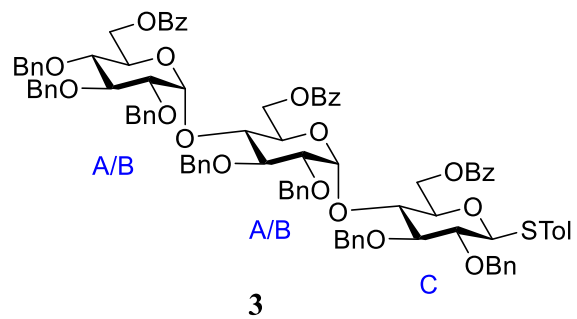




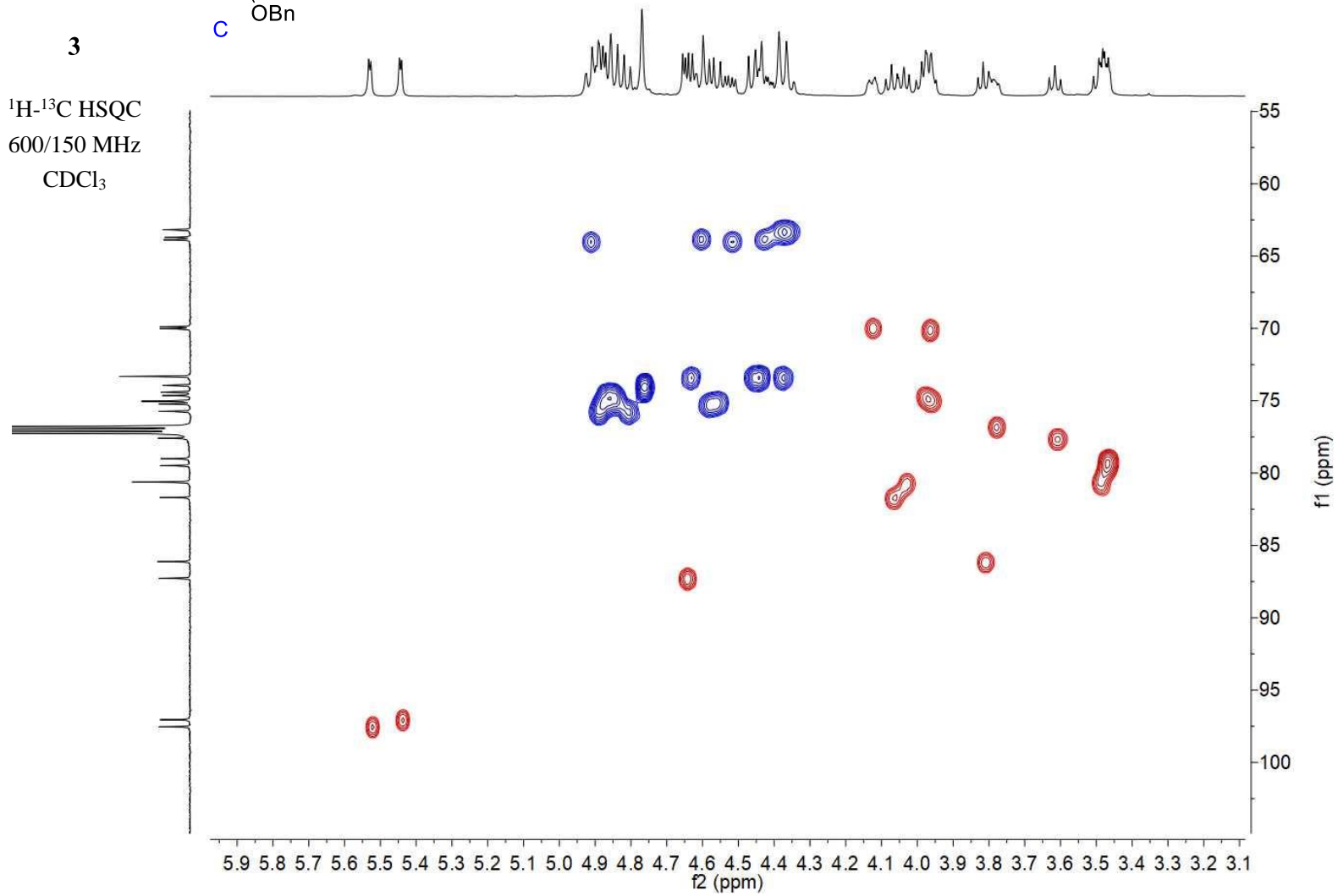


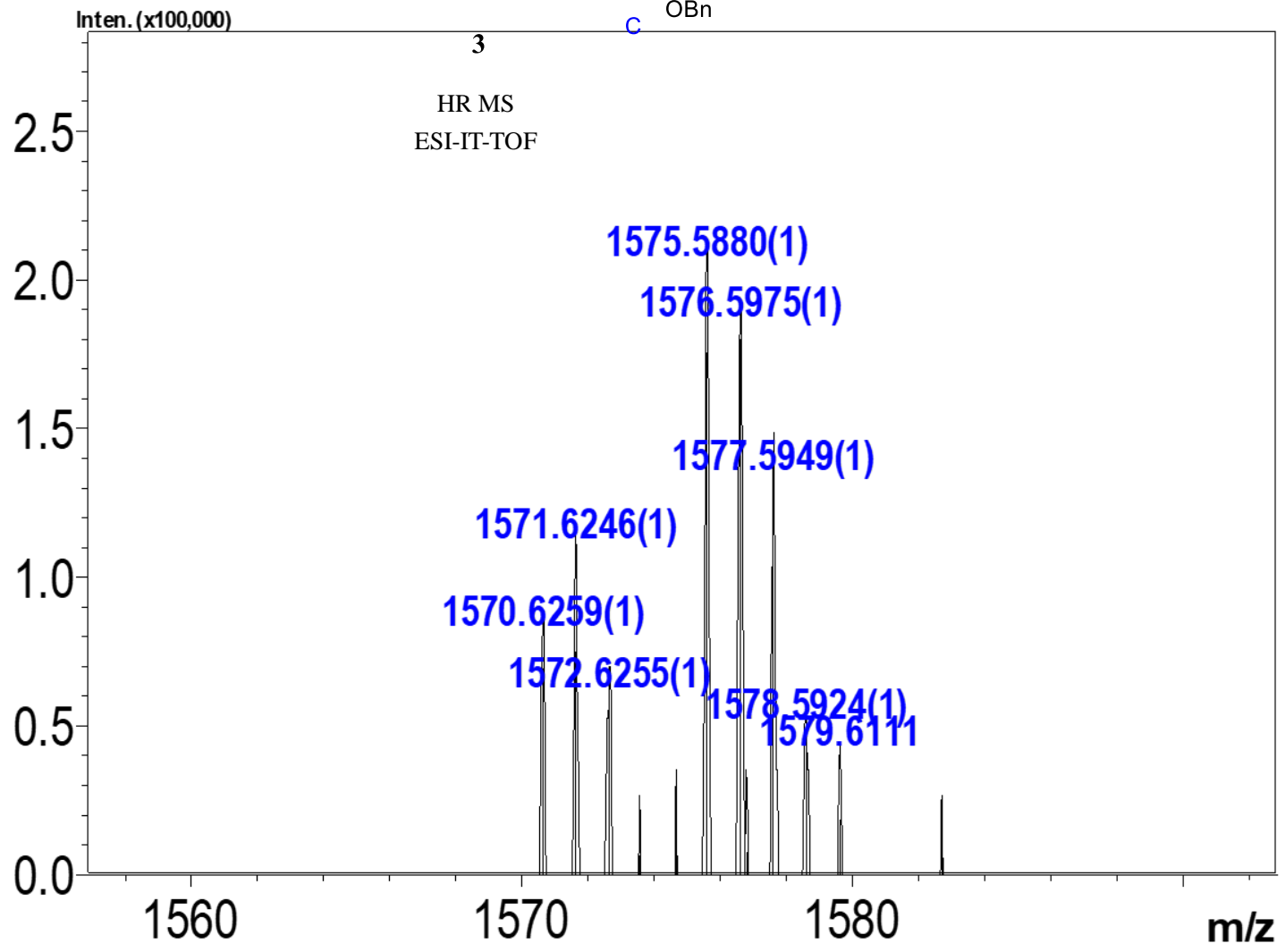
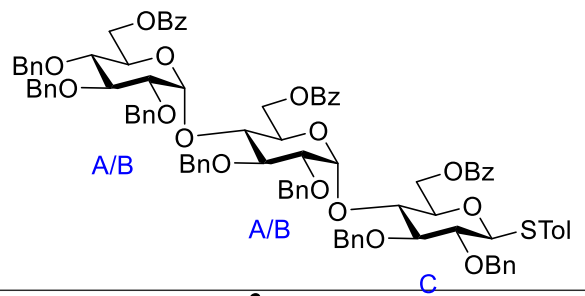
<sup>1</sup>H-<sup>1</sup>H COSY  
600 MHz  
CDCl<sub>3</sub>

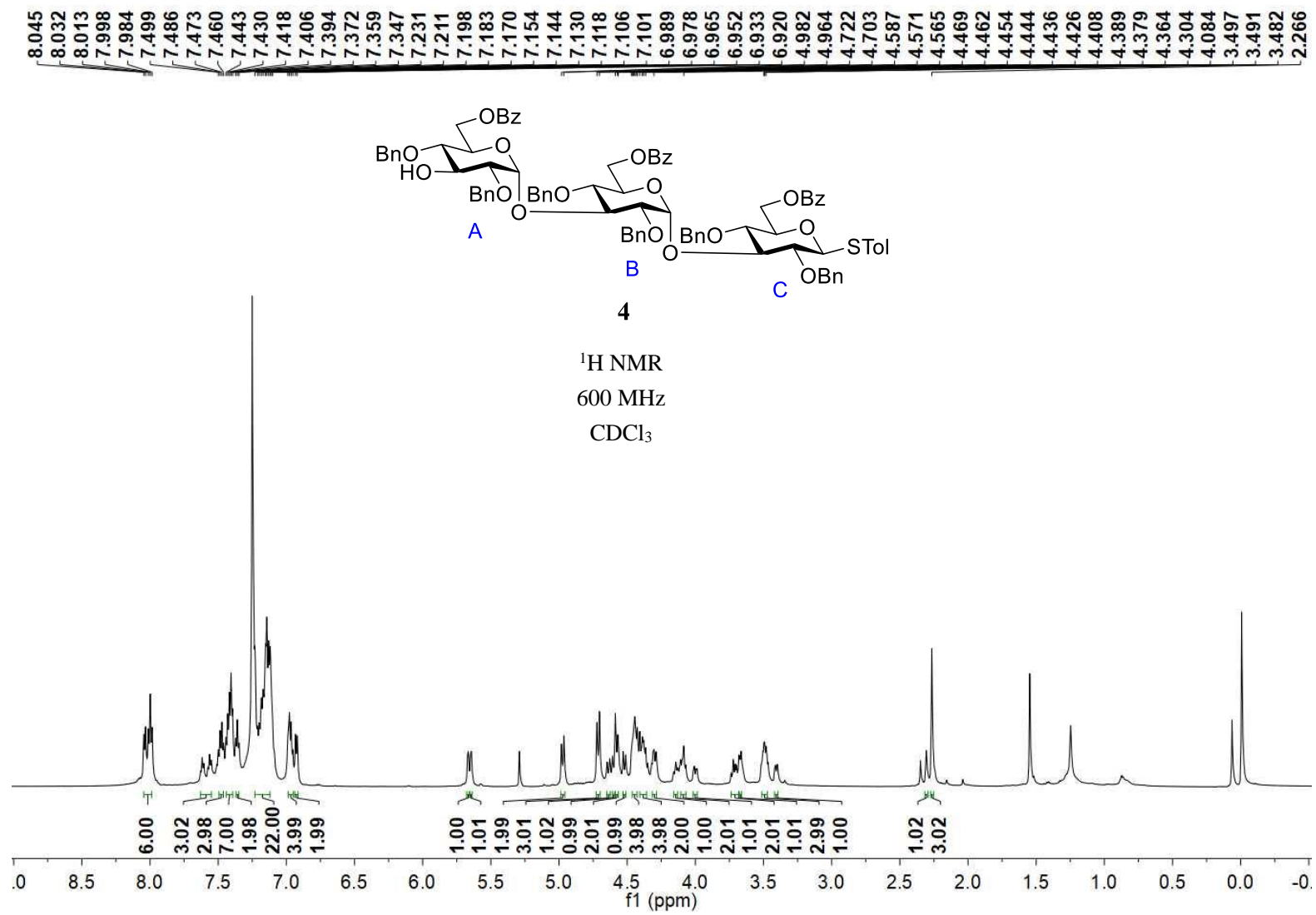




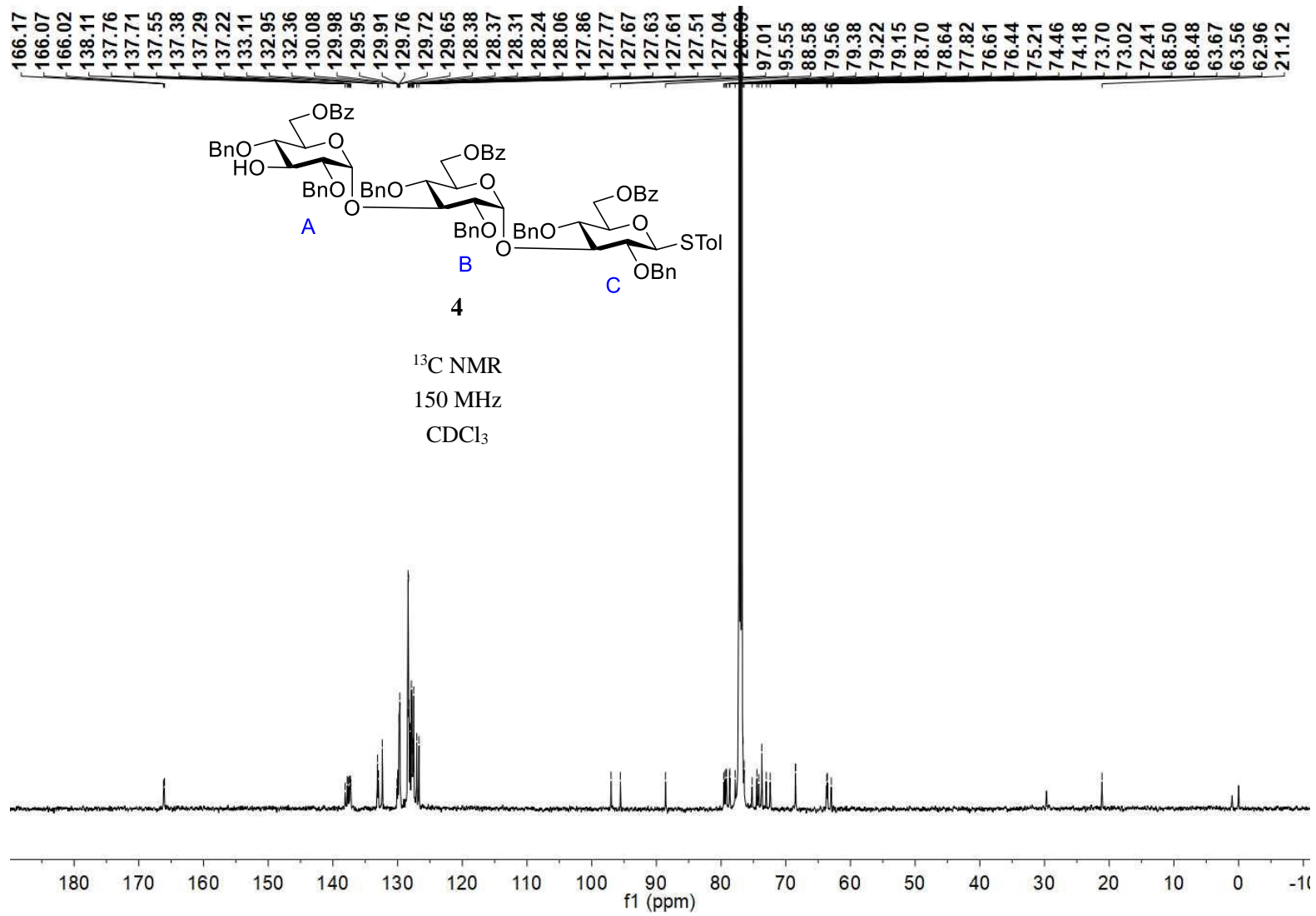
$^1\text{H}$ - $^{13}\text{C}$  HSQC  
600/150 MHz  
 $\text{CDCl}_3$

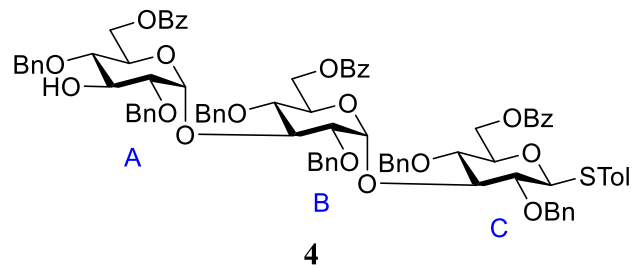




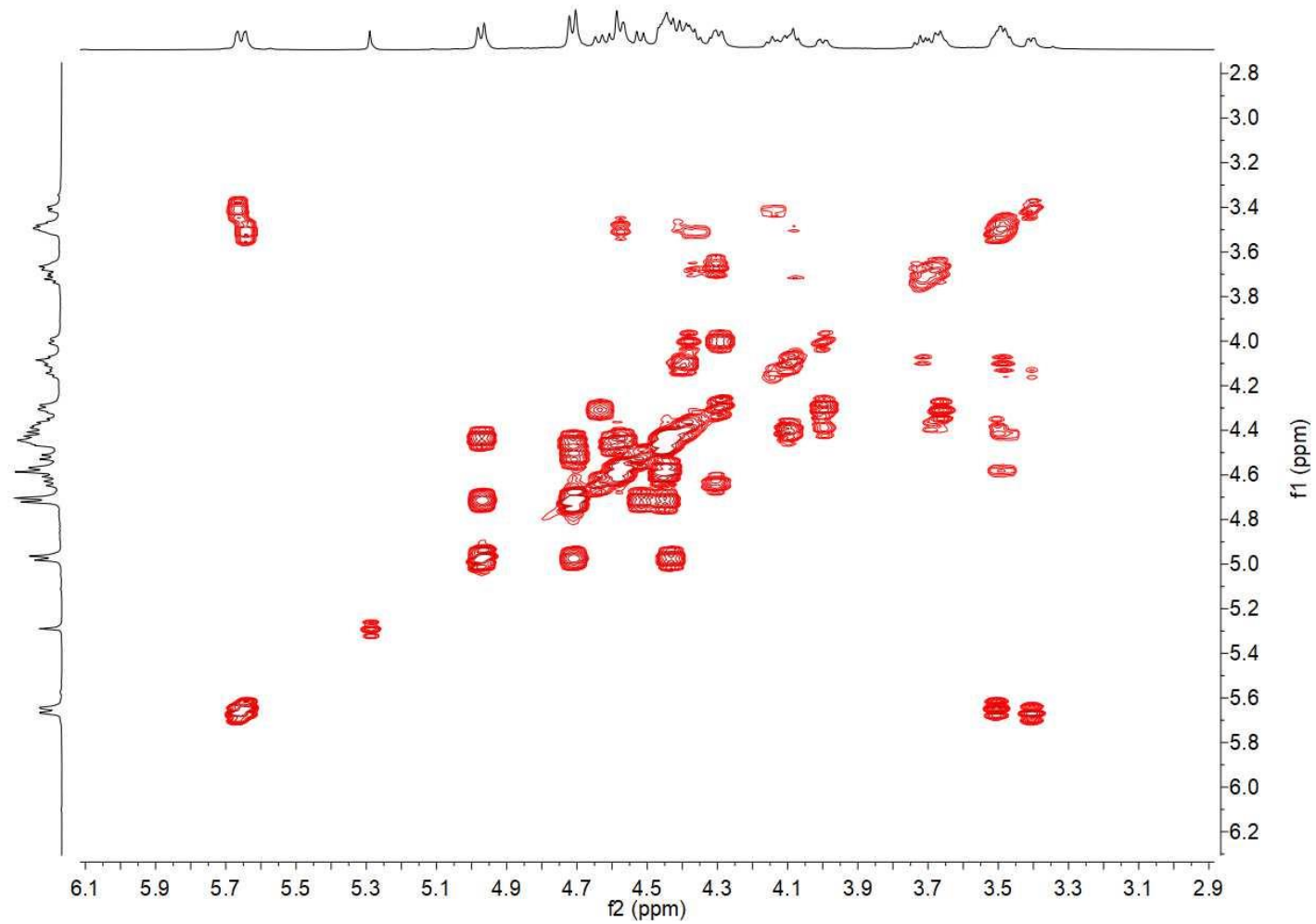


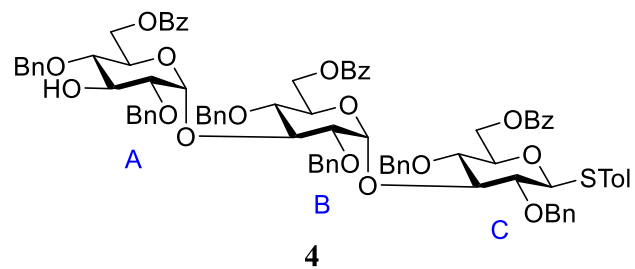




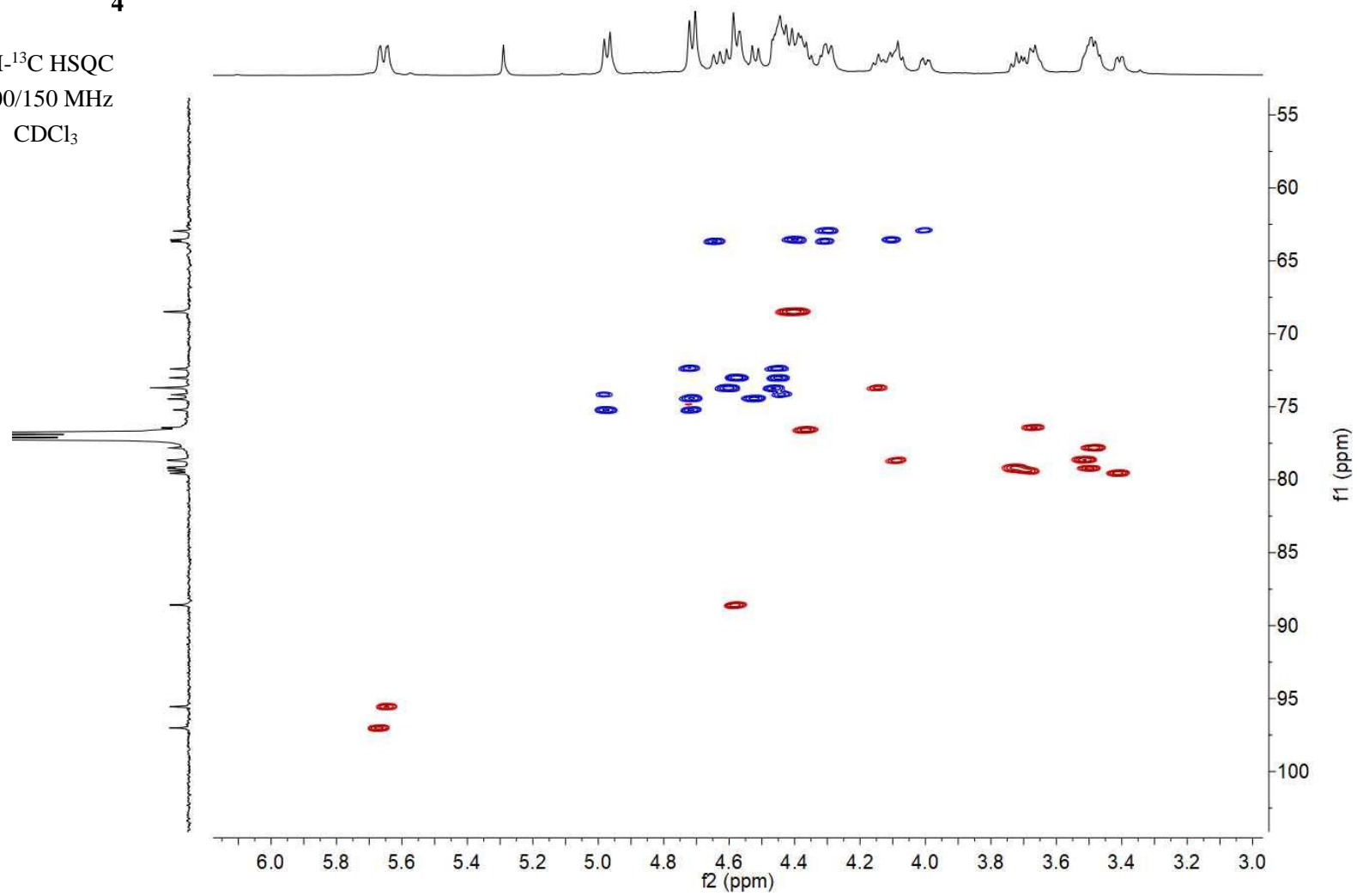


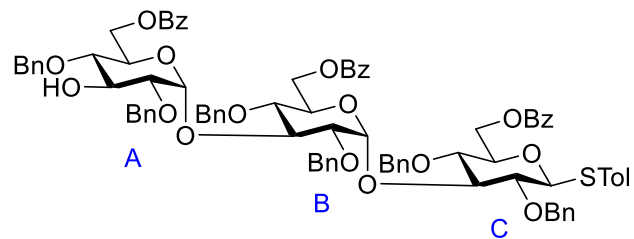
$^1\text{H}$ - $^1\text{H}$  COSY  
600 MHz  
 $\text{CDCl}_3$



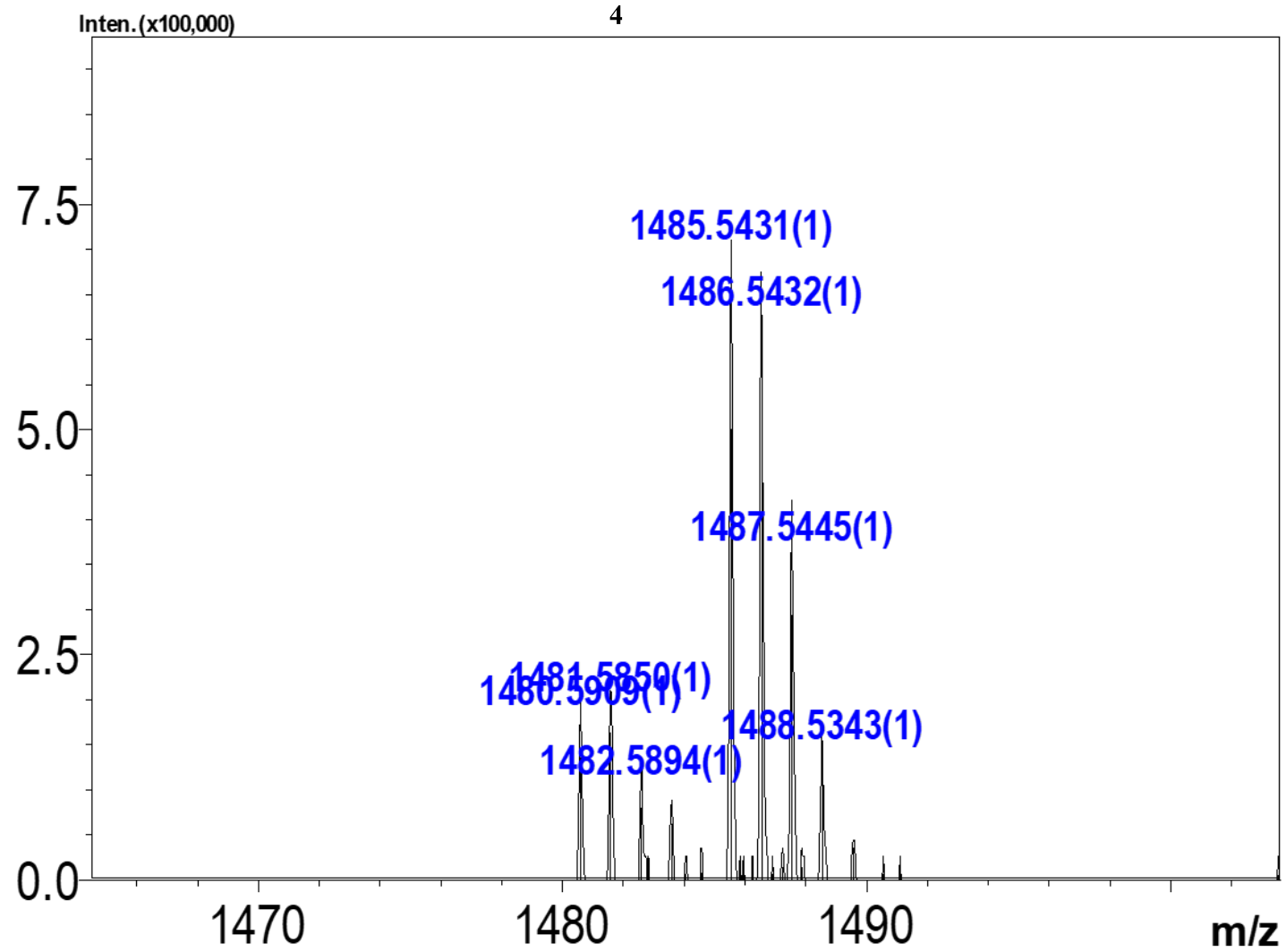


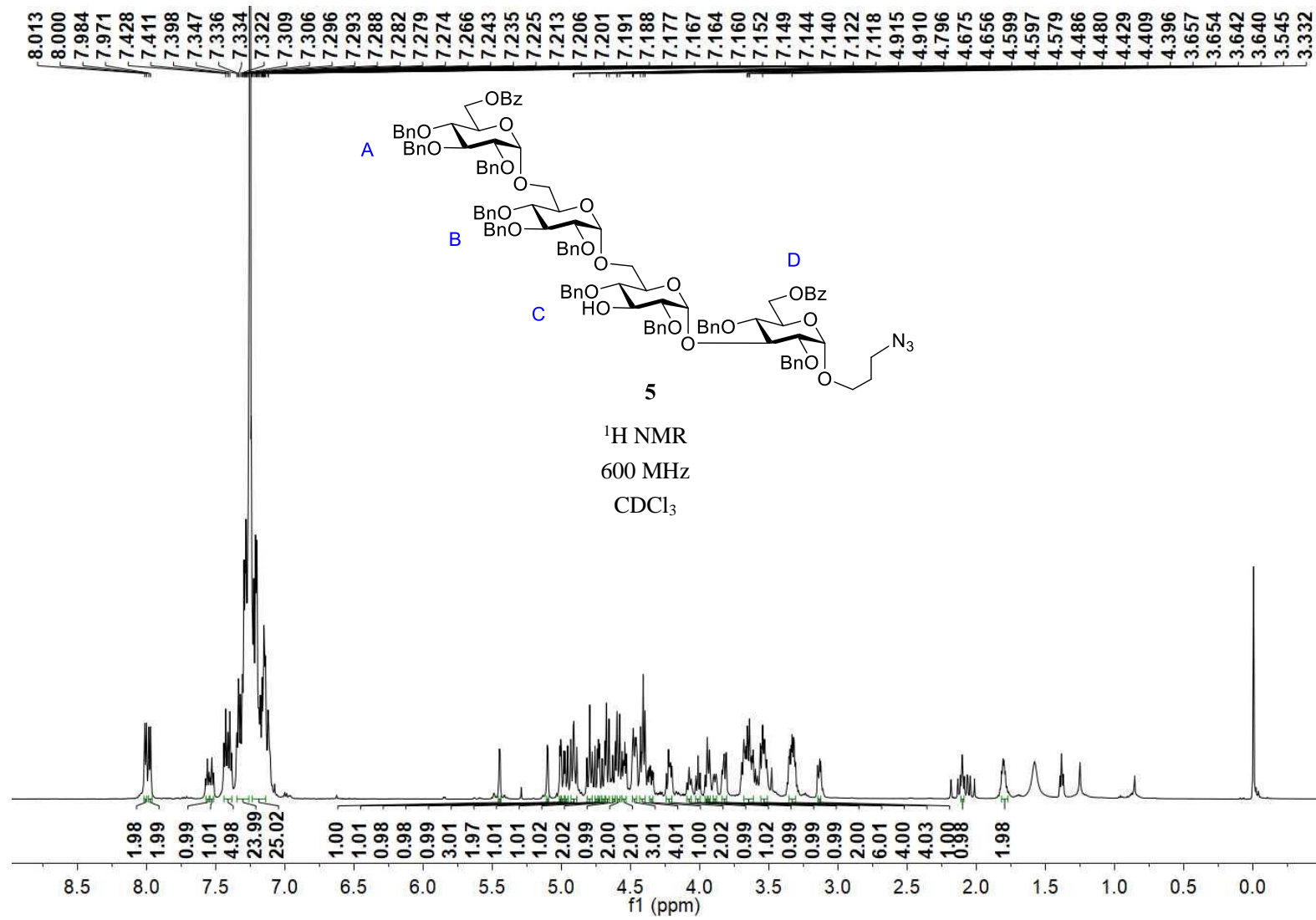
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600/150 MHz  
 $\text{CDCl}_3$

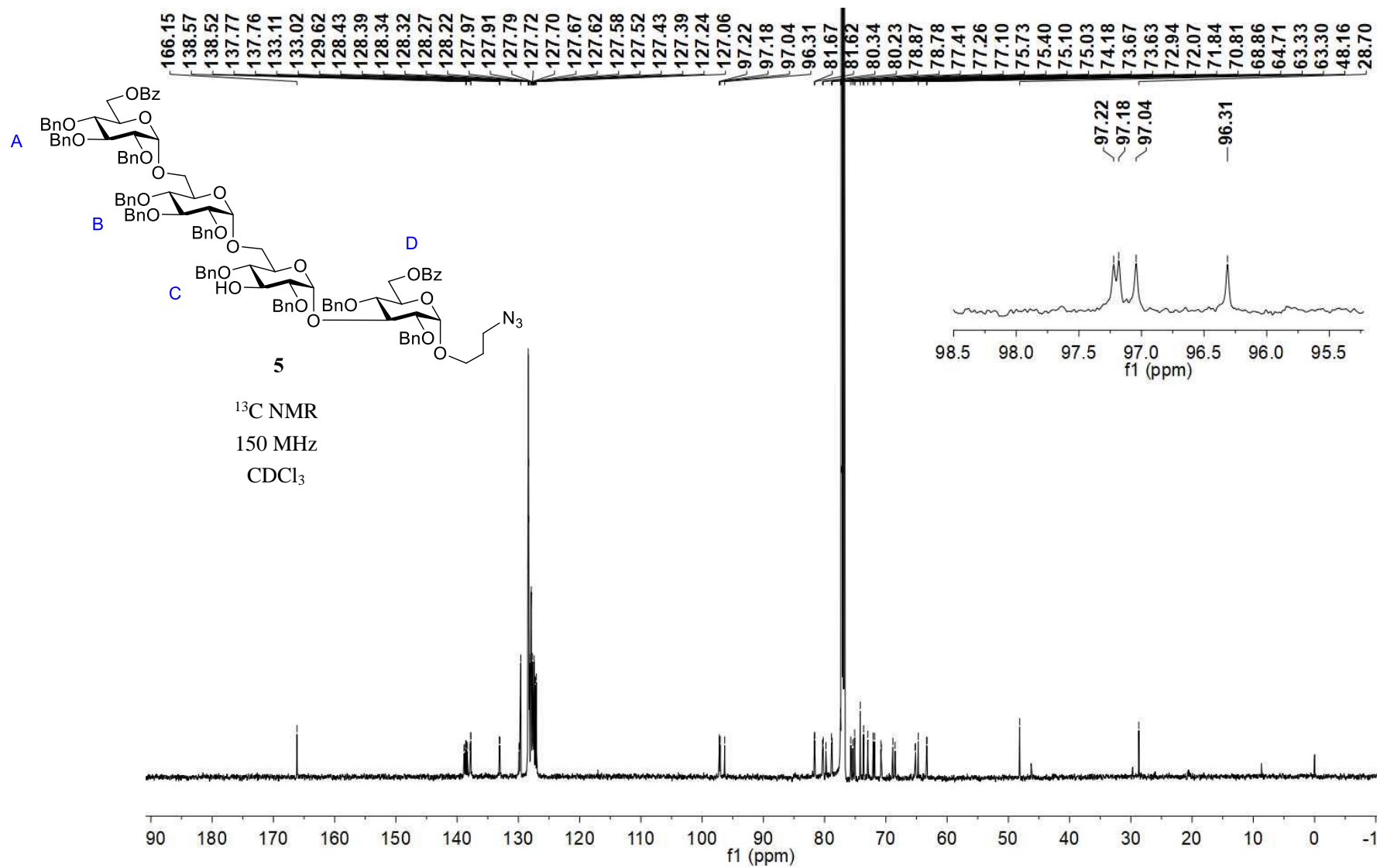


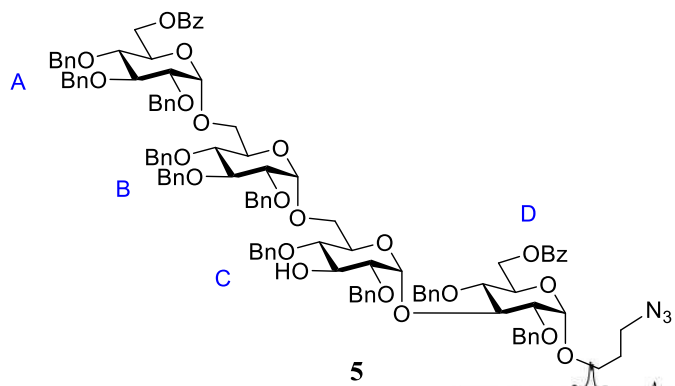


HR MS  
ESI-IT-TOF

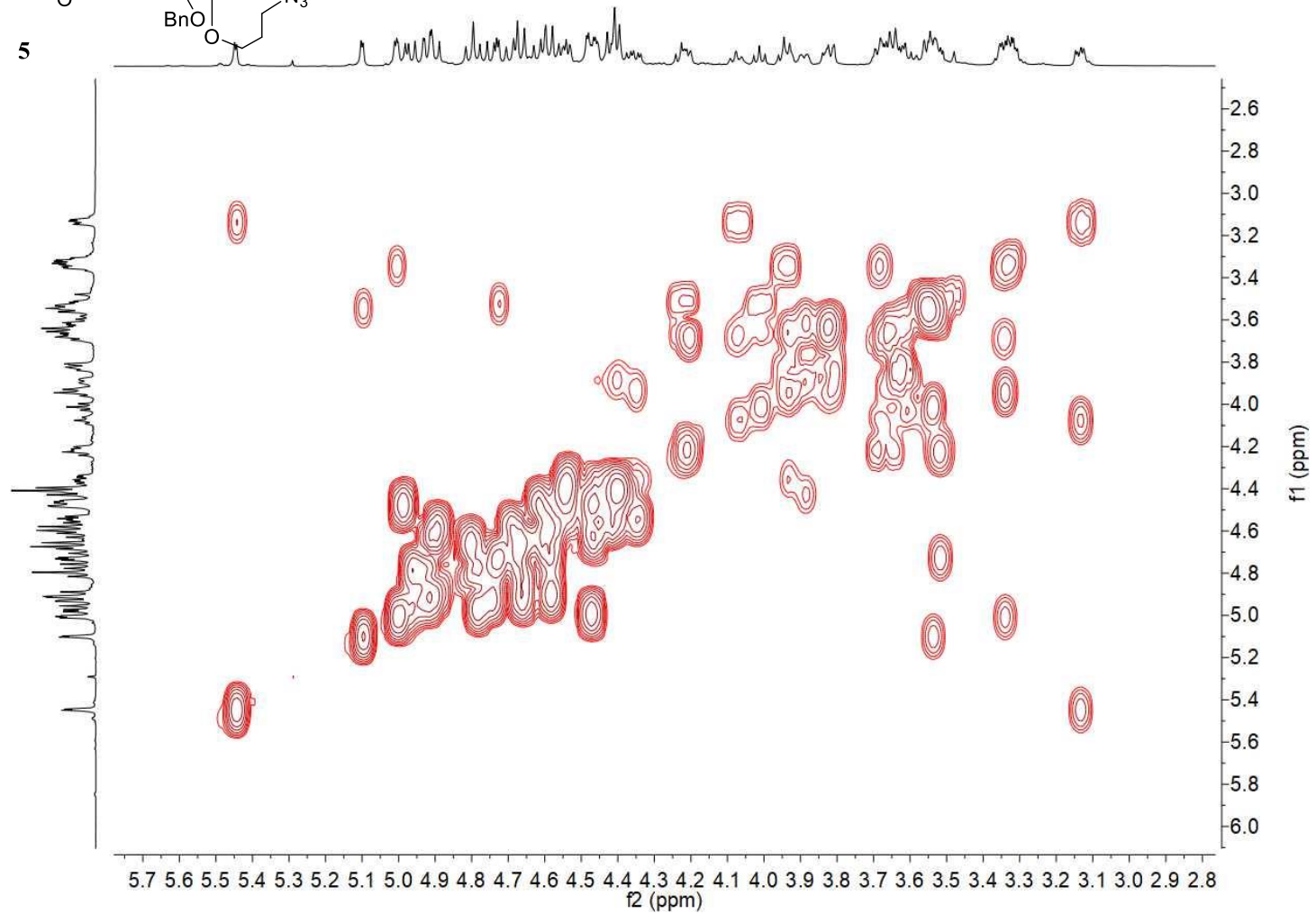


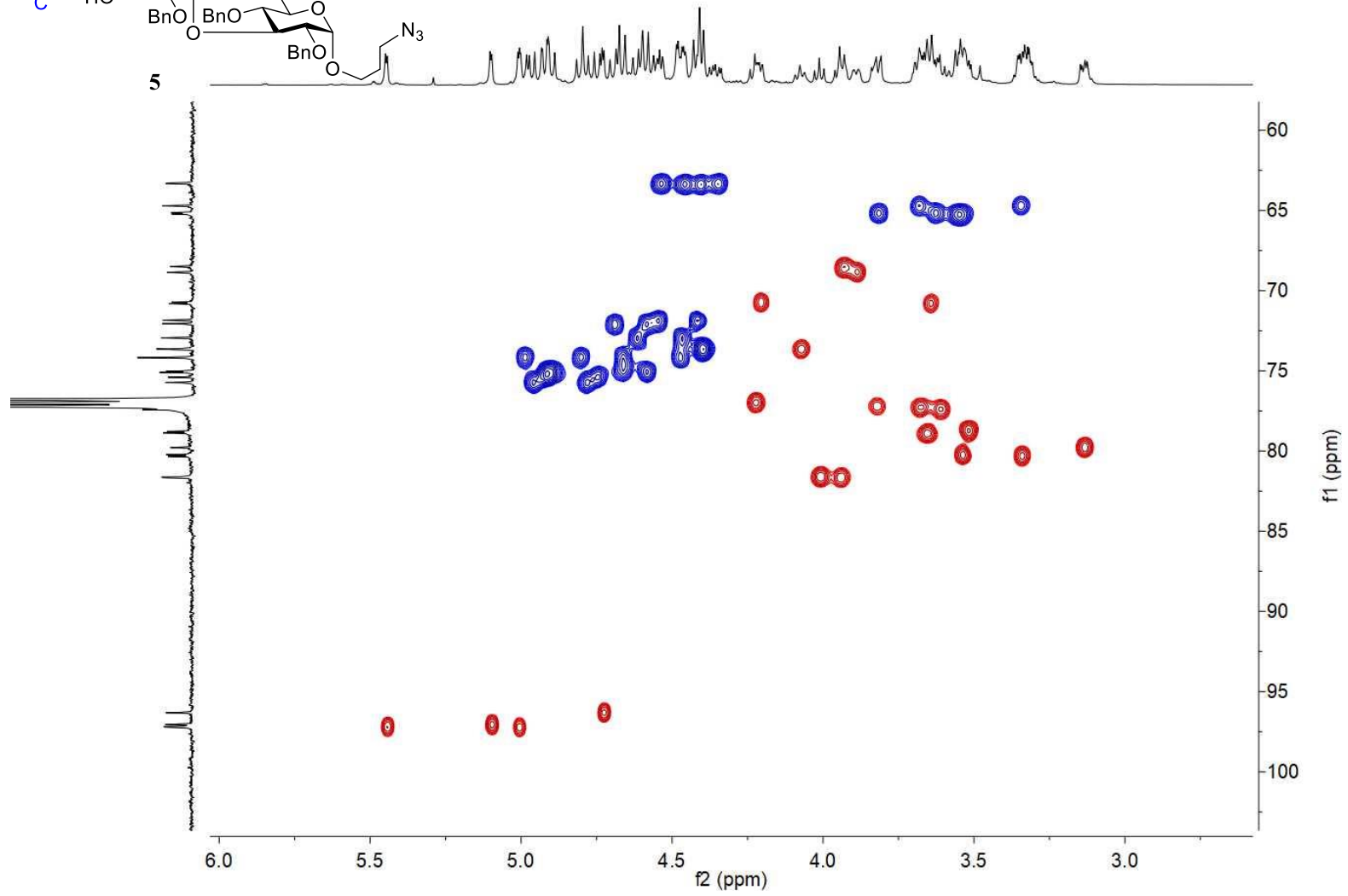
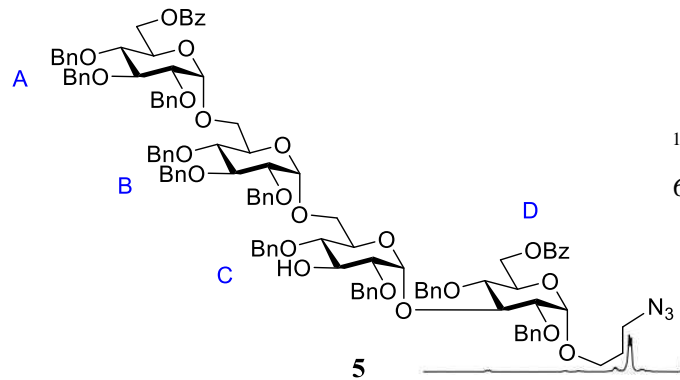




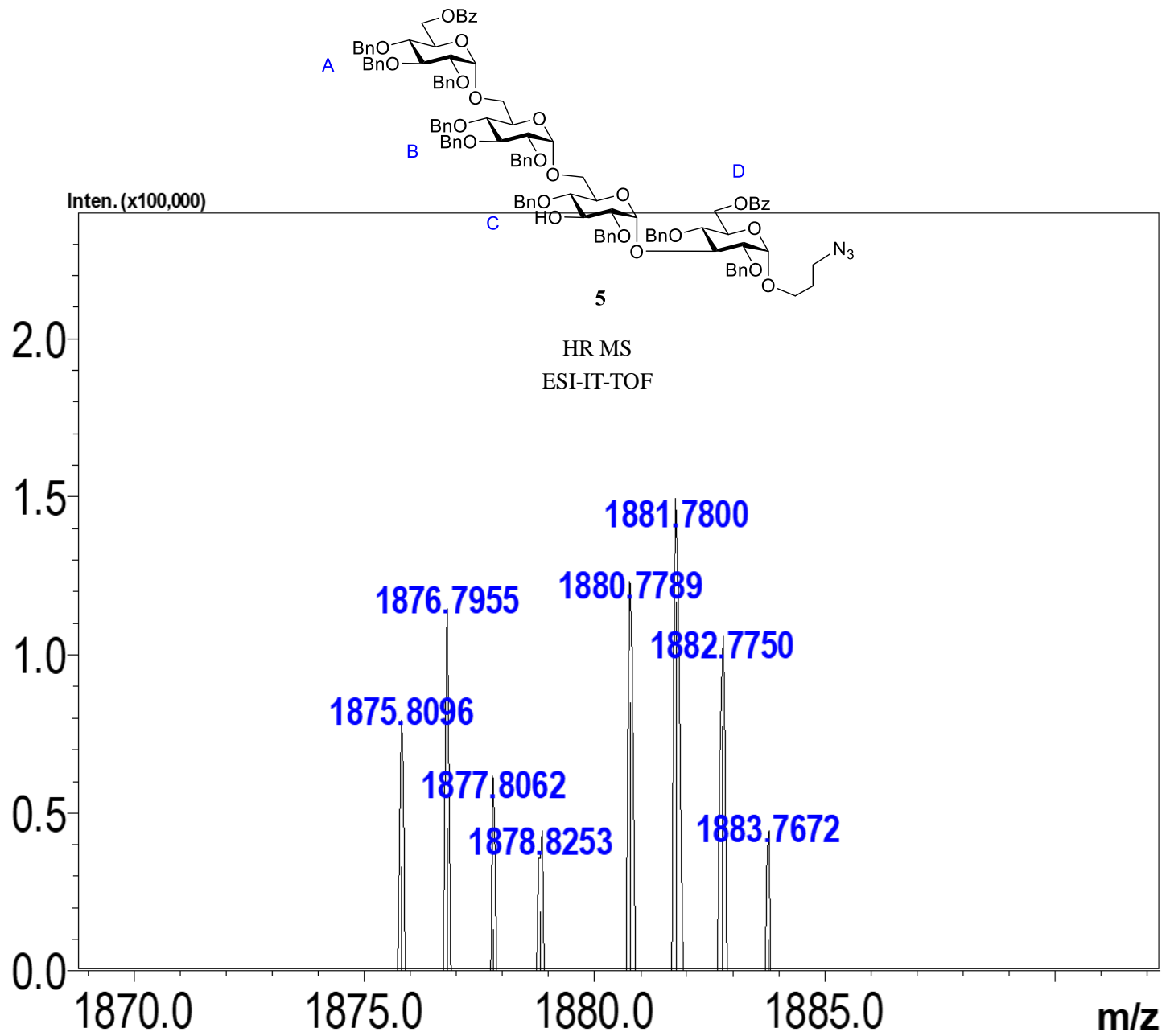


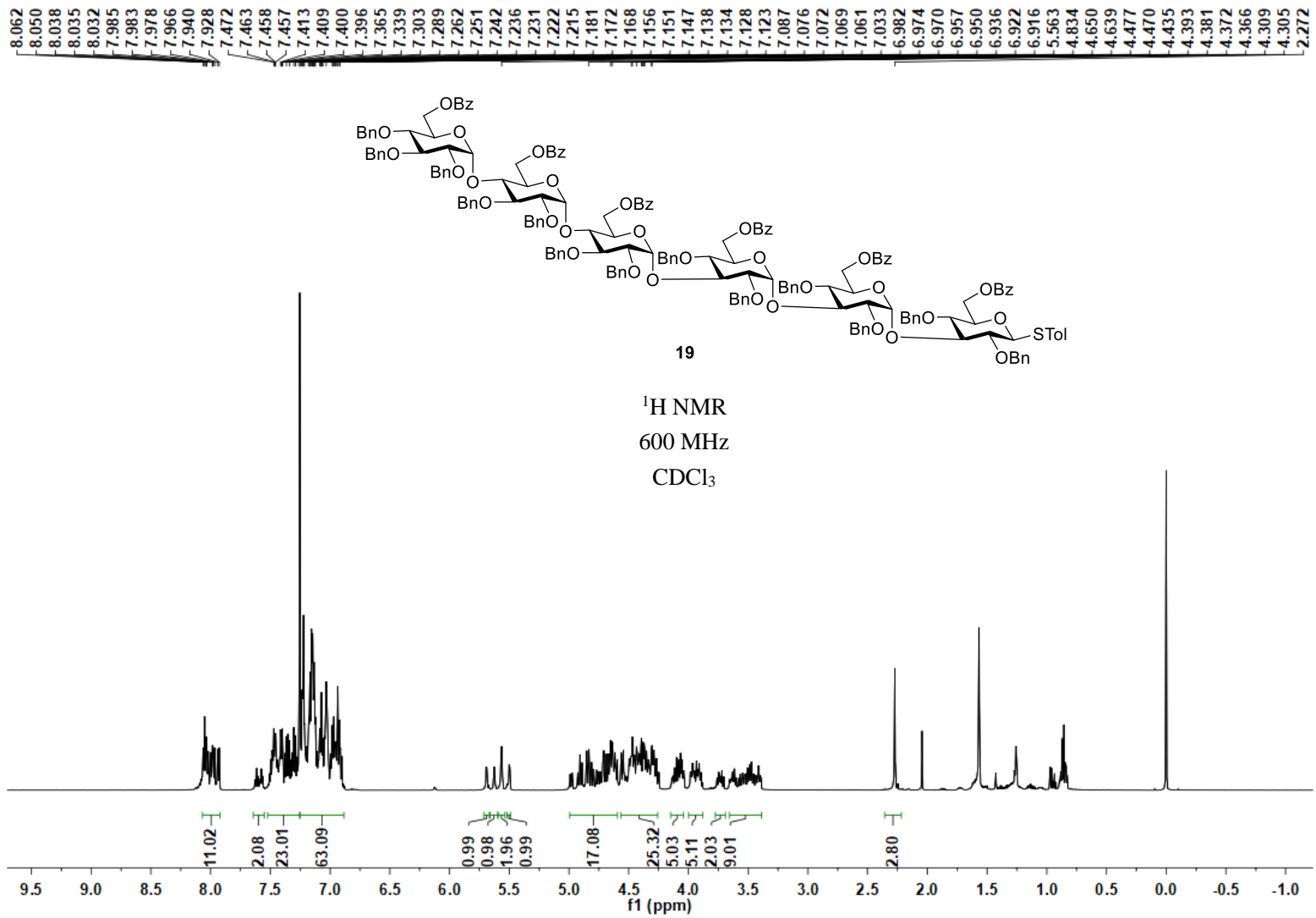
<sup>1</sup>H-<sup>1</sup>H COSY  
600 MHz  
CDCl<sub>3</sub>

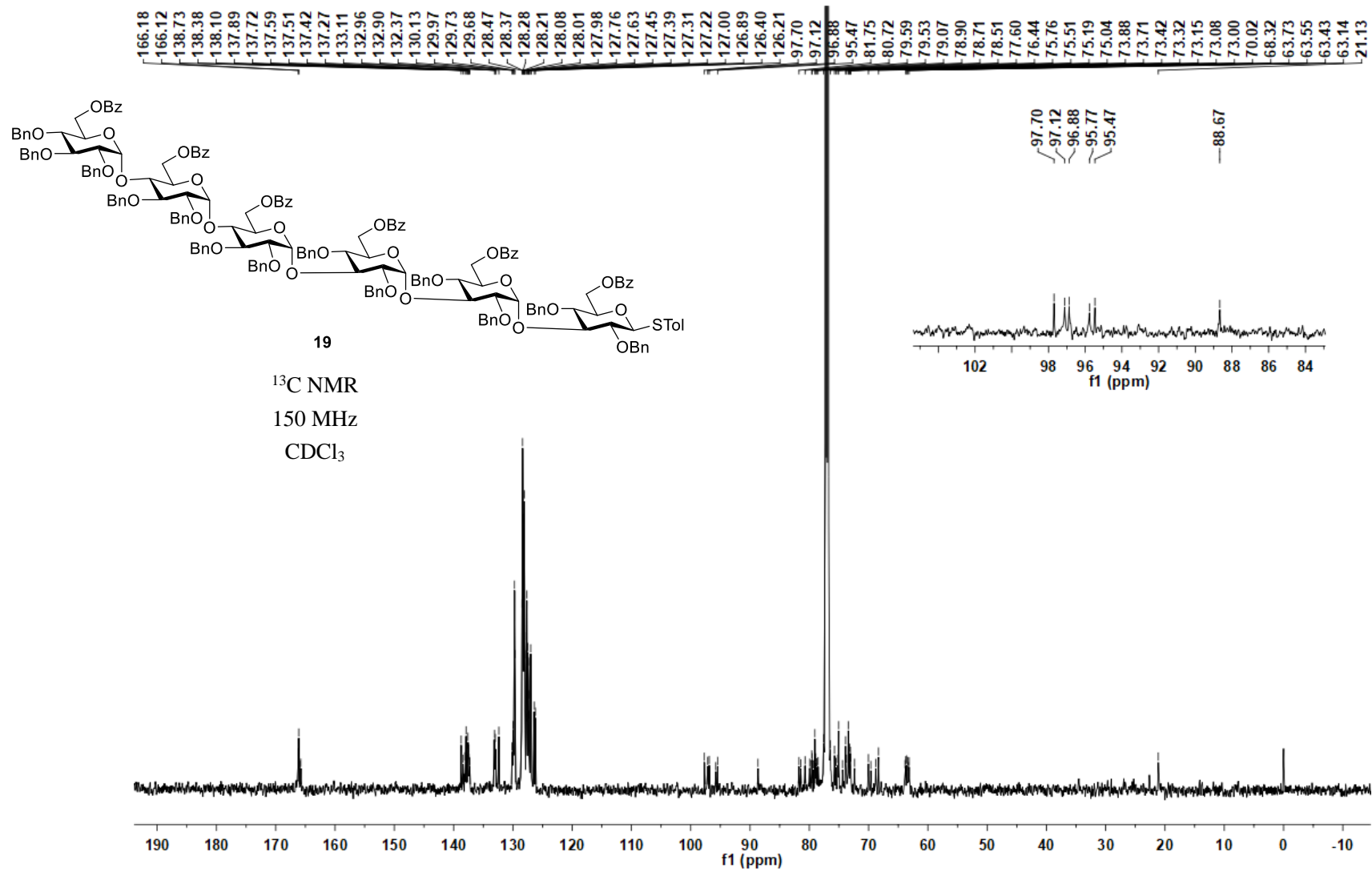






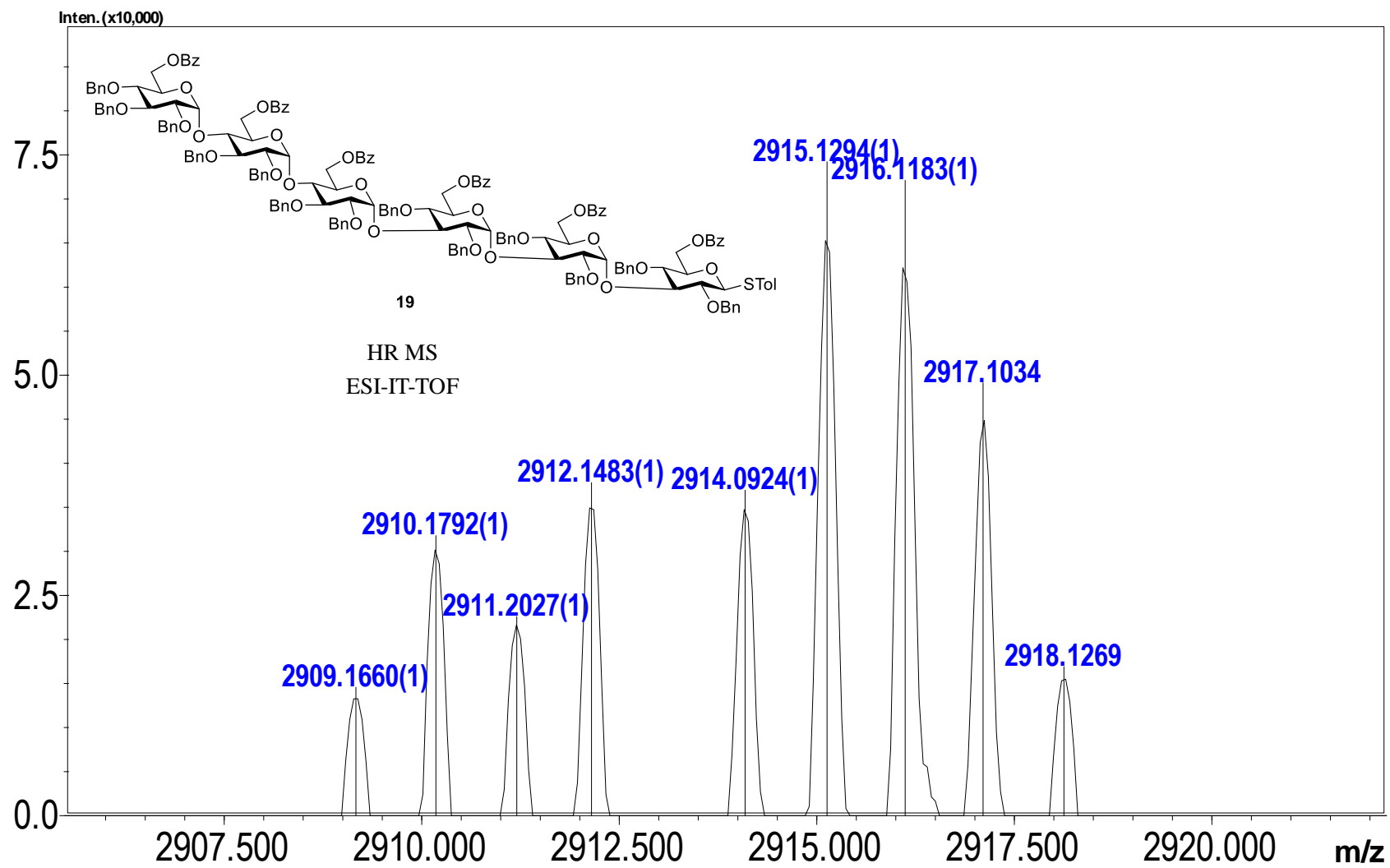


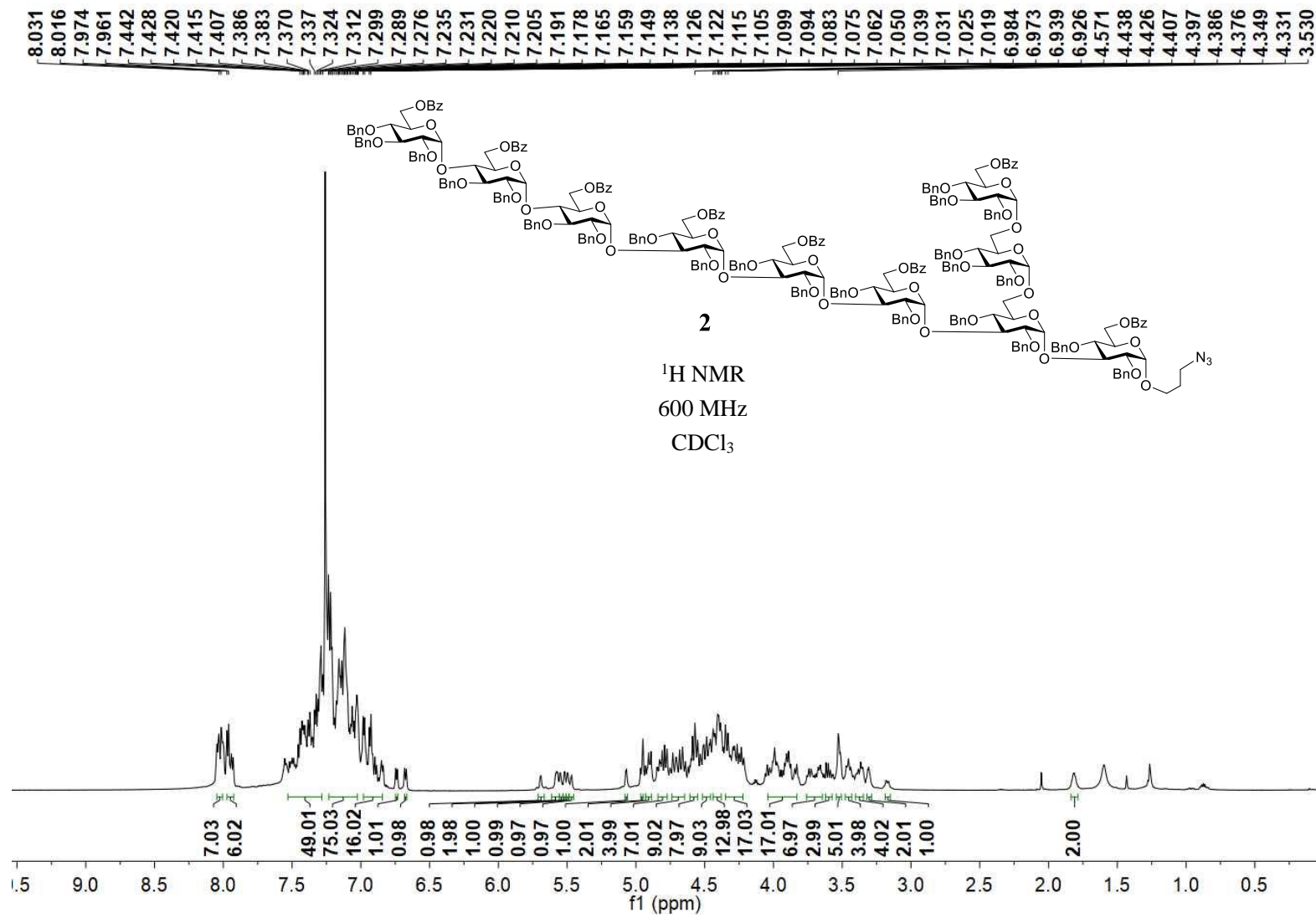


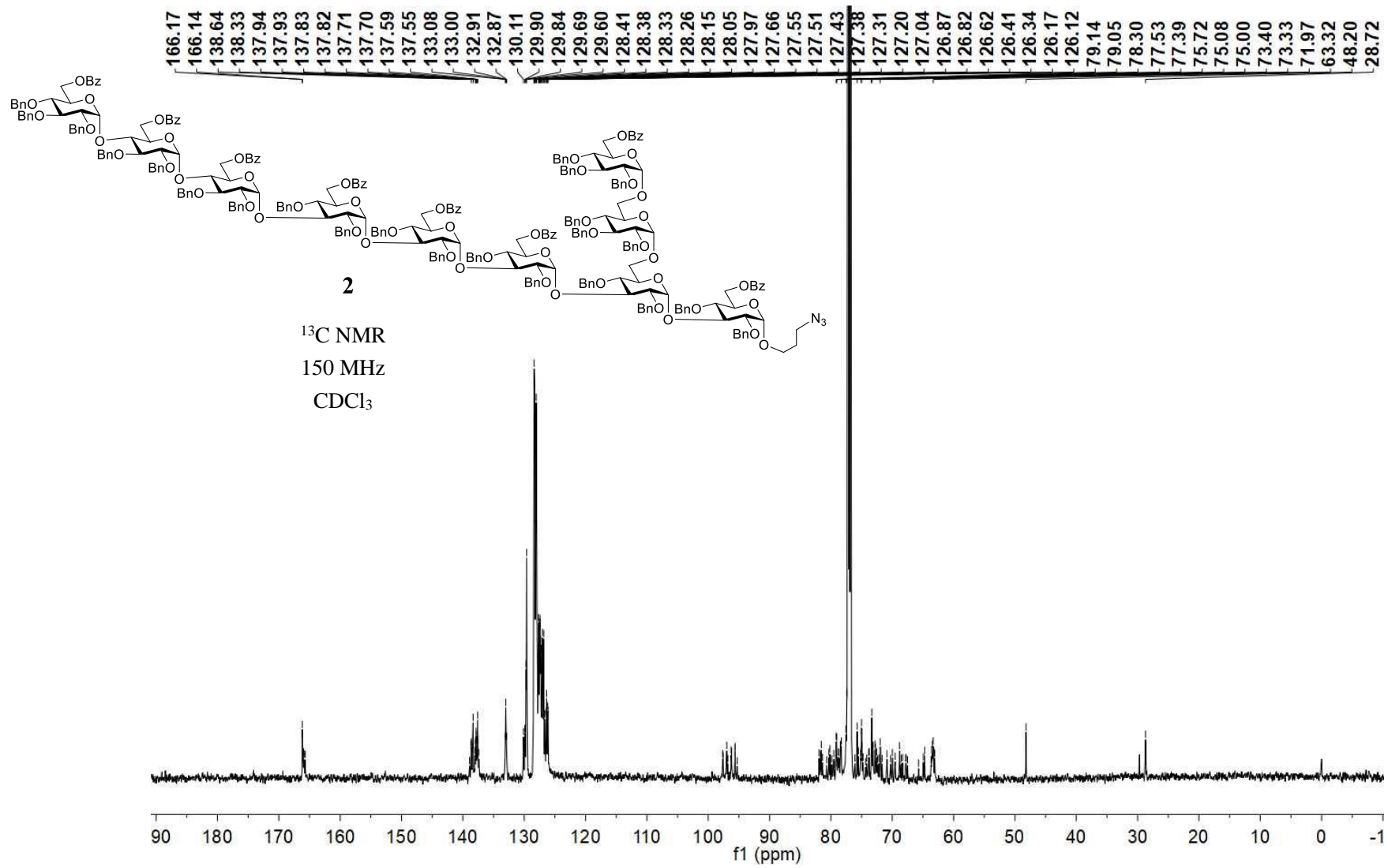




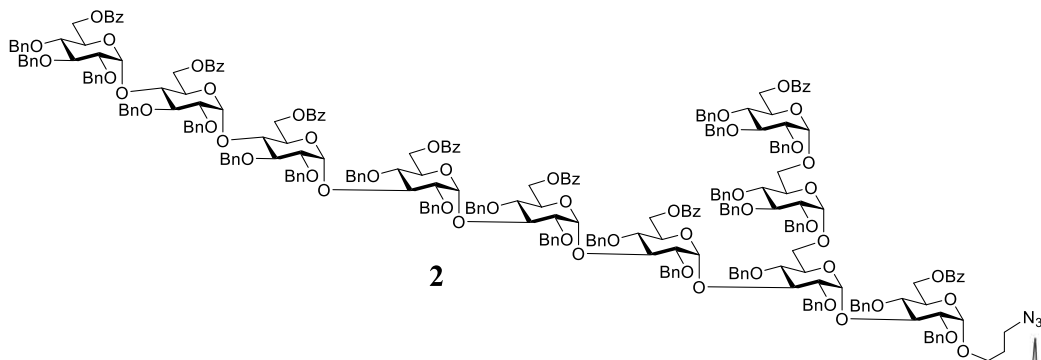




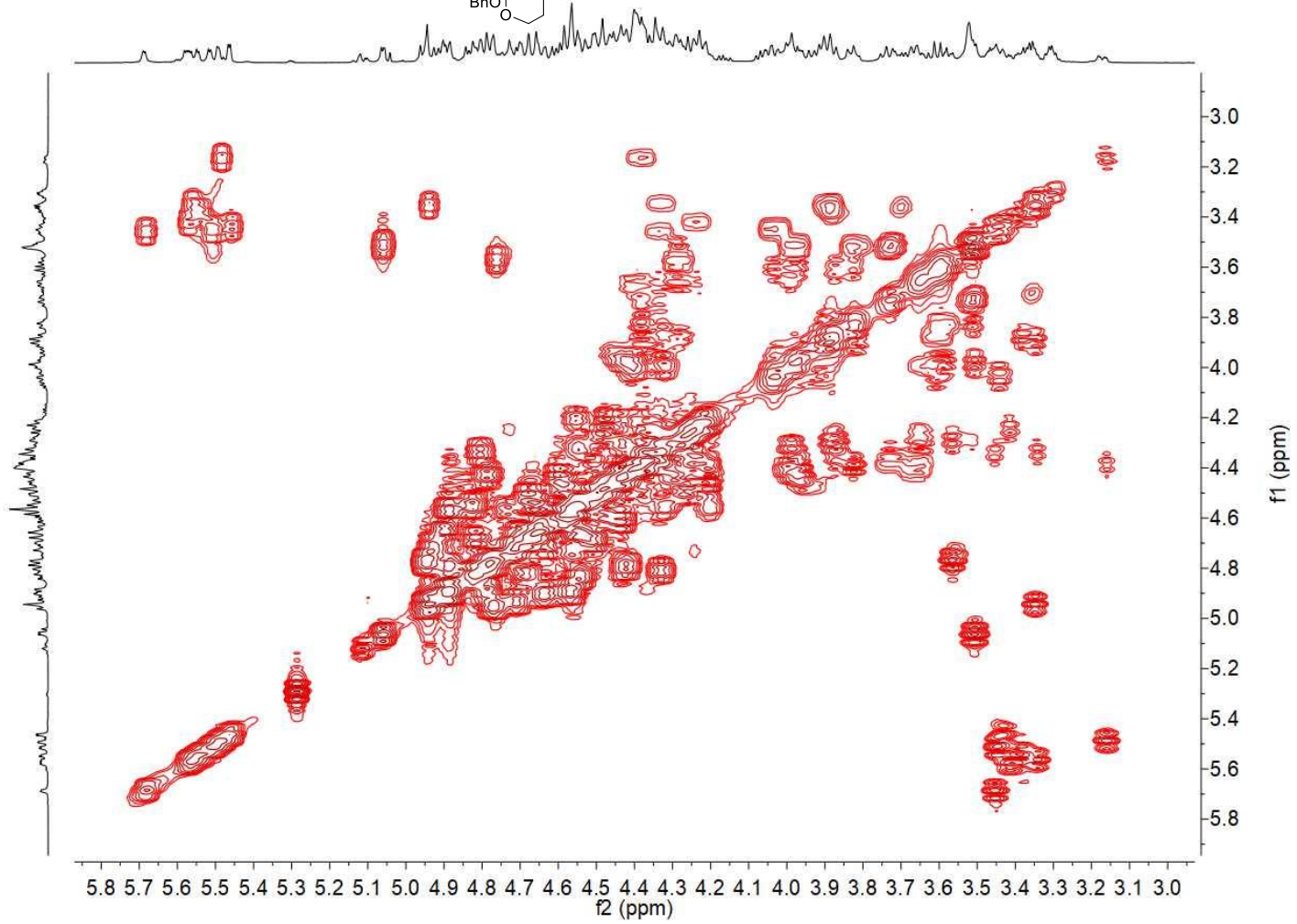


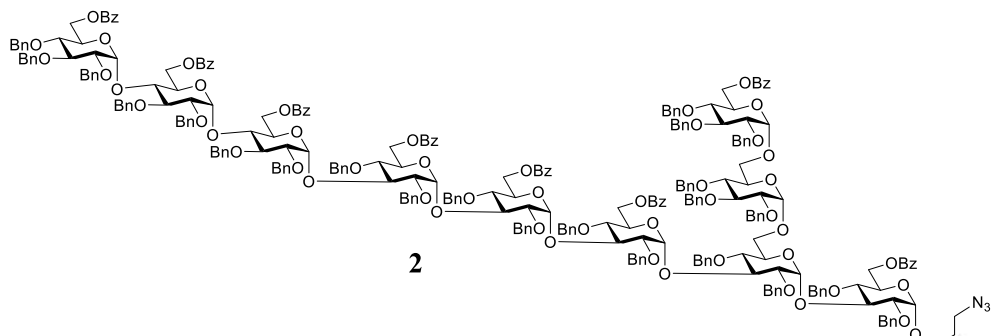




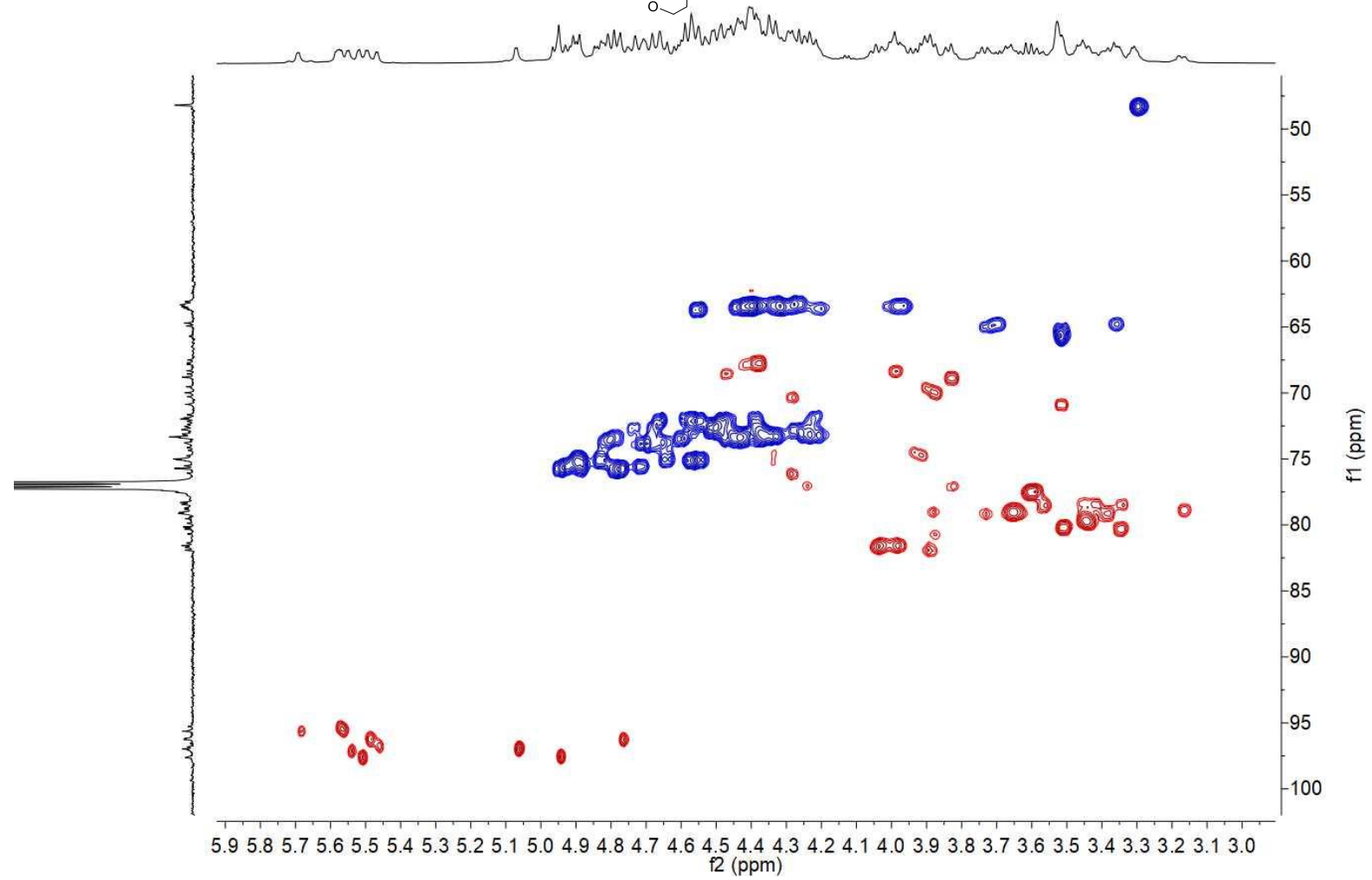


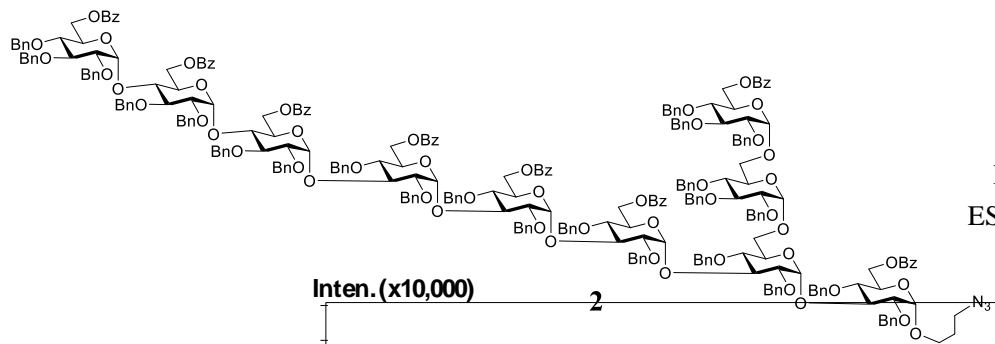
$^1\text{H}-^1\text{H}$  COSY  
600 MHz  
 $\text{CDCl}_3$



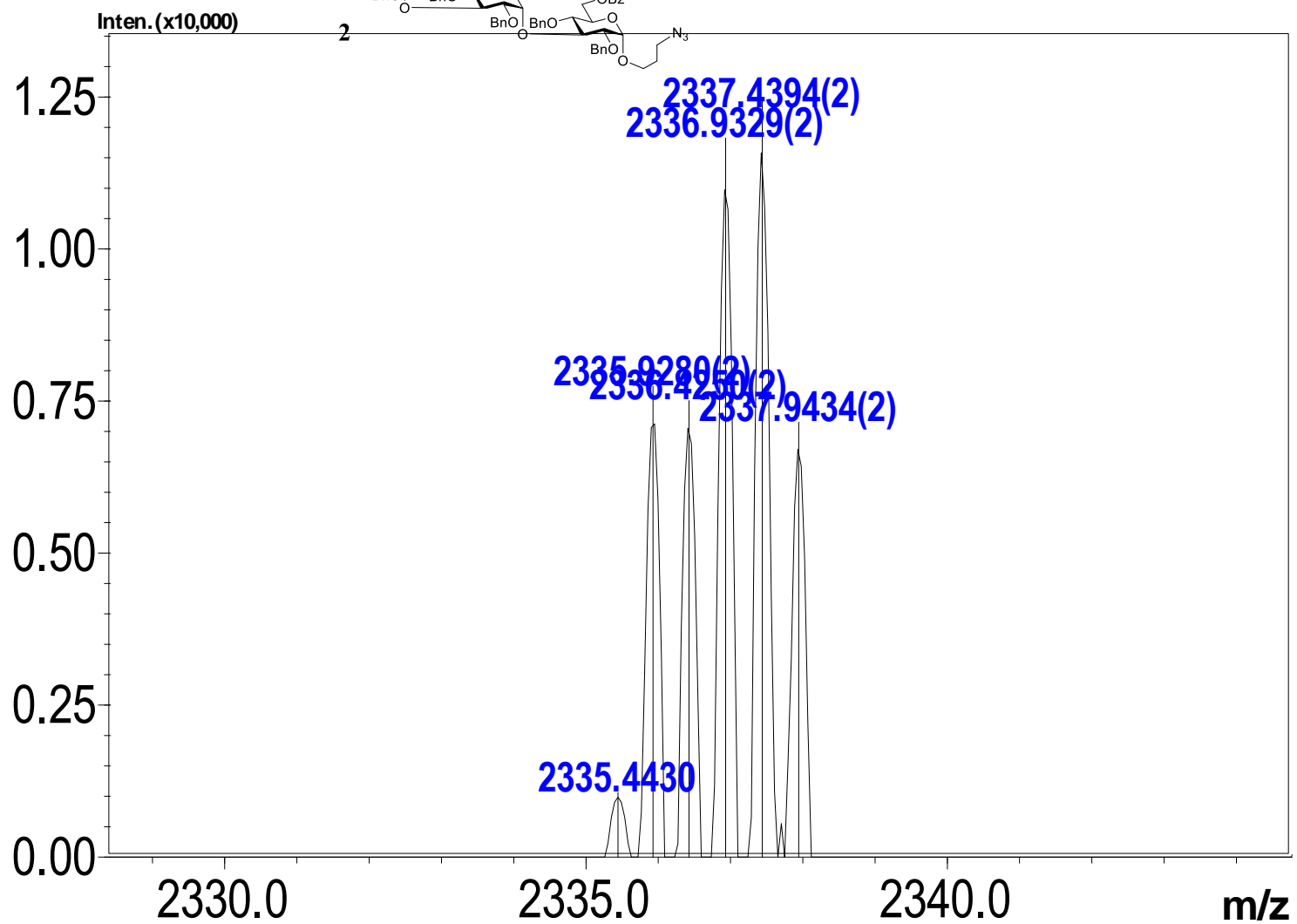


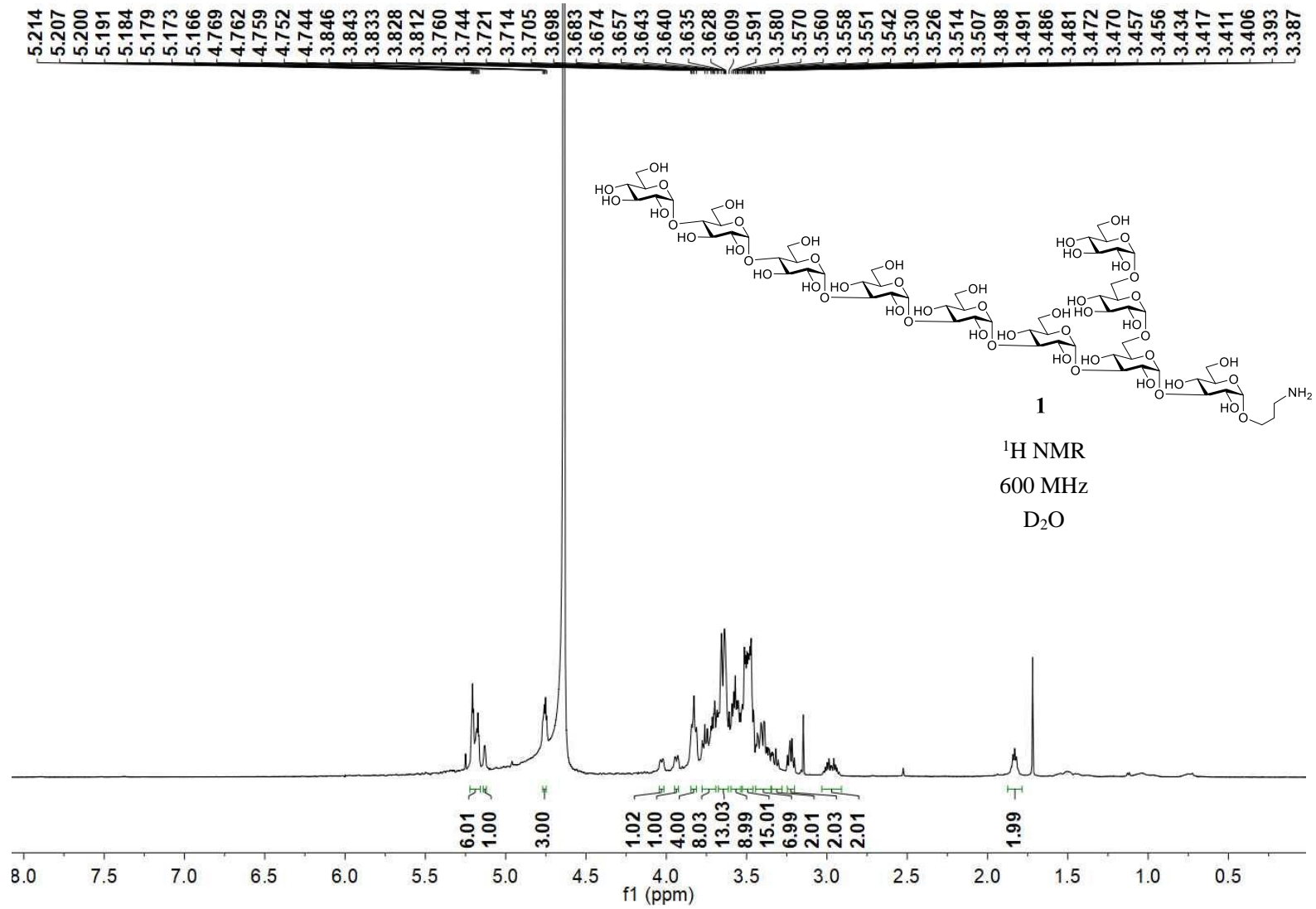
<sup>1</sup>H-<sup>13</sup>C HSQC  
600/150 MHz  
CDCl<sub>3</sub>

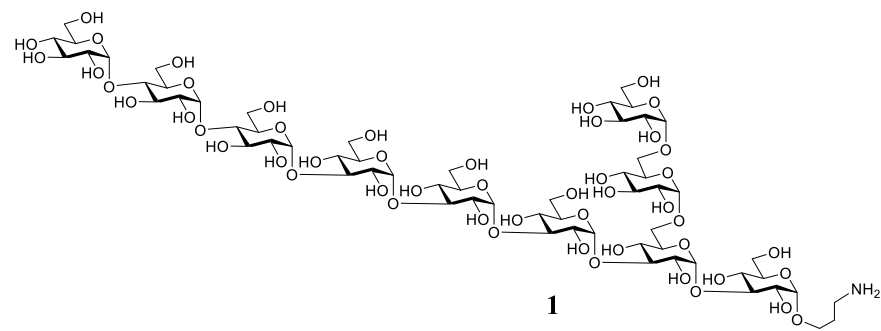




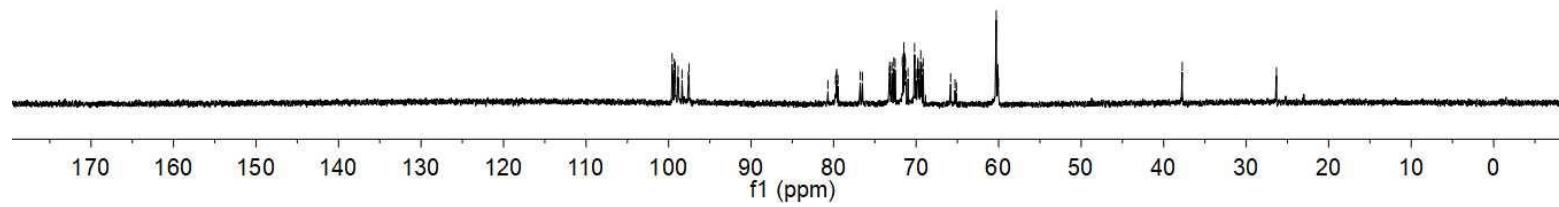
HR MS  
ESI-IT-TOF



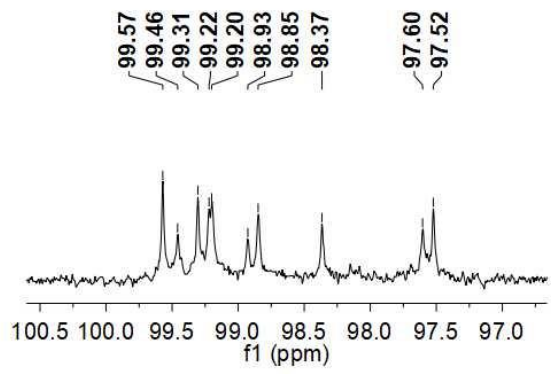


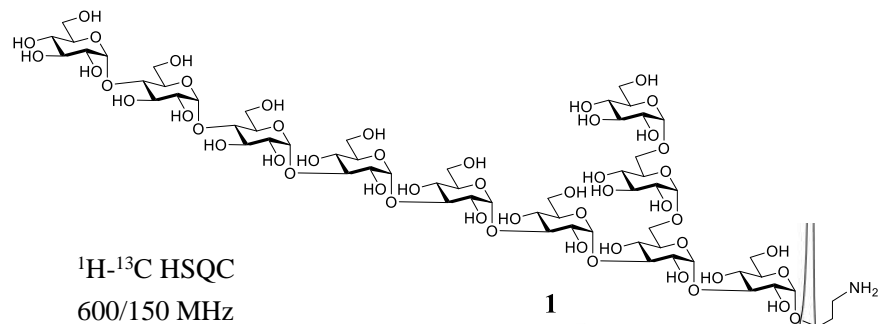


<sup>13</sup>C NMR  
150 MHz  
D<sub>2</sub>O



99.57  
99.46  
99.31  
99.22  
99.20  
98.93  
98.85  
98.37  
97.60  
97.52  
80.69  
79.76  
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65.81  
65.28  
65.12  
60.29  
60.18  
60.09  
60.03  
37.75  
26.33





$^1\text{H}$ - $^{13}\text{C}$  HSQC  
600/150 MHz  
 $\text{D}_2\text{O}$

