

## **Supporting Information**

for

### **Synthesis of (2*S*,3*R*)-3-amino-2-hydroxydecanoic acid and its enantiomer: a non-proteinogenic amino acid segment of the linear pentapeptide microginin**

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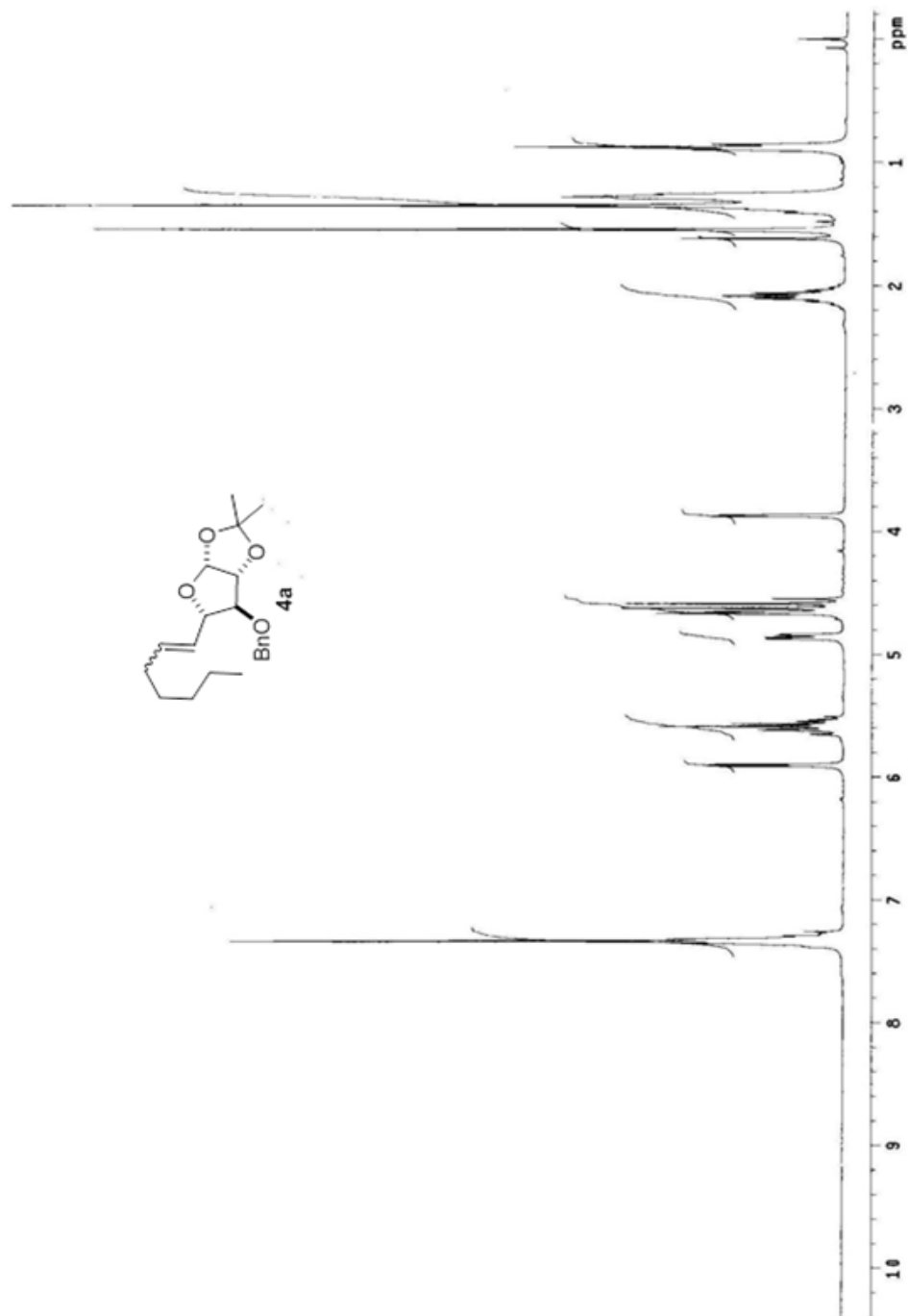
\* Corresponding author

### **Copies of NMR spectra**

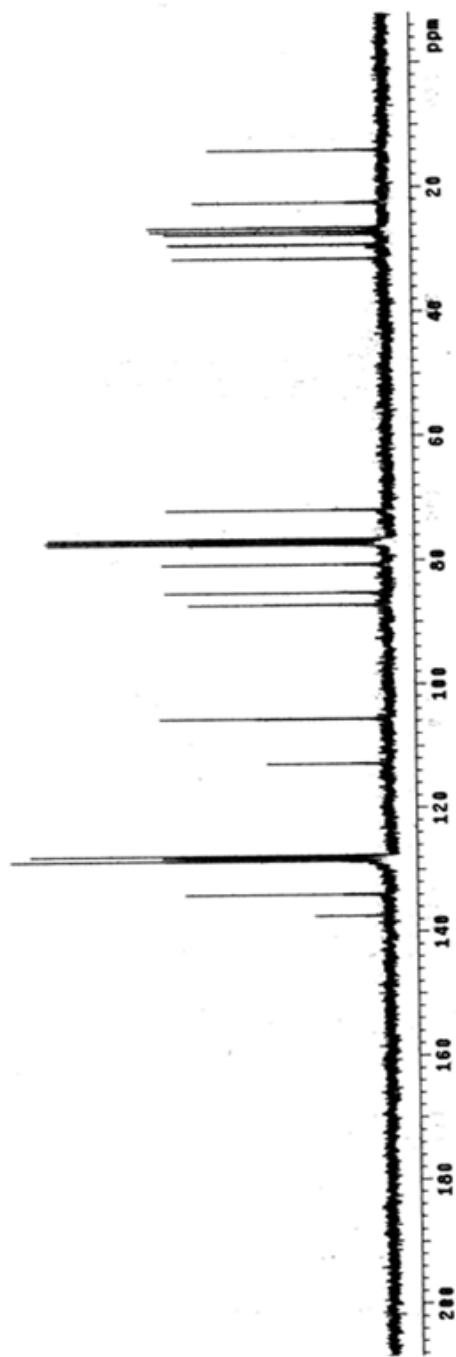
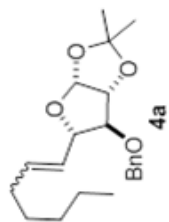
<sup>1</sup>H NMR spectrum of compound **4a** S3  
<sup>1</sup>H NMR spectrum of compound **4b** S5  
<sup>1</sup>H NMR spectrum of compound **5a** S7  
<sup>1</sup>H NMR spectrum of compound **5b**S9  
<sup>1</sup>H NMR spectrum of compound **6a** S11  
<sup>1</sup>H NMR spectrum of compound **7a** S13  
<sup>1</sup>H NMR spectrum of compound **8a** S15  
<sup>1</sup>H NMR spectrum of compound **9a** S17  
<sup>1</sup>H NMR spectrum of compound **10a** S19  
<sup>1</sup>H NMR spectrum of compound (+)-**2a** S21

<sup>13</sup>C NMR spectrum of compound **4a**S6  
<sup>13</sup>C NMR spectrum of compound **4b** S8  
<sup>13</sup>C NMR spectrum of compound **5a** S10  
<sup>13</sup>C NMR spectrum of compound **5b**S12  
<sup>13</sup>C NMR spectrum of compound **6a** S14  
<sup>13</sup>C NMR spectrum of compound **7a** S16  
<sup>13</sup>C NMR spectrum of compound **8a** S18  
<sup>13</sup>C NMR spectrum of compound **9a** S20  
<sup>13</sup>C NMR spectrum of compound **10a** S22  
<sup>13</sup>C NMR spectrum of compound (+)-**2a** S24

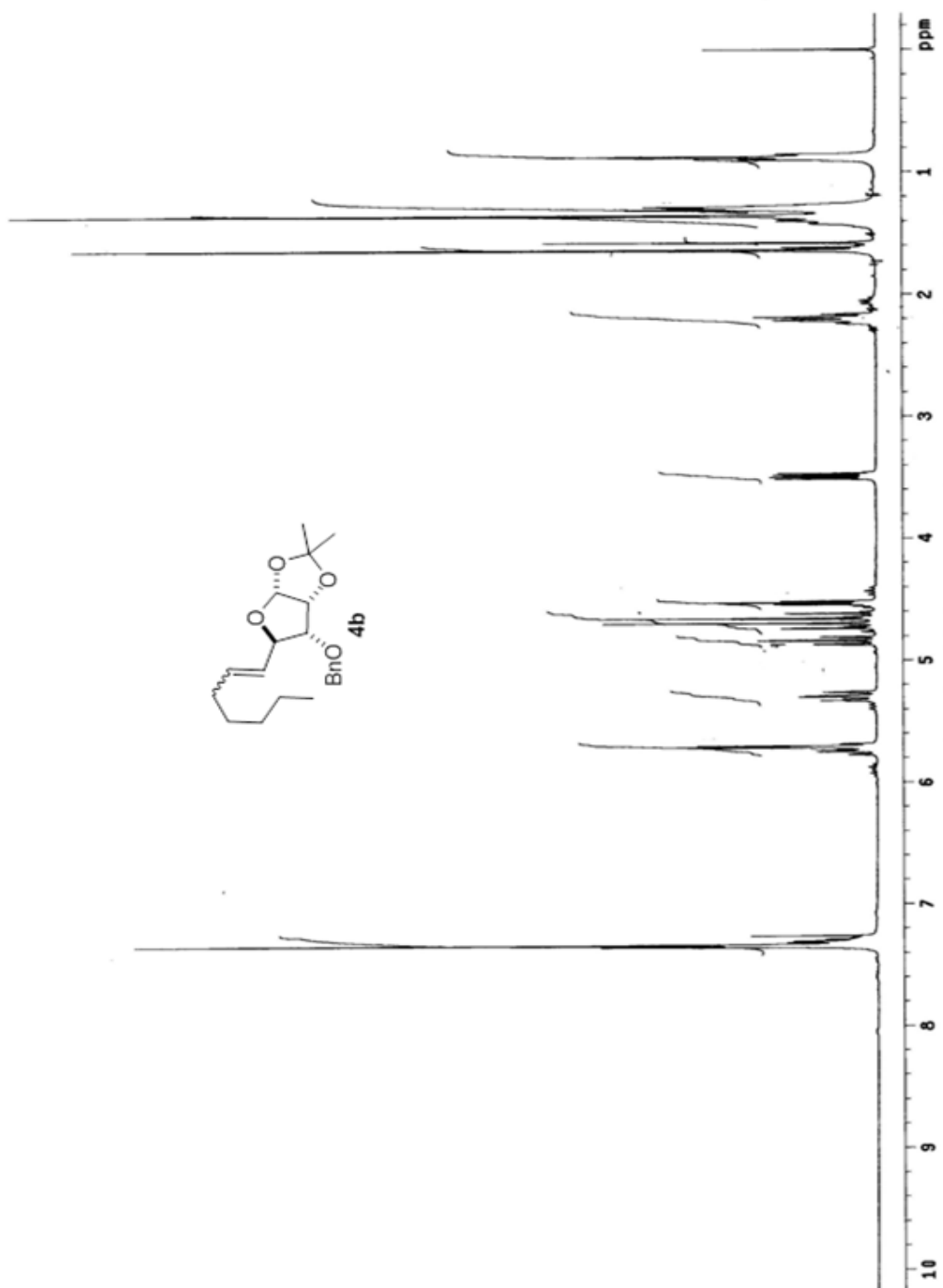
$^1\text{H}$  NMR and  $^{13}\text{C}$  NMR Spectra



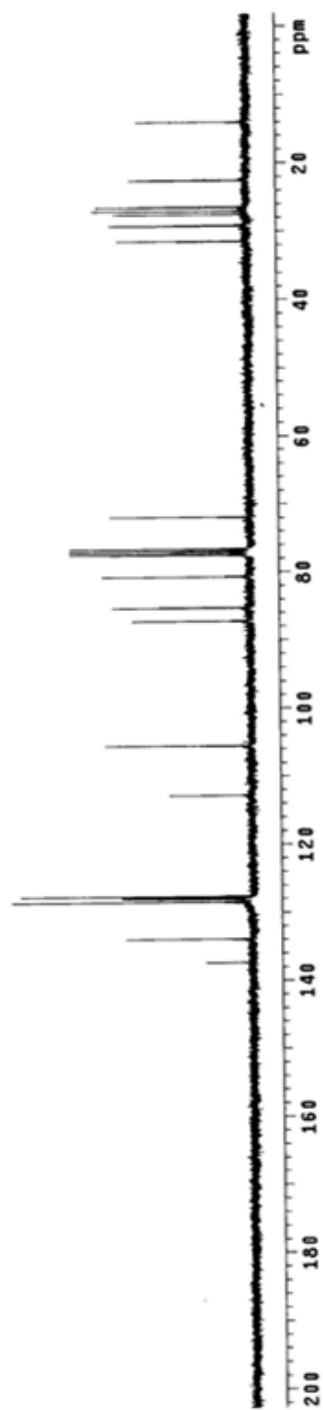
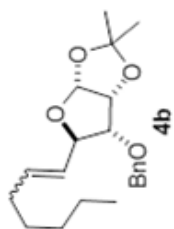
**Figure 1:**  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 4a.



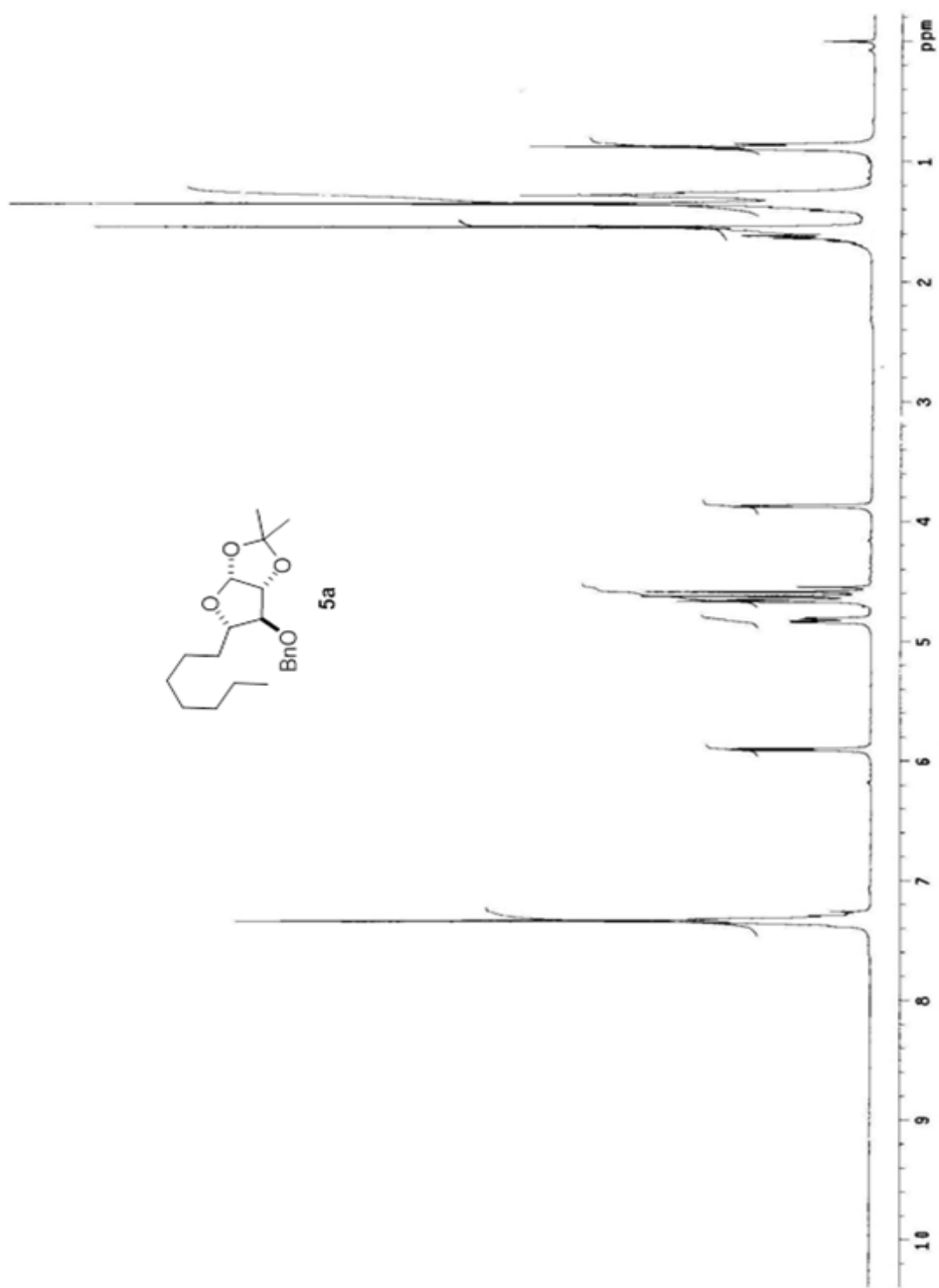
**Figure 2:**  $^{13}\text{C}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound **4a**.



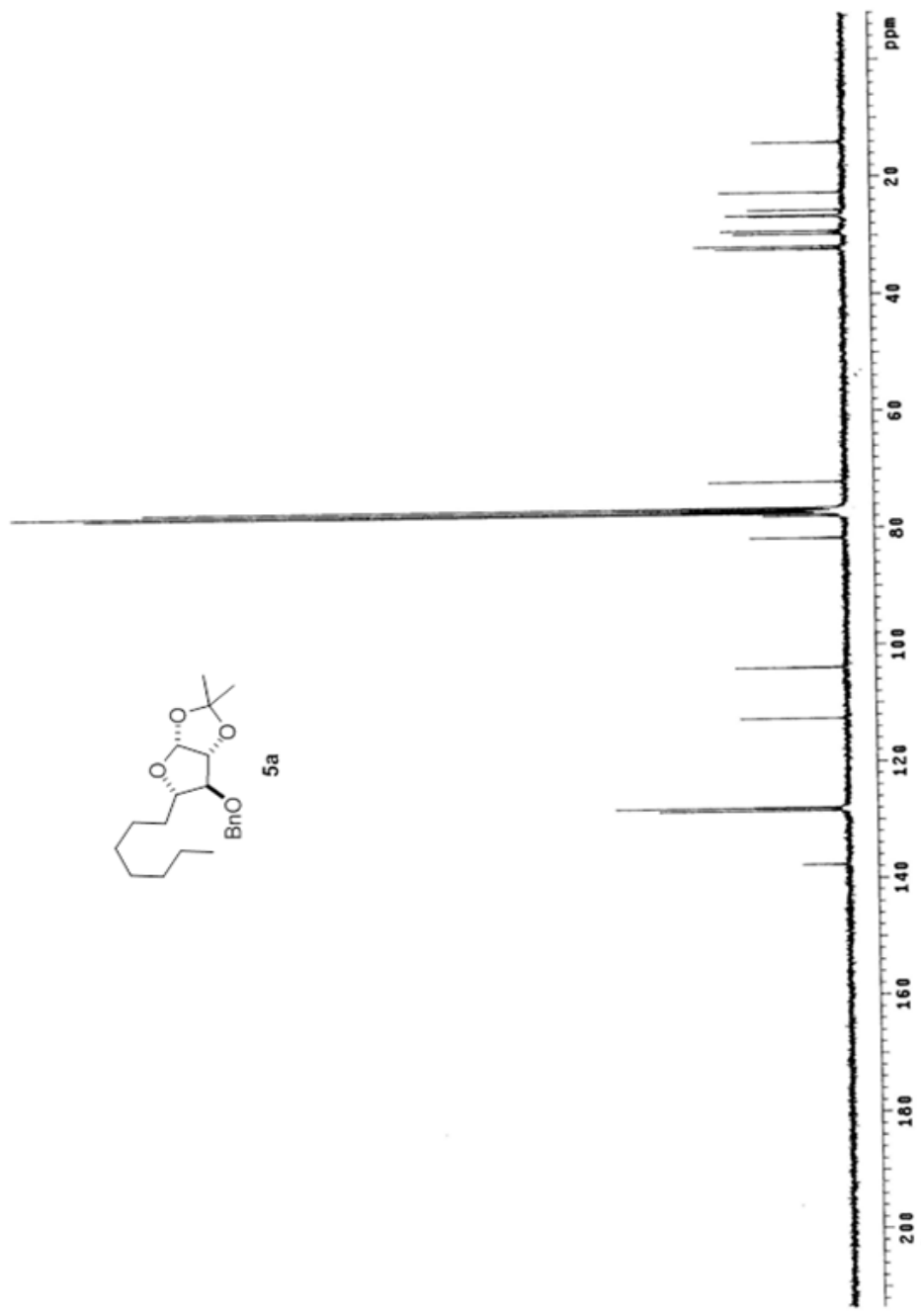
**Figure 3:**  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 4b.



**Figure 4:**  $^{13}\text{C}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 4b.

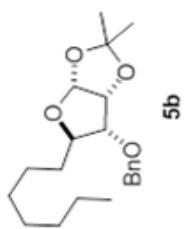
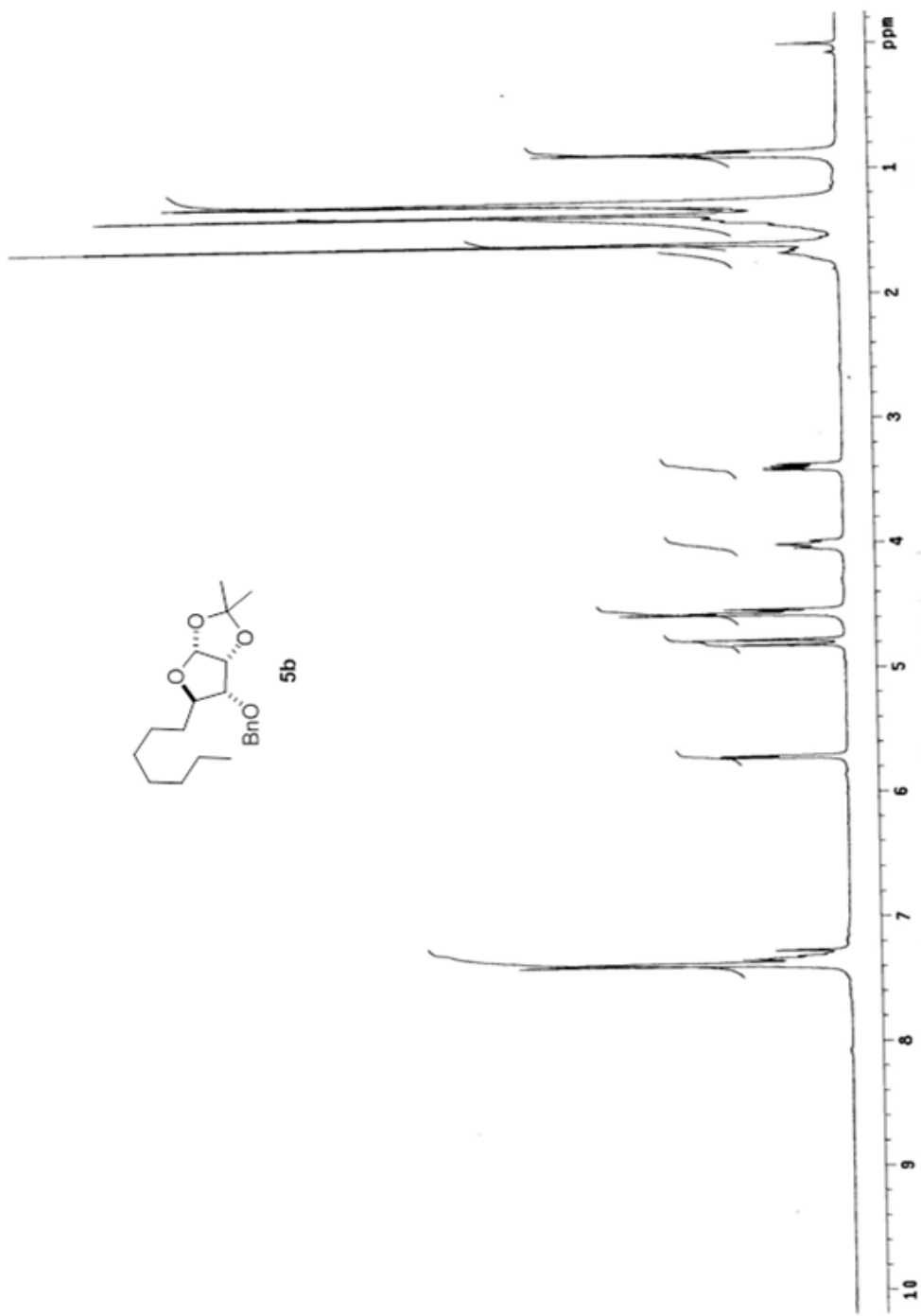


**Figure 5:**  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 5a.



**Figure 6:** <sup>13</sup>C NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 5a.





**Figure 7:** <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 5b.

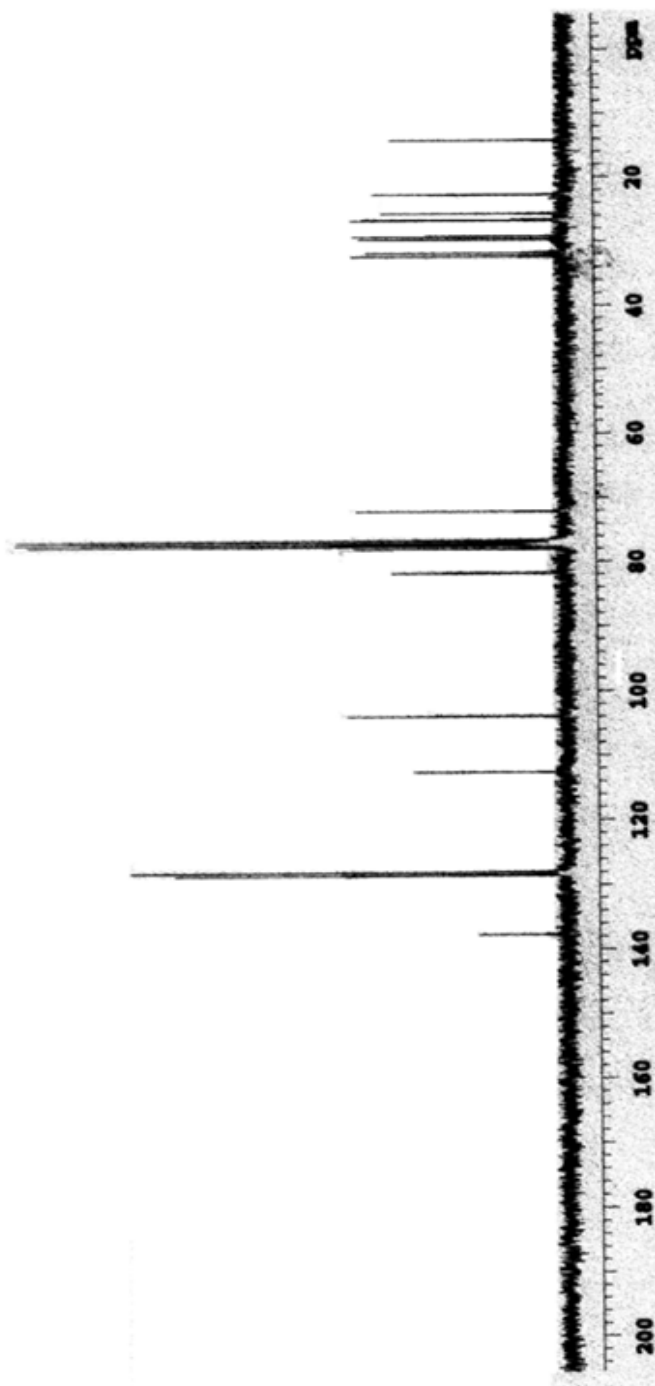
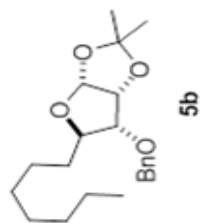
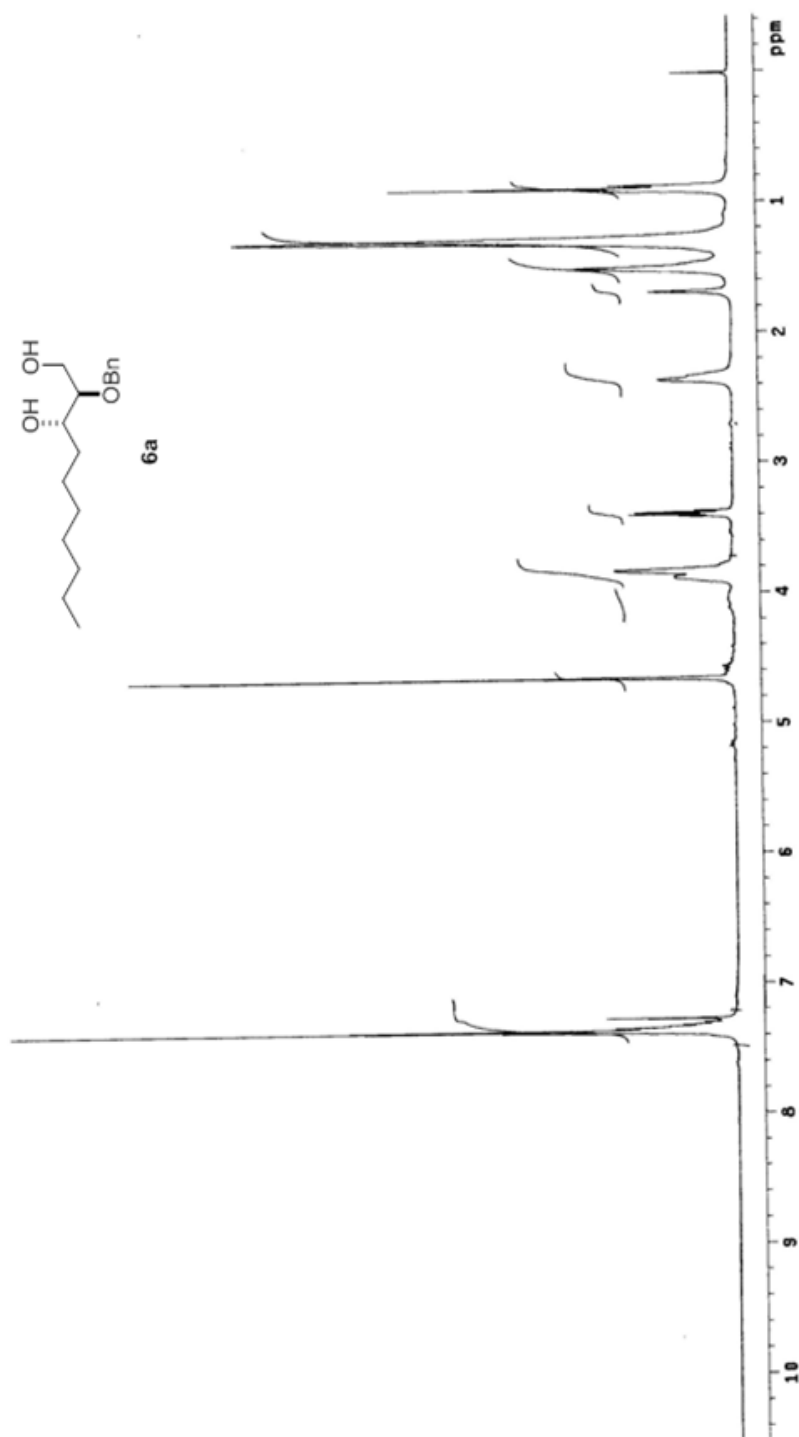


Figure 8:  $^{13}\text{C}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 5b.



**Figure 9:**  $^1\text{H}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 6a.

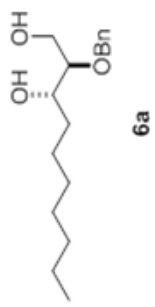
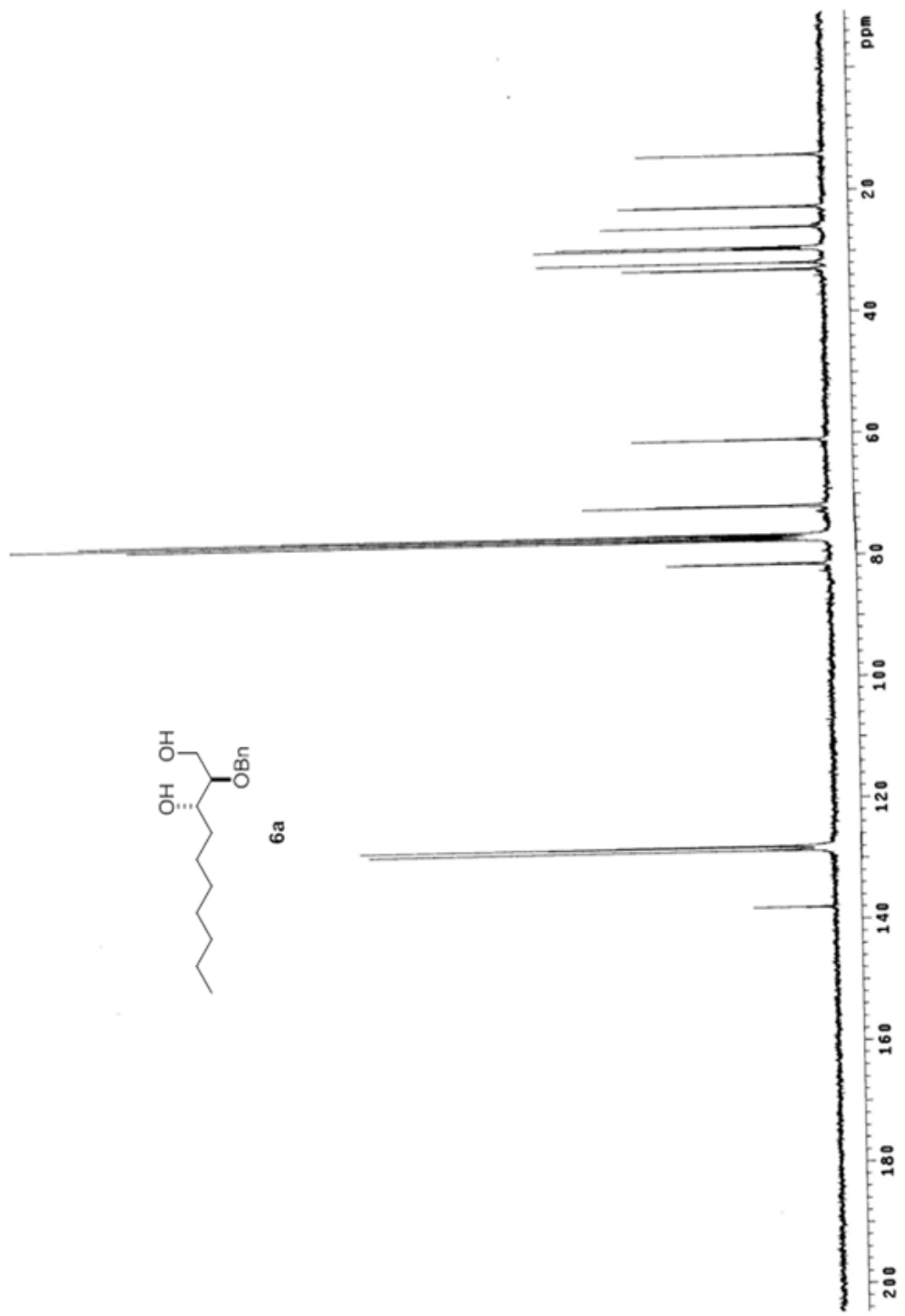
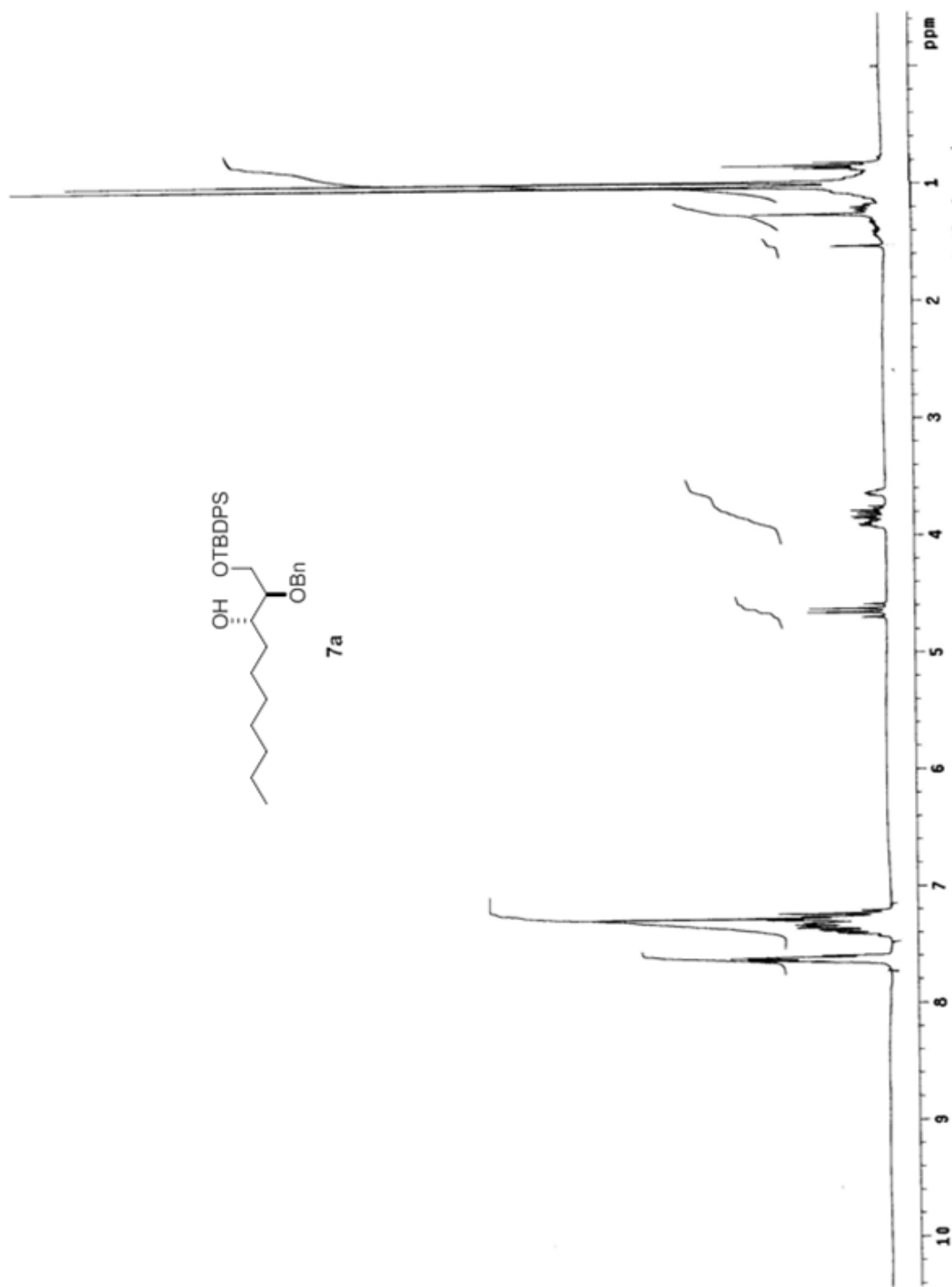


Figure 10:  $^{13}\text{C}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 6a.



**Figure 11:** <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 7a.

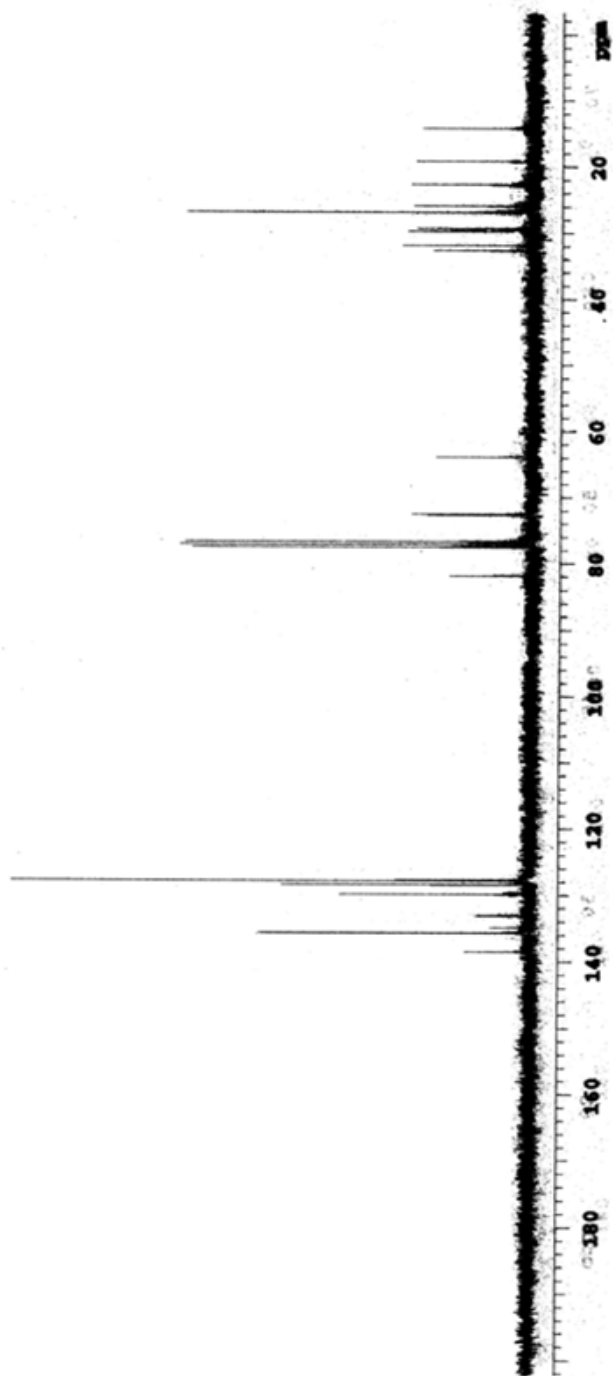
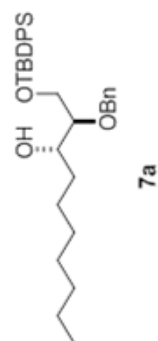
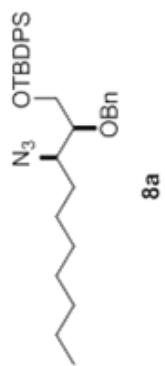
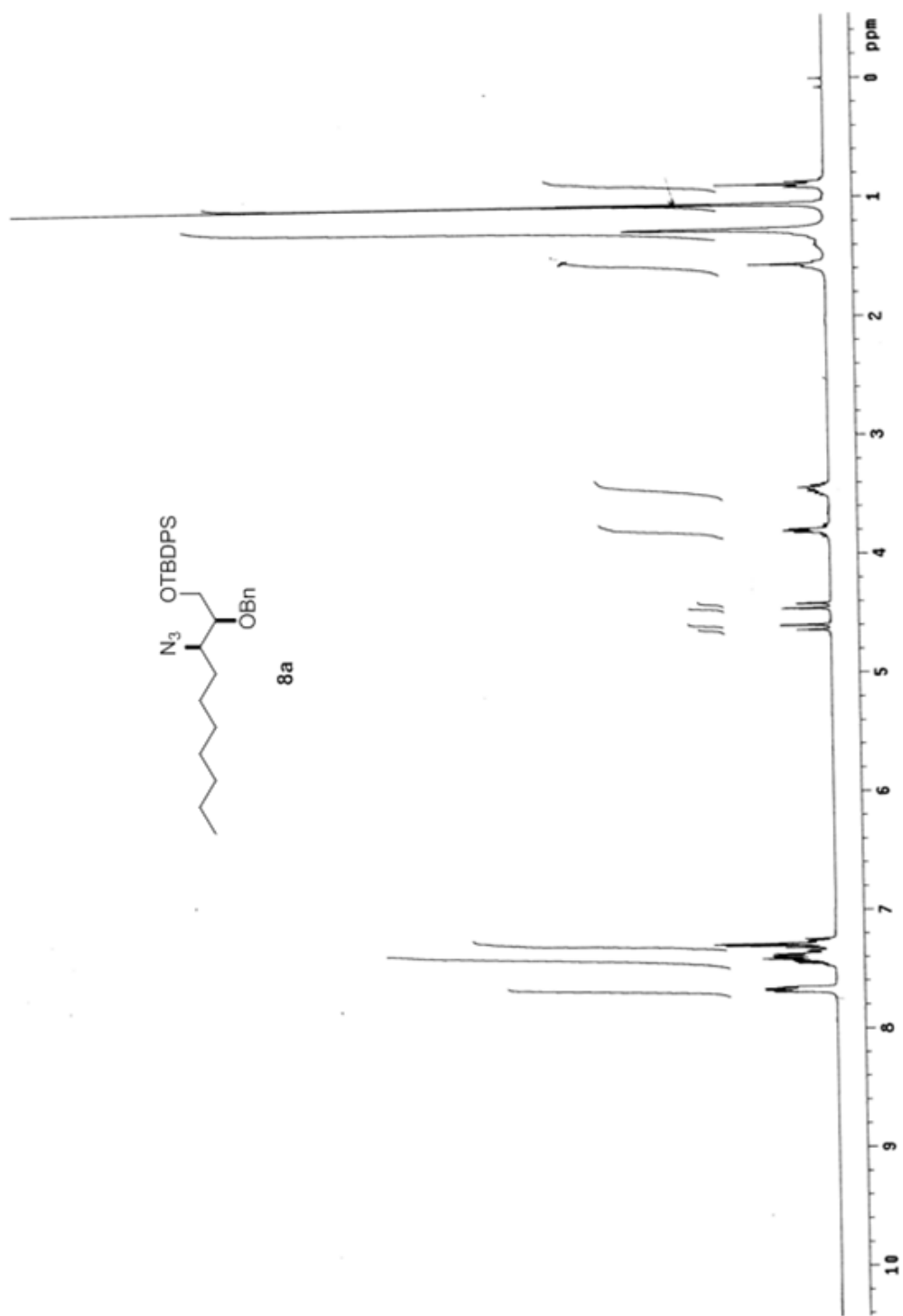


Figure 12:  $^{13}\text{C}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 7a.



**Figure 13:** <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 8a.

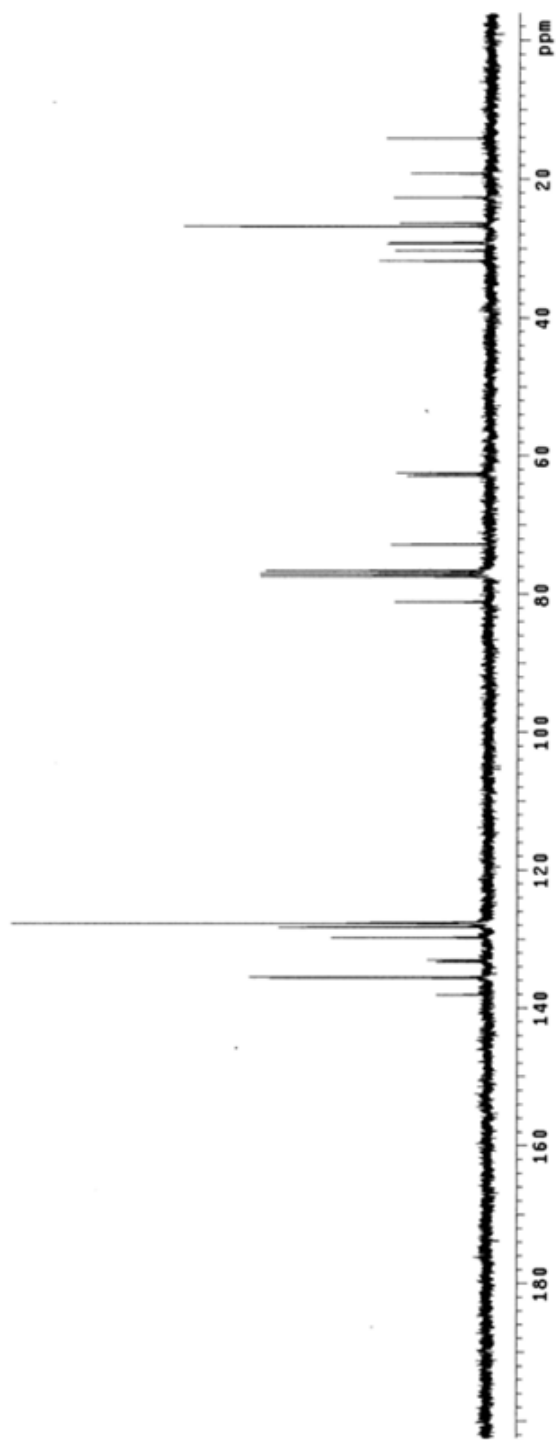
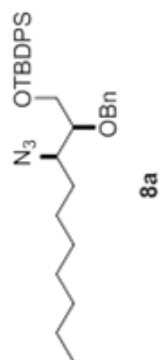
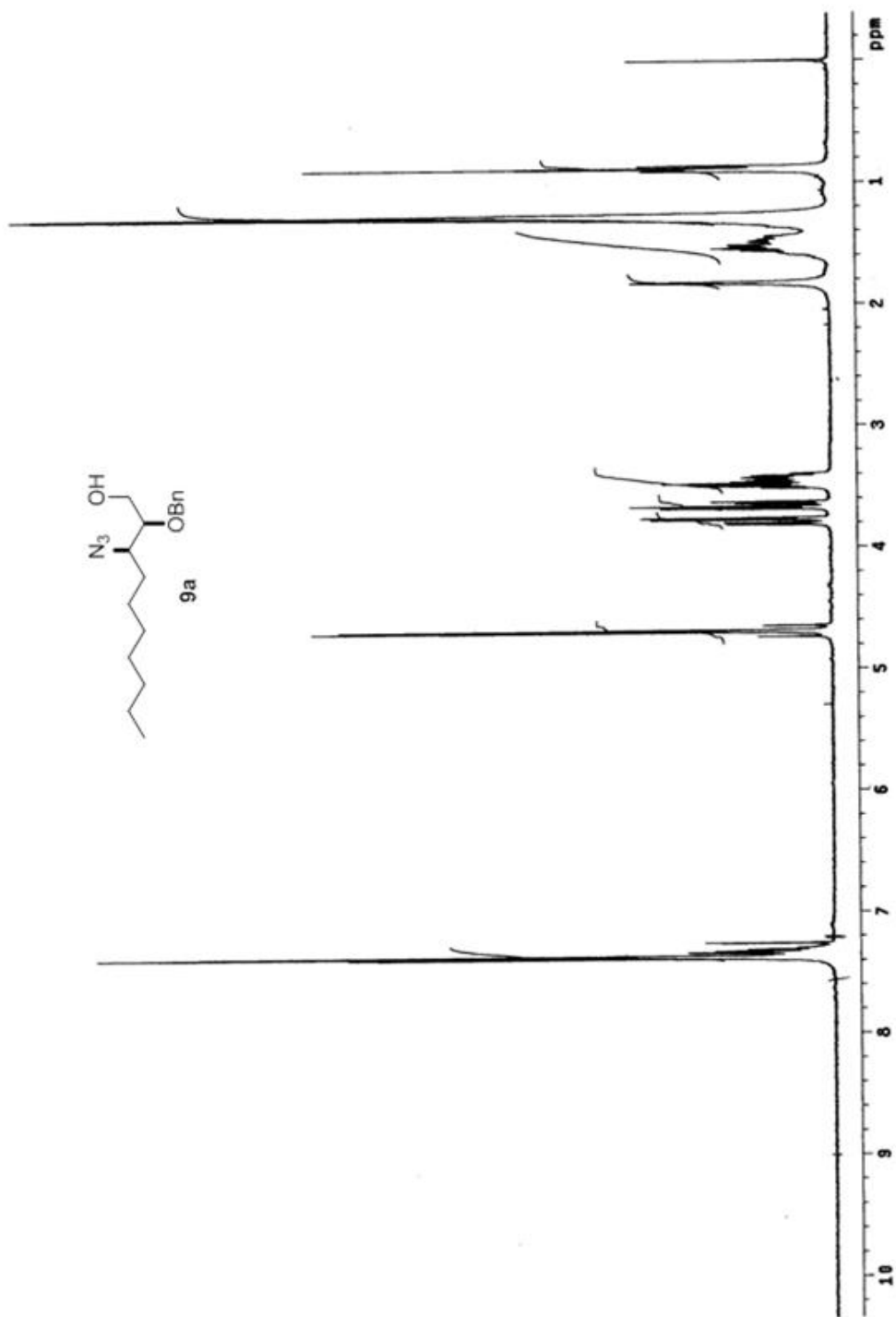


Figure 14: <sup>13</sup>C NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 8a.





**Figure 15:** <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 9a.

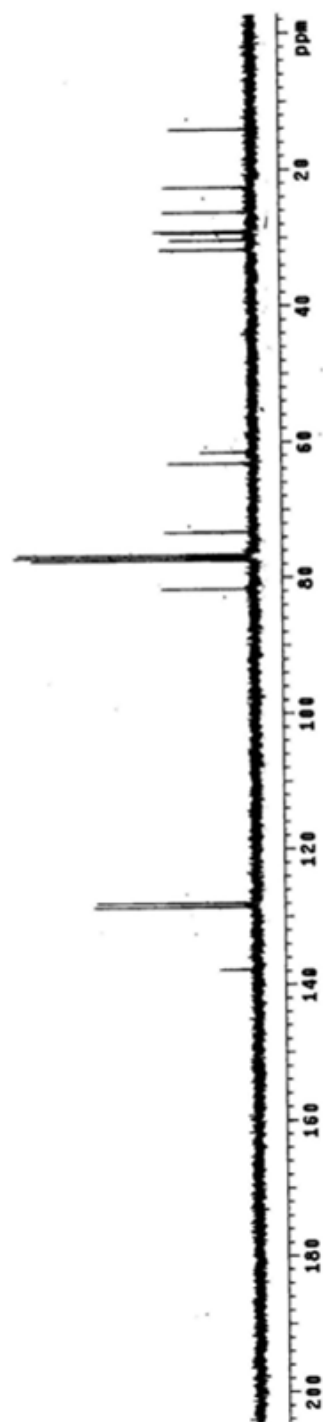
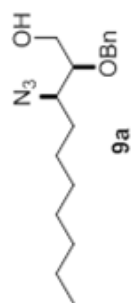
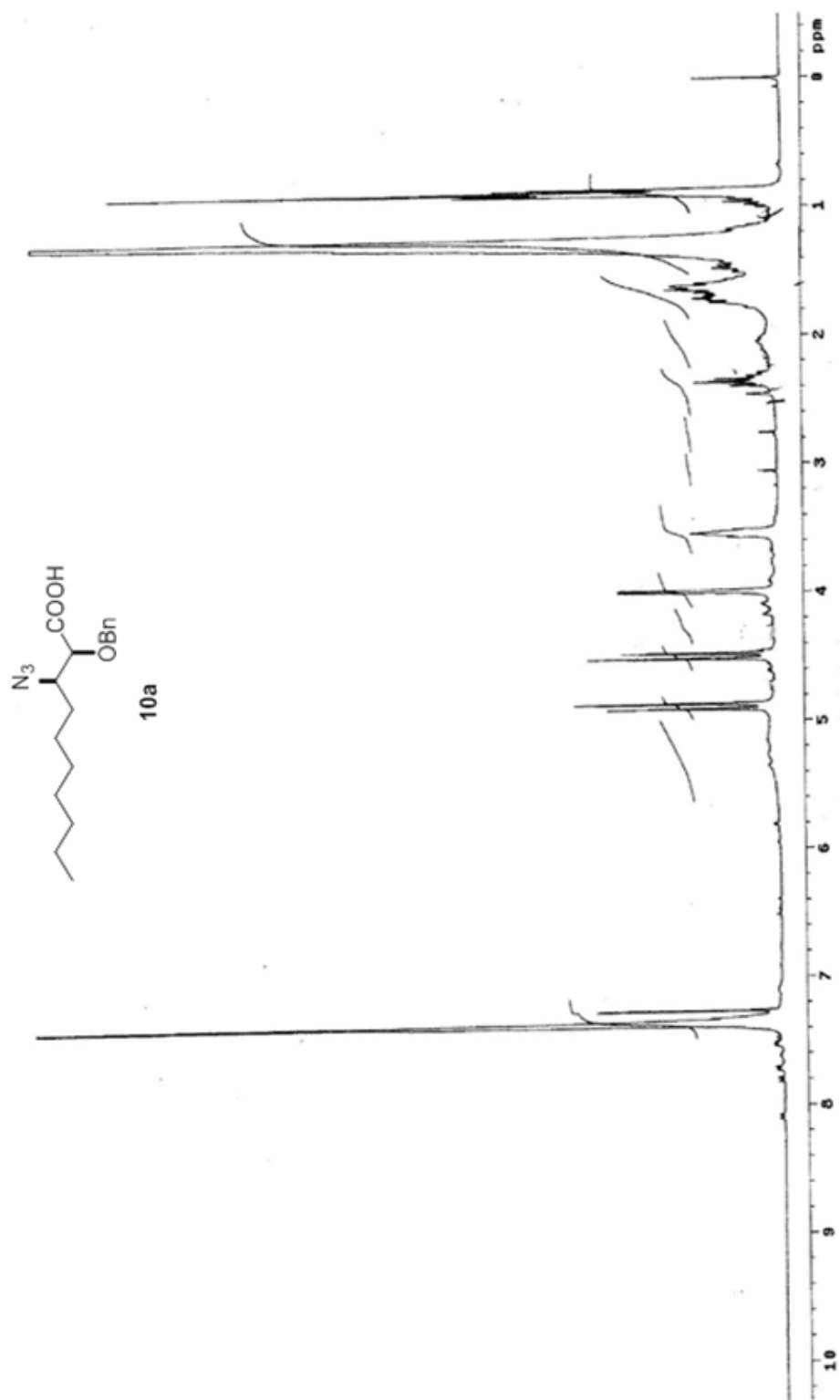
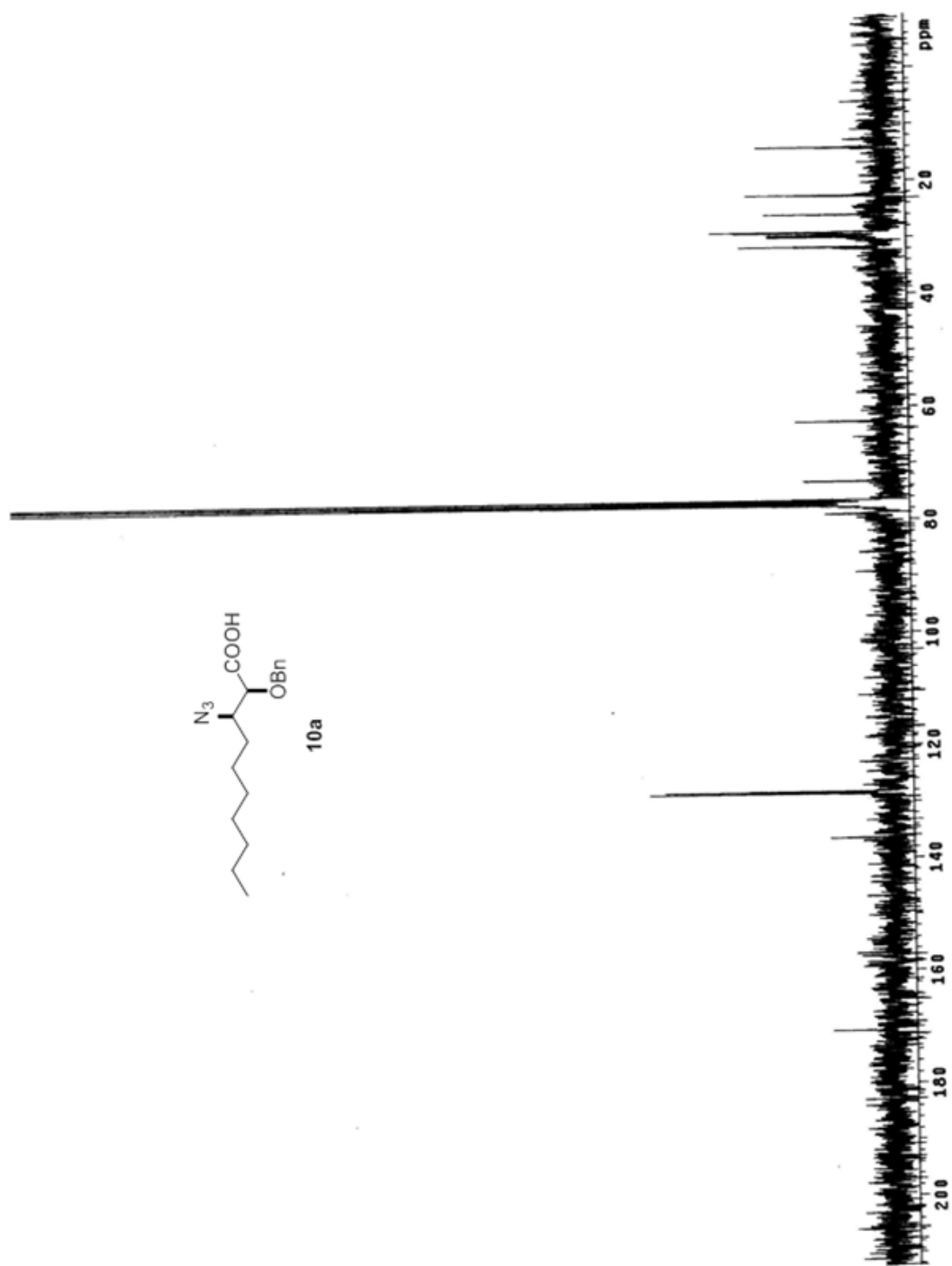


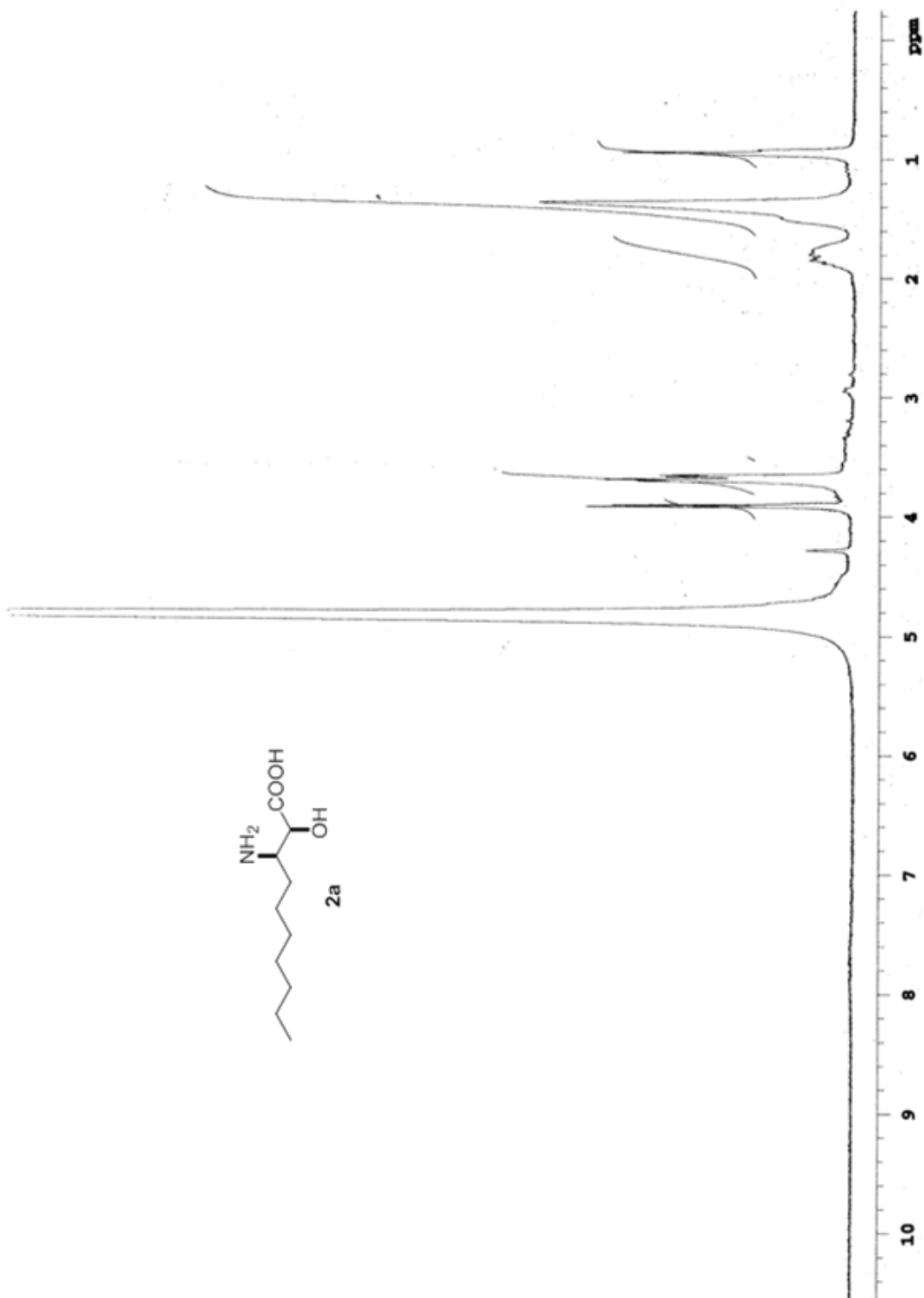
Figure 16:  $^{13}\text{C}$  NMR (300 MHz,  $\text{CDCl}_3$ ) Spectrum of Compound 9a.



**Figure 17:** <sup>1</sup>H NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 10a.



**Figure 18:** <sup>13</sup>C NMR (300 MHz, CDCl<sub>3</sub>) Spectrum of Compound 10a.



**Figure 18:** <sup>1</sup>H NMR (300 MHz, D<sub>2</sub>O) Spectrum of Compound 2a.

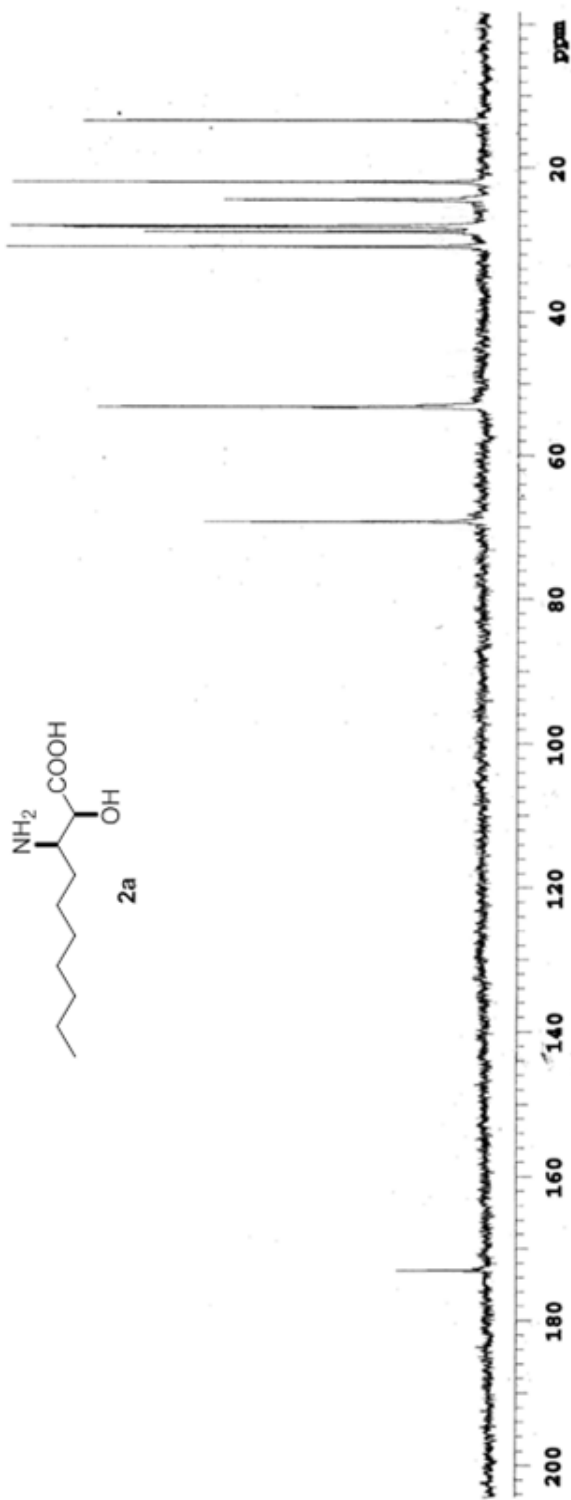


Figure 20:  $^{13}\text{C}$  NMR (300 MHz,  $\text{D}_2\text{O}$ ) Spectrum of Compound 2a.