

# Solid-phase synthesis of a library of linear oligoester ion-channels

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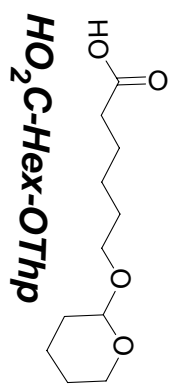
tmf@uvic.ca

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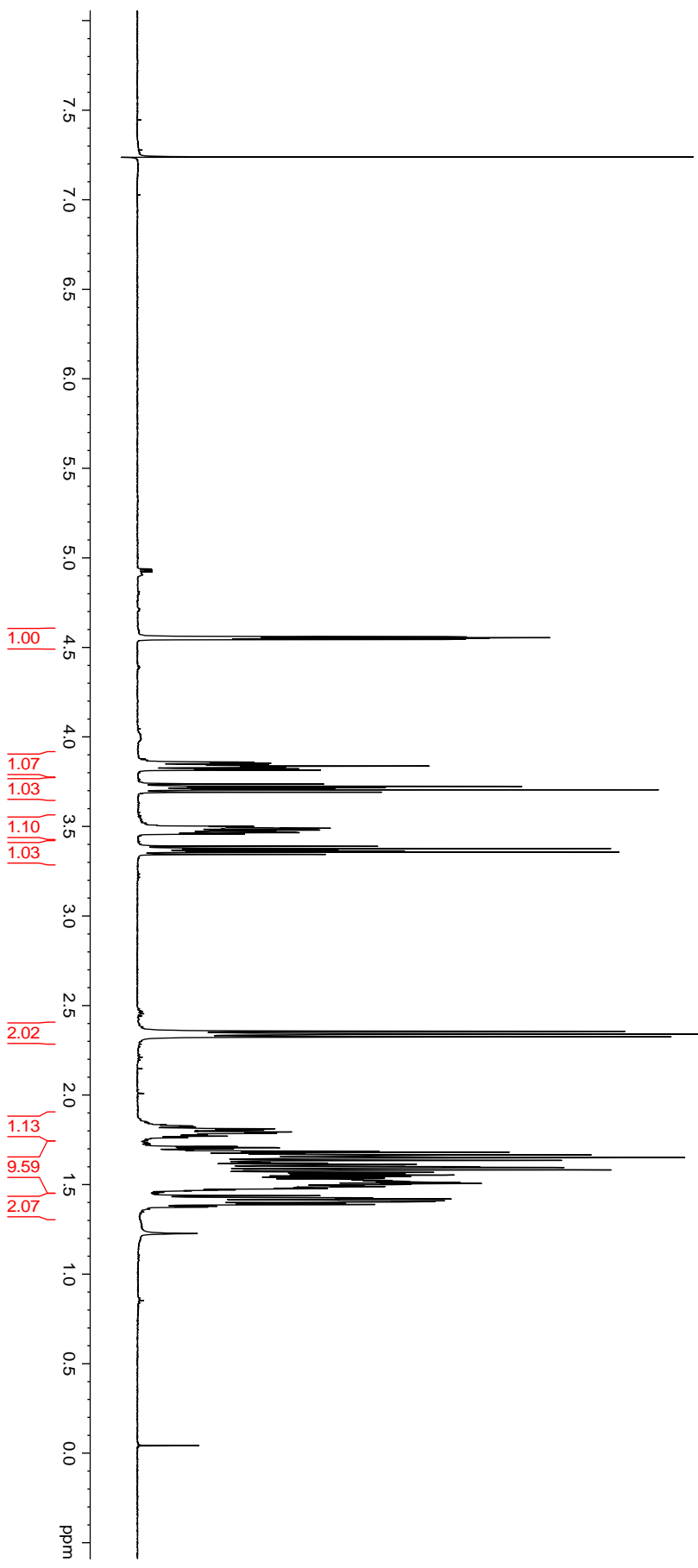
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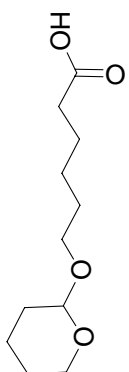
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**General Methods.** Unless specified, reagents were purchased from Aldrich and were used without further purification. THF used for solid-phase reactions was dried over sodium and benzophenone and distilled. Wang Resin was purchased from Anaspec Incorporated (loading capacity 0.75 meq/g, 100-200 mesh). New resin is swollen and washed in THF before usage. Solid-phase reactions were carried out in 25 mL solid-phase reaction vessels and were agitated by a mechanical shaker. Column chromatography was performed on silica gel (grade 60, 63-200 mesh). Size exclusion separation of the oligoester compounds was performed on a Lipophilic Sephadex LH-20 column. All amounts for solid-phase reactions are for 200 mg of resin. Yields for the solid-phase reactions are reported relative to their starting resin loading capacity.



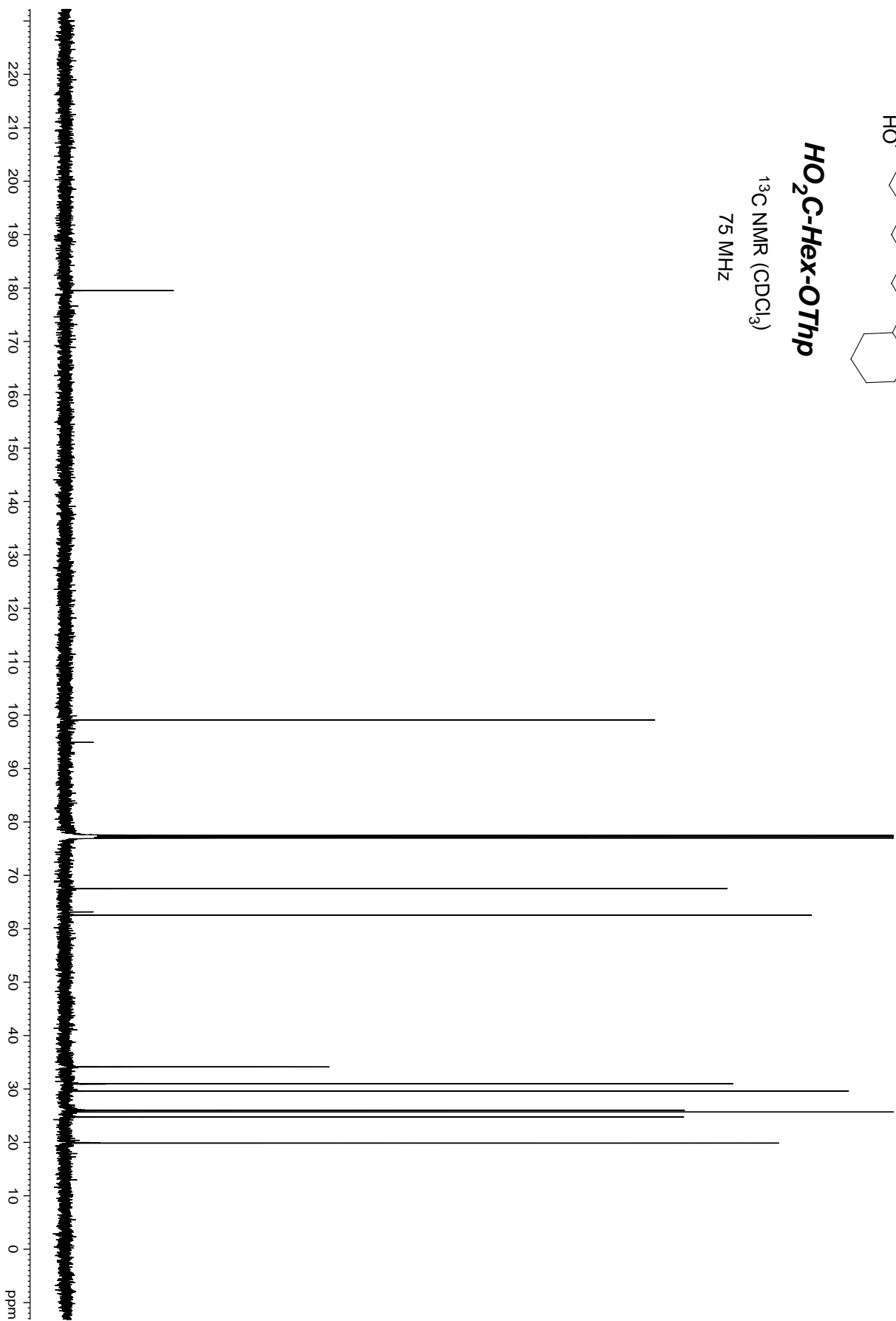
<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
300 MHz

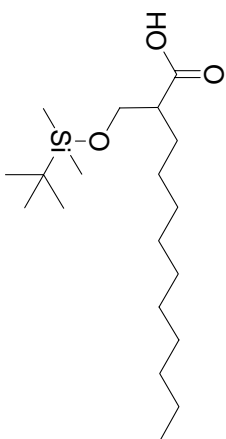




***HO<sub>2</sub>C-Hex-OThp***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)  
75 MHz

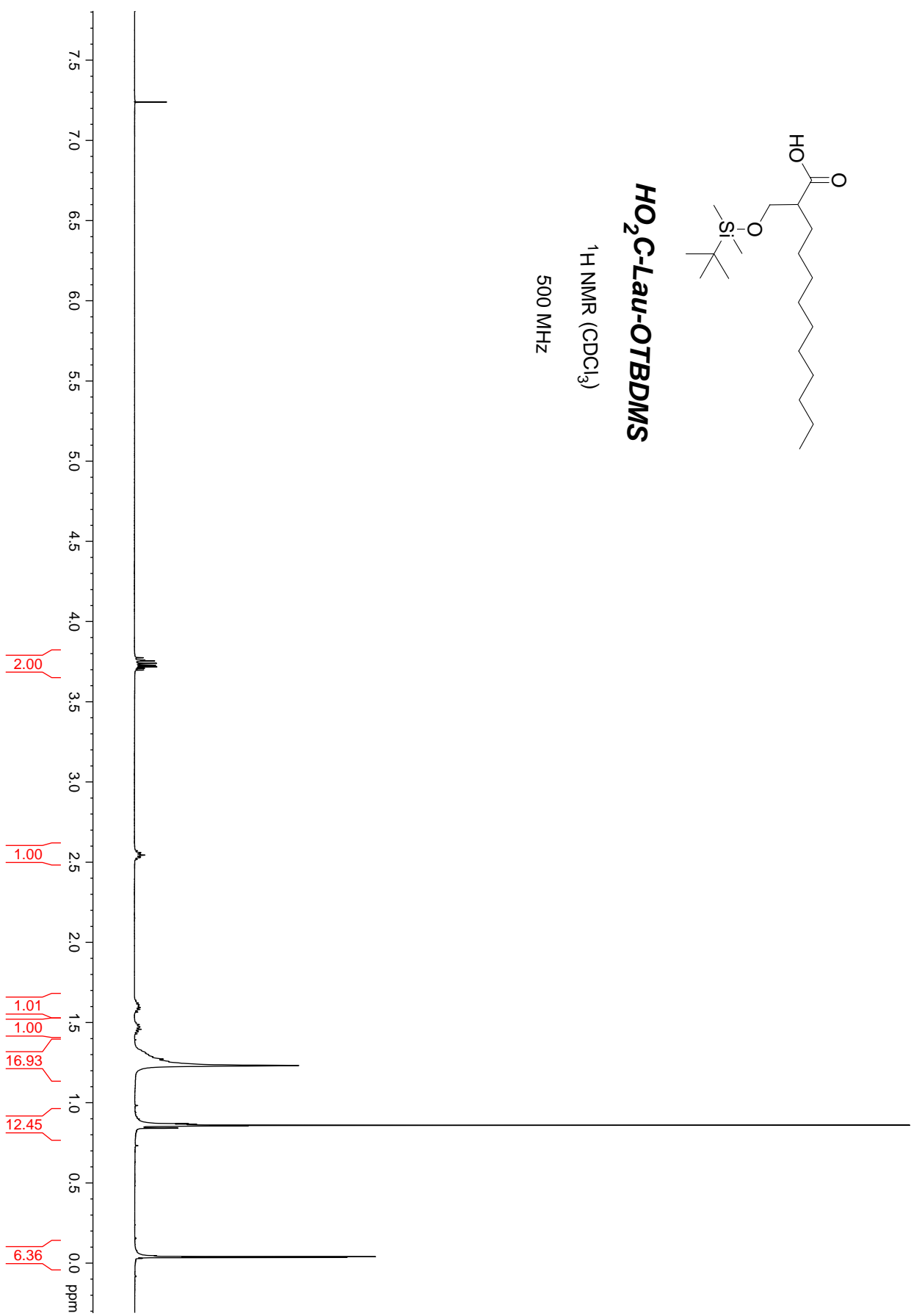


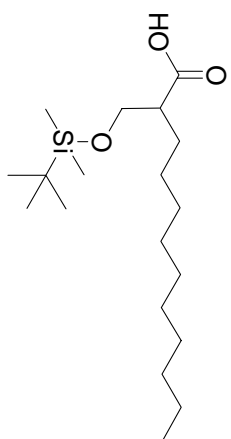


### ***HO<sub>2</sub>C-Lau-OTBDMS***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

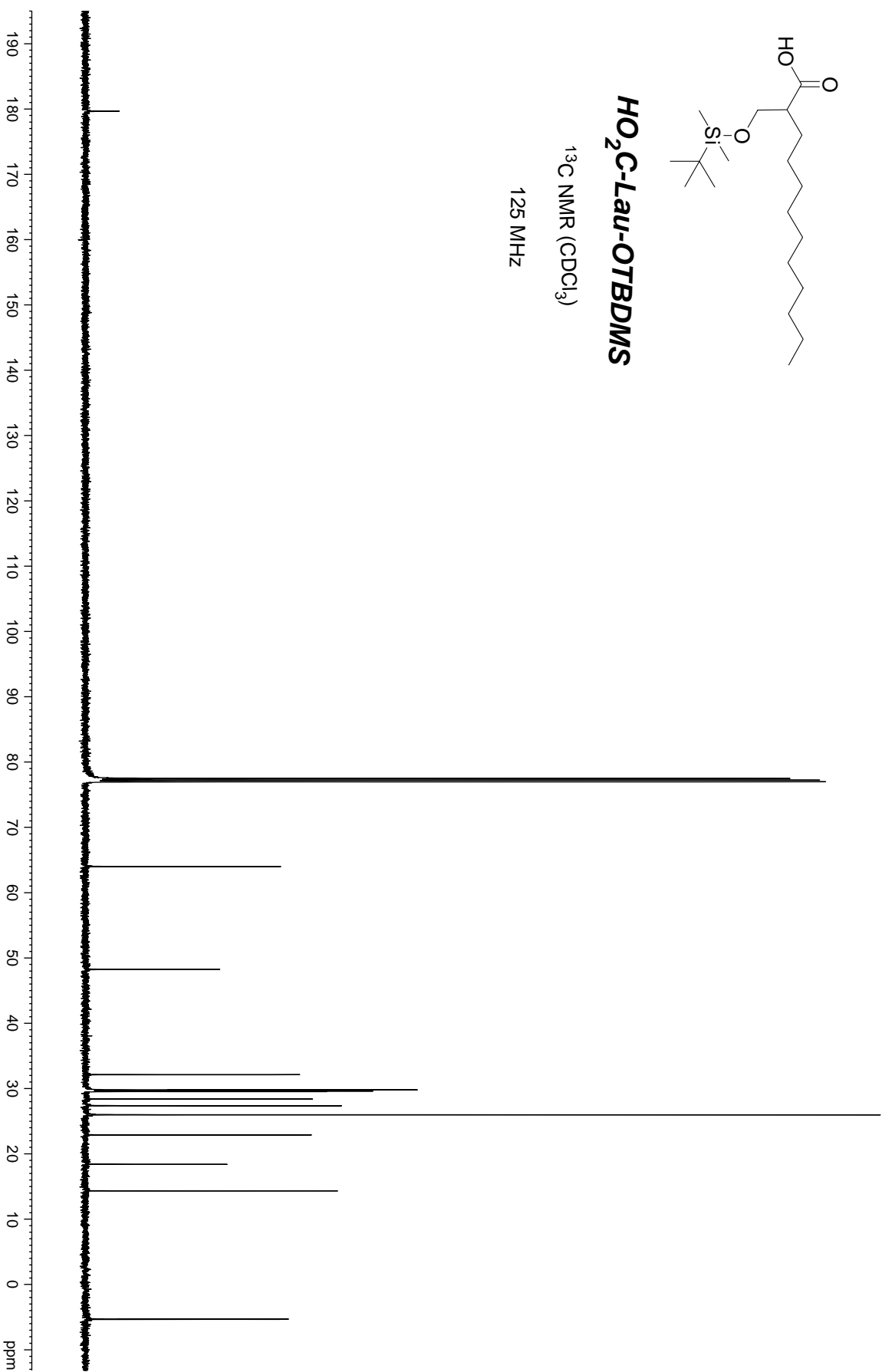


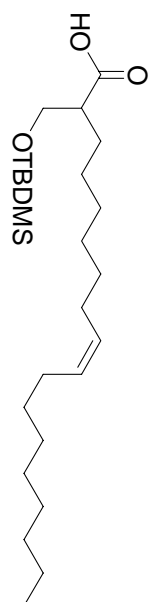


### ***HO<sub>2</sub>C-Lau-OTBDMS***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

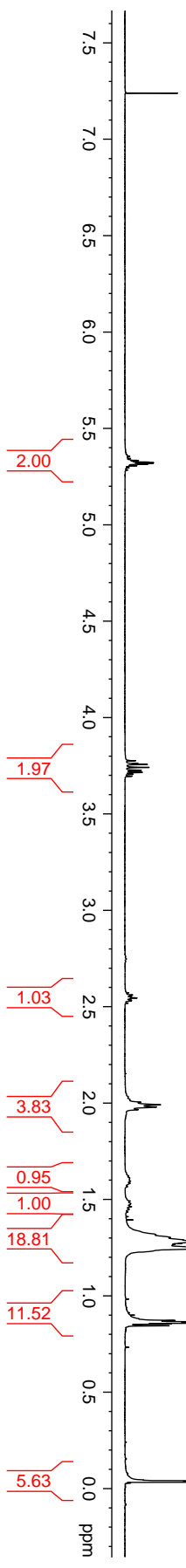




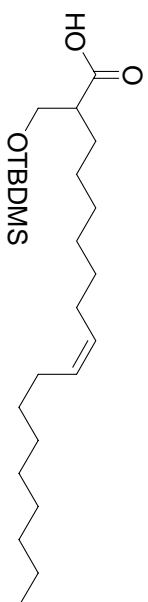
### ***HO<sub>2</sub>C-Ole-OTBDMS***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz



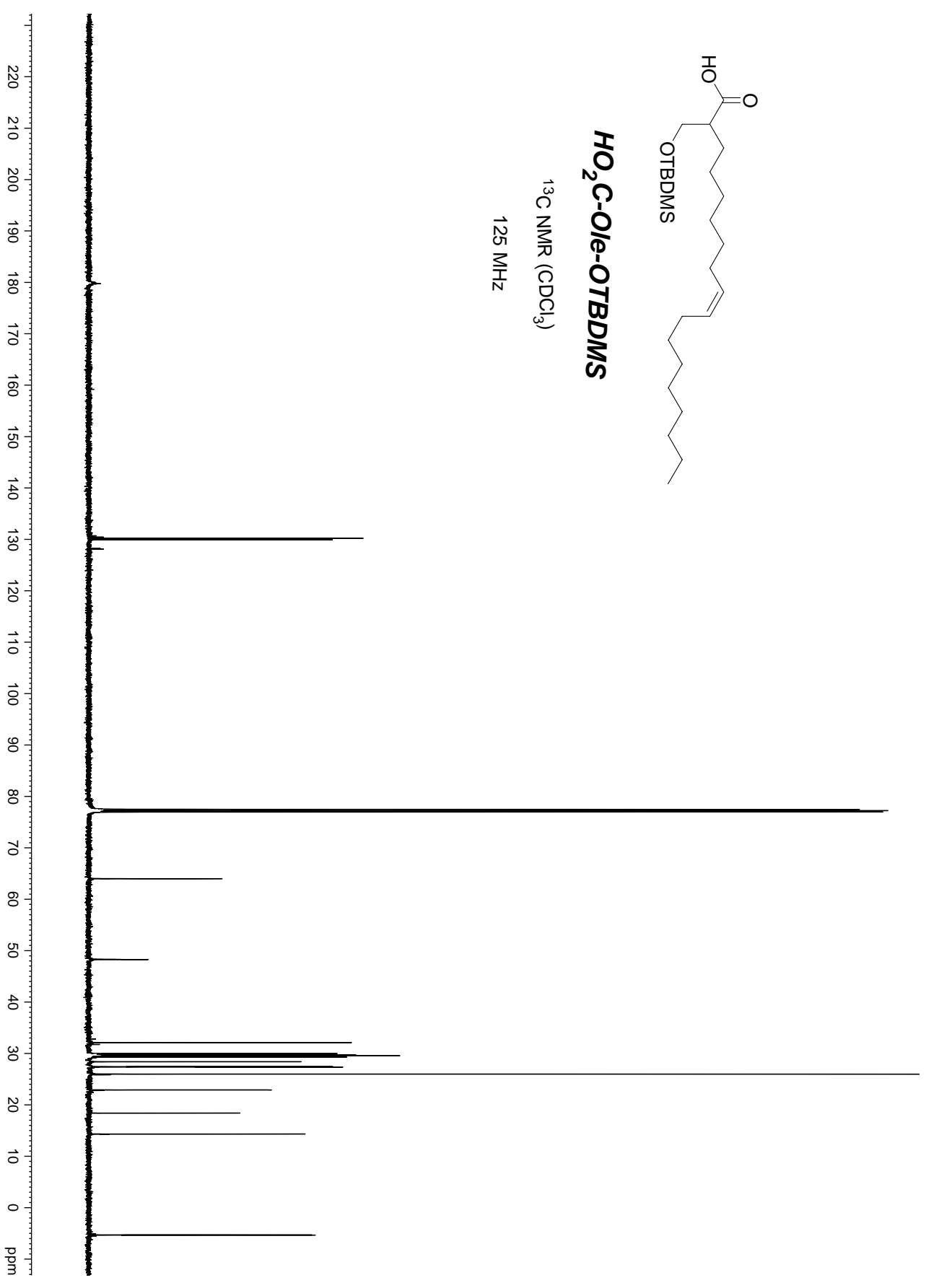


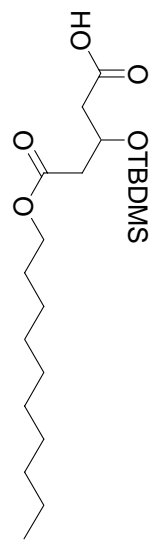


***HO<sub>2</sub>C-Ole-OTBDMS***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

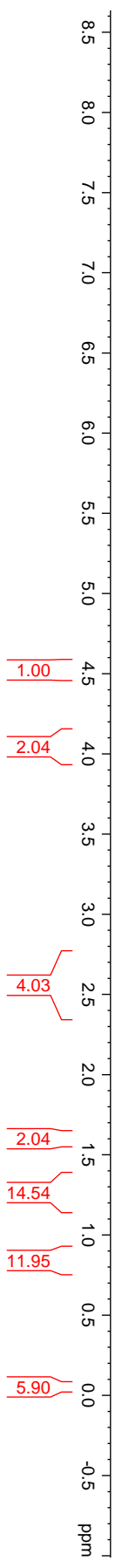
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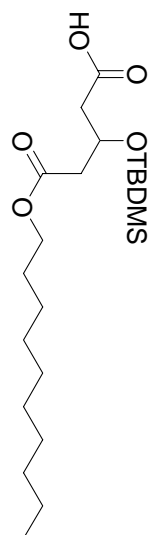




**HO<sub>2</sub>C-G(10)-OTBDMS**

<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
500 MHz

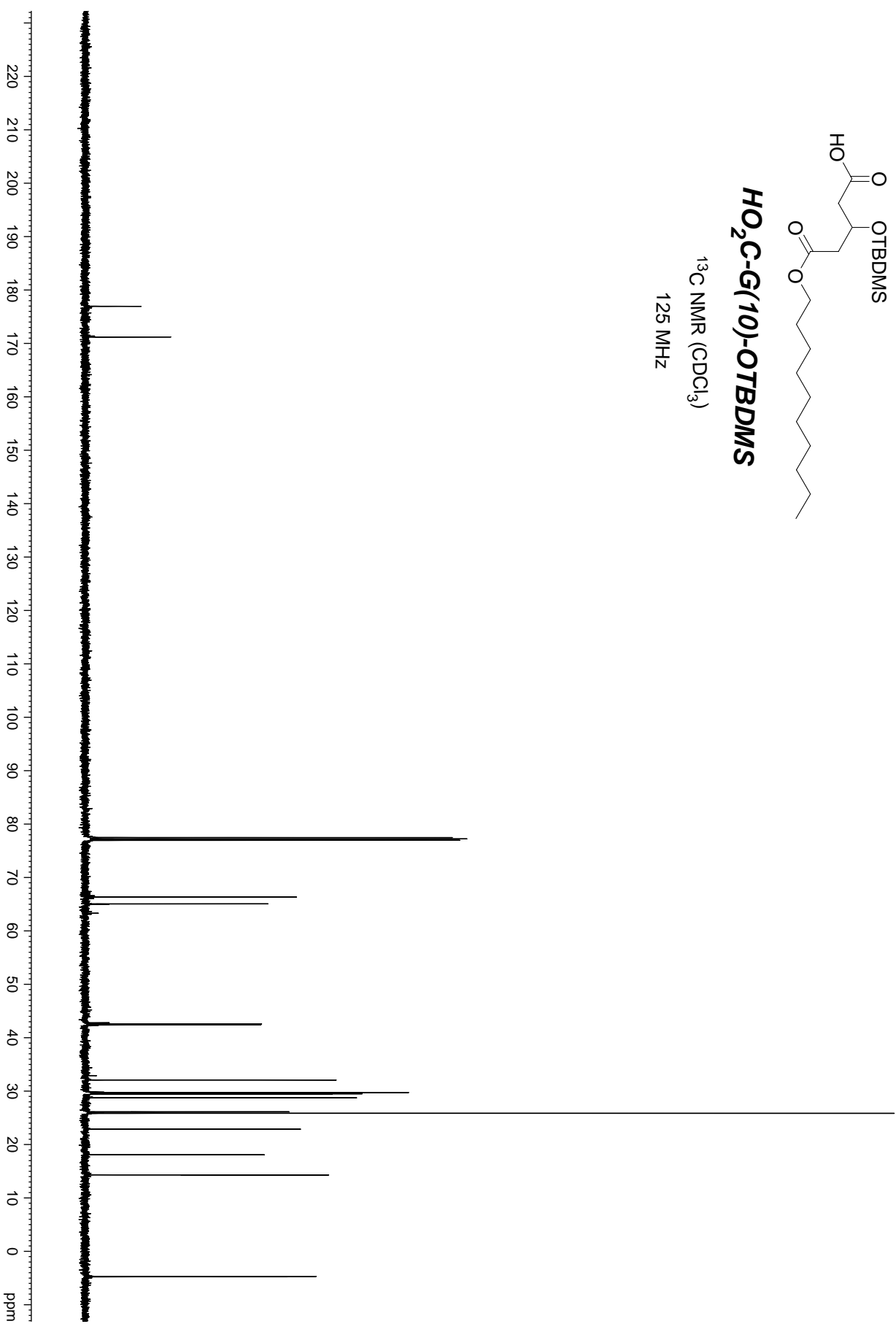


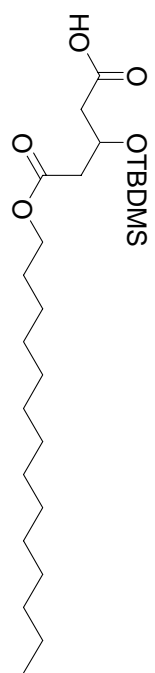


### *HO<sub>2</sub>C-G(10)-OTBDMS*

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

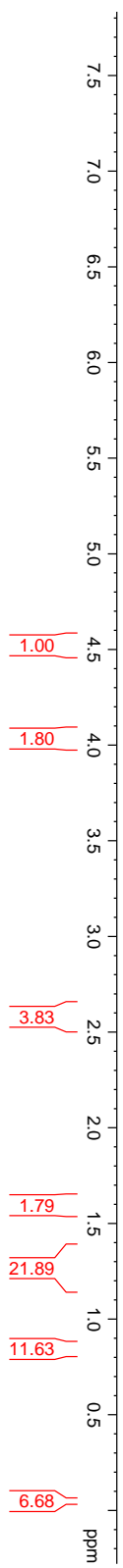


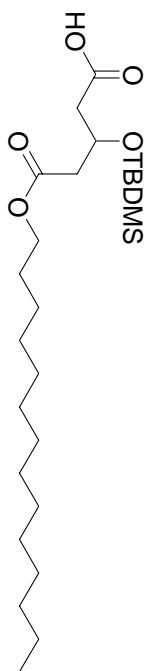


### ***HO<sub>2</sub>C-G(14)-OTBDMS***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

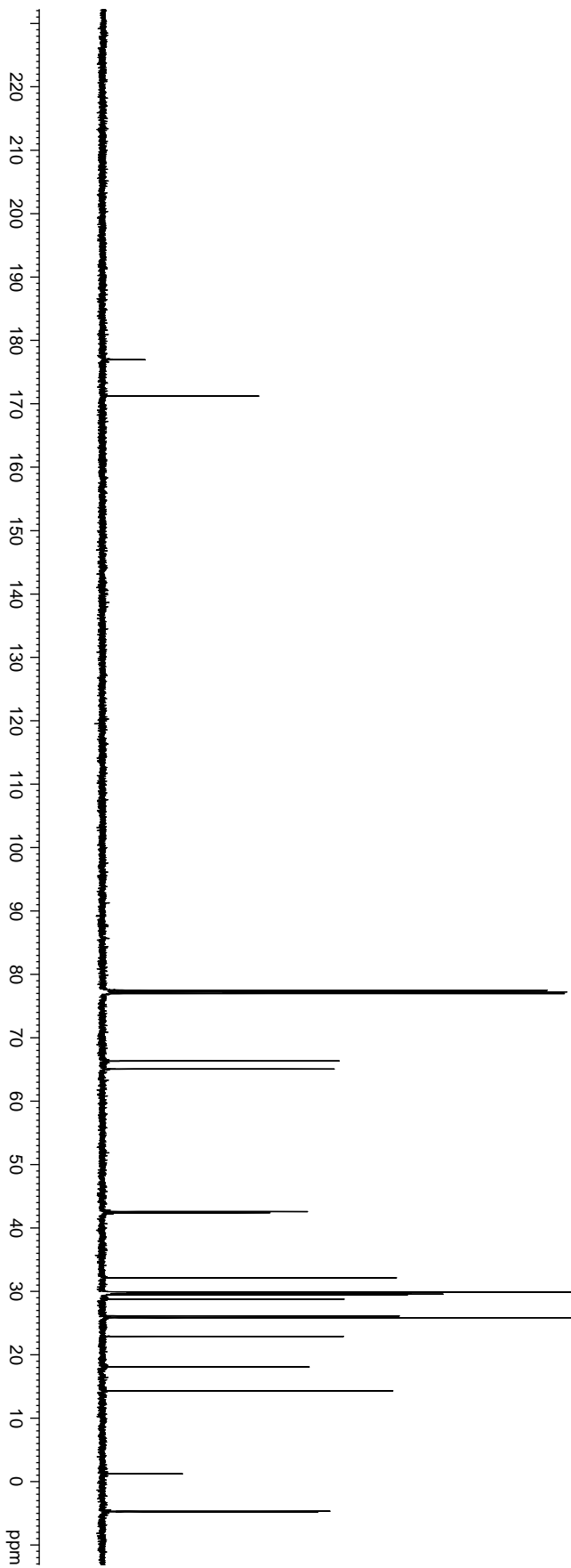
500 MHz



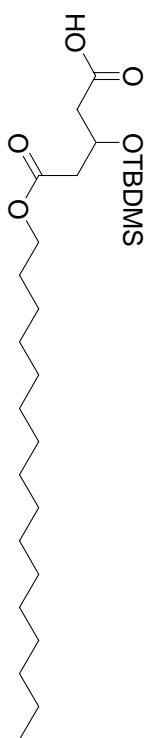


***HO<sub>2</sub>C-G(14)-OTBDMS***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)  
125 MHz



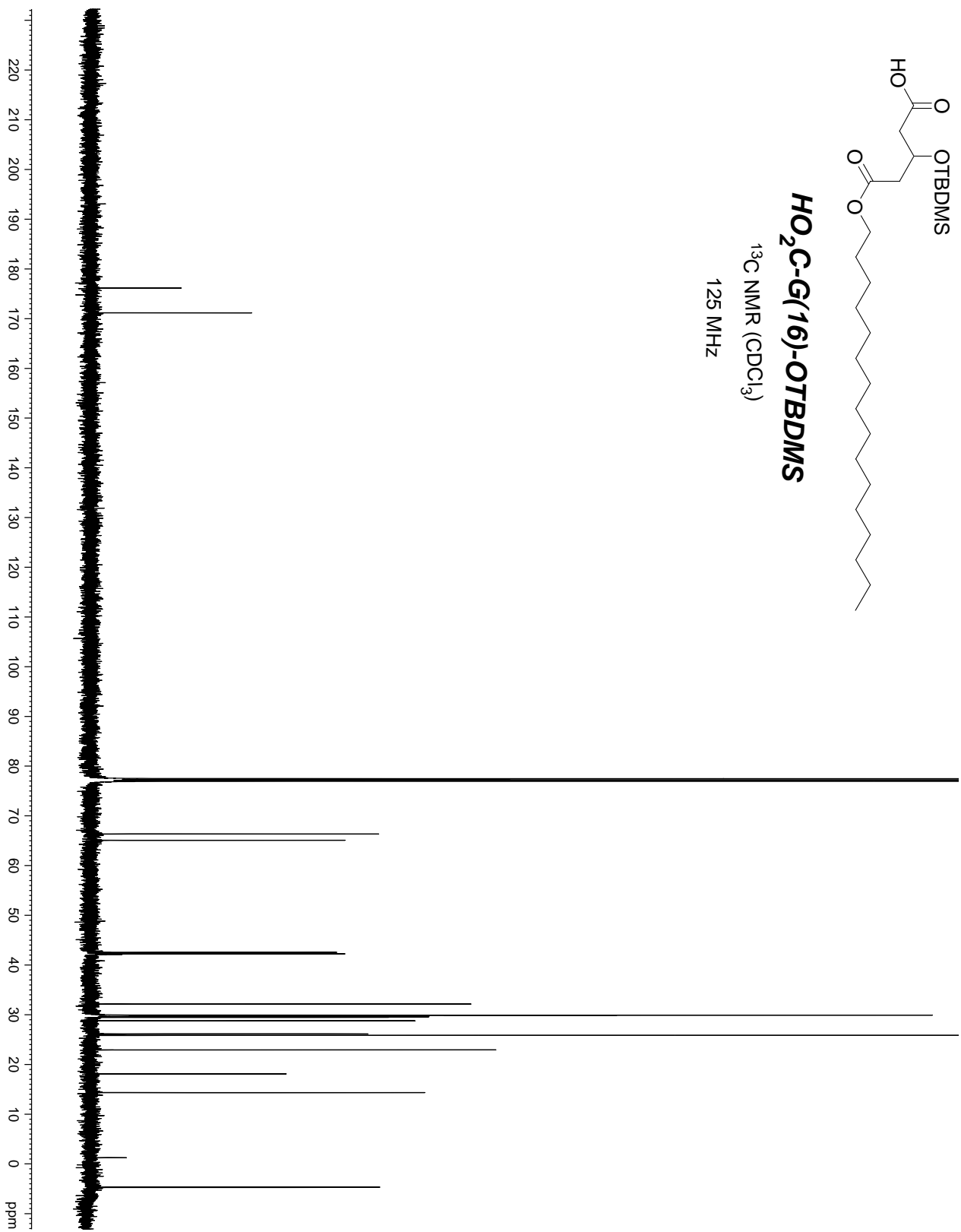


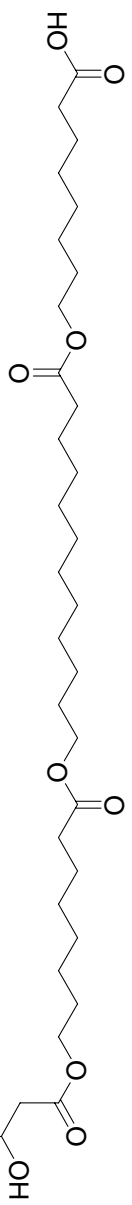


### ***HO<sub>2</sub>C-G(16)-OTBDMS***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

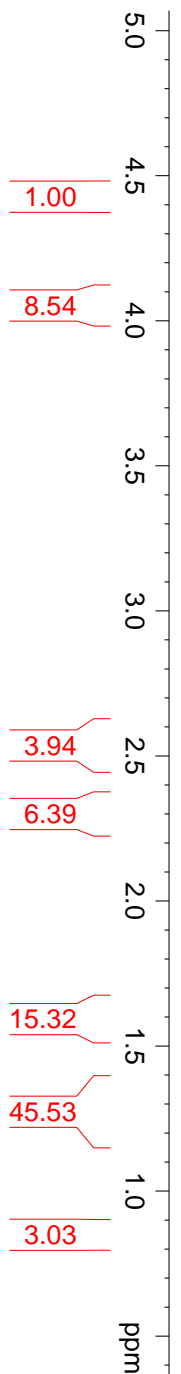
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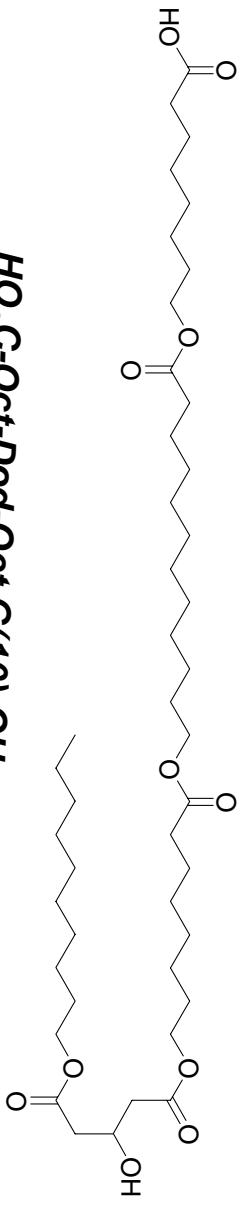


***HO<sub>2</sub>C-Oct-Dod-Oct-G(10)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
500 MHz



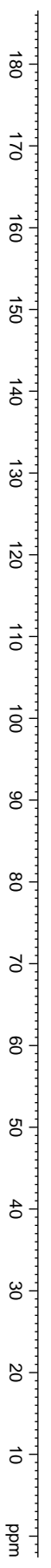


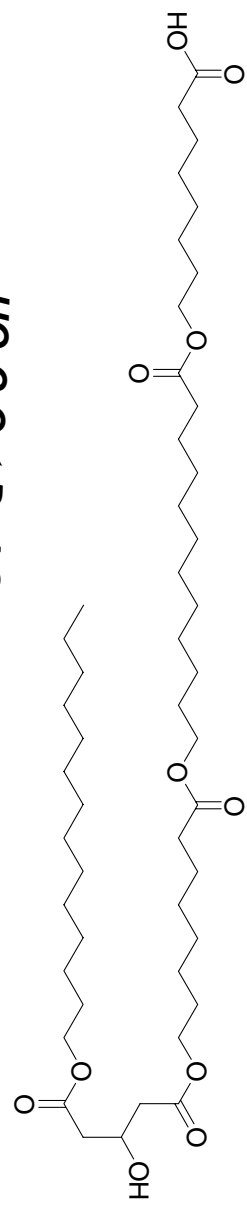


***HO<sub>2</sub>C-Oct-Dod-Oct-G(10)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

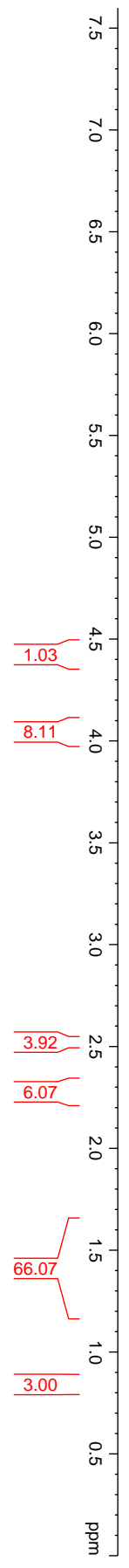


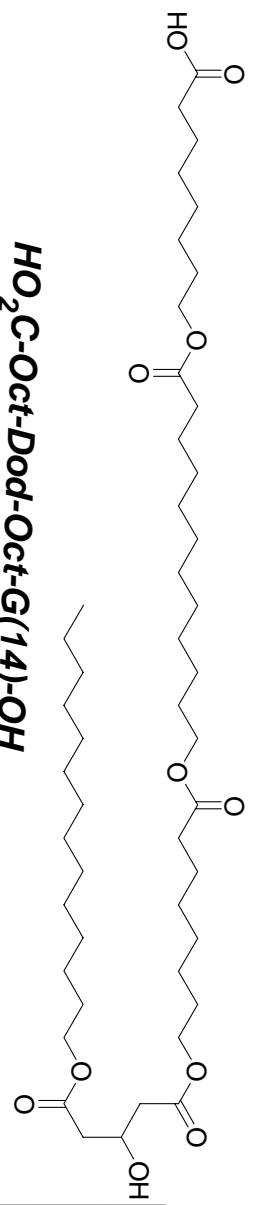


***HO<sub>2</sub>C-Oct-Dod-Oct-G(14)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

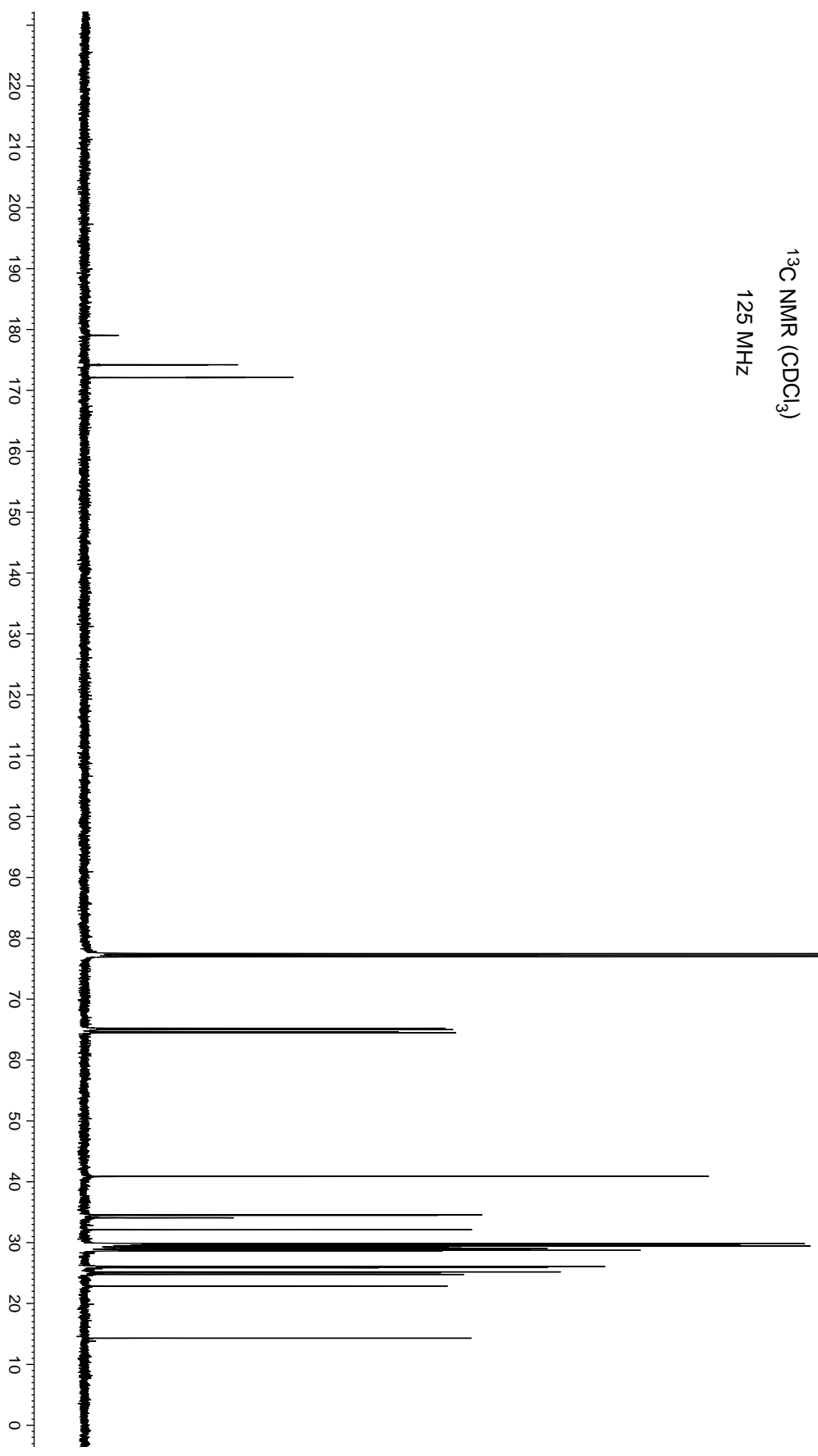


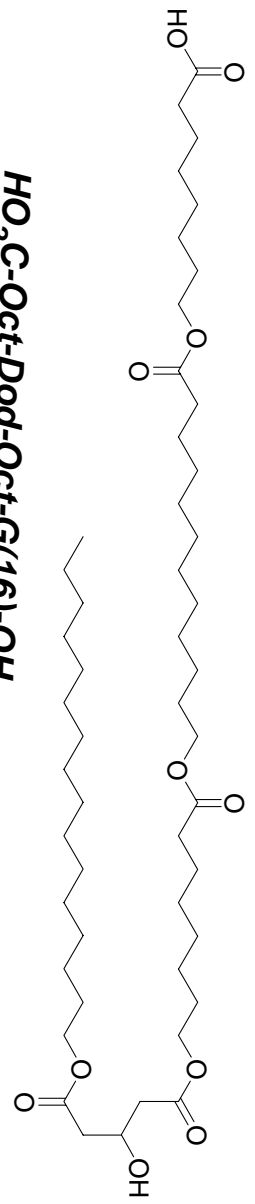


***HO<sub>2</sub>C-Oct-Dod-Oct-G(14)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

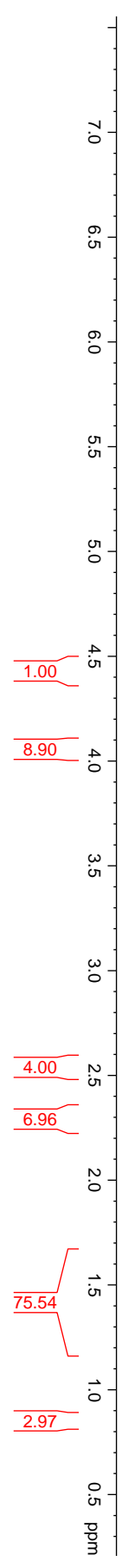


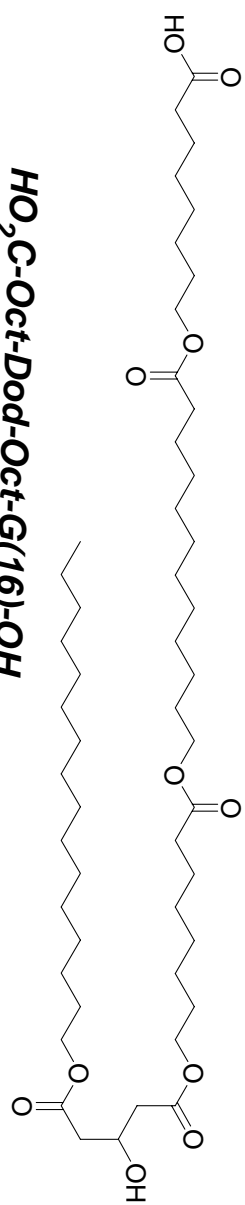


***HO<sub>2</sub>C-Oct-Dod-Oct-G(16)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

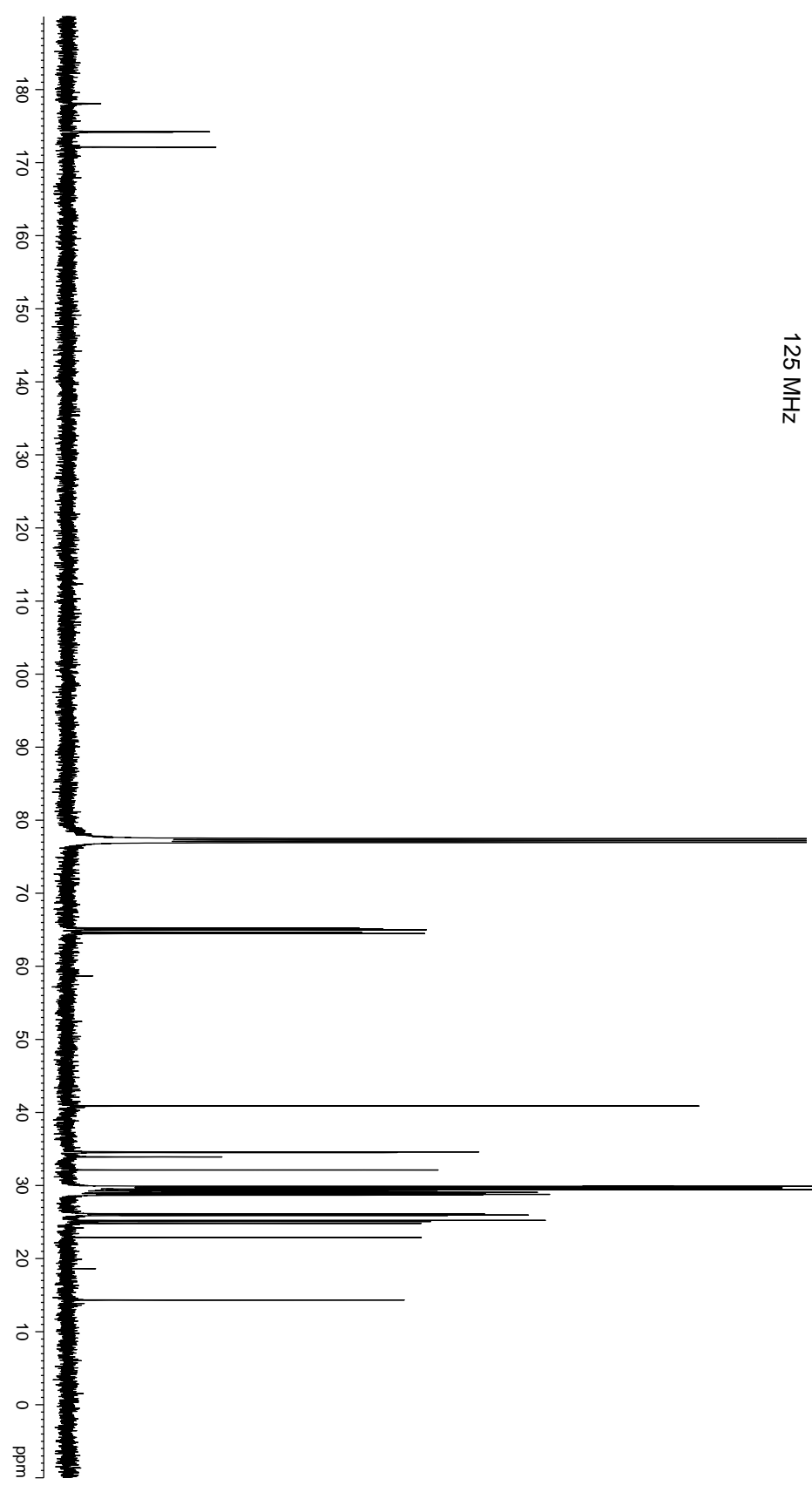


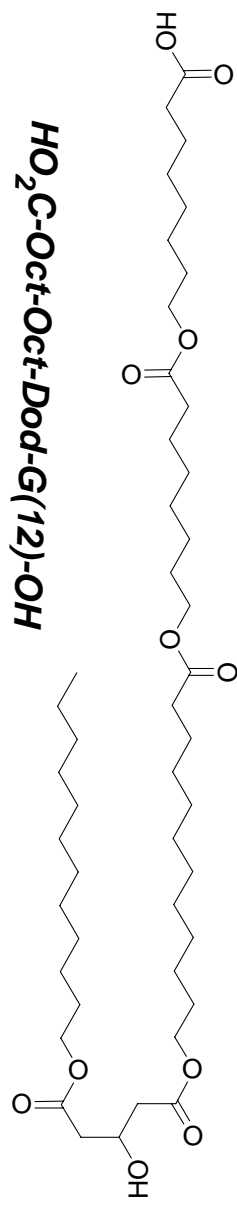


***HO<sub>2</sub>C-Oct-Dod-Oct-G(16)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

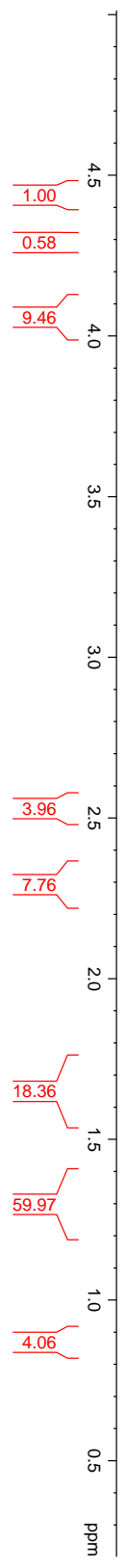
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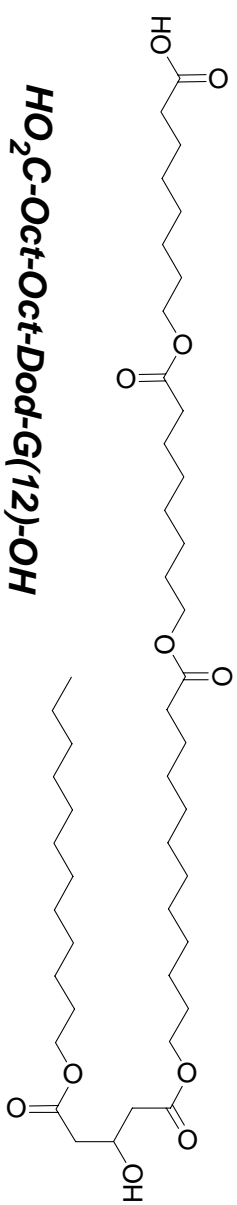




<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

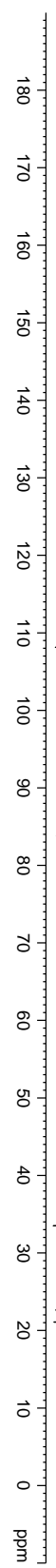


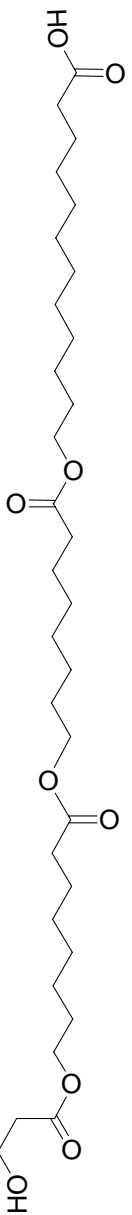


***HO<sub>2</sub>C-Oct-Oct-Dod-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

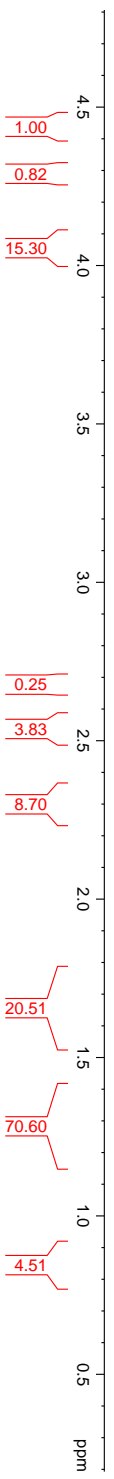
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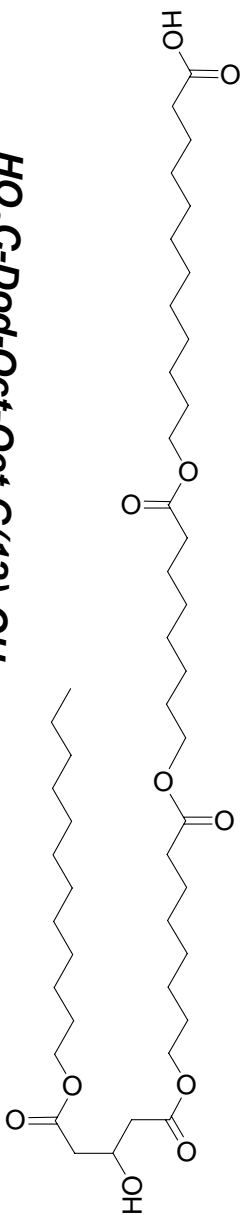


***HO<sub>2</sub>C-Dod-Oct-Oct-G(12)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
500 MHz



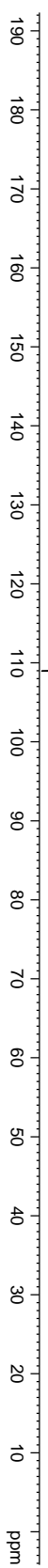


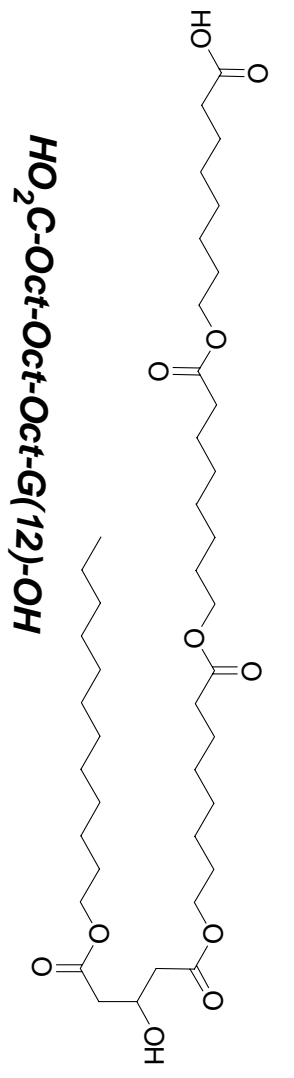


***HO<sub>2</sub>C-Dod-Oct-Oct-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

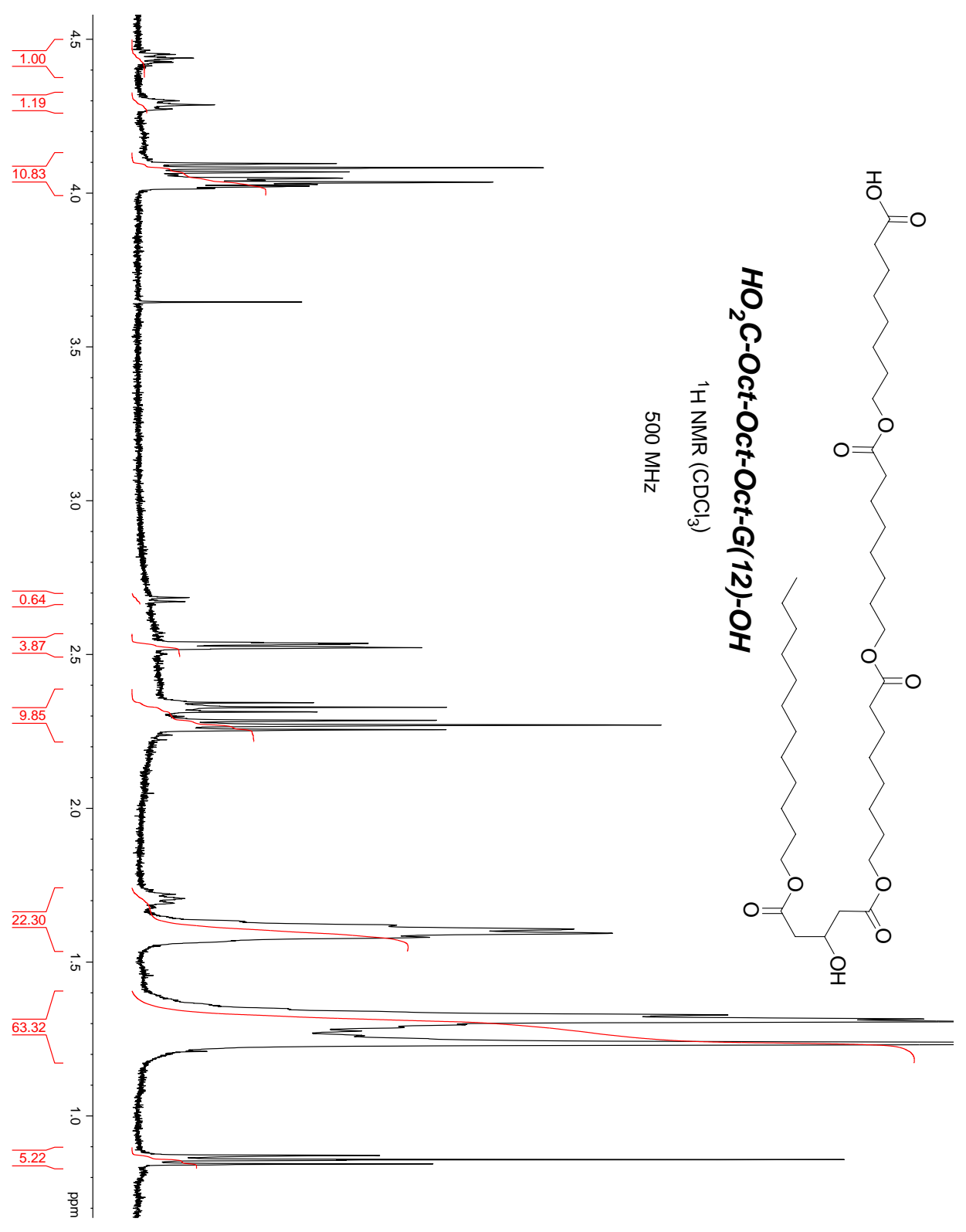


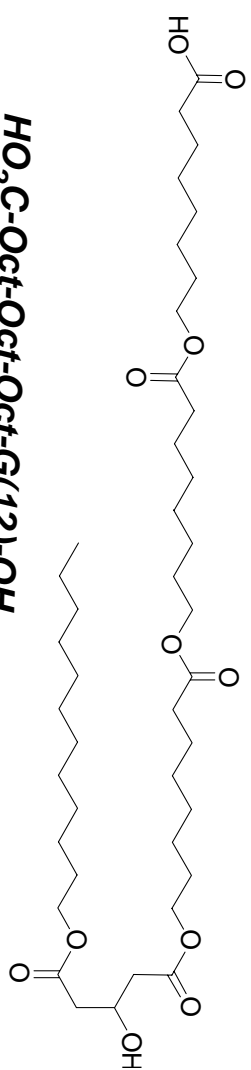


***HO<sub>2</sub>C-Oct-Oct-G(12)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

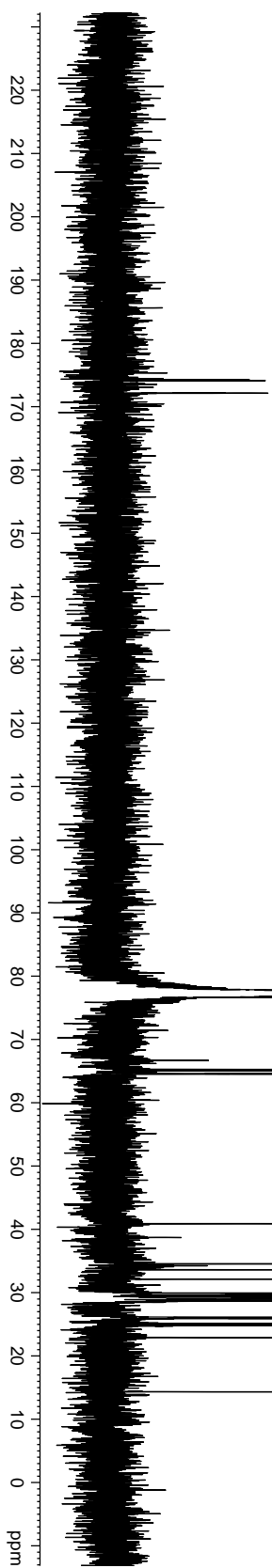


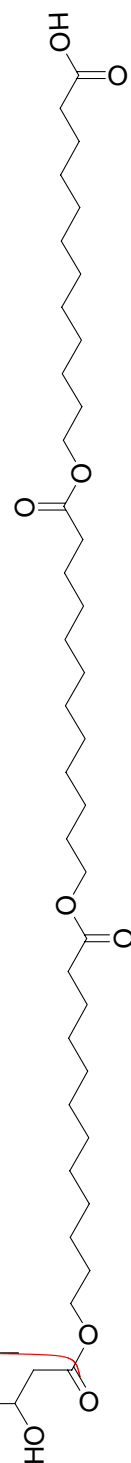


***HO<sub>2</sub>C-Oct-Oct-Oct-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

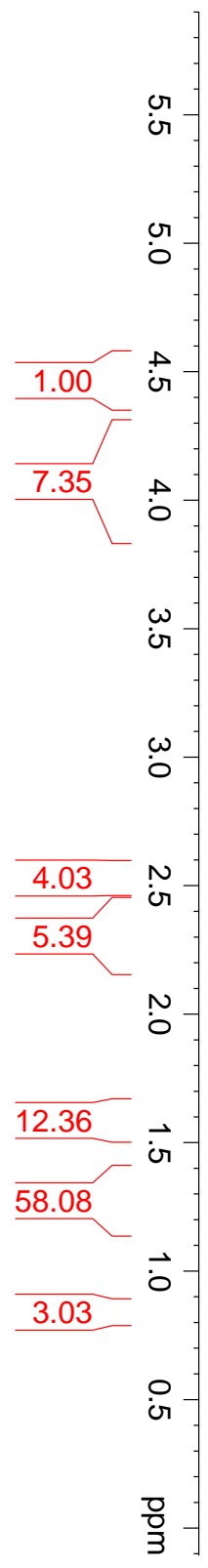
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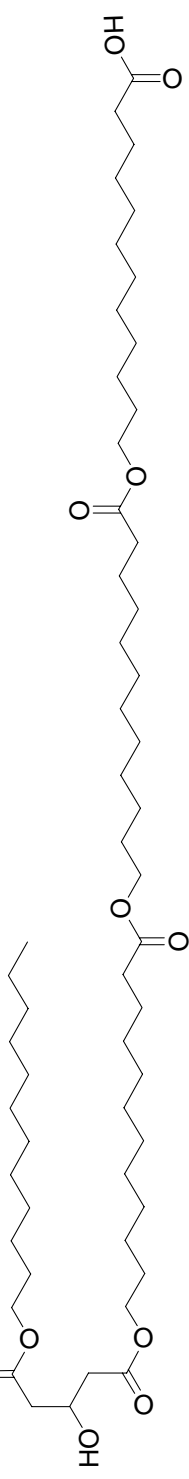




***HO<sub>2</sub>C-Dod-Dod-Dod-G(12)-OH***

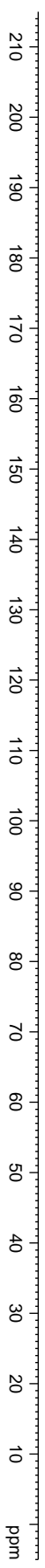
<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
500 MHz

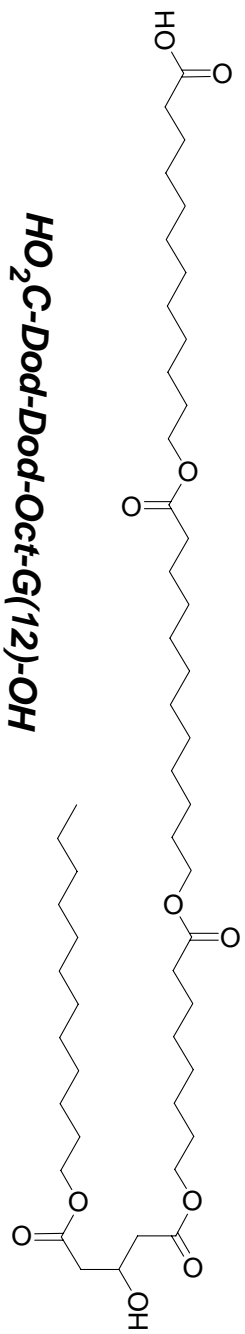




**HO<sub>2</sub>C-Dod-Dod-Dod-G(12)-OH**

<sup>13</sup>C NMR (CDCl<sub>3</sub>)  
125 MHz

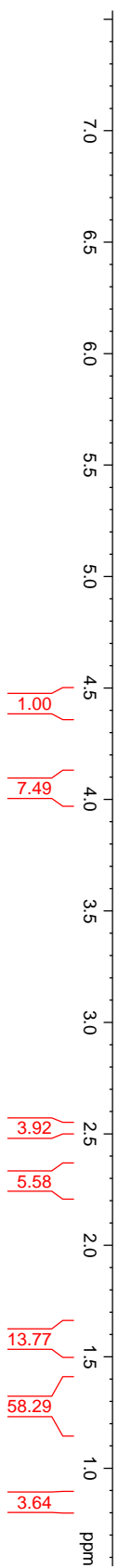


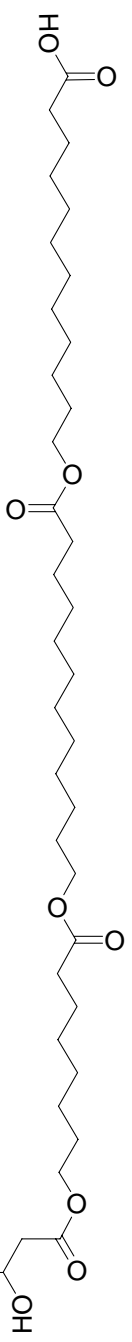


***HO<sub>2</sub>C-Dod-Dod-Oct-G(12)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

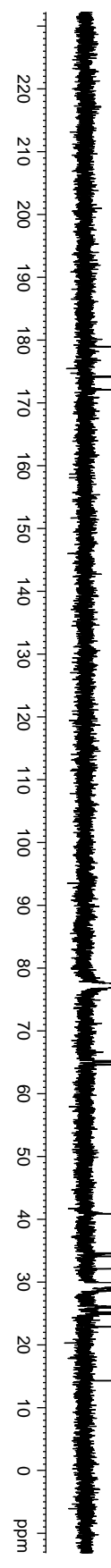


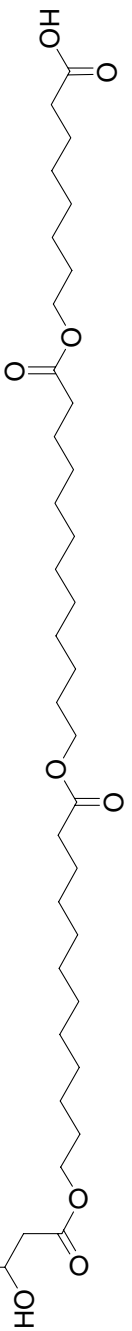


***HO<sub>2</sub>C-Dod-Dod-Oct-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

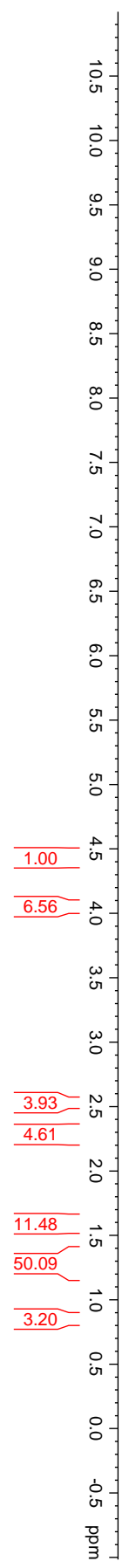




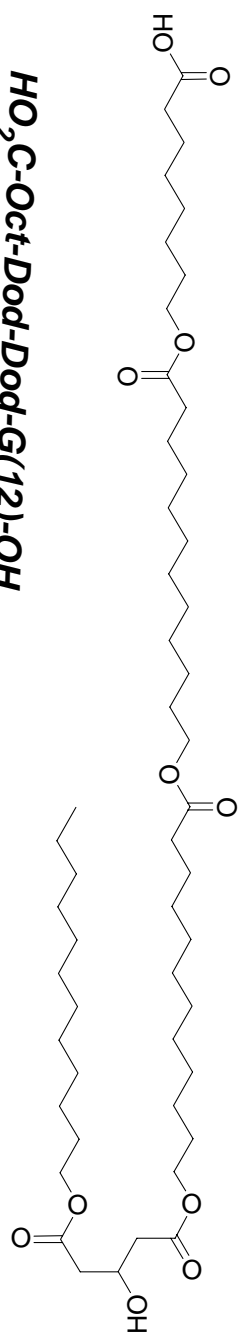
***HO<sub>2</sub>C-Oct-Dod-Dod-G(12)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz



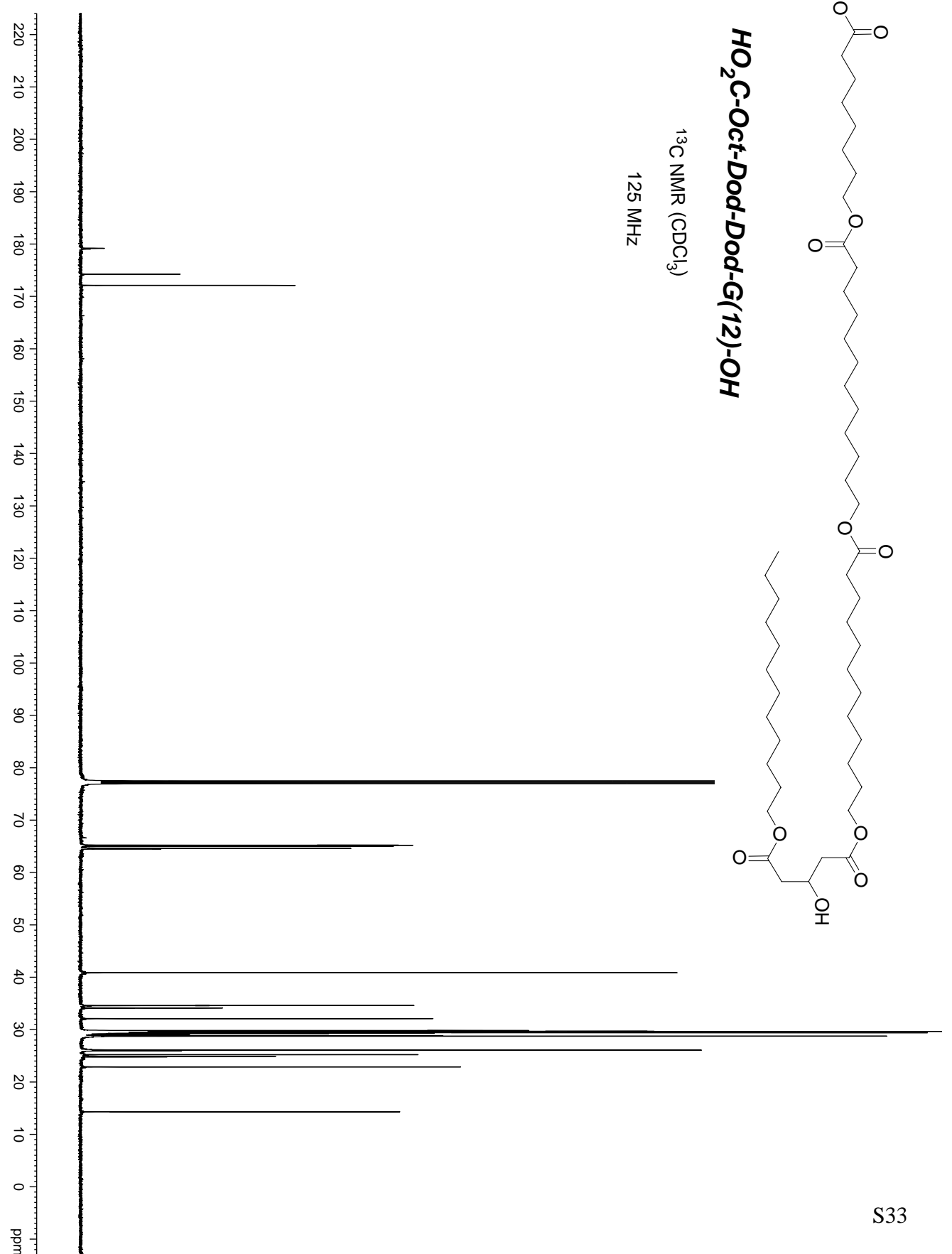


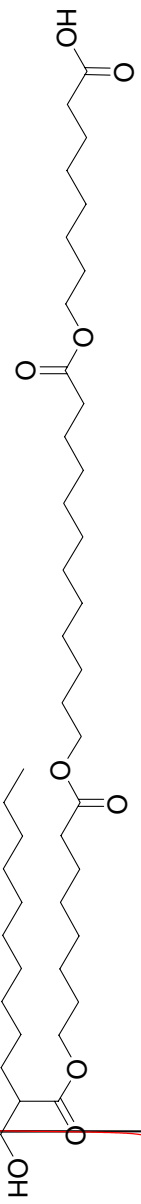


***HO<sub>2</sub>C-Oct-Dod-Dod-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

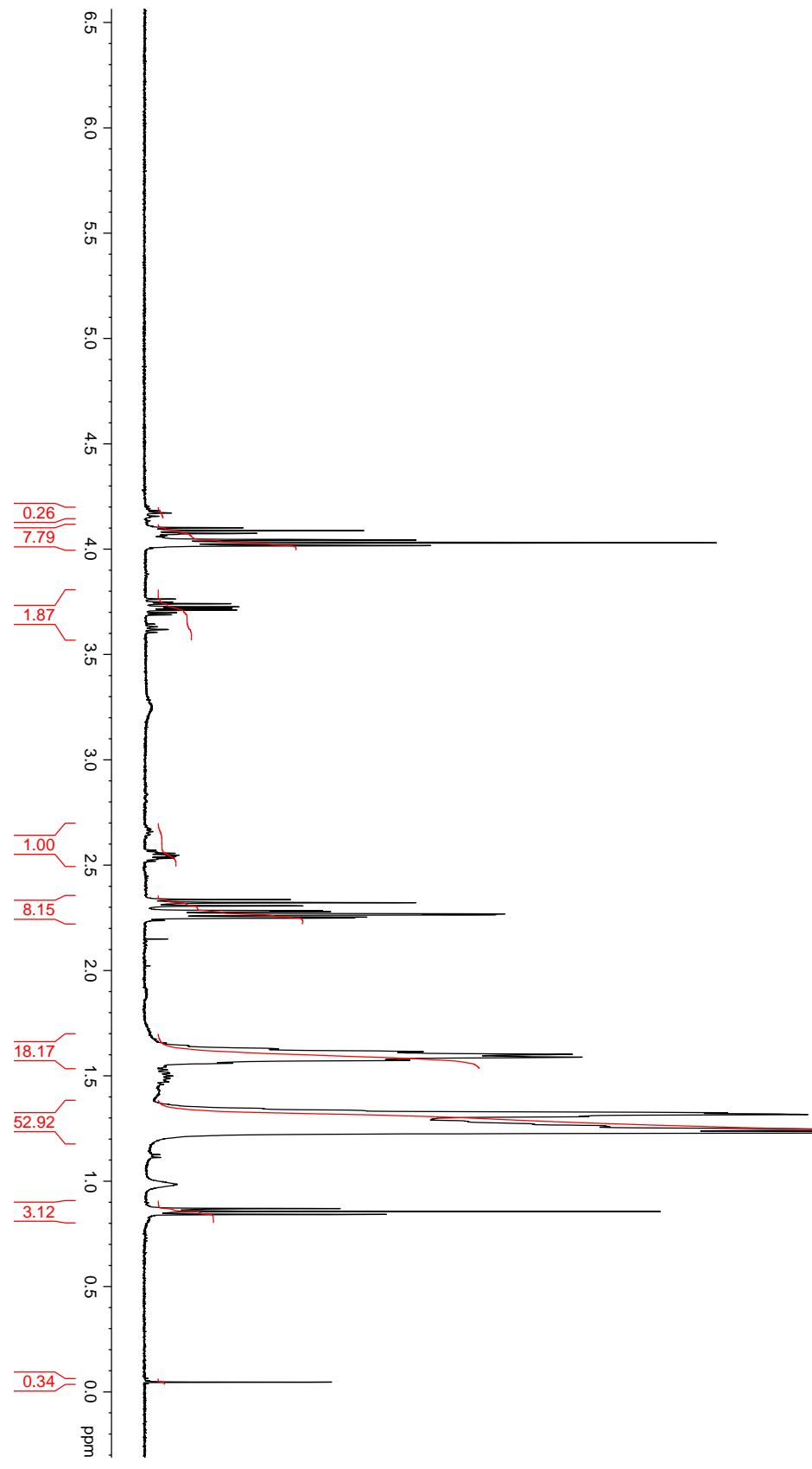


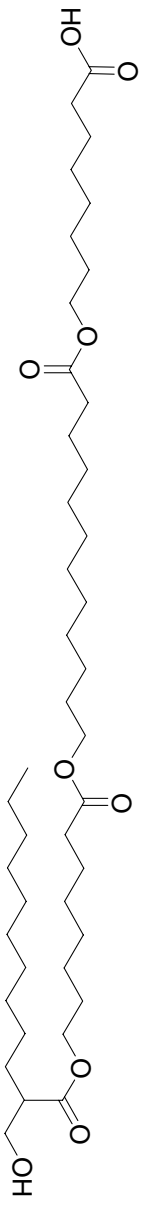


***HO<sub>2</sub>C-Oct-Dod-Oct-Lau-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

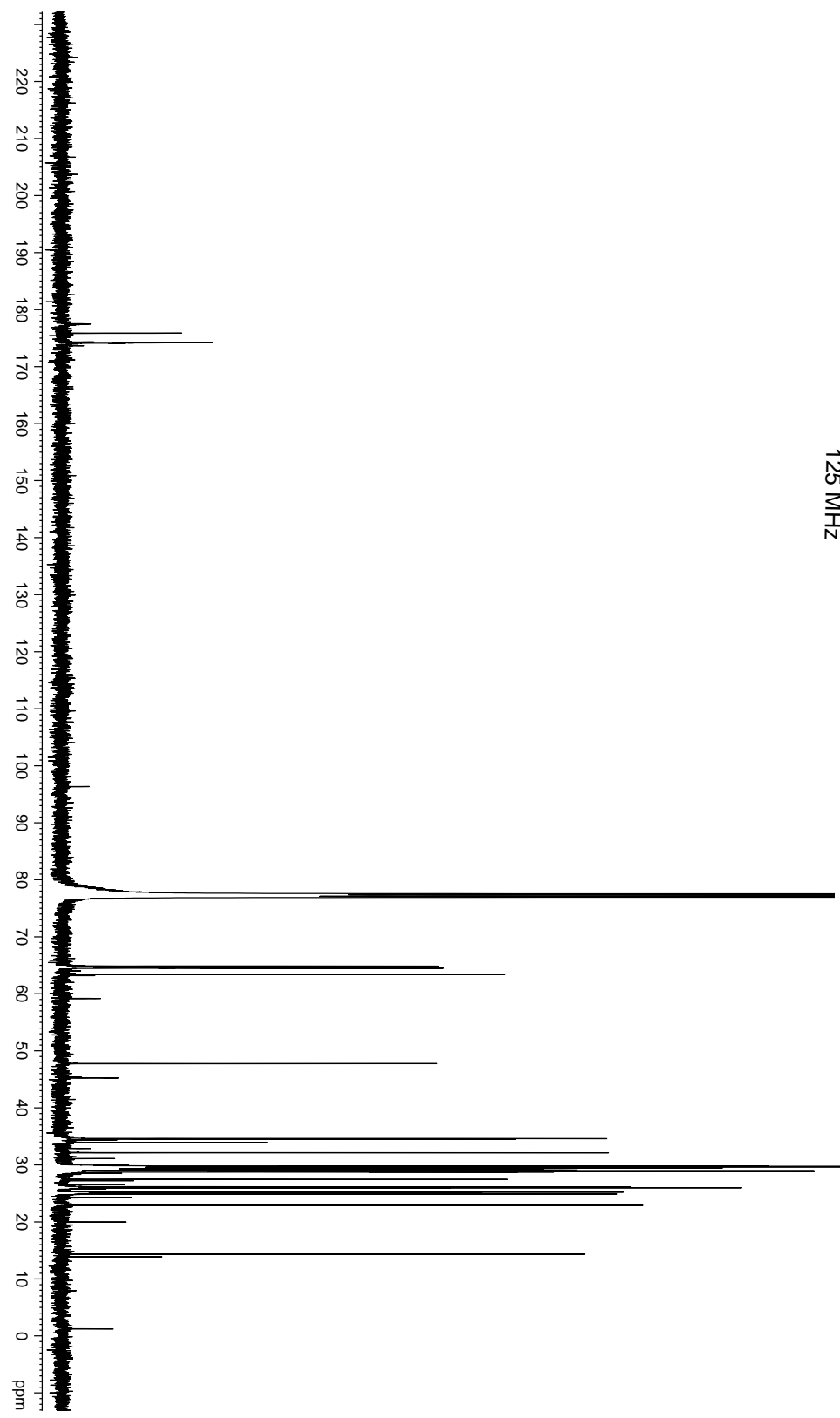


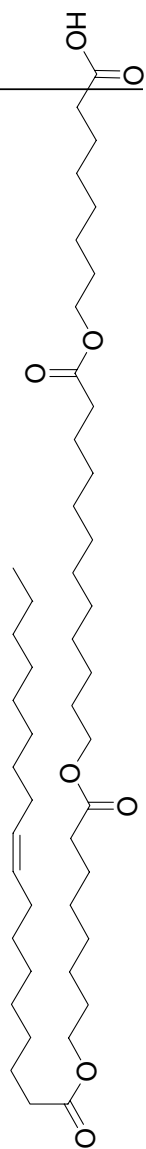


***HO<sub>2</sub>C-Oct-Dod-Oct-Lau-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

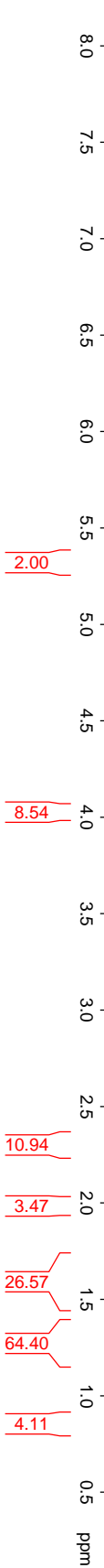


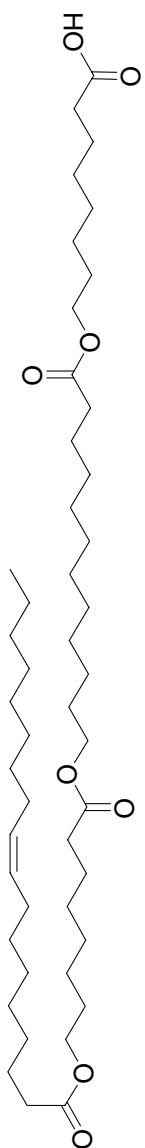


***HO<sub>2</sub>C-Oct-Dod-Oct-Oleate***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz

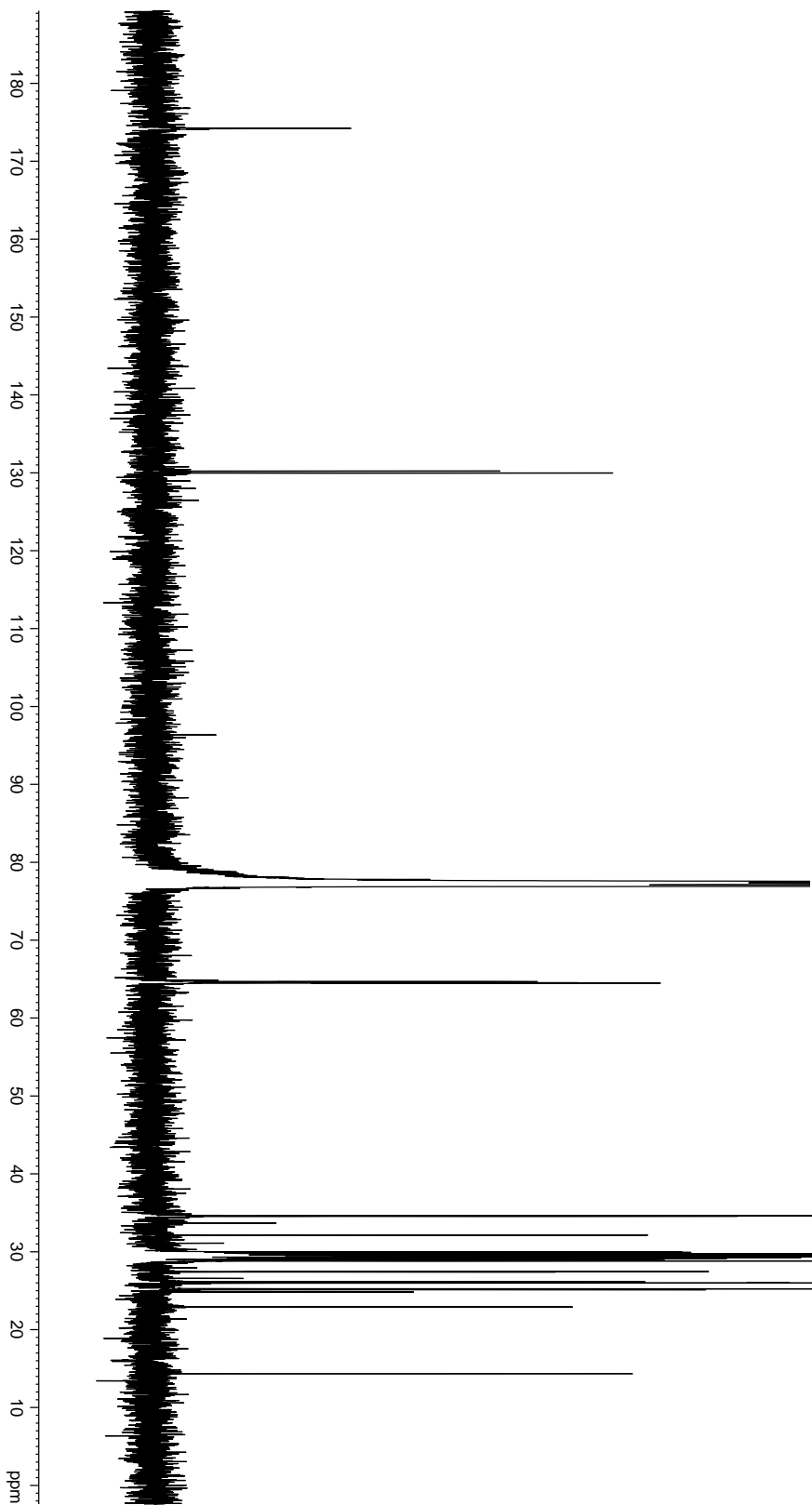


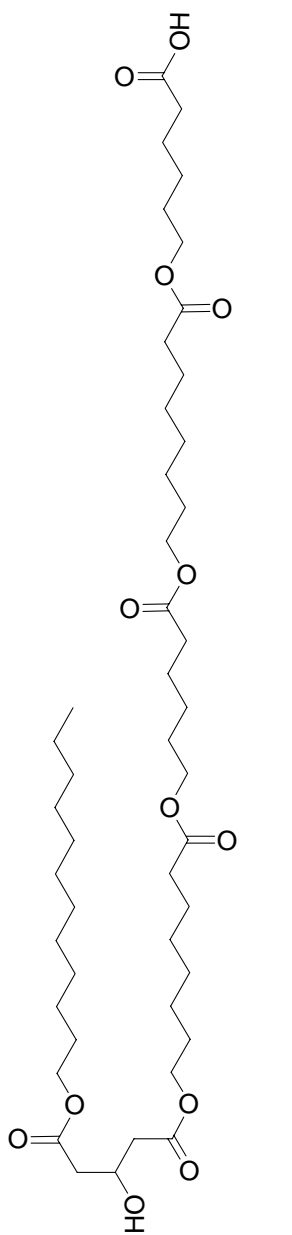


***HO<sub>2</sub>C-Oct-Dod-Oct-Oleate***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

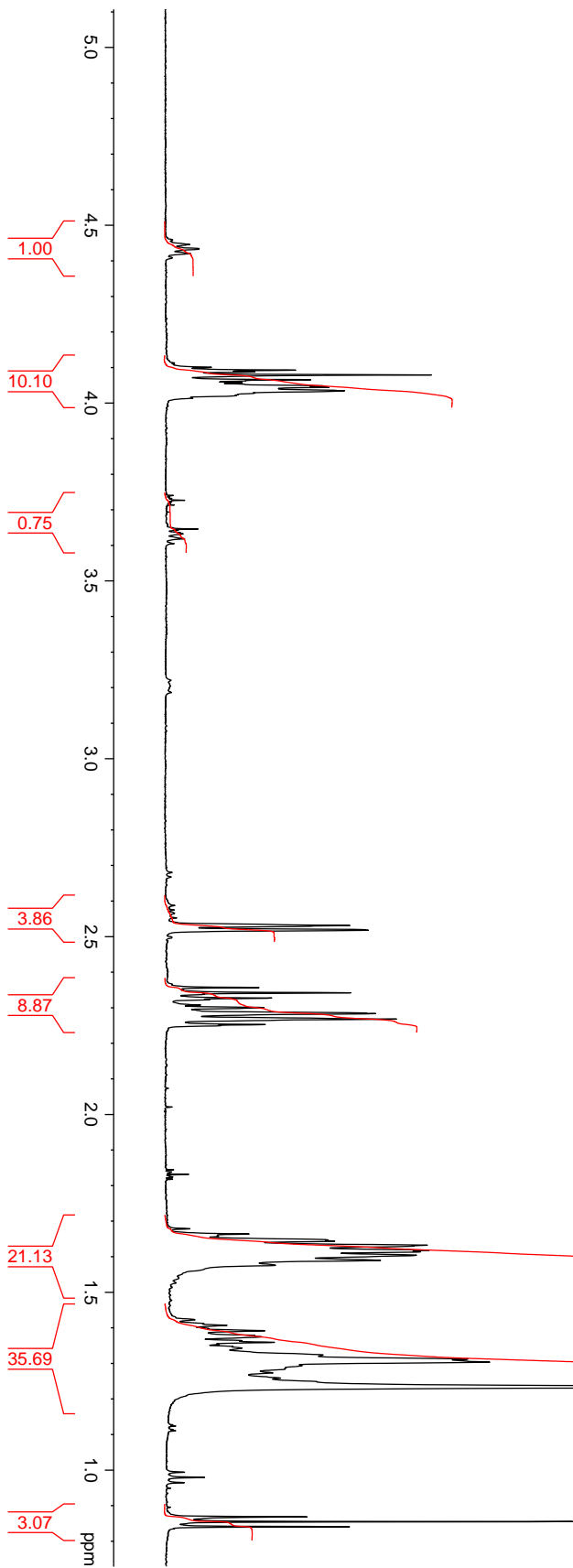
125 MHz

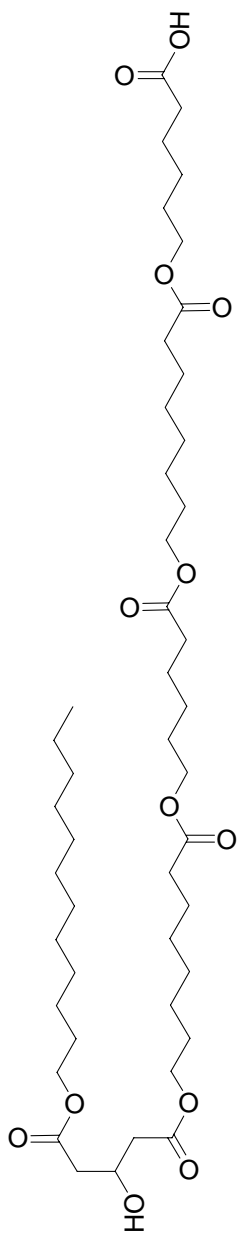




***HO<sub>2</sub>C-Hex-Oct-Hex-Oct-G(12)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
500 MHz

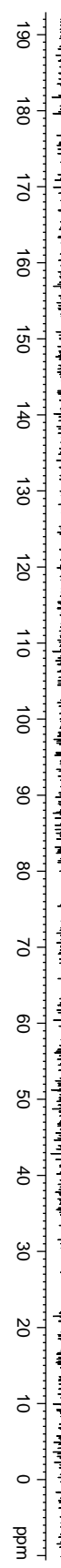


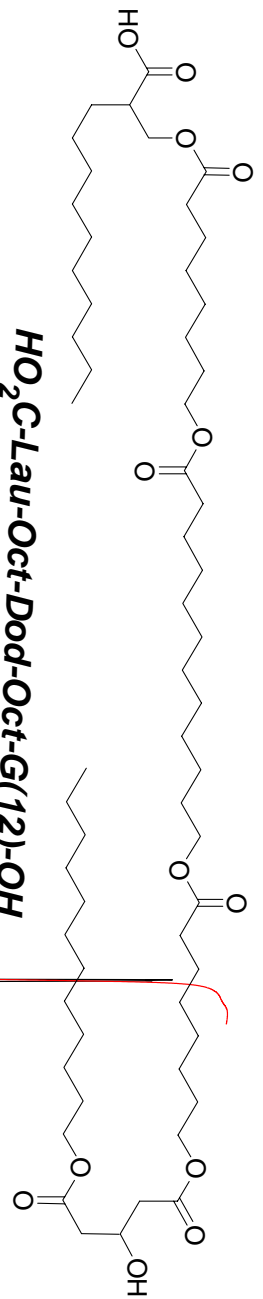


***HO<sub>2</sub>C-Hex-Oct-Hex-Oct-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

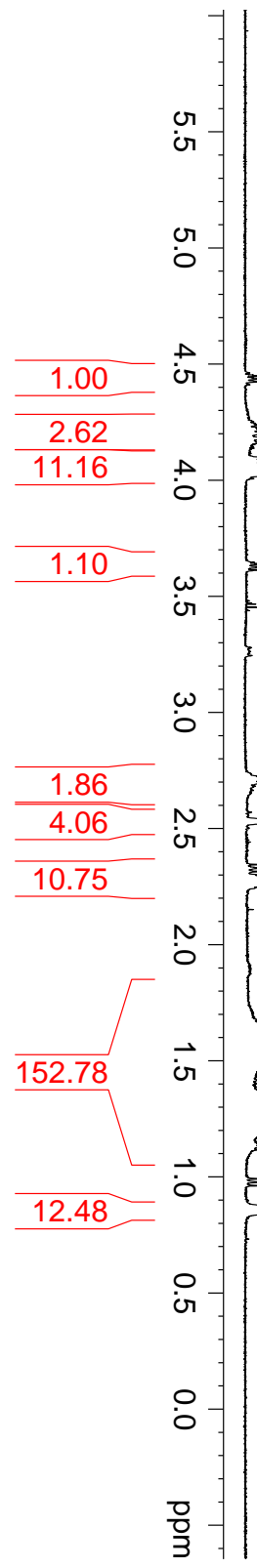
125 MHz



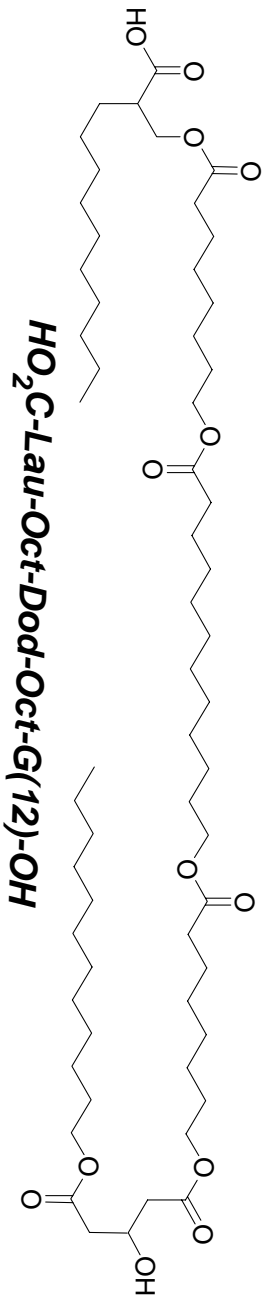


***HO<sub>2</sub>C-Lau-Oct-Dod-Oct-G(12)-OH***

<sup>1</sup>H NMR (CDCl<sub>3</sub>)  
500 MHz

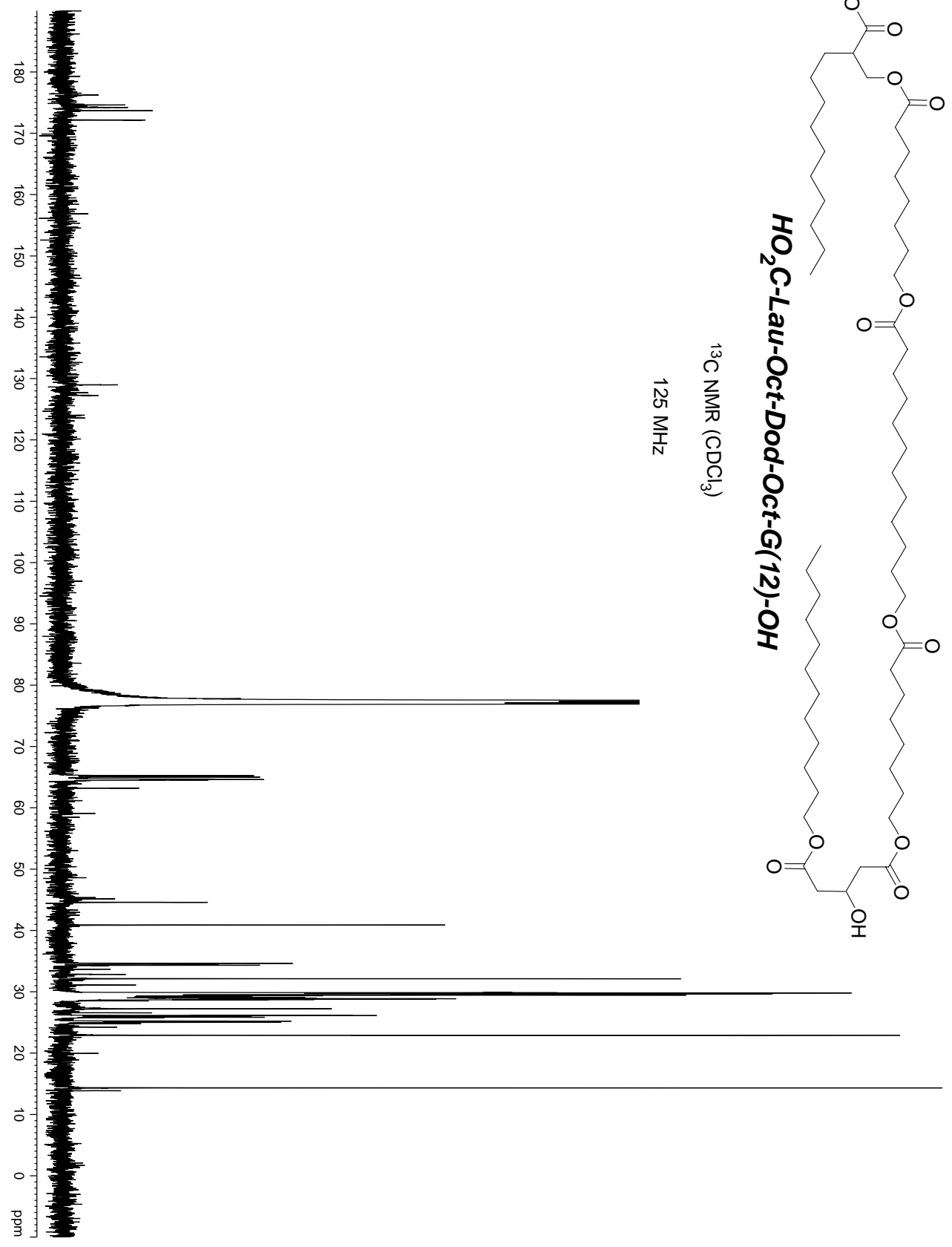


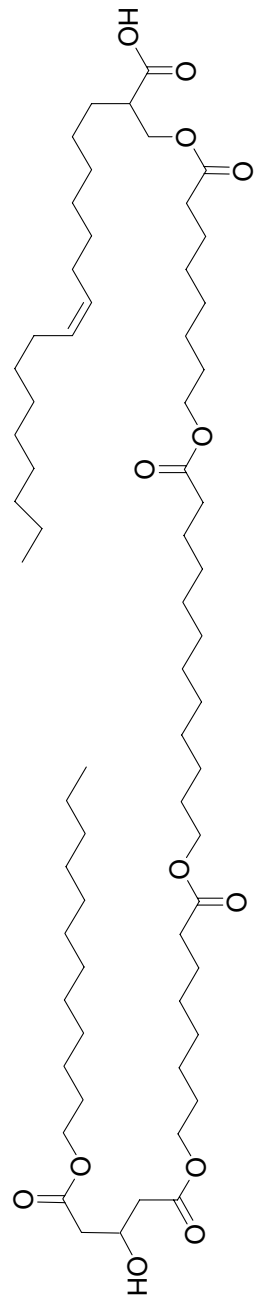




<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

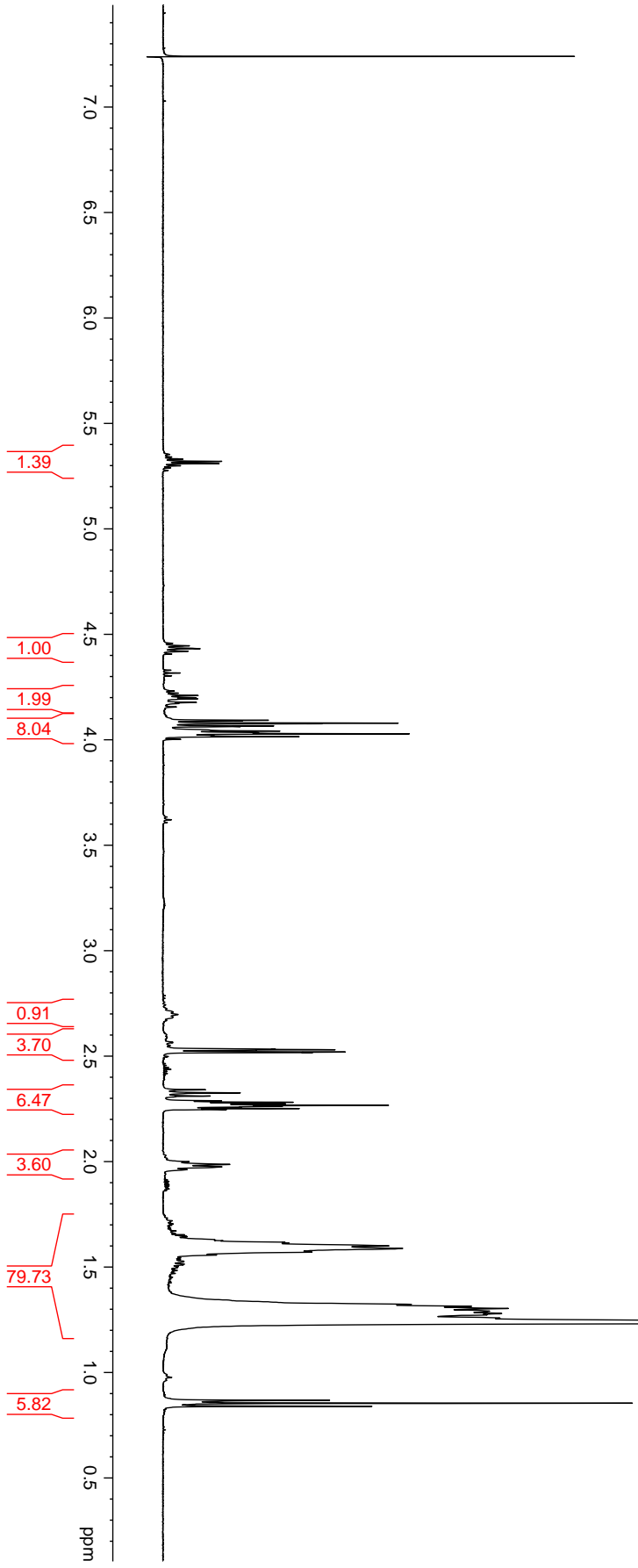


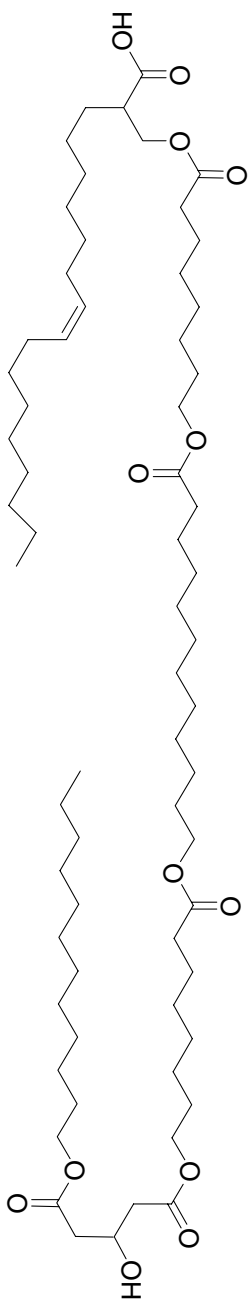


**HO<sub>2</sub>C-Ole-Dod-Oct-G(12)-OH**

<sup>1</sup>H NMR (CDCl<sub>3</sub>)

500 MHz





***HO<sub>2</sub>C-Ole-Oct-Dod-Oct-G(12)-OH***

<sup>13</sup>C NMR (CDCl<sub>3</sub>)

125 MHz

