

## Supporting Information

### Design, Synthesis and Biological Evaluation of Sugar-Derived Esters, $\alpha$ -Ketoesters and $\alpha$ -Ketoamides as Inhibitors for *Mycobacterium tuberculosis* Antigen 85C

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Steven J. Sucheck\*

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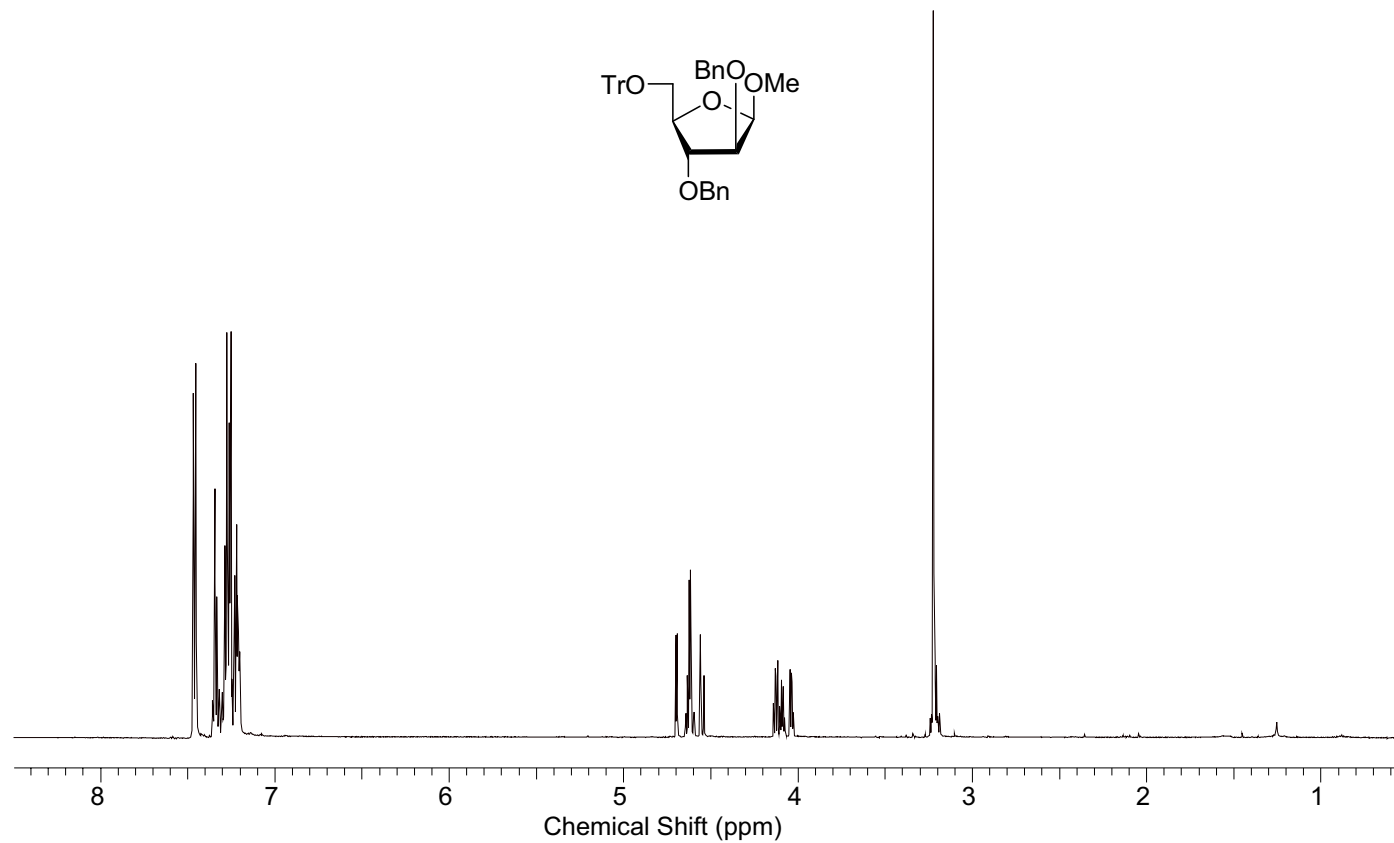
\*E-mail: [Steve.Sucheck@UTNet.UToledo.Edu](mailto:Steve.Sucheck@UTNet.UToledo.Edu)

### Supporting Information Contents

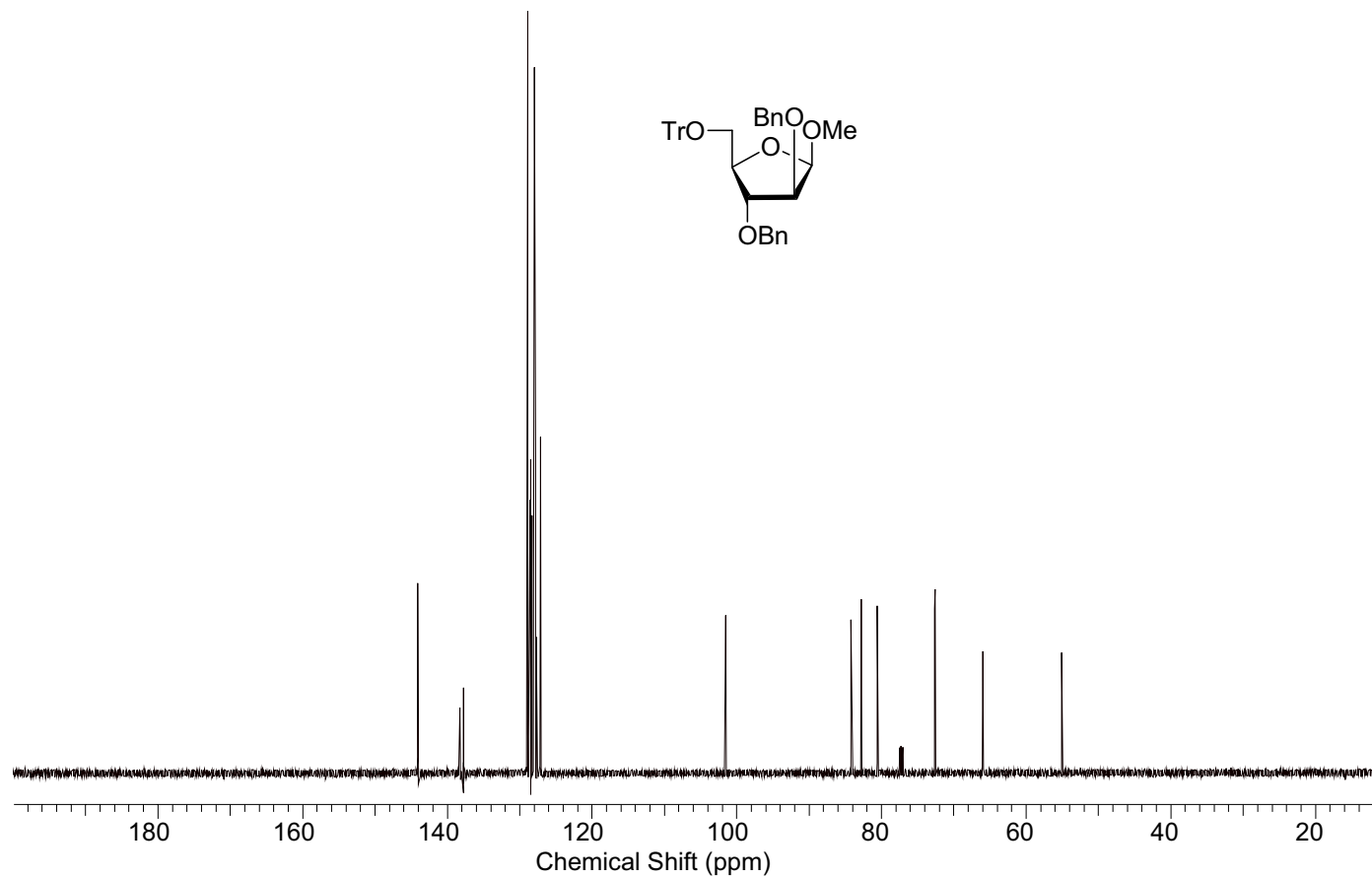
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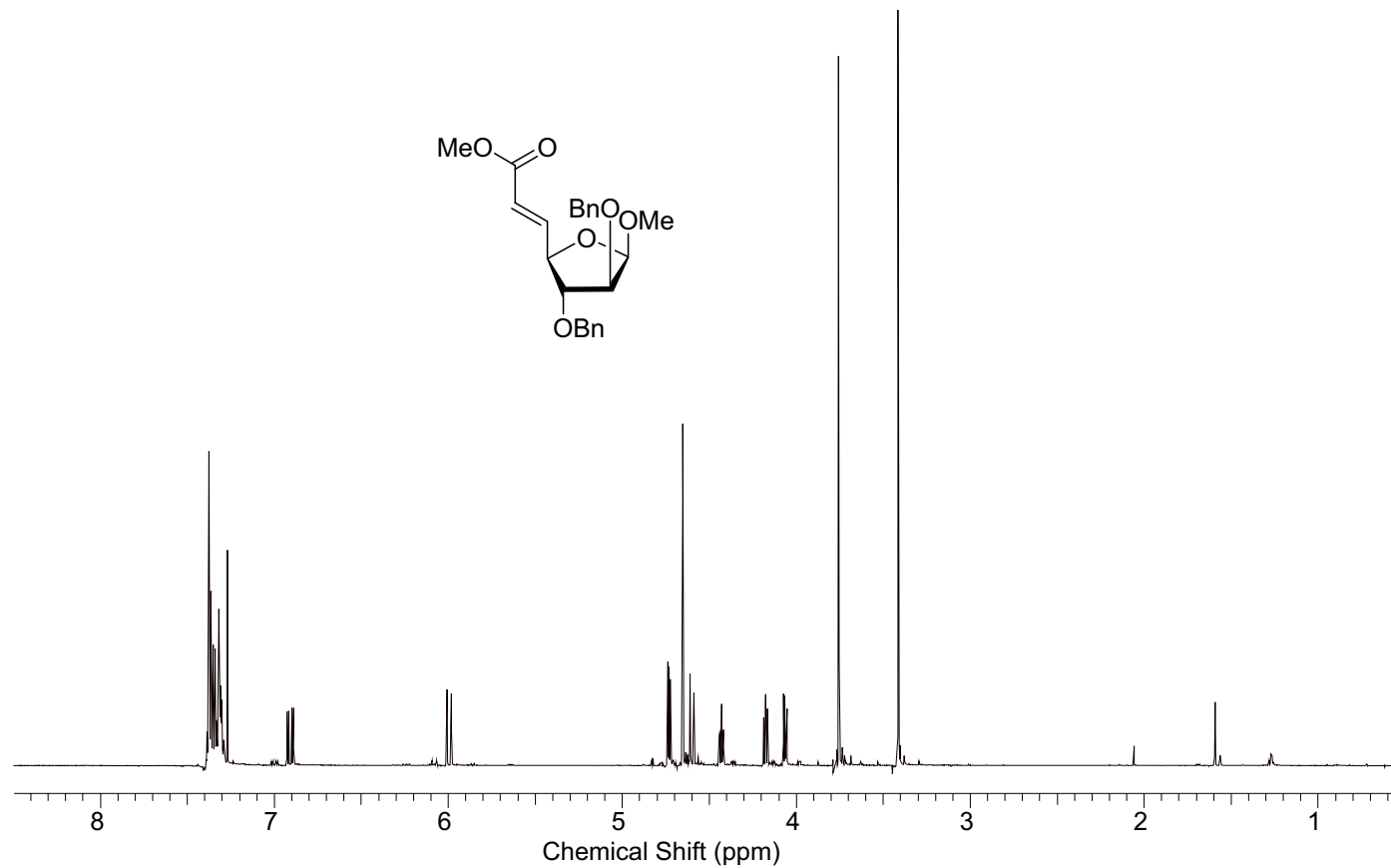
**<sup>1</sup>H NMR of methyl 2,3-di-*O*-benzyl-5-*O*-trityl-β-D-arabinofuranoside (8)**



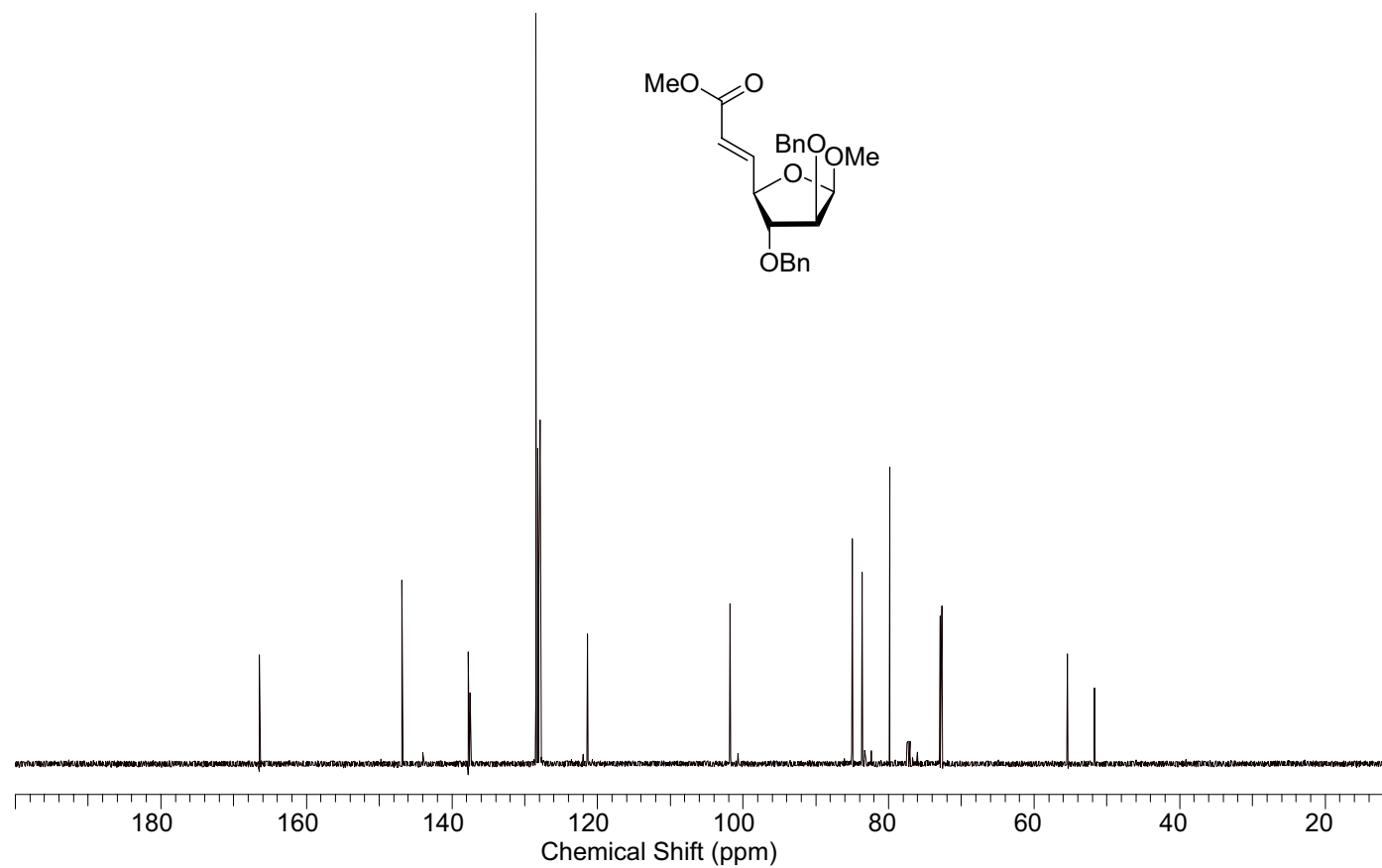
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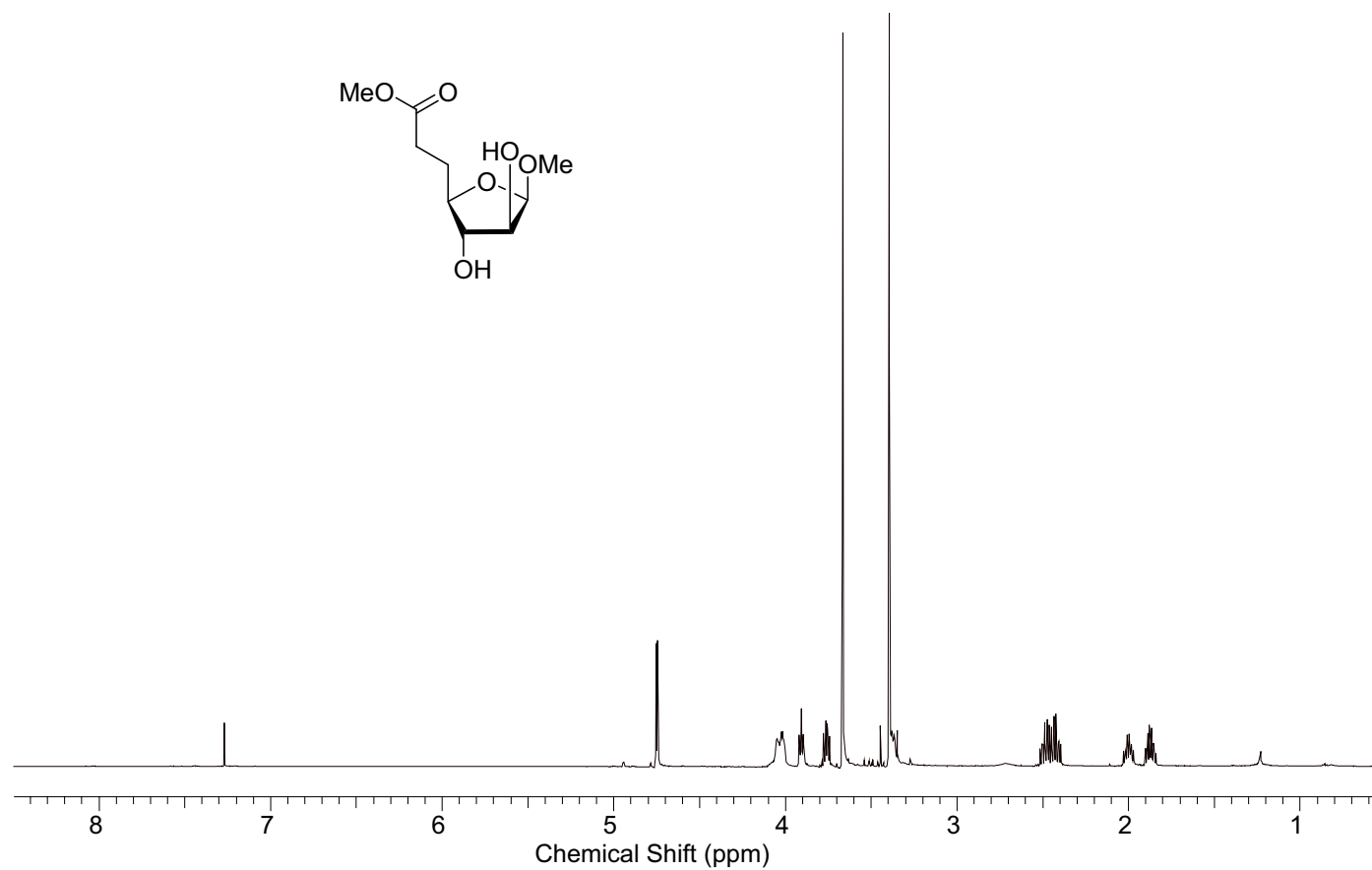
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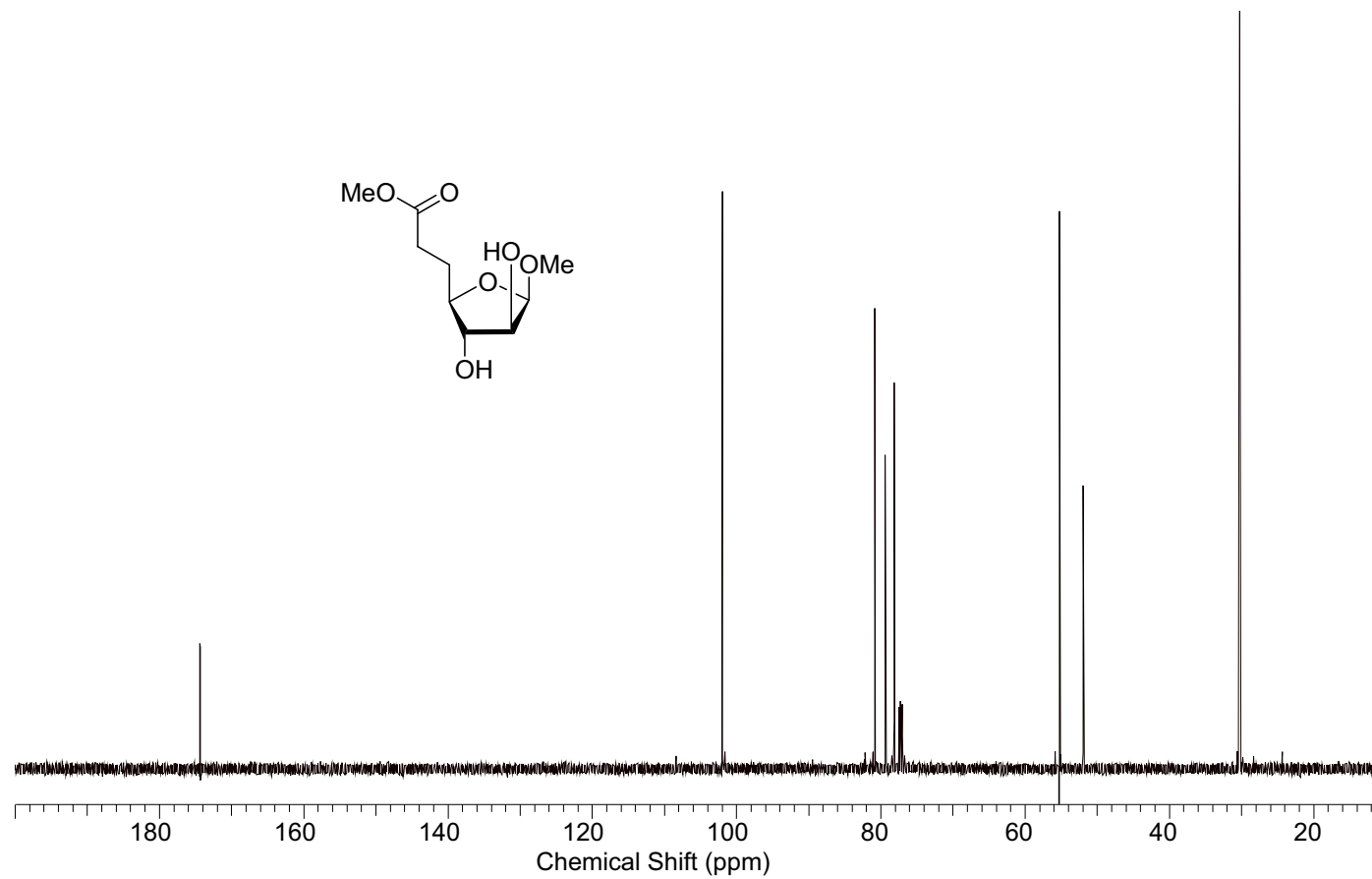
**$^{13}\text{C}$  NMR of methyl (5*E*)-2,3-di-*O*-benzyl-5,6-dideoxy- $\beta$ -D-arabino-hept-5-enofuranosiduronic acid methyl ester (10)**



### $^1\text{H}$ NMR of methyl $\beta$ -D-arabino-heptafuranosiduronic acid methyl ester (1)

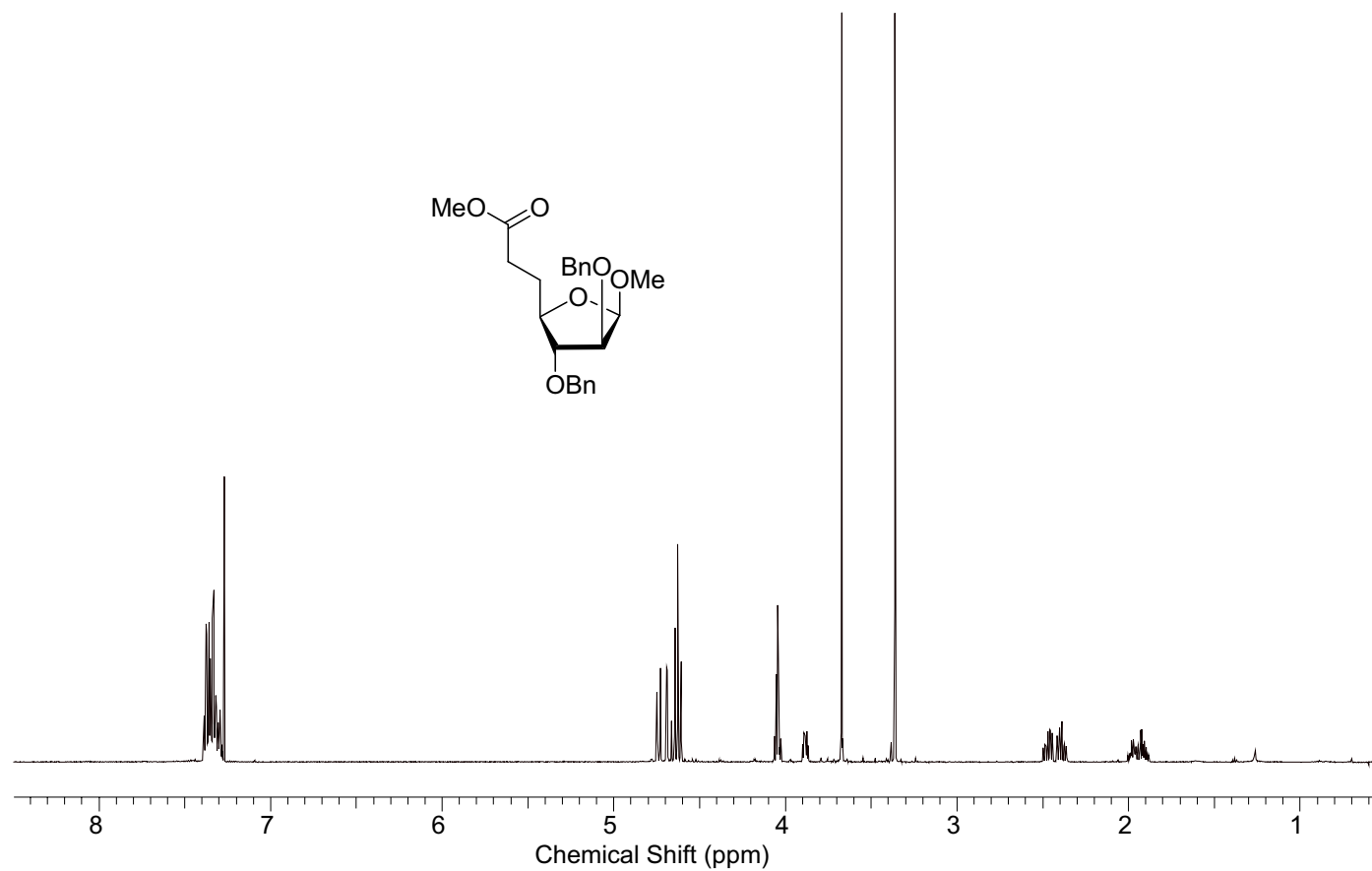


### $^{13}\text{C}$ NMR of methyl $\beta$ -D-arabino-heptafuranosiduronic acid methyl ester (1)

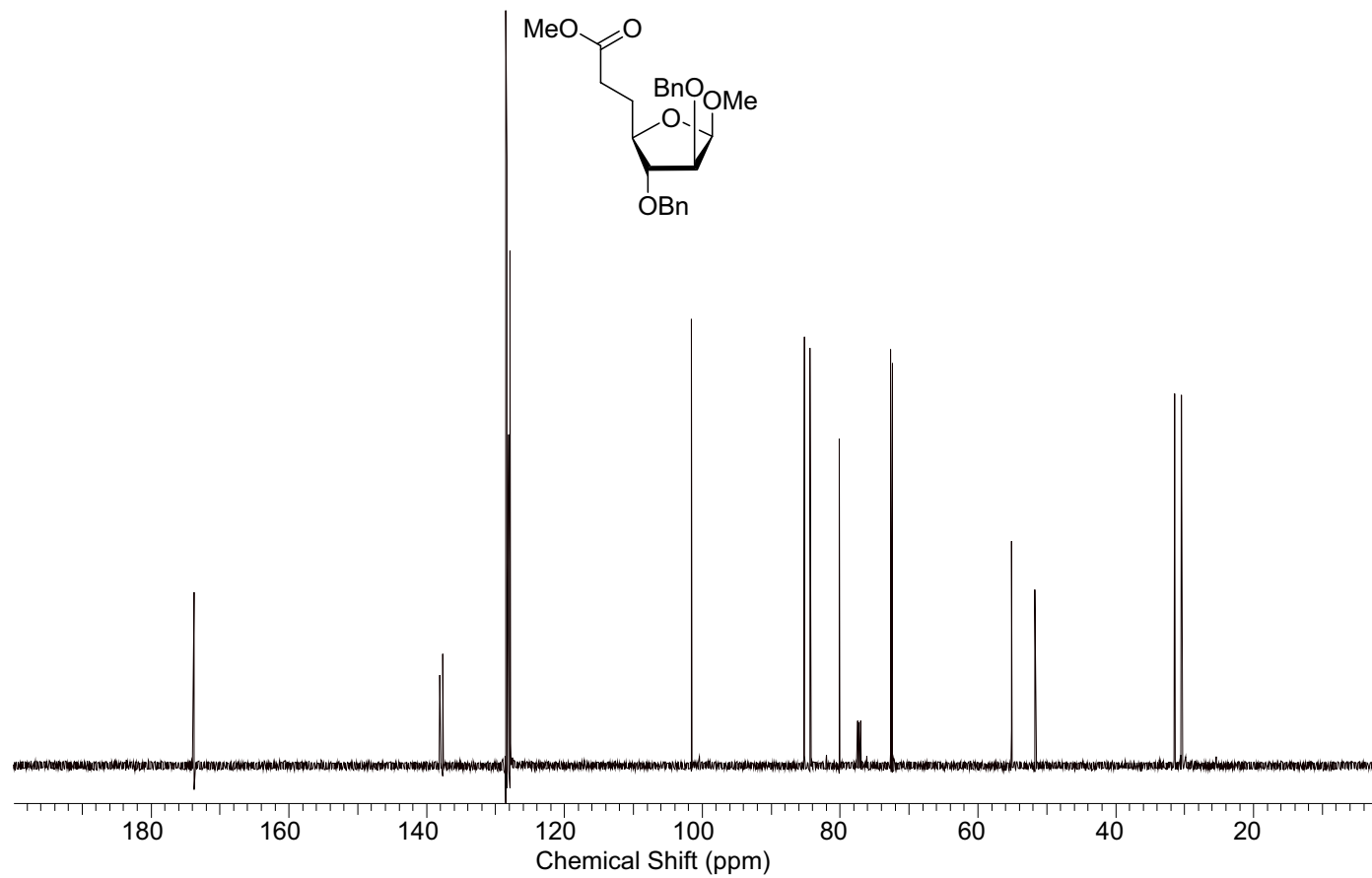




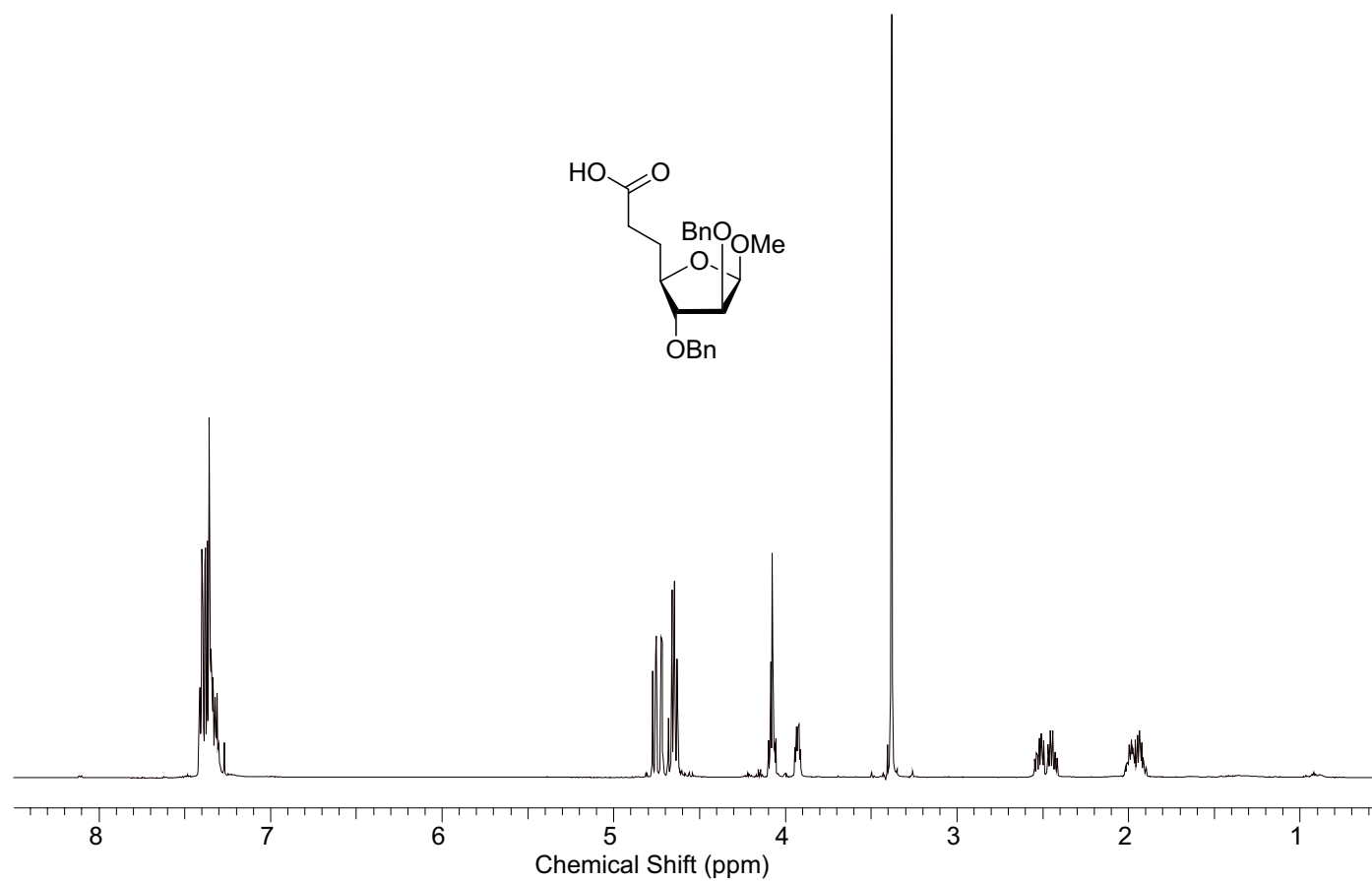
**<sup>1</sup>H NMR of methyl 2,3-di-*O*-benzyl-β-D-arabino-heptafuranosiduronic acid methyl ester (11)**



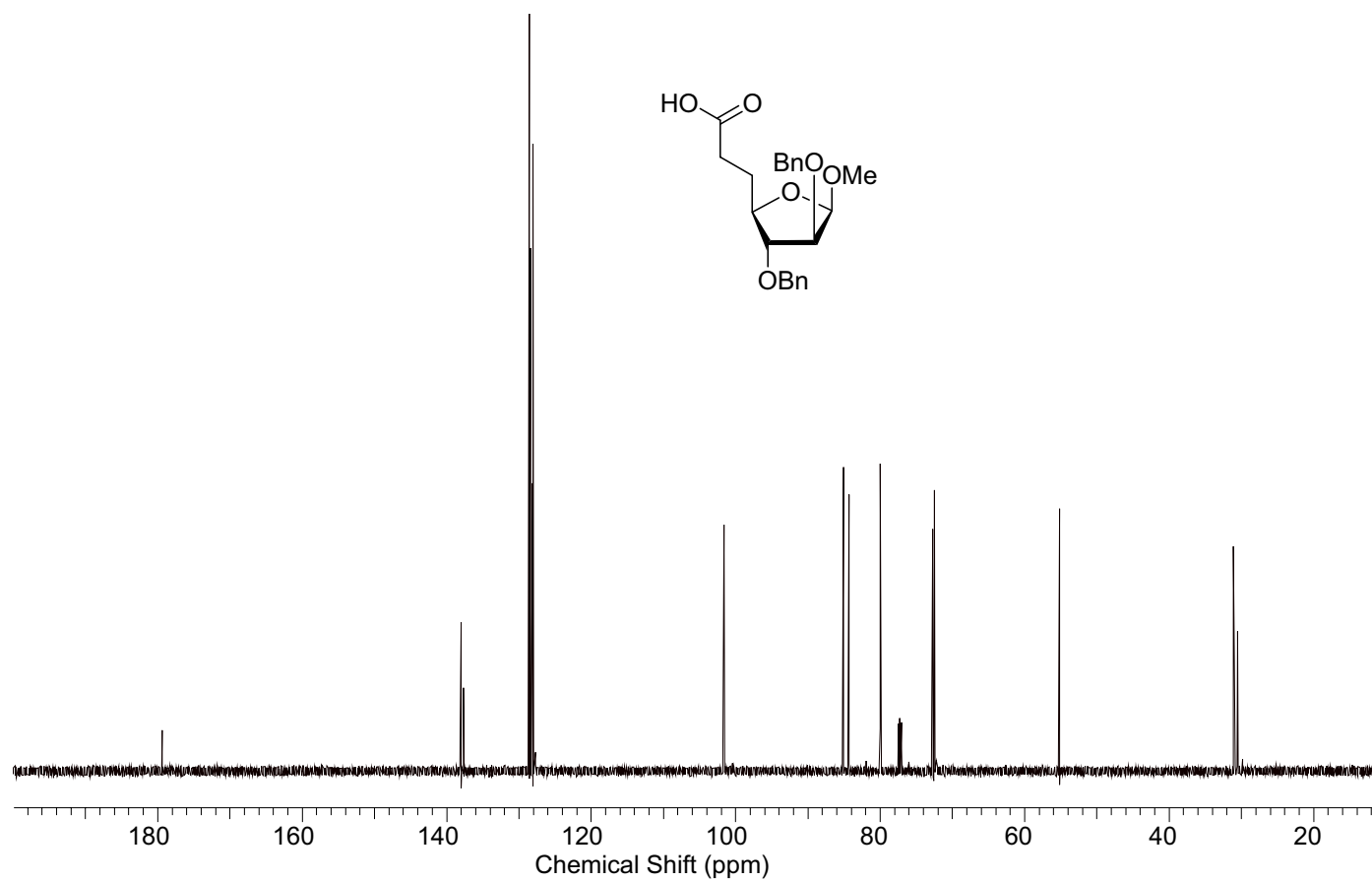
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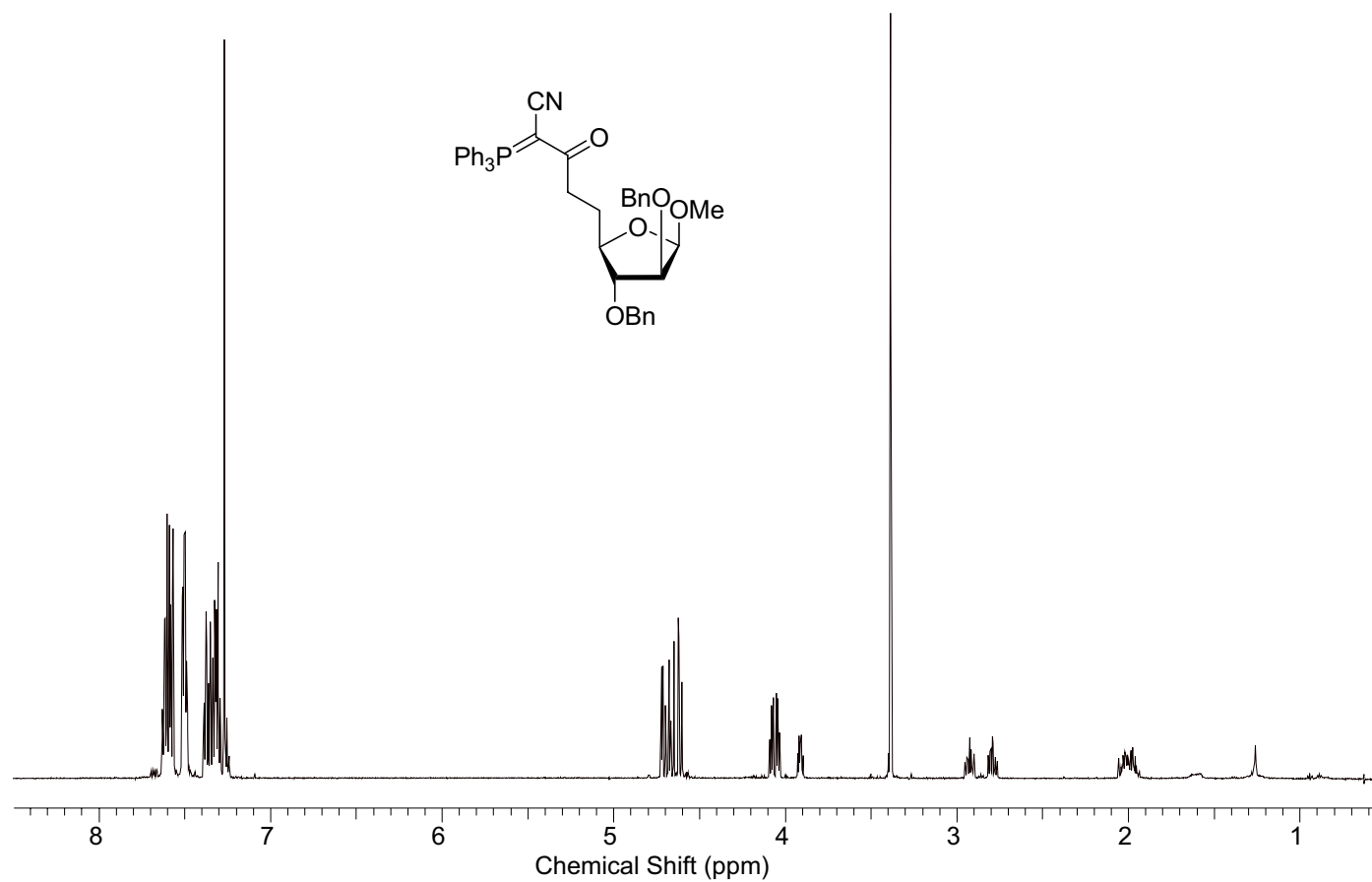
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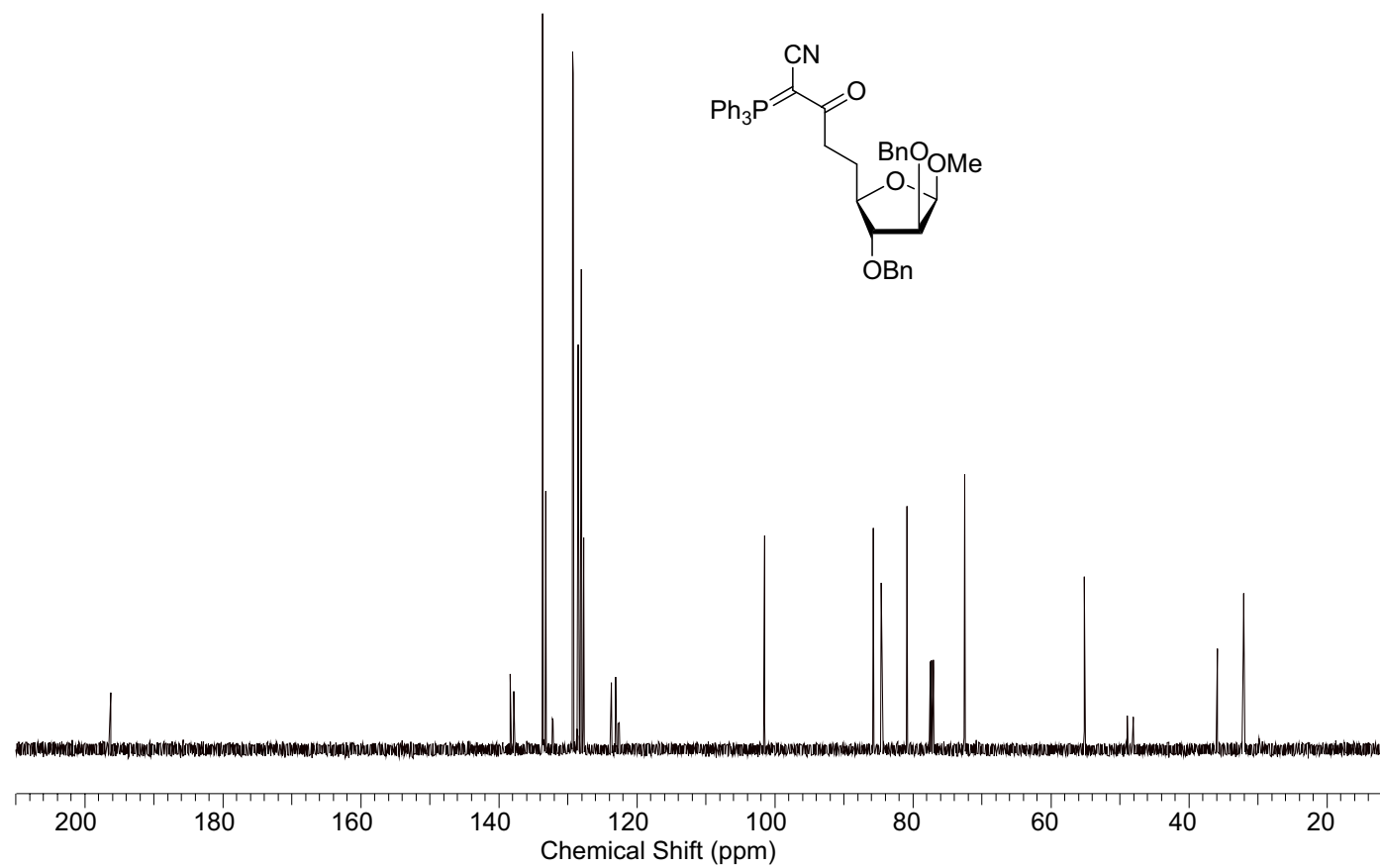
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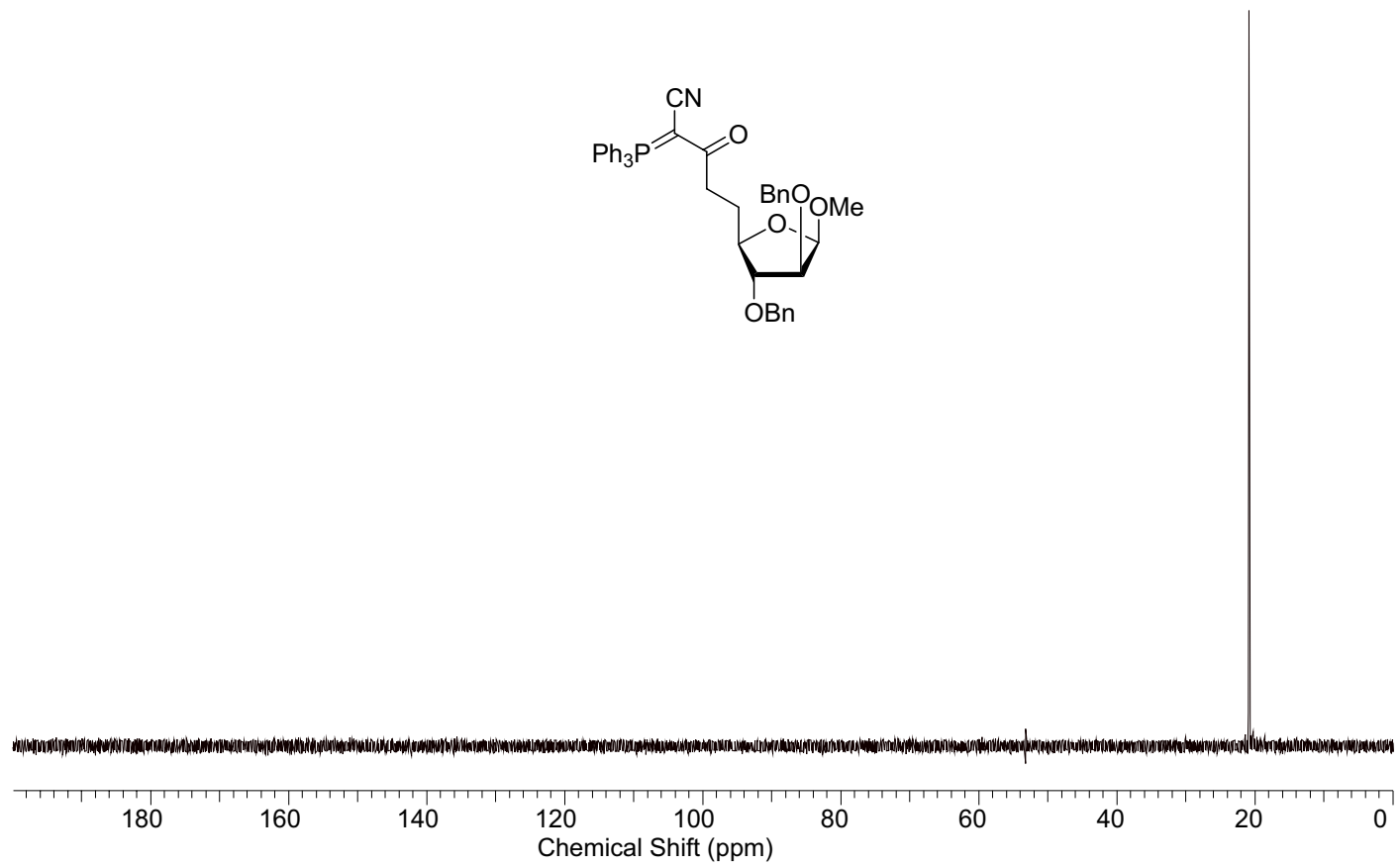
**<sup>1</sup>H NMR of methyl 2,3-di-O-benzyl-7-keto-β-D-arabino-nonafuranosiduronitrile (13)**



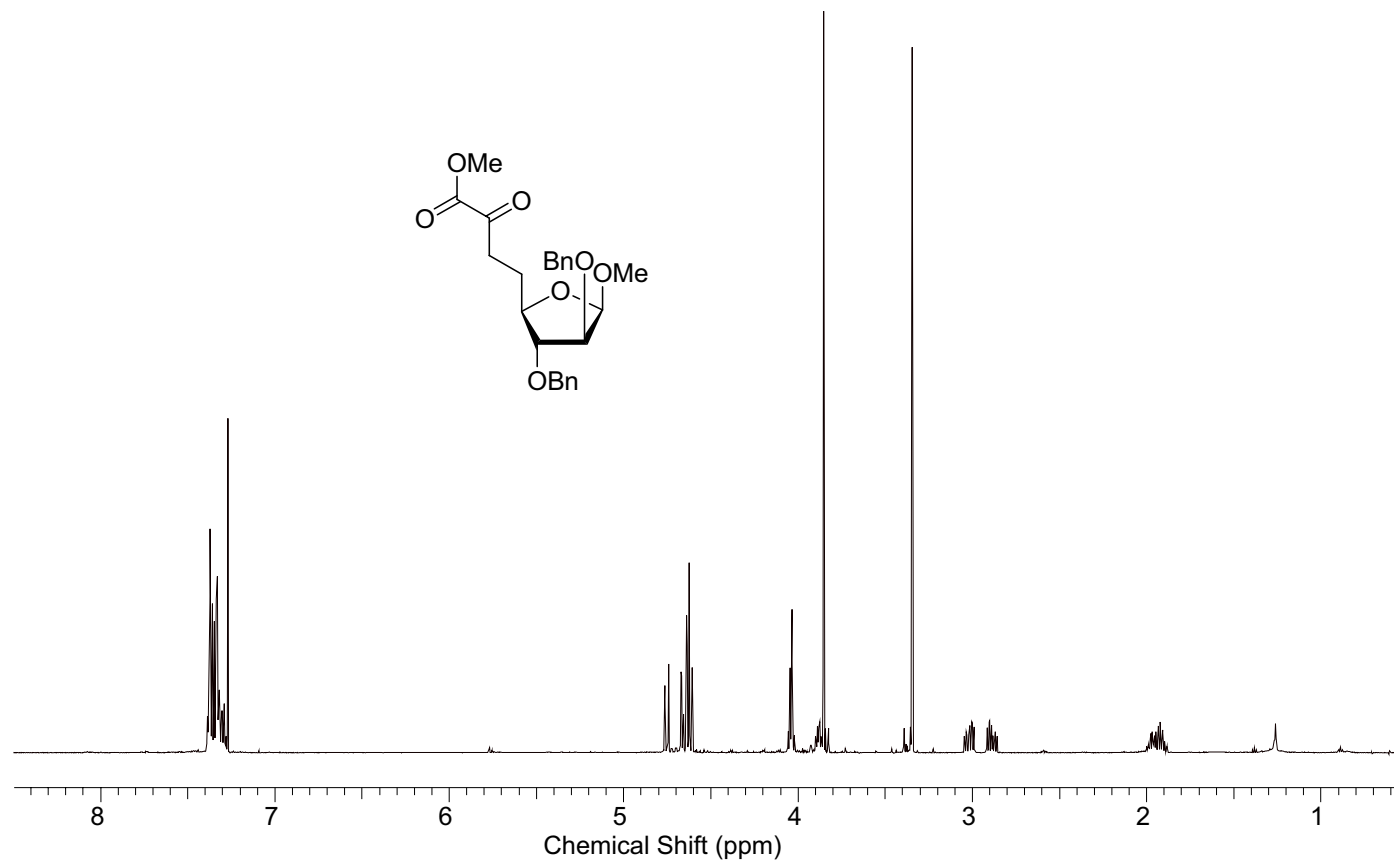
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**<sup>31</sup>P NMR of methyl 2,3-di-*O*-benzyl-7-keto-β-*D*-arabino-nonafuranosiduronitrile (13)**

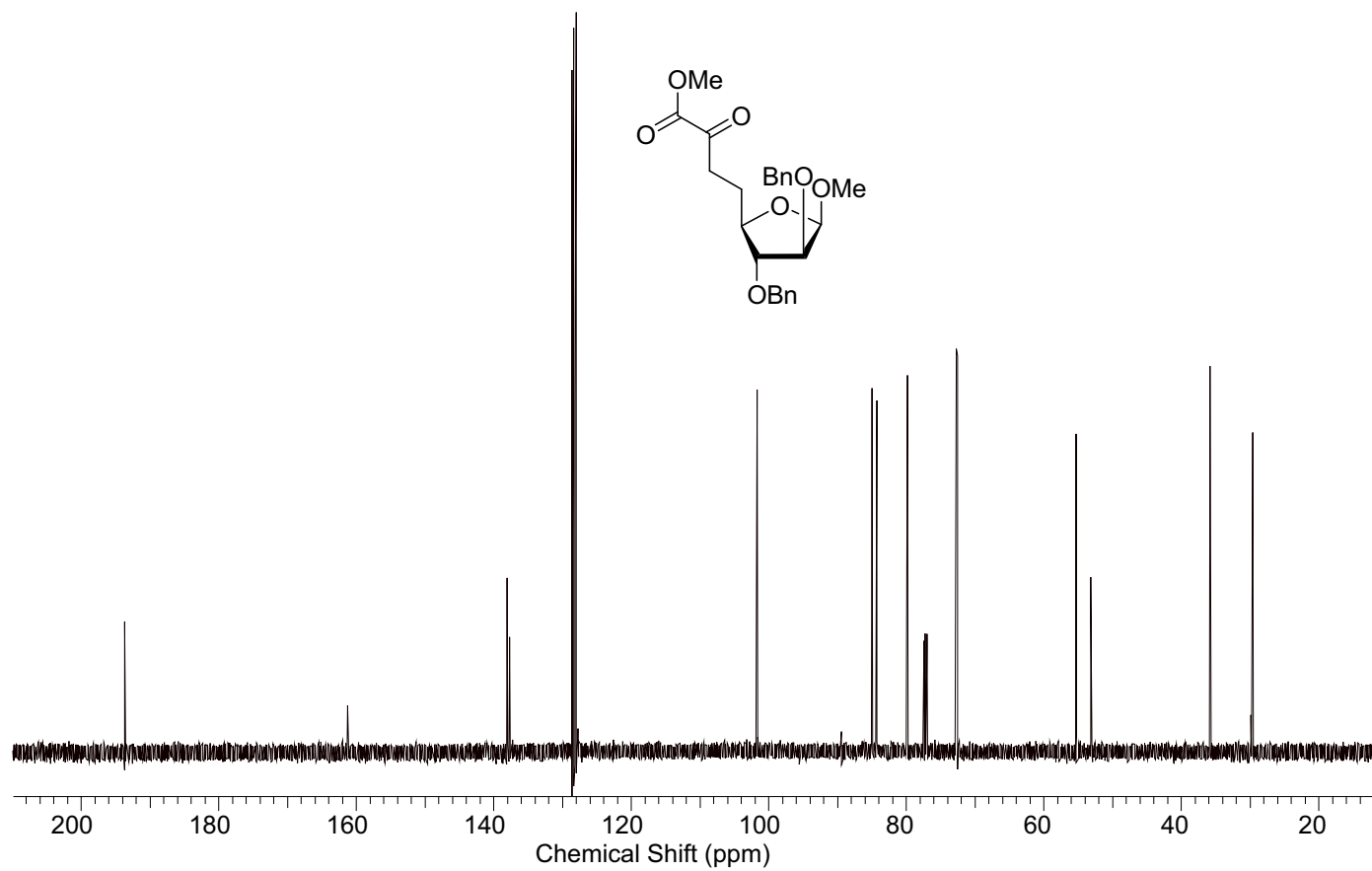


**<sup>1</sup>H NMR of methyl 2,3-di-*O*-benzyl-7-keto-β-*D*-arabino-octafuranosiduronic acid methyl ester (14)**

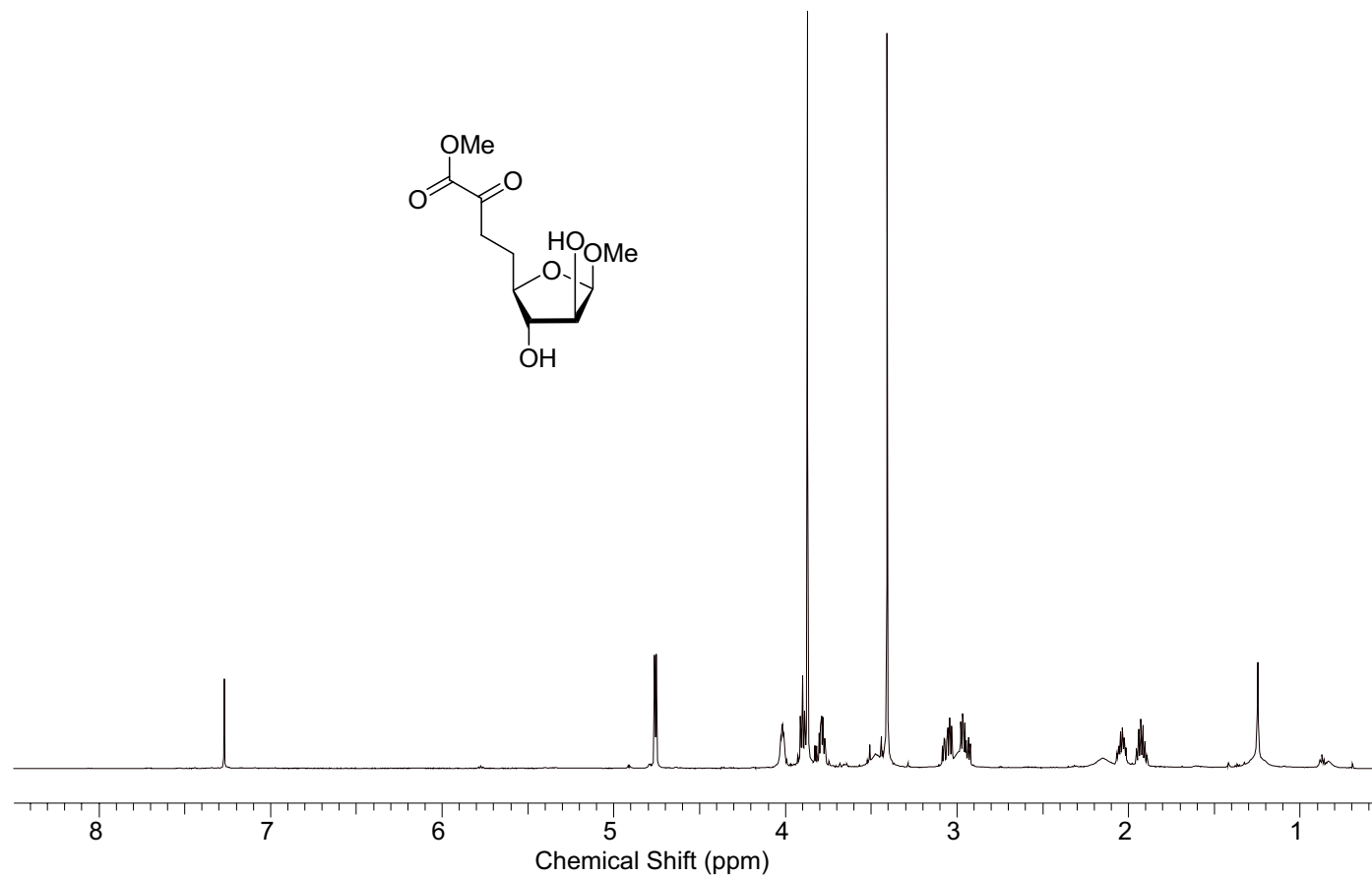




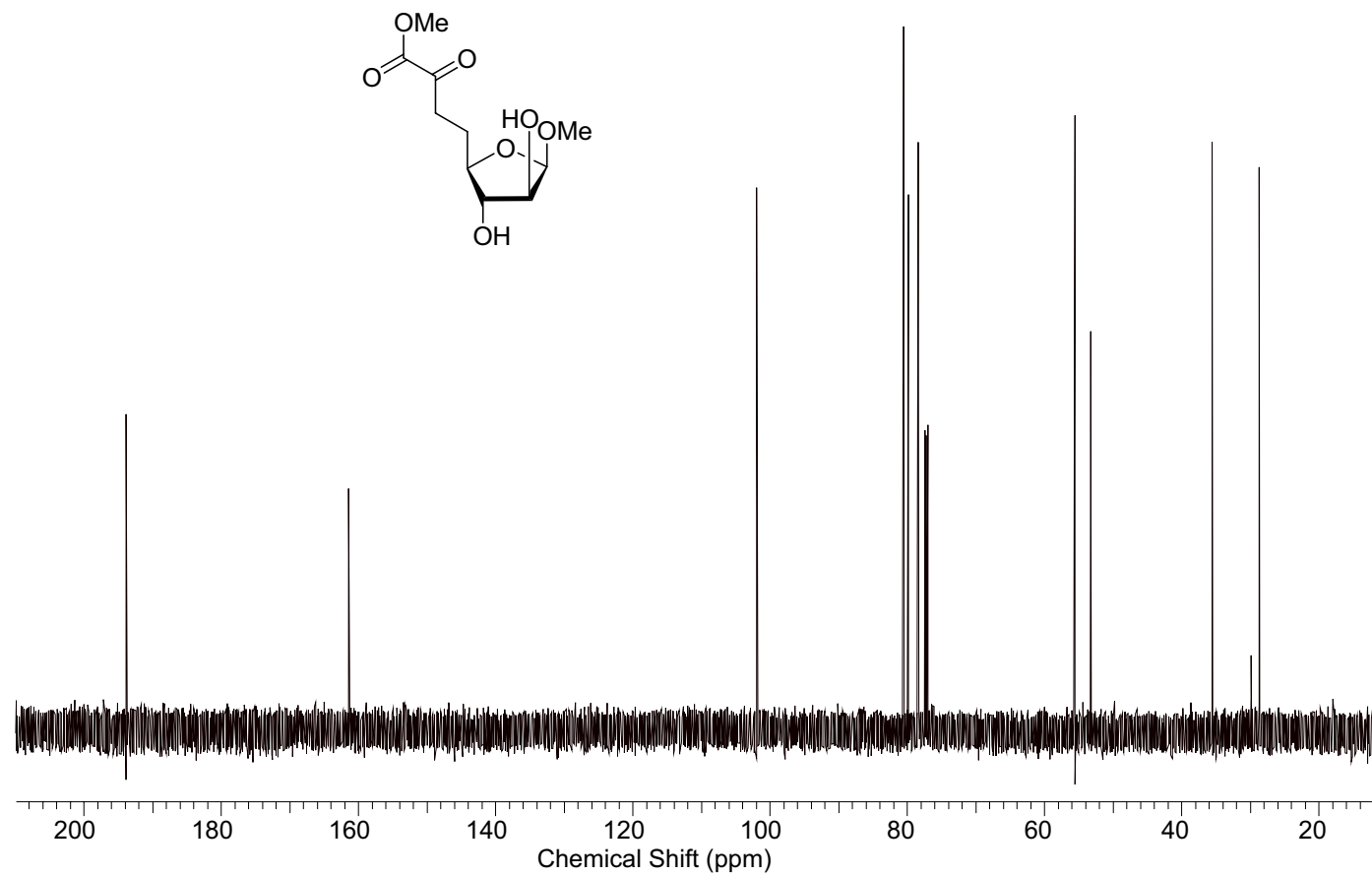
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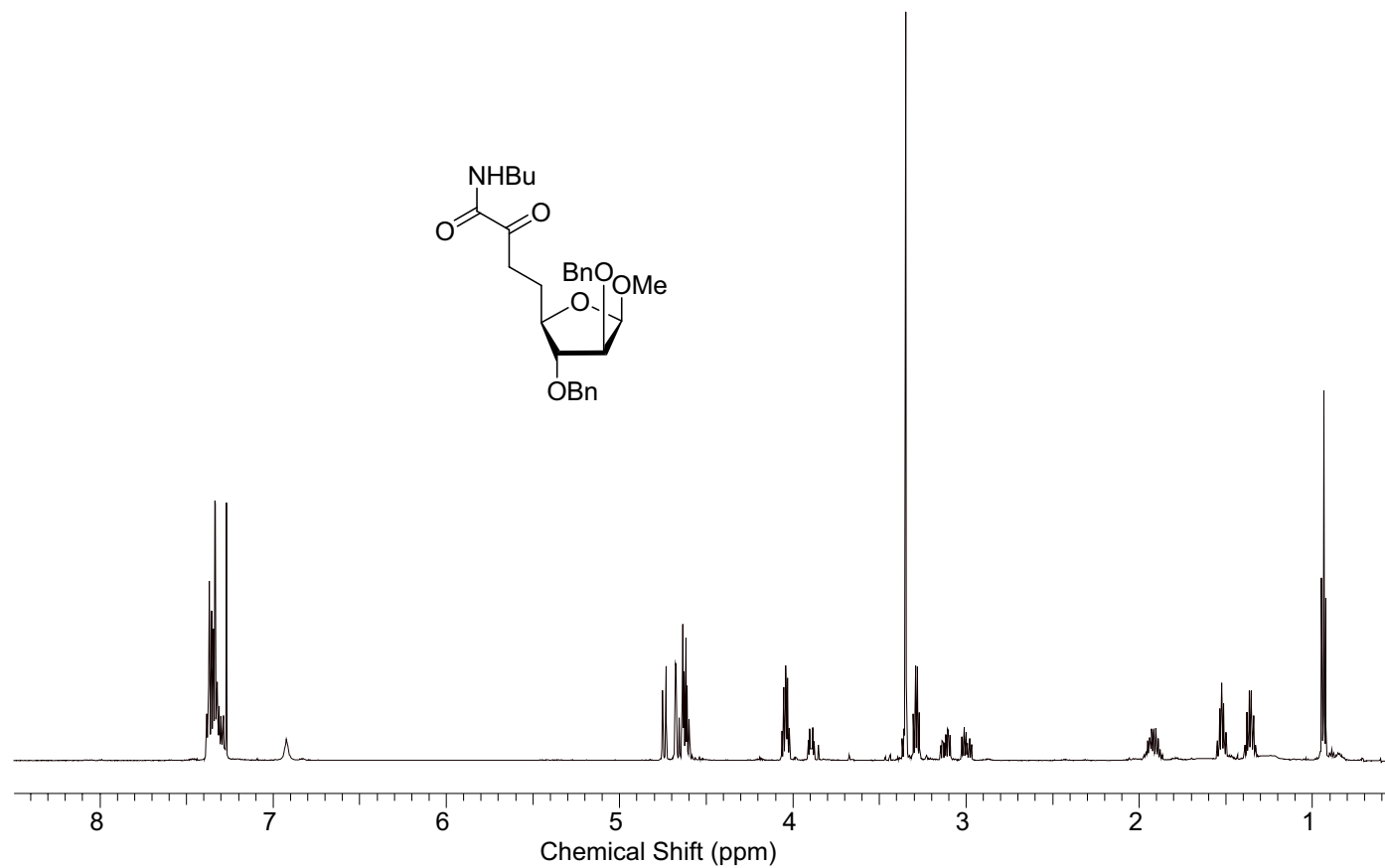
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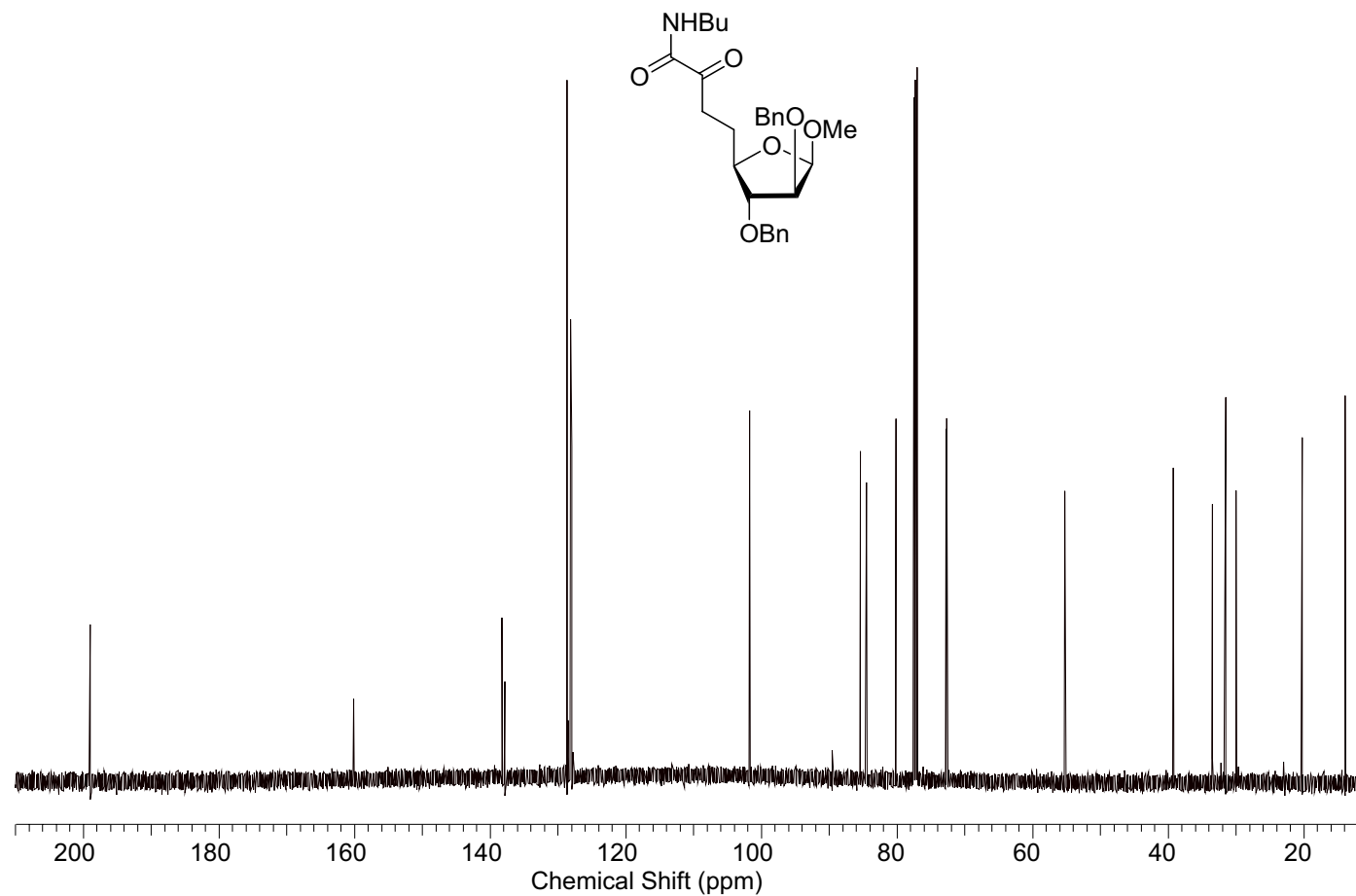
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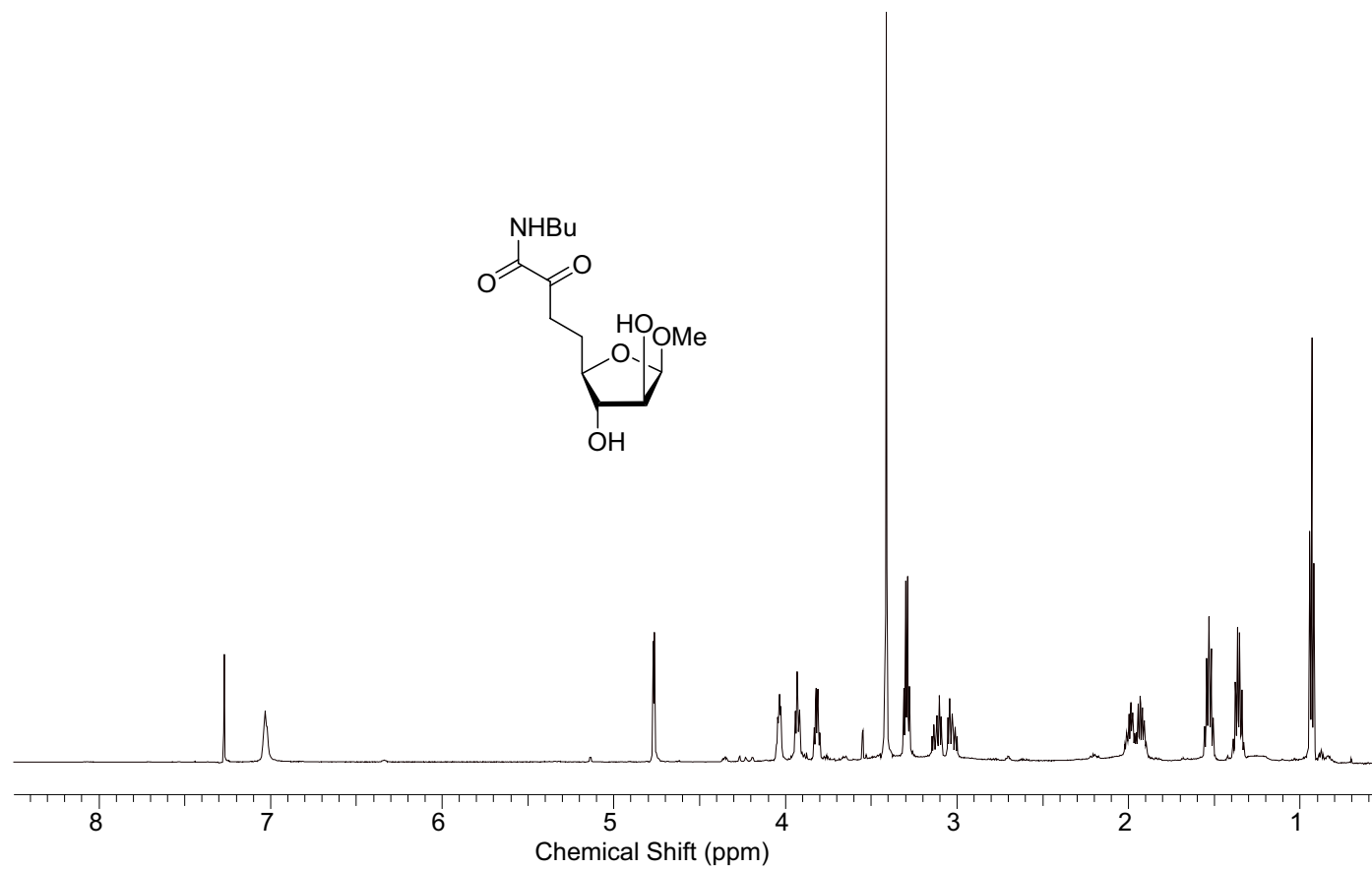
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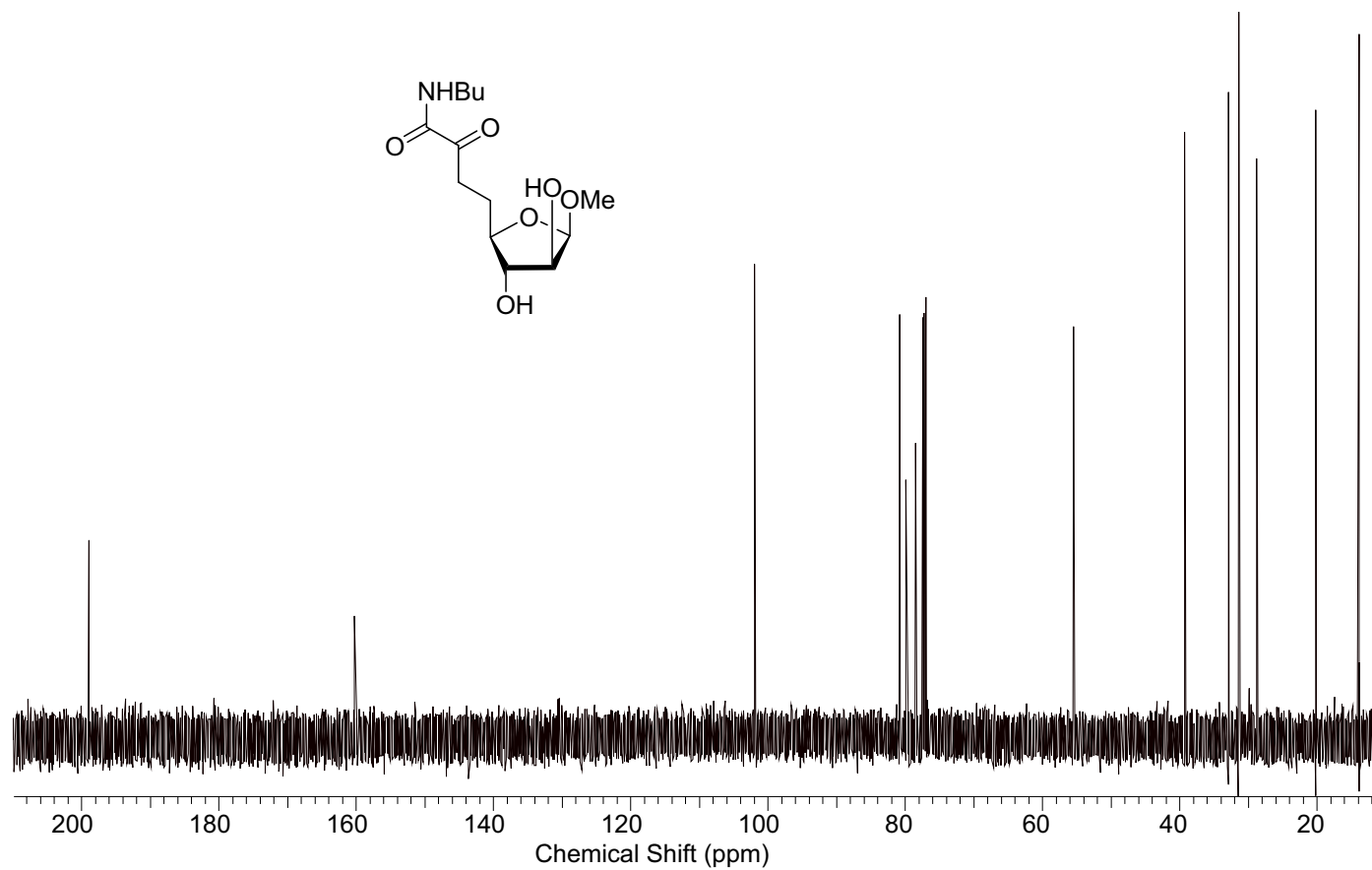
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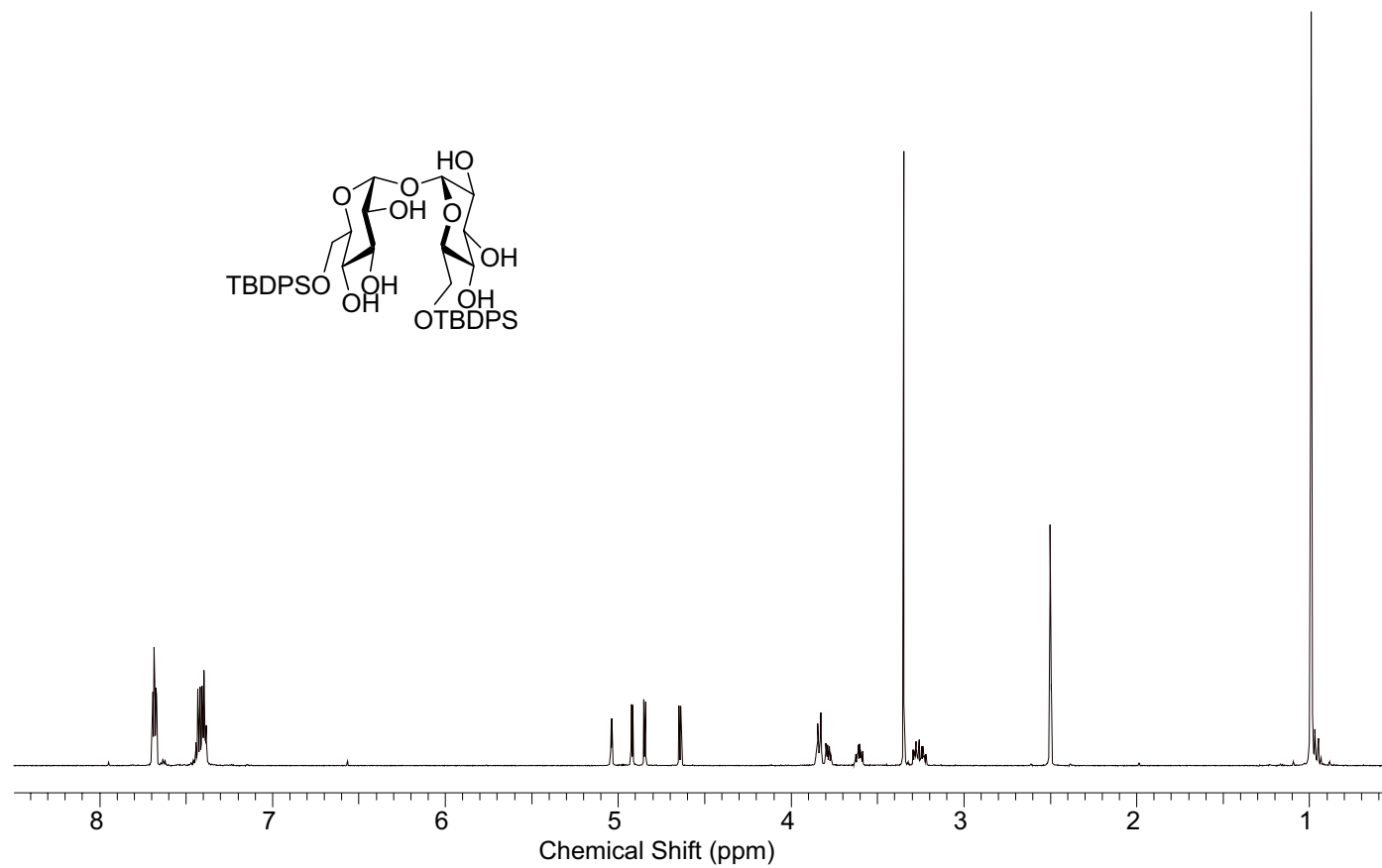
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**$^{13}\text{C}$  NMR of methyl *N*-butyl-7-keto- $\beta$ -D-arabino-octafuranosiduronamide (3)**

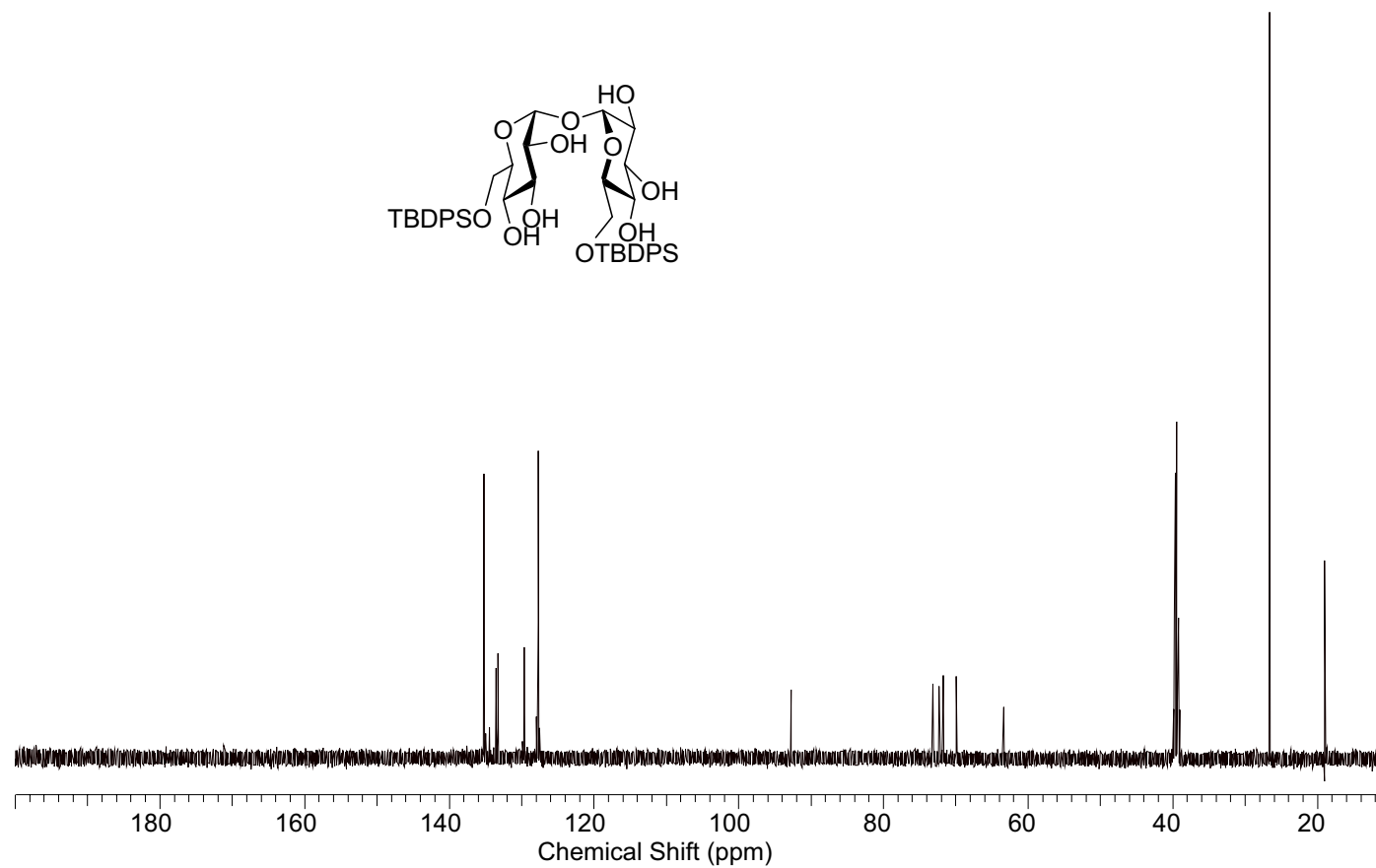


**$^1\text{H}$  NMR of 6, 6'-di-*O*-*tert*-butyldiphenylsilyl- $\alpha$ -D-trehalose (18)**

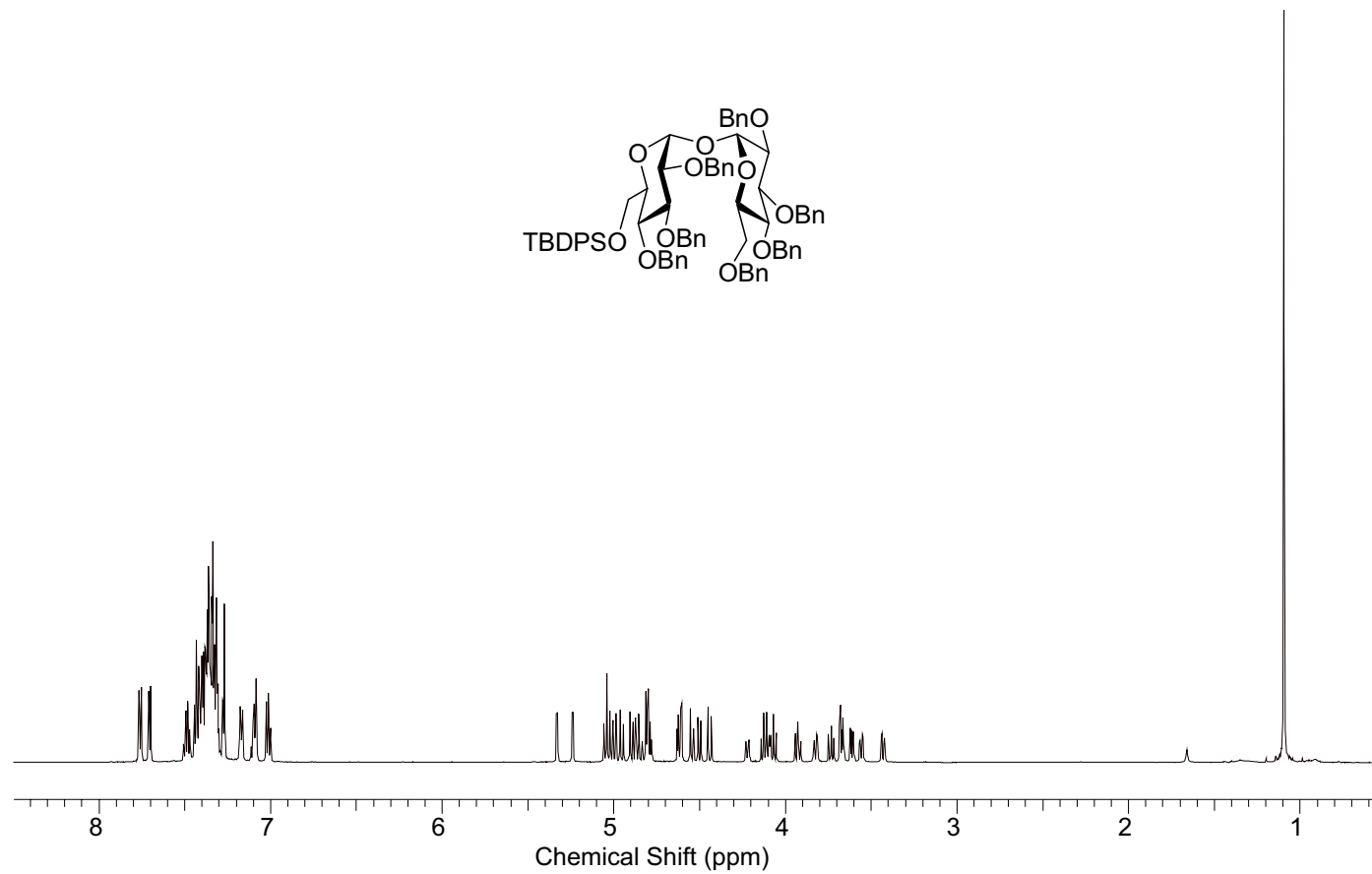




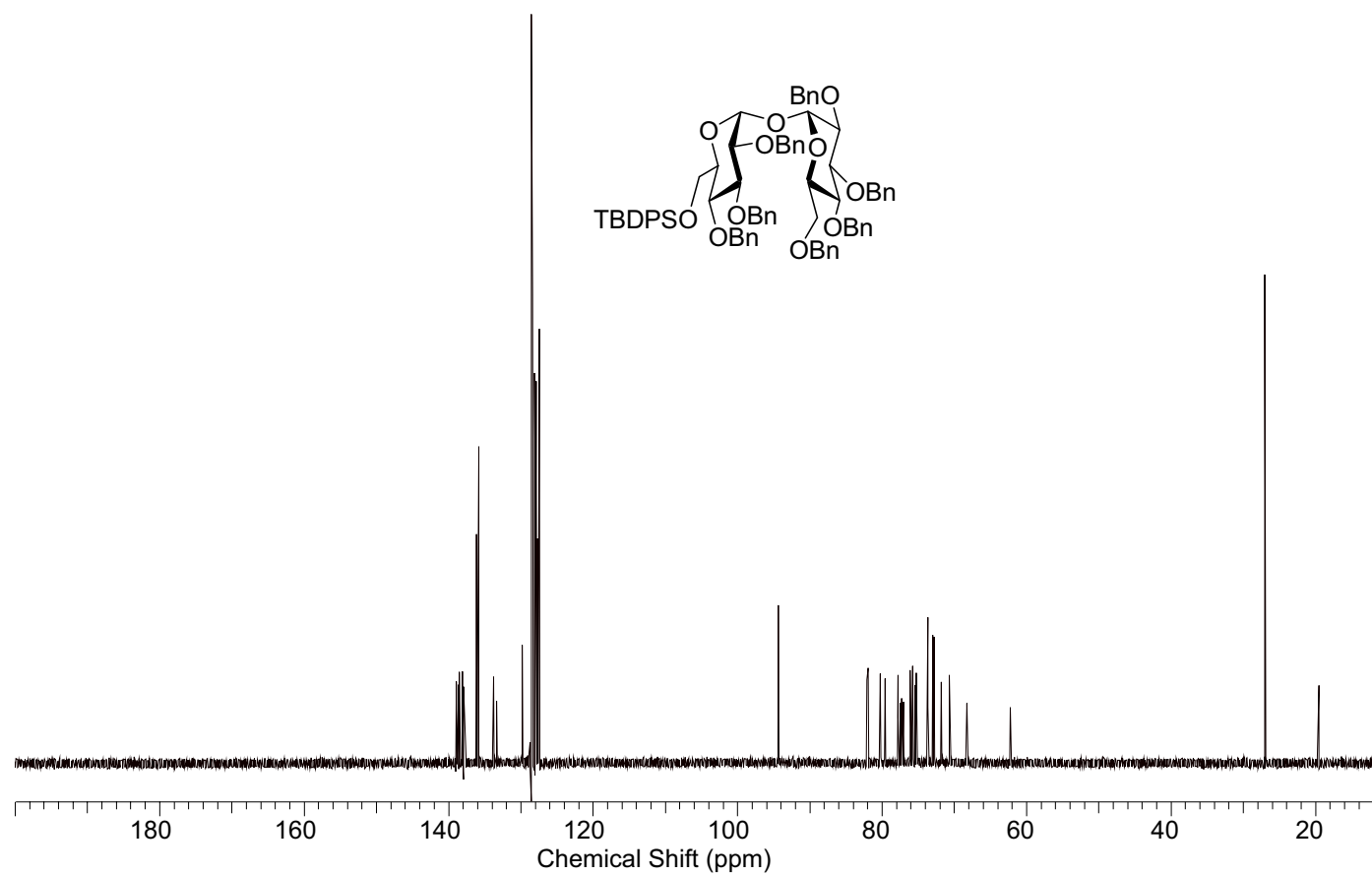
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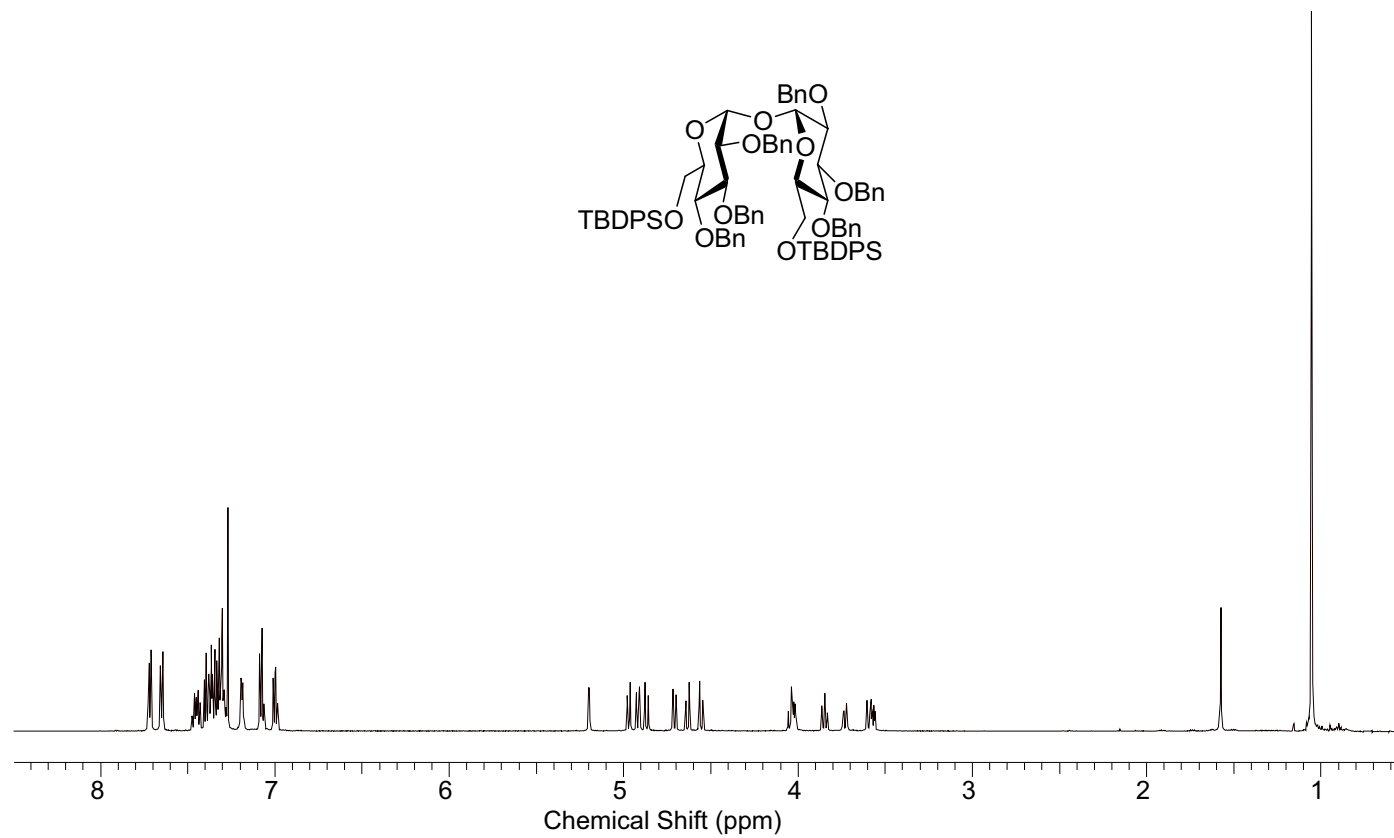
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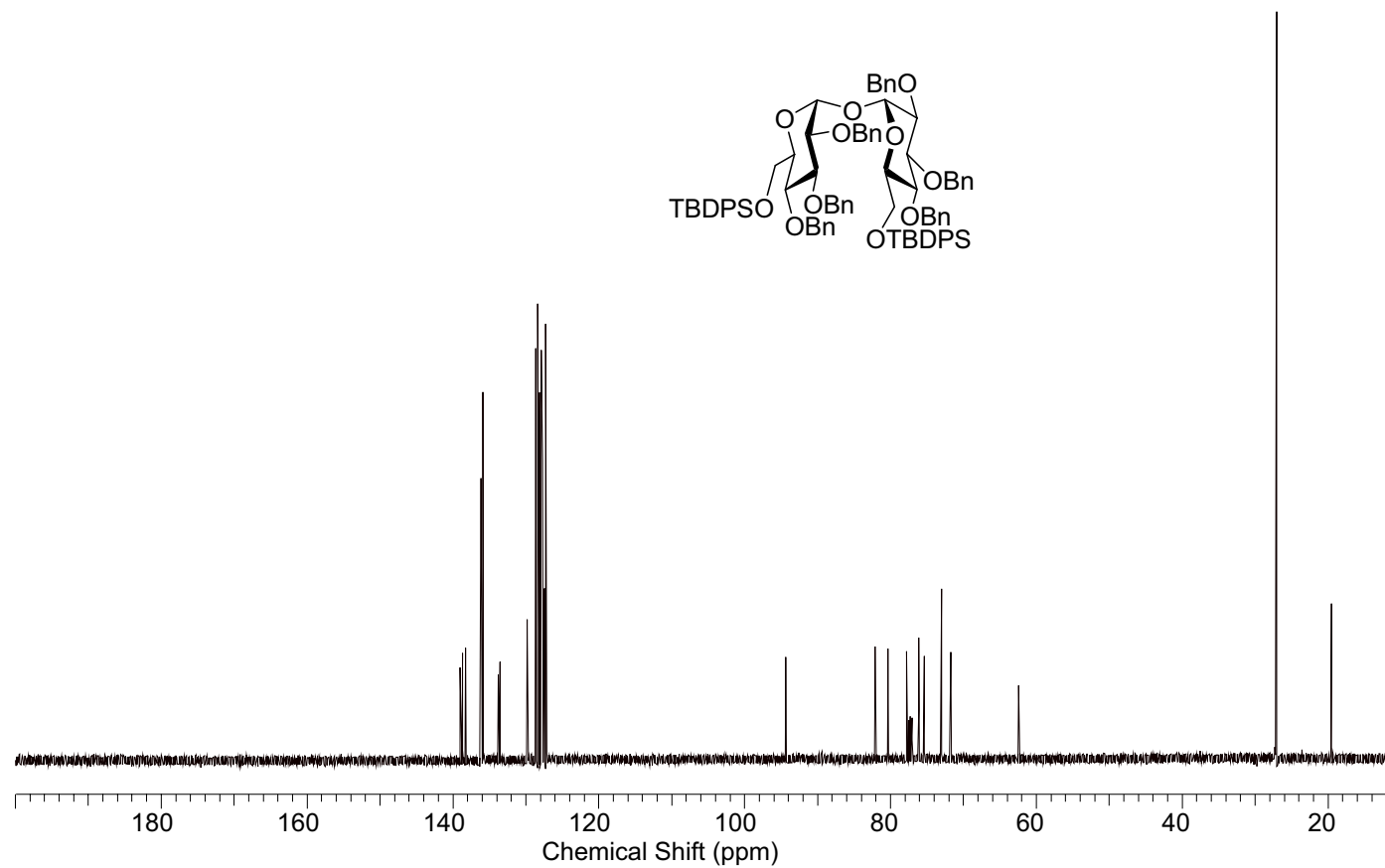
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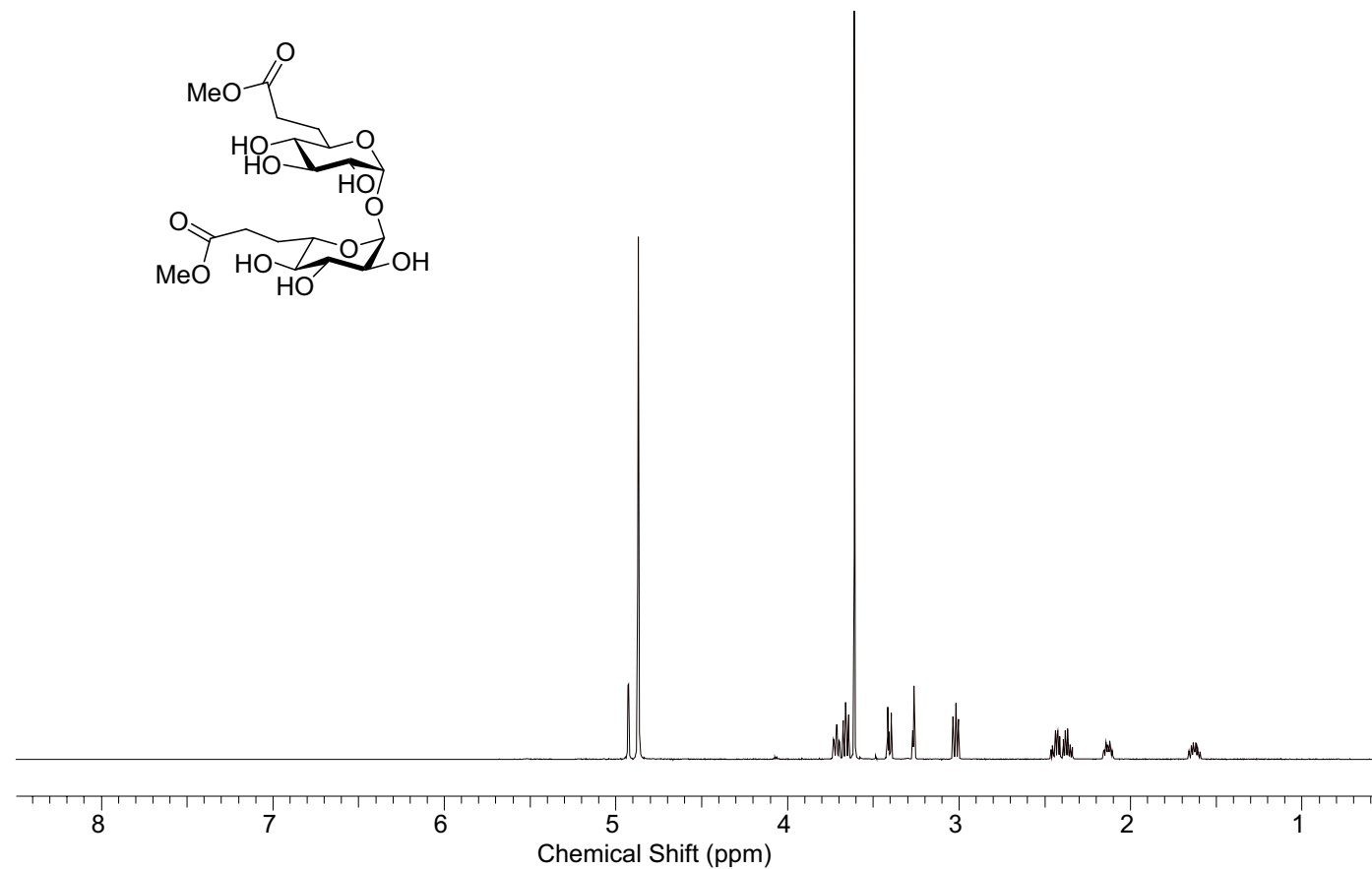
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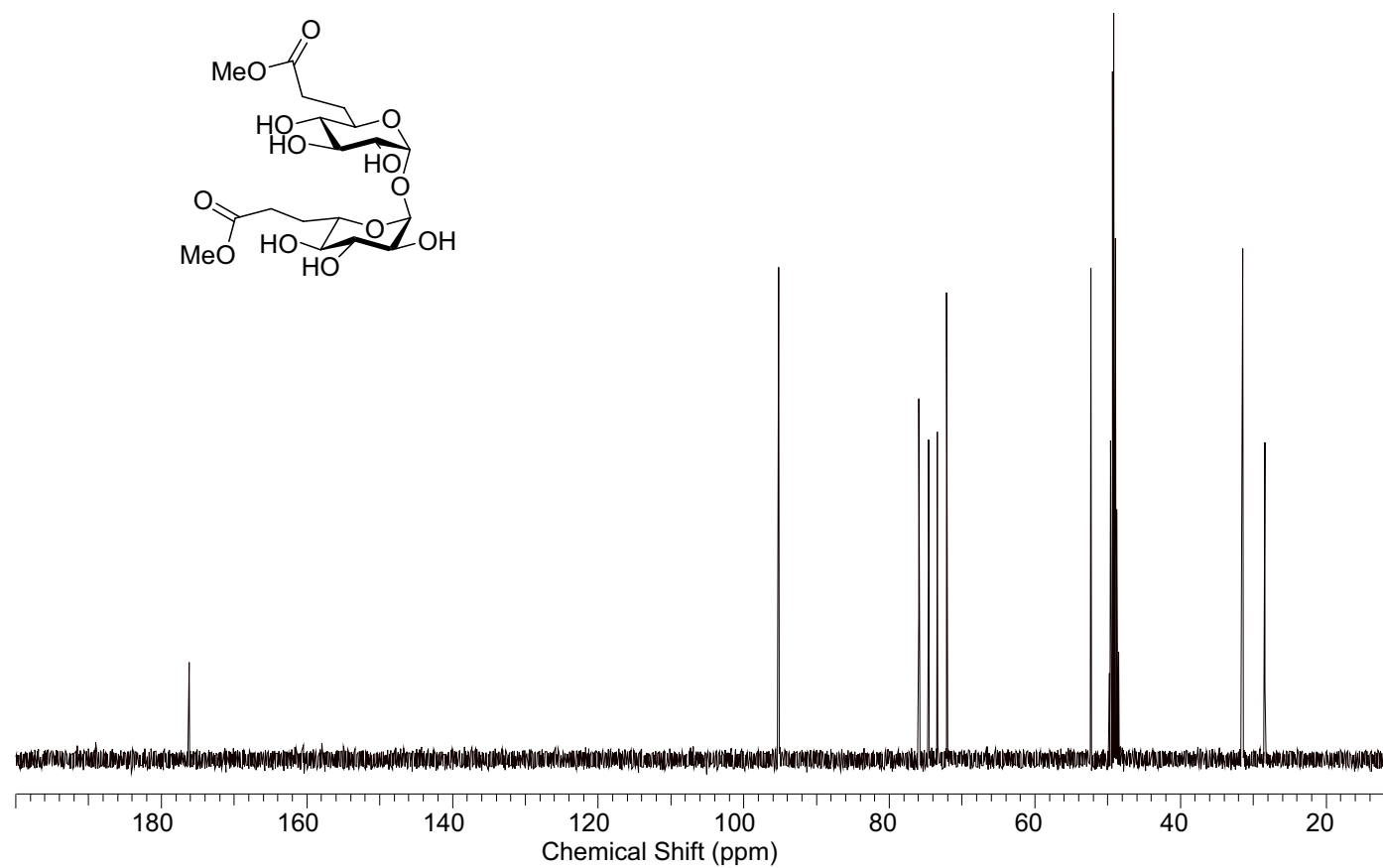
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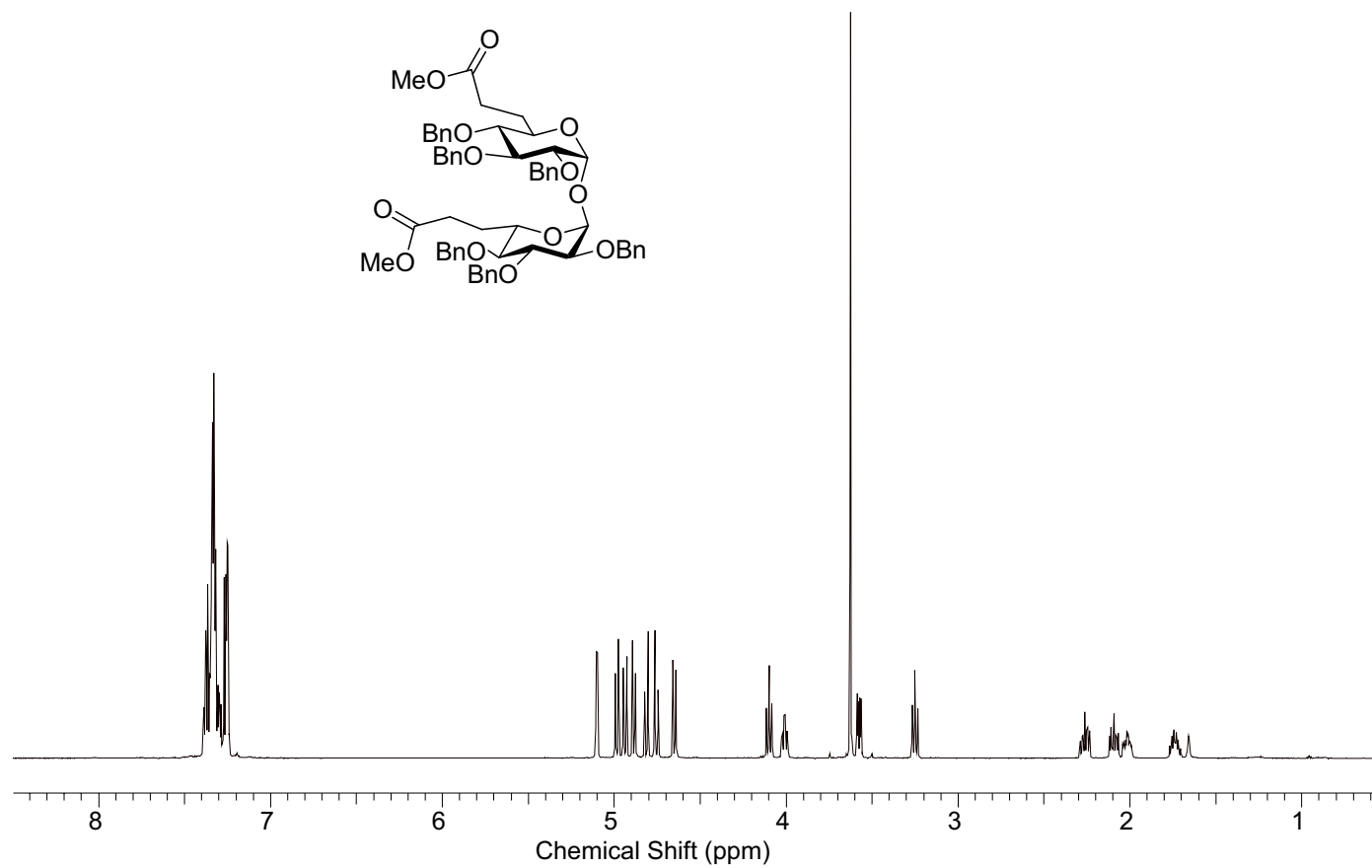
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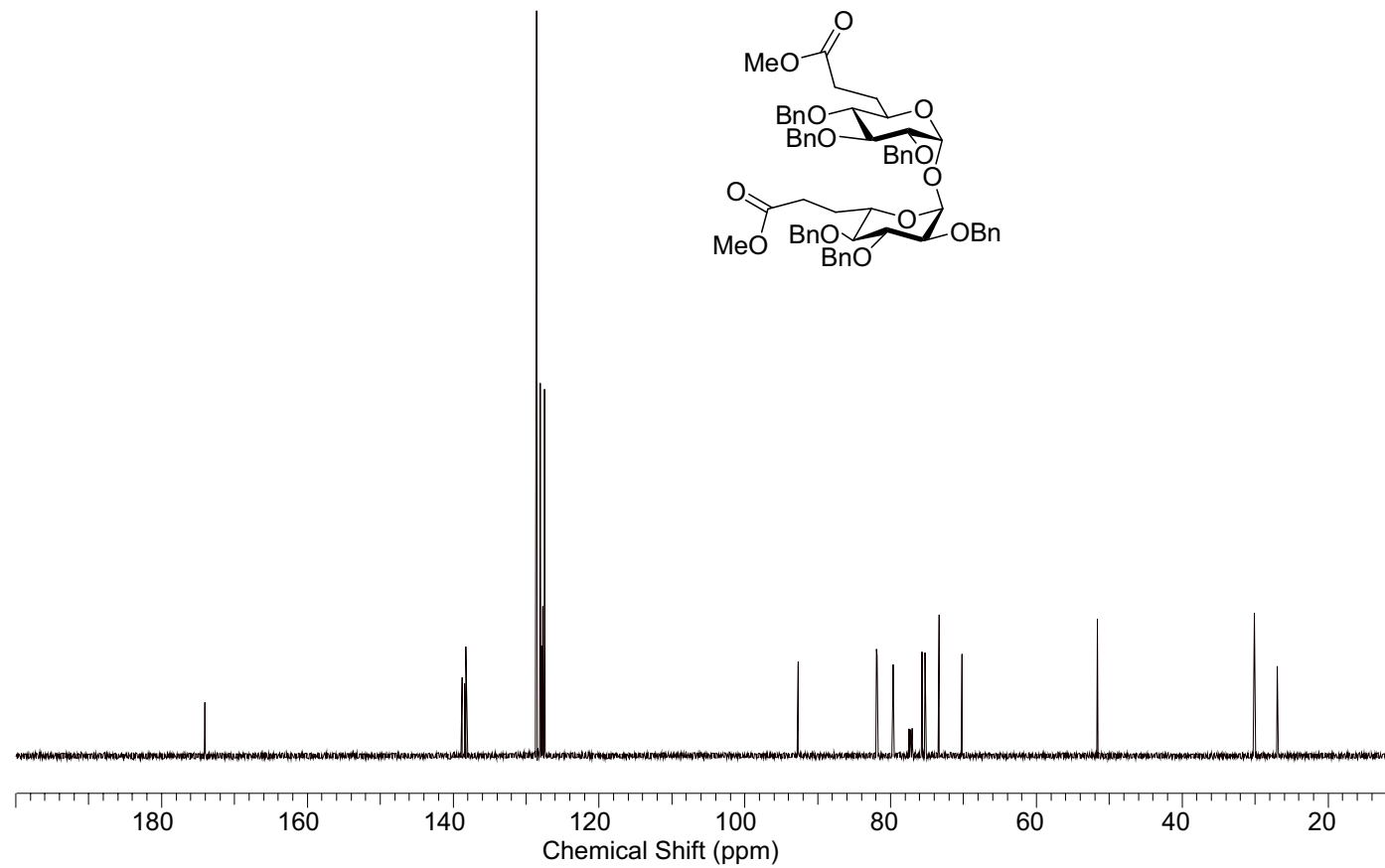


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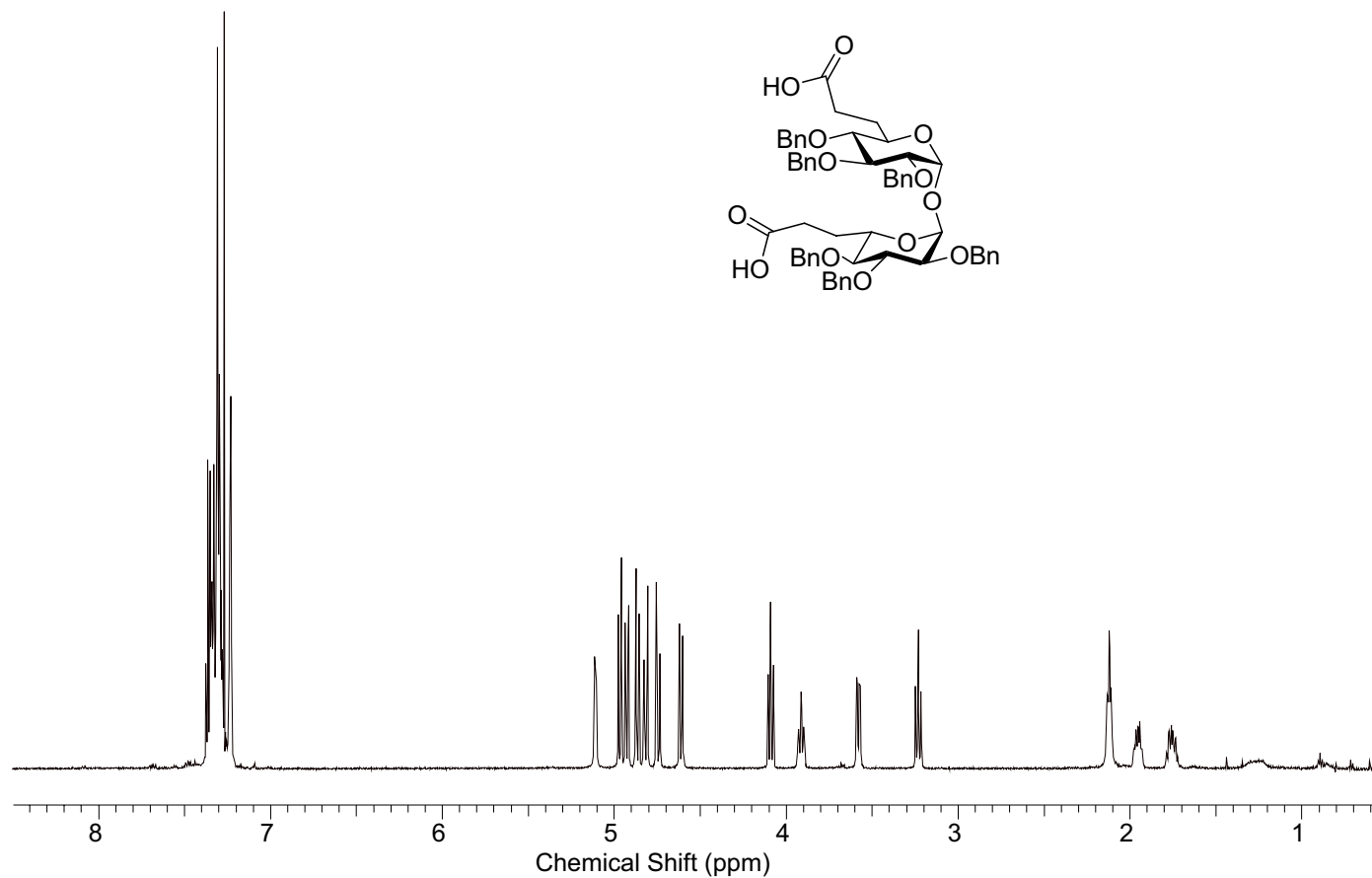




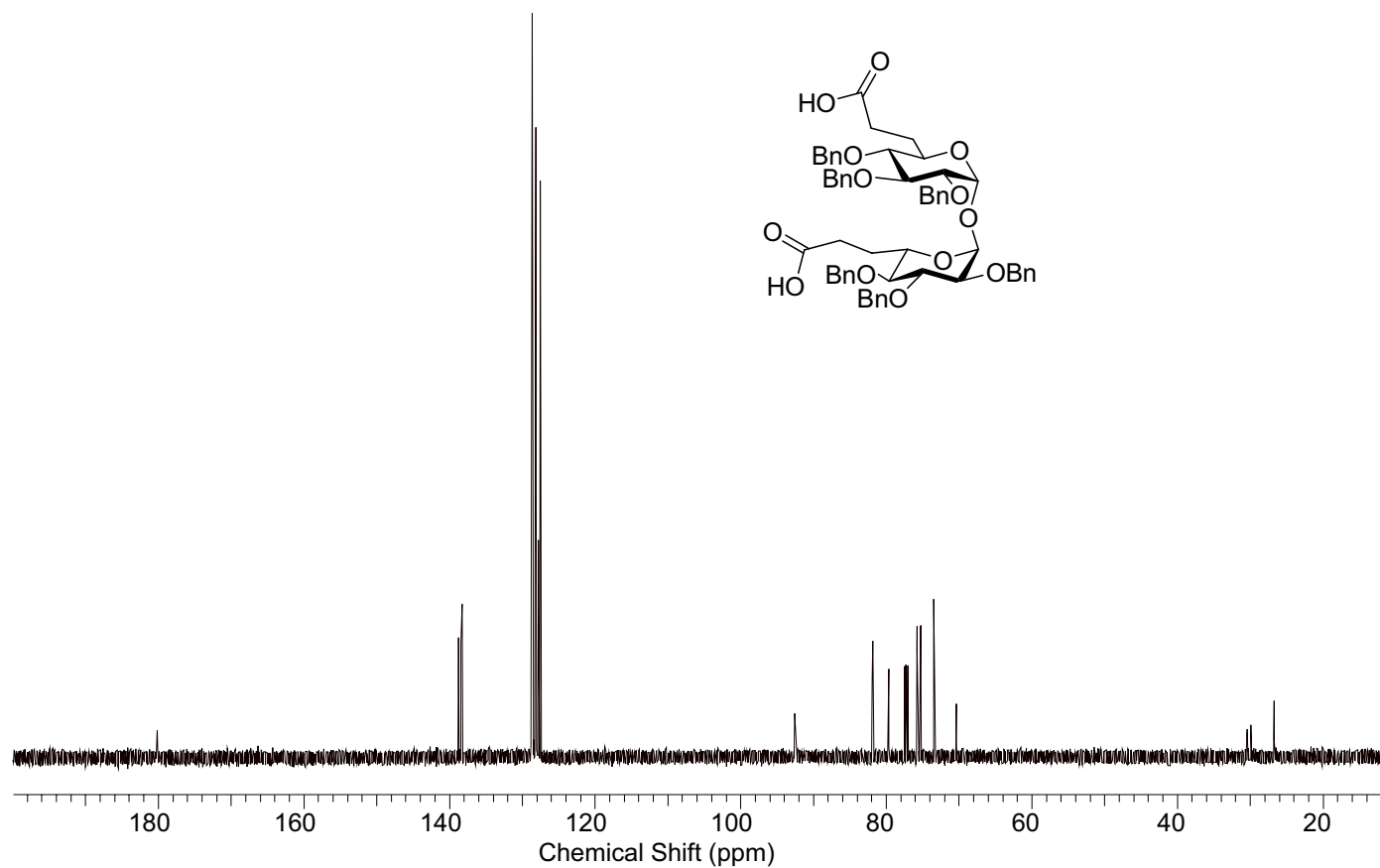
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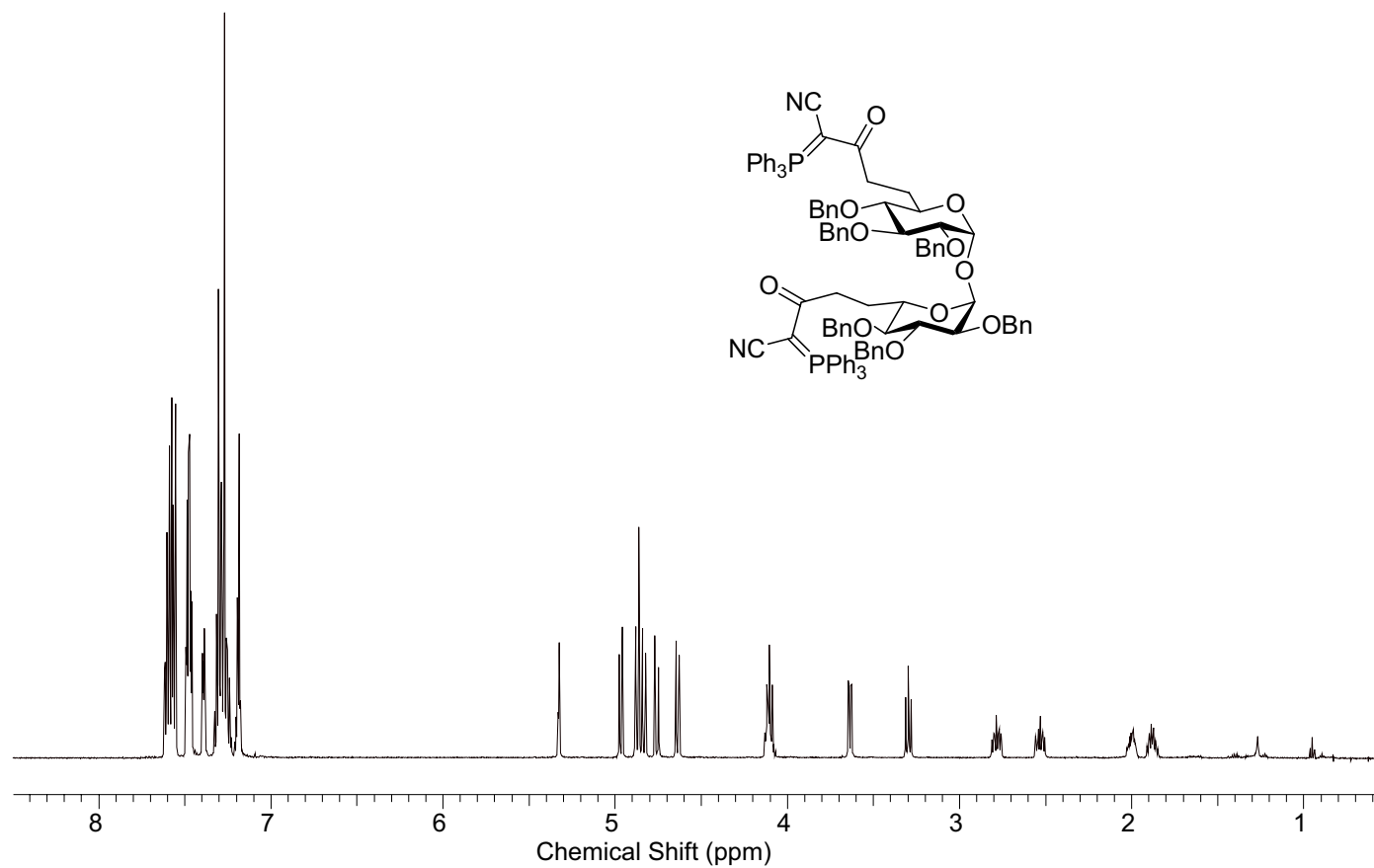
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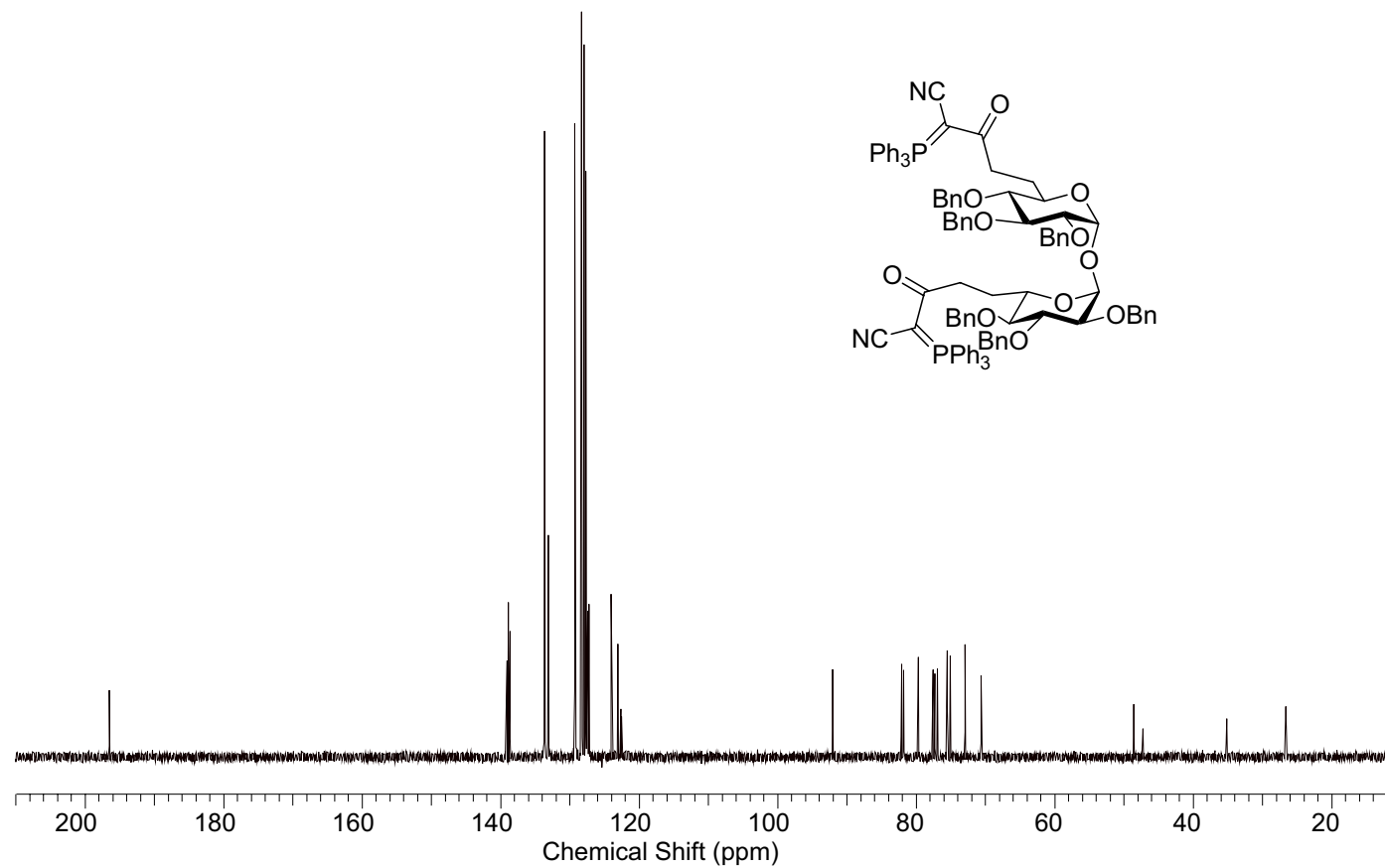
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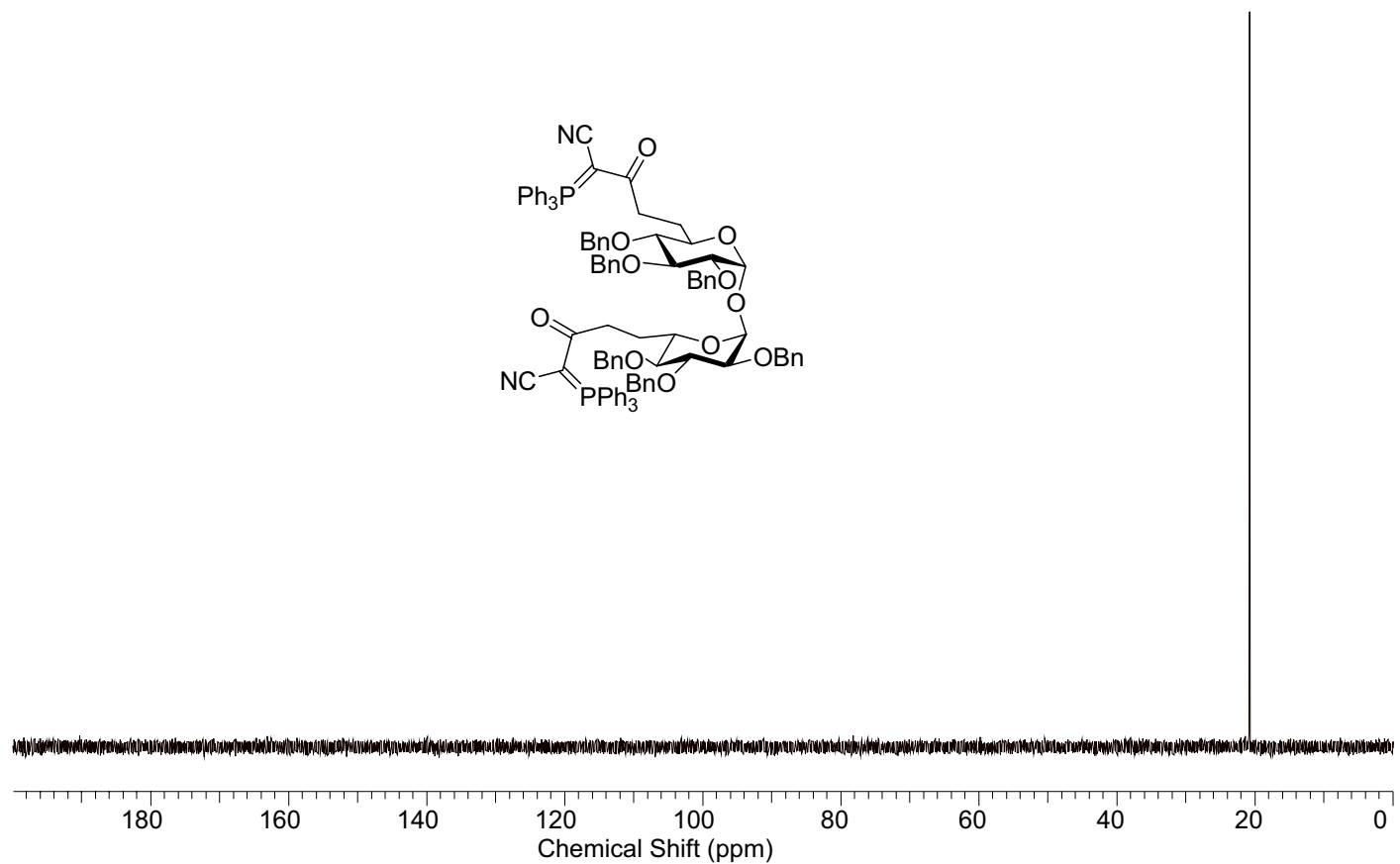
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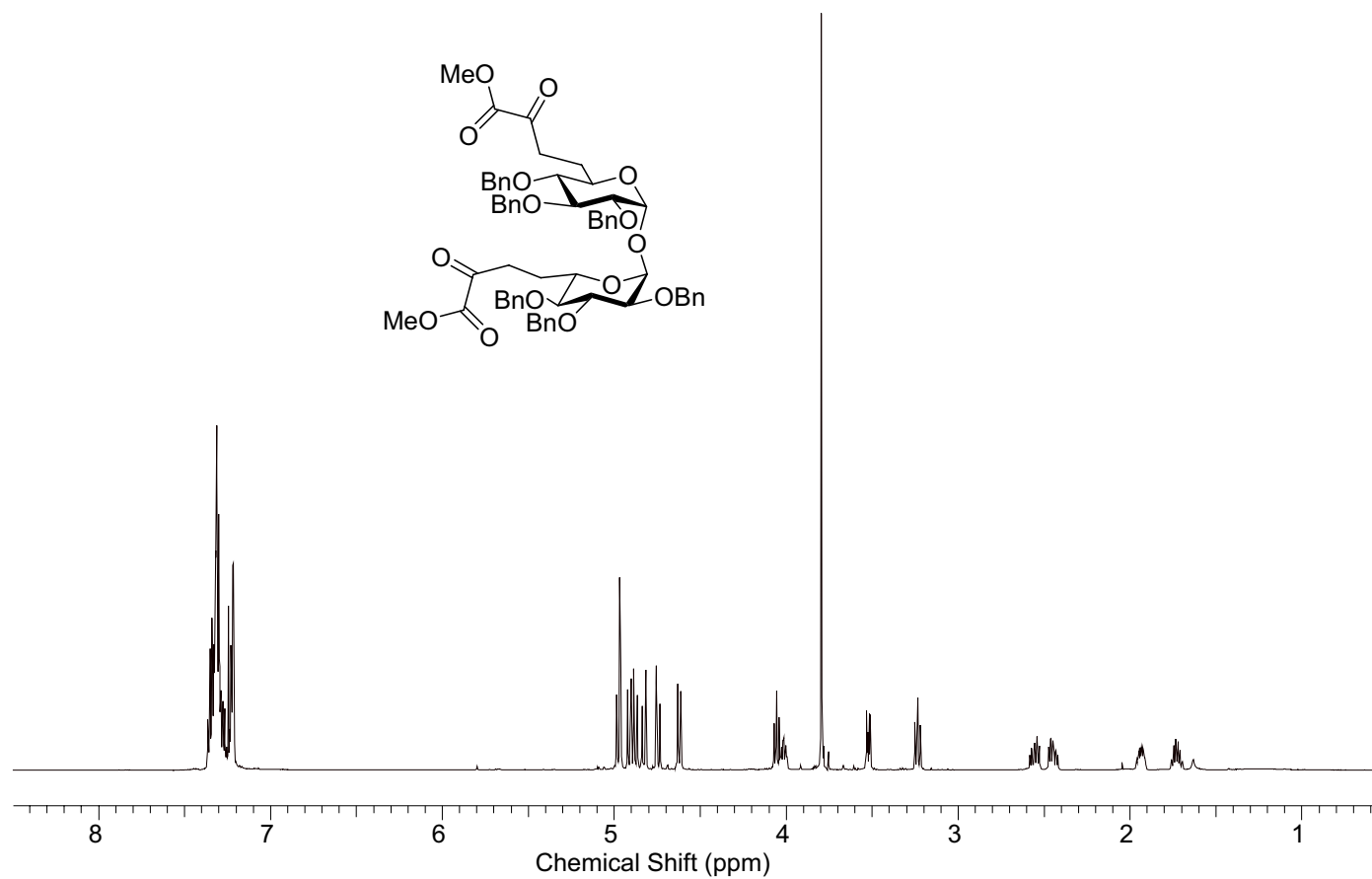
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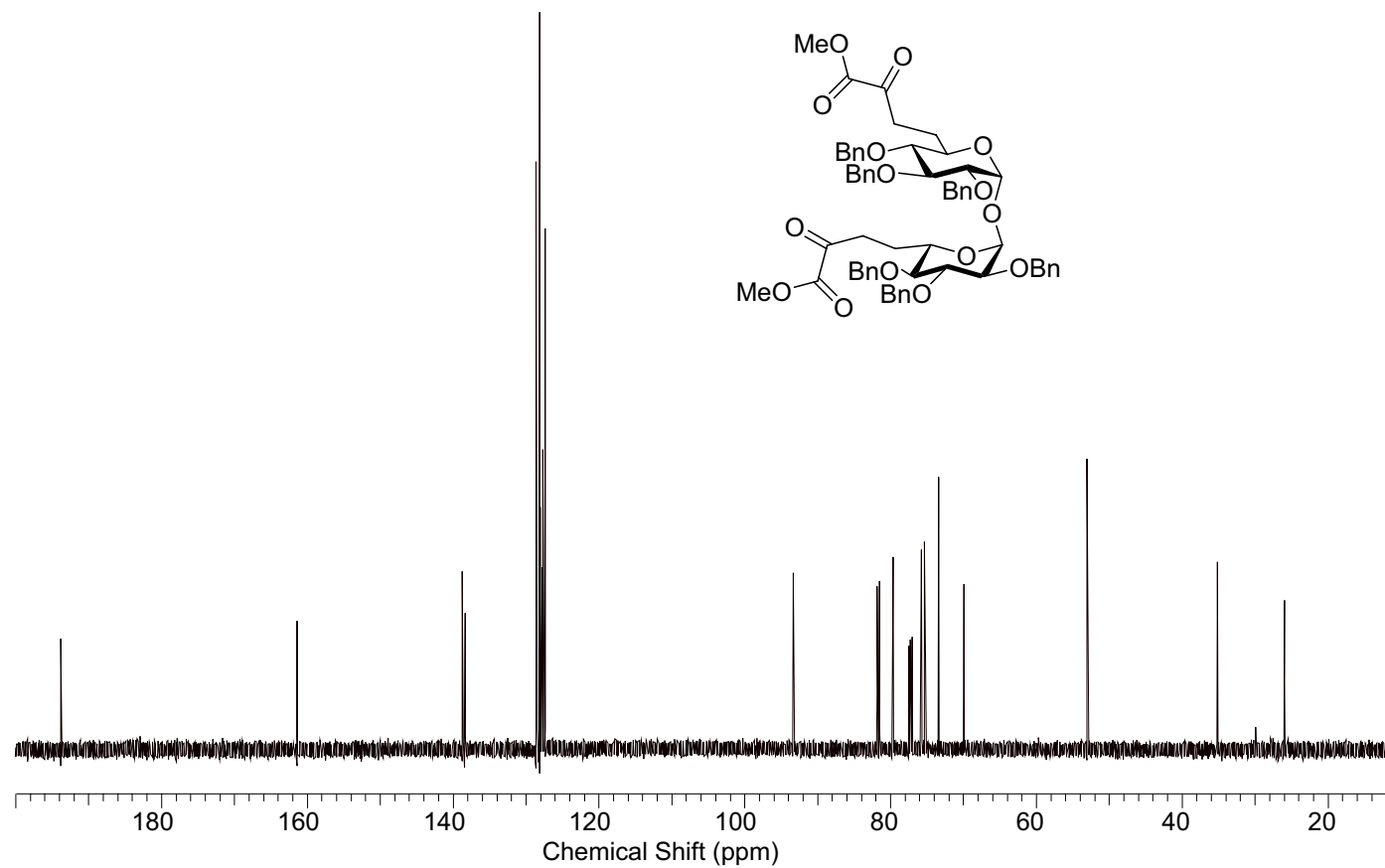
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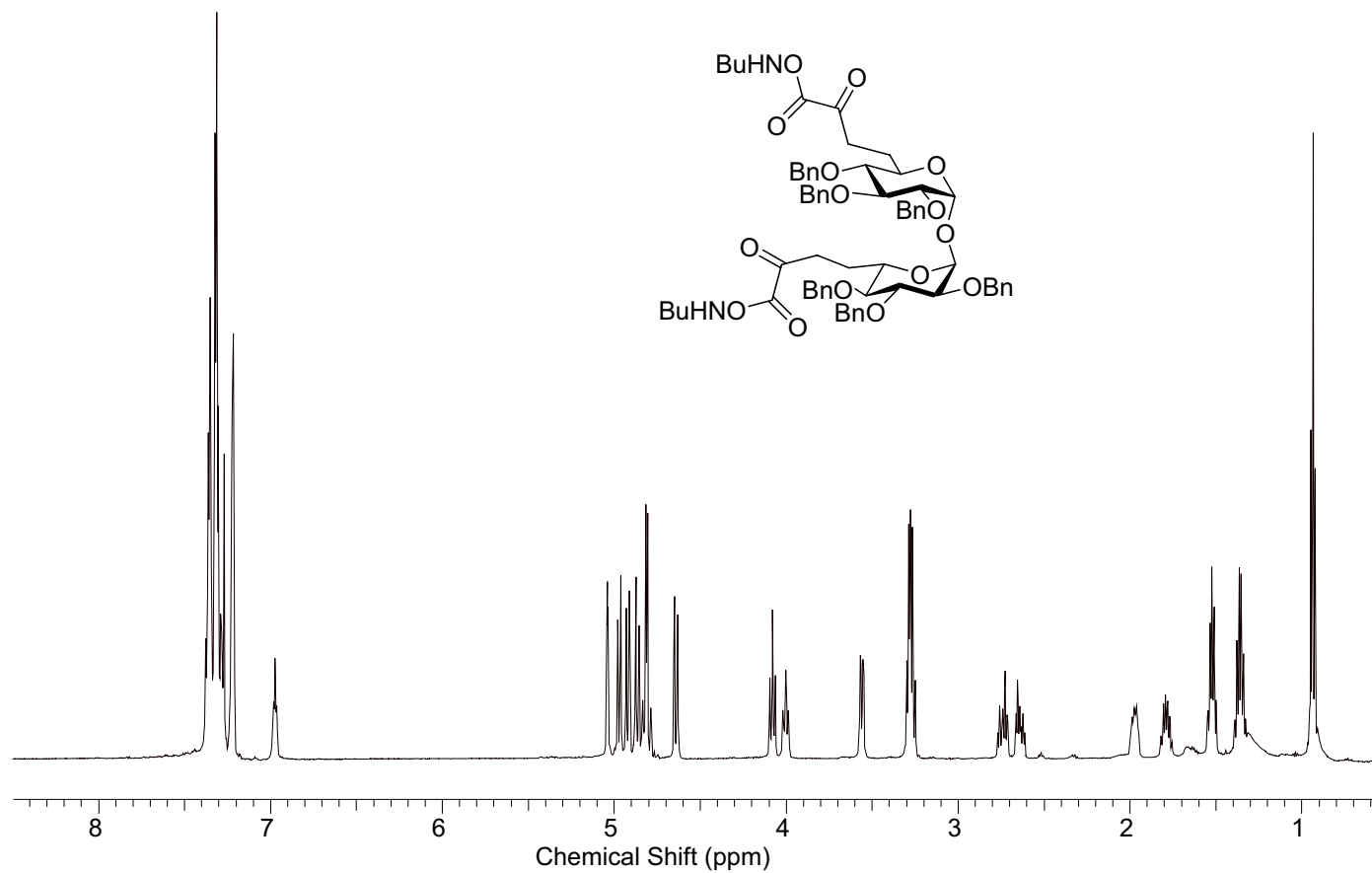


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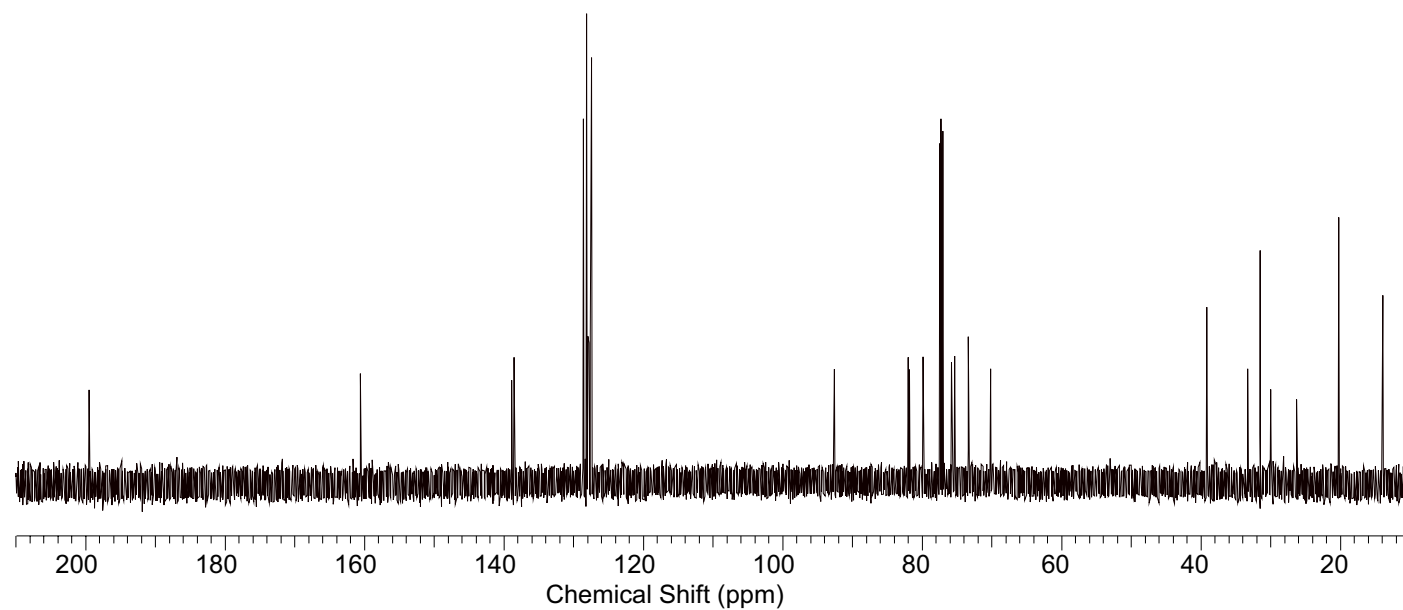
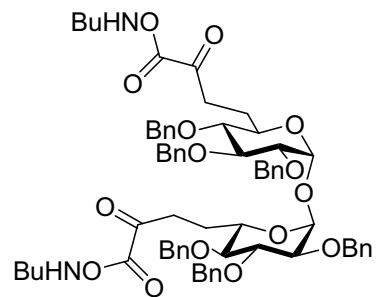




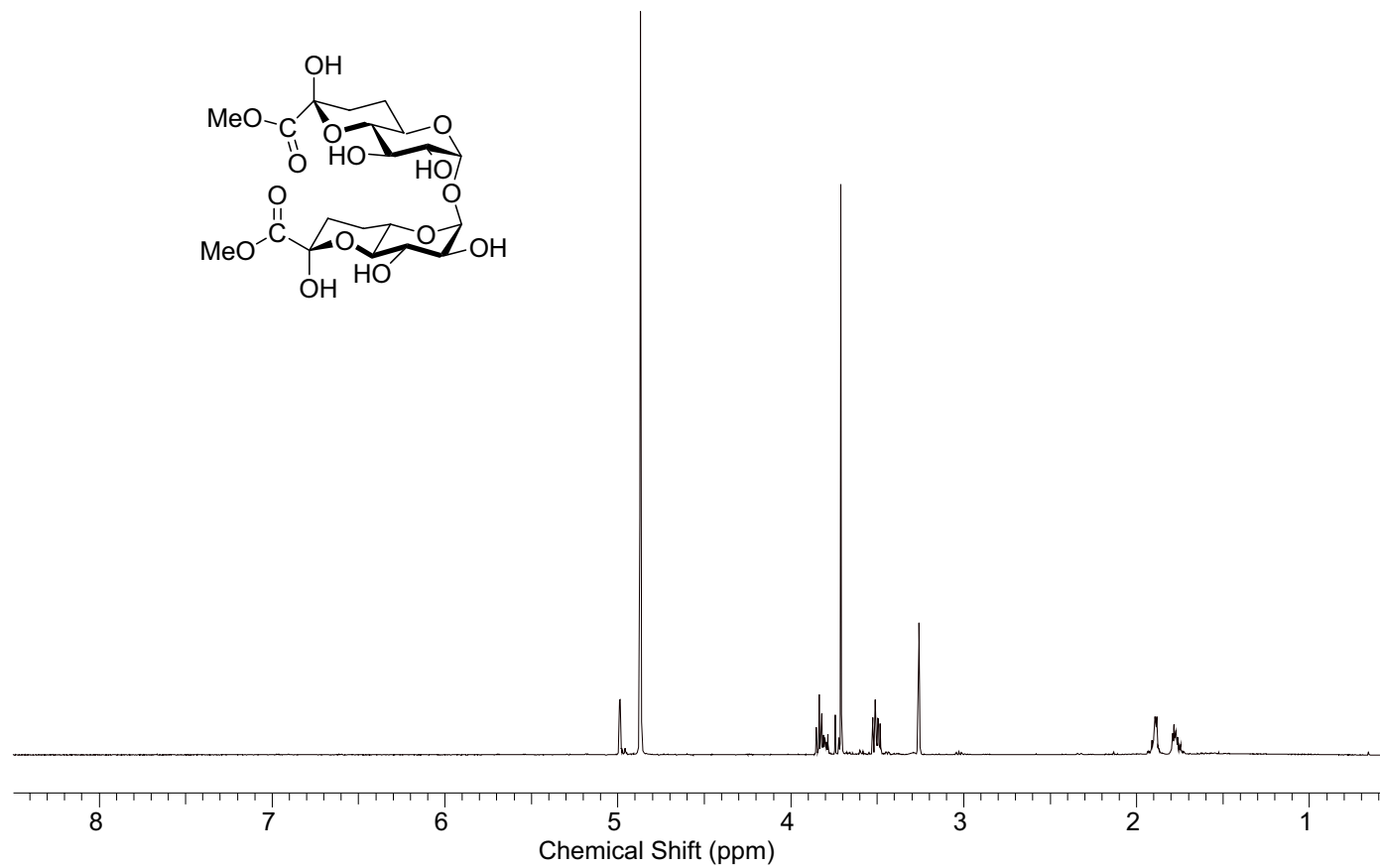
**<sup>1</sup>H NMR of bis(*N*-butyl-2,3,4-tri-*O*-benzyl-8-oxo- $\alpha$ -D-glucopyranosyluronamide) ether (28)**



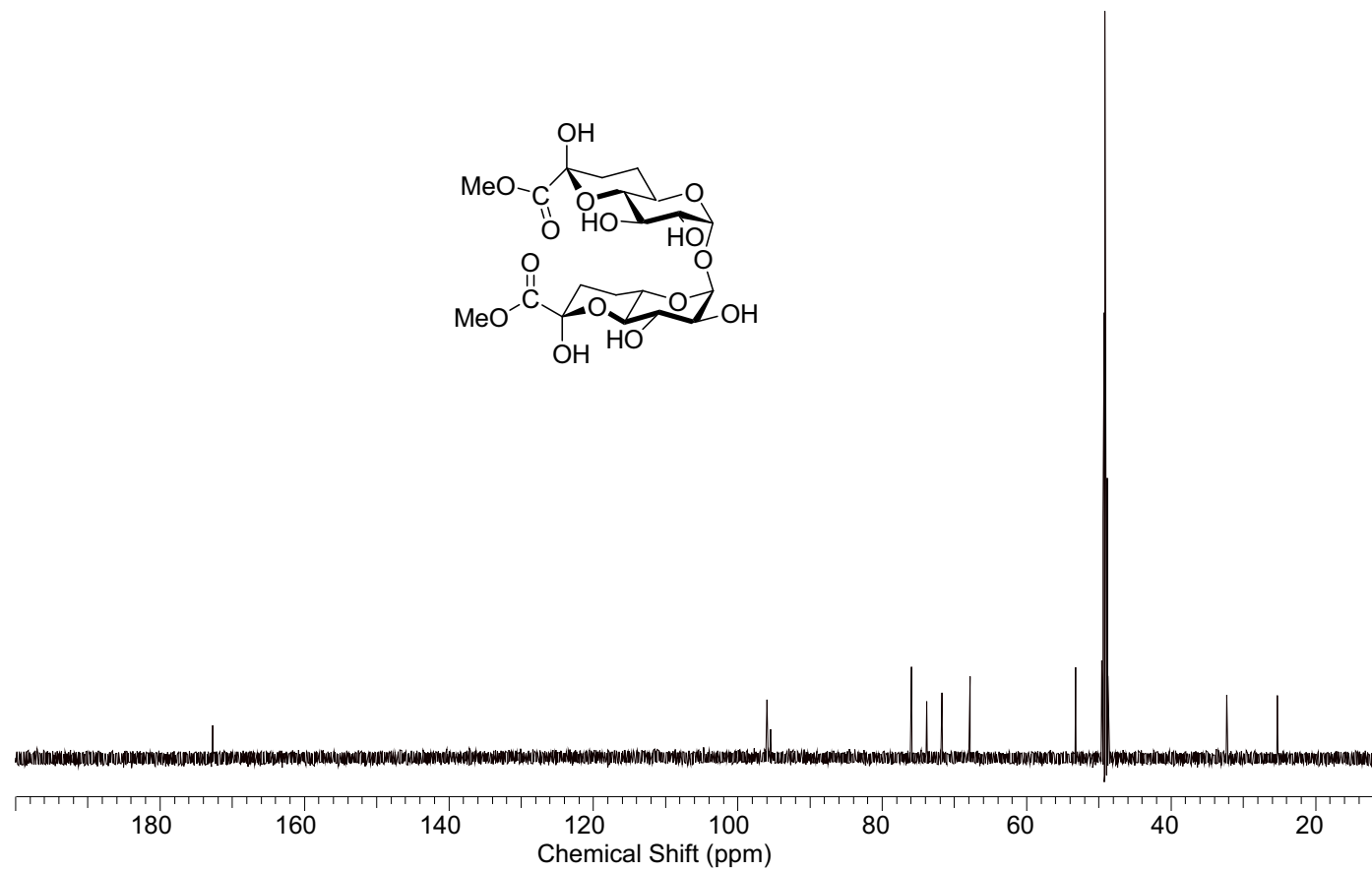
**$^{13}\text{C}$  NMR of bis(*N*-butyl-2,3,4-tri-*O*-benzyl-8-oxo- $\alpha$ -D-glucopyranosyluronamide) ether (28)**



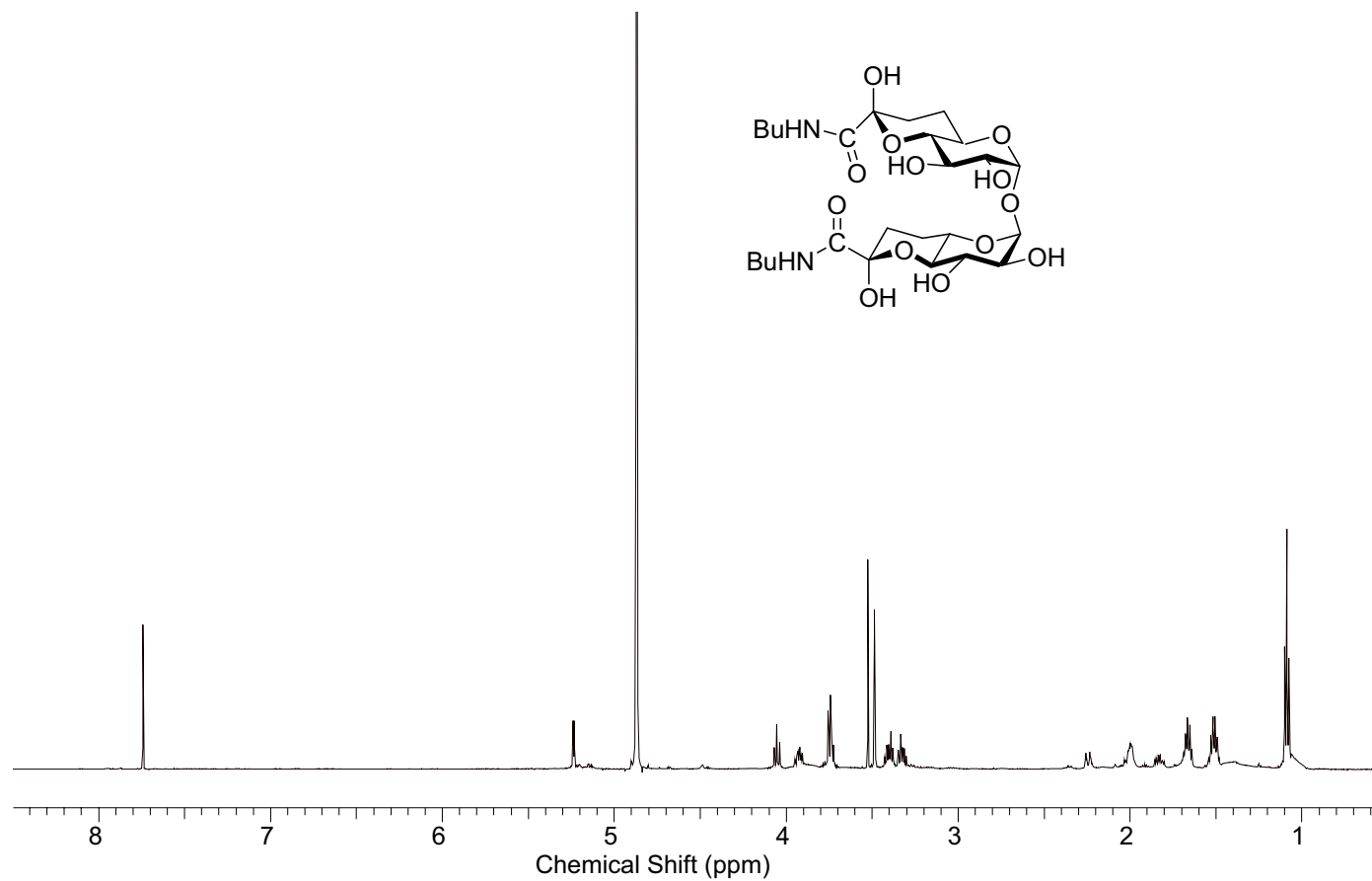
### <sup>1</sup>H NMR of trehalose-derived bicyclo-methyl ester (29)



### $^{13}\text{C}$ NMR of trehalose-derived bicyclo-methyl ester (29)



**<sup>1</sup>H NMR of trehalose-derived bicyclo-*N*-butylamide (30)**



### $^{13}\text{C}$ NMR of trehalose-derived bicyclo-*N*-butylamide (30)

