

**A synthetic strategy to xylose-containing thioglycoside tri- and tetrasaccharide building blocks corresponding to *Cryptococcus neoformans* capsular polysaccharide structures.**

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**Supporting information**

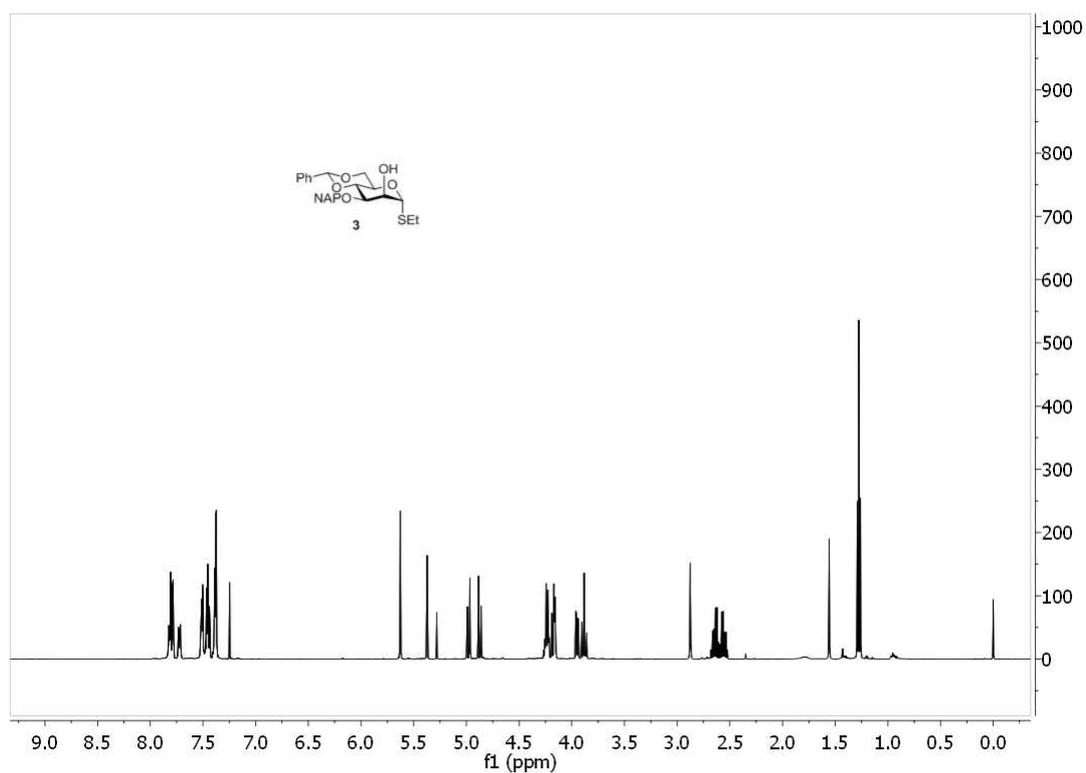
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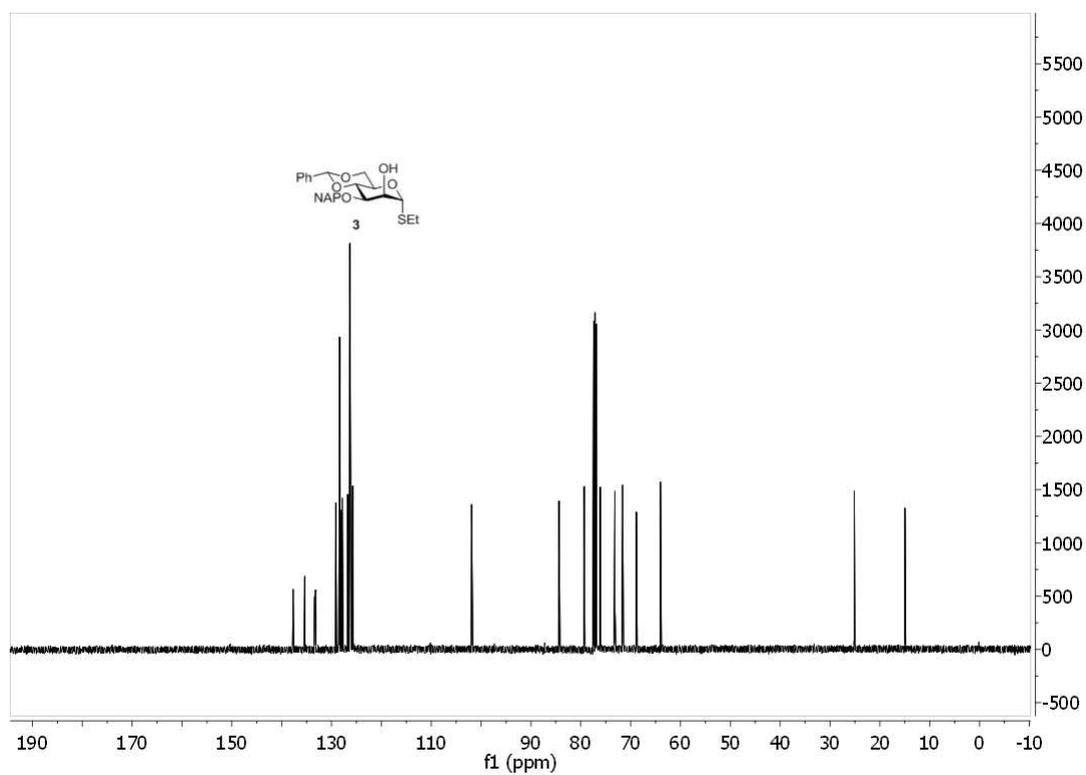
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<sup>1</sup> Corresponding author. E-mail address: stefan.oscarson@ucd.ie

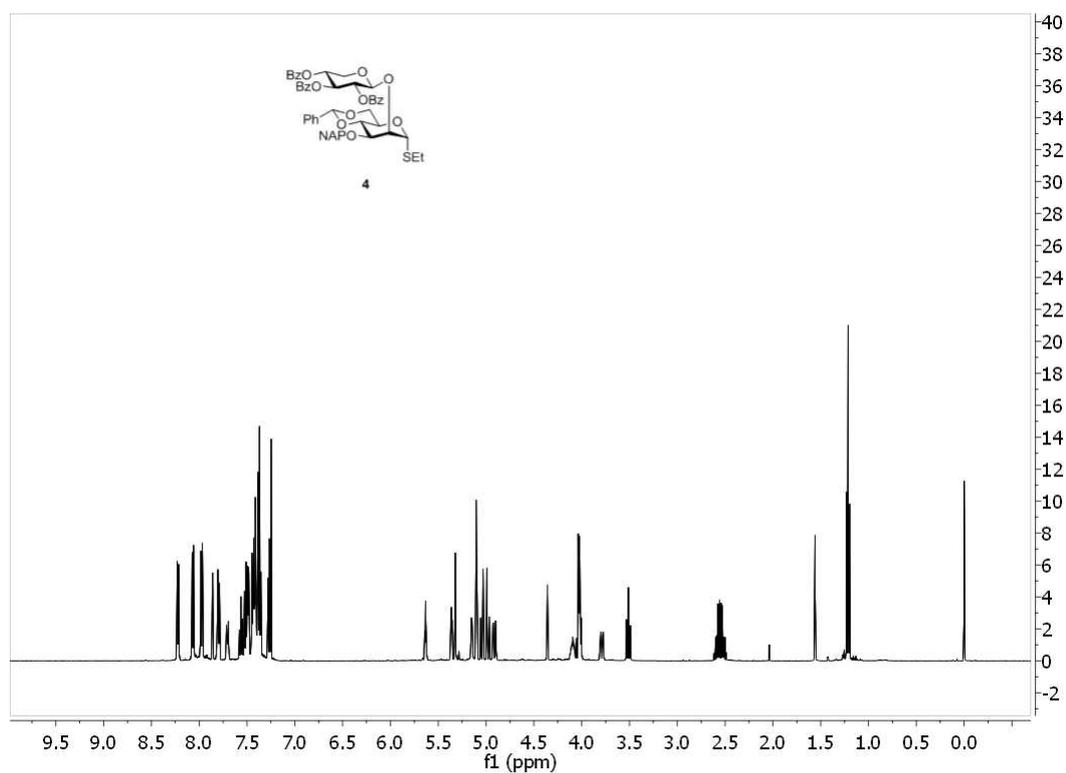
**3:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



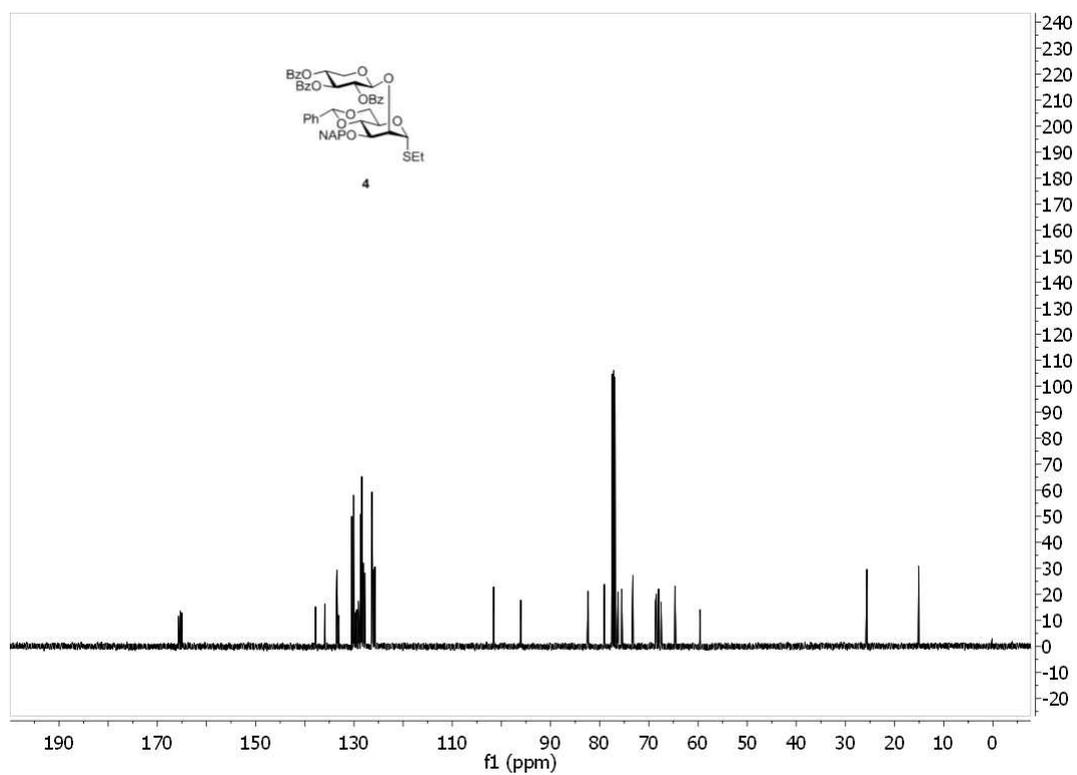
**3:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



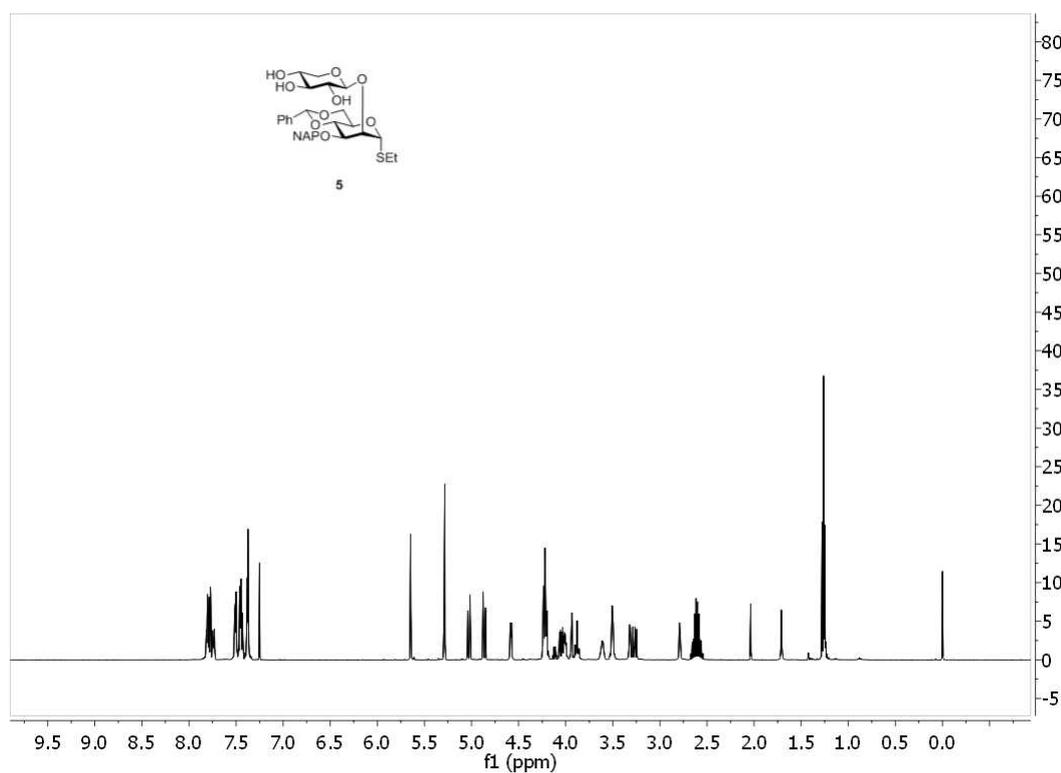
4:  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



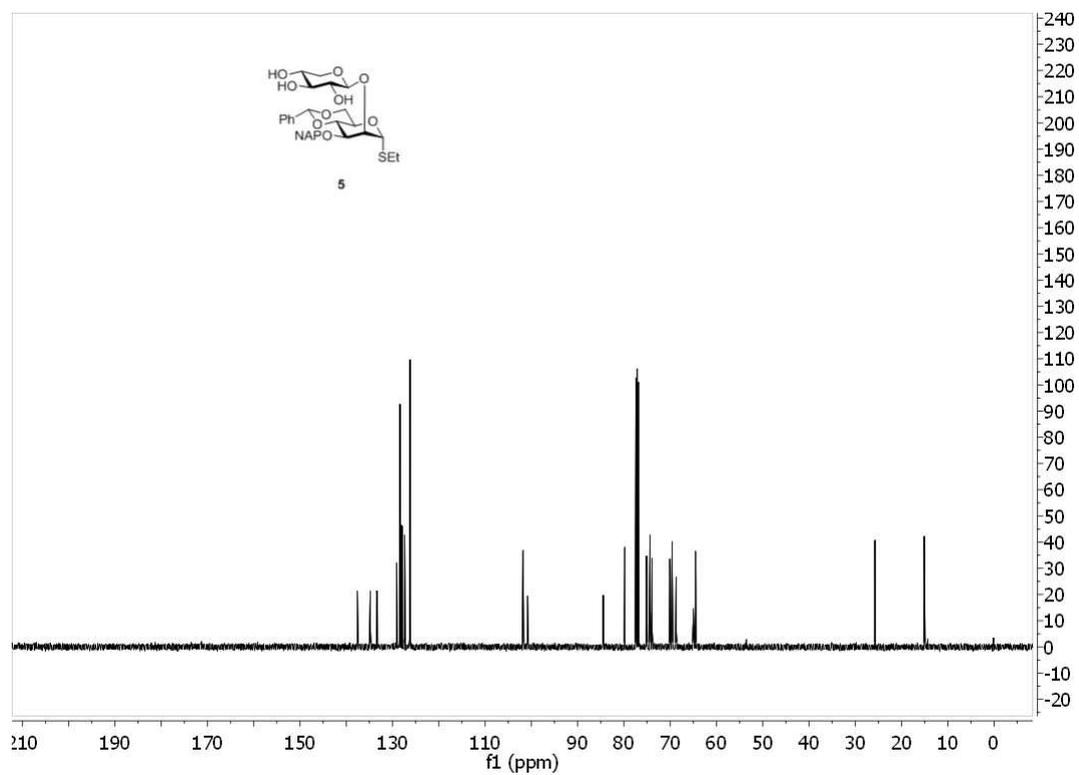
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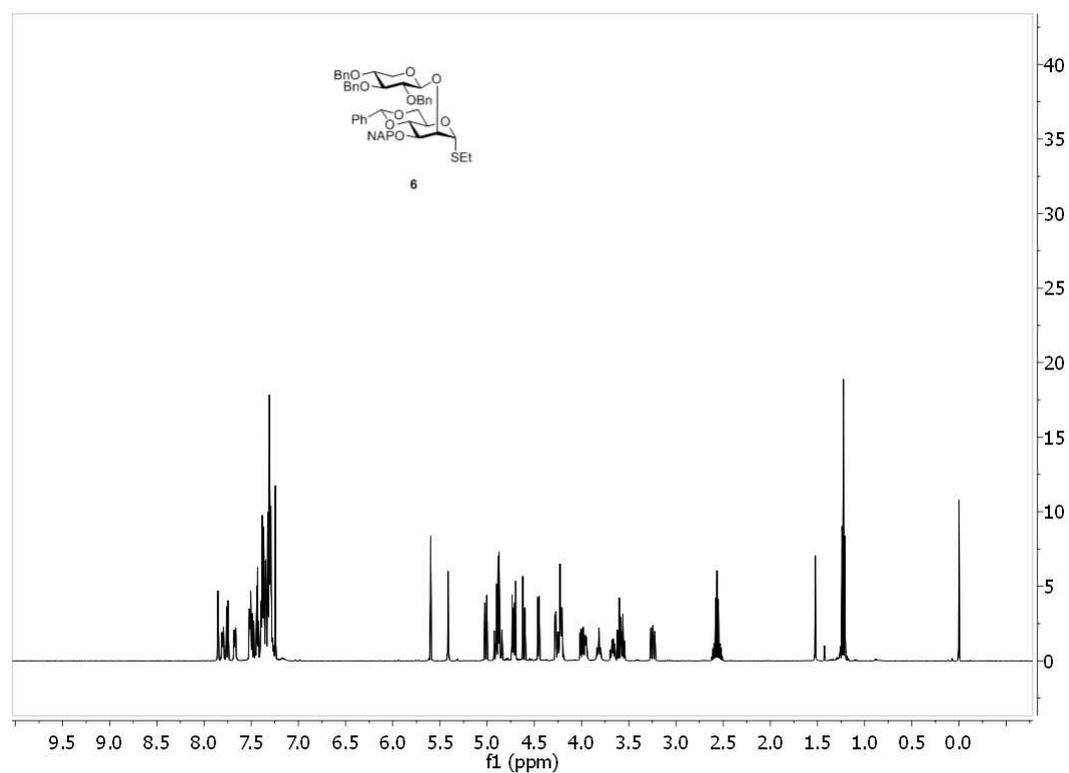
**5:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



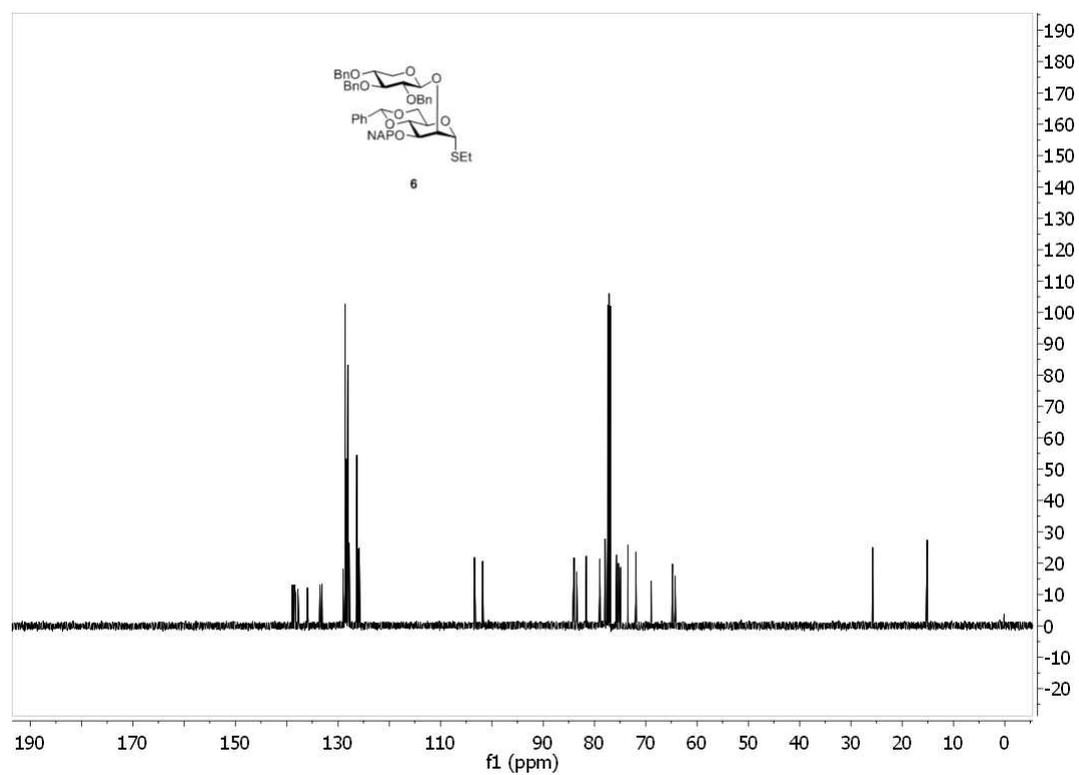
**5:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



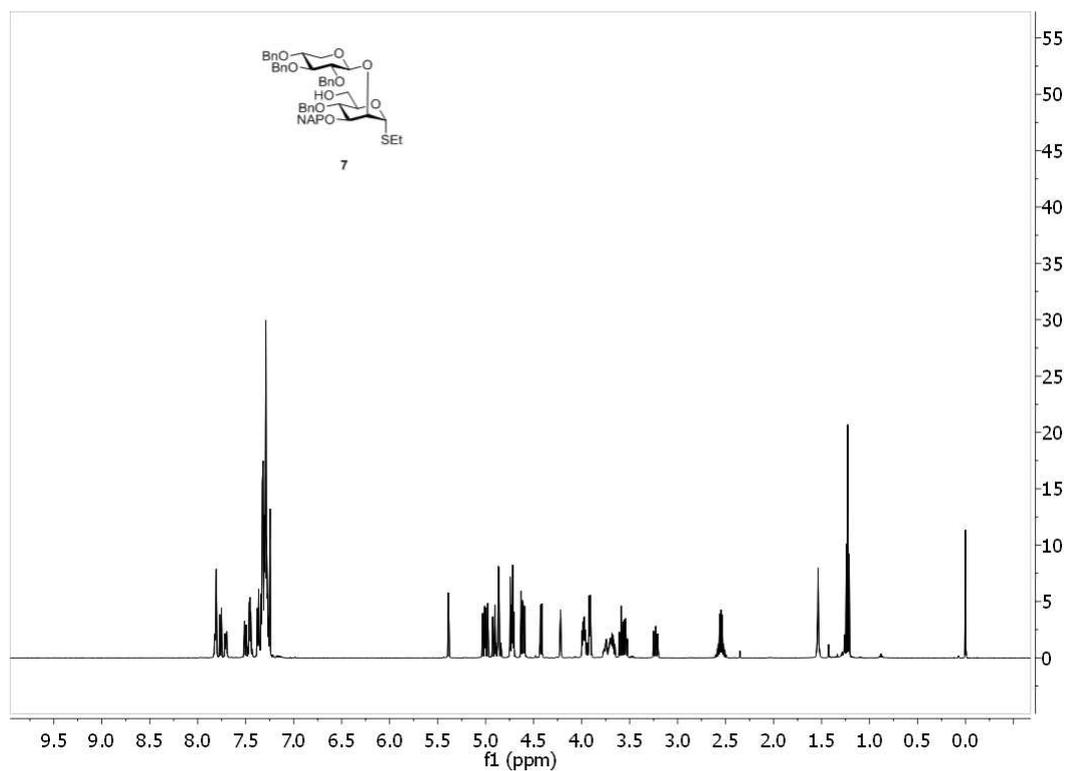
**6:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



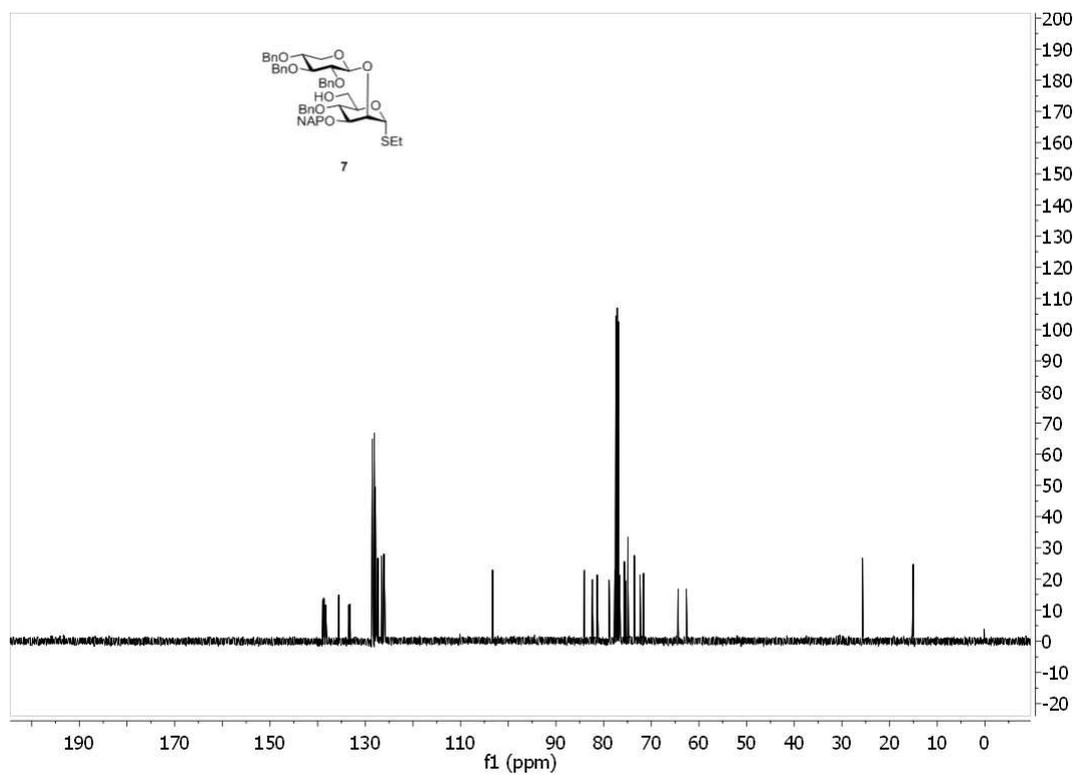
**6:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



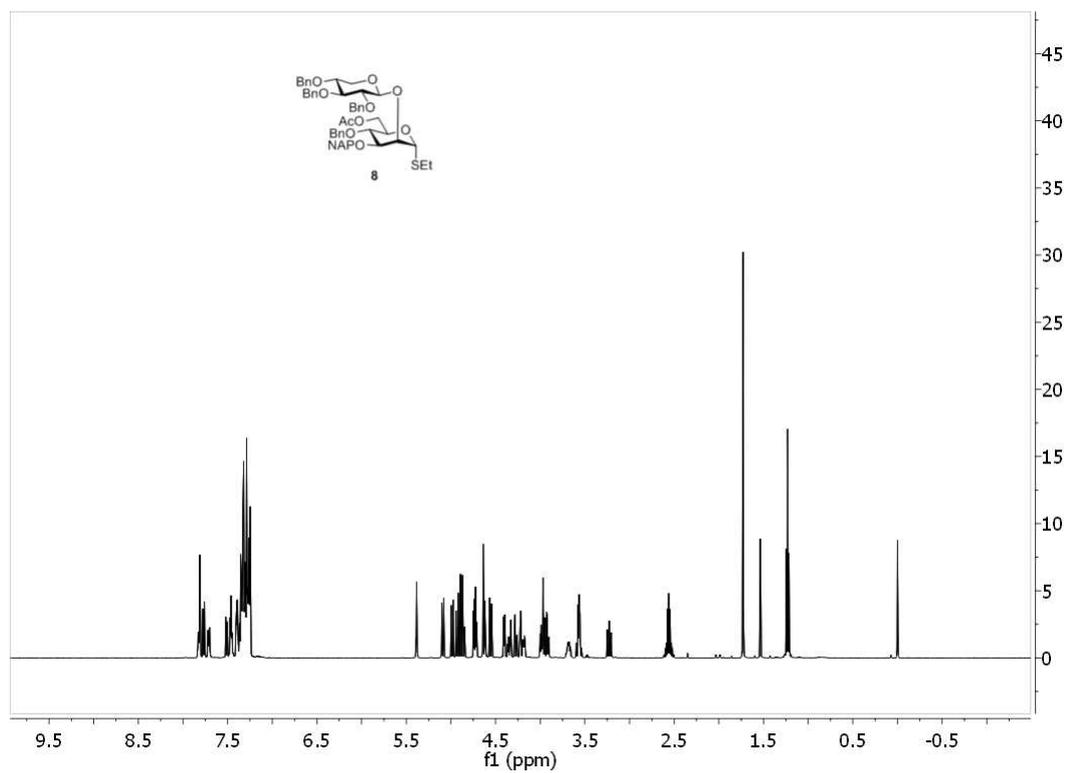
7:  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



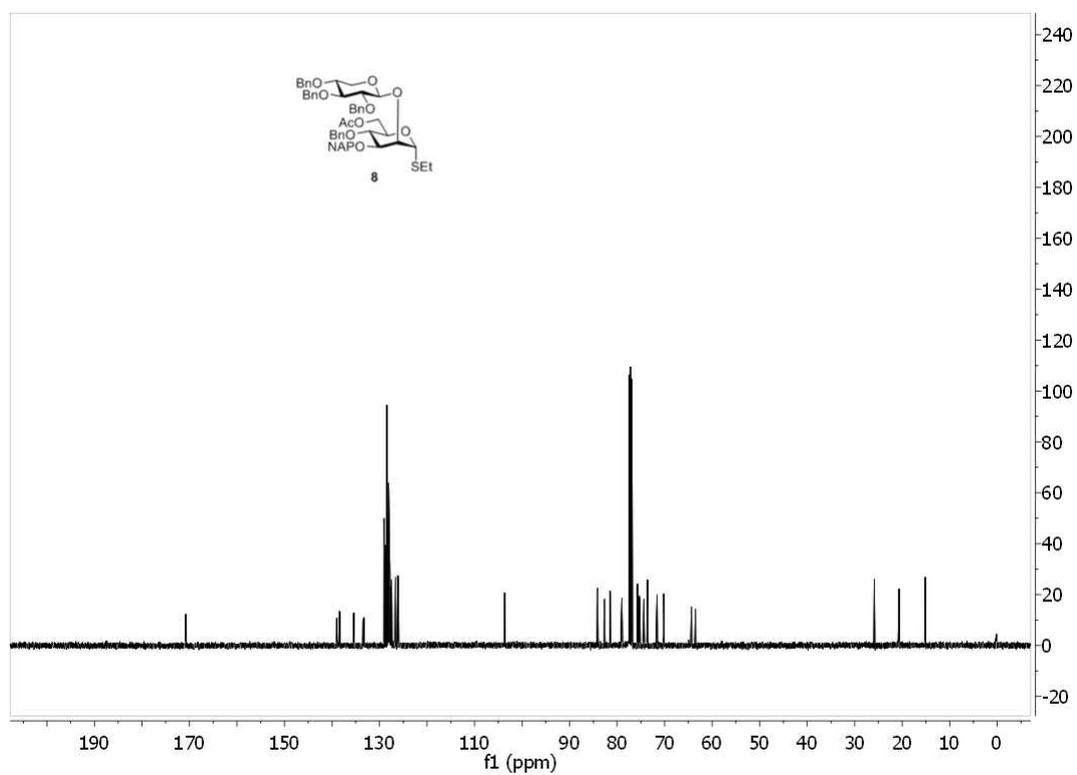
7:  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



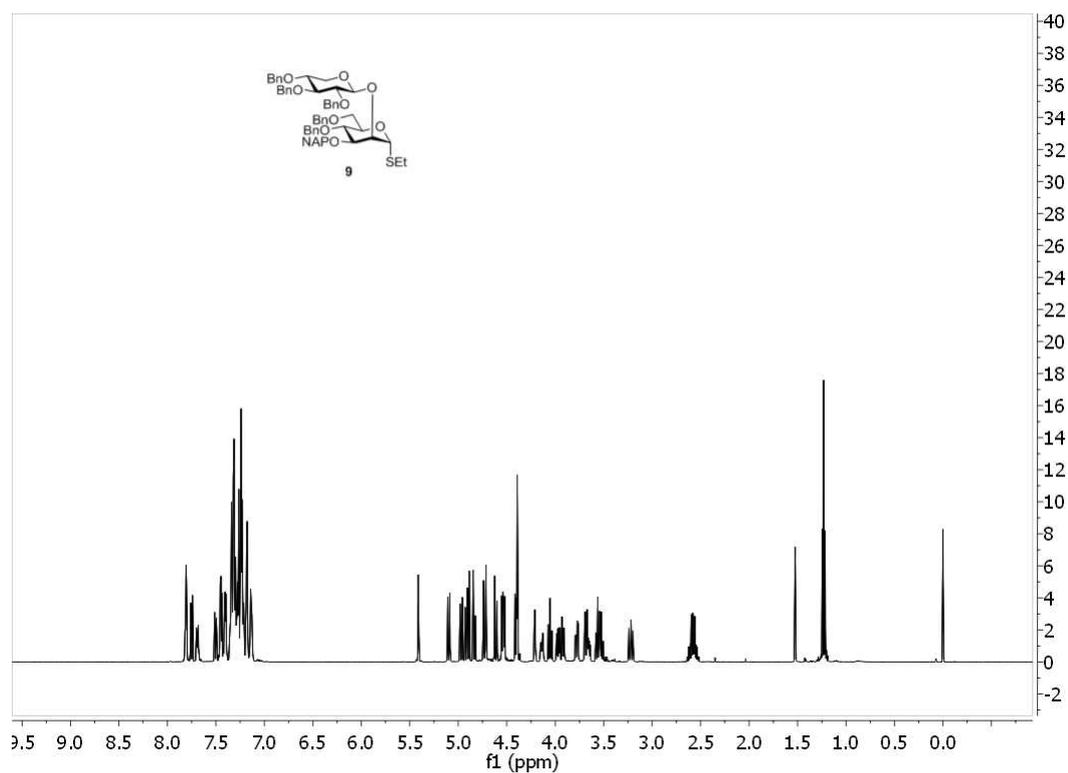
**8:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



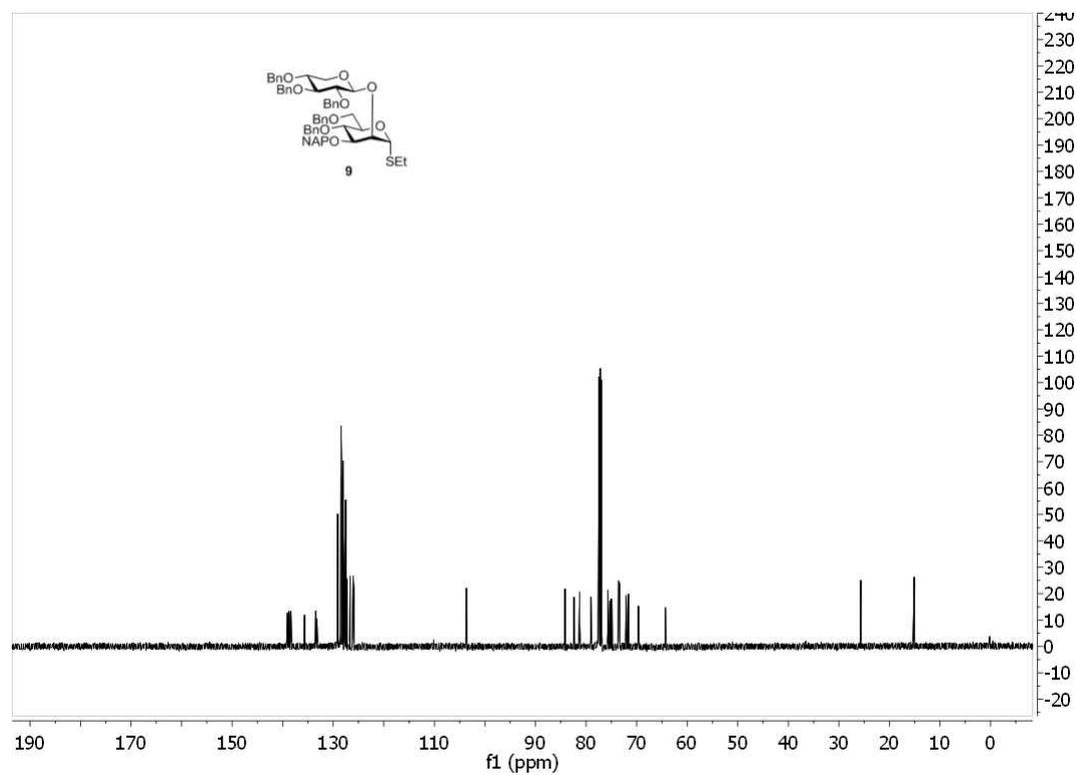
**8:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



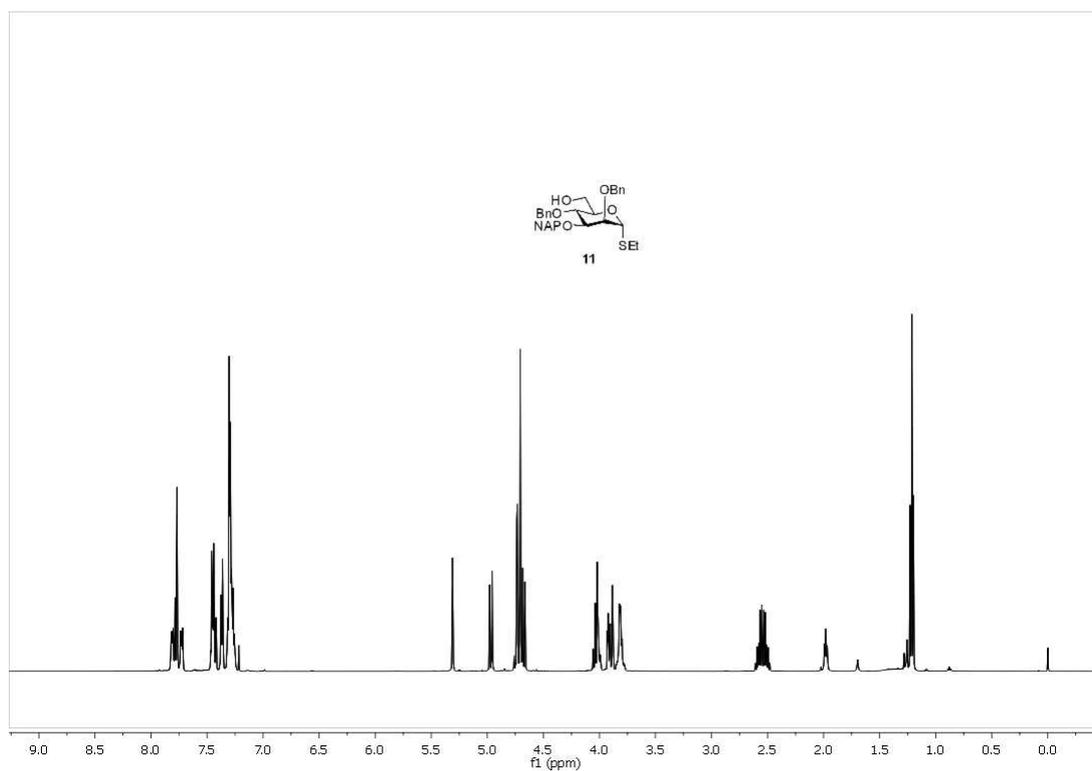
**9:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



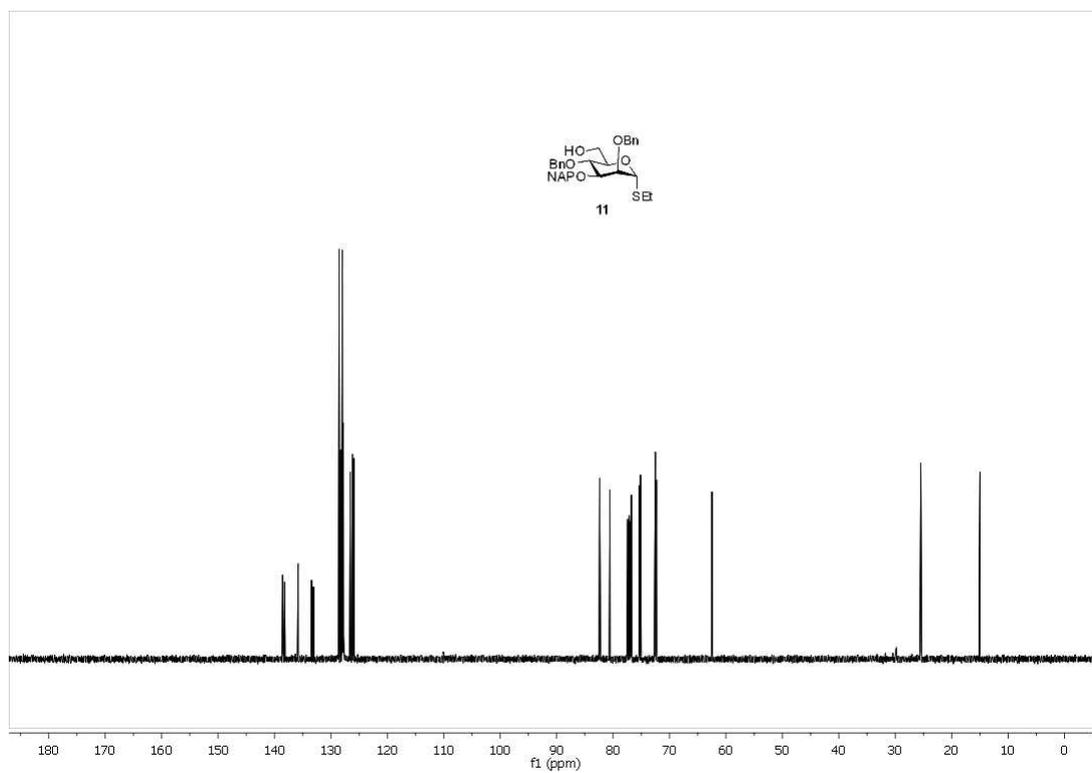
**9:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



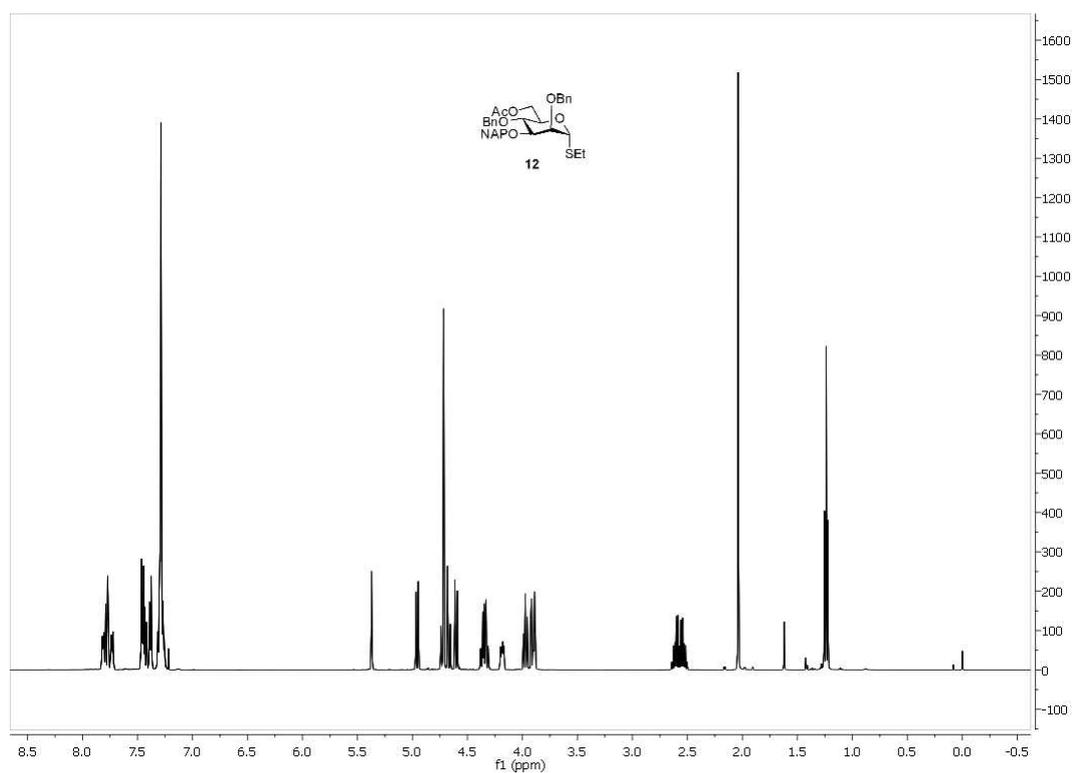
**11:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



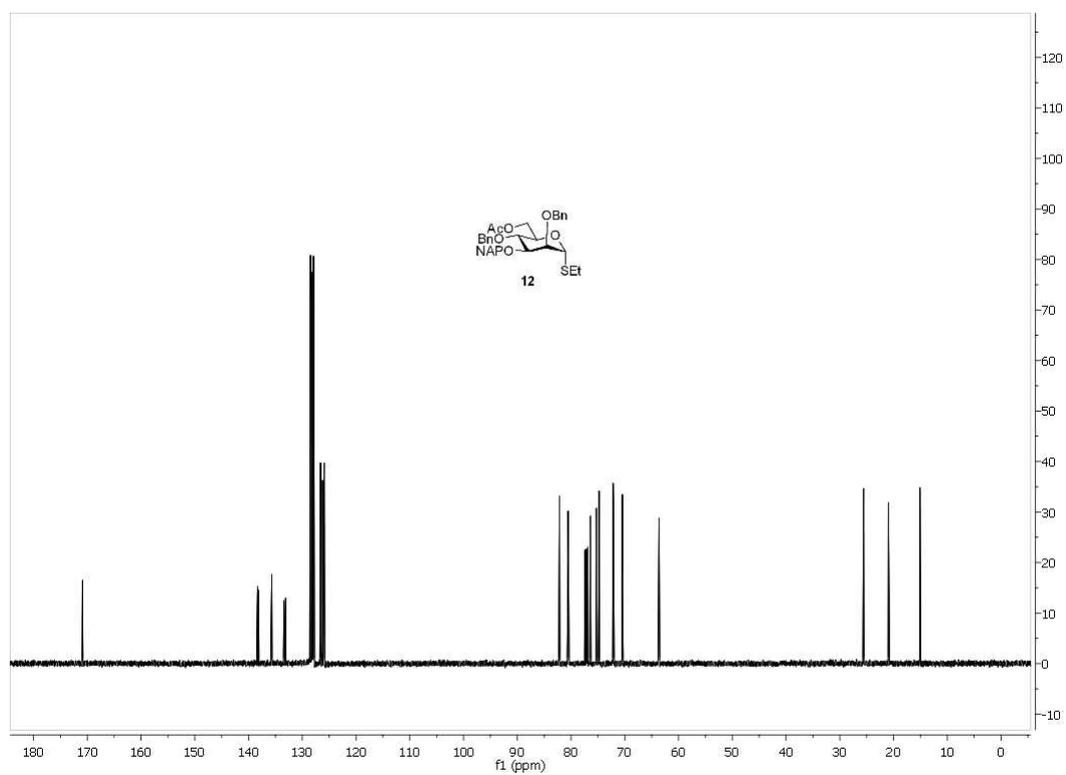
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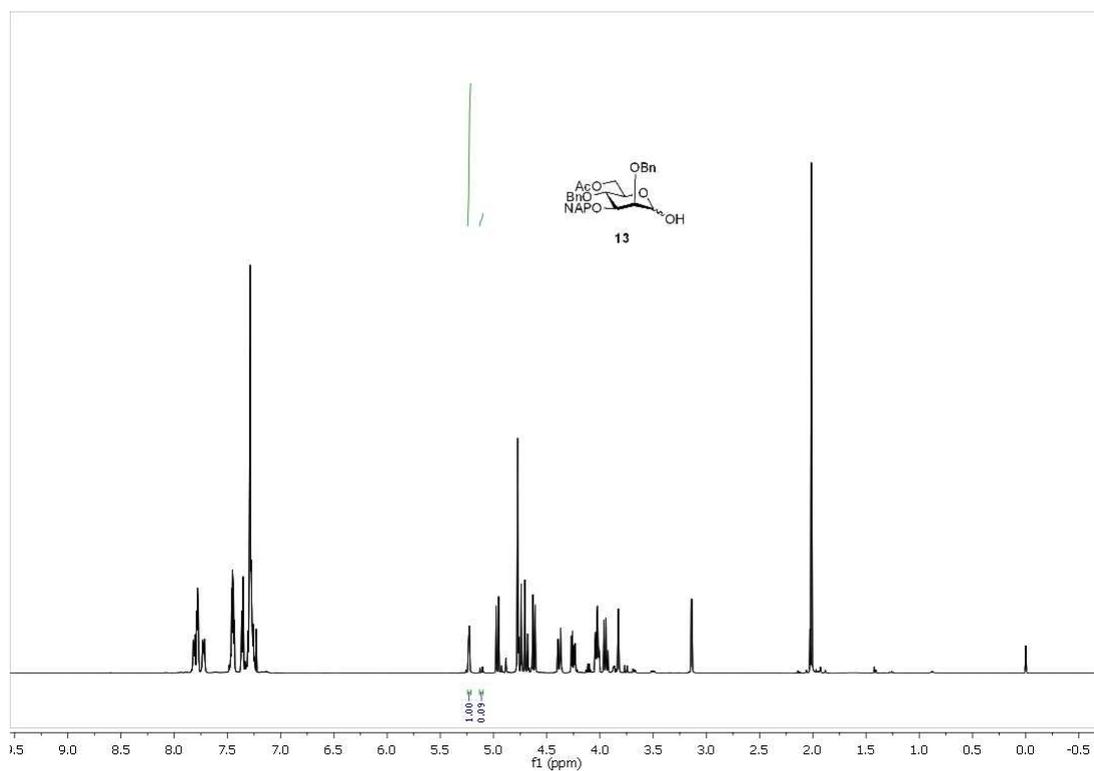
**12:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



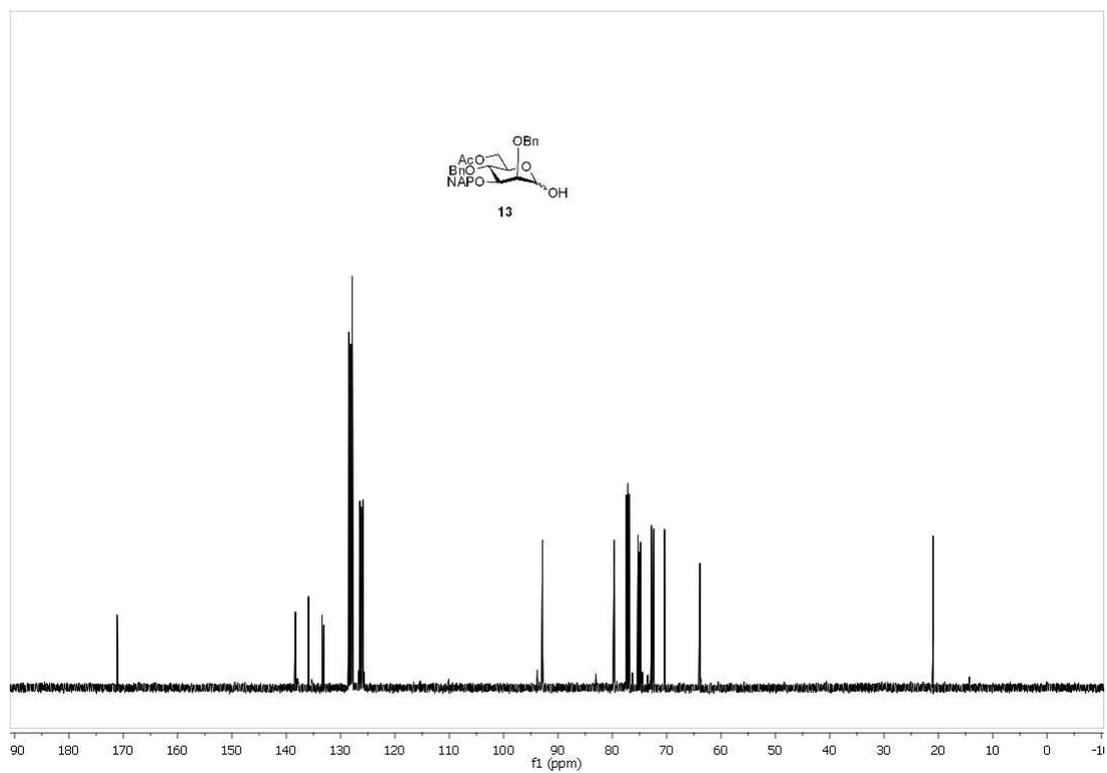
**12:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



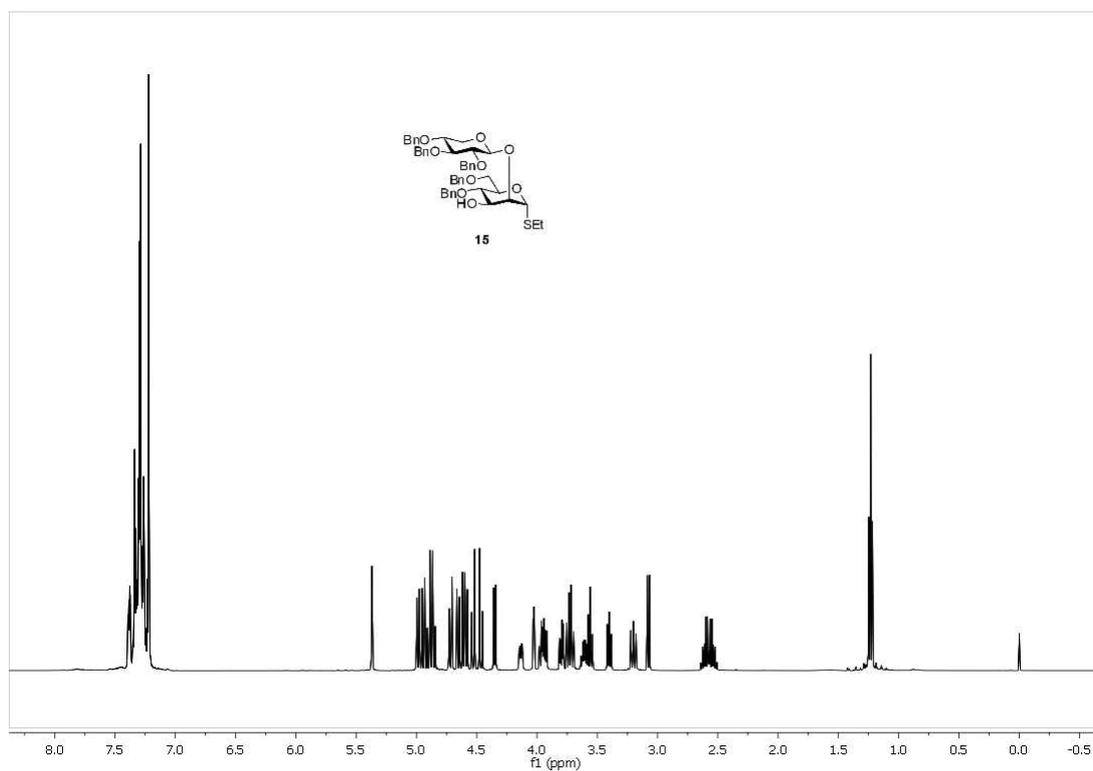
**13:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



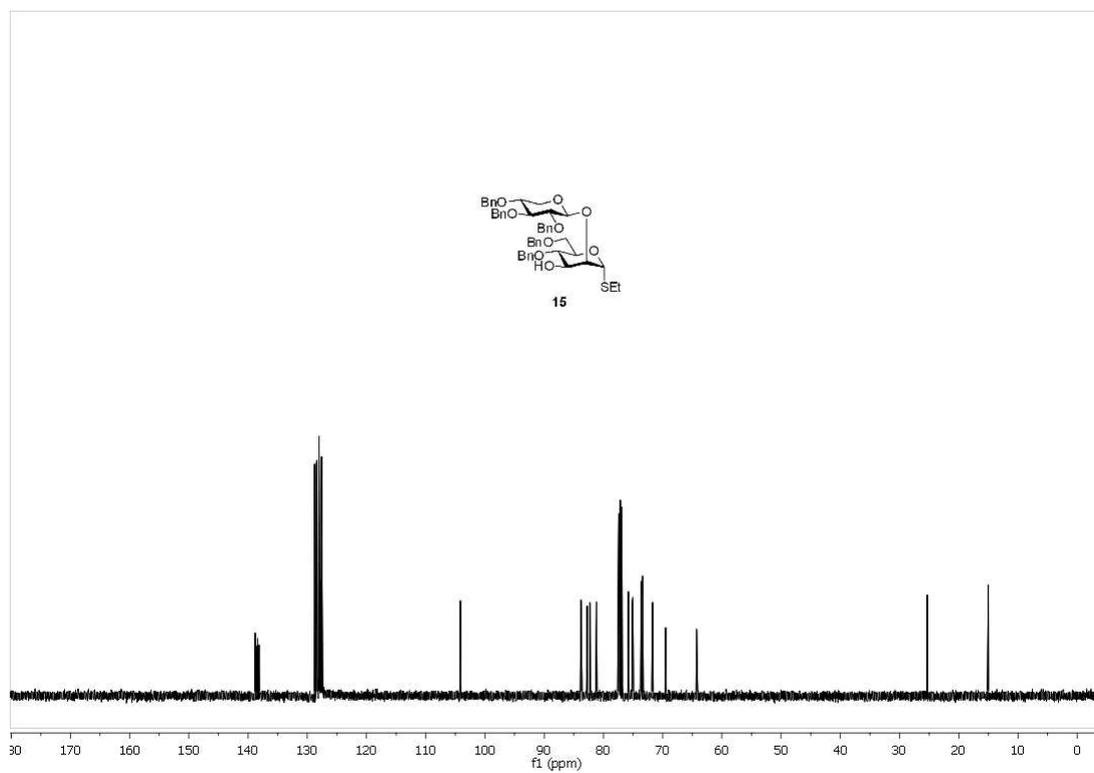
**13:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



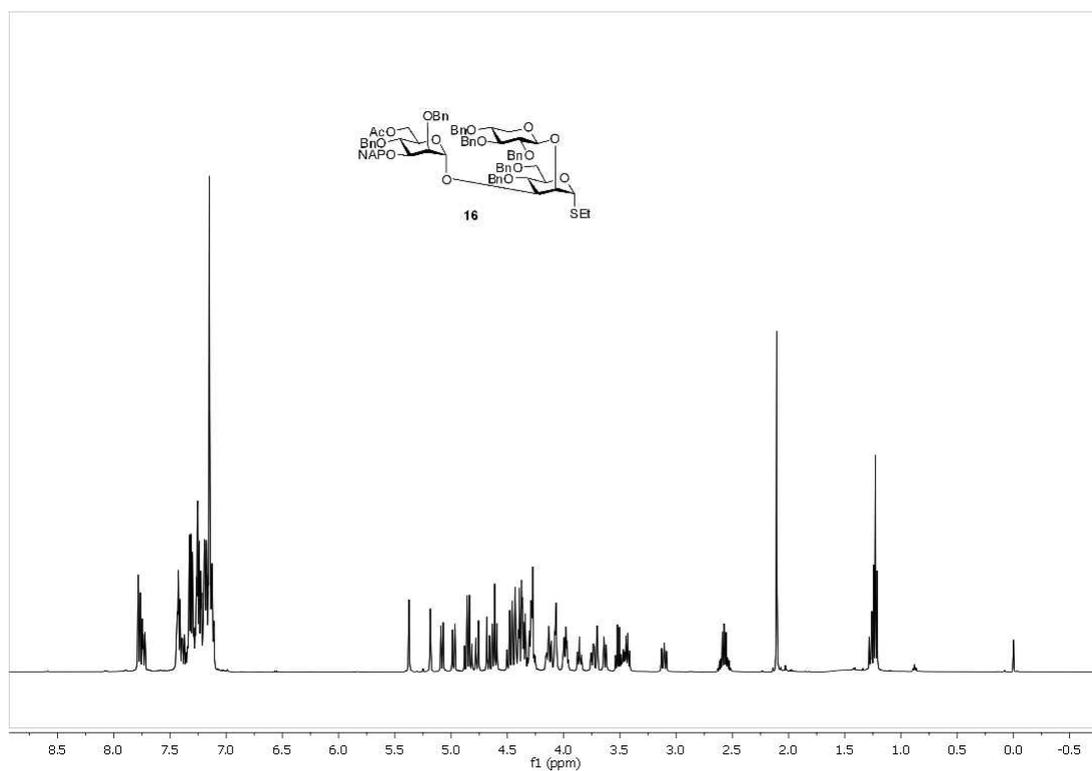
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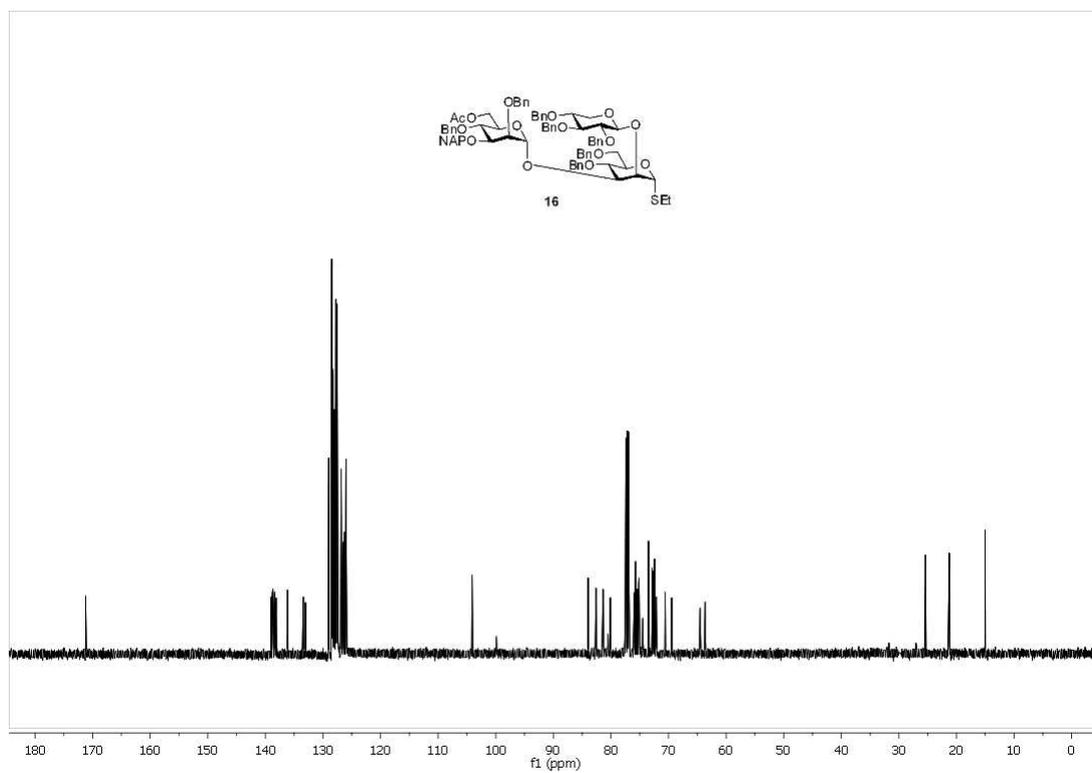
**15:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



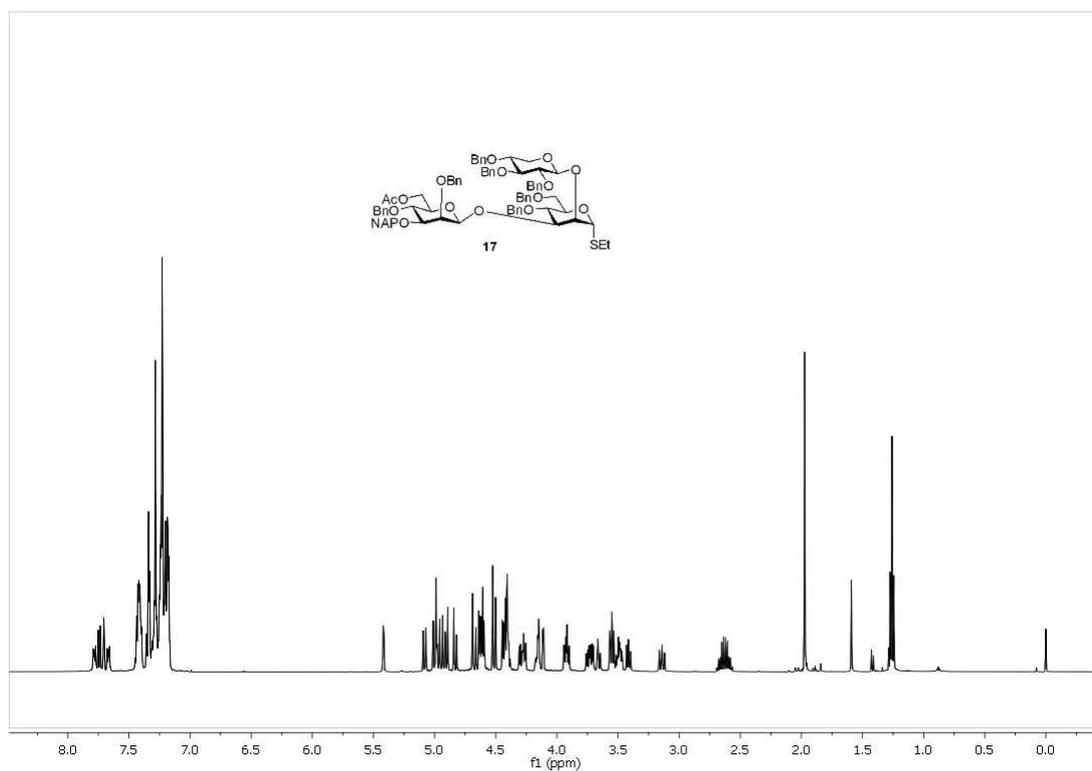
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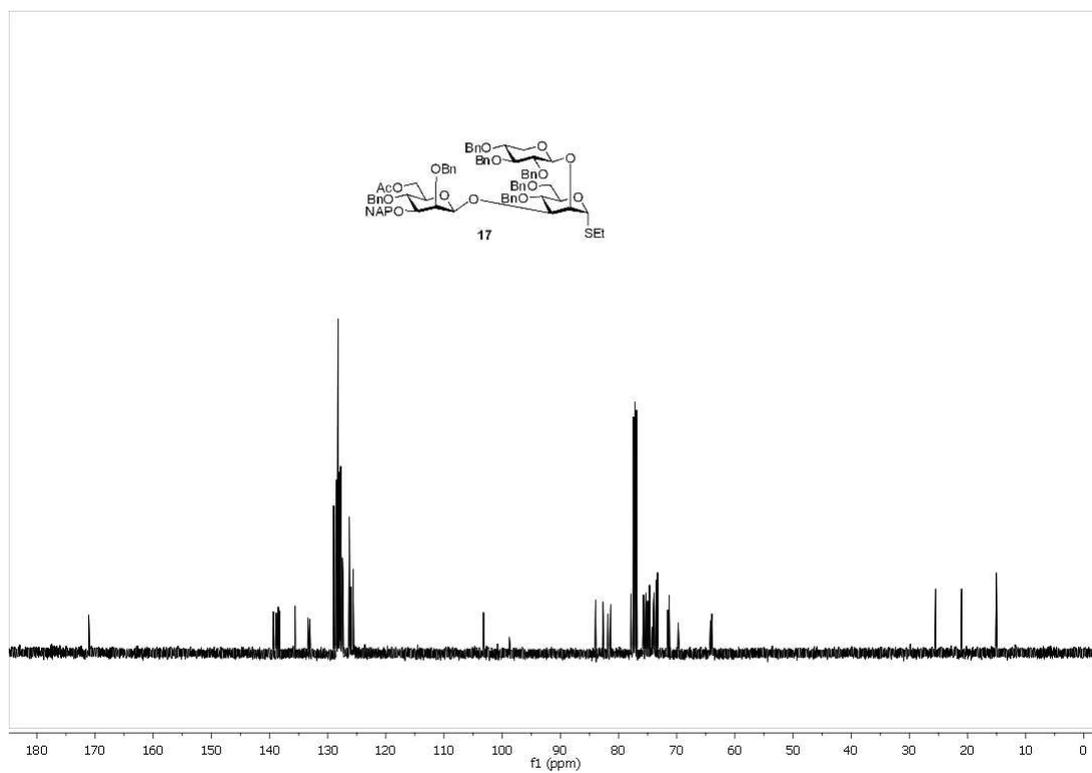
**16:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



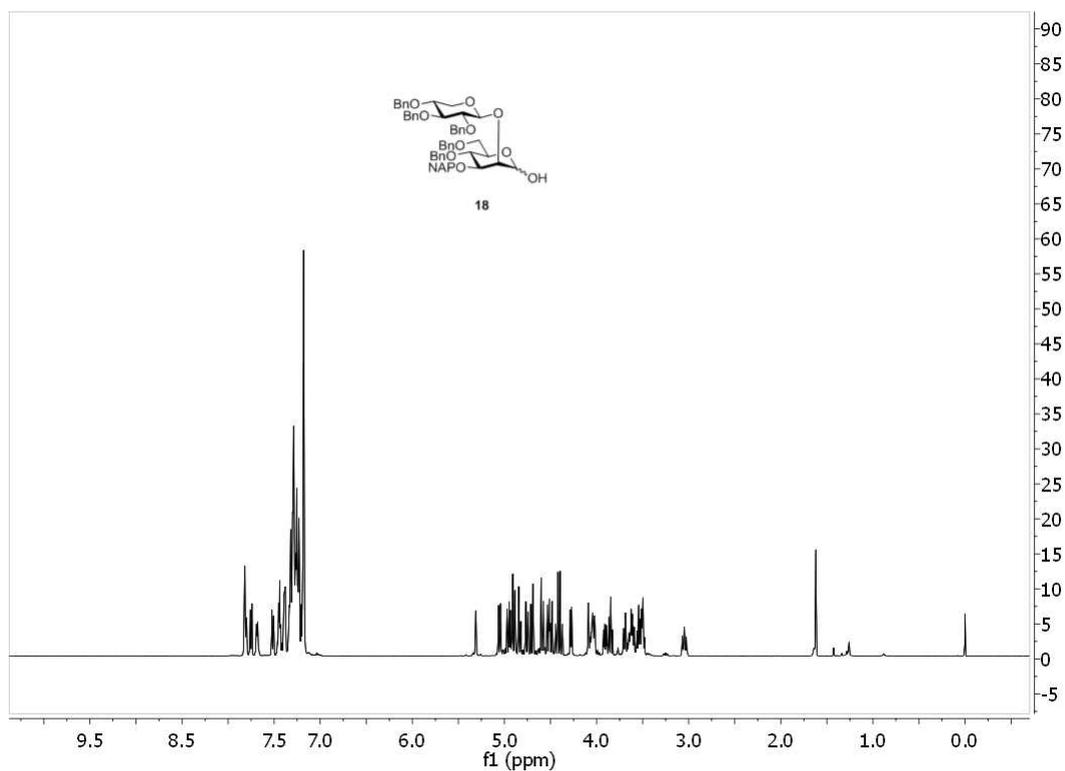
**17:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



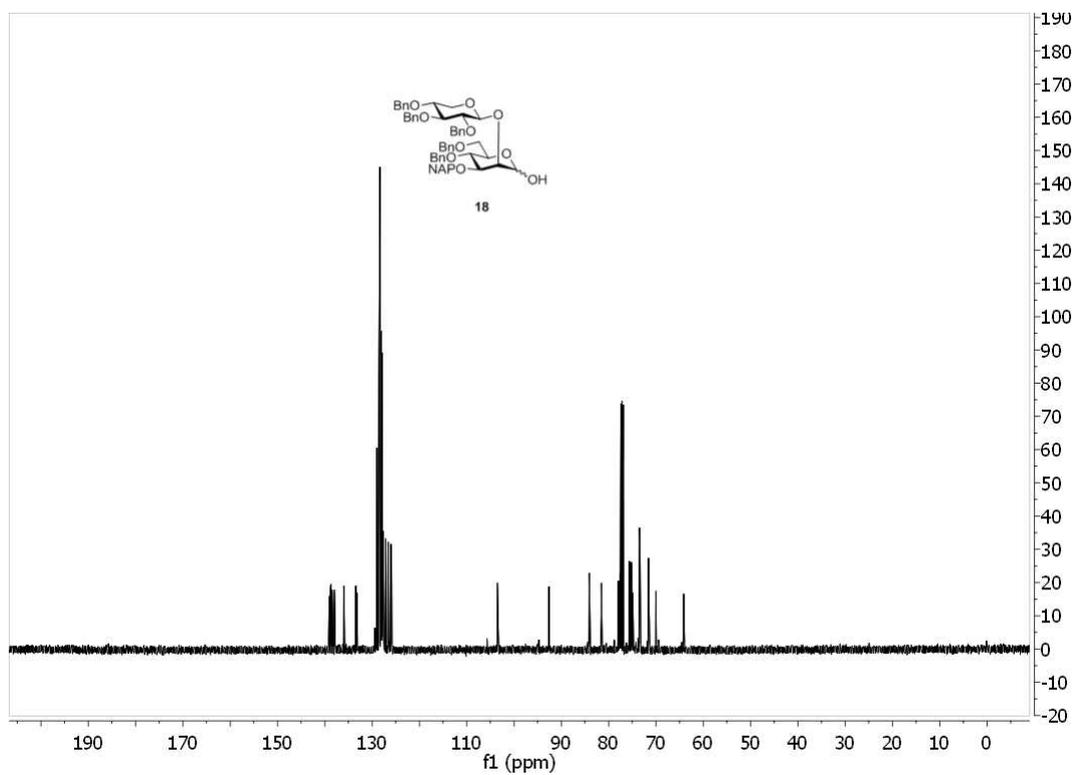
**17:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



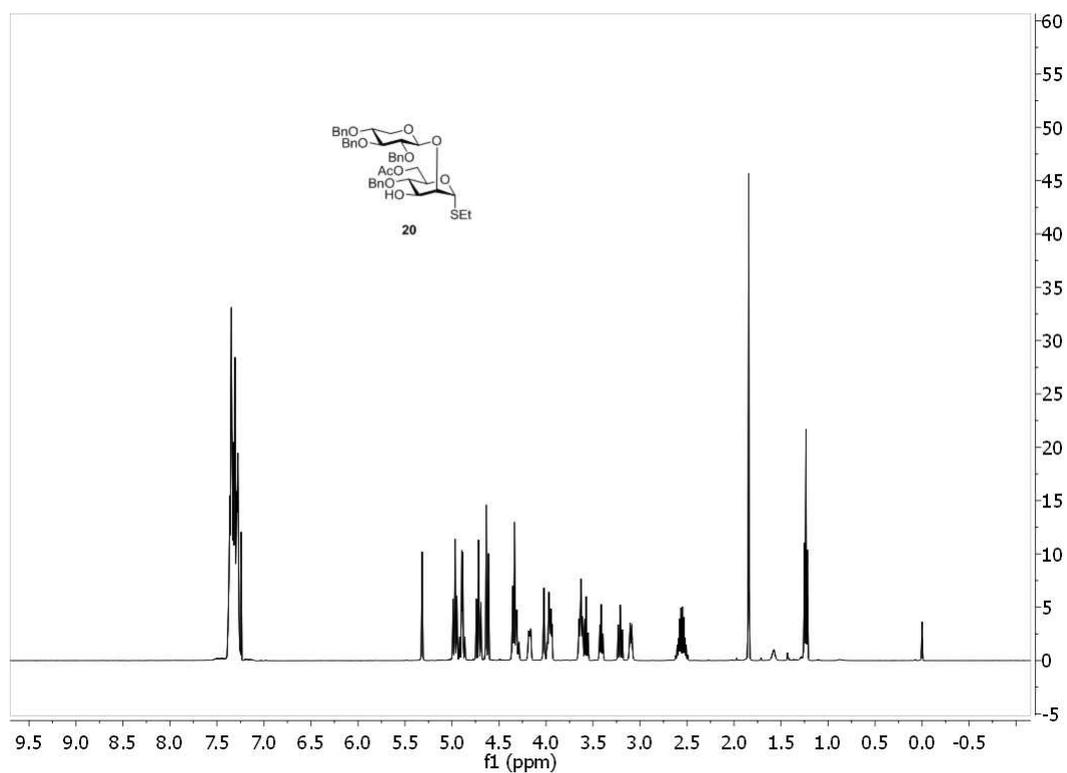
**18:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



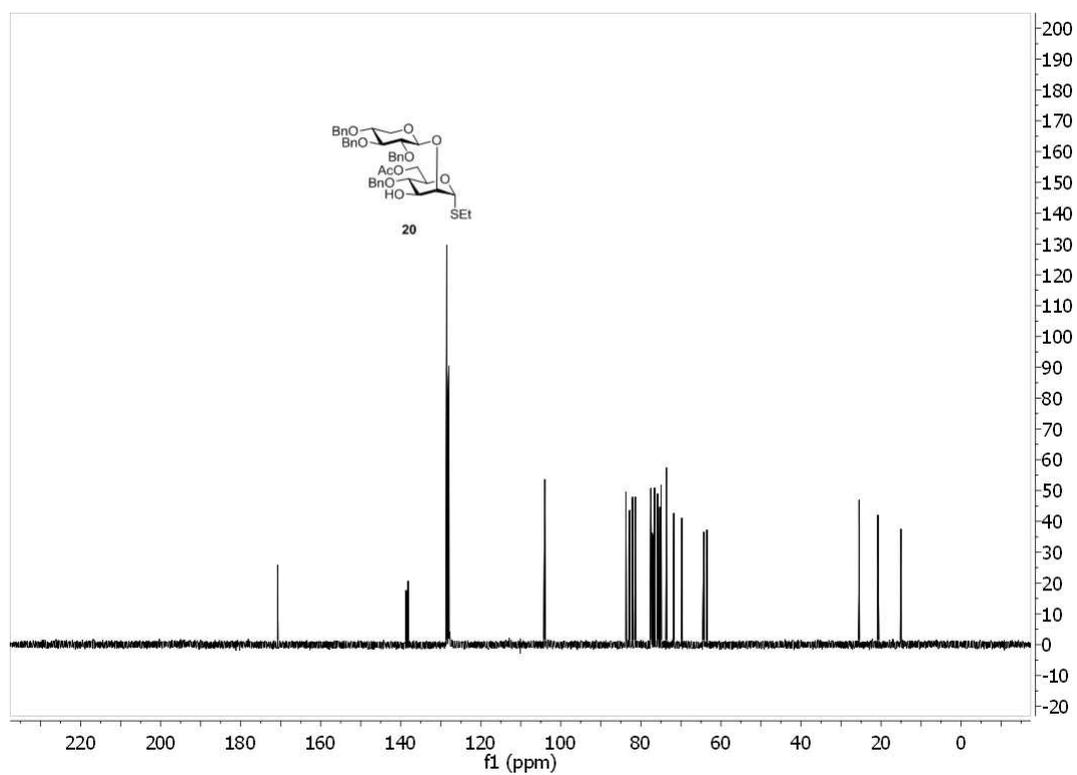
**18:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



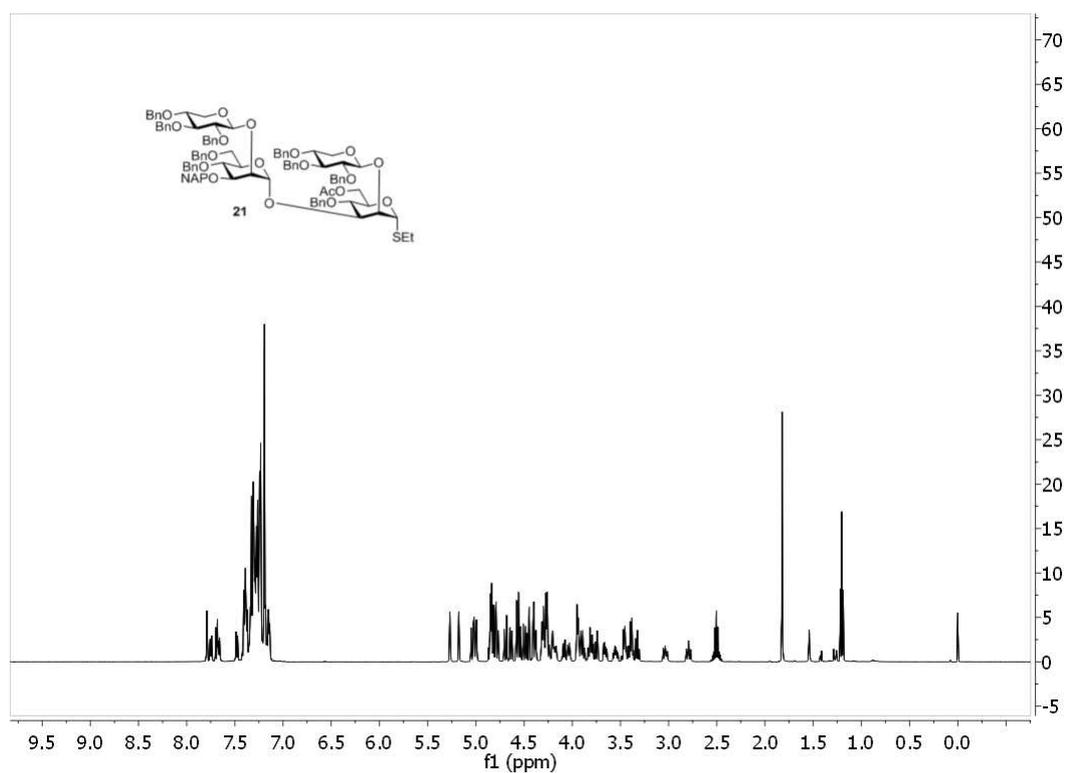
**20:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



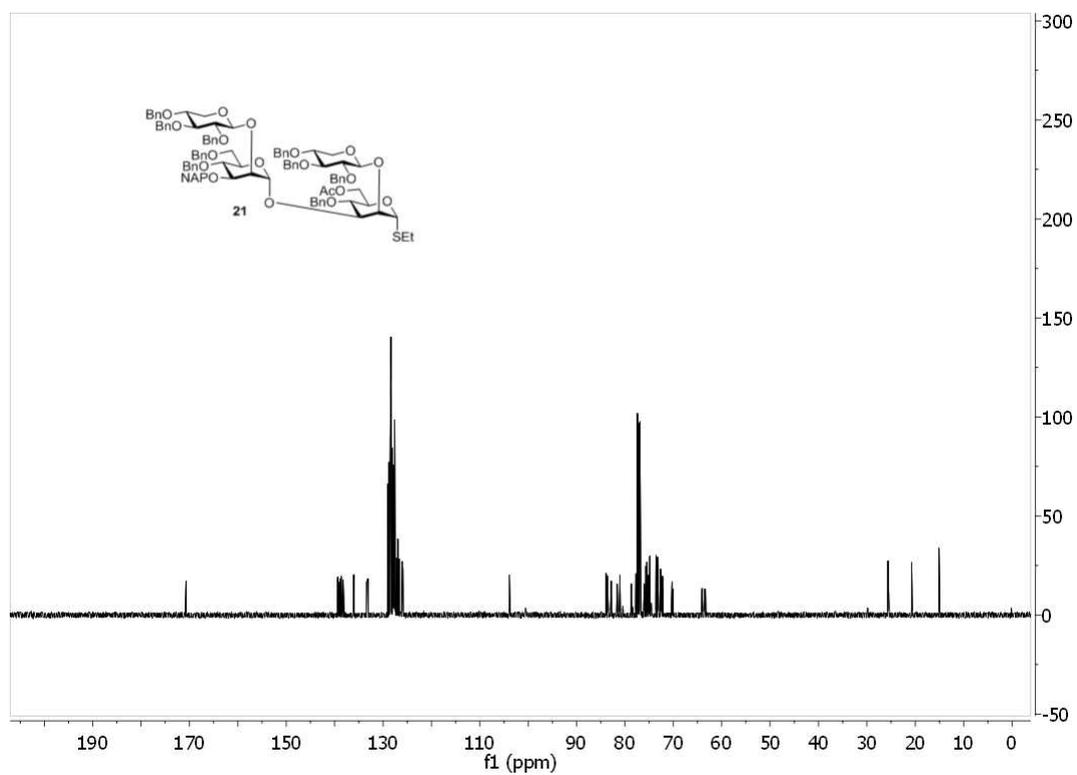
**20:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



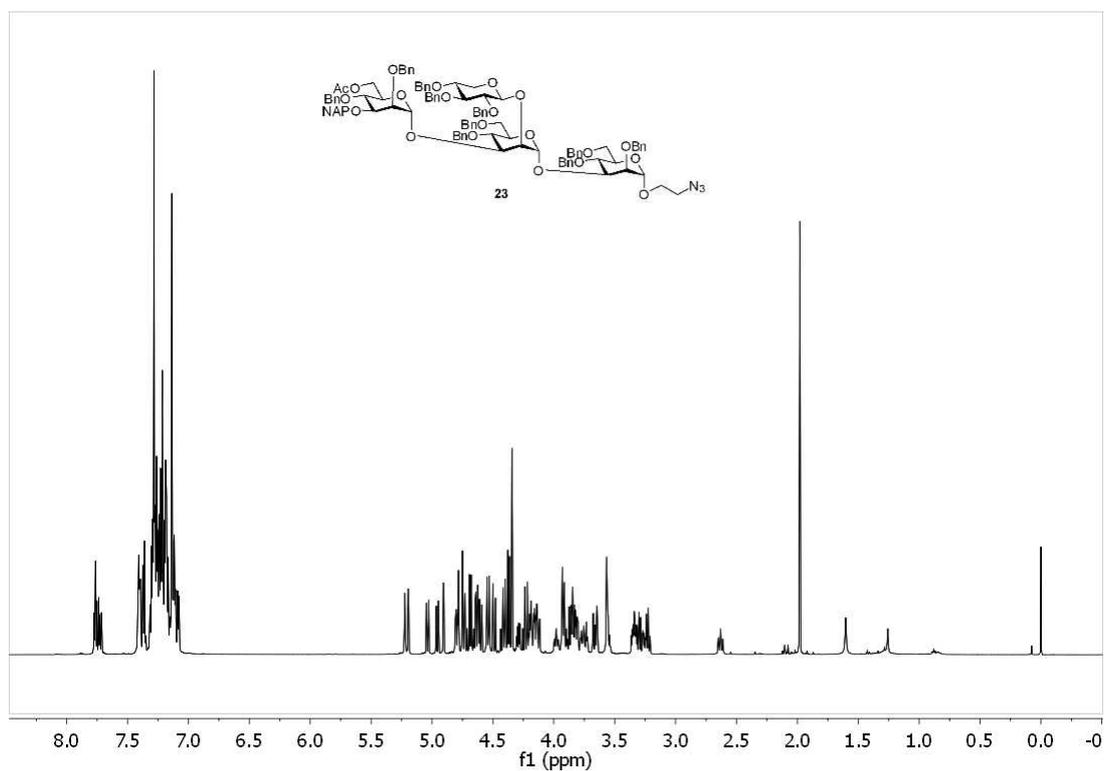
**21:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



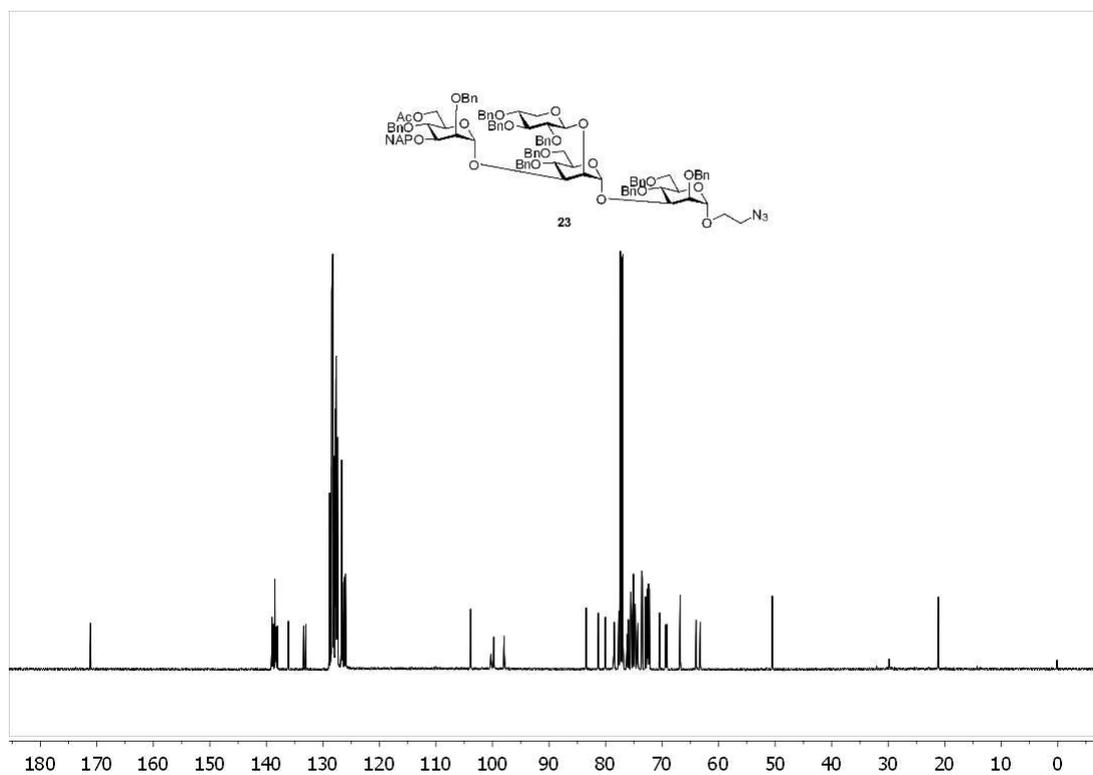
**21:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



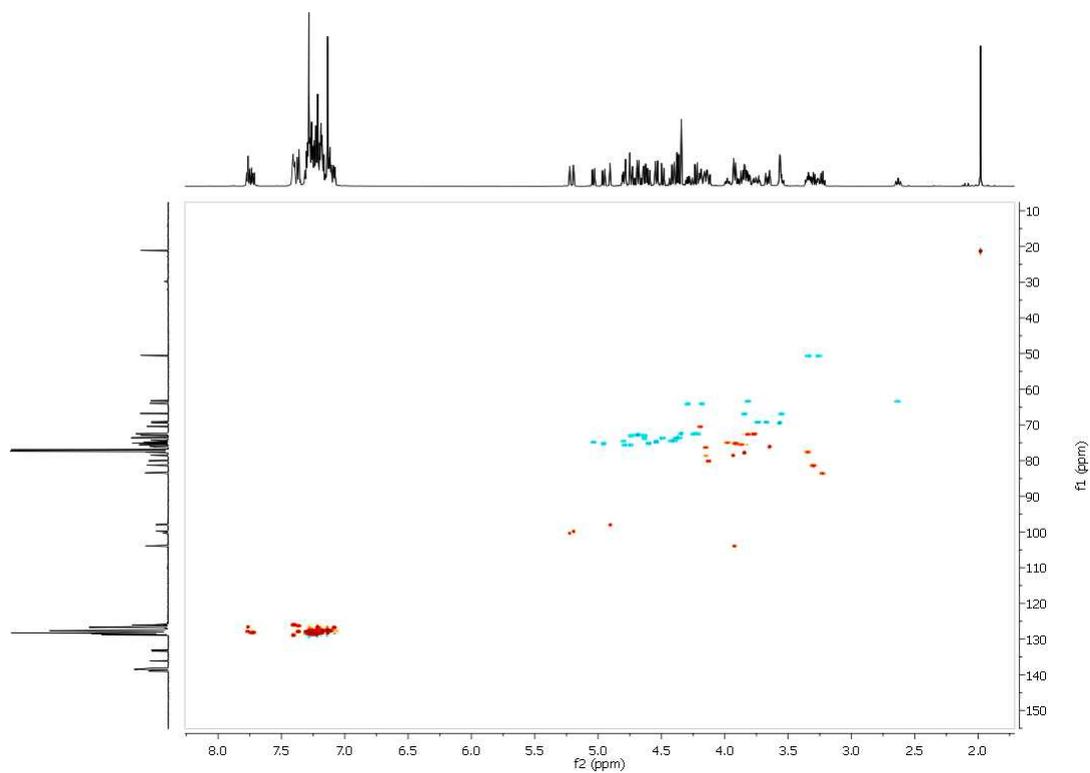
**23:**  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 600 MHz)



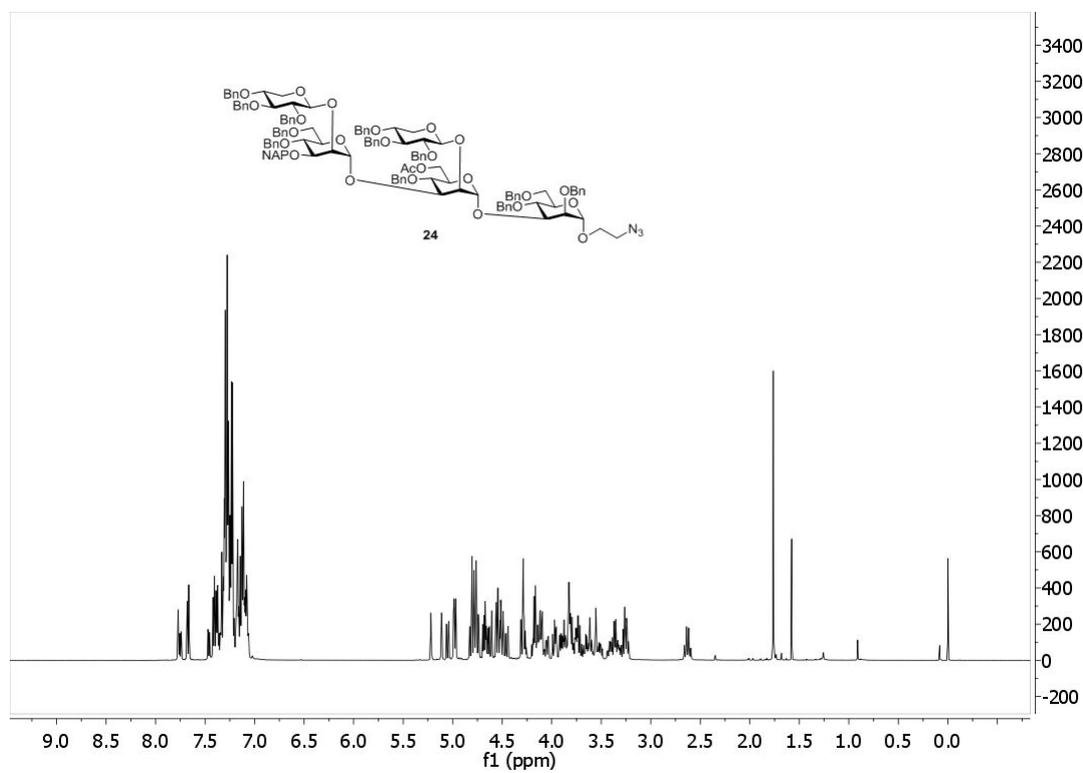
**23:**  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 150 MHz)



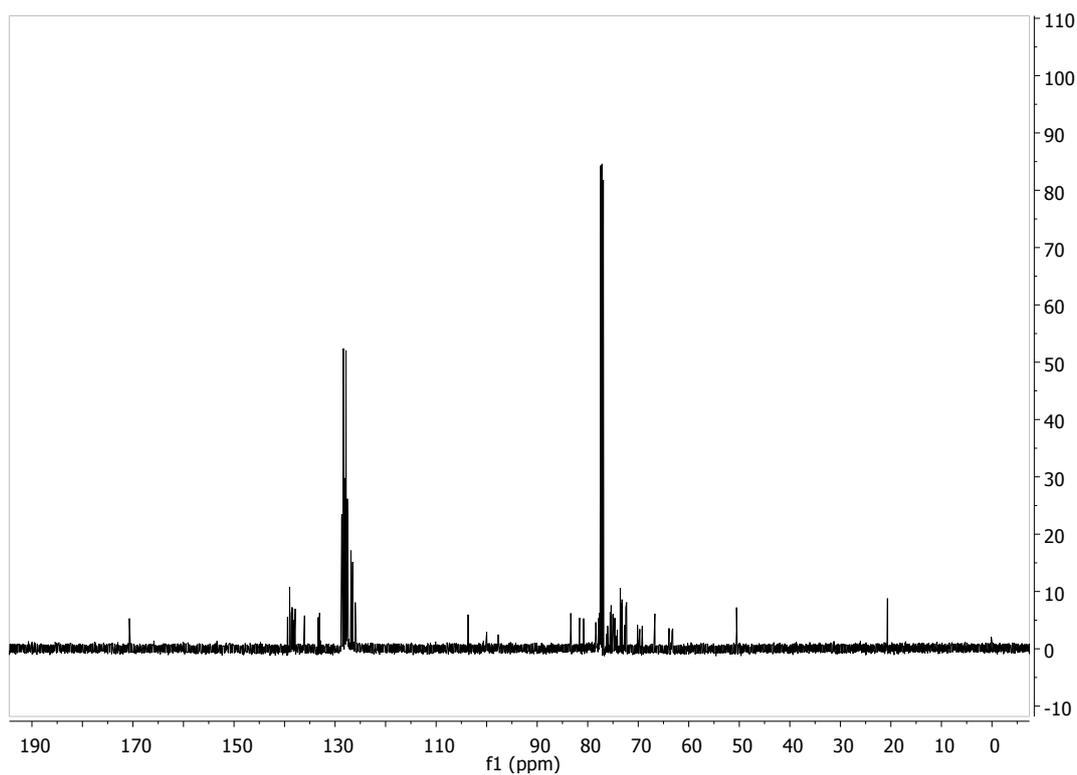
23:  $^1\text{H}$   $^{13}\text{C}$  HSQC ( $\text{CDCl}_3$ , 600 MHz)



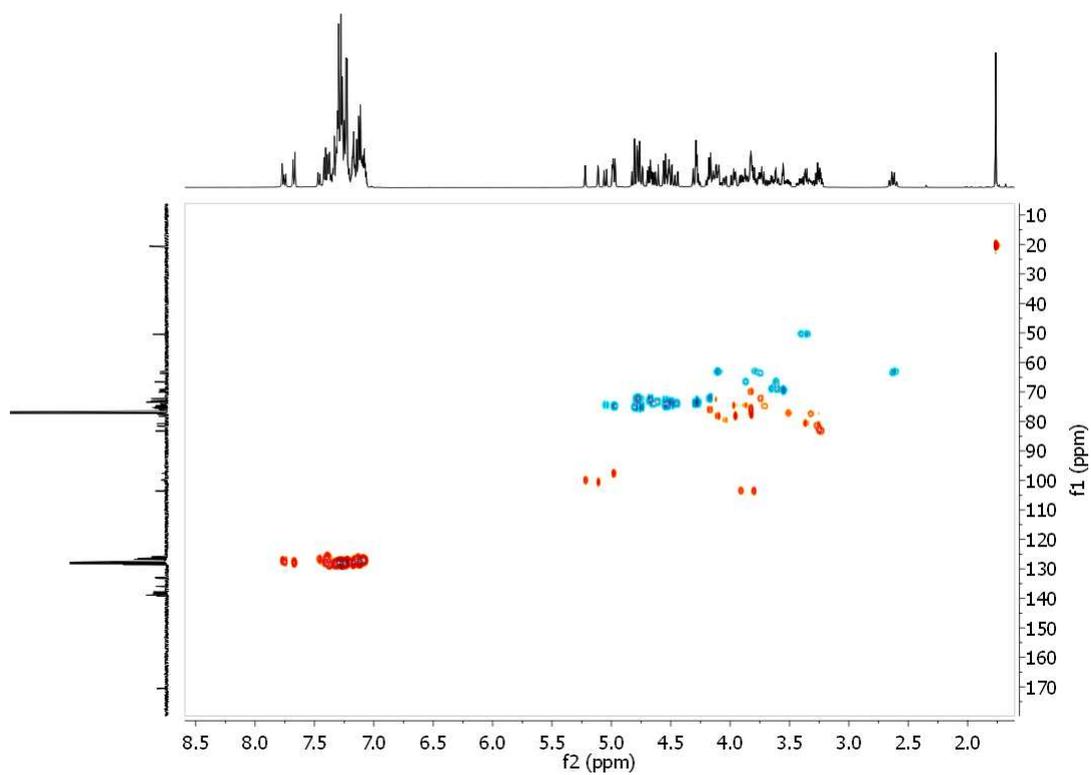
24:  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



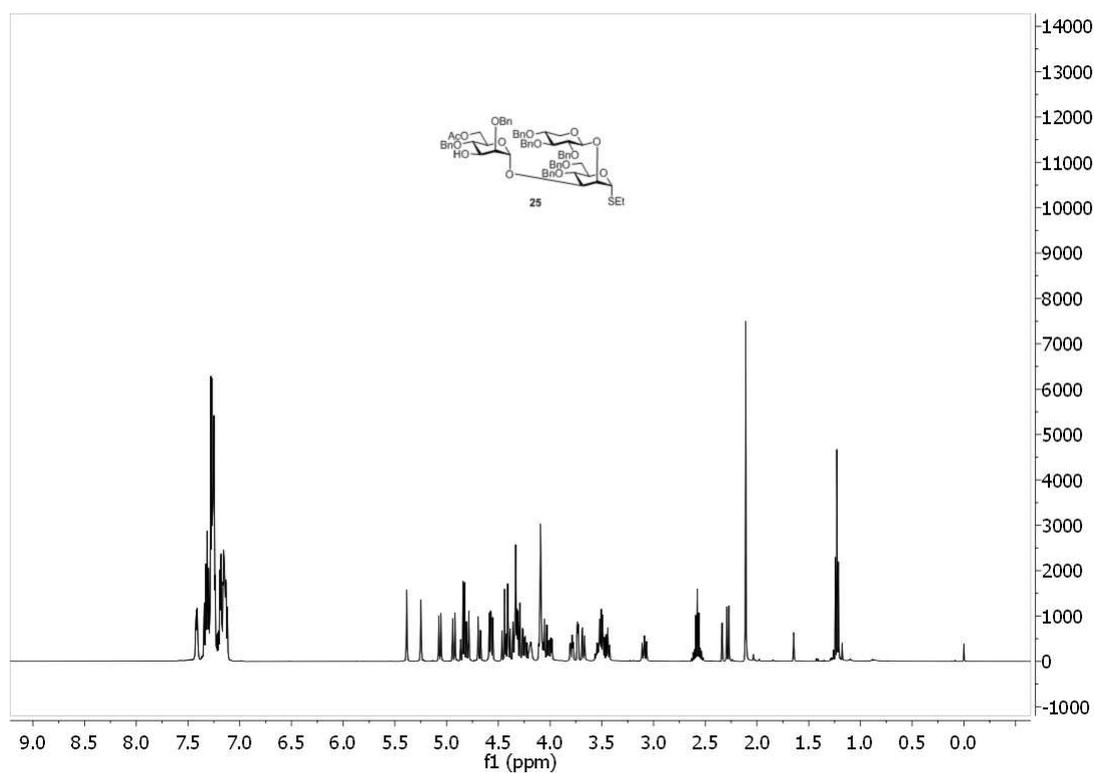
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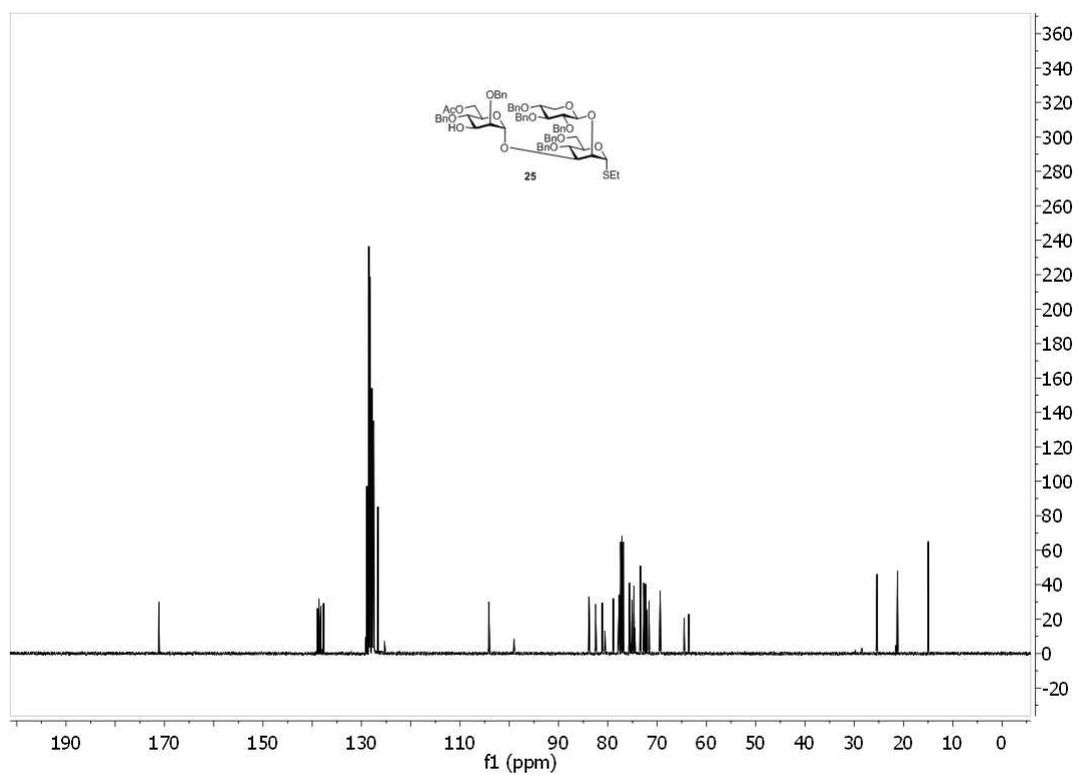
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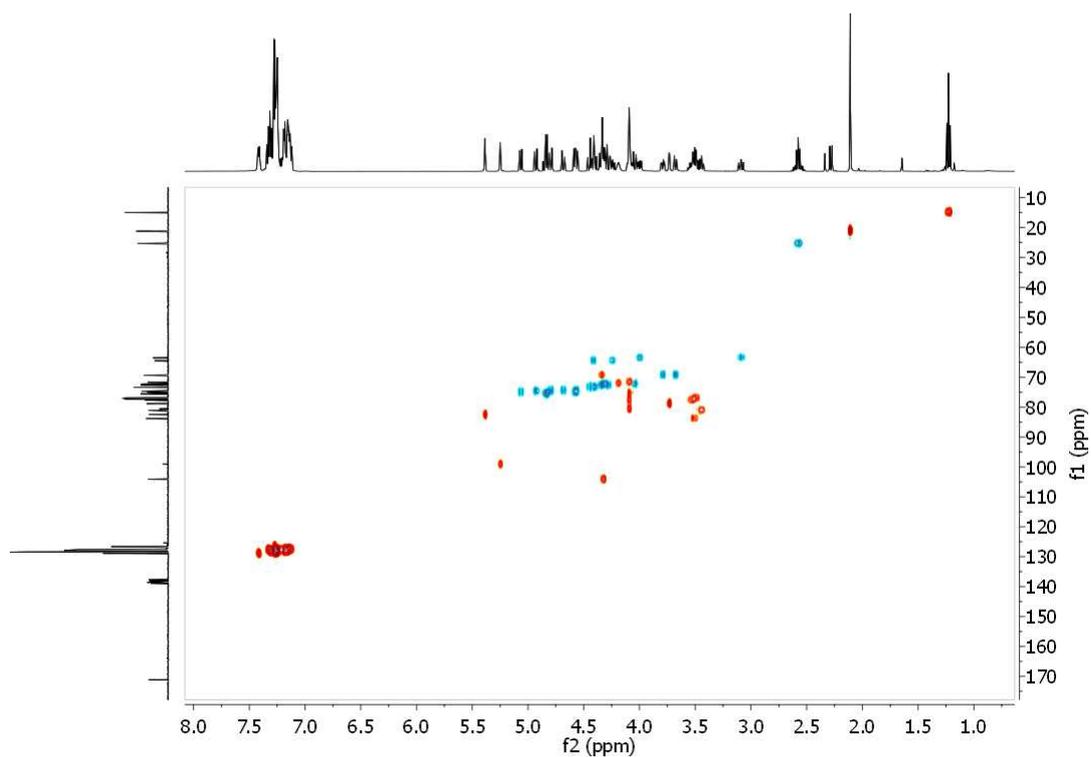
25:  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



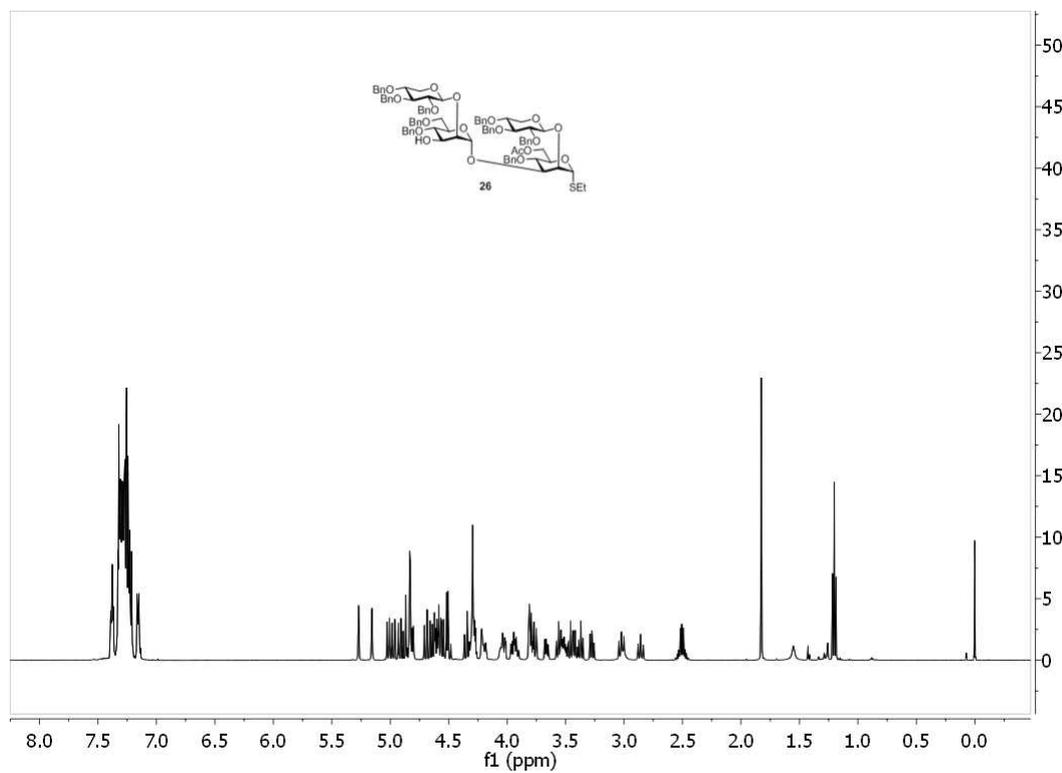
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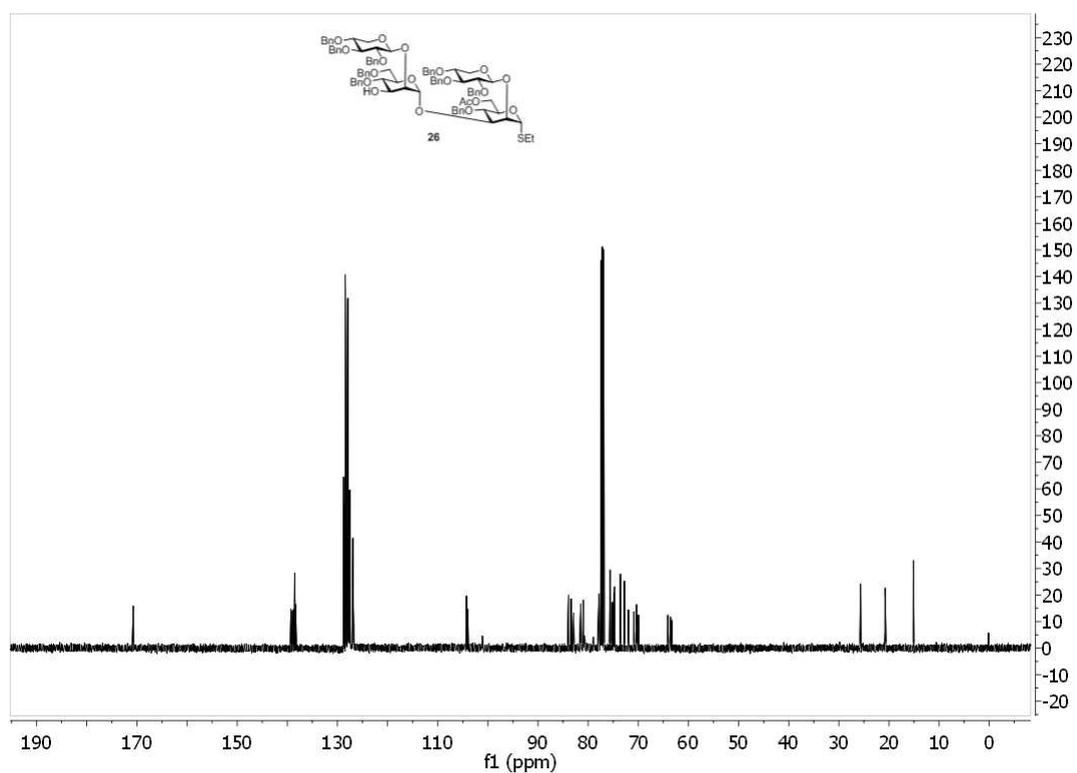
25:  $^1\text{H}$   $^{13}\text{C}$  HSQC ( $\text{CDCl}_3$ , 500 MHz)



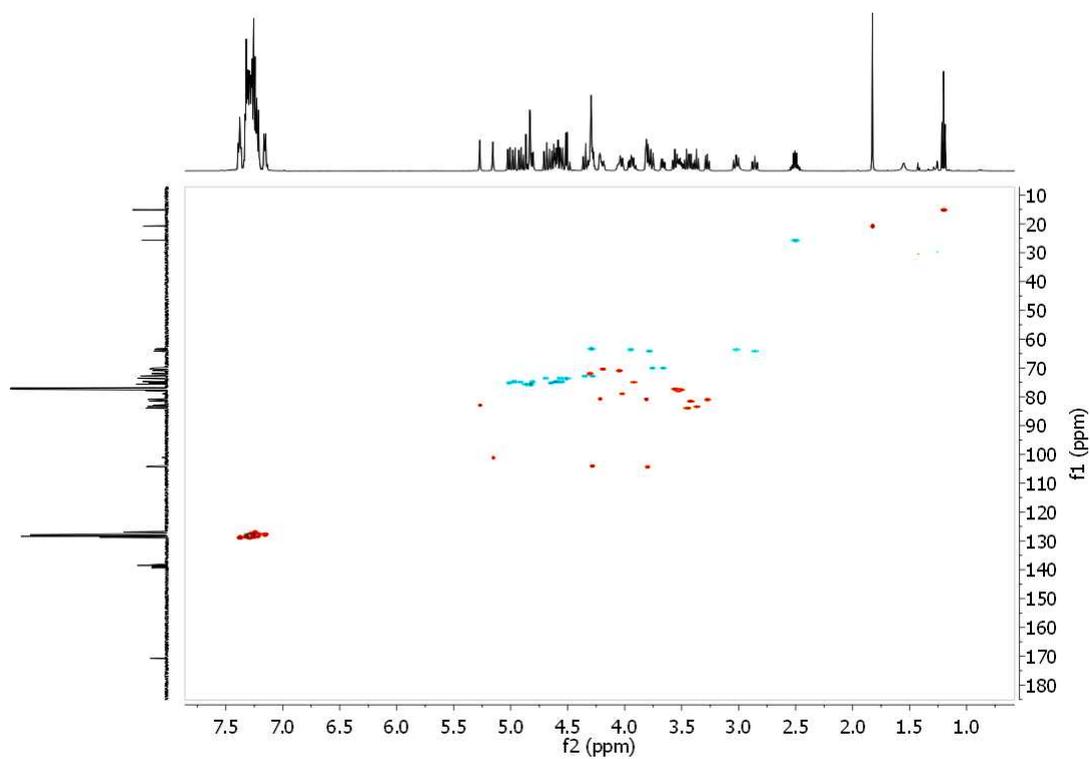
26:  $^1\text{H}$  NMR ( $\text{CDCl}_3$ , 500 MHz)



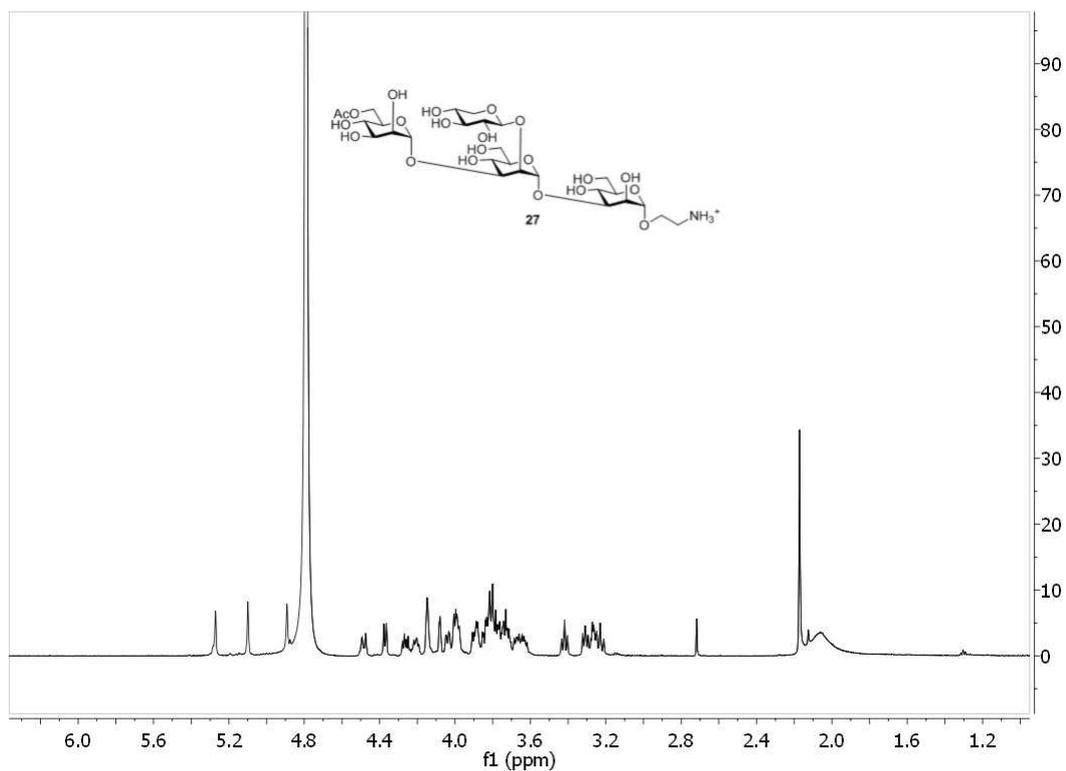
26:  $^{13}\text{C}$  NMR ( $\text{CDCl}_3$ , 125 MHz)



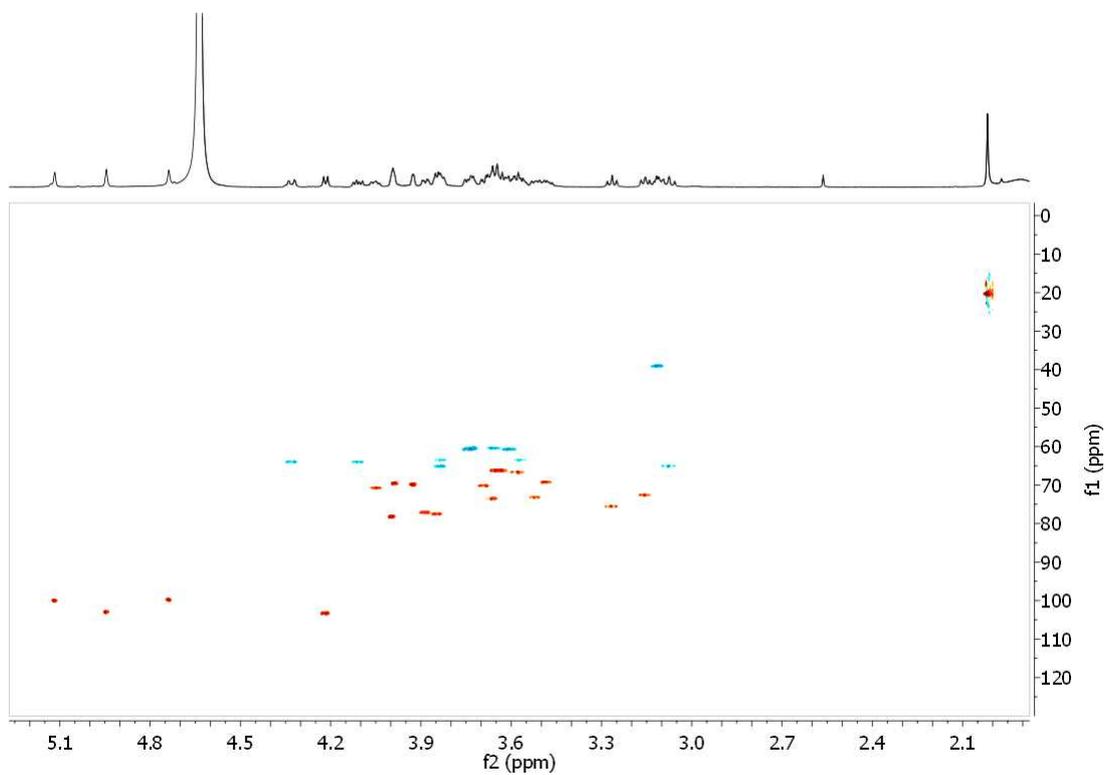
26:  $^1\text{H}$   $^{13}\text{C}$  HSQC ( $\text{CDCl}_3$ , 500 MHz)



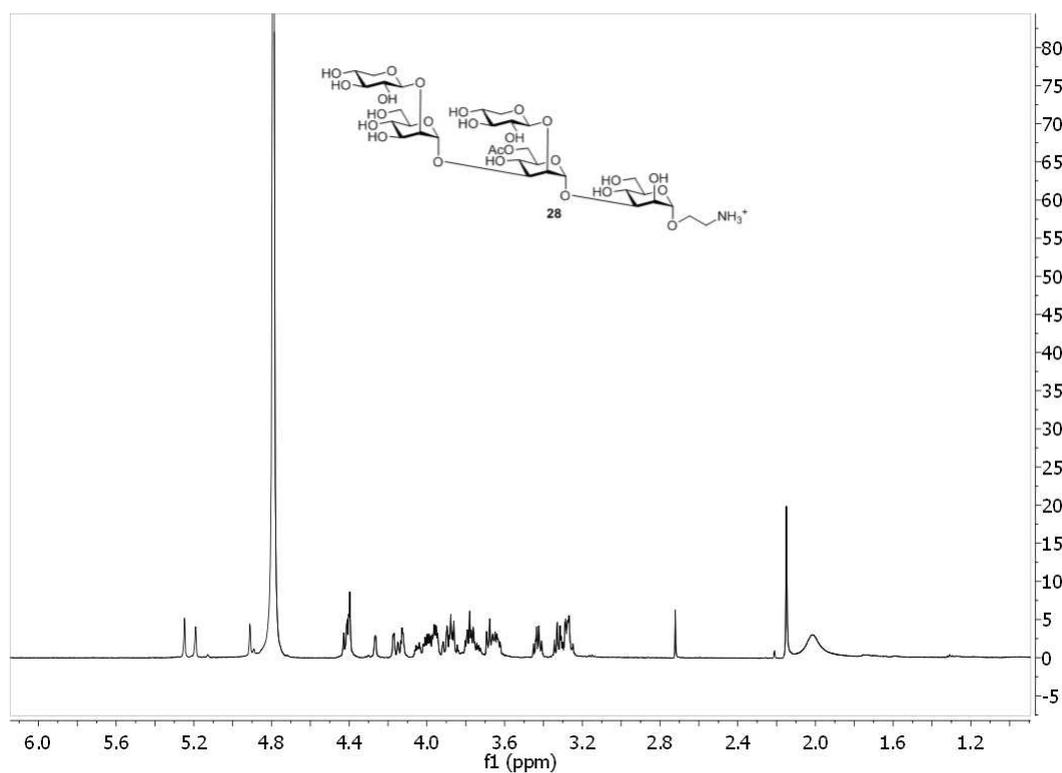
27:  $^1\text{H}$  NMR ( $\text{D}_2\text{O}$ , 600 MHz)



27:  $^1\text{H}$   $^{13}\text{C}$  HSQC ( $\text{D}_2\text{O}$ , 600 MHz)



28:  $^1\text{H}$  NMR ( $\text{D}_2\text{O}$ , 600 MHz)



28:  $^1\text{H}$   $^{13}\text{C}$  HSQC ( $\text{D}_2\text{O}$ , 600 MHz)

