Electronic Supplementary Material (ESI) for Organic & Biomolecular Chemistry.

Efficient assembly of oligomannosides using the hydrophobically assisted switching phase method

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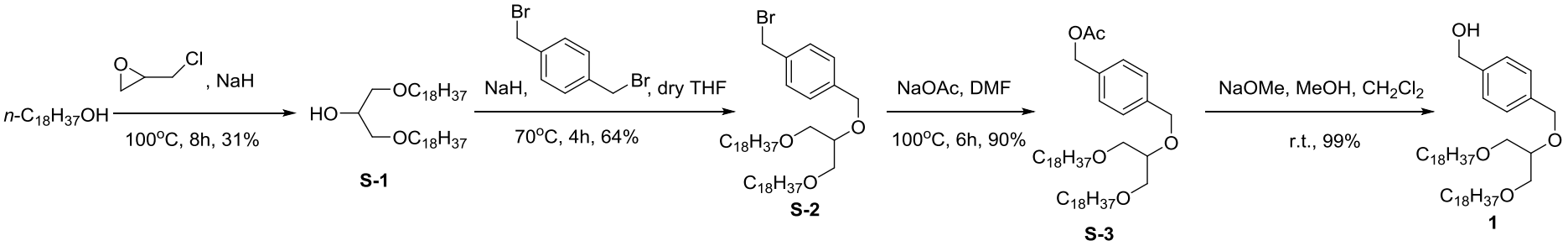
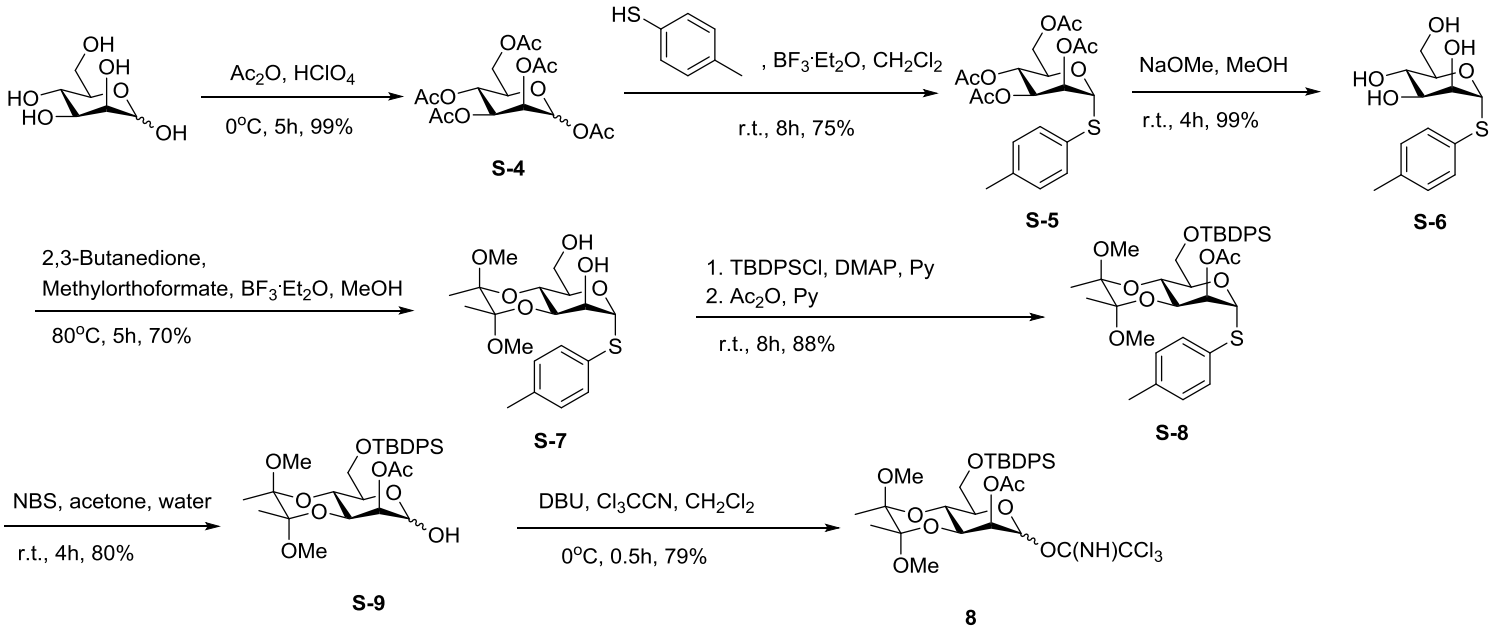
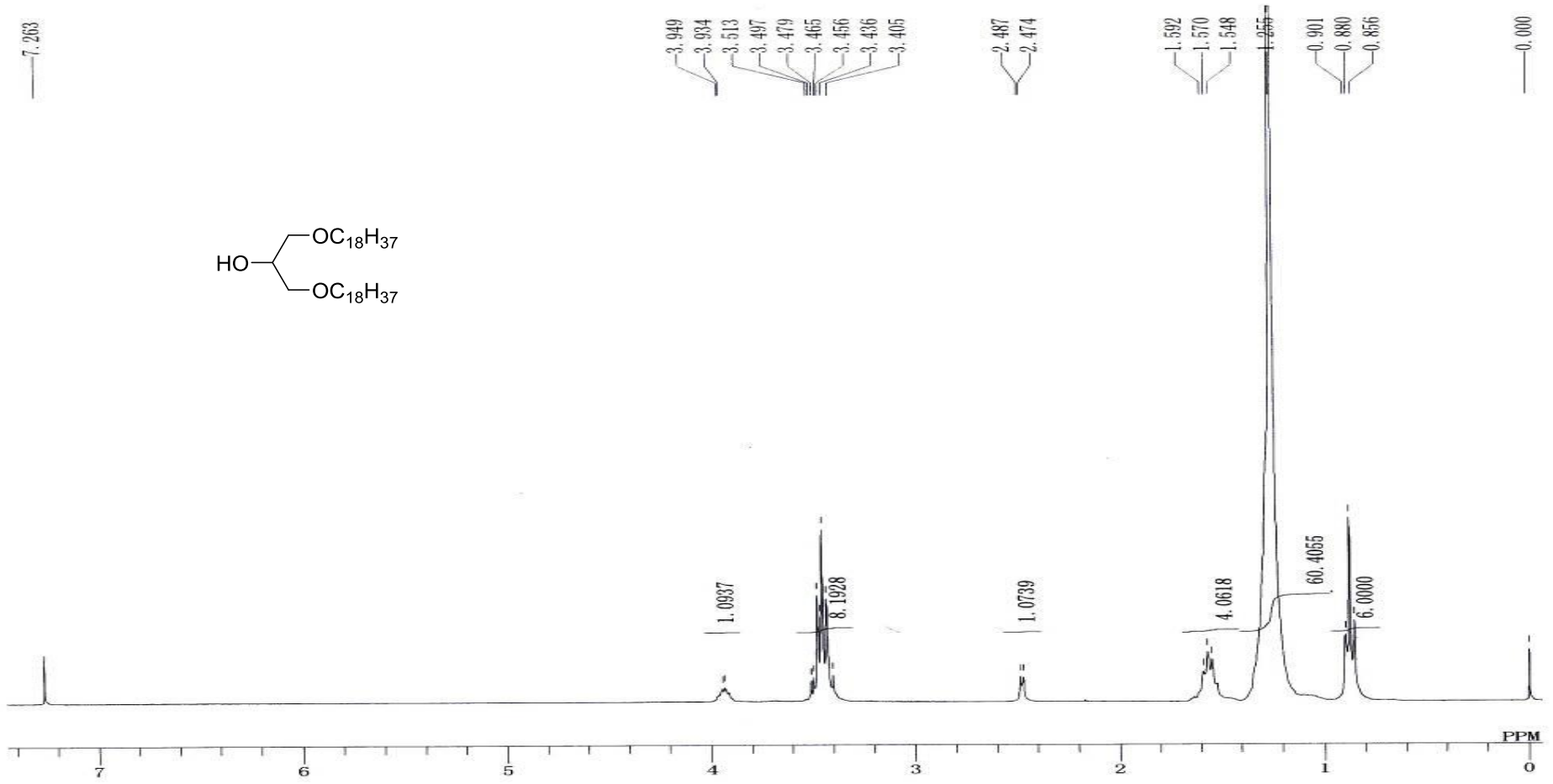
*Synthesis of Compound **1**:*



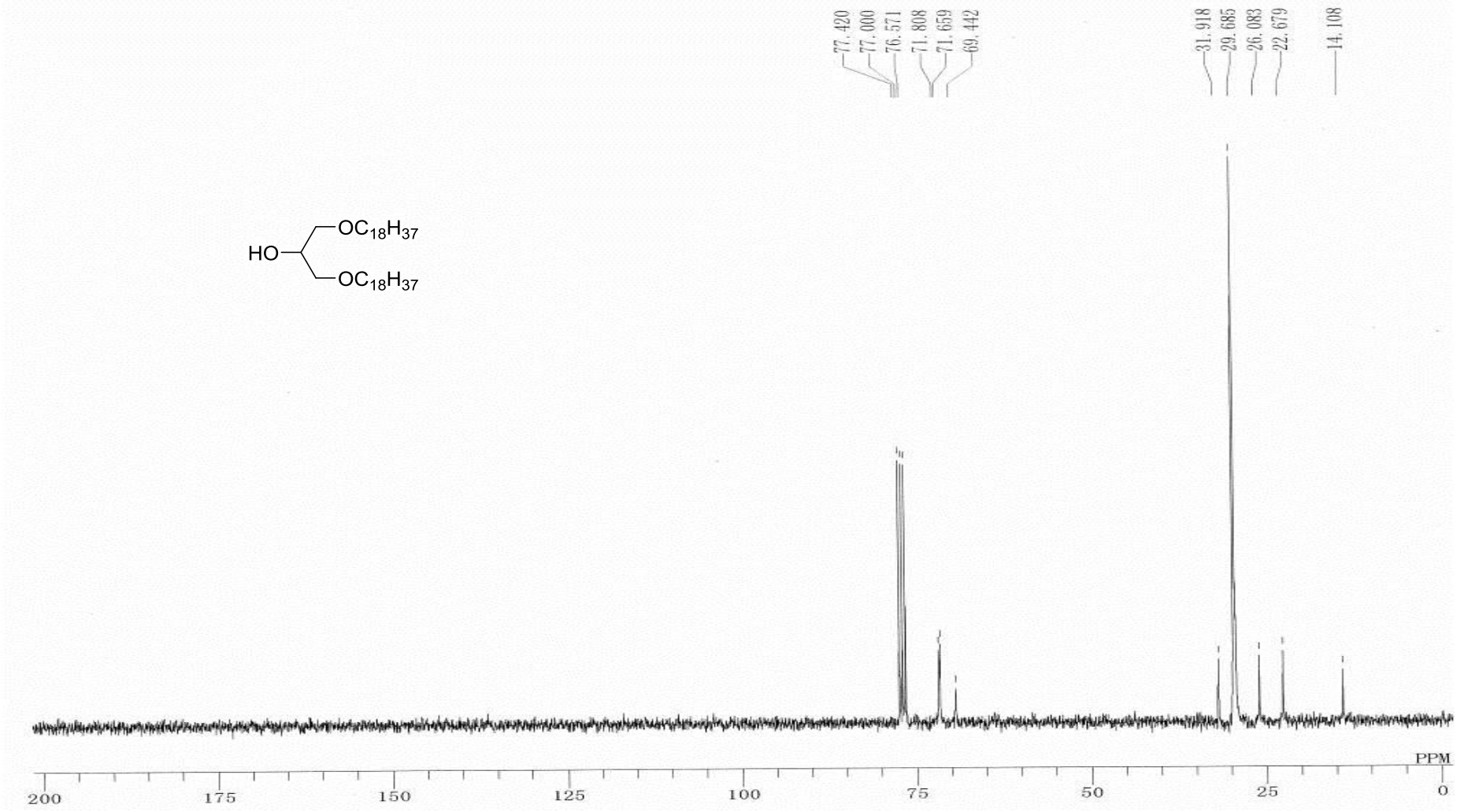
*Synthesis of Compound **8**:*



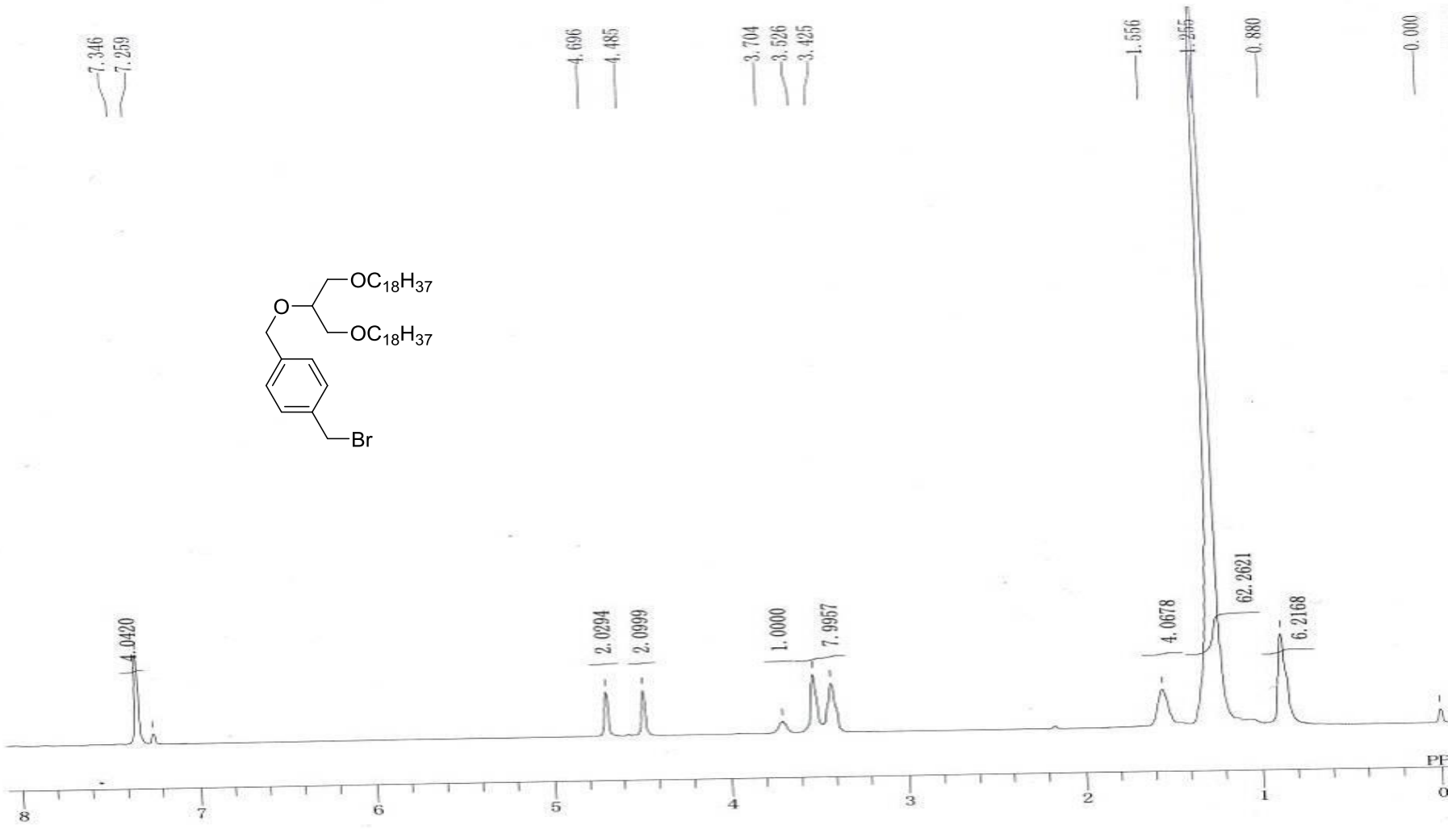
^{1}H NMR of Compound **S-1** ($CDCl_3$, 300MHz)



^{13}C NMR of Compound **S-1** ($CDCl_3$, 75MHz)



^{1}H NMR of Compound **S-2** ($CDCl_3$, 300MHz)



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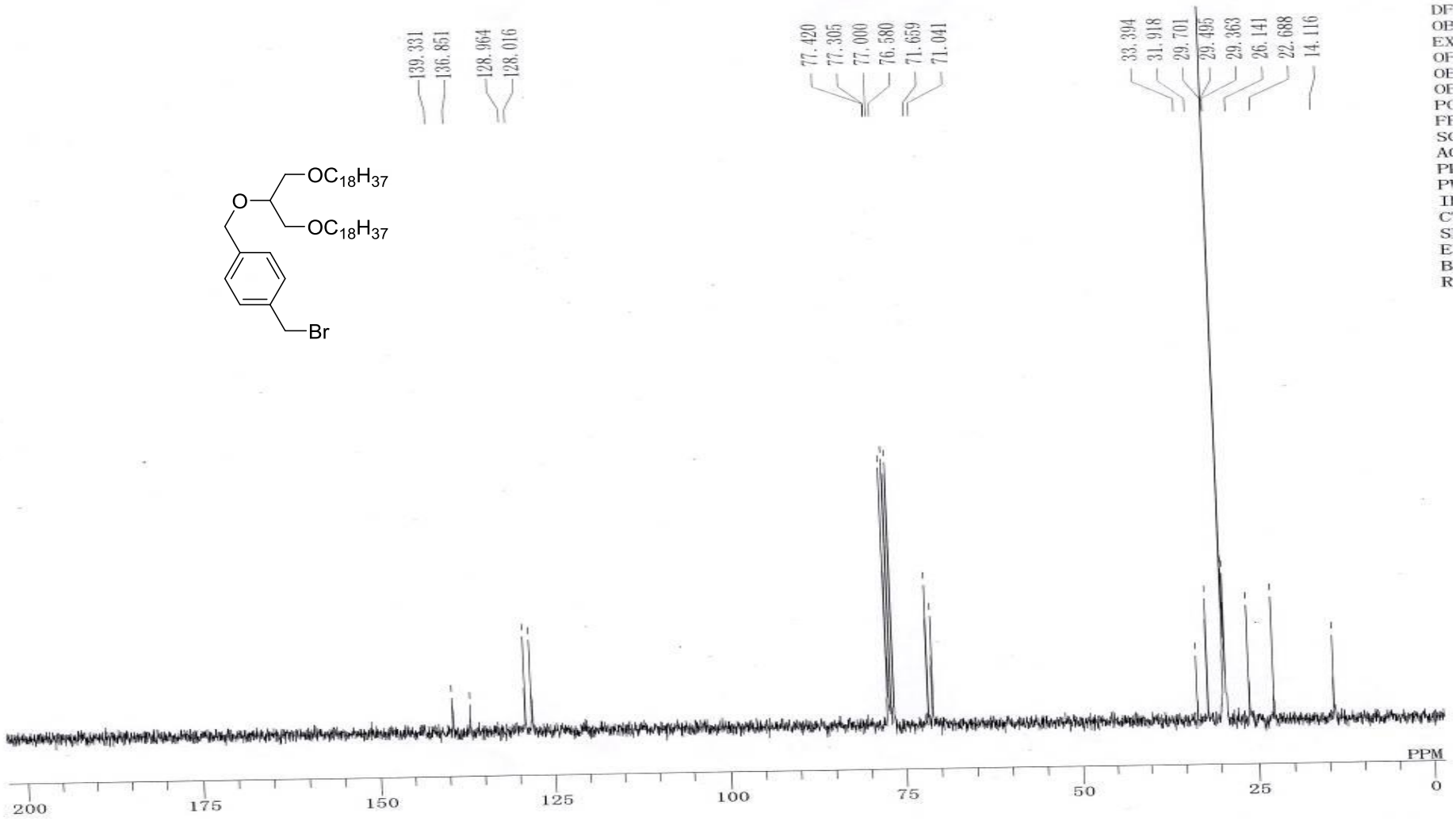

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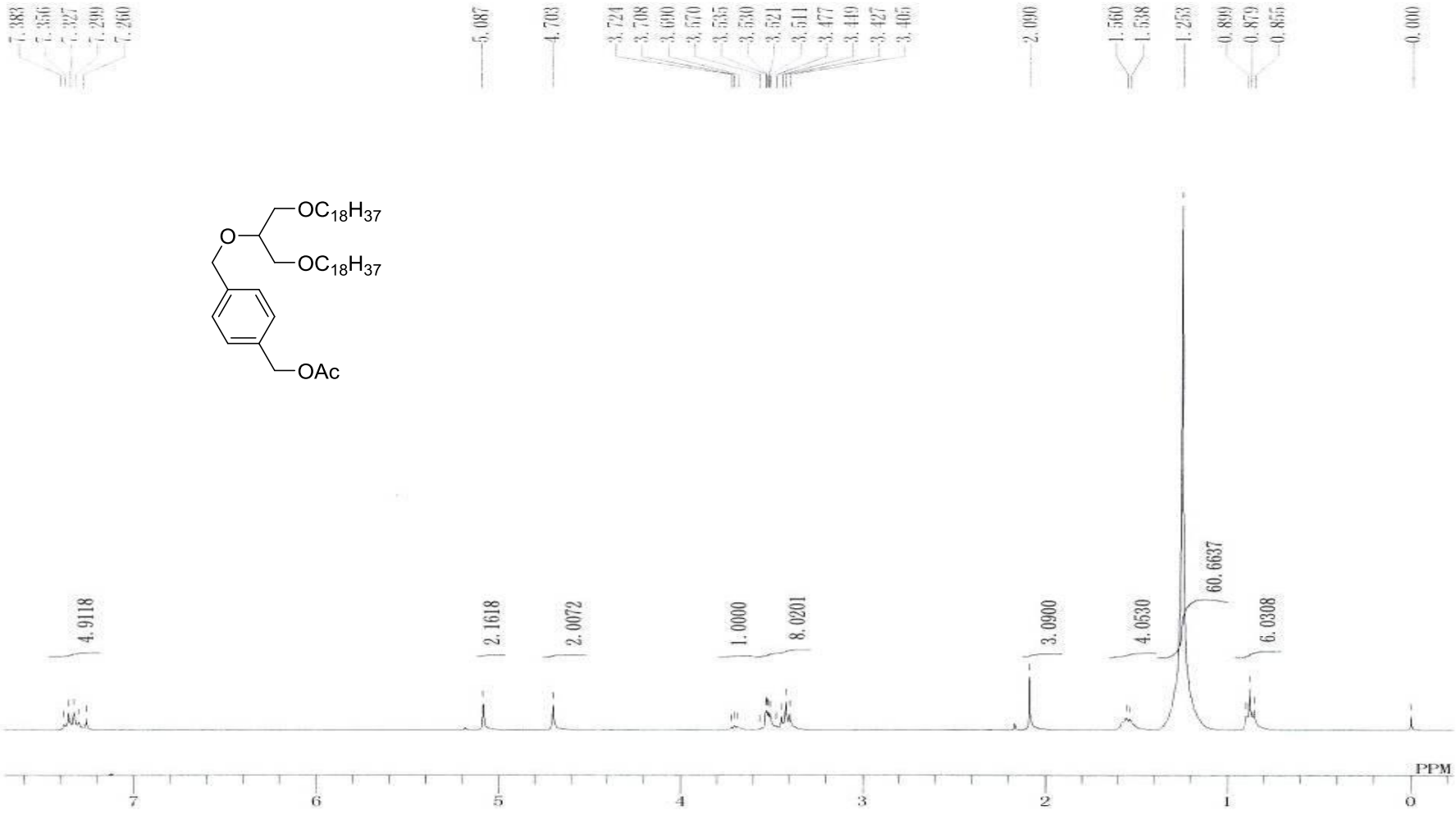

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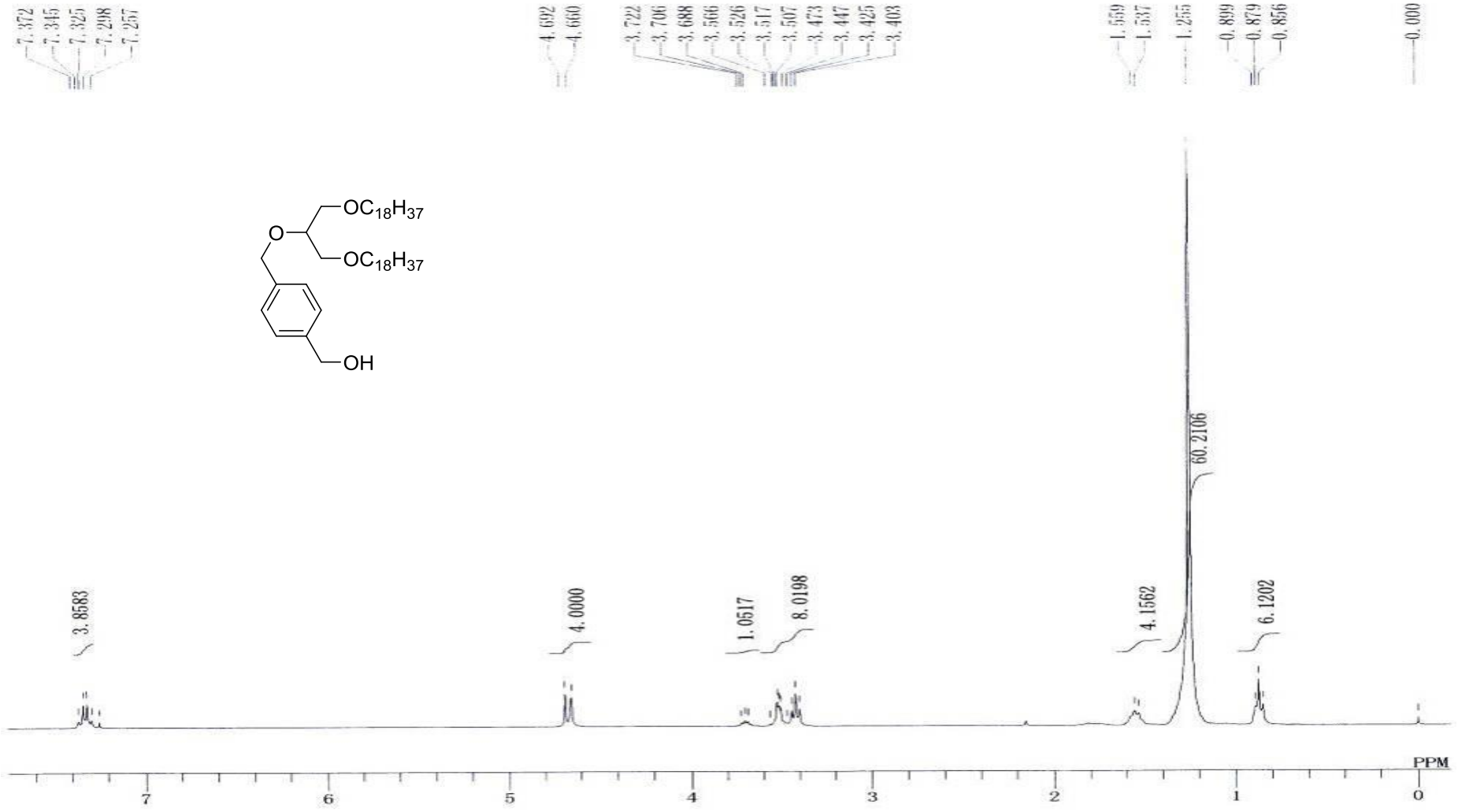

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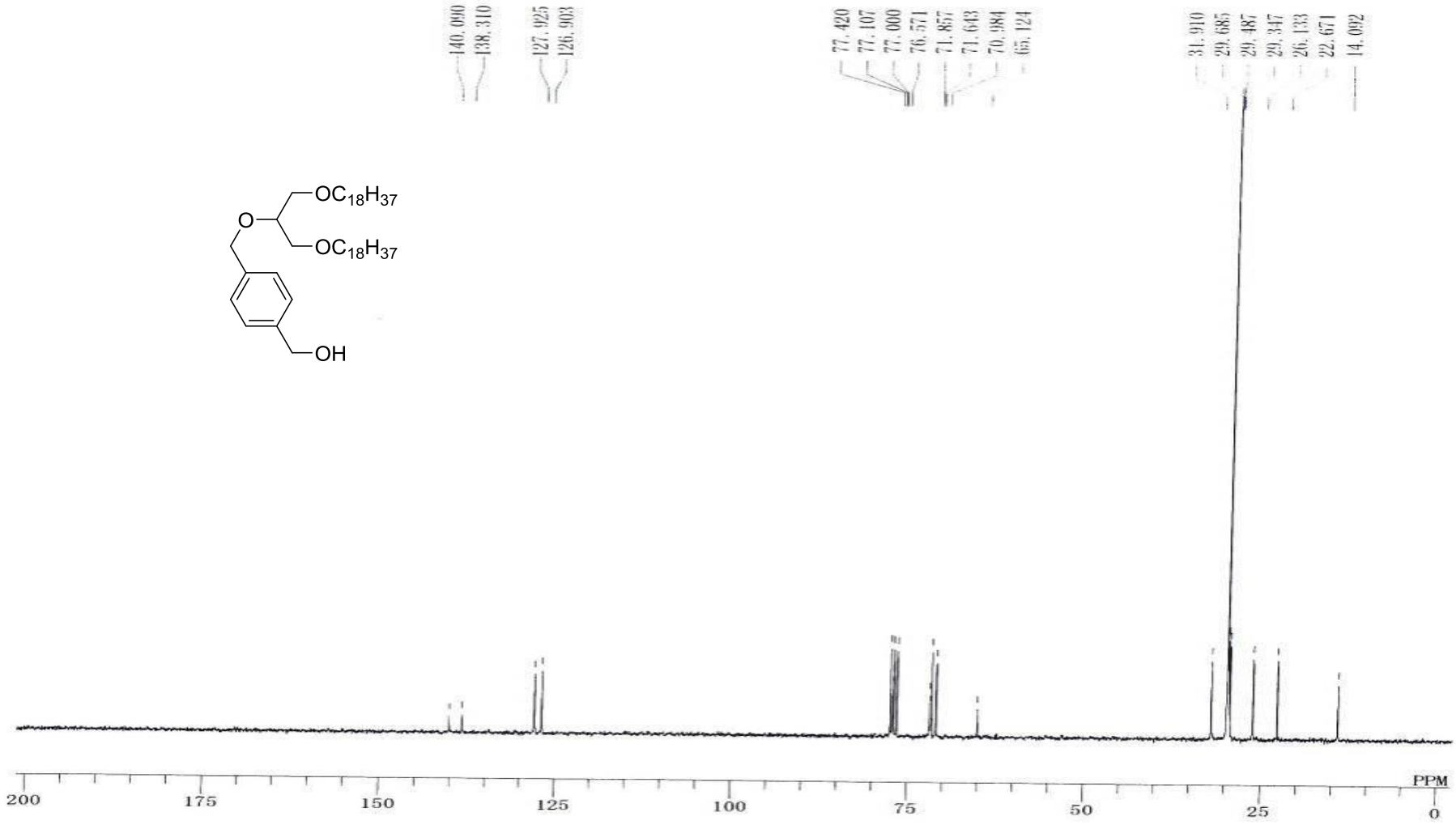

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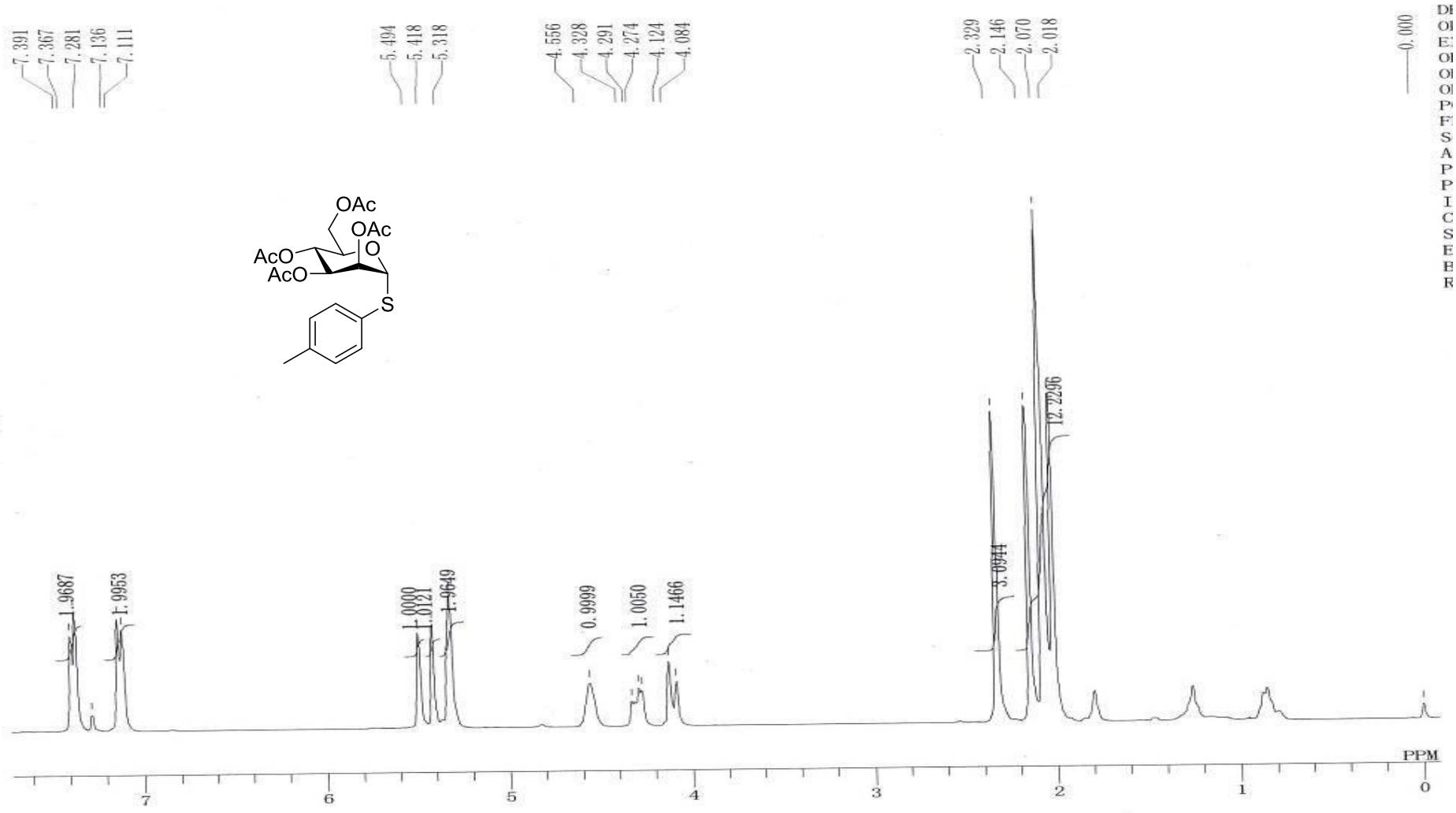

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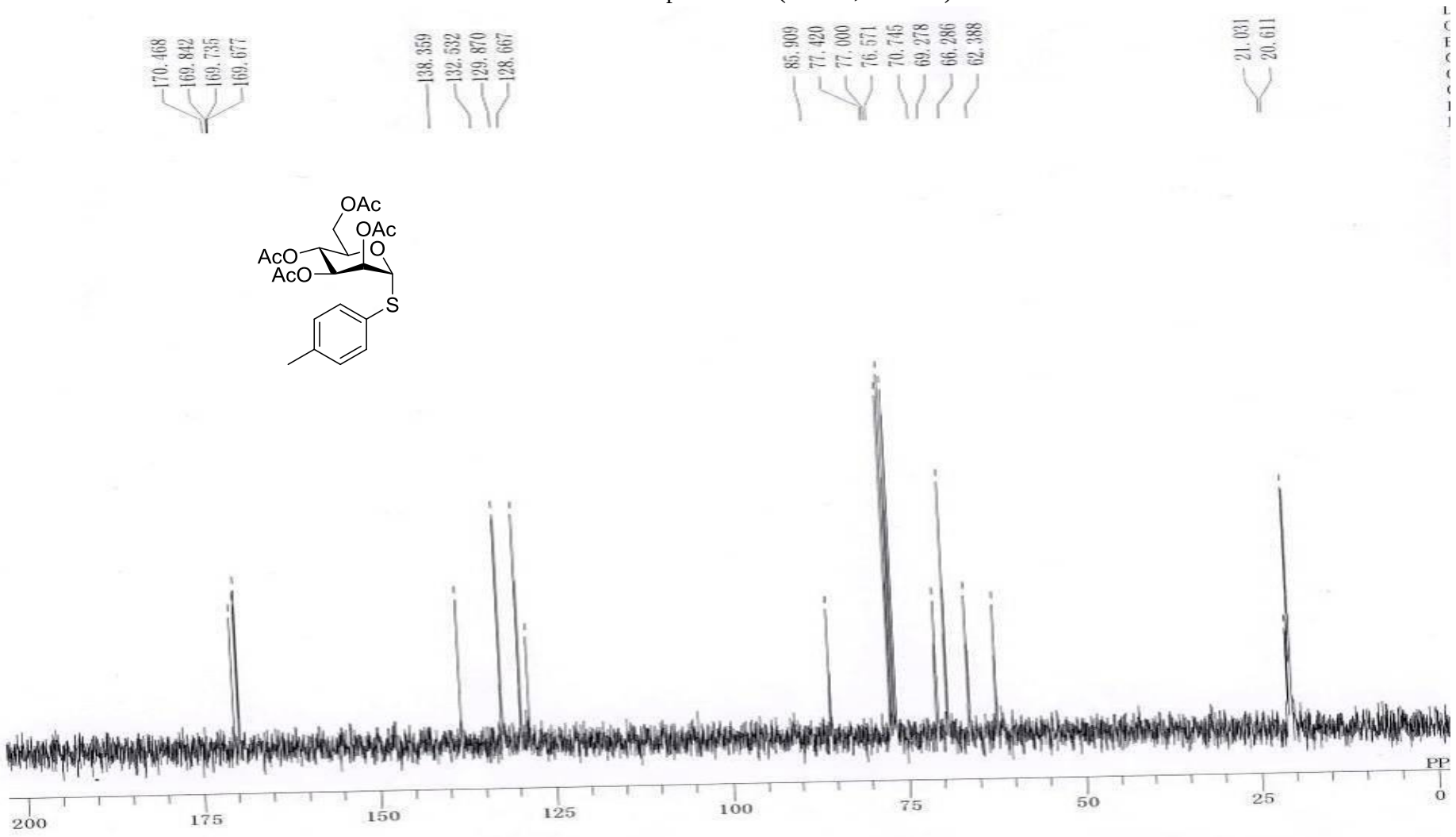

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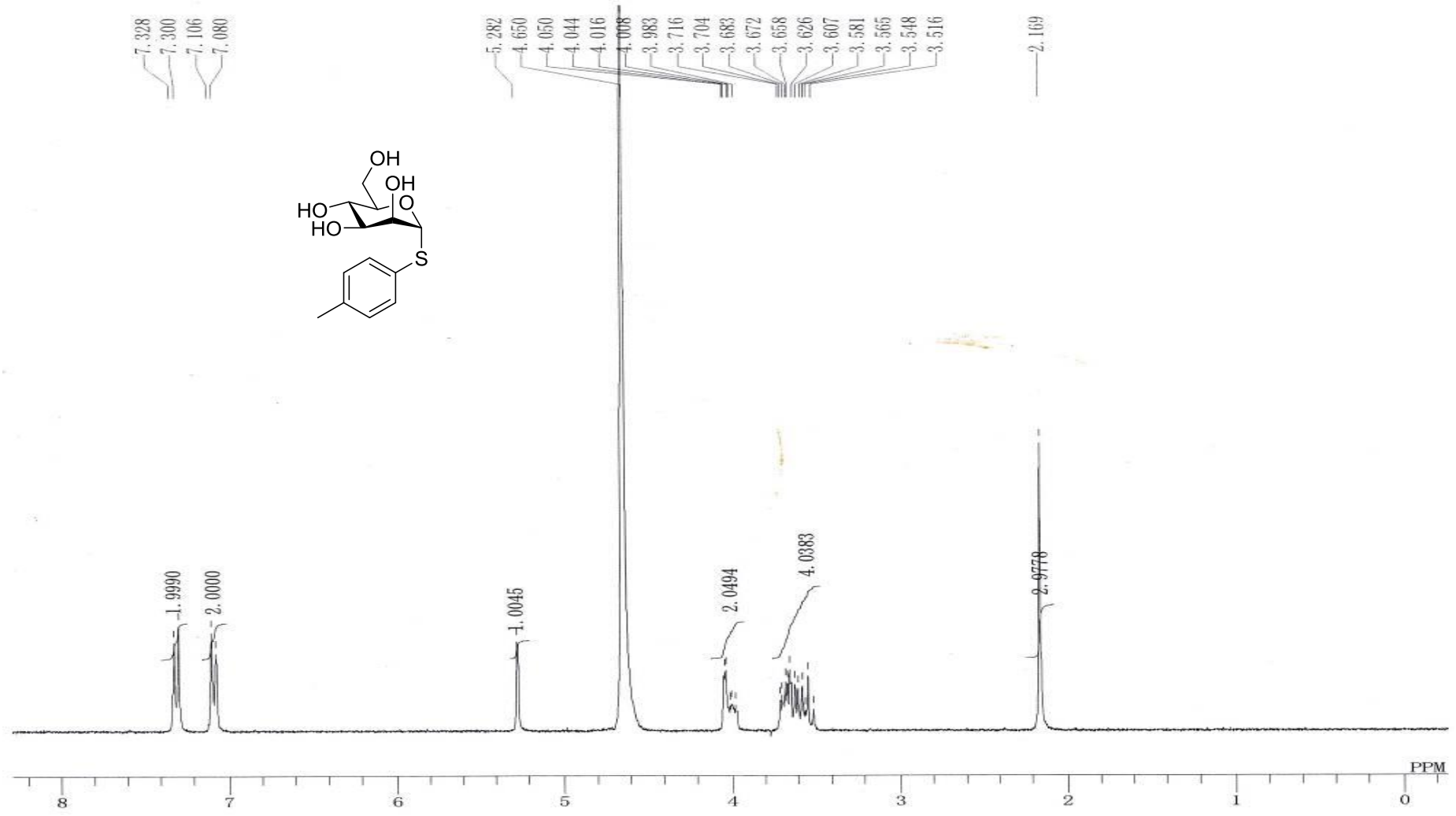

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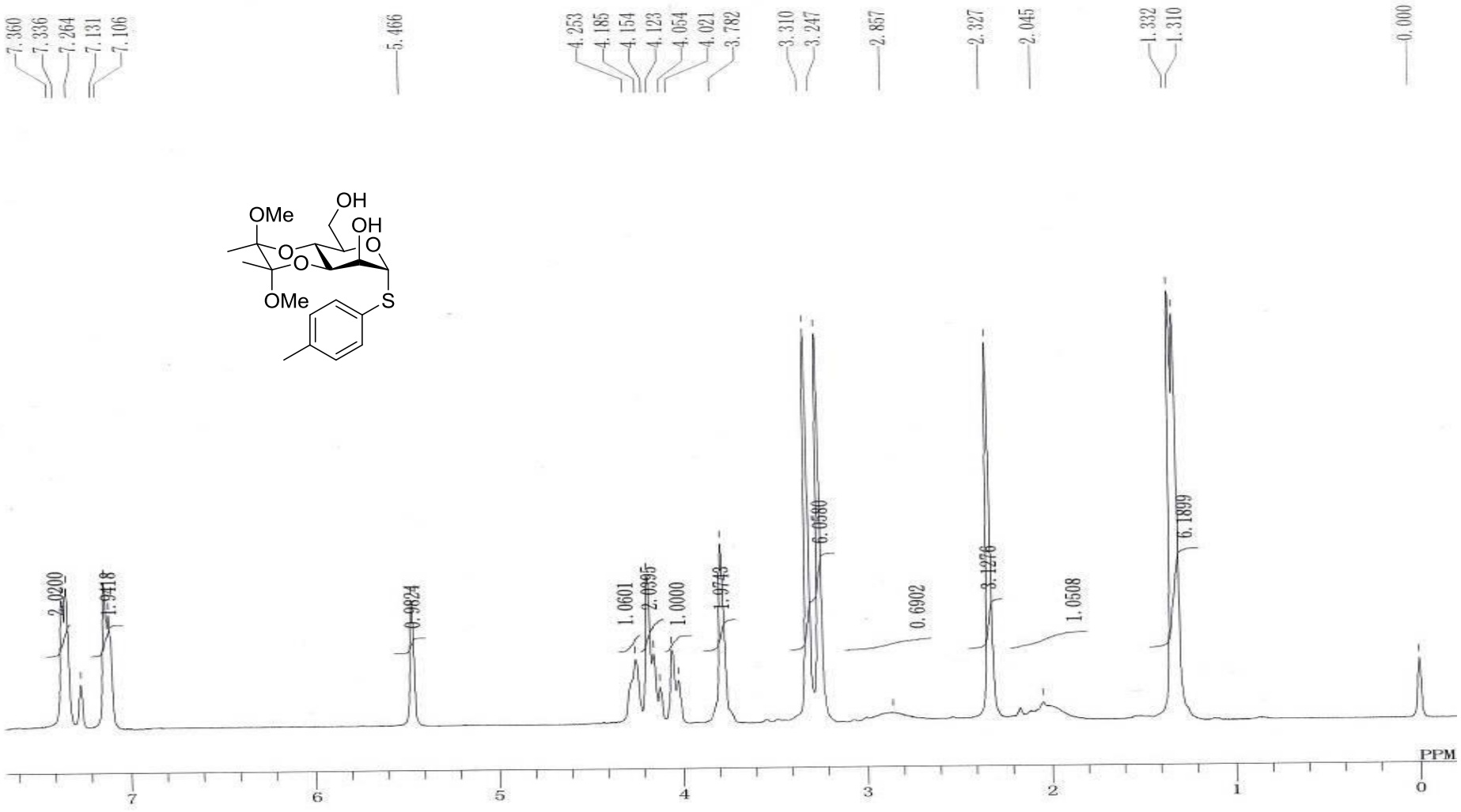

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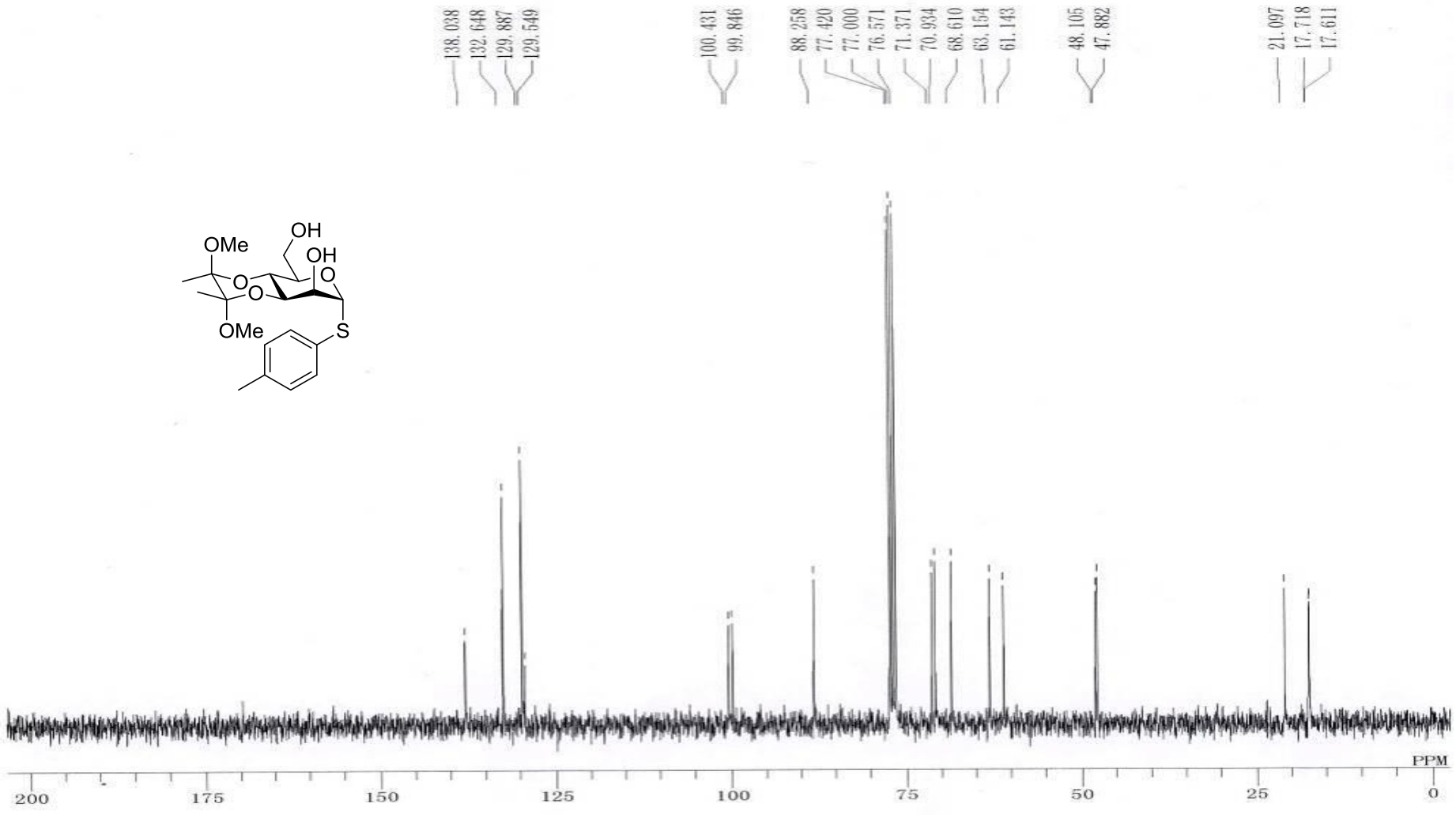
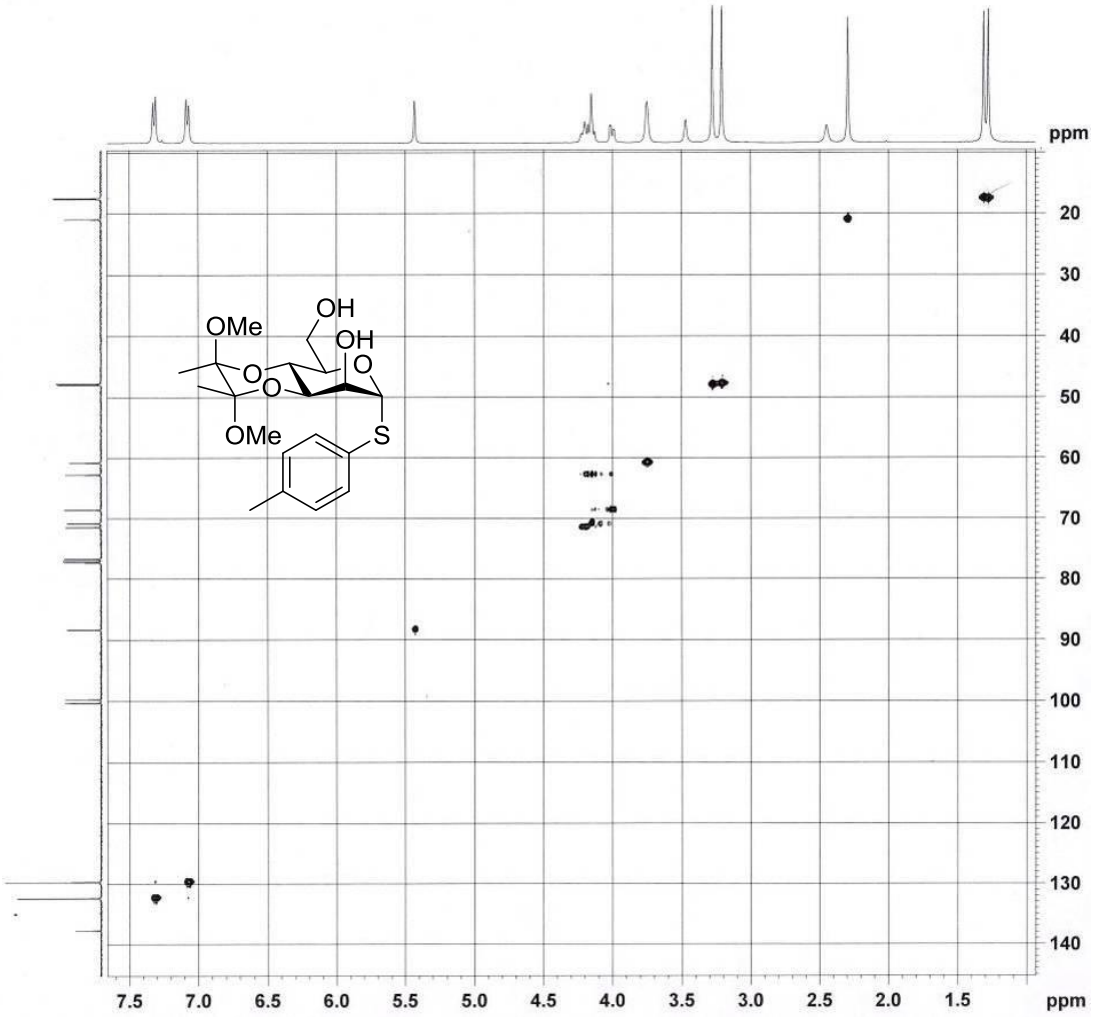


HHCOSY of Compound **S-7** ($CDCl_3$, 300 MHz)

HSQC of Compound **S-7** ($CDCl_3$, 300 MHz)



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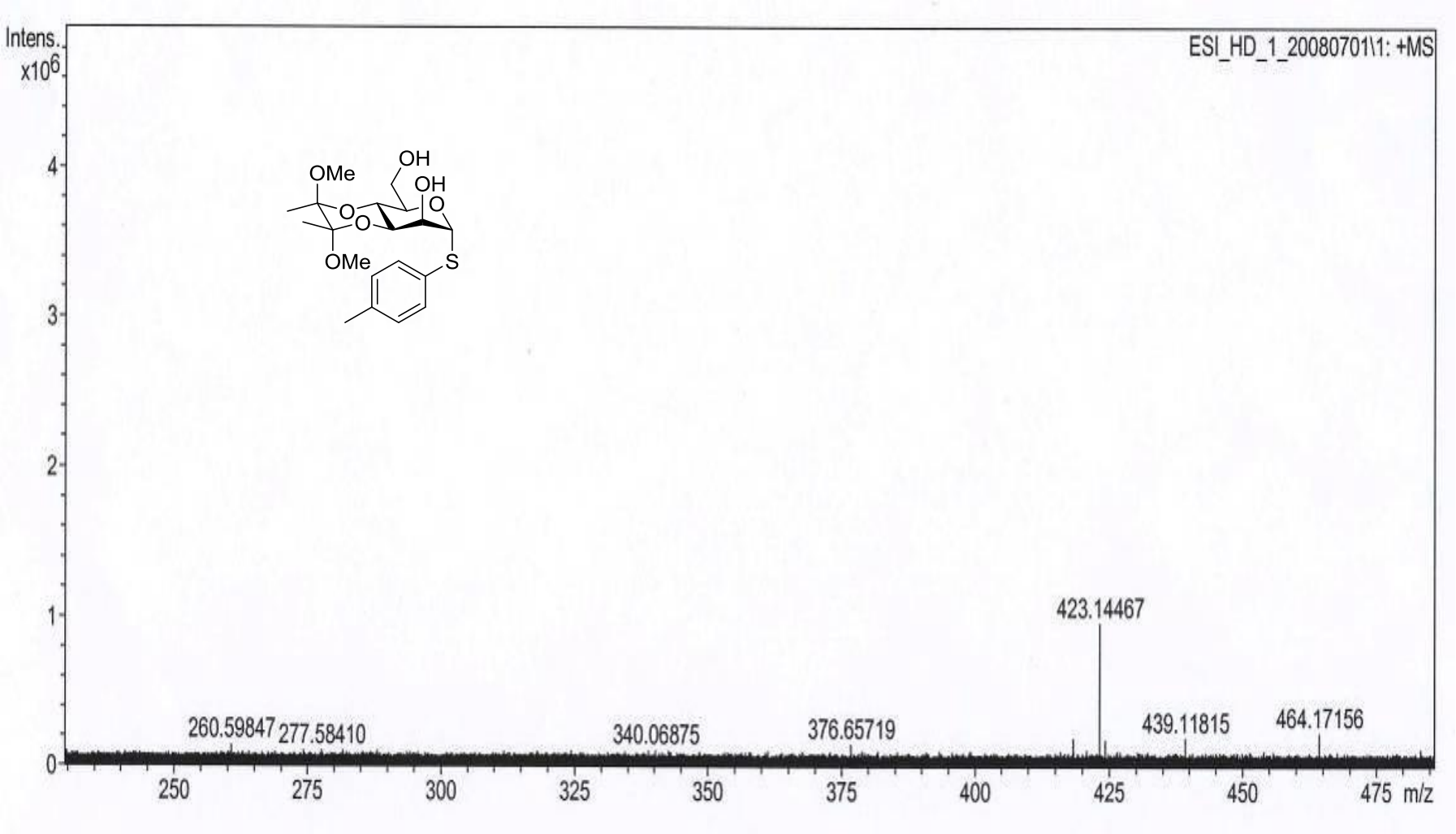

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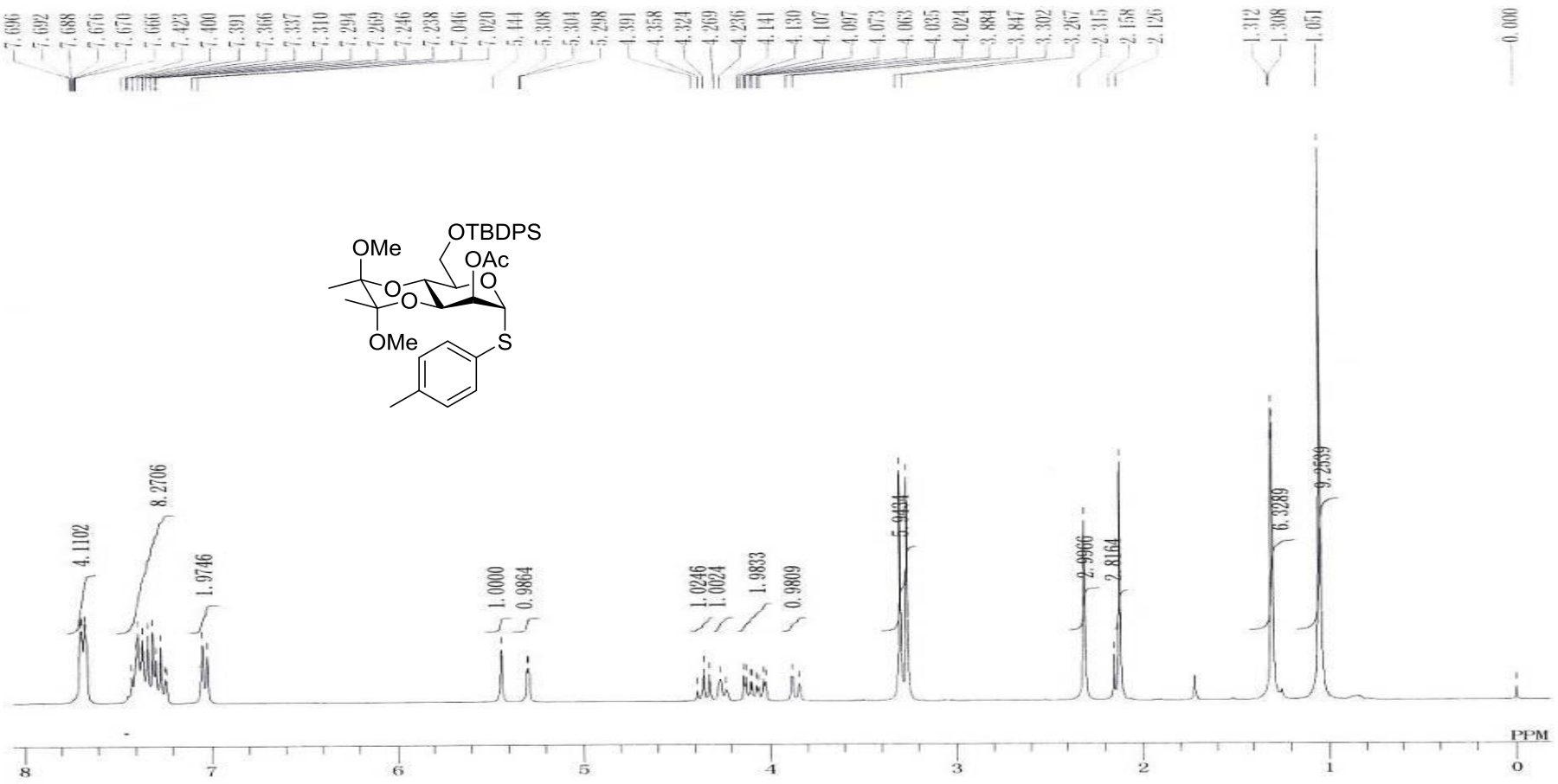

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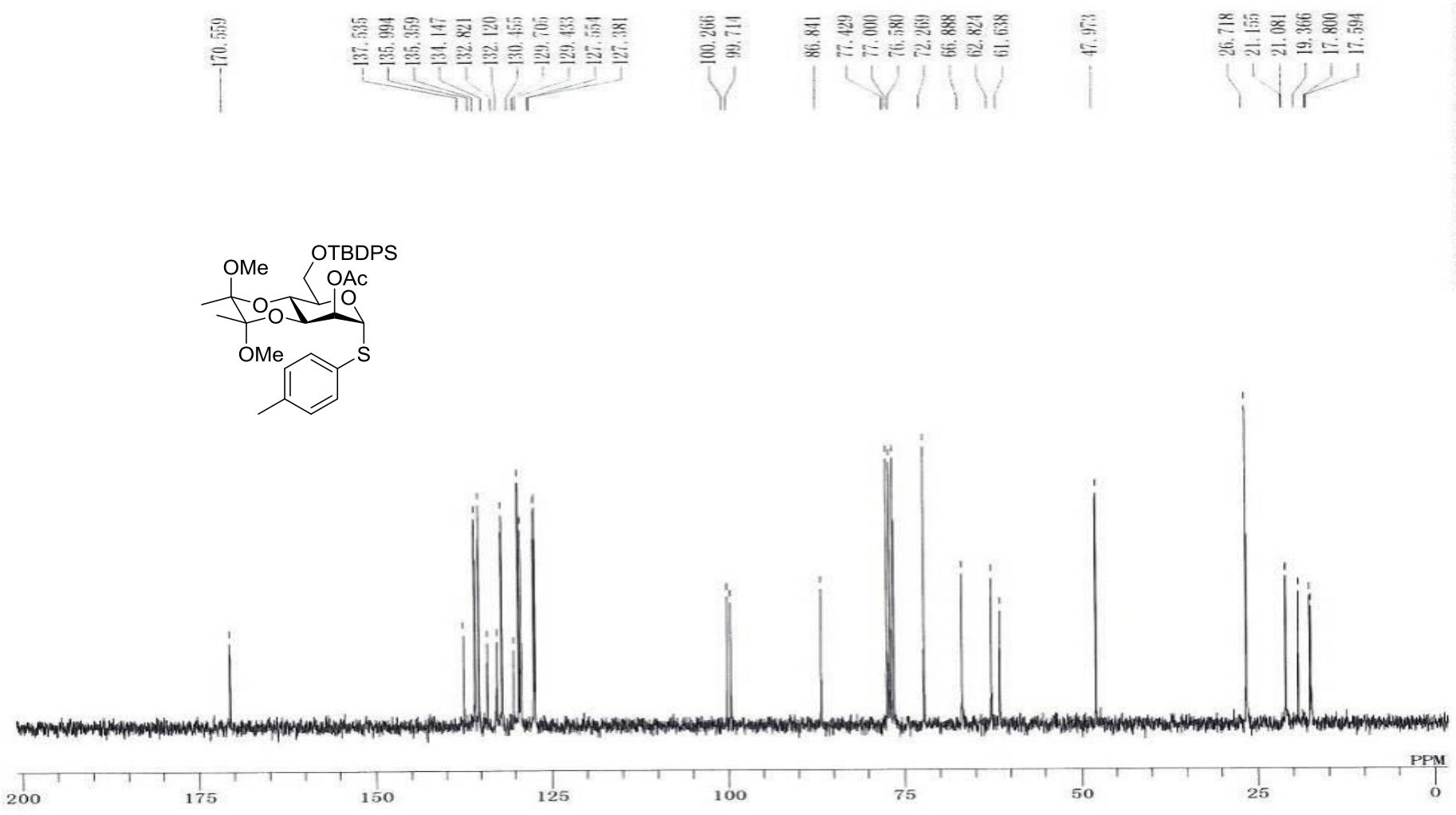

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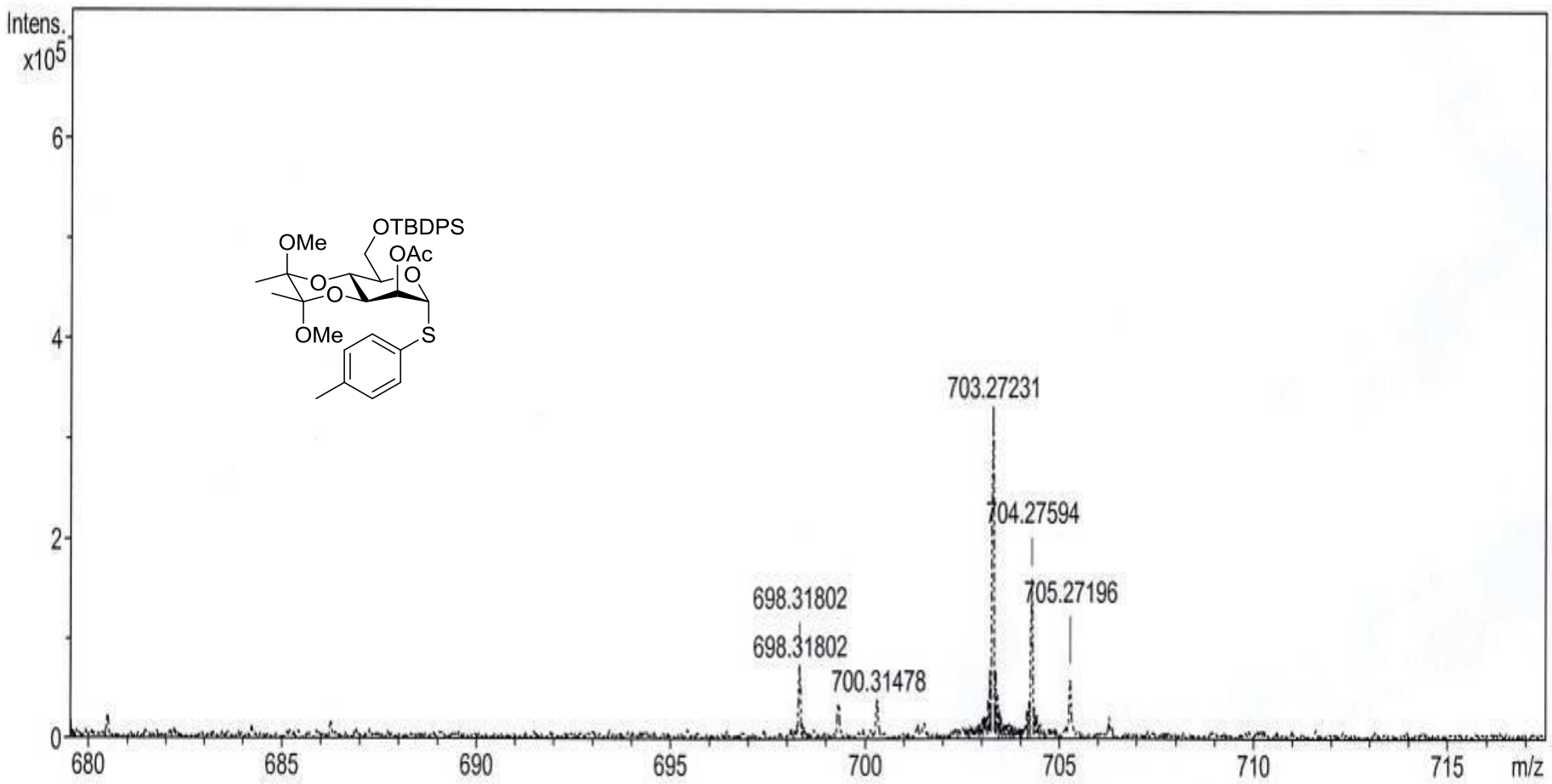

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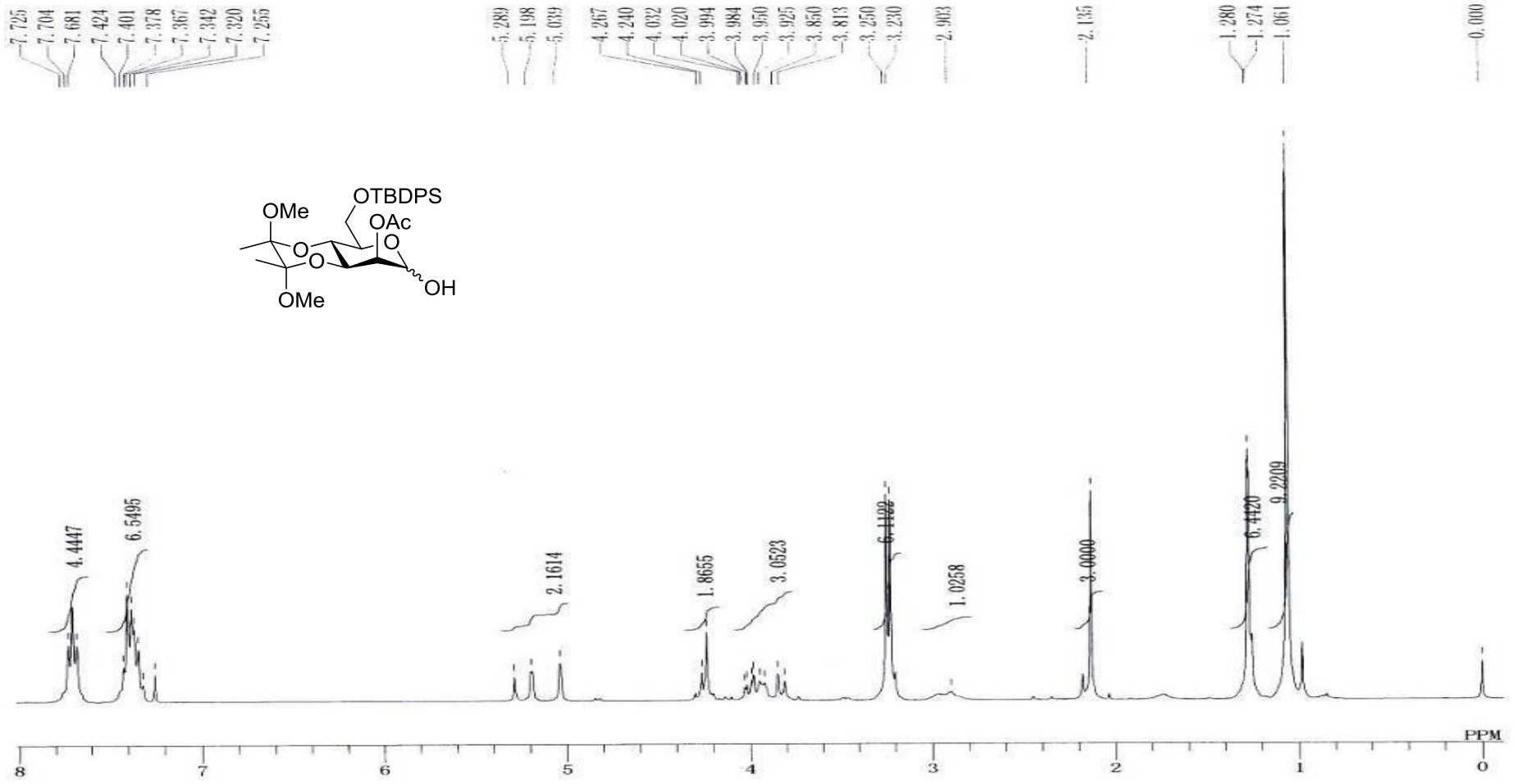

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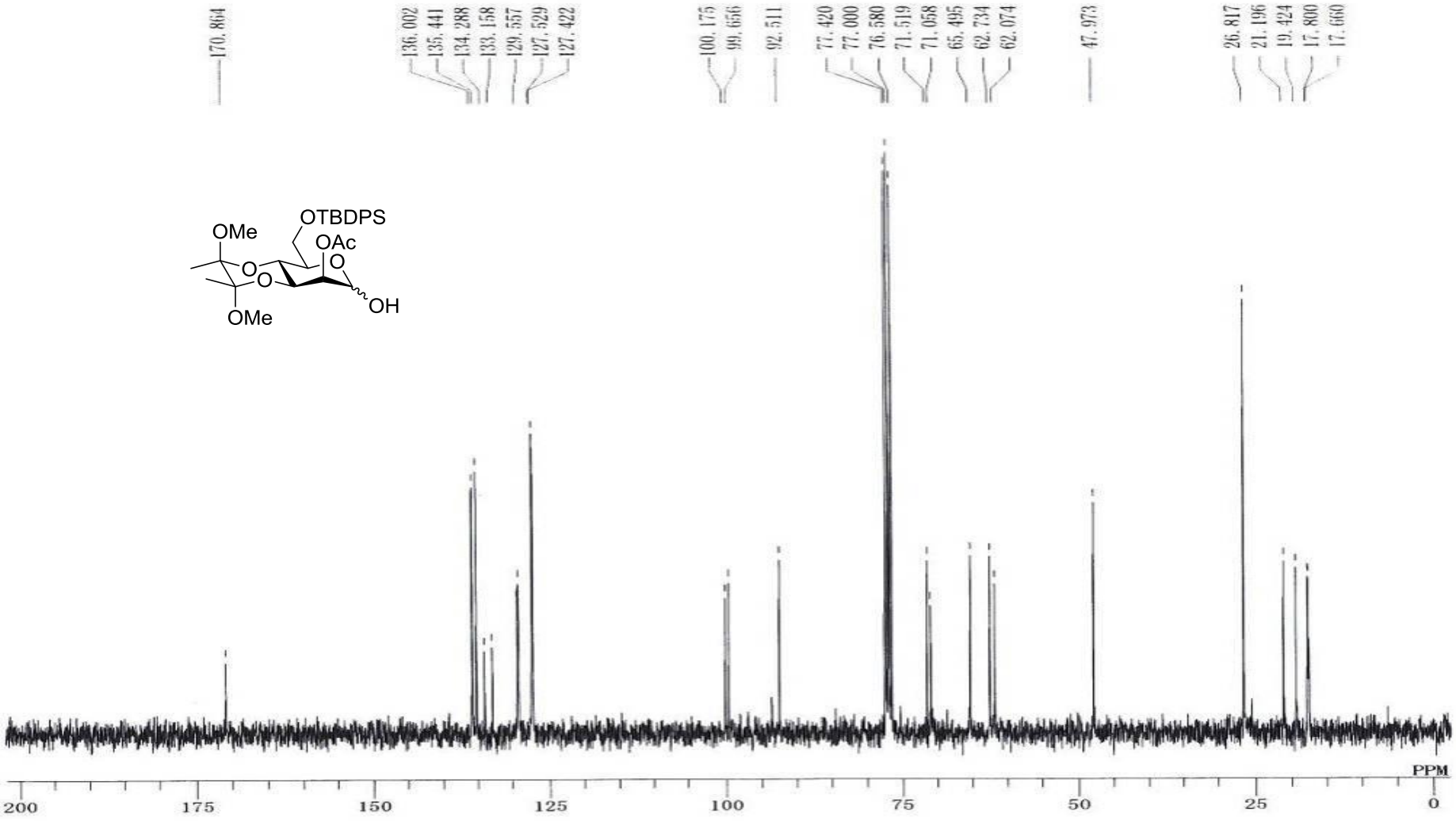

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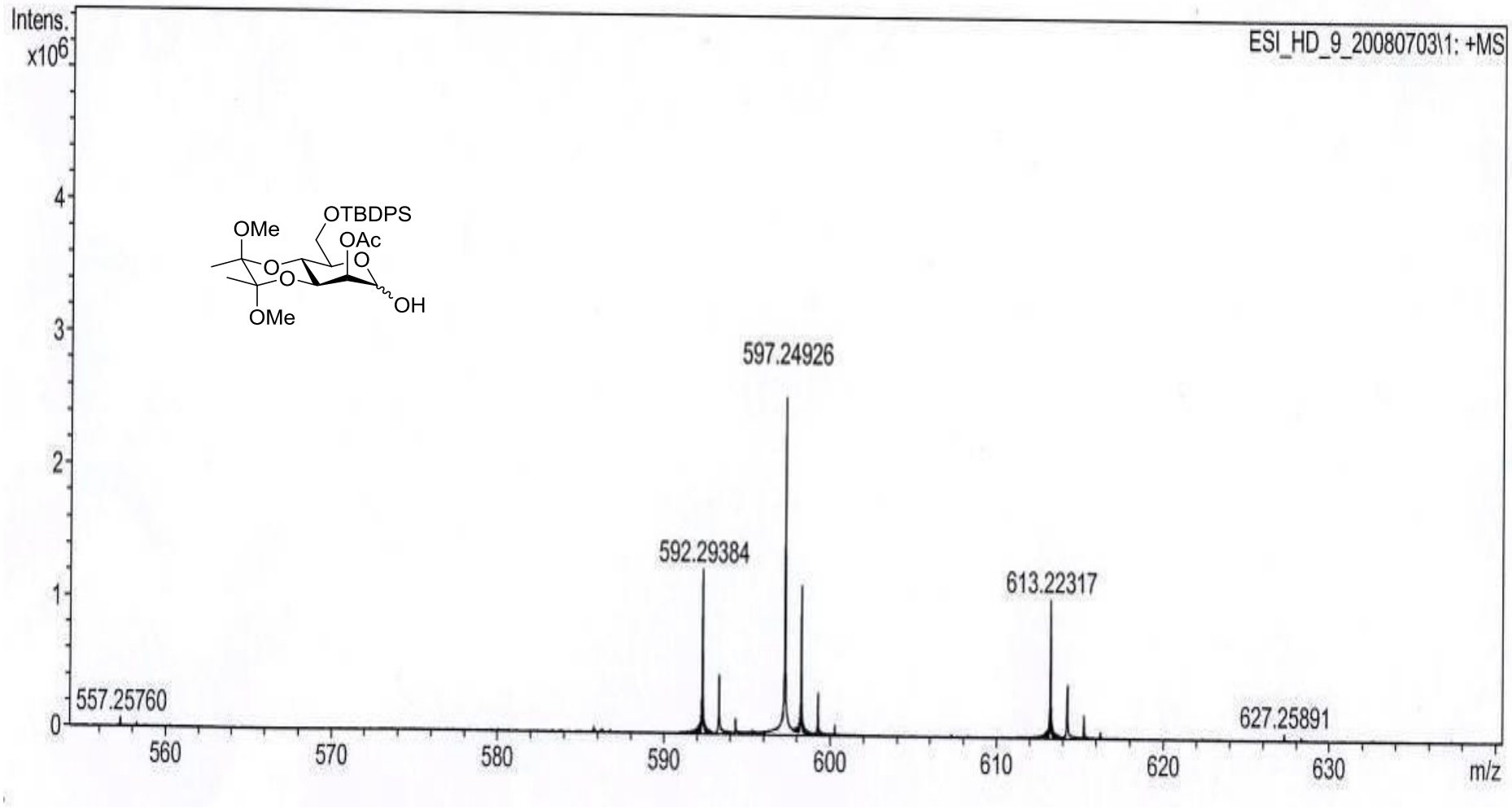

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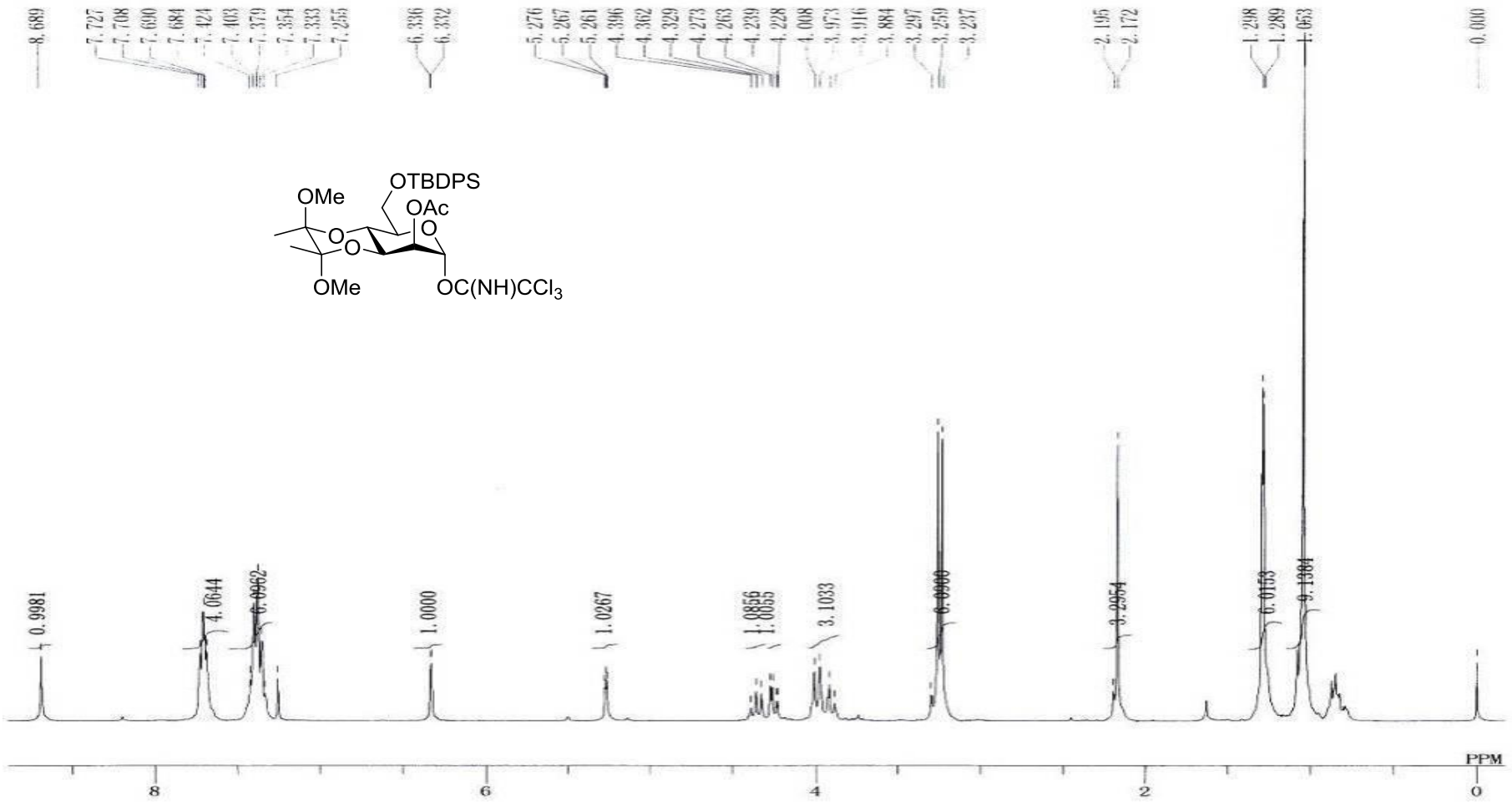

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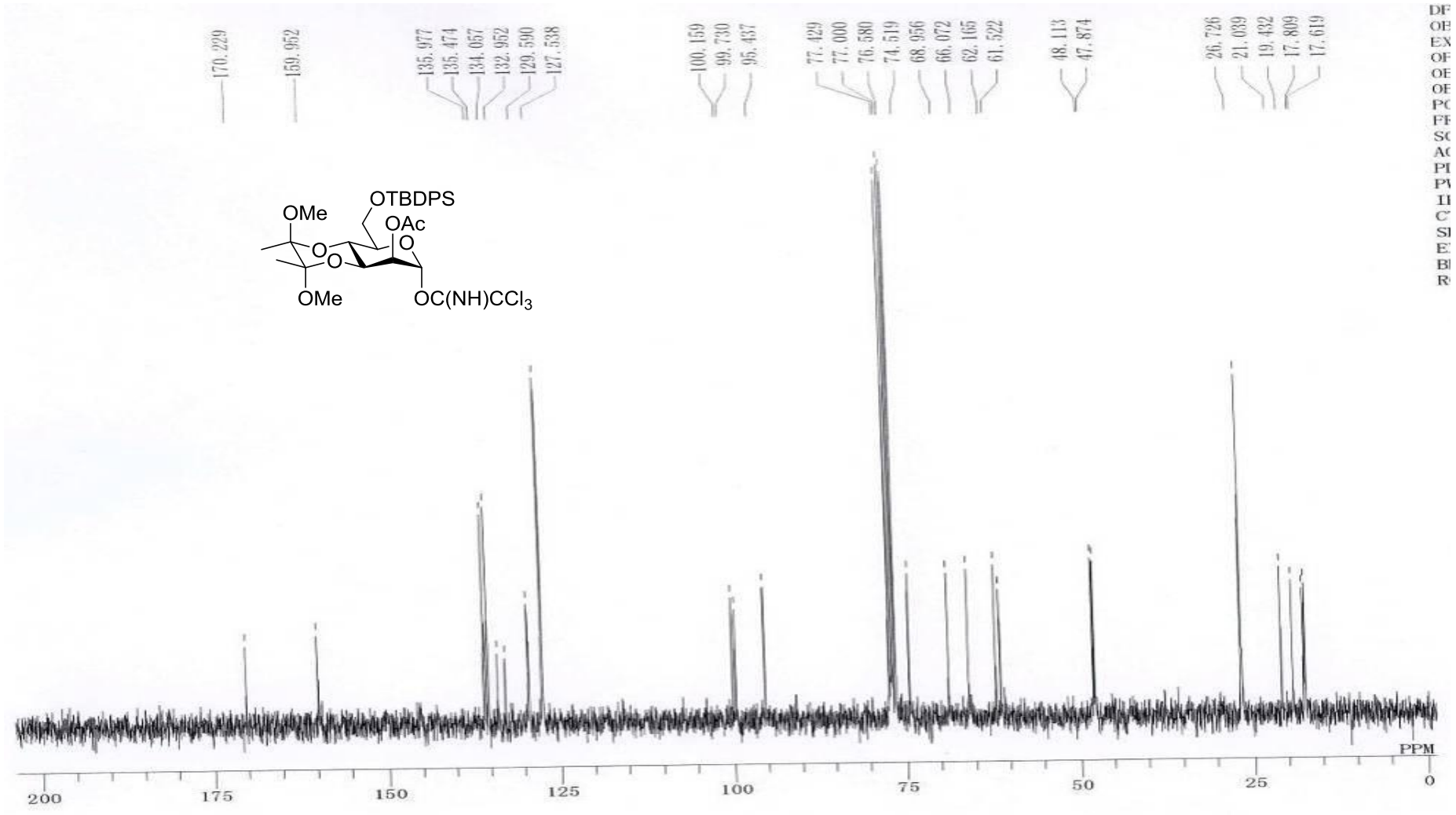

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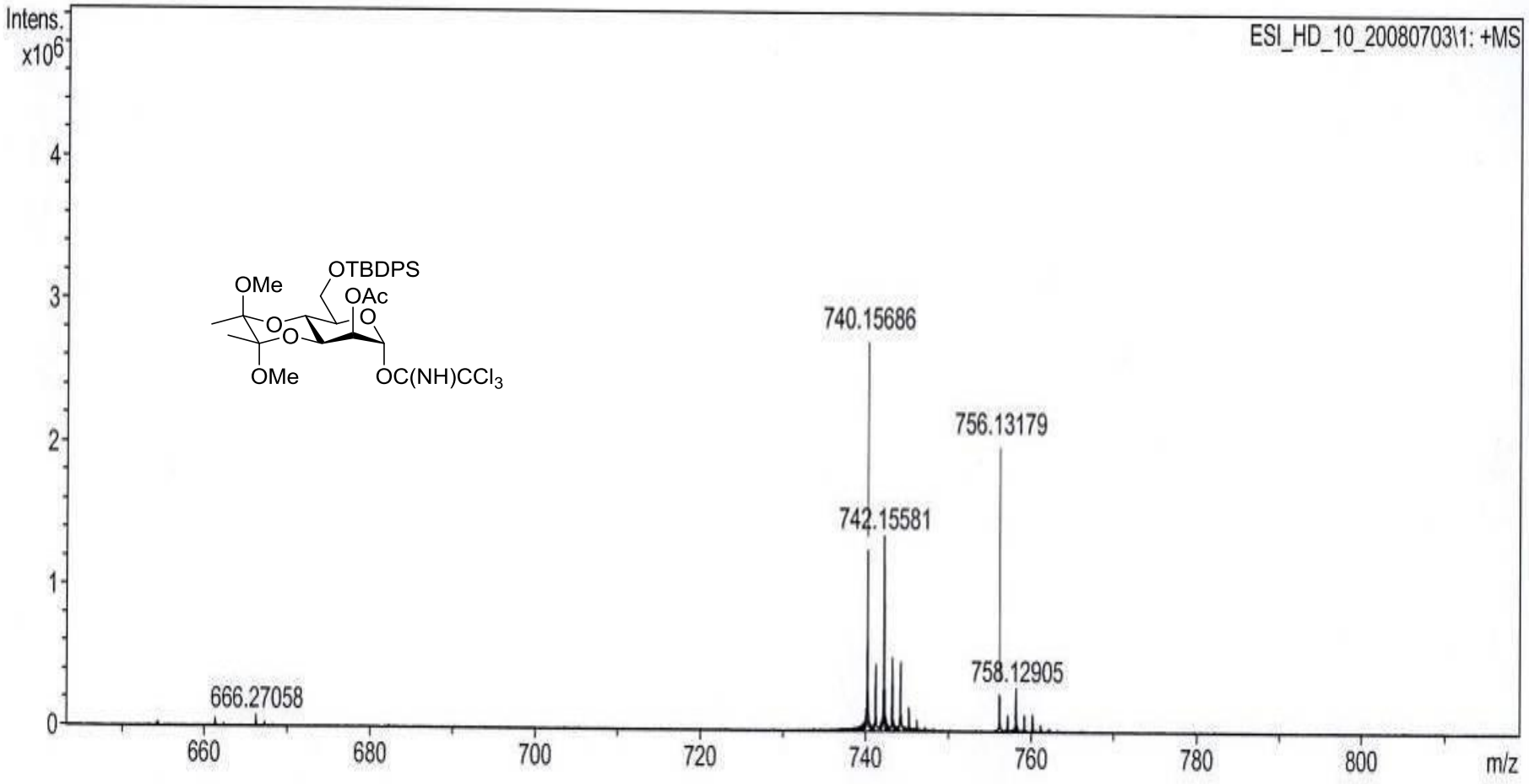

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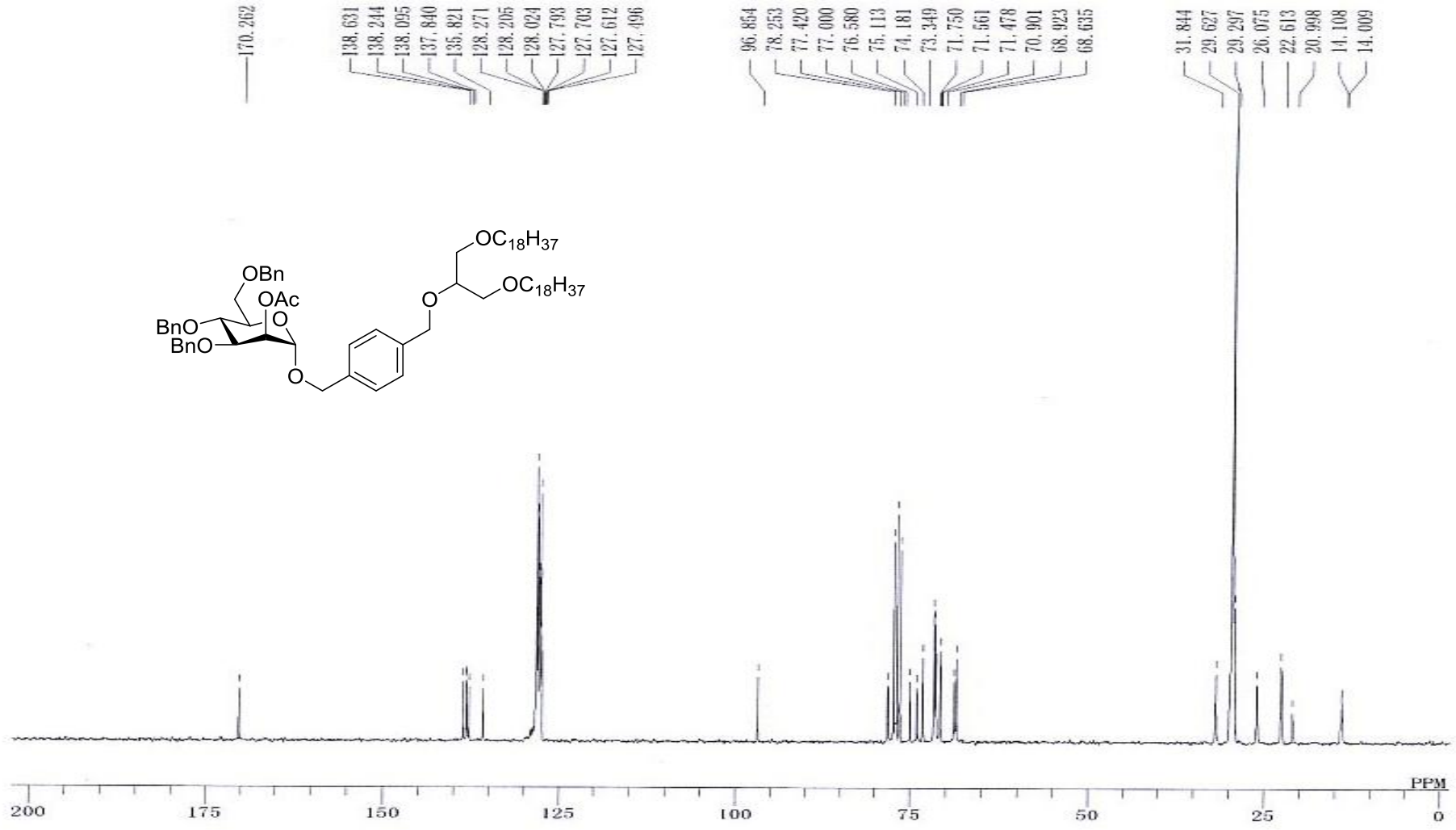

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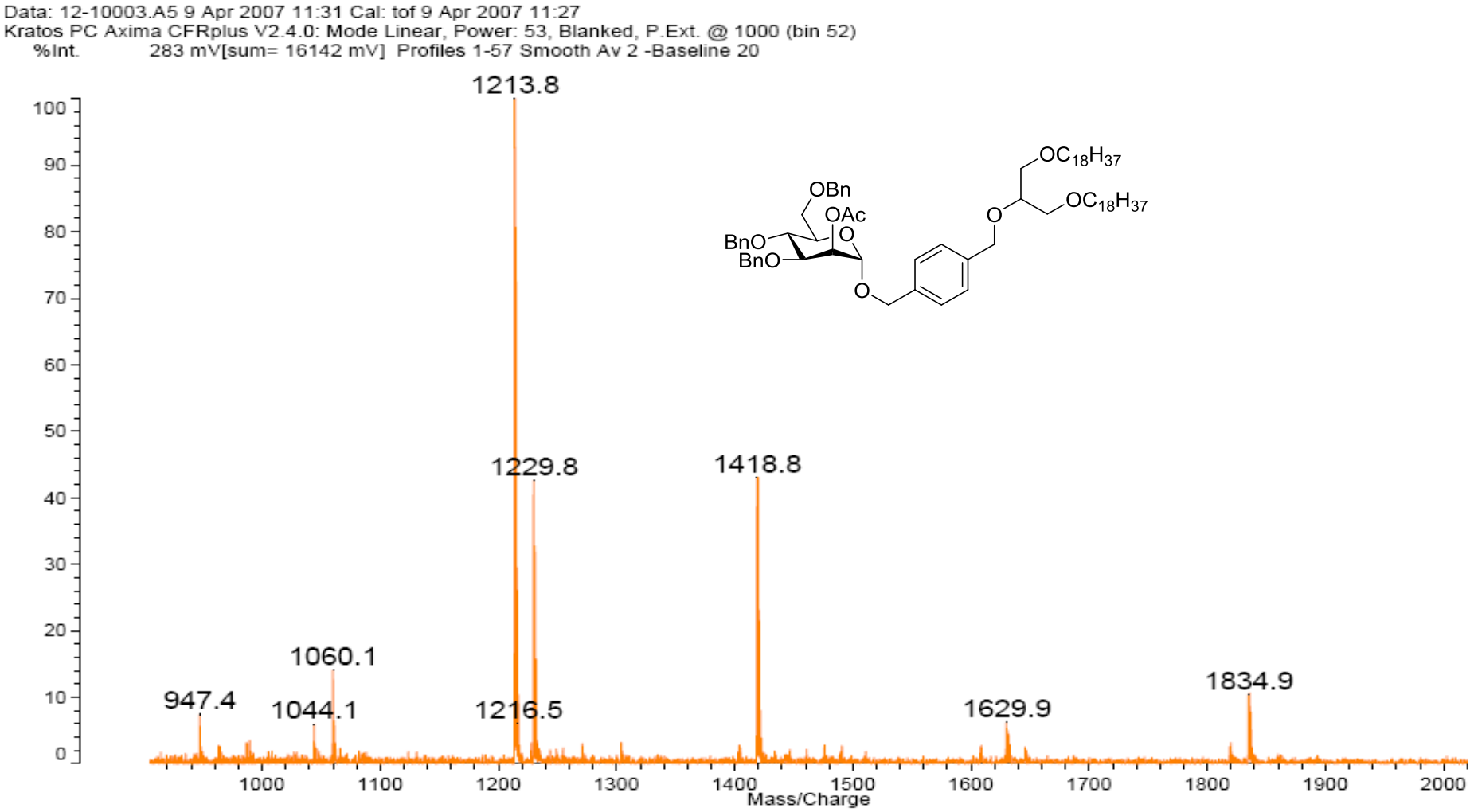

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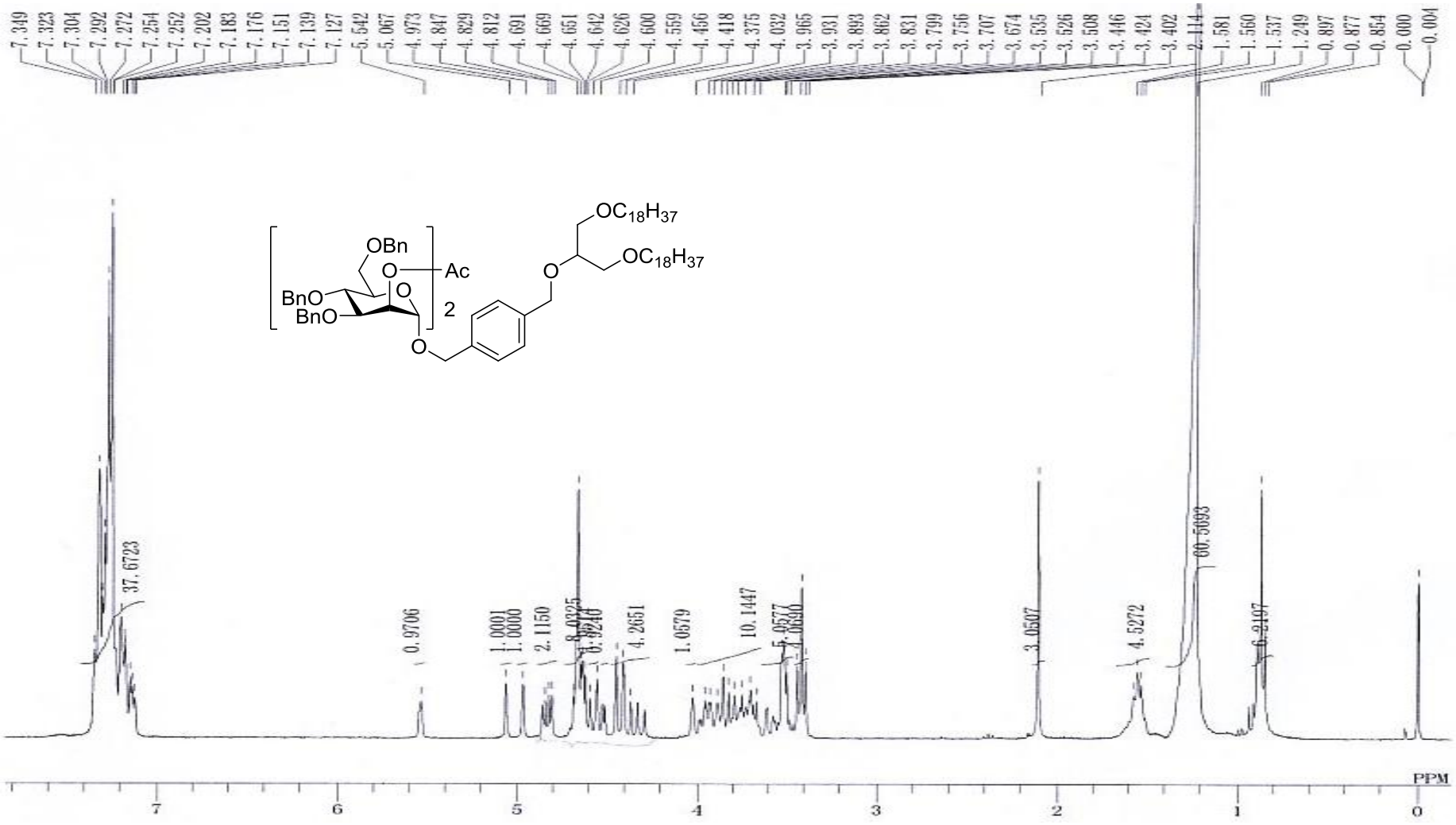
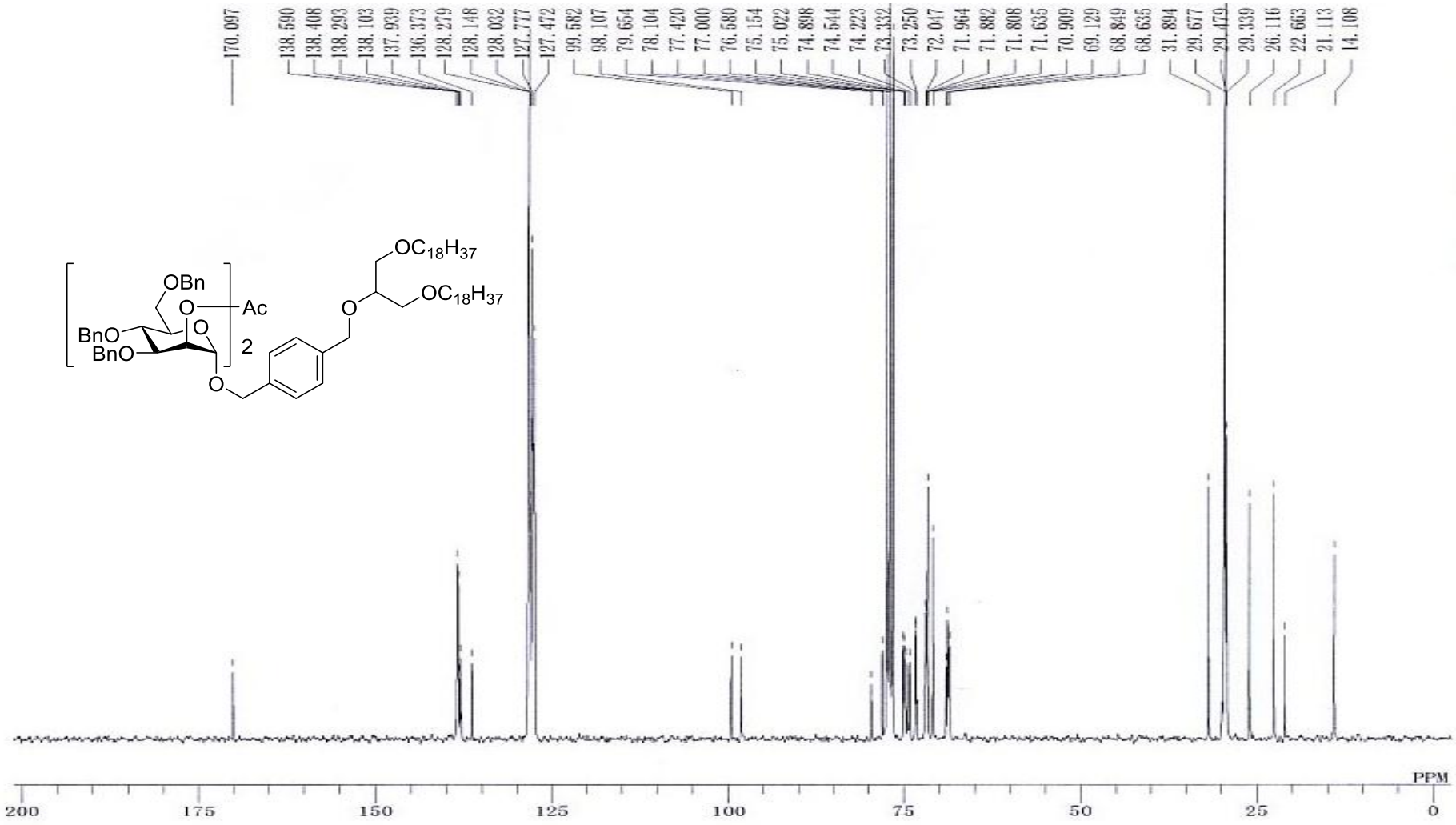
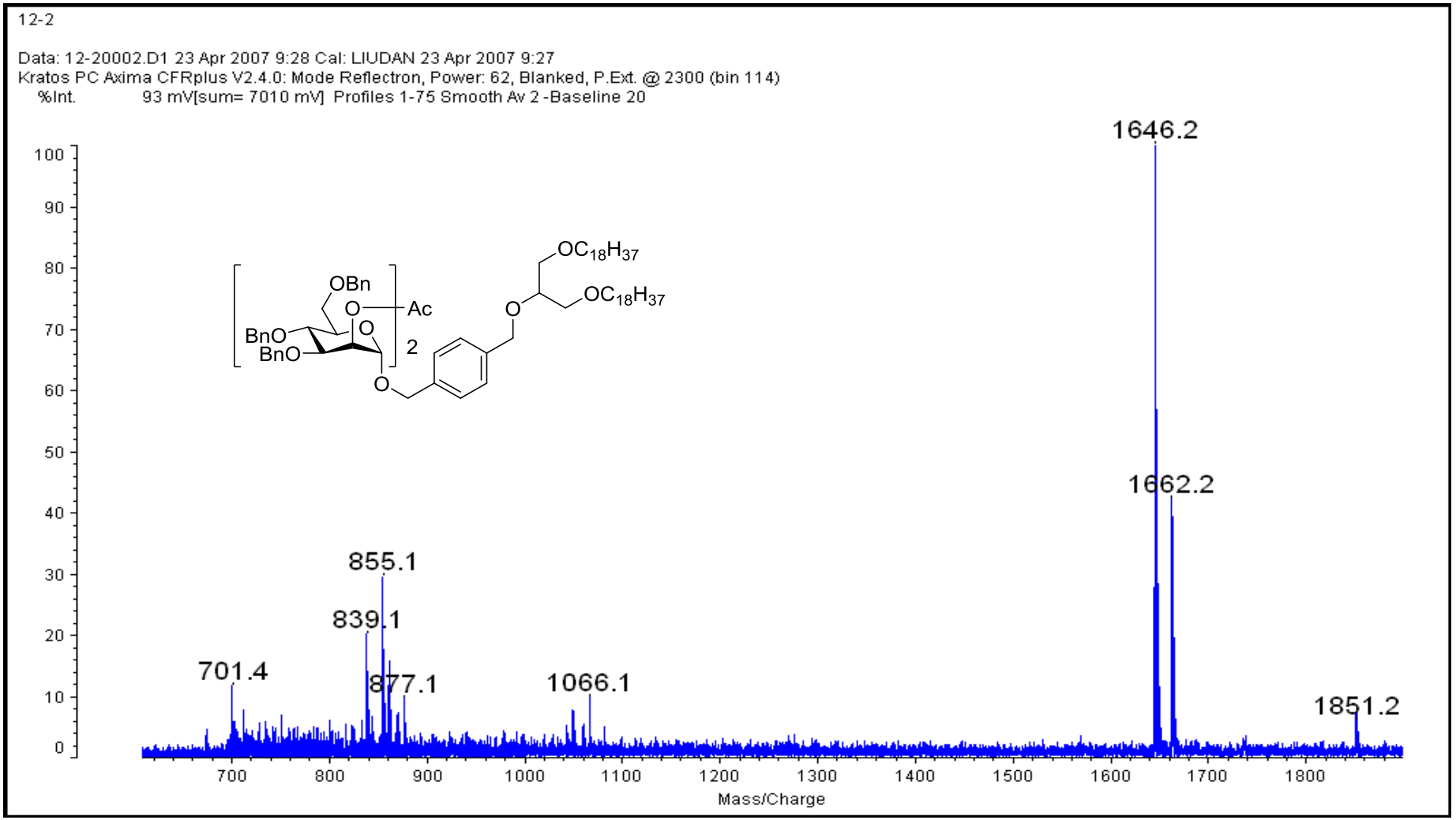


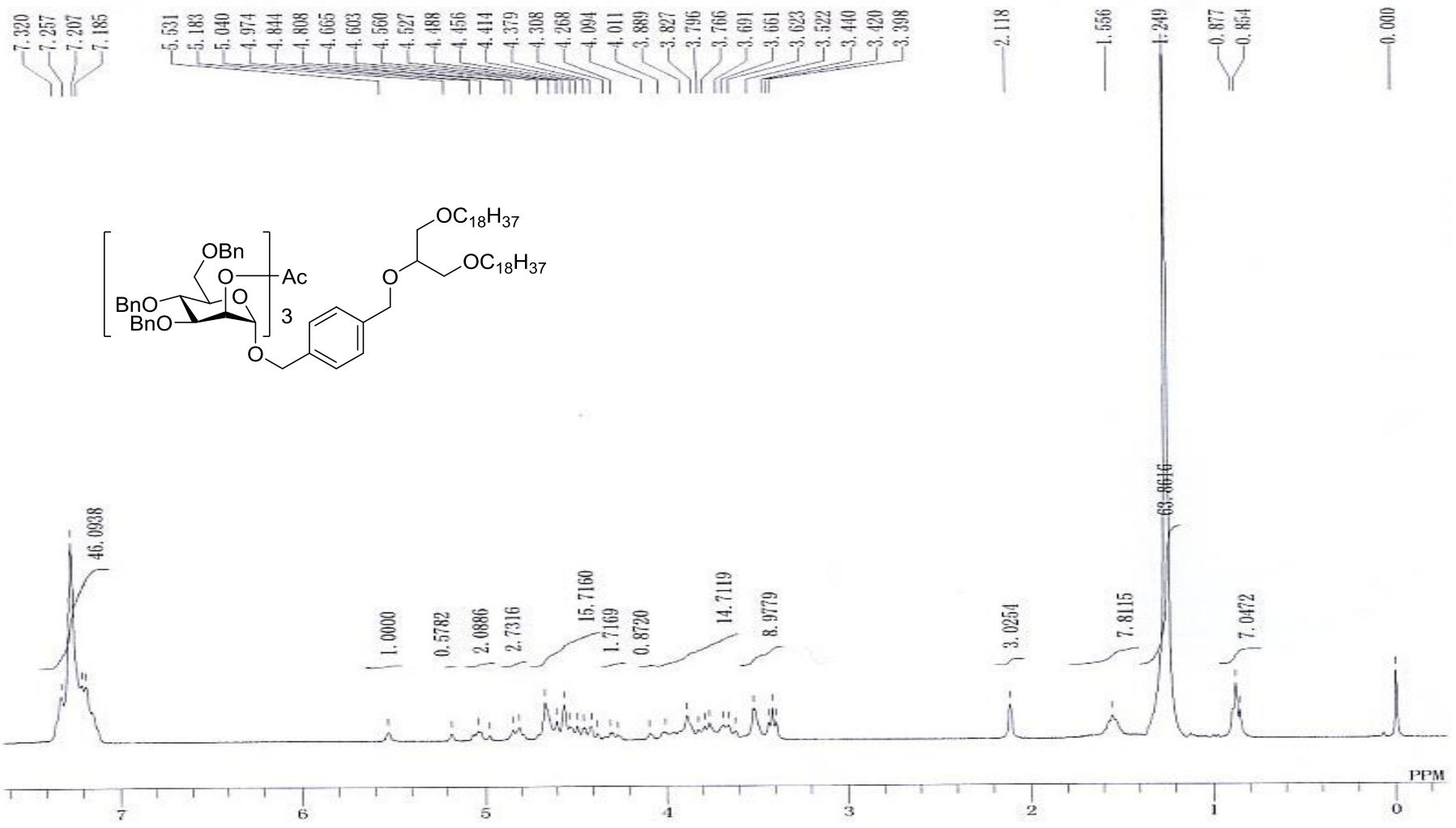
^{13}C NMR of Compound **3-2a** ($CDCl_3$, 75MHz)



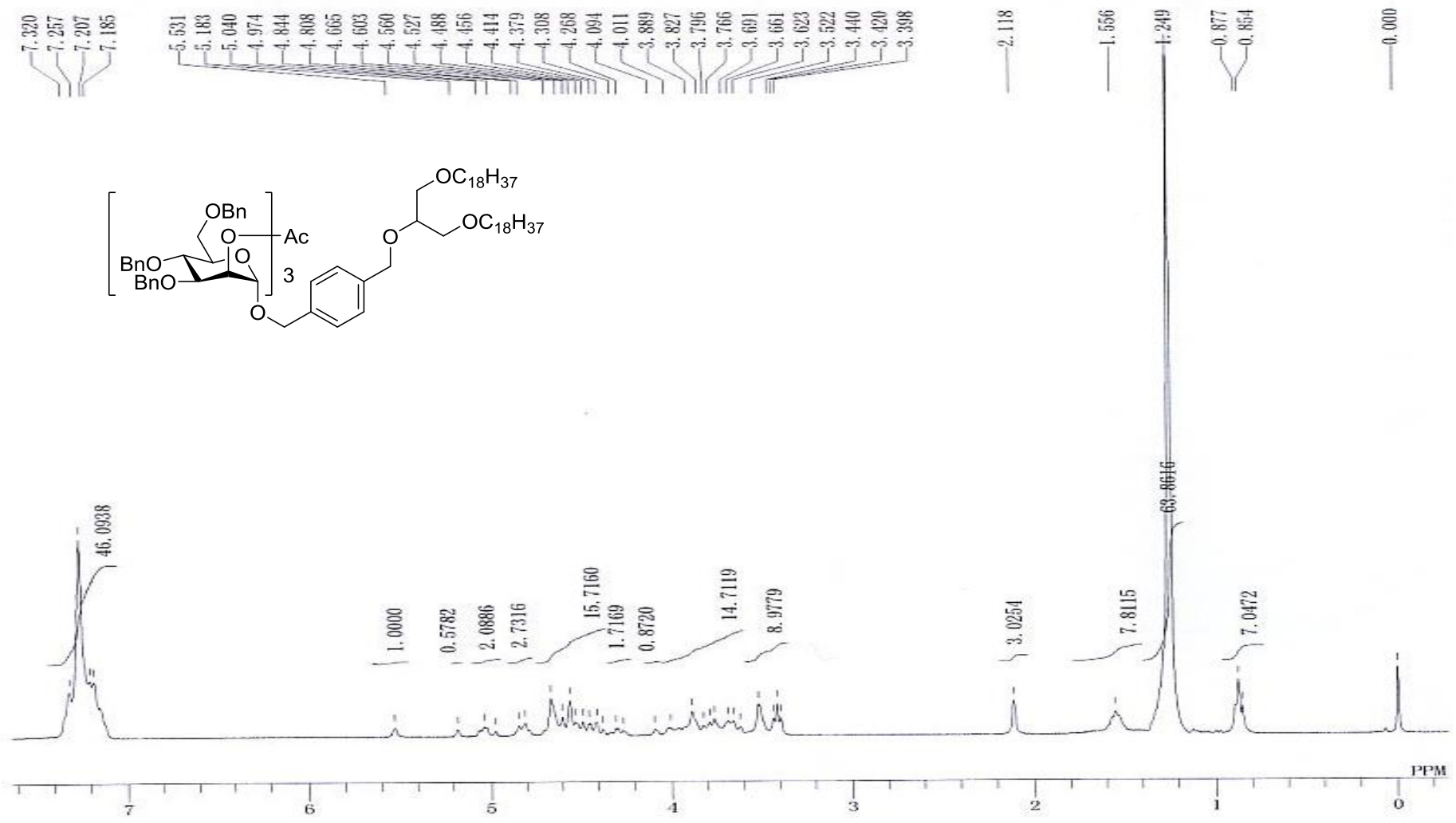
MALDI-TOF-MS of Compound **3-2a**



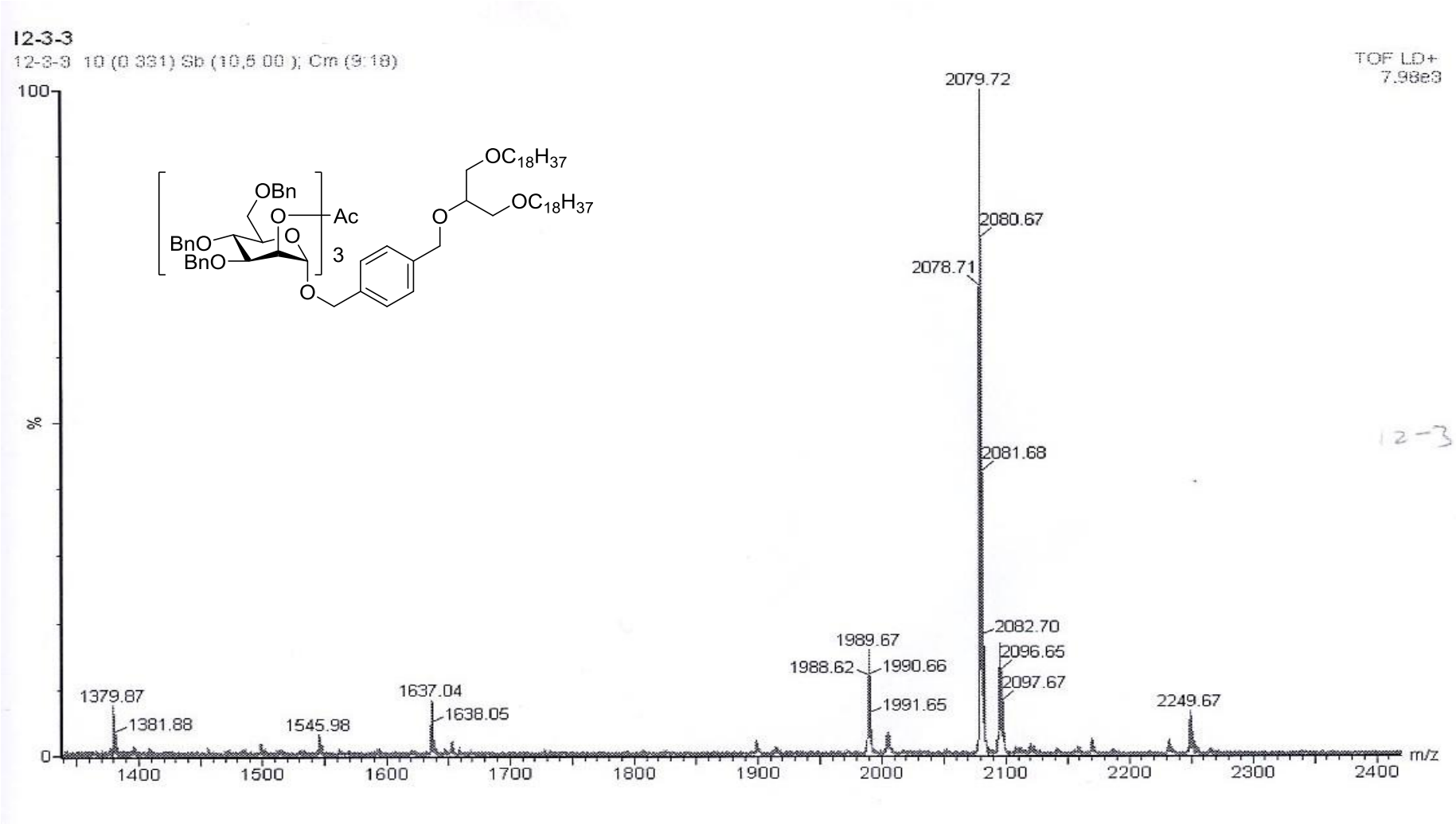
^{1}H NMR of Compound **3-3a** ($CDCl_3$, 300MHz)



^{13}C NMR of Compound **3-2a** ($CDCl_3$, 75MHz)



MALDI-TOF-MS of Compound **3-3a**



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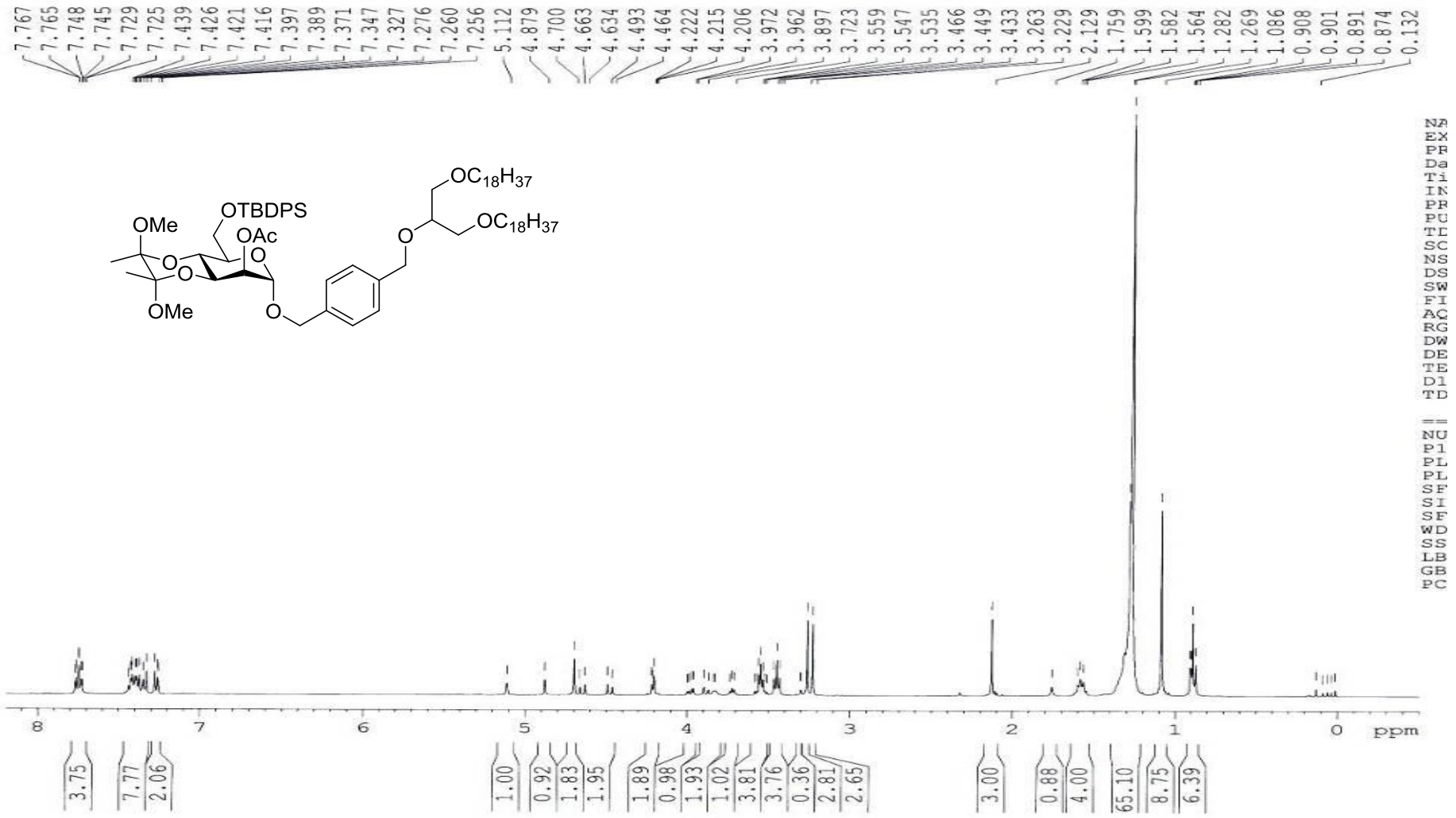

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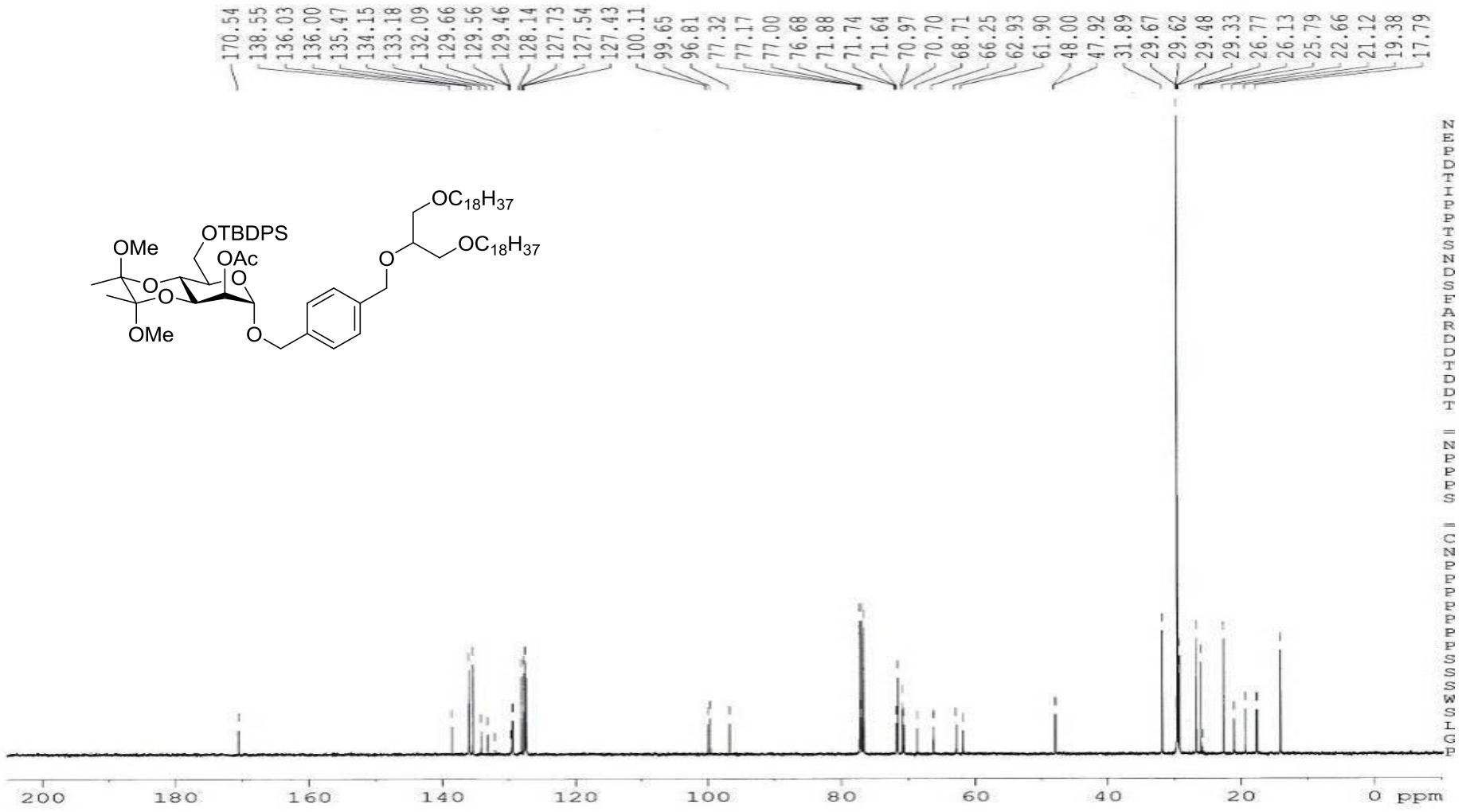

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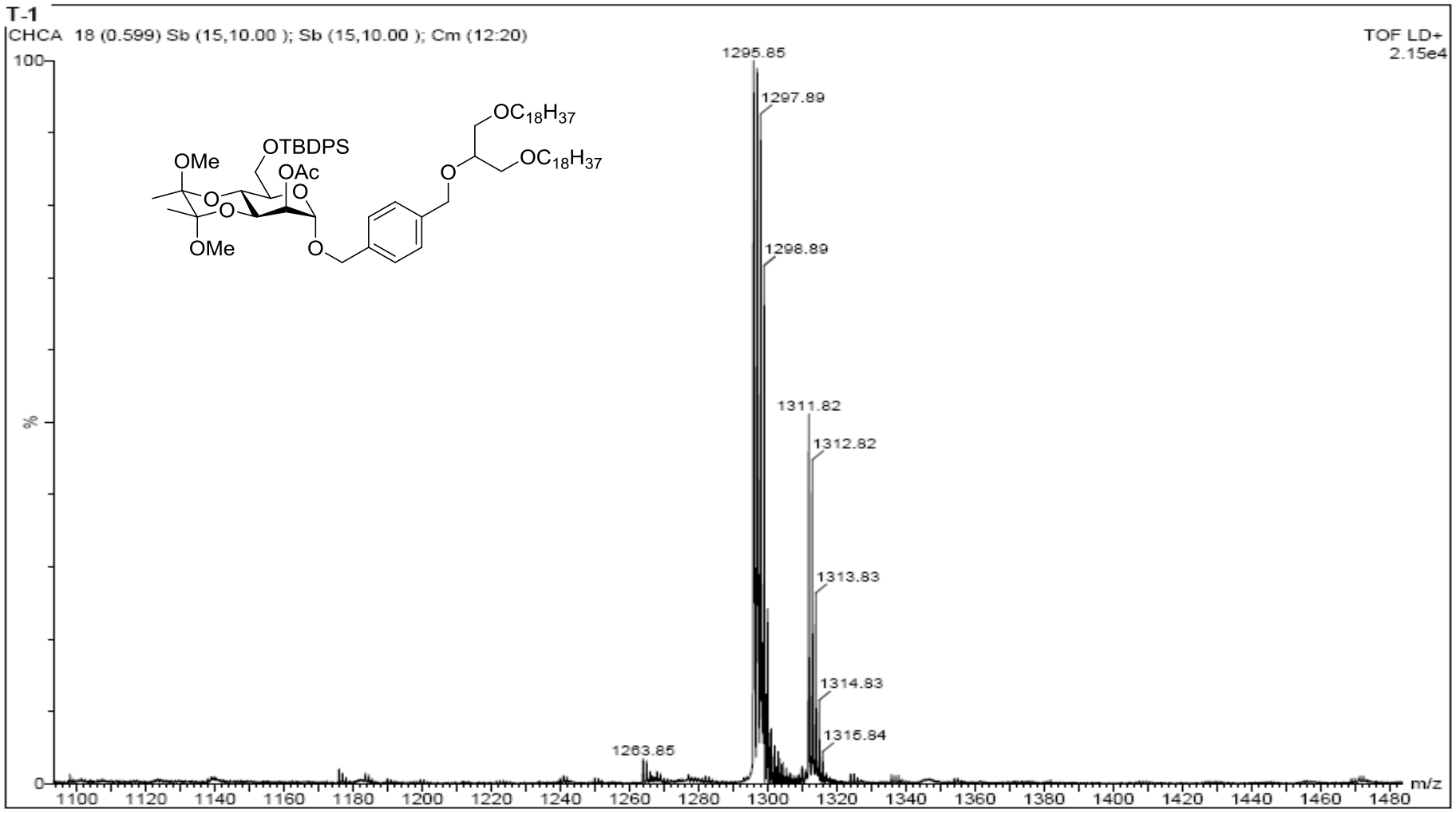
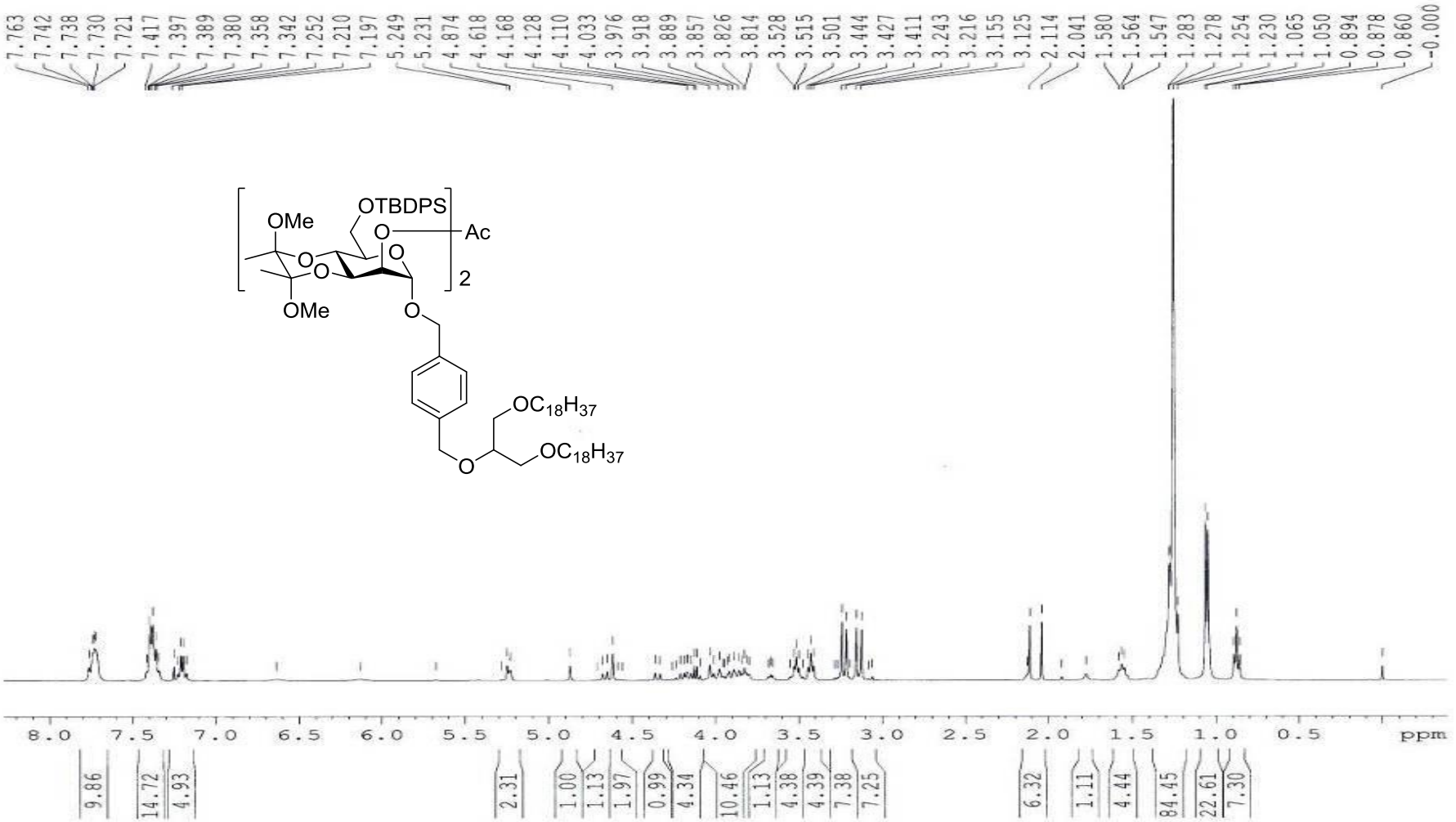


^{1}H NMR of Compound **10-2a** ($CDCl_3$, 400MHz)



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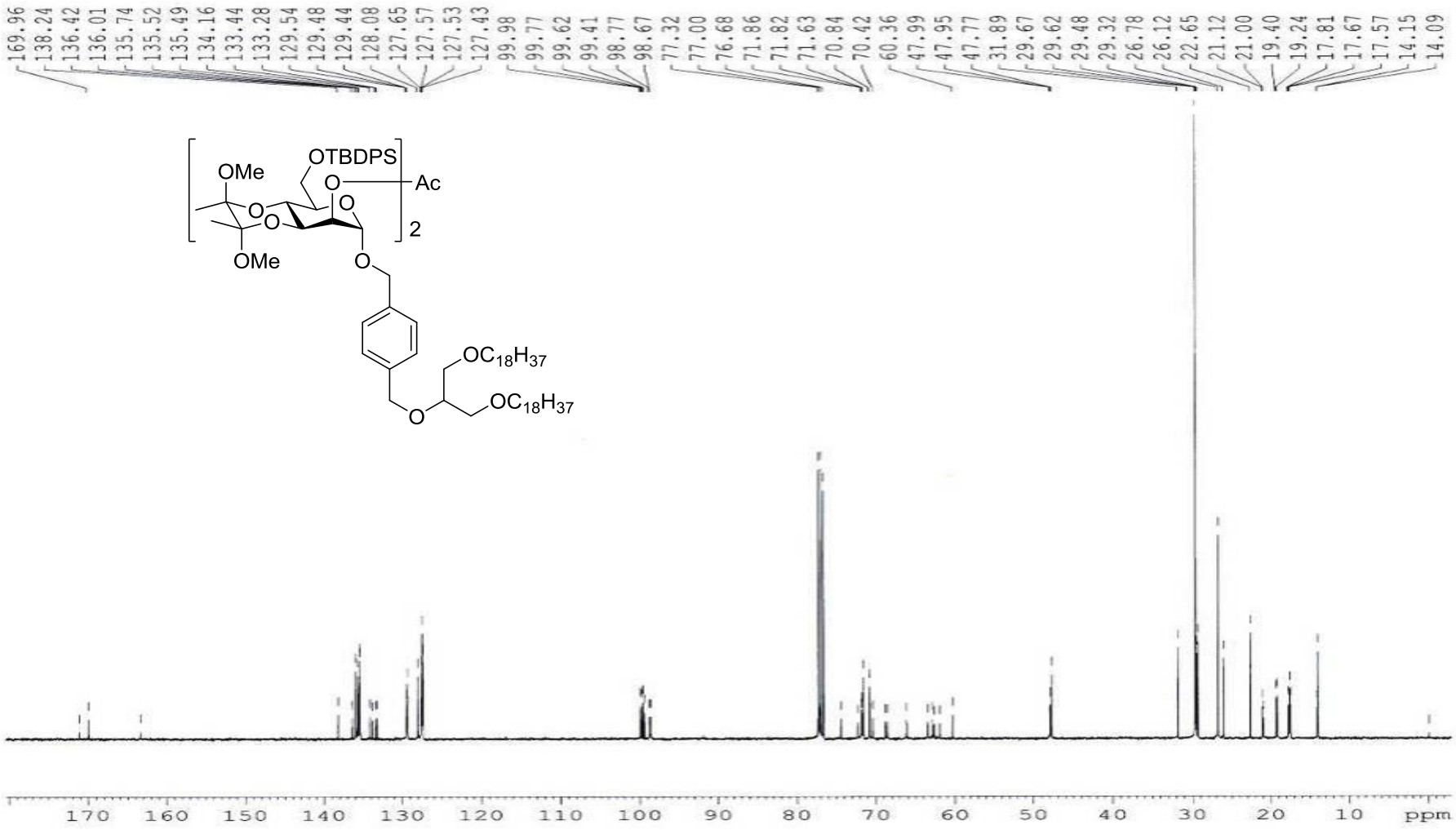

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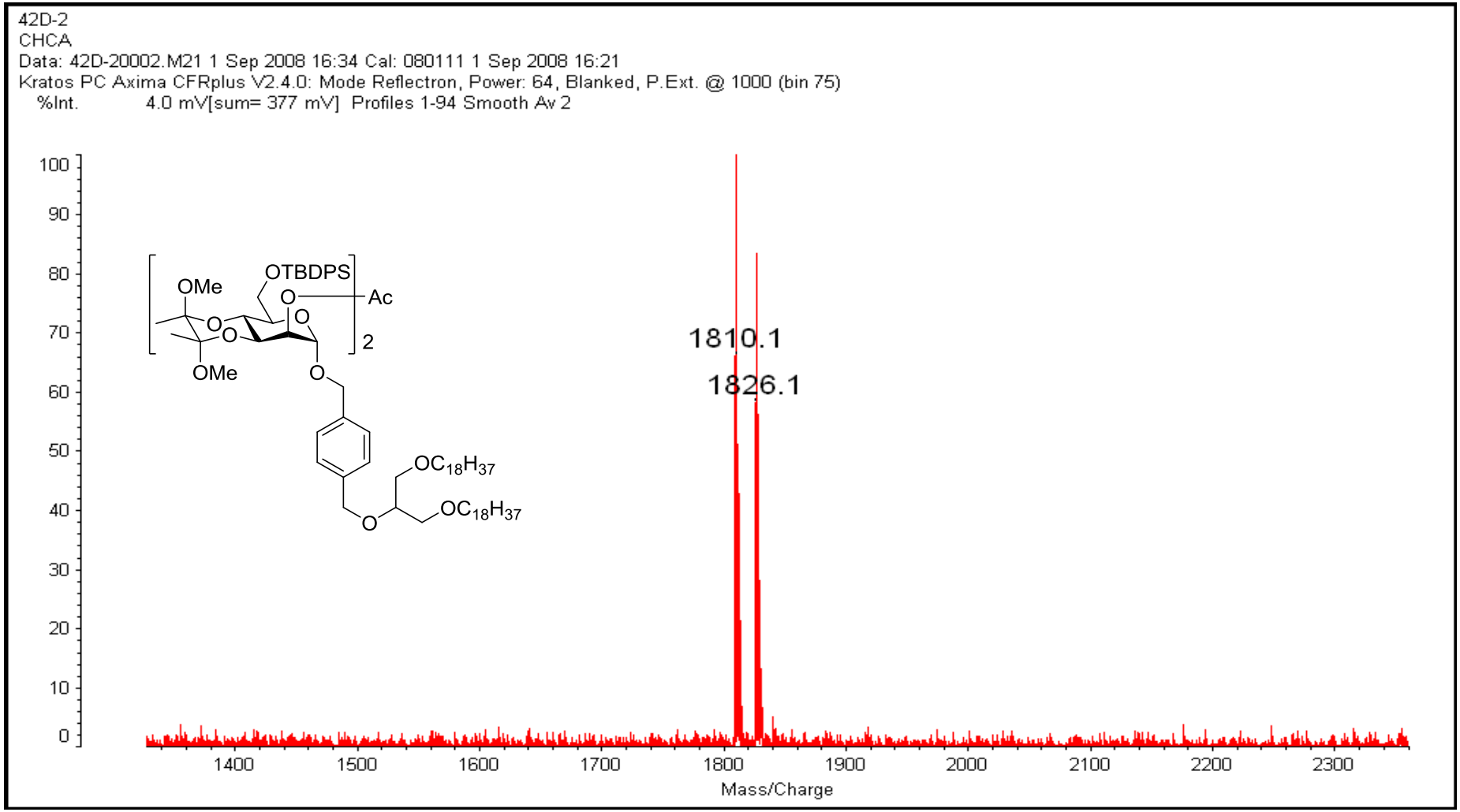

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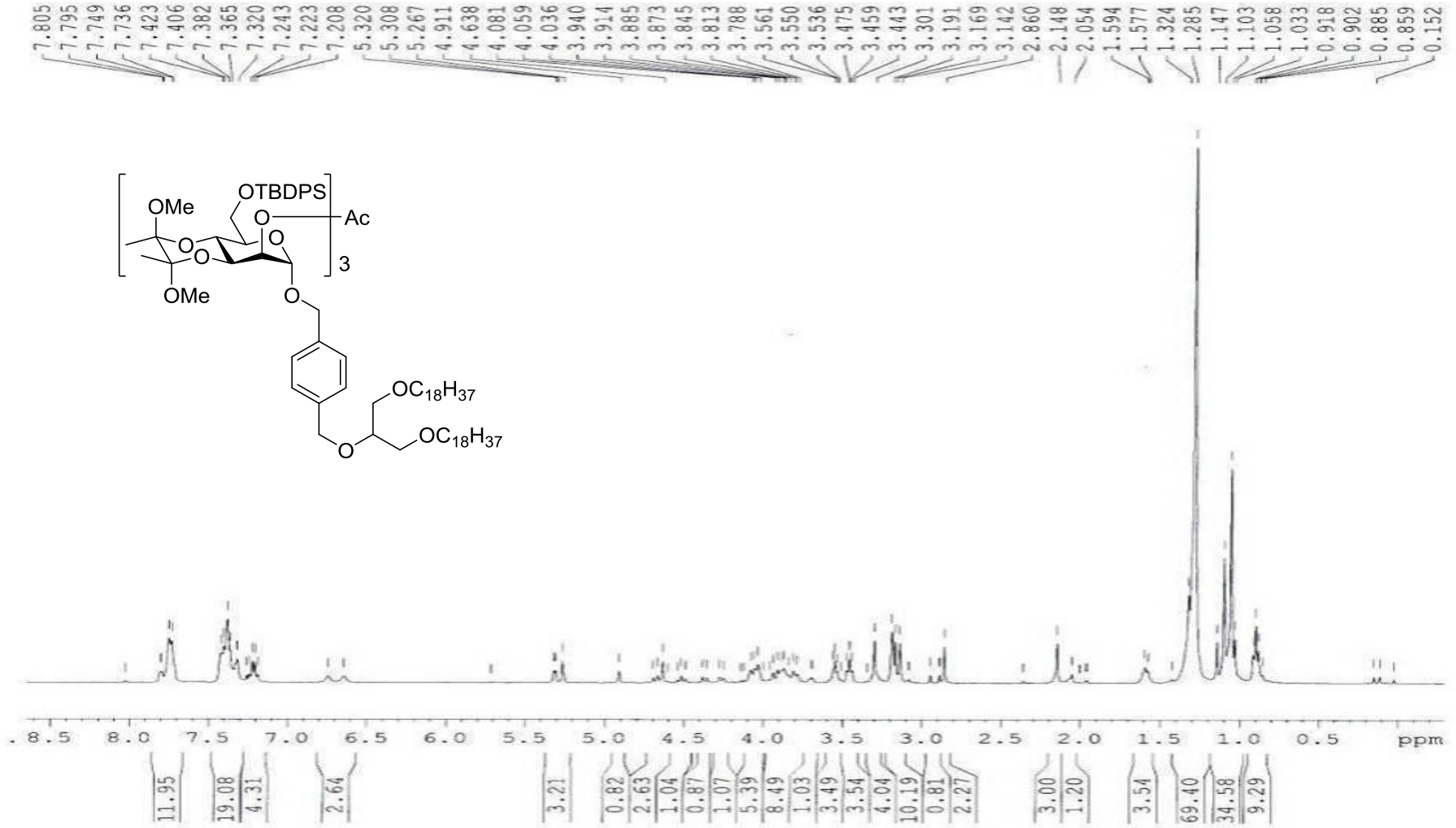

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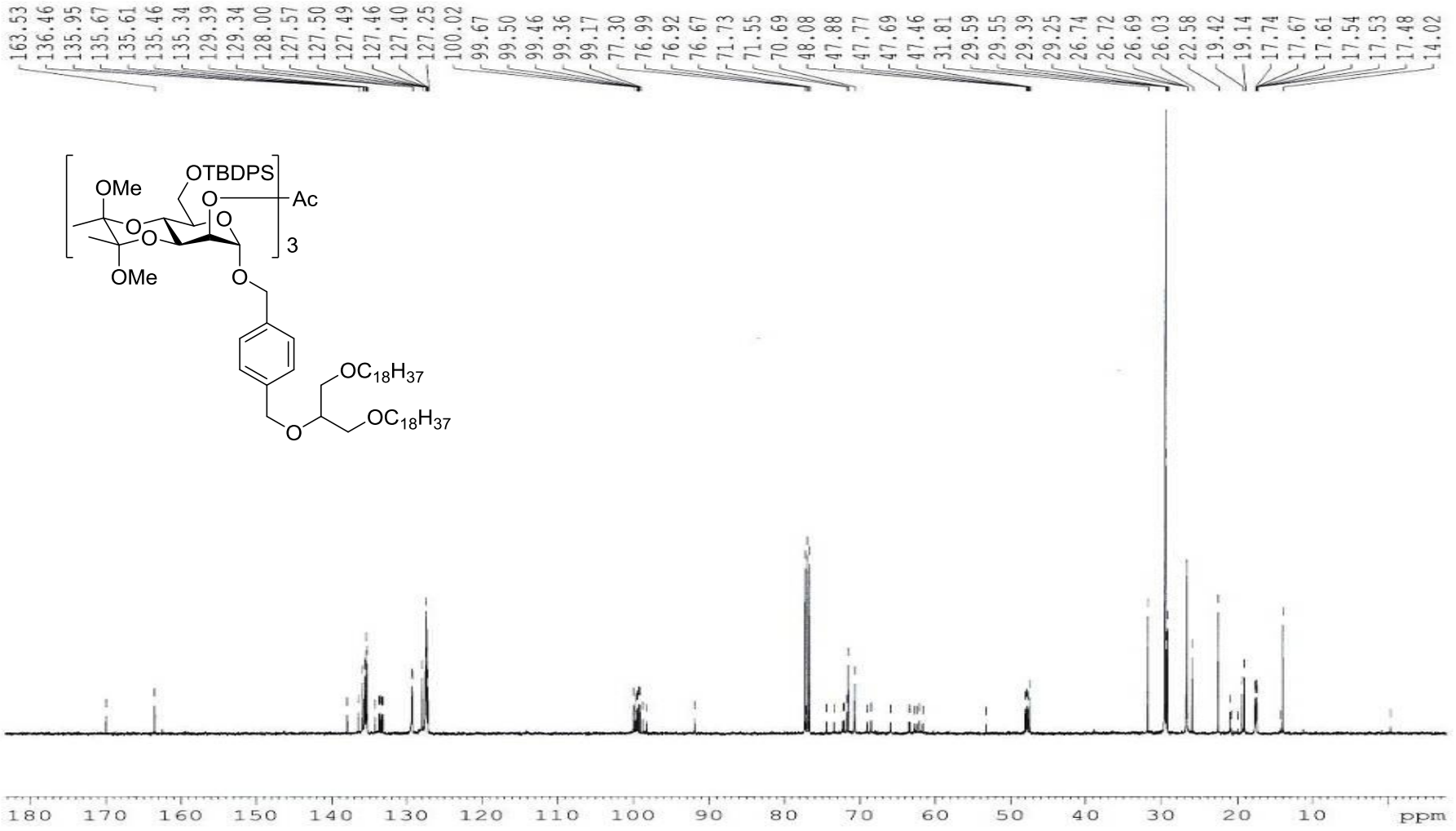

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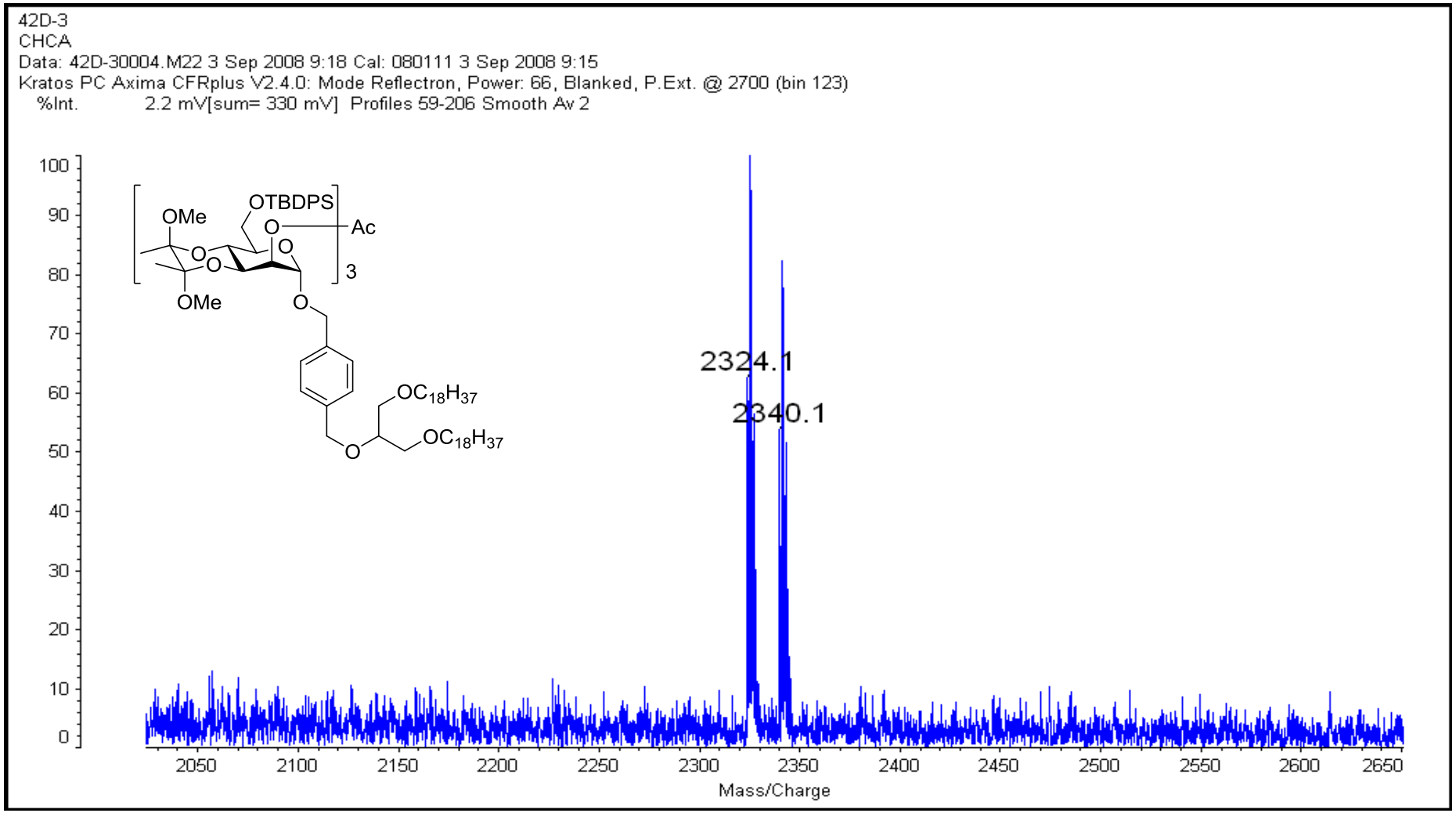

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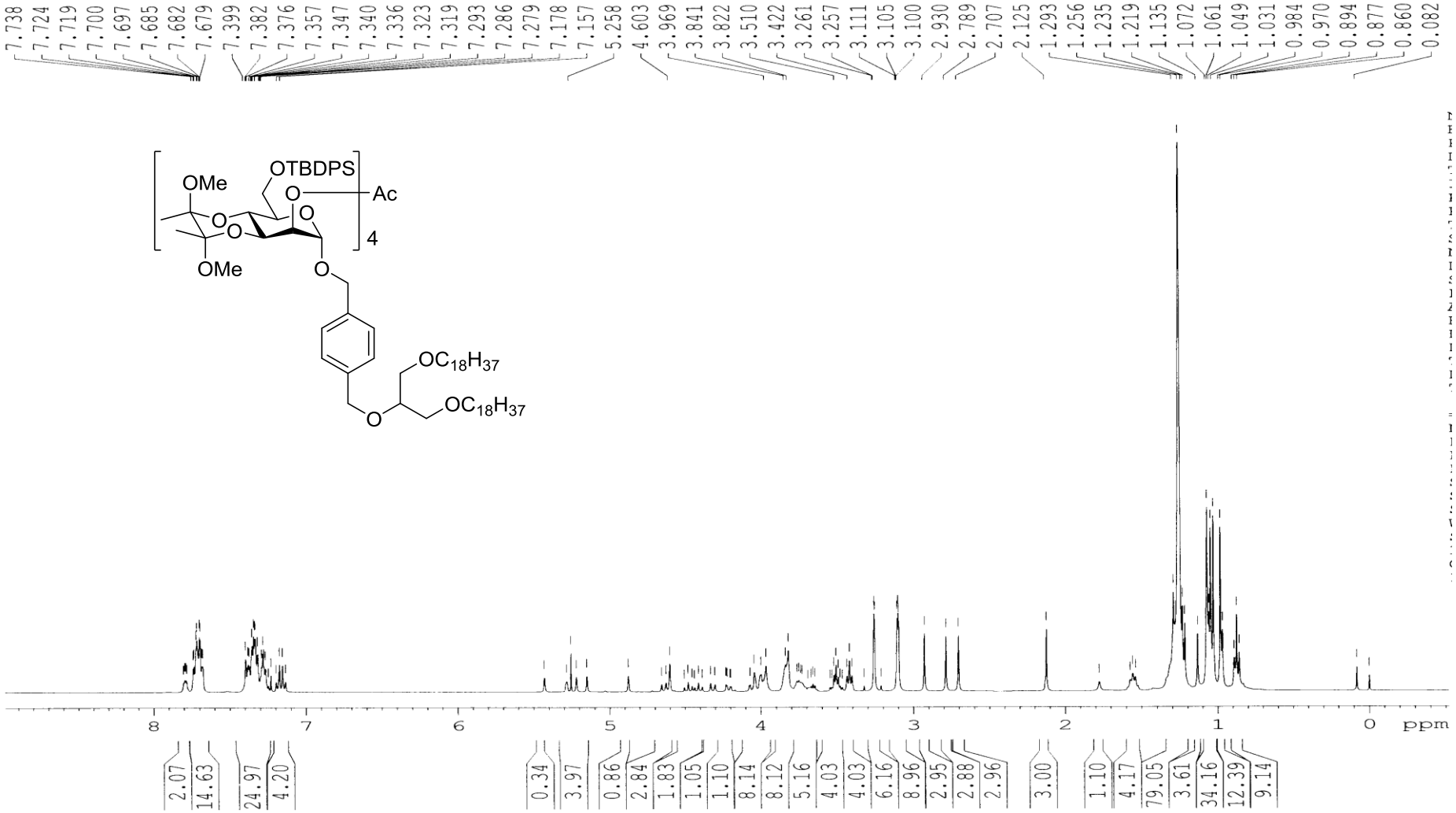

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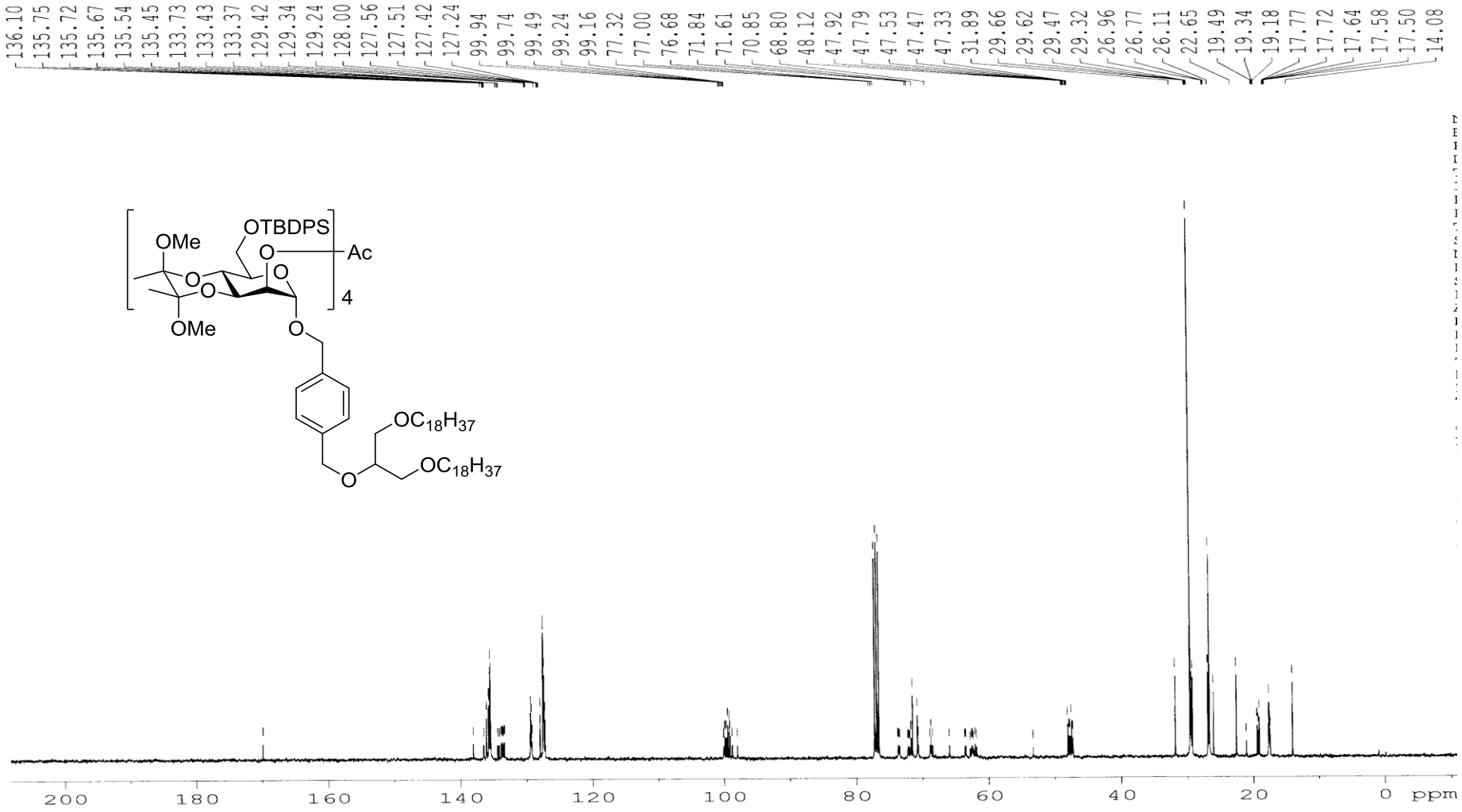
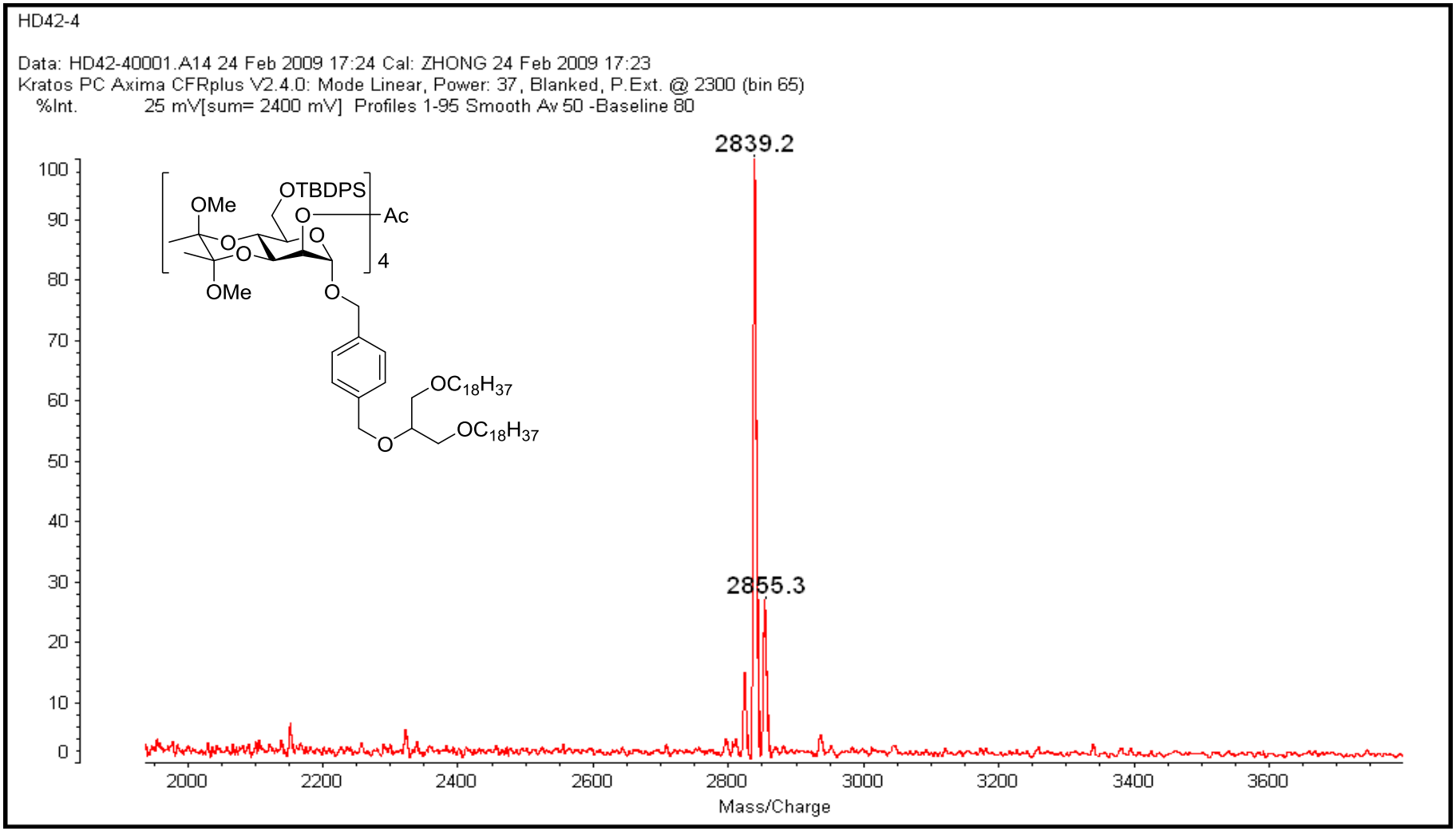


MALDI-TOF-MS of Compound **10-4a**



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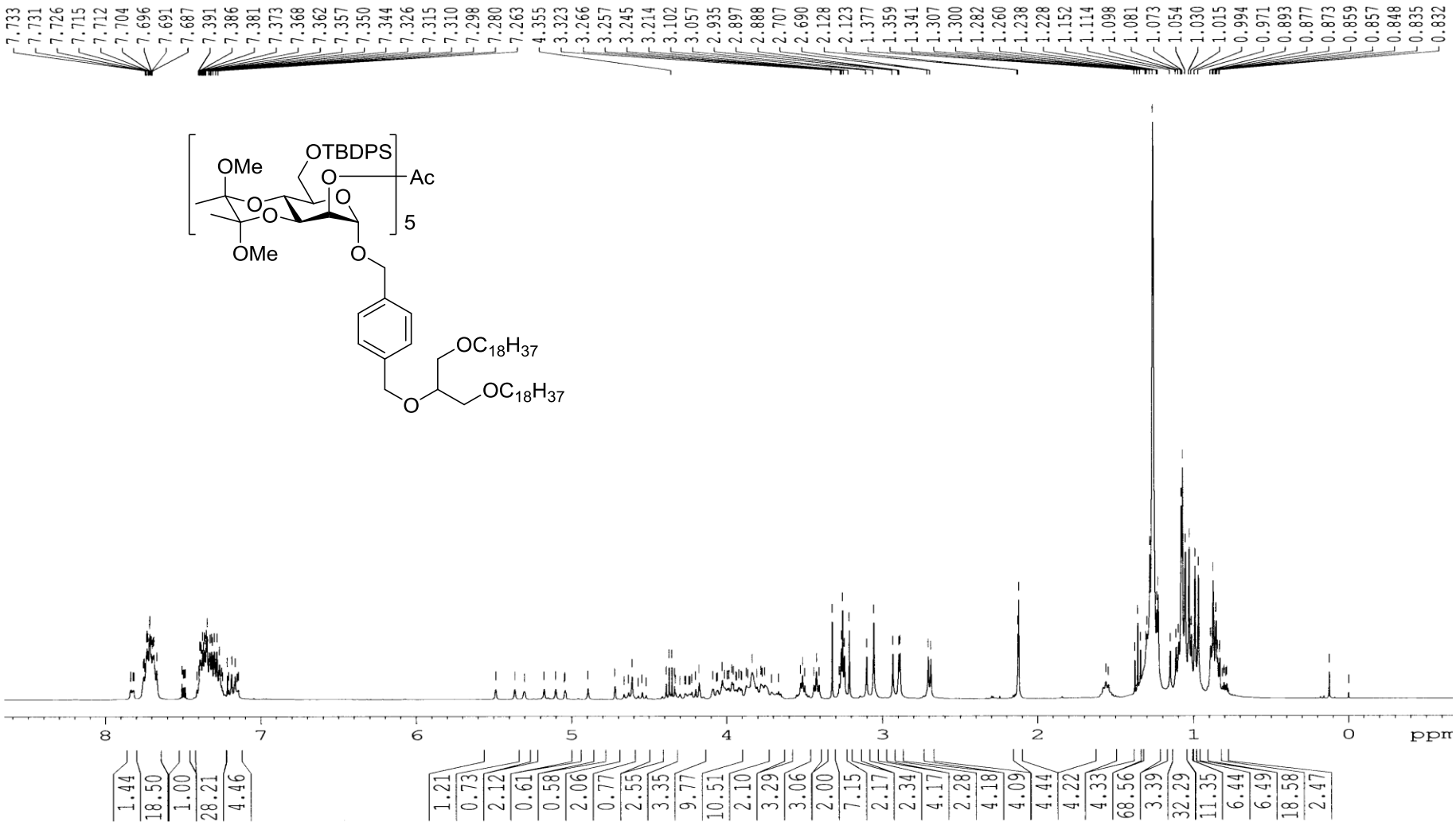

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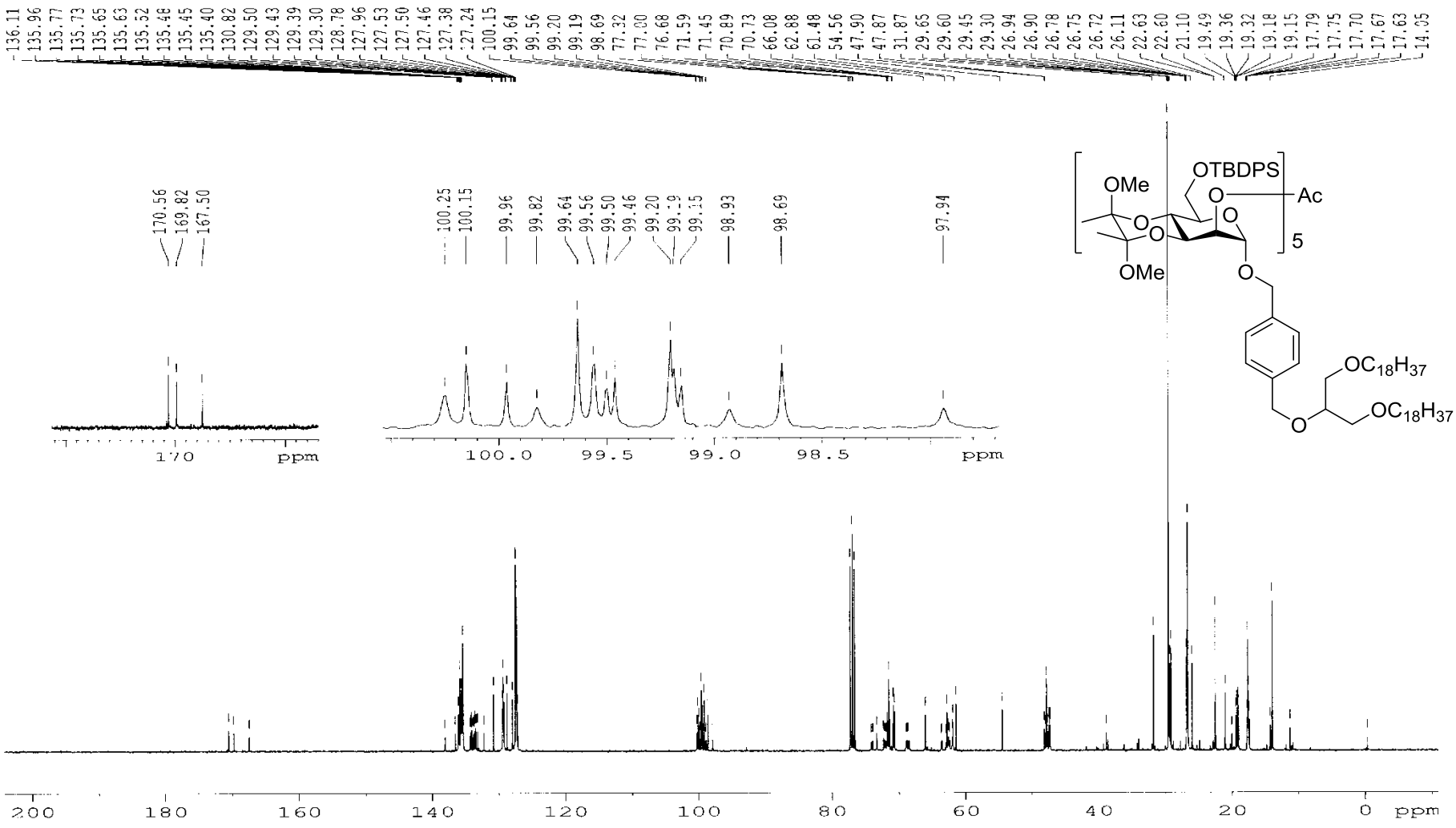

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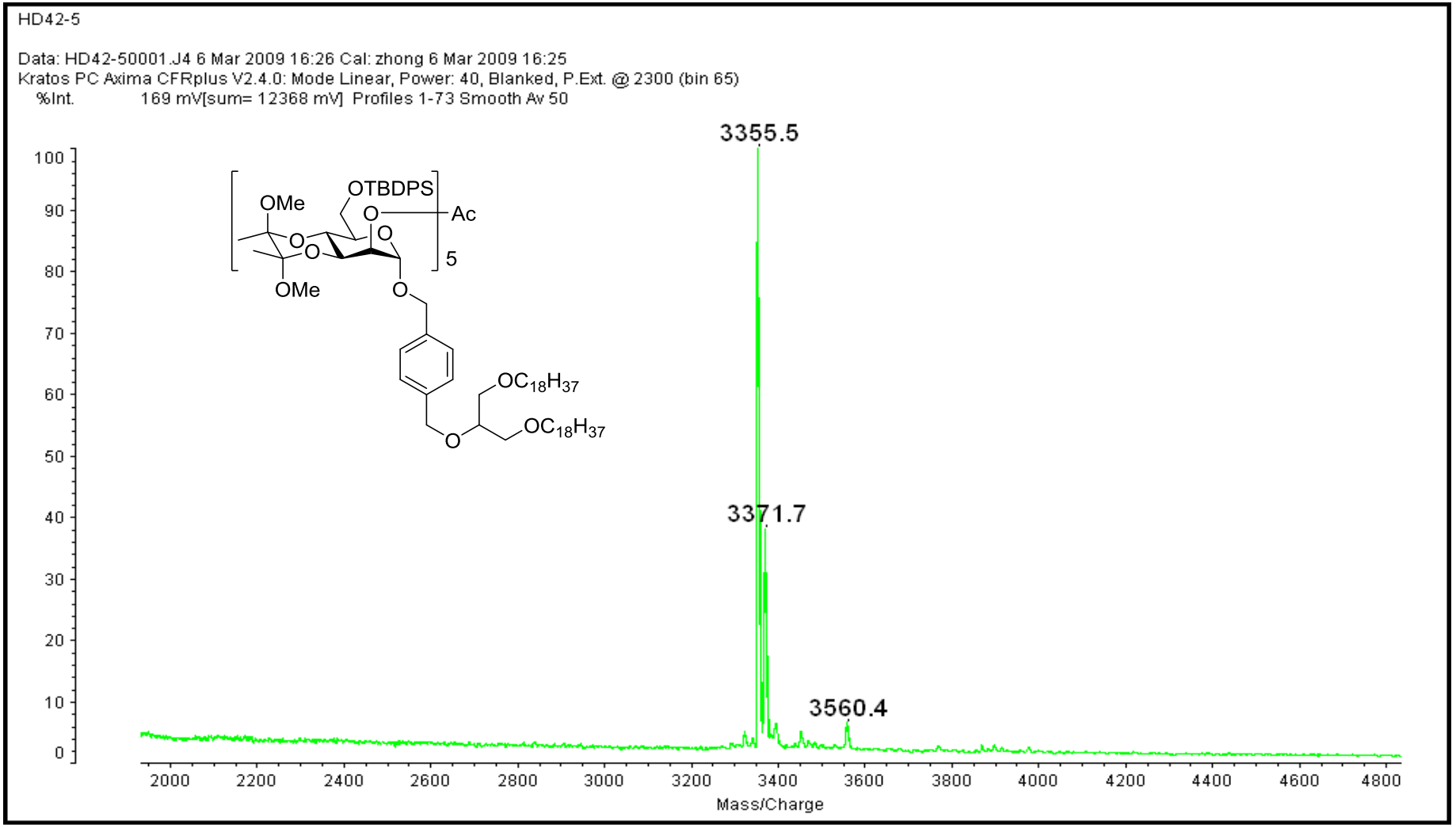

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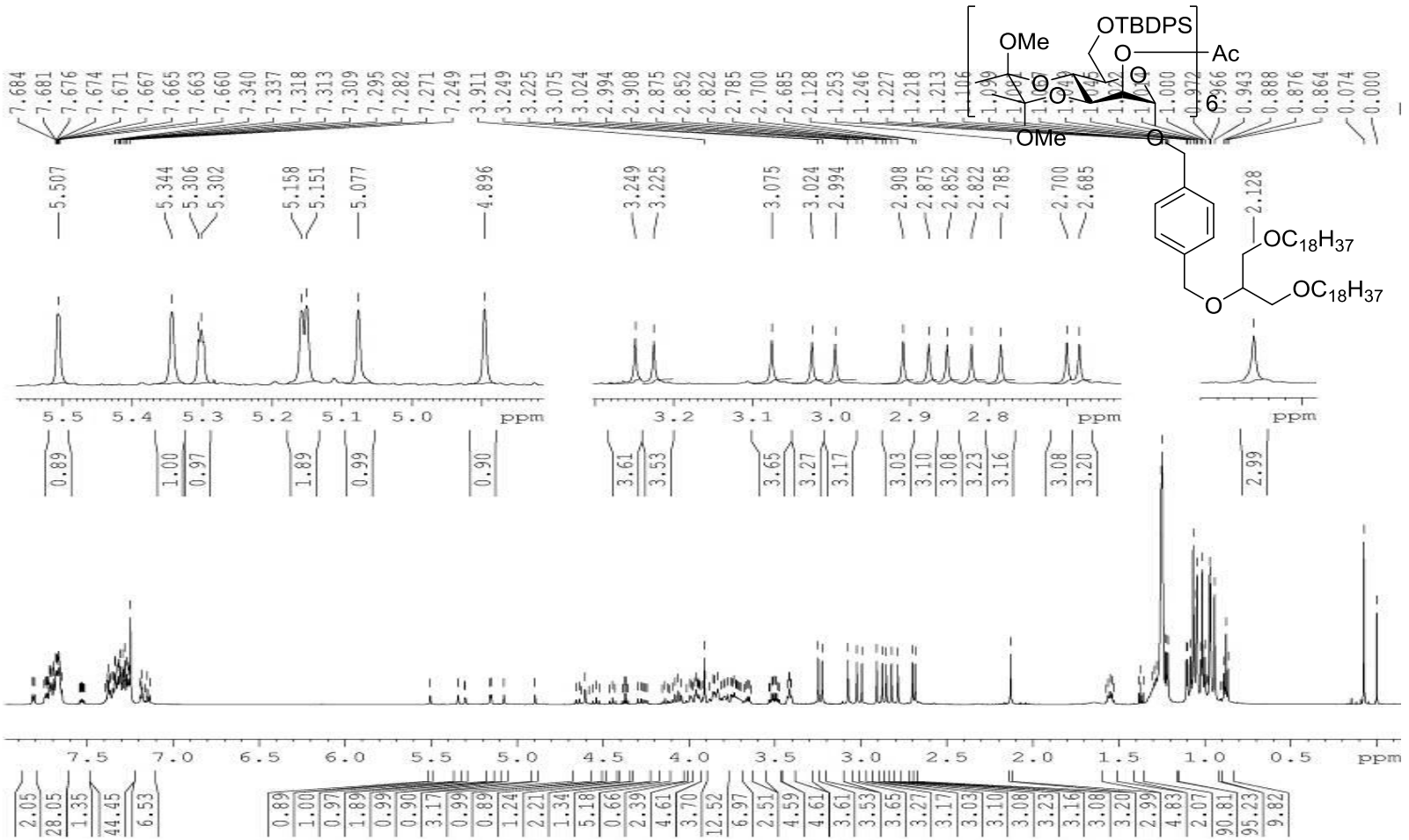

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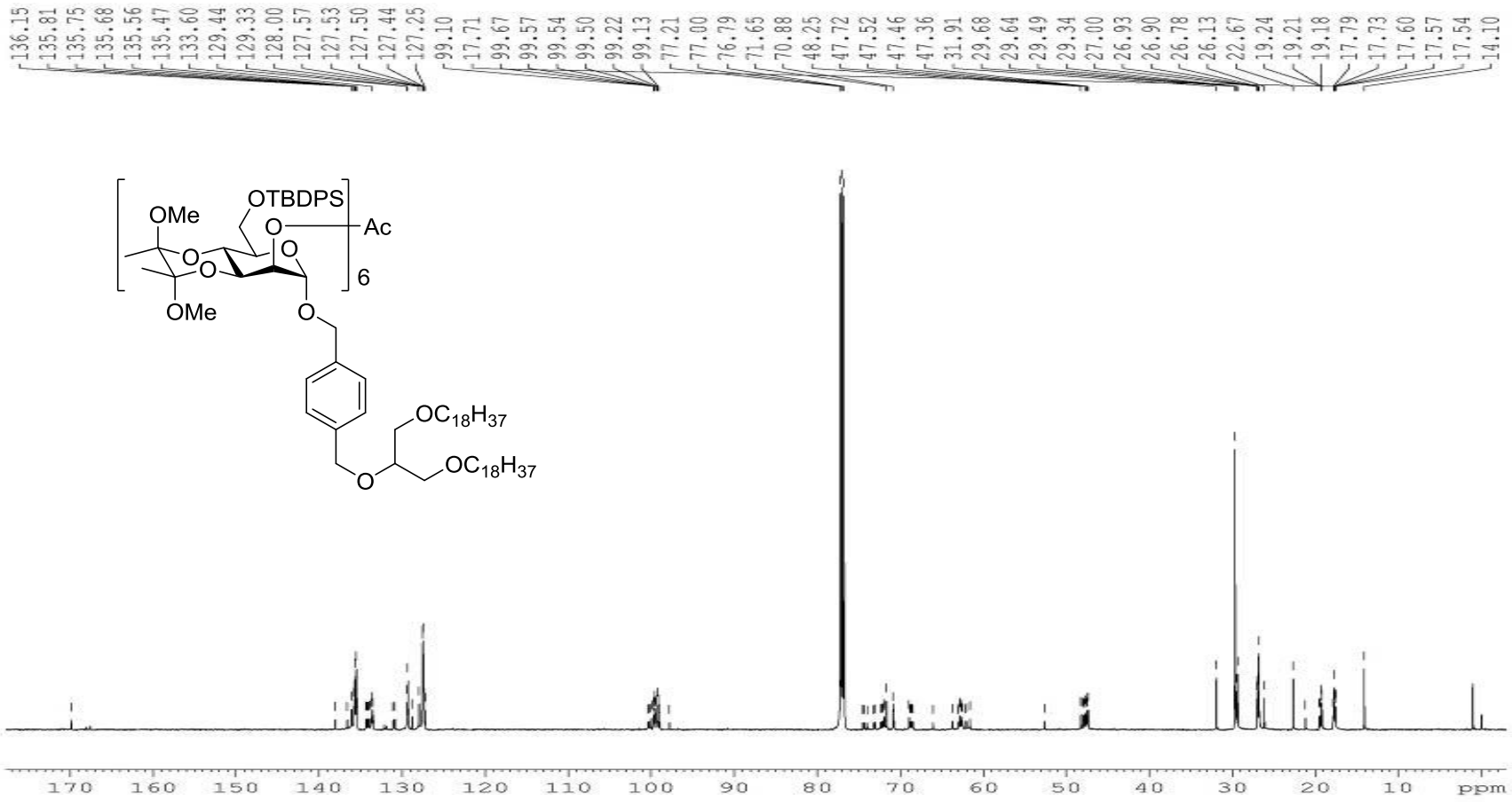

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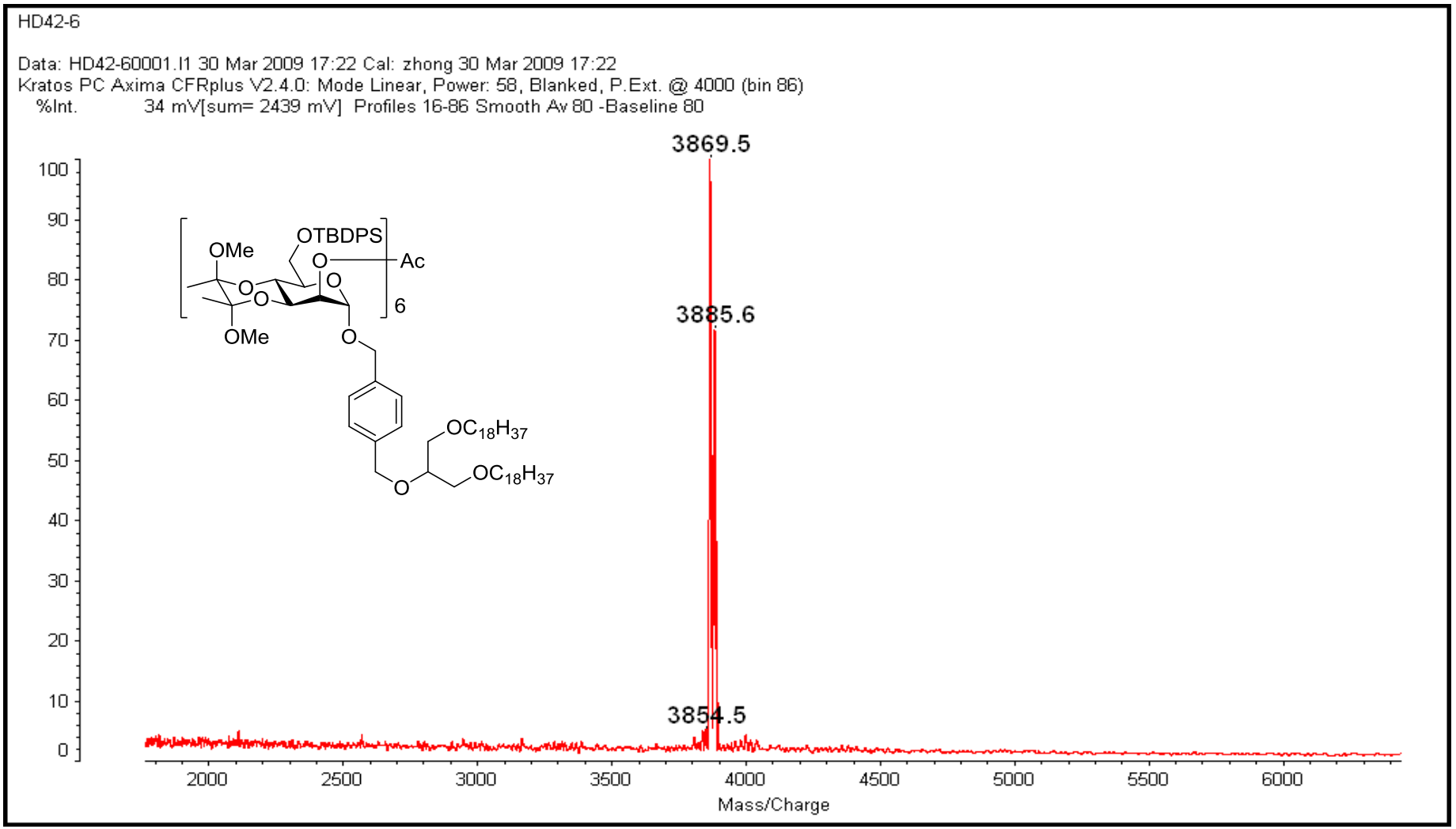

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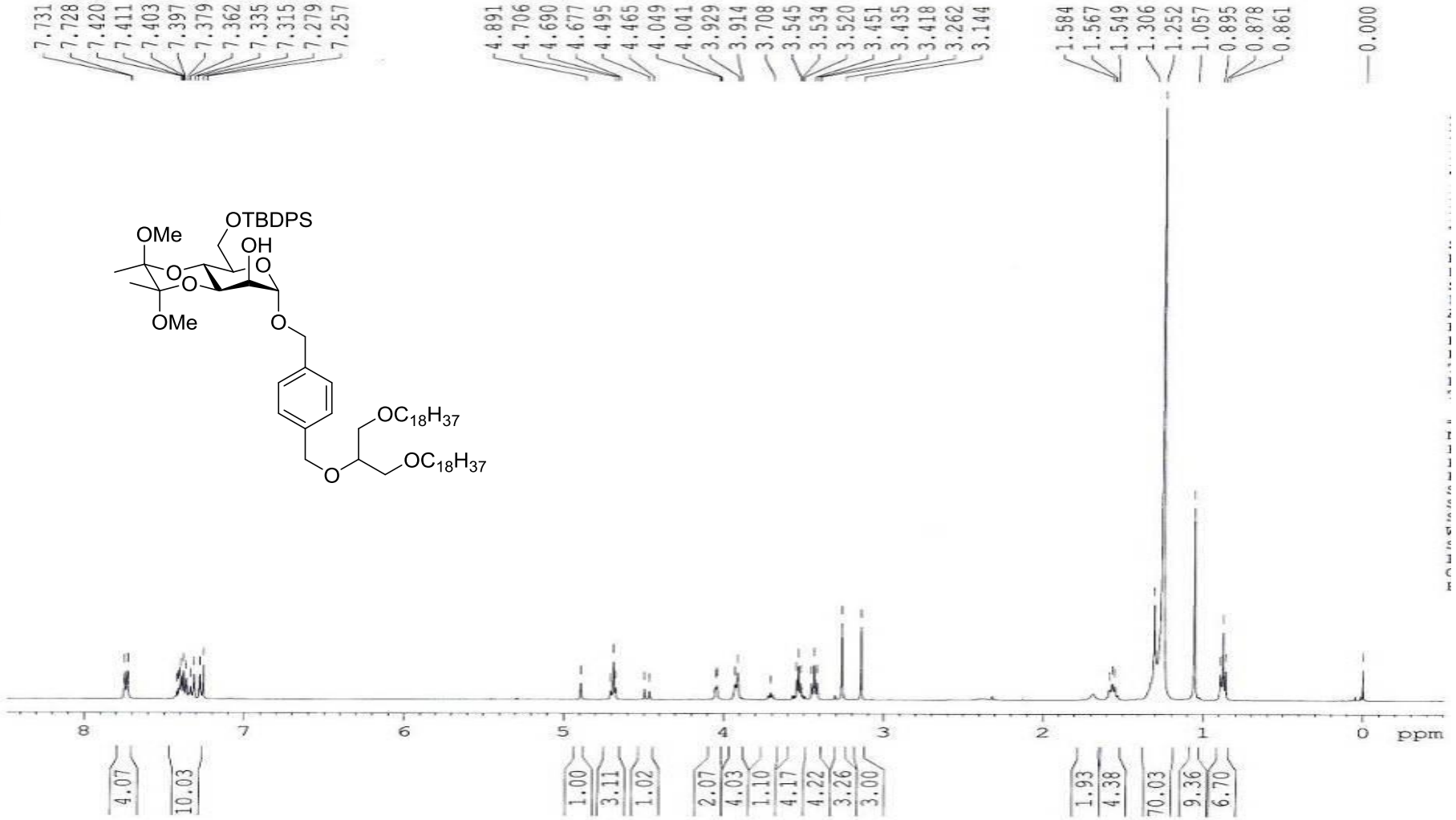
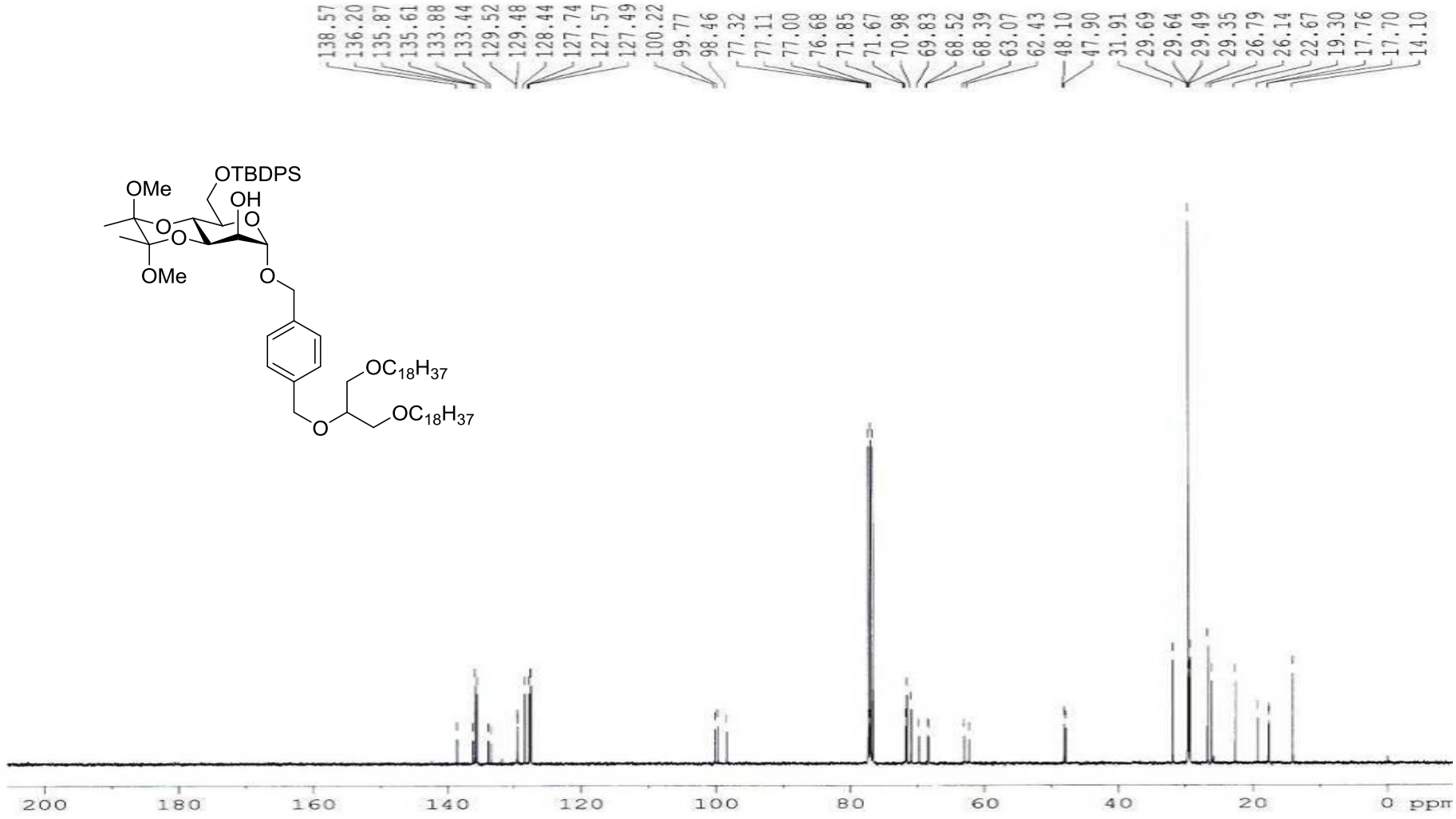
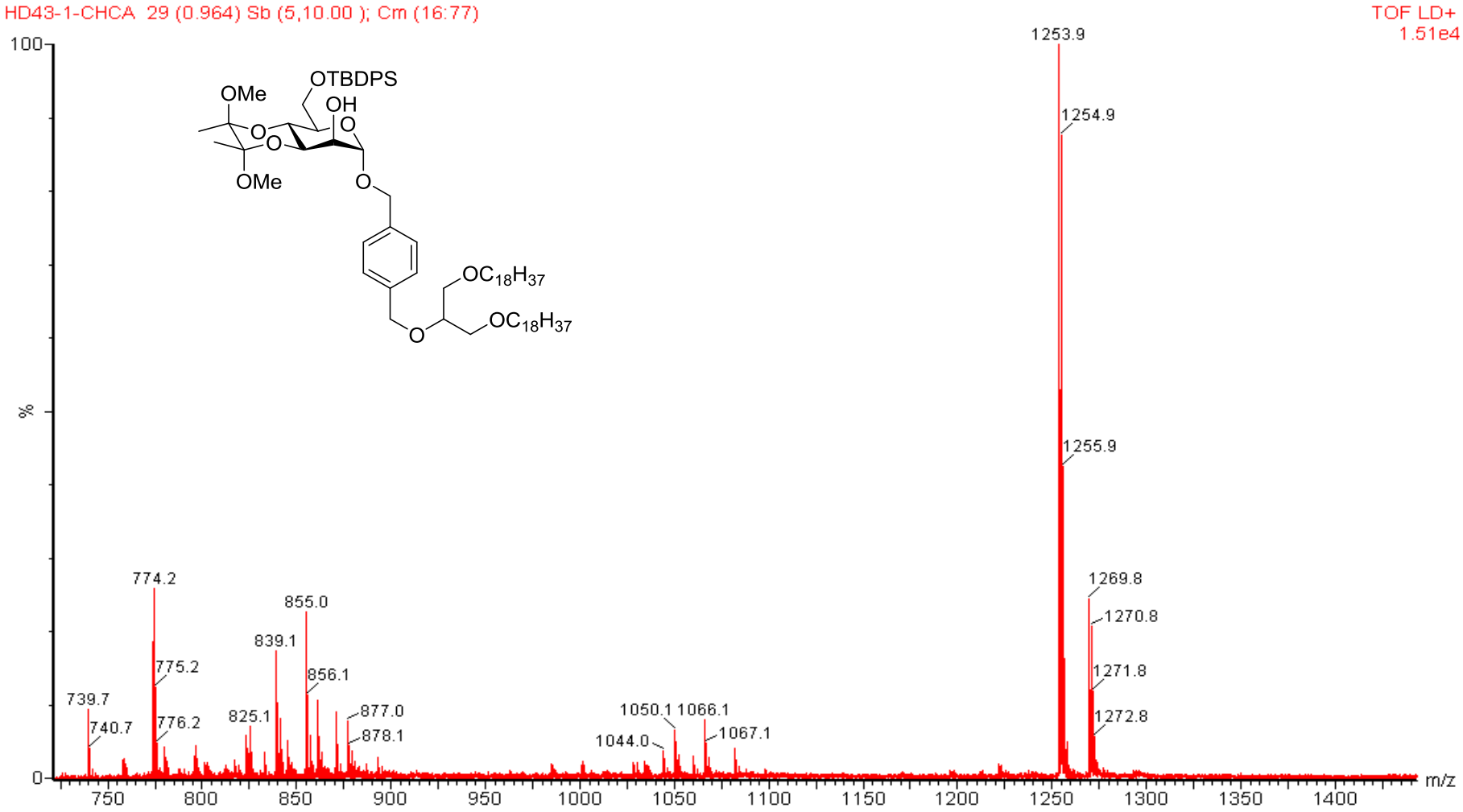


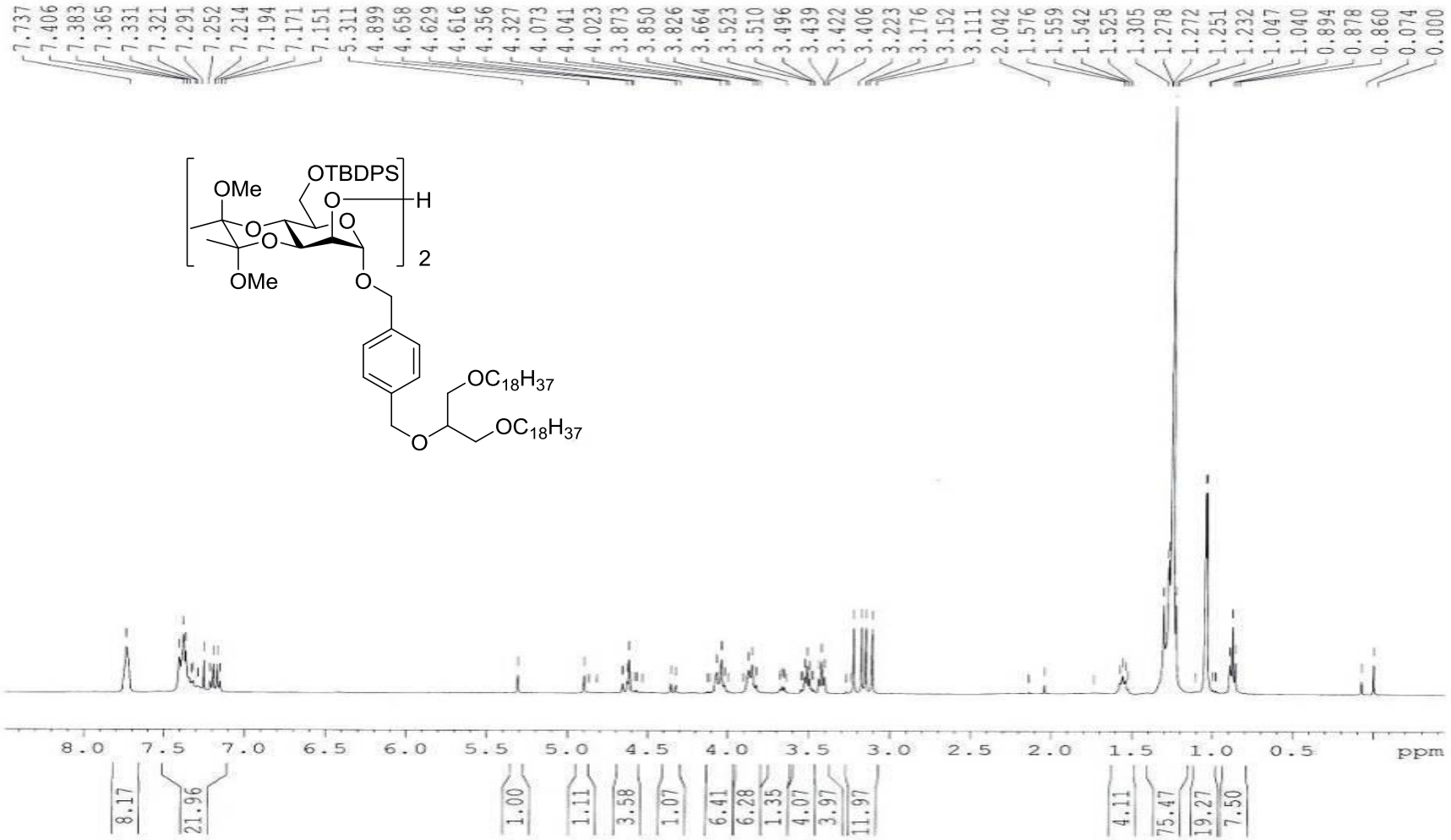
^{13}C NMR of Compound **10-1b** ($CDCl_3$, 100MHz)



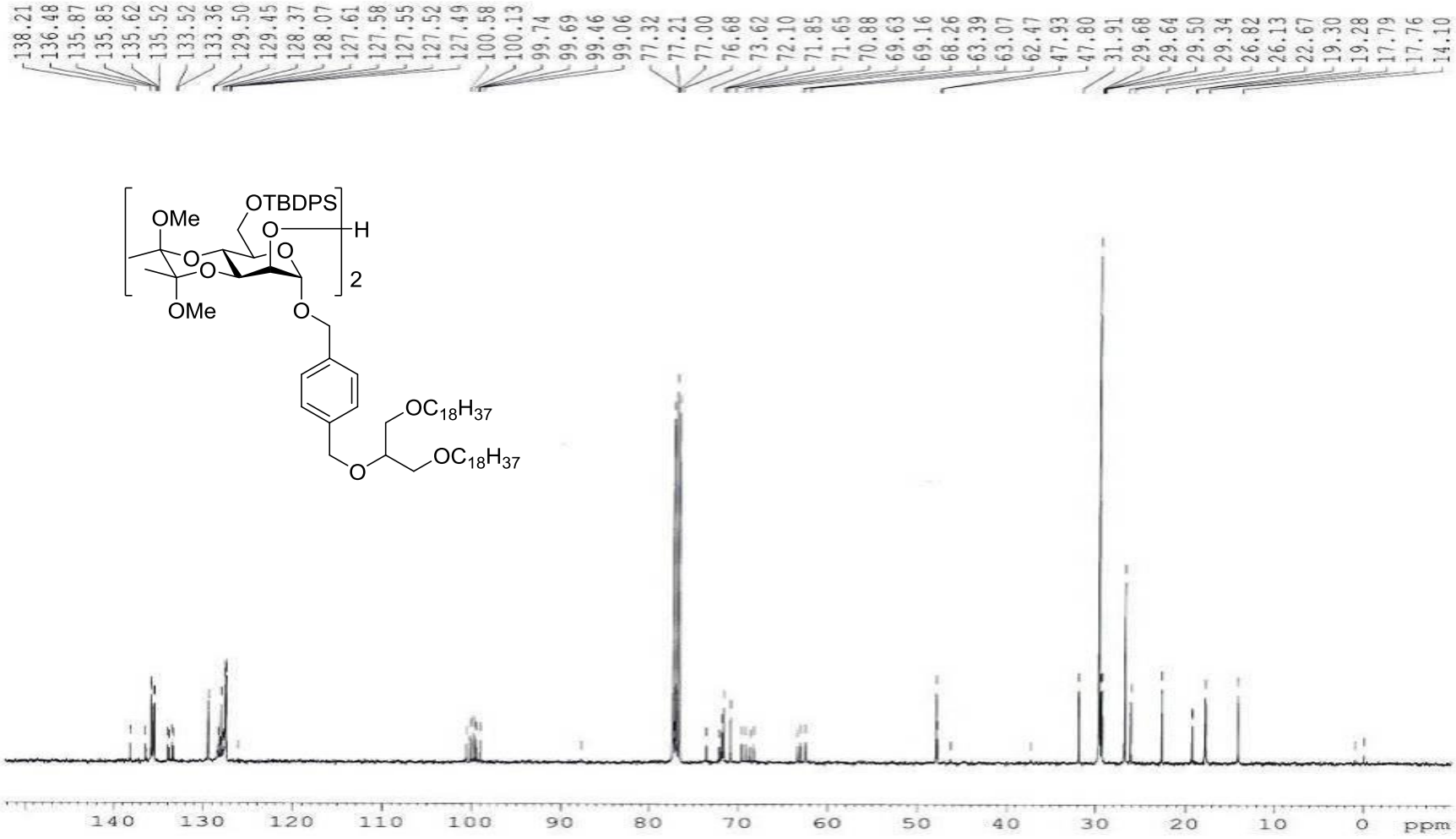
MALDI-TOF-MS of Compound **10-1b**



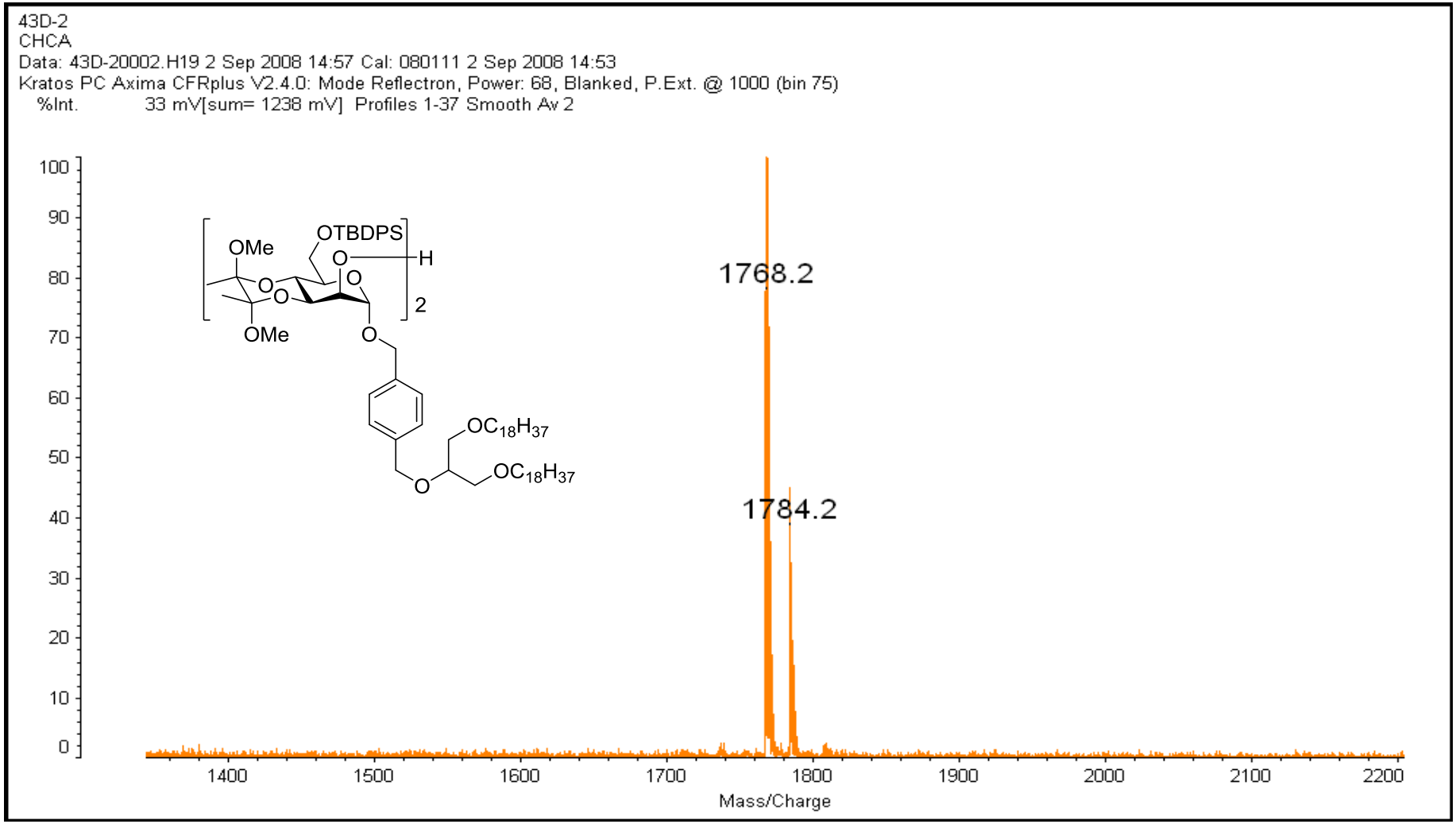
^{1}H NMR of Compound **10-2b** ($CDCl_3$, 400MHz)



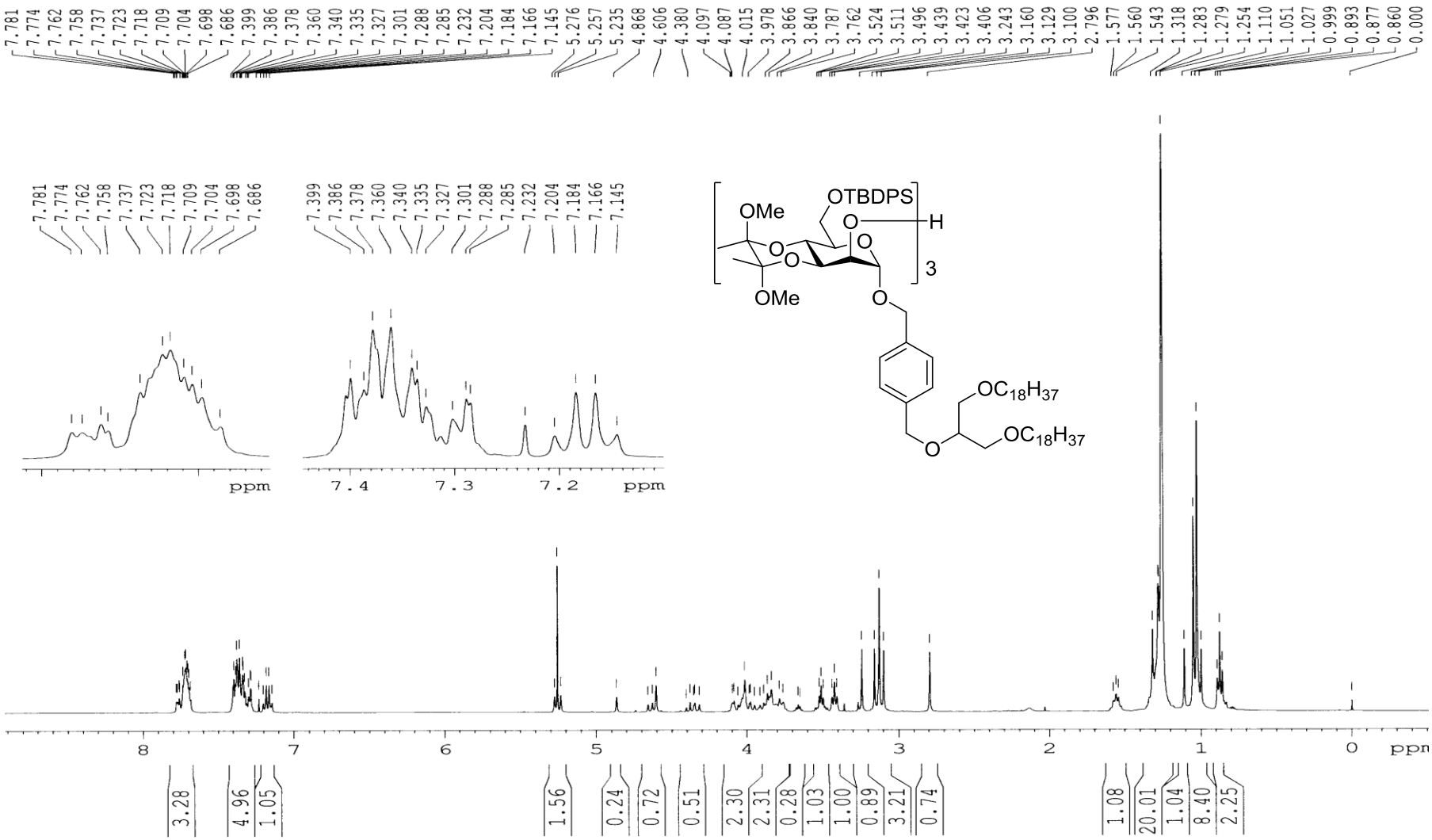
^{13}C NMR of Compound **10-2b** ($CDCl_3$, 100MHz)



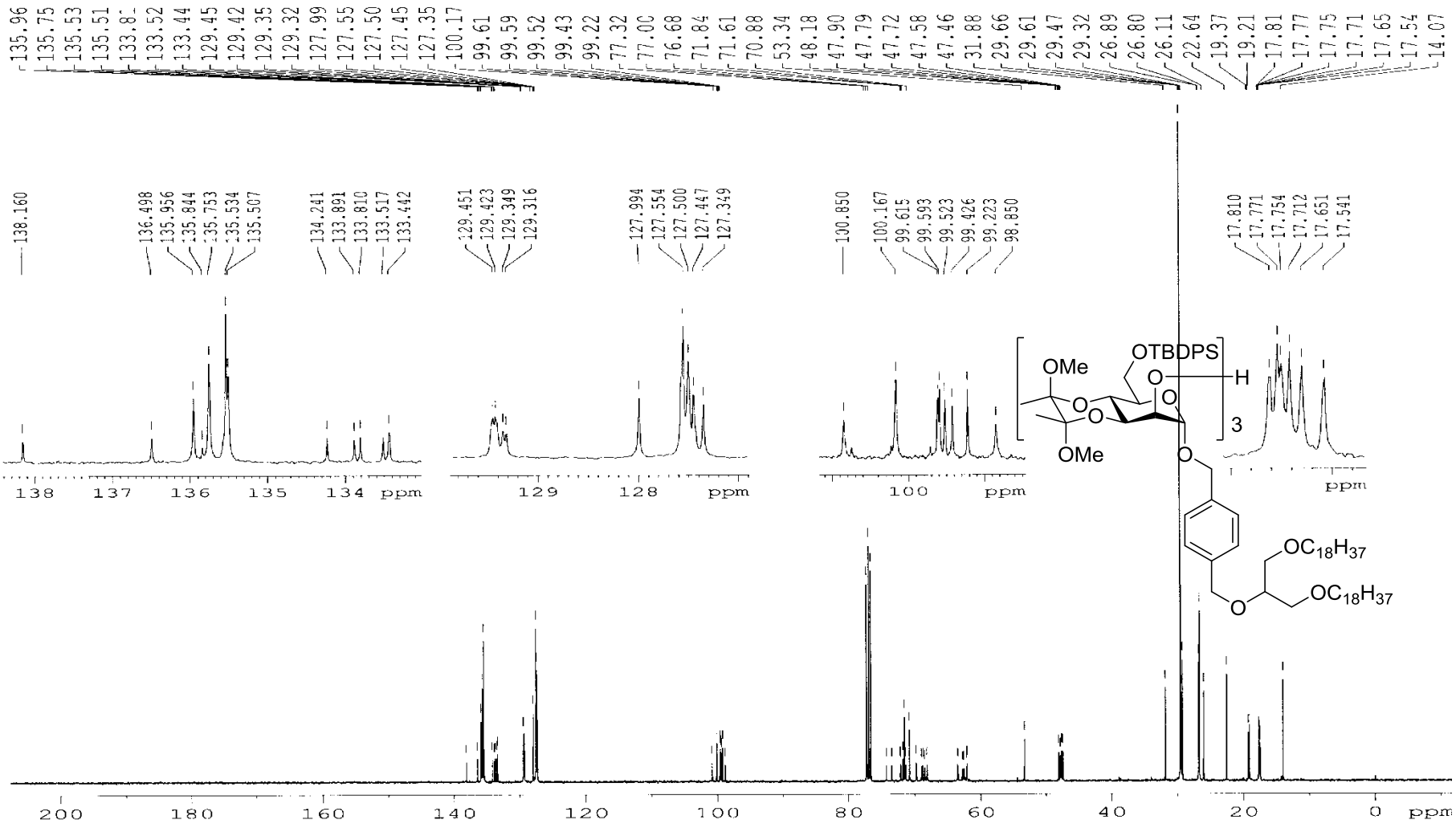
MALDI-TOF-MS of Compound **10-2b**



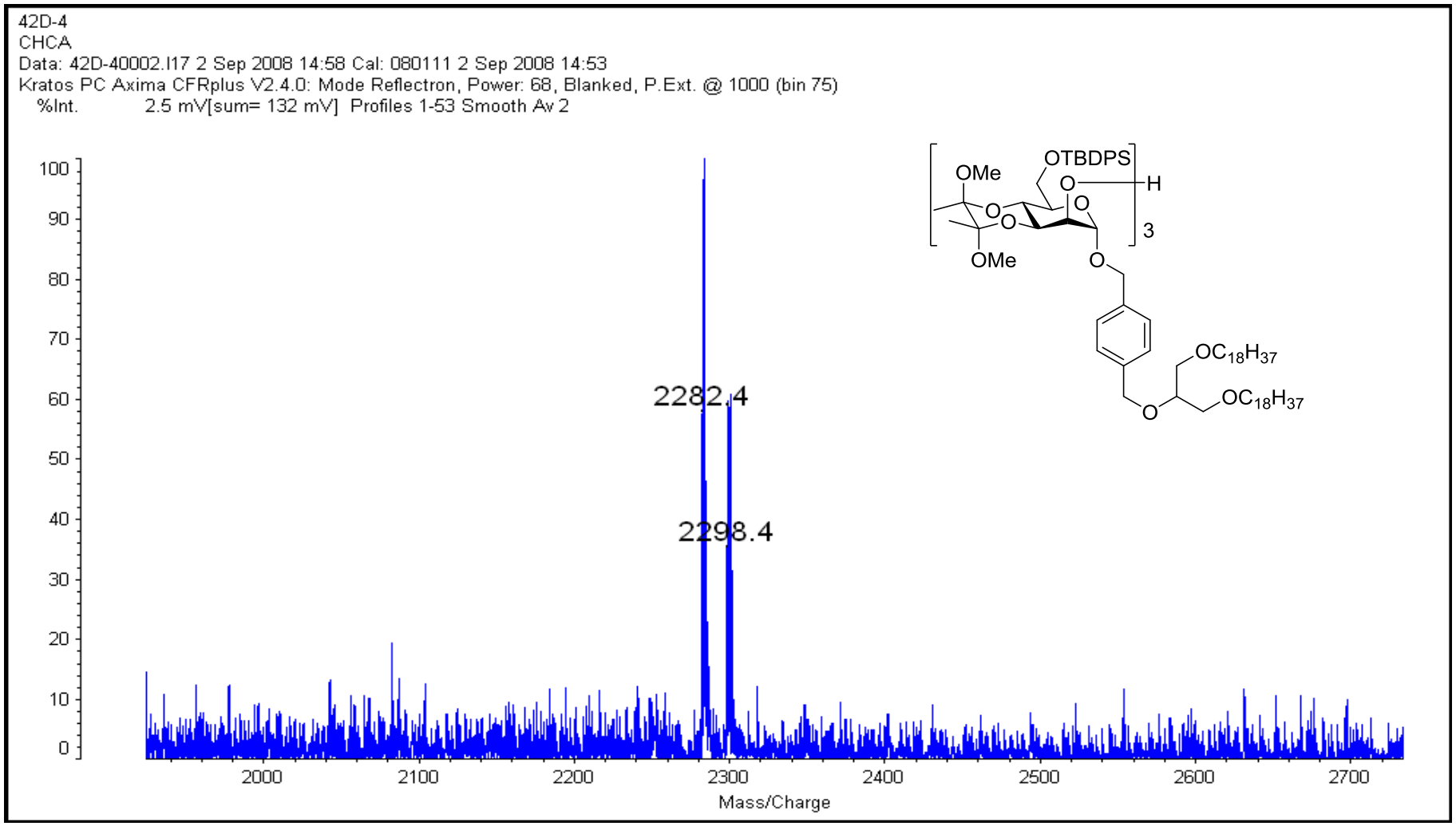
^{1}H NMR of Compound **10-3b** ($CDCl_3$, 400MHz)



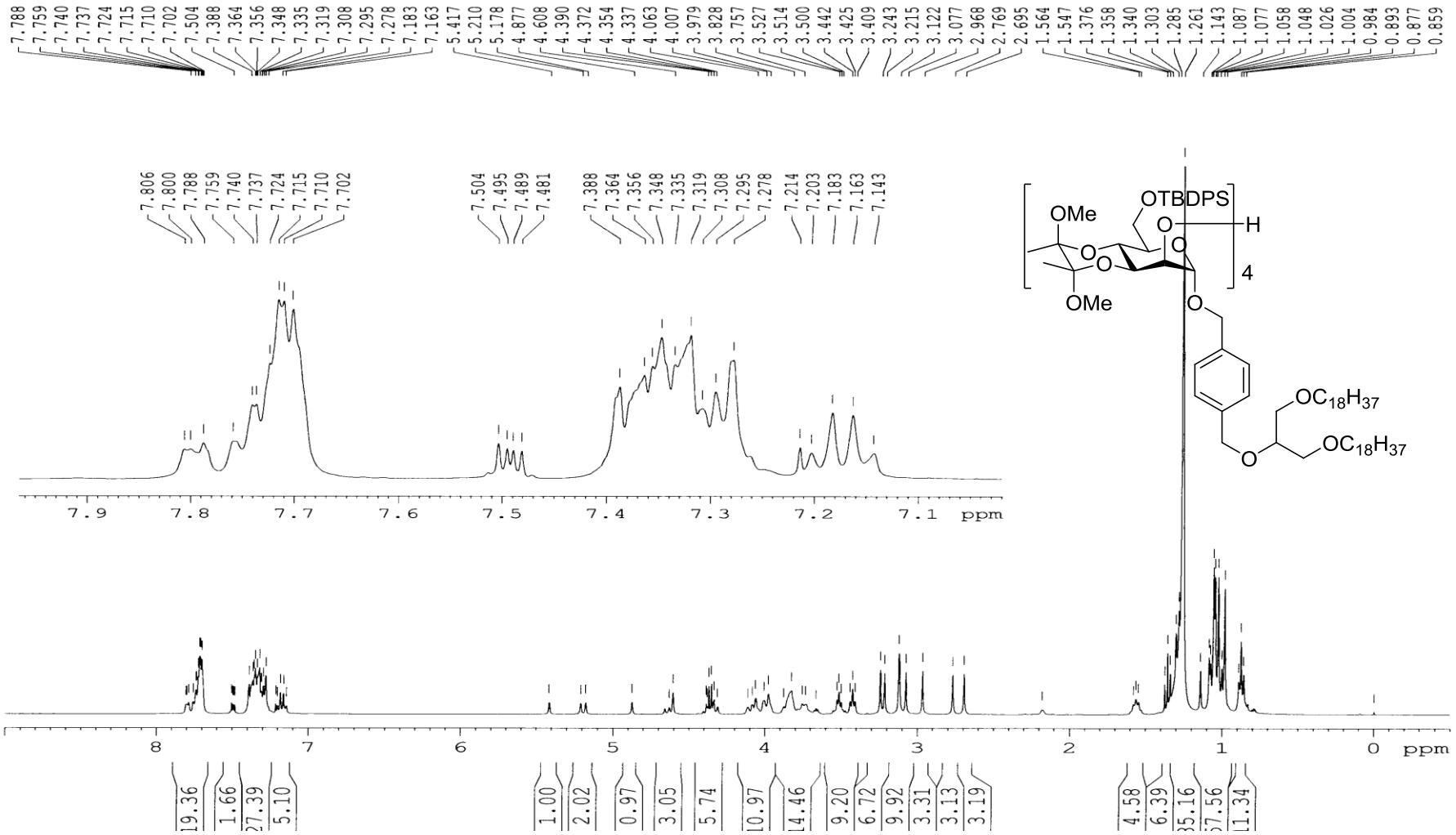
^{13}C NMR of Compound **10-3b** ($CDCl_3$, 100MHz)



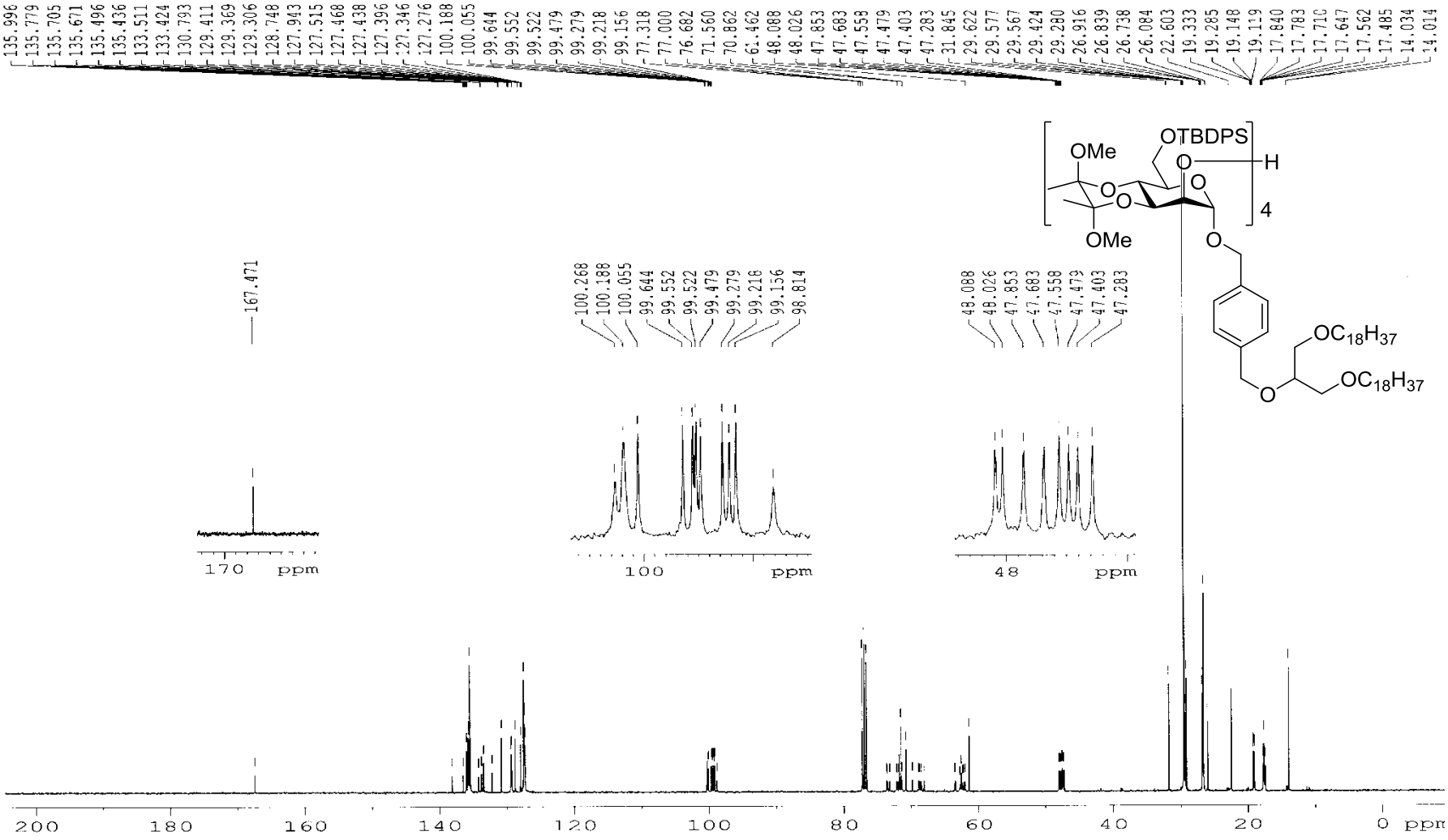
MALDI-TOF-MS of Compound **10-3b**



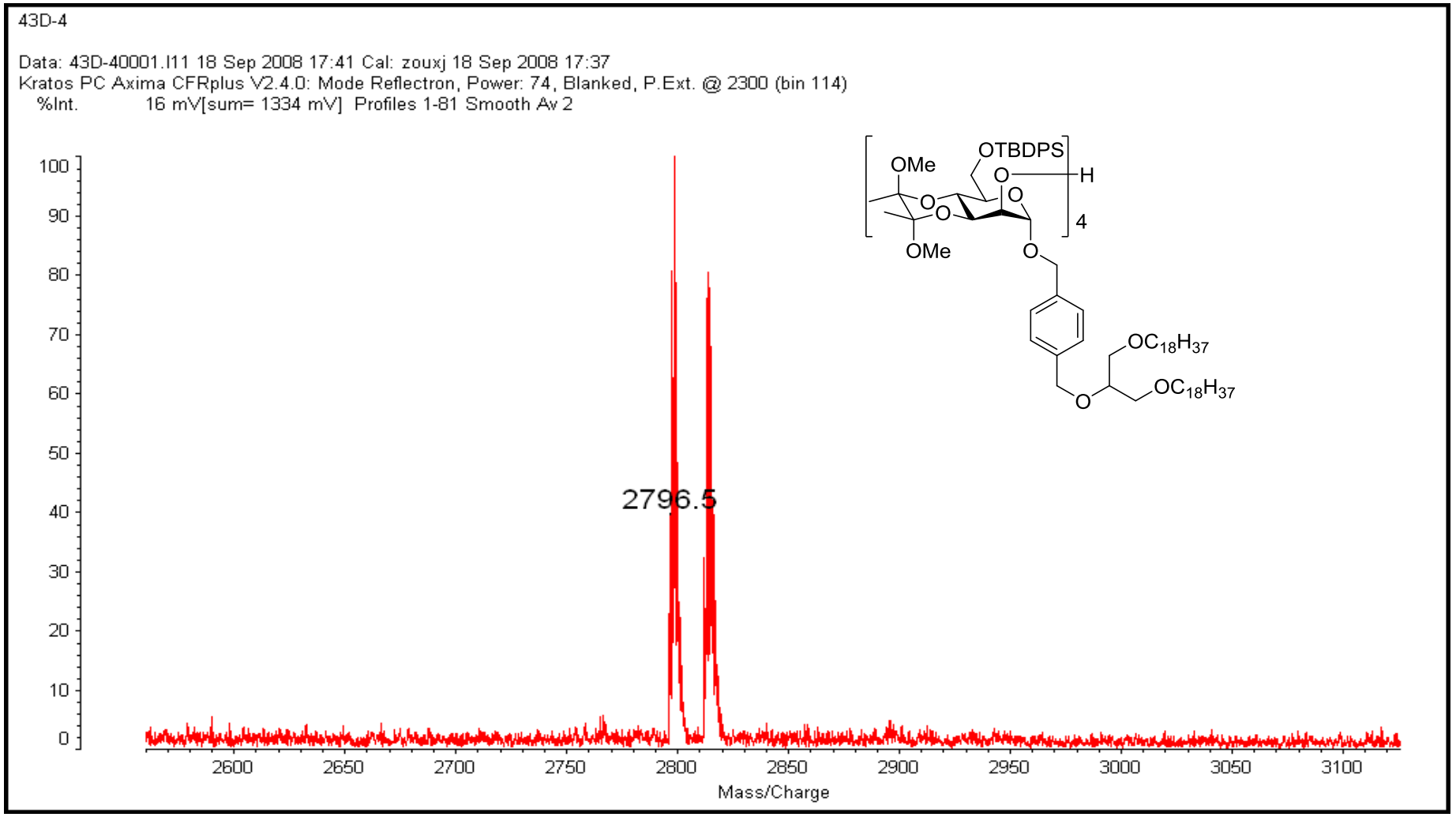
^{1}H NMR of Compound **10-4b** ($CDCl_3$, 400MHz)



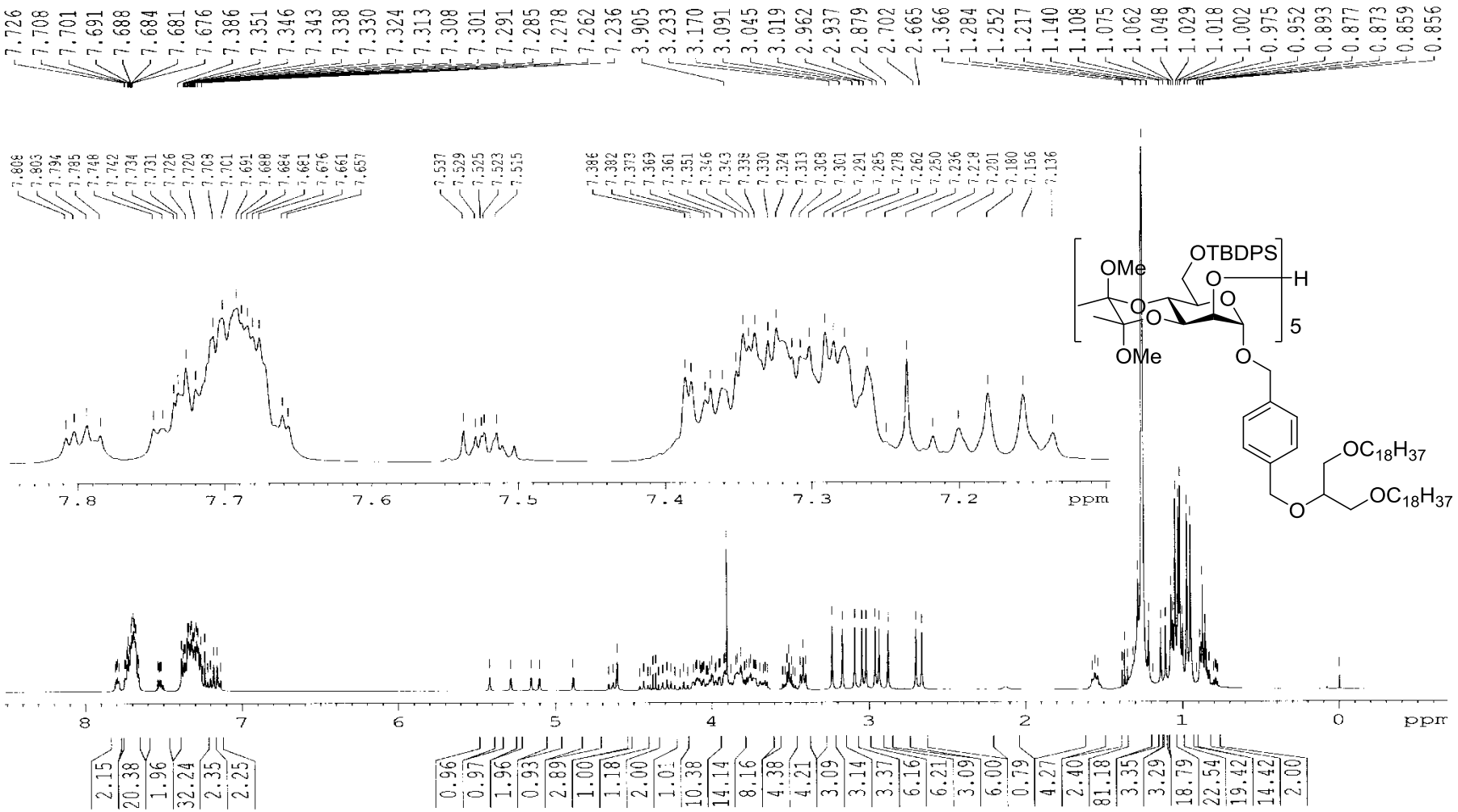
^{13}C NMR of Compound **10-4b** ($CDCl_3$, 100MHz)



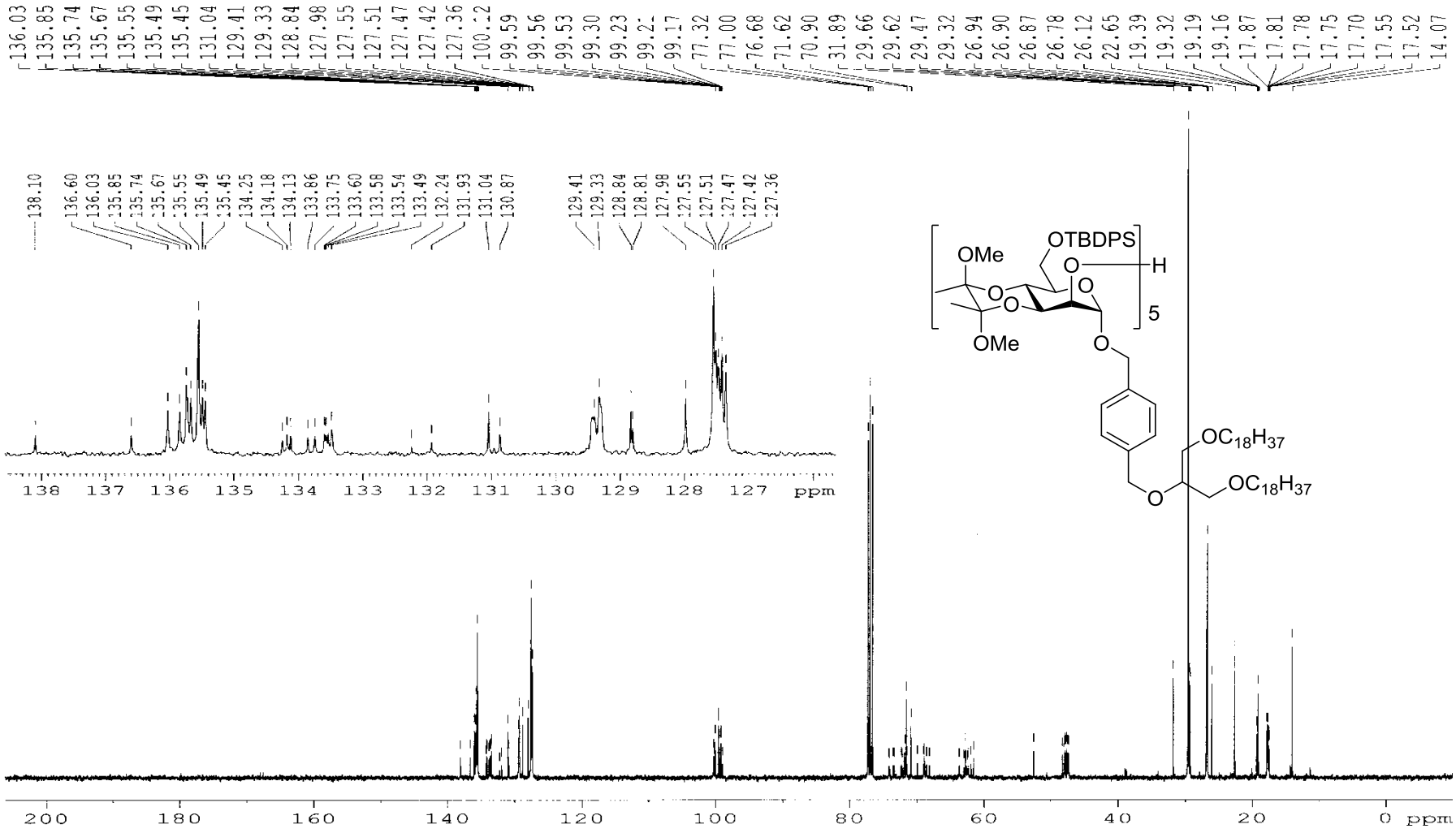
MALDI-TOF-MS of Compound **10-4b**



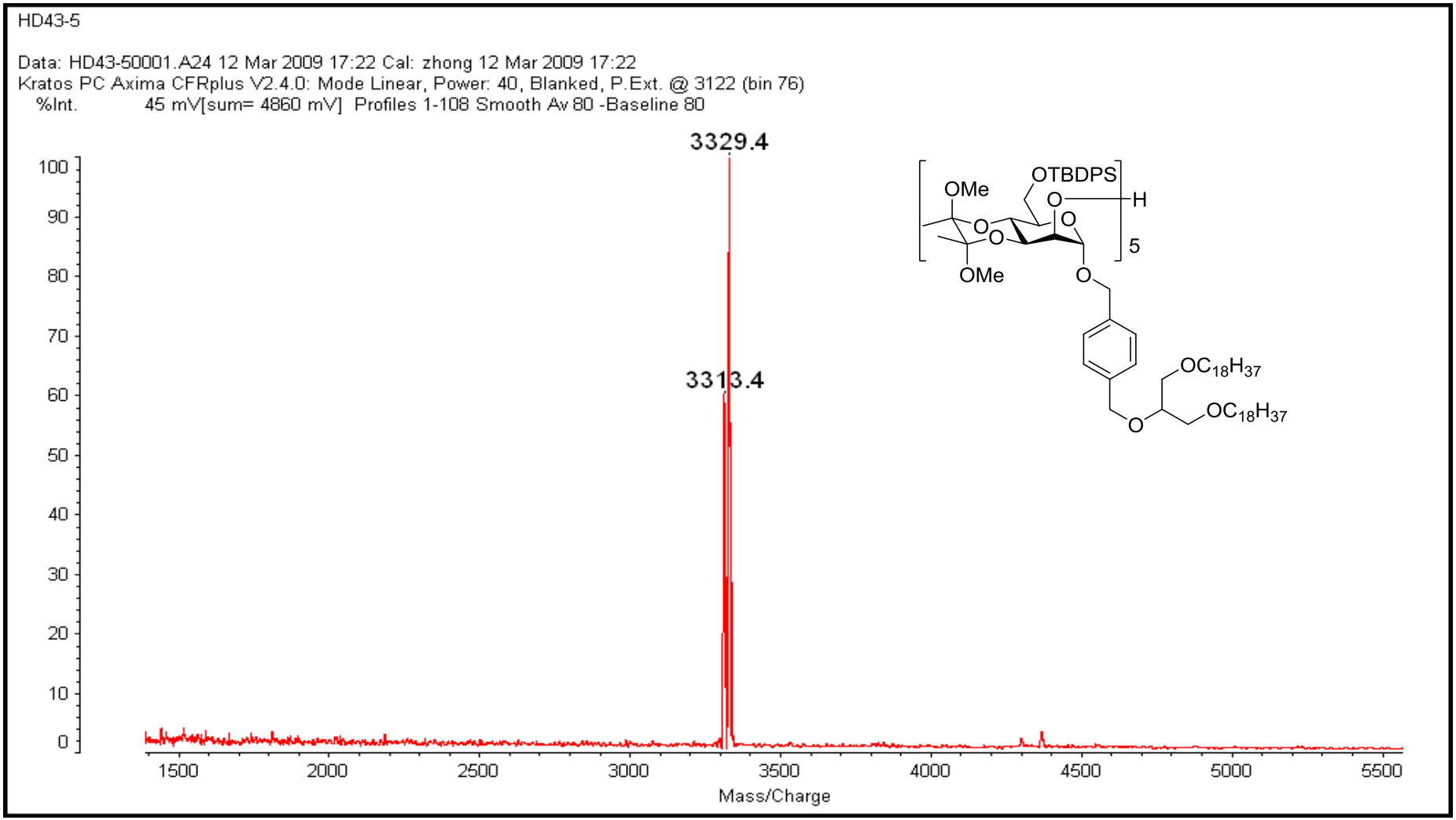
^{1}H NMR of Compound **10-5b** ($CDCl_3$, 400MHz)



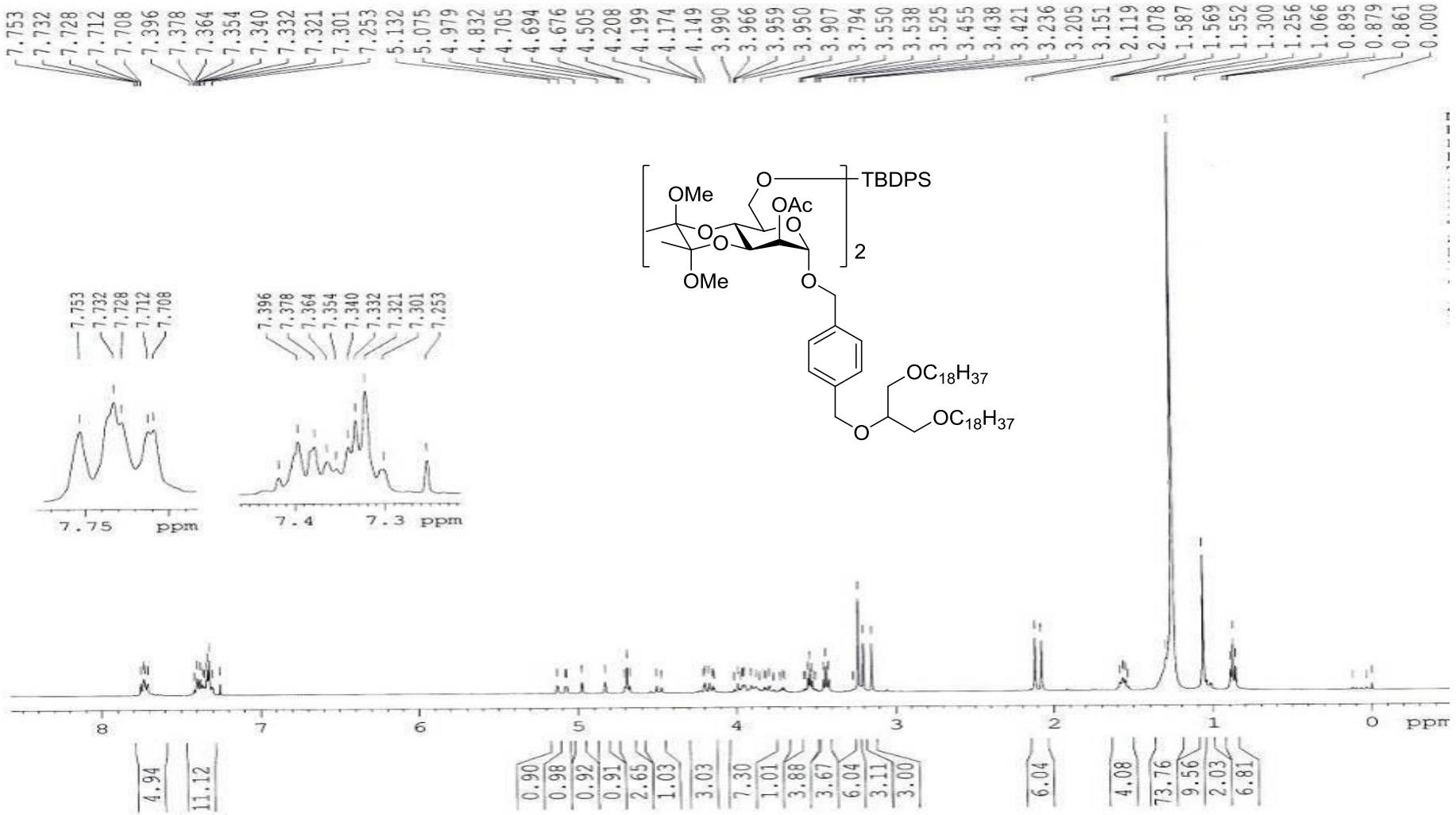
^{13}C NMR of Compound **10-5b** ($CDCl_3$, 100MHz)



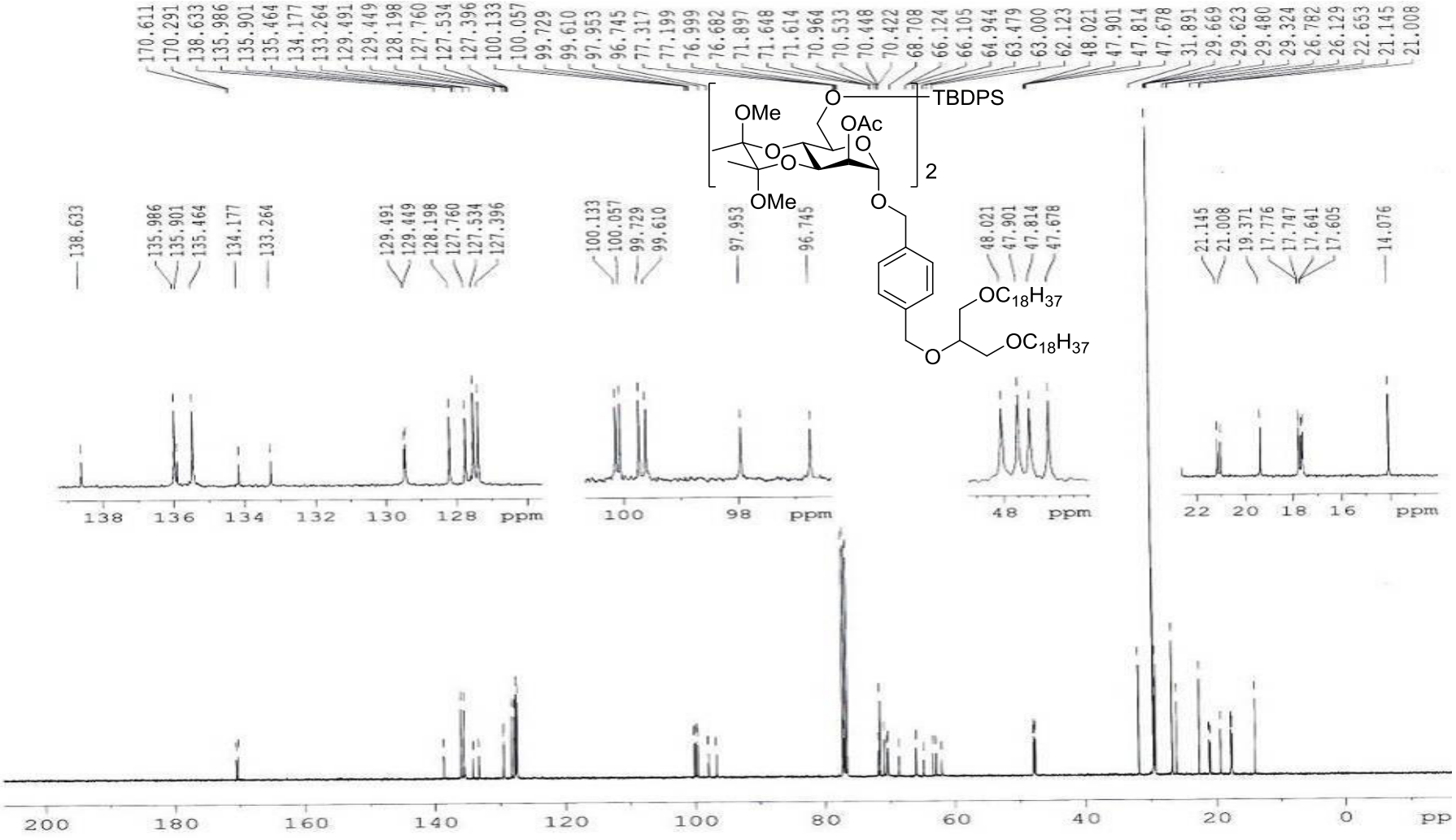
MALDI-TOF-MS of Compound **10-5b**



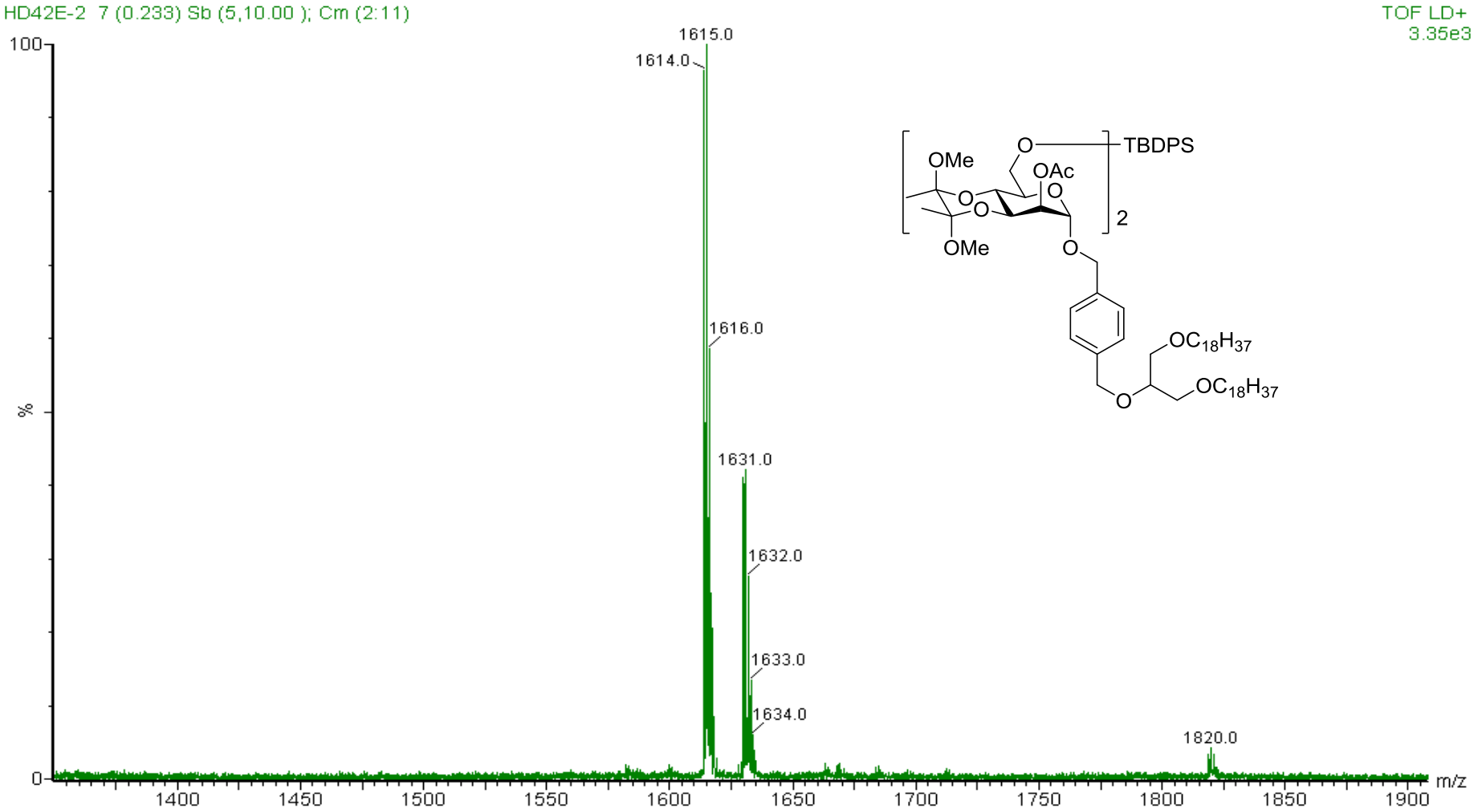
^{1}H NMR of Compound **11-2a** ($CDCl_3$, 400MHz)



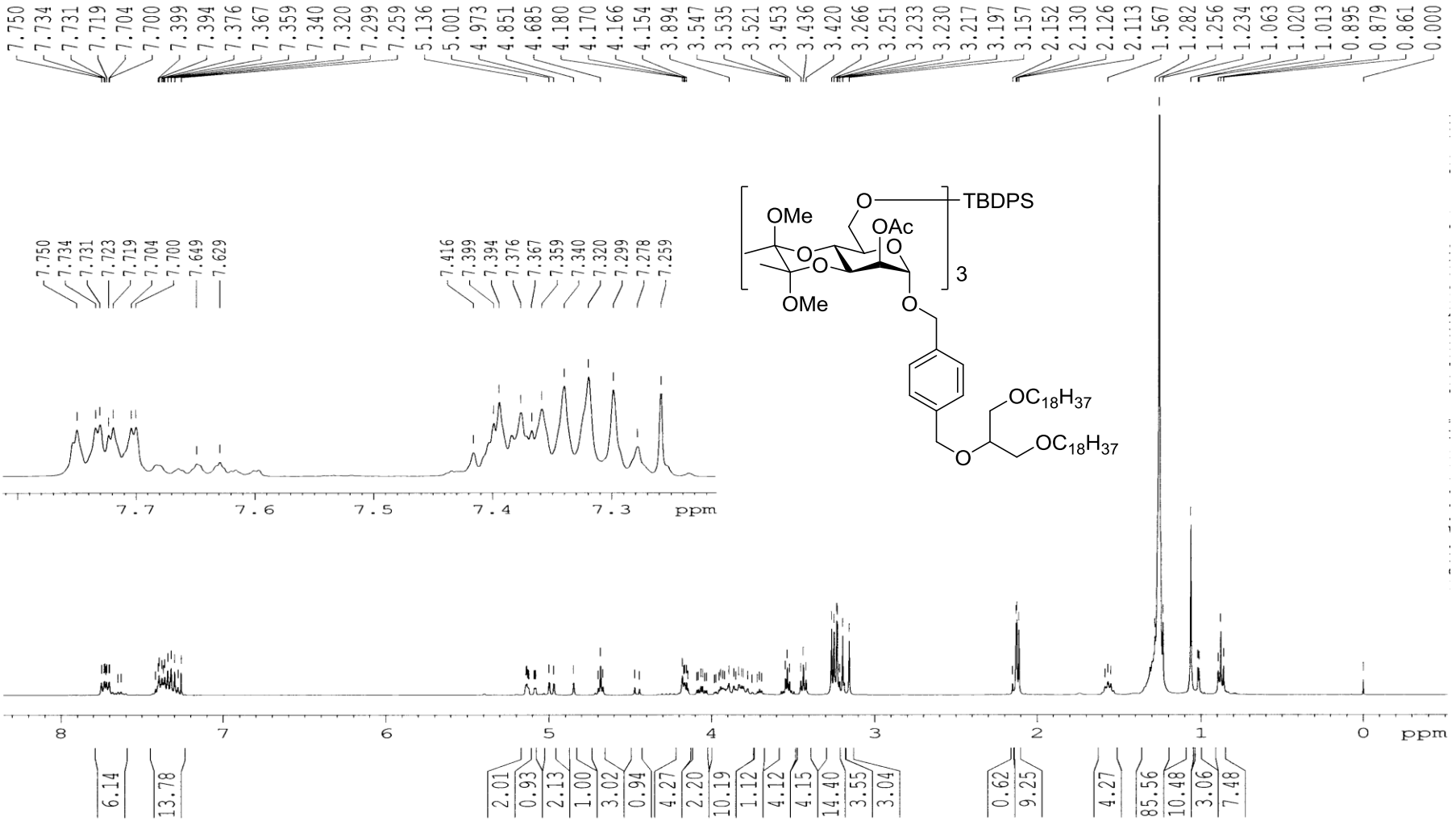
^{13}C NMR of Compound **11-2a** ($CDCl_3$, 100MHz)



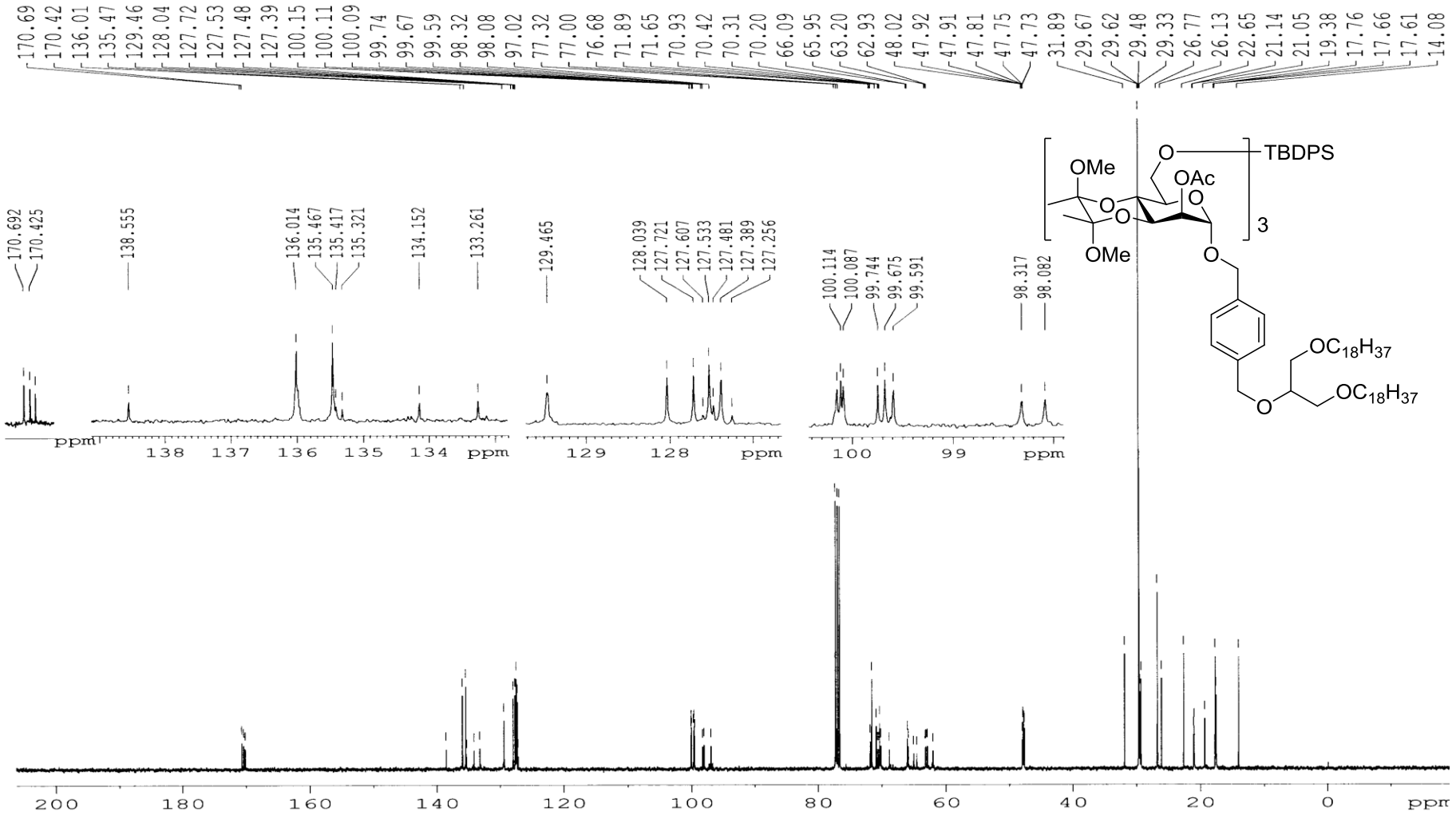
MALDI-TOF-MS of Compound **11-2a**



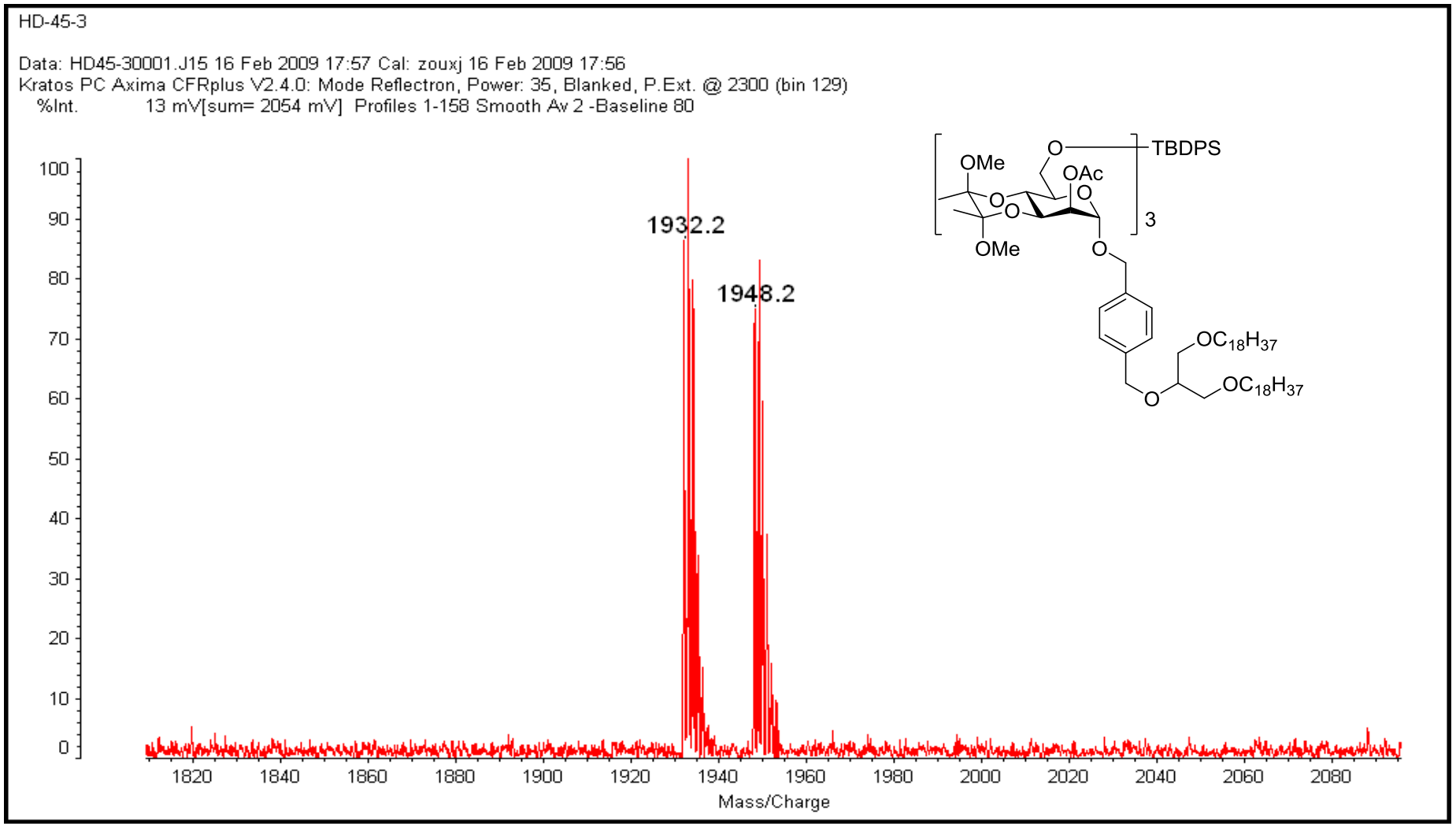
^{1}H NMR of Compound **11-3a** ($CDCl_3$, 400MHz)



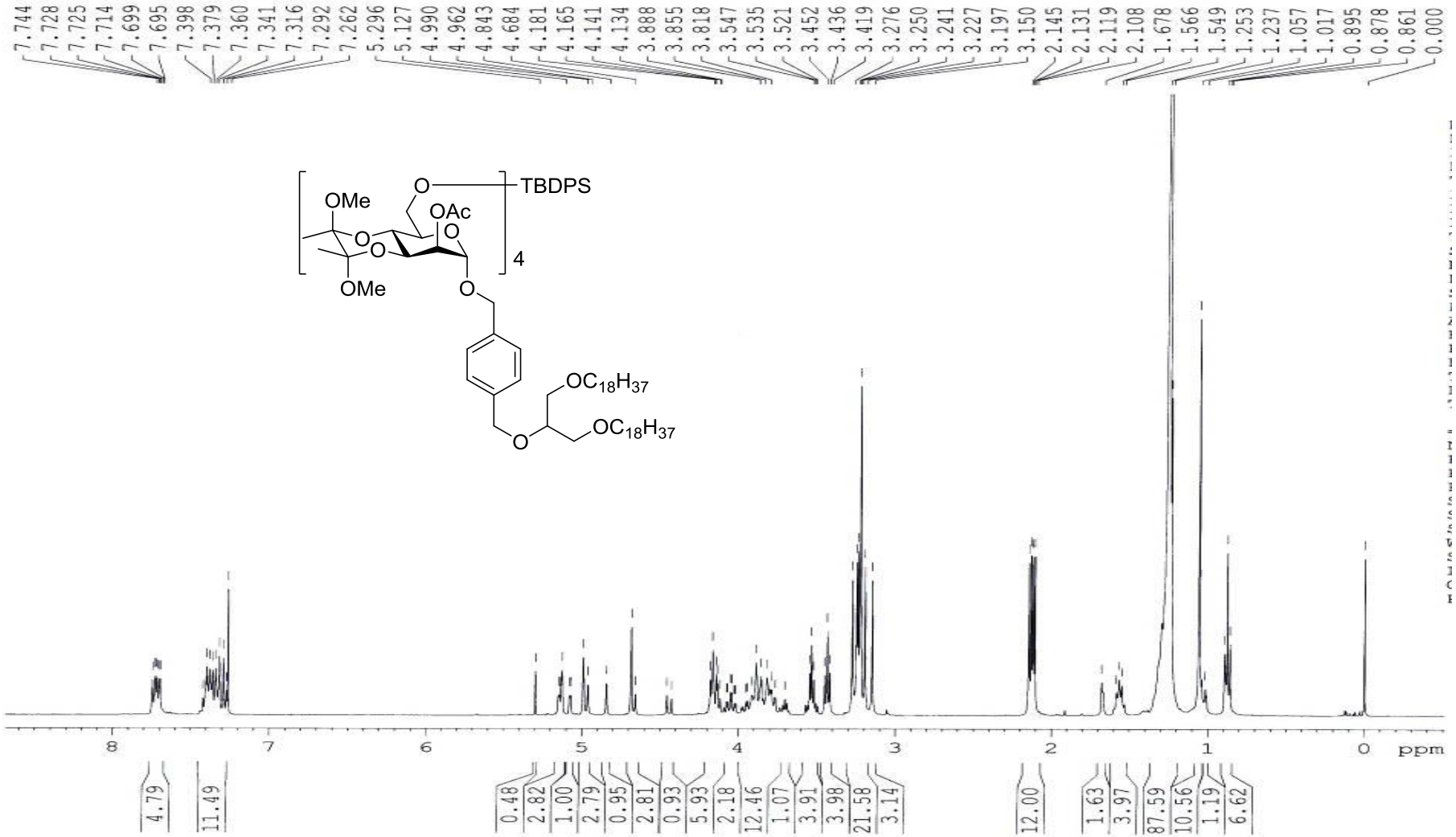
^{13}C NMR of Compound **11-3a** ($CDCl_3$, 100MHz)



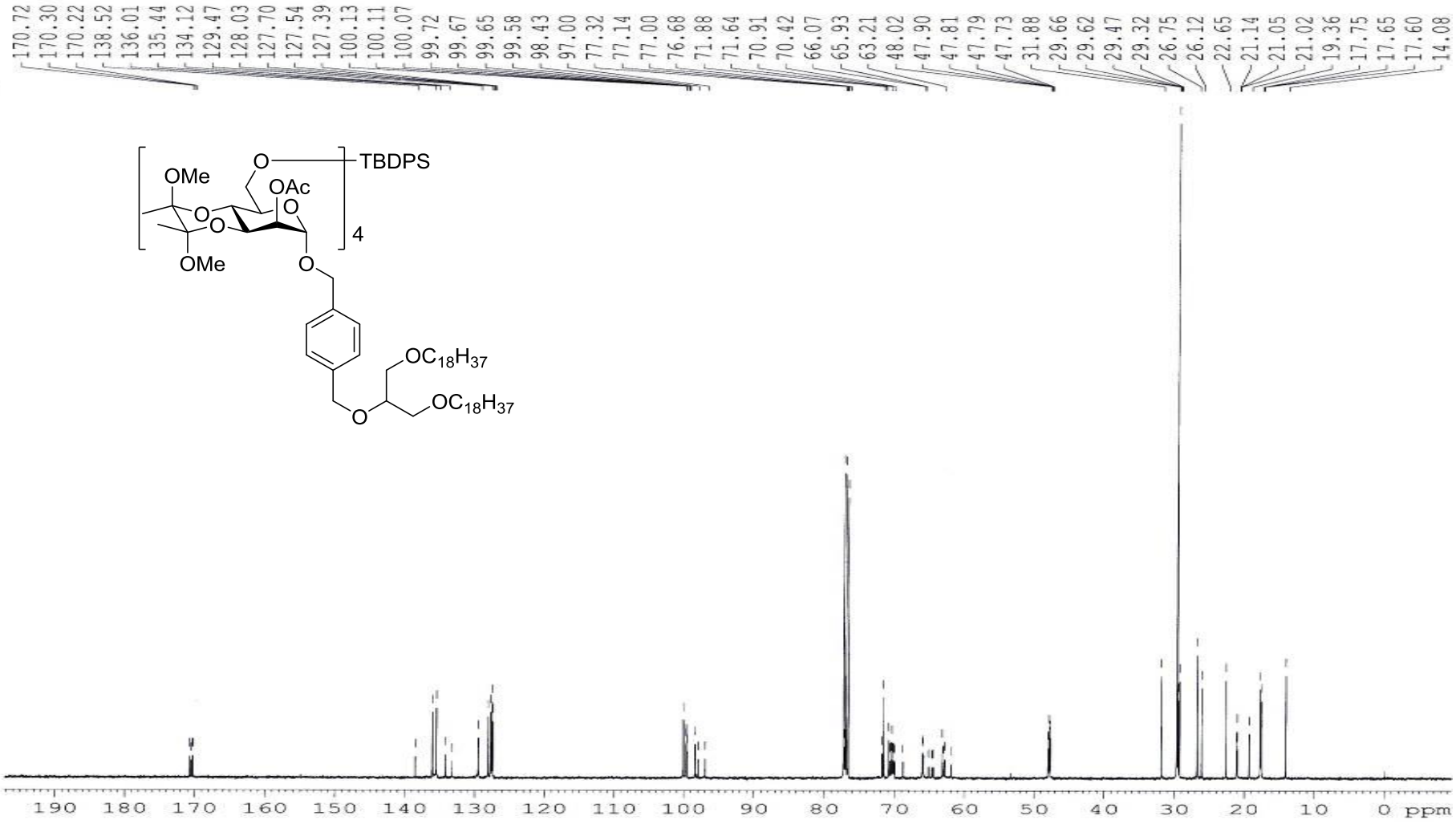
MALDI-TOF-MS of Compound **11-3a**



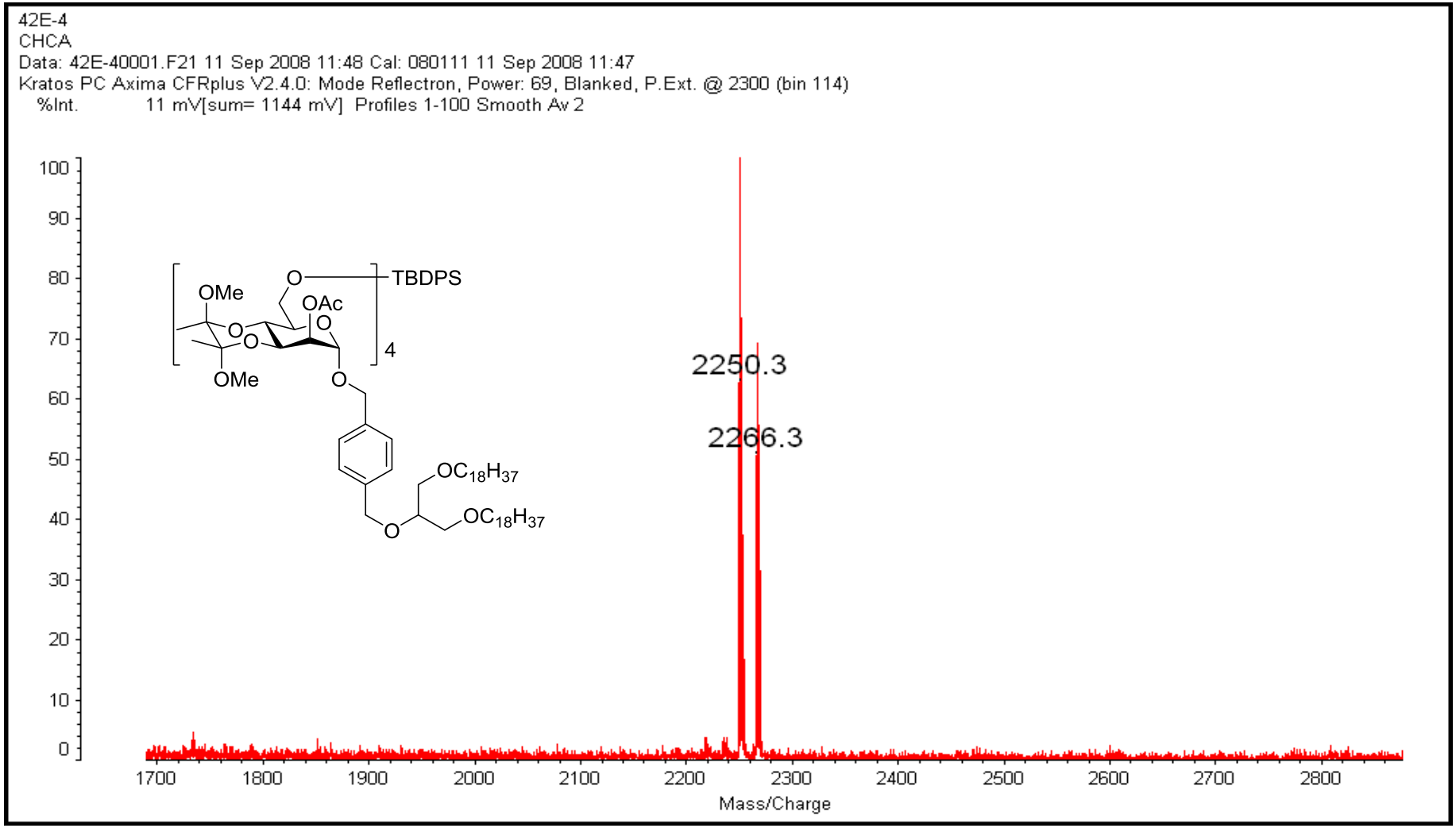
^{1}H NMR of Compound **11-4a** ($CDCl_3$, 400MHz)



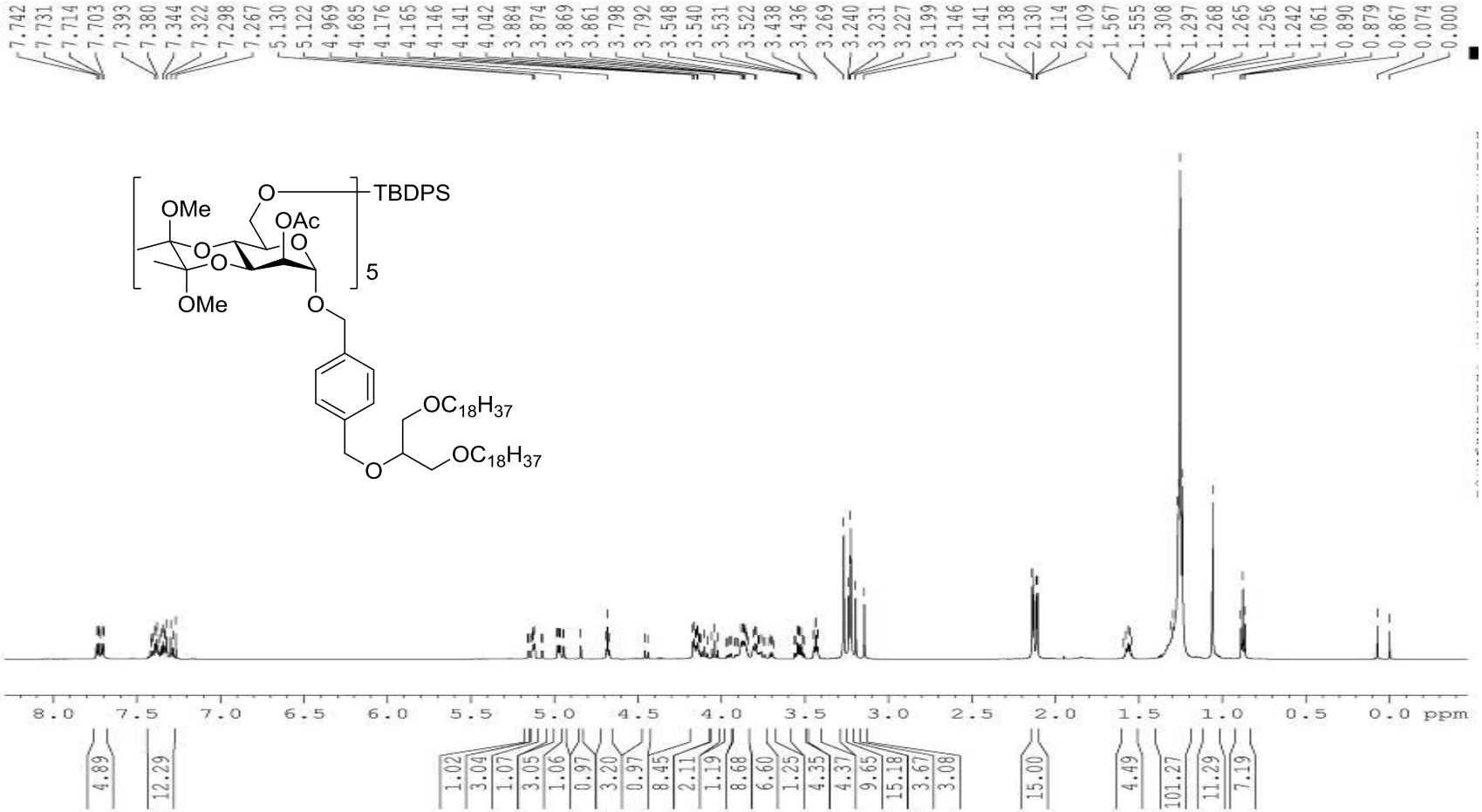
^{13}C NMR of Compound **11-4a** ($CDCl_3$, 100MHz)



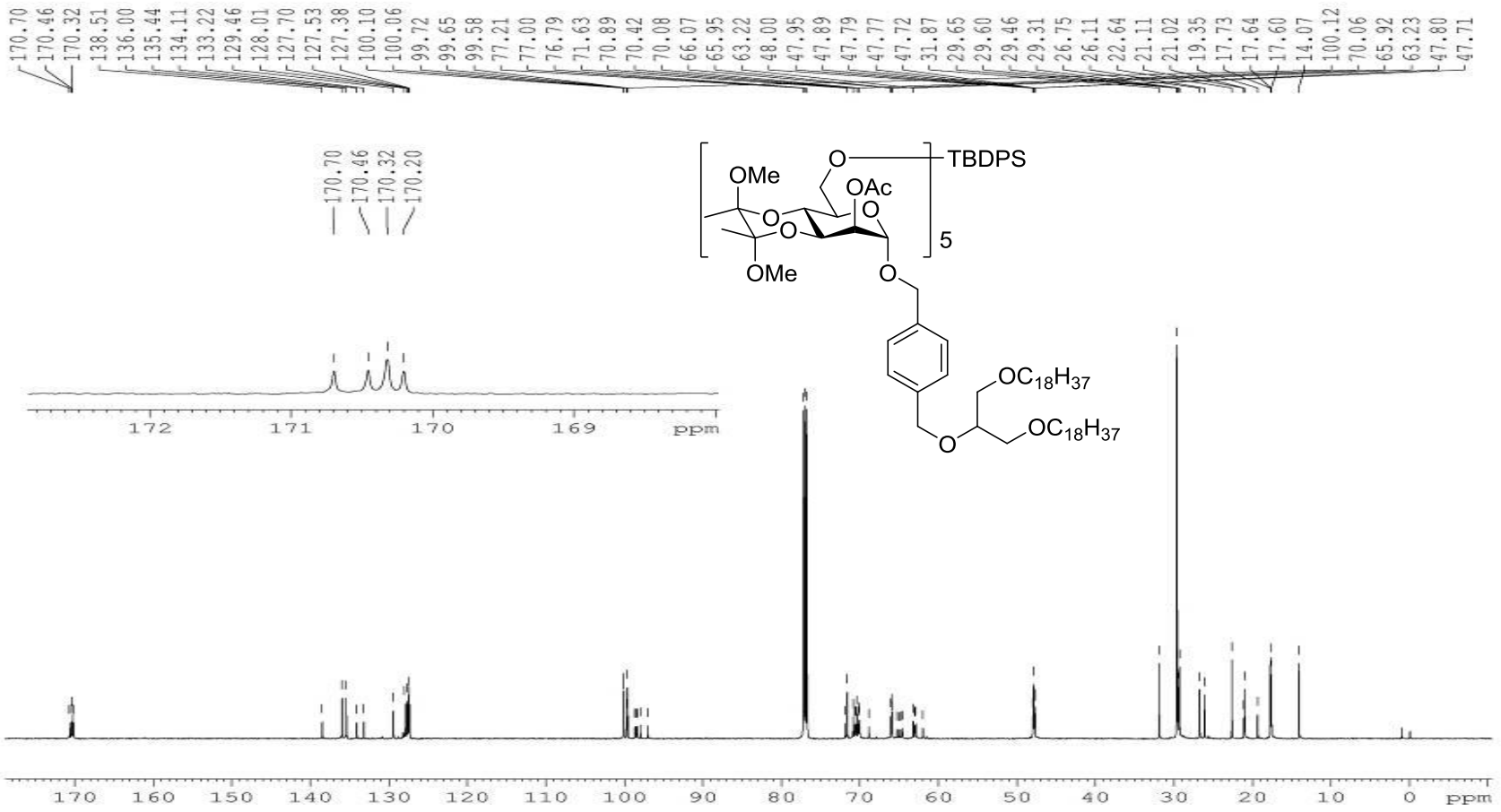
MALDI-TOF-MS of Compound **11-4a**



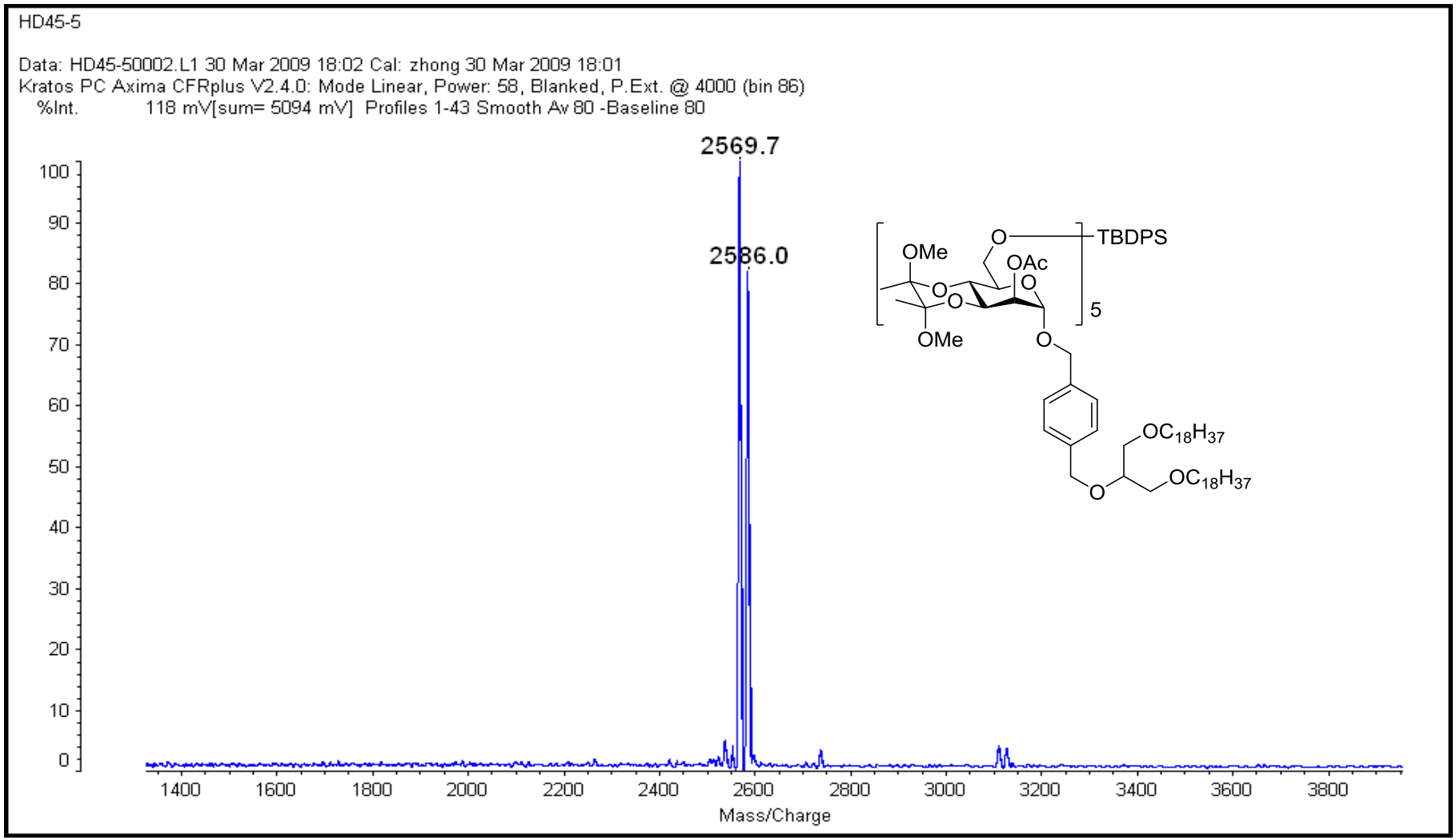
^{1}H NMR of Compound **11-5a** ($CDCl_3$, 600MHz)



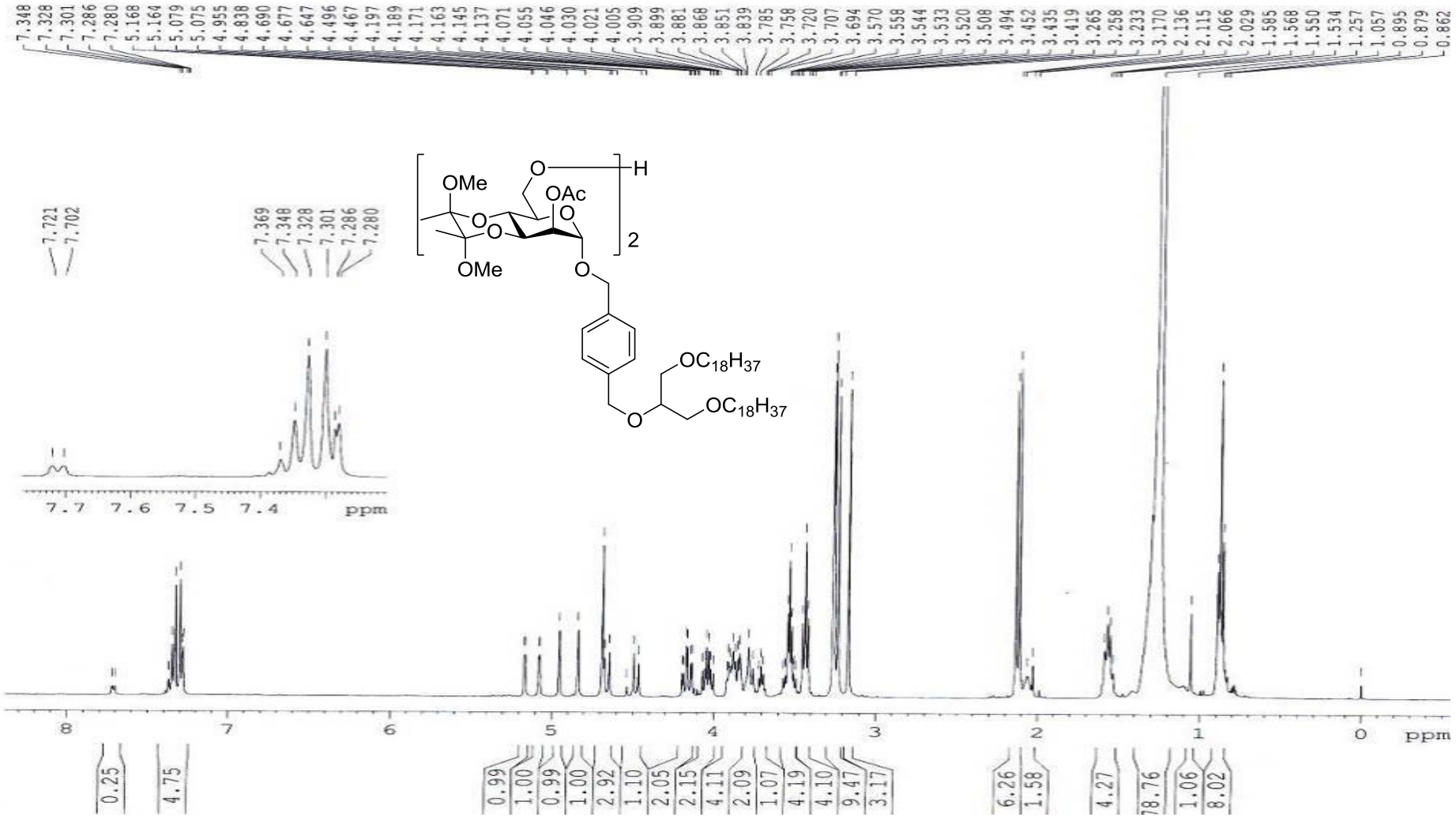
^{13}C NMR of Compound **11-5a** ($CDCl_3$, 150MHz)



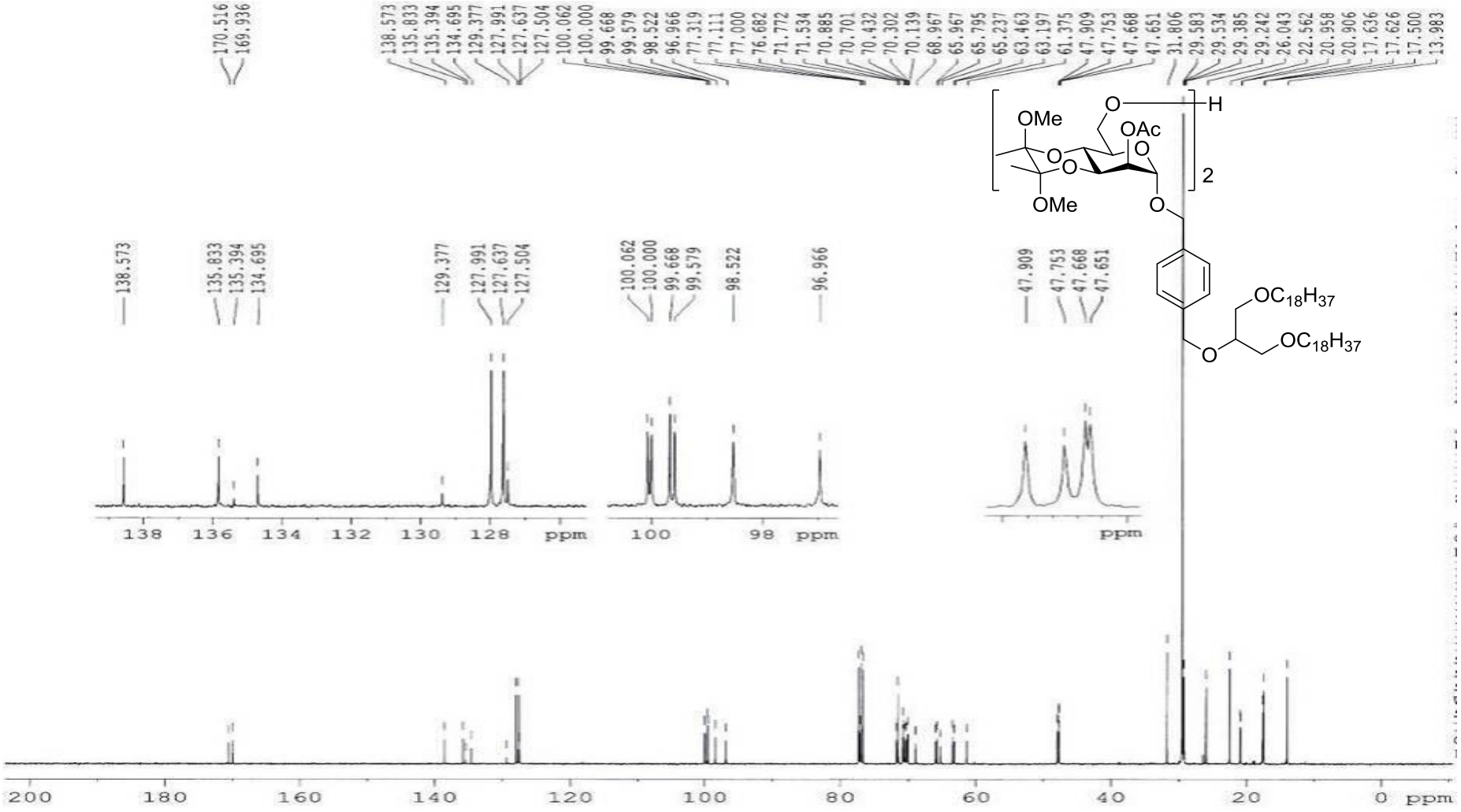
MALDI-TOF-MS of Compound **11-5a**



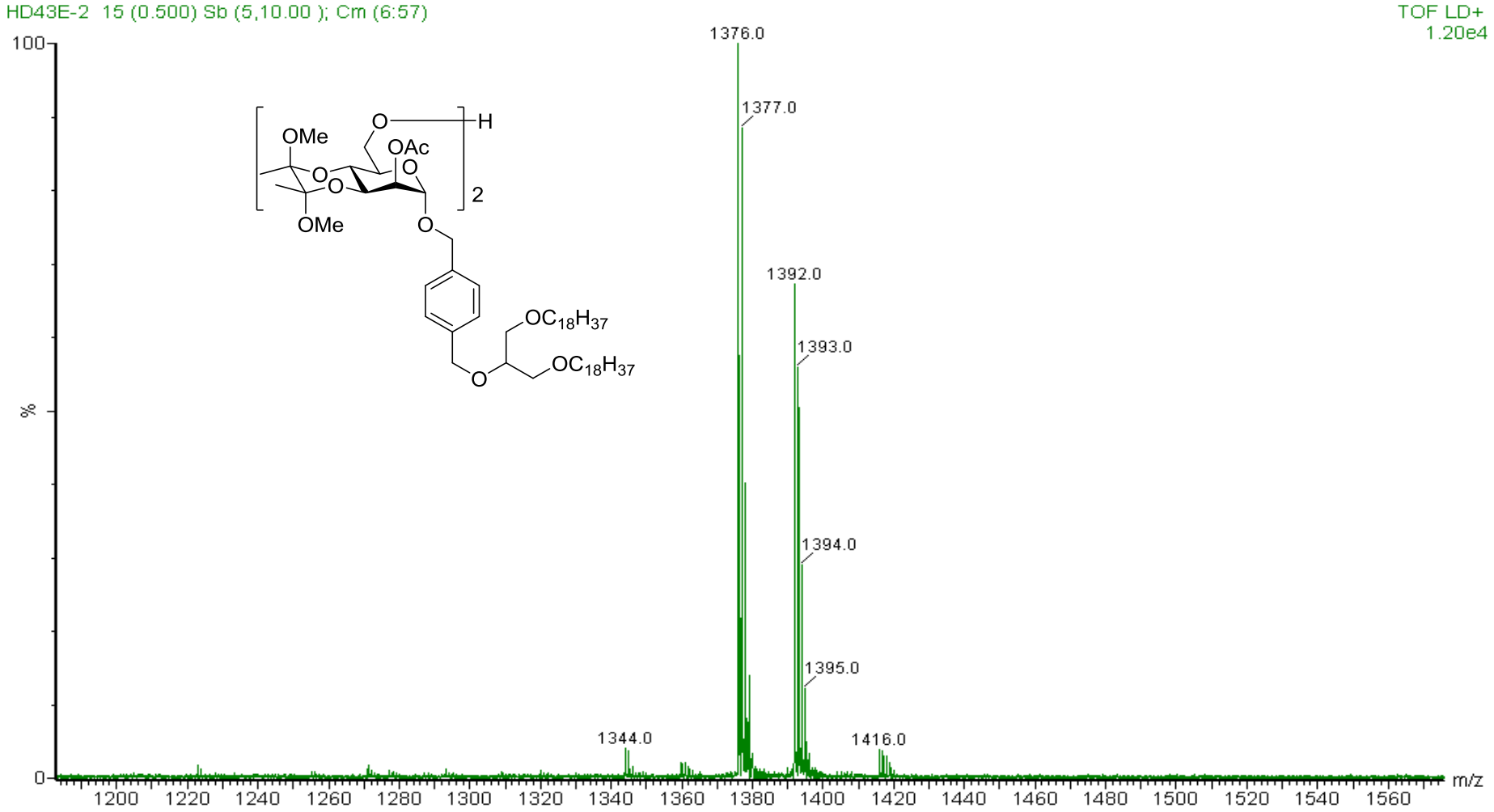
^{1}H NMR of Compound **11-2b** ($CDCl_3$, 400MHz)



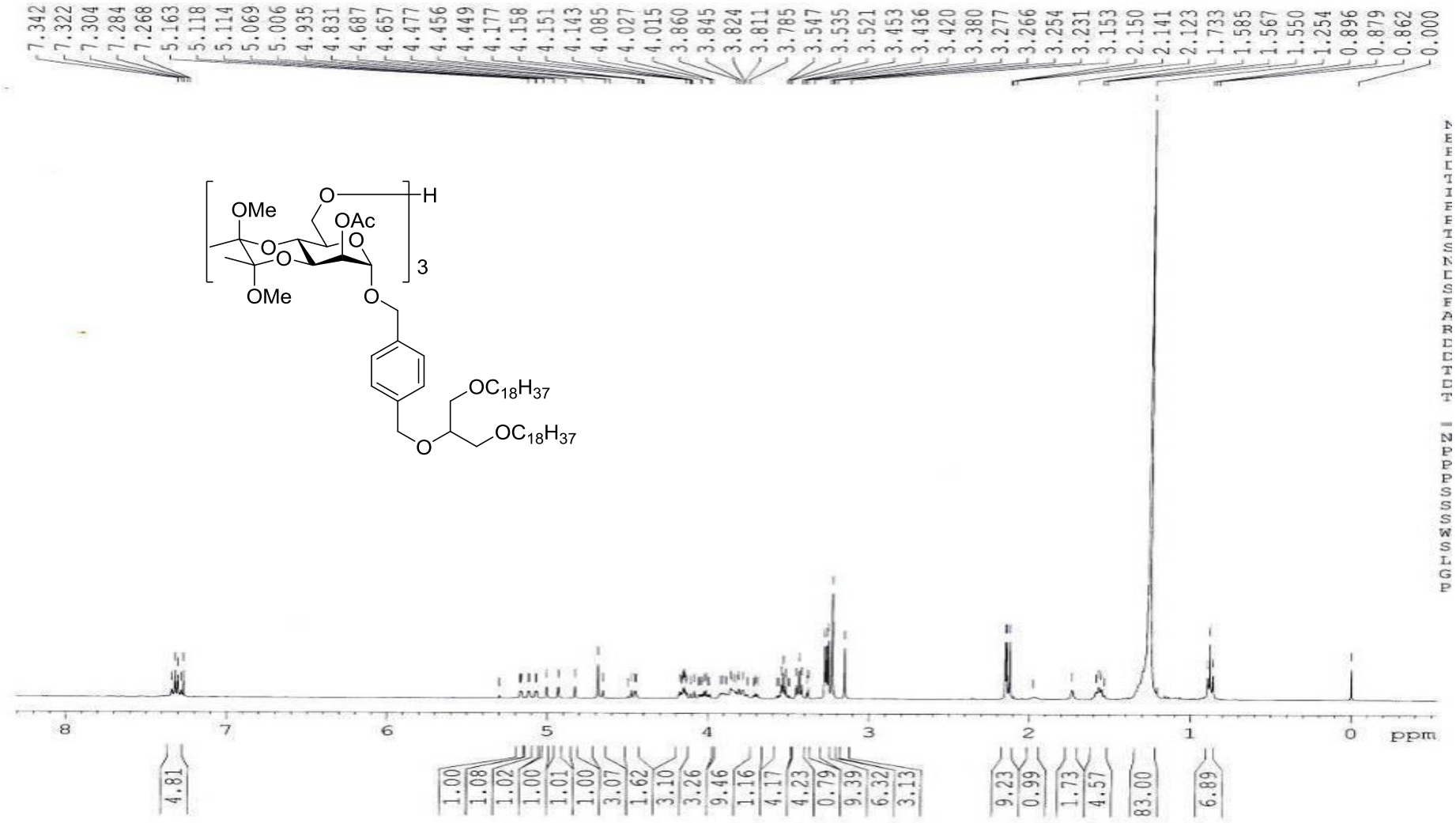
^{13}C NMR of Compound **11-2b** ($CDCl_3$, 100MHz)



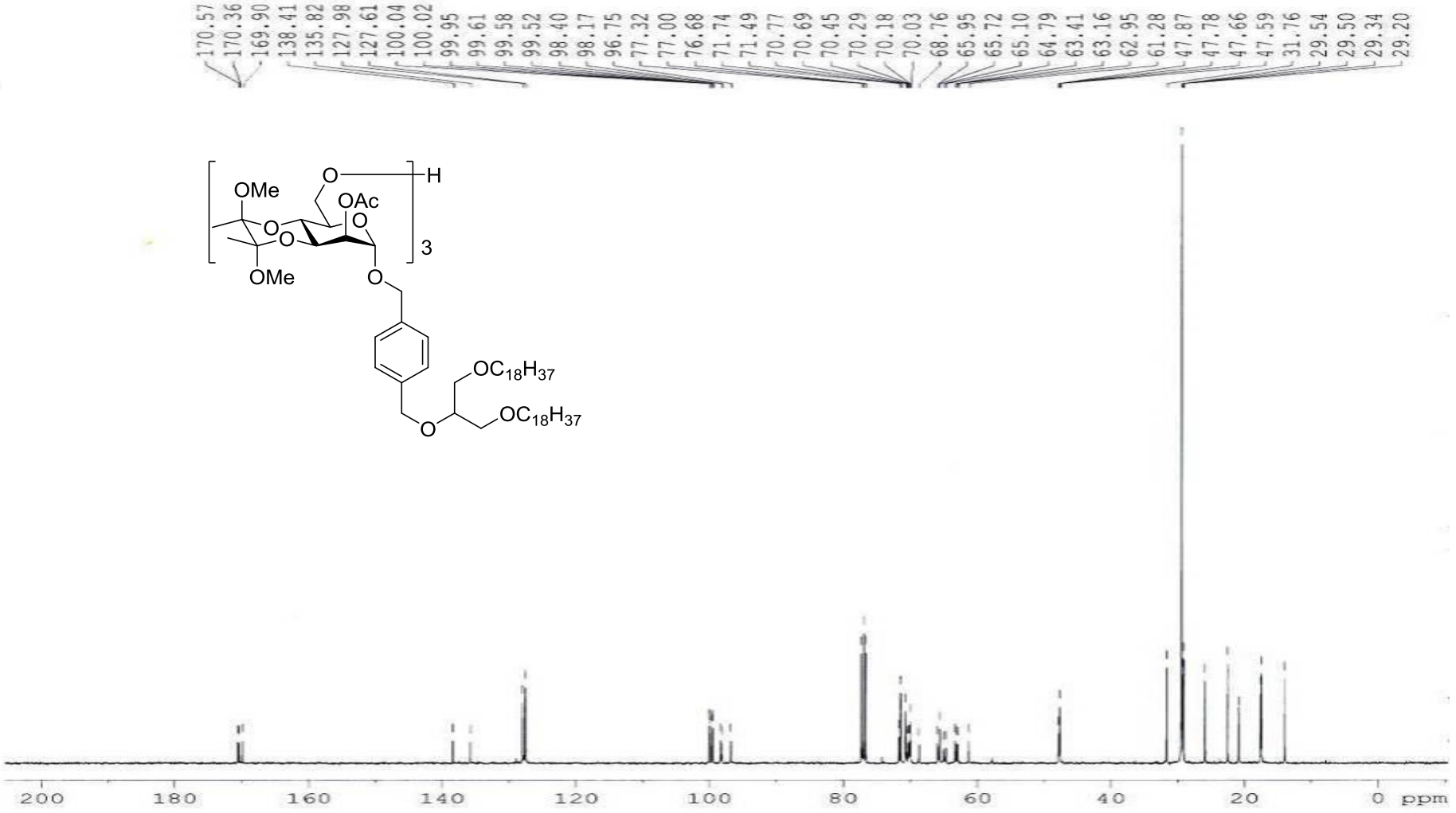
MALDI-TOF-MS of Compound **11-2b**



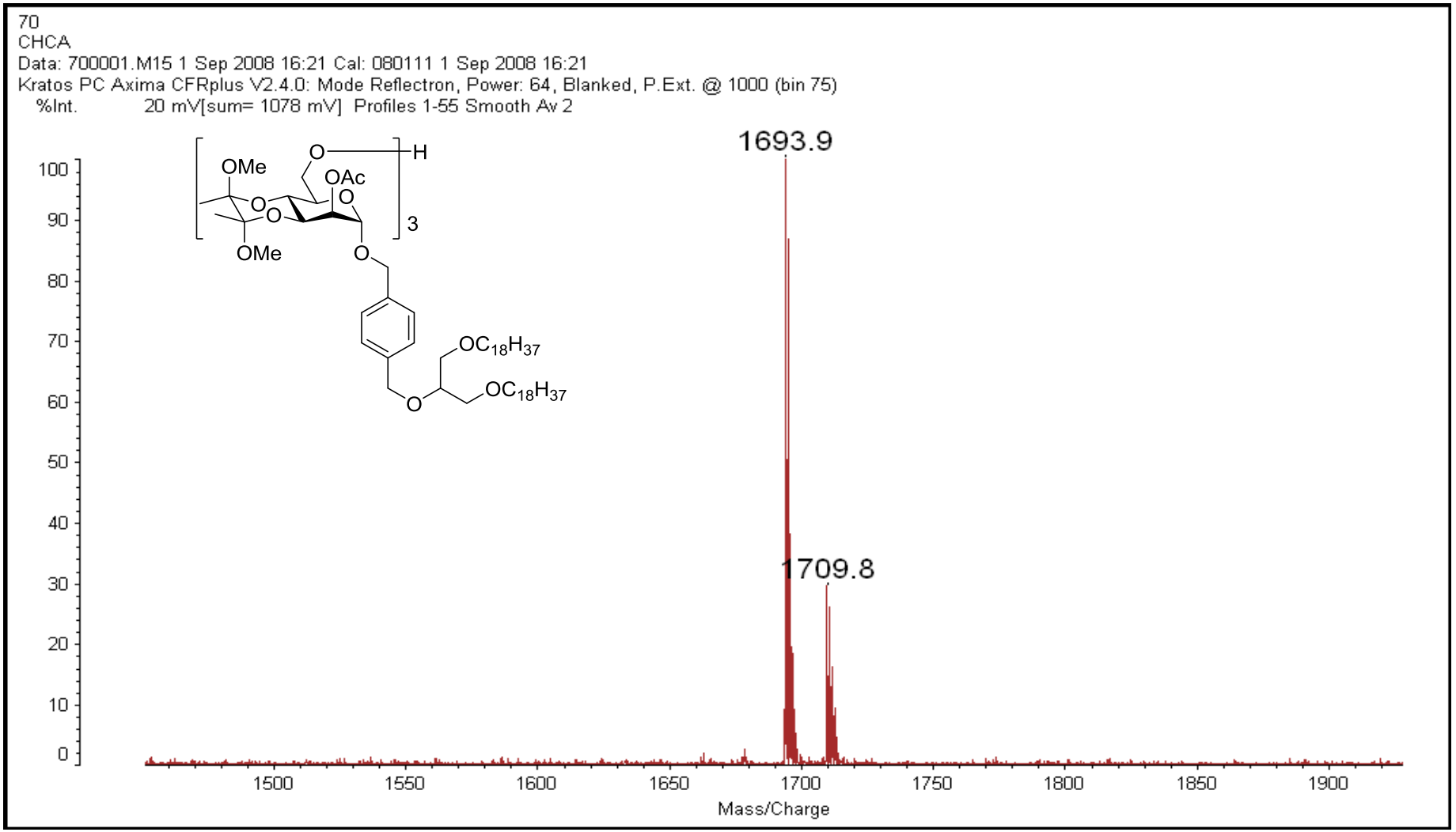
^{1}H NMR of Compound **11-3b** ($CDCl_3$, 400MHz)



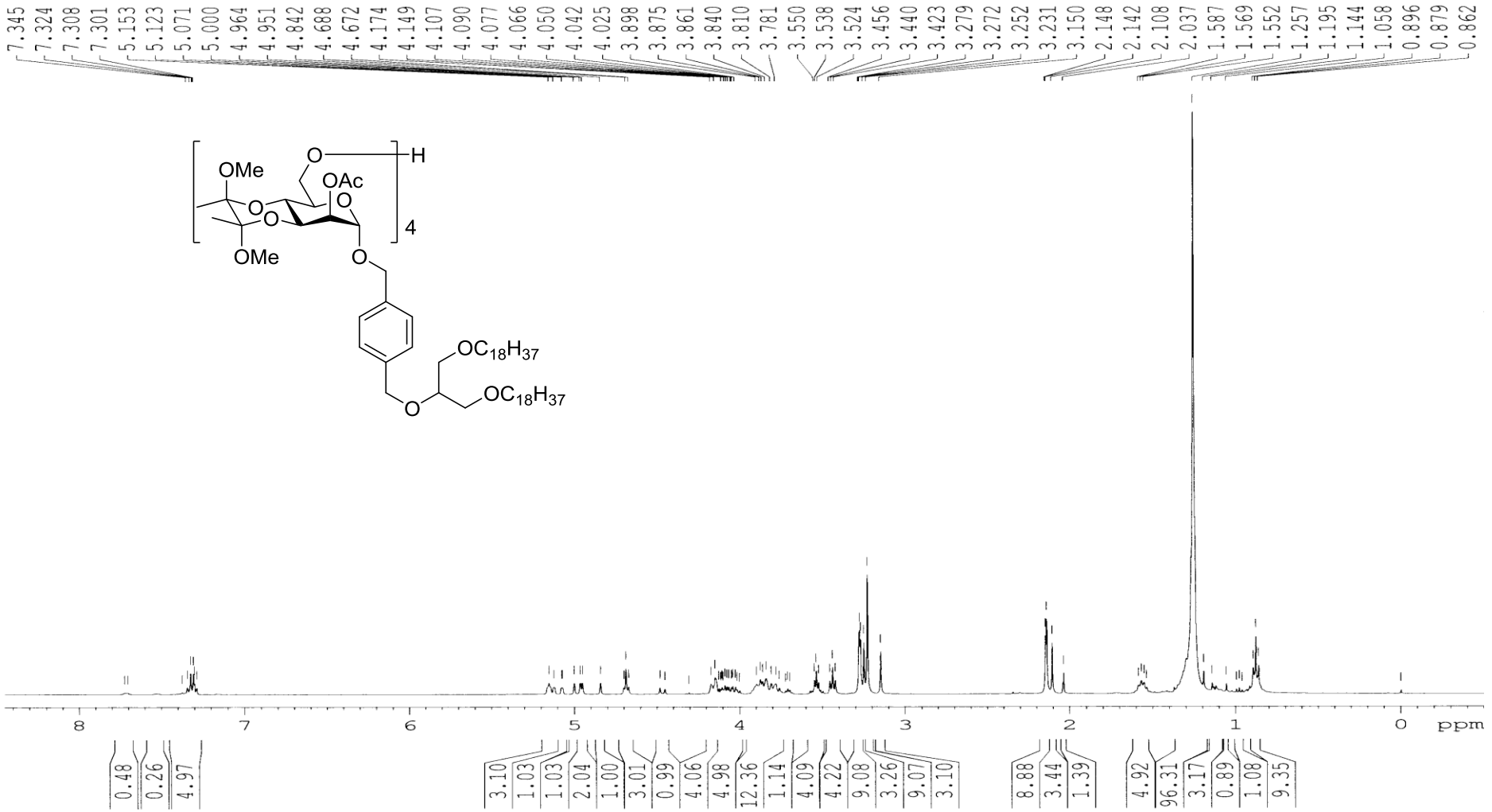
^{13}C NMR of Compound **11-3b** ($CDCl_3$, 100MHz)



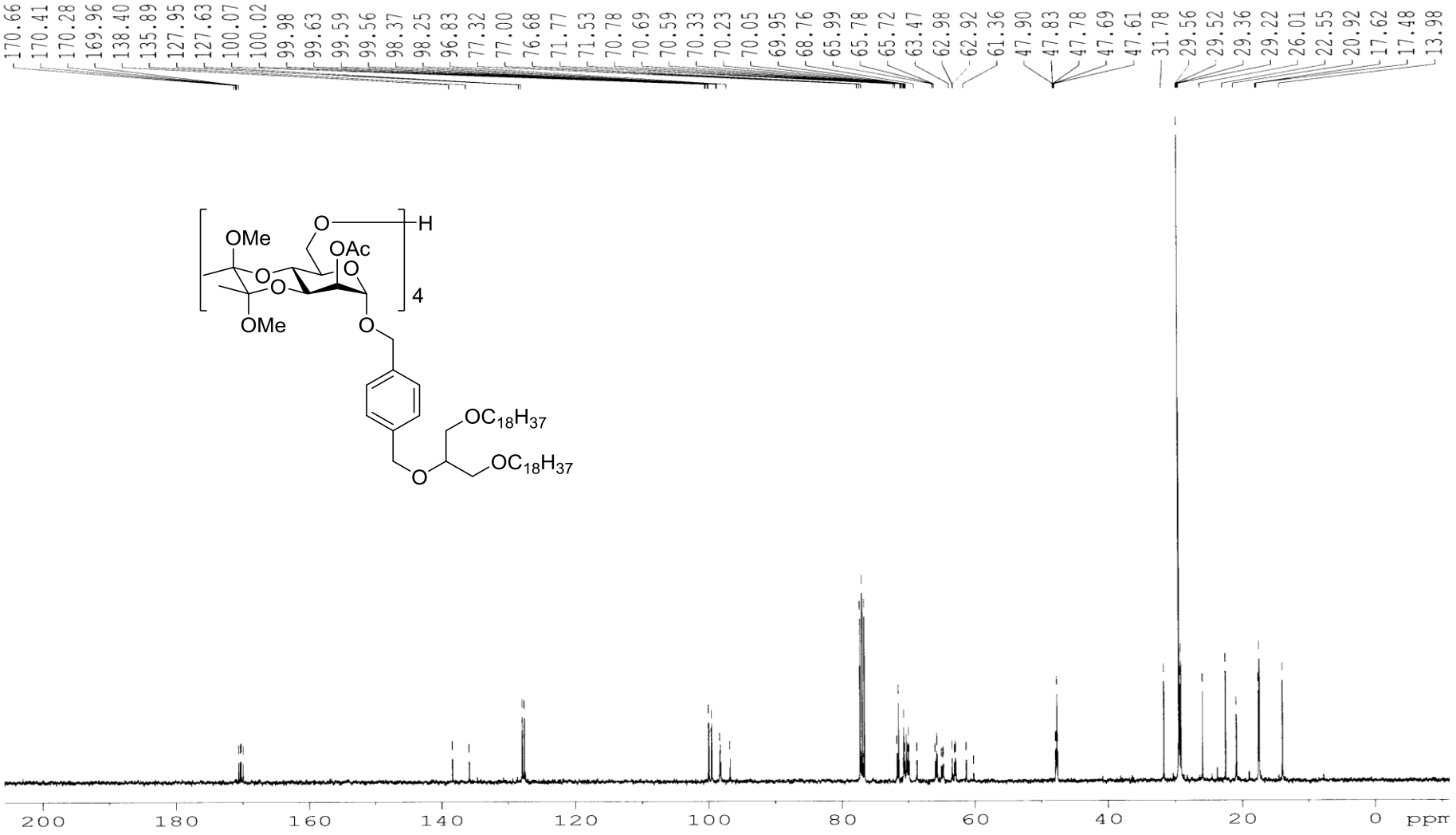
MALDI-TOF-MS of Compound **11-3b**



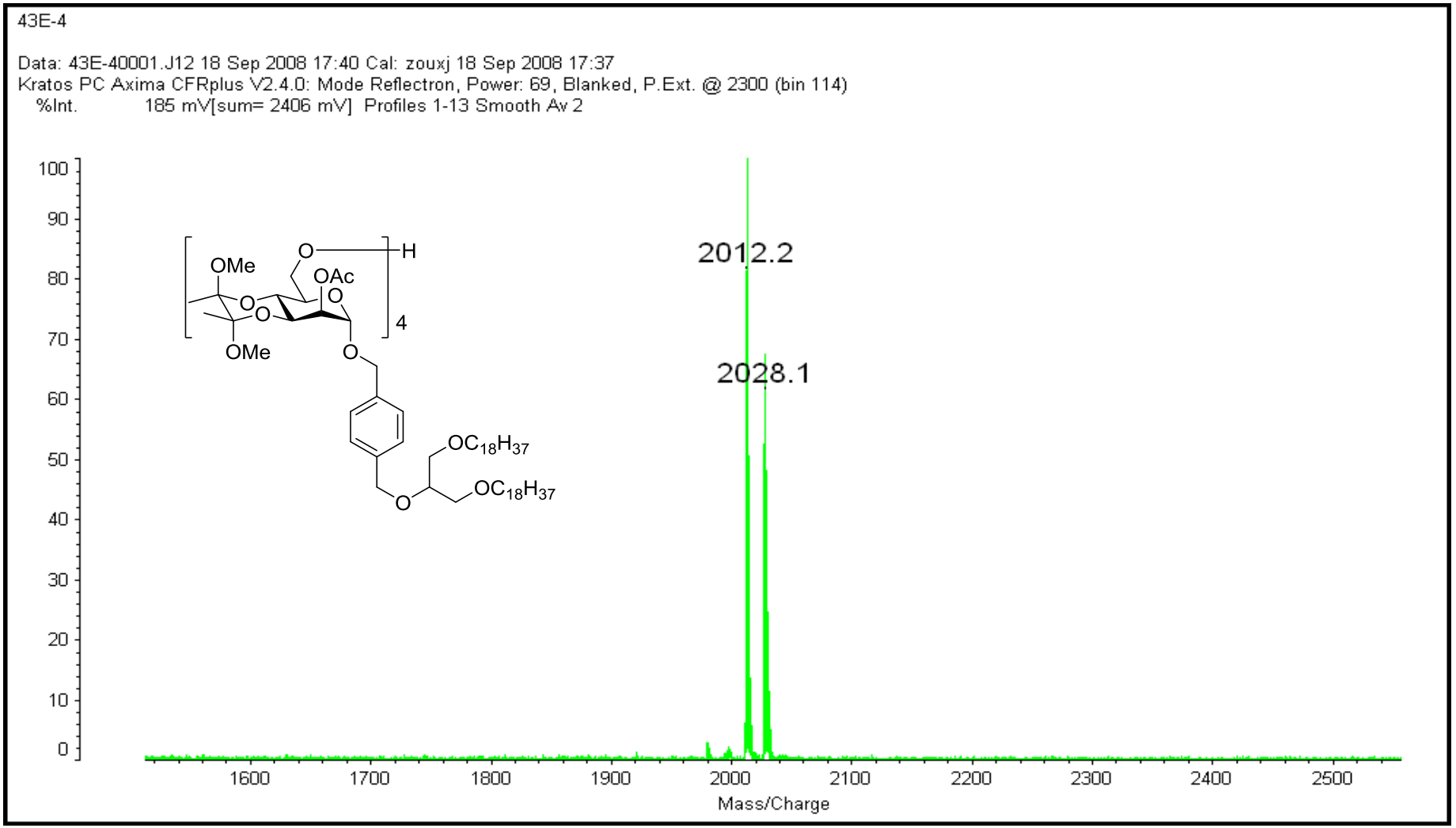
^{1}H NMR of Compound **11-4b** ($CDCl_3$, 400MHz)



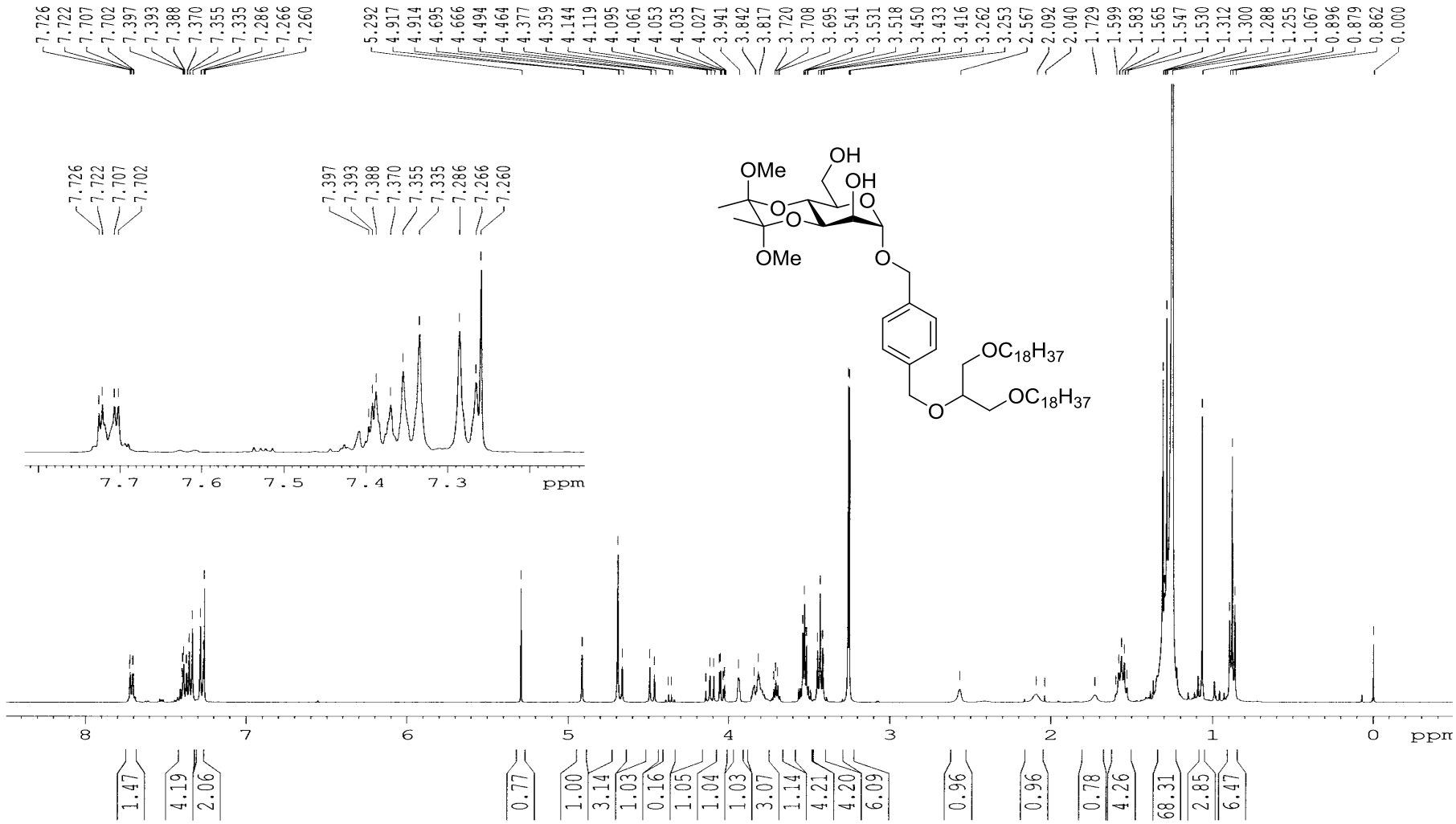
^{13}C NMR of Compound **11-4b** ($CDCl_3$, 100MHz)



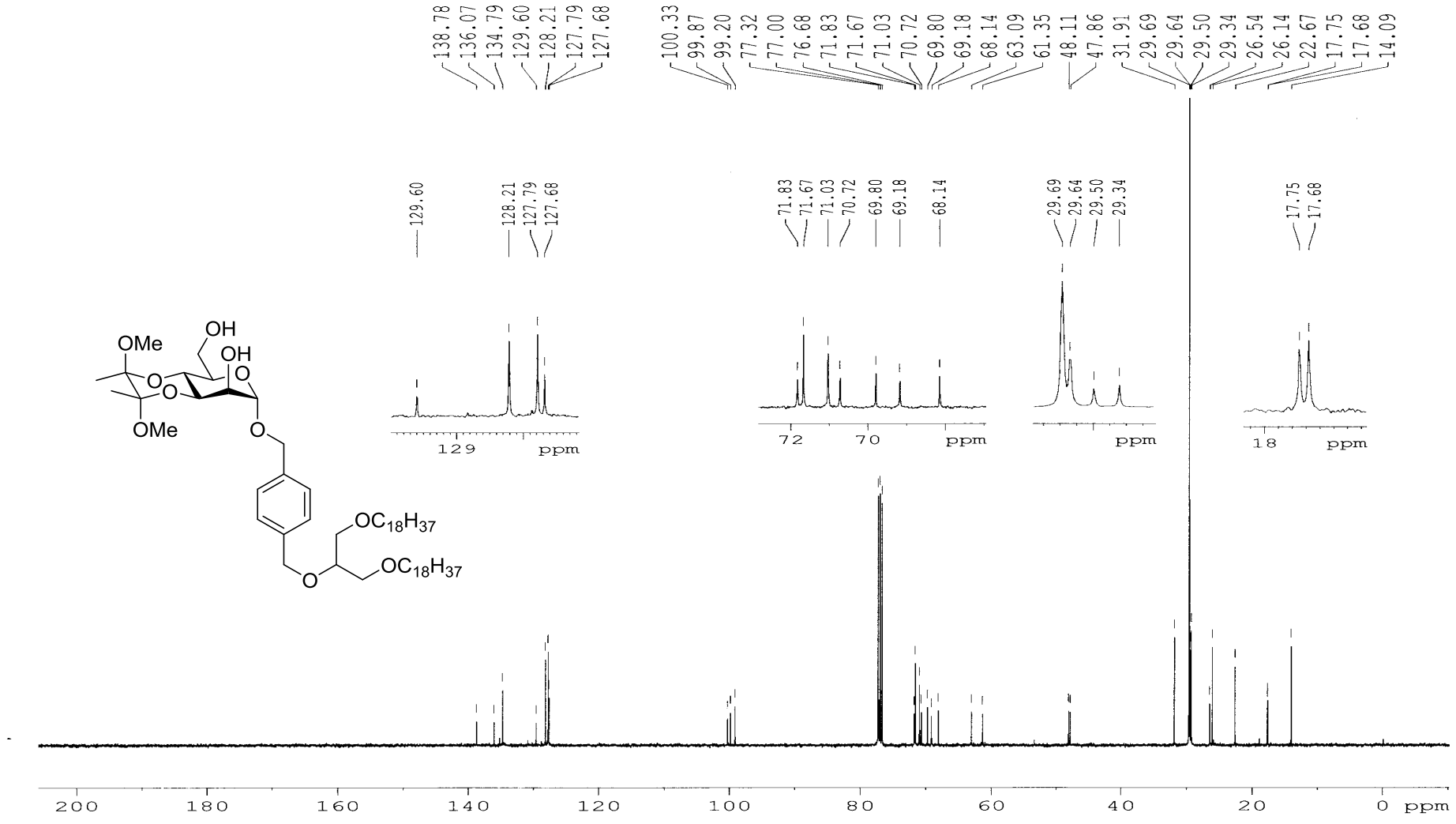
MALDI-TOF-MS of Compound **11-4b**



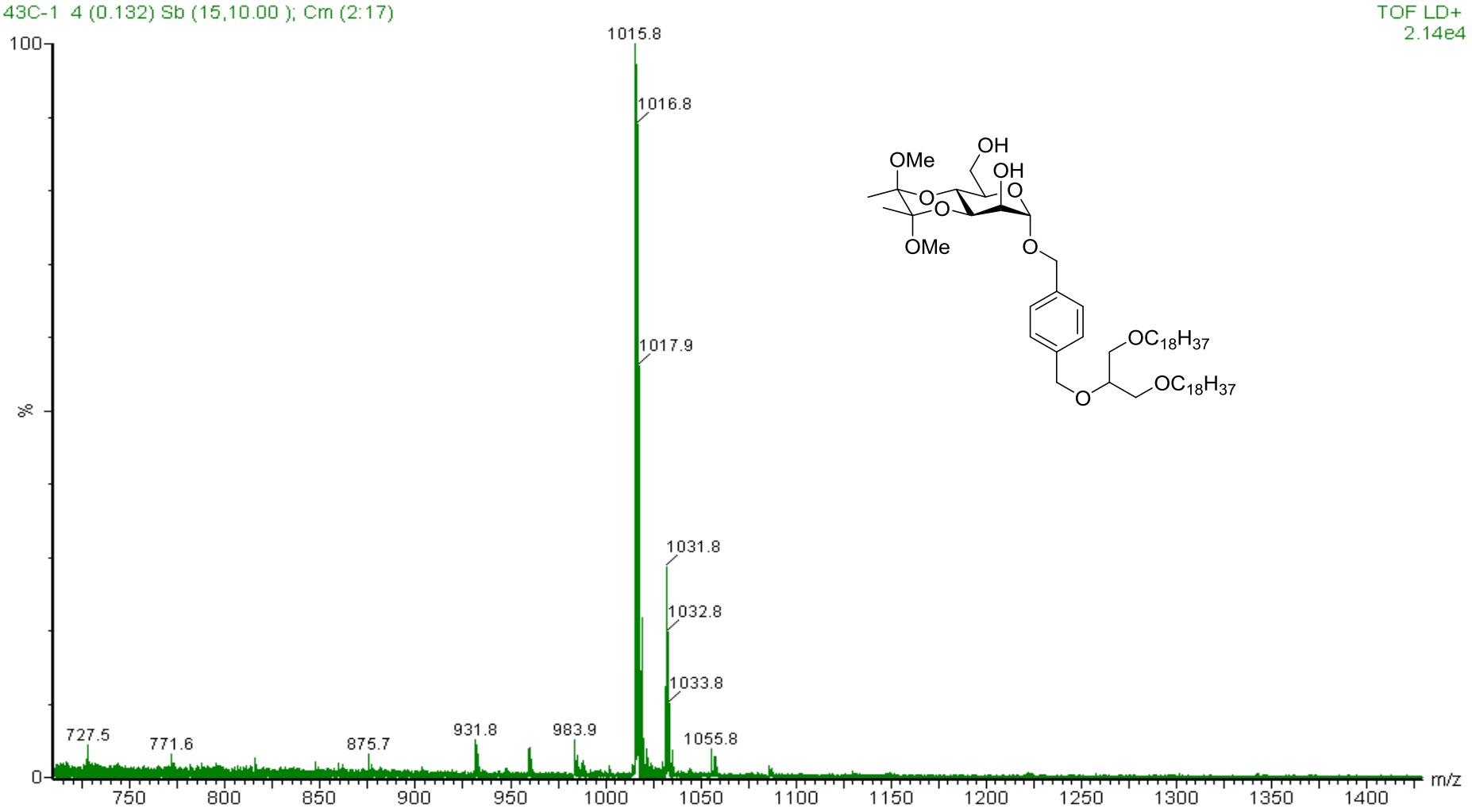
^{1}H NMR of Compound **12** ($CDCl_3$, 400MHz)



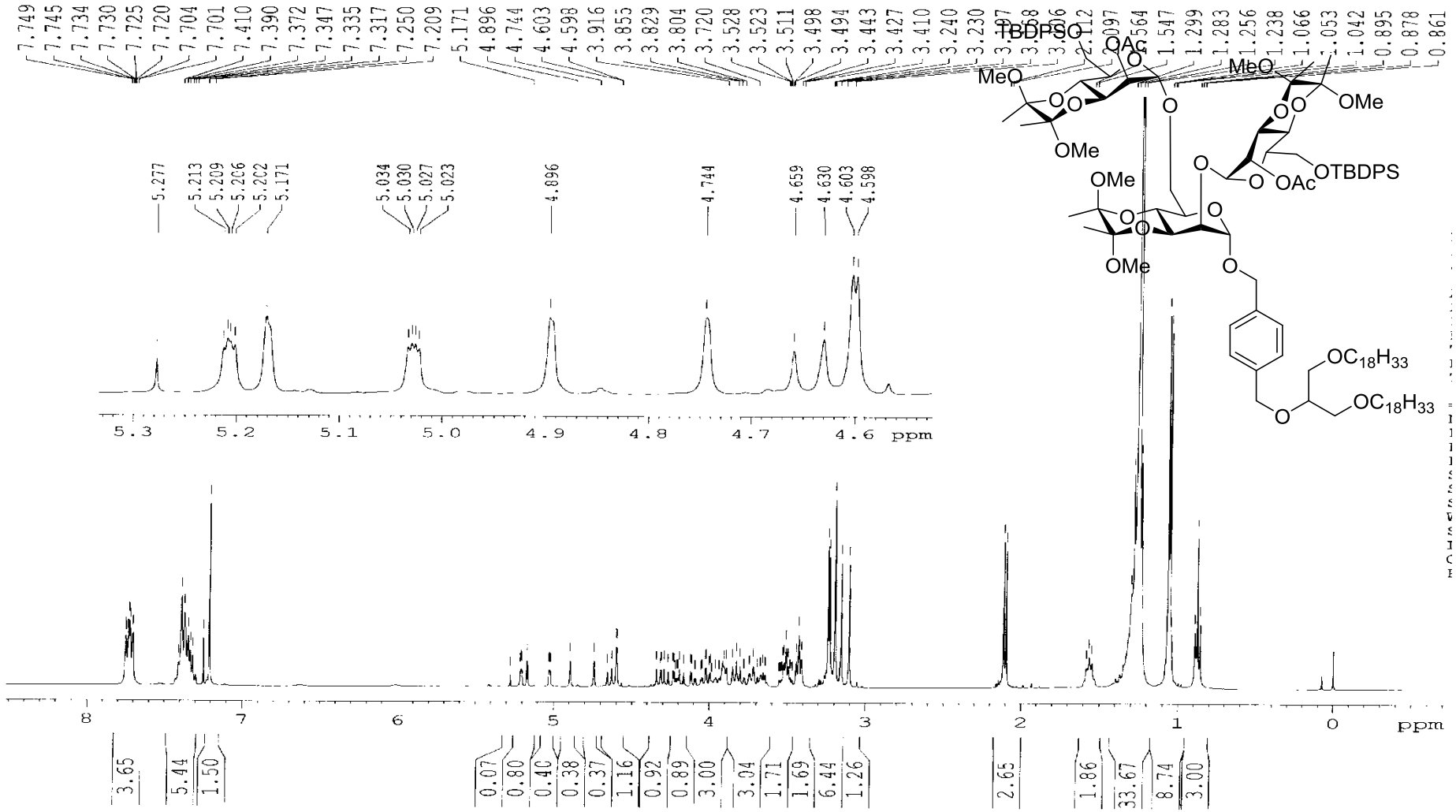
^{13}C NMR of Compound **12** ($CDCl_3$, 100MHz)



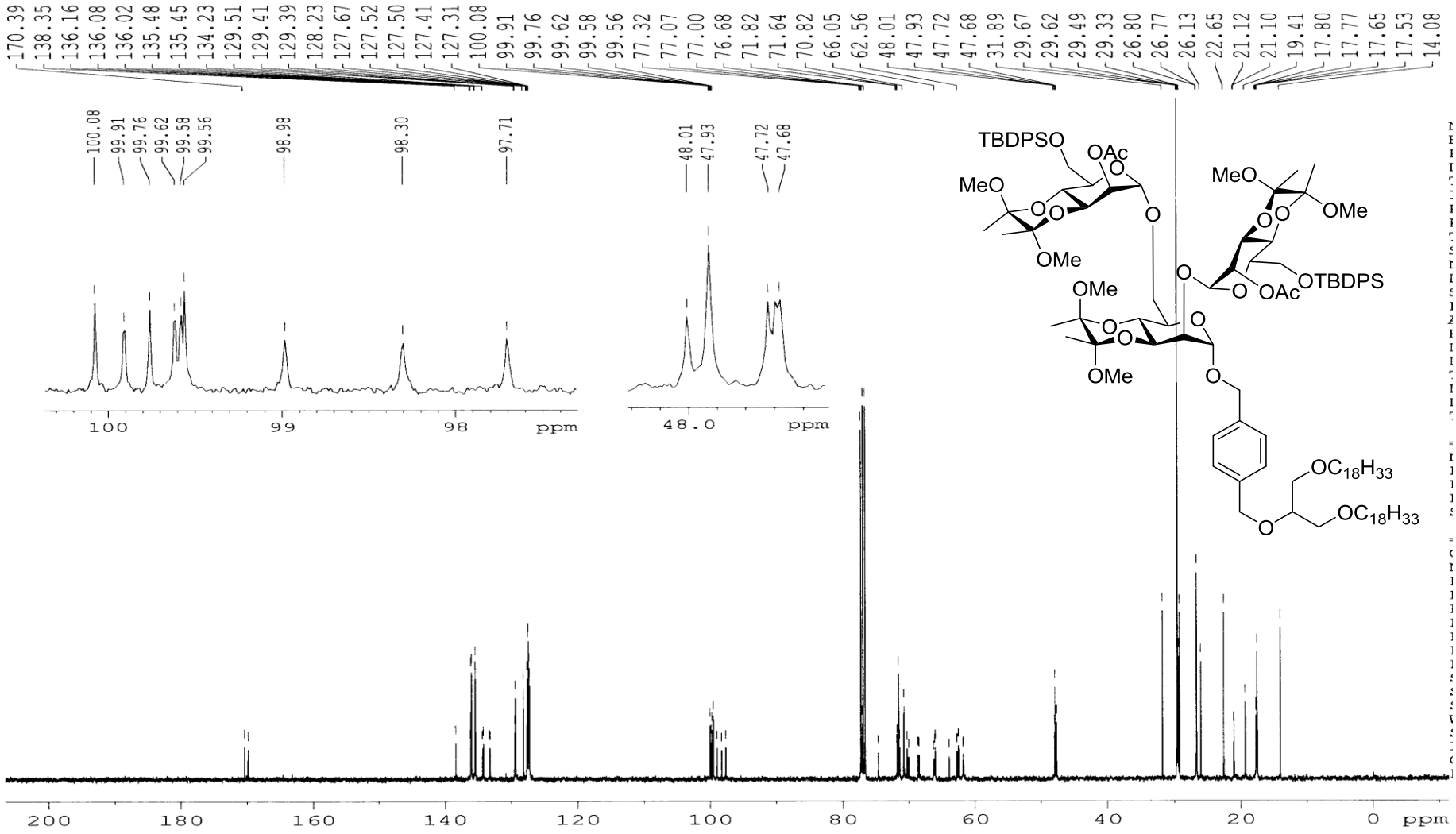
MALDI-TOF-MS of Compound **12**



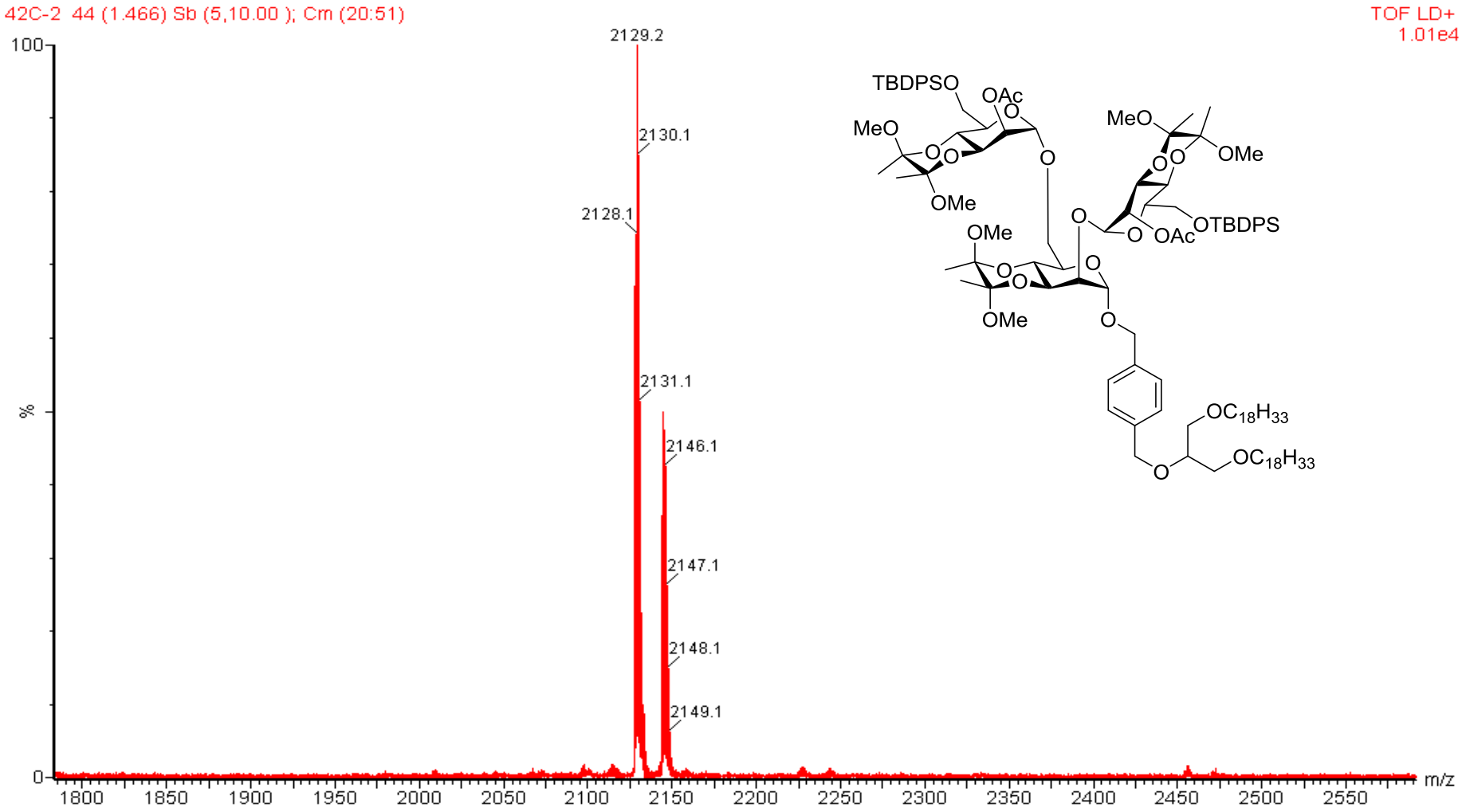
^{1}H NMR of Compound **13** ($CDCl_3$, 400MHz)



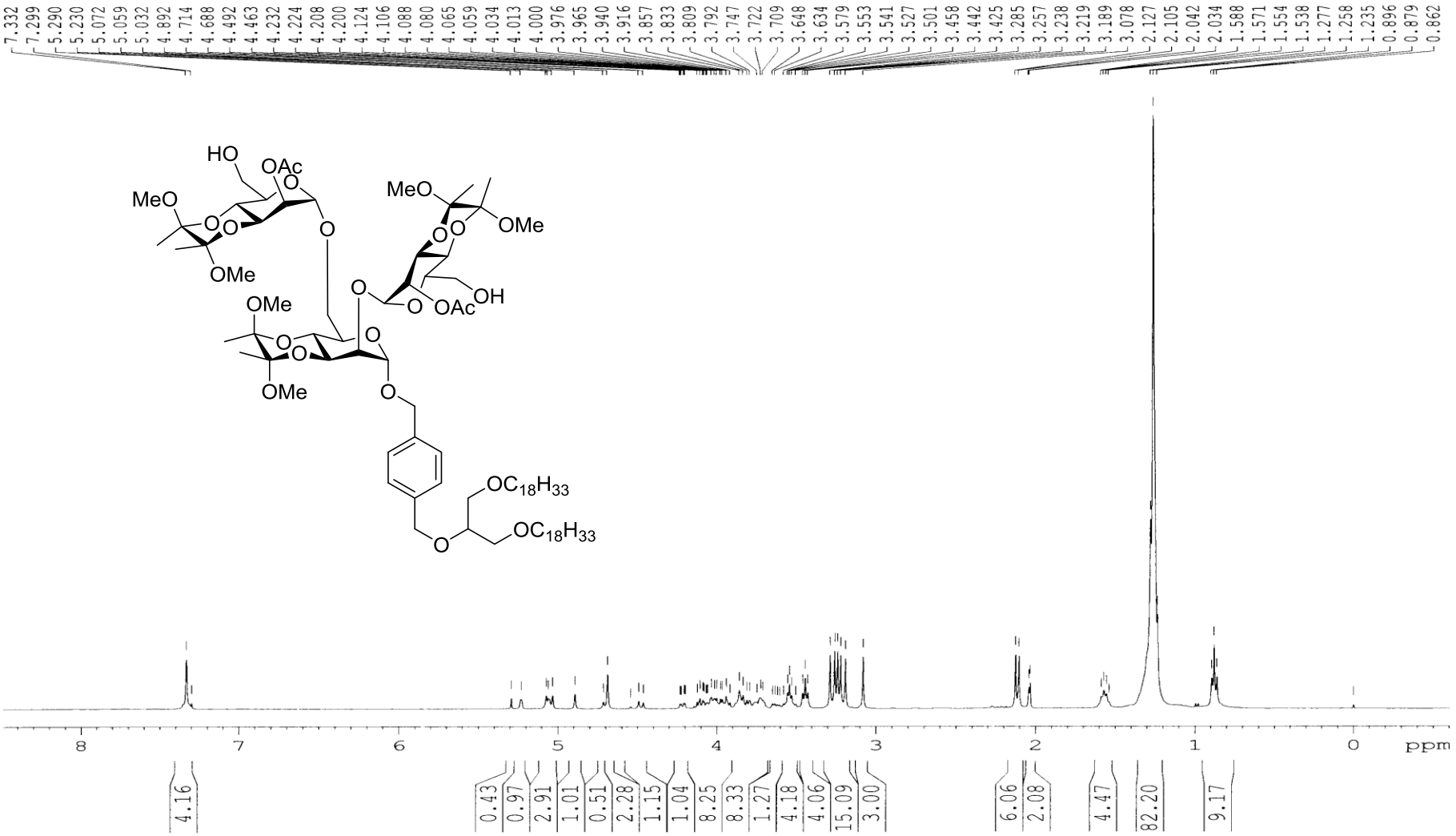
^{13}C NMR of Compound **13** ($CDCl_3$, 100MHz)



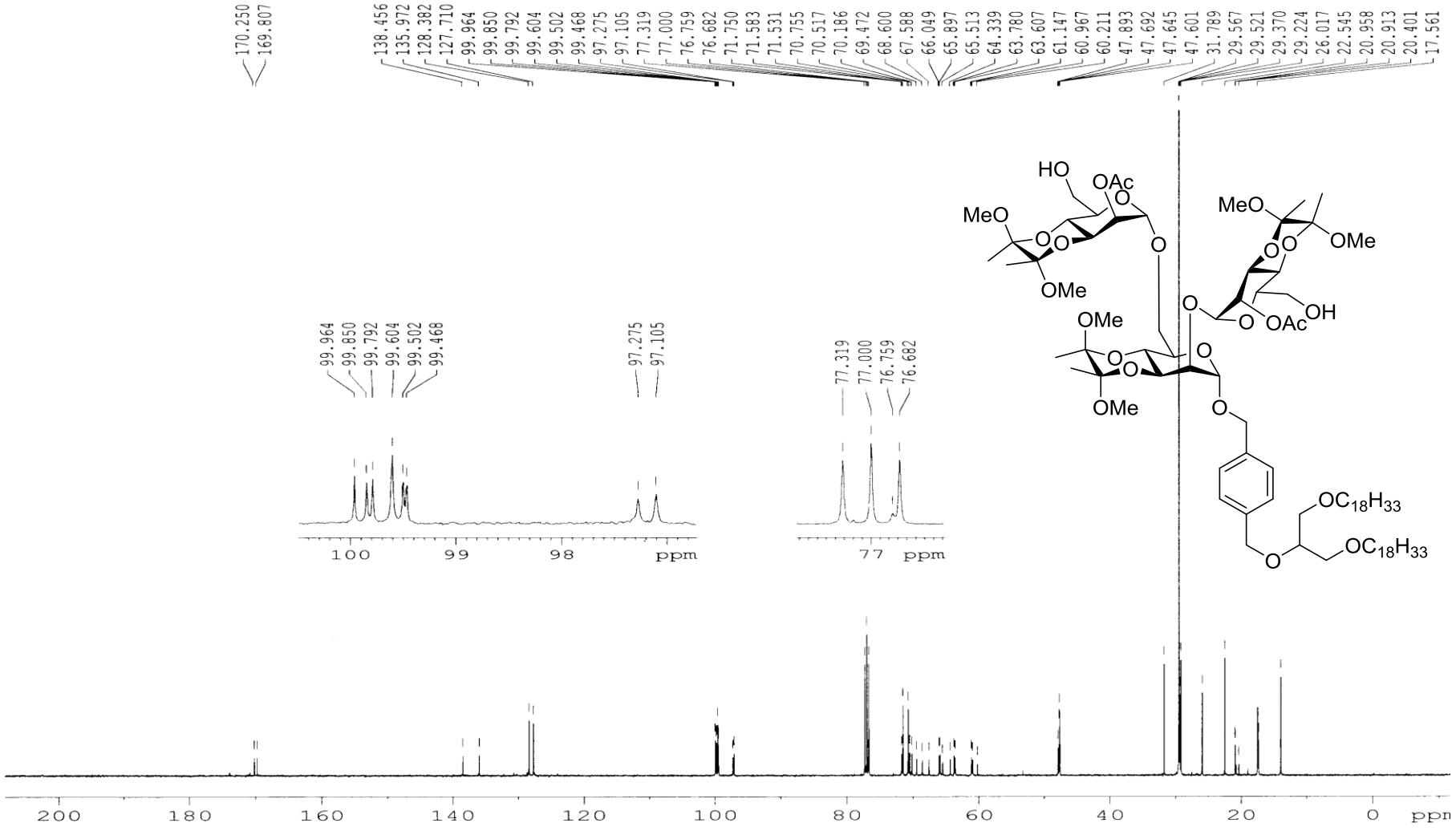
MALDI-TOF-MS of Compound **13**



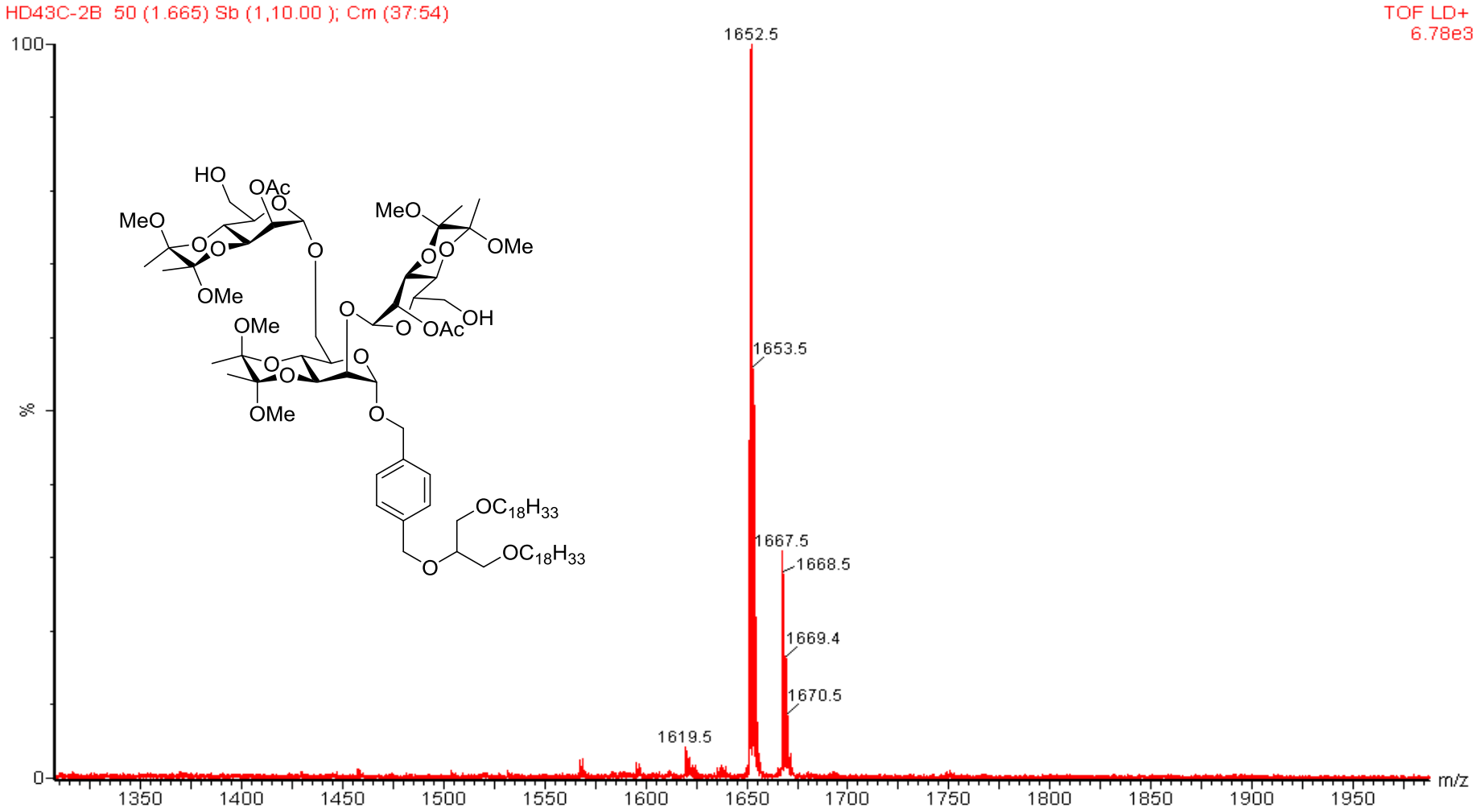
^{1}H NMR of Compound **16** ($CDCl_3$, 400MHz)



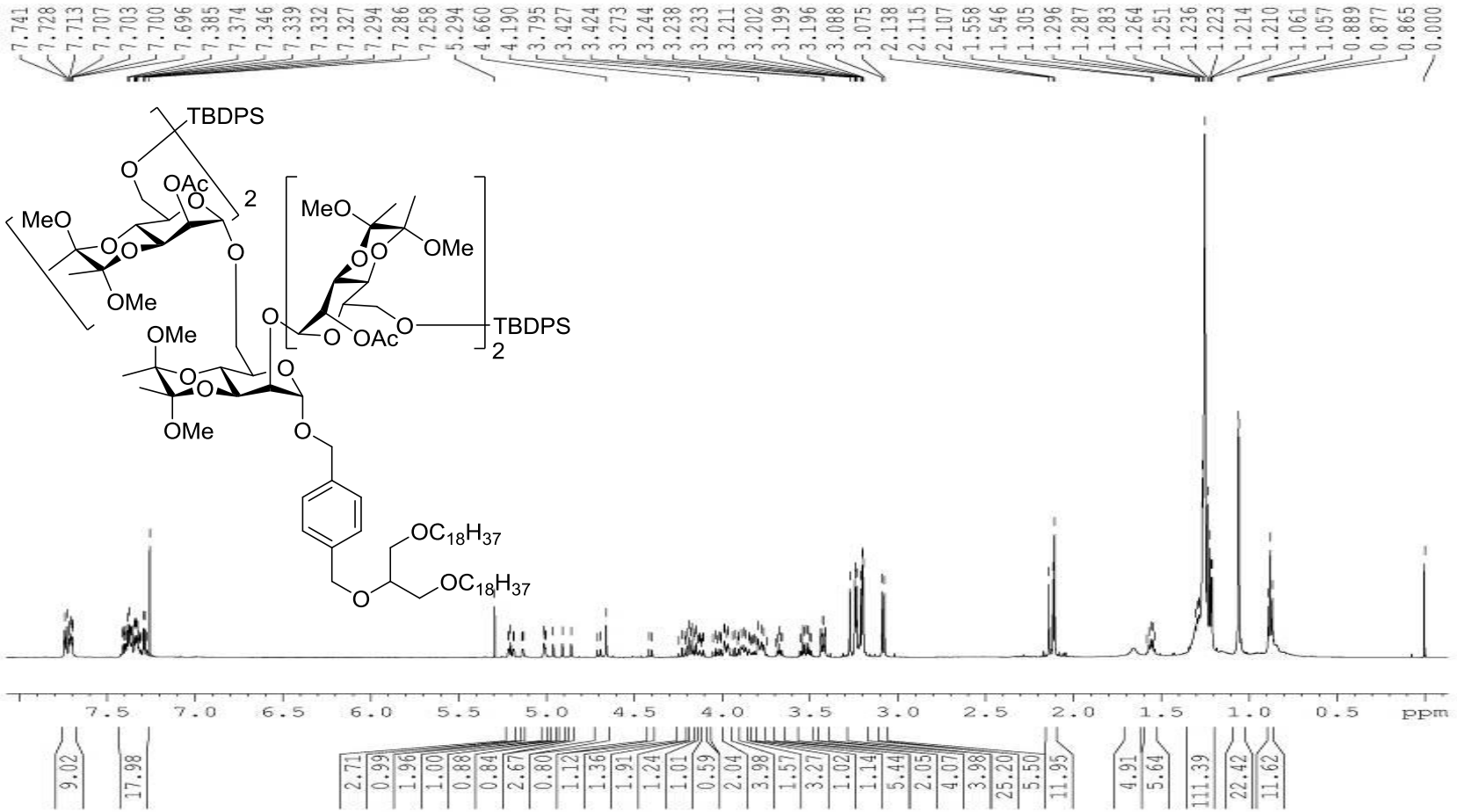
^{13}C NMR of Compound **16** ($CDCl_3$, 100MHz)



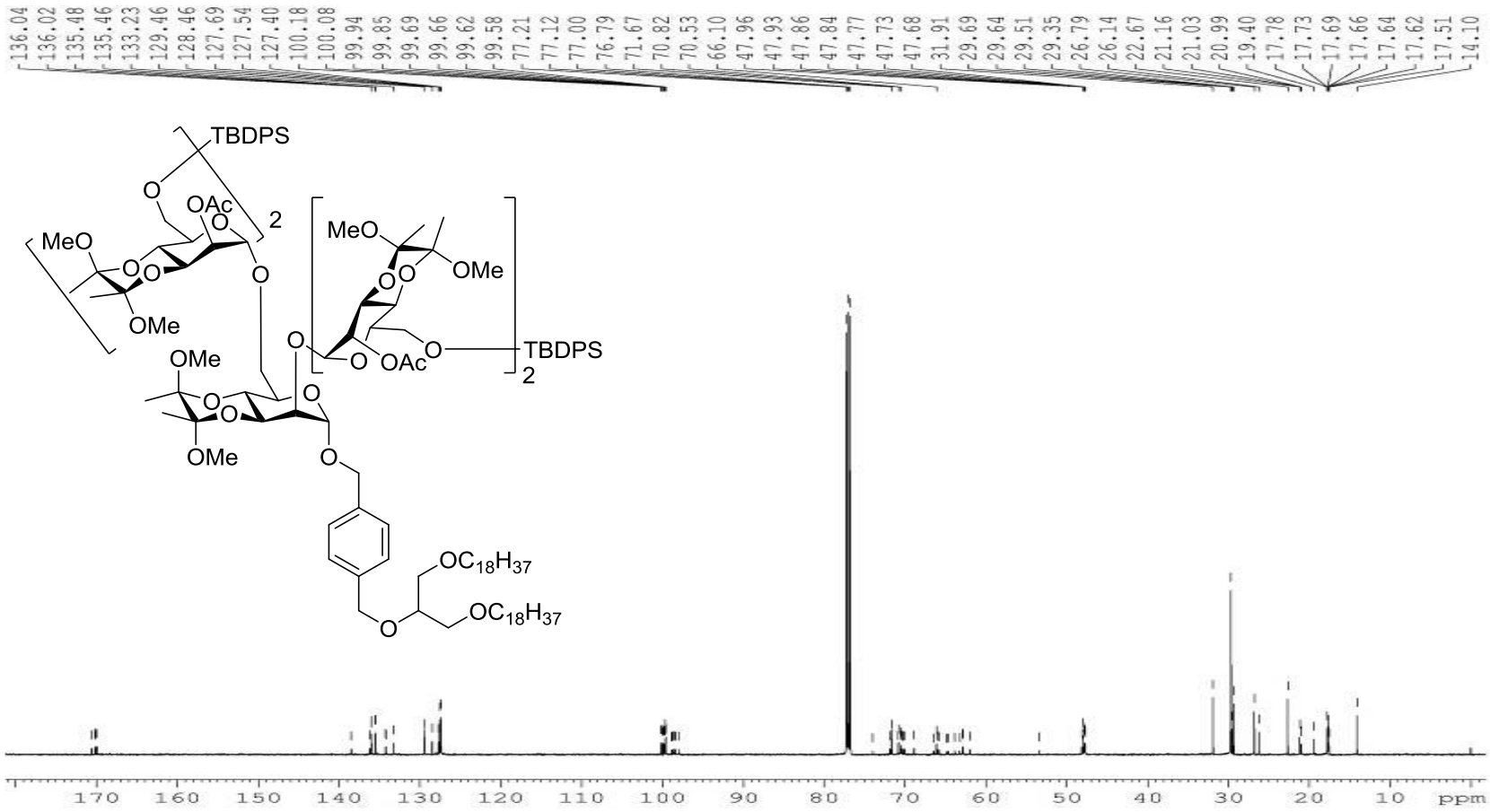
MALDI-TOF-MS of Compound **16**



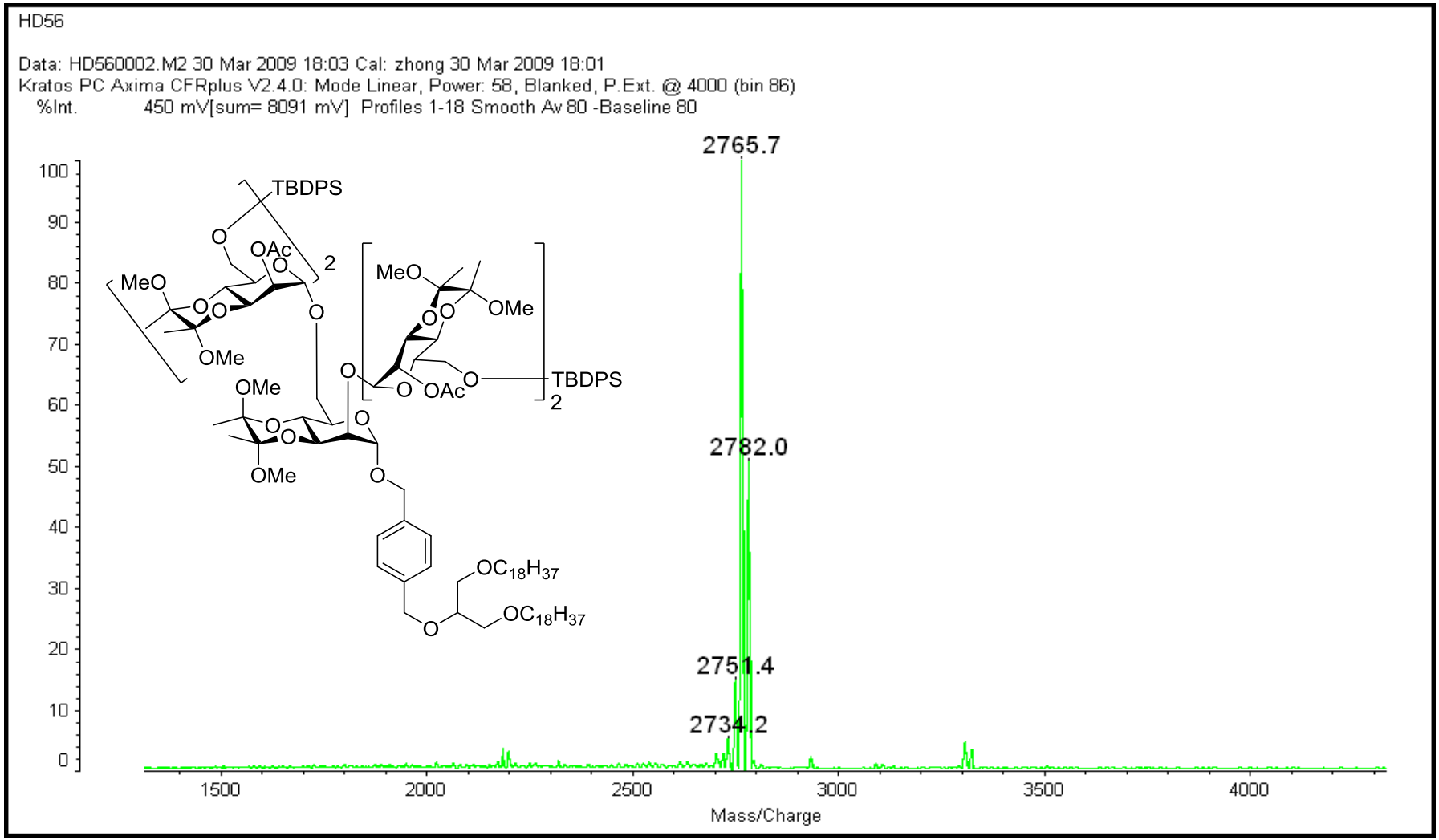
^{1}H NMR of Compound **17** ($CDCl_3$, 600MHz)



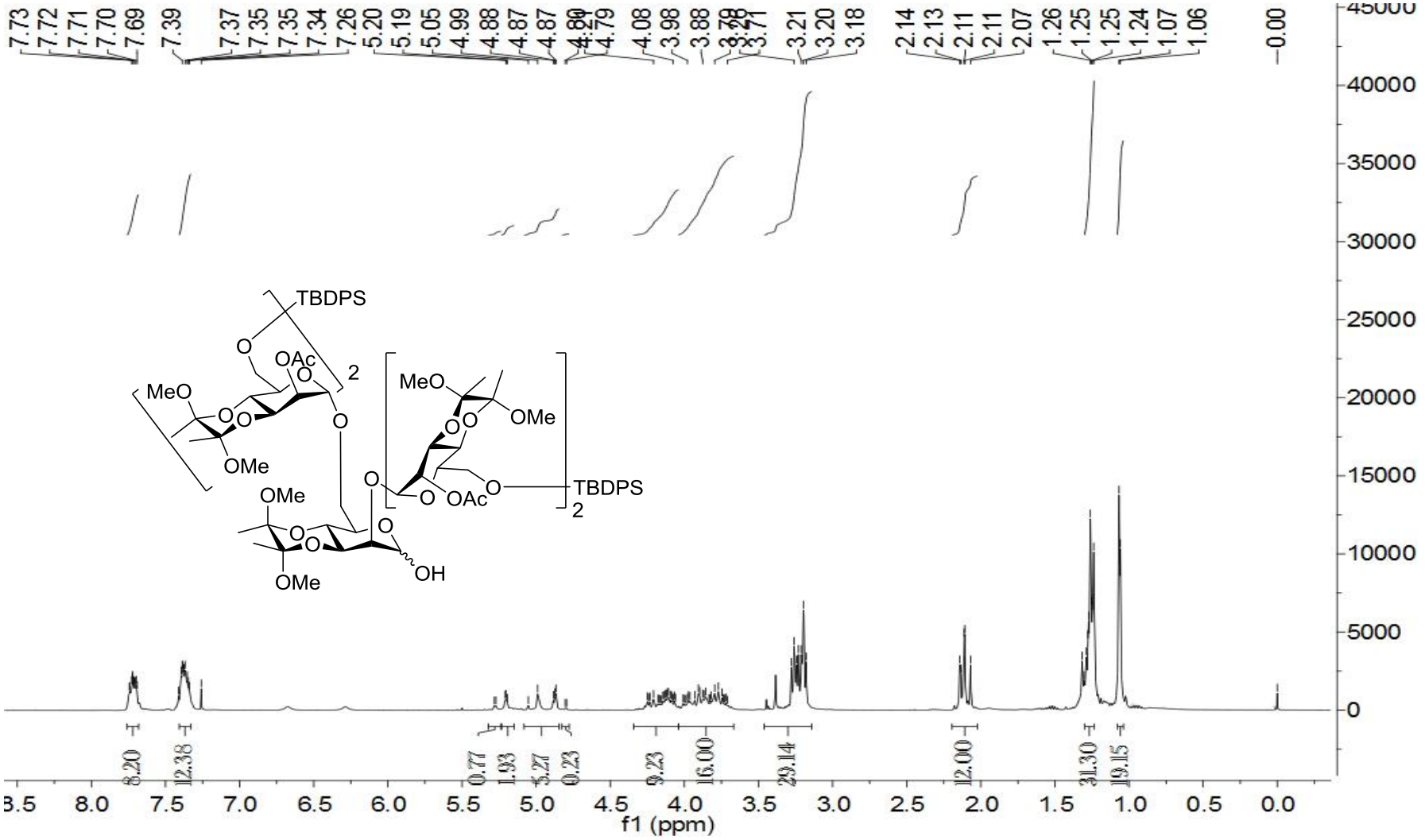
^{13}C NMR of Compound **17** ($CDCl_3$, 150MHz)



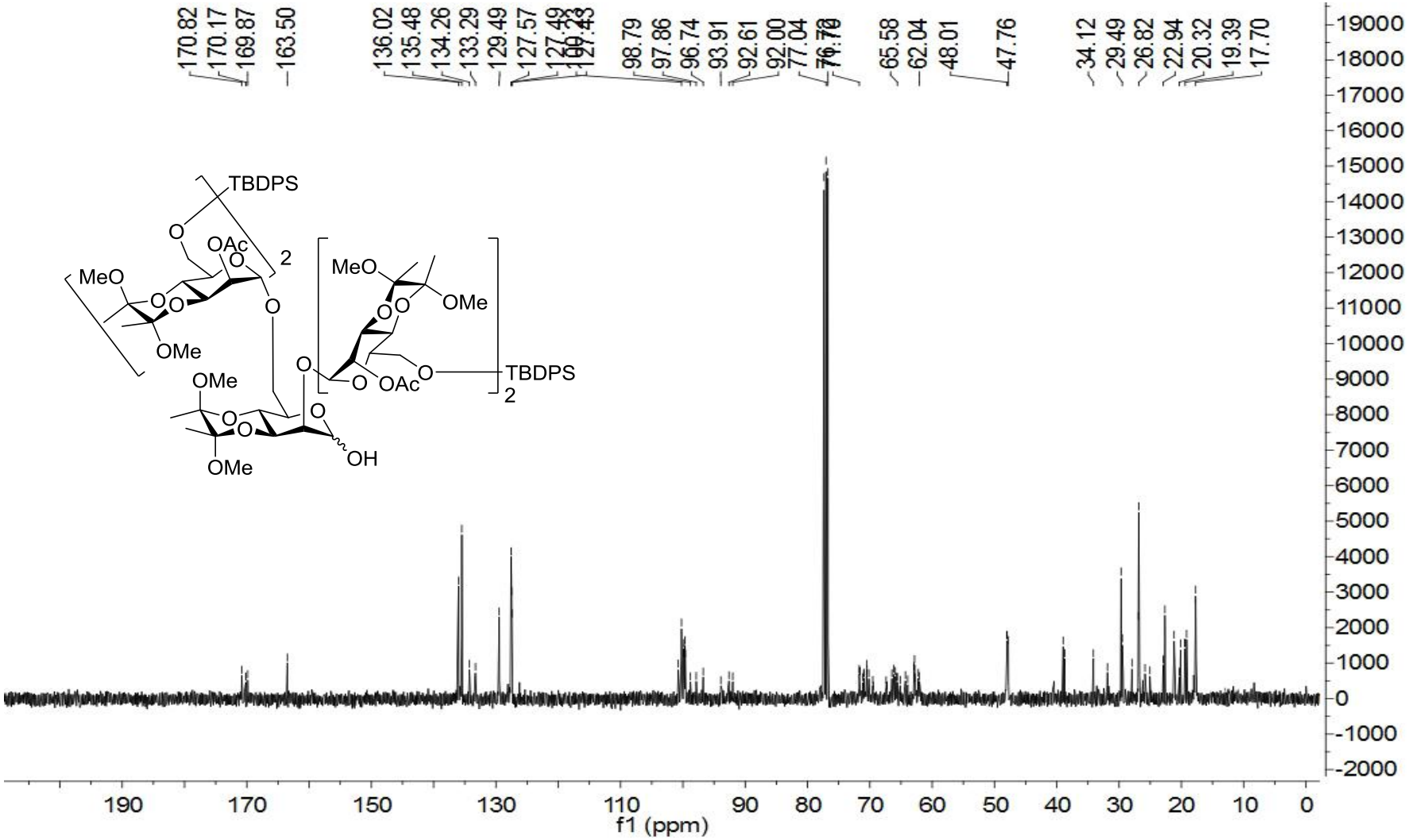
MALDI-TOF-MS of Compound **17**



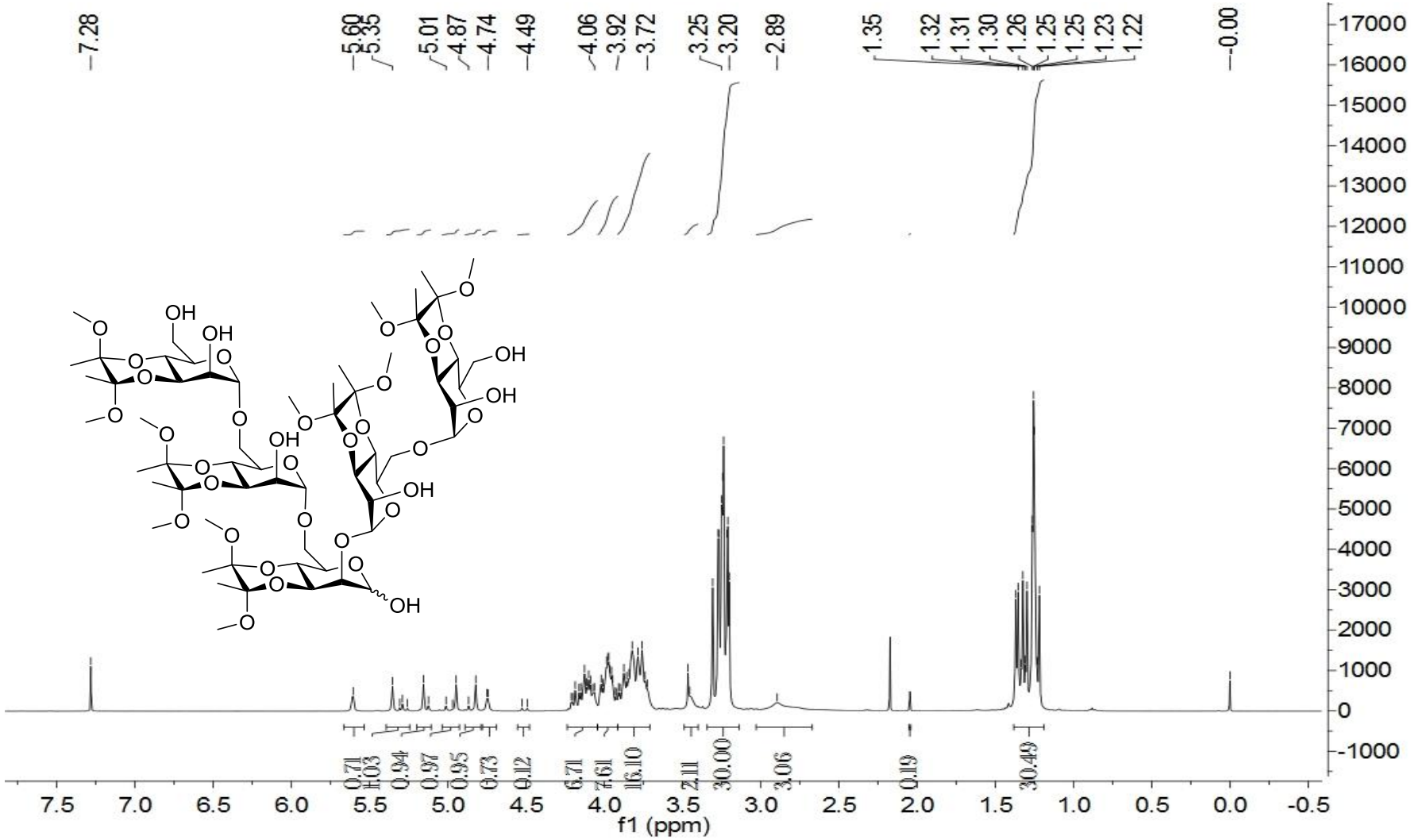
^{1}H NMR of Compound **18** ($CDCl_3$, 400MHz)



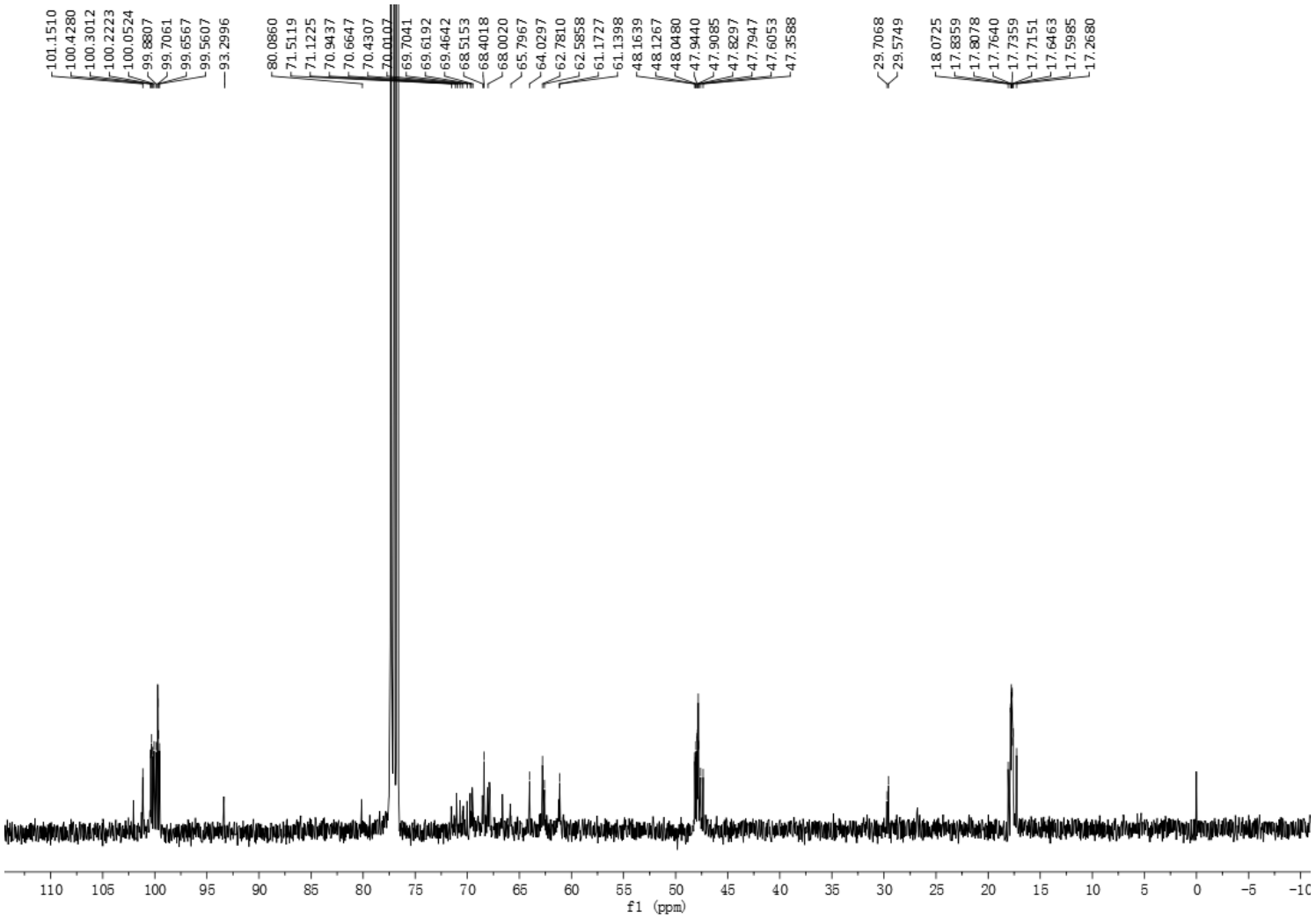
^{13}C NMR of Compound **18** ($CDCl_3$, 100MHz)



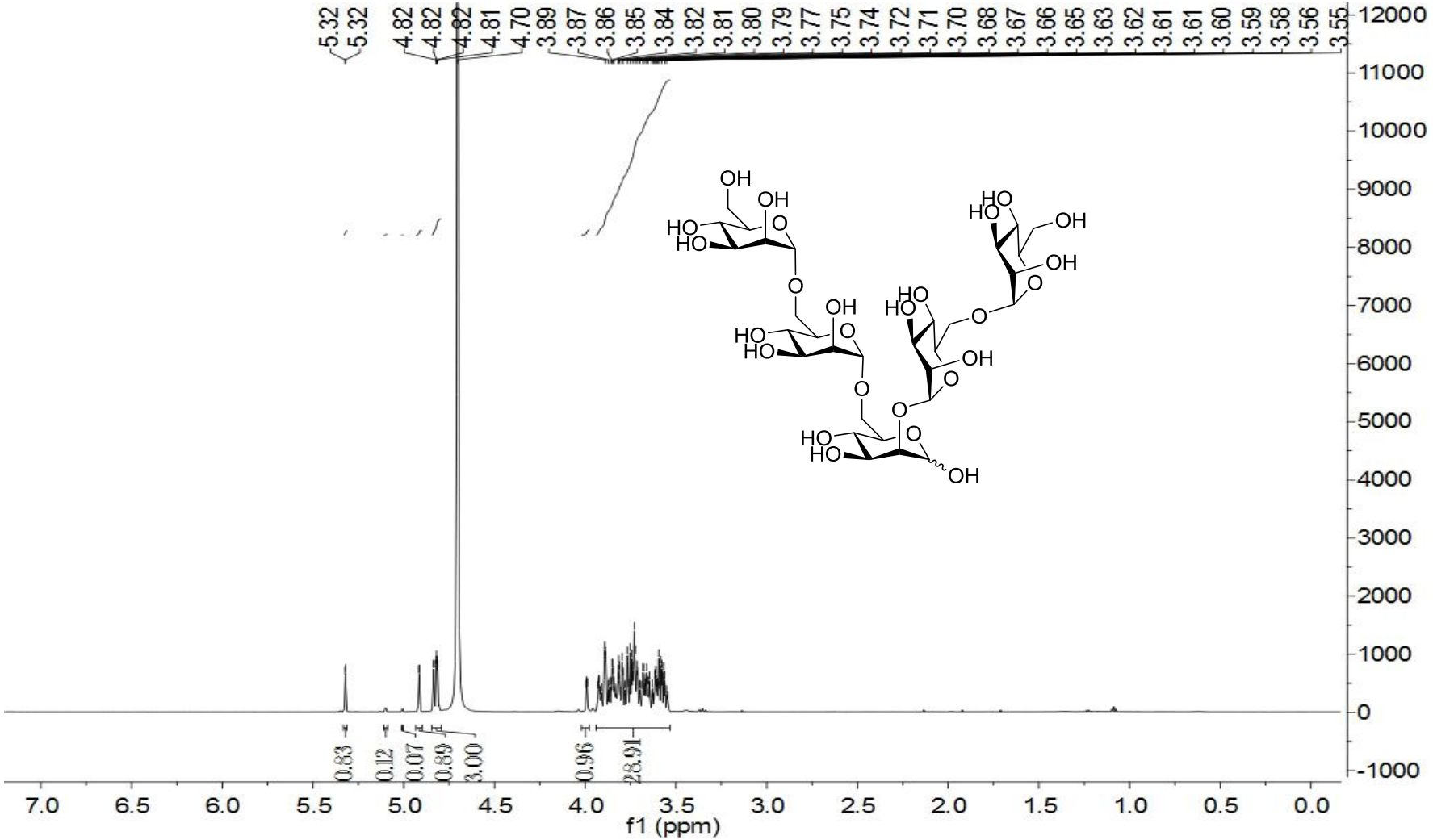
^{1}H NMR of Compound **19** ($CDCl_3$, 400MHz)



^{13}C NMR of Compound **19** ($CDCl_3$, 100MHz)



^{1}H NMR of Compound **20** (D_2O, 600MHz)



^{13}C NMR of Compound **20** (D_2O, 150MHz)