

A Unified Strategy for C1-C14 Fragment/Segment** of Marinolic acids, Mupirocins, Pseudomonic acids and Thiomarinols: Total Synthesis of Pseudomonic acid methyl monate C.**

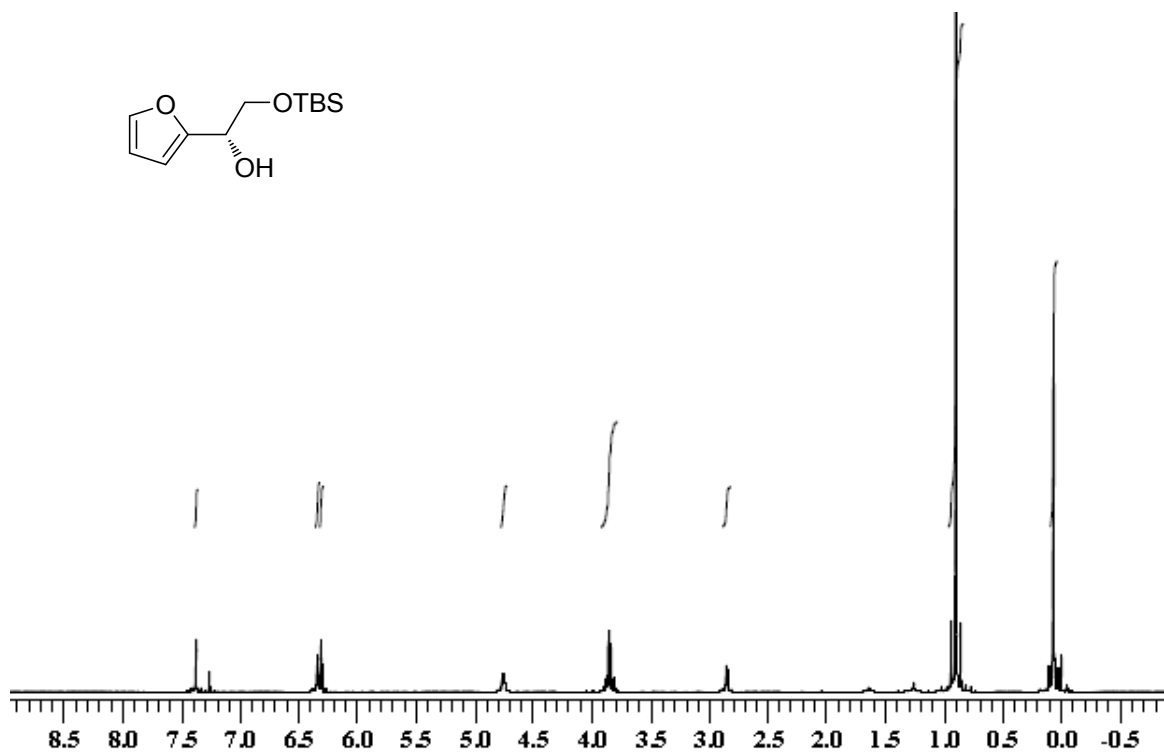
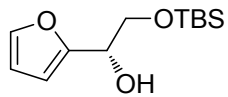
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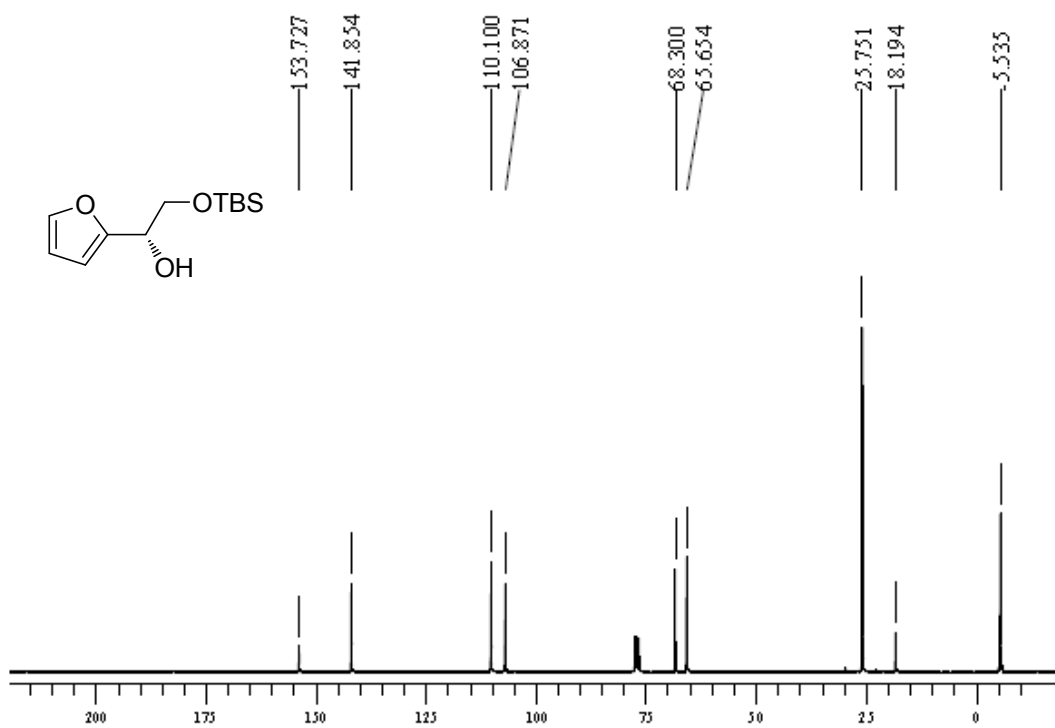
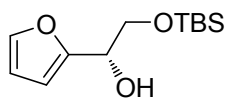
Hyderabad-500007

SUPPORTING INFORMATION

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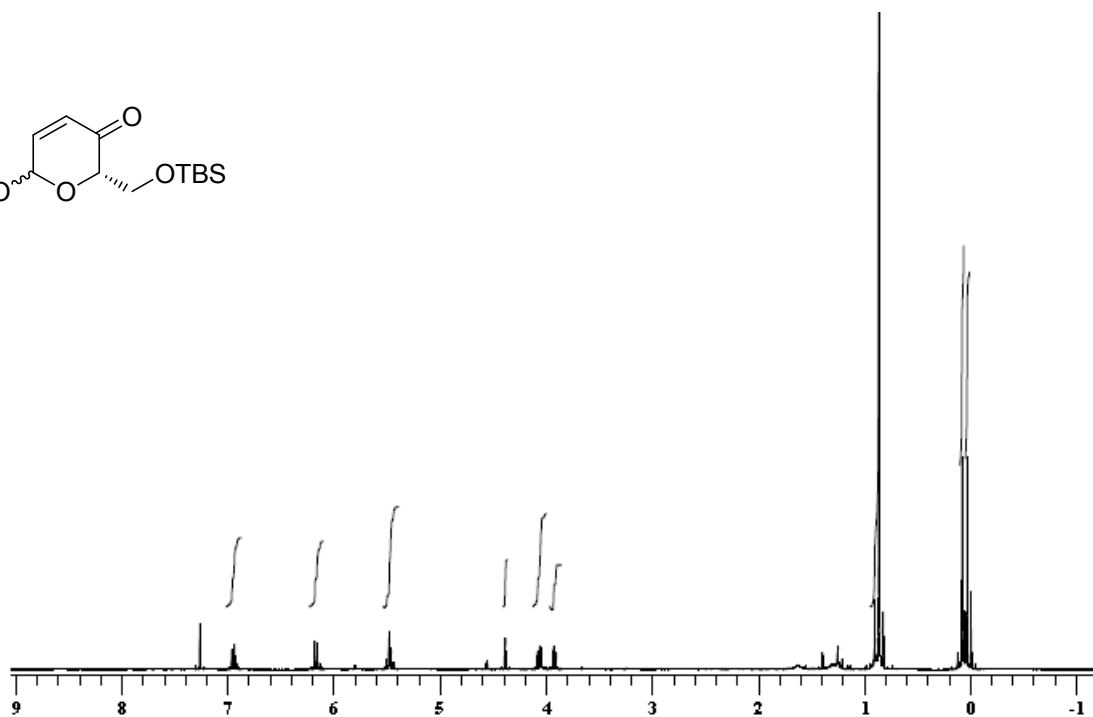
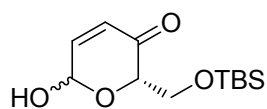


¹H-NMR of 9 (500 MHz, CDCl₃)

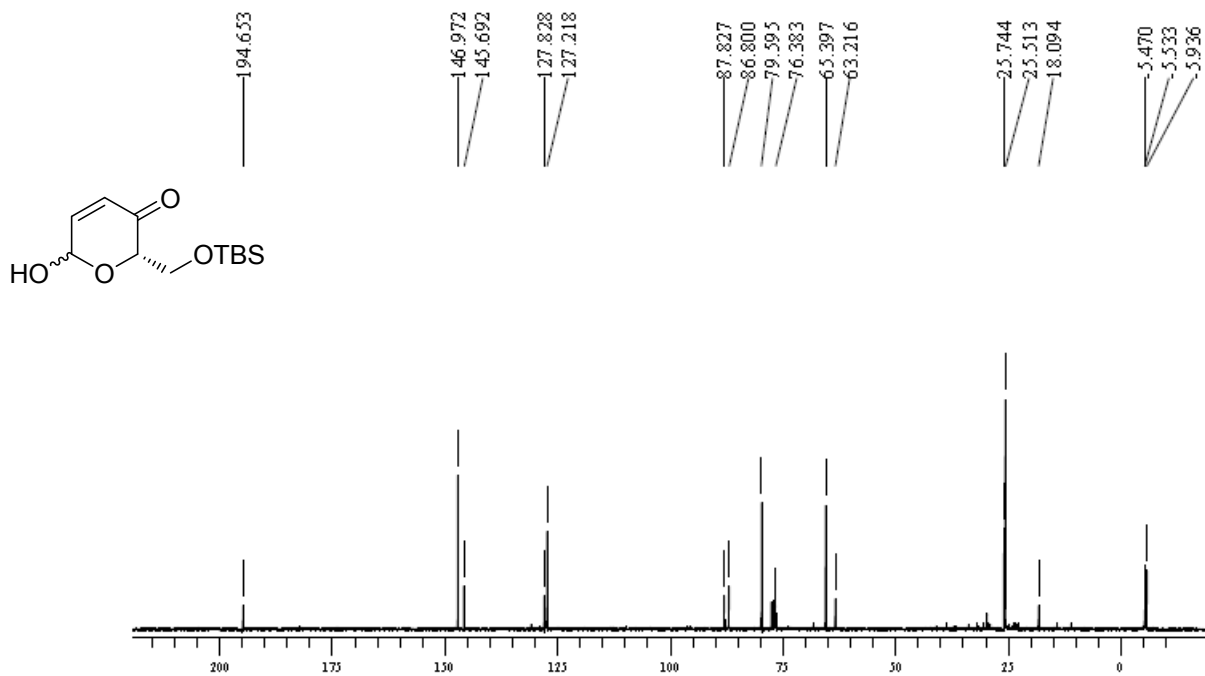


¹³C-NMR of 9 (75 MHz, CDCl₃)

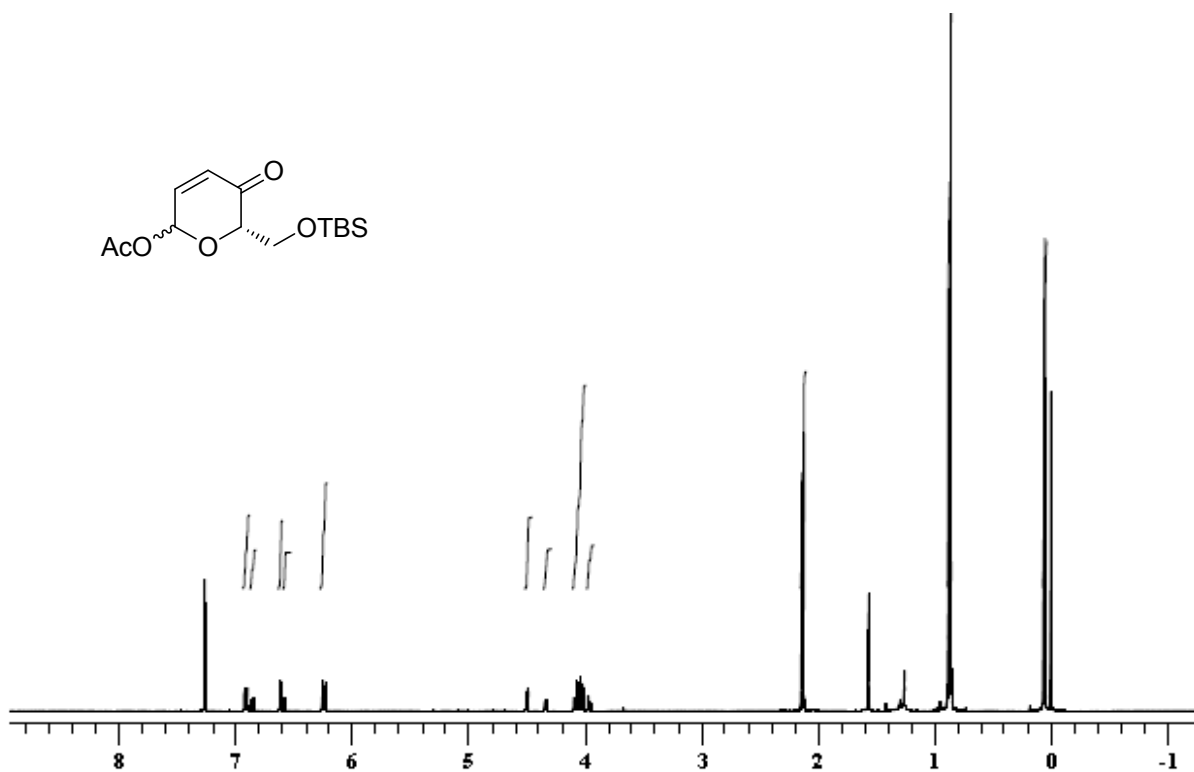
¹³C



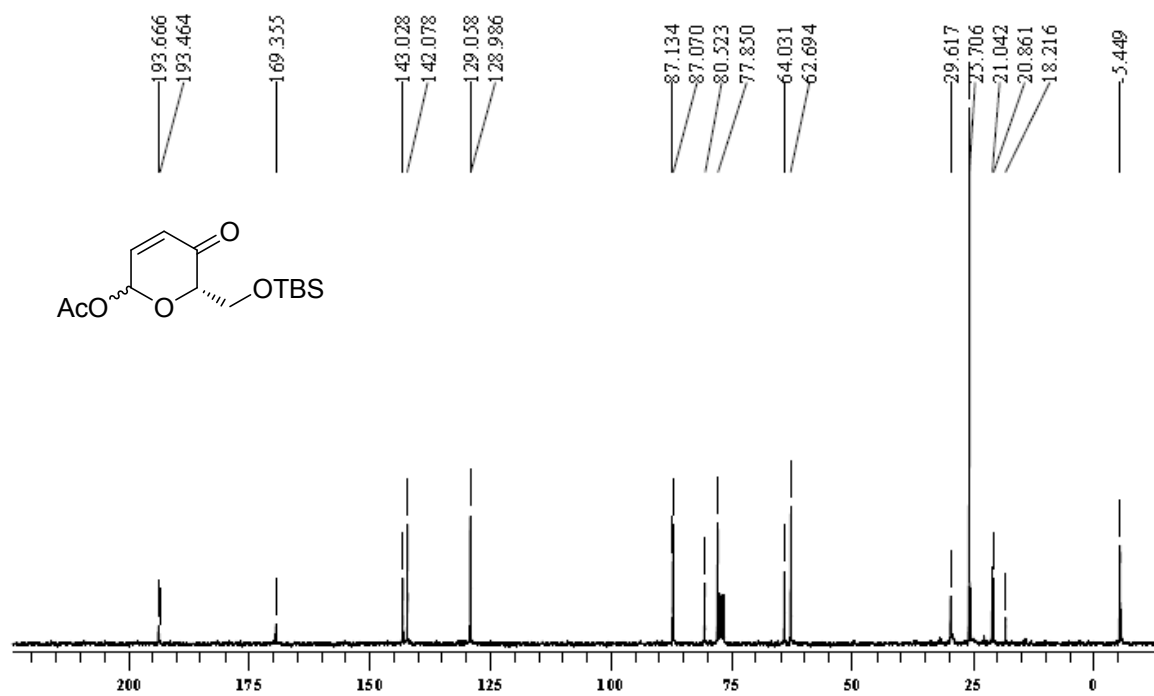
¹H-NMR of 10 (500 MHz, CDCl₃)



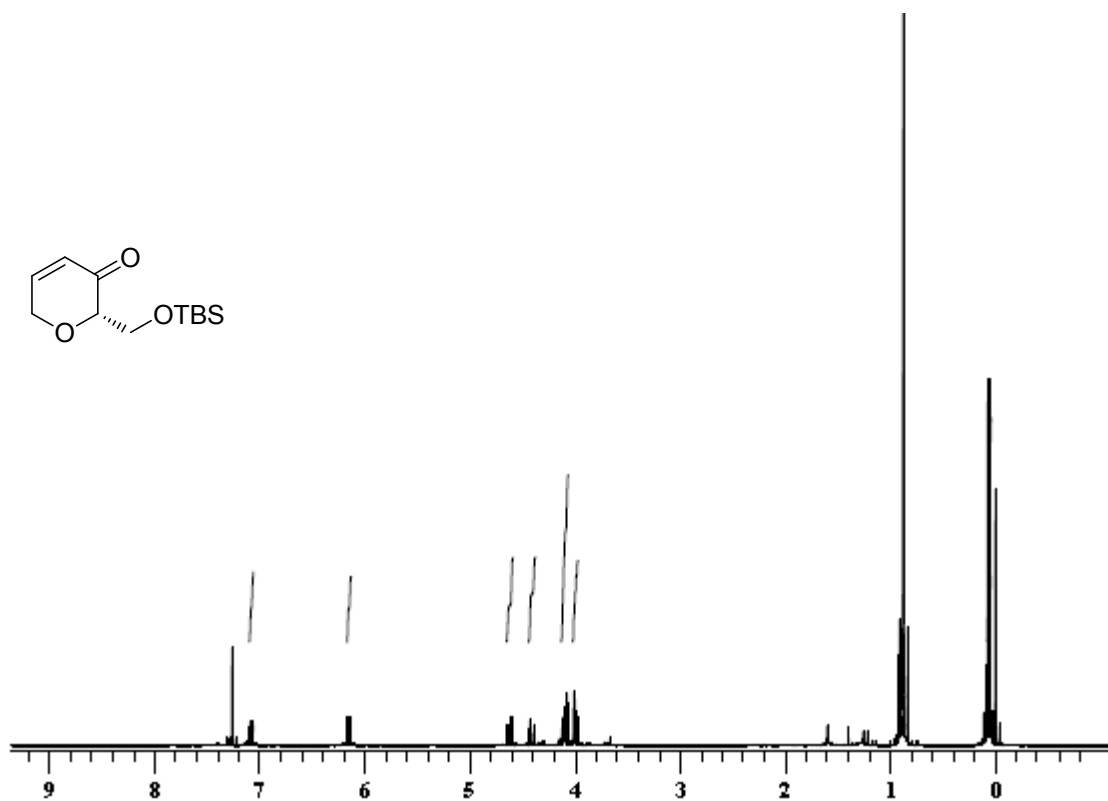
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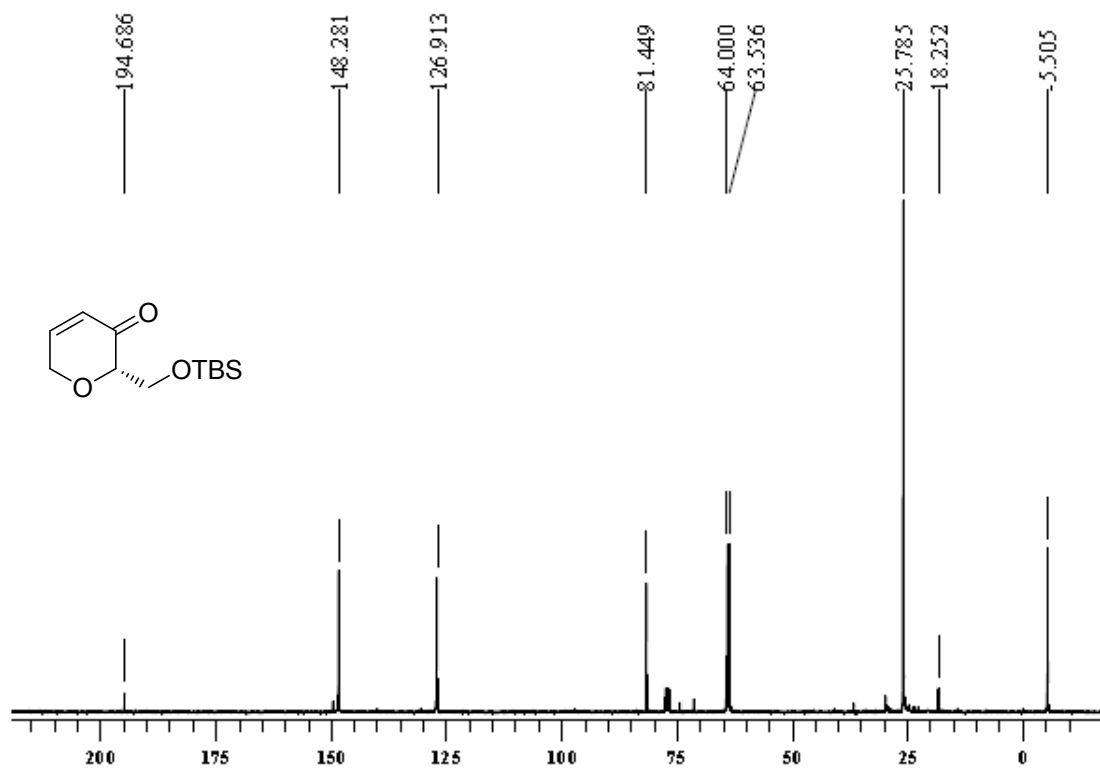
¹H-NMR of 11 (500 MHz, CDCl₃)



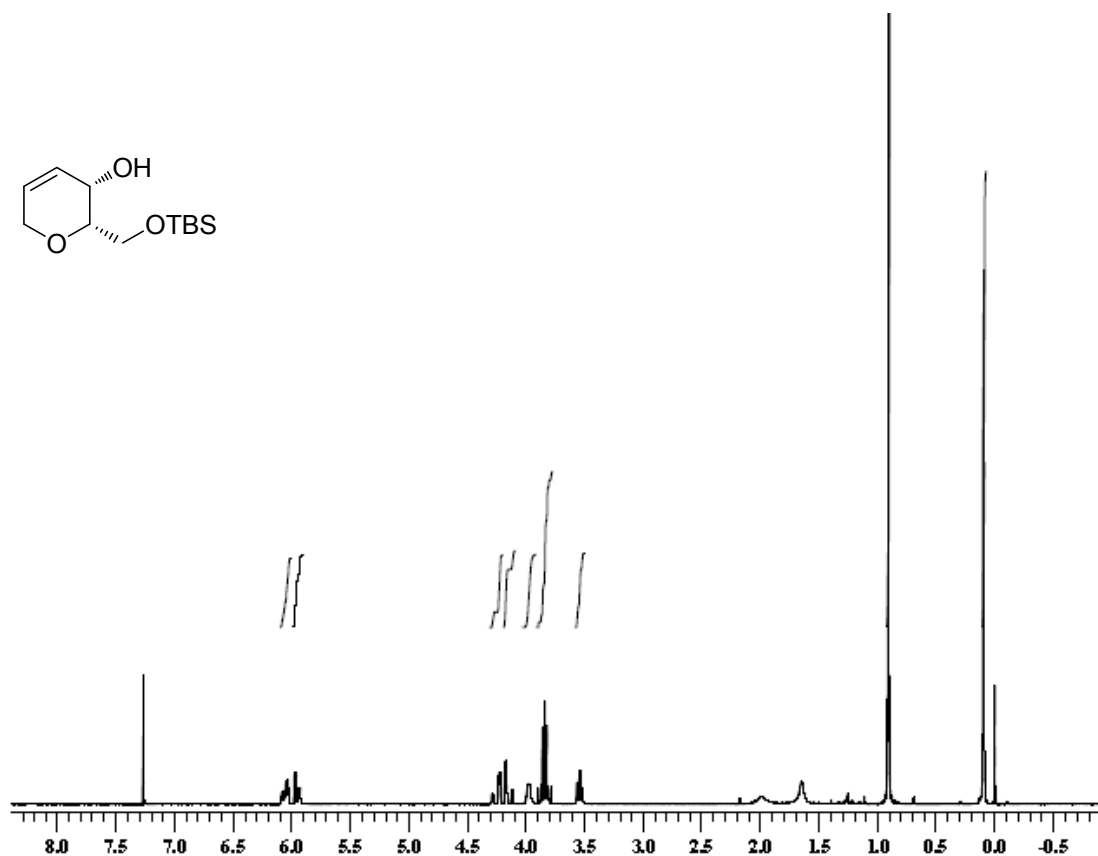
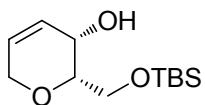
¹³C-NMR of 11 (75 MHz, CDCl₃)



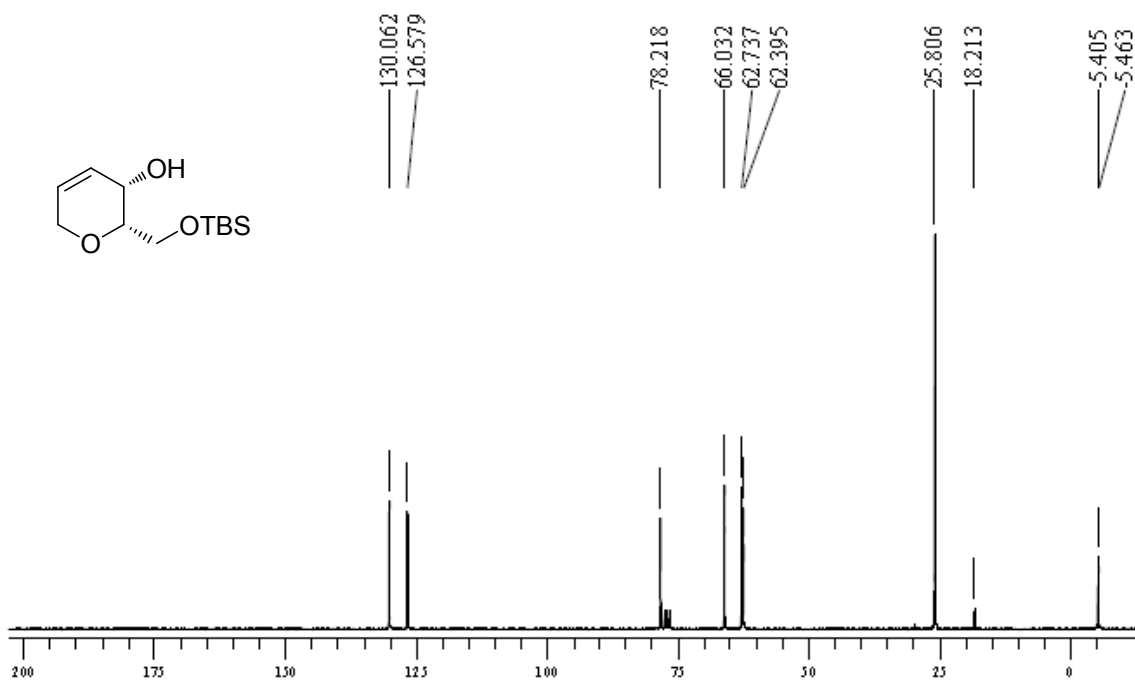
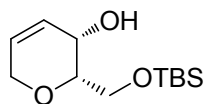
¹H-NMR of 12 (500 MHz, CDCl₃)



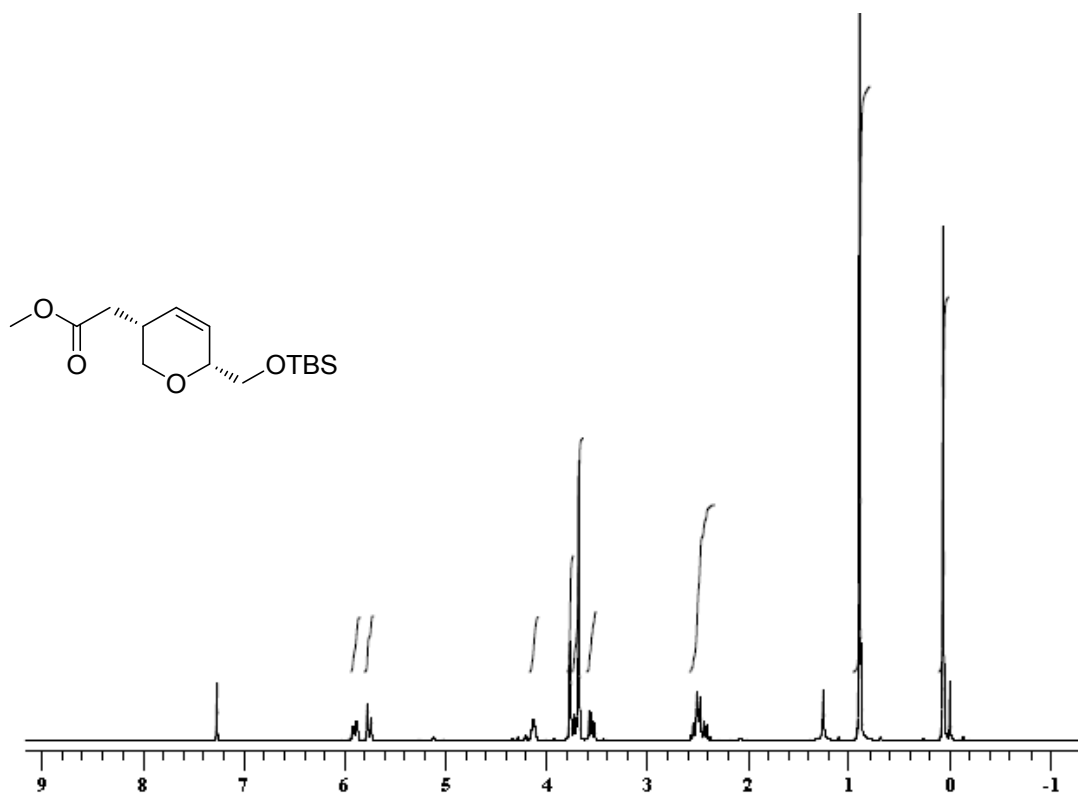
¹³C-NMR 12 (75 MHz, CDCl₃)



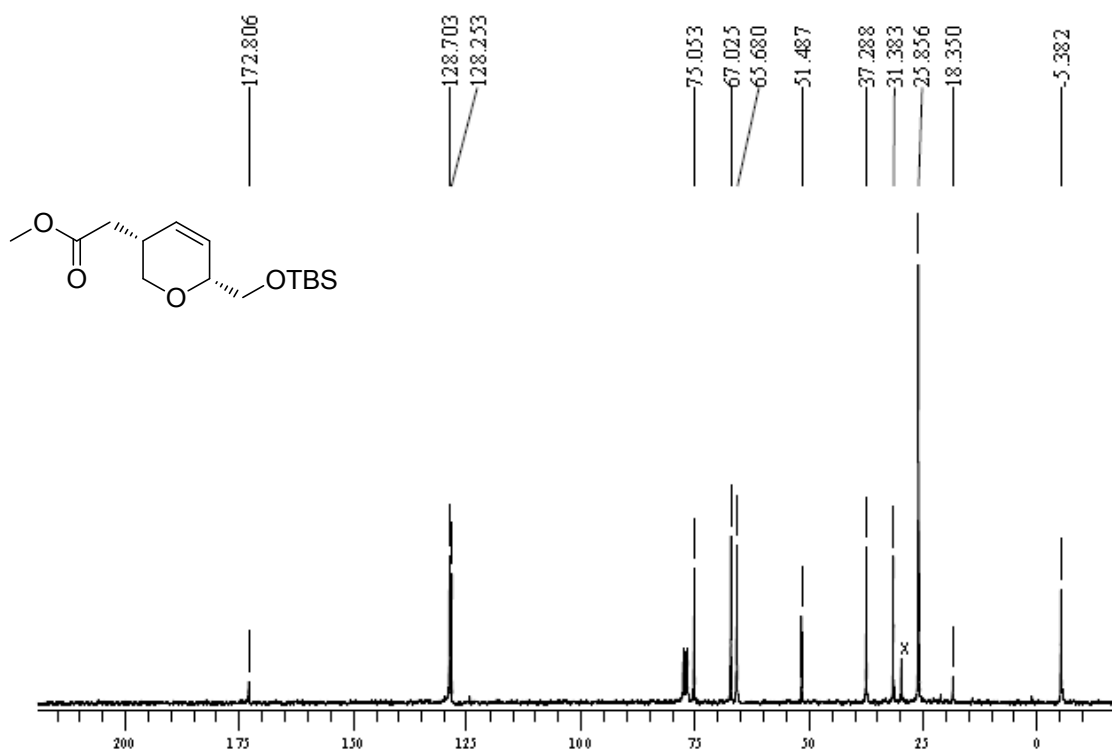
¹H-NMR of 5 (300 MHz, CDCl₃)



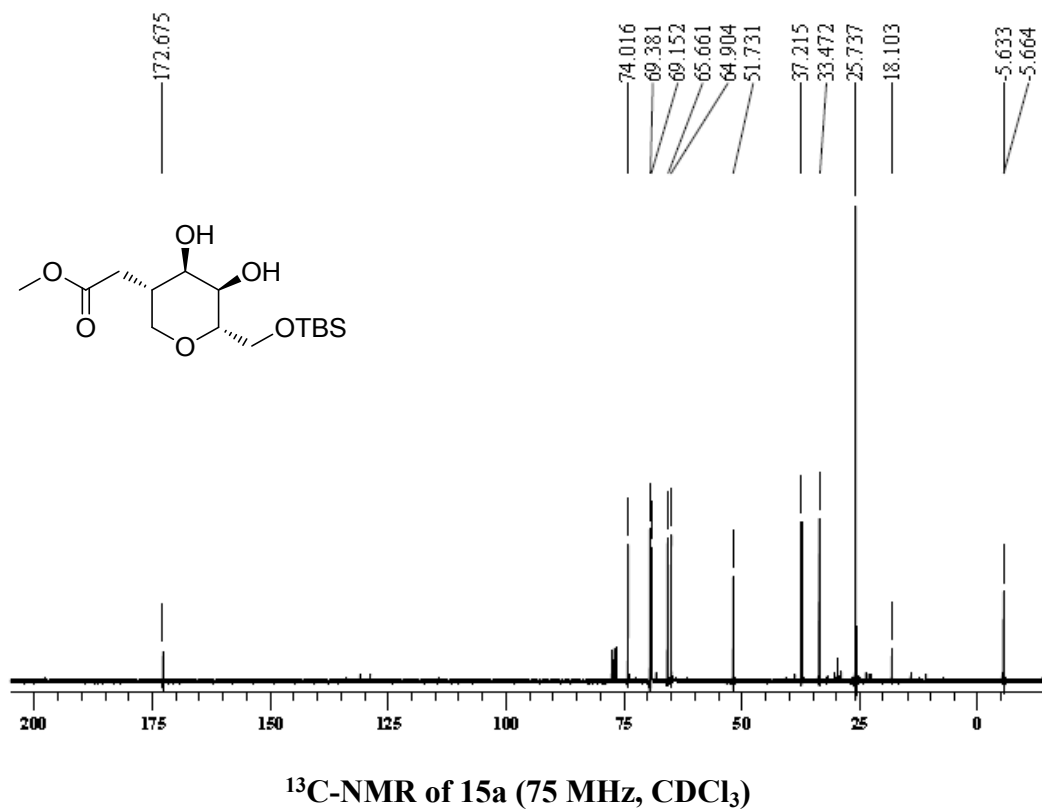
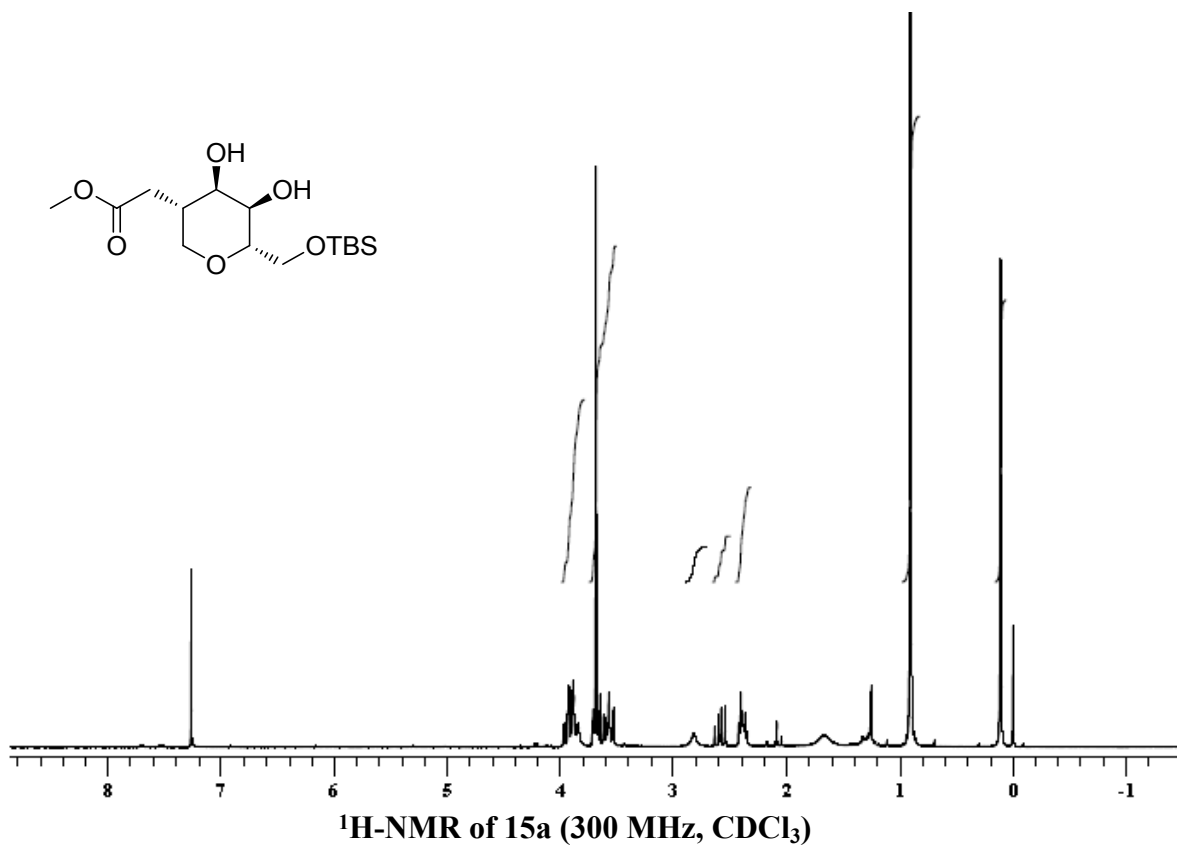
¹³C-NMR of 5 (75 MHz, CDCl₃)

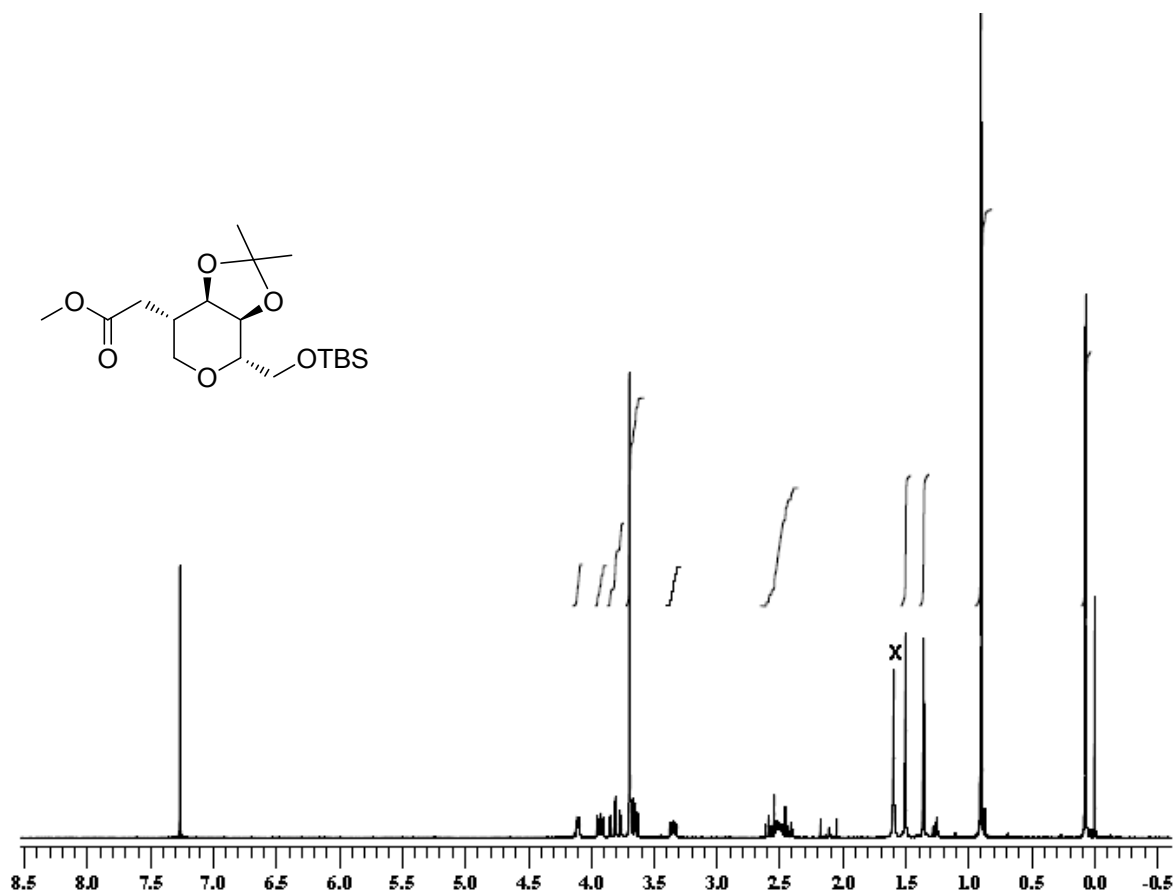


¹H-NMR of compound 14 (300 MHz, CDCl₃)

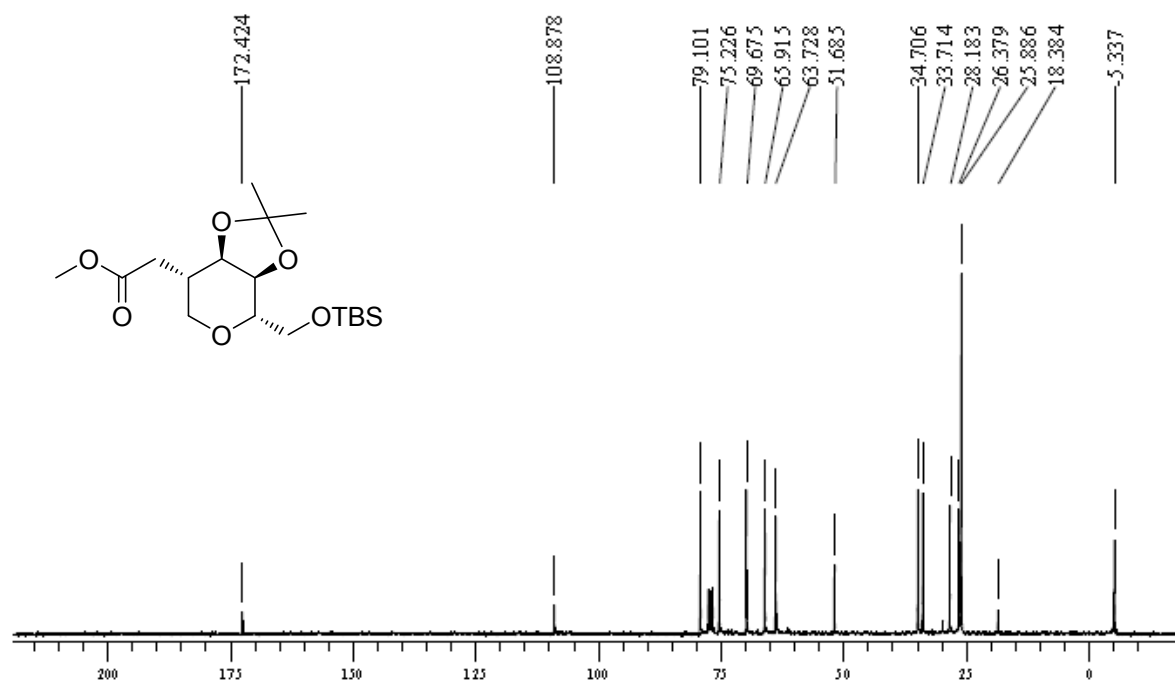


¹³C-NMR of 14 (75 MHz, CDCl₃)

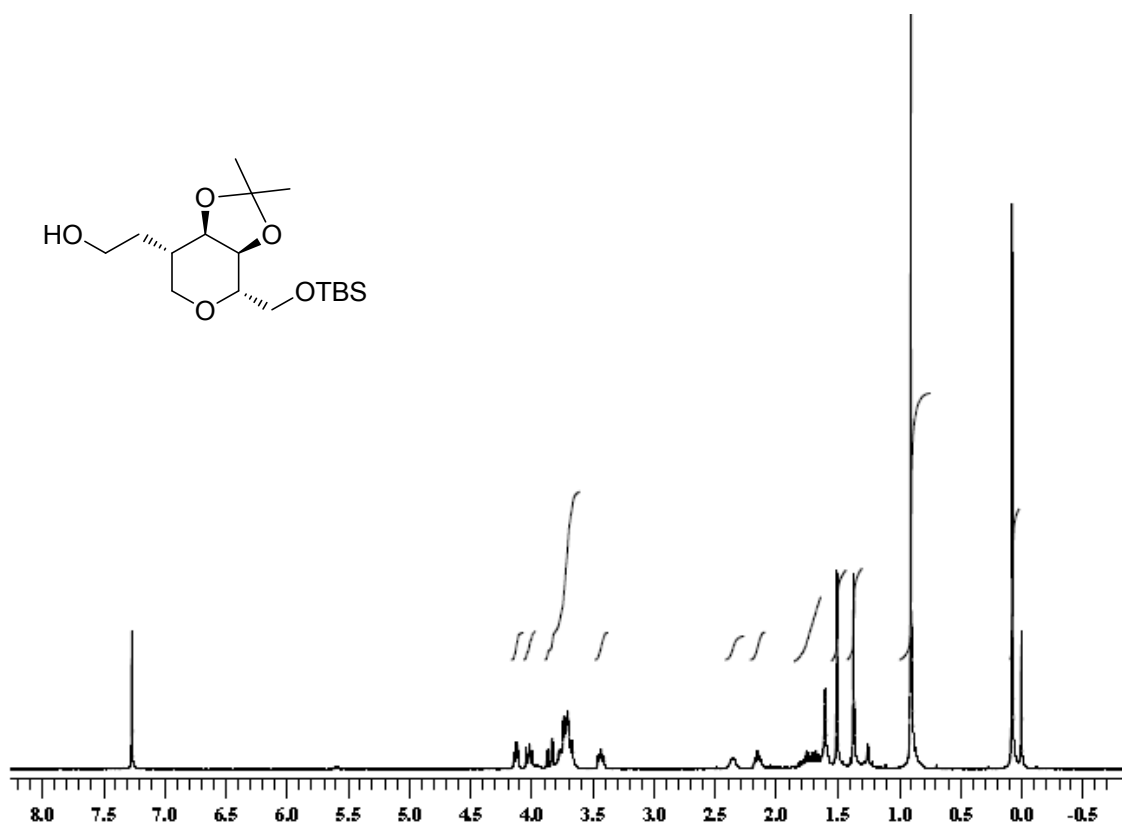




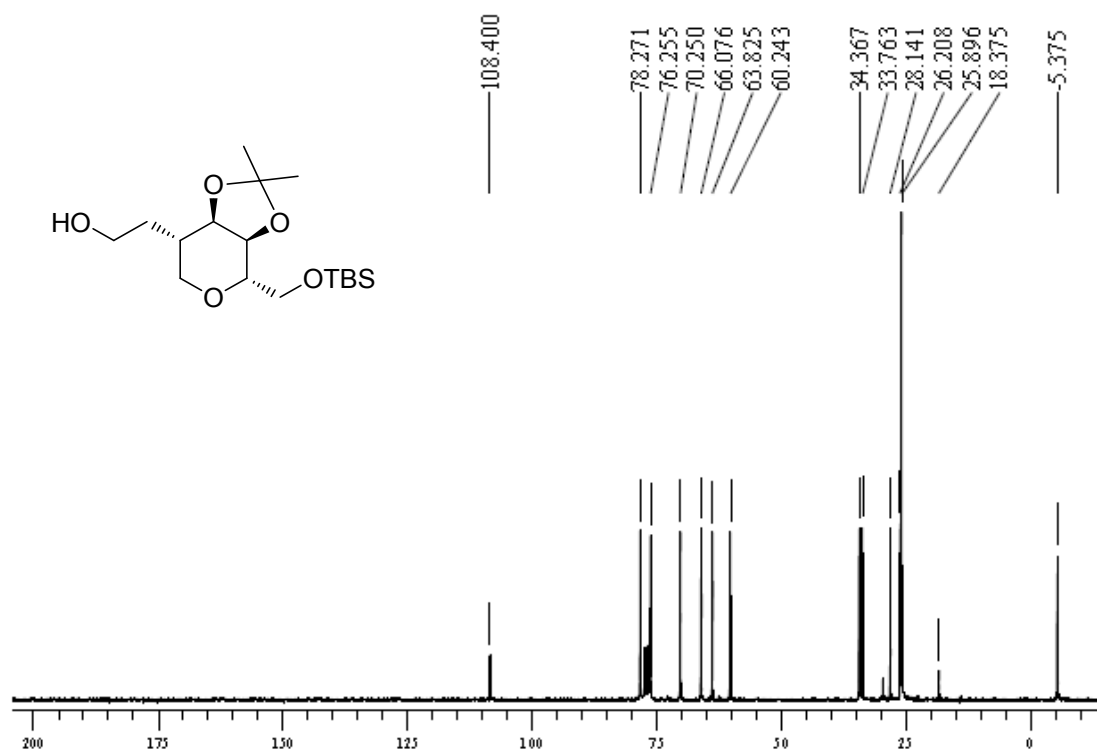
¹H-NMR of 15 (300 MHz, CDCl₃)



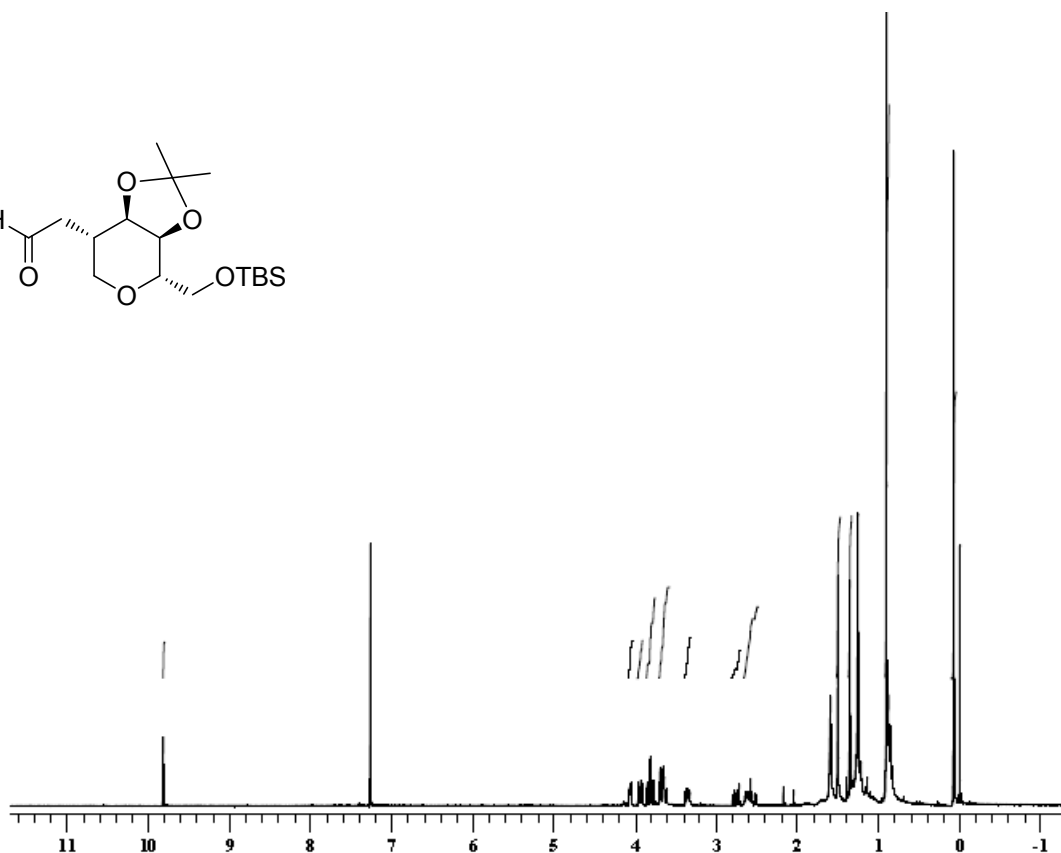
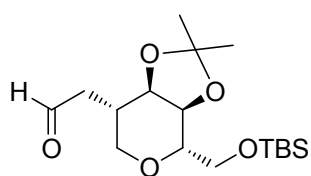
¹³C-NMR of 15 (75 MHz, CDCl₃)



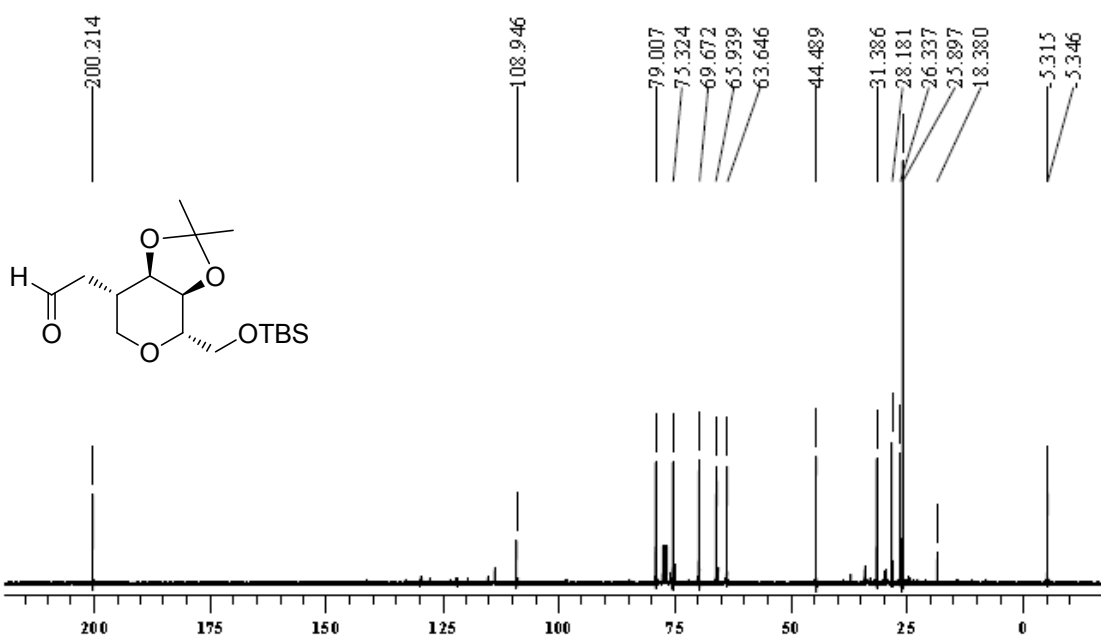
¹H-NMR of 3a (300 MHz, CDCl₃)



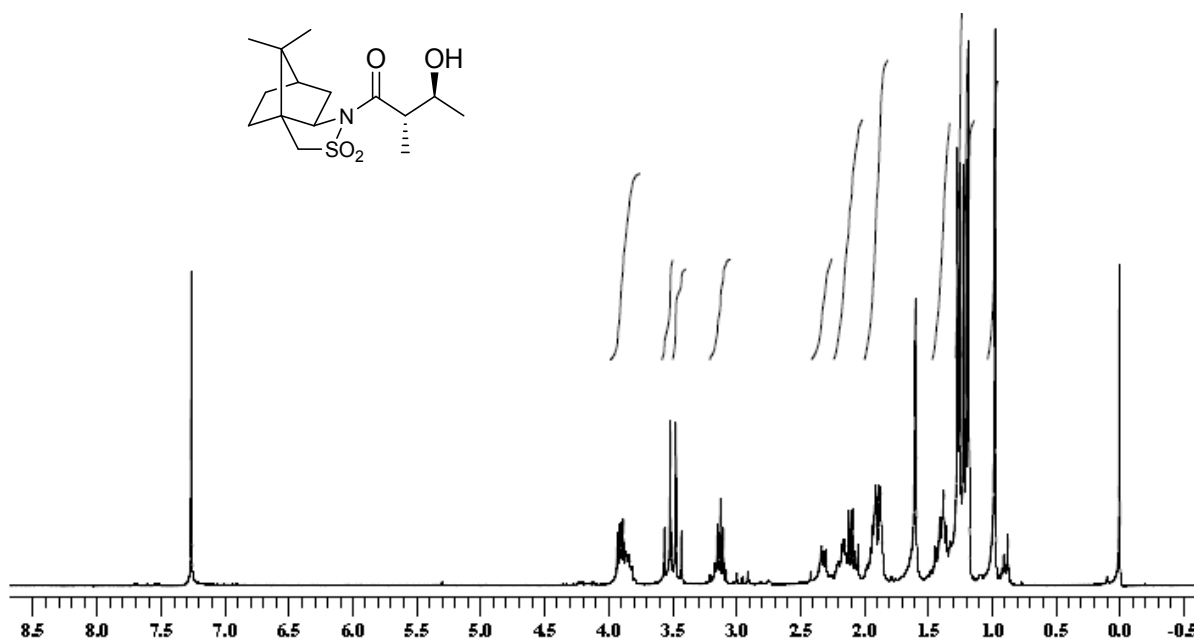
¹³C-NMR of 3a (75 MHz, CDCl₃)



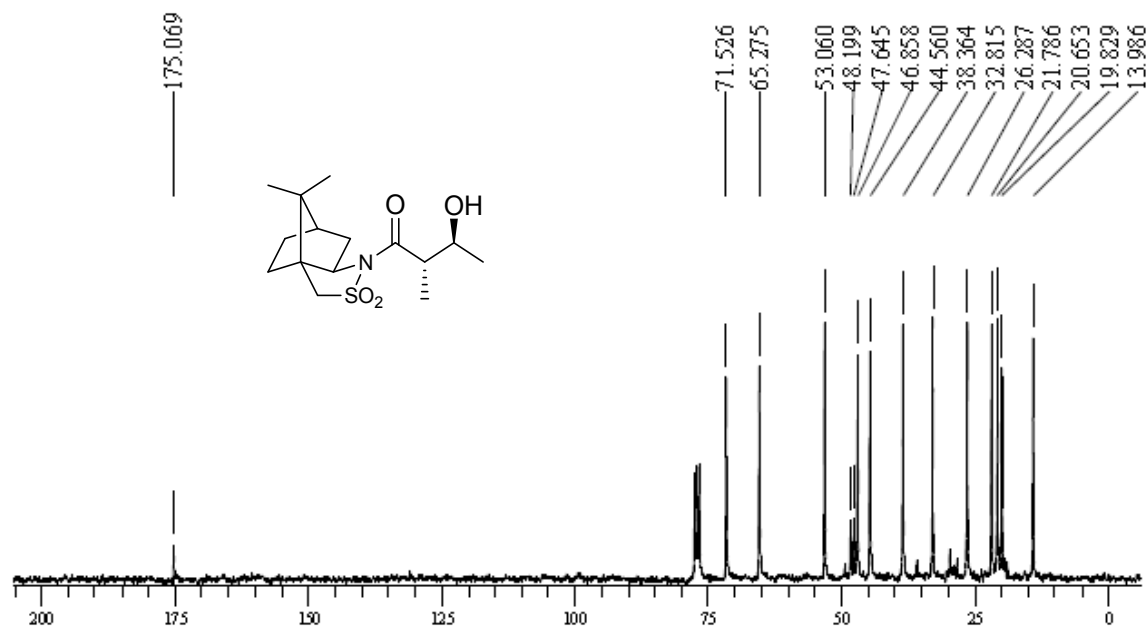
¹H-NMR of 3 (300 MHz, CDCl₃)



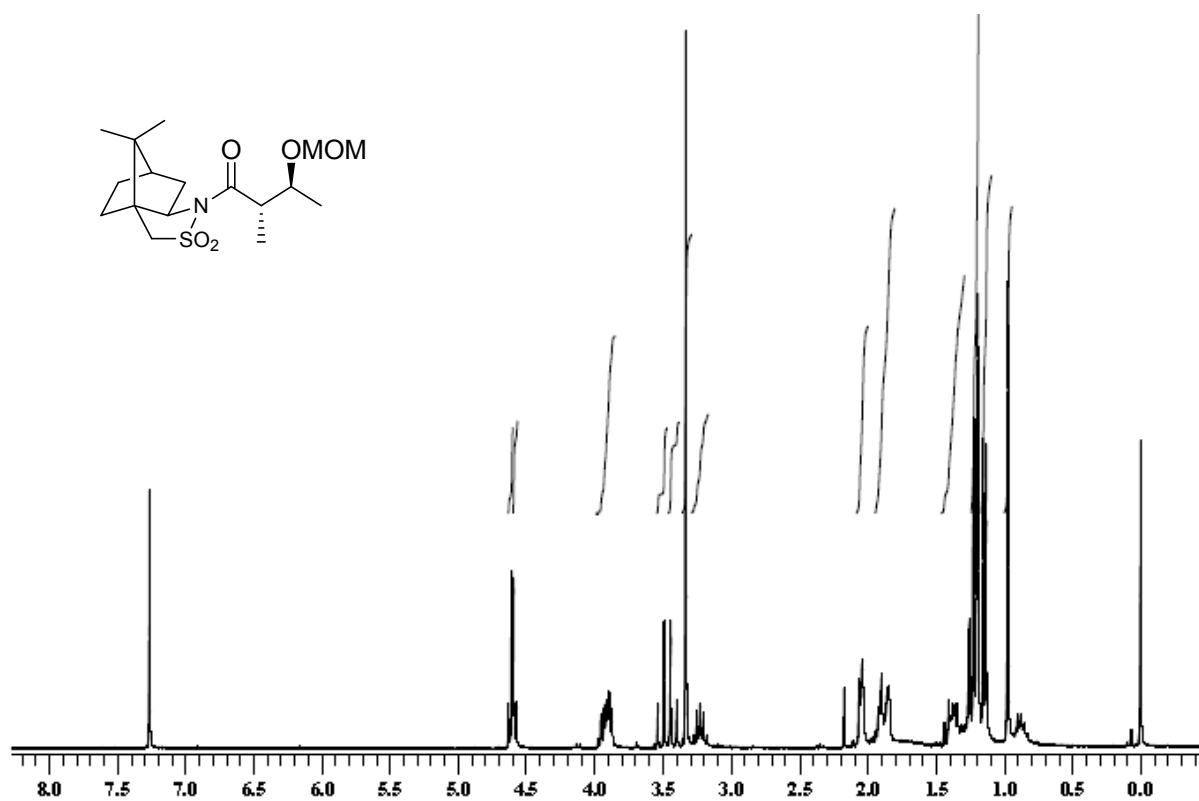
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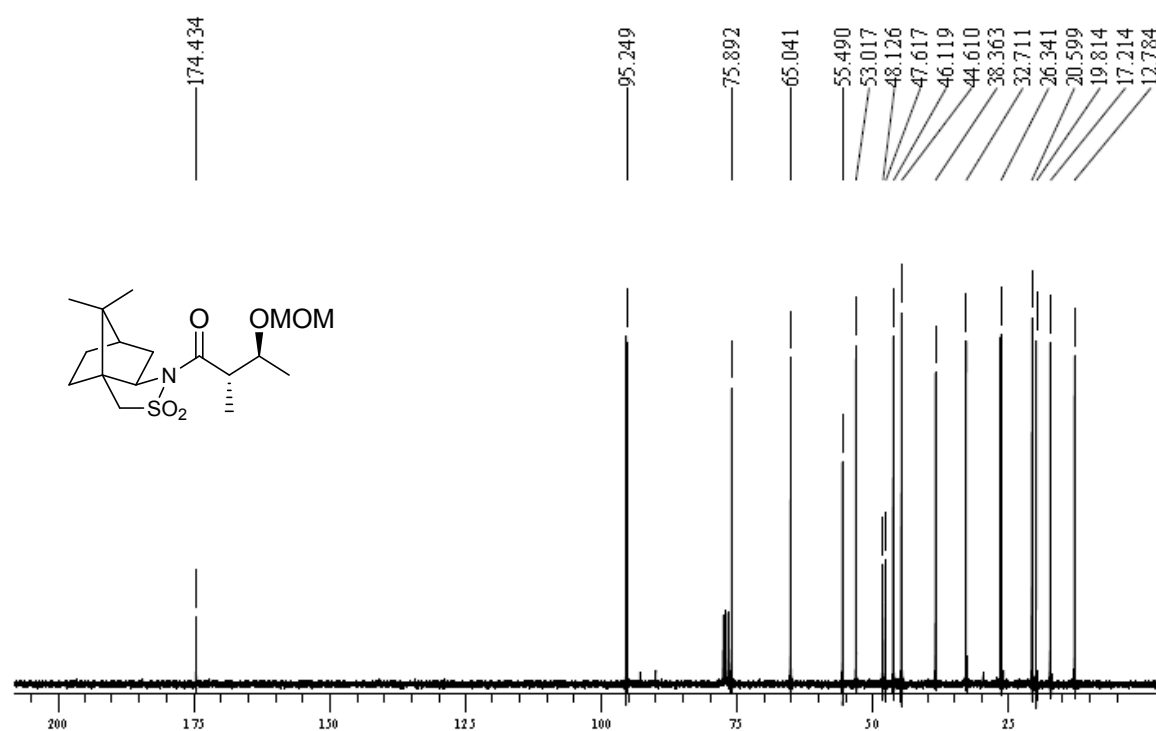
¹H-NMR of 16 (300 MHz, CDCl₃)



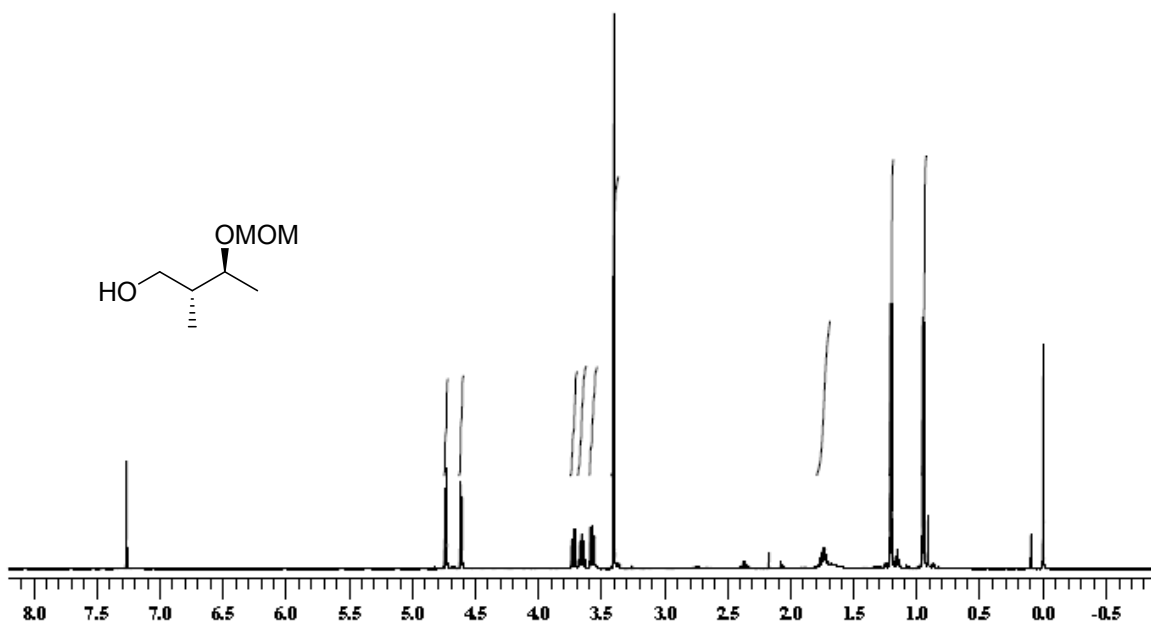
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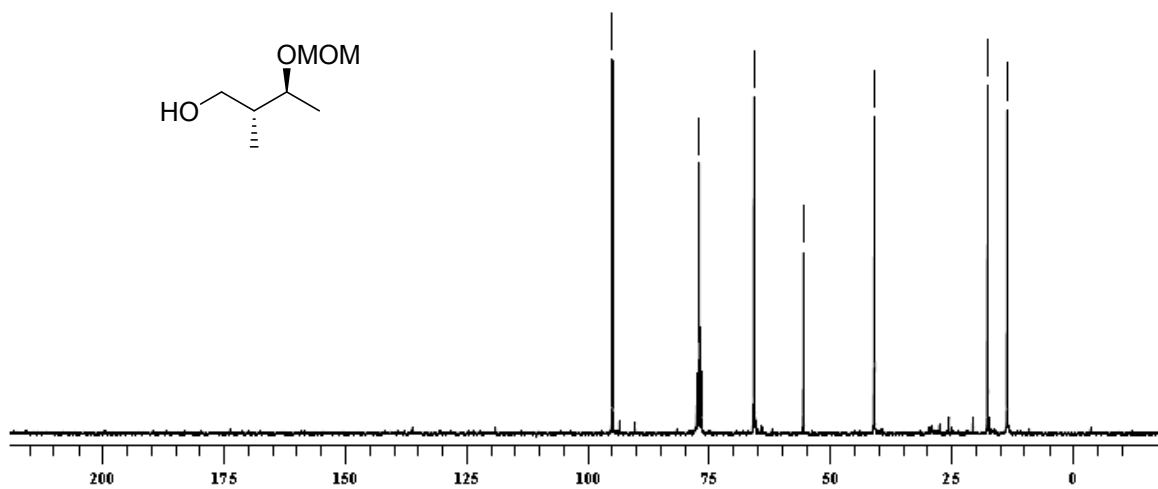
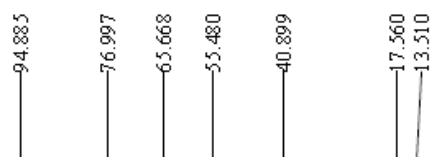
¹H-NMR of 17 (300 MHz, CDCl₃)



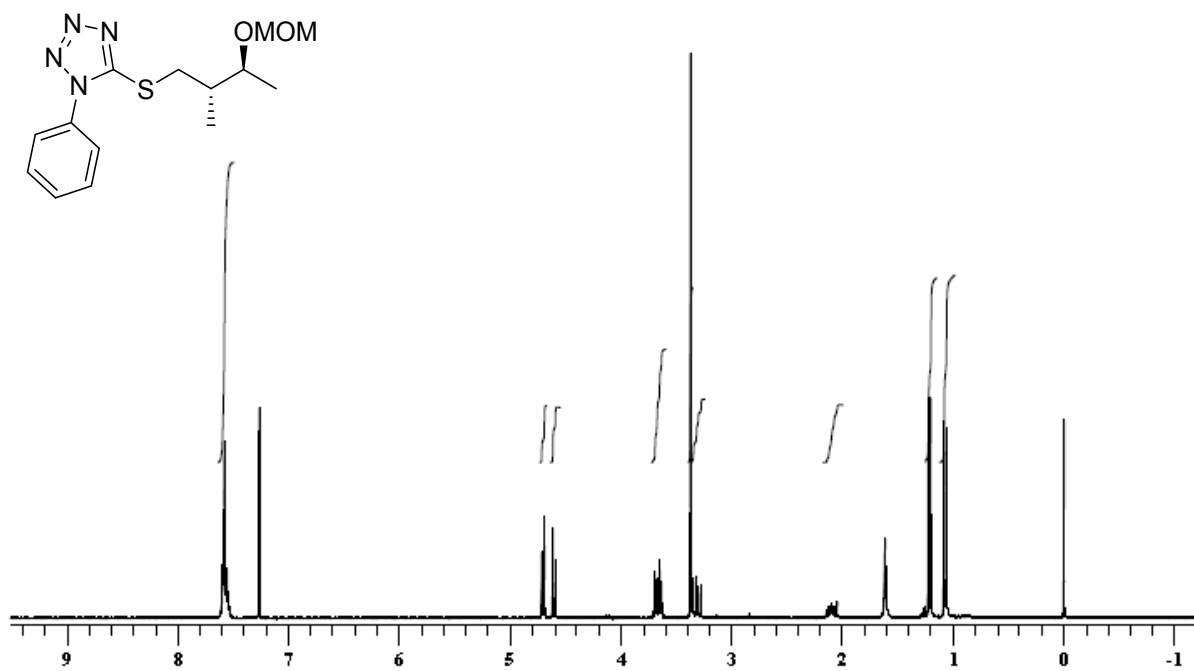
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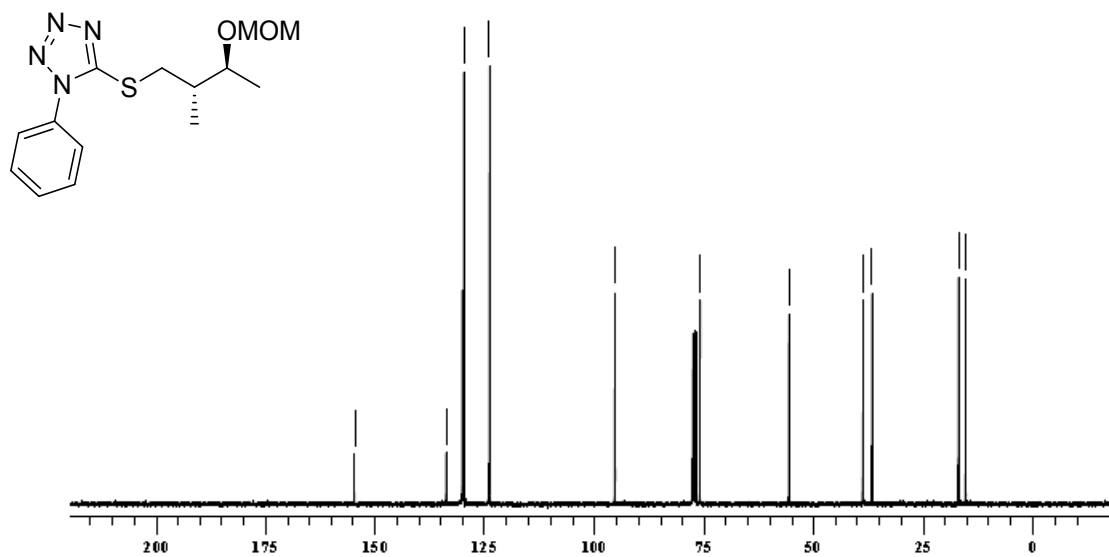
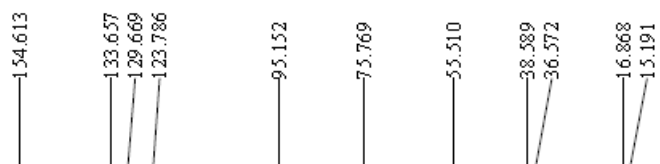
$^1\text{H-NMR}$ of 7 (500 MHz, CDCl_3)



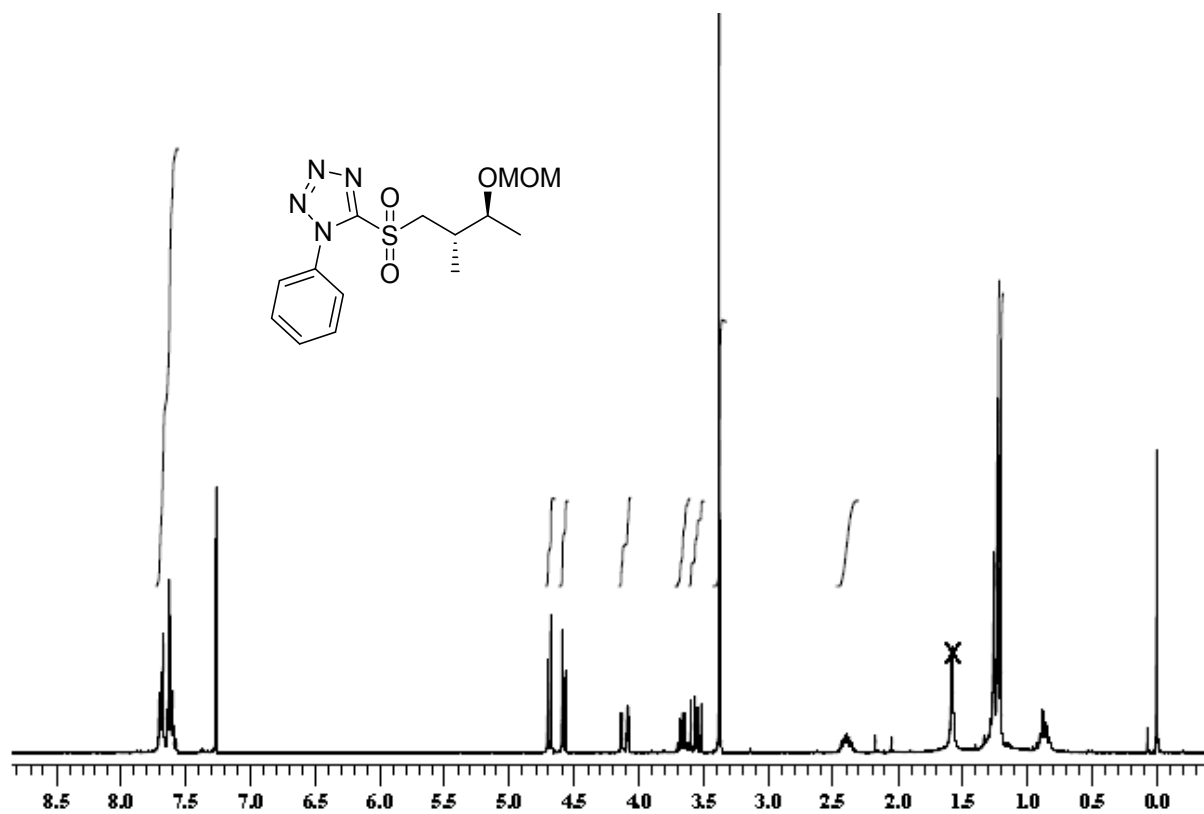
$^{13}\text{C-NMR}$ of 7 (75 MHz, CDCl_3)



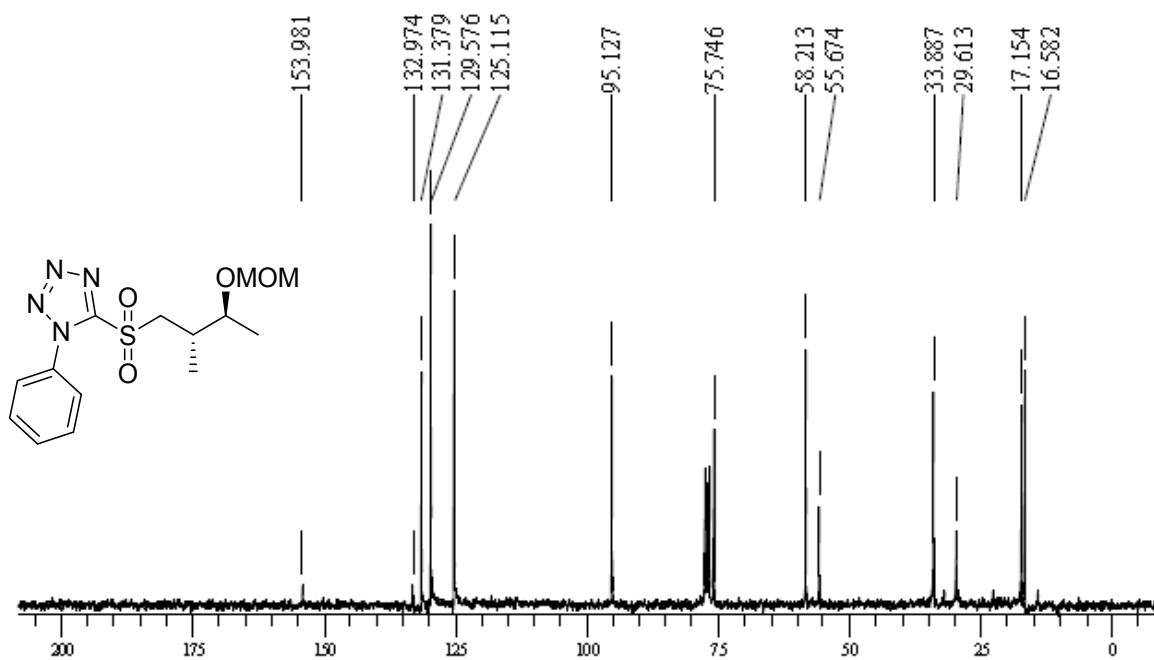
¹H-NMR of 4a (300 MHz, CDCl₃)



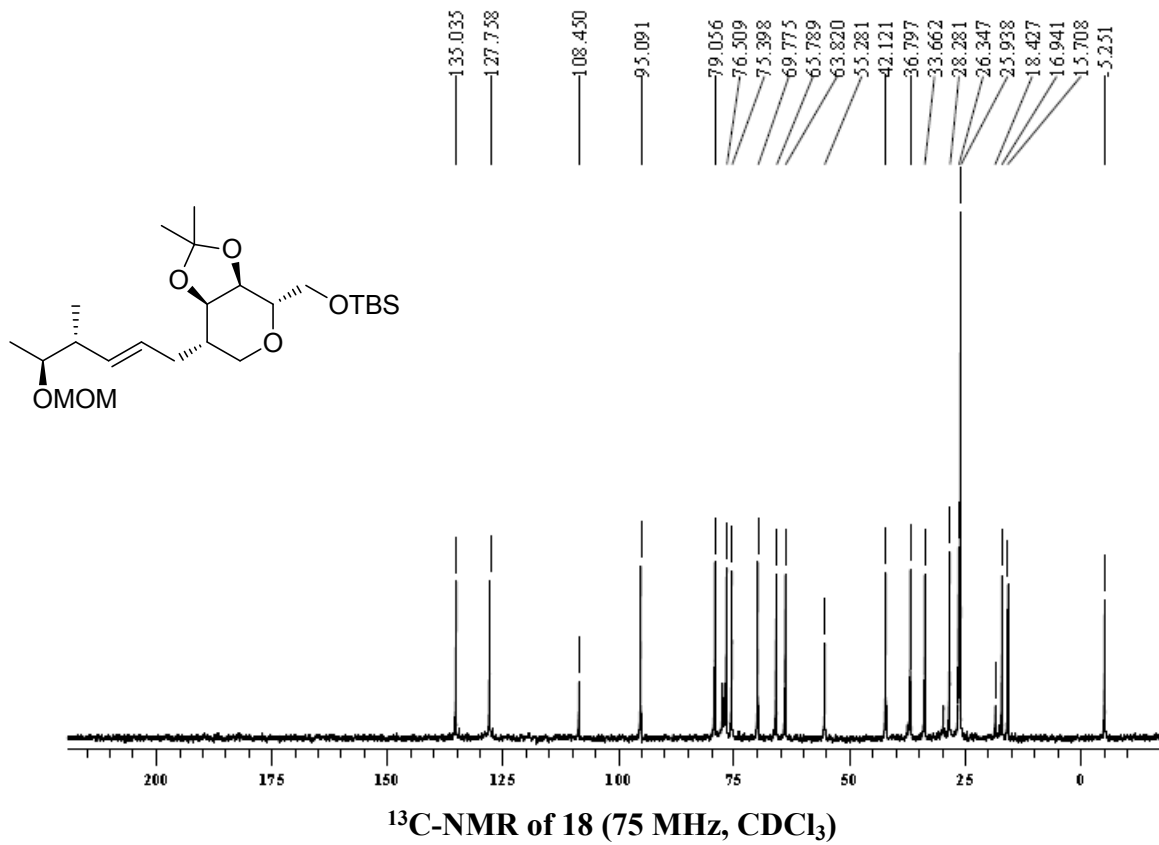
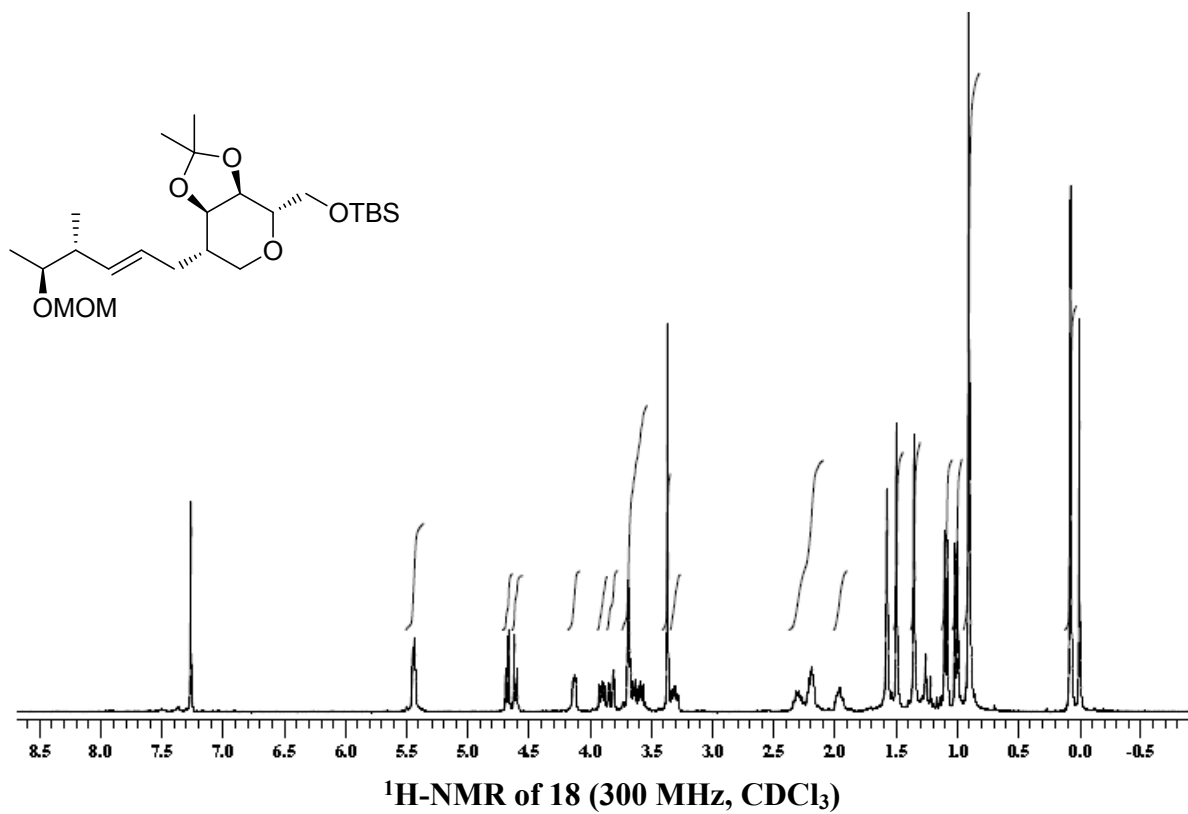
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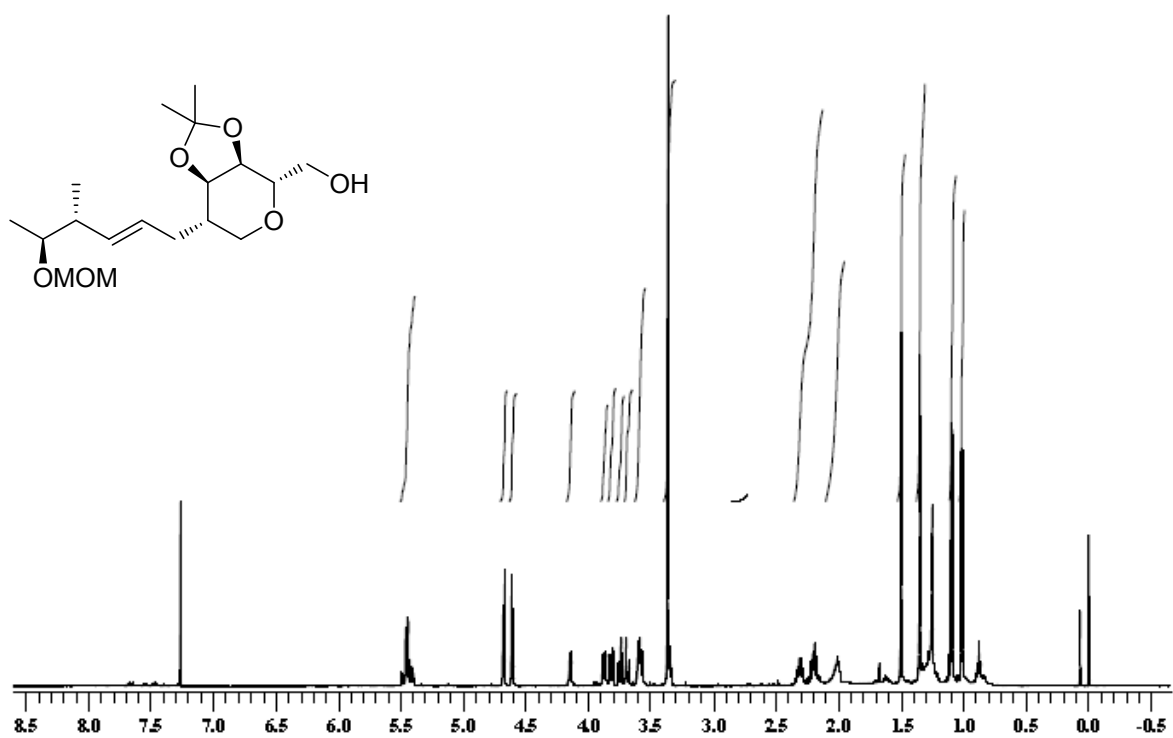


¹H-NMR of 4 (300 MHz, CDCl₃)

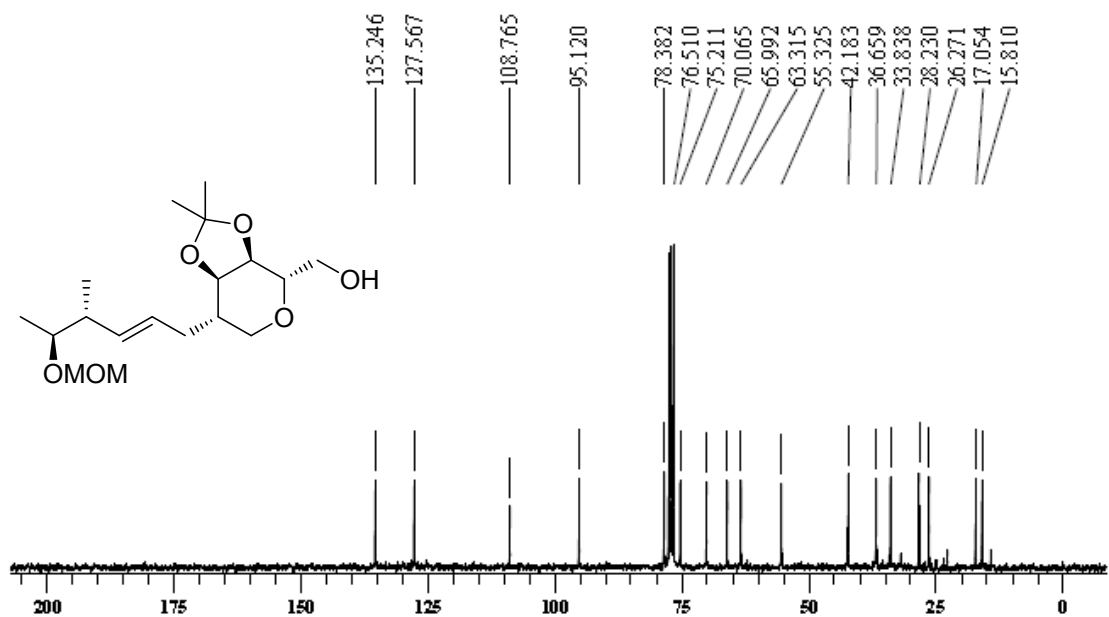


¹³C-NMR of 4 (75 MHz, CDCl₃)

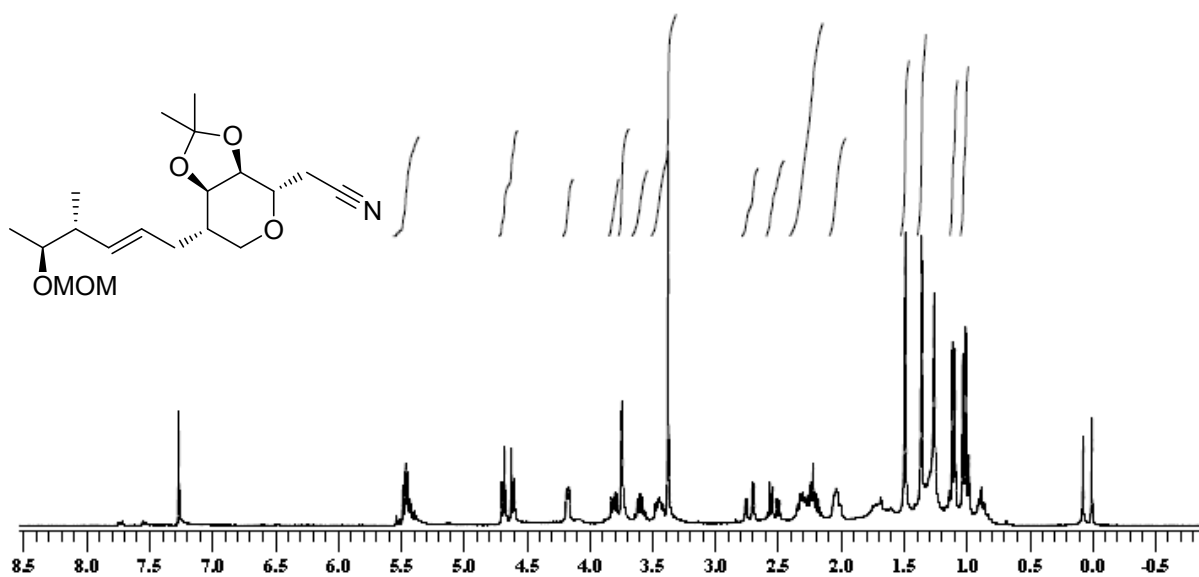




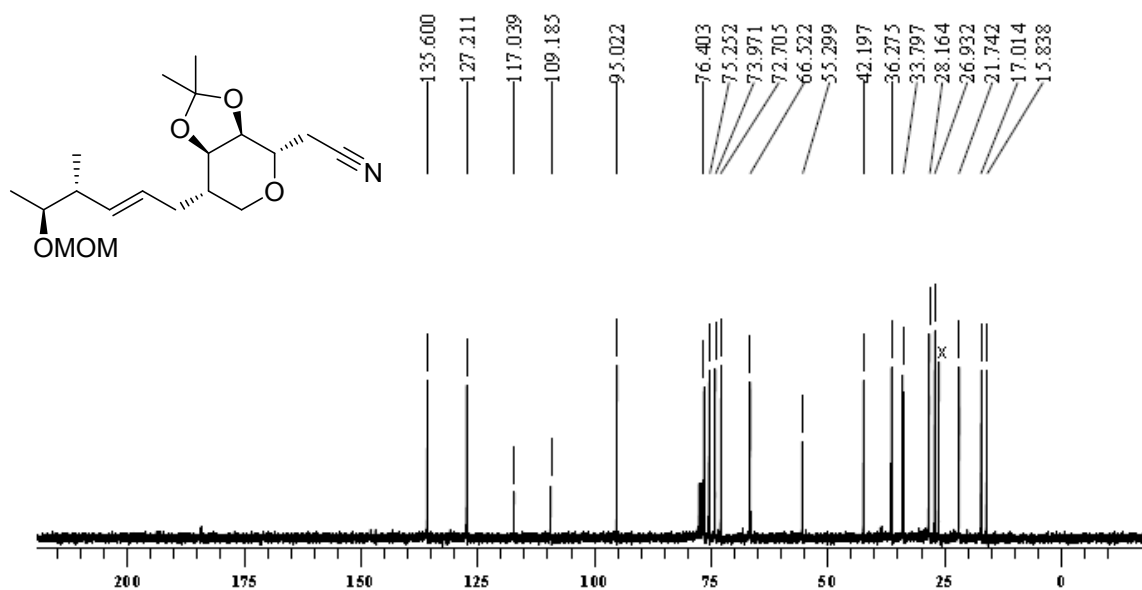
¹H-NMR of 2 (500 MHz, CDCl₃)



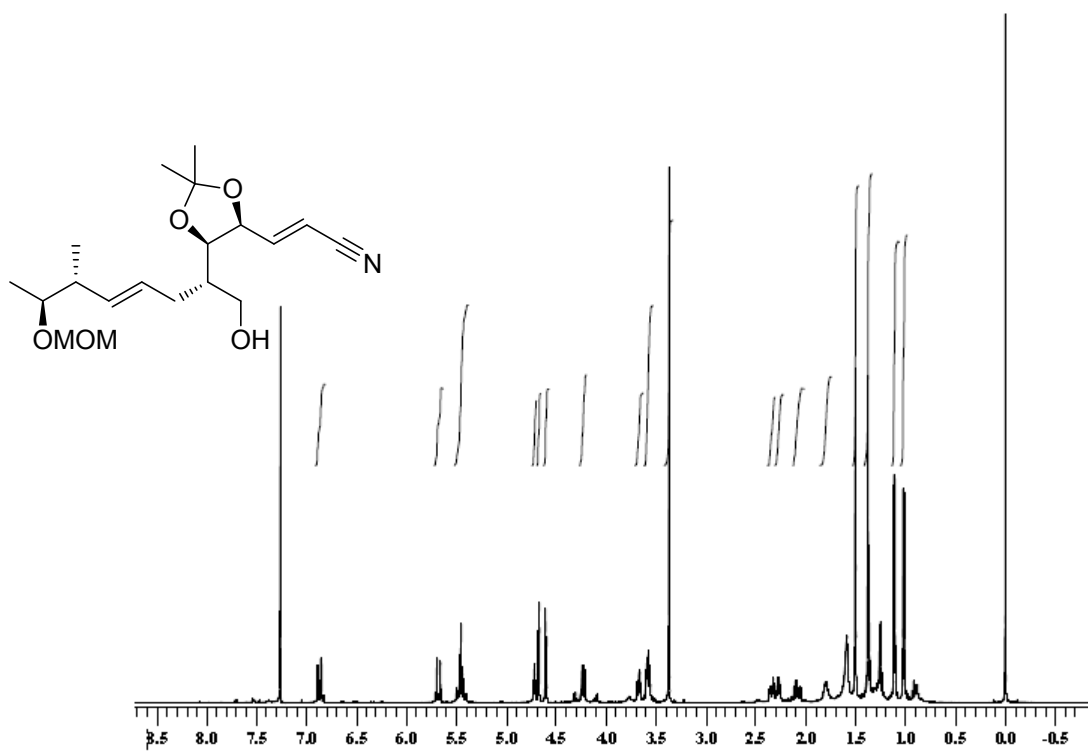
¹³C-NMR of 2 (75 MHz, CDCl₃)



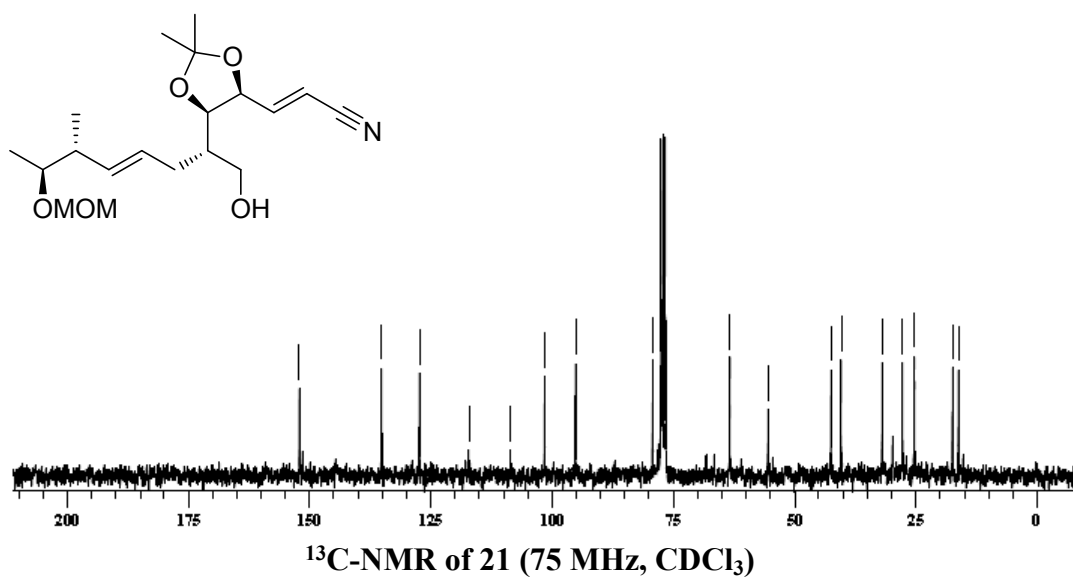
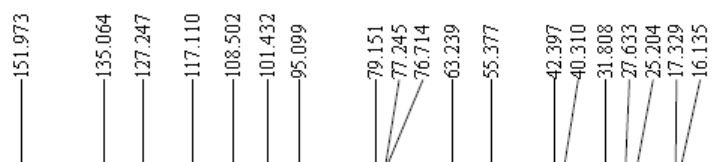
¹H-NMR of 19 (300 MHz, CDCl₃)



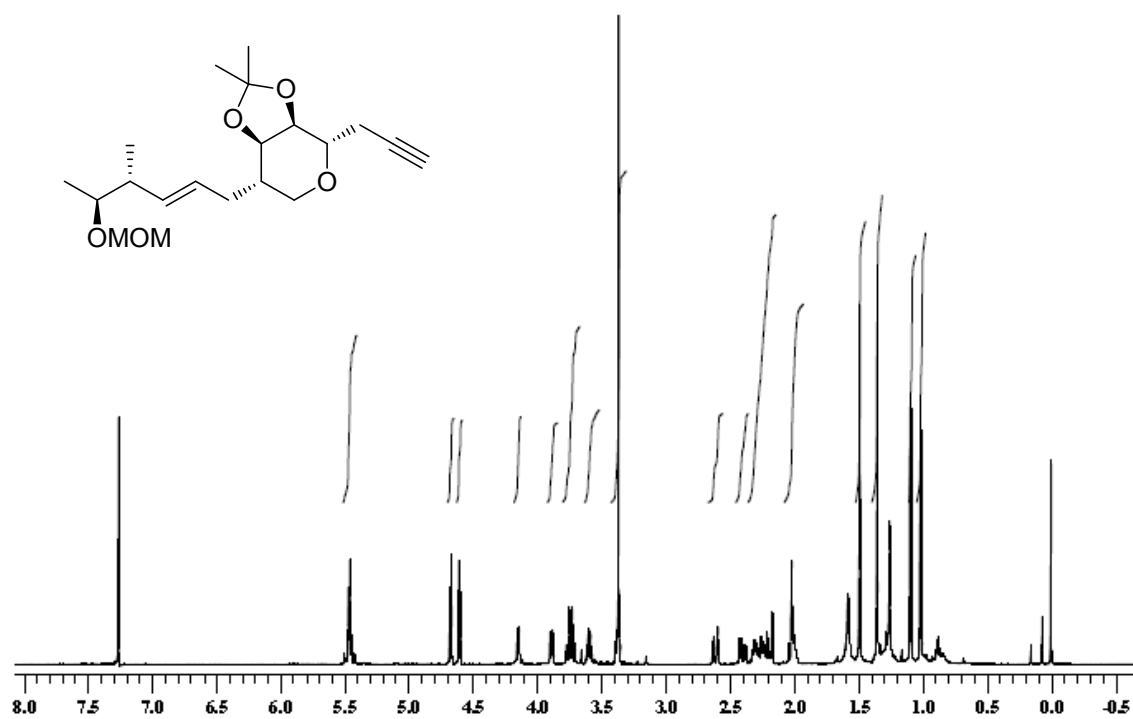
¹³C-NMR of 19 (75 MHz, CDCl₃)



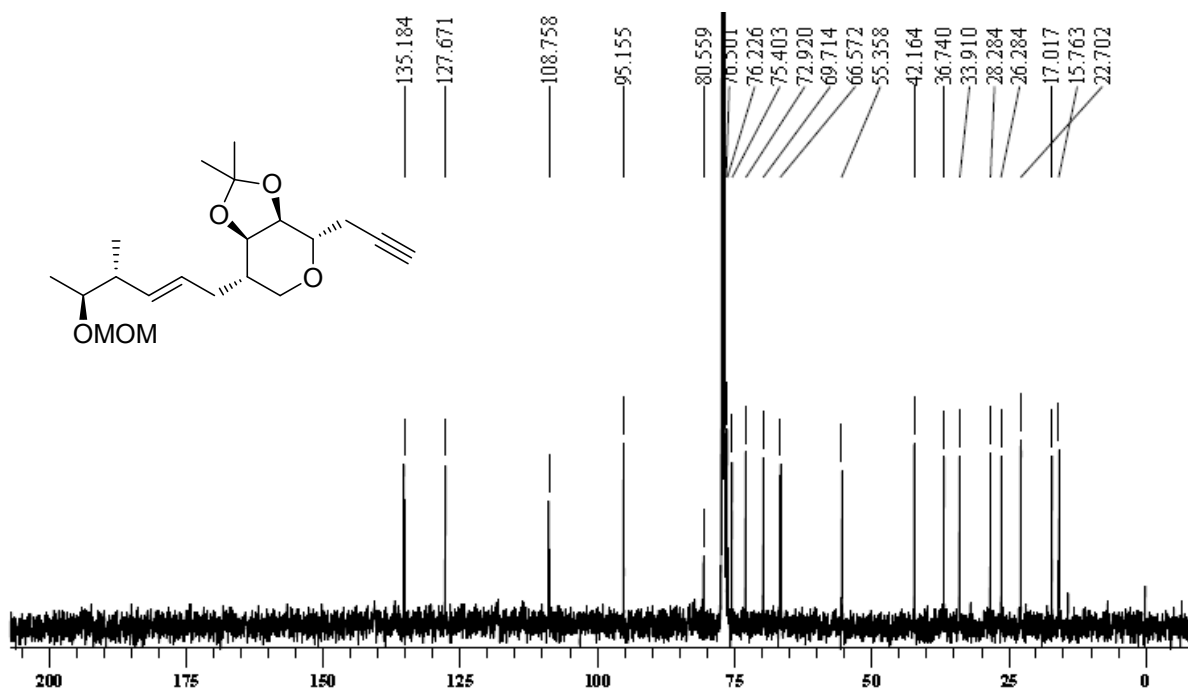
^1H -NMR of 21 (500 MHz, CDCl_3)



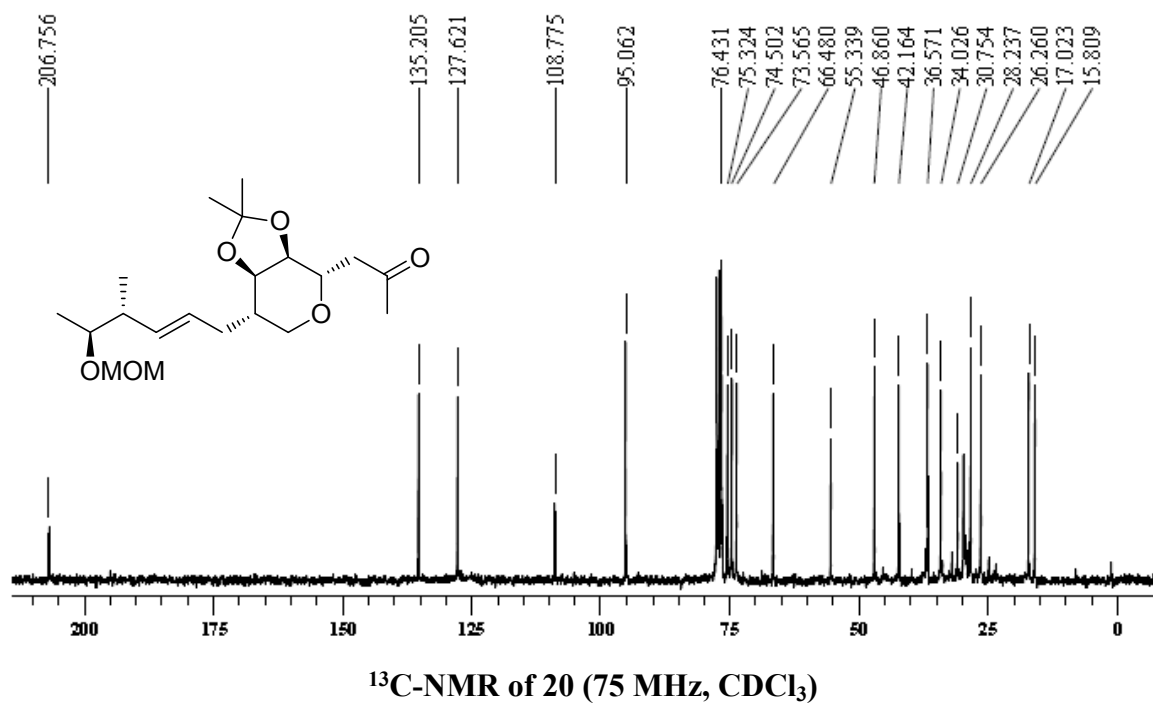
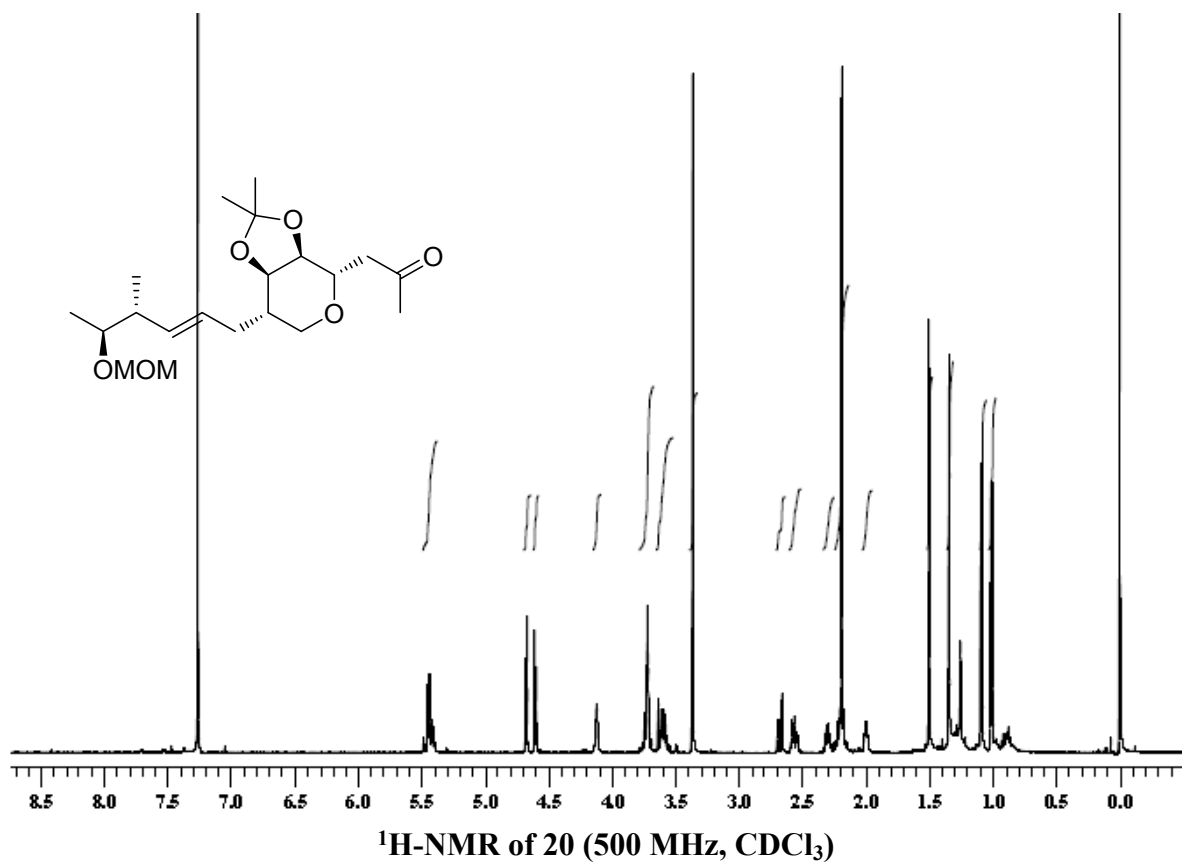
^{13}C -NMR of 21 (75 MHz, CDCl_3)

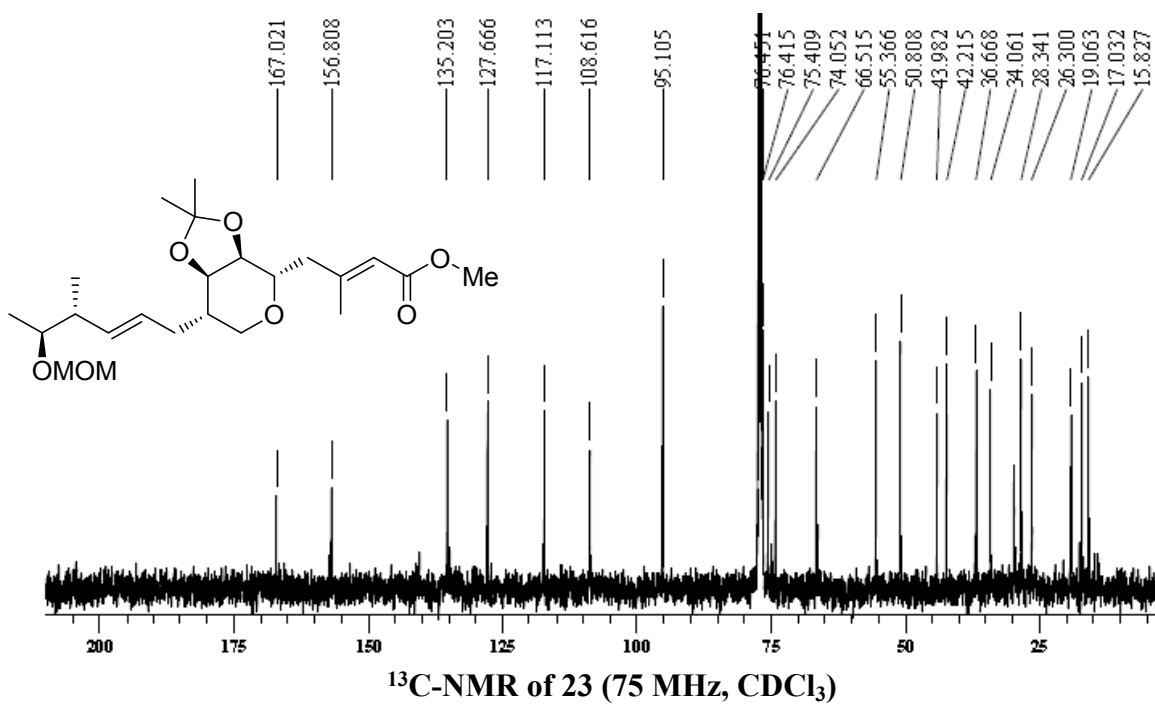
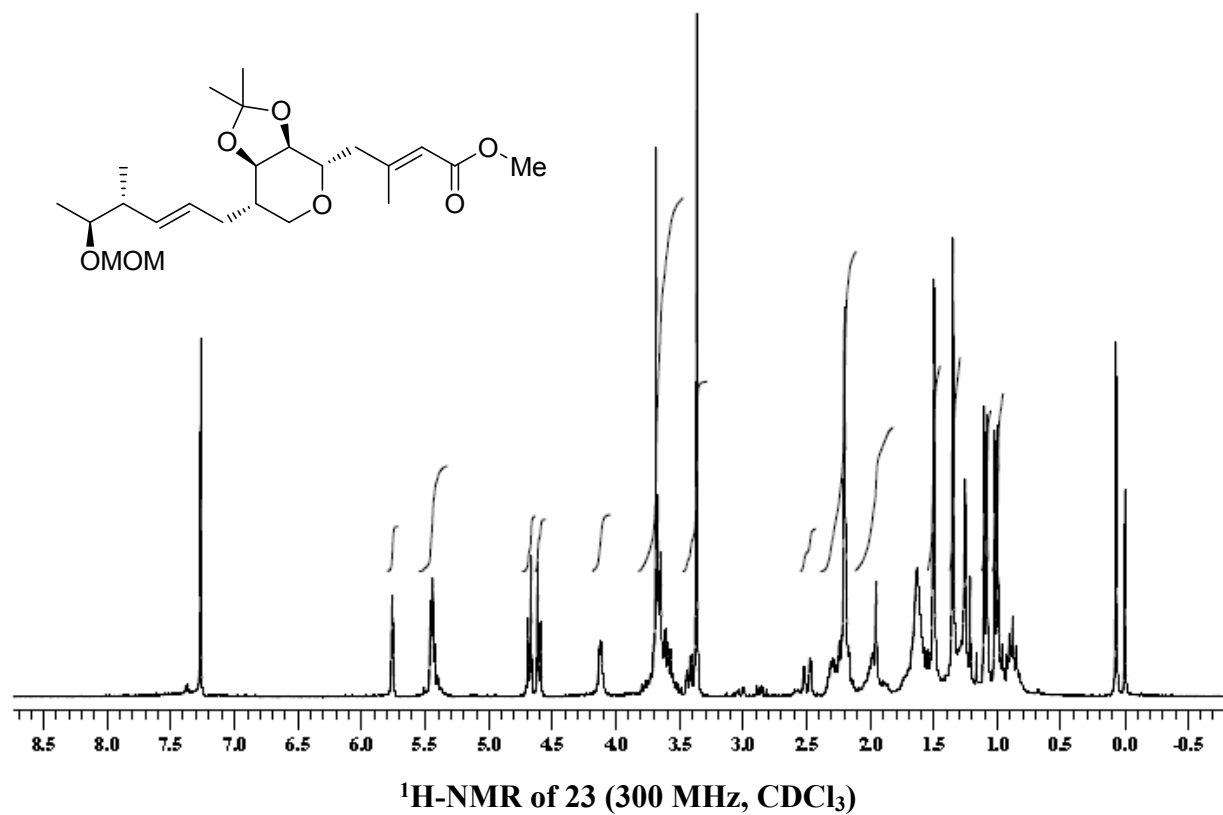


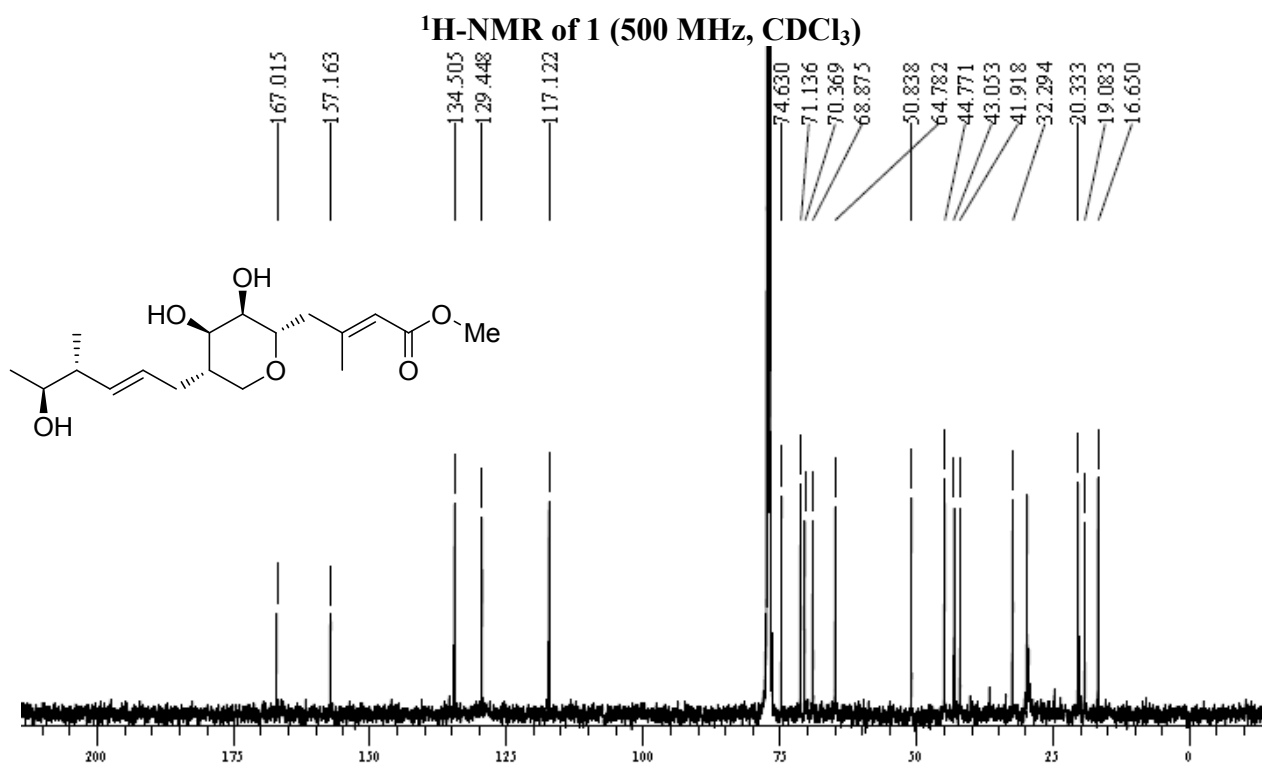
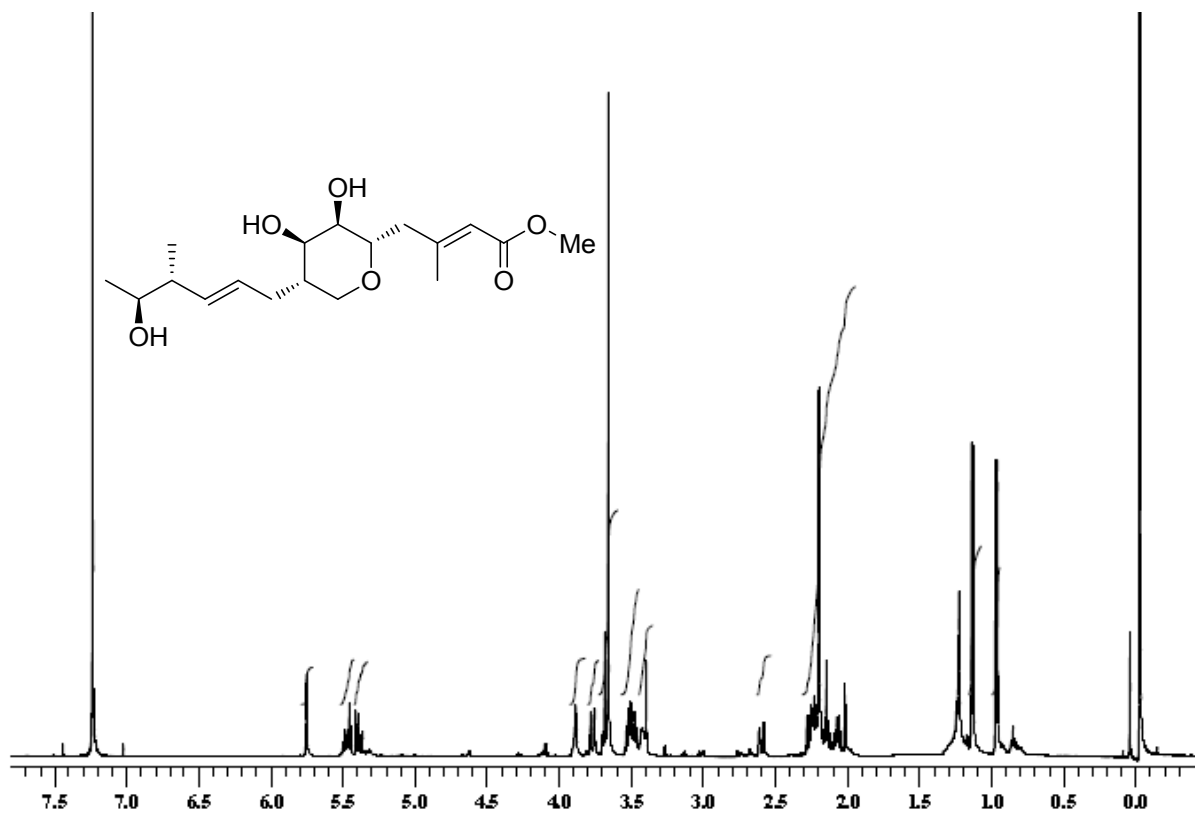
¹H-NMR of 22 (500 MHz, CDCl₃)

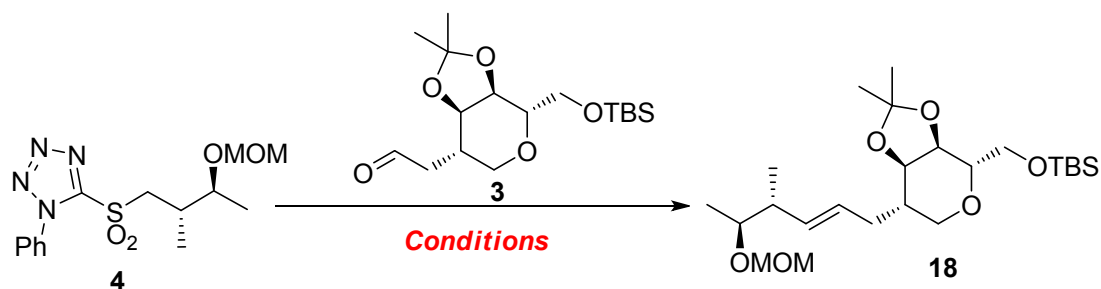


¹³C-NMR of 22 (125 MHz, CDCl₃)









Entry	Conditions	<i>T</i> [°C]	Time [h]	Result
1	KHMDS, THF	-78 to rt	16	3 recovered
2	KHMDS, DME	-78 to rt	16	3 recovered
3	KHMDS (2 equiv), Sulfone (2 equiv), THF	-78 to rt	16	3 recovered
4	KHMDS, 18-Crown-6, THF	-78 to rt	3	Complex mixture
5	KHMDS, 18-Crown-6, THF	-100 to rt	3	Complex mixture
6	KHMDS, HMPA-THF (1:4)	-78 to rt	3	Complex mixture
7	LiHMDS, THF	-78 to rt	16	3 recovered
8	LiHMDS, HMPA-THF (1:4)	-78 to rt	3	Complex mixture
9	LiHMDS, 18-Crown-6, THF	-100 to rt	3	Complex mixture
10	NaHMDS, THF	-78 to rt	16	3 recovered
11	KHMDS (2 equiv), Sulfone (1 equiv), THF	-78 to rt	3	72% of 18

*Unless specified one equivalent of sulfone **4**, aldehyde **3**, and base were loaded for optimization*

Optimization of Julia-Kocienski olefination of **3**.