

**Diastereoselective Synthesis of Highly Functionalized *cis*-1-Oxadecalines
via 6-*endo-tet* cyclizations of 2-*C*- Branched sugars.**

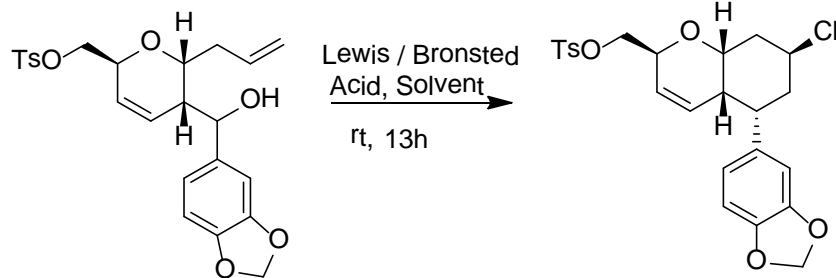
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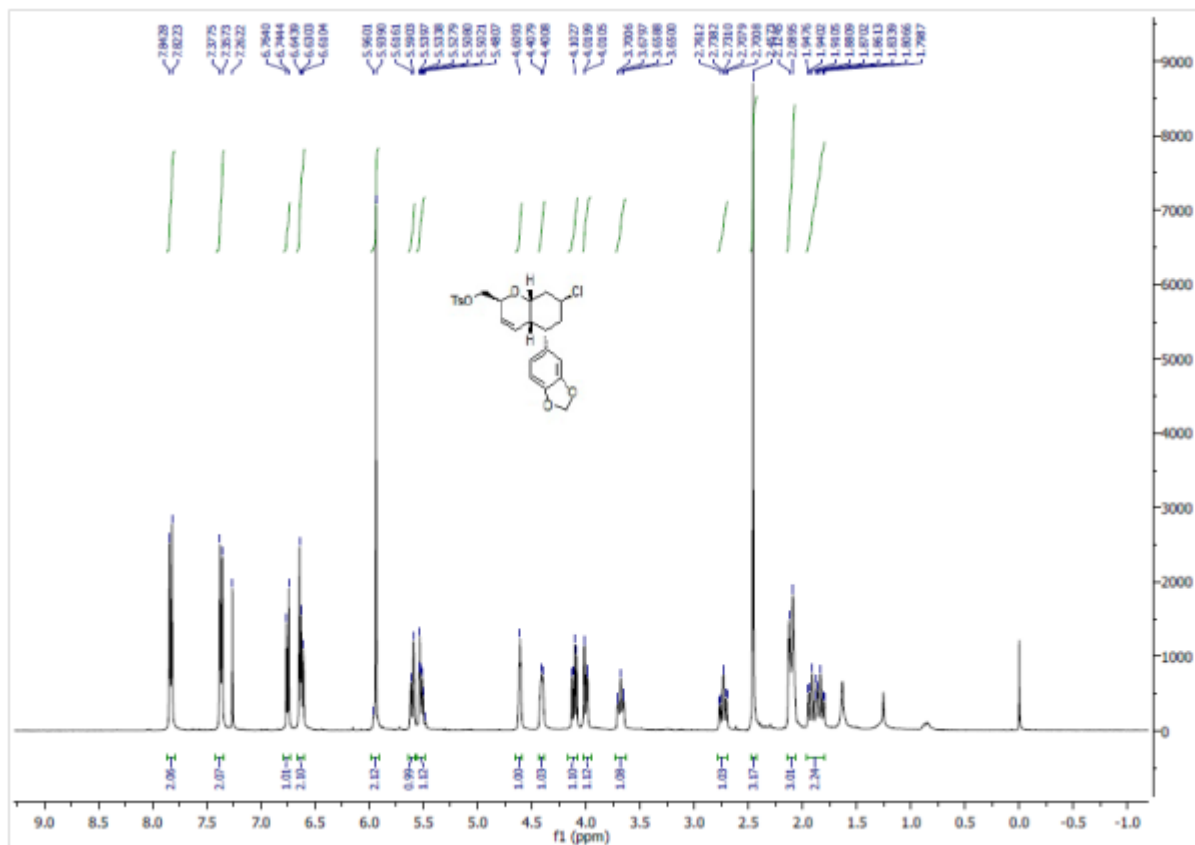
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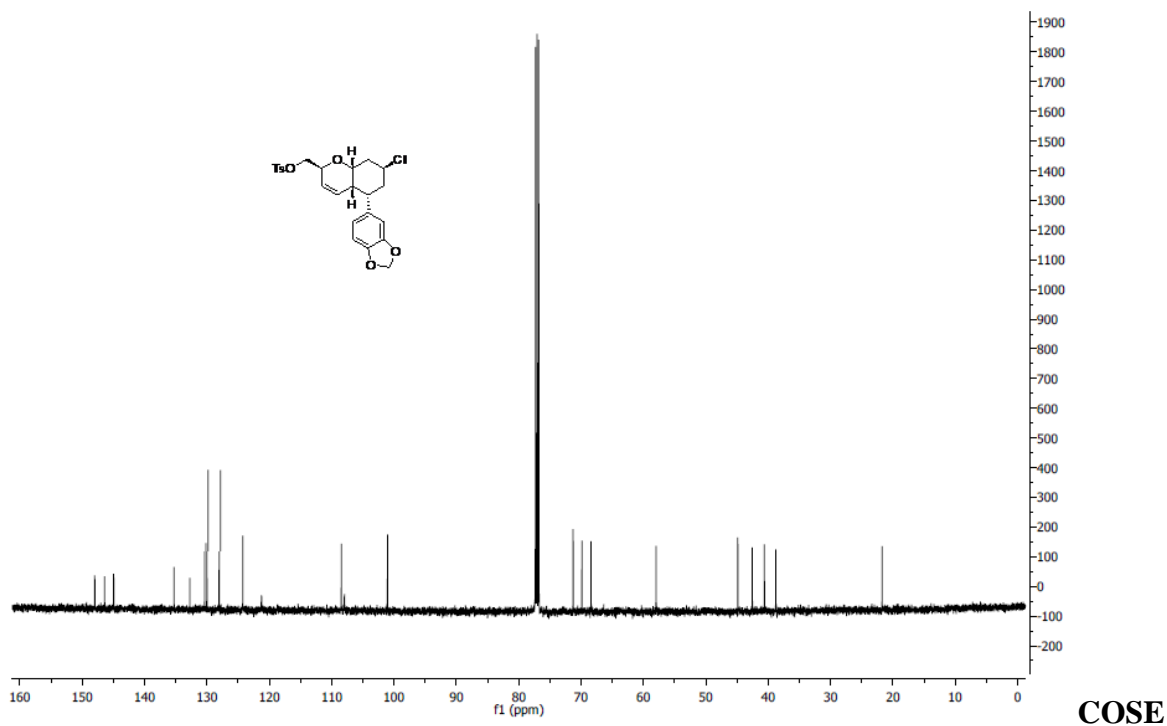
Copies of ¹H NMR and ¹³C NMR of compounds **6-13** 2-13

Table 1: Standardization of the reaction for the synthesis of 1-oxadecaline.

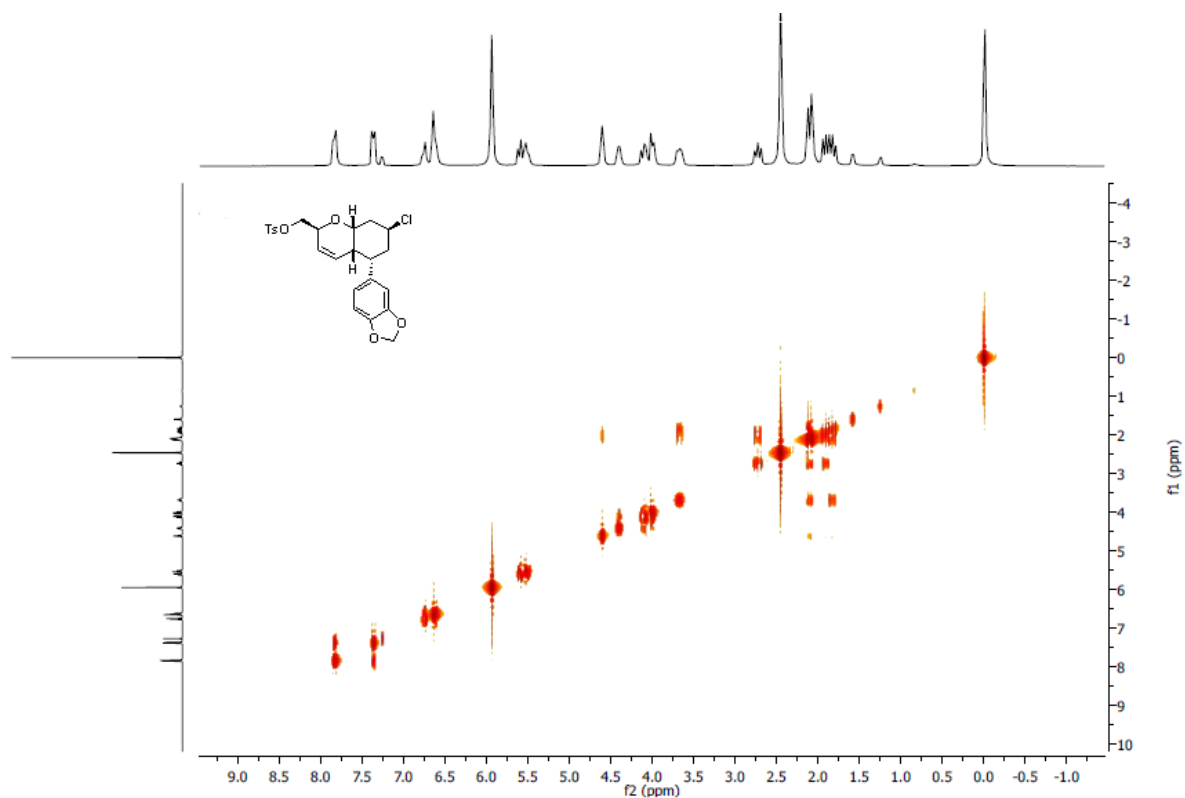
Entry	Lewis acid (mmol)	Solvent	Yield (%)
1	FeCl ₃ (1.0)	DCM	30
2	FeCl ₃ (0.75)	DCM	43
3	FeCl ₃ (0.5)	DCM	68
4	FeCl ₃ (0.33)	DCM	50
5	FeCl ₃ (0.20)	DCM	28
6	FeCl ₃ (0.50)	ACN	Nd
7	FeCl ₃ (1.0)	THF	Trace amount
8	FeCl ₃ (0.50)	DCE	58
9	BF ₃ .Et ₂ O (0.33/)	ACN	Nd
10	TFA (1.0 equiv.)	DCM	Nd
11	CeCl ₃ .7H ₂ O (0.50)	ACN	Nd

¹H NMR of compound 6 (400 MHz, CDCl₃).

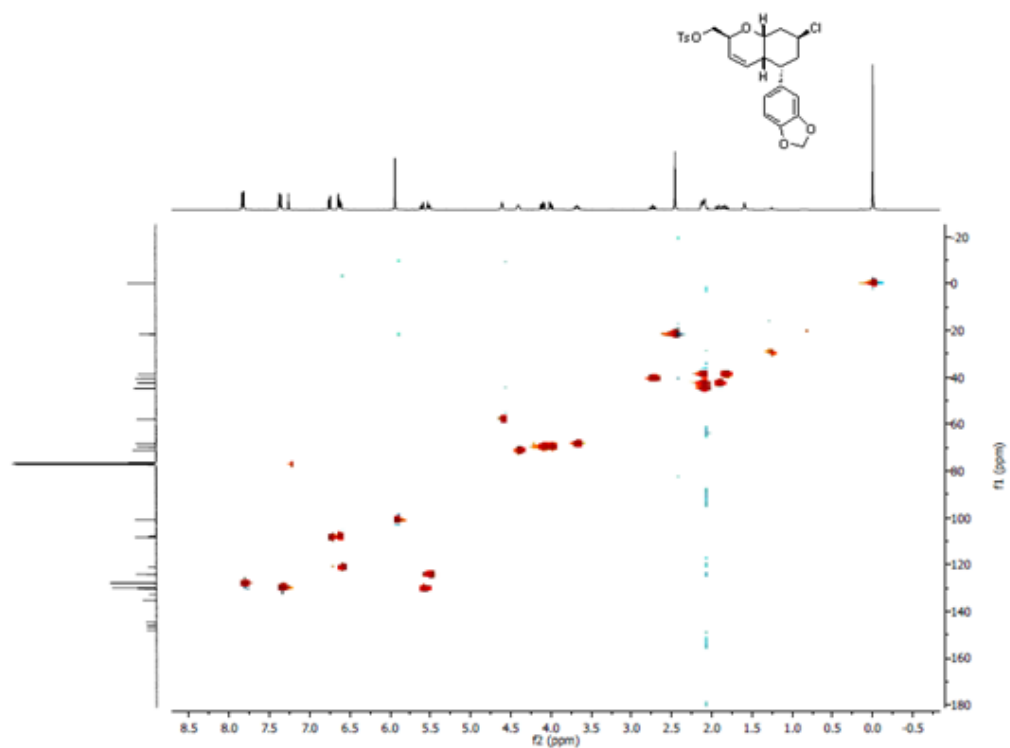
^{13}C NMR of compound 6 (126 MHz, CDCl_3).



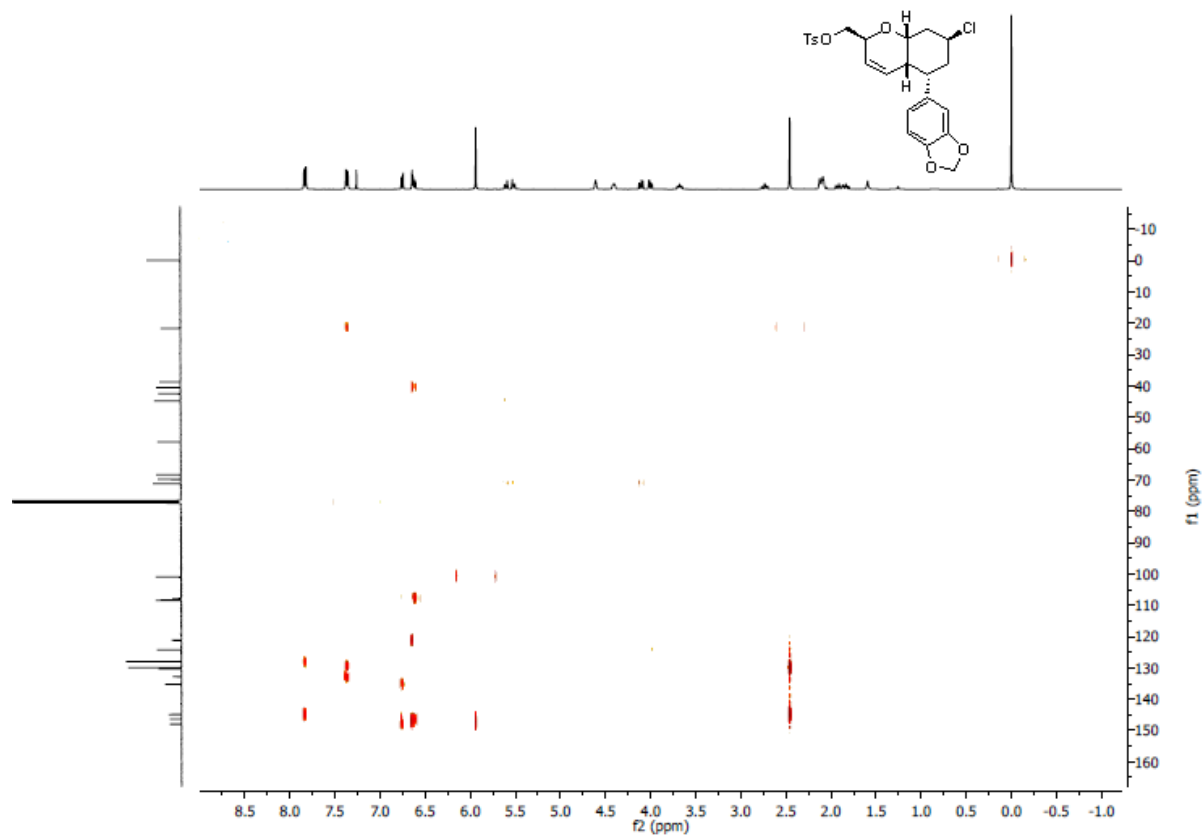
Y of compound 6.



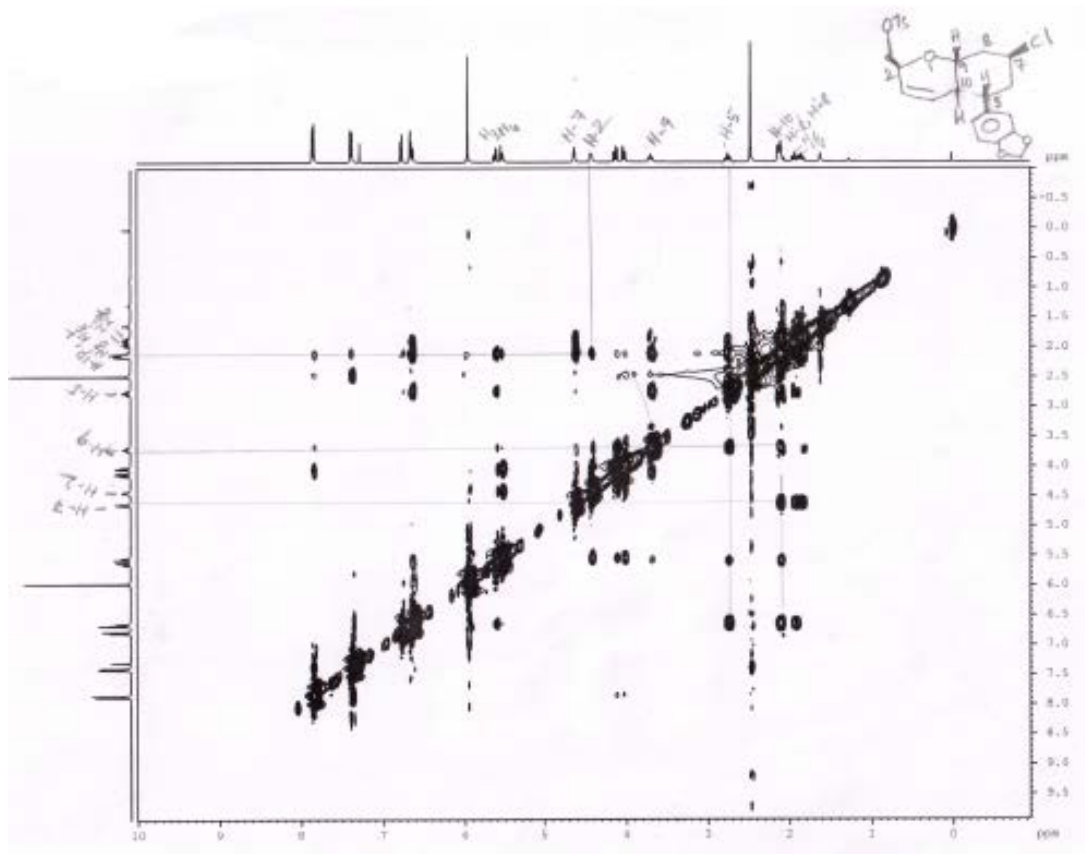
HSQC compound 6.



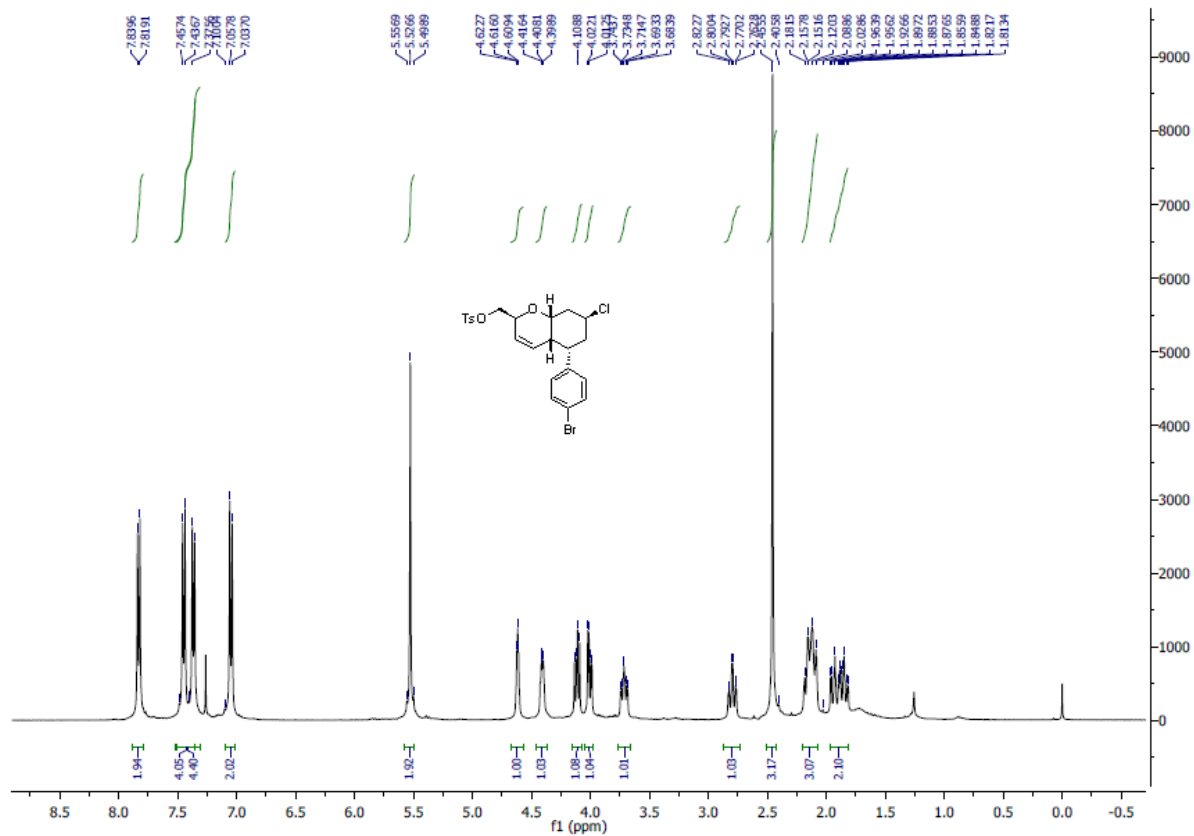
HMBC of compound 6.



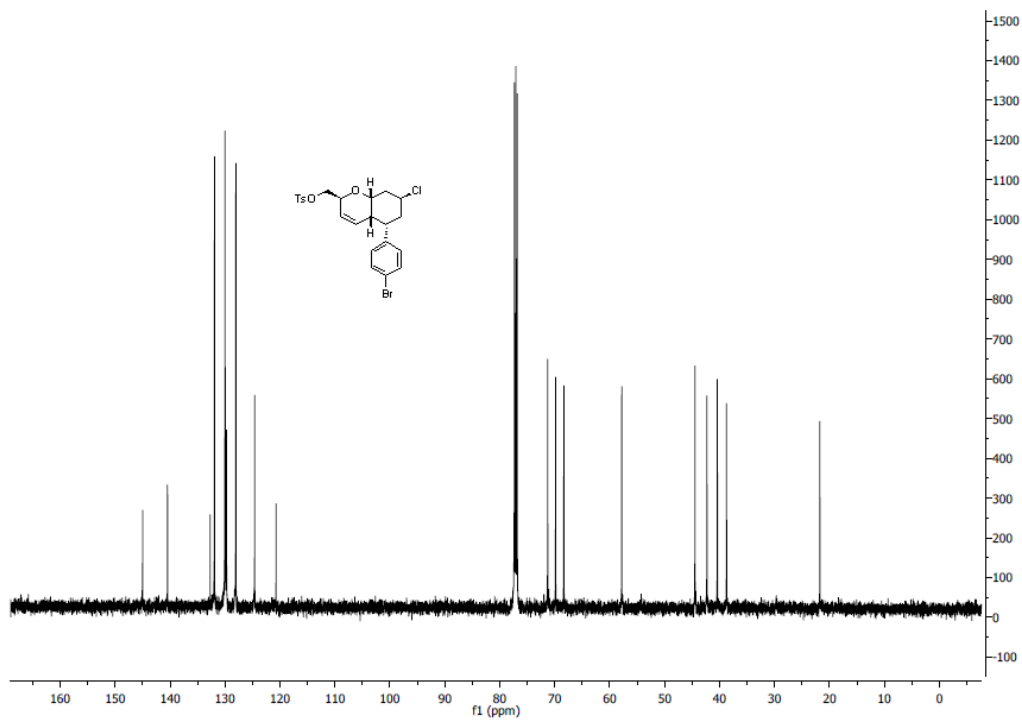
NOSEY of compound 6.



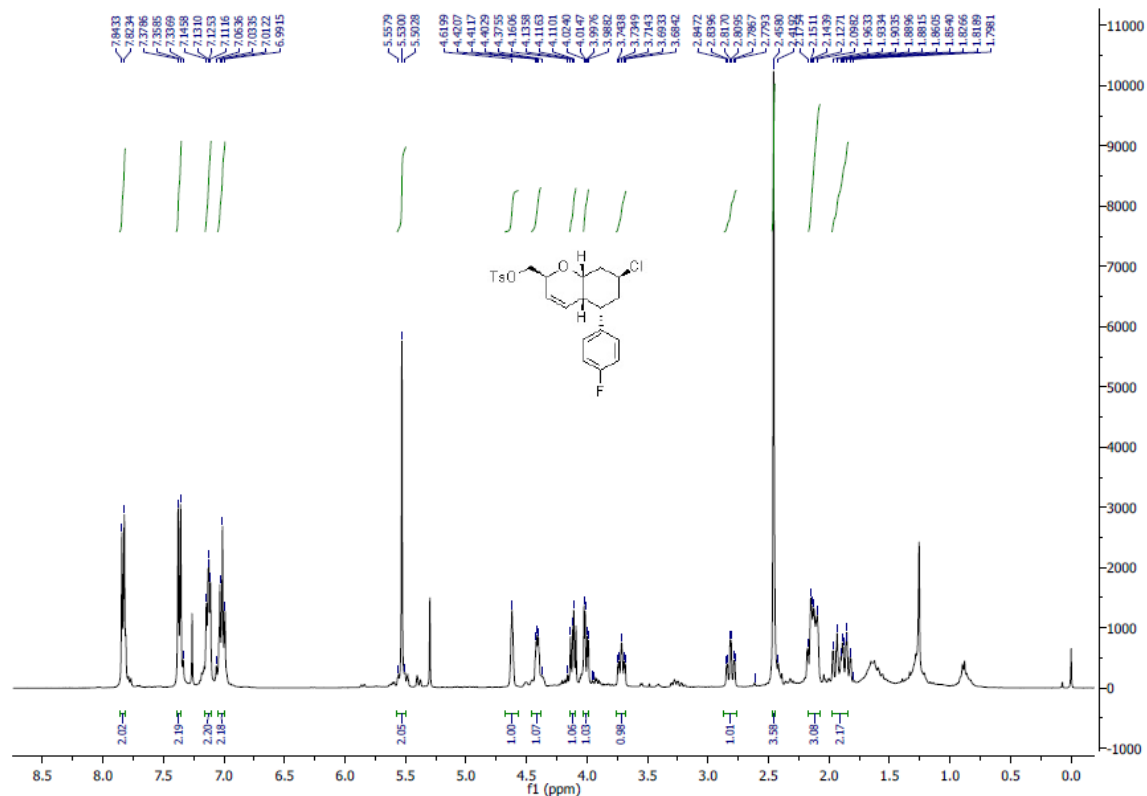
¹H NMR of compound 7 (400 MHz, CDCl₃).



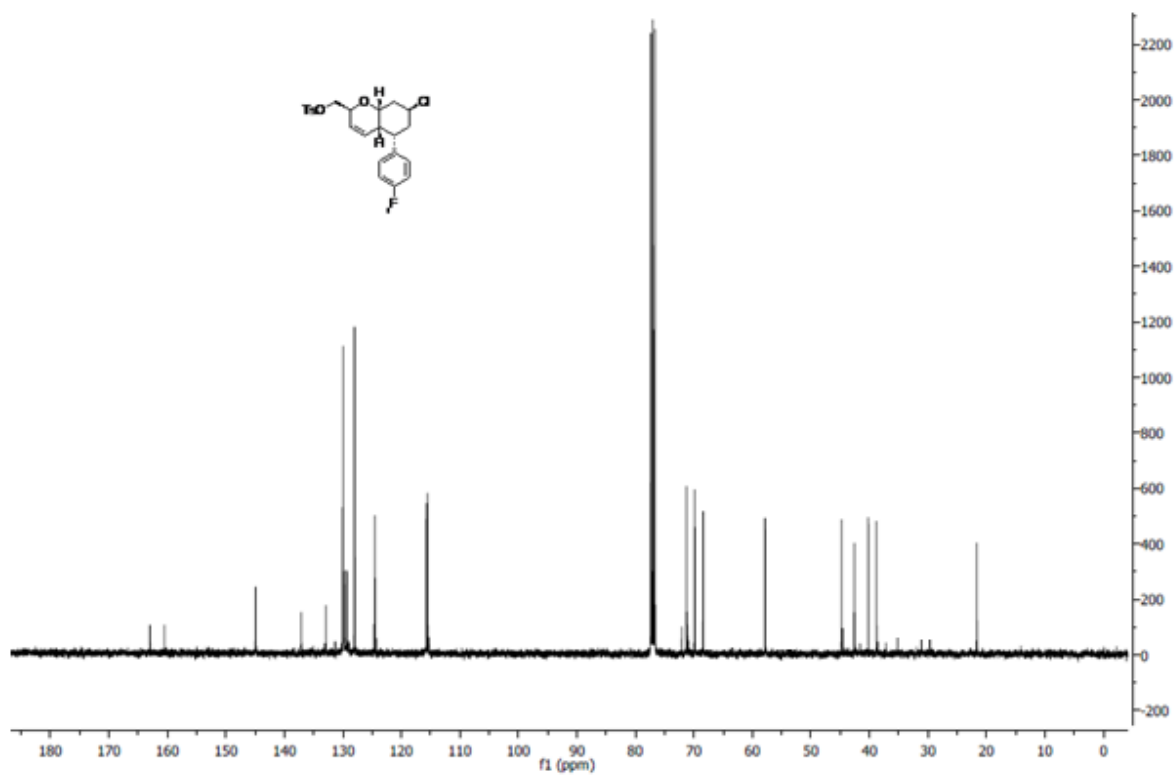
¹³C NMR of compound 7 (126 MHz, CDCl₃).



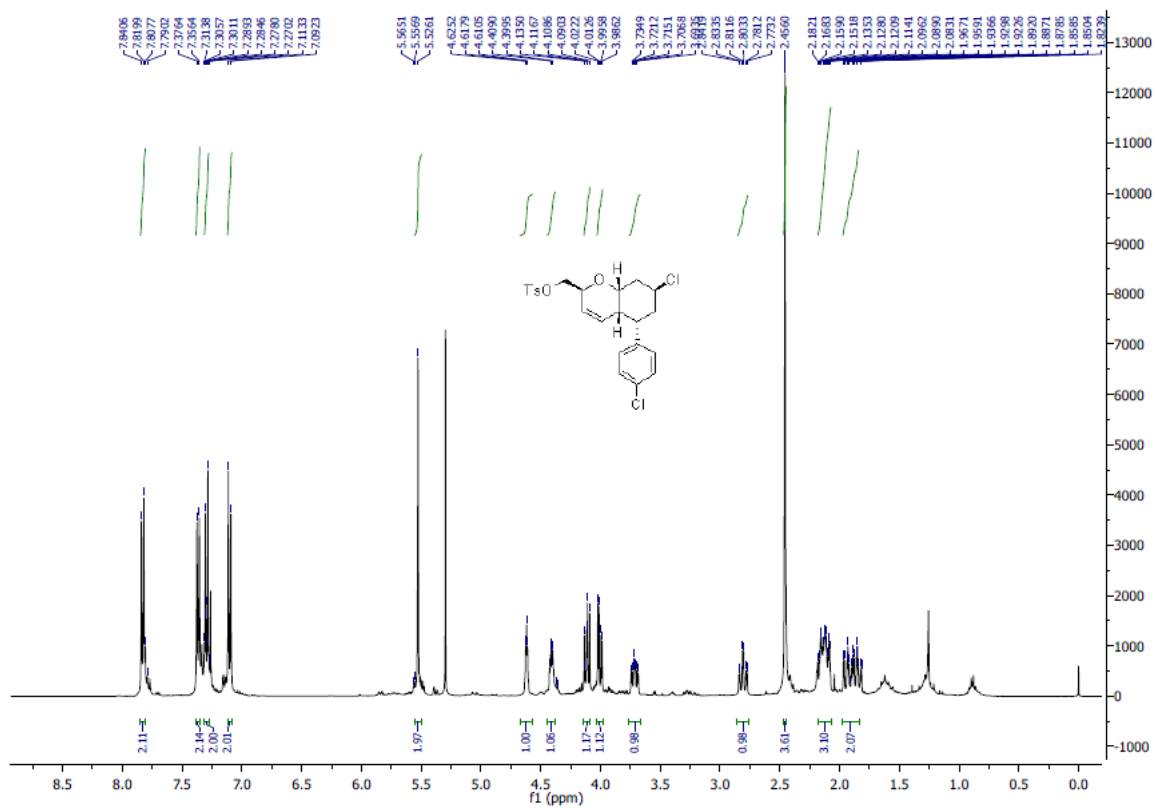
¹H NMR of compound 8 (400 MHz, CDCl₃).



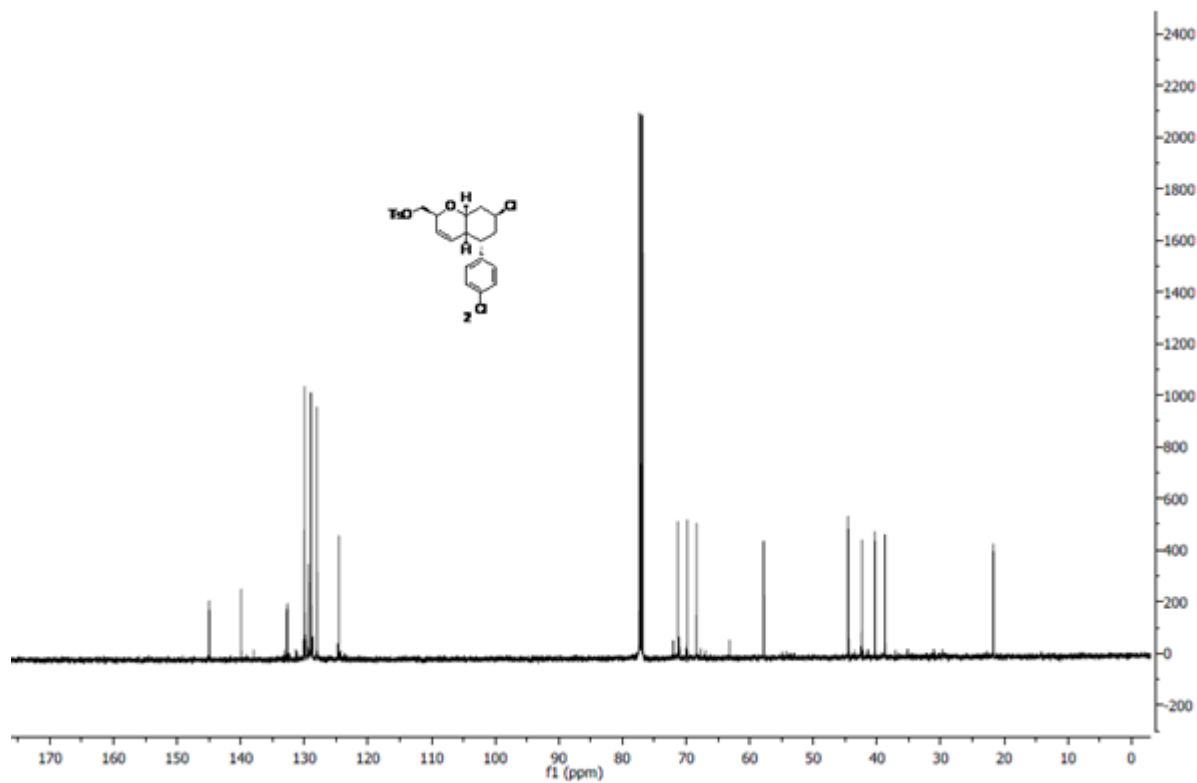
¹³C NMR of compound 8 (126 MHz, CDCl₃).



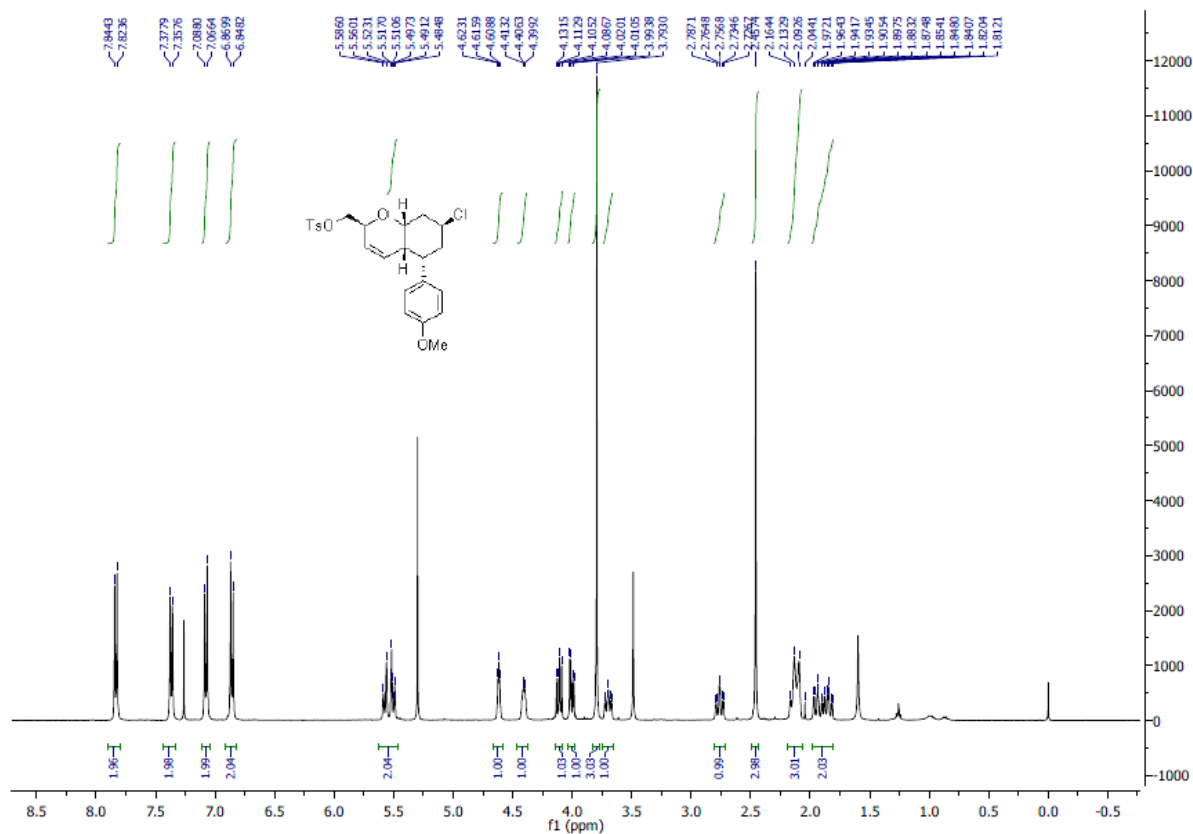
¹H NMR of compound 9 (400MHz, CDCl₃).



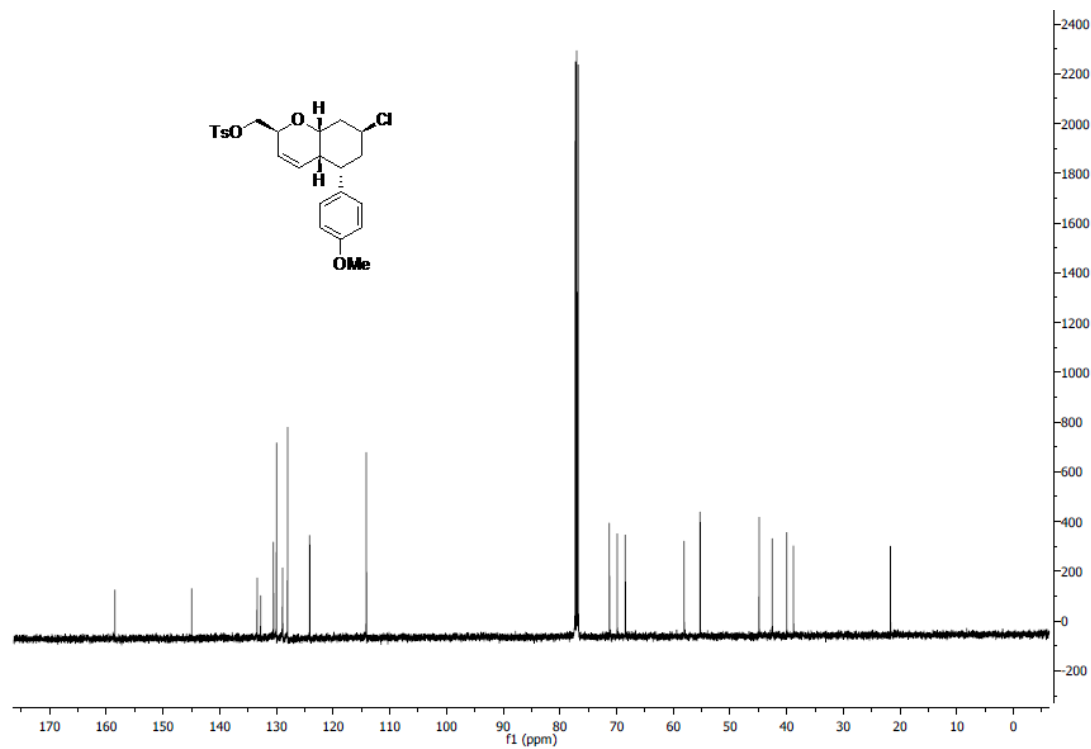
¹³C NMR of compound 9 (126 MHz, CDCl₃).



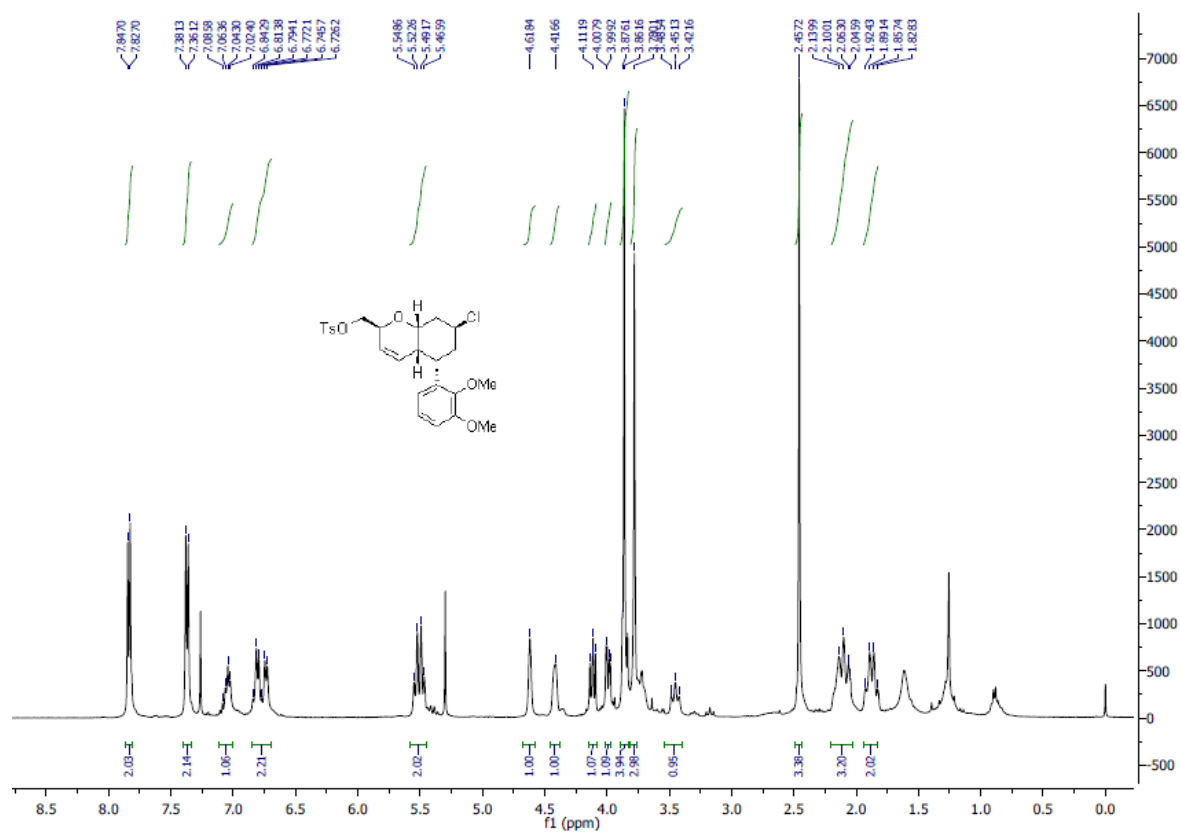
¹H NMR of compound 10 (400MHz, CDCl₃).



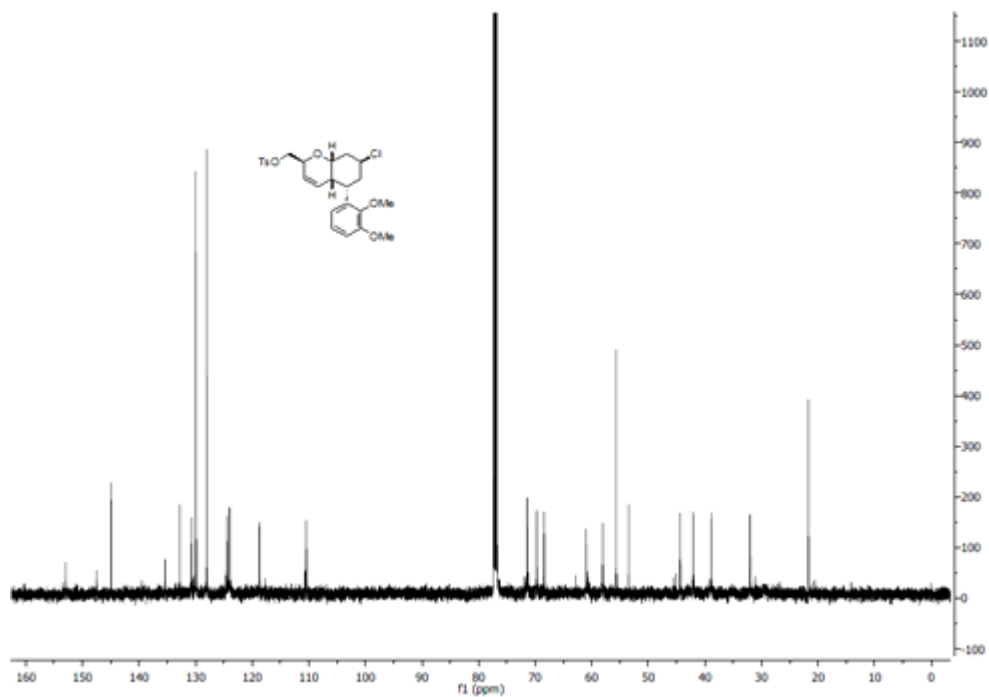
¹³C NMR of compound 10 (126 MHz, CDCl₃).



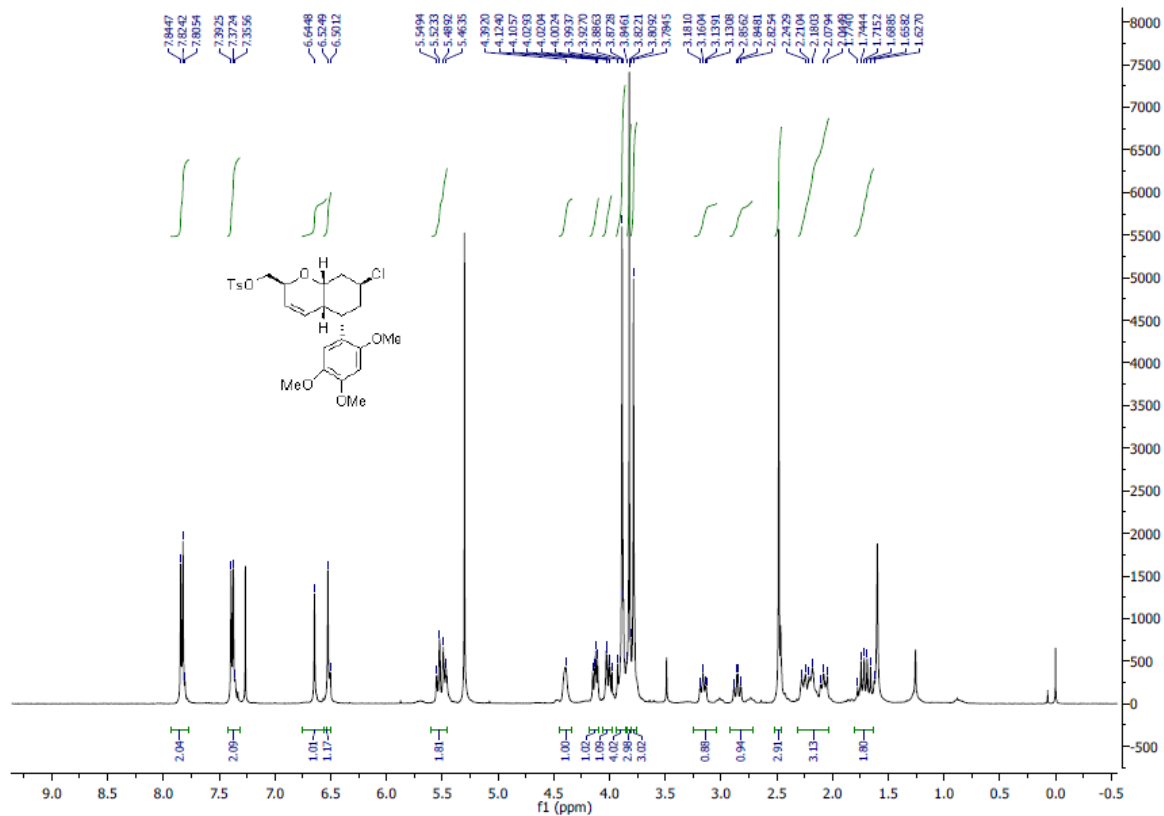
¹H NMR of compound 11 (400 MHz, CDCl₃).



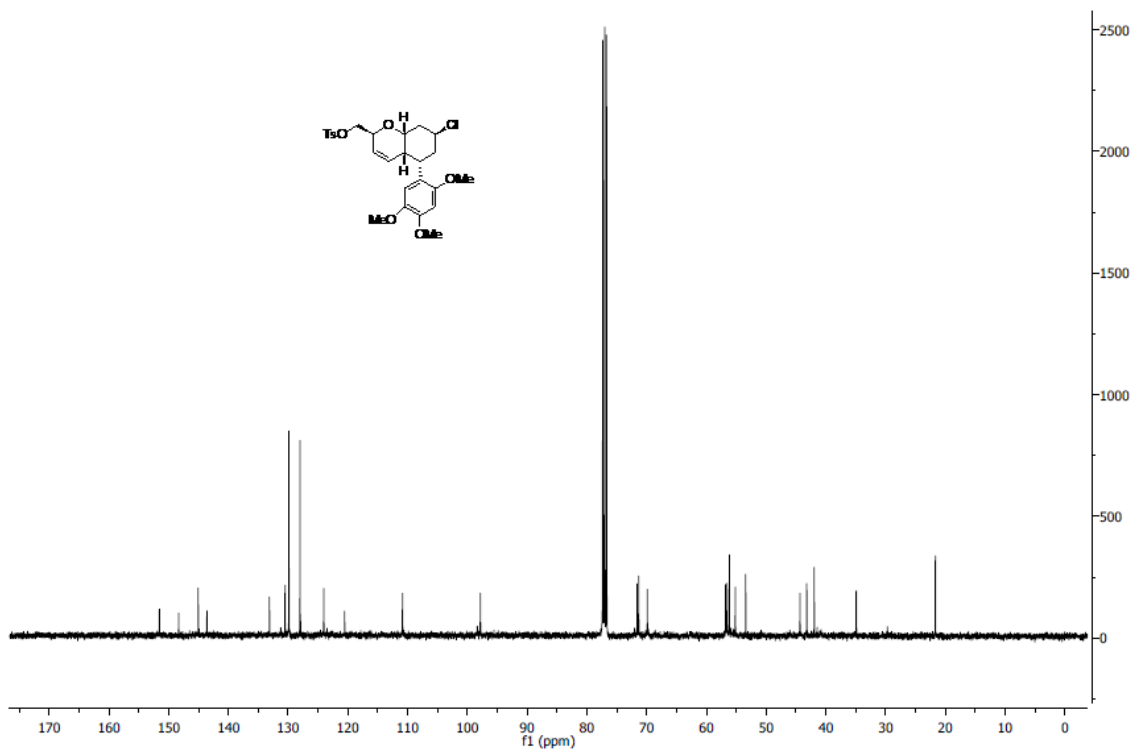
¹³C NMR of compound 11 (126 MHz, CDCl₃).



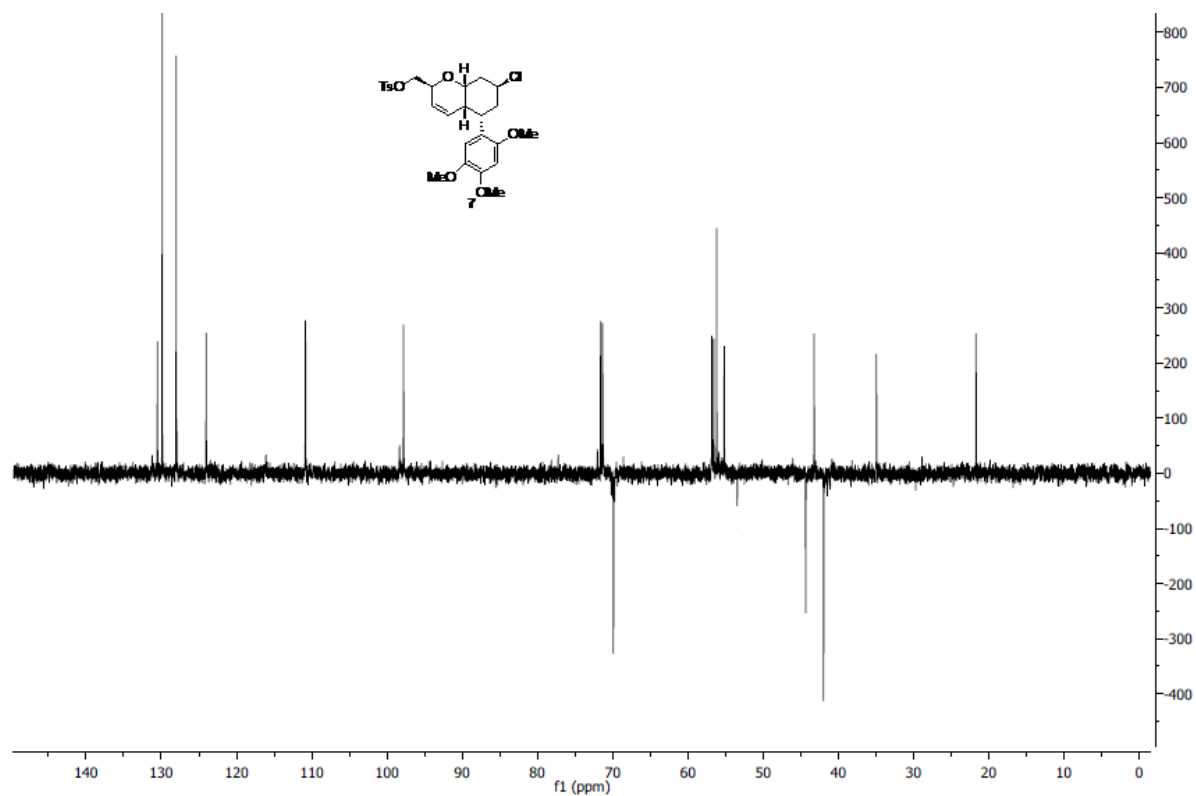
¹H NMR of compound 12 (400 MHz, CDCl₃).



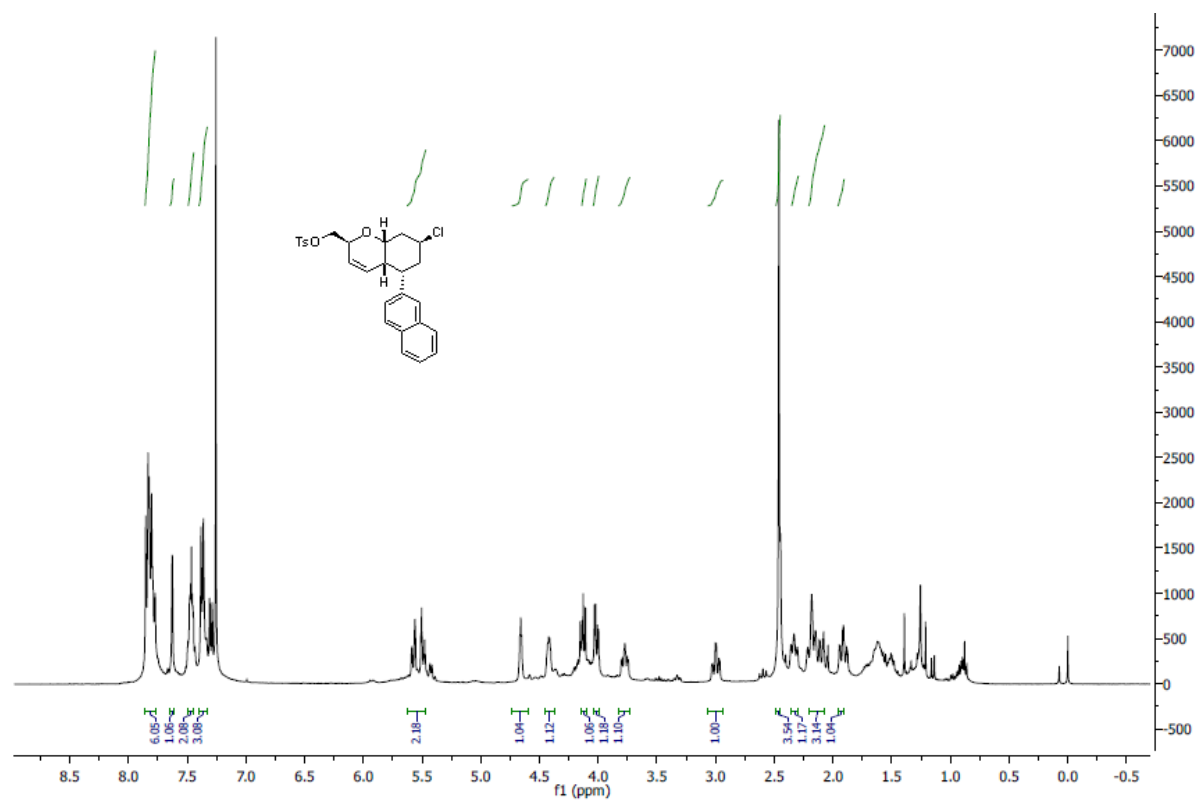
¹³C NMR of compound 12 (126 MHz, CDCl₃).



DEPT of the compound 12 (126 MHz, CDCl₃)



¹H NMR of compound 13



¹³C NMR of compound 13

