

Supporting Information

Electroreductive Intramolecular Coupling of Phthalimides with Aromatic Aldehydes: Application to the Synthesis of Lennoxamine

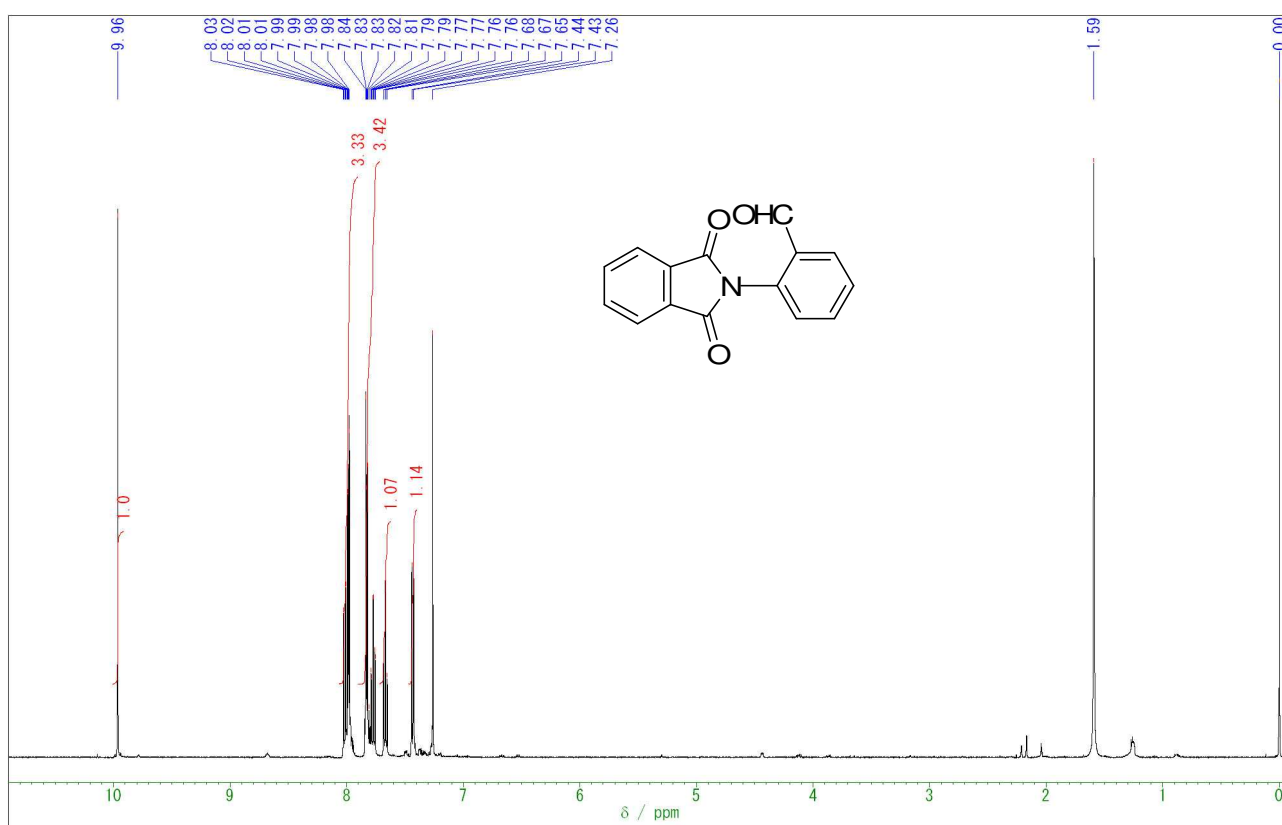
Naoki Kise,* Shinsaku Isemoto, and Toshihiko Sakurai

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4-101, Koyama-cho Minami, Tottori 680-8552, Japan

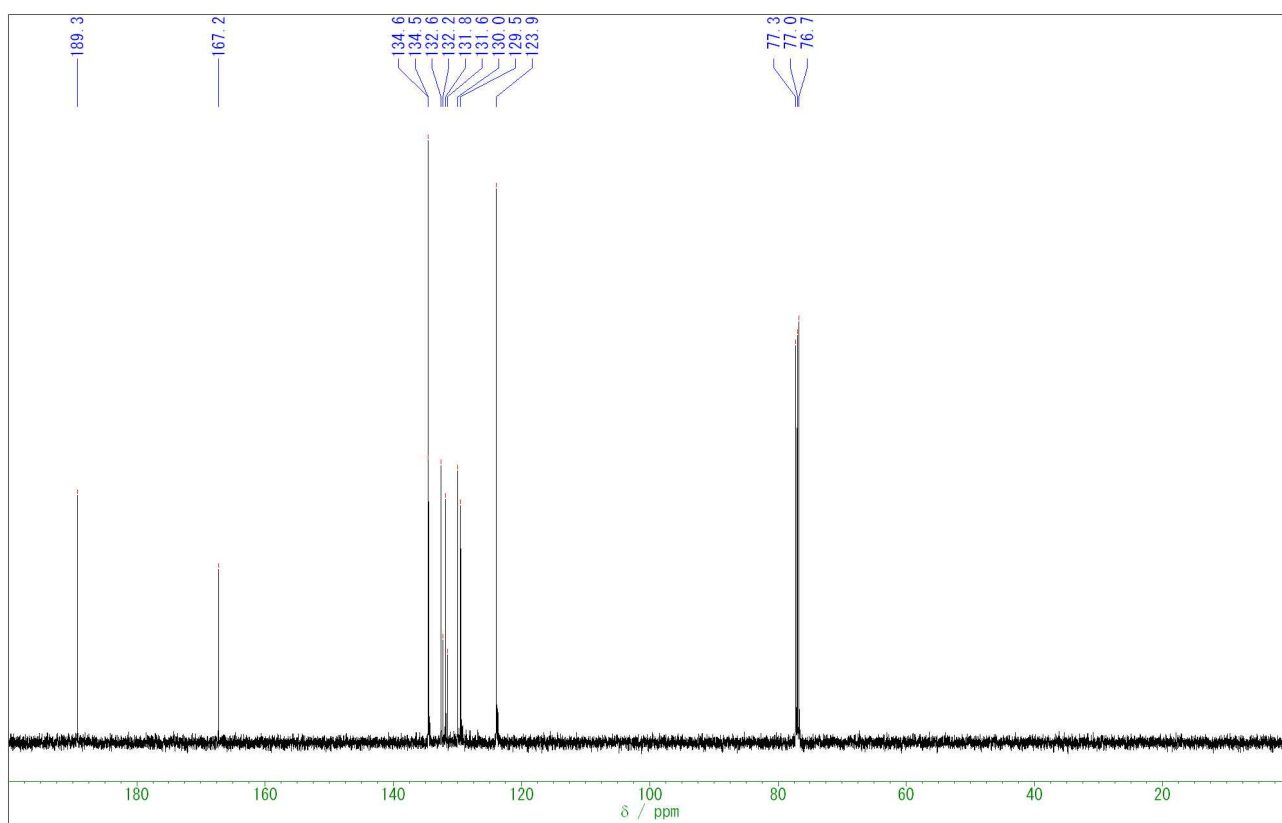
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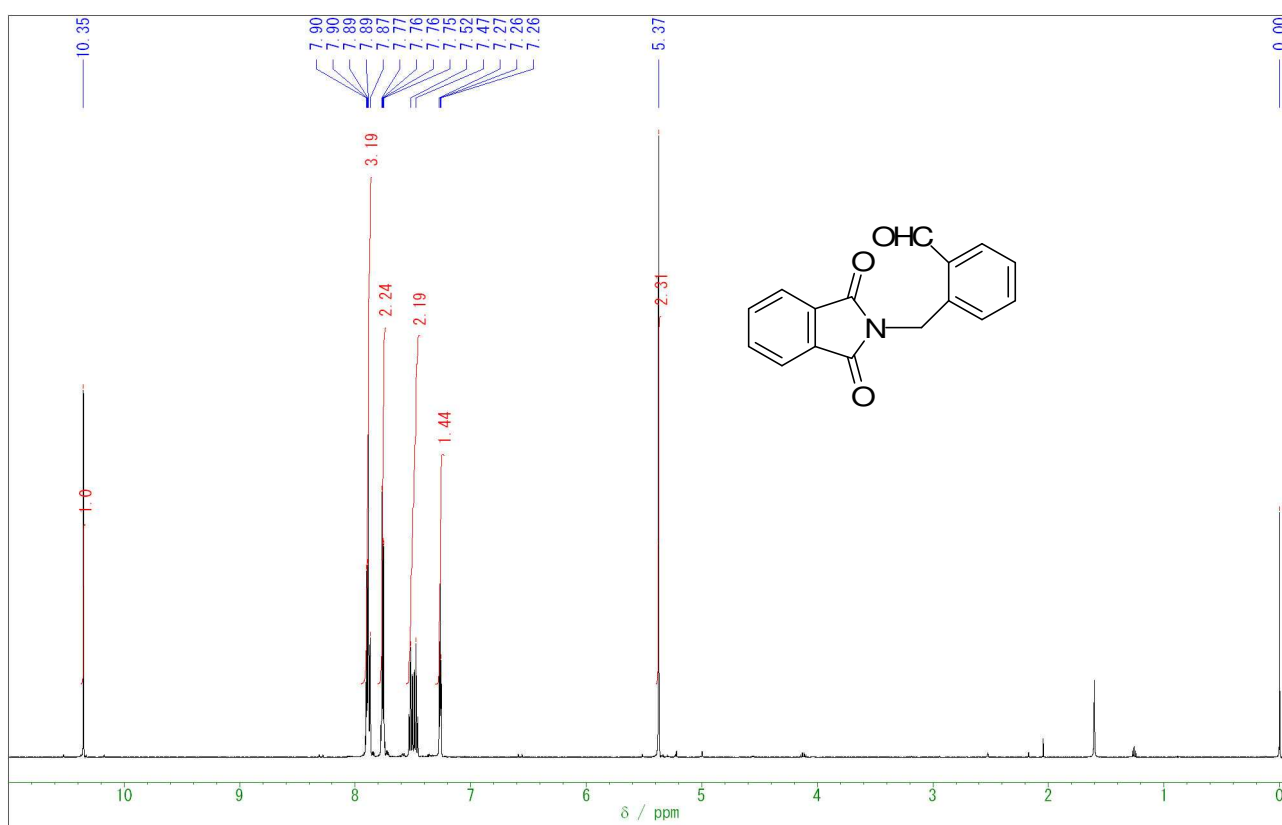
¹H NMR Spectrum of 1 (500 MHz, CDCl₃)



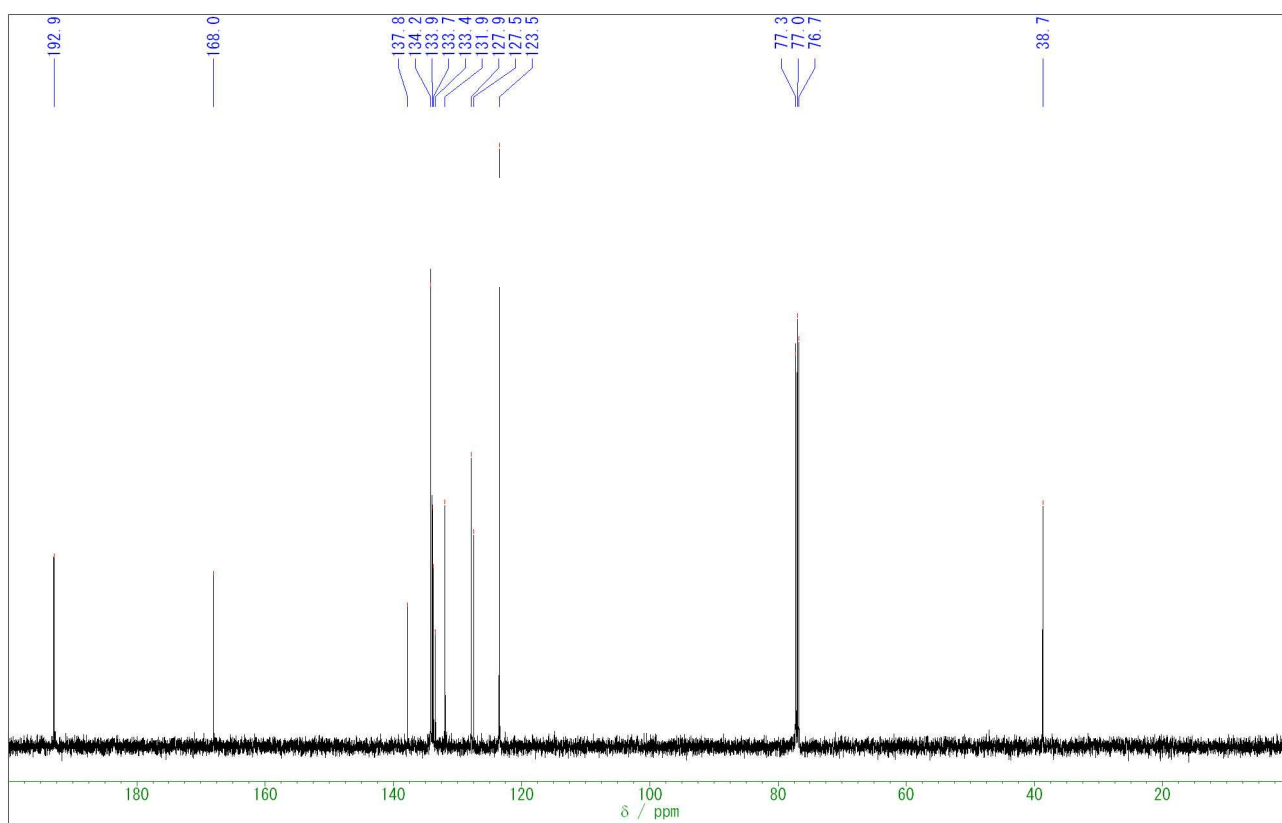
¹³C NMR Spectrum of 1 (125 MHz, CDCl₃)



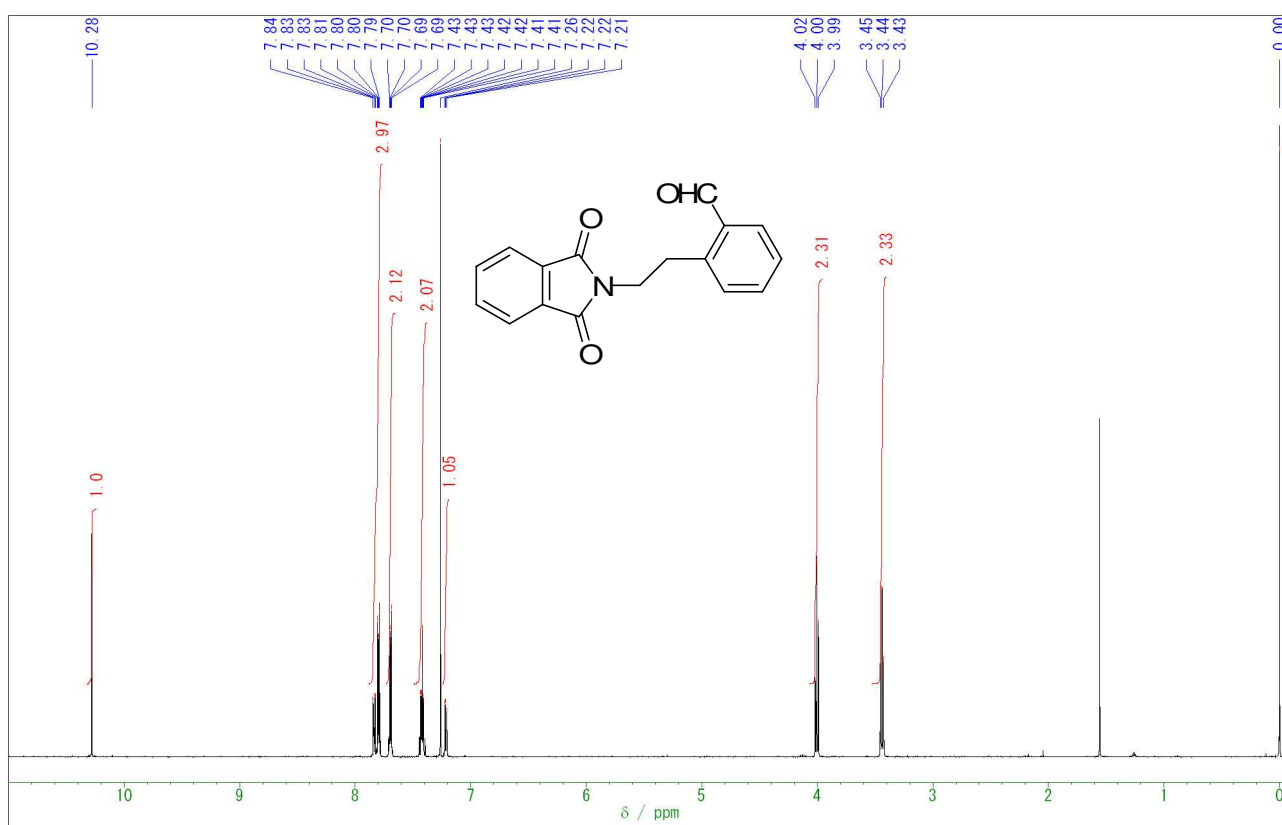
^1H NMR Spectrum of 2 (500 MHz, CDCl_3)



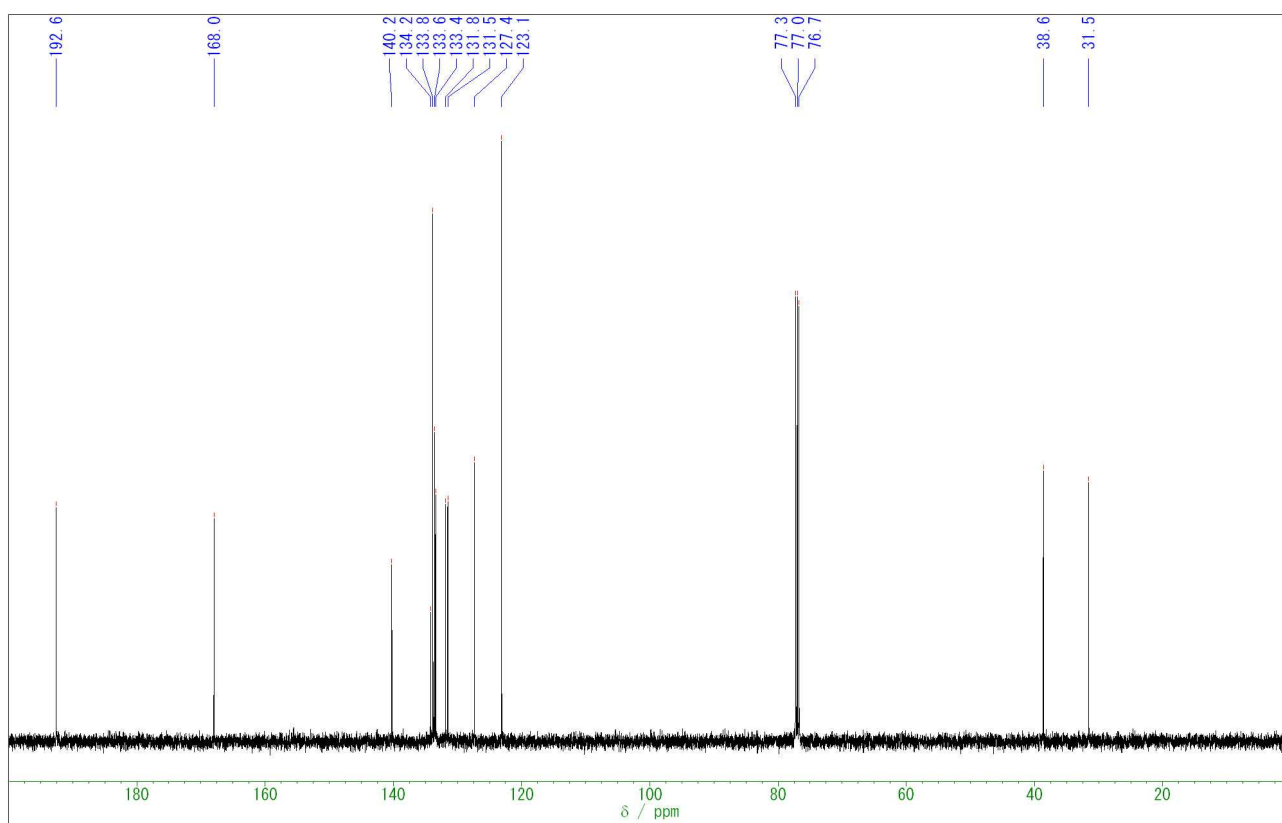
^{13}C NMR Spectrum of 2 (125 MHz, CDCl_3)



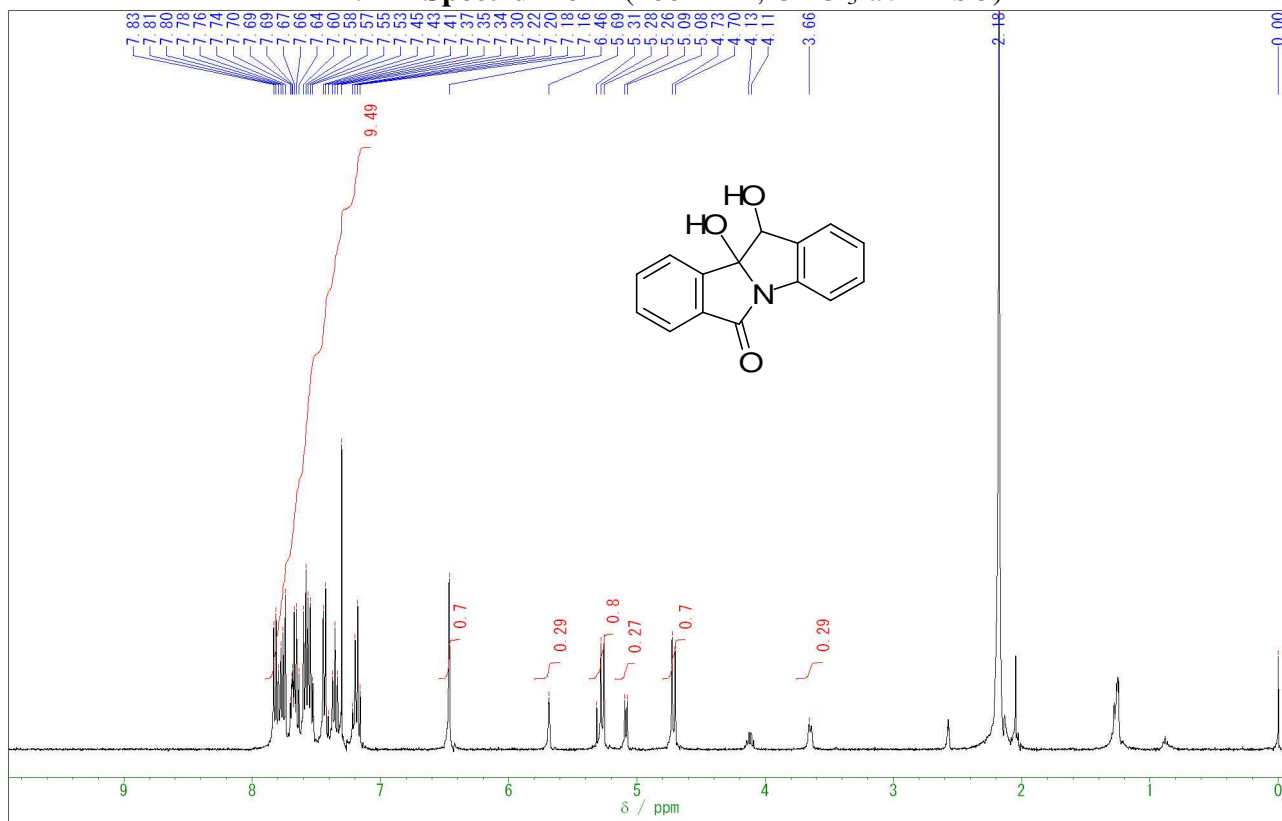
¹H NMR Spectrum of 3 (500 MHz, CDCl₃)



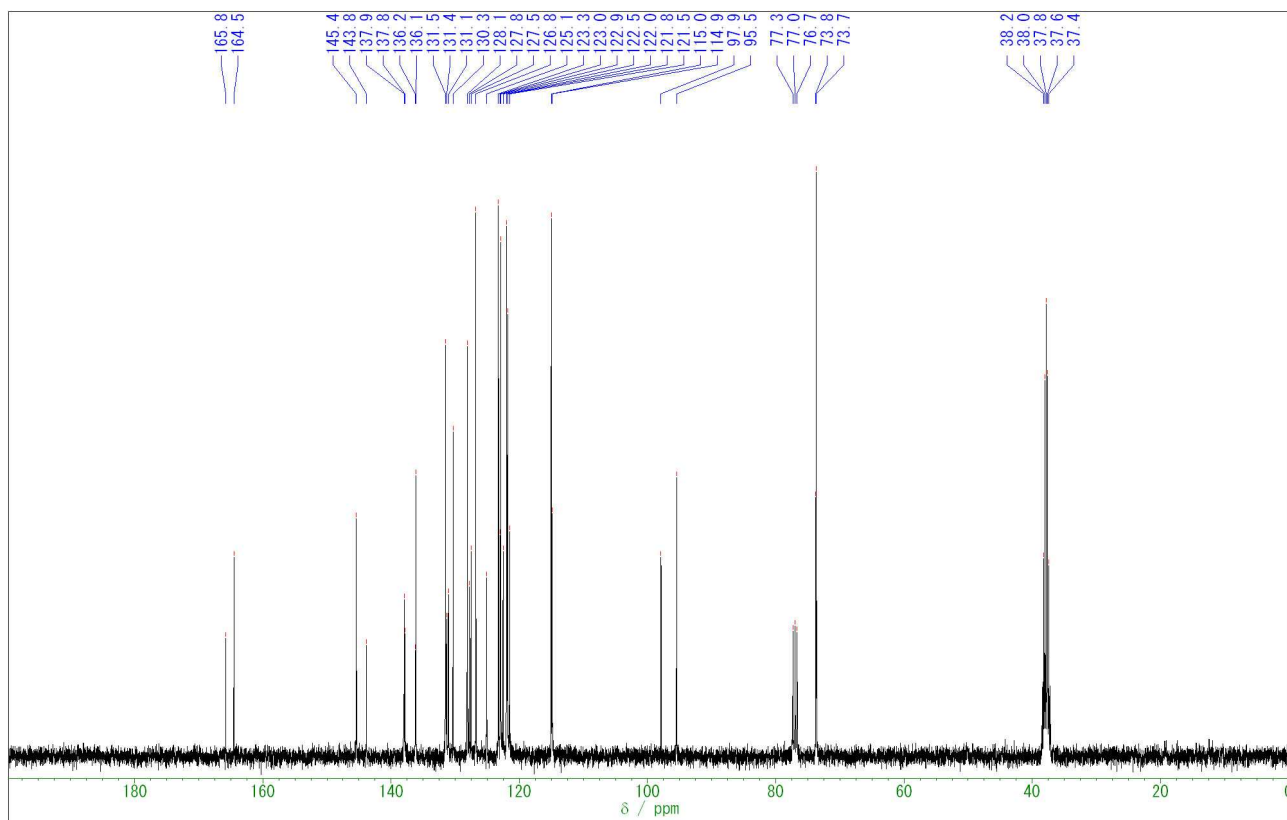
¹³C NMR Spectrum of 3 (125 MHz, CDCl₃)



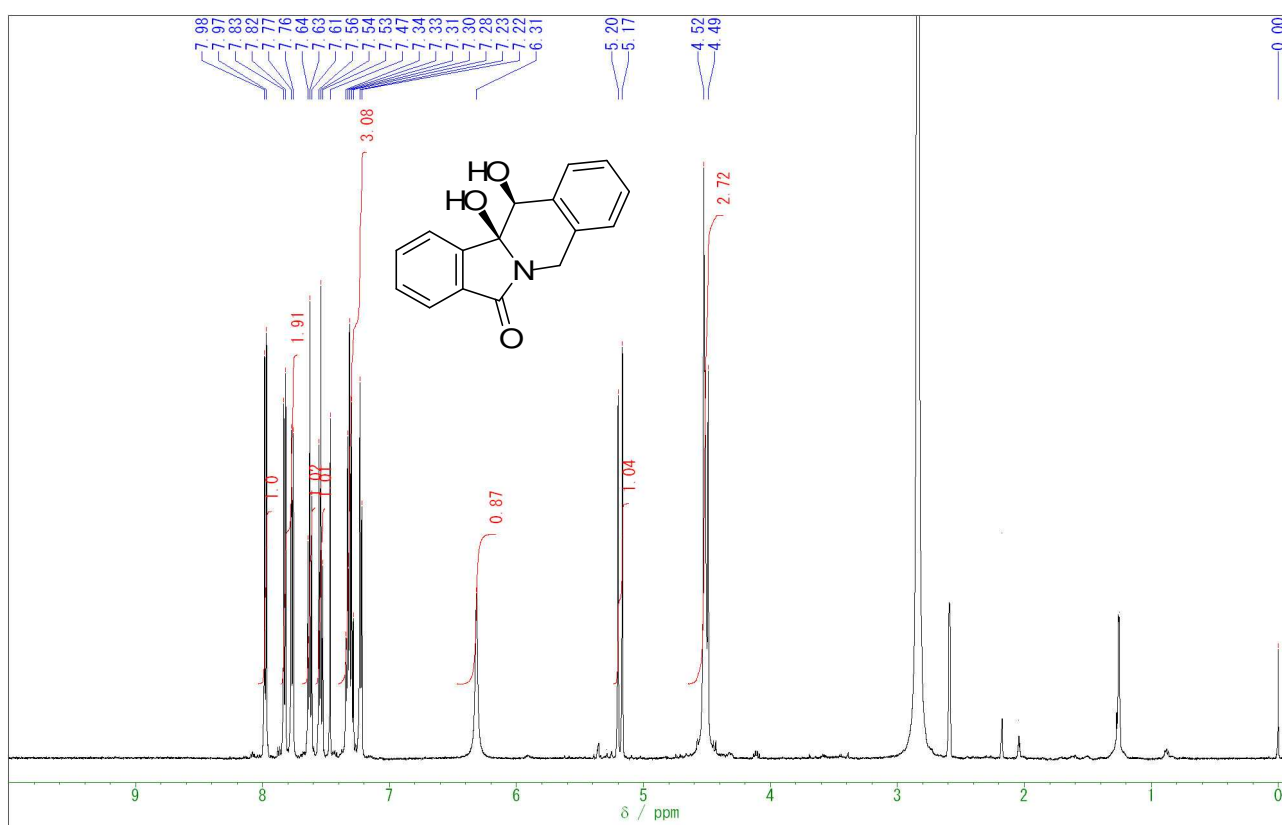
¹H NMR Spectrum of 4 (400 MHz, CDCl₃-d₆DMSO)



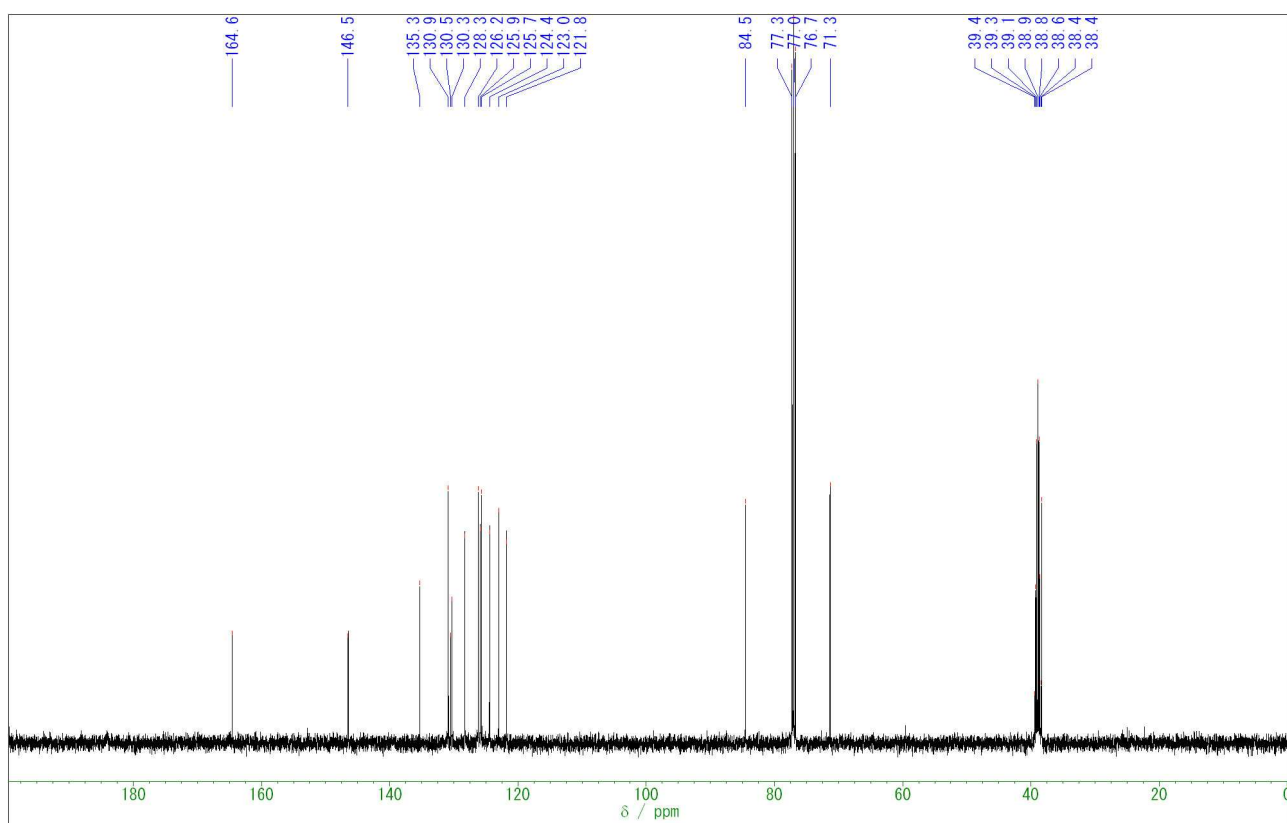
¹³C NMR Spectrum of 4 (100 MHz, CDCl₃-d₆DMSO)



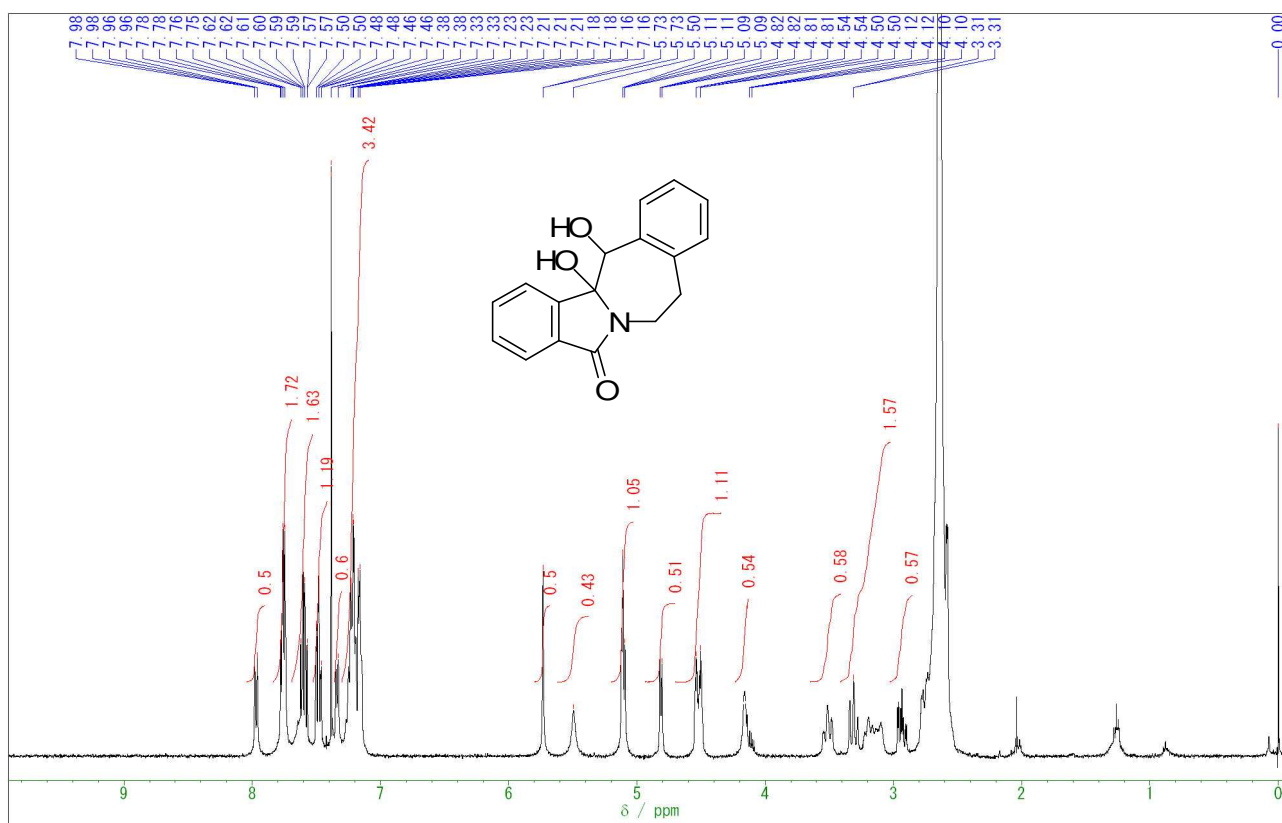
¹H NMR Spectrum of *cis*-5 (500 MHz, CDCl₃-d₆DMSO)



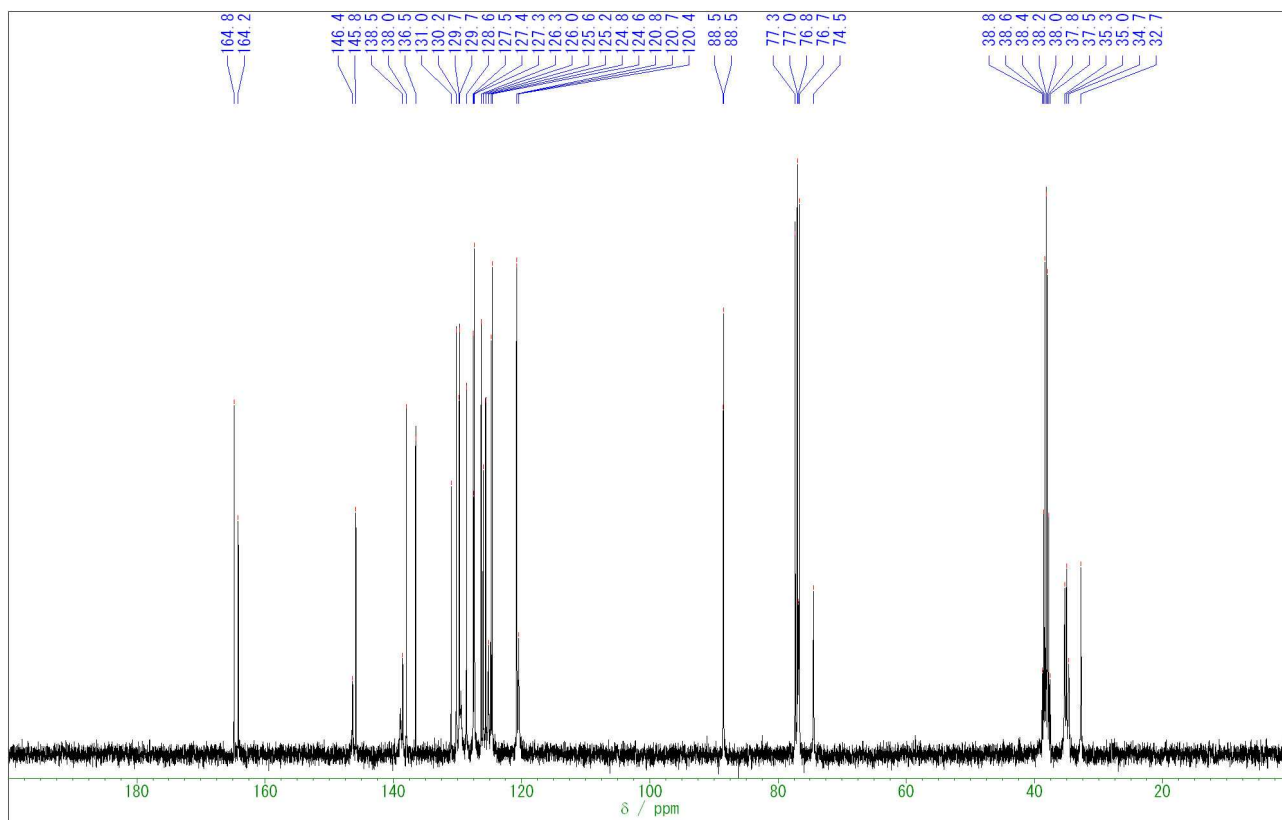
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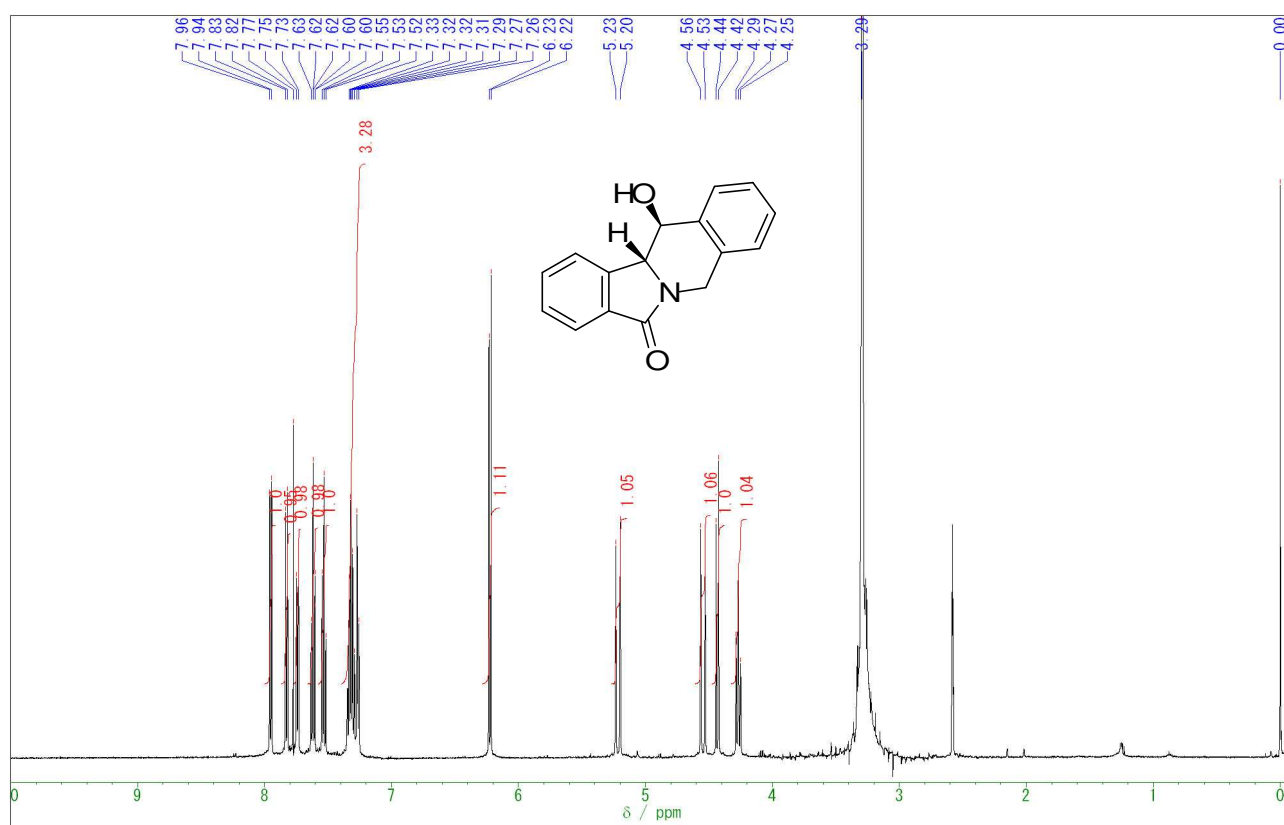
¹H NMR Spectrum of 6 (400 MHz, CDCl₃-d₆DMSO)



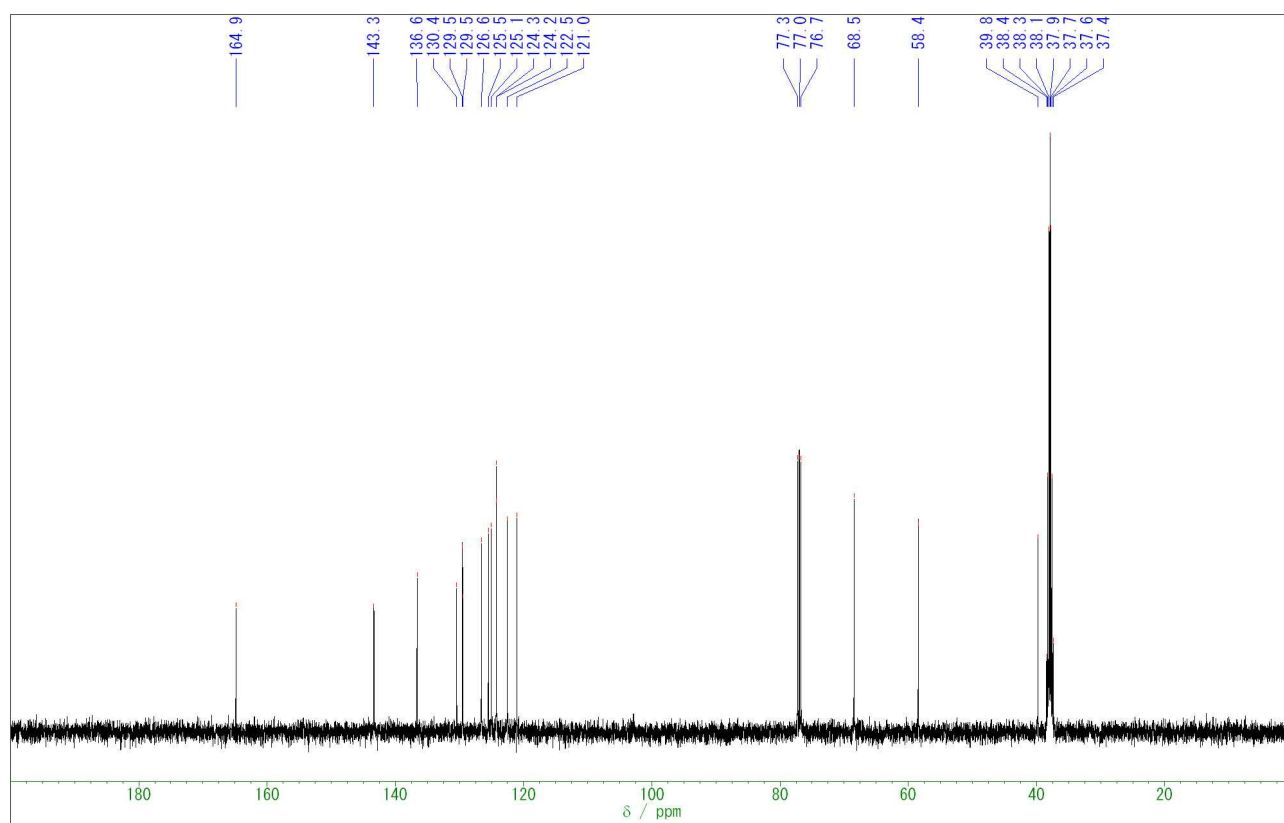
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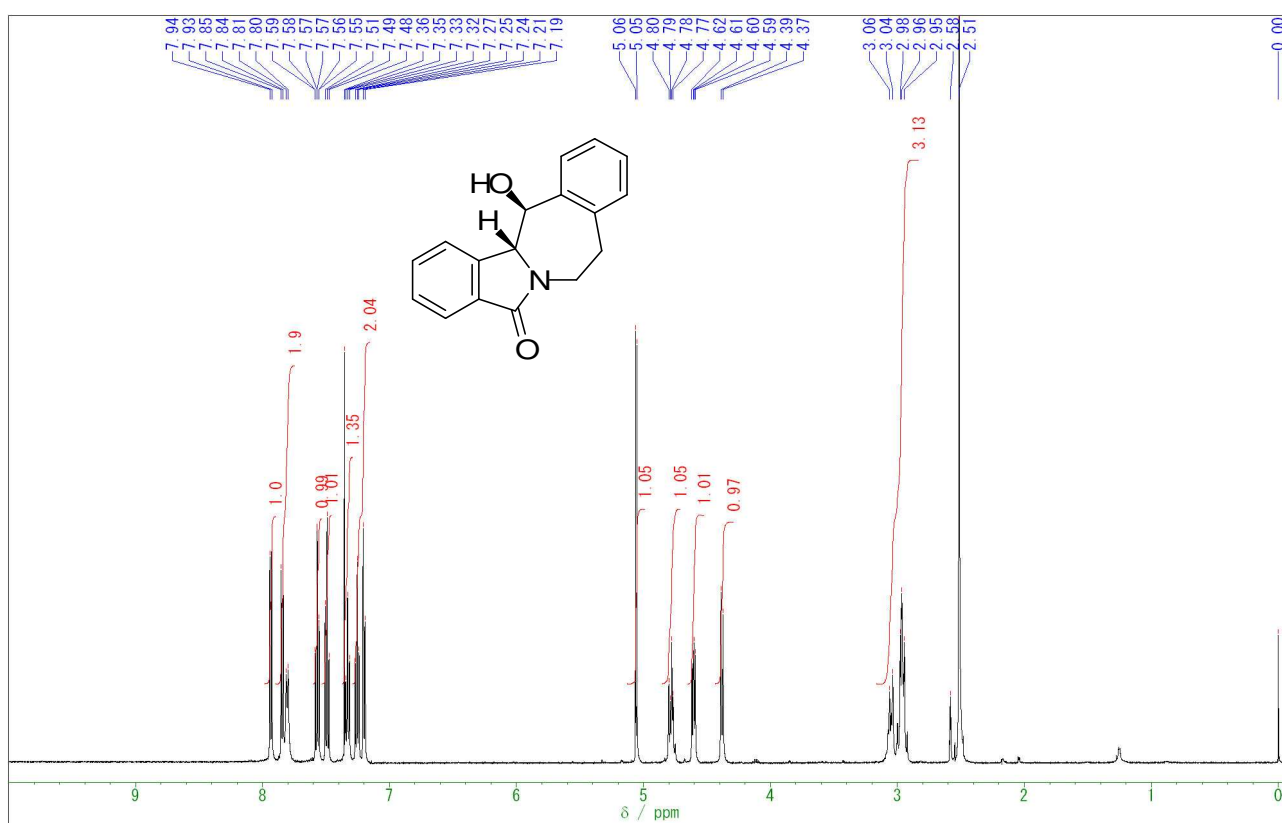
^1H NMR Spectrum of *trans*-11 (500 MHz, CDCl_3 - d_6 DMSO)



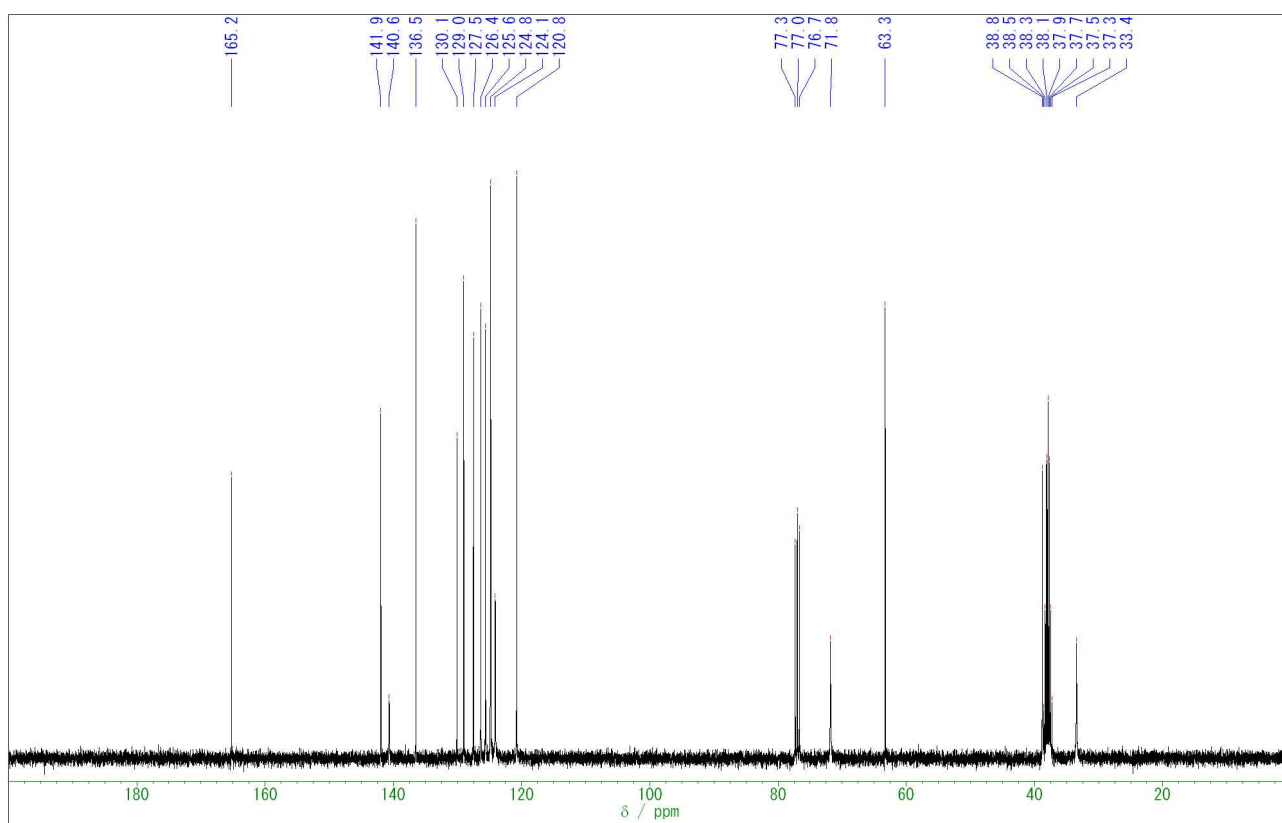
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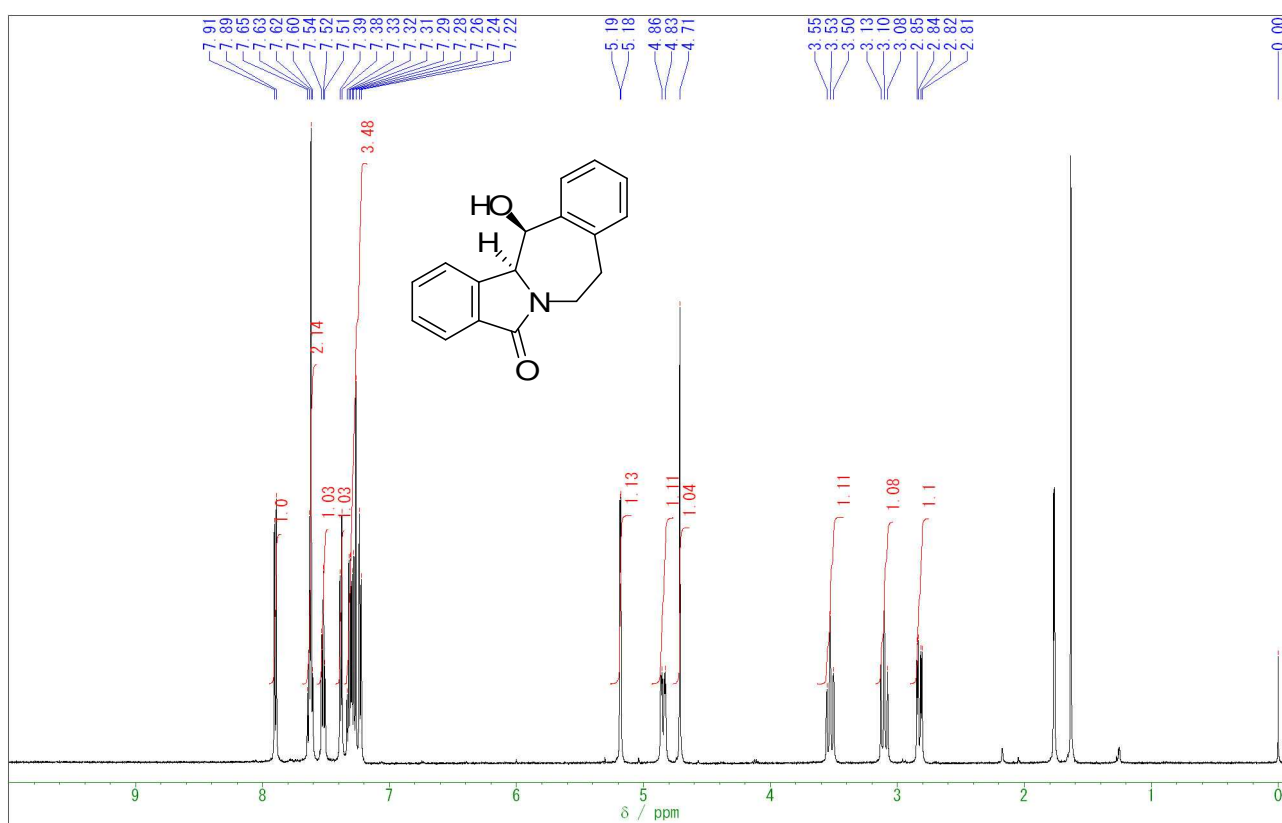
^1H NMR Spectrum of *trans*-12 (500 MHz, CDCl_3 -*d*6DMSO)



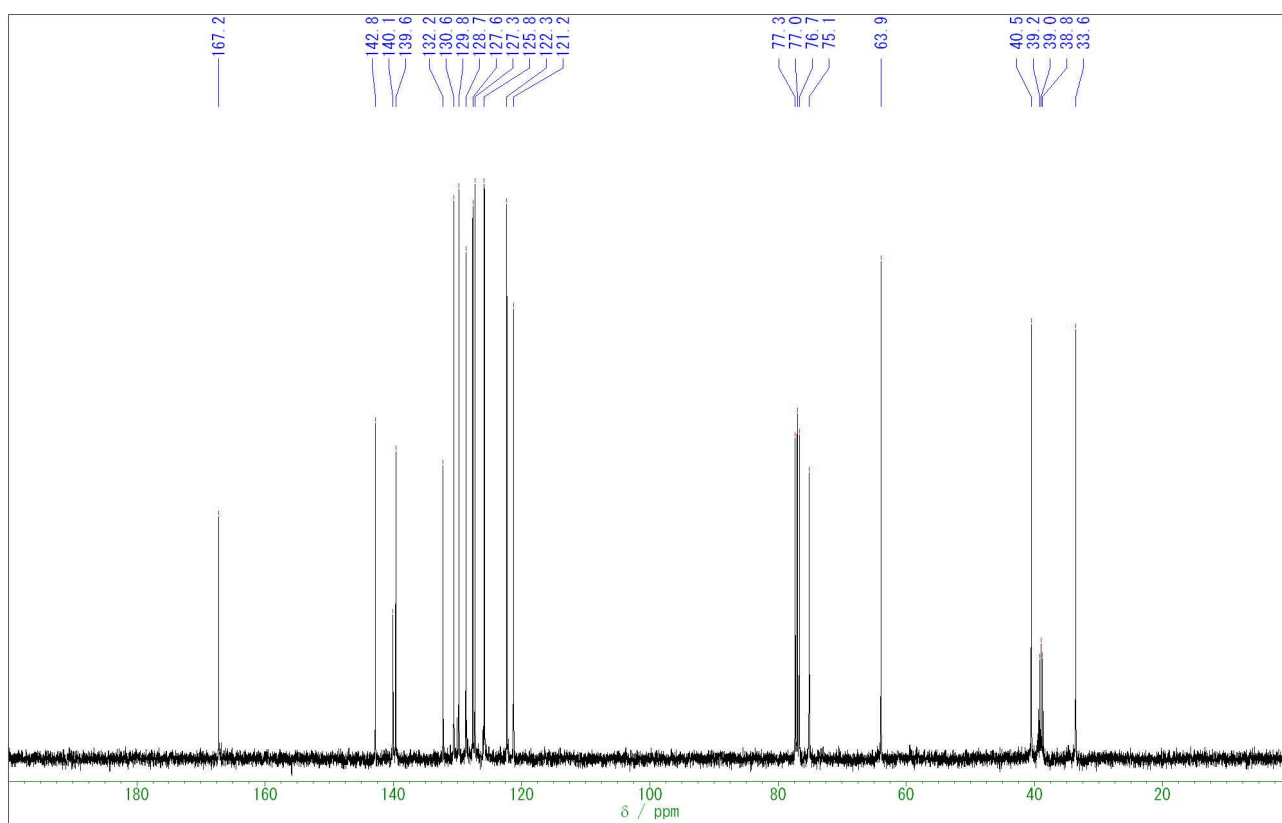
^{13}C NMR Spectrum of *trans*-12 (125 MHz, CDCl_3 -*d*6DMSO)



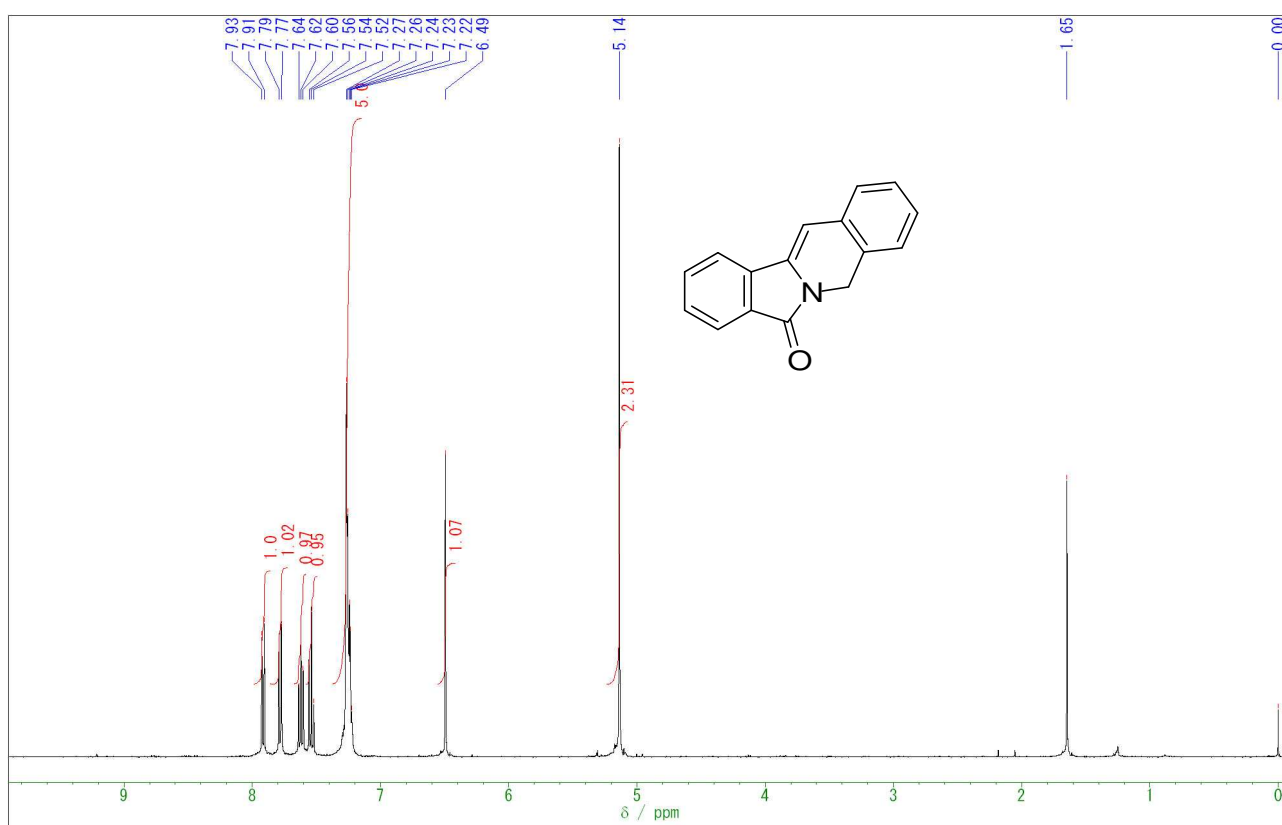
^1H NMR Spectrum of *cis*-12 (500 MHz, CDCl_3)



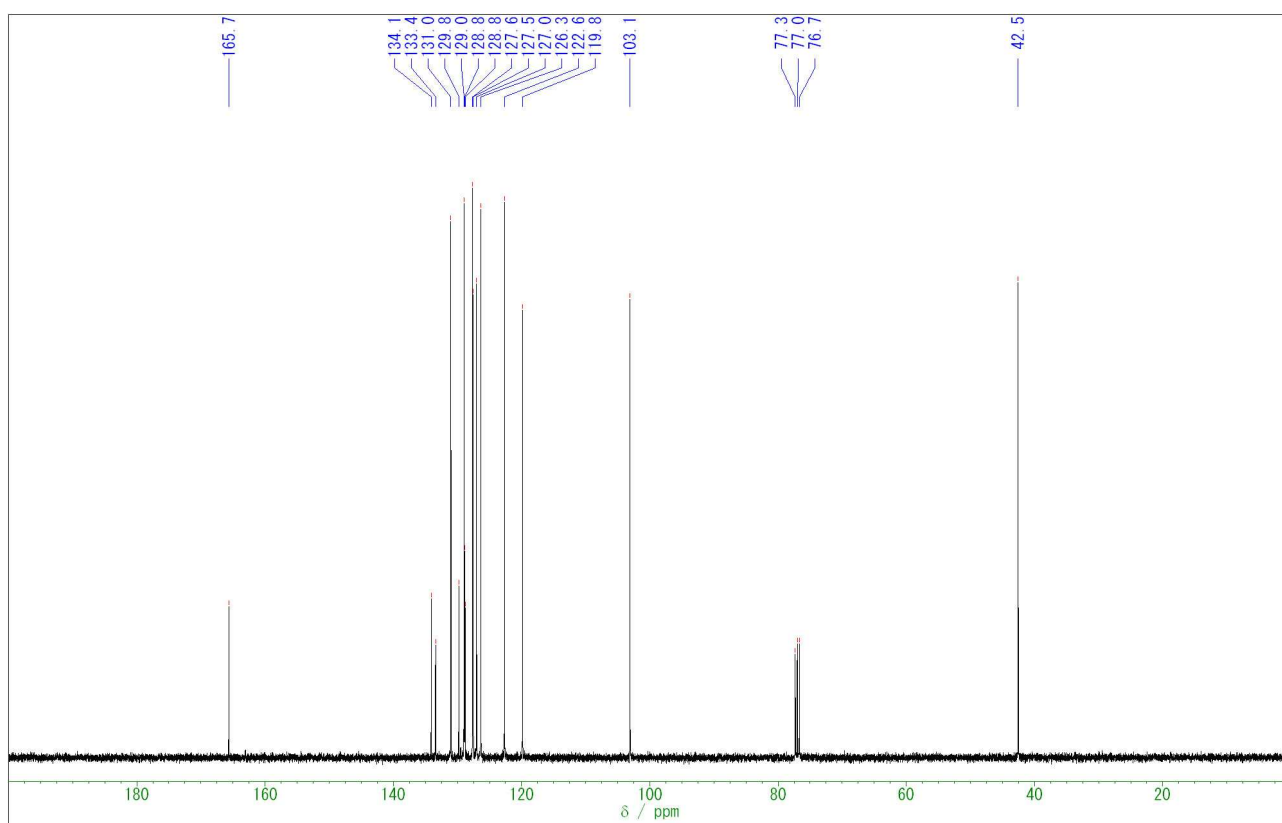
^{13}C NMR Spectrum of *cis*-12 (125 MHz, CDCl_3 - d_6 DMSO)



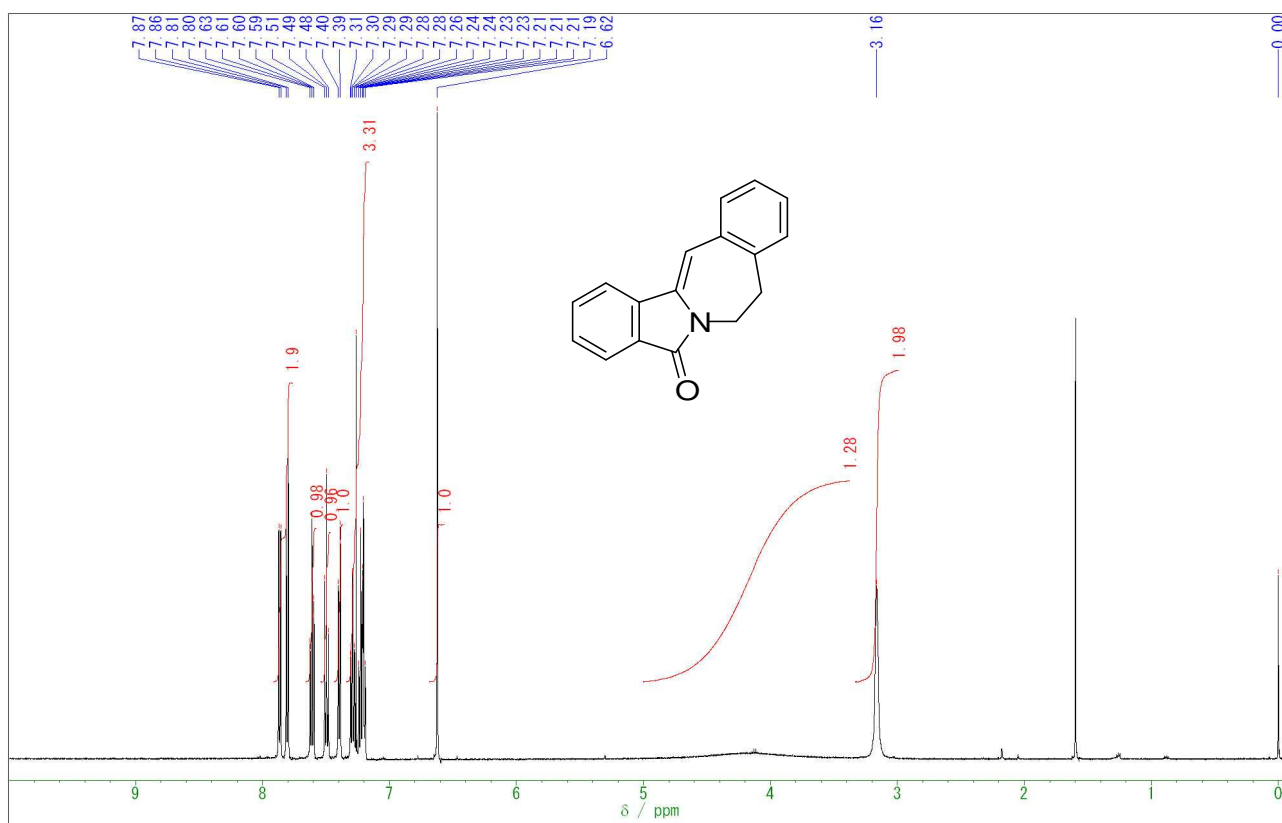
^1H NMR Spectrum of 13 (400 MHz, CDCl_3)



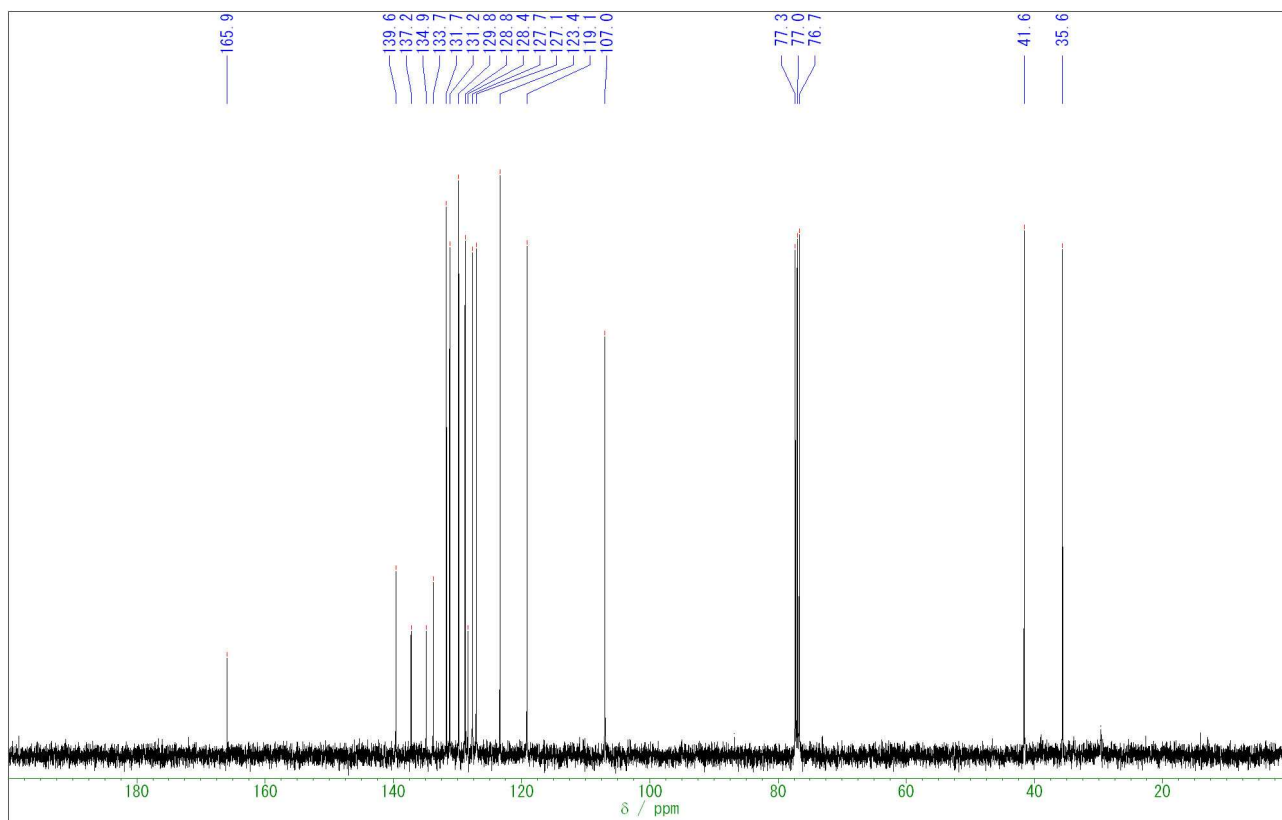
^{13}C NMR Spectrum of 13 (100 MHz, CDCl_3)



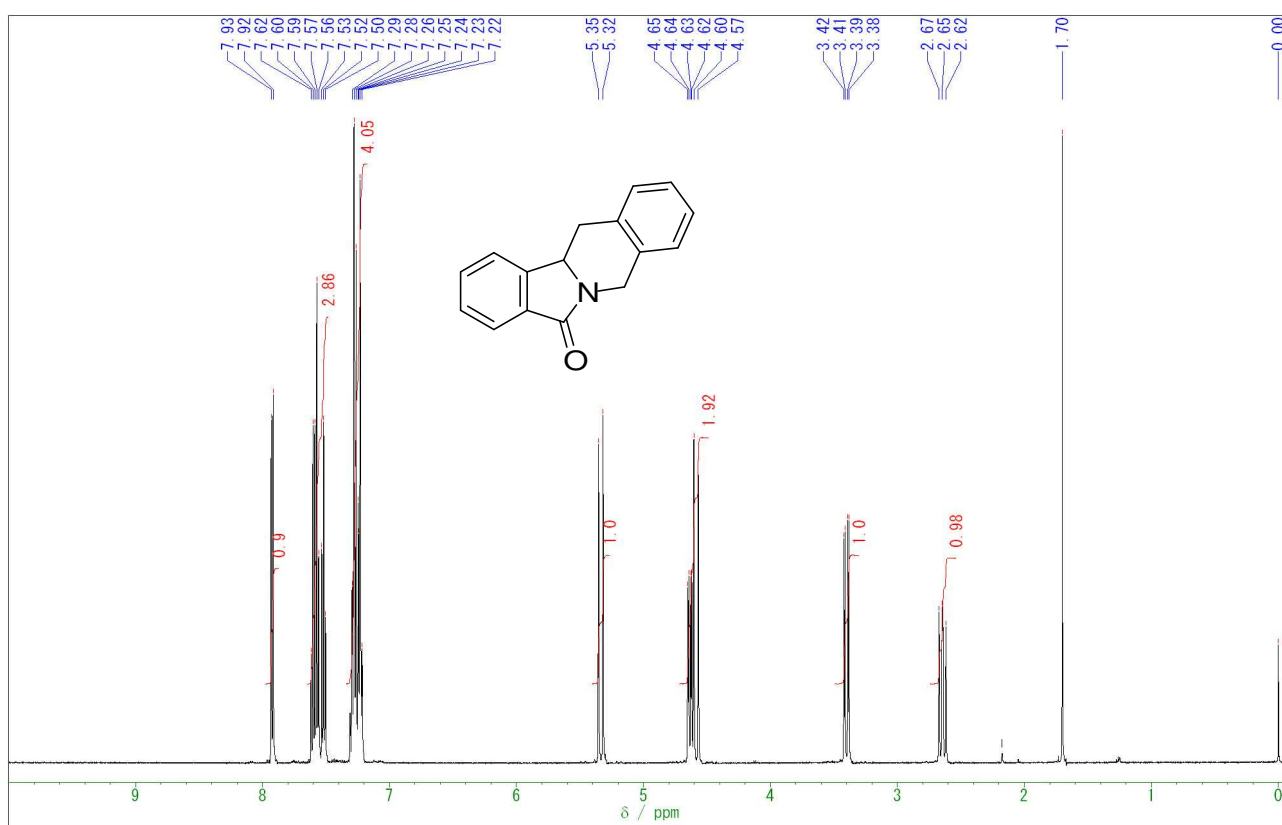
^1H NMR Spectrum of 14 (500 MHz, CDCl_3)



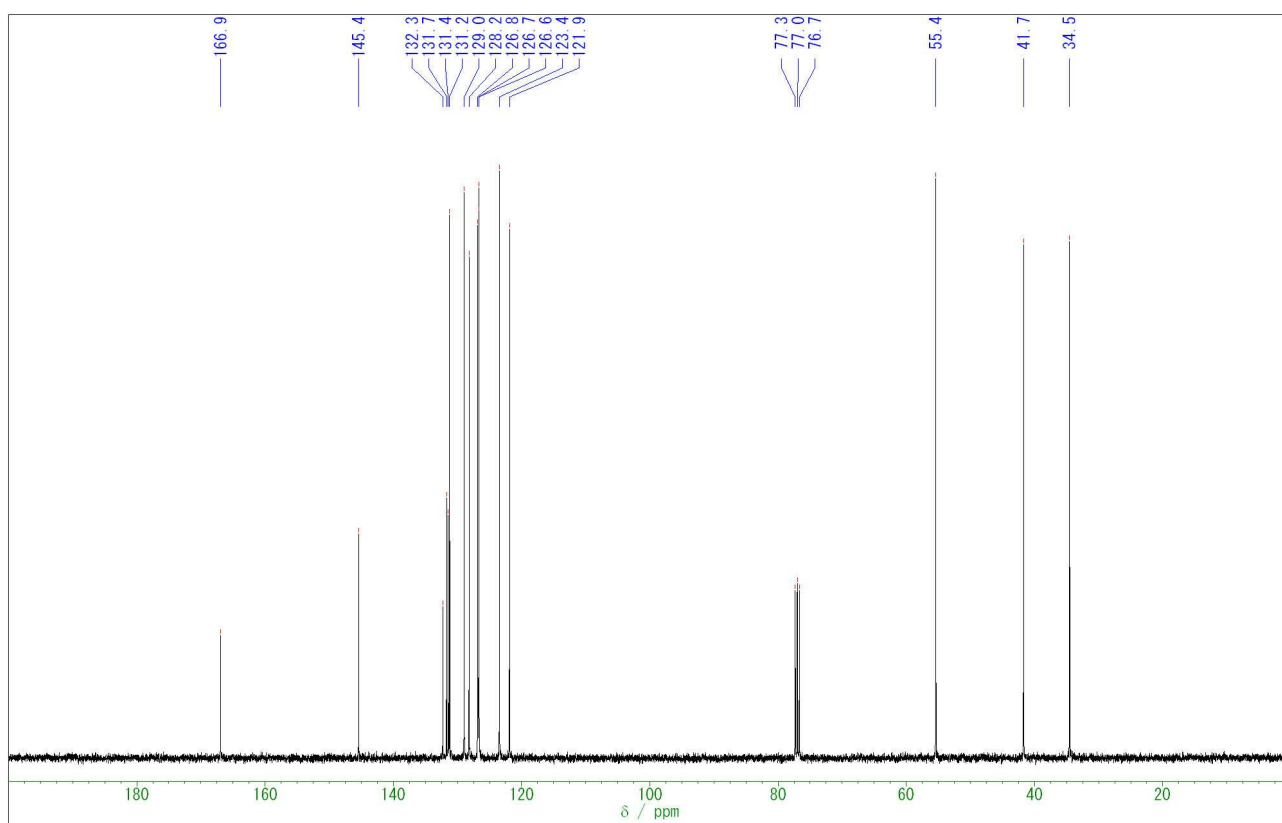
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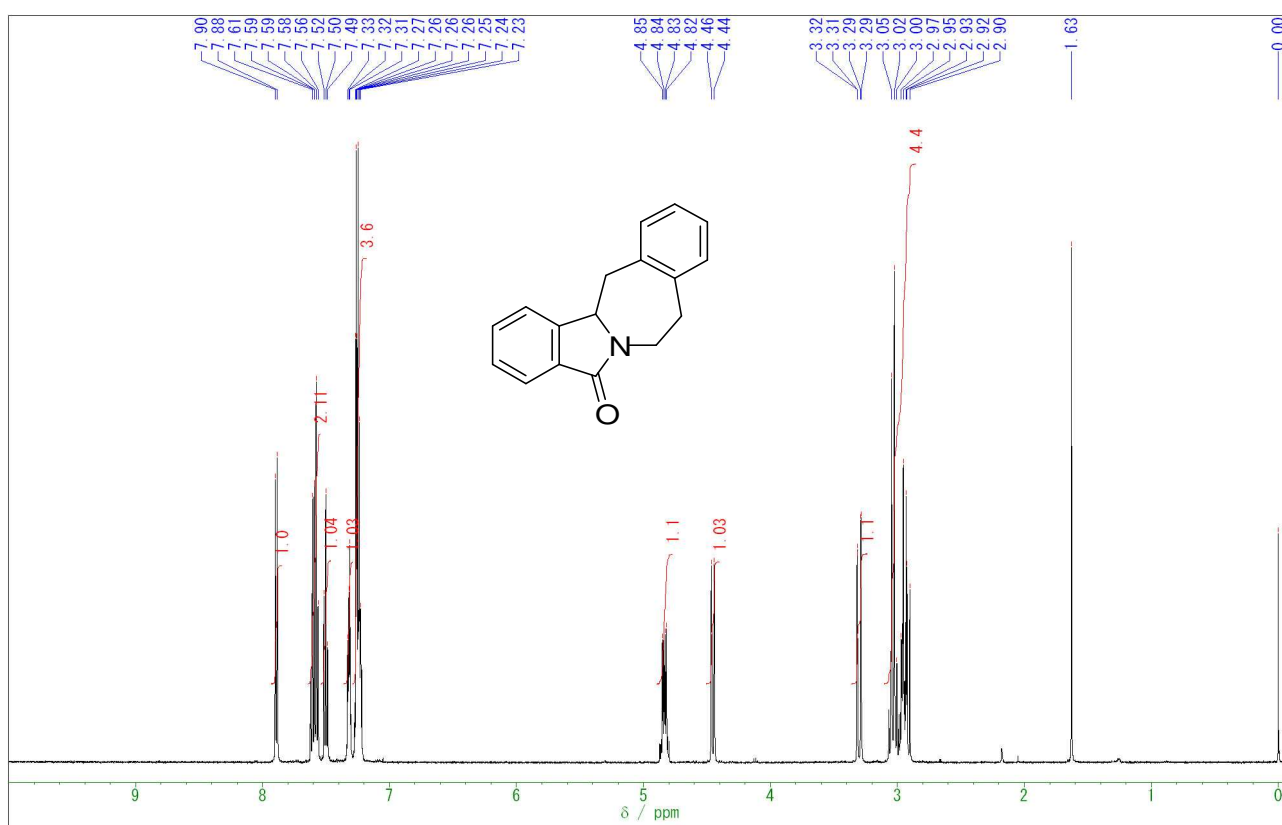
^1H NMR Spectrum of 15 (500 MHz, CDCl_3)



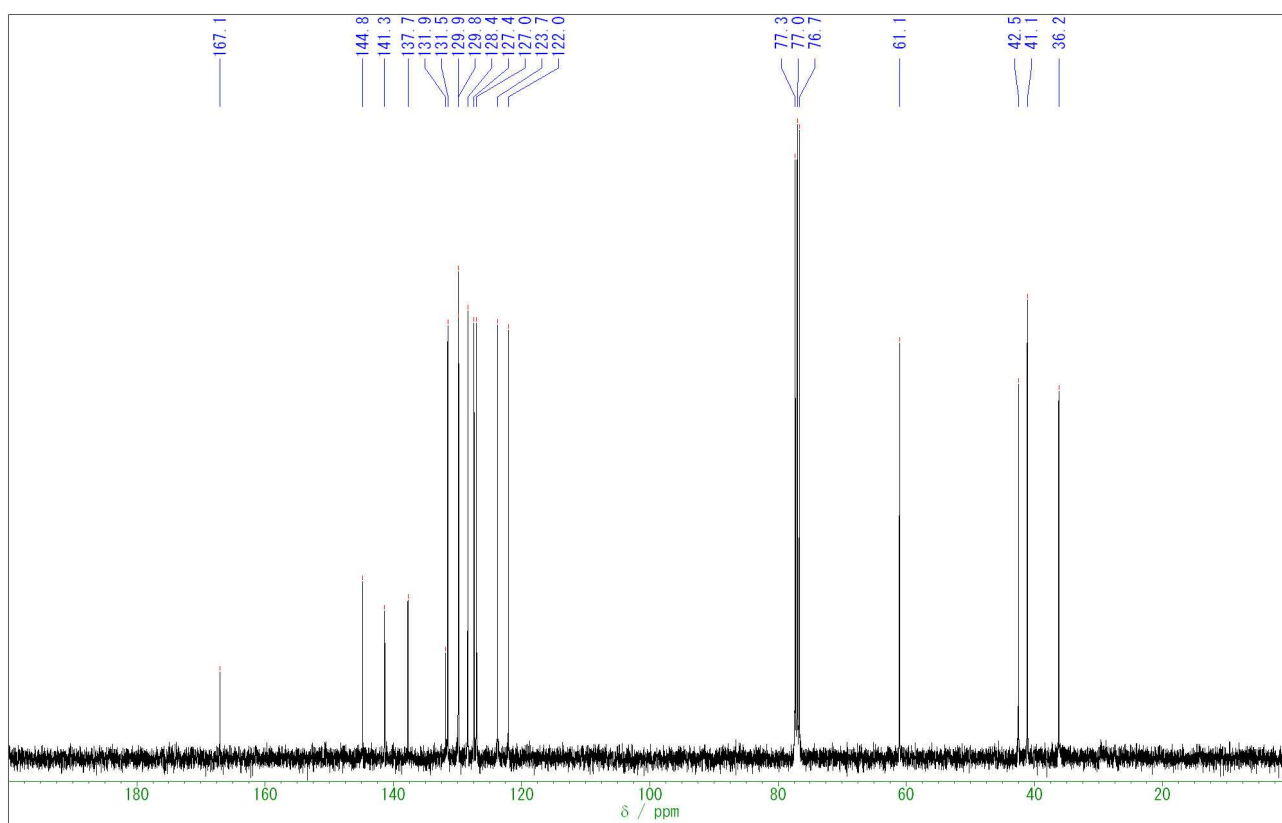
^{13}C NMR Spectrum of 15 (100 MHz, CDCl_3)



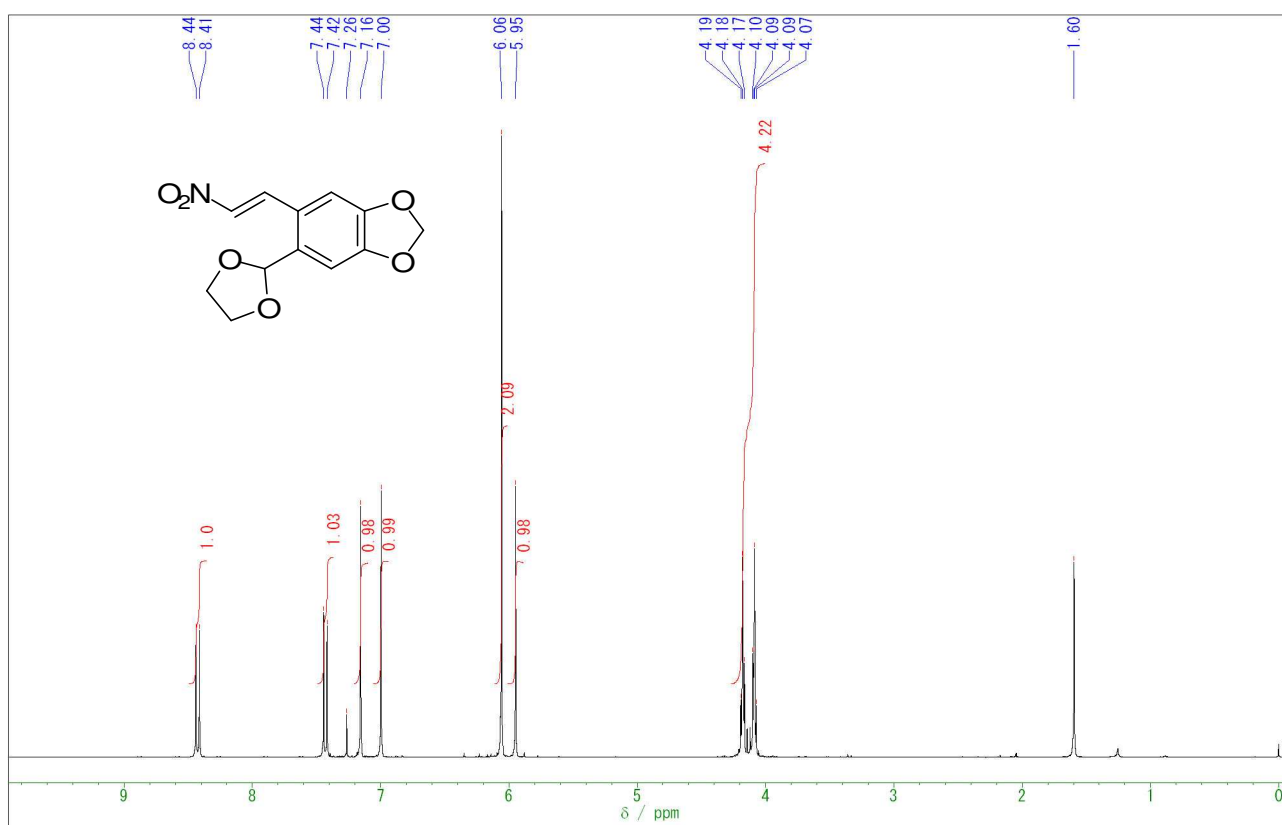
¹H NMR Spectrum of 16 (500 MHz, CDCl₃)



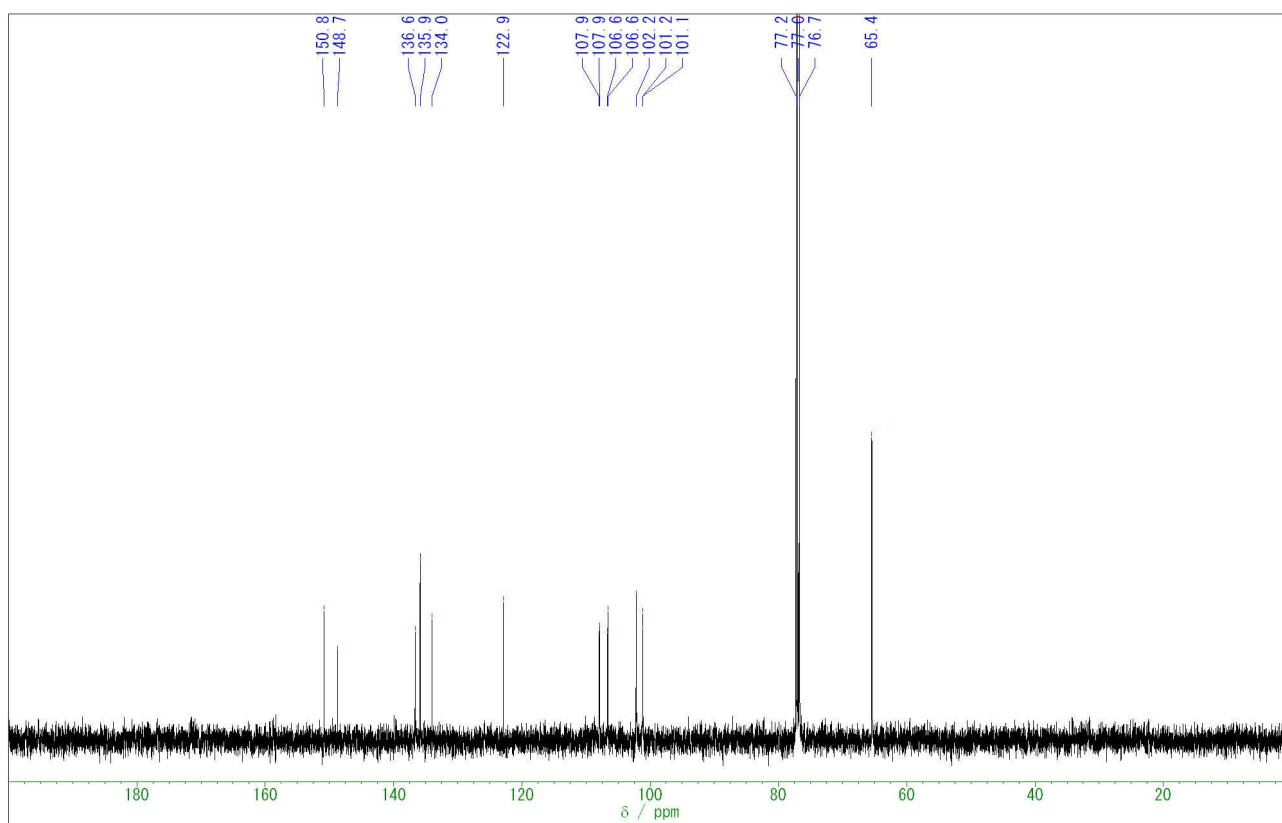
¹³C NMR Spectrum of 16 (100 MHz, CDCl₃)



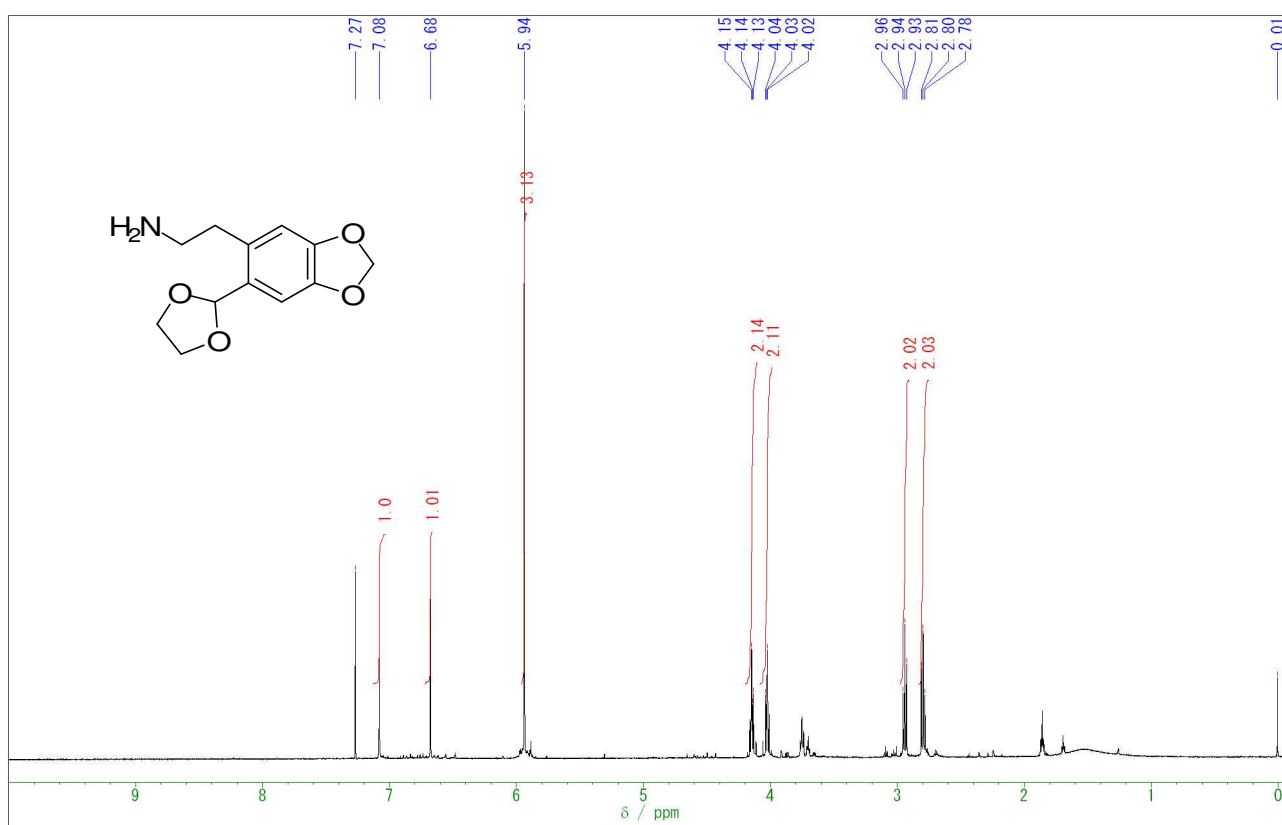
^1H NMR Spectrum of 18 (500 MHz, CDCl_3)



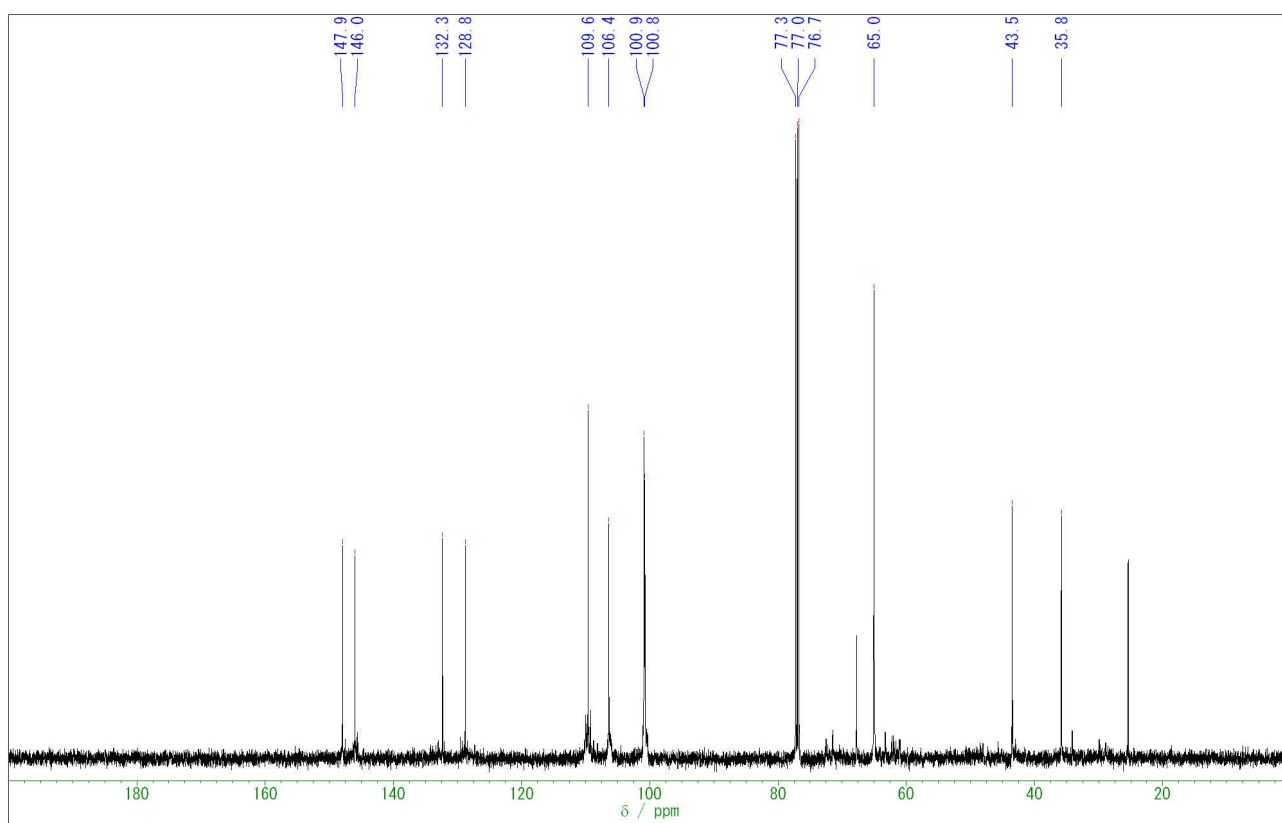
^{13}C NMR Spectrum of 18 (125 MHz, CDCl_3)



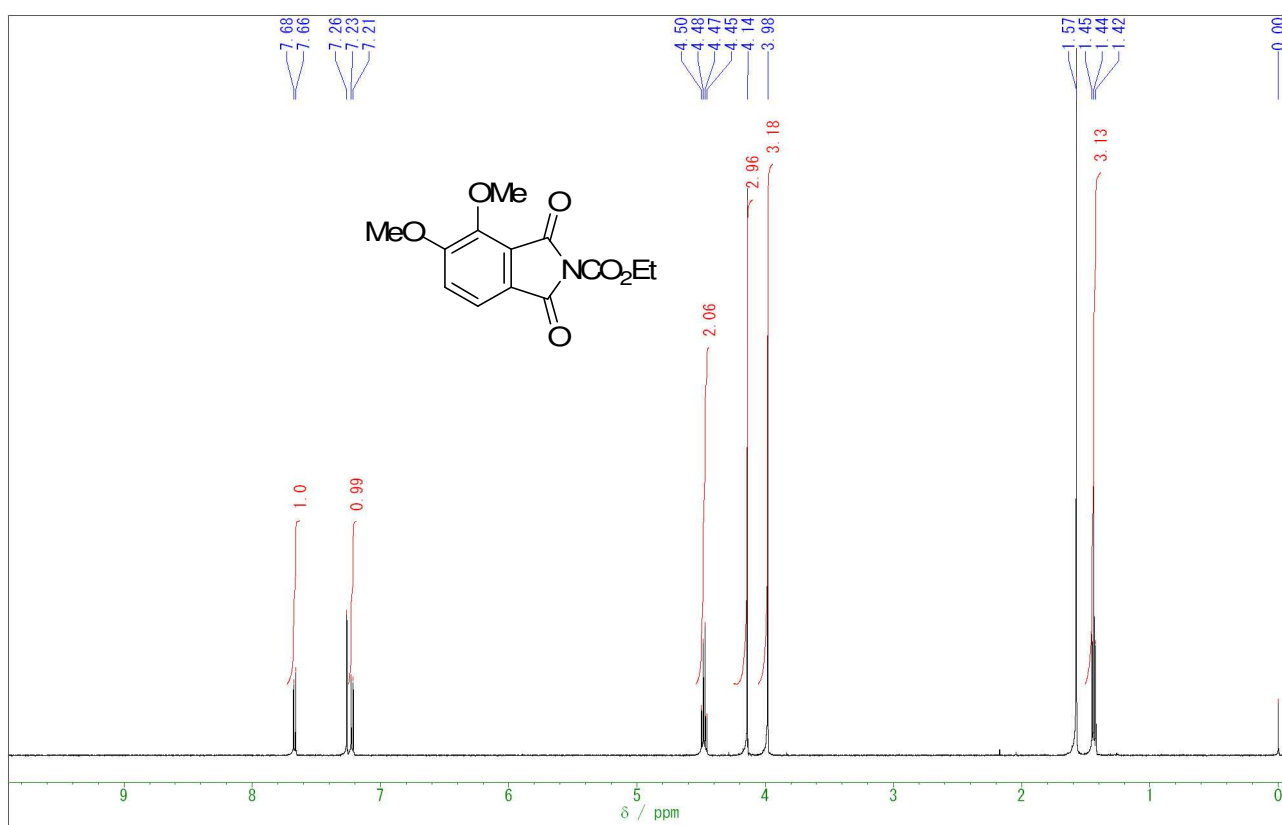
¹H NMR Spectrum of crude 19 (500 MHz, CDCl₃)



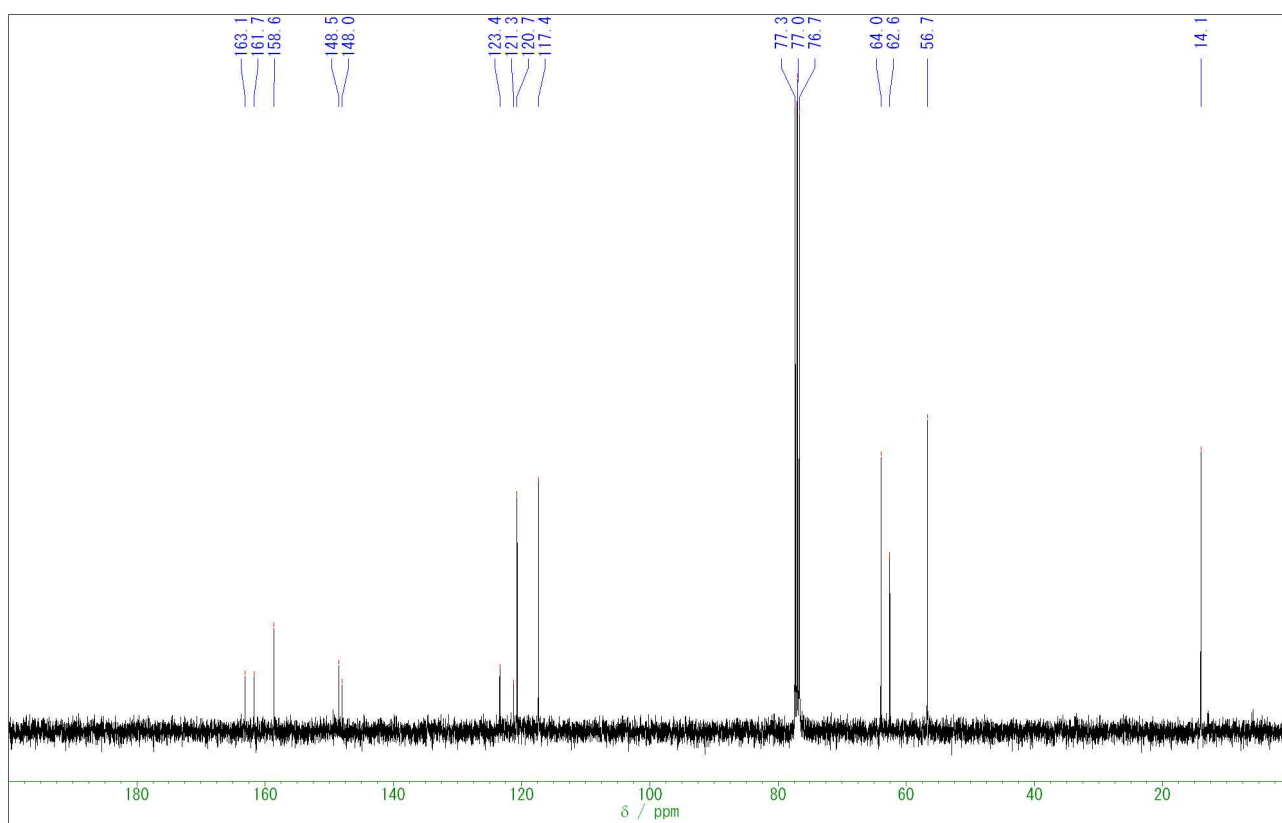
¹³C NMR Spectrum of crude 19 (125 MHz, CDCl₃)



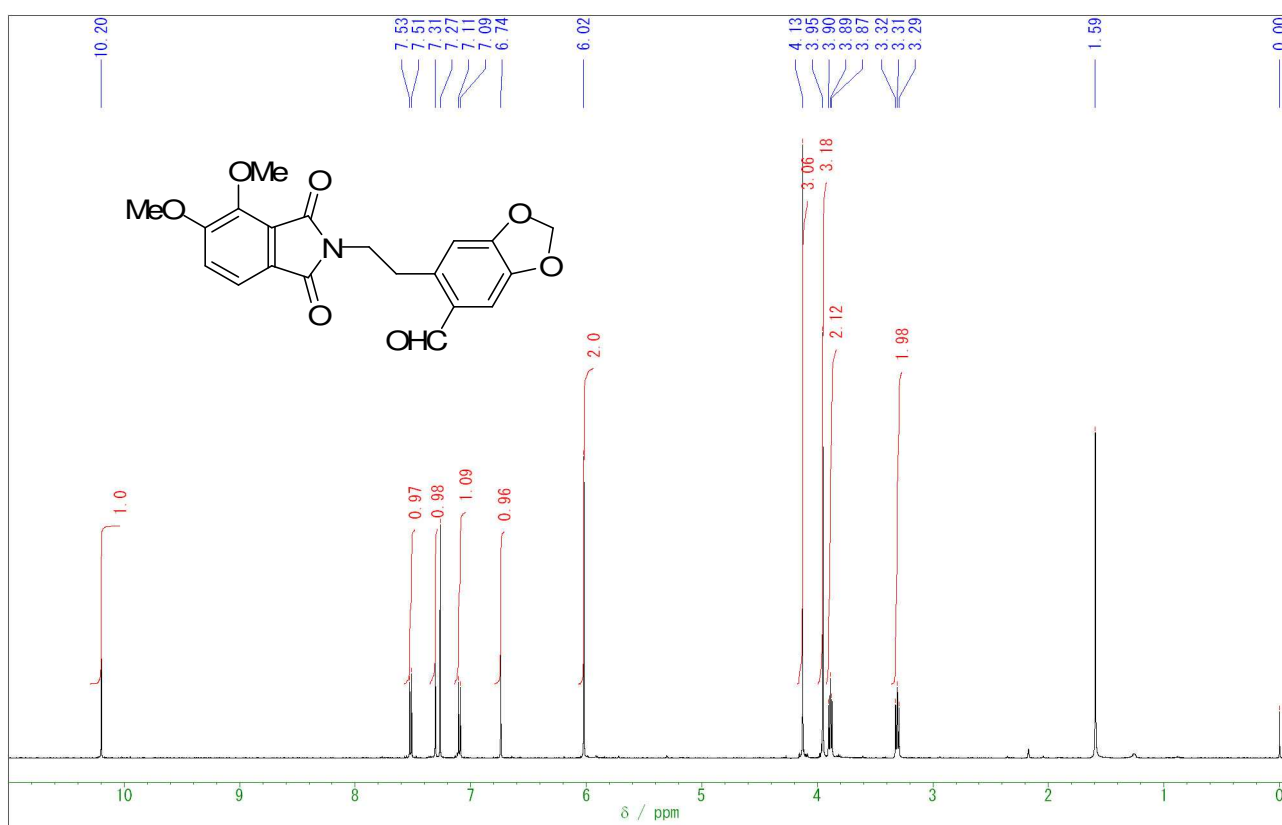
^1H NMR Spectrum of 21 (500 MHz, CDCl_3)



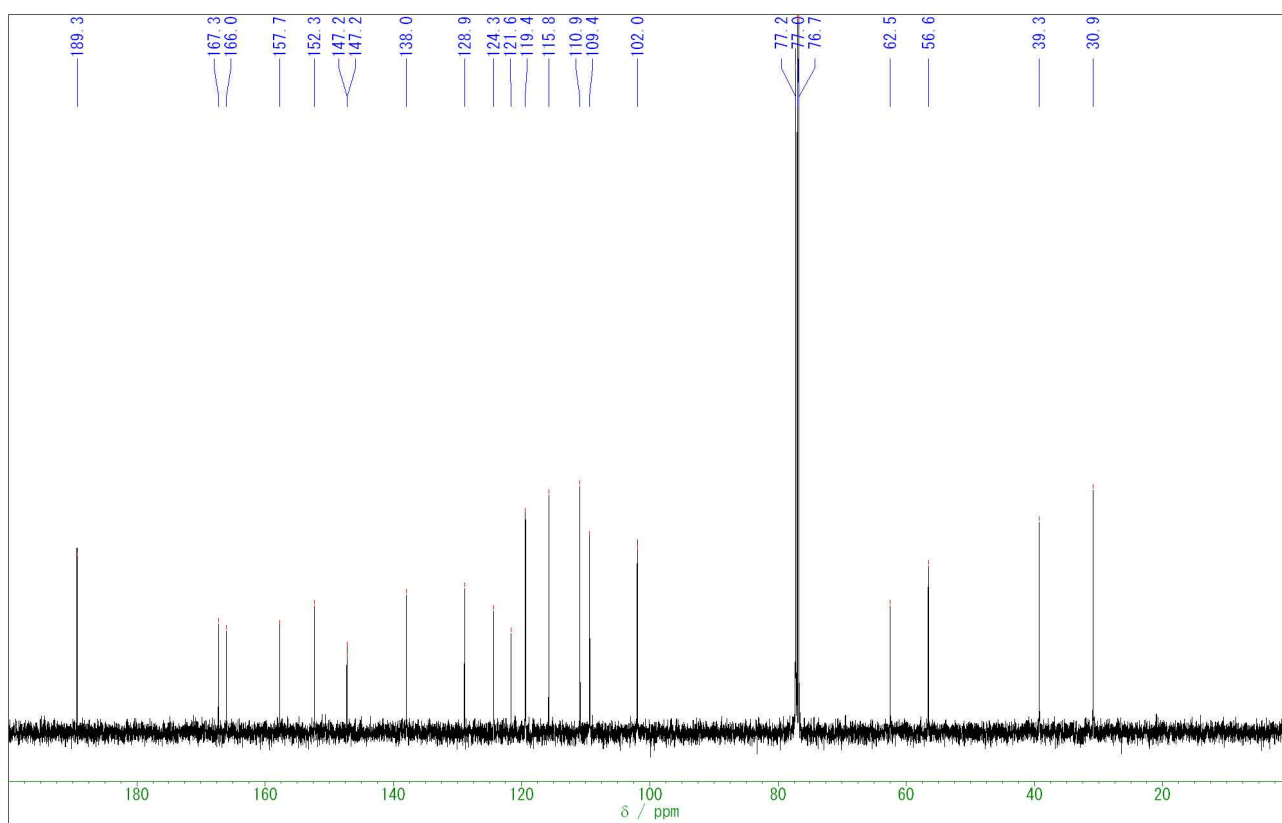
^{13}C NMR Spectrum of 21 (100 MHz, CDCl_3)



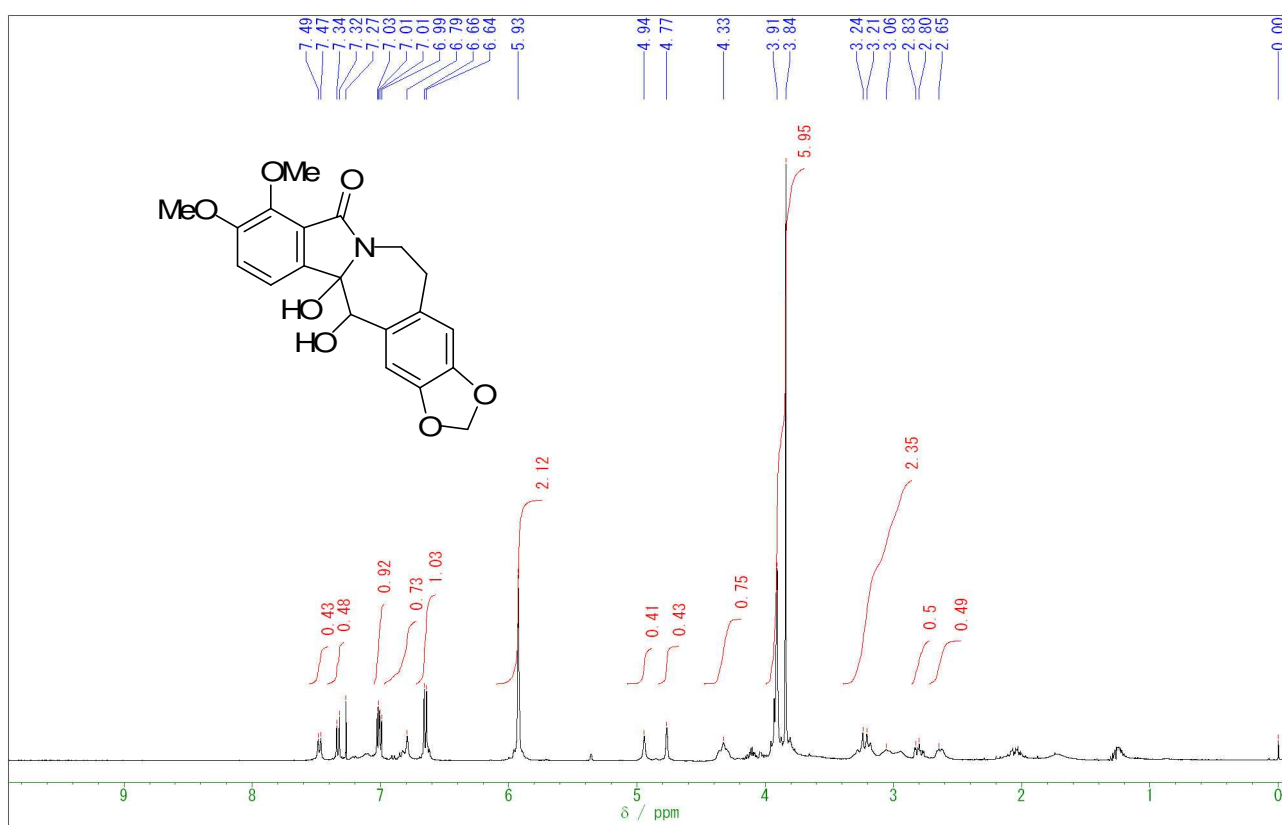
¹H NMR Spectrum of 9 (500 MHz, CDCl₃)



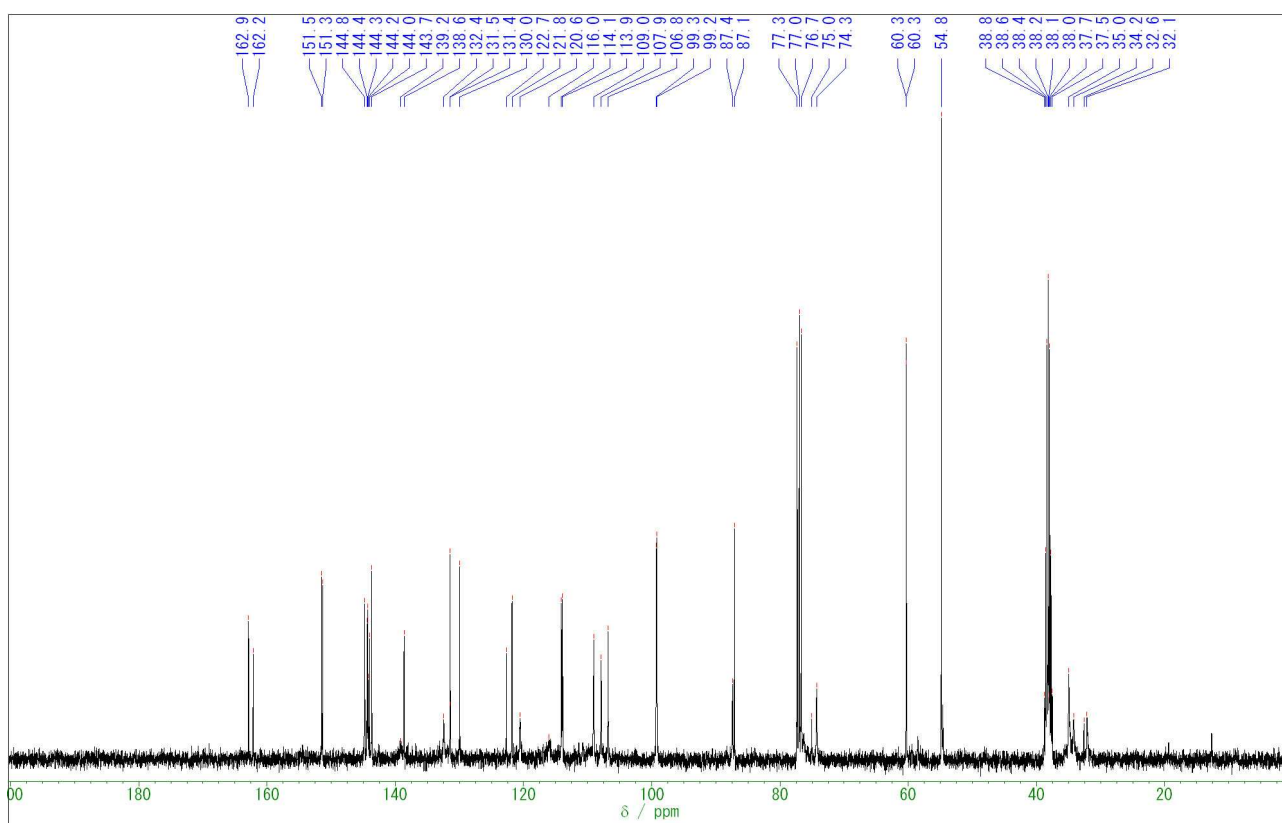
¹³C NMR Spectrum of 9 (125 MHz, CDCl₃)



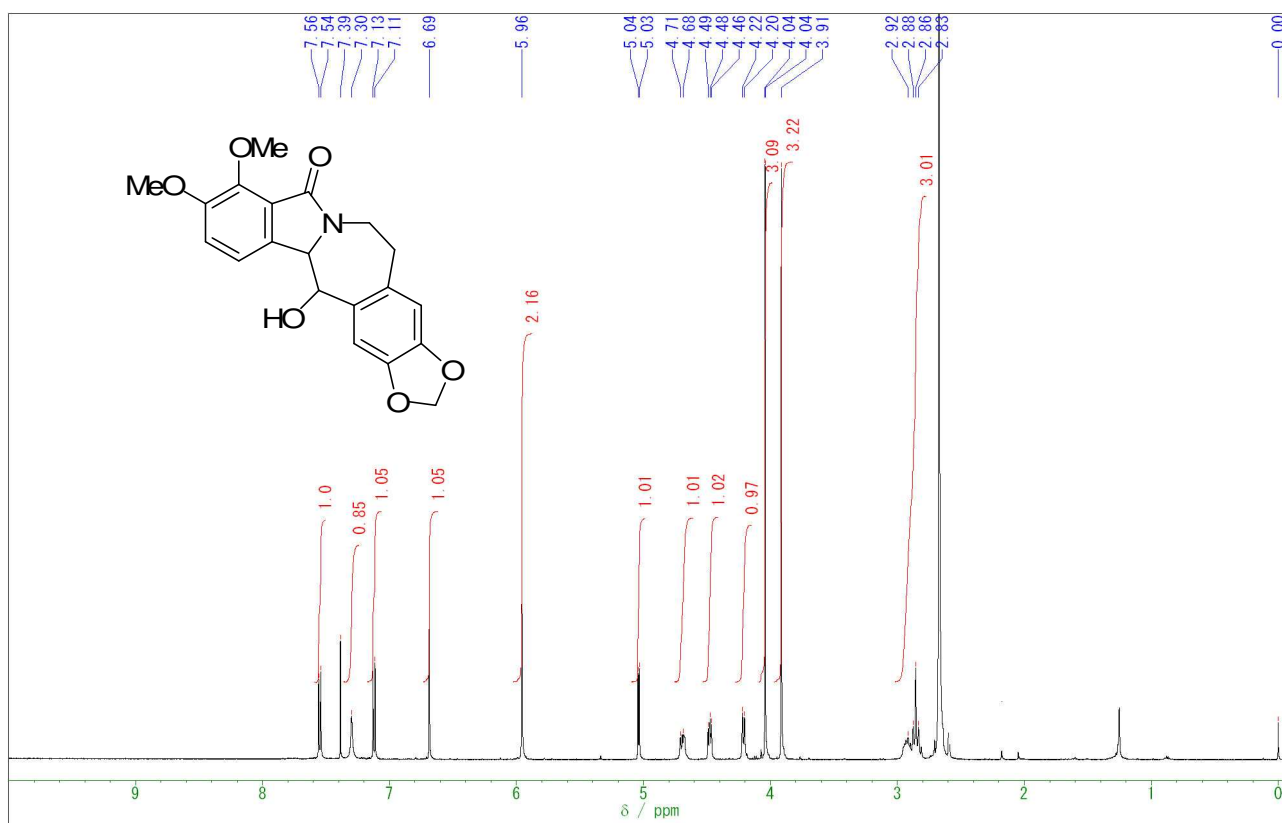
^1H NMR Spectrum of 10 (400 MHz, CDCl_3)



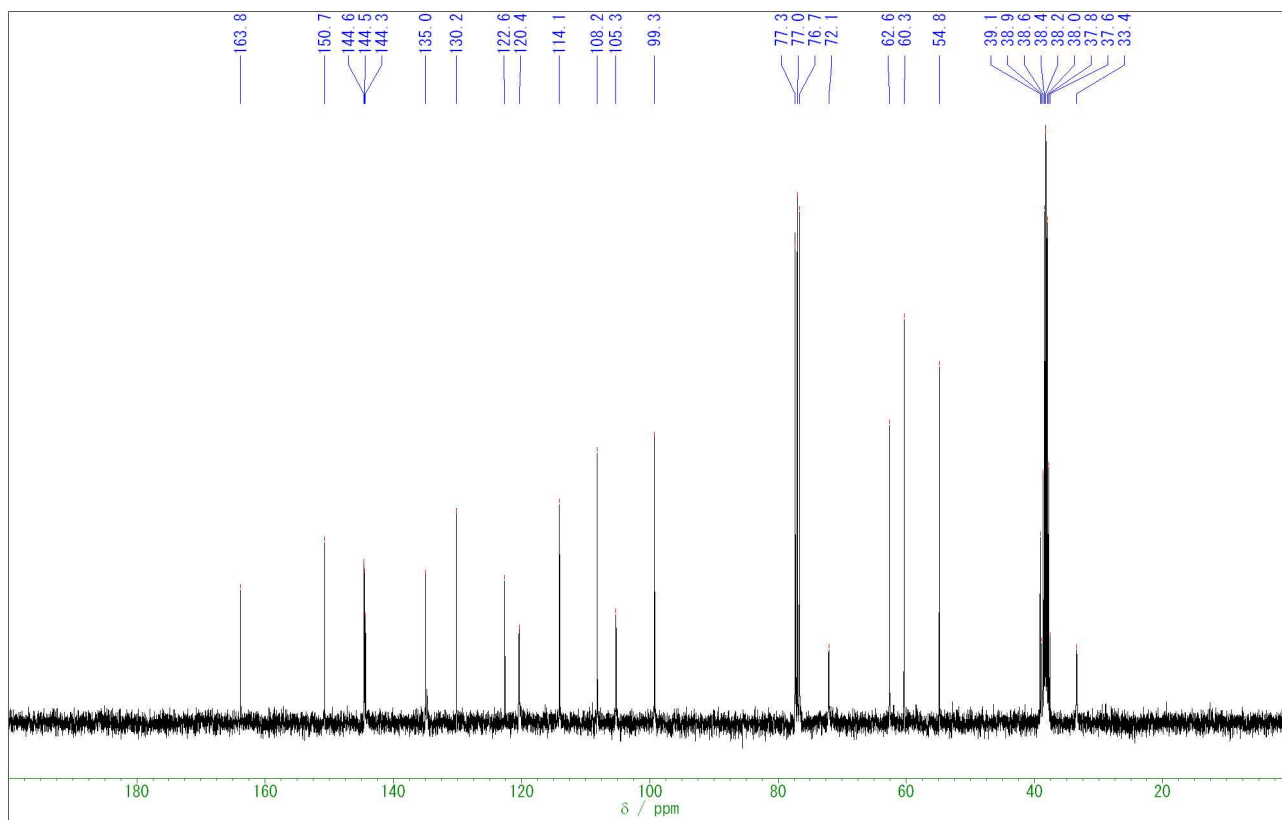
^{13}C NMR Spectrum of 10 (100 MHz, CDCl_3 - d_6 DMSO)



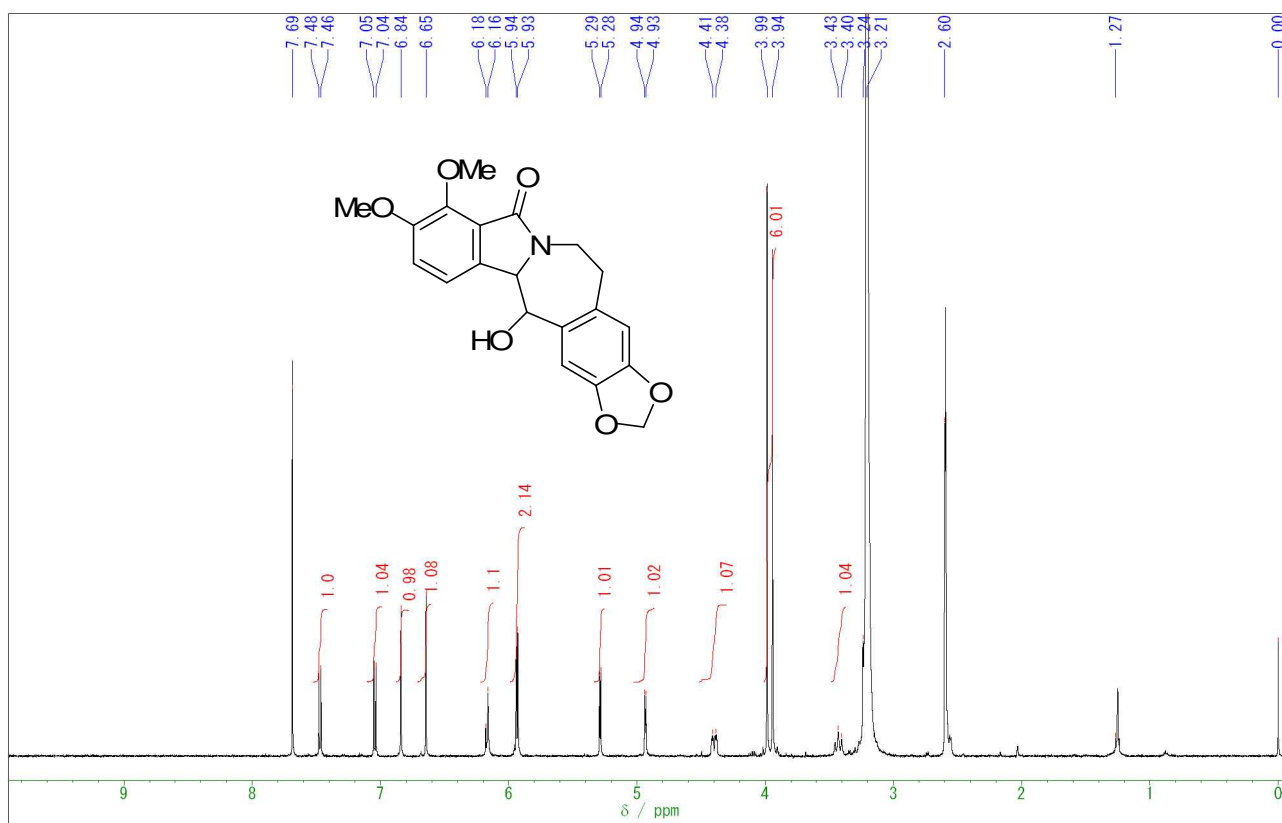
¹H NMR Spectrum of 22a (500 MHz, CDCl₃-d₆DMSO)



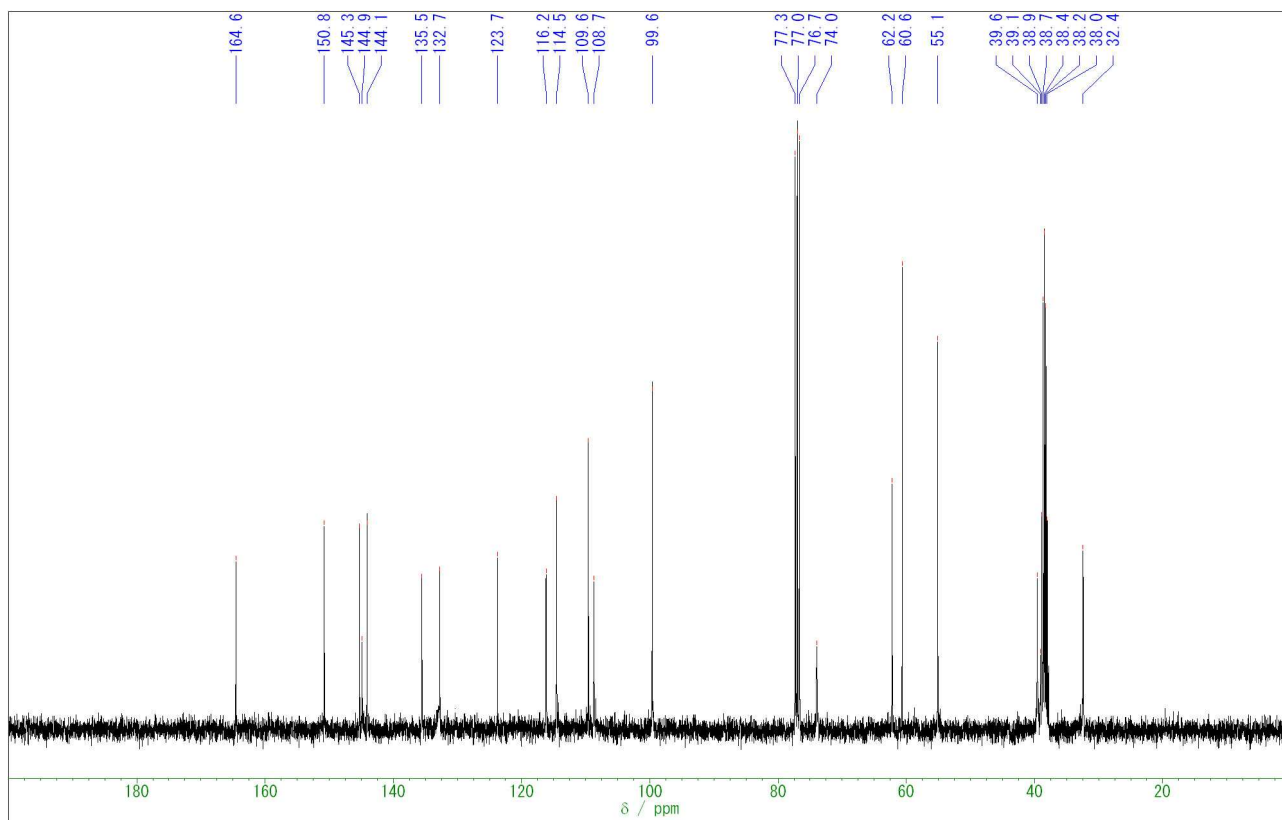
¹³C NMR Spectrum of 22a (100 MHz, CDCl₃-d₆DMSO)



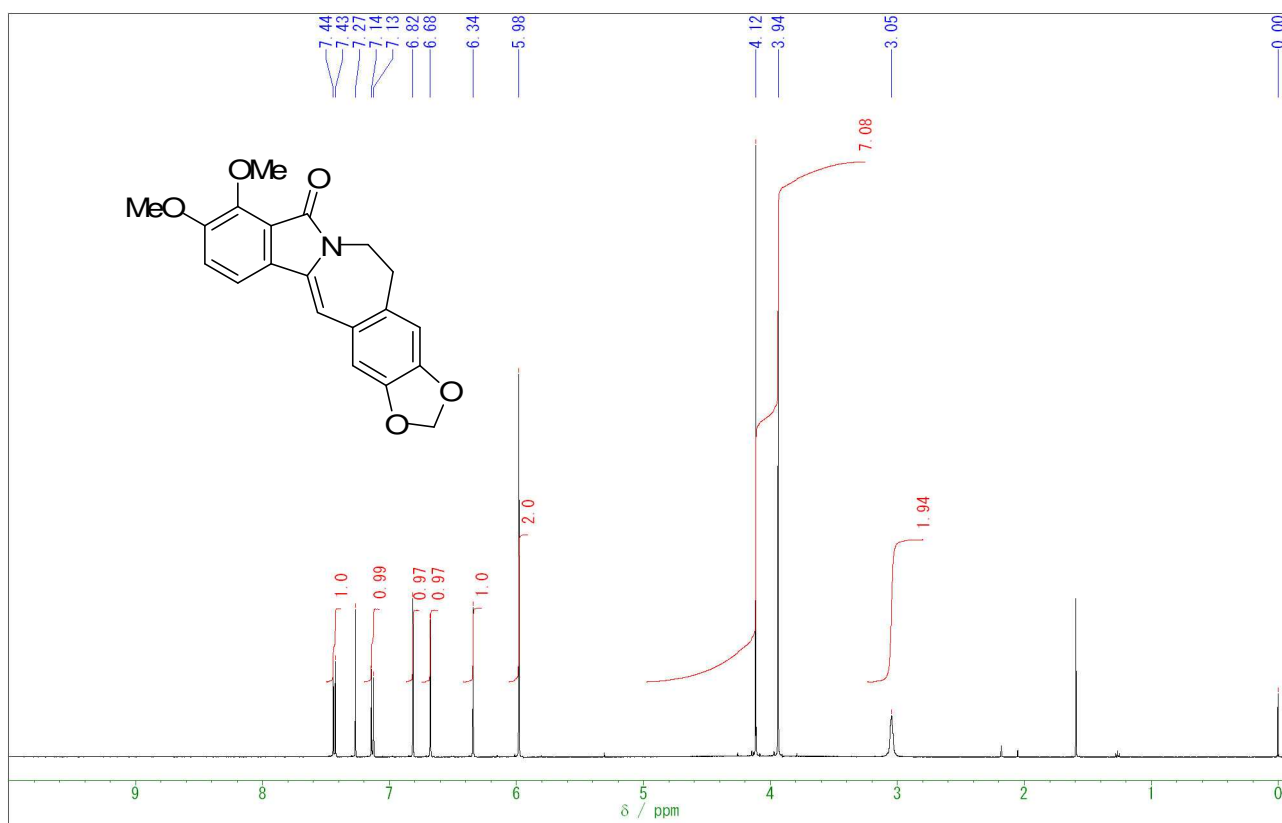
^1H NMR Spectrum of 22b (500 MHz, CDCl_3)



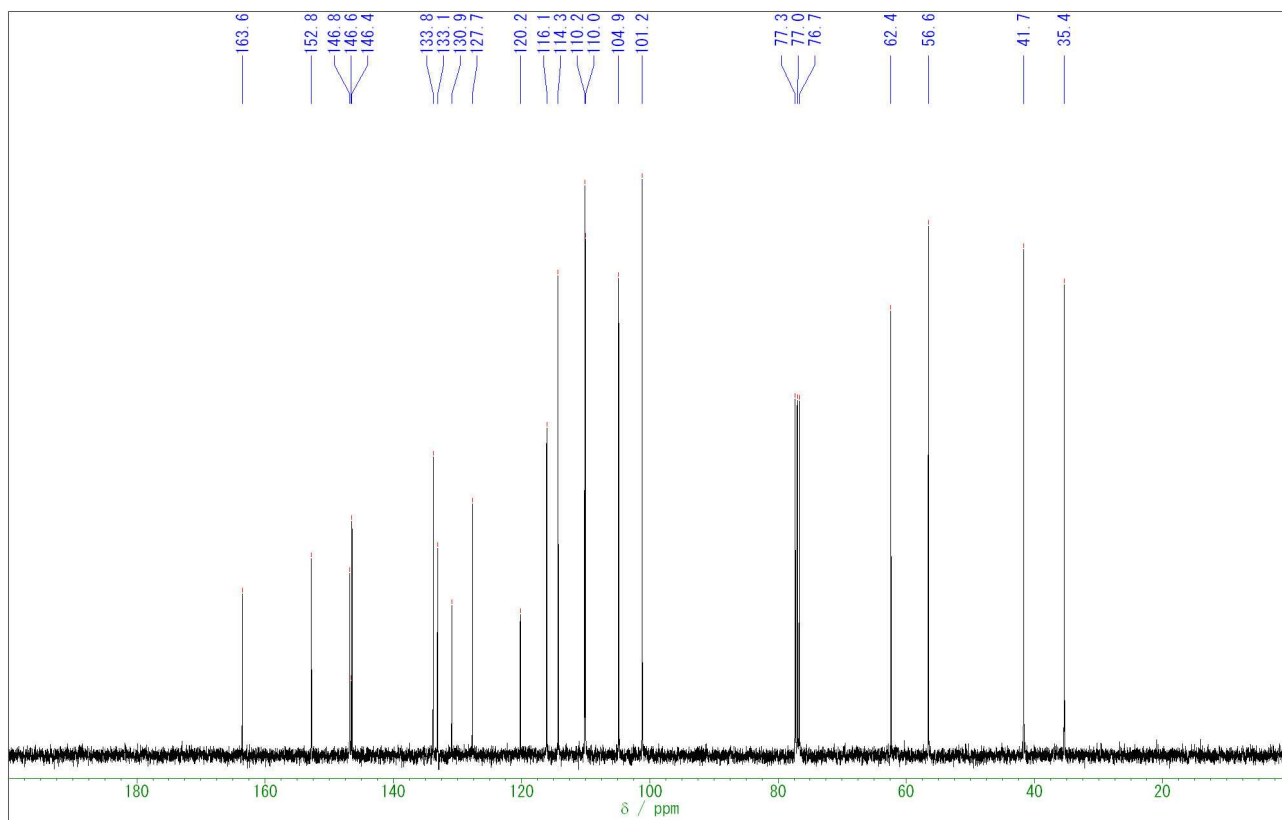
^{13}C NMR Spectrum of 22b (100 MHz, CDCl_3 - d_6 DMSO)



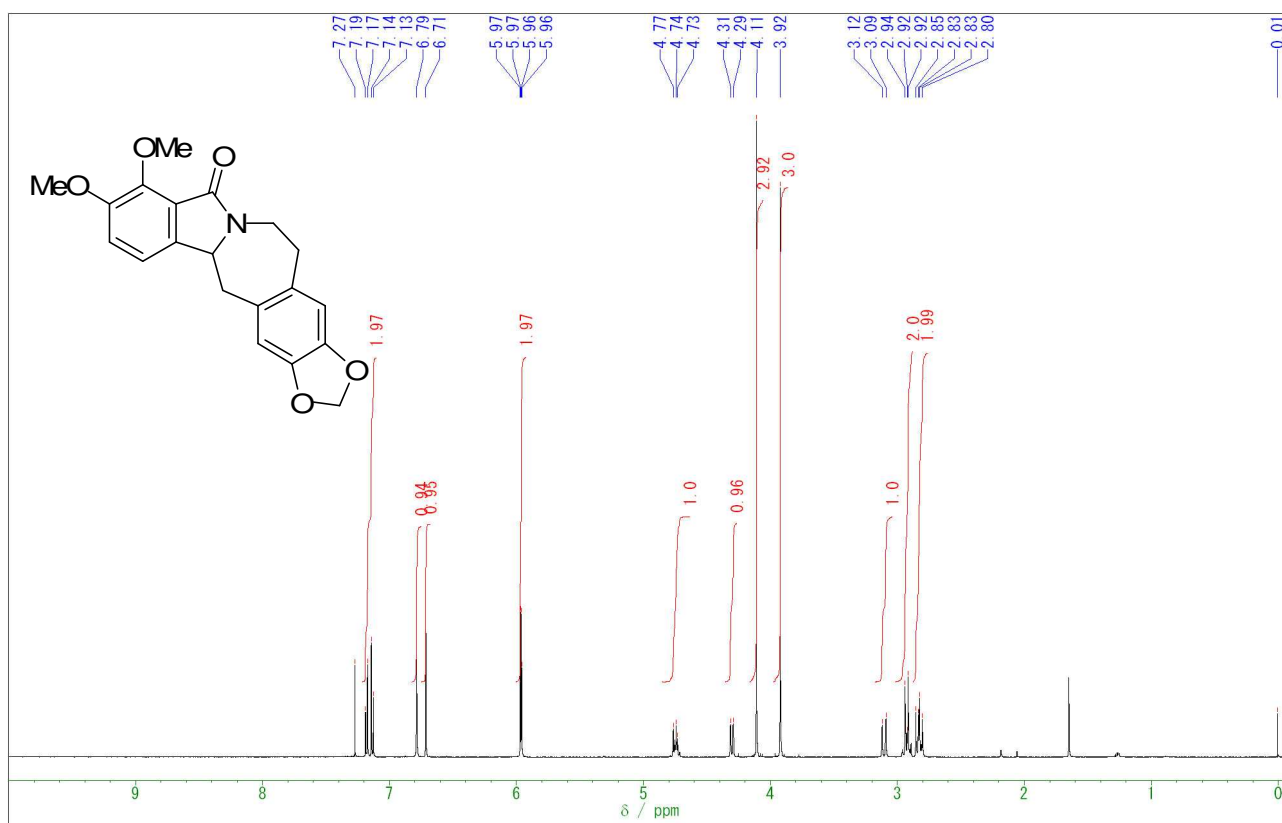
¹H NMR Spectrum of Dehydrolennoxamine 23 (500 MHz, CDCl₃)



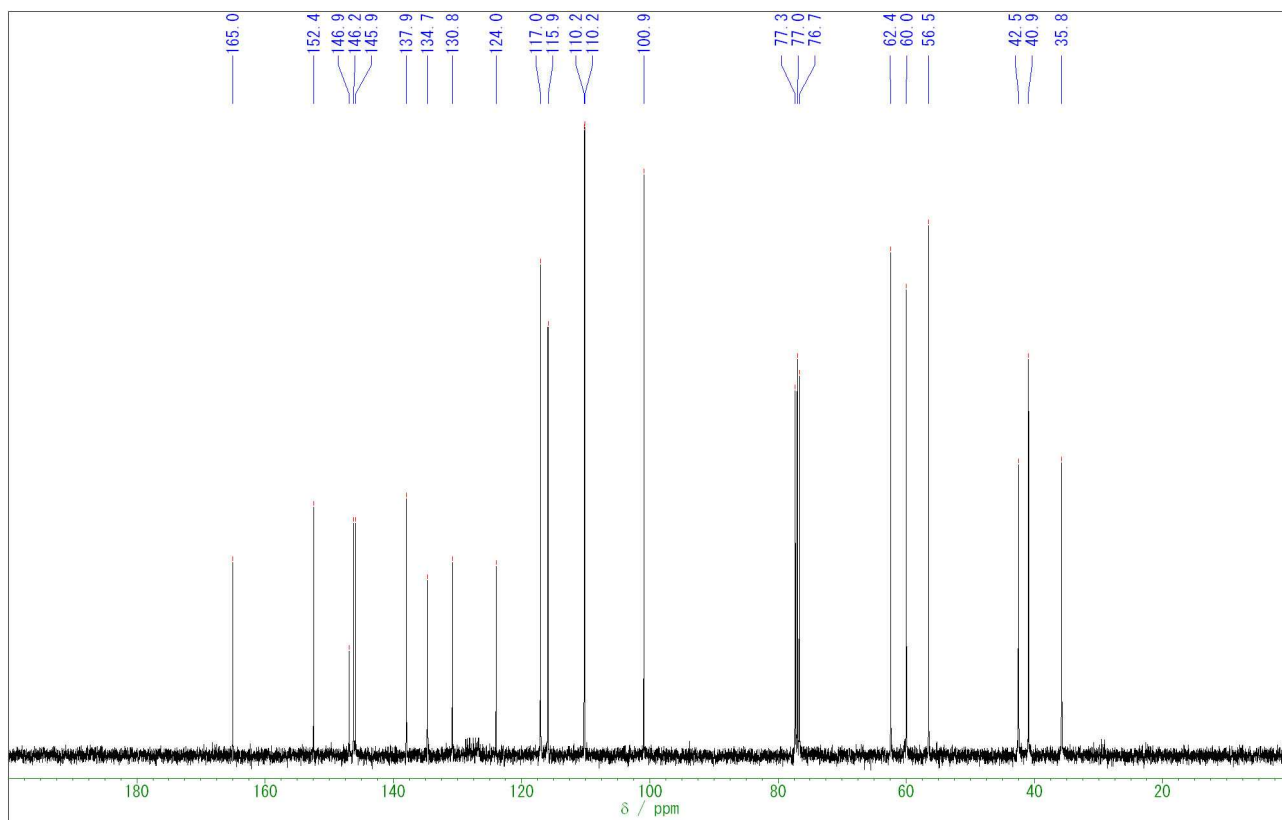
¹³C NMR Spectrum of Dehydrolennoxamine 23 (100 MHz, CDCl₃)



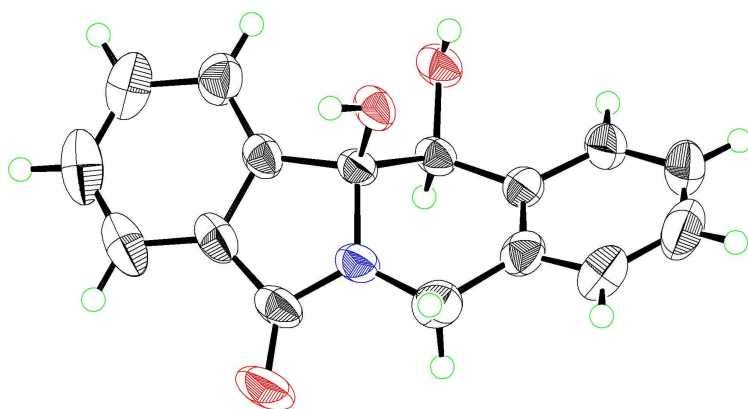
^1H NMR Spectrum of Lennoxamine 7 (500 MHz, CDCl_3)



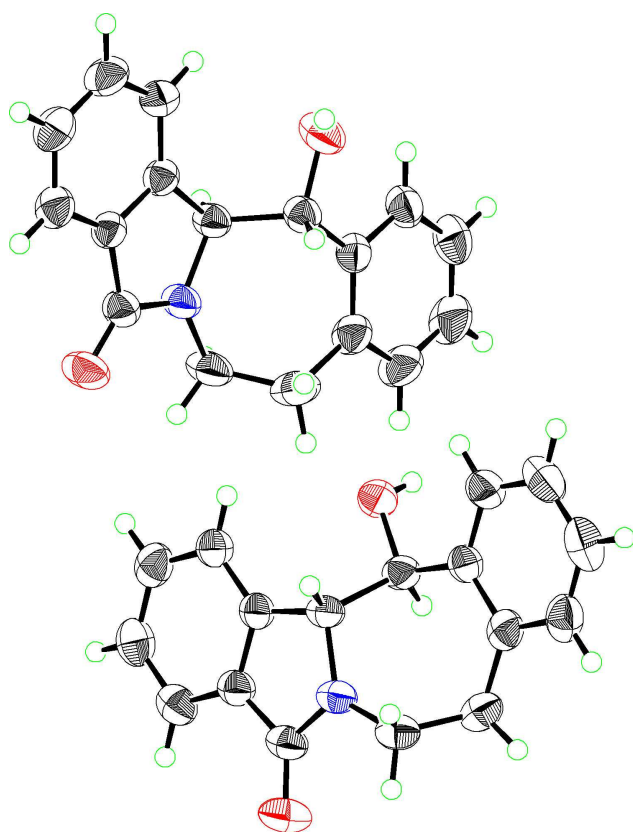
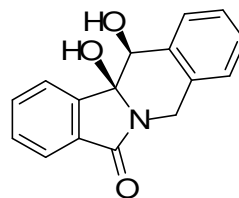
^{13}C NMR Spectrum of Lennoxamine 7 (100 MHz, CDCl_3)



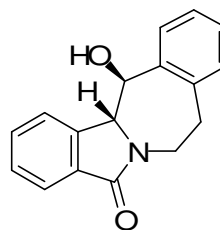
X-ray Crystallographic Structures (Ortep) of *cis*-5, *trans*-12, and *cis*-12

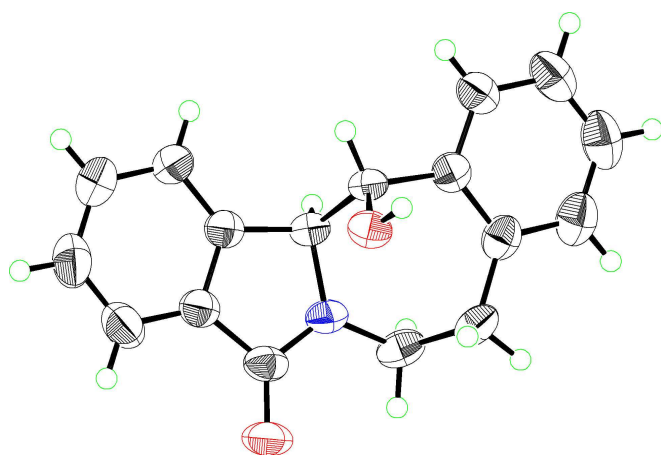


cis-5



trans-12





cis-12

