

Supporting Information

Synthesis of Tetracyclic Indolin-3-ones through Pd-Catalyzed Intramolecular Deacetylative Dearomatization of 3-Acetoxyindoles

Ren-Xiao Liang,^a Ke Wang,^a Ling-Jie Song,^a Wei-Jian Sheng,^a and Yi-Xia Jia^{a,b,*}

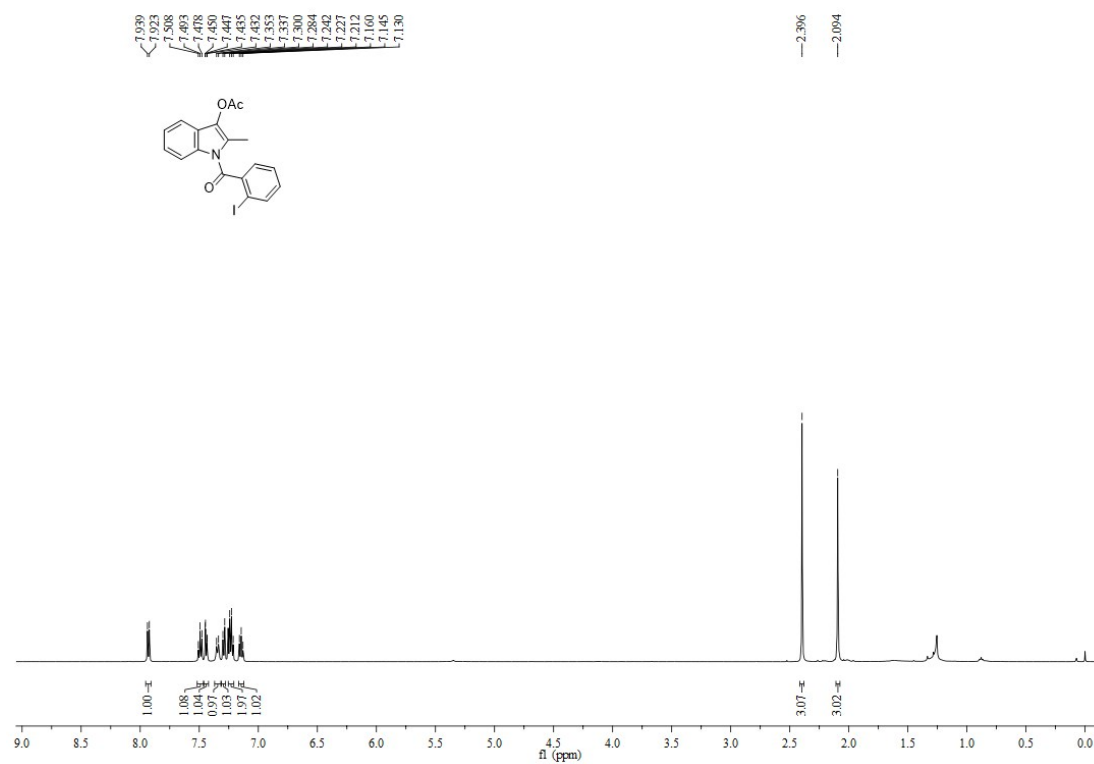
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Synthesis Technology, Zhejiang University of Technology, Chaowang Road 18#, Hangzhou
310014, China*

^b *State Key Laboratory of Organometallic Chemistry, Shanghai Institute of Organic Chemistry,
Chinese Academy of Sciences, Shanghai 200032, P R China*

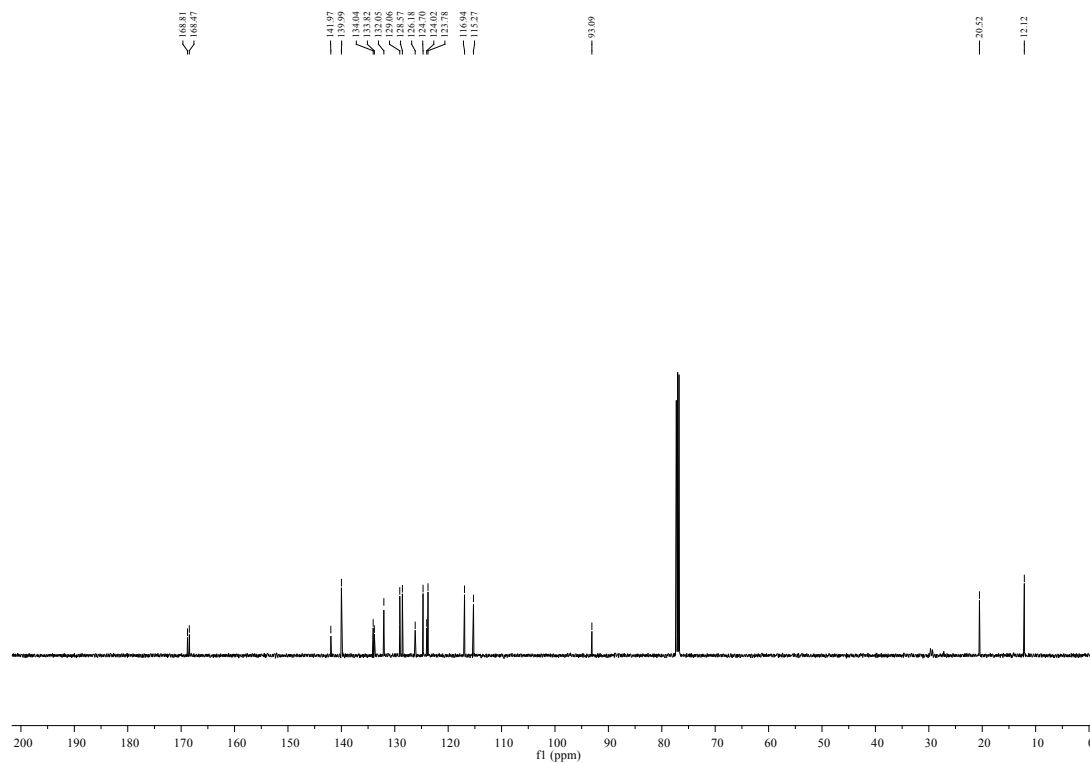
Copies of NMR spectra of the Compounds

1a

^1H NMR (CDCl_3 , 500 MHz)

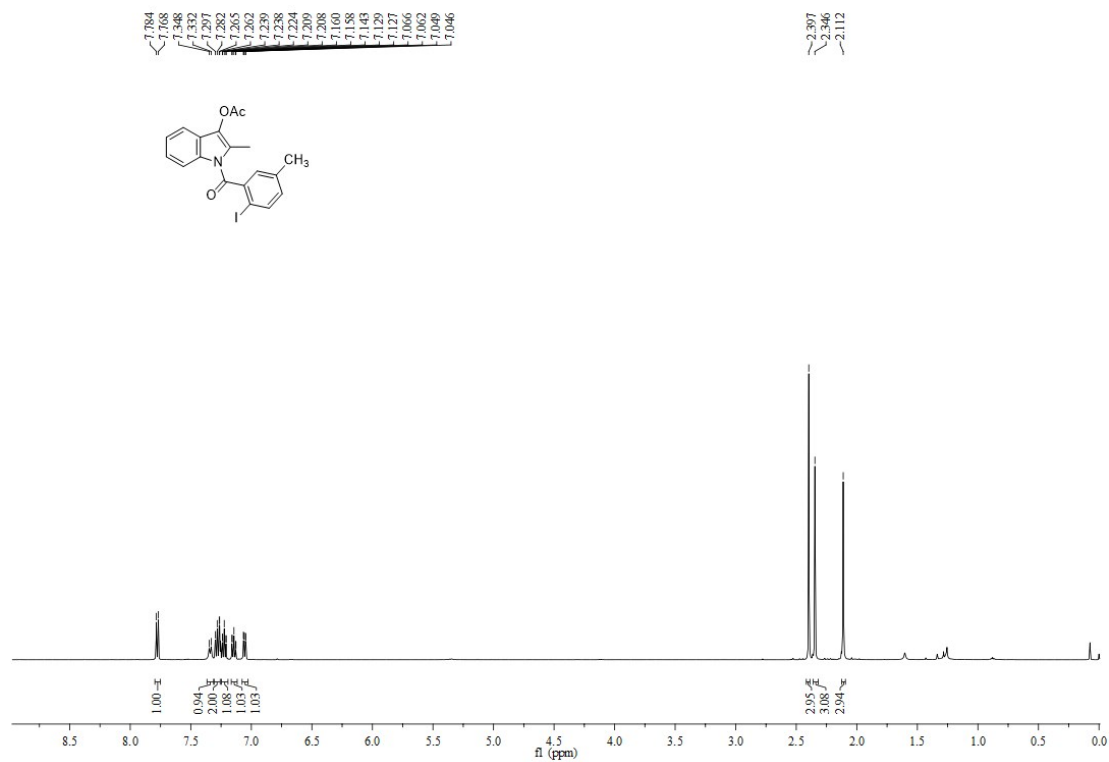


^{13}C NMR (CDCl_3 , 125 MHz)

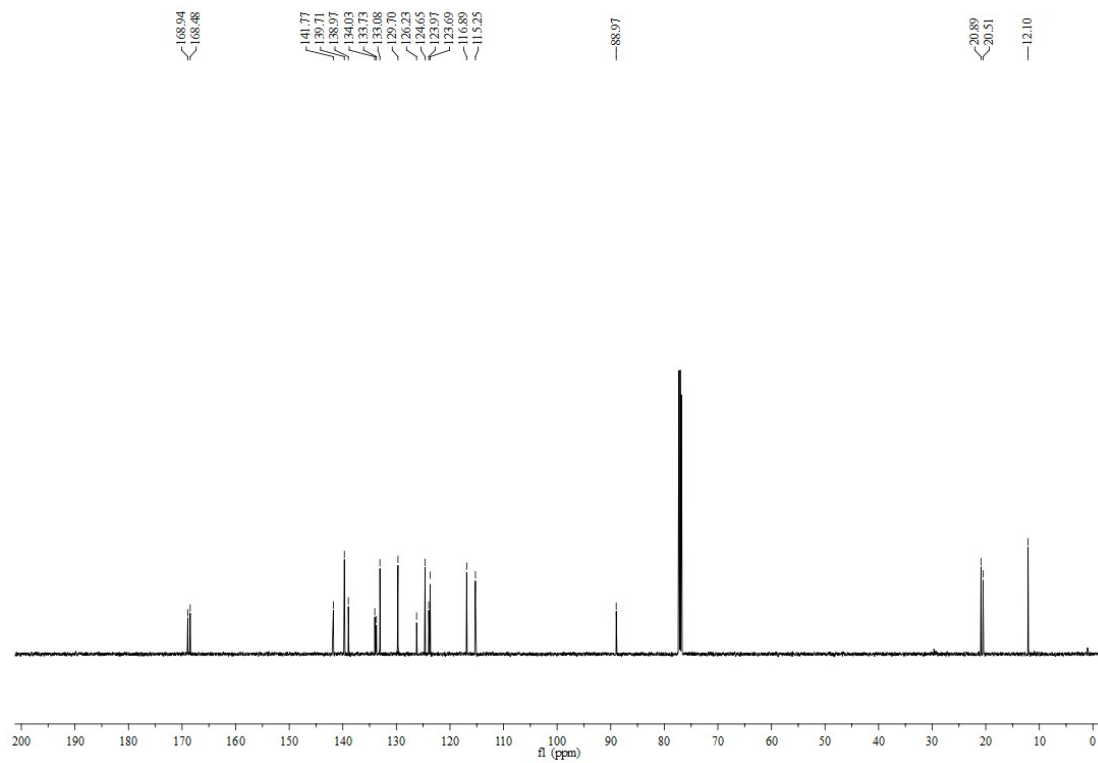


1b

¹H NMR (CDCl₃, 500 MHz)

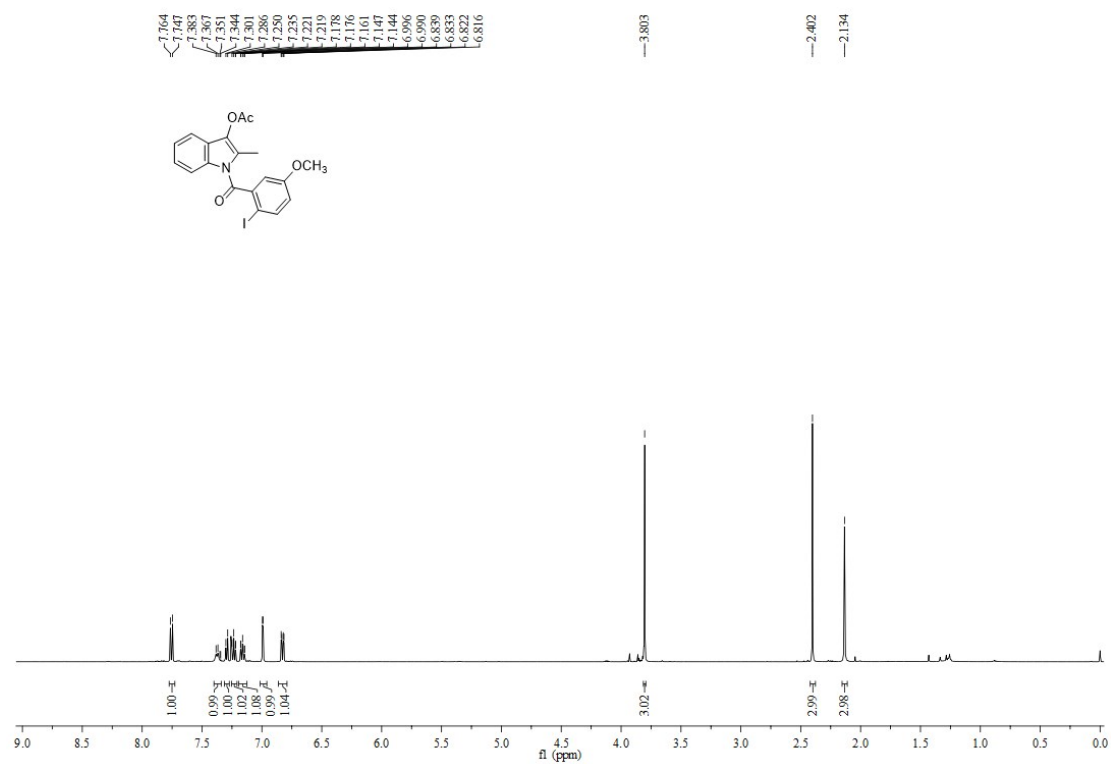


¹³C NMR (CDCl₃, 125 MHz)

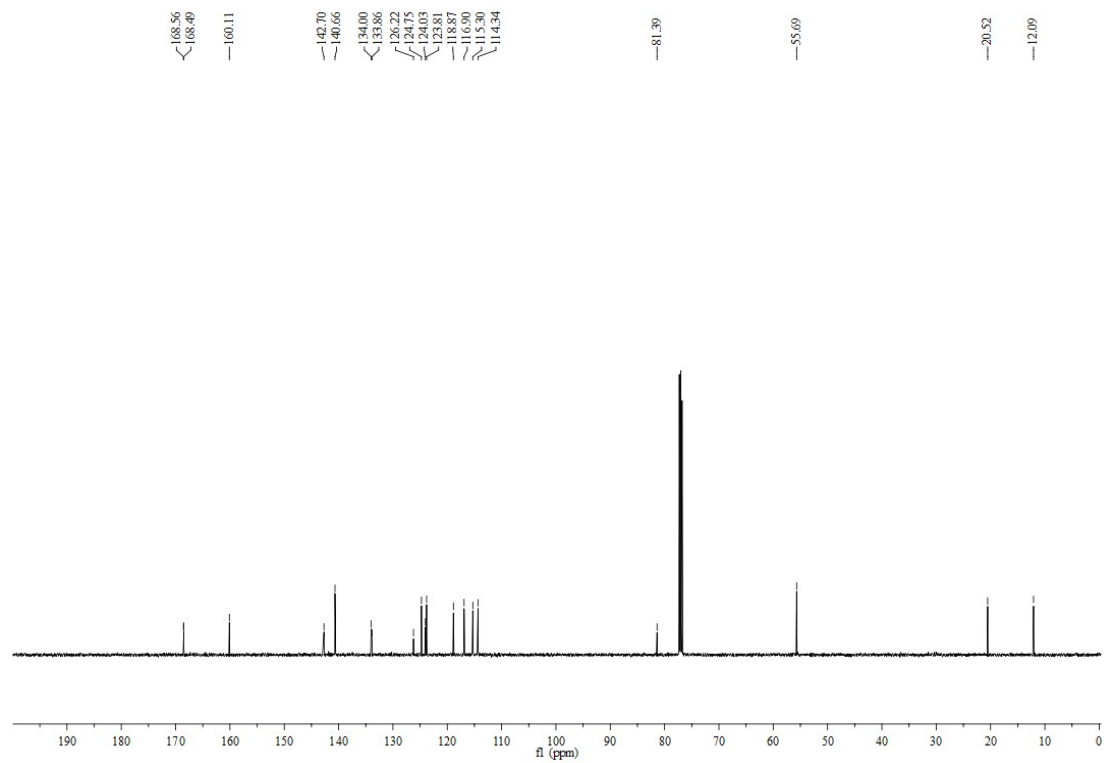


1c

¹H NMR (CDCl₃, 500 MHz)

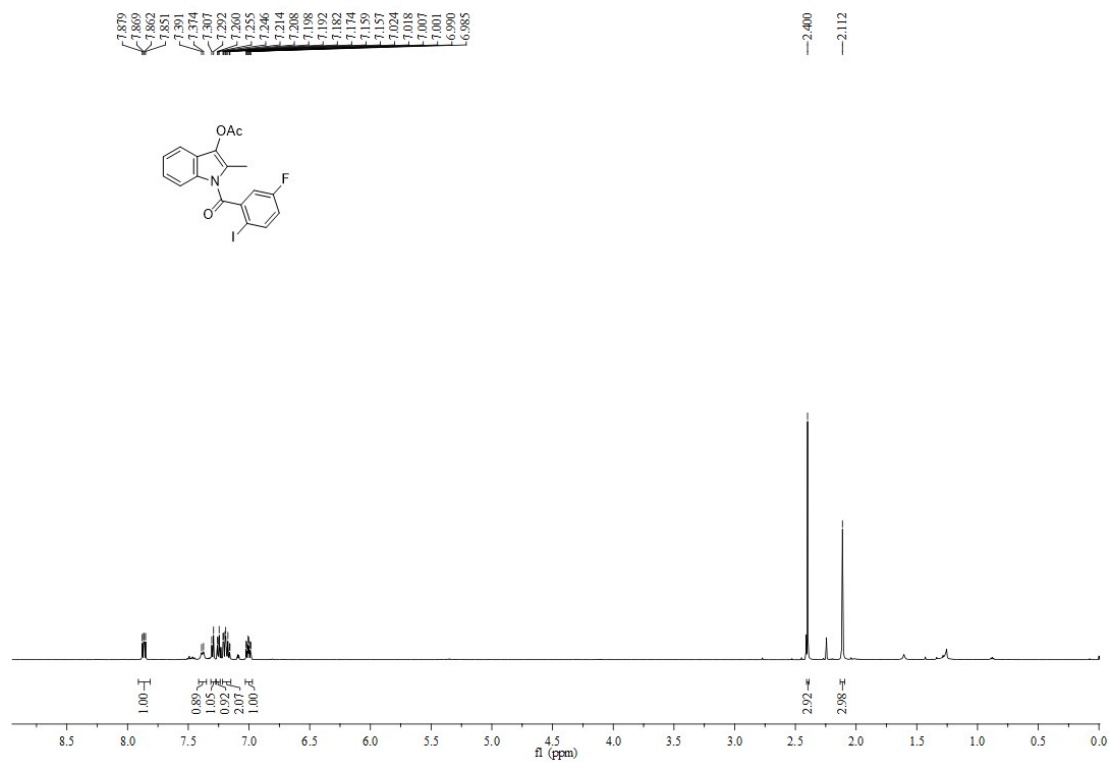


¹³C NMR (CDCl₃, 125 MHz)

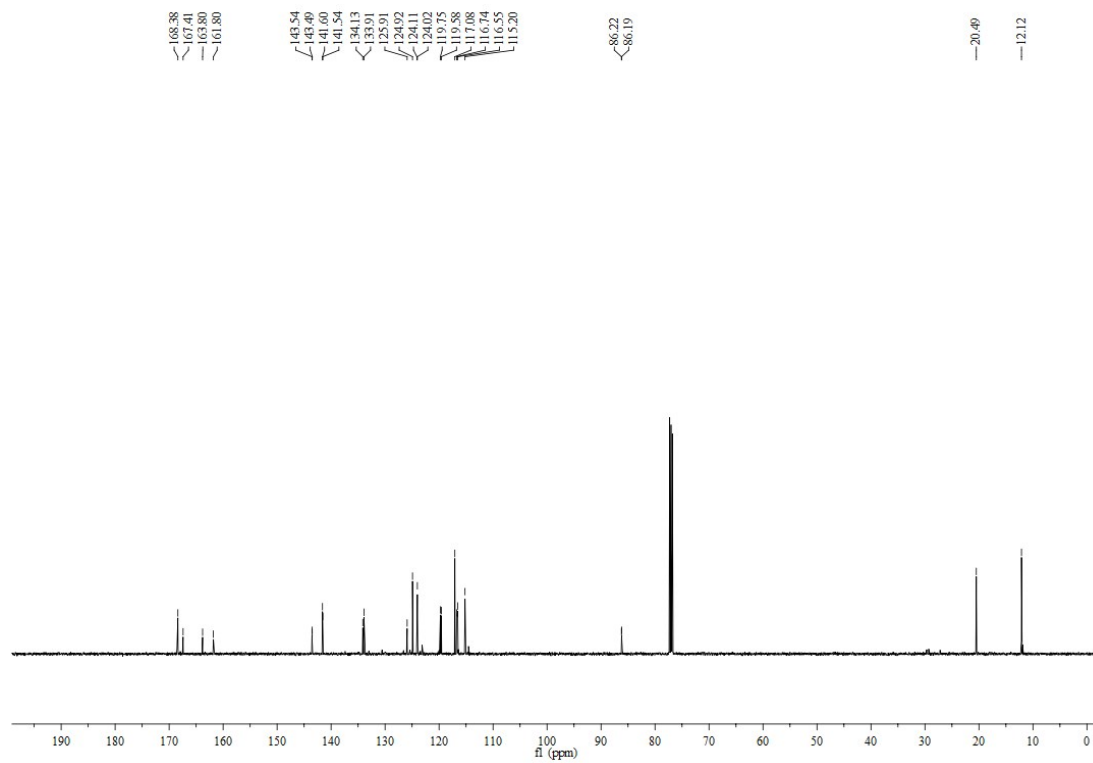


1d

¹H NMR (CDCl₃, 500 MHz)

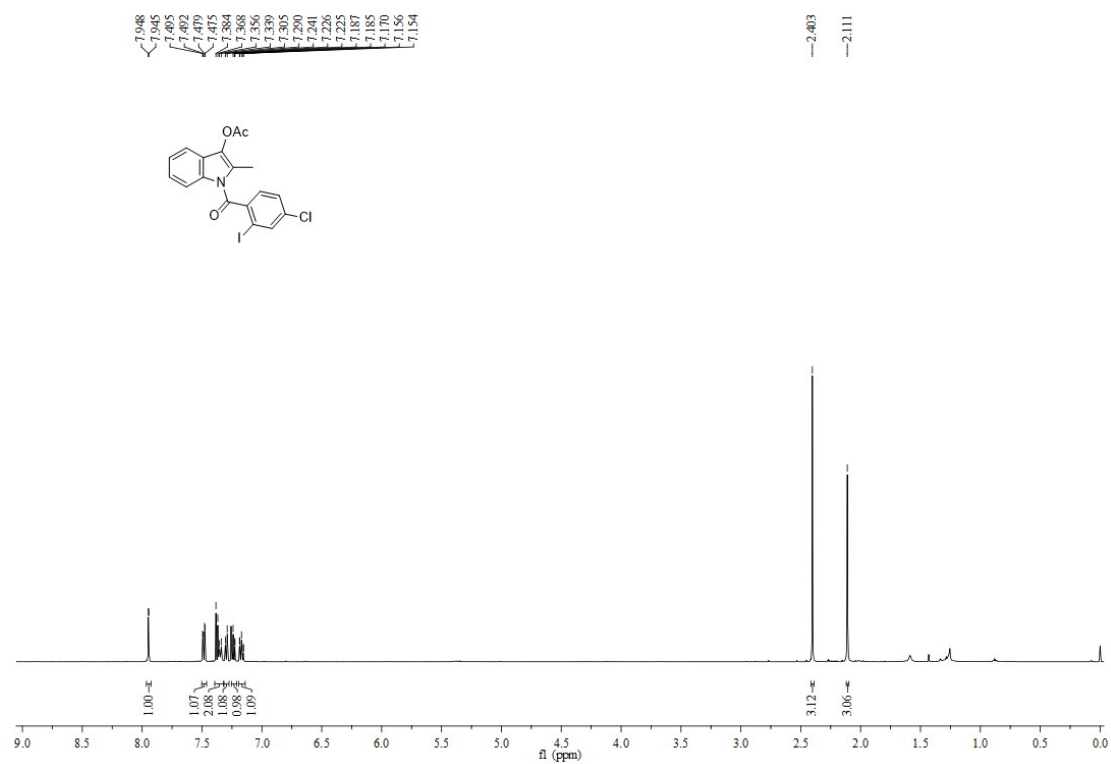


¹³C NMR (CDCl₃, 125 MHz)

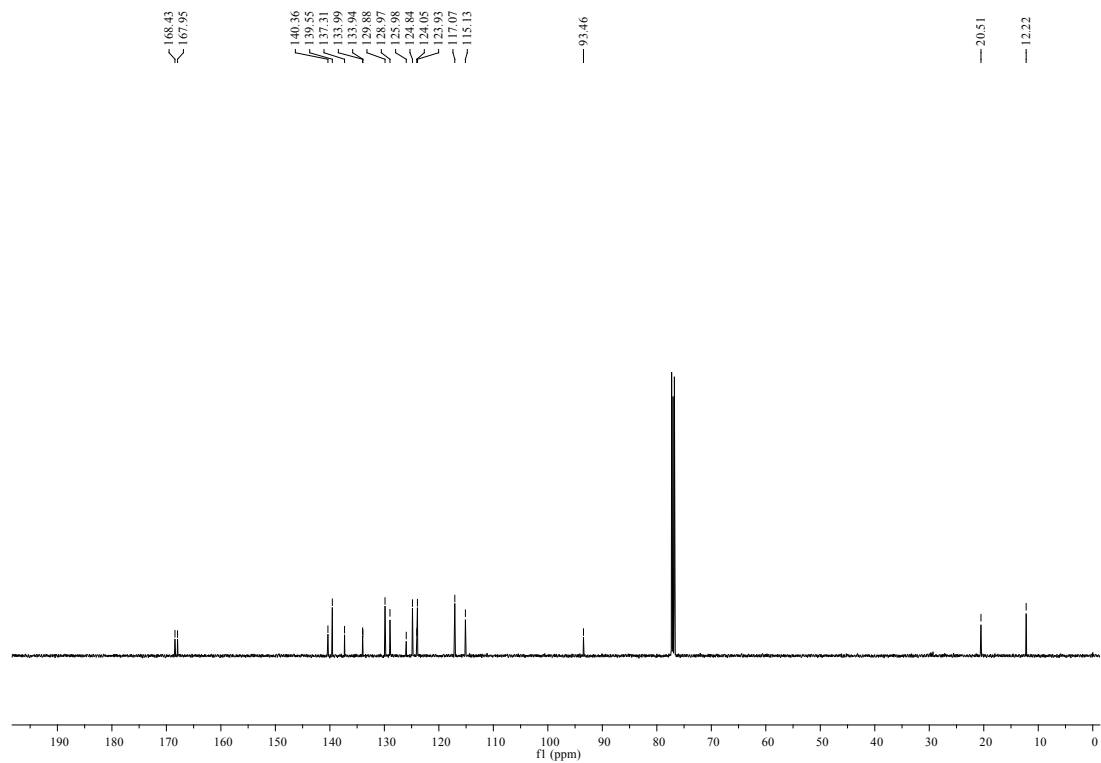


1e

¹H NMR (CDCl₃, 500 MHz)

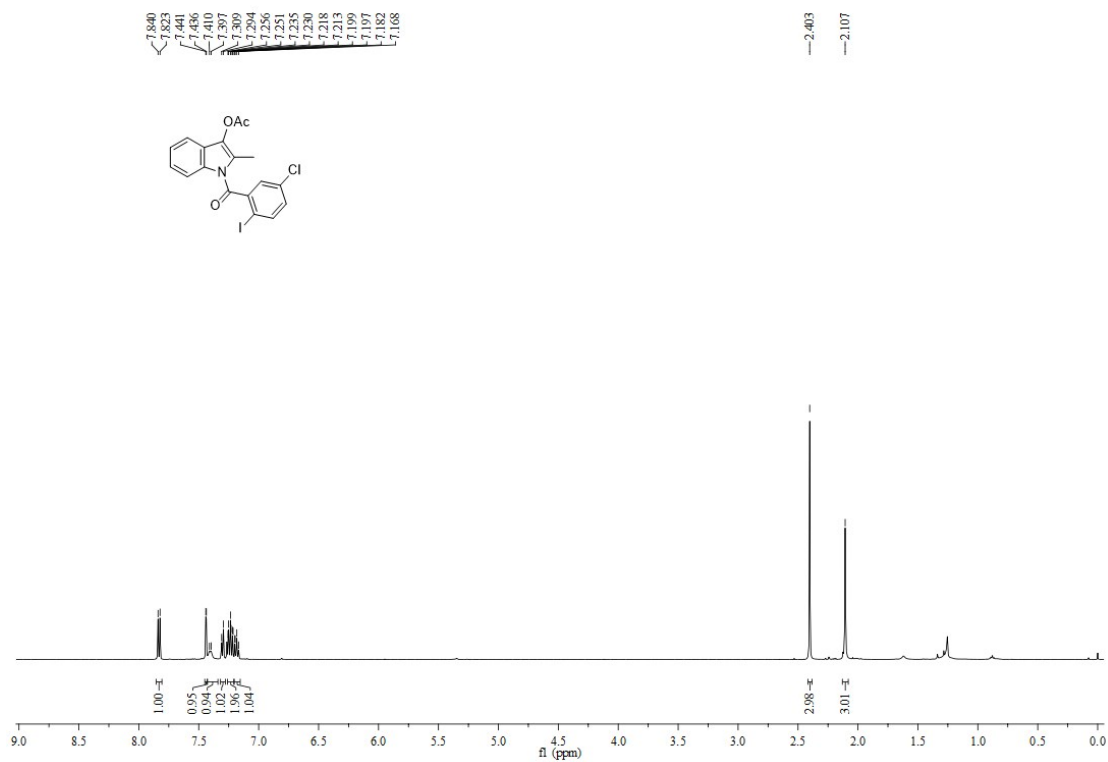


¹³C NMR (CDCl₃, 125 MHz)

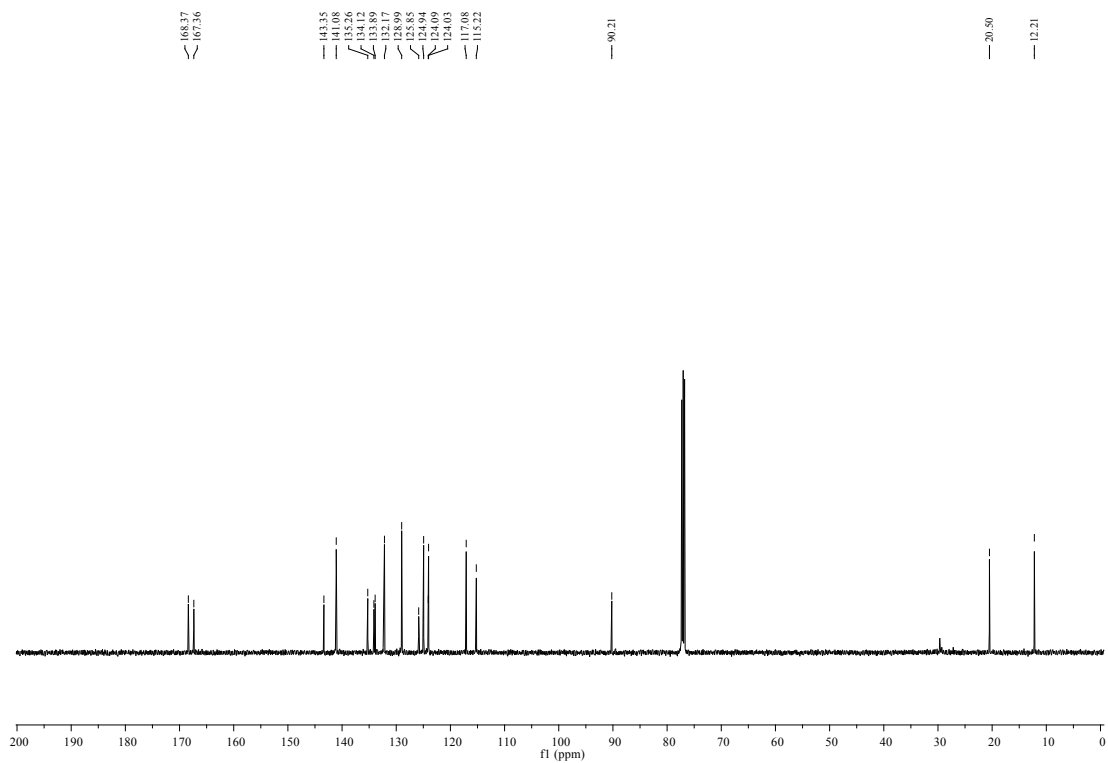


1f

¹H NMR (CDCl₃, 500 MHz)

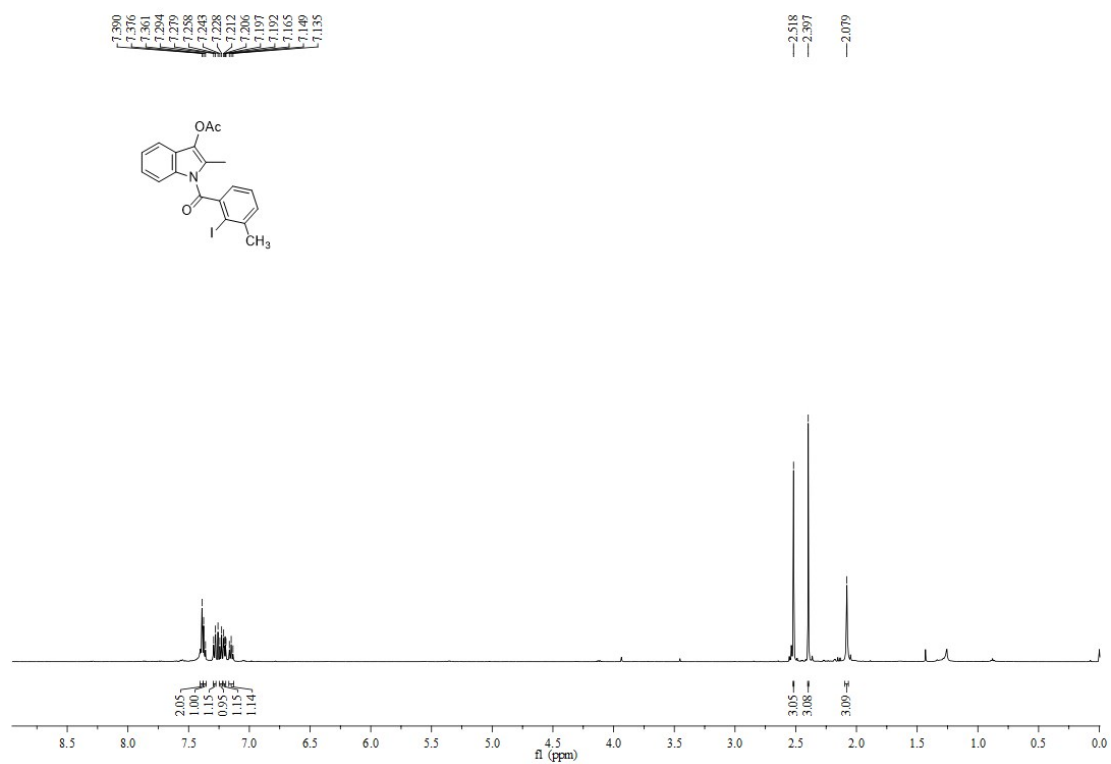


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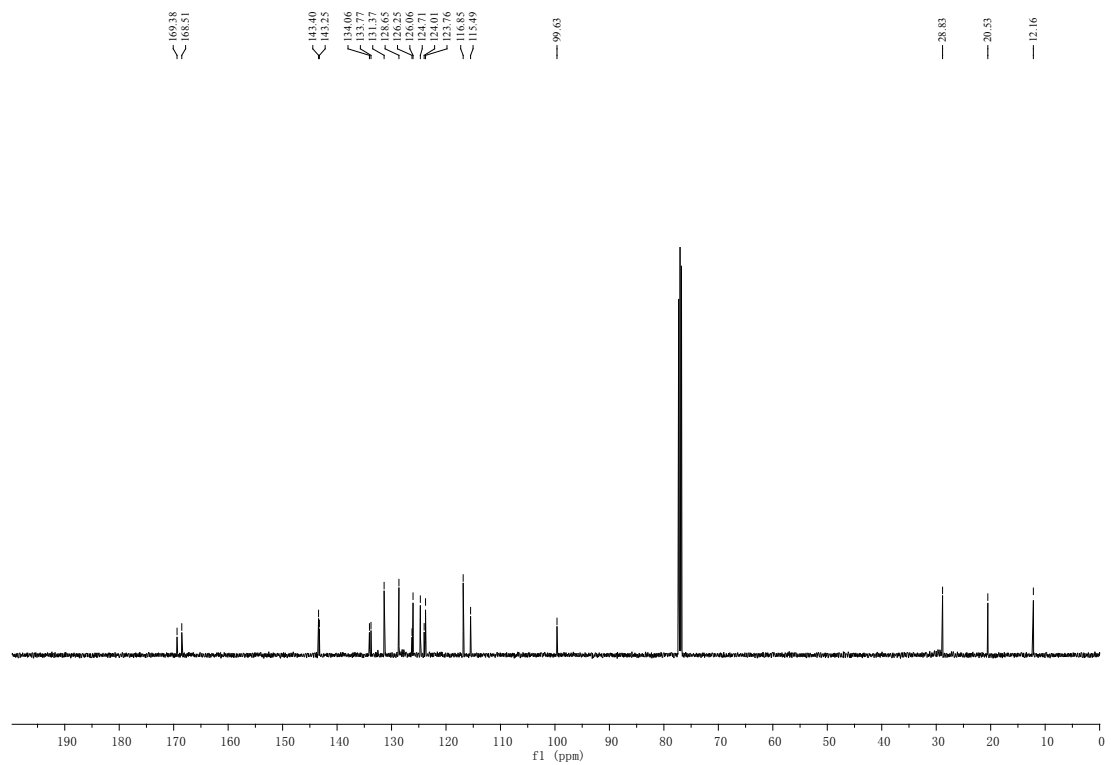


1g

¹H NMR (CDCl₃, 500 MHz)

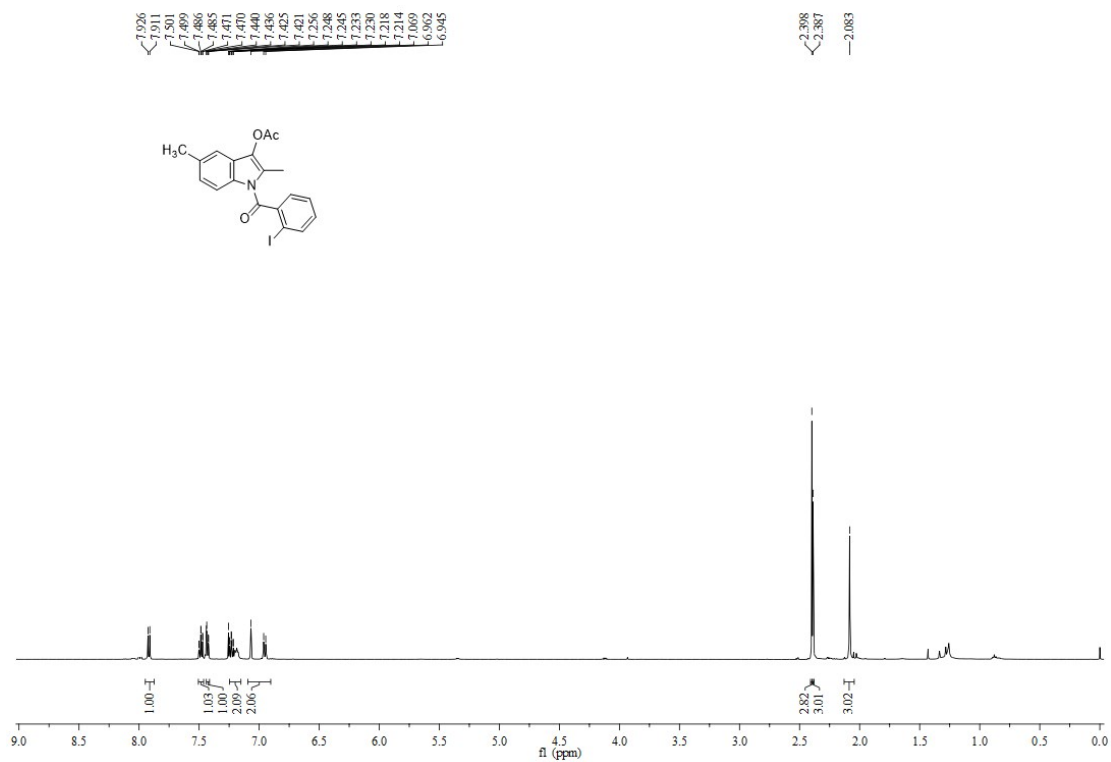


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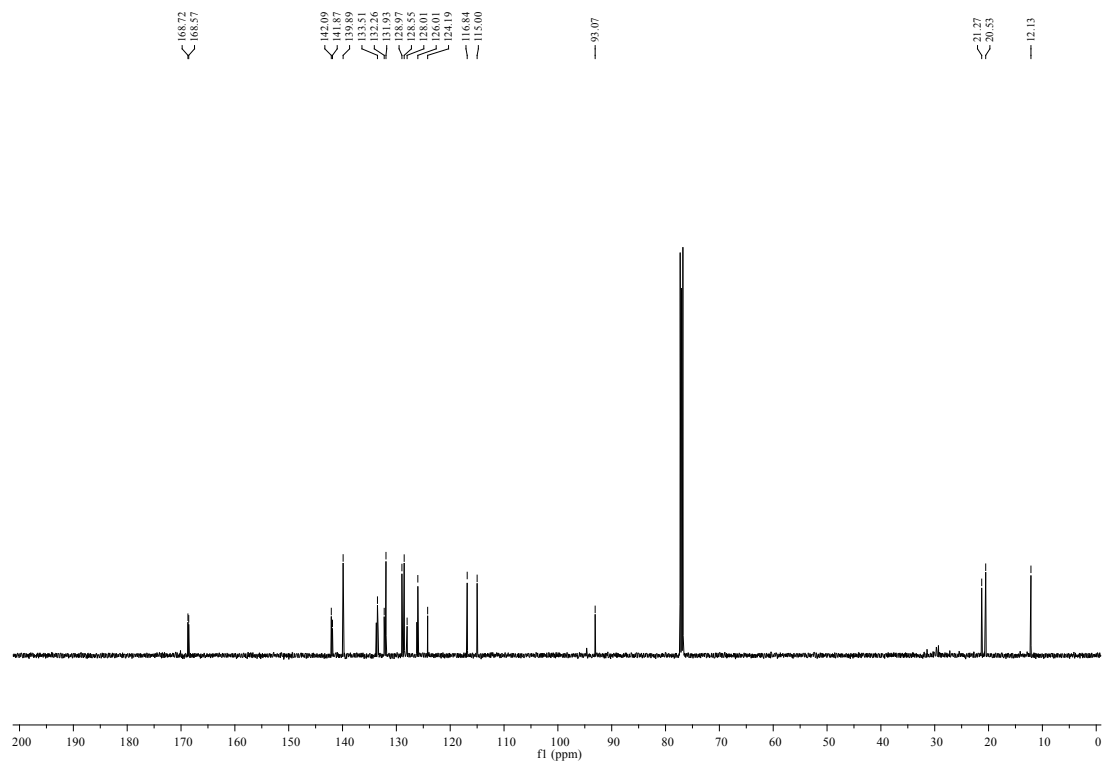


1h

¹H NMR (CDCl₃, 500 MHz)

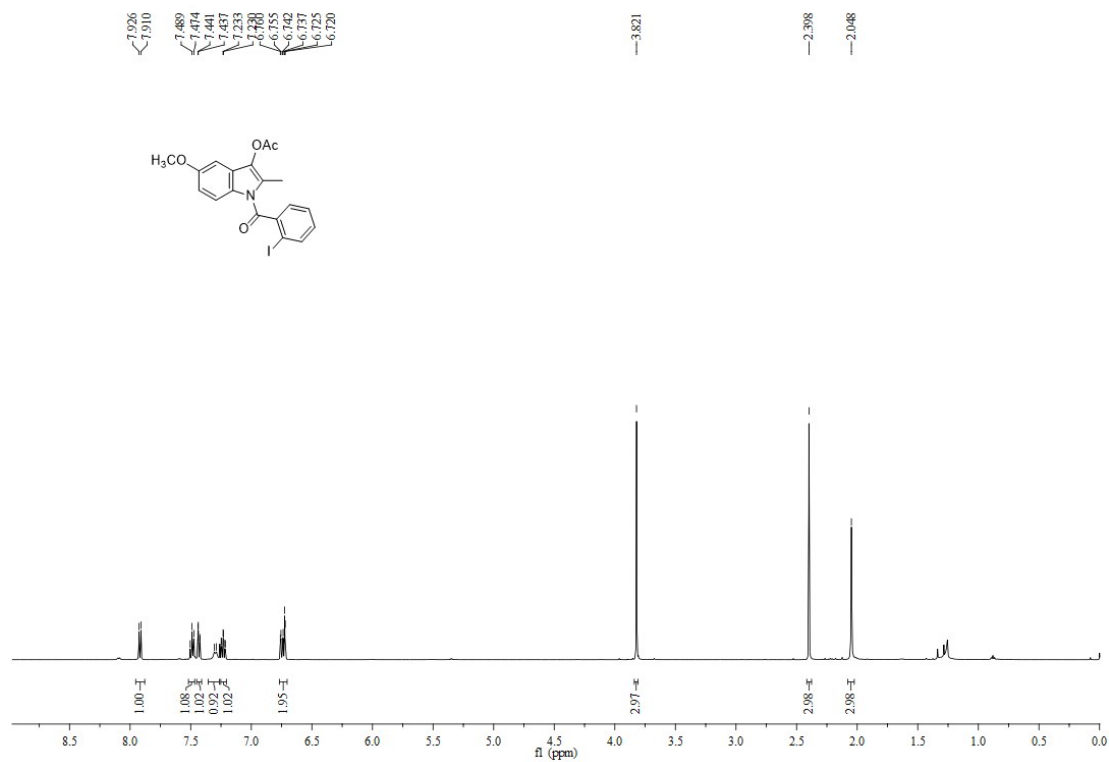


¹³C NMR (CDCl₃, 125 MHz)

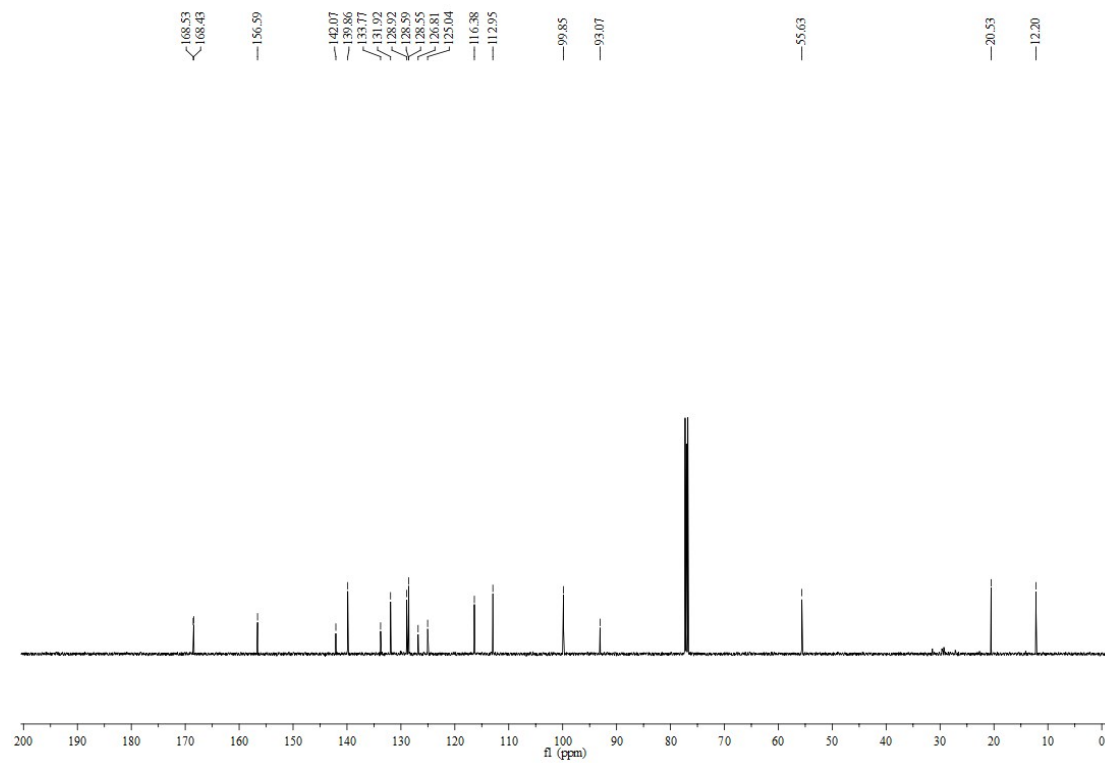


1i

¹H NMR (CDCl₃, 500 MHz)

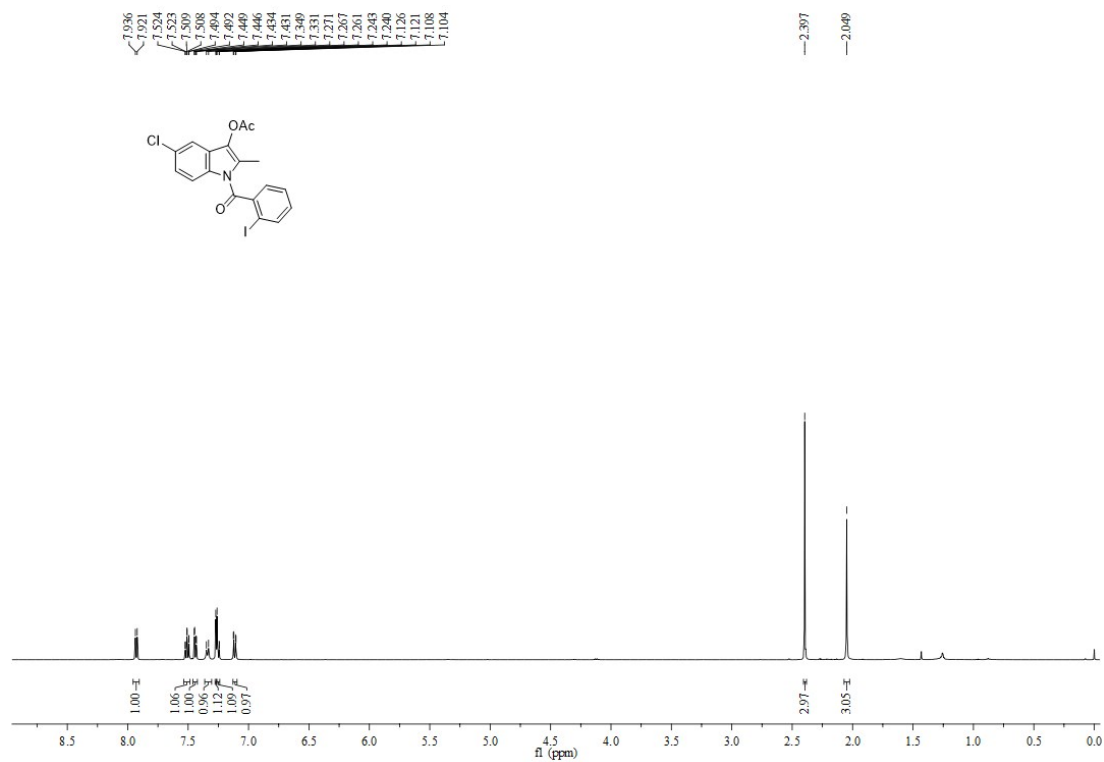


¹³C NMR (CDCl₃, 125 MHz)

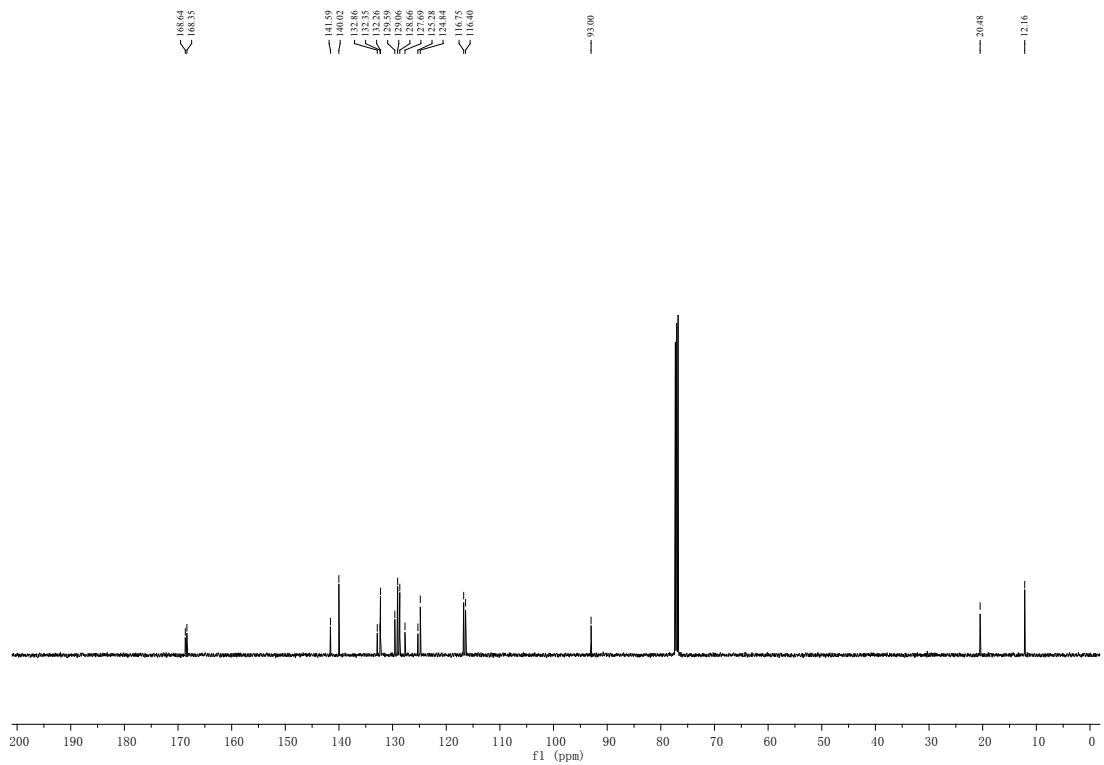


1j

¹H NMR (CDCl₃, 500 MHz)

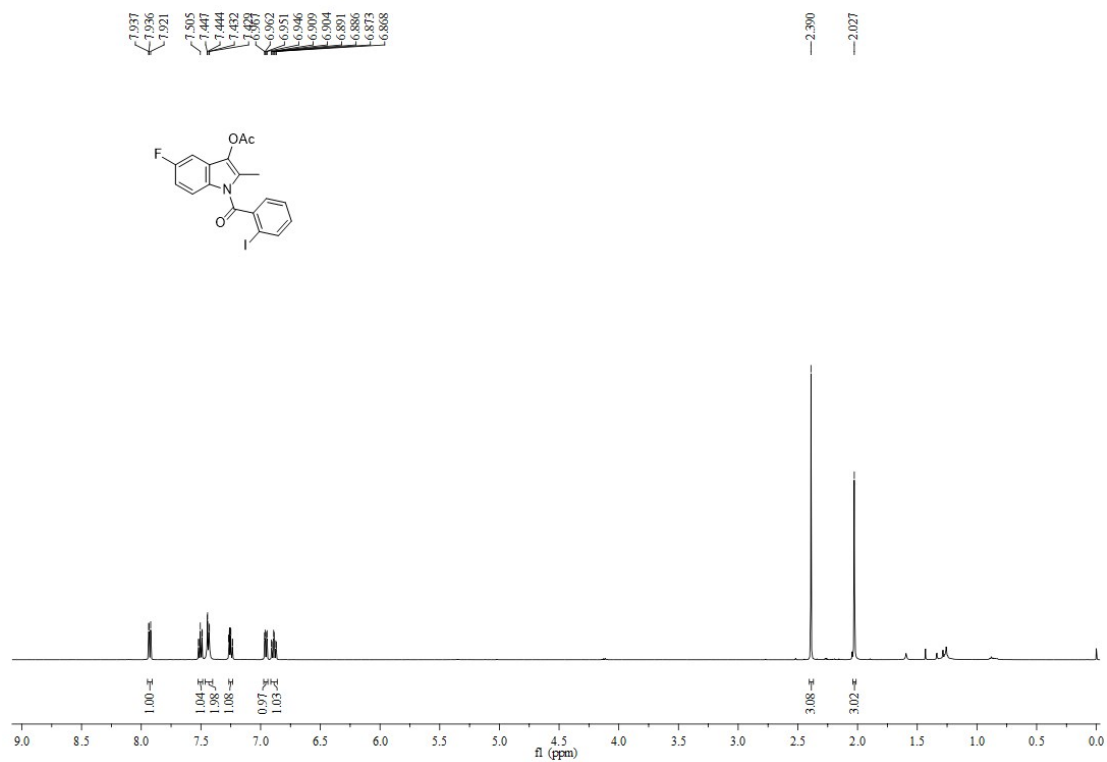


¹³C NMR (CDCl₃, 125 MHz)

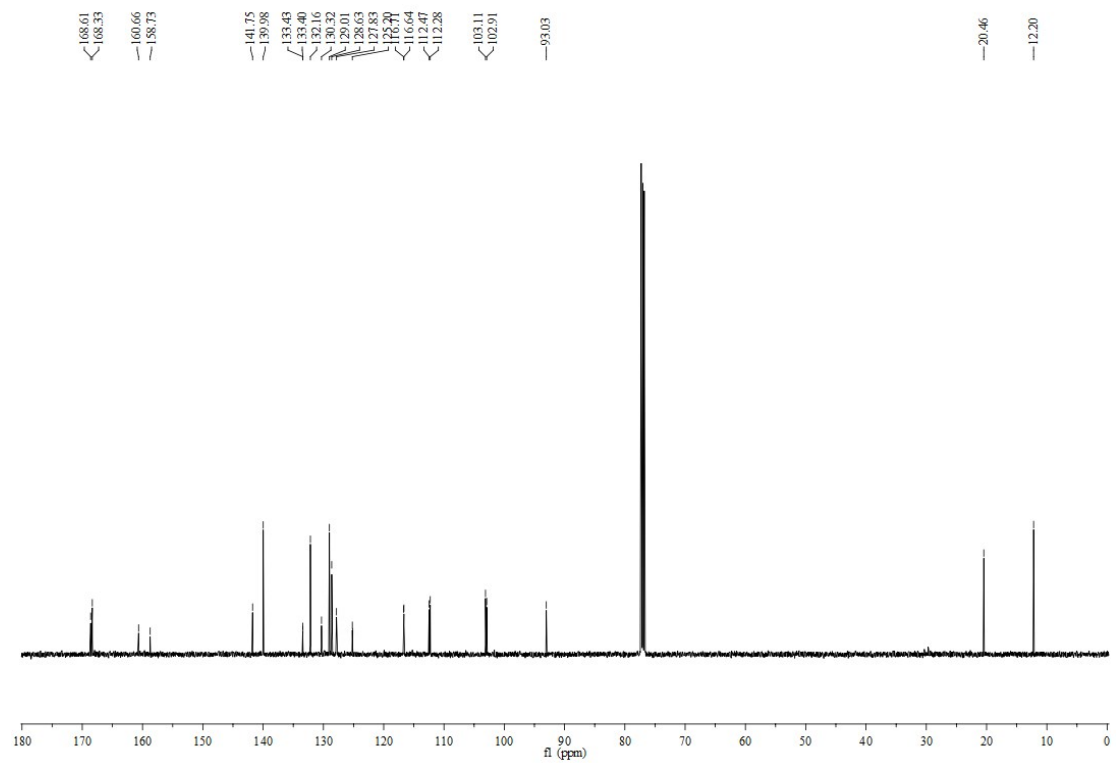


1k

¹H NMR (CDCl₃, 500 MHz)

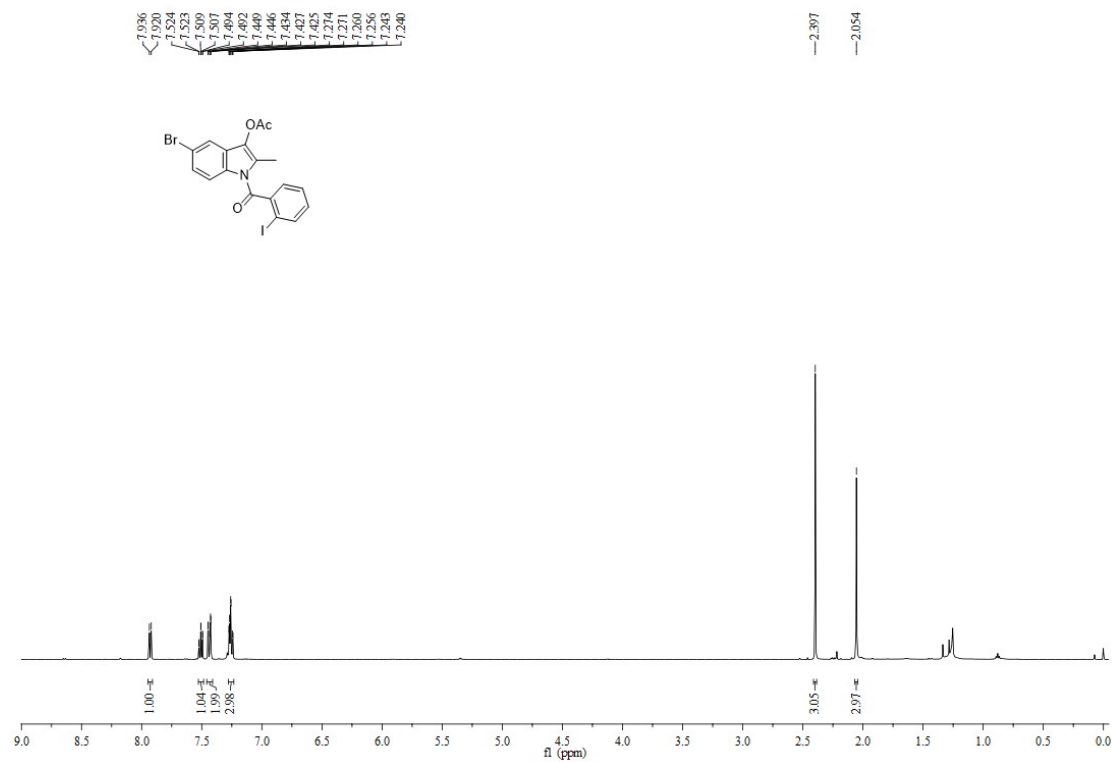


¹³C NMR (CDCl₃, 125 MHz)

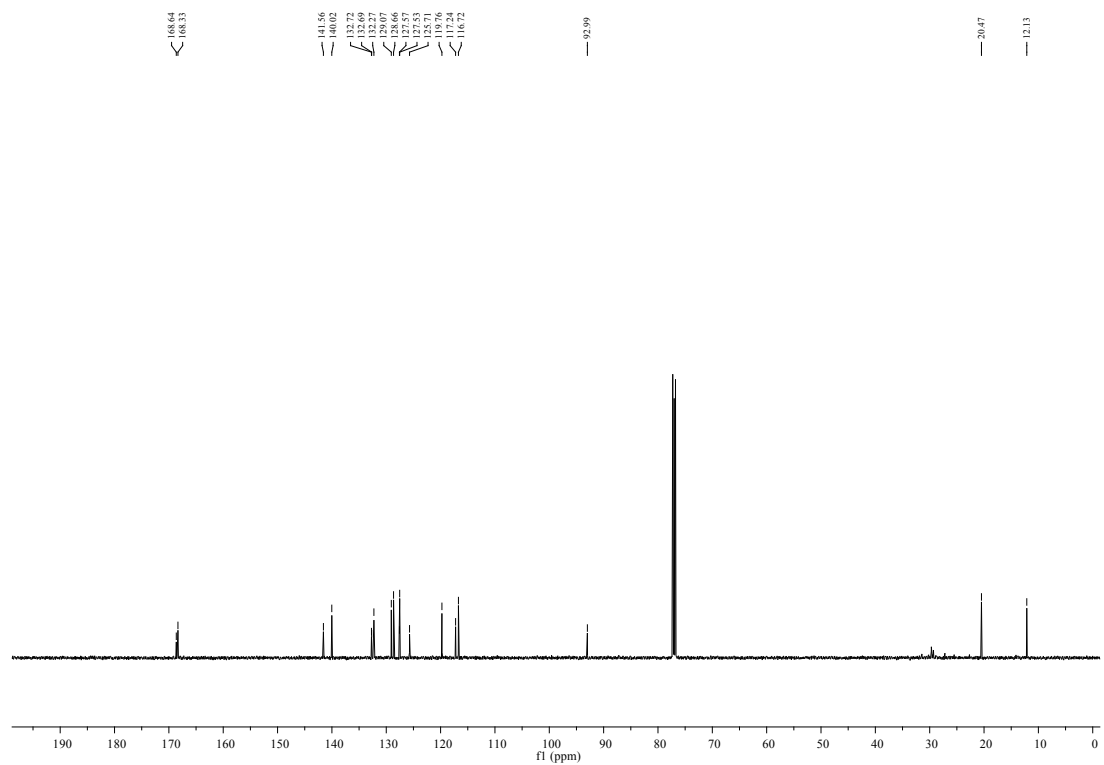


11

^1H NMR (CDCl_3 , 500 MHz)

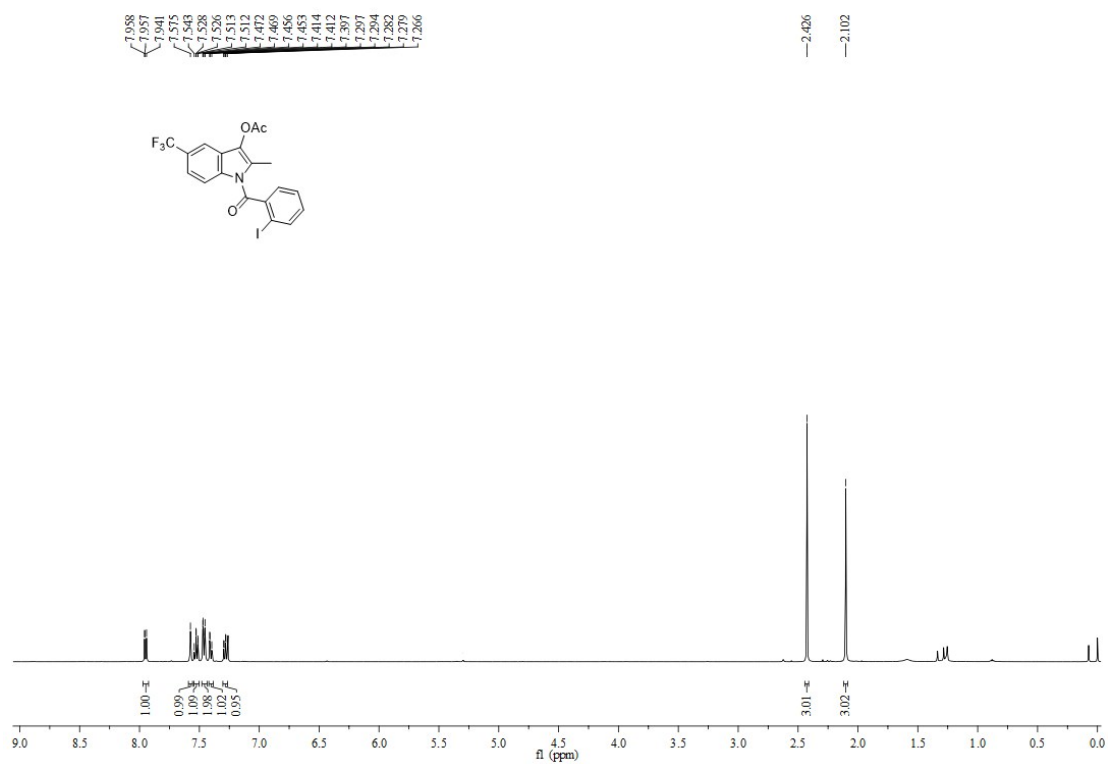


^{13}C NMR (CDCl_3 , 125 MHz)

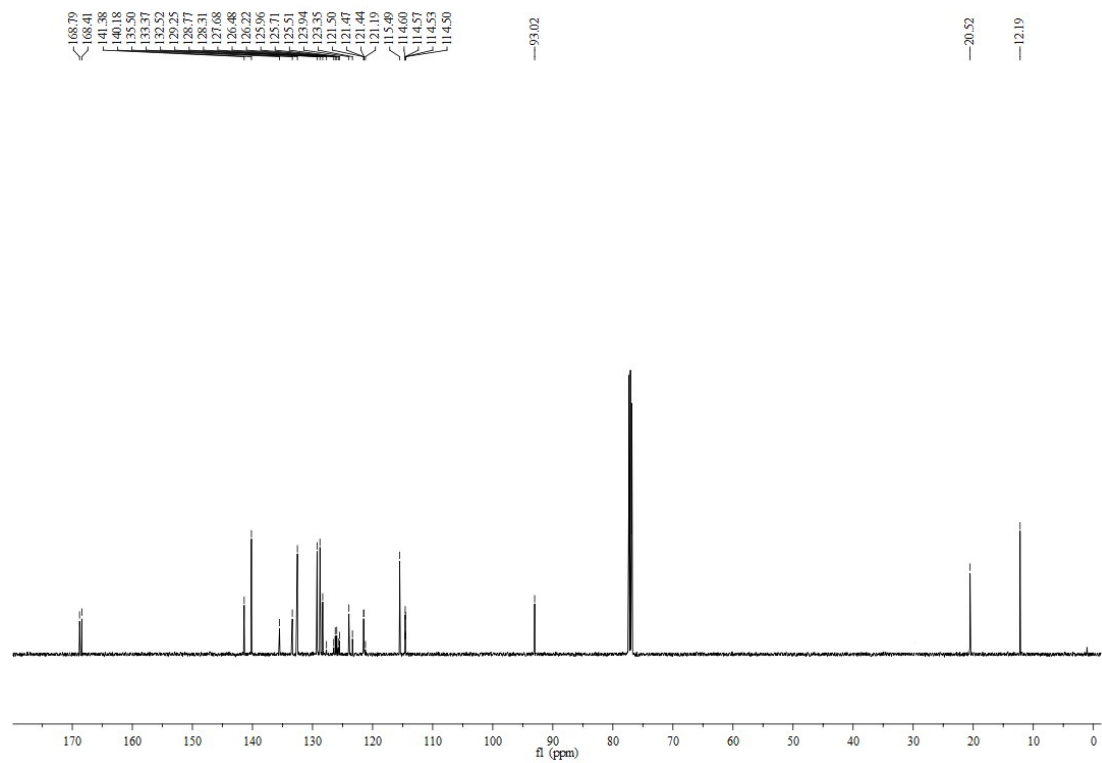


1m

¹H NMR (CDCl₃, 500 MHz)

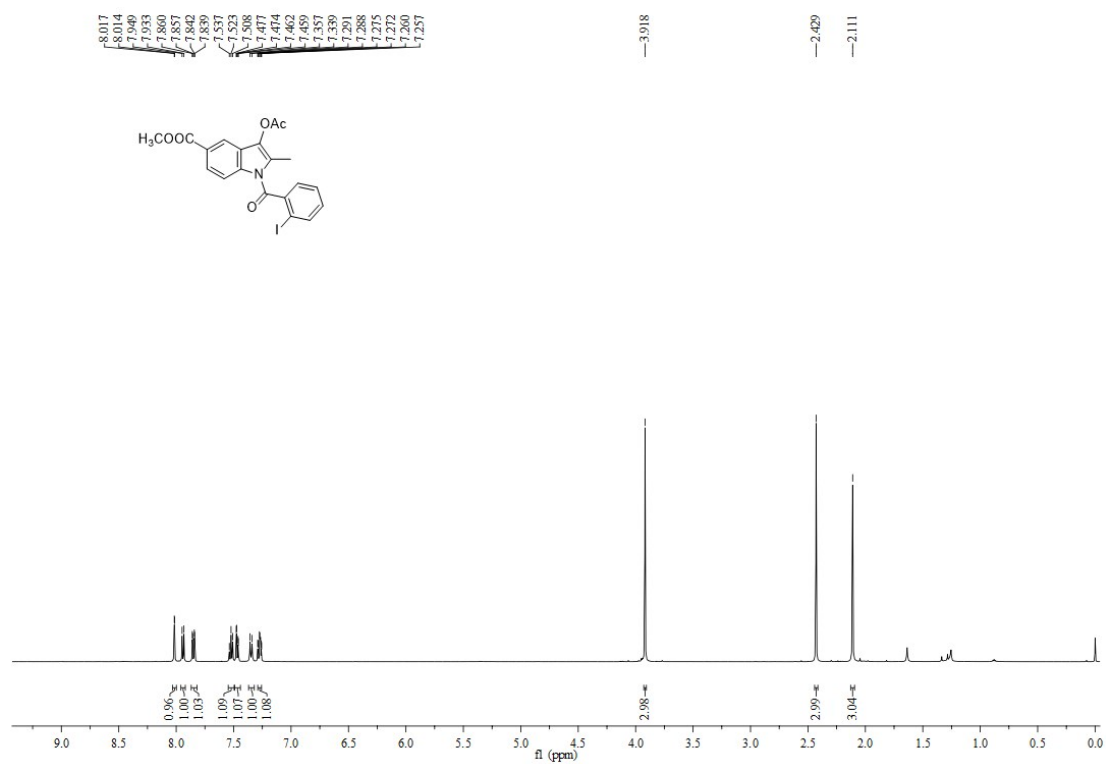


¹³C NMR (CDCl₃, 125 MHz)

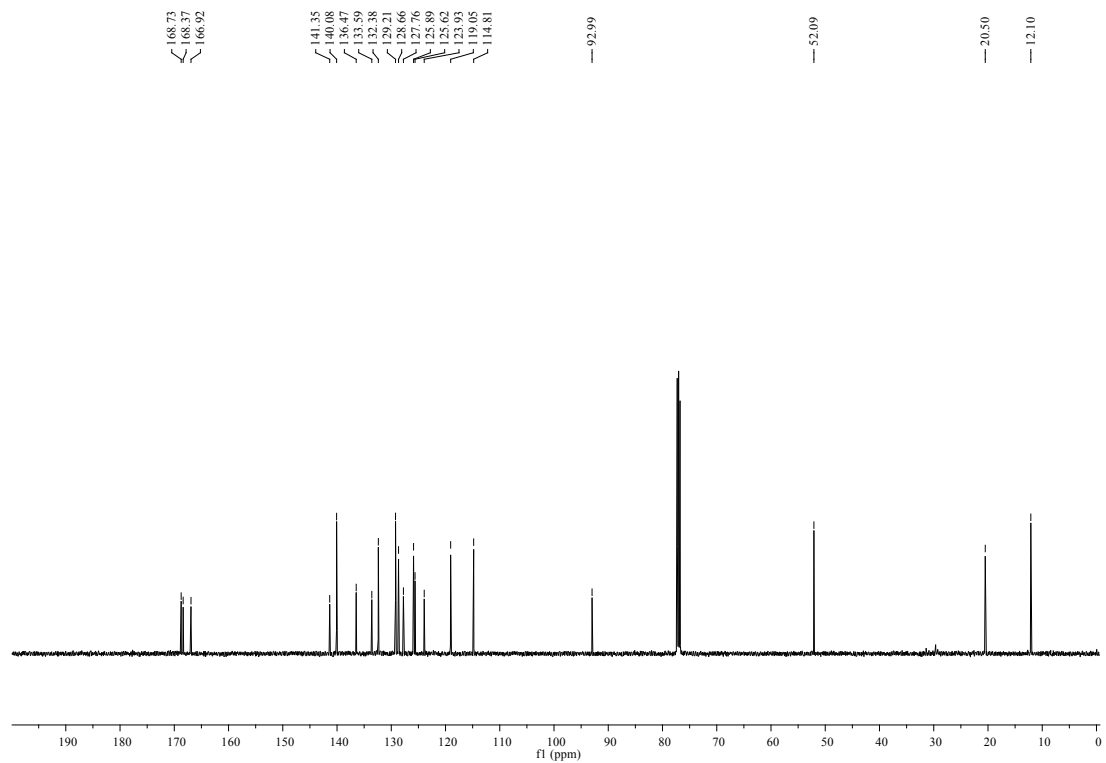


1n

¹H NMR (CDCl₃, 500 MHz)

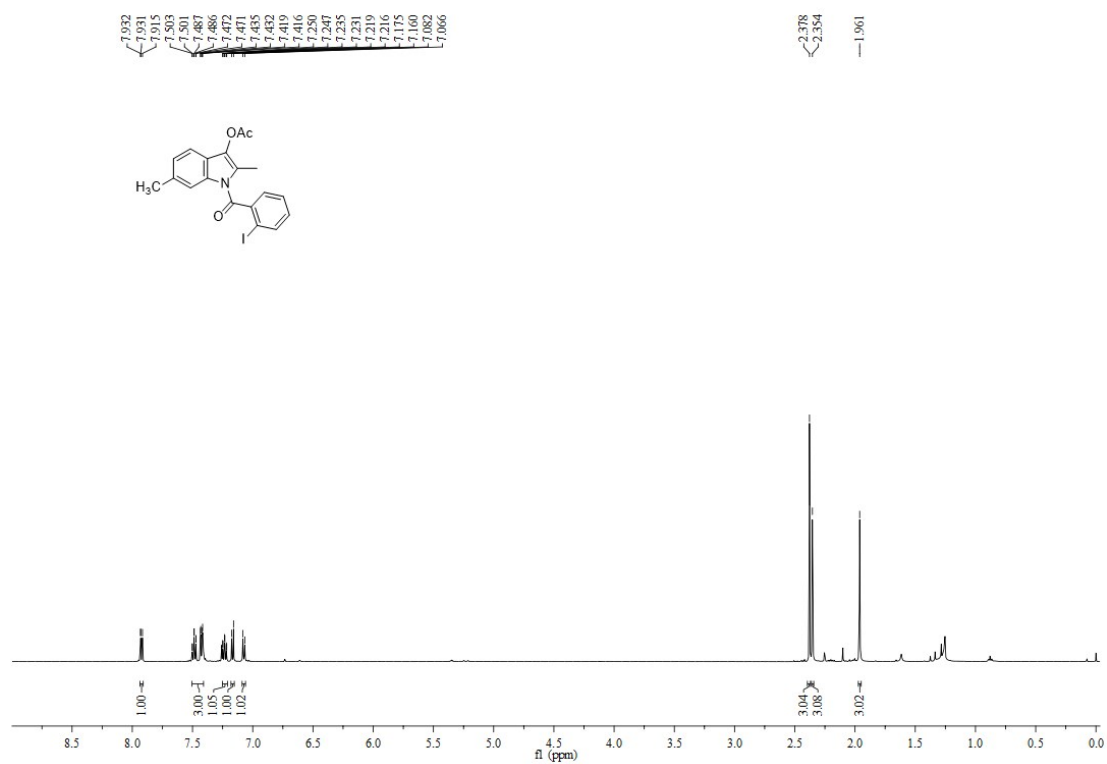


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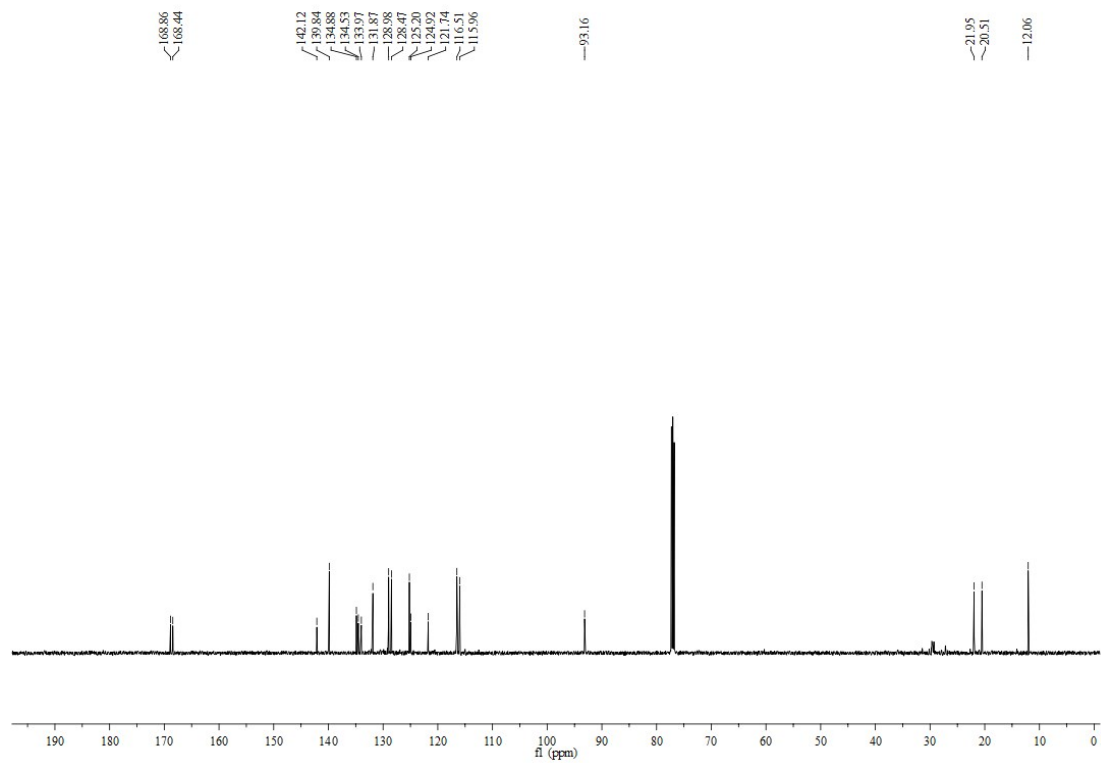


1o

¹H NMR (CDCl₃, 500 MHz)

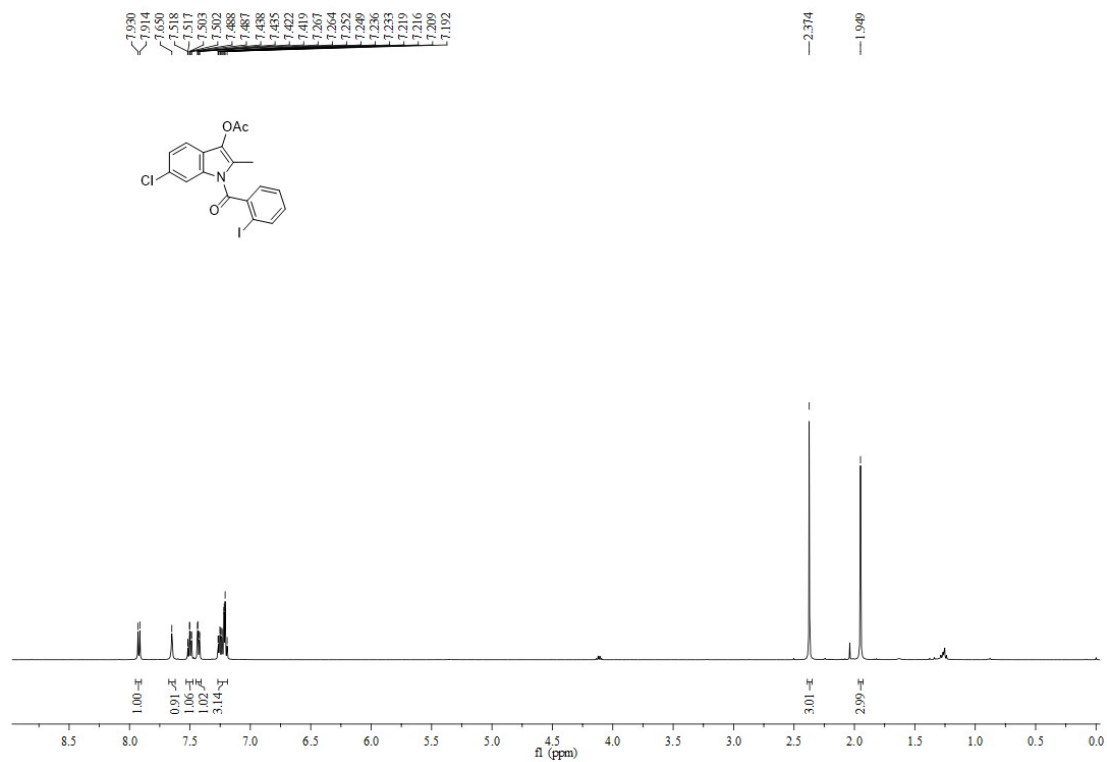


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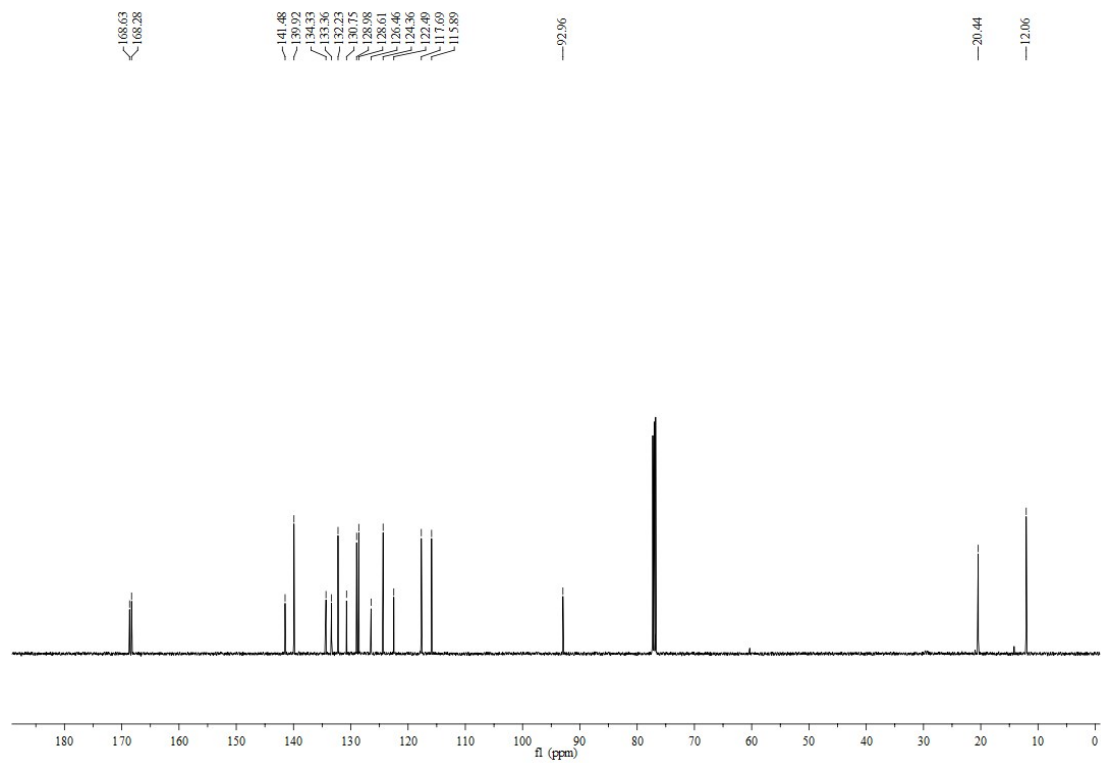


1p

¹H NMR (CDCl₃, 500 MHz)

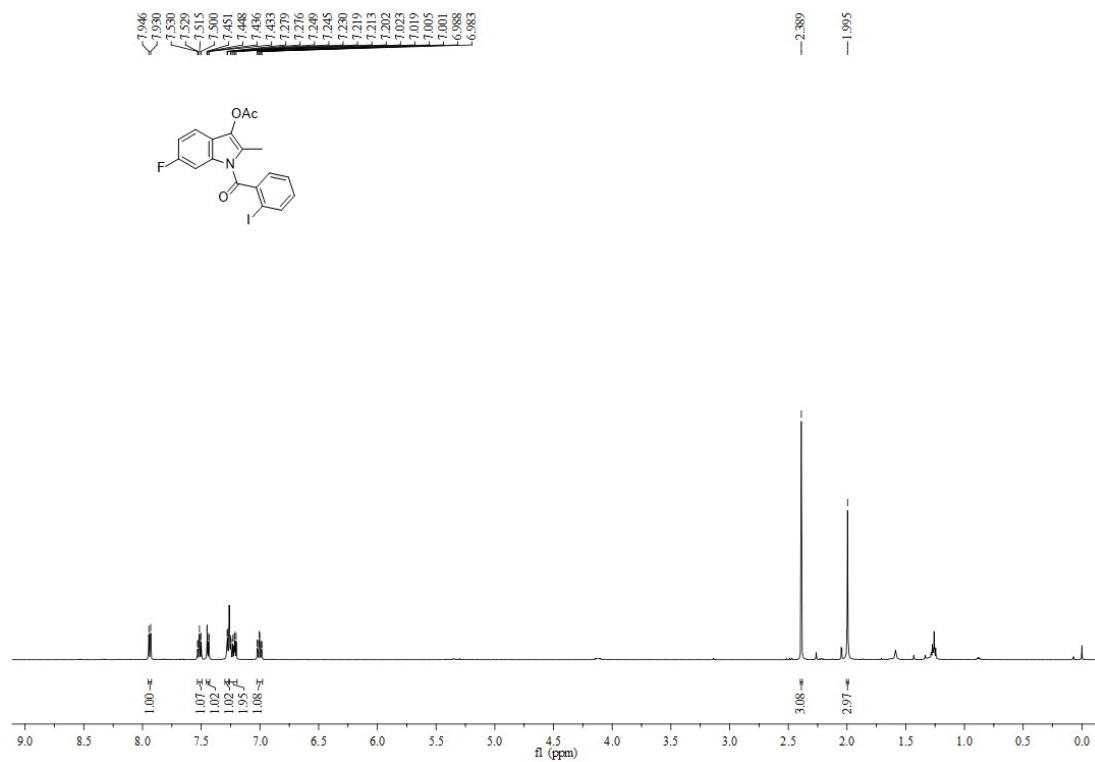


¹³C NMR (CDCl₃, 125 MHz)

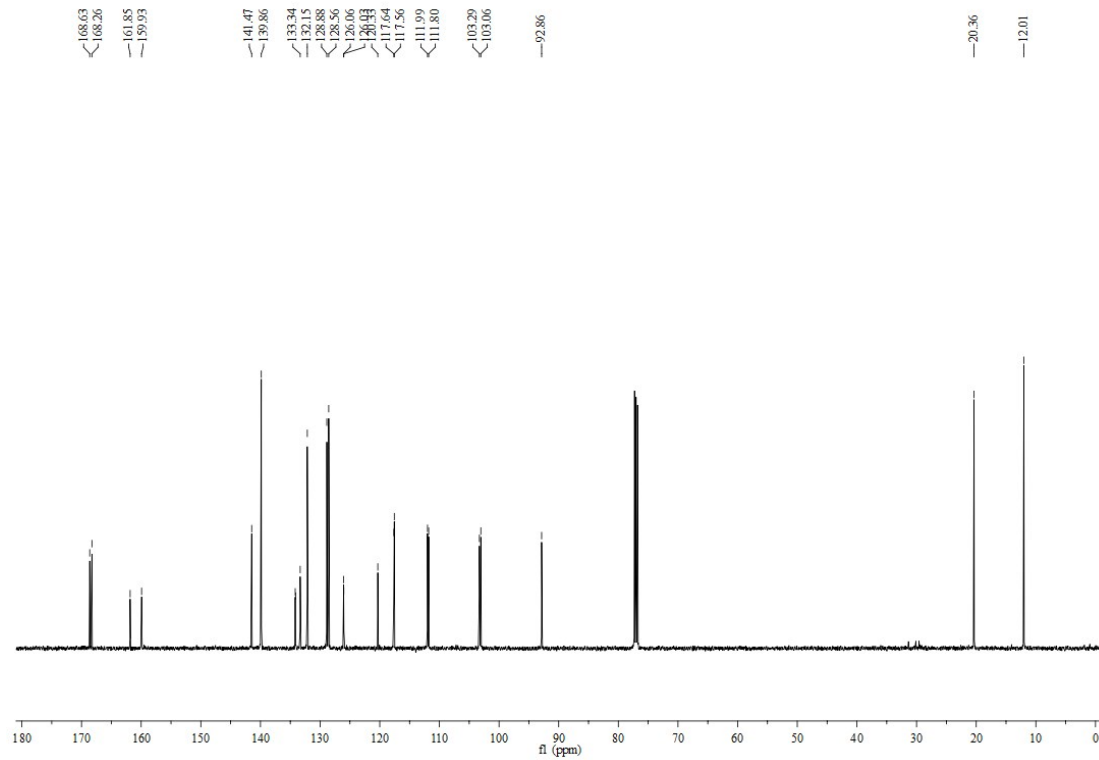


1q

¹H NMR (CDCl₃, 500 MHz)

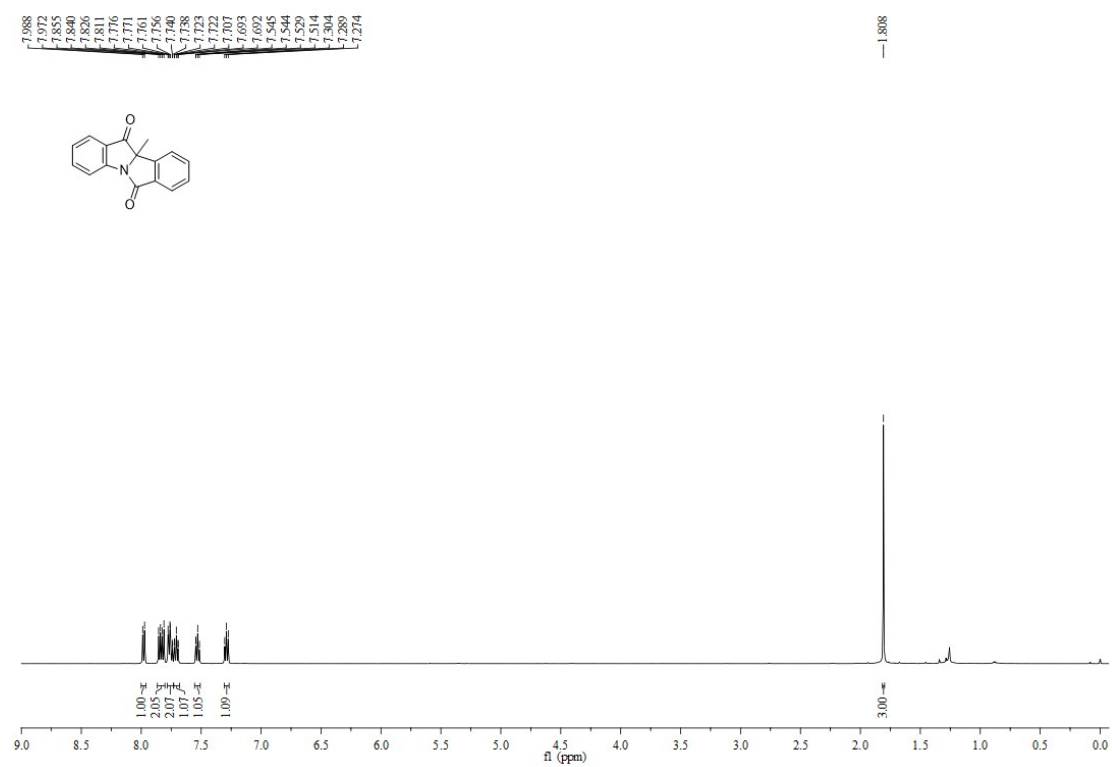


¹³C NMR (CDCl₃, 125 MHz)

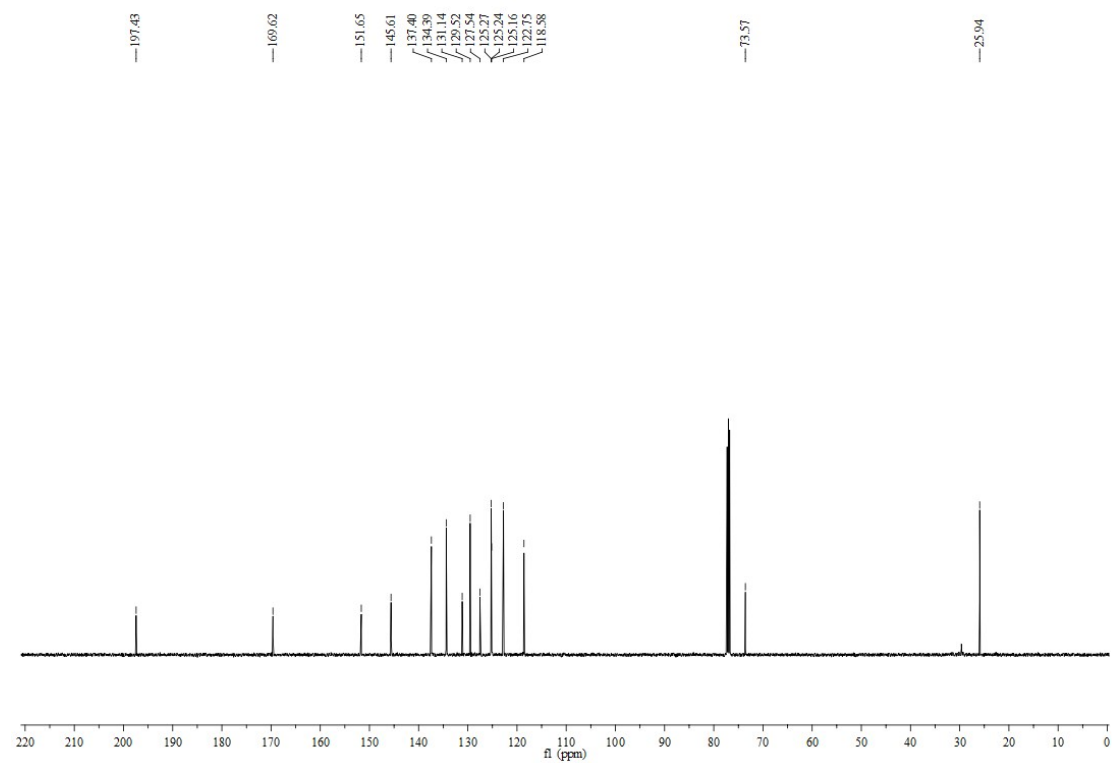


2a

^1H NMR (CDCl_3 , 500 MHz)

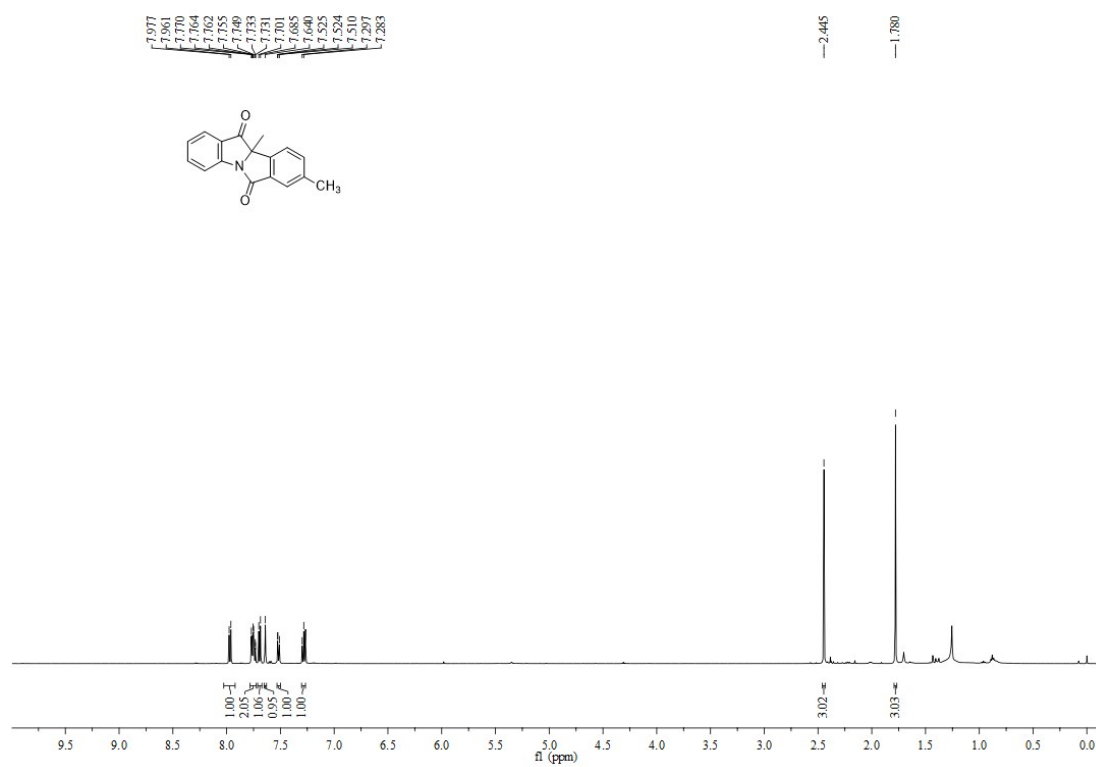


^{13}C NMR (CDCl_3 , 125 MHz)

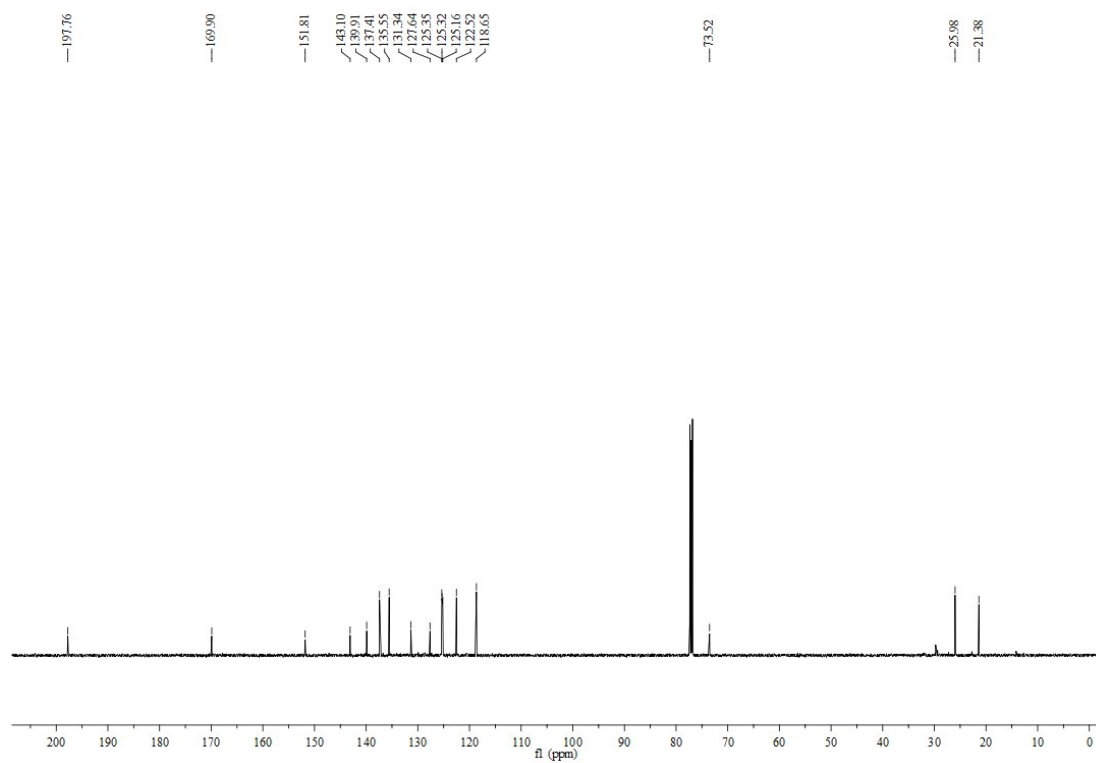


2b

^1H NMR (CDCl_3 , 500 MHz)

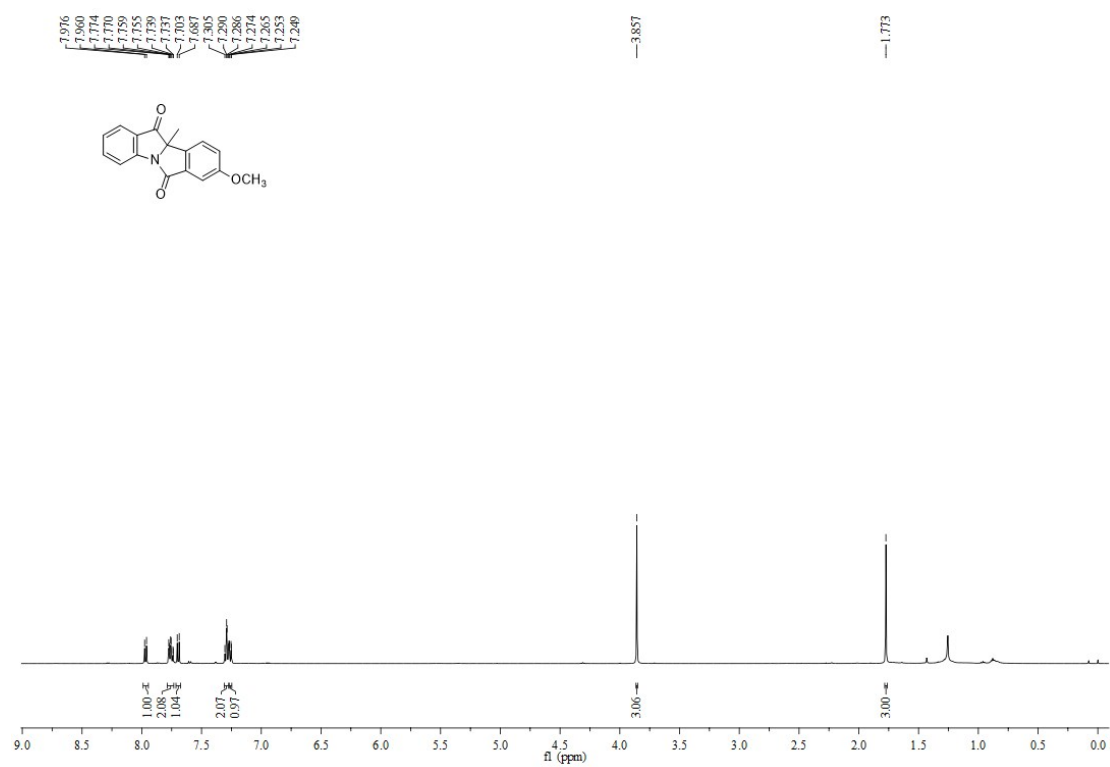


^{13}C NMR (CDCl_3 , 125 MHz)

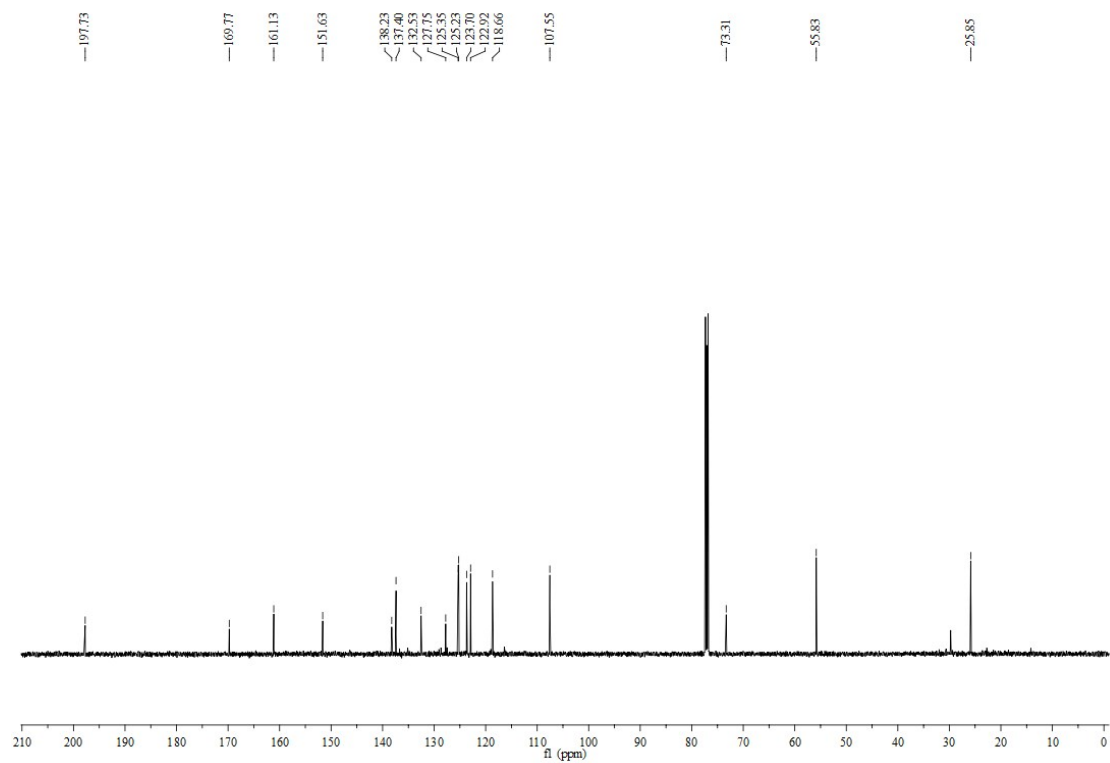


2c

^1H NMR (CDCl_3 , 500 MHz)

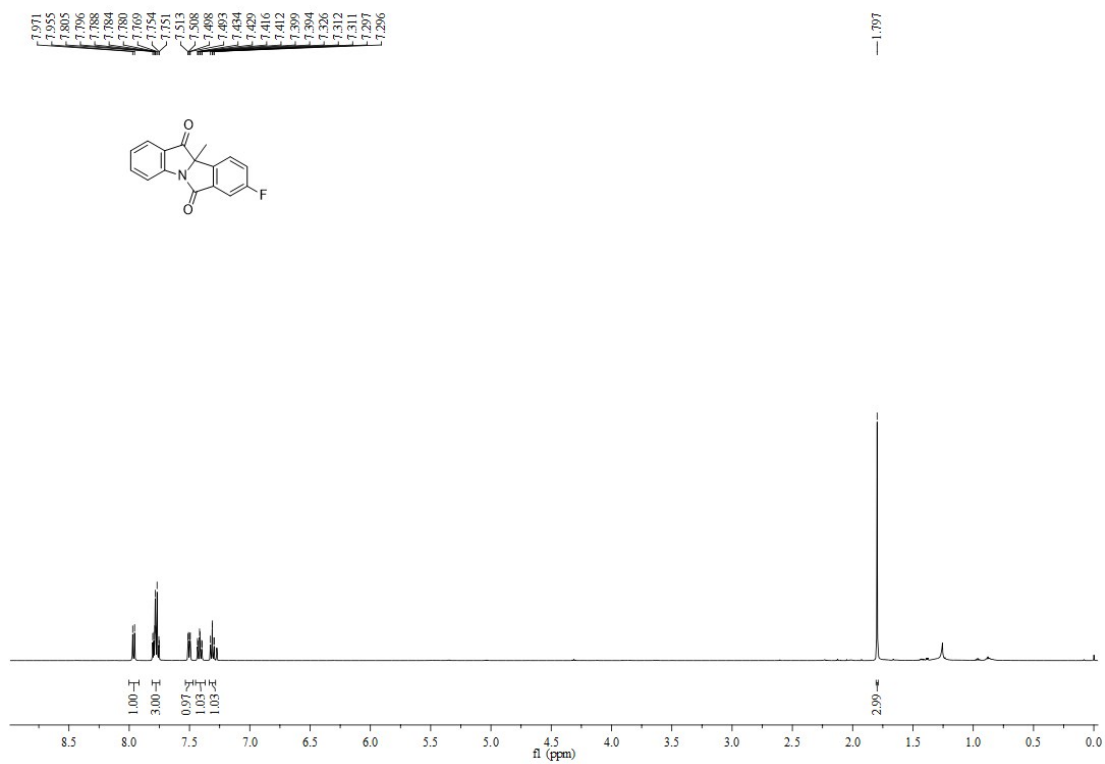


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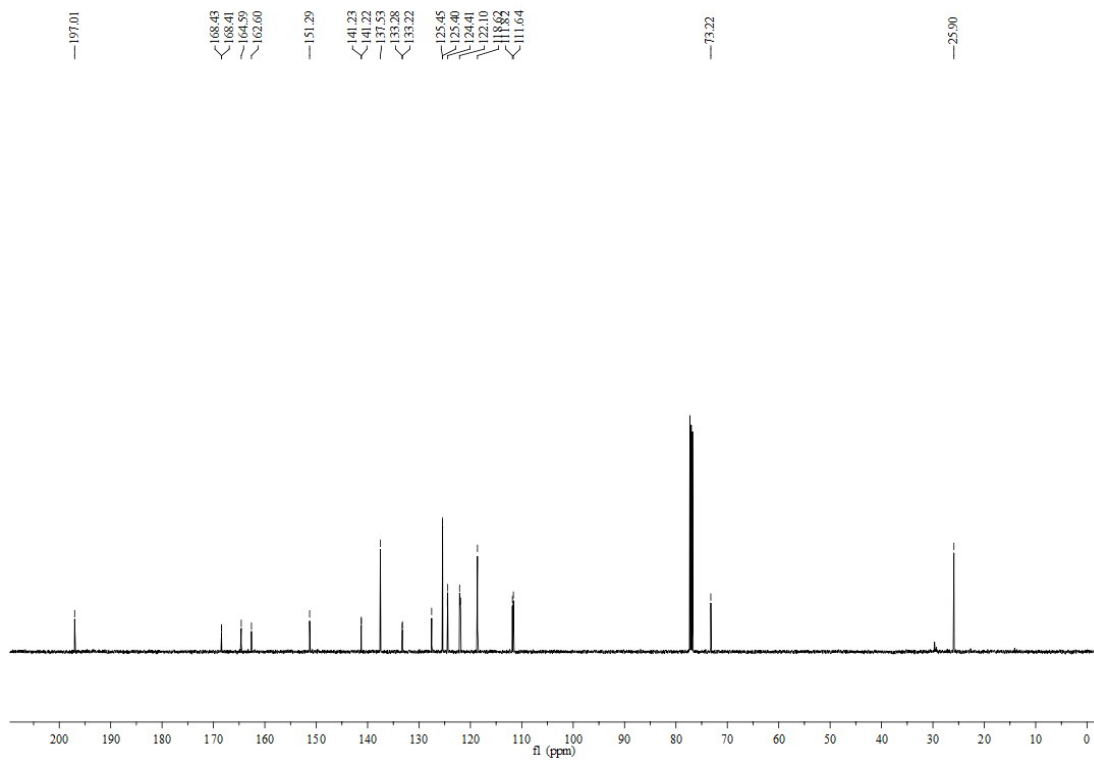


2d

^1H NMR (CDCl_3 , 500 MHz)

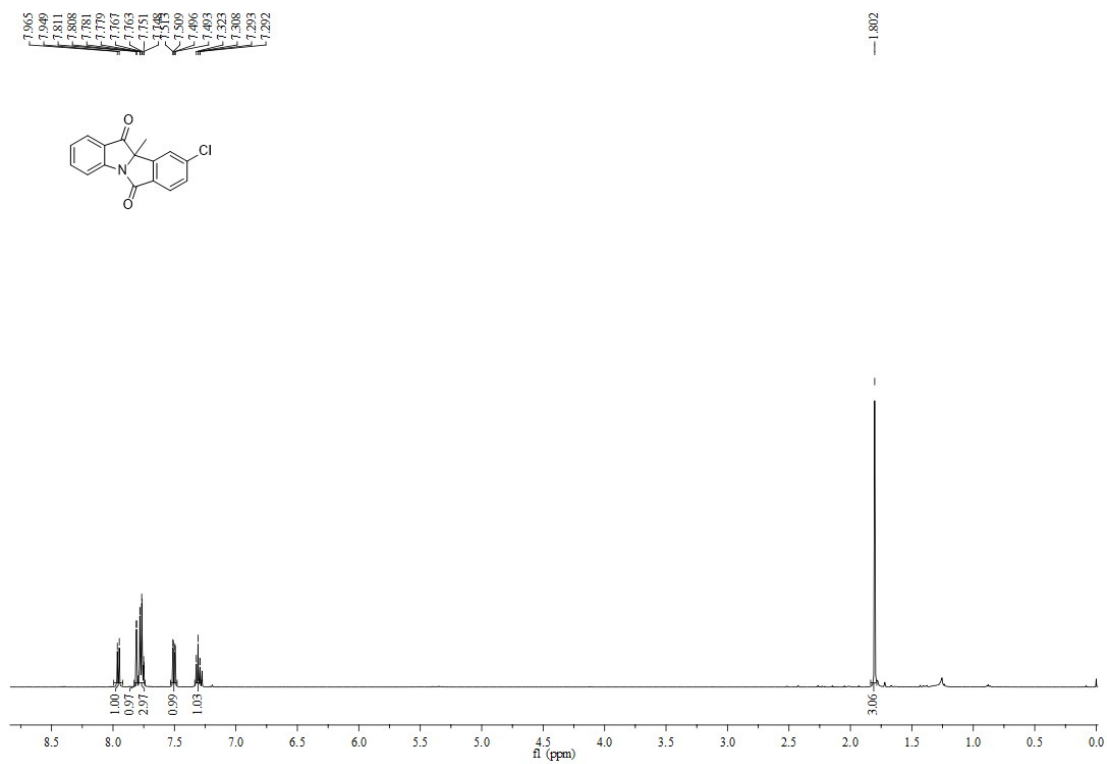


^{13}C NMR (CDCl_3 , 125 MHz)

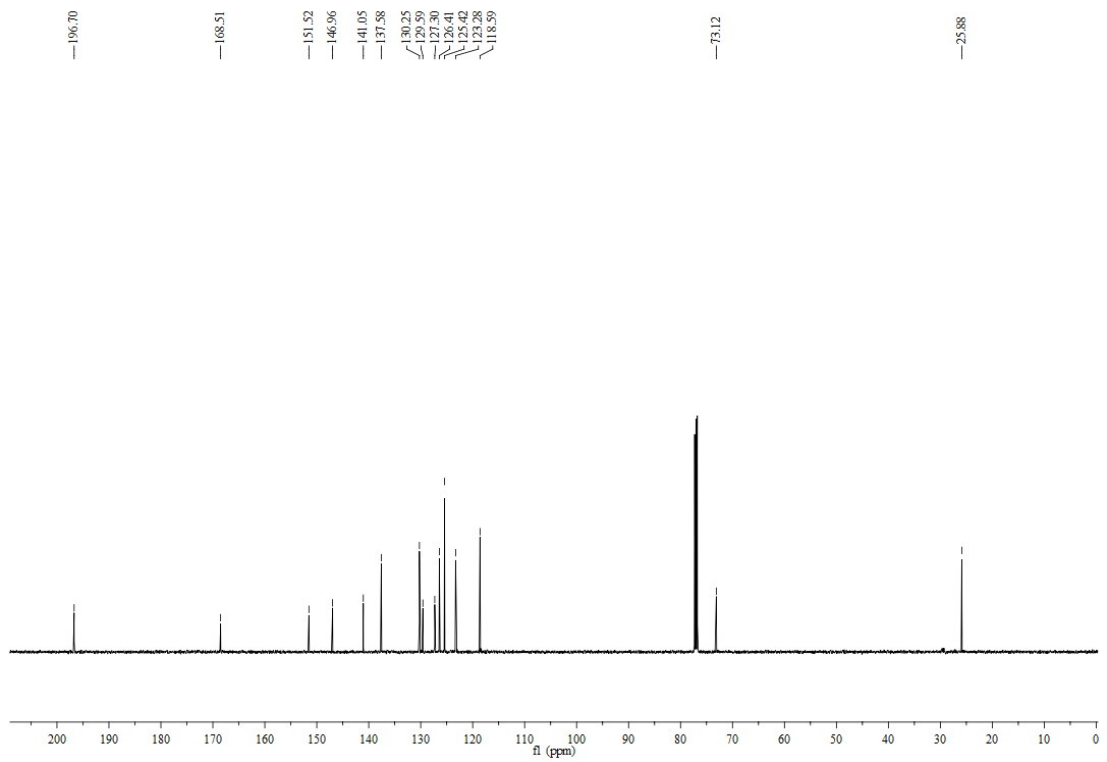


2e

^1H NMR (CDCl_3 , 500 MHz)

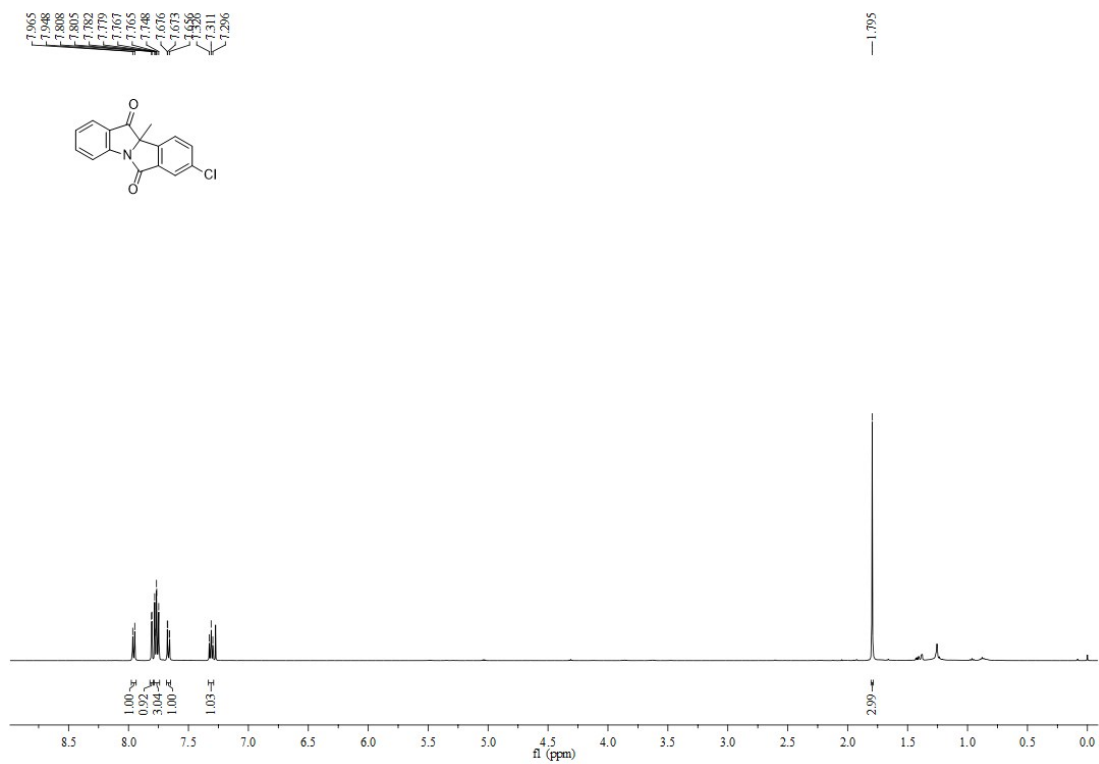


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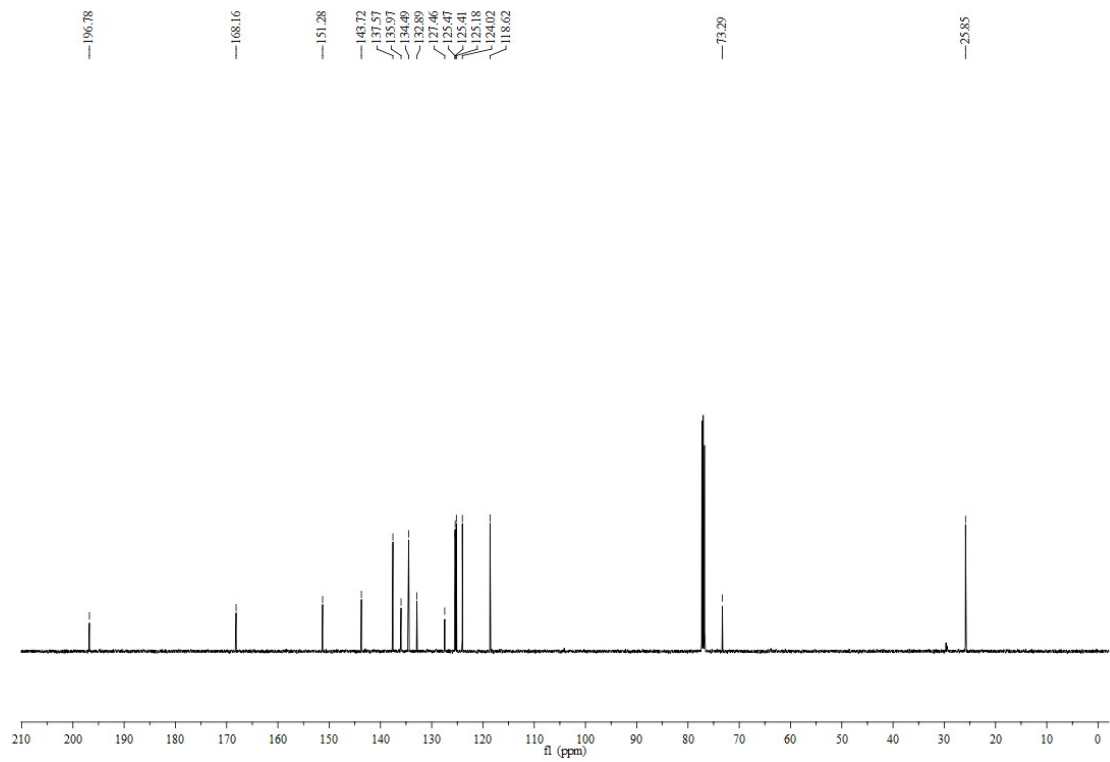


2f

^1H NMR (CDCl_3 , 500 MHz)

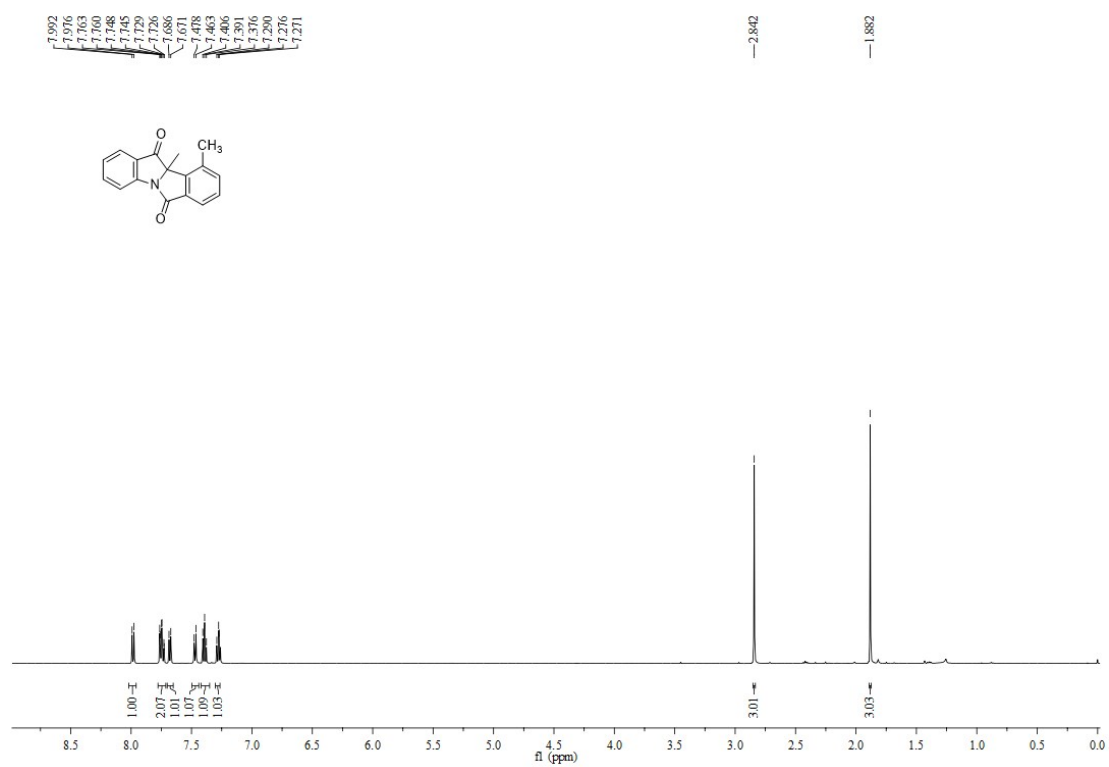


^{13}C NMR (CDCl_3 , 125 MHz)

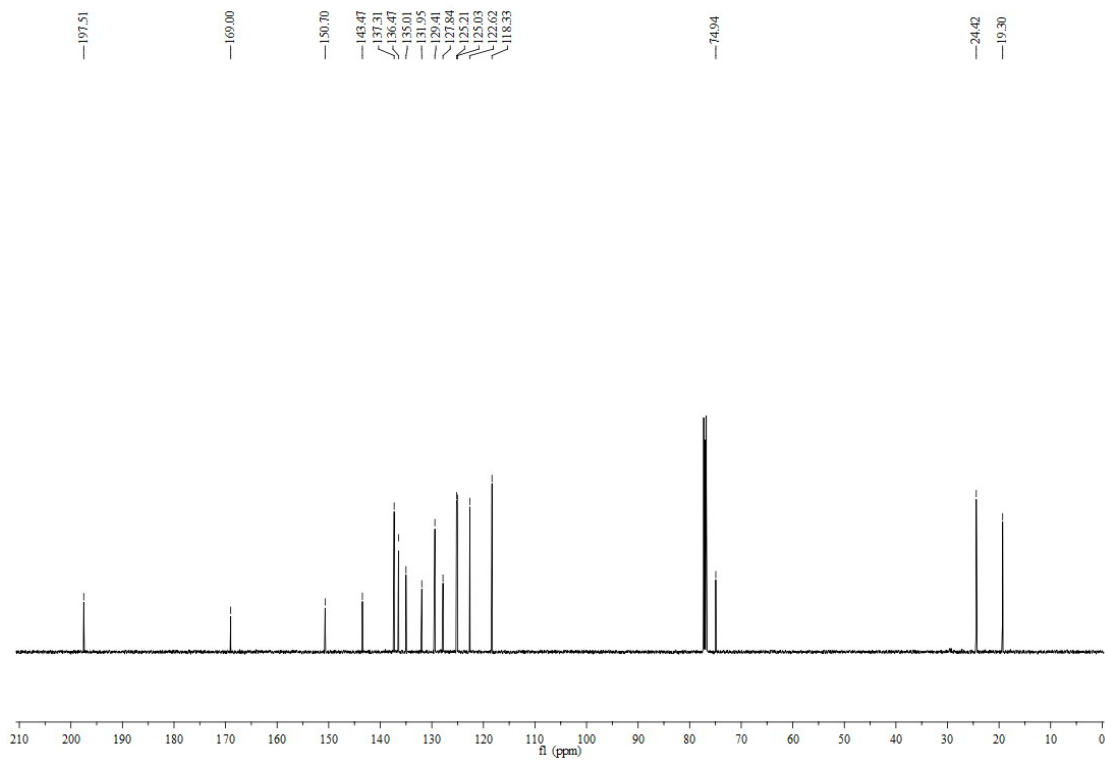


2g

¹H NMR (CDCl₃, 500 MHz)

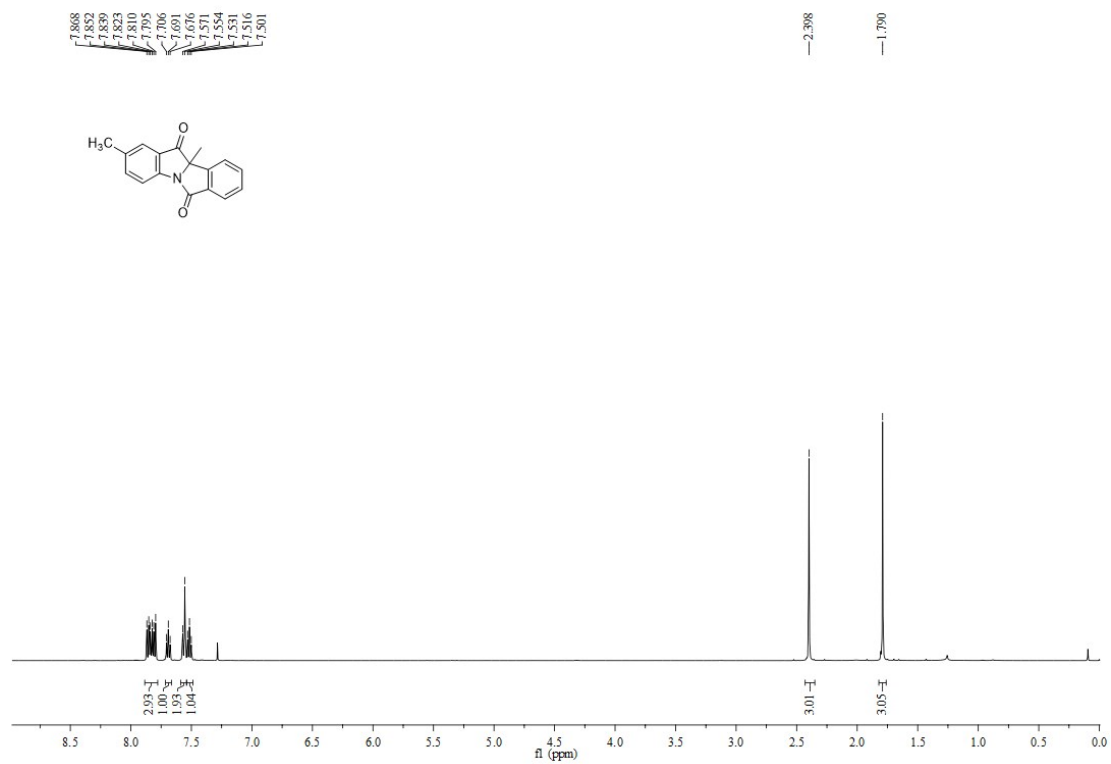


¹³C NMR (CDCl₃, 125 MHz)

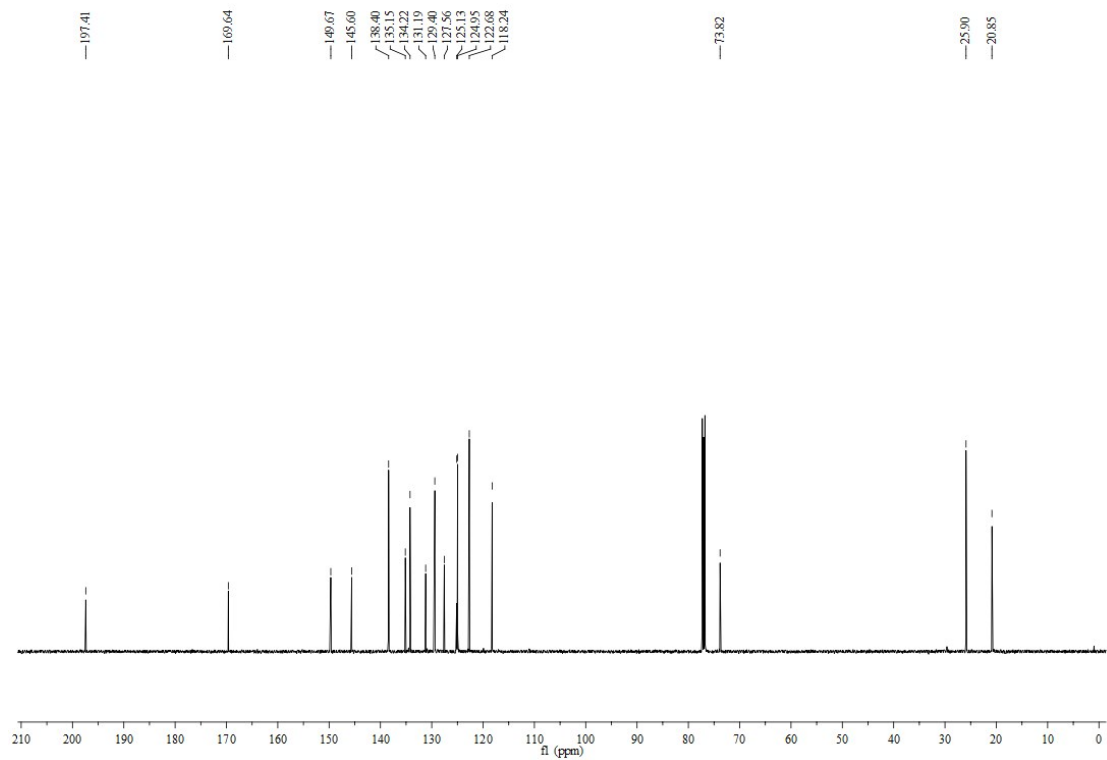


2h

^1H NMR (CDCl_3 , 500 MHz)

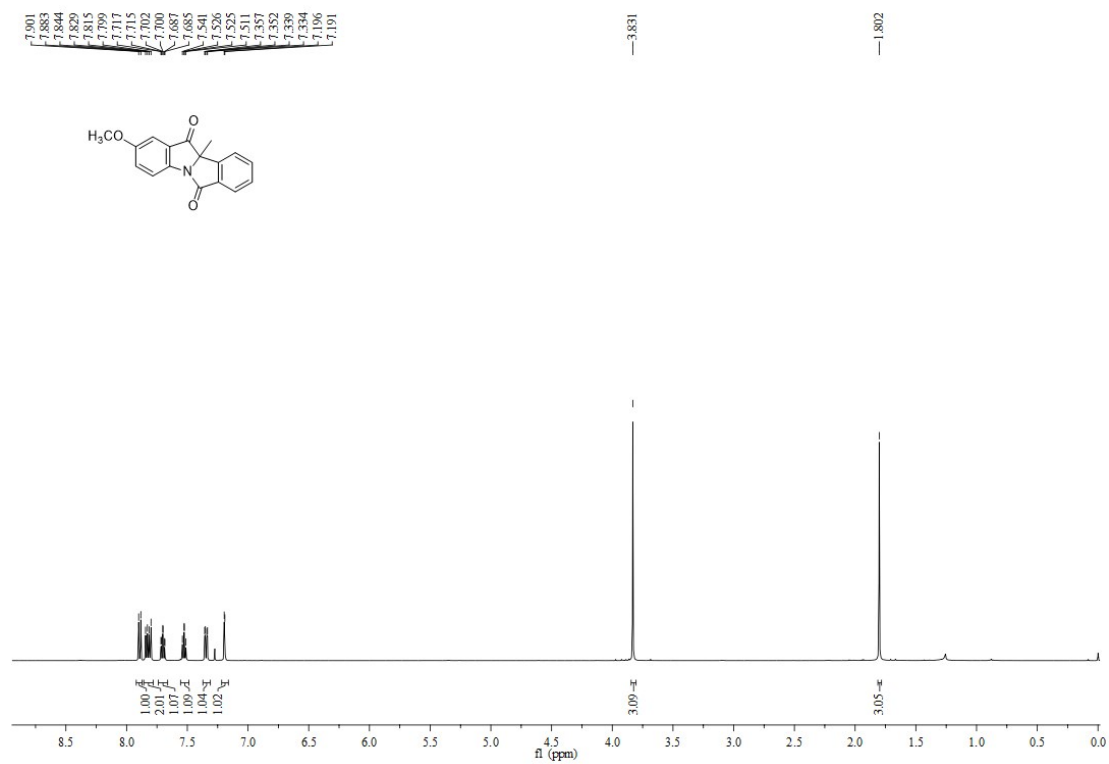


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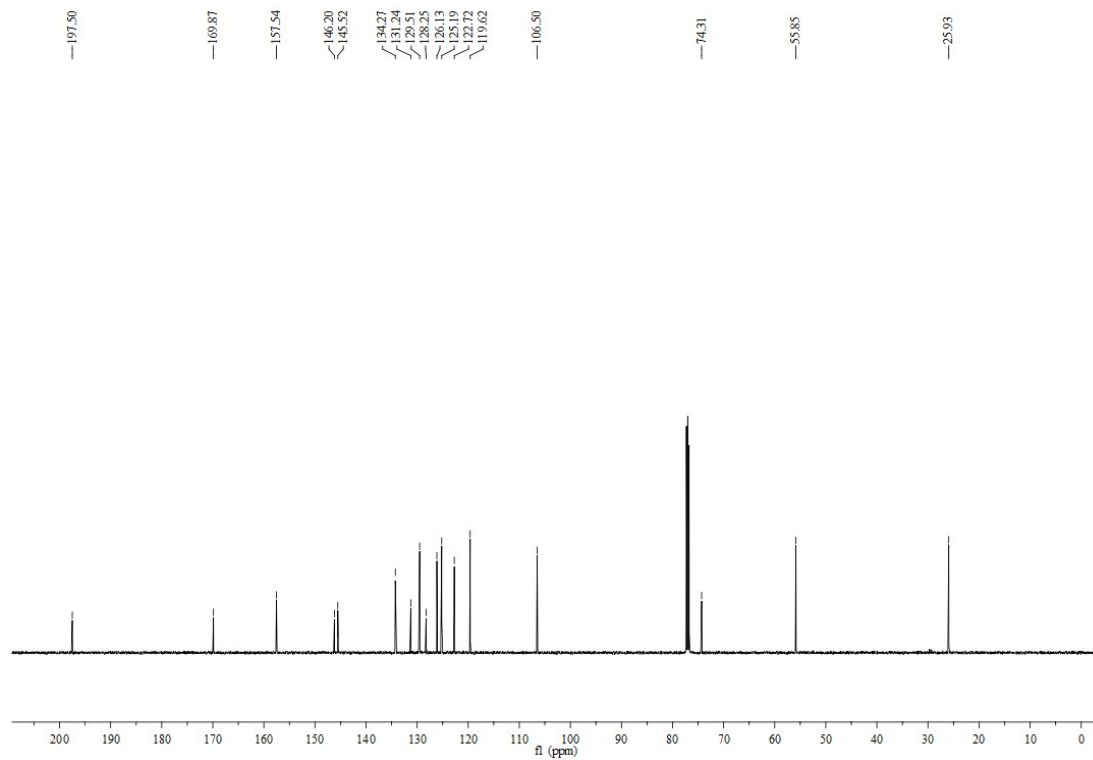


2i

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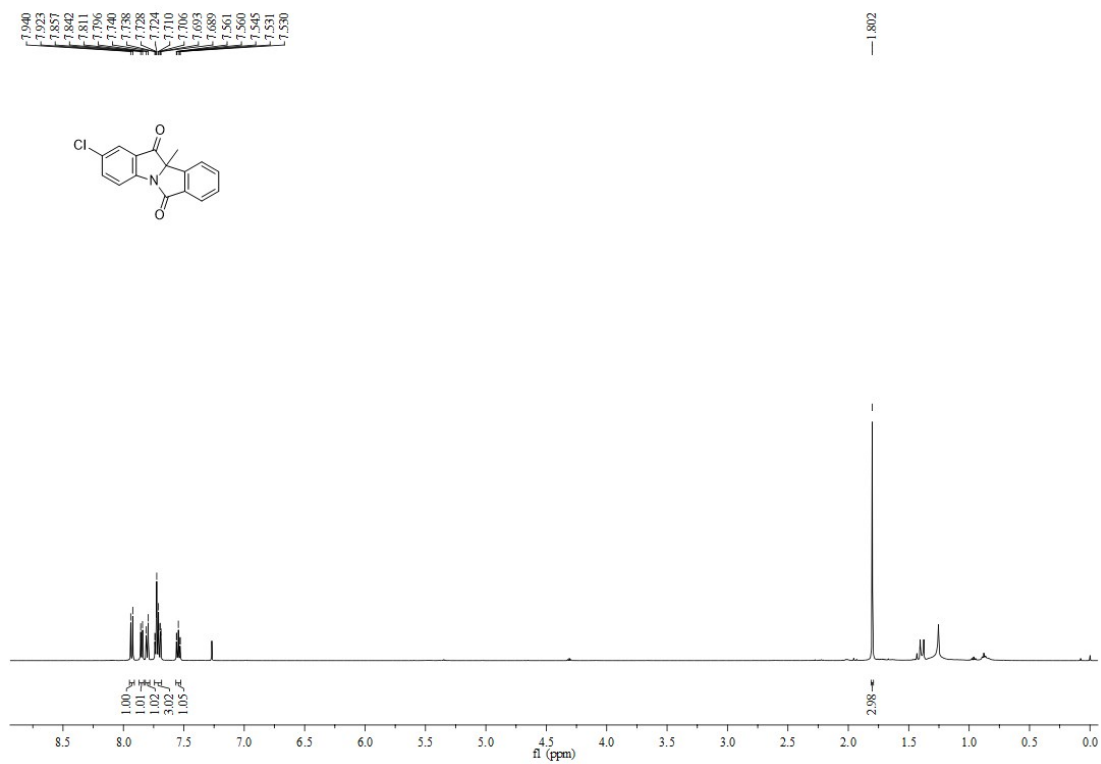


^{13}C NMR (CDCl_3 , 125 MHz)

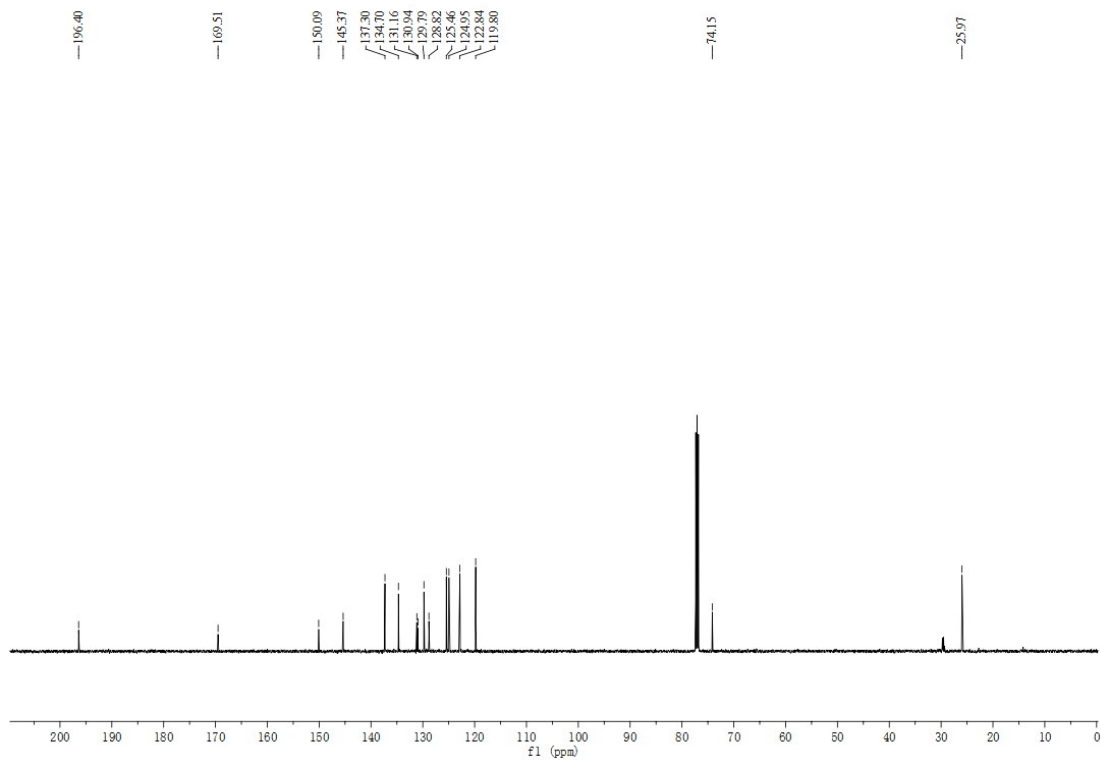


2j

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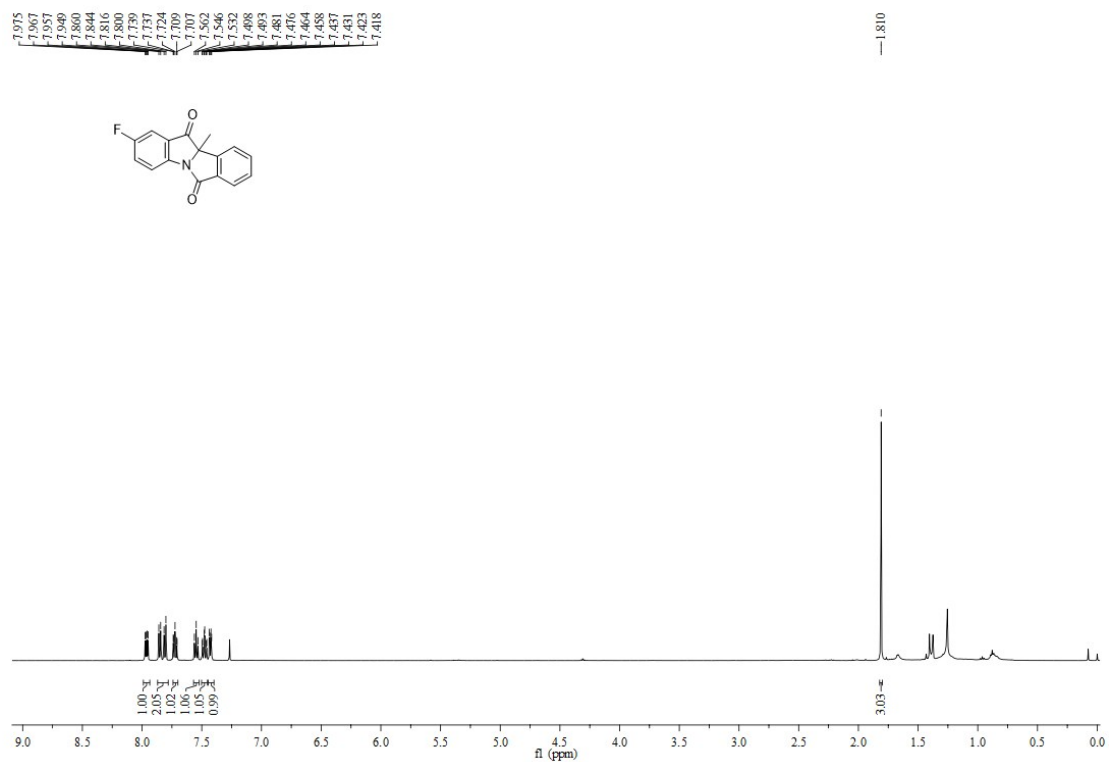


¹³C NMR (CDCl₃, 125 MHz)

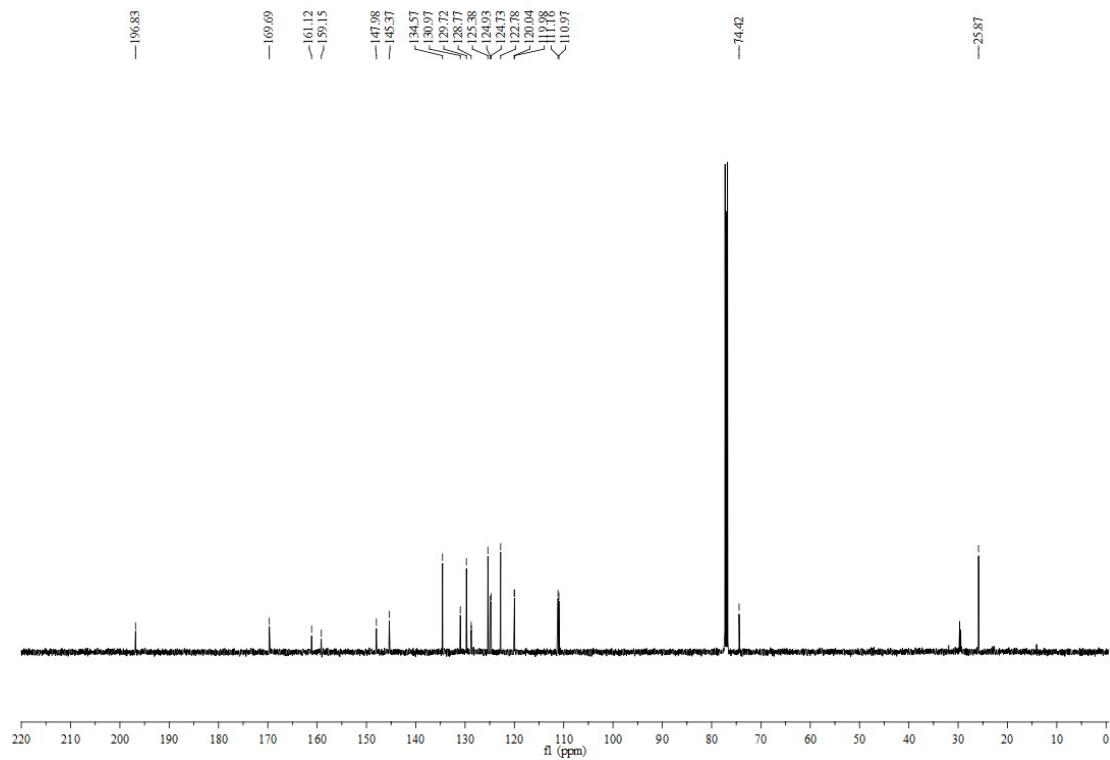


2k

^1H NMR (CDCl_3 , 500 MHz)

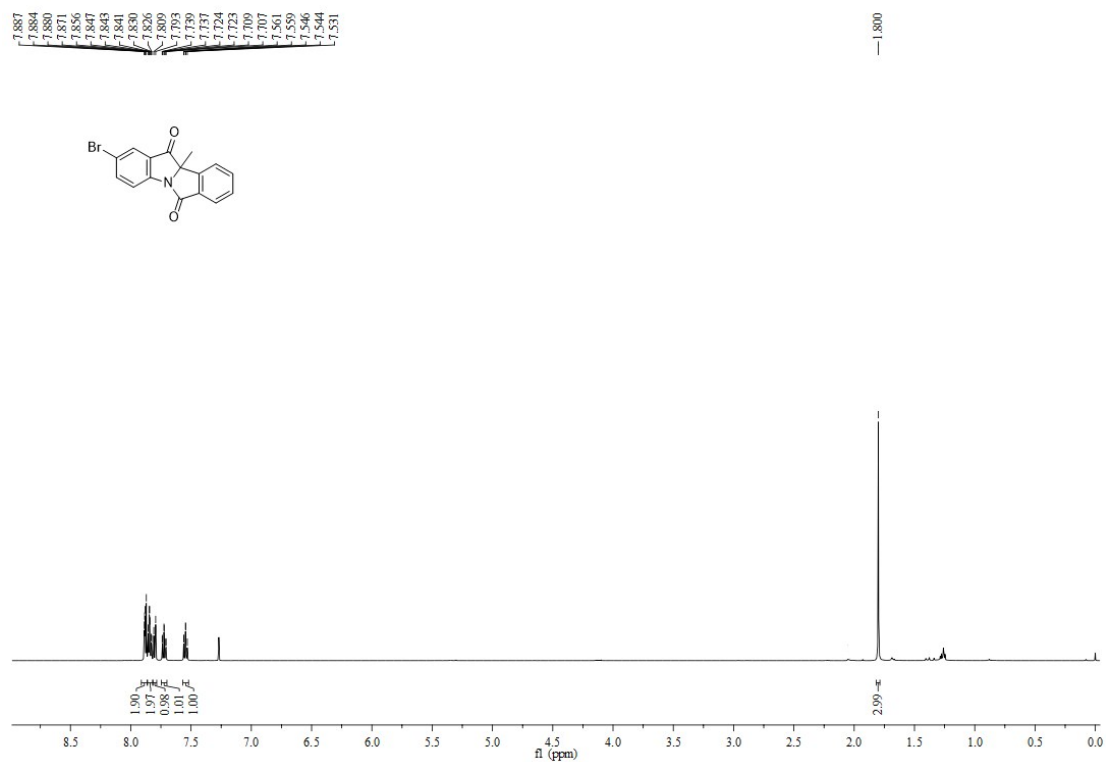


^{13}C NMR (CDCl_3 , 125 MHz)

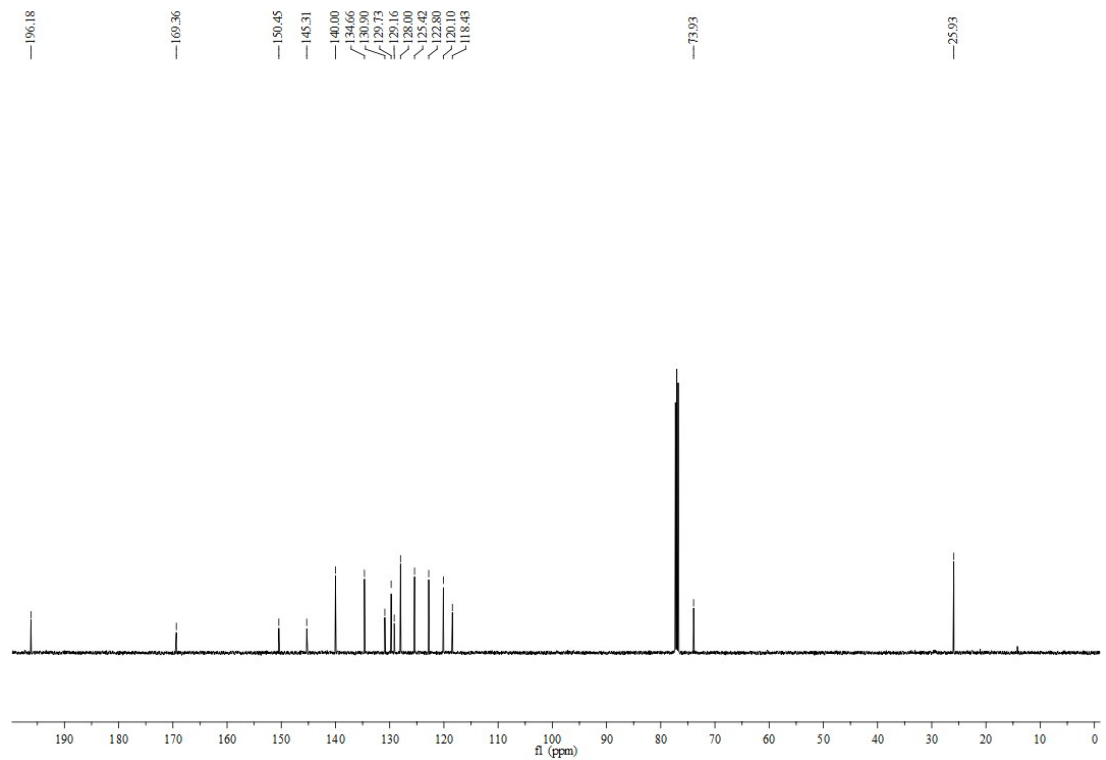


21

^1H NMR (CDCl_3 , 500 MHz)

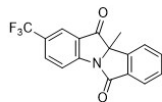
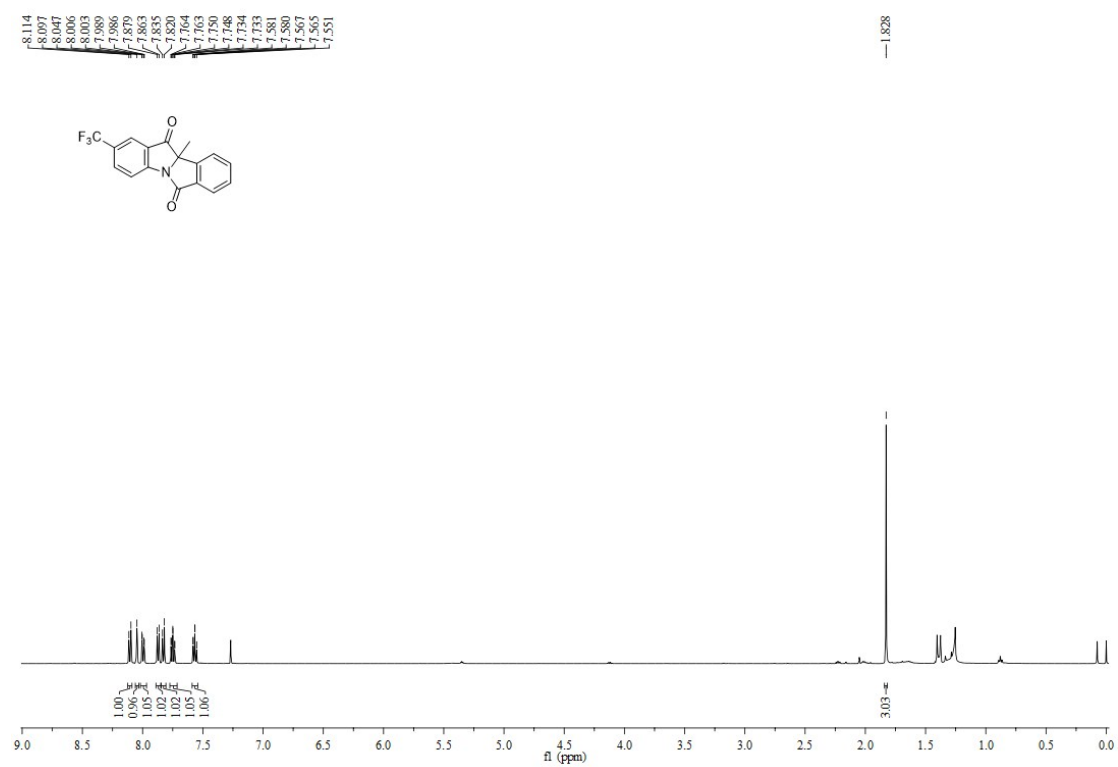


^{13}C NMR (CDCl_3 , 125 MHz)

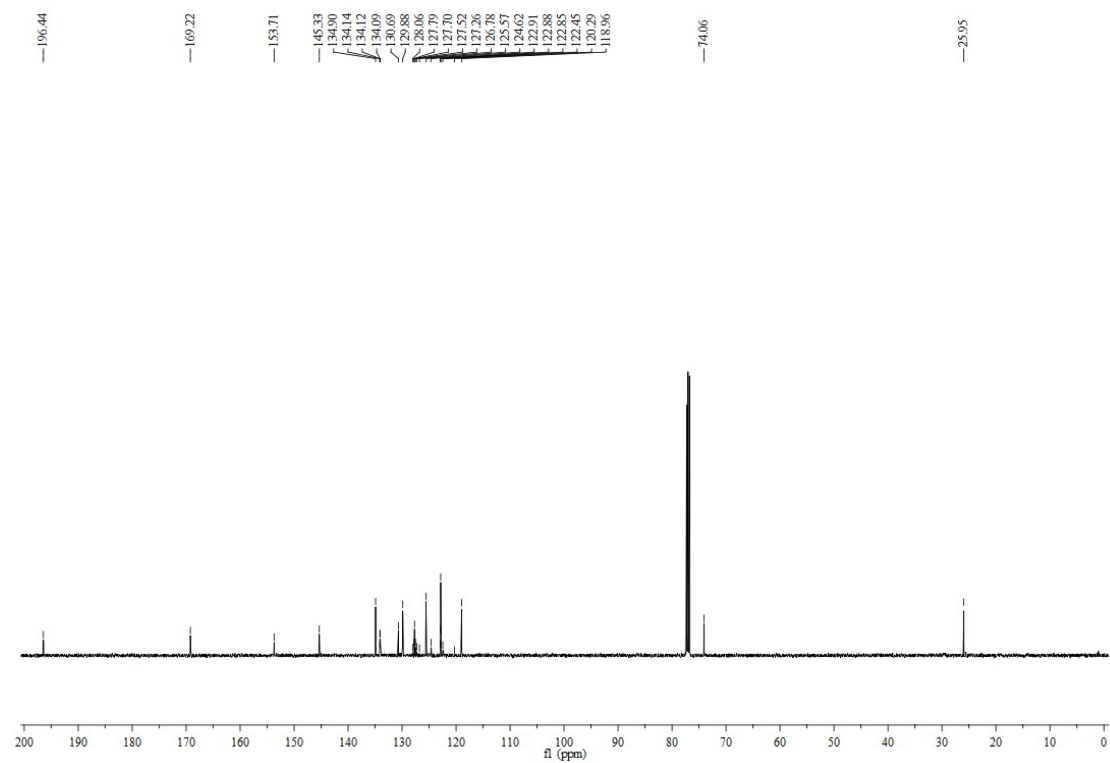


2m

¹H NMR (CDCl₃, 500 MHz)

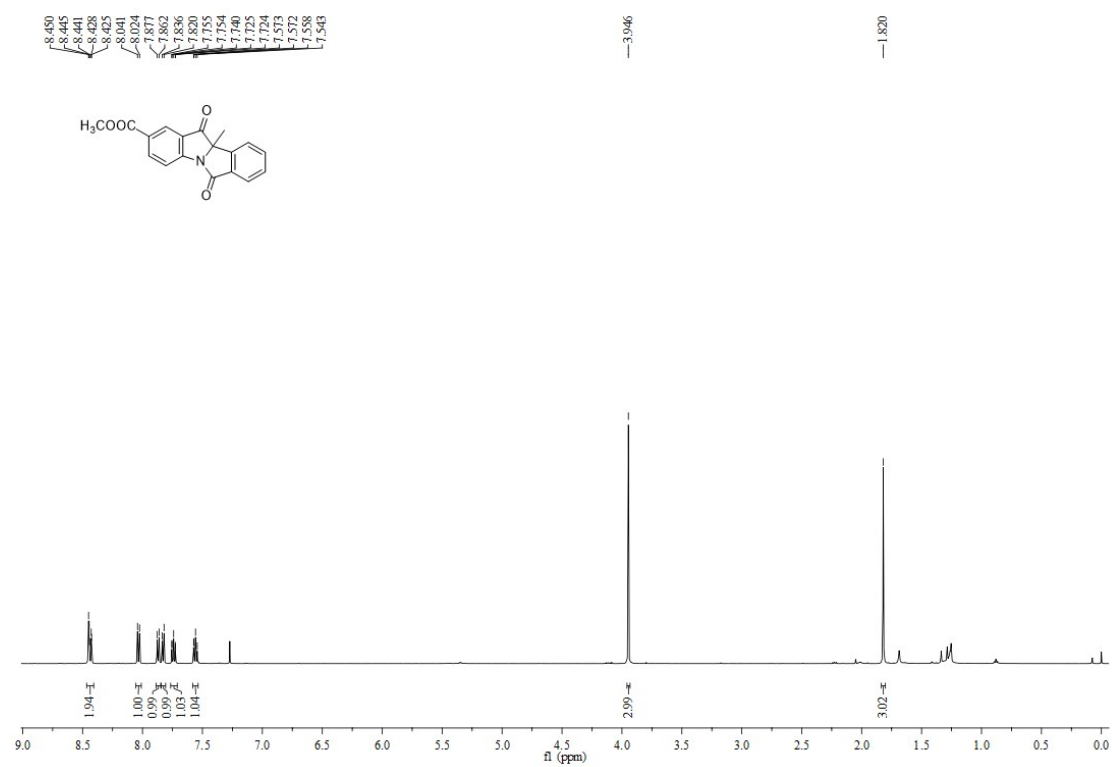


¹³C NMR (CDCl₃, 125 MHz)

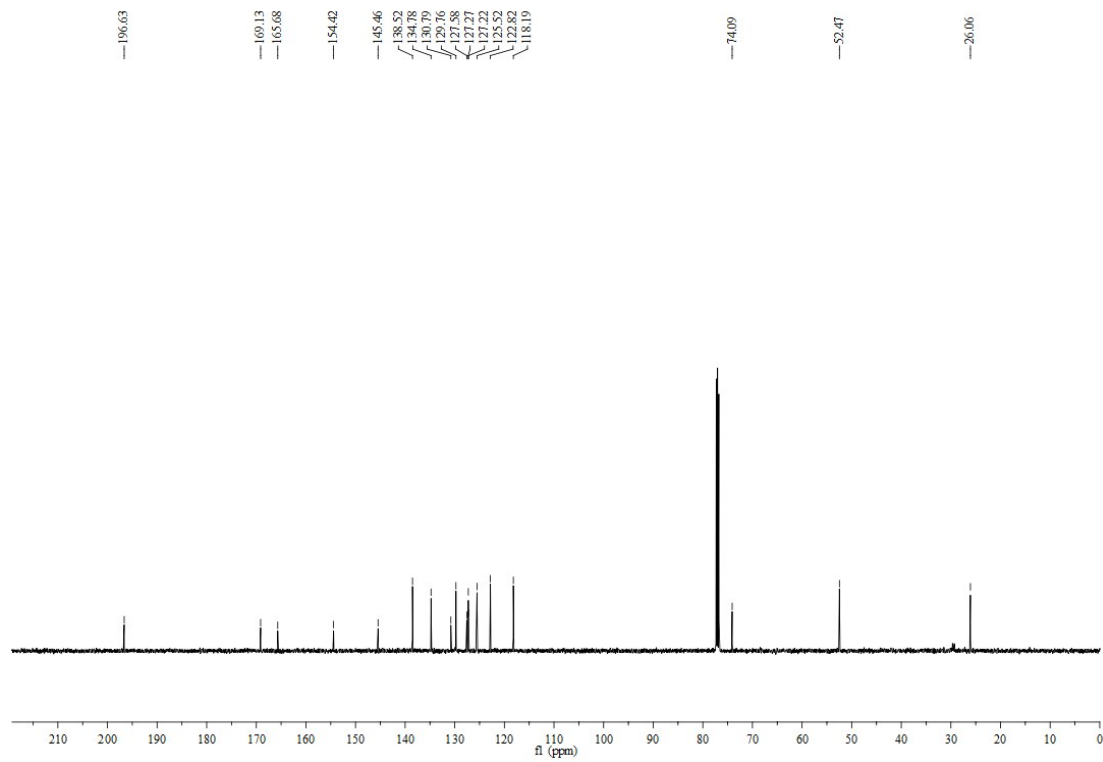


2n

¹H NMR (CDCl₃, 500 MHz)

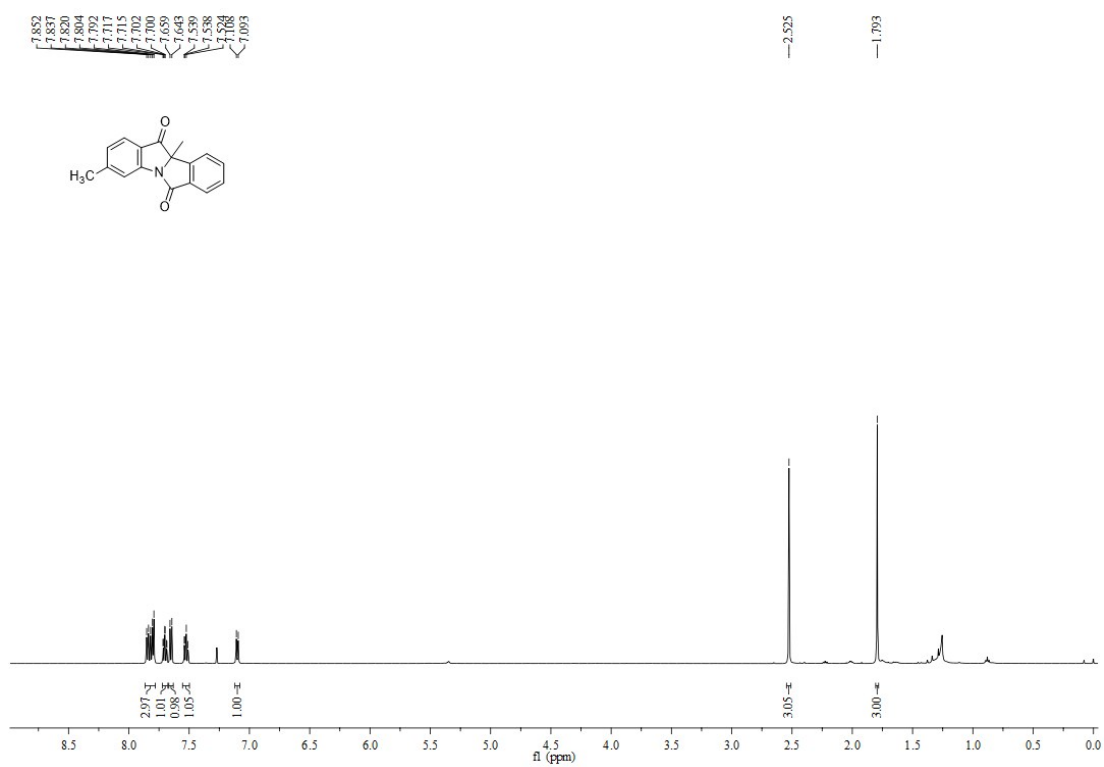


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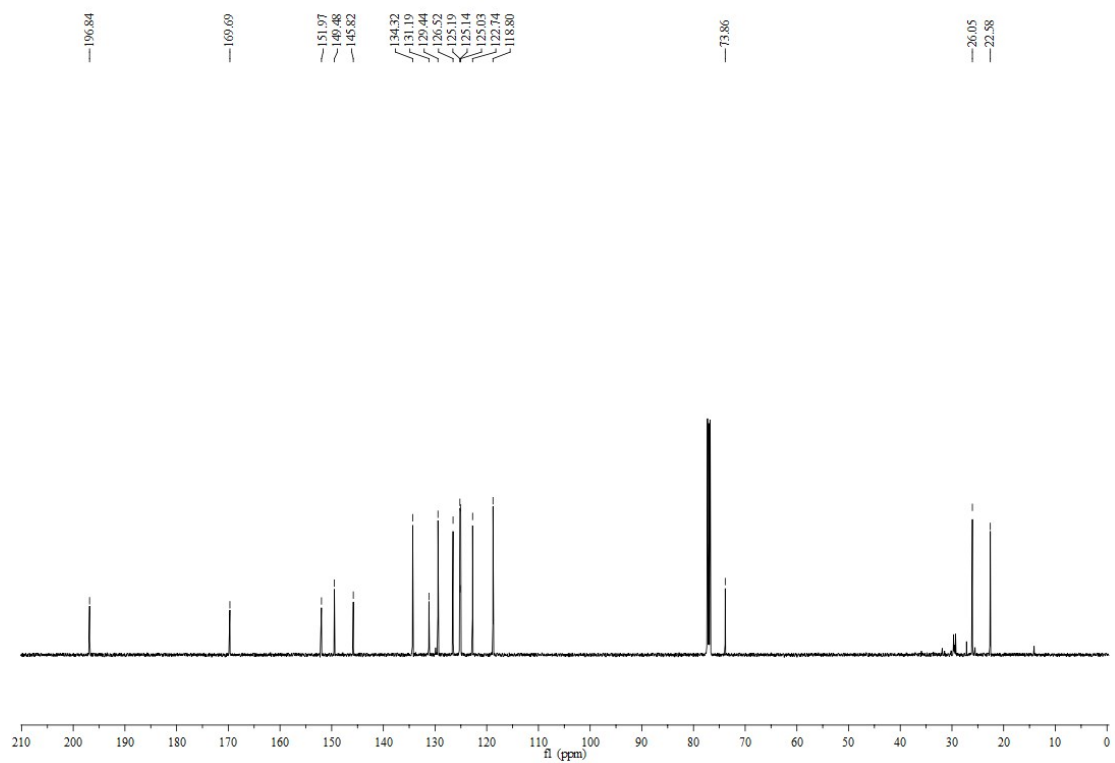


2o

^1H NMR (CDCl_3 , 500 MHz)

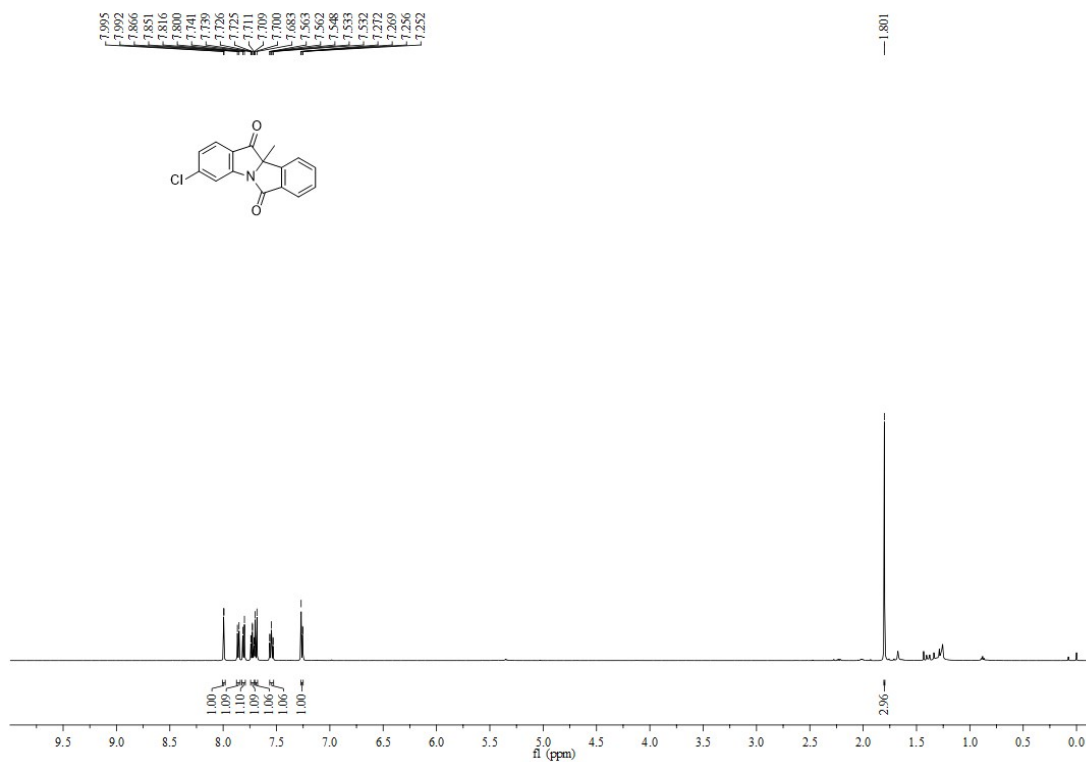


^{13}C NMR (CDCl_3 , 125 MHz)

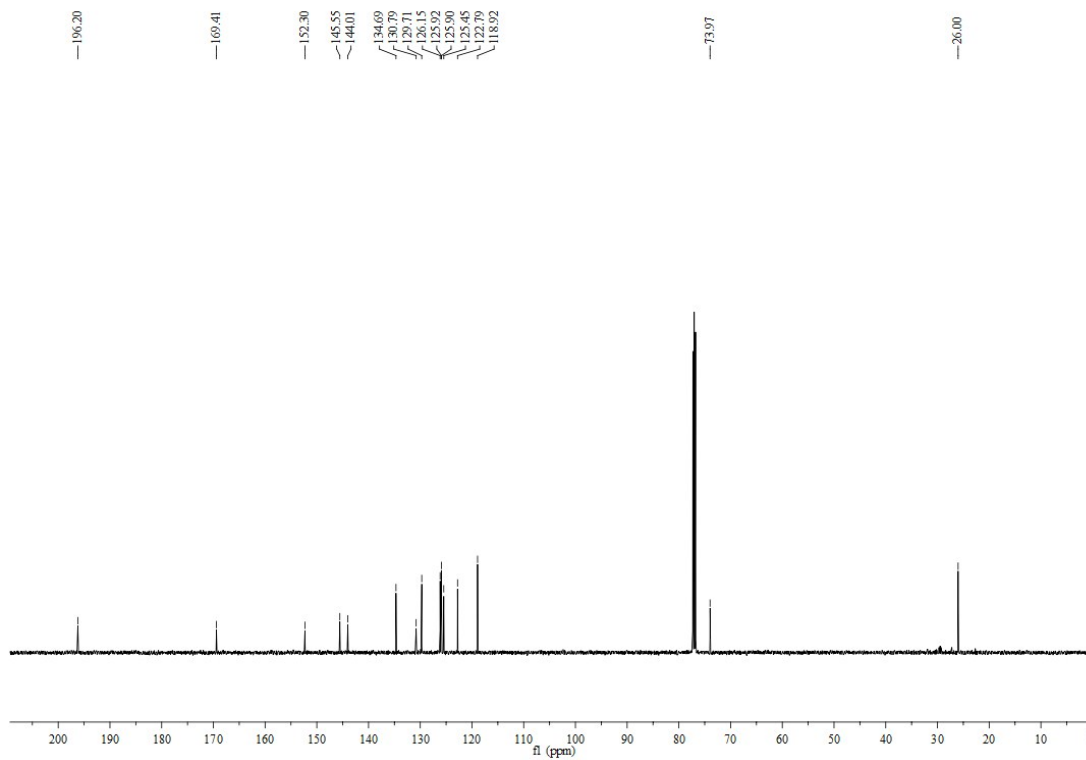


2p

¹H NMR (CDCl₃, 500 MHz)

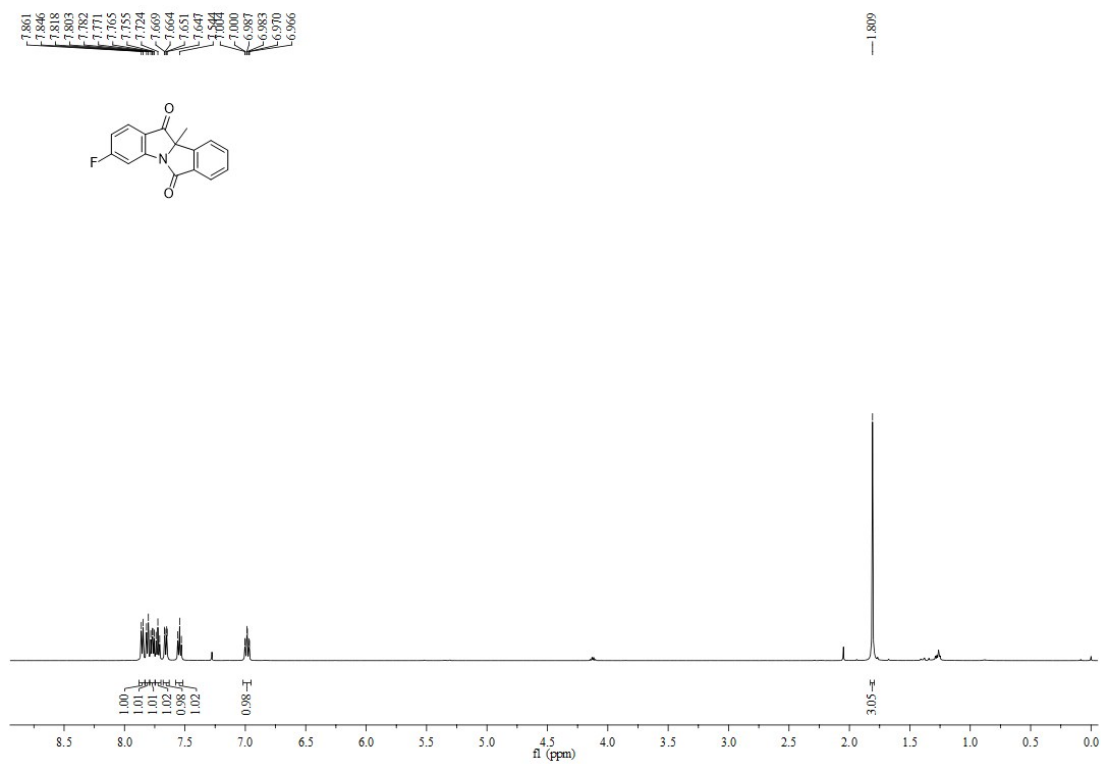


¹³C NMR (CDCl₃, 125 MHz)

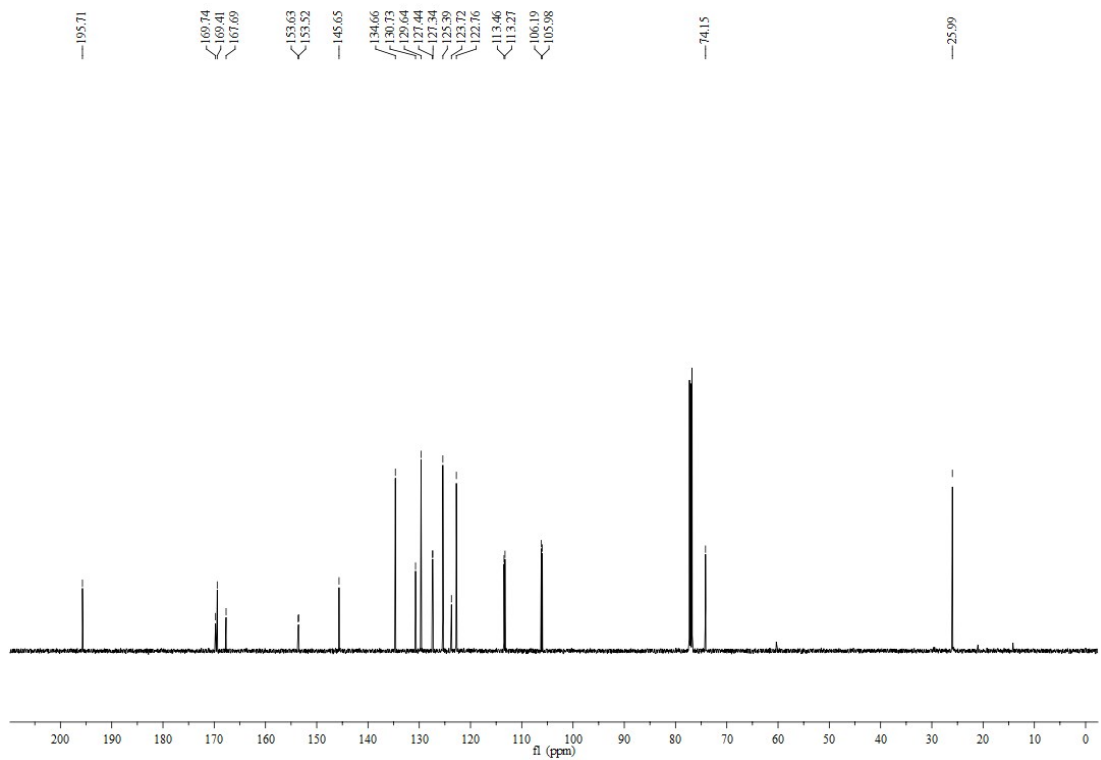


2q

¹H NMR (CDCl₃, 500 MHz)

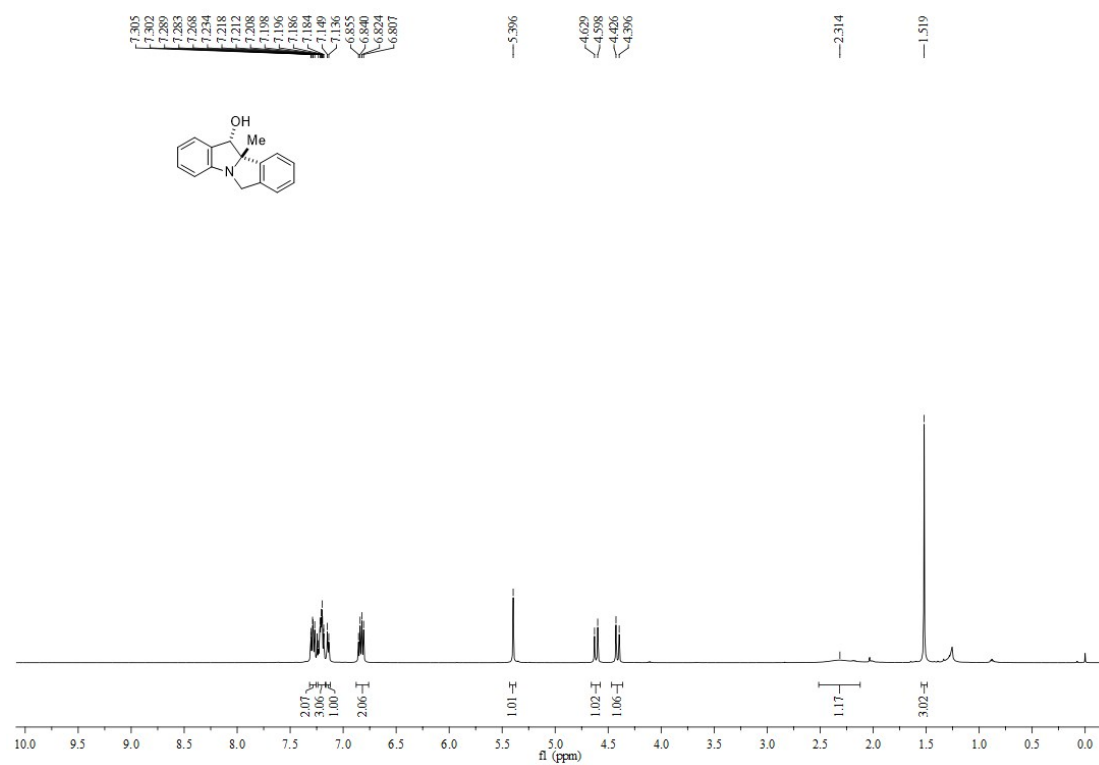


¹³C NMR (CDCl₃, 125 MHz)

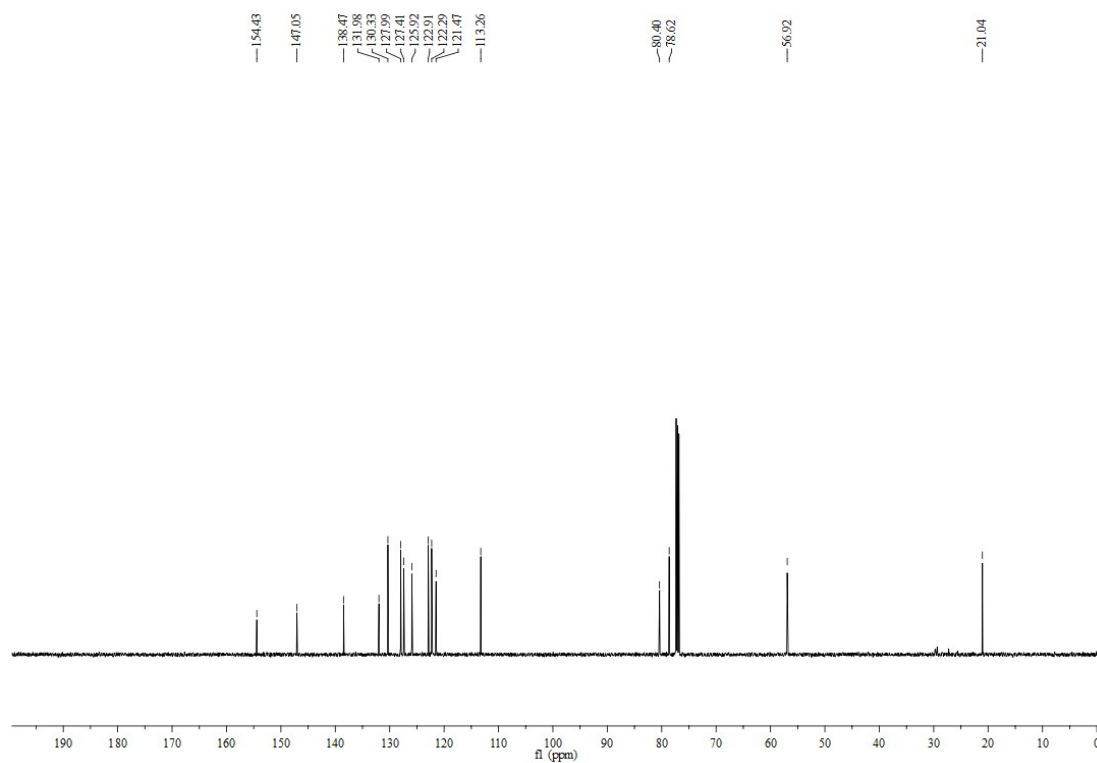


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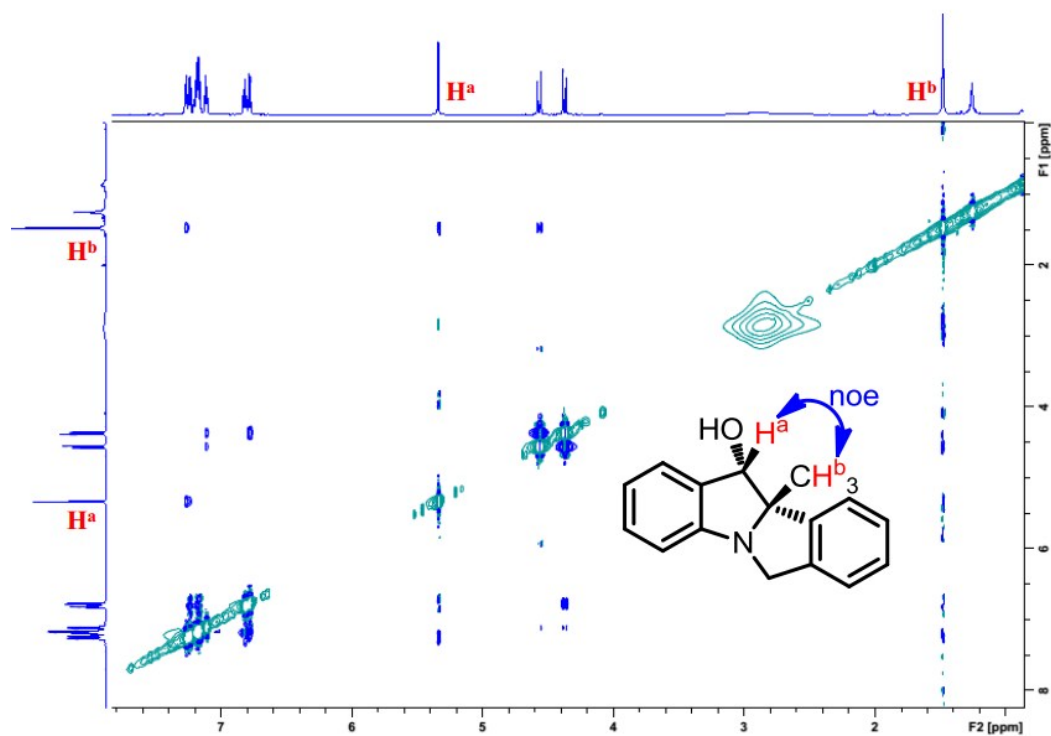
^1H NMR (CDCl_3 , 500 MHz)



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

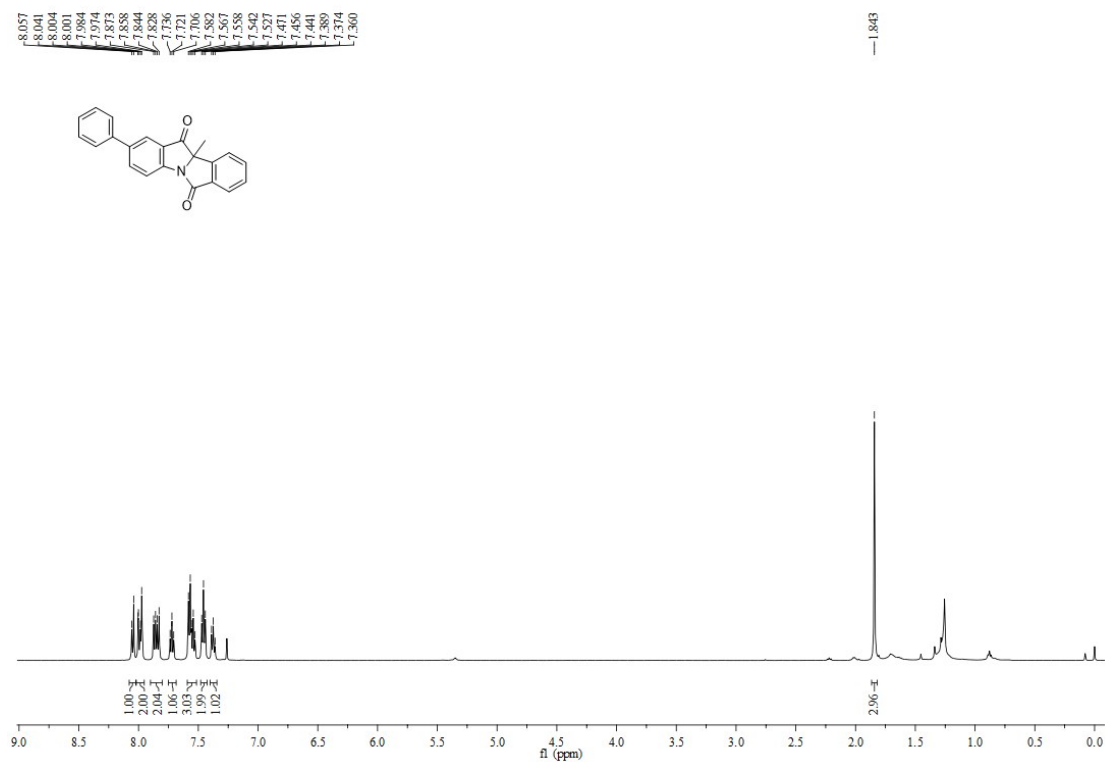


NOESY spectrum of 3

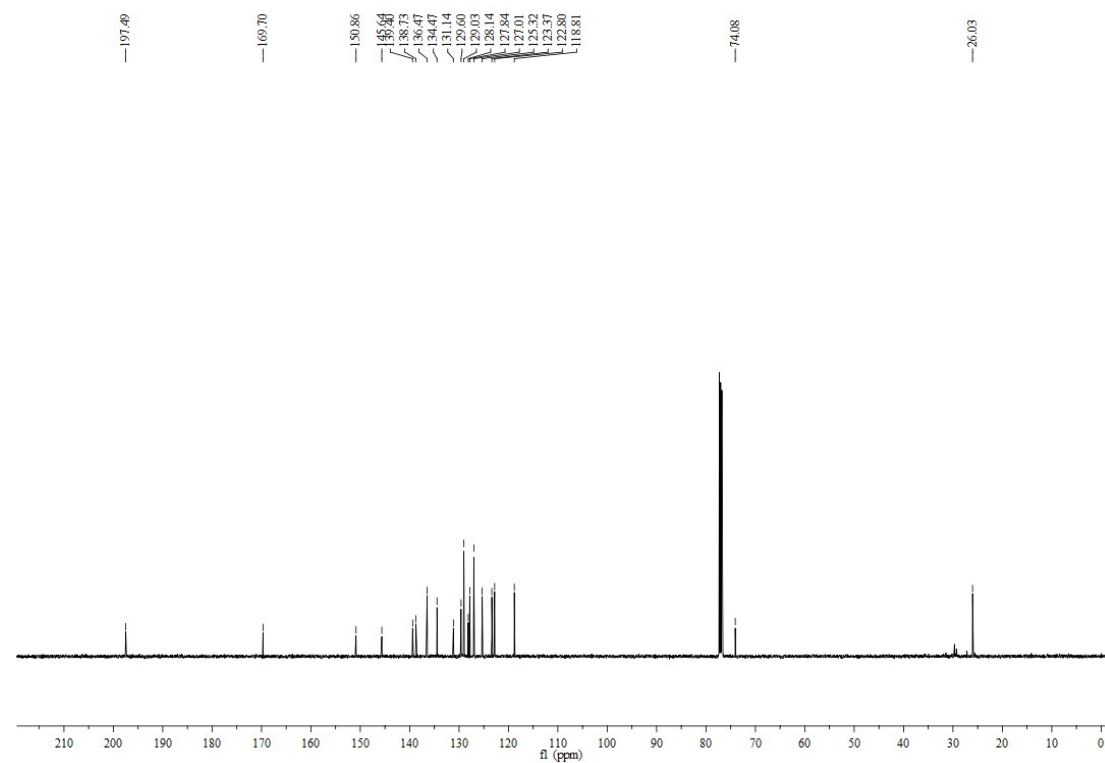


4

^1H NMR (CDCl_3 , 500 MHz)

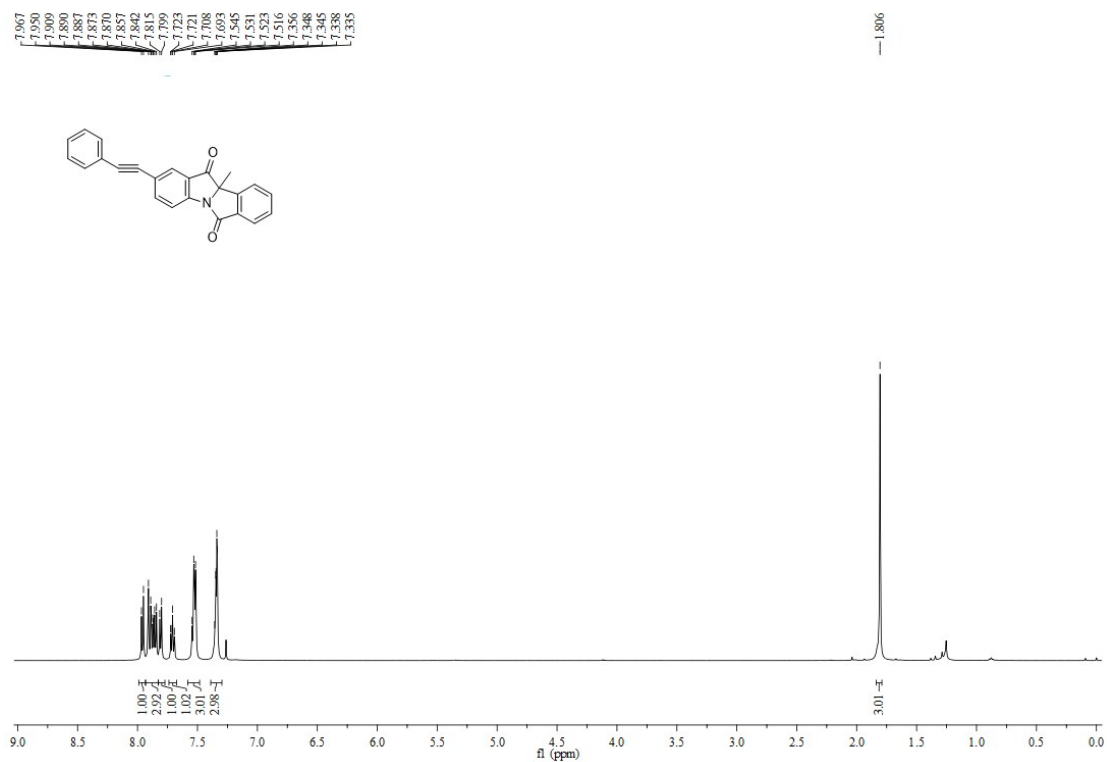


^{13}C NMR (CDCl_3 , 125 MHz)

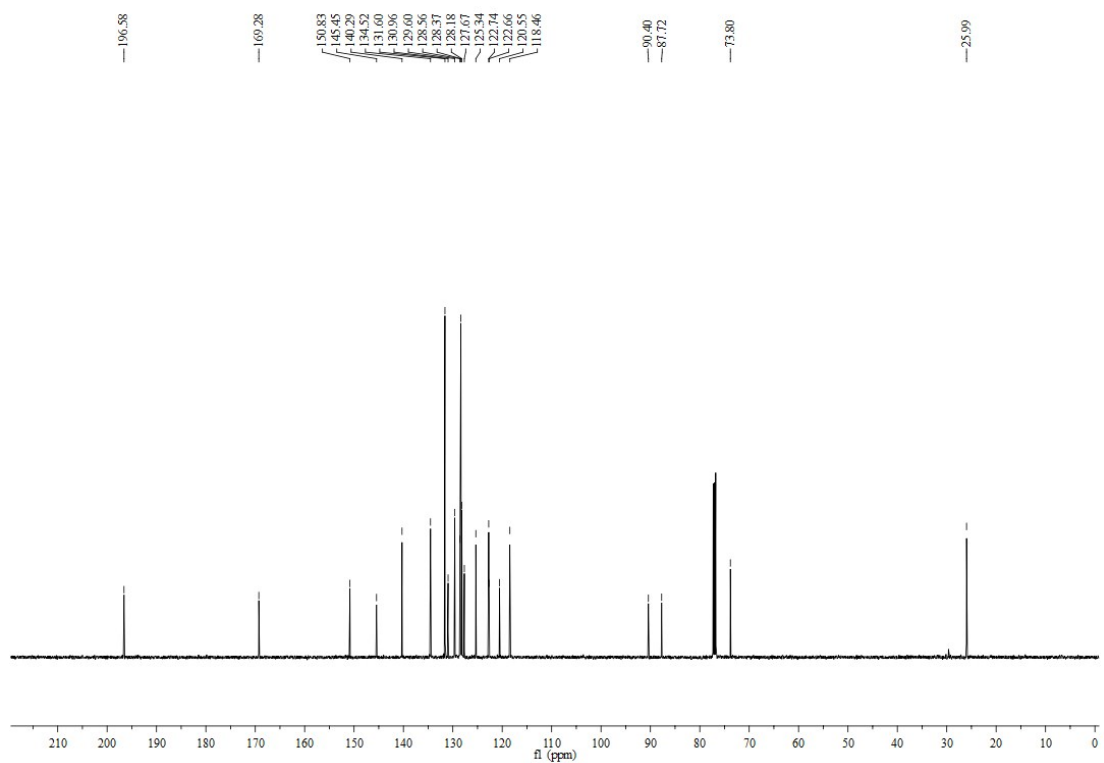


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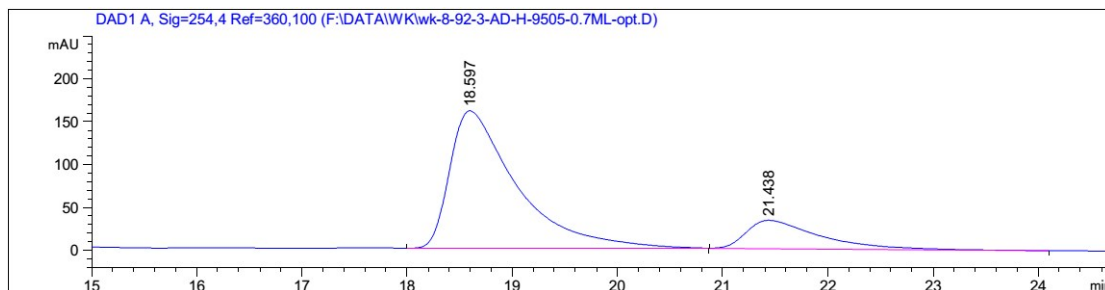
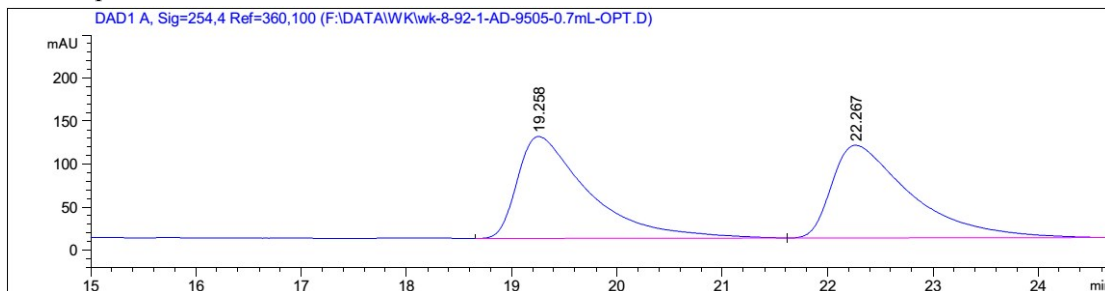
^1H NMR (CDCl_3 , 500 MHz)



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



HPLC spectrum of 2a



峰 #	保留时间 [min]	类型	峰宽 [min]	峰面积 [mAU*s]	峰高 [mAU]	峰面积 %
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2	21.438	BBA	0.6798	1582.88196	32.98718	18.2719