

**Supporting Information for**

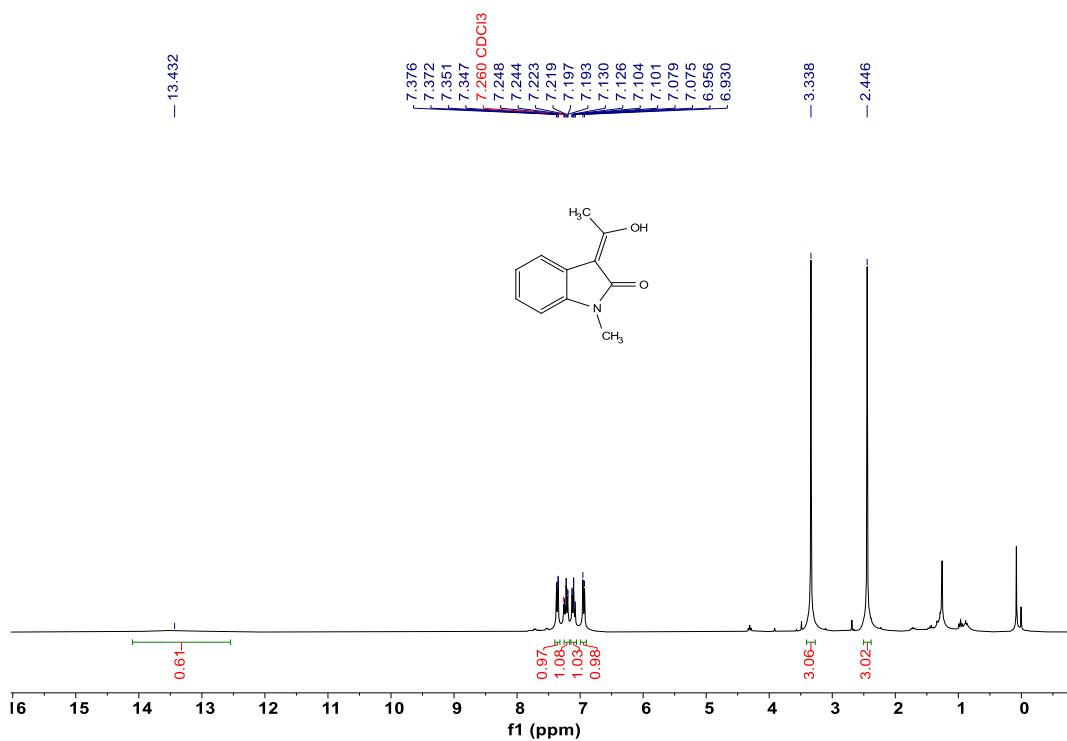
**Synthesis and Antimicrobial Activity of**

**3-Alkylidene-2-Indolone Derivatives**

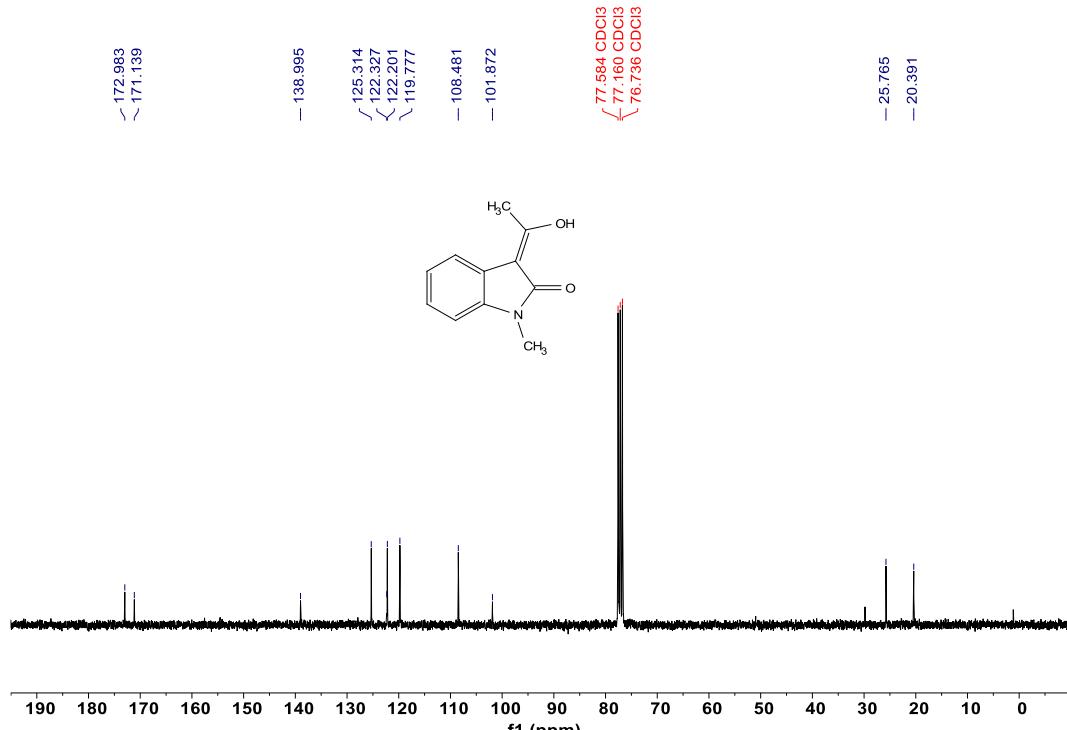
**List of Contents**

**$^1\text{H}$ ,  $^{13}\text{C}$  NMR and Mass-Spectra**

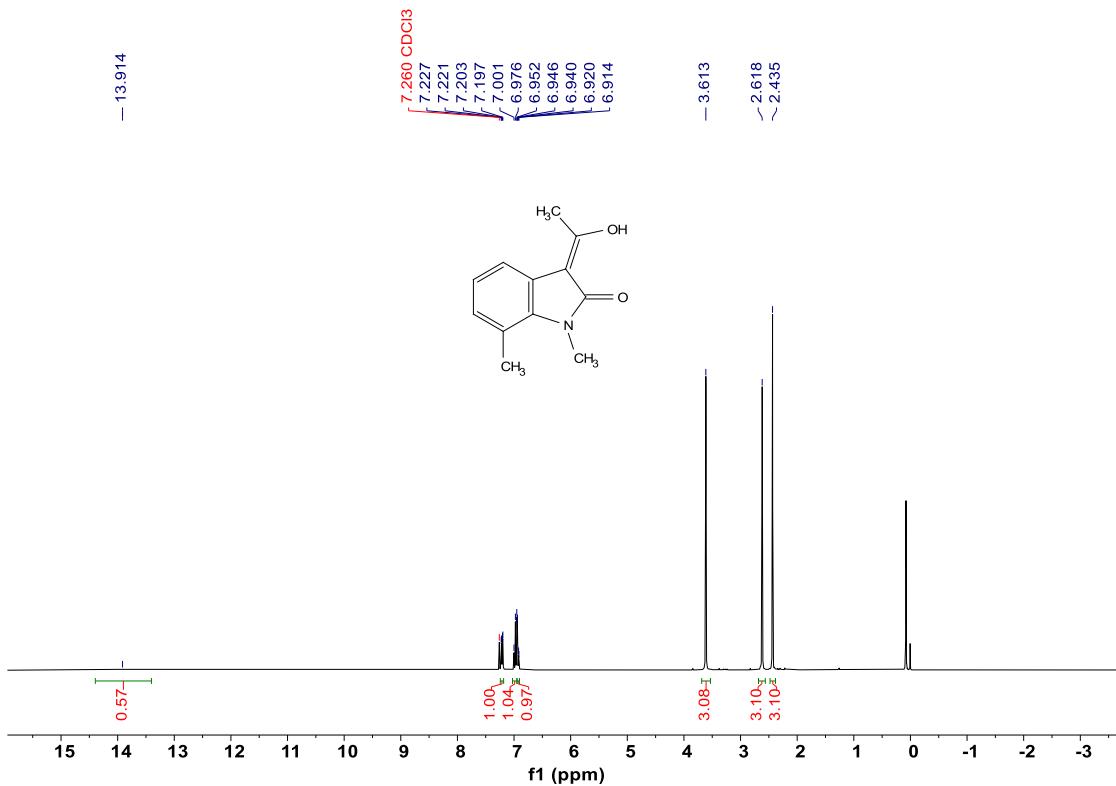
**Compounds 5a-w and 10a-i**



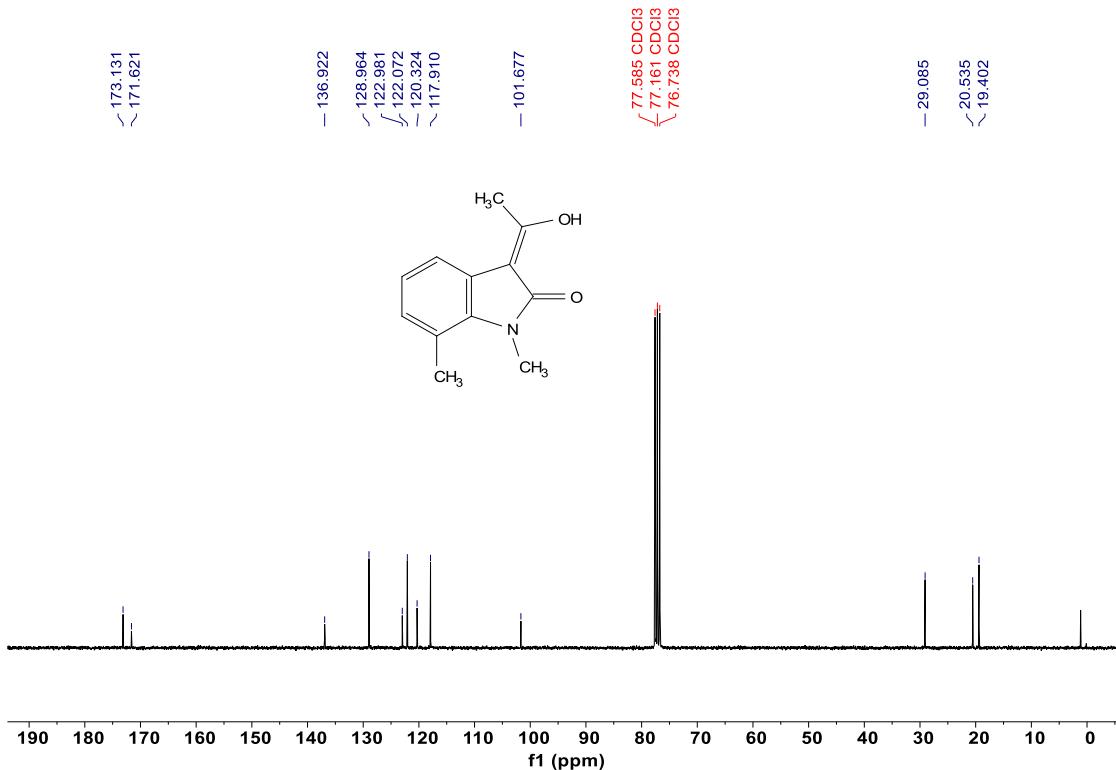
<sup>1</sup>H NMR spectrum of compound 5a (300 MHz, CDCl<sub>3</sub>)



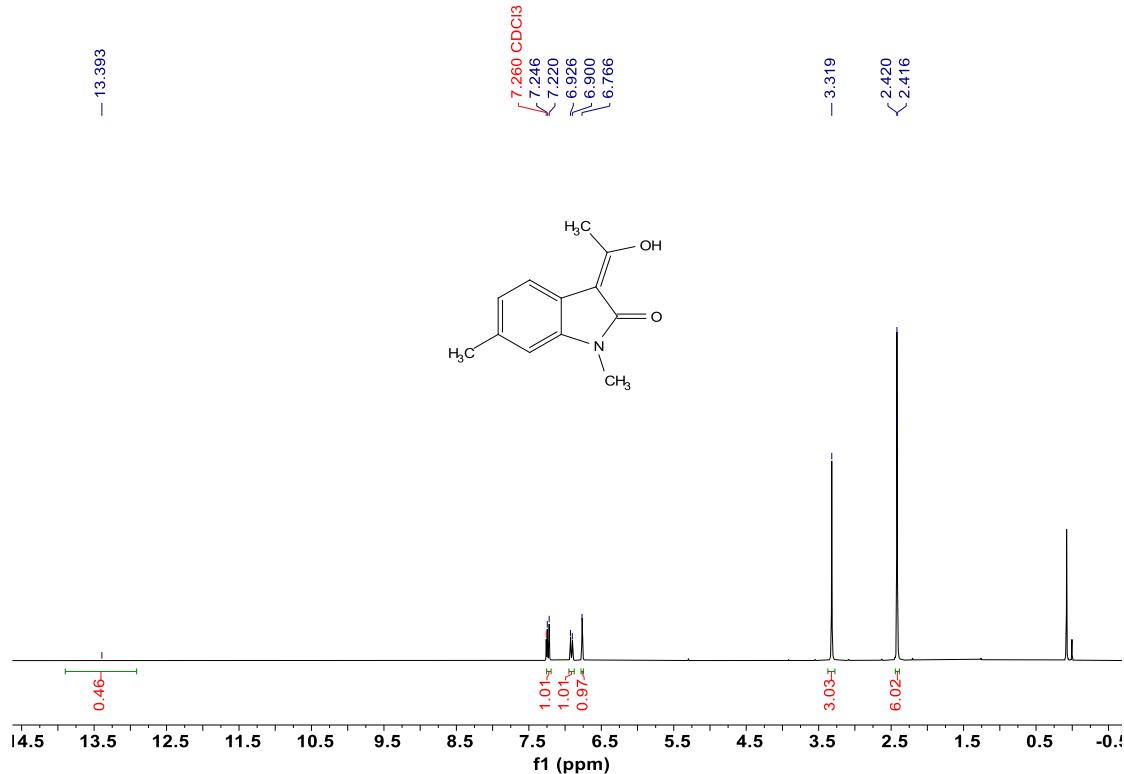
<sup>13</sup>C NMR spectrum of compound 5a (75 MHz, CDCl<sub>3</sub>)



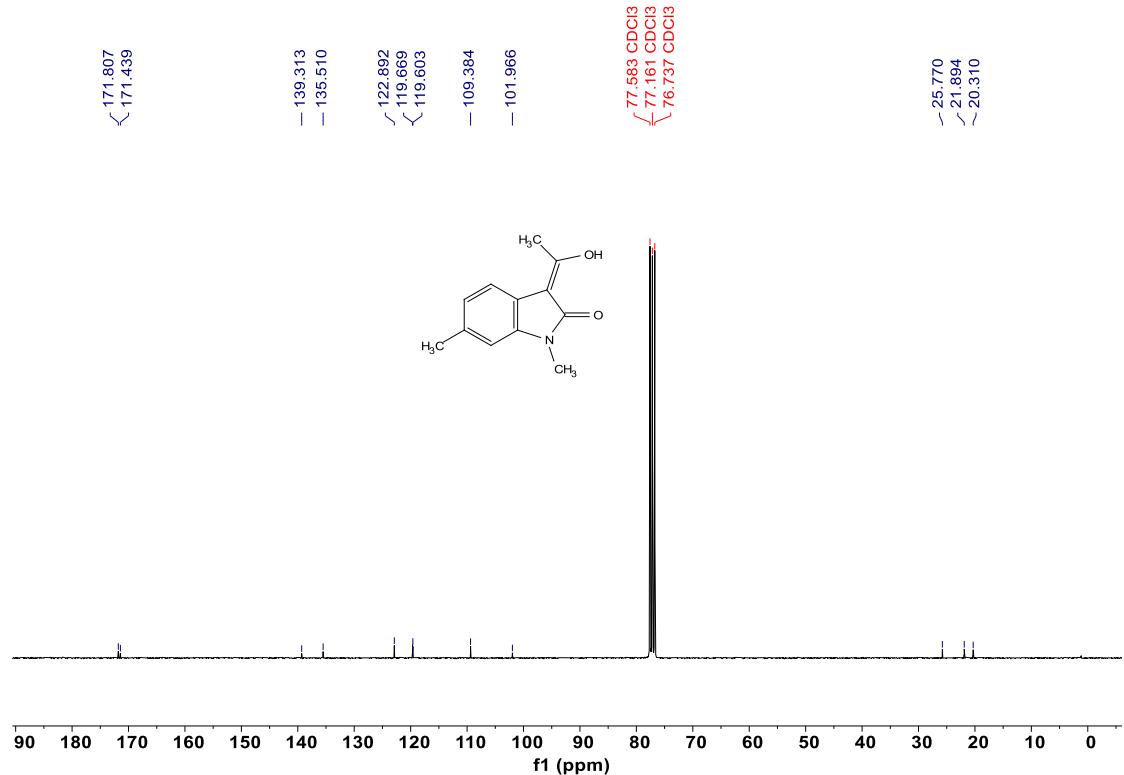
<sup>1</sup>H NMR spectrum of compound **5b** (300 MHz, CDCl<sub>3</sub>)



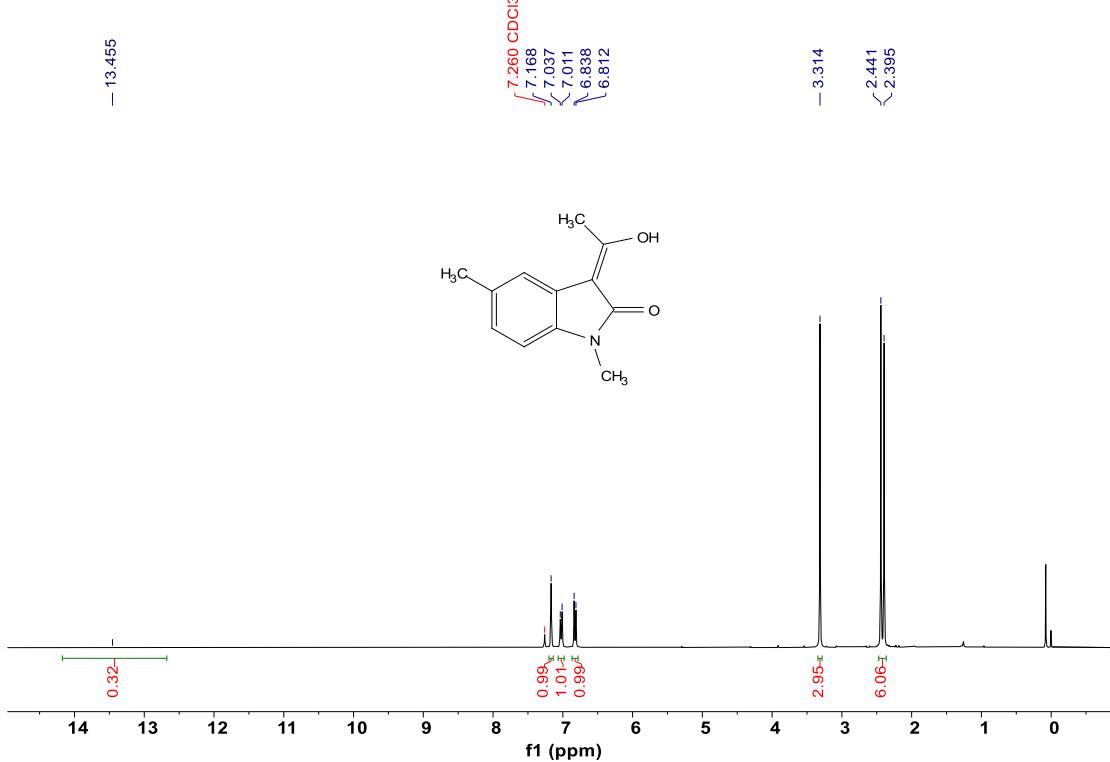
<sup>13</sup>C NMR spectrum of compound **5b** (75 MHz, CDCl<sub>3</sub>)



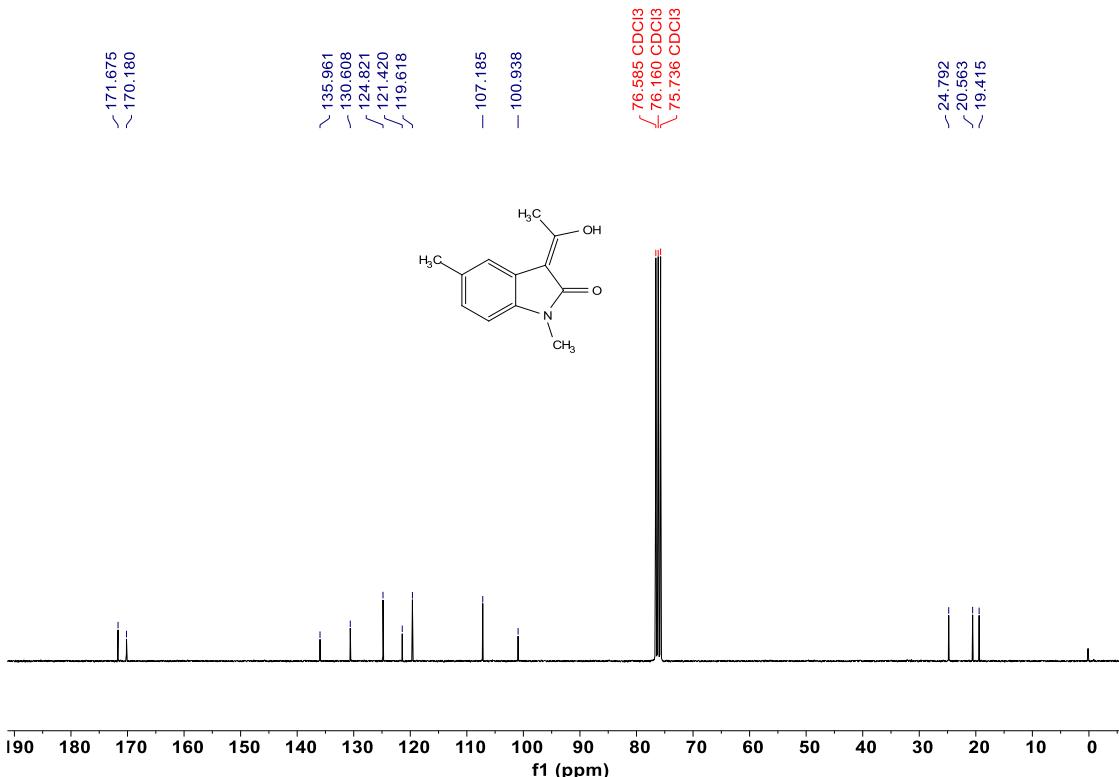
<sup>1</sup>H NMR spectrum of compound **5c** (300 MHz, CDCl<sub>3</sub>)



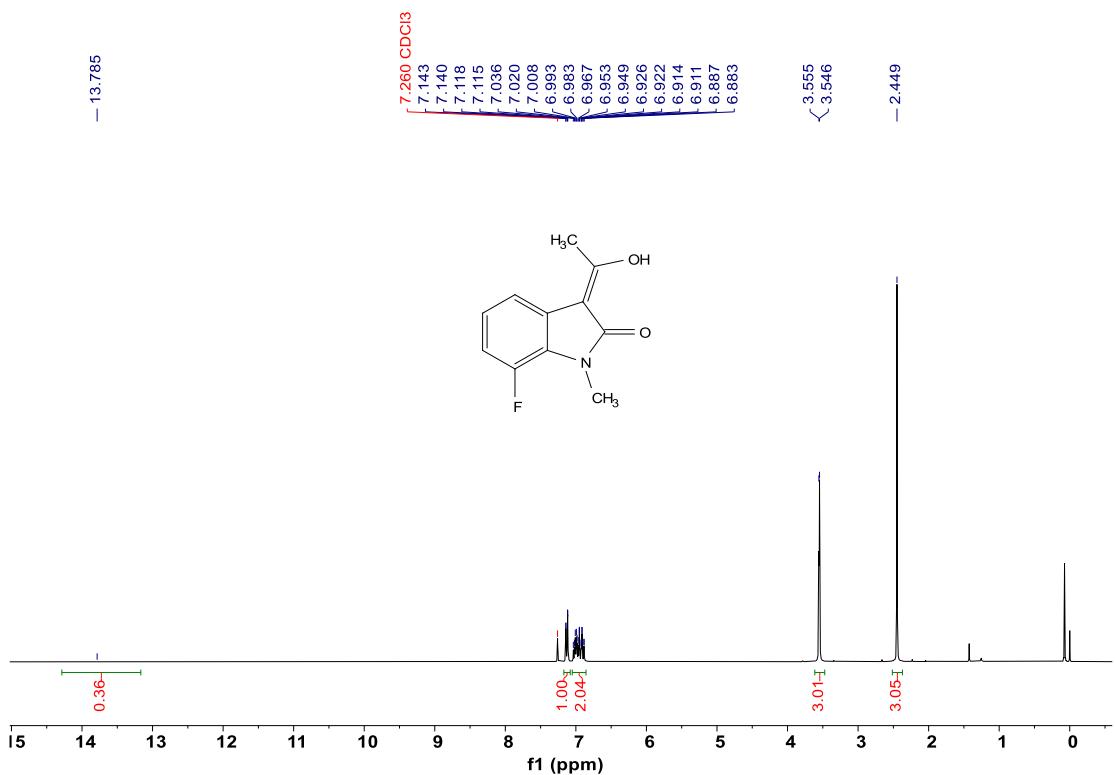
<sup>13</sup>C NMR spectrum of compound **5c** (75 MHz, CDCl<sub>3</sub>)



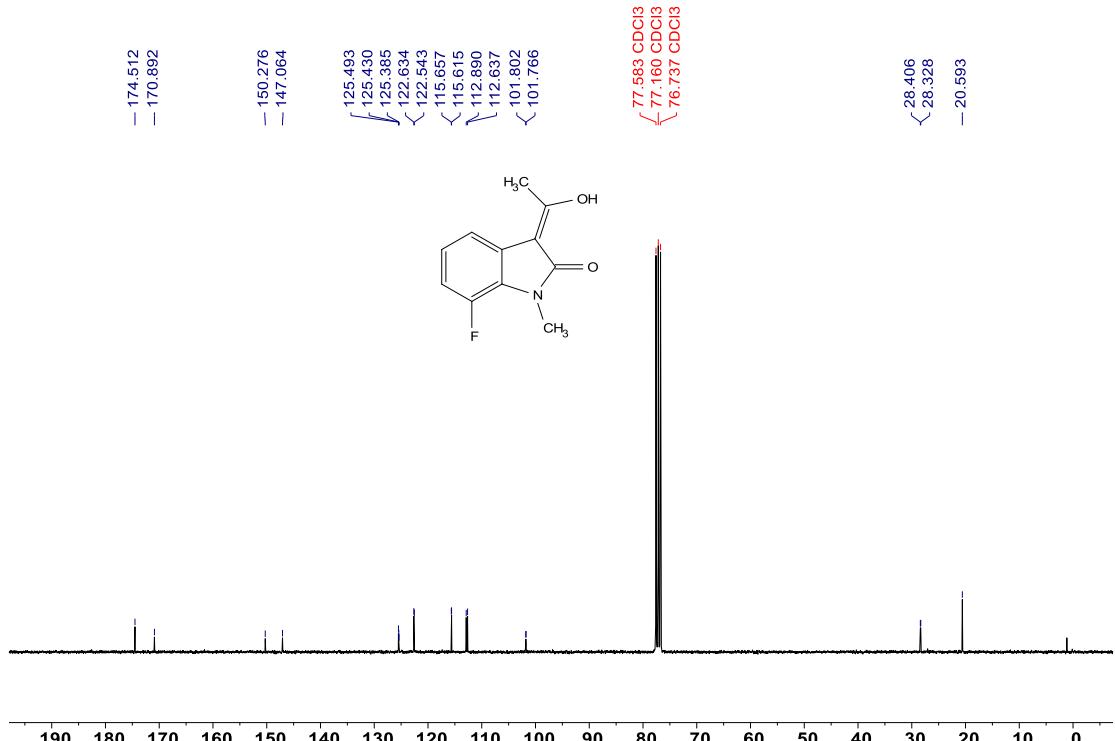
<sup>1</sup>H NMR spectrum of compound **5d** (300 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C NMR spectrum of compound **5d** (75 MHz, CDCl<sub>3</sub>)

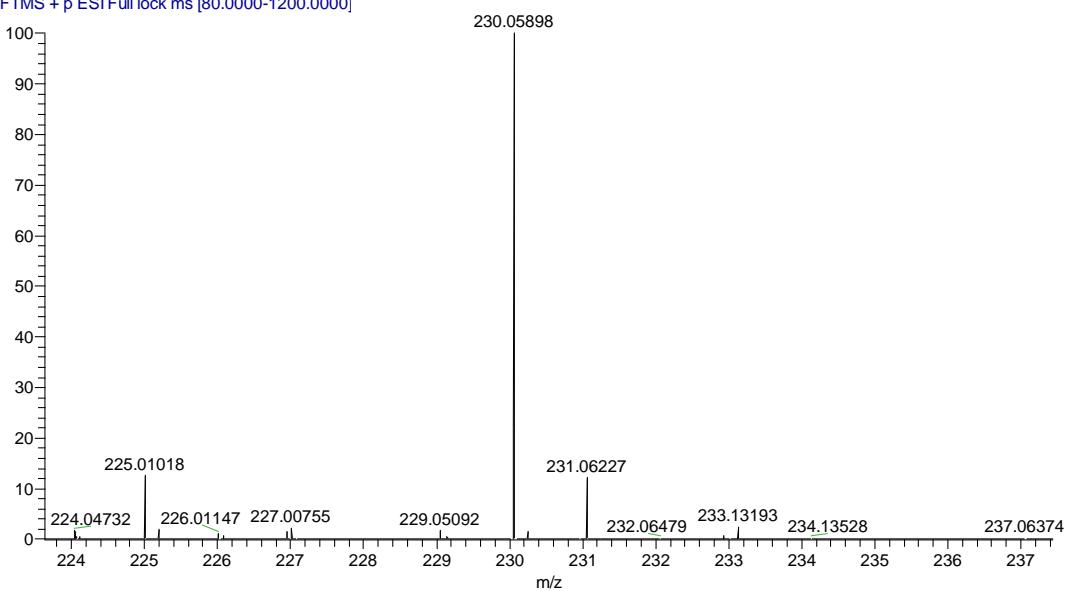


<sup>1</sup>H NMR spectrum of compound **5e** (300 MHz, CDCl<sub>3</sub>)

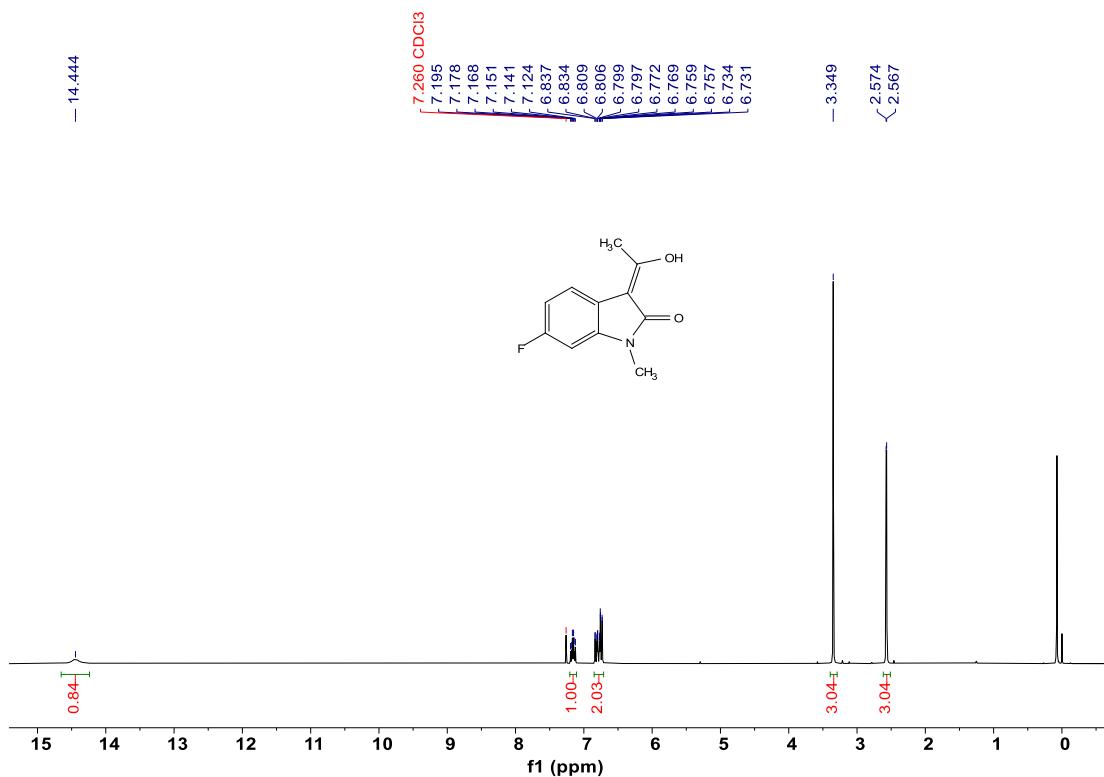


<sup>13</sup>C NMR spectrum of compound **2-5e** (75 MHz, CDCl<sub>3</sub>)

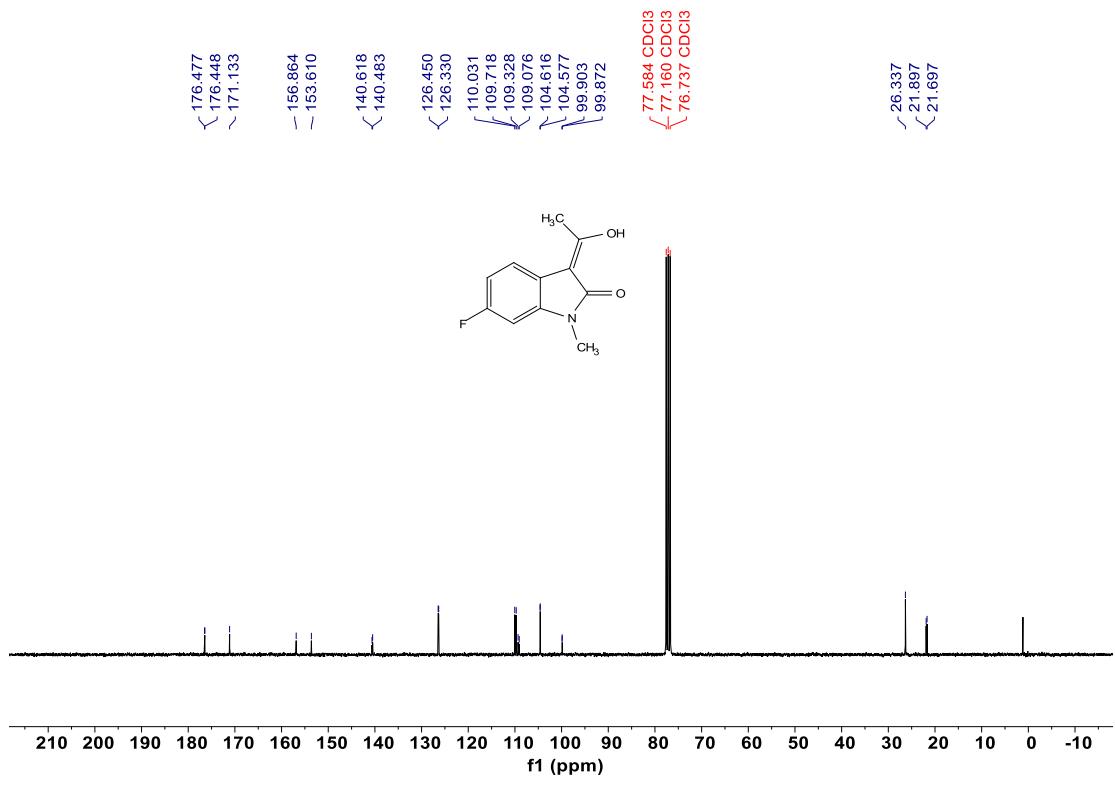
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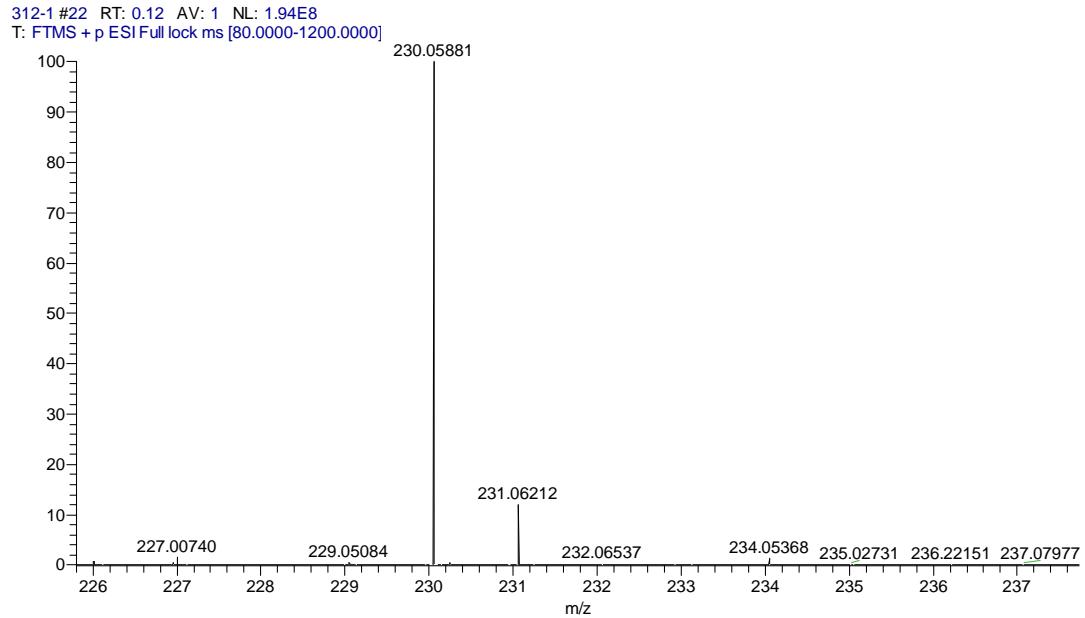
HRMS(ESI) of compound **5e**



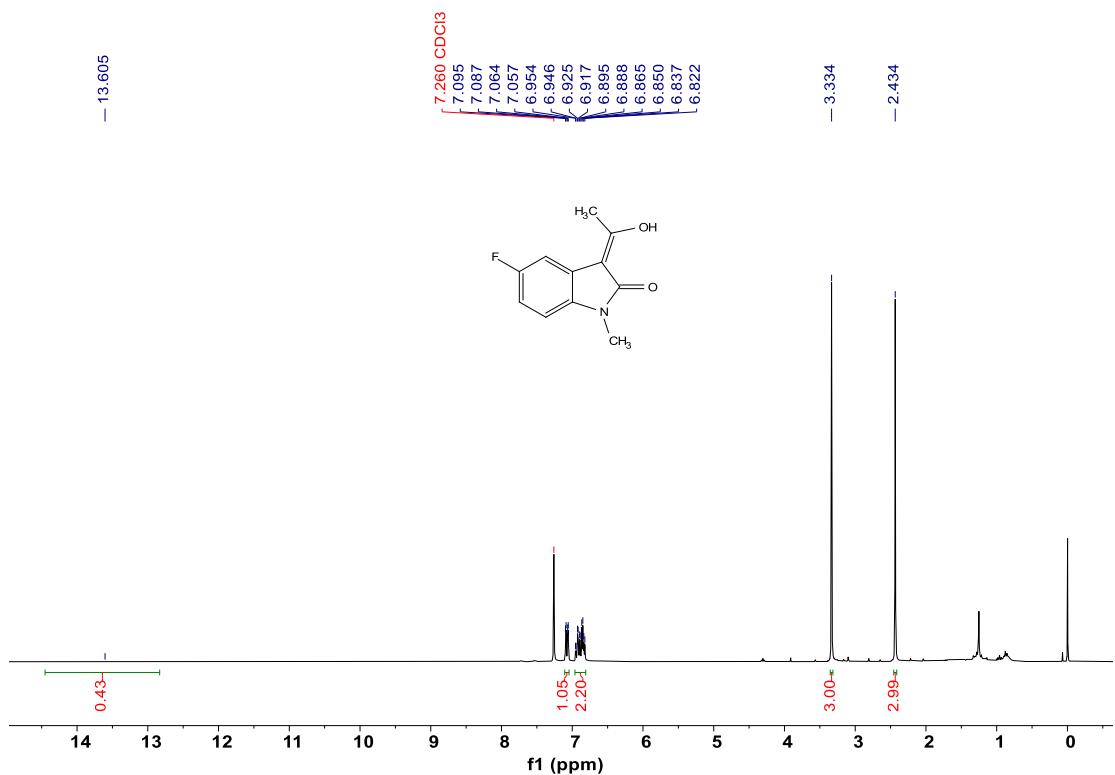
$^1\text{H}$  NMR spectrum of compound **5f** (300 MHz,  $\text{CDCl}_3$ )



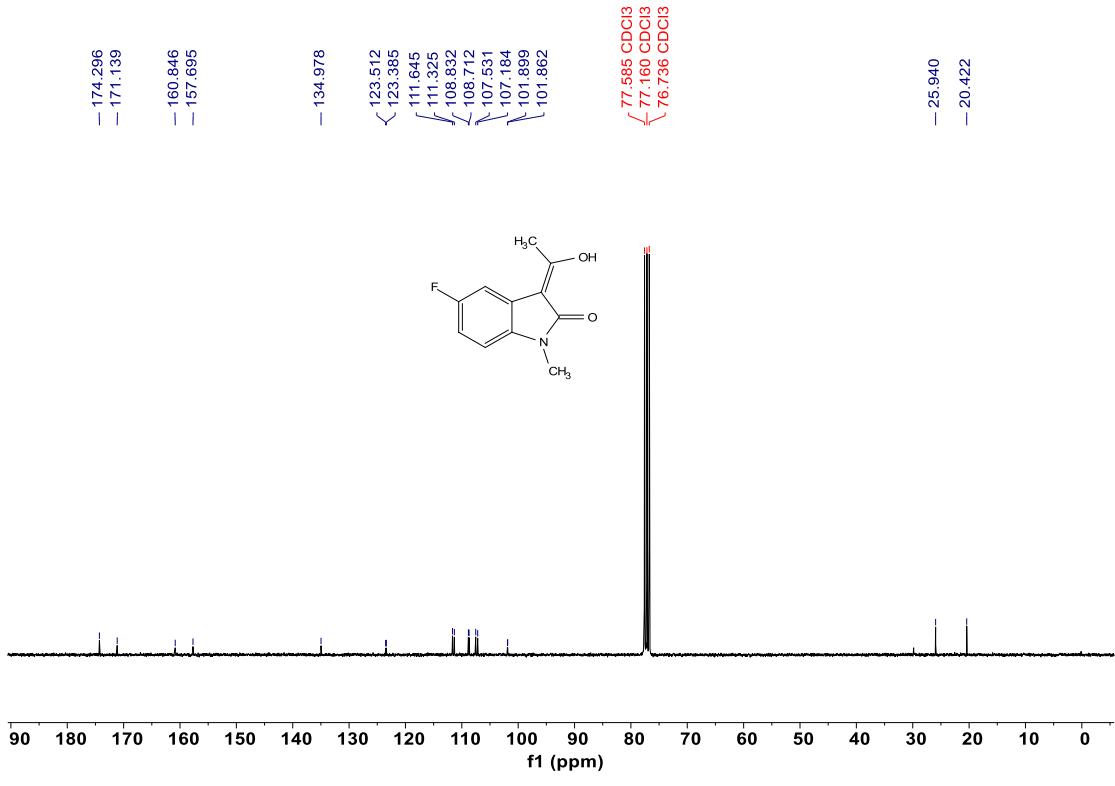
$^{13}\text{C}$  NMR spectrum of compound **5f** (75 MHz, CDCl<sub>3</sub>)



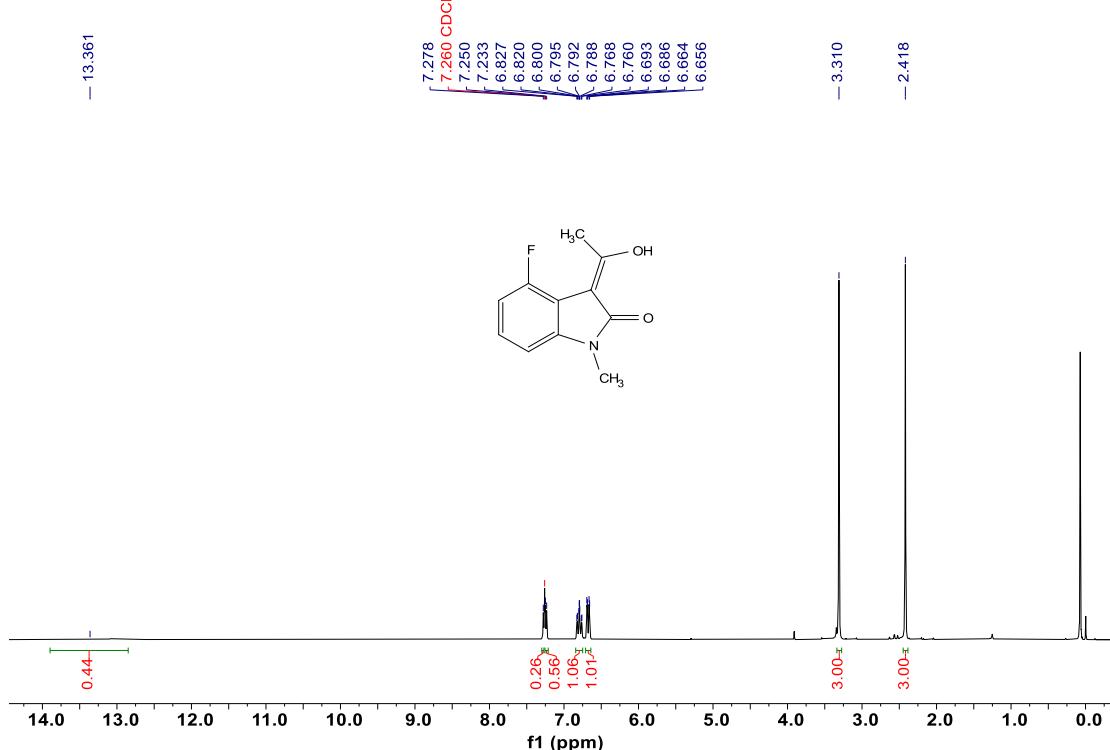
HRMS(ESI) of compound **5f**



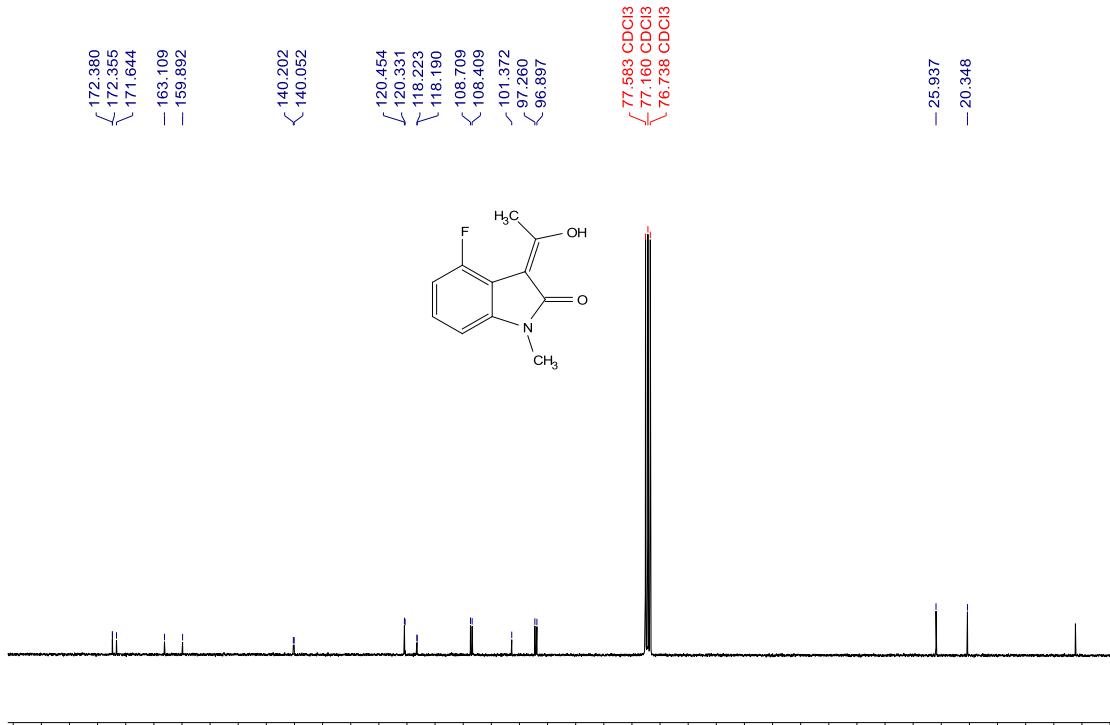
<sup>1</sup>H NMR spectrum of compound **5g** (300 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C NMR spectrum of compound **5g** (75 MHz, CDCl<sub>3</sub>)

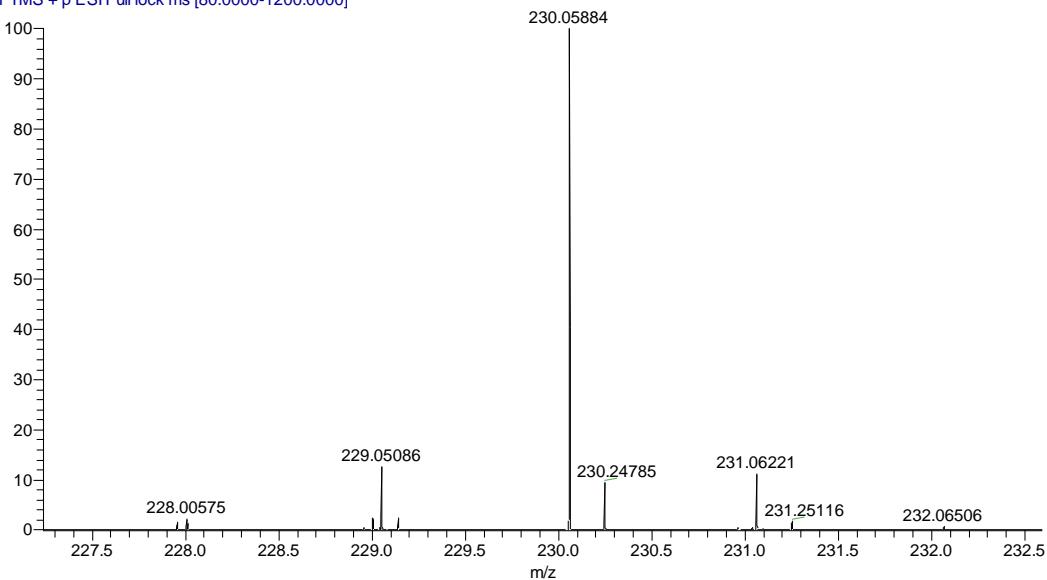


<sup>1</sup>H NMR spectrum of compound **5h** (300 MHz, CDCl<sub>3</sub>)

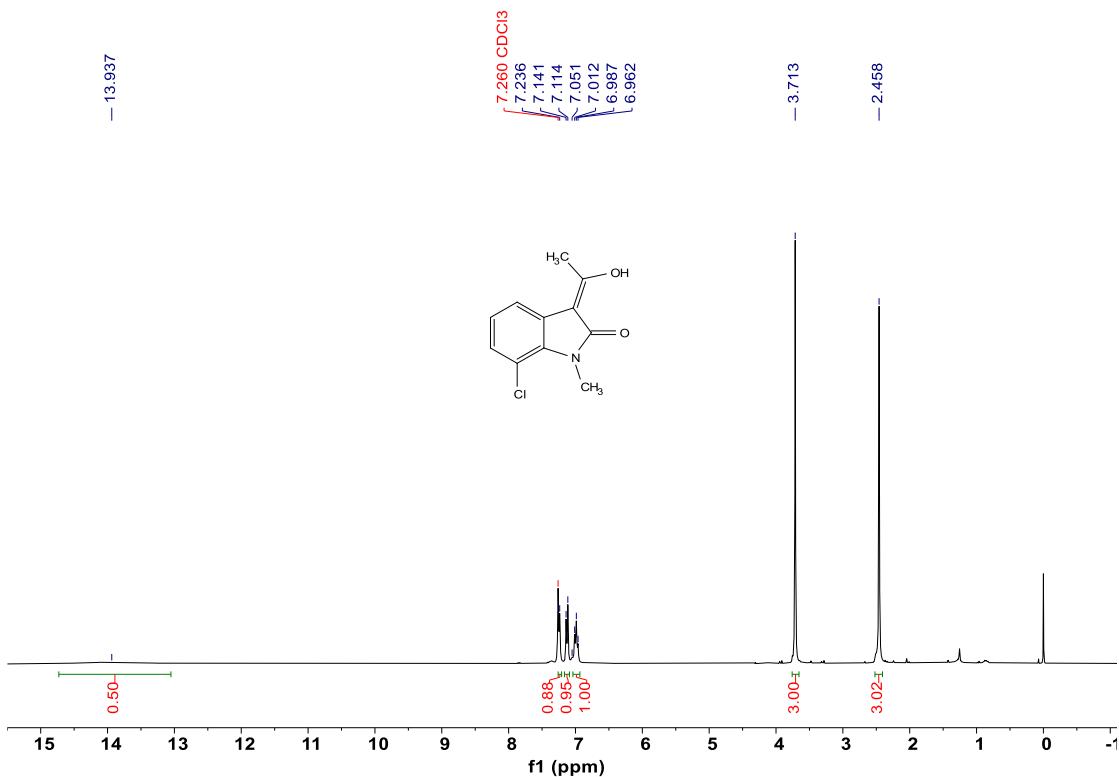


<sup>13</sup>C NMR spectrum of compound **5h** (75 MHz, CDCl<sub>3</sub>)

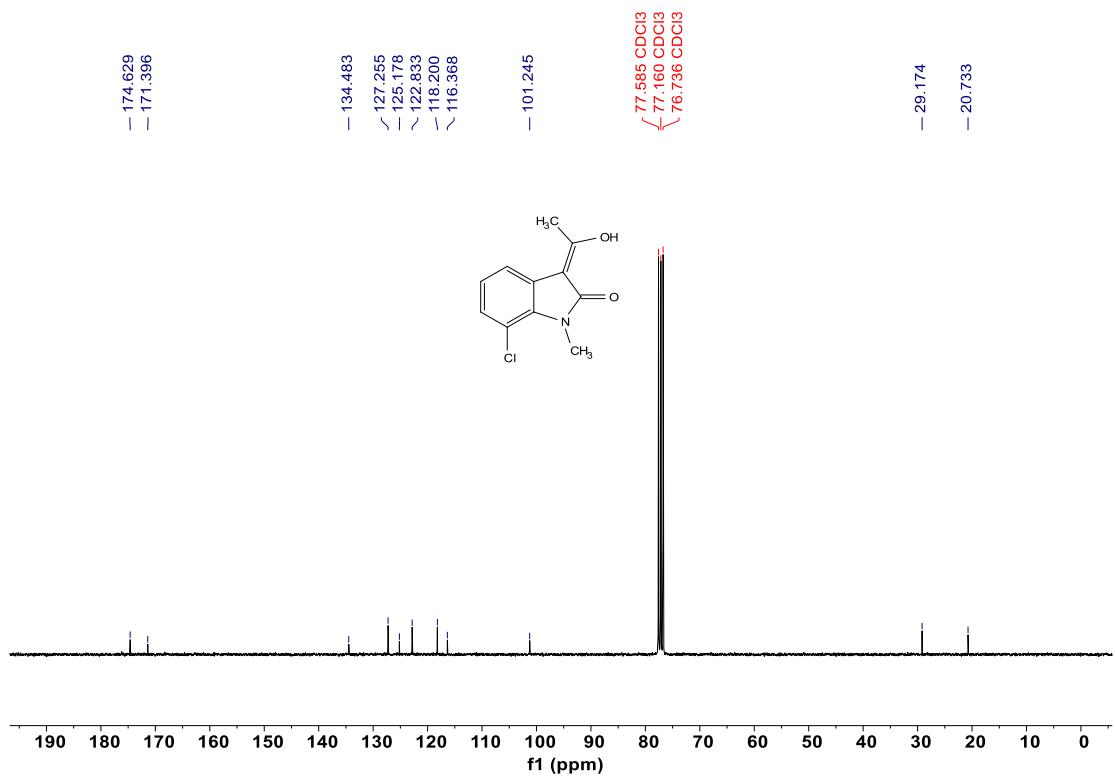
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T: FTMS + p ESI Full lock ms [80.0000-1200.0000]



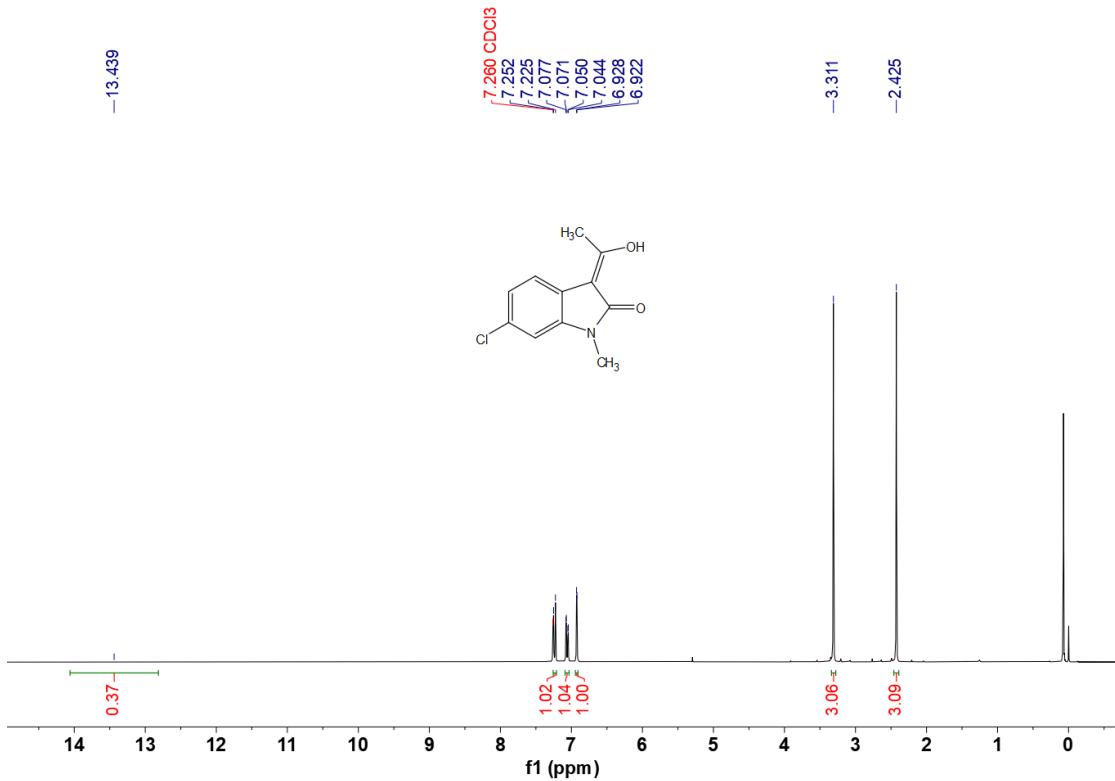
HRMS(EI) of compound **5h**



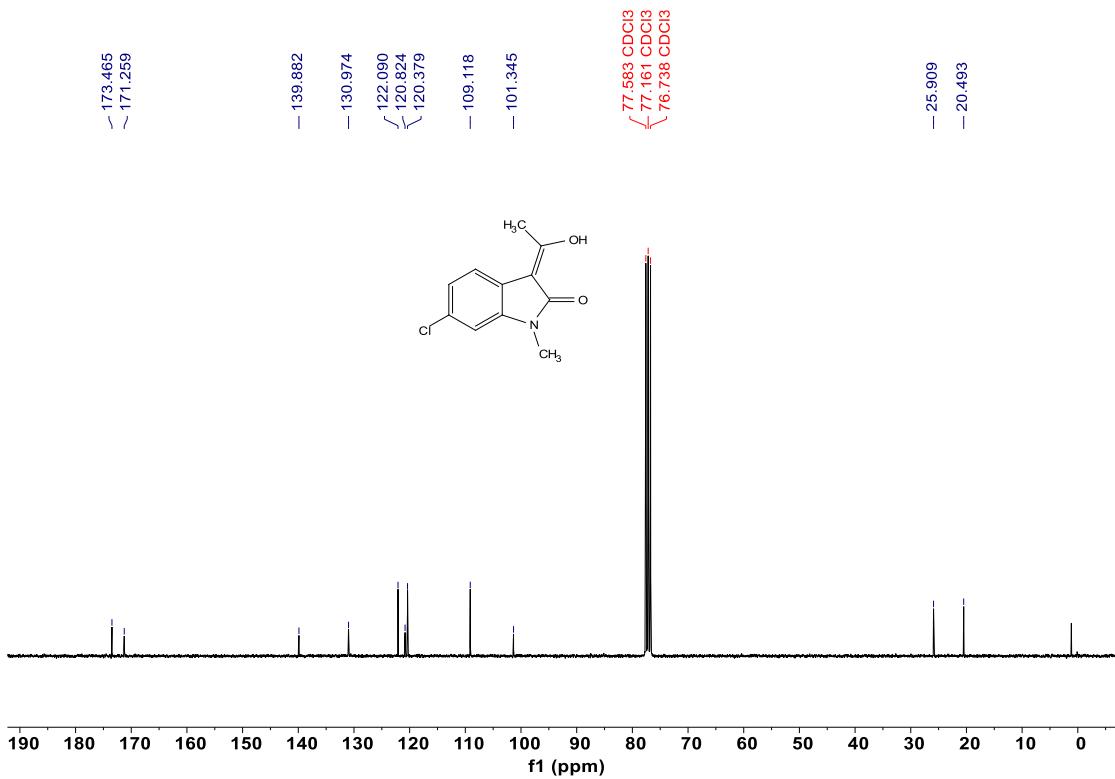
<sup>1</sup>H NMR spectrum of compound **5i** (300 MHz, CDCl<sub>3</sub>)



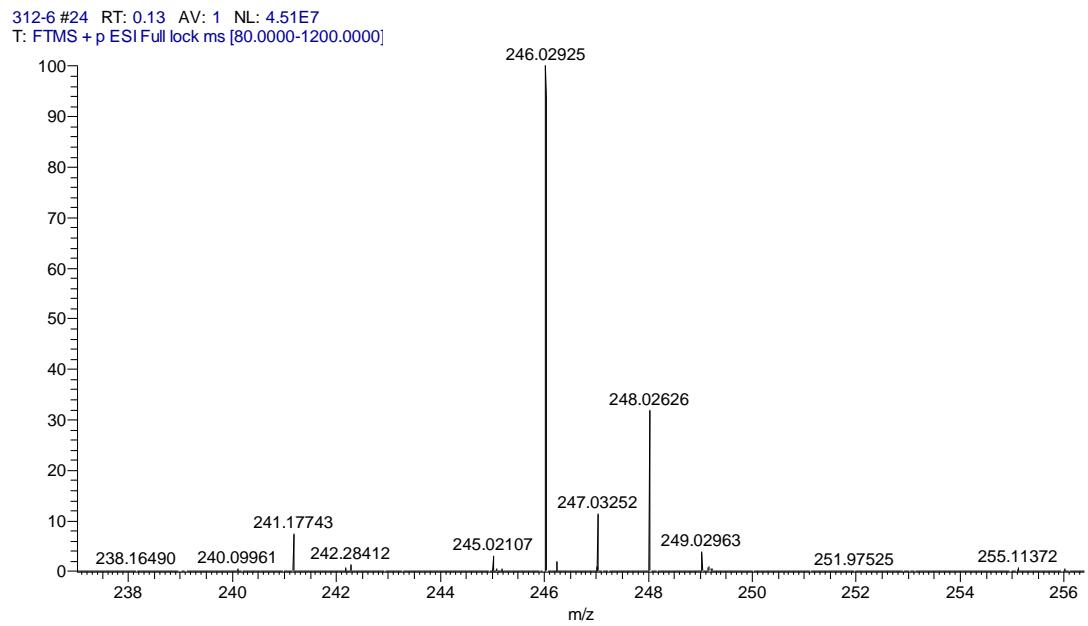
<sup>13</sup>C NMR spectrum of compound **5i** (75 MHz, CDCl<sub>3</sub>)



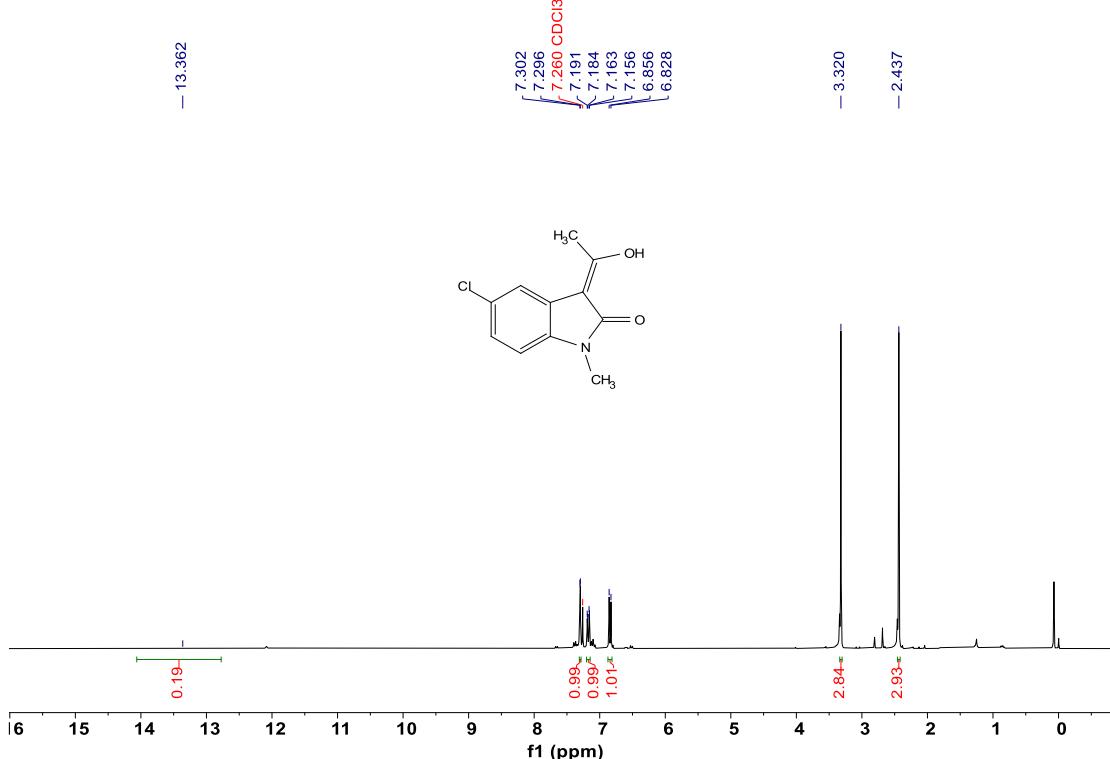
<sup>1</sup>H NMR spectrum of compound **5j** (300 MHz, CDCl<sub>3</sub>)



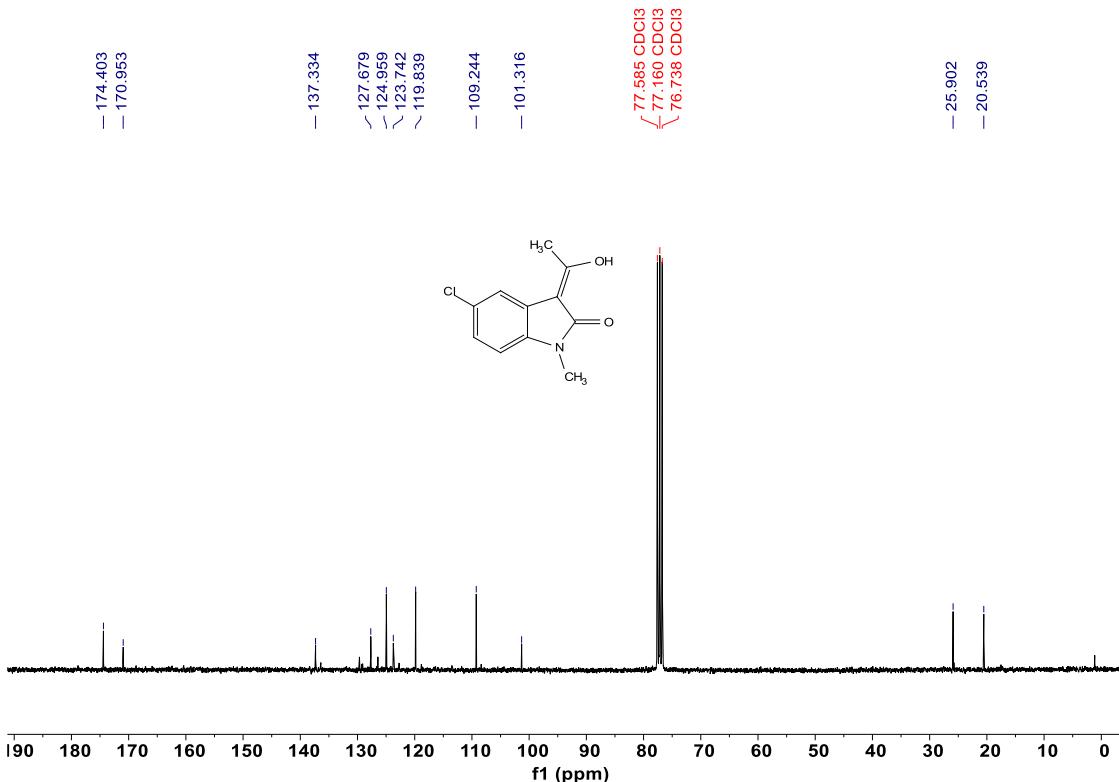
<sup>13</sup>C NMR spectrum of compound **5j** (75 MHz, CDCl<sub>3</sub>)



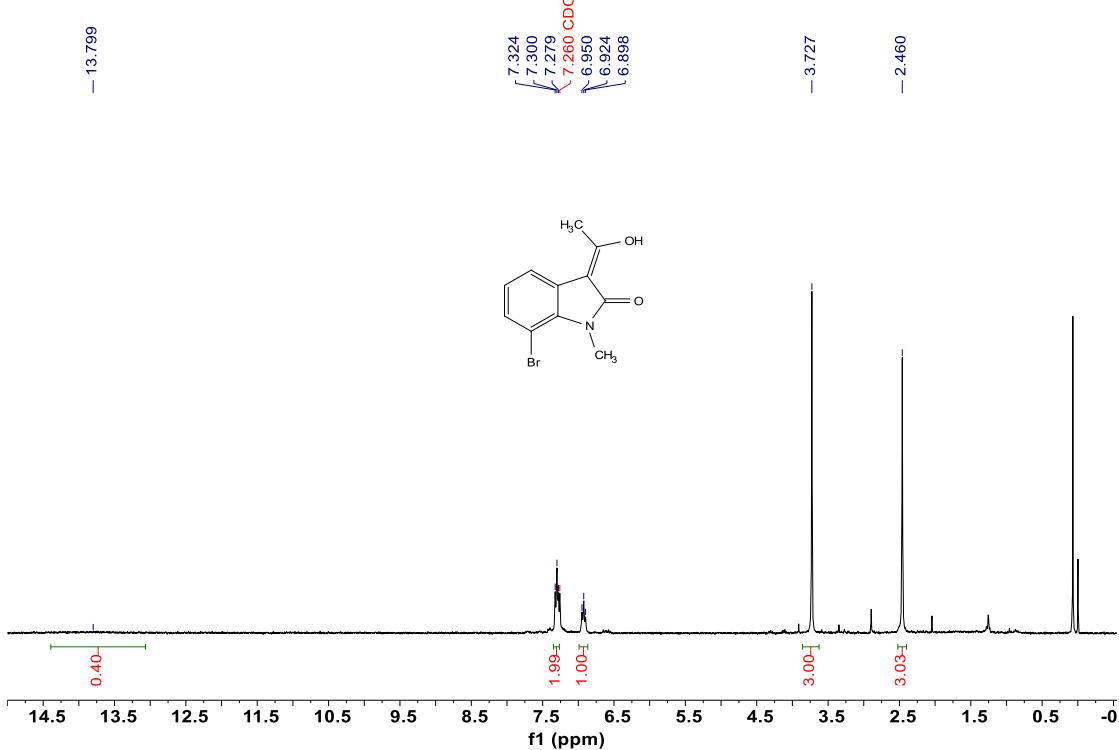
HRMS(ESI) of compound **5j**



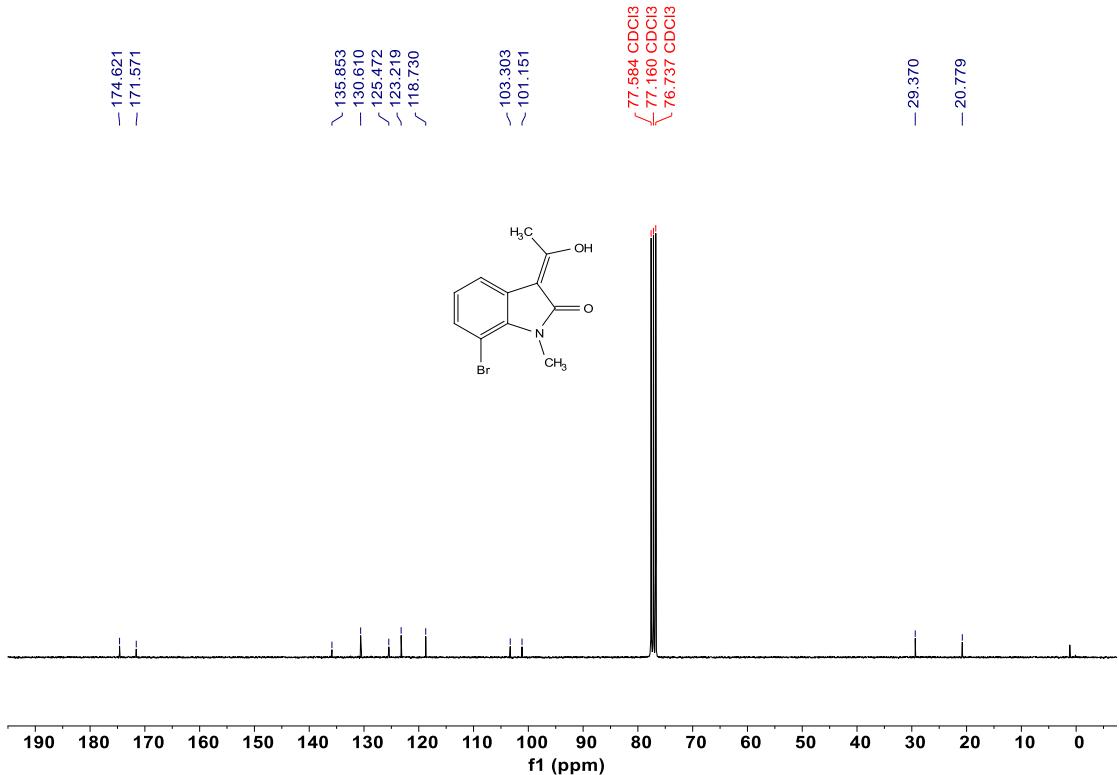
<sup>1</sup>H NMR spectrum of compound **5k** (300 MHz, CDCl<sub>3</sub>)



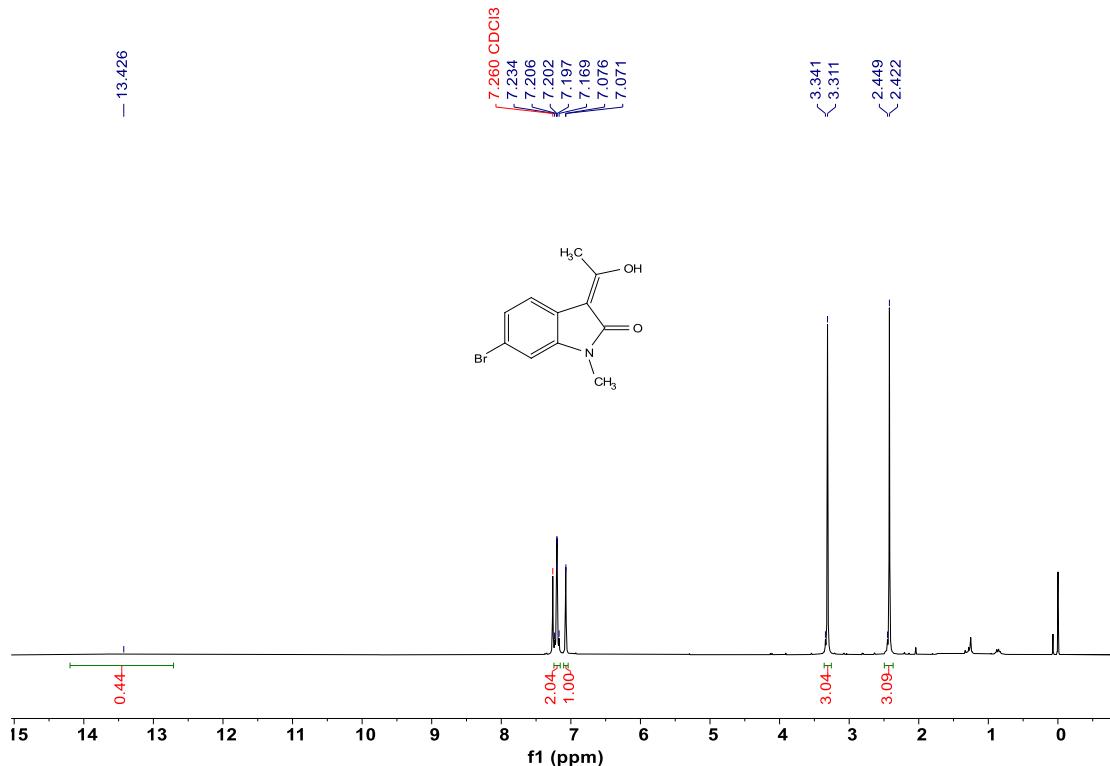
<sup>13</sup>C NMR spectrum of compound **5k** (75 MHz, CDCl<sub>3</sub>)



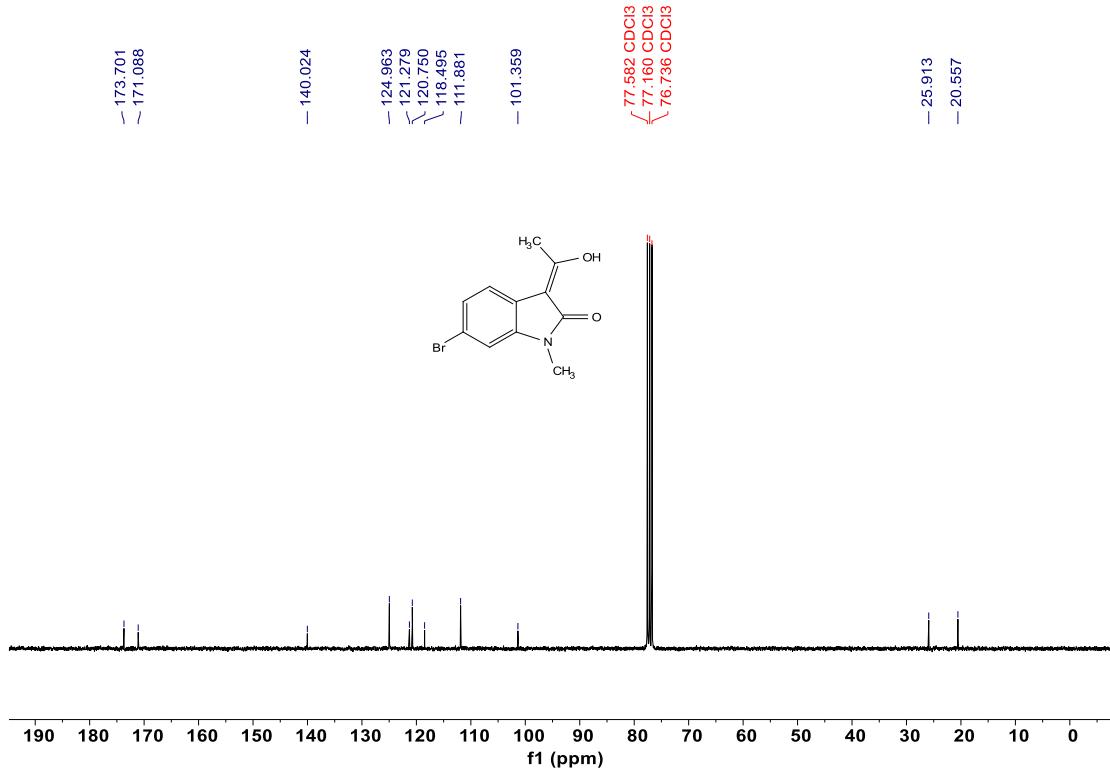
<sup>1</sup>H NMR spectrum of compound **5l** (300 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C NMR spectrum of compound **5l** (75 MHz, CDCl<sub>3</sub>)

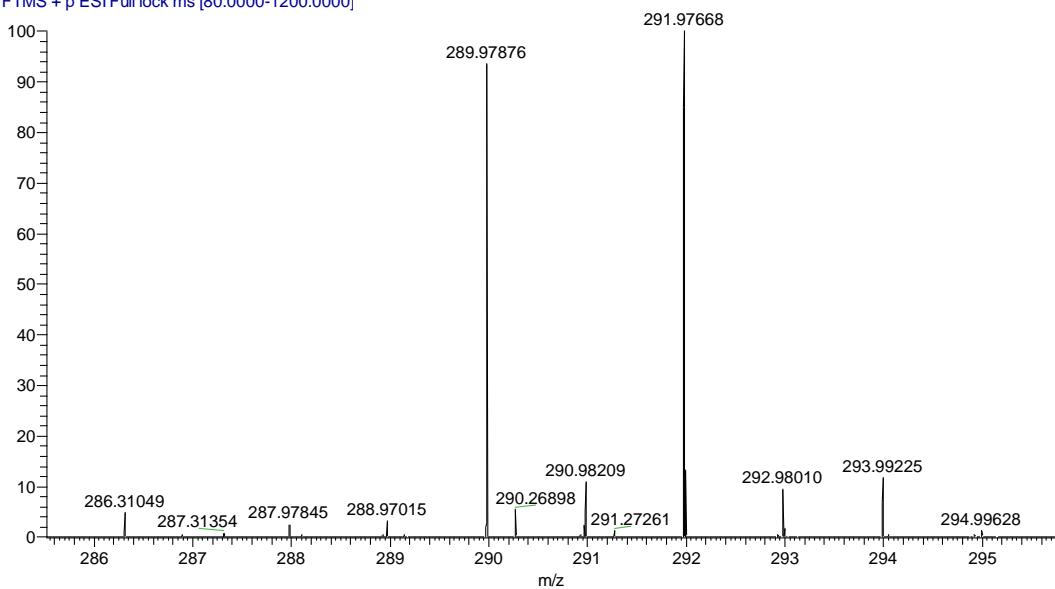


<sup>1</sup>H NMR spectrum of compound **5m** (300 MHz, CDCl<sub>3</sub>)

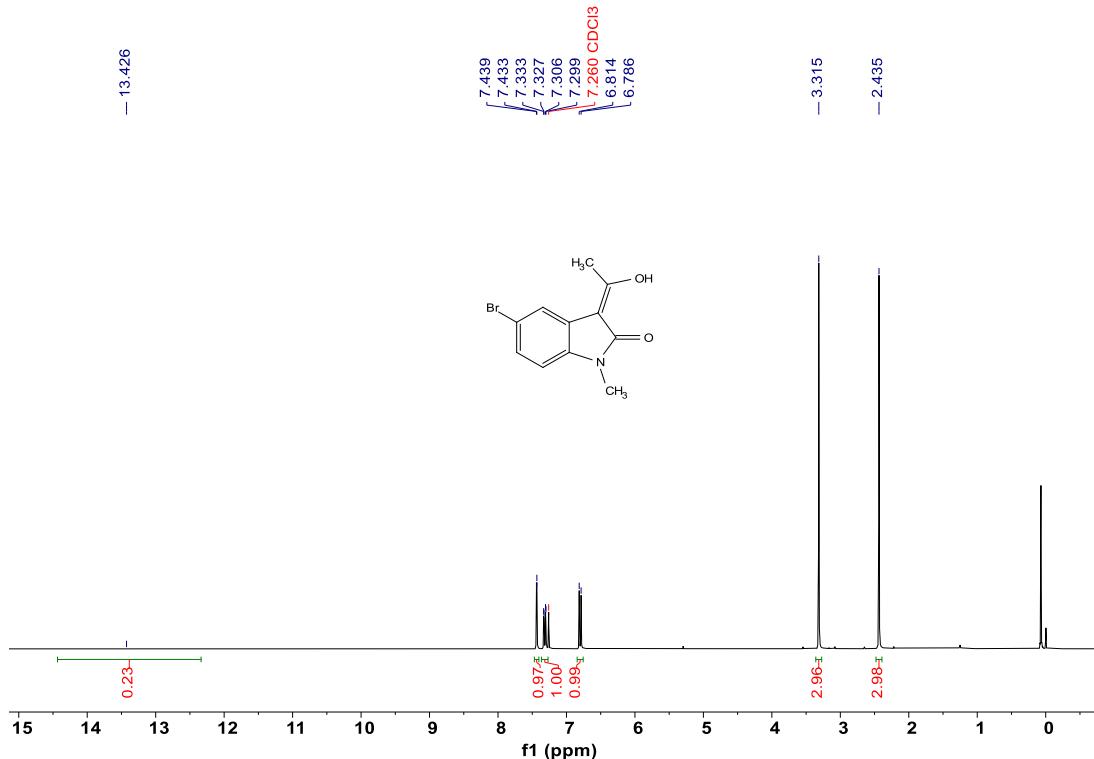


<sup>13</sup>C NMR spectrum of compound **5m** (75 MHz, CDCl<sub>3</sub>)

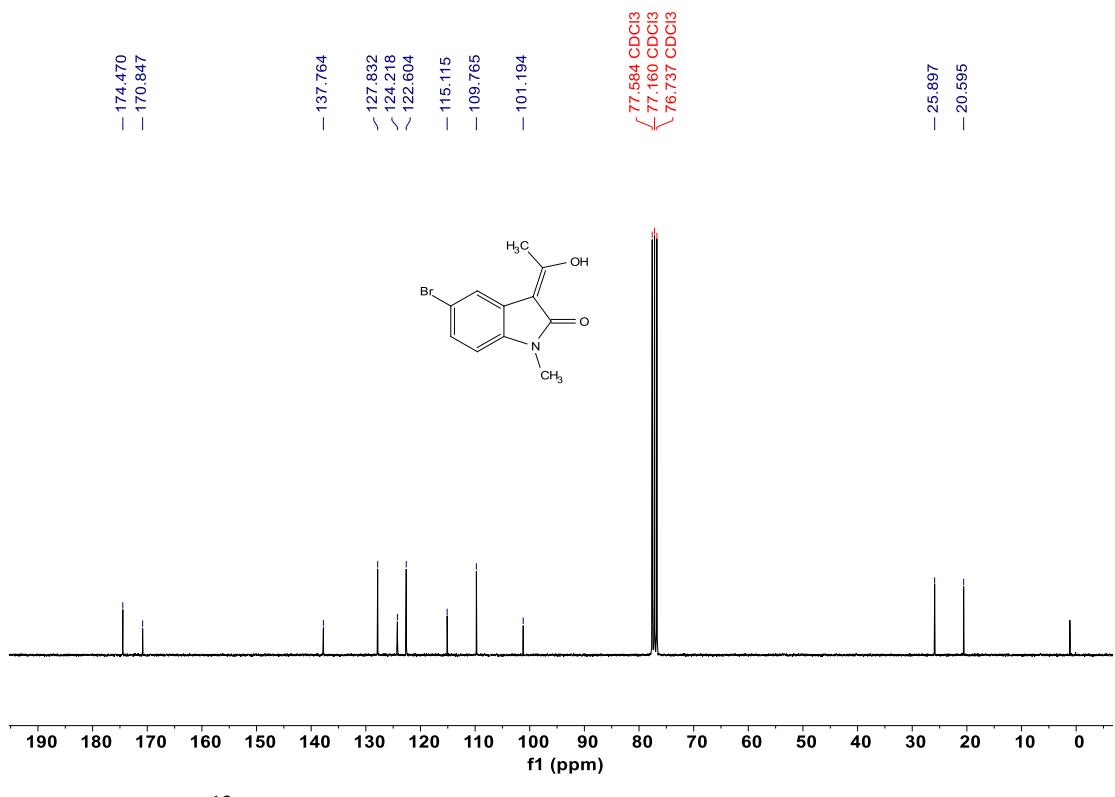
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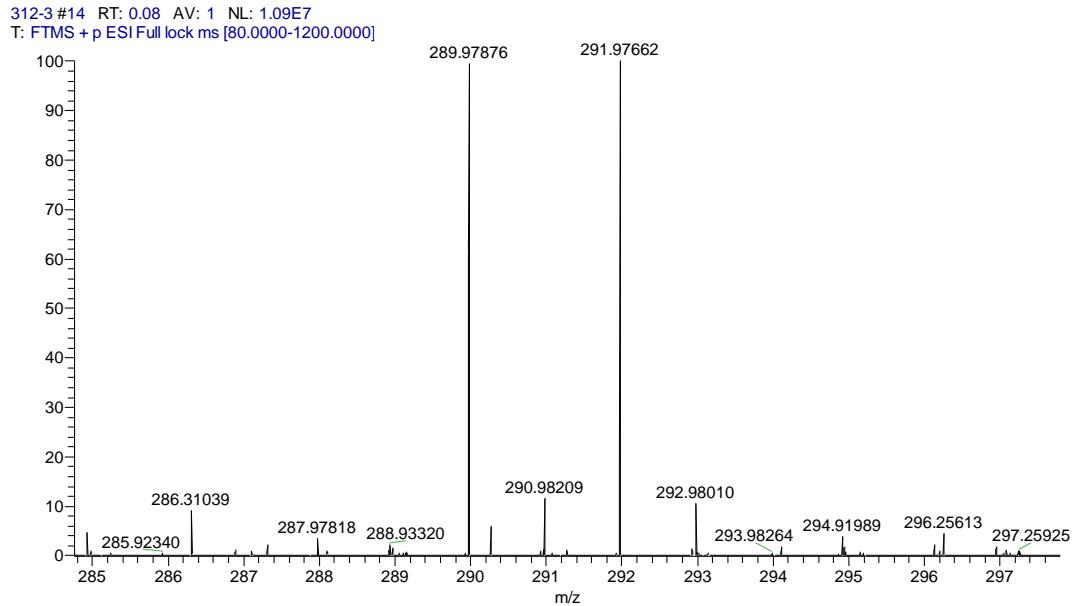
HRMS(ESI) of compound **5m**



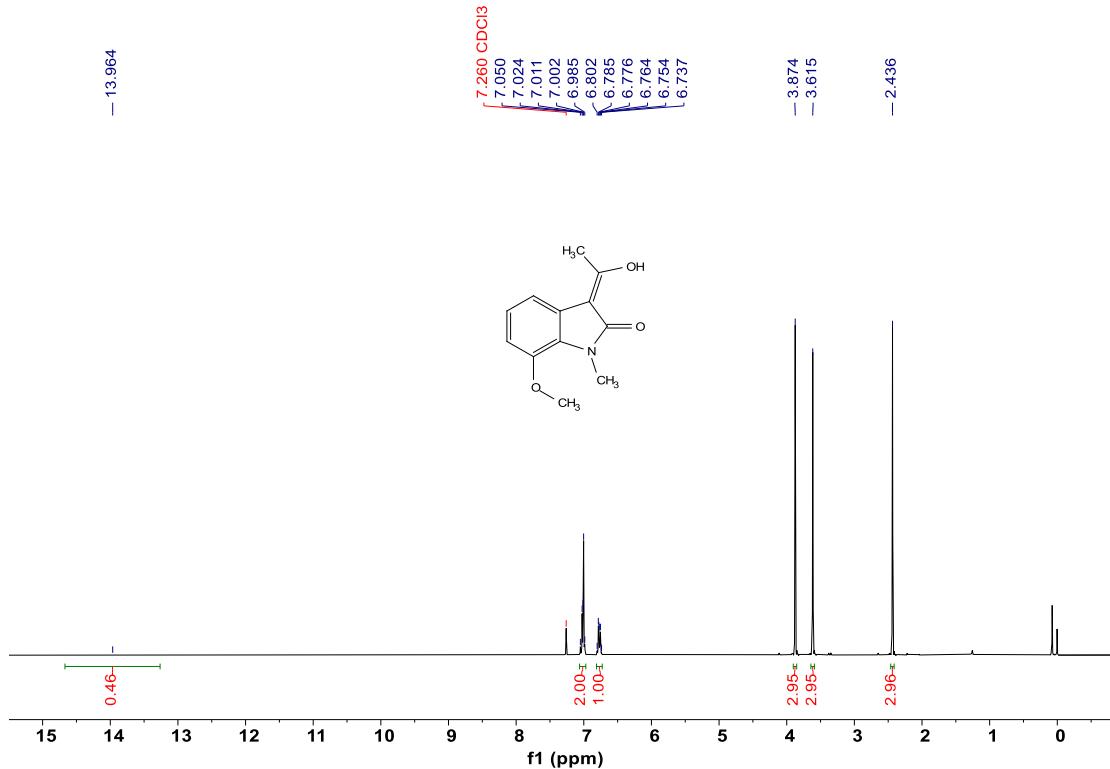
$^1\text{H}$  NMR spectrum of compound **5n** (300 MHz, CDCl<sub>3</sub>)



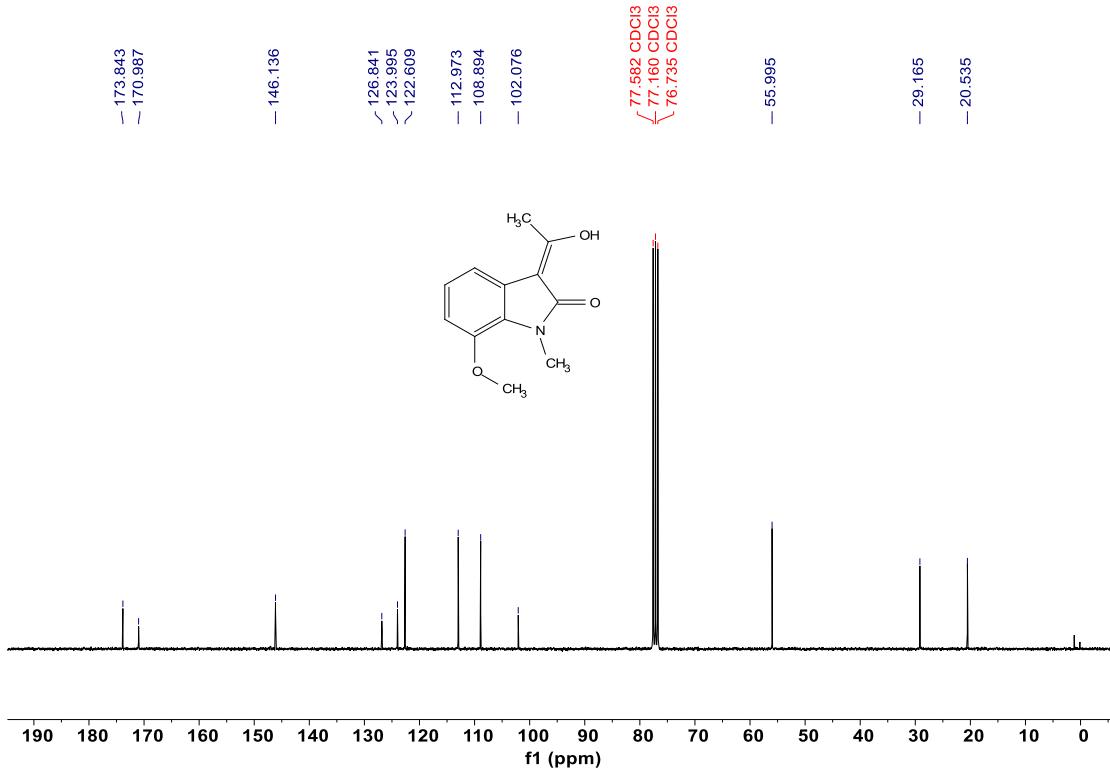
<sup>13</sup>C NMR spectrum of compound **5n** (75 MHz, CDCl<sub>3</sub>)



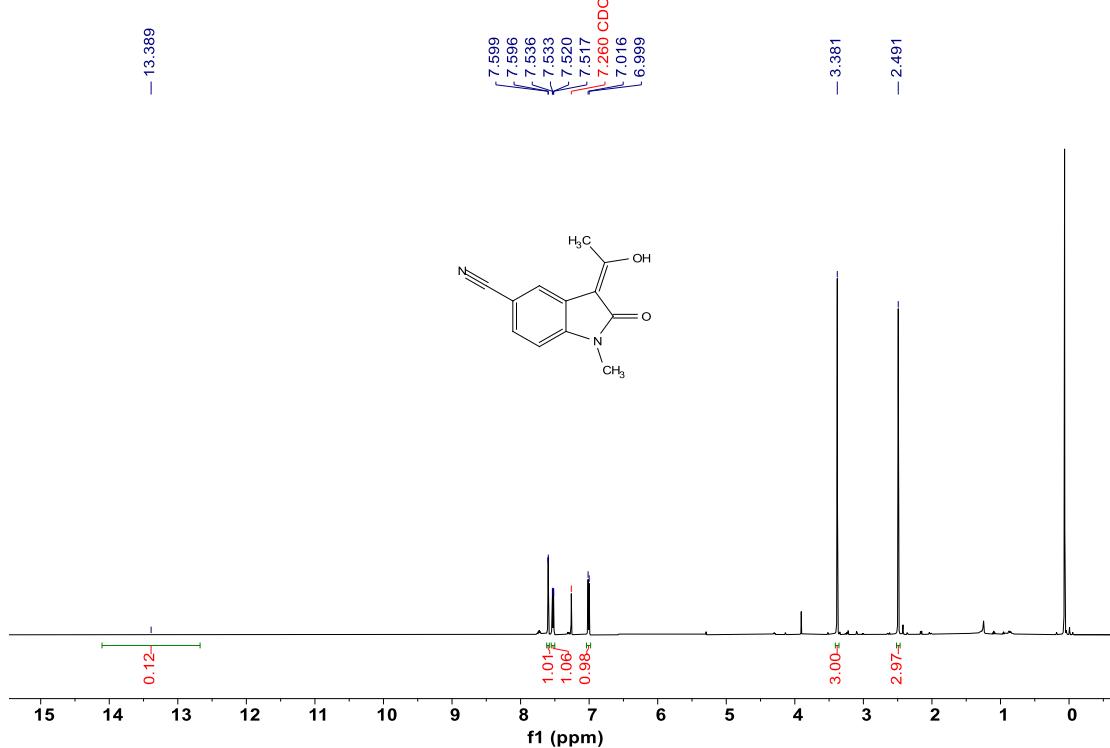
HRMS(ESI) of compound **5n**



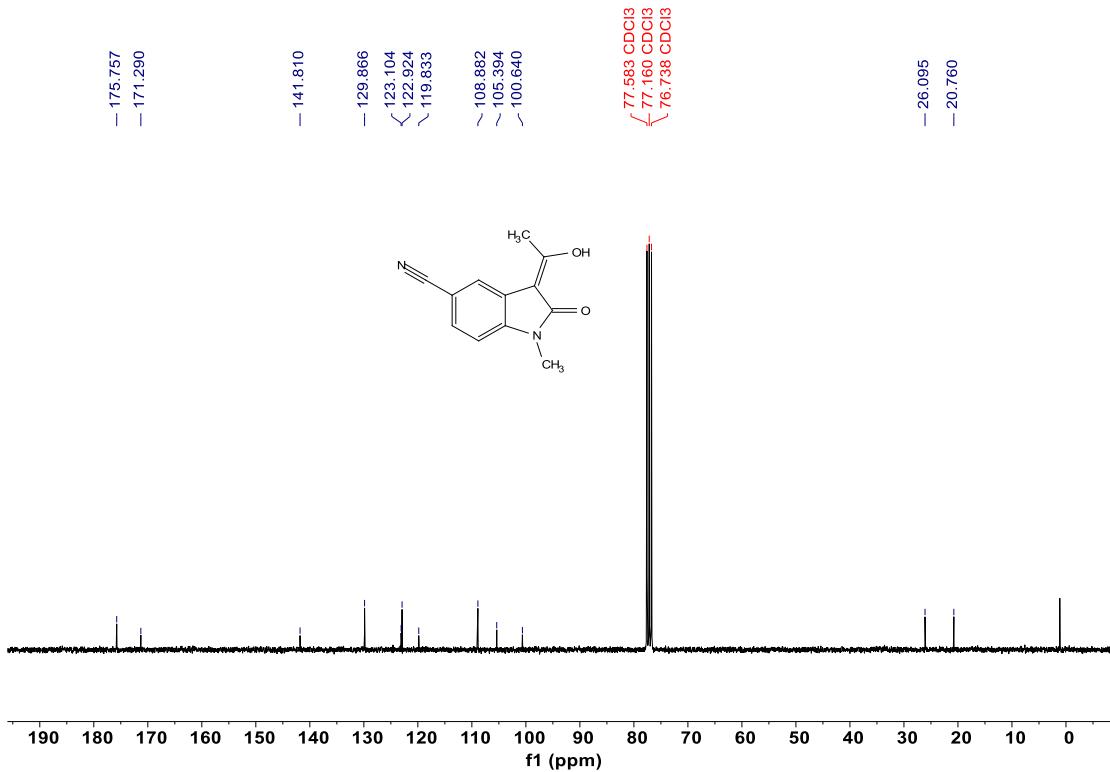
<sup>1</sup>H NMR spectrum of compound **5o** (300 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C NMR spectrum of compound **5o** (75 MHz, CDCl<sub>3</sub>)

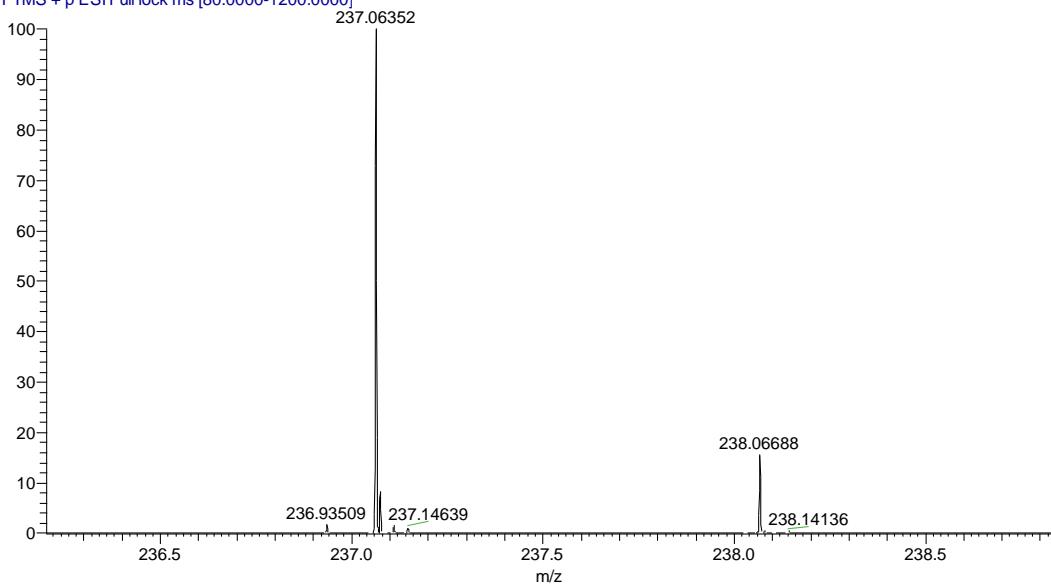


<sup>1</sup>H NMR spectrum of compound **5p** (500 MHz, CDCl<sub>3</sub>)

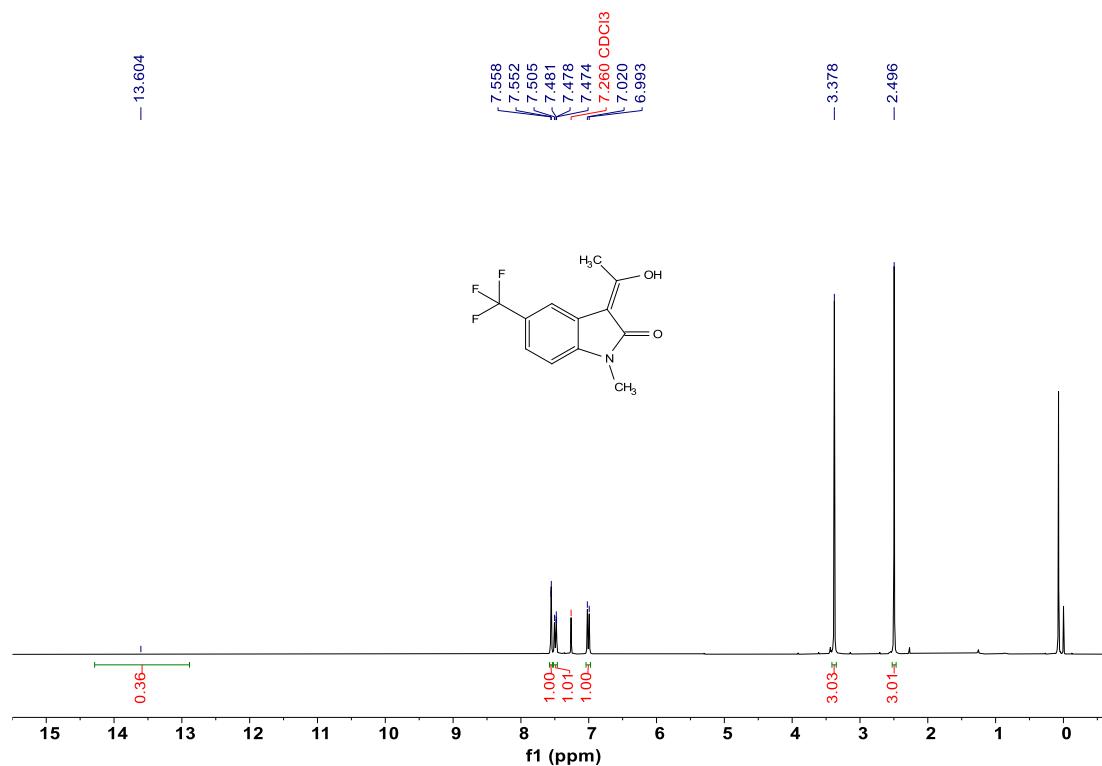


<sup>13</sup>C NMR spectrum of compound **5p** (75 MHz, CDCl<sub>3</sub>)

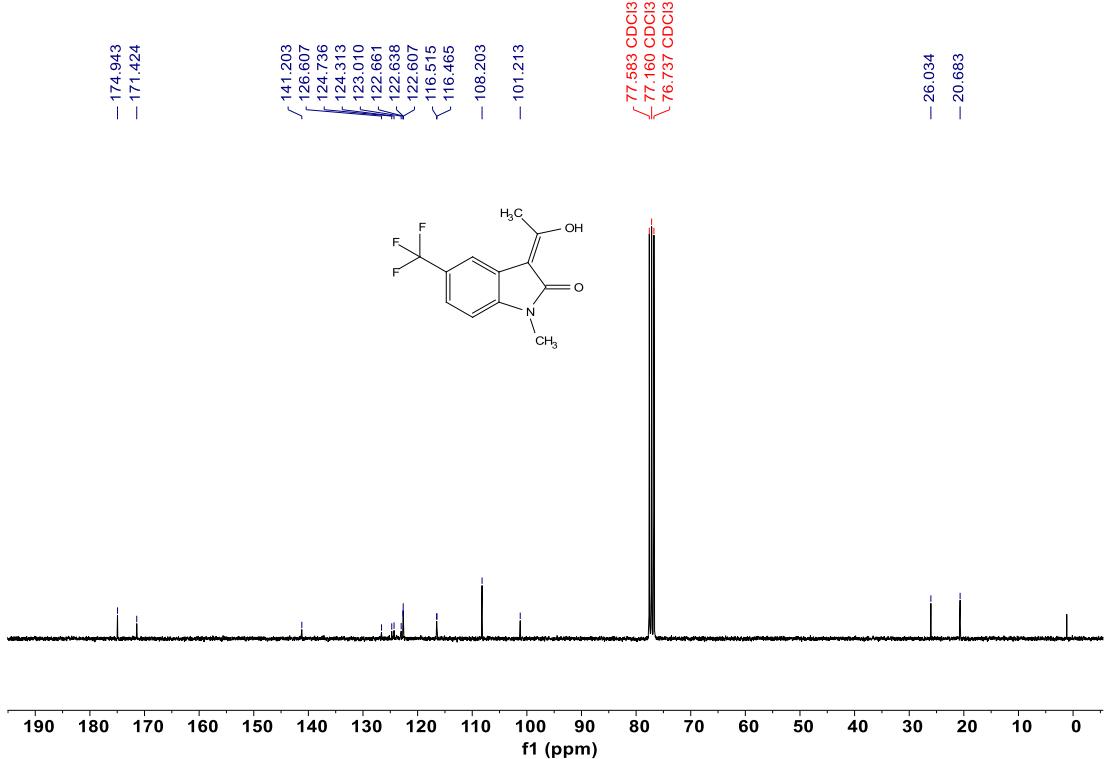
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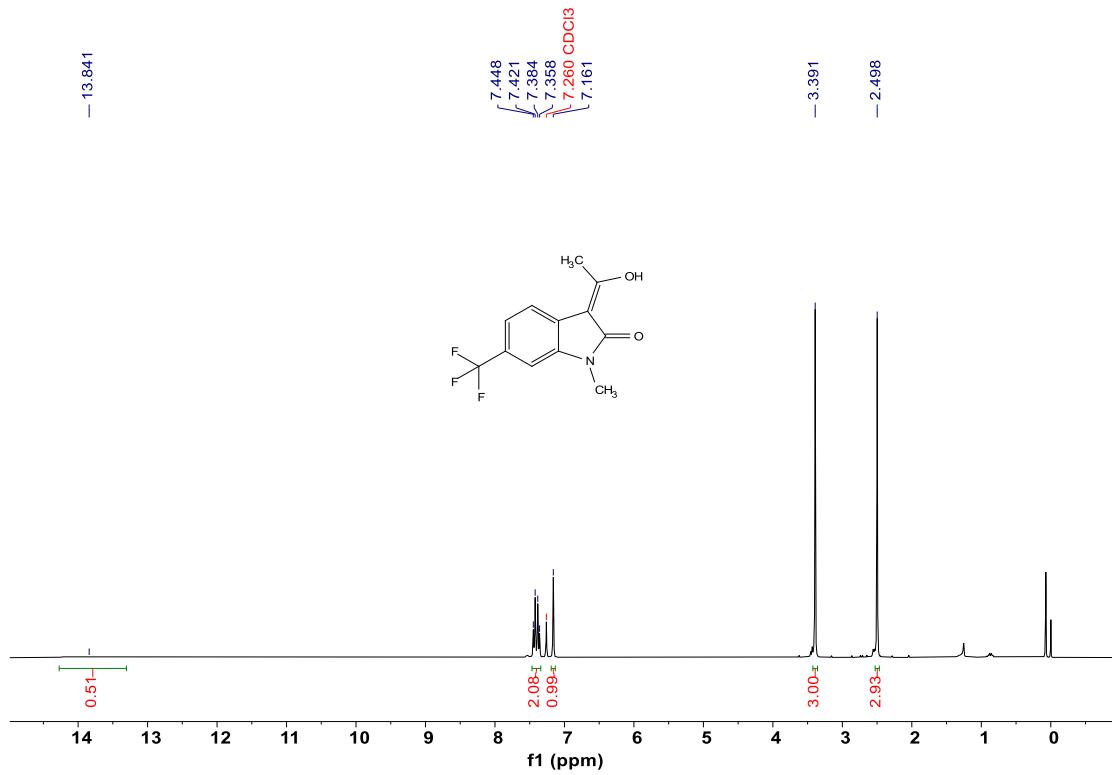
HRMS(ESI) of compound **5p**



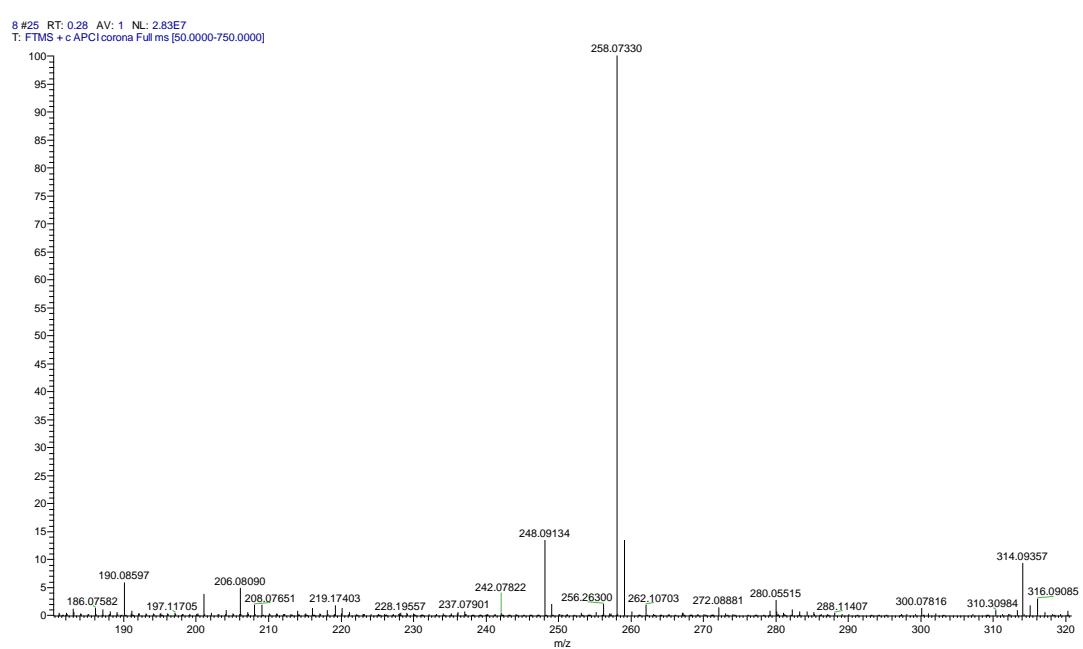
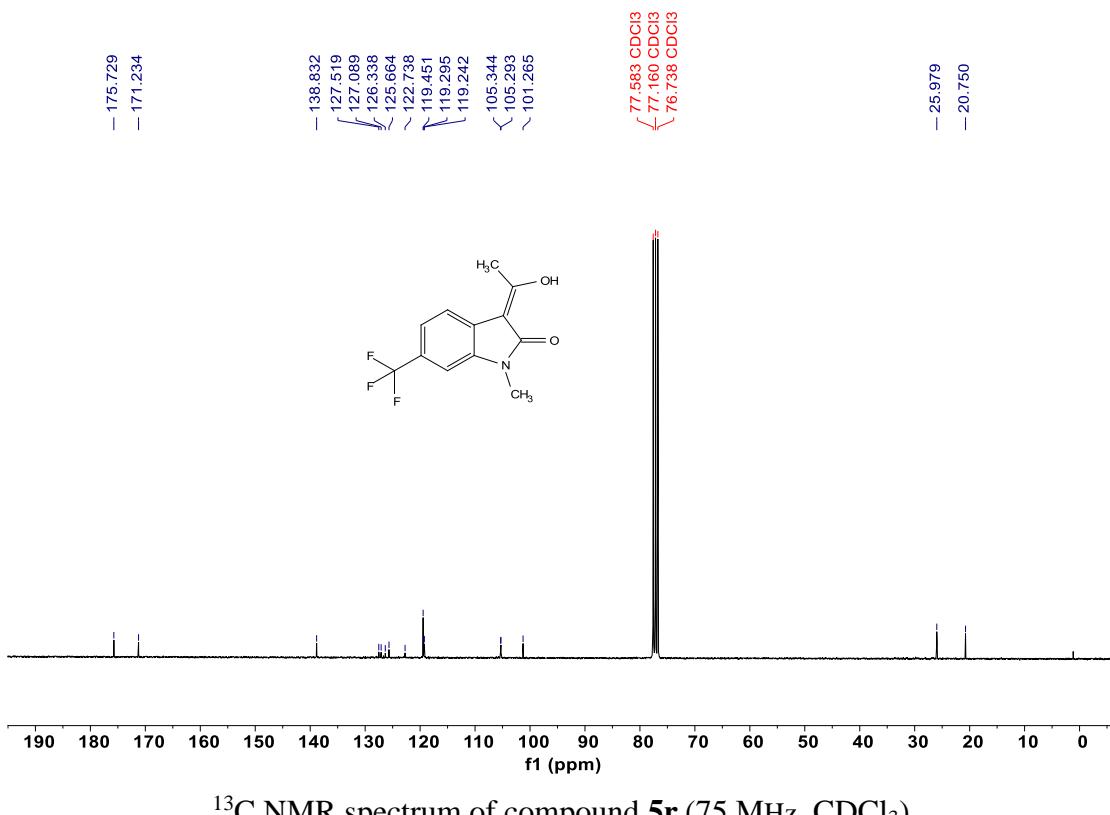
<sup>1</sup>H NMR spectrum of compound **5q** (300 MHz, CDCl<sub>3</sub>)

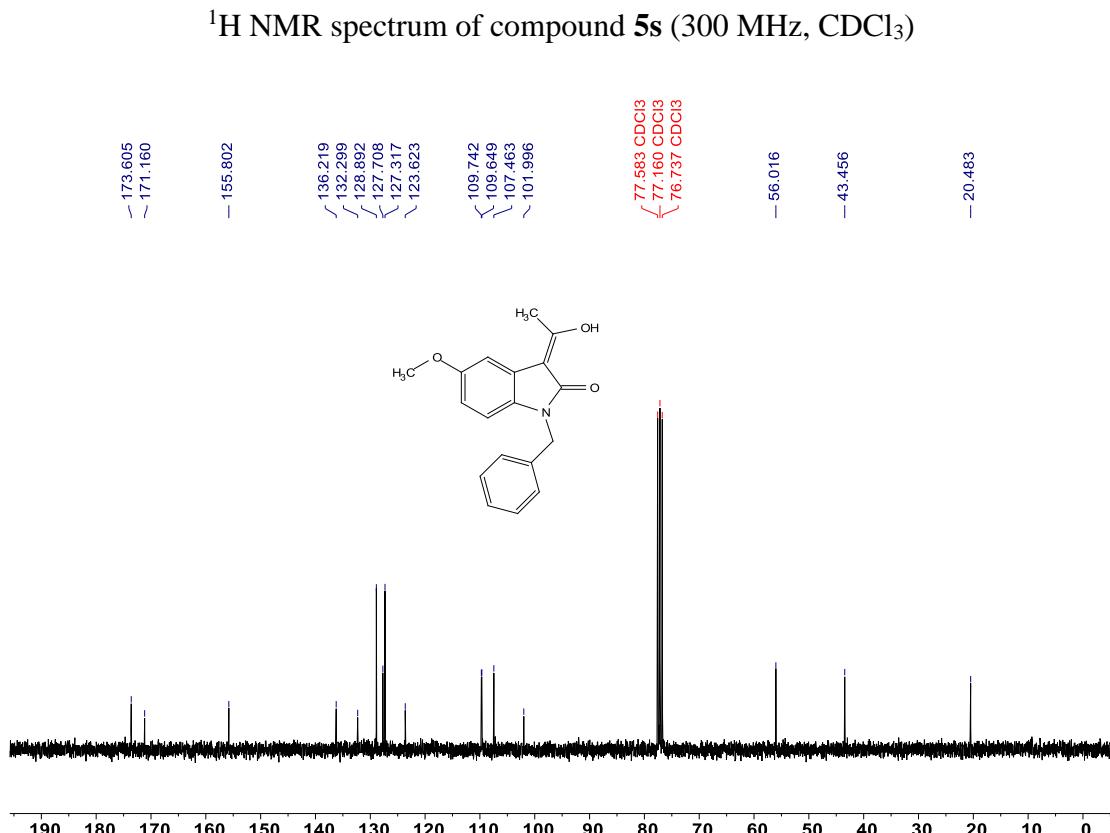
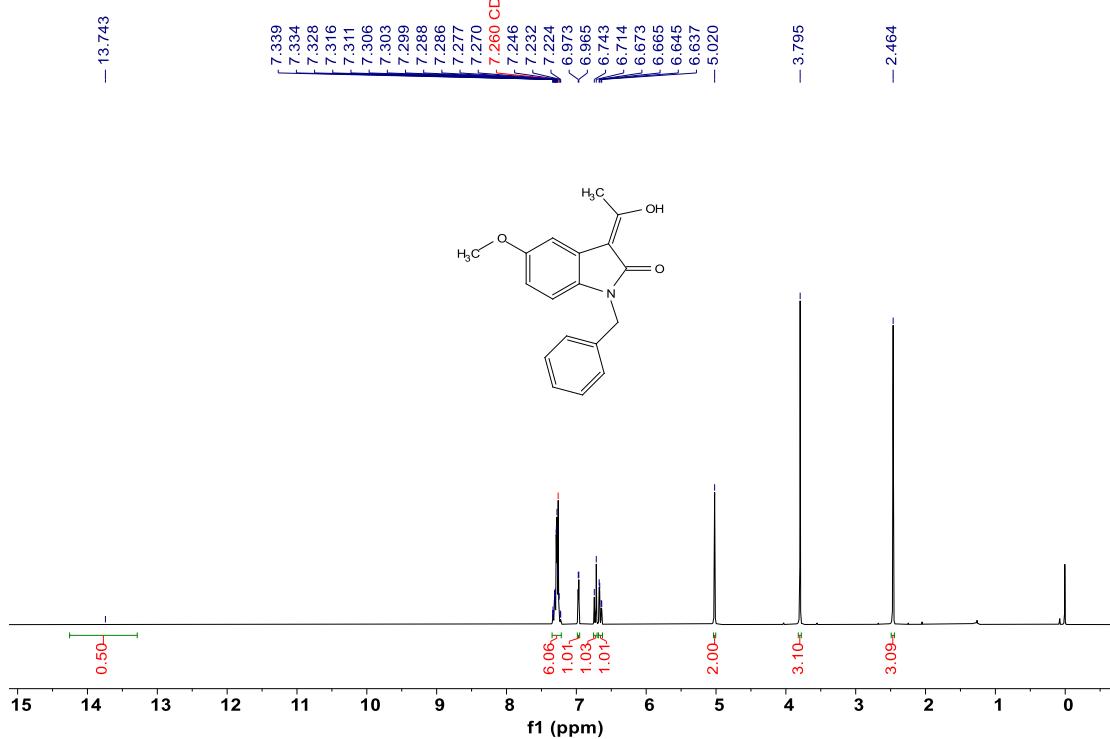


<sup>13</sup>C NMR spectrum of compound **5q** (75 MHz, CDCl<sub>3</sub>)



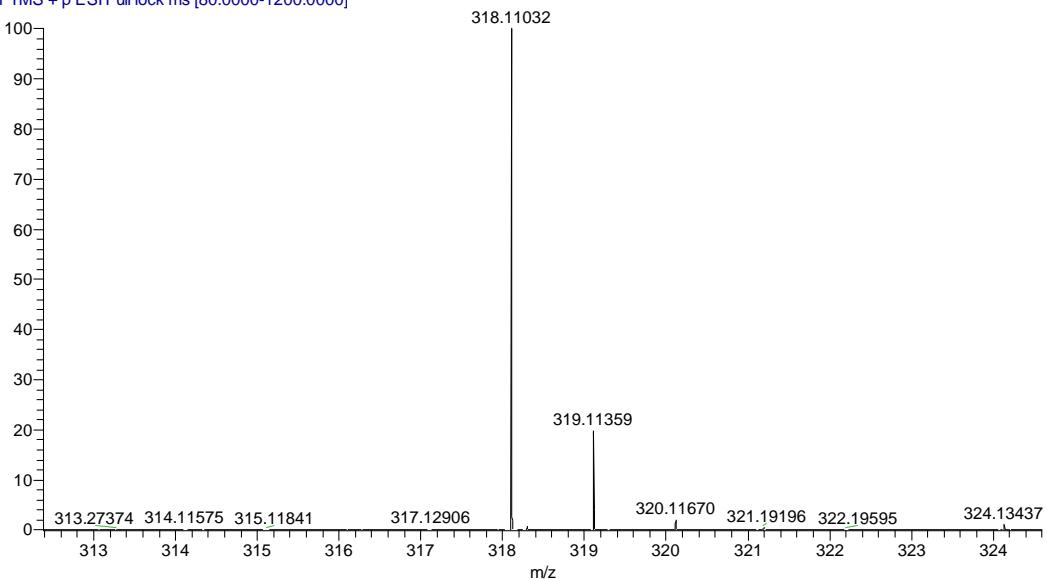
<sup>1</sup>H NMR spectrum of compound **5r** (300 MHz, CDCl<sub>3</sub>)



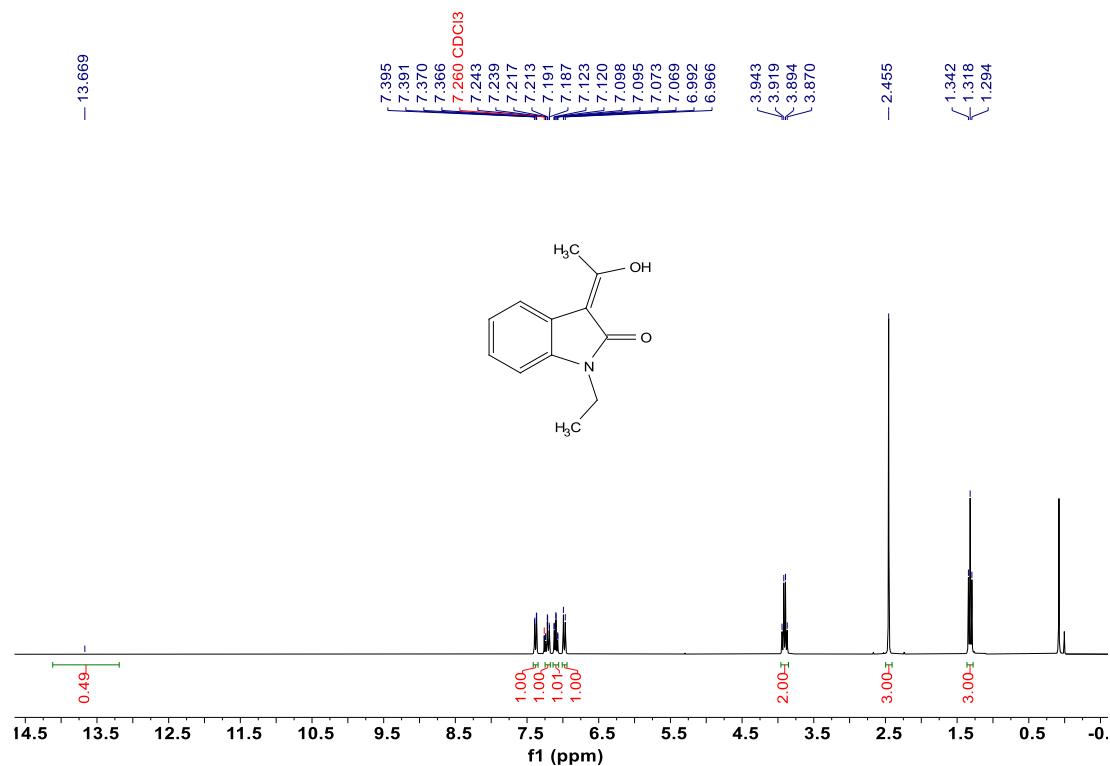


<sup>13</sup>C NMR spectrum of compound **5s** (75 MHz, CDCl<sub>3</sub>)

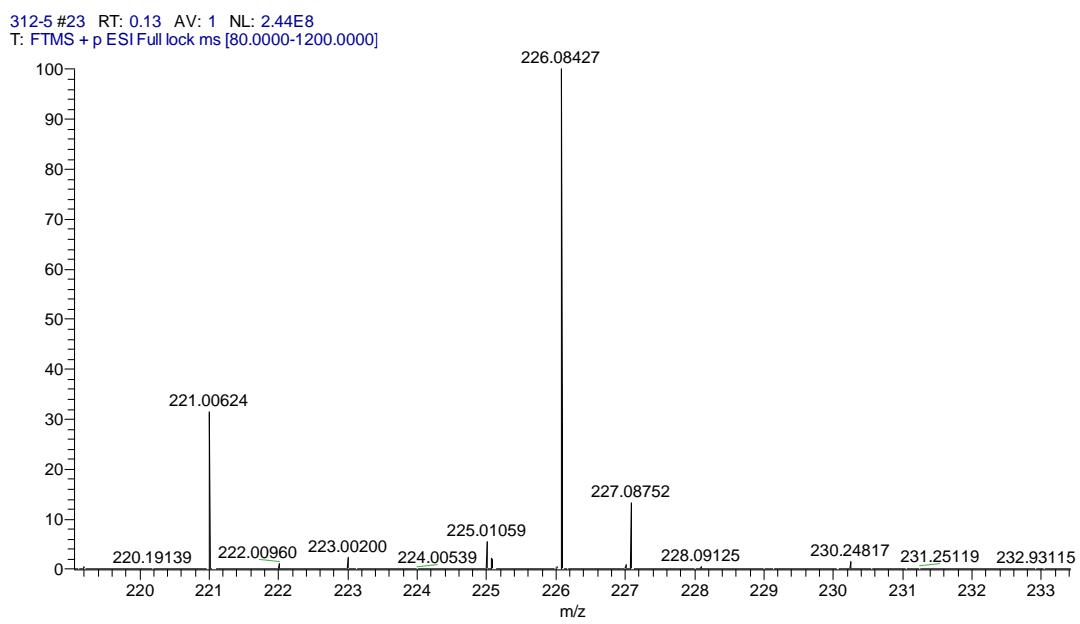
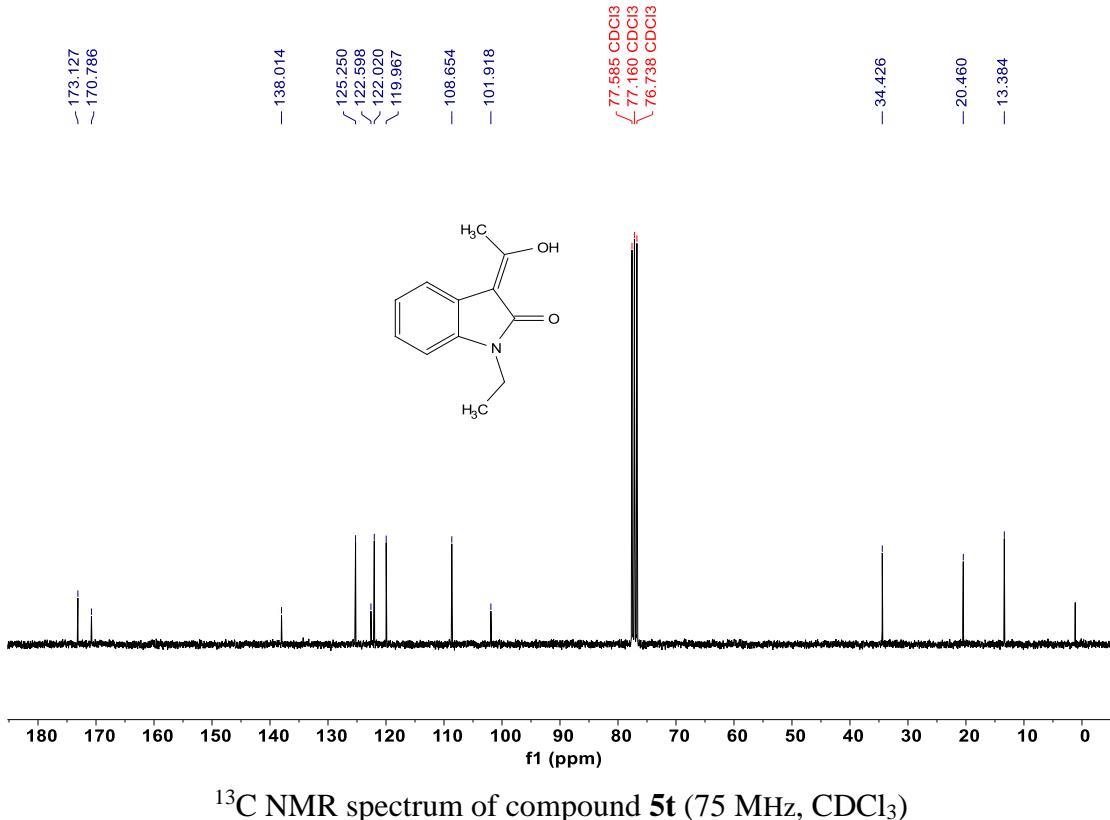
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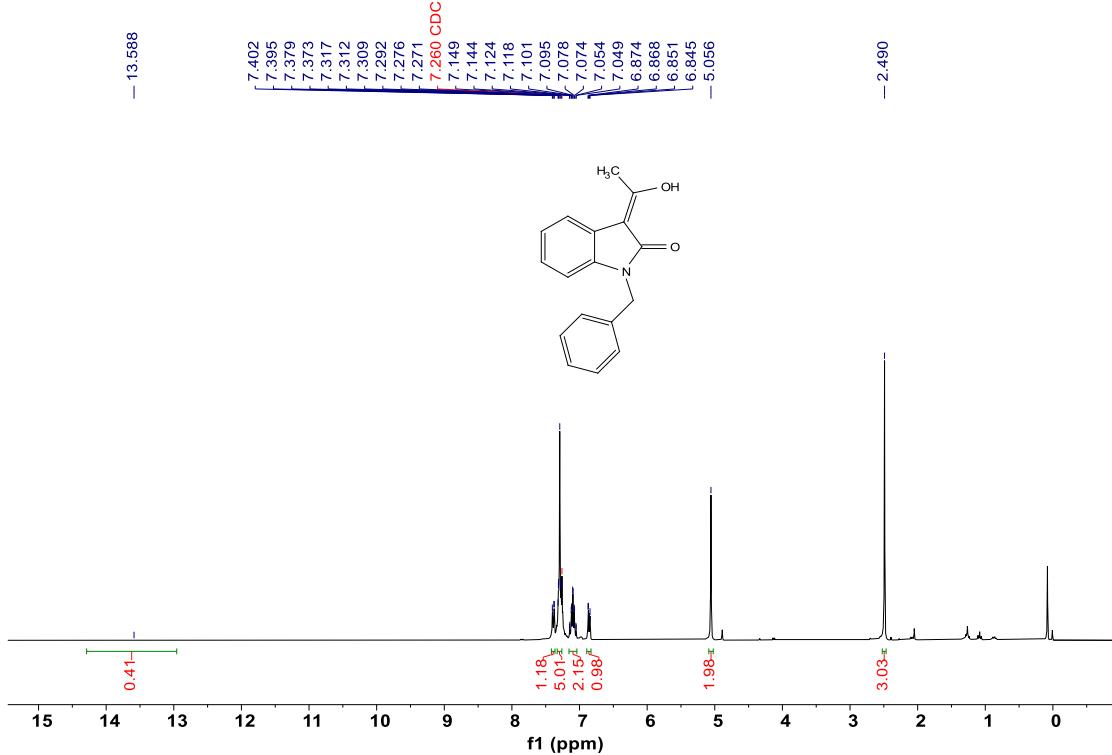
HRMS(ESI) of compound **5s**



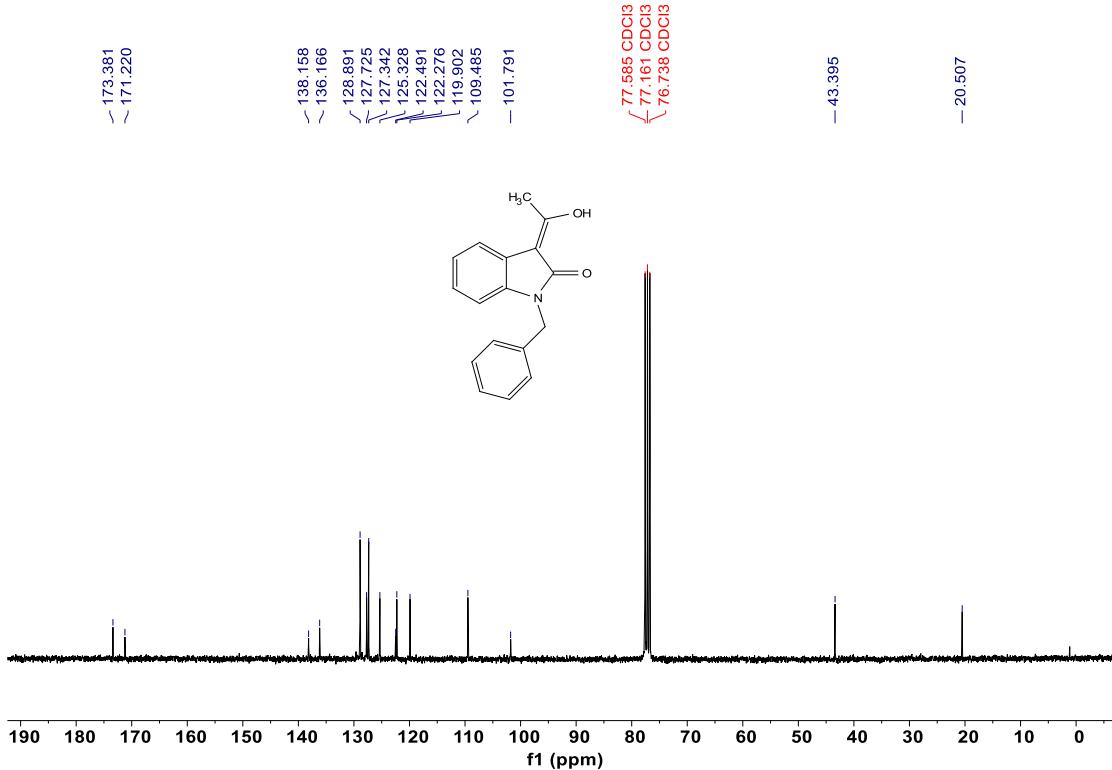
<sup>1</sup>H NMR spectrum of compound **5t** (300 MHz, CDCl<sub>3</sub>)



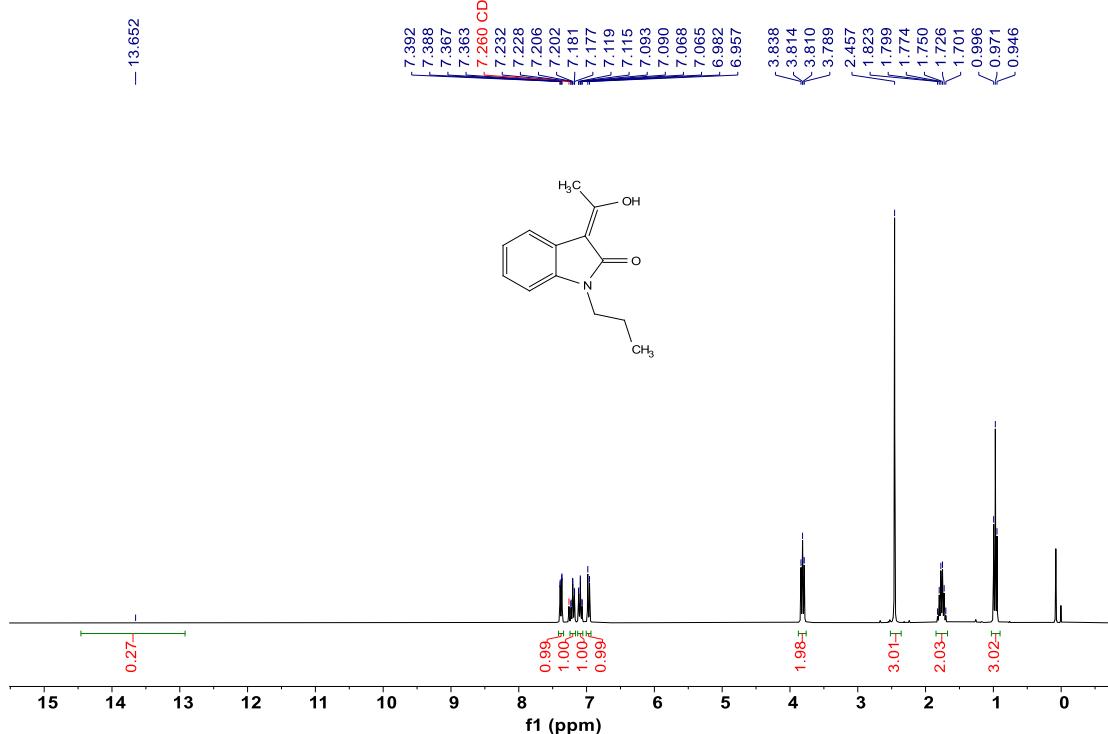
HRMS(ESI) of compound **5t**



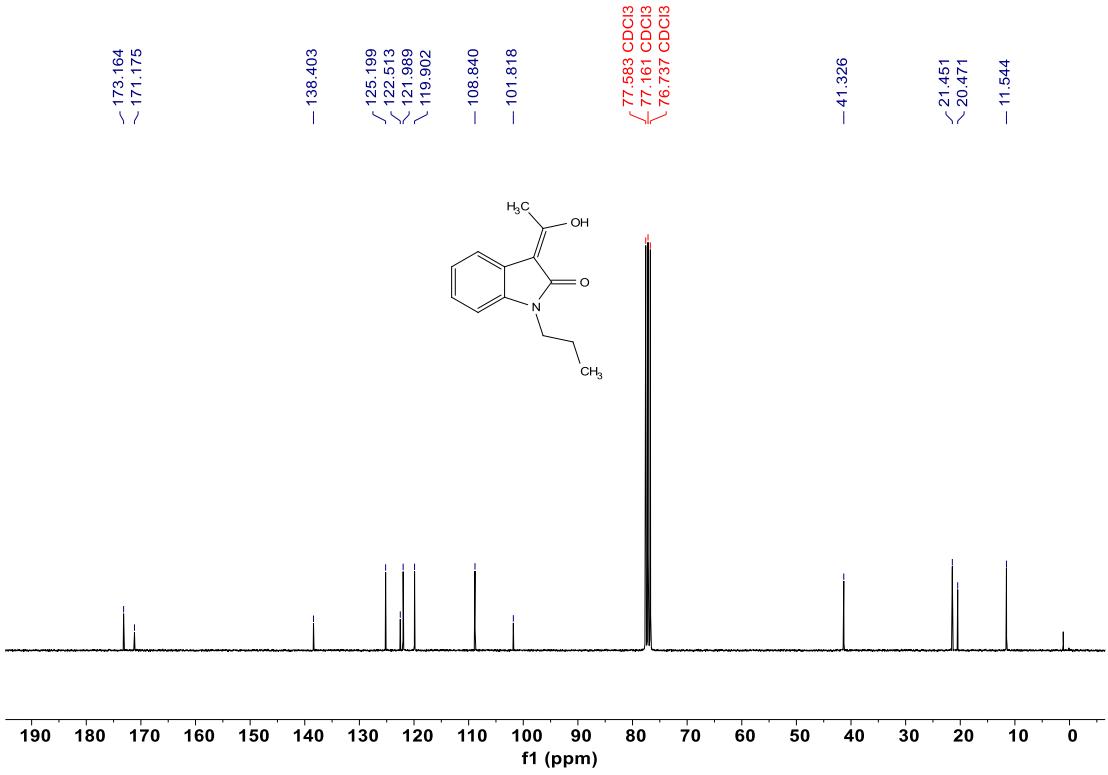
<sup>1</sup>H NMR spectrum of compound **5u** (300 MHz, CDCl<sub>3</sub>)



<sup>13</sup>C NMR spectrum of compound **5u** (75 MHz, CDCl<sub>3</sub>)

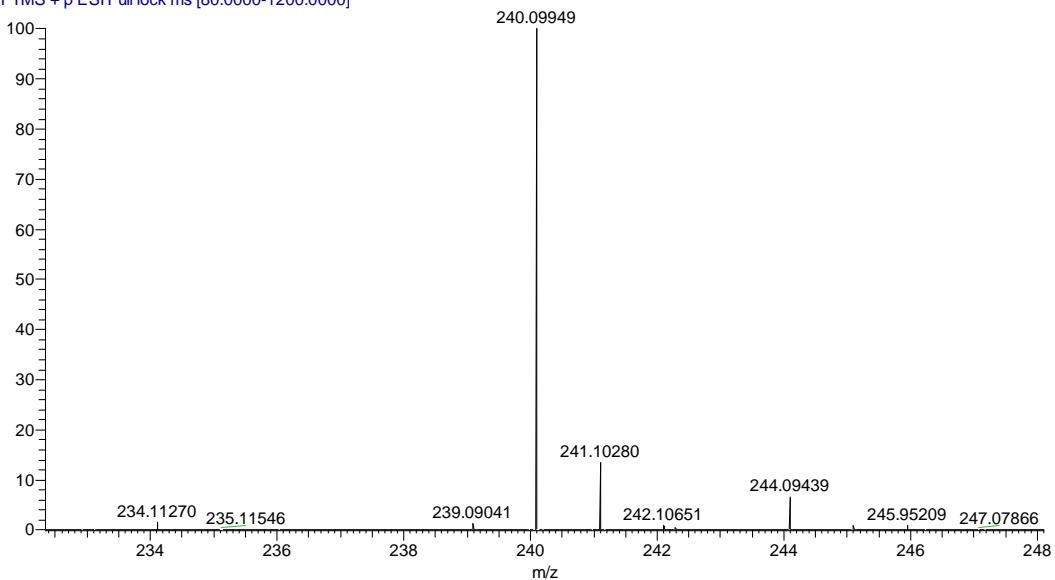


<sup>1</sup>H NMR spectrum of compound 5v (300 MHz, CDCl<sub>3</sub>)

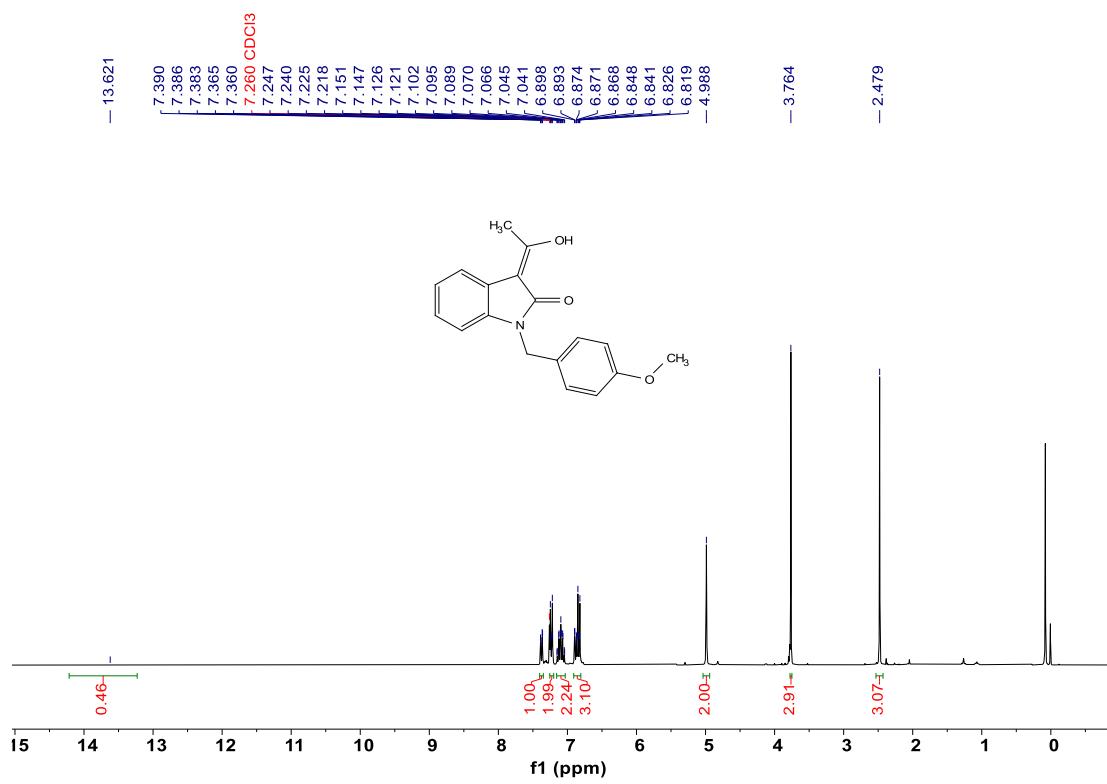


<sup>13</sup>C NMR spectrum of compound 5v (75 MHz, CDCl<sub>3</sub>)

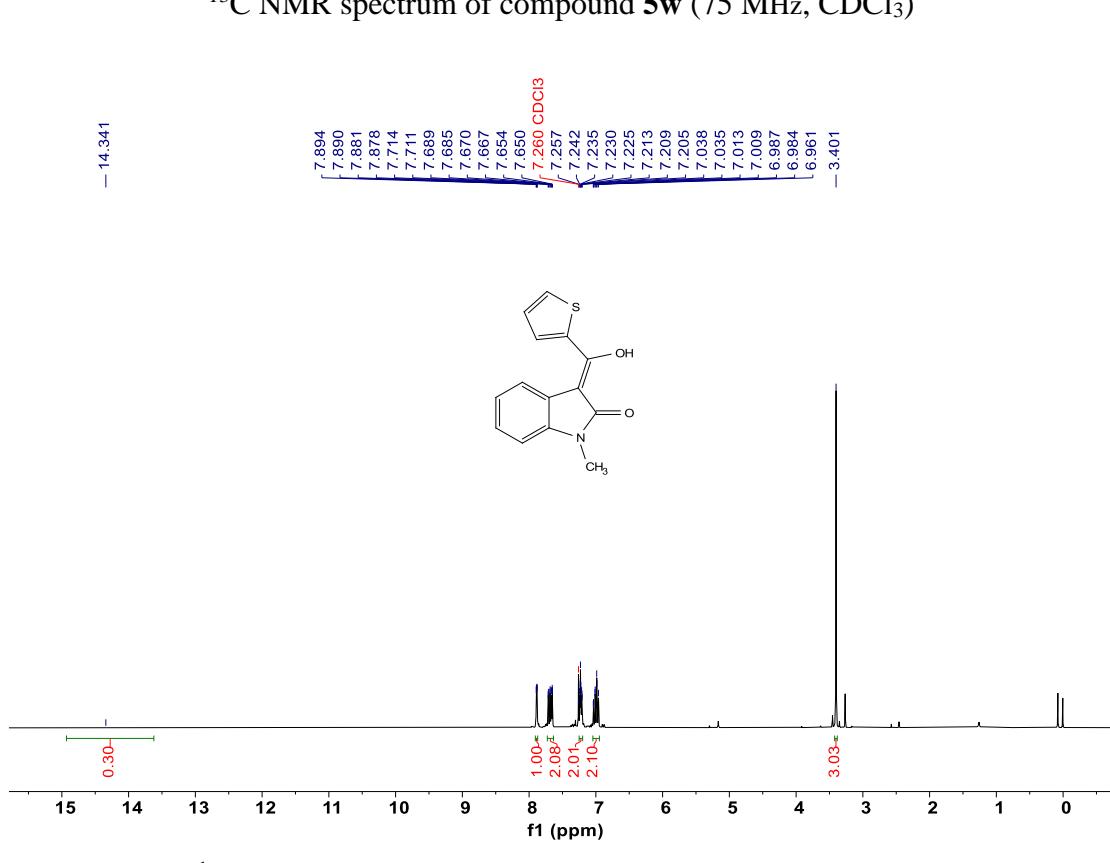
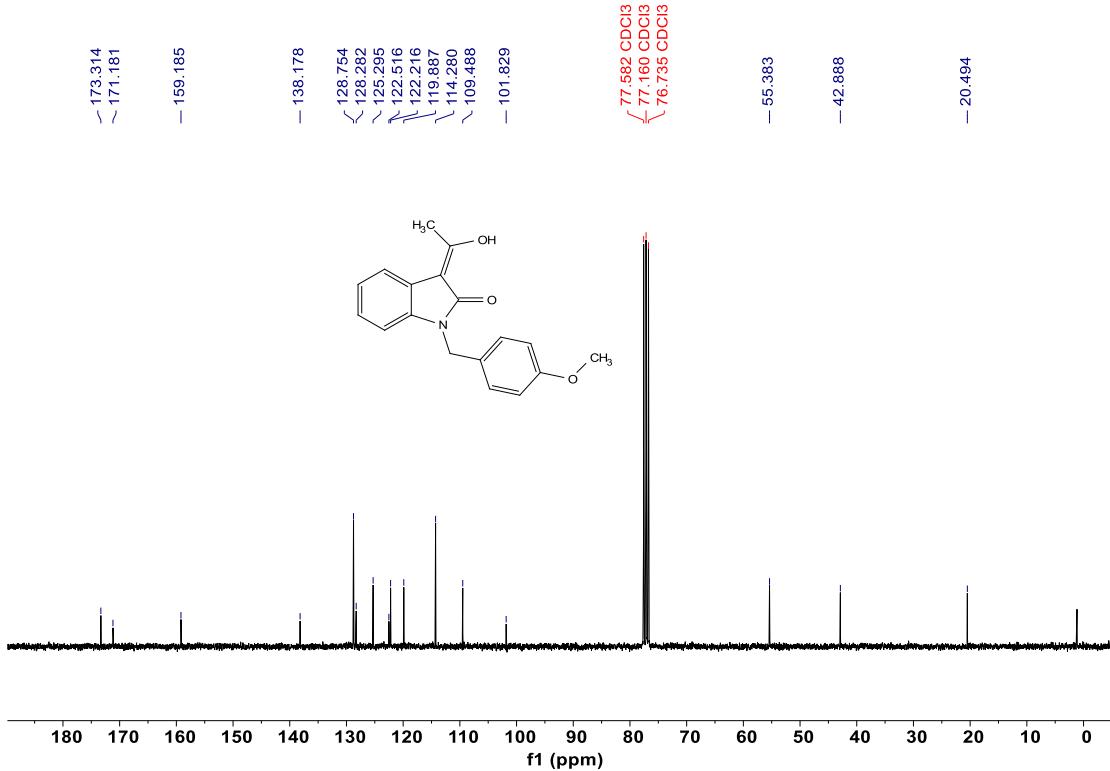
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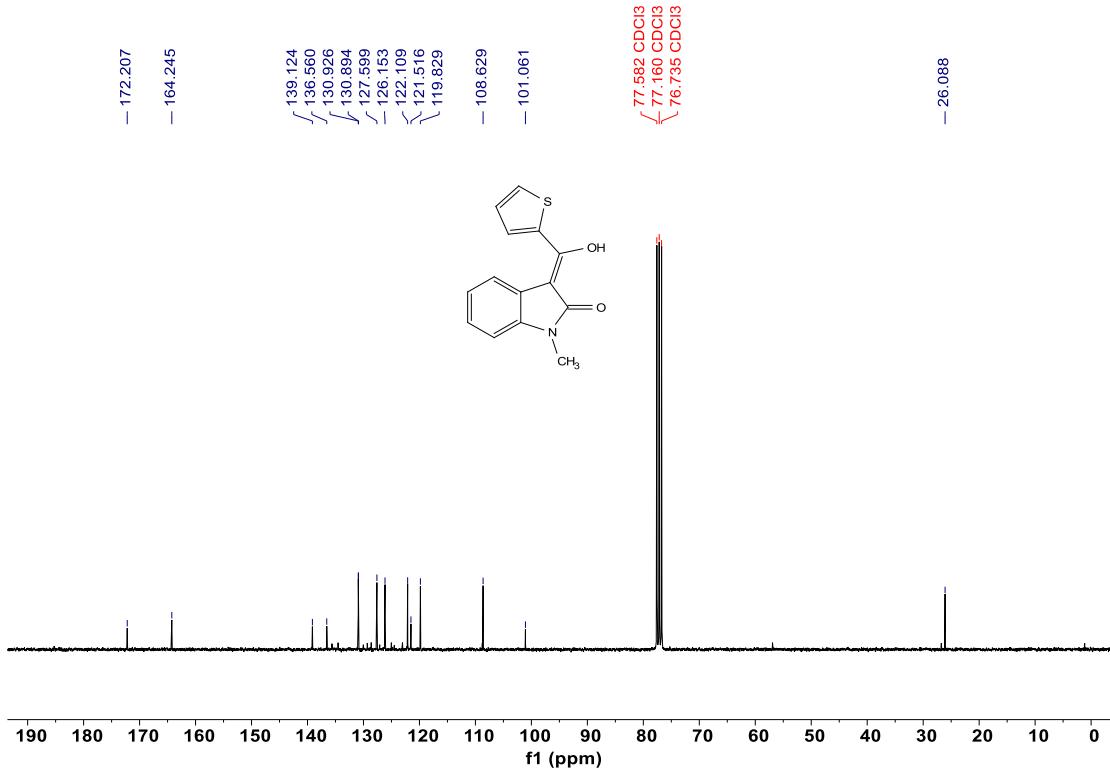


HRMS(ESI) of compound **5v**

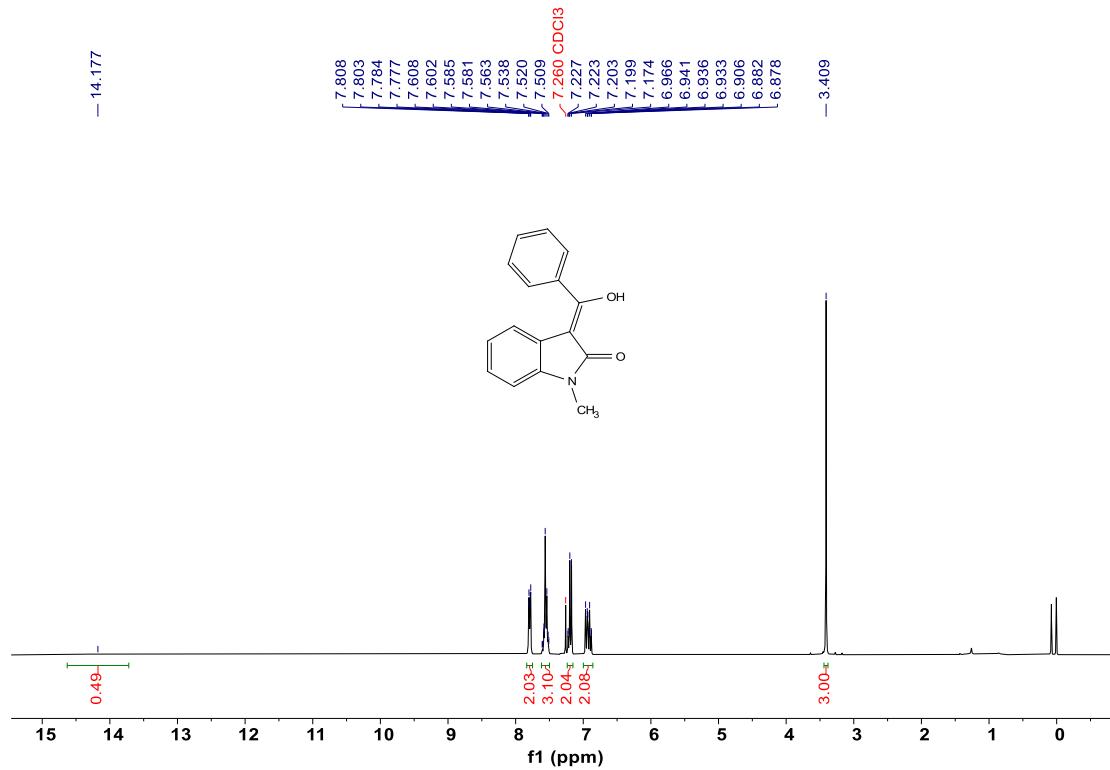


<sup>1</sup>H NMR spectrum of compound **5w** (300 MHz, CDCl<sub>3</sub>)

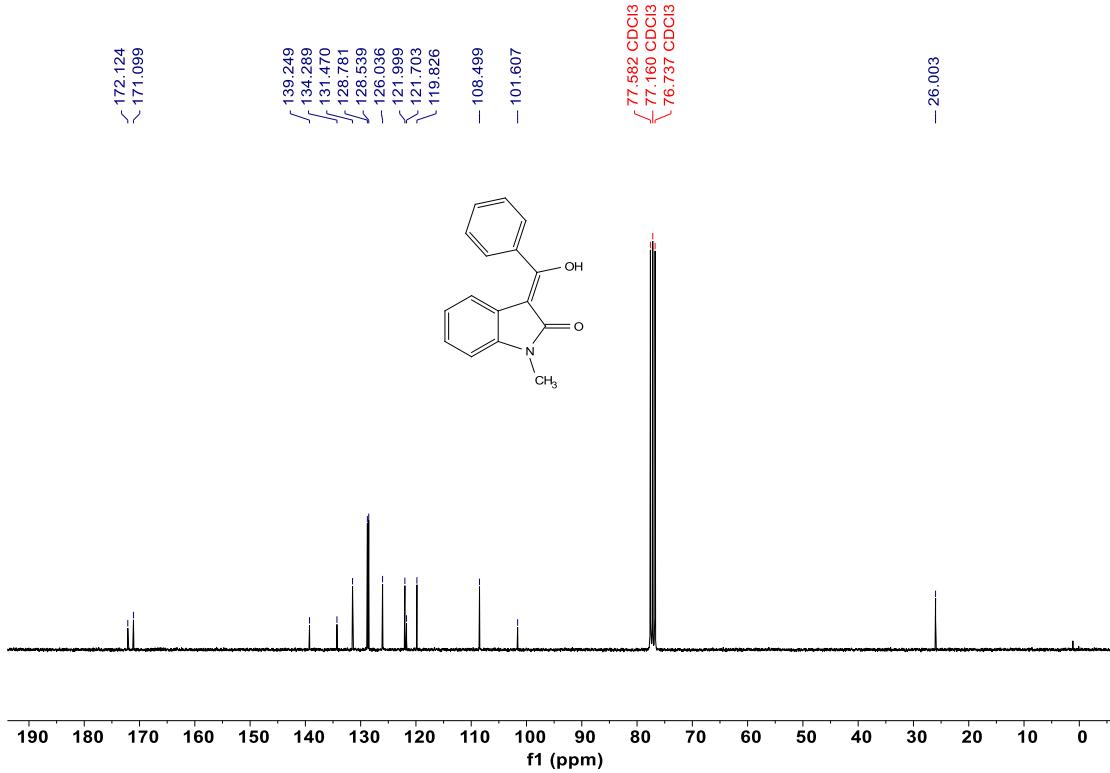




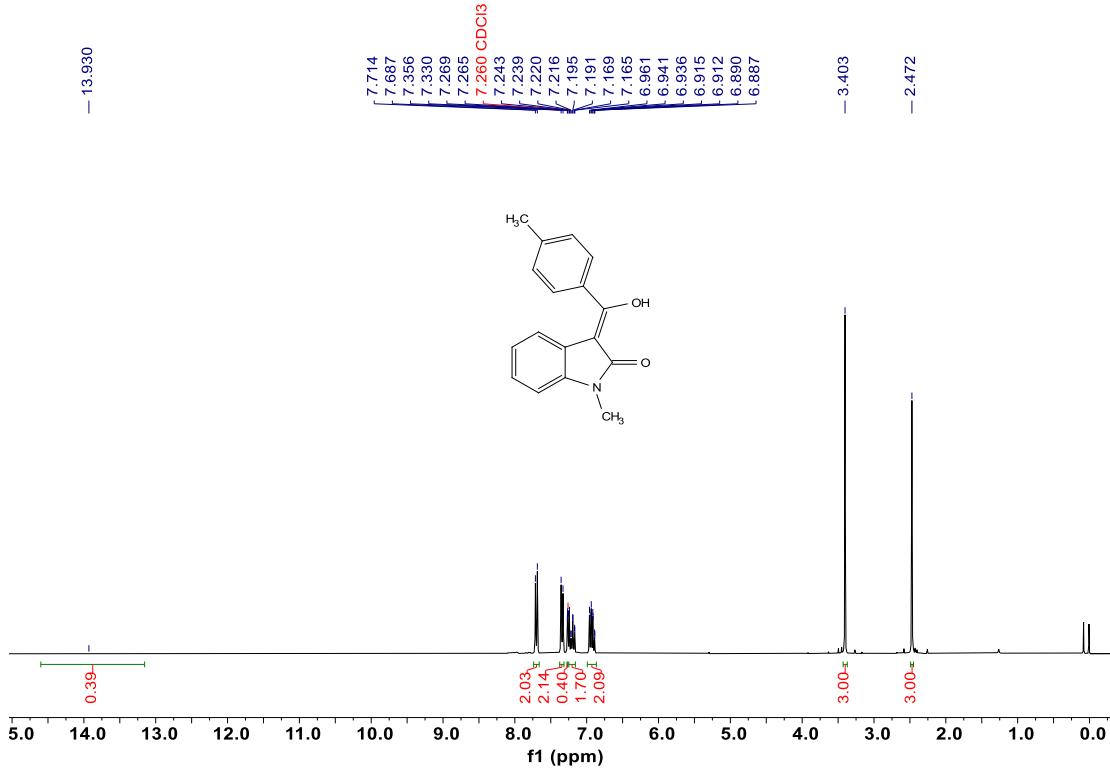
<sup>13</sup>C NMR spectrum of compound **10a** (75 MHz, CDCl<sub>3</sub>)



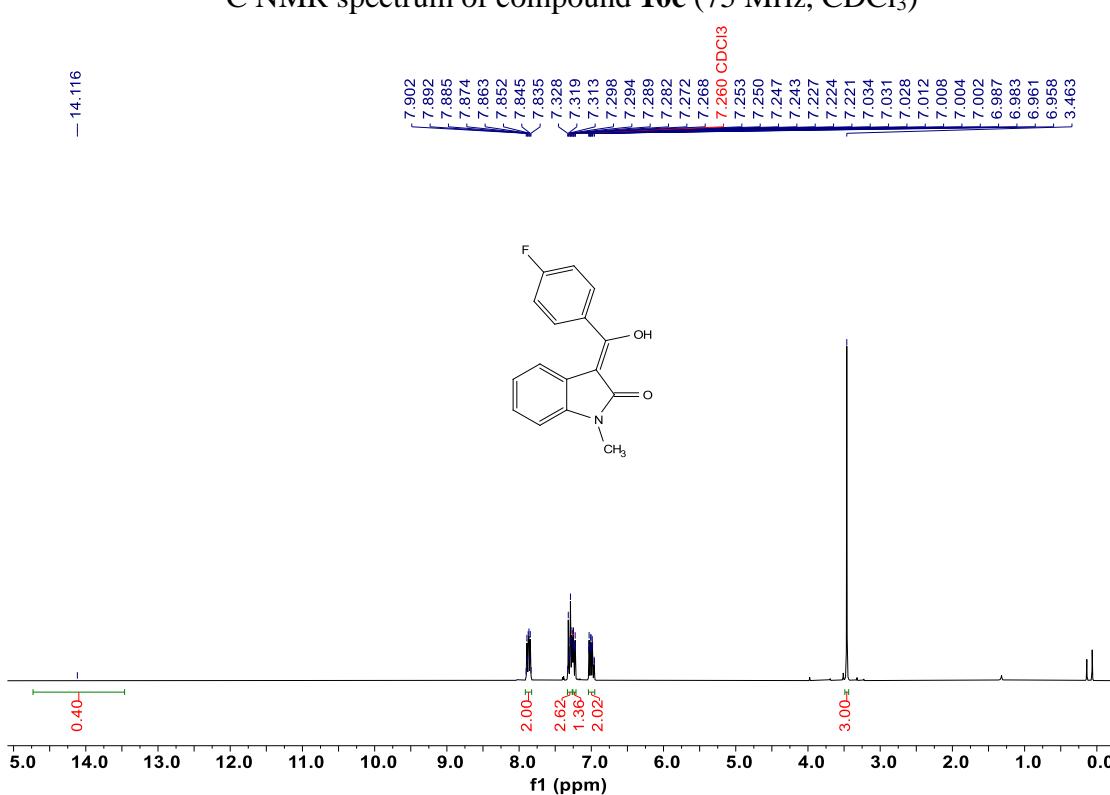
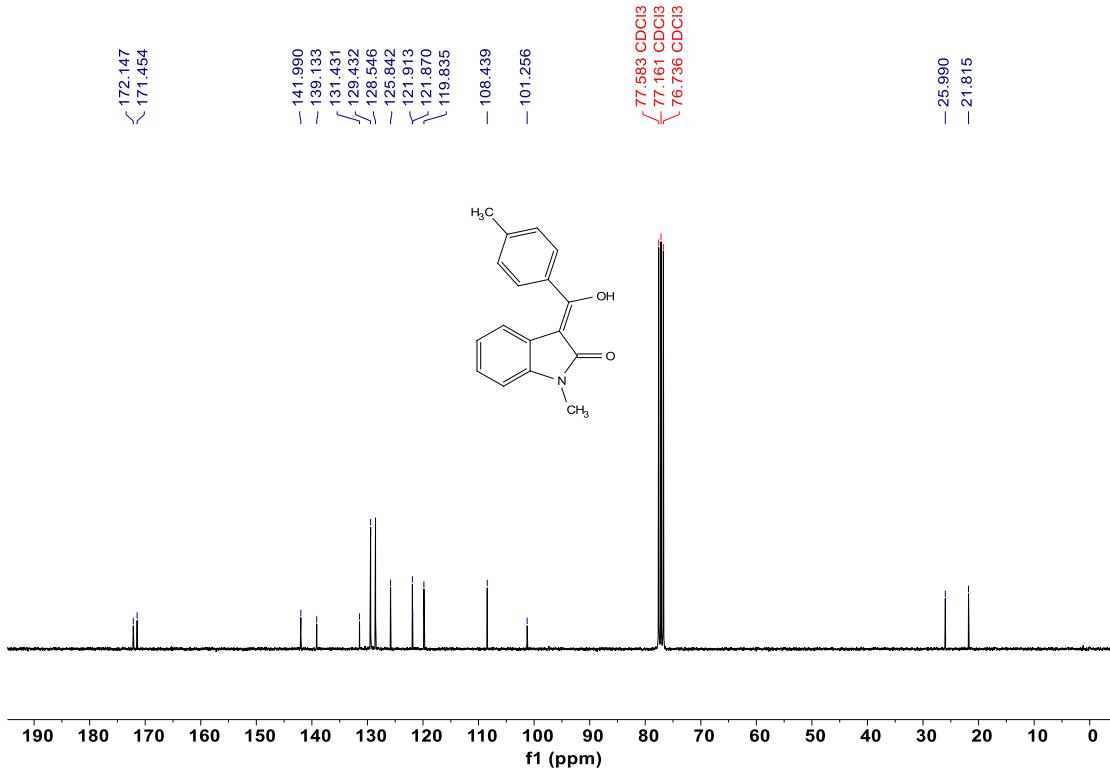
<sup>1</sup>H NMR spectrum of compound **10b** (300 MHz, CDCl<sub>3</sub>)

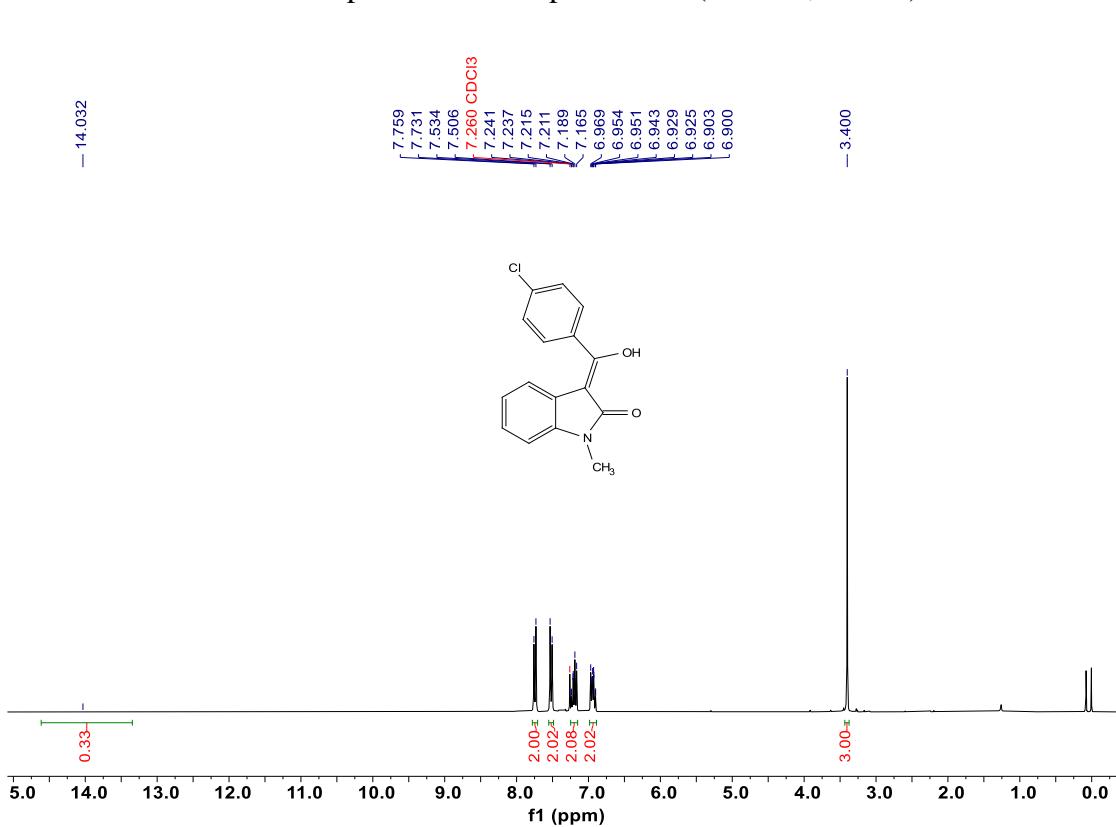
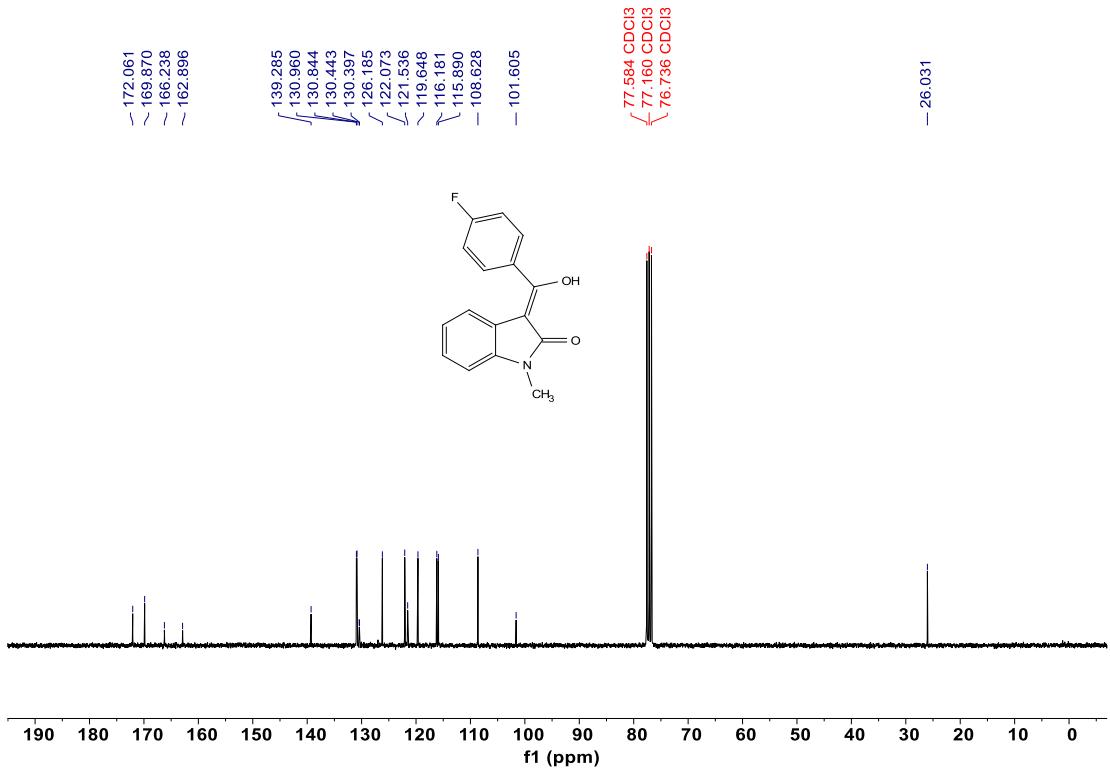


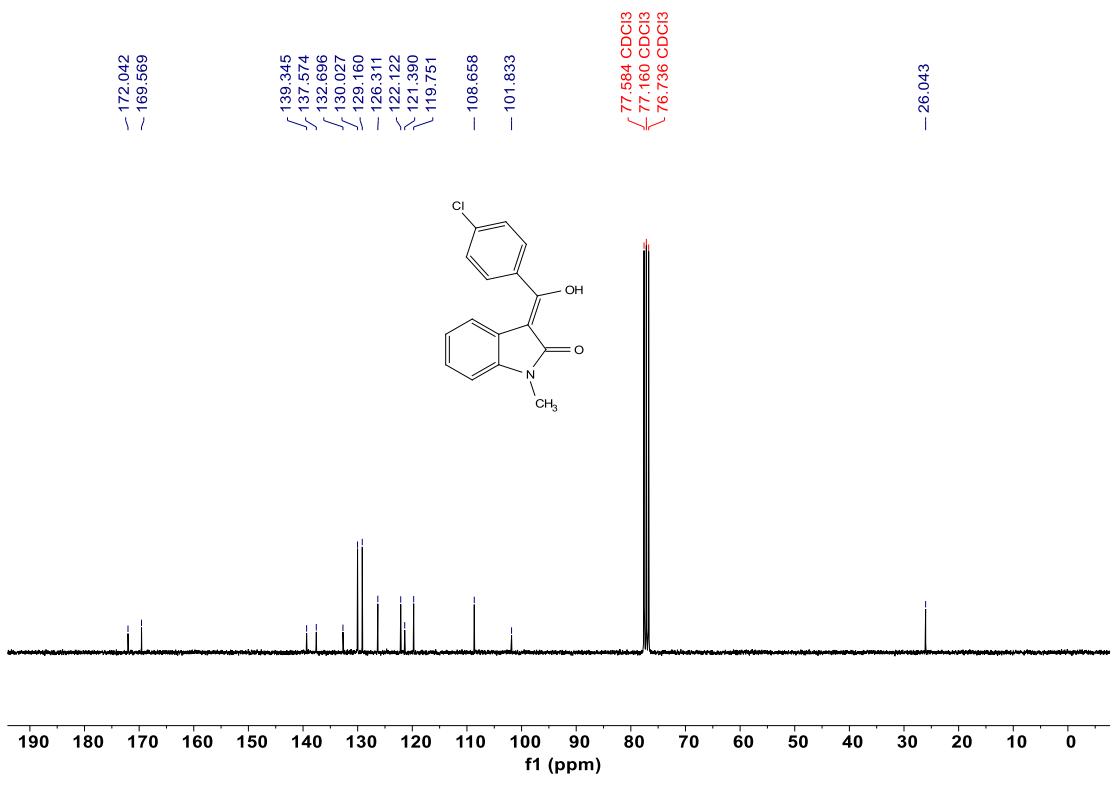
<sup>13</sup>C NMR spectrum of compound **10b** (75 MHz, CDCl<sub>3</sub>)



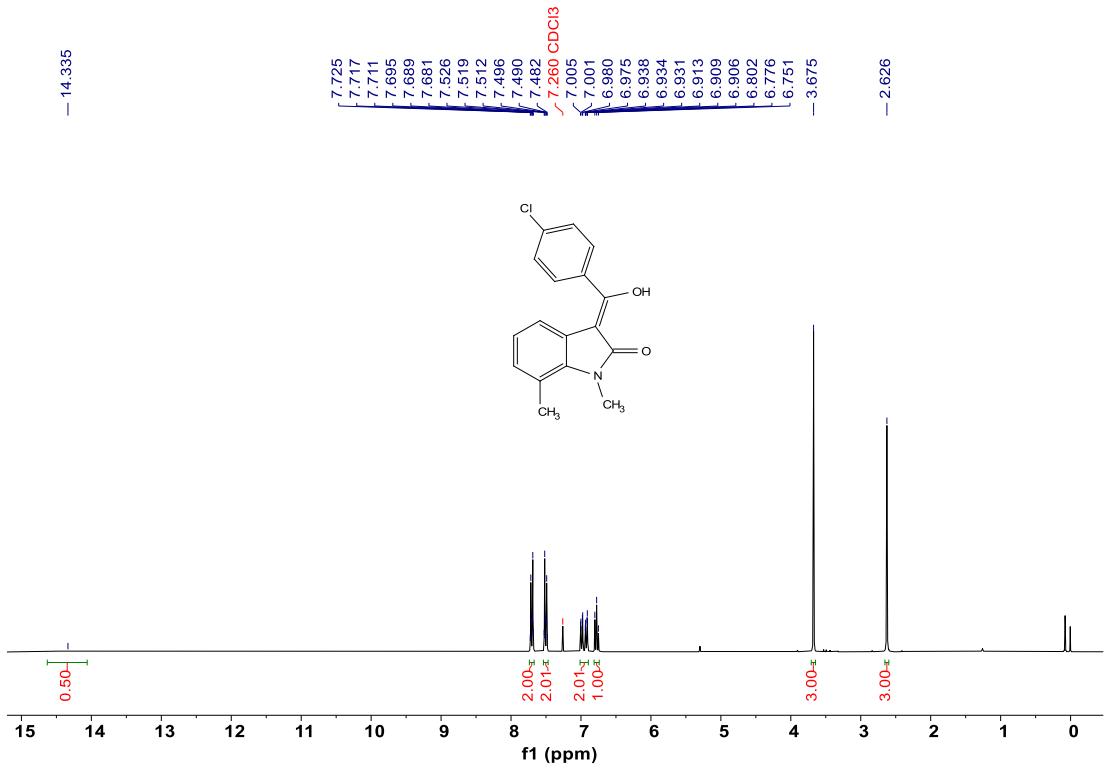
<sup>1</sup>H NMR spectrum of compound **10c** (300 MHz, CDCl<sub>3</sub>)



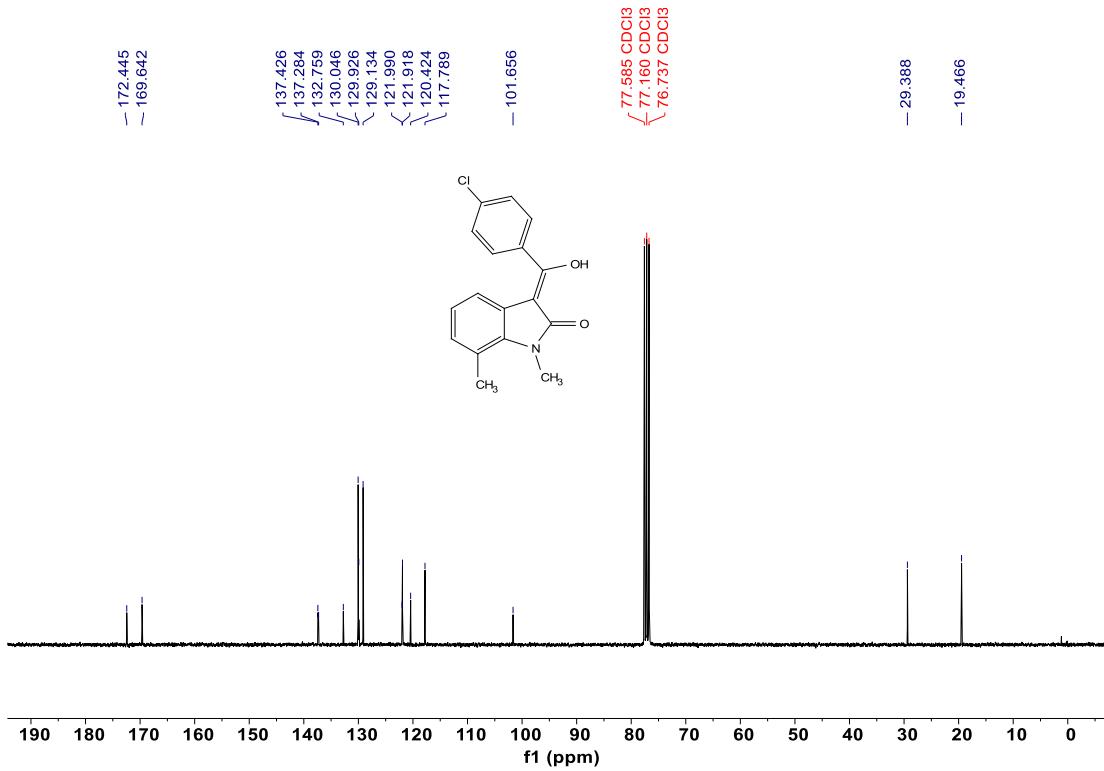




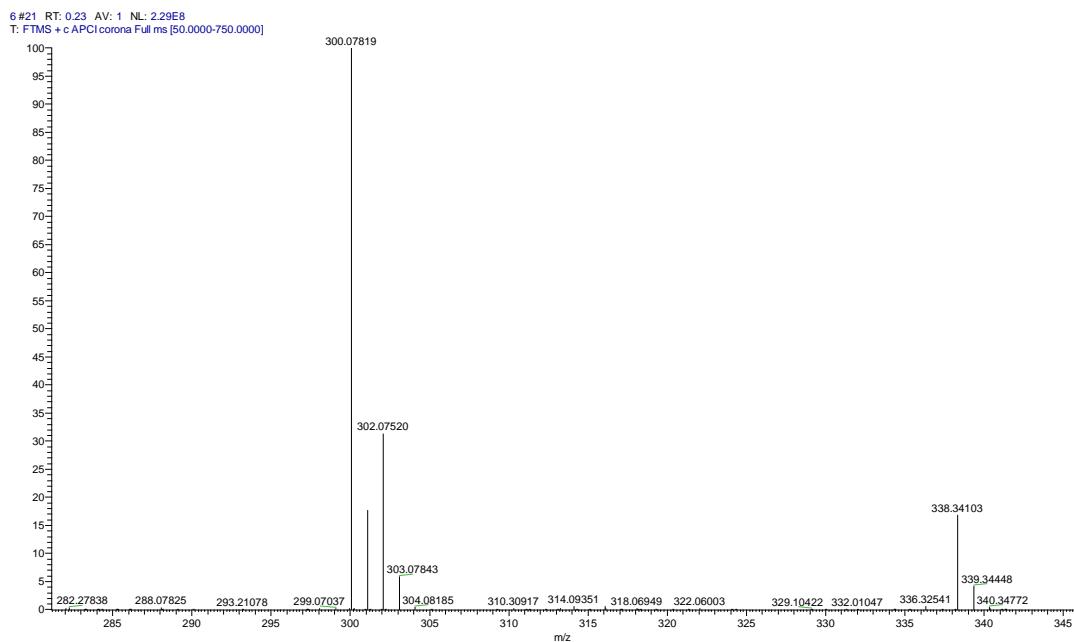
<sup>13</sup>C NMR spectrum of compound **10e** (75 MHz, CDCl<sub>3</sub>)



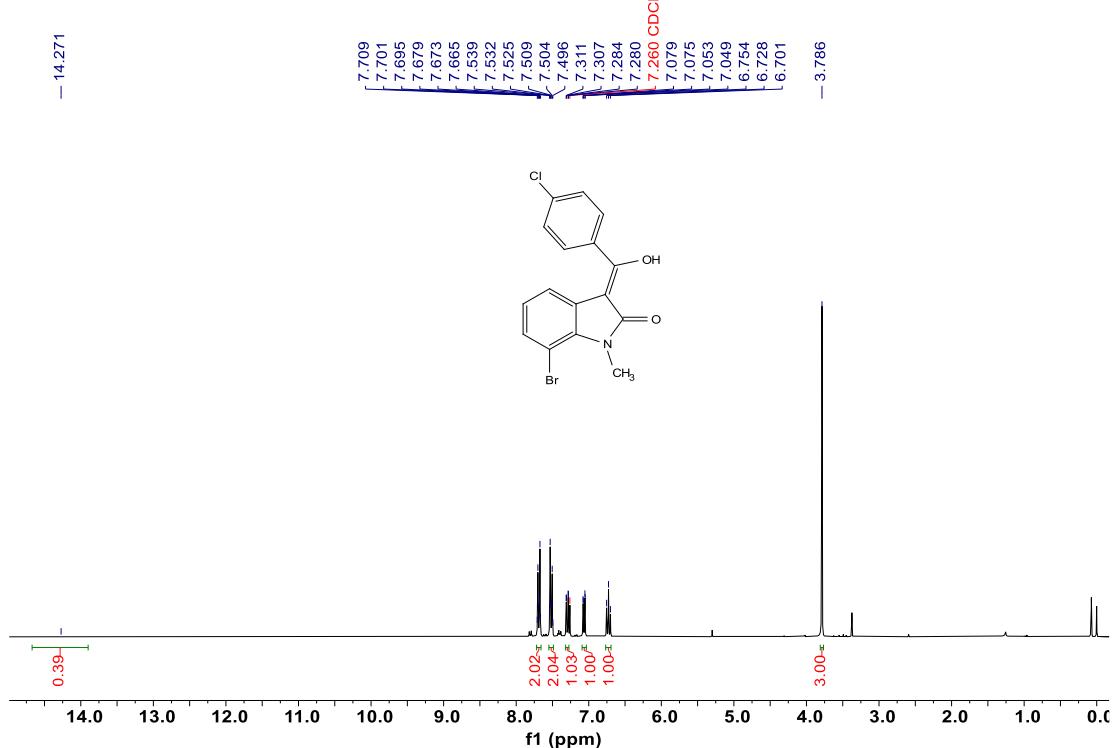
<sup>1</sup>H NMR spectrum of compound **10f** (300 MHz, CDCl<sub>3</sub>)



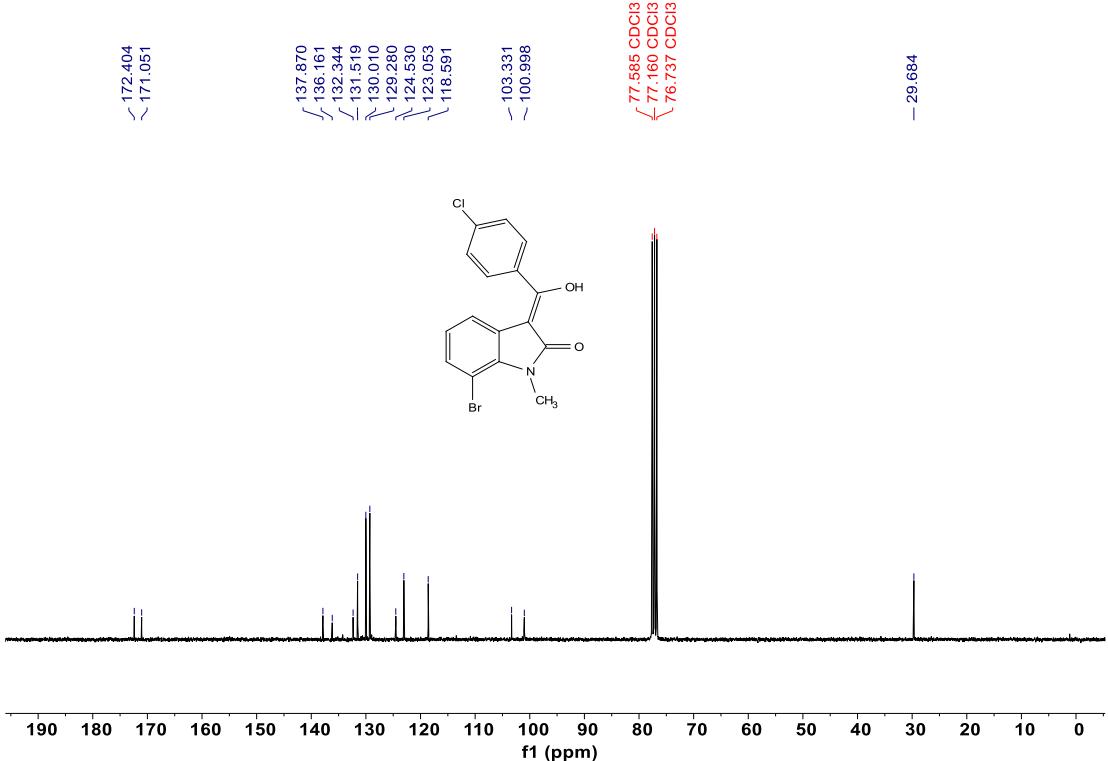
$^{13}\text{C}$  NMR spectrum of compound **10f** (75 MHz,  $\text{CDCl}_3$ )



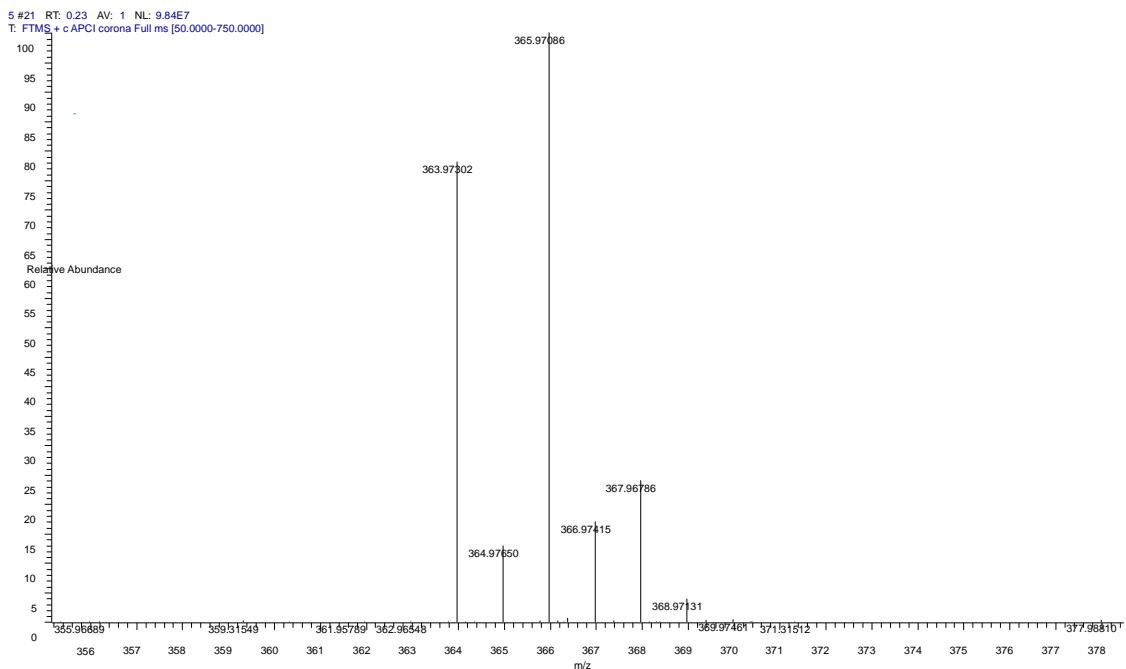
HRMS(APCI) of compound **10f**



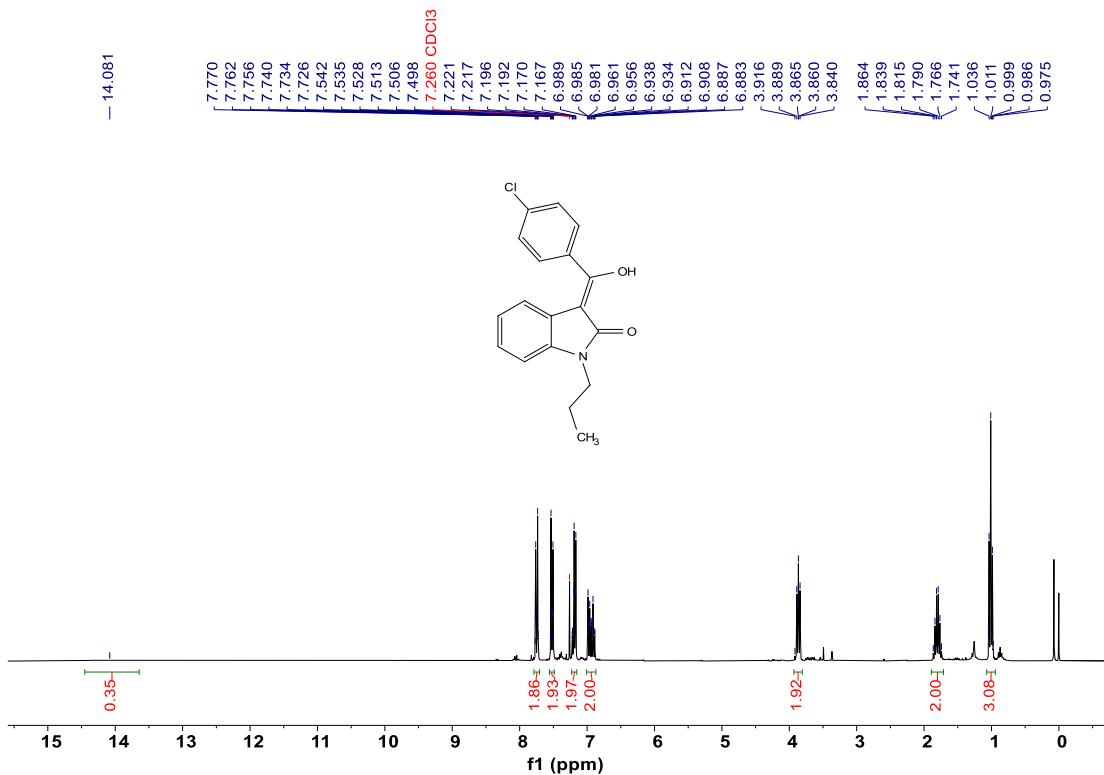
<sup>1</sup>H NMR spectrum of compound **10g** (300 MHz, CDCl<sub>3</sub>)



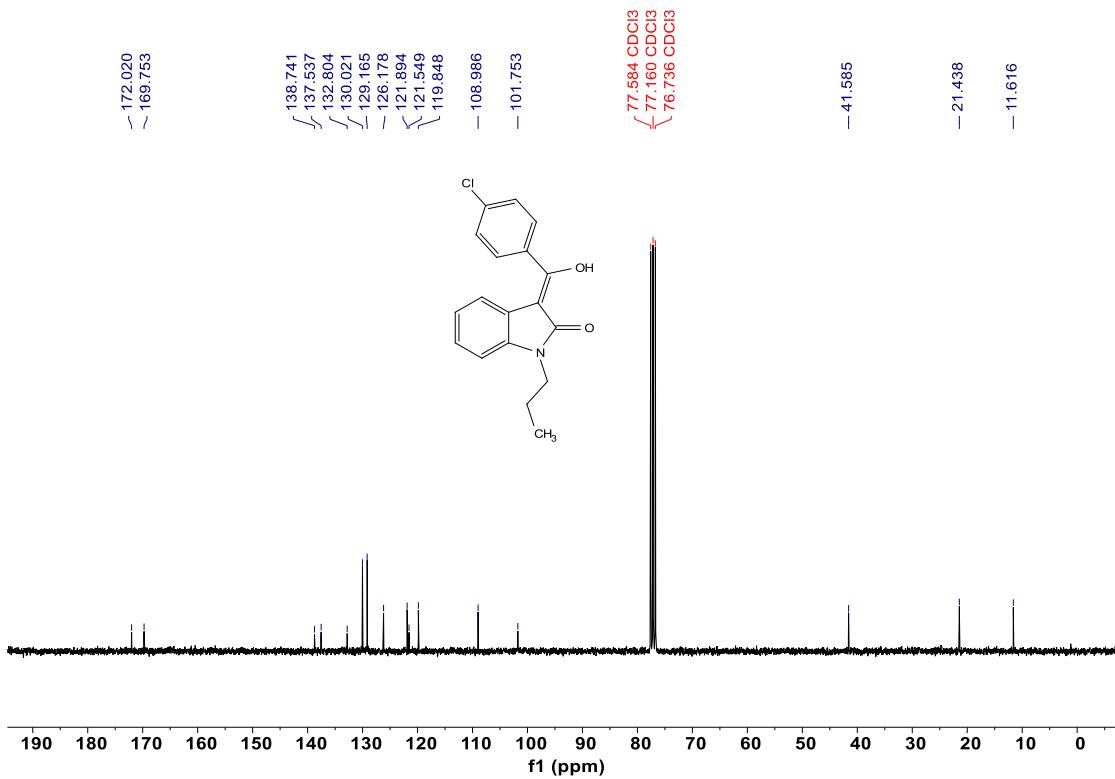
<sup>13</sup>C NMR spectrum of compound **10g** (75 MHz, CDCl<sub>3</sub>)



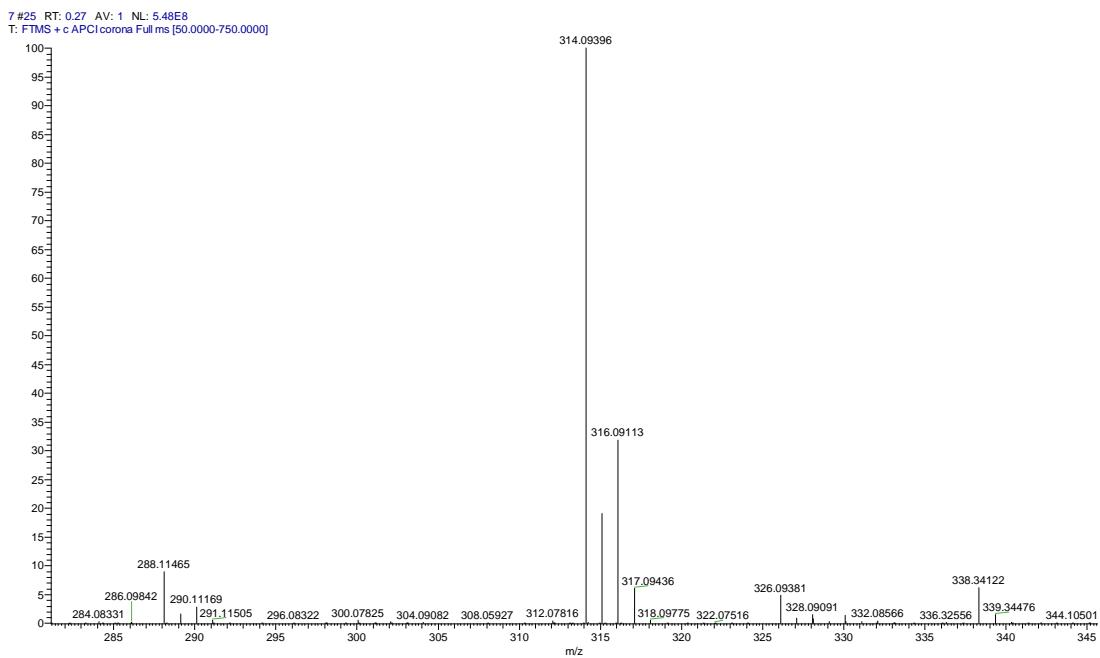
### HRMS(APCI) of compound **10g**



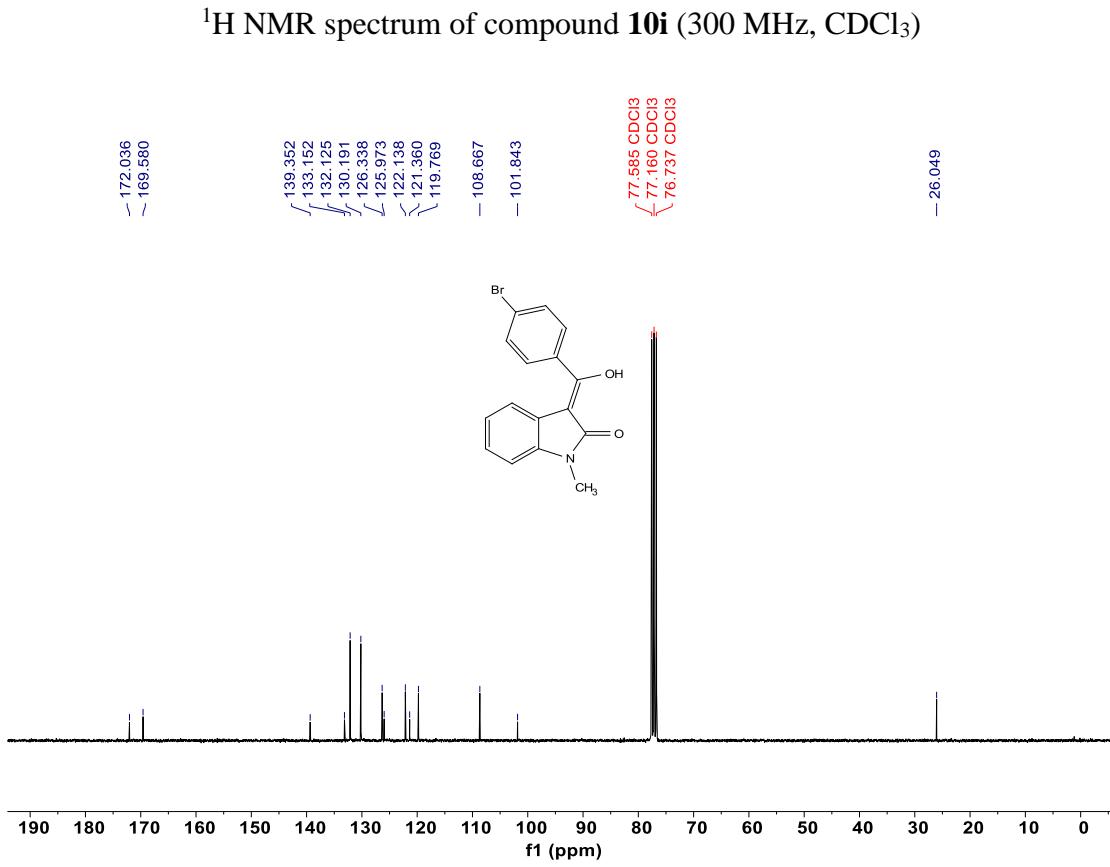
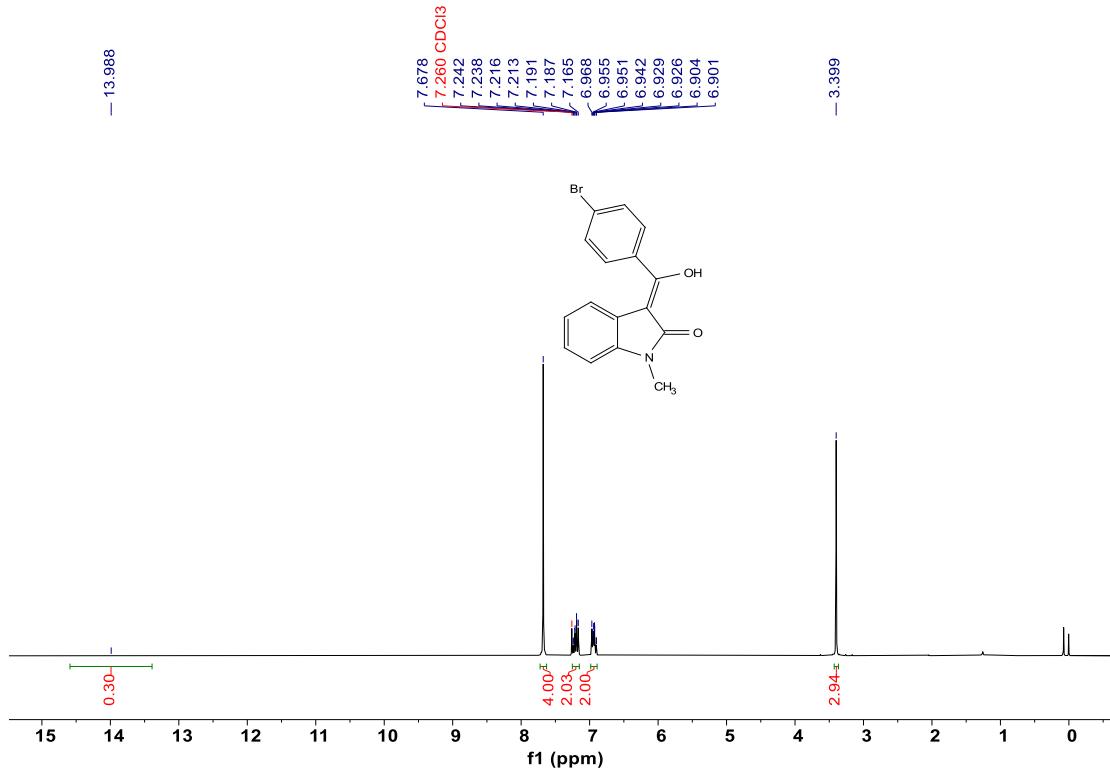
<sup>1</sup>H NMR spectrum of compound **10h** (300 MHz, CDCl<sub>3</sub>)

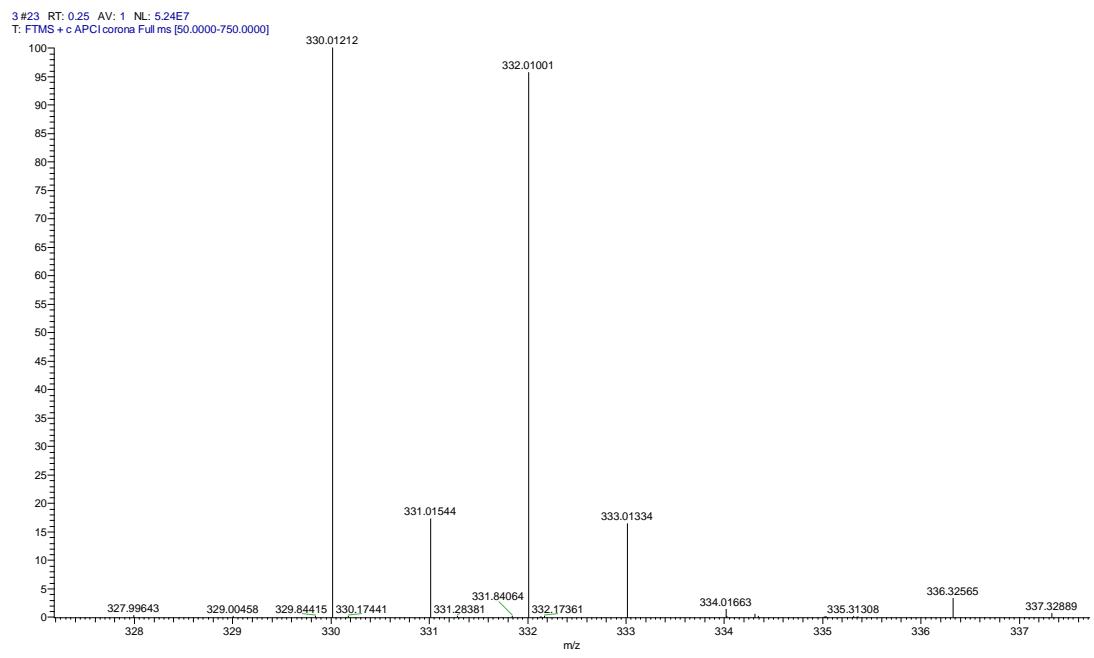


$^{13}\text{C}$  NMR spectrum of compound **10h** (75 MHz,  $\text{CDCl}_3$ )



HRMS(APCI) of compound **10h**





HRMS(APCI) of compound **10i**