

## Supplementary Material

### Synthesis of *N*-acyl-benzotriazole using Mukaiyama reagent

Rajesh K. Pandey,<sup>a,b</sup> Monika Gupta,<sup>b</sup> Chatrasal S. Rajput,<sup>\*a</sup> Anoop S. Singh<sup>\*a</sup>

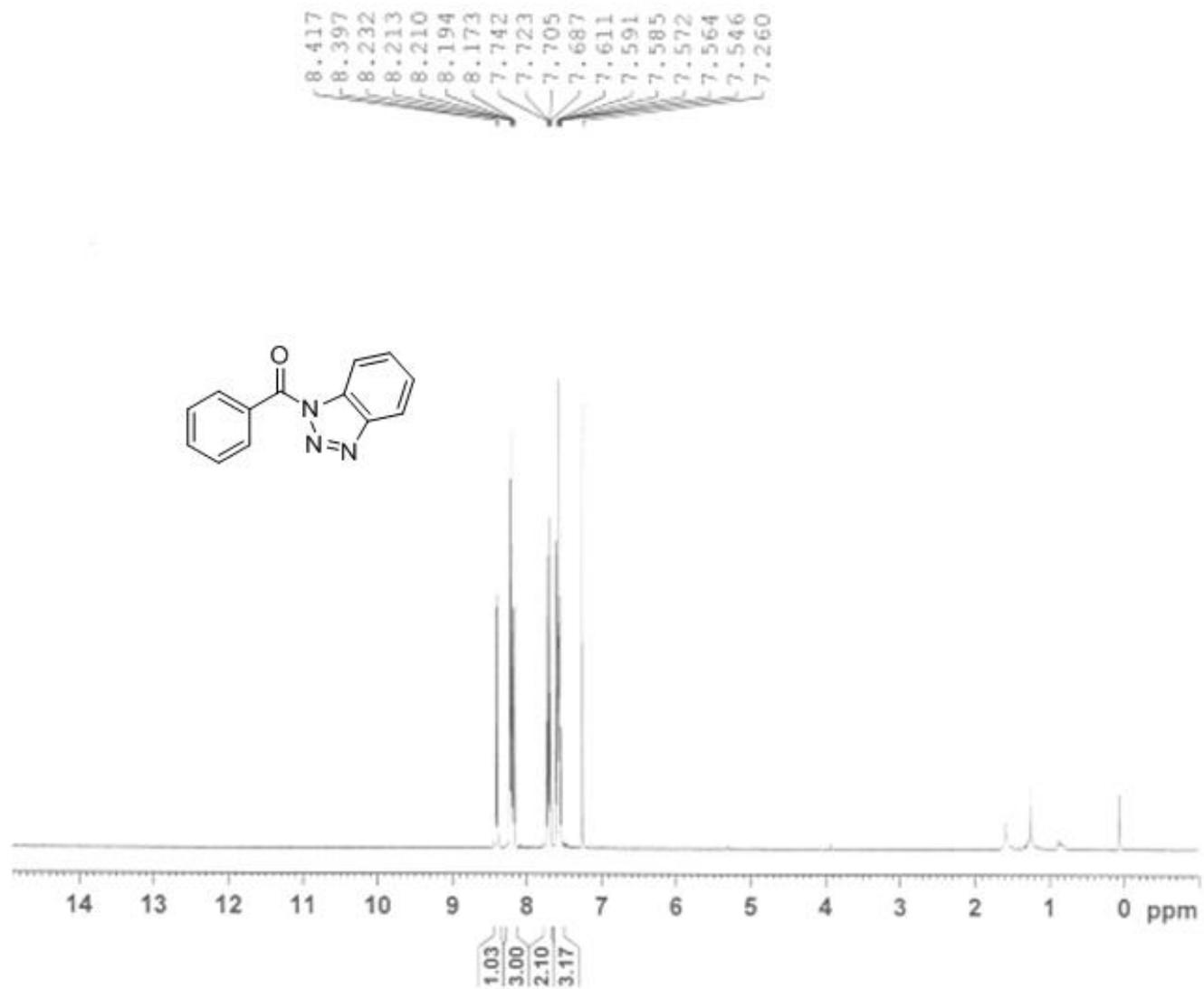
<sup>a</sup>*Chemistry Innovation Research Center, Jubilant Biosys Ltd, Greater Noida, Uttar Pradesh-201310, India*

<sup>b</sup>*School of Basic Sciences, Department of Chemistry, Babu Banarasi Das University, Lucknow, Uttar Pradesh-227015, India*

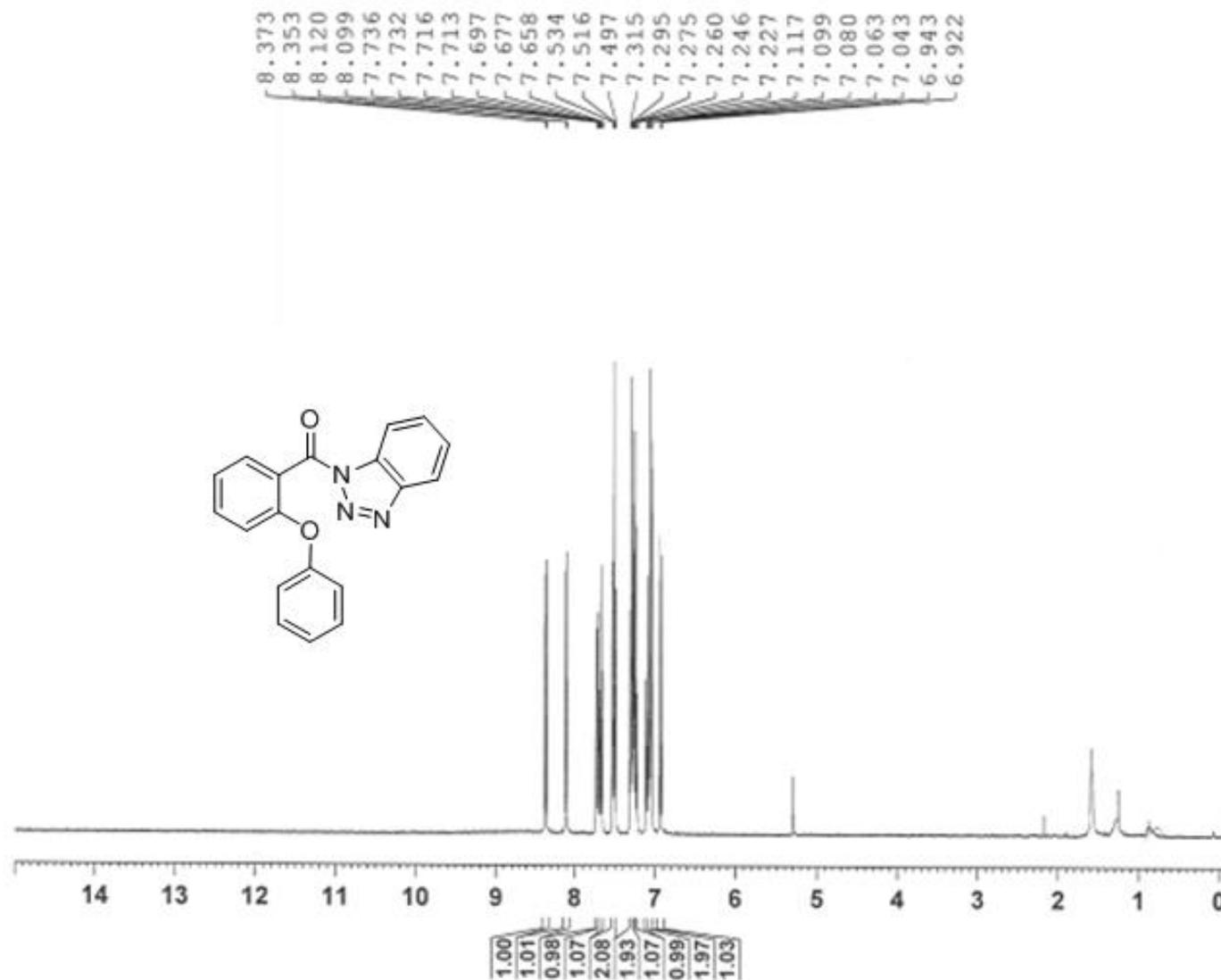
Email: [chatrasal.rajput@jubilantbiosys.com](mailto:chatrasal.rajput@jubilantbiosys.com) and [anoopshyambhu7@gmail.com](mailto:anoopshyambhu7@gmail.com)

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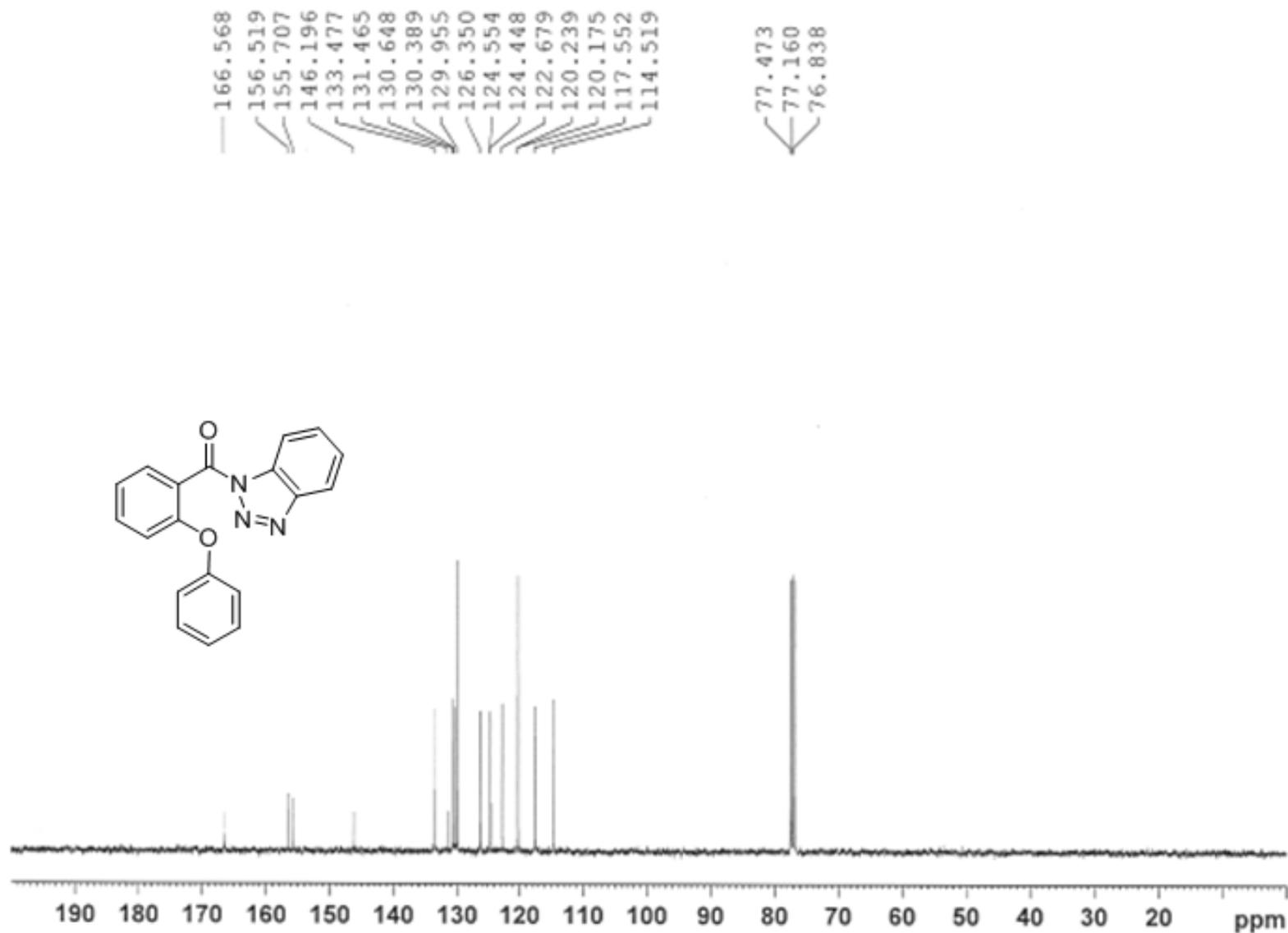
<sup>1</sup> H and <sup>13</sup> C NMR Spectra of <i>N</i> -acyl-benzotriazole ( <b>2a-q</b> ) .....	S2
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$^1\text{H}$  and  $^{13}\text{C}$  NMR Spectra of *N*-acyl-benzotriazole (**2a-2y**)**Spectra 1:**  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) of compound **2a**

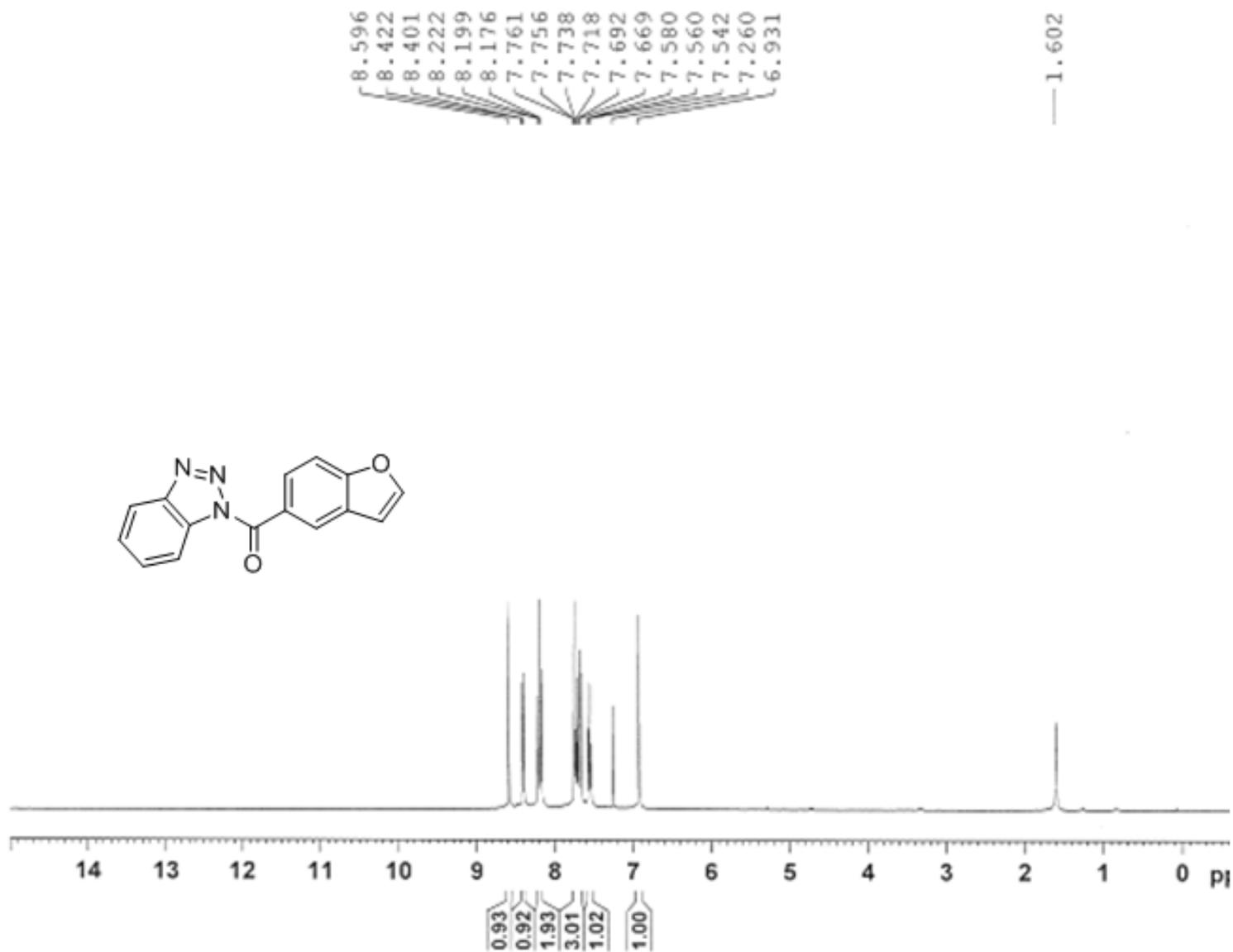
J351-A04014-053

CDCl<sub>3</sub>Spectra 2: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2b**

J351-A04014-053

CDCl<sub>3</sub> (13C)Spectra 3: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound **2b**

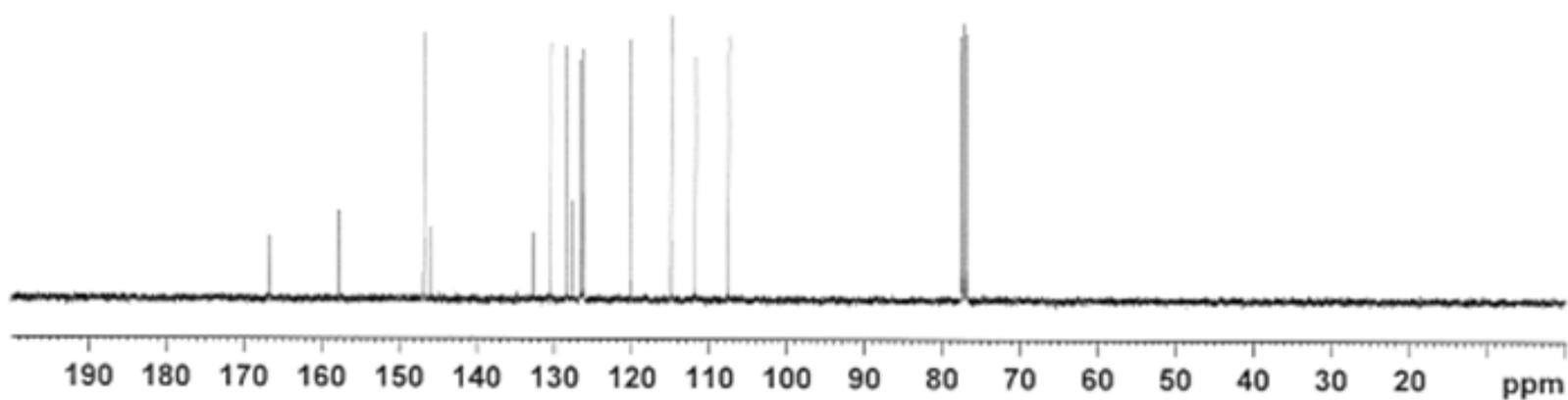
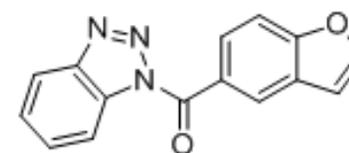
J351-A04014-055

CDCl<sub>3</sub>**Spectra 4:** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 2c

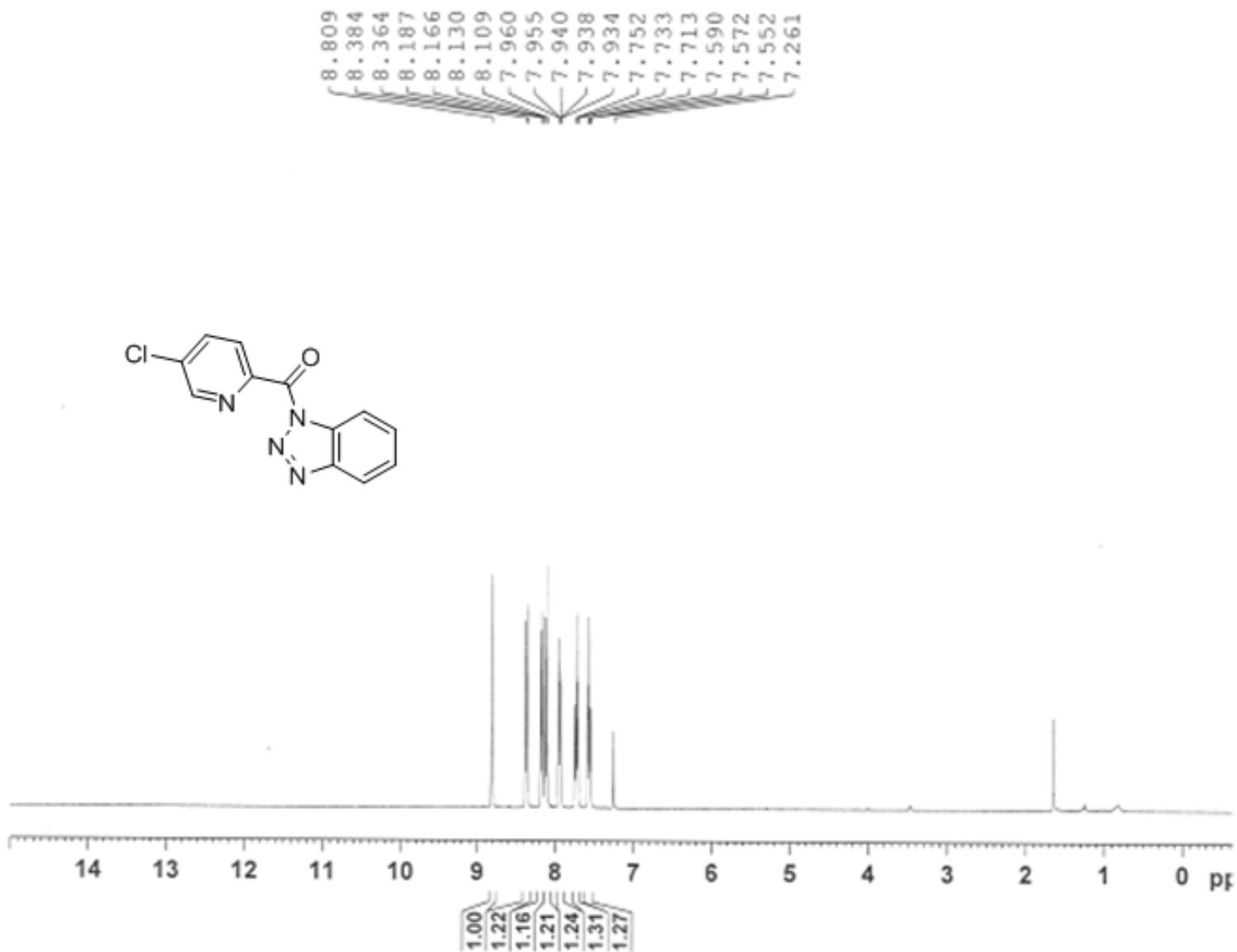
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CDCl<sub>3</sub> (13C)

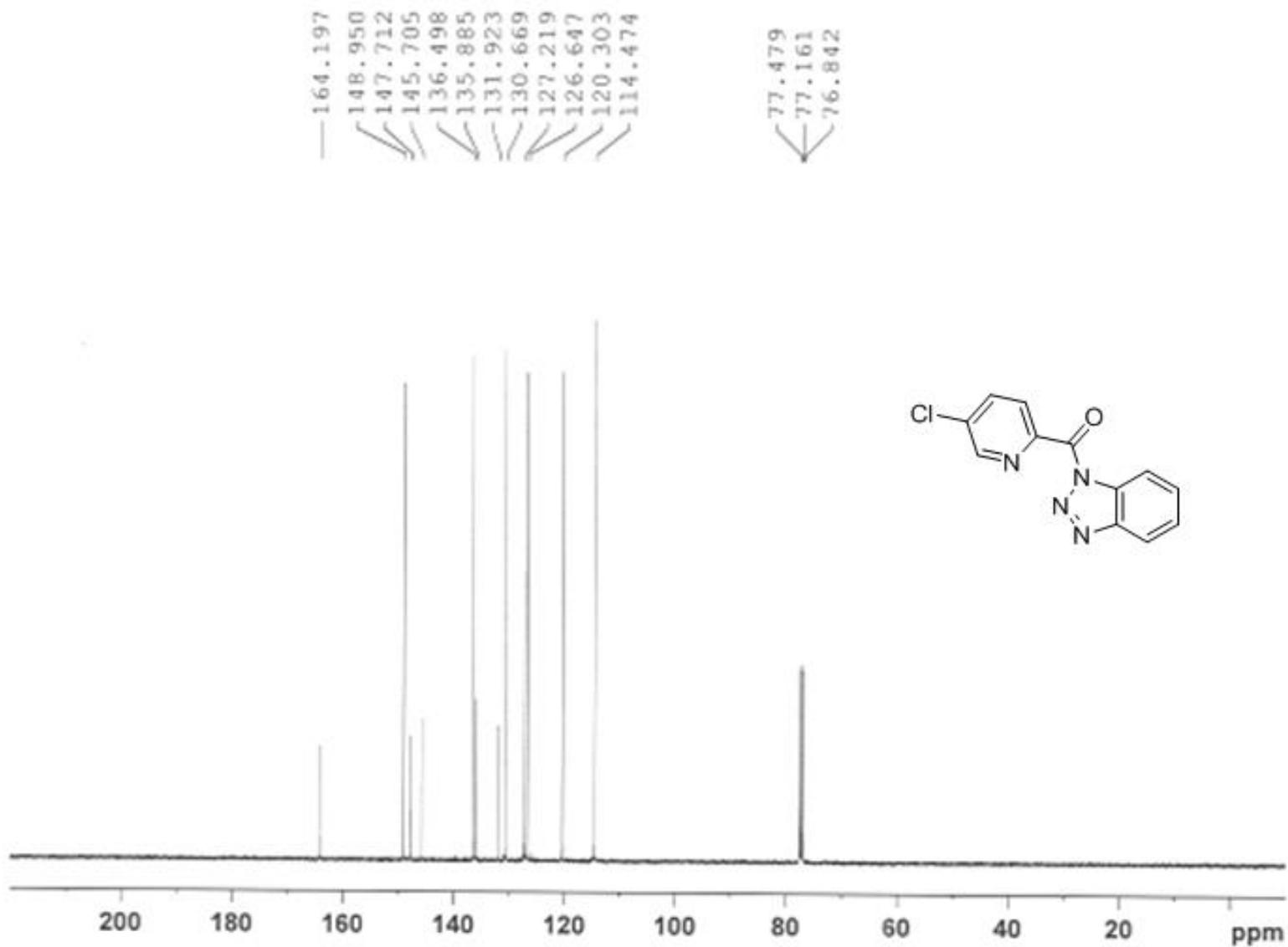
— 166.660  
— 157.812  
/ 146.804  
/ 145.820  
/ 132.639  
/ 130.394  
/ 128.365  
/ 127.580  
/ 126.660  
/ 126.340  
/ 126.315  
/ 120.237  
/ 114.932  
/ 111.740  
/ 107.469  
  
/ 77.475  
/ 77.161  
/ 76.840

Spectra 5: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound 2c

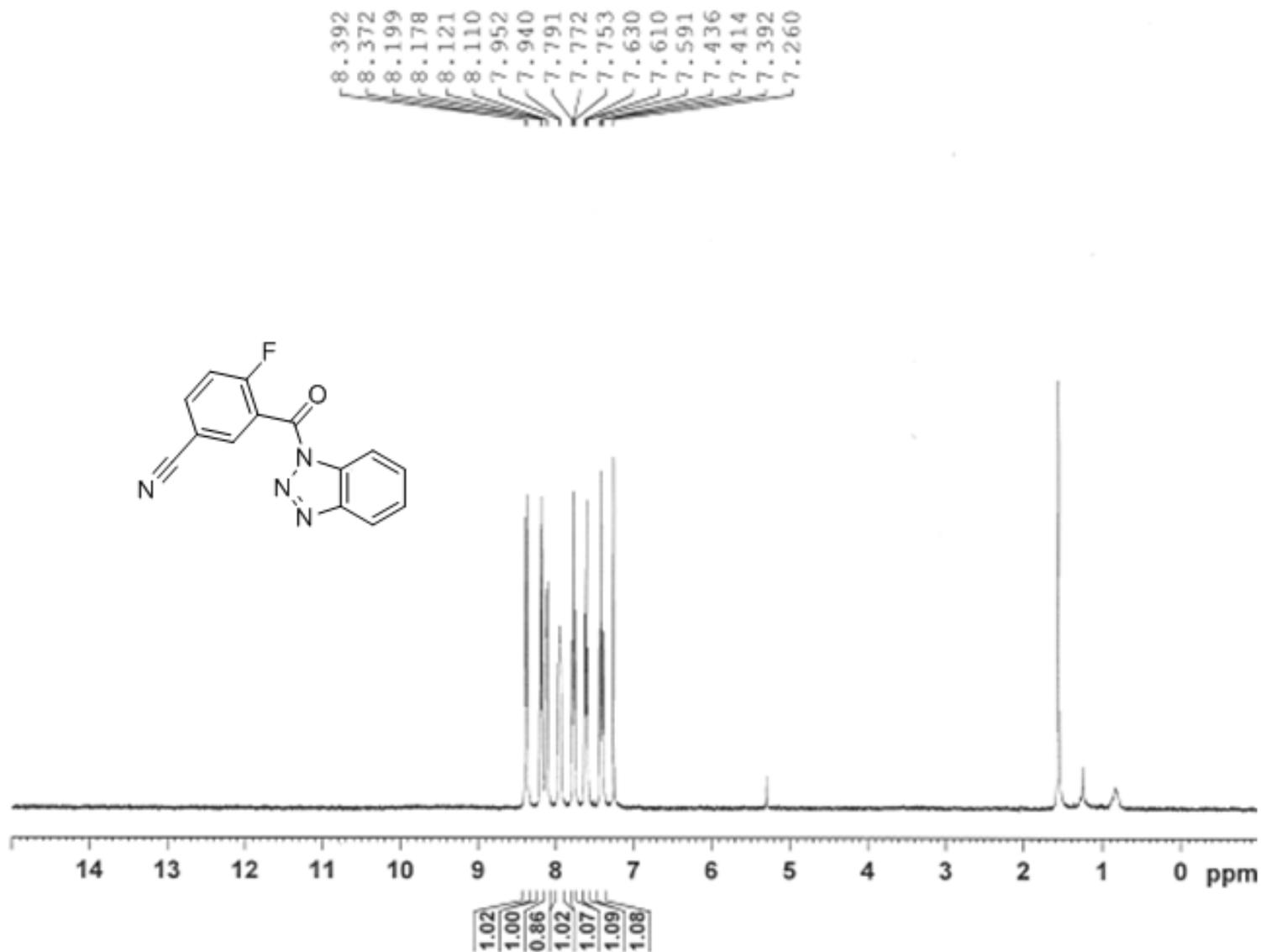
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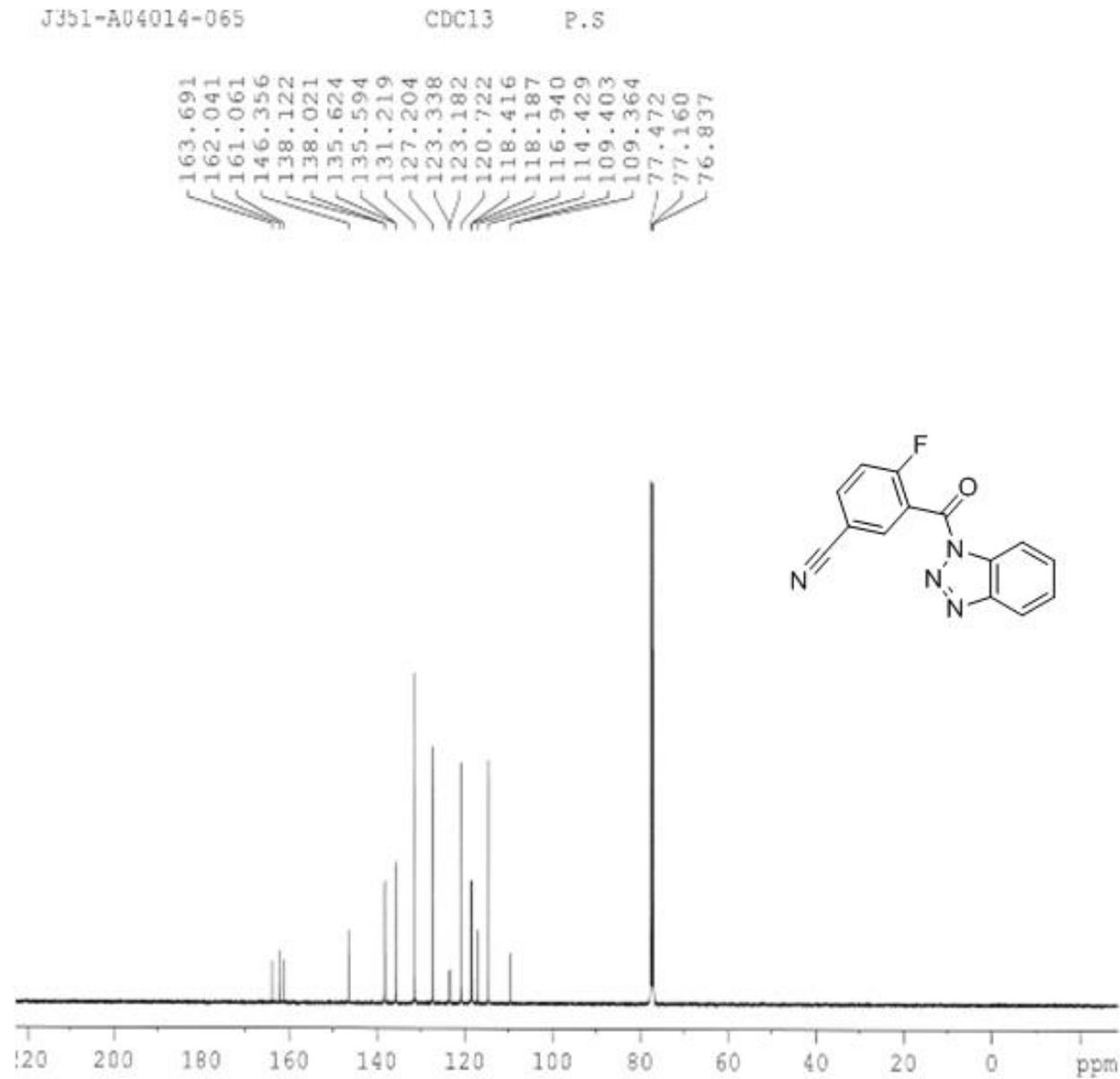
CDCl<sub>3</sub>Spectra 6: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 2d

J351-A04014-063

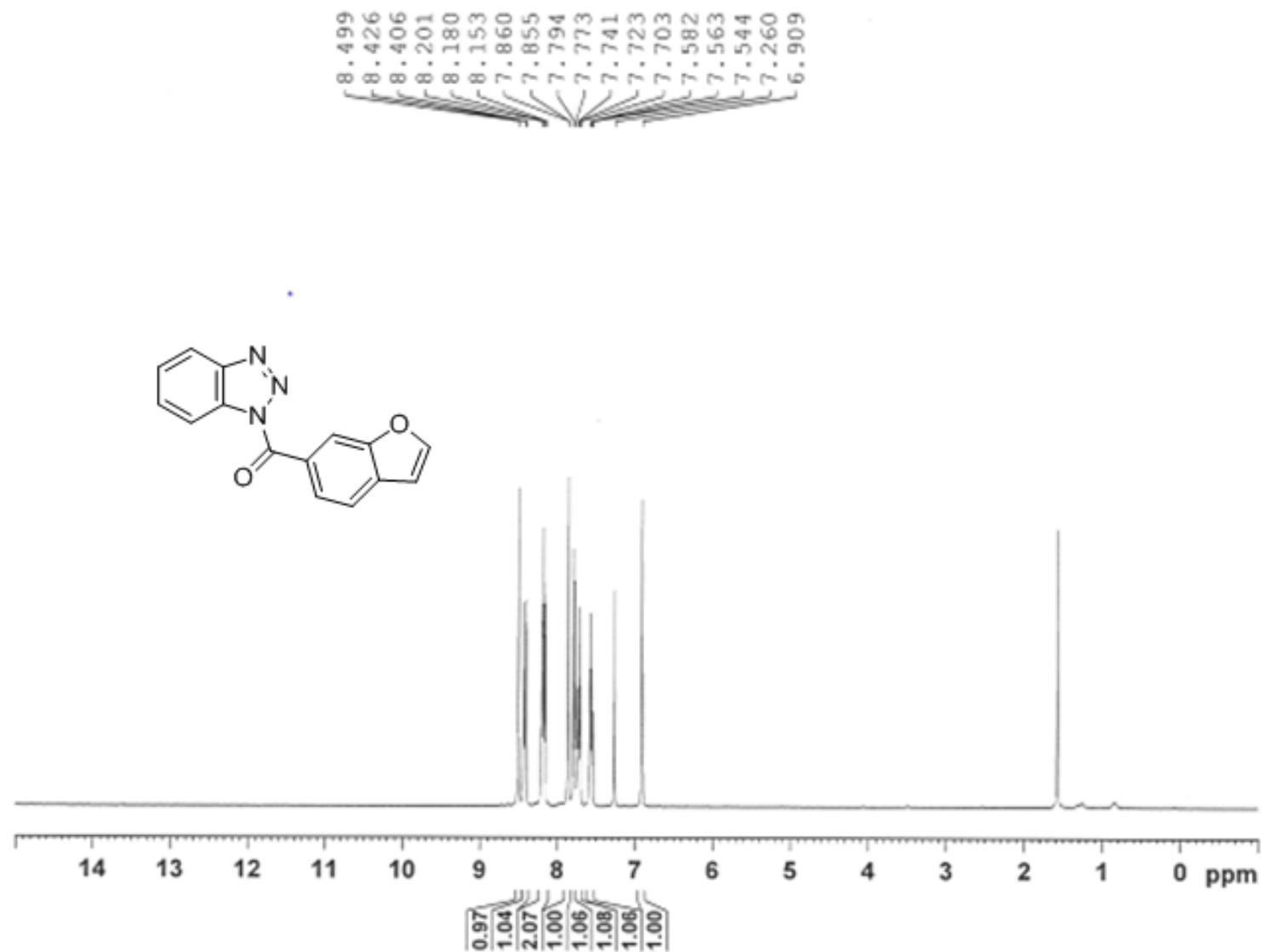
CDCl<sub>3</sub>Spectra 7: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound 2d

J351-A04014-065

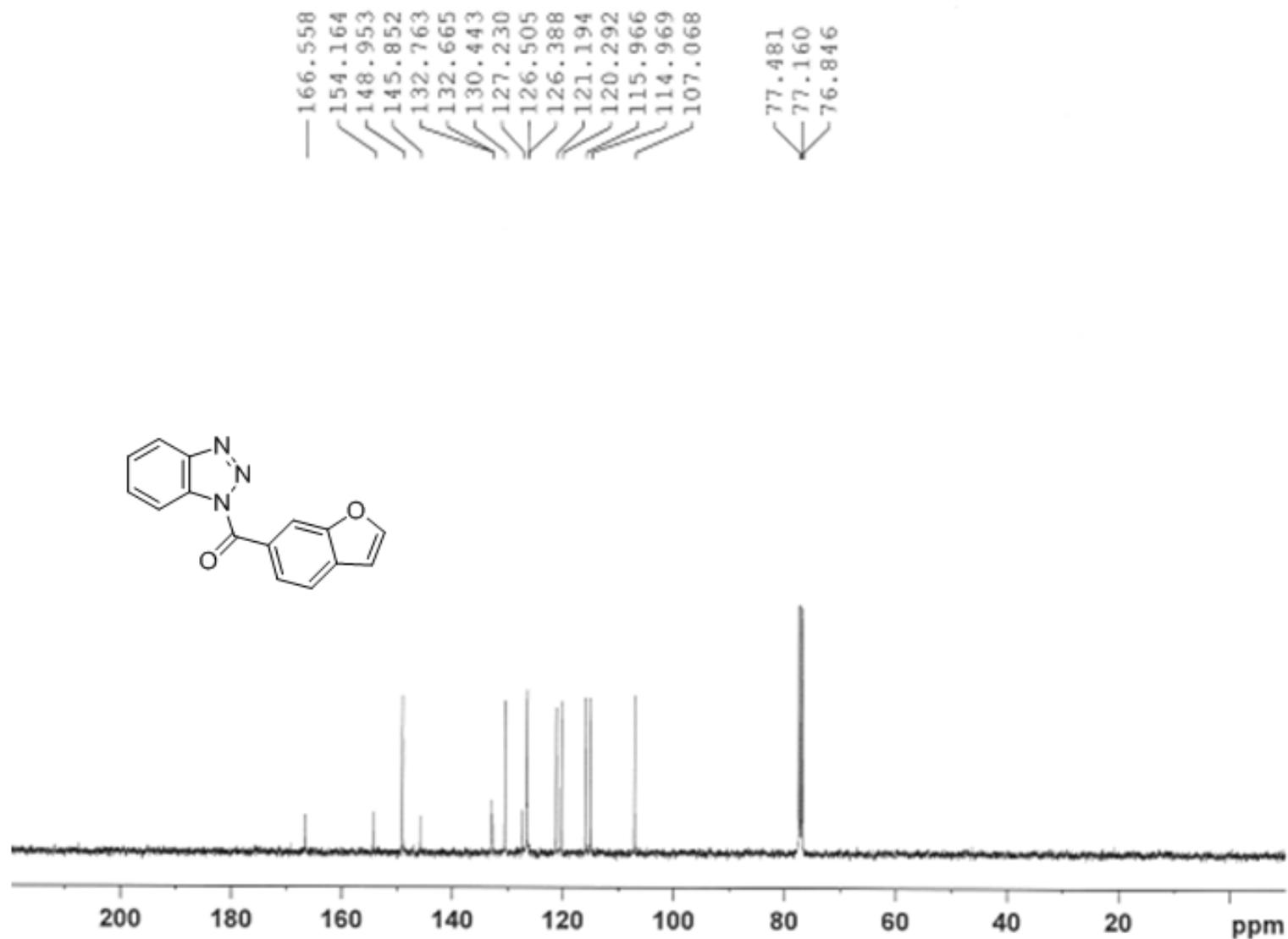
CDCl<sub>3</sub>Spectra 8: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 2e

Spectra 9:  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound 2e

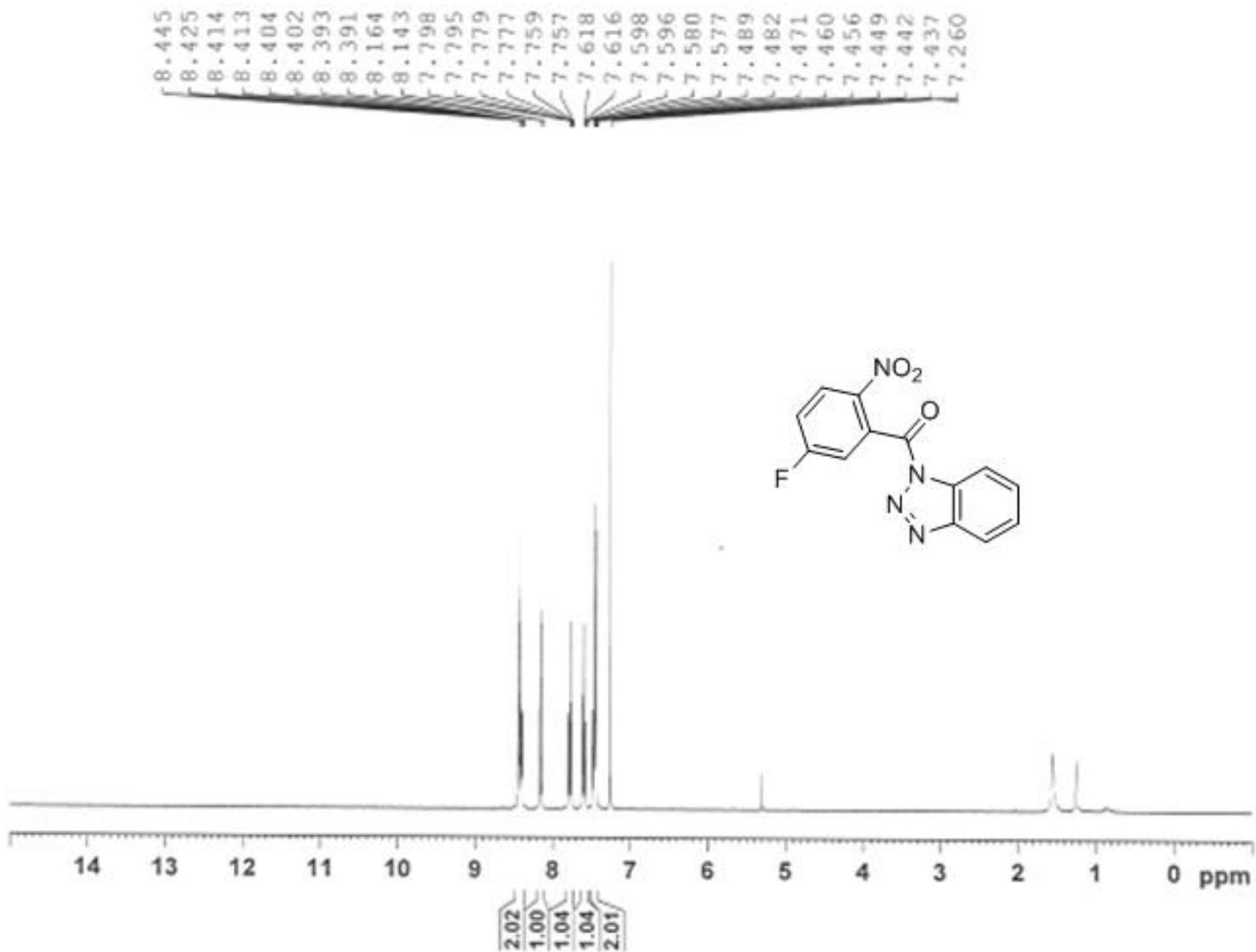
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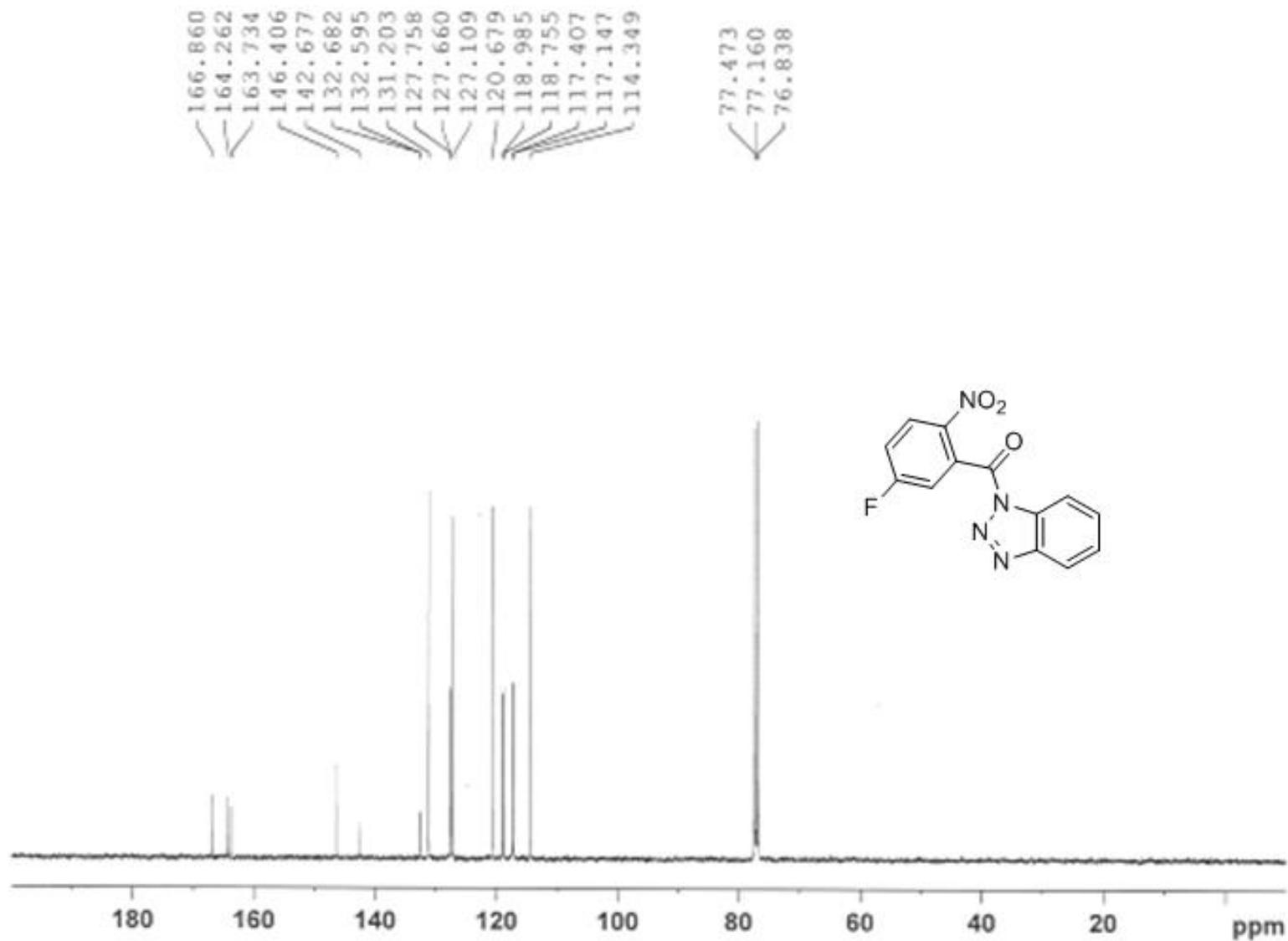
CDCl<sub>3</sub>Spectra 10: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 2f

J351-A04014-071

CDCl<sub>3</sub>Spectra 11: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound 2f

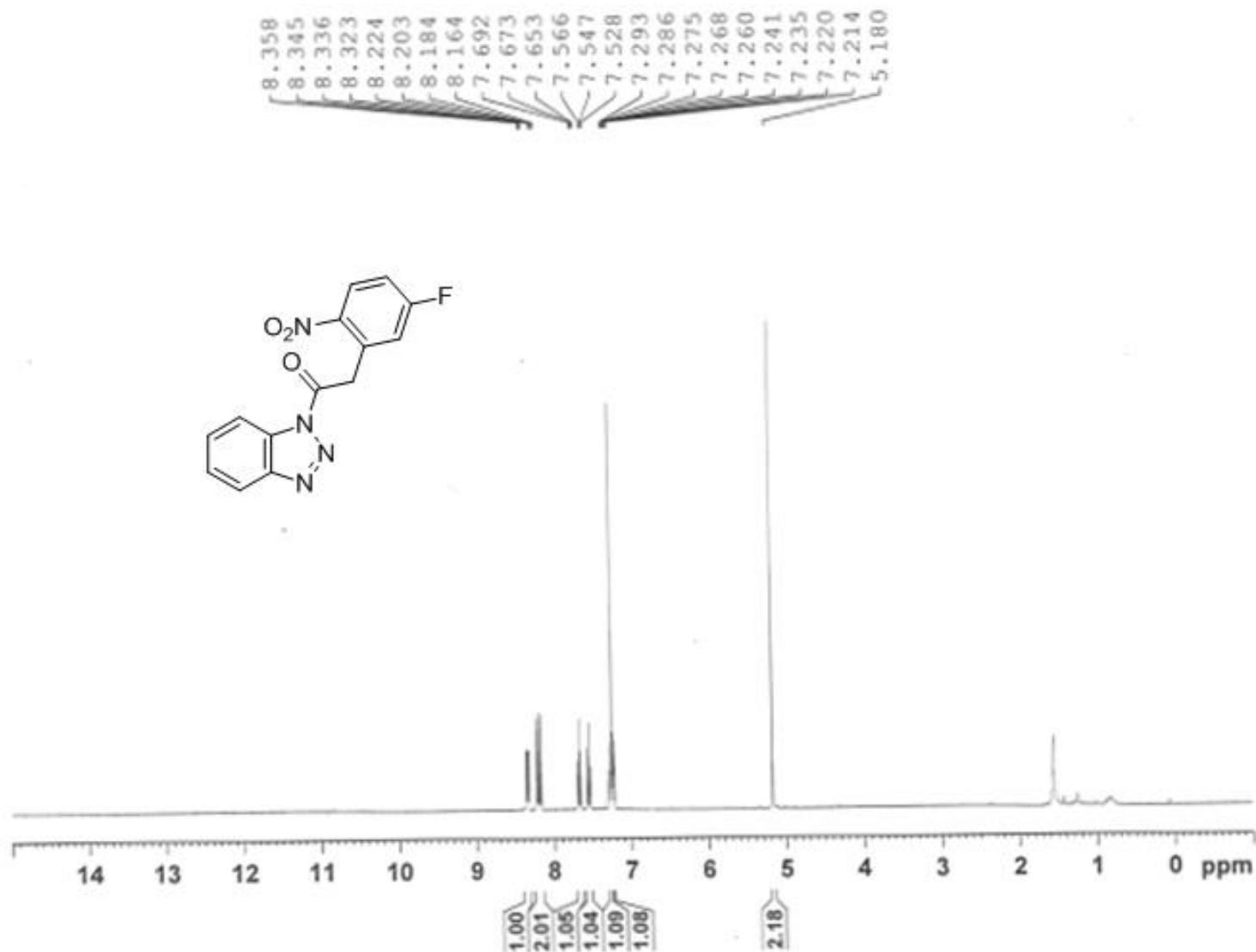
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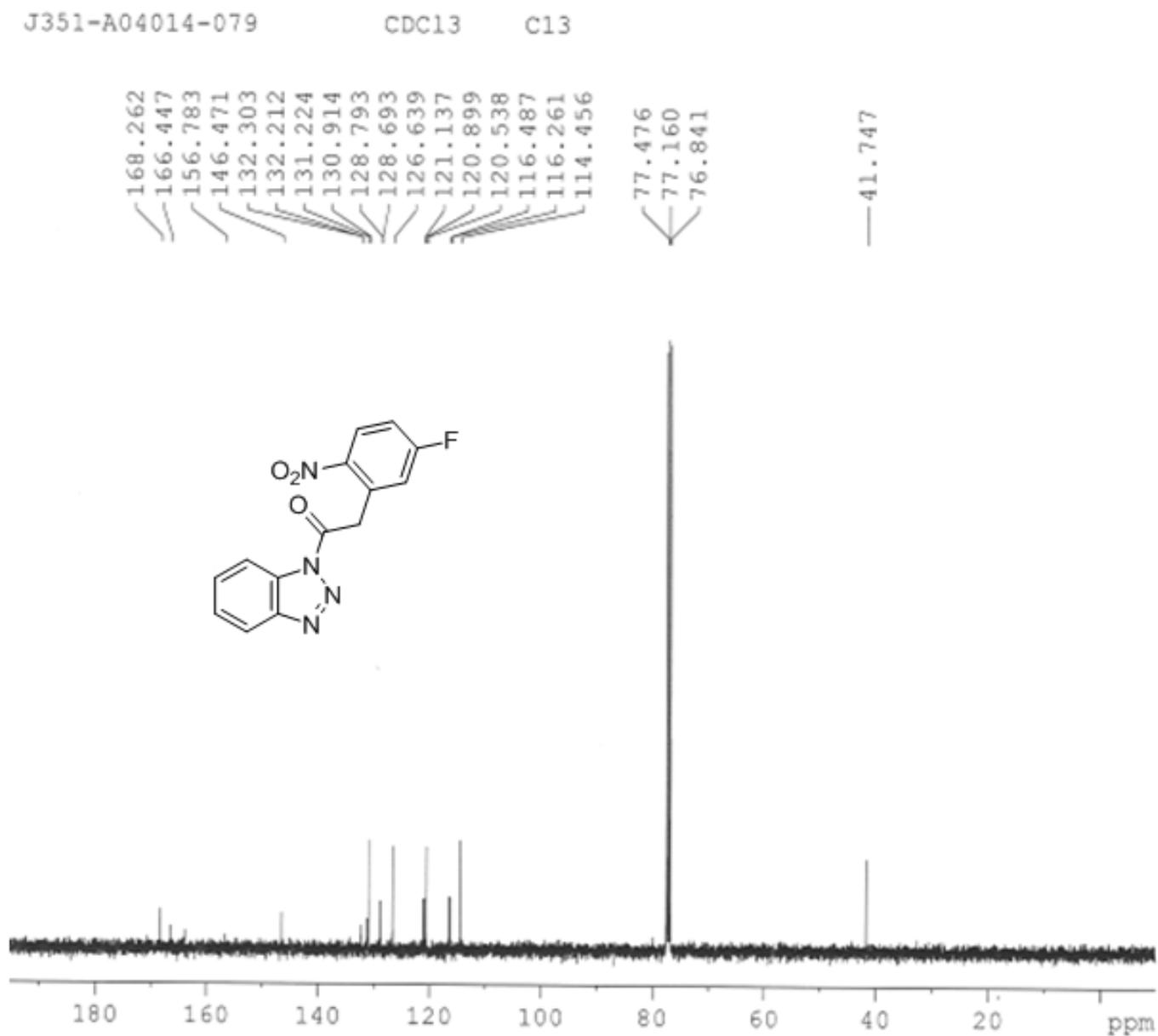
CDCl<sub>3</sub>Spectra 12: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2g**

J351-A04014-077-F1  
C13CDCl<sub>3</sub>Spectra 13: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound 2g

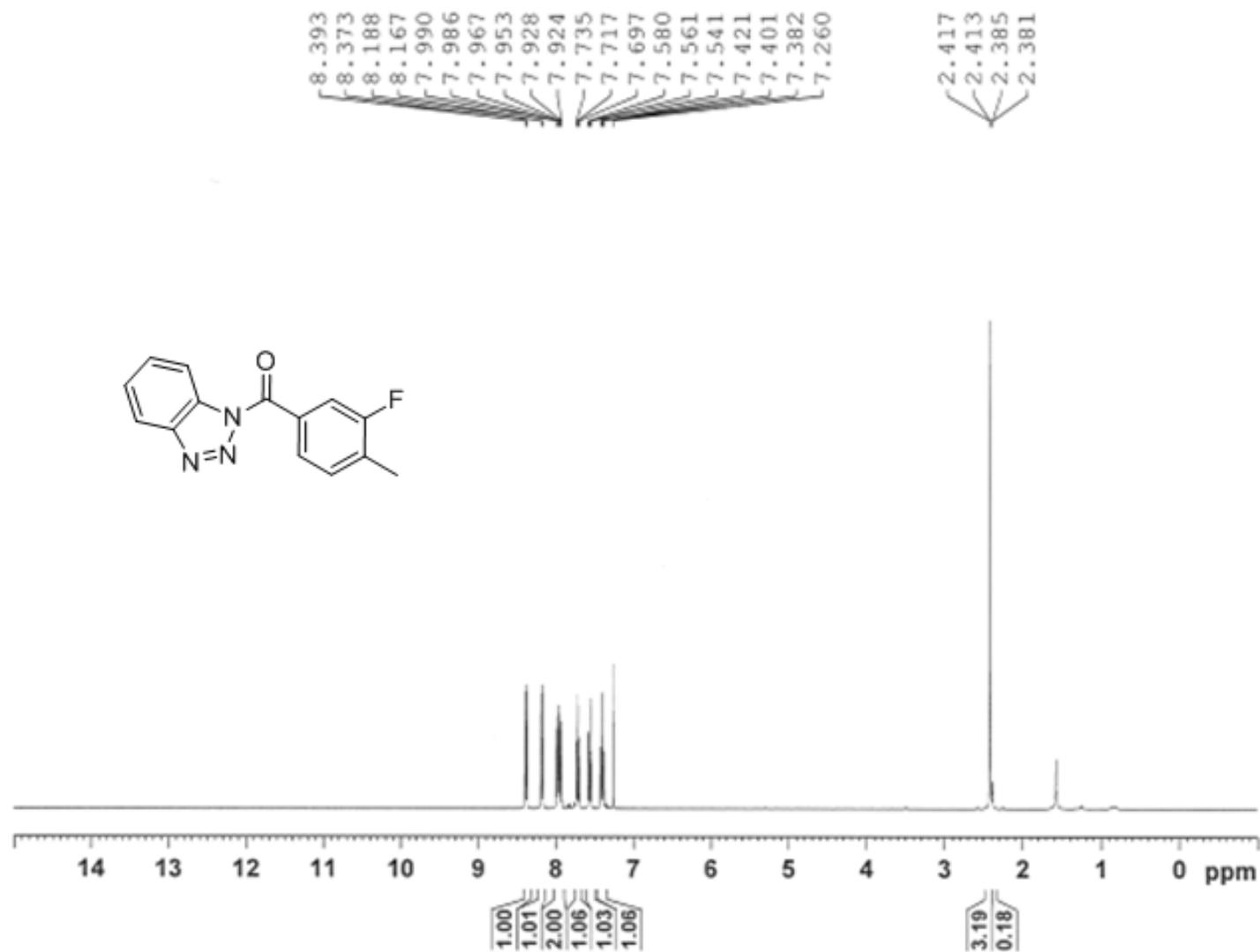
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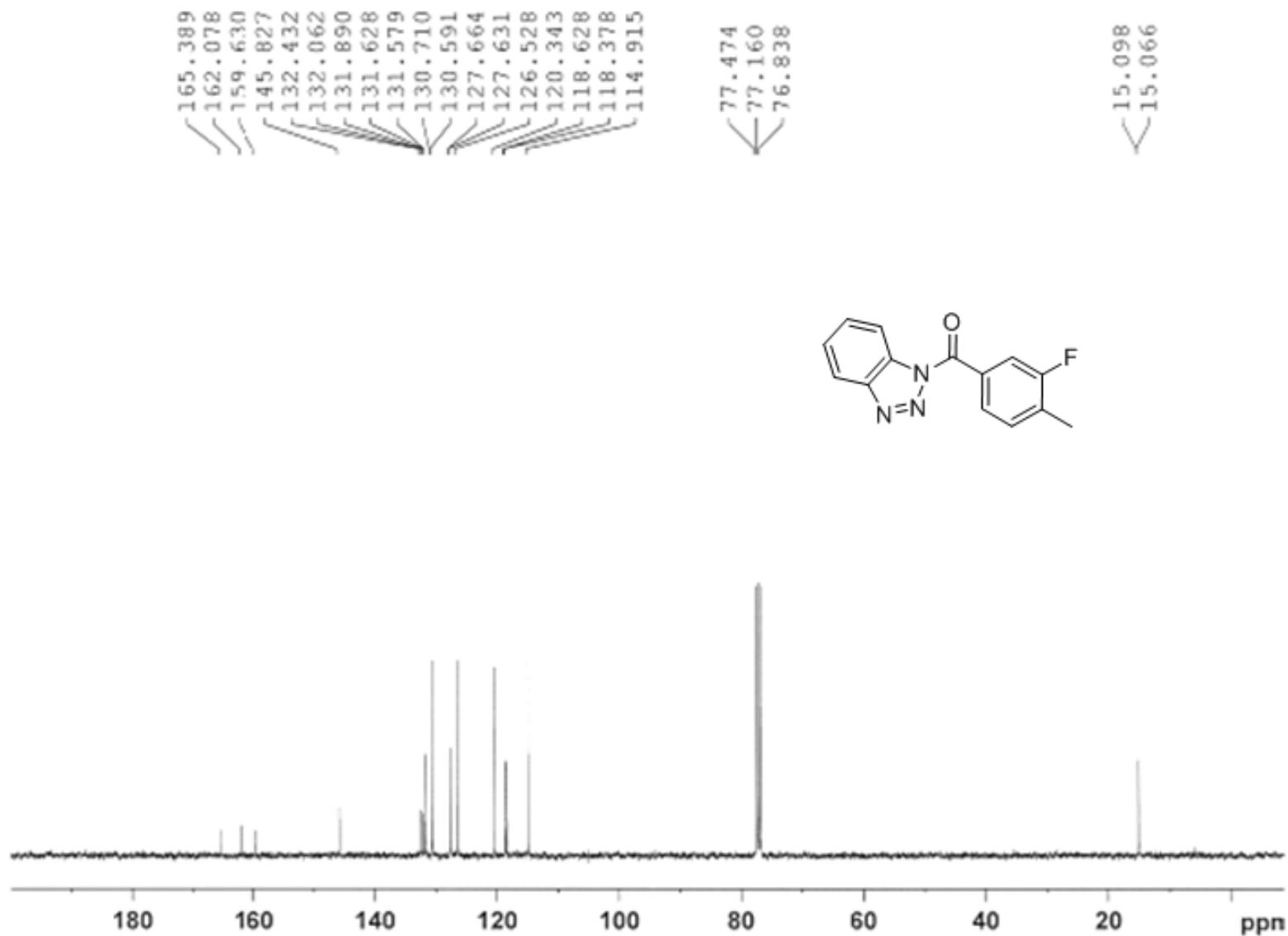
CDC13

Spectra 14:  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) of compound 2h

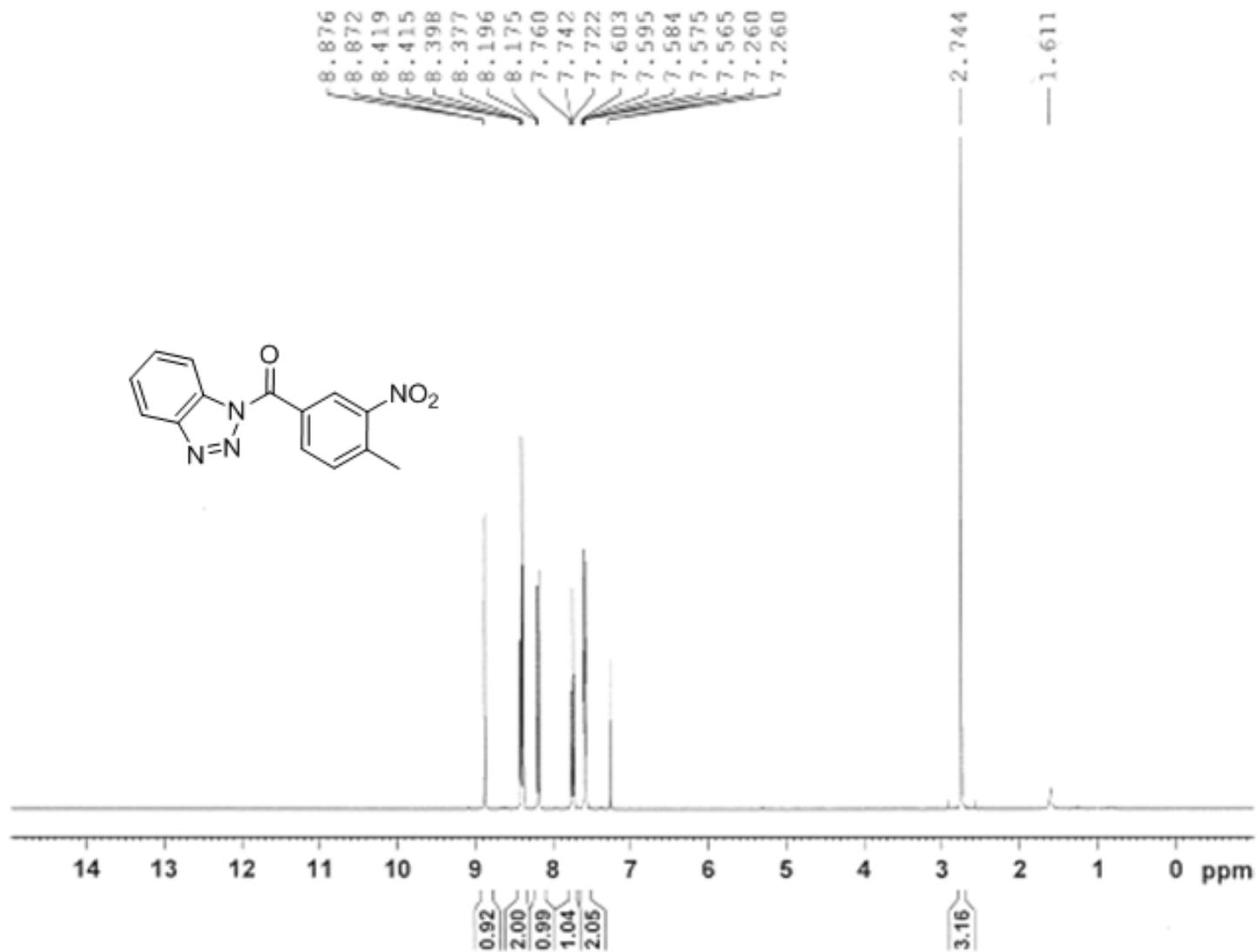


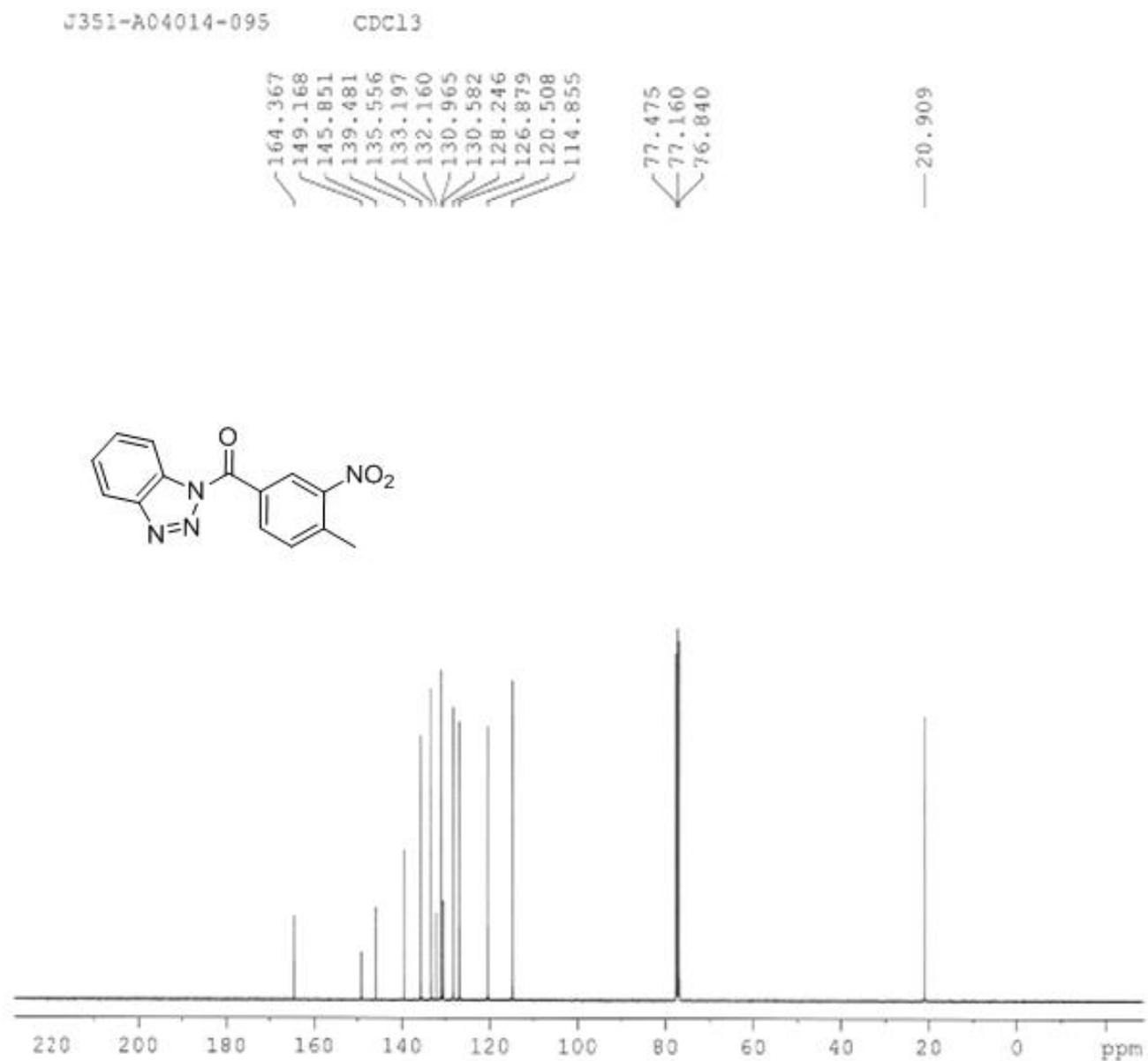
J351-A04014-093

CDCl<sub>3</sub>Spectra 16: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 2i

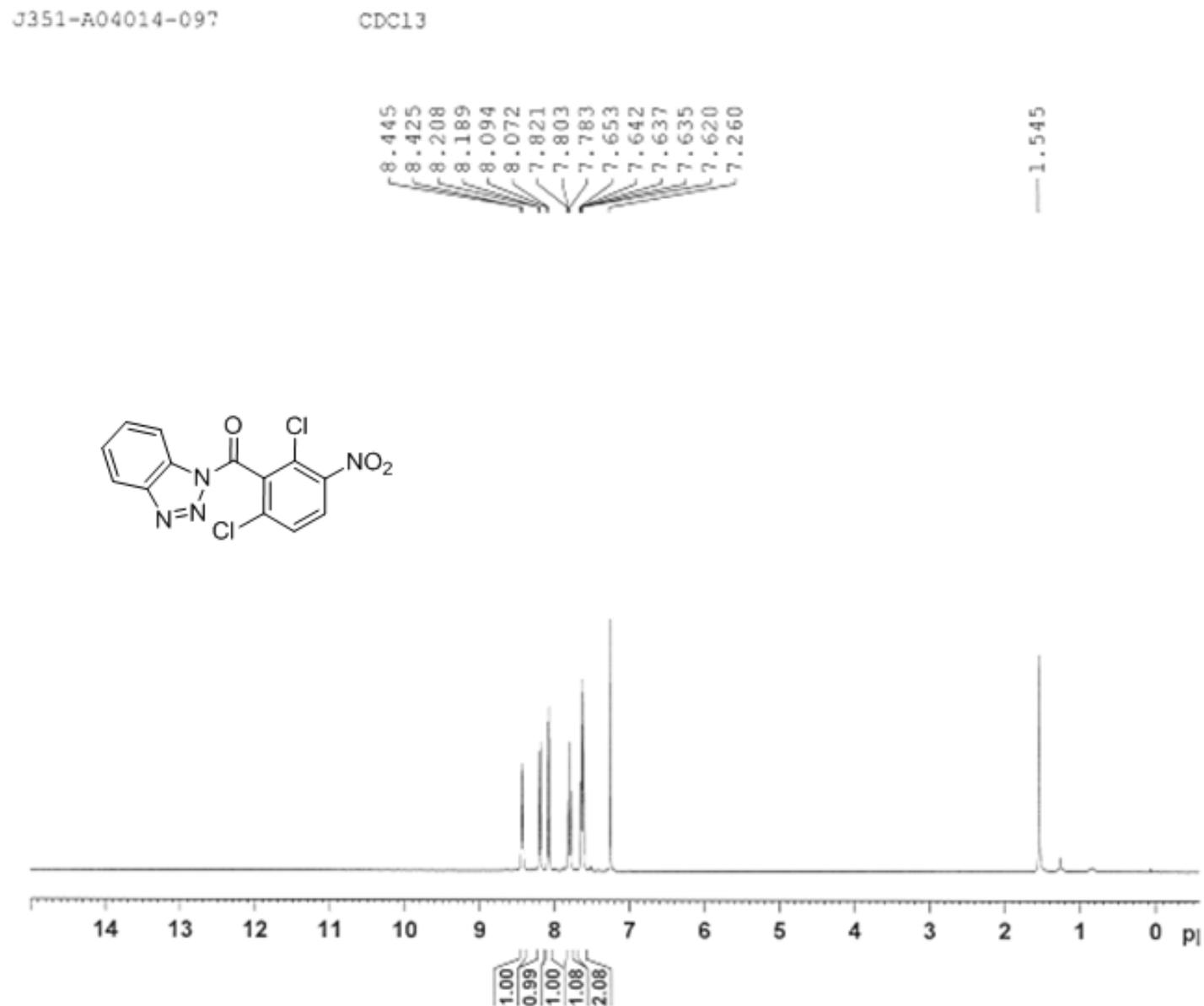
1351-A04014-093  
:13CDCl<sub>3</sub>Spectra 17: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound 2i

351-A04014-095

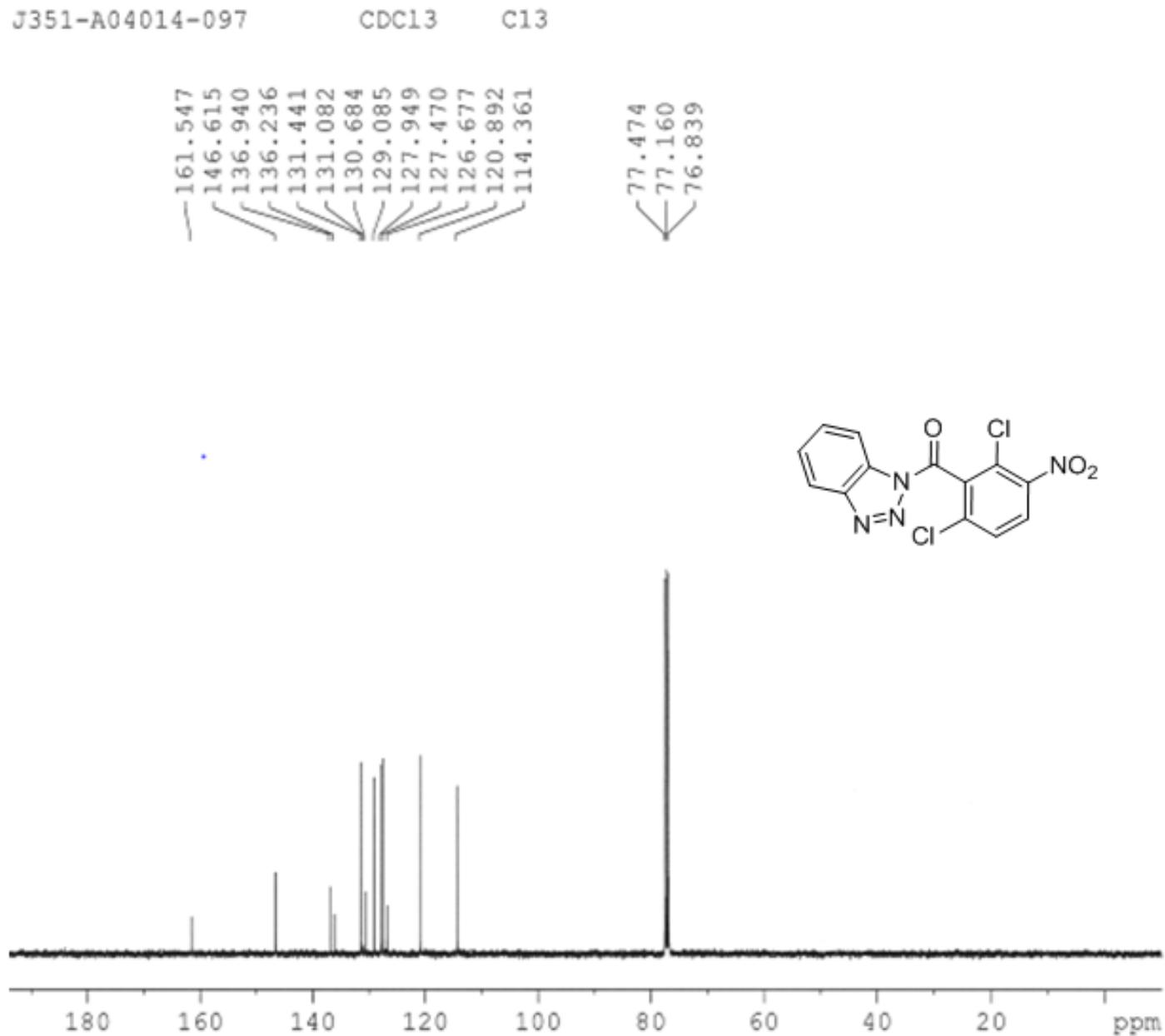
CDCl<sub>3</sub>**Spectra 18:** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2j**

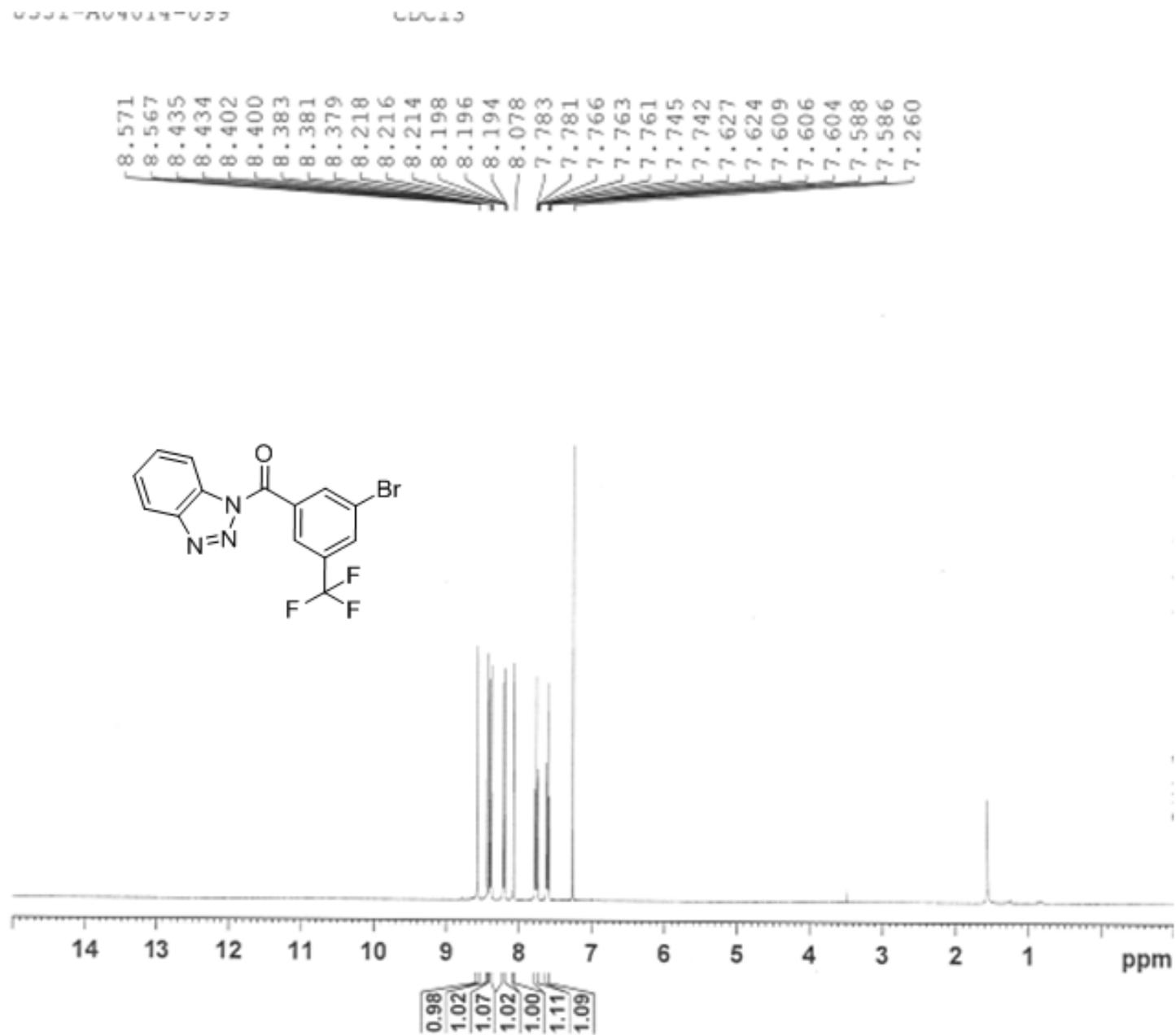


Spectra 19: <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound 2j



**Spectra 20:** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2k**  
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**Spectra 21:** <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound **2k**

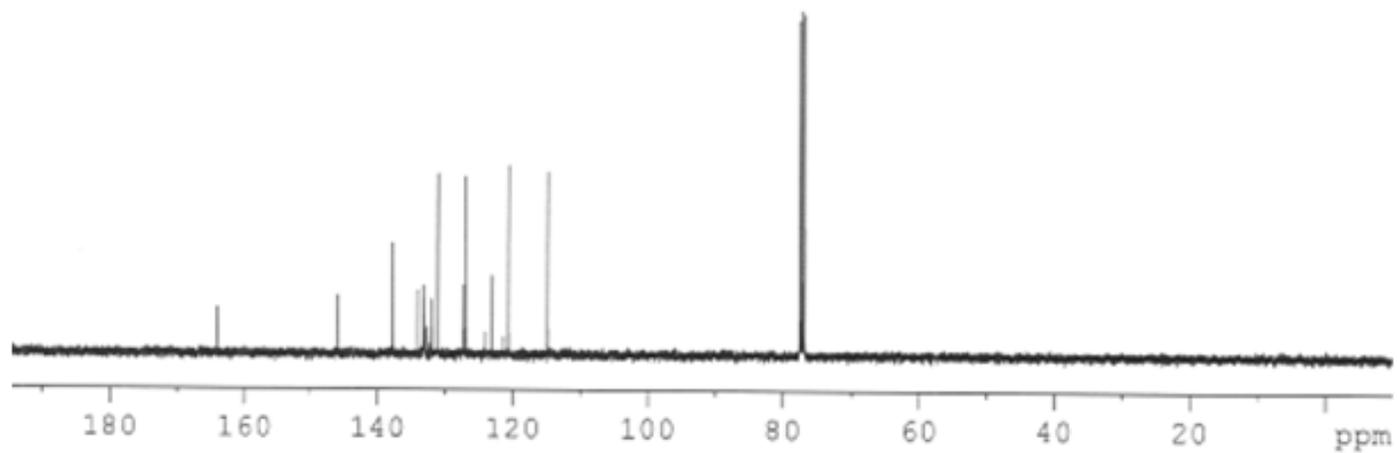
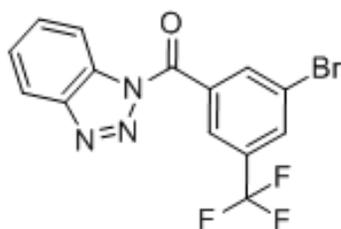
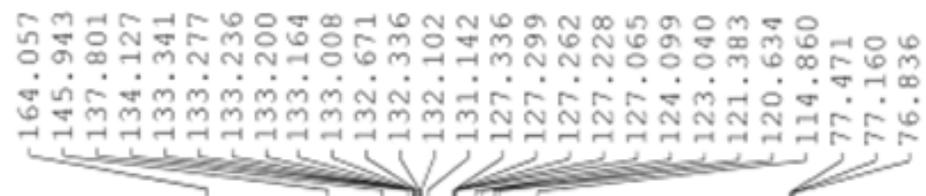


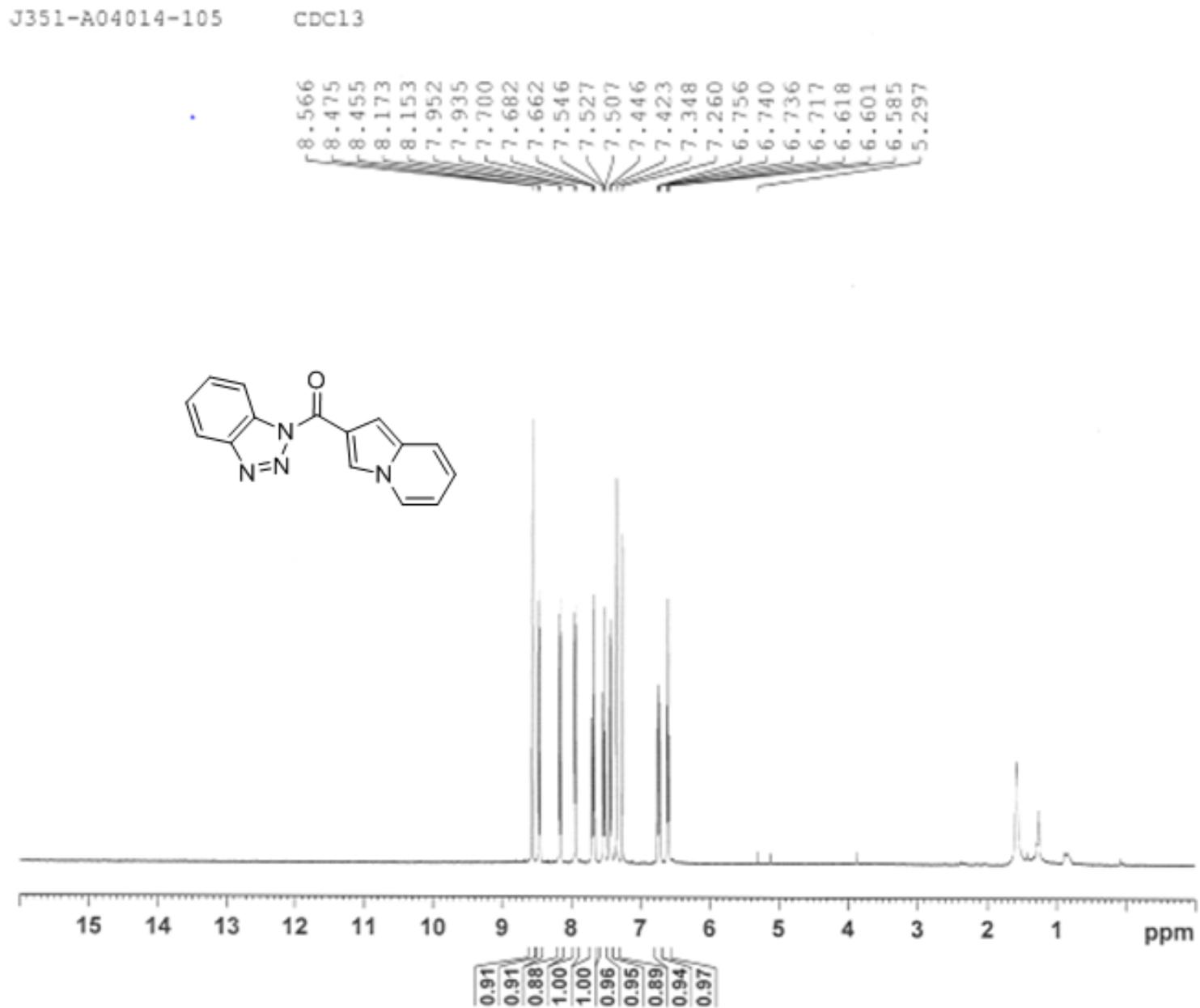
**Spectra 22:**  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) of compound **2I**

J351-A04014-099

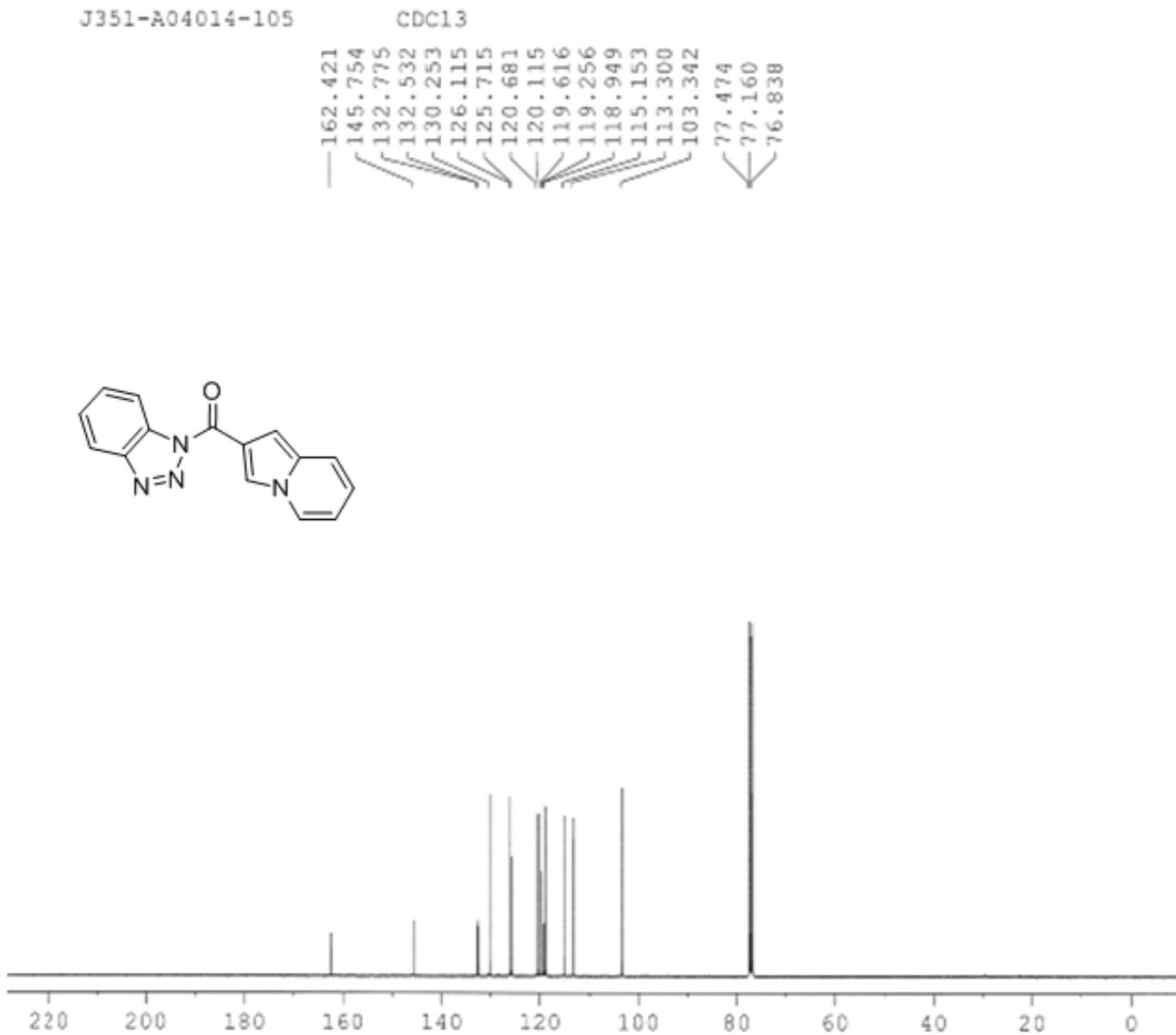
CDC13

C13

**Spectra 23:**  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **21**

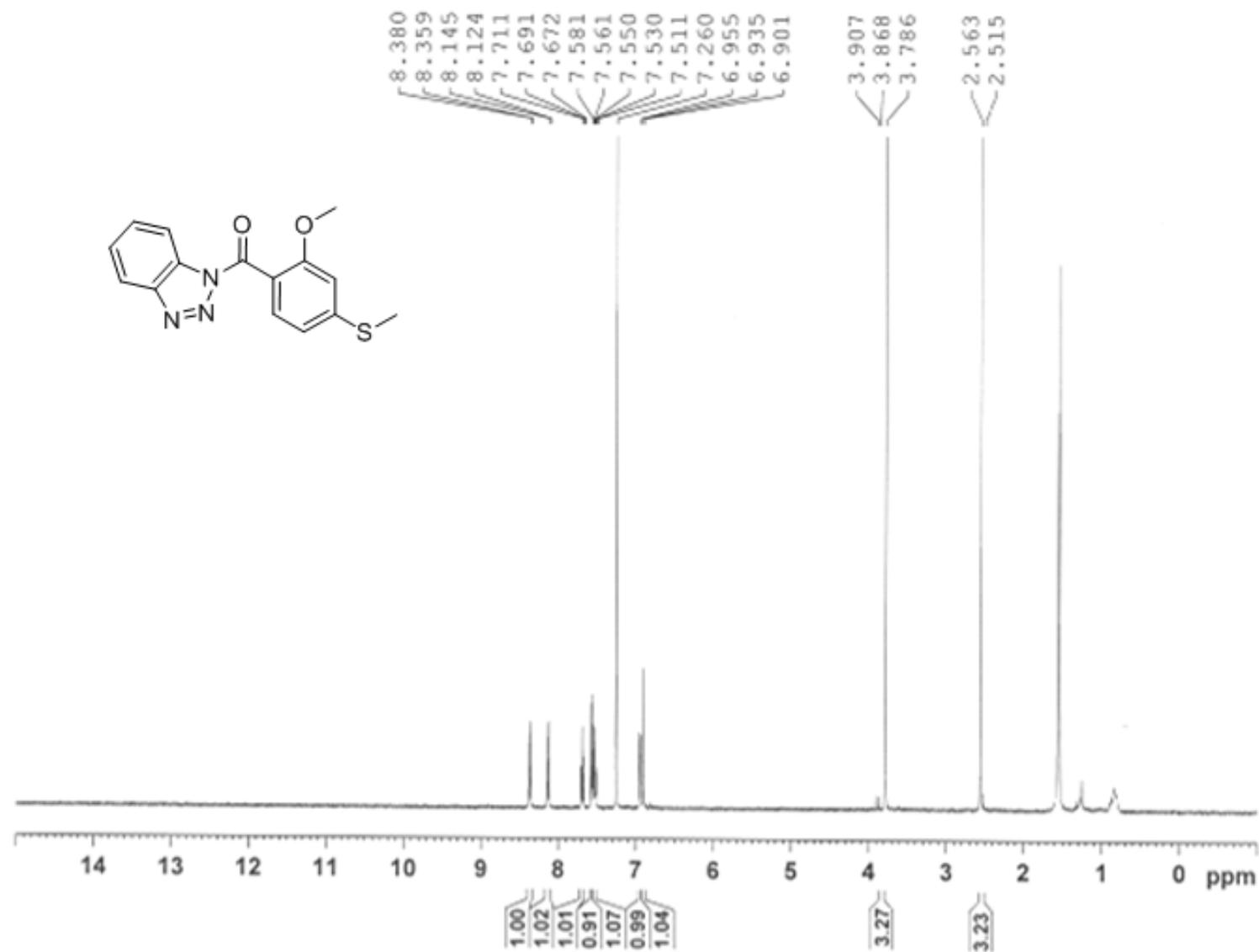


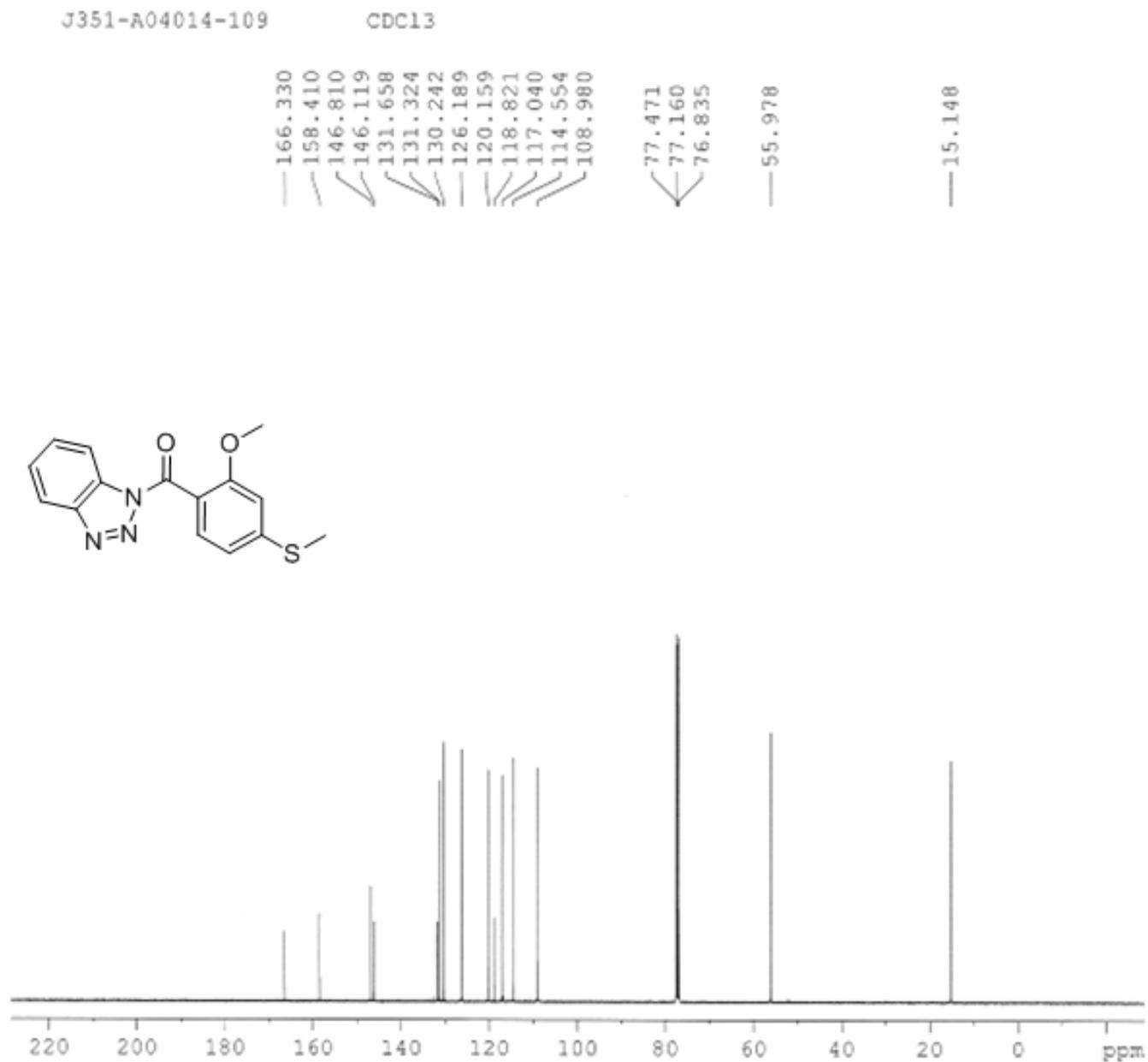
**Spectra 24:** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2m**



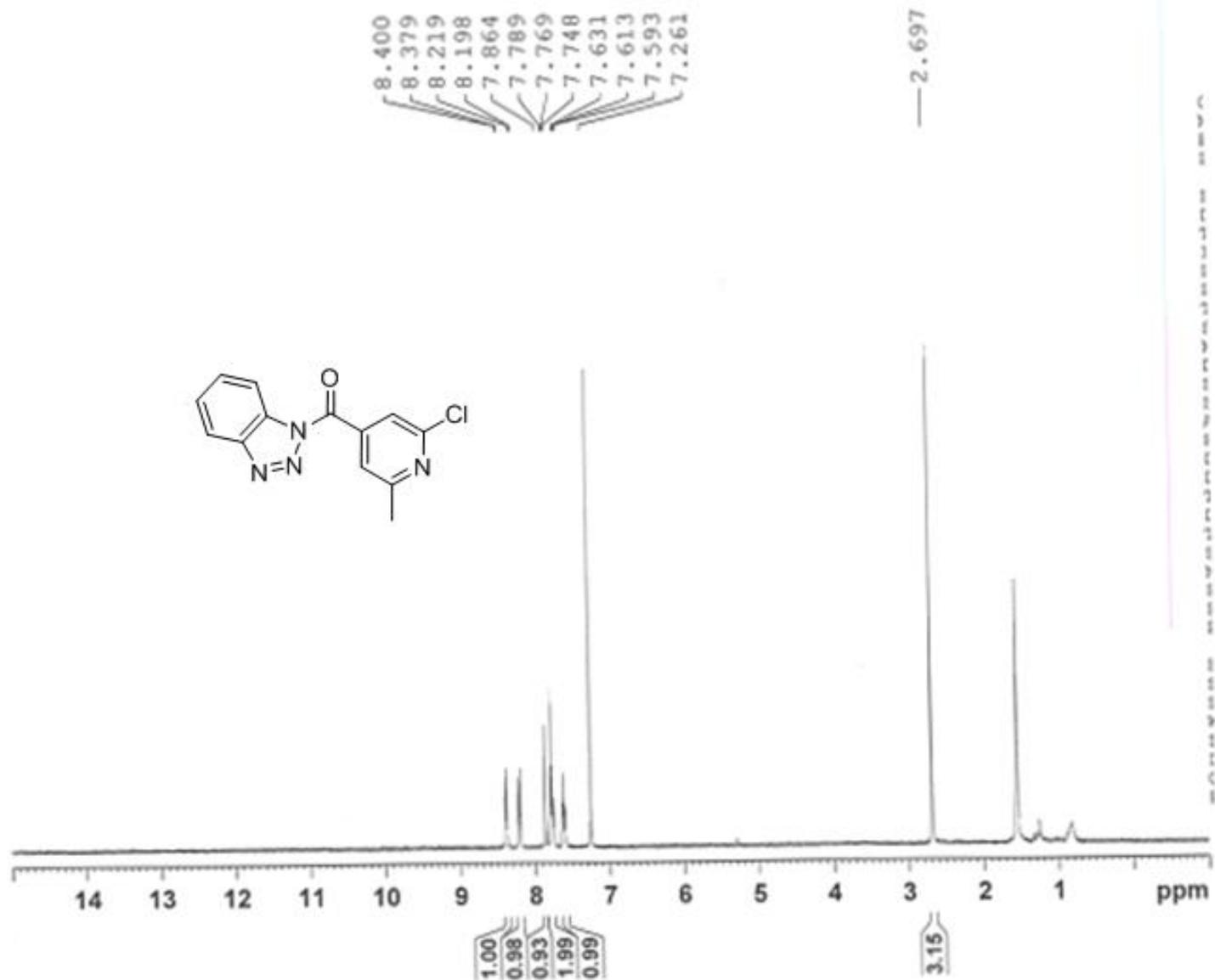
**Spectra 25:** <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound **2m**

J351-A04014-109

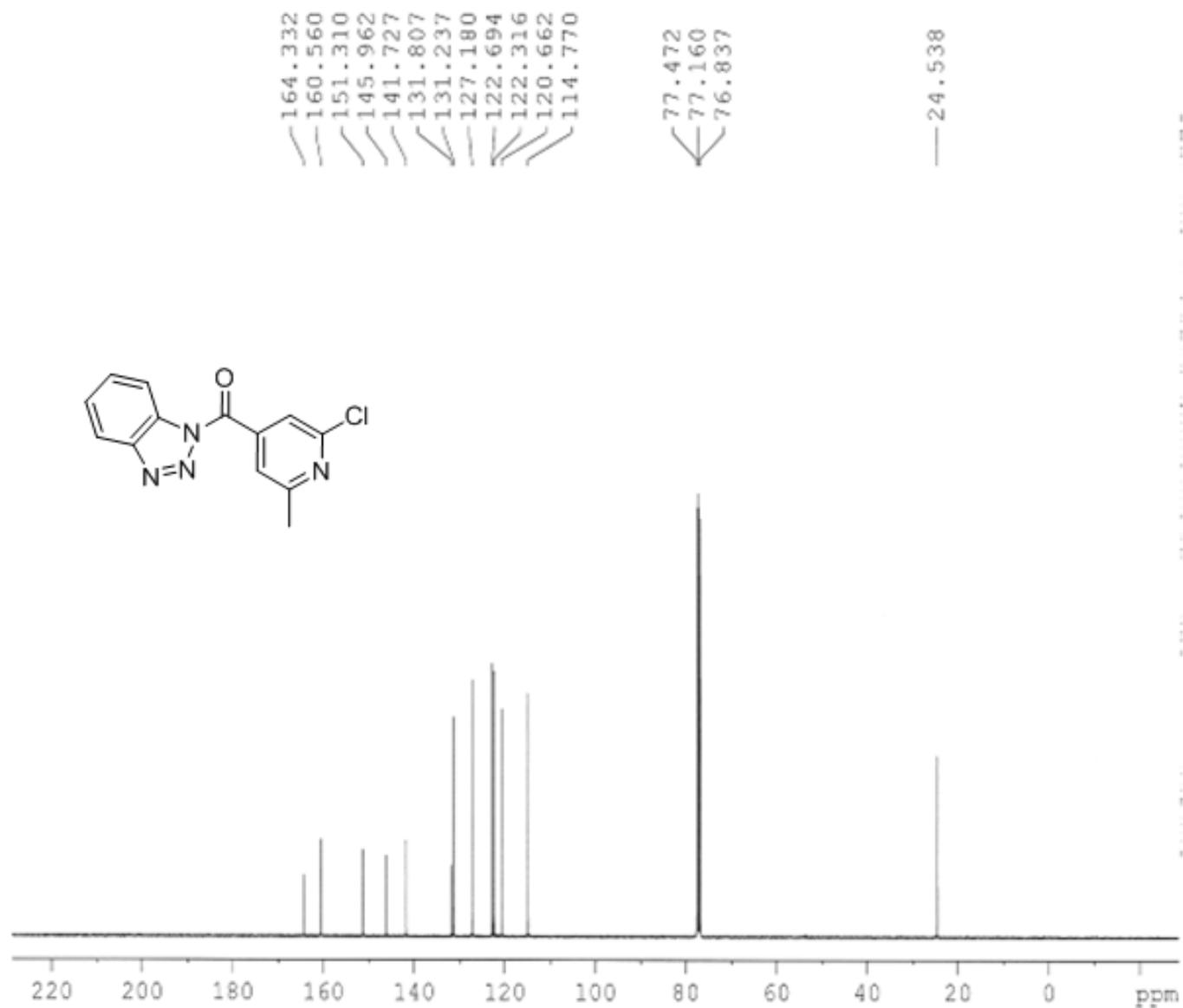
CDCl<sub>3</sub>**Spectra 25:** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2n**

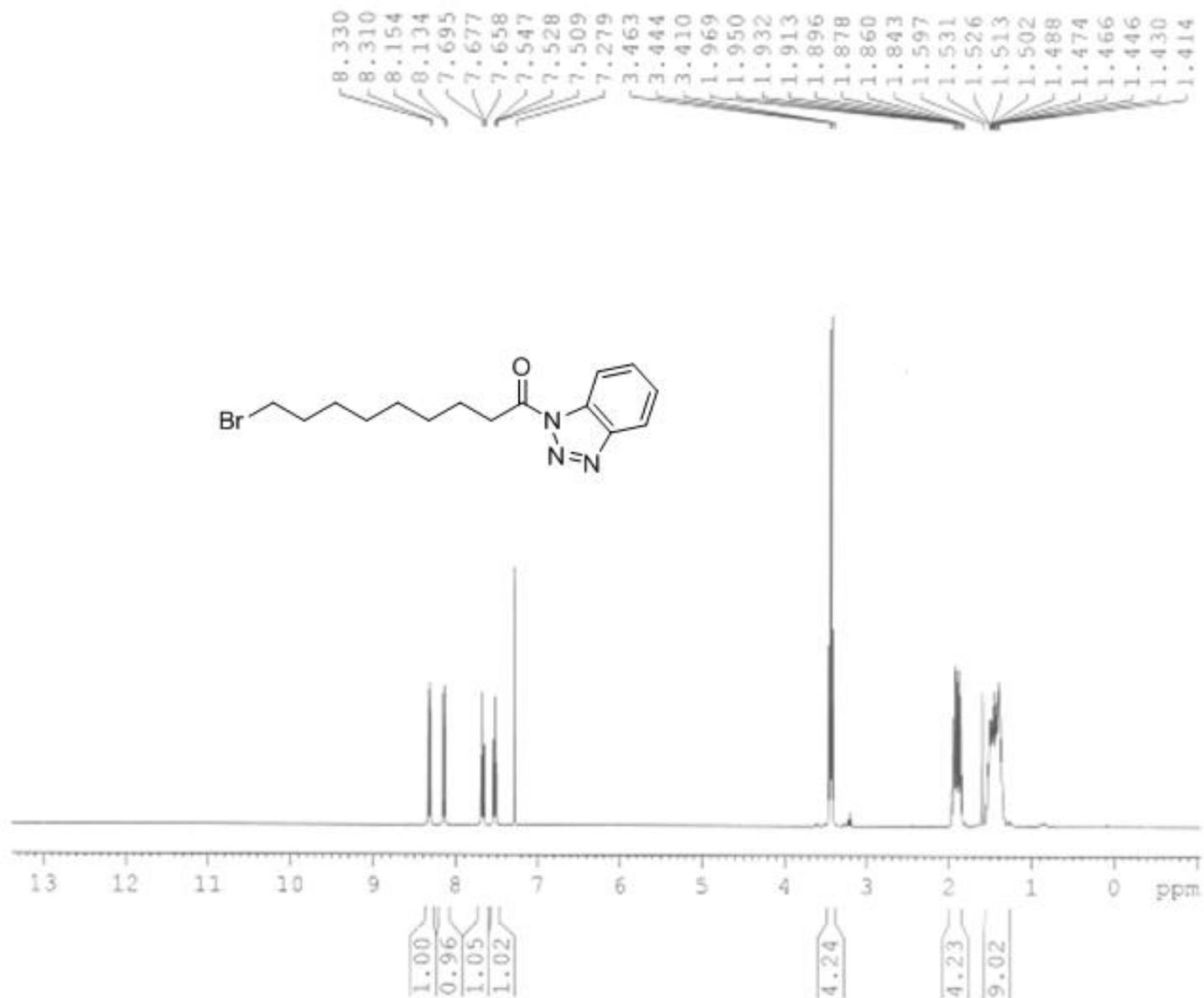
**Spectra 27:**  $^{13}\text{C}$  NMR (100 MHz,  $\text{CDCl}_3$ ) of compound **2n**

J351-A04014-113

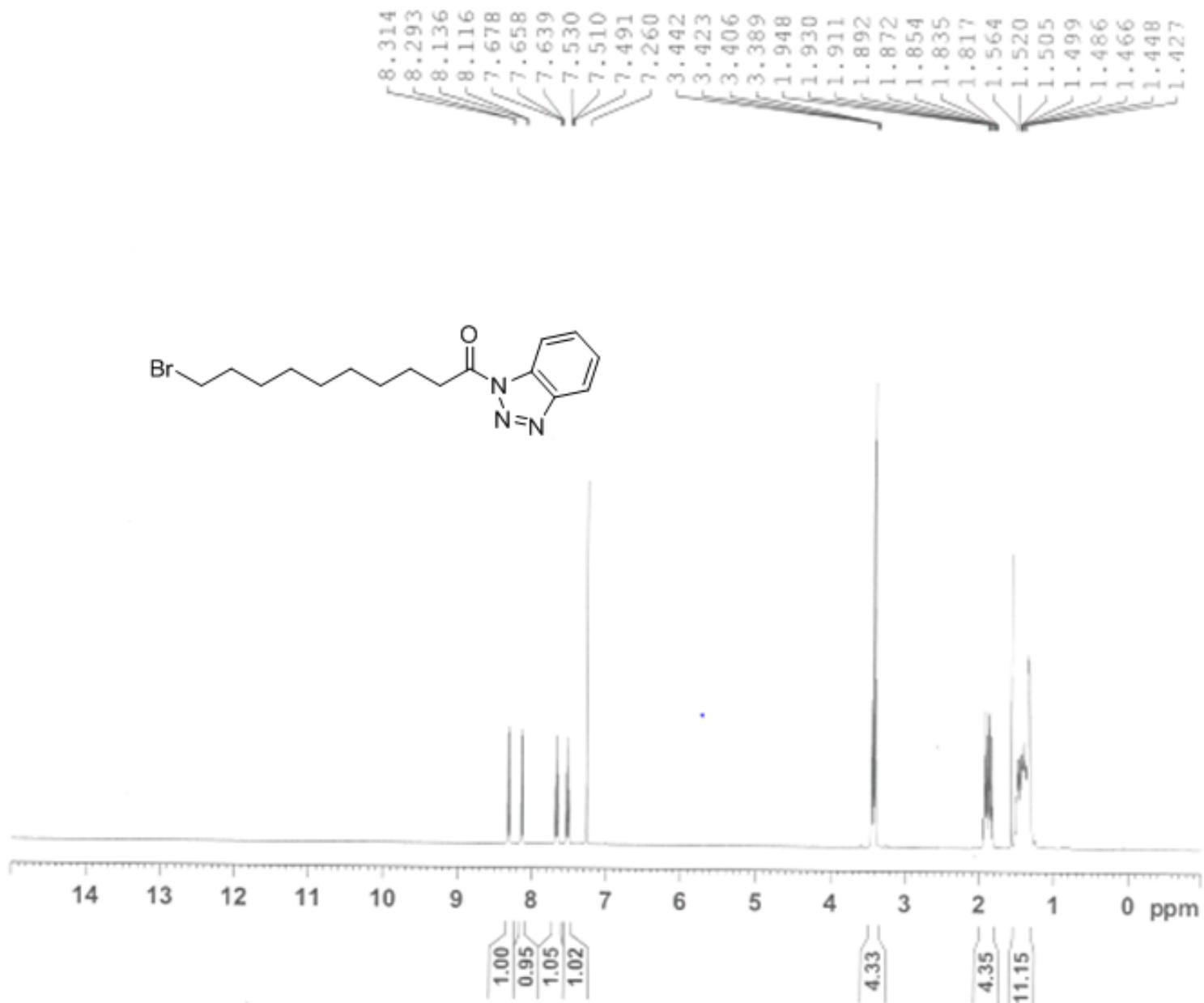
CDCl<sub>3</sub>Spectra 28: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **2o**

J351-A04014-113

CDCl<sub>3</sub>**Spectra 29:** <sup>13</sup>C NMR (100 MHz, CDCl<sub>3</sub>) of compound **2o**



**Spectra 30:**  $^1\text{H NMR}$  (400 MHz,  $\text{CDCl}_3$ ) of compound **2p**  
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Spectra 30: <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 2q