

## *Supporting Information*

### **Synthesis, Fungicidal Activity and Plant Protective Properties of 1,2,3-Thiadiazole and Isothiazole-Based *N*-acyl-*N*-arylalaninates**

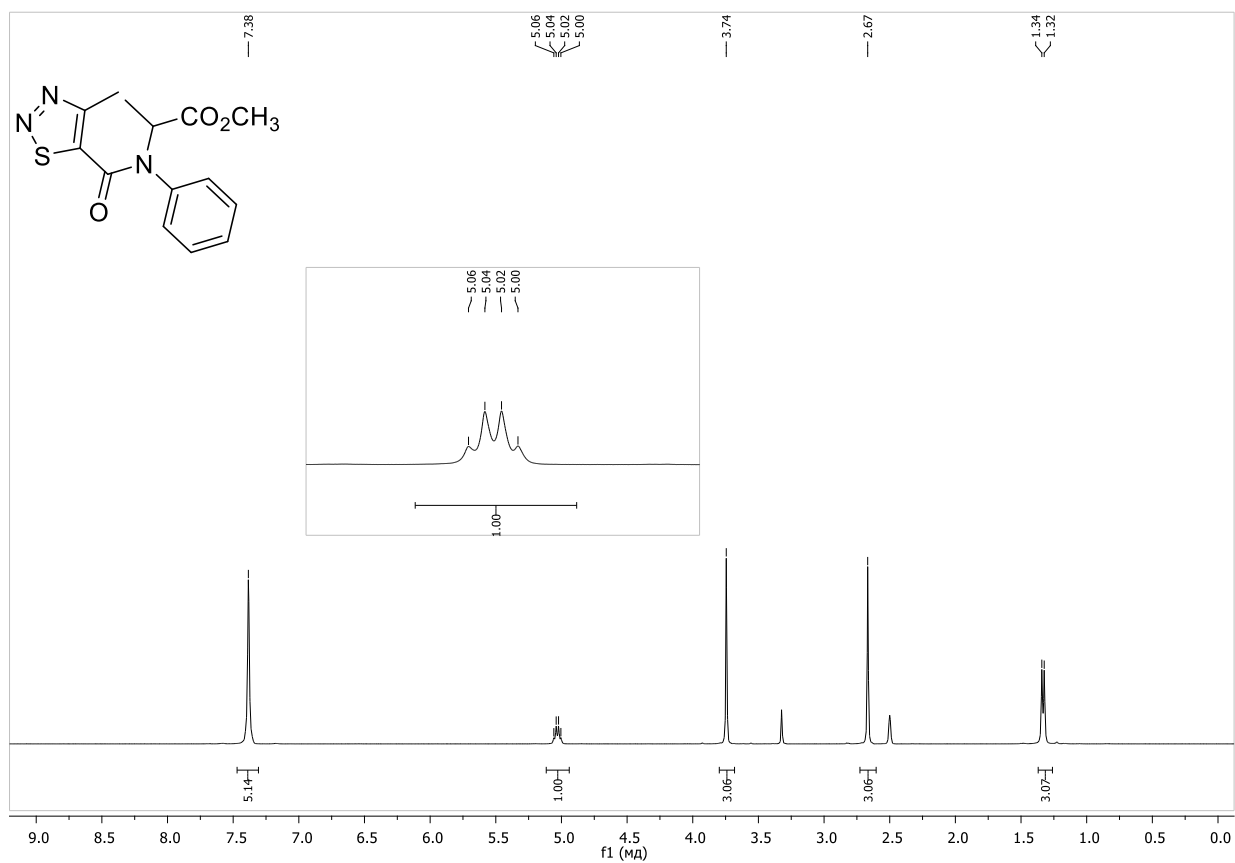
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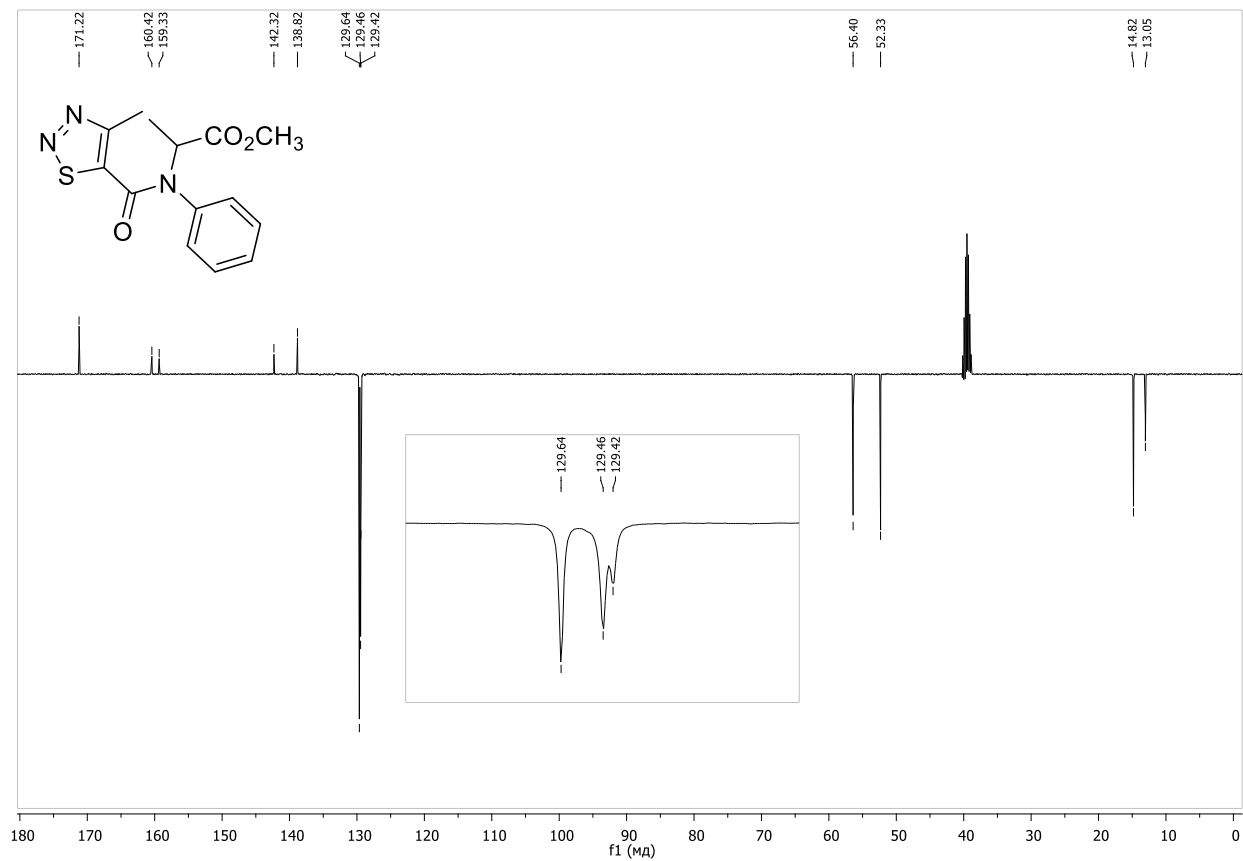
<sup>2</sup> Postovsky Institute of Organic Synthesis, Ural Branch of Russian Academy of Sciences, 22/20 S. Kovalevskaya Street, 620108 Ekaterinburg, Russia

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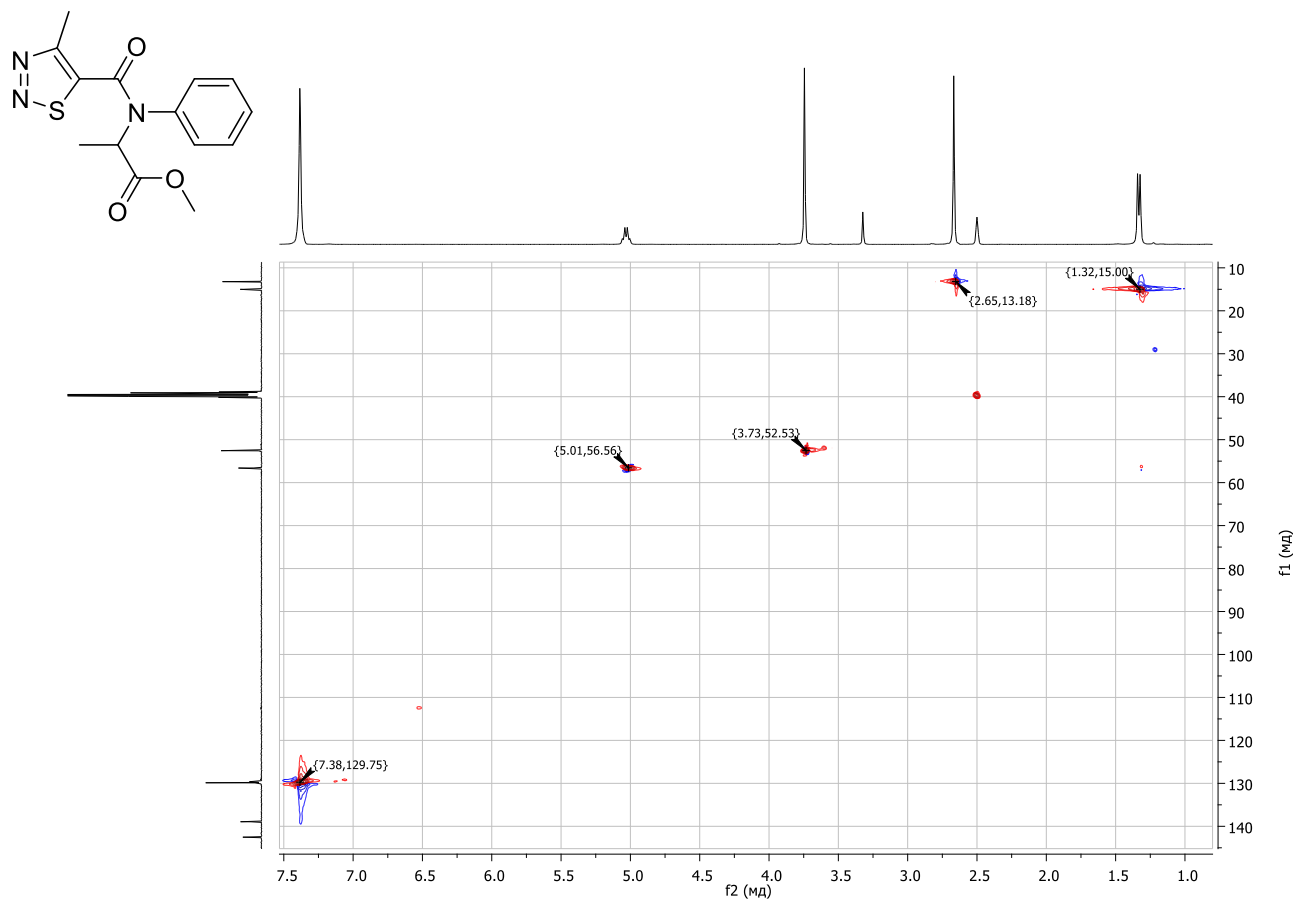
\* Correspondence: t.a.kalinina@urfu.ru; v.a.bakulev@urfu.ru; Tel.: +7-3433754818



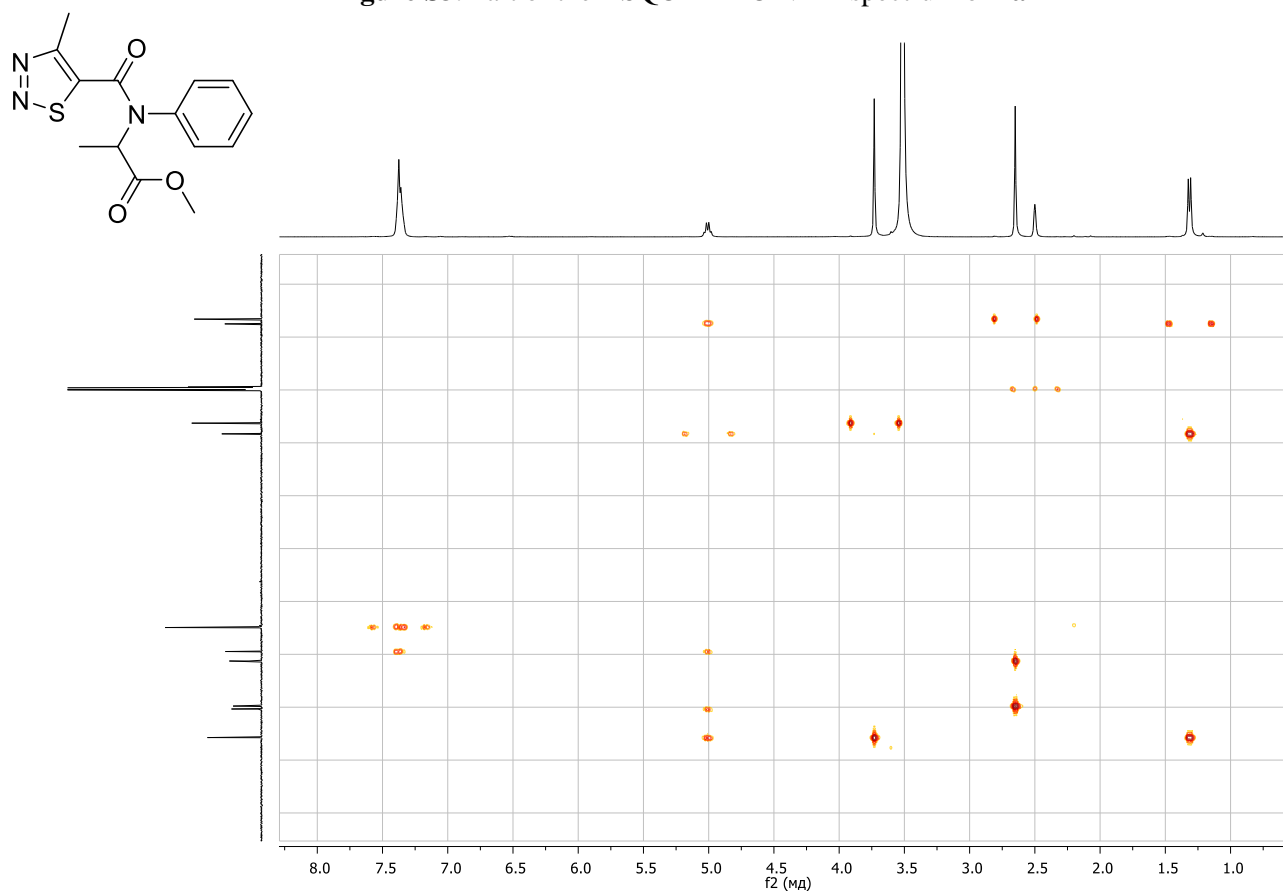
**Figure S1.**  $^1\text{H}$  NMR of compound **1a**



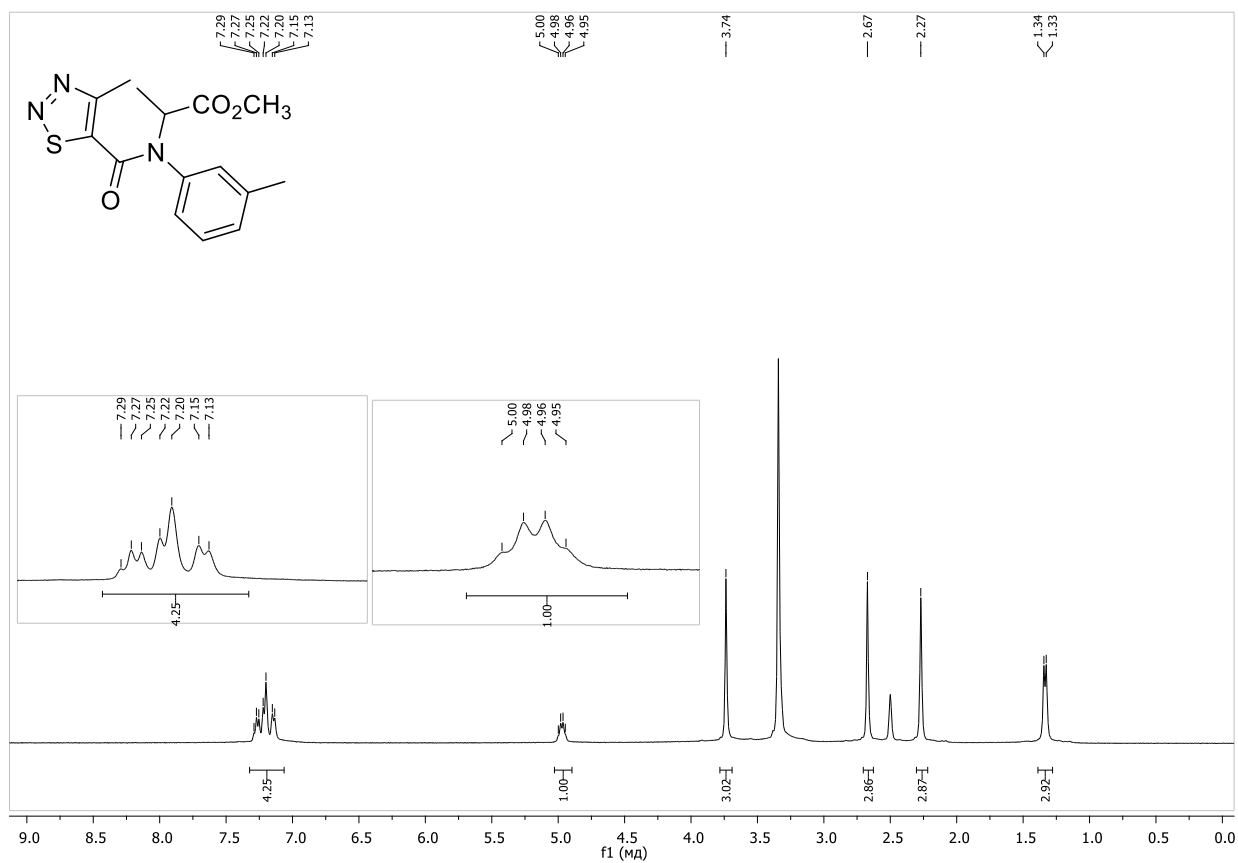
**Figure S2.**  $^{13}\text{C}$  NMR of compound **1a**



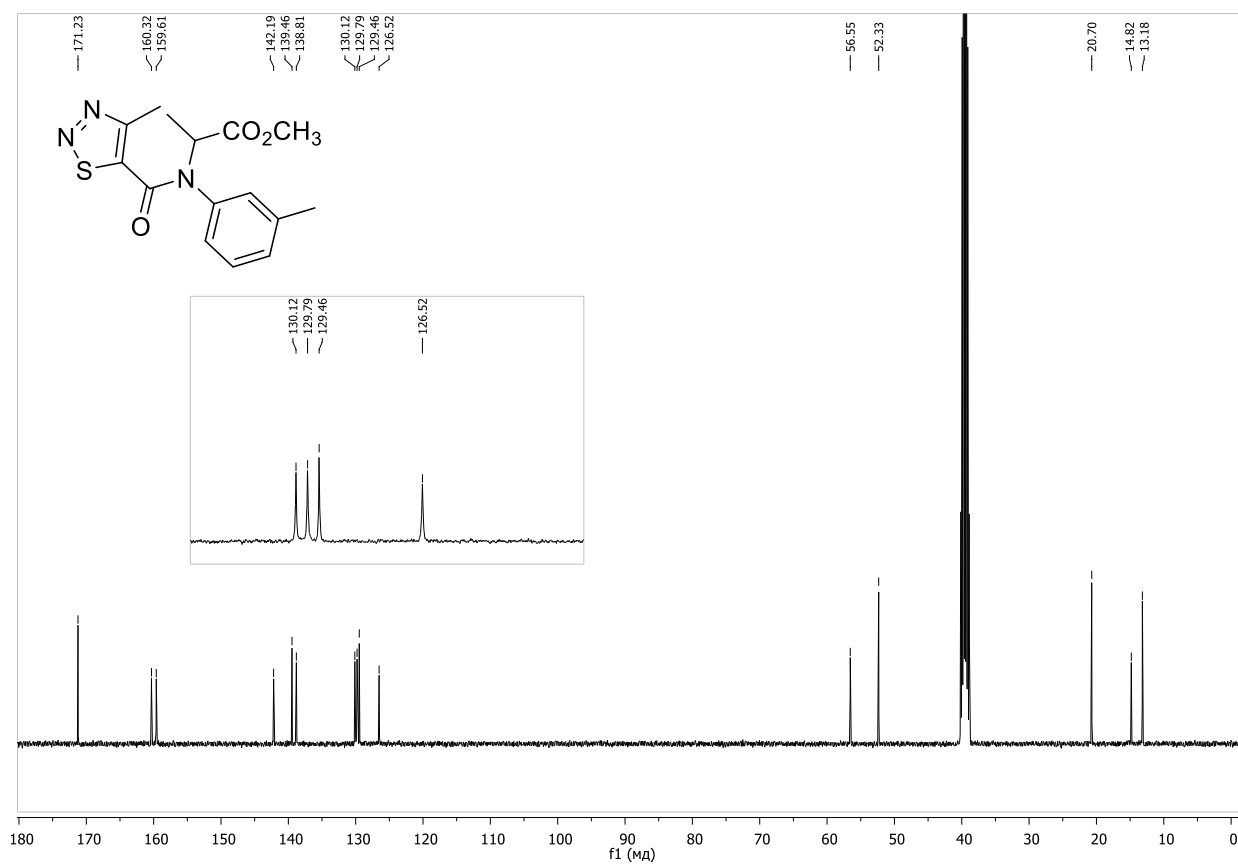
**Figure S3.** Part of the HSQC  $^1\text{H}$ - $^{13}\text{C}$  NMR spectrum of **1a**



**Figure S4.** The HMBC  $^1\text{H}$ - $^{13}\text{C}$  NMR spectrum of **1a**



**Figure S5.** <sup>1</sup>H NMR of compound **1b**



**Figure S6.** <sup>13</sup>C NMR of compound **1b**

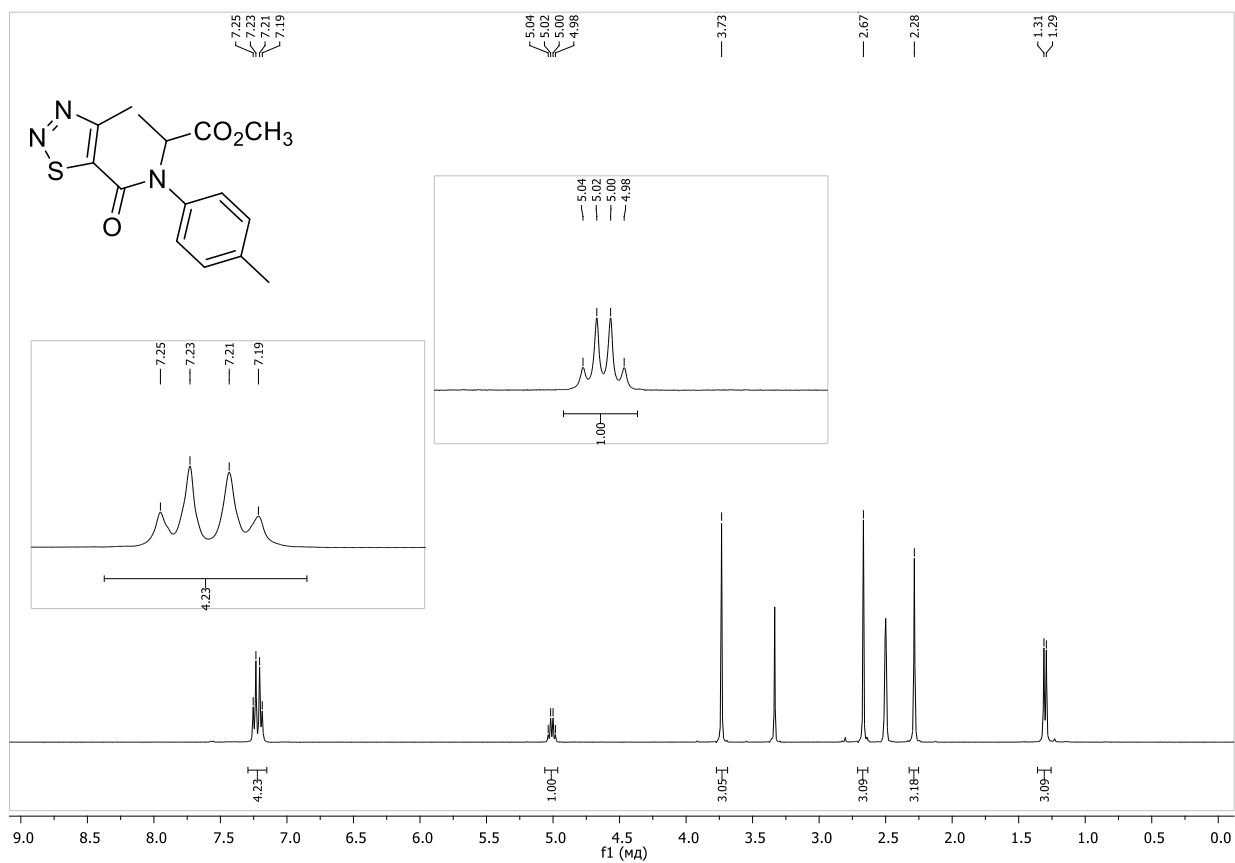


Figure S7. <sup>1</sup>H NMR of compound **1c**

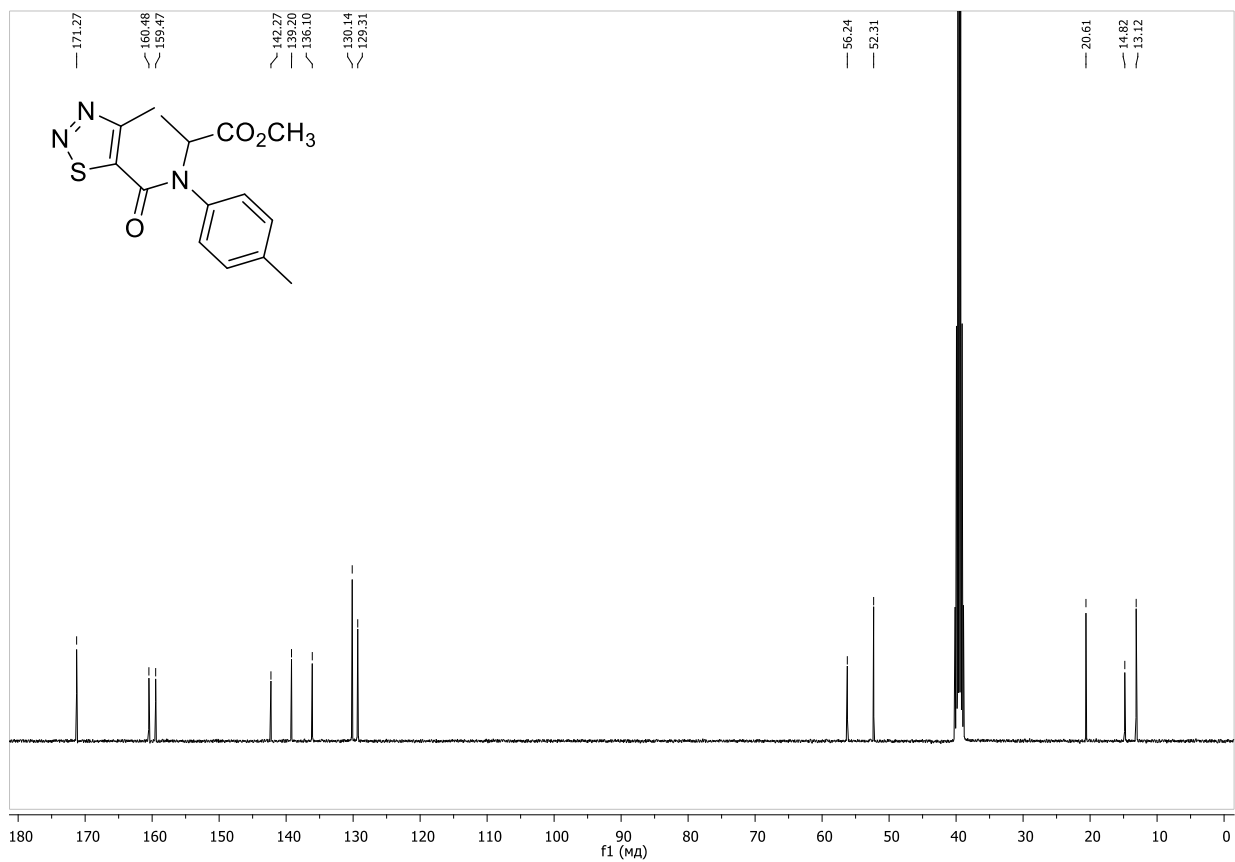
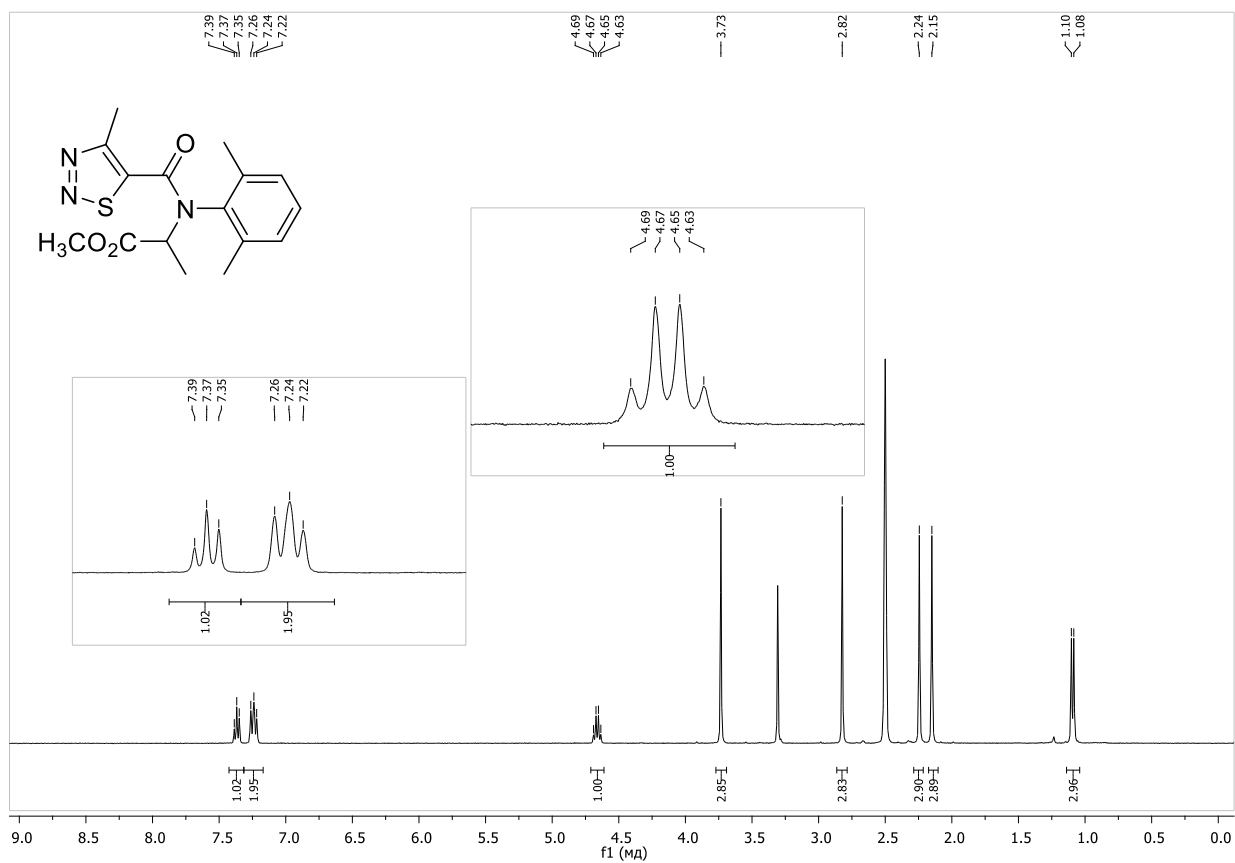
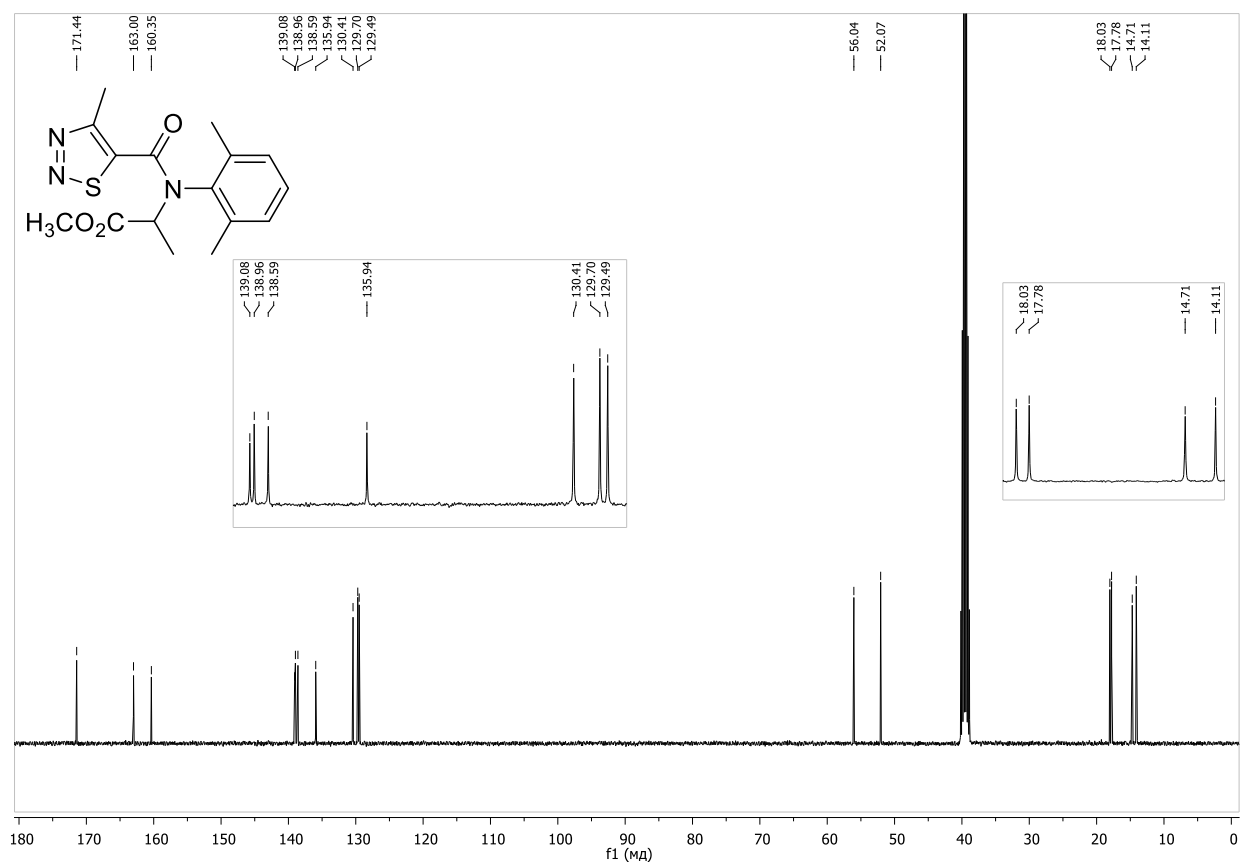


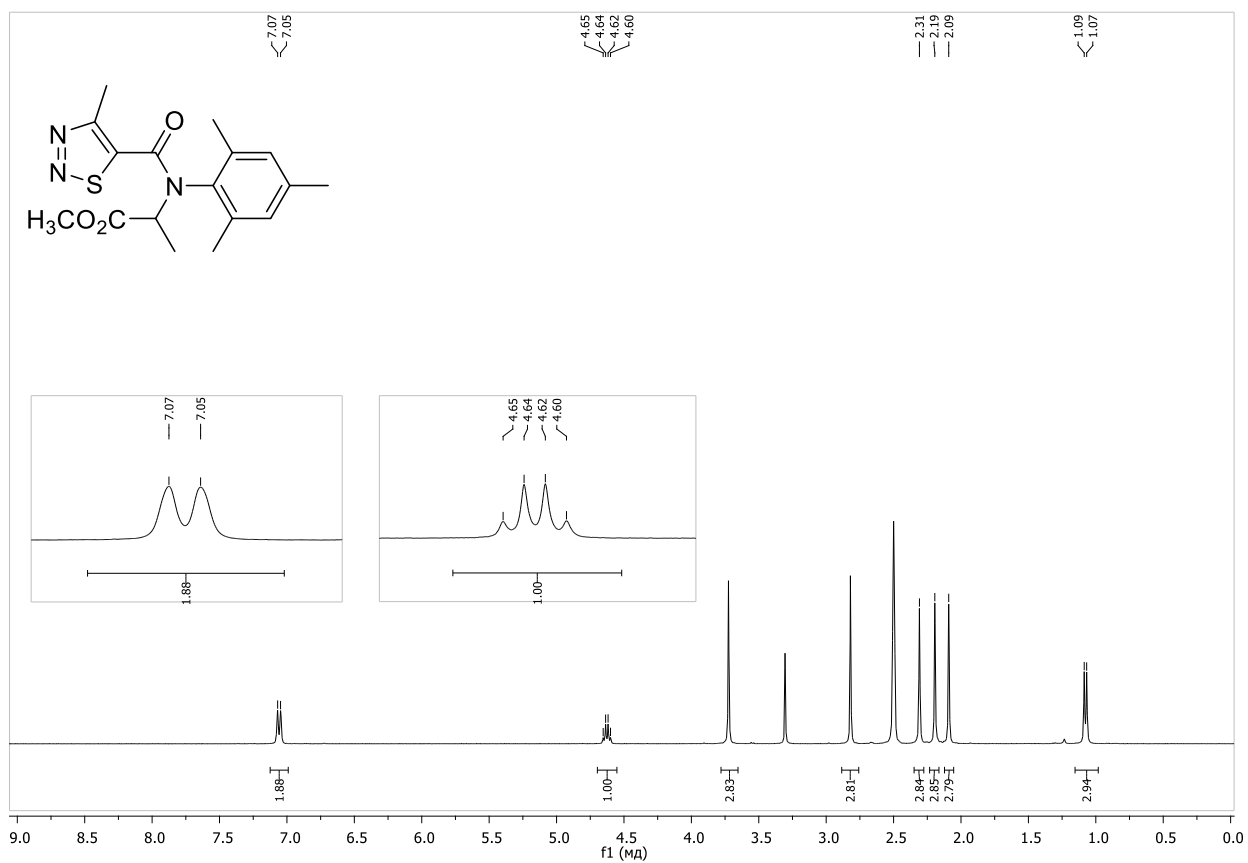
Figure S8. <sup>13</sup>C NMR of compound **1c**



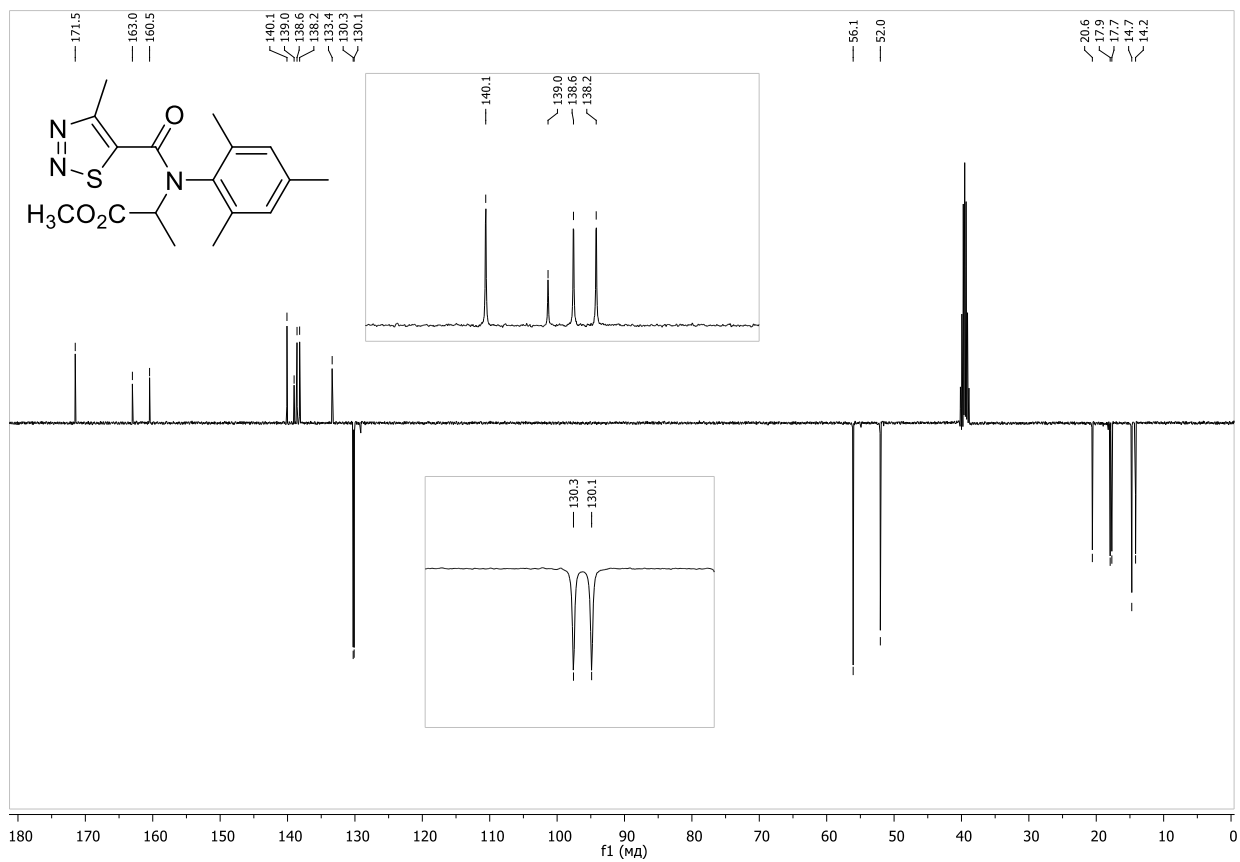
**Figure S9.** <sup>1</sup>H NMR of compound **1d**



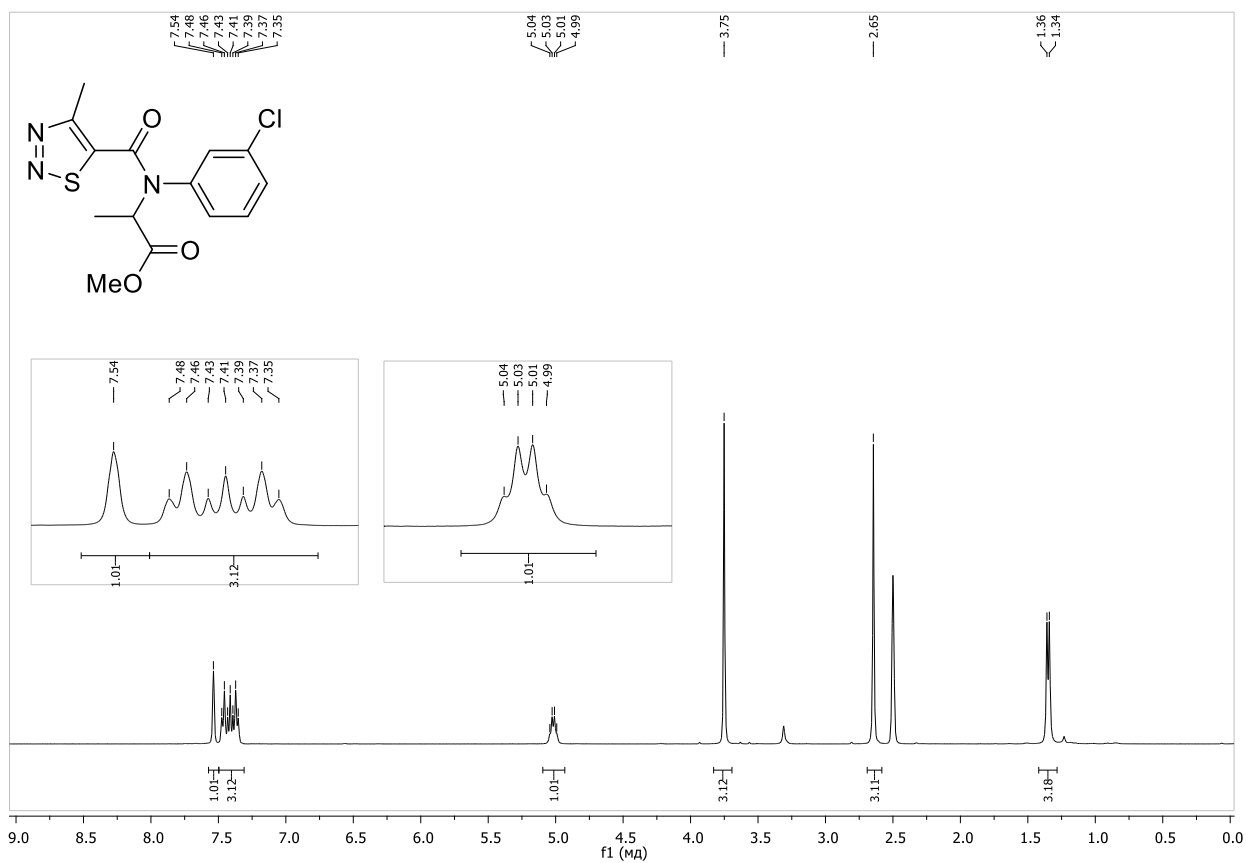
**Figure S10.** <sup>13</sup>C NMR of compound **1d**



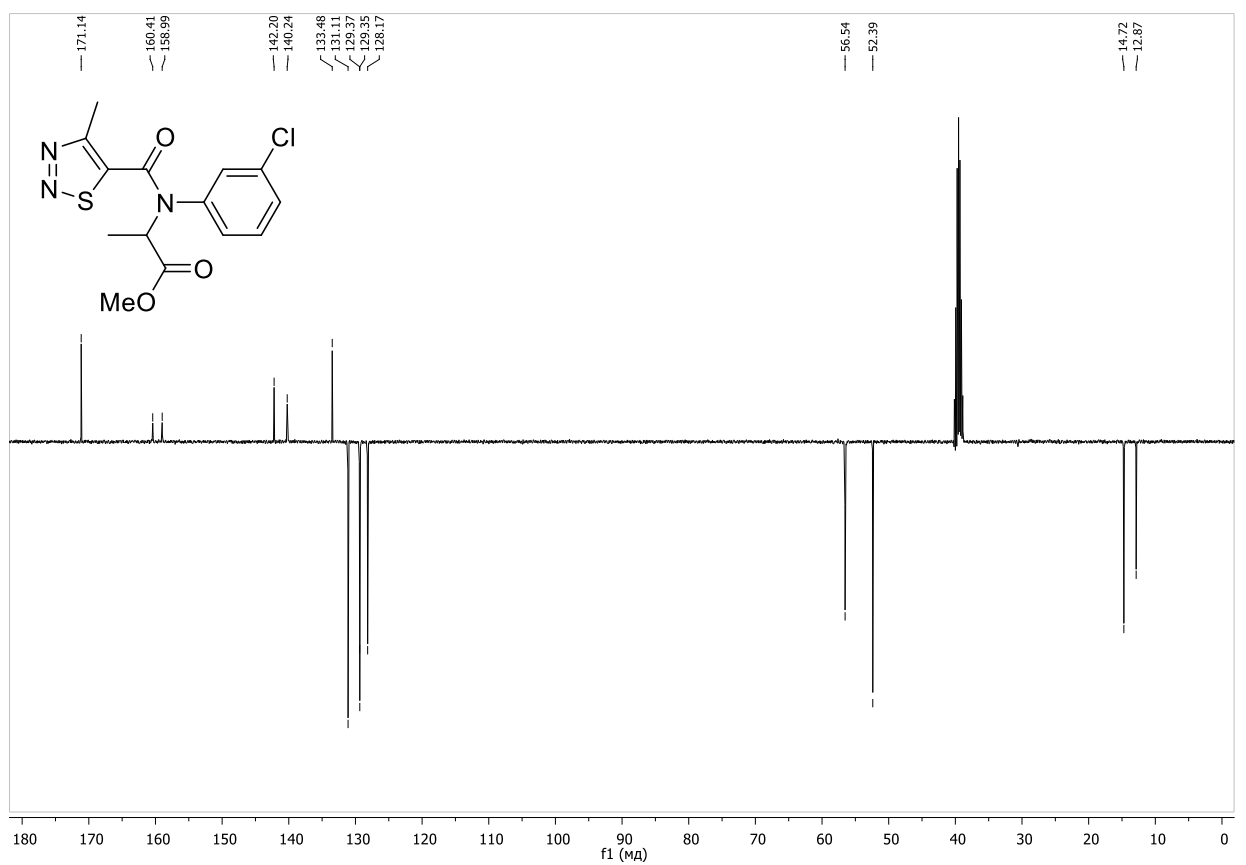
**Figure S11.** <sup>1</sup>H NMR of compound **1e**



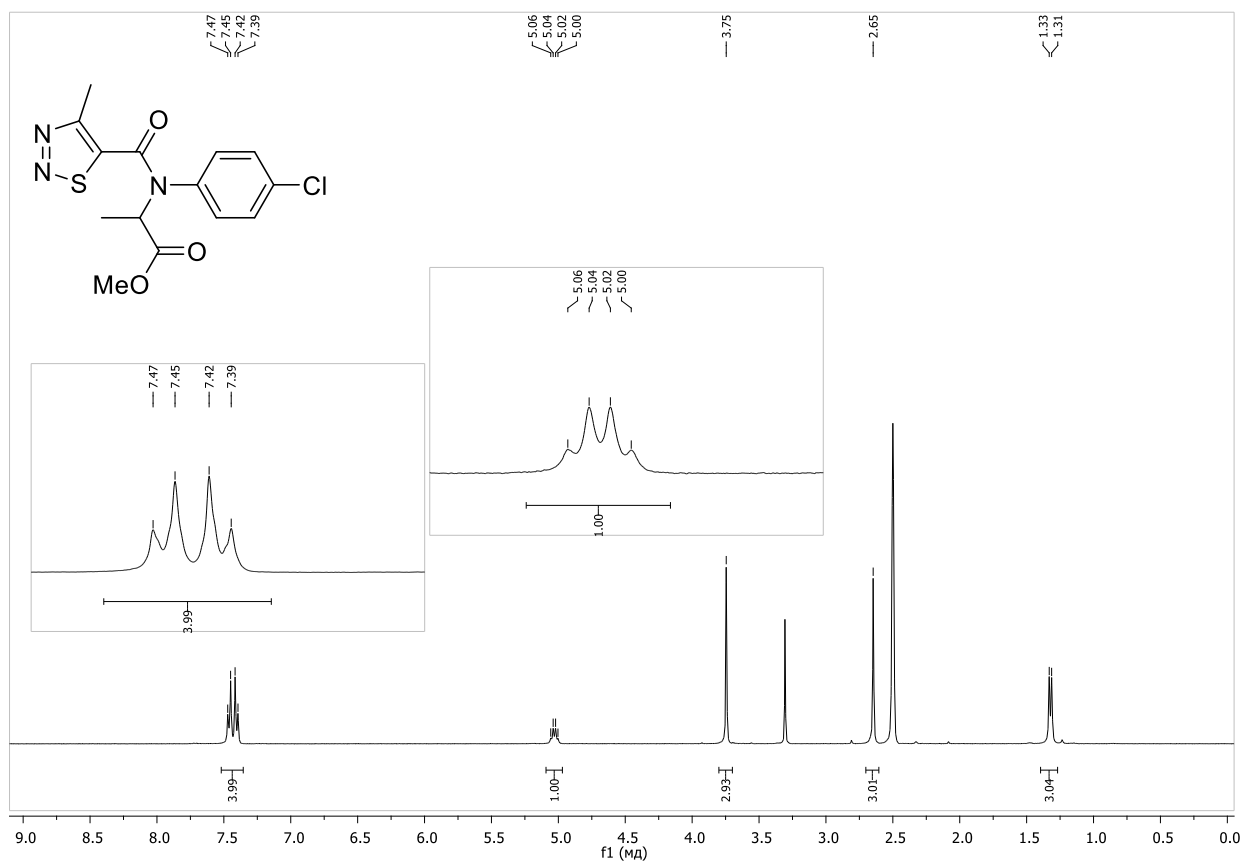
**Figure S12.** <sup>13</sup>C NMR of compound **1e**



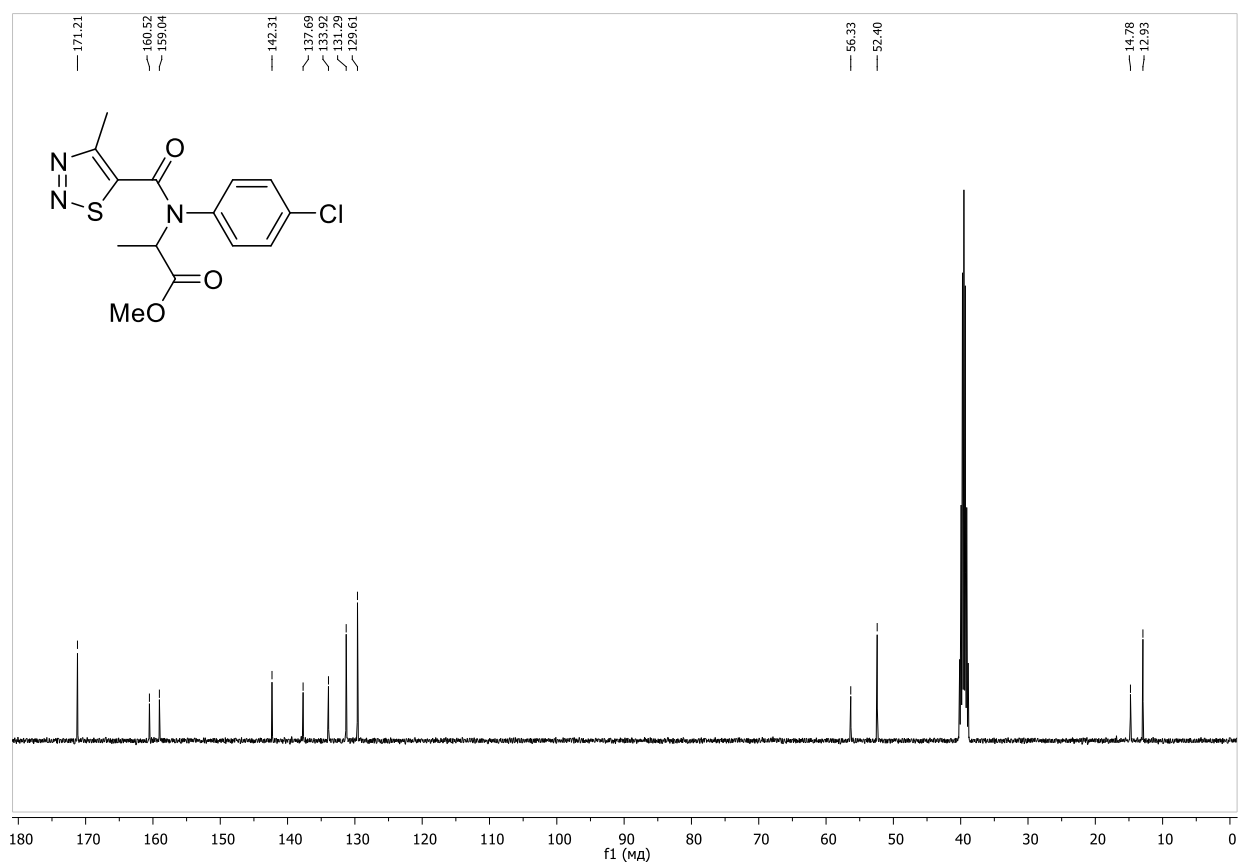
**Figure S13.** <sup>1</sup>H NMR of compound **1f**



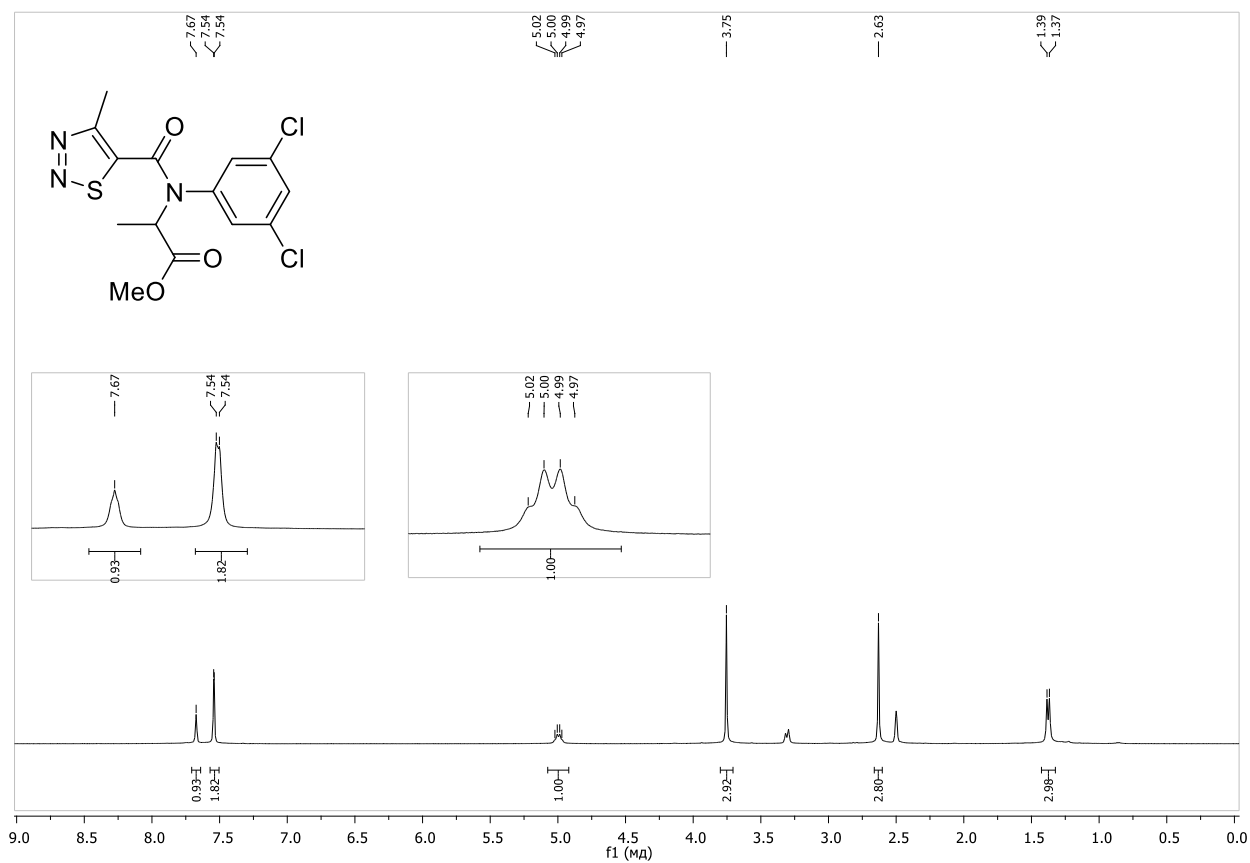
**Figure S14.** <sup>13</sup>C NMR of compound **1f**



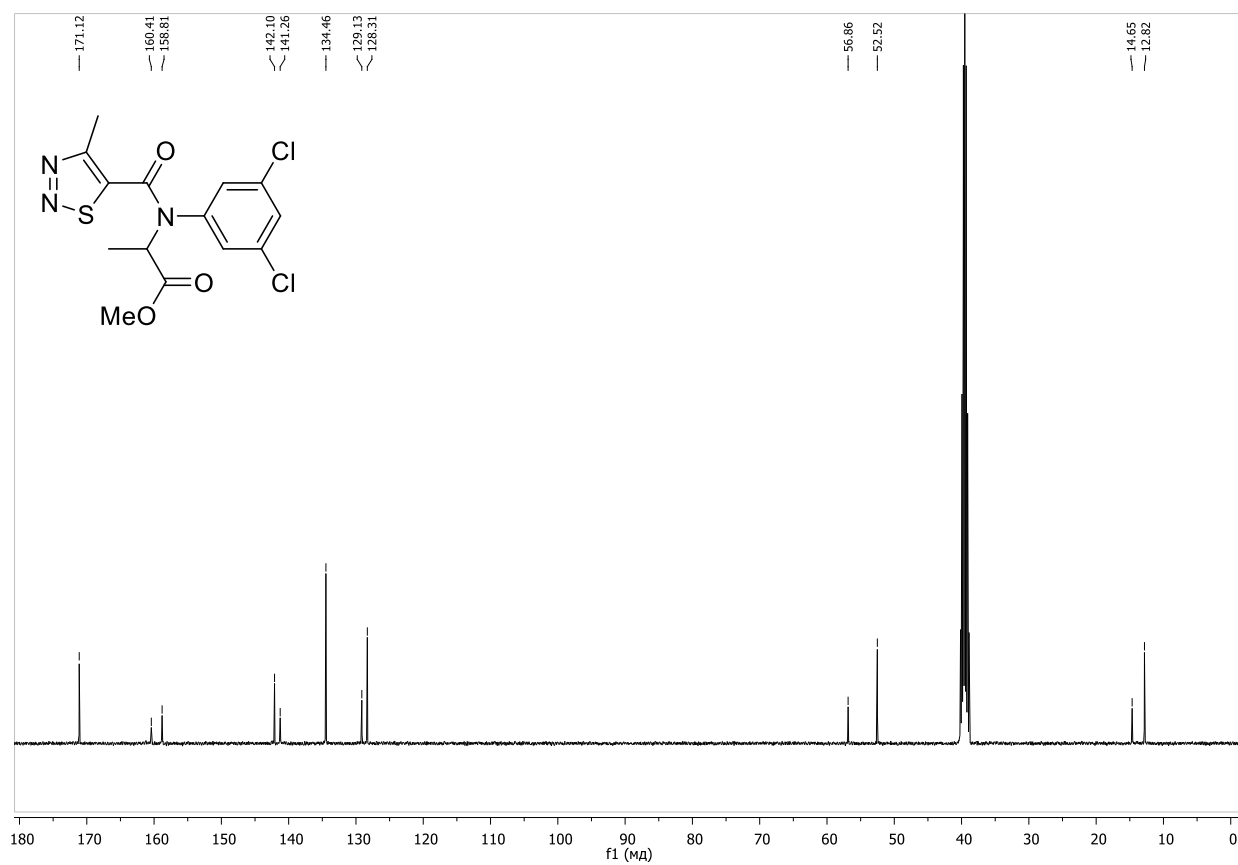
**Figure S15.** <sup>1</sup>H NMR of compound **1g**



**Figure S16.** <sup>13</sup>C NMR of compound **1f**



**Figure S17.** <sup>1</sup>H NMR of compound **1h**



**Figure S18.** <sup>13</sup>C NMR of compound **1h**

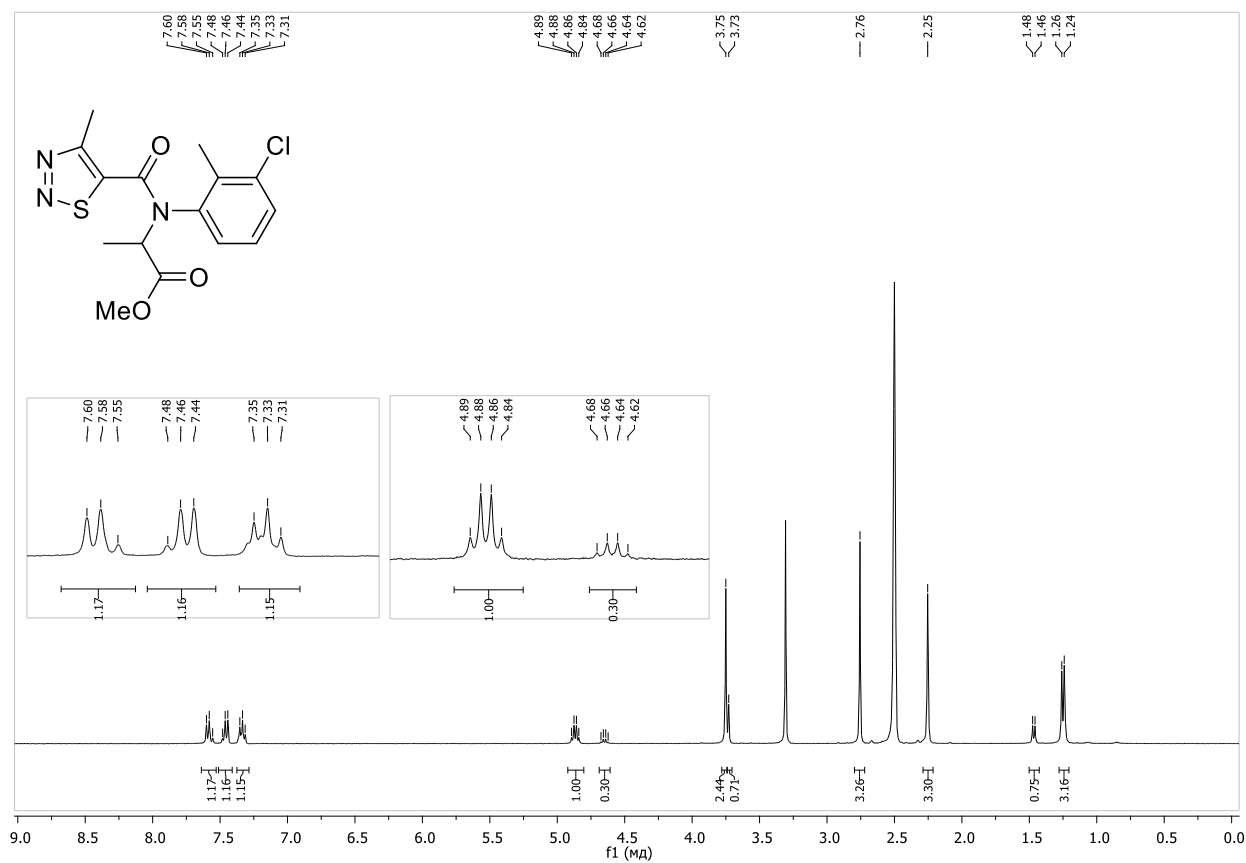


Figure S19. <sup>1</sup>H NMR of compound **1i**

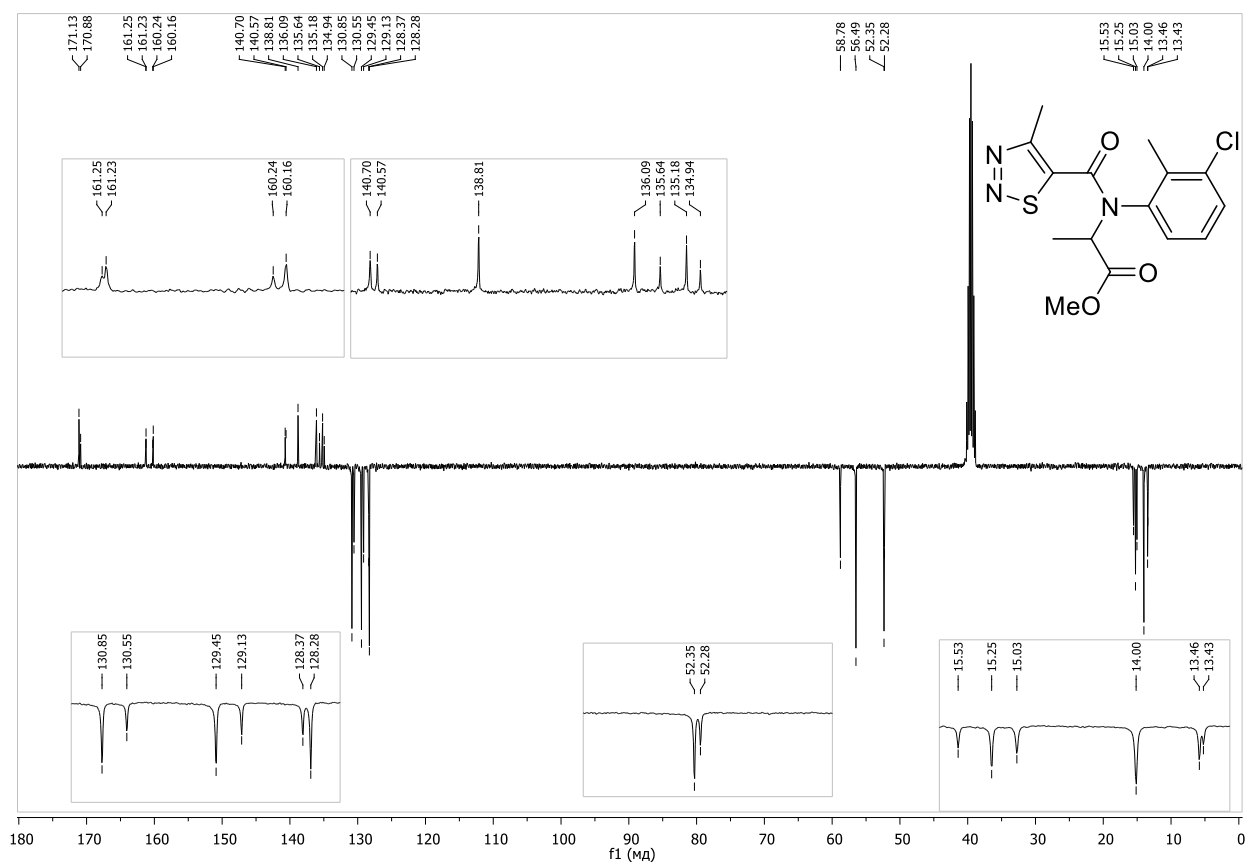
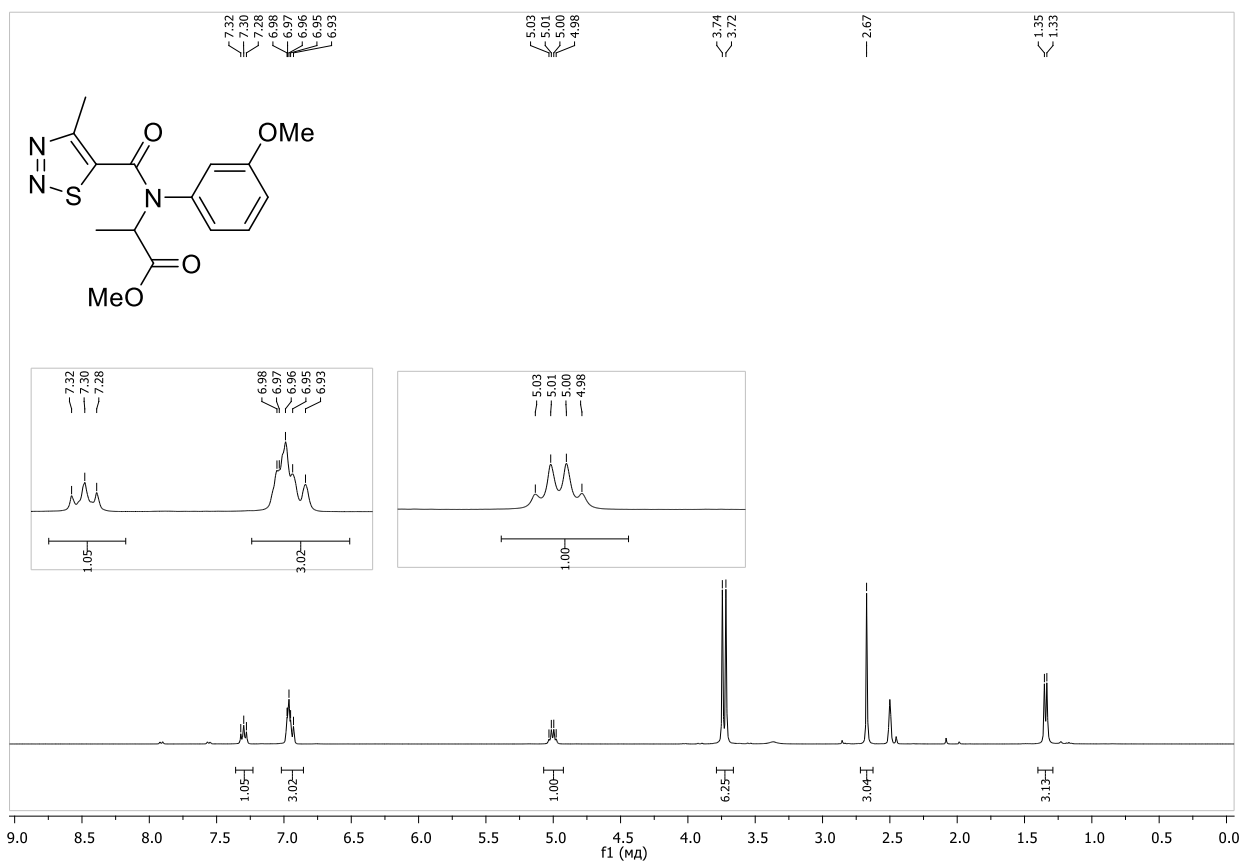
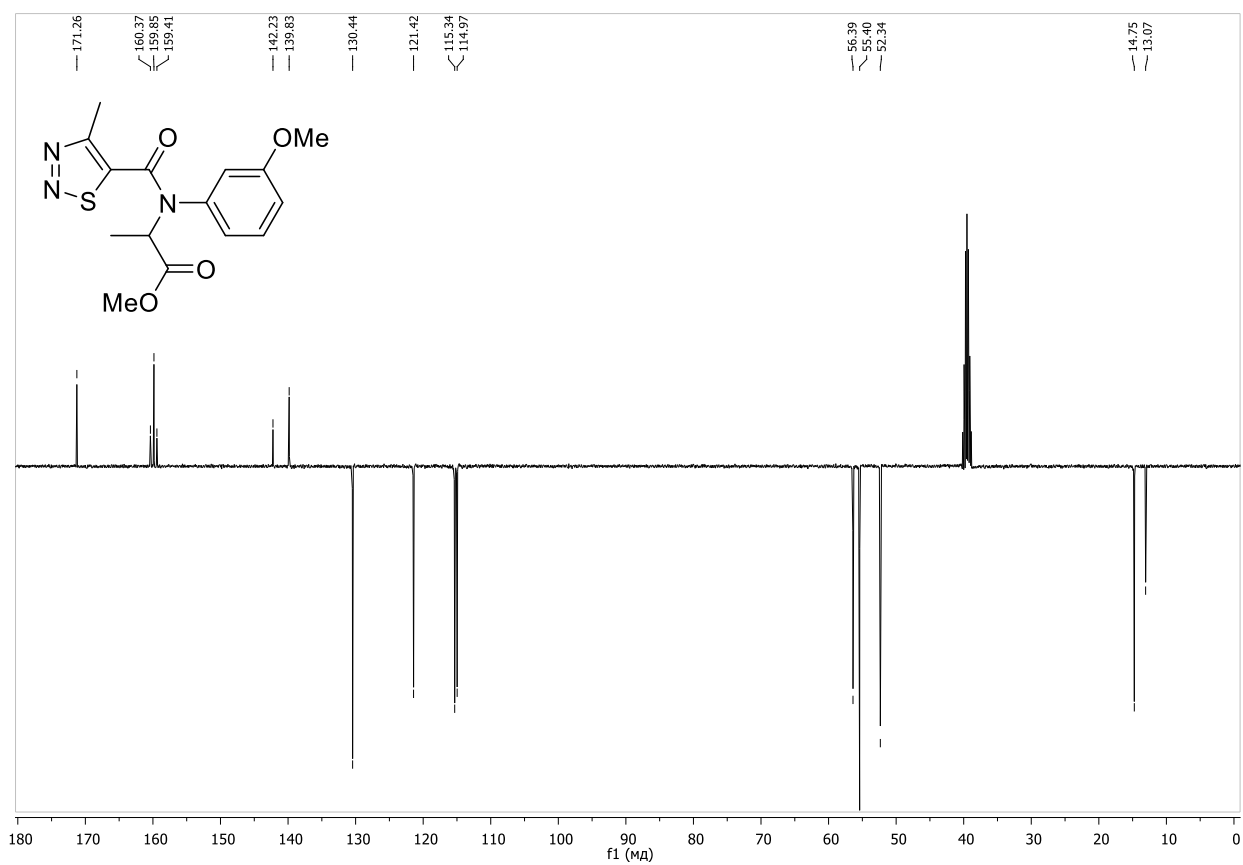


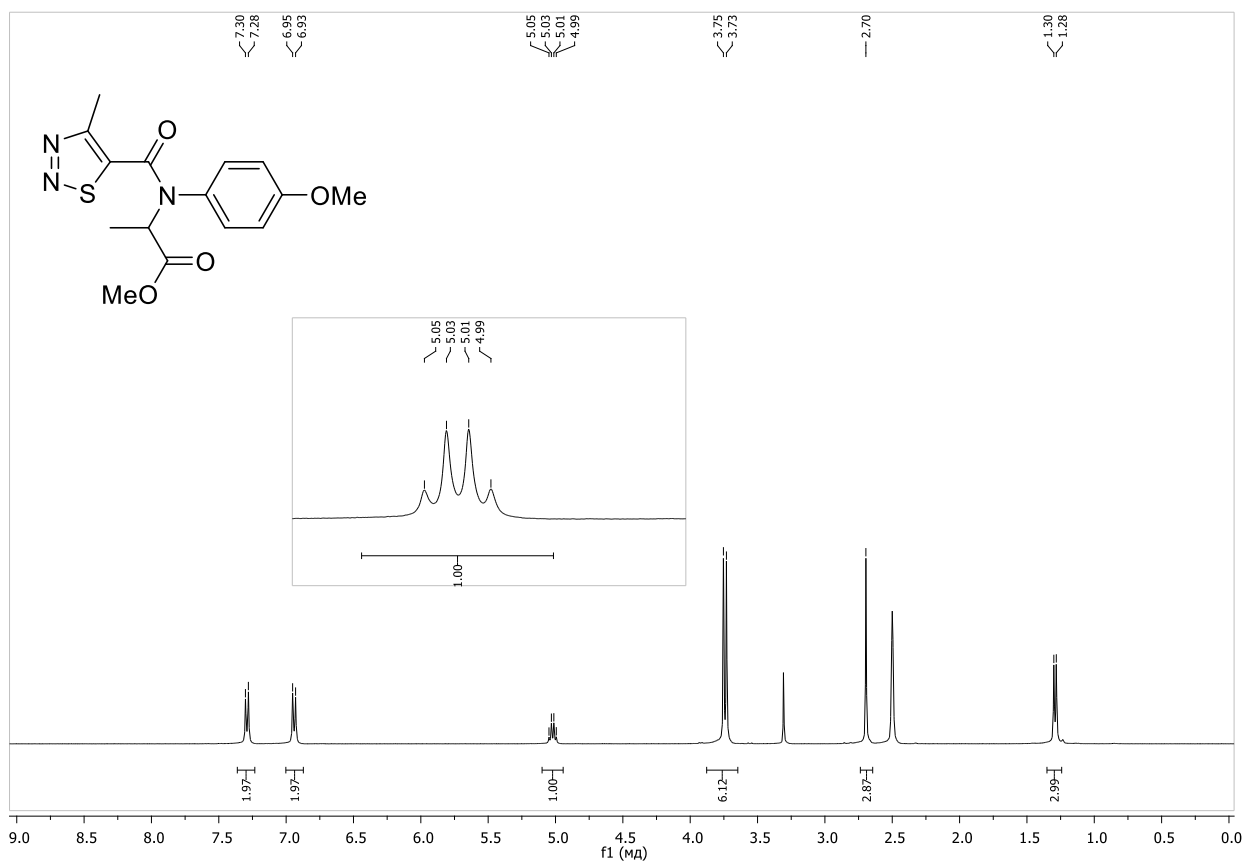
Figure S20. <sup>13</sup>C NMR of compound **1i**



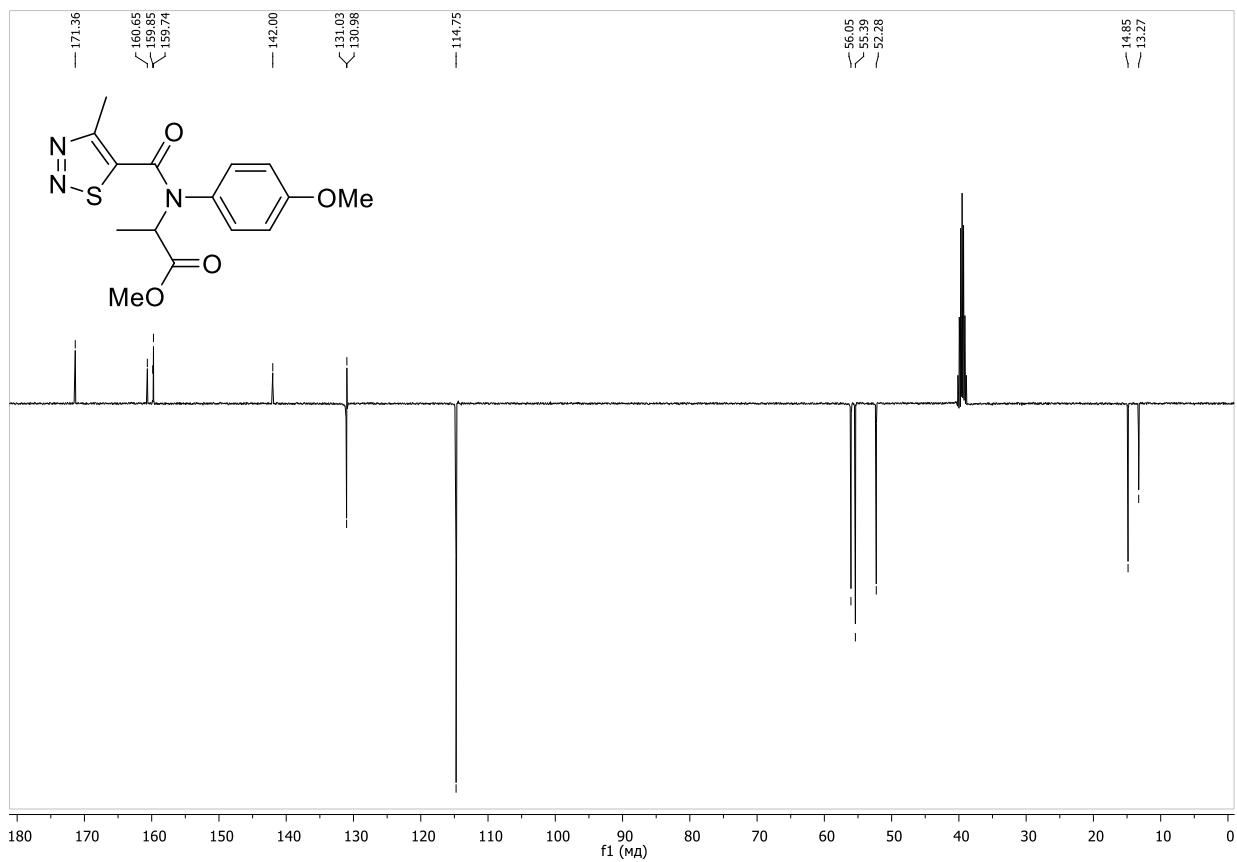
**Figure S21.** <sup>1</sup>H NMR of compound **1j**



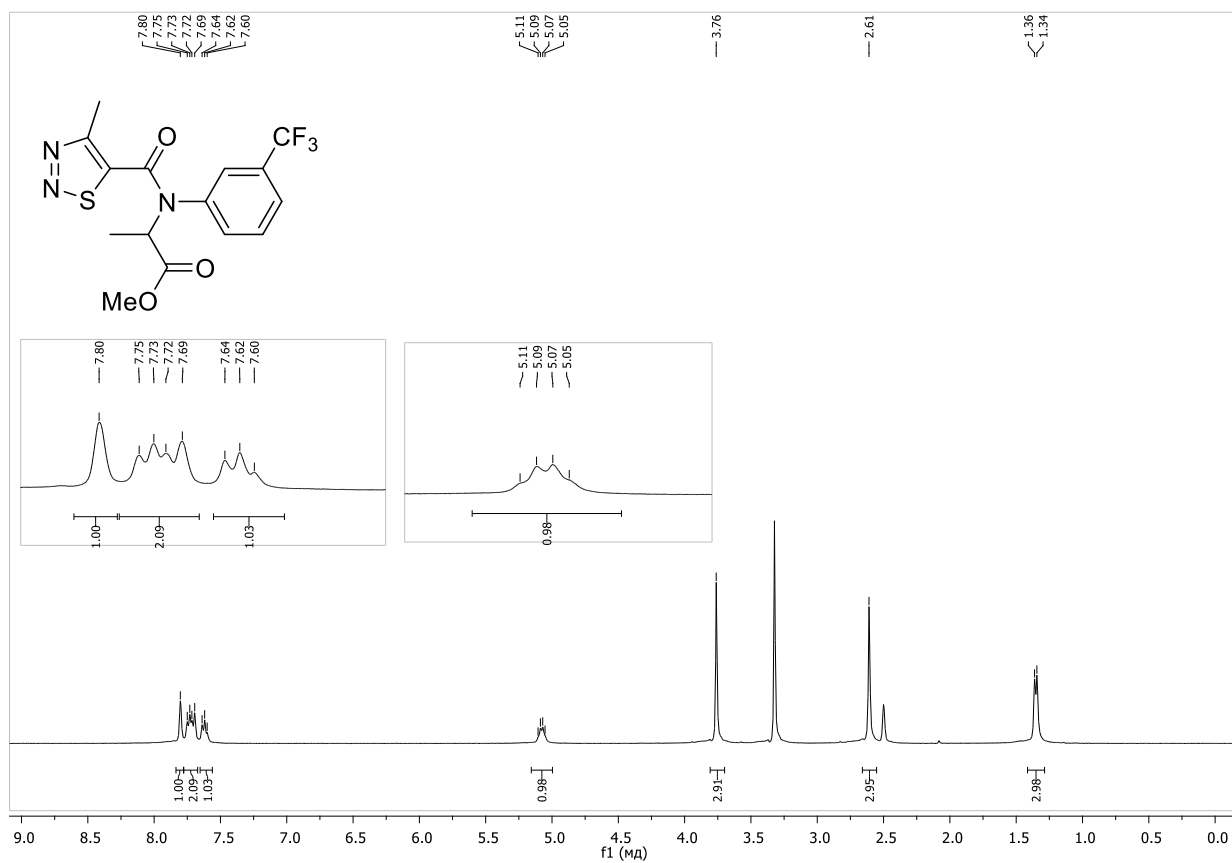
**Figure S22.** <sup>13</sup>C NMR of compound **1j**



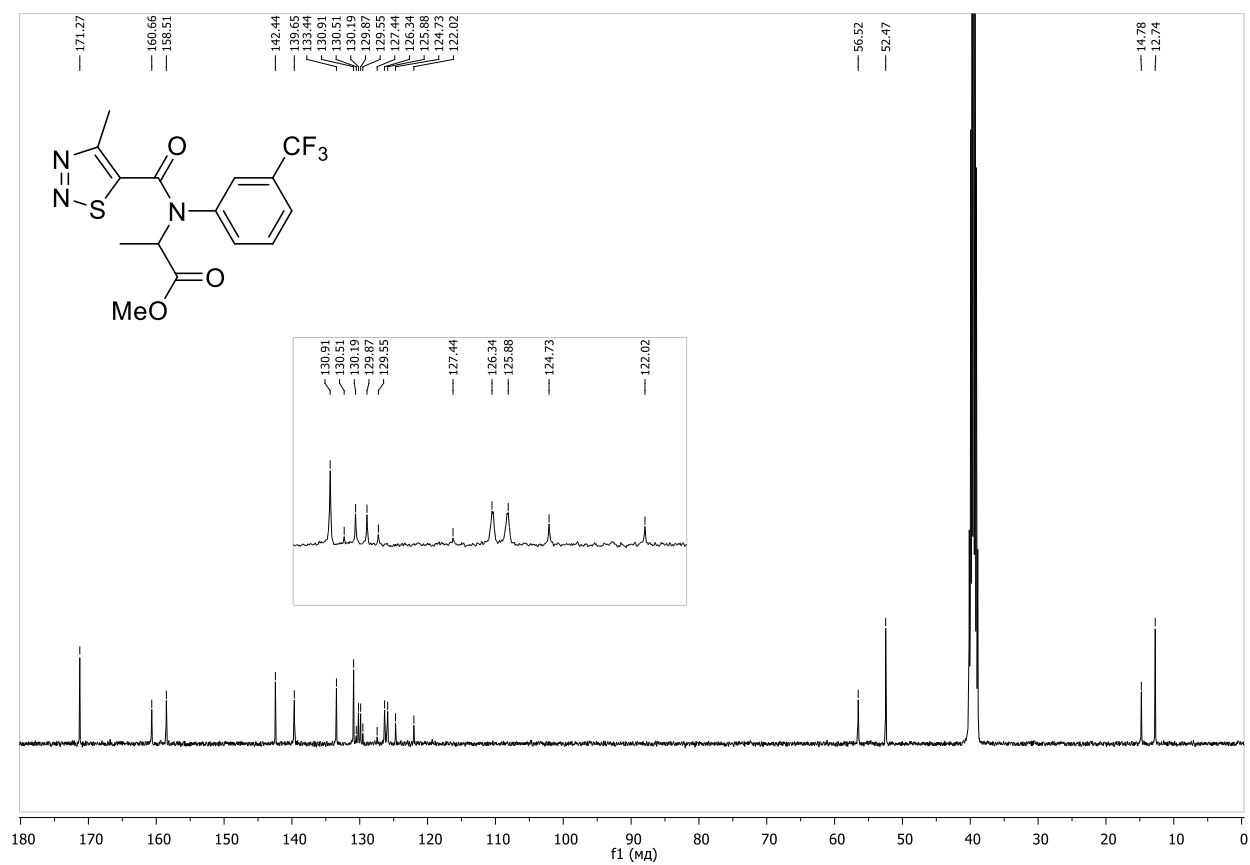
**Figure S23.** <sup>1</sup>H NMR of compound **1k**



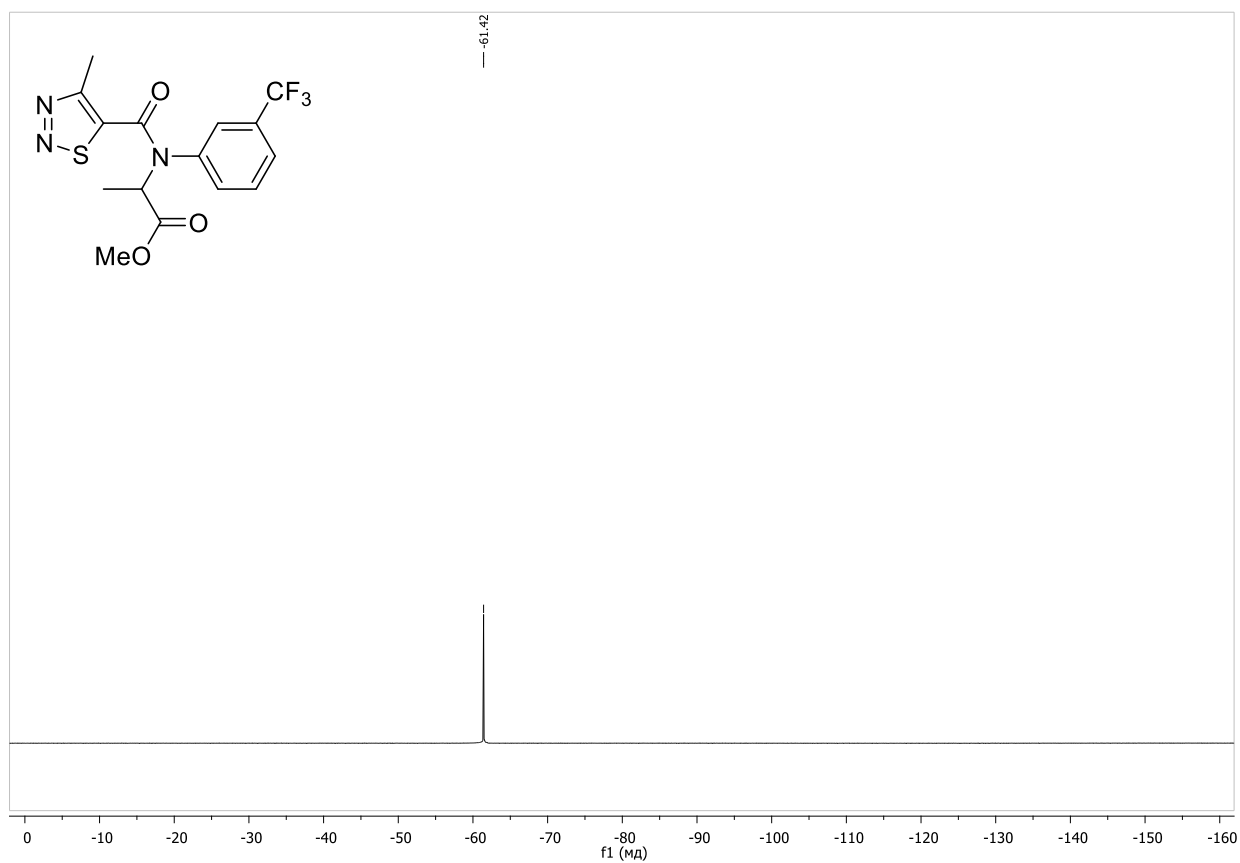
**Figure S24.** <sup>13</sup>C NMR of compound **1k**



**Figure S25.** <sup>1</sup>H NMR of compound **11**



**Figure S26.** <sup>13</sup>C NMR of compound **11**



**Figure S27.**  $^{19}\text{F}$  NMR of compound **11**

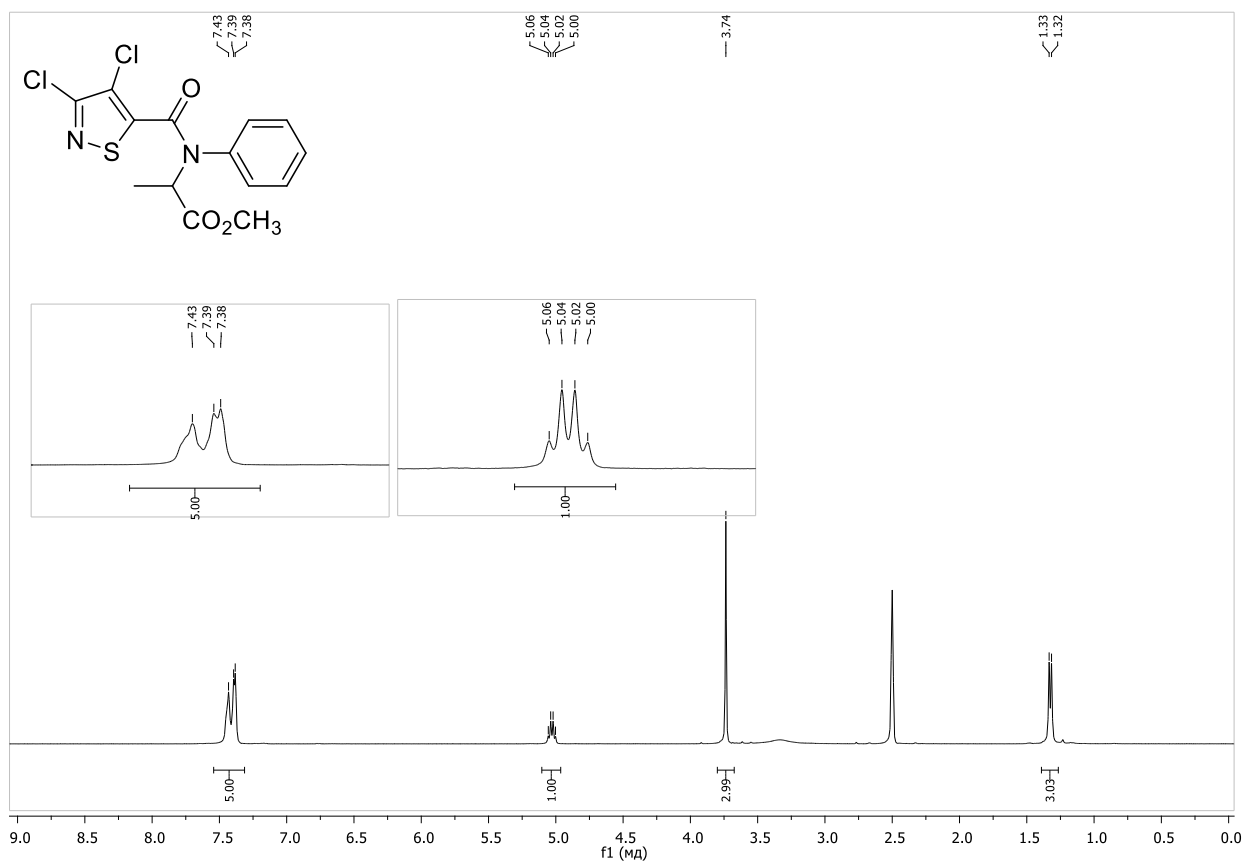


Figure S28. <sup>1</sup>H NMR of compound 2a

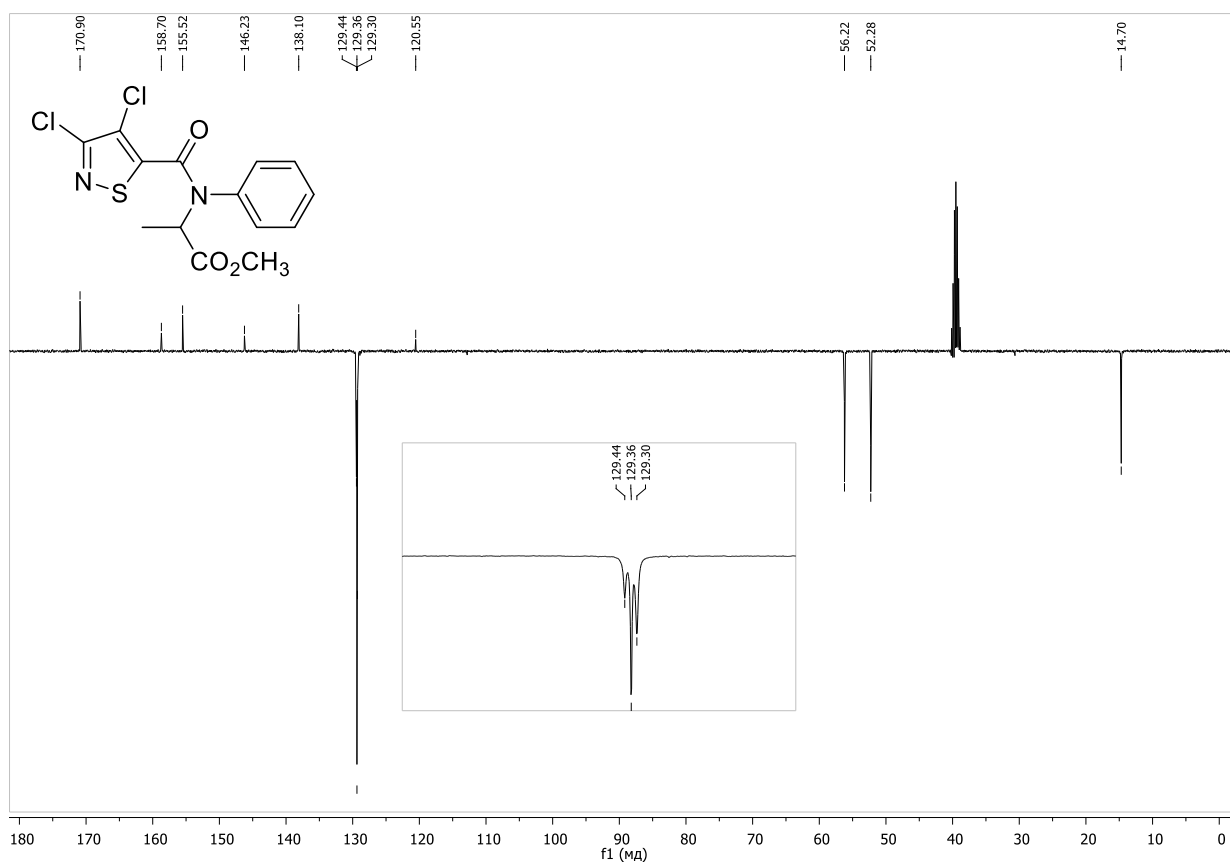
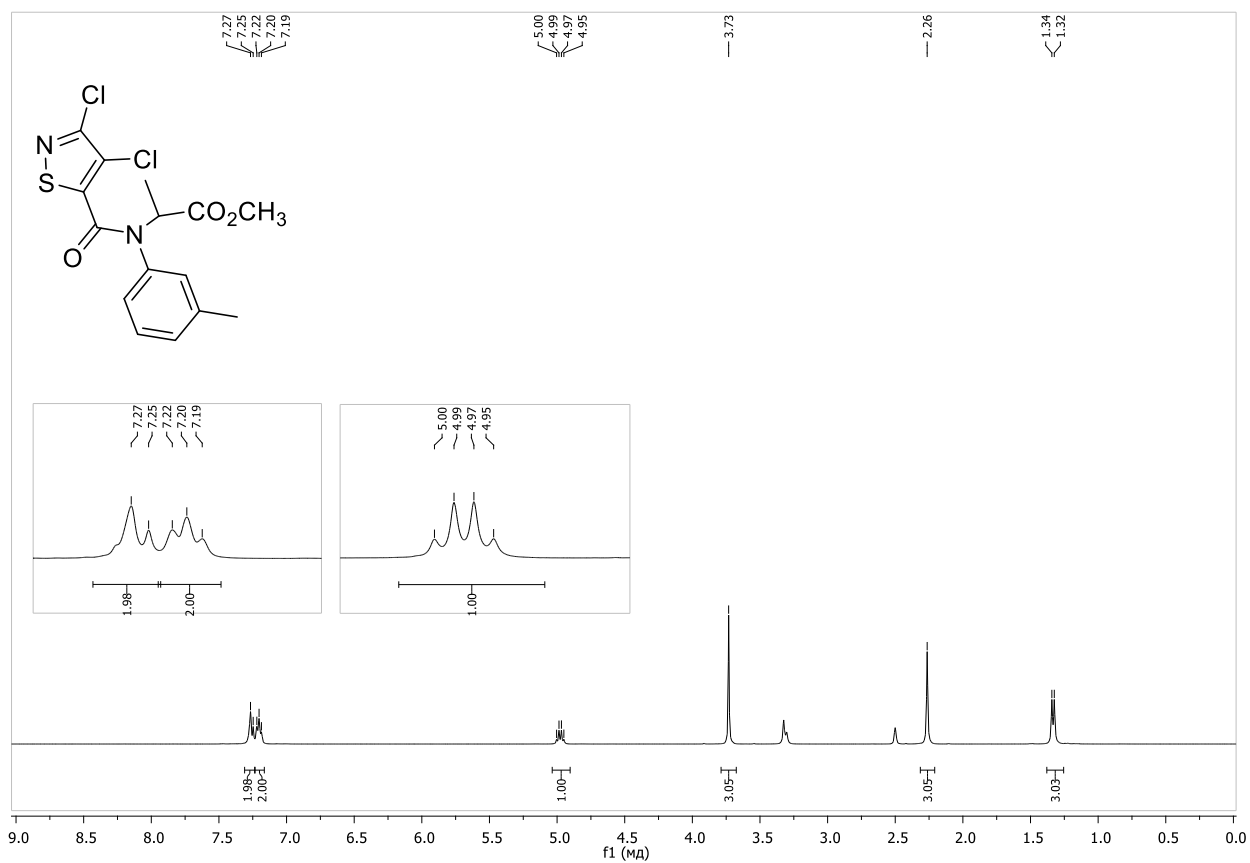
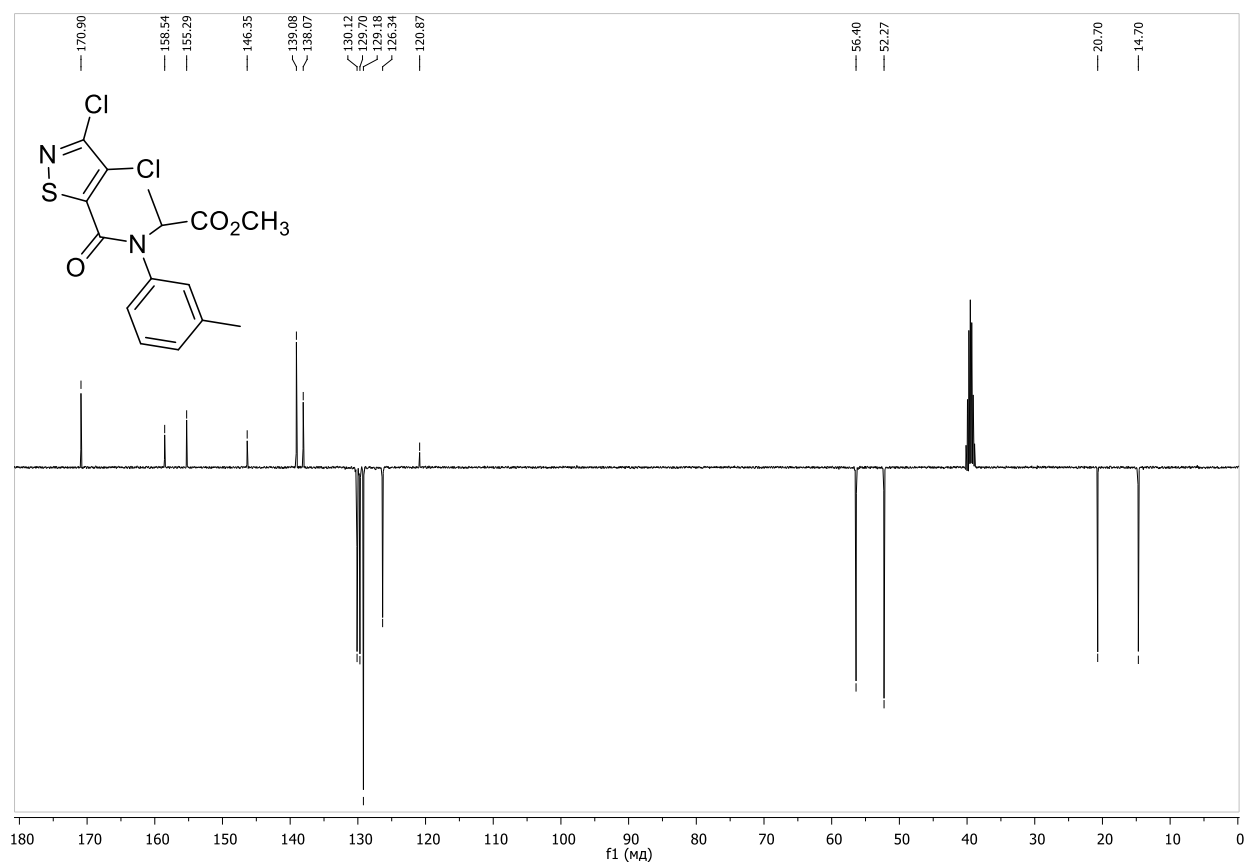


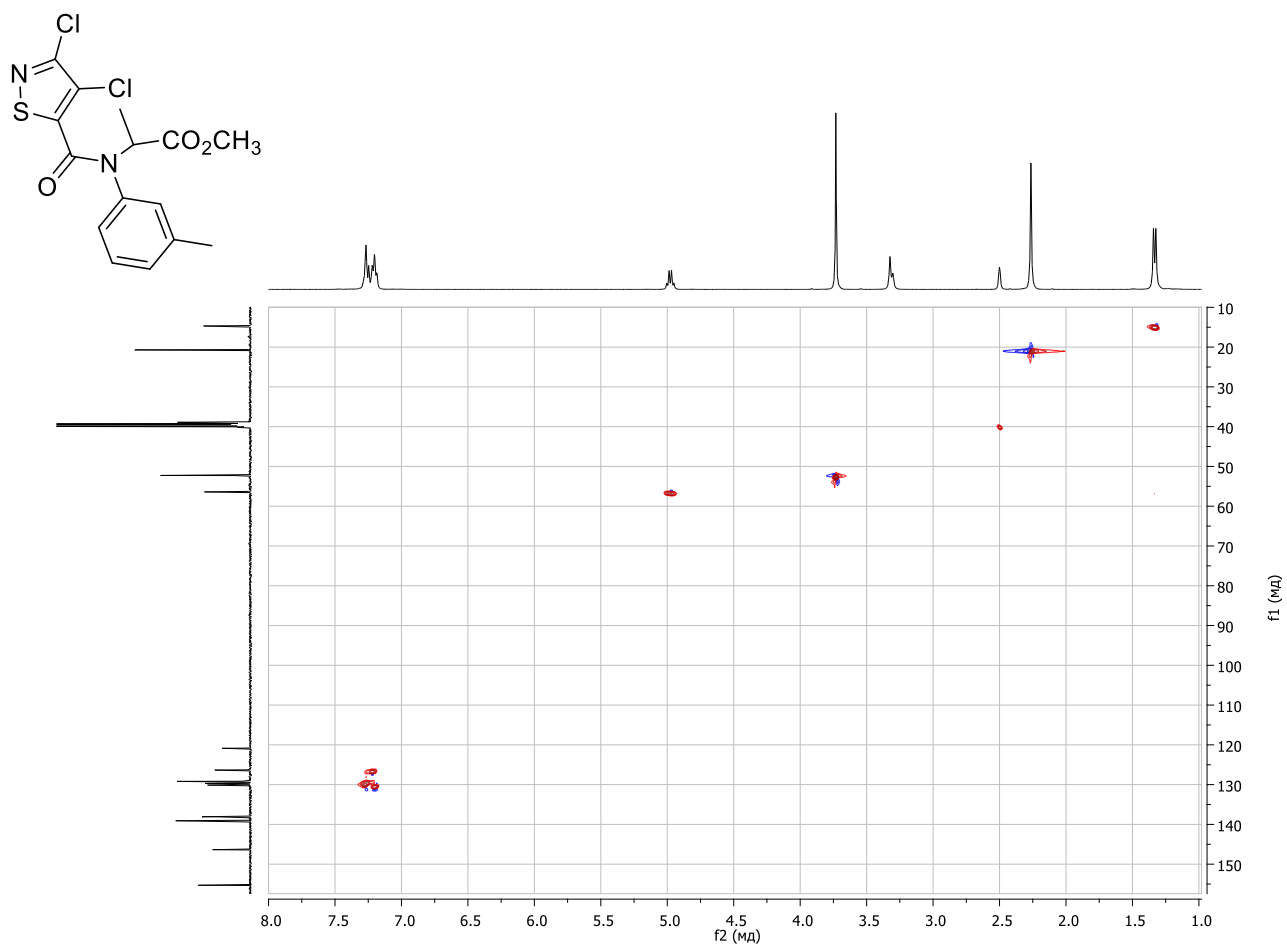
Figure S29. <sup>13</sup>C NMR of compound 2a



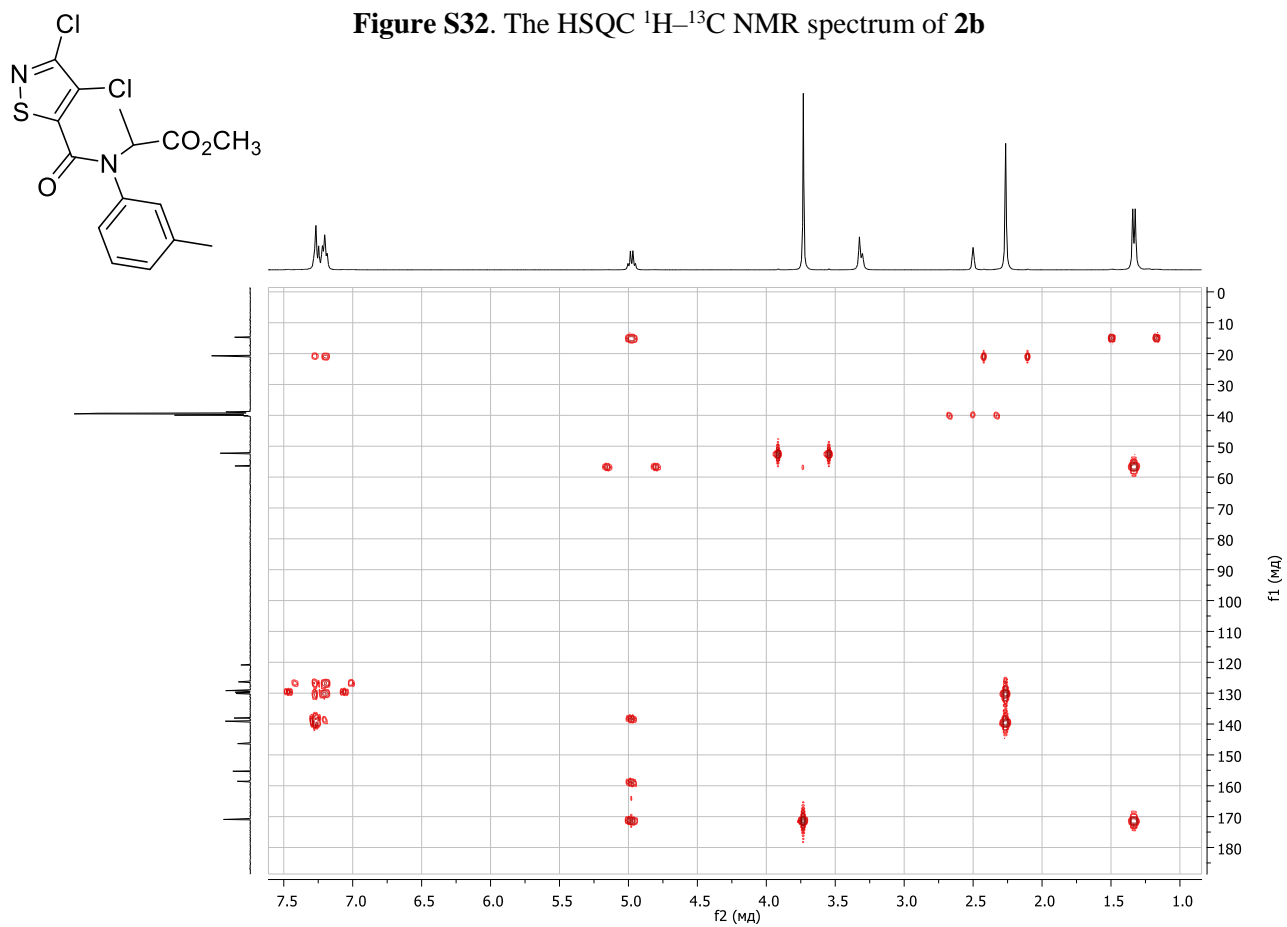
**Figure S30.** <sup>1</sup>H NMR of compound **2b**



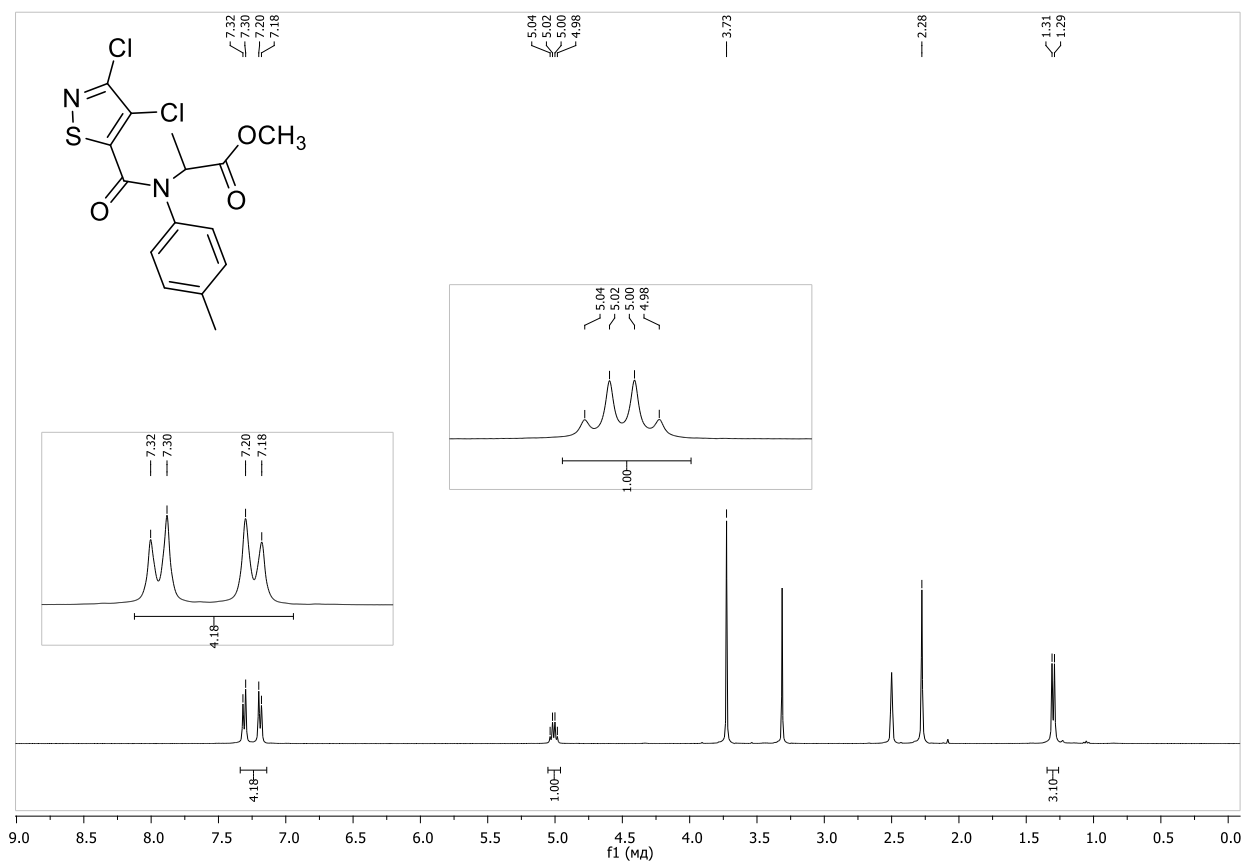
**Figure S31.** <sup>13</sup>C NMR of compound **2b**



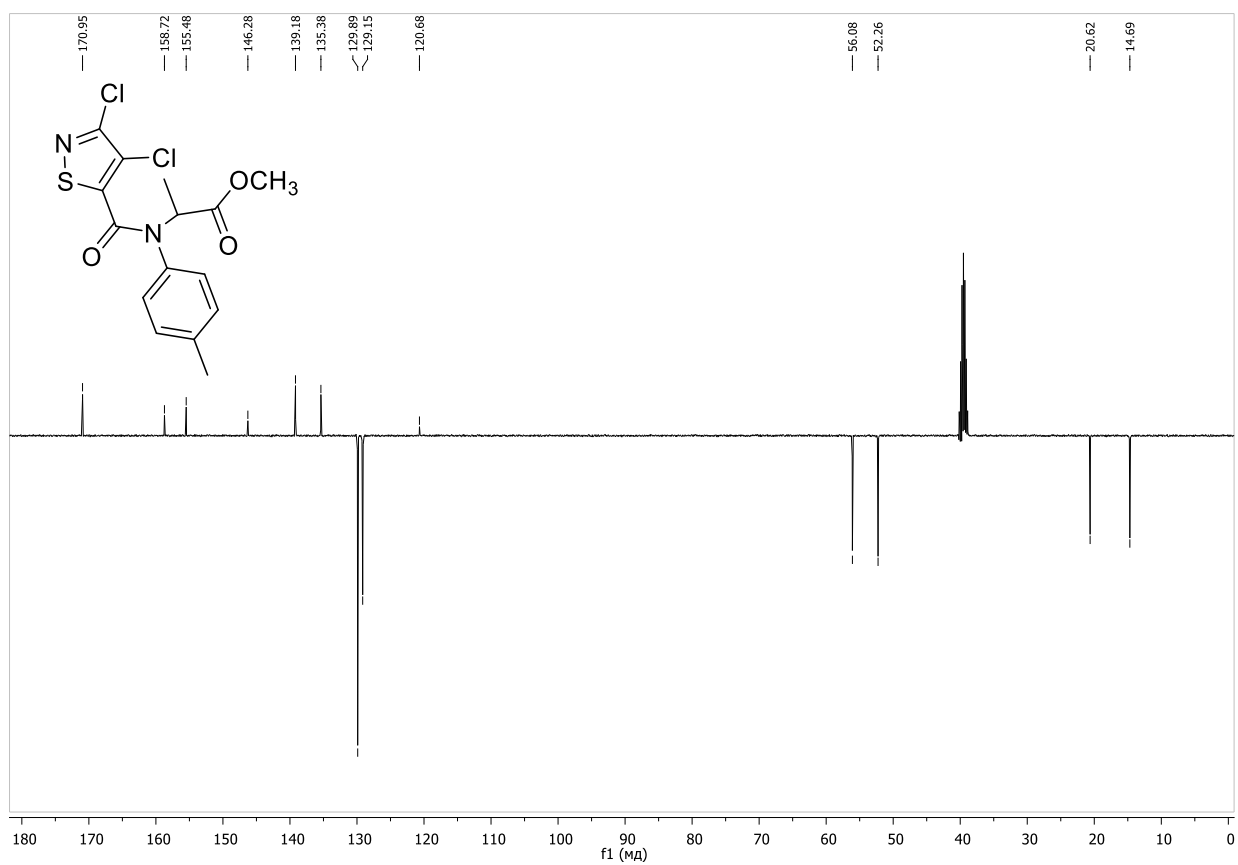
**Figure S32.** The HSQC  $^1\text{H}$ - $^{13}\text{C}$  NMR spectrum of **2b**



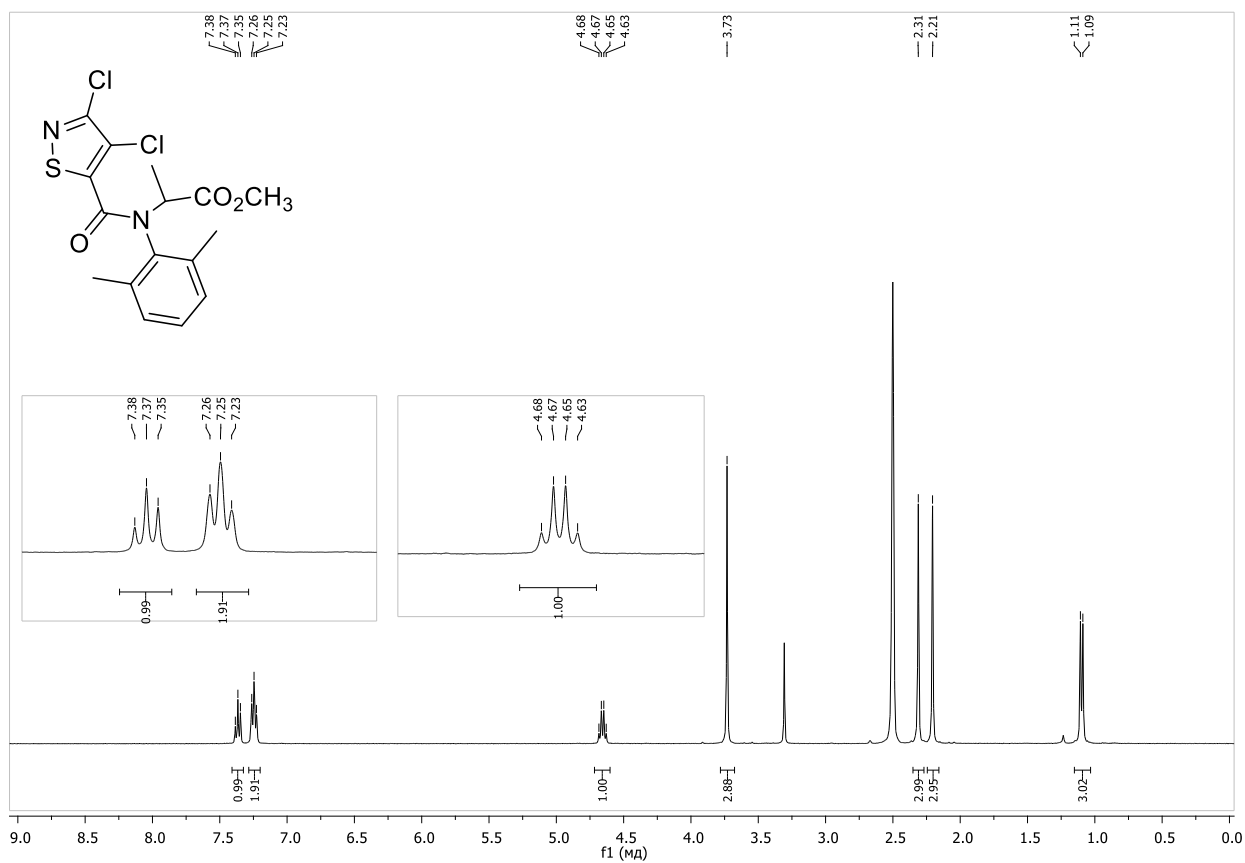
**Figure S33.** The HMBC  $^1\text{H}$ - $^{13}\text{C}$  NMR spectrum of **2b**



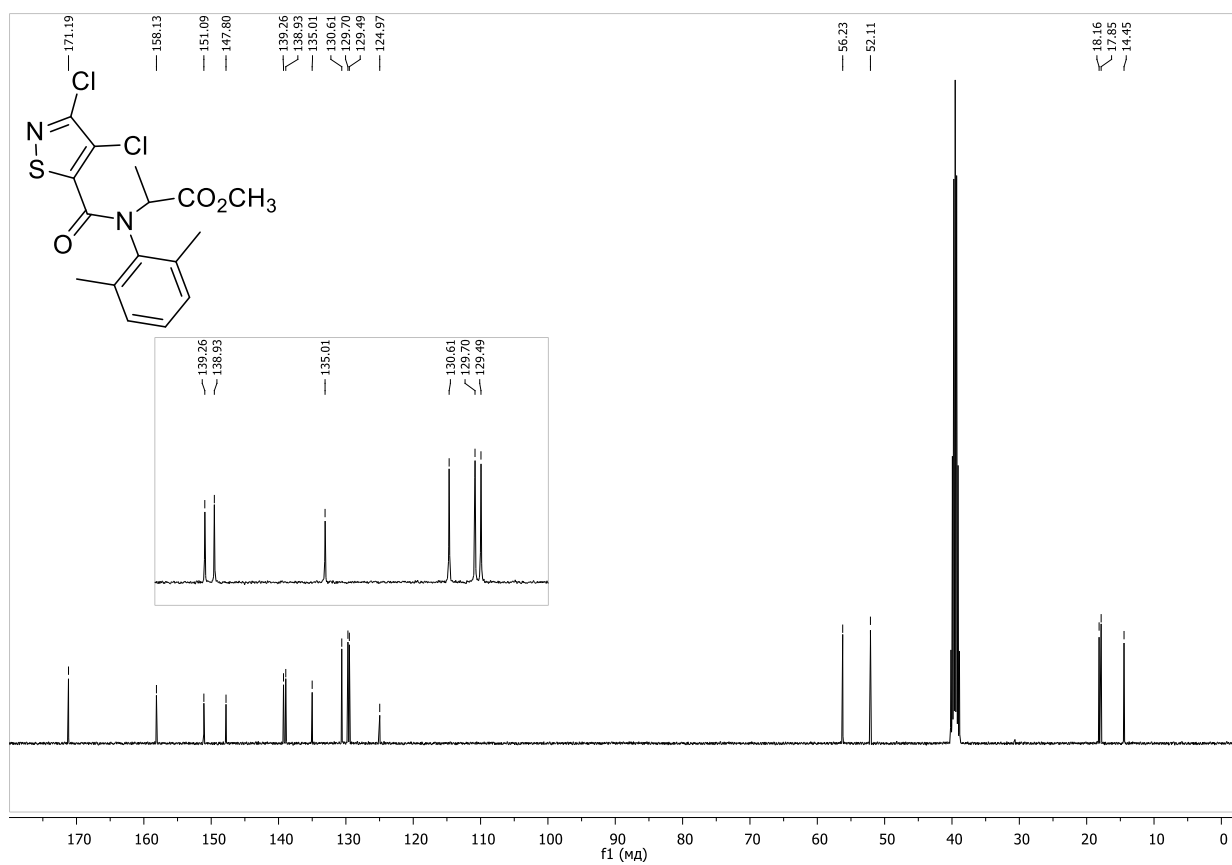
**Figure S34.**  $^1\text{H}$  NMR of compound **2c**



**Figure S35.**  $^{13}\text{C}$  NMR of compound **2c**



**Figure S36.** <sup>1</sup>H NMR of compound **2d**



**Figure S37.** <sup>13</sup>C NMR of compound **2d**

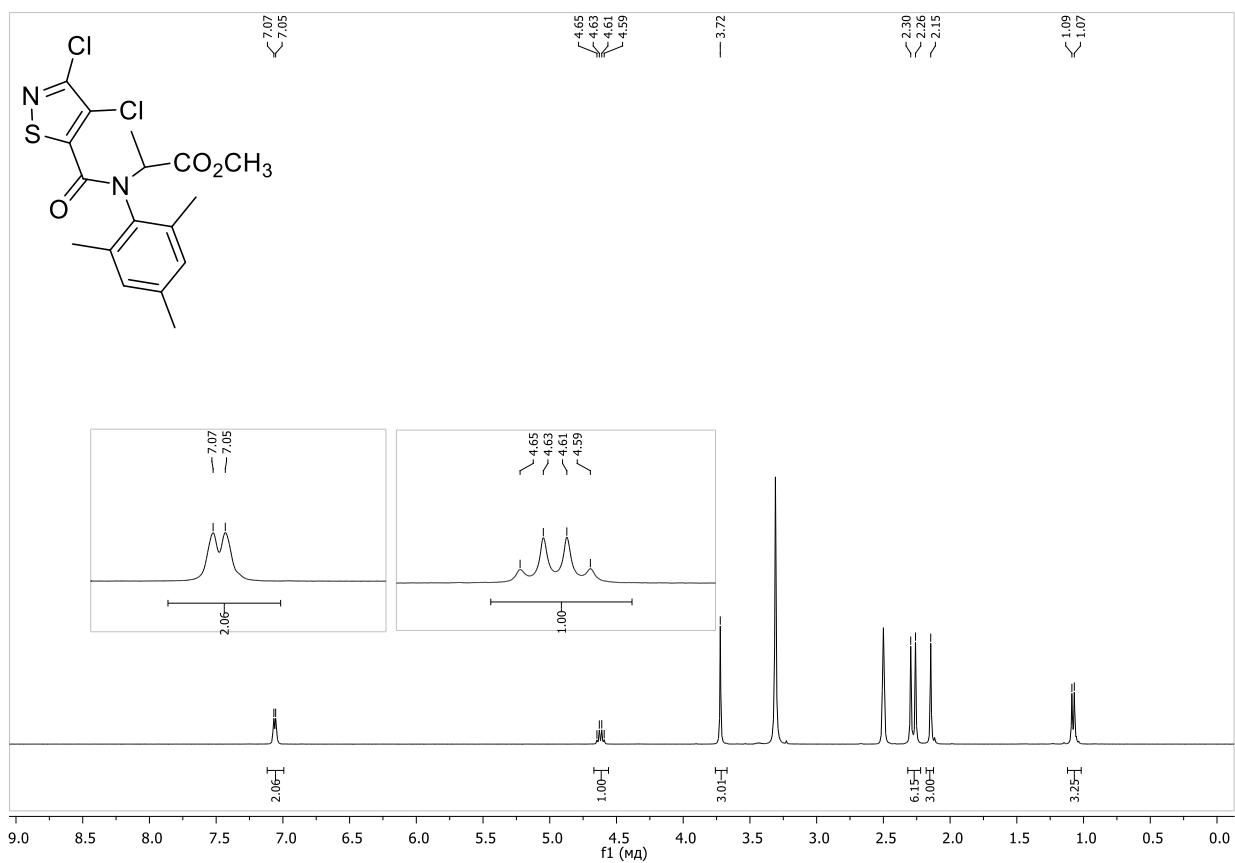


Figure S38. <sup>1</sup>H NMR of compound 2e

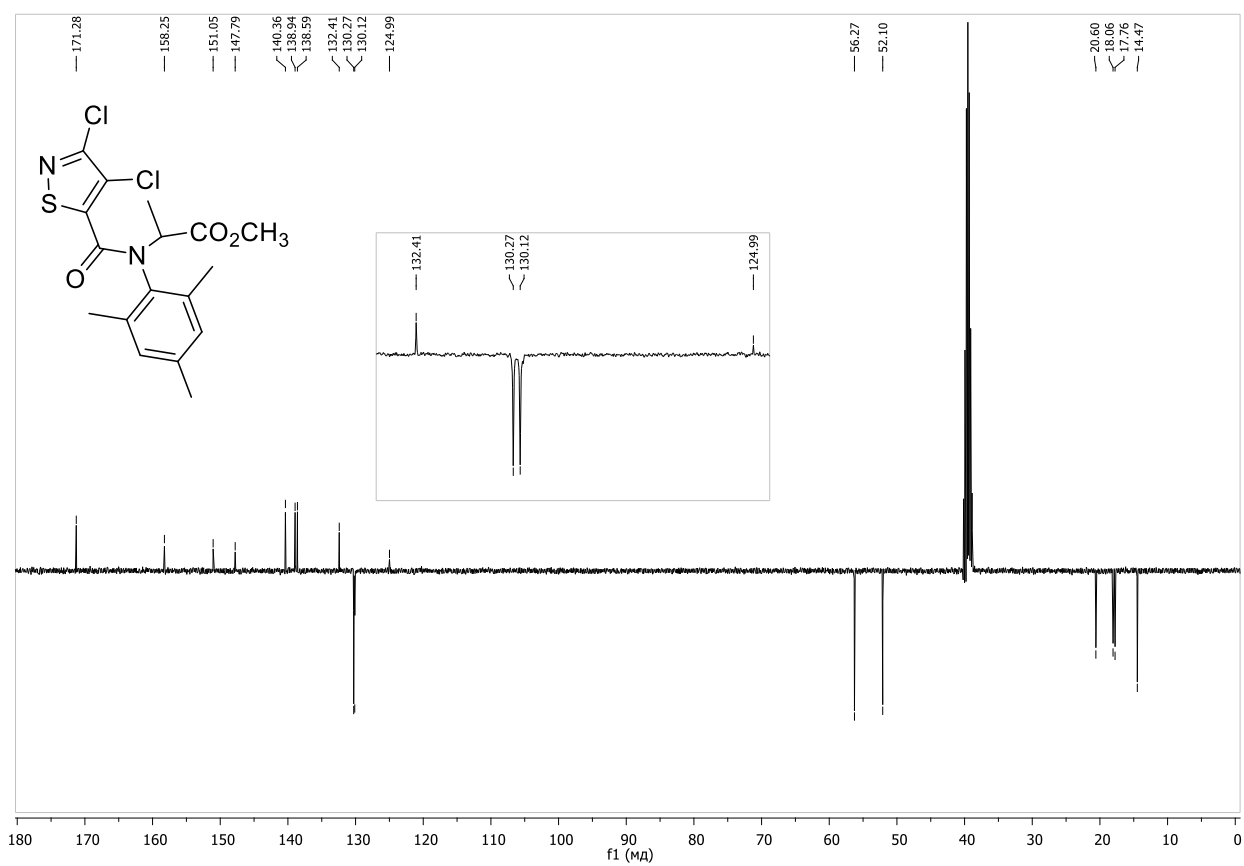
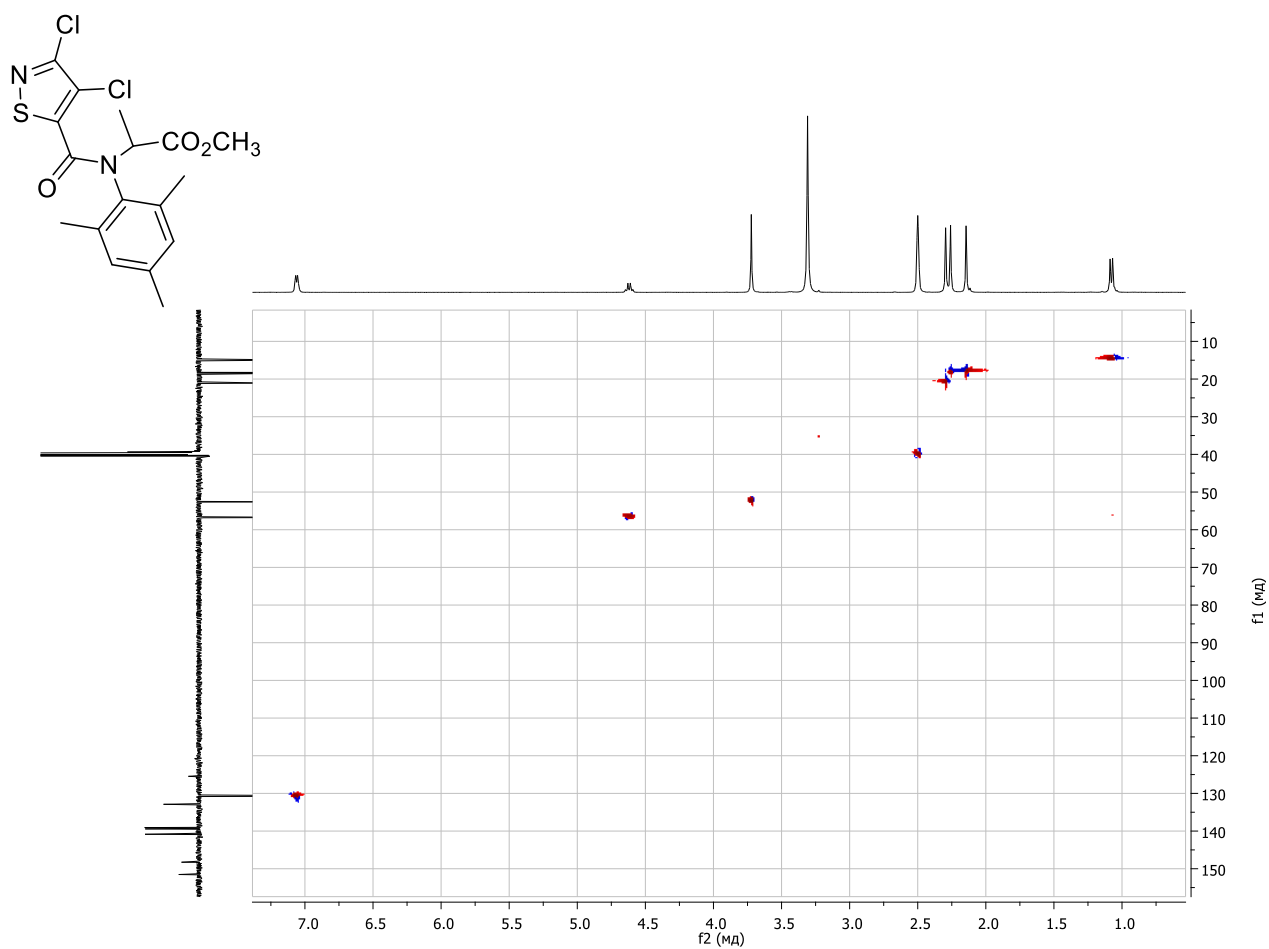
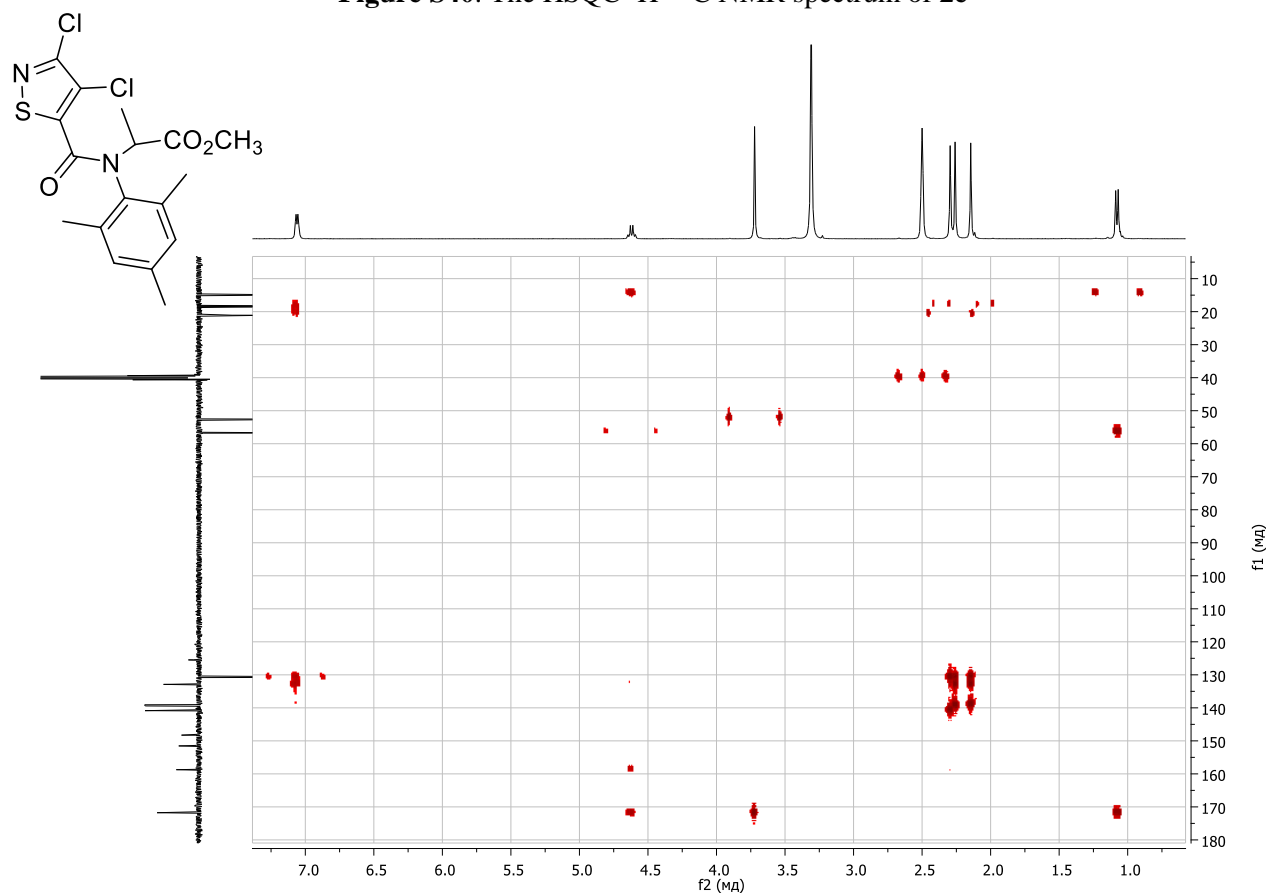


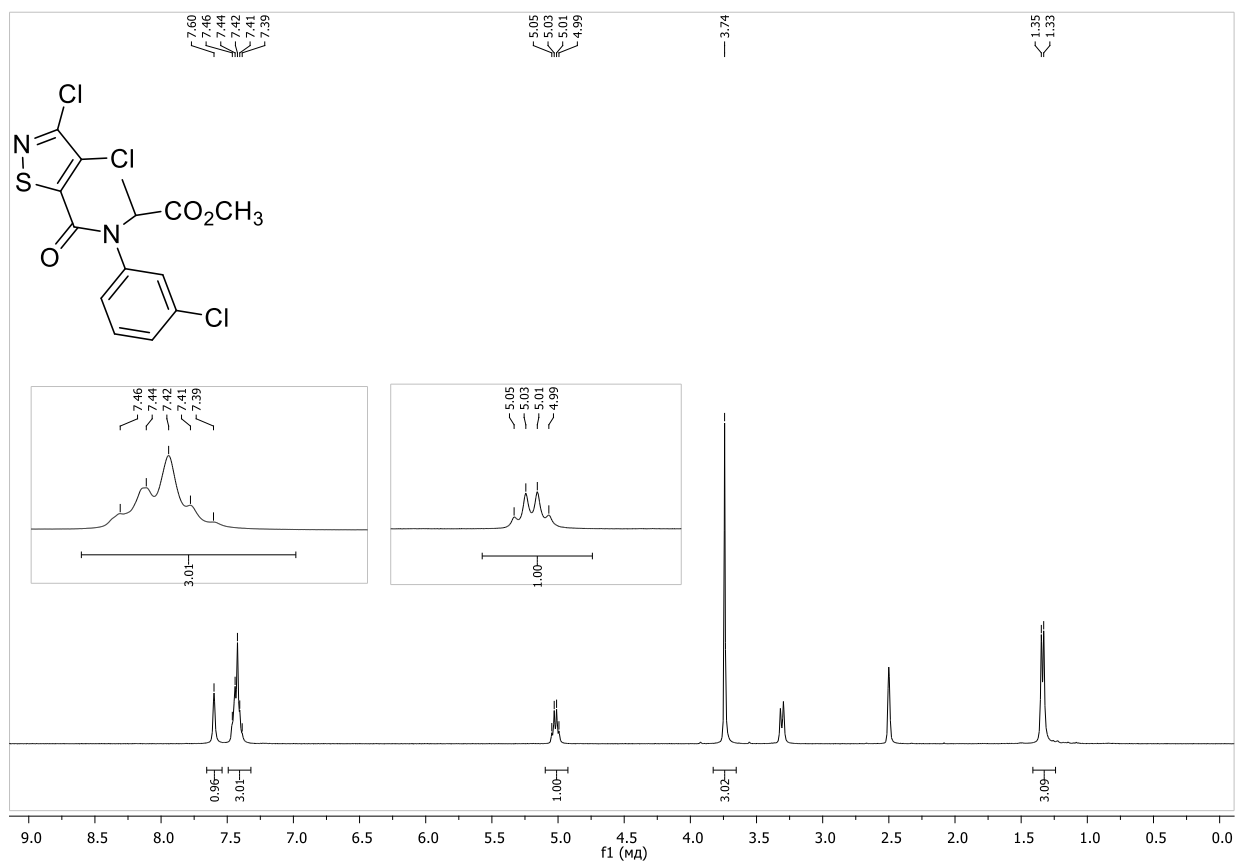
Figure S39. <sup>13</sup>C NMR of compound 2e



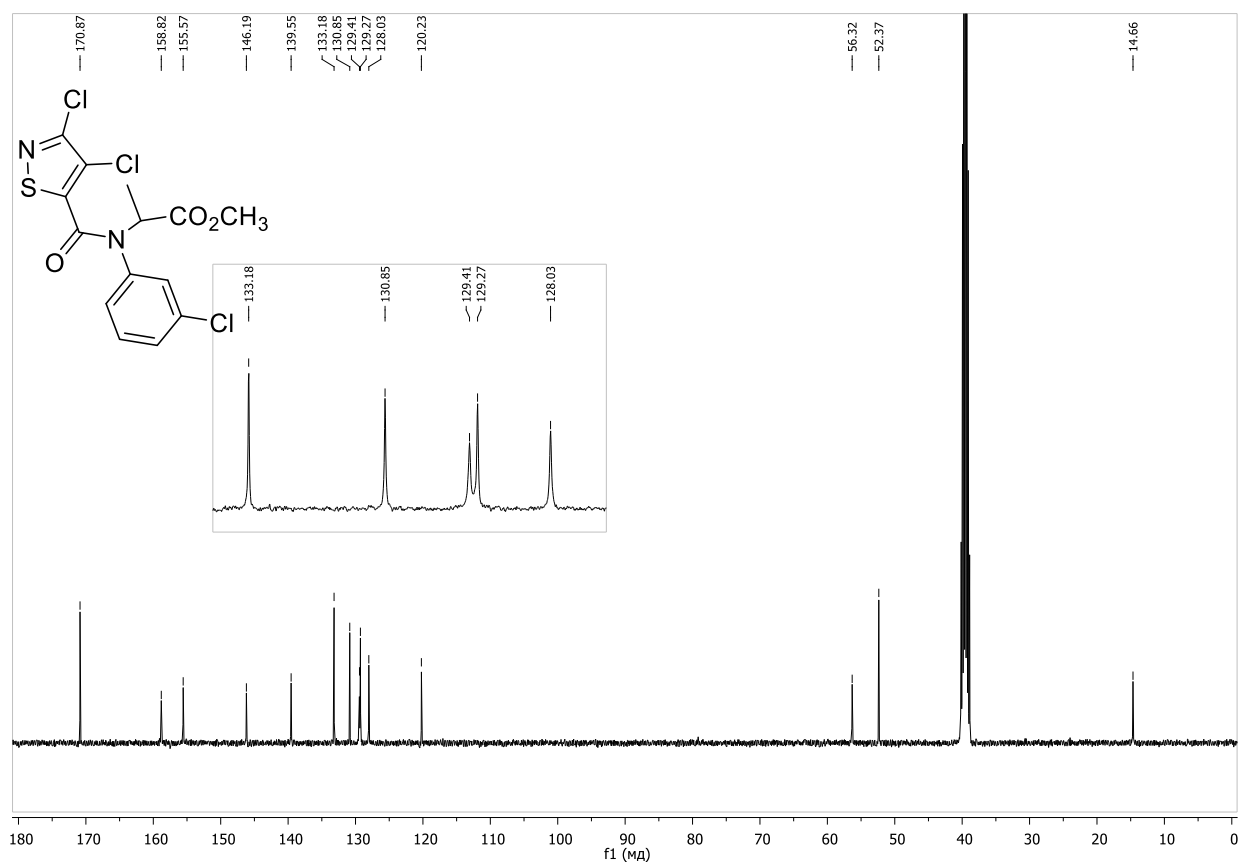
**Figure S40.** The HSQC  $^1\text{H}$ - $^{13}\text{C}$  NMR spectrum of **2e**



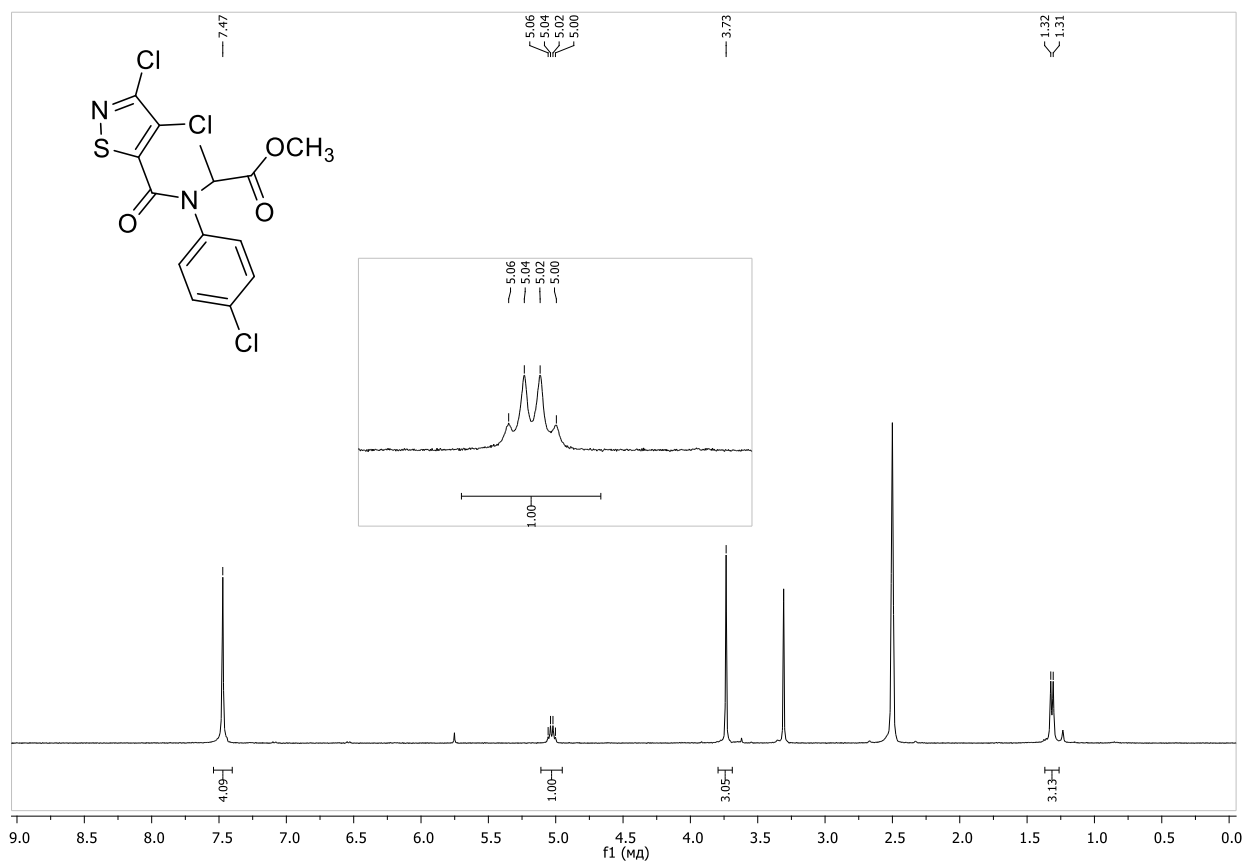
**Figure S41.** The HMBC  $^1\text{H}$ - $^{13}\text{C}$  NMR spectrum of **2e**



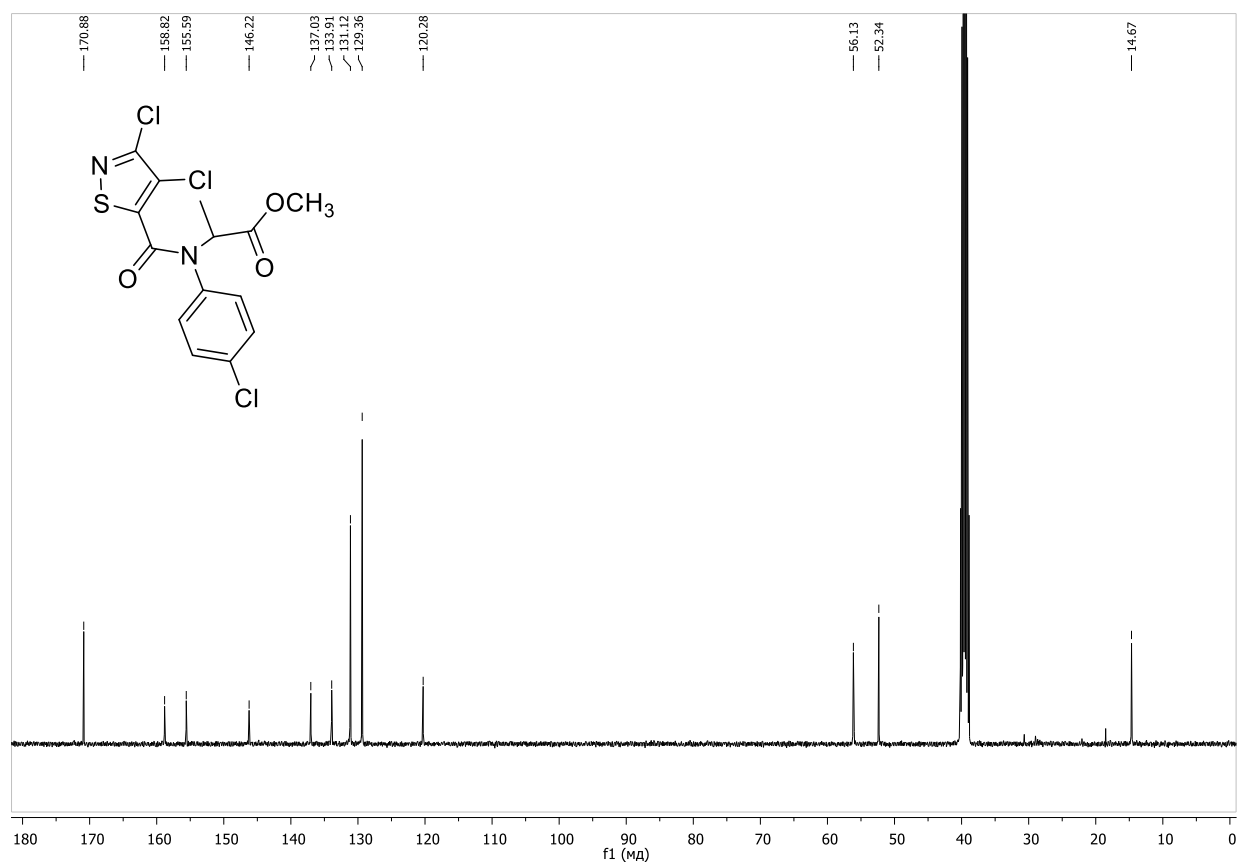
**Figure S42.** <sup>1</sup>H NMR of compound **2f**



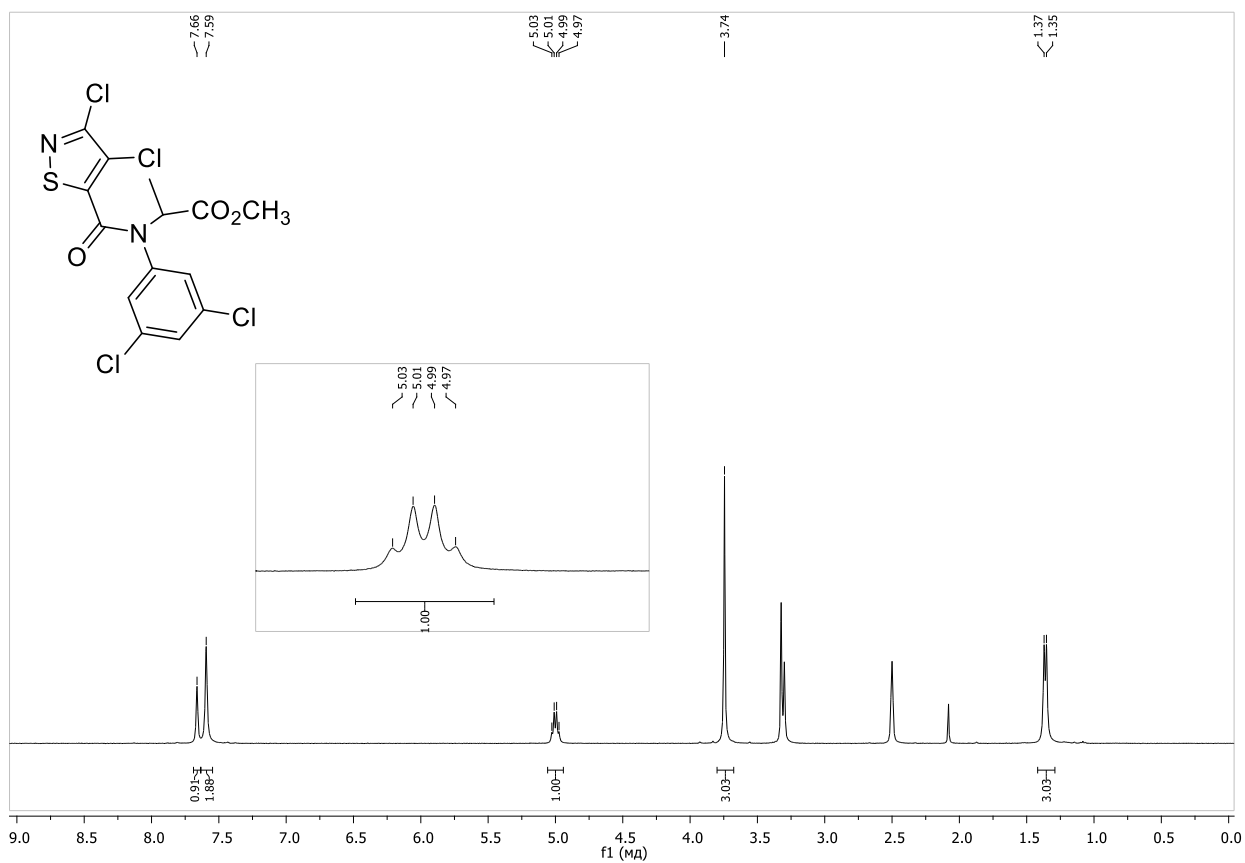
**Figure S43.** <sup>13</sup>C NMR of compound **2f**



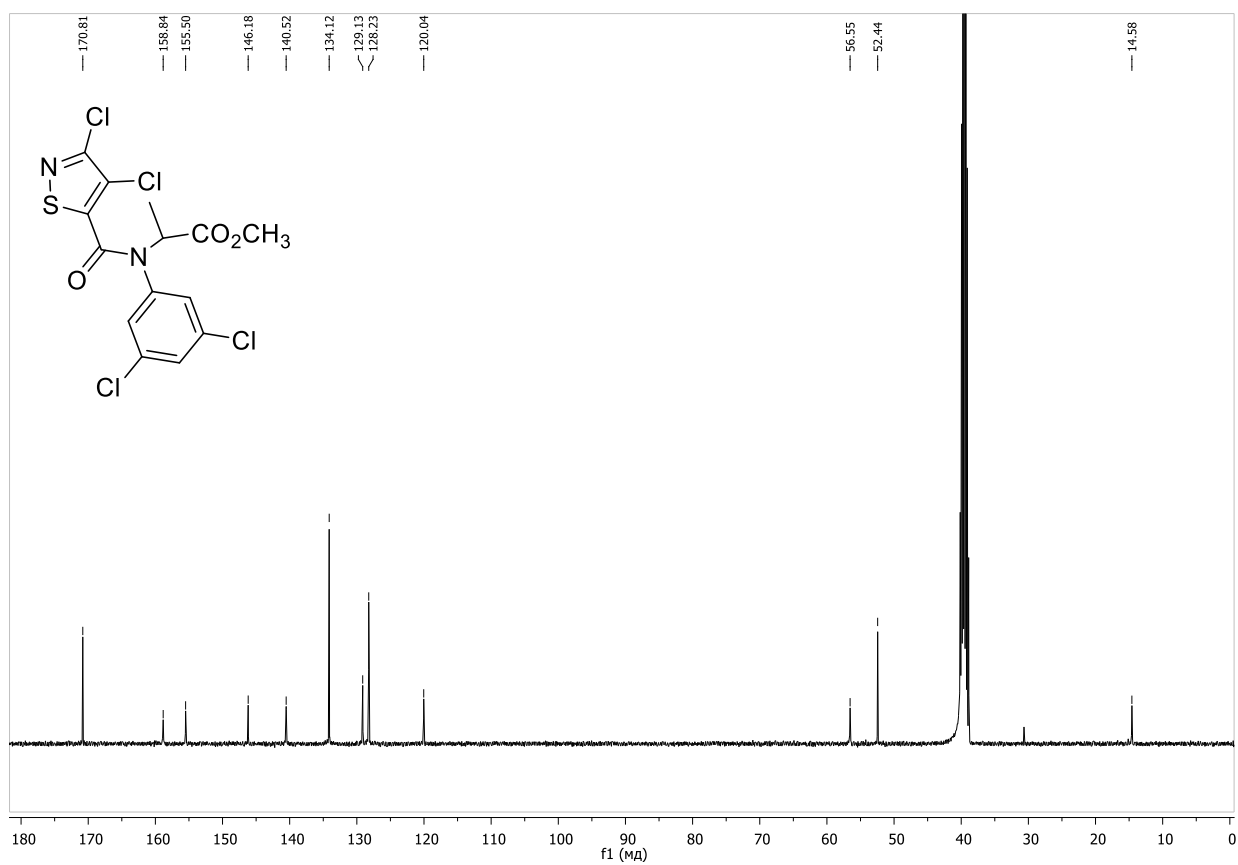
**Figure S44.** <sup>1</sup>H NMR of compound **2g**



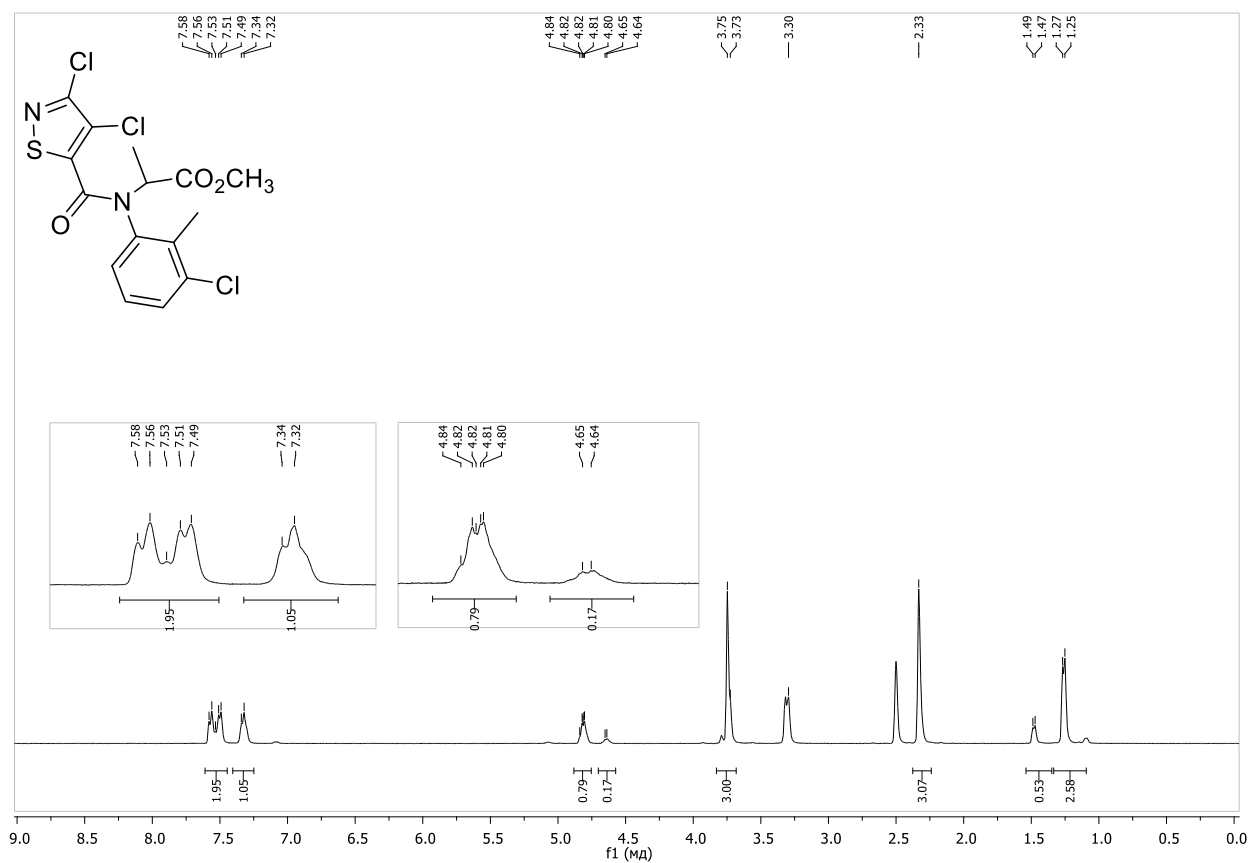
**Figure S45.** <sup>13</sup>C NMR of compound **2g**



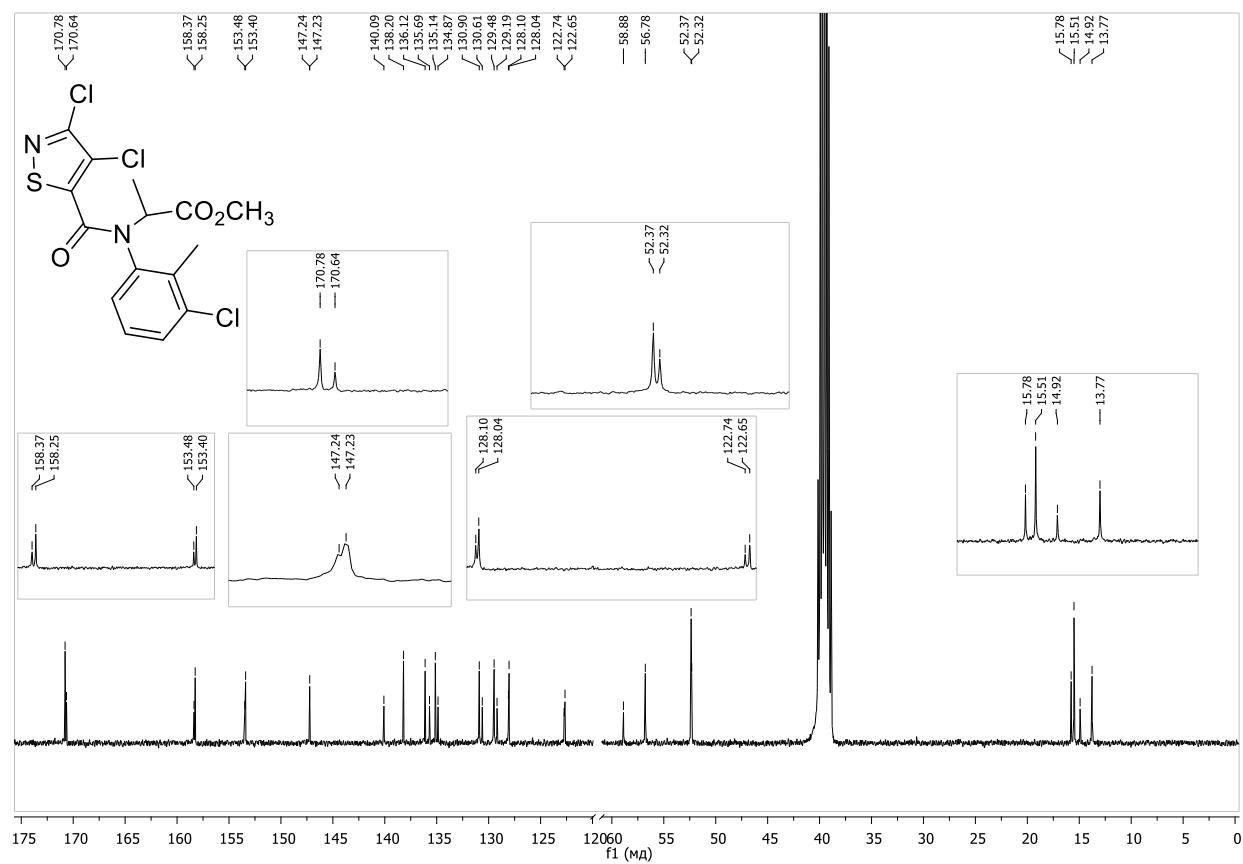
**Figure S46.** <sup>1</sup>H NMR of compound **2h**



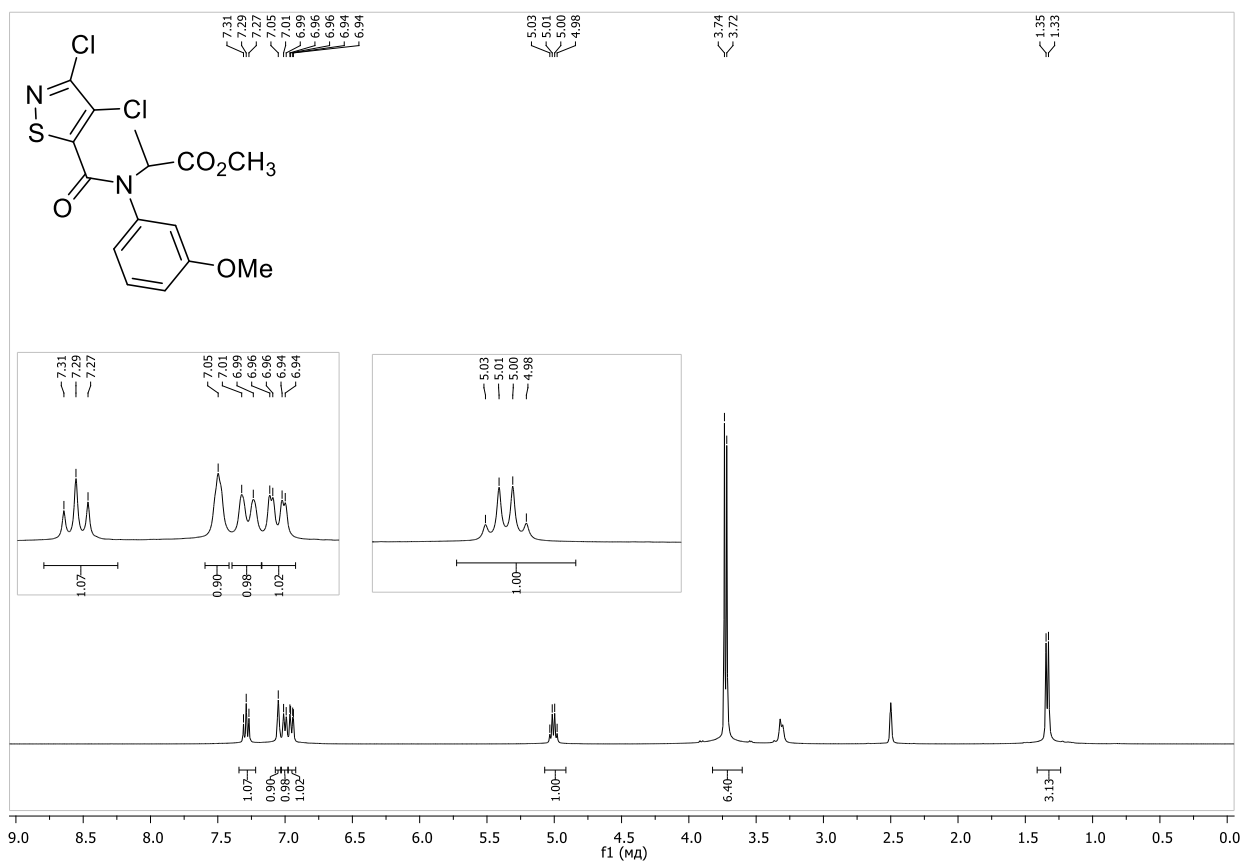
**Figure S47.** <sup>13</sup>C NMR of compound **2h**



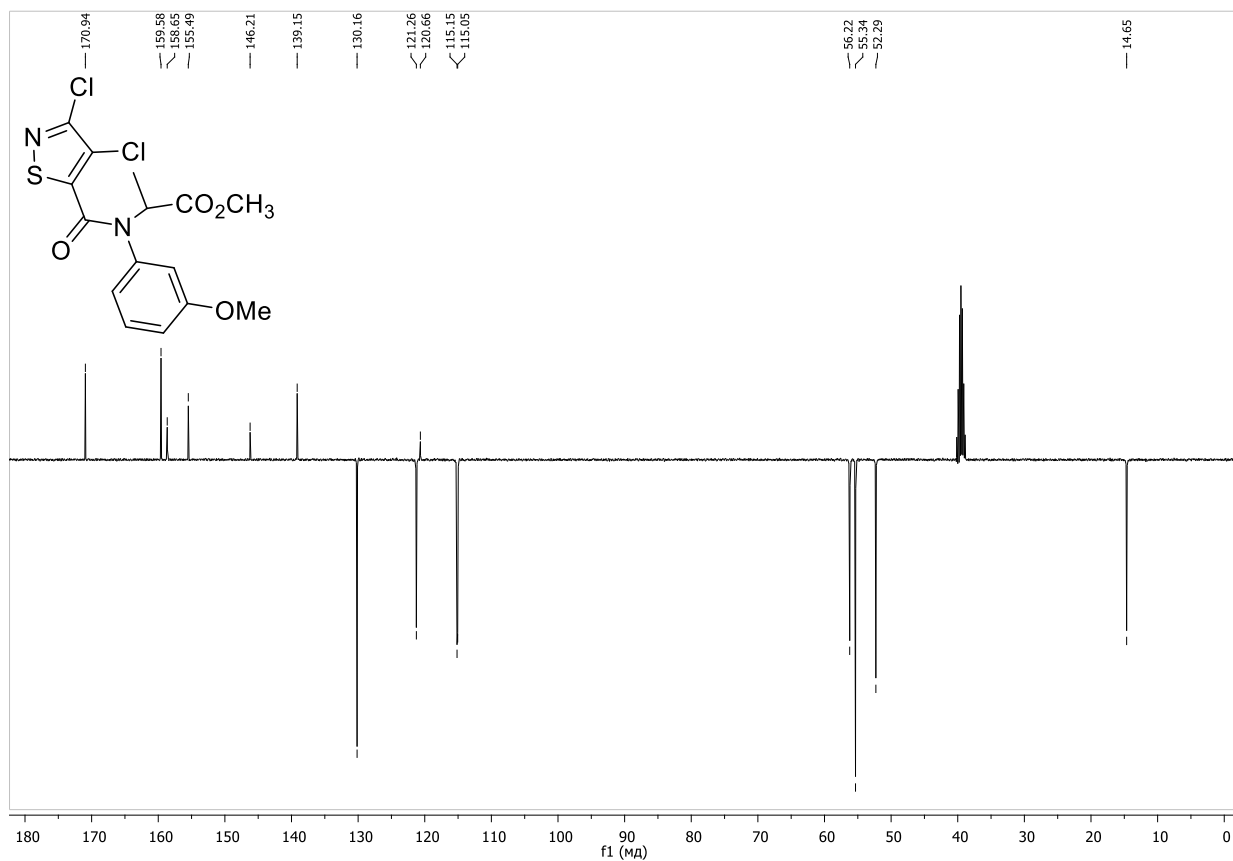
**Figure S48.** <sup>1</sup>H NMR of compound **2i**



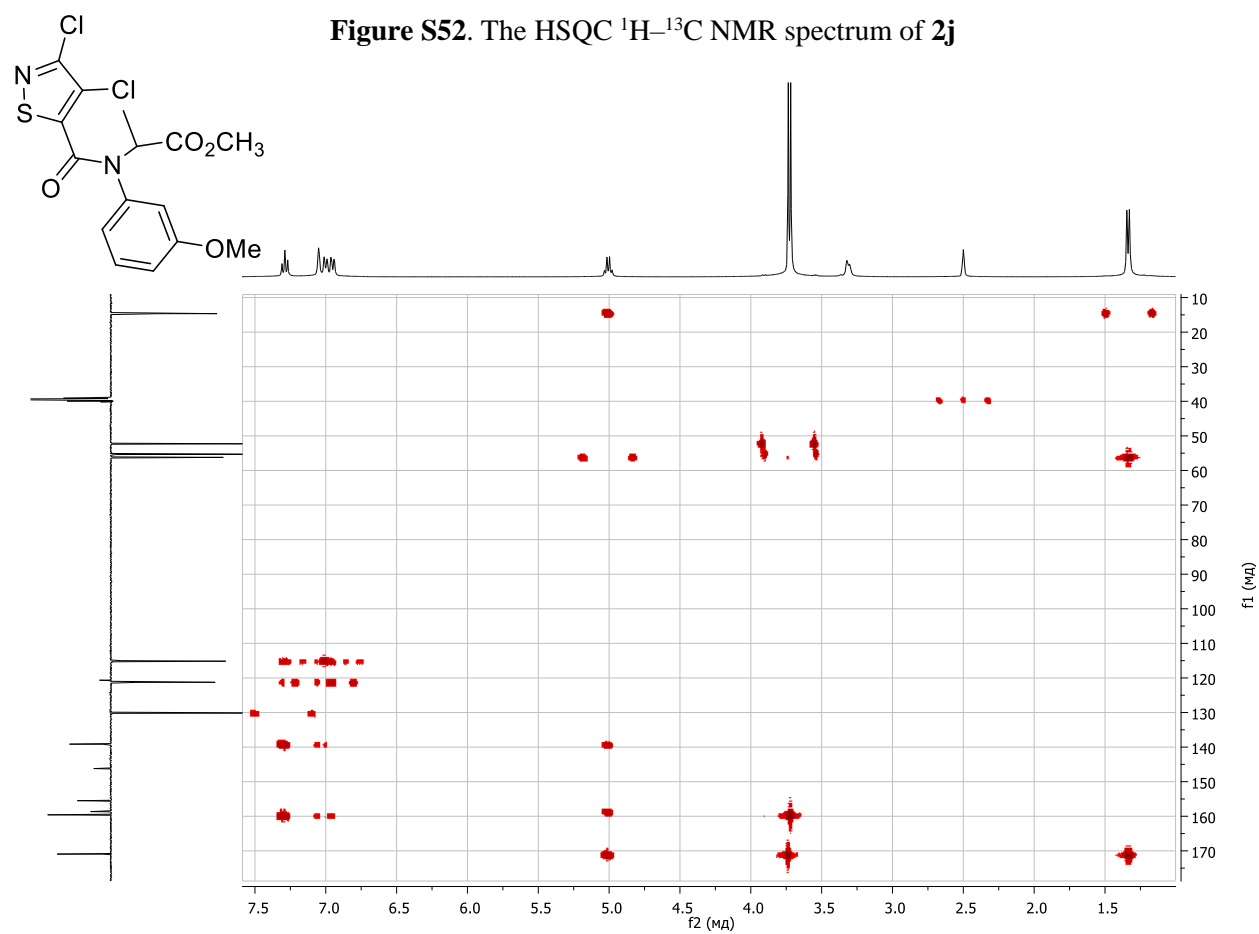
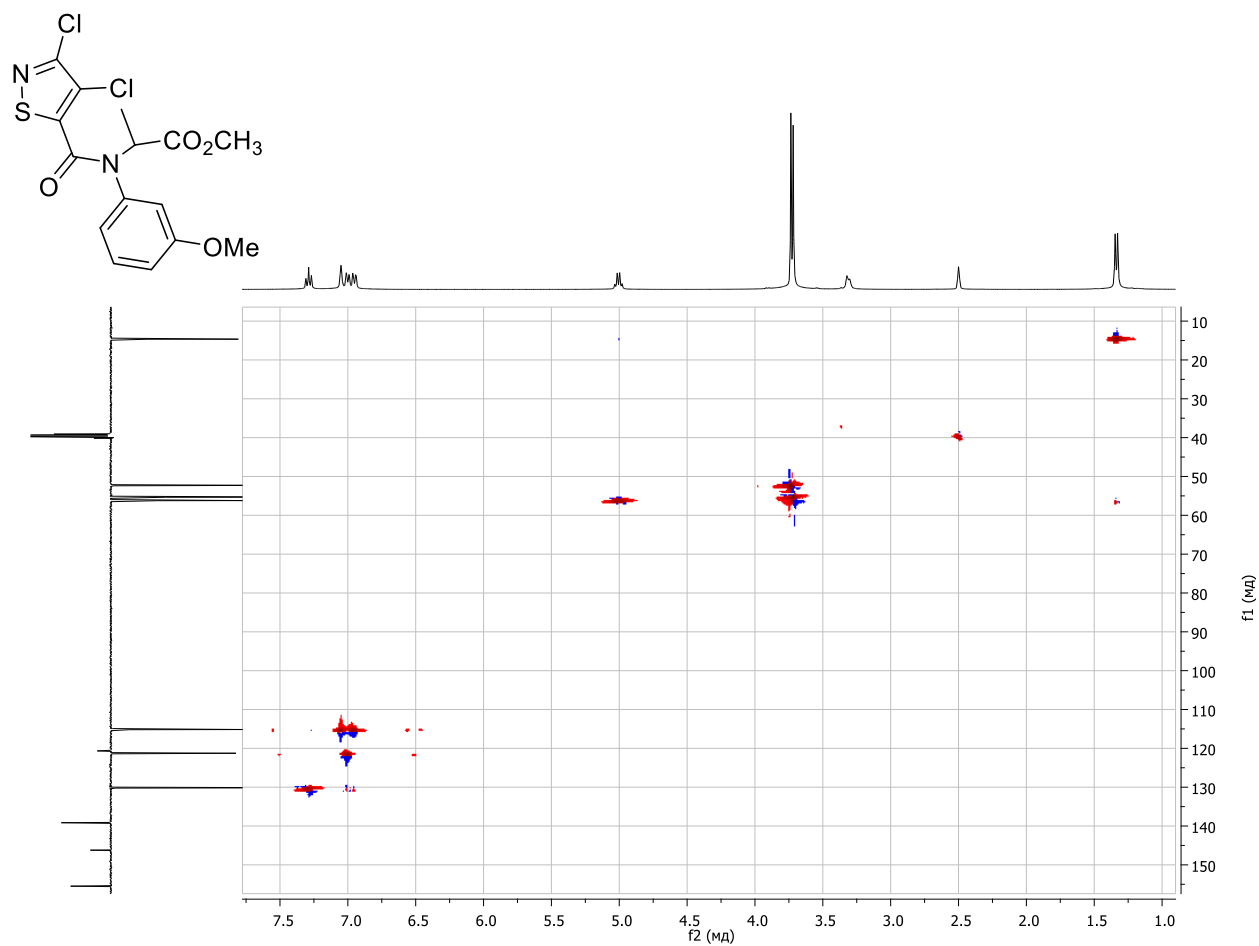
**Figure S49.** <sup>13</sup>C NMR of compound **2i**

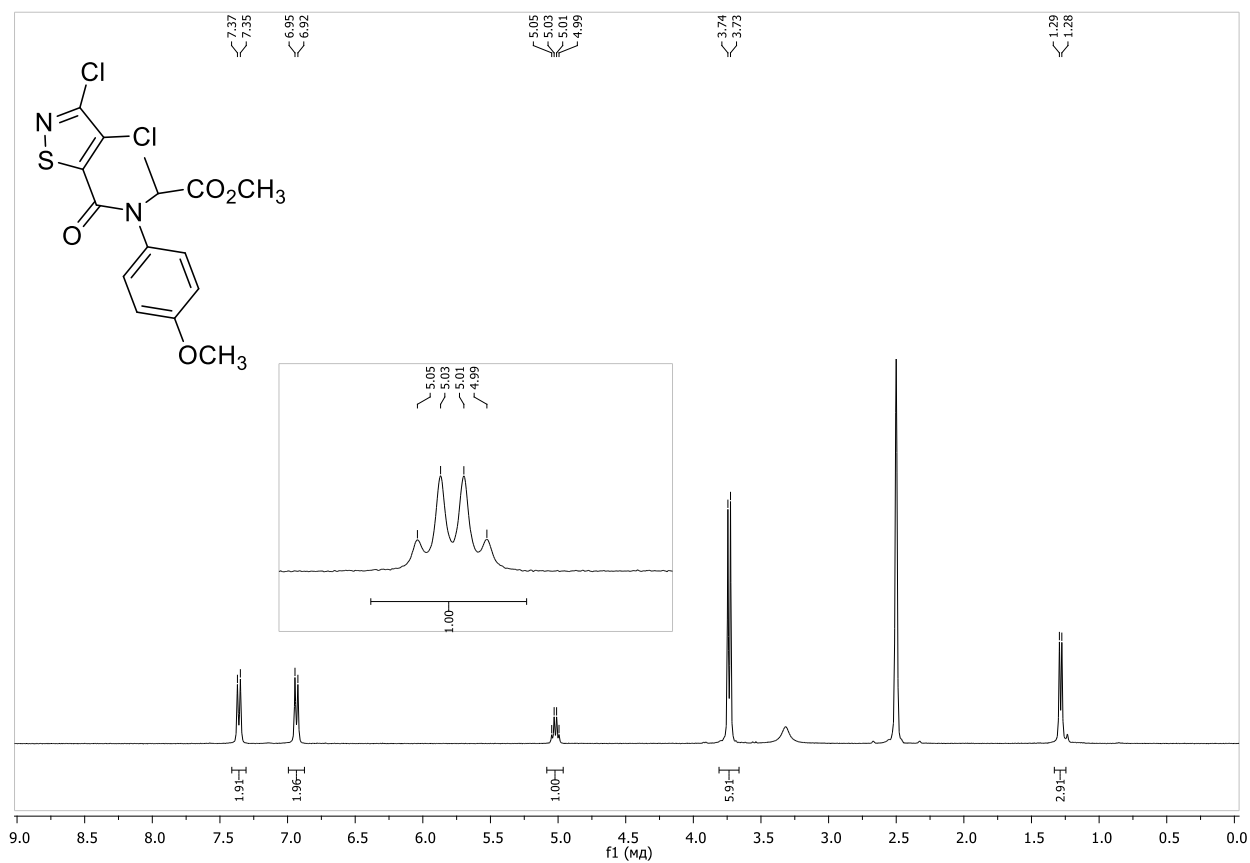


**Figure S50.** <sup>1</sup>H NMR of compound **2j**

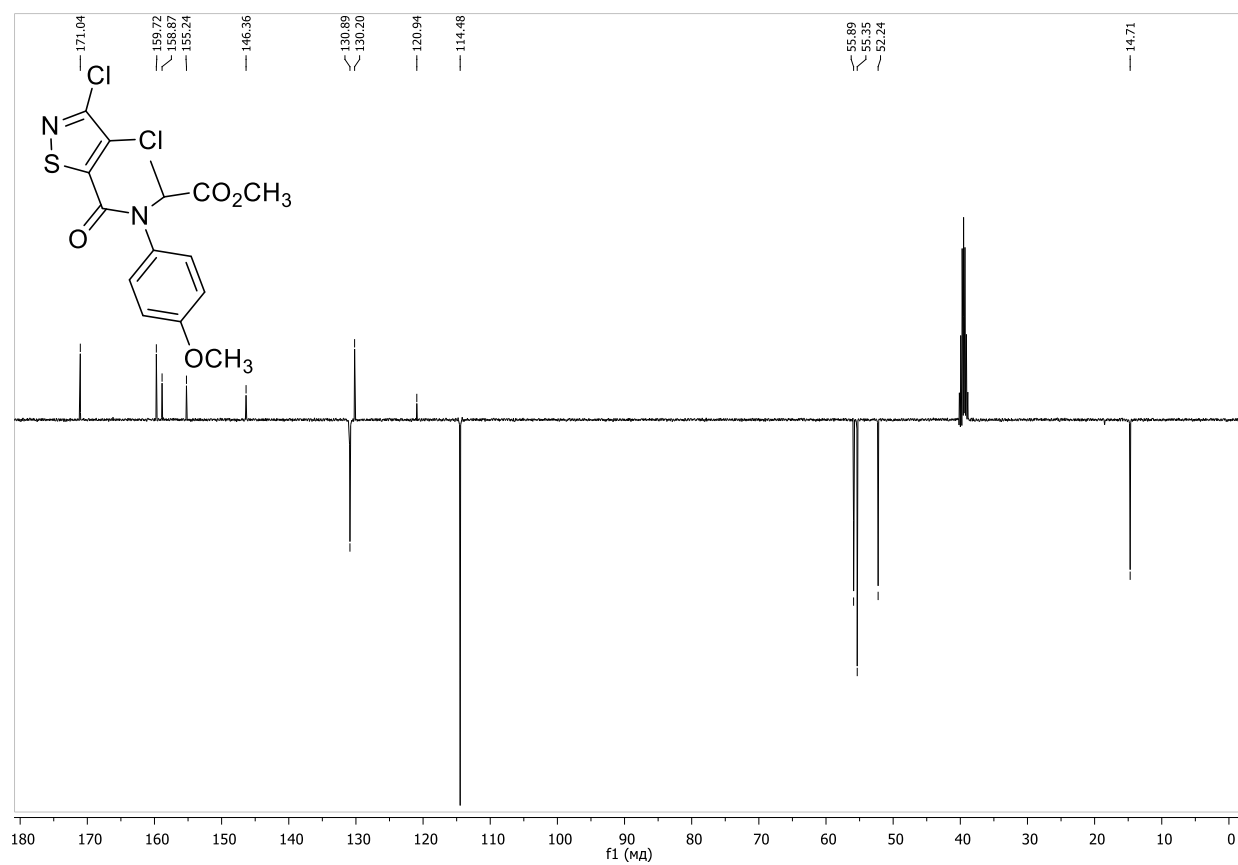


**Figure S51.** <sup>13</sup>C NMR of compound **2j**





**Figure S54.** <sup>1</sup>H NMR of compound **2k**



**Figure S55.** <sup>13</sup>C NMR of compound **2k**

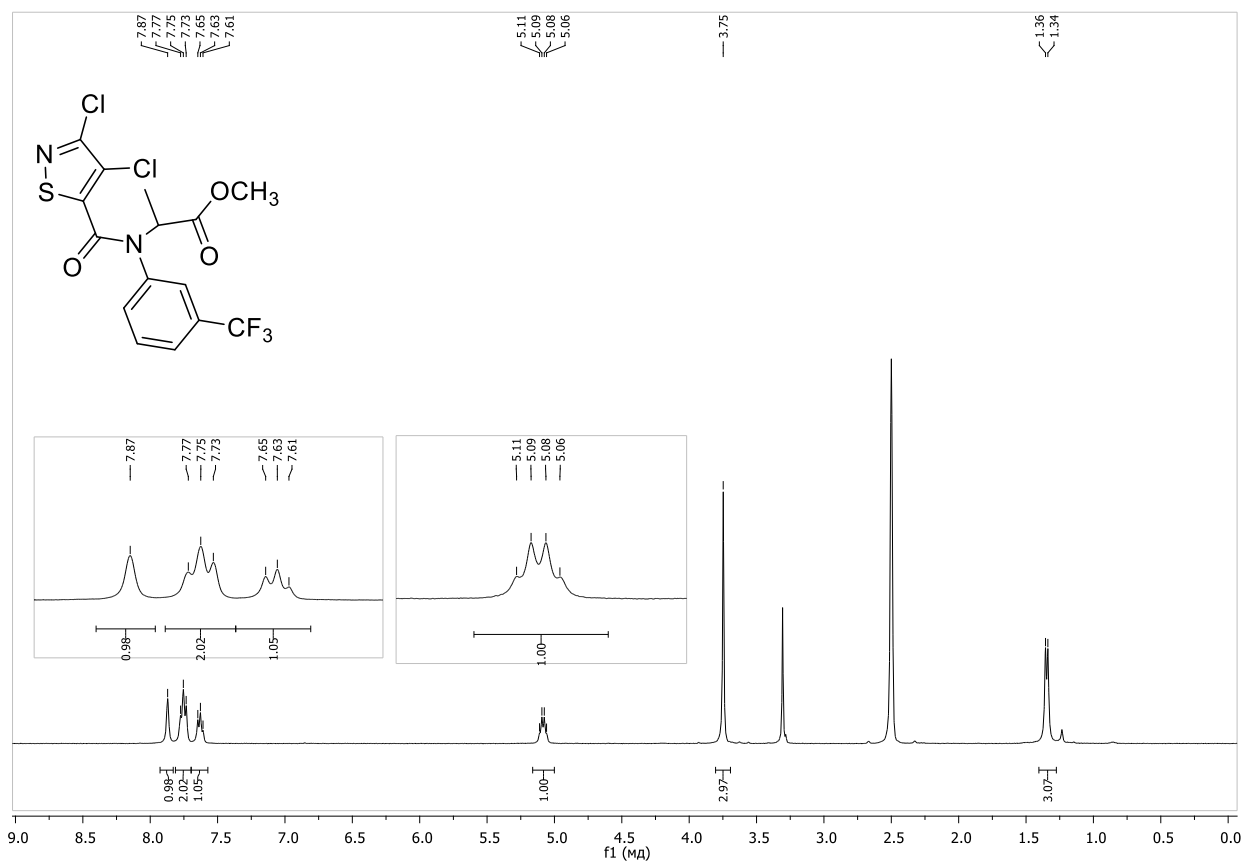


Figure S56. <sup>1</sup>H NMR of compound 2I

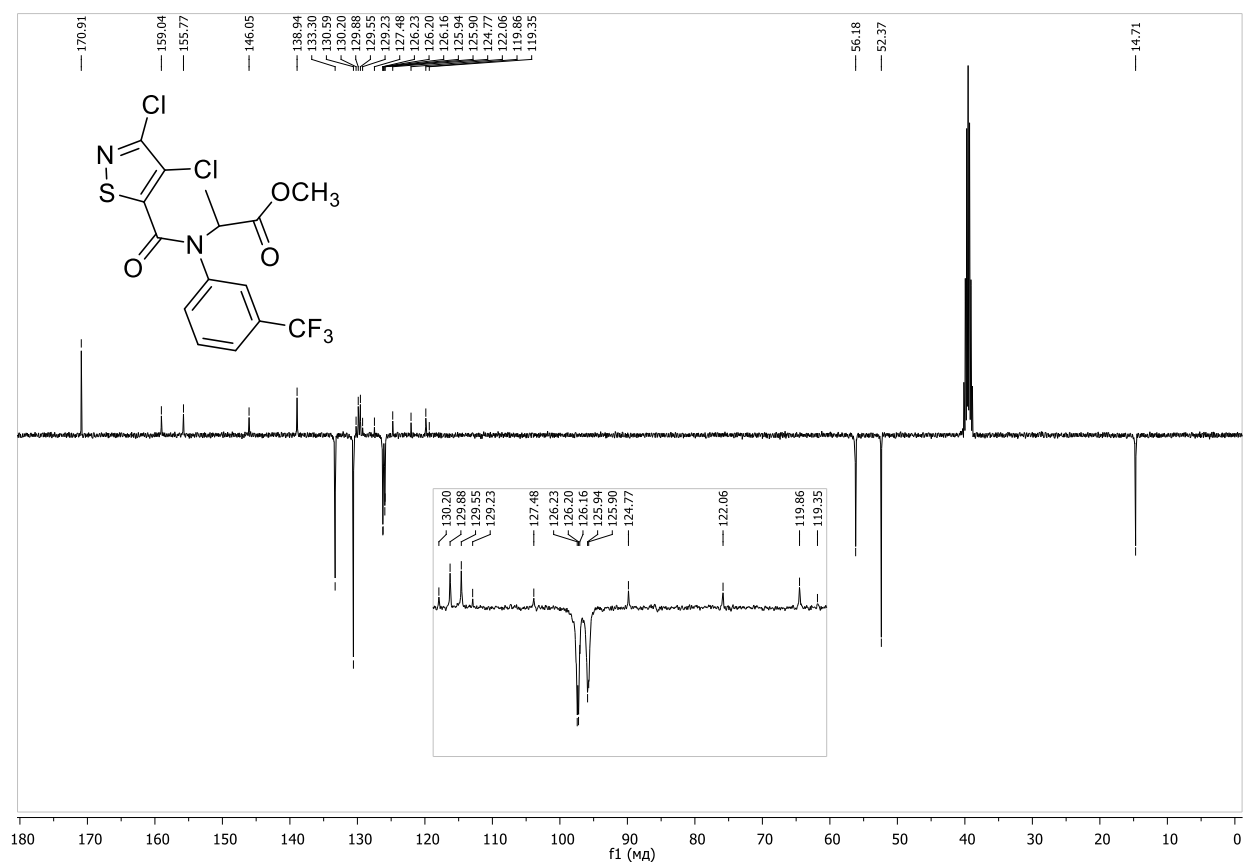


Figure S57. <sup>13</sup>C NMR of compound 2I