

## Supplementary Information

### Synthesis, *in vitro* Toxicity, and Antitrypanosomal Activity of Arylated and Diarylated Thiazoles

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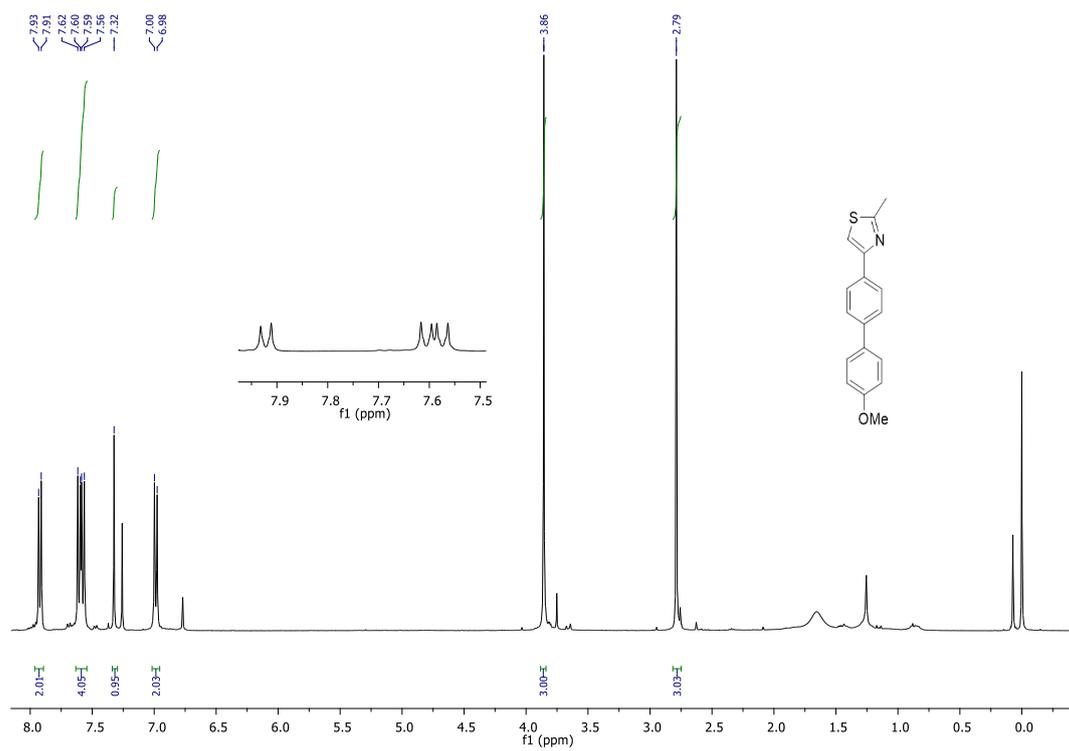
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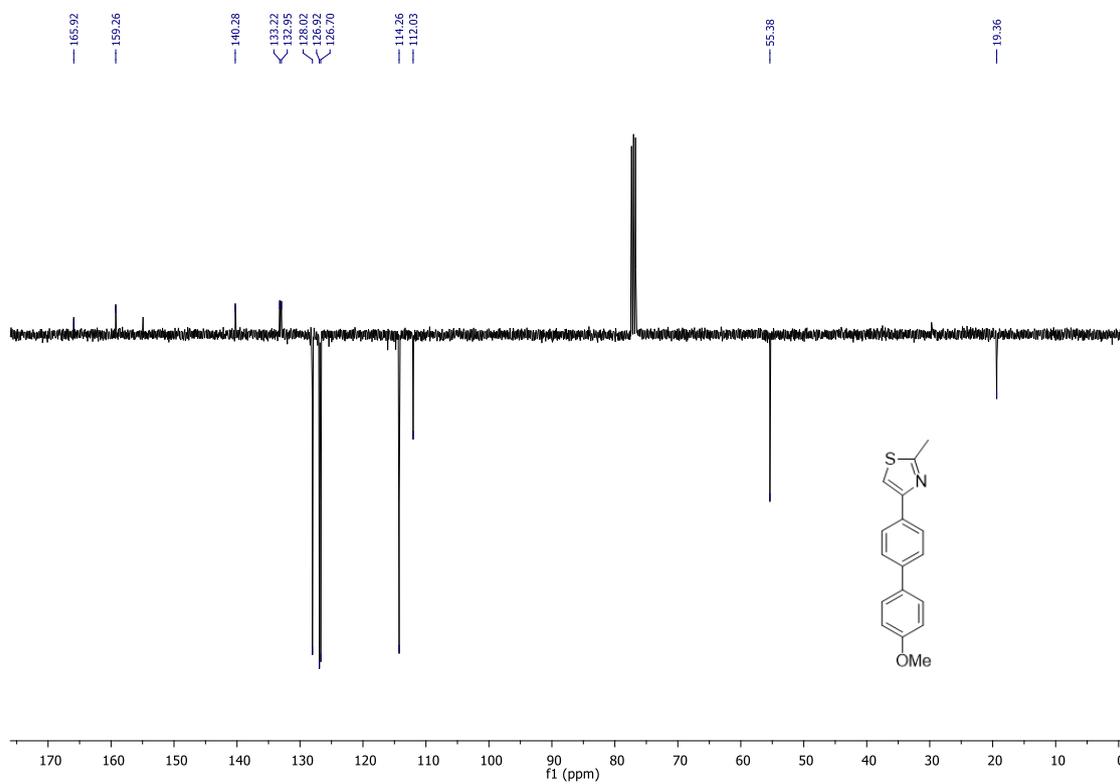
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## NMR spectra



**Figure S1.** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **4a**.



**Figure S2.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound **4a**.

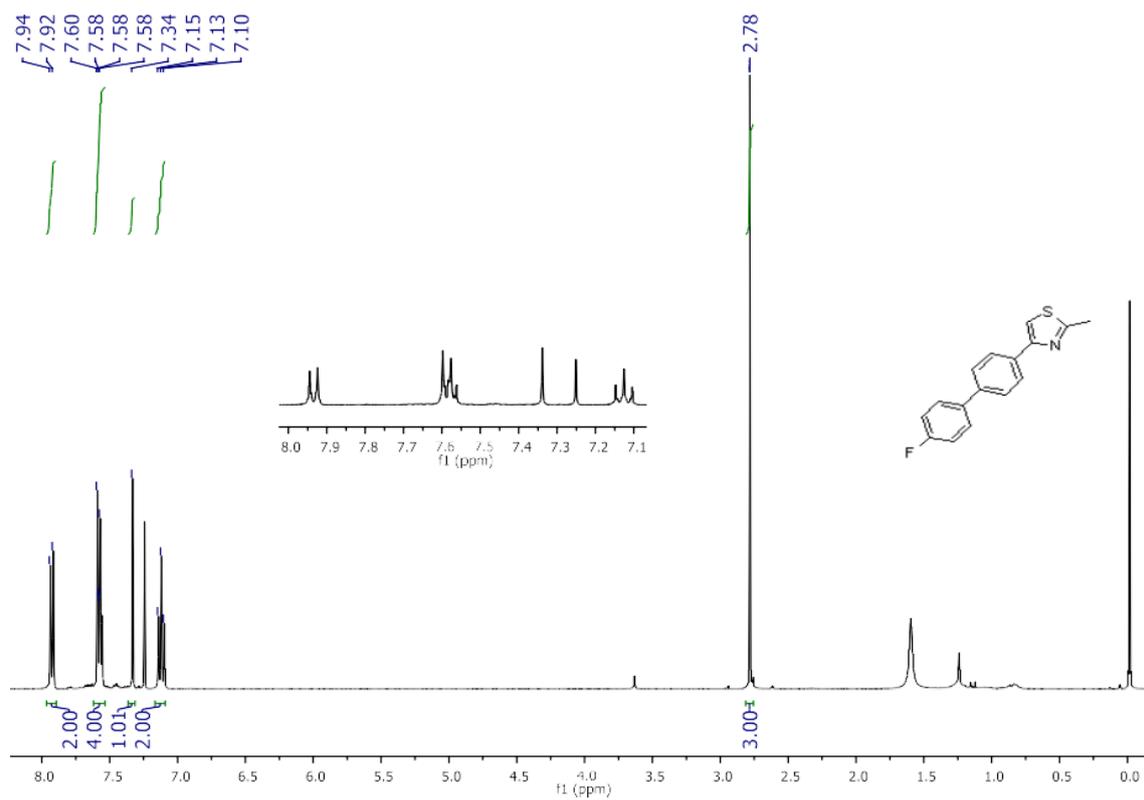


Figure S3. <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 4b.

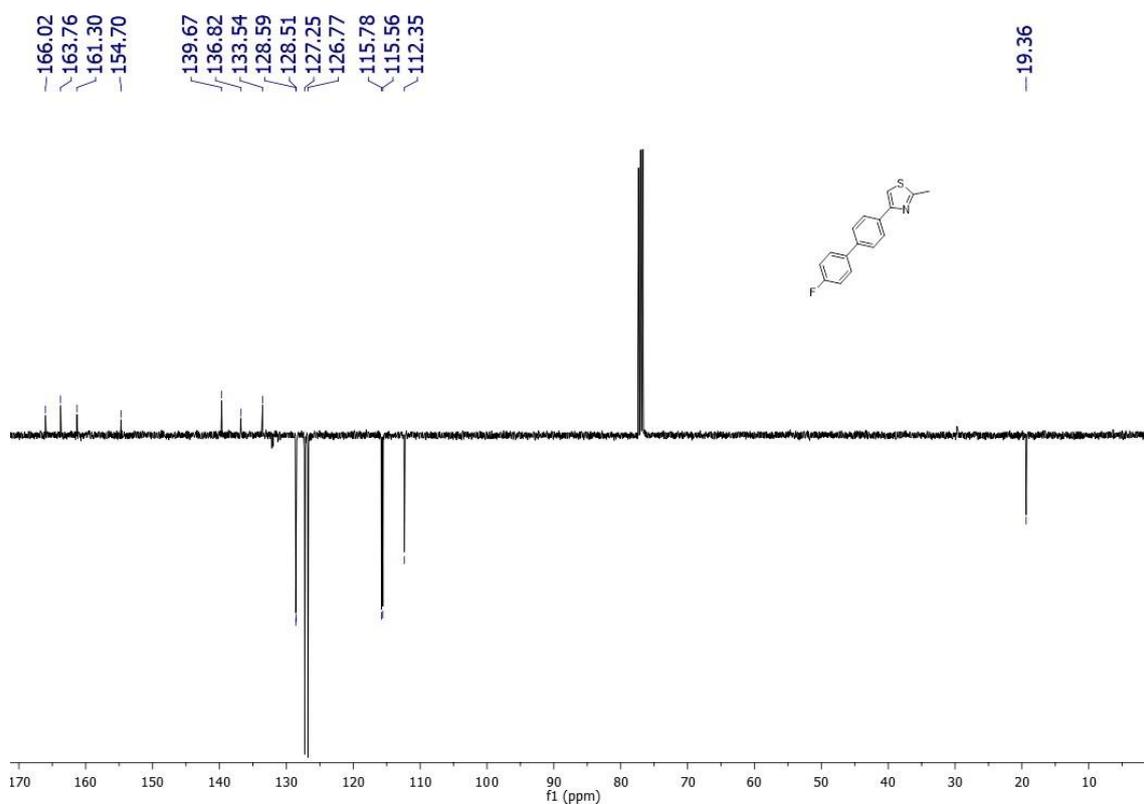
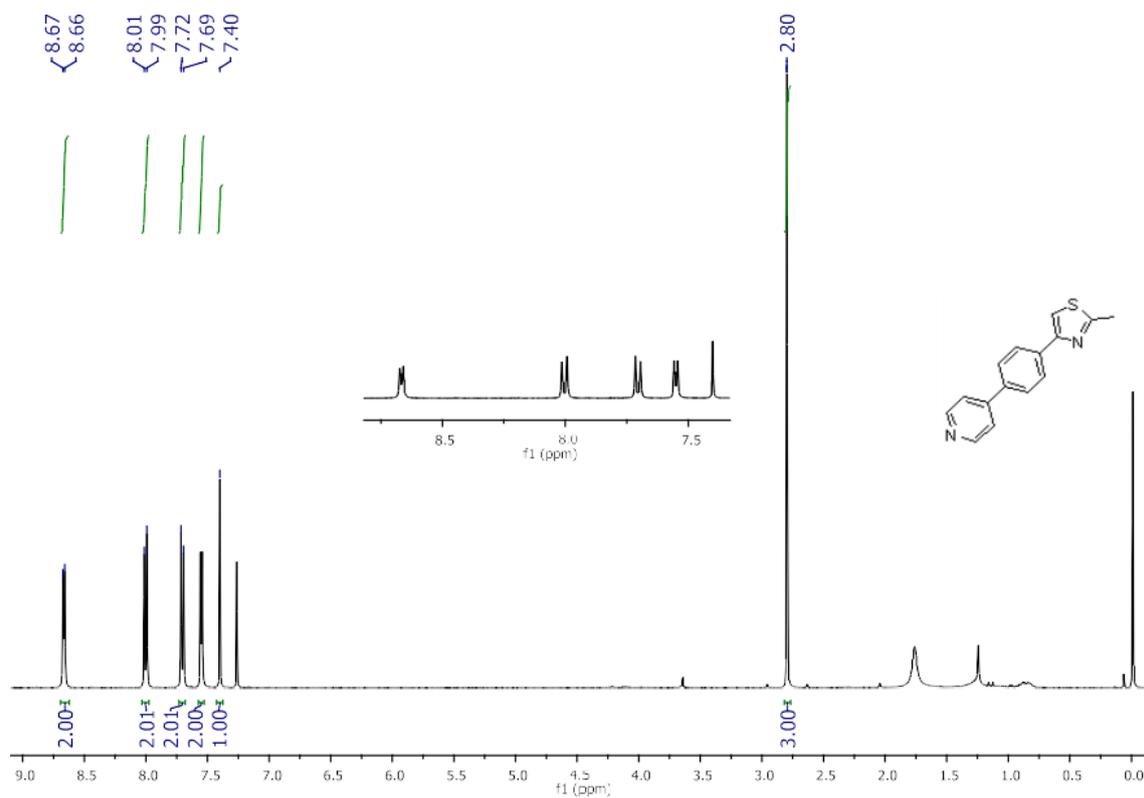
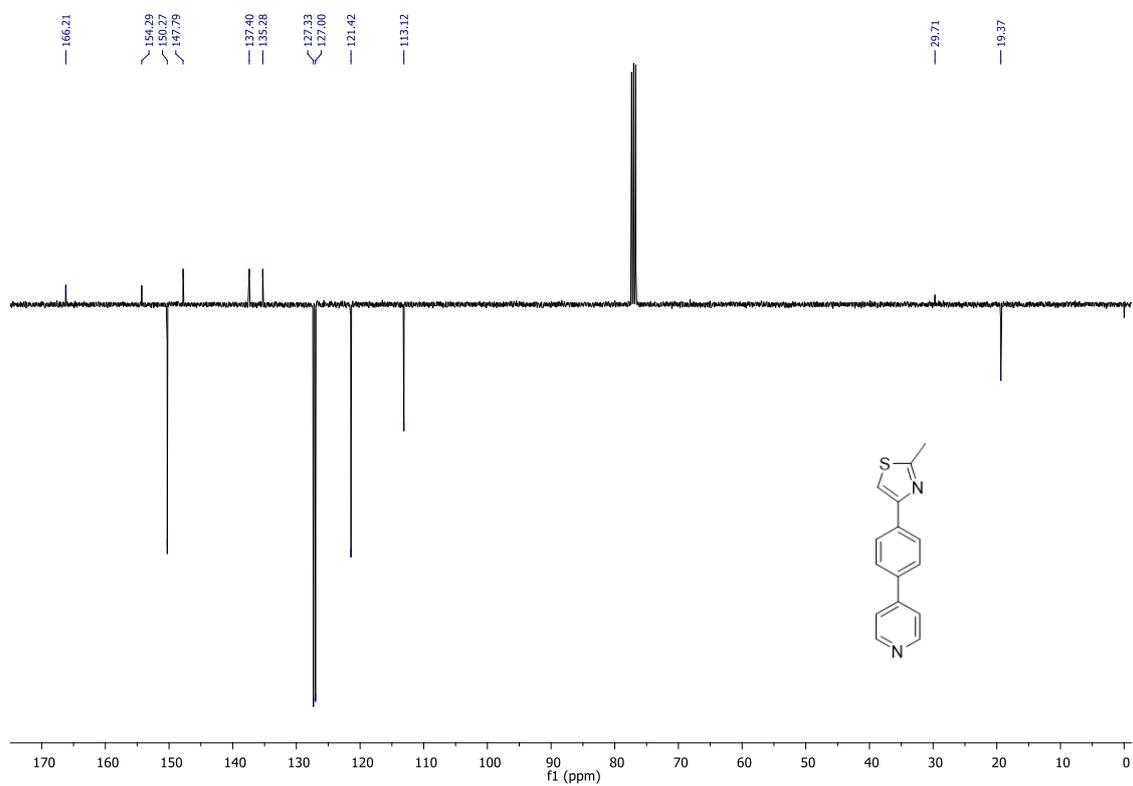


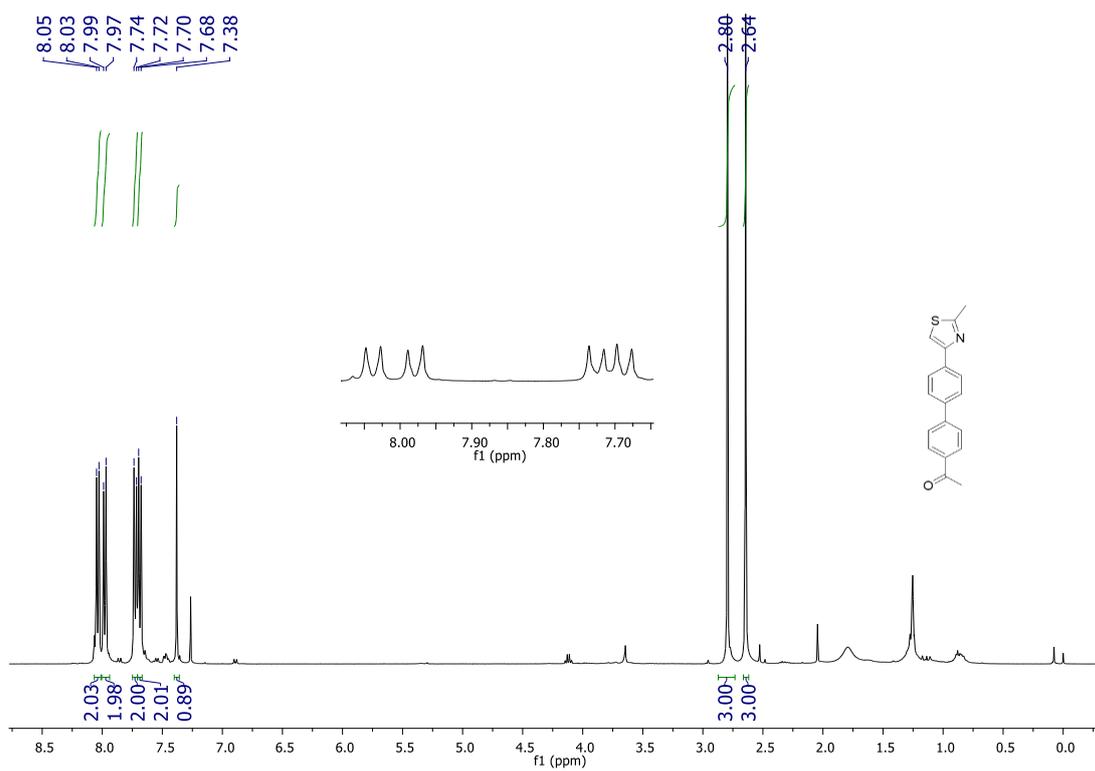
Figure S4. <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound 4b.



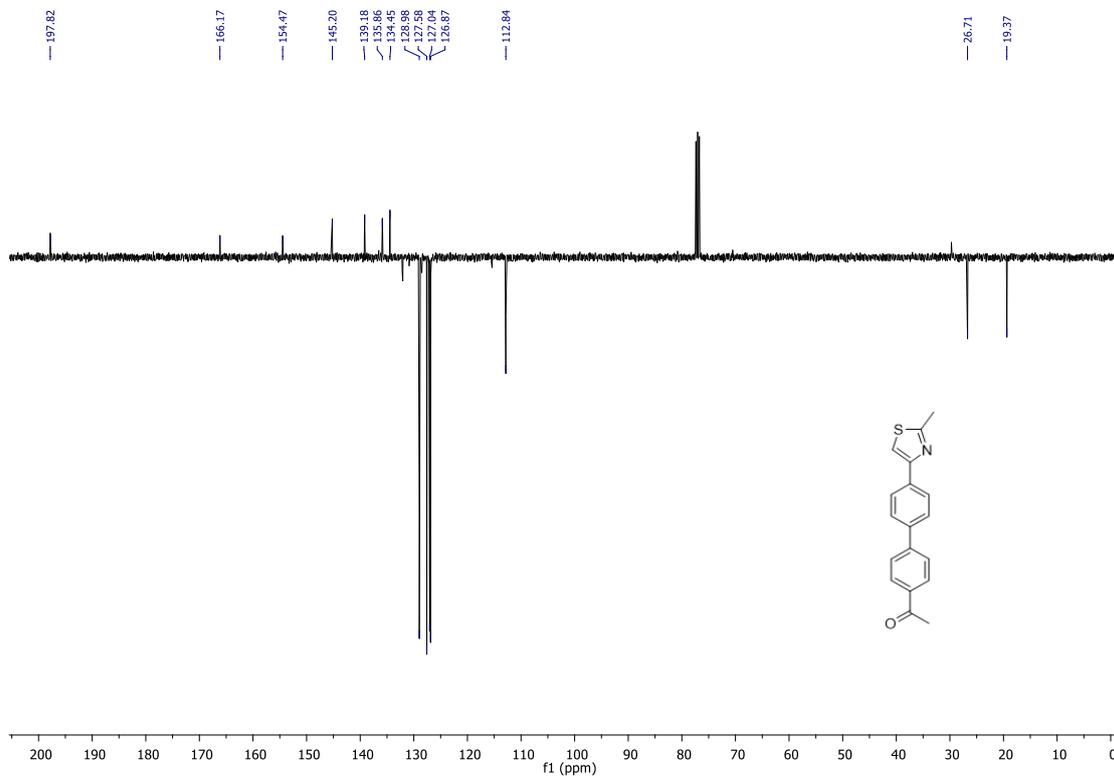
**Figure S5.** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **4c**.



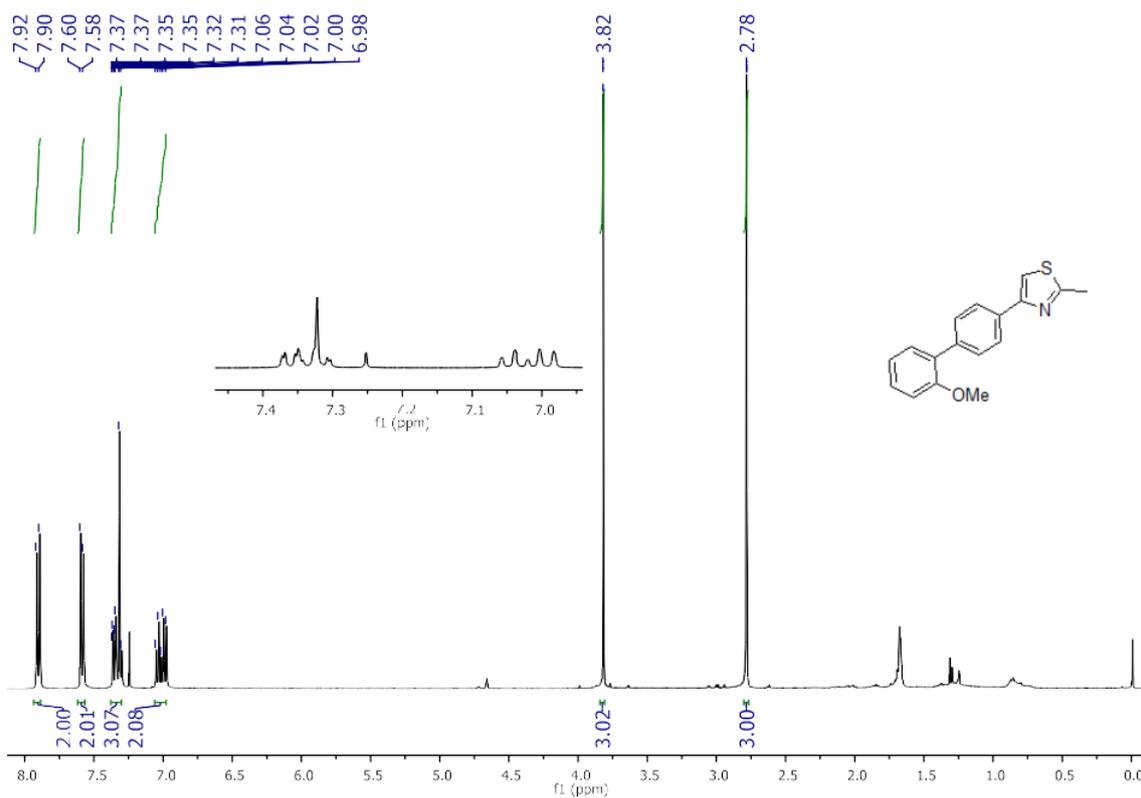
**Figure S6.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound **4c**.



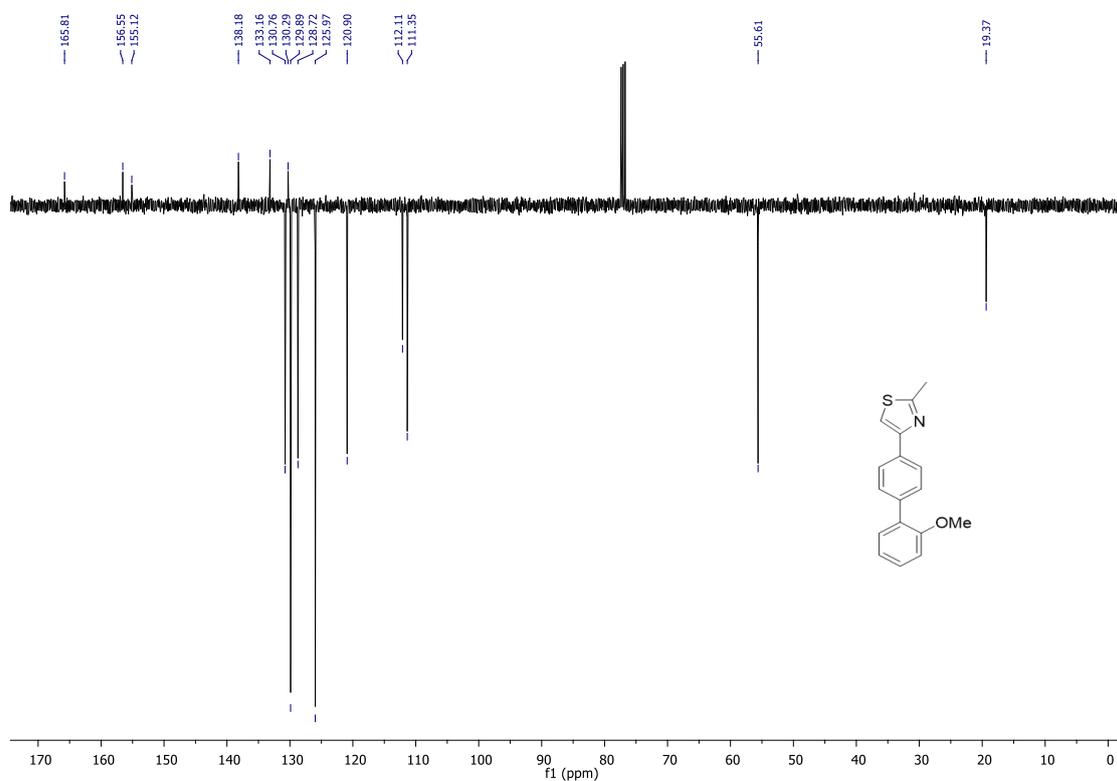
**Figure S7.** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **4d**.



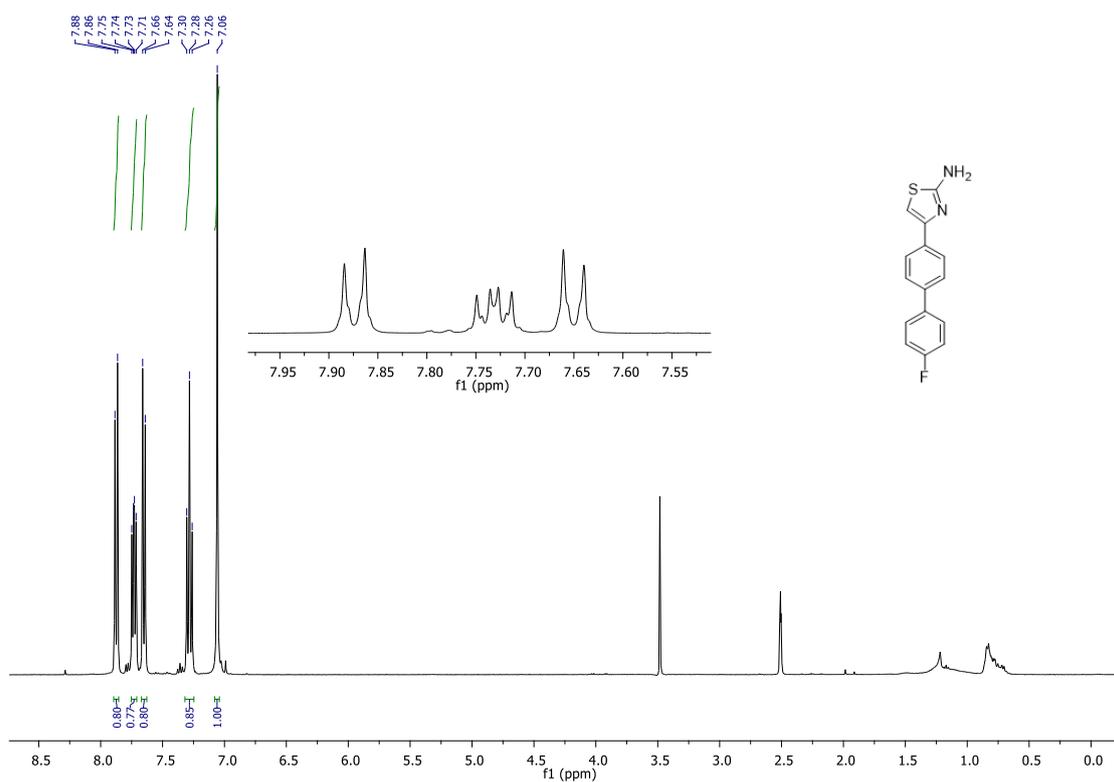
**Figure S8.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound **4d**.



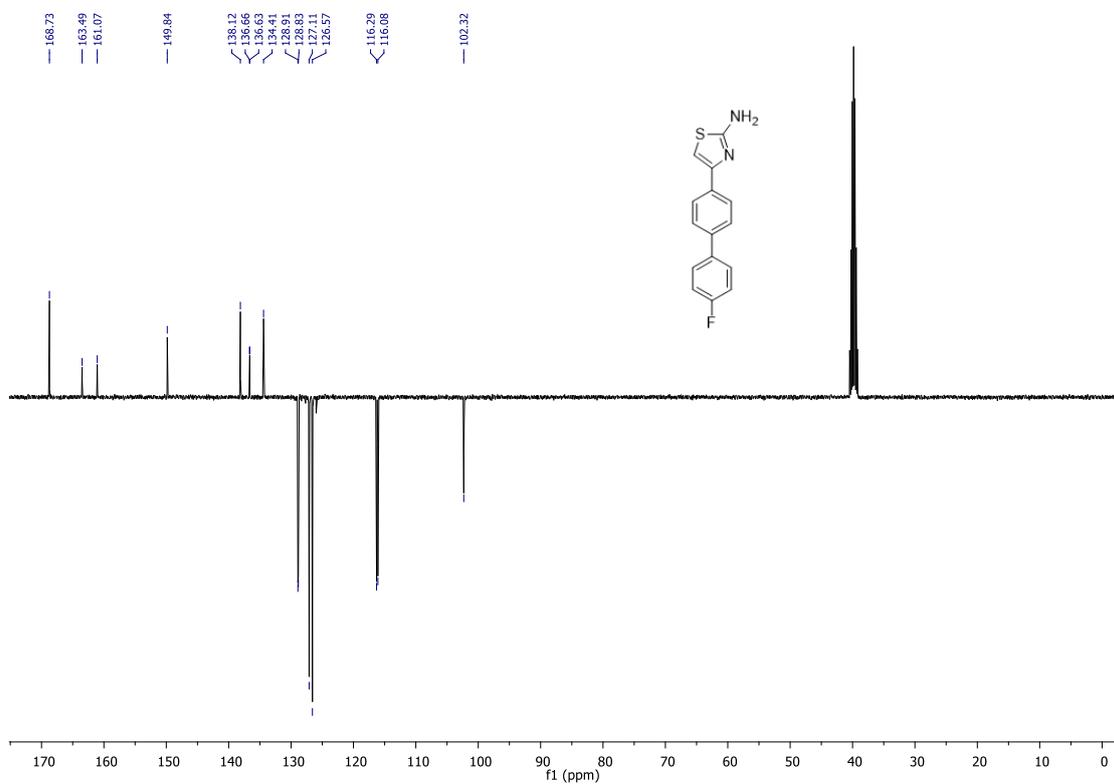
**Figure S9.** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **4e**.



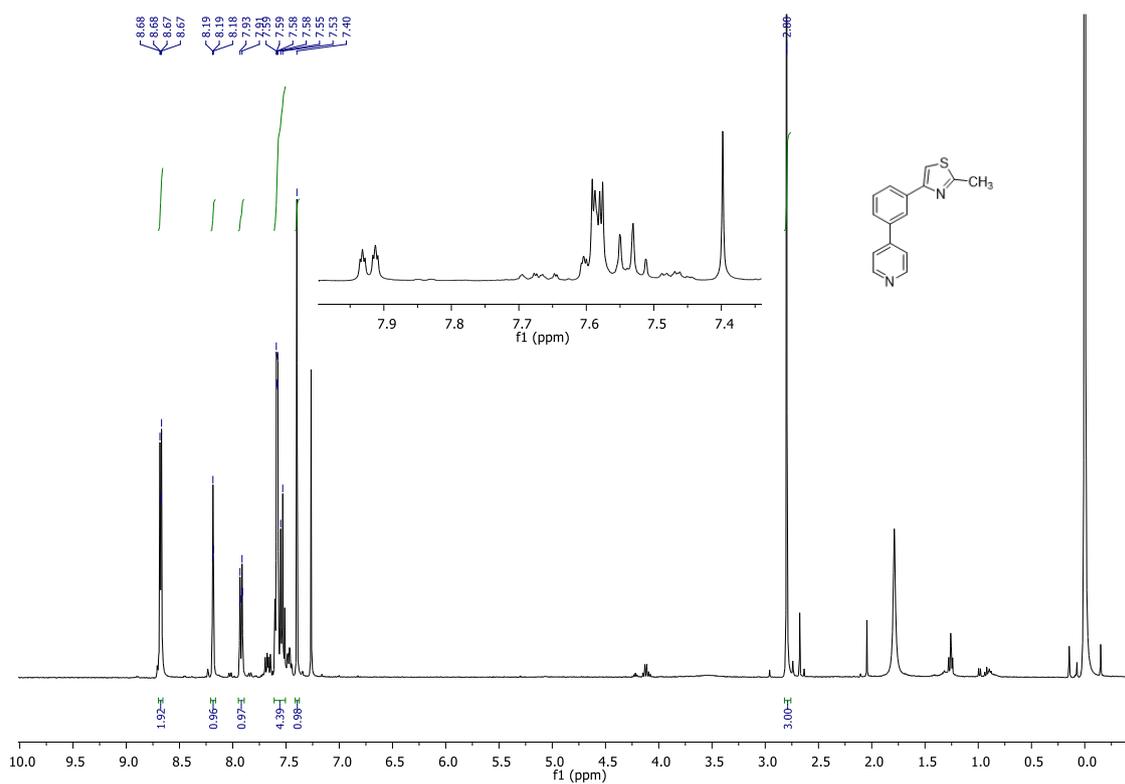
**Figure S10.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound **4e**.



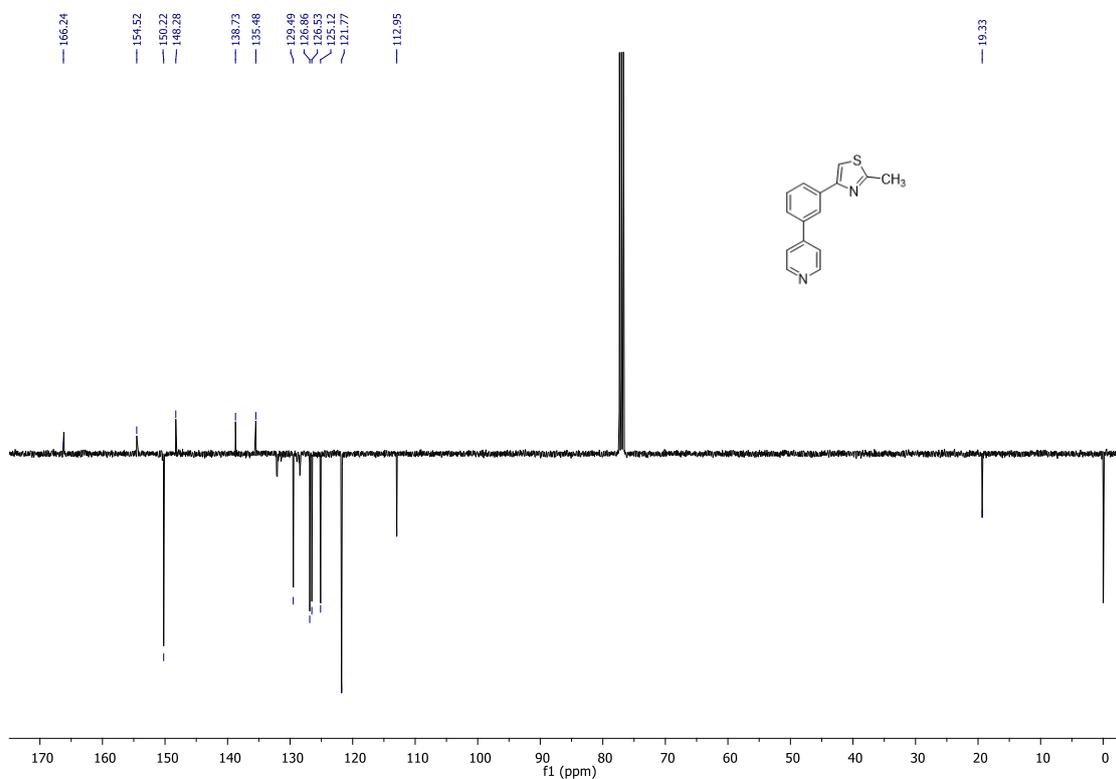
**Figure S11.** <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) of compound **4f**.



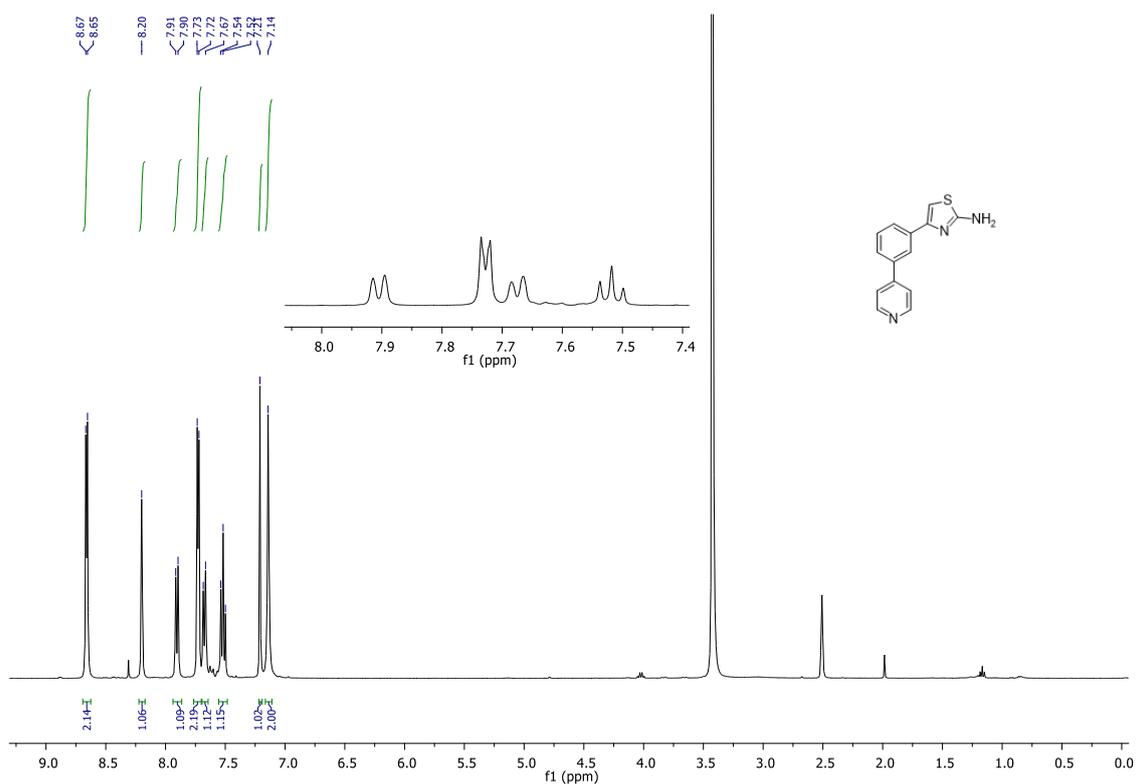
**Figure S12.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, DMSO-*d*<sub>6</sub>) of compound **4f**.



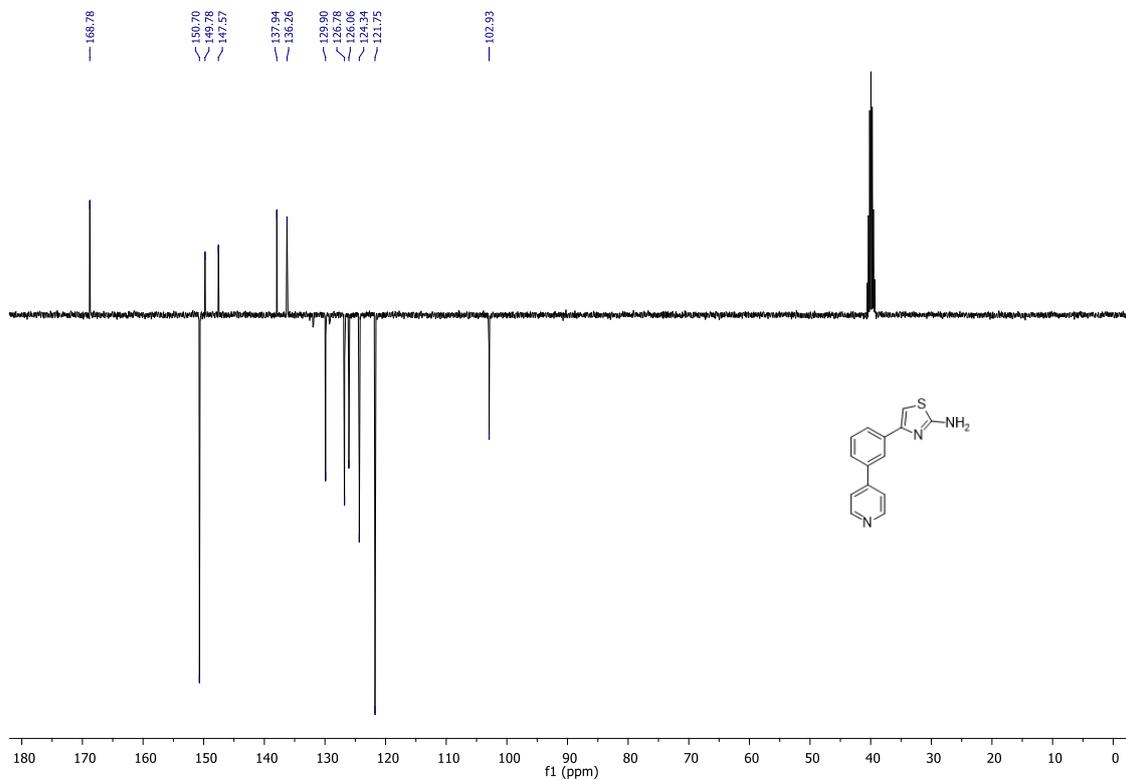
**Figure S13.** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **4g**.



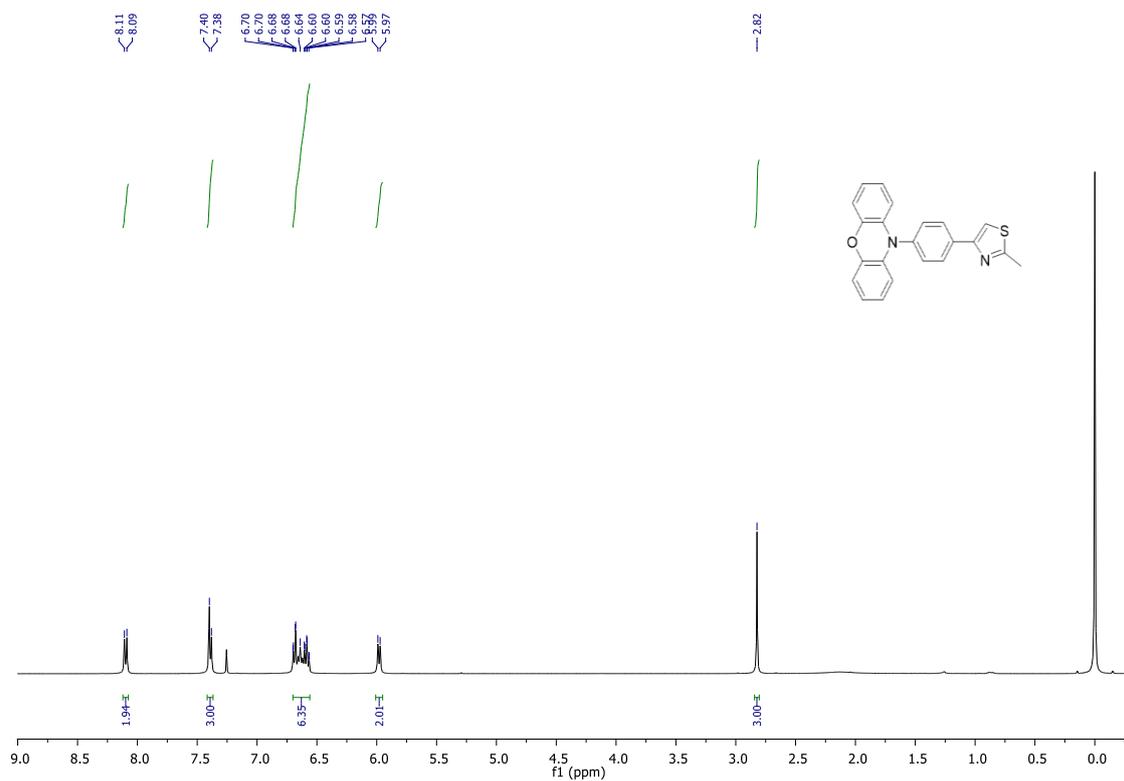
**Figure S14.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound **4g**.



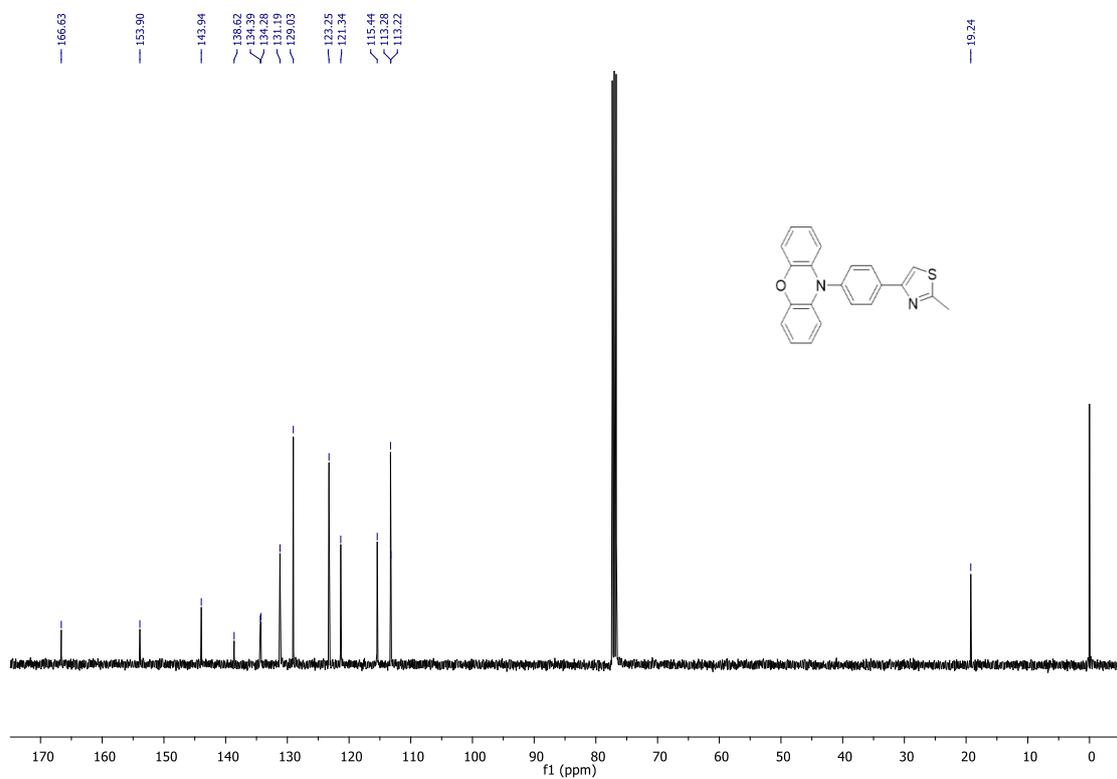
**Figure S15.** <sup>1</sup>H NMR (400 MHz, DMSO-*d*<sub>6</sub>) of compound **4h**.



**Figure S16.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, DMSO-*d*<sub>6</sub>) of compound **4h**.



**Figure S17.**  $^1\text{H}$  NMR (400 MHz,  $\text{CDCl}_3$ ) of compound **5**.



**Figure S18.**  $^{13}\text{C}$  NMR spectrum (100 MHz,  $\text{CDCl}_3$ ) of compound **5**.

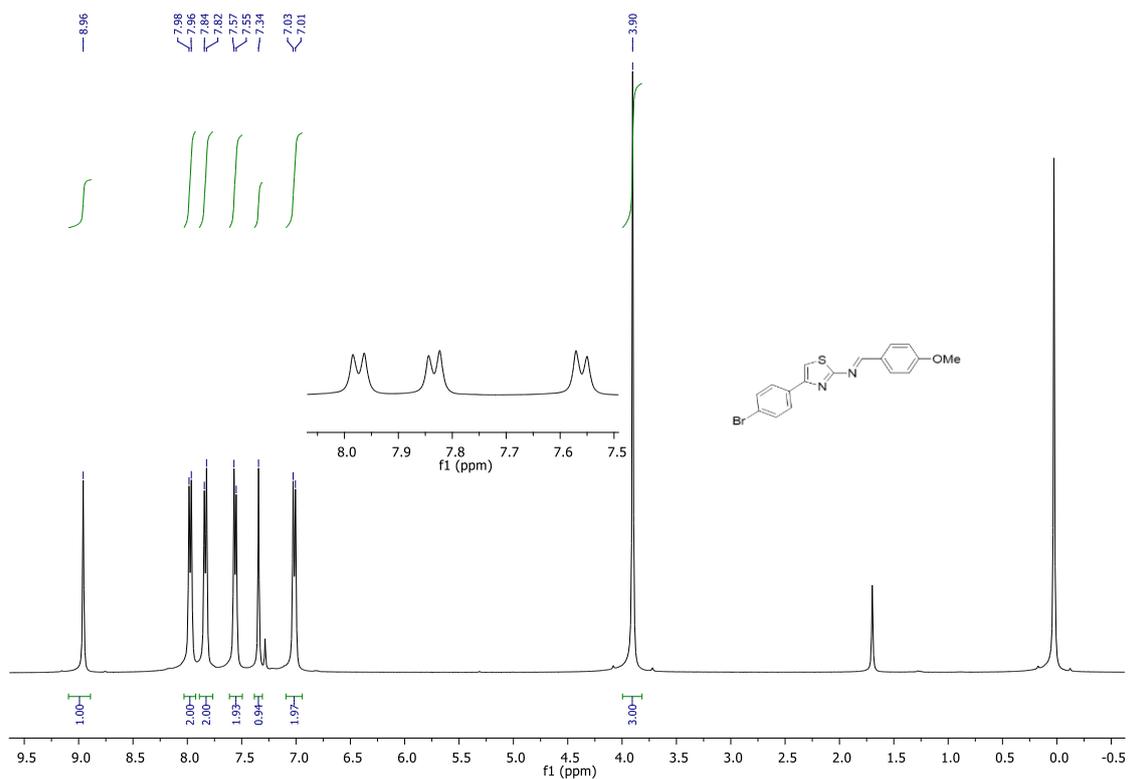


Figure S19. <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound 6a.

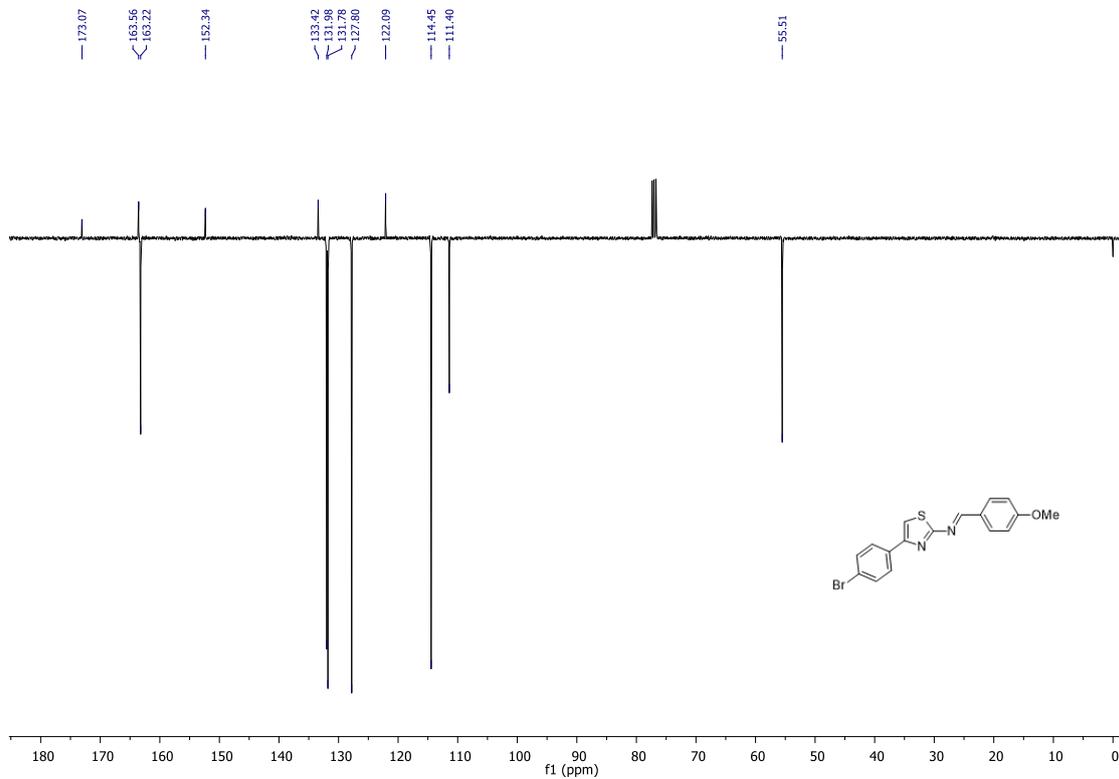
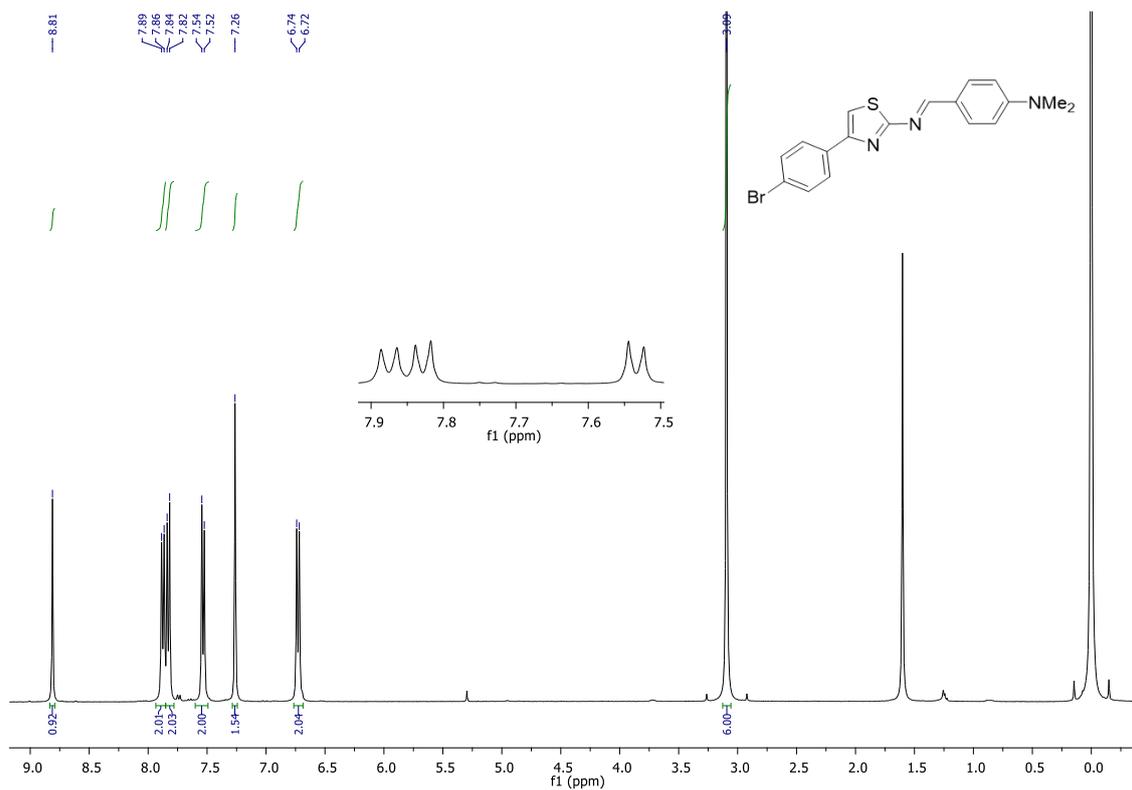
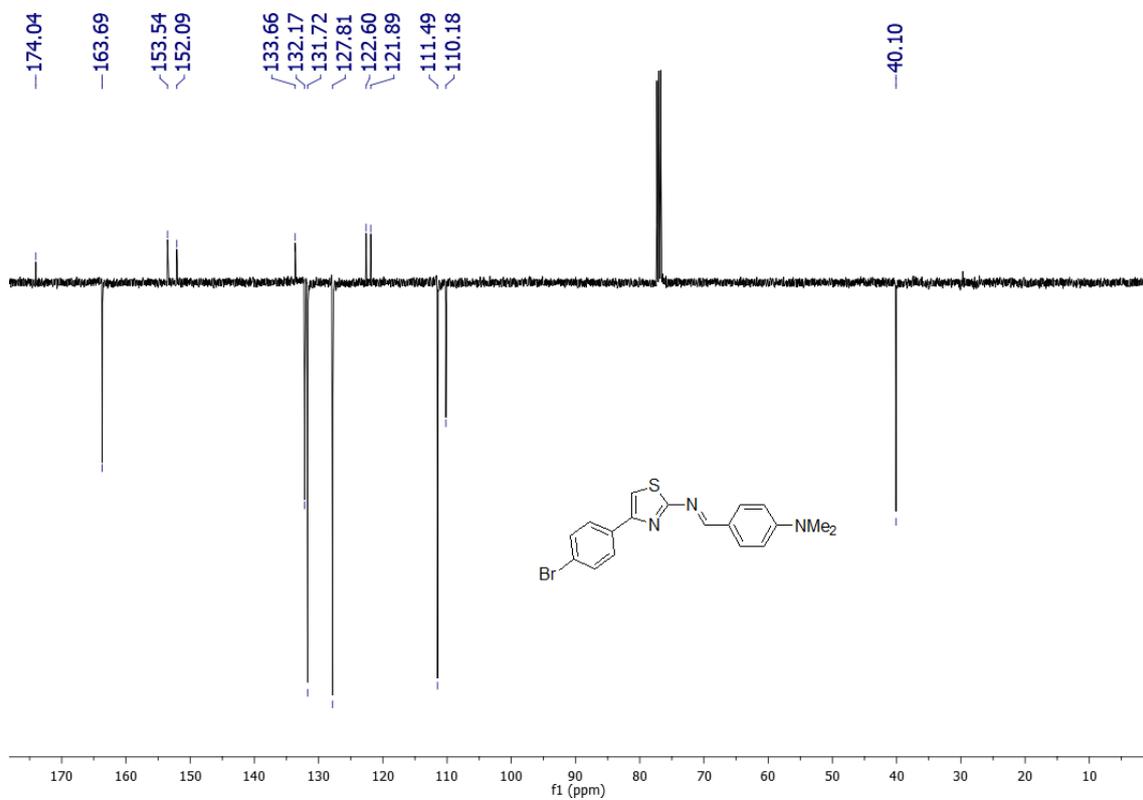


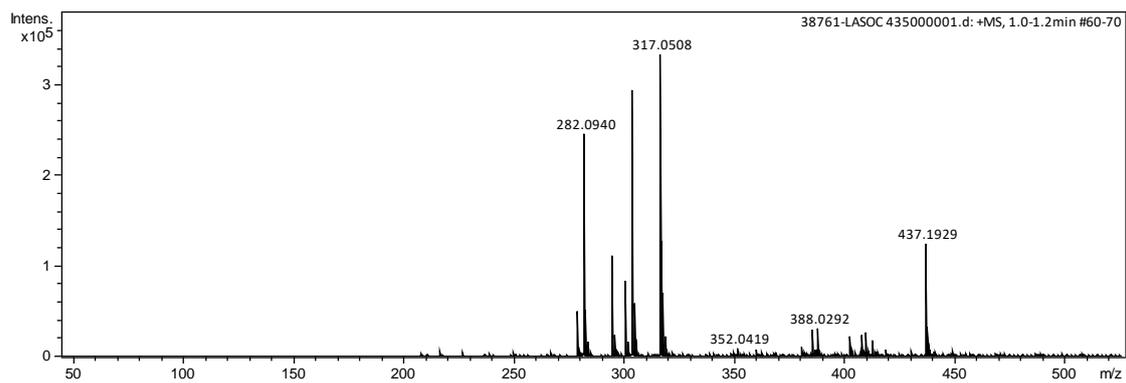
Figure S20. <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound 6a.



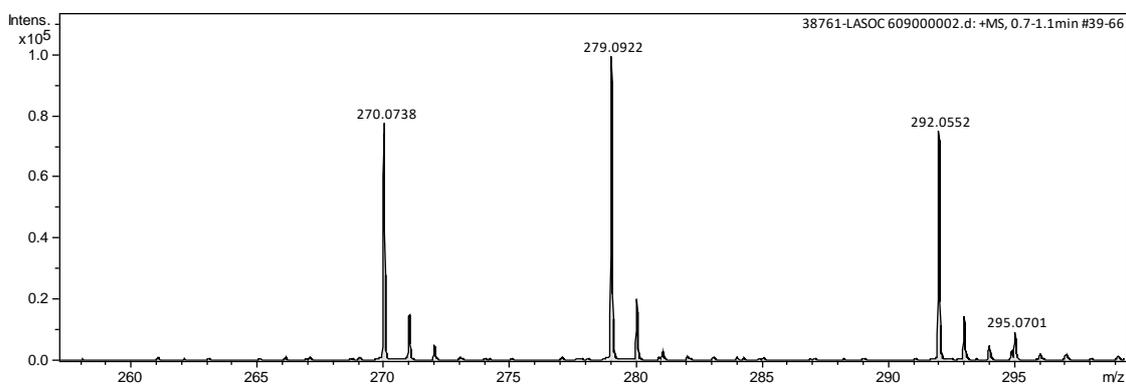
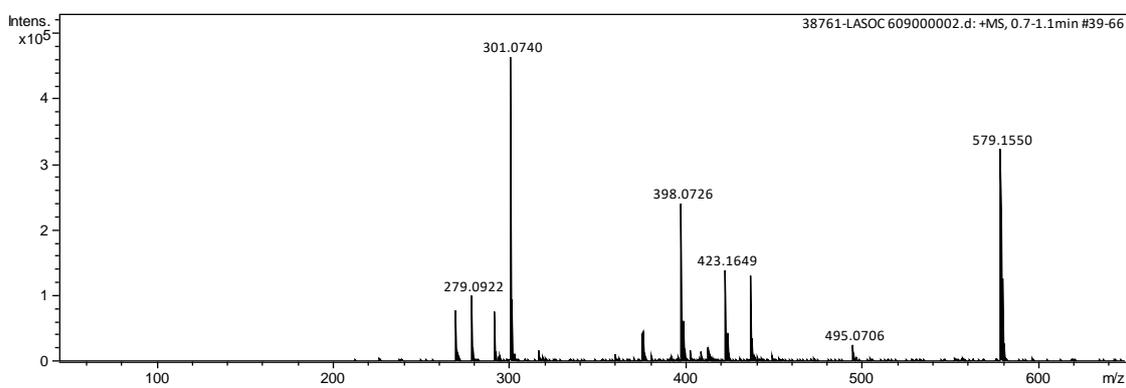
**Figure S21.** <sup>1</sup>H NMR (400 MHz, CDCl<sub>3</sub>) of compound **6b**.



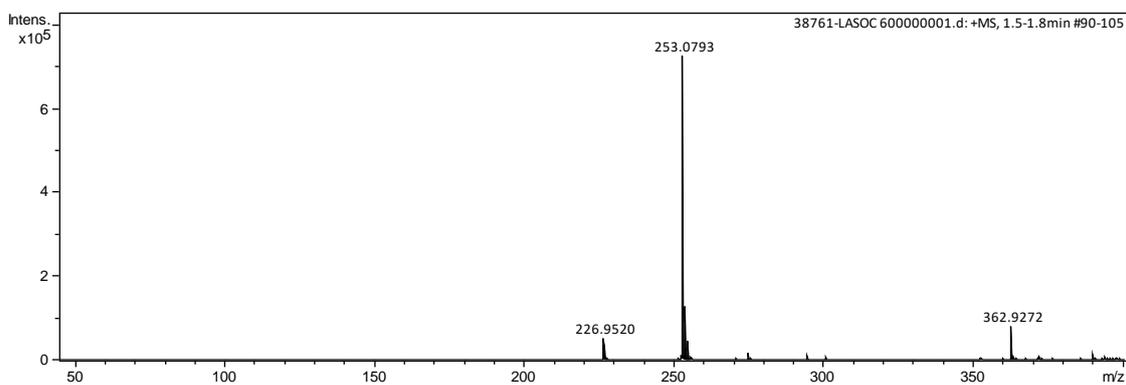
**Figure S22.** <sup>13</sup>C NMR spectrum (APT, 100 MHz, CDCl<sub>3</sub>) of compound **6b**.



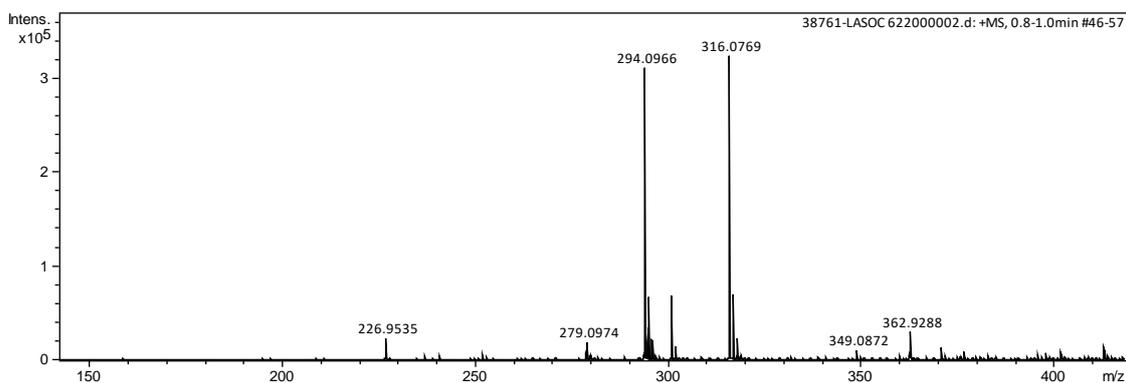
**Figure S23.** HRMS (ESI-+) spectra of compound **4a**.



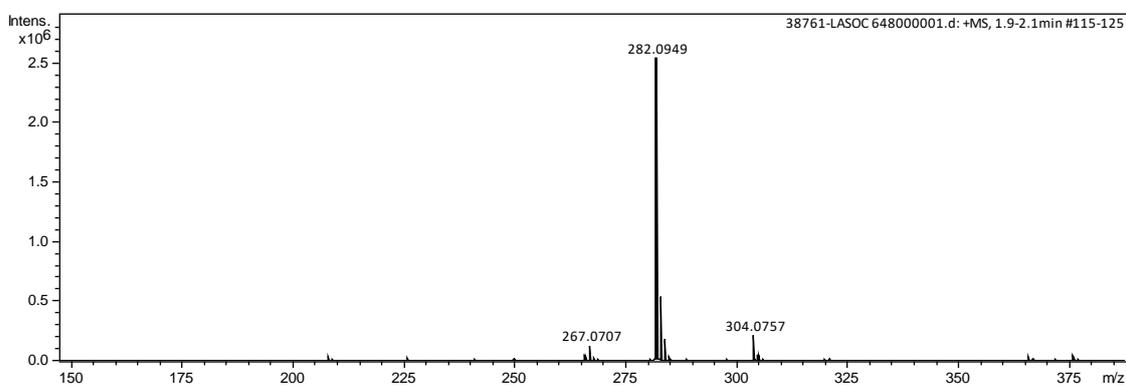
**Figure S24.** HRMS (ESI-+) spectra of compound **4b**.



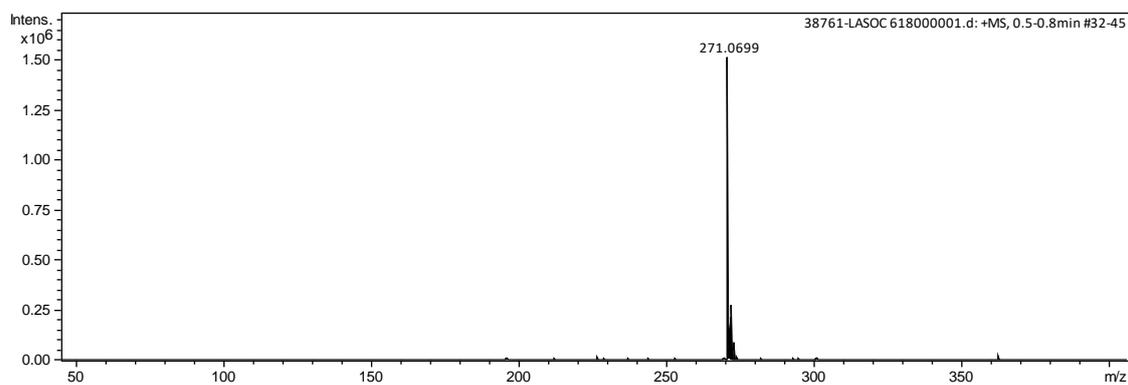
**Figure S25.** HRMS (ESI(+)) spectra of compound **4c**.



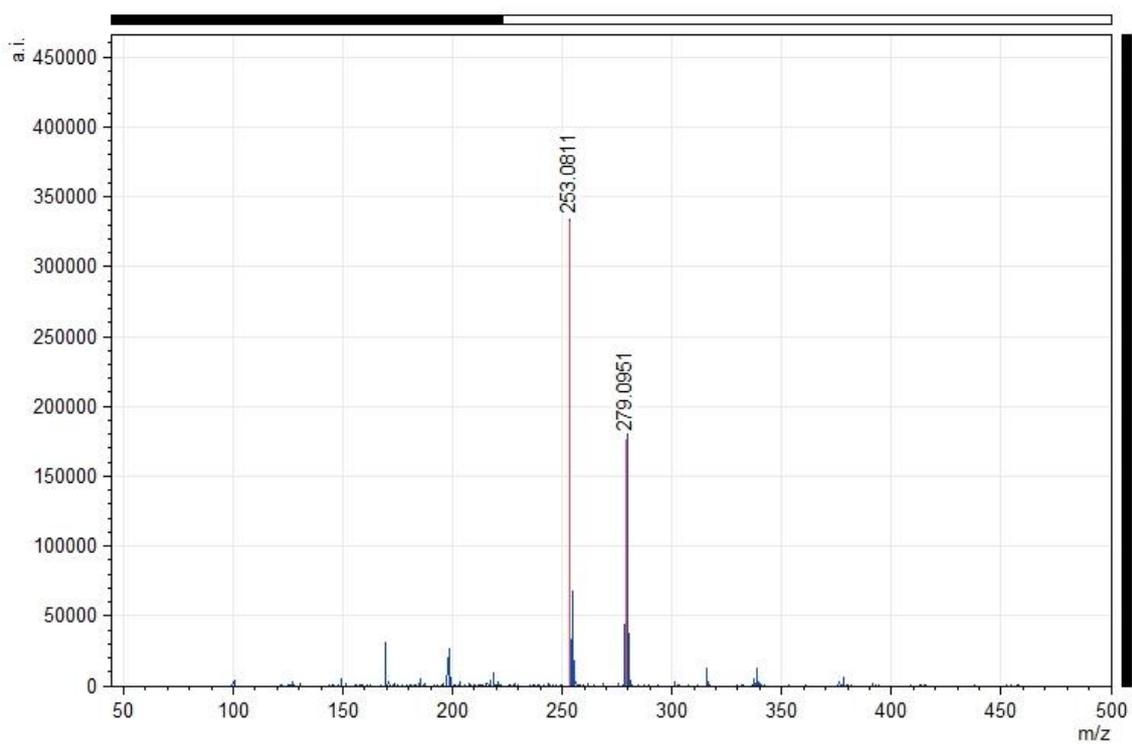
**Figure S26.** HRMS (ESI(+)) spectra of compound **4d**.



**Figure S27.** HRMS (ESI(+)) spectra of compound **4e**.



**Figure S28.** HRMS (ESI-+) spectra of compound **4f**.



**Figure S29.** HRMS (ESI-+) spectra of compound **4g**.

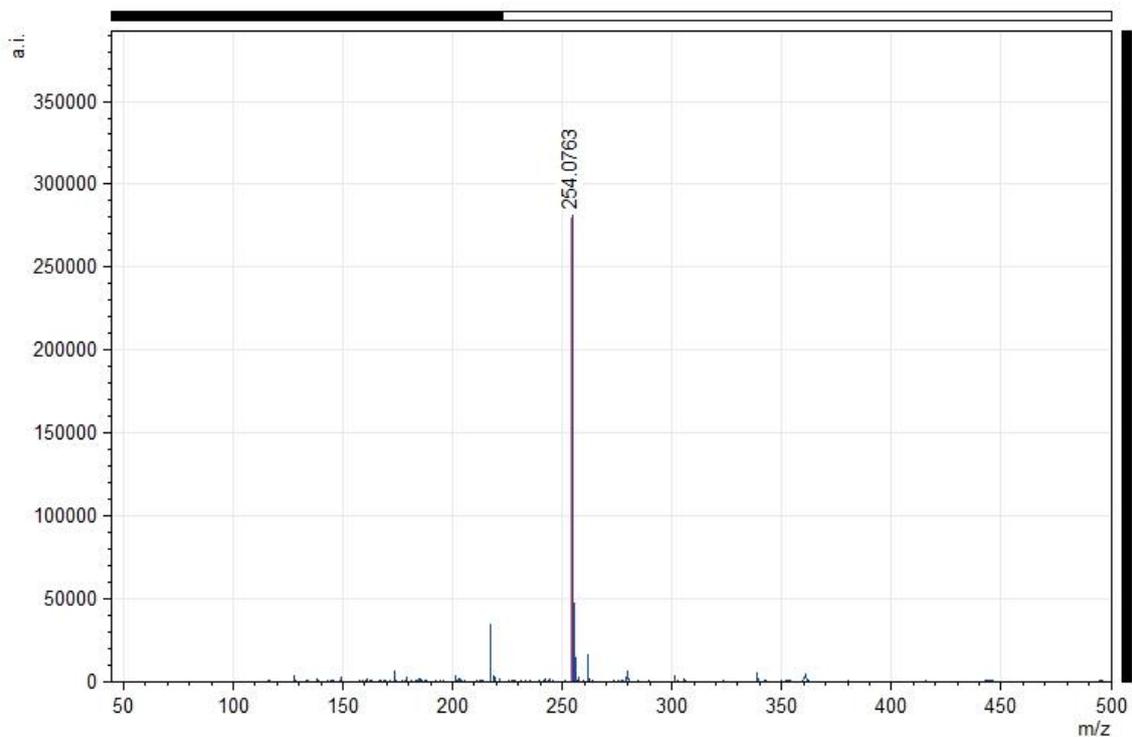


Figure S30. HRMS (ESI-+) spectra of compound 4h.

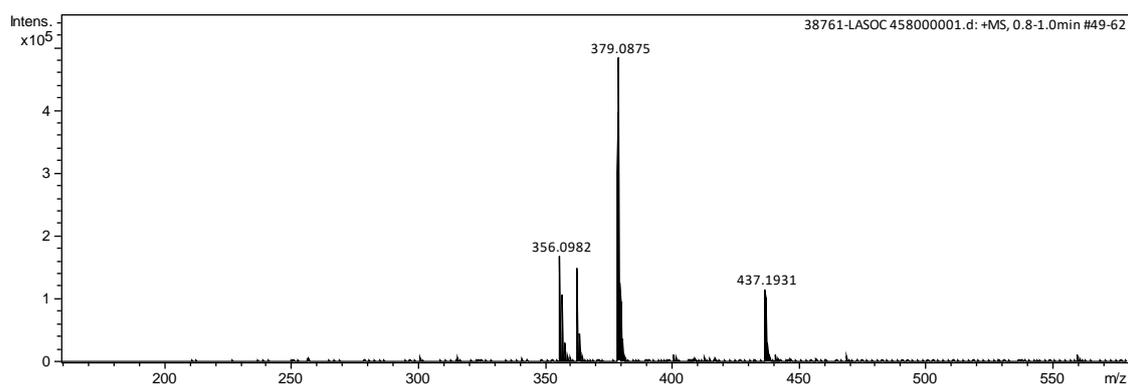


Figure S31. HRMS (ESI-+) spectra of compound 5.

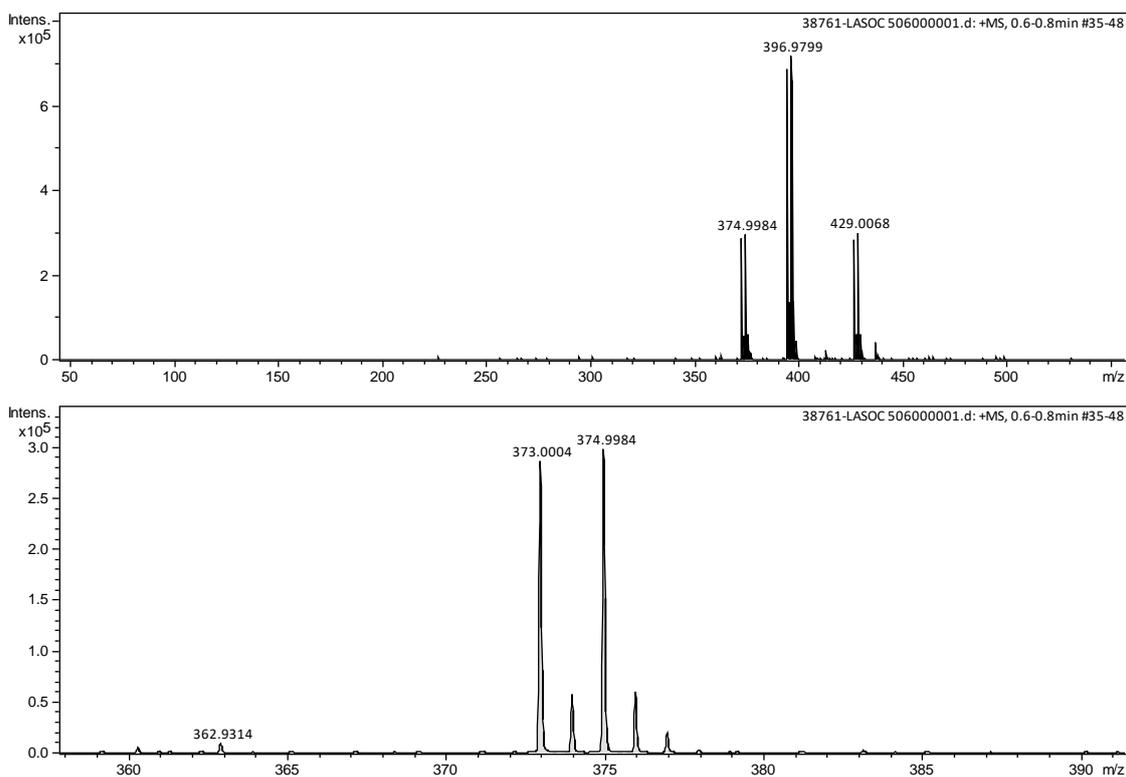


Figure S32. HRMS (ESI-+) spectra of compound 6a.

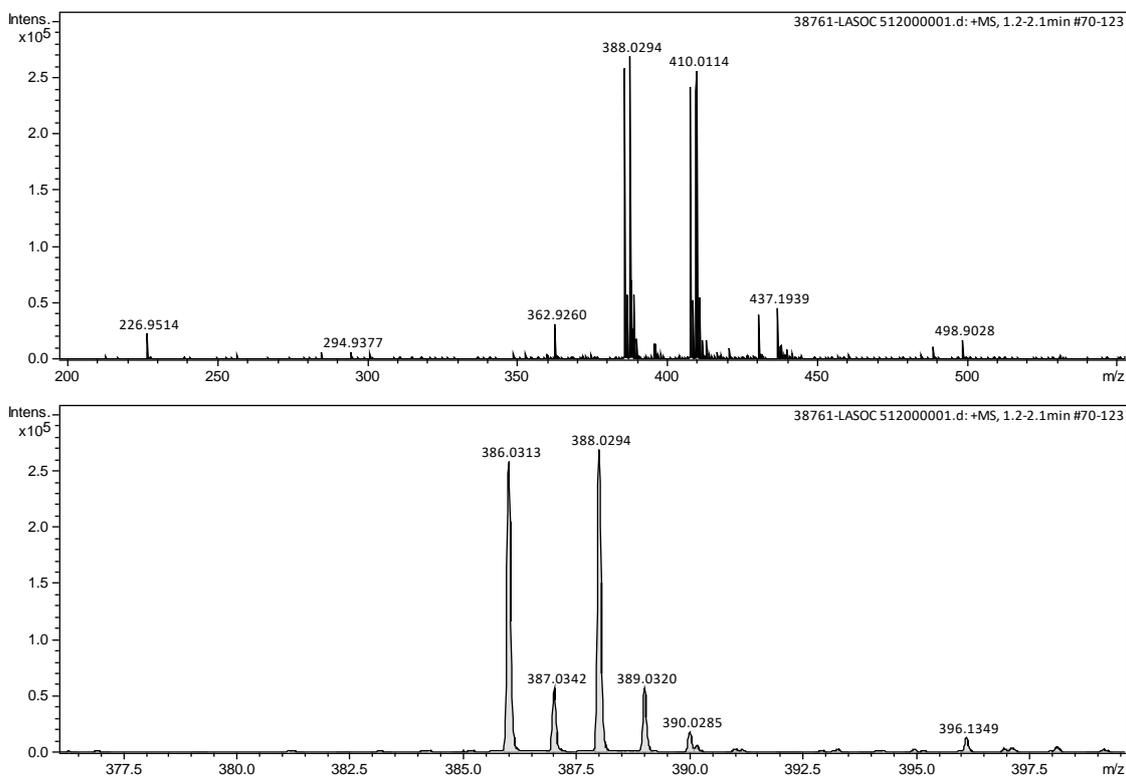


Figure S33. HRMS (ESI-+) spectra of compound 6b.

### Activity against *T. cruzi* Tulahuen strain

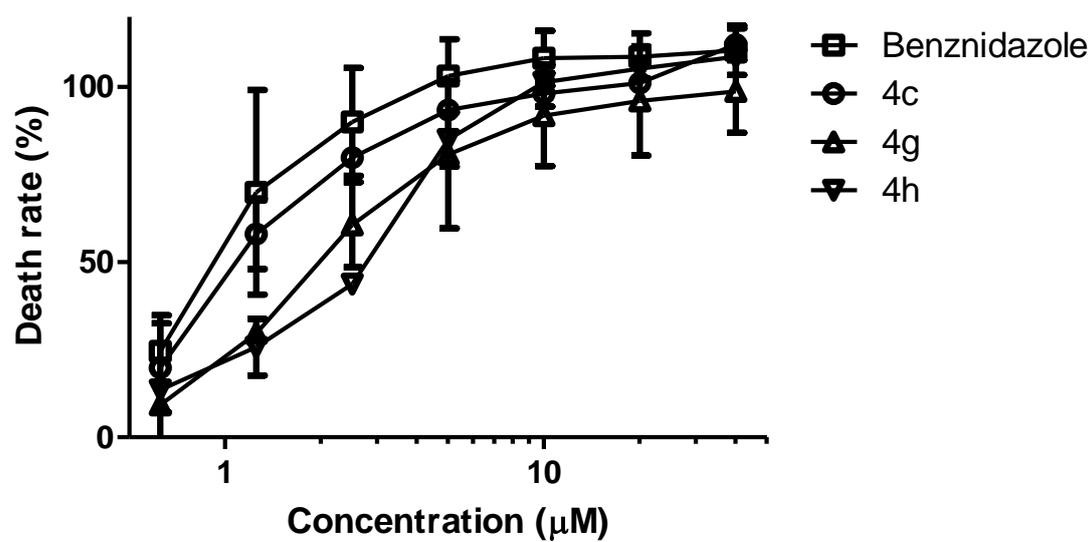


Figure S34. Activity of compounds 4c, 4g and 4h against intracellular forms of *T. cruzi* Tulahuen strain.