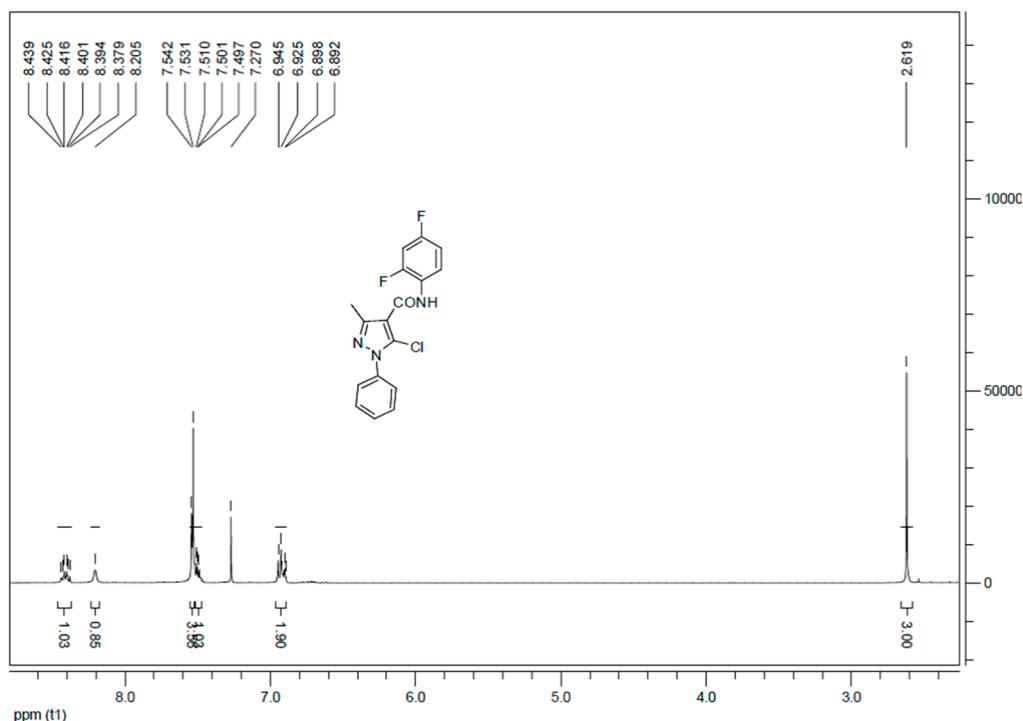
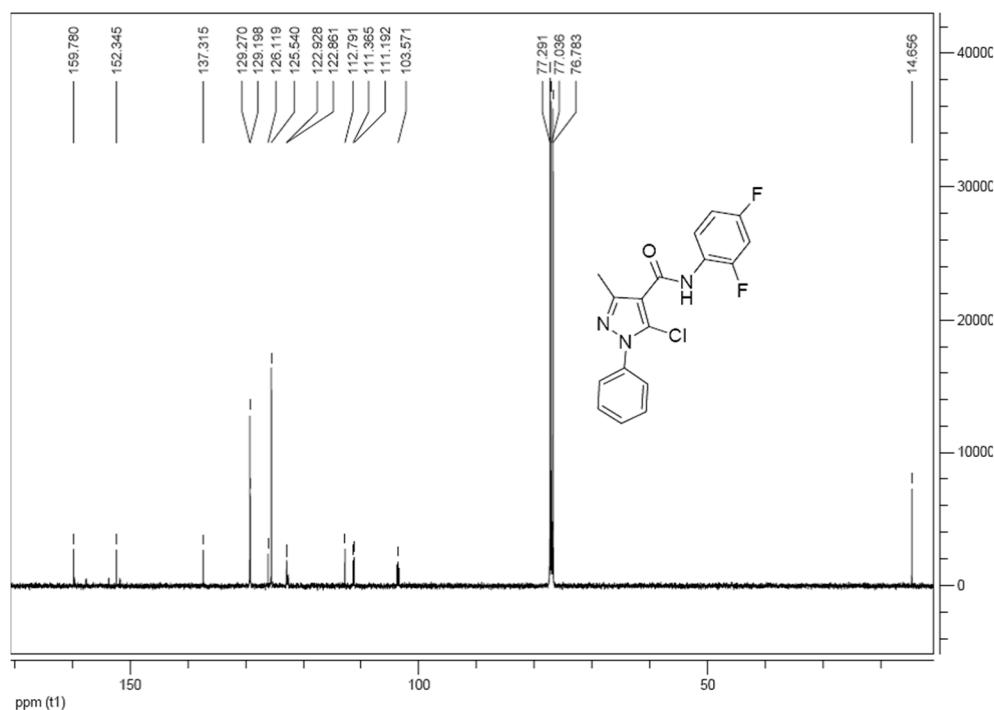


# Supplementary Materials: Design, Synthesis, DFT Study and Antifungal Activity of Pyrazolecarboxamide Derivatives

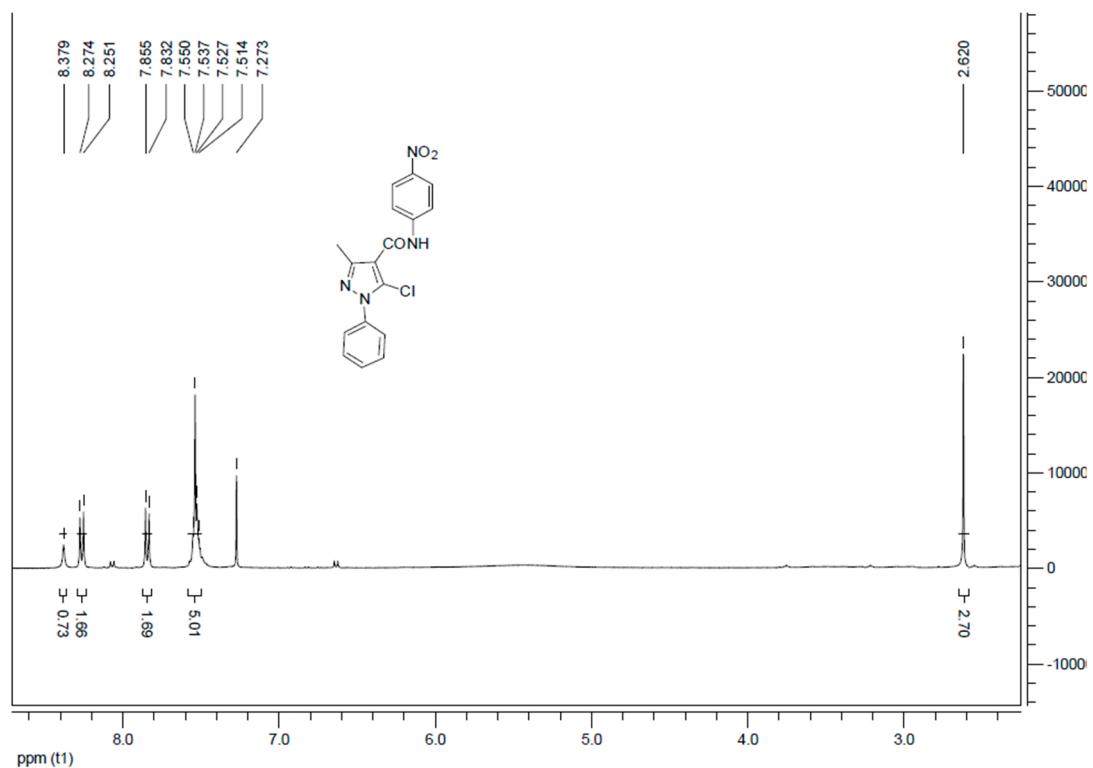
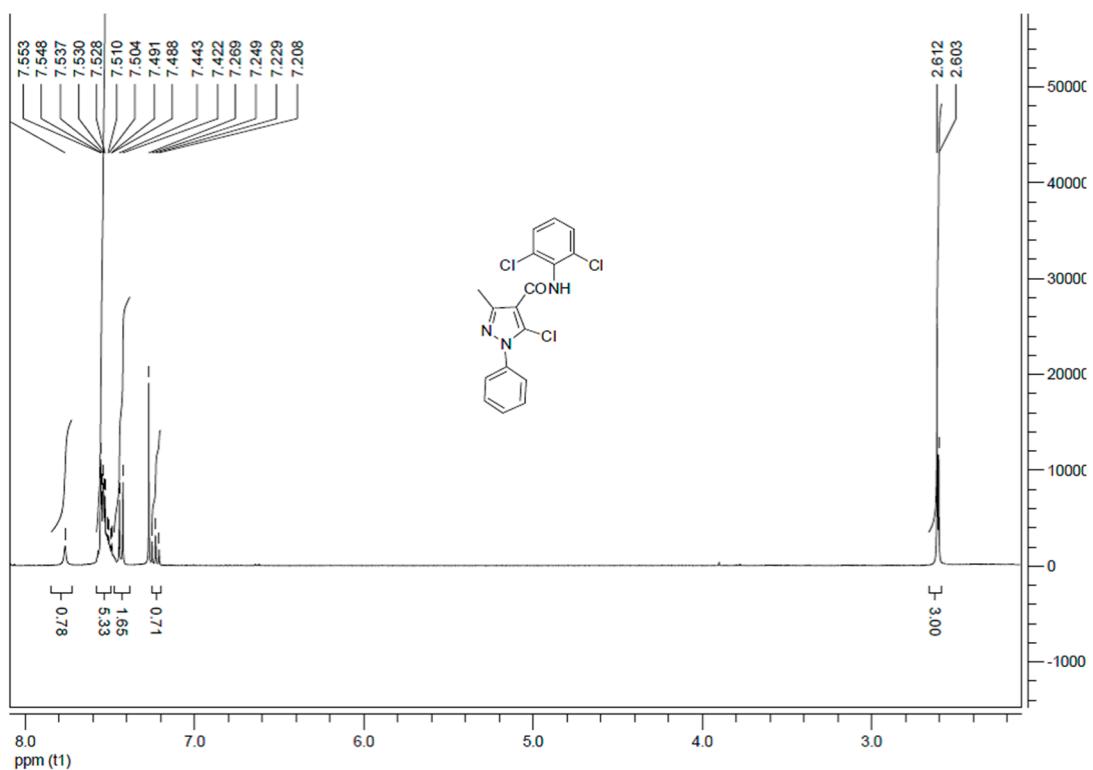
Jin-Xia Mu, Yan-Xia Shi, Ming-Yan Yang, Zhao-Hui Sun, Xing-Hai Liu, Bao-Ju Li and Na-Bo Sun

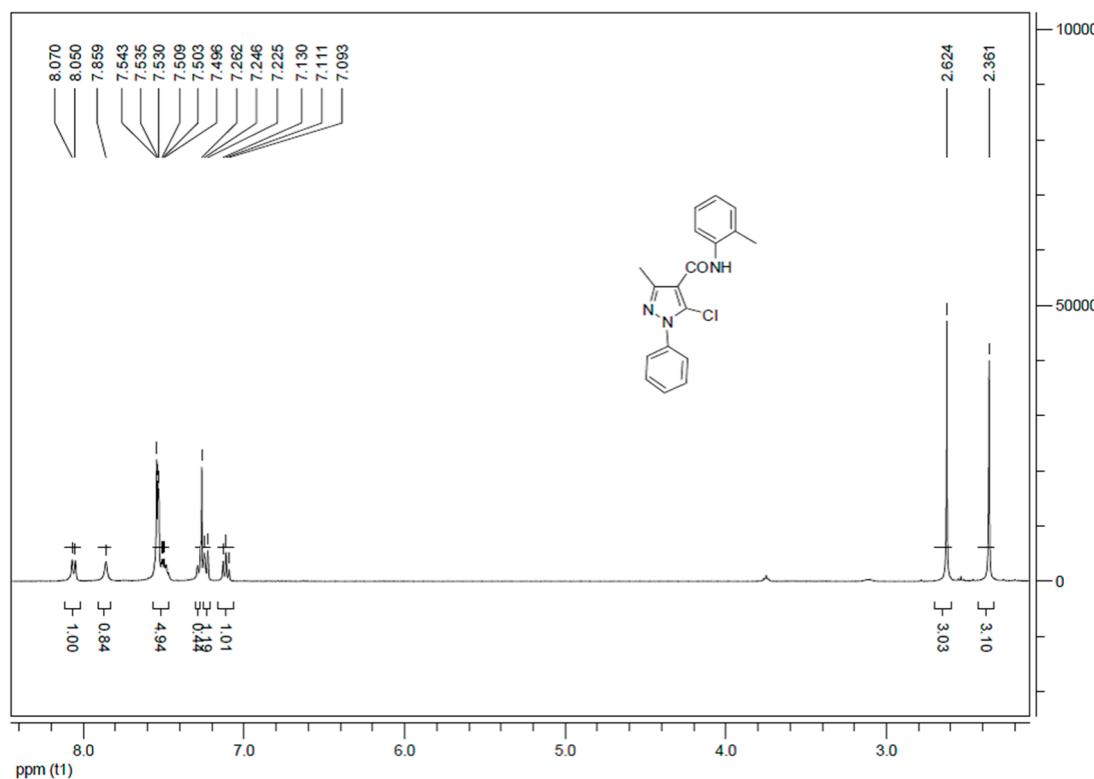
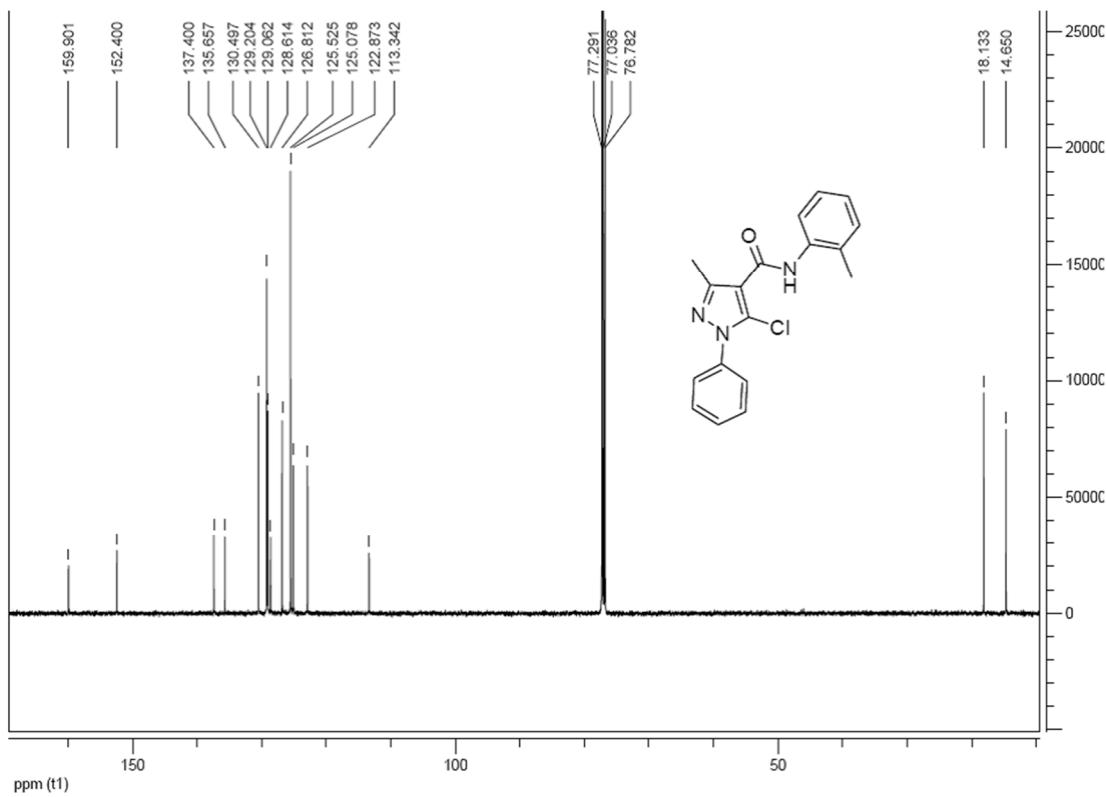


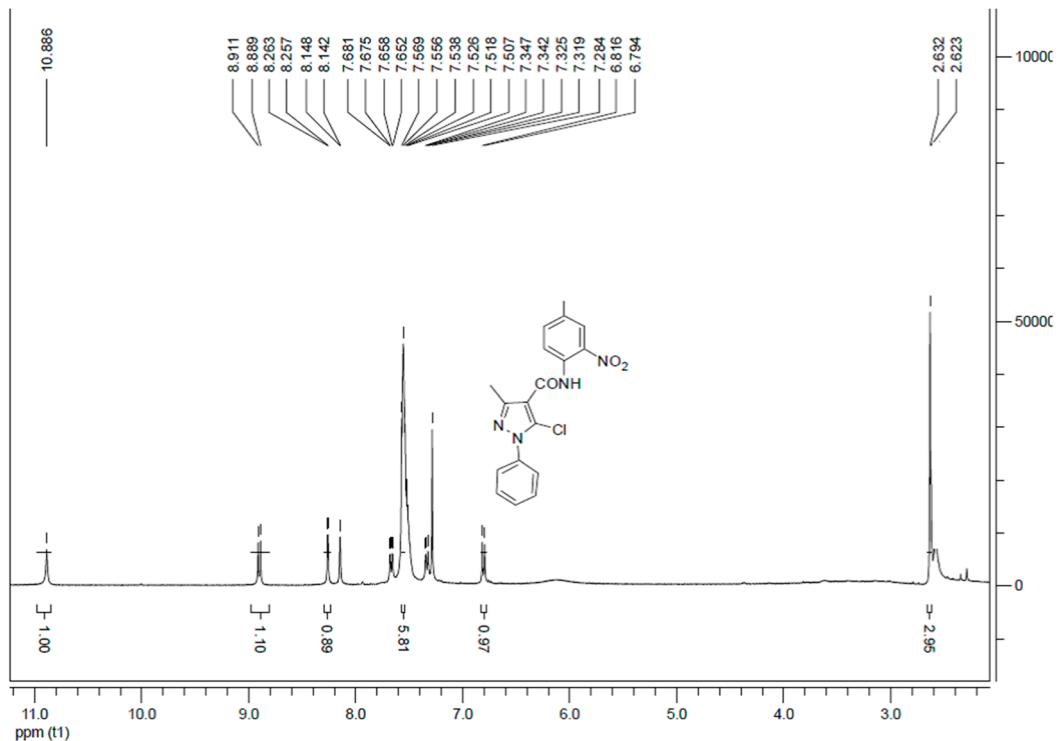
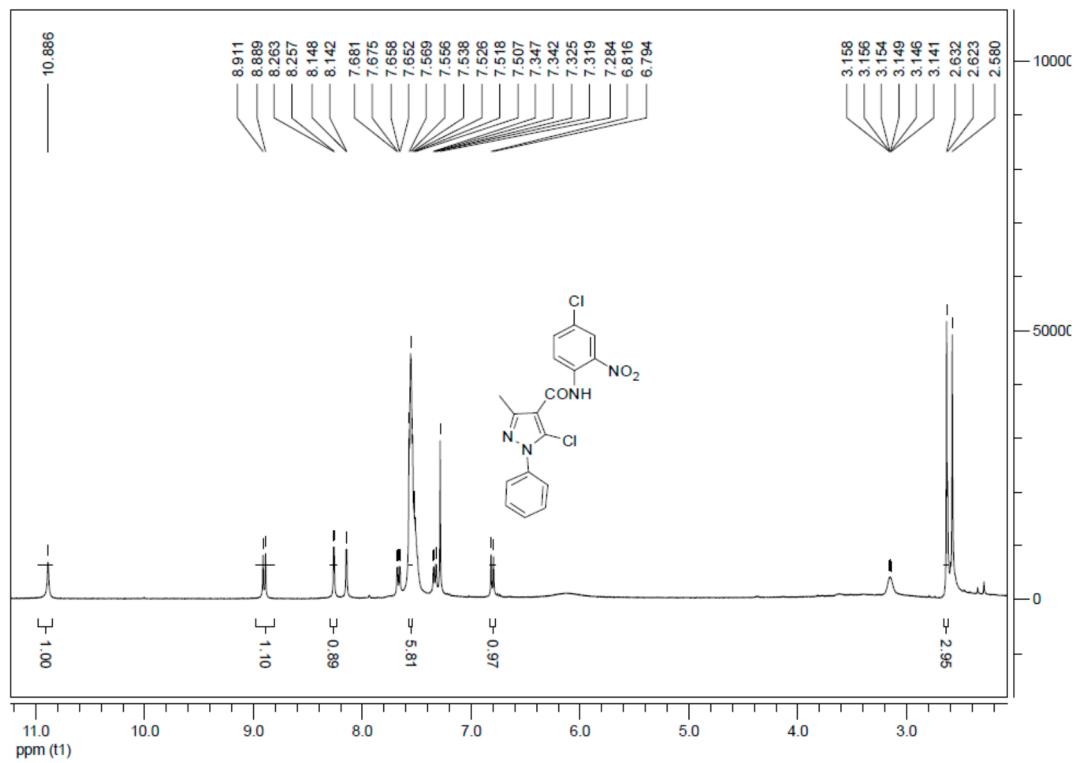
**Figure S1.**  $^1\text{H}$ -NMR spectrum of compound 5a.

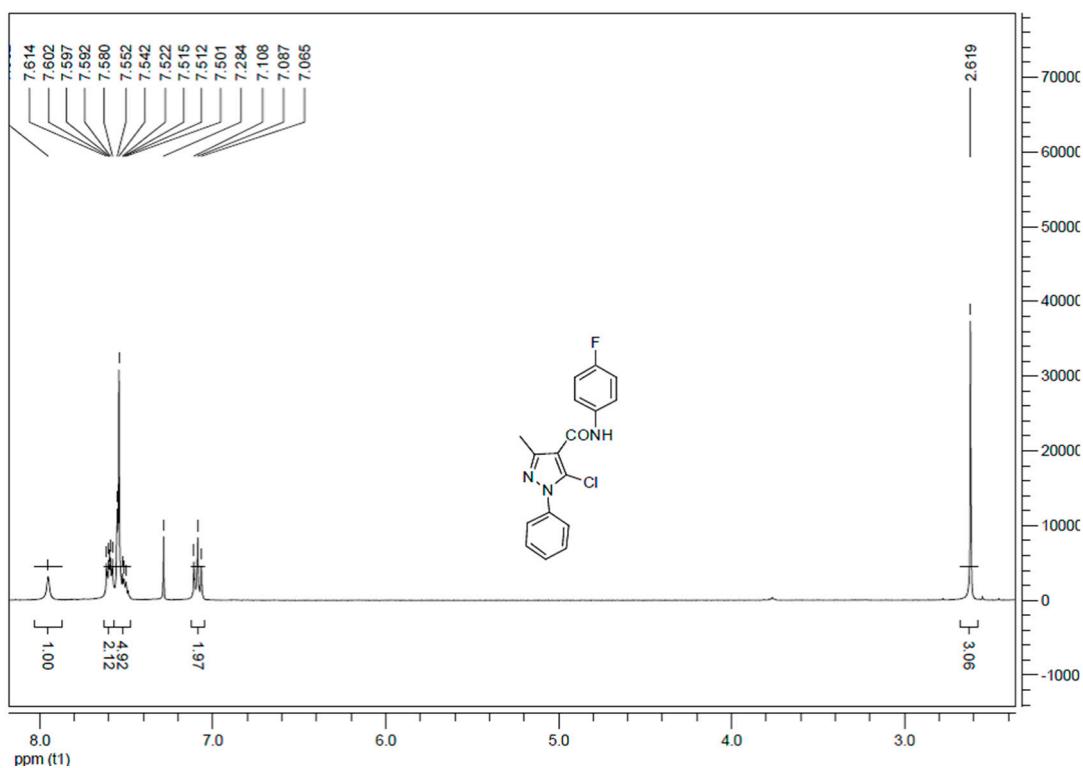
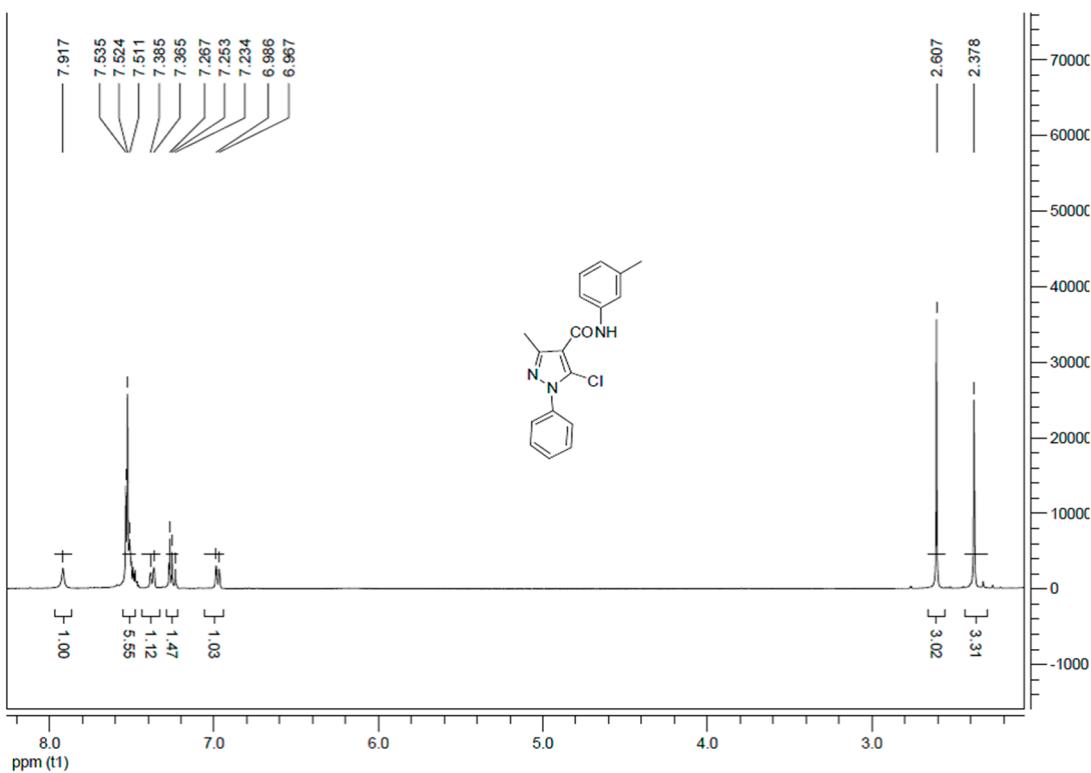


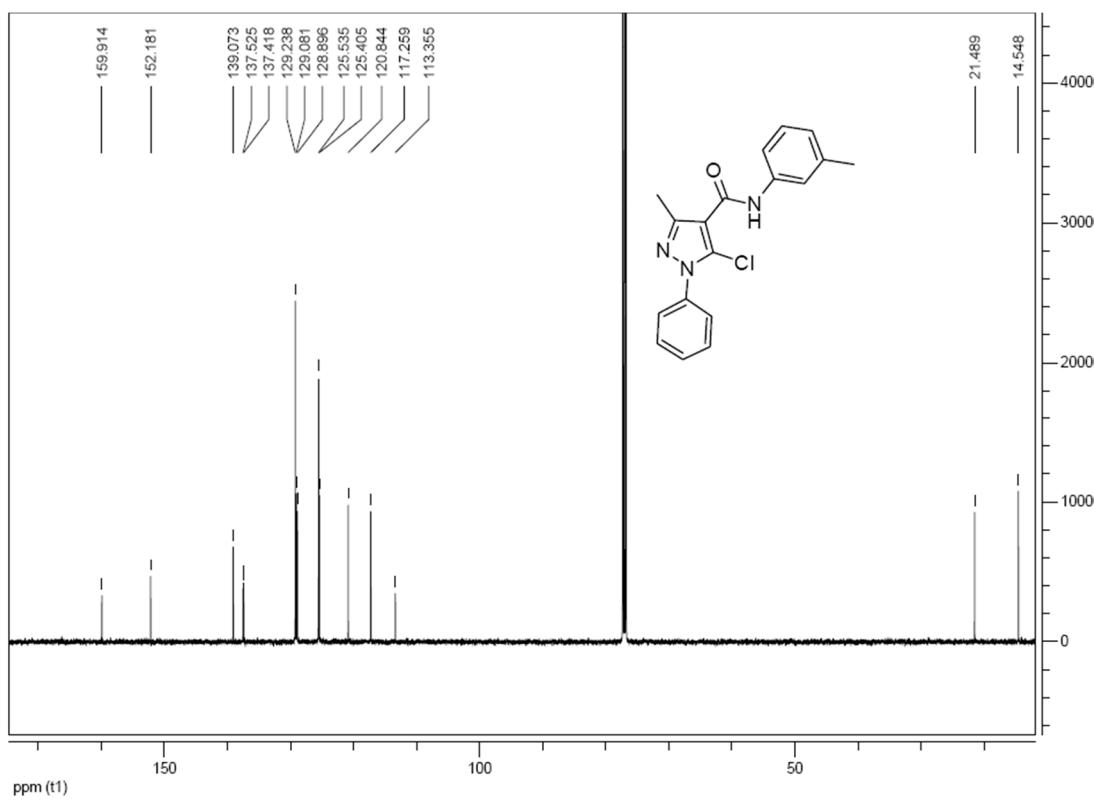
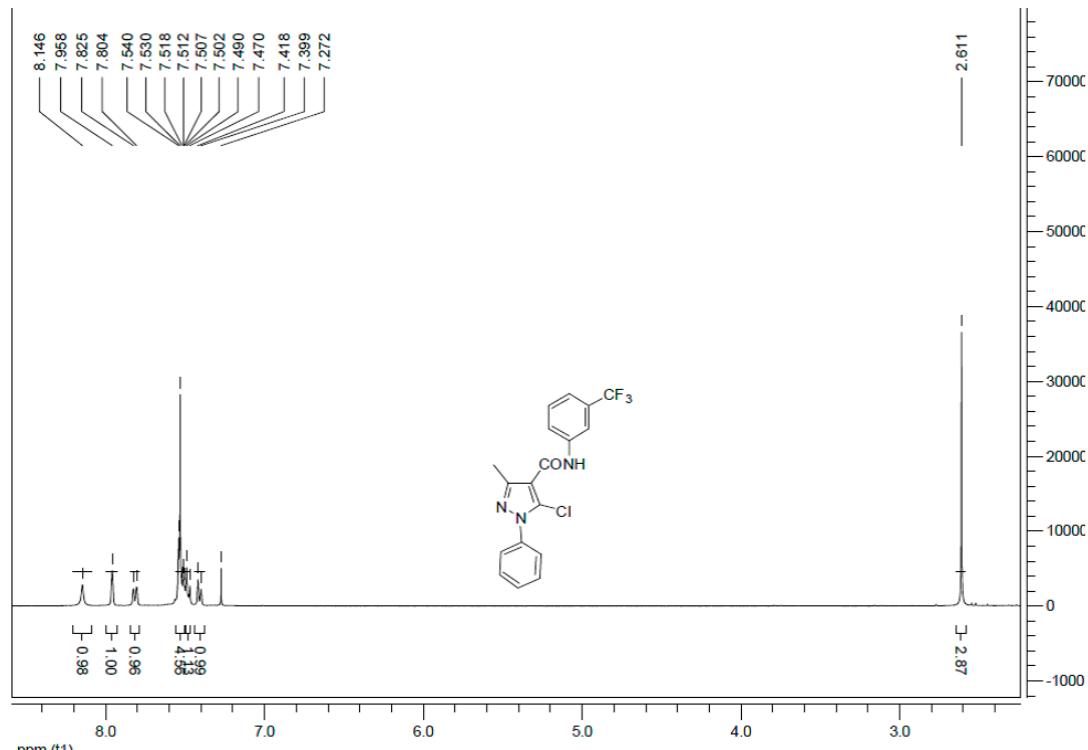
**Figure S2.**  $^{13}\text{C}$ -NMR spectrum of compound 5a.

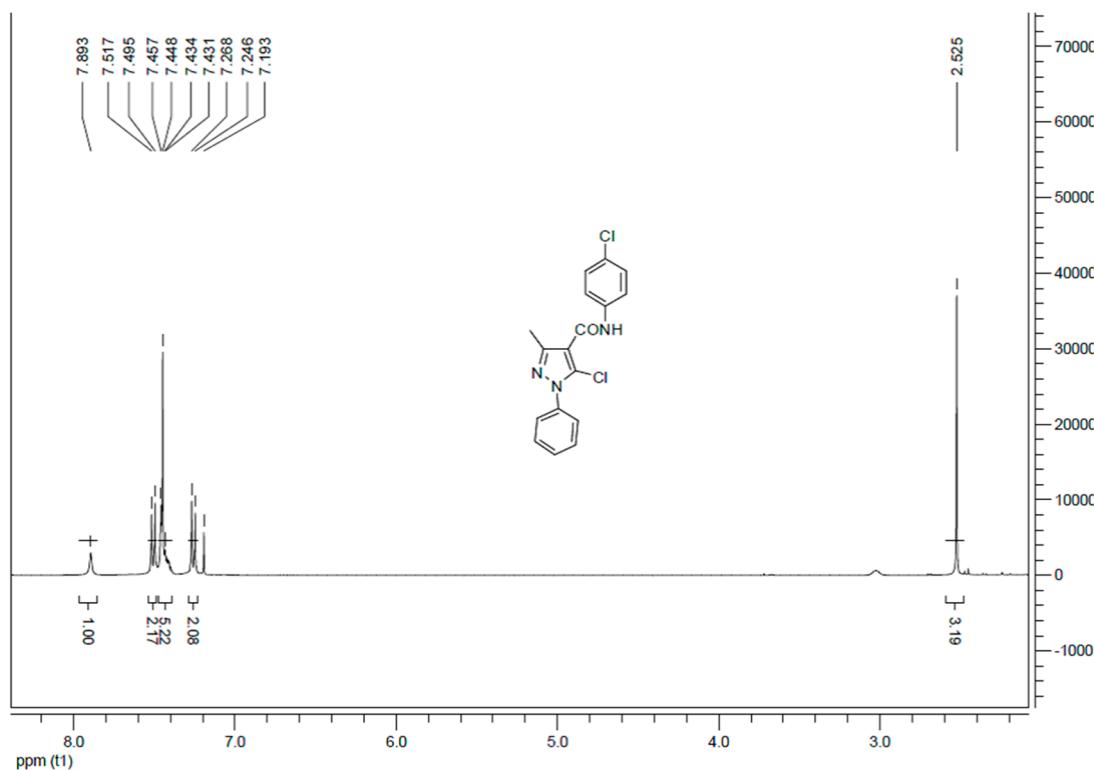
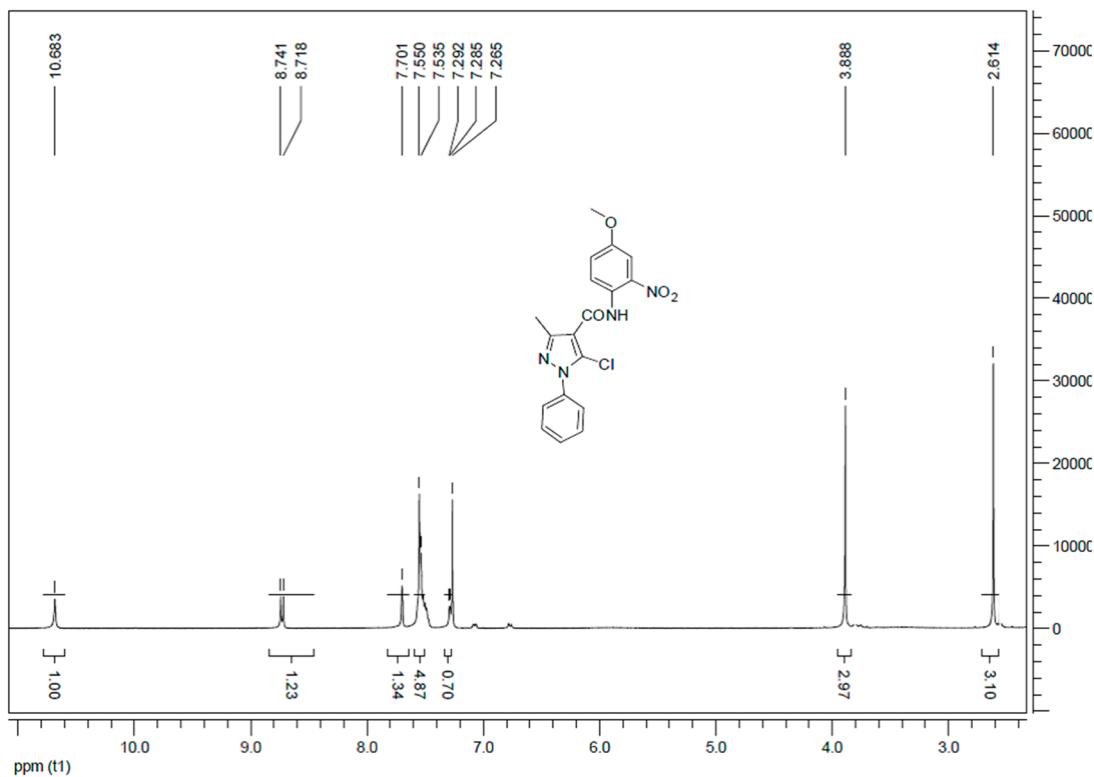
**Figure S3.** <sup>1</sup>H-NMR spectrum of compound 5b.**Figure S4.** <sup>1</sup>H-NMR spectrum of compound 5c.

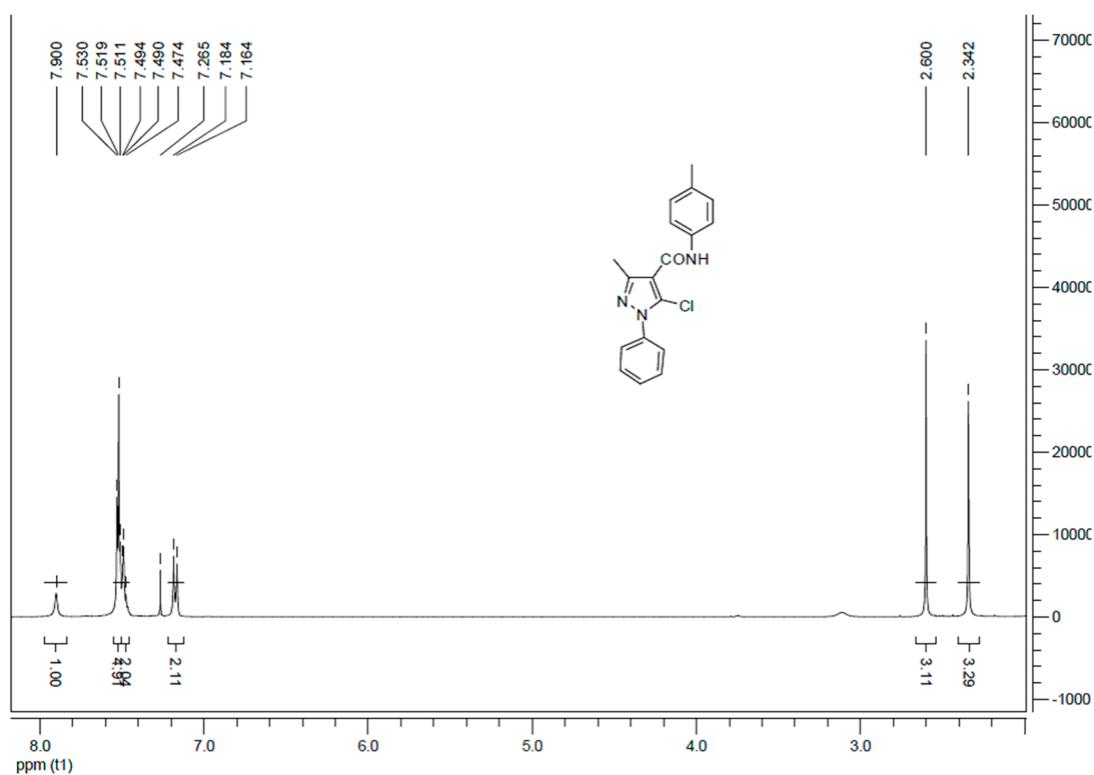
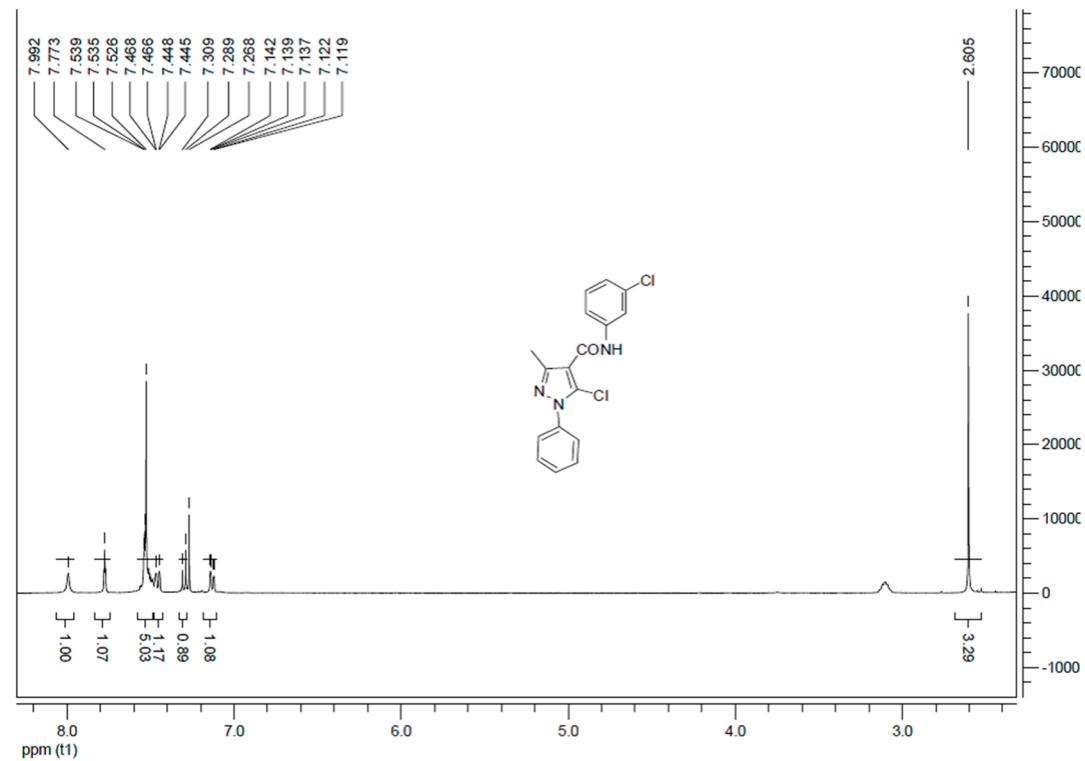
**Figure S5.** <sup>1</sup>H-NMR spectrum of compound 5d.**Figure S6.** <sup>13</sup>C-NMR spectrum of compound 5d.

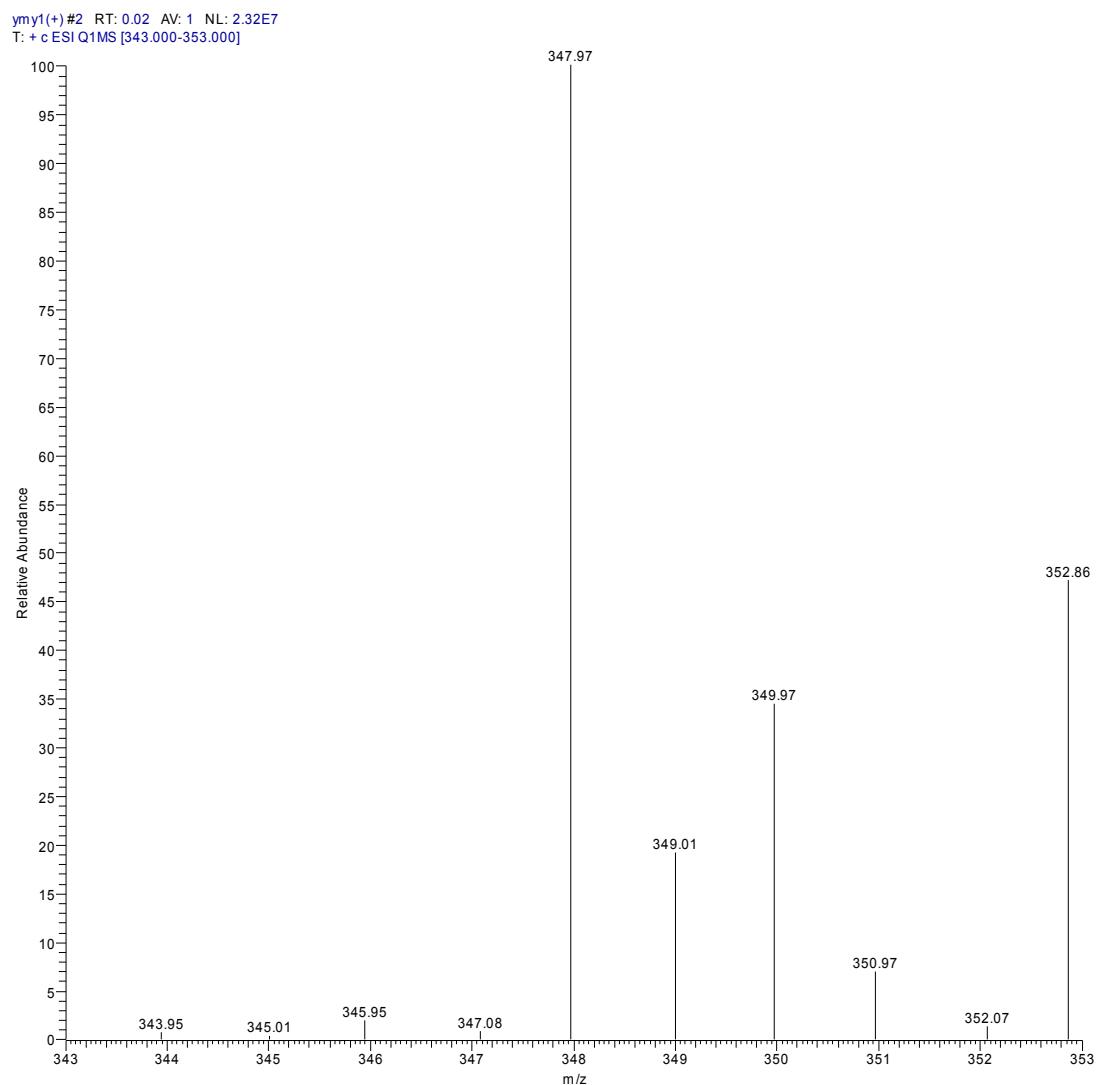
**Figure S7.** <sup>1</sup>H-NMR spectrum of compound 5e.**Figure S8.** <sup>1</sup>H-NMR spectrum of compound 5f.

**Figure S9.** <sup>1</sup>H-NMR spectrum of compound 5g.**Figure S10.** <sup>1</sup>H-NMR spectrum of compound 5h.

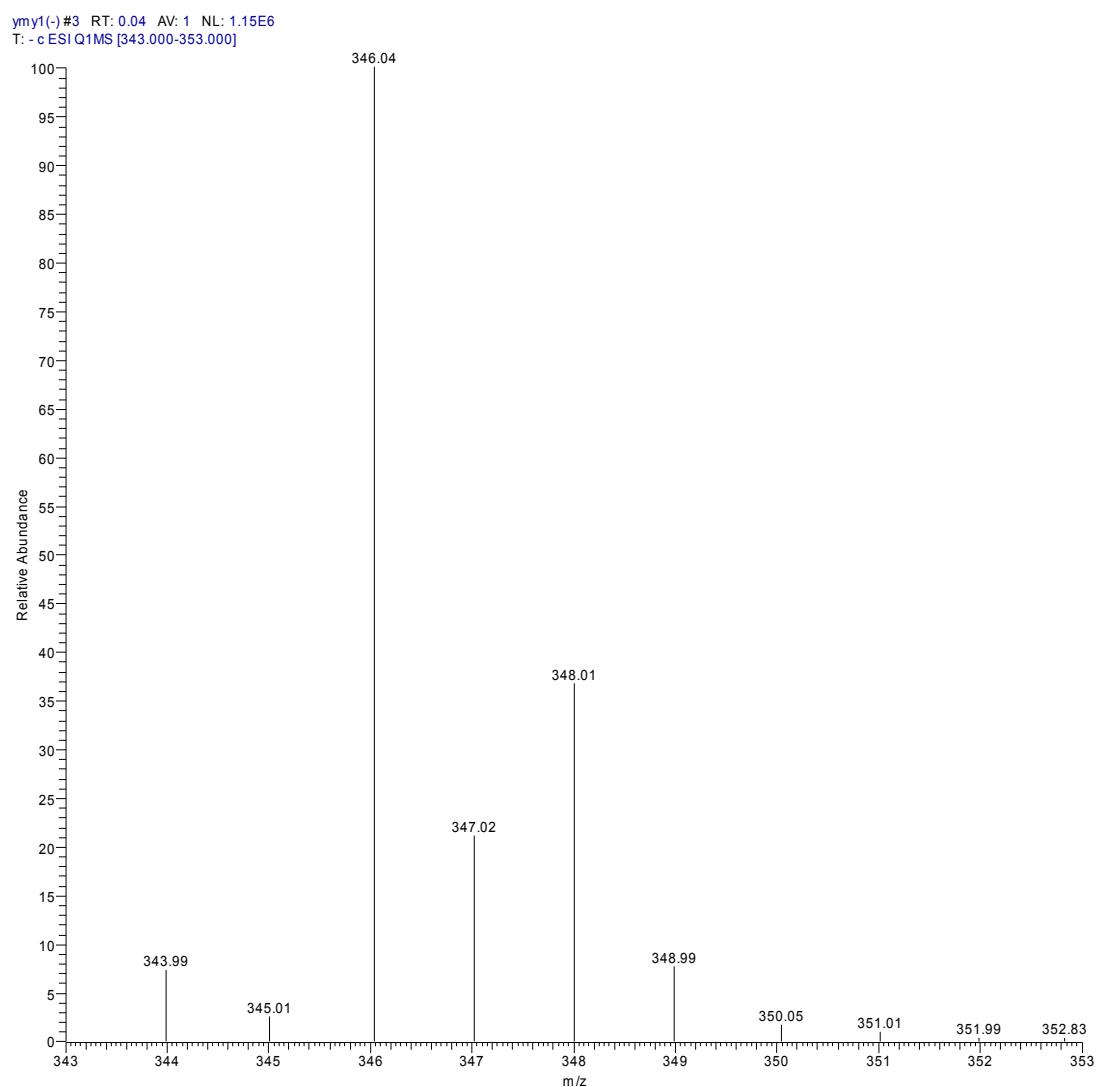
**Figure S11.** <sup>13</sup>C-NMR spectrum of compound 5h.**Figure S12.** <sup>1</sup>H-NMR spectrum of compound 5i.

**Figure S13.** <sup>1</sup>H-NMR spectrum of compound 5j.**Figure S14.** <sup>1</sup>H-NMR spectrum of compound 5k.

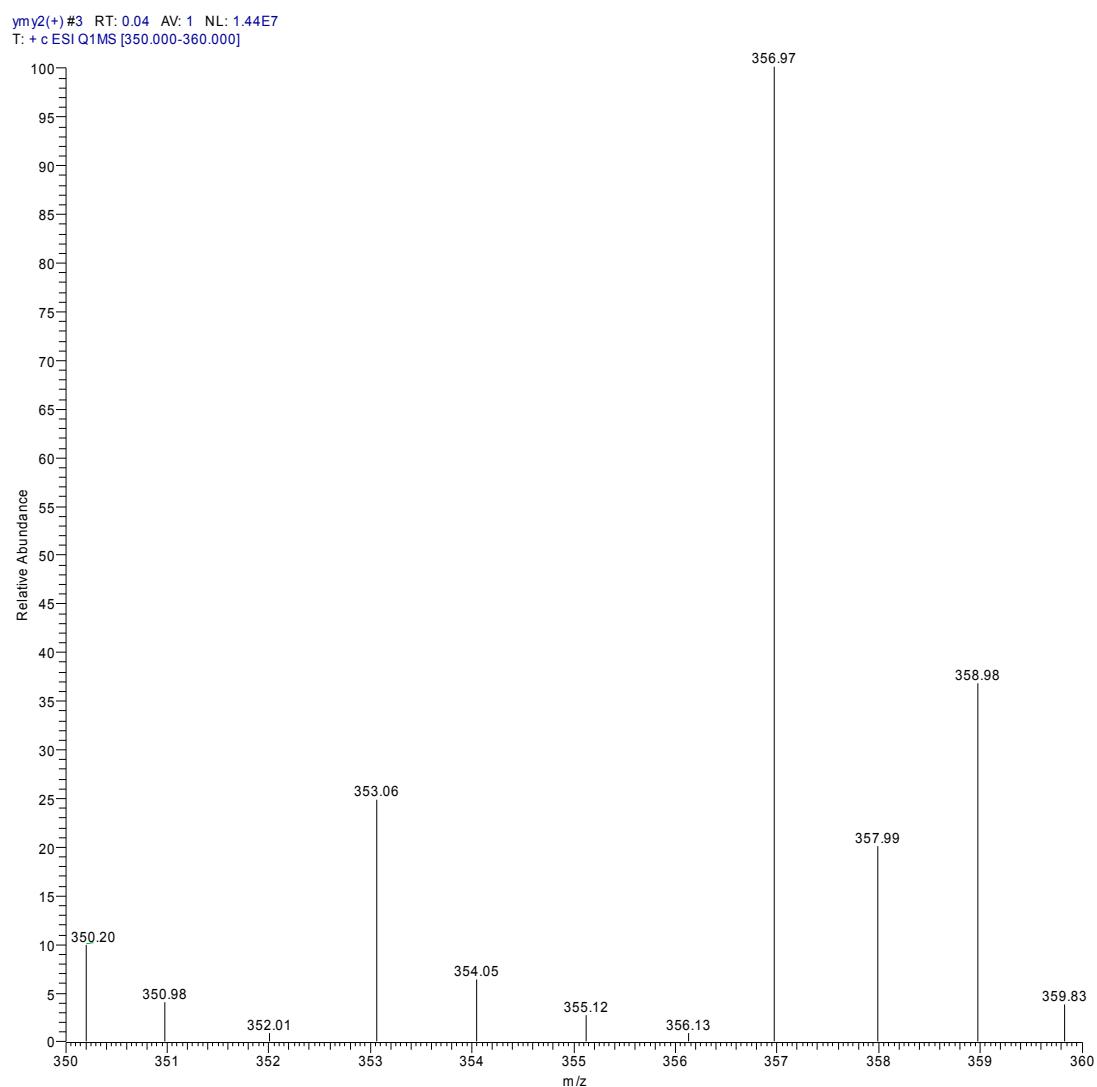
**Figure S15.** <sup>1</sup>H-NMR spectrum of compound 5l.**Figure S16.** <sup>1</sup>H-NMR spectrum of compound 5m.



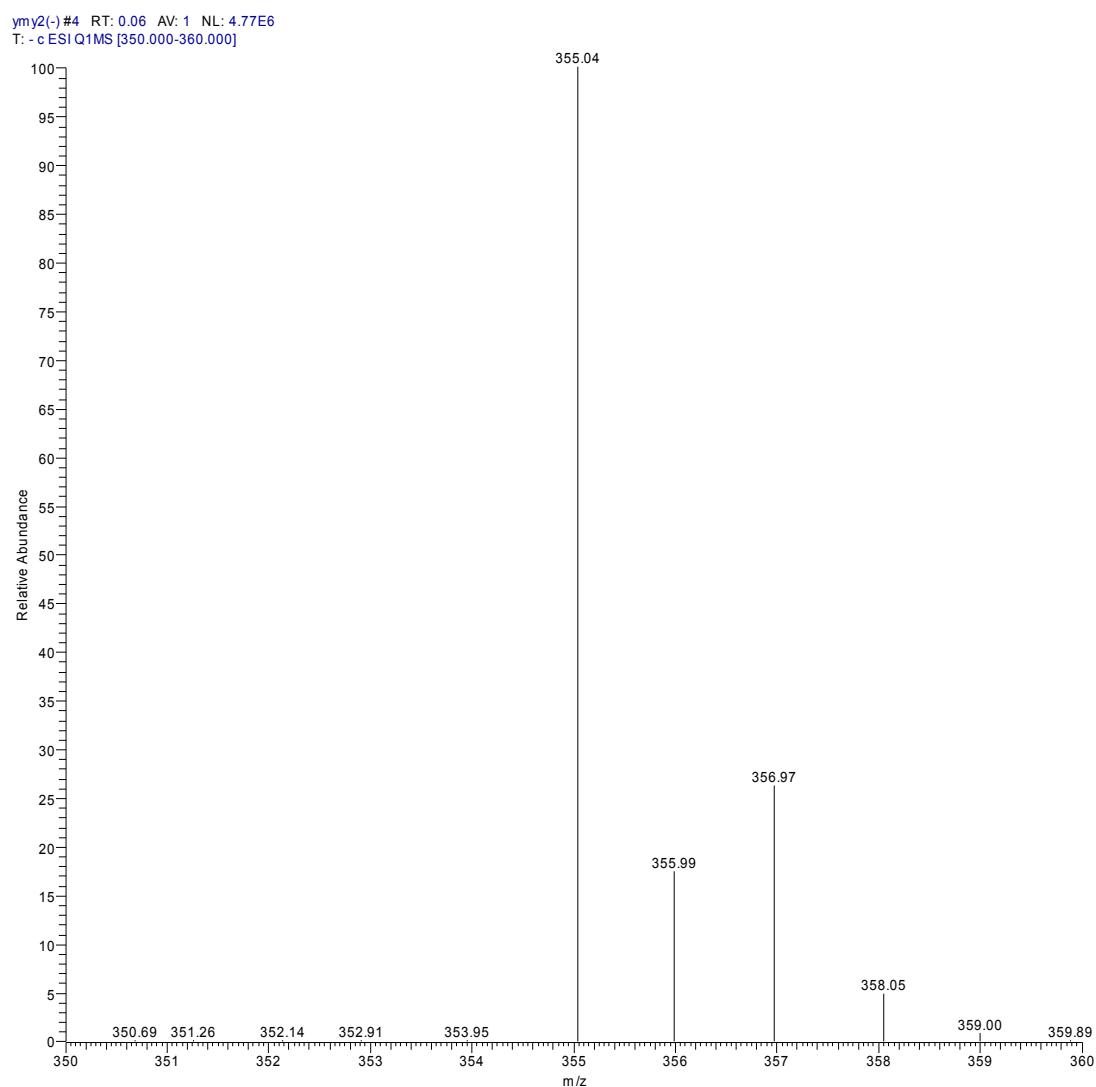
**Figure S17.** MS spectrum of compound 5a (+).



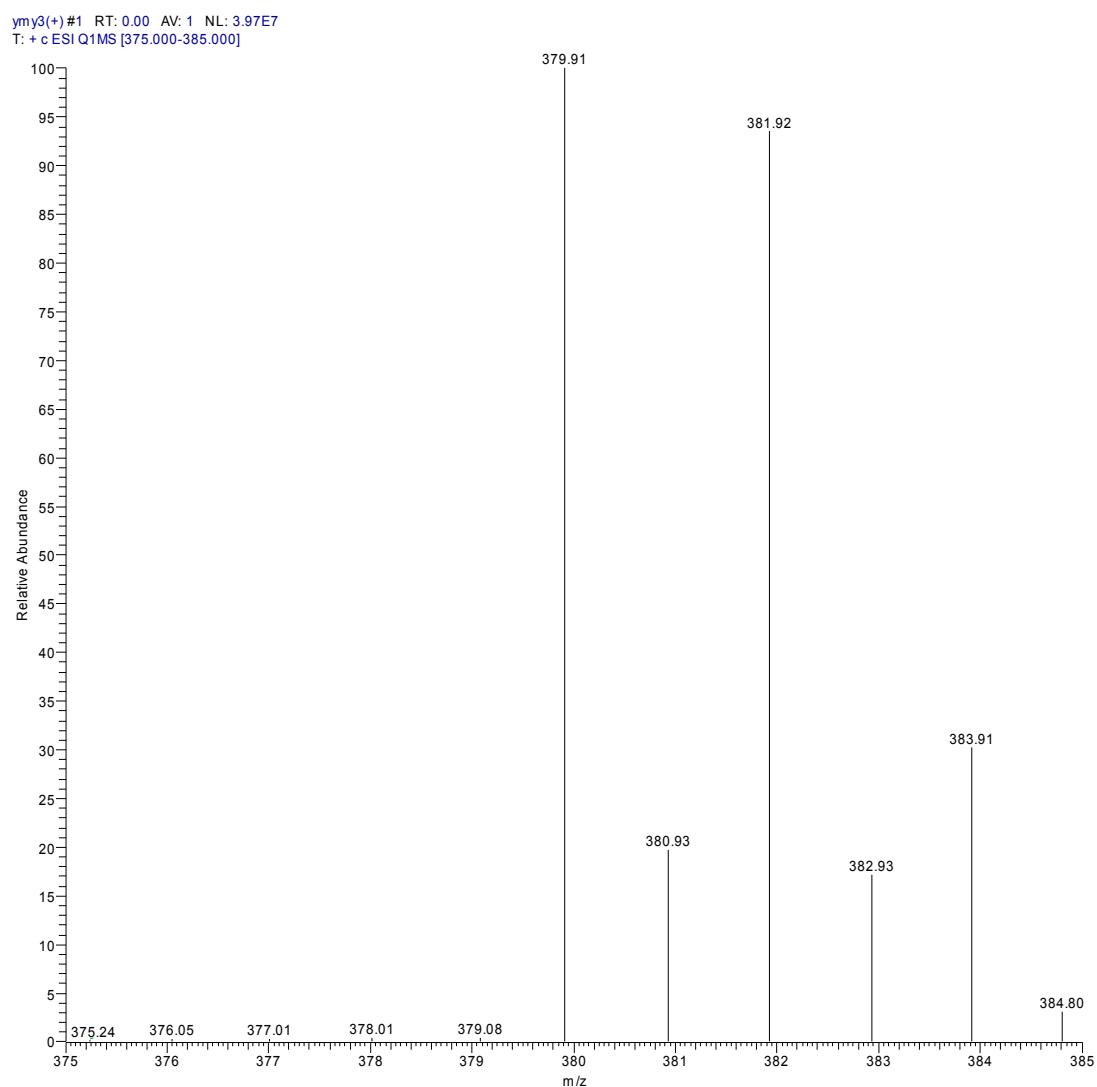
**Figure S18.** MS spectrum of compound 5a (-).



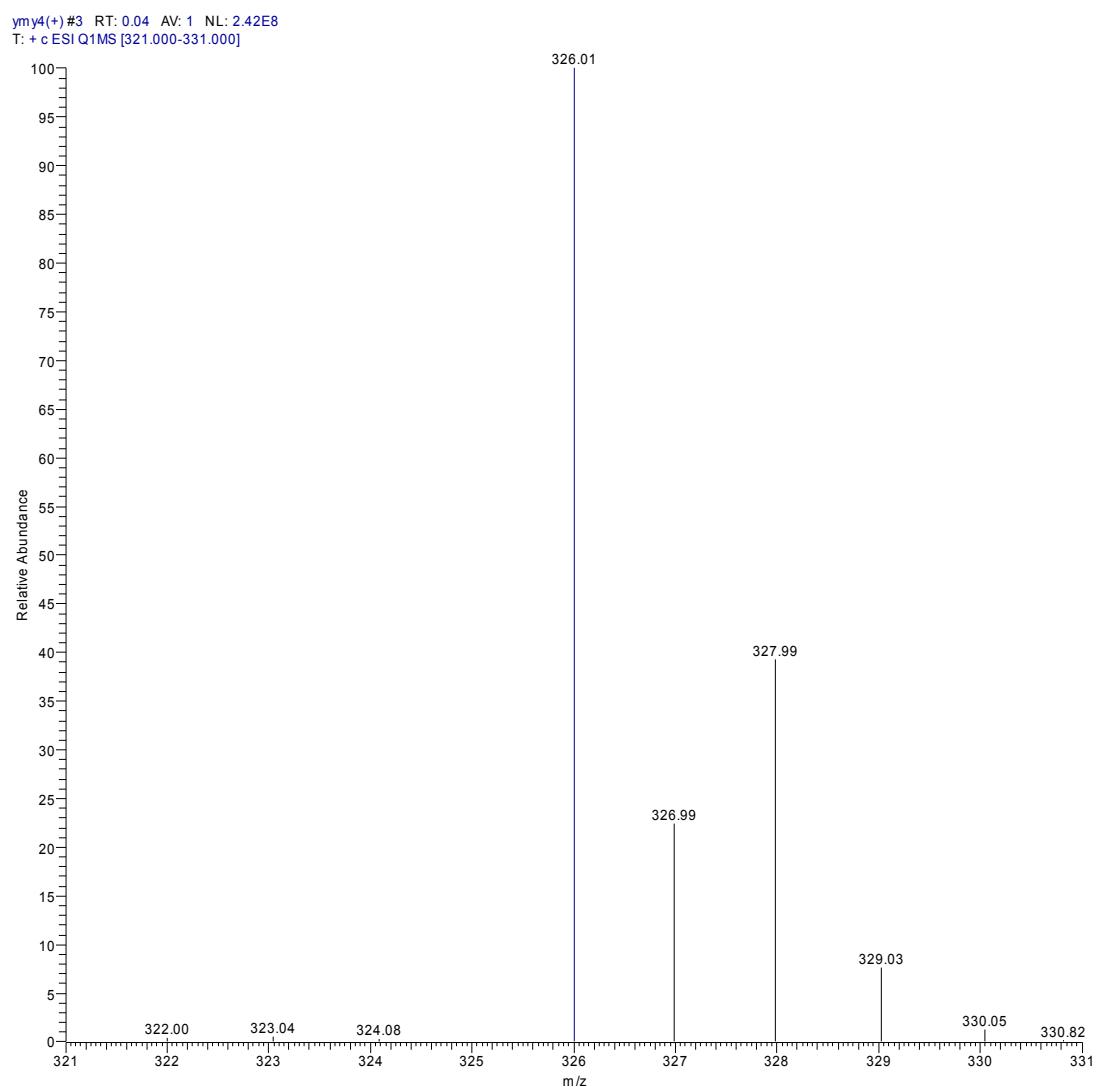
**Figure S19.** MS spectrum of compound 5b (+).



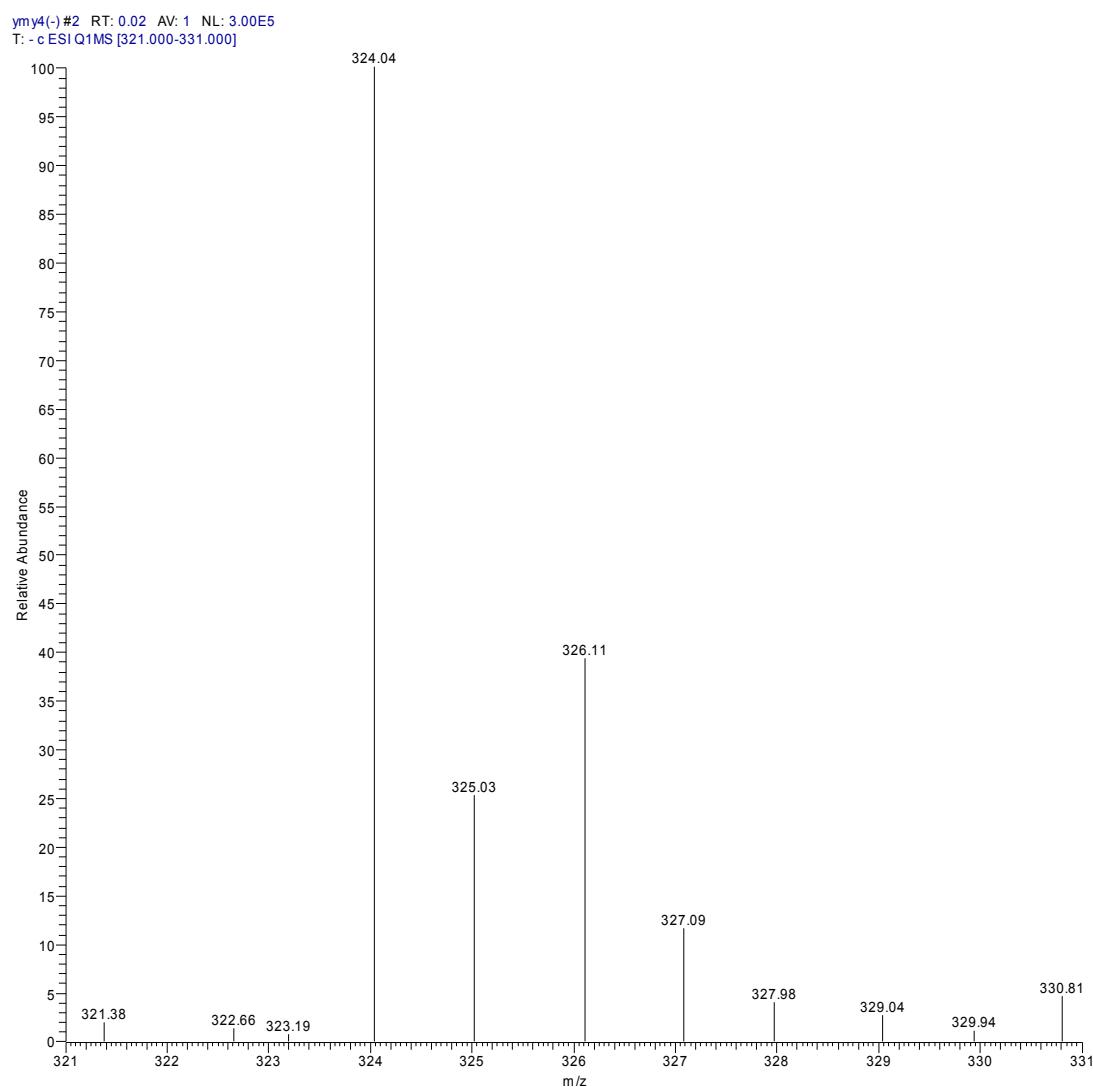
**Figure S20.** MS spectrum of compound **5b** (-).



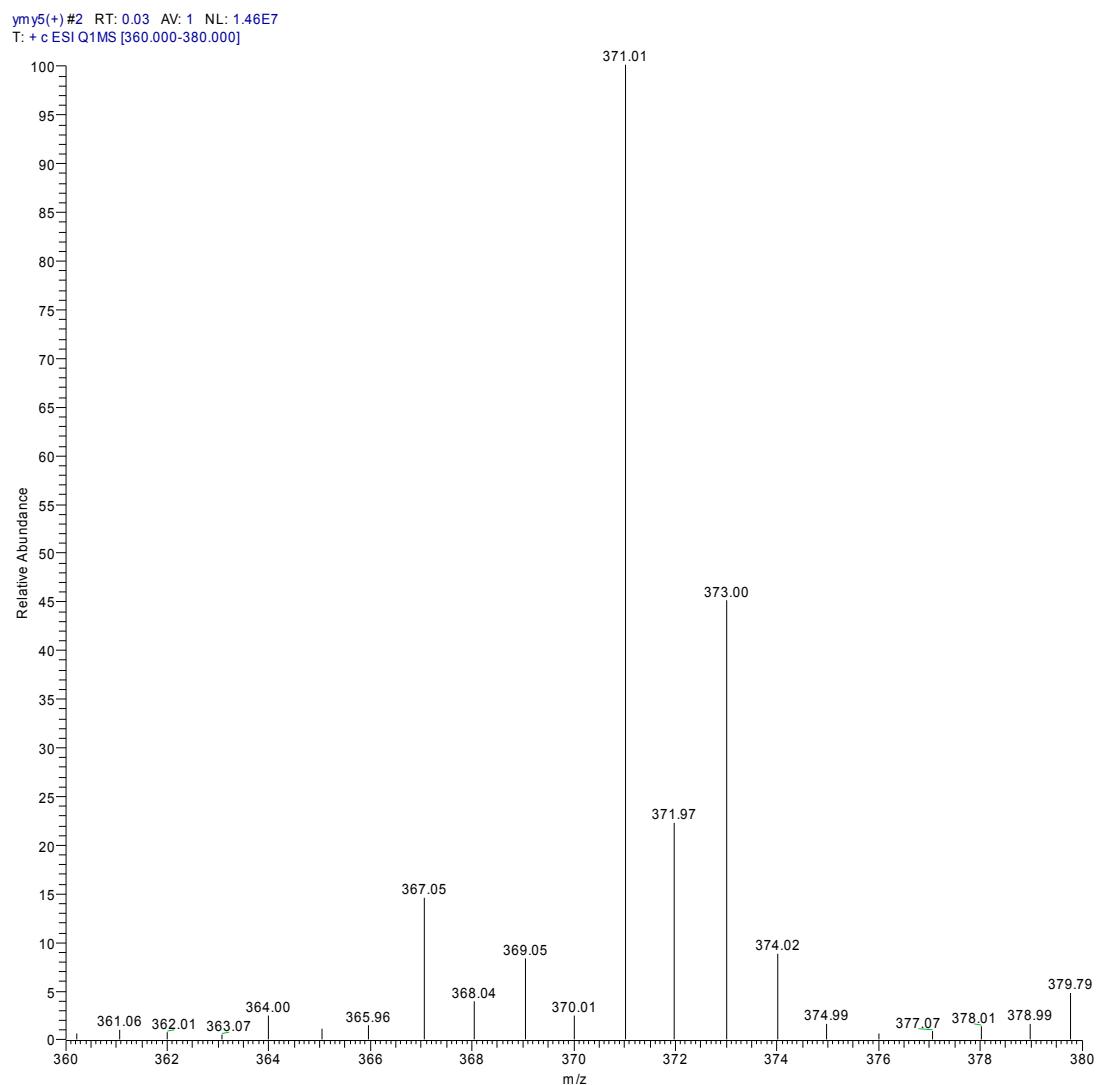
**Figure S21.** MS spectrum of compound 5c (+).



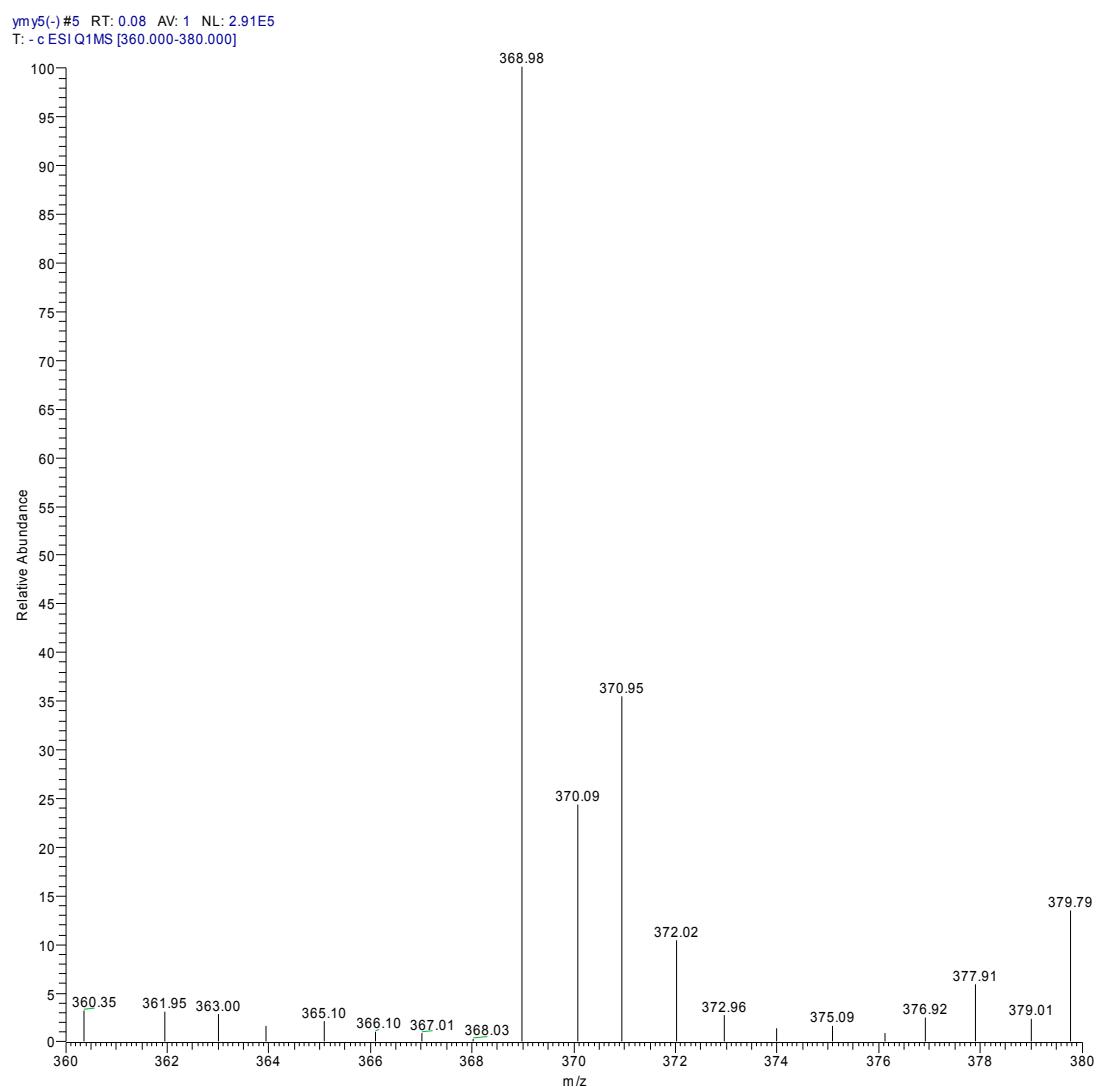
**Figure S22.** MS spectrum of compound 5d (+).



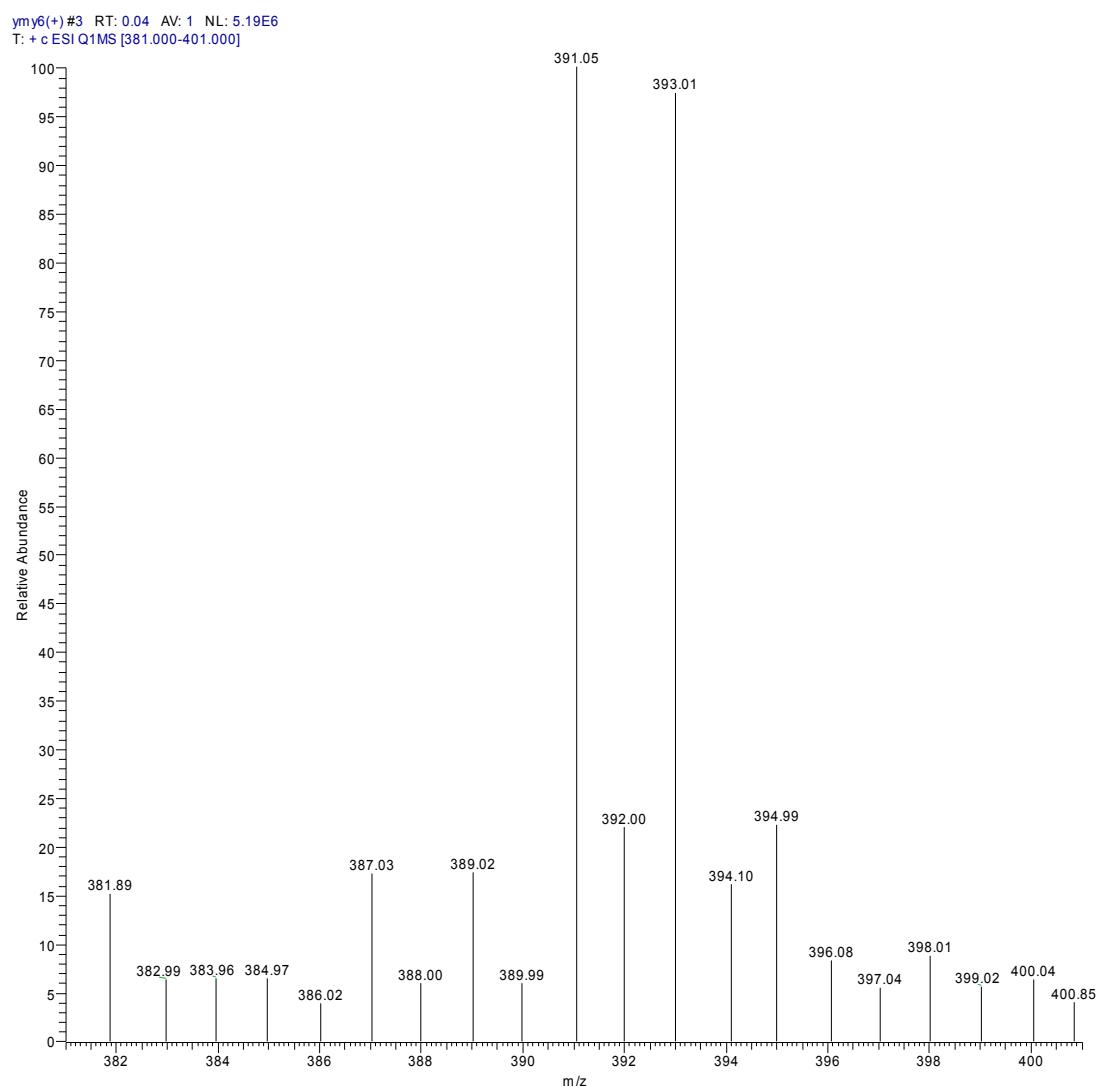
**Figure S23.** MS spectrum of compound 5d (-).



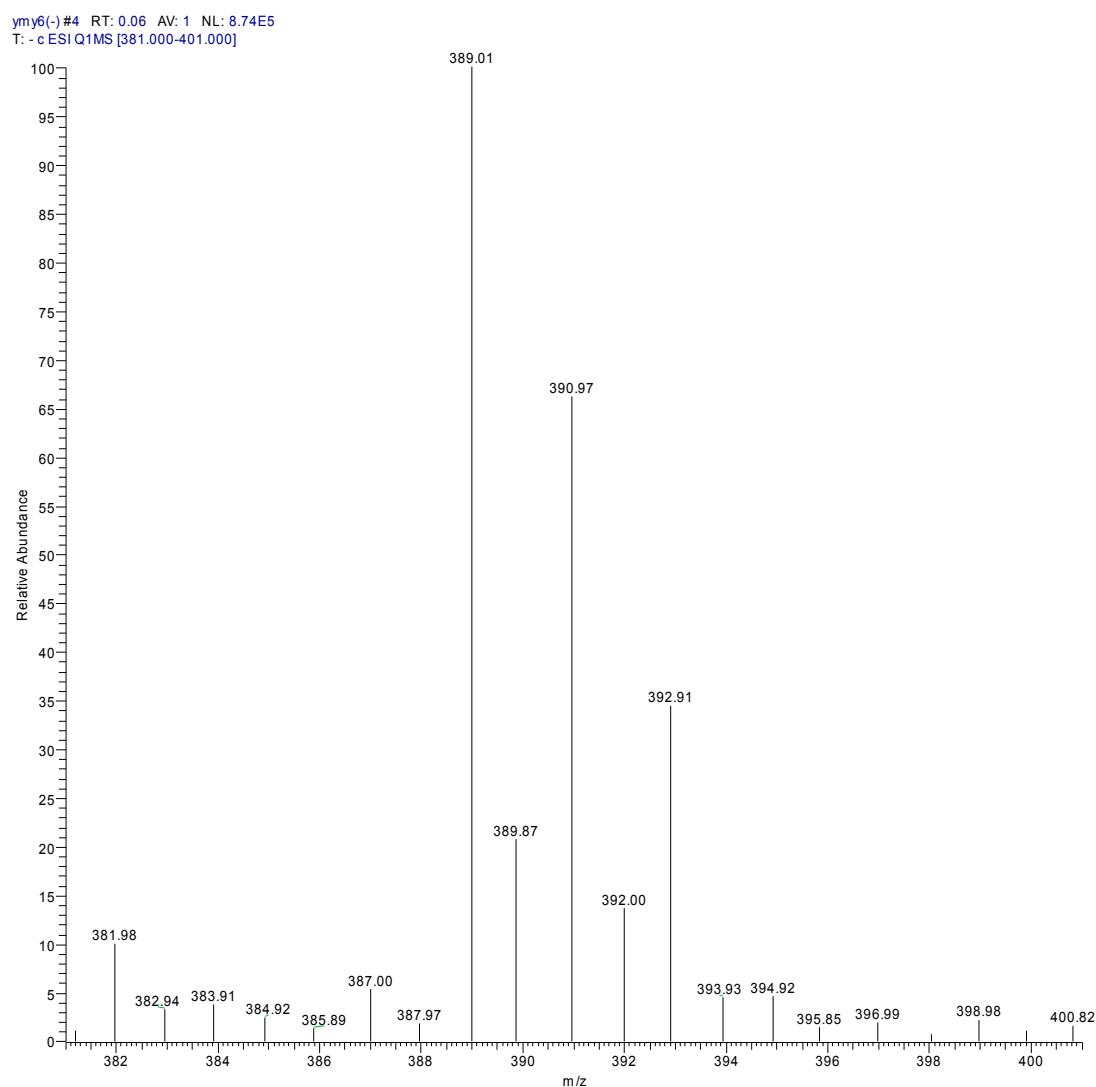
**Figure S24.** MS spectrum of compound 5e (+).



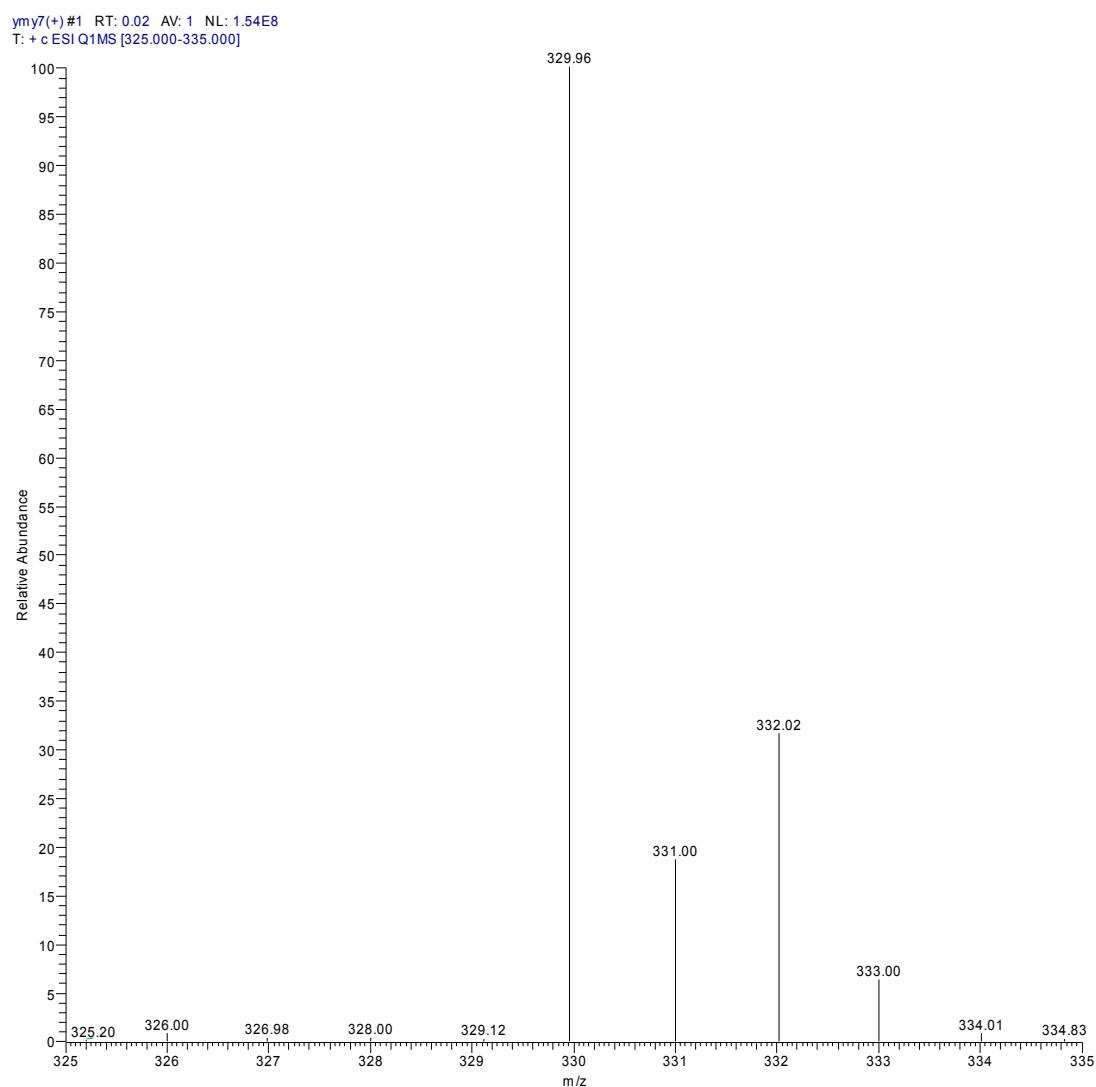
**Figure S25.** MS spectrum of compound 5e (-).



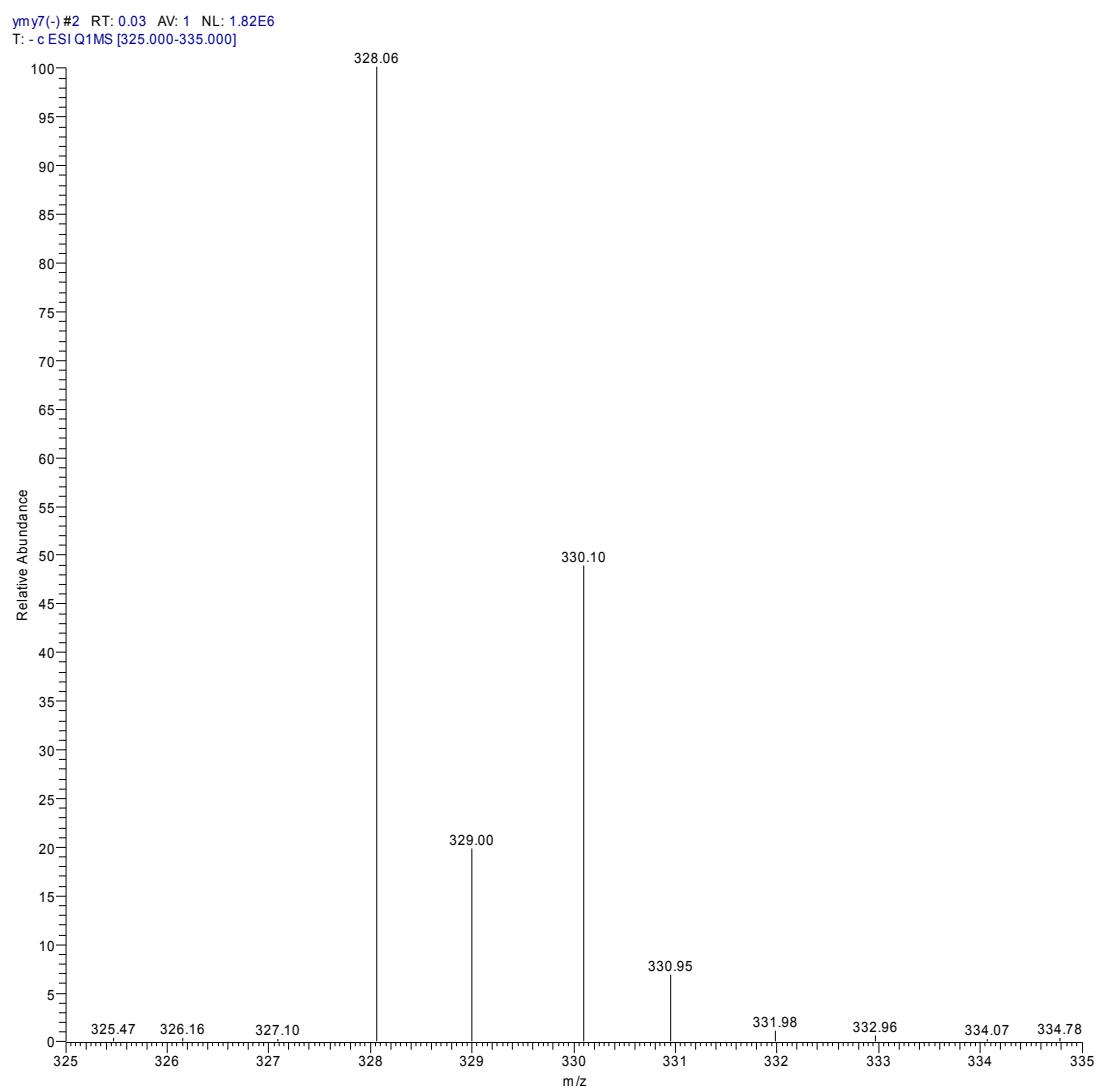
**Figure S26.** MS spectrum of compound 5f (+).



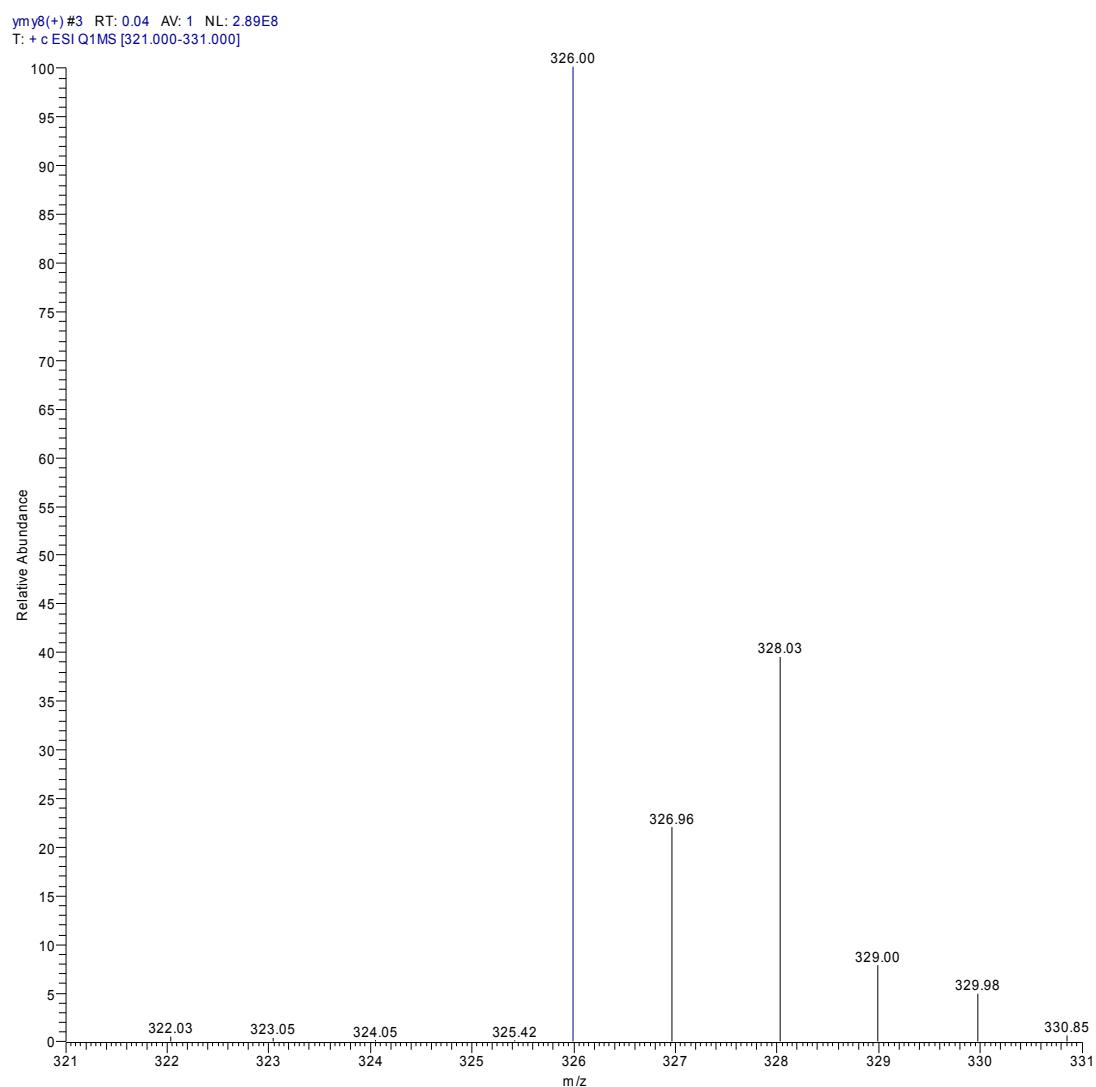
**Figure S27.** MS spectrum of compound 5f (-).



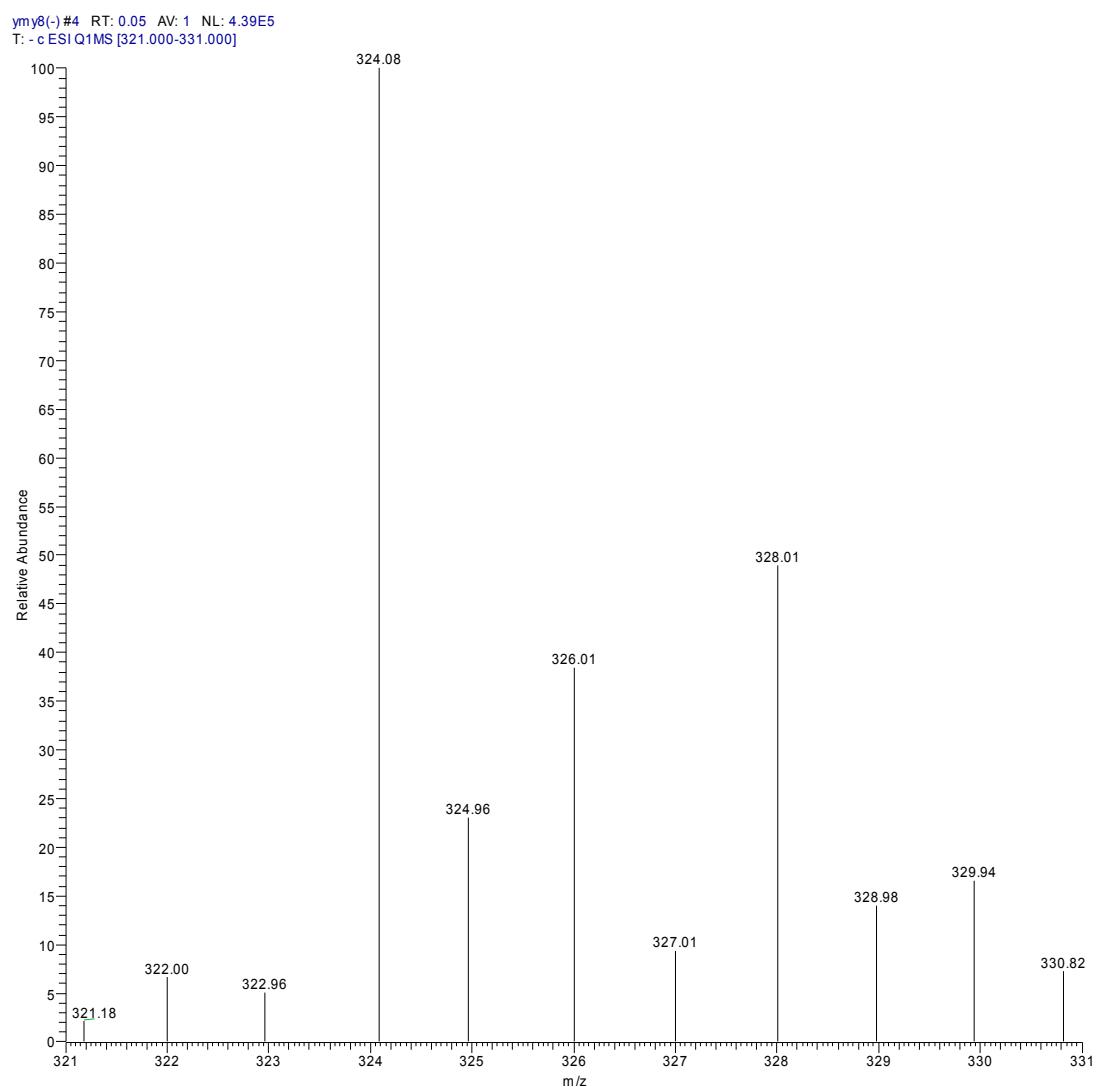
**Figure S28.** MS spectrum of compound 5g (+).



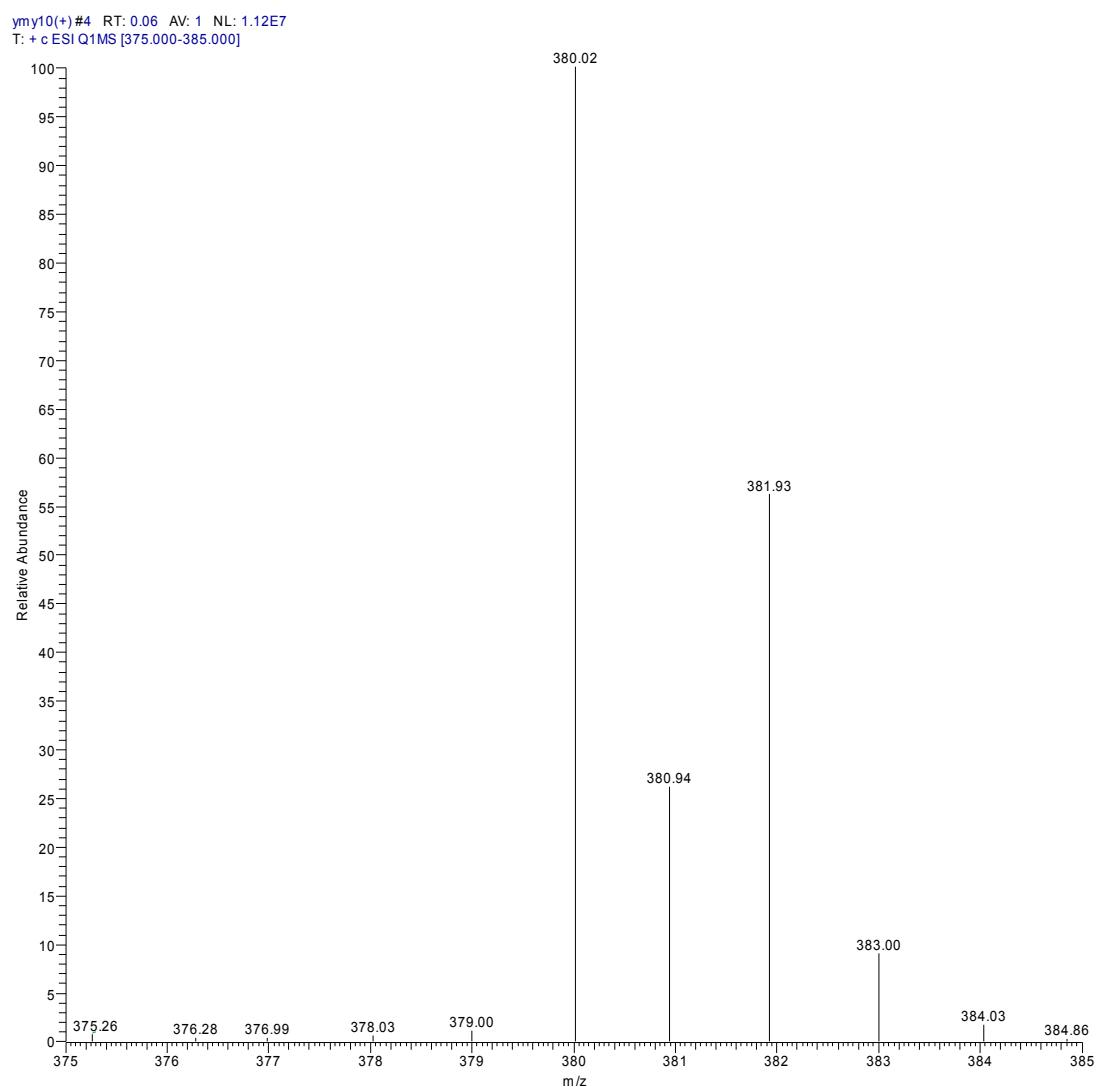
**Figure S29.** MS spectrum of compound 5g (-).



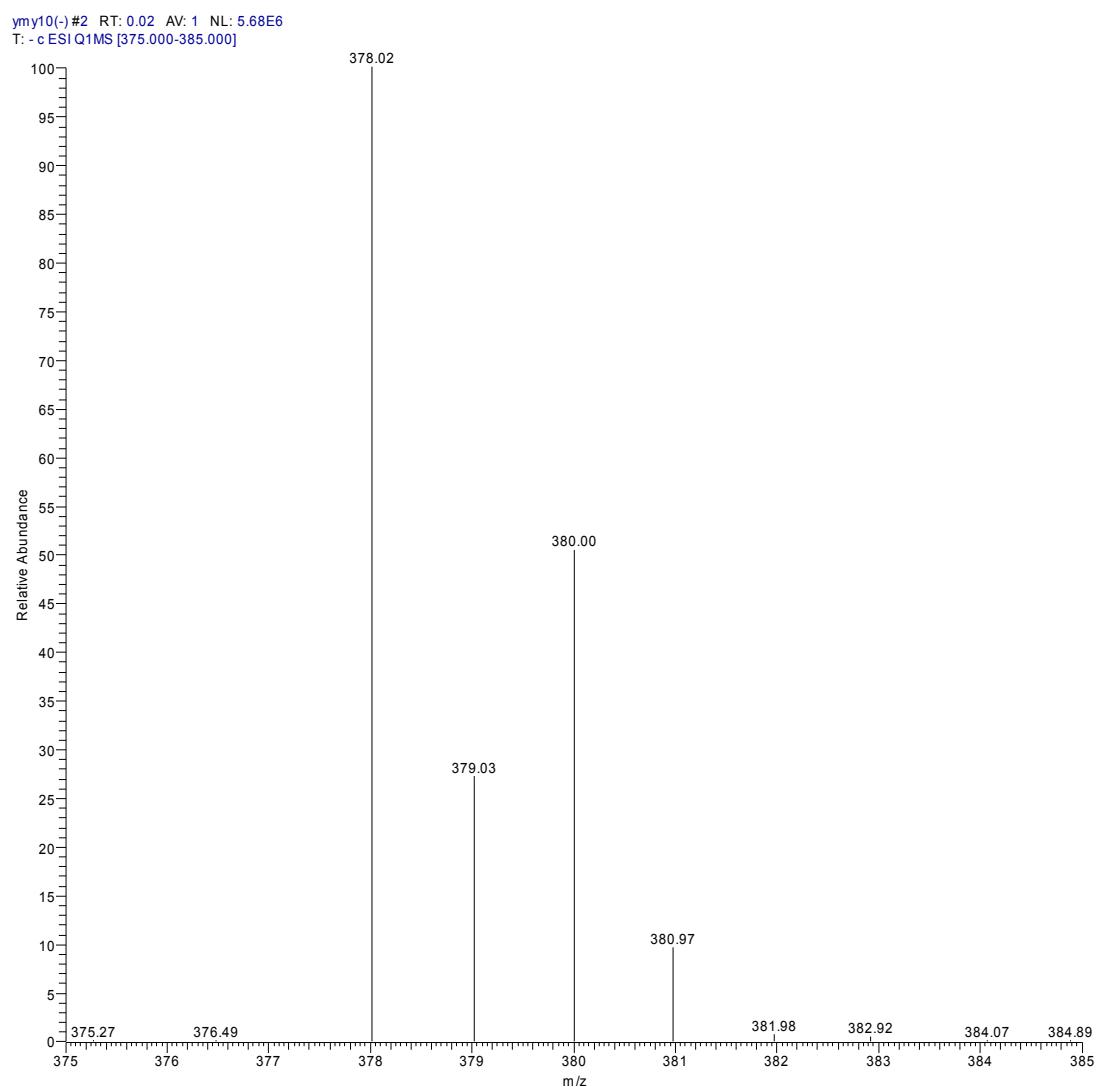
**Figure S30.** MS spectrum of compound 5h (+).



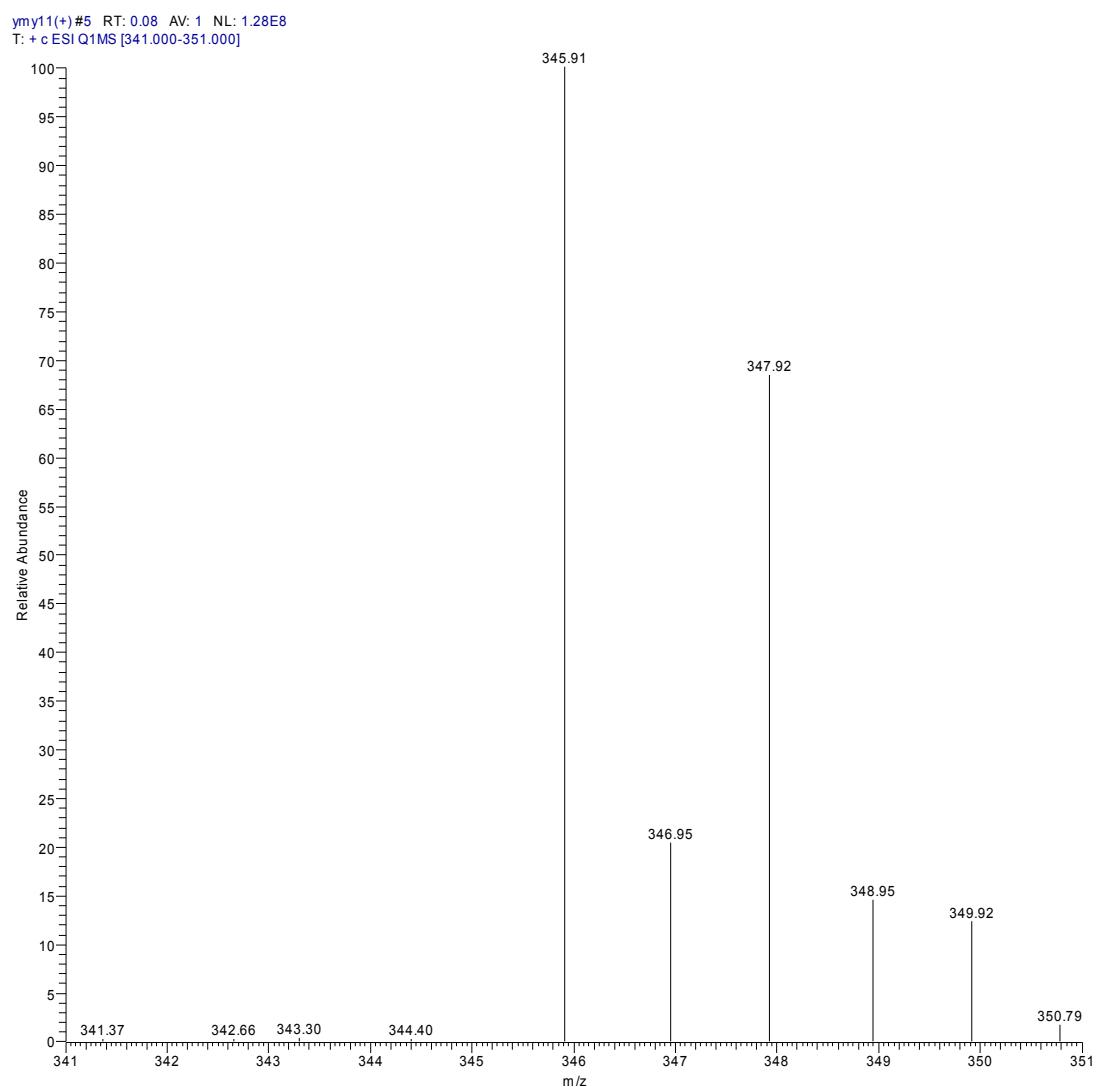
**Figure S31.** MS spectrum of compound 5h (-).



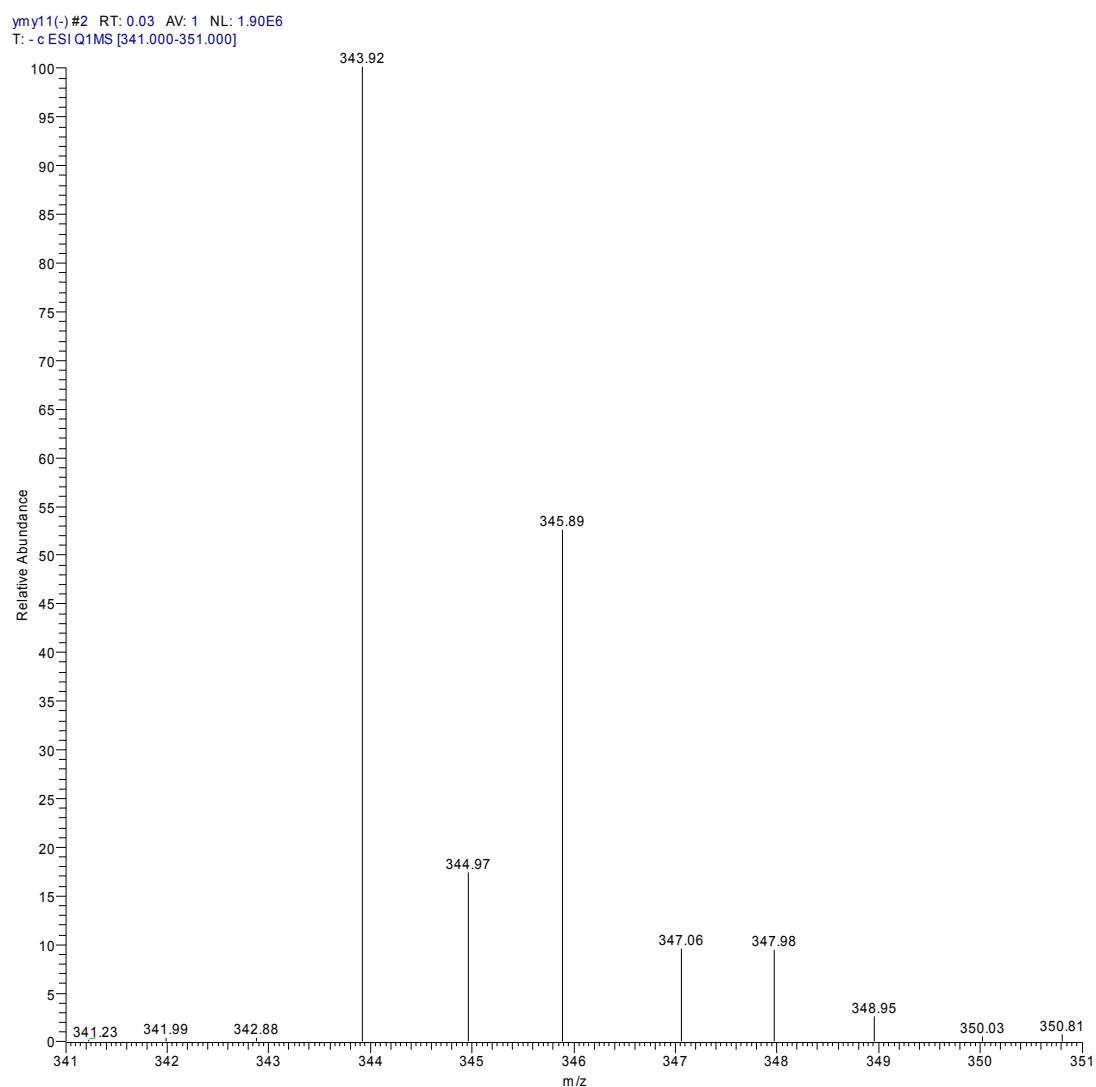
**Figure S32.** MS spectrum of compound **5i** (+).



**Figure S33.** MS spectrum of compound **5i** (-).



**Figure S34.** MS spectrum of compound 5j (+).



**Figure S35.** MS spectrum of compound 5j (-).

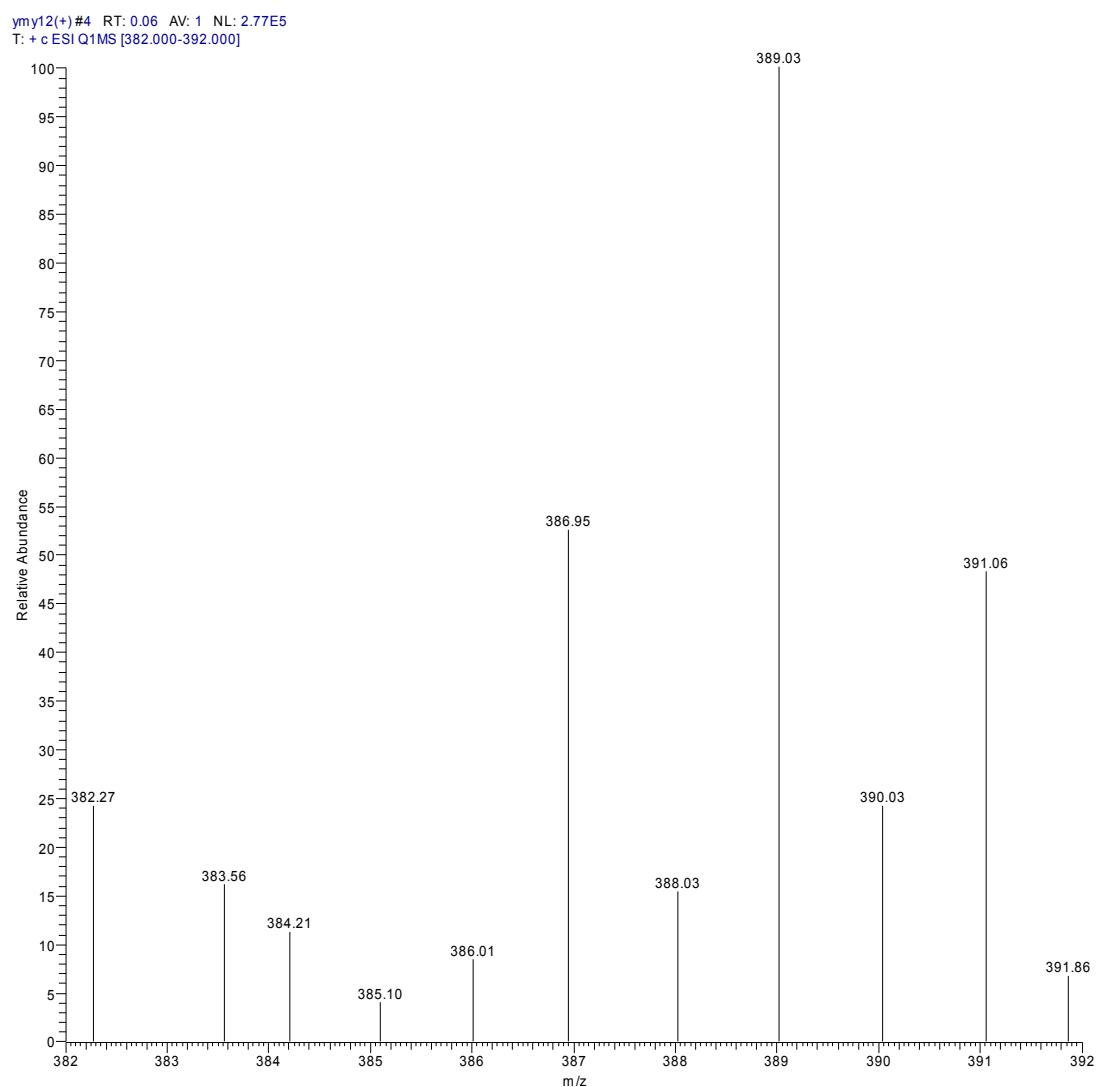
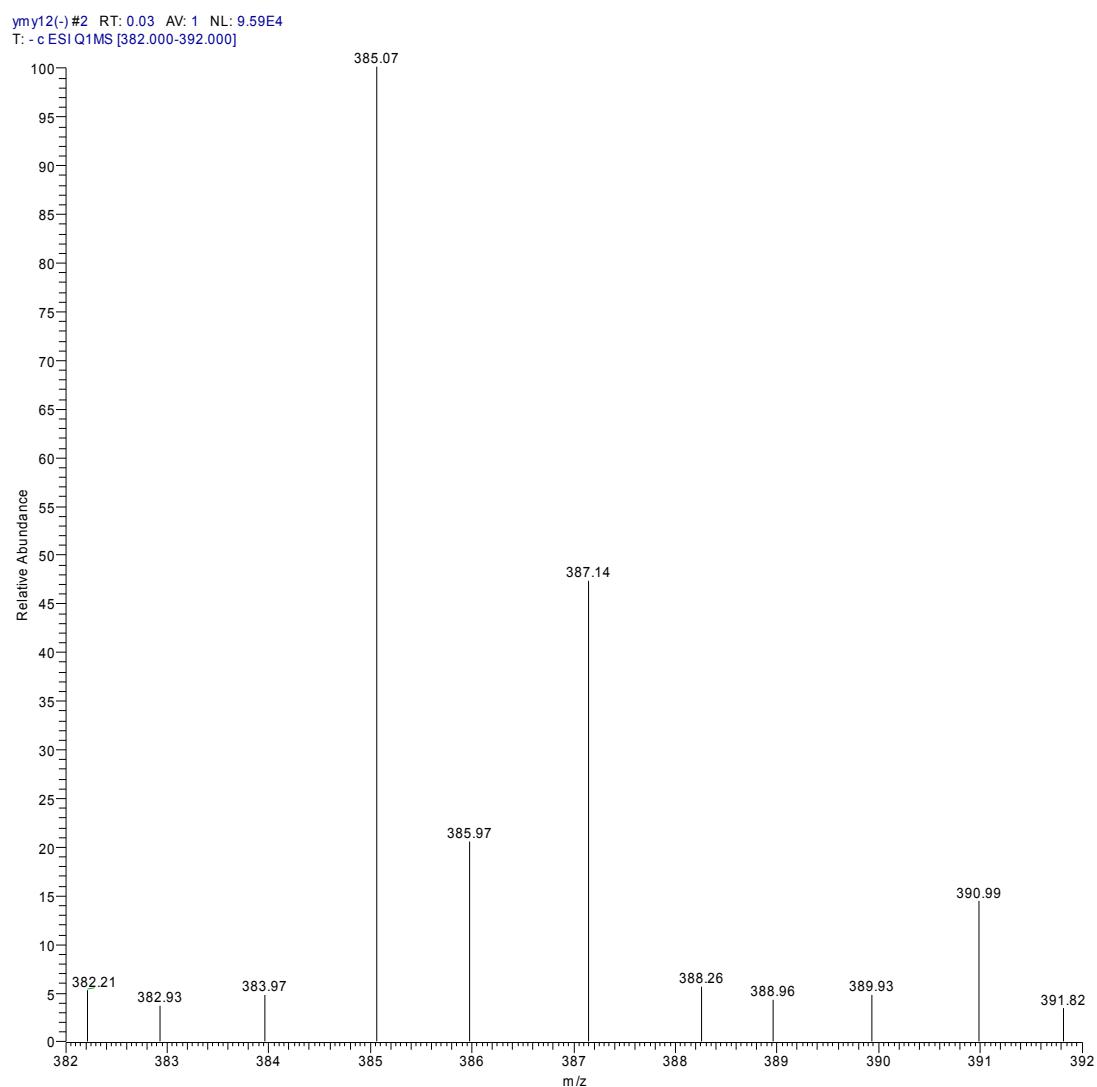
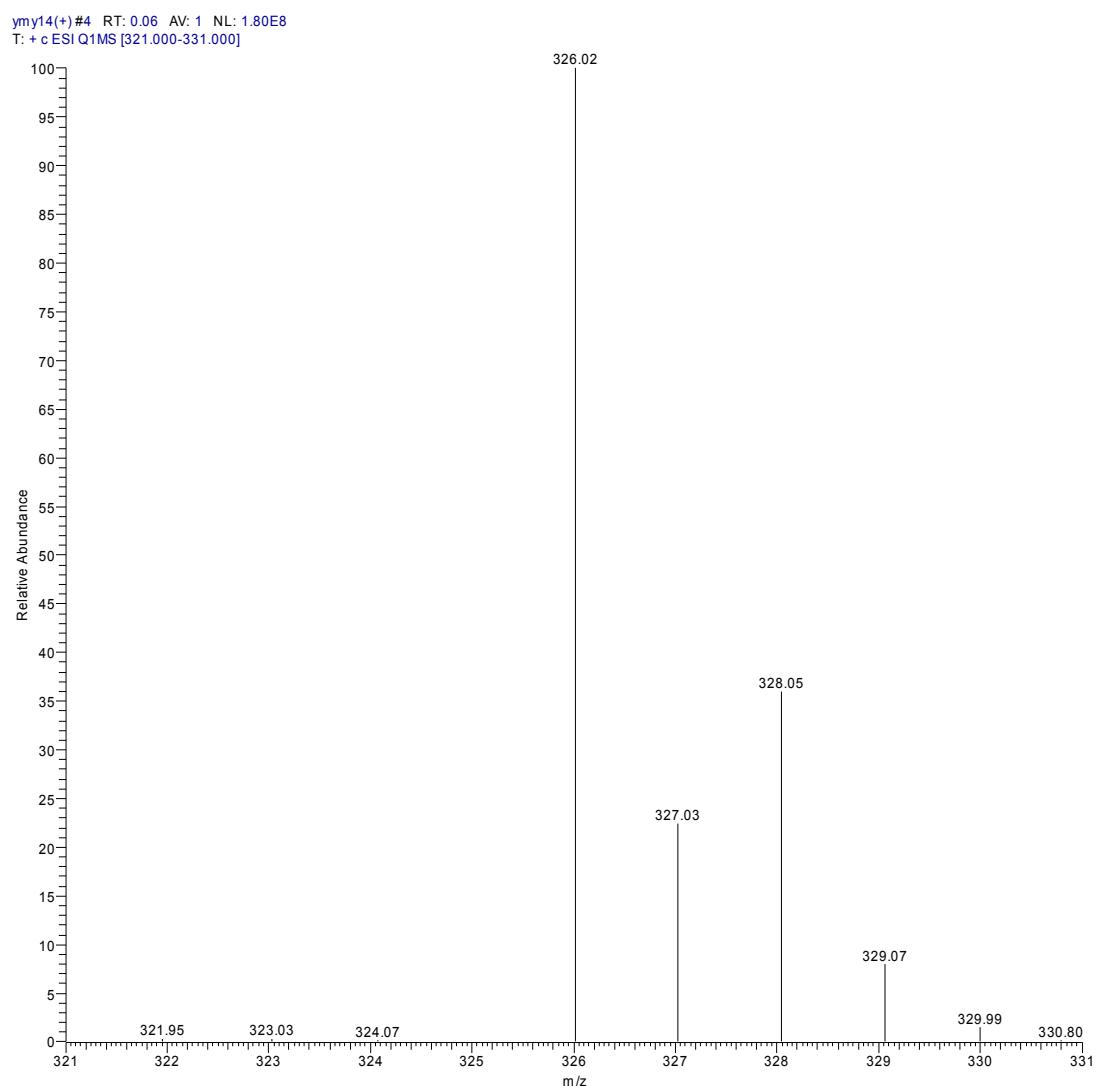


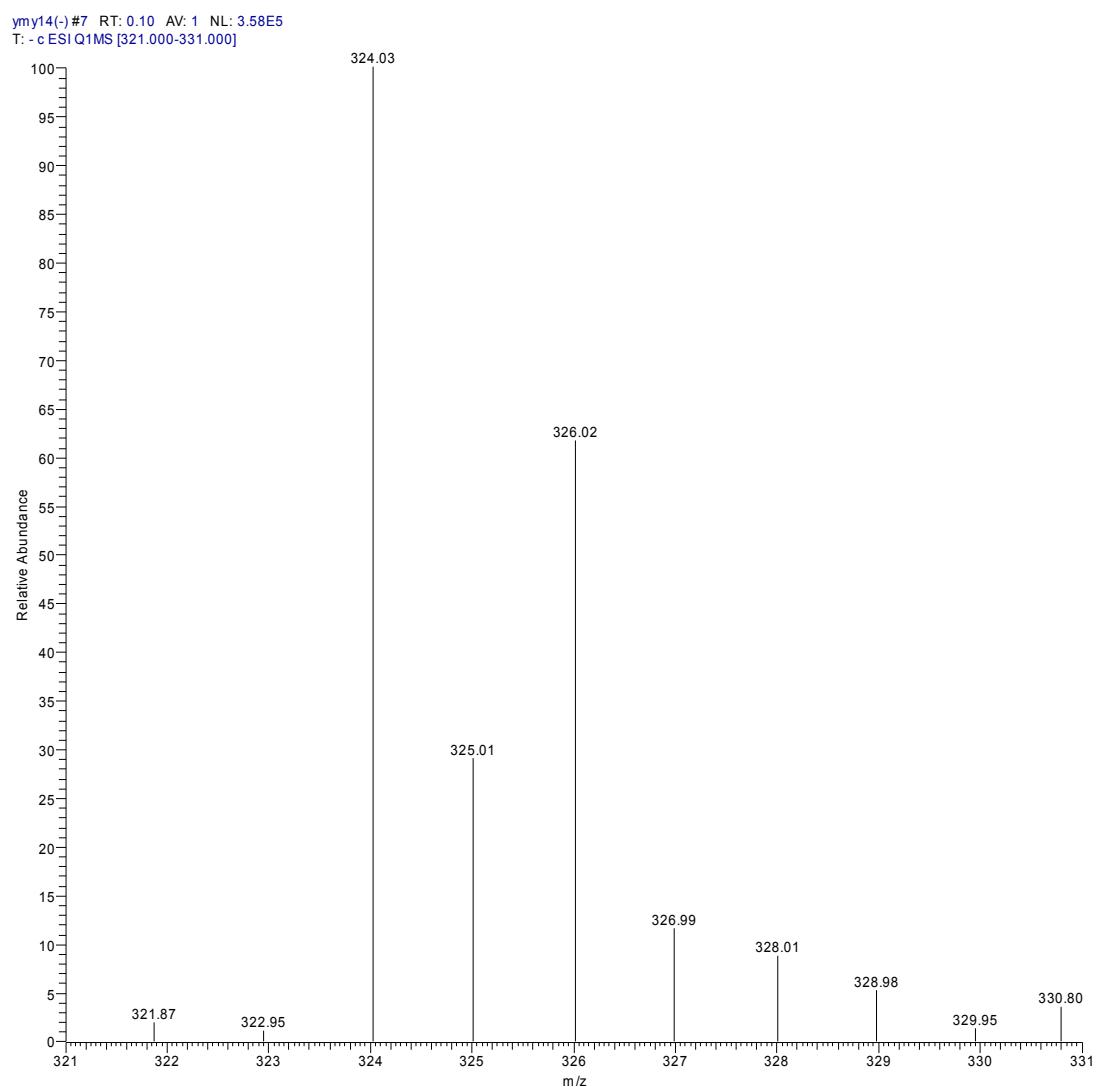
Figure S36. MS spectrum of compound 5k (+).



**Figure S37.** MS spectrum of compound 5k (-).



**Figure S38.** MS spectrum of compound 5l (+).



**Figure S39.** MS spectrum of compound 5l (-).

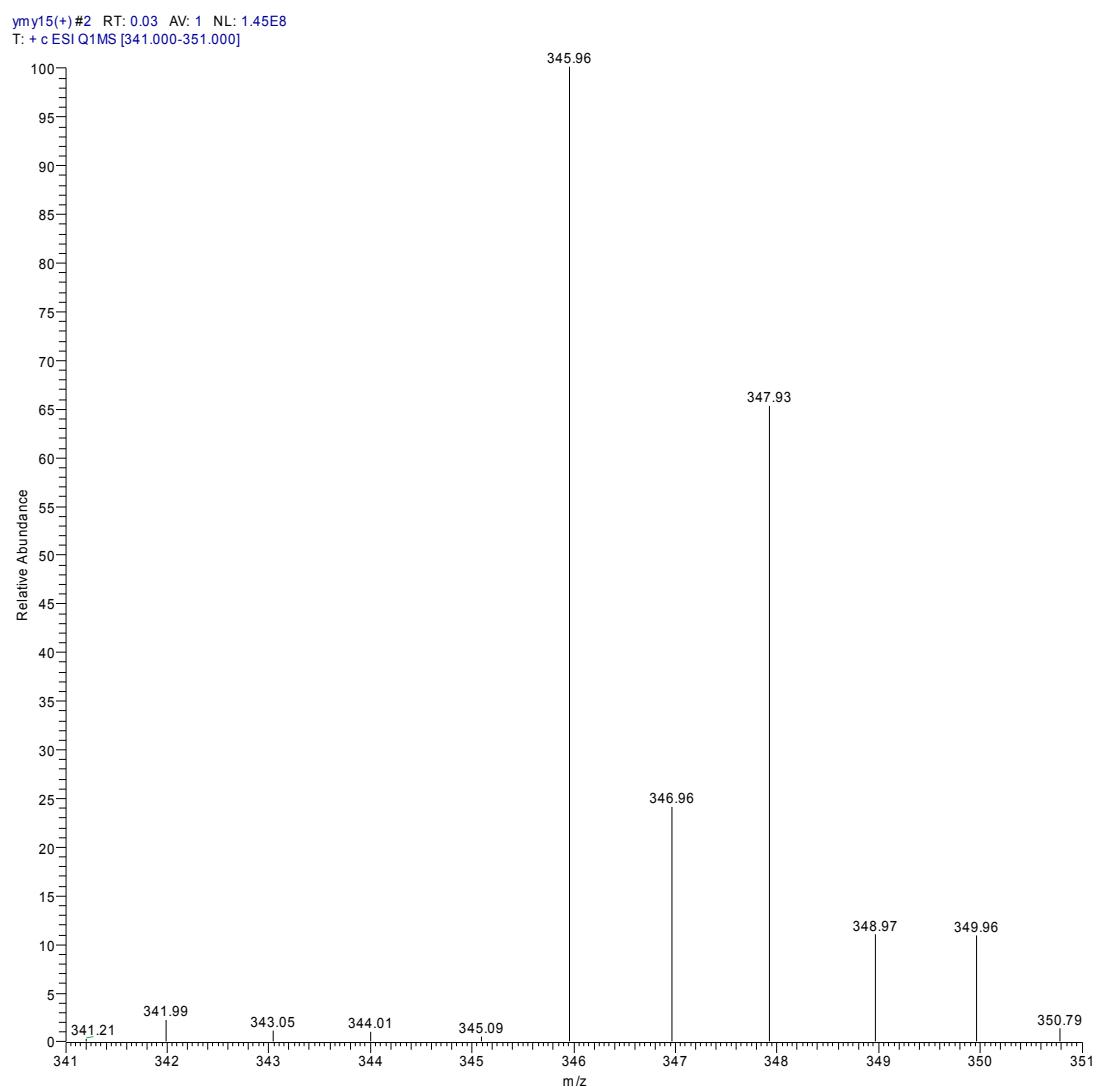
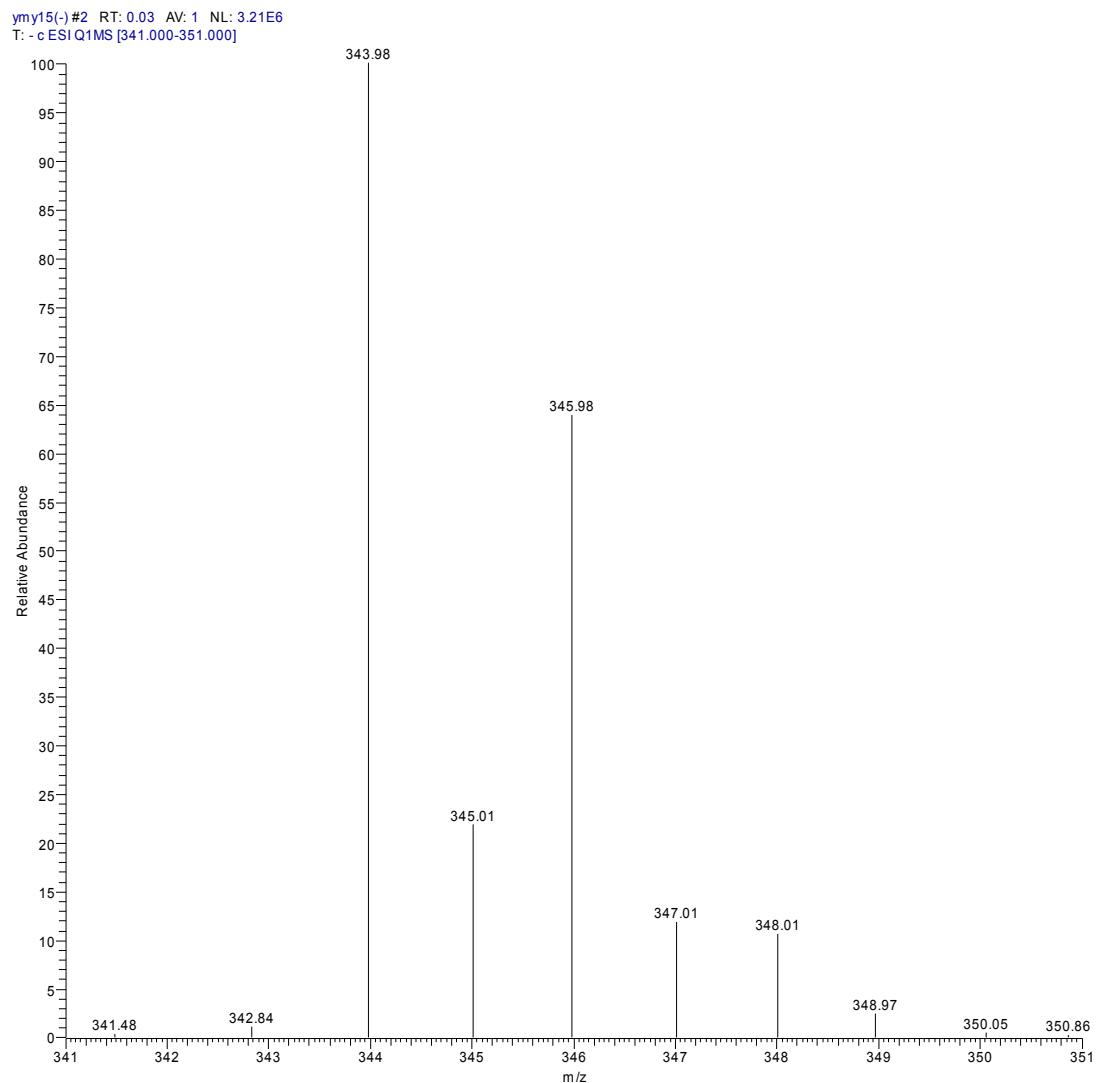


Figure S40. MS spectrum of compound 5m (+).



**Figure S41.** MS spectrum of compound **5m** (-).