

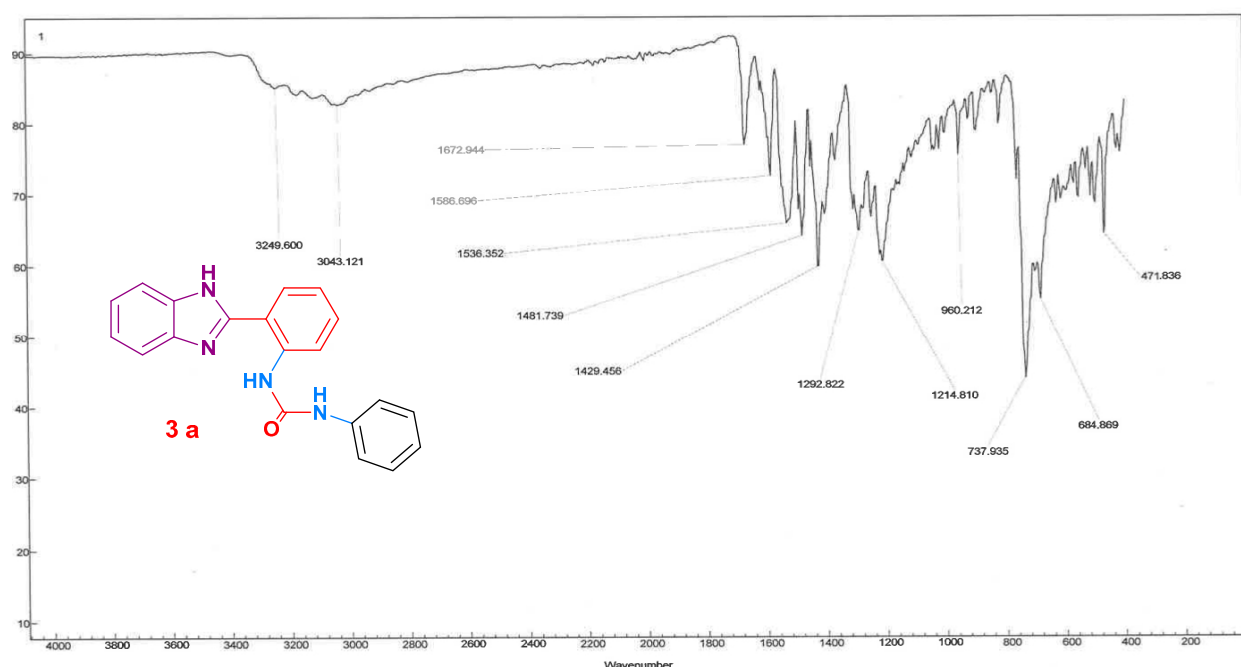
## **Supplementary Materials:**

# **Synthesis, Molecular Docking, and Bioactivity Study of Novel Hybrid Benzimidazole Urea Derivatives: A Promising $\alpha$ -amylase and $\alpha$ -Glucosidase Inhibitor Candidate with Antioxidant Activity**

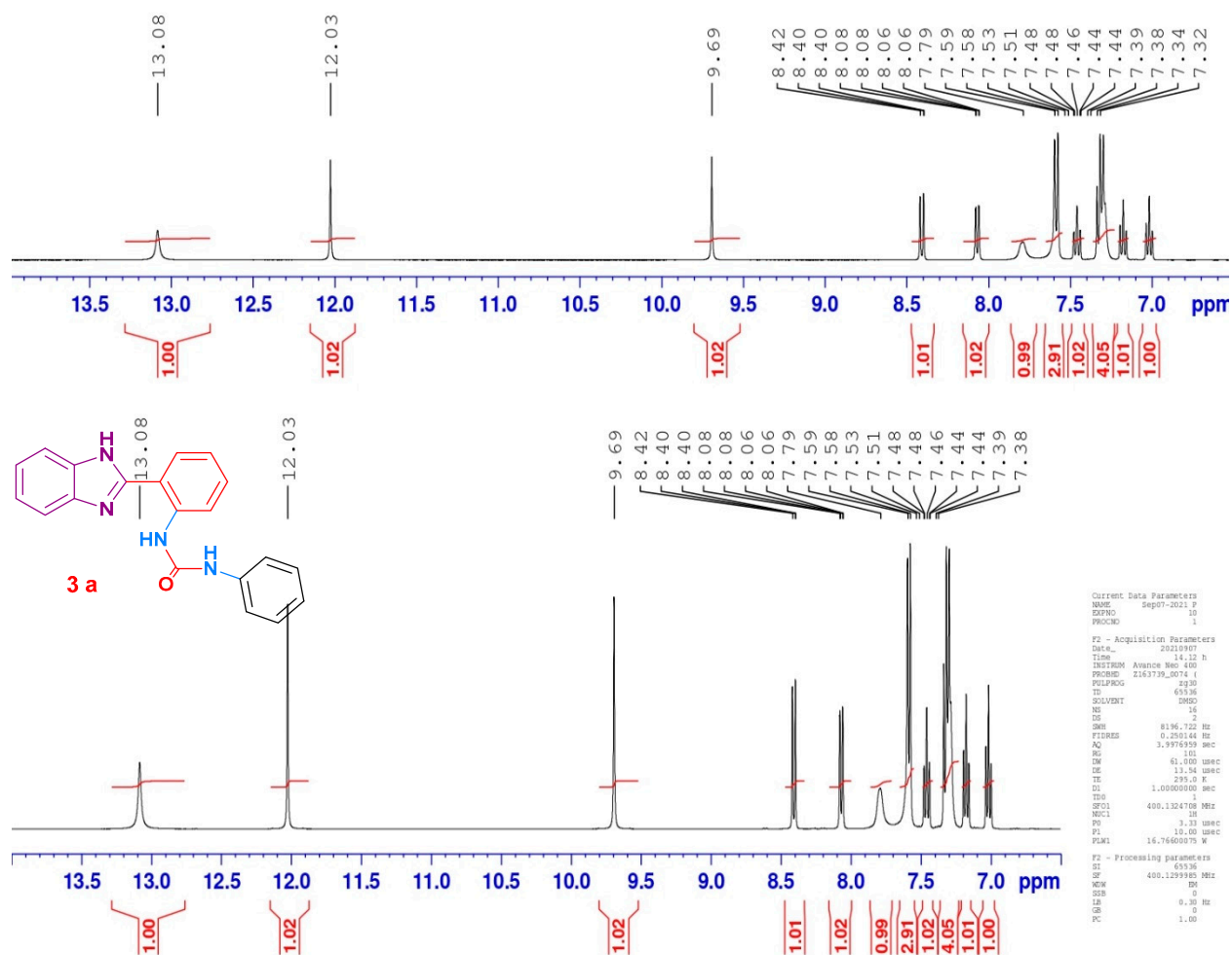
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**Figure S-1:** FTIR spectrum of compound **3a**.



**Figure S-2:** <sup>1</sup>H-NMR spectrum of compound **3a**.

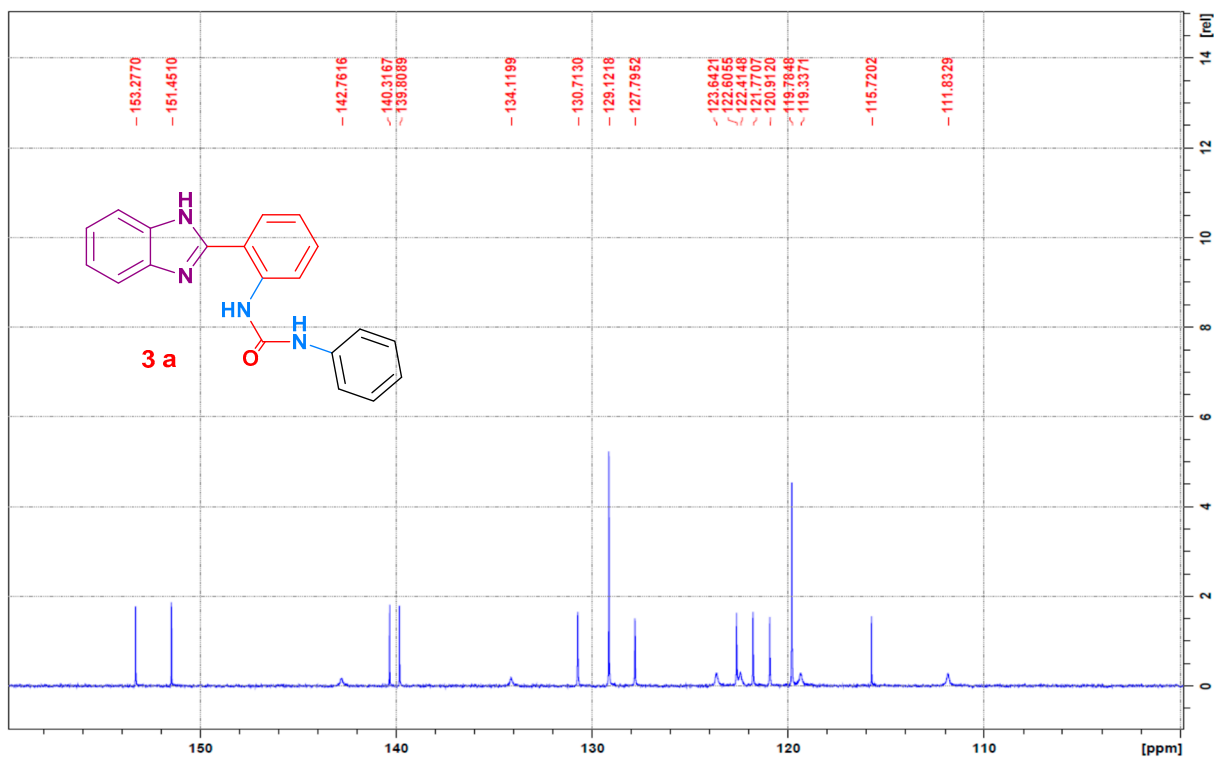


Figure S-3: <sup>13</sup>C NMR spectrum of compound 3a.

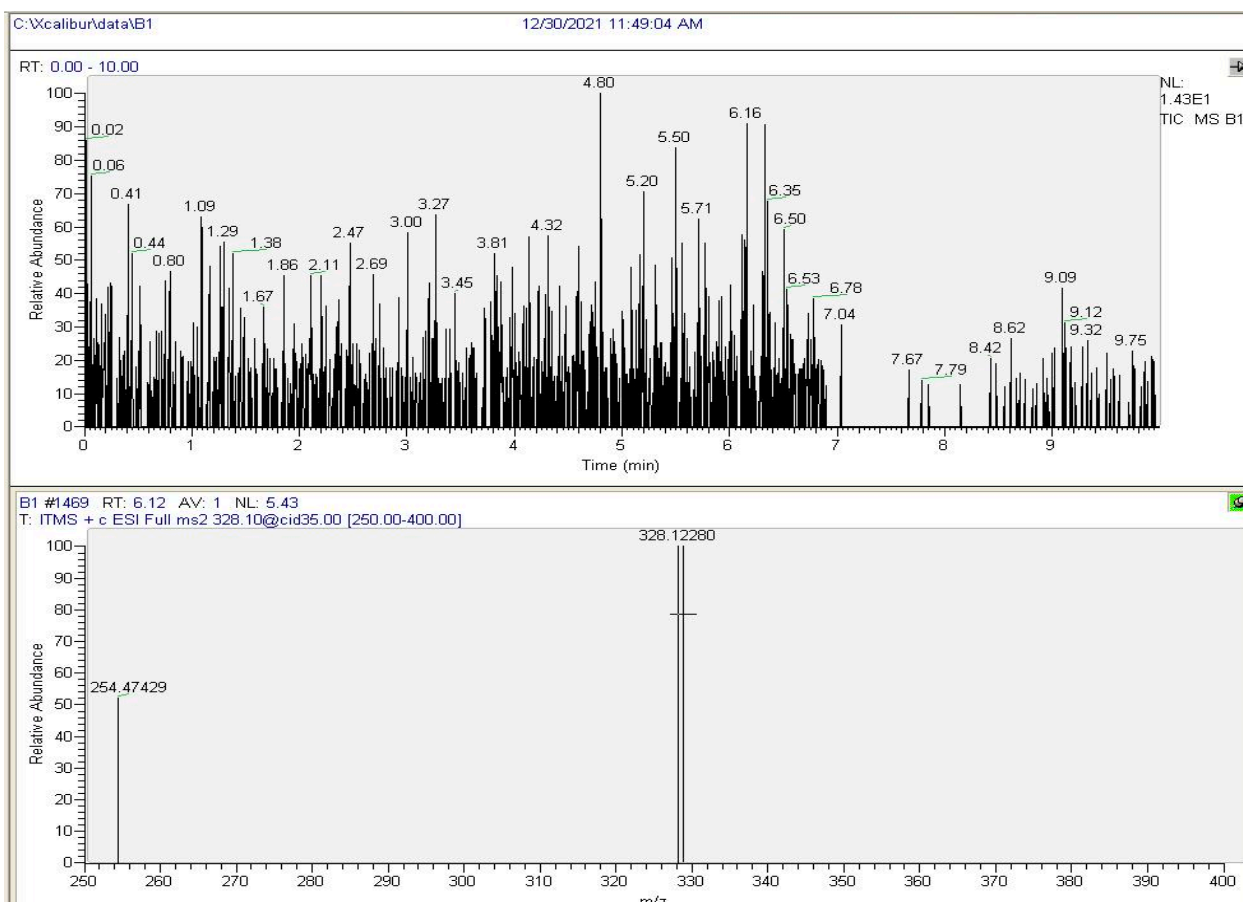


Figure S-4: Mass spectrum of compound 3a.



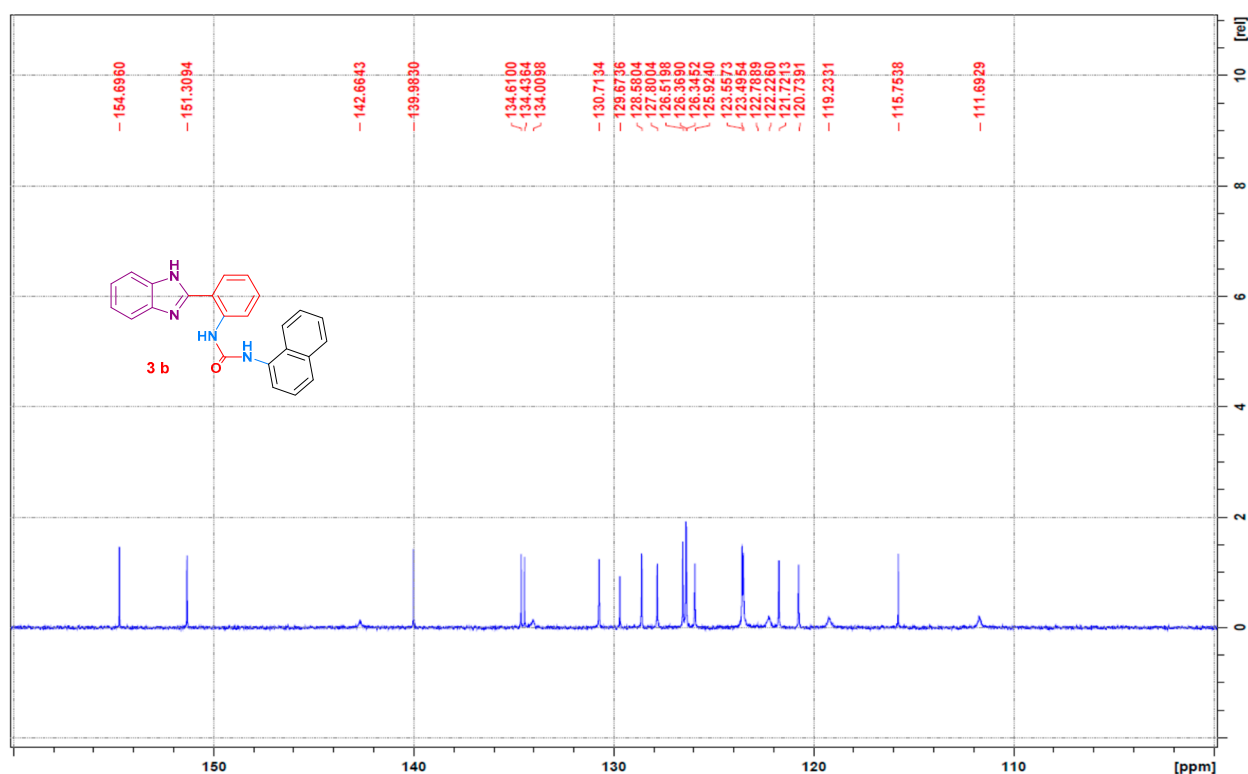


Figure S-7: <sup>13</sup>C NMR spectrum of compound 3b.

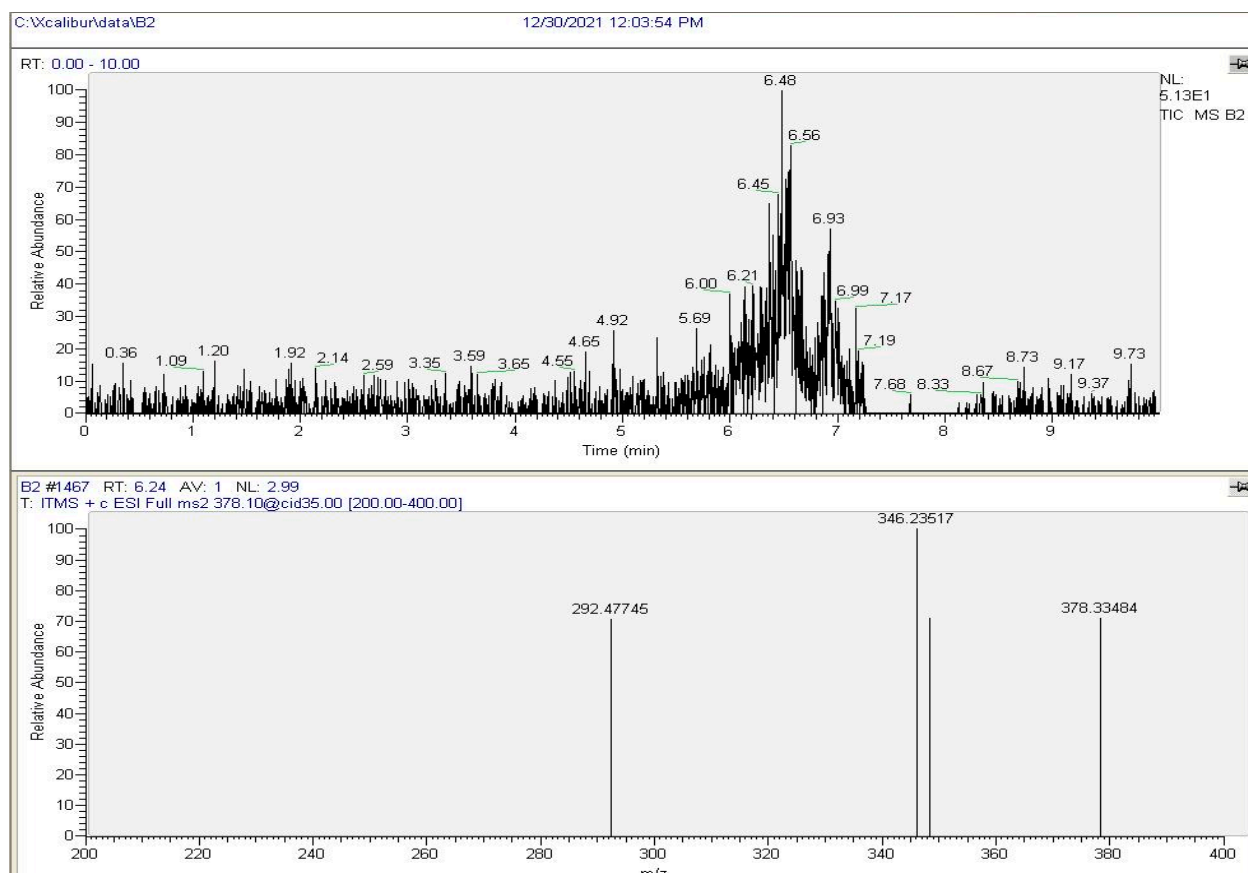
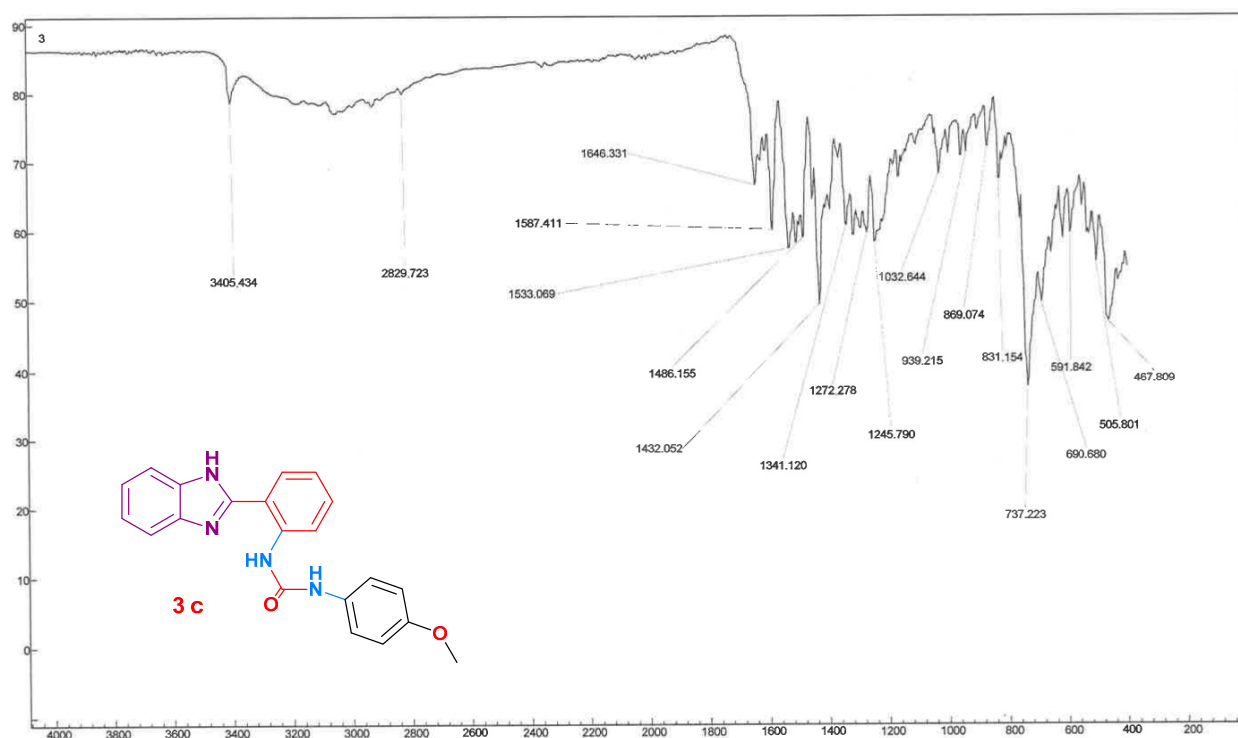
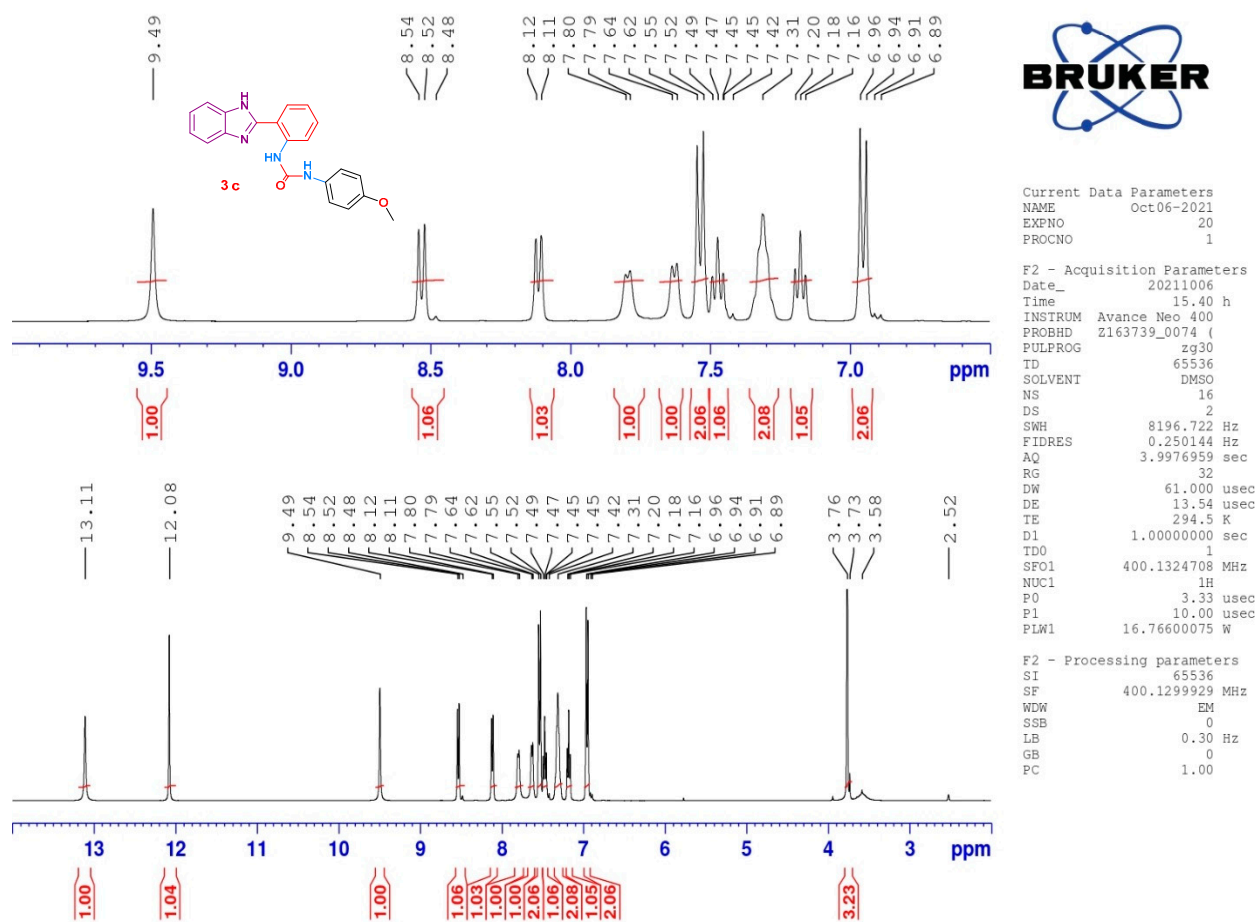


Figure S-8: Mass spectrum of compound 3b.



**Figure S-9:** FTIR spectrum of compound **3c**.



**Figure S-10:** <sup>1</sup>H-NMR spectrum of compound **3c**.



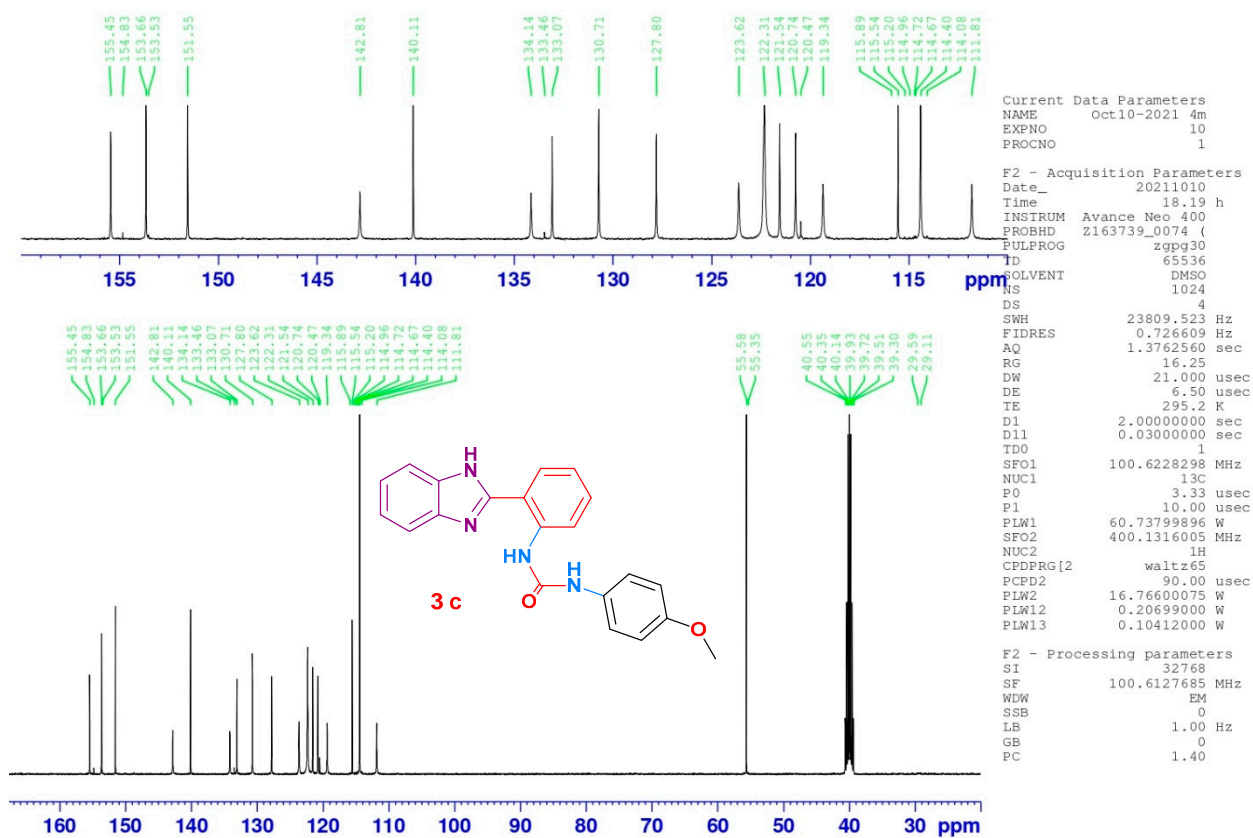


Figure S-11:  $^{13}\text{C}$  NMR spectrum of compound 3c.

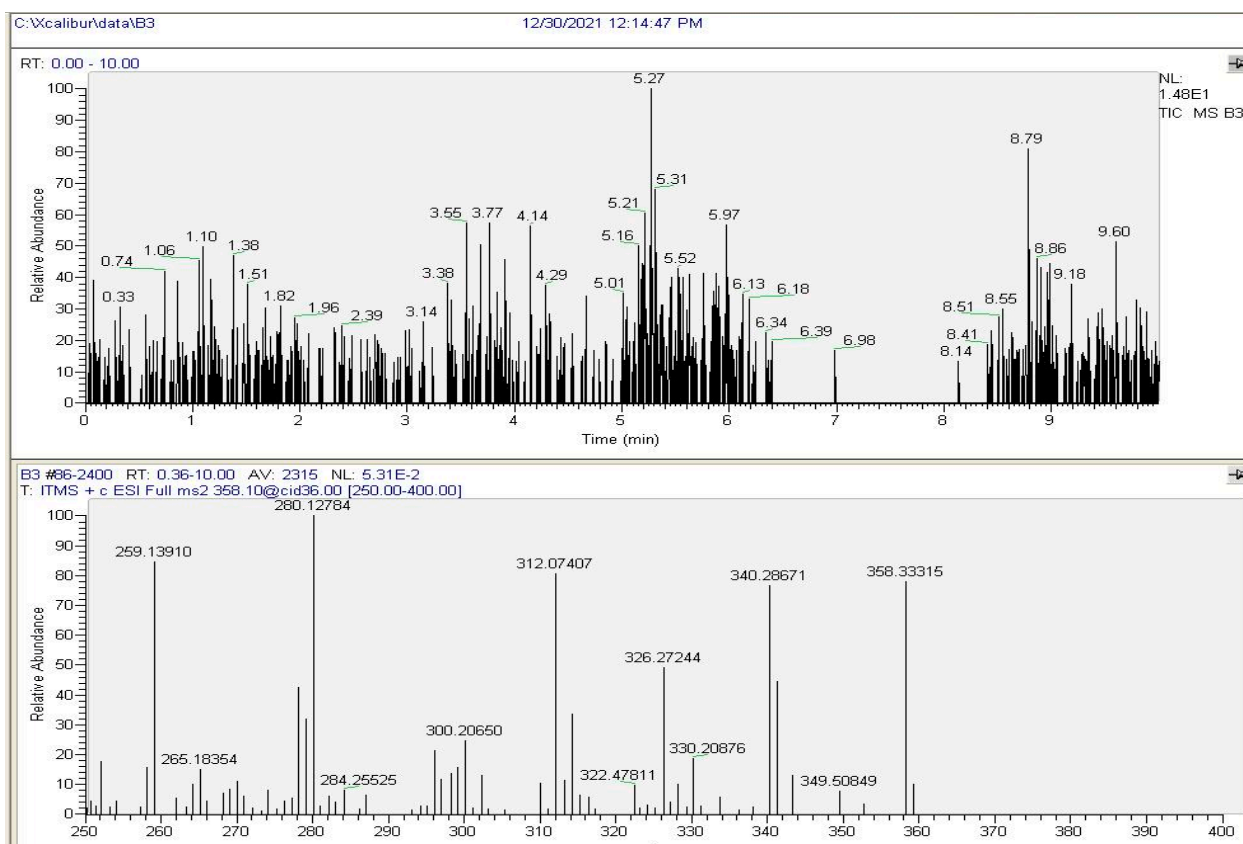


Figure S-12: Mass spectrum of compound 3c.



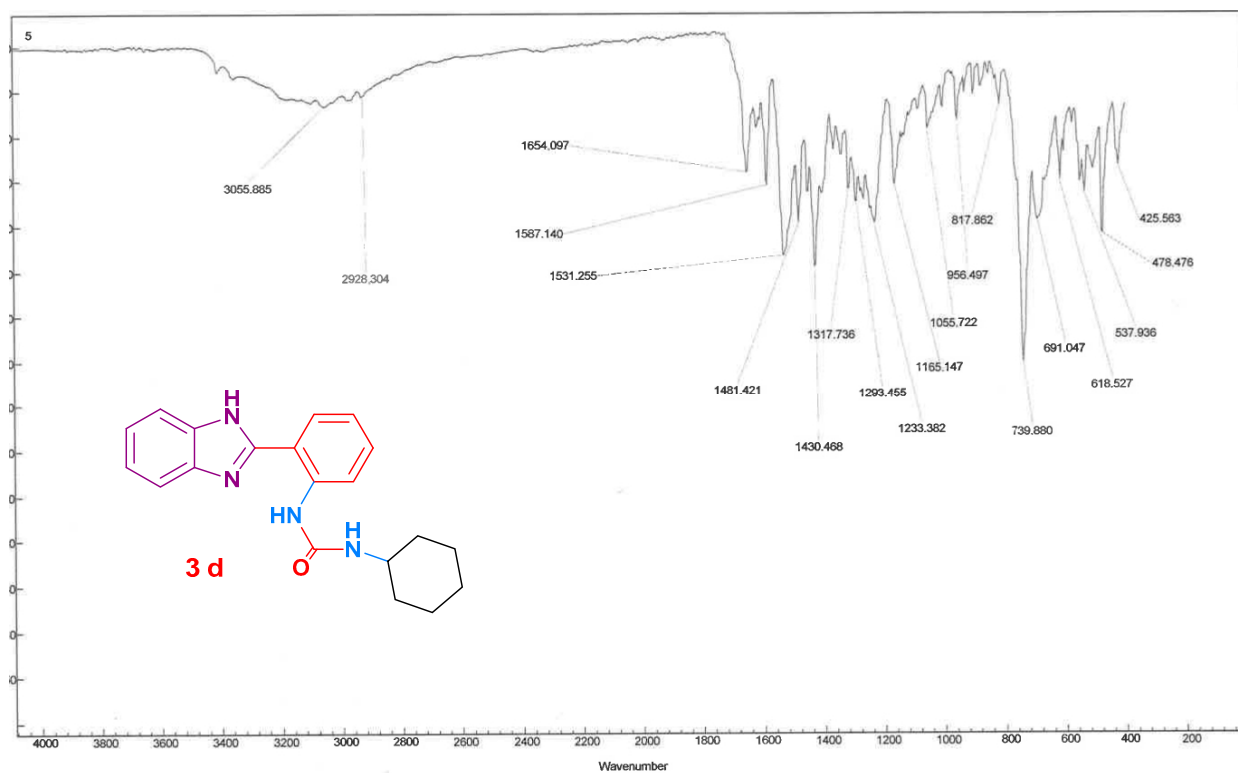


Figure S-13: FTIR spectrum of compound 3d.

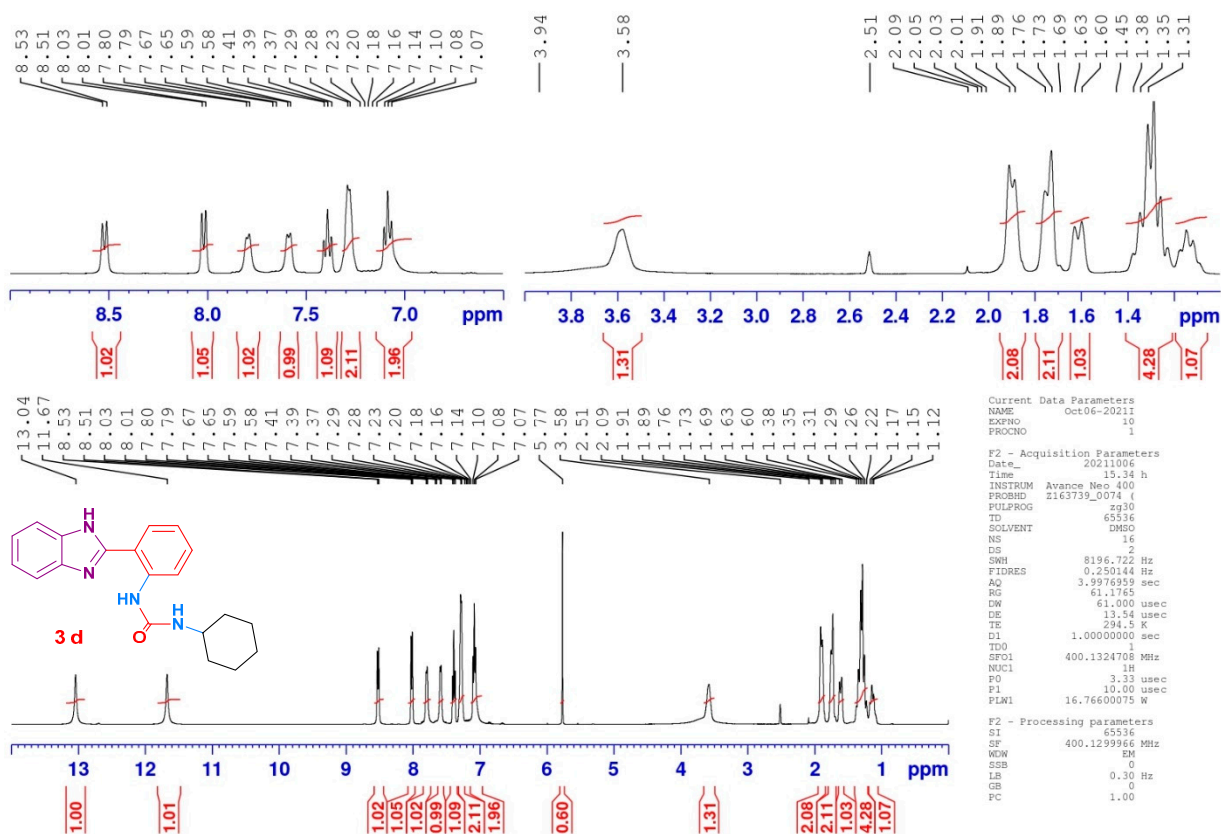


Figure S-14: <sup>1</sup>H-NMR spectrum of compound 3d.

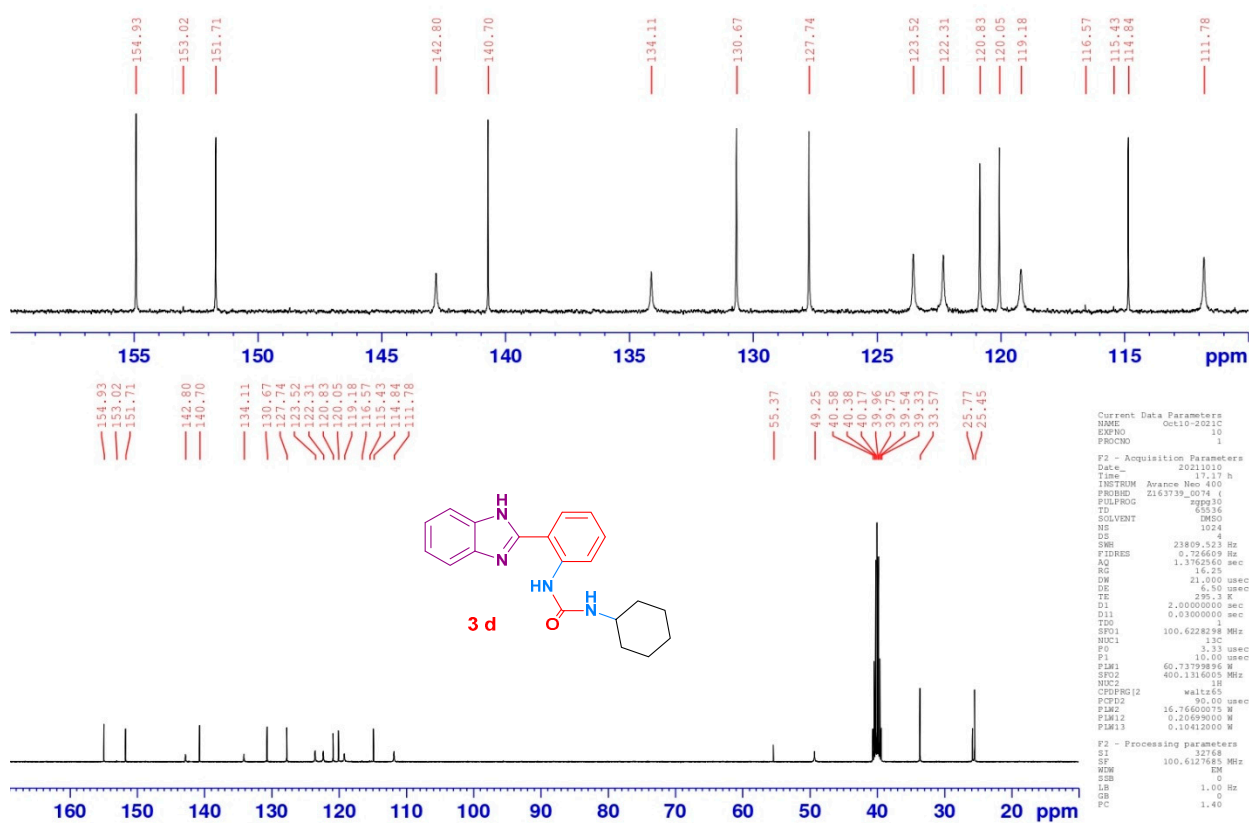


Figure S-15: <sup>13</sup>C NMR spectrum of compound 3d.

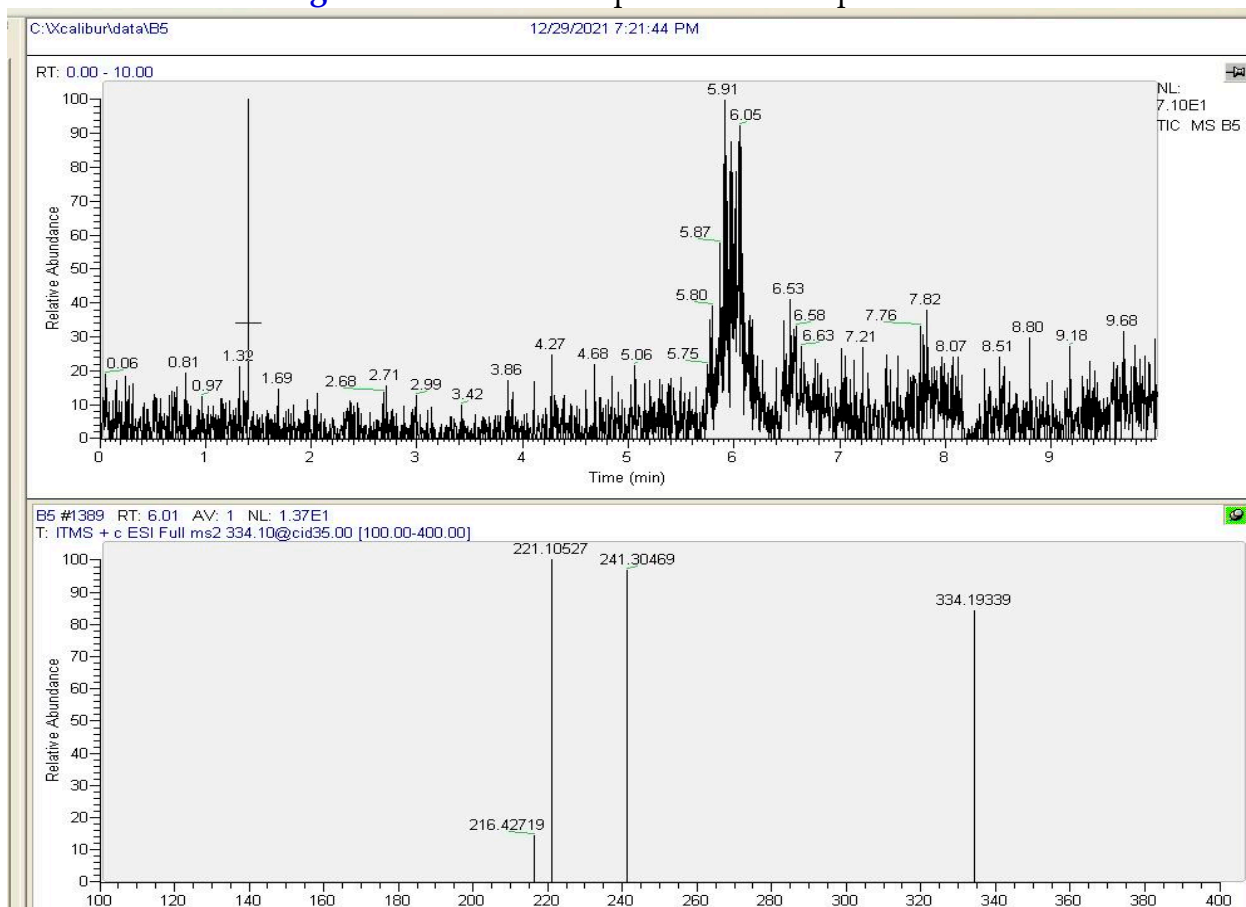


Figure S-16: Mass spectrum of compound 3d.

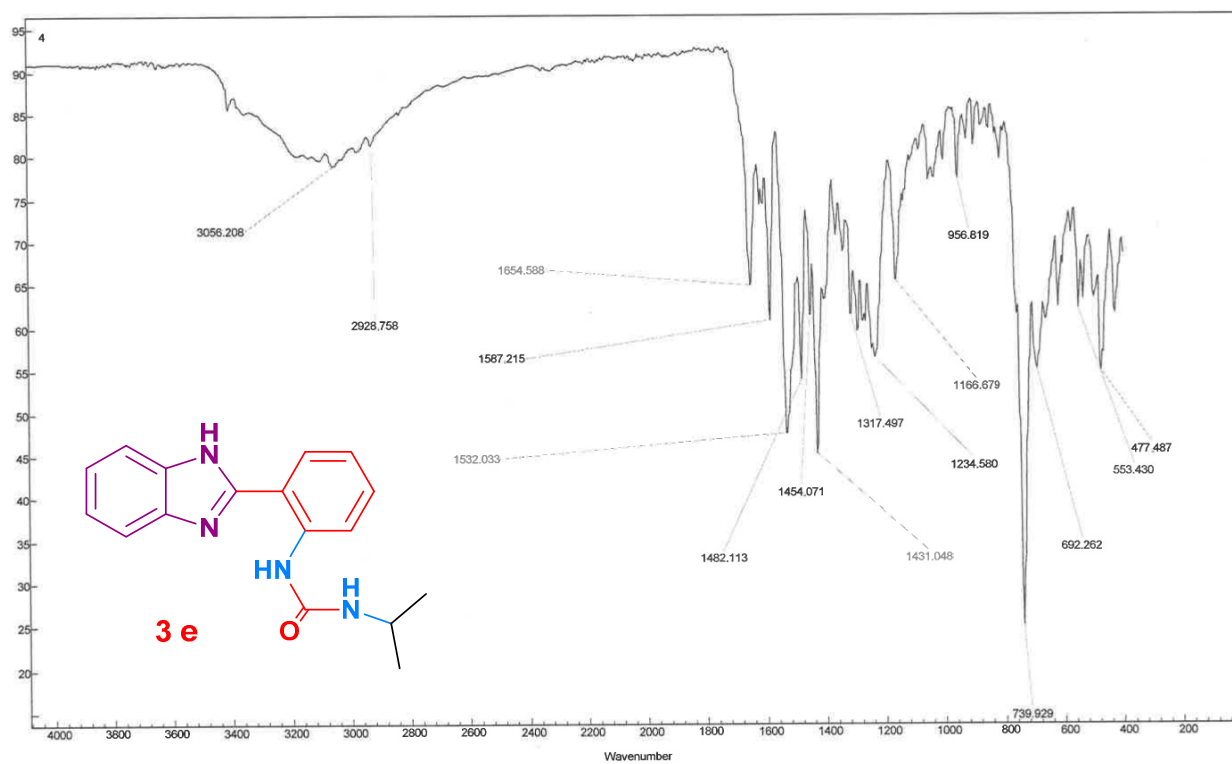


Figure S-17: FTIR spectrum of compound **3e**.

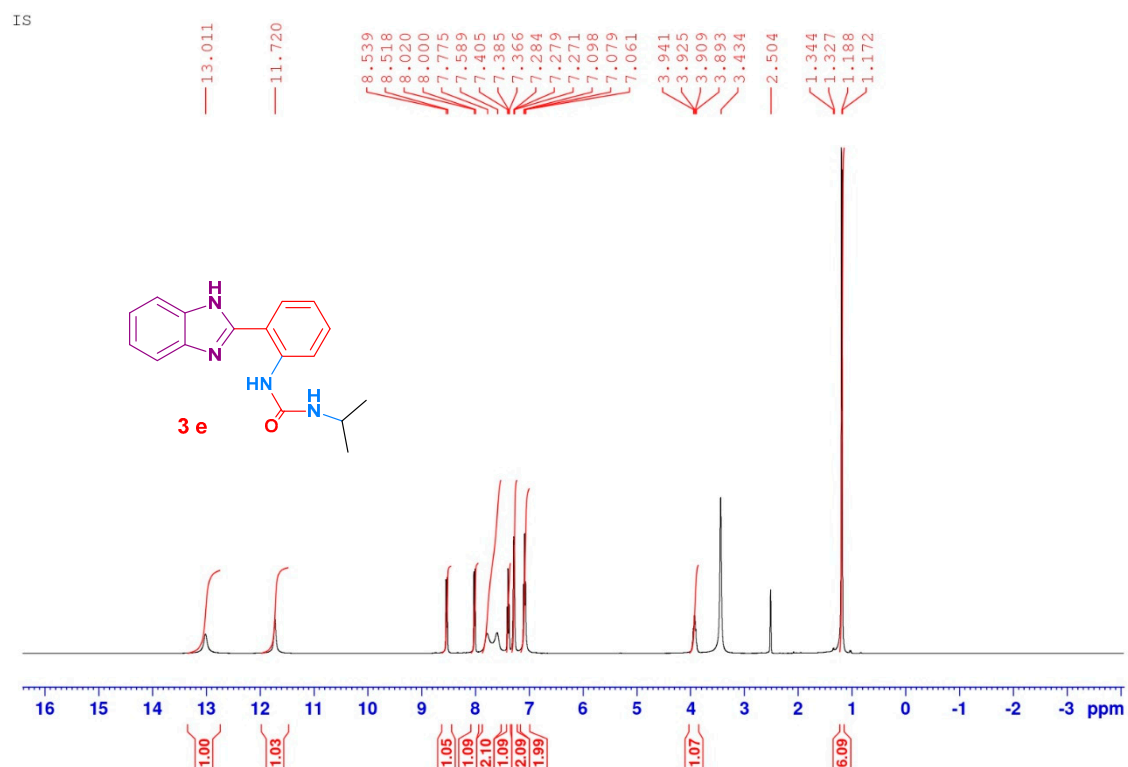


Figure S-18:  $^1\text{H}$ -NMR spectrum of compound **3e**.

IS

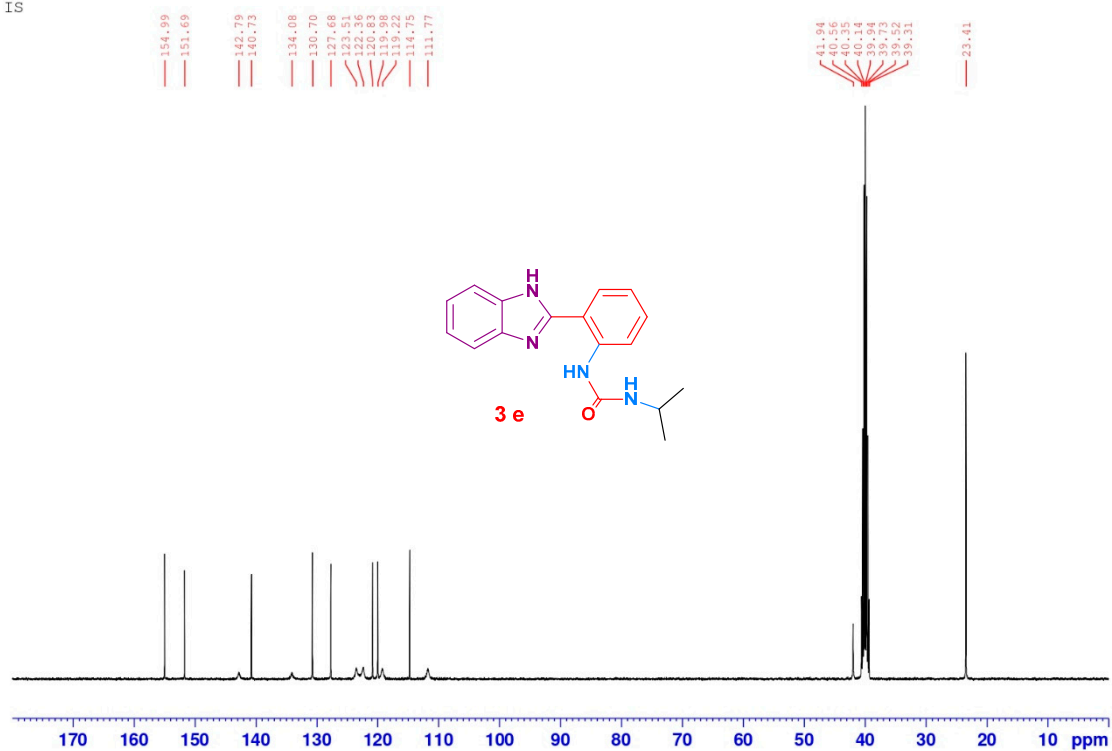


Figure S-19: <sup>13</sup>C NMR spectrum of compound 3e.

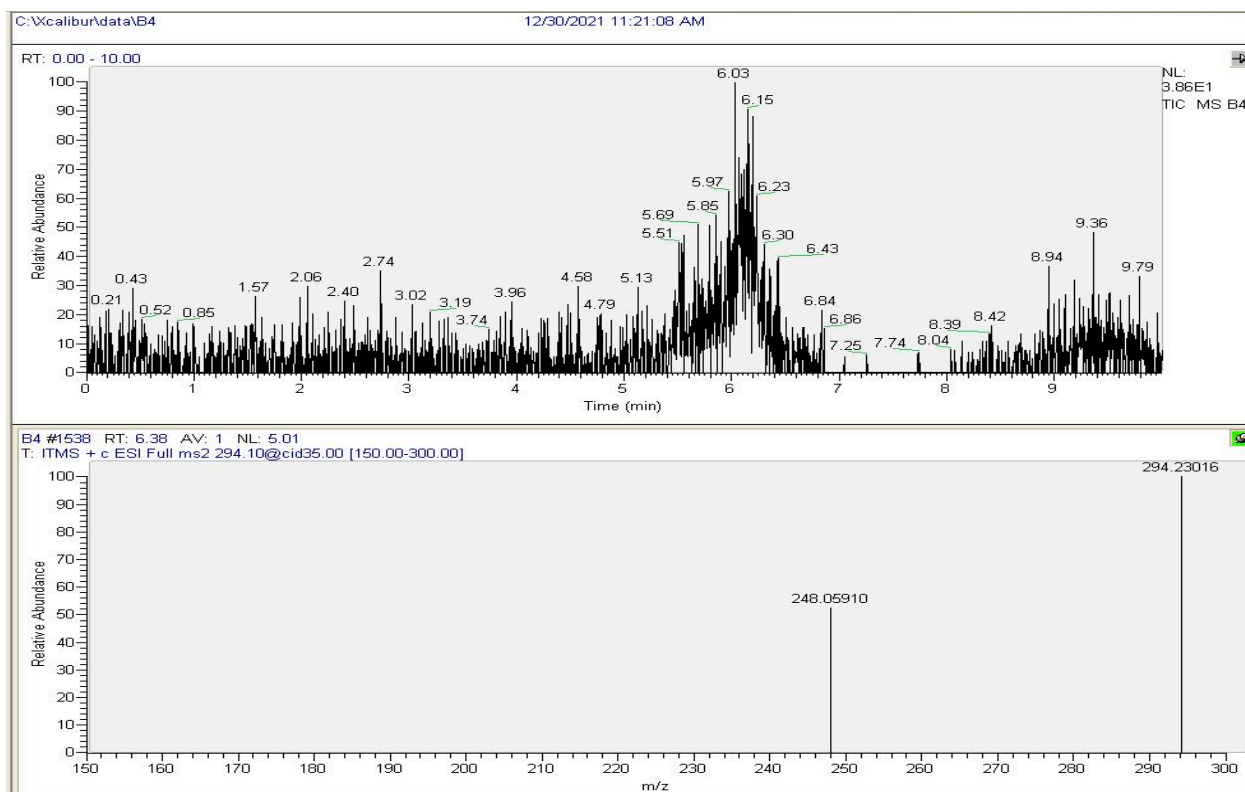


Figure S-20: Mass spectrum of compound 3e.

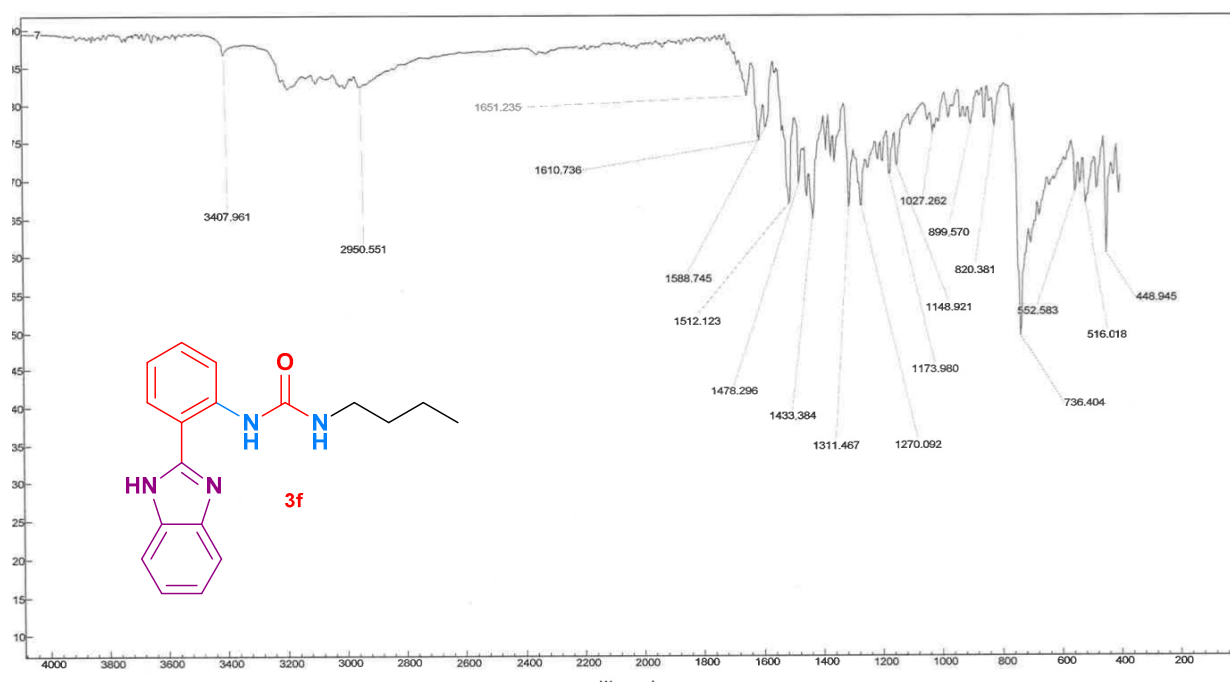


Figure S-21: FTIR spectrum of compound 3f.

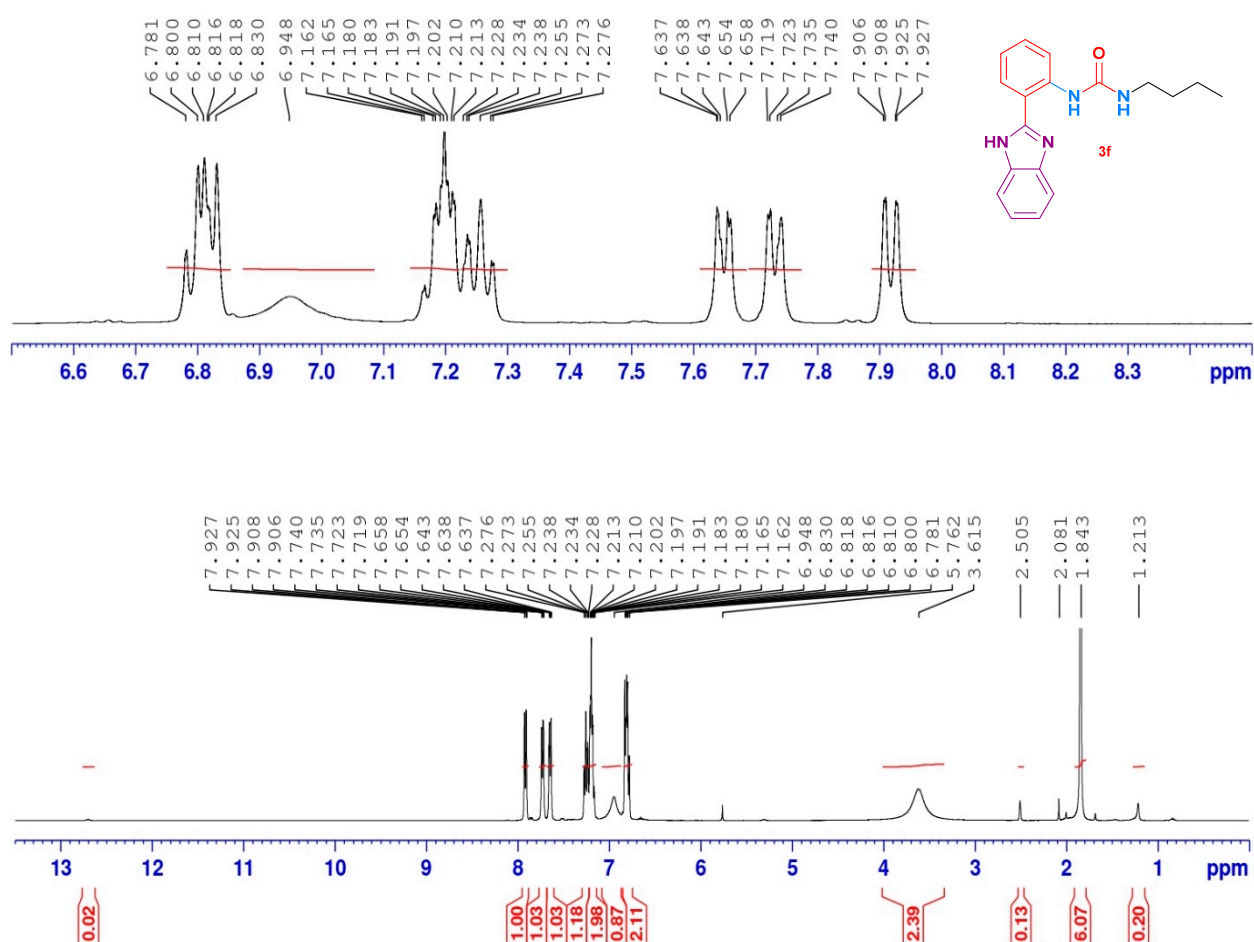
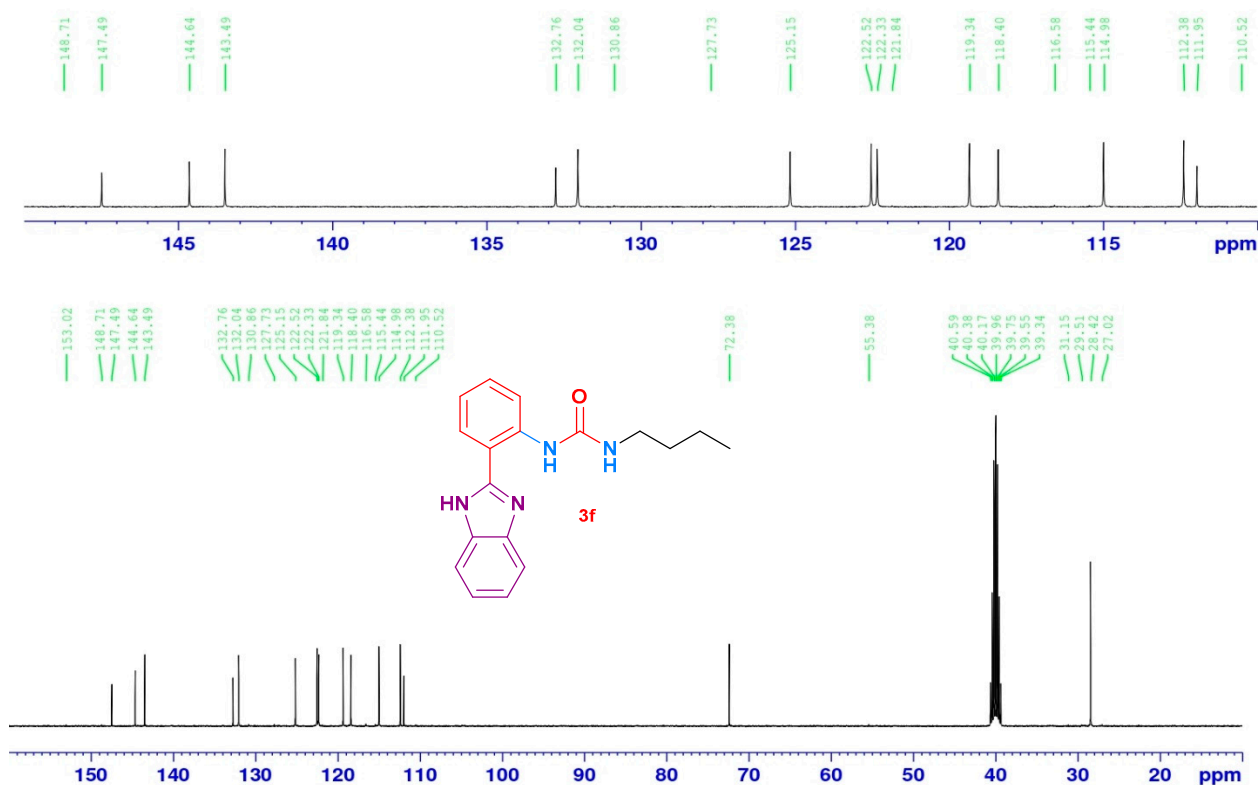
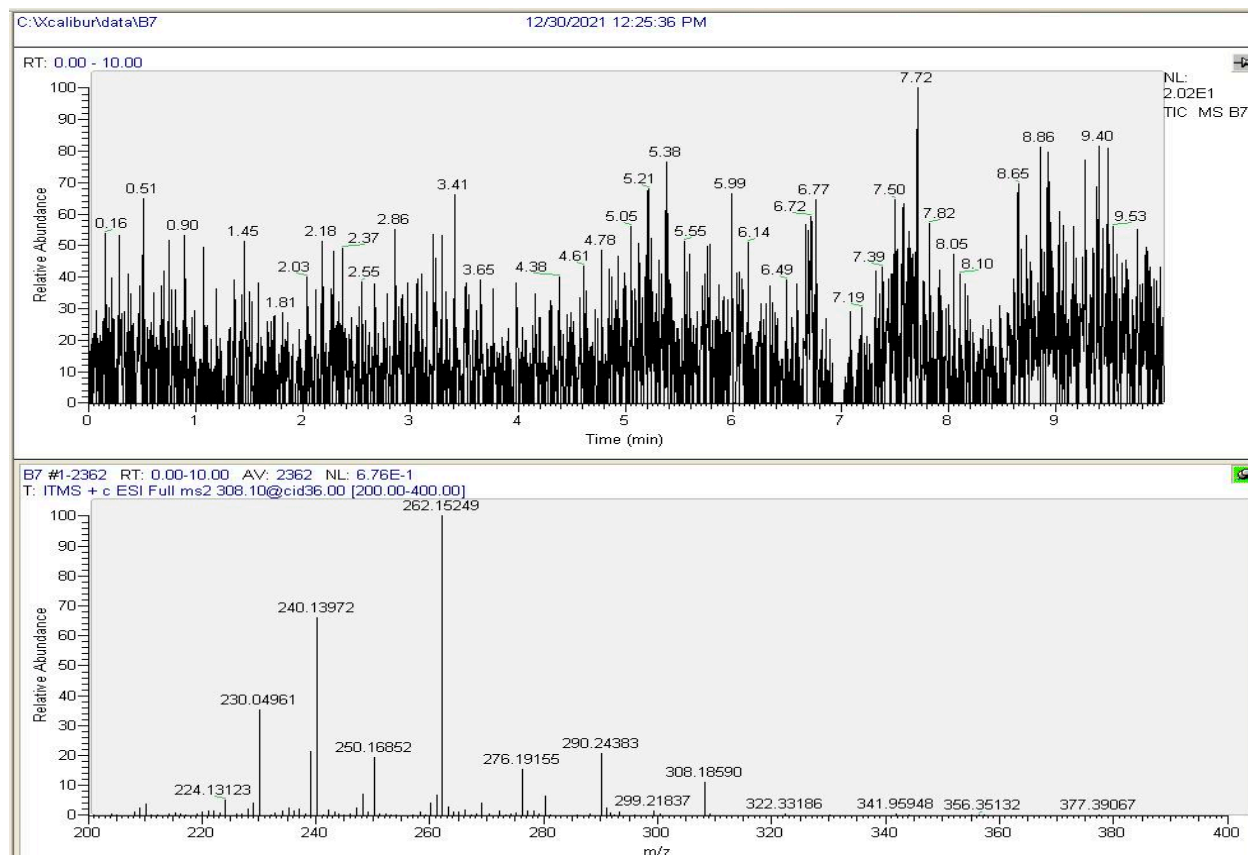


Figure S-22: <sup>1</sup>H-NMR spectrum of compound 3f.



**Figure S-23:**  $^{13}\text{C}$  NMR spectrum of compound 3f.



**Figure S-24:** Mass spectrum of compound 3f.



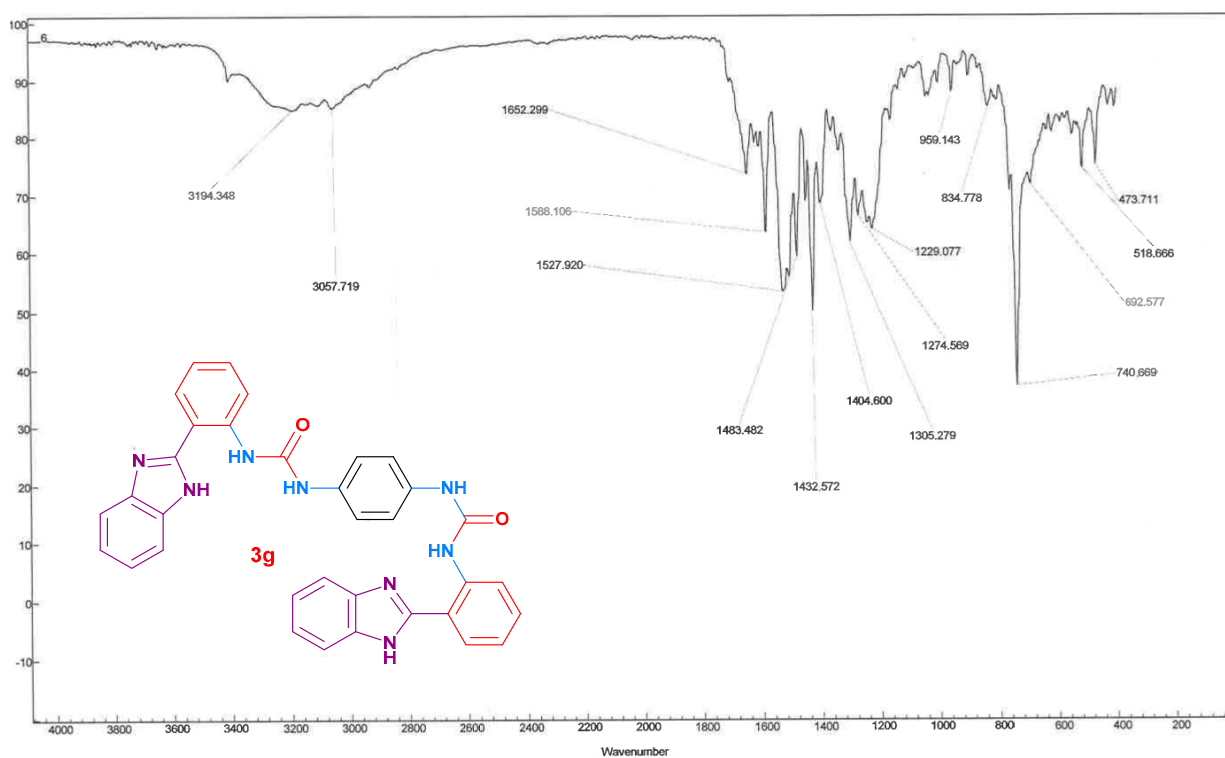


Figure S-25: FTIR spectrum of compound **3g**.

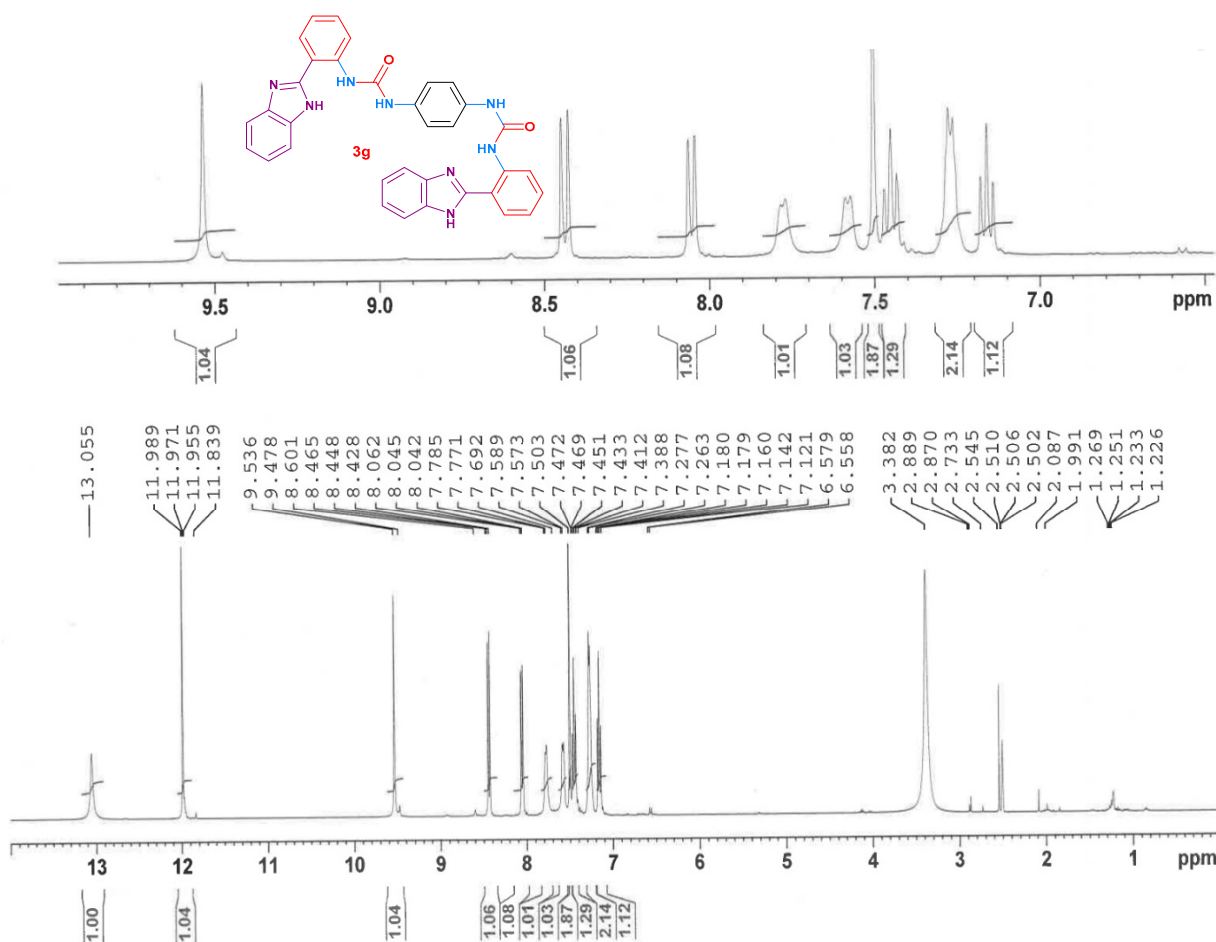


Figure S-26: <sup>1</sup>H-NMR spectrum of compound **3g**.

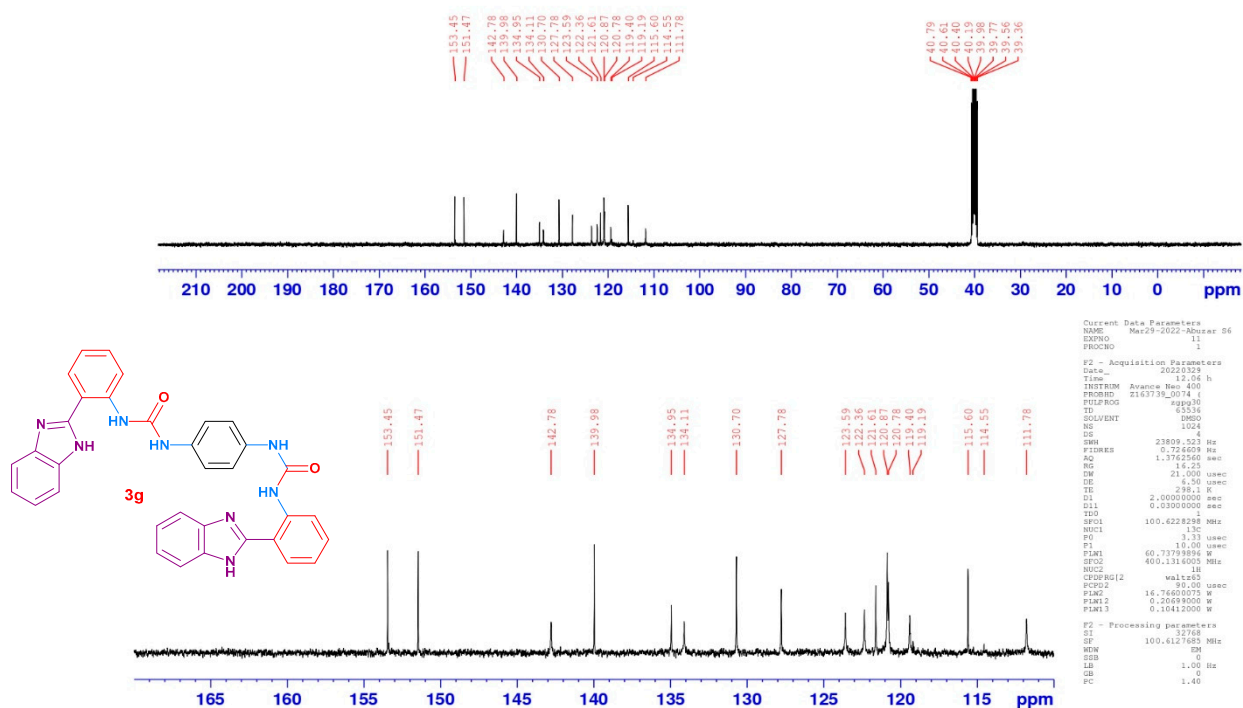


Figure S-27:  $^{13}\text{C}$  NMR spectrum of compound **3g**.

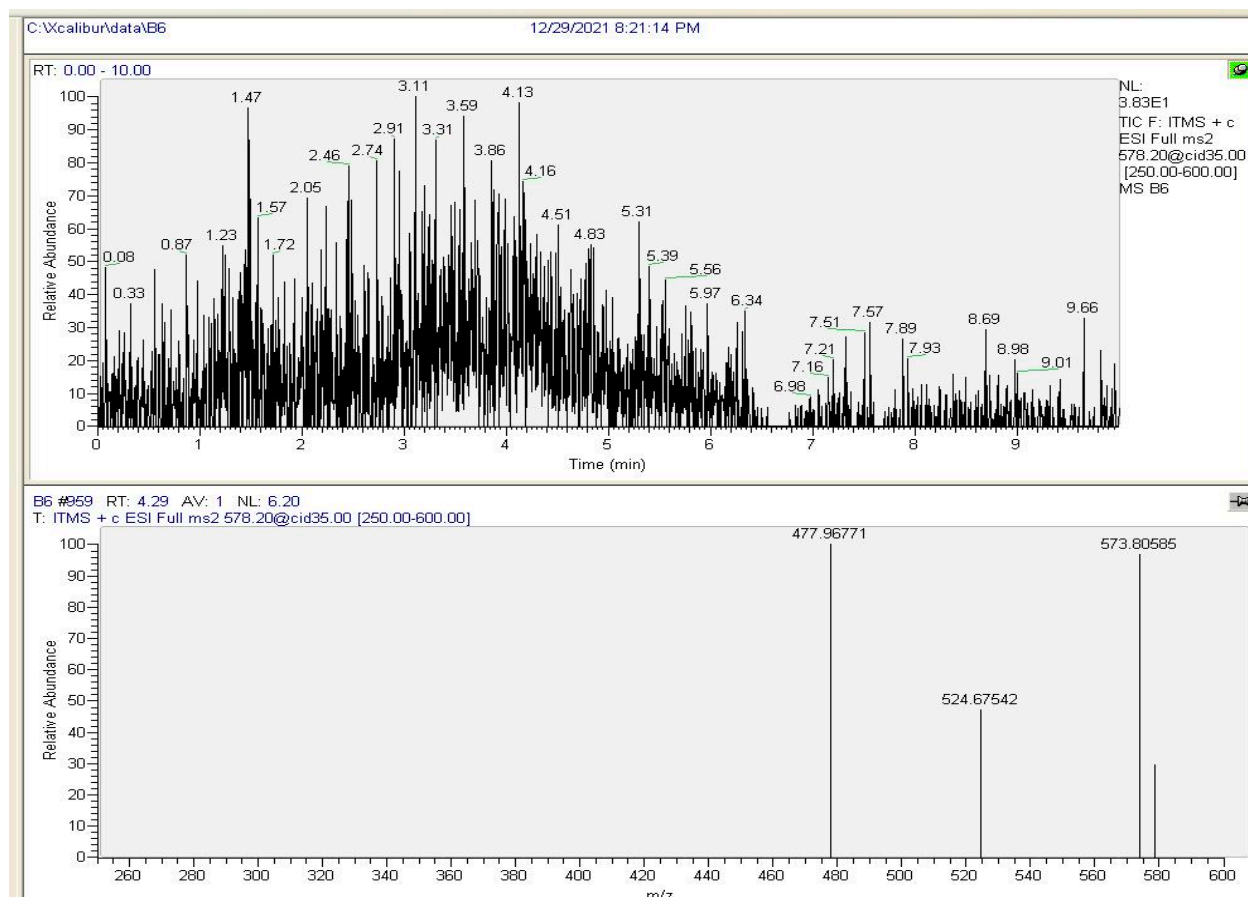


Figure S-28: Mass spectrum of compound **3g**.

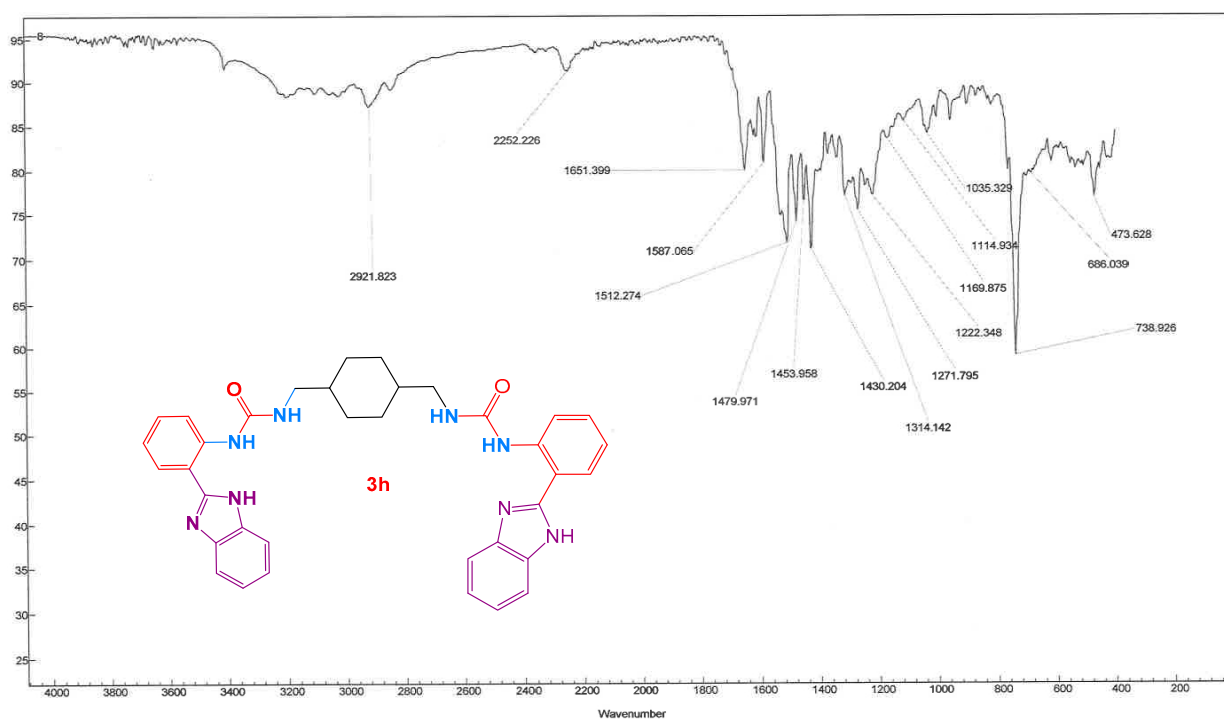


Figure S-29: FTIR spectrum of compound 3h.

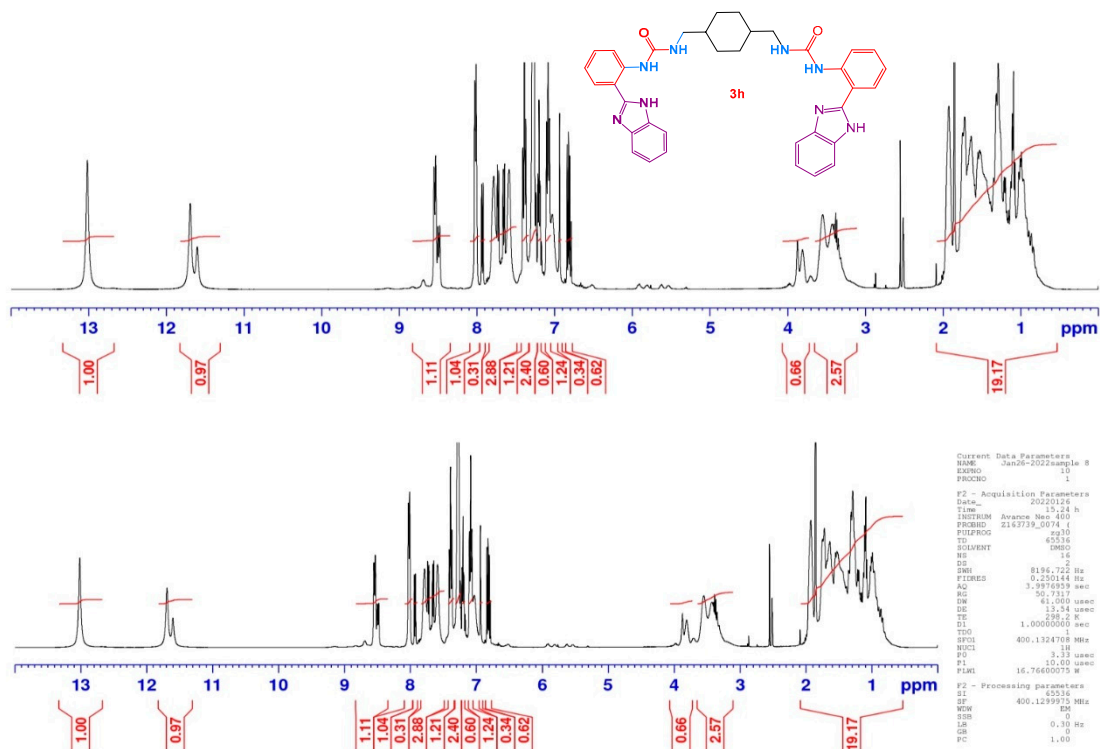
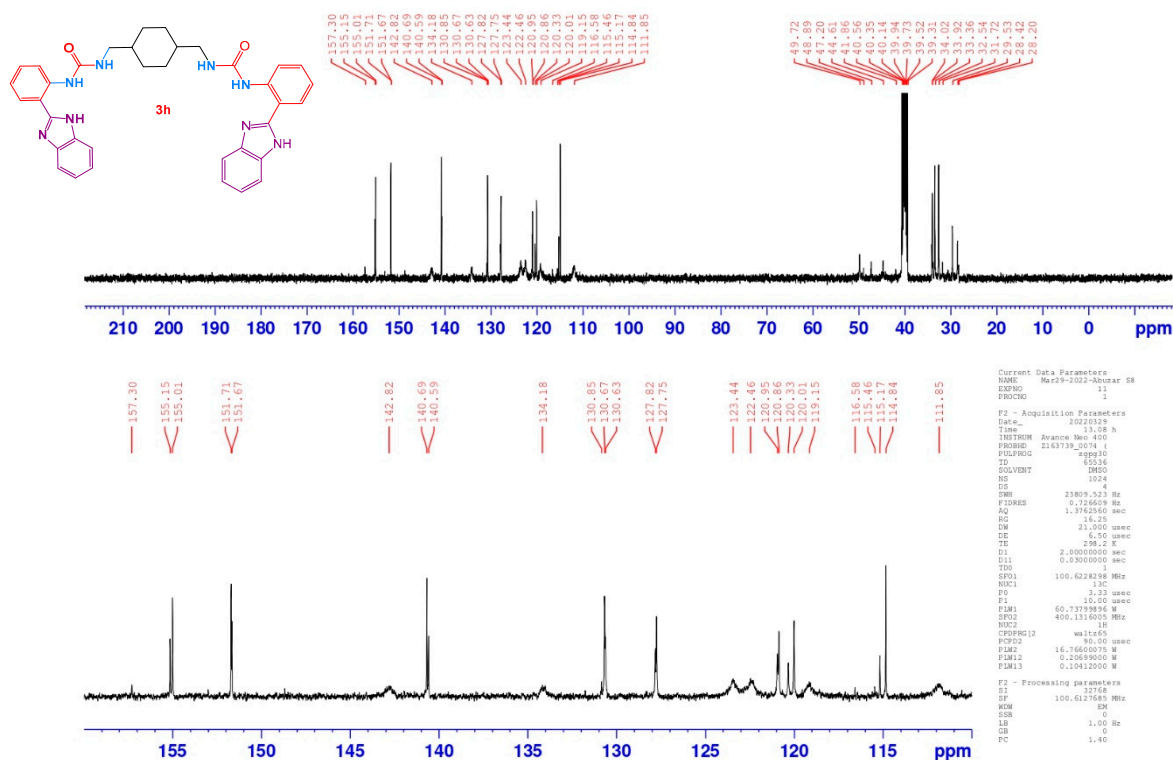
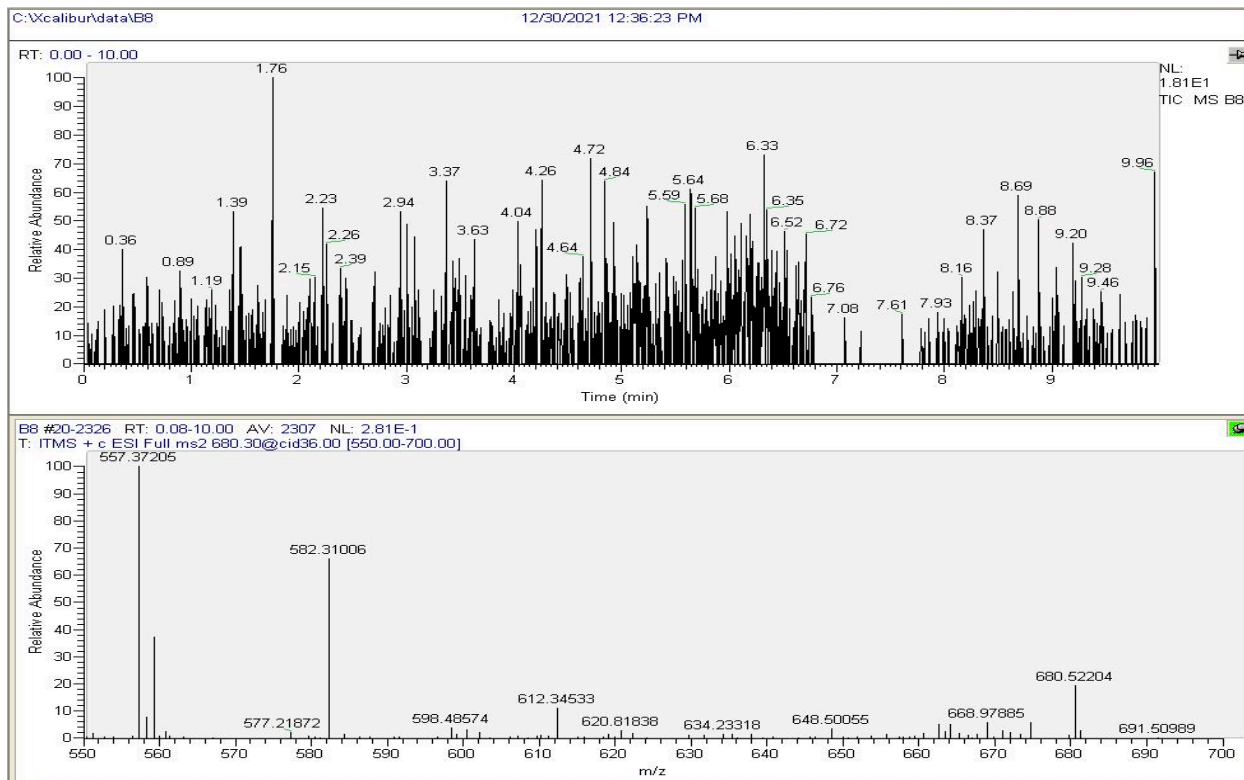


Figure S-30: <sup>1</sup>H-NMR spectrum of compound 3h.



**Figure S31:**  $^{13}\text{C}$  NMR spectrum of compound 3h.



**Figure S-32:** Mass spectrum of compound 3h

