

Supporting Information

An efficient, catalyst-free and aqueous ethanol-mediated synthesis (5-((2-aminothiazol-5-yl)(phenyl)methyl)-6-hydroxypyrimidine-2,4(1H,3H)-dione derivatives and their antioxidant activity

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Figure S1: $^1\text{H-NMR}$ (500 MHz, DMSO- d_6) of Compound **4a**

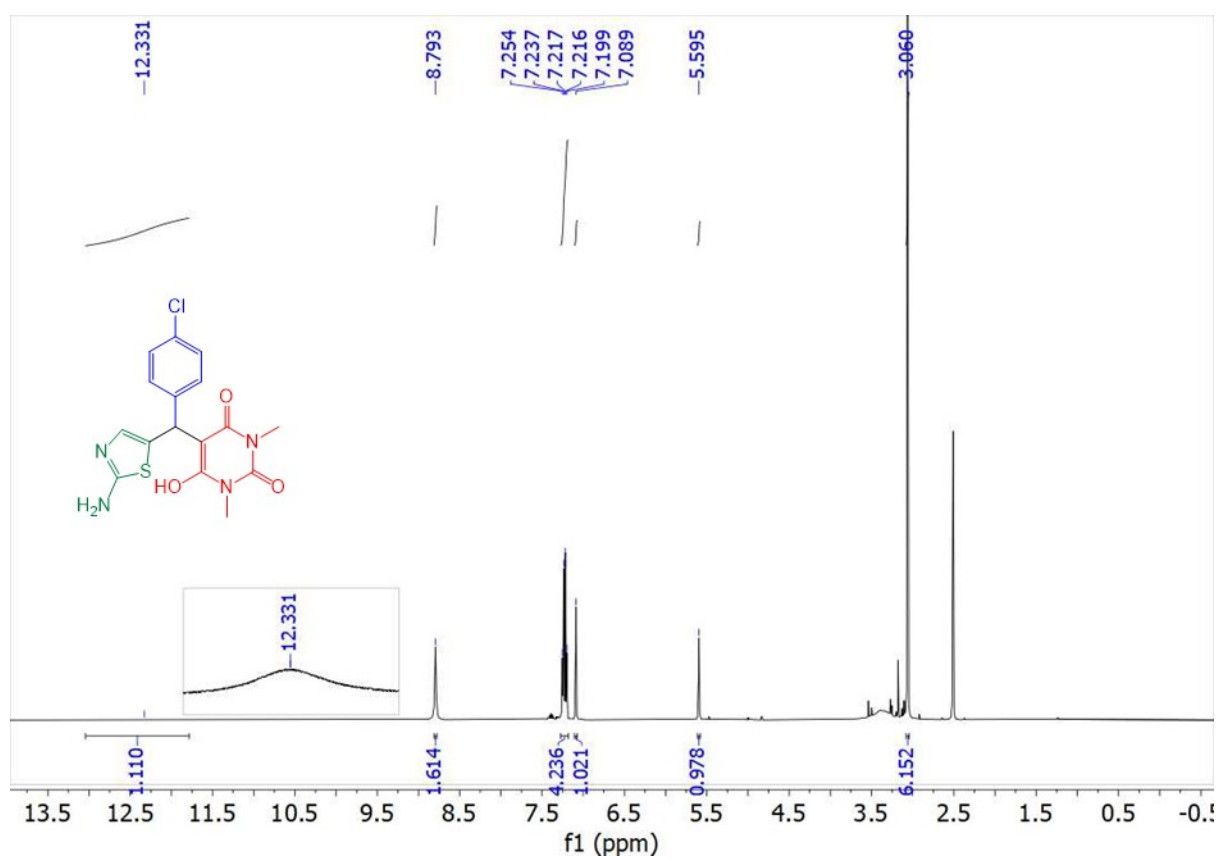


Figure S2: $^{13}\text{C-NMR}$ (126 MHz, DMSO- d_6) of Compound **4a**

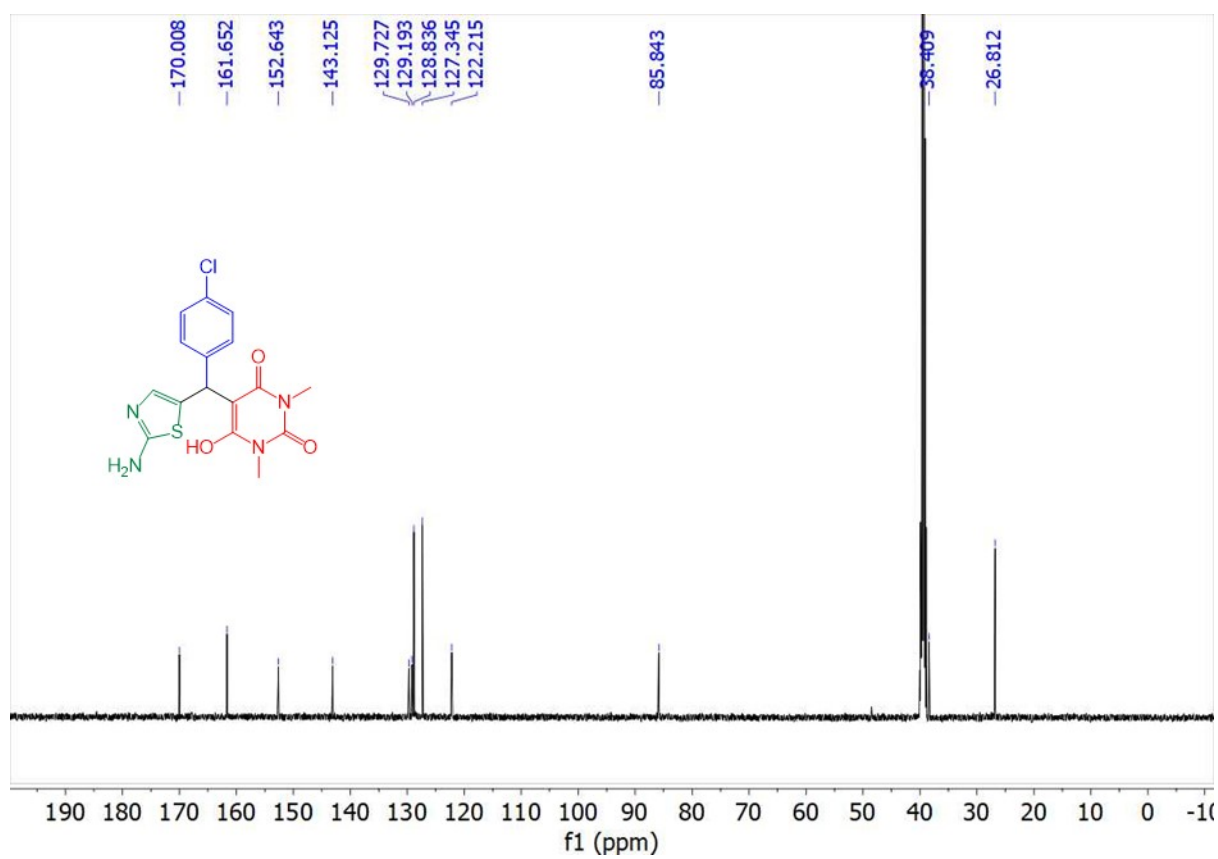


Figure S3: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4b**

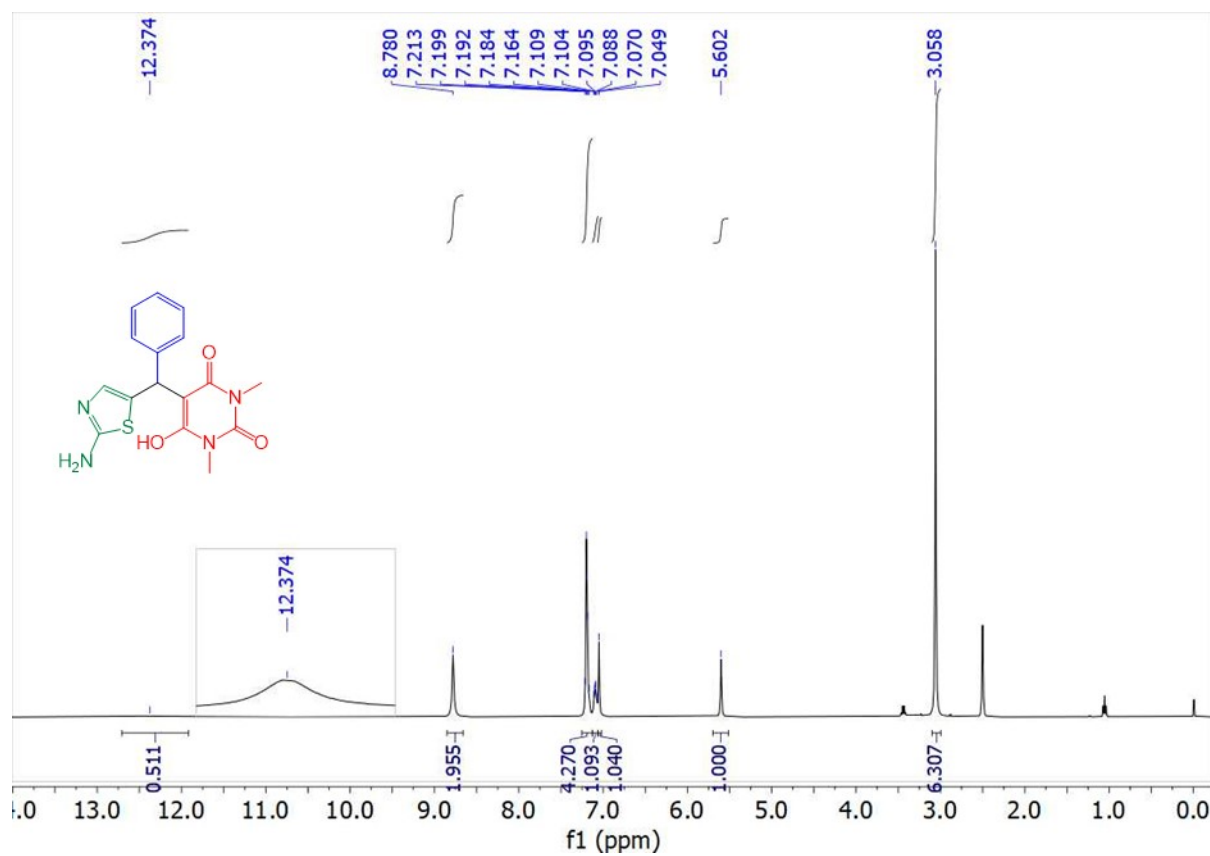


Figure S4: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4b**

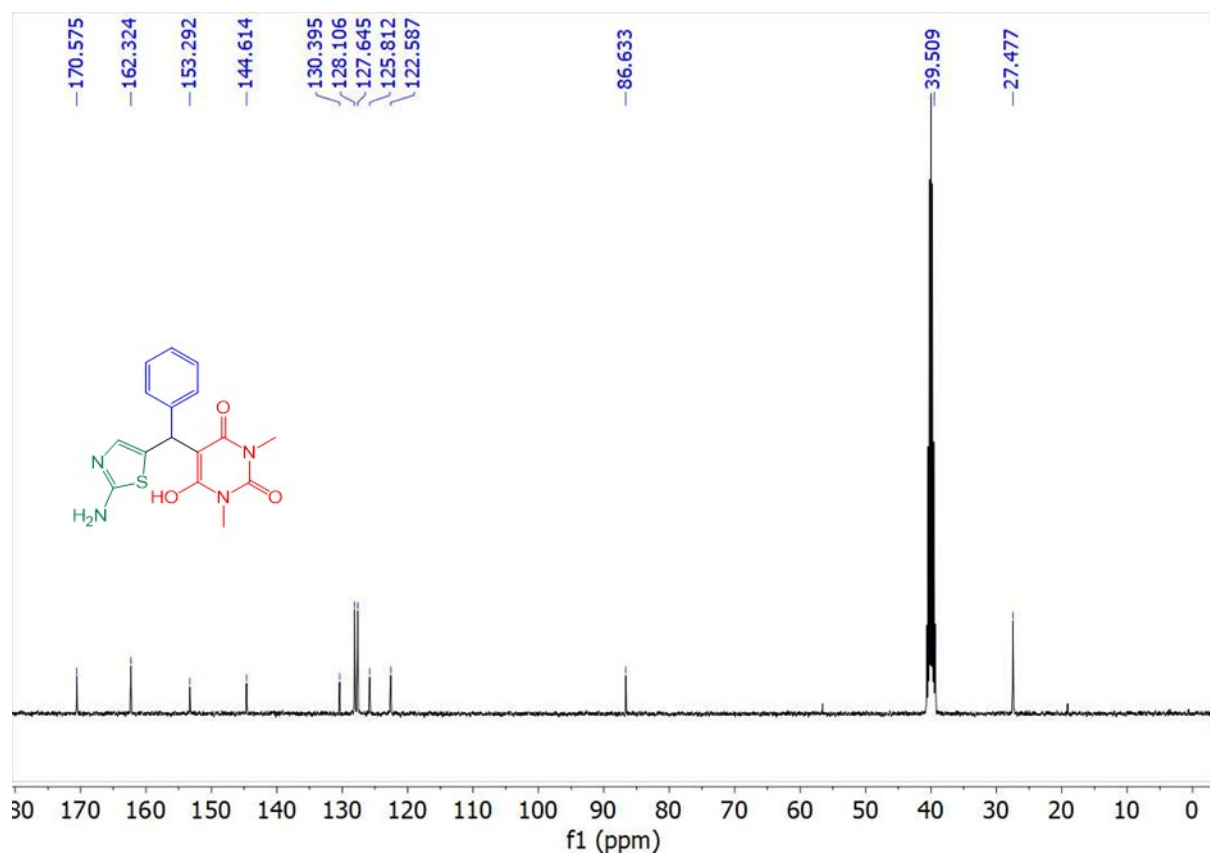


Figure S5: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4c**

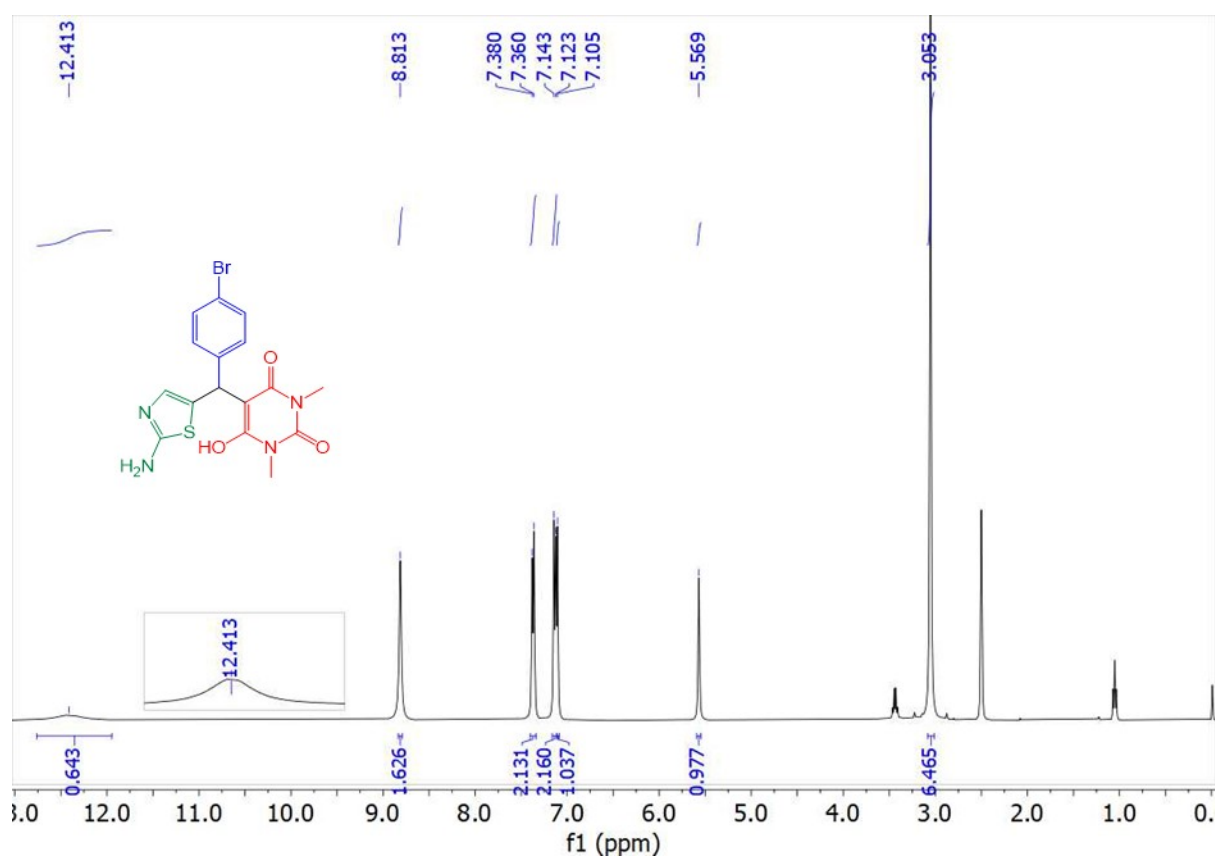


Figure S6: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4c**

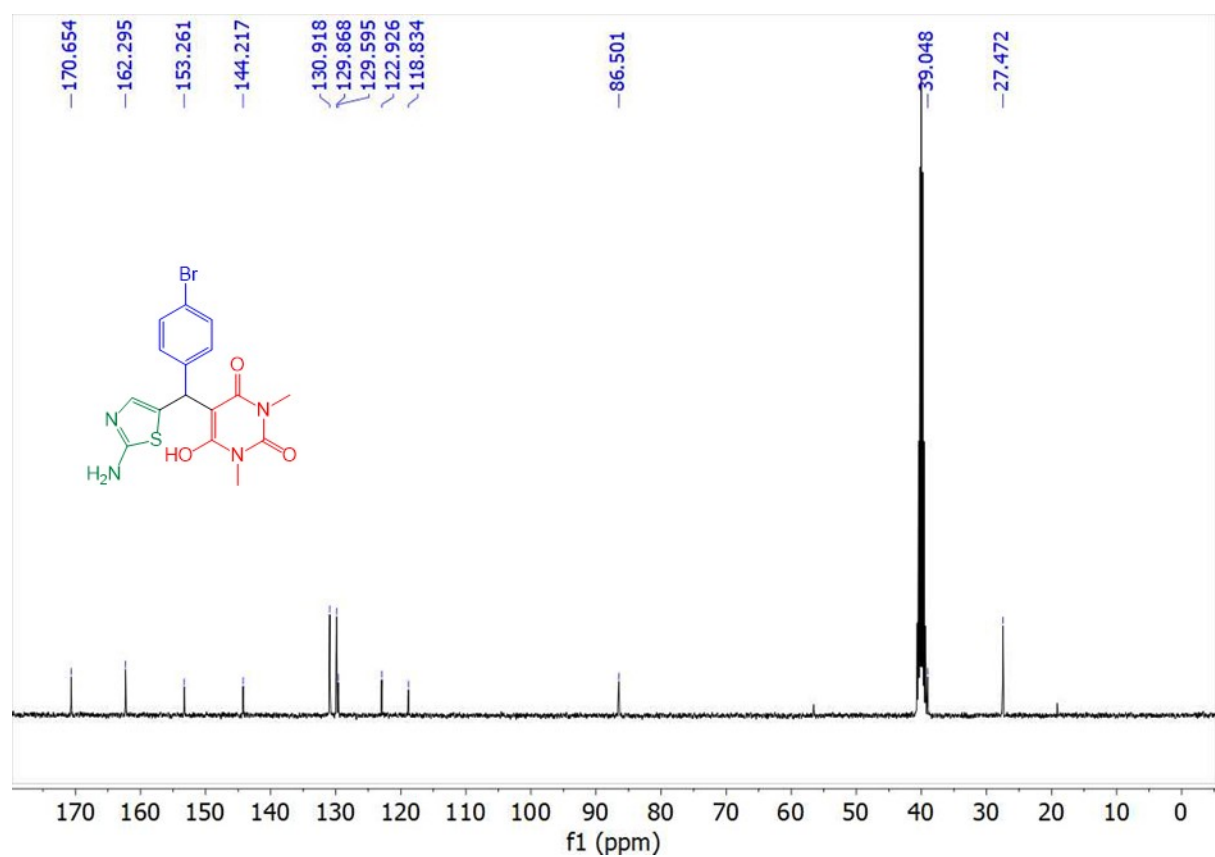


Figure S7: $^1\text{H-NMR}$ (400 MHz, DMSO- d_6) of Compound **4d**

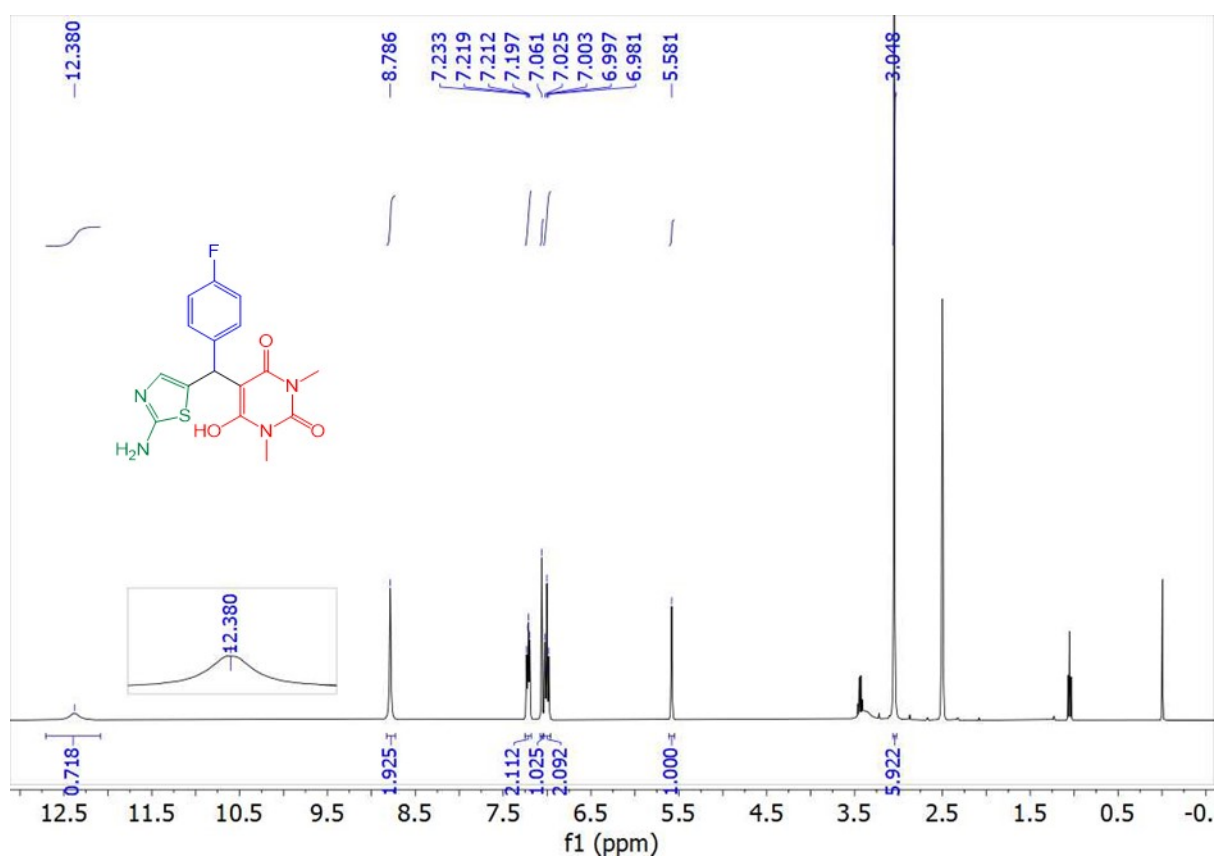


Figure S8: $^{13}\text{C-NMR}$ (101 MHz, DMSO- d_6) of Compound **4d**

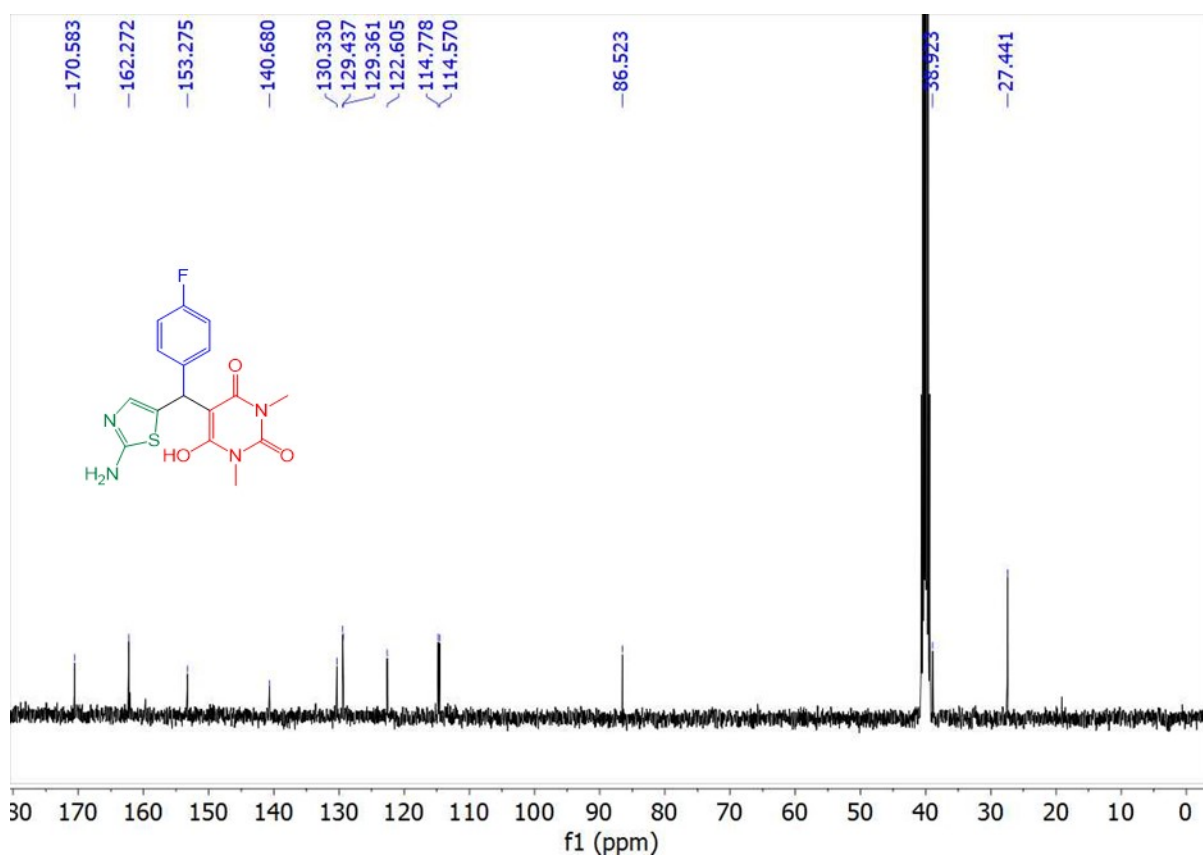


Figure S9: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4e**

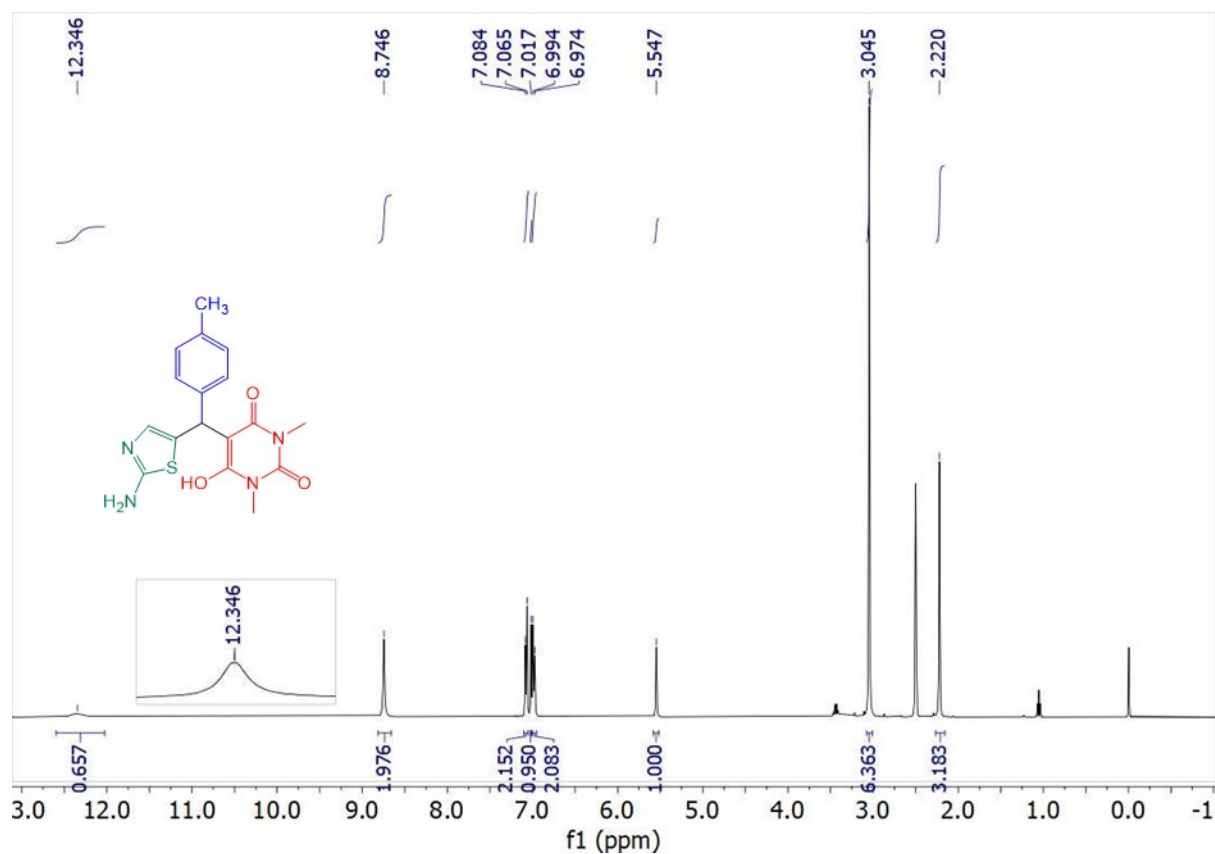


Figure S10: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4e**

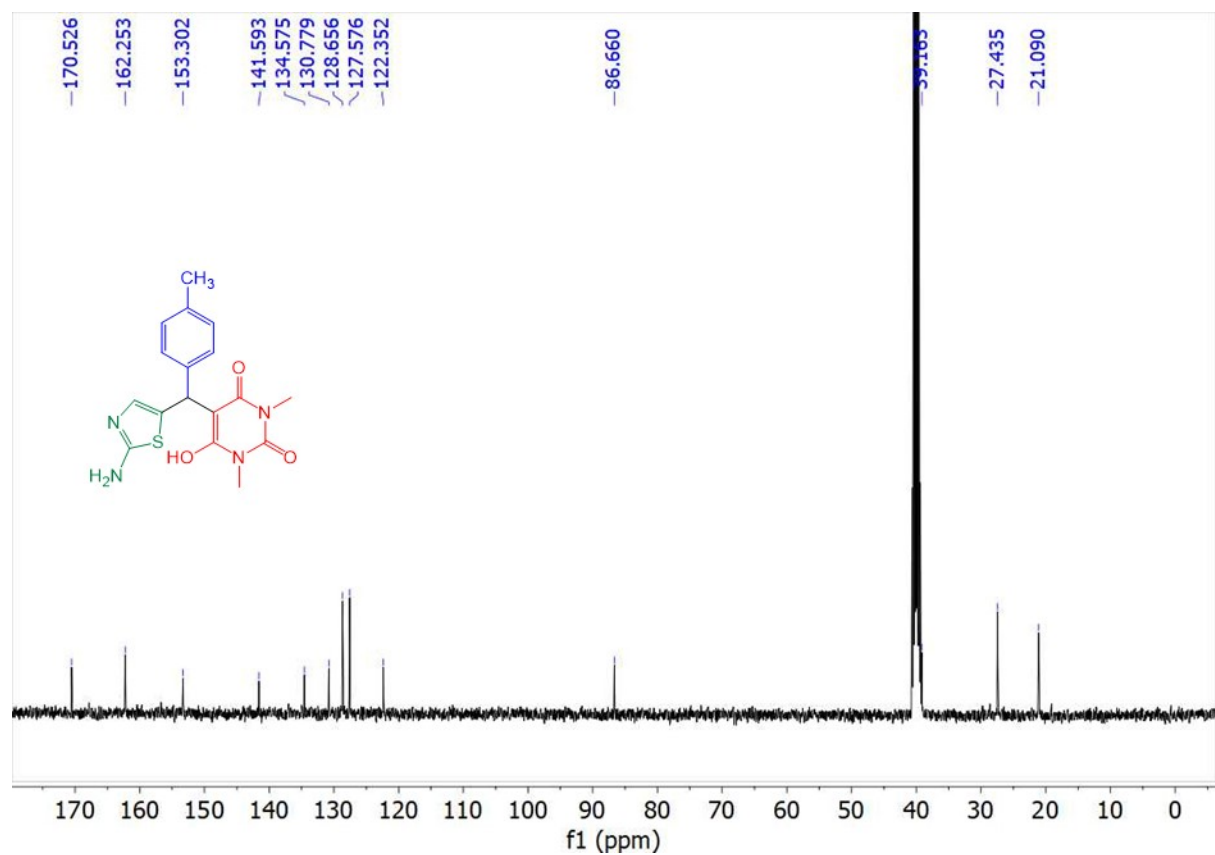


Figure S11: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4f**

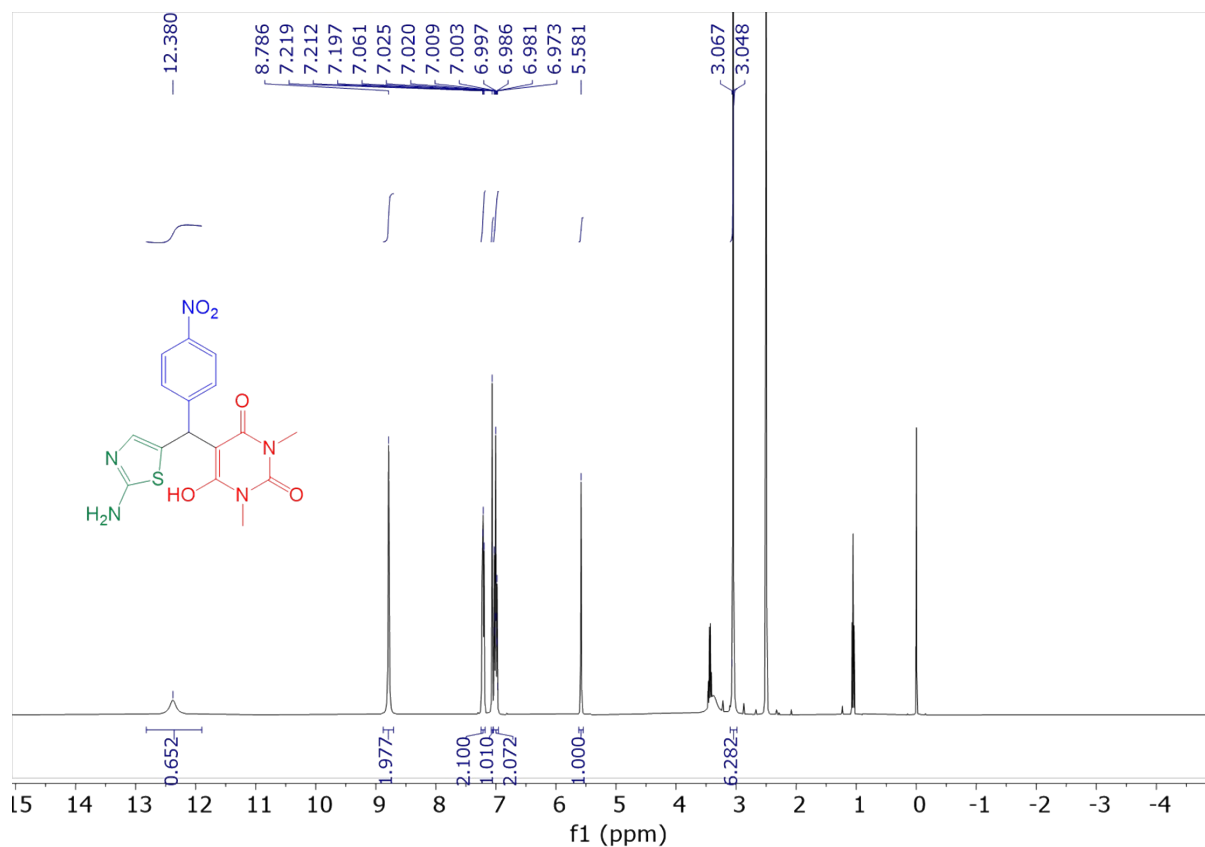


Figure S12: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4f**

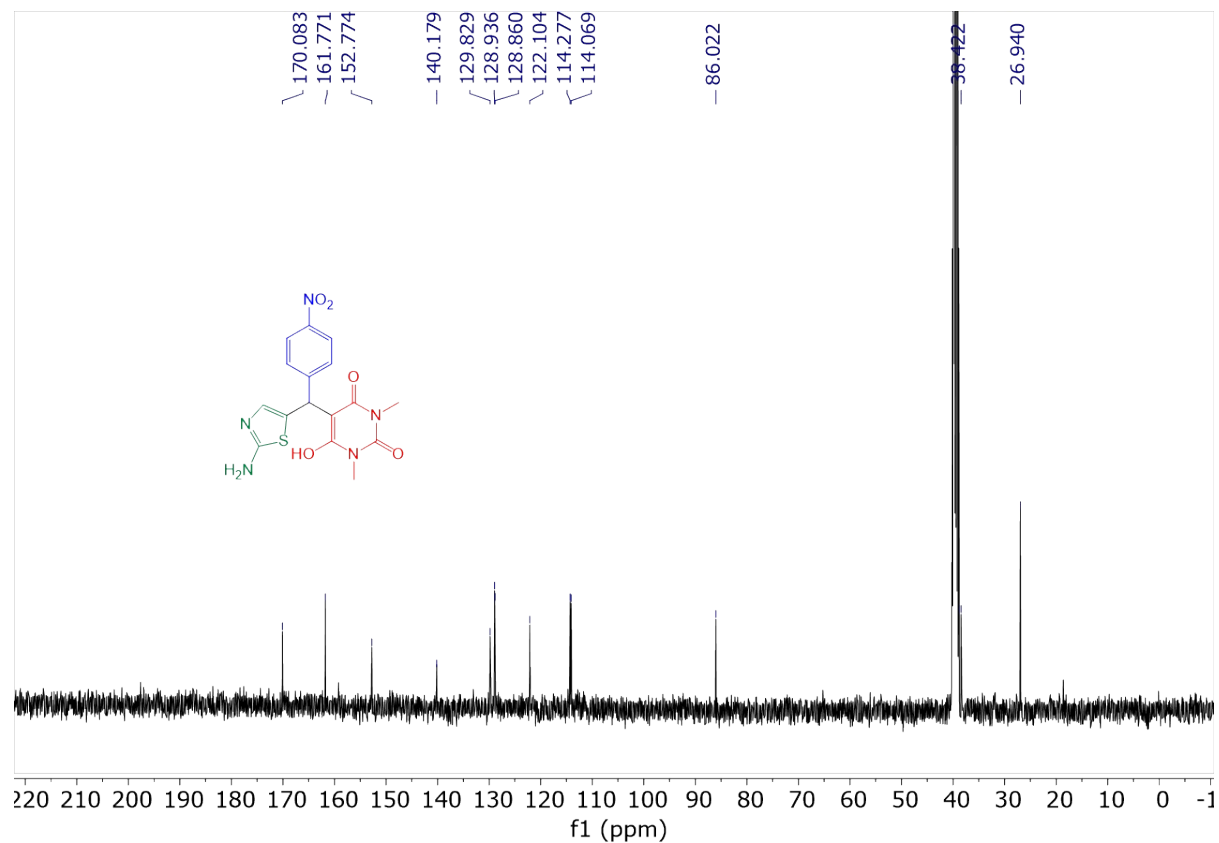


Figure S13: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4g**

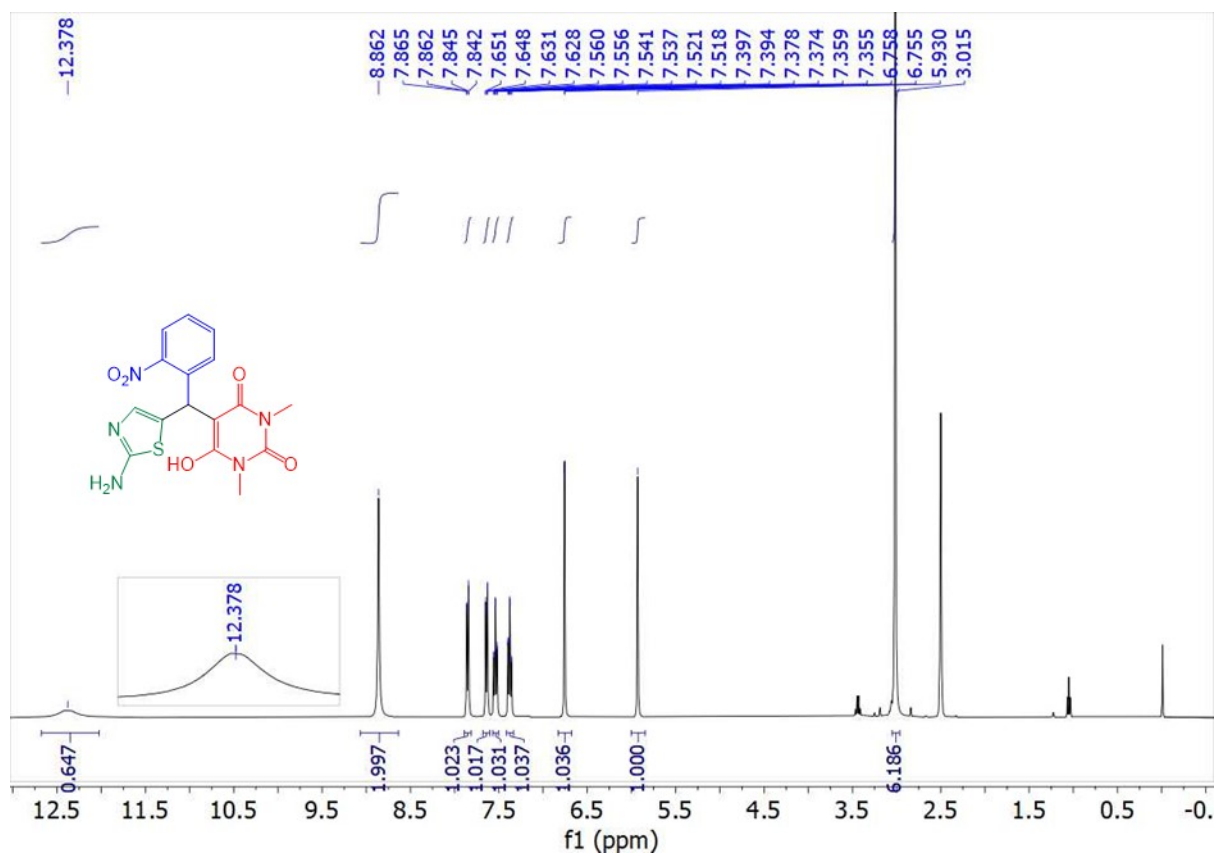


Figure S14: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4g**

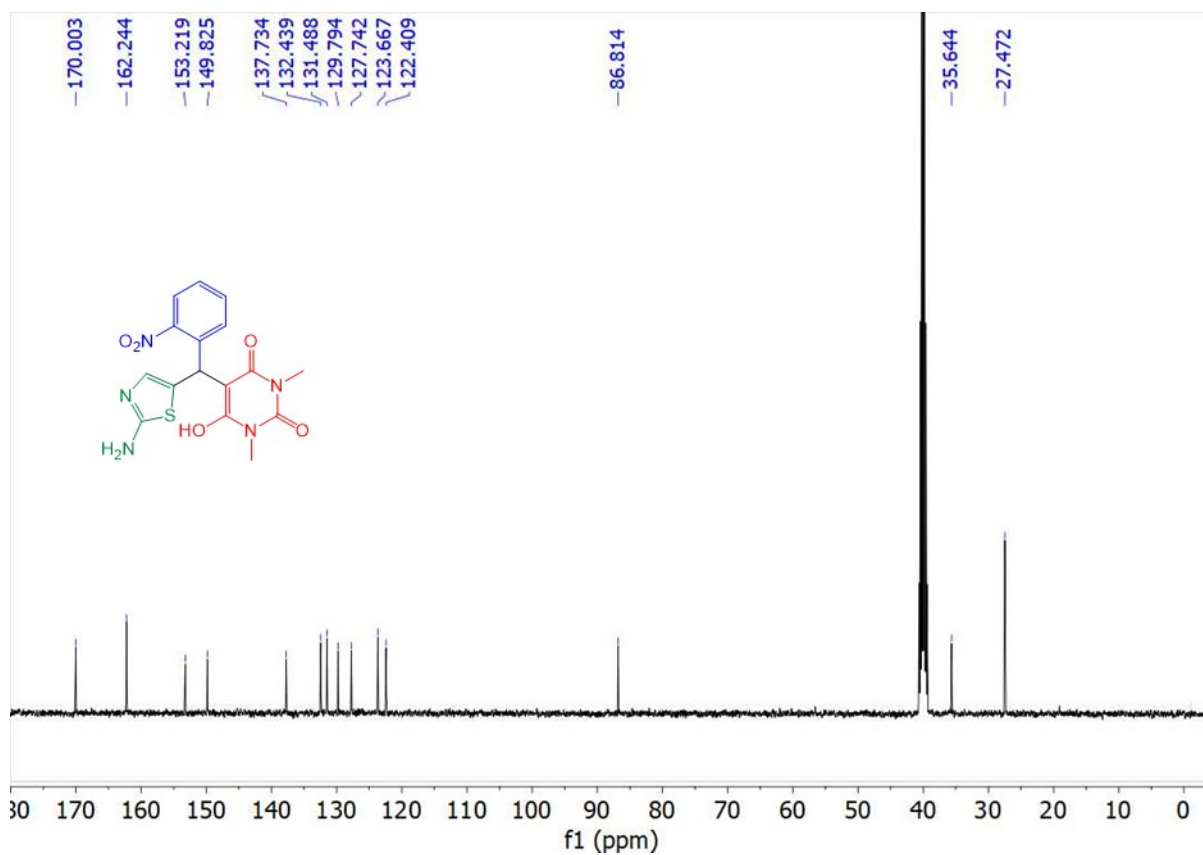


Figure S15: $^1\text{H-NMR}$ (400 MHz, DMSO- d_6) of Compound **4h**

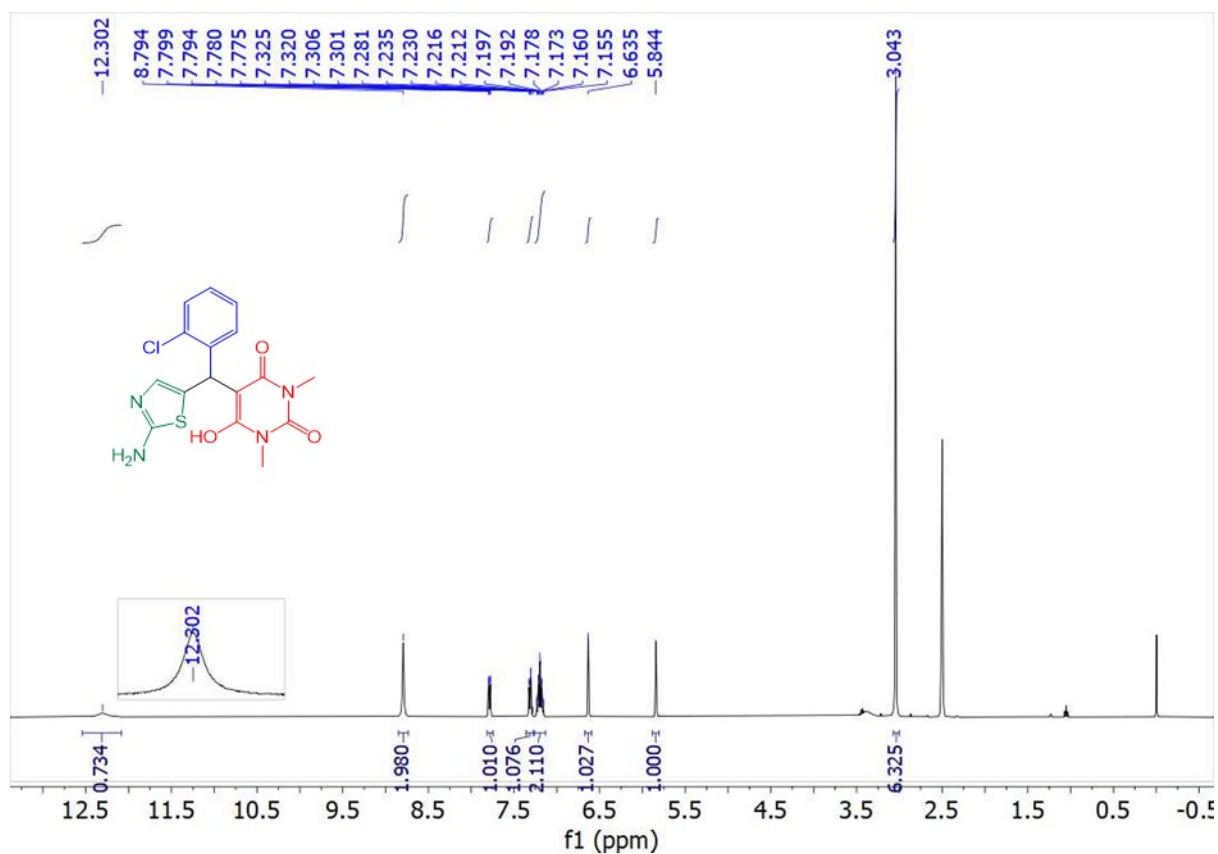


Figure S16: $^{13}\text{C-NMR}$ (101 MHz, DMSO- d_6) of Compound **4h**

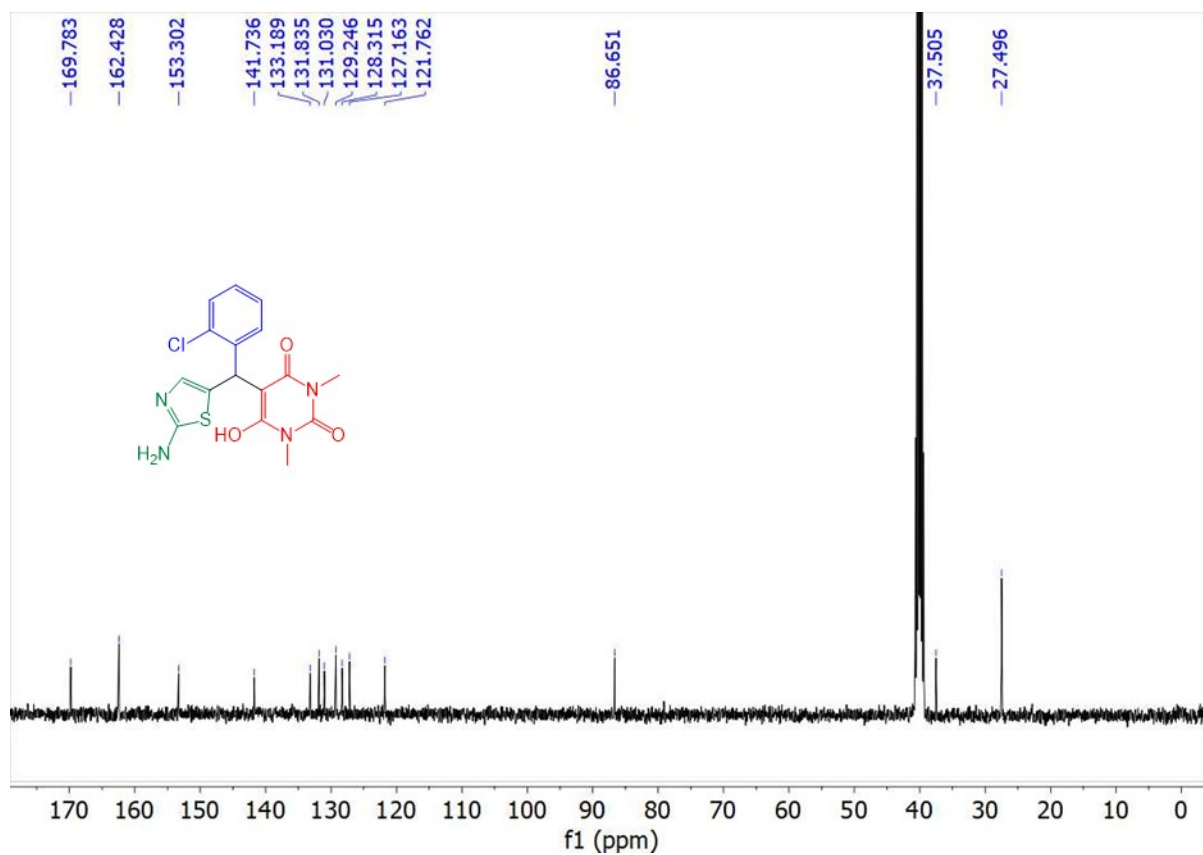


Figure S17: $^1\text{H-NMR}$ (400 MHz, DMSO- d_6) of Compound **4i**

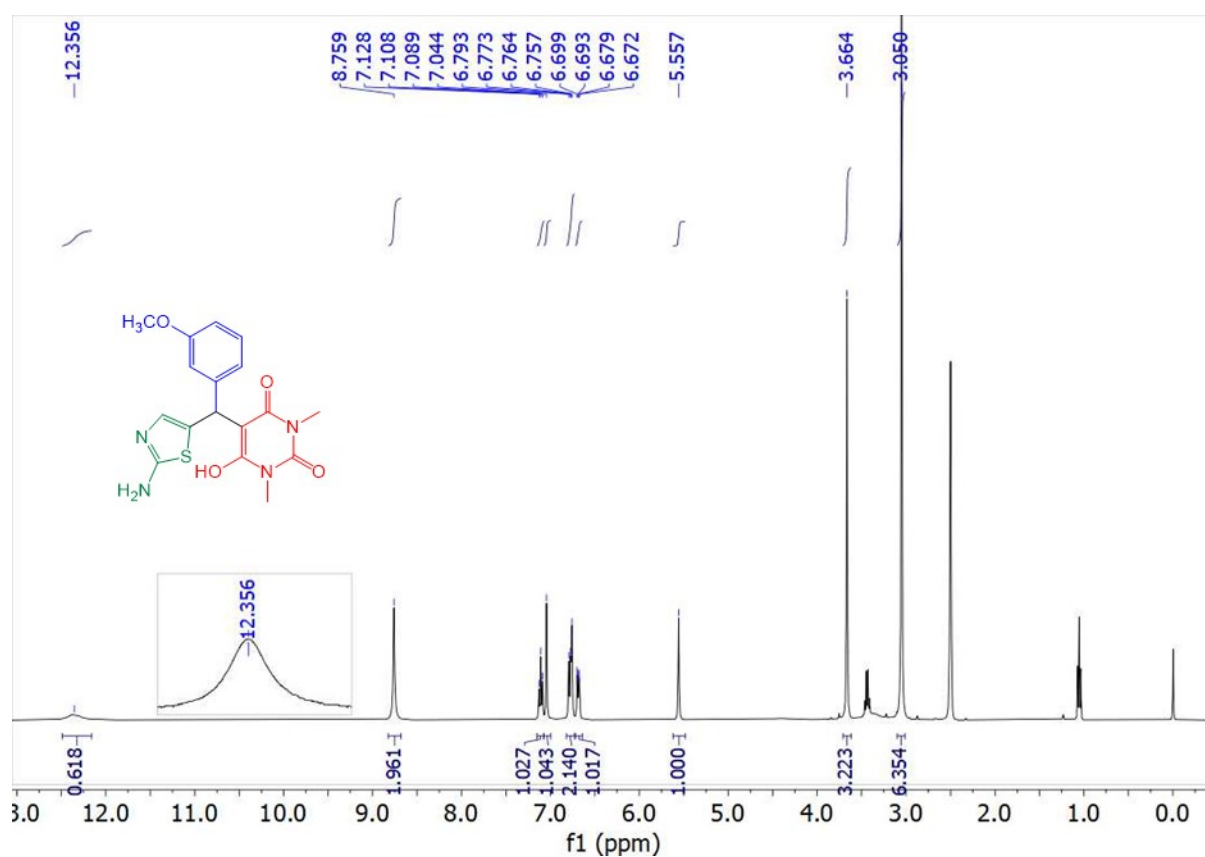


Figure S18: $^{13}\text{C-NMR}$ (101 MHz, DMSO- d_6) of Compound **4i**

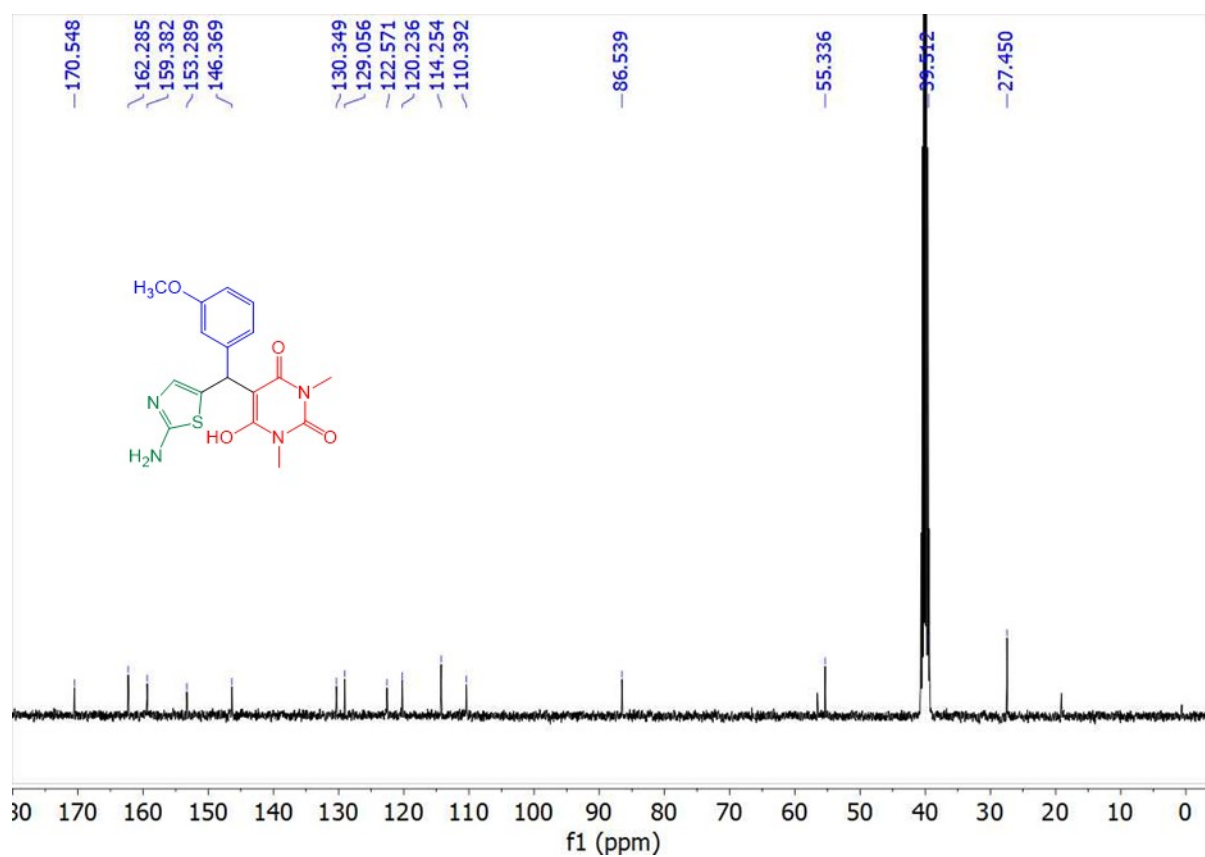


Figure S19: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4j**

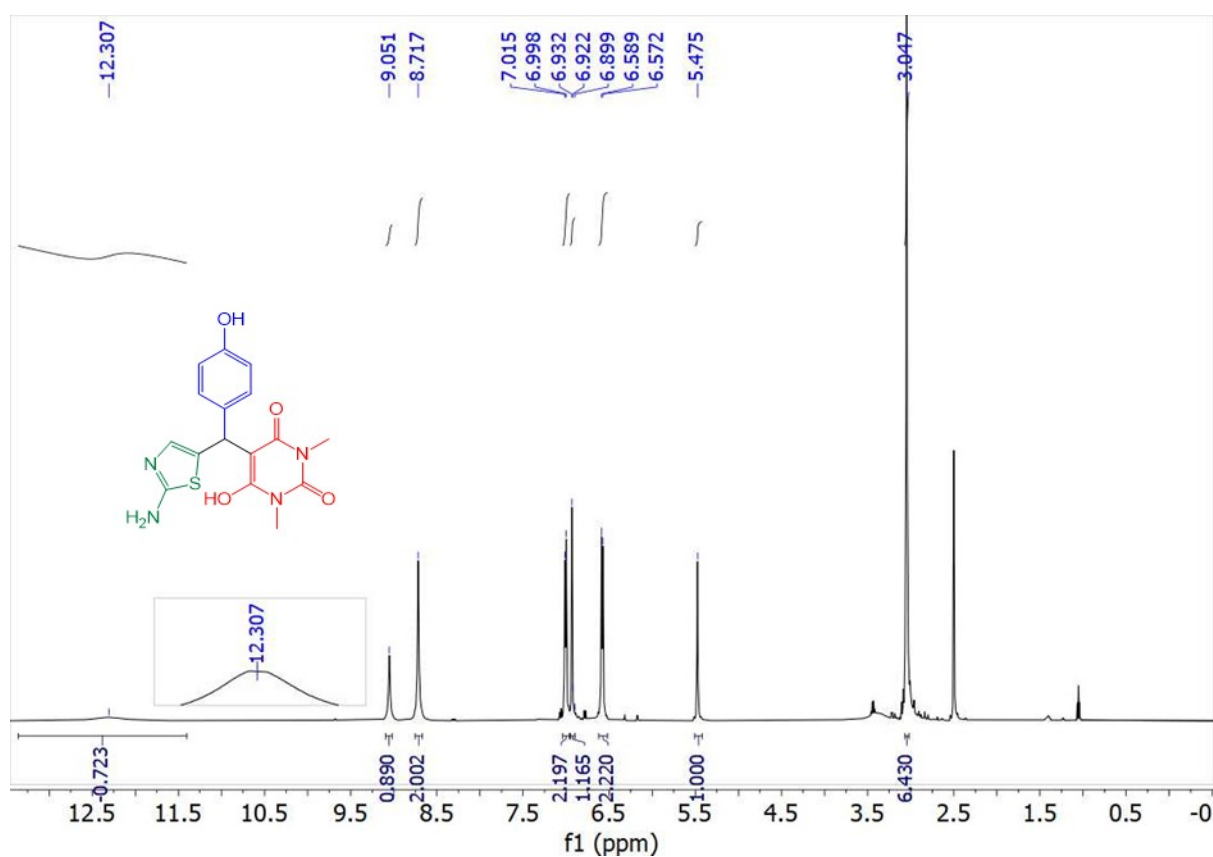


Figure S20: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4j**

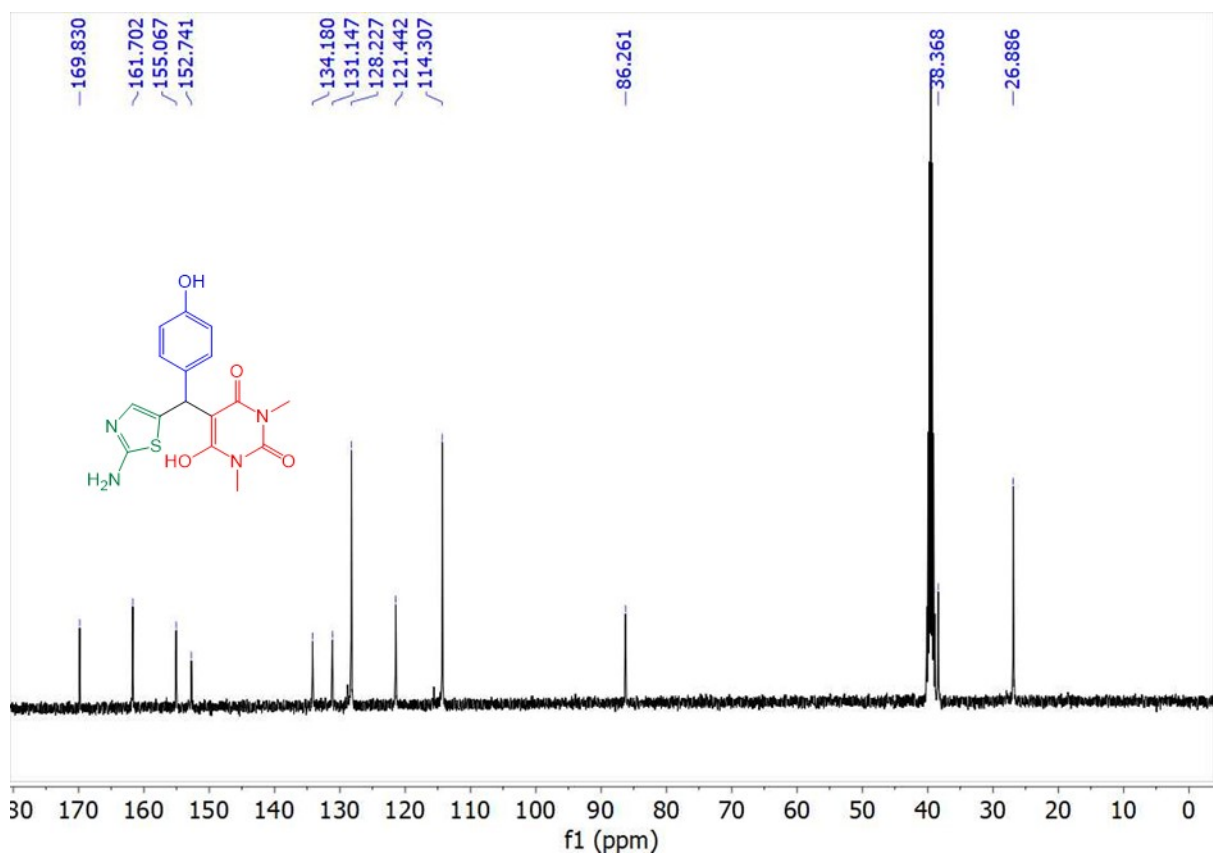


Figure S21: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4k**

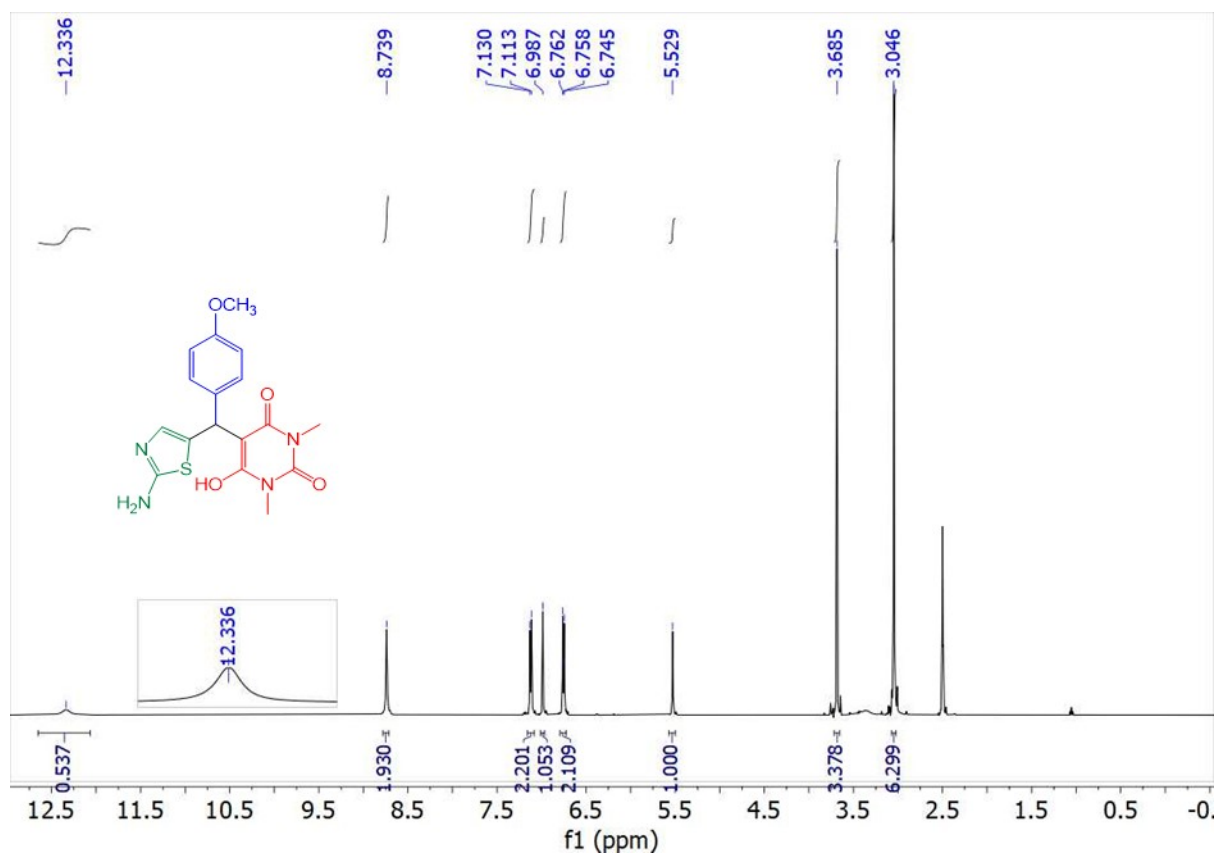


Figure S22: $^{13}\text{C-NMR}$ (101 MHz, DMSO-d_6) of Compound **4k**

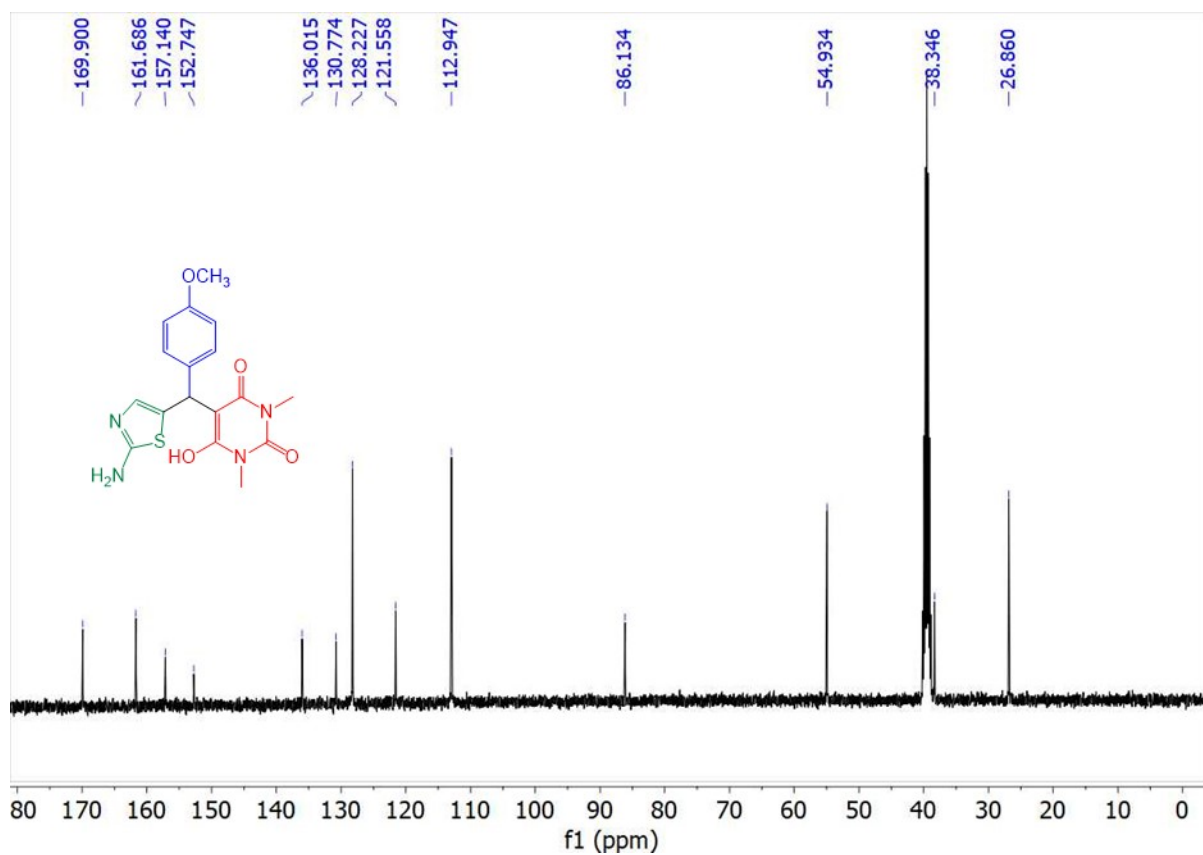


Figure S23: $^1\text{H-NMR}$ (400 MHz, DMSO- d_6) of Compound **4I**

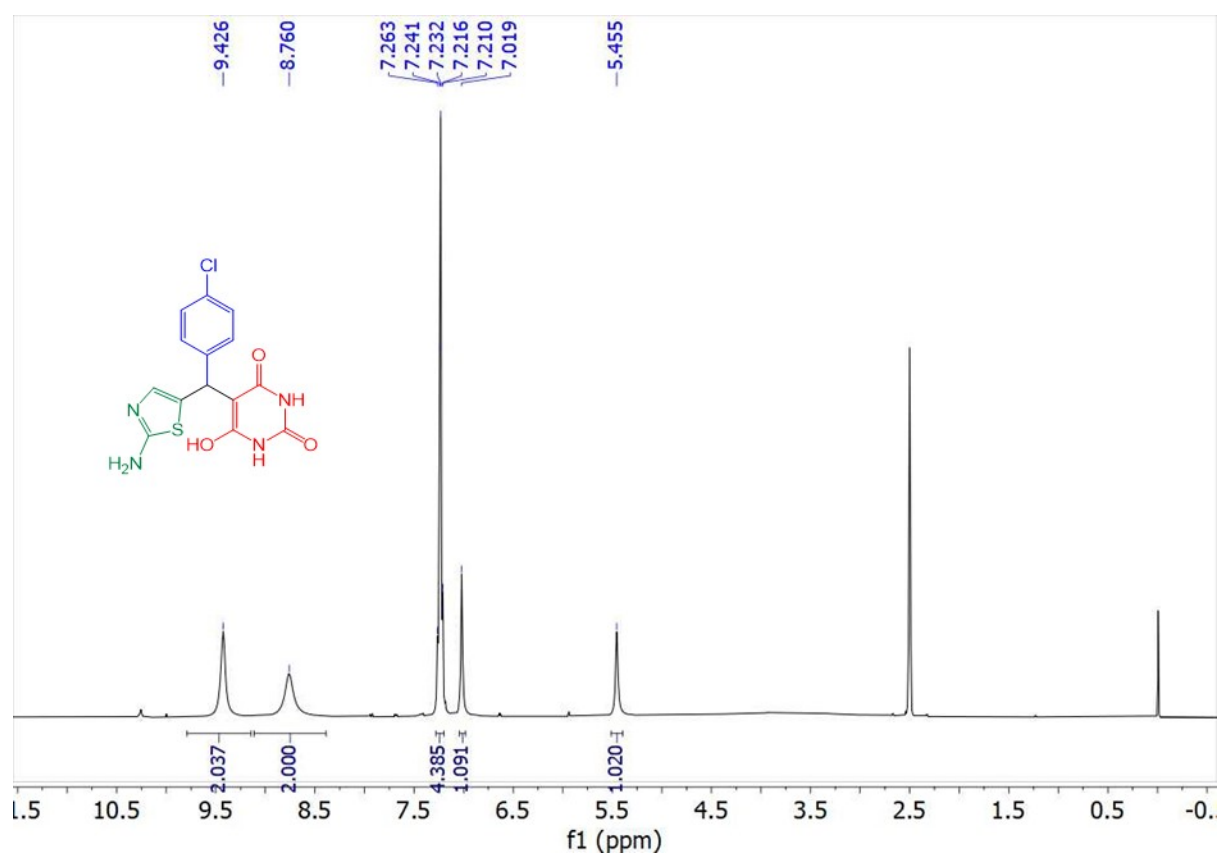


Figure S24: $^{13}\text{C-NMR}$ (126 MHz, DMSO- d_6) of Compound **4I**.

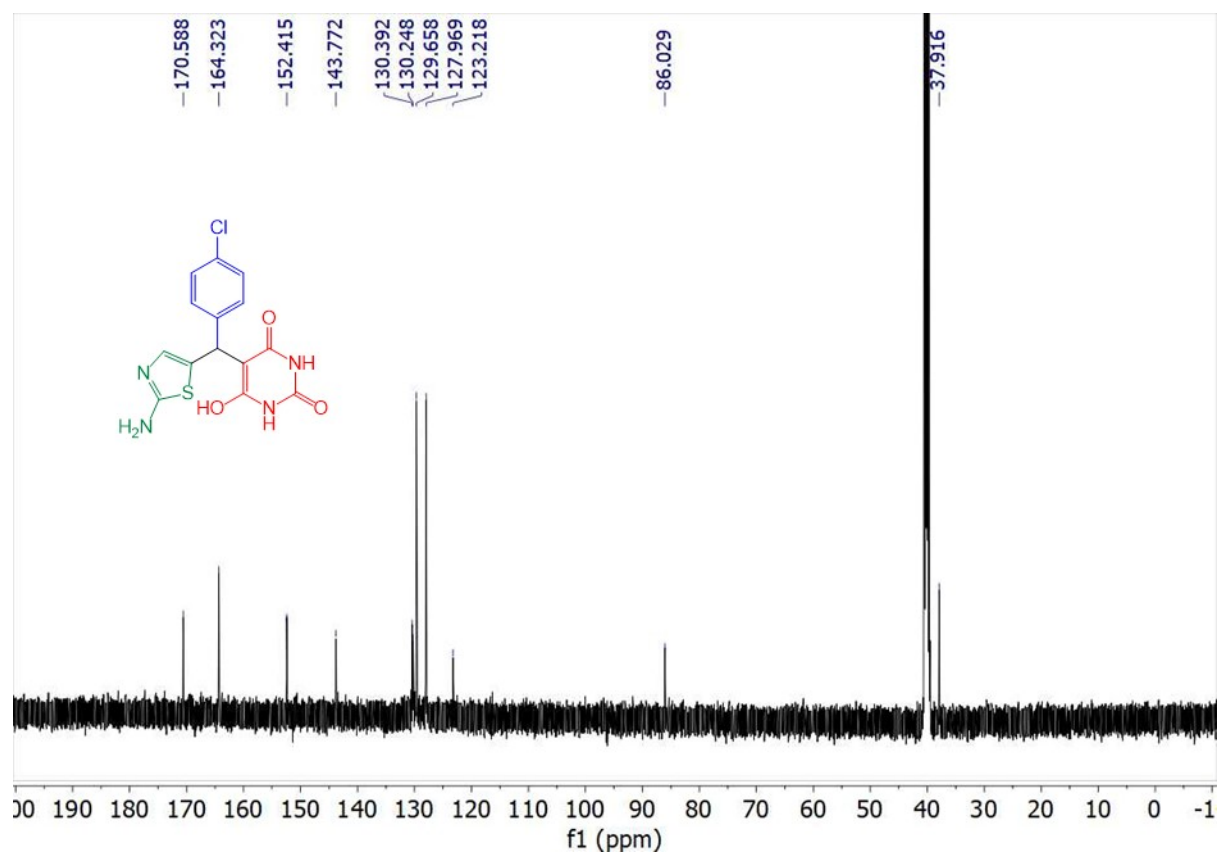


Figure S25: ¹H-NMR (400 MHz, DMSO-d₆) of Compound **4m**

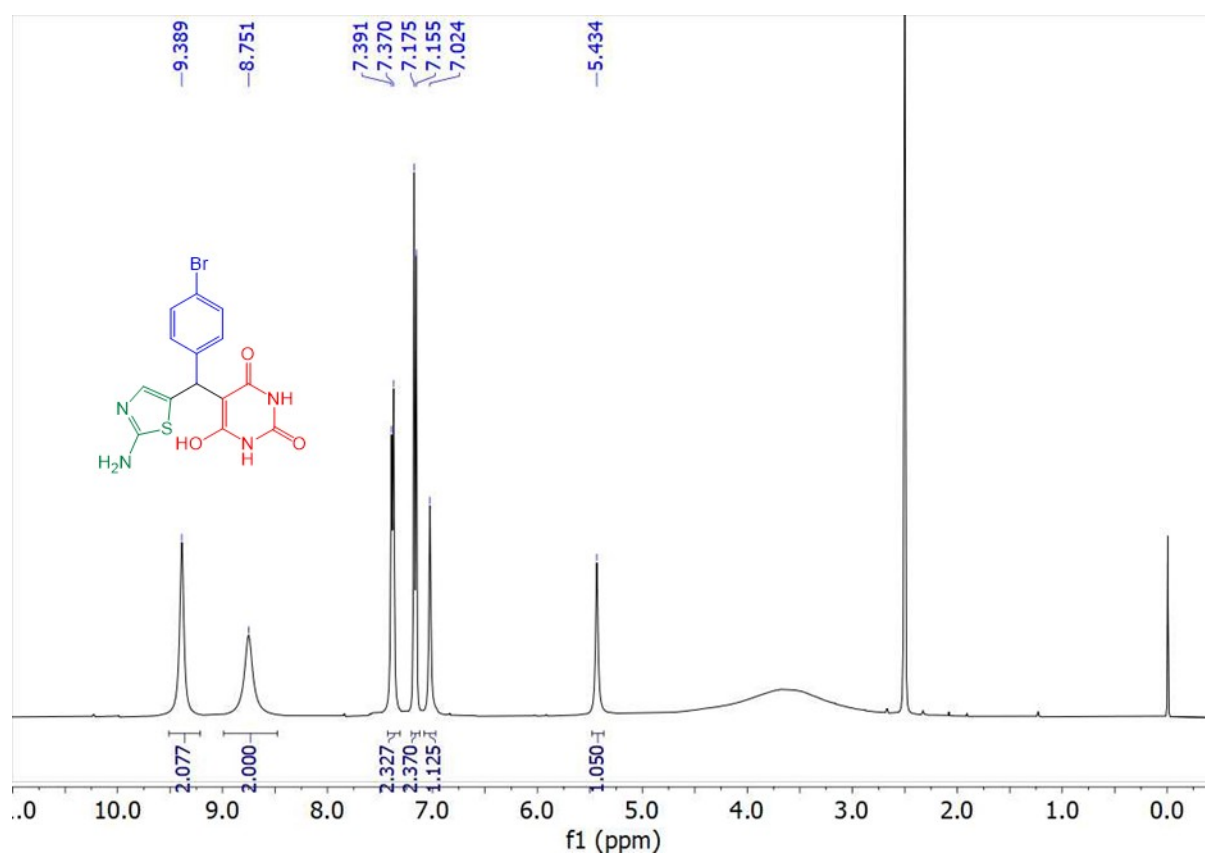


Figure S26: ¹³C-NMR (126 MHz, DMSO-d₆) of Compound **4m**

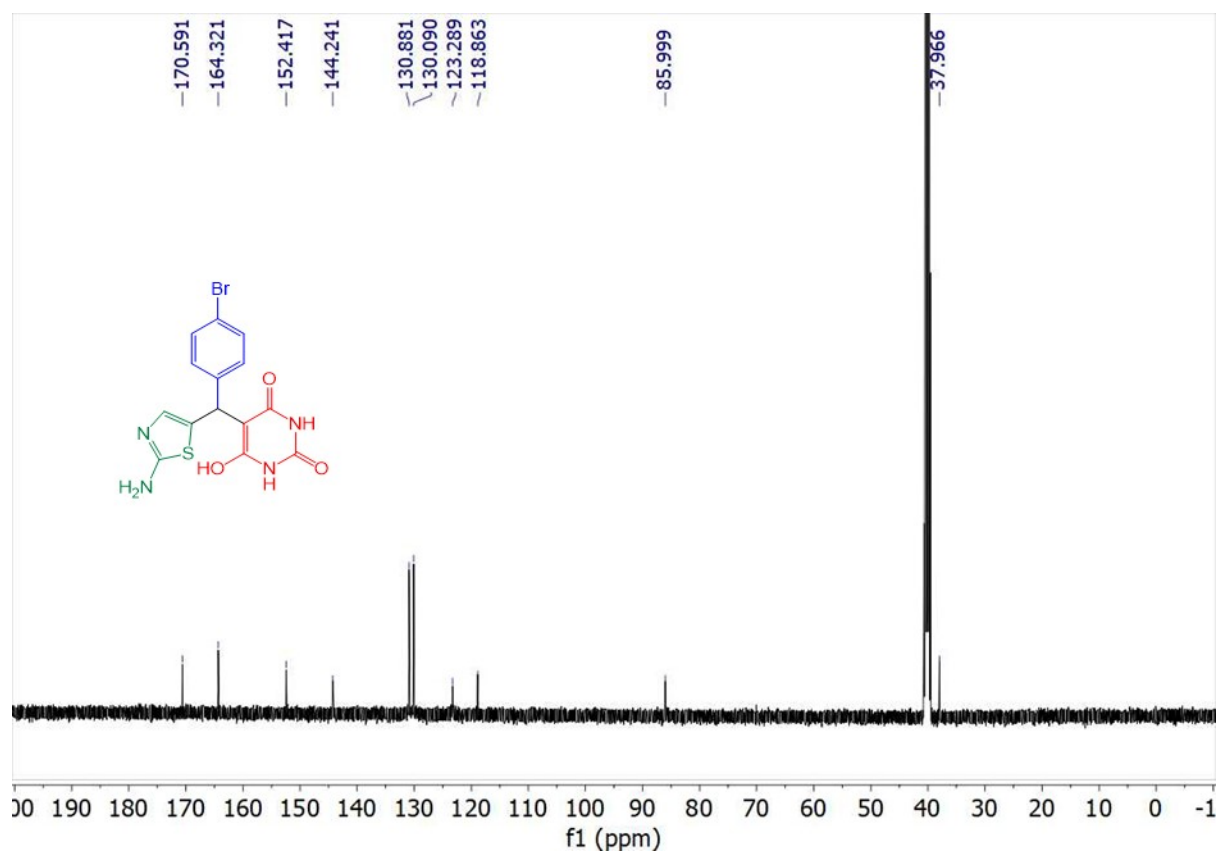


Figure S27: $^1\text{H-NMR}$ (400 MHz, DMSO- d_6) of Compound **4n**

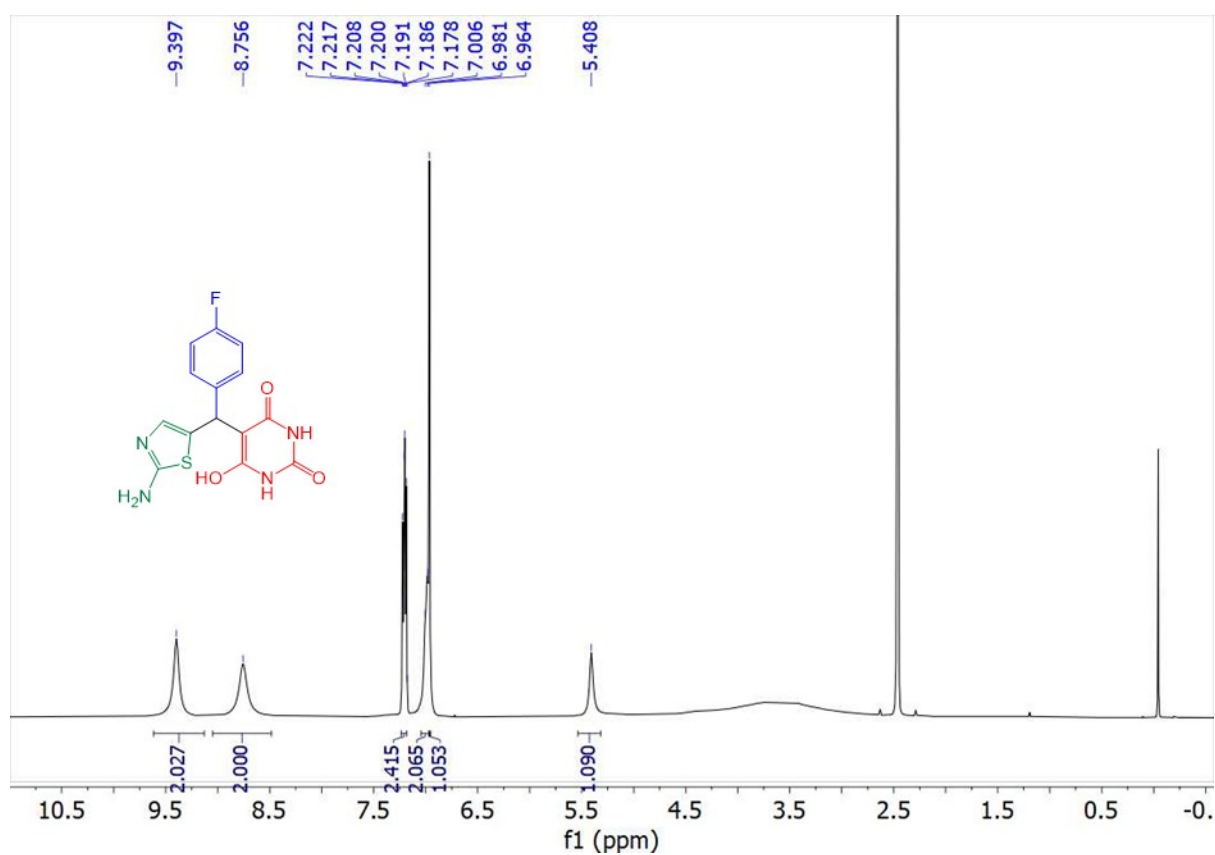


Figure S28: $^{13}\text{C-NMR}$ (126 MHz, DMSO- d_6) of Compound **4n**

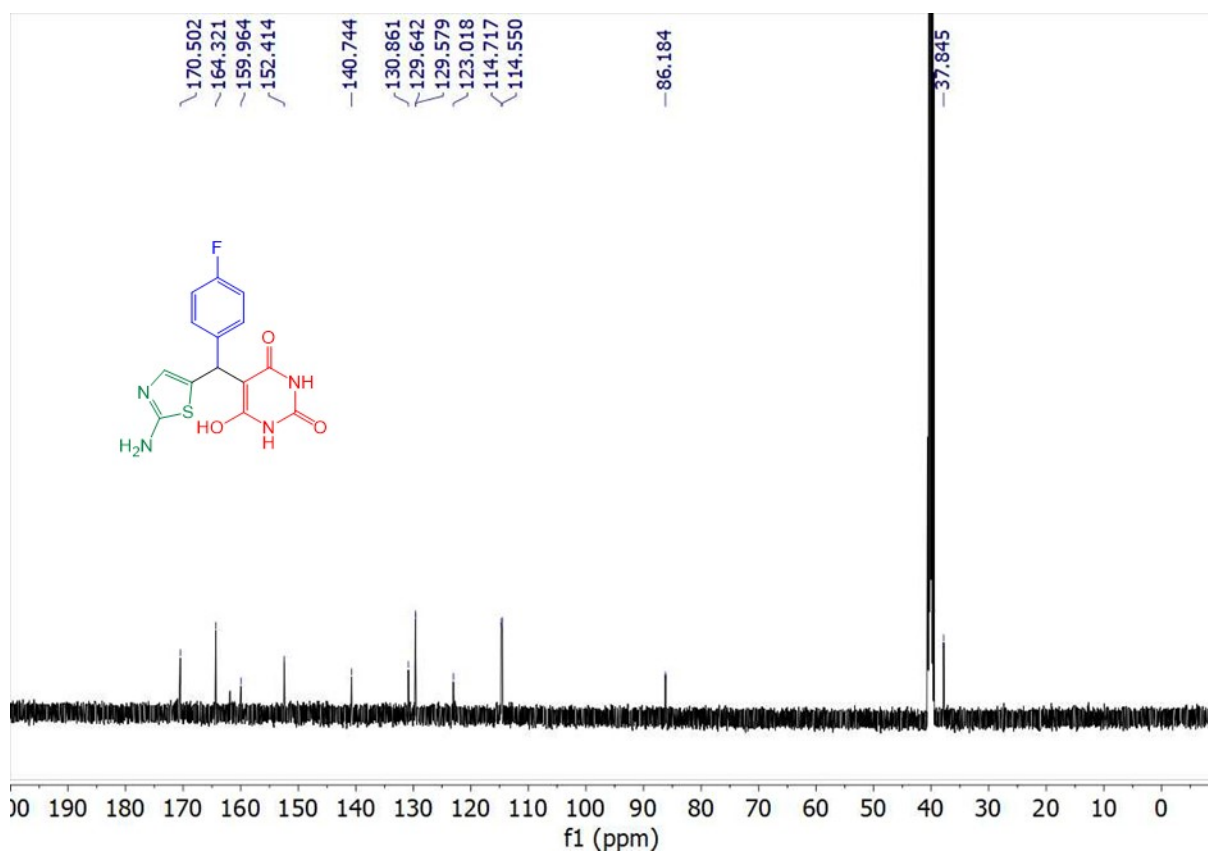


Figure S29: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4o**

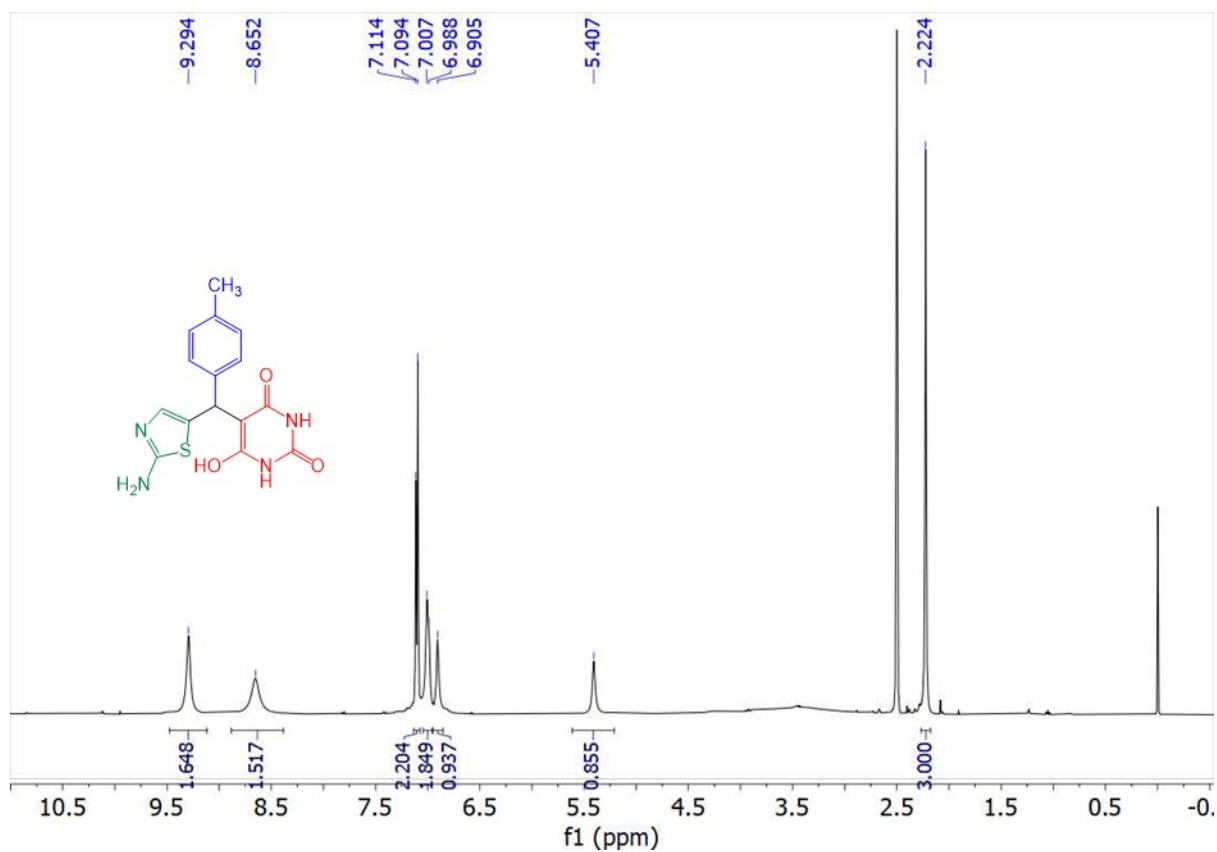


Figure S30: $^{13}\text{C-NMR}$ (126 MHz, DMSO-d_6) of Compound **4o**

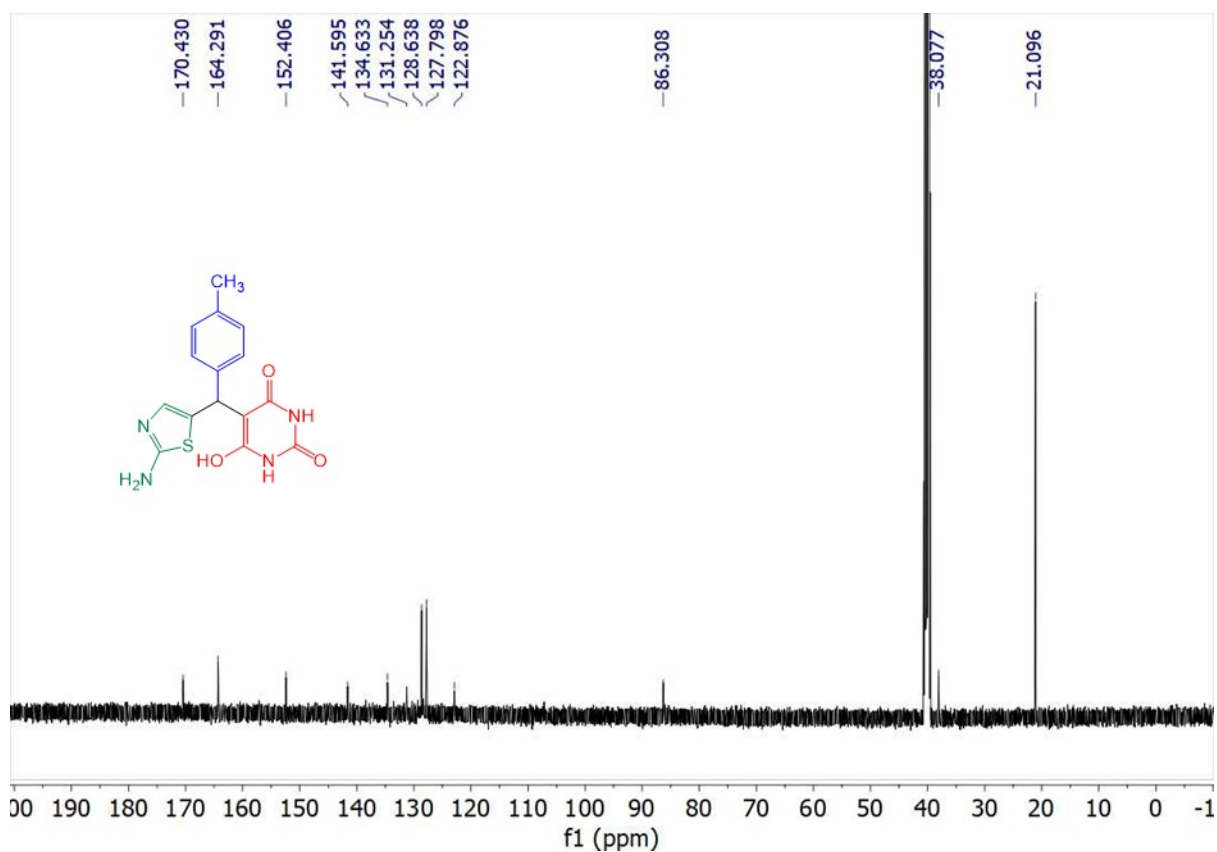


Figure S31: $^1\text{H-NMR}$ (400 MHz, DMSO-d_6) of Compound **4p**

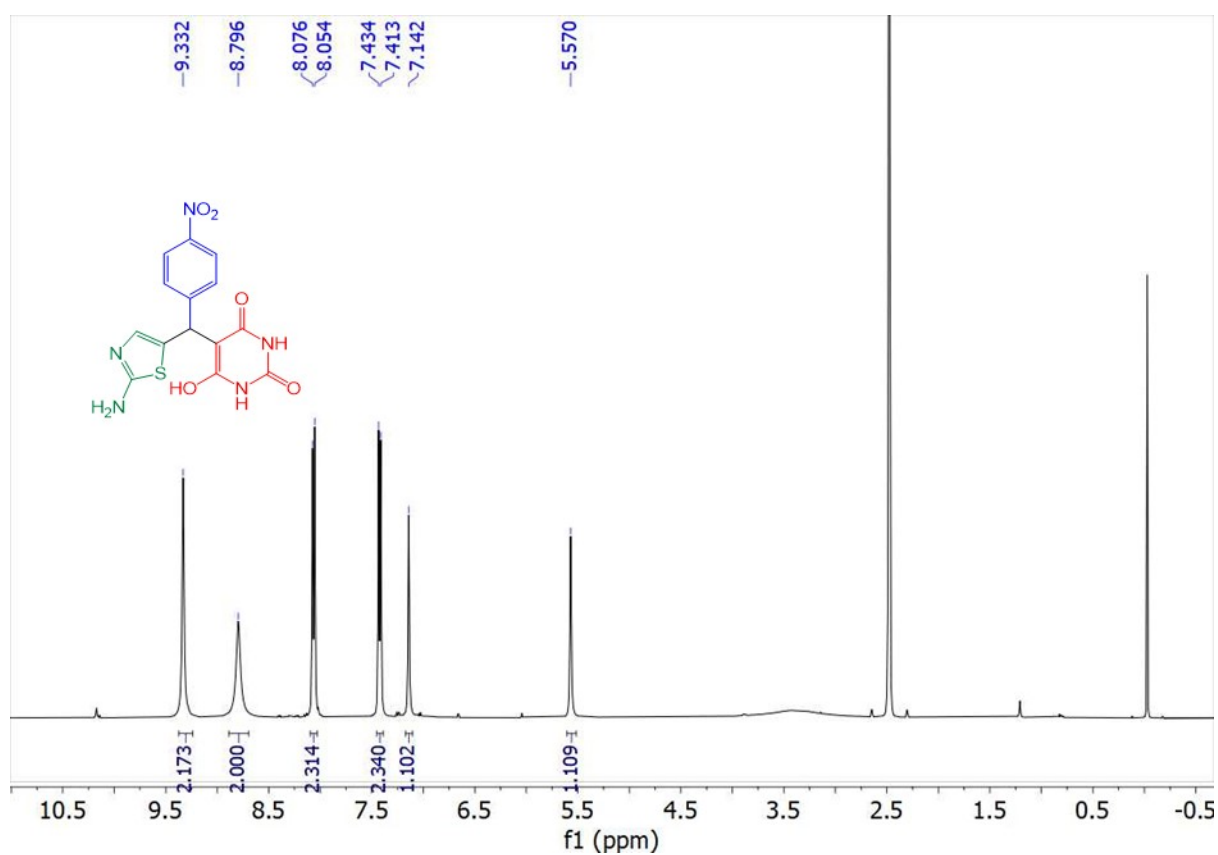


Figure S32: $^{13}\text{C-NMR}$ (126 MHz, DMSO-d_6) of Compound **4p**

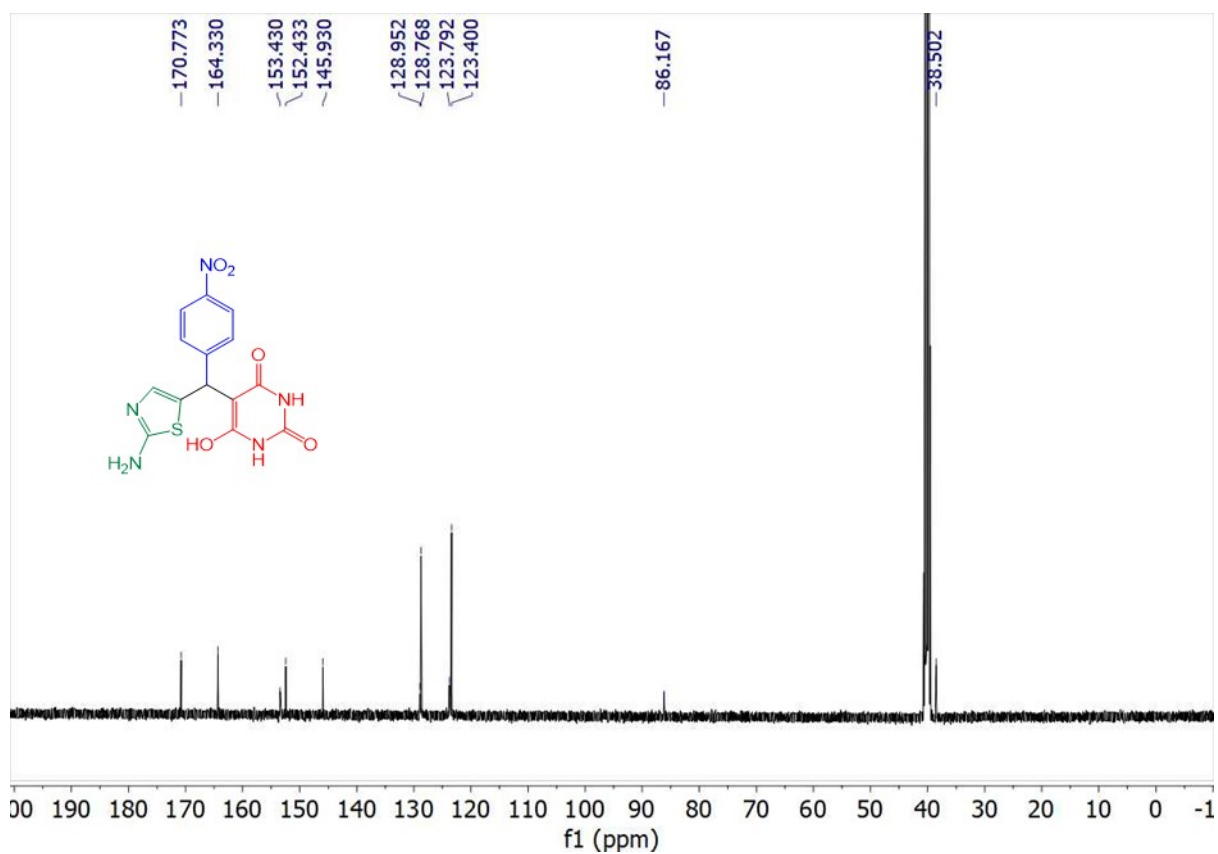


Figure S33: $^1\text{H-NMR}$ (500 MHz, DMSO-d_6) of Compound **4q**

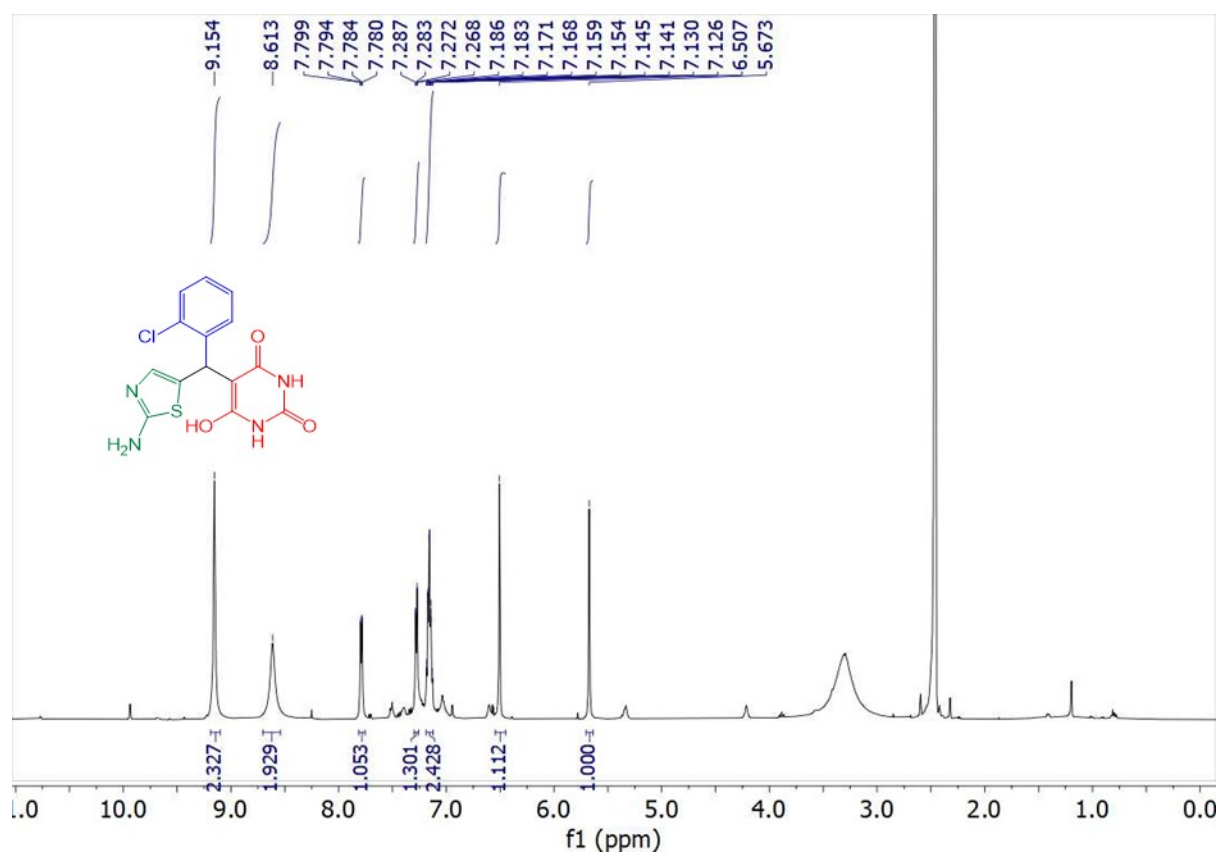


Figure S34: $^{13}\text{C-NMR}$ (126 MHz, DMSO-d_6) of Compound **4q**

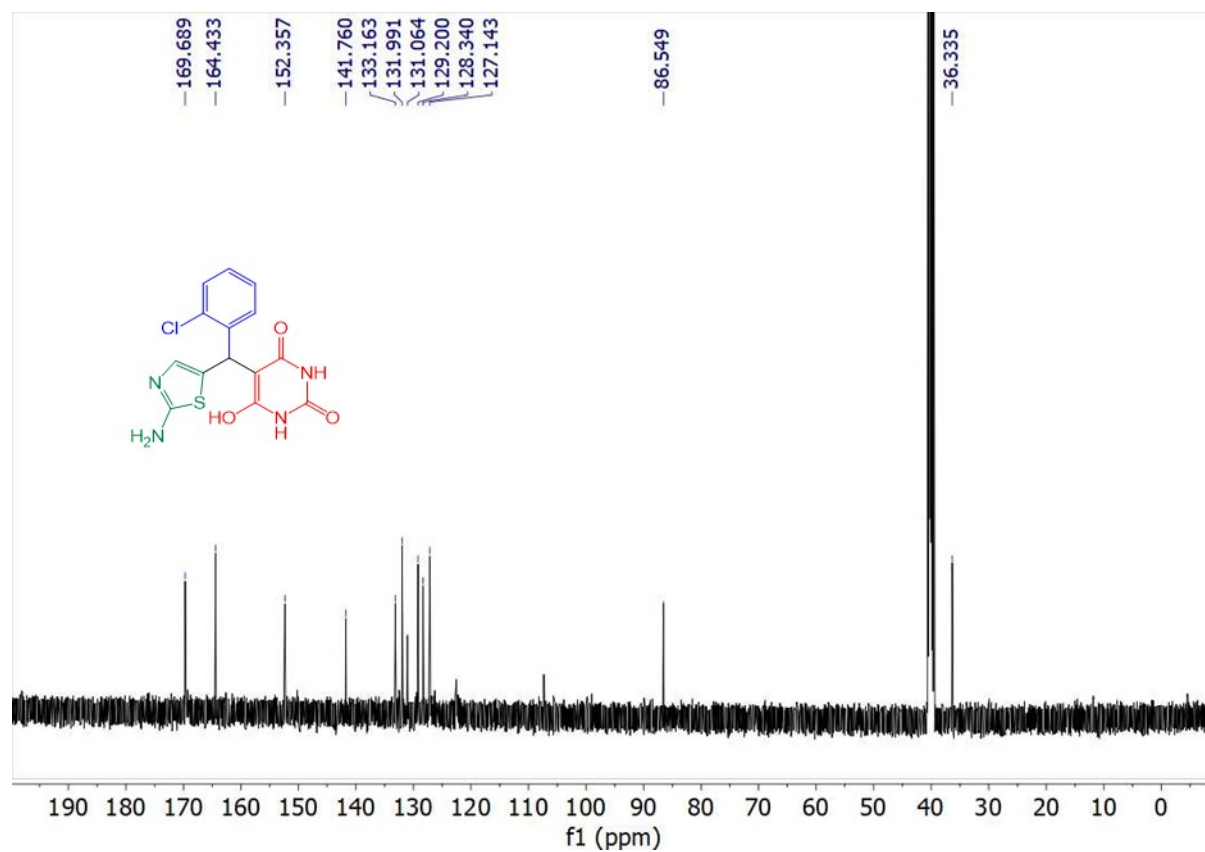


Figure S35: $^1\text{H-NMR}$ (400 MHz, DMSO- d_6) of Compound **4r**

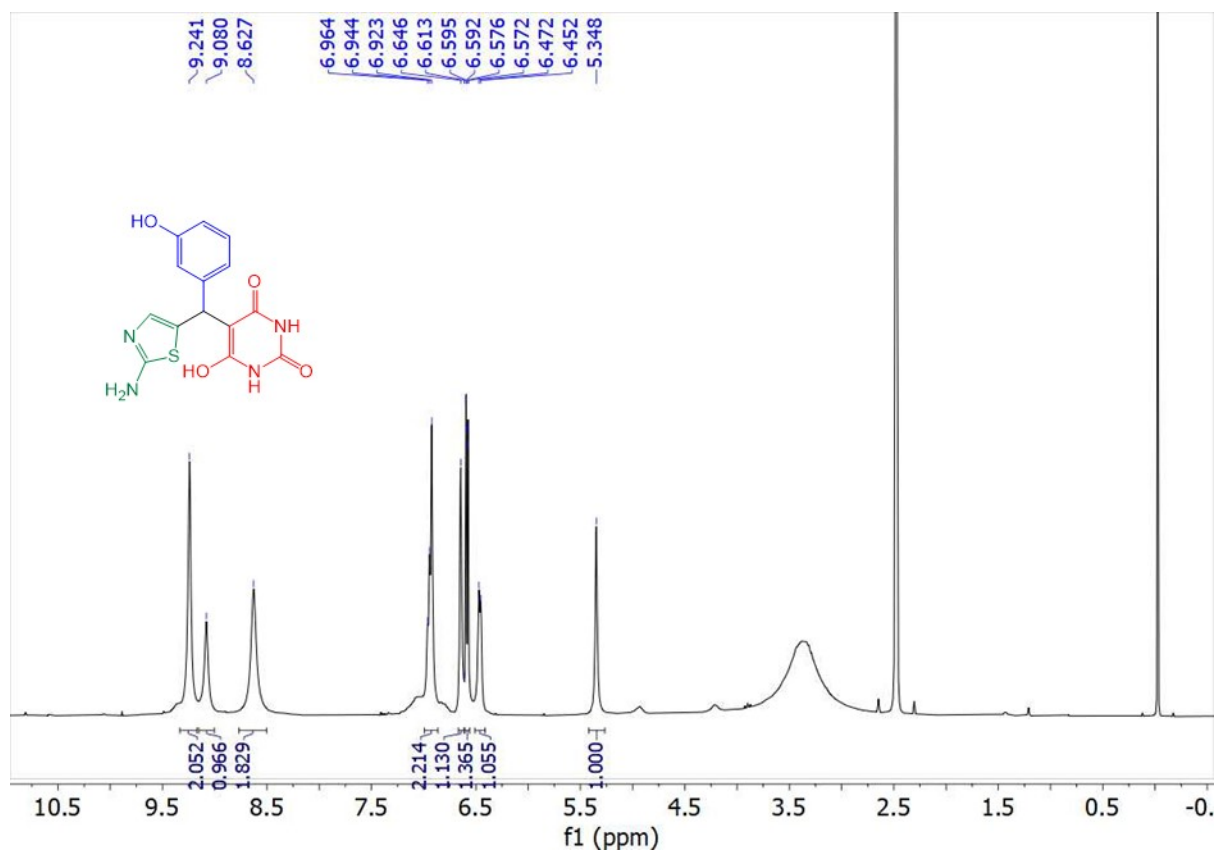


Figure S36: $^{13}\text{C-NMR}$ (126 MHz, DMSO- d_6) of Compound **4r**

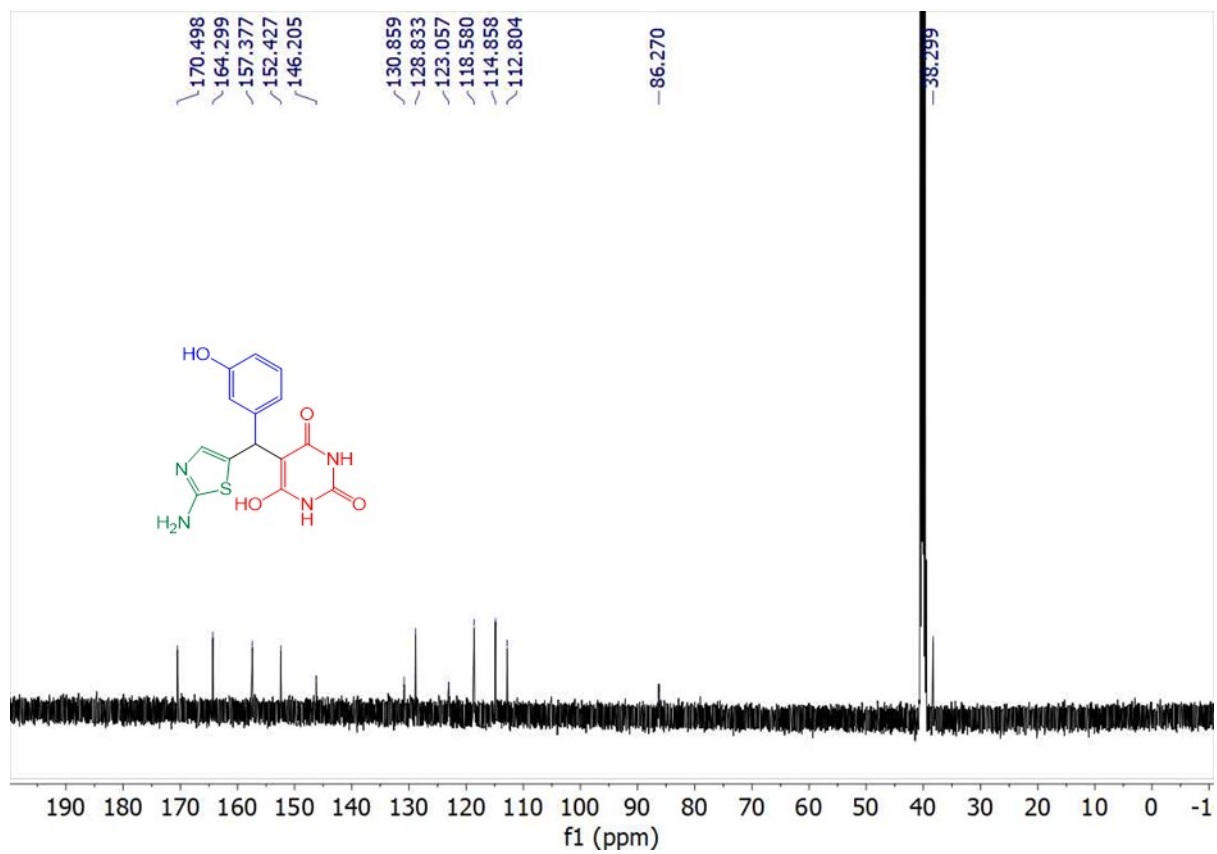


Figure S37: HRMS of Compound **4a**

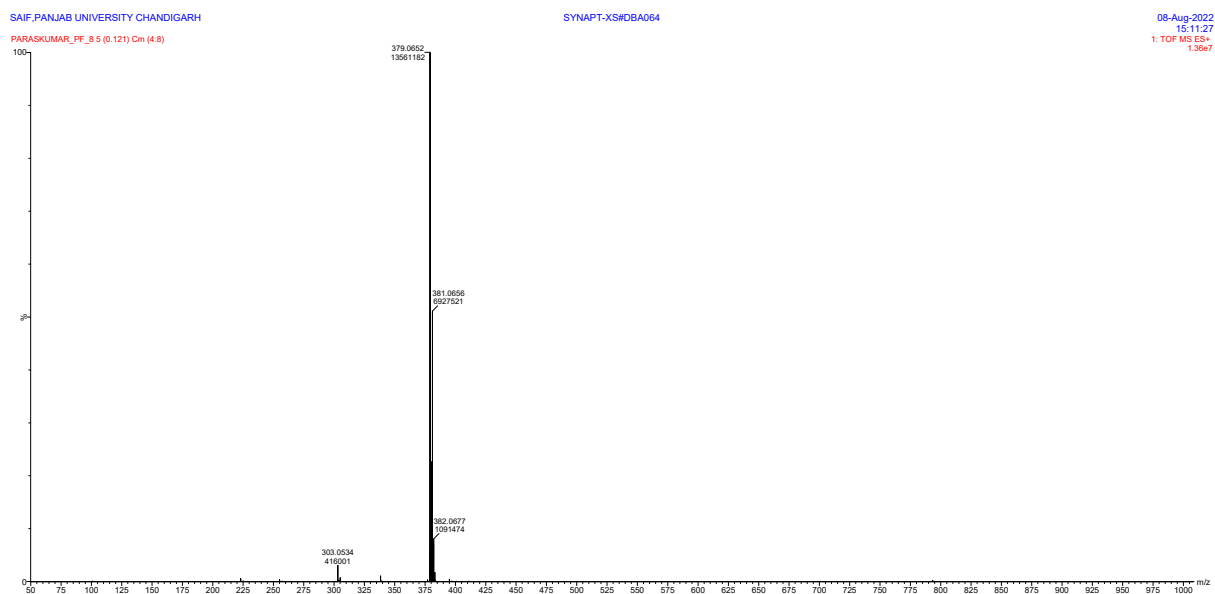


Figure S38: HRMS of Compound **4b**

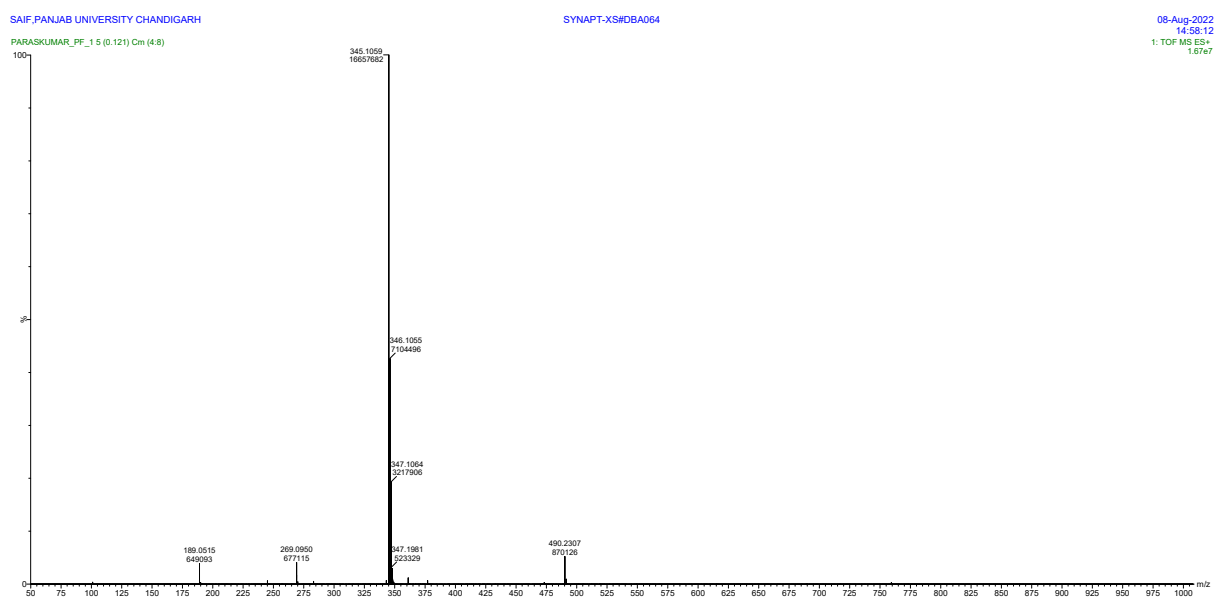


Figure S39: HRMS of Compound **4c**

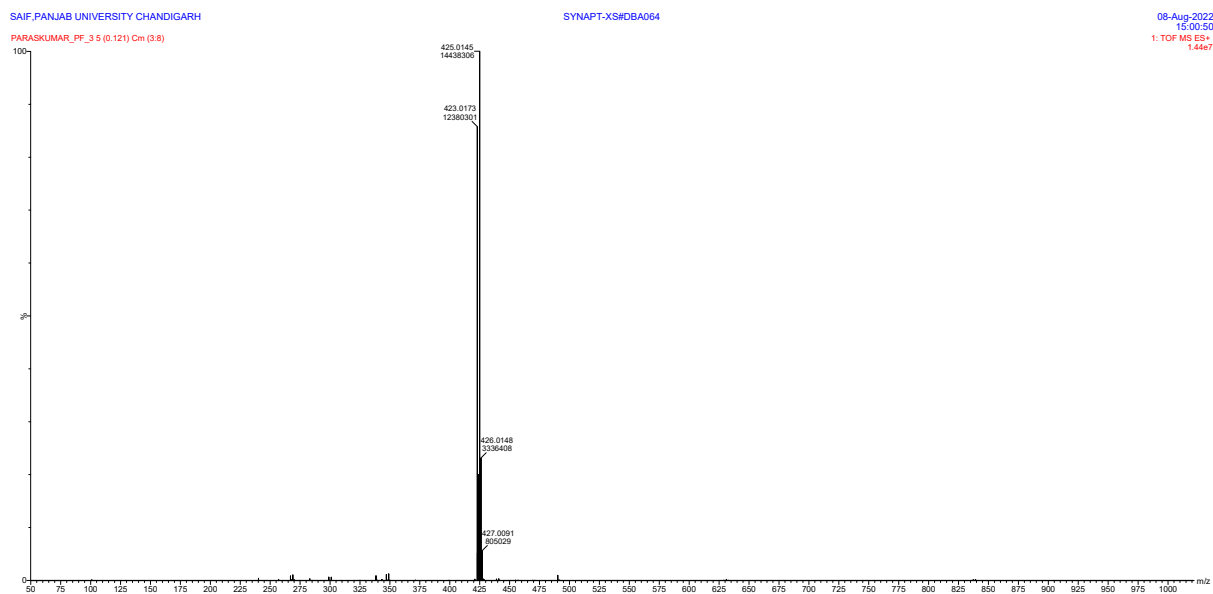


Figure S40: HRMS of Compound **4d**

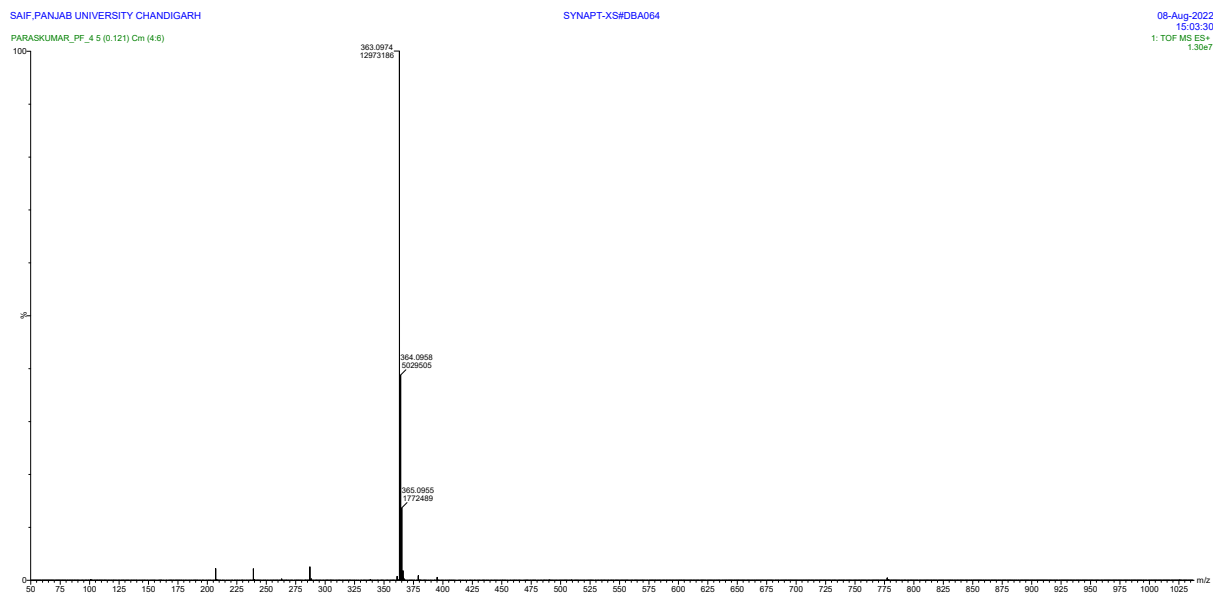


Figure S41: HRMS of Compound **4e**

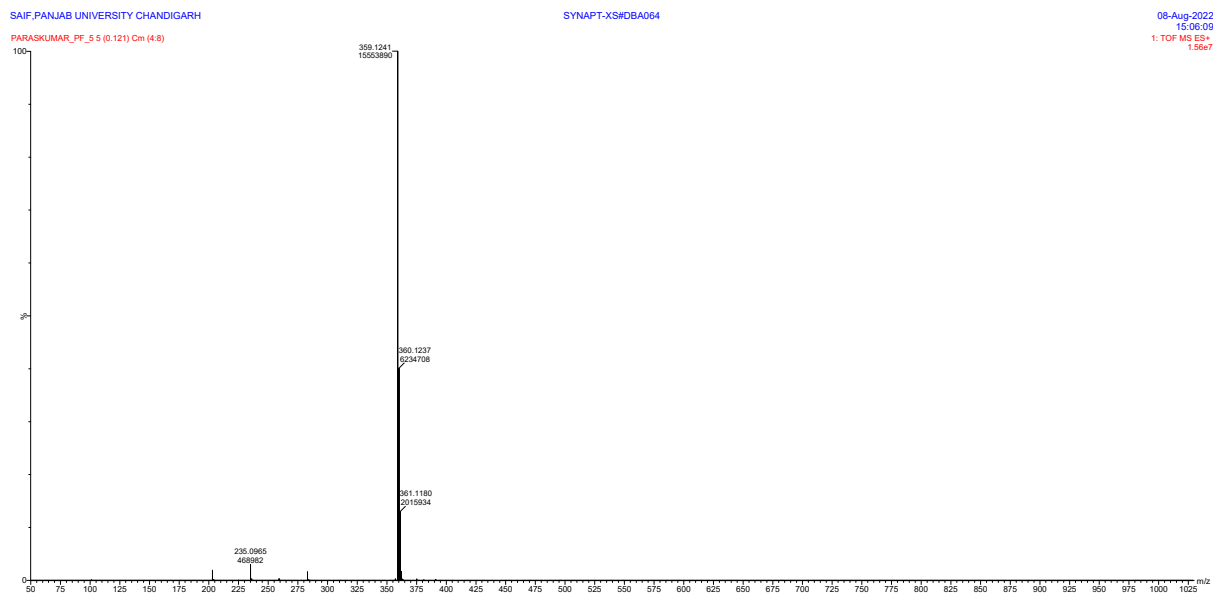


Figure S42: HRMS of Compound **4f**

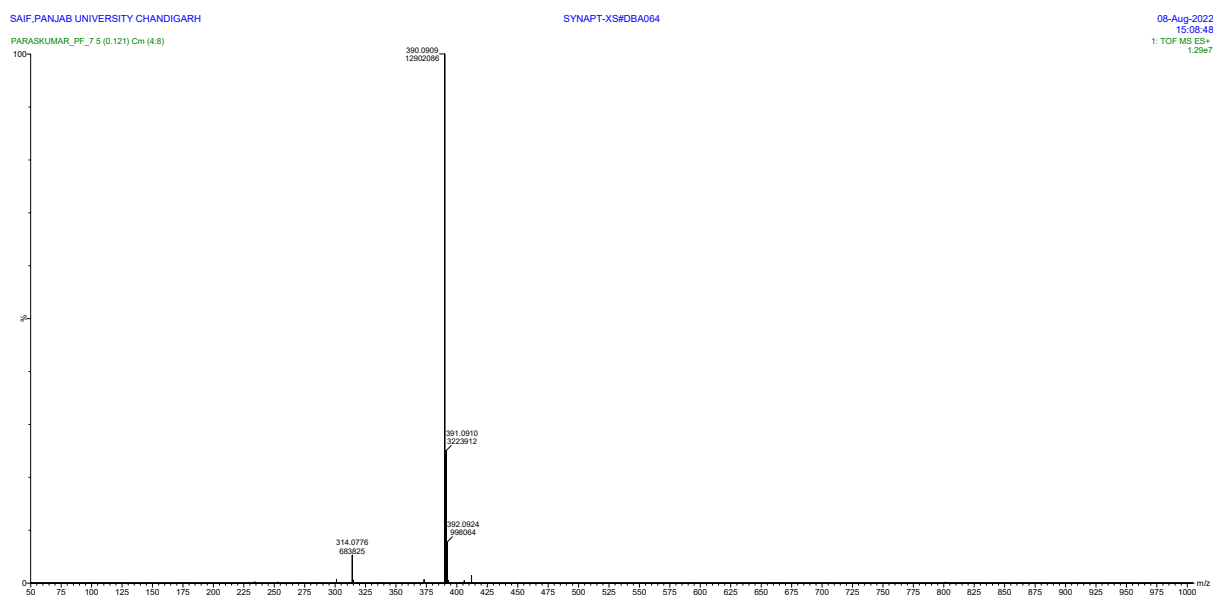


Figure S43: HRMS of Compound **4g**

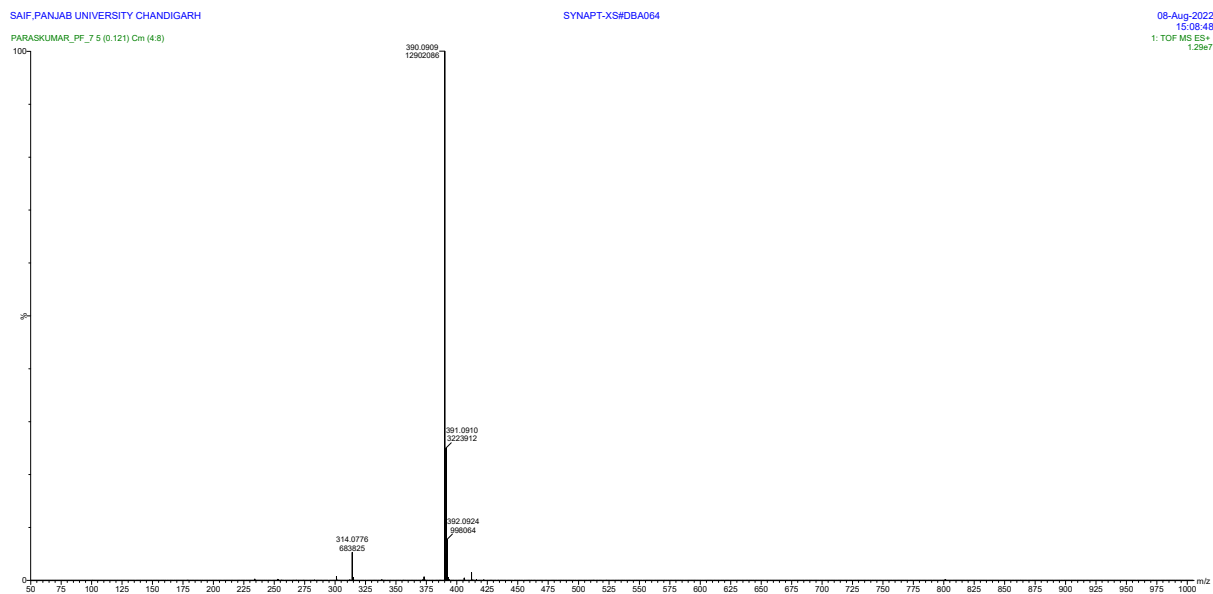


Figure S44: HRMS of Compound **4h**

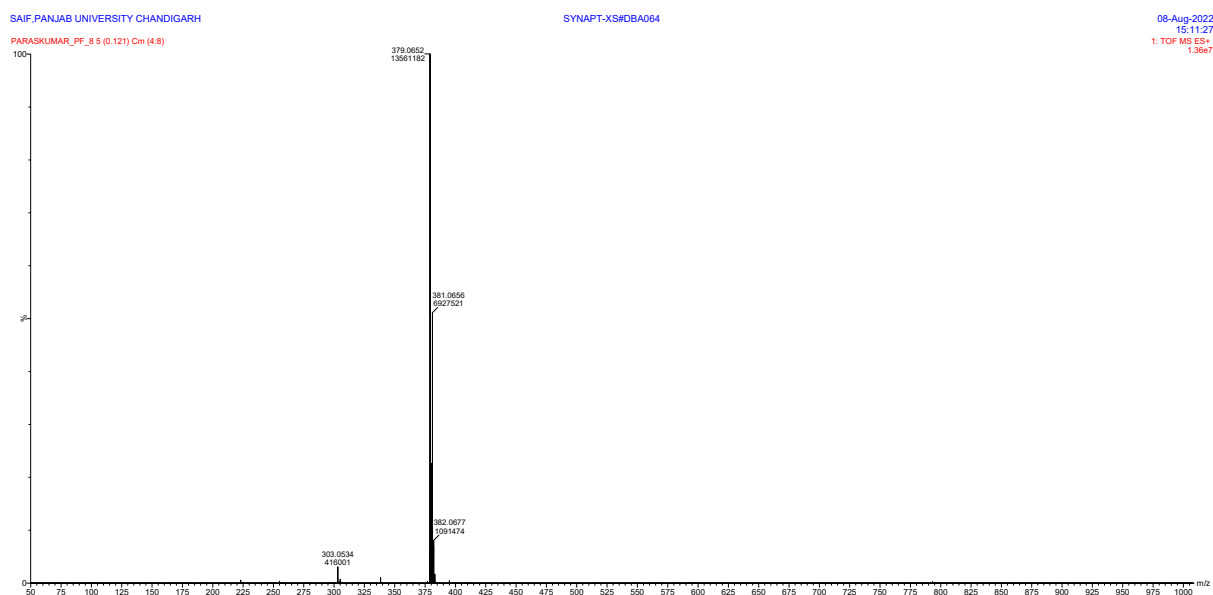


Figure S45: HRMS of Compound **4i**

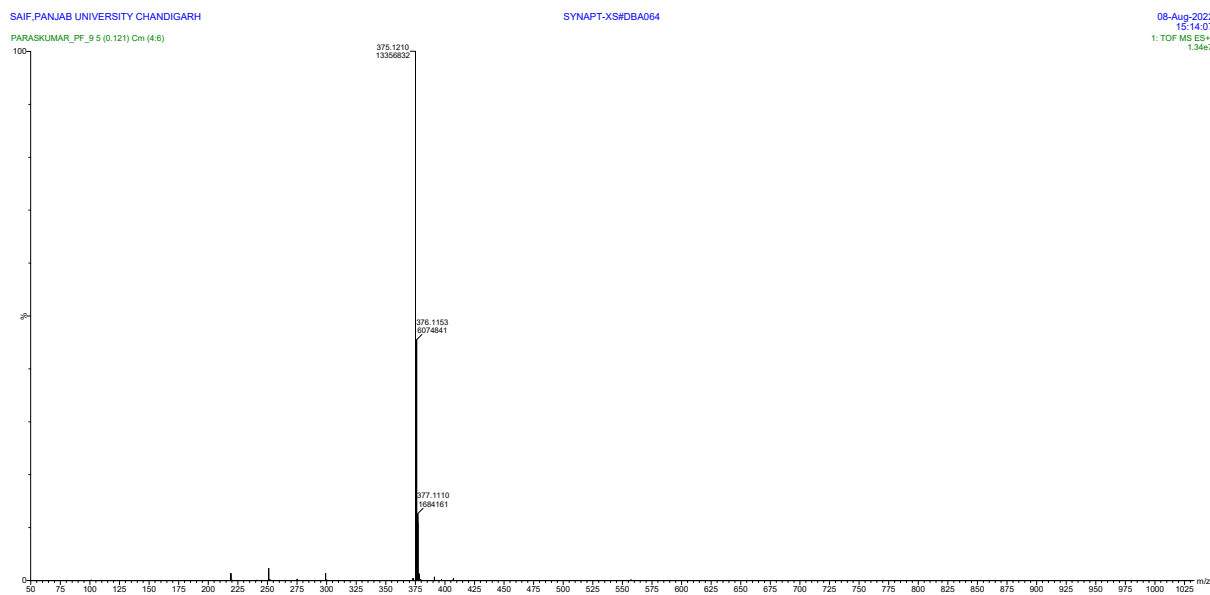
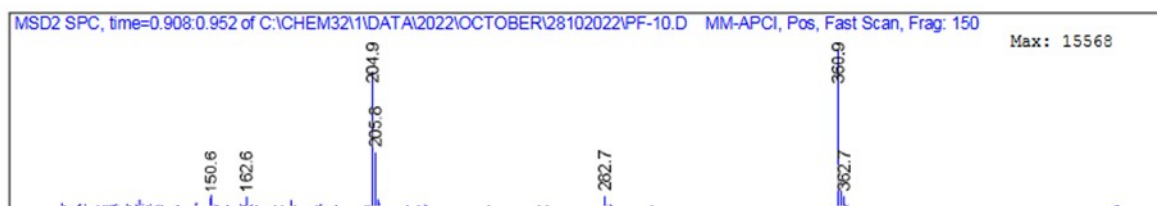


Figure S46: LCMS of Compound **4j**

Retention Time (MS)	MS Area	Mol. Weight or Ion
0.923	213538	361.80 I 360.90 I 205.80 I 204.85 I



*** End of Report ***

Figure S47: HRMS of Compound **4k**

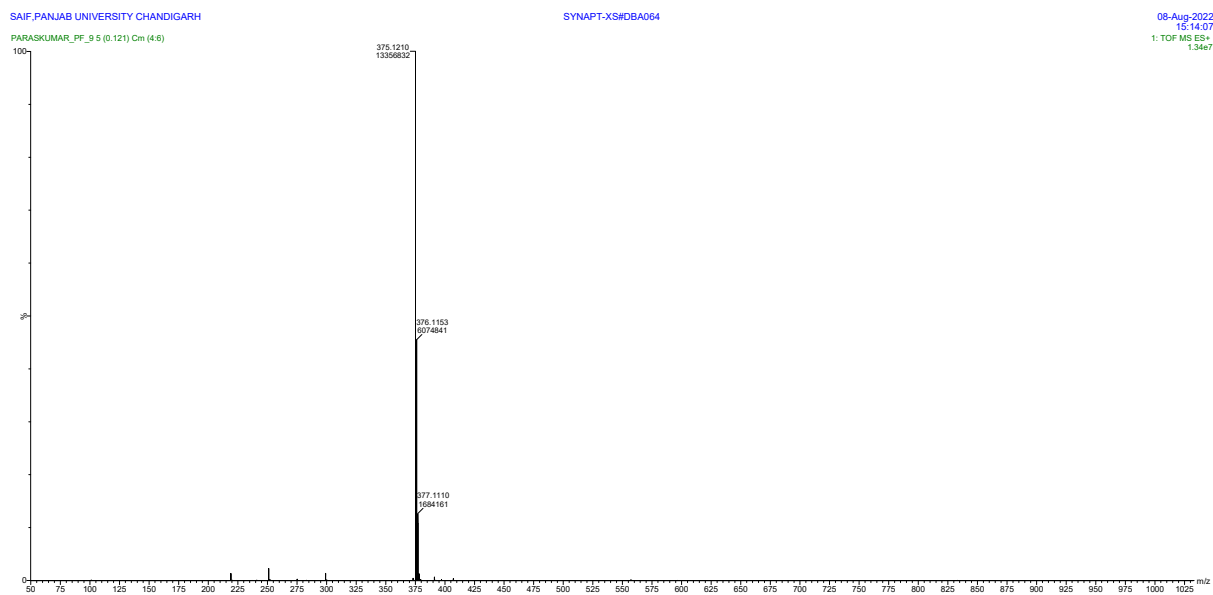


Figure S48: HRMS of Compound **4l**

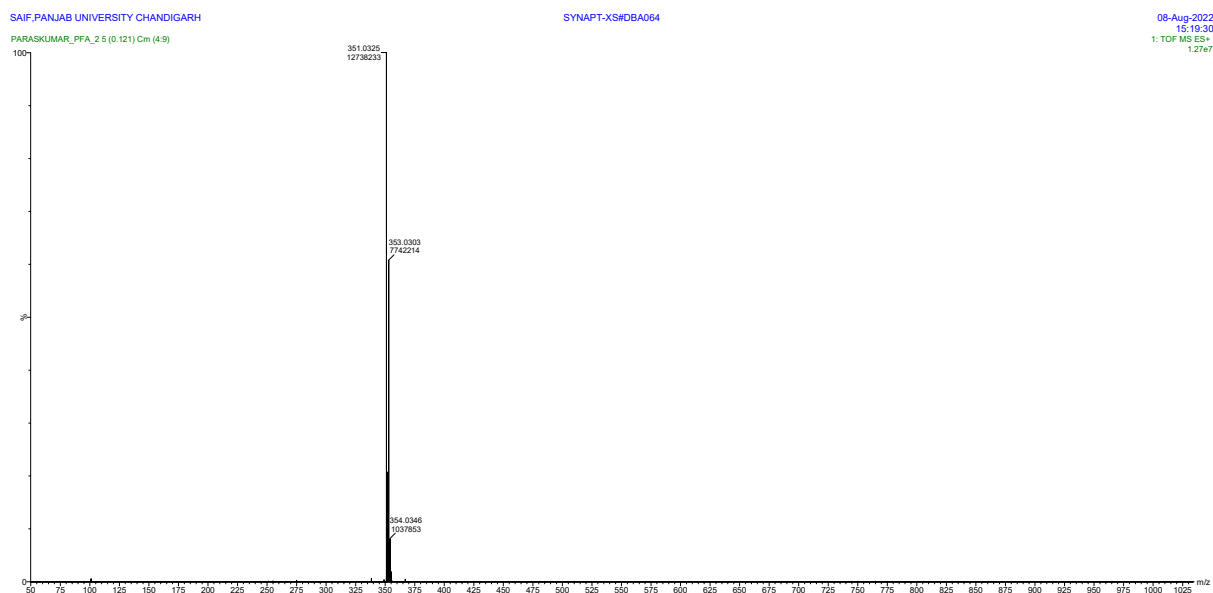


Figure S49: HRMS of Compound **4m**

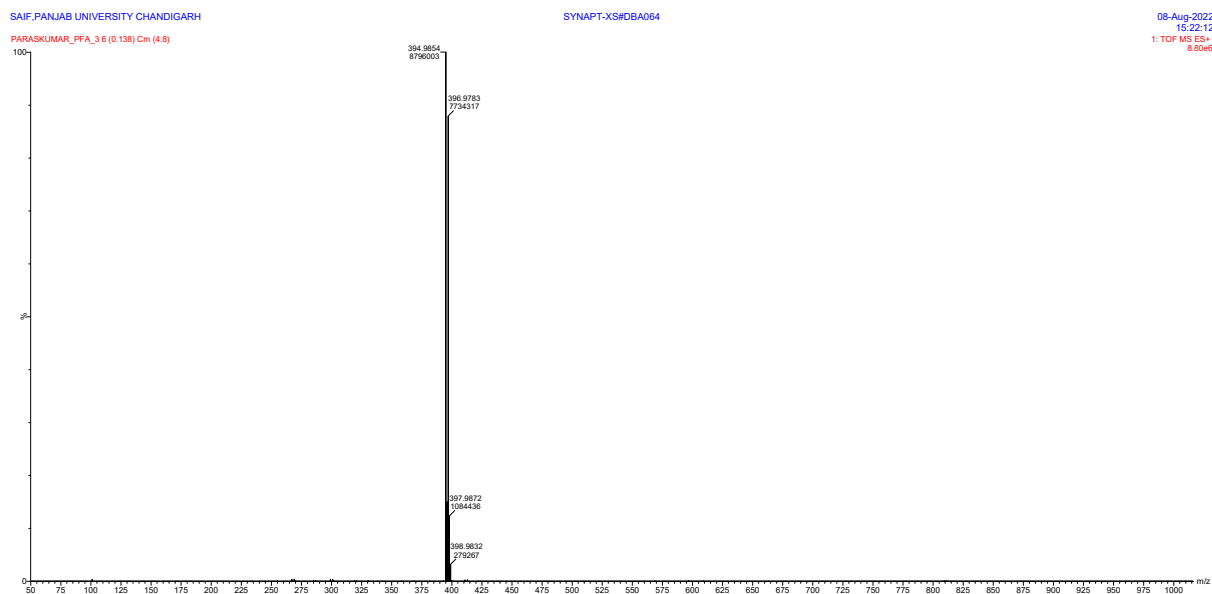


Figure S50: HRMS of Compound **4n**

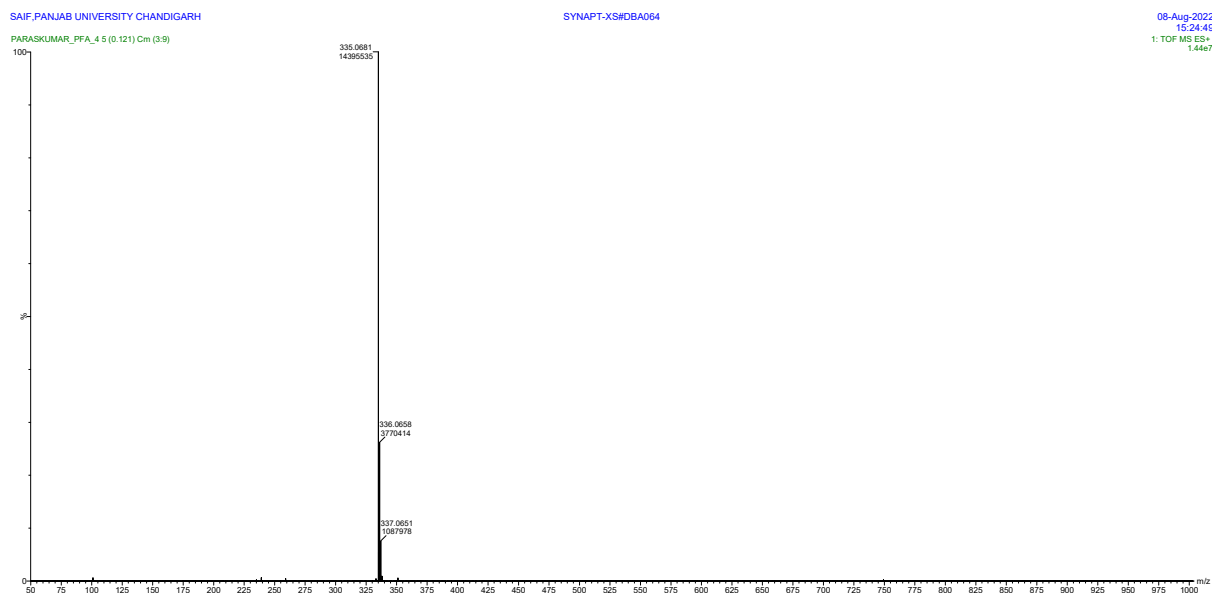


Figure S51: HRMS of Compound **4o**

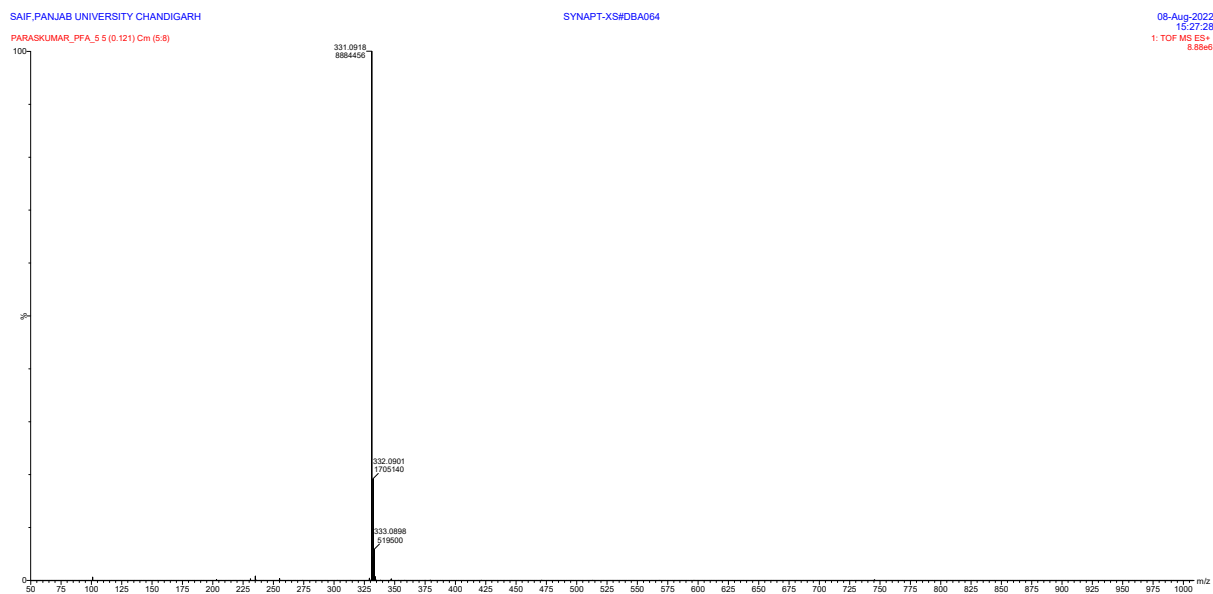


Figure S52: HRMS of Compound **4p**

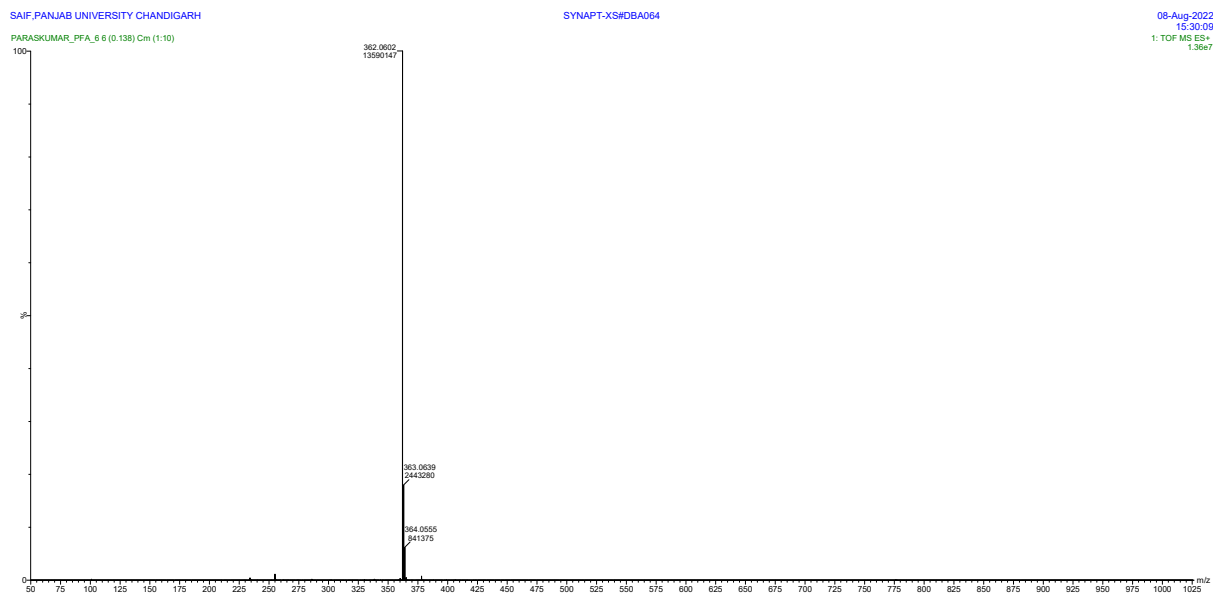


Figure S53: HRMS of Compound **4q**

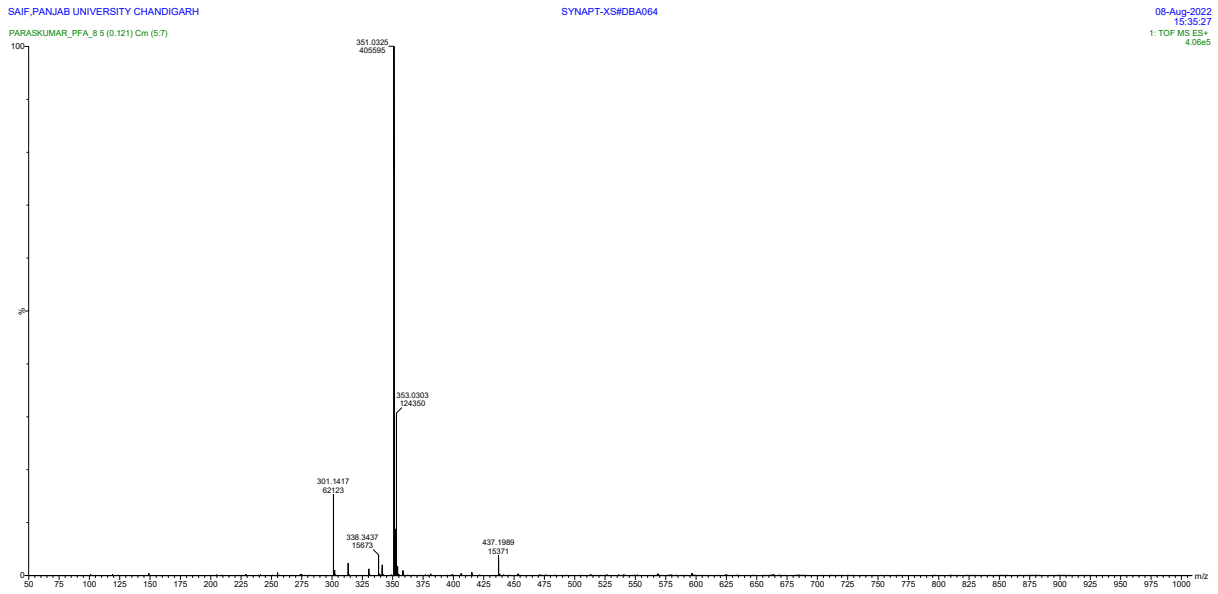


Figure S54: HRMS of Compound **4r**

