Supplementary material to:

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Novel Coumarin Derivatives: Synthesis, Characterization and Antimicrobial Activity

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Supplementary Information

Novel coumarin derivatives: Synthesis, characterization and antimicrobial activity

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Process for the impurity-A and impurity-B preparation

4-Hydroxy coumarin **1** (1.0 mole), DMF (4 vol) and potassium carbonate (3.1 mole) was heated up to 85 °C. Dibromoalkane (0.55 mole) in DMF (1 vol) was added in to the reaction mixture. The reaction mass stirred for 5 hours at 85 °C (TLC monitoring: Hexane/Ethyl acetate 7:3, Rf = 0.69). After completion of reaction, the reaction mass was filtered and washed with DMF. Dry the obtained product in oven at 50 °C. The Impurity-A (**Figure-S1**) and Impurity-B (**Figure-S2**) were characterized by 1H-NMR spectroscopy.

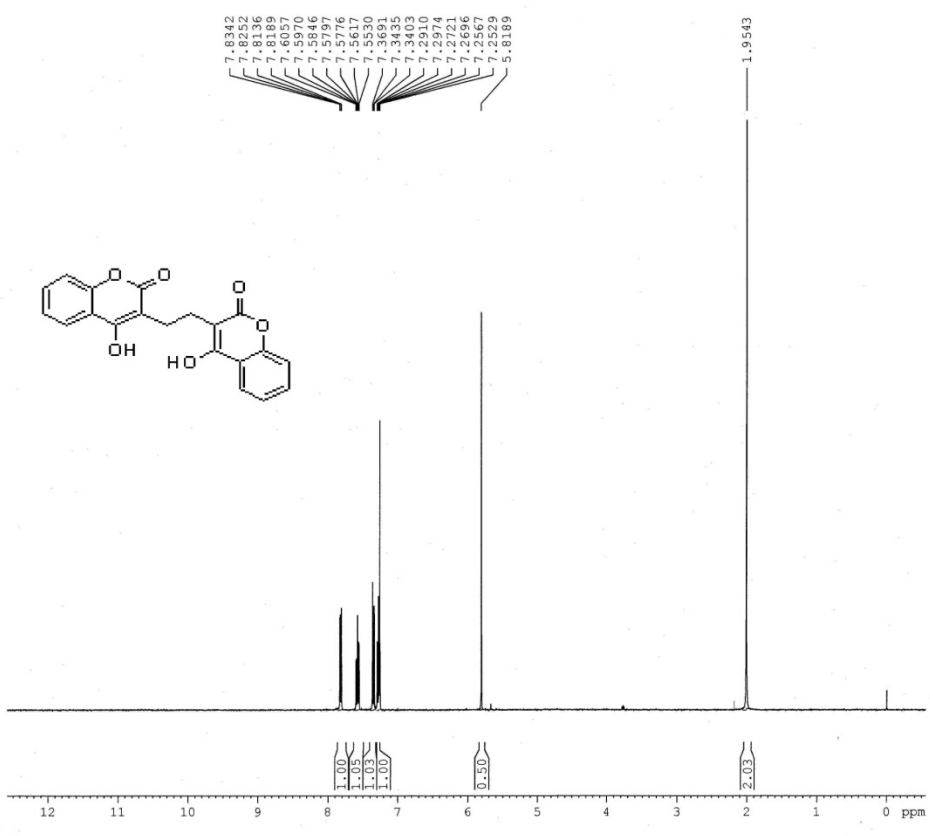

Figure-S1: ^{1}H NMR spectra of Impurity-A

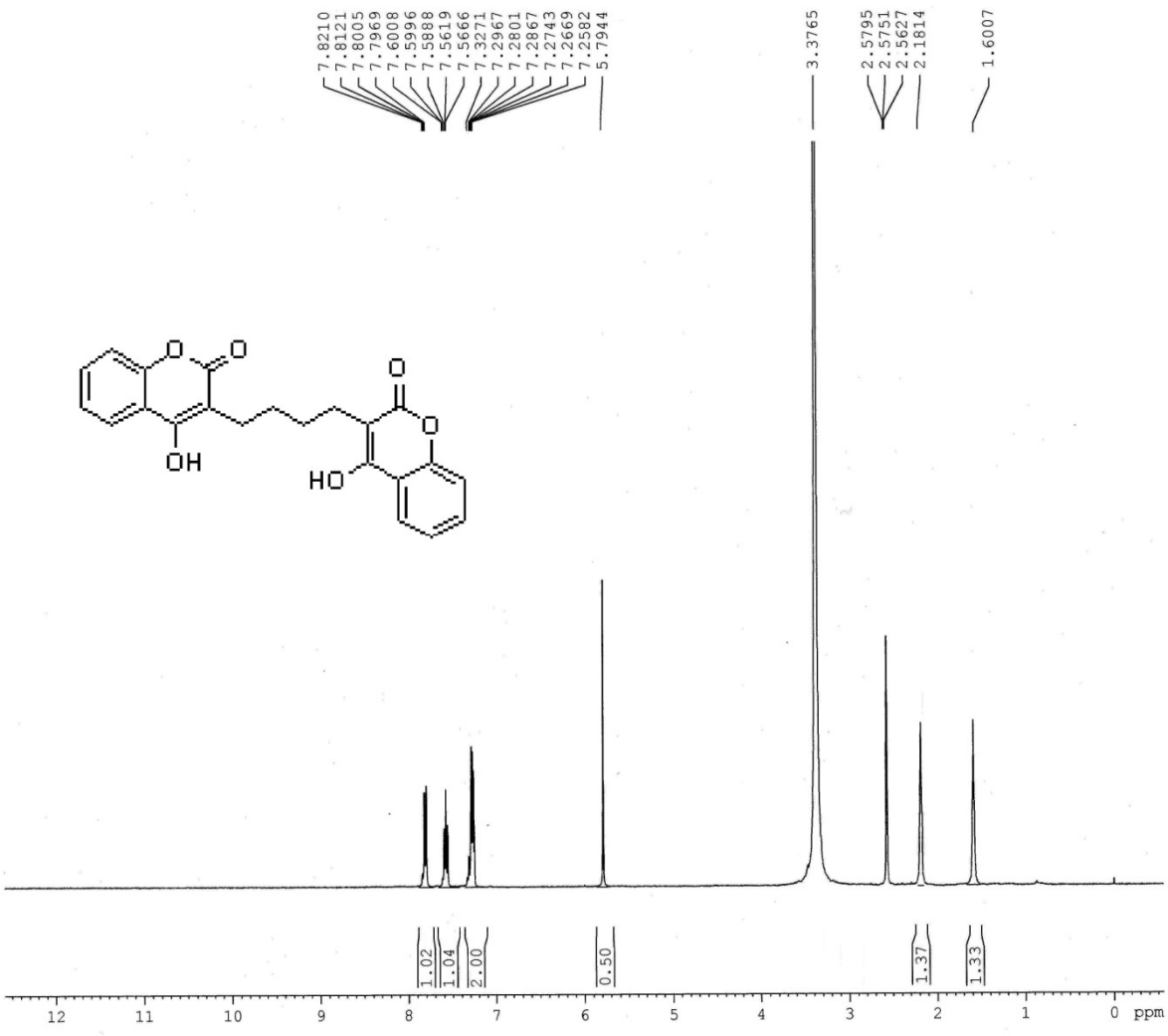

Figure-S2: ^{1}H NMR spectra of Impurity-B

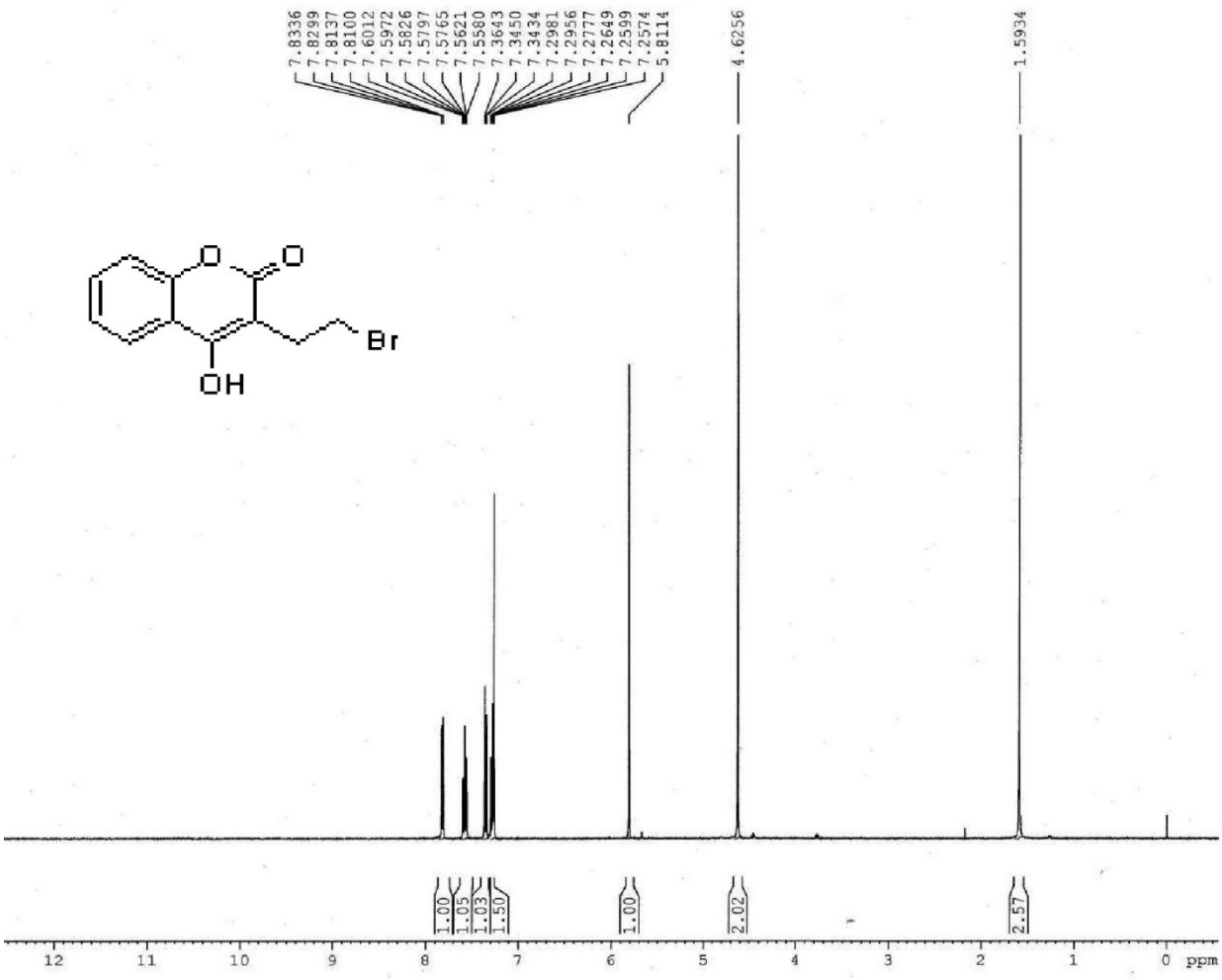

Figure-S3: ^{1}H NMR spectra of Compound **2**

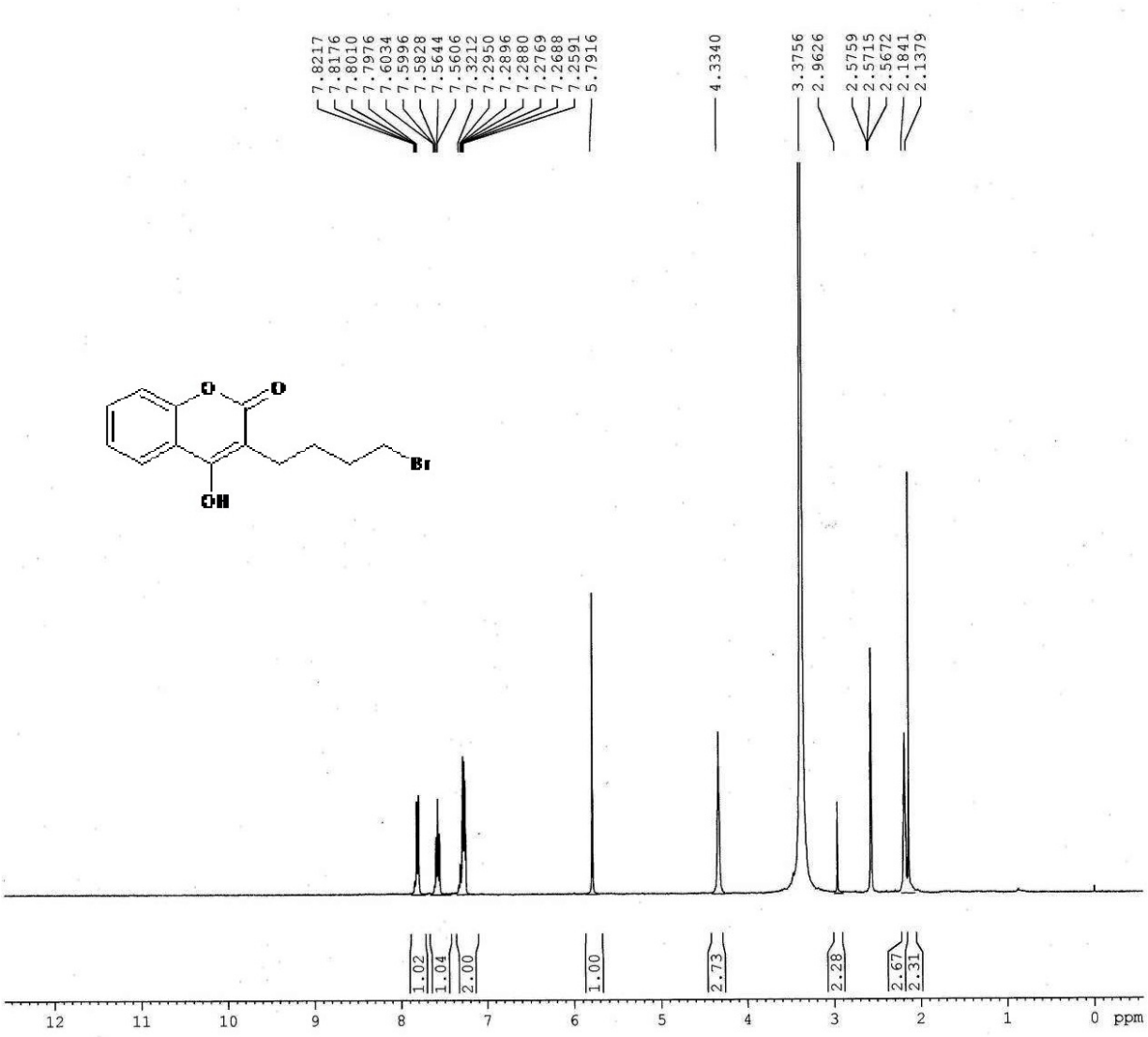

Figure-S4: ^{1}H NMR spectra of Compound **3**

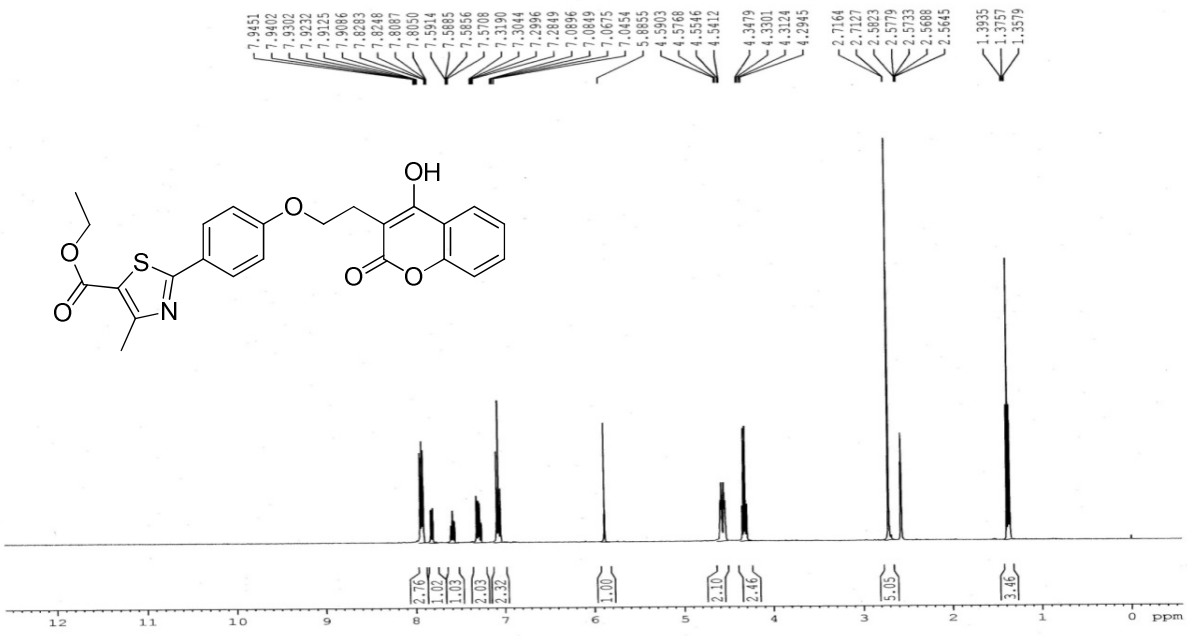

Figure-S5: ^{1}H NMR spectra of compound **4**

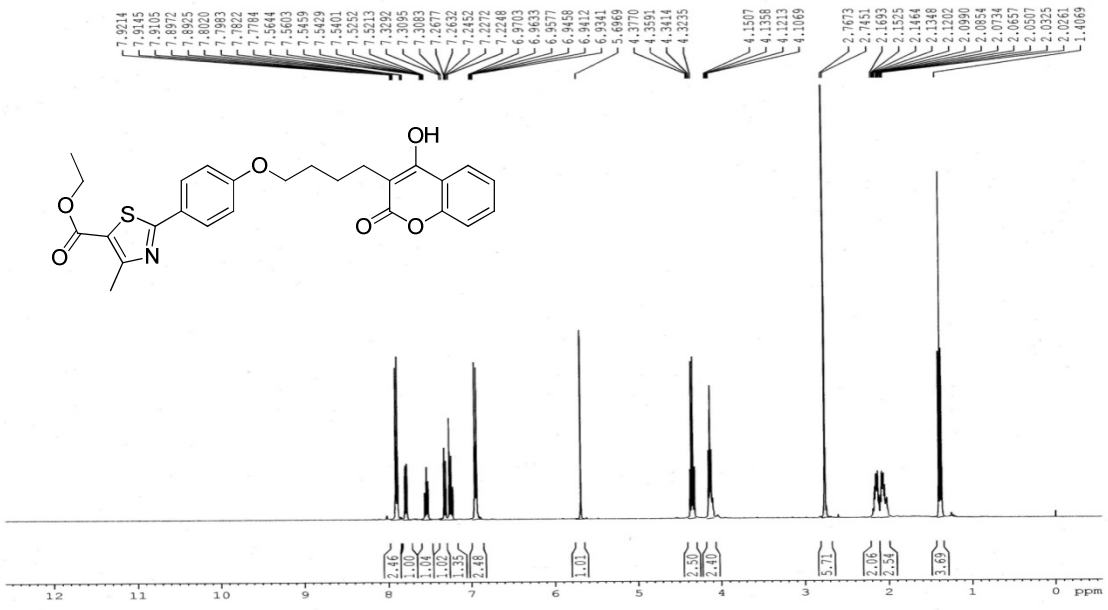

Figure-S6: ^{1}H NMR spectra of Compound 5

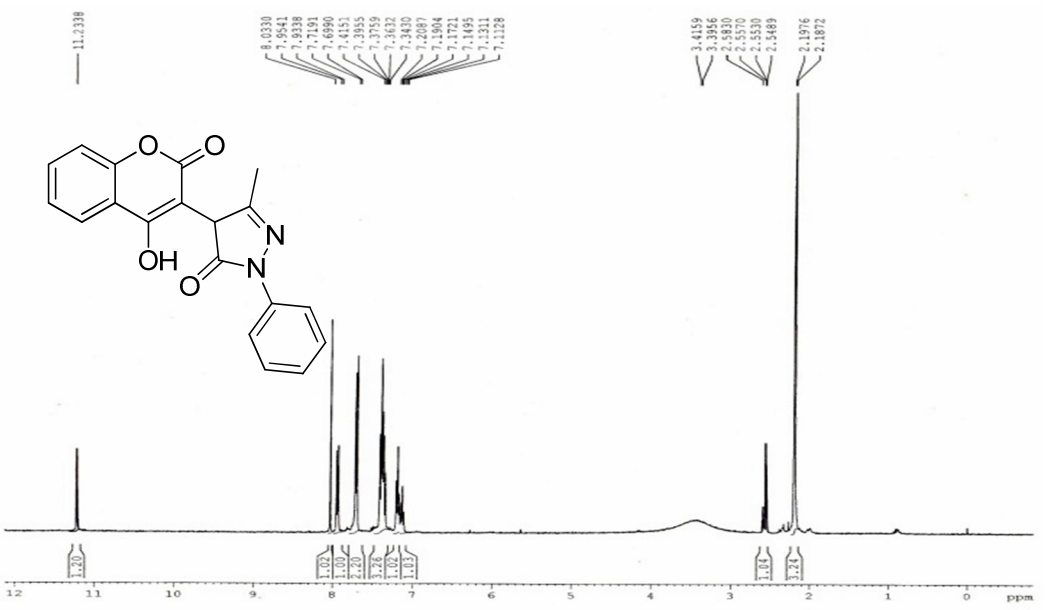

Figure-S7: ^{1}H NMR spectra of compound **6**

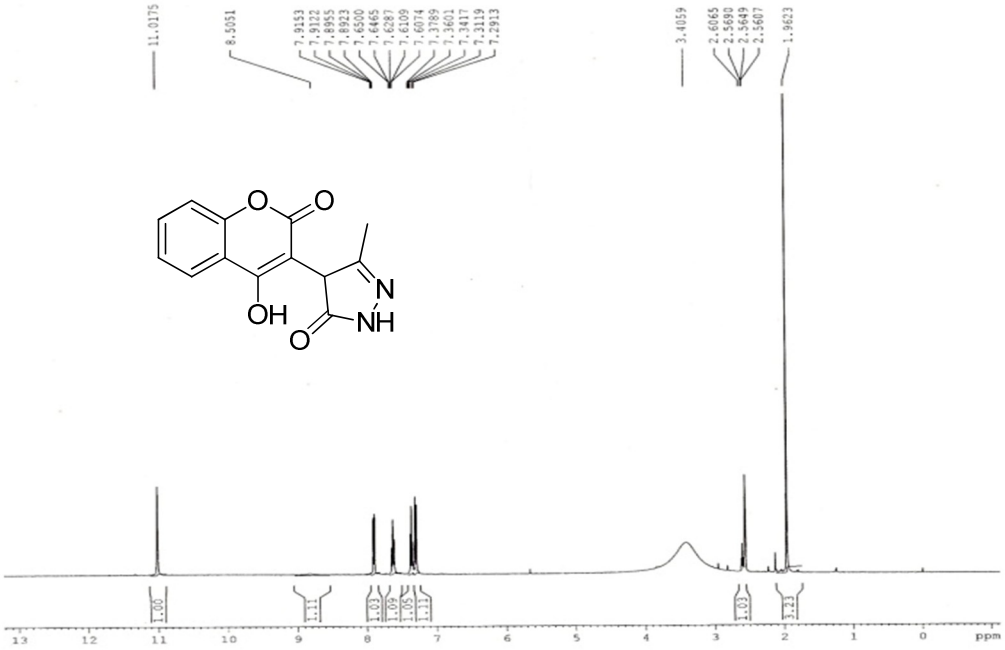

Figure-S8: ^{1}H NMR spectra of Compound **7**

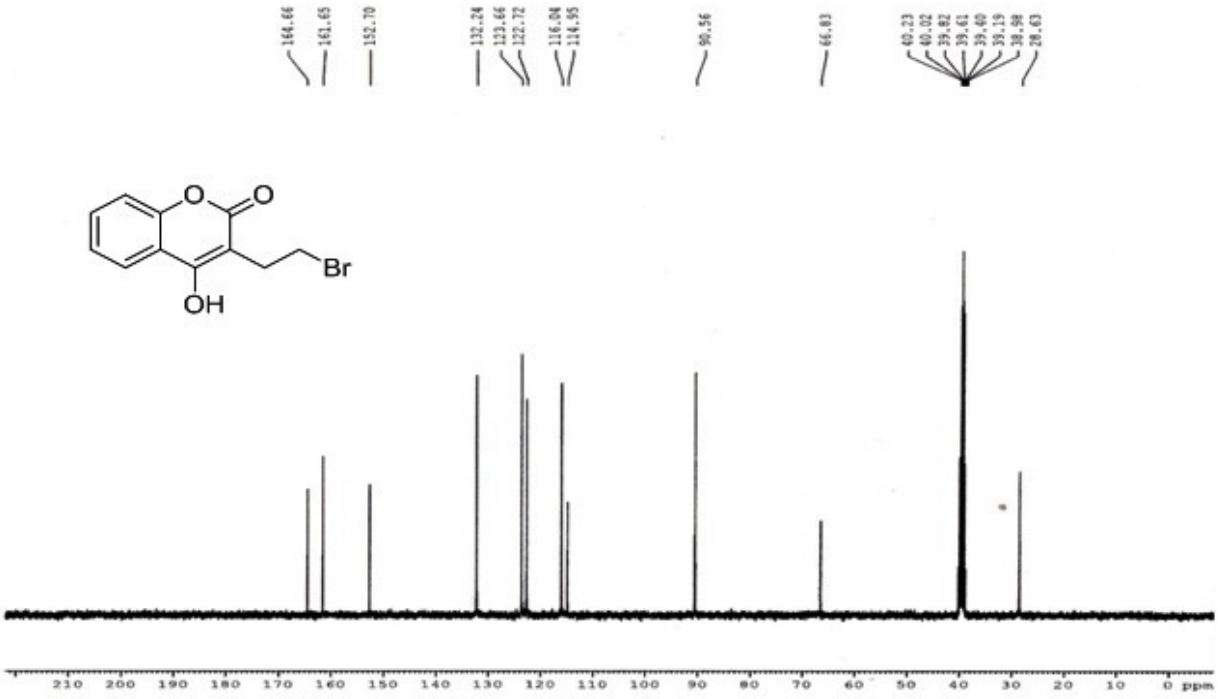

Figure-S9: ^{13}C NMR spectra of Compound **2**

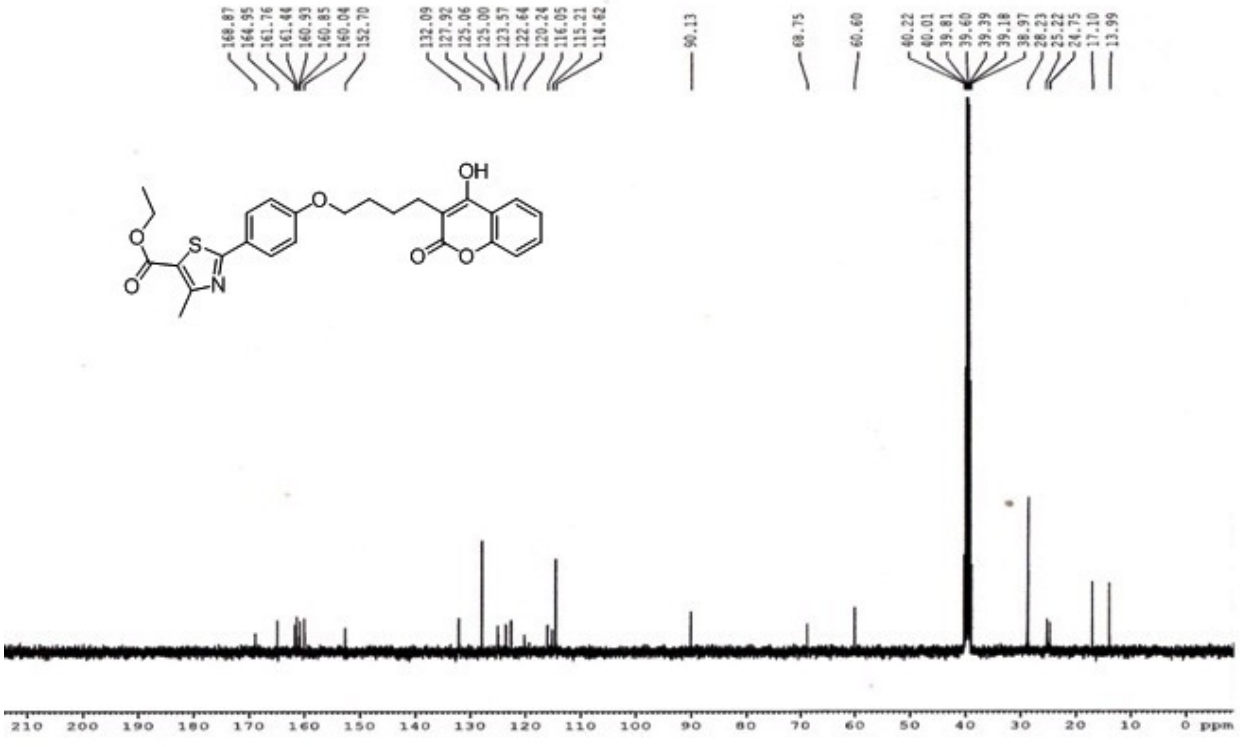

Figure-S10: ^{13}C NMR spectra of Compound **5**

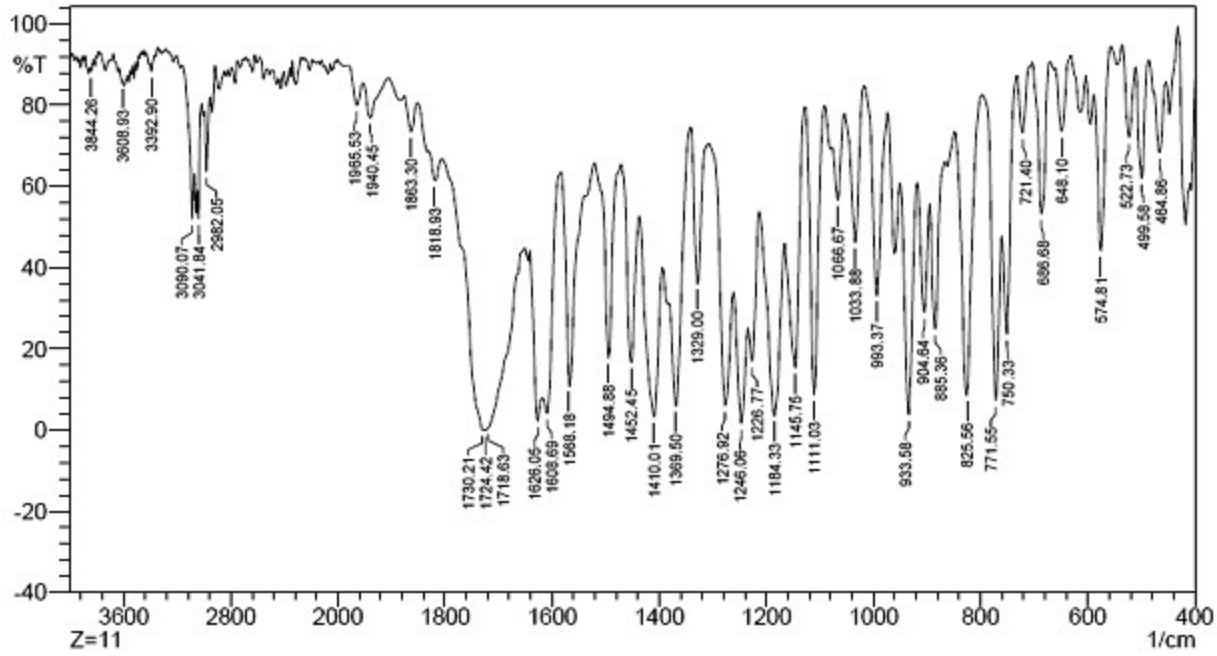

Figure-S11: IR spectra of Compound **2**

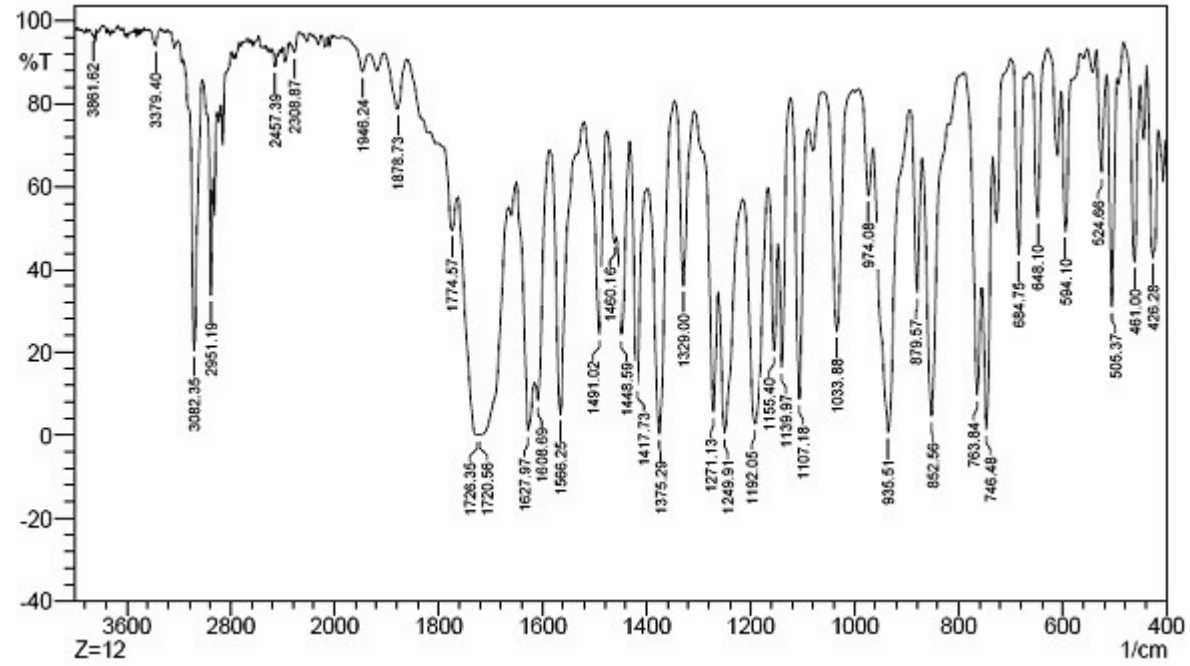

Figure-S12: IR spectra of Compound **3**

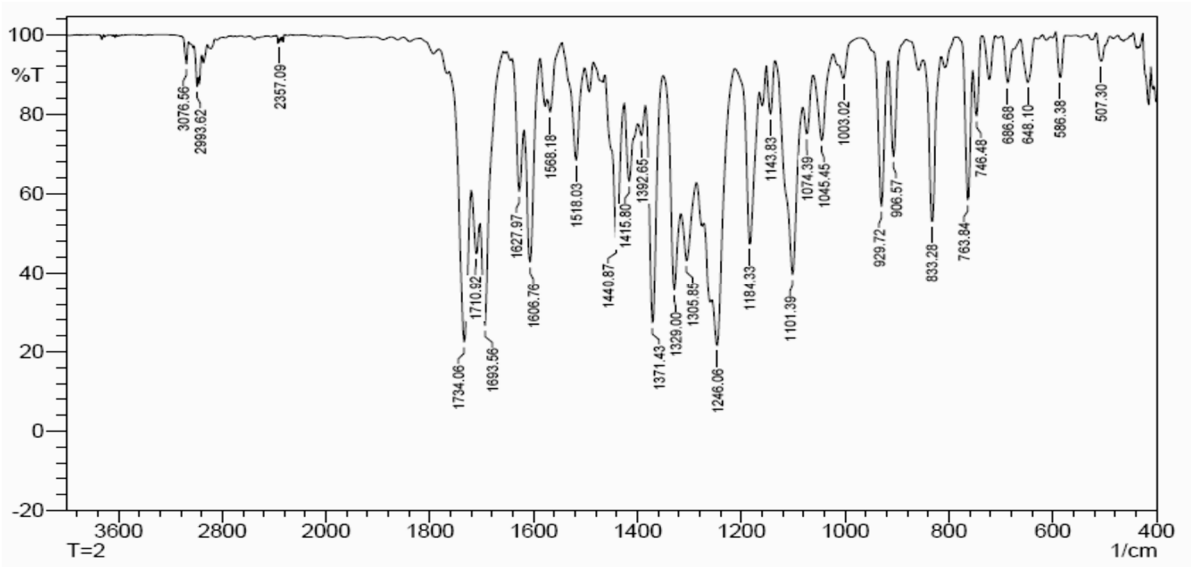

Figure-S13: IR spectra of compounds **4**

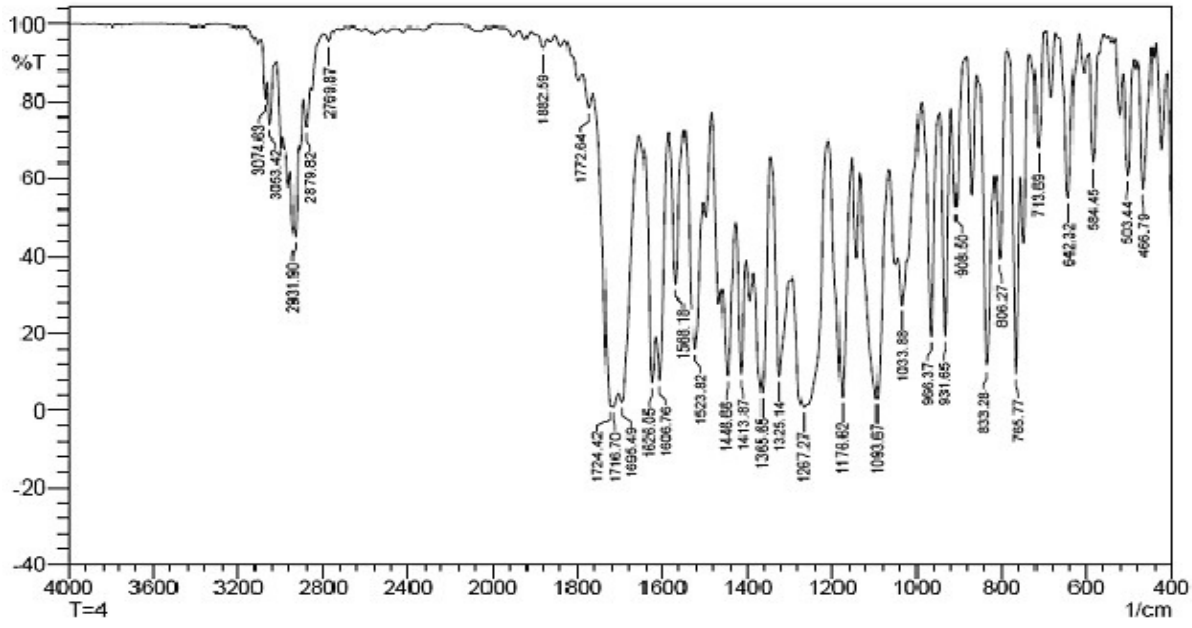

Figure-S14: IR spectra of Compound **5**

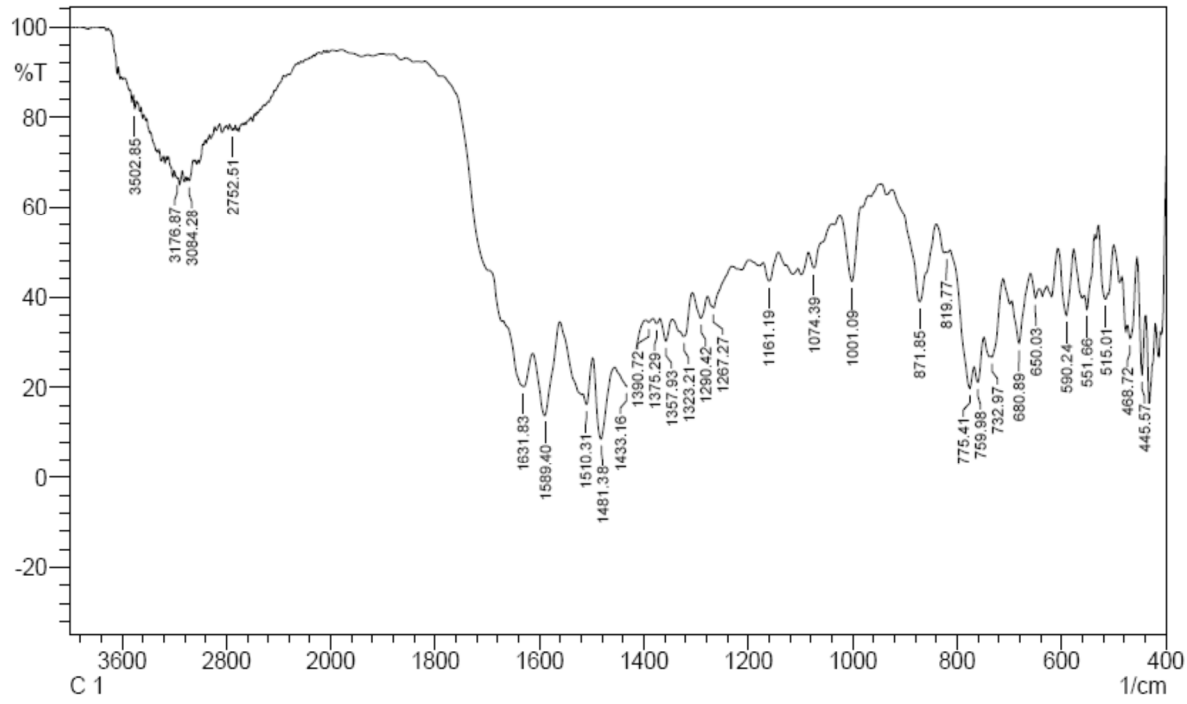

Figure-S15: IR spectra of Compound **6**

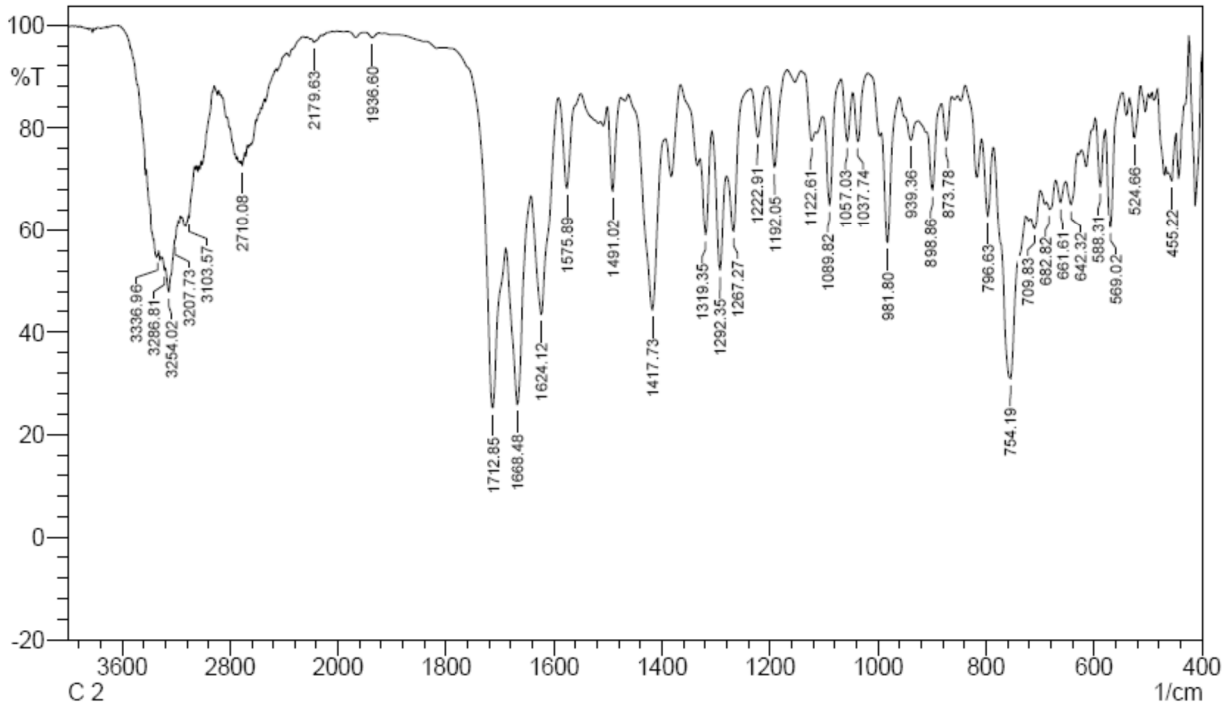

Figure-S16: IR spectra of Compound **7**

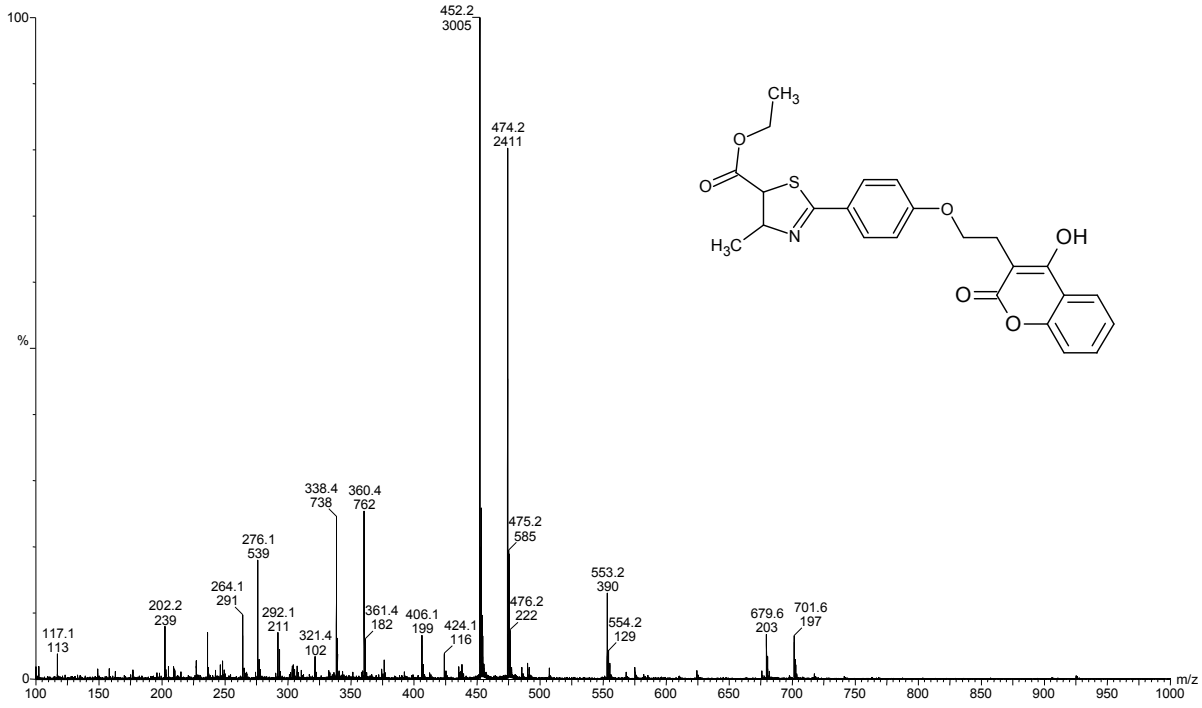

Figure-S17: Mass spectra of Compound **4**

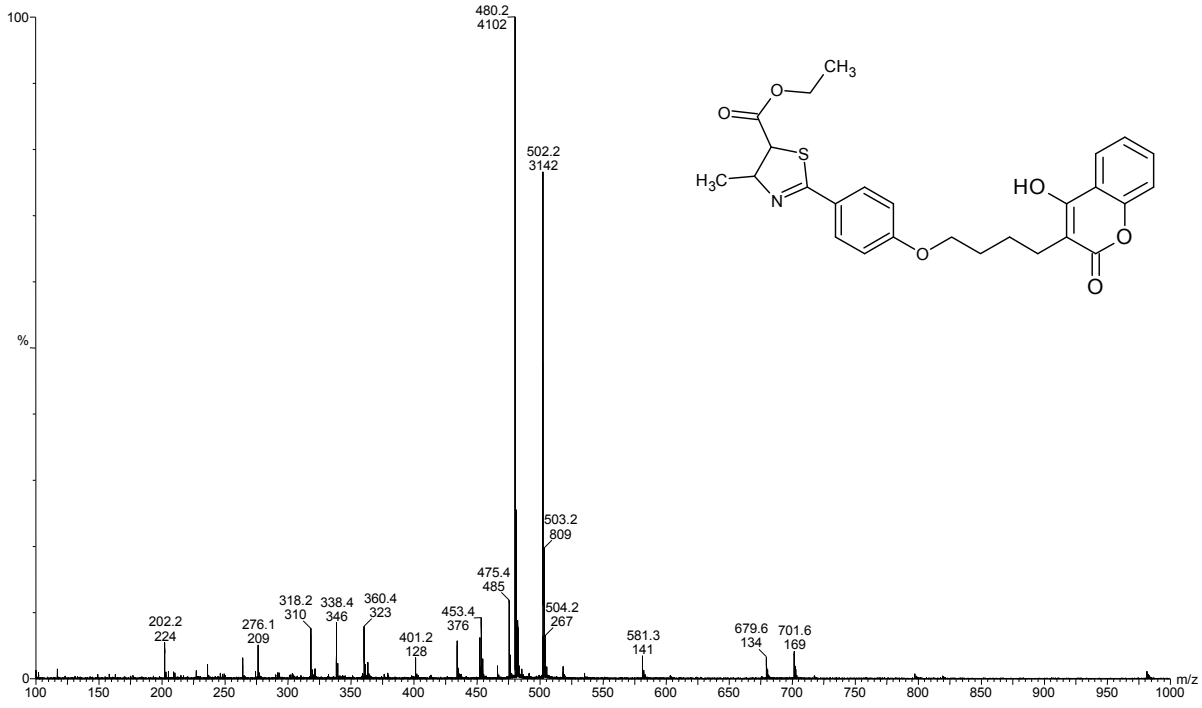

Figure-S18: Mass spectra of Compound **5**