

Supporting information

Molecular Iodine Catalyzed One-Pot Multicomponent Reactions for the Synthesis of Dihydrochromeno [4, 3-b] Pyrazolo [4, 3-e] Pyridin-6(7H)-ones

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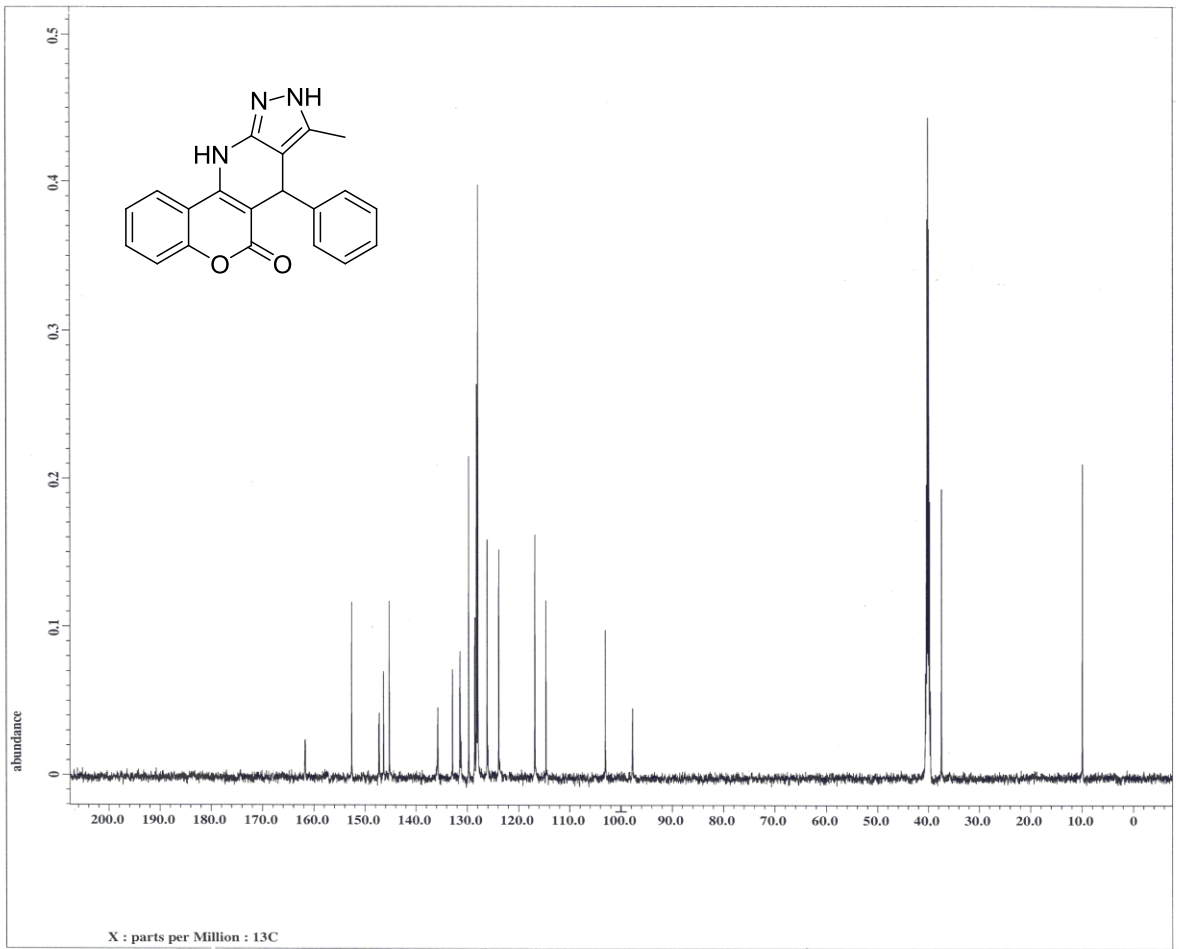
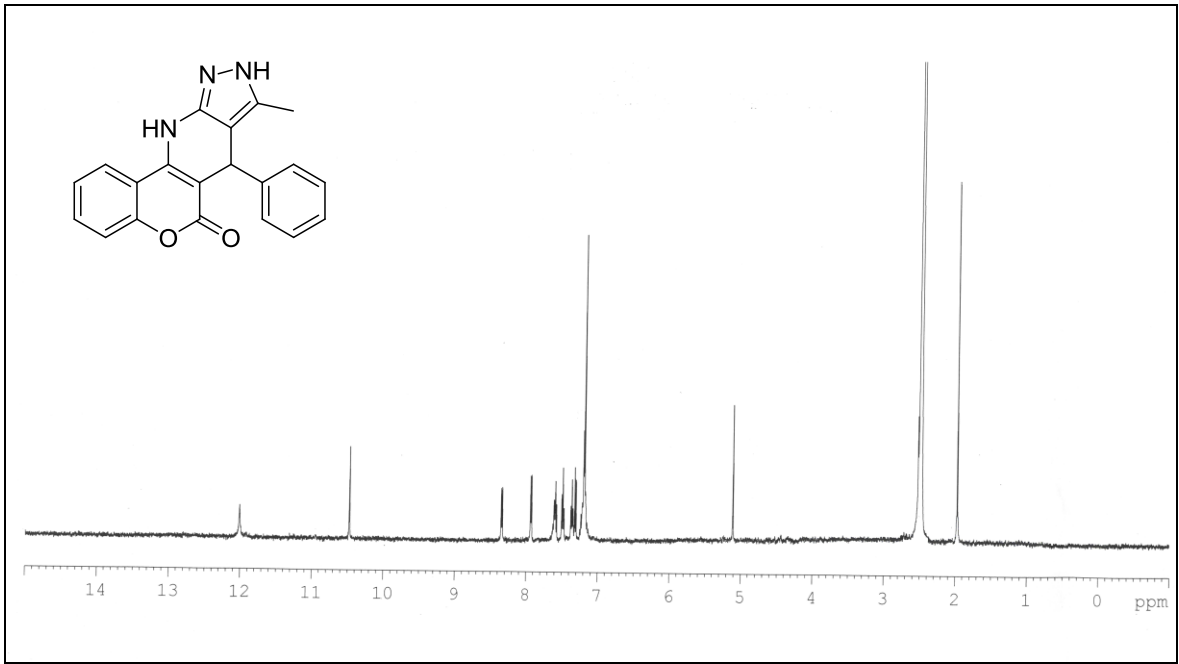
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General experimental information

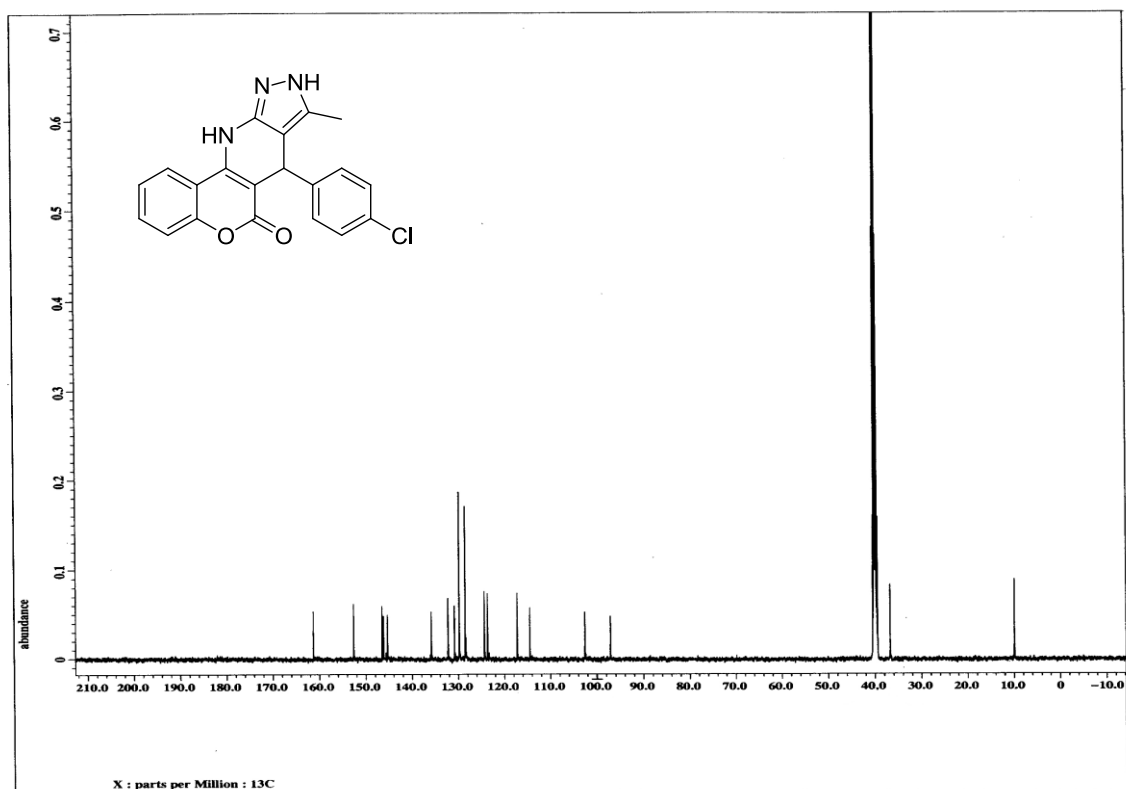
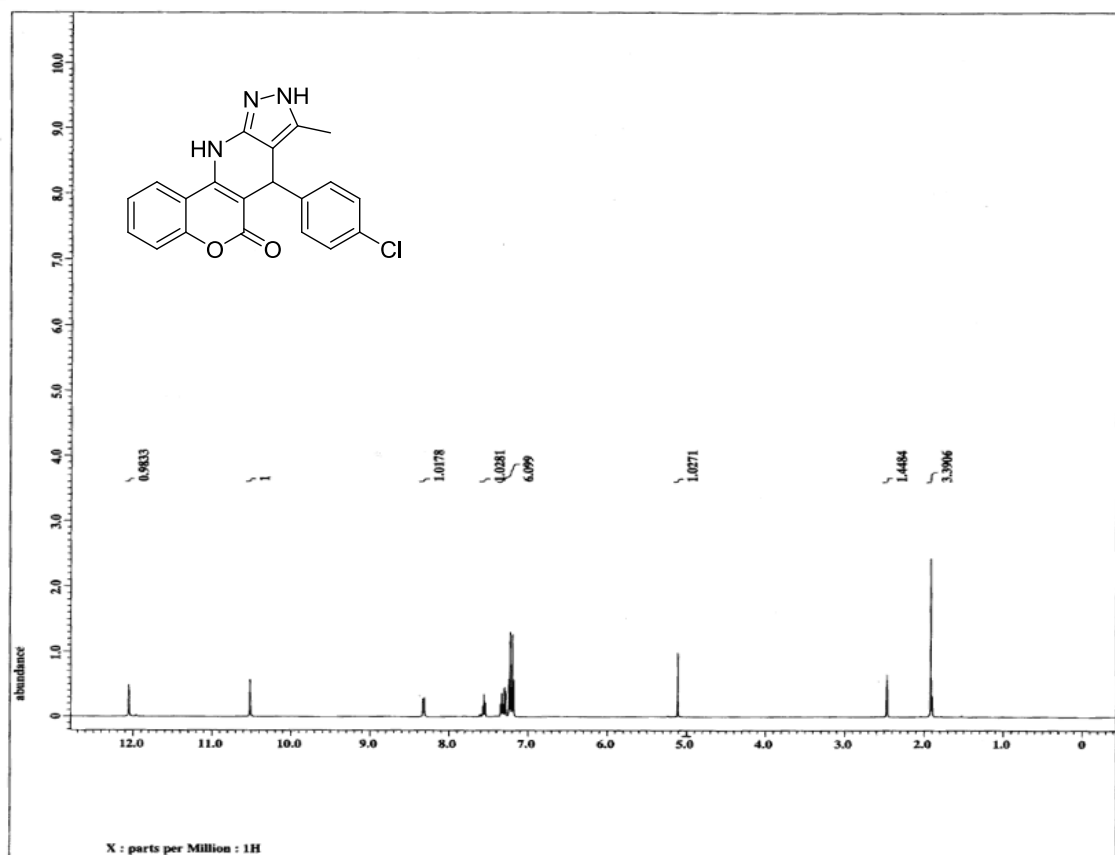
All reagents were purchased from commercial sources (Sigma Aldrich, Merck, Avra) and used without further purification. 4-hydroxy-6-nitro-2H-chromen-2-one was prepared according to the literature method.²⁰ IR spectra were recorded in Shimadzu FTIR spectrophotometer. ¹H and ¹³C NMR spectra were recorded on Jeol 500 MHz and Bruker 500 MHz or 400 MHz spectrometer in DMSO-d₆ or DMSO-d₆ + CDCl₃ using TMS as internal reference. Elemental analyses were carried out in a Perkin Elmer 2400 automatic carbon, hydrogen and nitrogen analyzer. All compounds were characterized by usual spectroscopic techniques. For compound **1a**, Single crystal XRD was recorded in *Bruker* Nonius Smart Apex II X-ray Single crystal diffractometer(CCD)

20. Huang, C-N.; Kuo, P-Y.; Lin, C-H.; Yang, D-Y. *Tetrahedron* **2007**, *63*, 10025–10033.

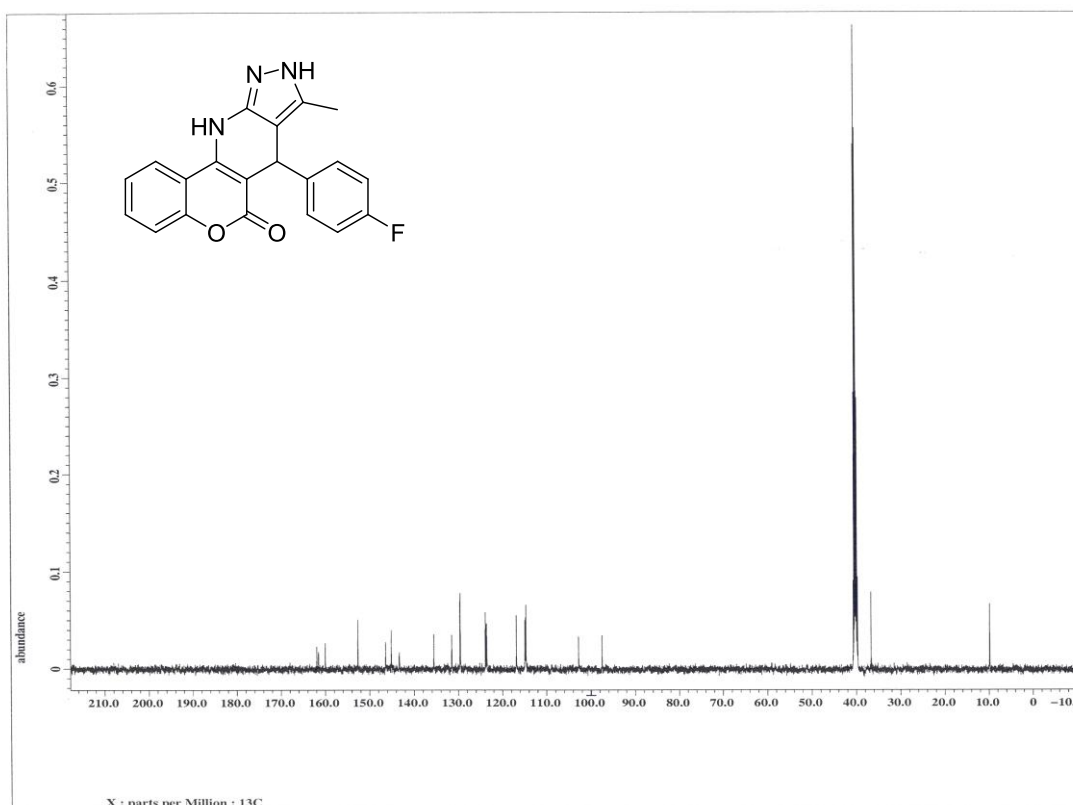
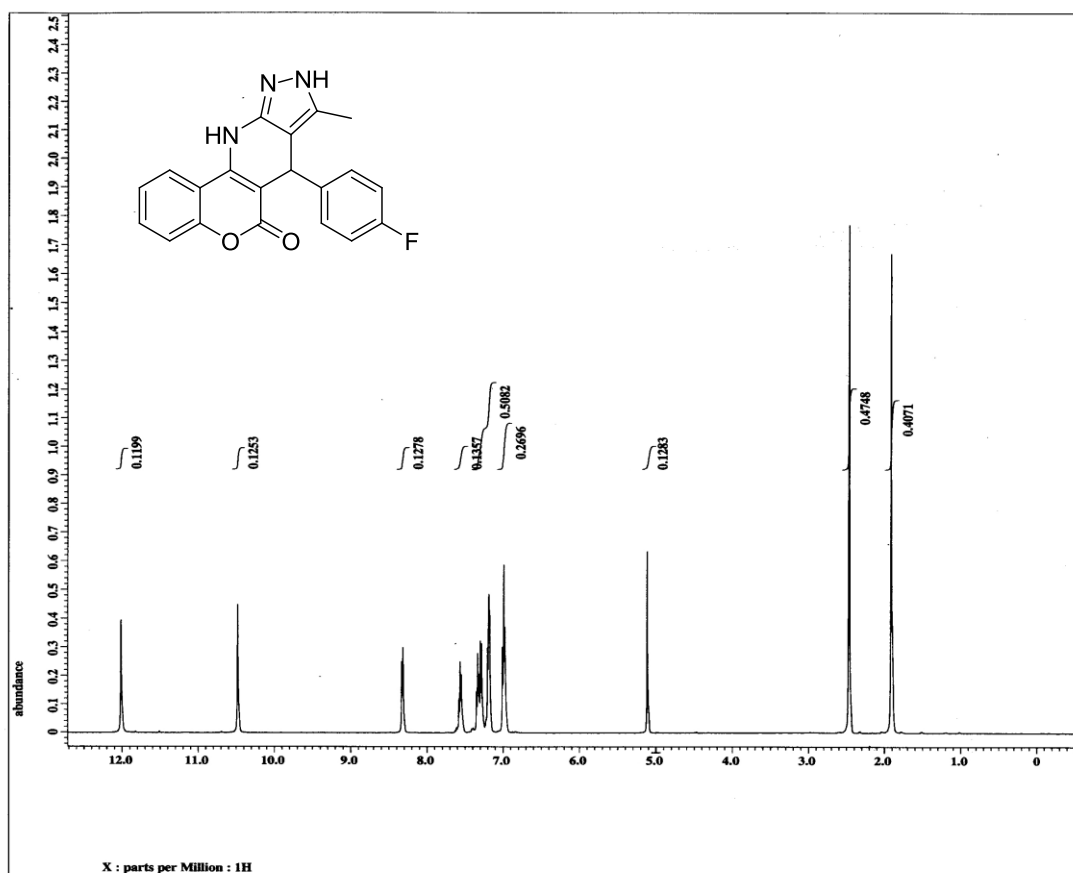
Copies of ¹H and ¹³C NMR spectra of compound 1a



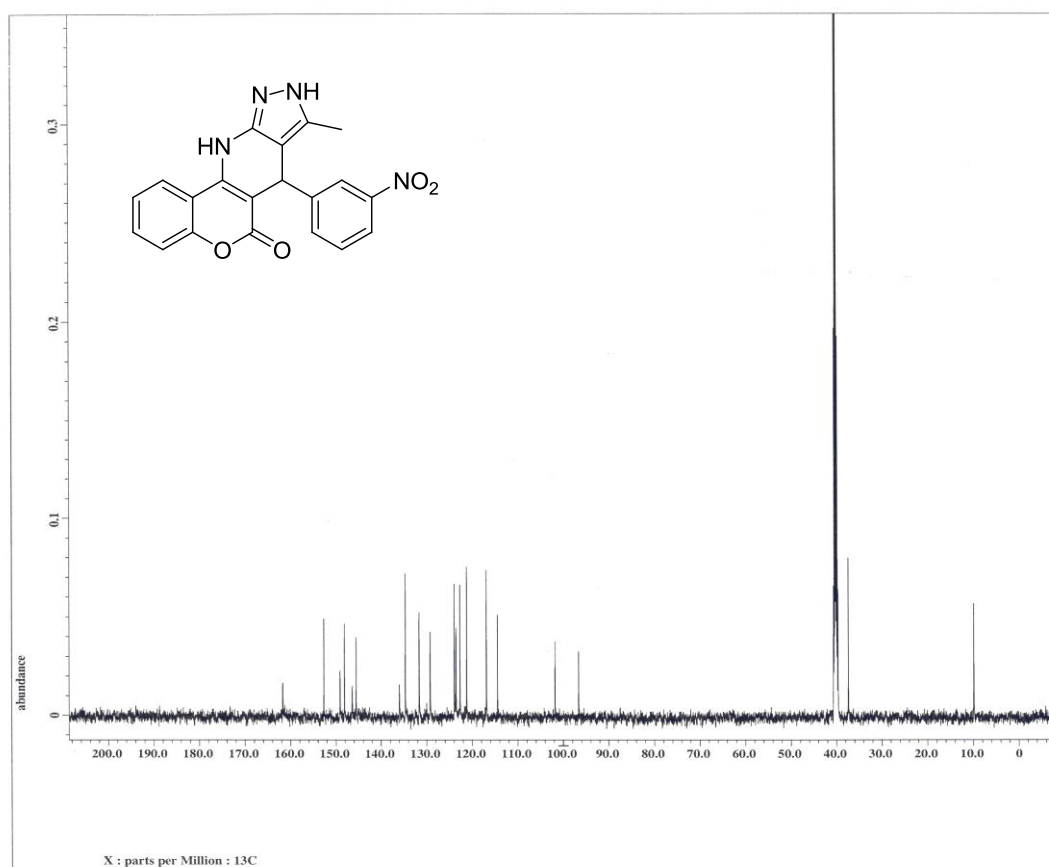
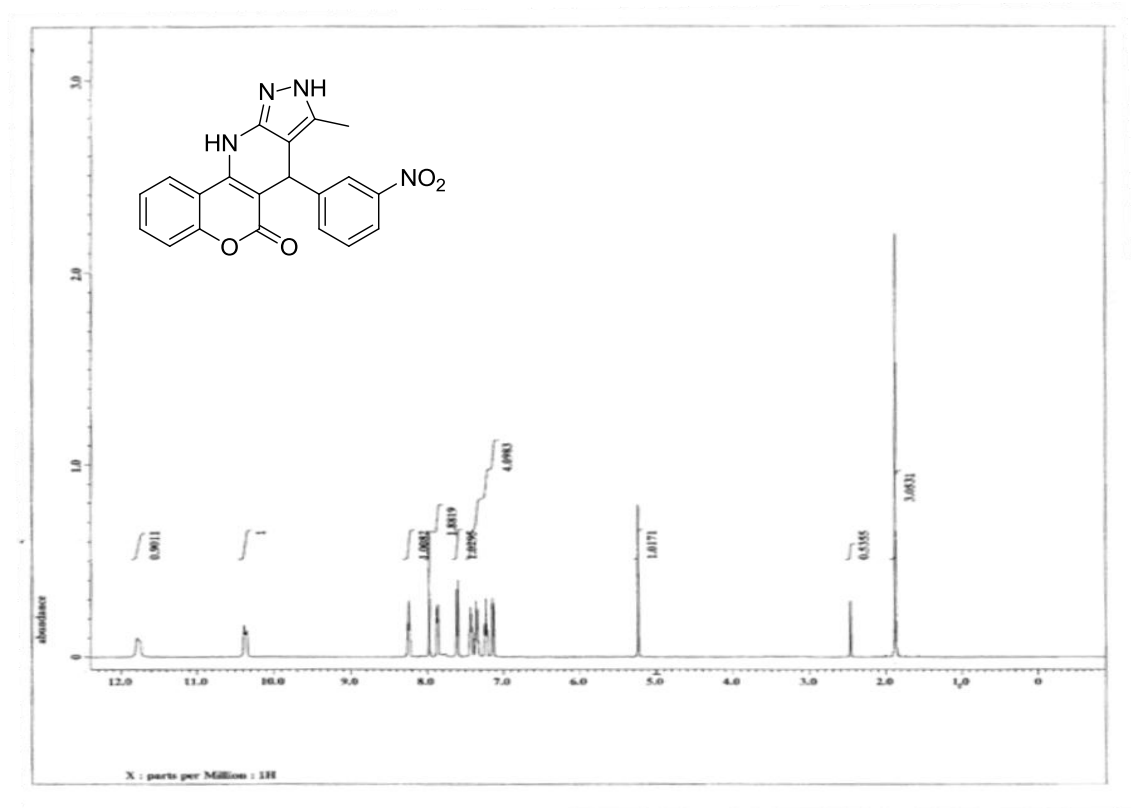
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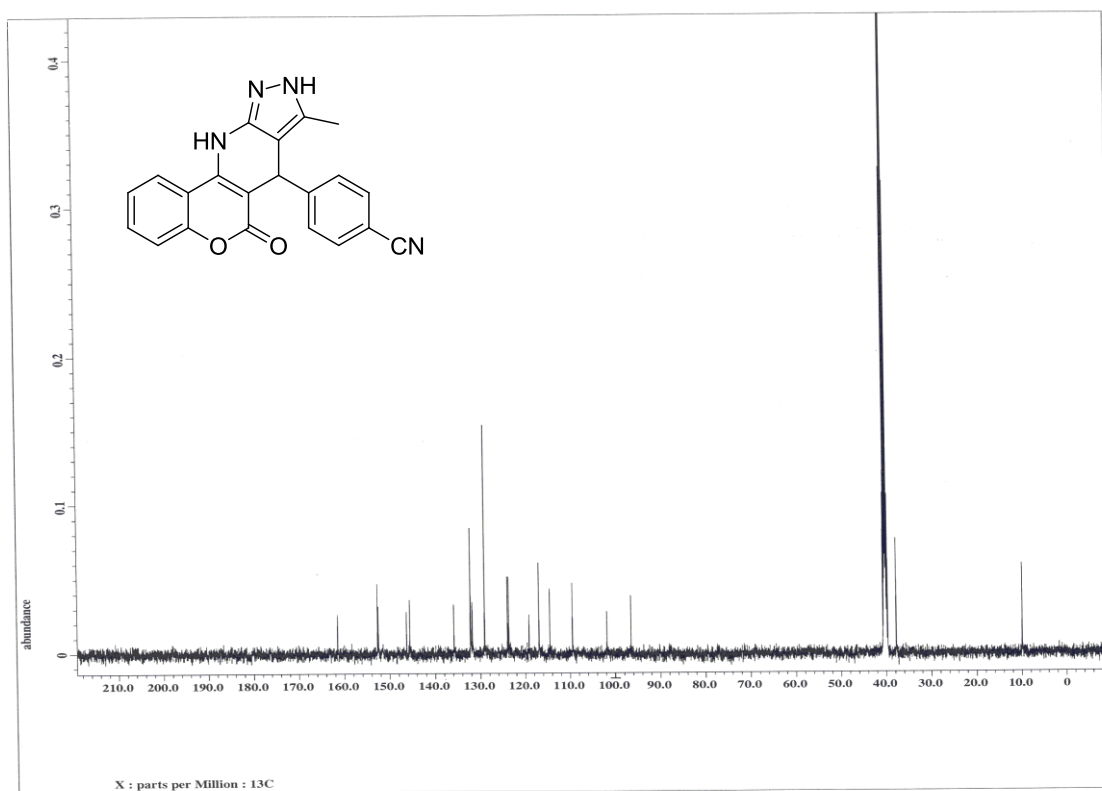
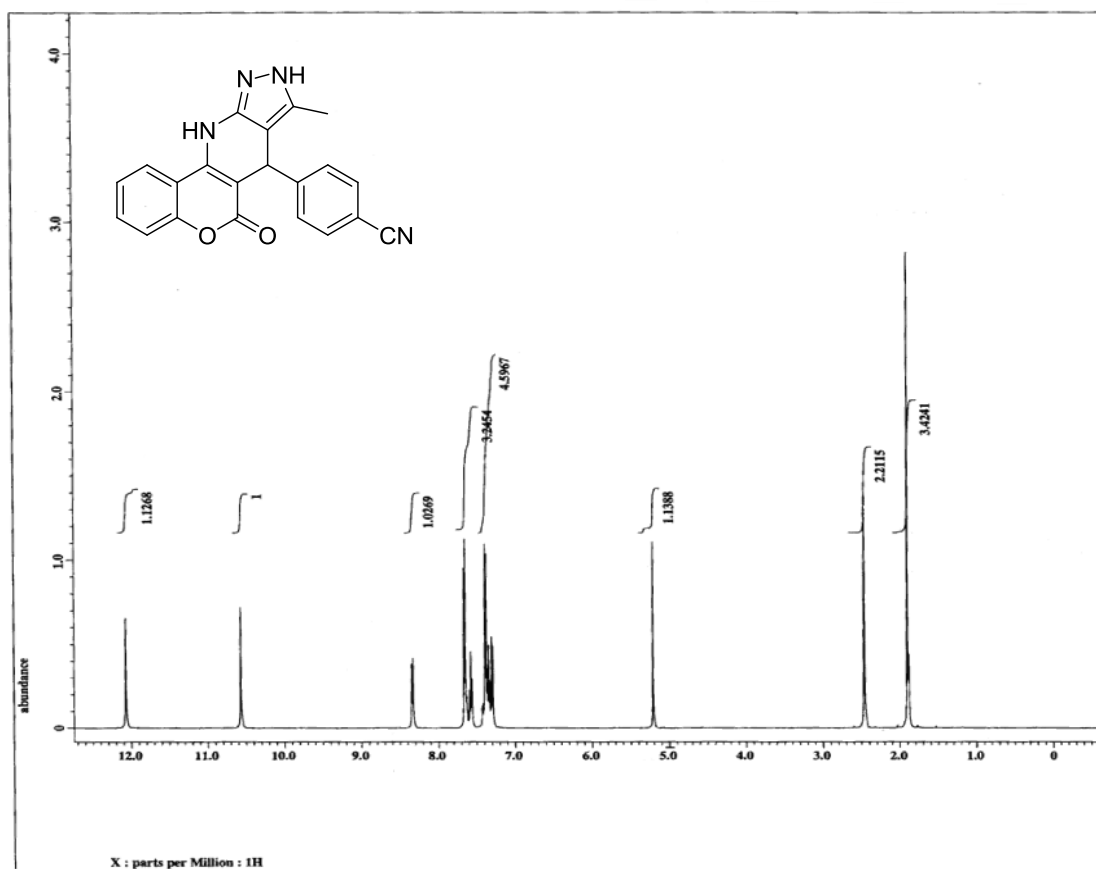
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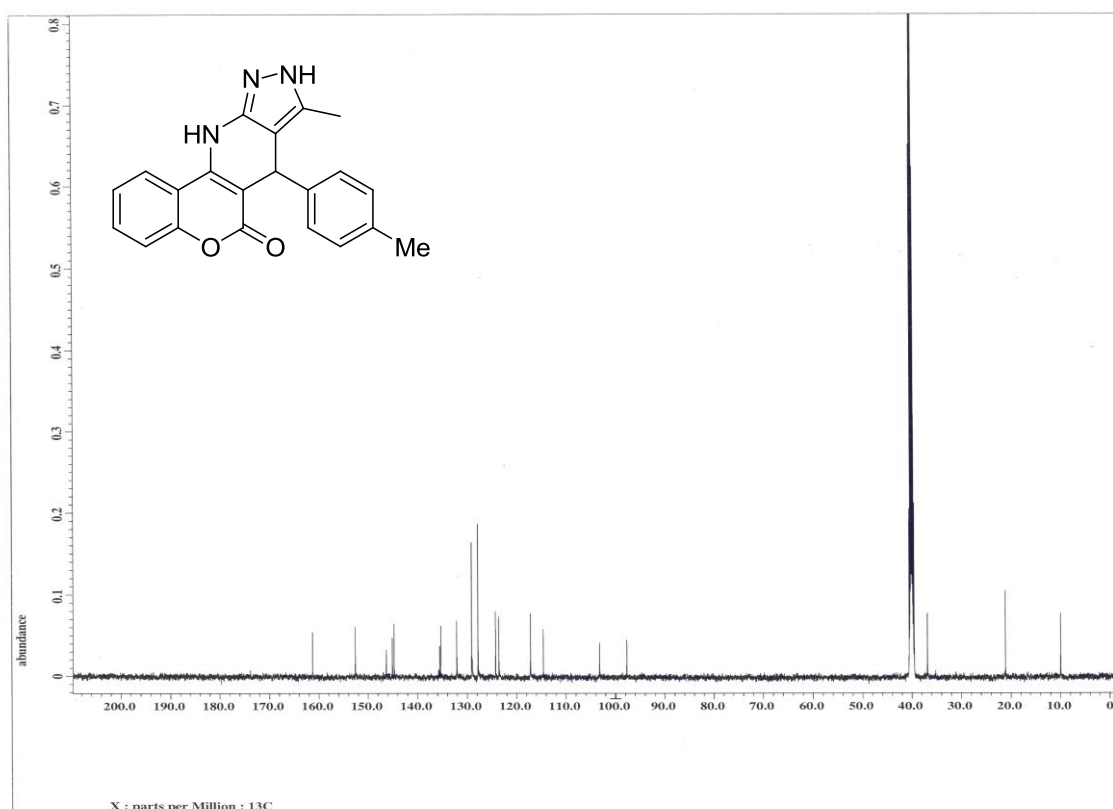
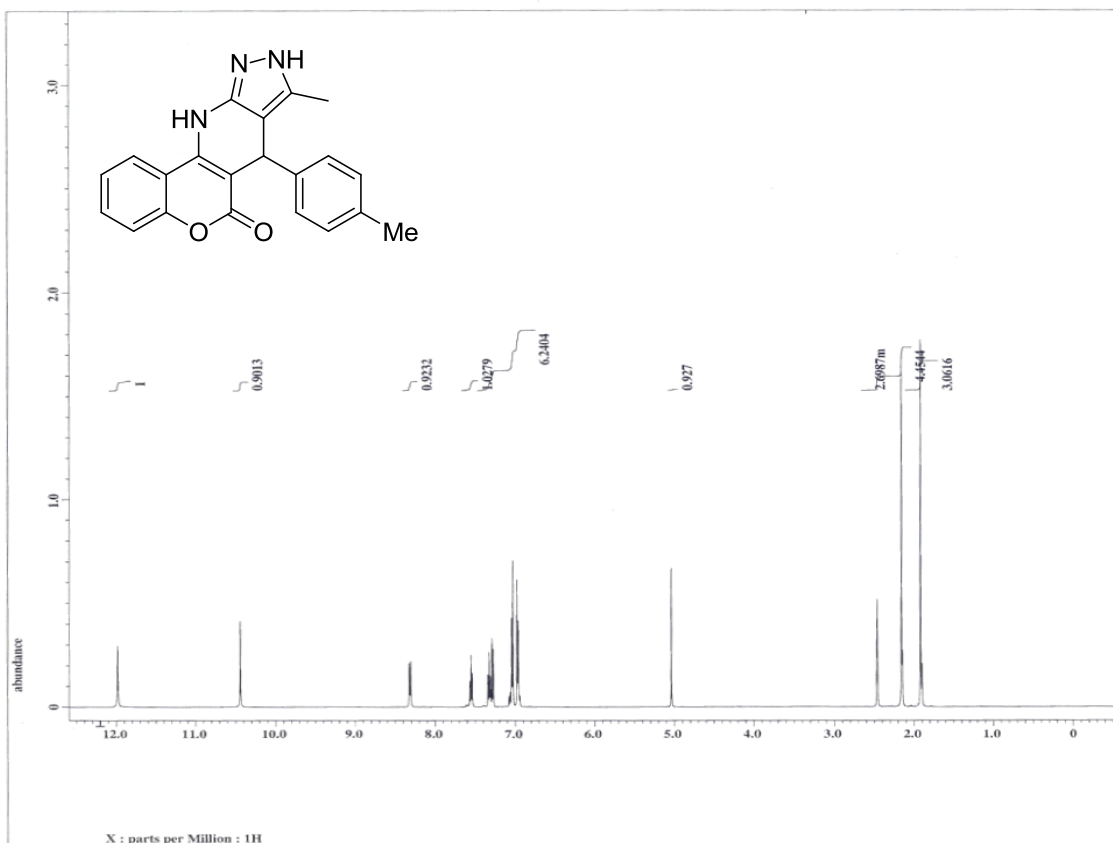
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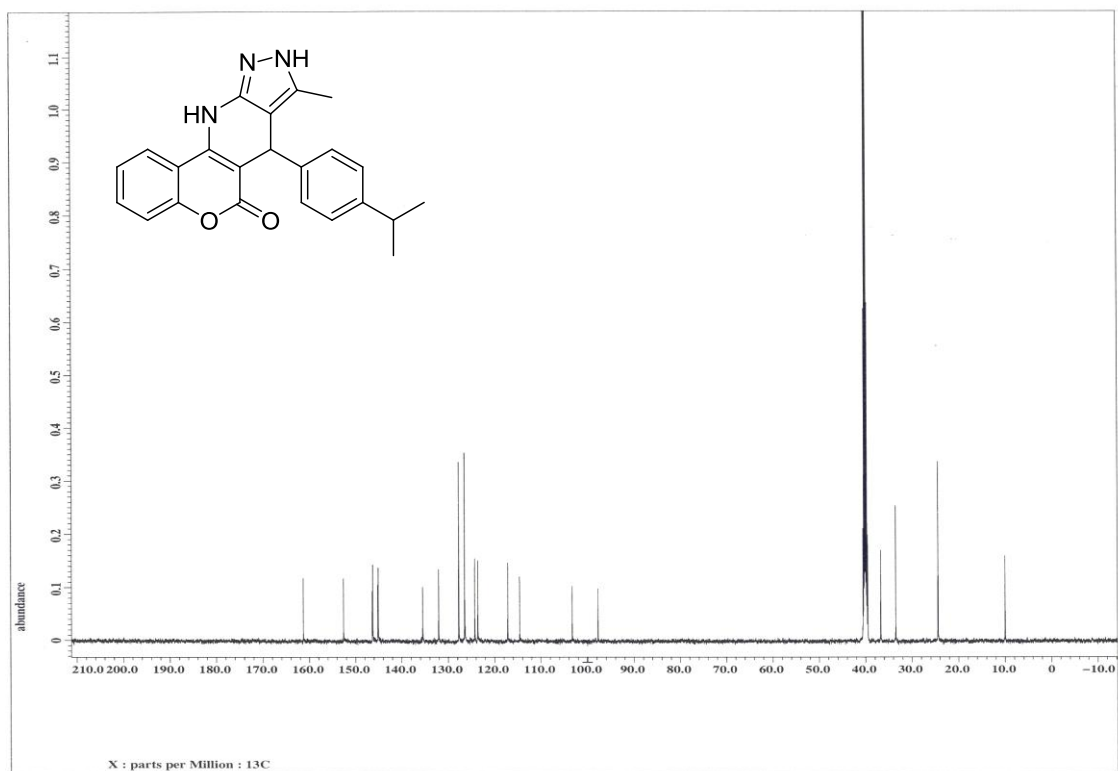
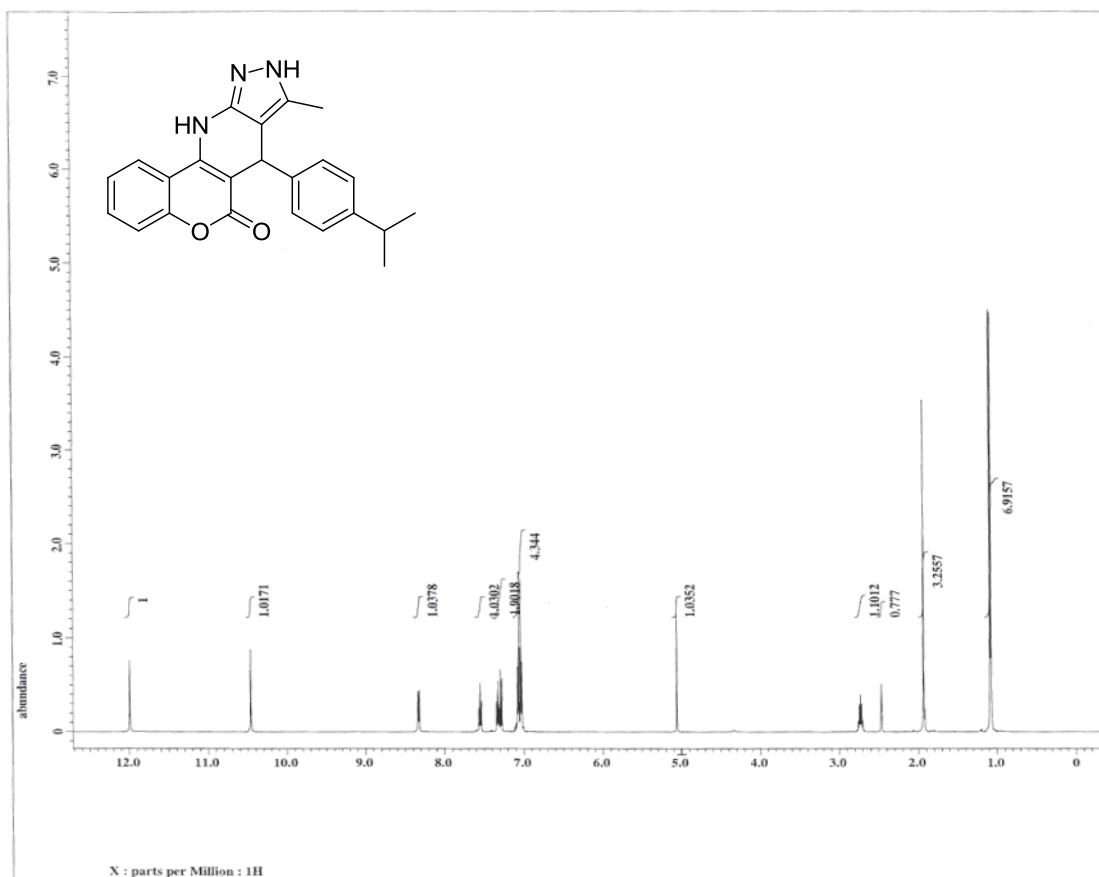
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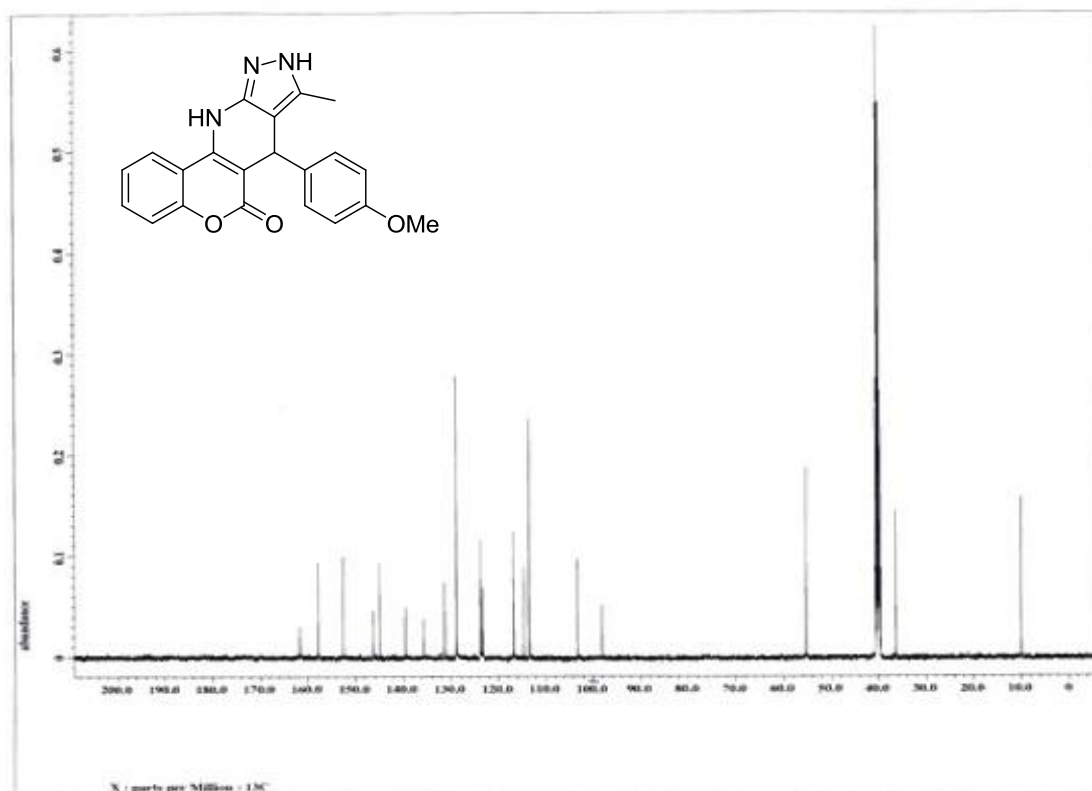
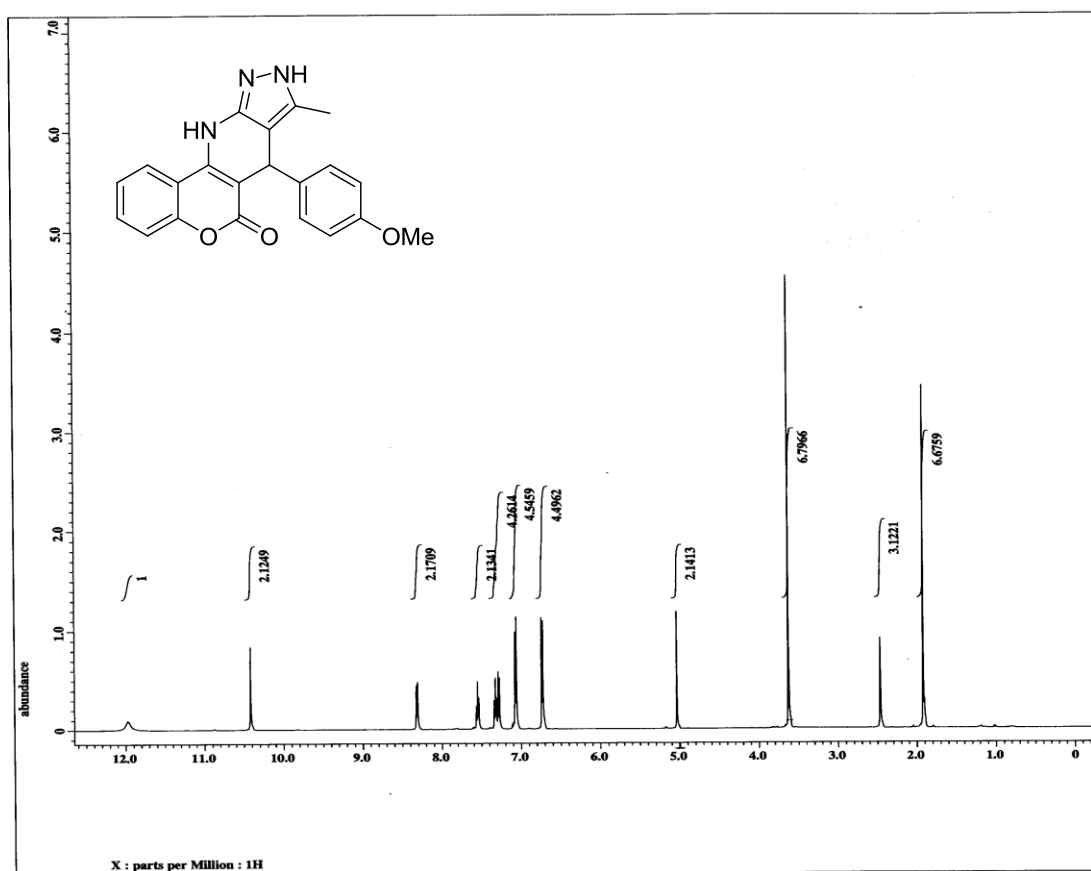
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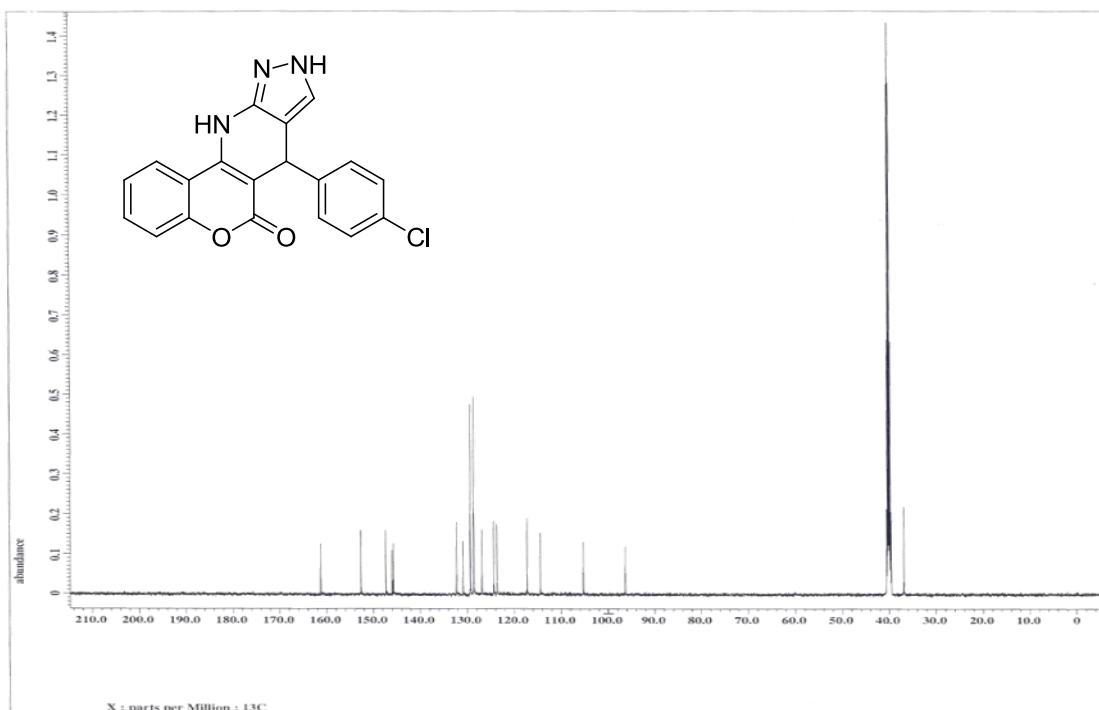
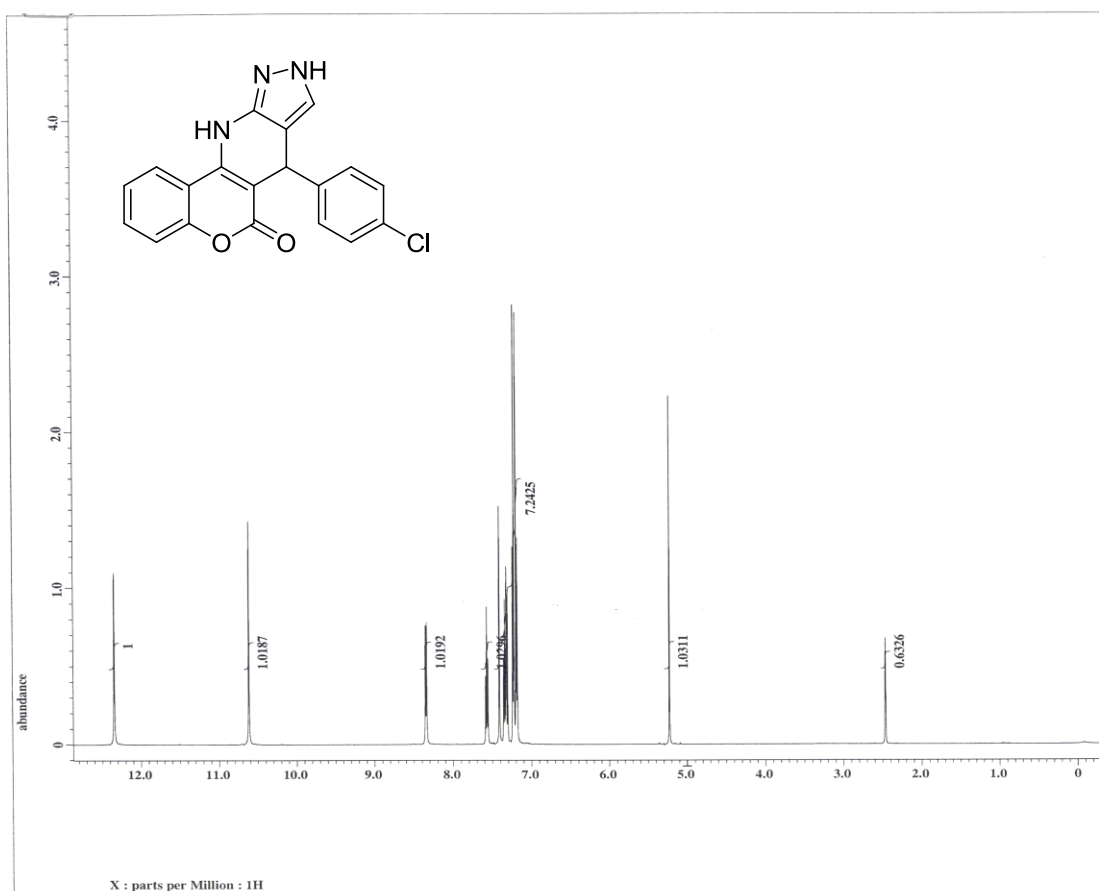
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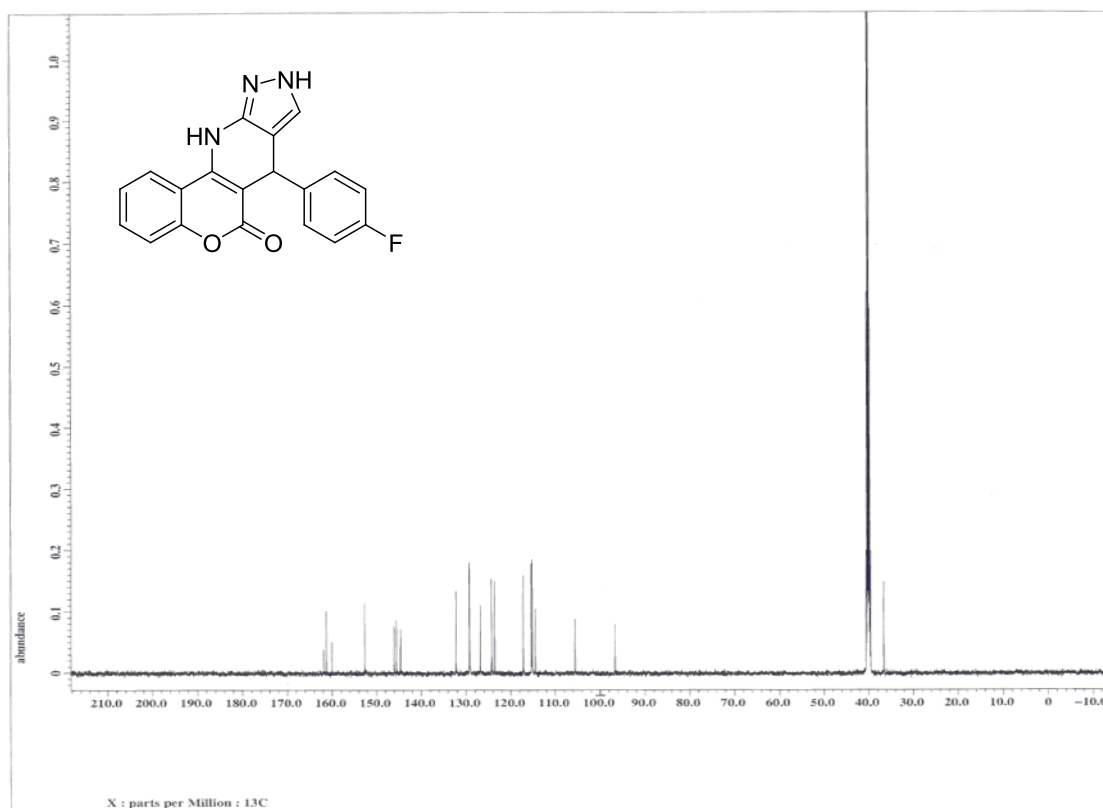
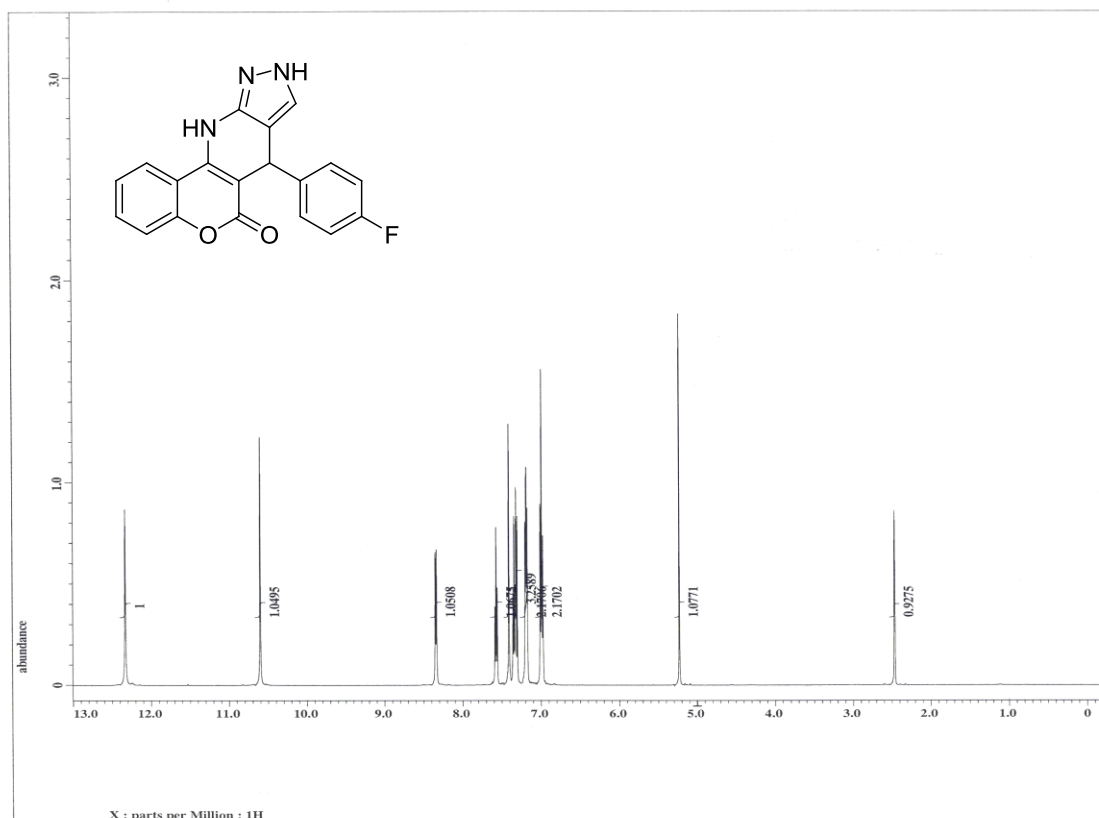
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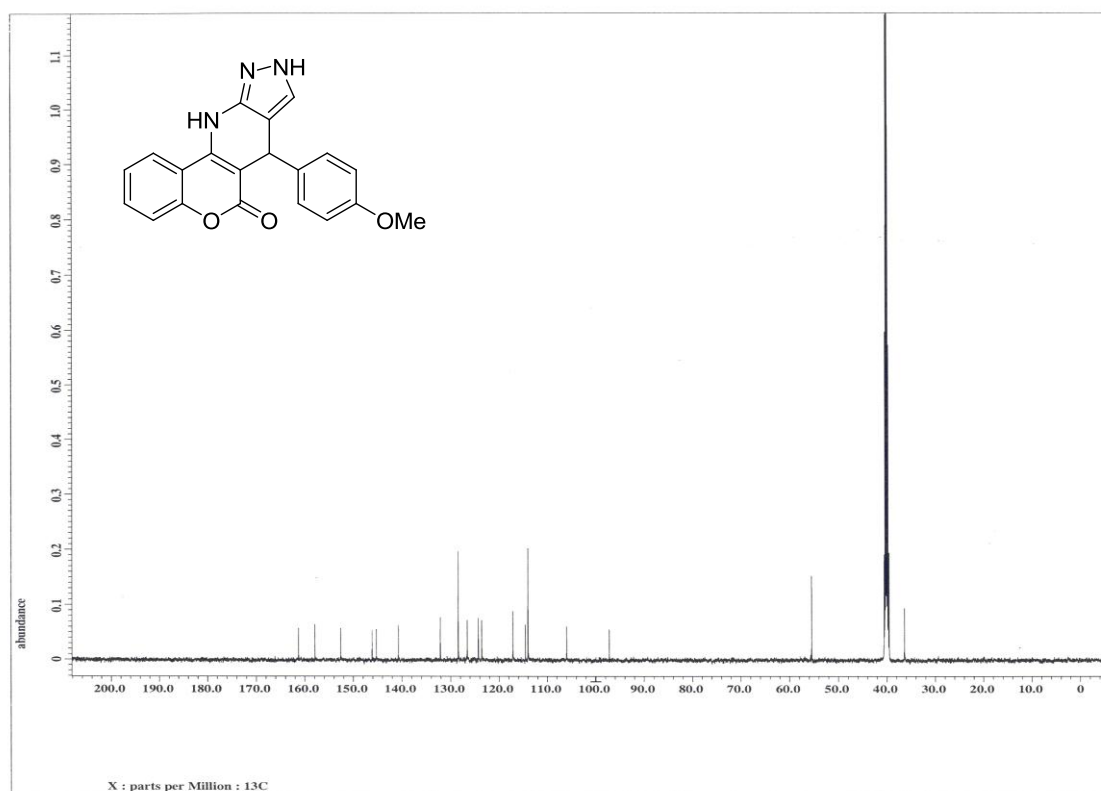
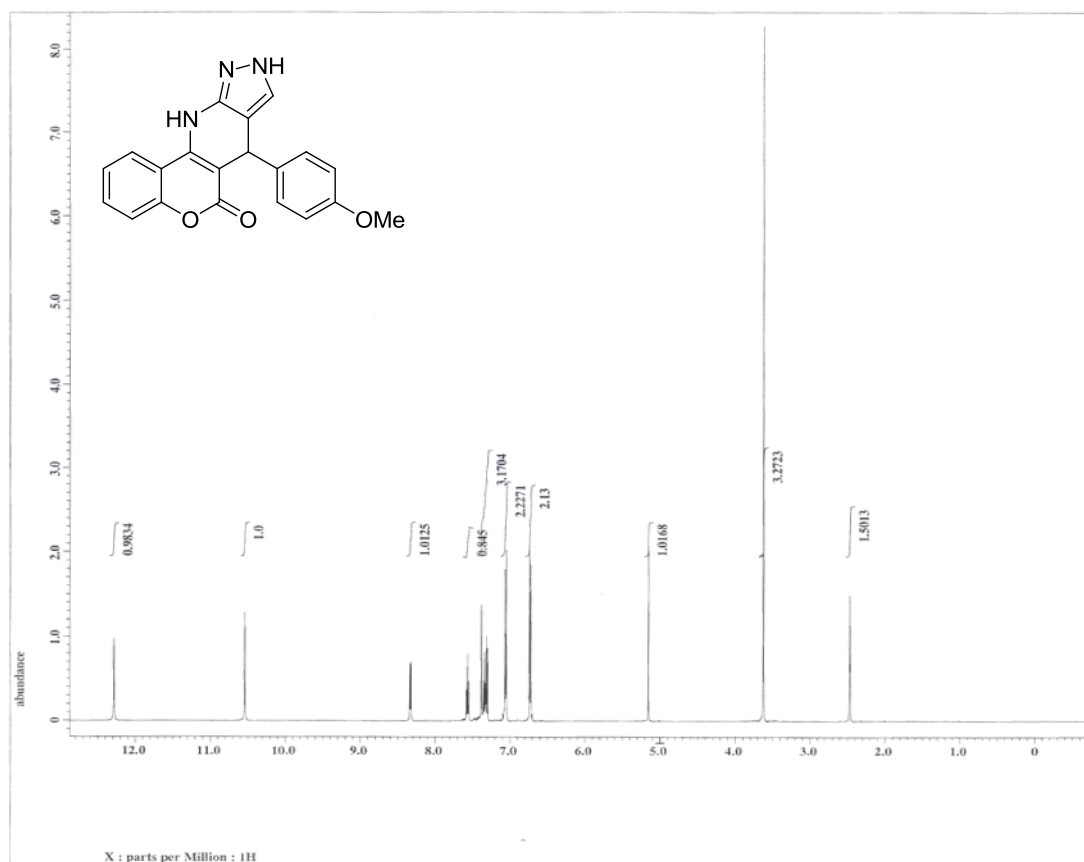
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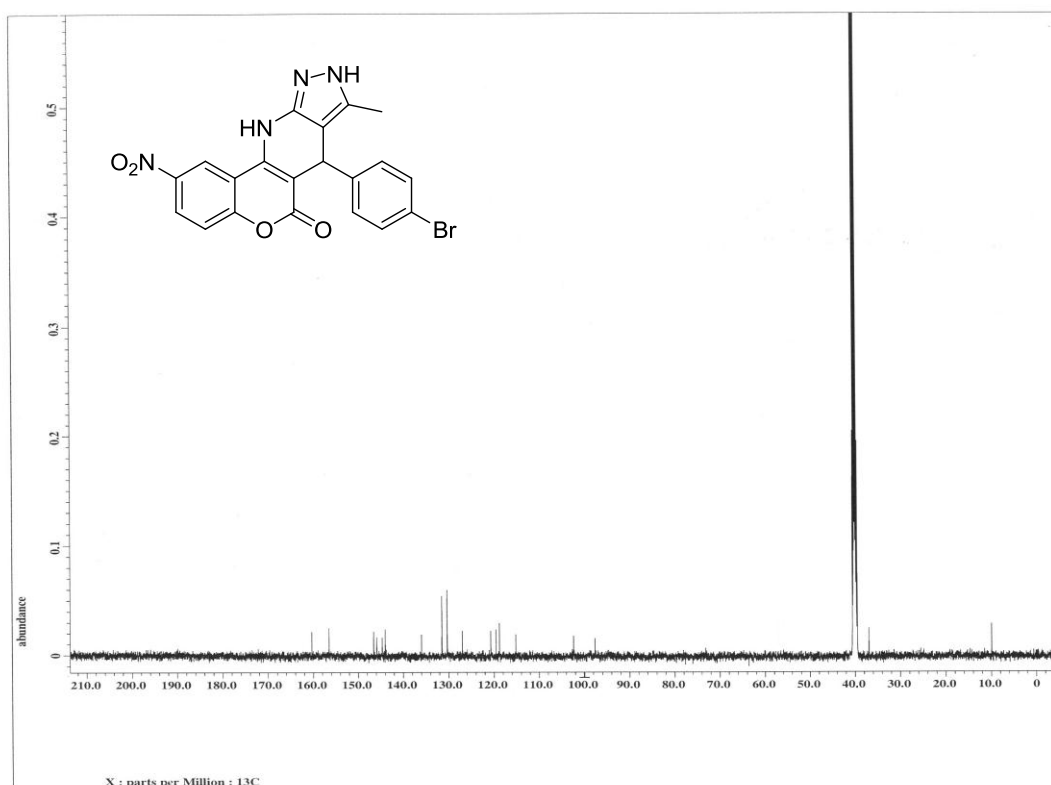
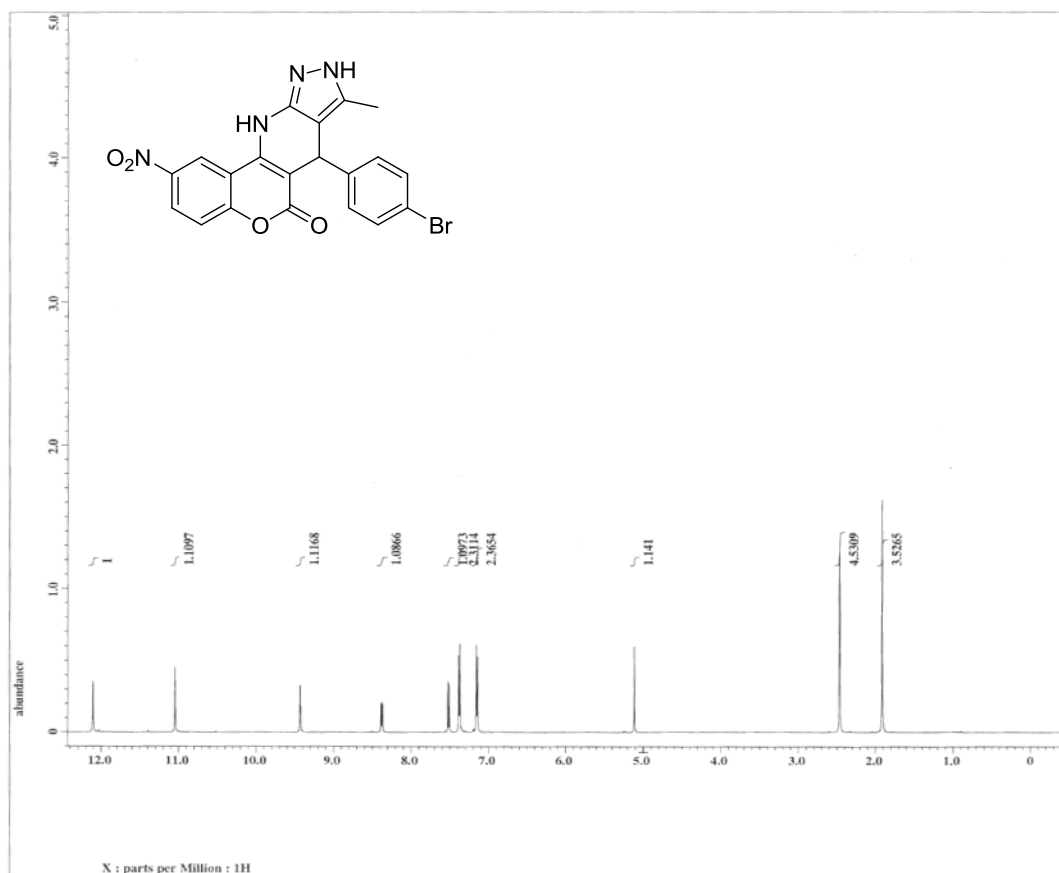
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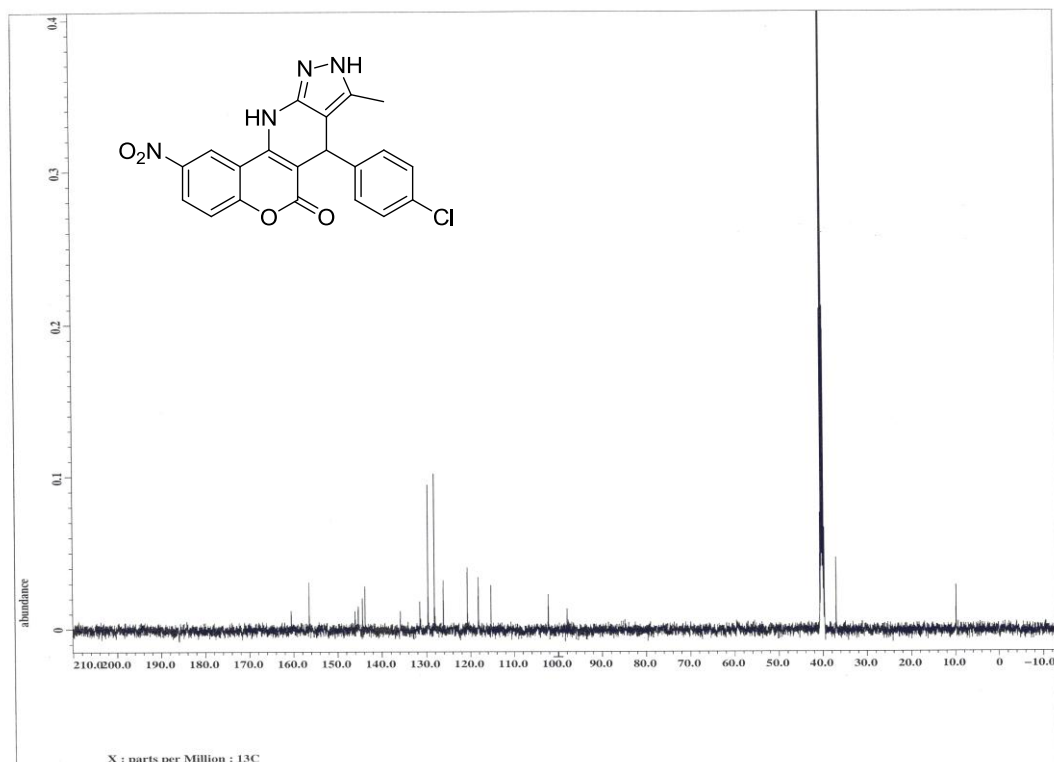
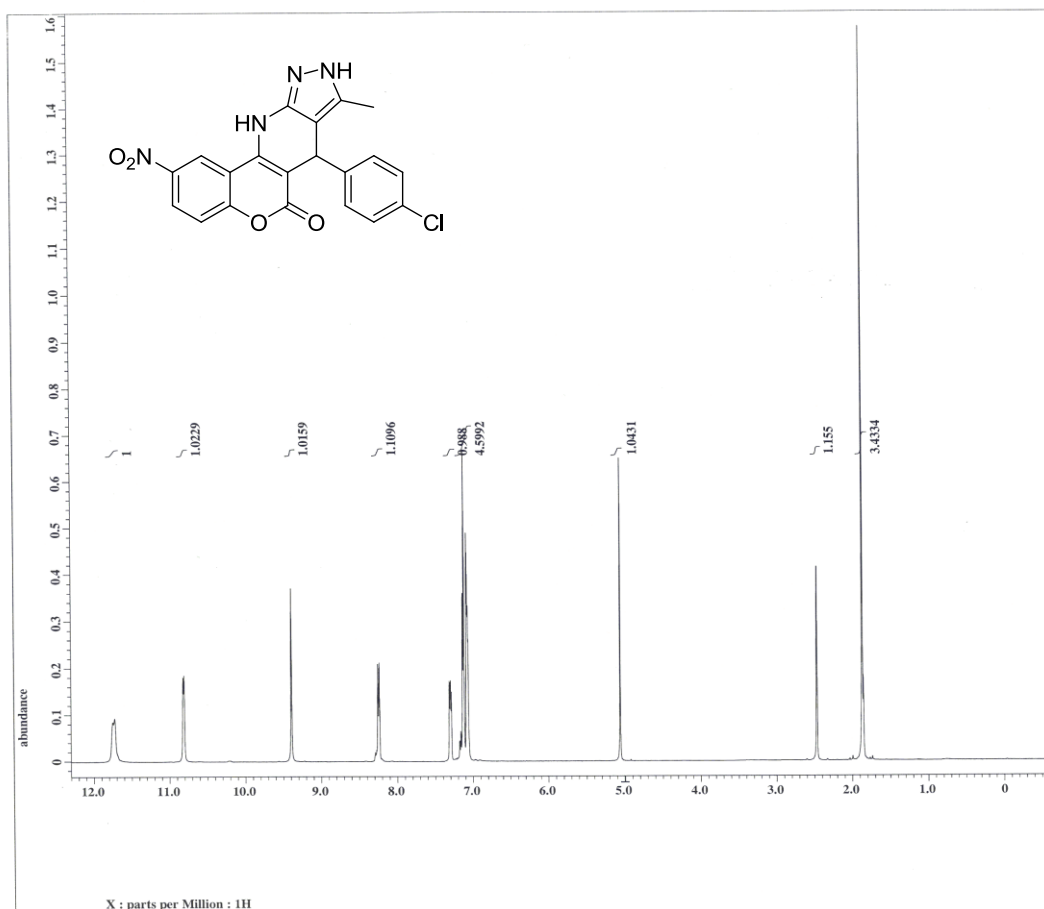
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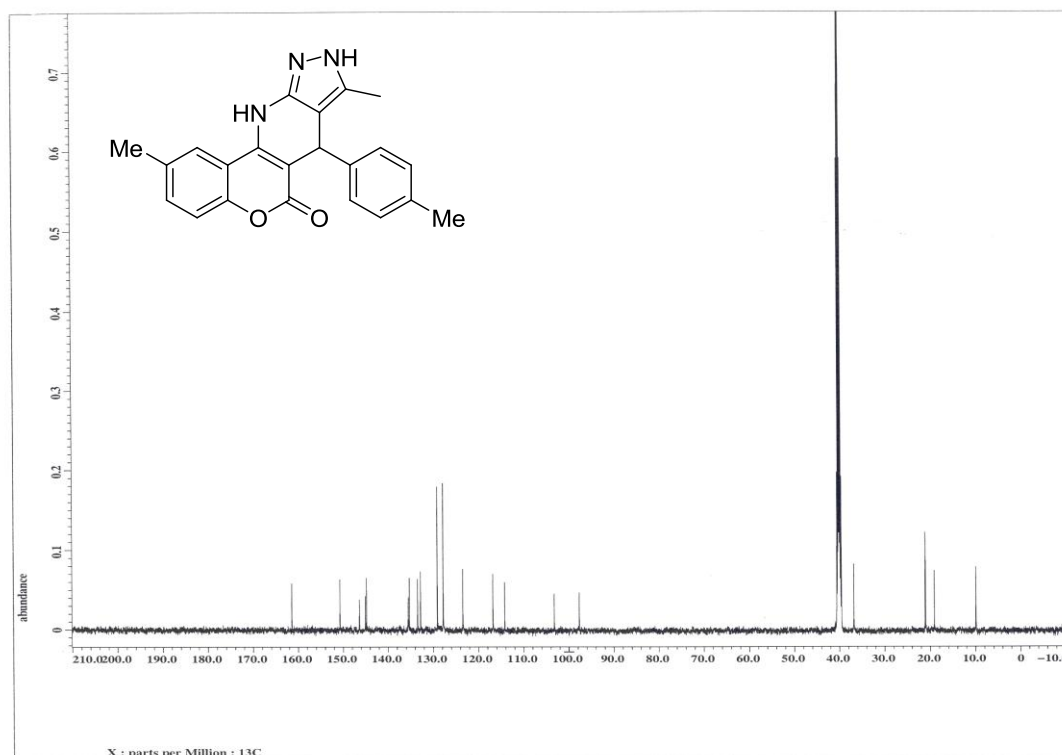
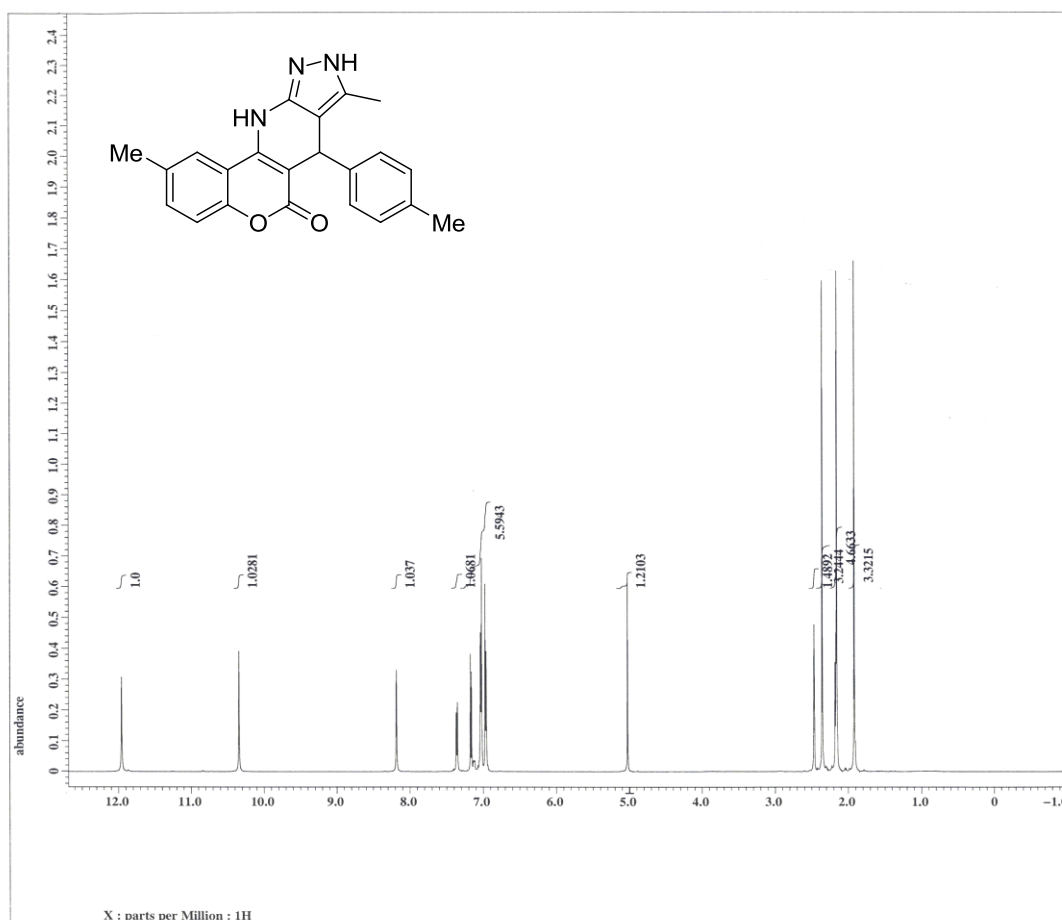
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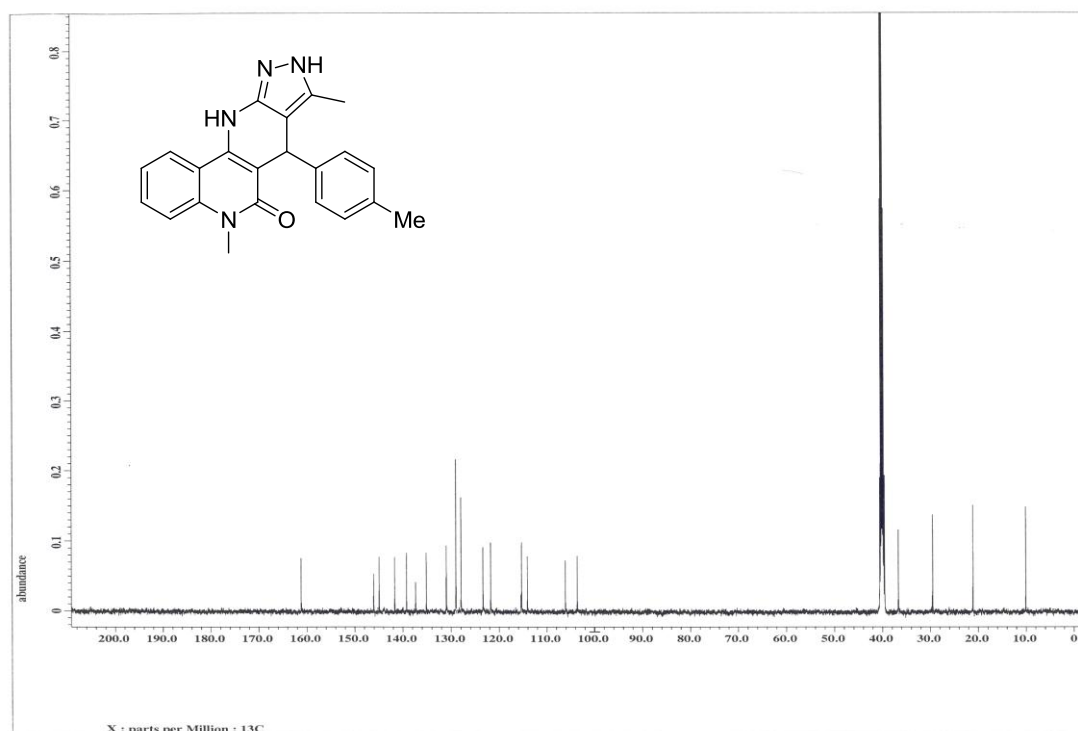
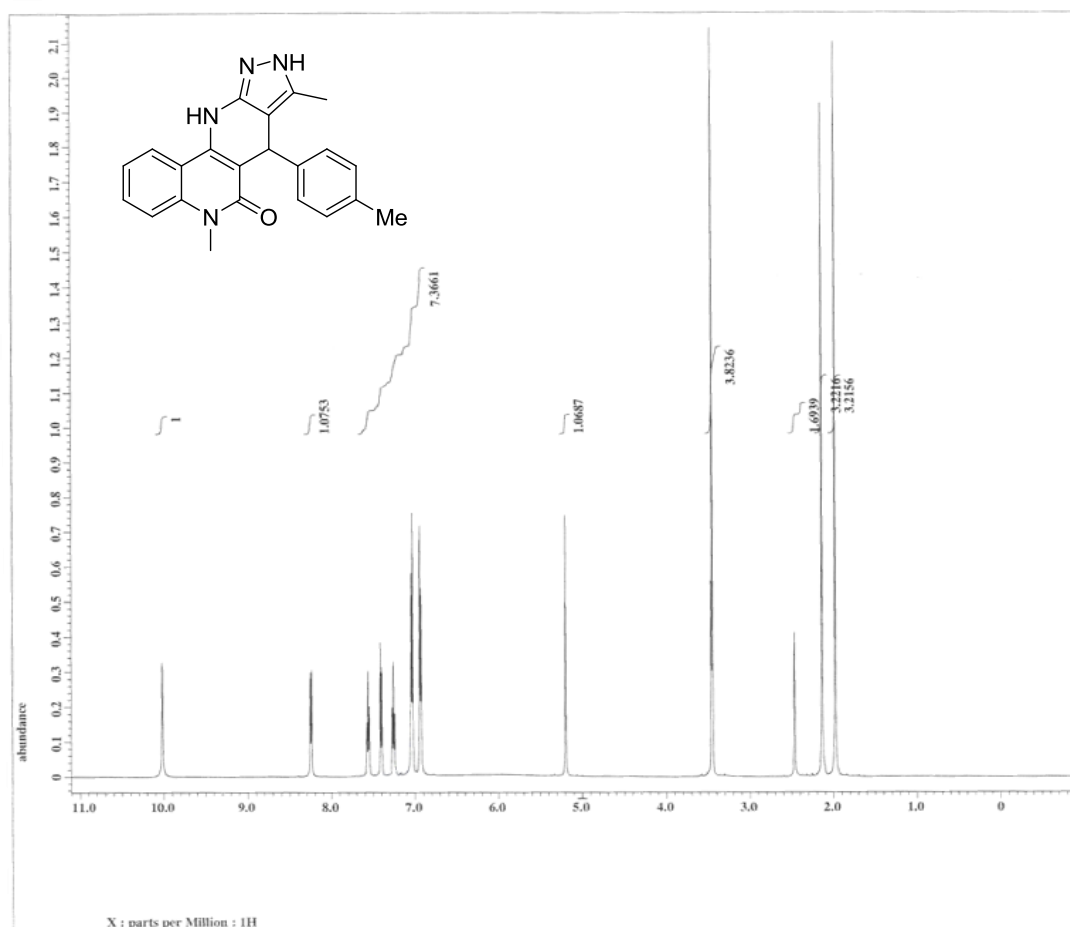
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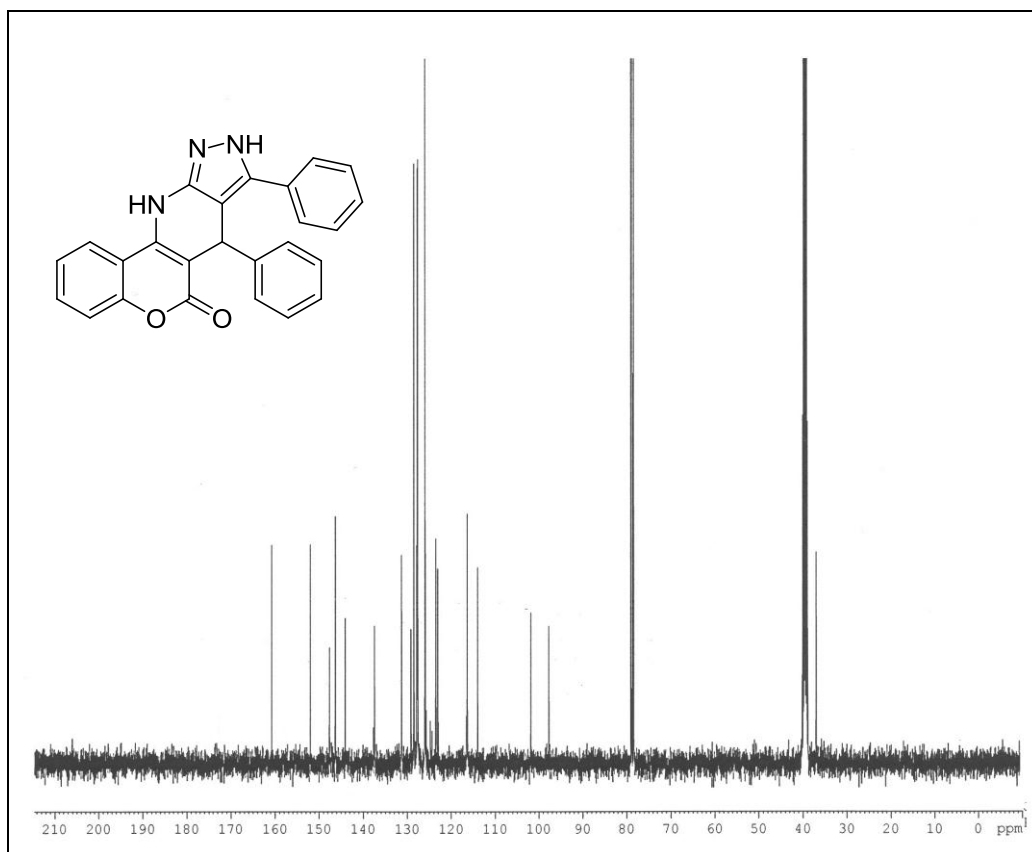
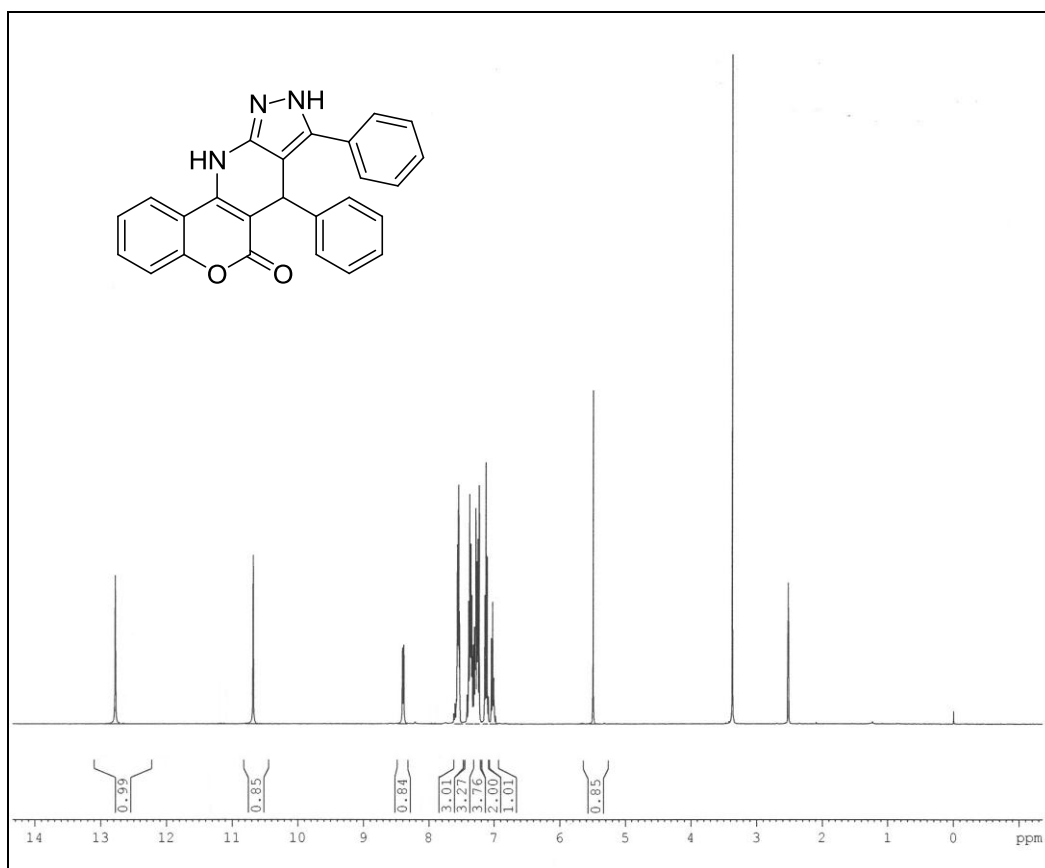
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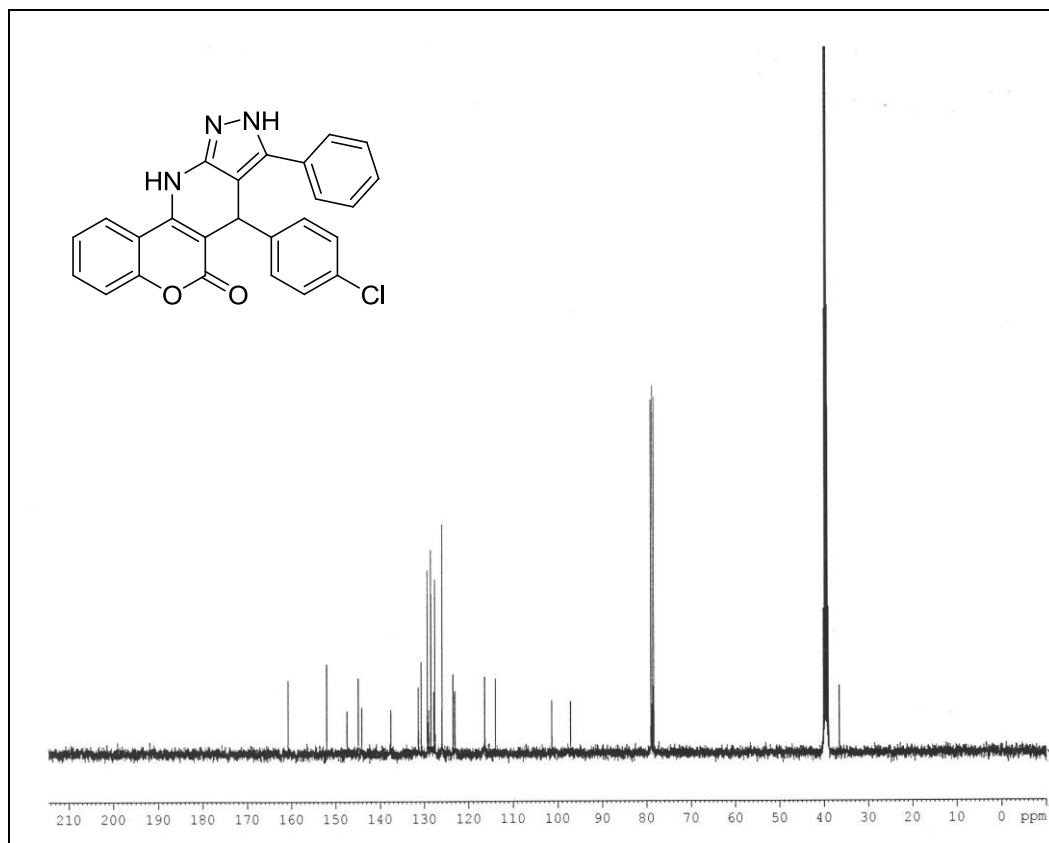
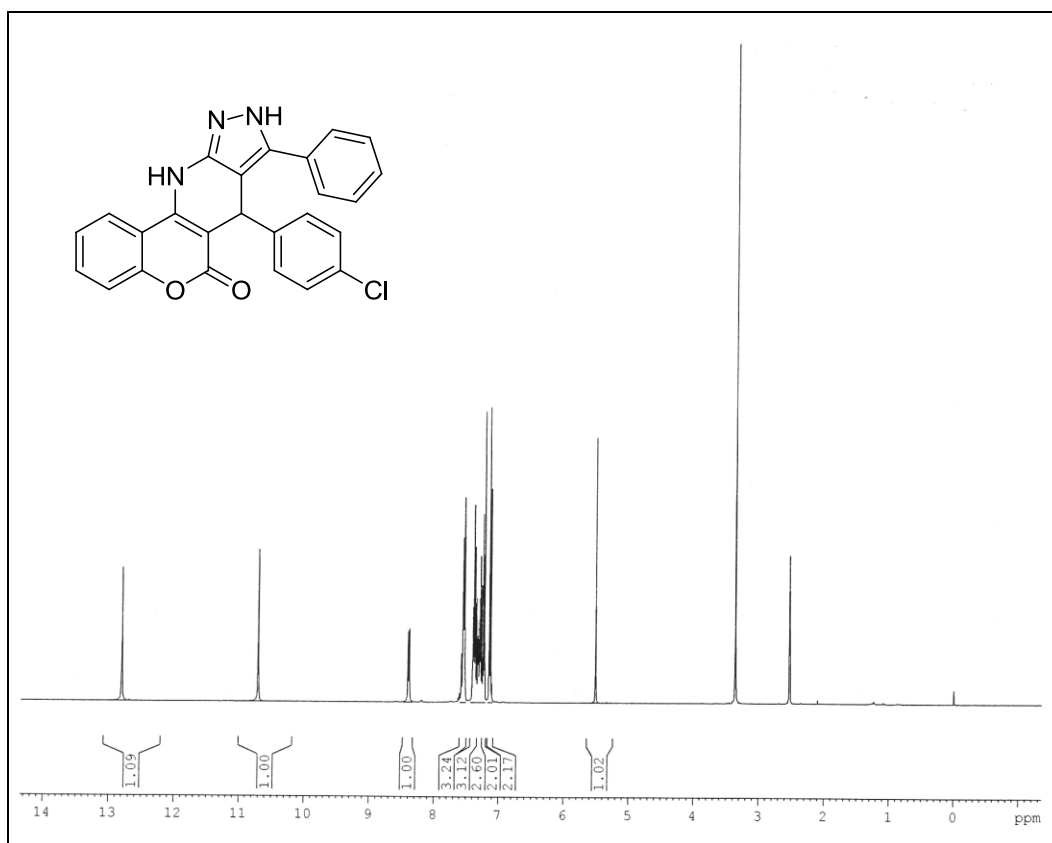
Copies of ^1H and ^{13}C NMR spectra of compound 1p



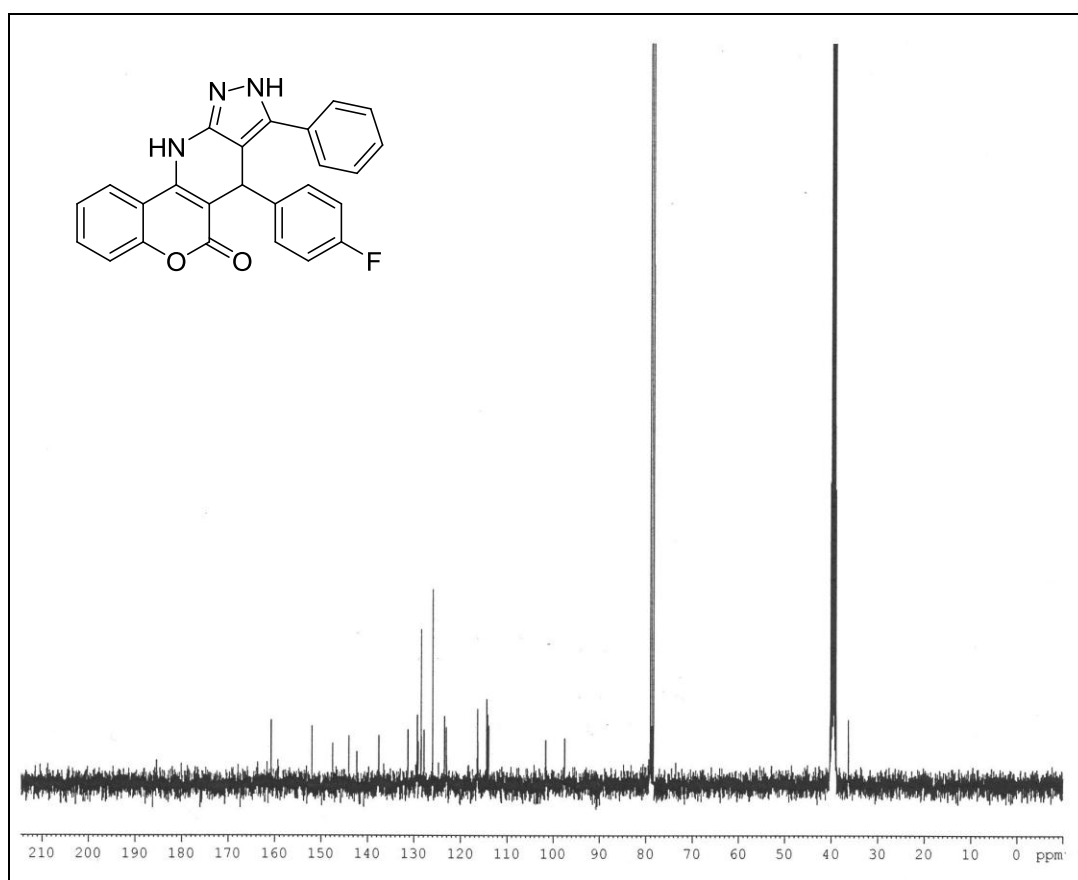
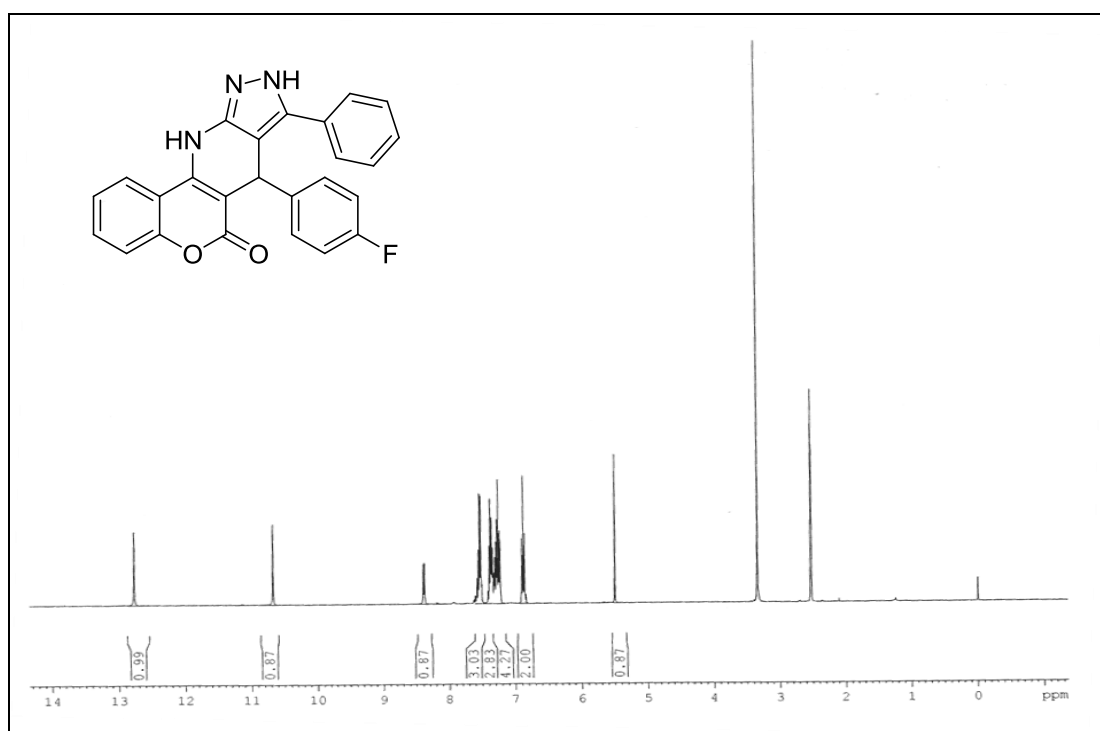
Copies of ^1H and ^{13}C NMR spectra of compound 2a



Copies of ^1H and ^{13}C NMR spectra of compound 2b



Copies of ^1H and ^{13}C NMR spectra of compound 2c



Copies of ^1H and ^{13}C NMR spectra of compound 2d

