

Supporting Information

Structure-activity relationship studies on highly functionalized pyrazole hydrazones and amides as antiproliferative and antioxidant agents

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Figure S1. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **10a**

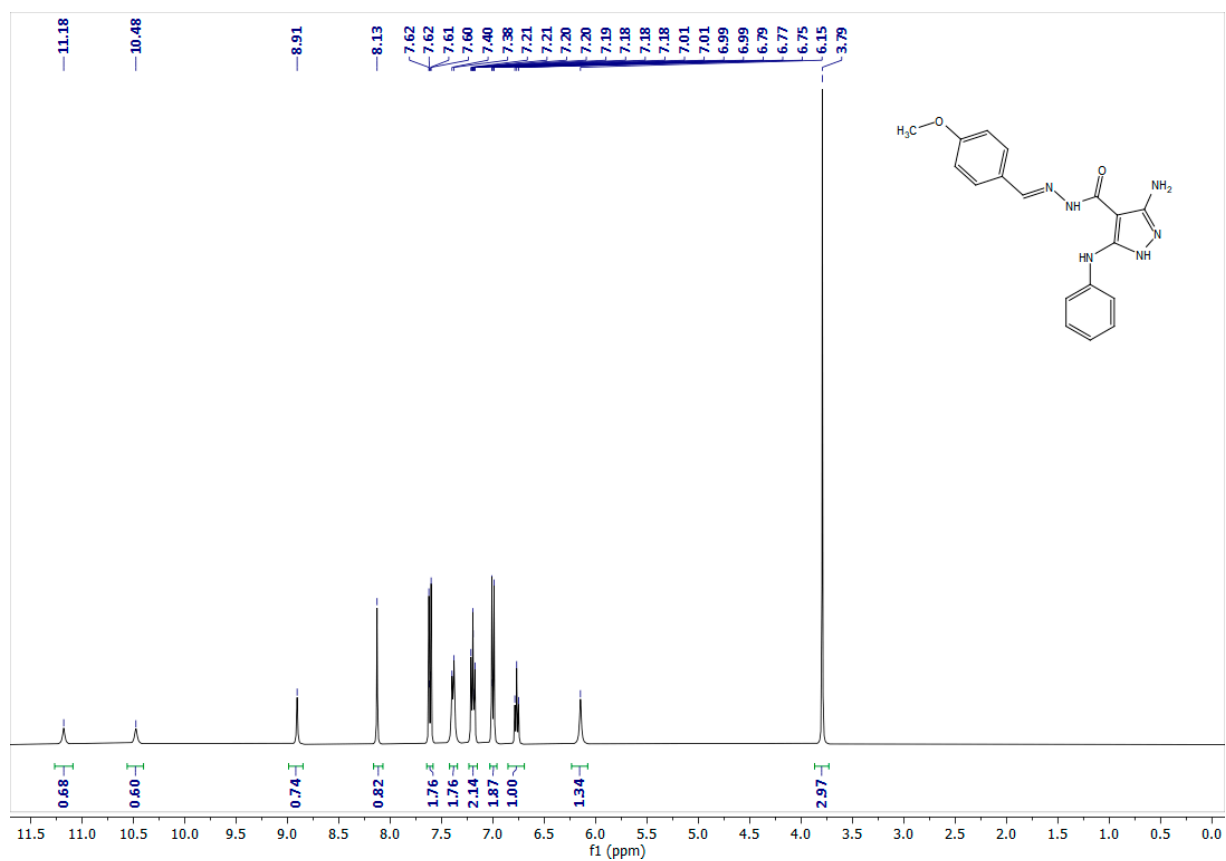


Figure S2. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **10a**

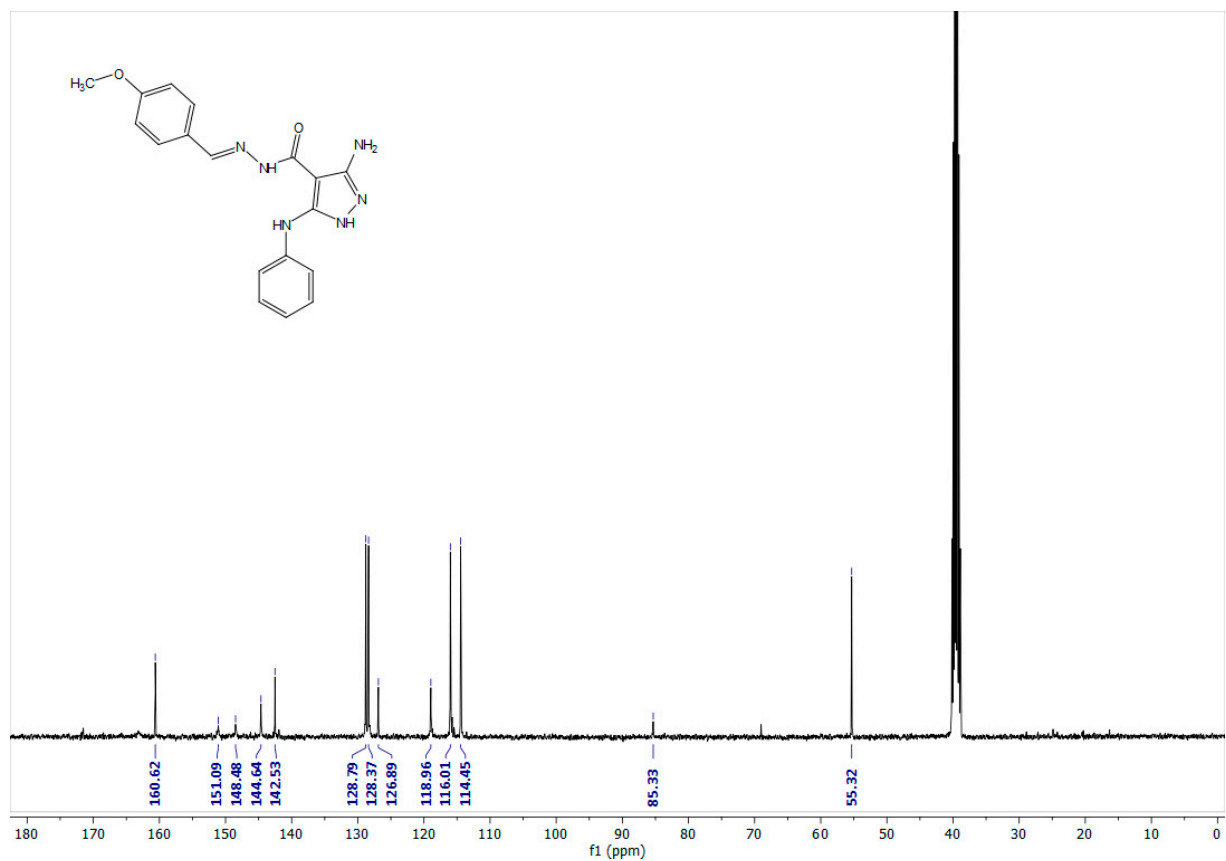


Figure S3. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **10b**

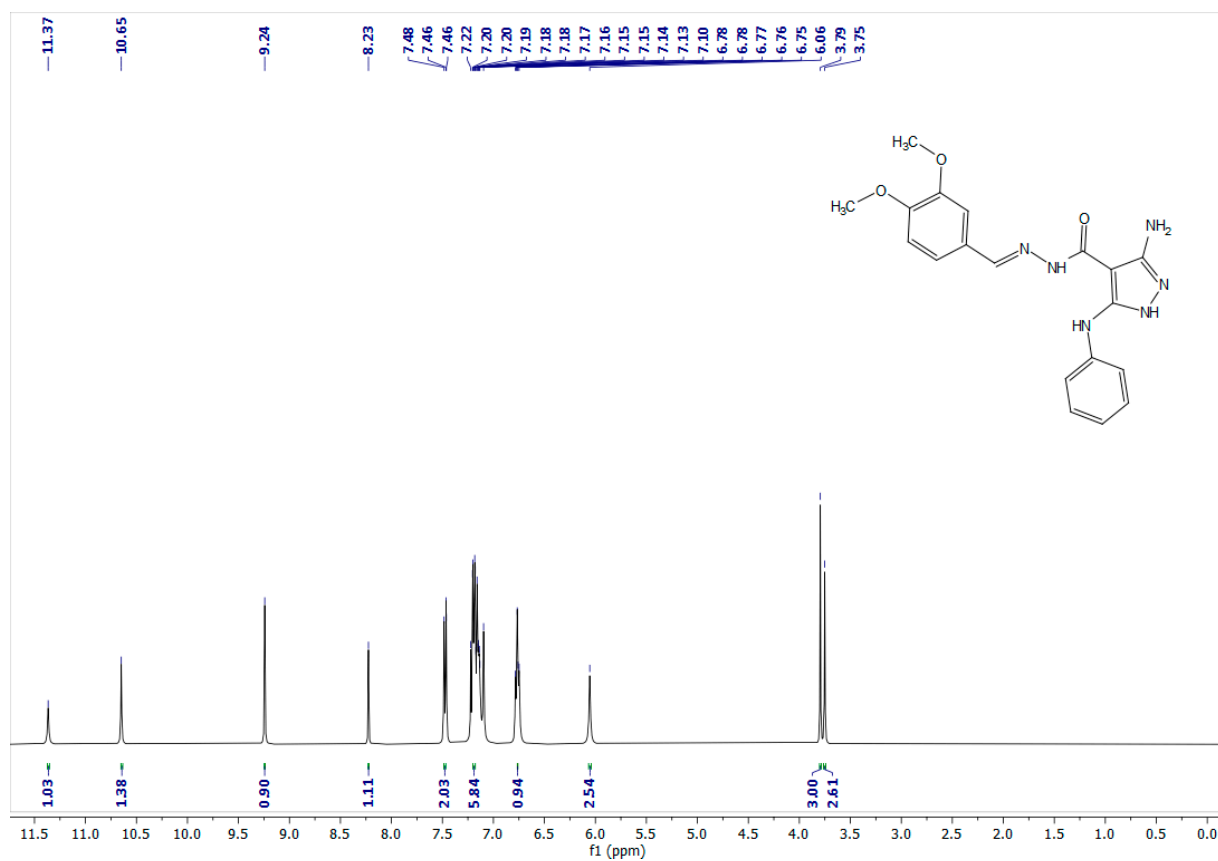


Figure S4. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **10b**

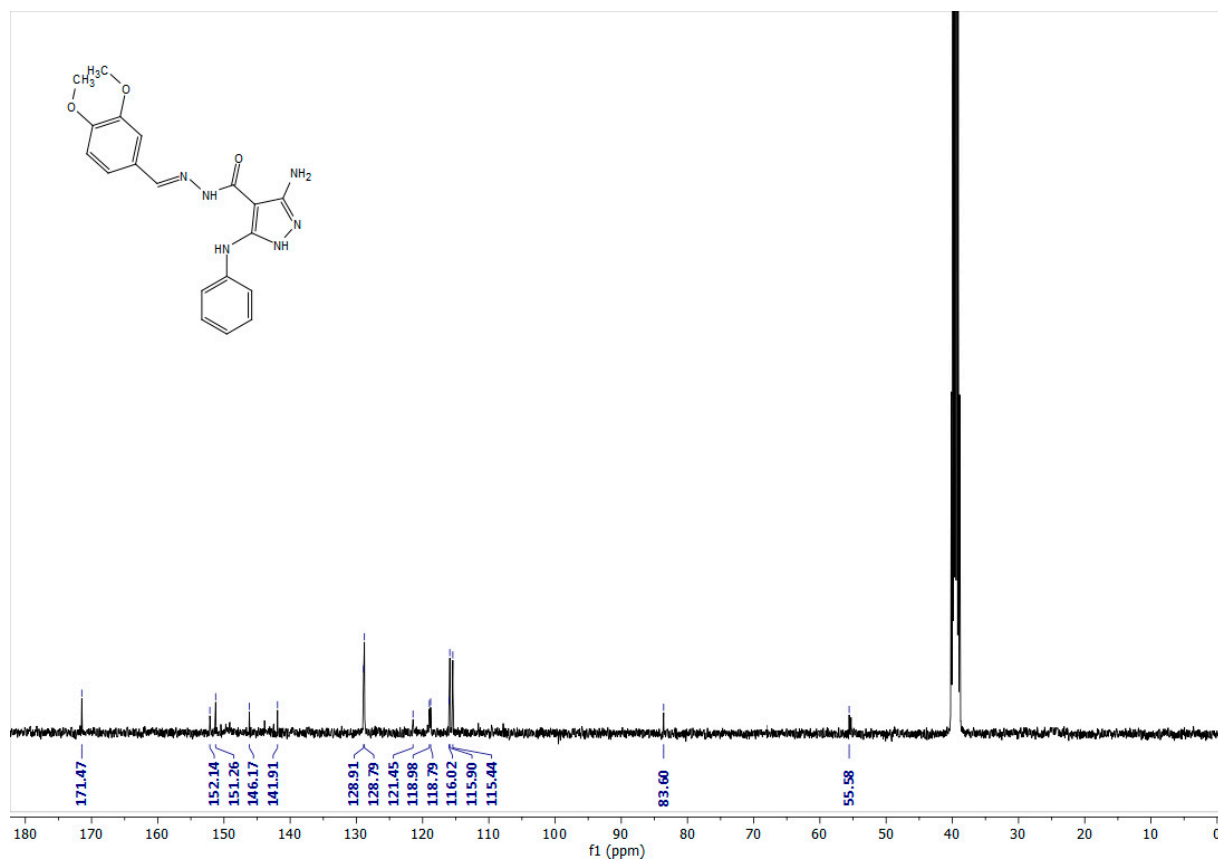


Figure S5. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **11a**

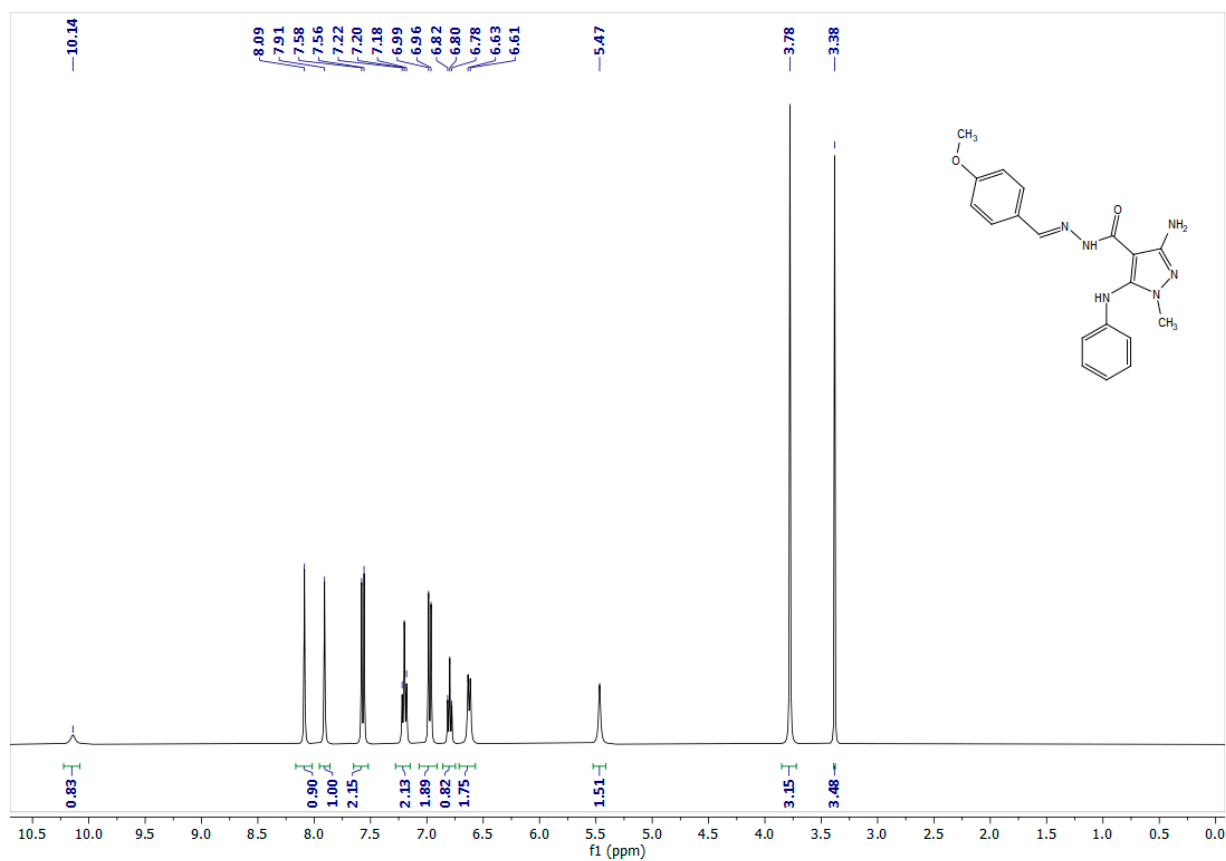


Figure S6. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **11a**

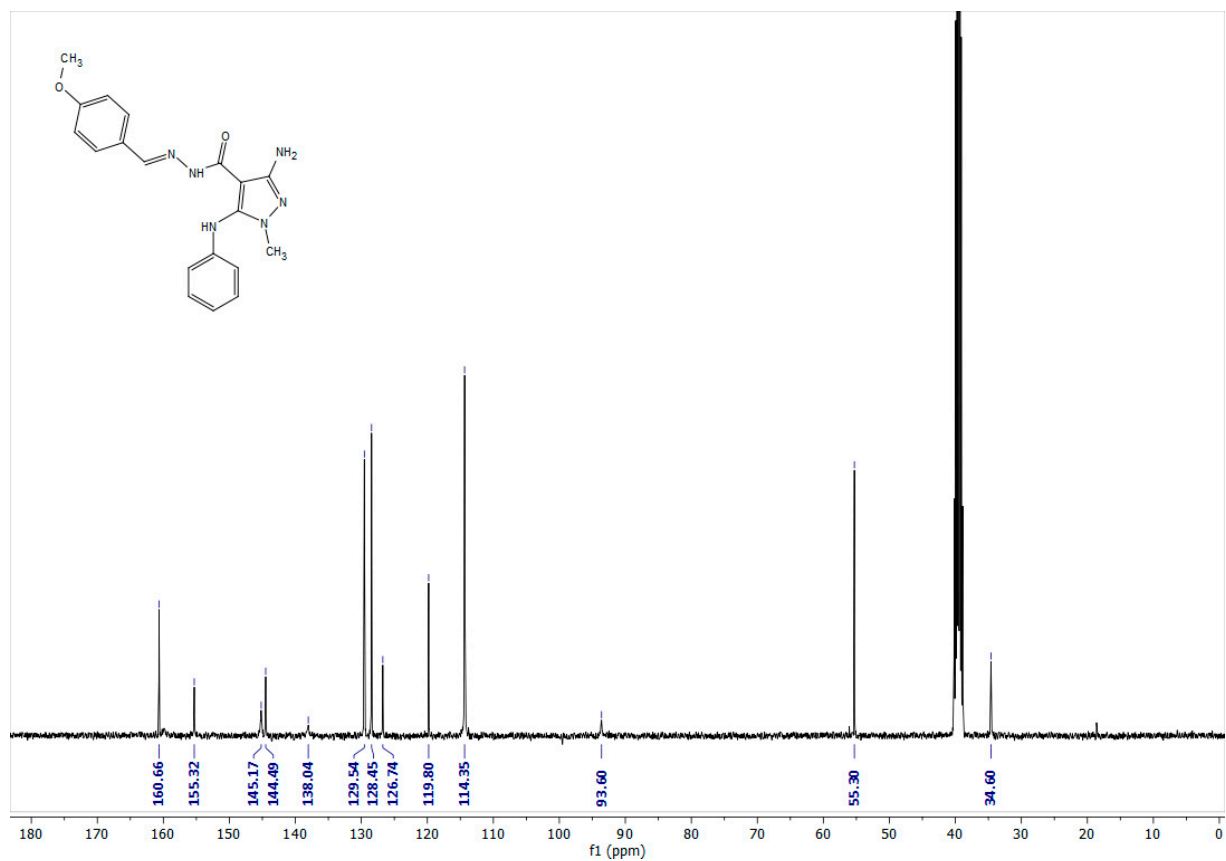


Figure S7. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **11b**

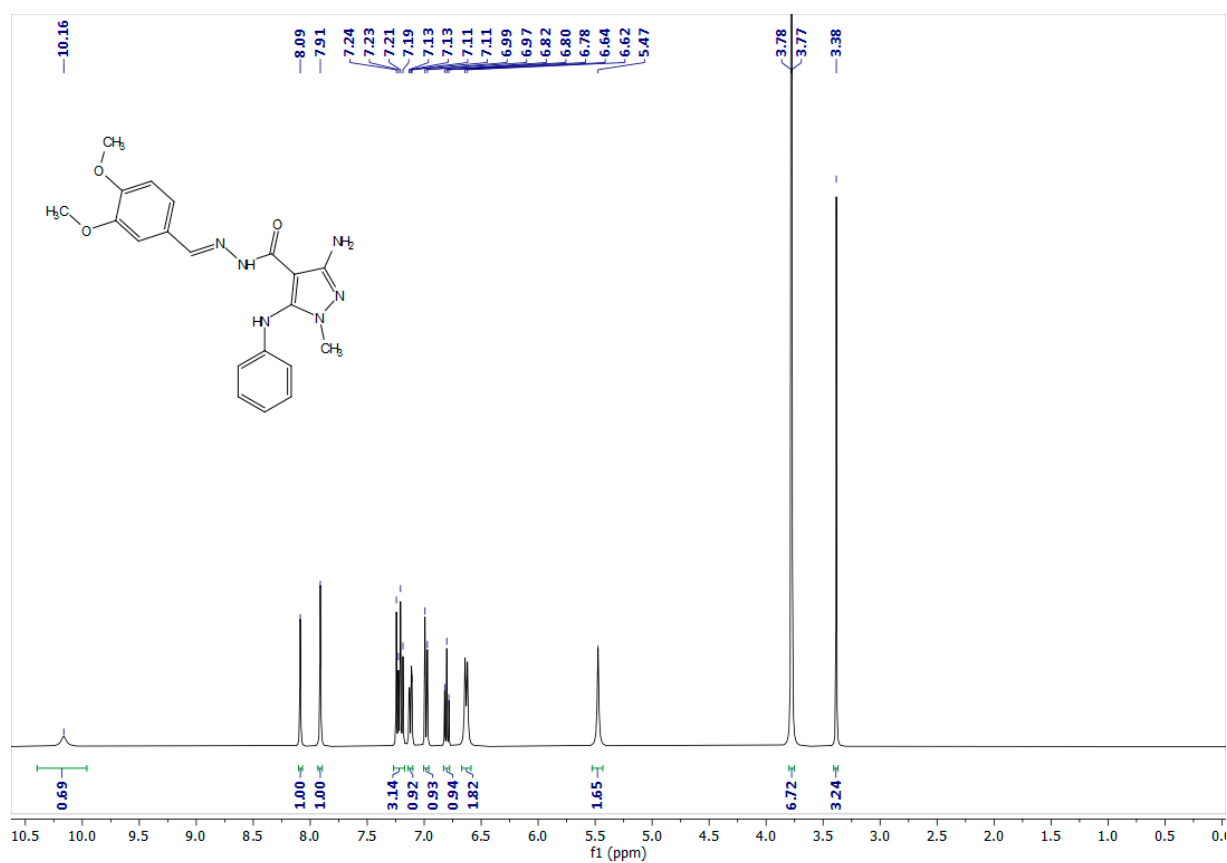


Figure S8. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **11b**

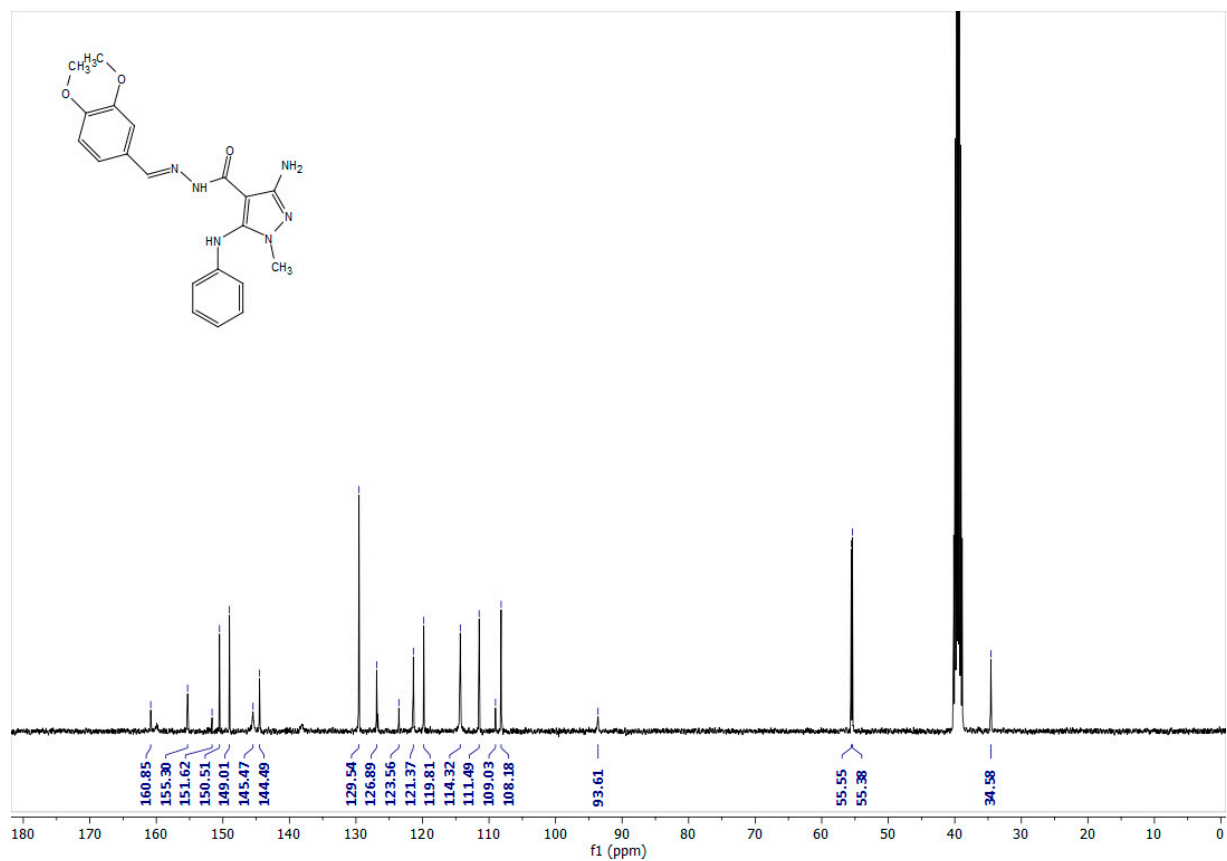


Figure S9. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **11c**

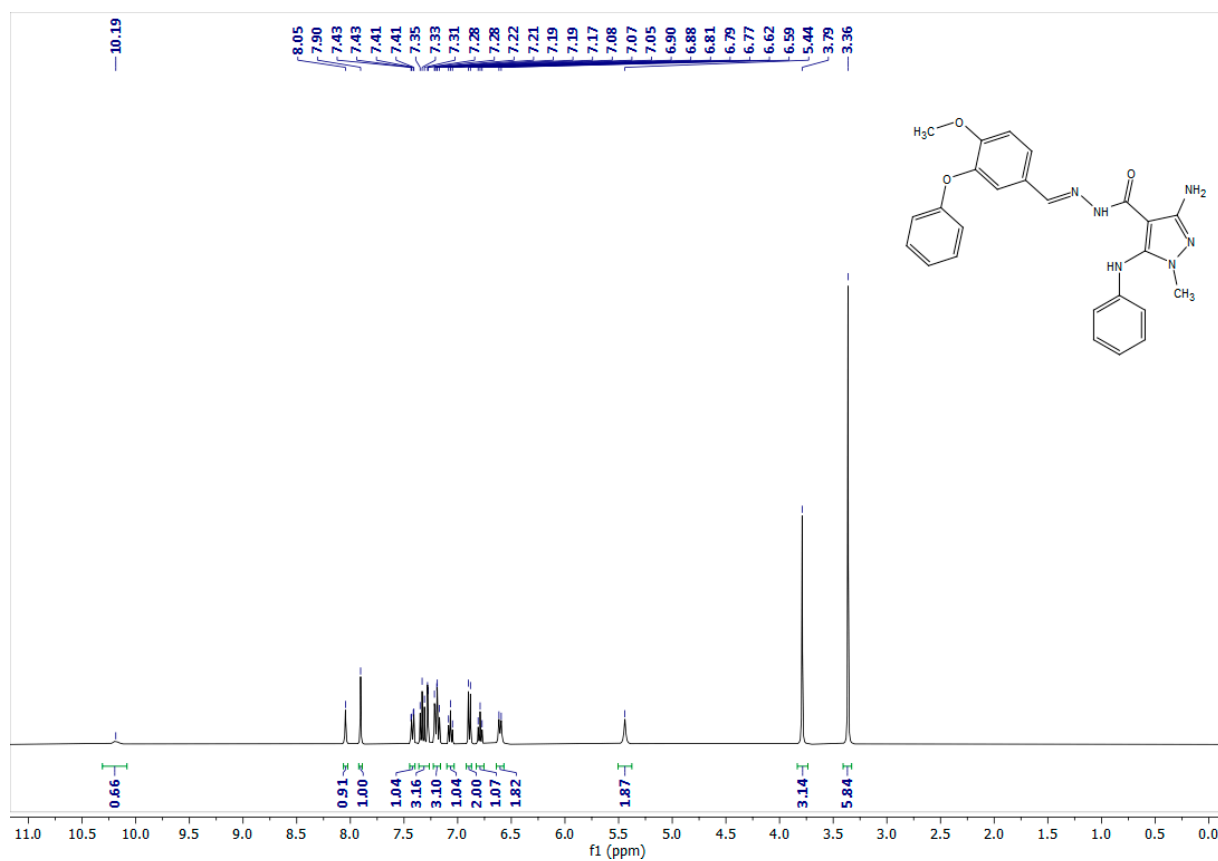


Figure S10. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **11c**

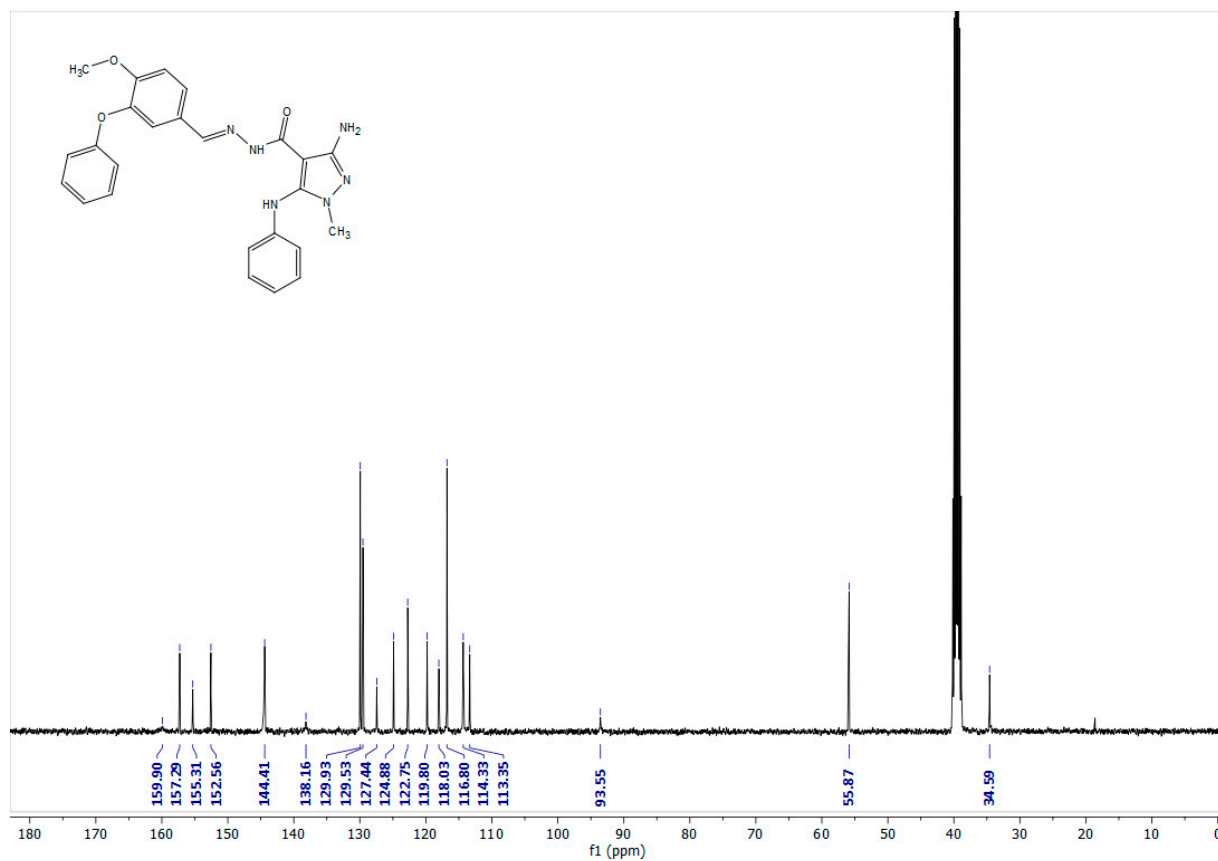


Figure S11. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **11d**

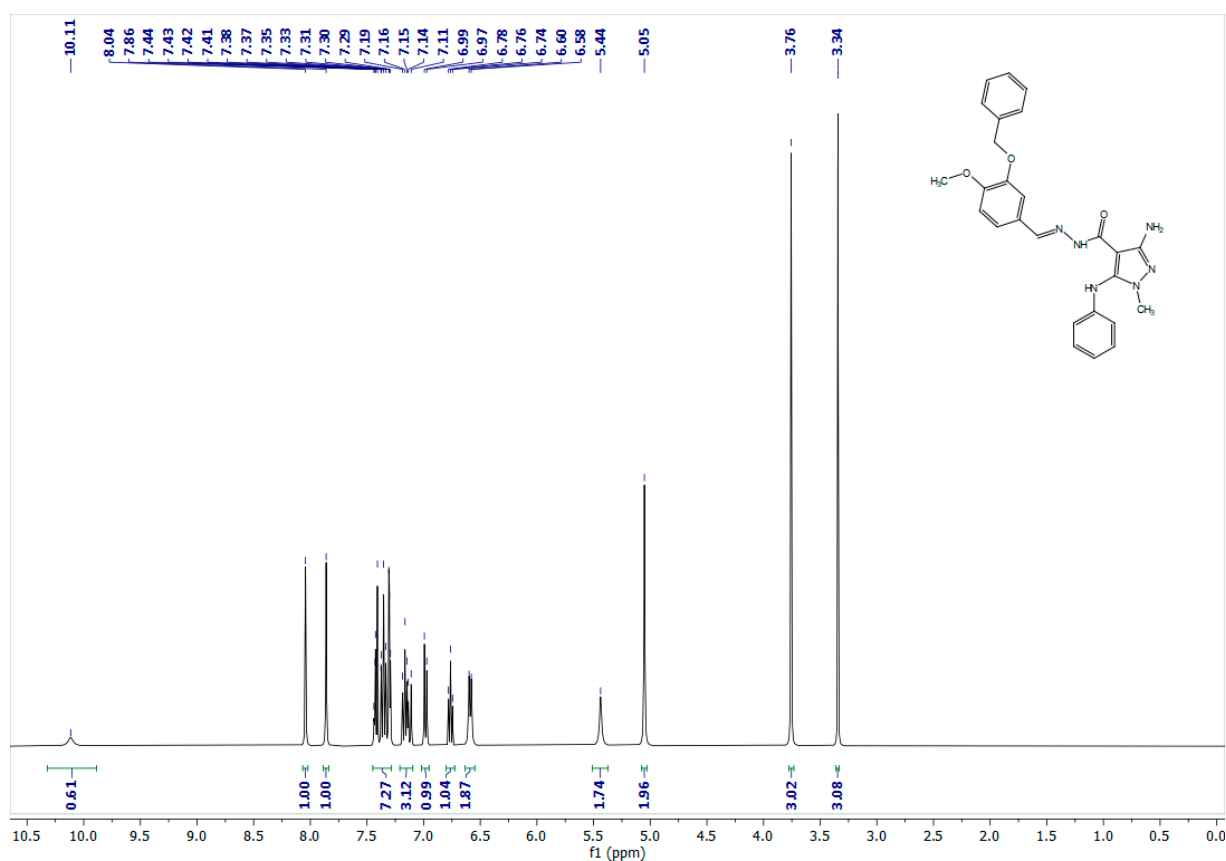


Figure S12. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **11d**

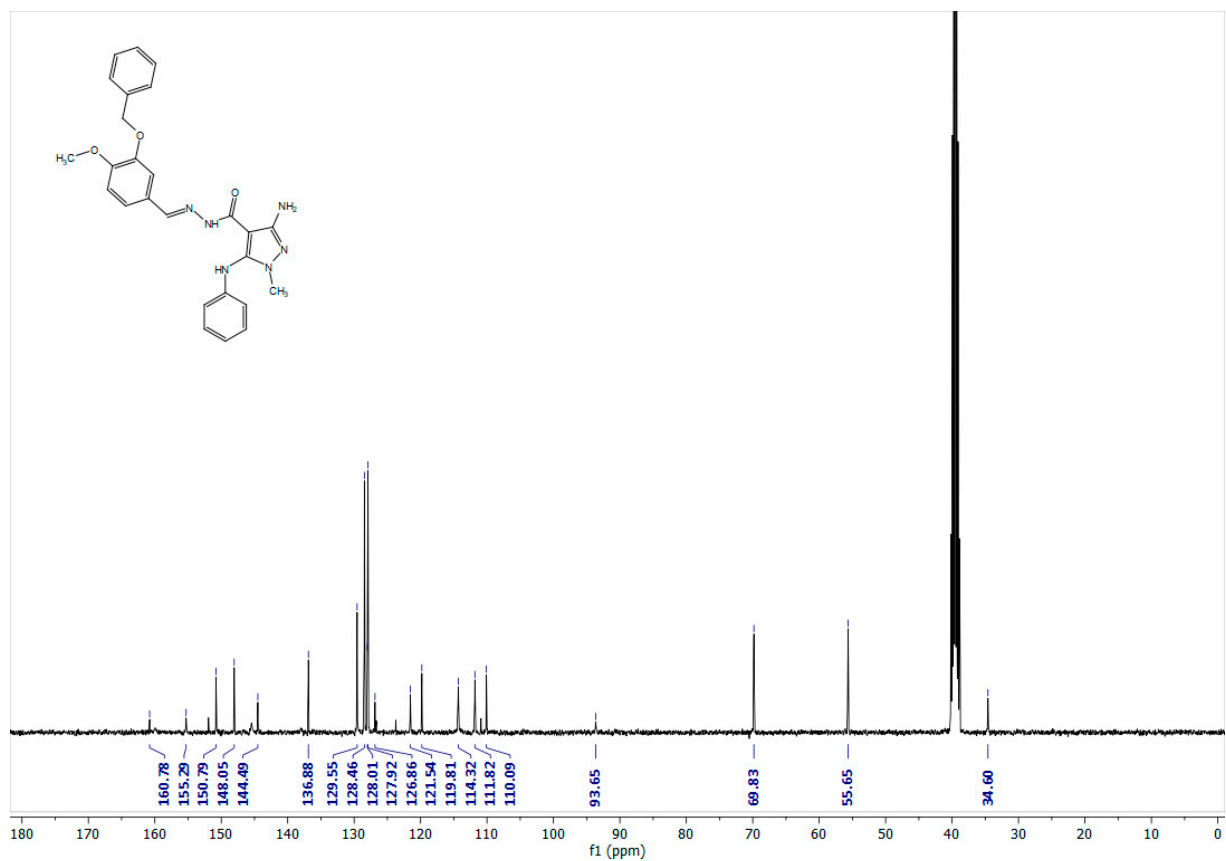


Figure S13. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **12a**

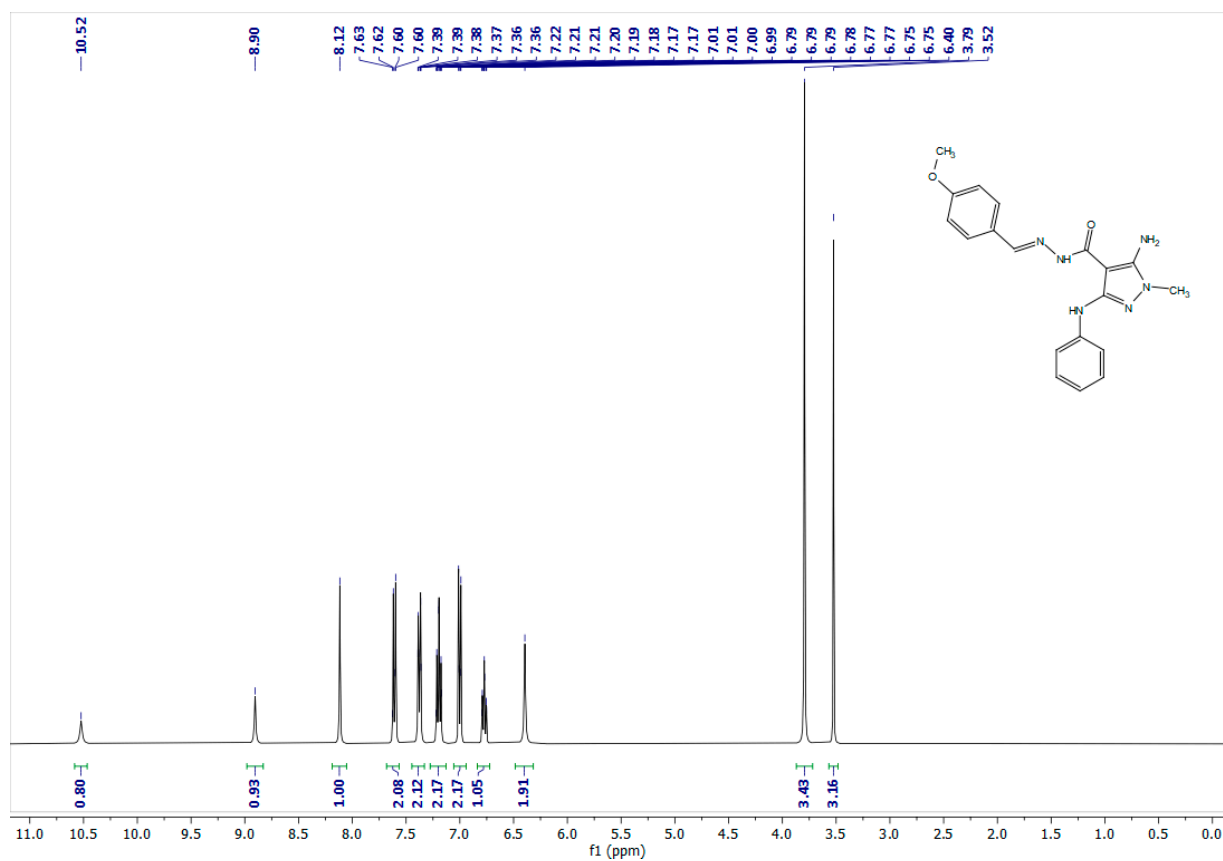


Figure S14. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **12a**

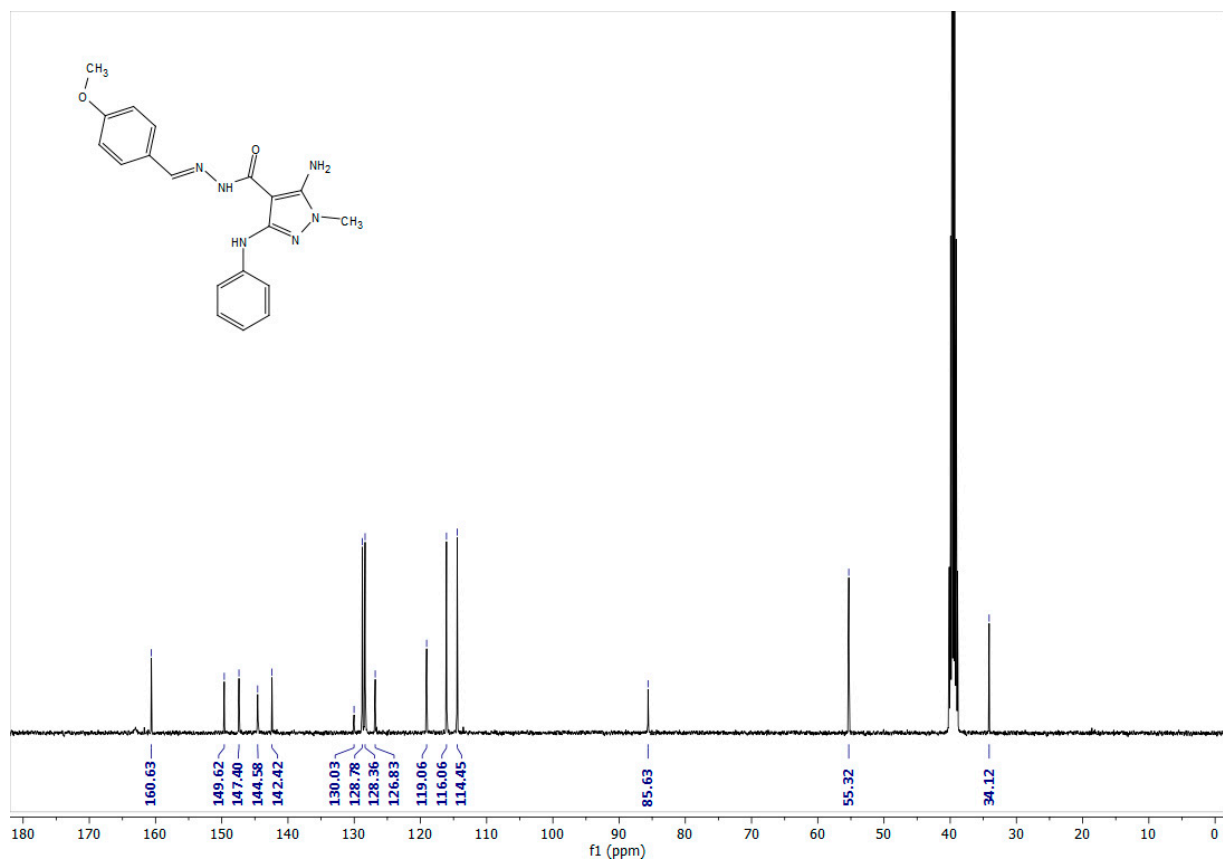


Figure S15. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **12b**

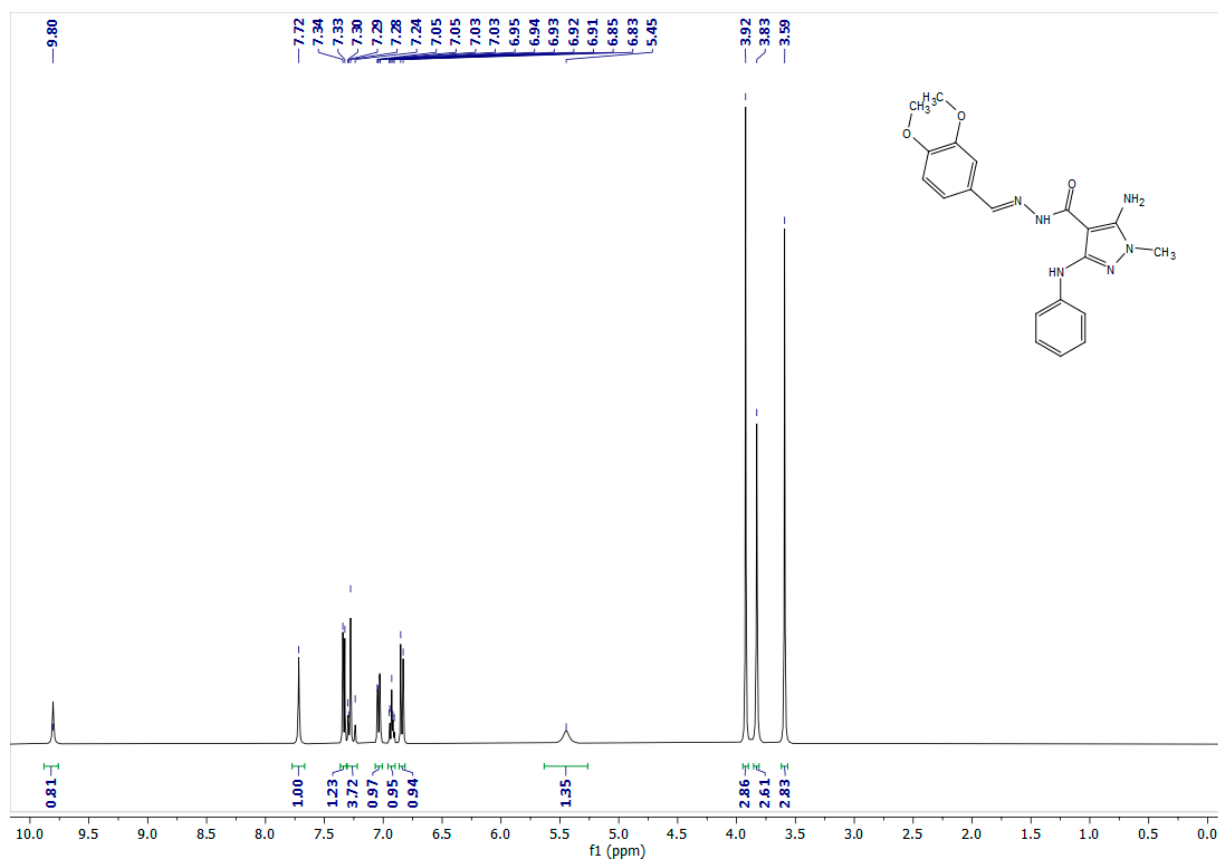


Figure S16. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **12b**

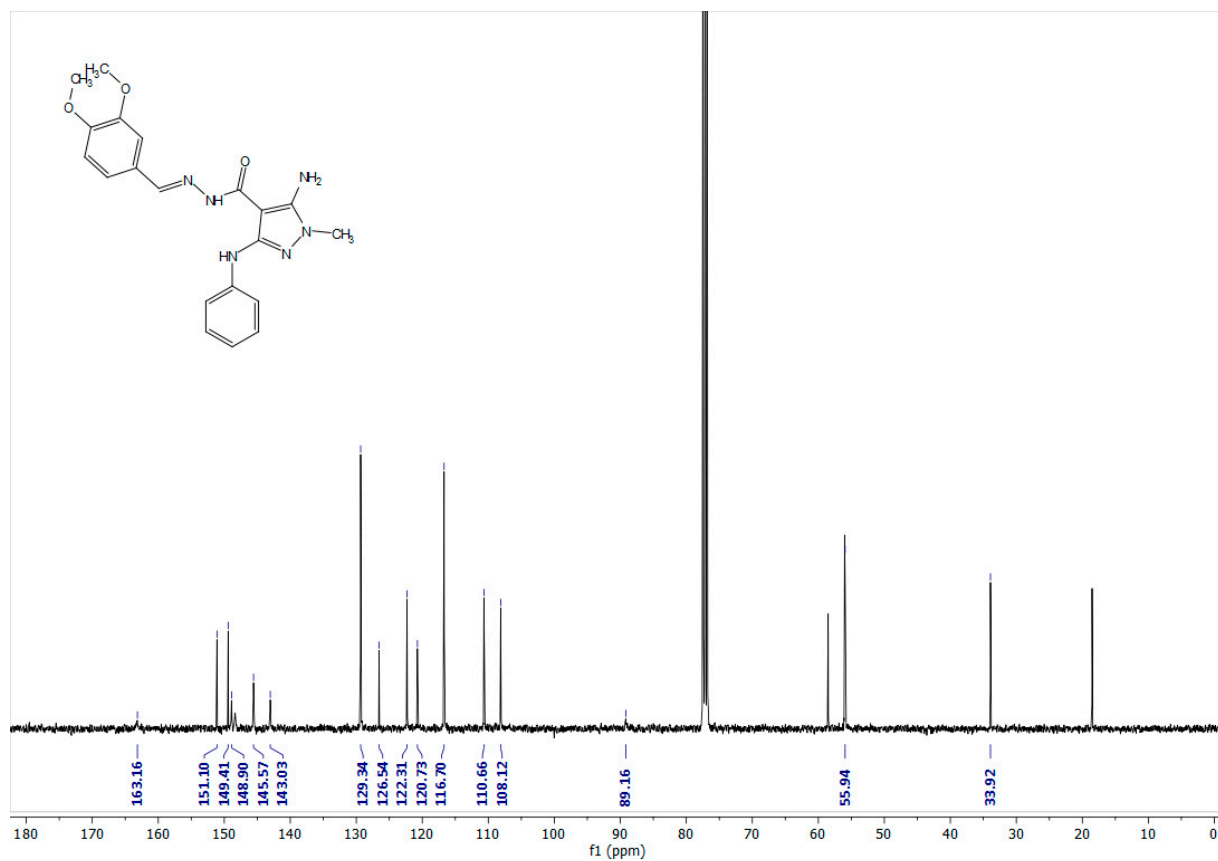


Figure S17. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **12c**

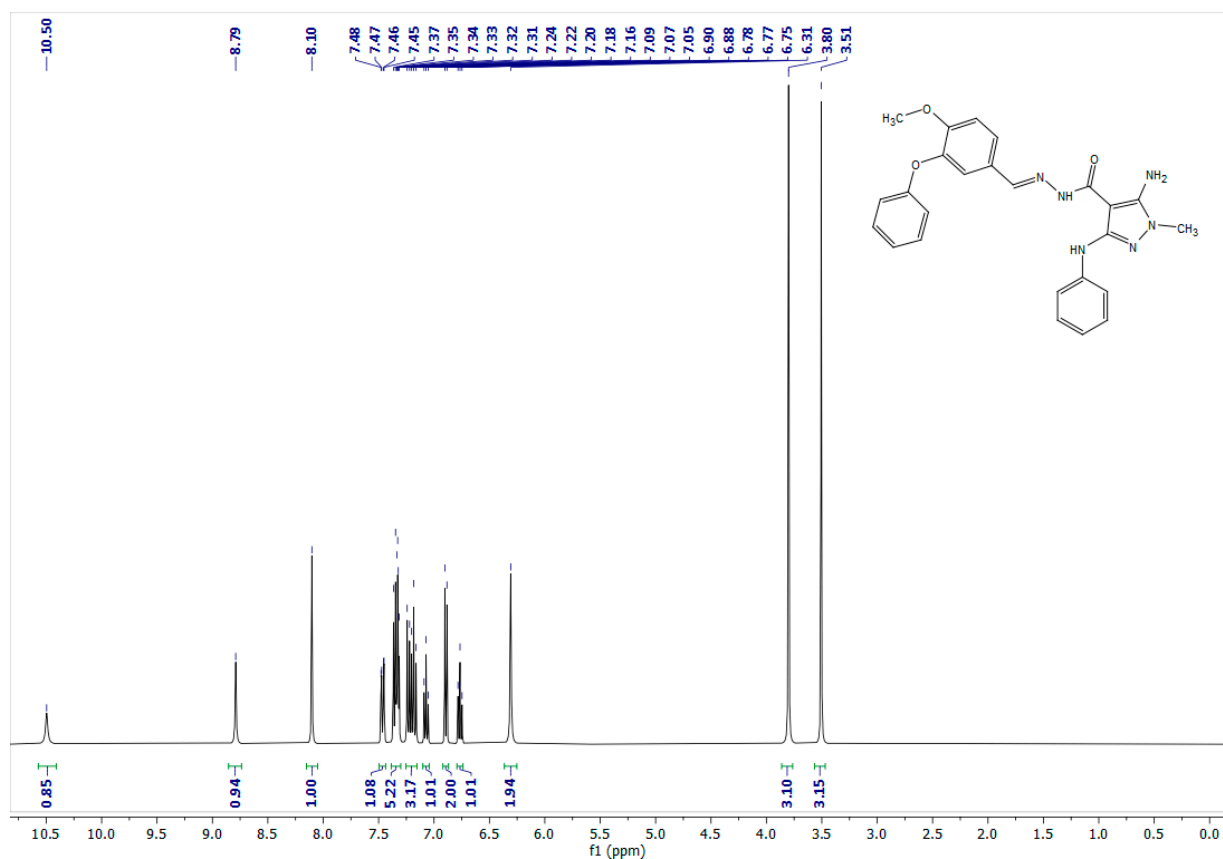


Figure S18. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **12c**

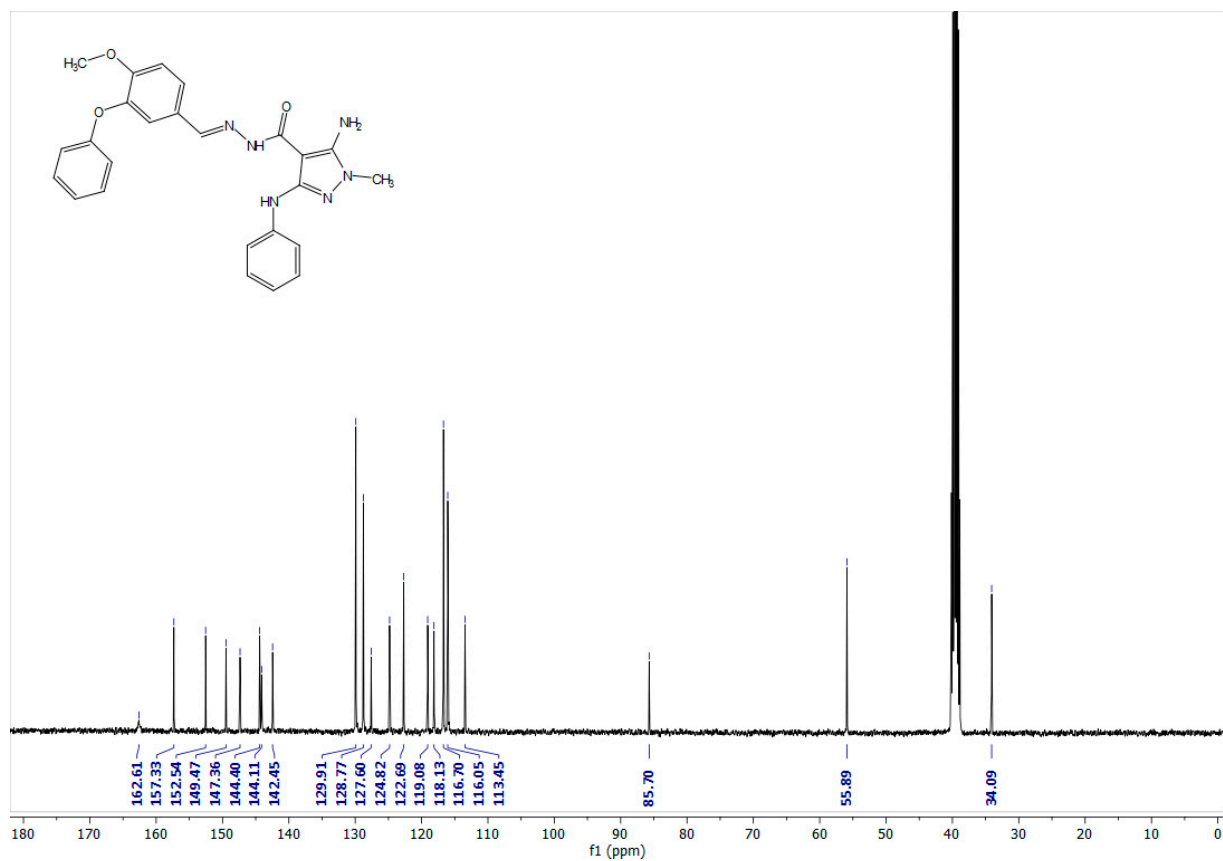


Figure S19. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **12d**

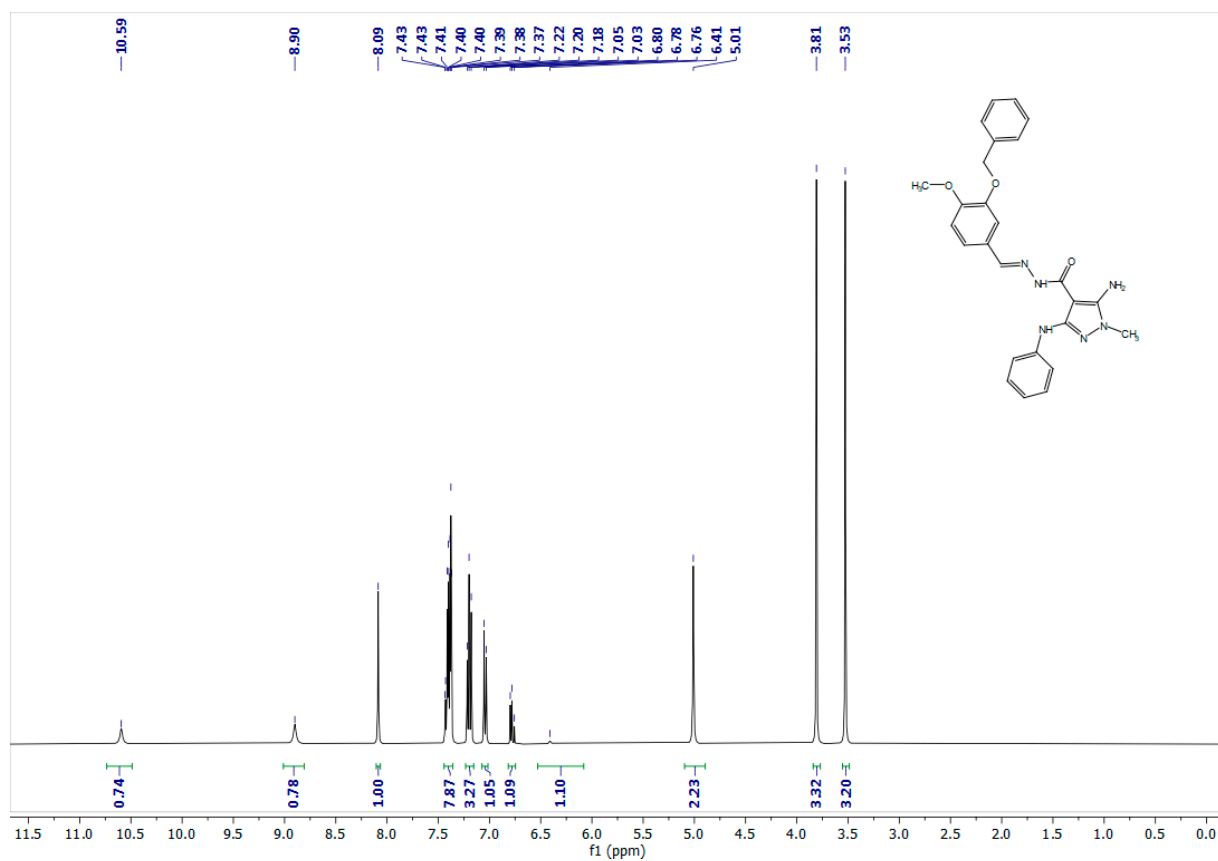


Figure S20. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **12d**

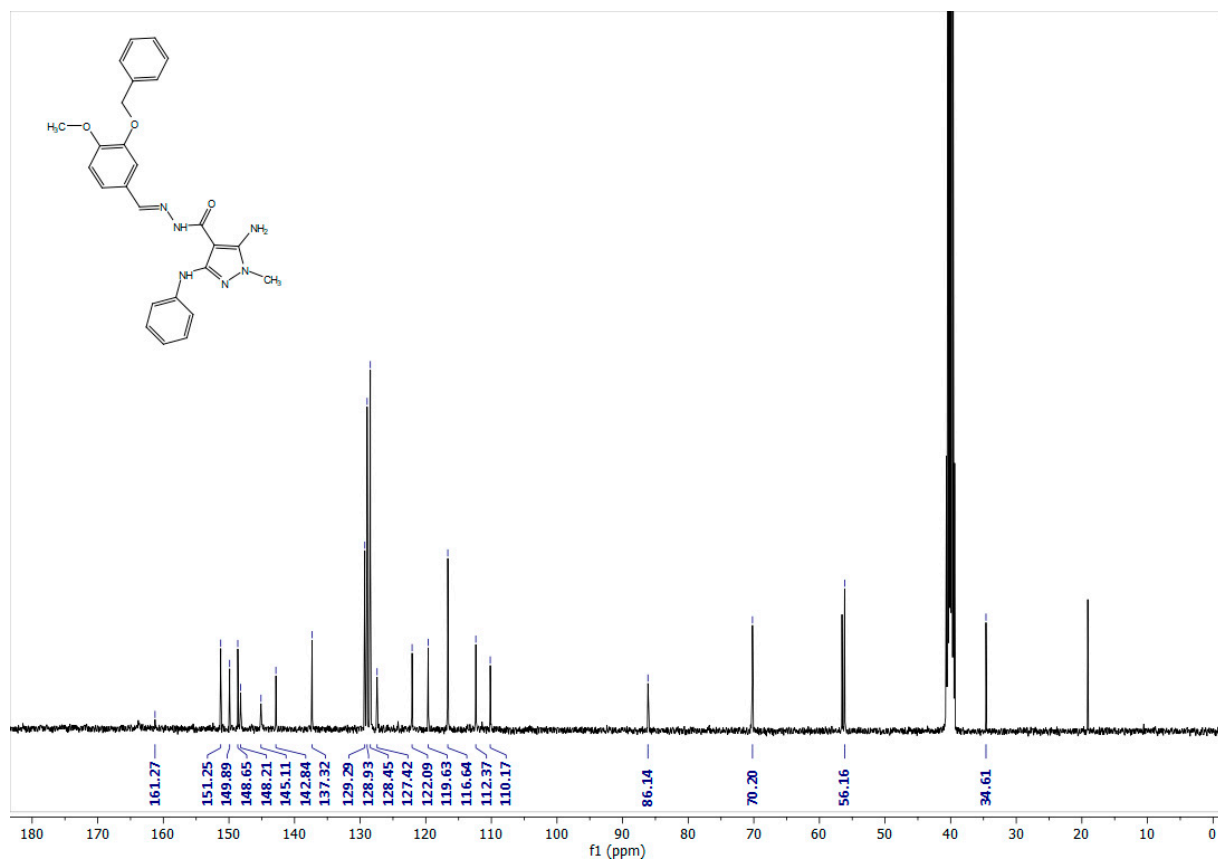


Figure S21. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **13a**

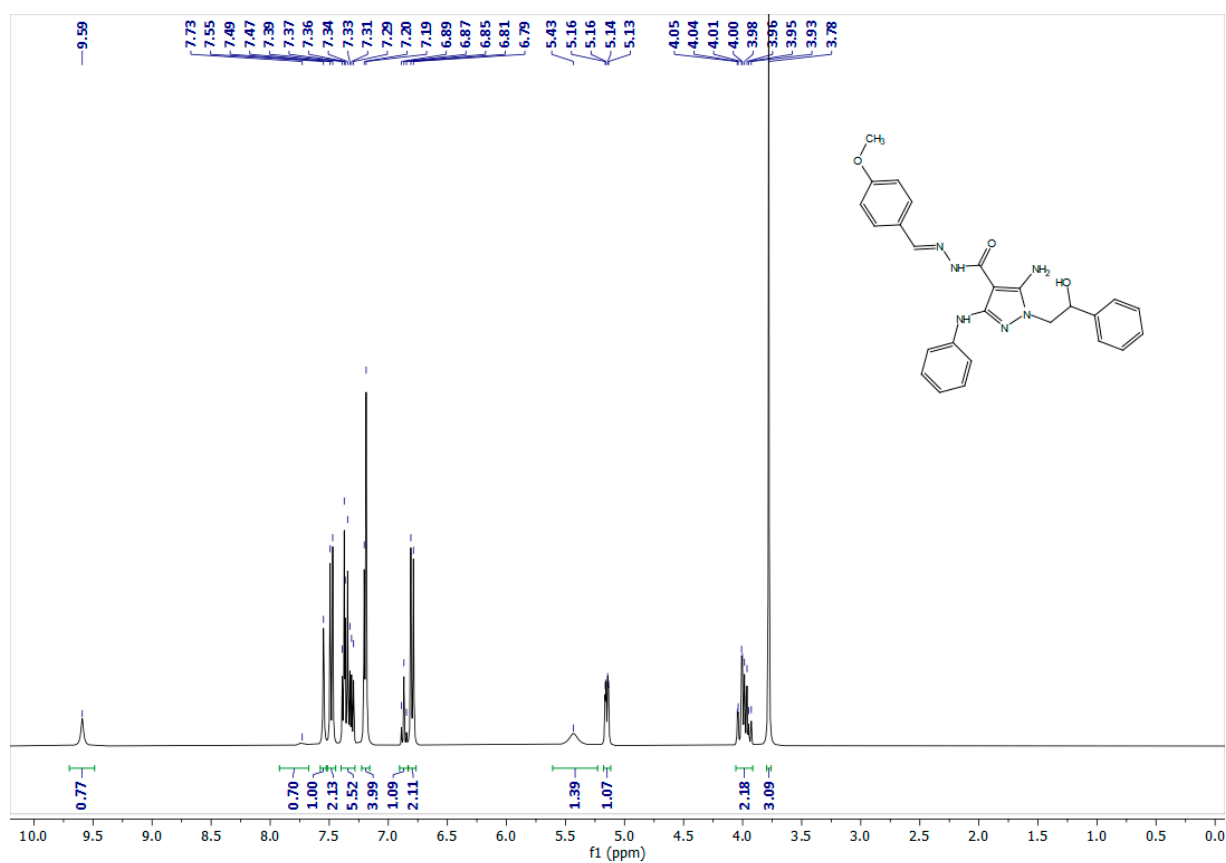


Figure S22. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **13a**

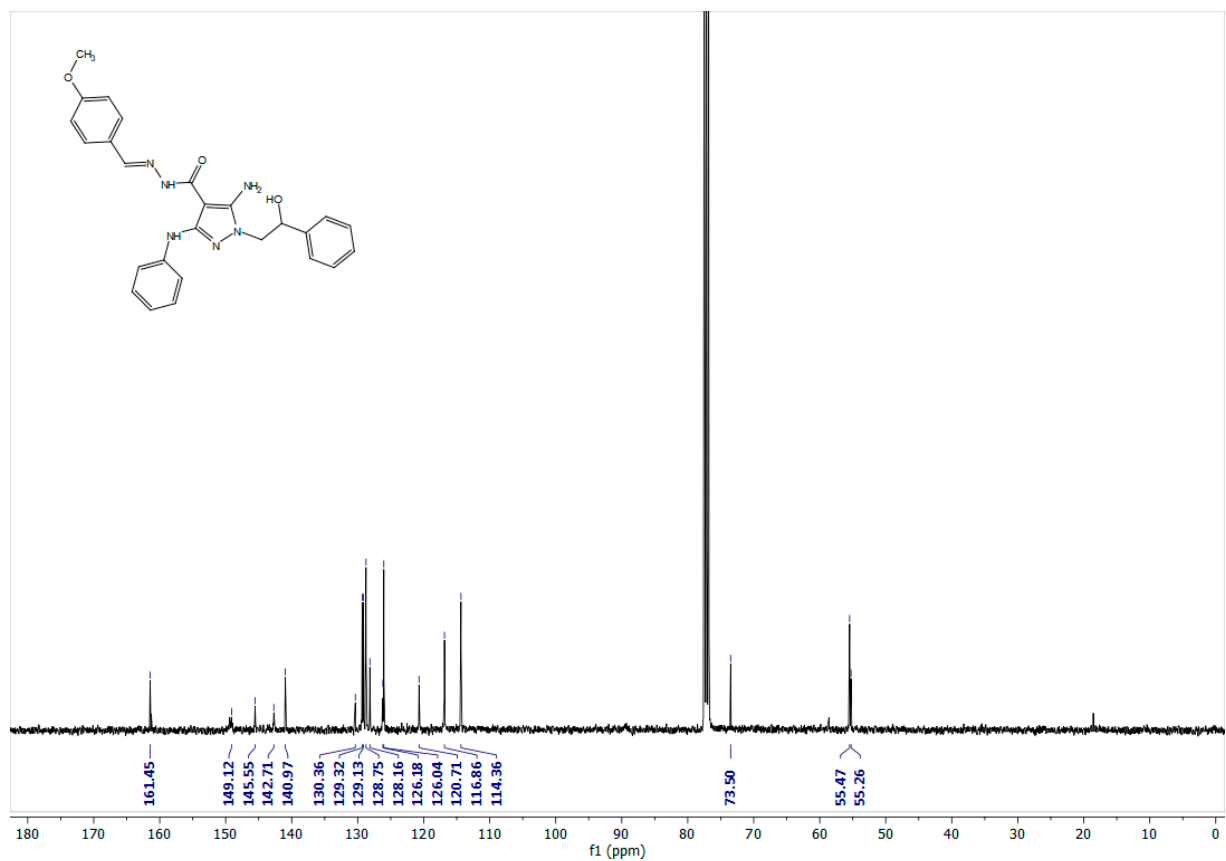


Figure S23. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **13b**

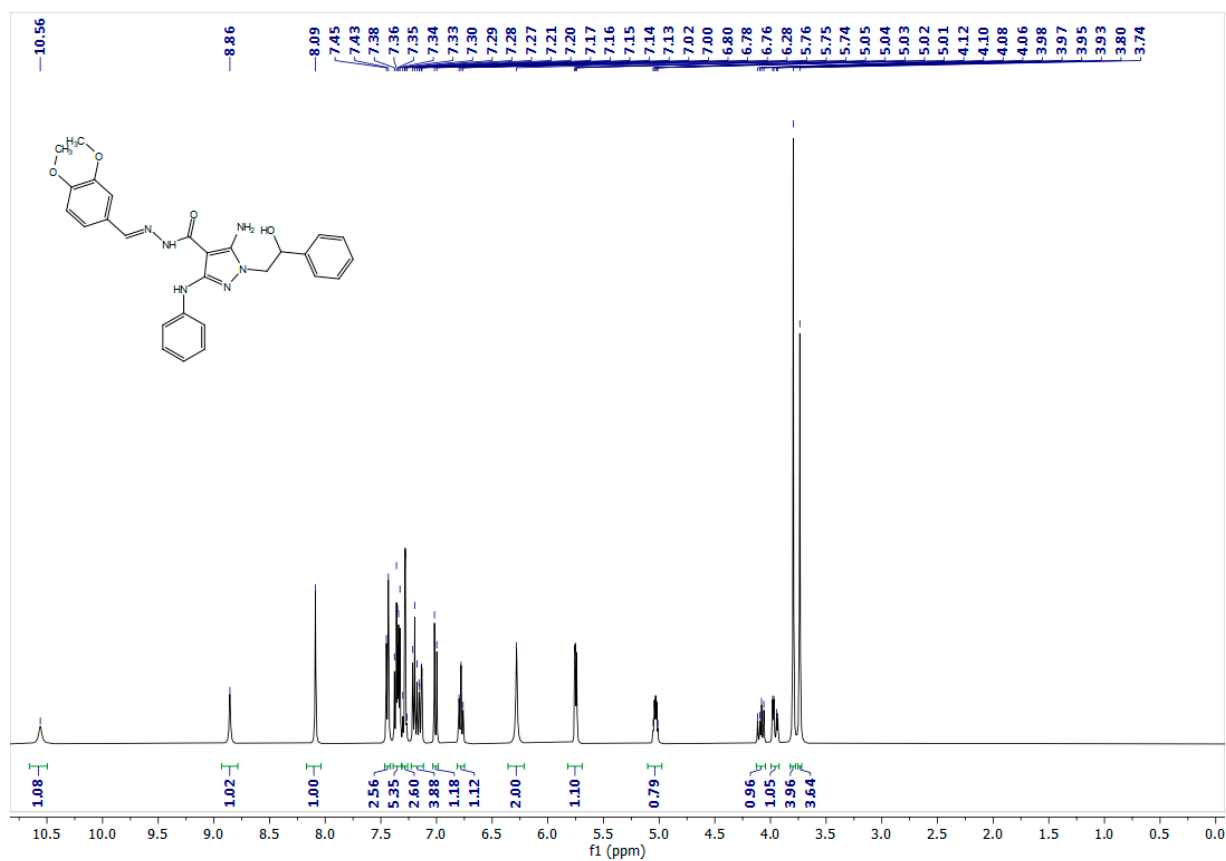


Figure S24. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **13b**

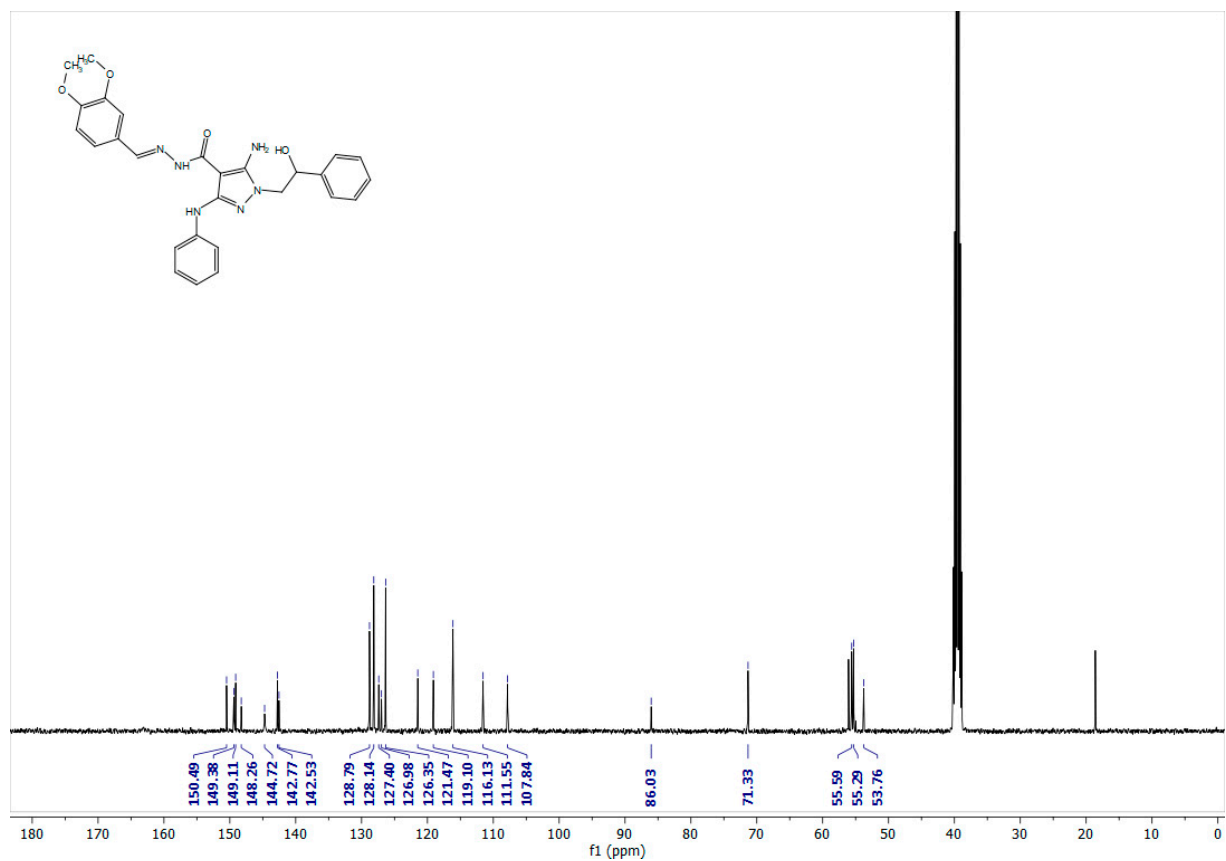


Figure S25. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **13c**

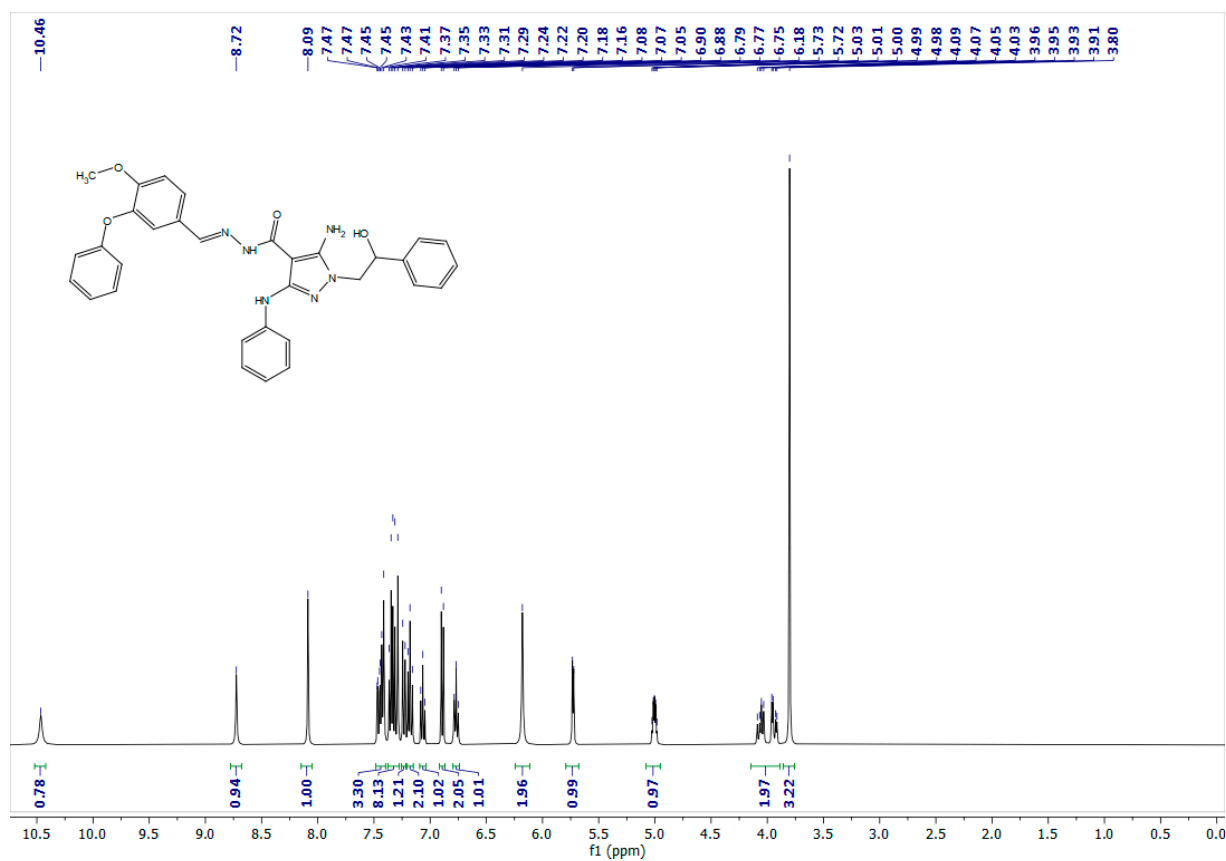


Figure S26. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **13c**

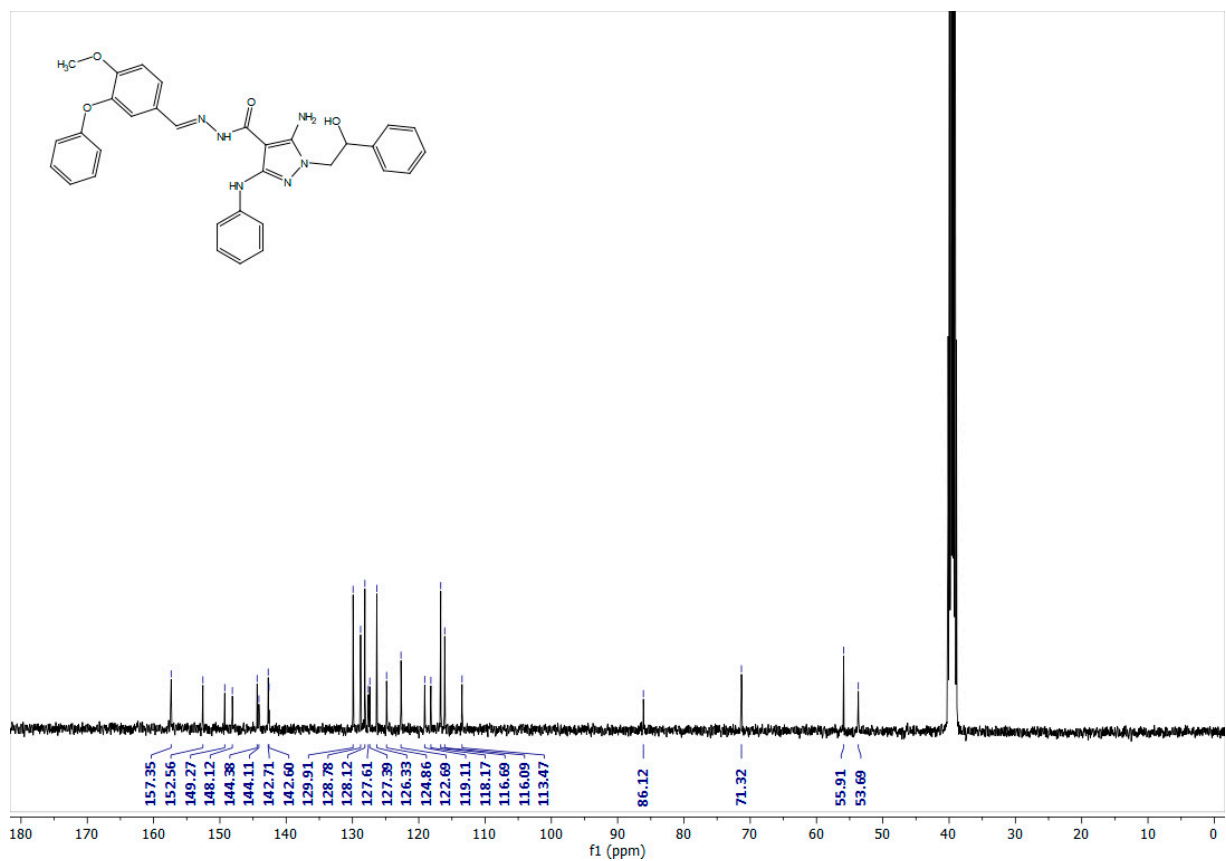


Figure S27. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **13d**

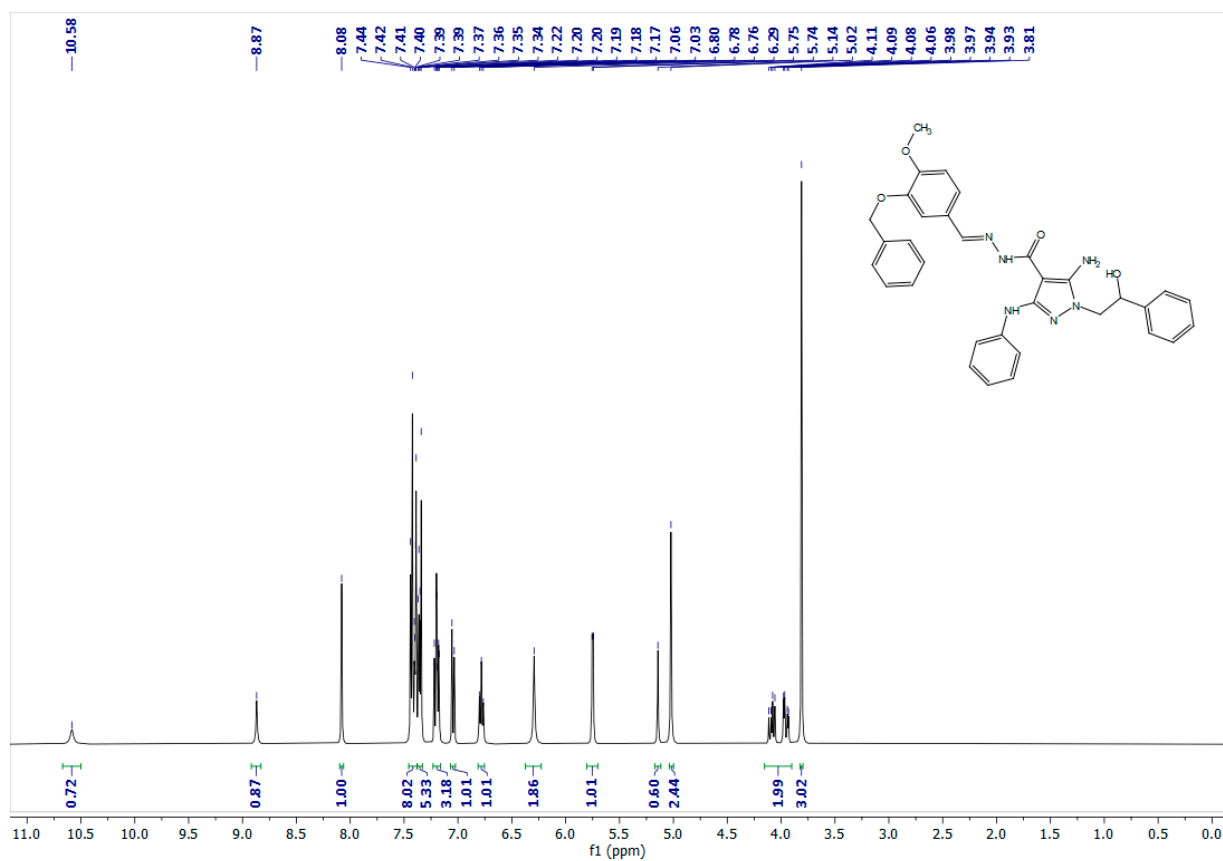


Figure S28. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **13d**

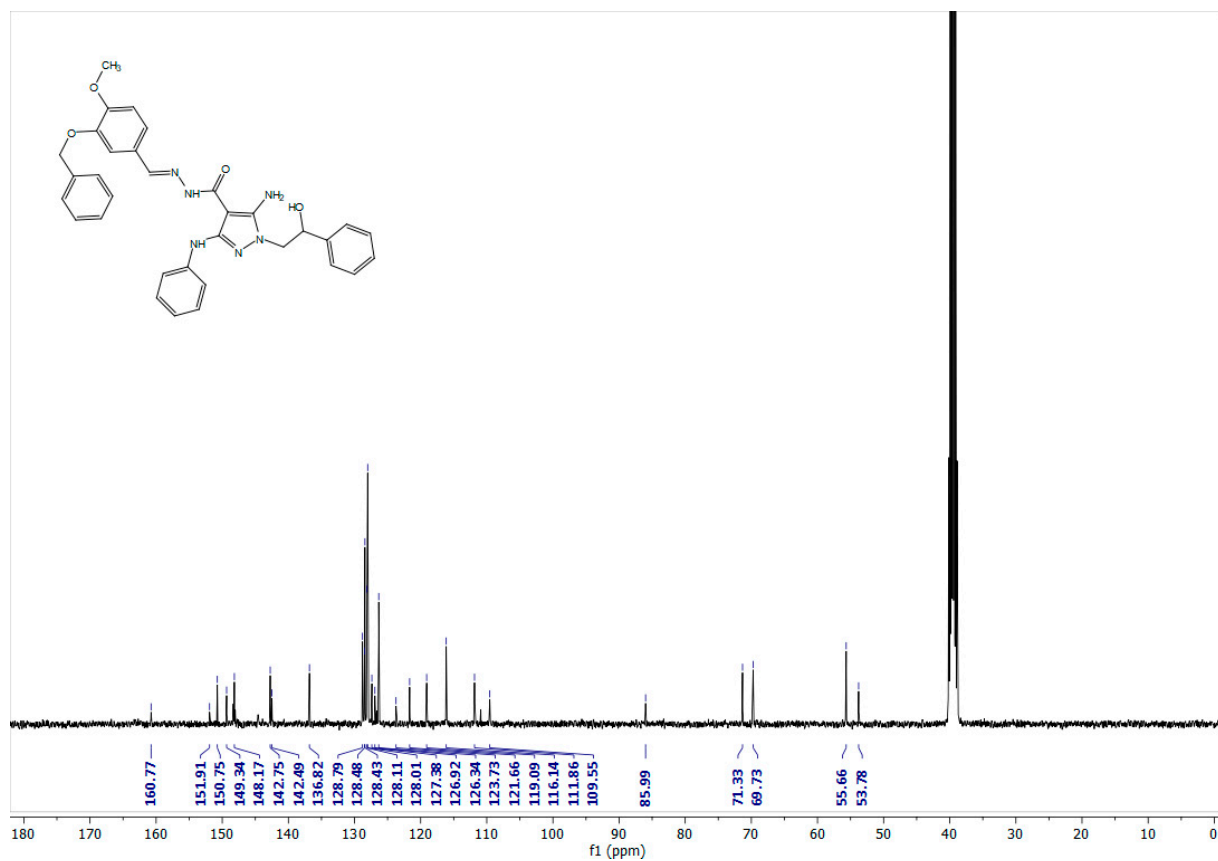


Figure S29. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **14**

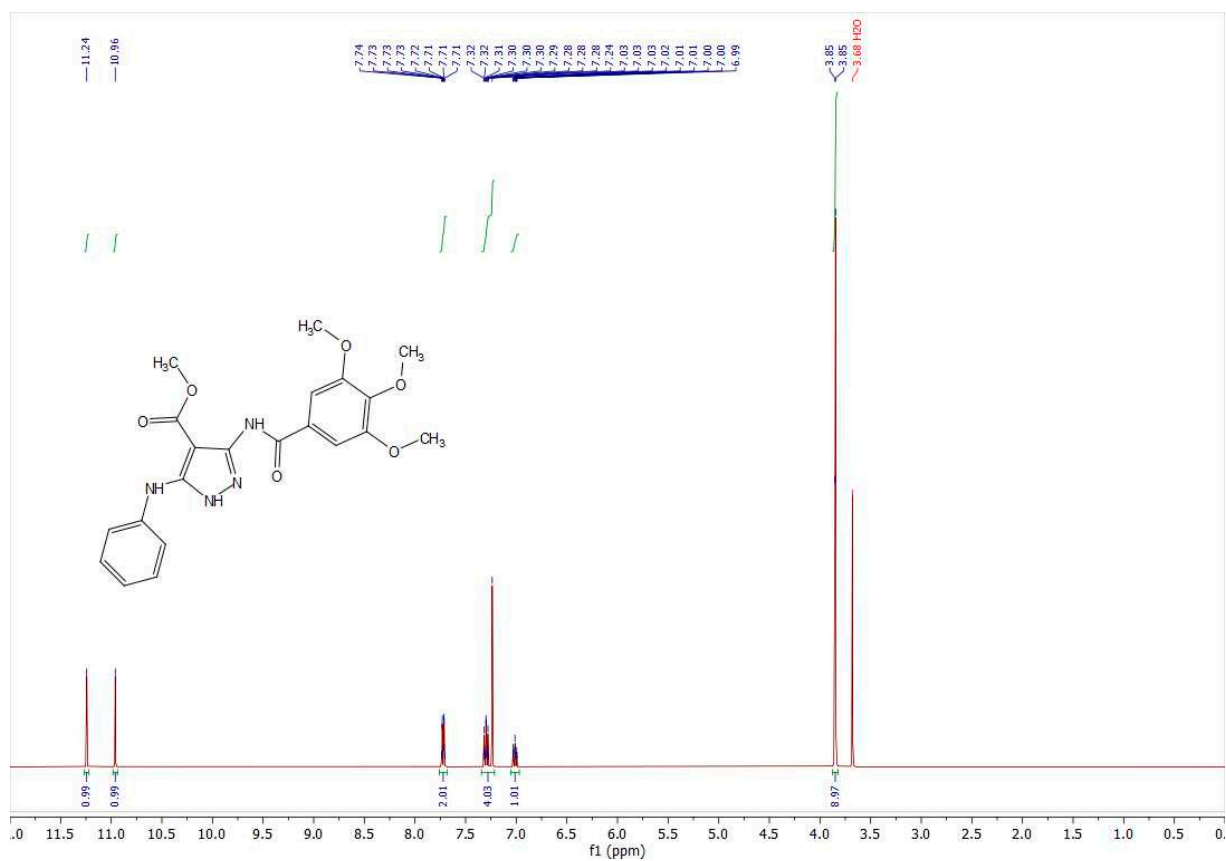


Figure S30. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **15**

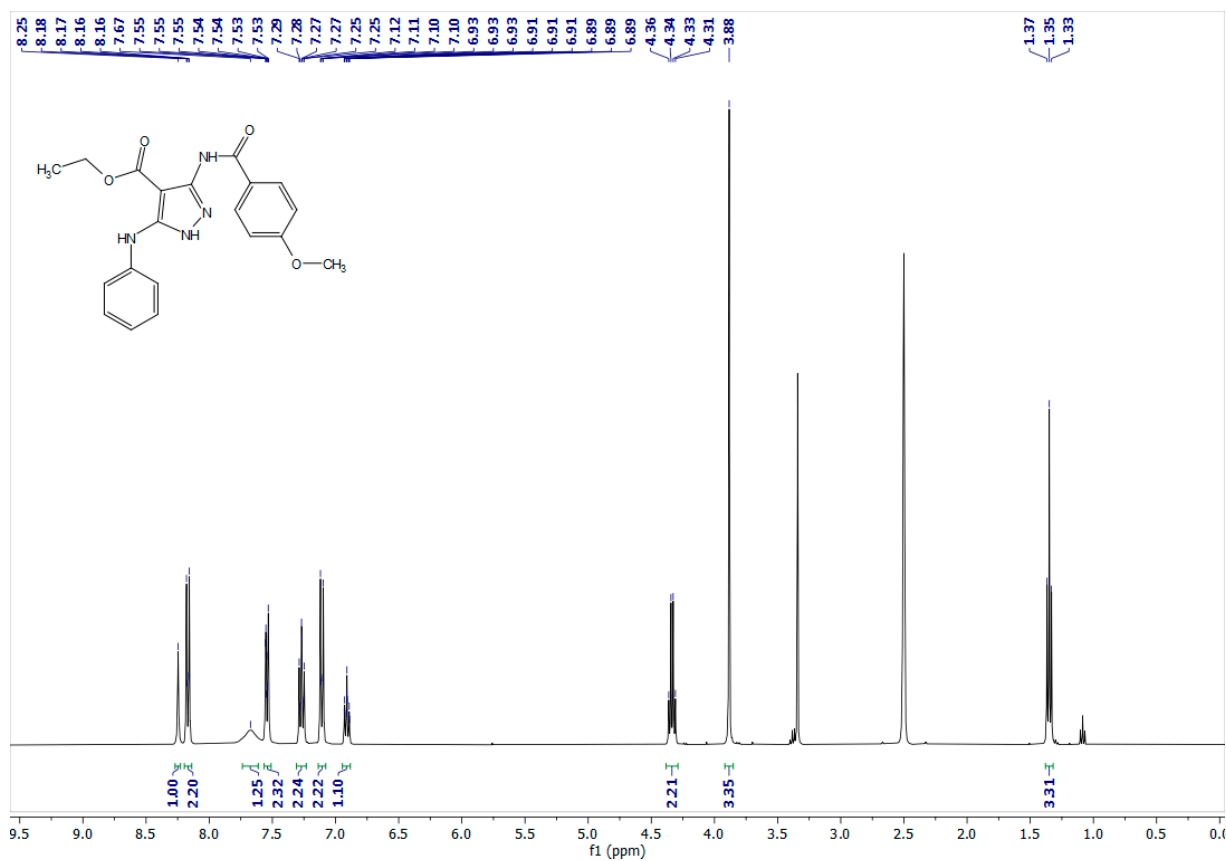


Figure S31. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **15**

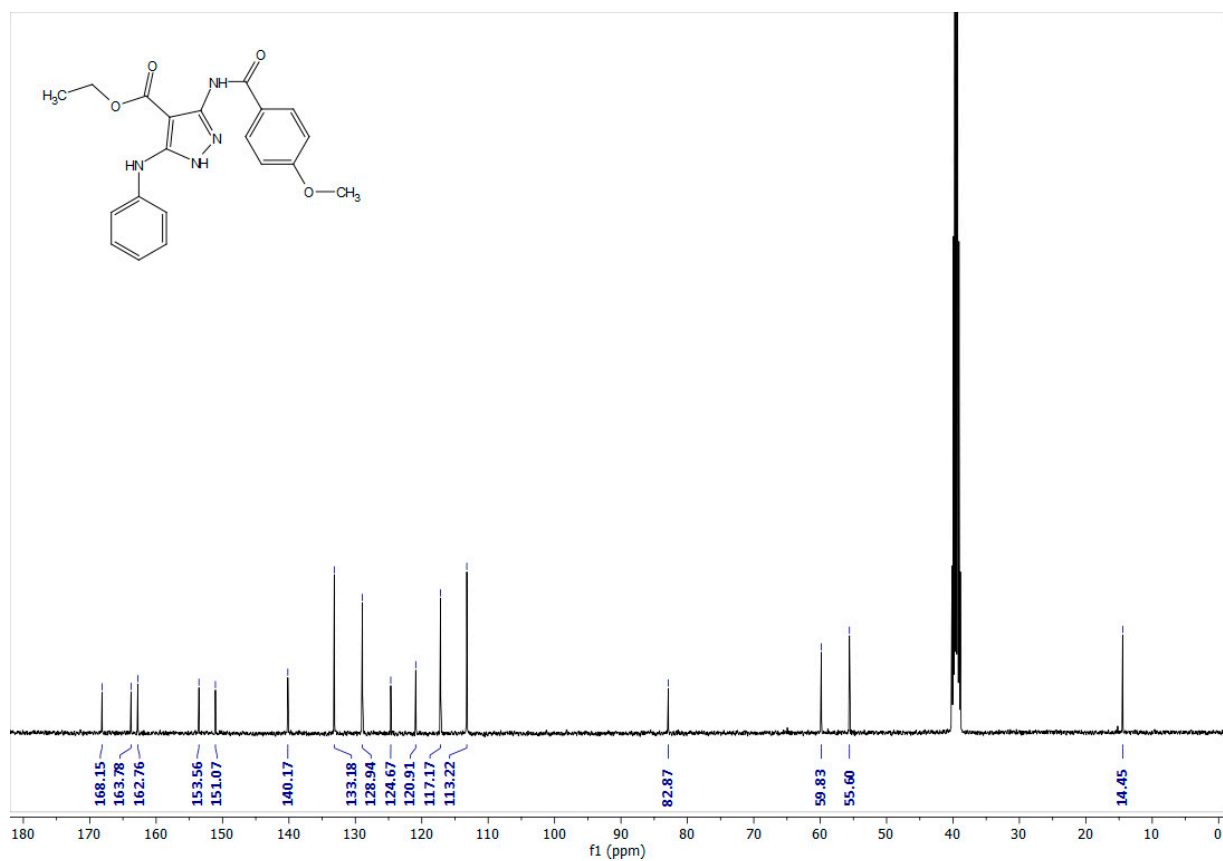


Figure S32. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **16**

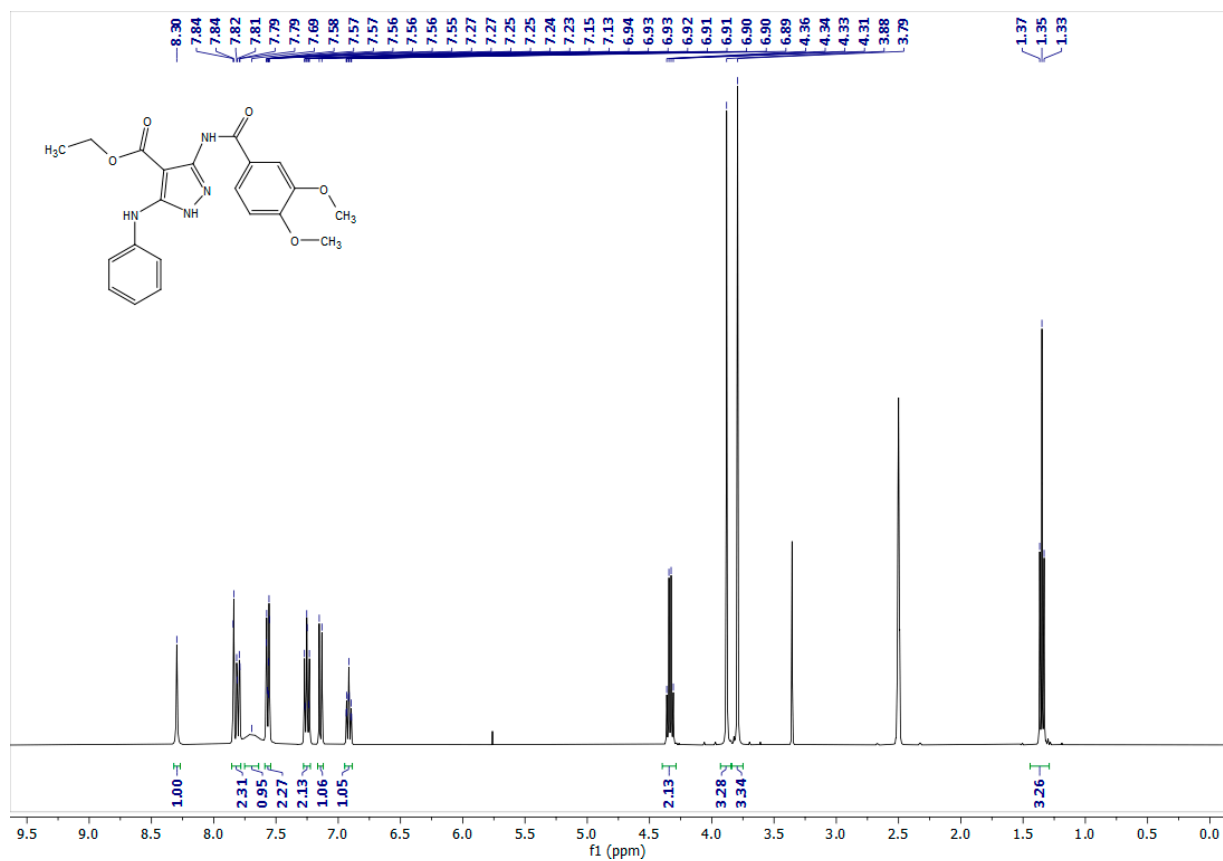


Figure S33. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **16**

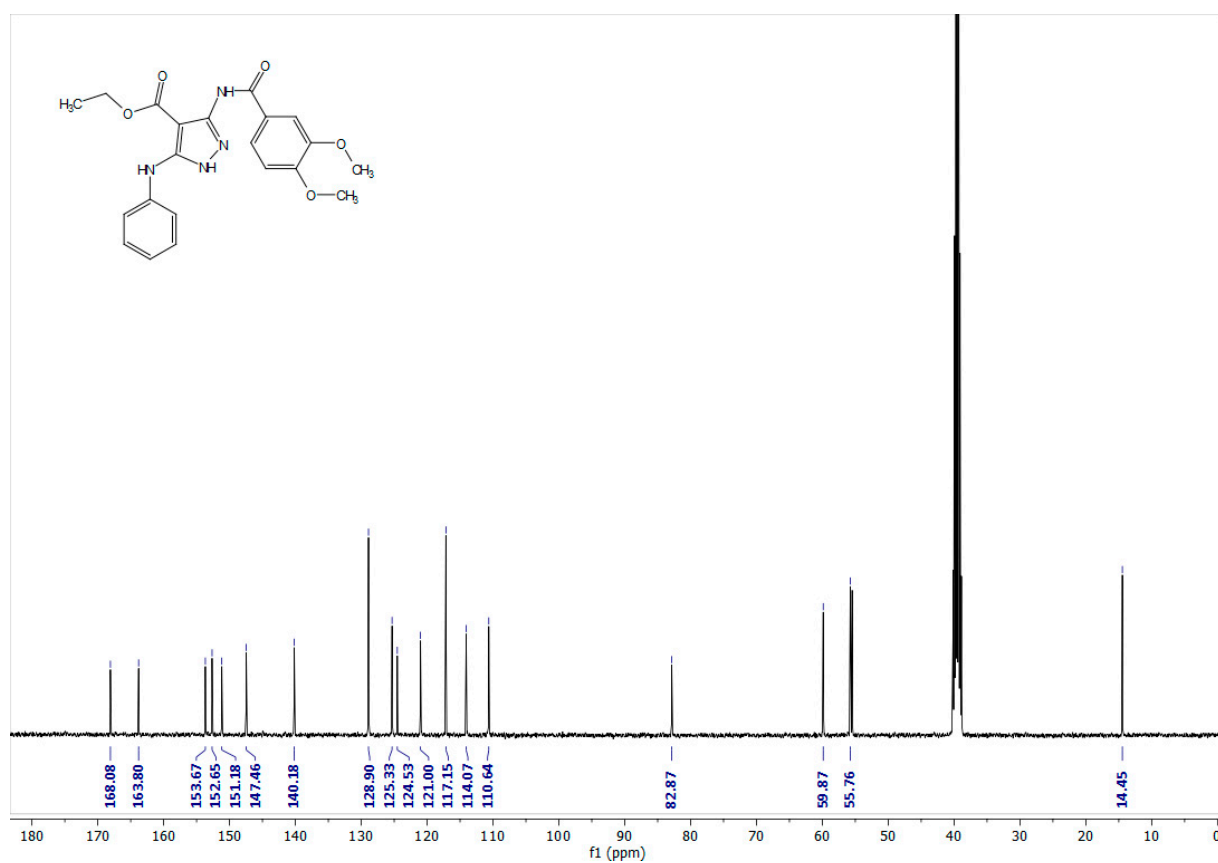


Figure S34. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **17**

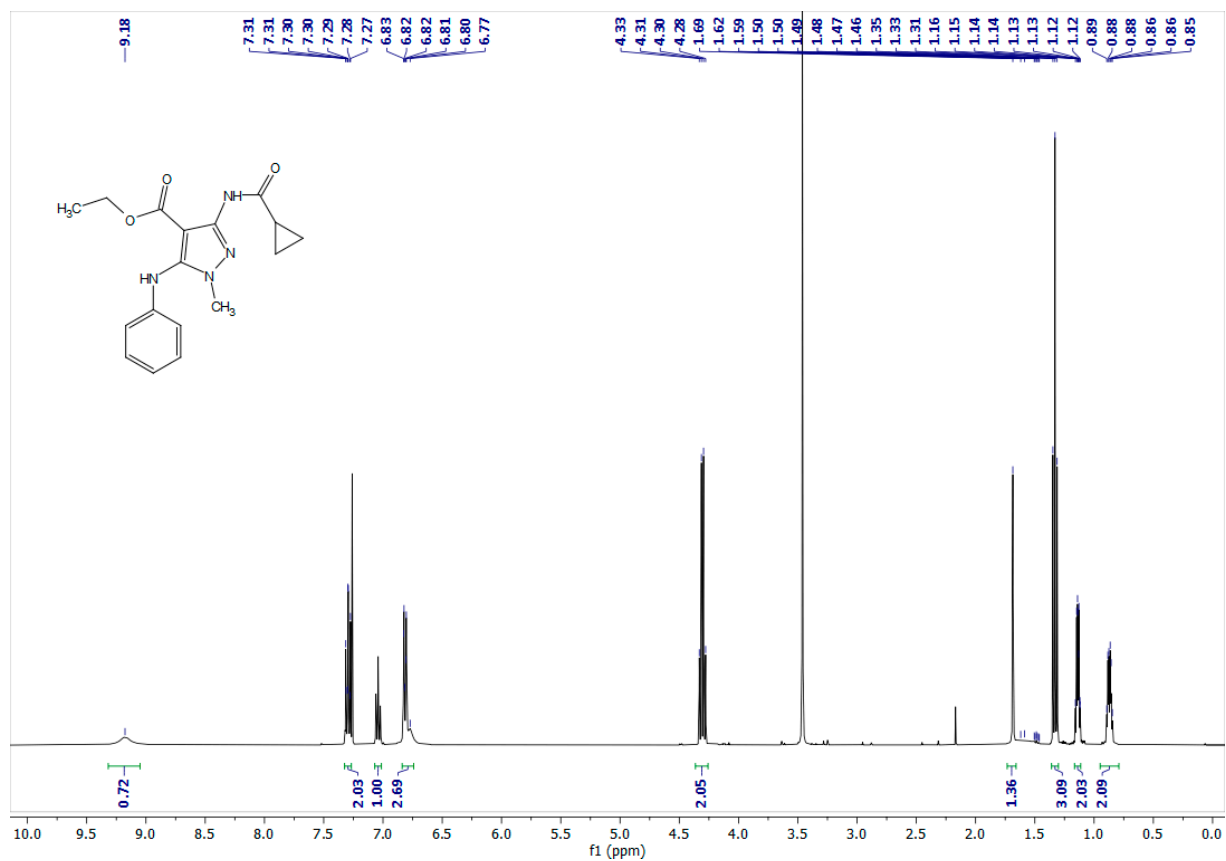


Figure S35. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **18**

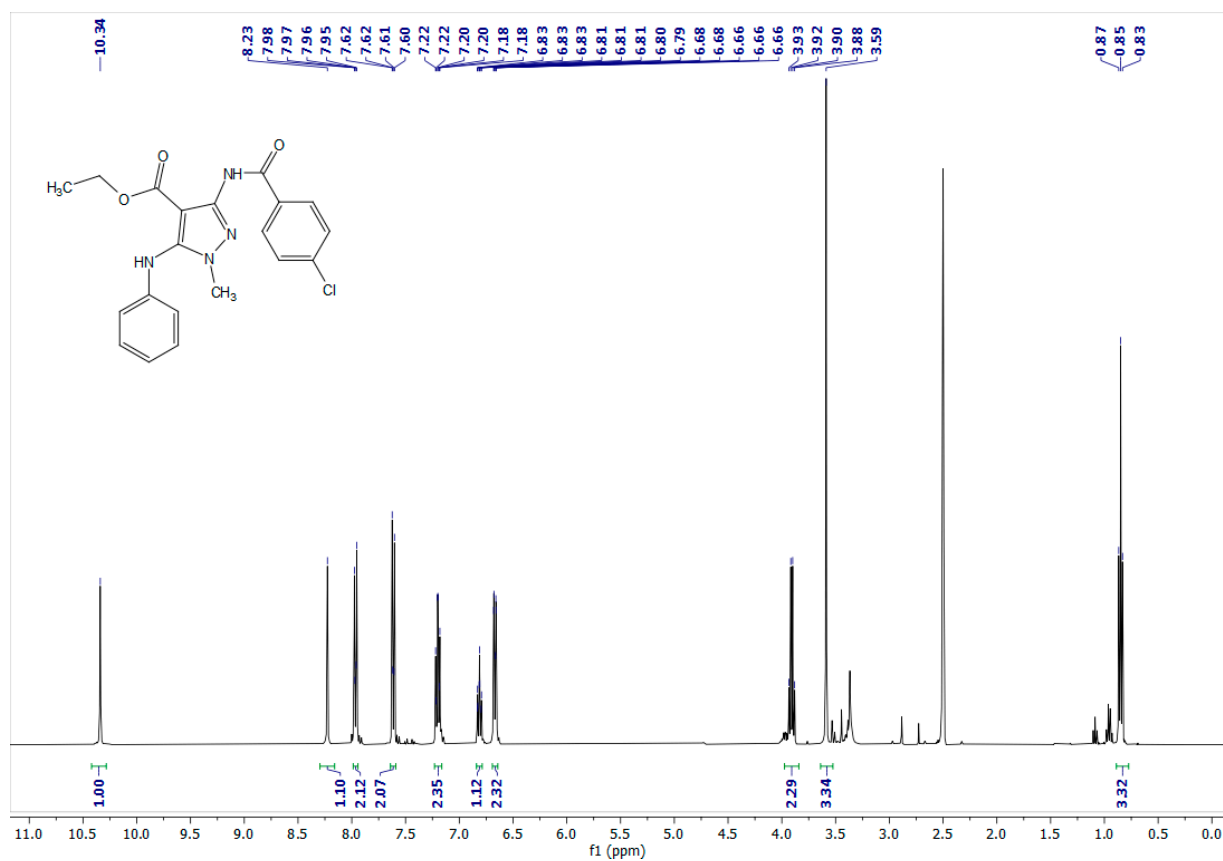


Figure S36. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **18**

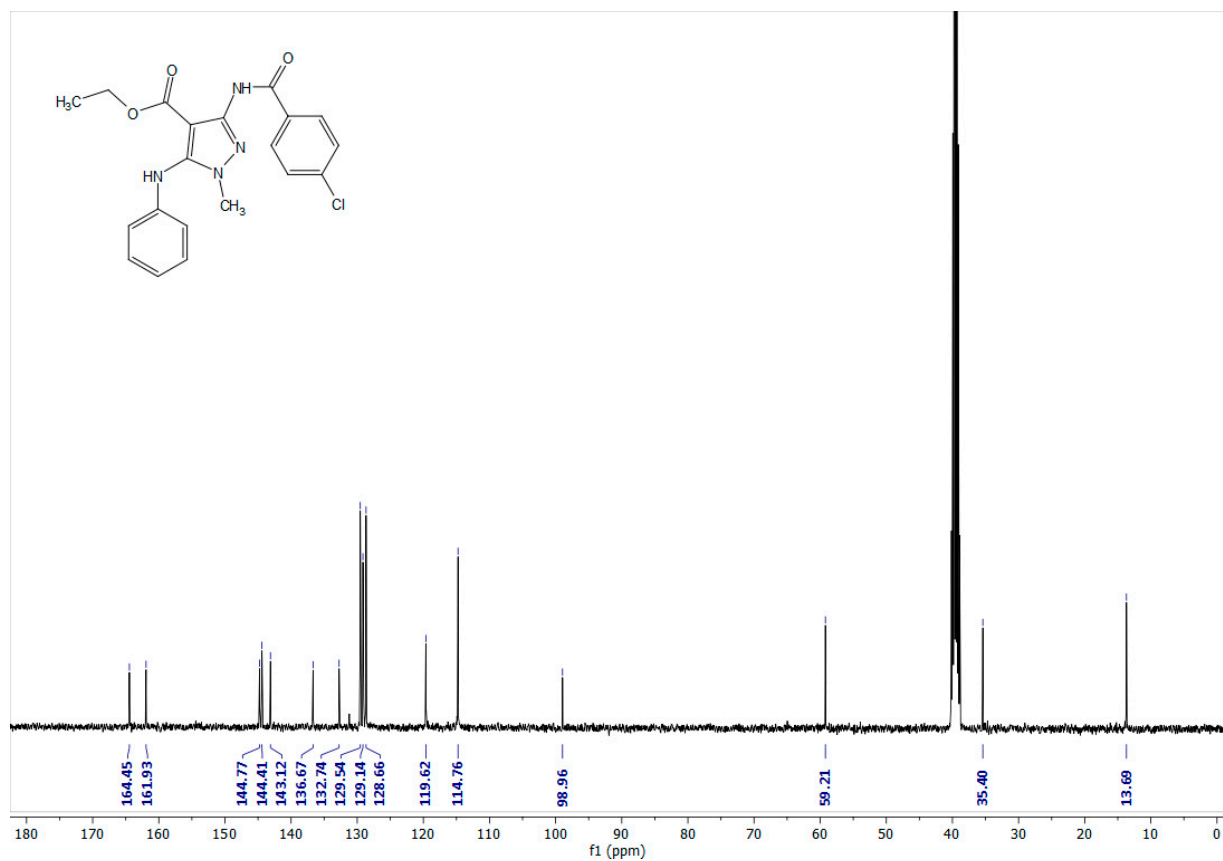


Figure S37. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **19**

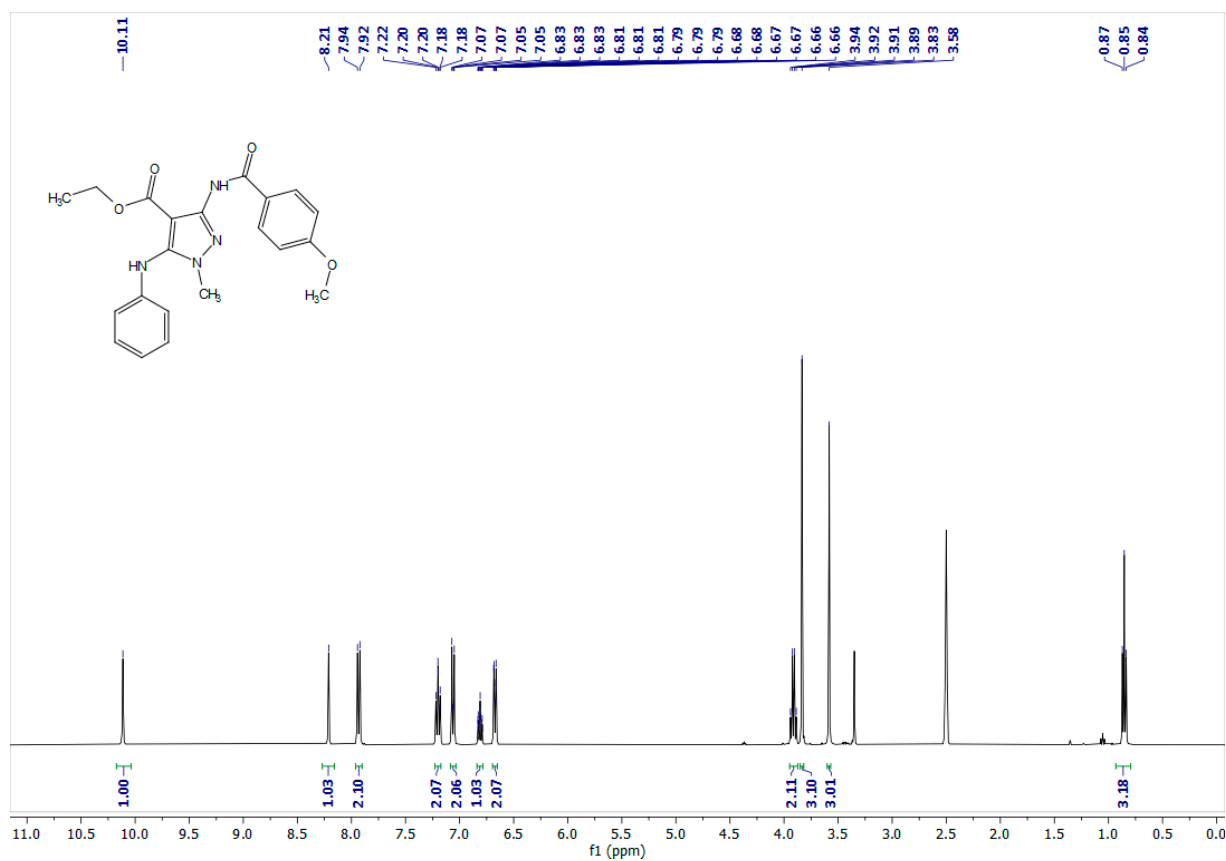


Figure S38. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **19**

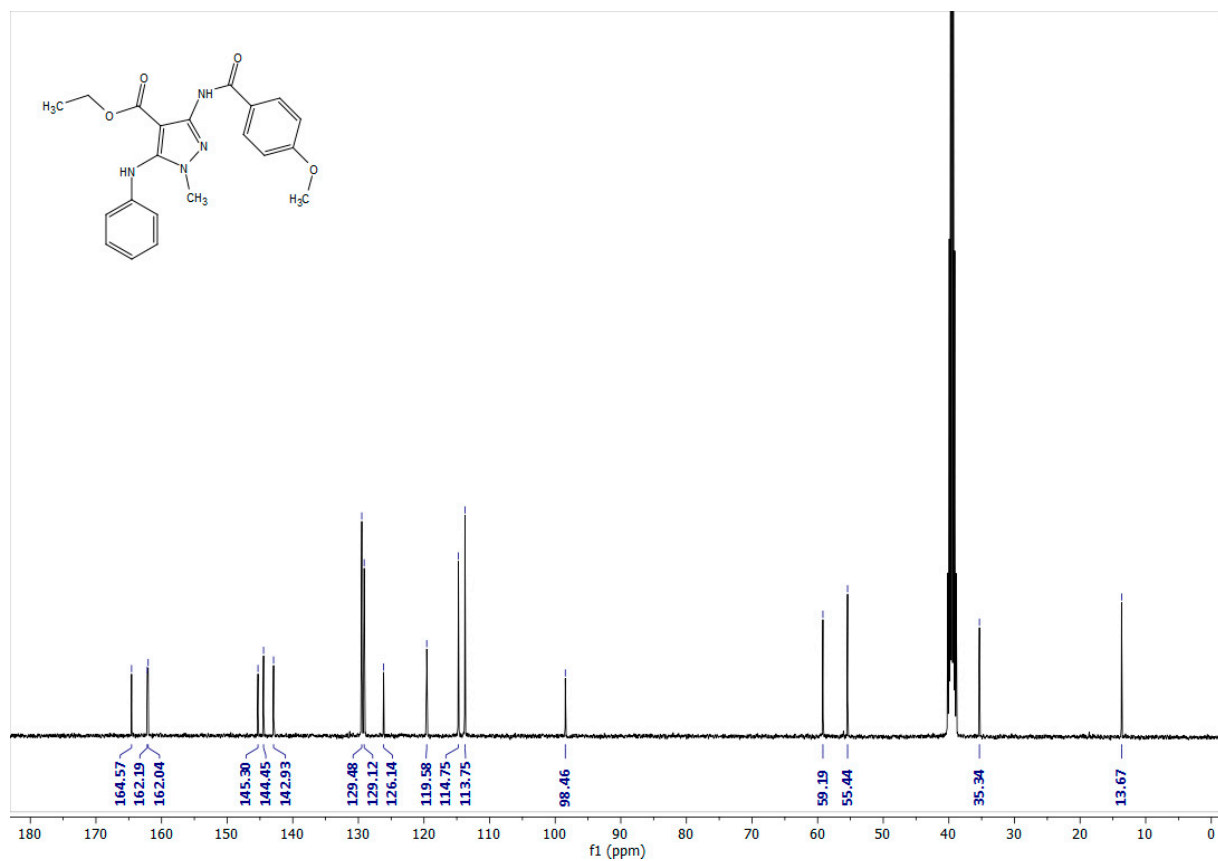


Figure S39. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **20**

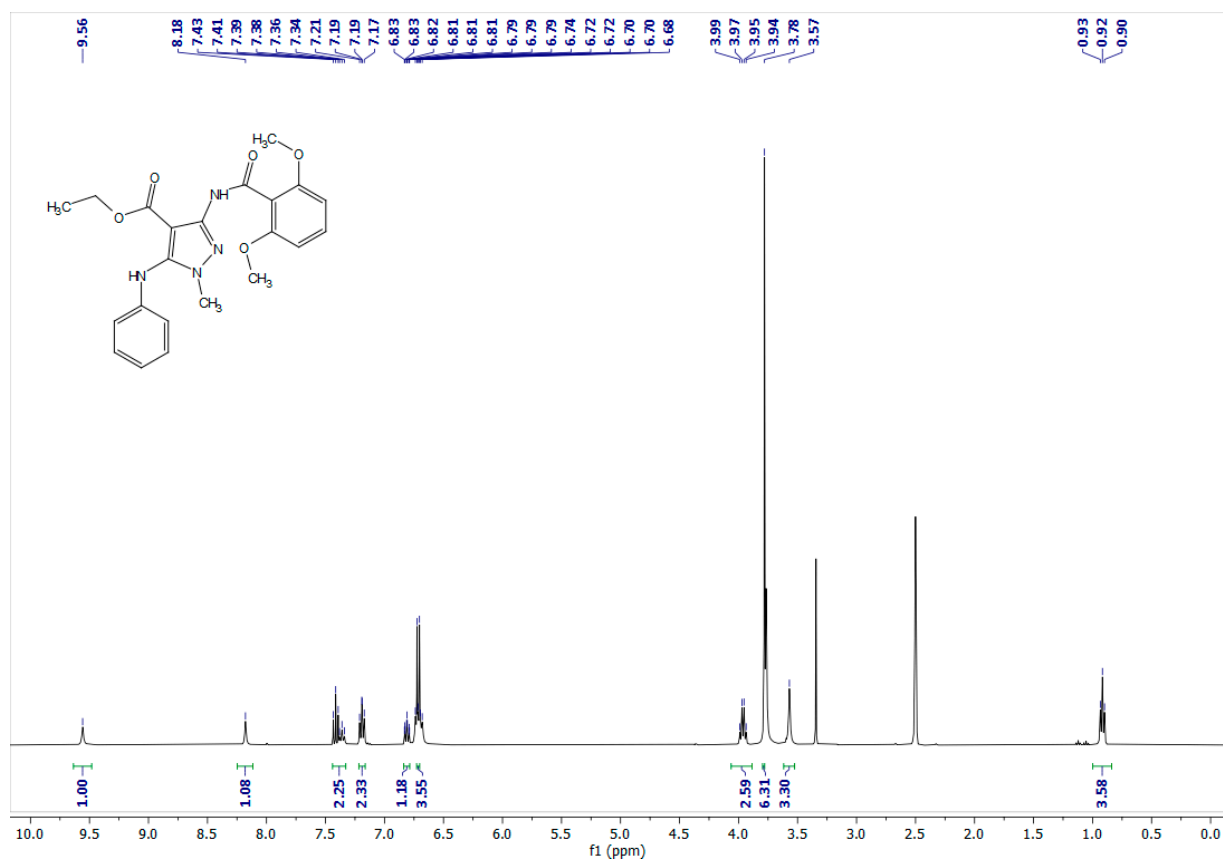


Figure S40. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **20**

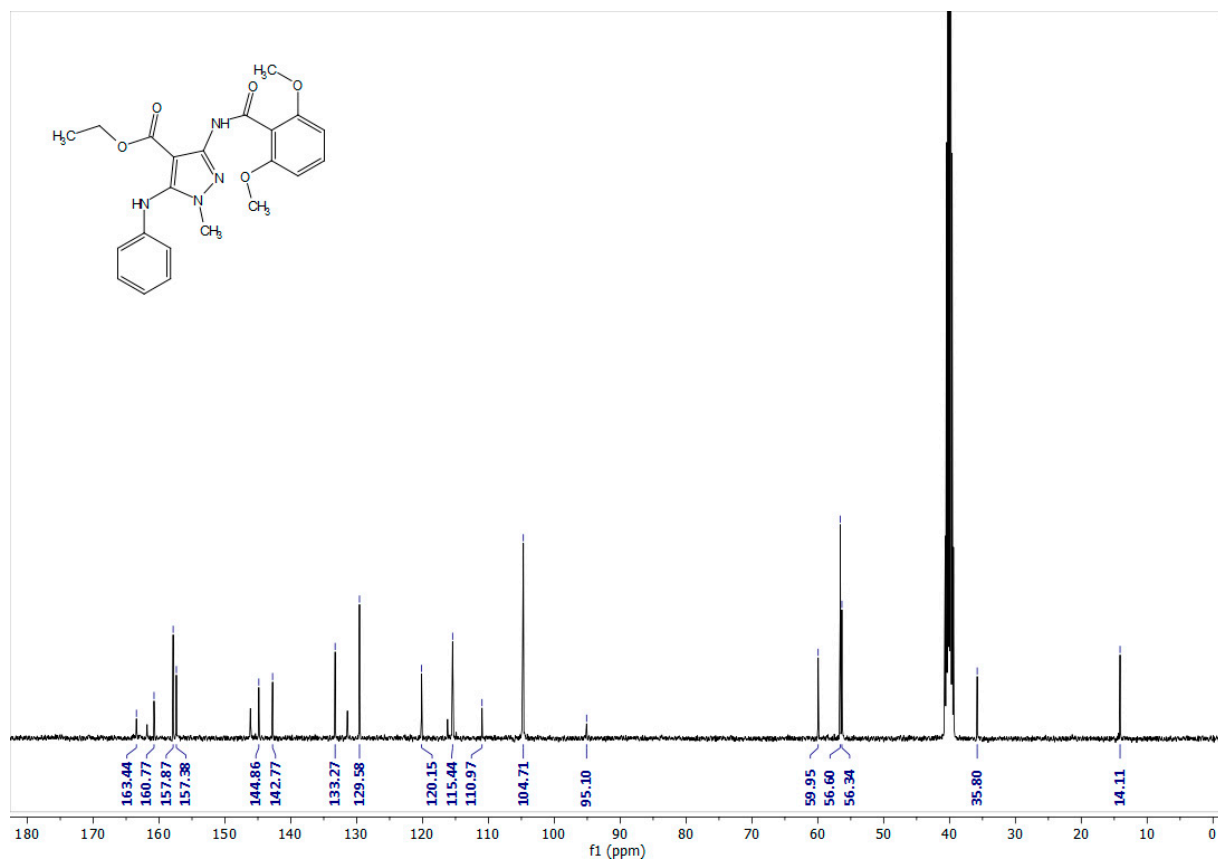


Figure S41. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **21**

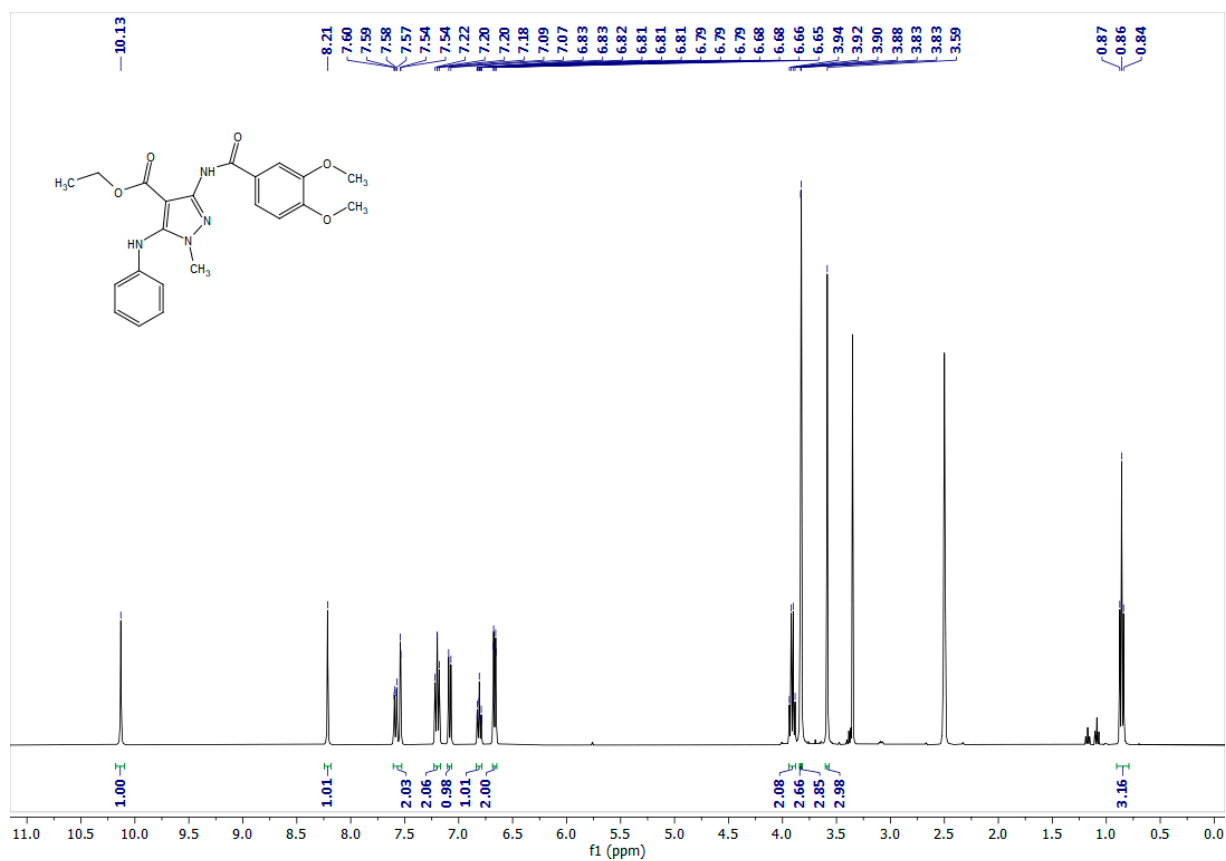


Figure S42. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **21**

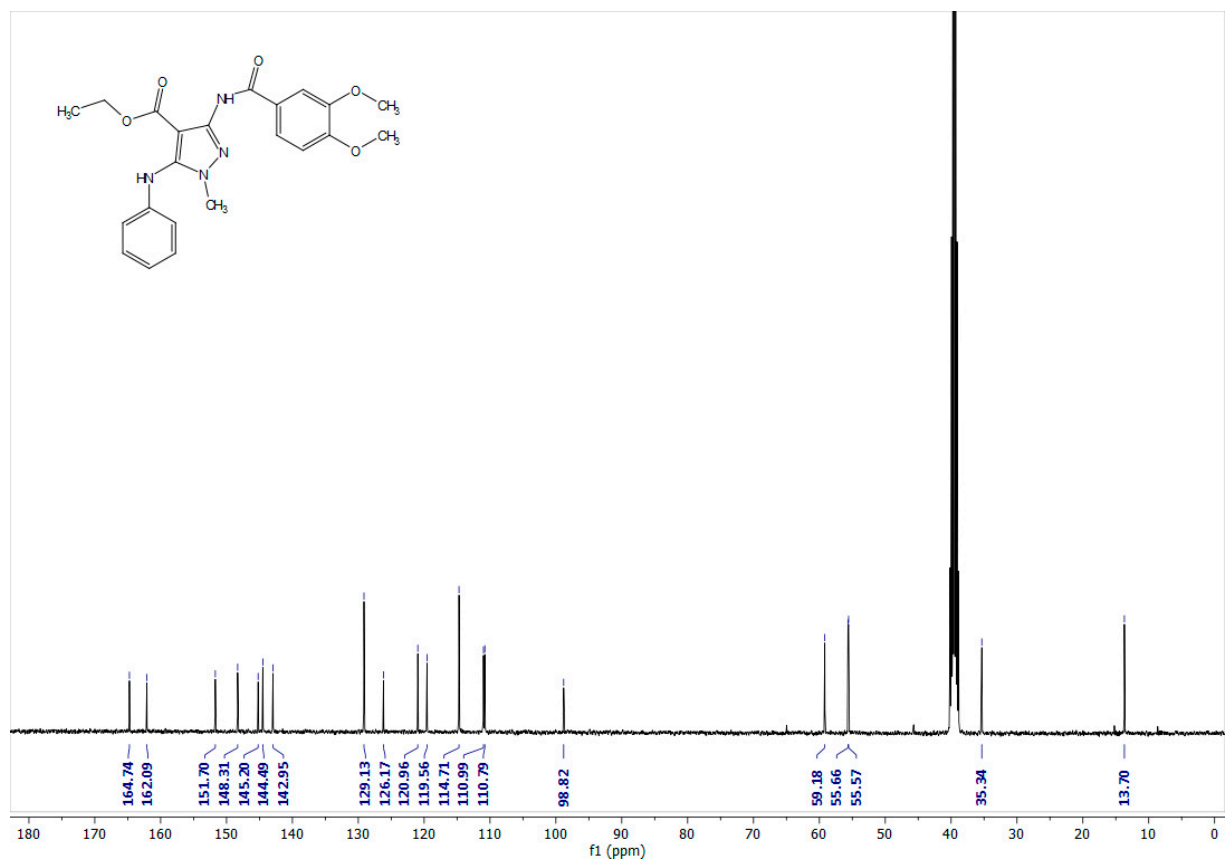


Figure S43. ^1H -NMR (400 MHz, d_6 -DMSO) spectrum of compound **22**

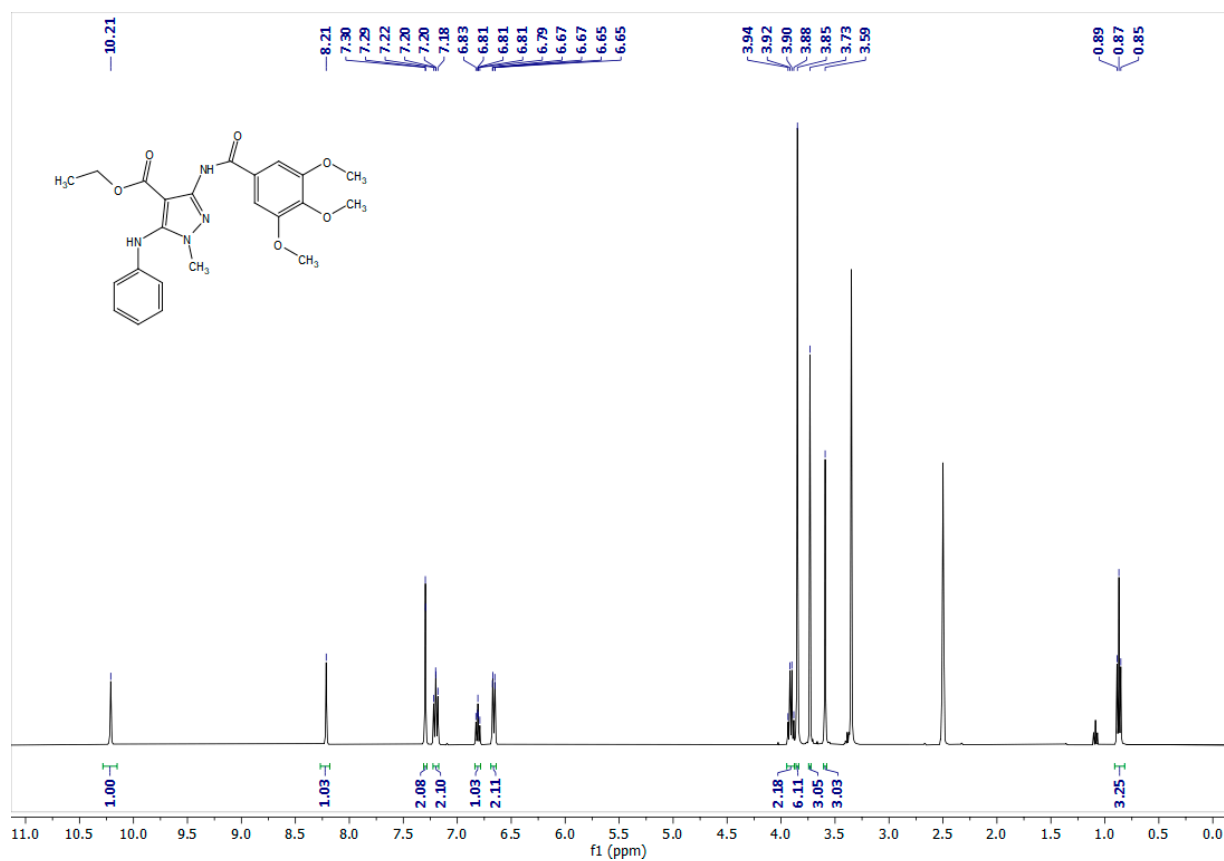


Figure S44. ^{13}C -NMR (101 MHz, d_6 -DMSO) spectrum of compound **22**

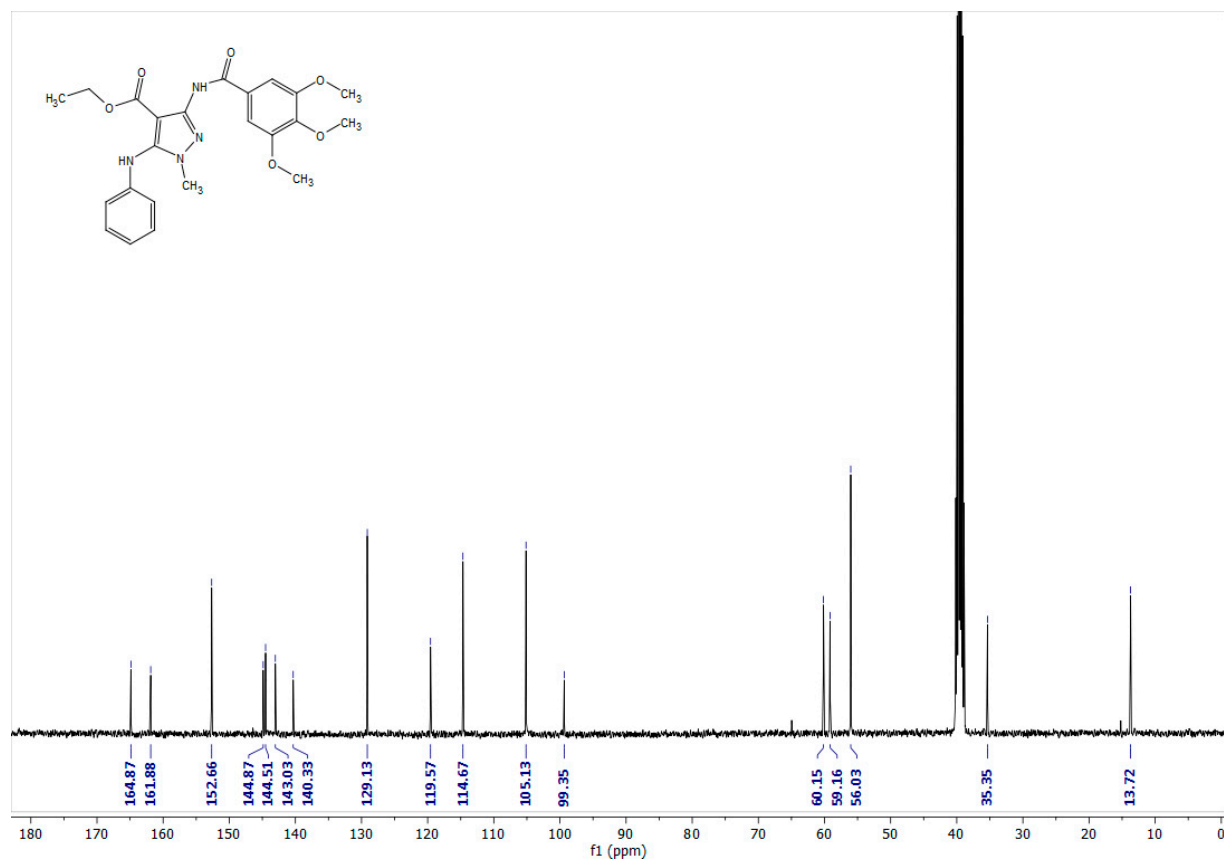


Table S1. Inhibitory effect of compounds **10-22** on platelet aggregation and ROS production

Cpd	IC₅₀ (μM±SD)^a	
	Aggregation inhibition	ROS production inhibition
10a	204±12	111±9
10b	94±7	104±4
11a	183±13	123±12
11b	129±10	113±7
11c	841±43	148±13
11d	890±19	182±11
12a	265±23	113±7
12b	187±16	106±9
12c	331±14	193±16
12d	433±16	171±9
13a	883±39	213±17
13b	909±87	433±32
13c	313±29	209±15
13d	437±25	405±29
14	365±28	387±35
15	250±19	323±14
16	292±28	310±24
17	460±35	573±43
18	268±25	273±17
19	294±26	293±18
20	301±24	289±27
21	278±27	262±13
22	249±22	313±25
NAC	ND	872±26
ASA	438±18	ND

^aReported data are the mean value ± standard deviation (SD) obtained in at least six different experiments each performed in duplicate.