

Dendrimeric magnetic nanoparticle cores with Co-phthalocyanine tags and its application in the synthesis of tetrahydrobenzo[b]pyran derivatives

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Fig S1. The IR spectrum of 2-amino-4-(3-ethoxy-4-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 6)

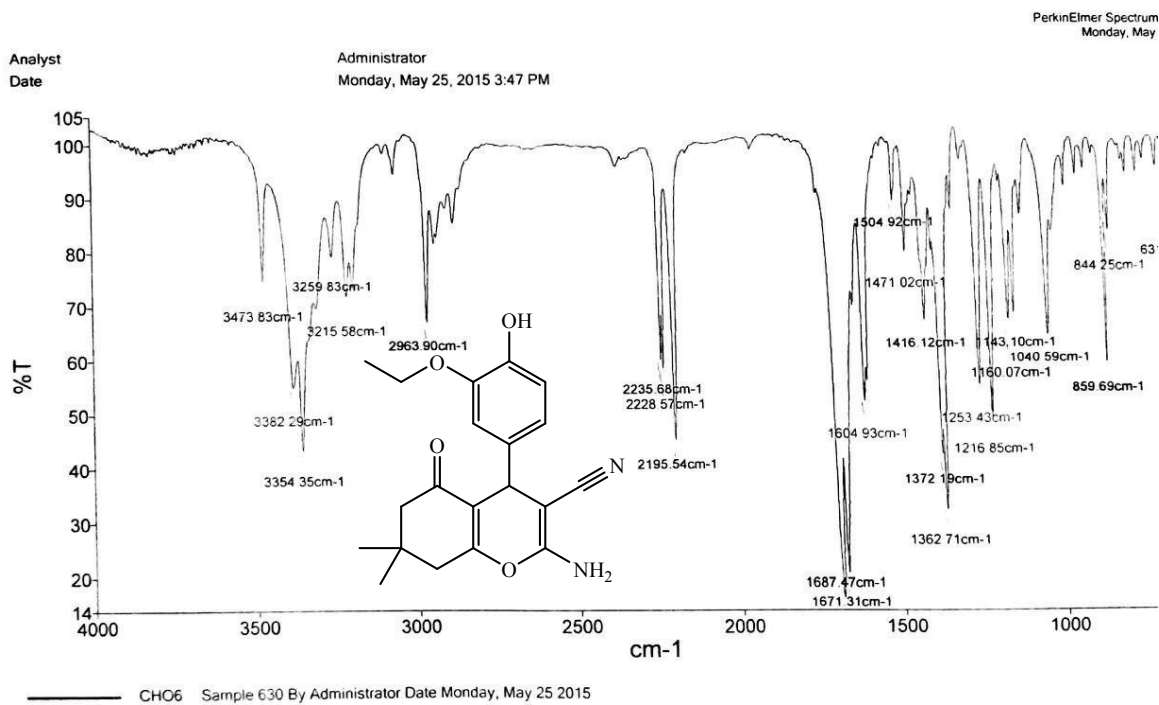


Fig S2. The ^1H NMR spectrum of 2-amino-4-(3-ethoxy-4-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 6)

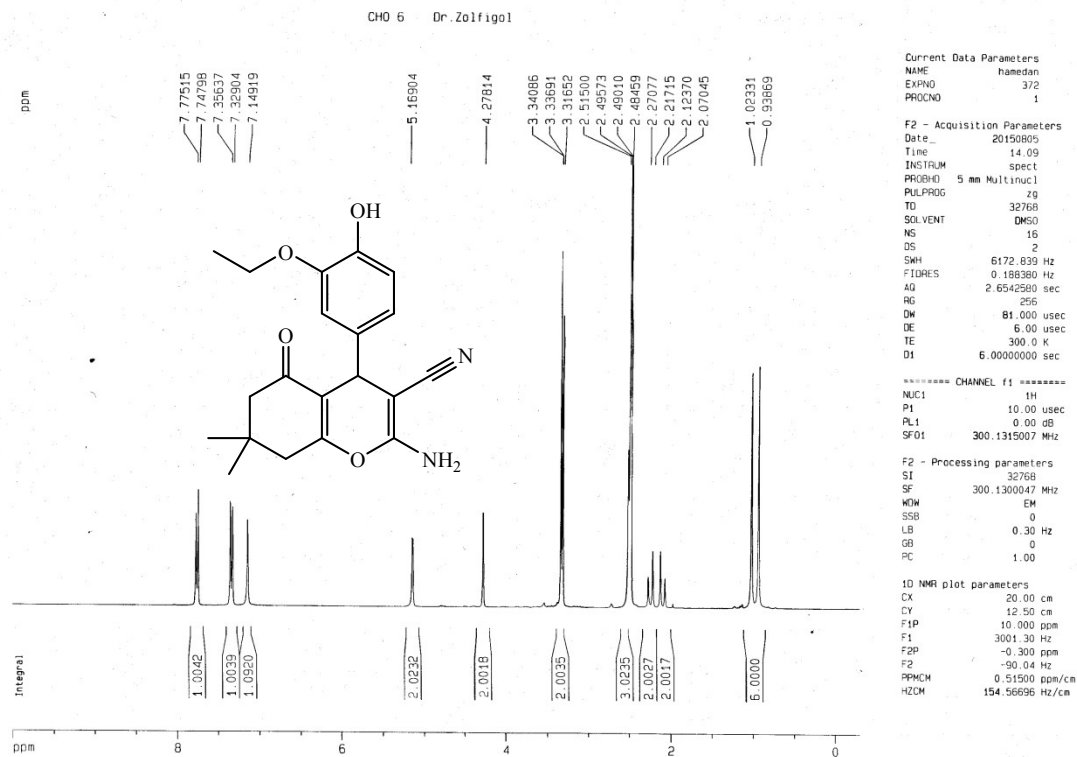


Fig S3. The ^1H NMR spectrum of 2-amino-4-(3-ethoxy-4-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 6)

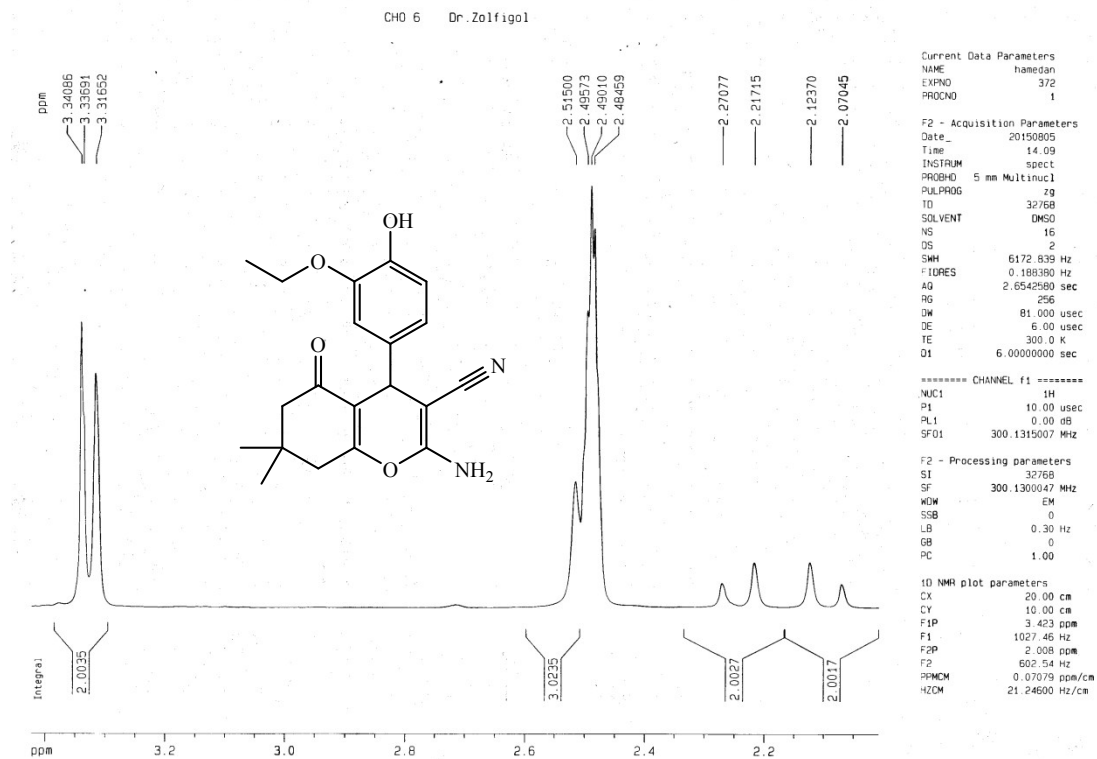


Fig S4. The ^{13}C NMR spectrum of 2-amino-4-(3-ethoxy-4-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 6)

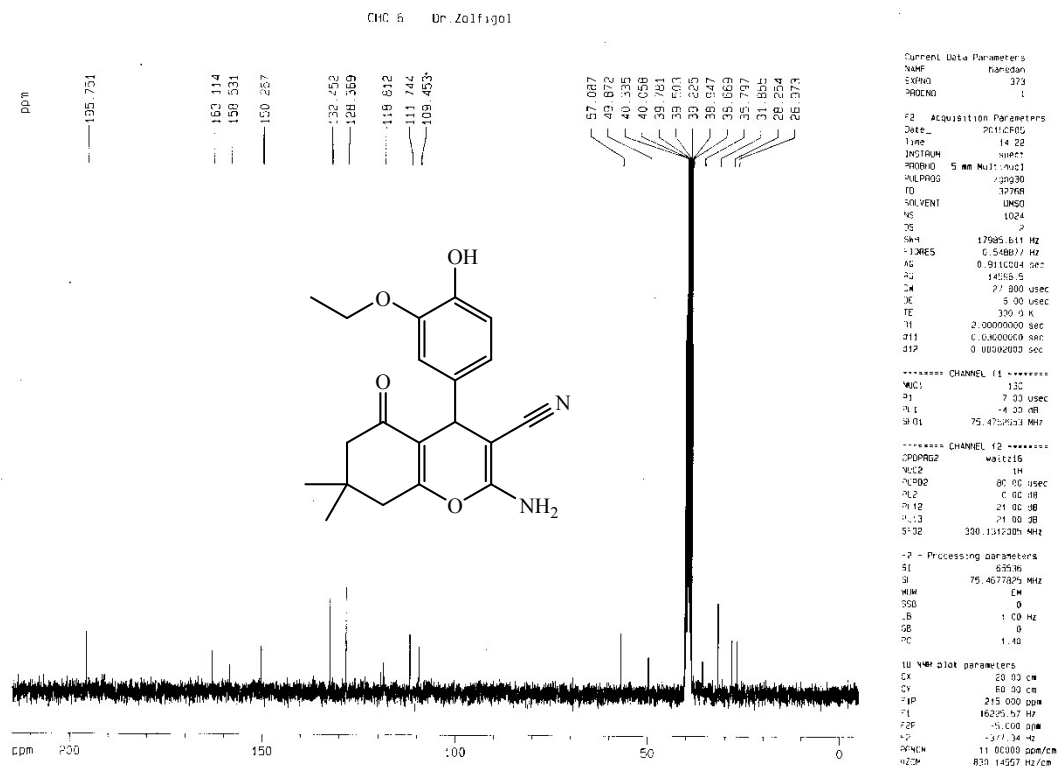


Fig S5. The ^{13}C NMR spectrum of 2-amino-4-(3-ethoxy-4-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 6)

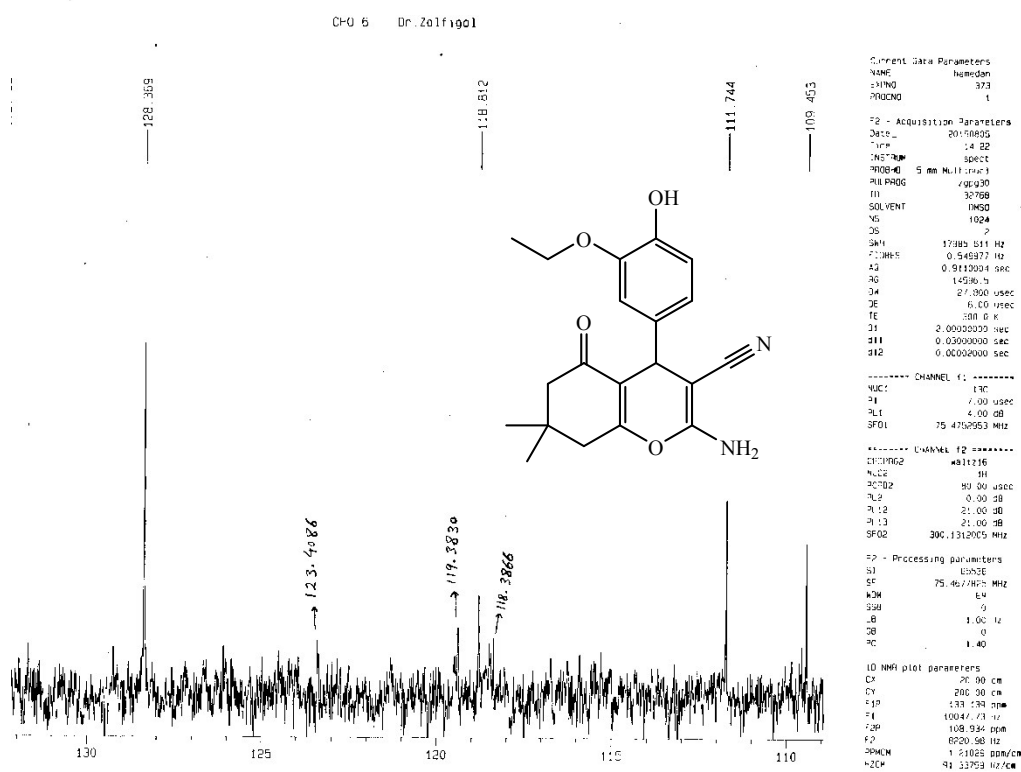


Fig S6. The IR spectrum of *2-amino-4-(2-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile* (Table 3, entry 9)

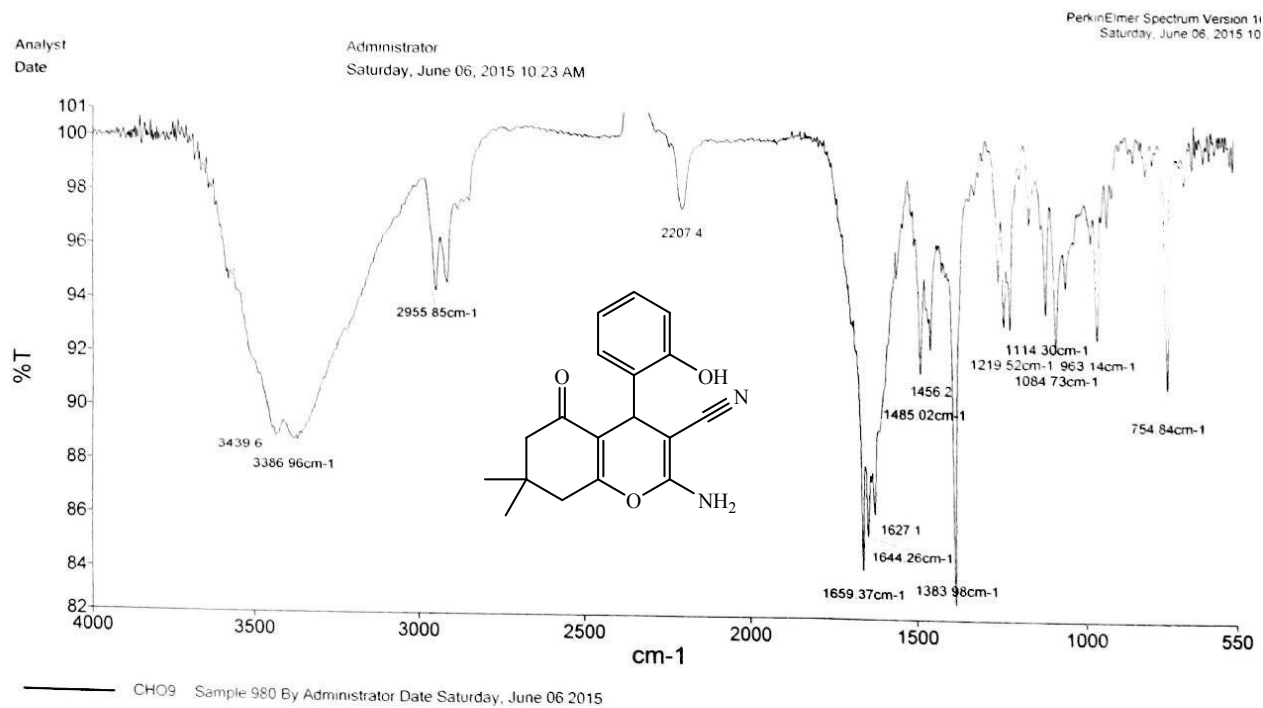


Fig S7. The ^1H NMR spectrum of 2-amino-4-(2-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 9)

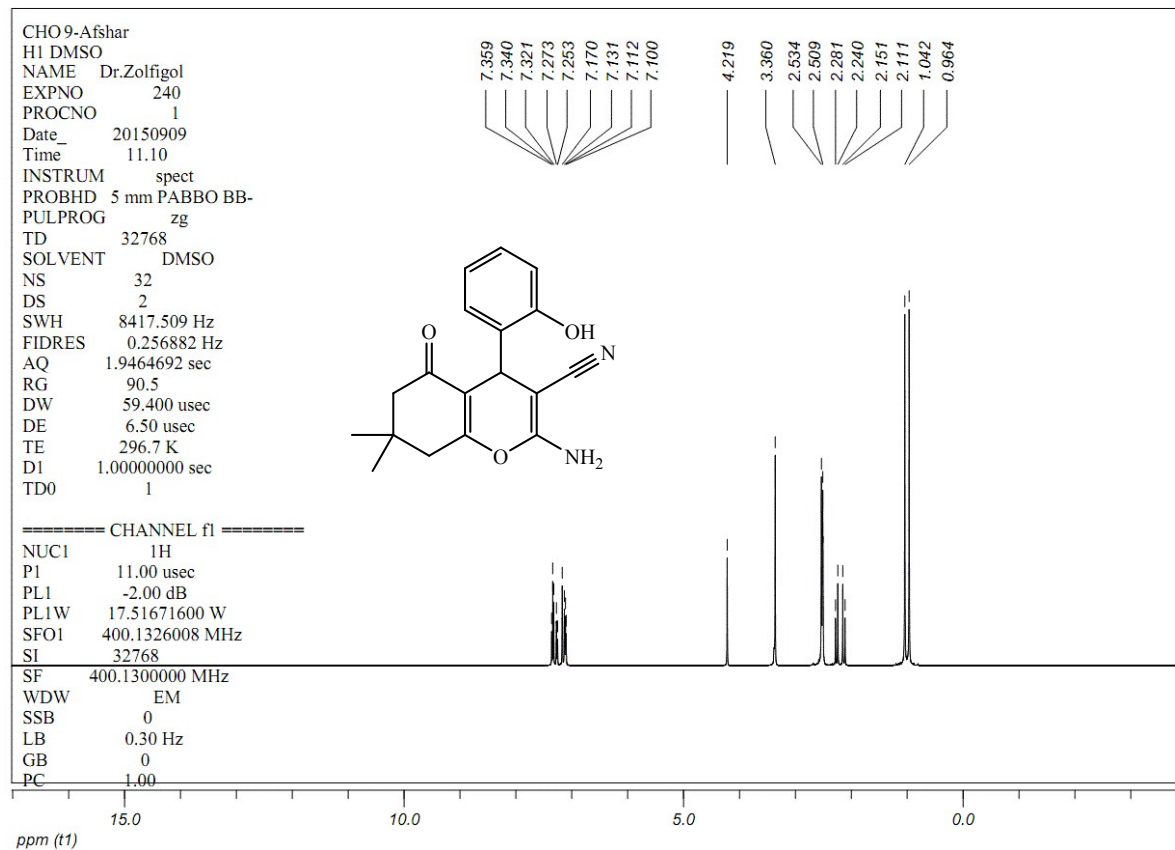


Fig S8. The ^1H NMR spectrum of 2-amino-4-(2-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 9)

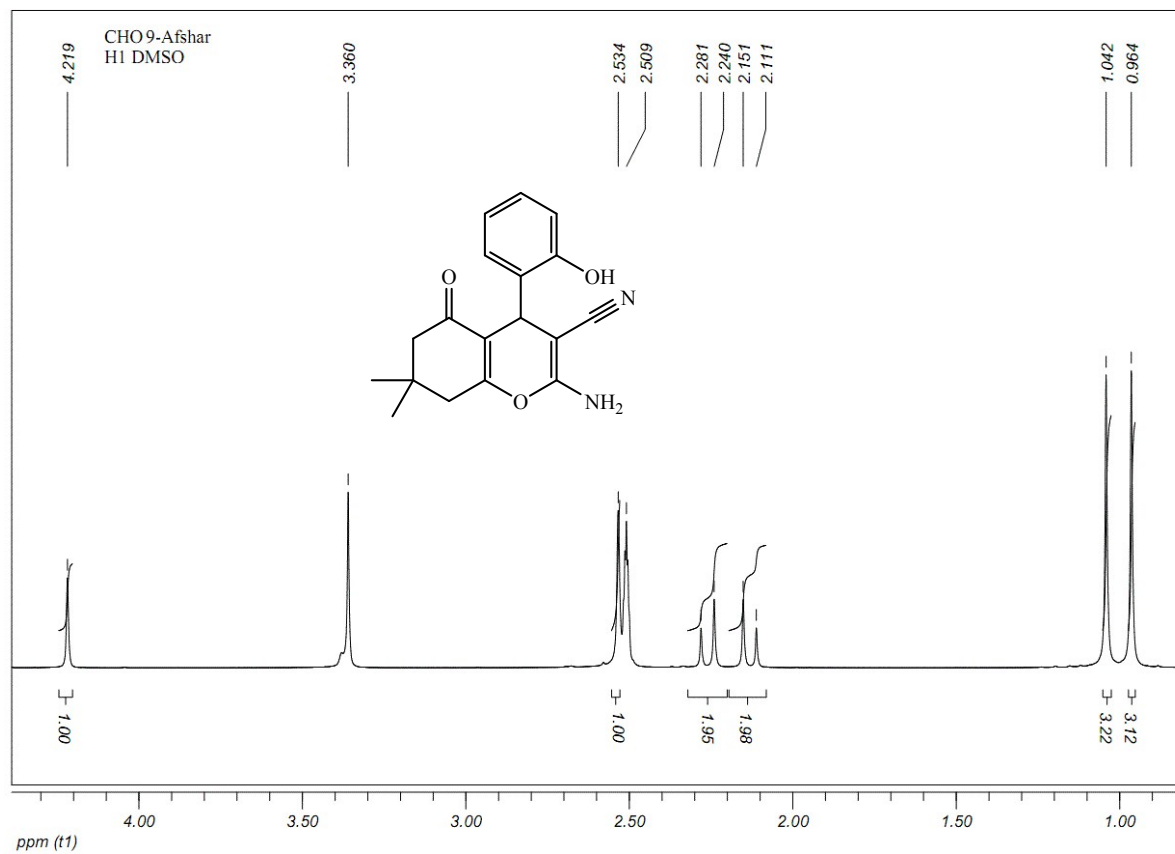


Fig S9. The ^1H NMR spectrum of 2-amino-4-(2-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 9)

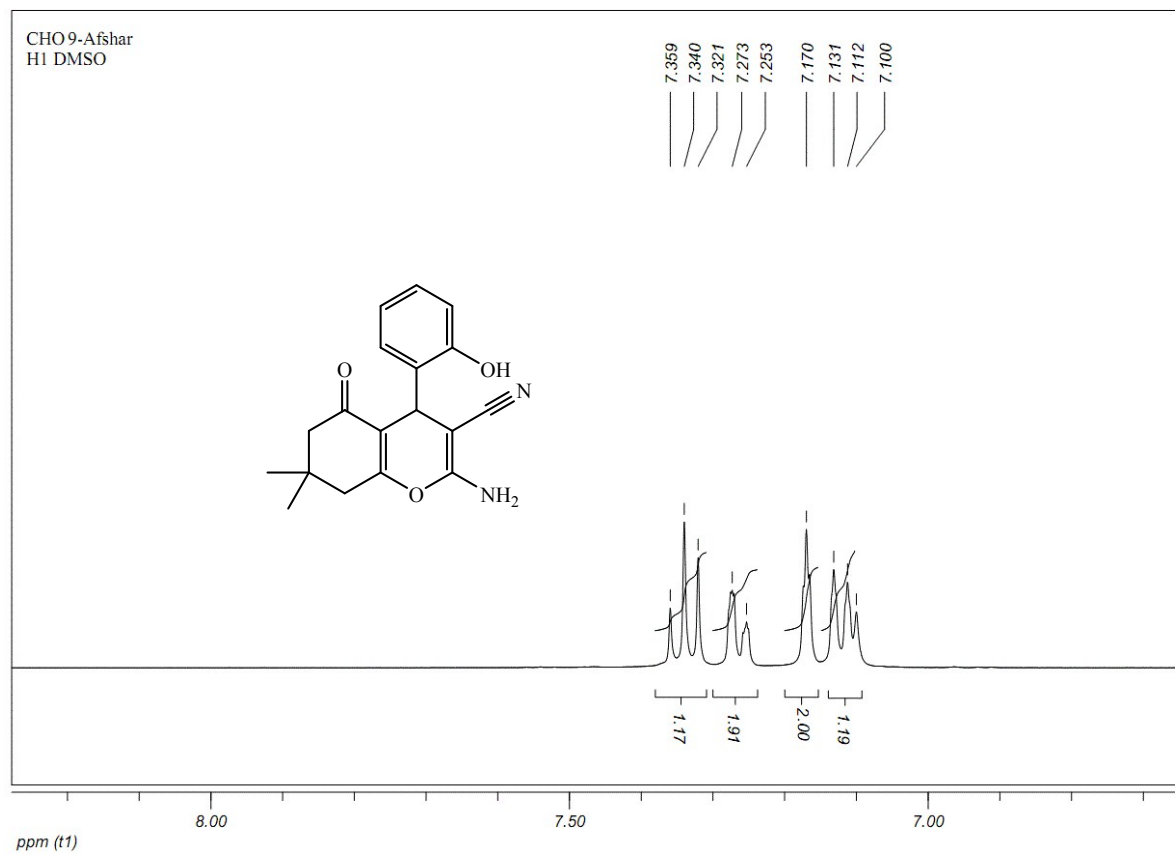


Fig S10. The ^{13}C NMR spectrum of 2-amino-4-(2-hydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 9)

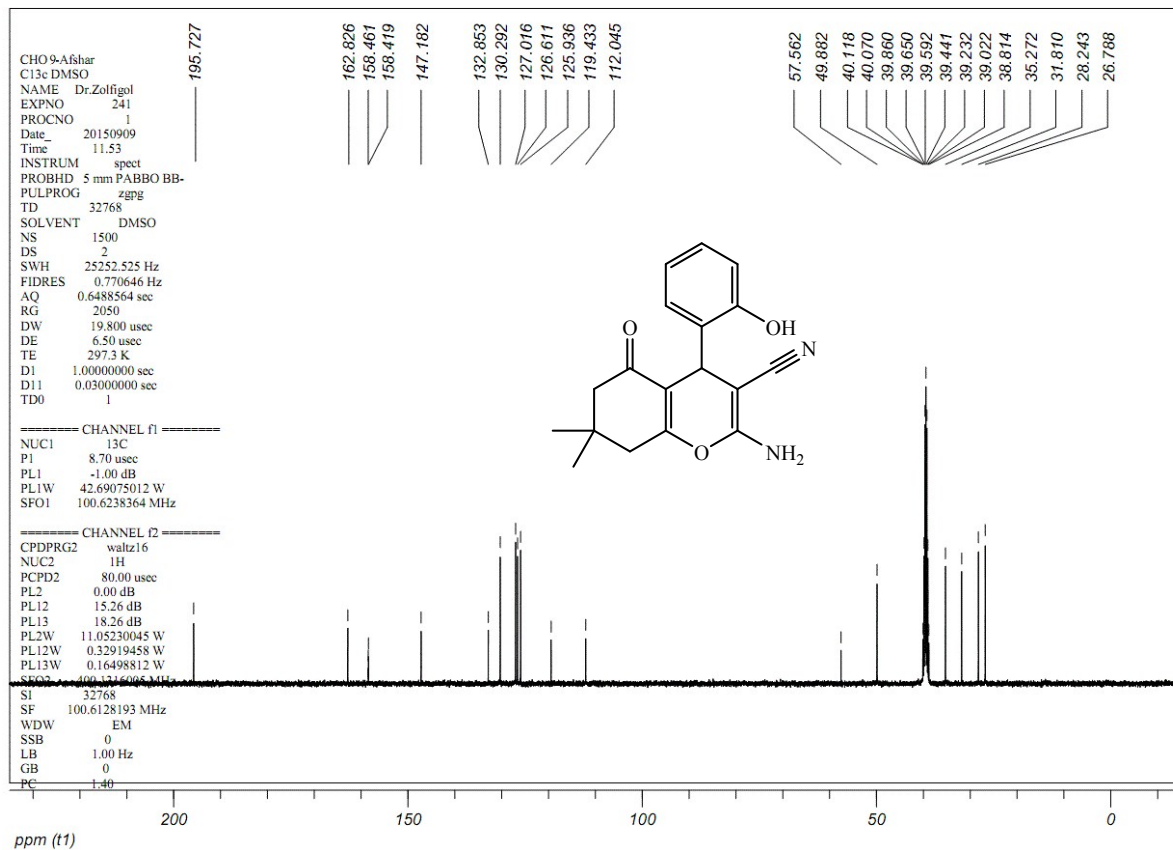


Fig S11. The IR spectrum of *2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile* (Table 3, entry 10)

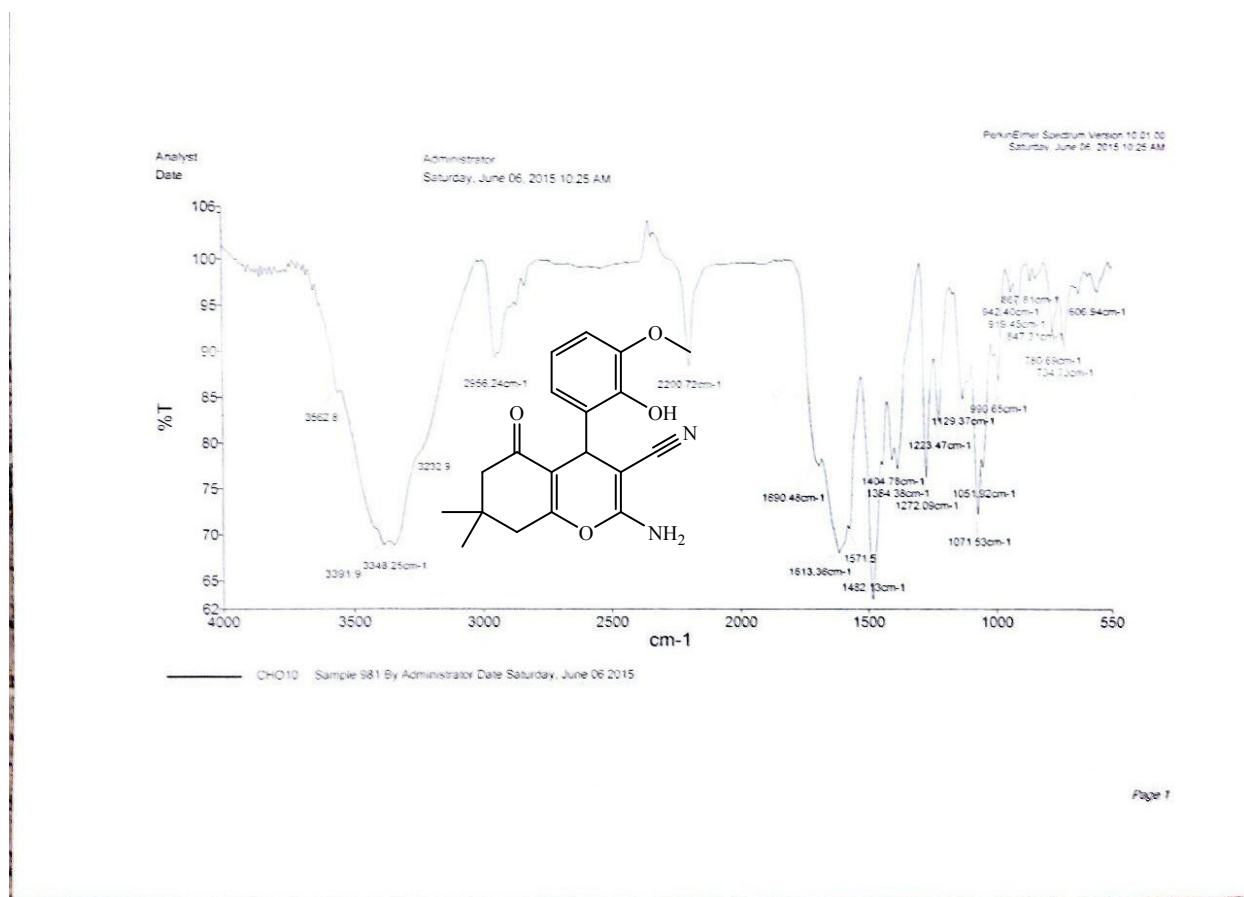


Fig S12. The ^1H NMR spectrum of 2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 10)

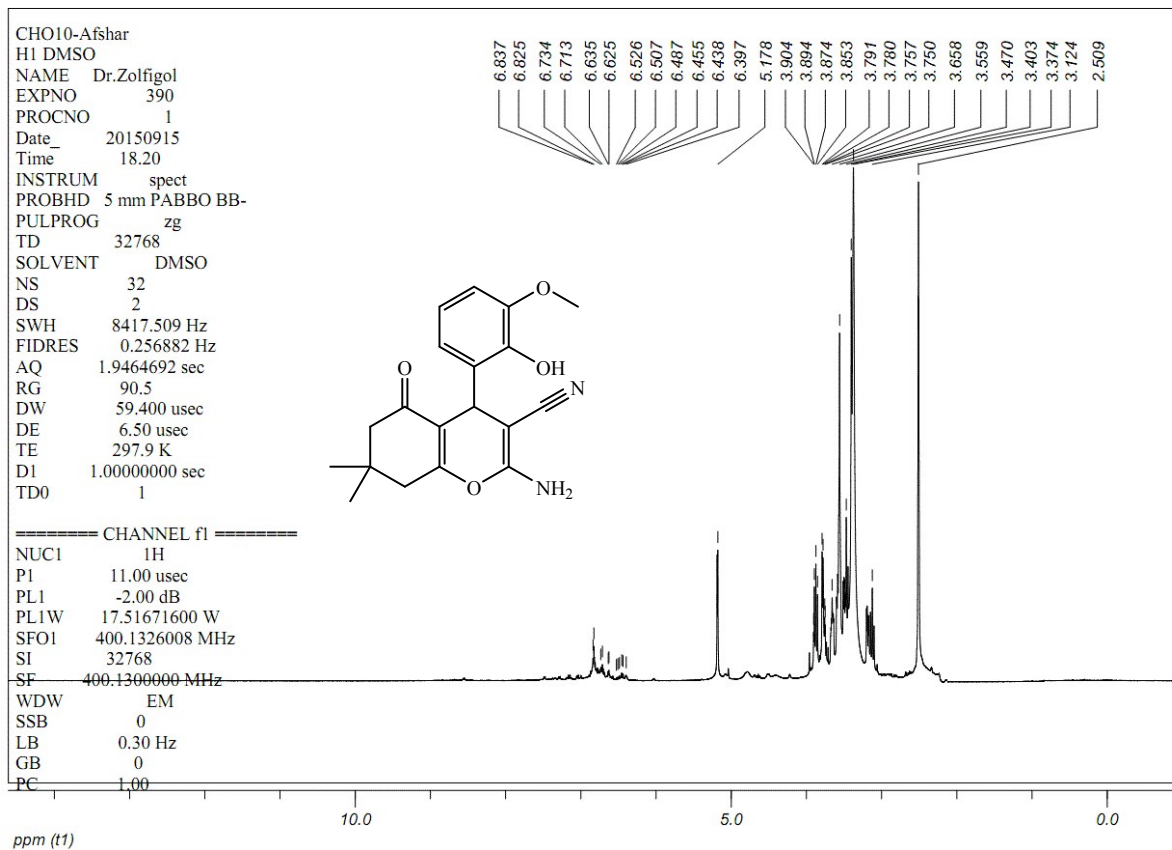


Fig S13. The ^1H NMR spectrum of 2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 10)

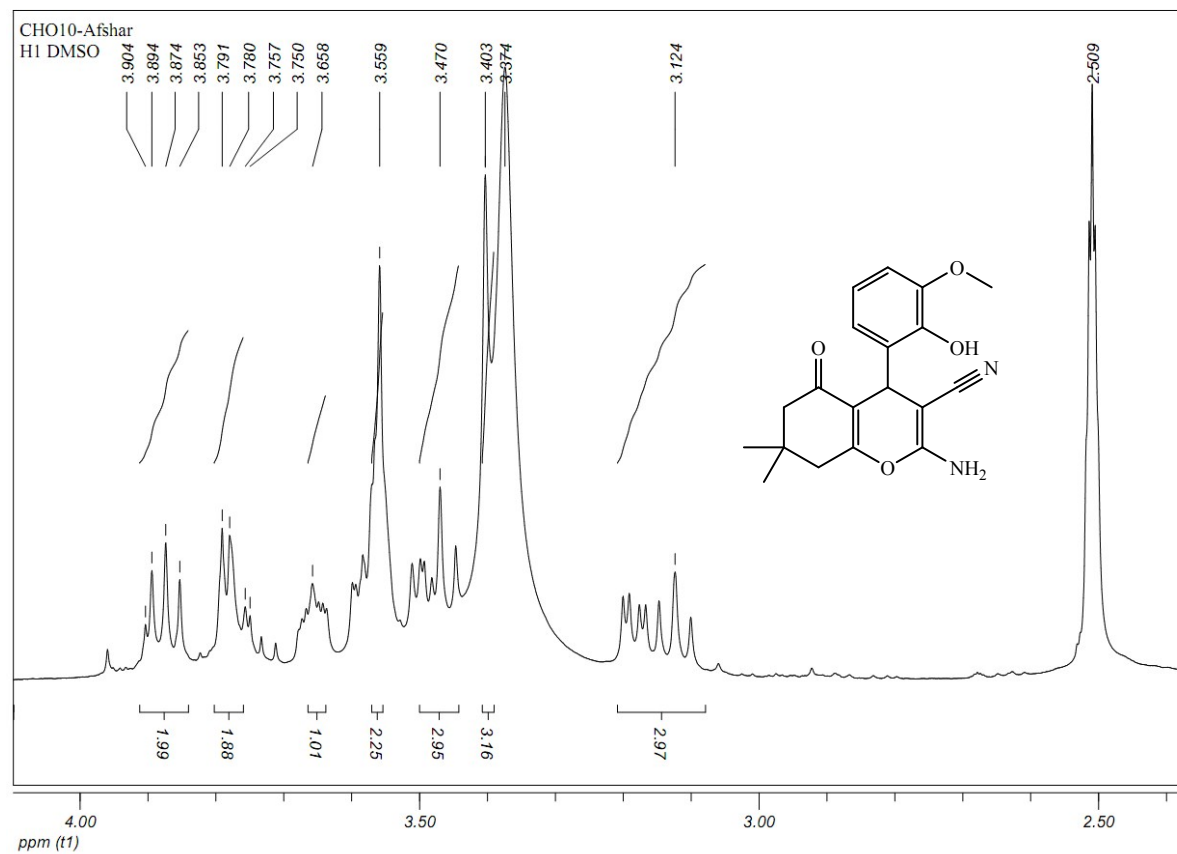


Fig S14. The ^1H NMR spectrum of 2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 10)

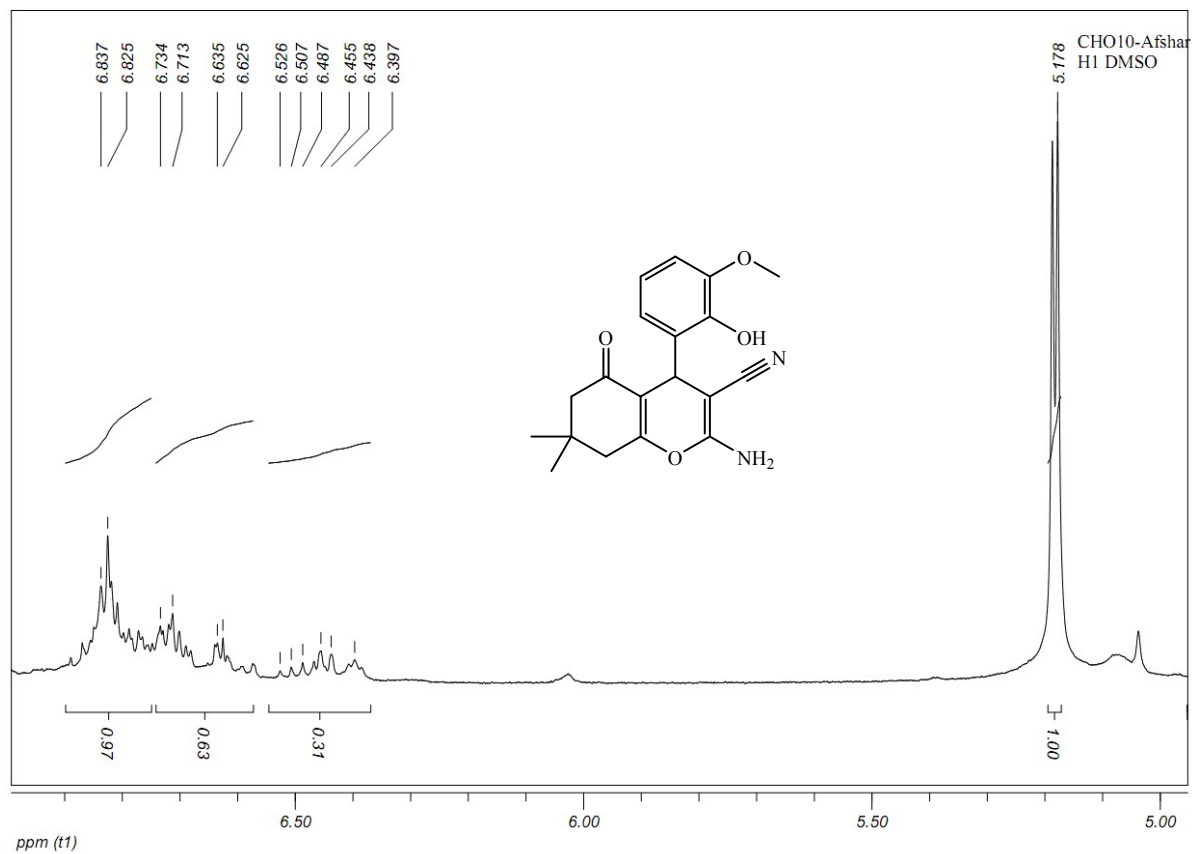


Fig S15. The ^{13}C NMR spectrum of 2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 10)

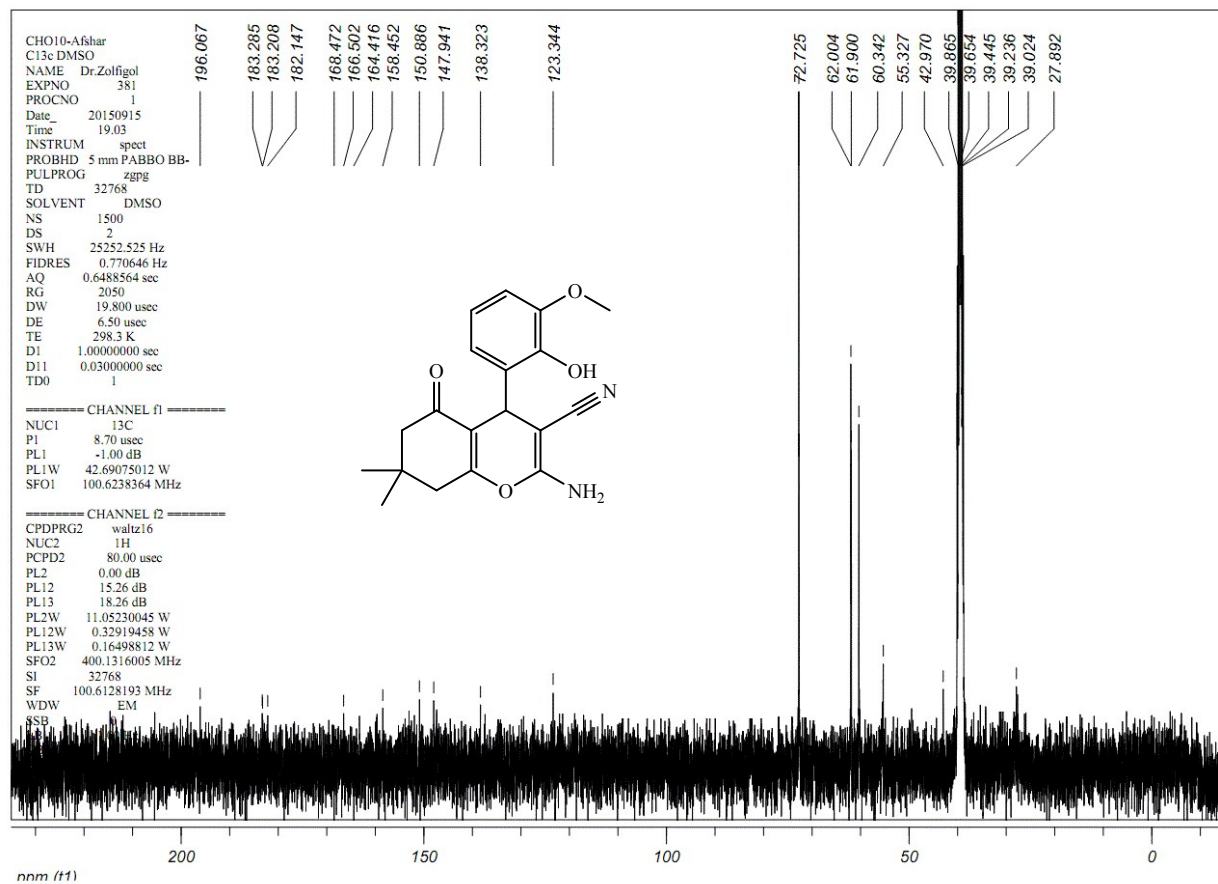


Fig S16. The ^{13}C NMR spectrum of 2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 10)

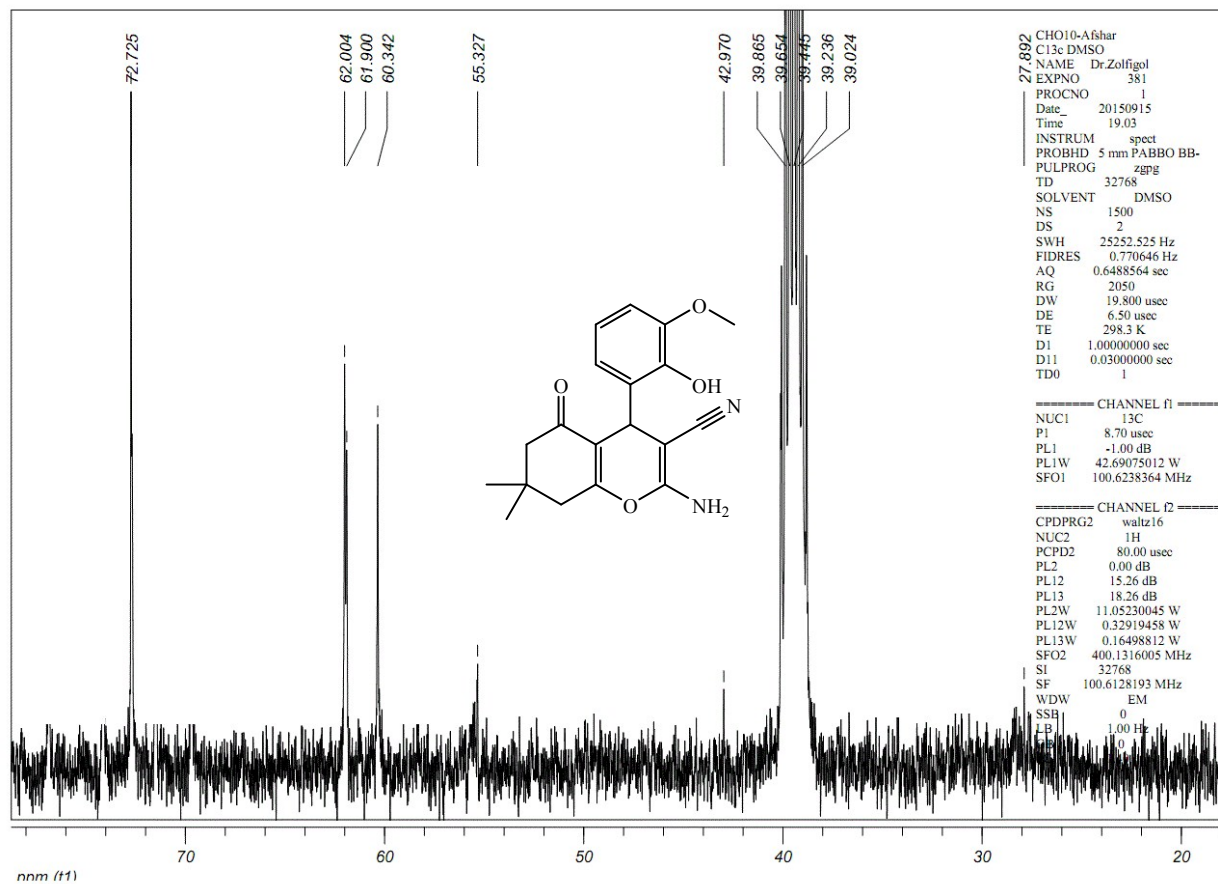


Fig S17. The ^{13}C NMR spectrum of 2-amino-4-(2-hydroxy-3-methoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 10)

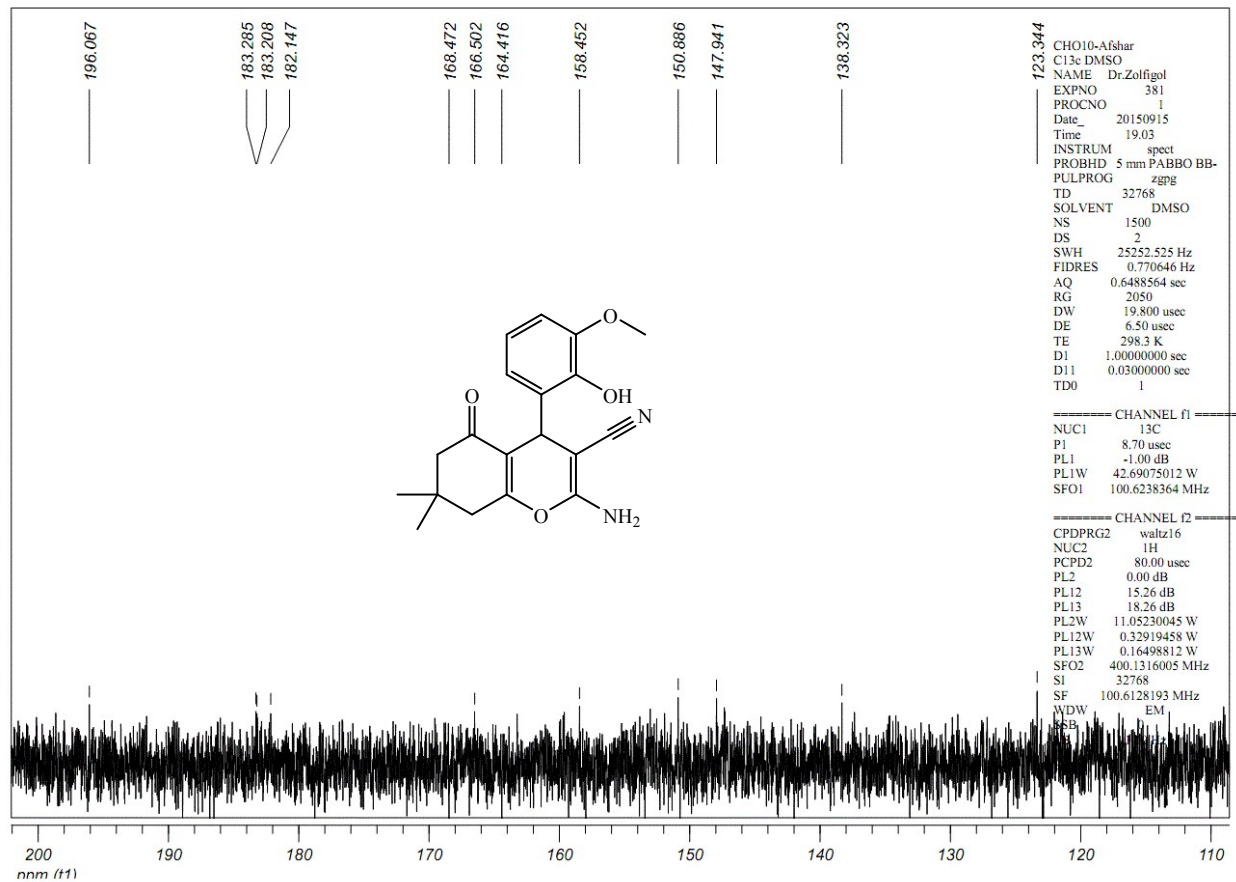


Fig S18. The IR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

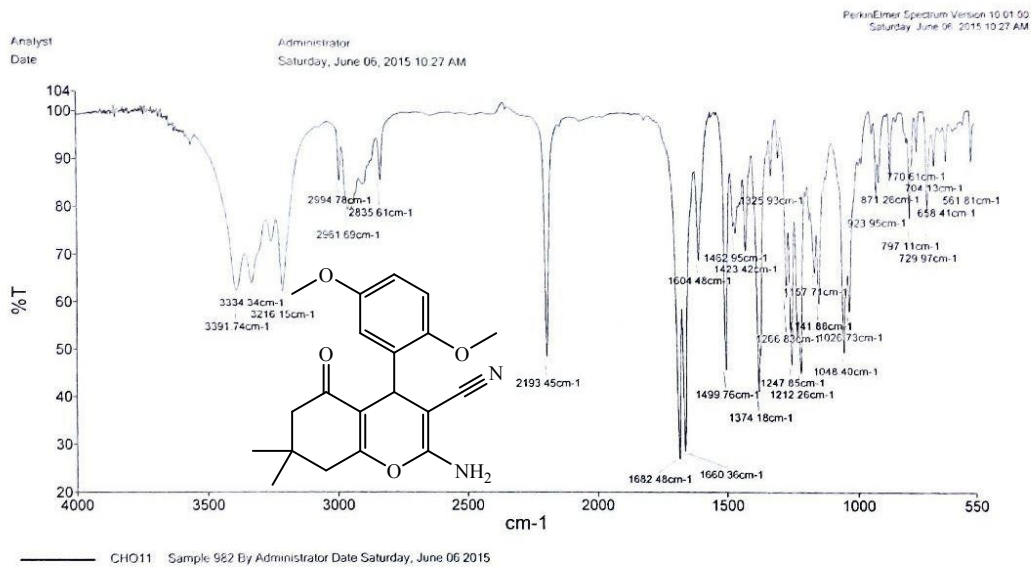


Fig S19. The ^1H NMR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

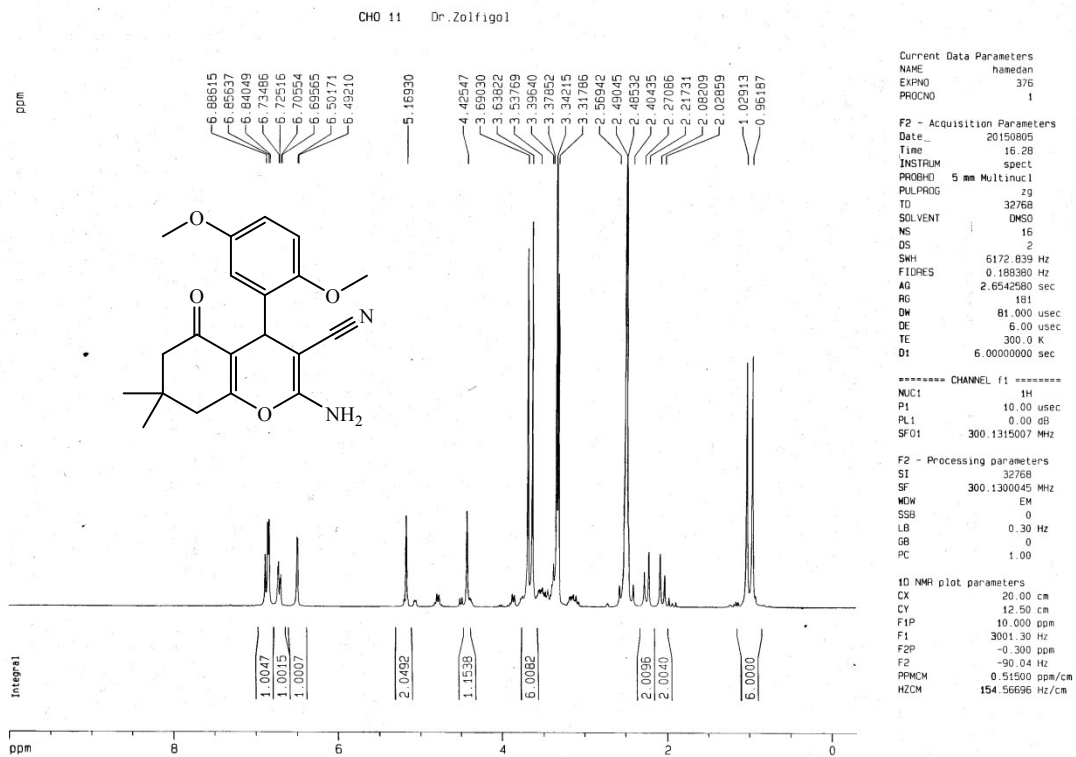


Fig S20. The ^1H NMR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

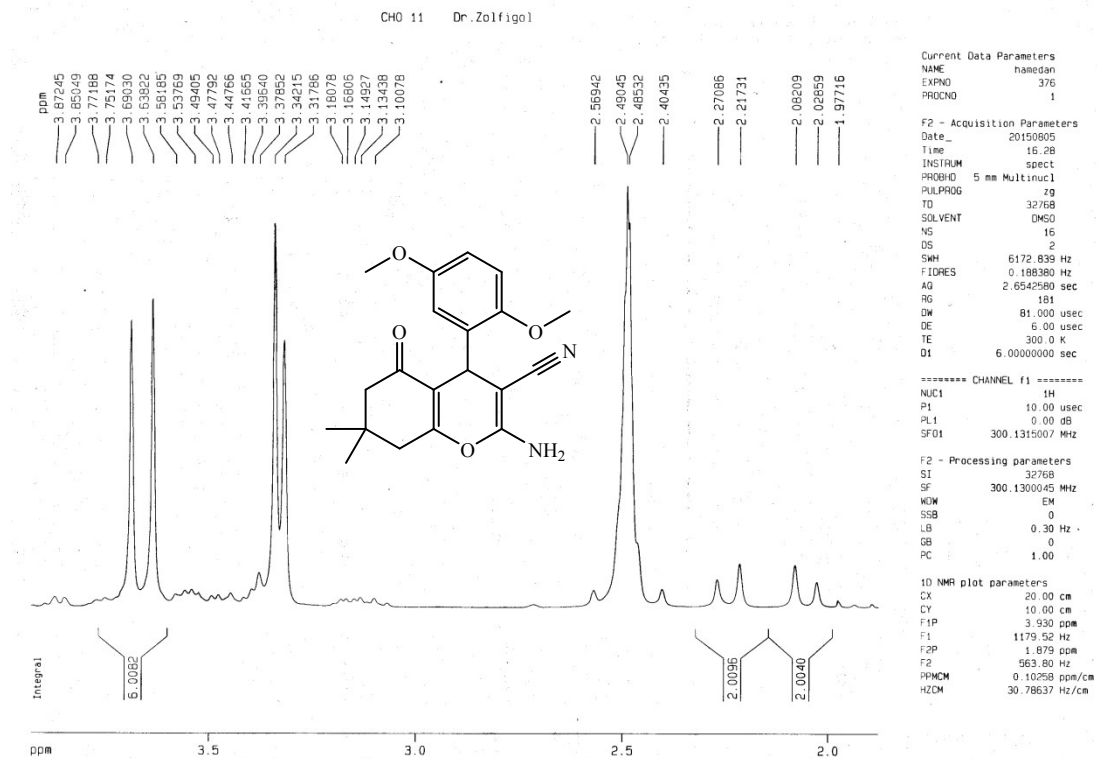


Fig S21. The ^1H NMR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

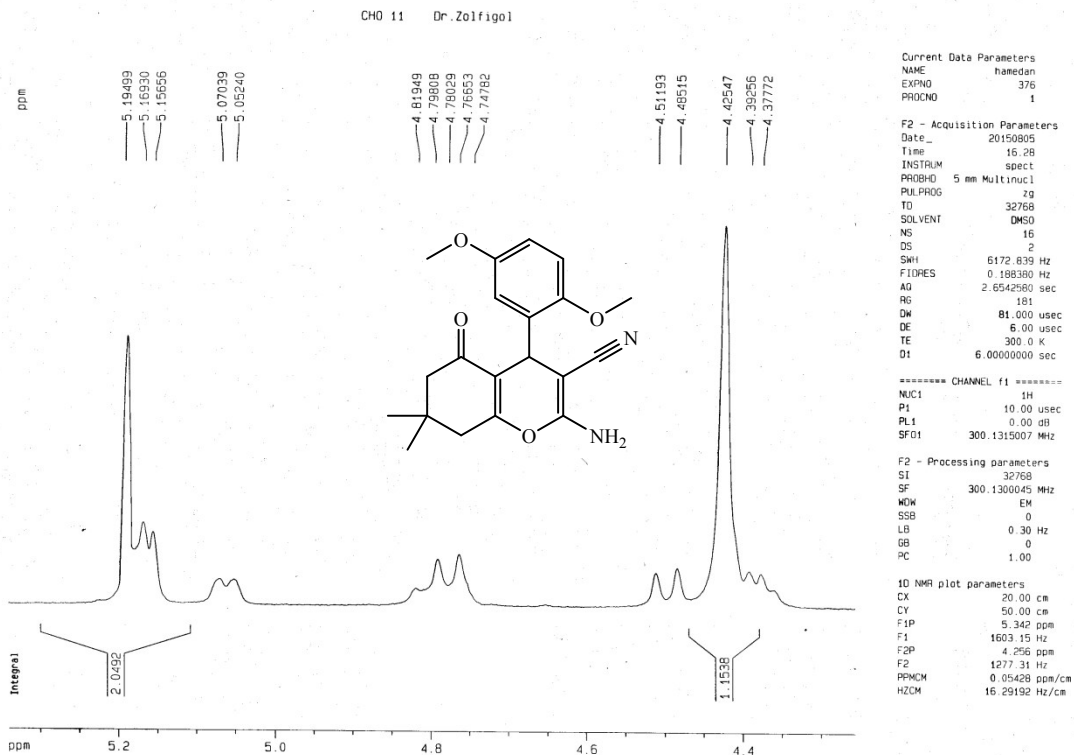


Fig S22. The ^1H NMR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

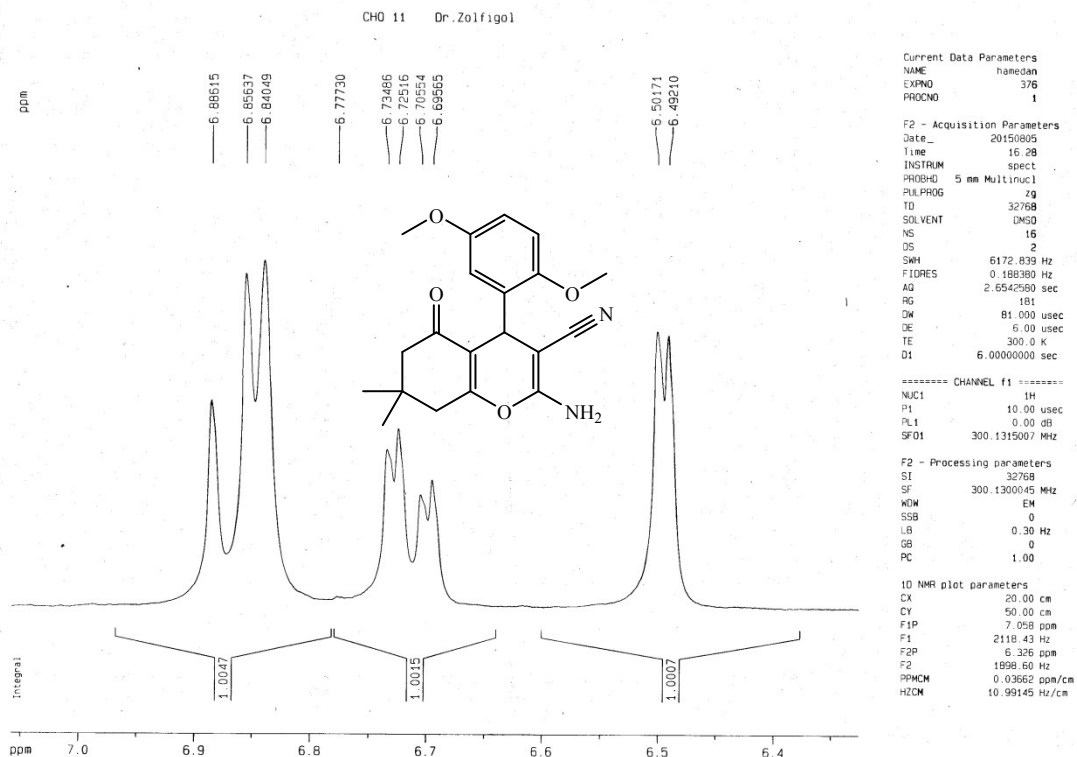


Fig S23. The ^{13}C NMR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

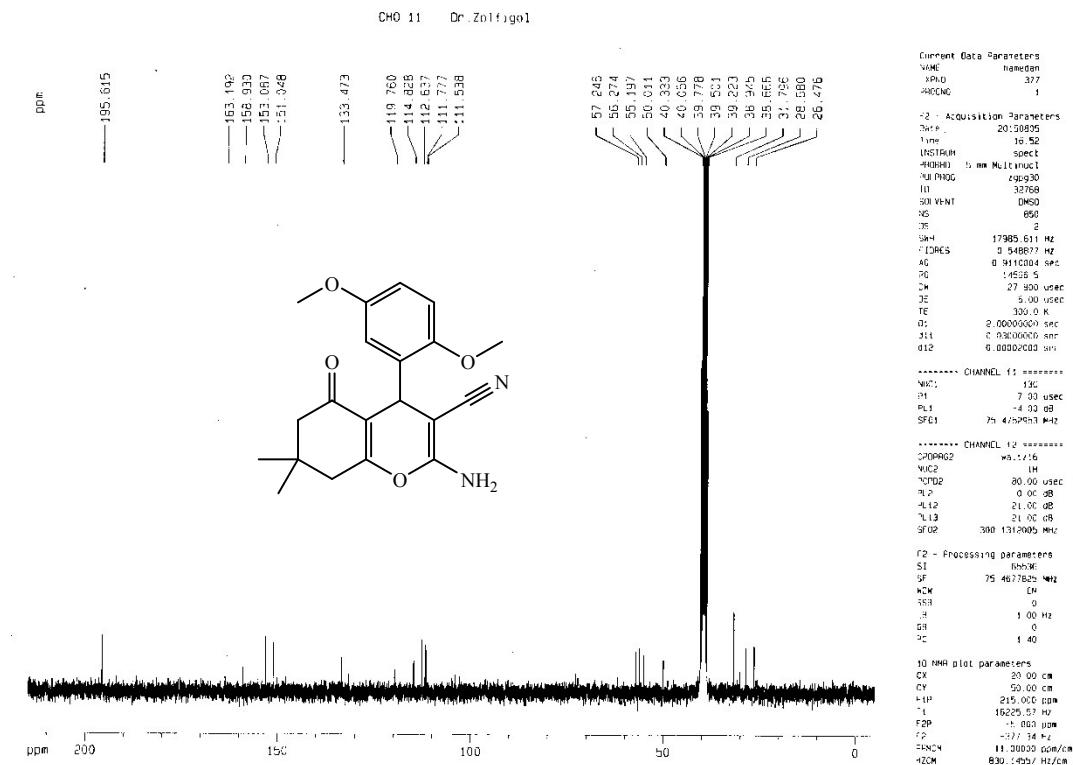


Fig S24. The ^{13}C NMR spectrum of 2-amino-4-(2,5-dimethoxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 11)

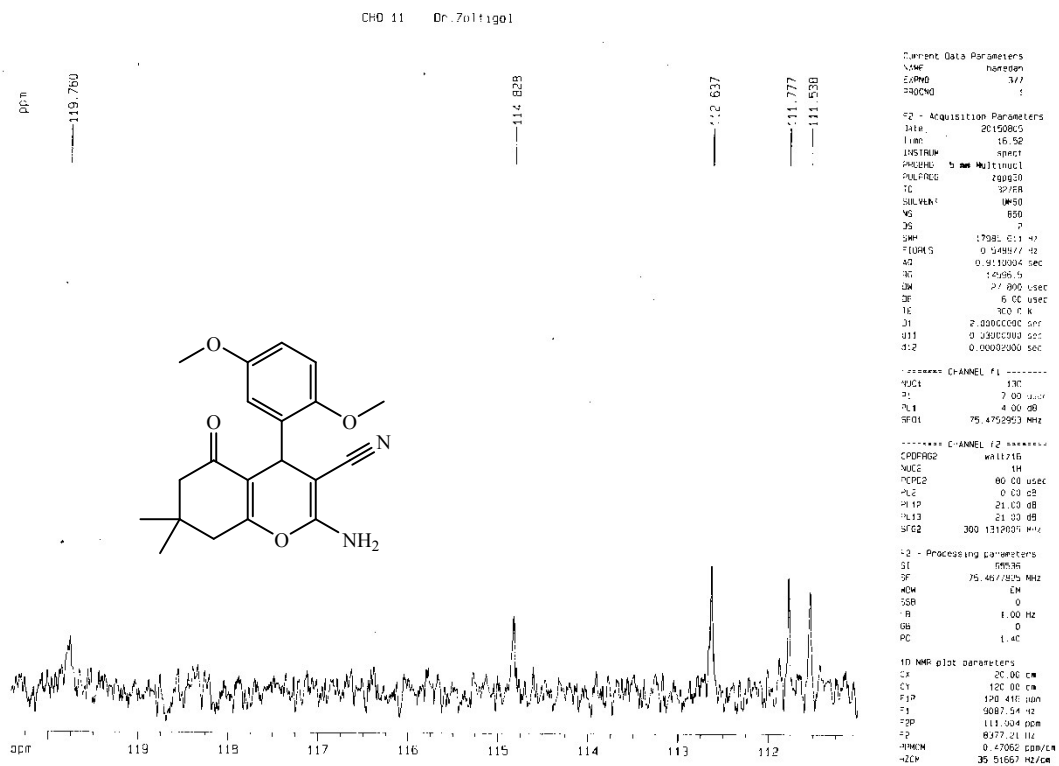


Fig S25. The IR spectrum of 4,4'-(1,4-phenylene)bis(2-amino-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile) (Table 3, entry 13)

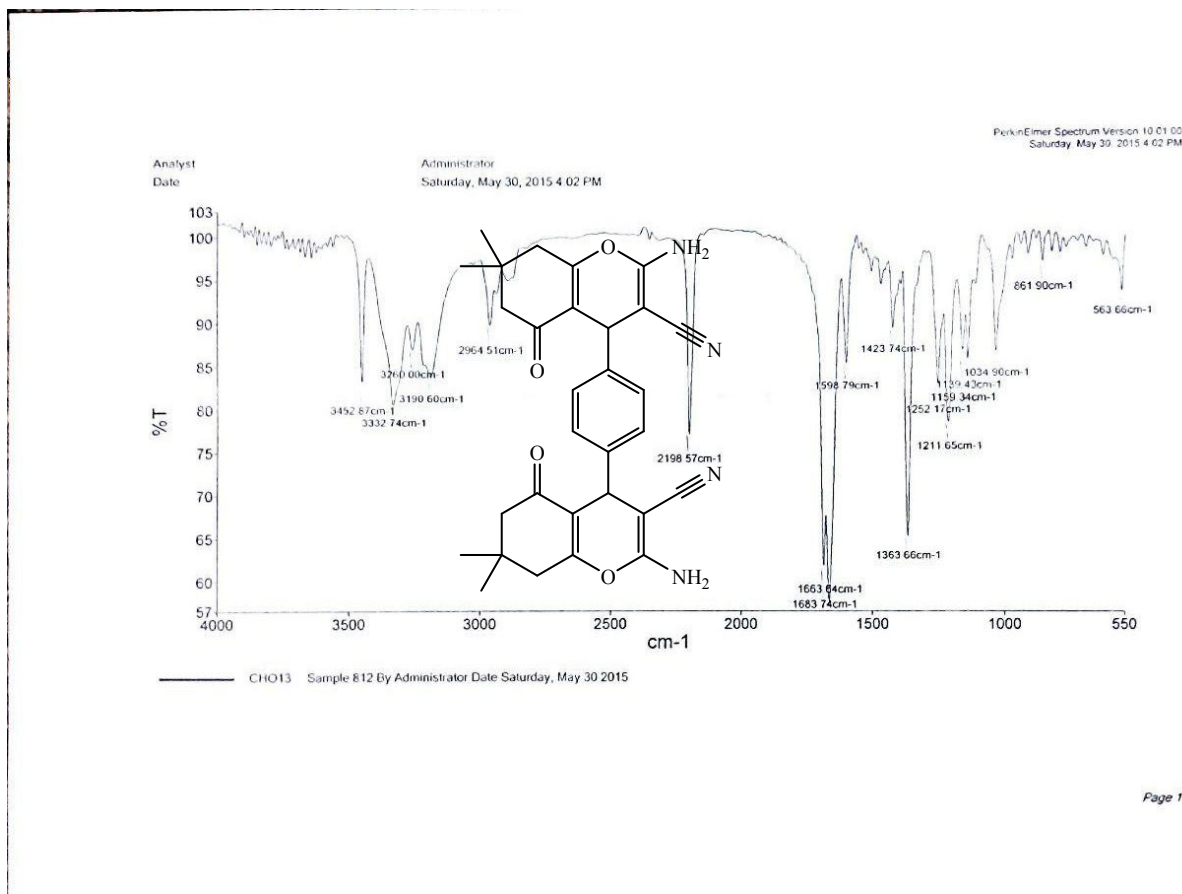


Fig S26. The ^1H NMR spectrum of 4,4'-(1,4-phenylene)bis(2-amino-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile) (Table 3, entry 13)

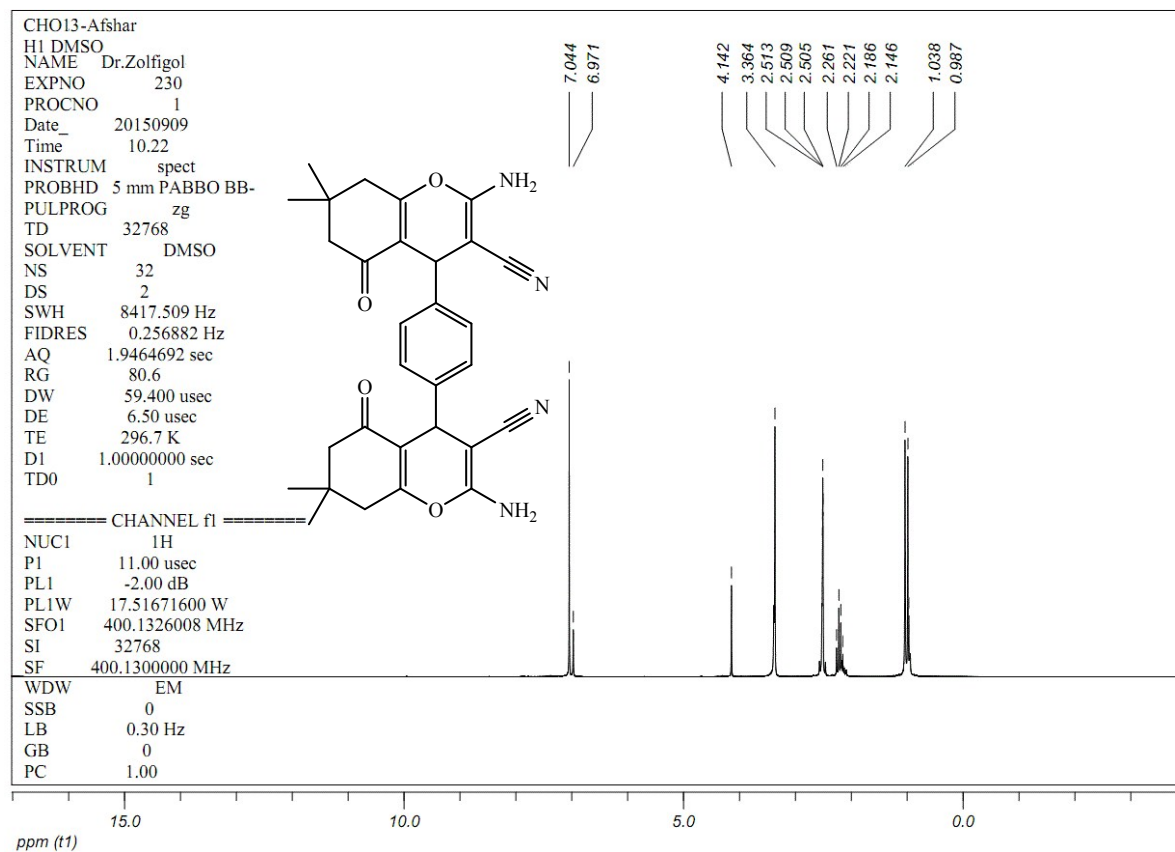


Fig S27. The ^1H NMR spectrum of 4,4'-(1,4-phenylene)bis(2-amino-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile) (Table 3, entry 13)

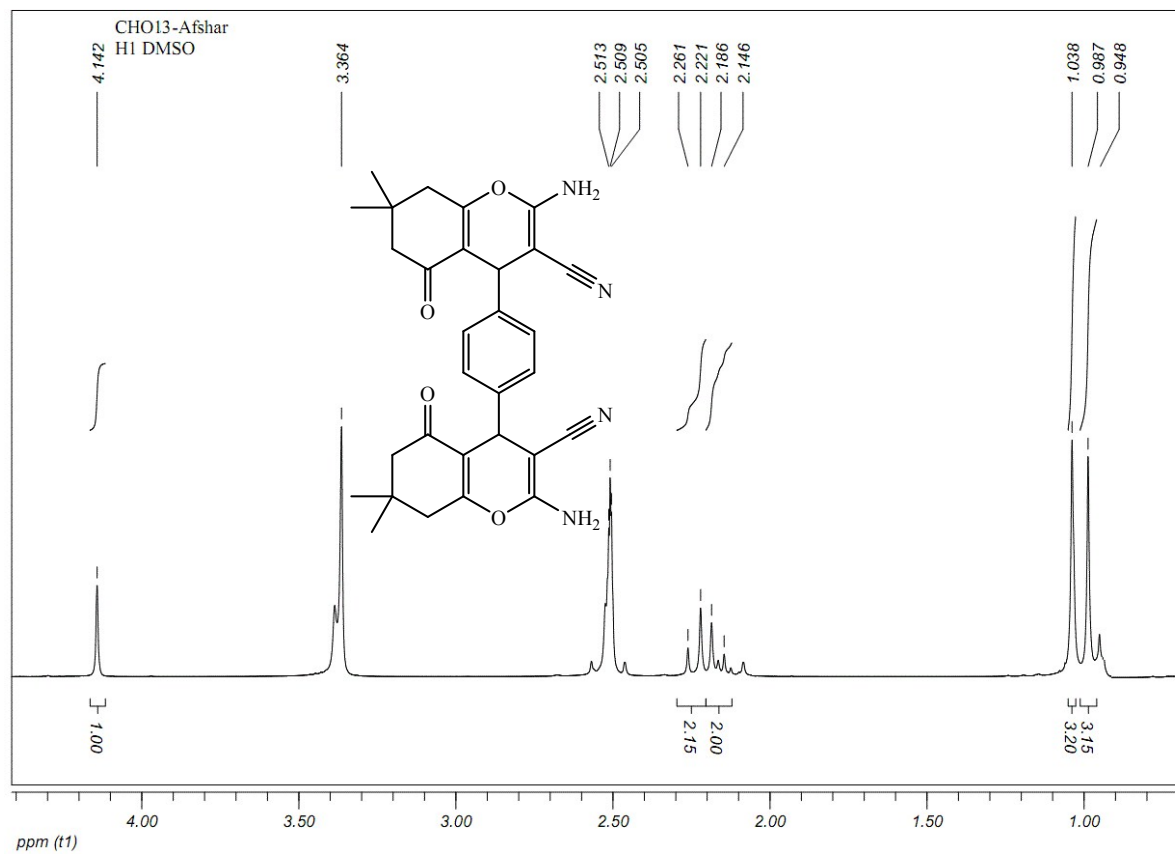


Fig S28. The ^1H NMR spectrum of 4,4'-(1,4-phenylene)bis(2-amino-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile) (Table 3, entry 13)

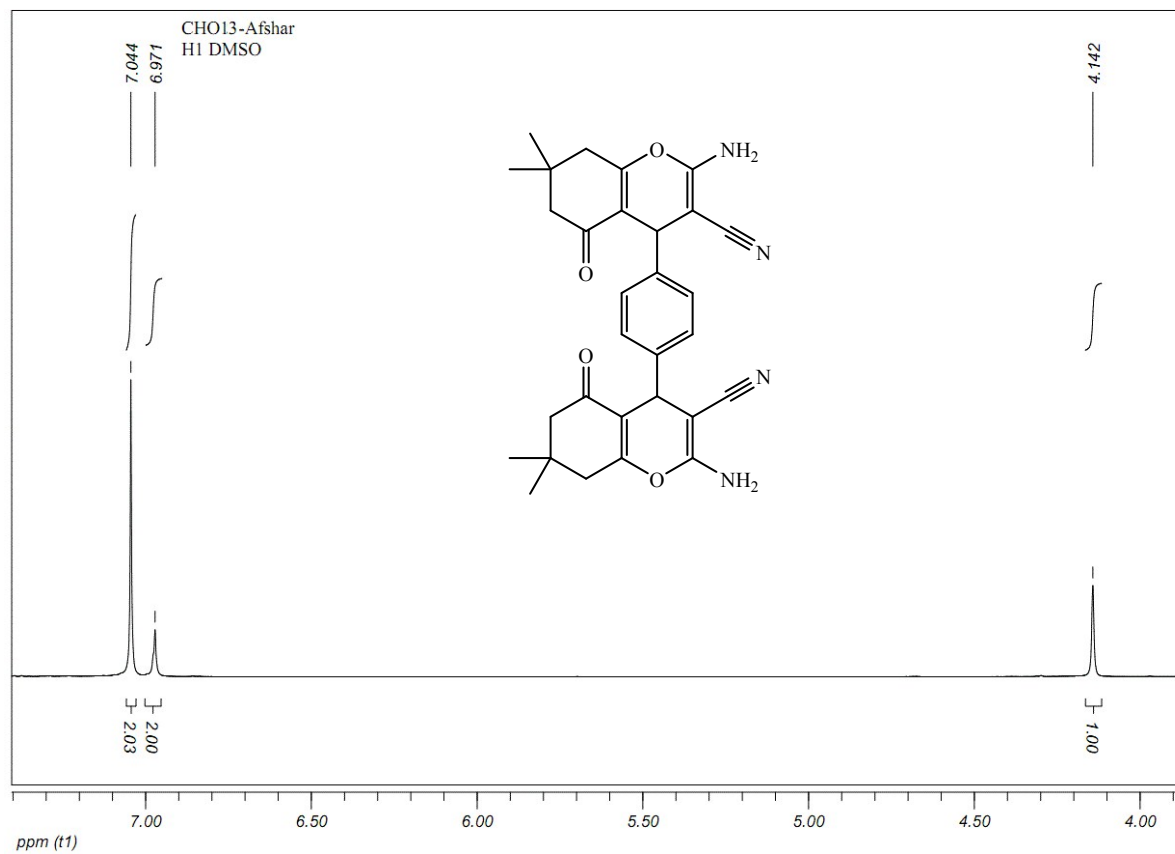


Fig S29. The ^{13}C NMR spectrum of 4,4'-(1,4-phenylene)bis(2-amino-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile) (Table 3, entry 13)

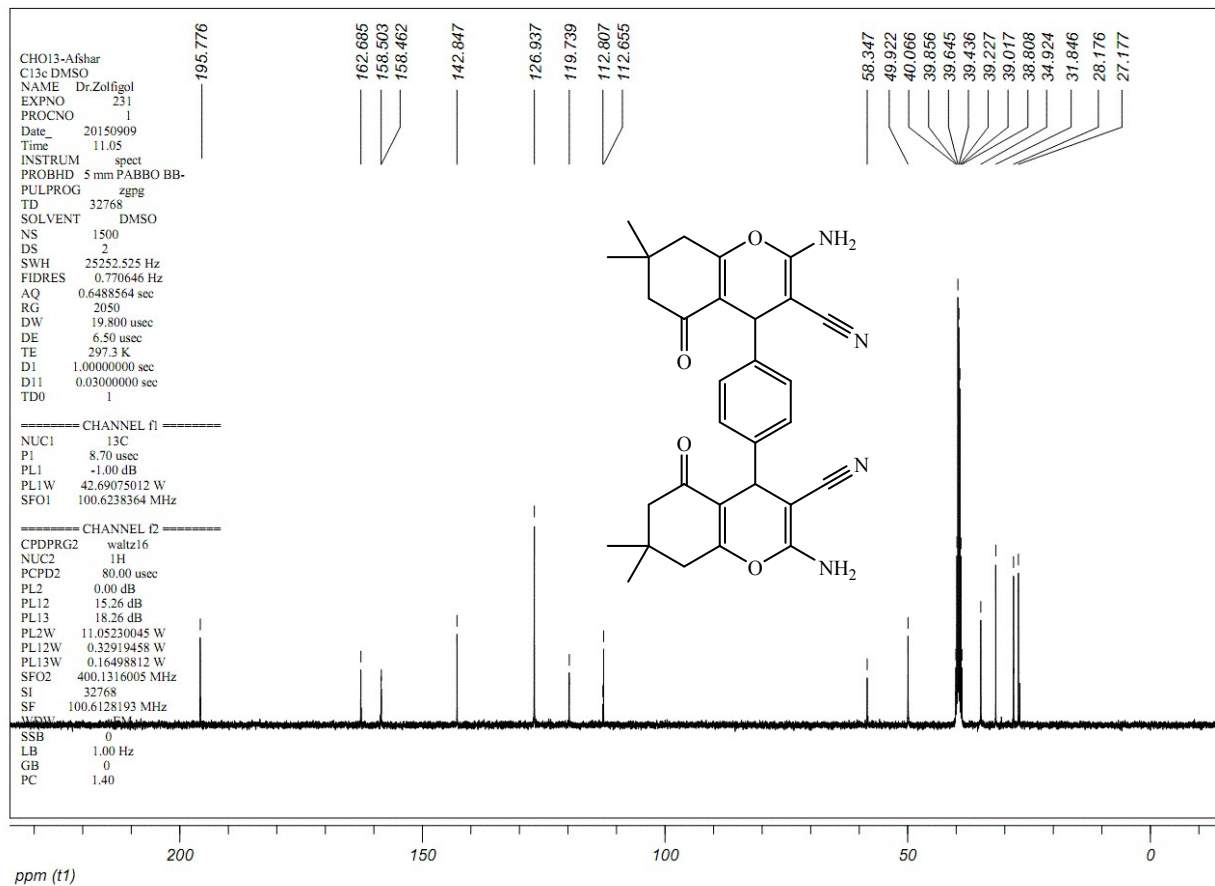


Fig S30. The IR spectrum of *2-amino-7,7-dimethyl-5-oxo-4-(pyridin-4-yl)-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile* (Table 3, entry 14)

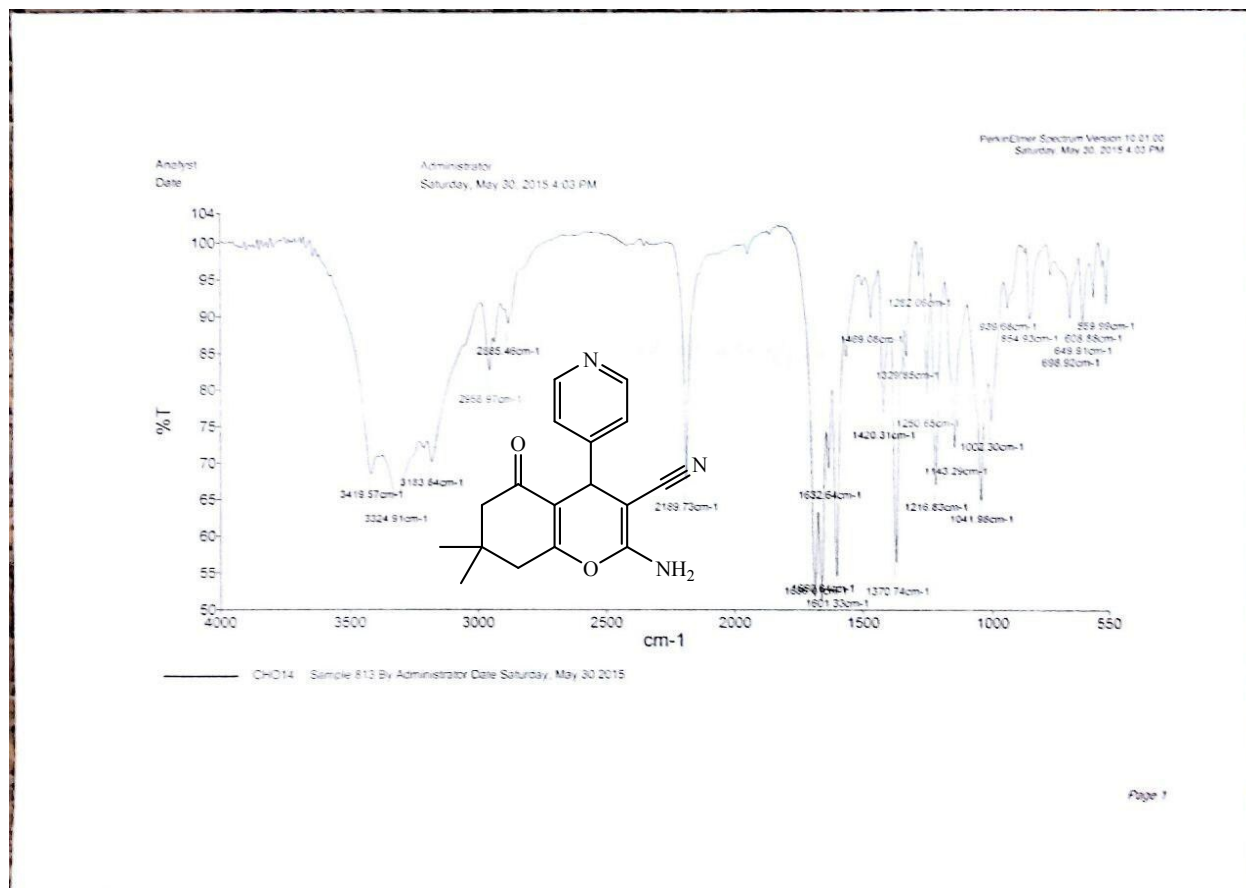


Fig S31. The ^1H NMR spectrum of 2-amino-7,7-dimethyl-5-oxo-4-(pyridin-4-yl)-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 14)

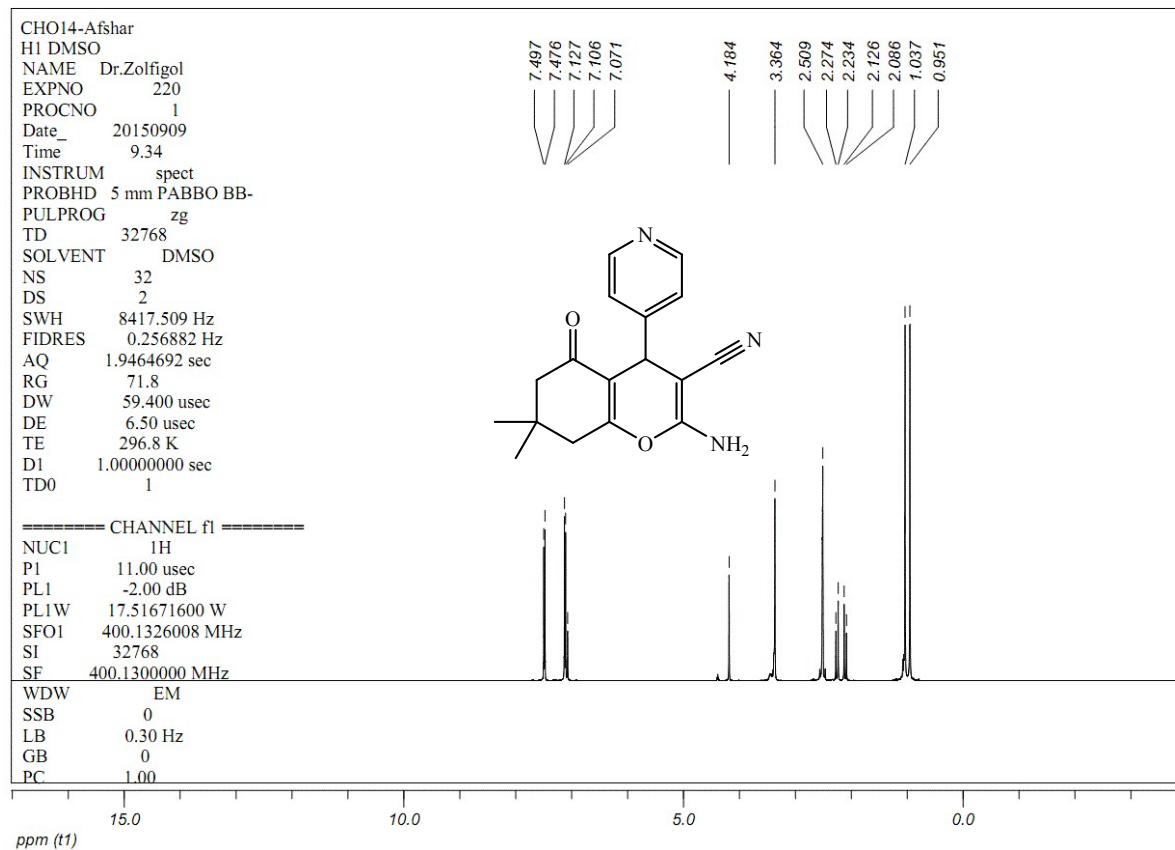


Fig S32. The ^1H NMR spectrum of 2-amino-7,7-dimethyl-5-oxo-4-(pyridin-4-yl)-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 14)

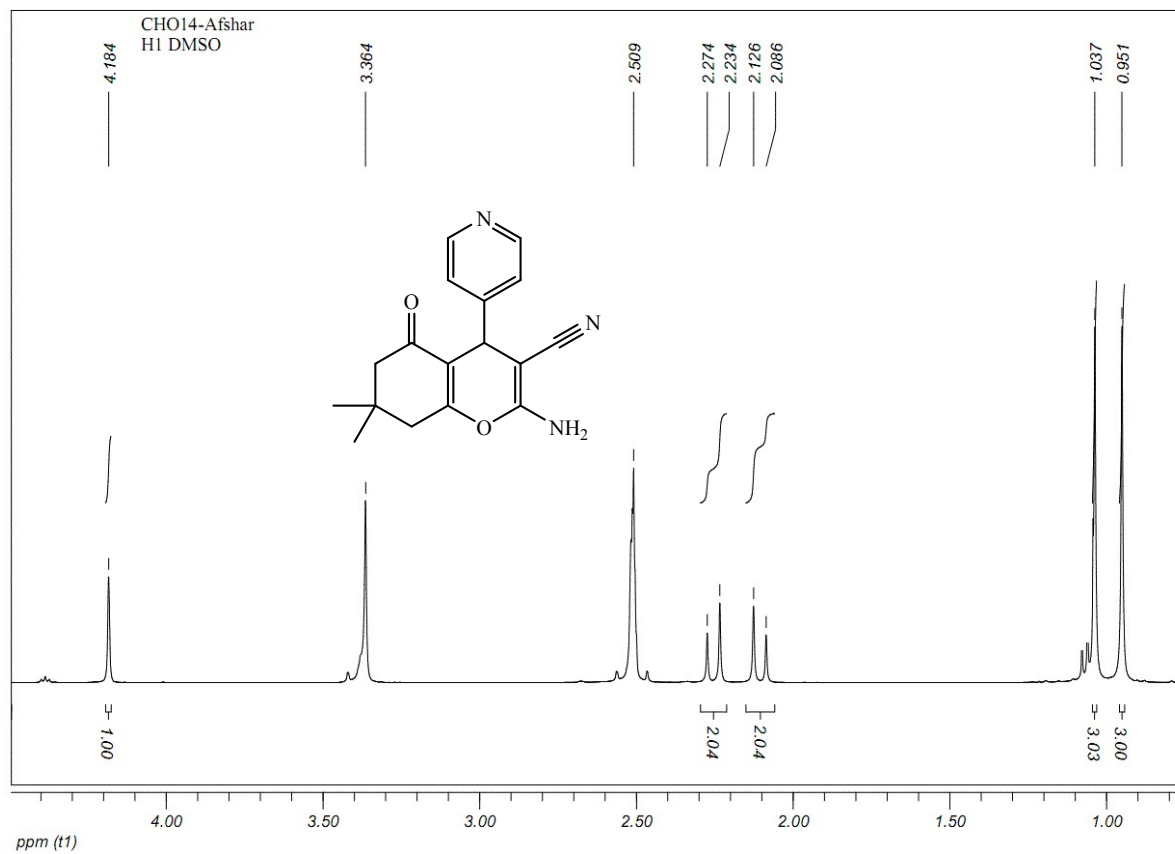


Fig S33. The ^1H NMR spectrum of 2-amino-7,7-dimethyl-5-oxo-4-(pyridin-4-yl)-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 14)

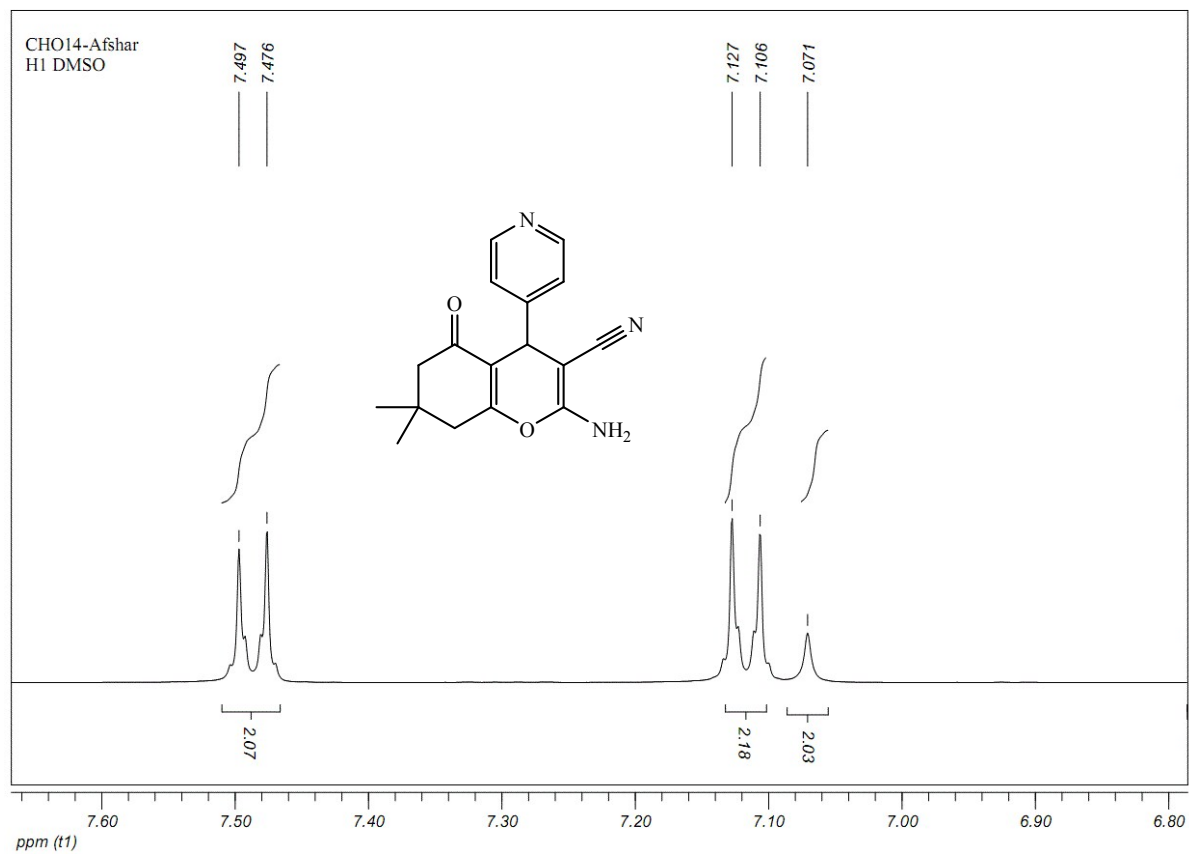


Fig S34. The ^{13}C NMR spectrum of 2-amino-7,7-dimethyl-5-oxo-4-(pyridin-4-yl)-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 14)

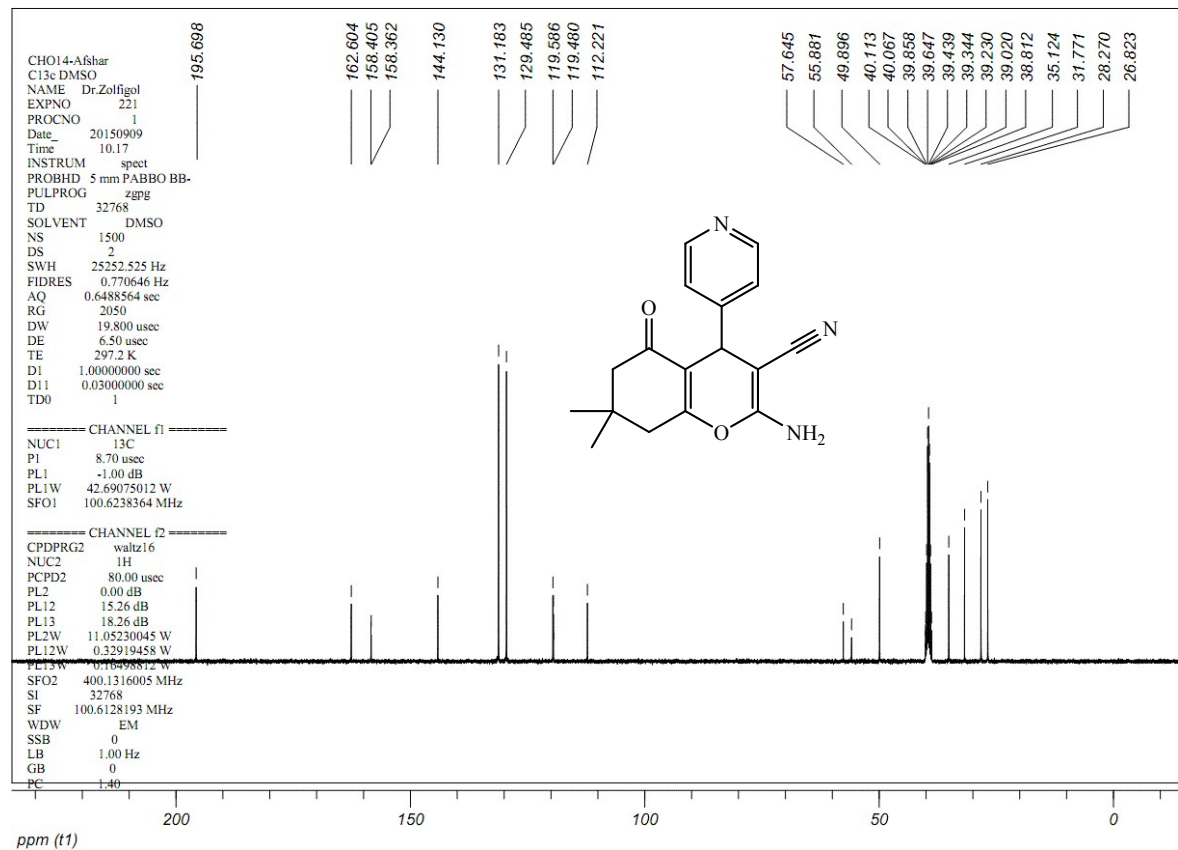


Fig S35. The IR spectrum of 2-amino-4-(2,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 18)

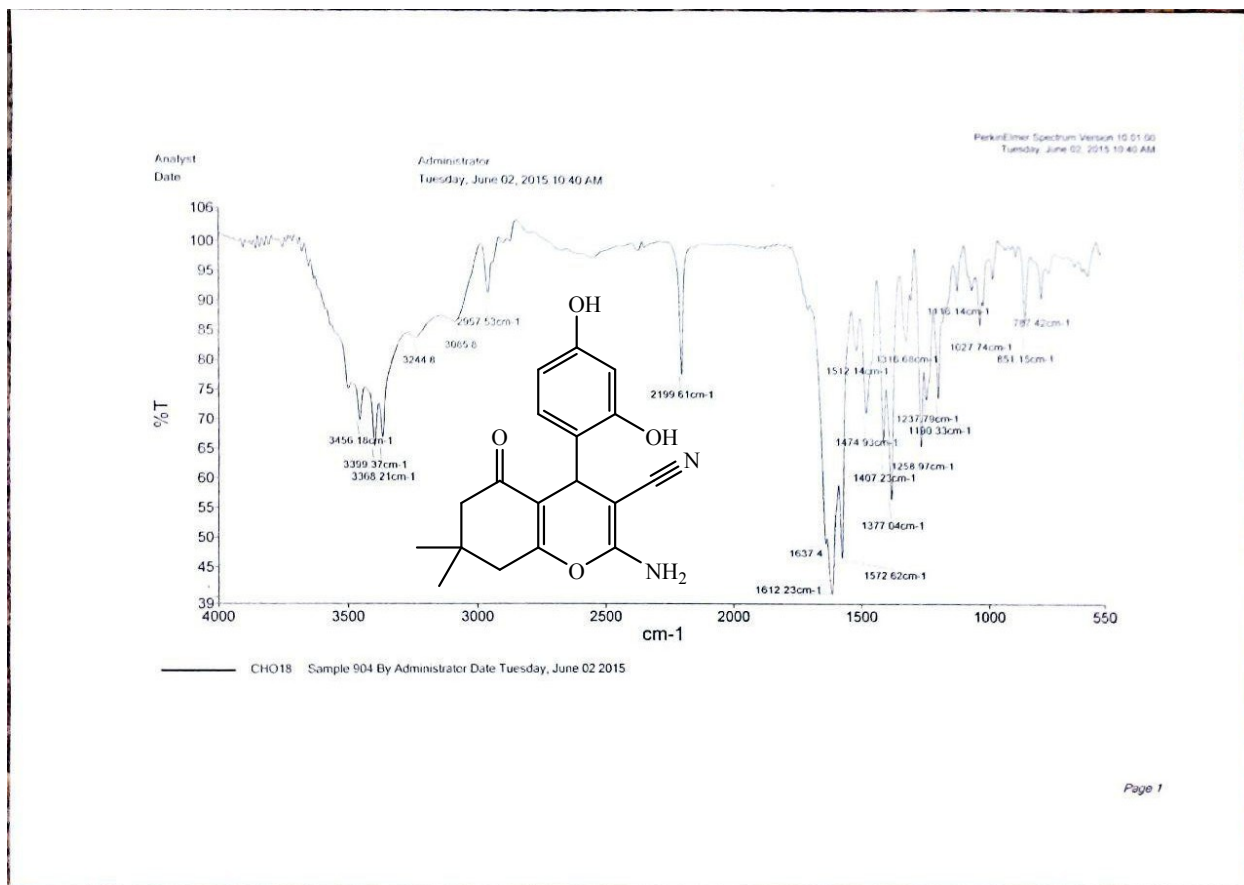


Fig S36. The ^1H NMR spectrum of 2-amino-4-(2,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 18)

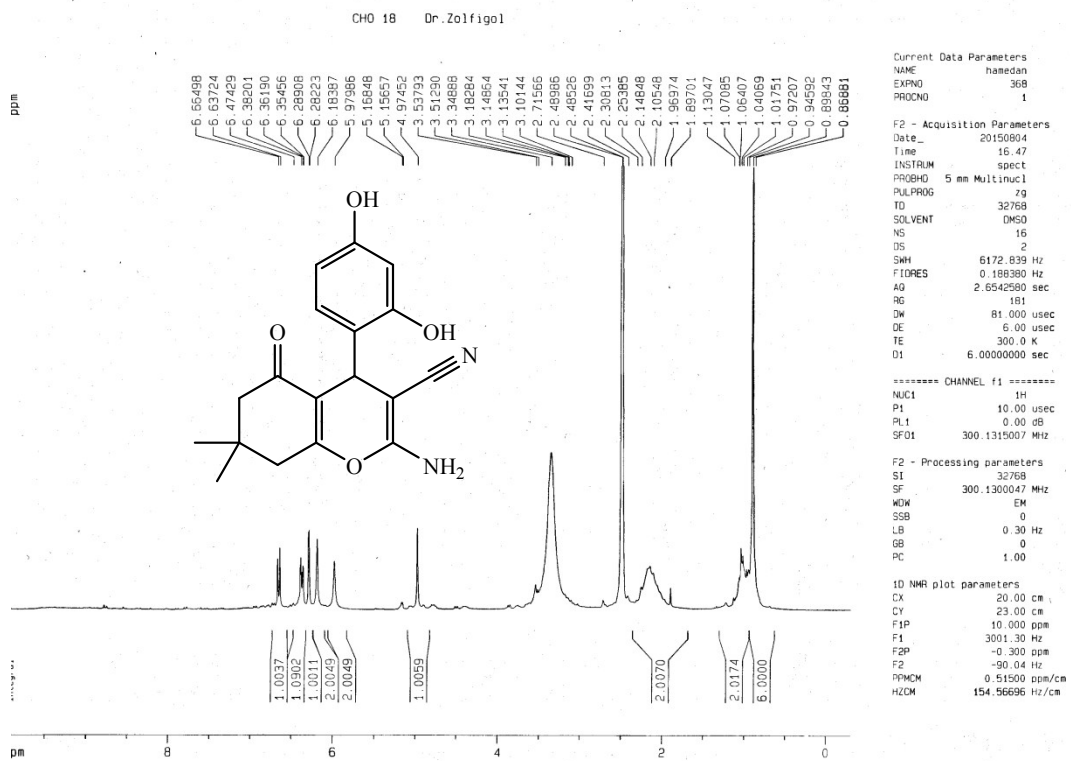


Fig S37. The ^1H NMR spectrum of 2-amino-4-(2,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 18)

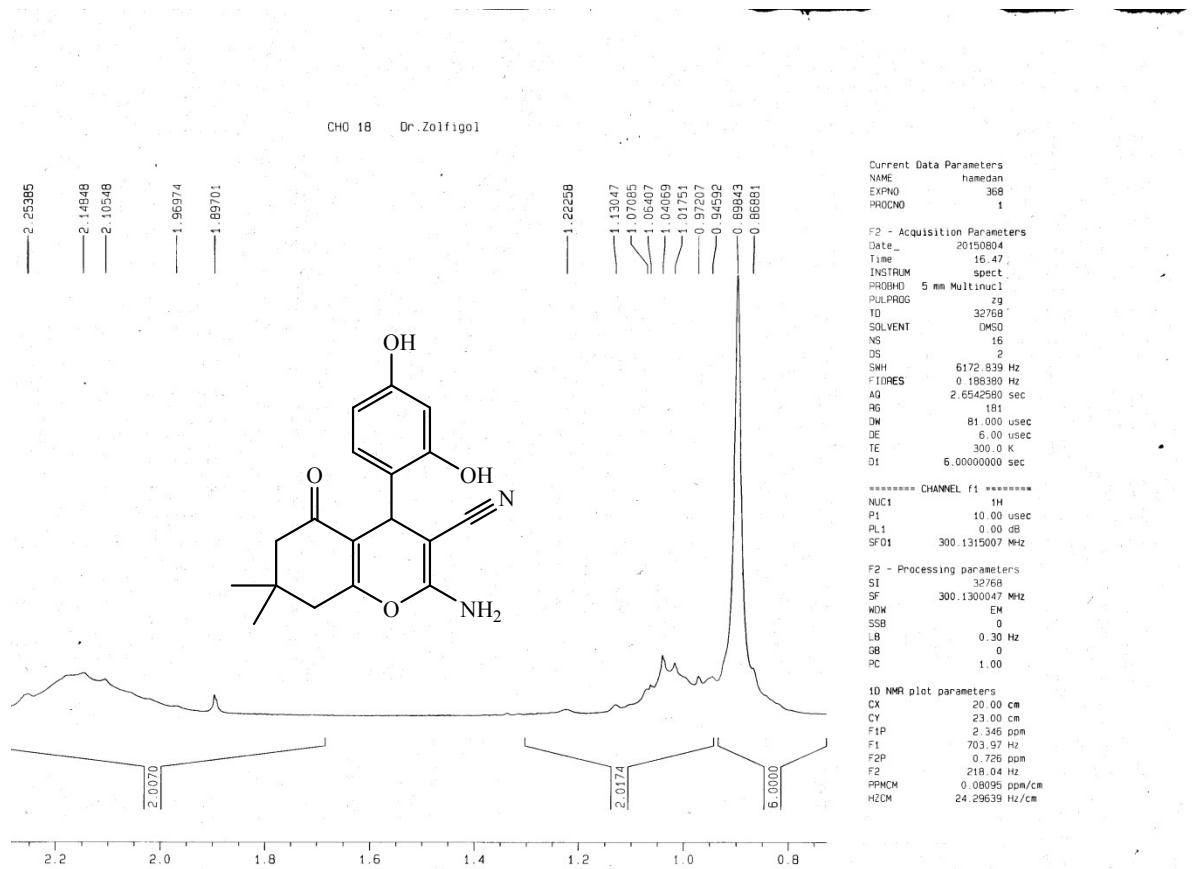


Fig S38. The ^1H NMR spectrum of 2-amino-4-(2,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 18)

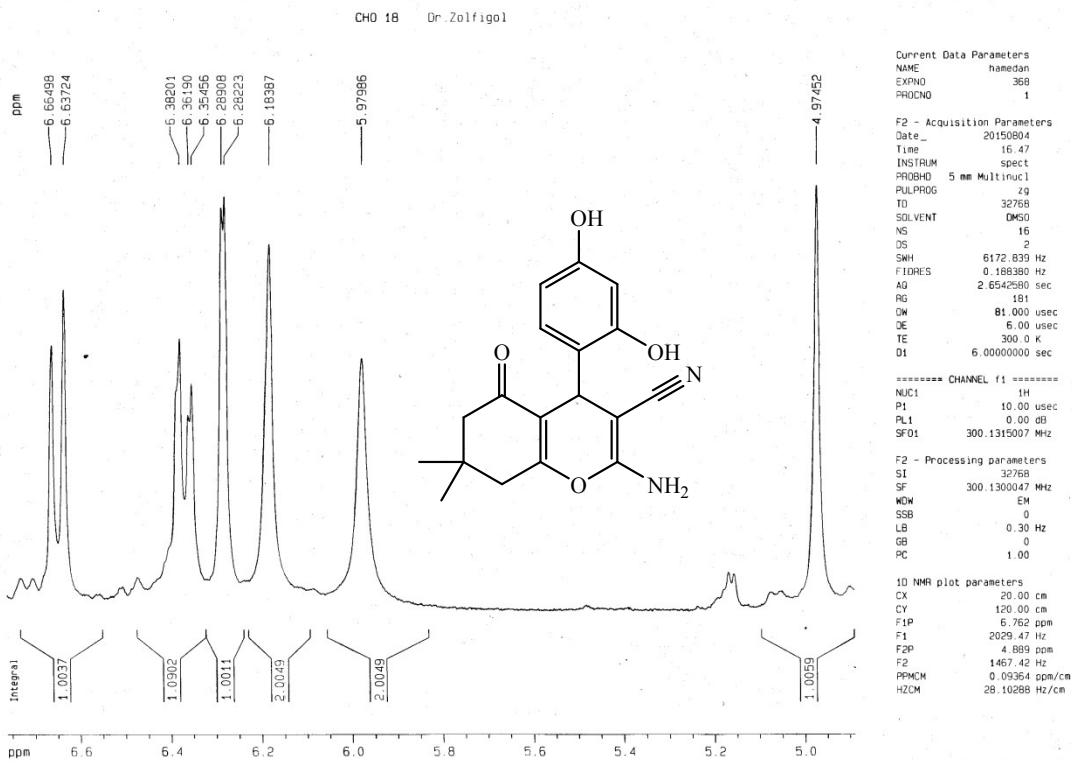


Fig S39. The ^{13}C NMR spectrum of 2-amino-4-(2,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 18)

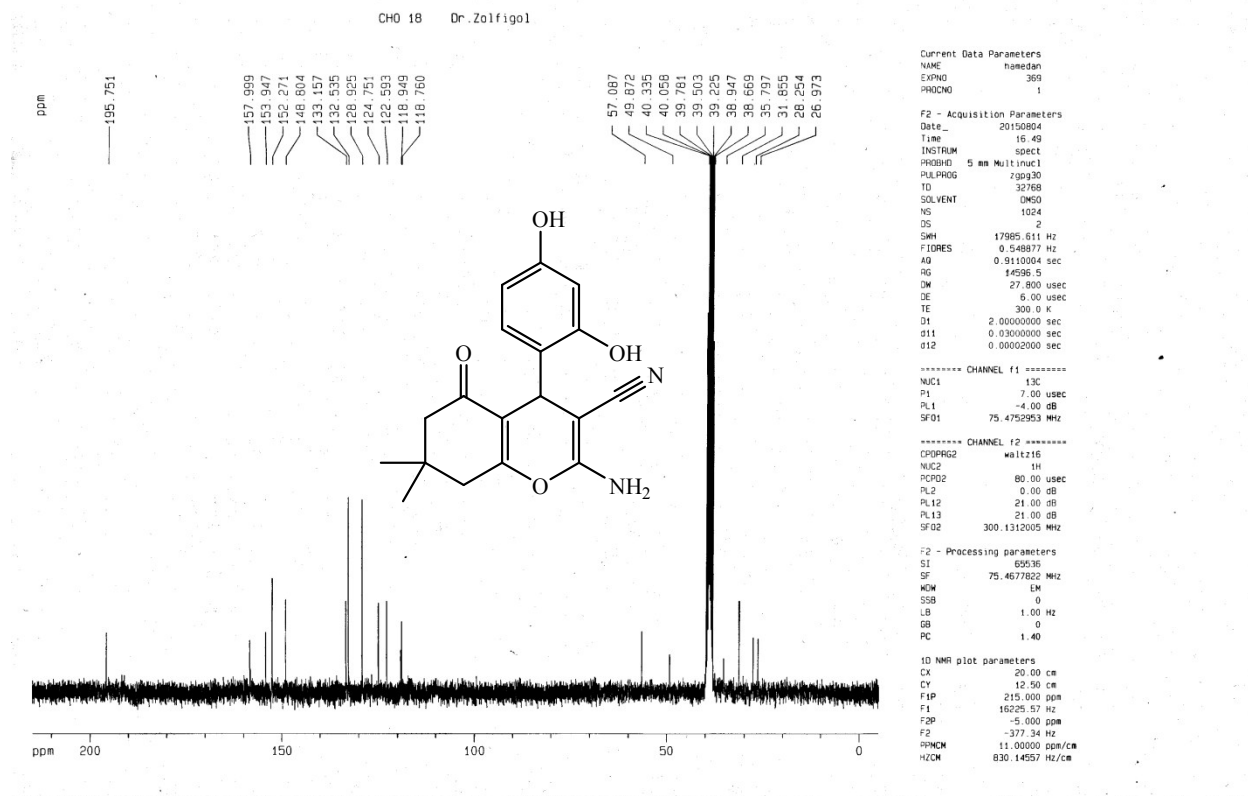


Fig S40. The IR spectrum of 2-amino-4-(3,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 19)

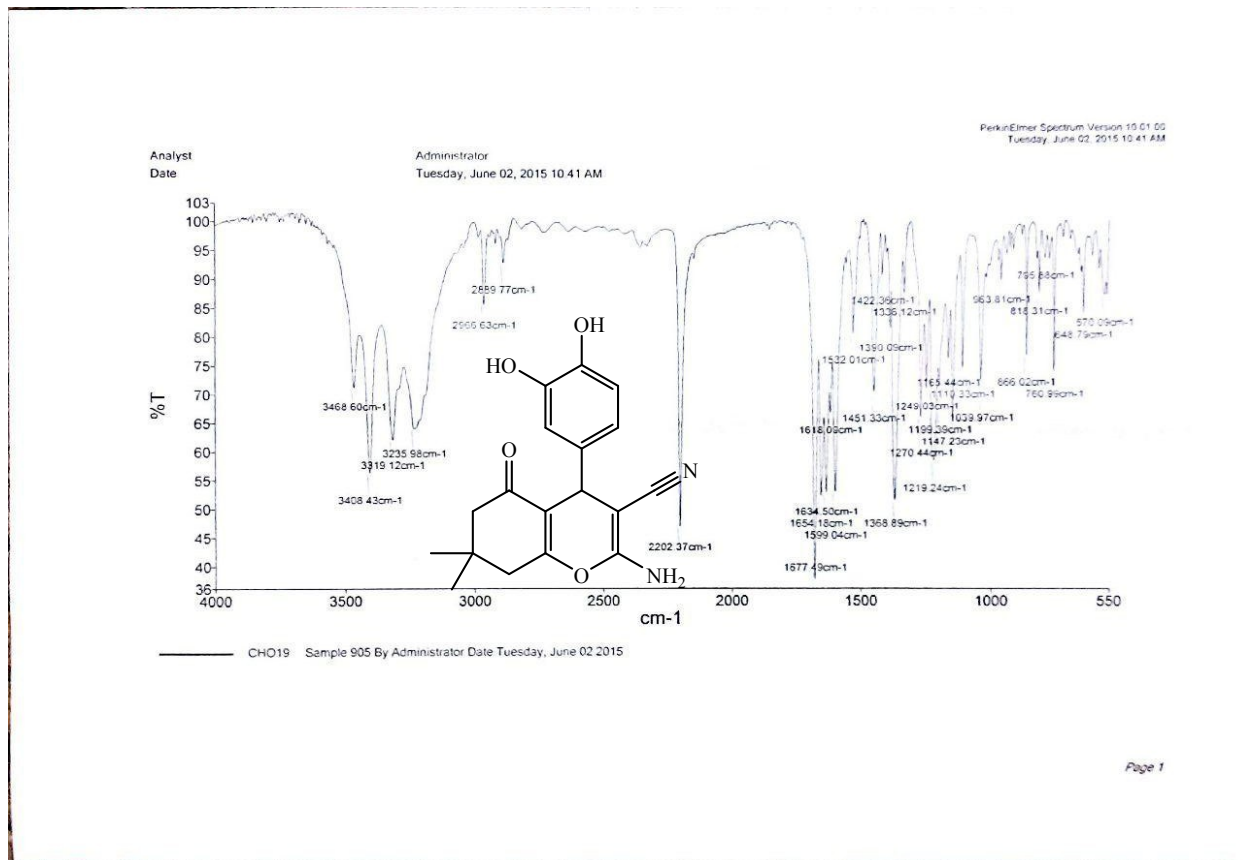


Fig S41. The ^1H NMR spectrum of 2-amino-4-(3,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 19)

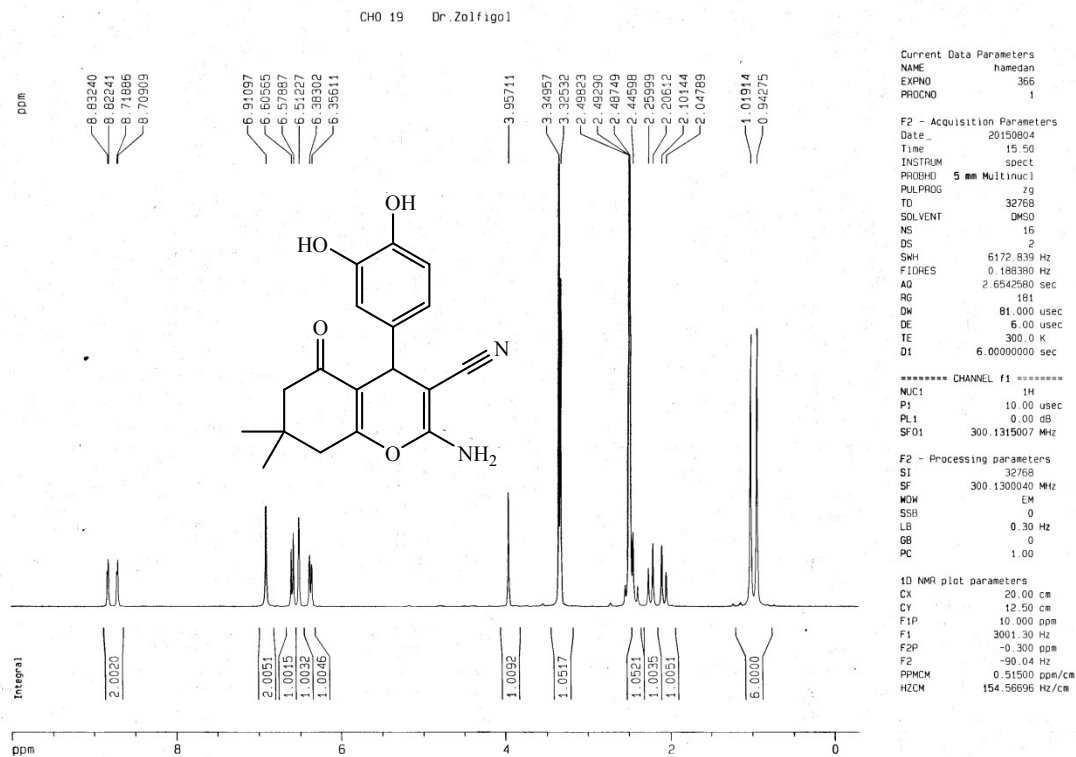


Fig S42. The ^1H NMR spectrum of 2-amino-4-(3,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 19)

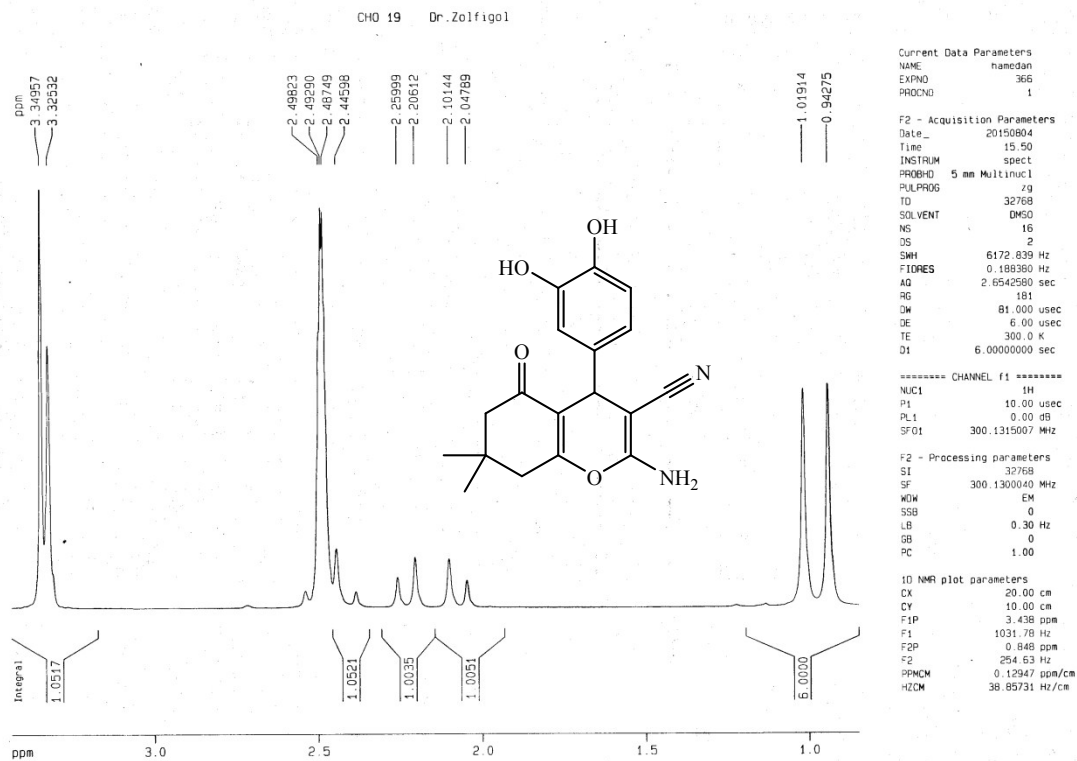


Fig S43. The ^1H NMR spectrum of 2-amino-4-(2,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 18)

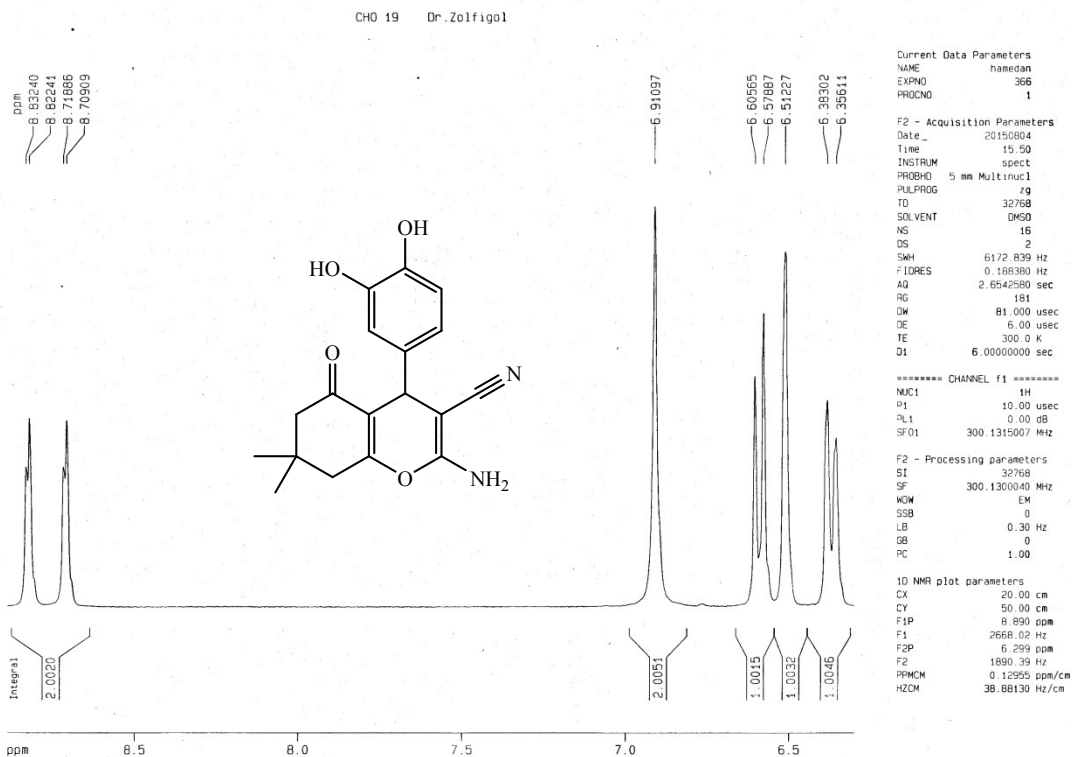


Fig S44. The ^{13}C NMR spectrum of 2-amino-4-(3,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 19)

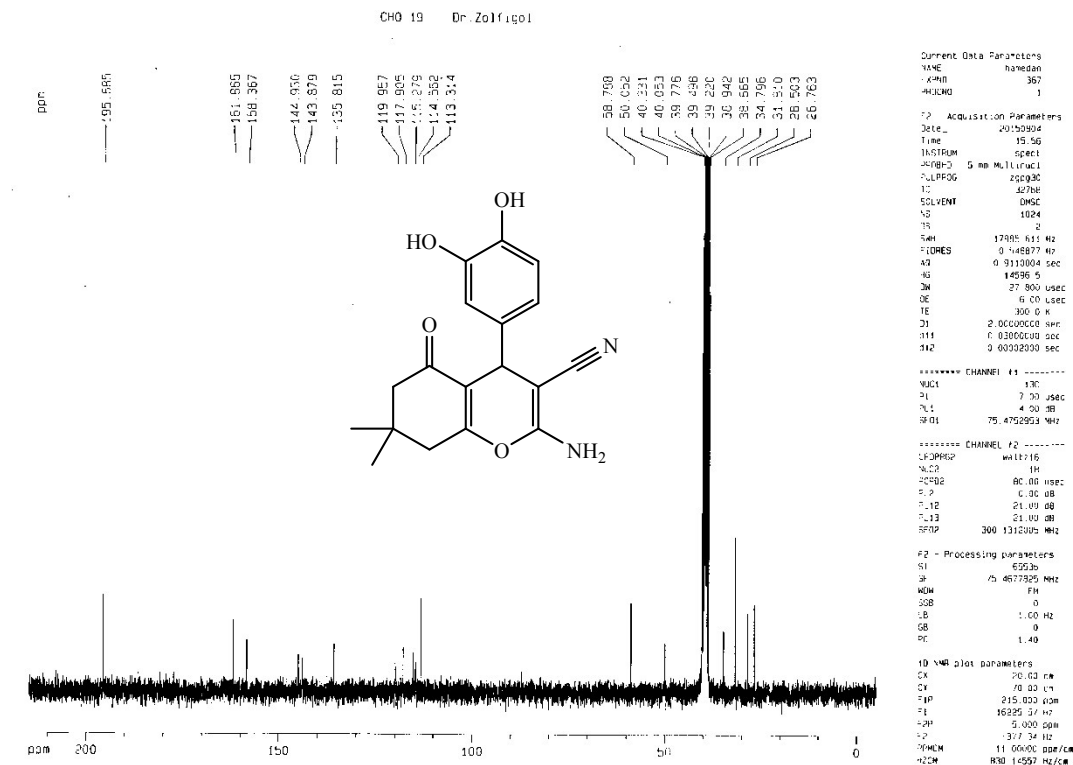


Fig S45. The ^{13}C NMR spectrum of 2-amino-4-(3,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 19)

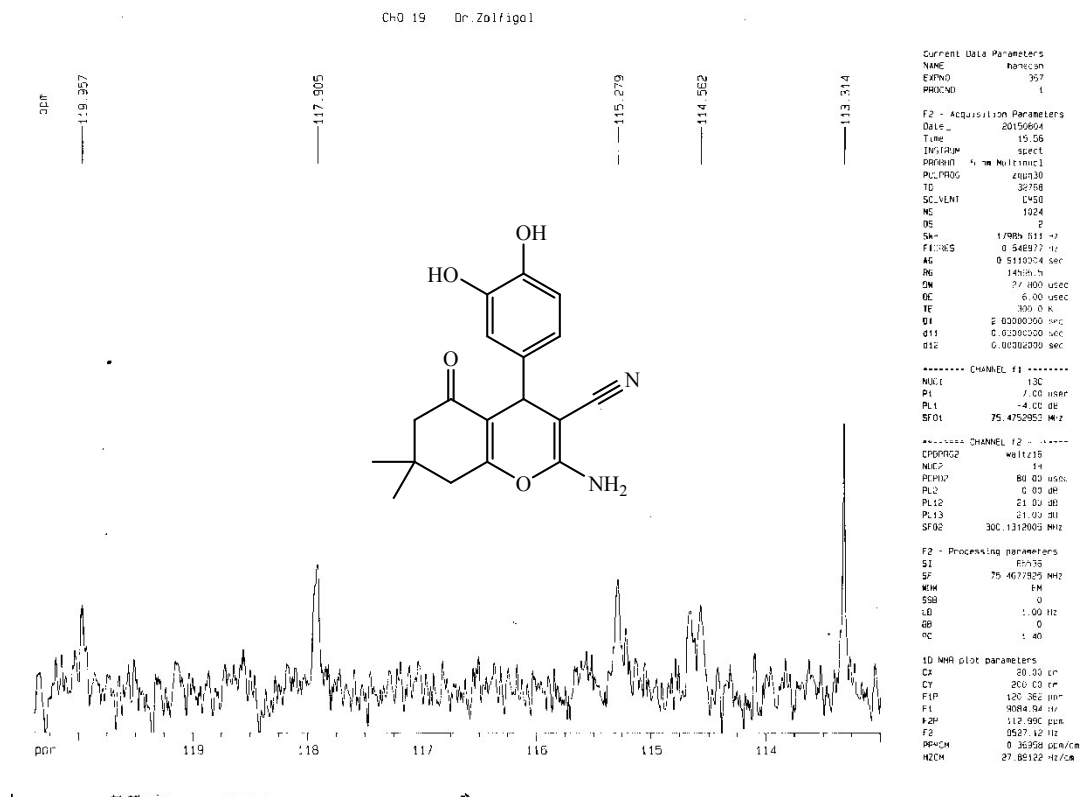


Fig S46. The ^{13}C NMR spectrum of 2-amino-4-(3,4-dihydroxyphenyl)-7,7-dimethyl-5-oxo-5,6,7,8-tetrahydro-4H-chromene-3-carbonitrile (Table 3, entry 19)

