

Design, Synthesis and Biological Evaluation of Novel Triazole *N*-acylhydrazone Hybrids for Alzheimer's Disease

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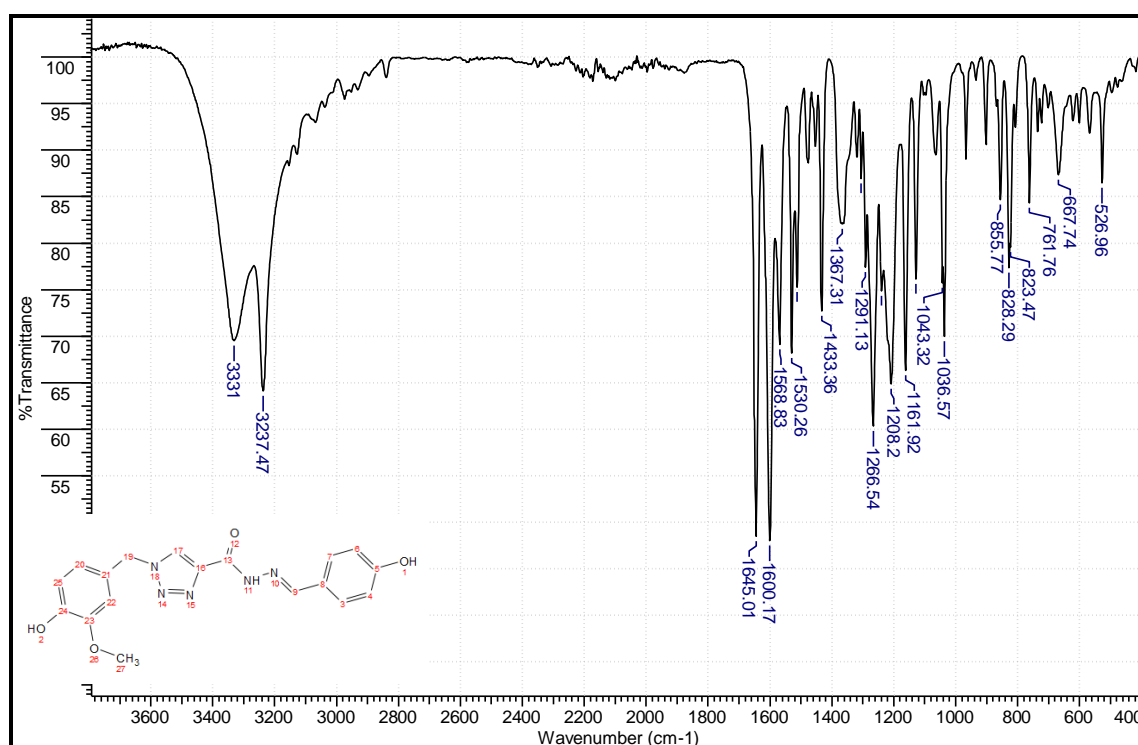


Figure S 1. Absorption spectra in the infrared region of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazone (3a).

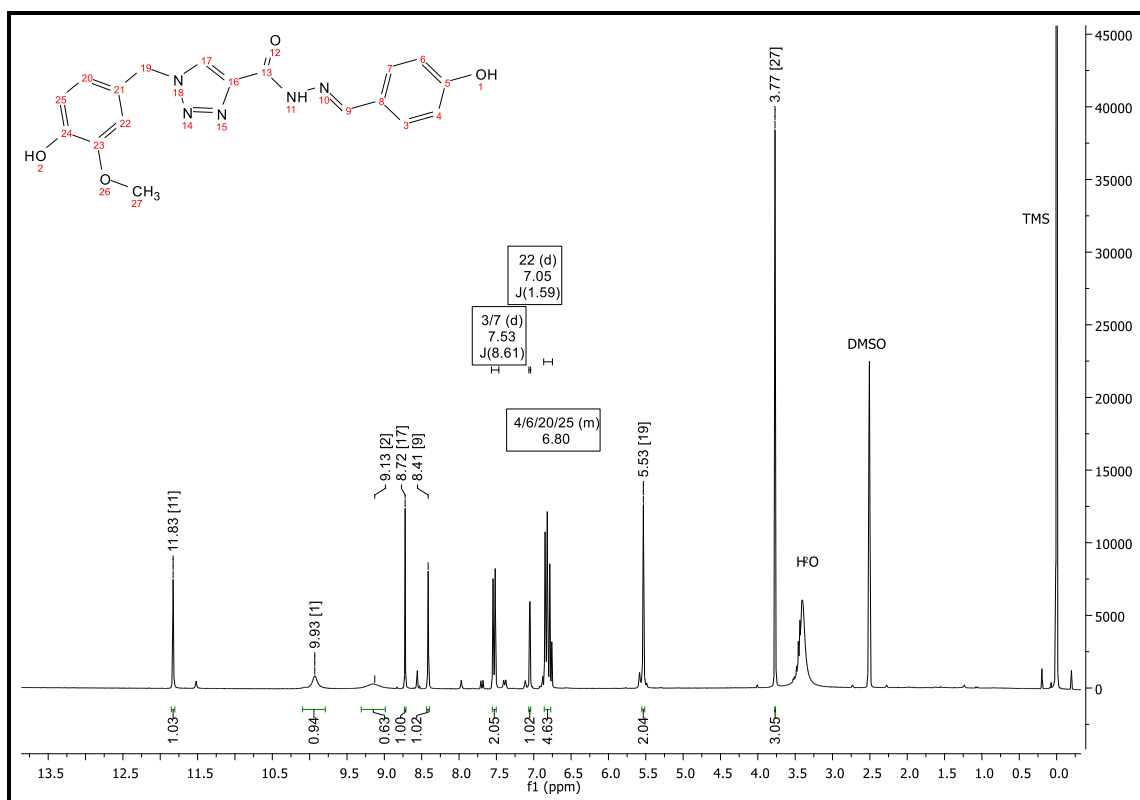


Figure S 2 ¹H NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (3a).

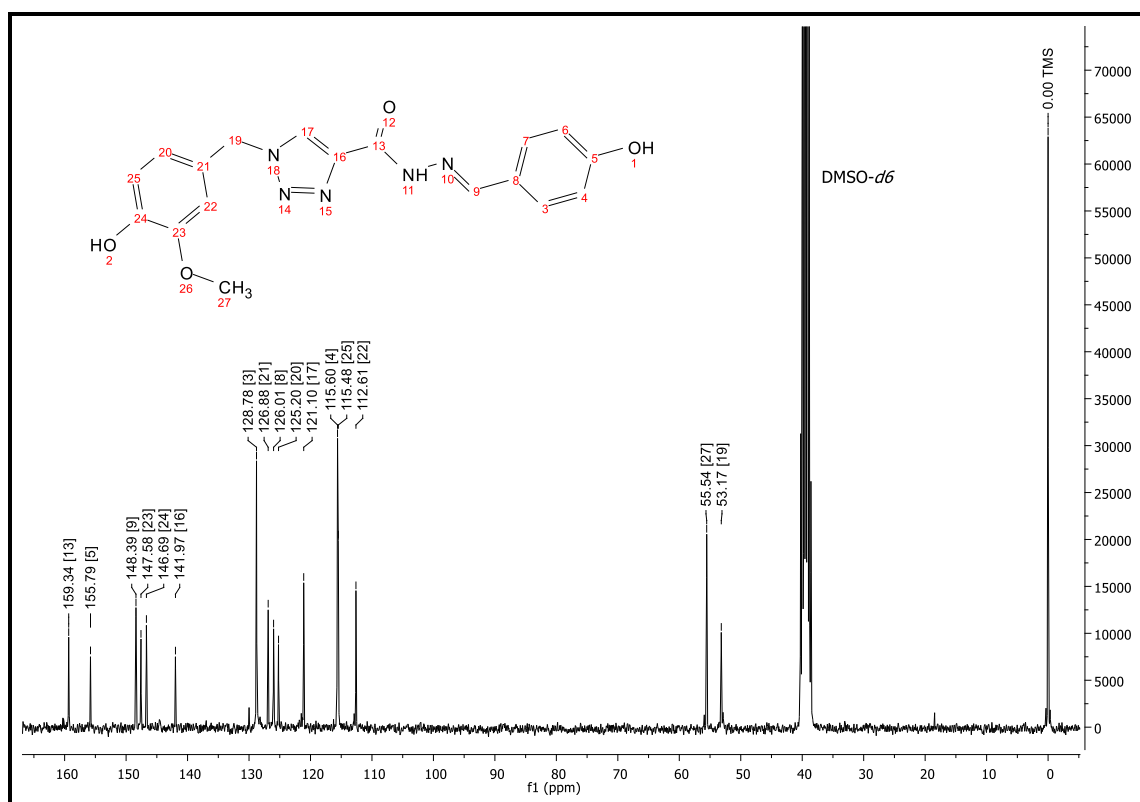


Figure S 3 ¹³C NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (3a).

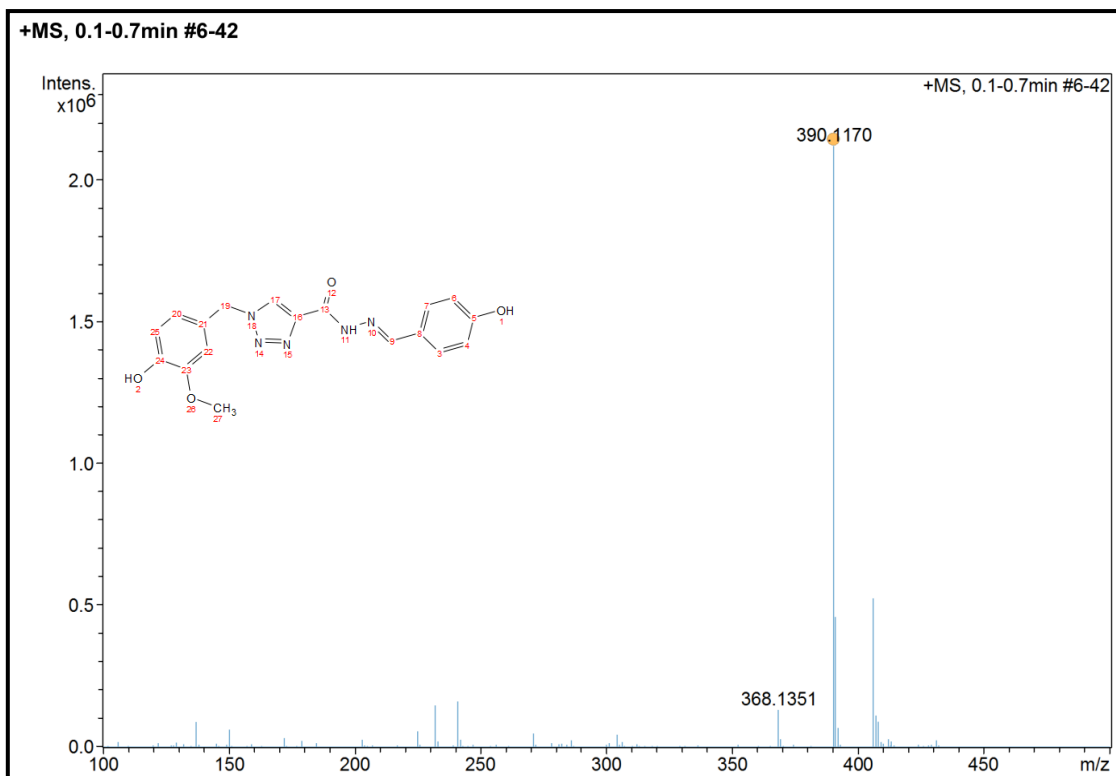


Figure S 4 . HR-MS spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (3a).

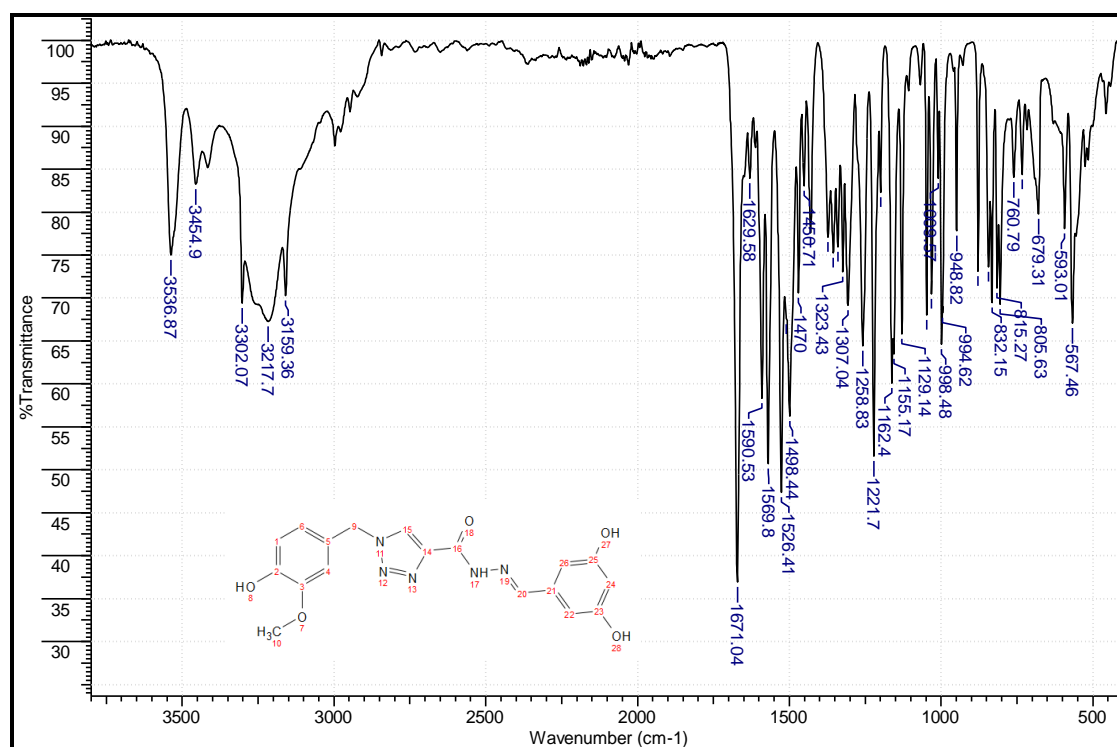


Figure S 5 Absorption spectra in the infrared region of (E)-N'-(3,5-dihydroxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3b).

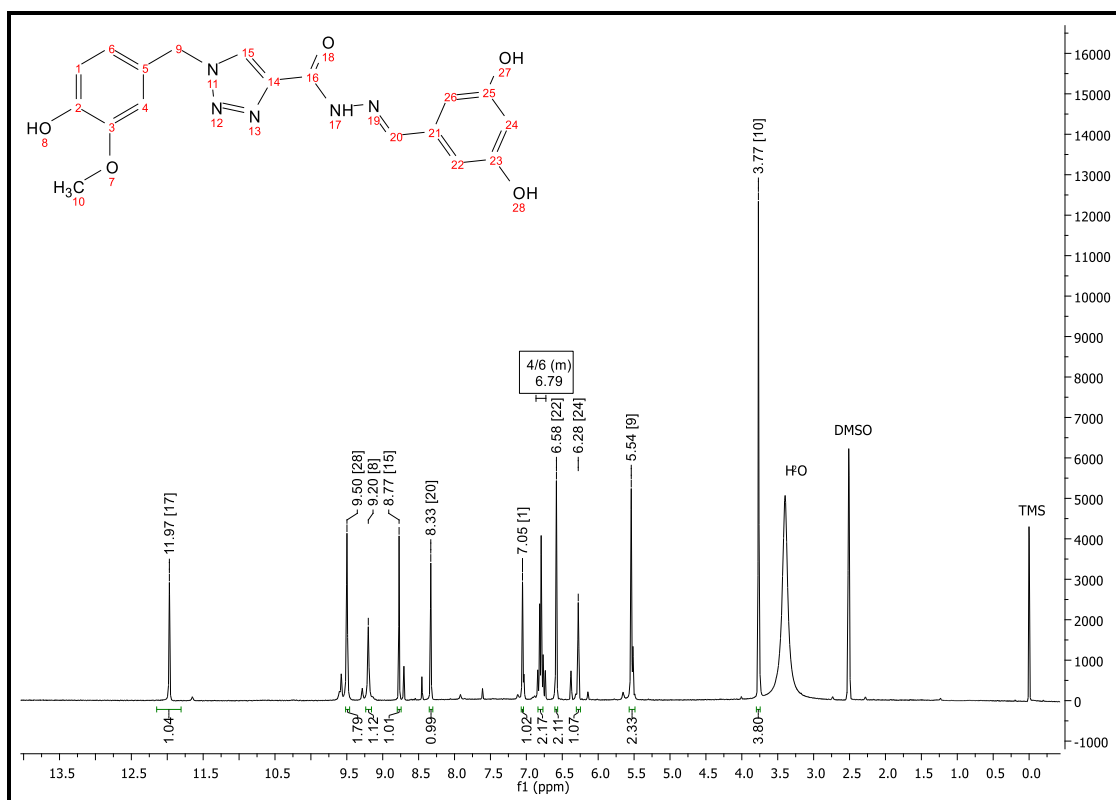


Figure S 6 ¹H NMR spectra of (E)-N'-(3,5-dihydroxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3b).

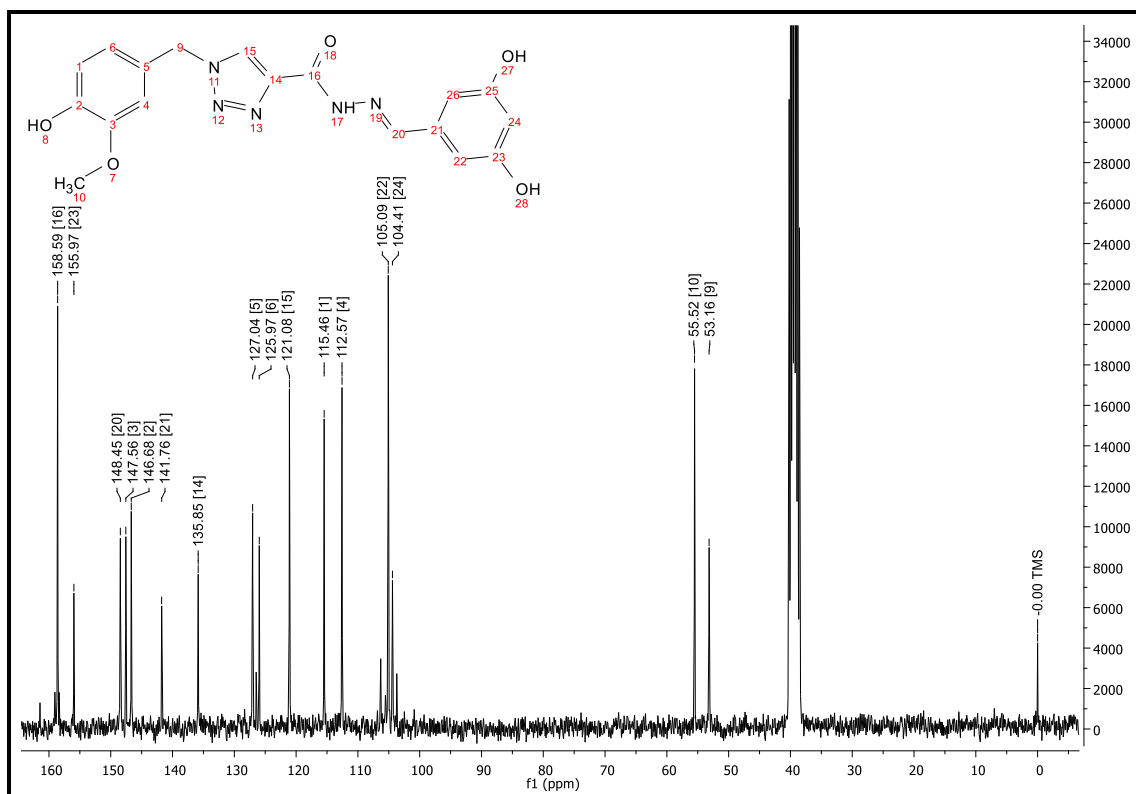
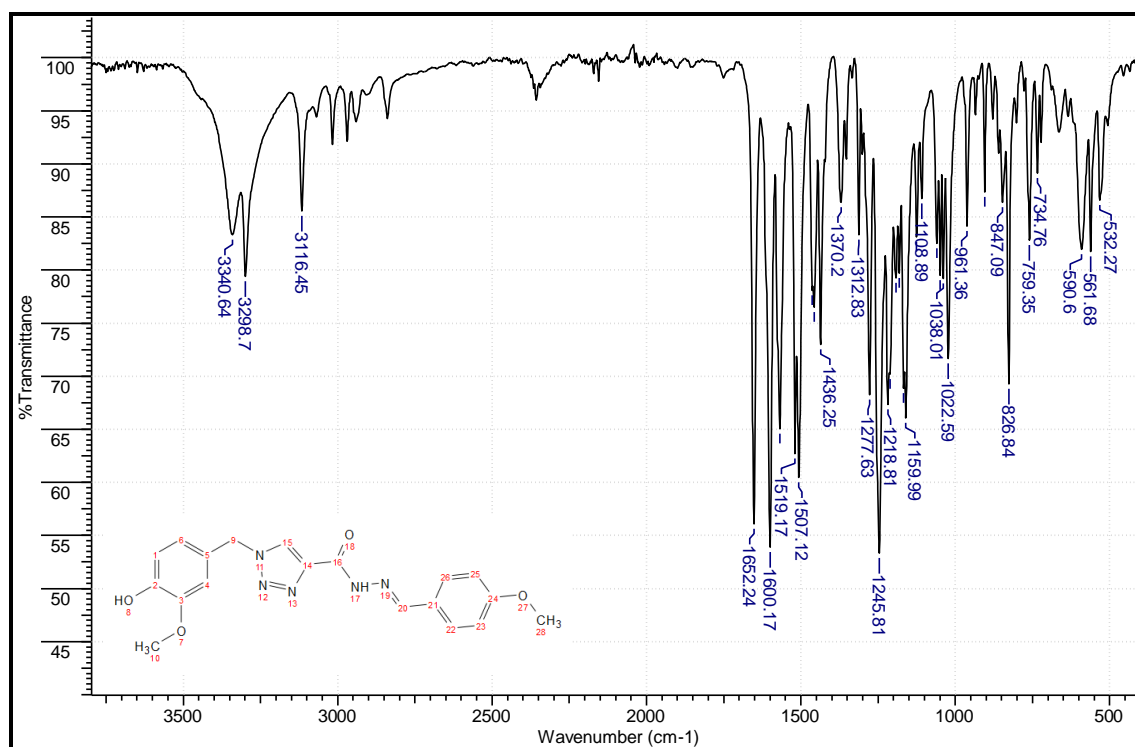
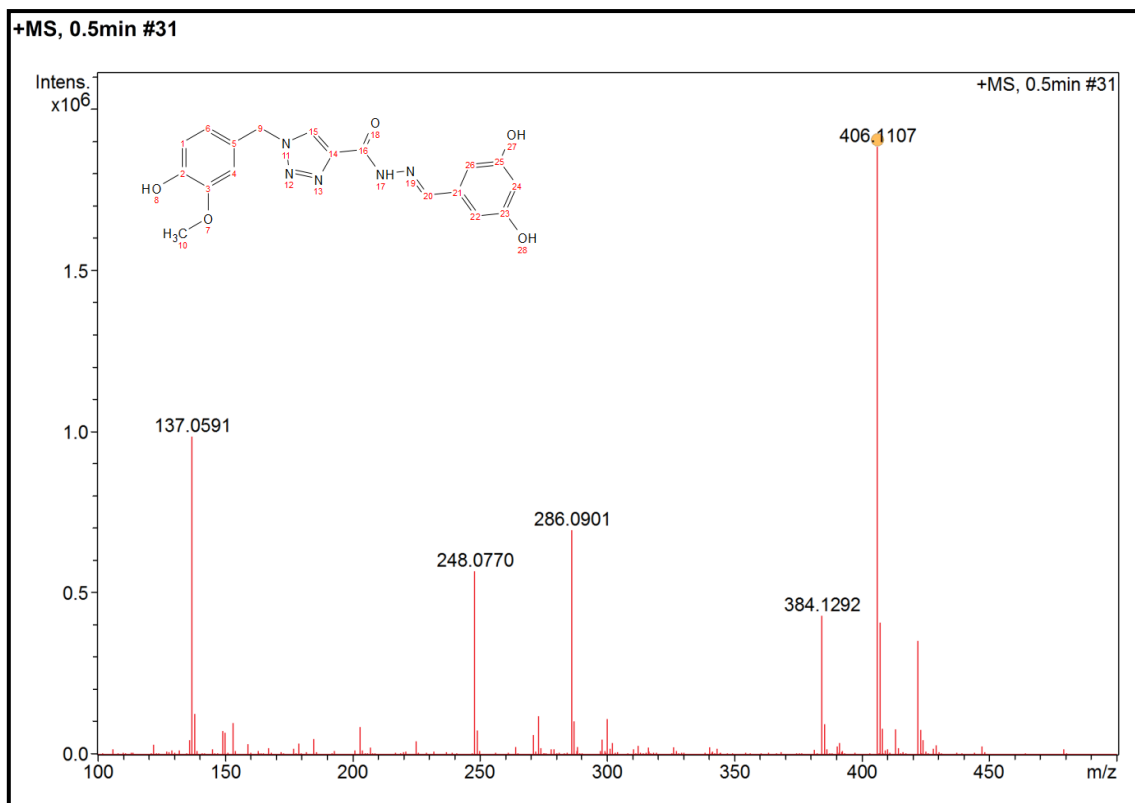


Figure S 7 ¹³C NMR spectra of (E)-N'-(3,5-dihydroxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3b).



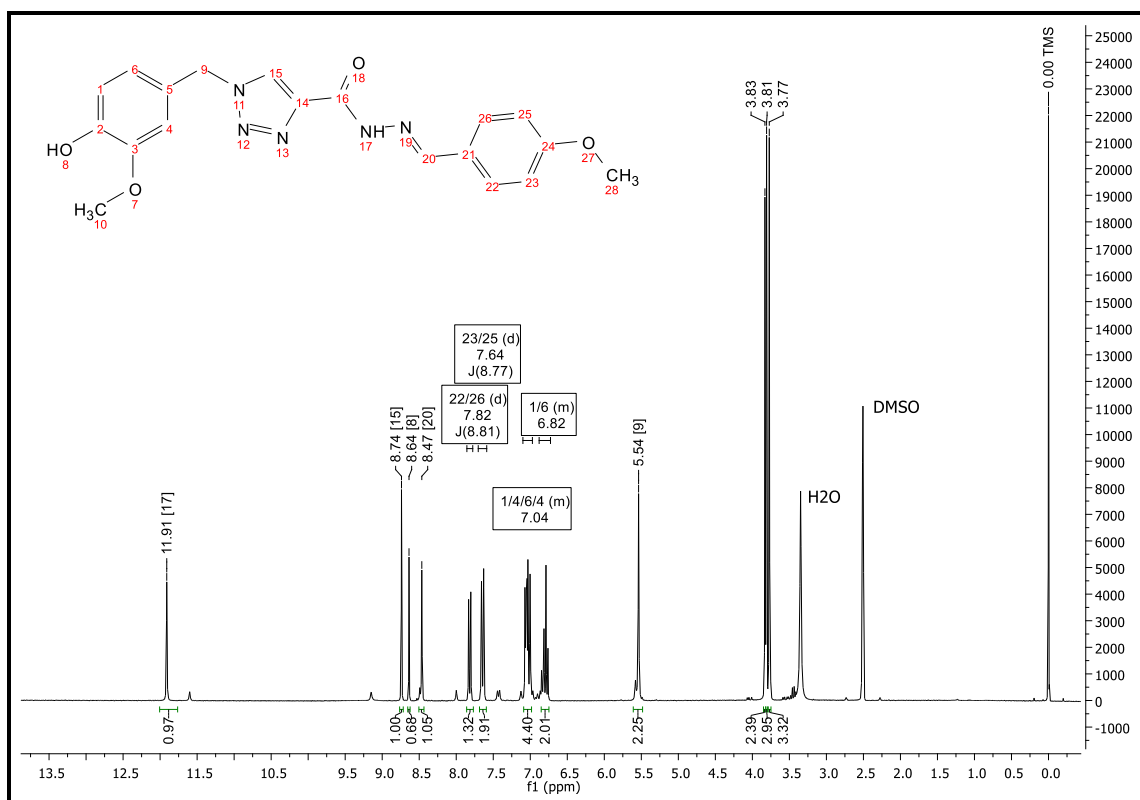


Figure S 1. ¹H NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3c**).

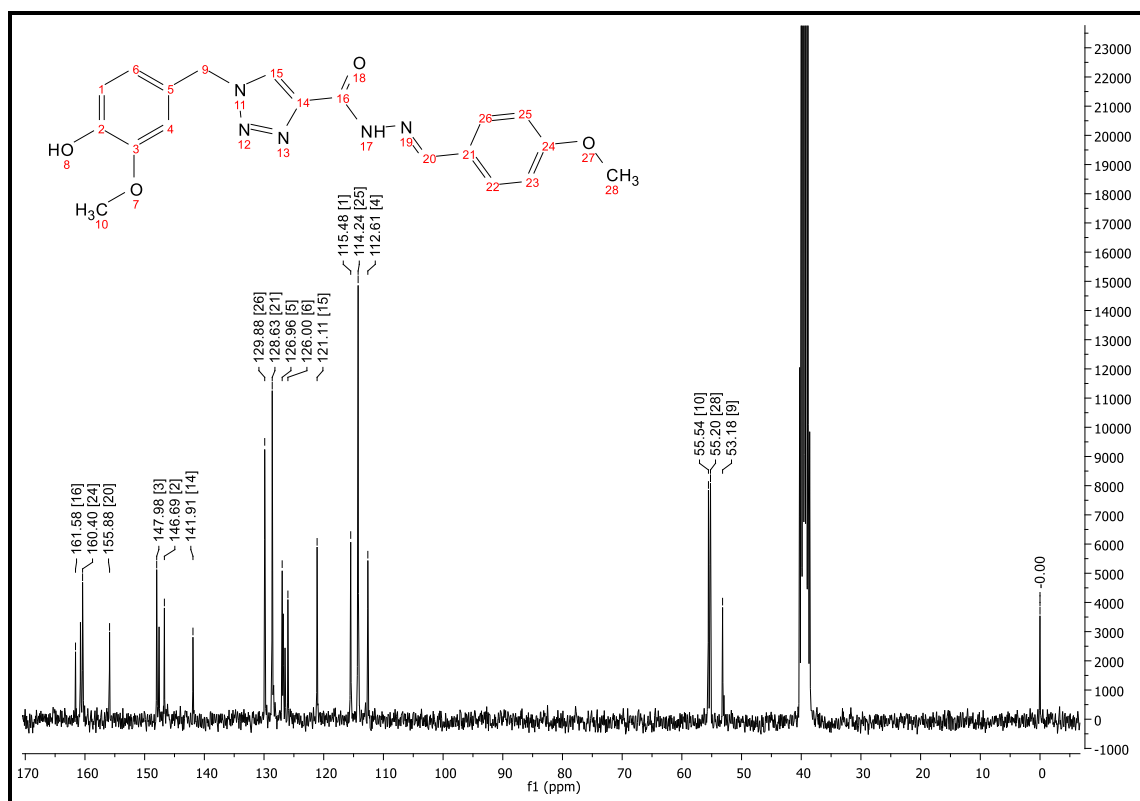


Figure S 2. ¹³C NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3c**).

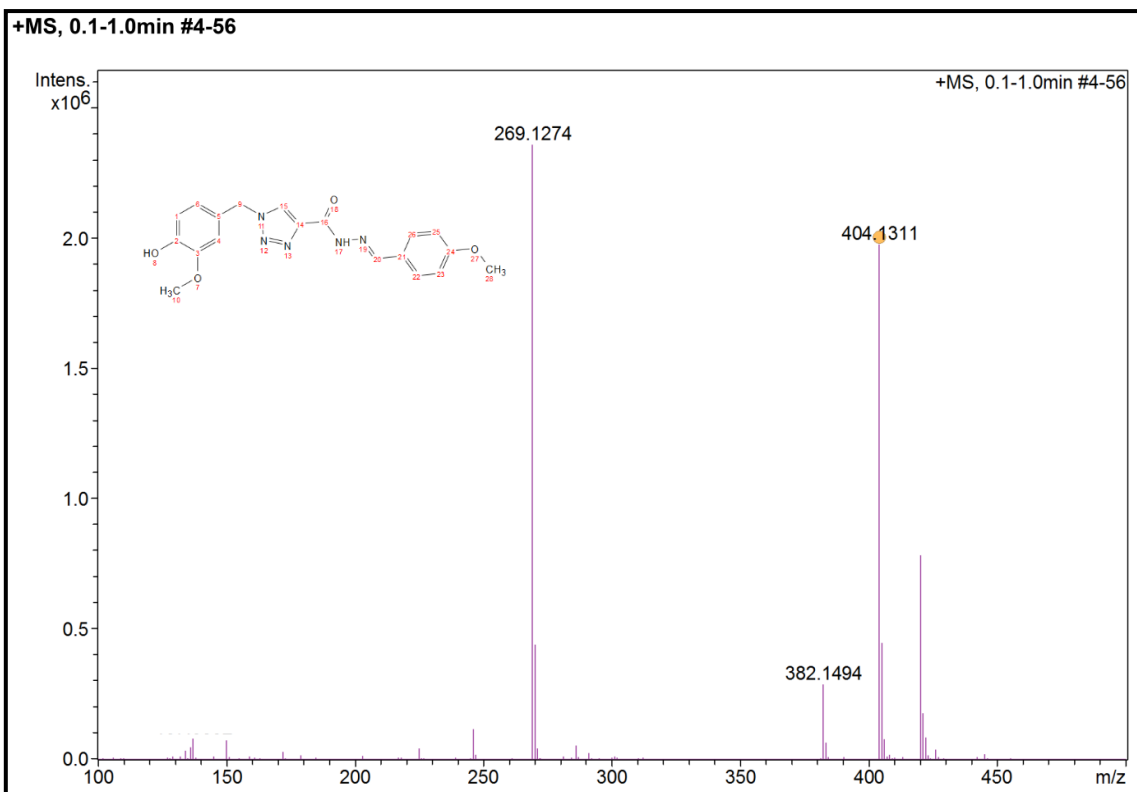


Figure S 3. HR-MS spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3c**).

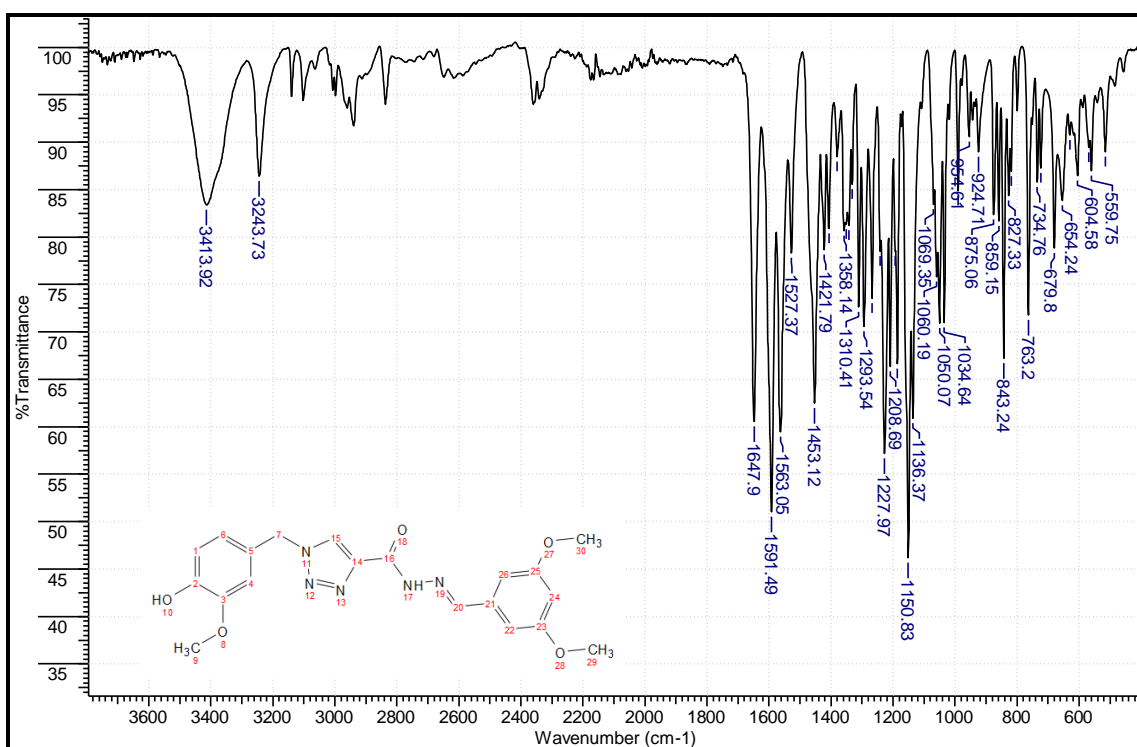


Figure S 4. Absorption spectra in the infrared region of (E)-N'-(3,5-dimethoxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3d**).

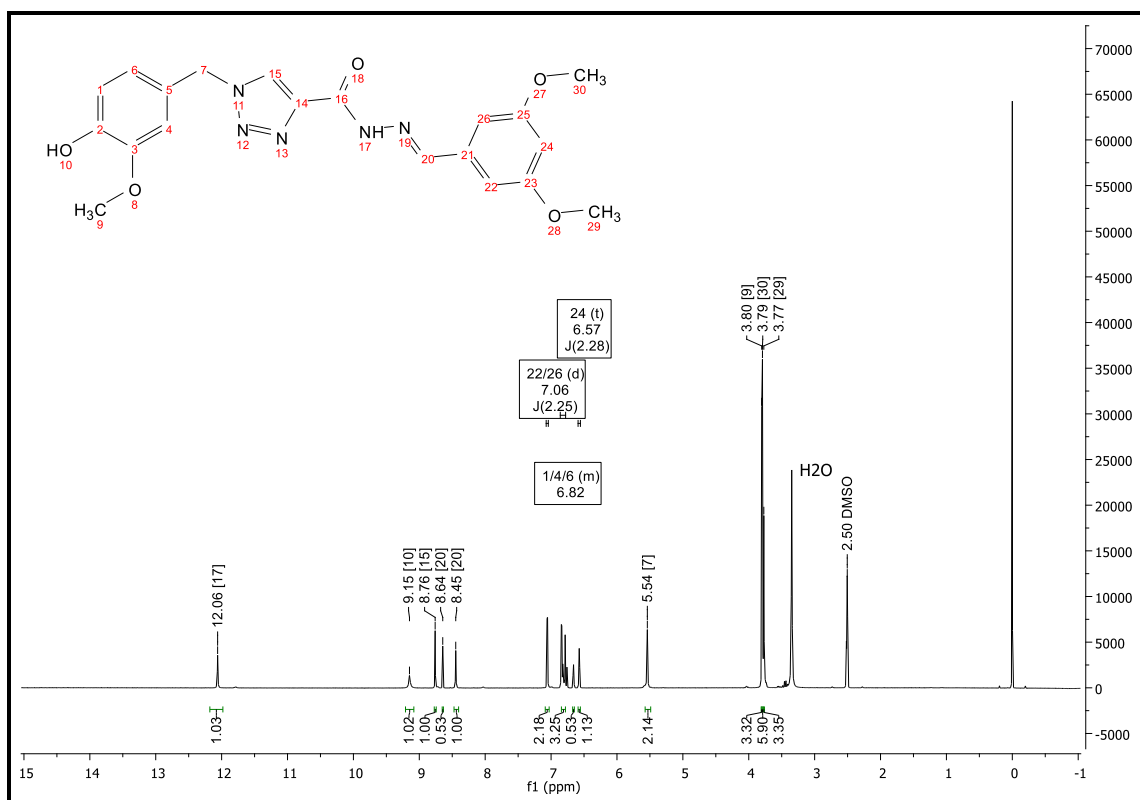


Figure S 5. ¹H NMR spectra of (E)-N'-(3,5-dimethoxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3d**).

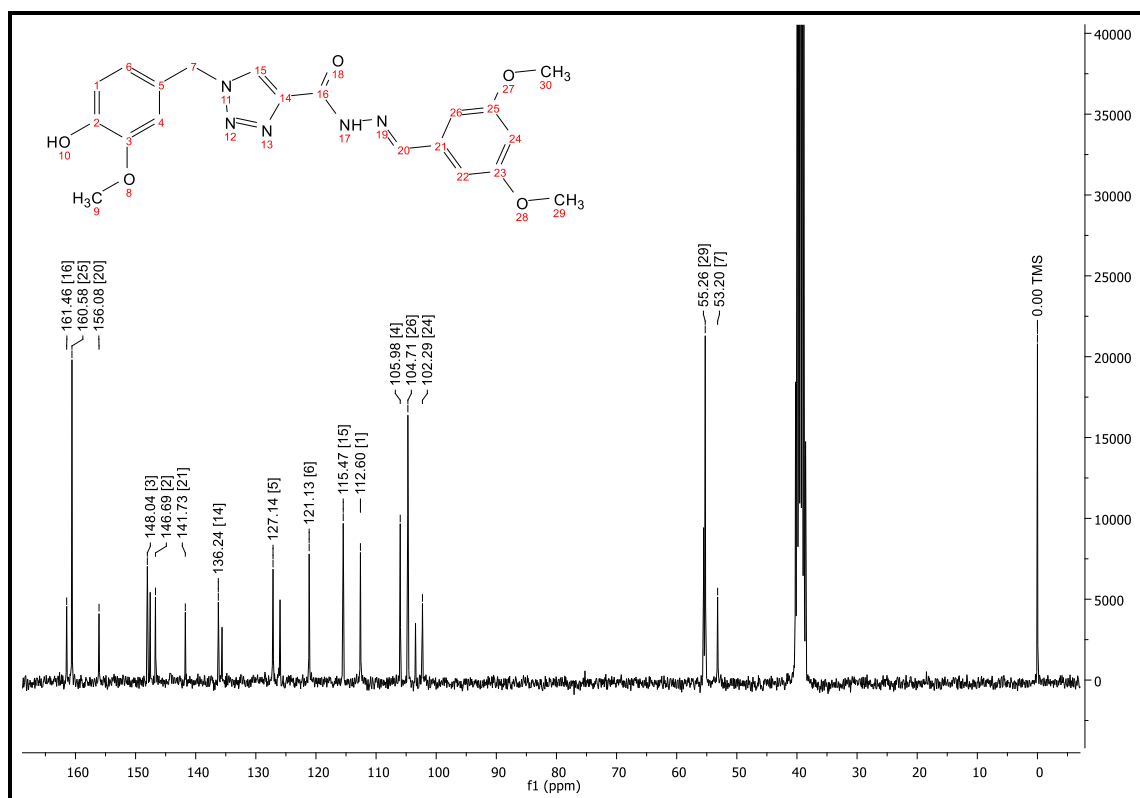


Figure S 6. ¹³C NMR spectra of (E)-N'-(3,5-dimethoxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3d**).

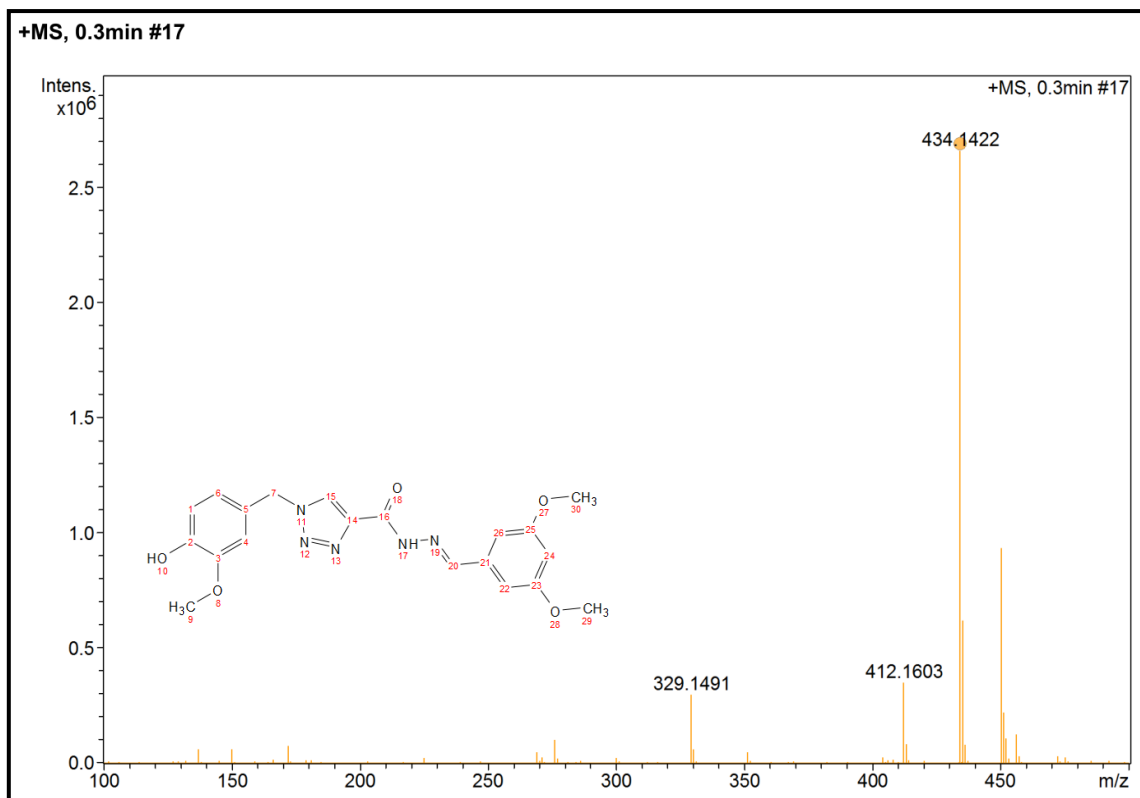


Figure S 7. HR-MS spectra of (E)-N'-(3,5-dimethoxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3d**).

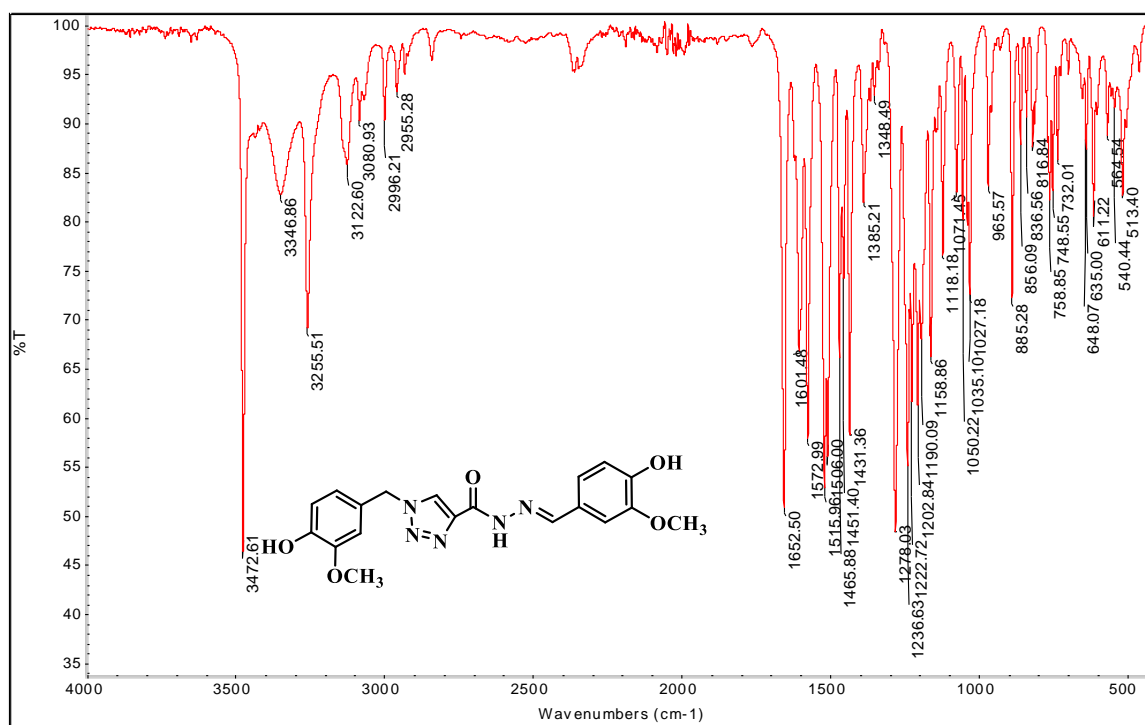


Figure S 8. Absorption spectra in the infrared region of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxy-3-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3e**).

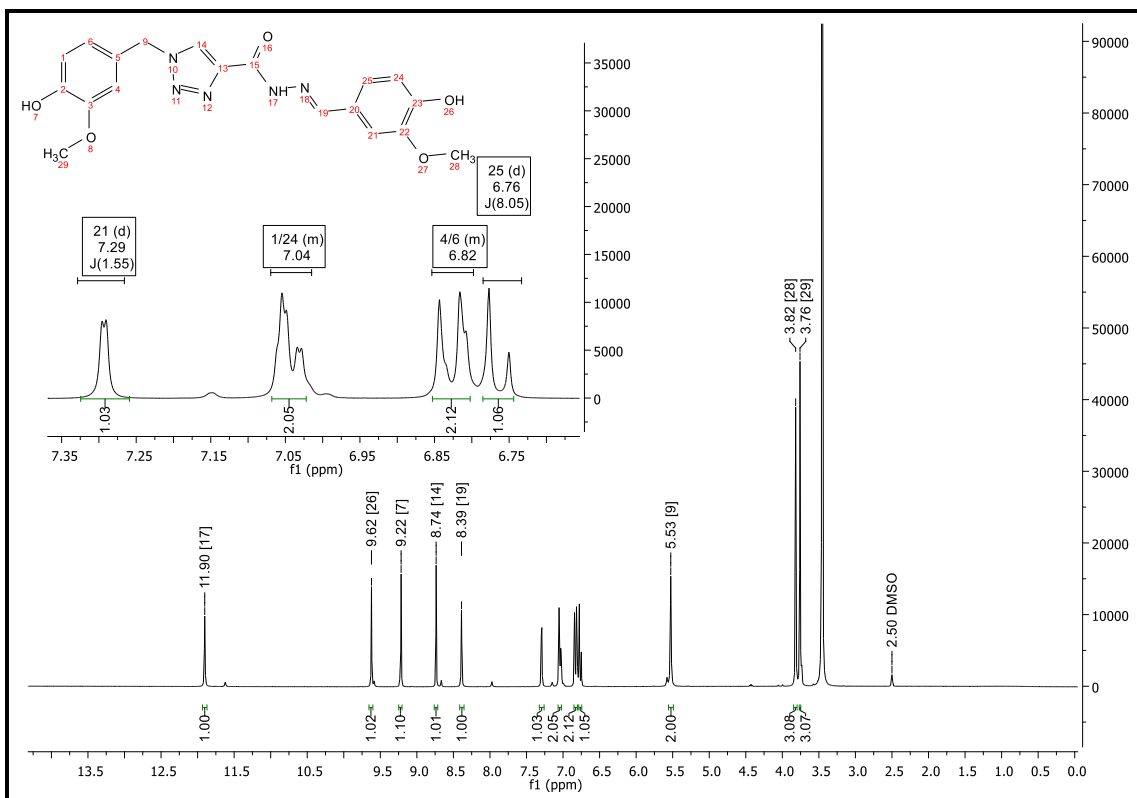


Figure S 9. ^1H NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxy-3-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3e**).

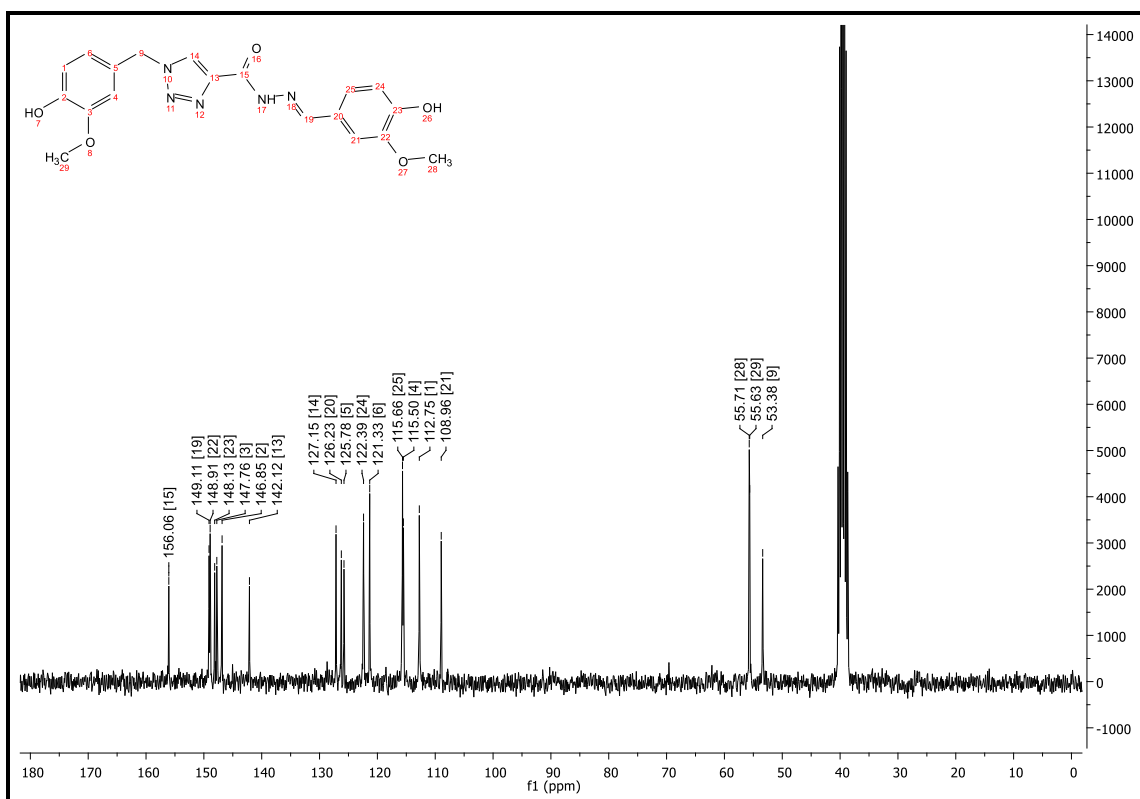


Figure S 10. ^{13}C NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxy-3-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3e**).

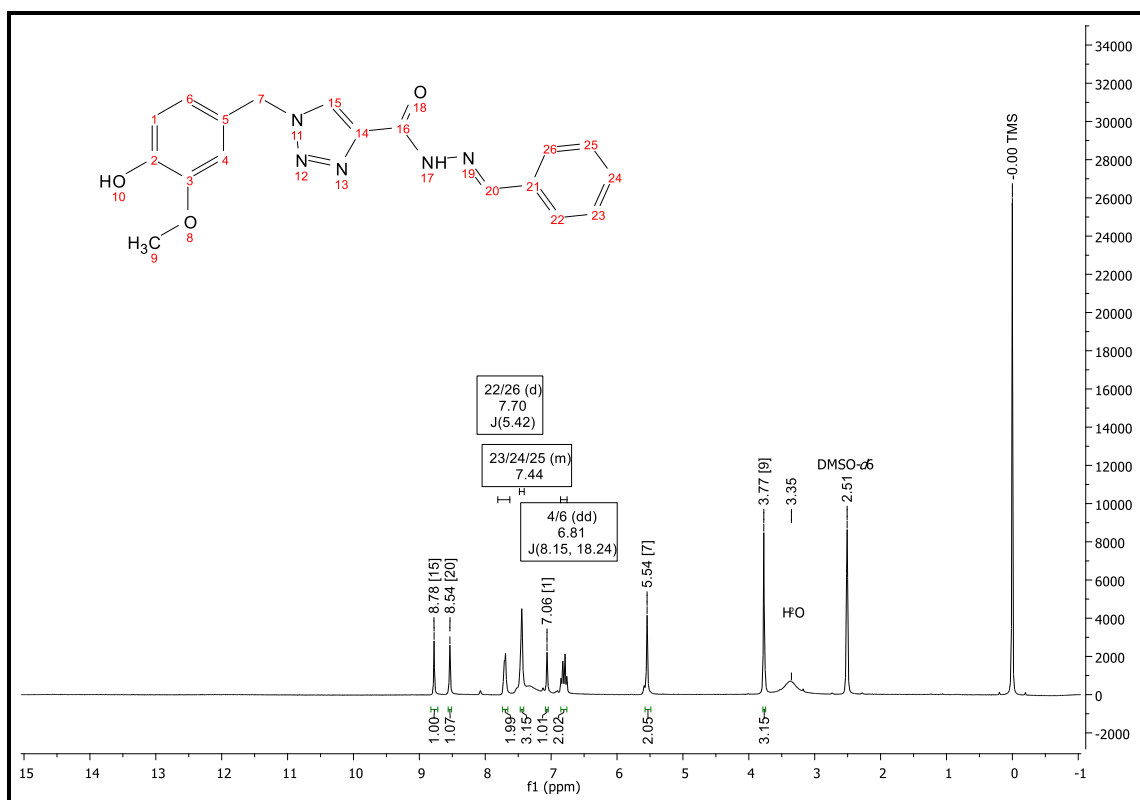


Figure S 13. ¹H NMR spectra of (E)-N'-benzylidene-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3f).

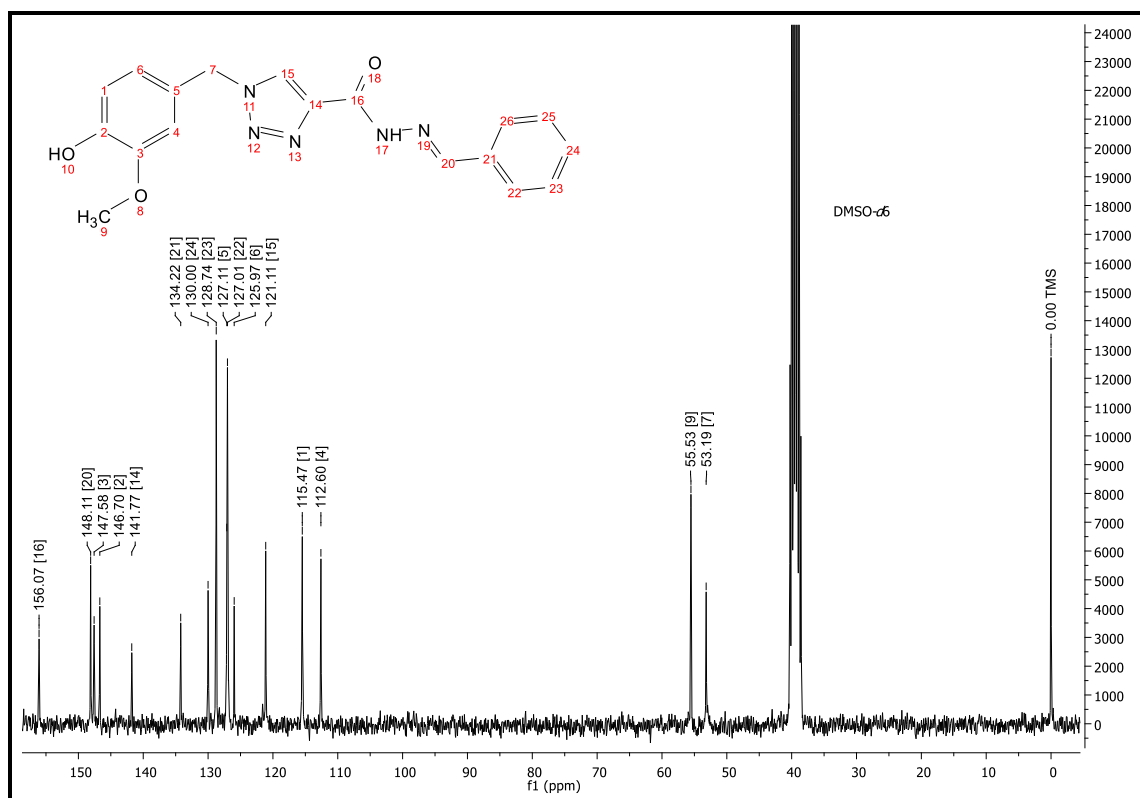


Figure S 14. ¹³C NMR spectra of (E)-N'-benzylidene-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3f).

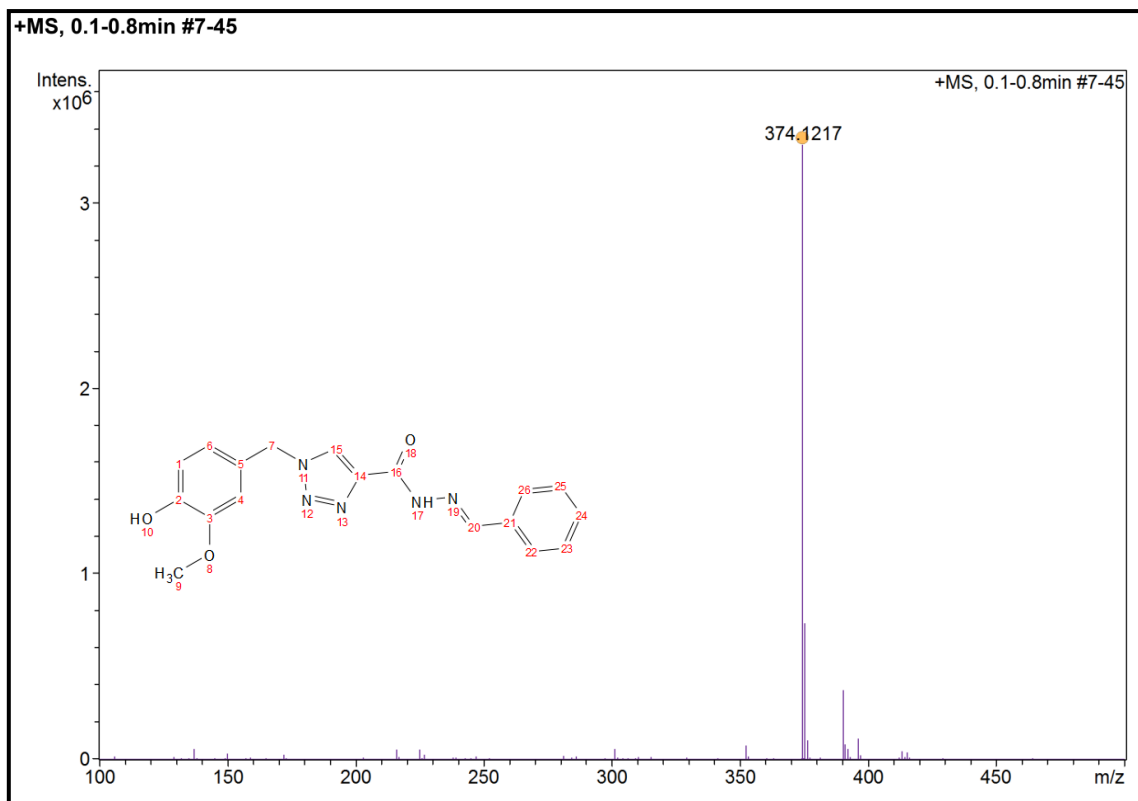


Figure S 15. HR-MS spectra of (E)-N'-benzylidene-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3f**).

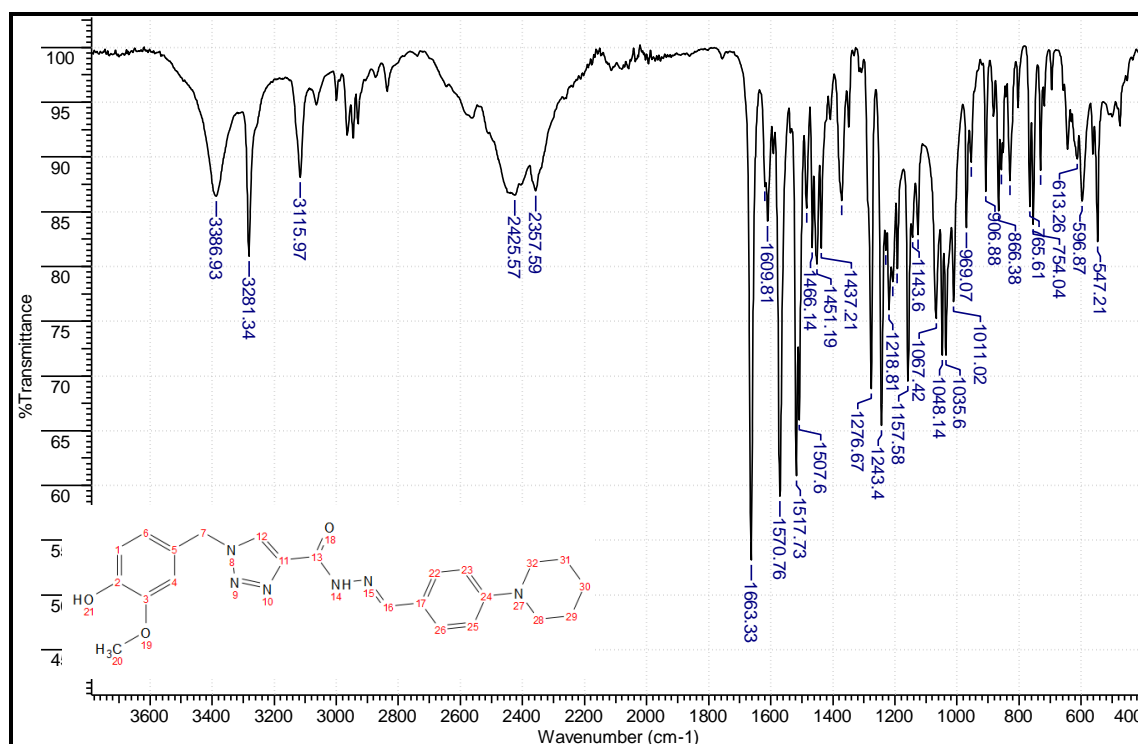


Figure S 16. Absorption spectra in the infrared region of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-(piperidin-1-yl)benzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3g**).

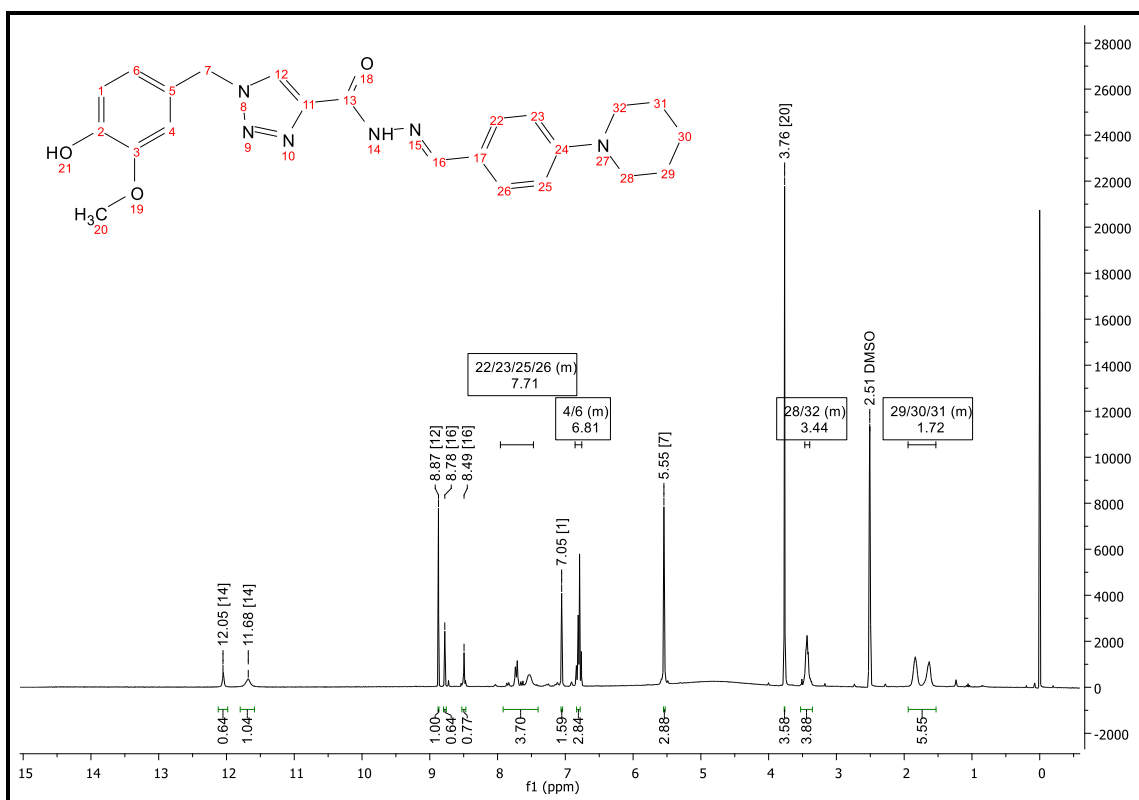


Figure S 17. ¹H NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-(piperidin-1-yl)benzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3g**).

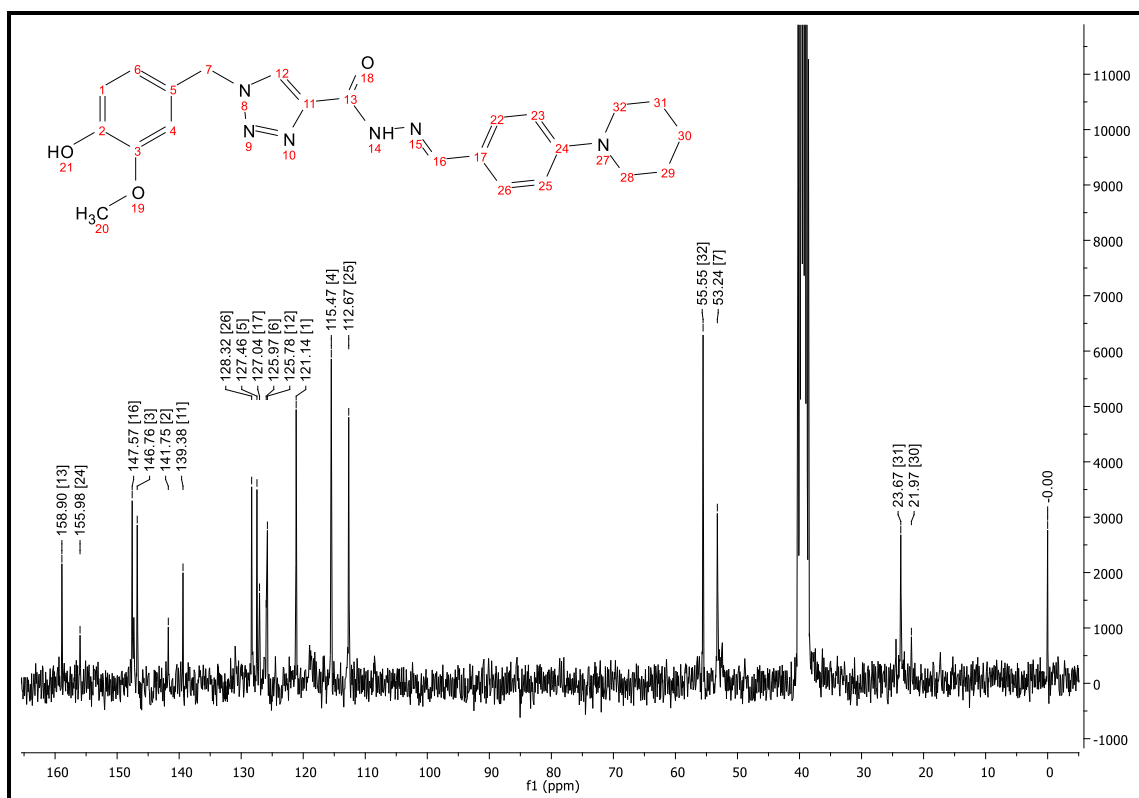


Figure S 18. ¹³C NMR spectra of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-(piperidin-1-yl)benzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3g**).

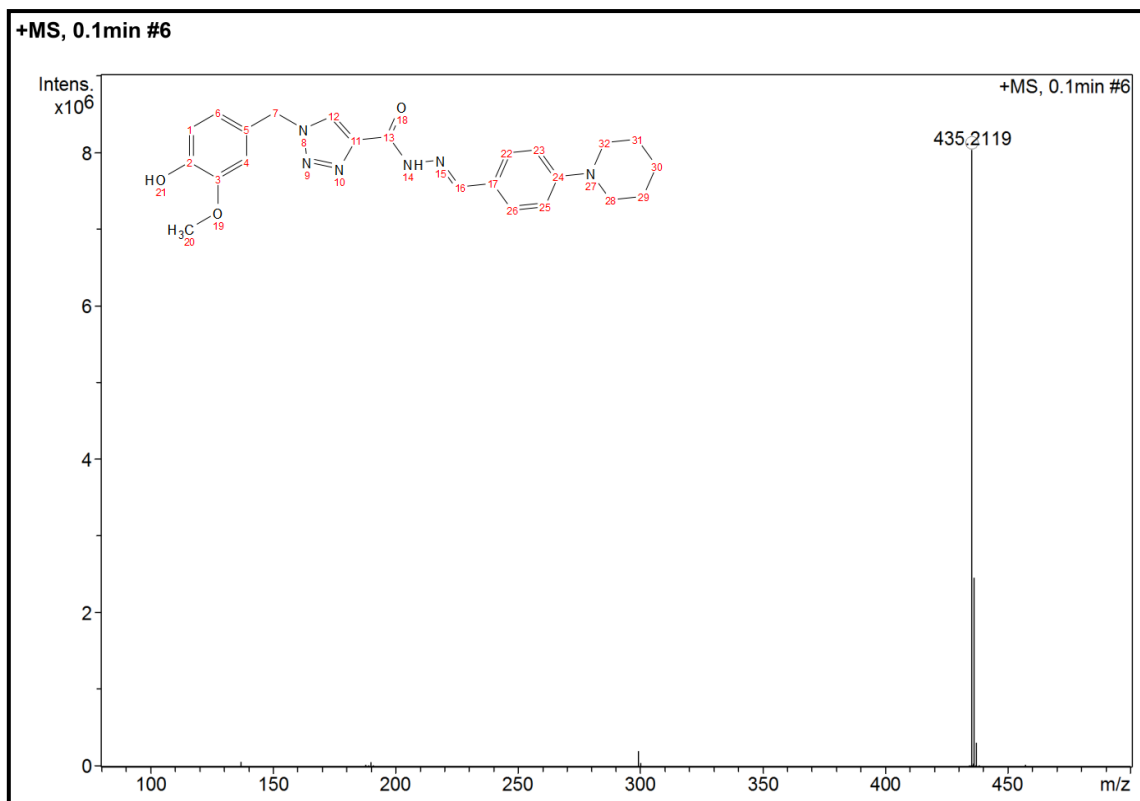


Figure S 19. HR-MS spectra of (E)-1-(4-hydroxy-3-methoxybenzylidene)-N'-(4-(piperidin-1-yl)benzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3g**).

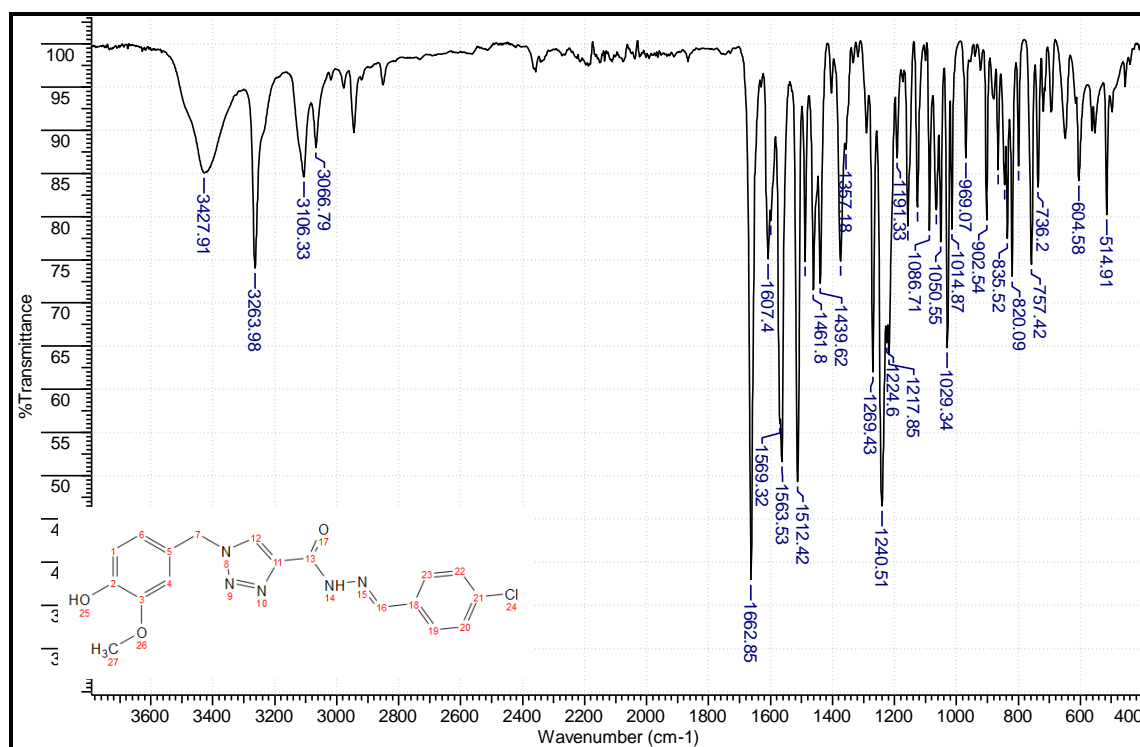


Figure S 20. Absorption spectra in the infrared region of (E)-N'-(4-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3h**).

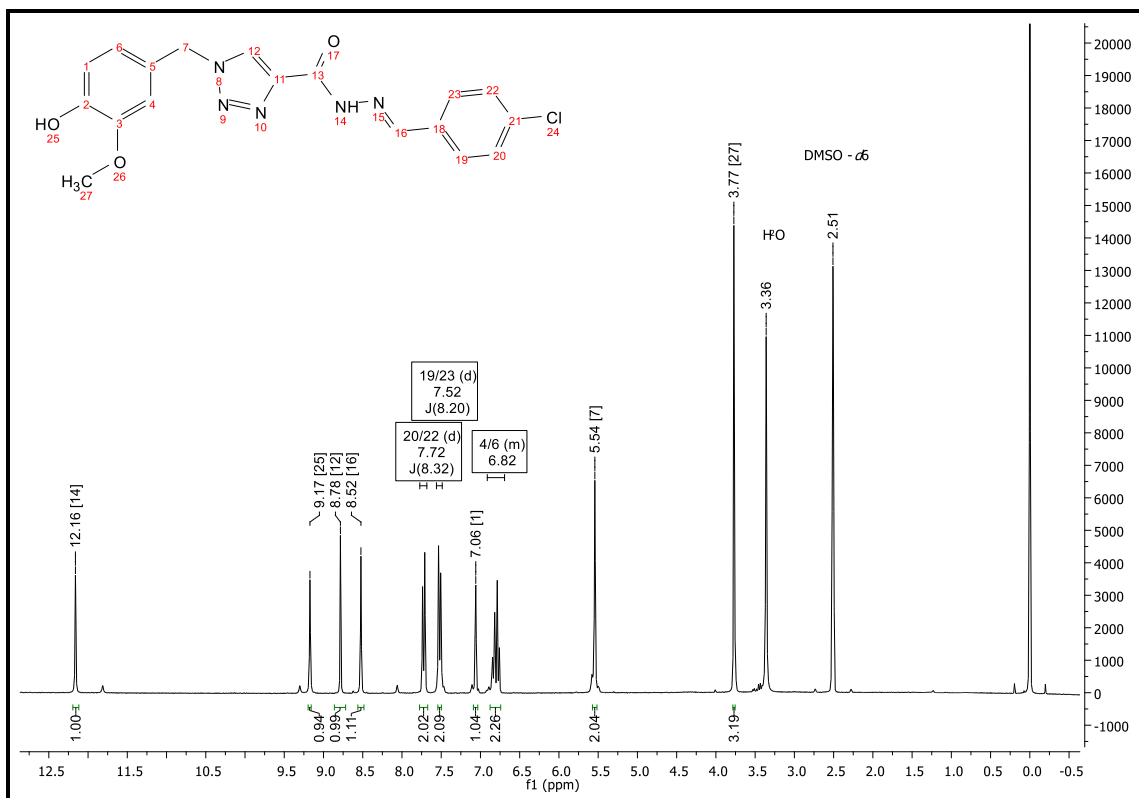


Figure S 21. ¹H NMR spectra of (E)-N'-(4-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3h**).

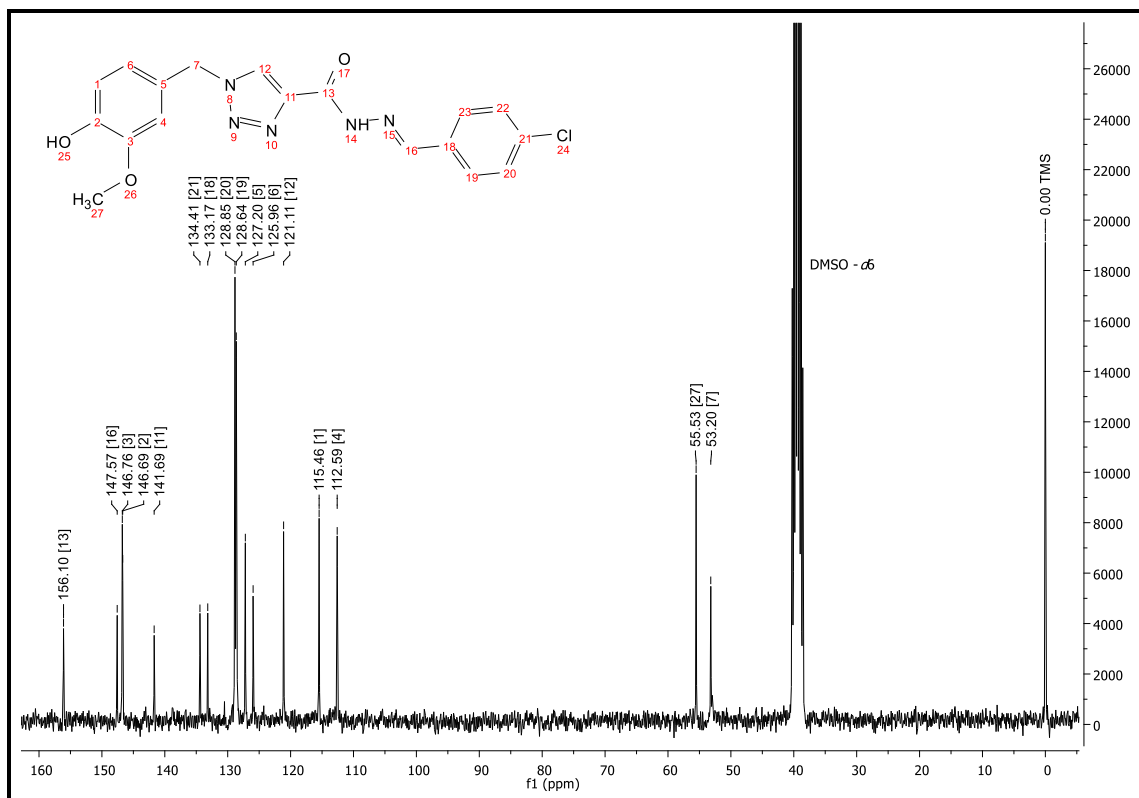


Figure S 22. ¹³C NMR spectra of (E)-N'-(4-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3h**).

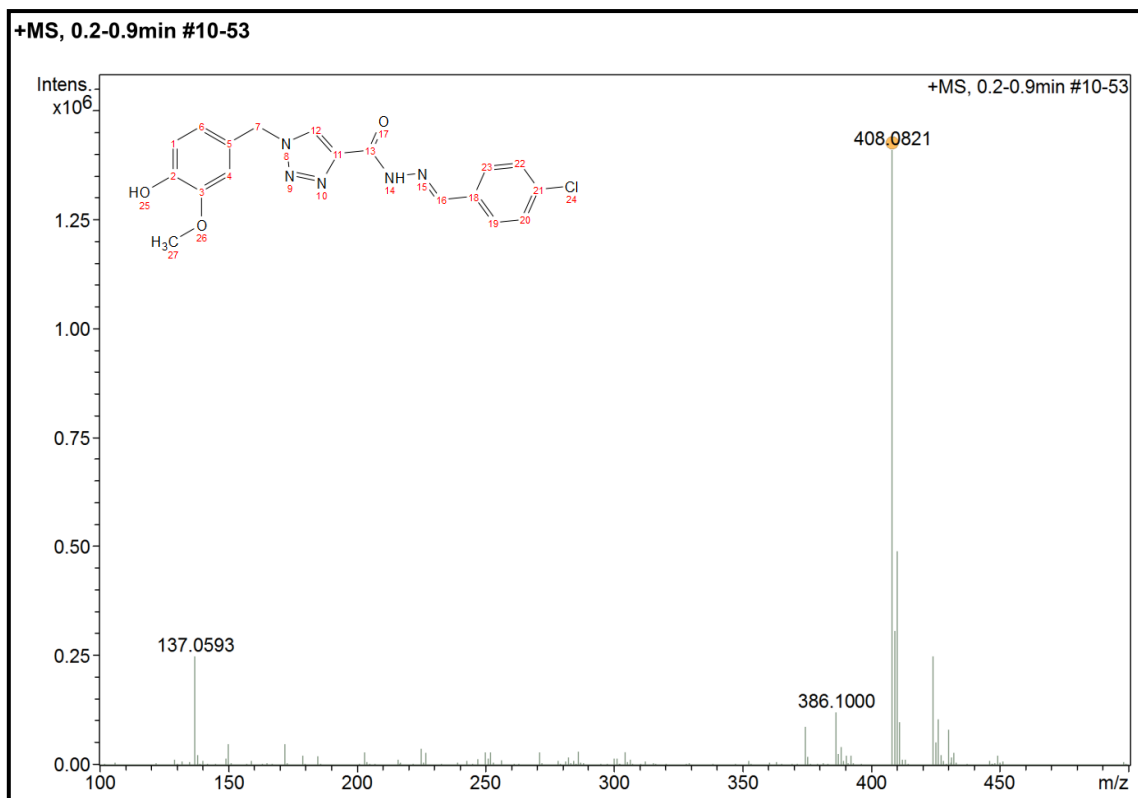


Figure S 23. HR-MS spectra of (E)-N'-(4-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3h**).

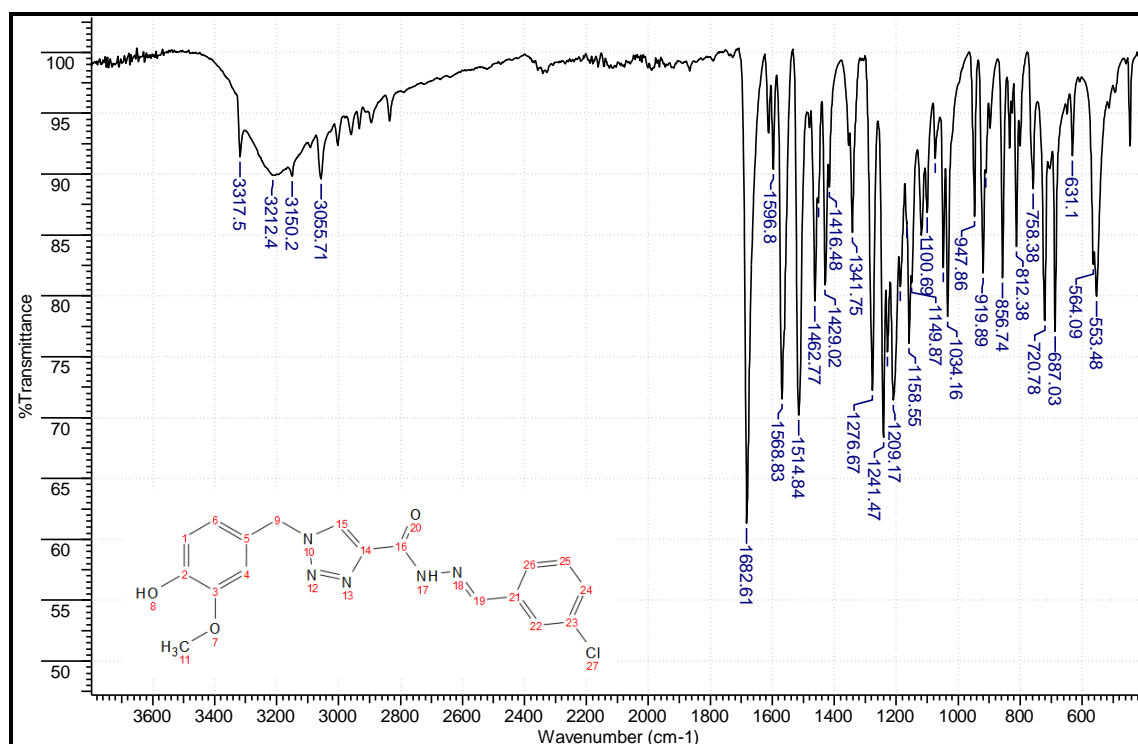


Figure S 24. Absorption spectra in the infrared region of (E)-N'-(3-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3i**).

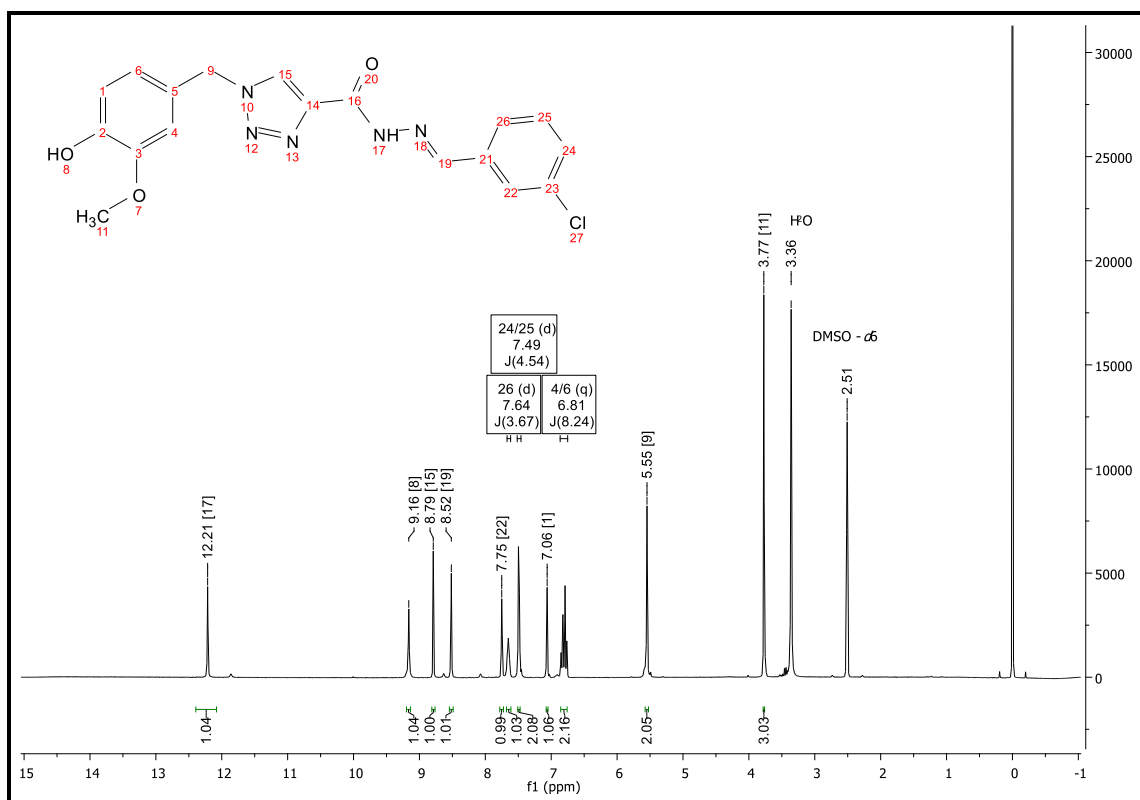


Figure S 25. ¹H NMR spectra of (E)-N'-(3-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3i).

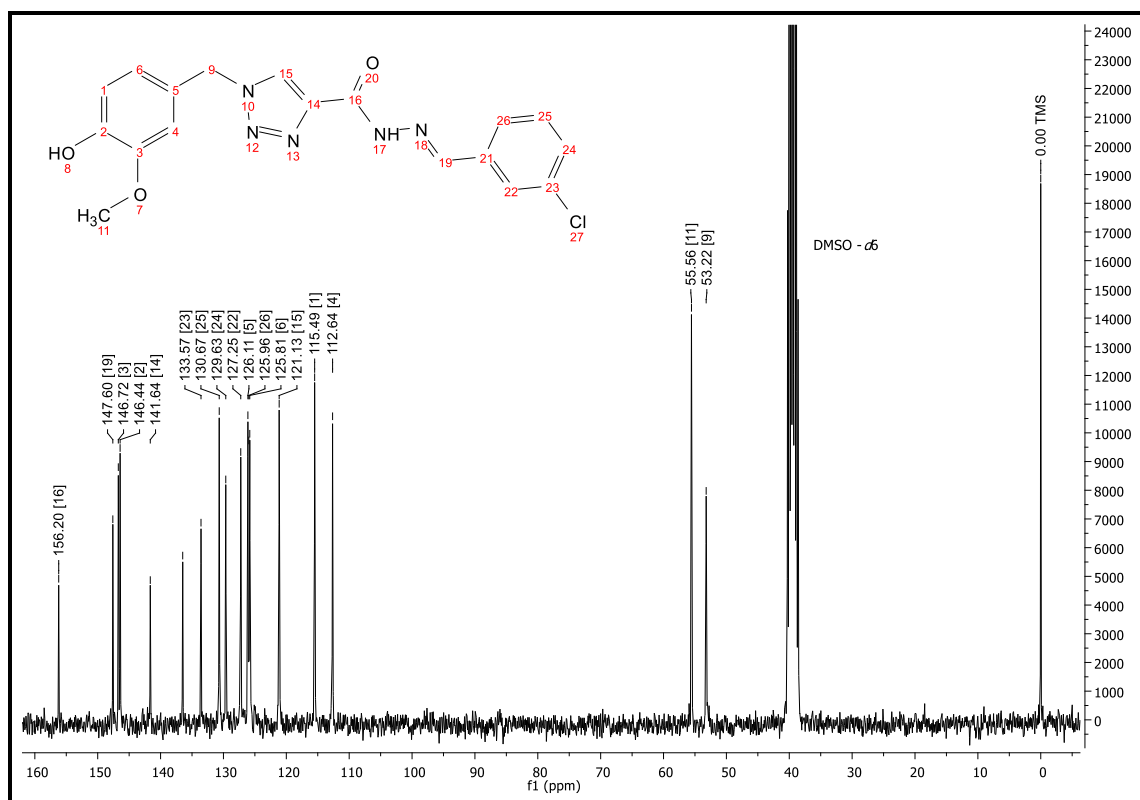


Figure S 26. ¹³C NMR spectra of (E)-N'-(3-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (3i).

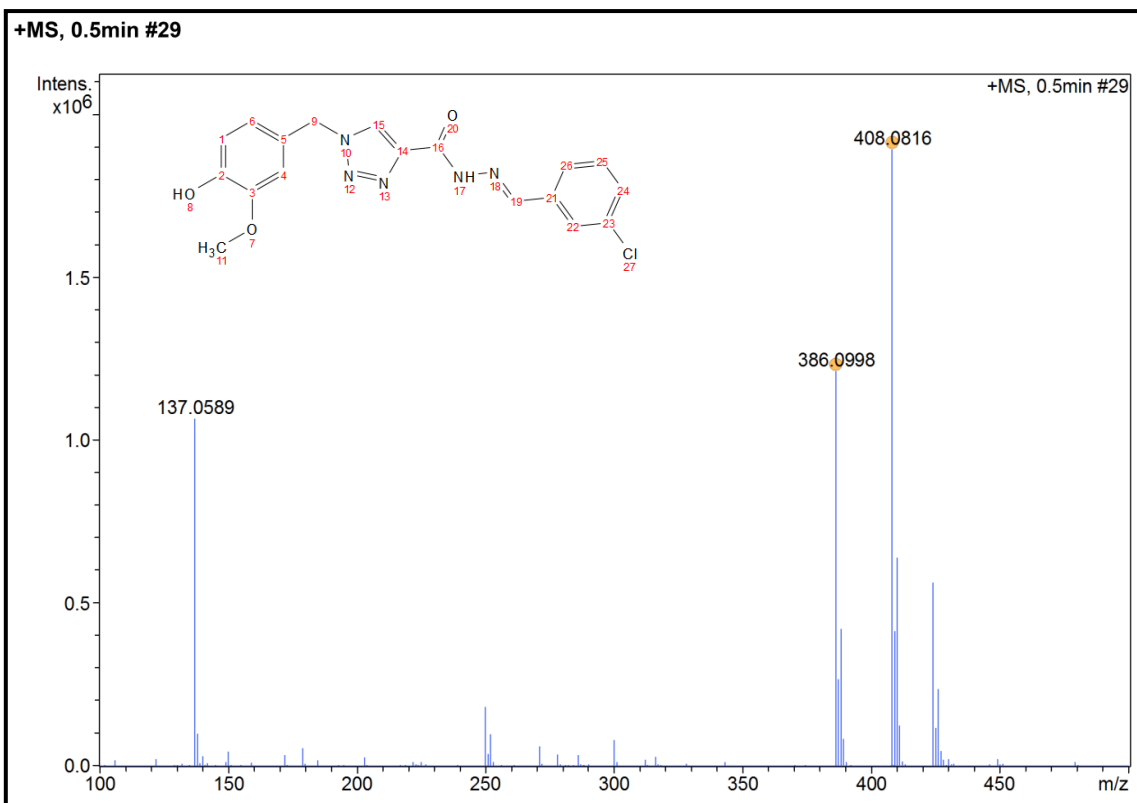


Figure S 27. HR-MS spectra of (E)-N'-(3-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3i**).

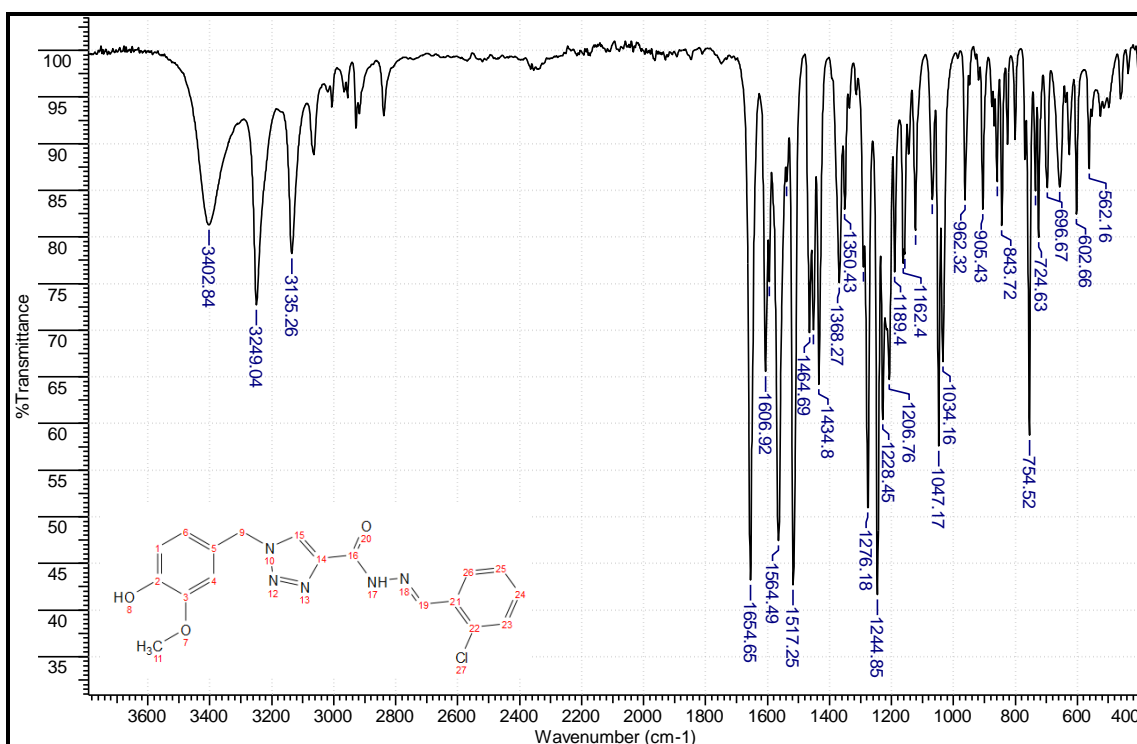


Figure S 28. Absorption spectra in the infrared region of (E)-N'-(2-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3j**).

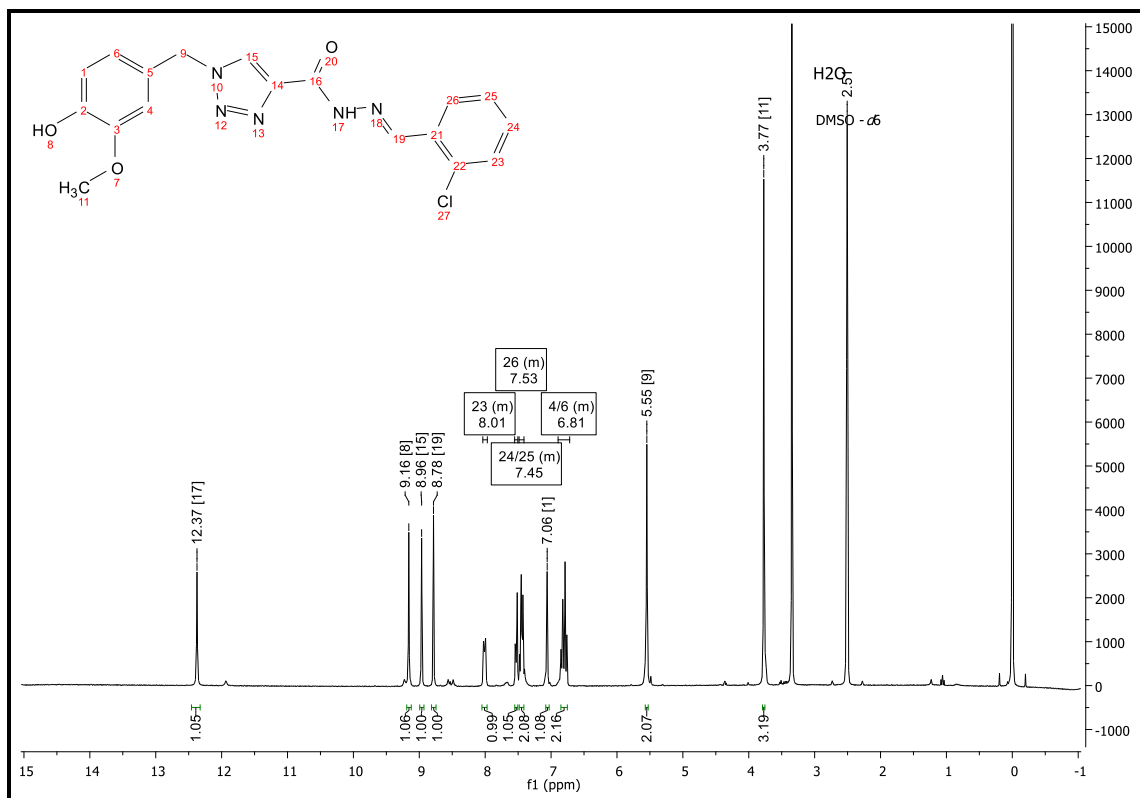


Figure S 29. ¹H NMR spectra of (E)-N'-(2-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3j**).

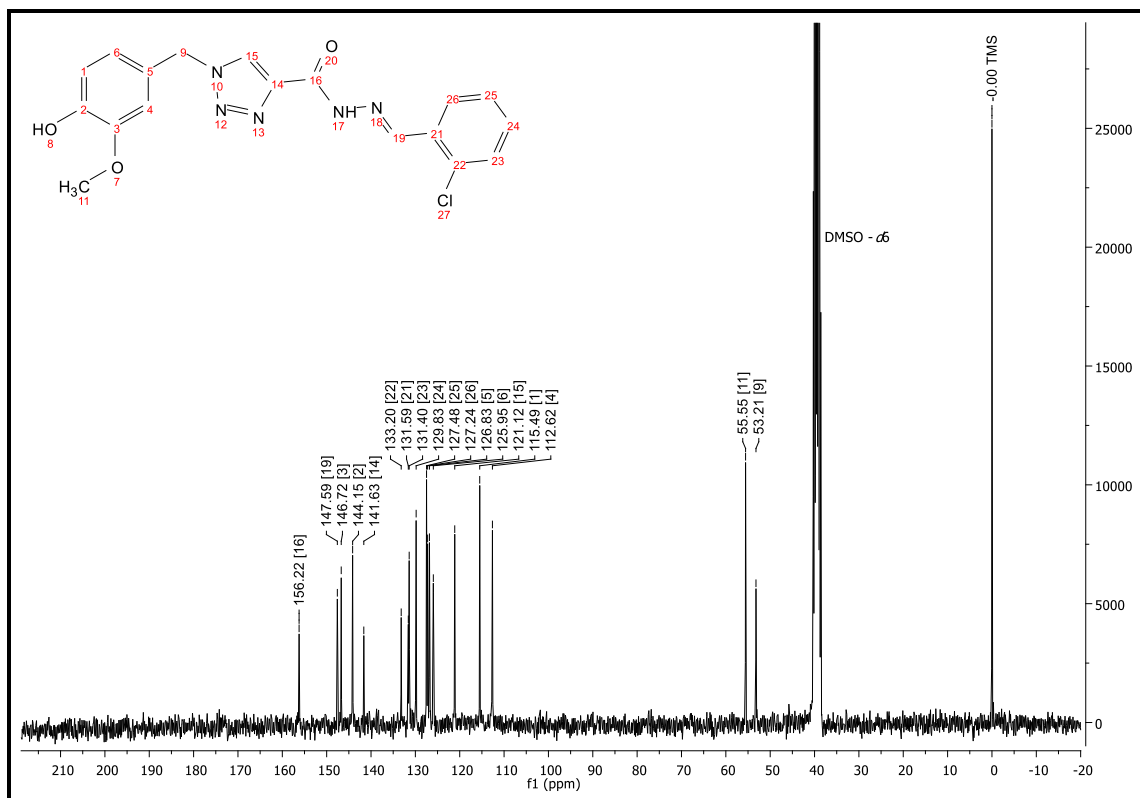


Figure S 30. ¹³C NMR spectra of (E)-N'-(2-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3j**).

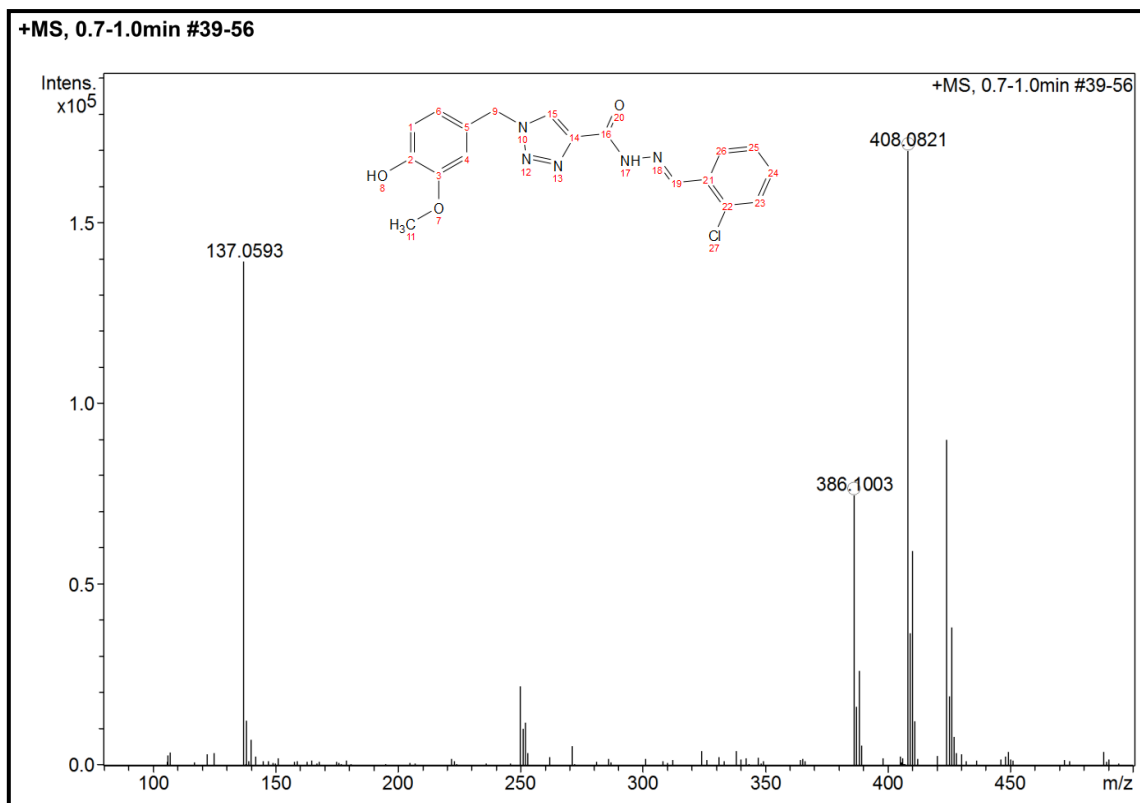


Figure S 31. HR-MS spectra of (E)-N'-(2-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3j**).

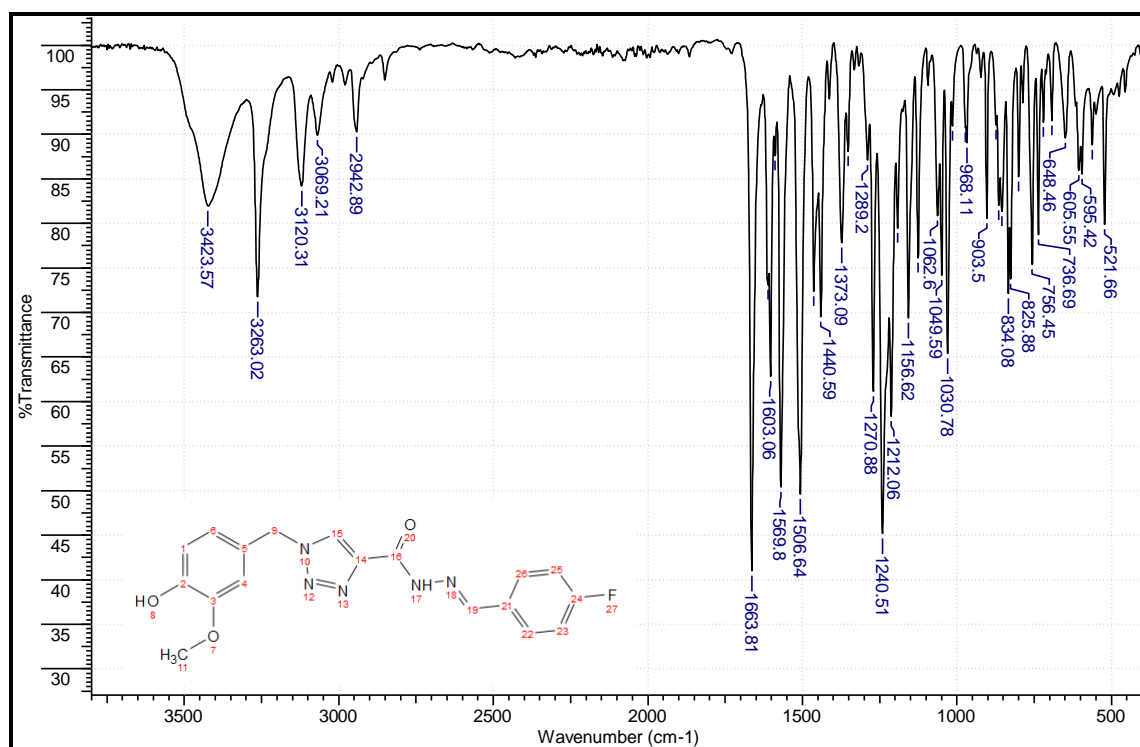


Figure S 32. Absorption spectra in the infrared region of (E)-N'-(4-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3k**).

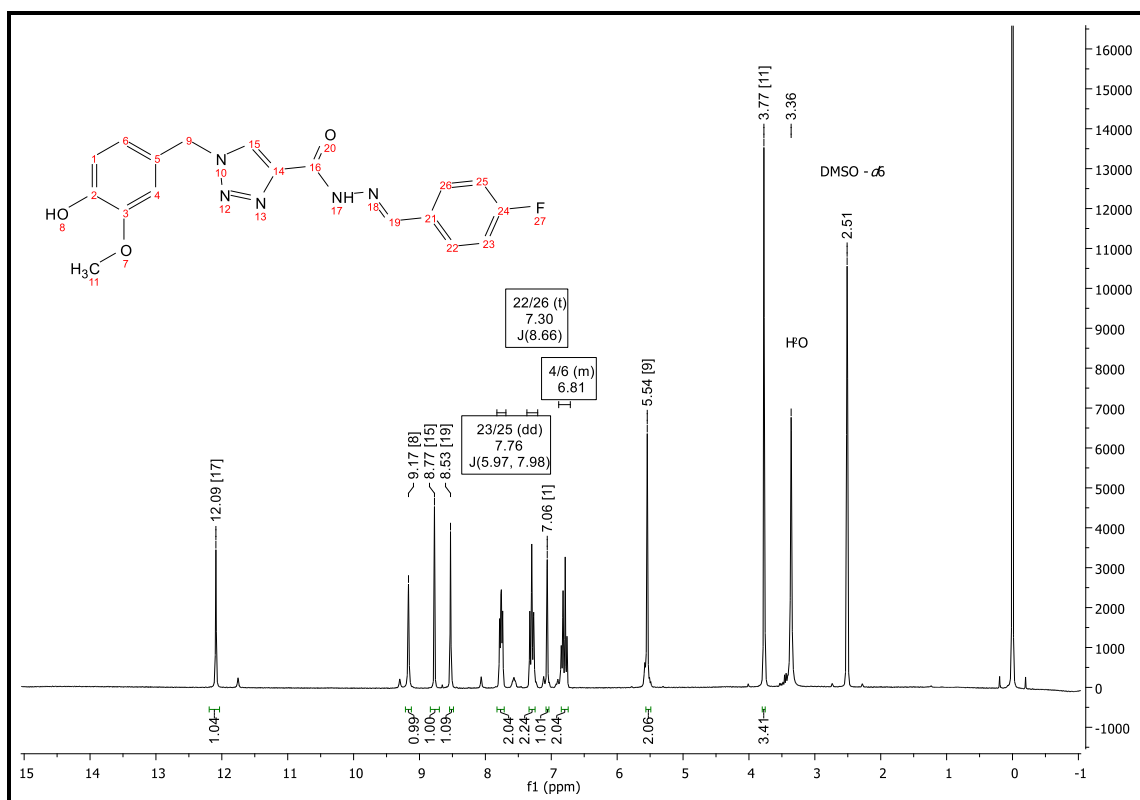


Figure S 33. ¹H NMR spectra of (E)-N'-(4-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3k**).

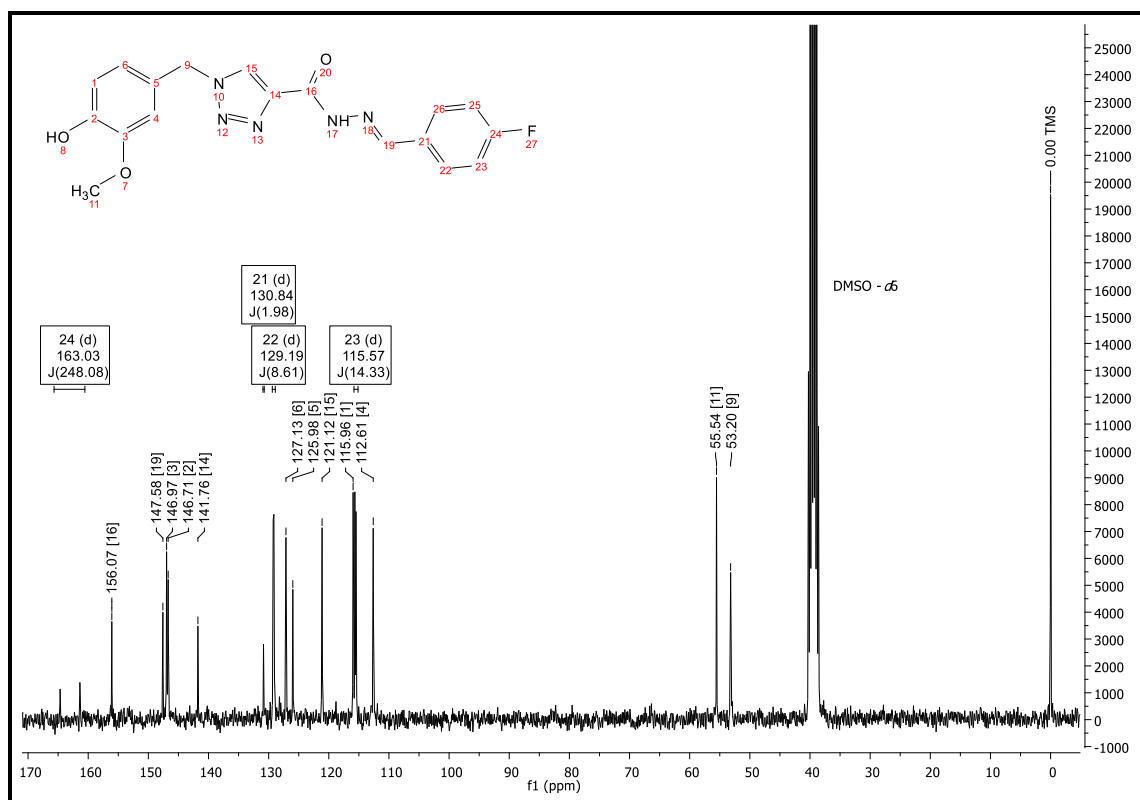


Figure S 34. ¹³C NMR spectra of (E)-N'-(4-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3k**).

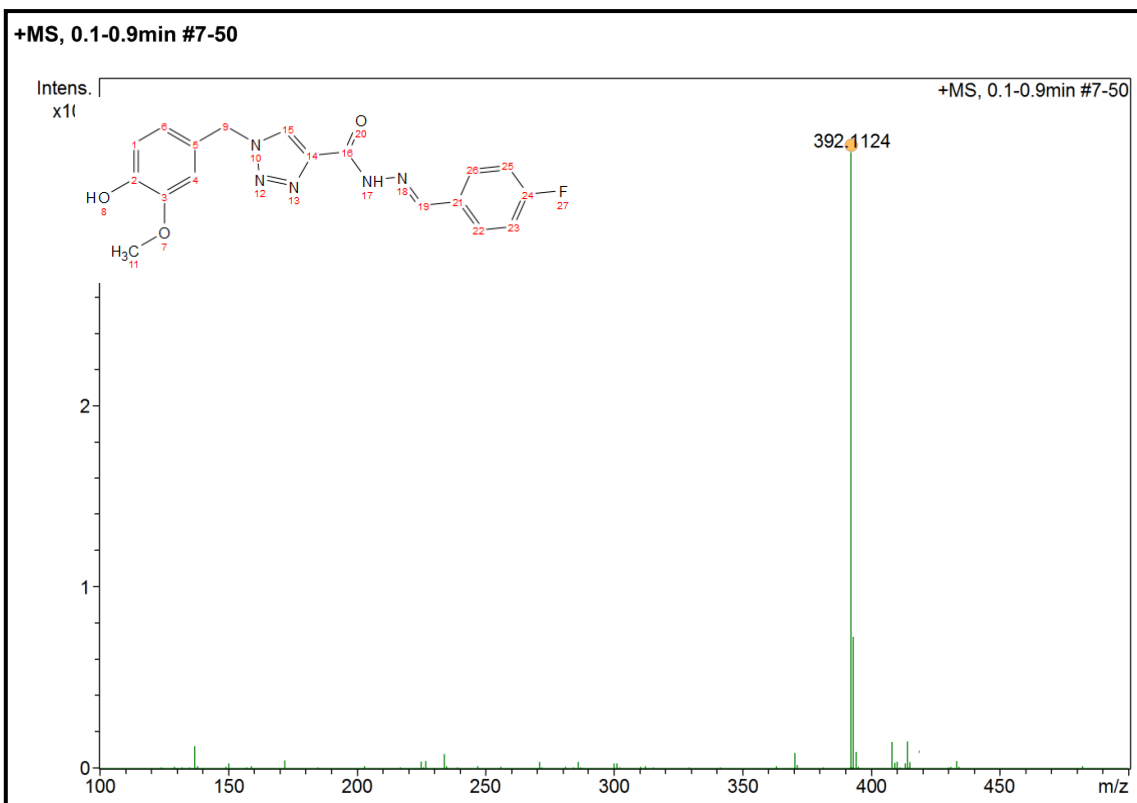


Figure S 35. HR-MS spectra of (E)-N'-(4-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3k**).

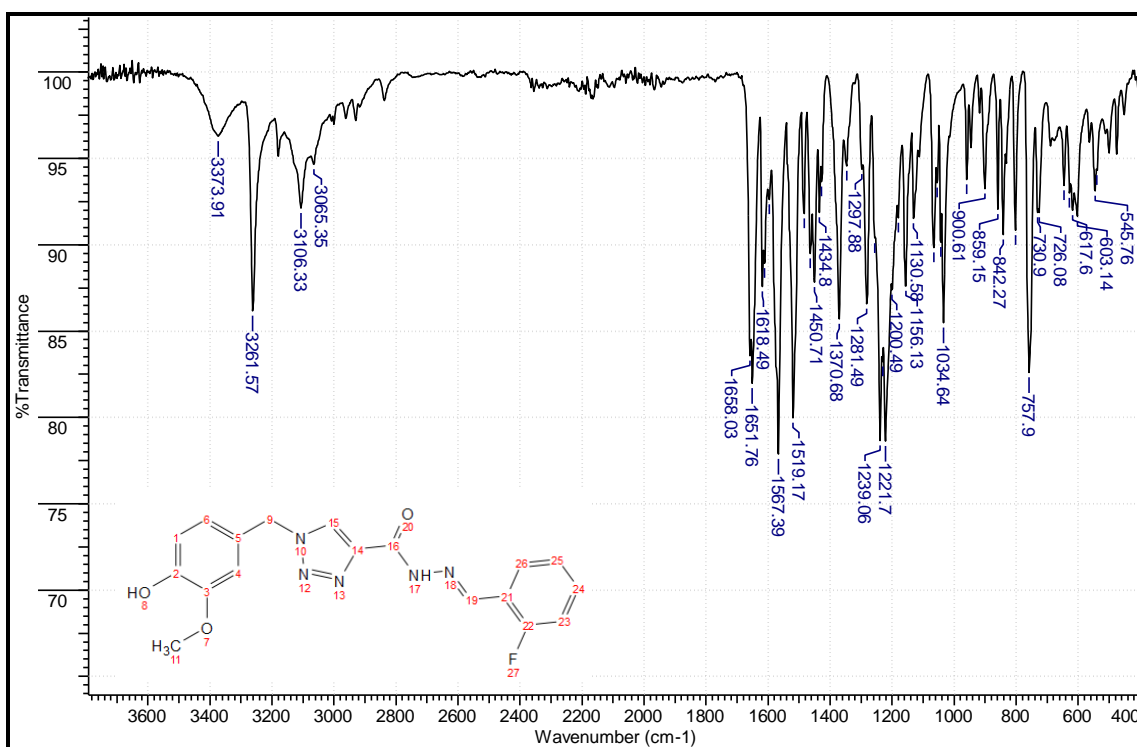


Figure S 36. Absorption spectra in the infrared region of (E)-N'-(2-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3l**).

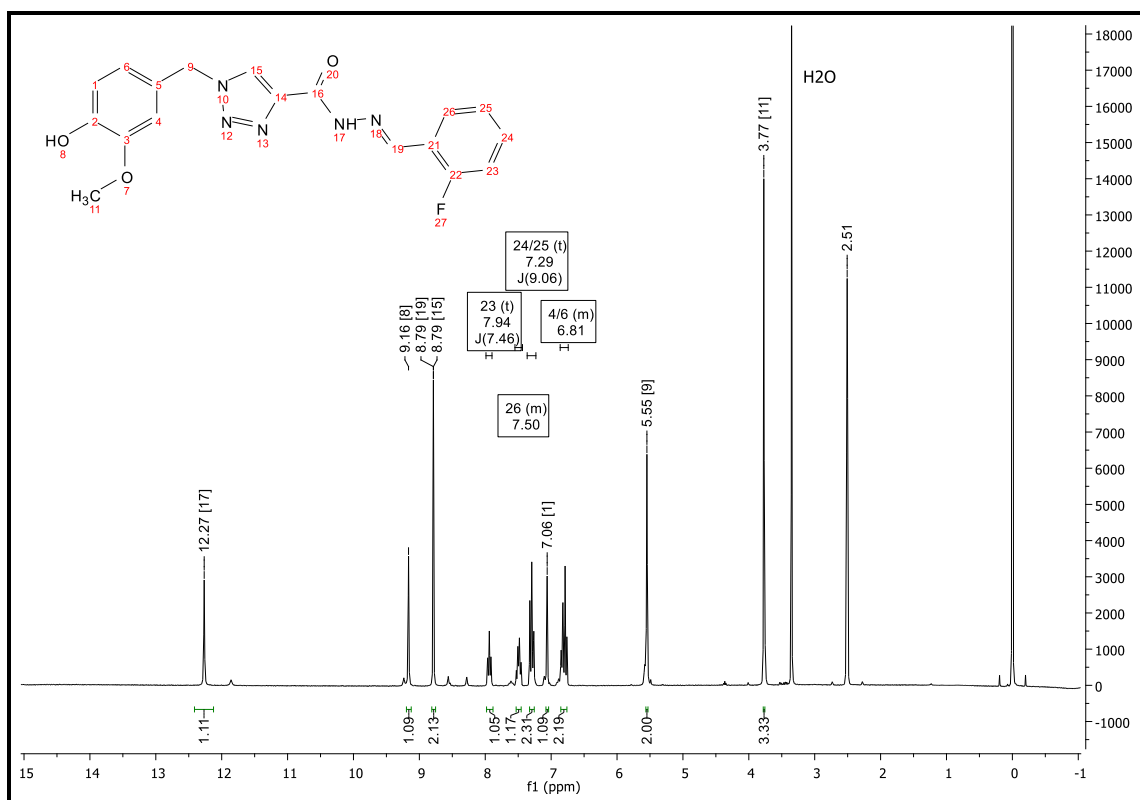


Figure S 37. ¹H NMR spectra of (E)-N'-(2-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3I**).

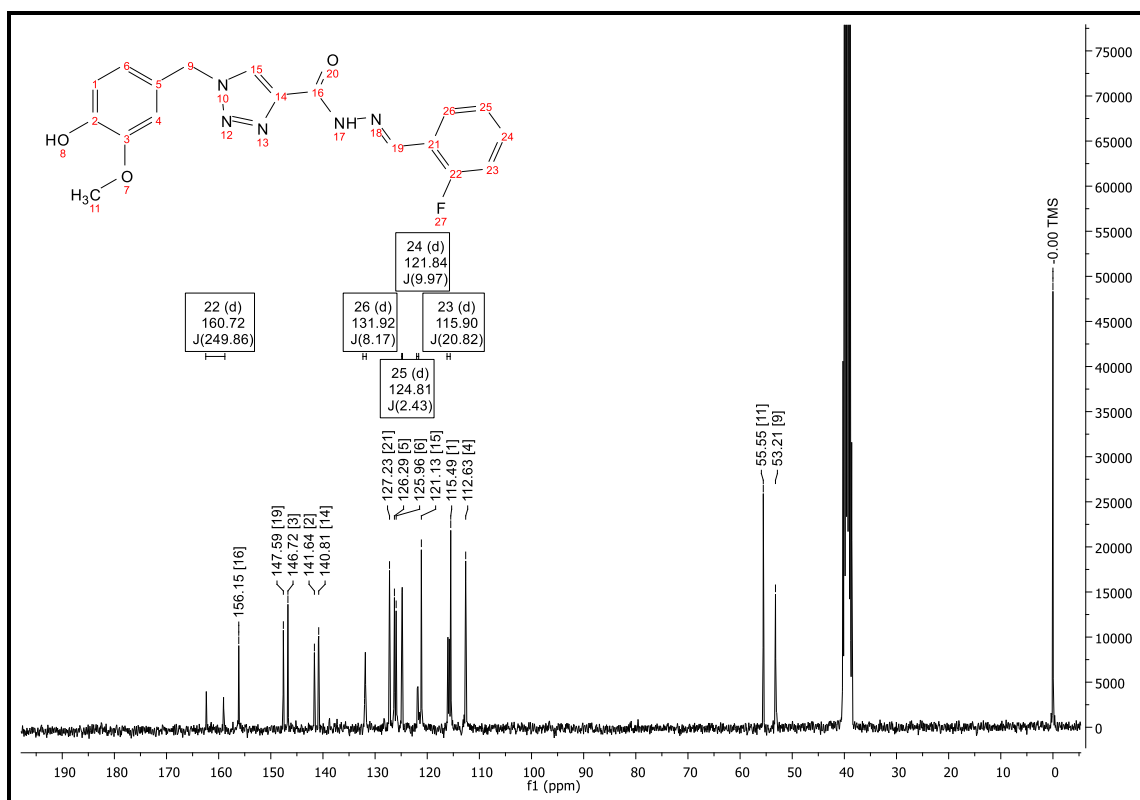


Figure S 38. ¹³C NMR spectra of (E)-N'-(2-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3I**).

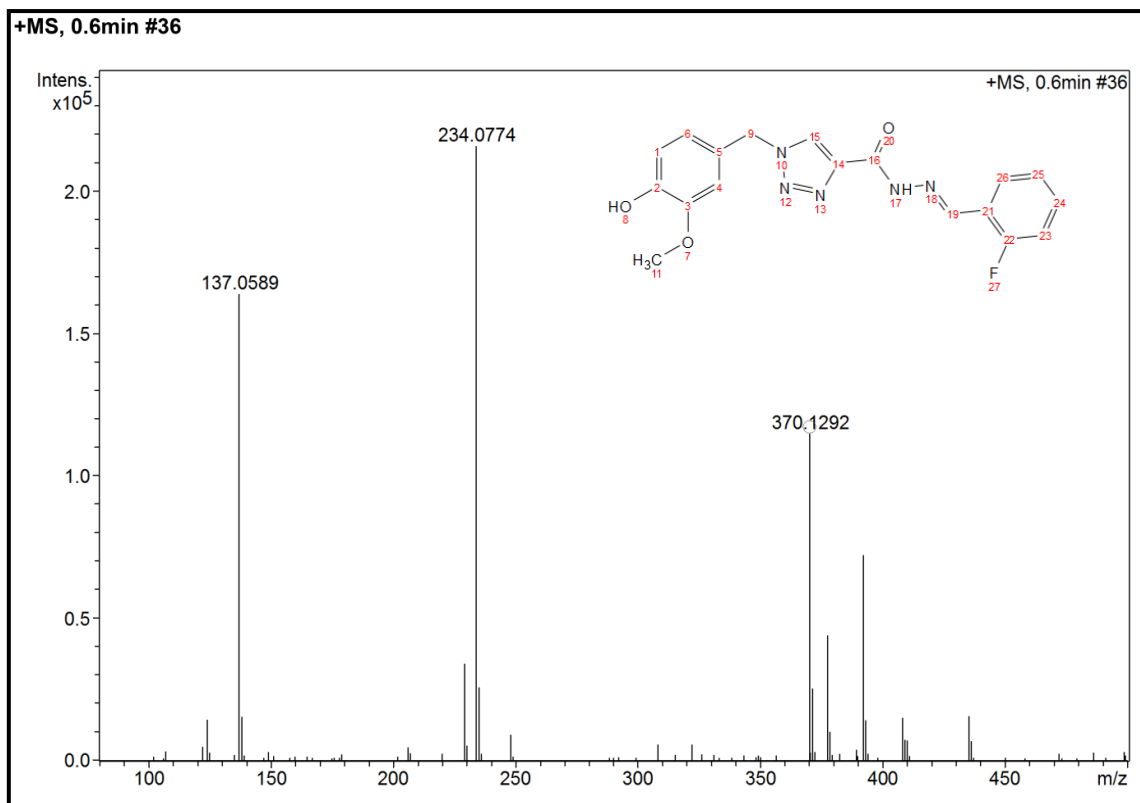


Figure S 39. HR-MS spectra of (E)-N'-(2-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3l**).

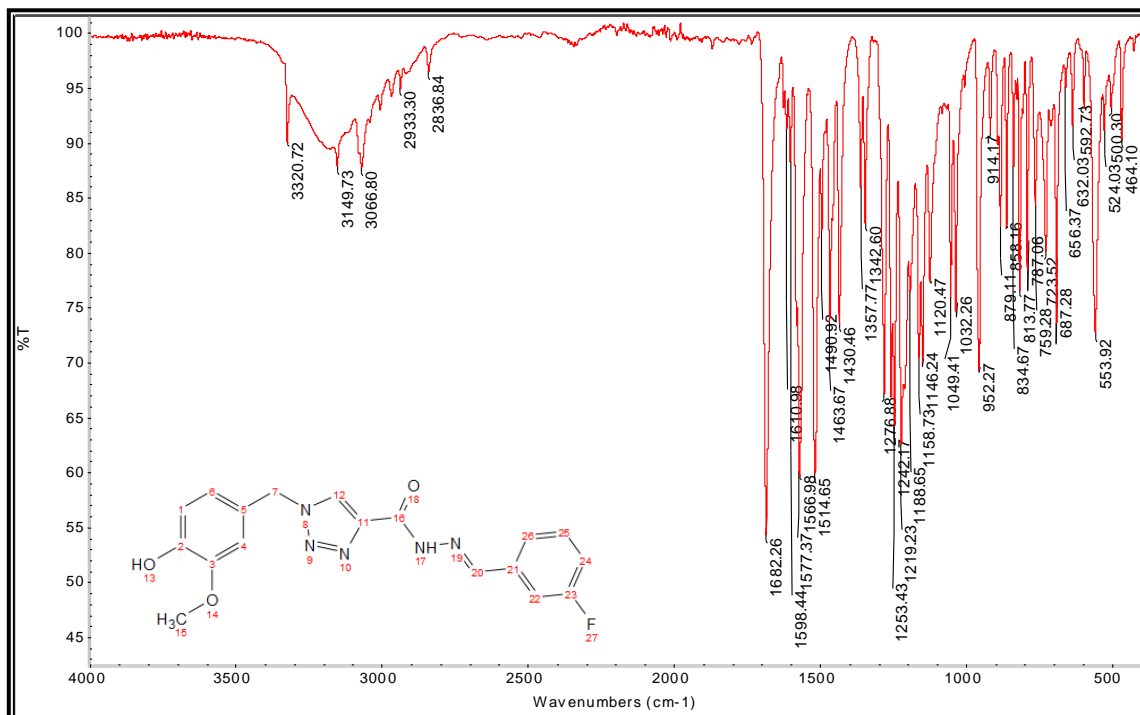


Figure S 40. Absorption spectra in the infrared region of (E)-N'-(3-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3m**).

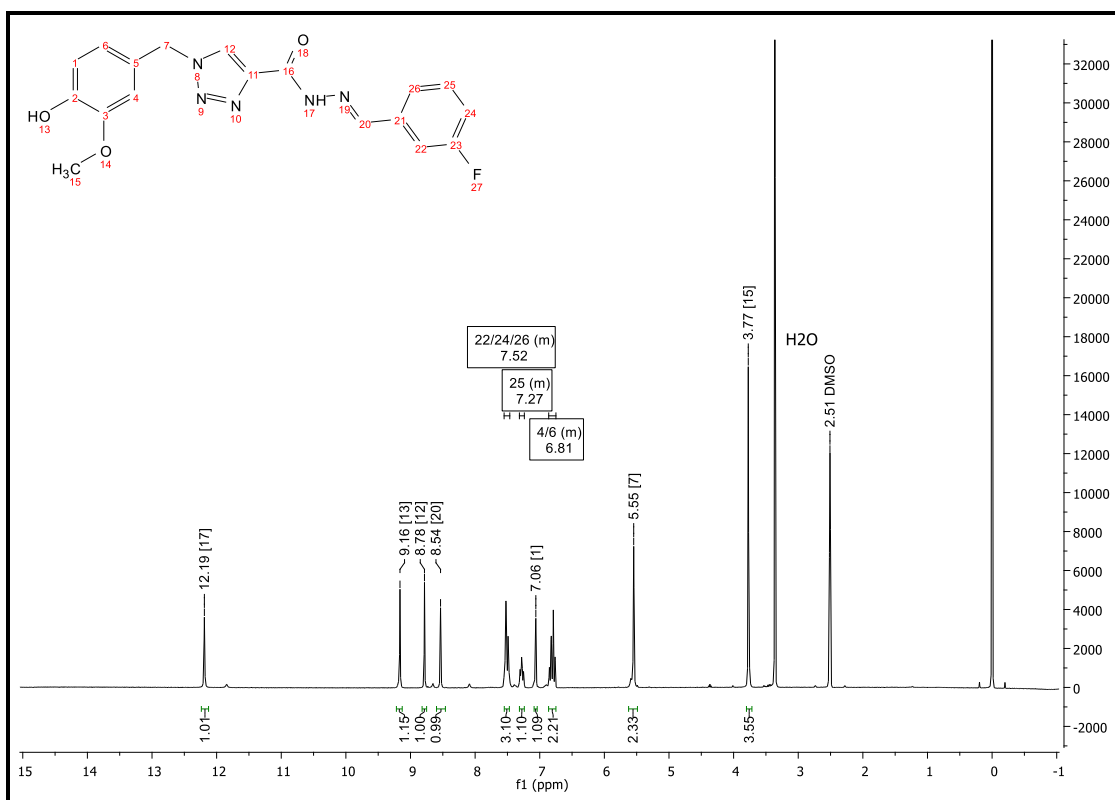


Figure S 41. ¹H NMR spectra of (E)-N'-(3-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3m**).

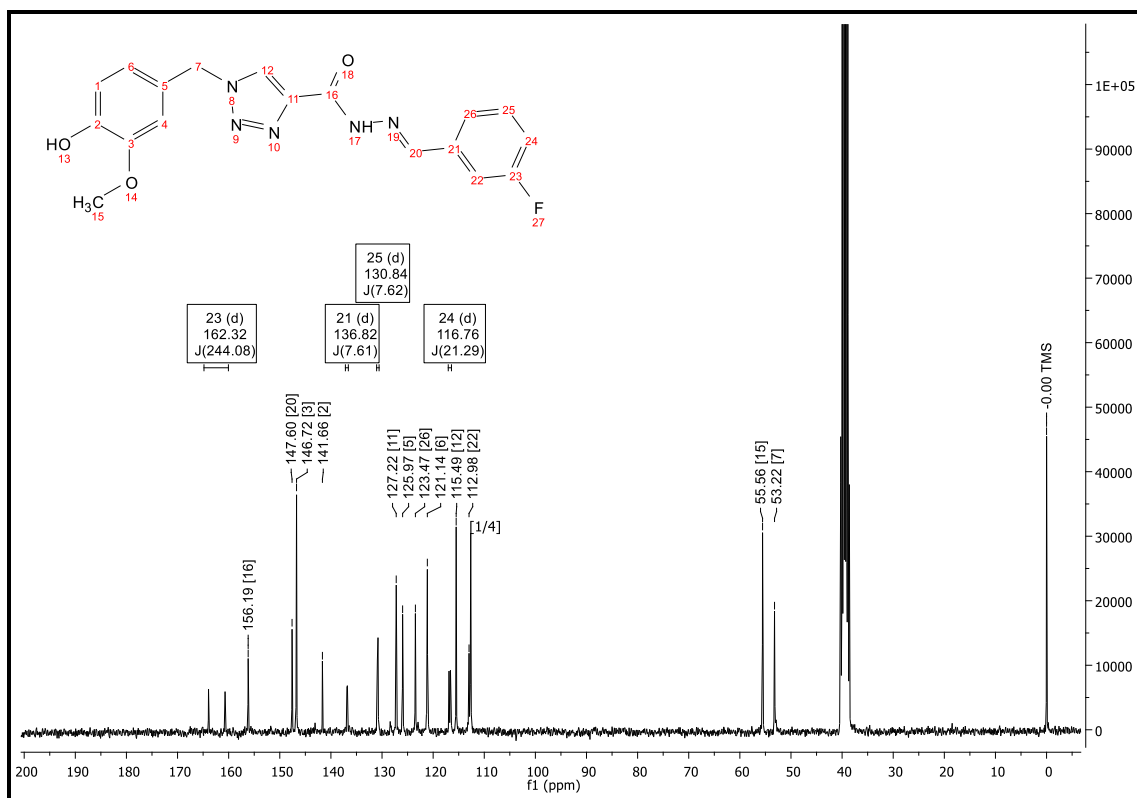


Figure S 42. ¹³C NMR spectra of (E)-N'-(3-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3m**).

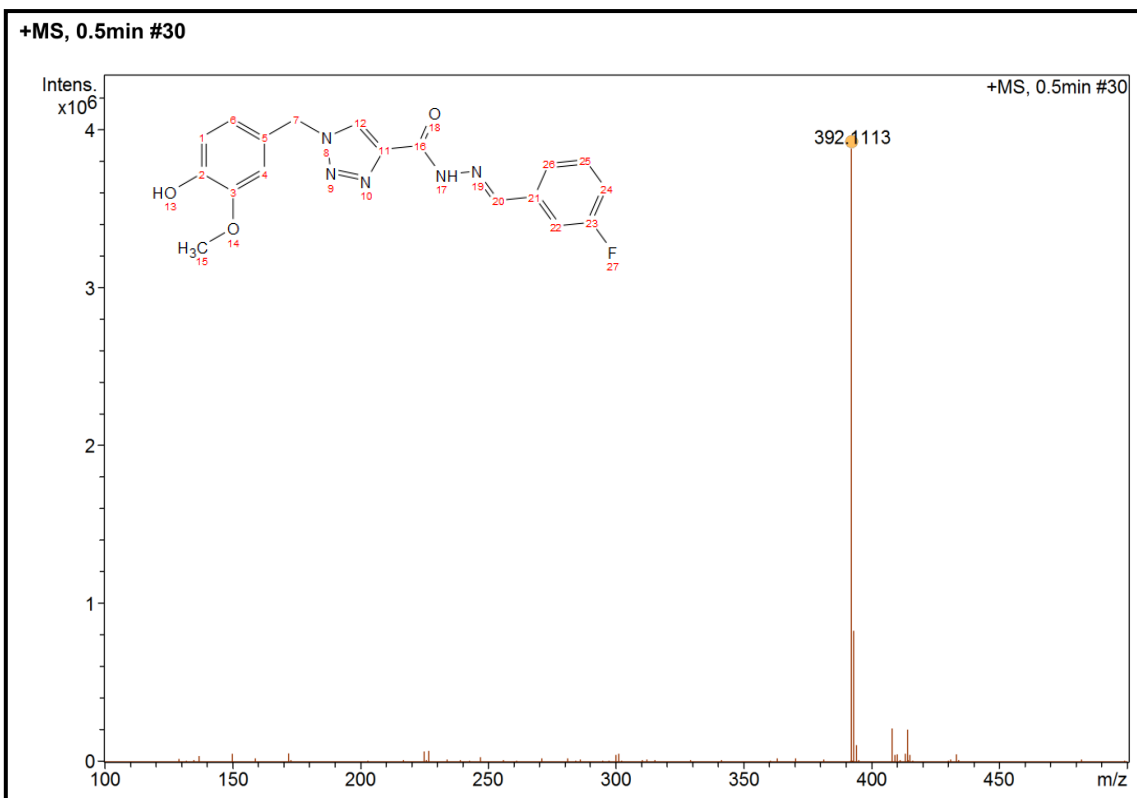


Figure S 43. HR-MS spectra of (E)-N'-(3-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3m**).

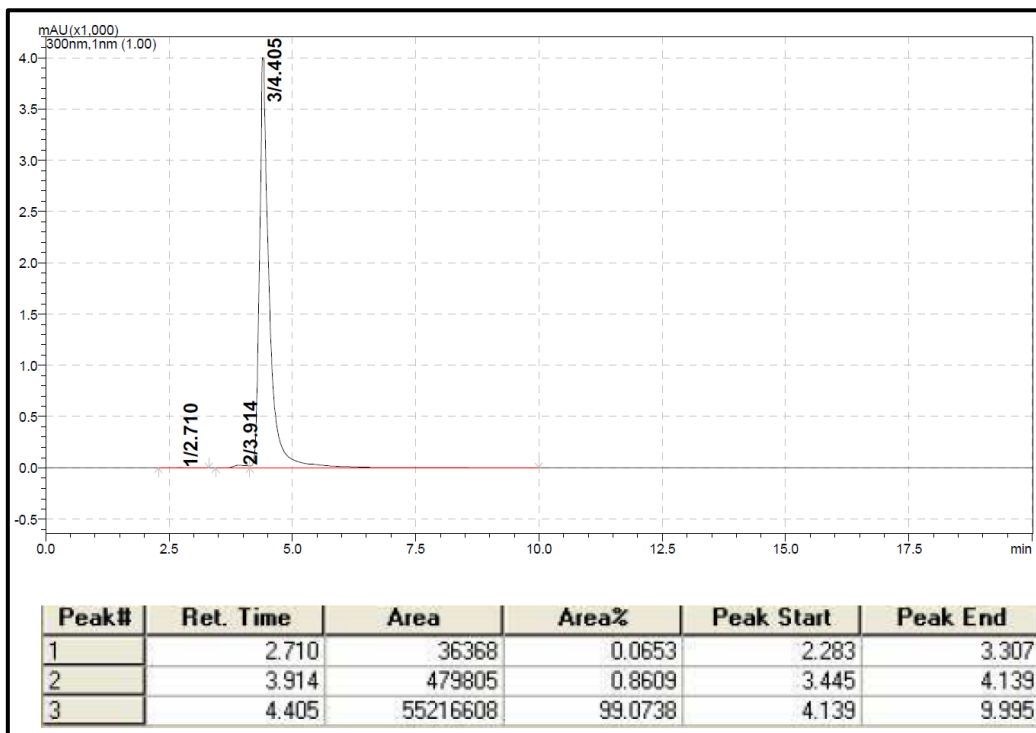


Figure S 44. Chromatogram of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3a**).

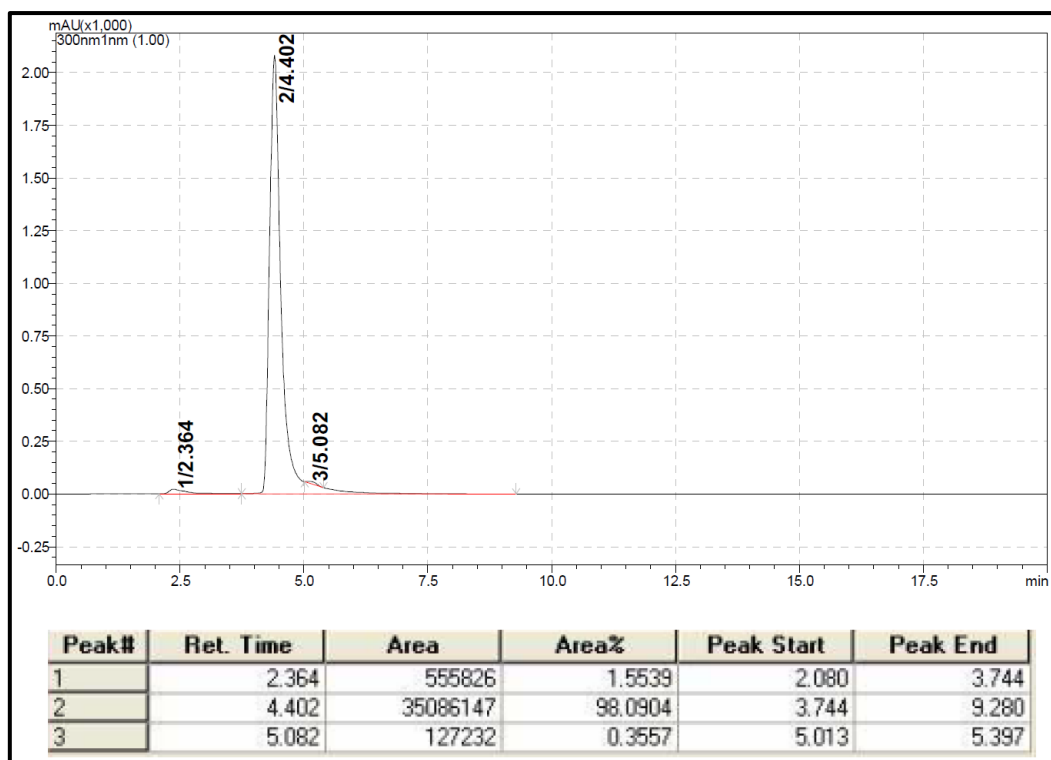


Figure S 45. Chromatogram of (E)-N'-(3,5-dihydroxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3b**).

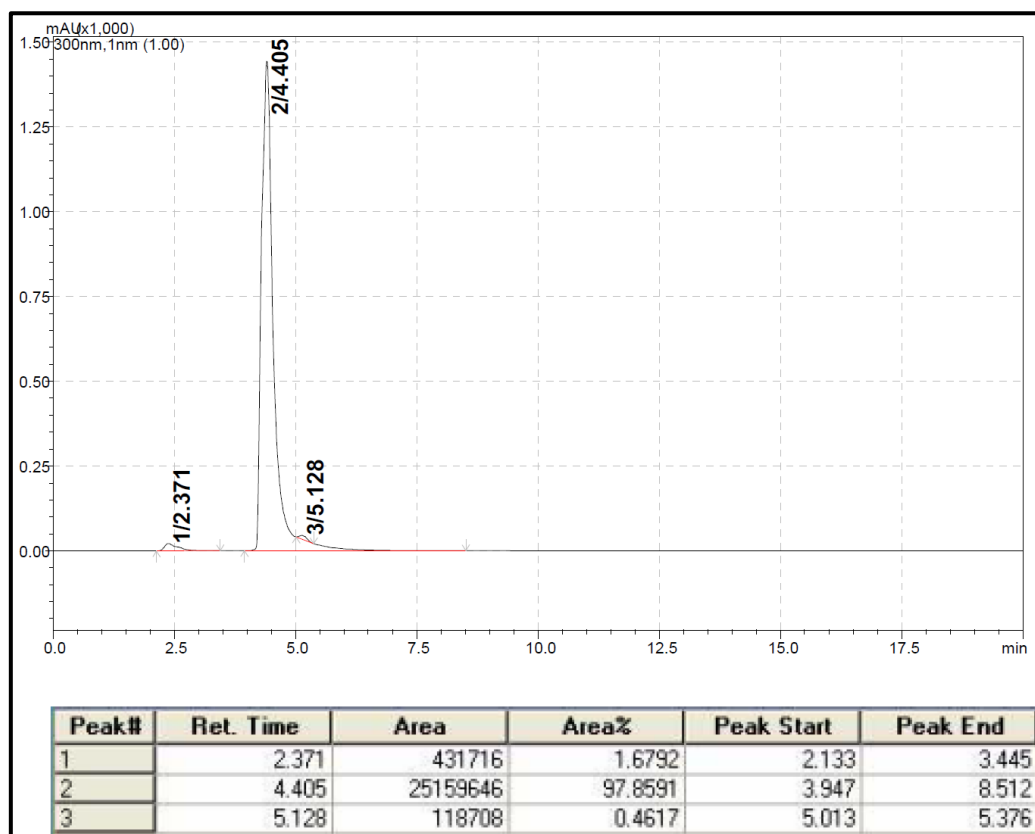


Figure S 46. Chromatogram of (E)-N'-(3,5-dimethoxybenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3d**).

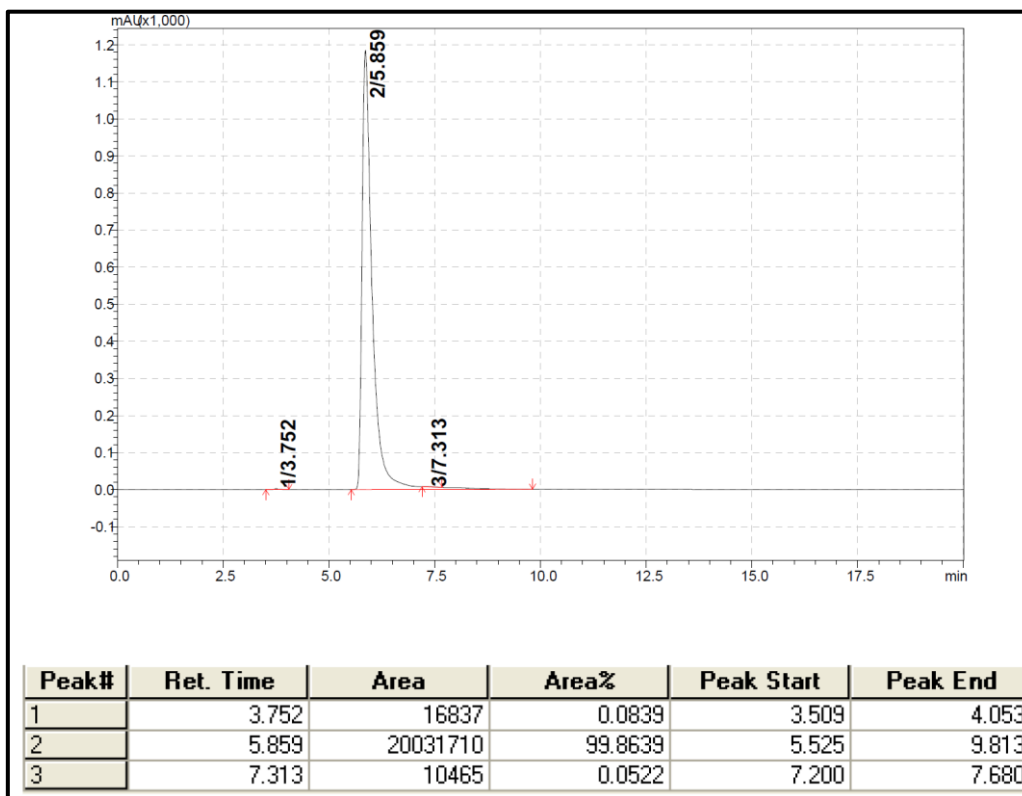


Figure S 47. Chromatogram of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-hydroxy-3-methoxybenzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3e**).

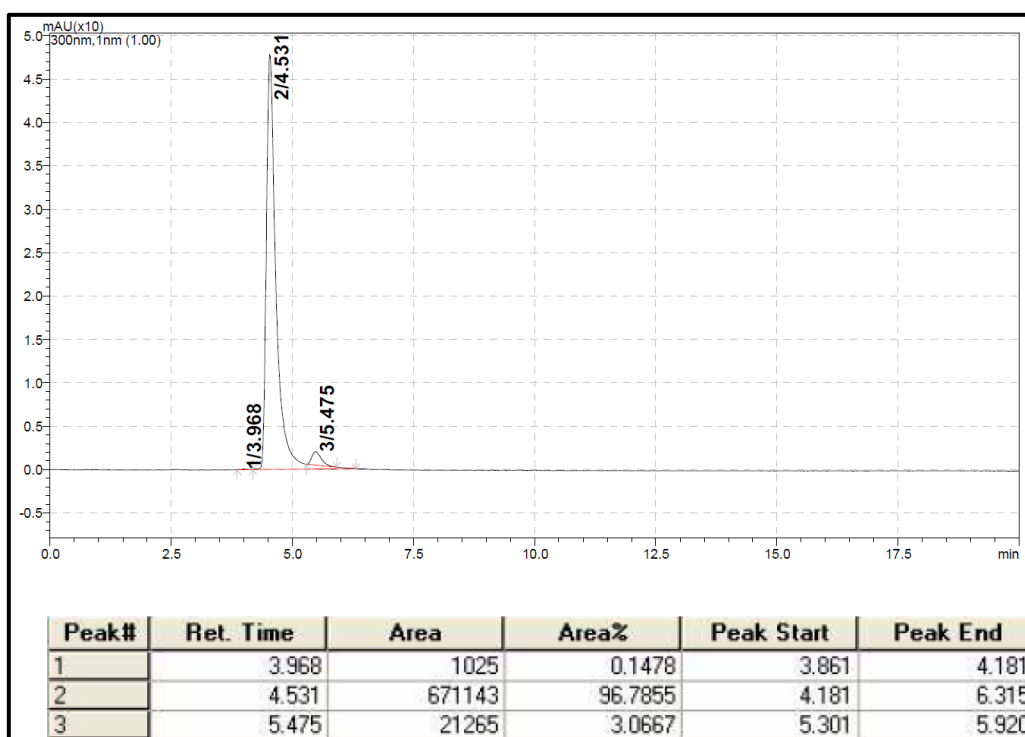


Figure S 48. Chromatogram of (E)-N'-benzylidene-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3f**).

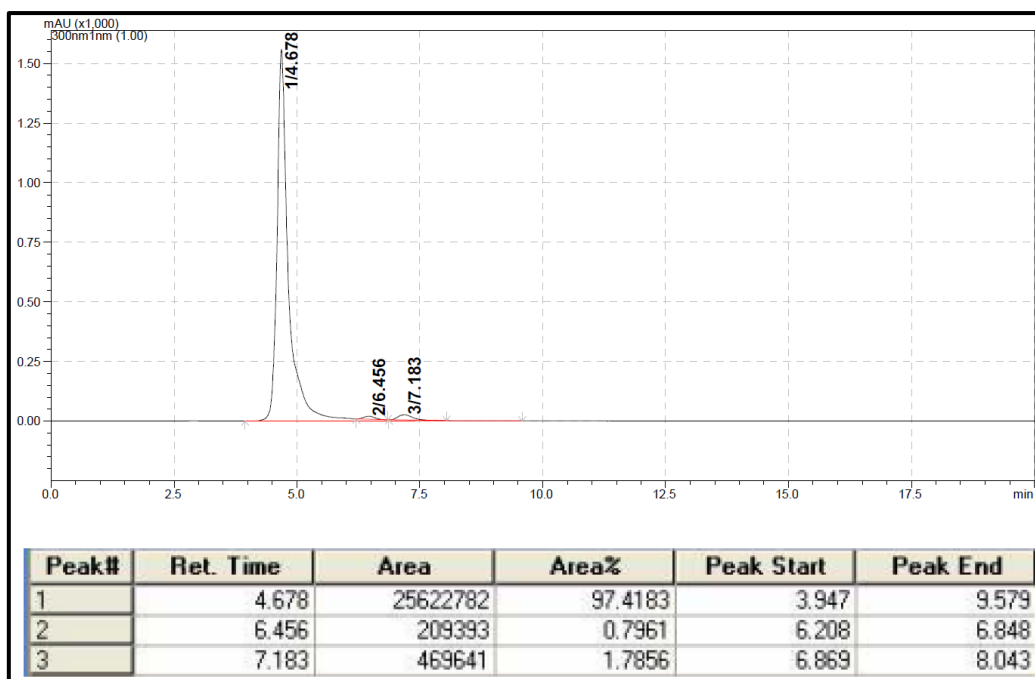


Figure S 49. Chromatogram of (E)-1-(4-hydroxy-3-methoxybenzyl)-N'-(4-(piperidin-1-yl)benzylidene)-1H-1,2,3-triazole-4-carbohydrazide (**3g**).

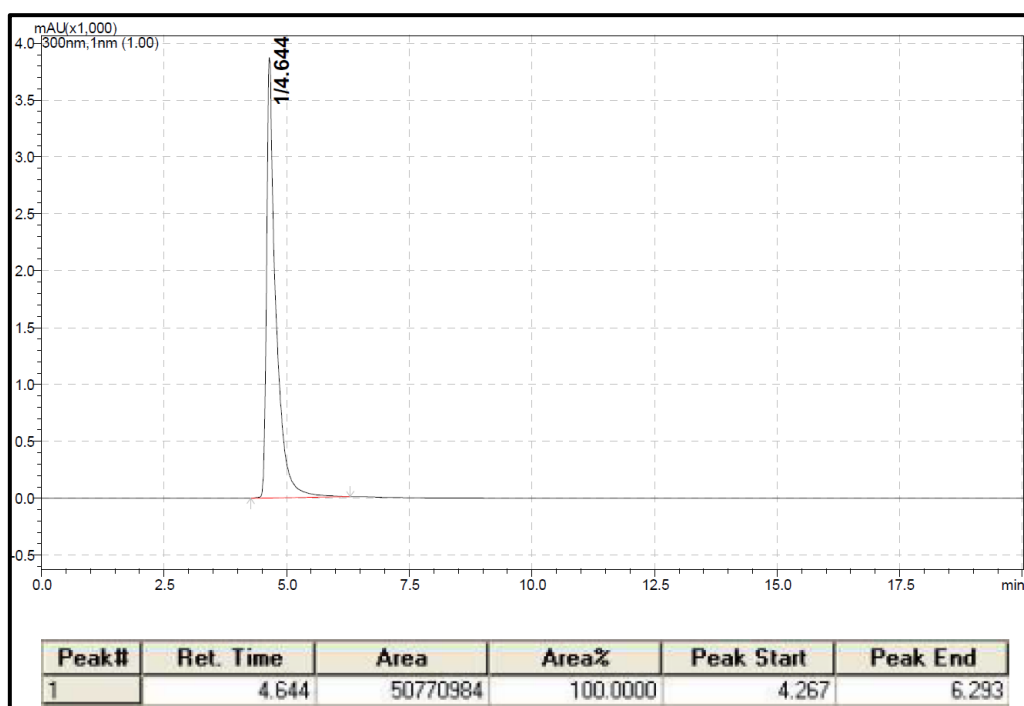


Figure S 50. Chromatogram of (E)-N'-(4-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3h**).

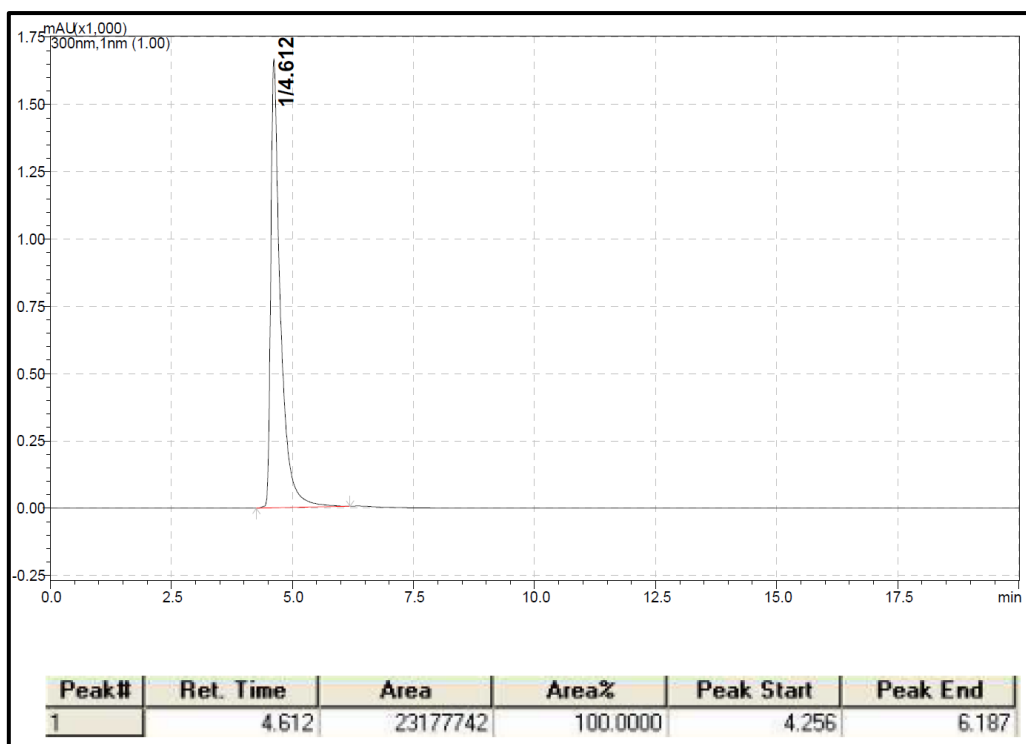


Figure S 51. Chromatogram of (E)-N'-(3-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3i**).

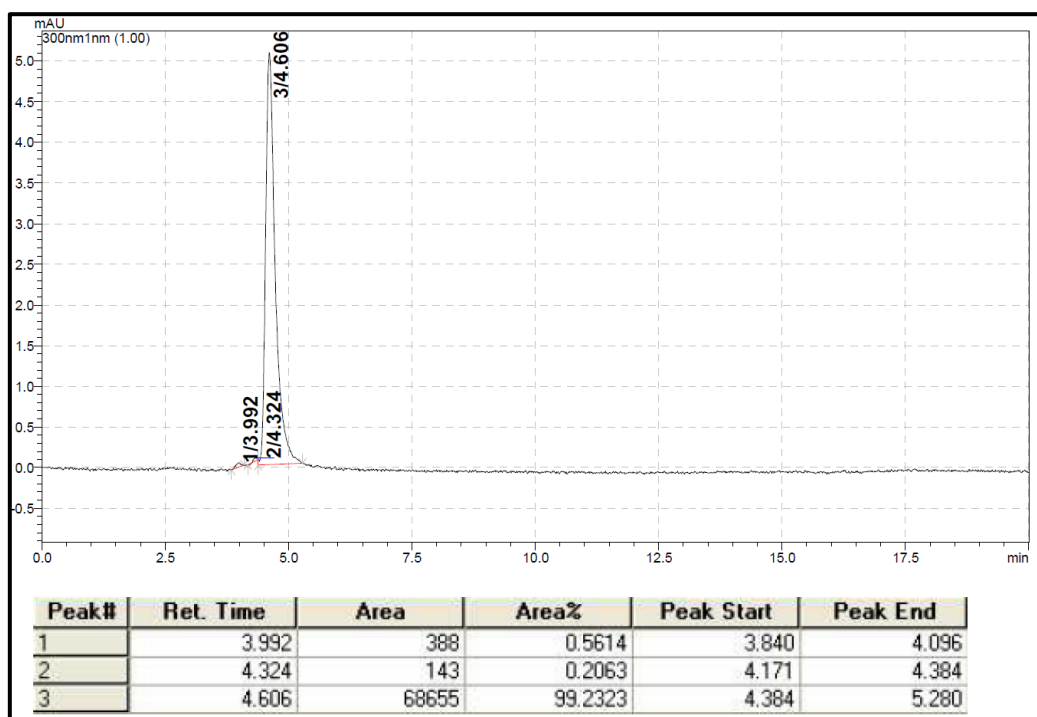


Figure S 52. Chromatogram of (E)-N'-(2-chlorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3j**).

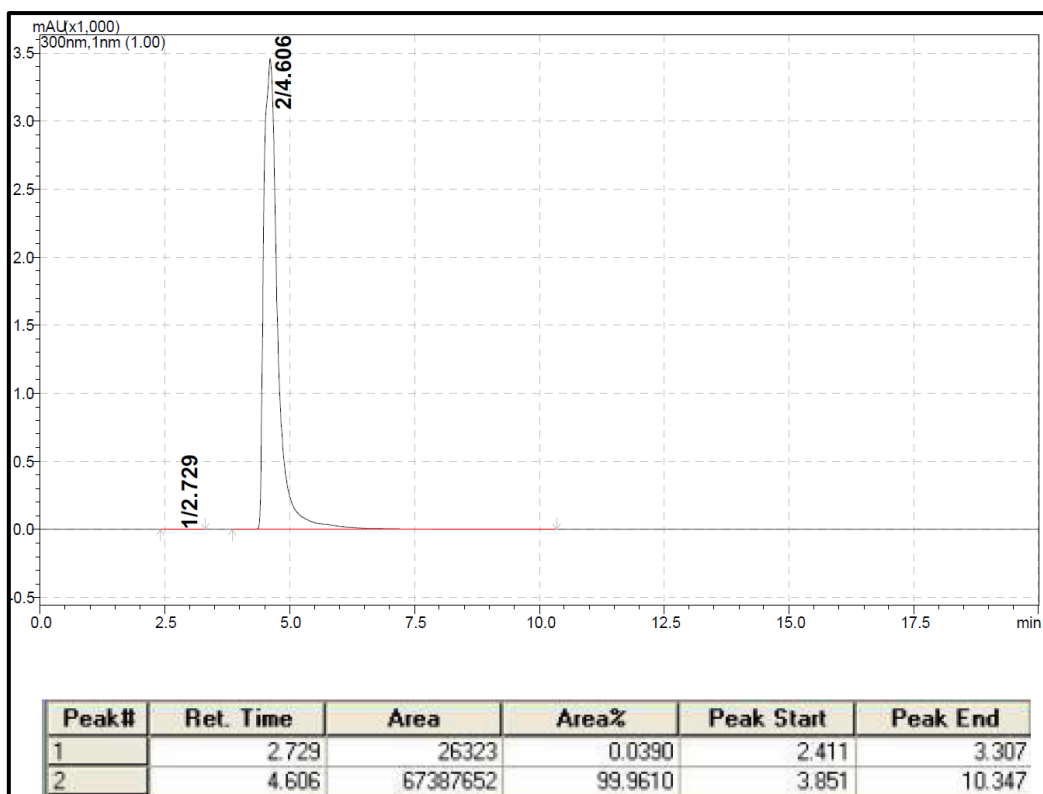


Figure S 53. Chromatogram of (E)-N'-(4-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3k**).

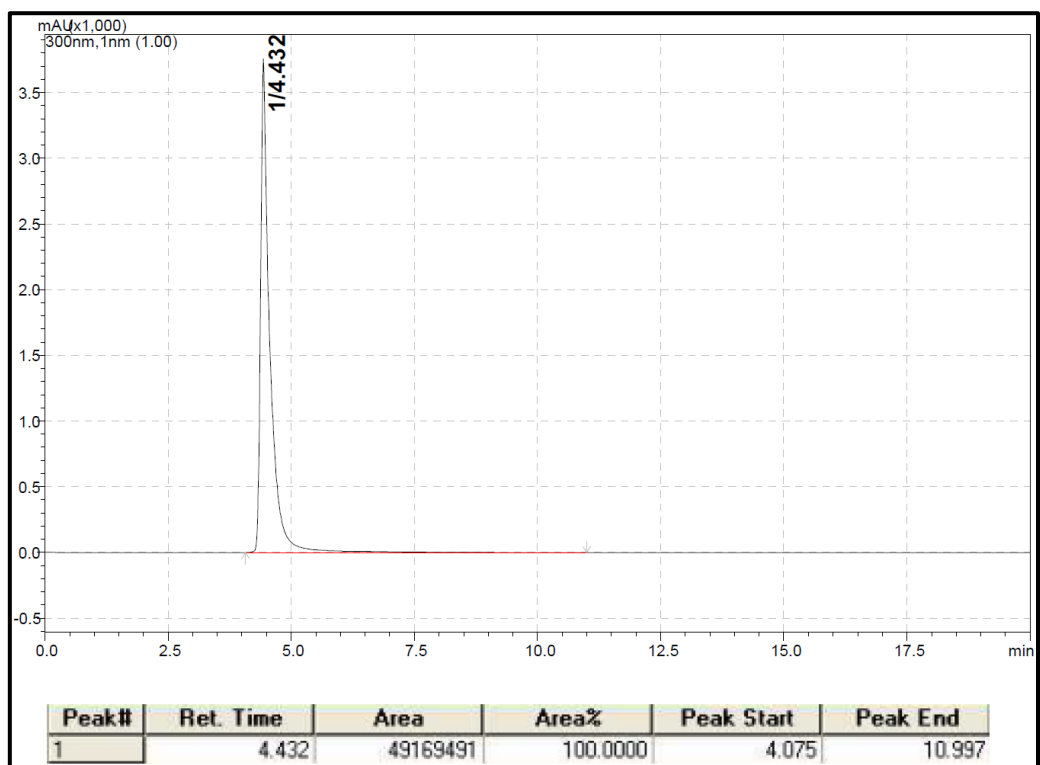


Figure S 54. Chromatogram of (E)-N'-(2-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3l**).

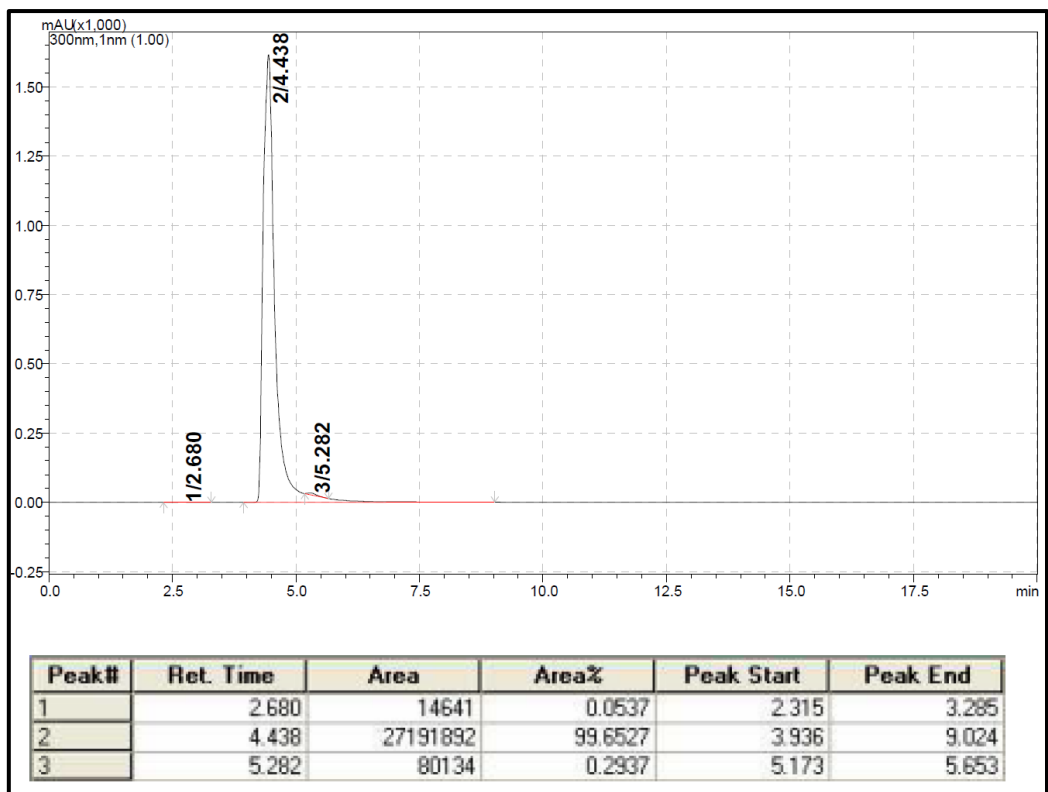


Figure S 55. Chromatogram of (E)-N'-(3-fluorobenzylidene)-1-(4-hydroxy-3-methoxybenzyl)-1H-1,2,3-triazole-4-carbohydrazide (**3m**).