

Supplementary Materials

Synthesis of 1-(5-Chloro-2-hydroxyphenyl)-5-oxopyrrolidine-3-carboxylic Acid Derivatives and Their Antioxidant Activity

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Figure S77. HRMS spectrum of **26**.

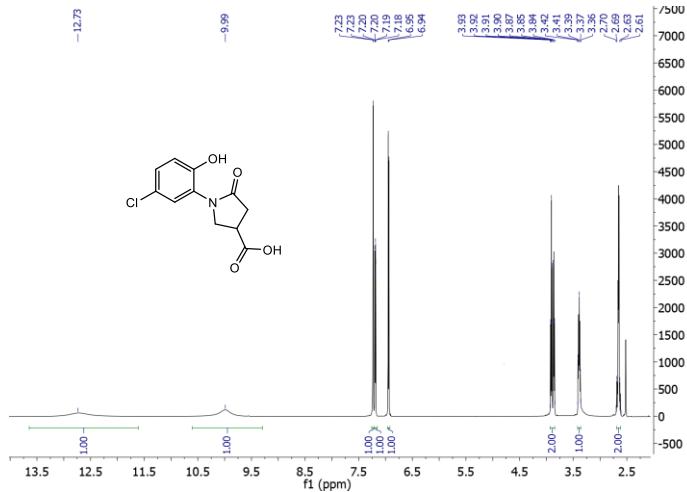


Figure S1. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **1**.

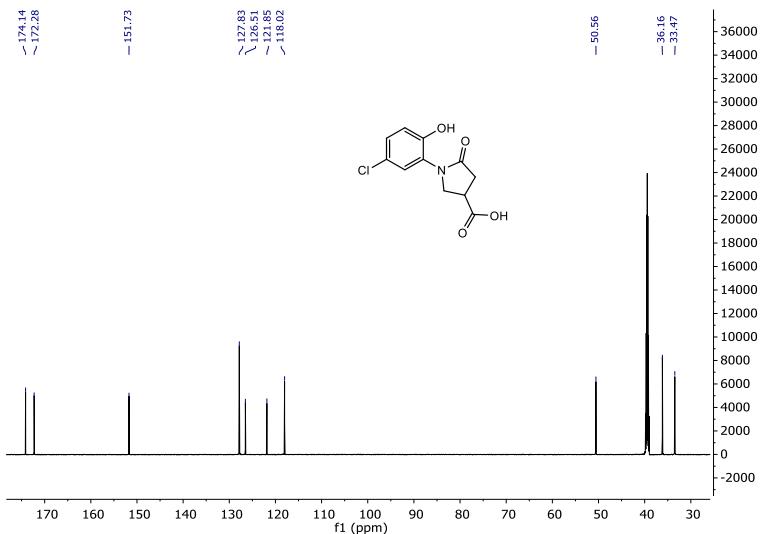


Figure S2. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **1**.

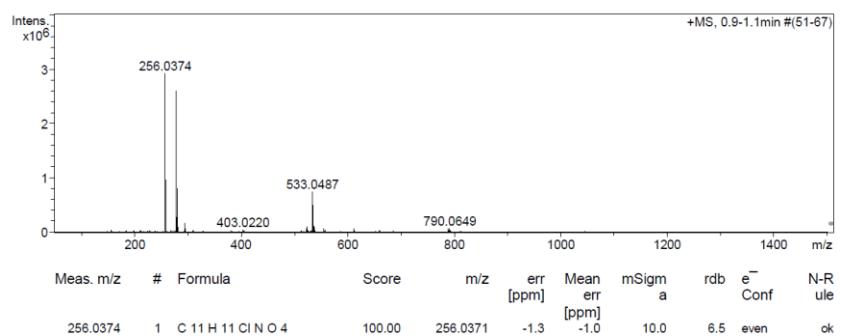


Figure S3. HRMS spectrum of **1**.

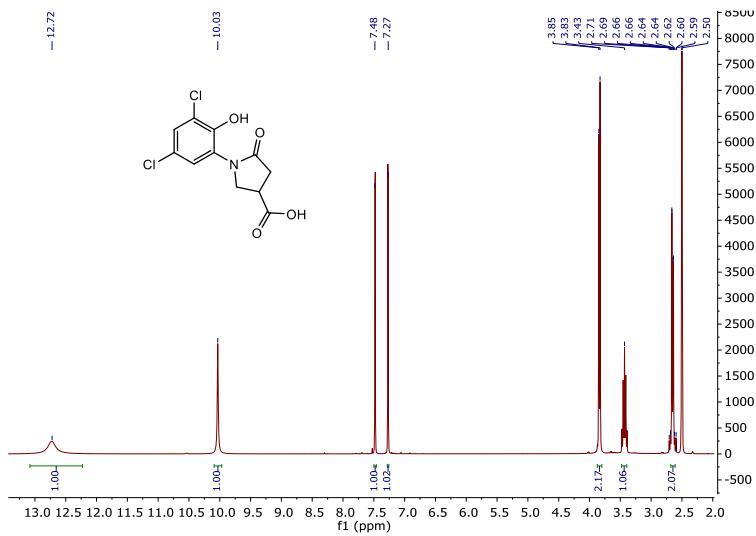


Figure S4. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 2.

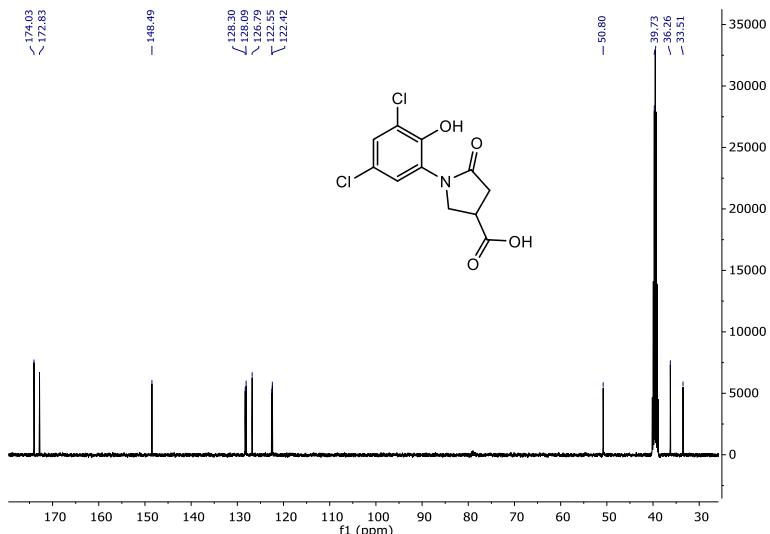


Figure S5. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 2.

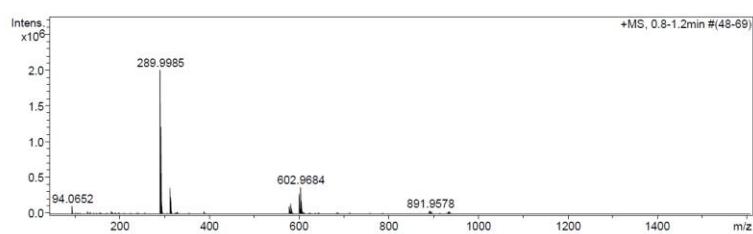


Figure S6. HRMS spectrum of **2**.

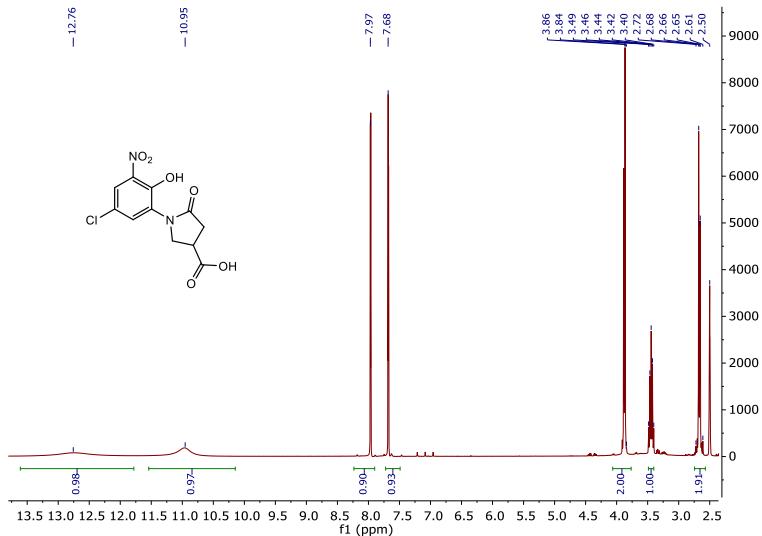


Figure S7. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 3.

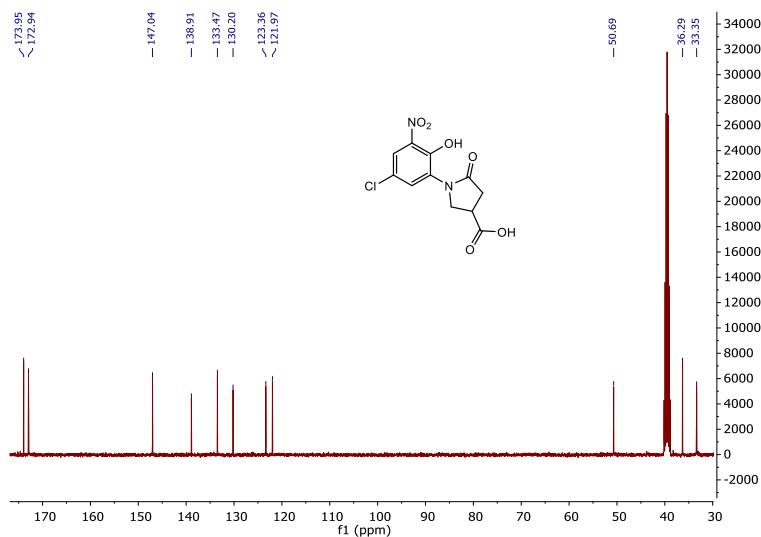


Figure S8. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 3.

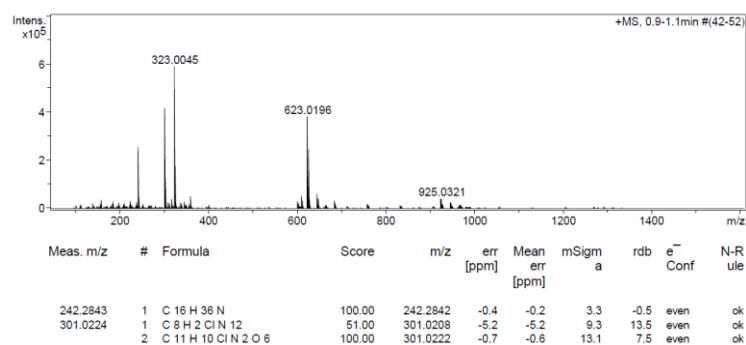


Figure S9. HRMS spectrum of 3.

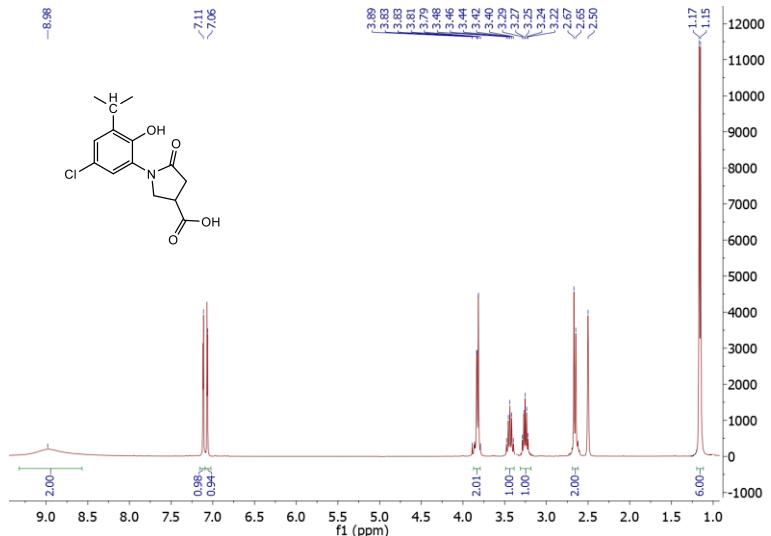


Figure S10. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **4**.

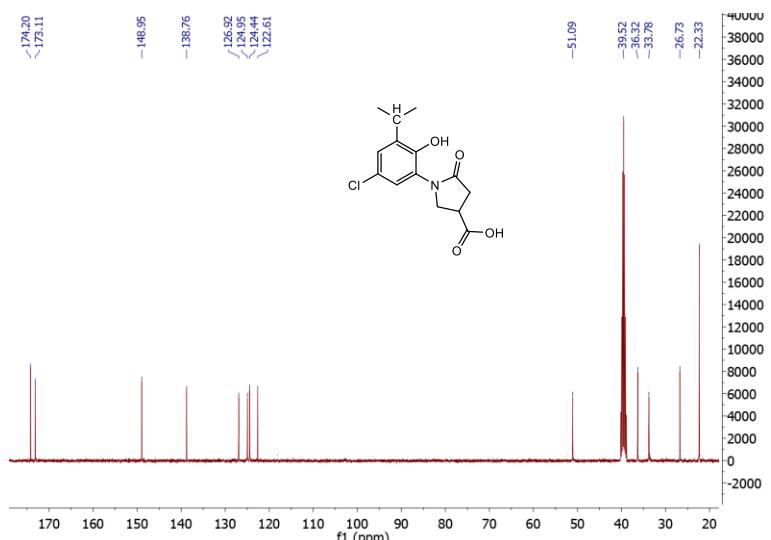


Figure S11. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **4**.

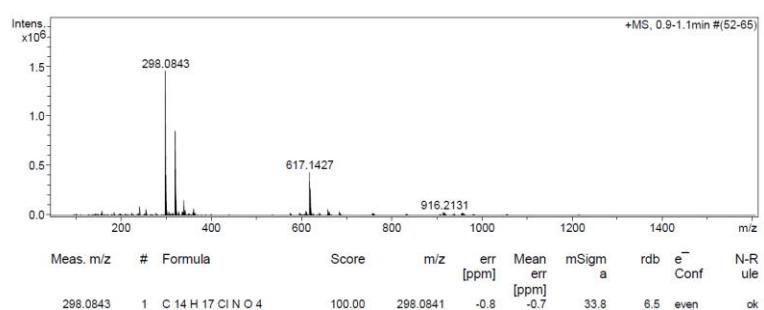


Figure S12. HRMS spectrum of **4**.

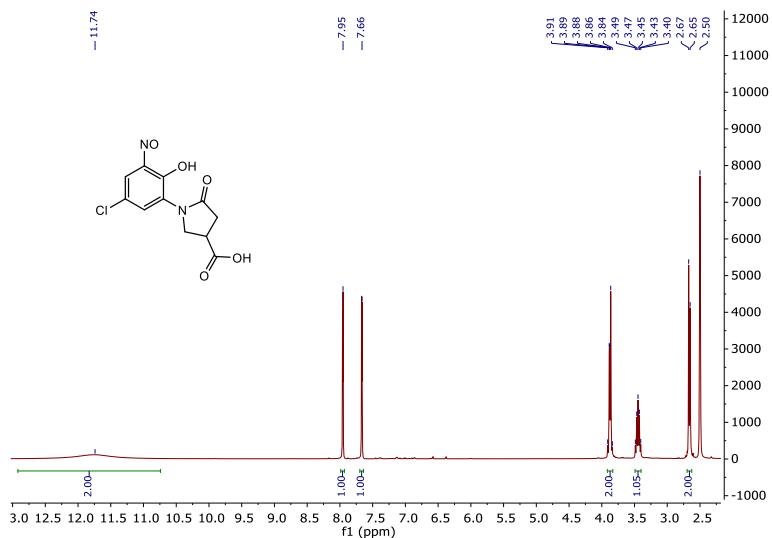


Figure S13. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 5.

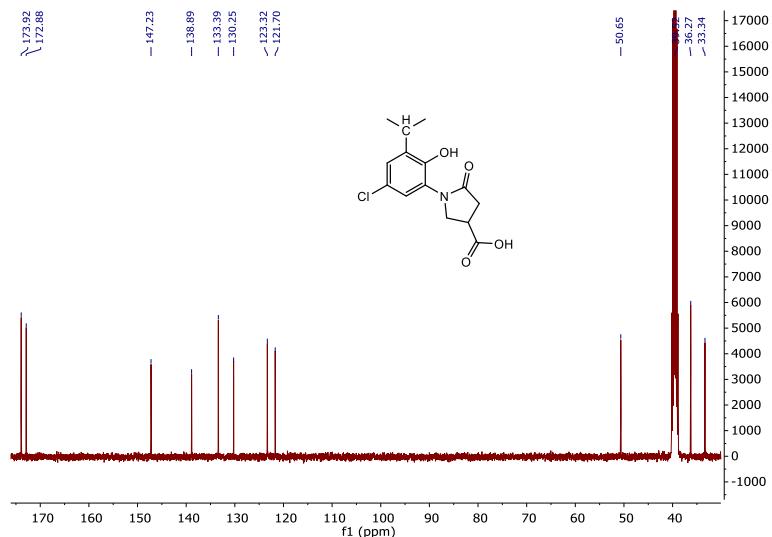


Figure S14. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 5.

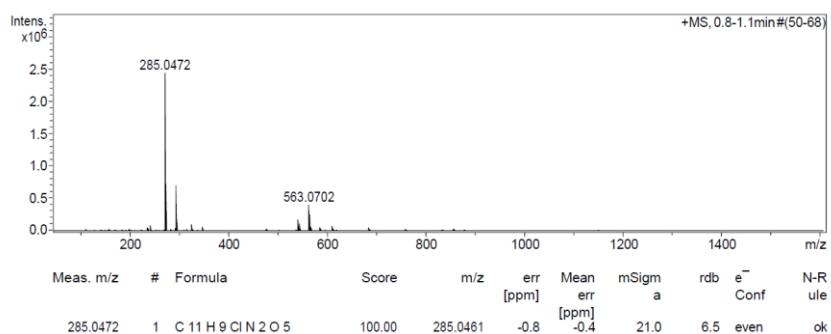


Figure S15. HRMS spectrum of 5.

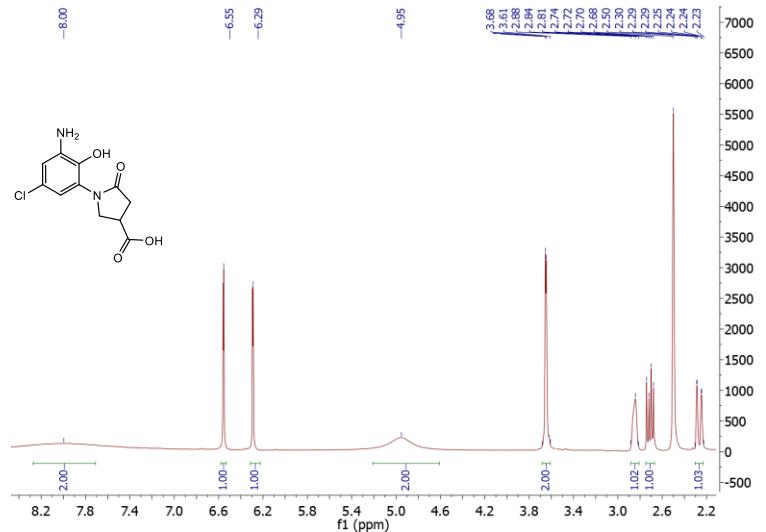


Figure S16. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **6**.

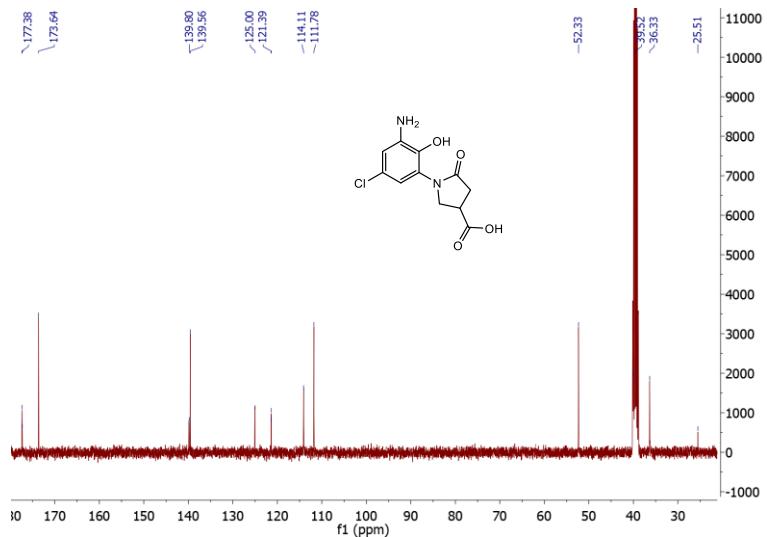


Figure S17. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **6**.

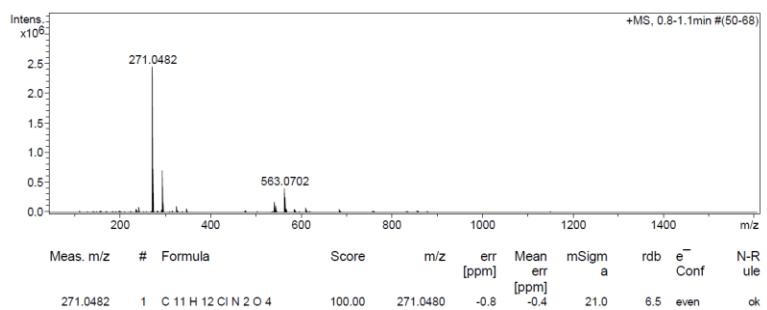


Figure S18. HRMS spectrum of **6**.

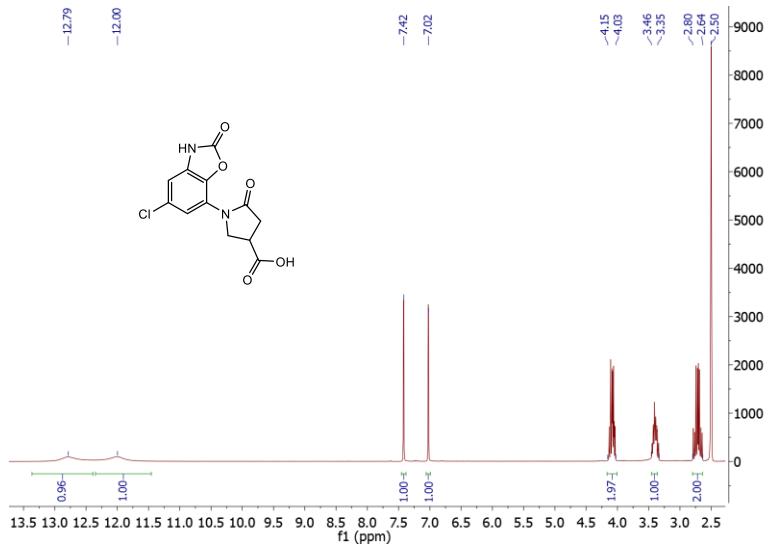


Figure S19. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 7.

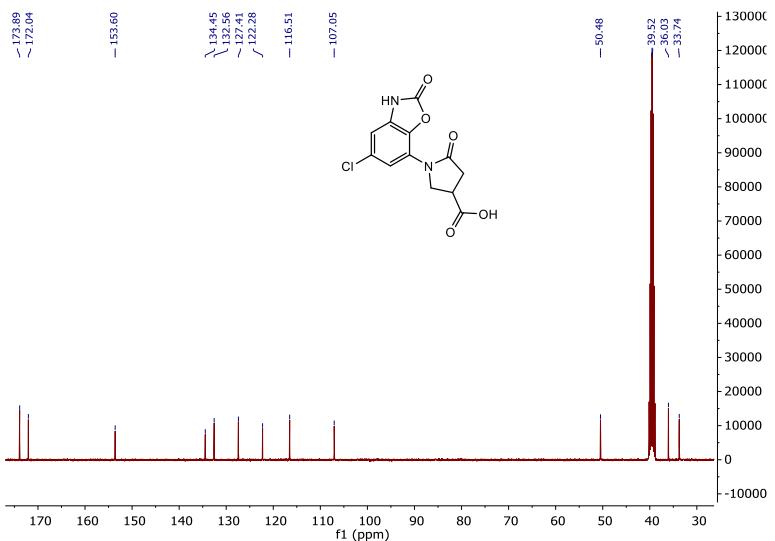


Figure S20. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 7.

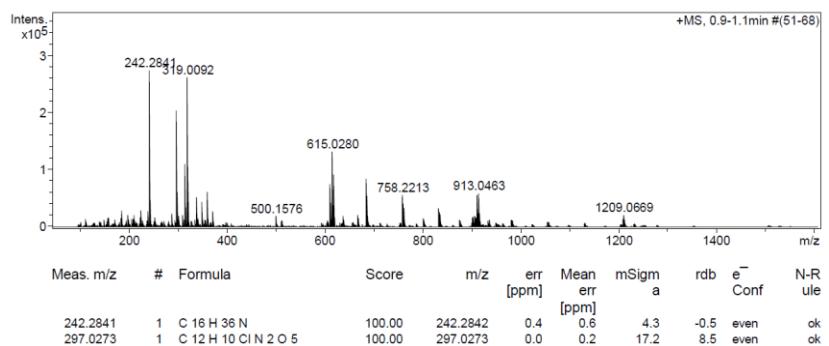


Figure S21. HRMS spectrum of 7.

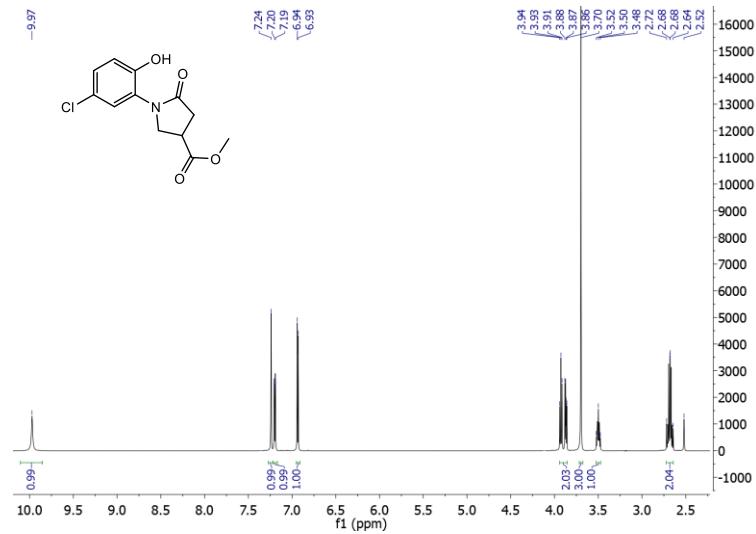


Figure S22. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 8.

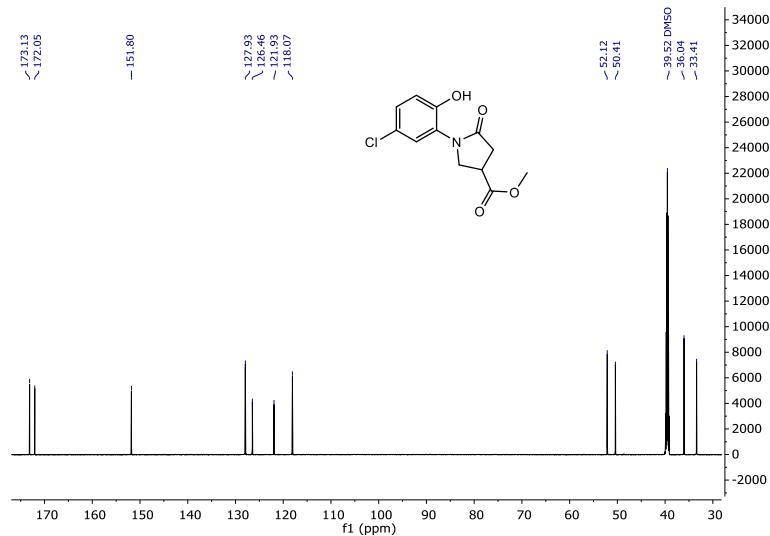


Figure S23. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 8.

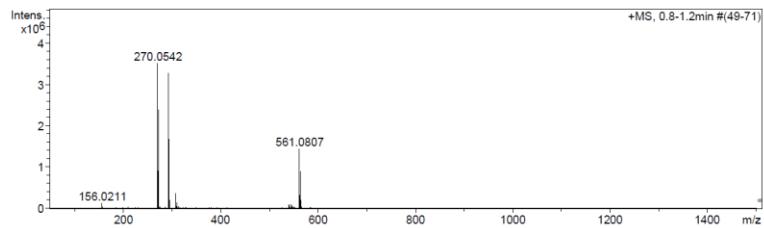


Figure S24. HRMS spectrum of 8.

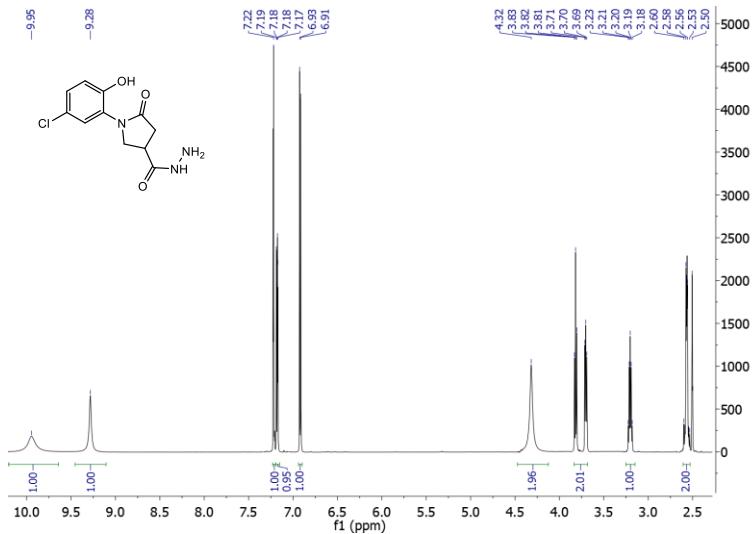


Figure S25. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **9**.

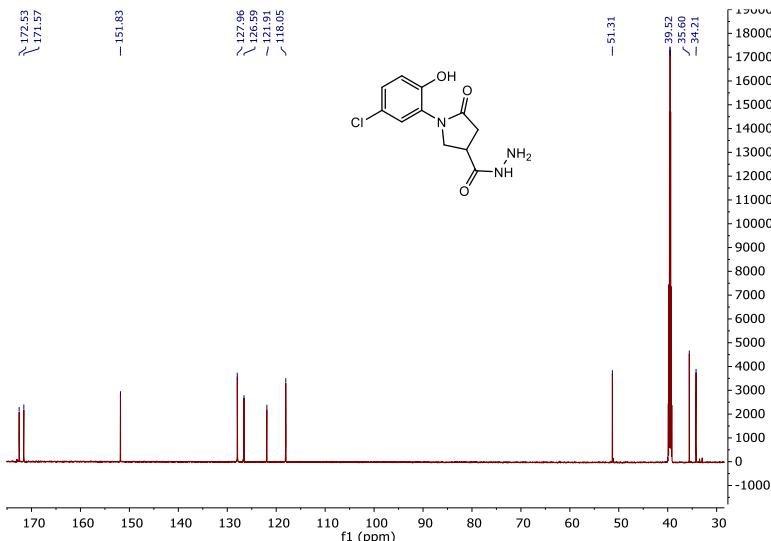


Figure S26. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 9.

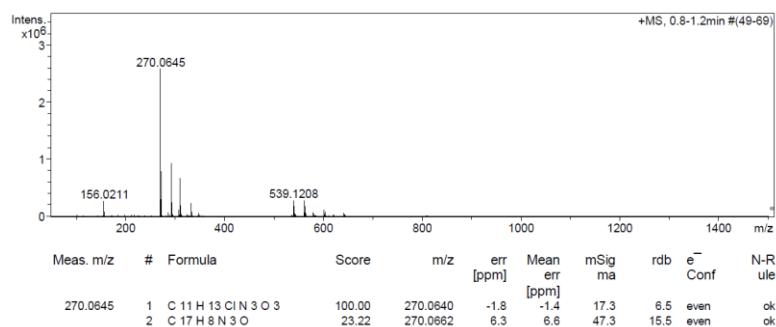


Figure S27. HRMS spectrum of 9.

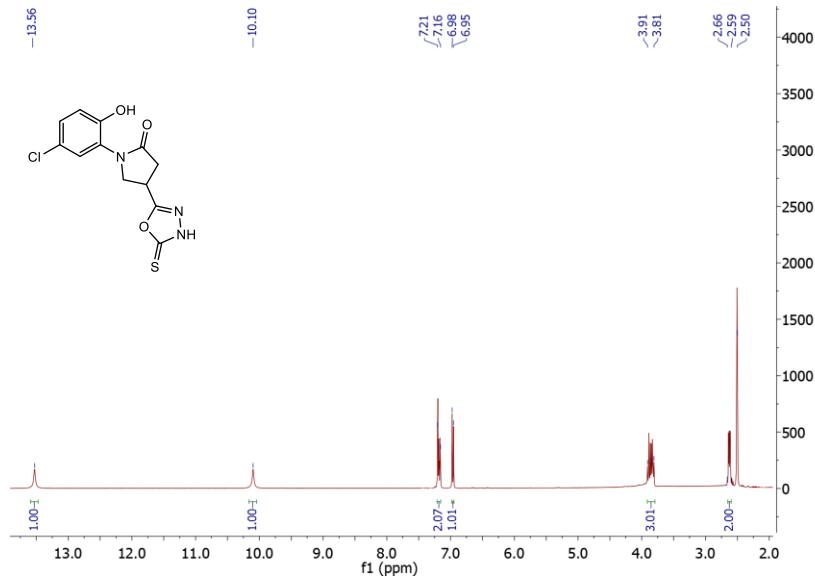


Figure S28. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **10**.

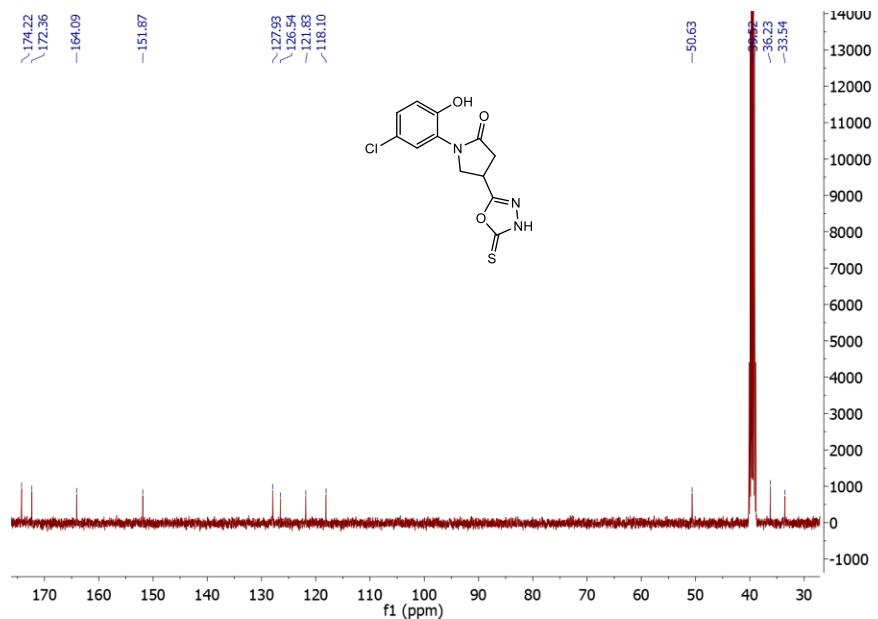


Figure S29. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **10**.

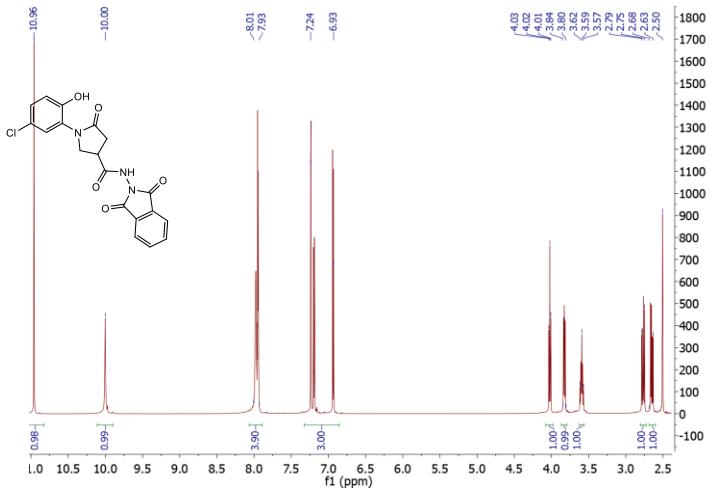


Figure S30. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **11**.

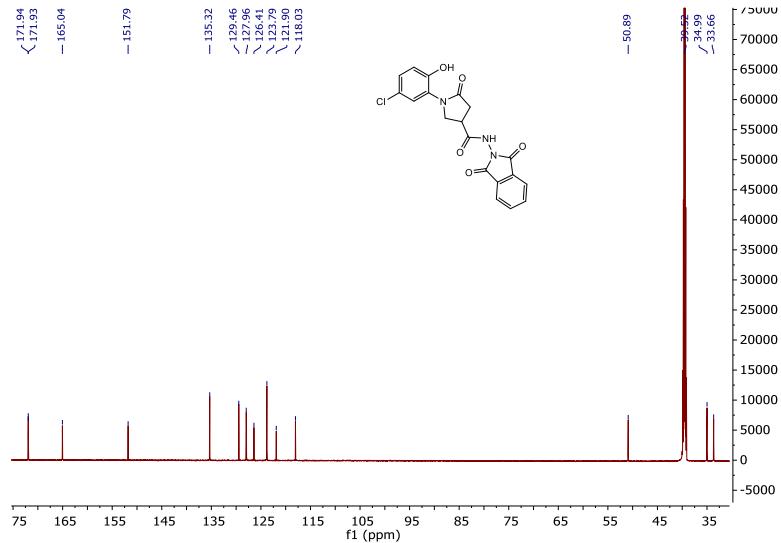


Figure S31. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **11**.

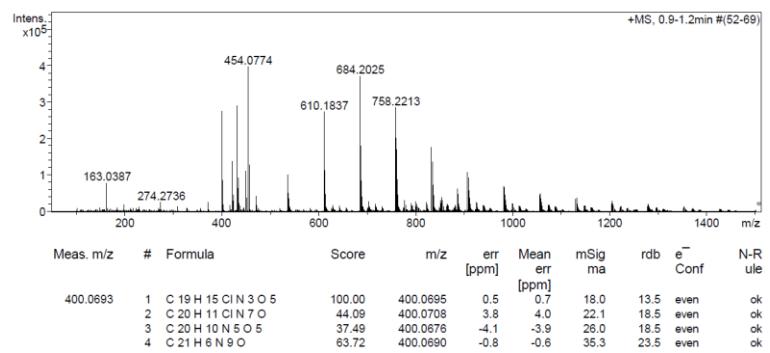


Figure S32. HRMS spectrum of **11**.

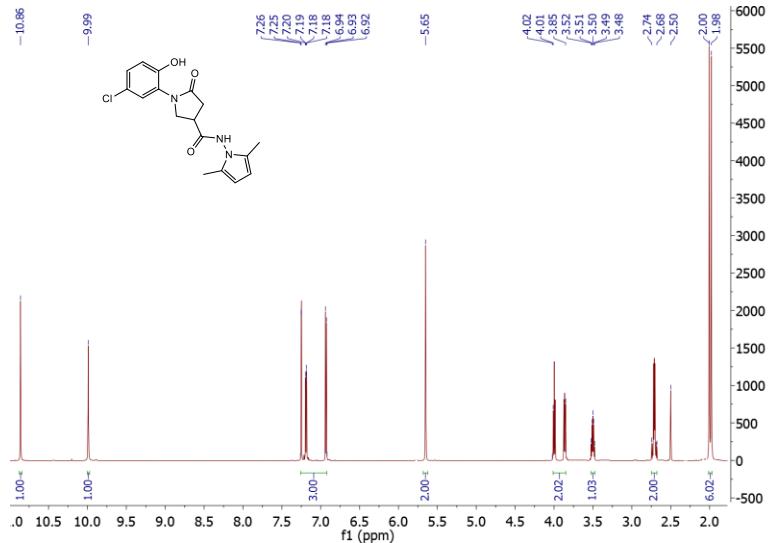


Figure S33. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **12**.

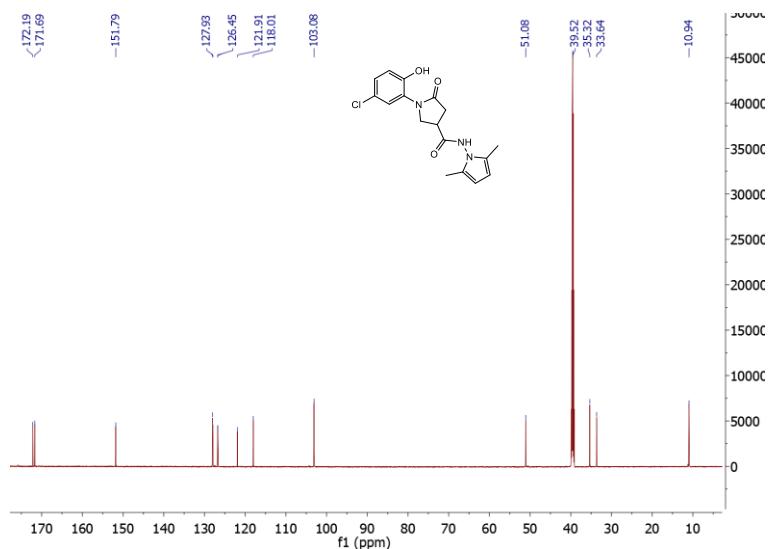


Figure S34. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **12**.

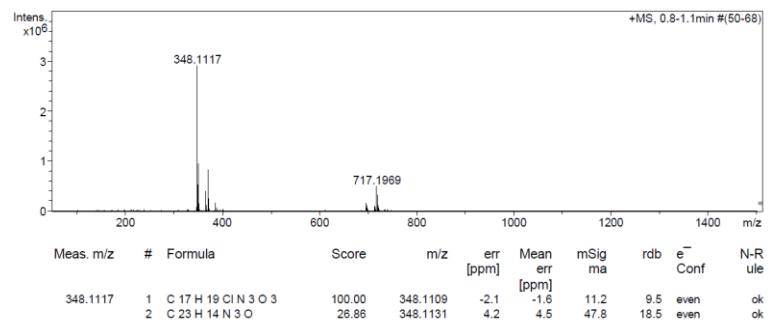


Figure S35. HRMS spectrum of **12**.

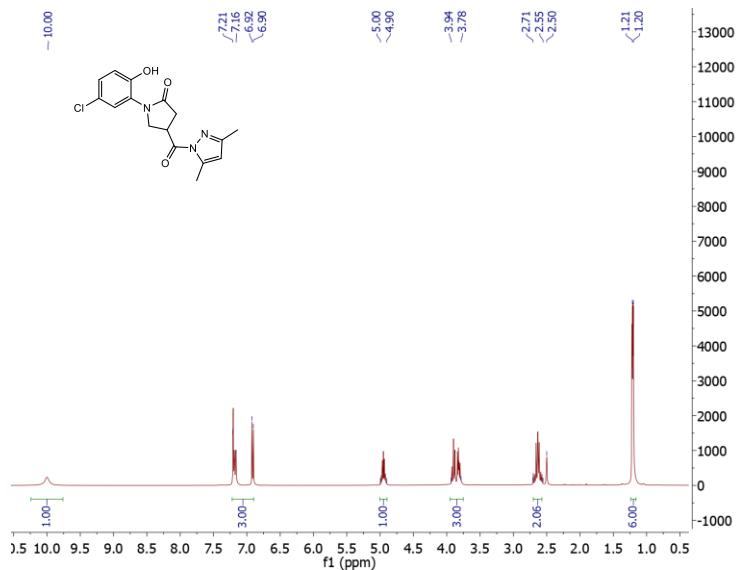


Figure S36. ^1H -NMR (400 MHz, DMSO-d₆) spectrum of **13**.

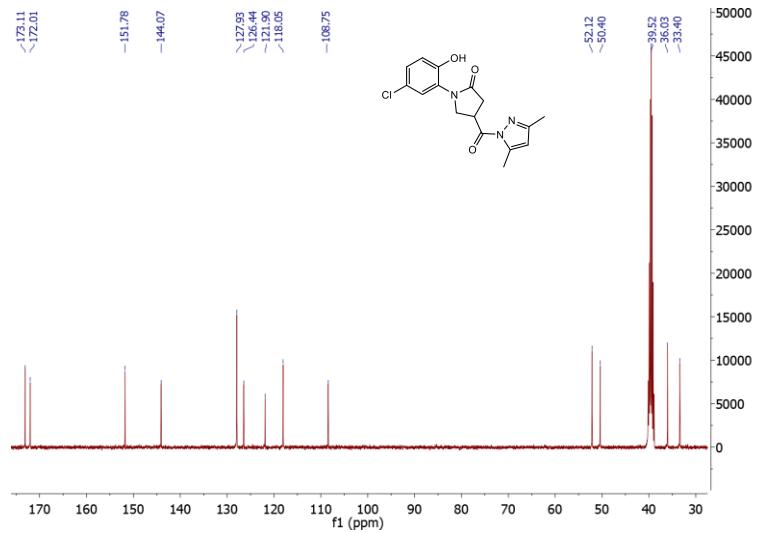


Figure S37. ^{13}C -NMR (400 MHz, DMSO-d₆) spectrum of **13**.

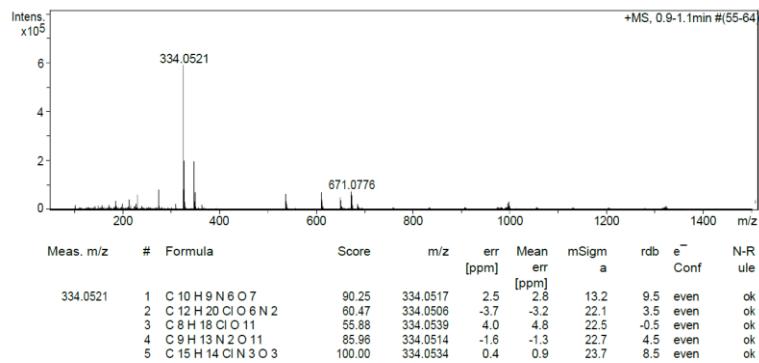


Figure S38. HRMS spectrum of **13**.

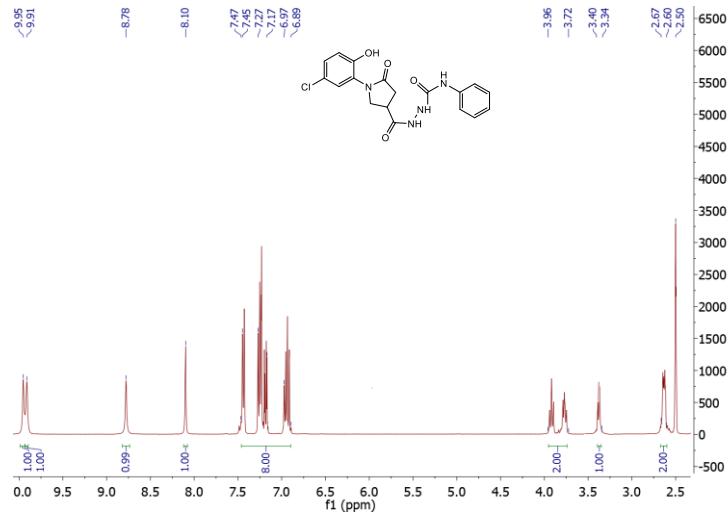


Figure S39. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **14**.

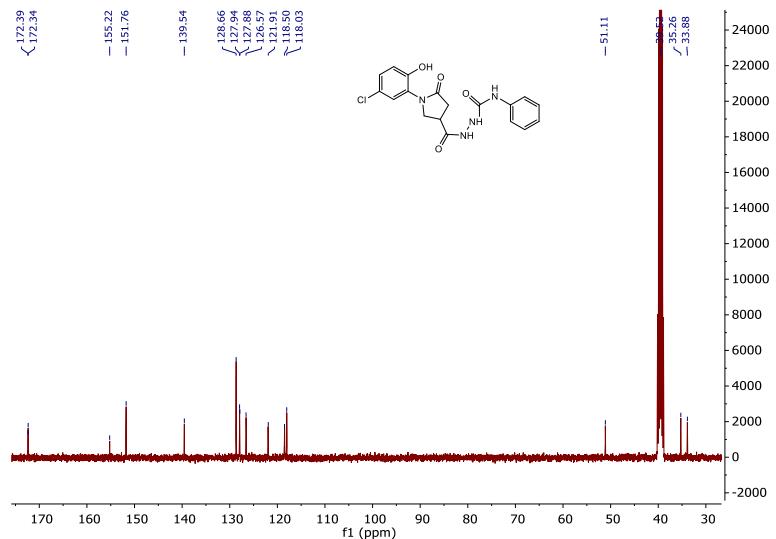


Figure S40. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **14**.

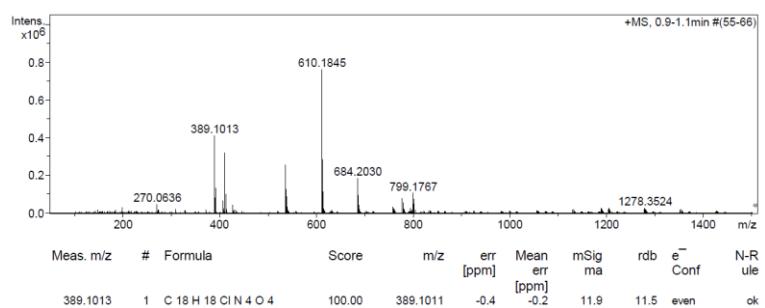


Figure S41. HRMS spectrum of **14**.

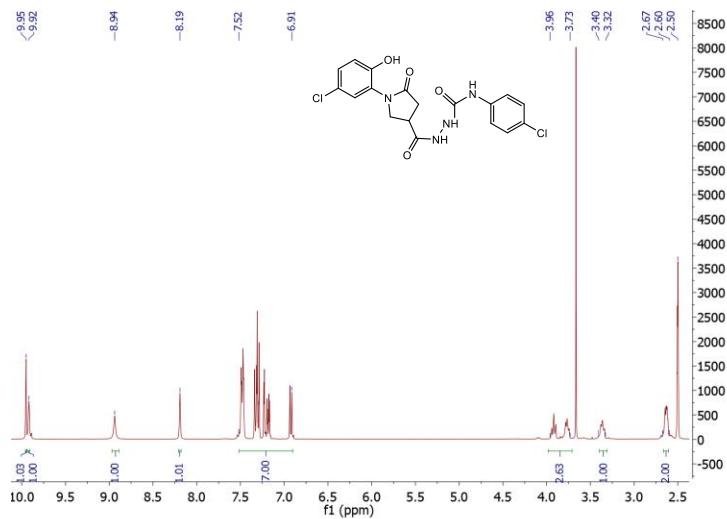


Figure S42. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **15**.

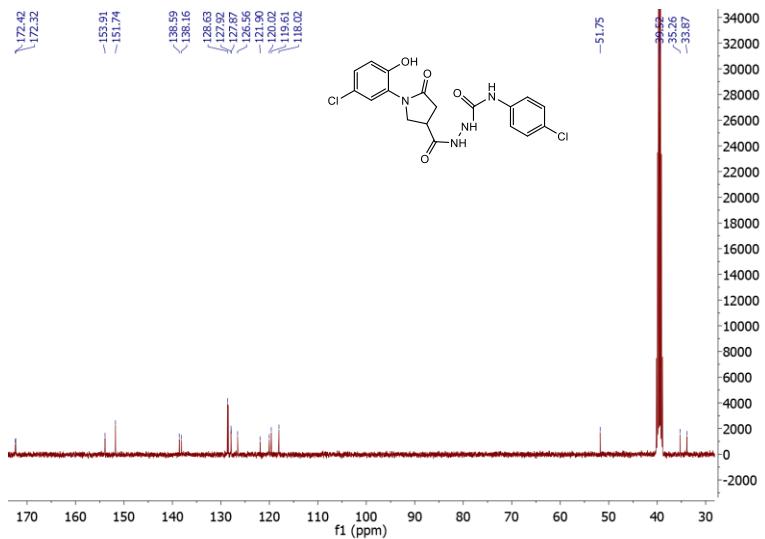


Figure S43. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **15**.

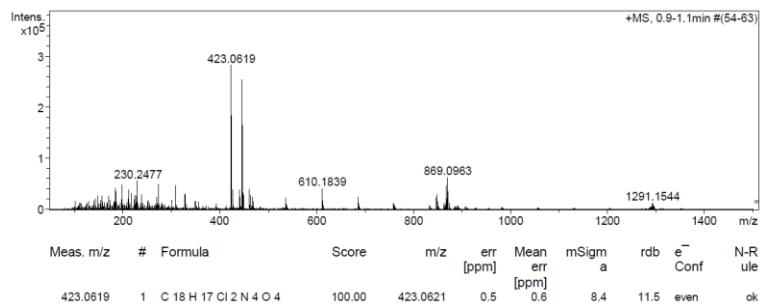


Figure S44. HRMS spectrum of **15**.

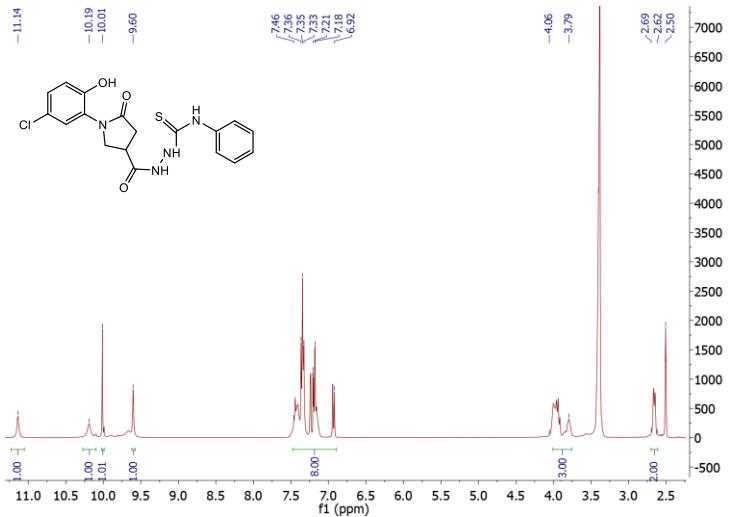


Figure S45. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **16**.

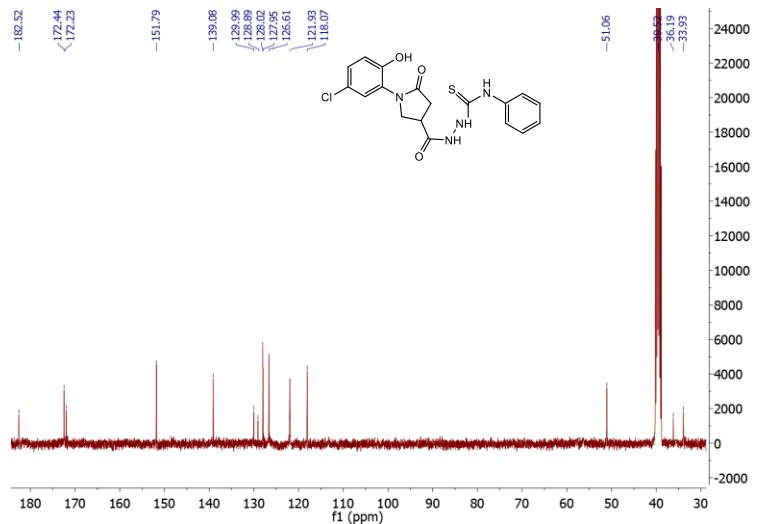


Figure S46. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **16**.

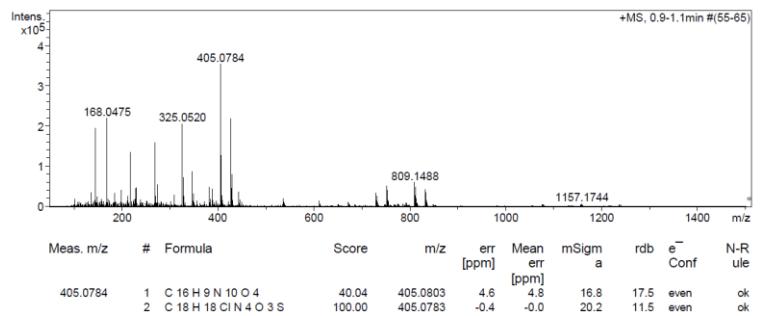


Figure S47. HRMS spectrum of **16**.

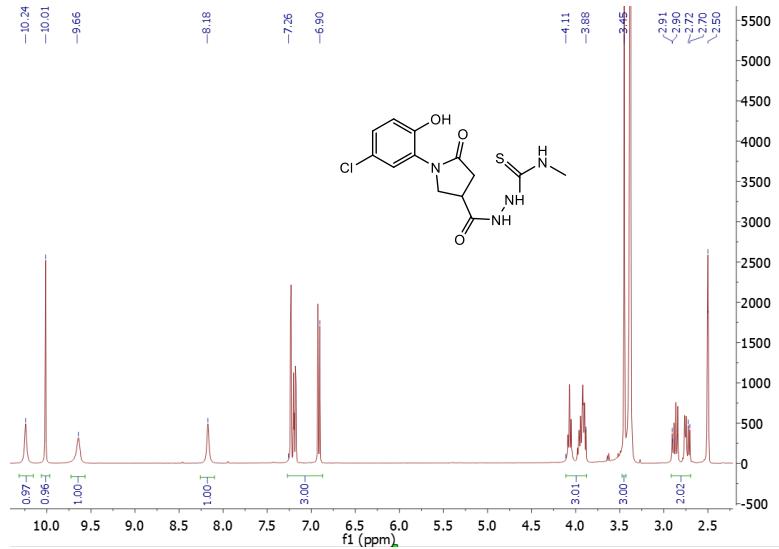


Figure S48. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 17.

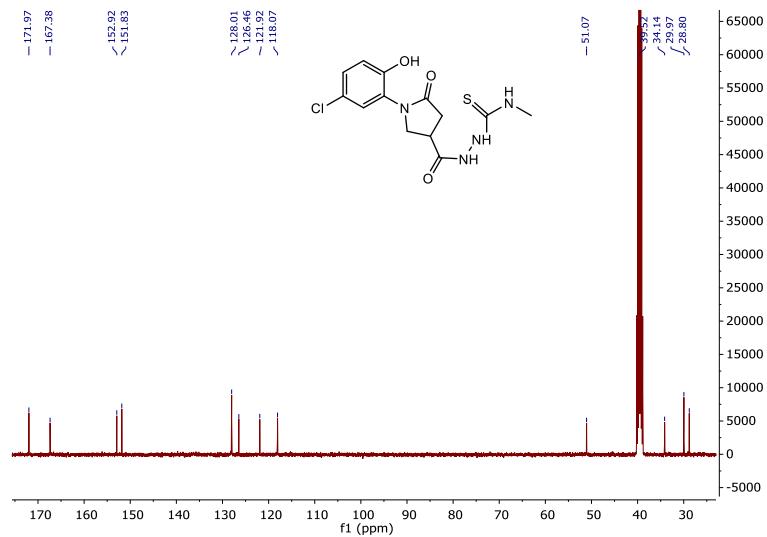


Figure S49. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 17.

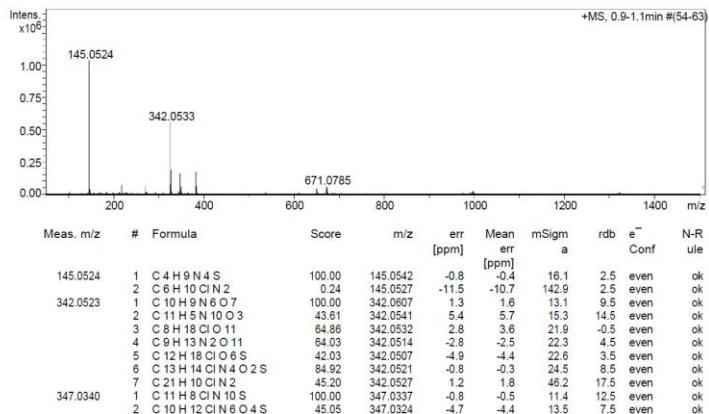


Figure S50. HRMS spectrum of 17.

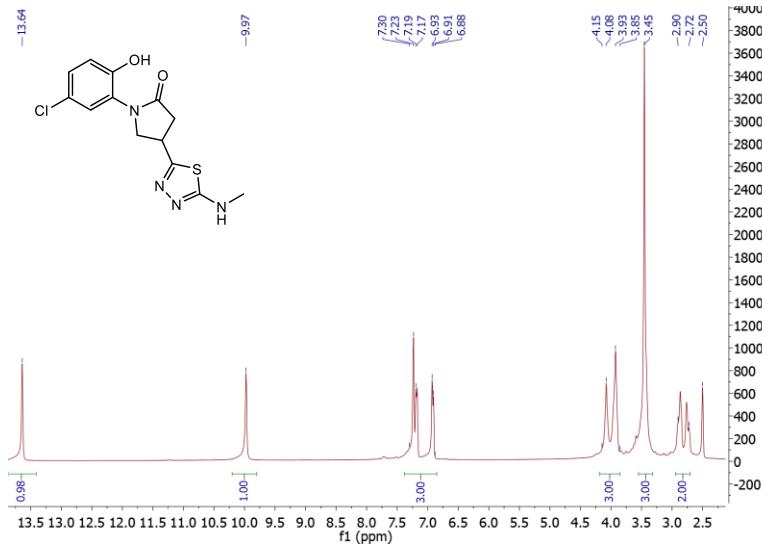


Figure S51. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **18**.

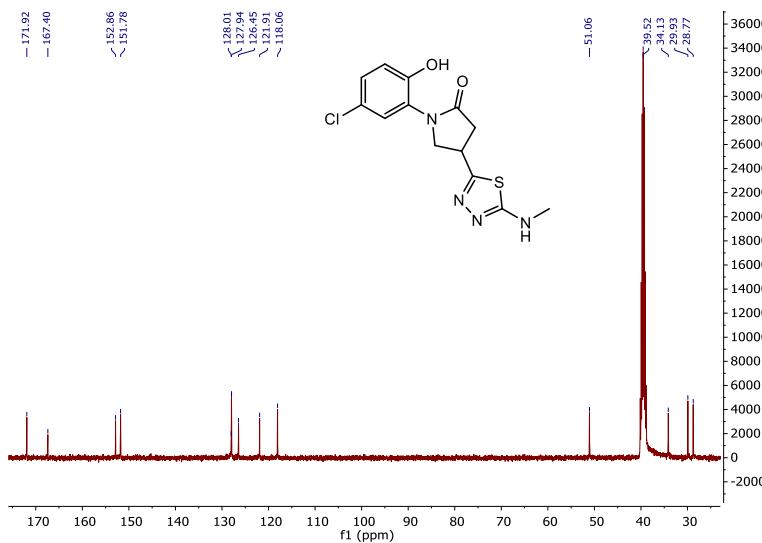


Figure S52. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **18**.

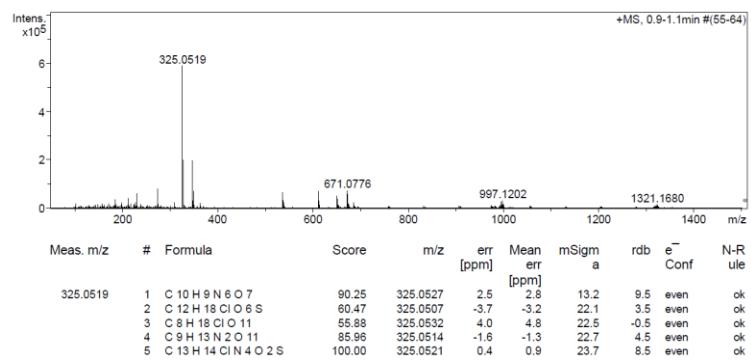


Figure S53. HRMS spectrum of **18**.

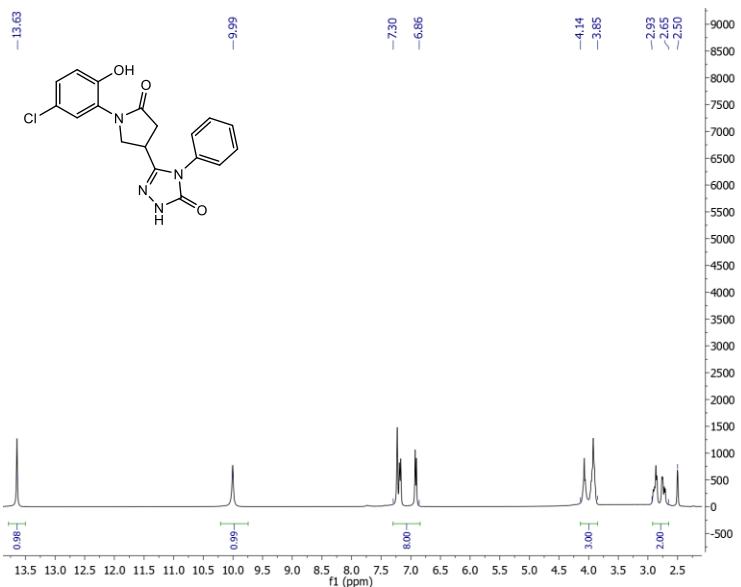


Figure S54. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **19**.

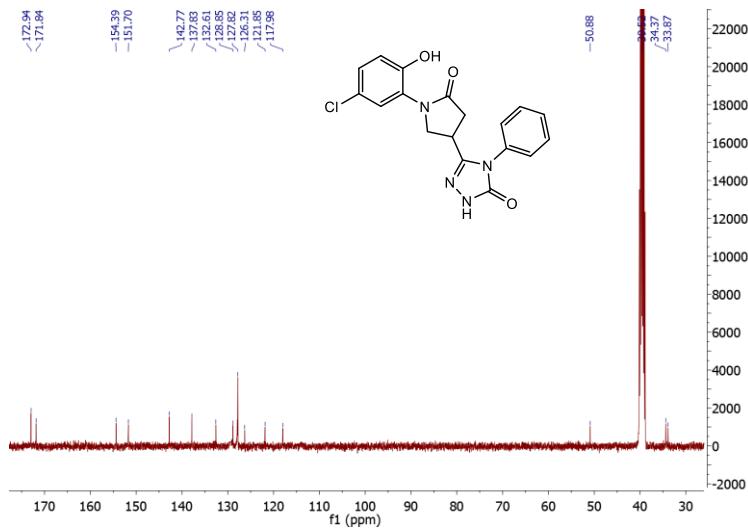


Figure S55. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **19**.

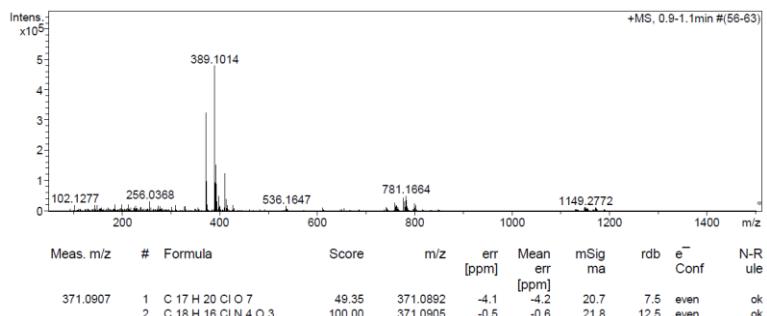


Figure S56. HRMS spectrum of **19**.

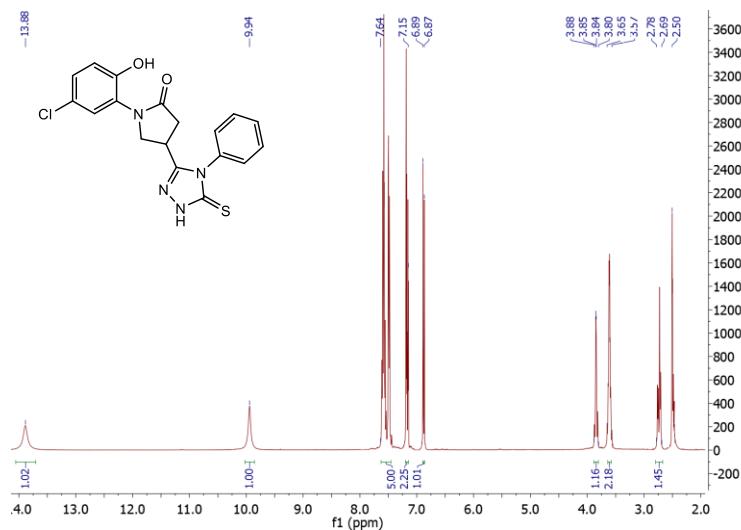


Figure S57. ^1H -NMR (400 MHz, DMSO-d₆) spectrum of **20**.

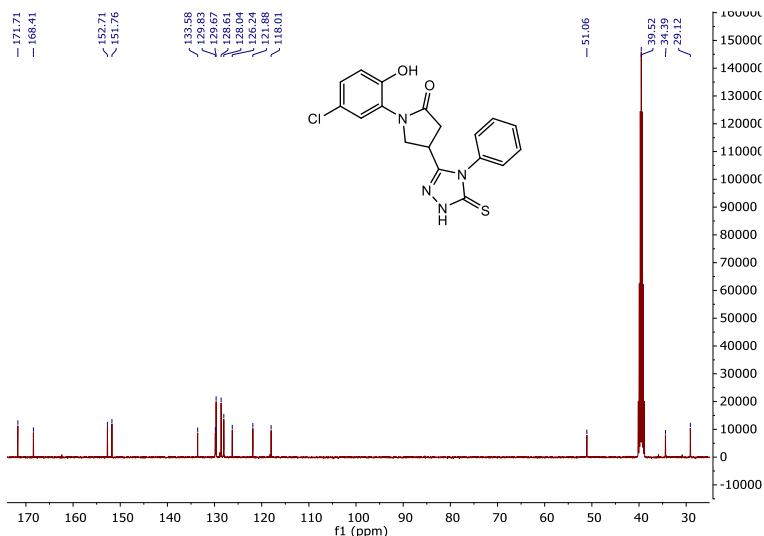


Figure S58. ^{13}C -NMR (400 MHz, DMSO-d₆) spectrum of **20**.

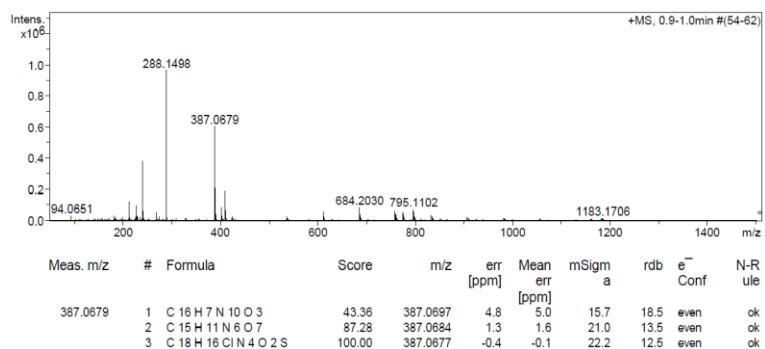


Figure S59. HRMS spectrum of **20**.

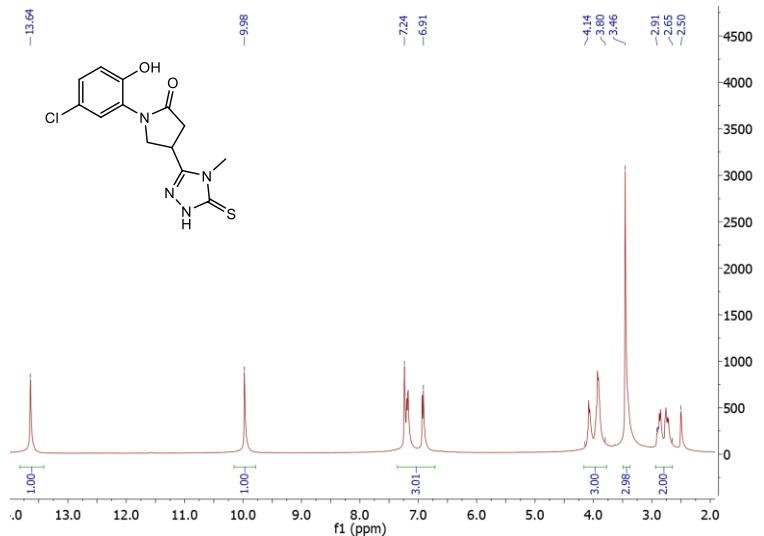


Figure S60. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **21**.

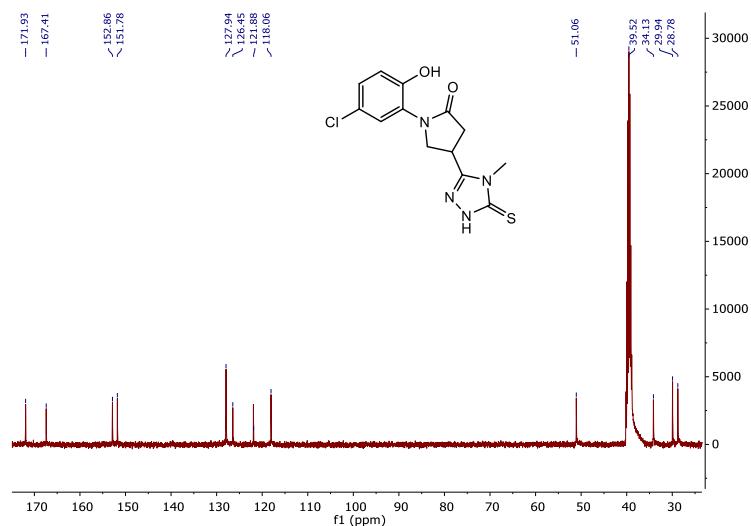


Figure S61. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **21**.

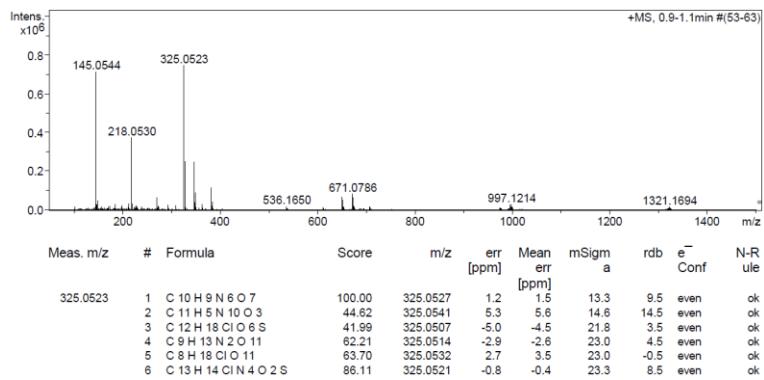


Figure S62. HRMS spectrum of **21**.

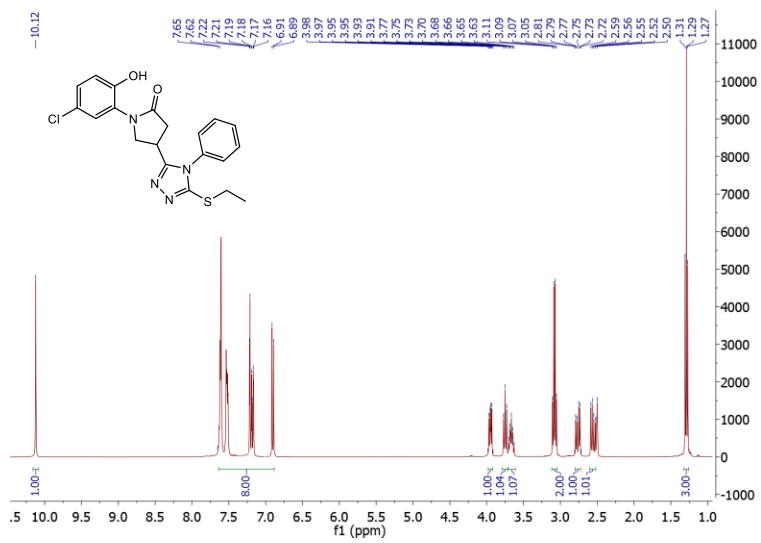


Figure S63. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **22**.

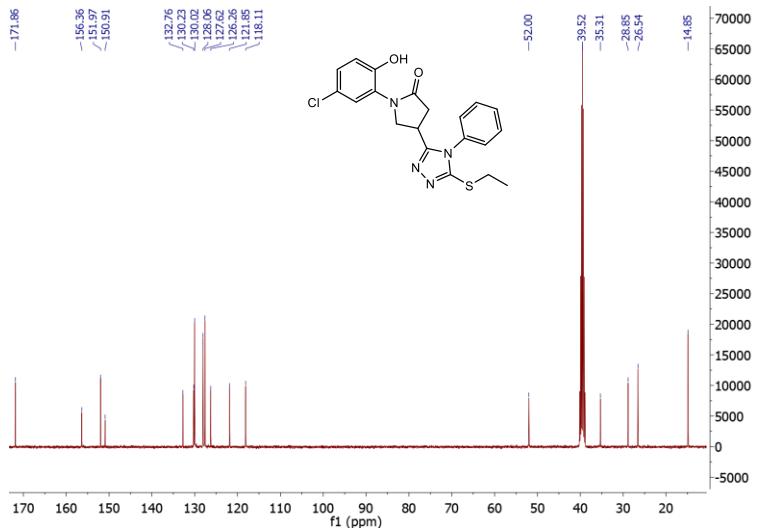


Figure S64. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **22**.

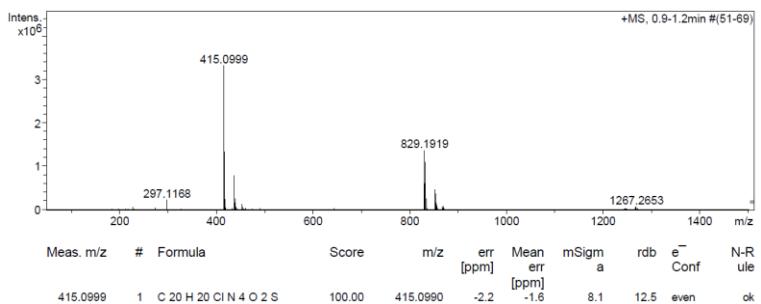


Figure S65. HRMS spectrum of **22**.

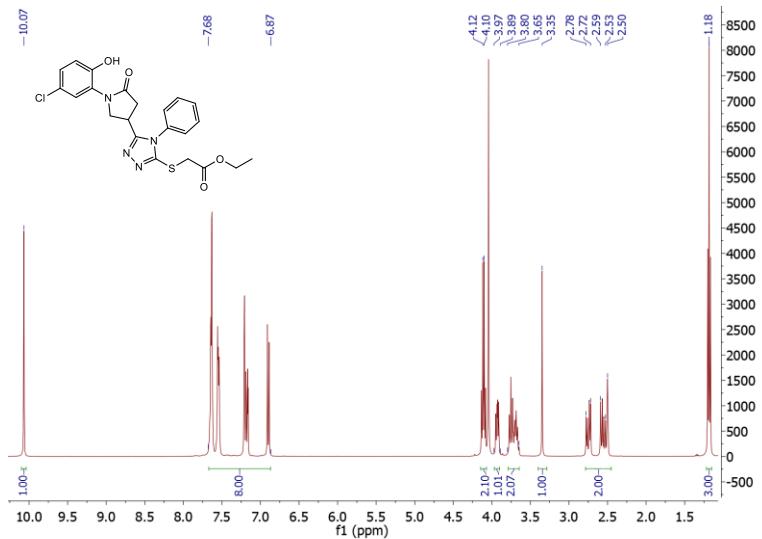


Figure S66. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **23**.

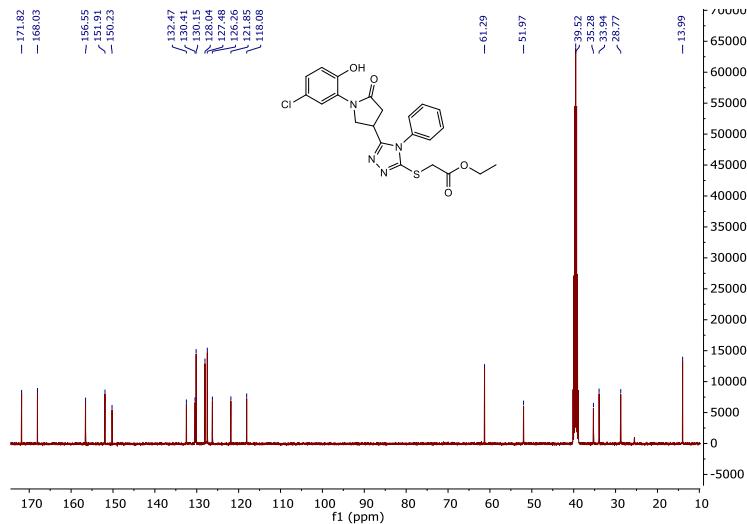


Figure S67. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **23**.

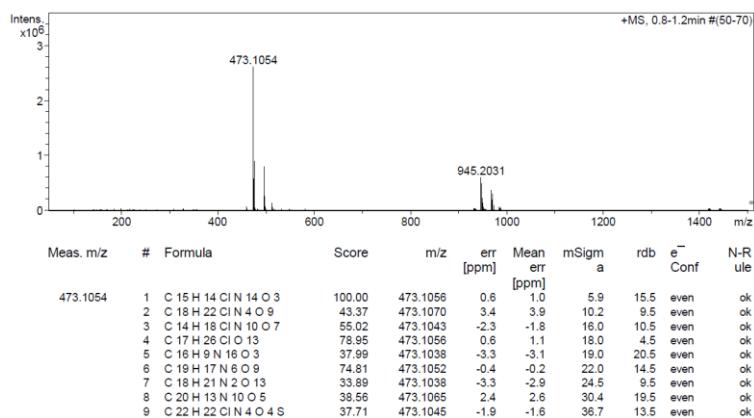


Figure S68. HRMS spectrum of **23**.

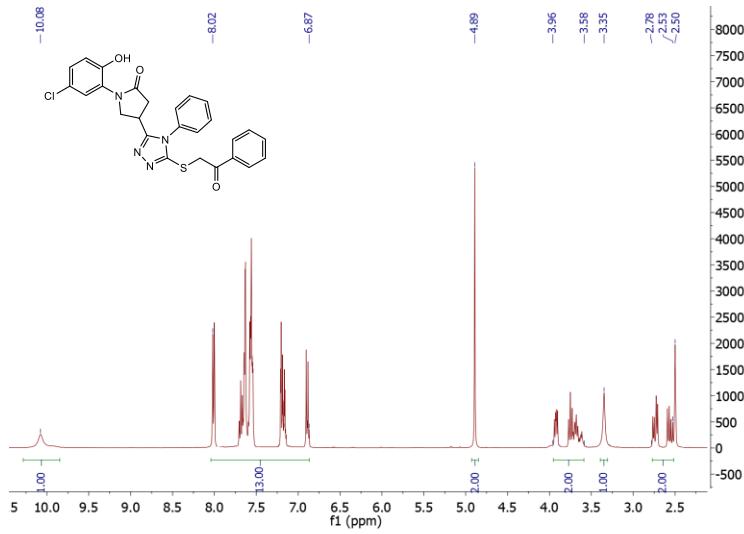


Figure S69. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of 24.

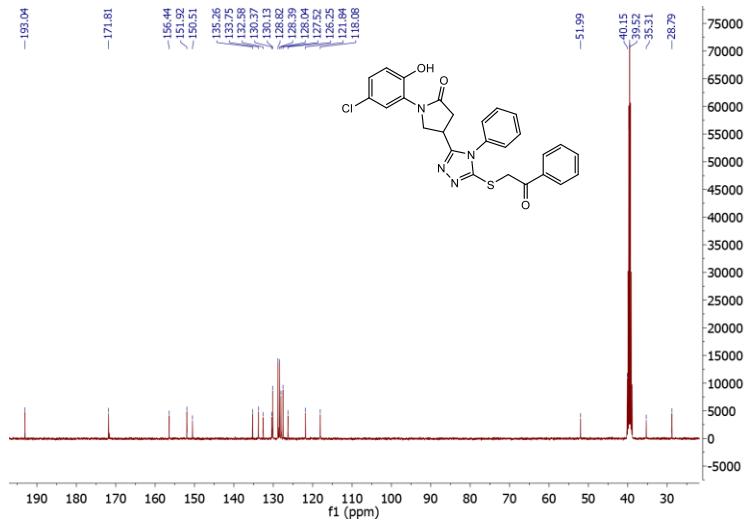


Figure S70. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of 24.

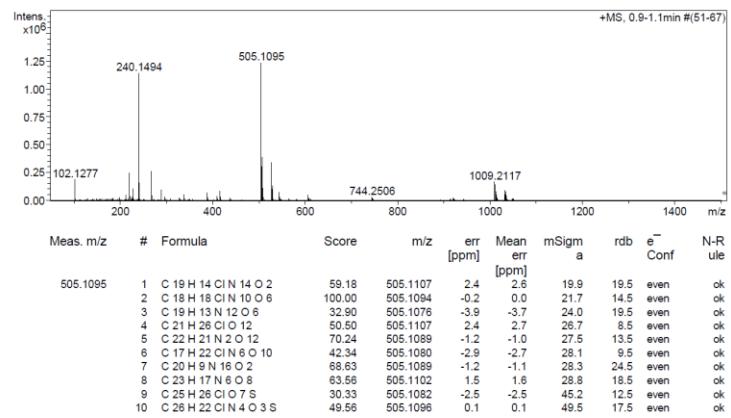


Figure S71. HRMS spectrum of 24.

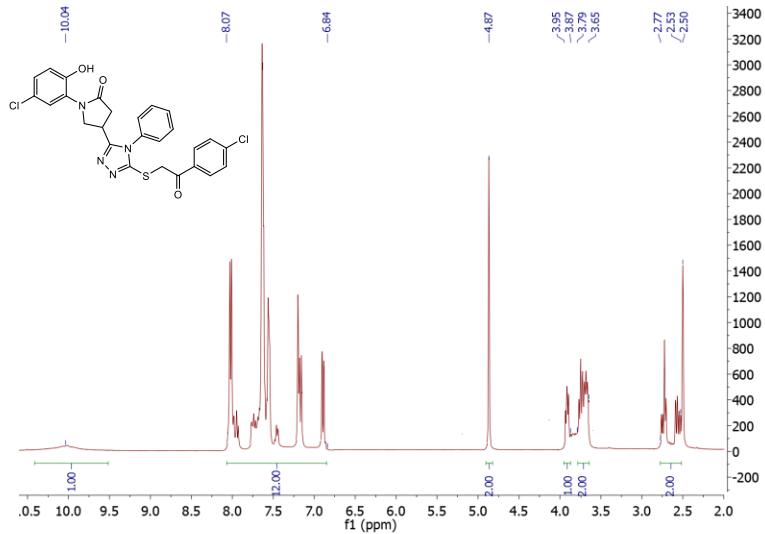


Figure S72. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **25**.

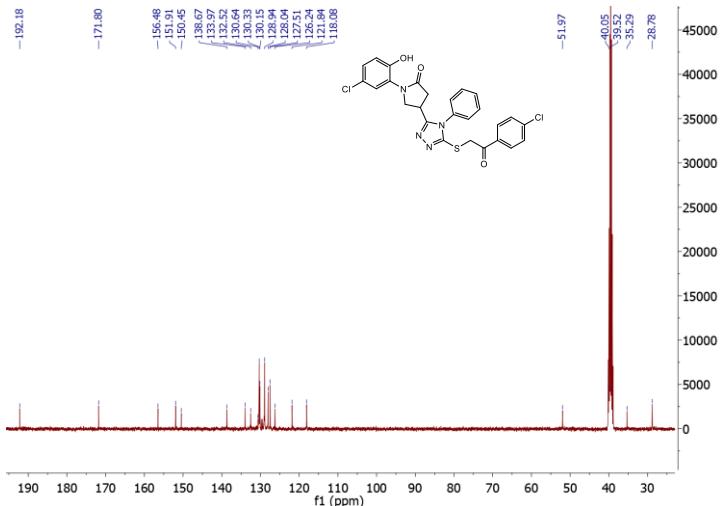


Figure S73. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **25**.

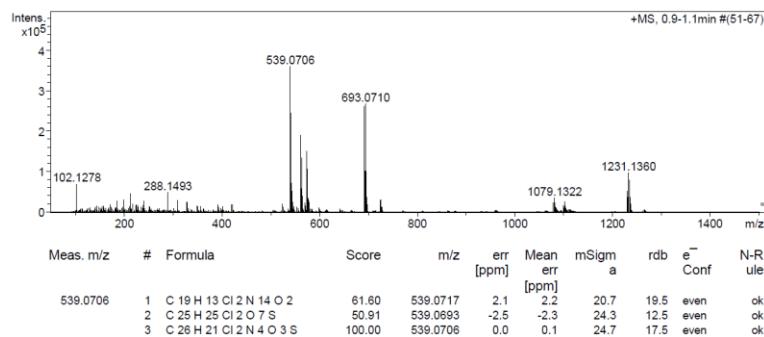


Figure S74. HRMS spectrum of **25**.

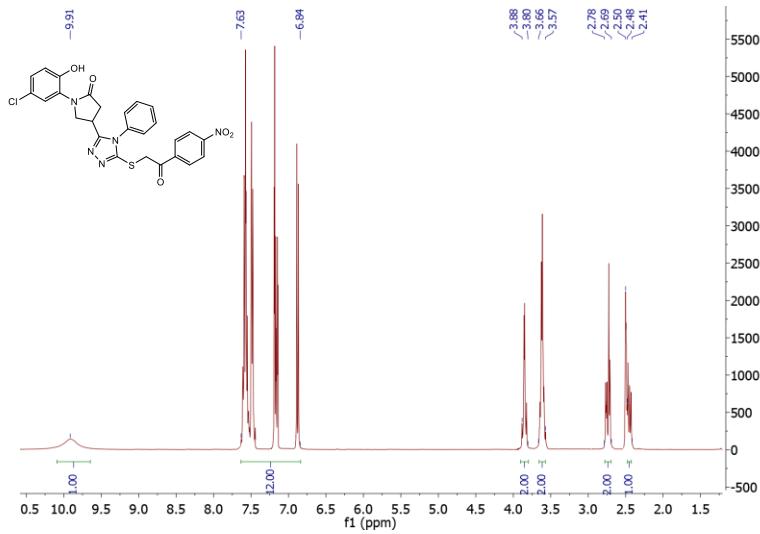


Figure S75. ^1H -NMR (400 MHz, DMSO- d_6) spectrum of **26**.

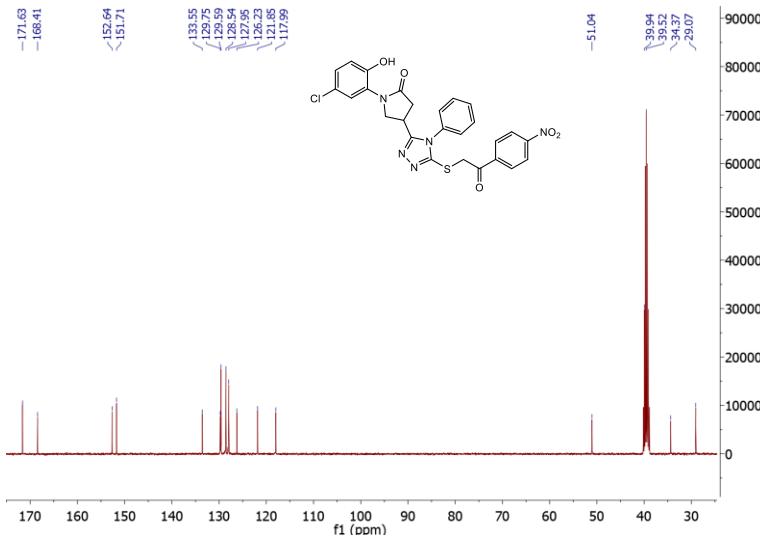


Figure S76. ^{13}C -NMR (400 MHz, DMSO- d_6) spectrum of **26**.

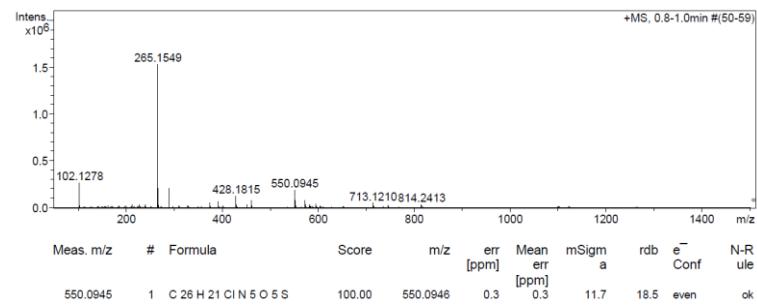


Figure S77. HRMS spectrum of **26**.