**Chemical Constituents from the Thorns of *Gleditsia sinensis* and Their Cytotoxic Activities**

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# Structural identification for 3-25

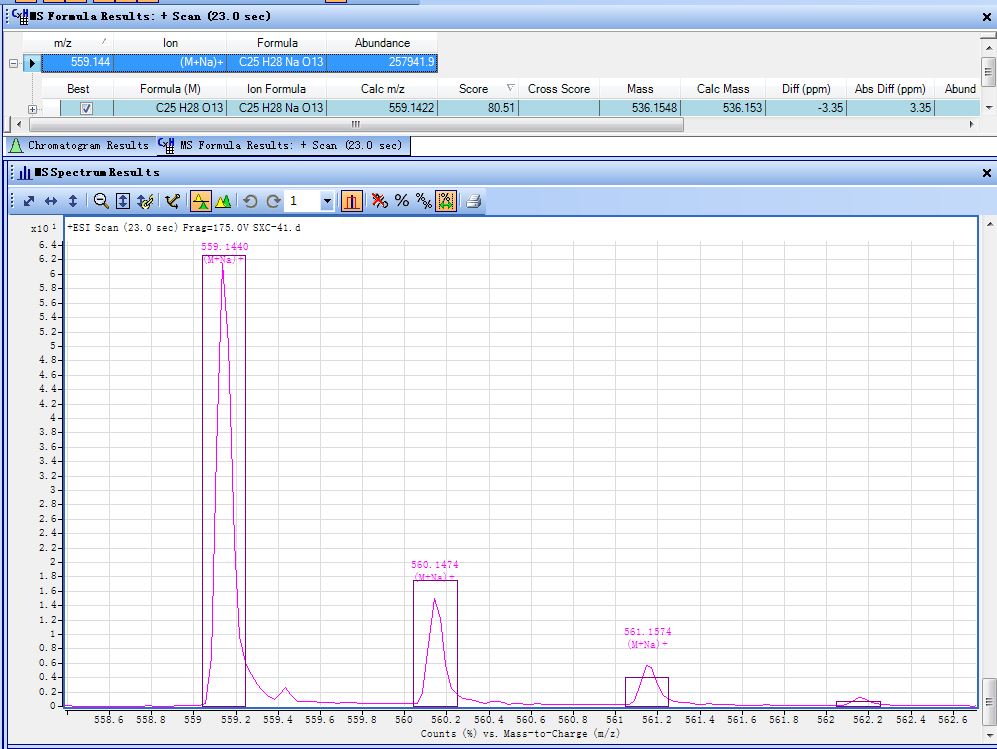
Twenty-three known compounds were identified as (7*S*,8*R*)-4,9′-dihydroxyl-3,3′- dimethoxyl-7,8-dihydrobenzofuran-1′-propylneolignan (**3**) [1], (7*S*,8*R*)-threo-1′-[3′ -hydroxy-7-(4-hydroxy-3-methoxyphenyl)-8-hydroxymethyl-7,8-dihydrobenzofuran]acrylaldehyde (**4**) [2], (2*R*-*trans*)-2,3-dihydro-2-(4-hydroxy-3-methoxyphenyl)-3- (hydroxymethyl)-7-methoxy-5-benzofuranpropanol acetate (**5**) [3], (7*R*,8*S*)-dehydrodiconiferyl alcohol (**6**) [4], (-)-secoisolariciresinol (**7**) [5], (+)-pinoresinol (**8**) [6], (+)-medioresinol (**9**) [7], syringaresinol (**10**) [8], garbanzol (**11**) [9], 7,4ʹ-dihydroxy-5,3ʹ-dimethoxyflavanonol (**12**) [10], 4′-*O*-methyldihydroquercetin (**13**) [10], (+)-aromadendrin (**14**) [11], (-)-eriodictyol (**15**) [12], 5-hydroxy-7-methoxyflavanone (**16**) [13], quercetin (**17**) [29], scopoletin (**18**) [14], 3-formylindole (**19**) [15], indazole (**20**) [16], isovanillic acid (**21**) [17], friedelin (**22**) [18], lupenone (**23**) [19], betulin (**24**) [19], sitosterol (**25**) [20] respectively, by comparing their spectroscopic and physical data with those of related literatures.



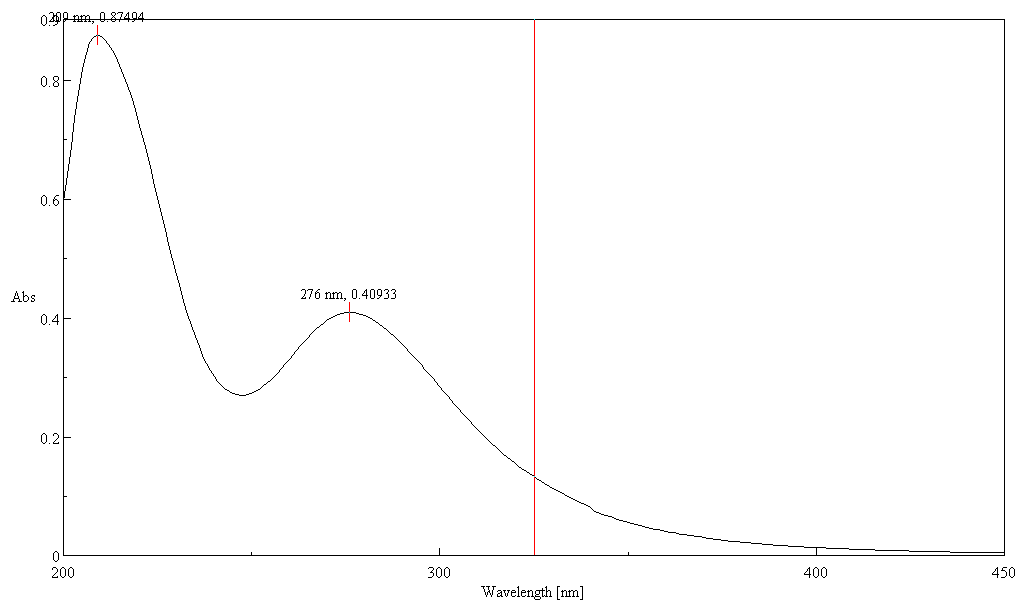
**Fig. S1.** The chemical structures of **3**-**25**.

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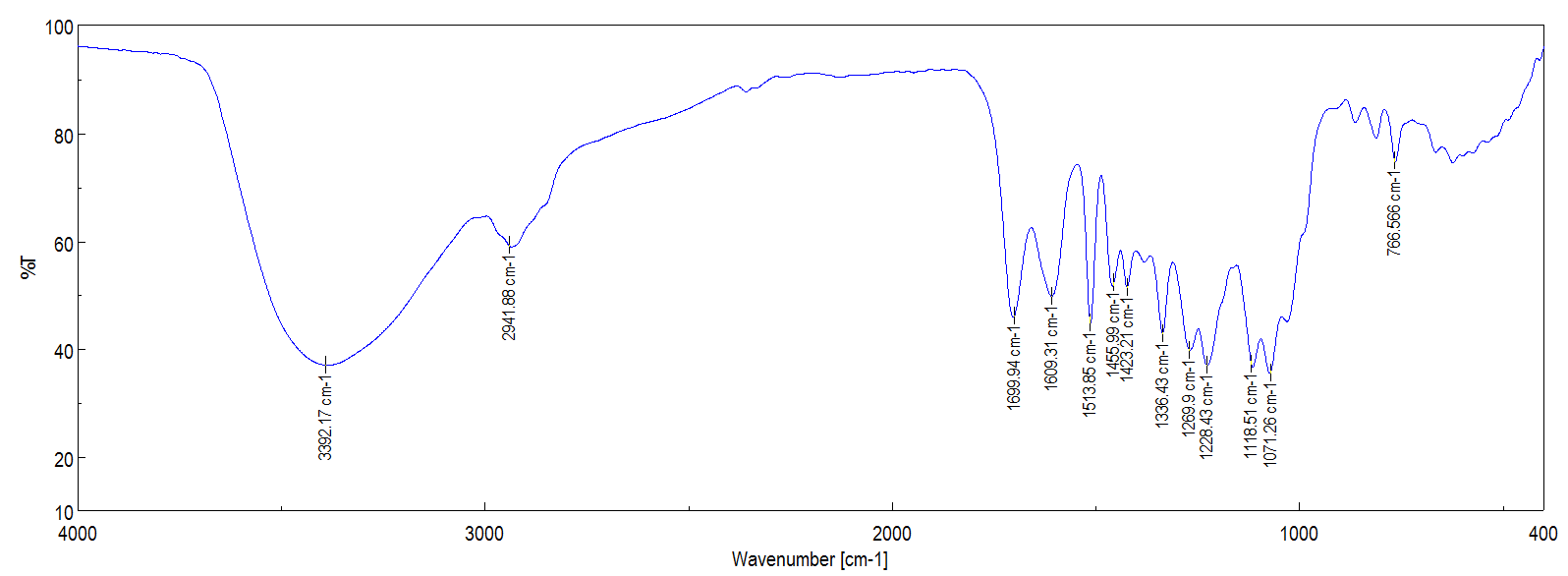
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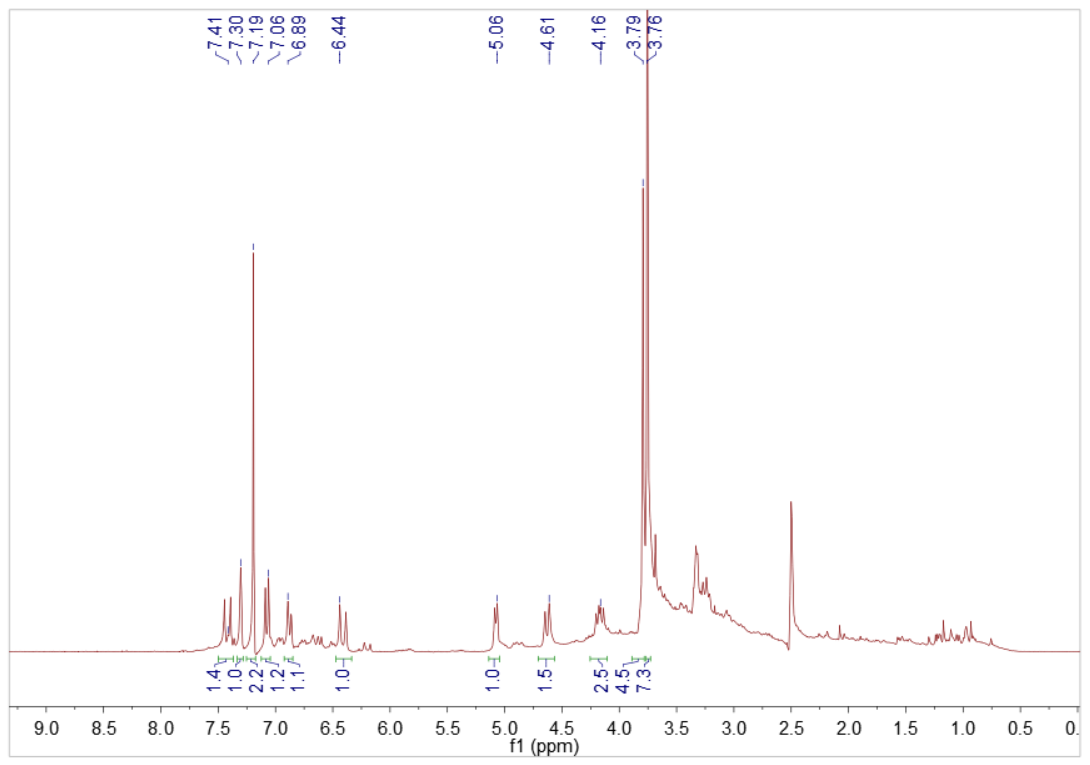
# Fig. S2. HRESIMS of 1



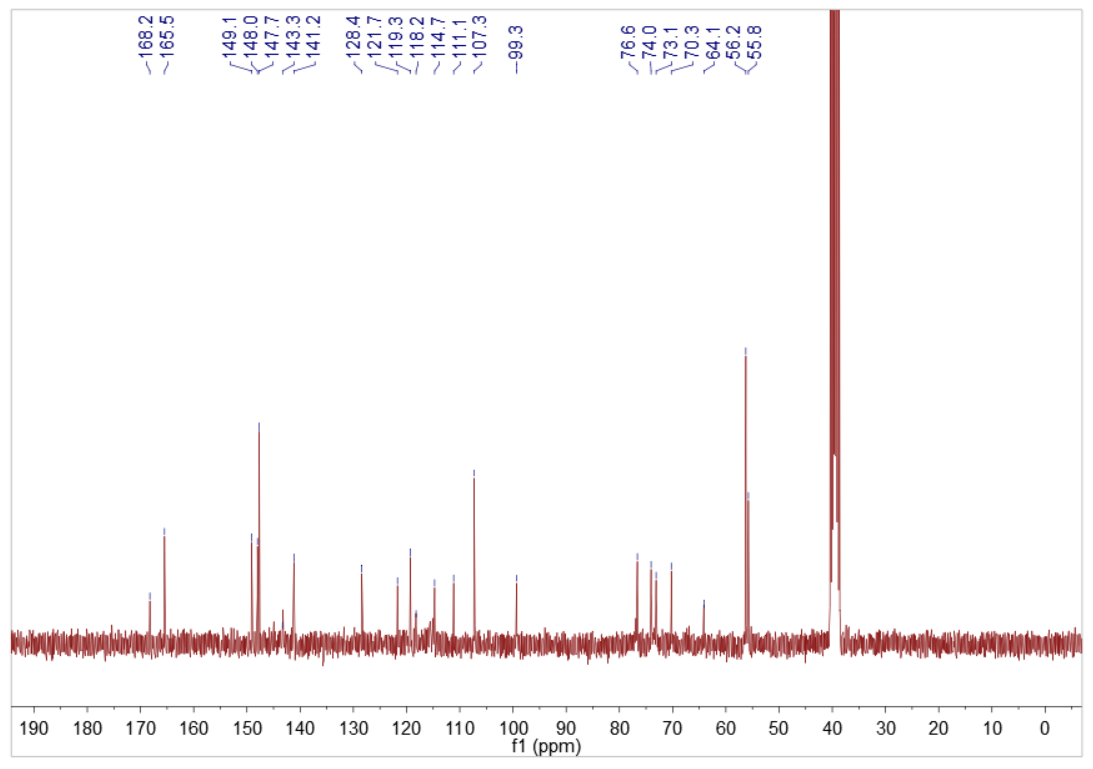
# Fig. S3. UV spectrum of 1 (CH3OH)



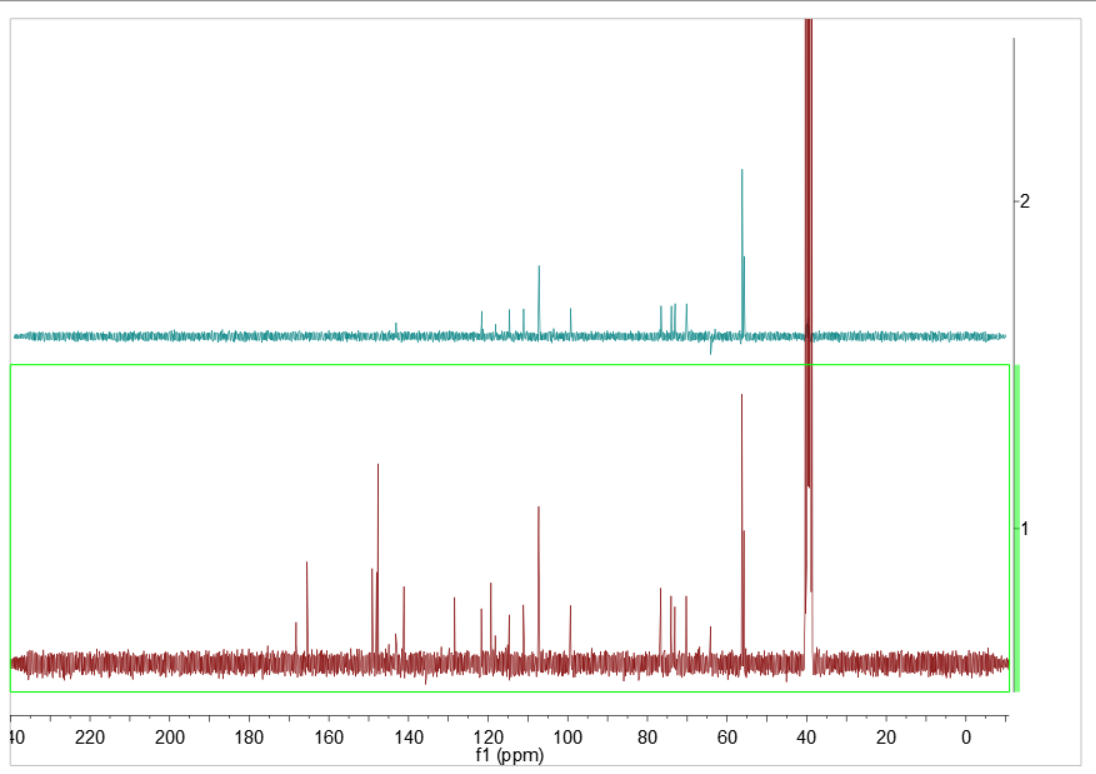
# Fig. S4. IR spectrum of 1 (KBr disc)



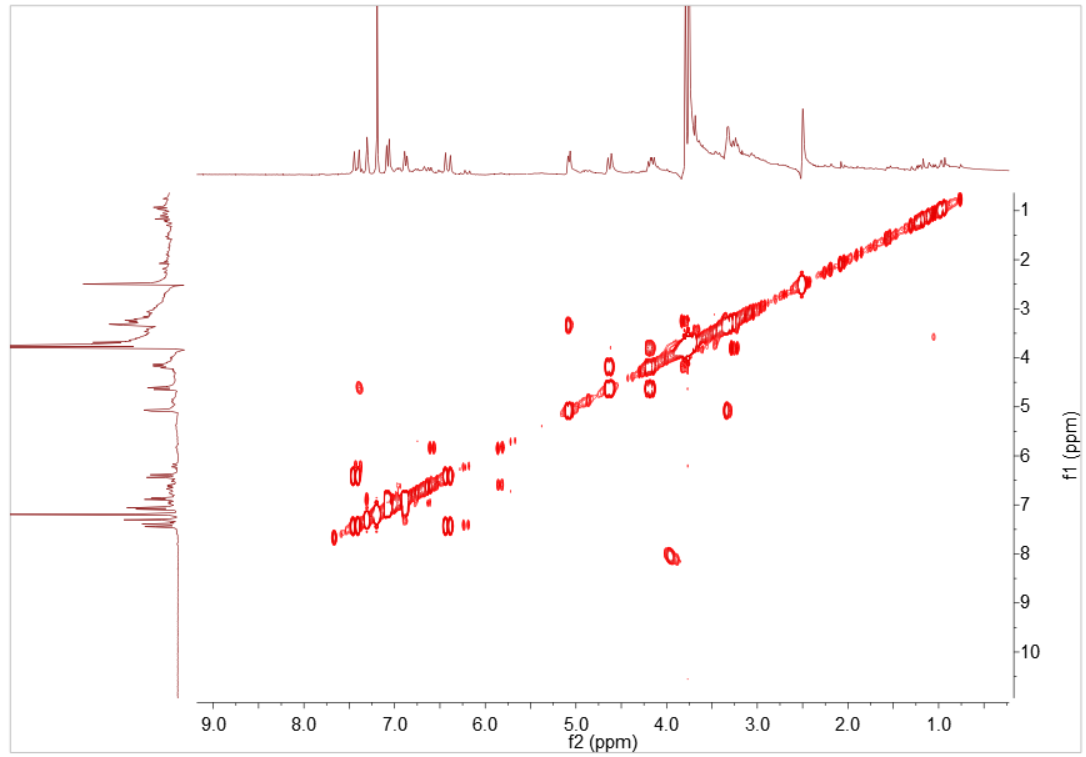
# Fig. S5. 1H NMR spectrum of 1 in DMSO



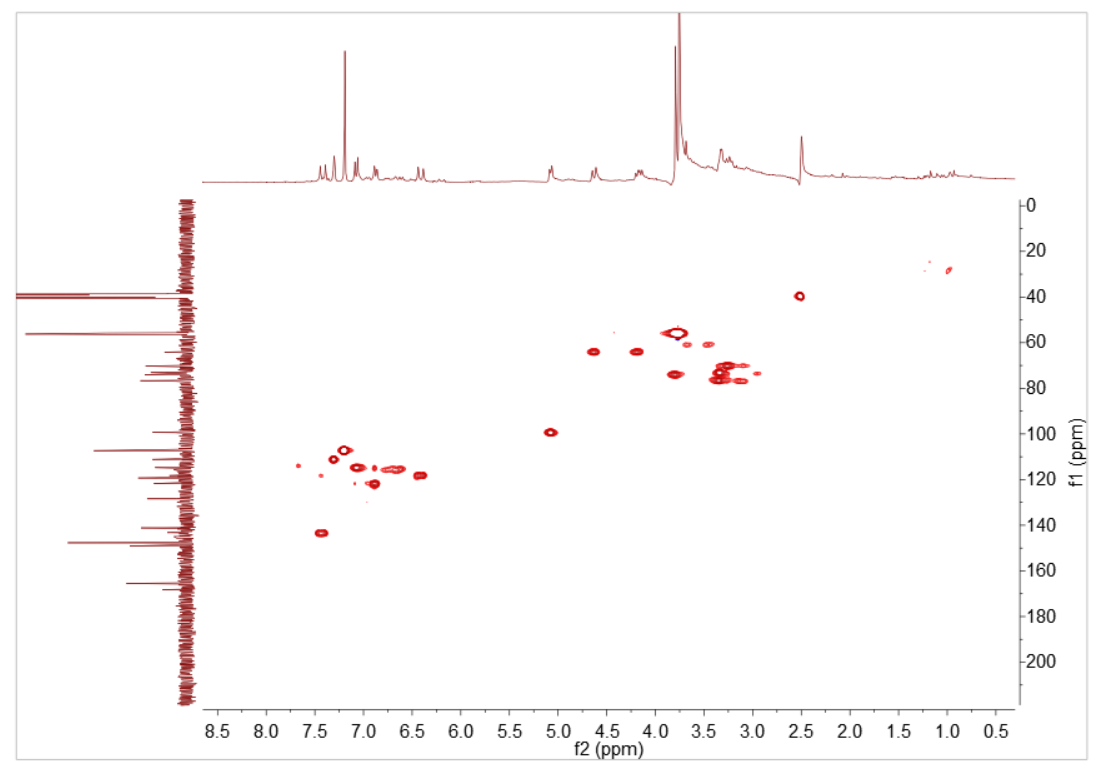
# Fig. S6. 13C NMR spectrum of 1 in DMSO



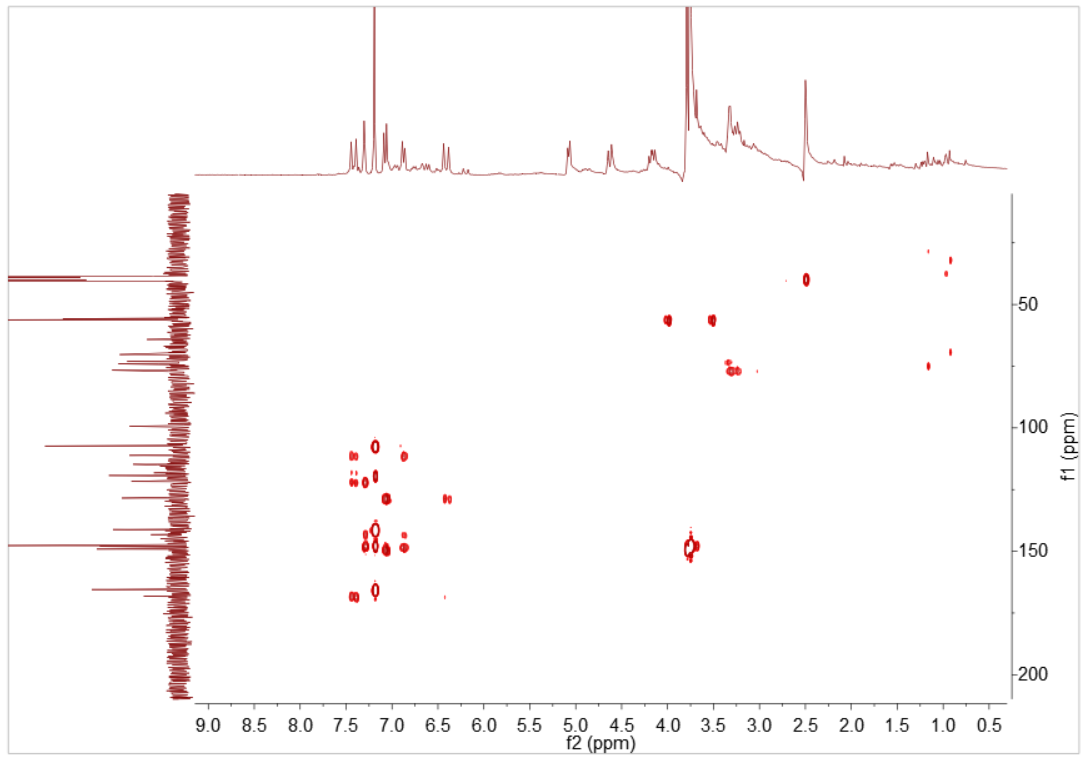
# Fig. S7. DEPT-135 spectrum of 1 in DMSO



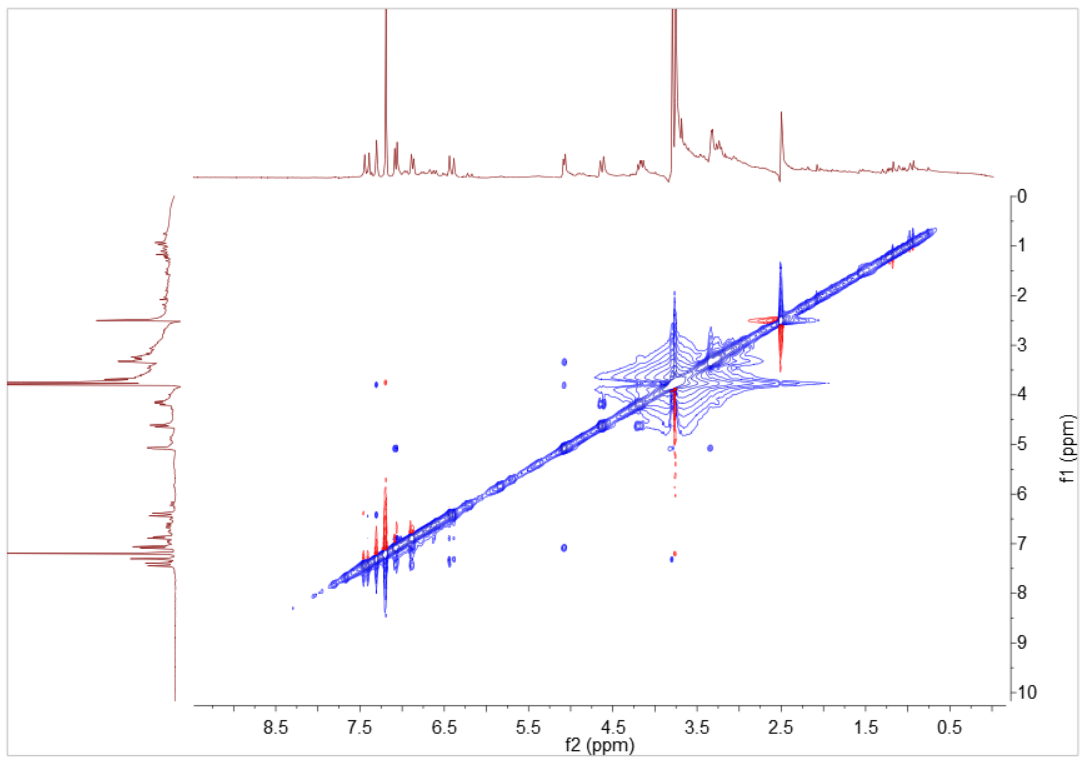
# Fig. S8. 1H-1H COSY spectrum of 1 in DMSO



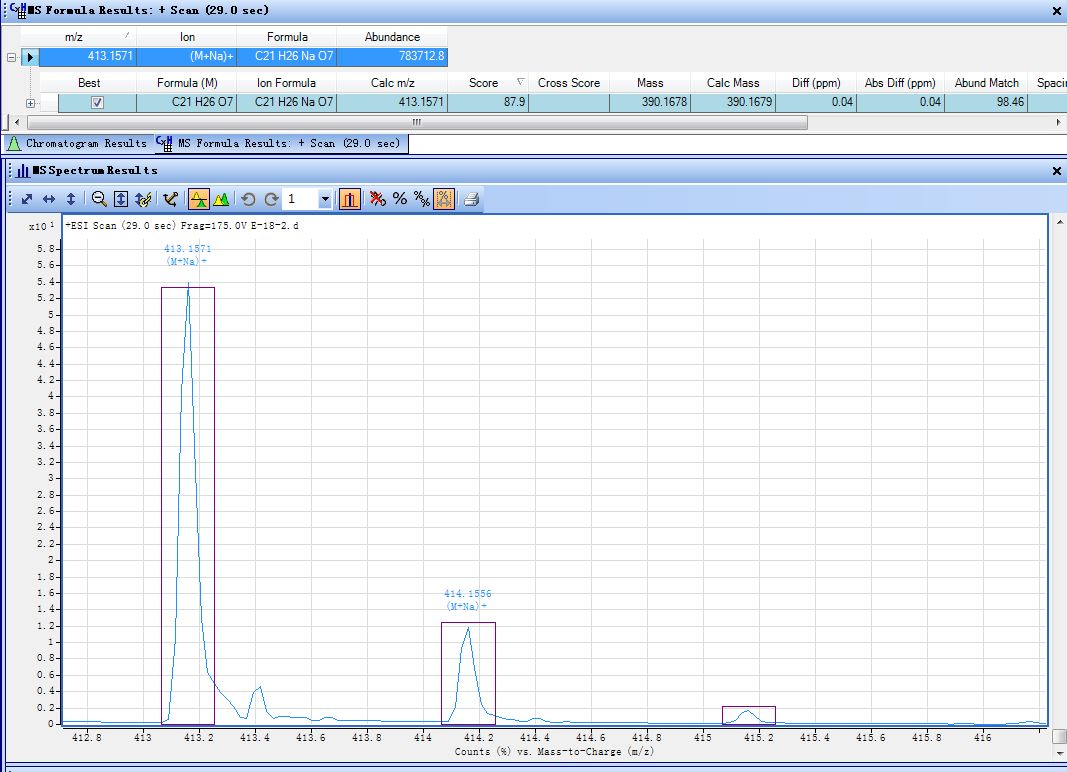
# Fig. S9. HSQC spectrum of 1 in DMSO



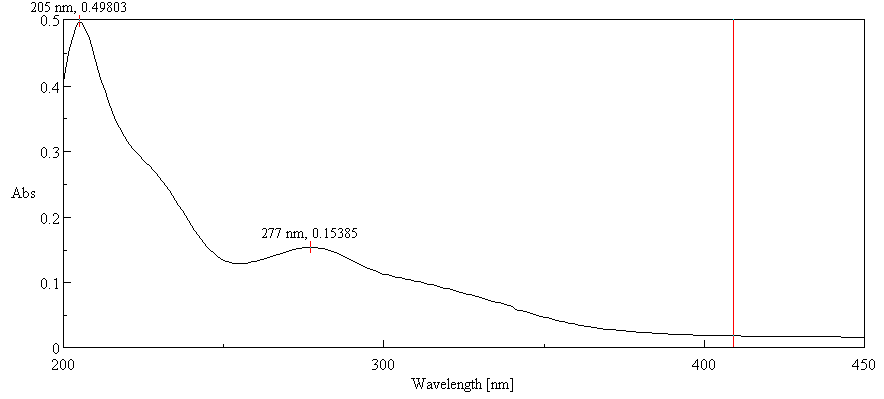
# Fig. S10. HMBC spectrum of 1 in DMSO



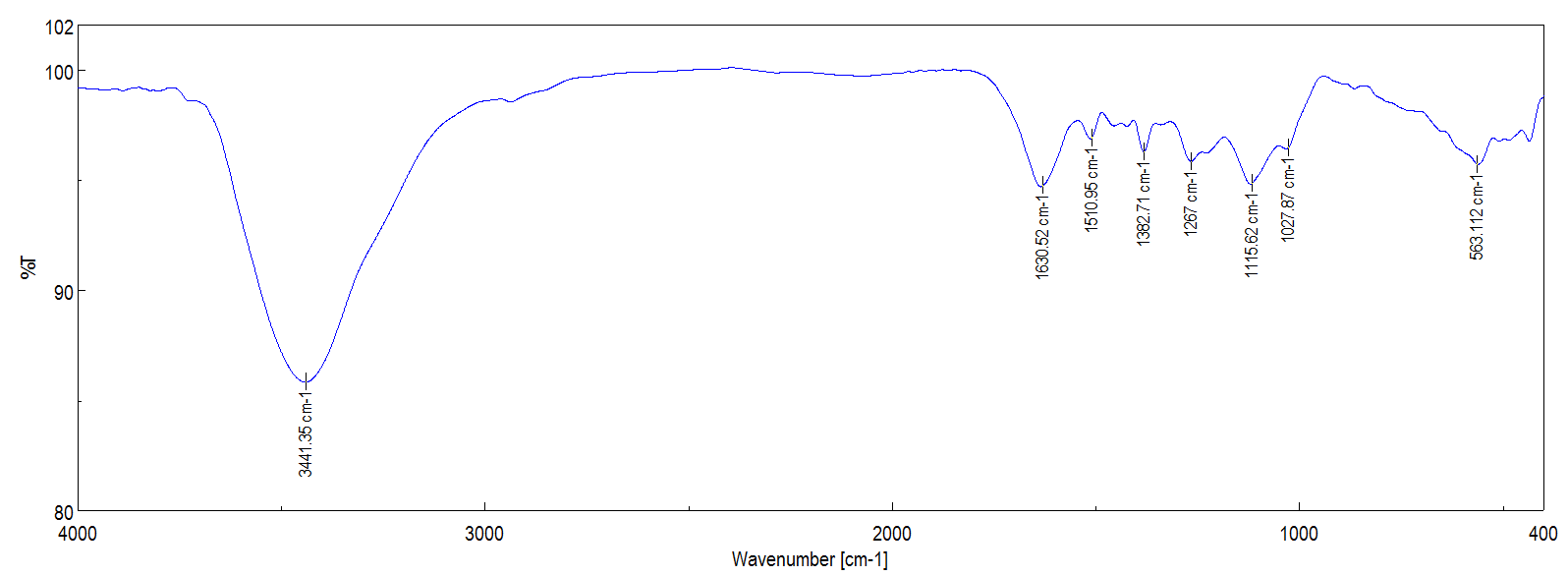
# Fig. S11. NOESY spectrum of 1 in DMSO



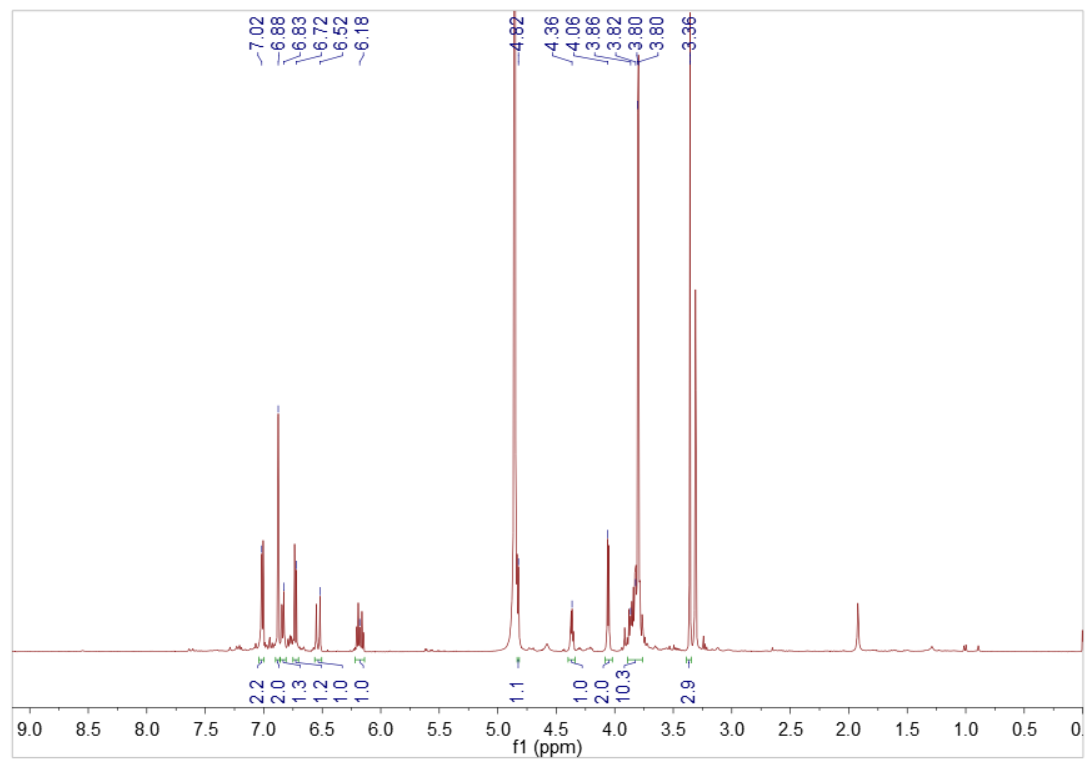
# Fig. S12. HRESIMS of 2



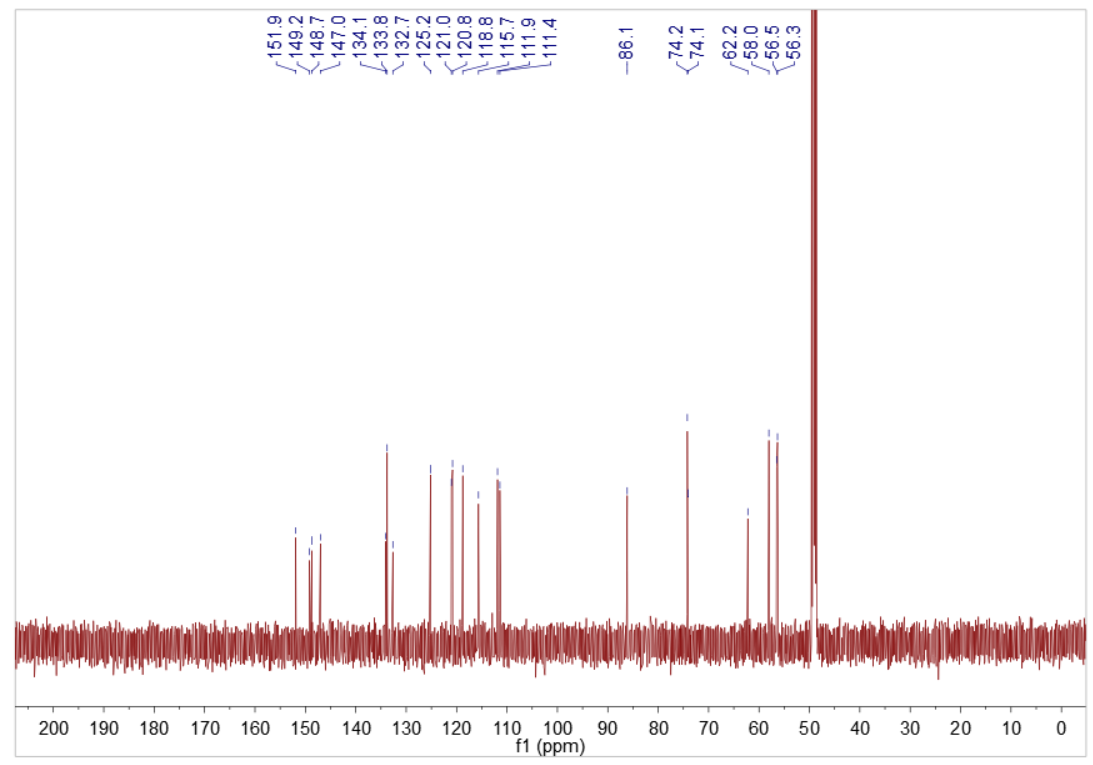
# Fig. S13. UV spectrum of 2 (CH3OH)



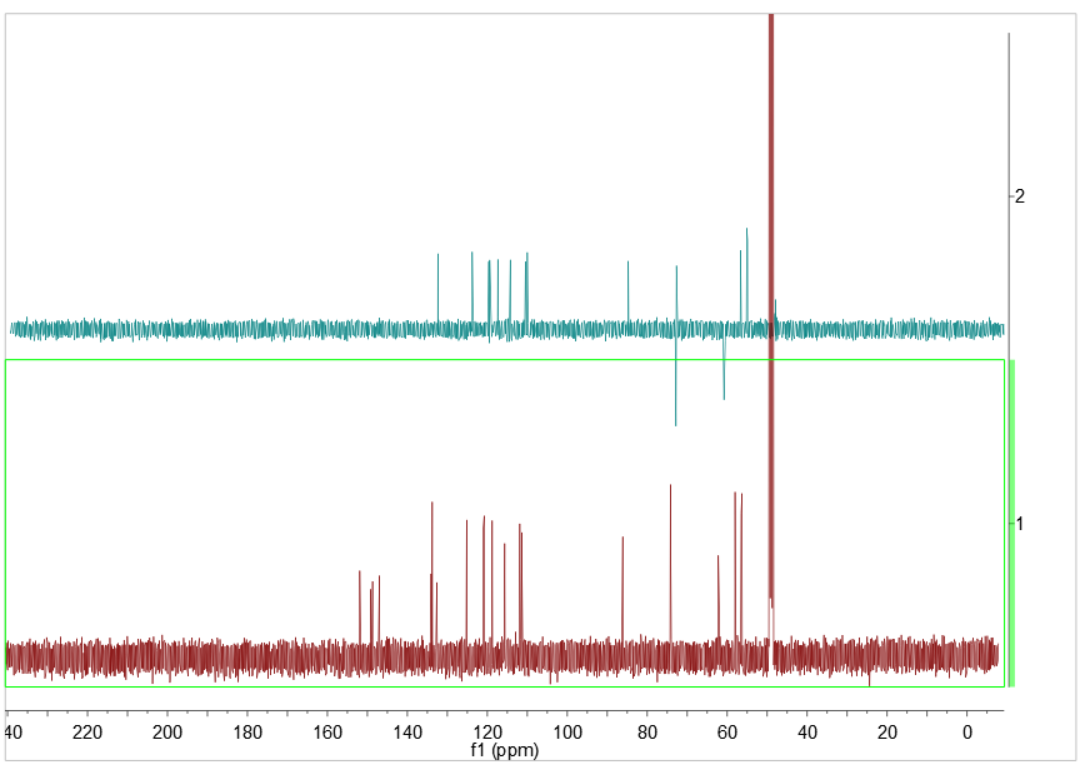
# Fig. S14. IR spectrum of 2 (KBr disc)



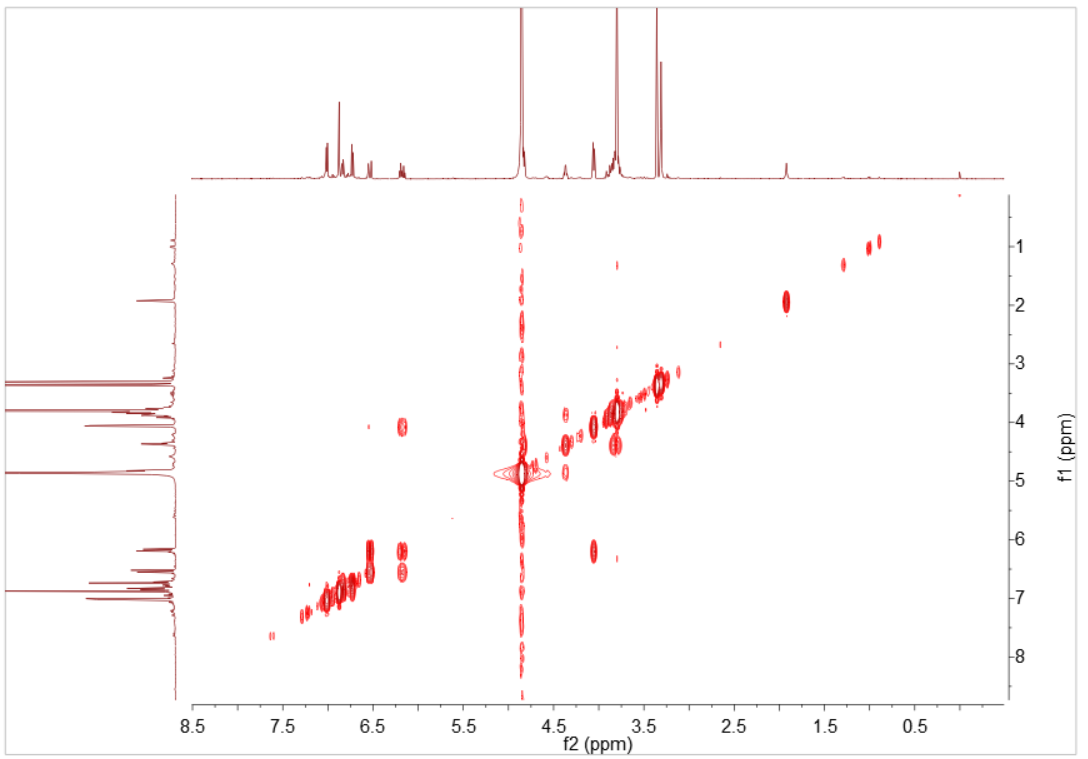
# Fig. S15. 1H NMR spectrum of 2 in CD3OD



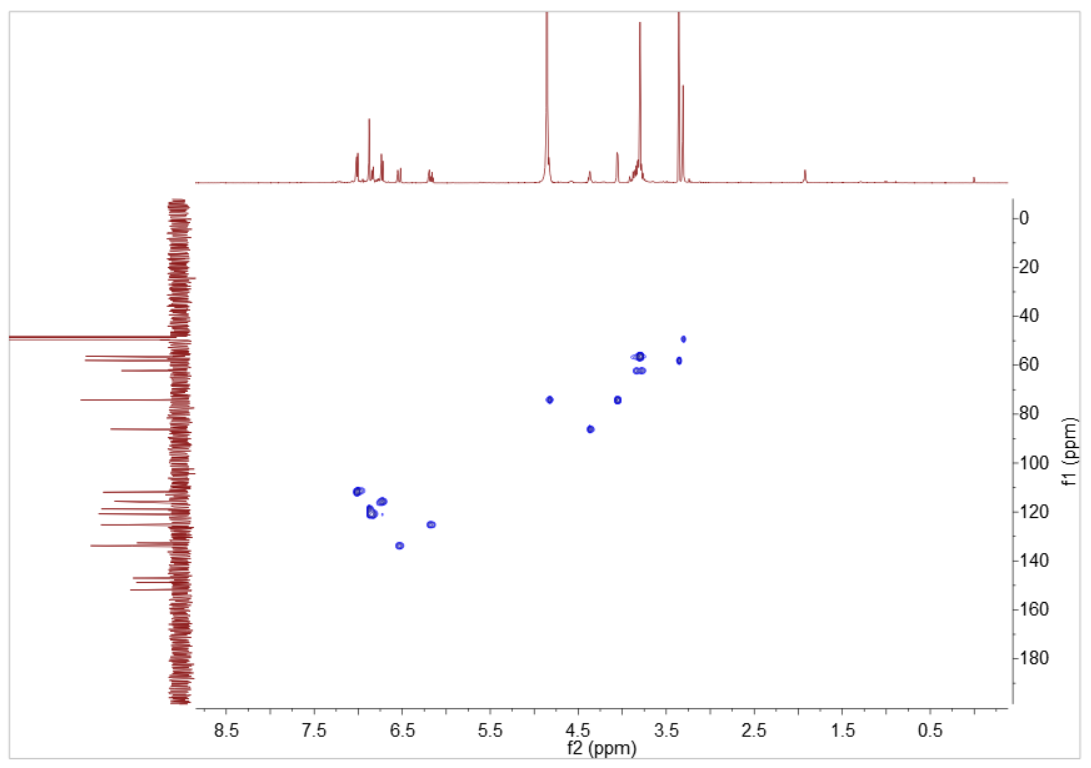
# Fig. S16. 13C NMR spectrum of 2 in CD3OD



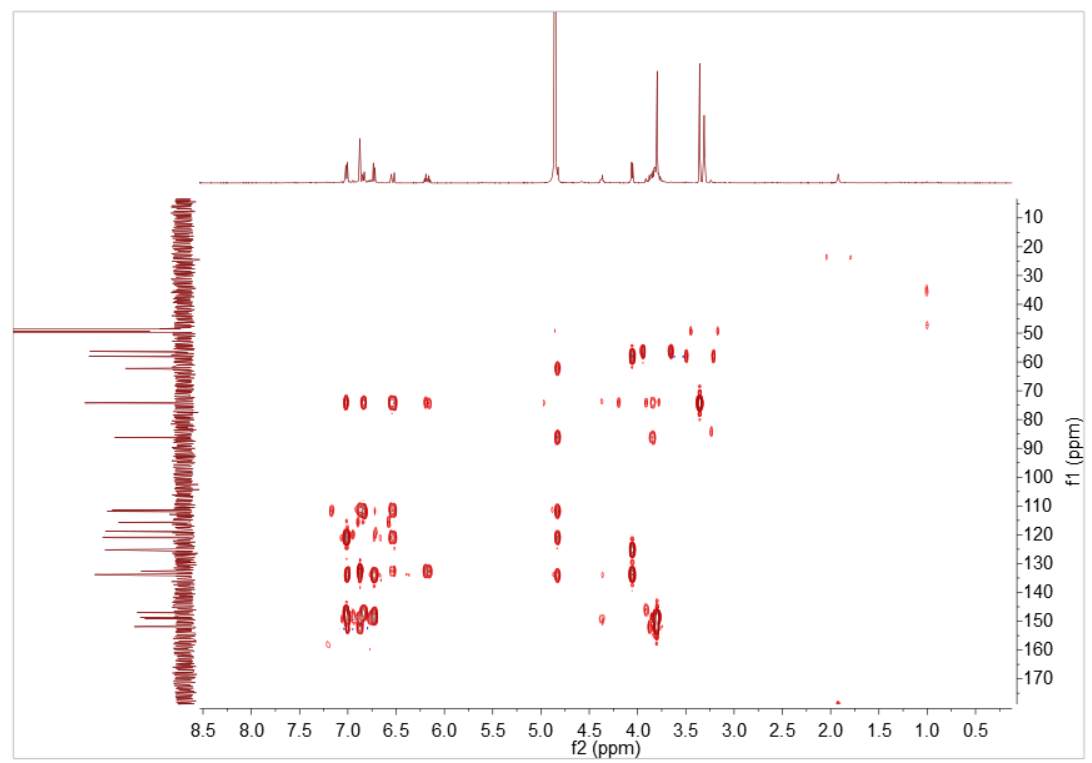
# Fig. S17. DEPT-135 spectrum of 2 in CD3OD



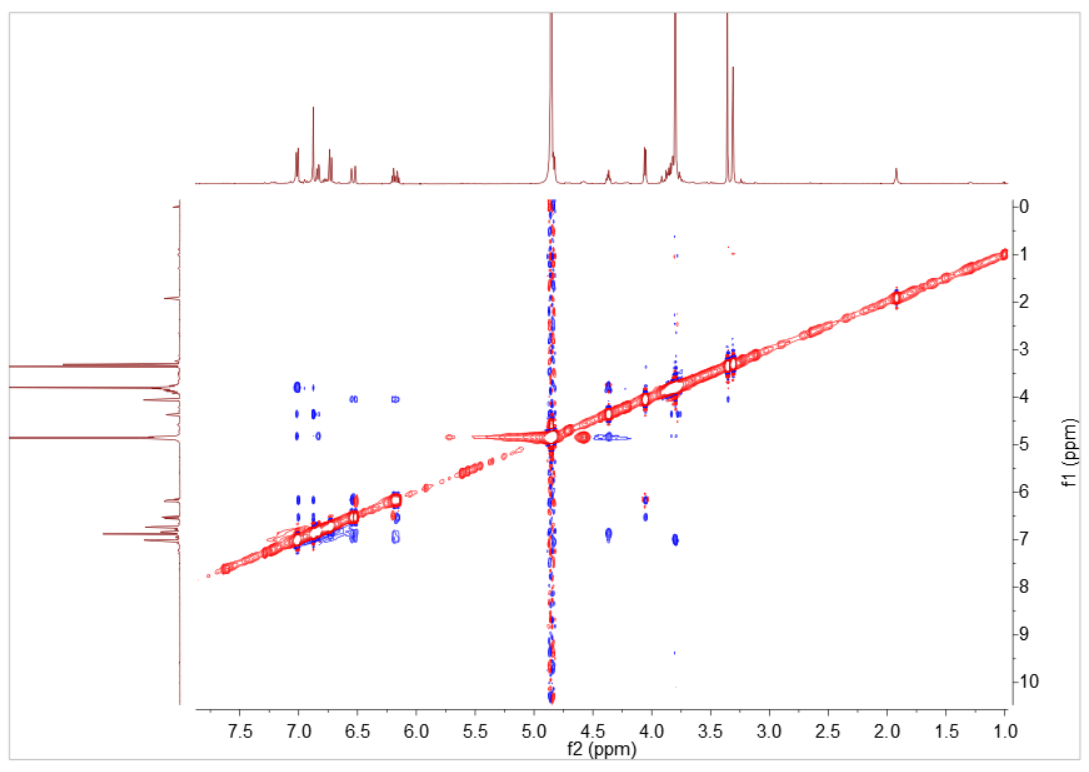
# Fig. S18. 1H-1H COSY spectrum of 2 in CD3OD



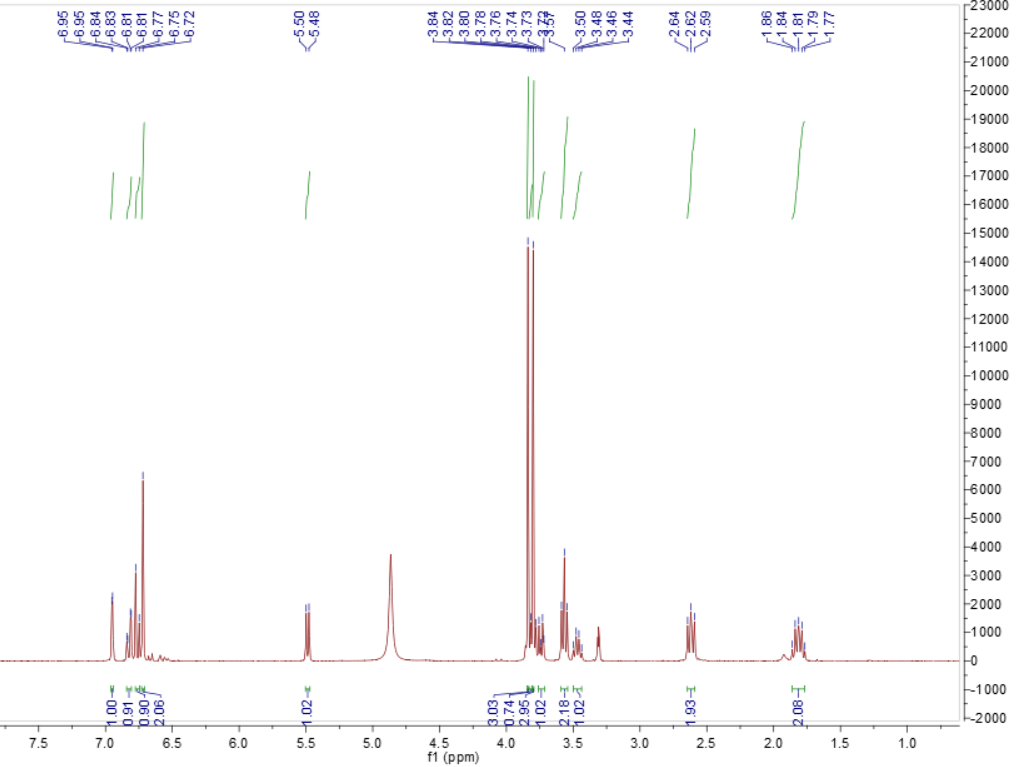
# Fig. S19. HSQC spectrum of 2 in CD3OD



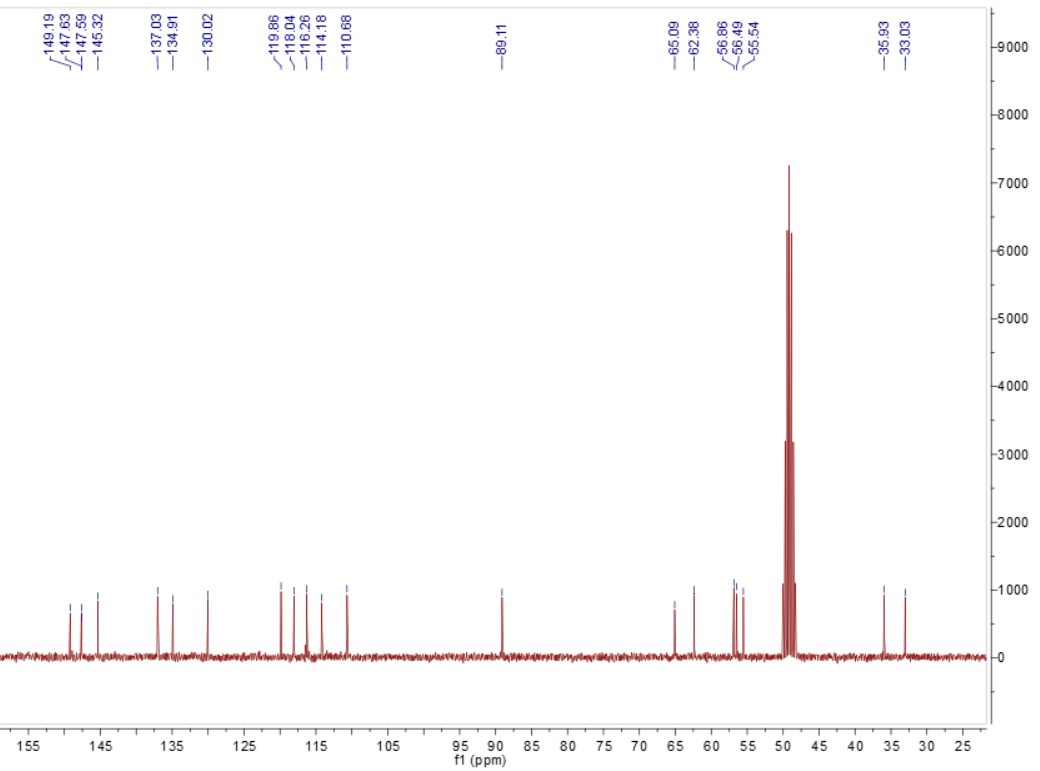
# Fig. S20. HMBC spectrum of 2 in CD3OD



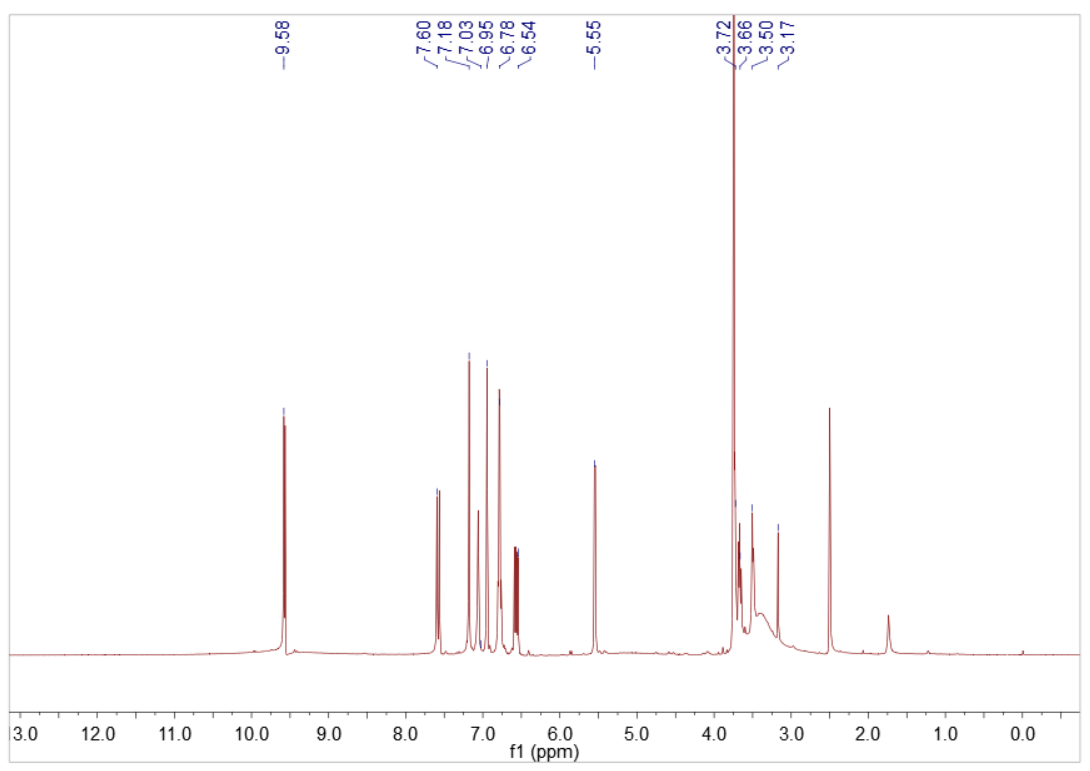
# Fig. S21. NOESY spectrum of 2 in CD3OD



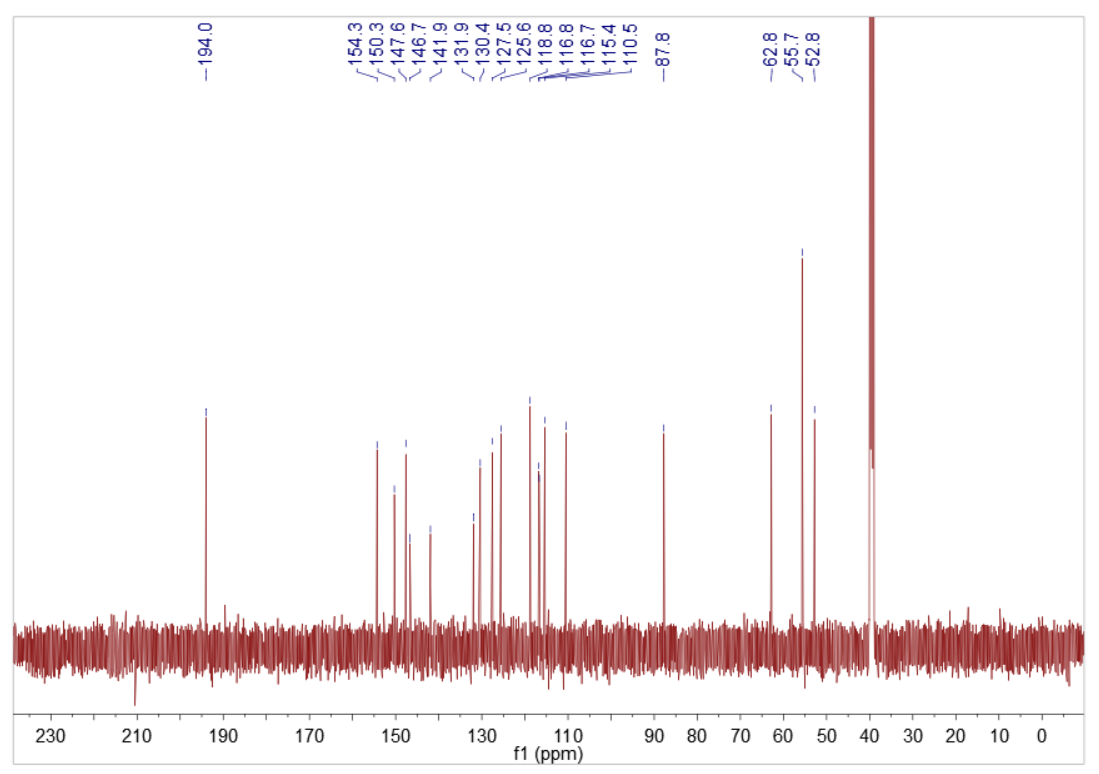
# Fig. S22. 1H NMR spectrum of 3 in CD3OD



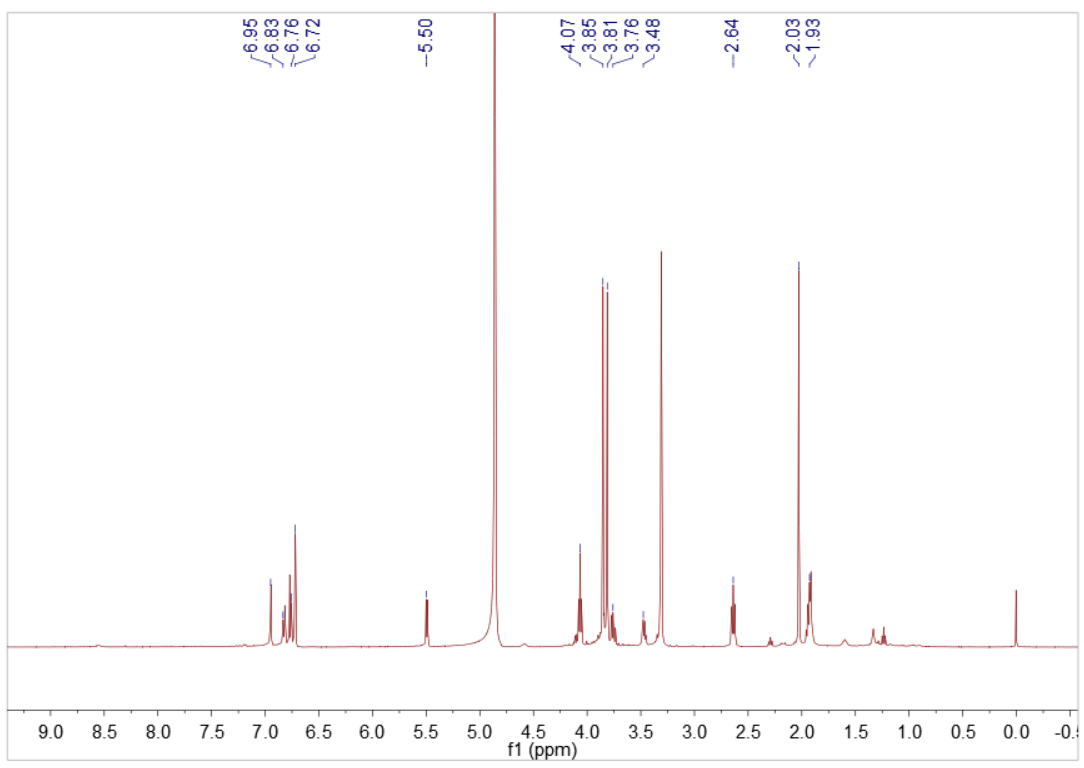
# Fig. S23. 13C NMR spectrum of 3 in CD3OD



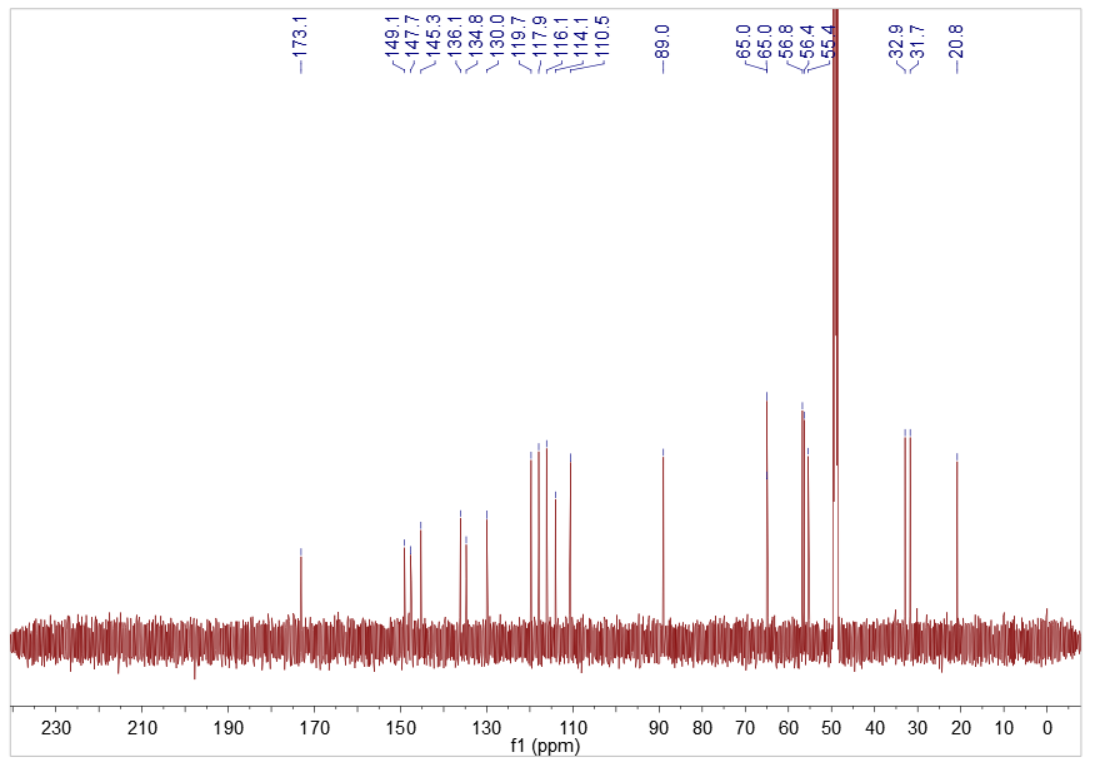
# Fig. S24. 1H NMR spectrum of 4 in DMSO



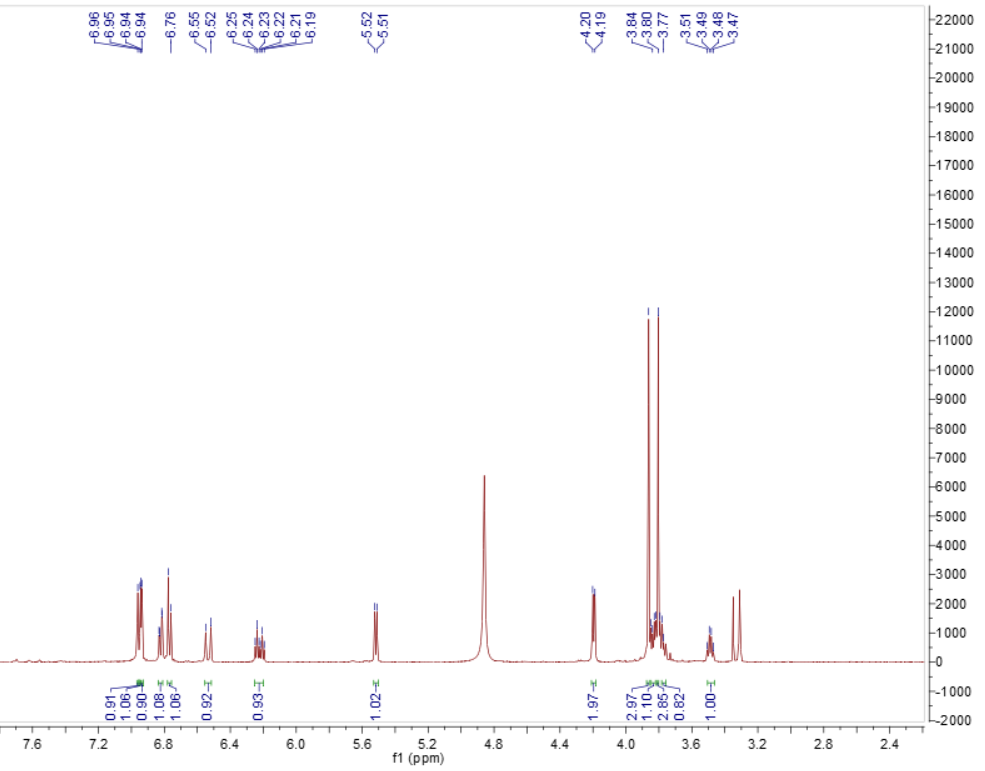
# Fig. S25. 13C NMR spectrum of 4 in DMSO



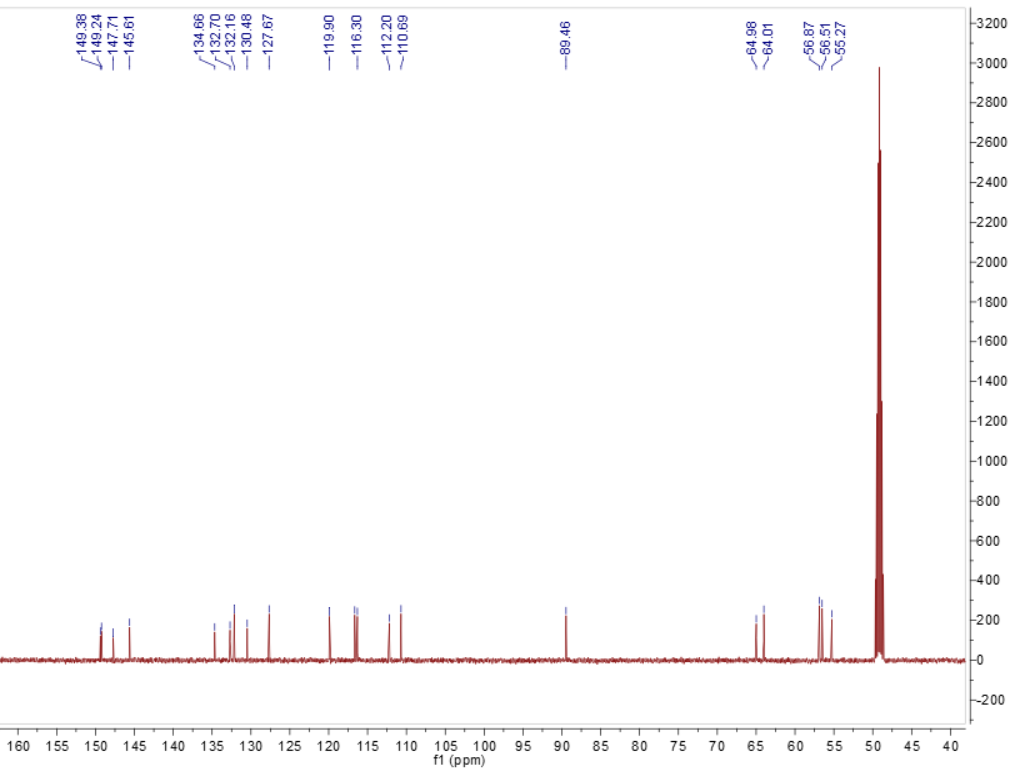
# Fig. S26. 1H NMR spectrum of 5 in CD3OD



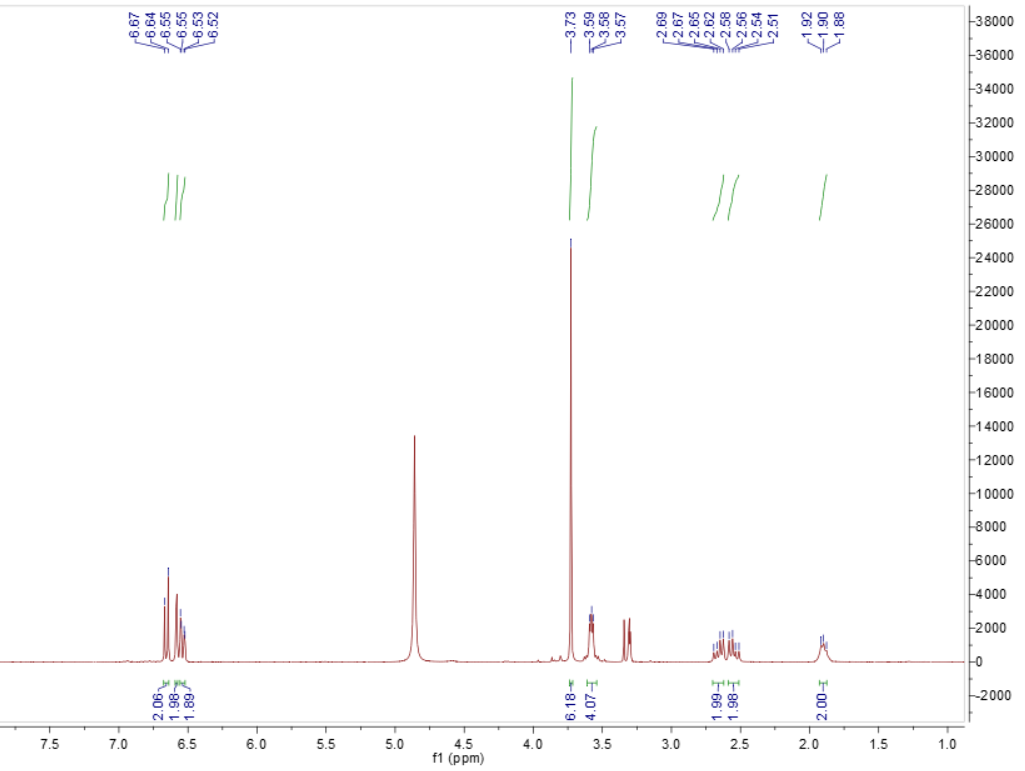
# Fig. S27. 13C NMR spectrum of 5 in CD3OD



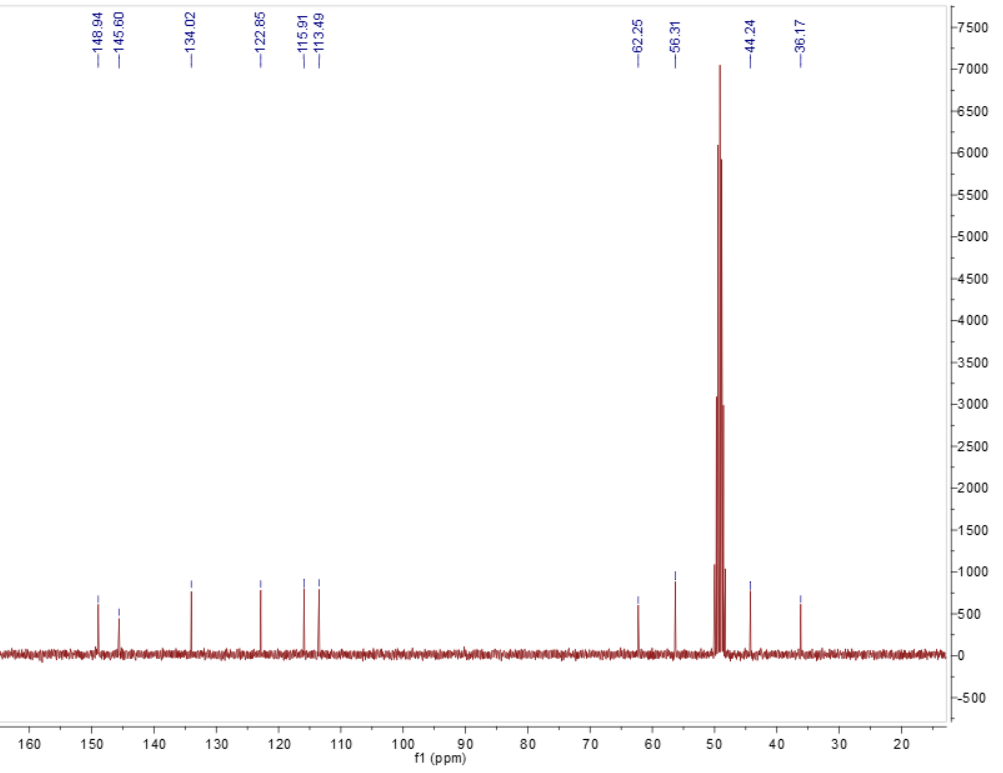
# Fig. S28. 1H NMR spectrum of 6 in CD3OD



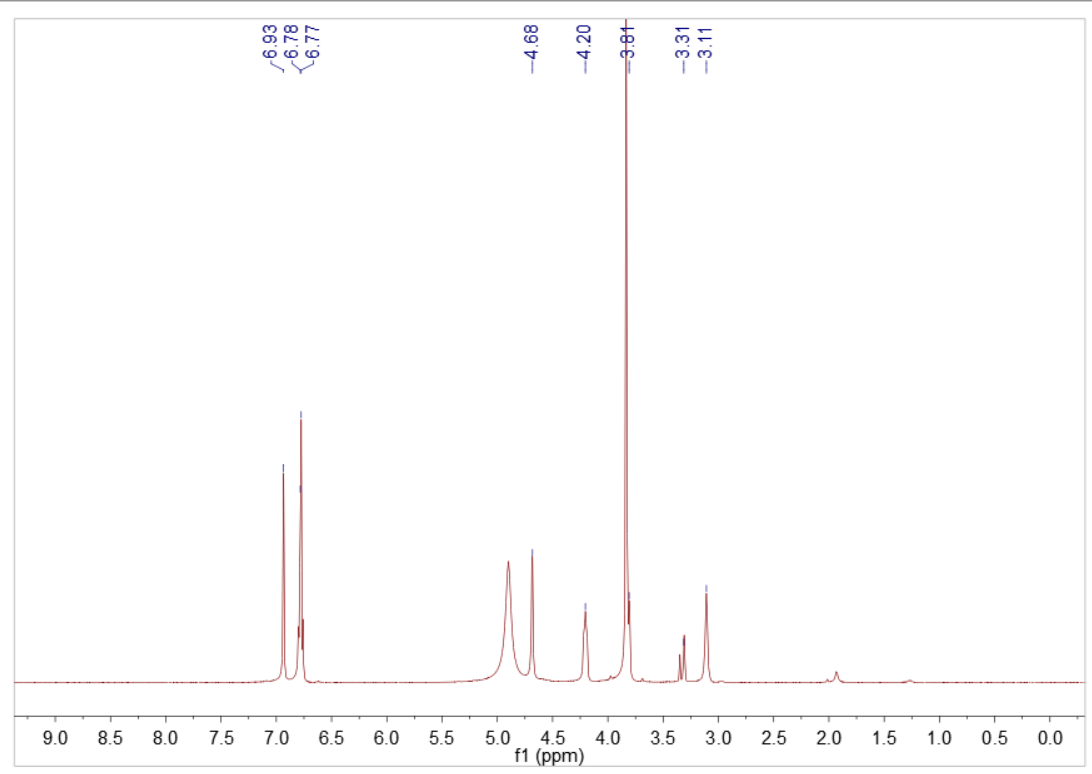
# Fig. S29. 13C NMR spectrum of 6 in CD3OD



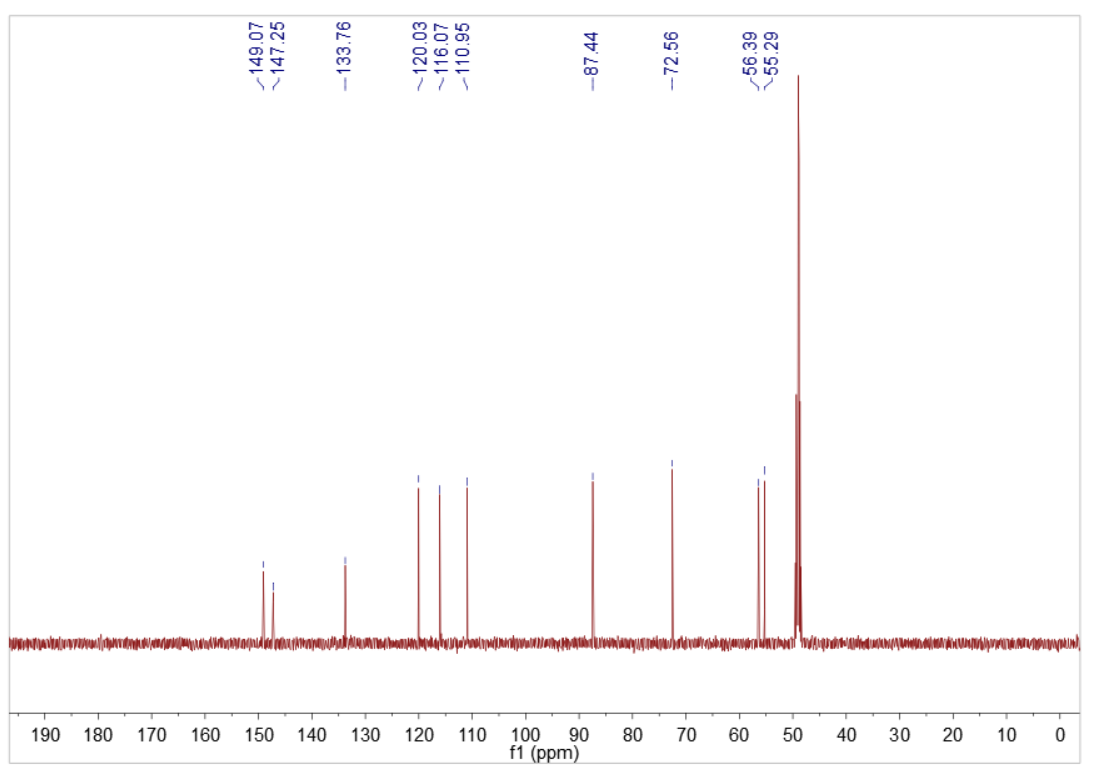
# Fig. S30. 1H NMR spectrum of 7 in CD3OD



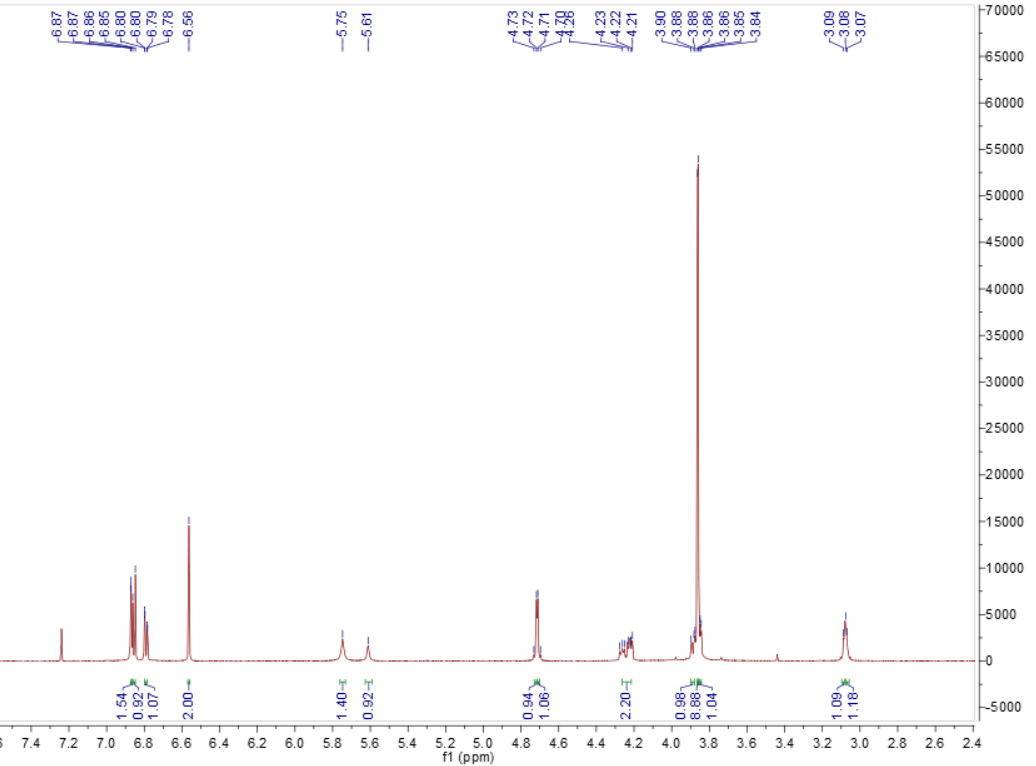
# Fig. S31. 13C NMR spectrum of 7 in CD3OD



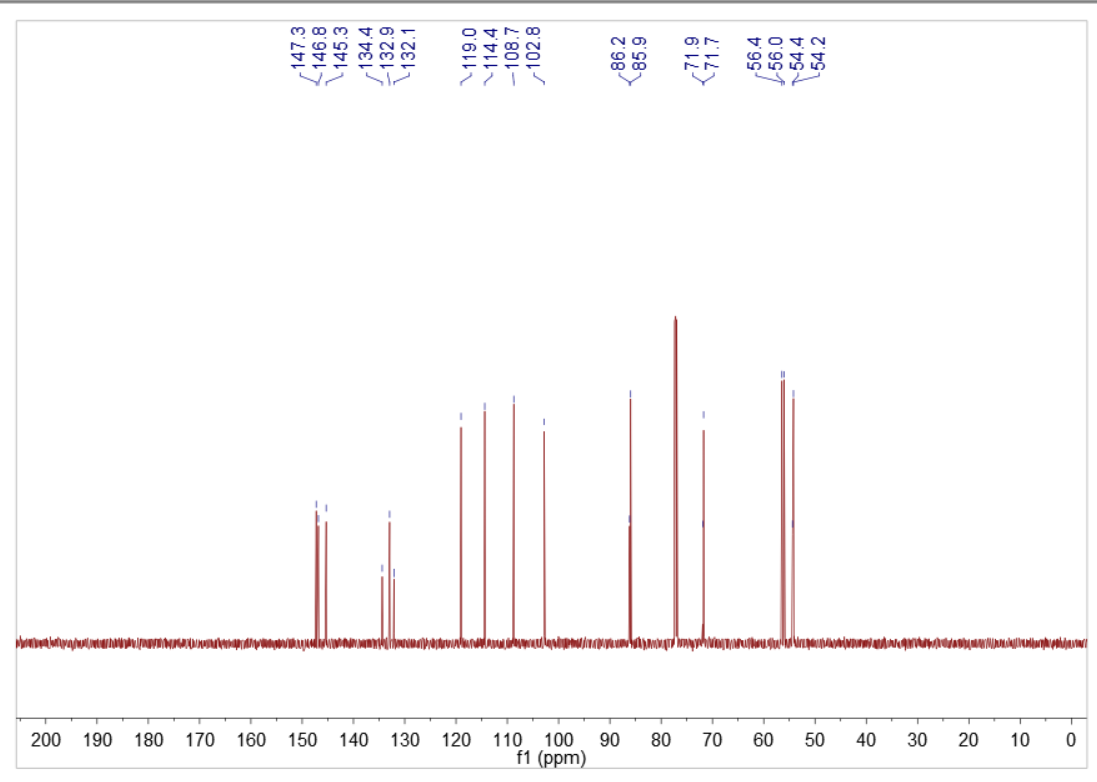
# Fig. S32. 1H NMR spectrum of 8 in CD3OD



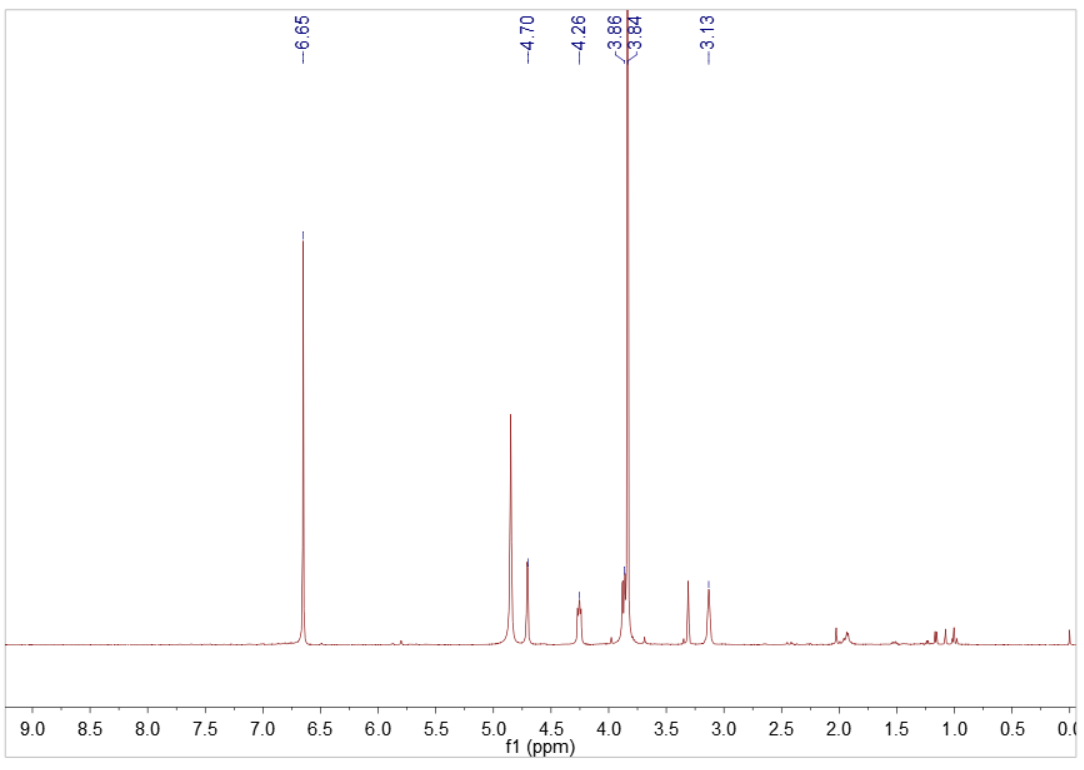
# Fig. S33. 13C NMR spectrum of 8 in CD3OD



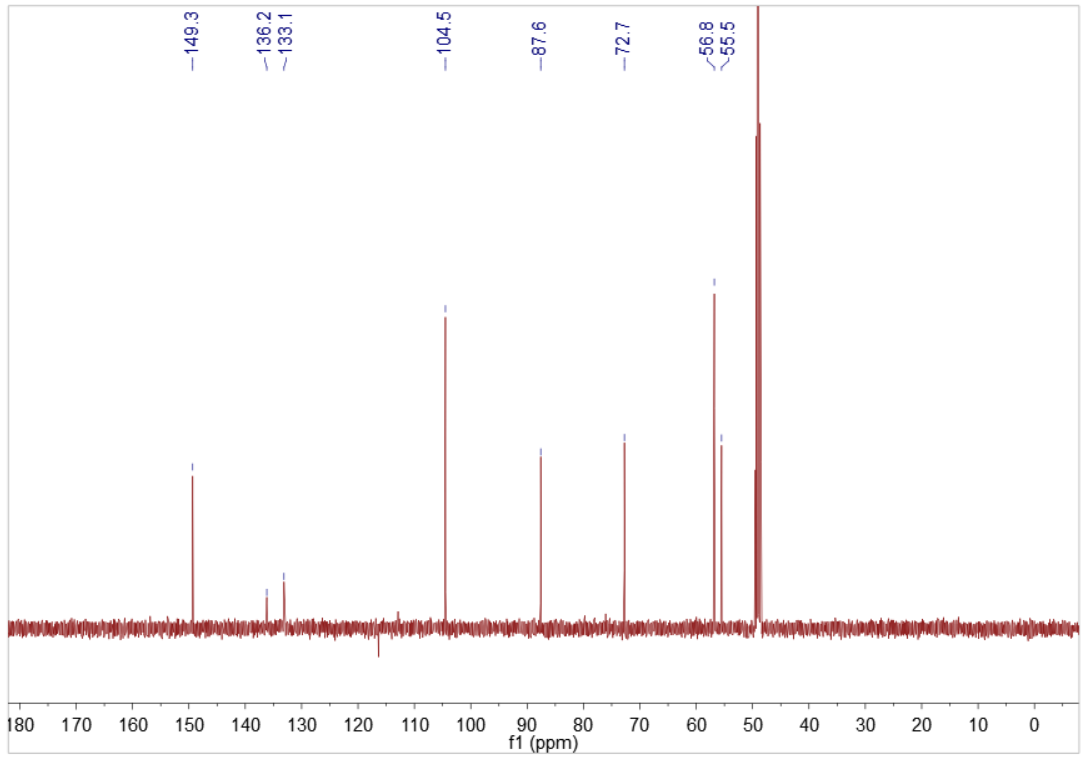
# Fig. S34. 1H NMR spectrum of 9 in CDCl3



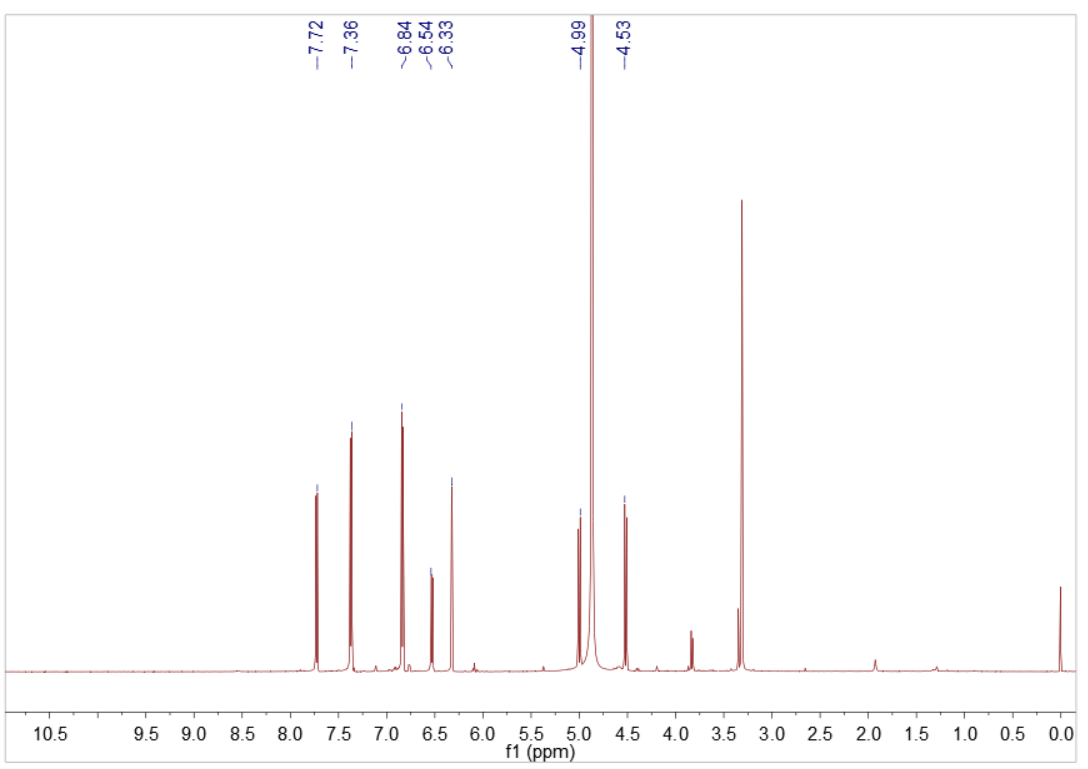
# Fig. S35. 13C NMR spectrum of 9 in CDCl3



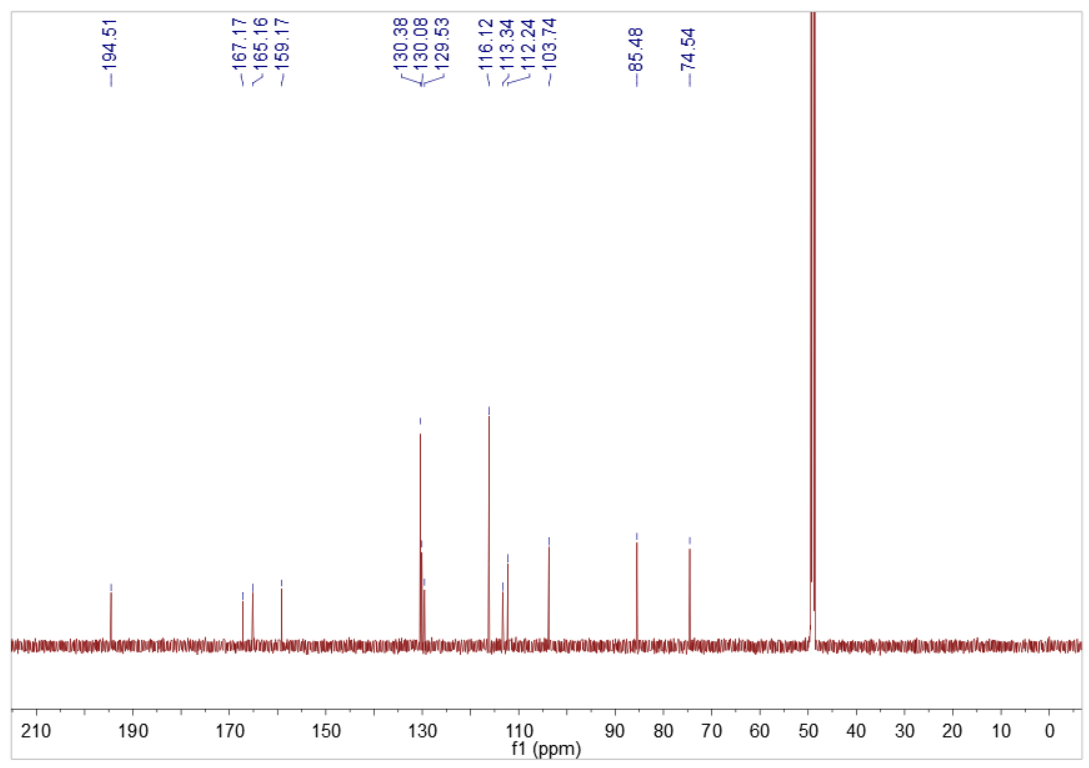
# Fig. S36. 1H NMR spectrum of 10 in CD3OD



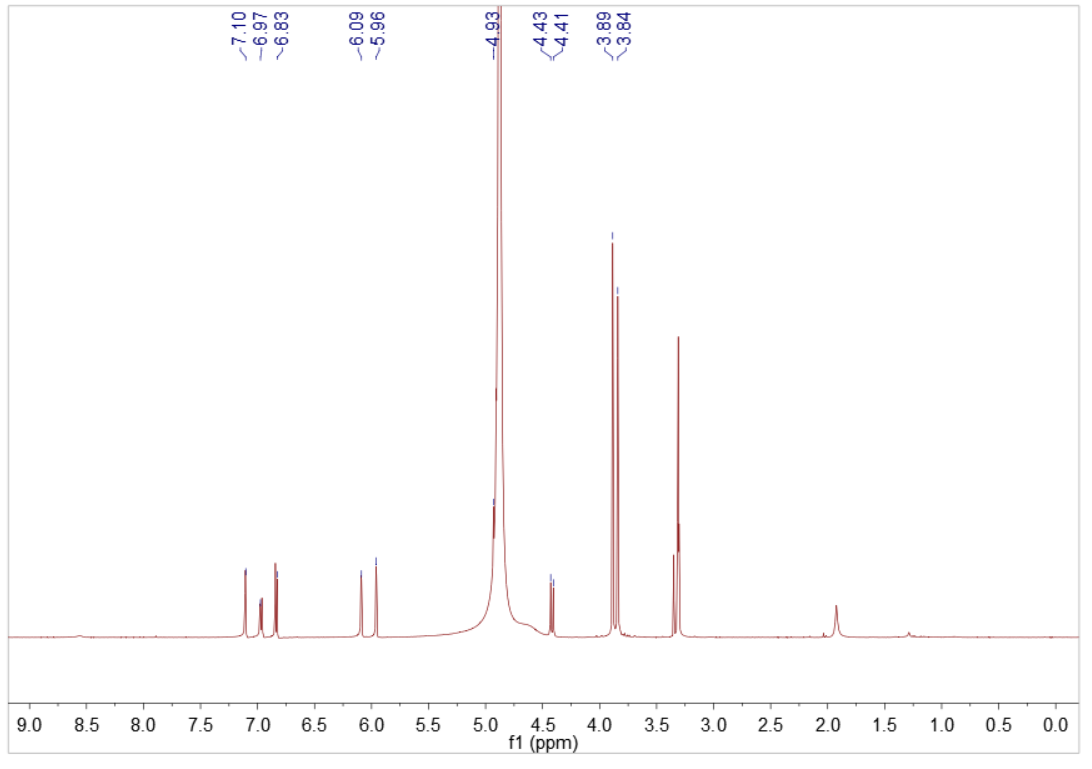
# Fig. S37. 13C NMR spectrum of 10 in CD3OD



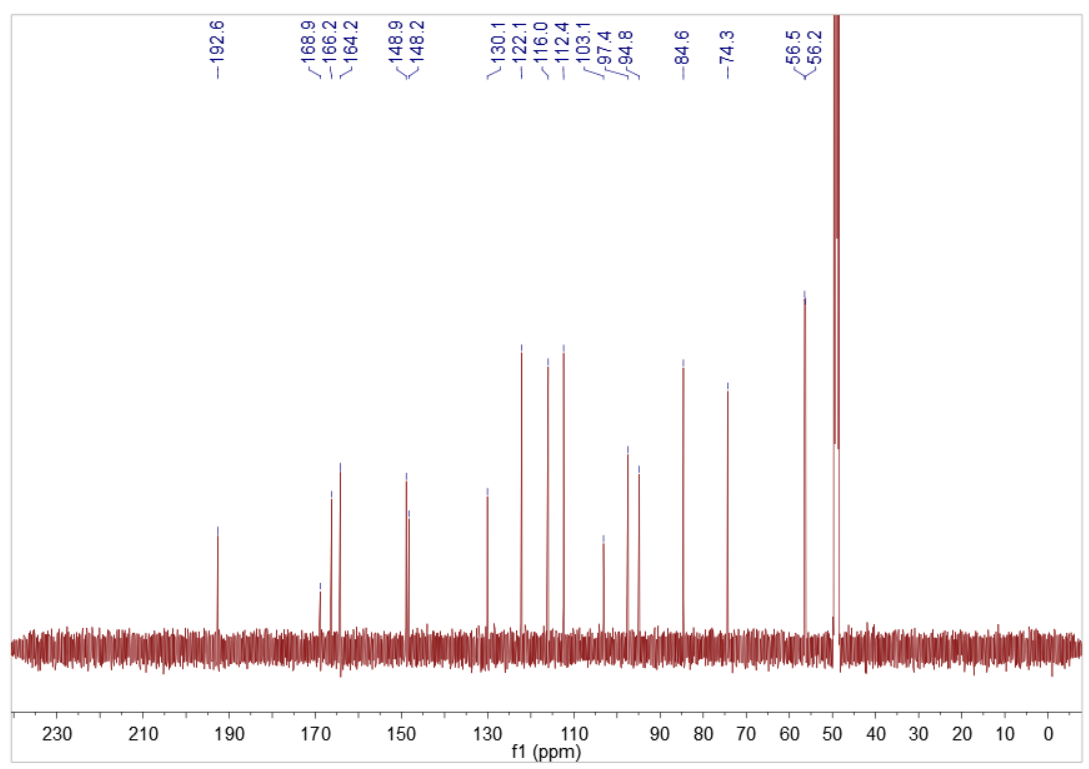
# Fig. S38. 1H NMR spectrum of 11 in CD3OD



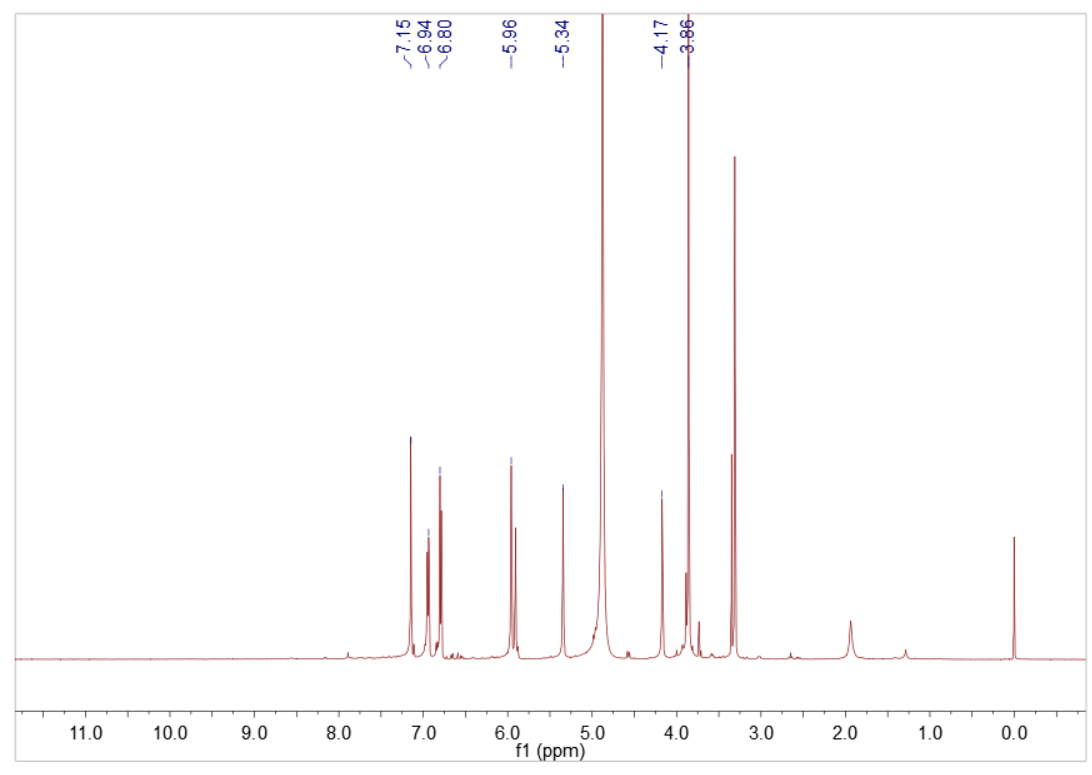
# Fig. S39. 13C NMR spectrum of 11 in CD3OD



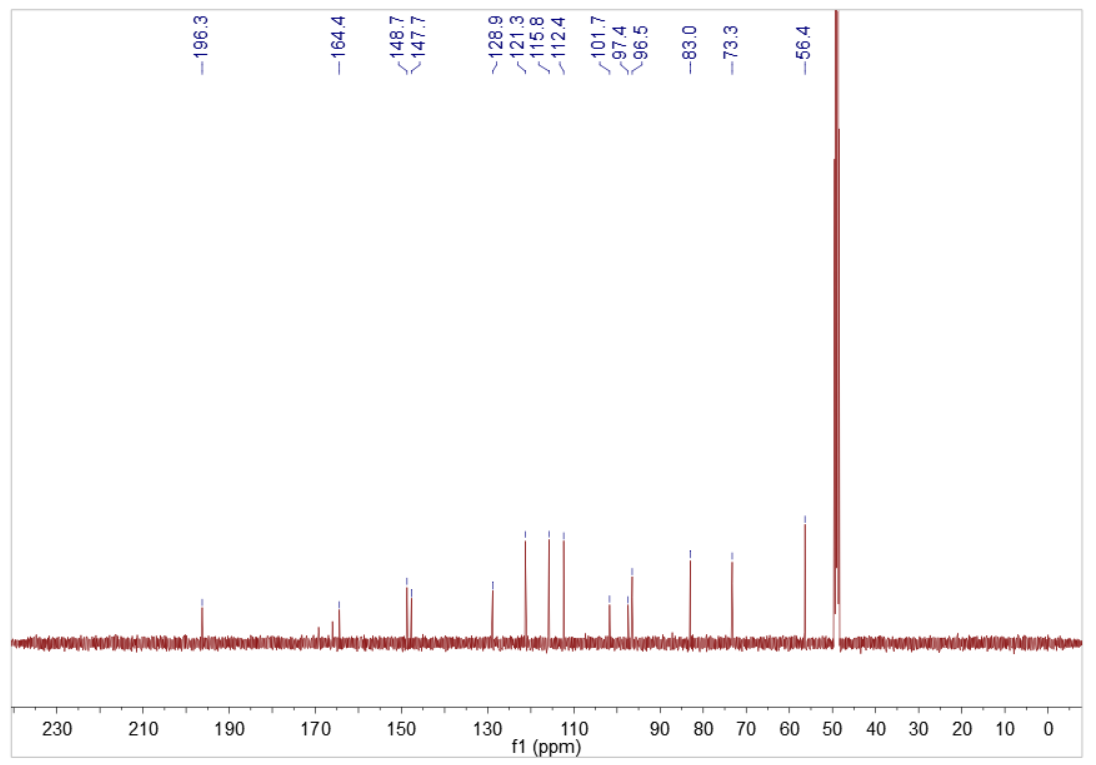
# Fig. S40. 1H NMR spectrum of 12 in CD3OD



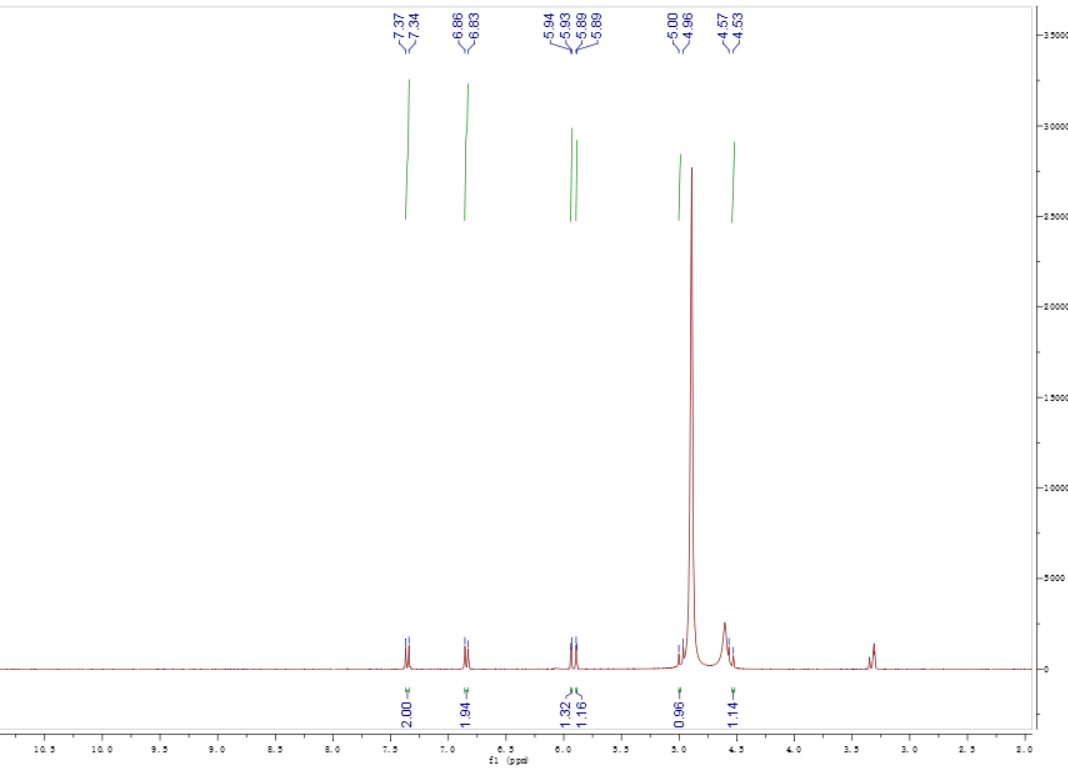
# Fig. S41. 13C NMR spectrum of 12 in CD3OD



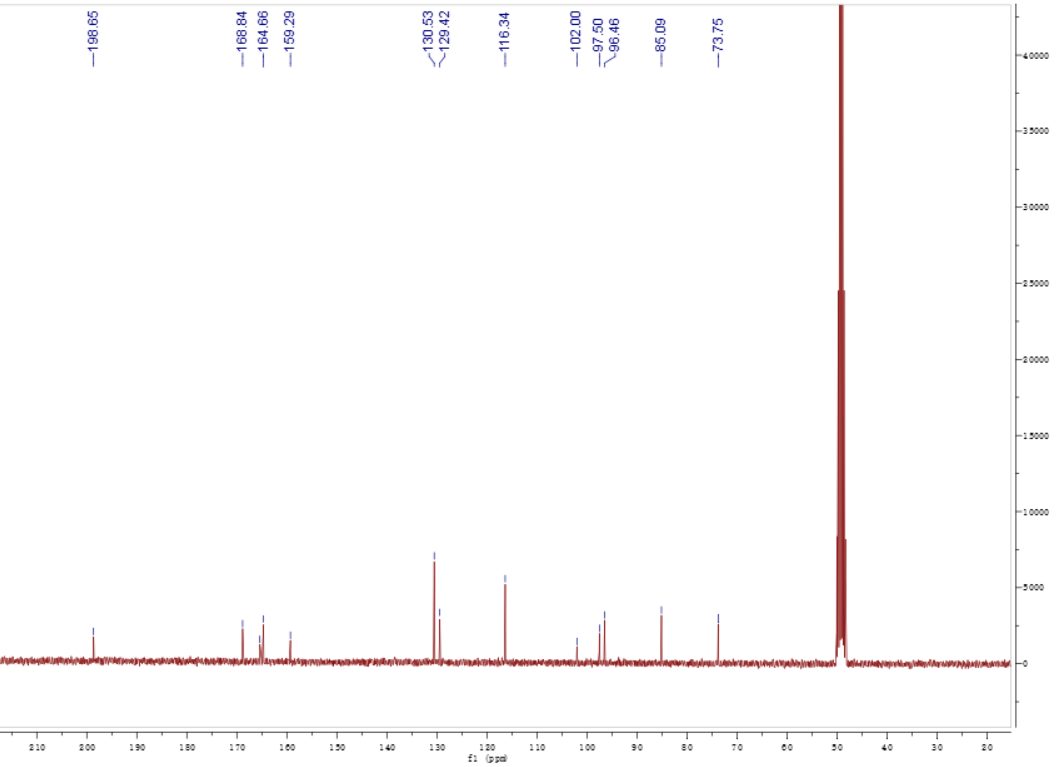
# Fig. S42. 1H NMR spectrum of 13 in CD3OD



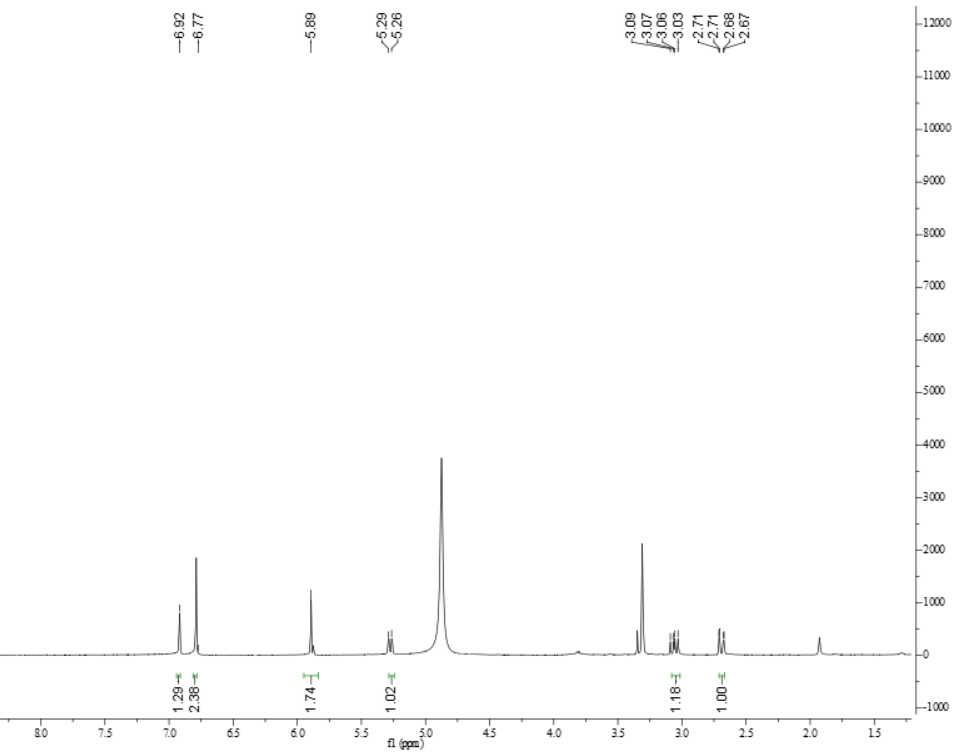
# Fig. S43. 13C NMR spectrum of 13 in CD3OD



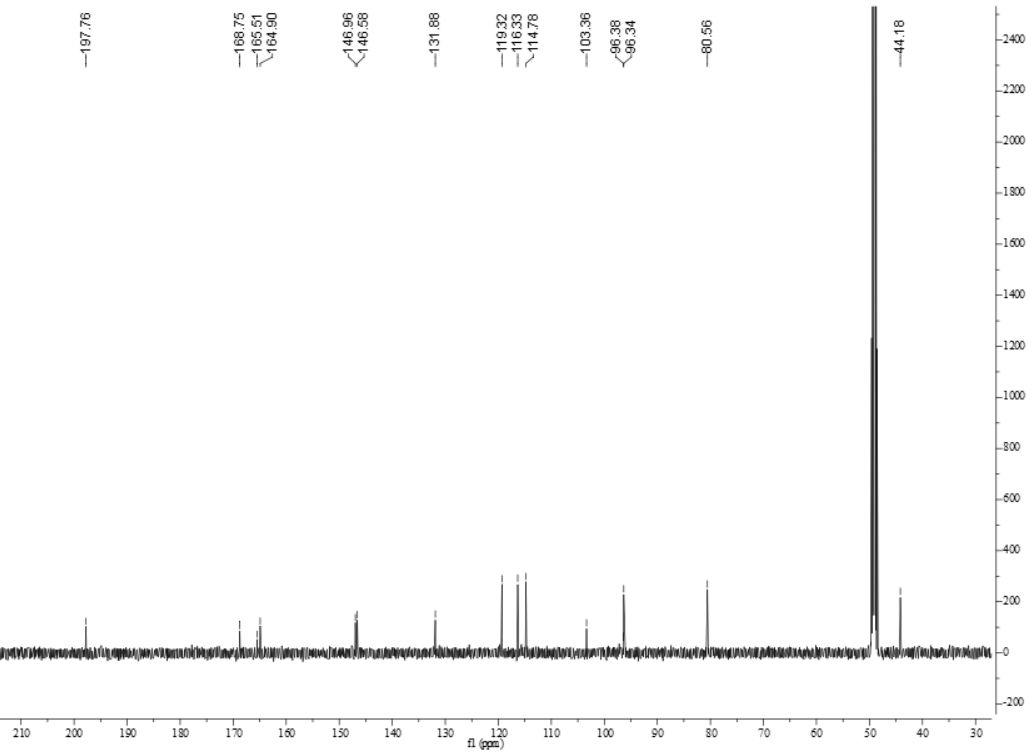
# Fig. S44. 1H NMR spectrum of 14 in CD3OD



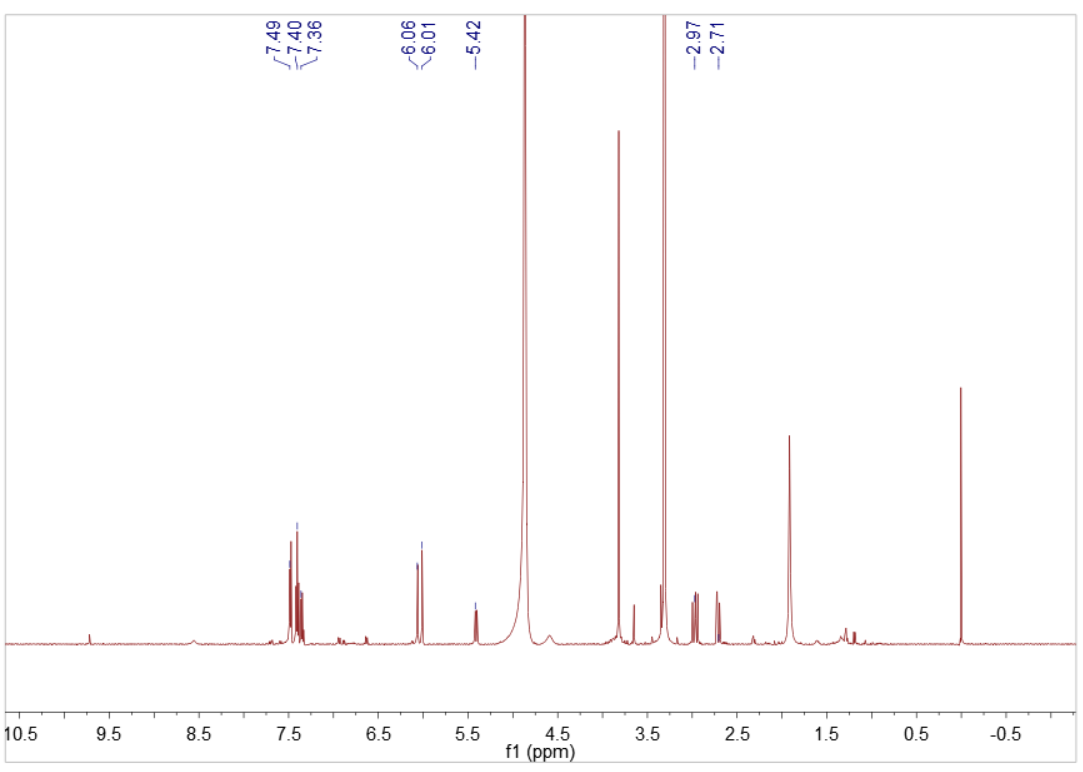
# Fig. S45. 13C NMR spectrum of 14 in CD3OD



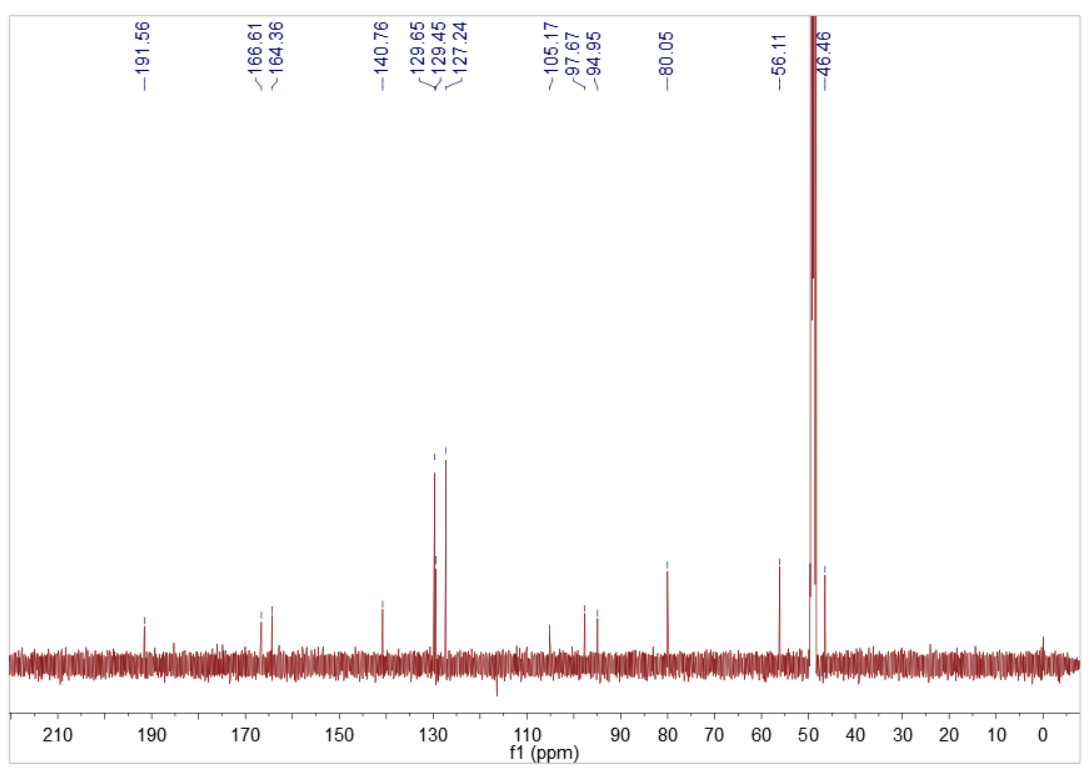
# Fig. S46. 1H NMR spectrum of 15 in CD3OD



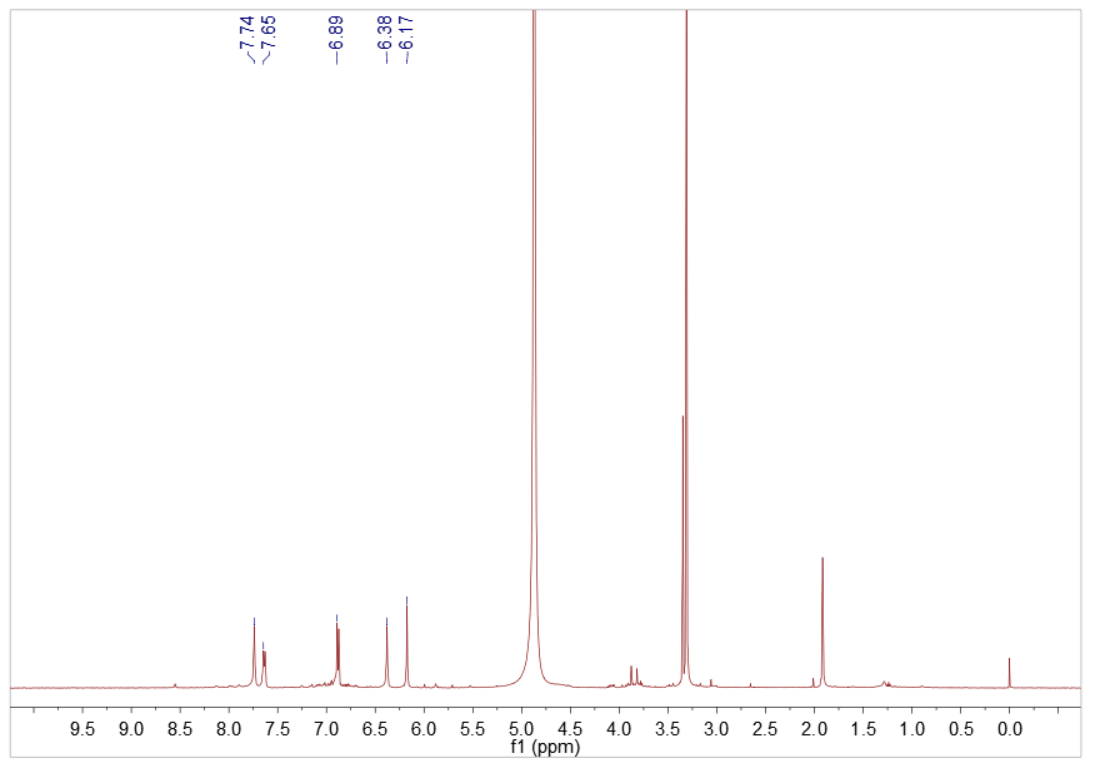
# Fig. S47. 13C NMR spectrum of 15 in CD3OD



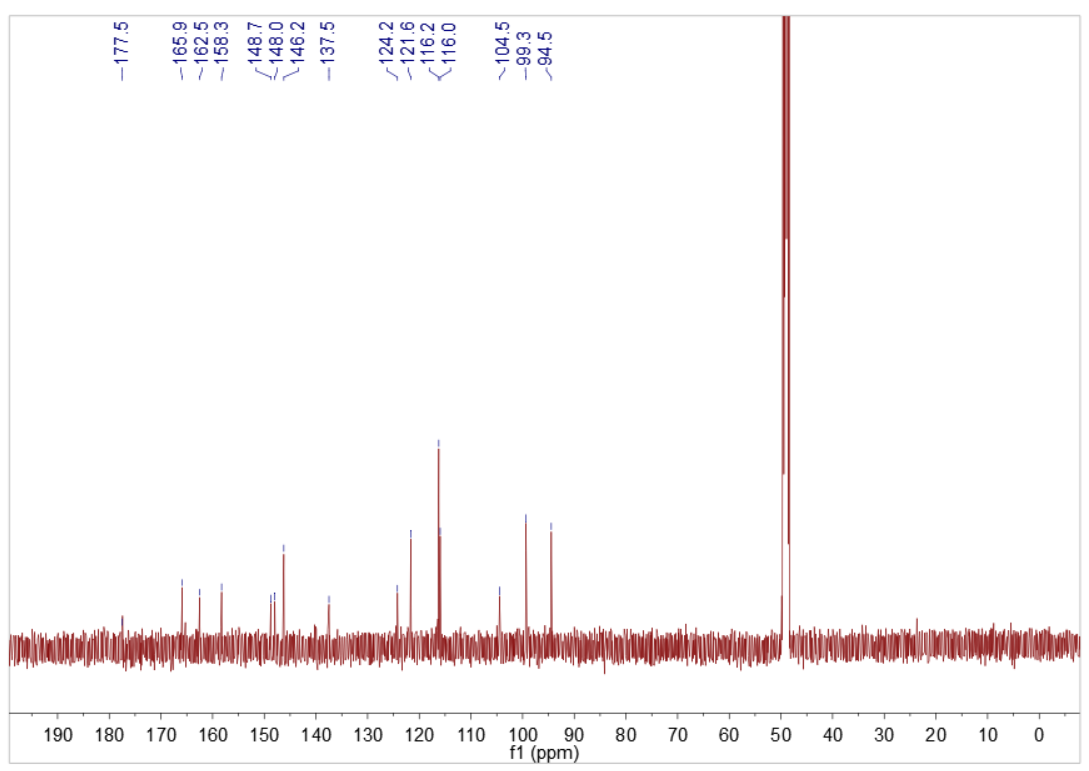
# Fig. S48. 1H NMR spectrum of 16 in CD3OD



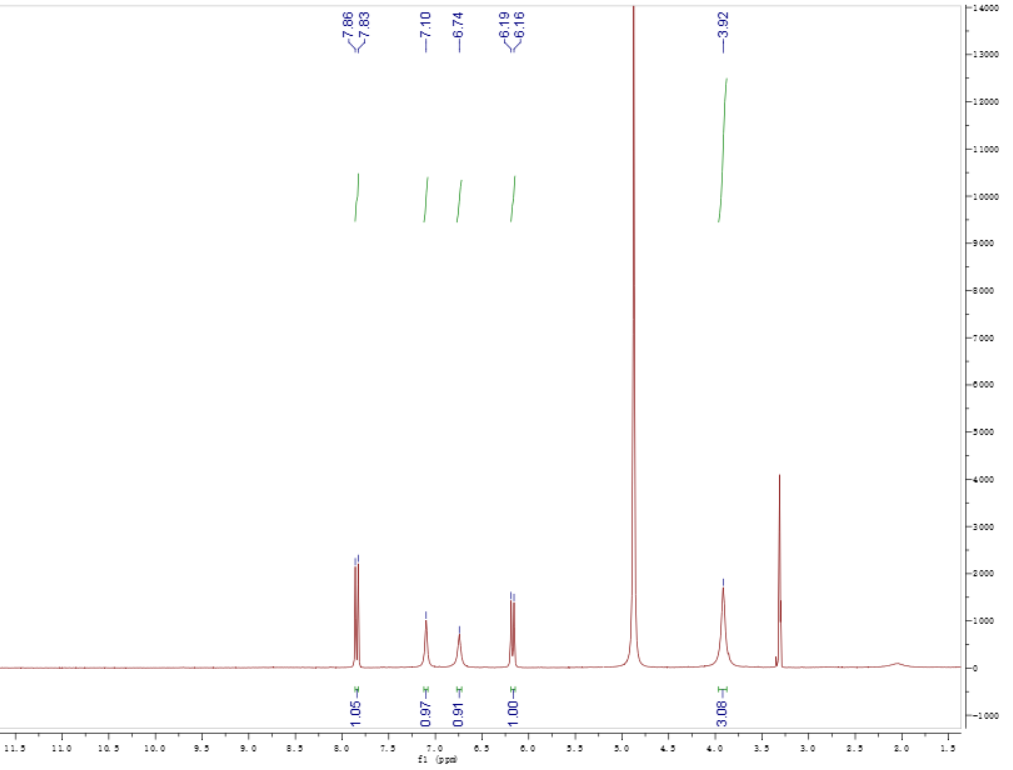
# Fig. S49. 13C NMR spectrum of 16 in CD3OD



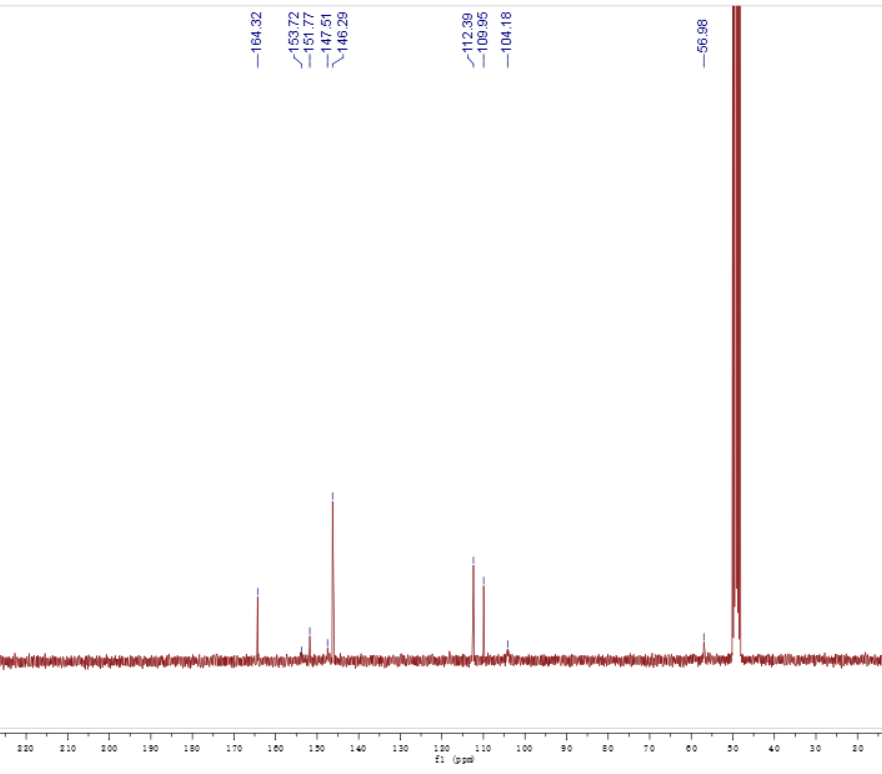
# Fig. S50. 1H NMR spectrum of 17 in CD3OD



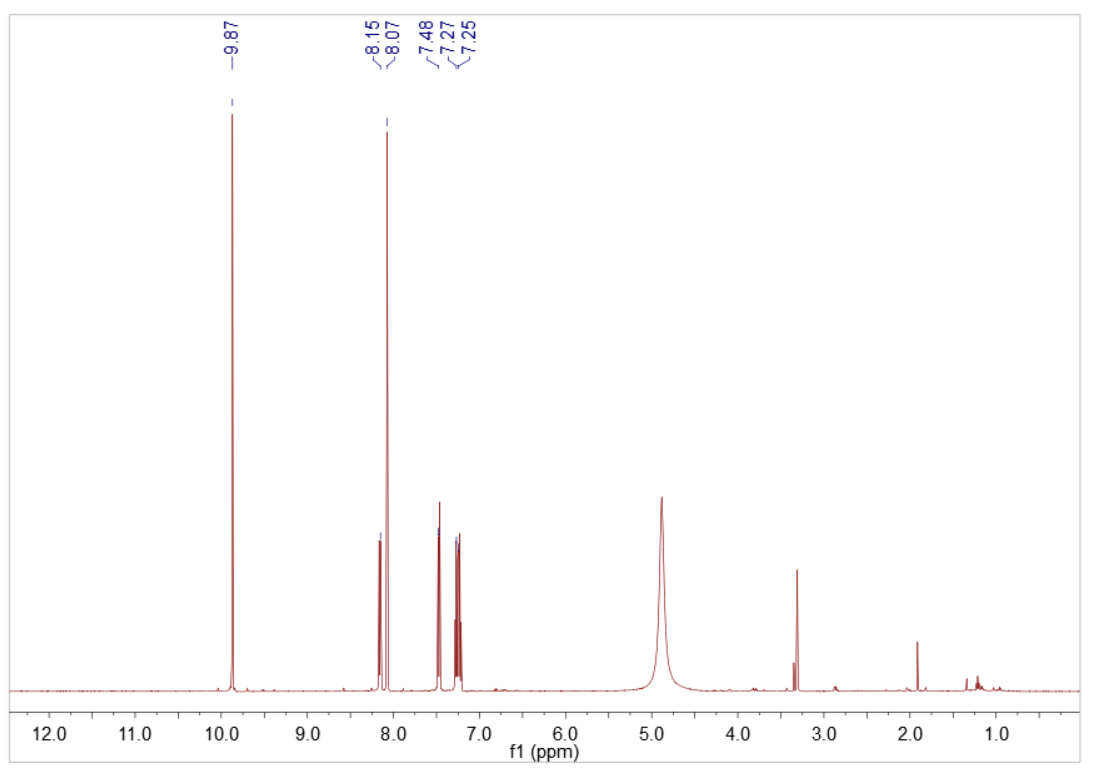
# Fig. S51. 13C NMR spectrum of 17 in CD3OD



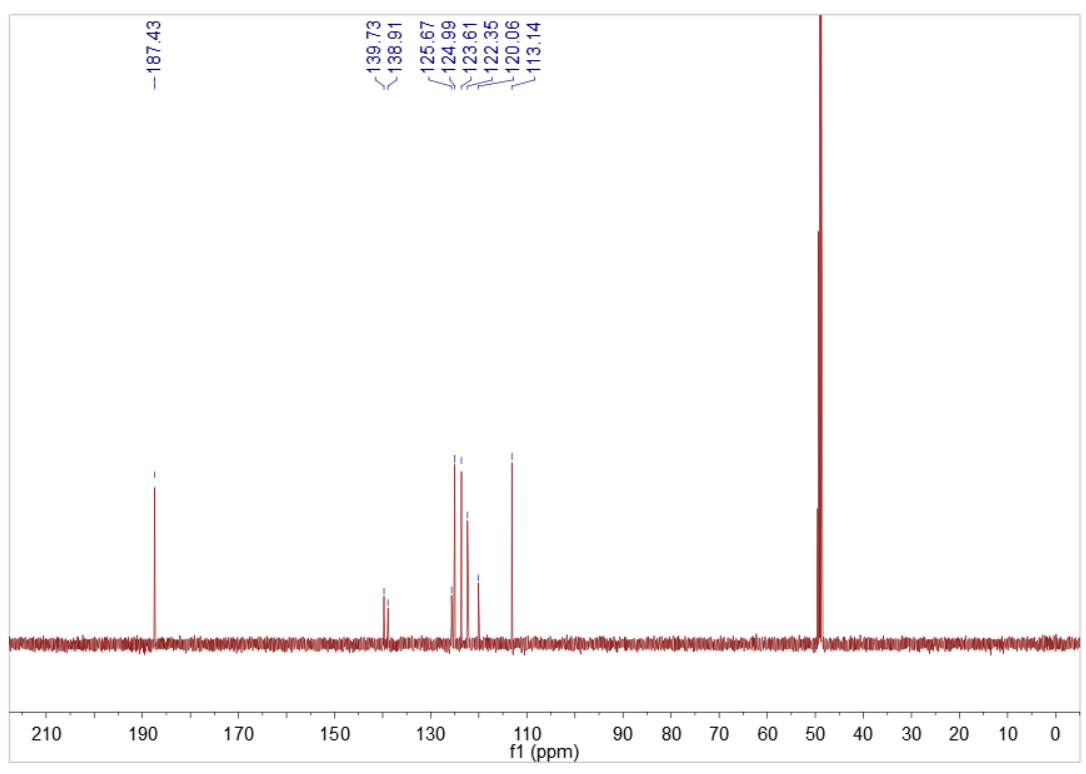
# Fig. S52. 1H NMR spectrum of 18 in CD3OD



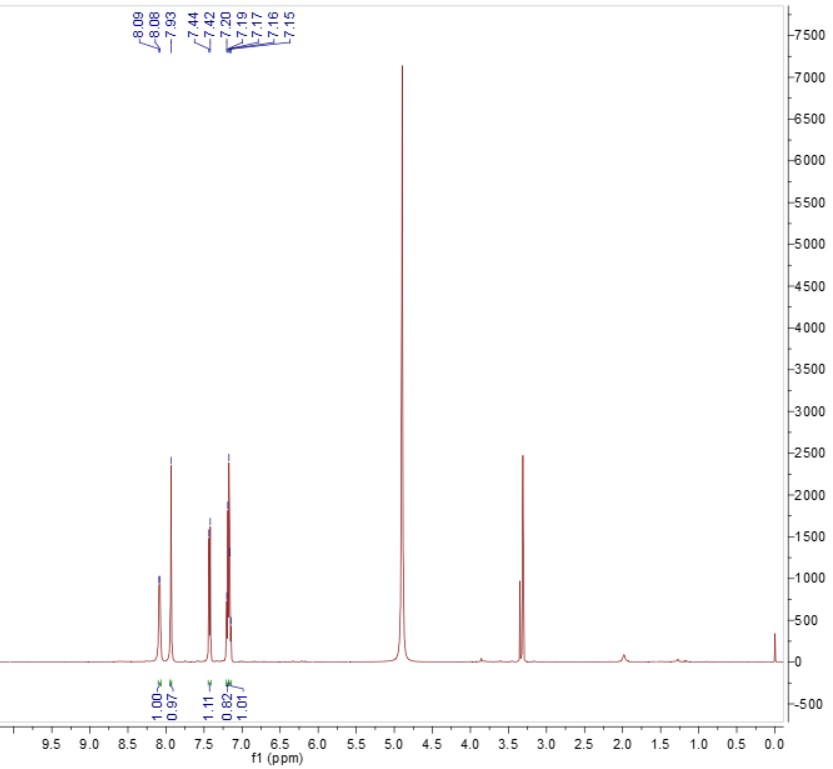
# Fig. S53. 13C NMR spectrum of 18 in CD3OD



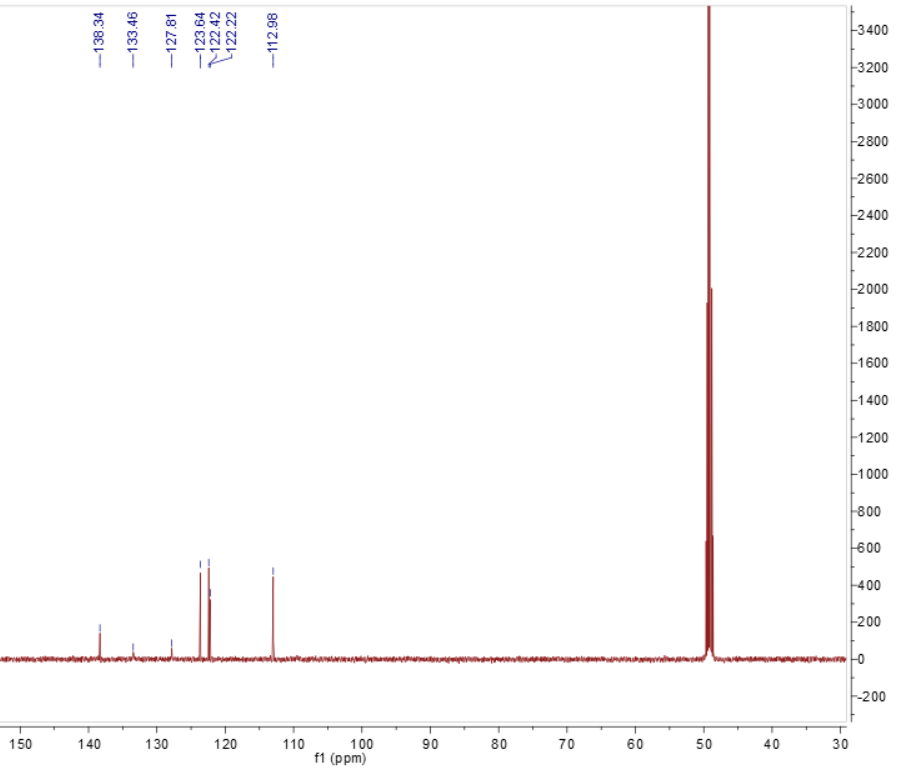
# Fig. S54. 1H NMR spectrum of 19 in CD3OD



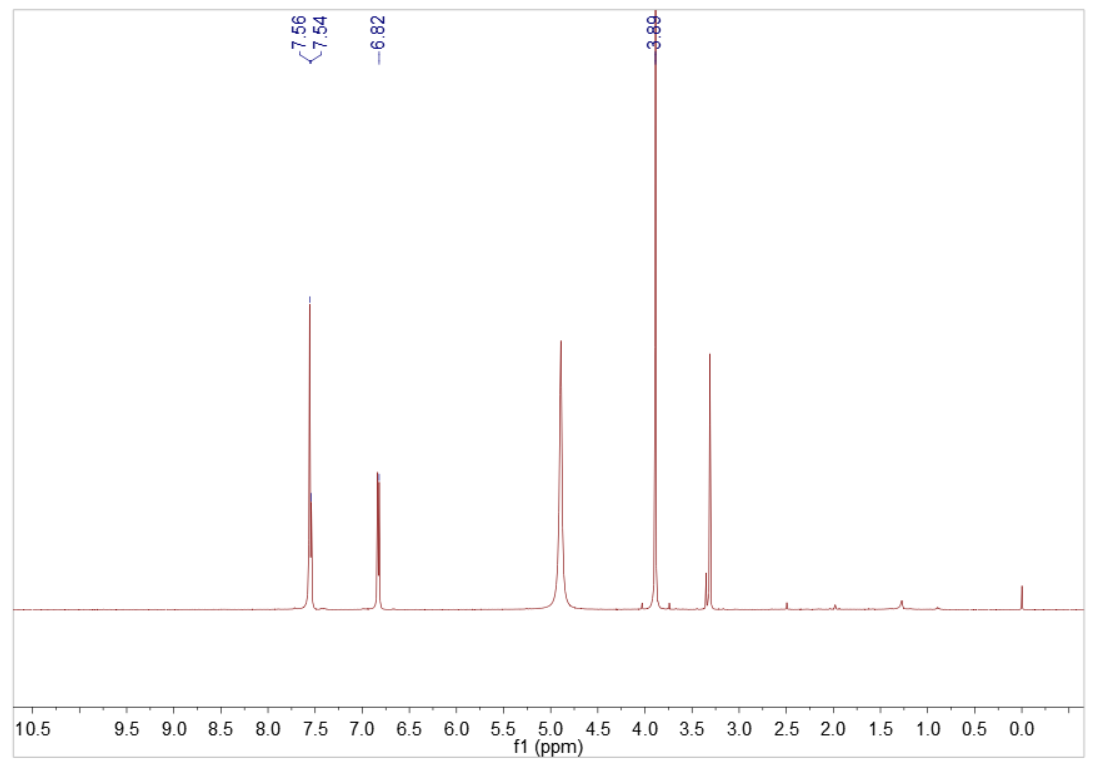
# Fig. S55. 13C NMR spectrum of 19 in CD3OD



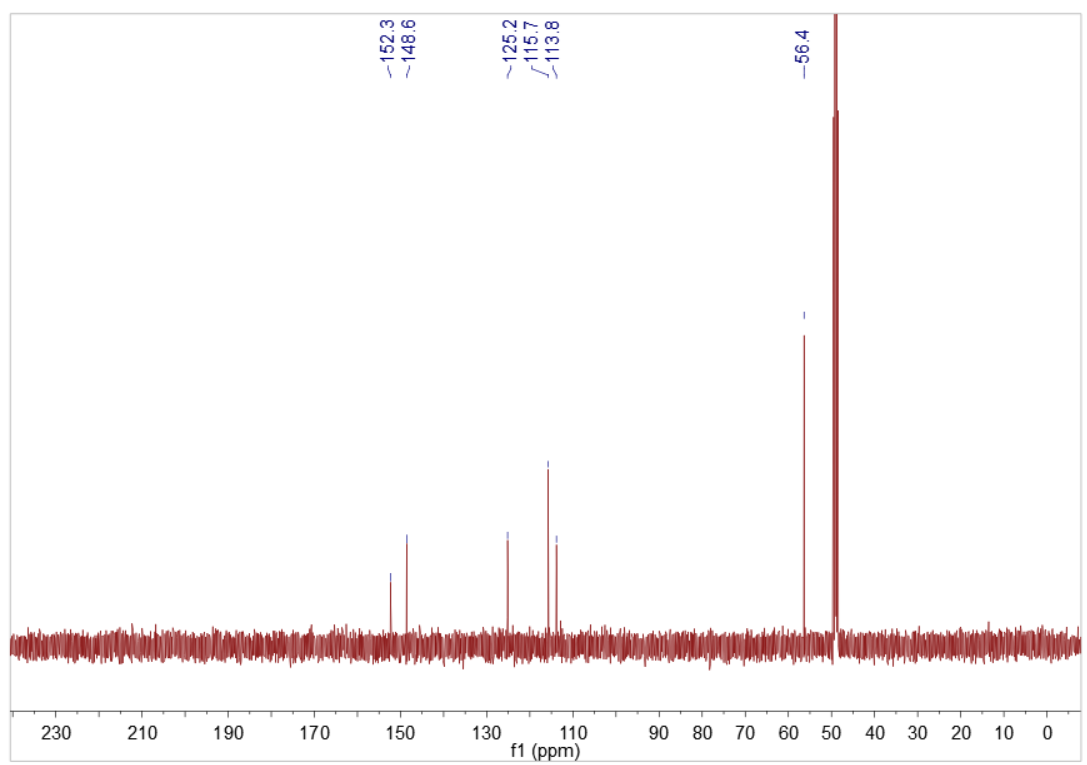
# Fig. S56. 1H NMR spectrum of 20 in CD3OD



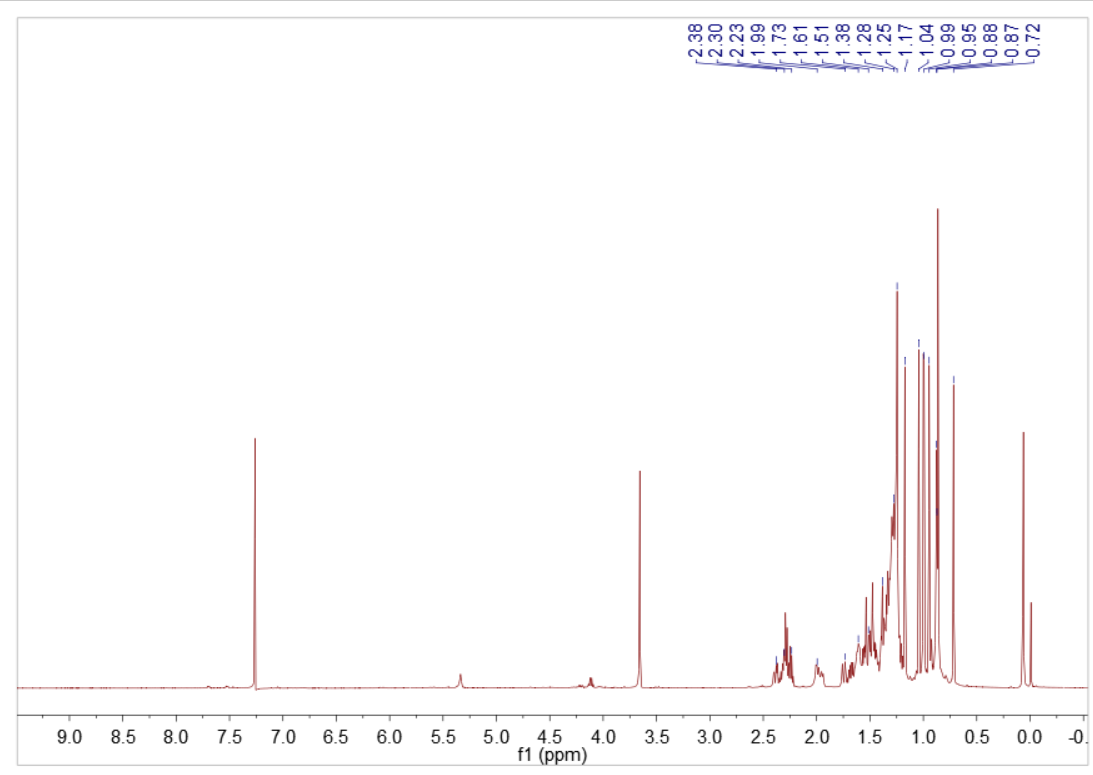
# Fig. S57. 13C NMR spectrum of 20 in CD3OD



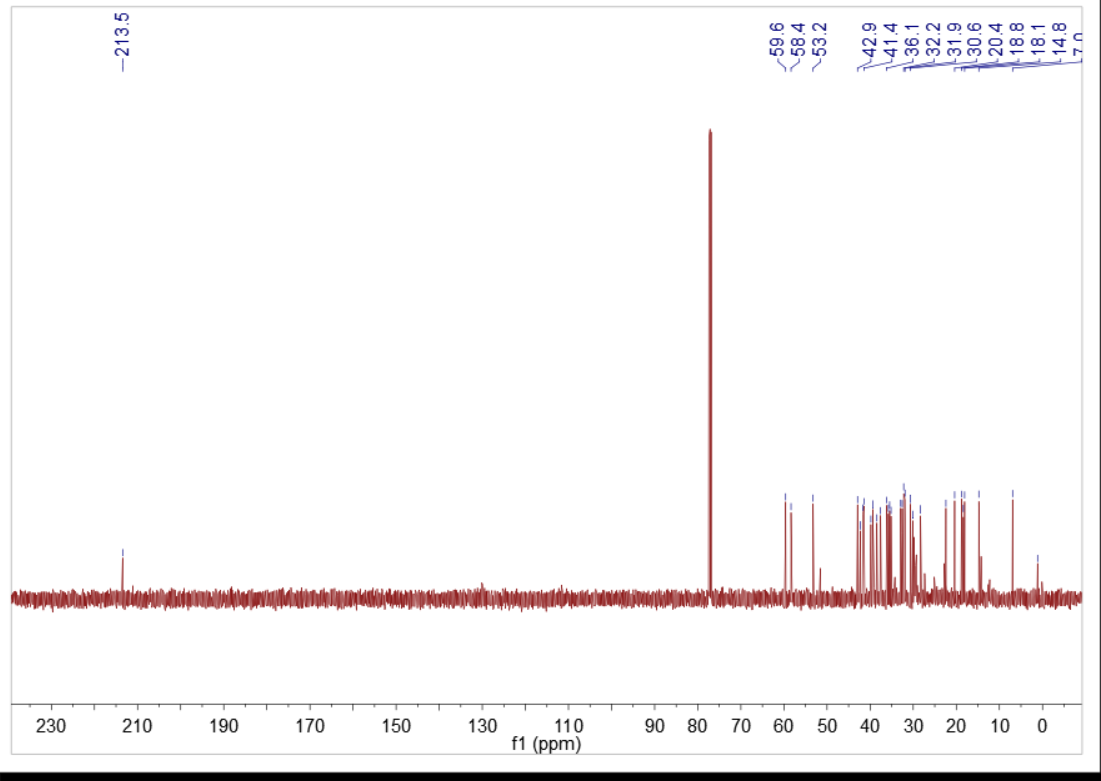
# Fig. S58. 1H NMR spectrum of 21 in CD3OD



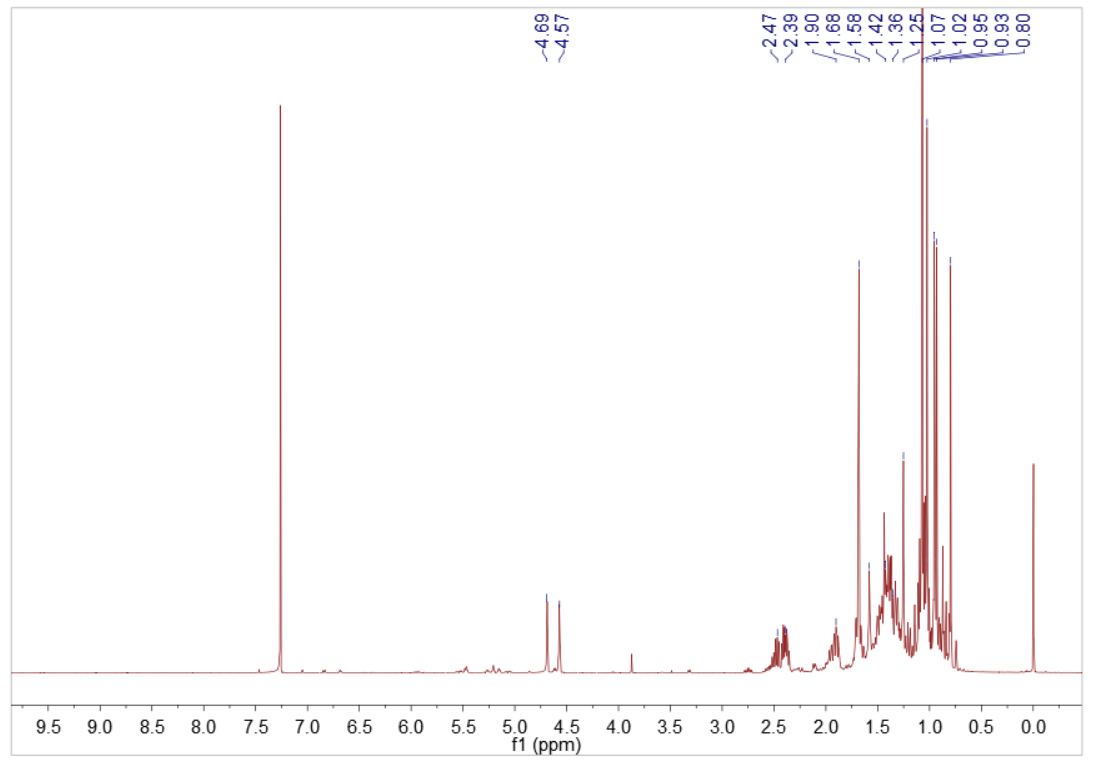
# Fig. S59. 13C NMR spectrum of 21 in CD3OD



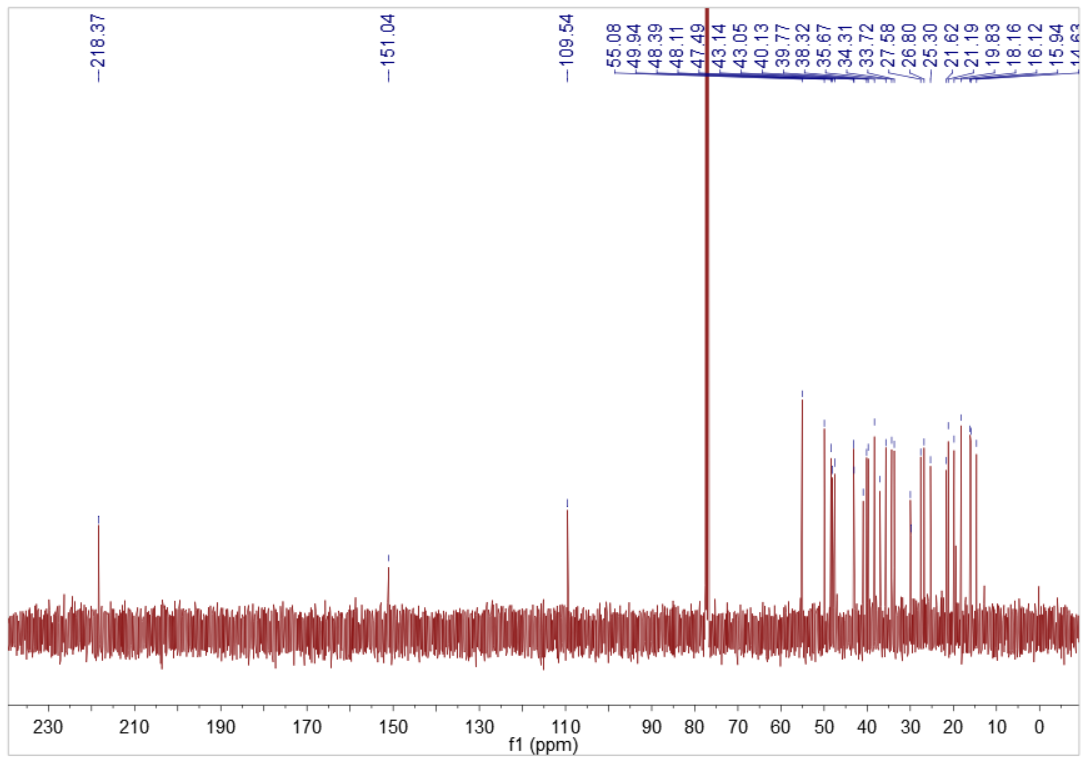
# Fig. S60. 1H NMR spectrum of 22 in CDCl3



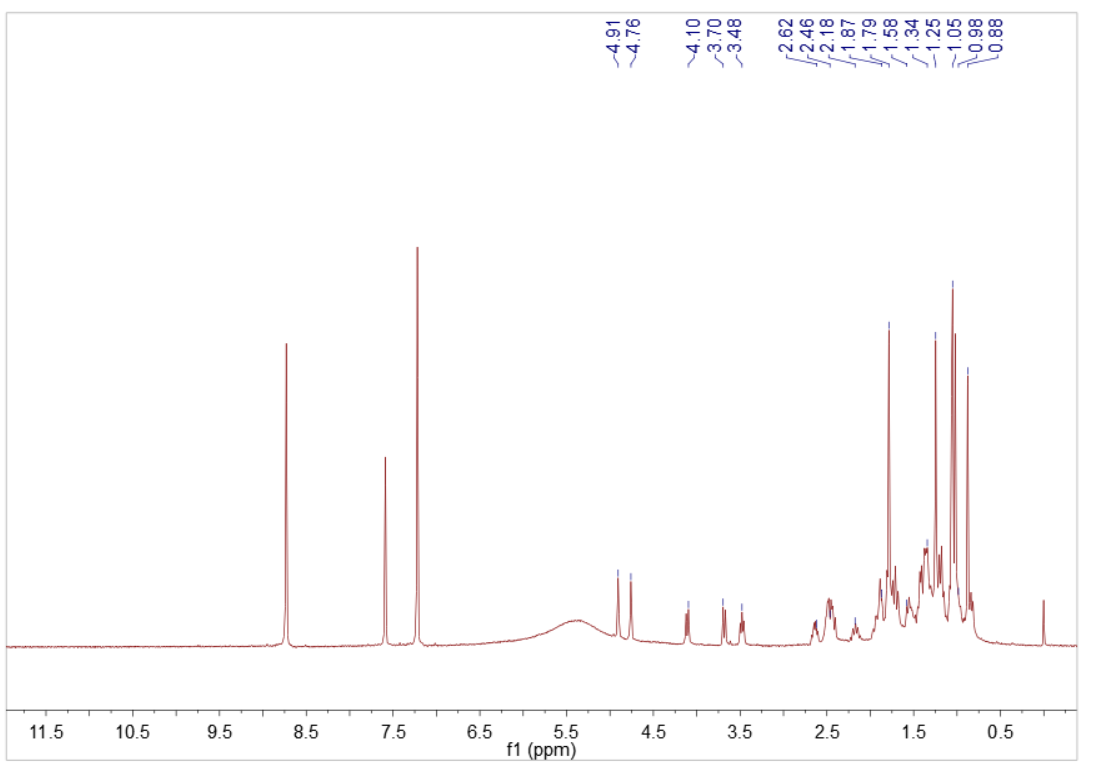
# Fig. S61. 13C NMR spectrum of 22 in CDCl3



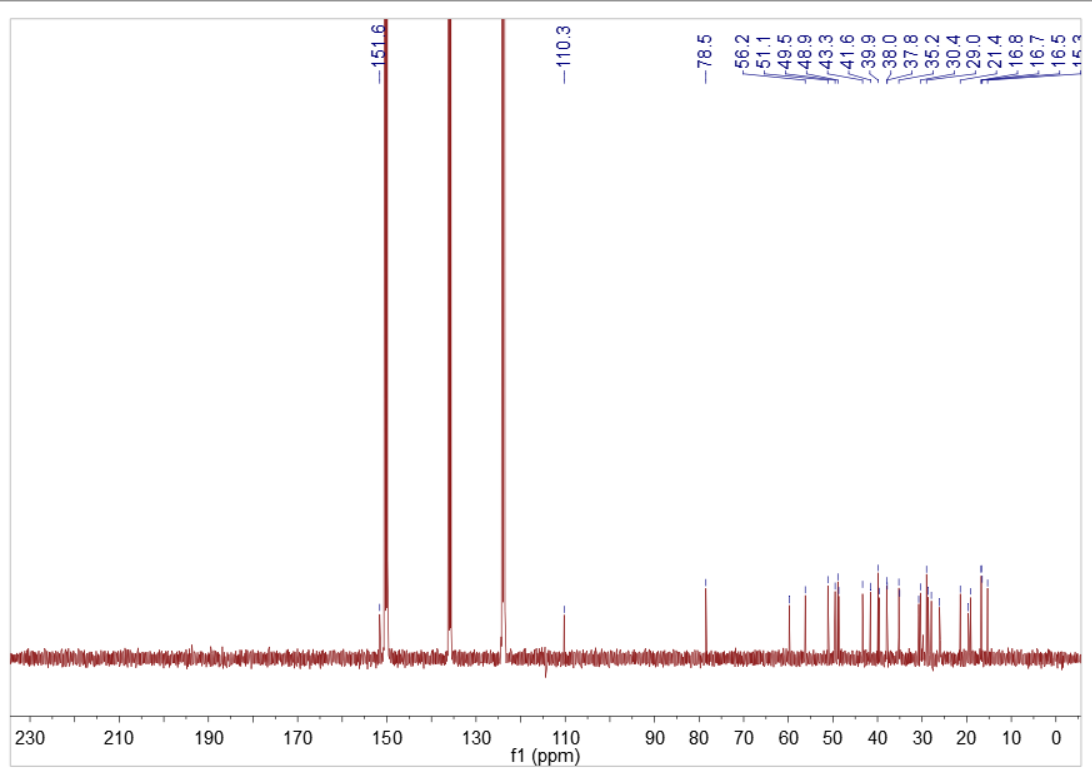
# Fig. S62. 1H NMR spectrum of 23 in CDCl3



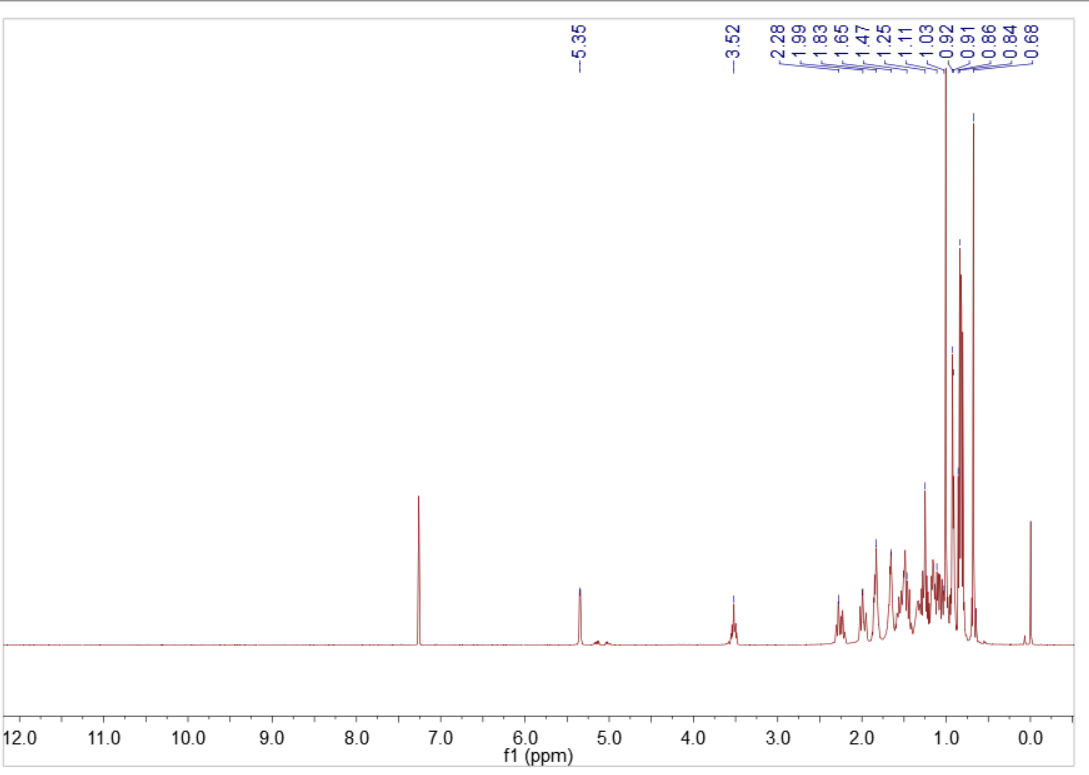
# Fig. S63. 13C NMR spectrum of 23 in CDCl3



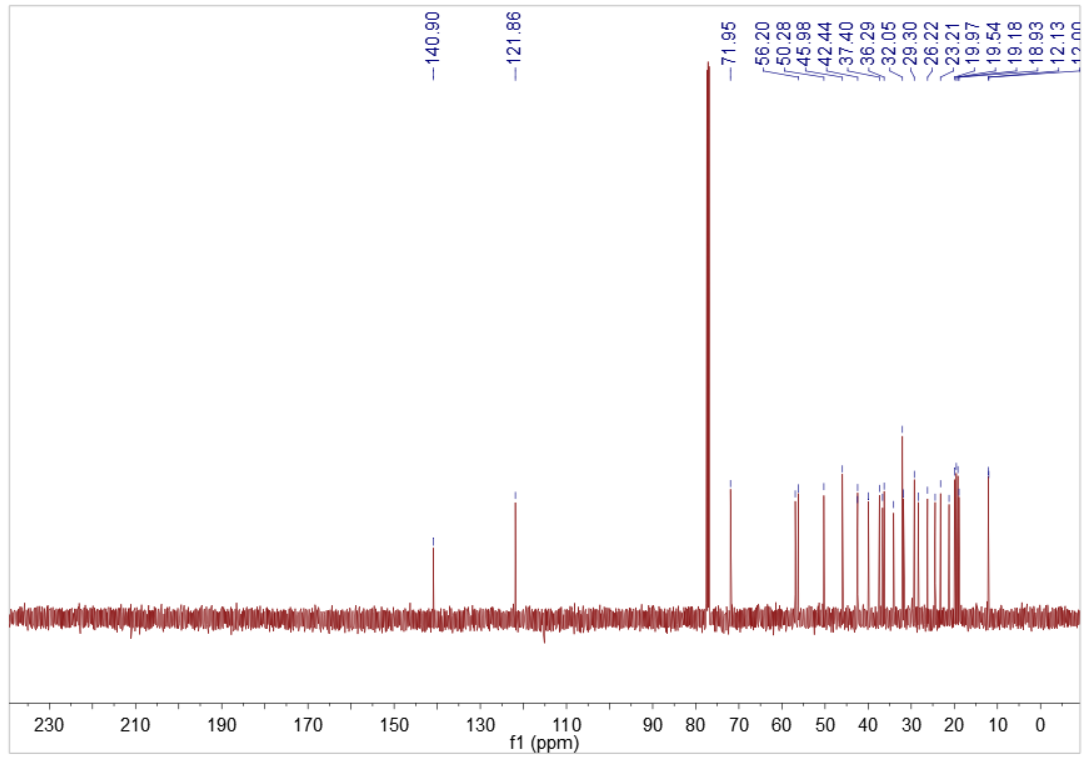
# Fig. S64. 1H NMR spectrum of 24 in C5D5N



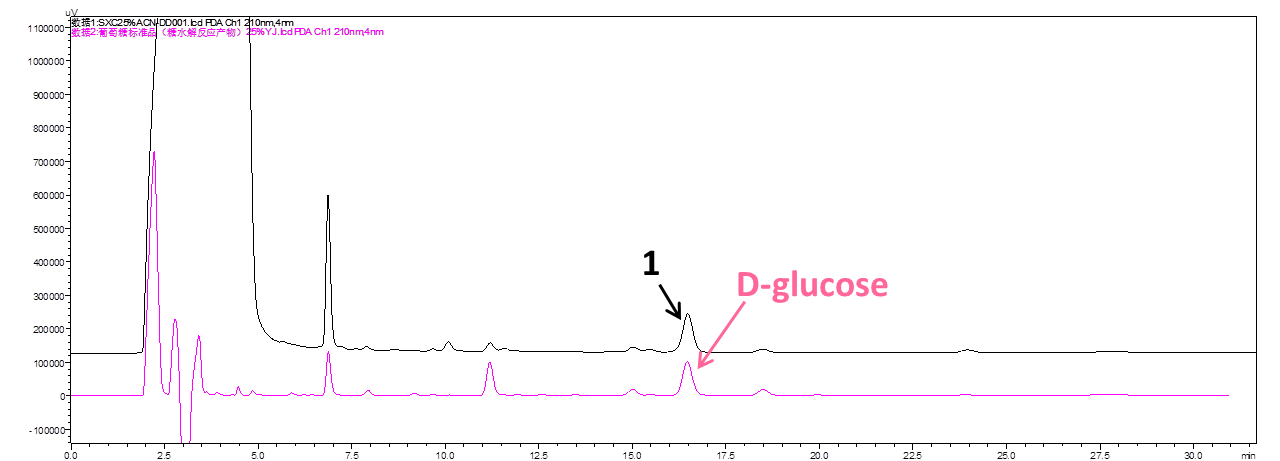
# Fig. S65. 13C NMR spectrum of 24 in C5D5N



# Fig. S66. 1H NMR spectrum of 25 in CDCl3



# Fig. S67. 13C NMR spectrum of 25 in CDCl3



# Fig. S68. HPLC chromatogram of the acid hydrolysis of 1