

Supplementary Materials: Cembranoids from a Chinese Collection of the Soft Coral *Lobophytum crassum*

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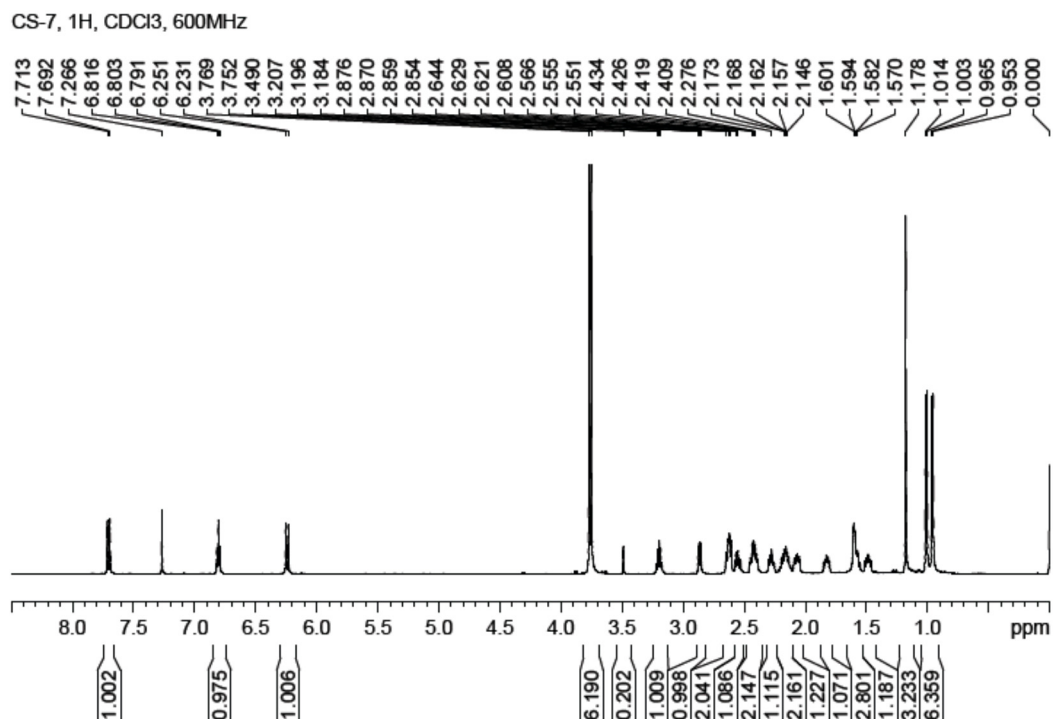


Figure S1. ¹H NMR spectrum (600 MHz) of compound 1 in CDCl₃.

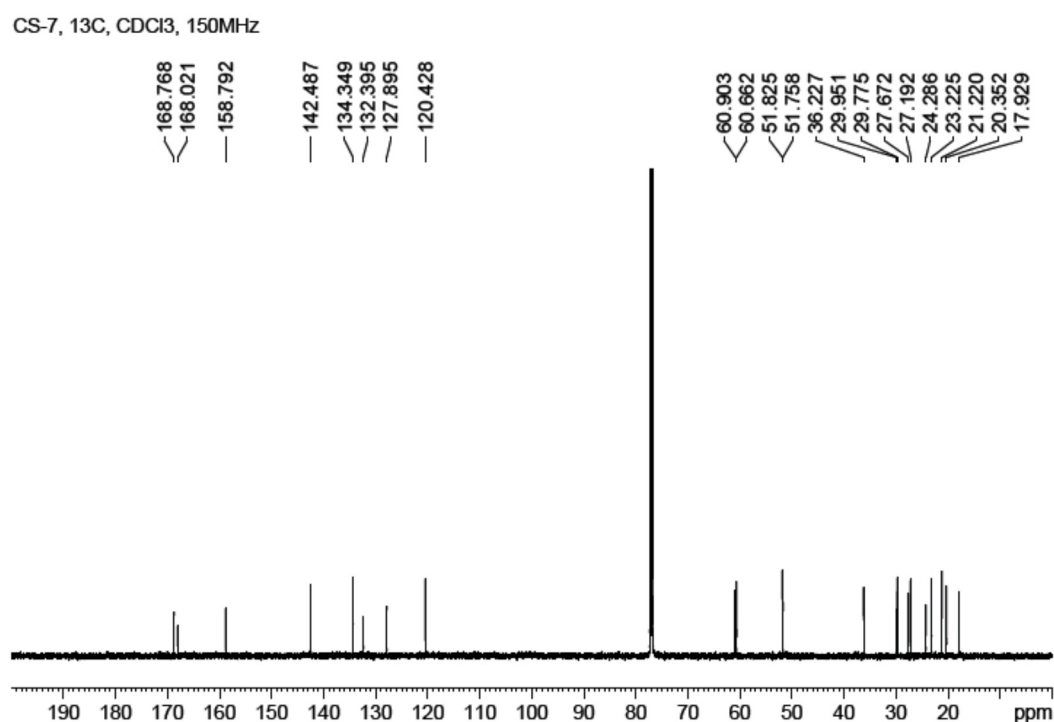
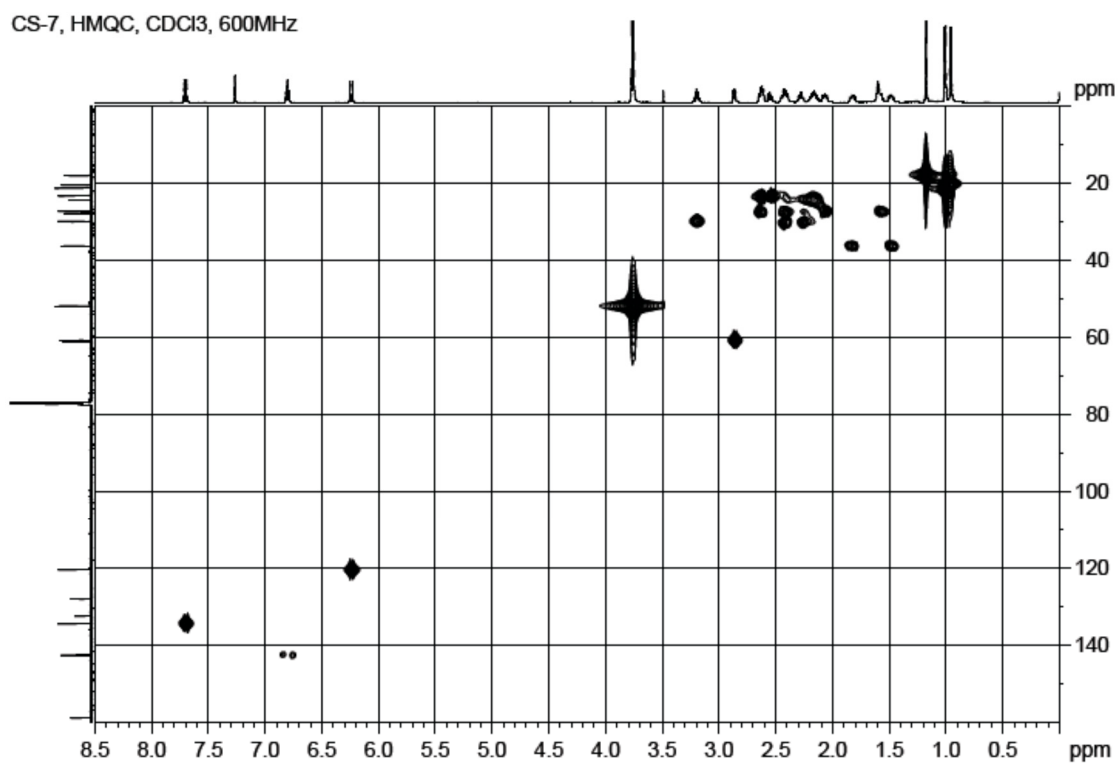
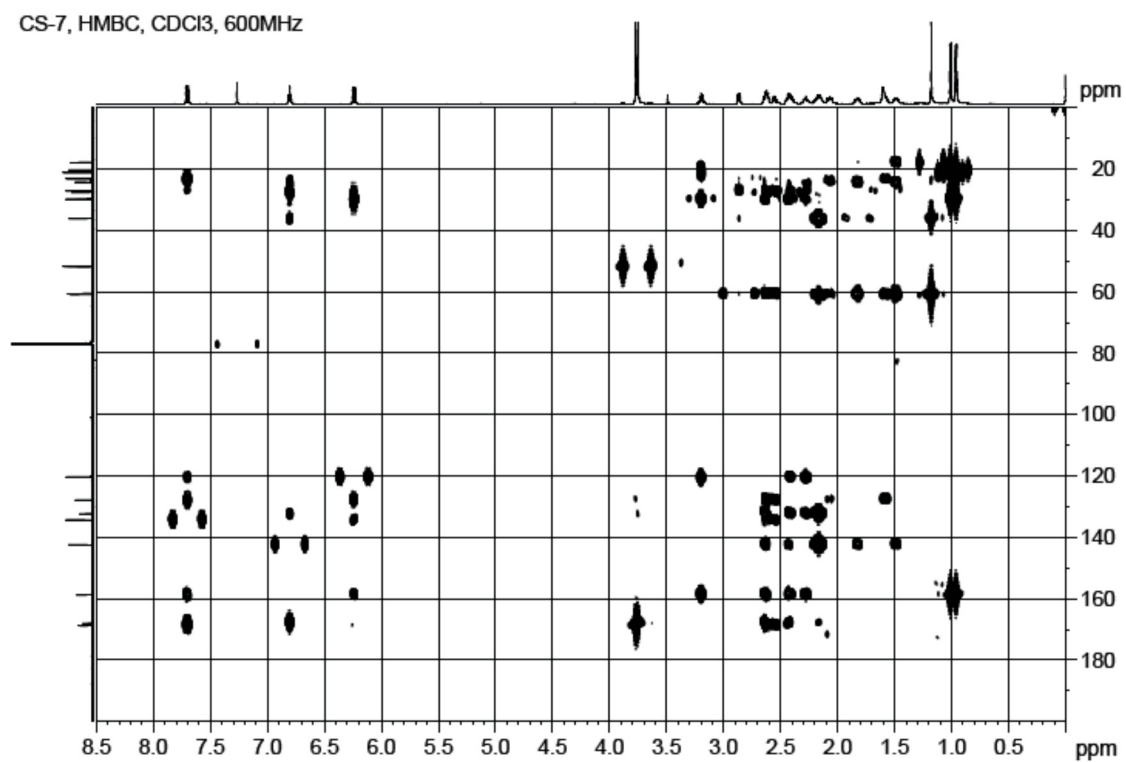
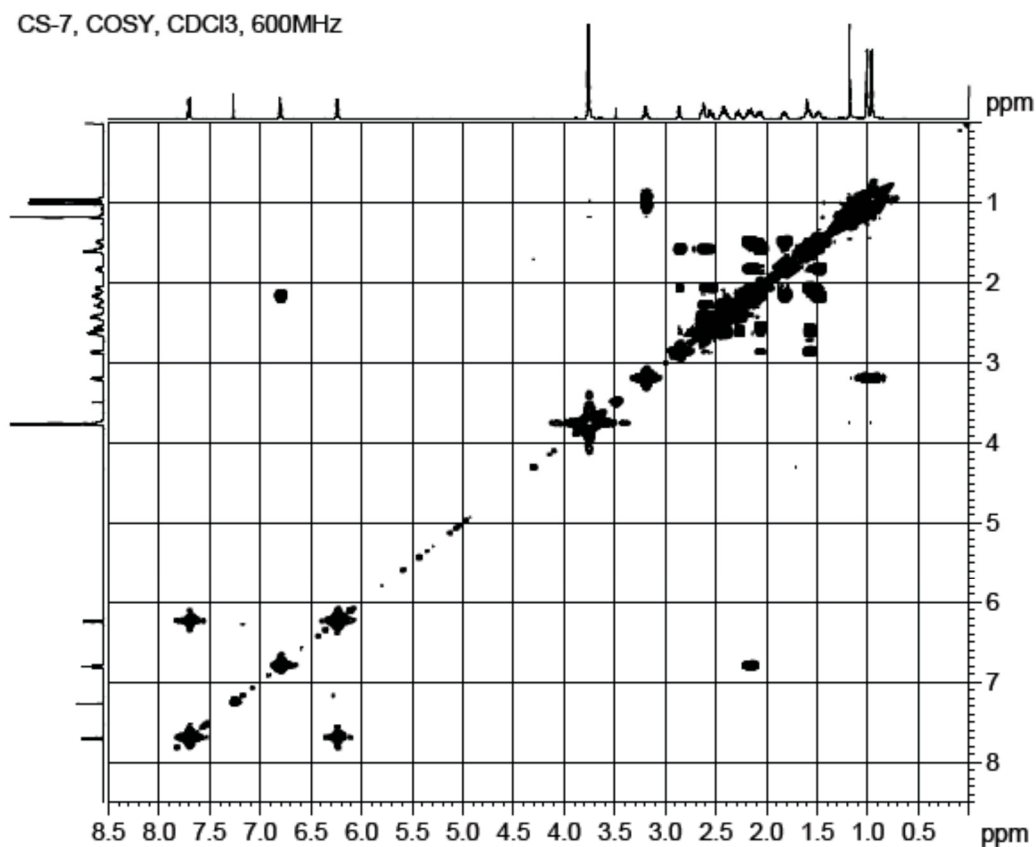
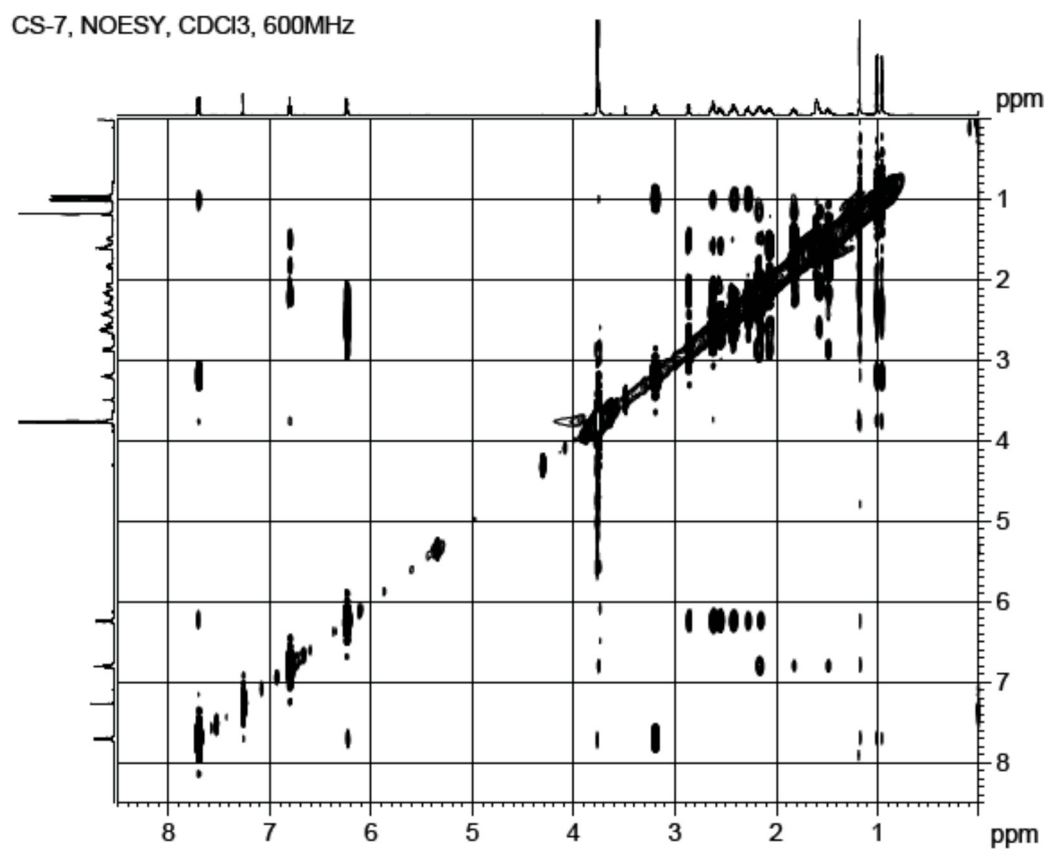


Figure S2. ¹³C NMR spectrum (150 MHz) of compound 1 in CDCl₃.

Figure S3. HMQC spectrum of compound 1 in CDCl₃.Figure S4. HMBC spectrum of compound 1 in CDCl₃.

Figure S5. COSY spectrum of compound 1 in CDCl₃.Figure S6. NOESY spectrum of compound 1 in CDCl₃.

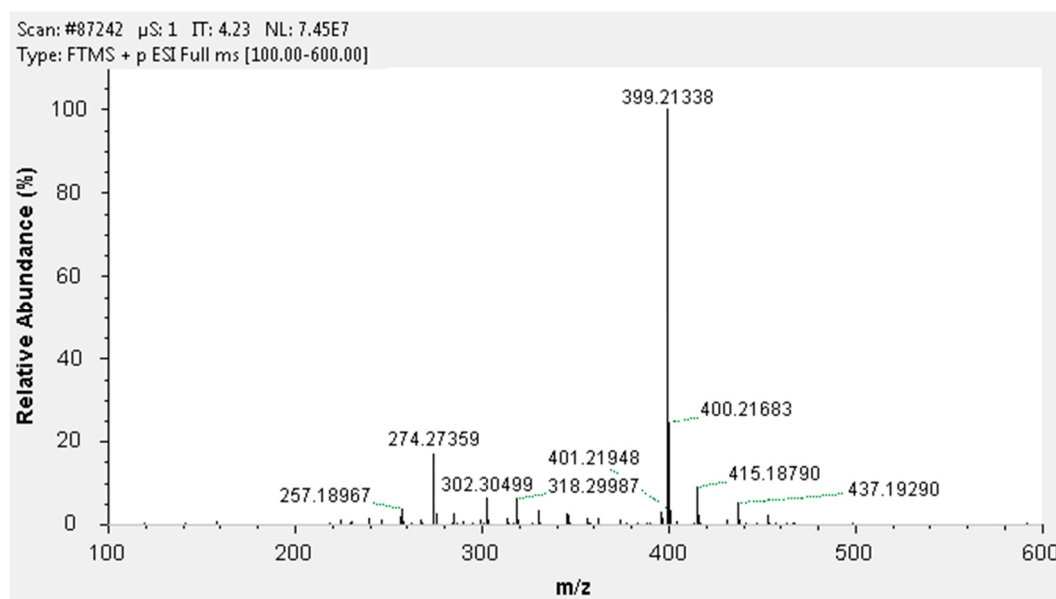
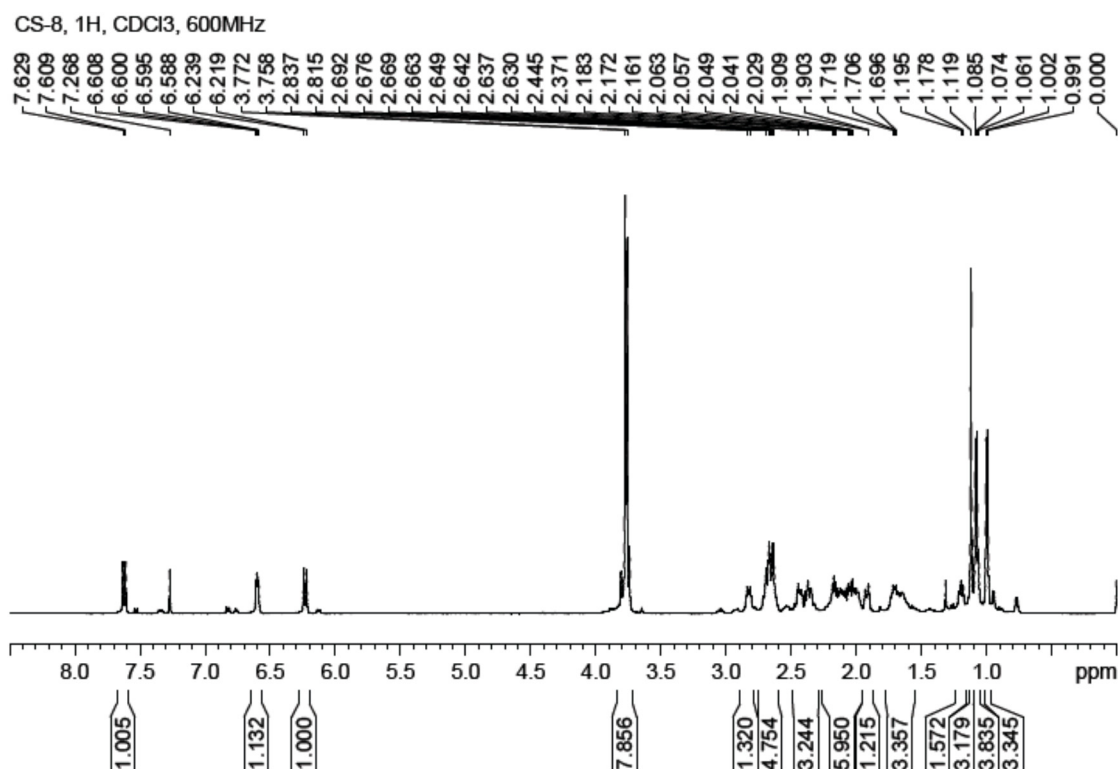


Figure S7. HRESIMS spectrum of compound 1.

Figure S8. ¹H NMR spectrum (600 MHz) of compound 2 in CDCl₃.

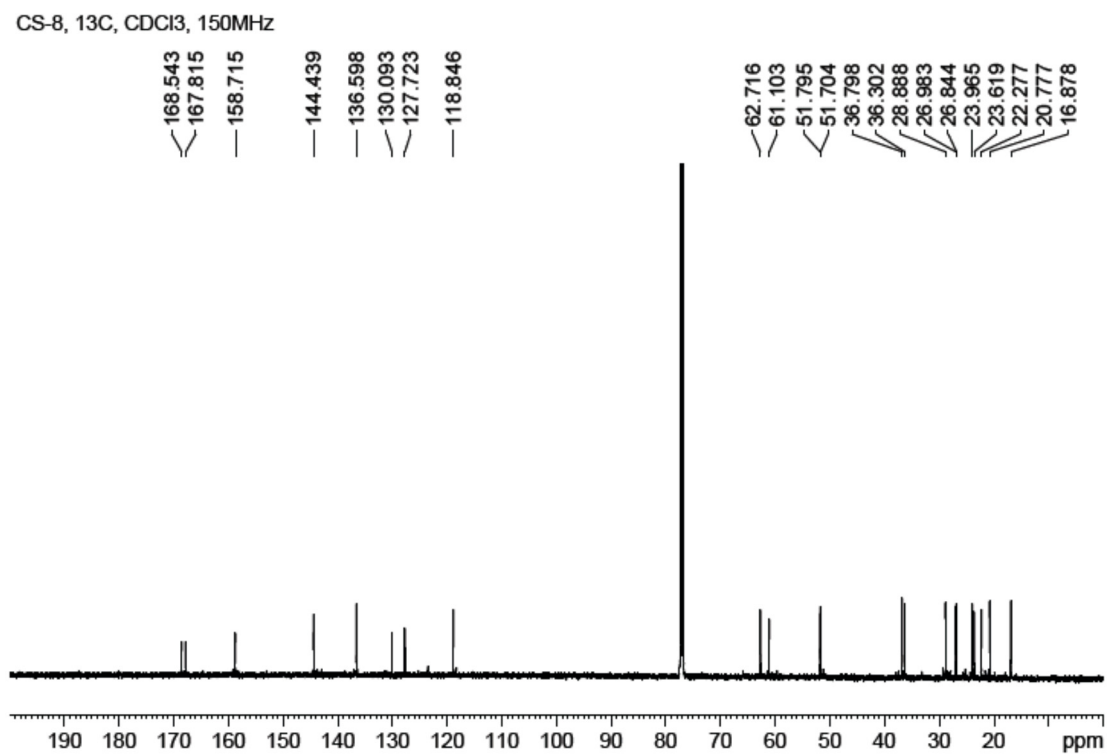


Figure S9. ^{13}C NMR spectrum (150 MHz) of compound 2 in CDCl_3 .

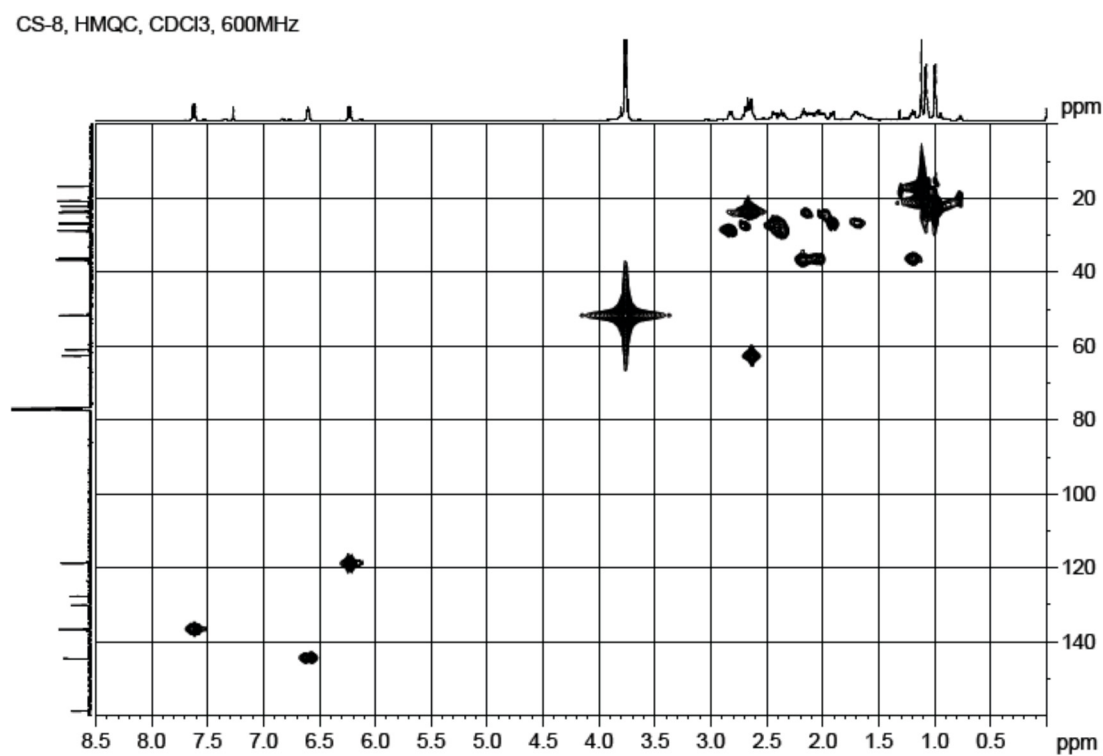


Figure S10. HMQC spectrum of compound 2 in CDCl_3 .

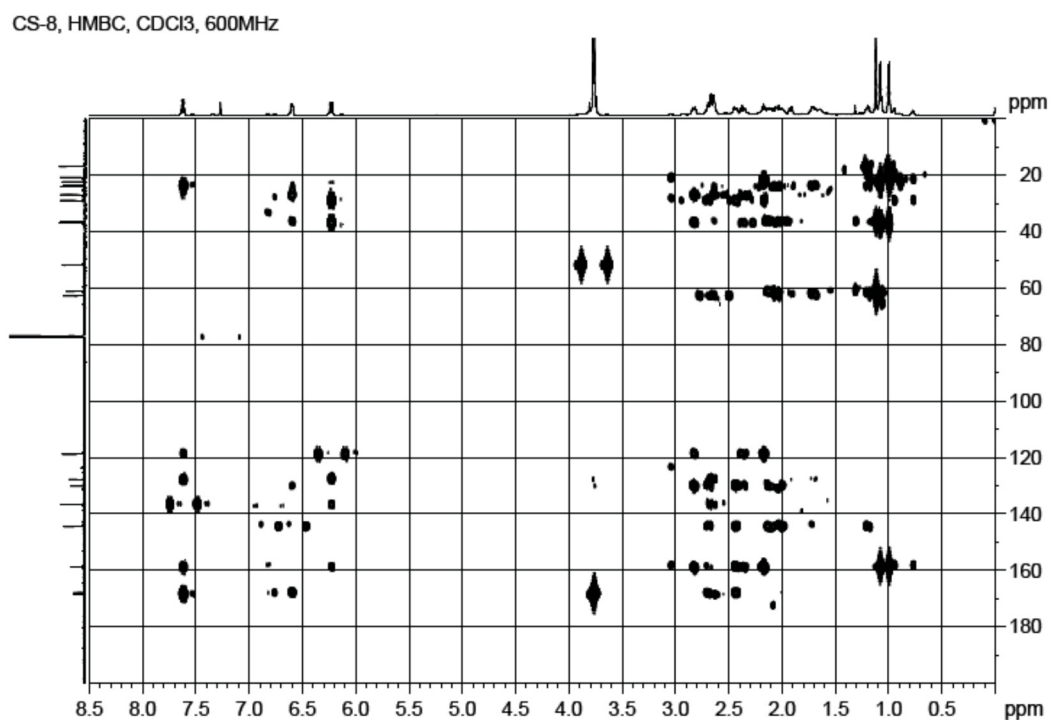


Figure S11. HMBC spectrum of compound 2 in CDCl₃.

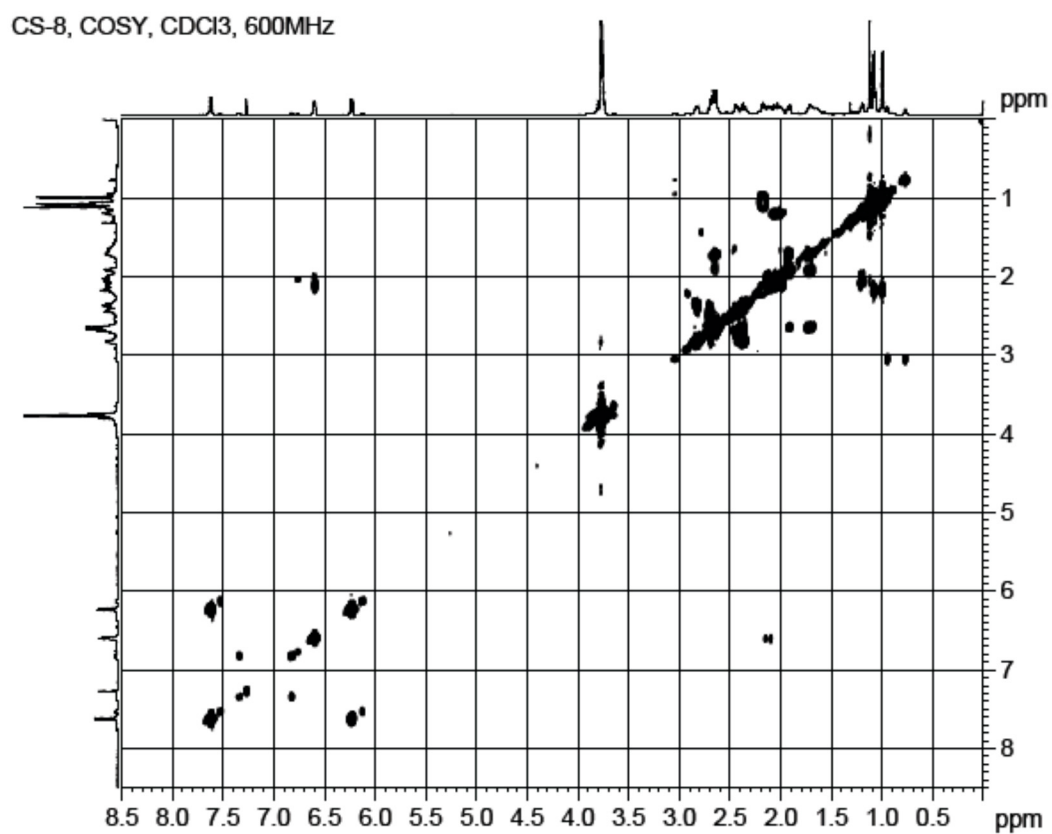


Figure S12. COSY spectrum of compound 2 in CDCl₃.

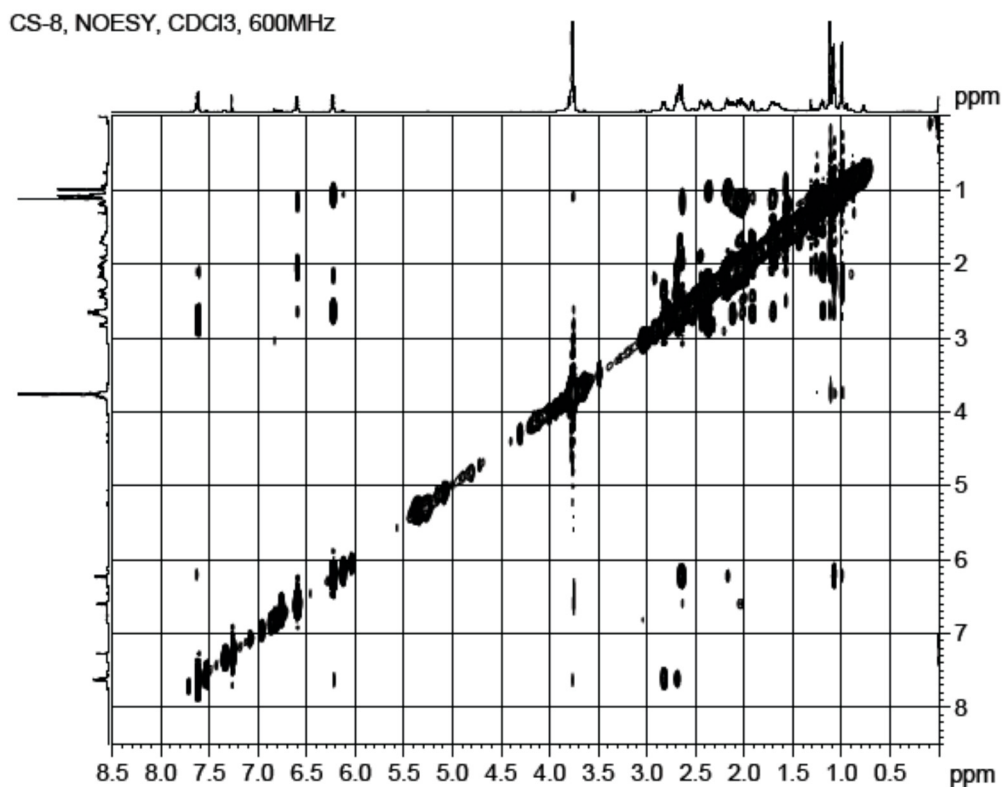


Figure S13. NOESY spectrum of compound 2 in CDCl₃.

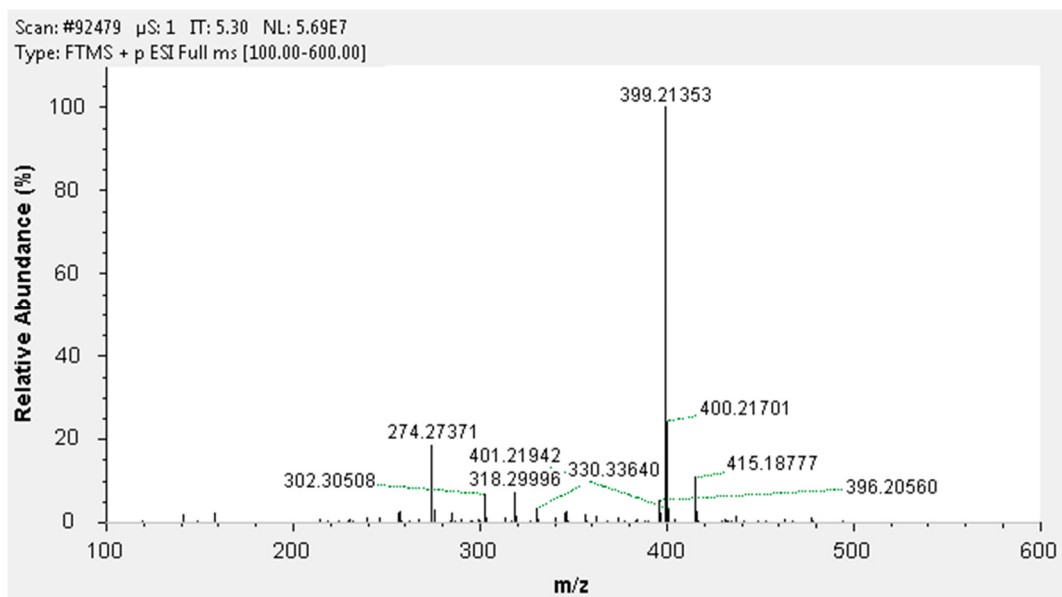


Figure S14. HRESIMS spectrum of compound 2.

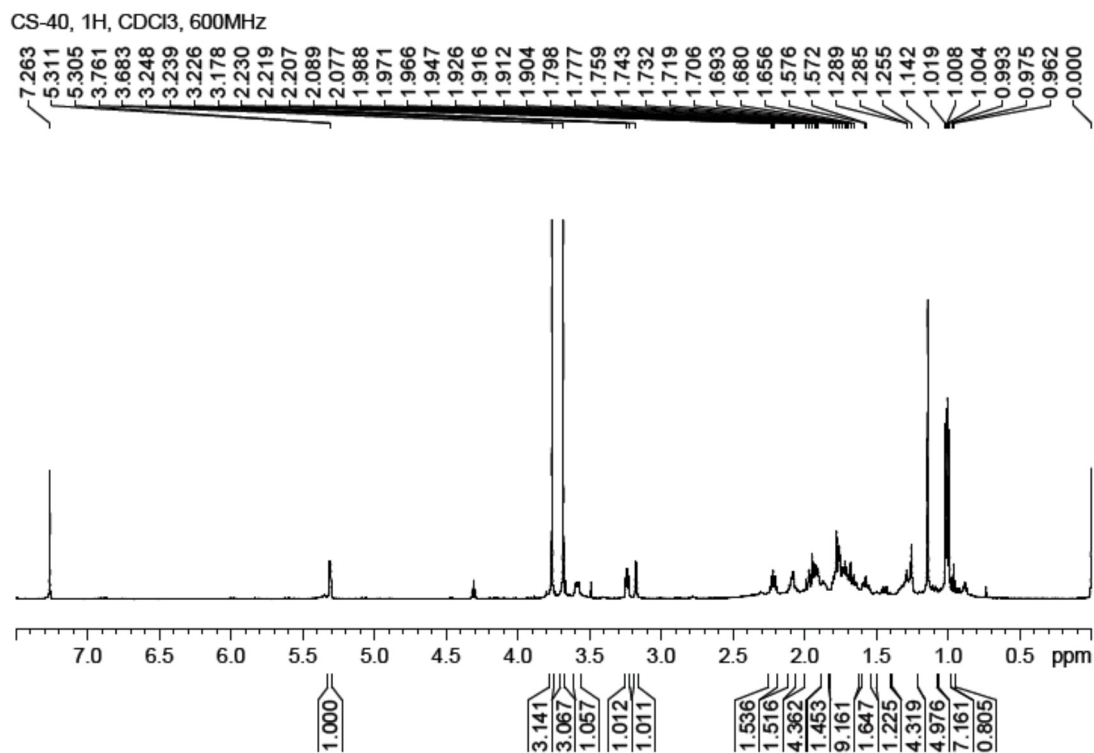


Figure S15. ¹H NMR spectrum (600 MHz) of compound 3 in CDCl₃.

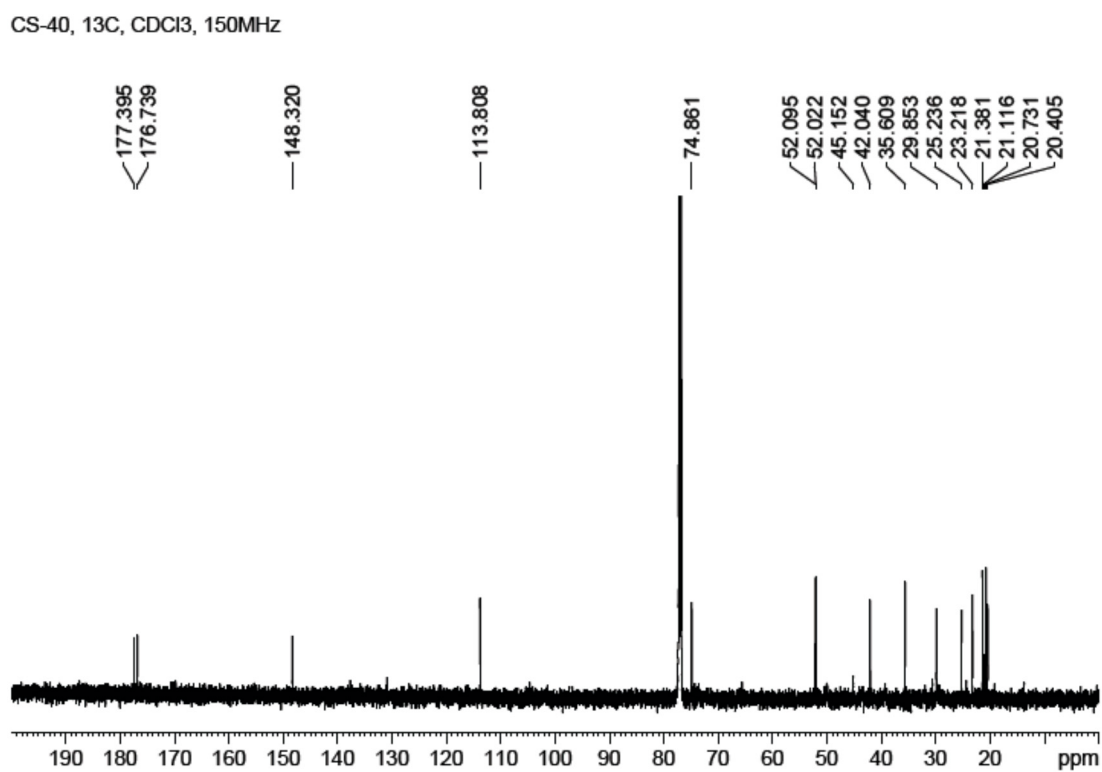


Figure S16. ¹³C NMR spectrum (150 MHz) of compound 3 in CDCl₃.

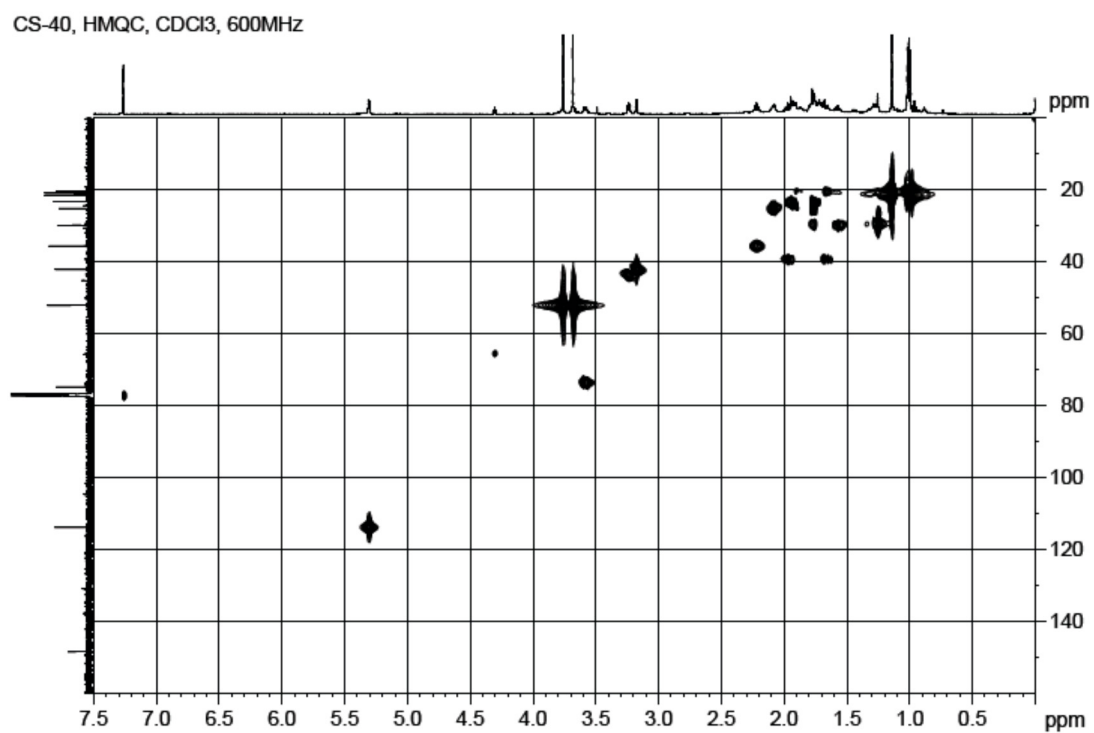


Figure S17. HMQC spectrum of compound 3 in CDCl₃.

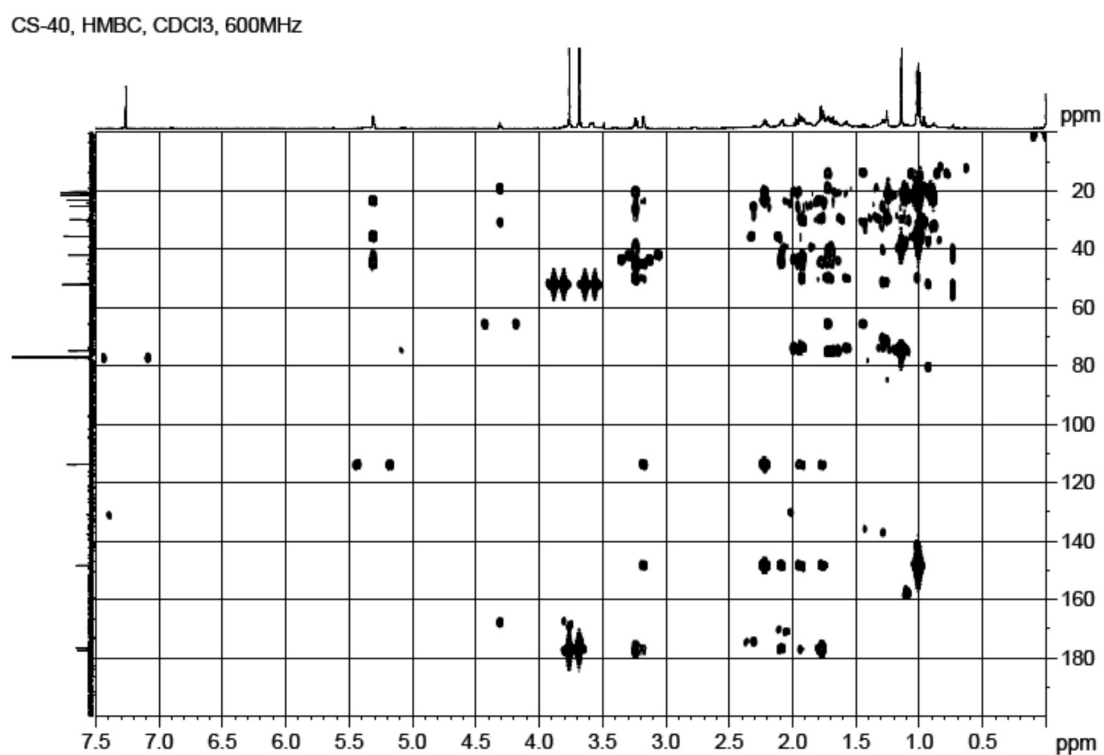


Figure S18. HMBC spectrum of compound 3 in CDCl₃.

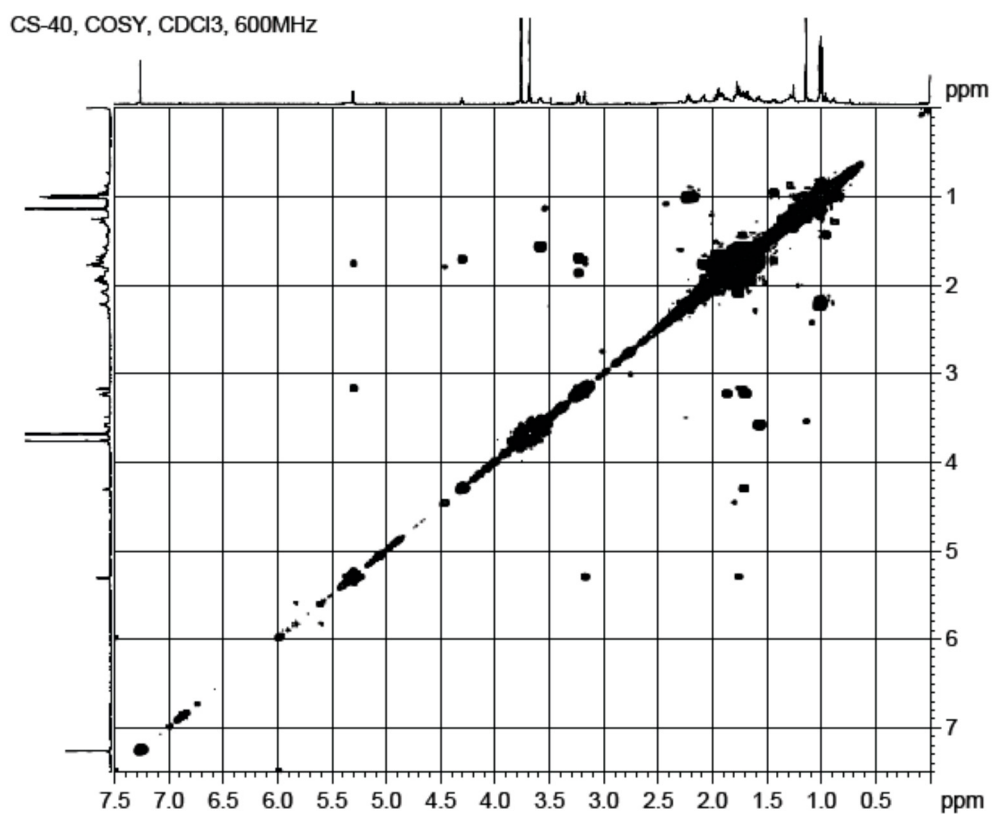


Figure S19. COSY spectrum of compound 3 in CDCl₃.

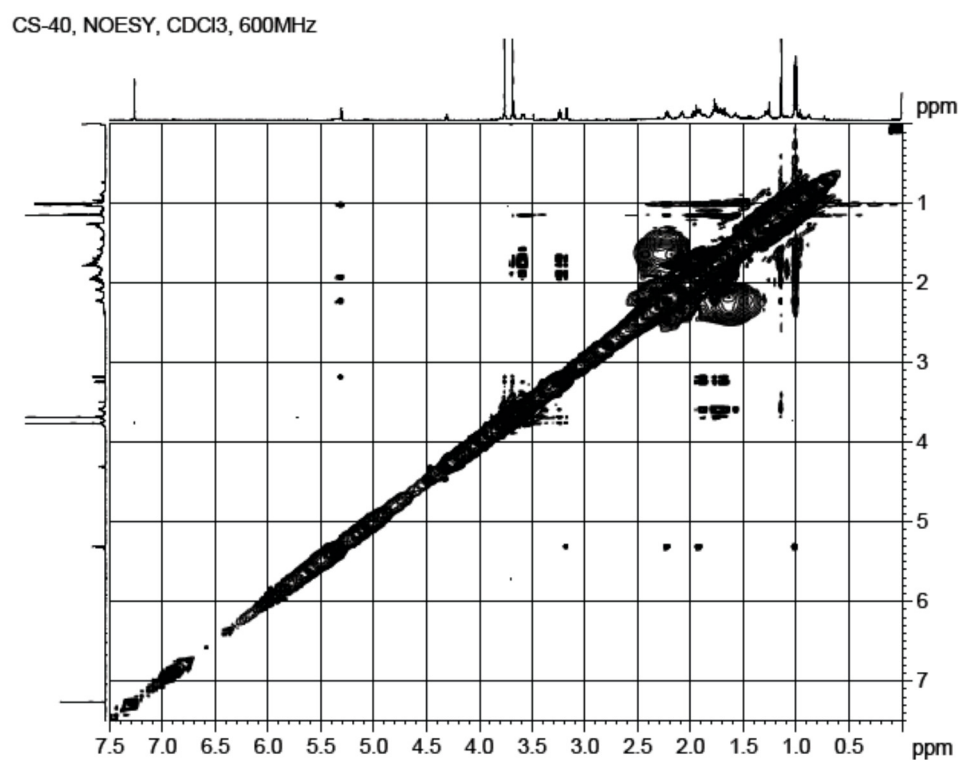


Figure S20. NOESY spectrum of compound 3 in CDCl₃.

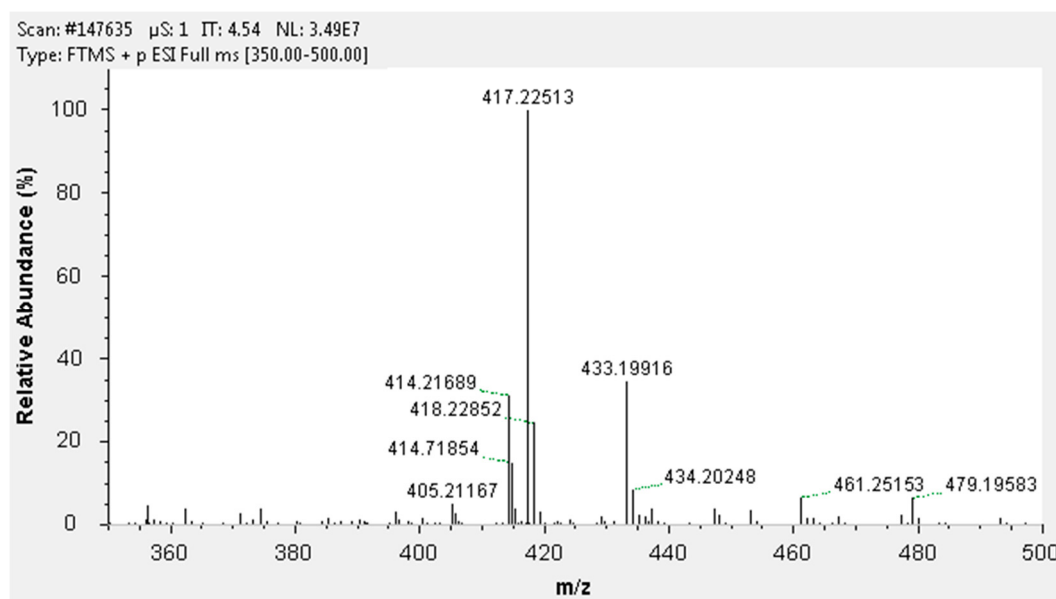
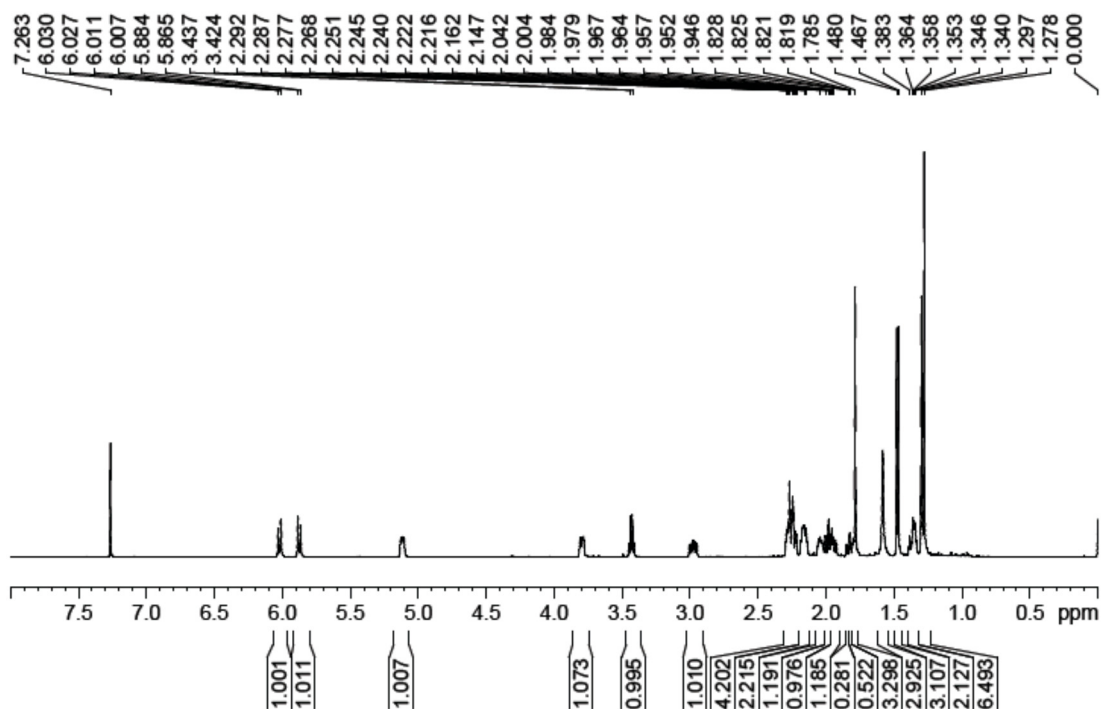
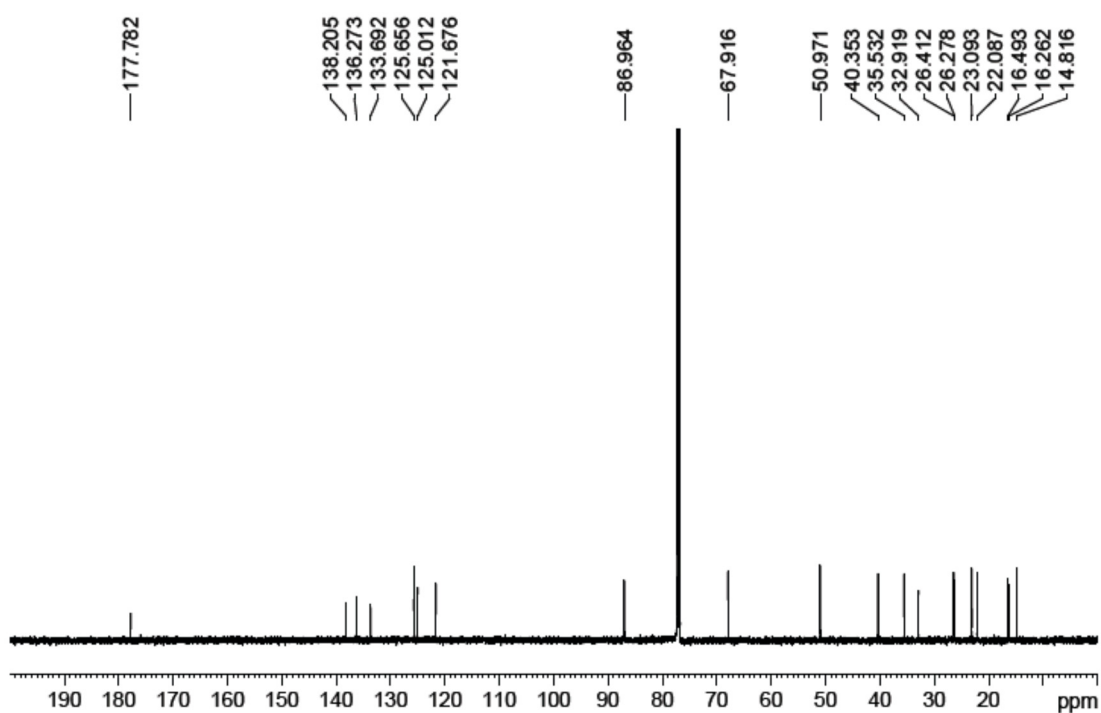
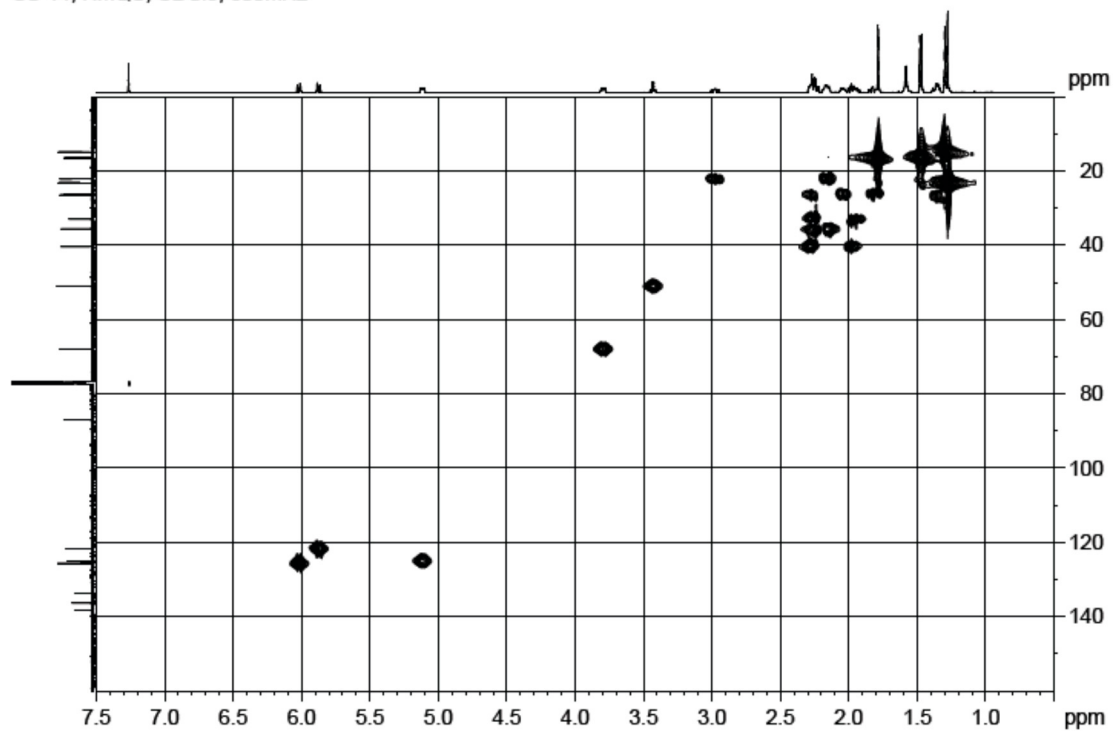
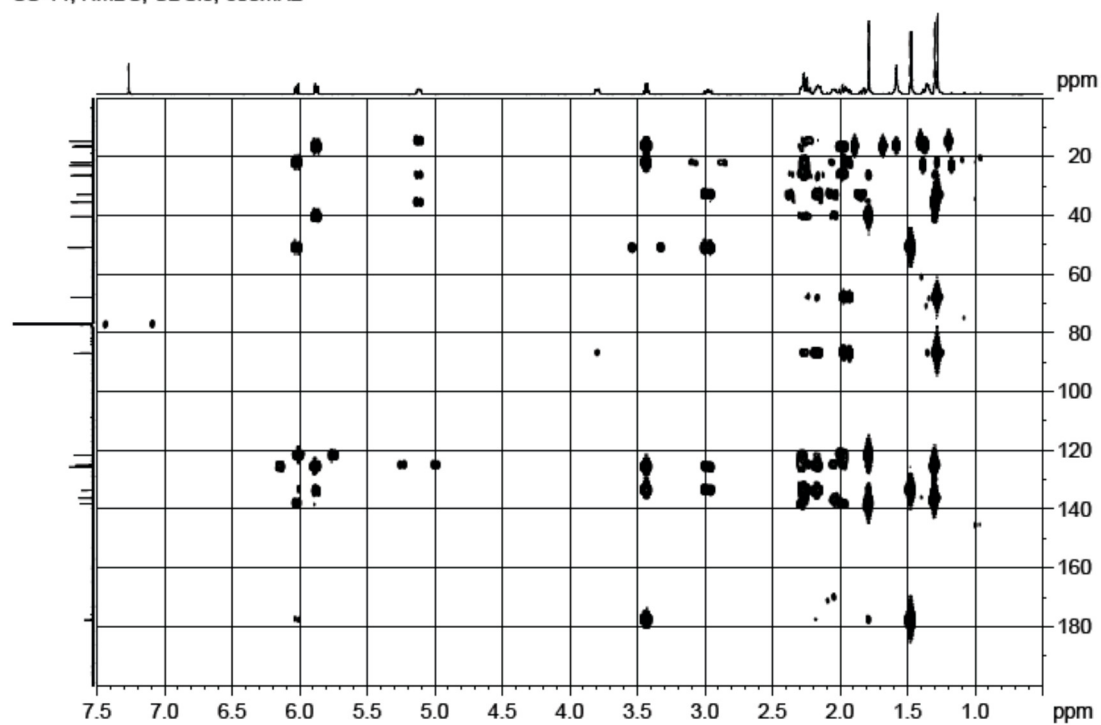
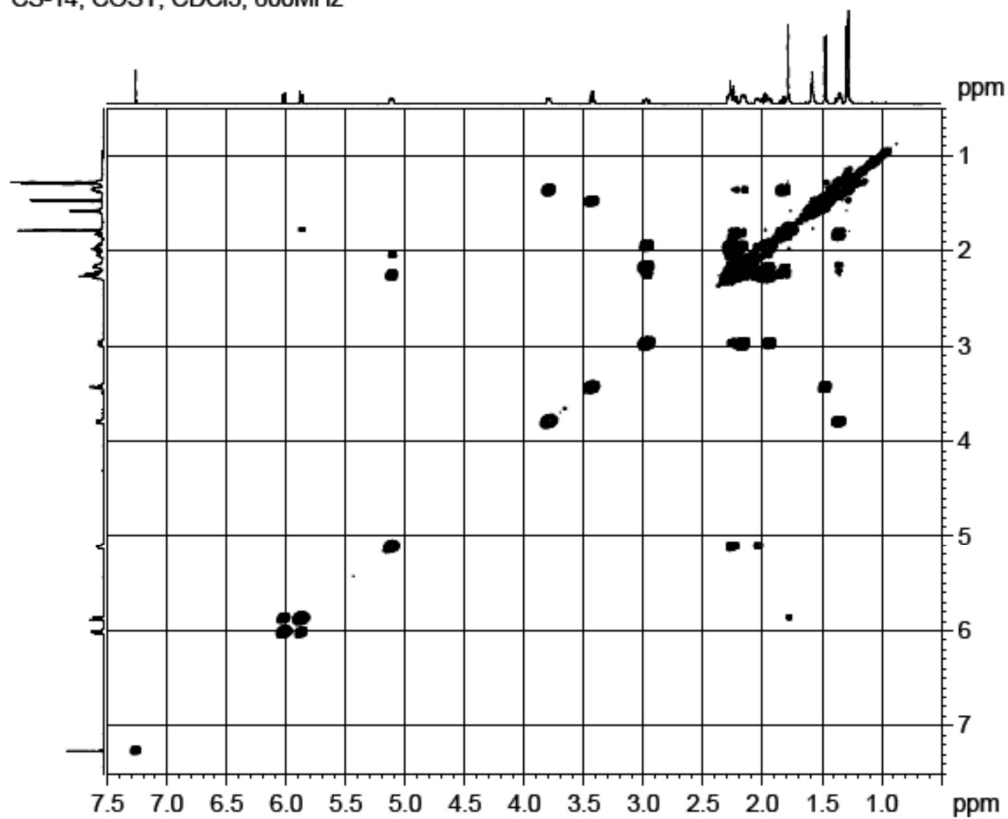


Figure S21. HRESIMS spectrum of compound 3.

CS-14, ^1H , CDCl_3 , 600MHzFigure S22. ^1H NMR spectrum (600 MHz) of compound 4 in CDCl_3 .

CS-14, ^{13}C , CDCl_3 , 150MHzFigure S23. ^{13}C NMR spectrum (150 MHz) of compound 4 in CDCl_3 .CS-14, HMQC, CDCl_3 , 600MHzFigure S24. HMQC spectrum of compound 4 in CDCl_3 .

CS-14, HMBC, CDCl₃, 600MHzFigure S25. HMBC spectrum of compound 4 in CDCl₃.CS-14, COSY, CDCl₃, 600MHzFigure S26. COSY spectrum of compound 4 in CDCl₃.

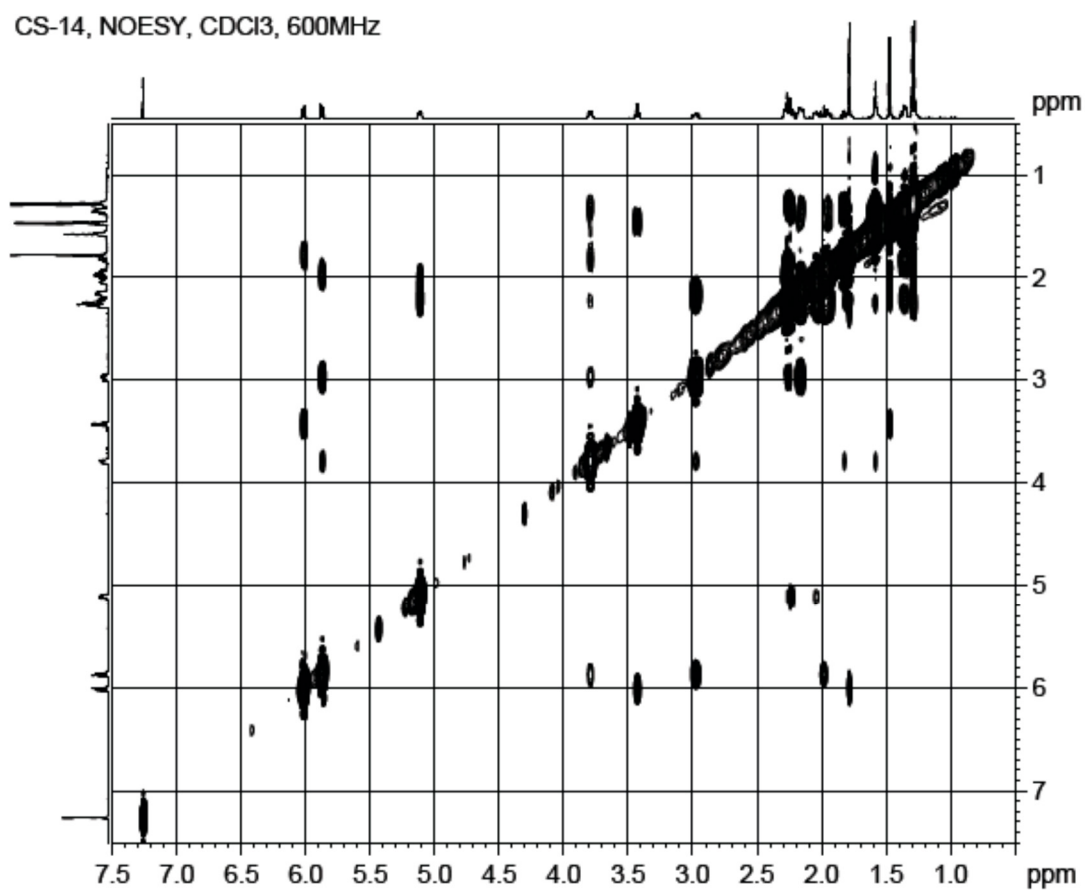


Figure S27. NIOSY spectrum of compound 4 in CDCl₃.

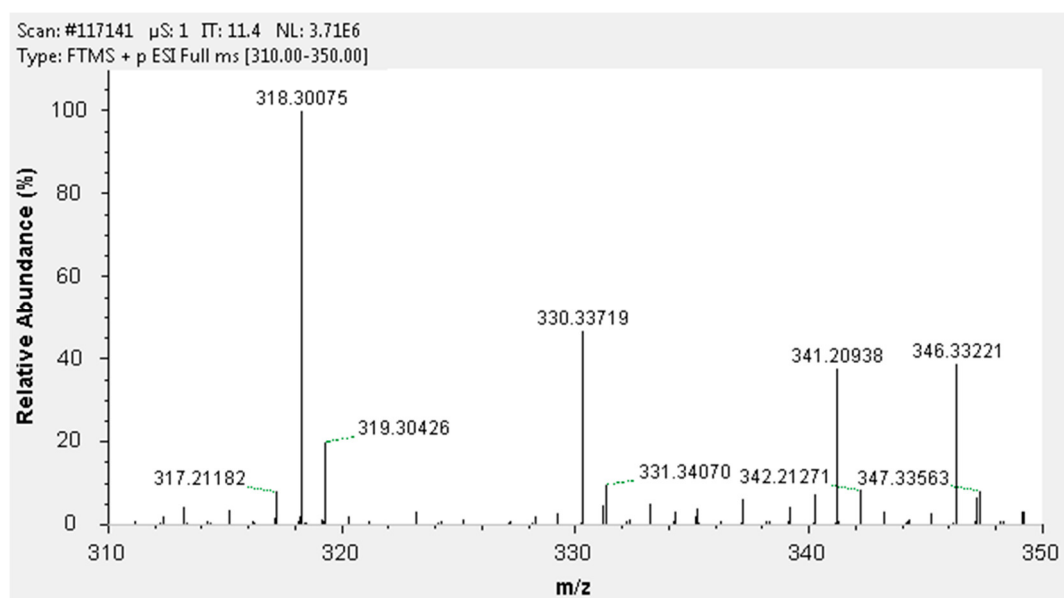


Figure S28. HRESIMS spectrum of compound 4.

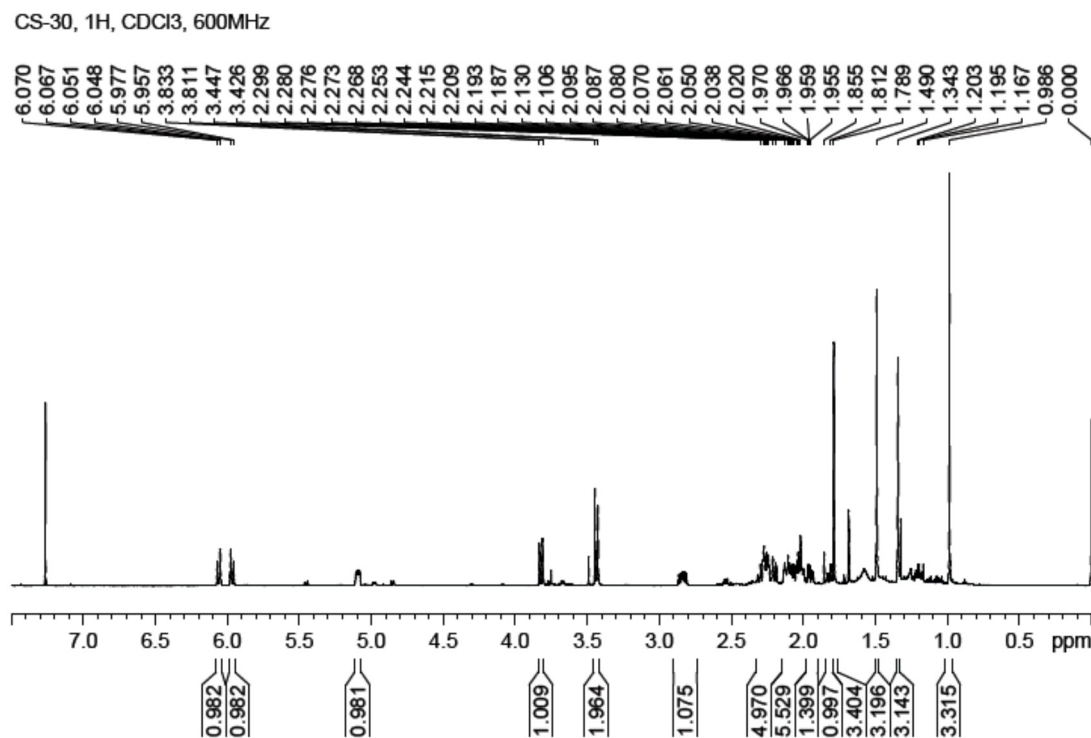


Figure S29. ^1H NMR spectrum (600 MHz) of compound 5 in CDCl_3 .

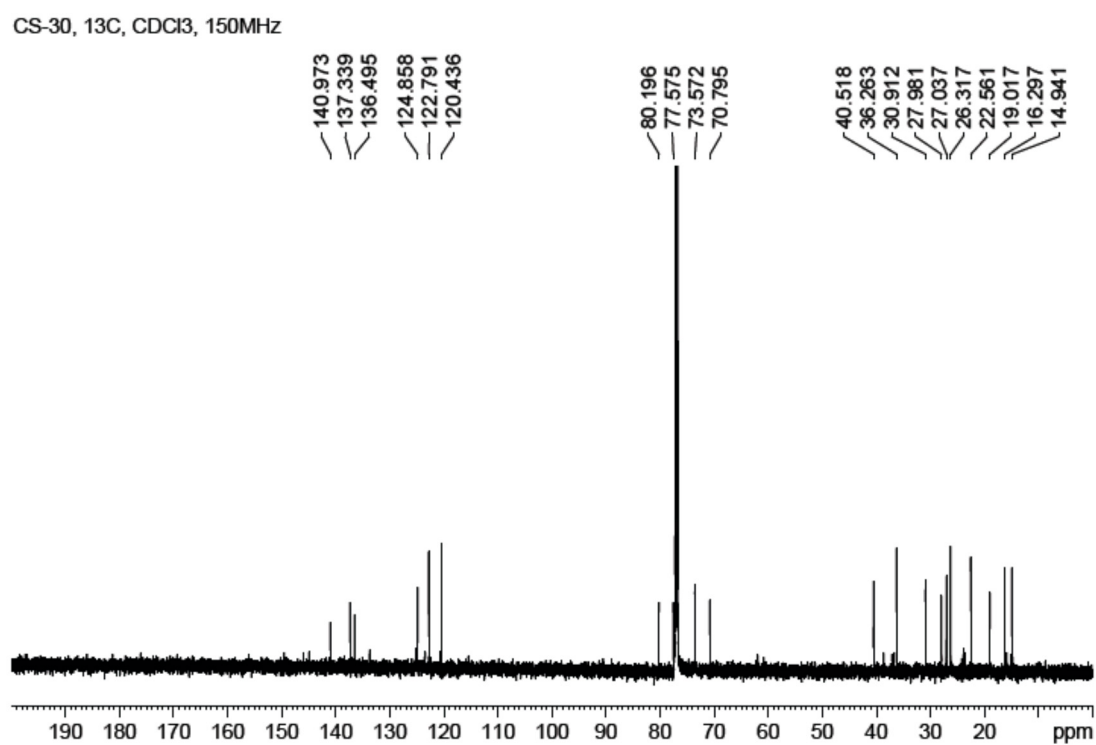


Figure S30. ^{13}C NMR spectrum (150 MHz) of compound 5 in CDCl_3 .

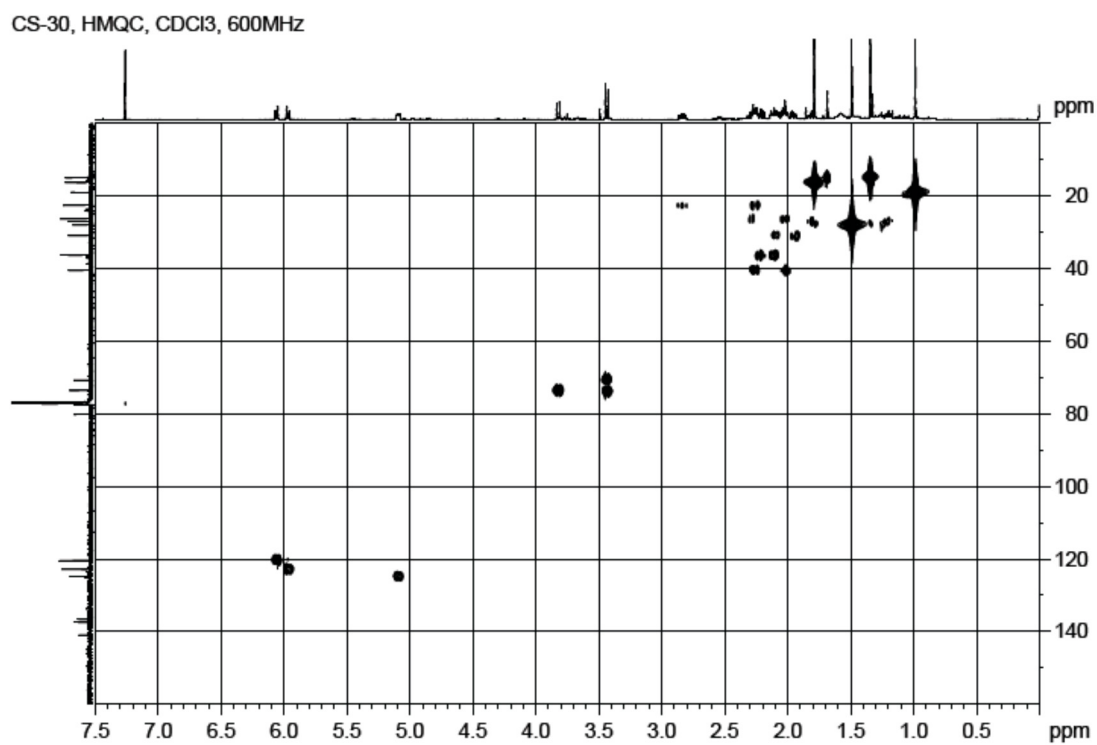


Figure S31. HMQC spectrum of compound 5 in CDCl₃.

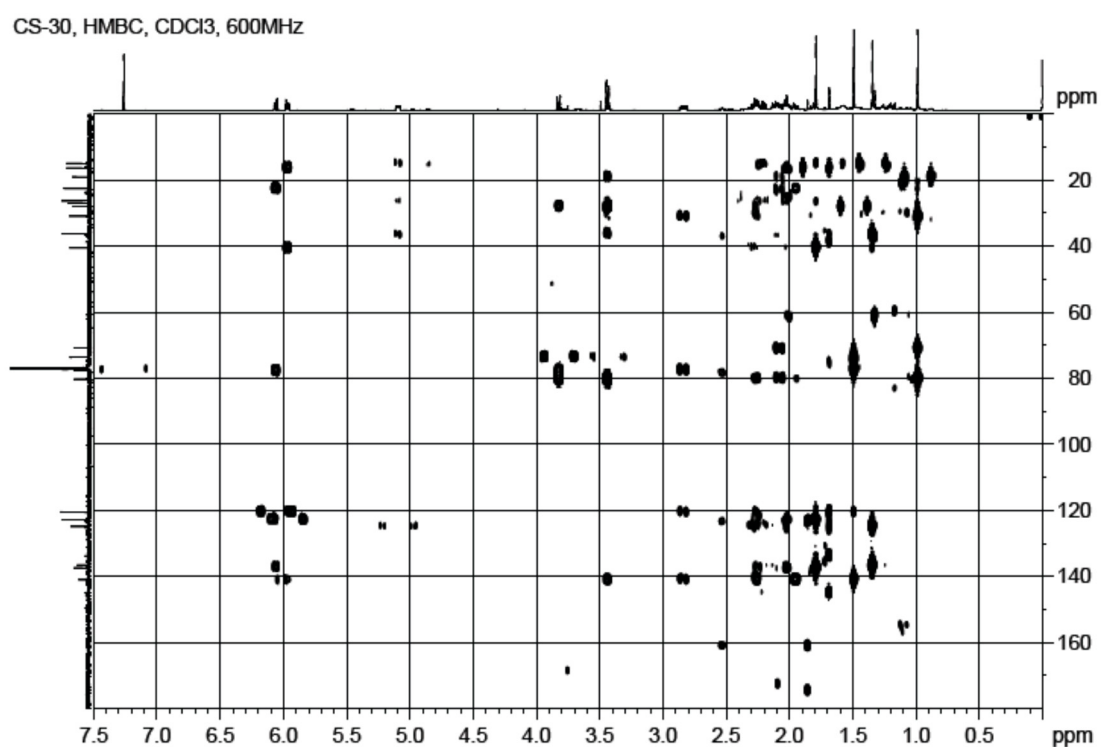
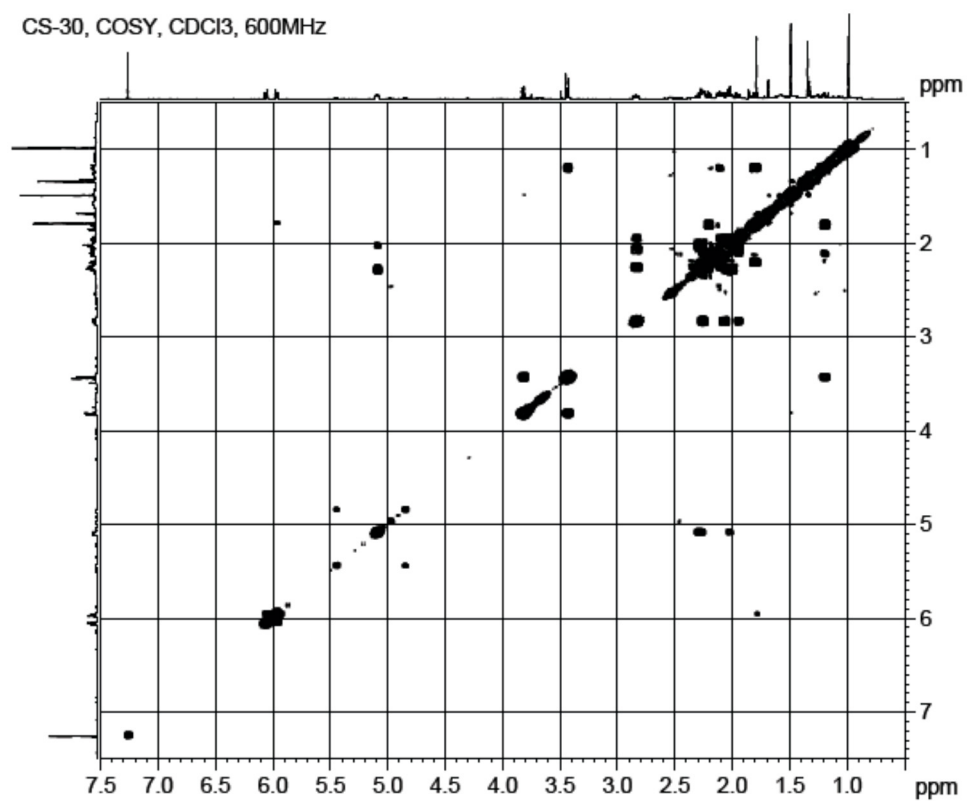
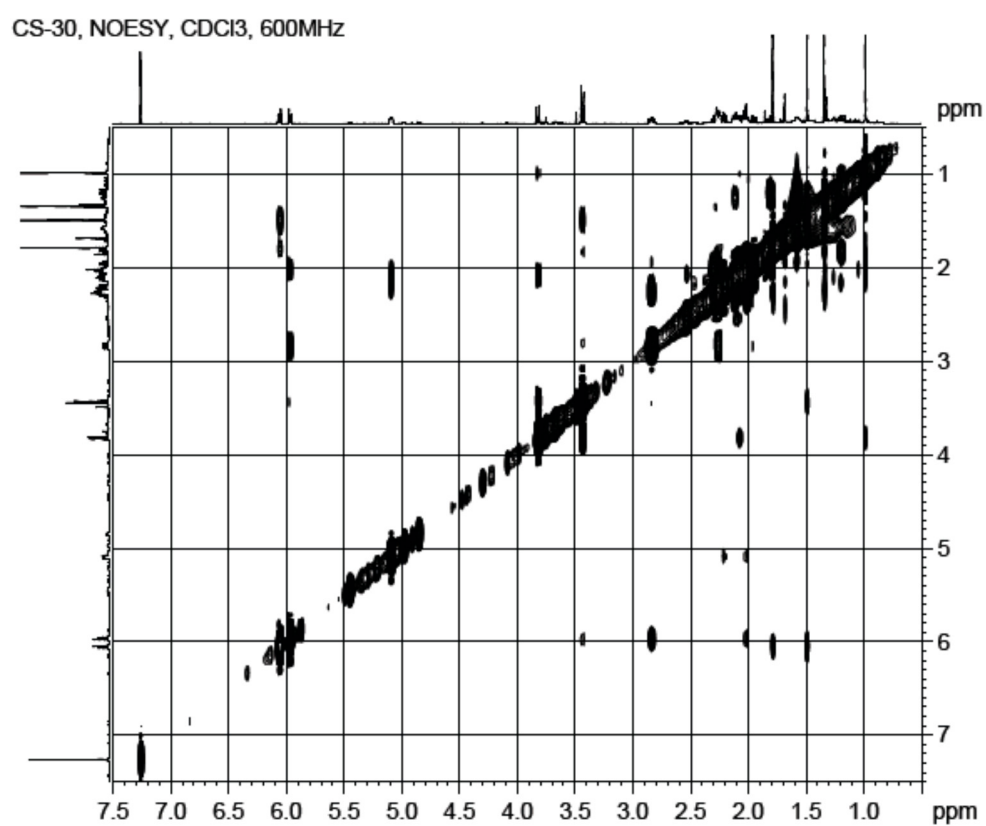


Figure S32. HMBC spectrum of compound 5 in CDCl₃.

Figure S33. COSY spectrum of compound 5 in CDCl₃.Figure S34. NOESY spectrum of compound 5 in CDCl₃.

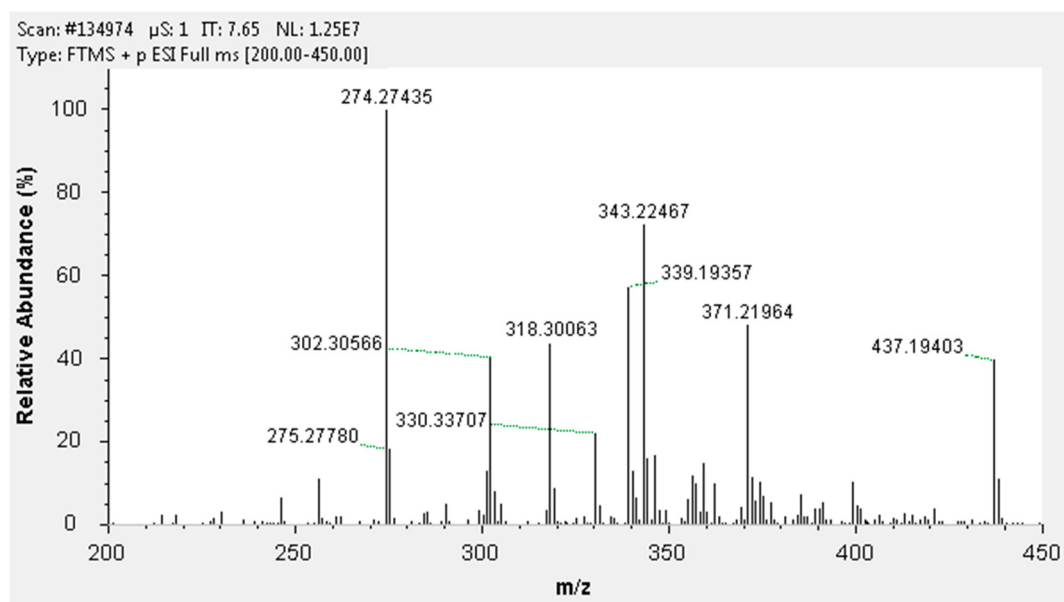
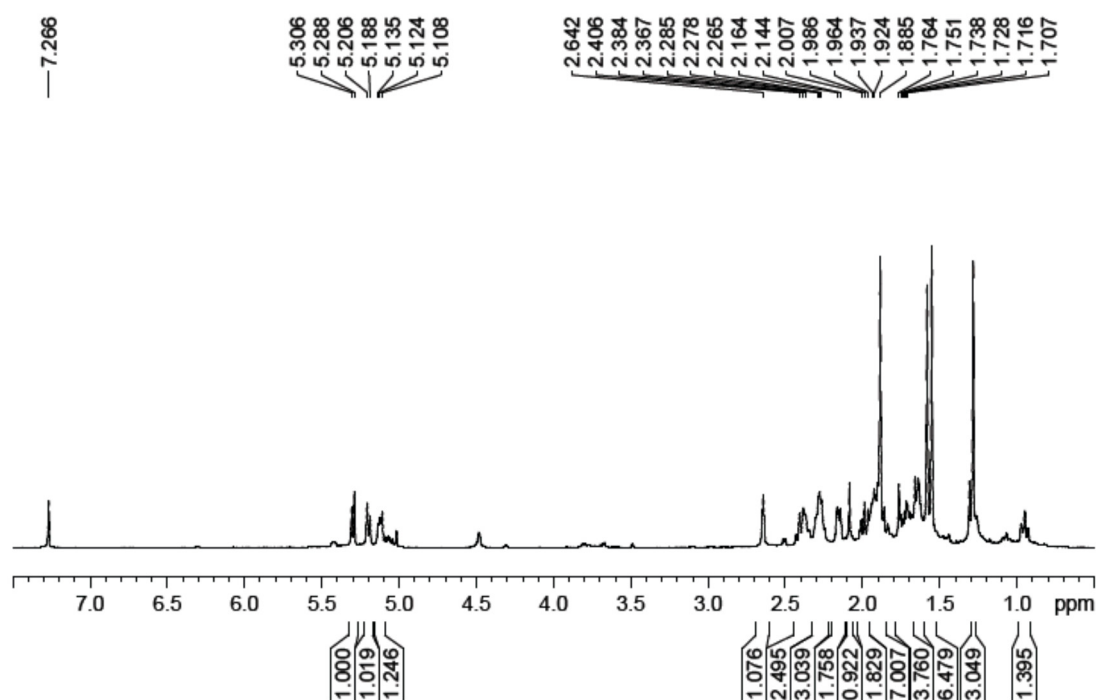
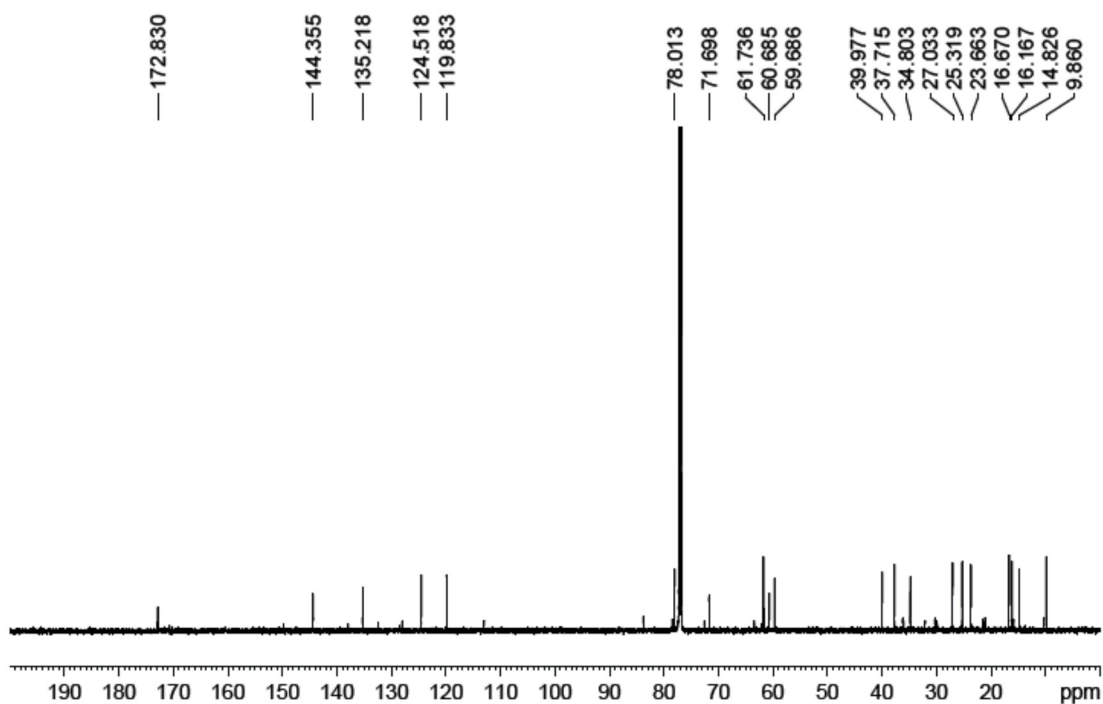
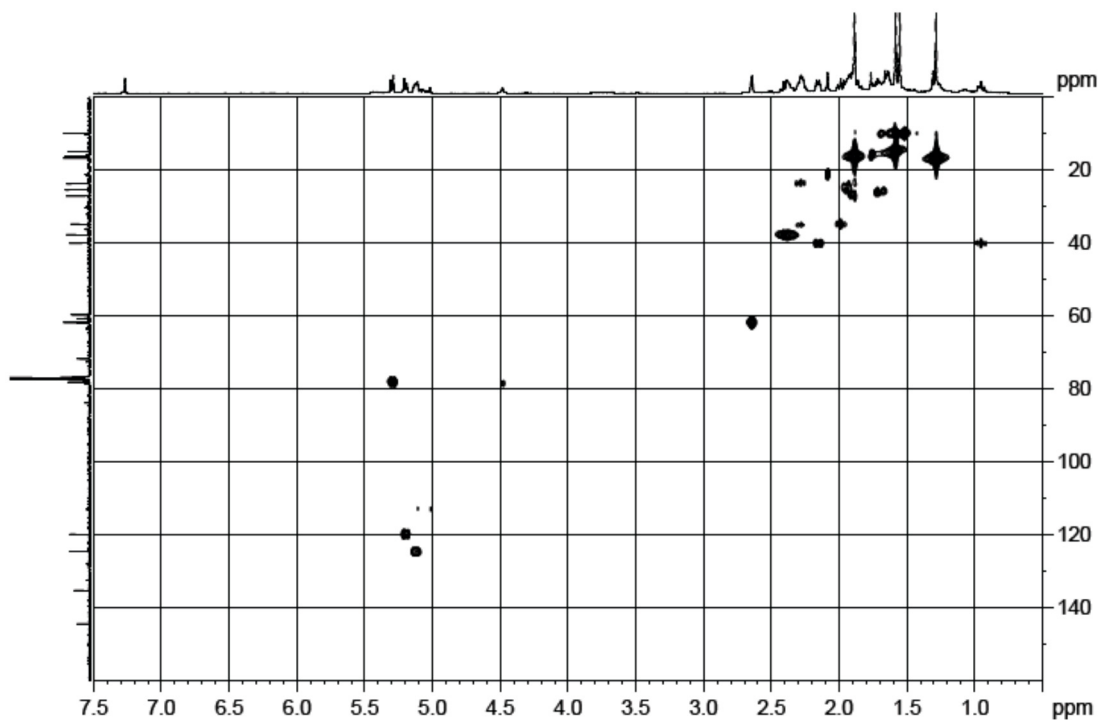
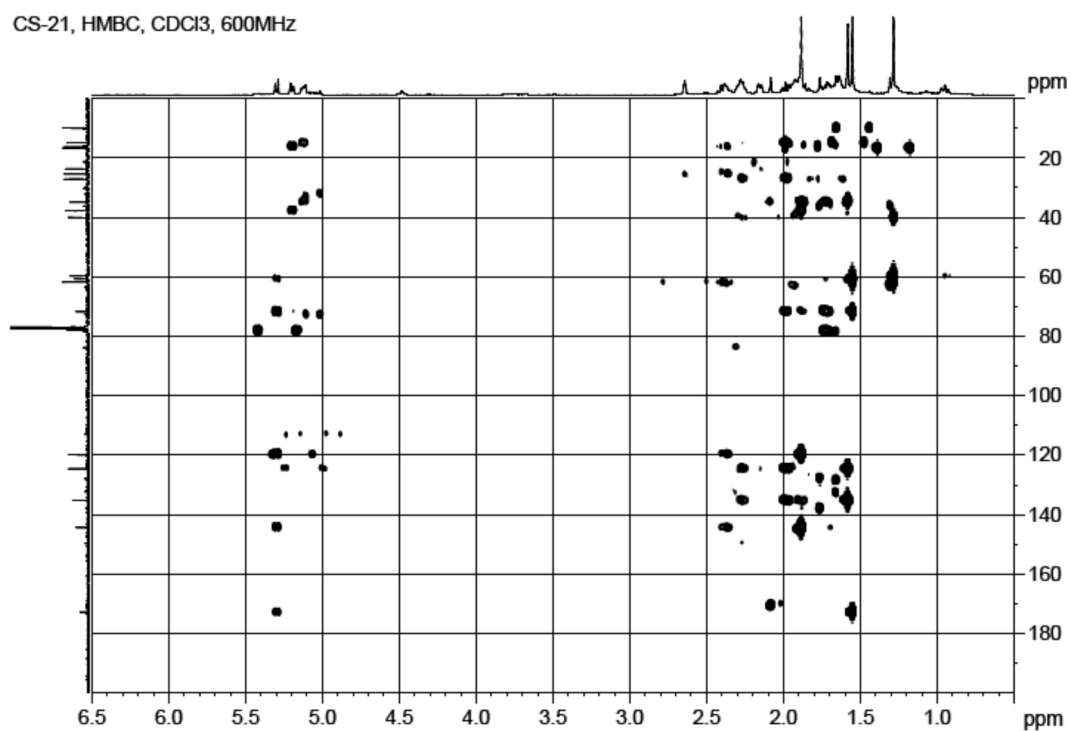
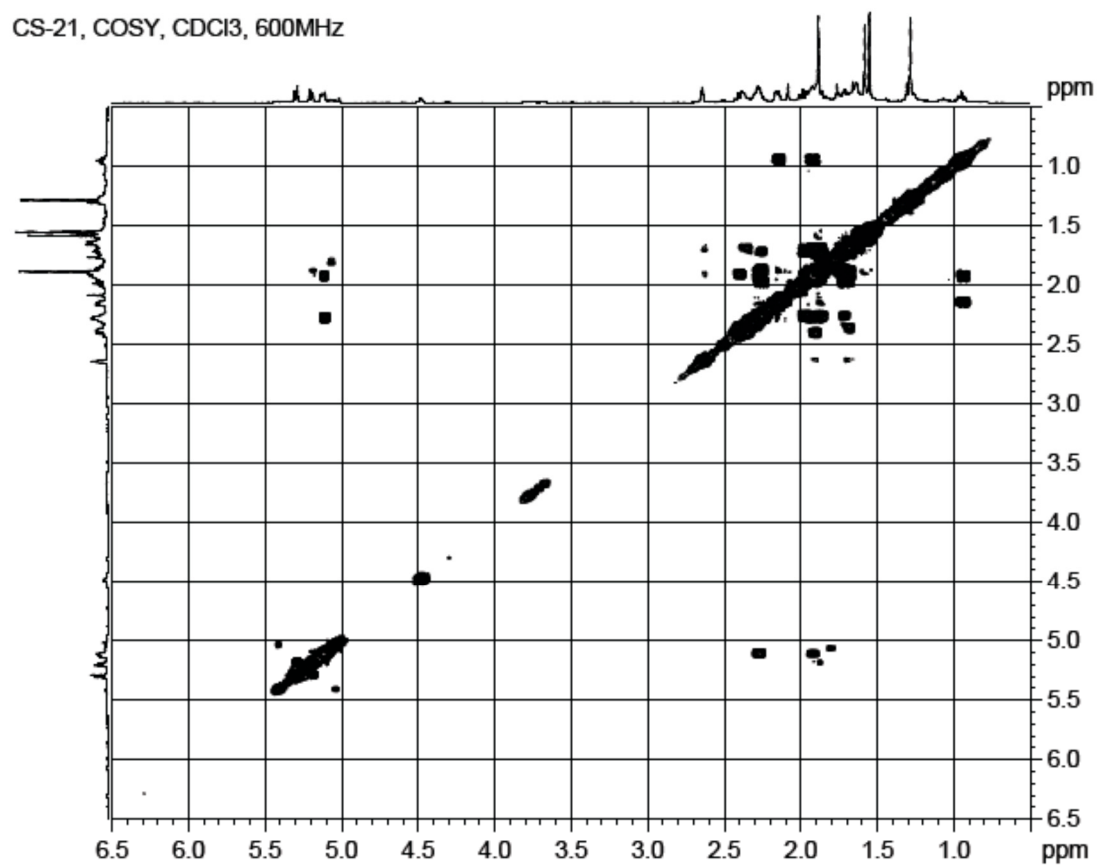


Figure S35. HRESIMS spectrum of compound 5.

CS-21, ^1H , CDCl_3 , 600MHzFigure S36. ^1H NMR spectrum (600 MHz) of compound 6 in CDCl_3 .

CS-21, ^{13}C , CDCl_3 , 150MHzFigure S37. ^{13}C NMR spectrum (150 MHz) of compound 6 in CDCl_3 .CS-21, HMQC, CDCl_3 , 600MHzFigure S38. HMQC spectrum of compound 6 in CDCl_3 .

Figure S39. HMBC spectrum of compound 6 in CDCl₃.Figure S40. COSY spectrum of compound 6 in CDCl₃.

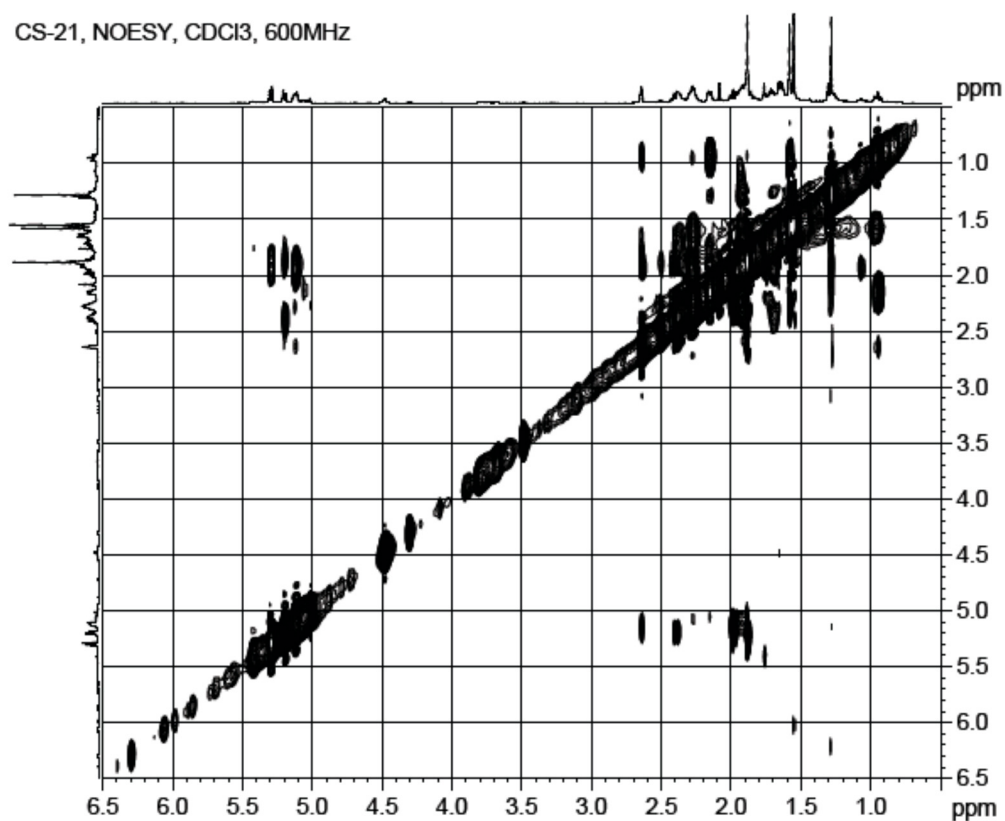


Figure S41. NOESY spectrum of compound 6 in CDCl₃.

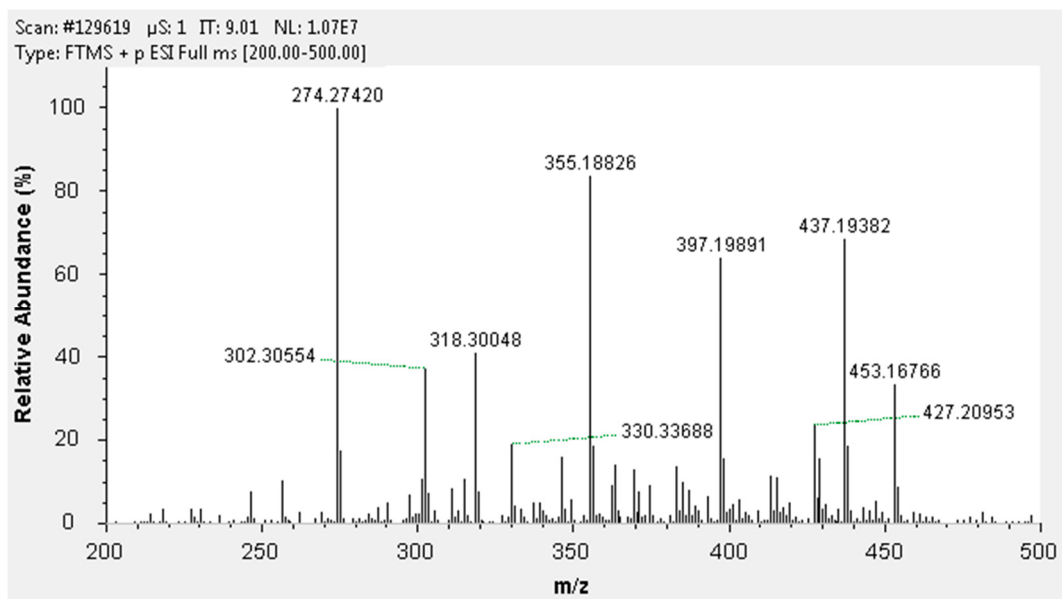


Figure S42. HRESIMS spectrum of compound 6.

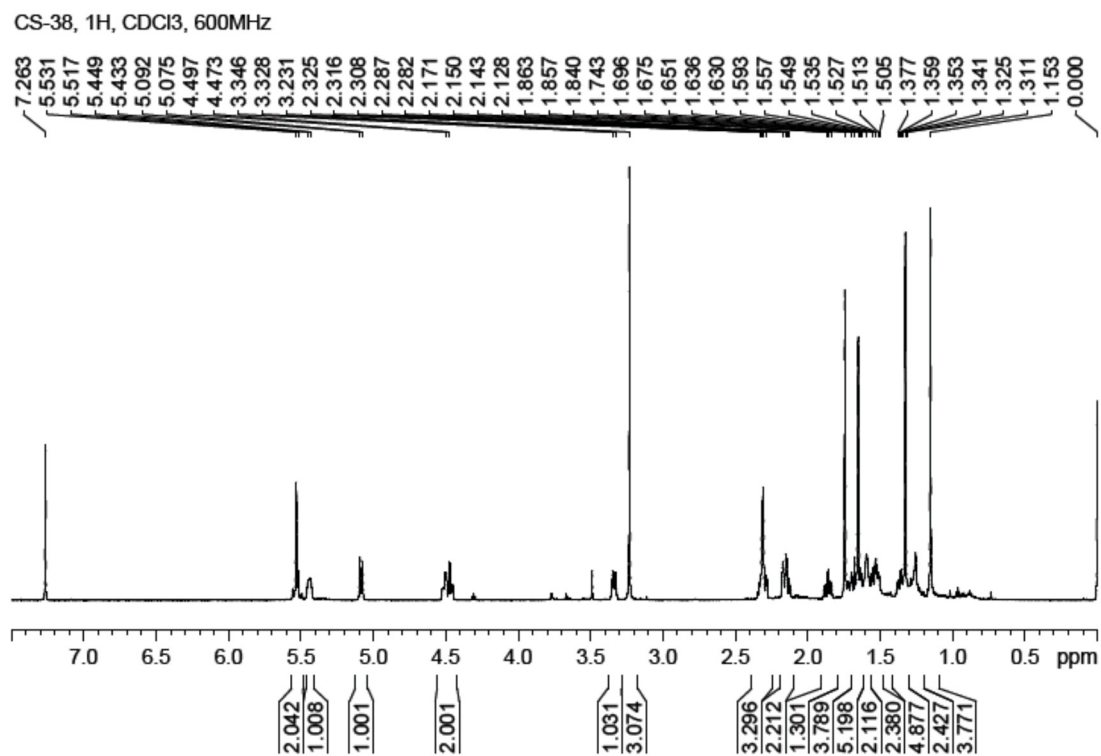


Figure S43. ¹H NMR spectrum (600 MHz) of compound 7 in CDCl₃.

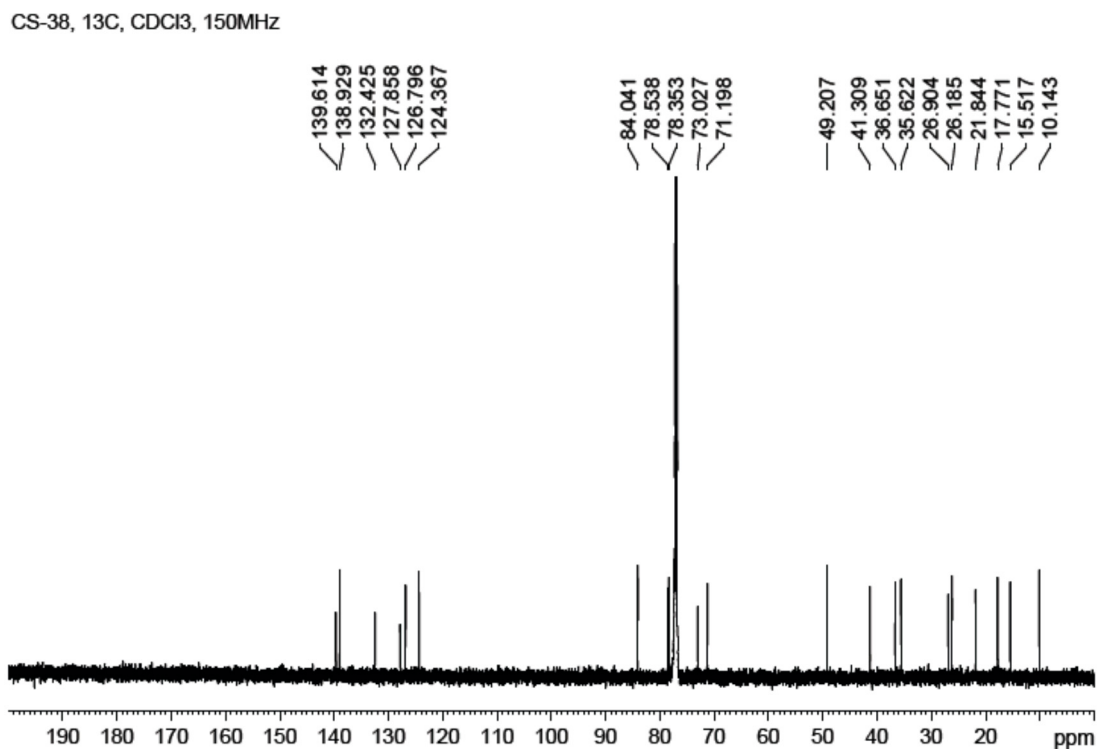
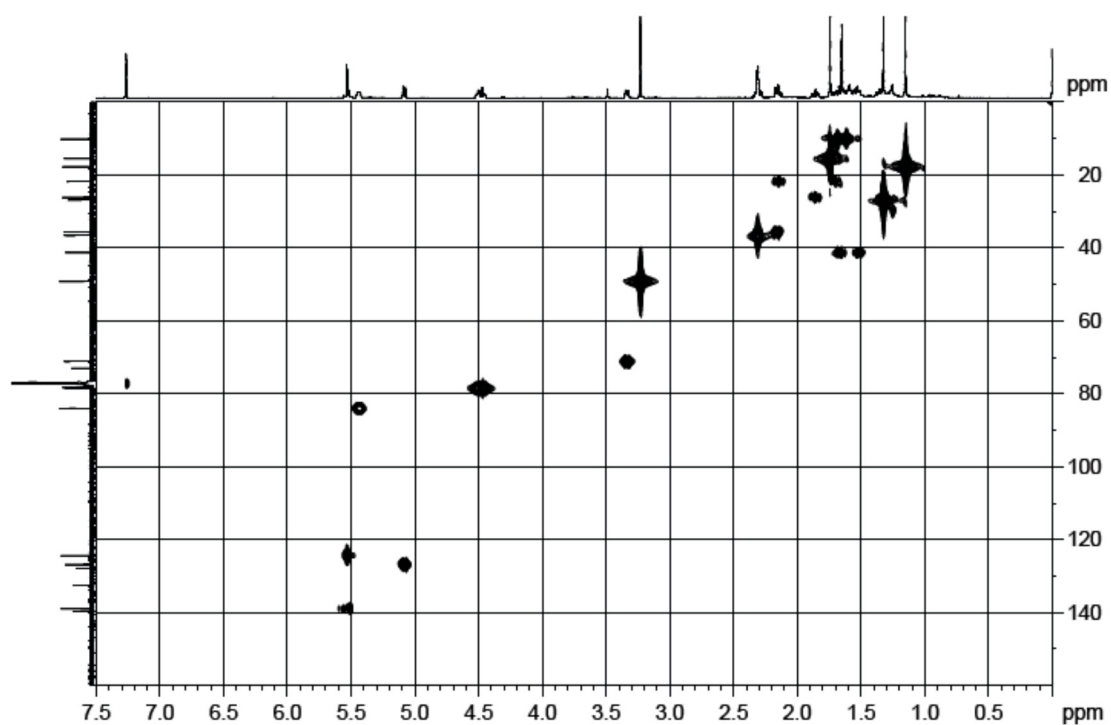
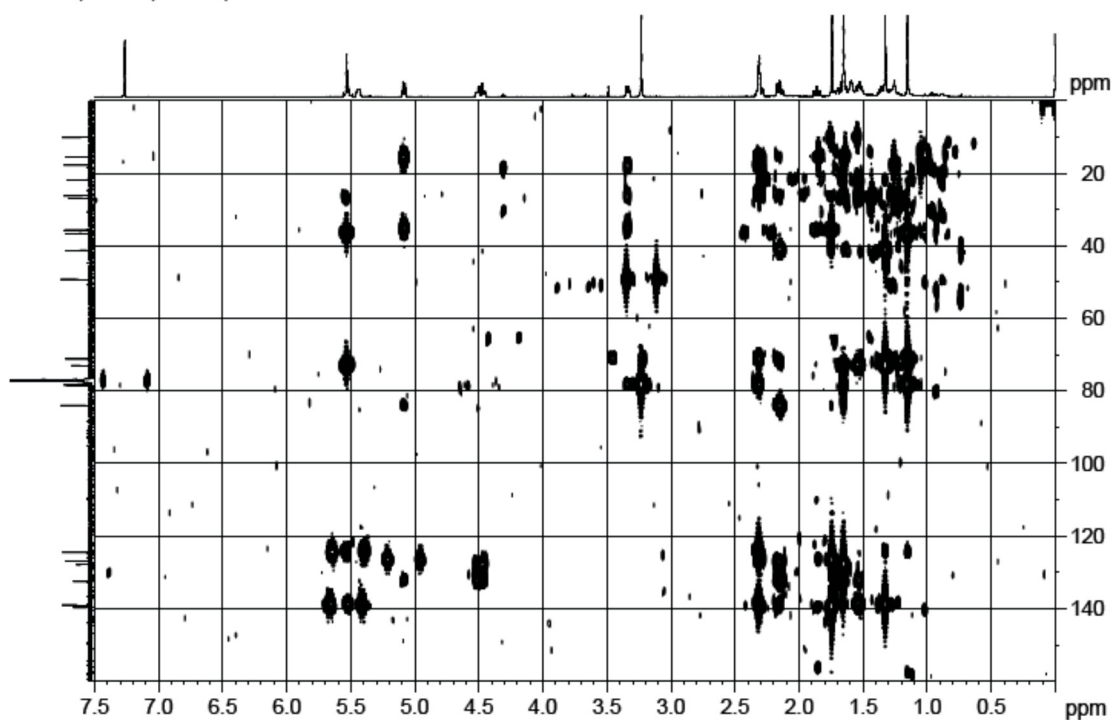
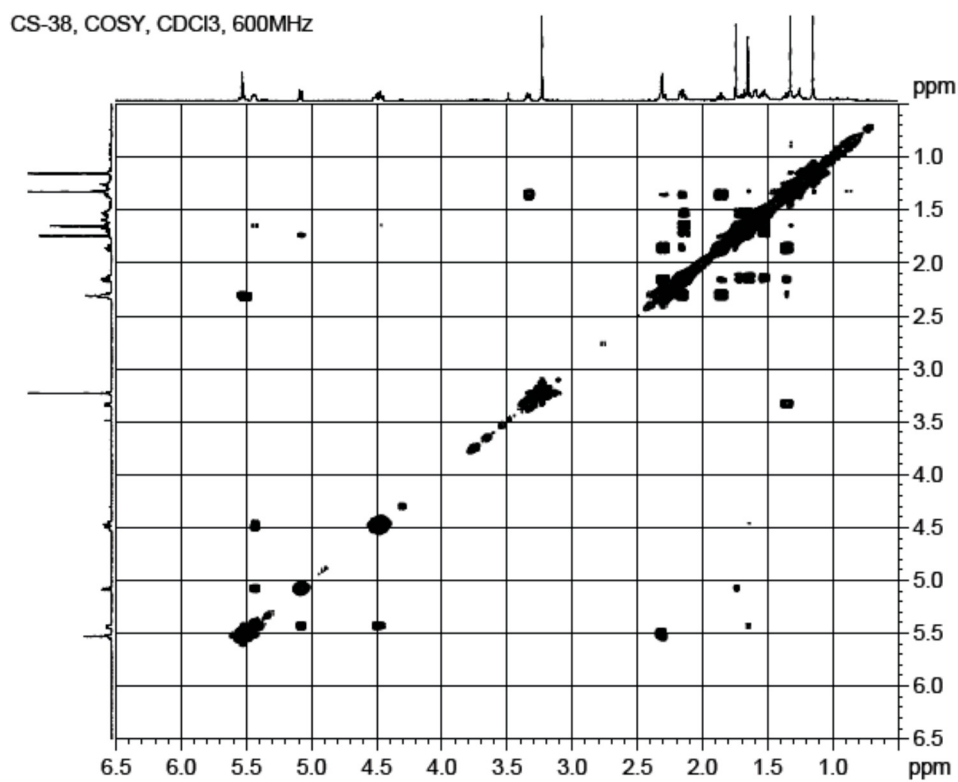
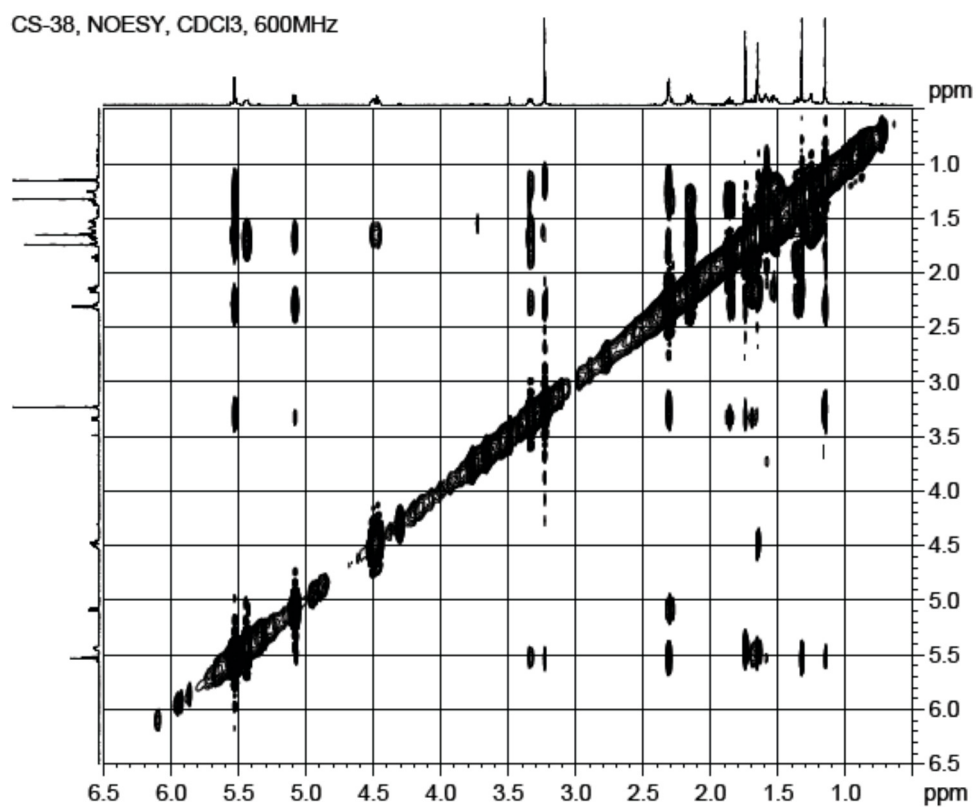
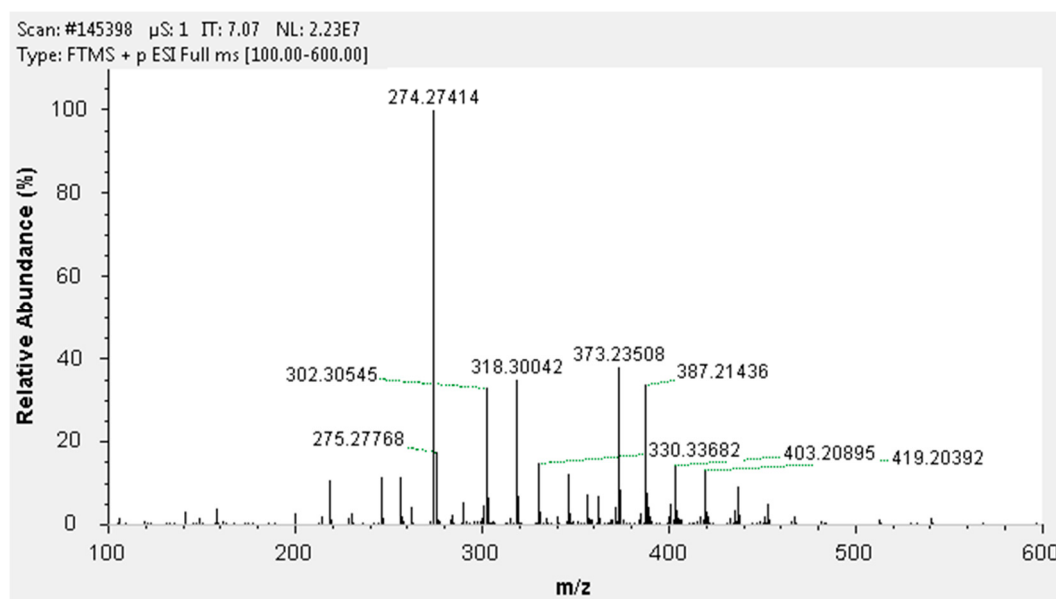
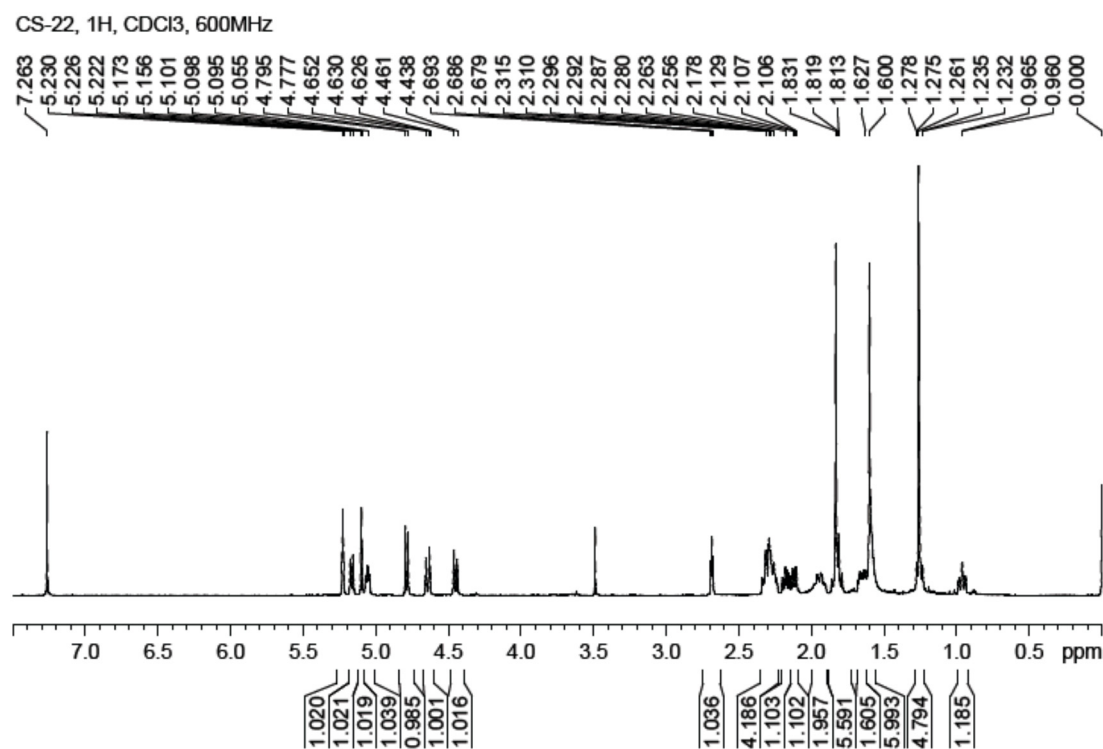


Figure S44. ¹³C NMR spectrum (150 MHz) of compound 7 in CDCl₃.

CS-38, HMQC, CDCl₃, 600MHzFigure S45. HMQC spectrum of compound 7 in CDCl₃.CS-38, HMBC, CDCl₃, 600MHzFigure S46. HMBC spectrum of compound 7 in CDCl₃.

Figure S47. COSY spectrum of compound 7 in CDCl₃.Figure S48. NOESY spectrum of compound 7 in CDCl₃.

**Figure S49.** HRESIMS spectrum of compound 7.**Figure S50.** ¹H NMR spectrum (600 MHz) of compound 8 in CDCl₃.

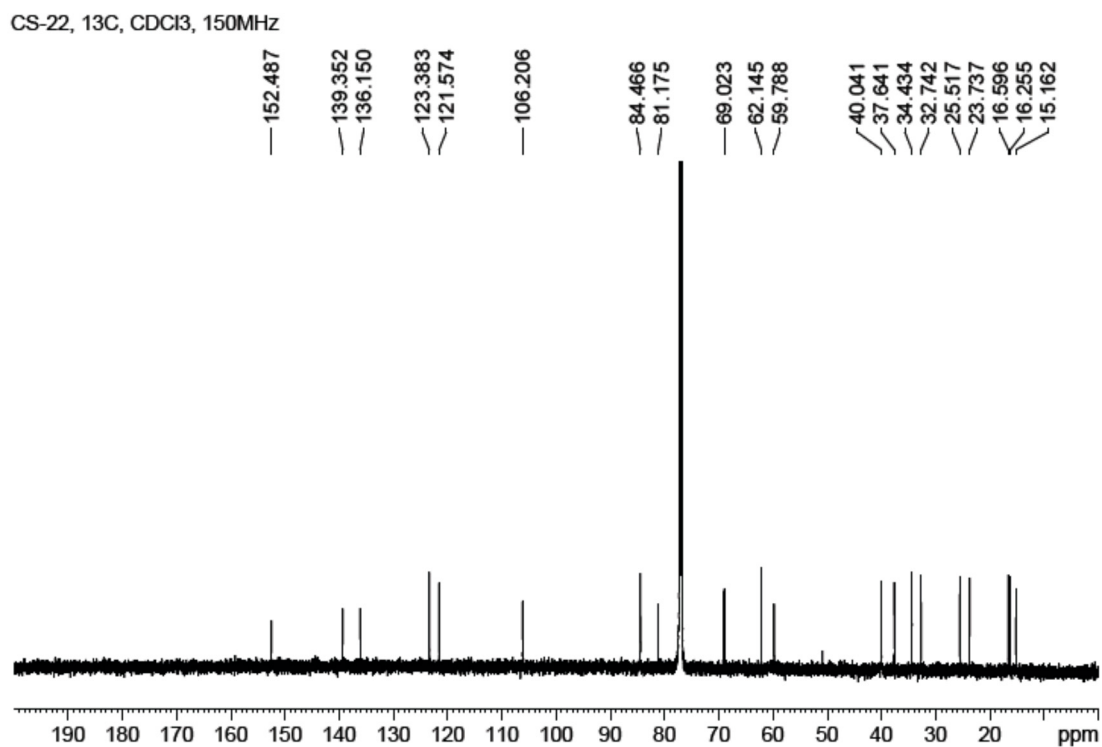


Figure S51. ^{13}C NMR spectrum (150 MHz) of compound 8 in CDCl_3 .

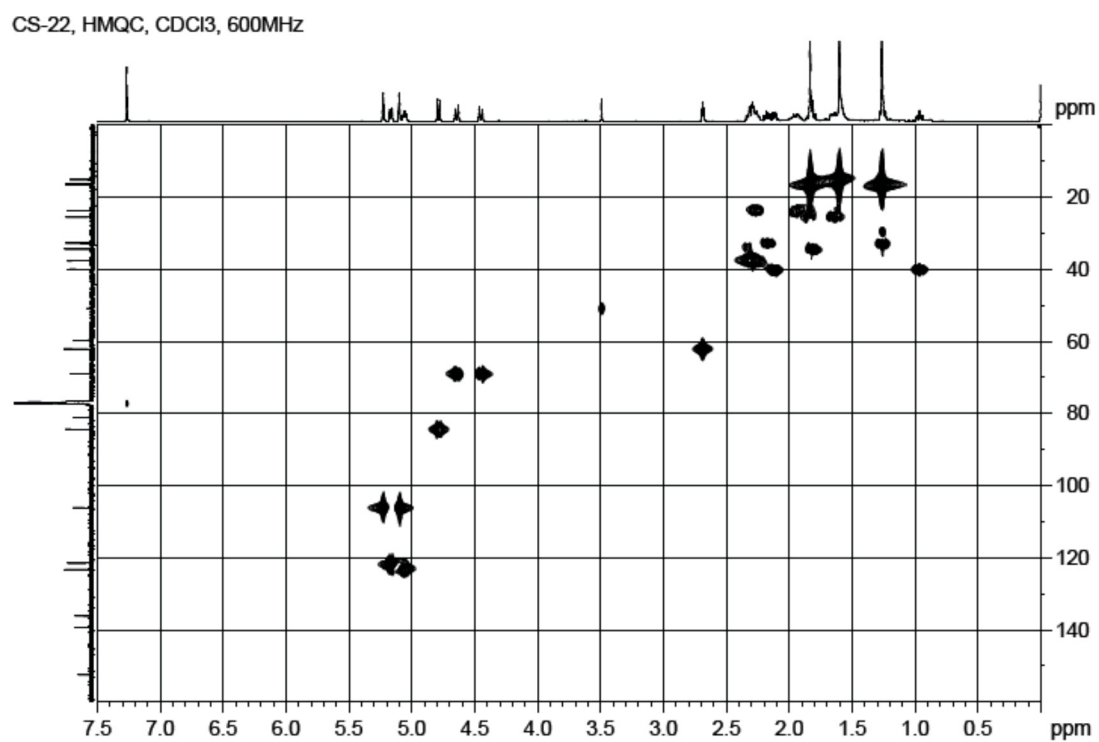
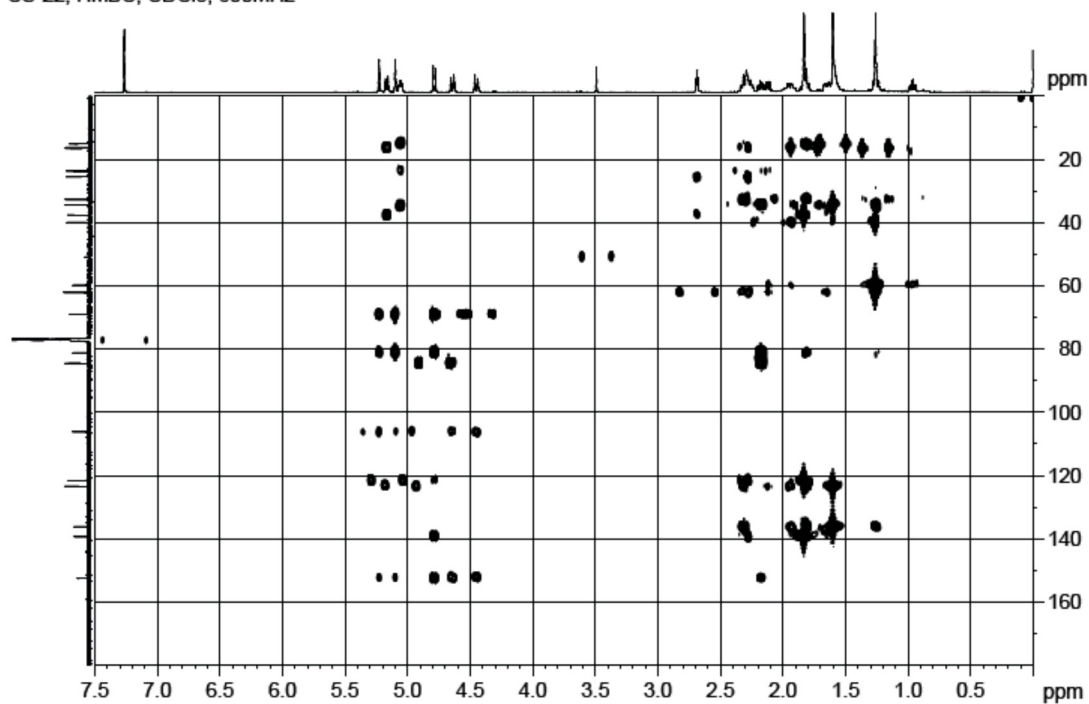
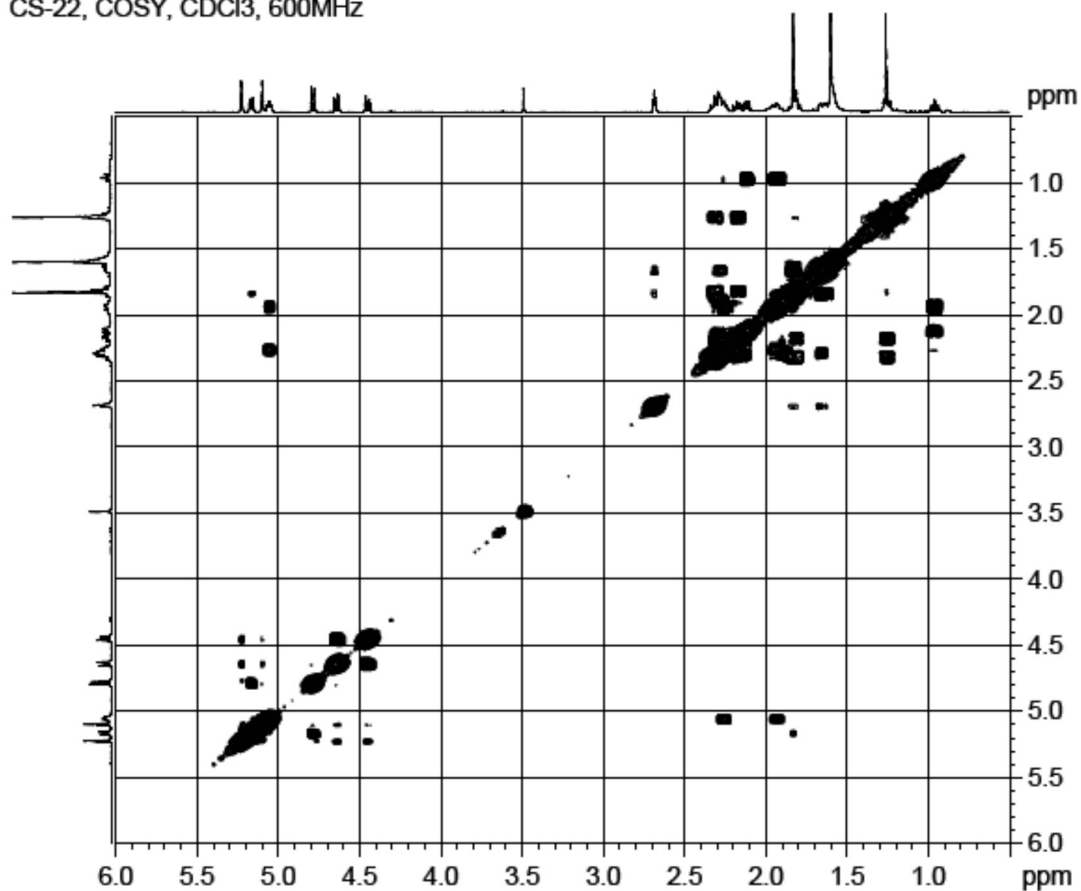


Figure S52. HMQC spectrum of compound 8 in CDCl_3 .

CS-22, HMBC, CDCl₃, 600MHzFigure S53. HMBC spectrum of compound 8 in CDCl₃.CS-22, COSY, CDCl₃, 600MHzFigure S54. COSY spectrum of compound 8 in CDCl₃.

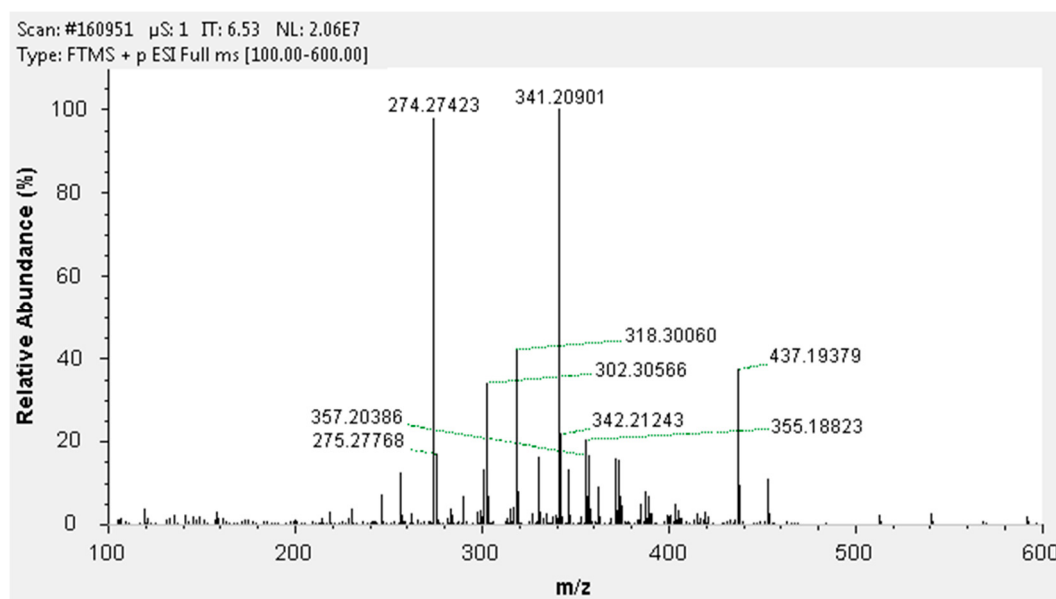
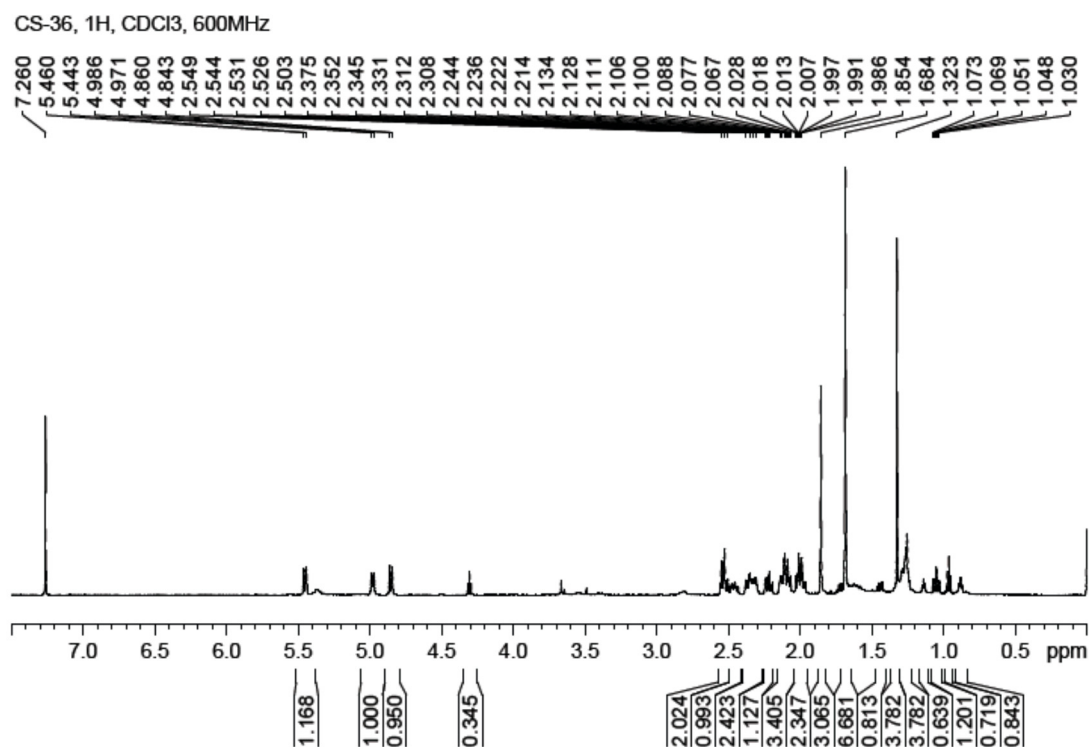
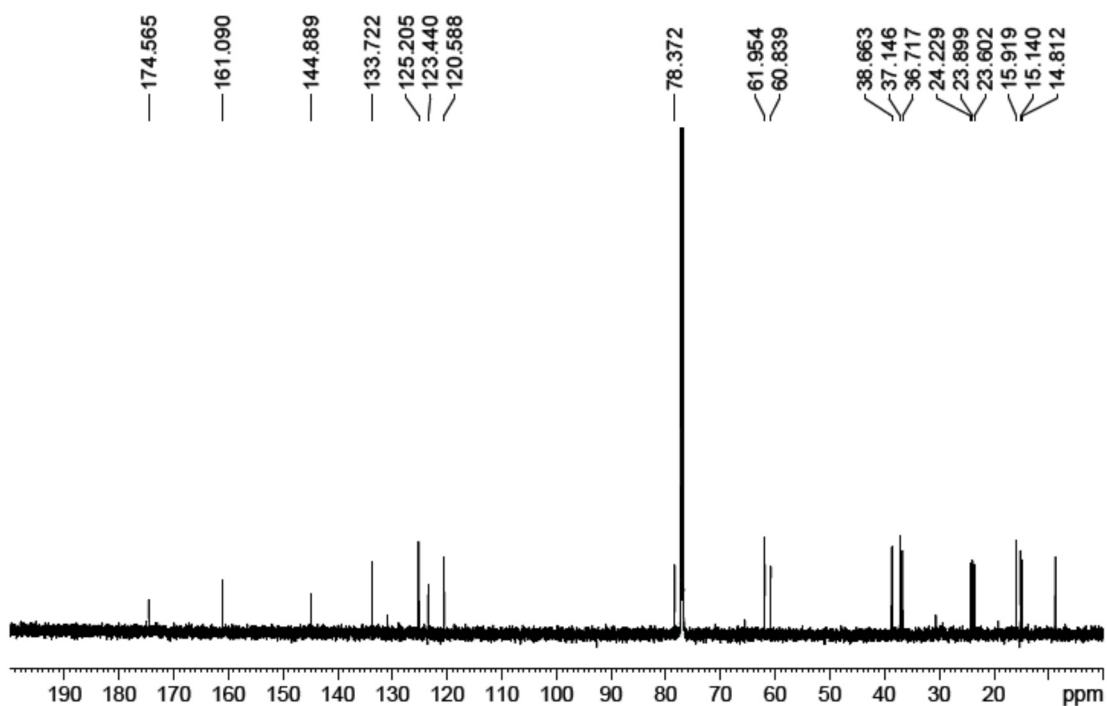
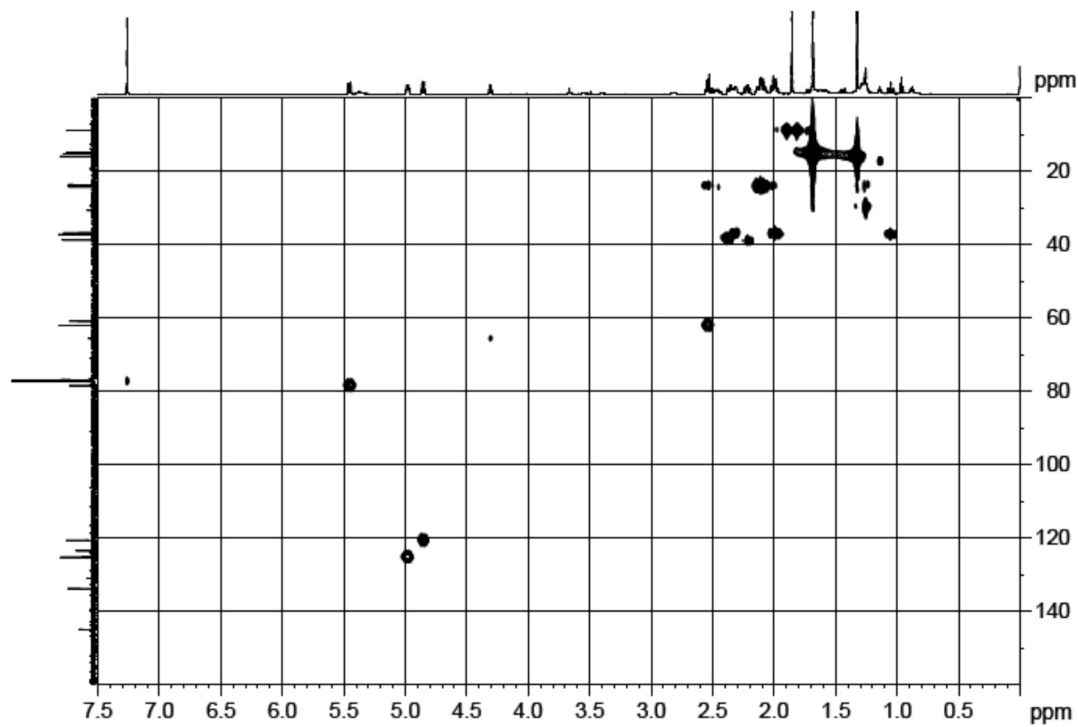
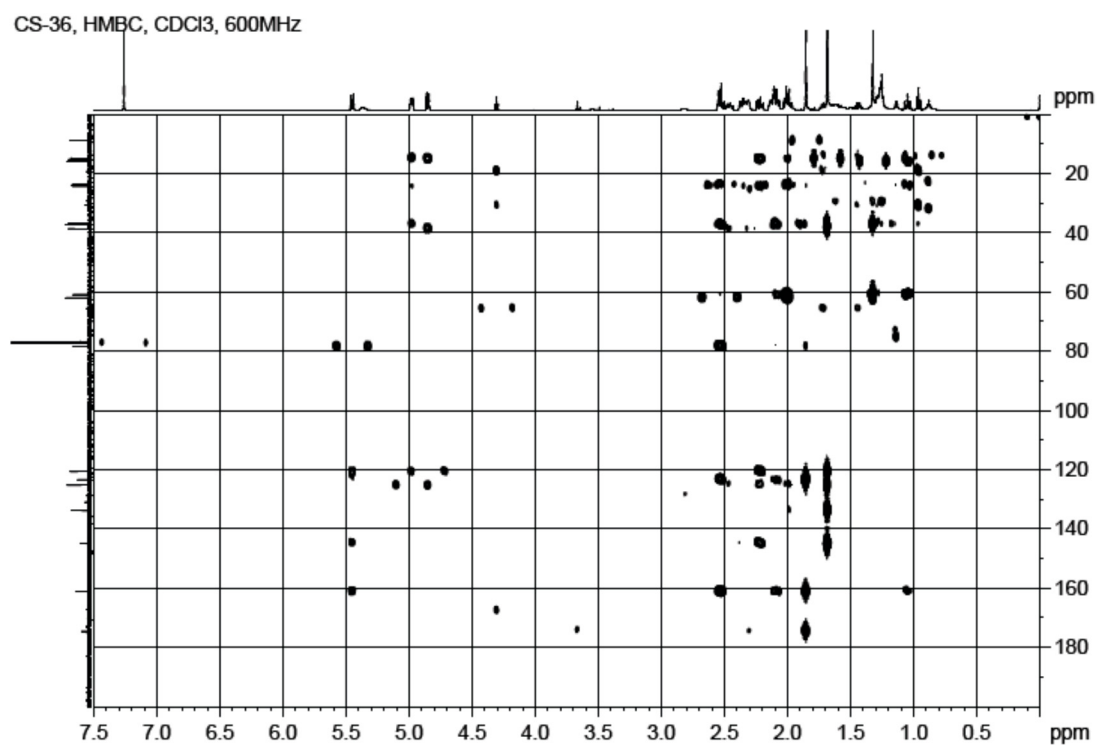
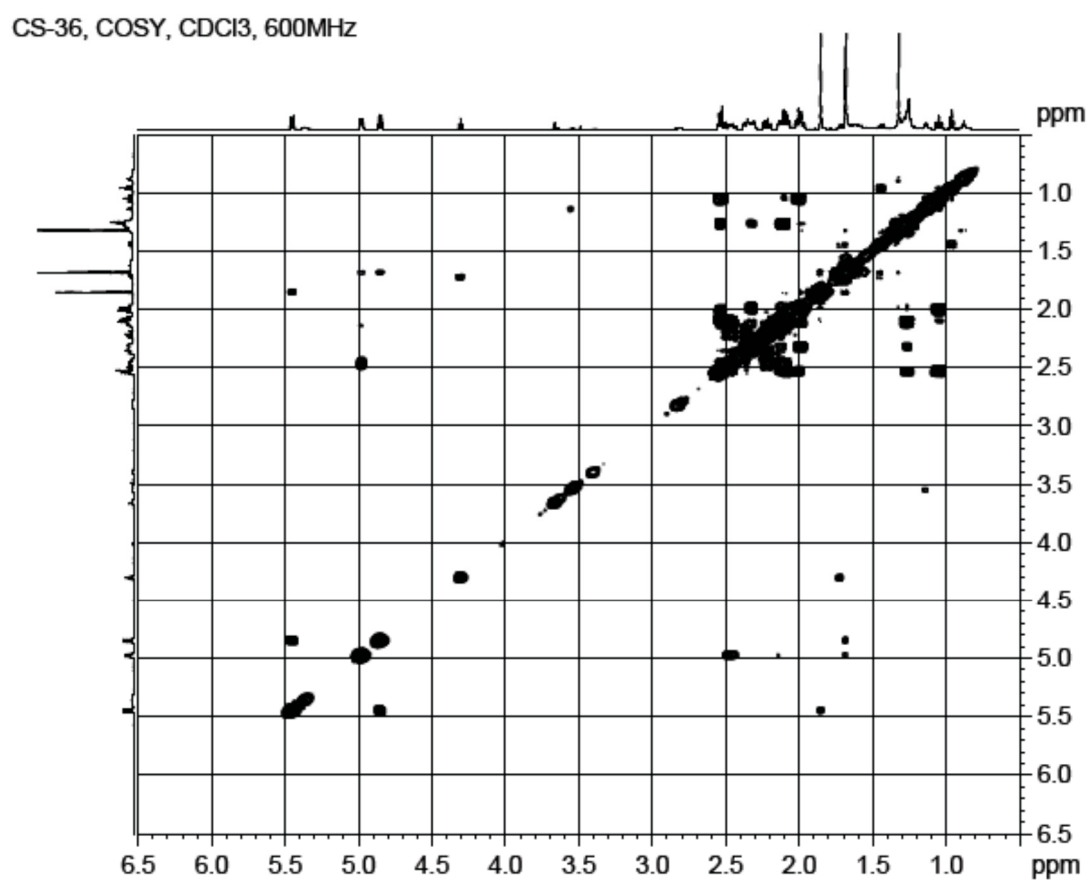


Figure S55. HRESIMS spectrum of compound 8.

Figure S56. ^1H NMR spectrum (600 MHz) of compound 9 in CDCl_3 .

CS-36, ^{13}C , CDCl_3 , 150MHzFigure S57. ^{13}C NMR spectrum (150 MHz) of compound 9 in CDCl_3 .CS-36, HMQC, CDCl_3 , 600MHzFigure S58. HMQC spectrum of compound 9 in CDCl_3 .

Figure S59. HMBC spectrum of compound 9 in CDCl₃.Figure S60. COSY spectrum of compound 9 in CDCl₃.

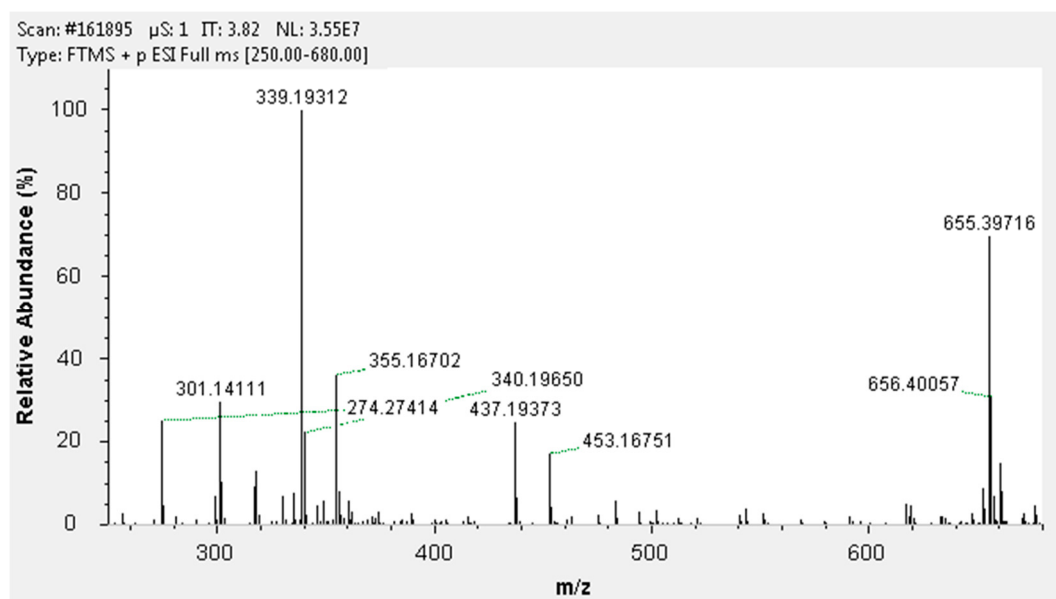
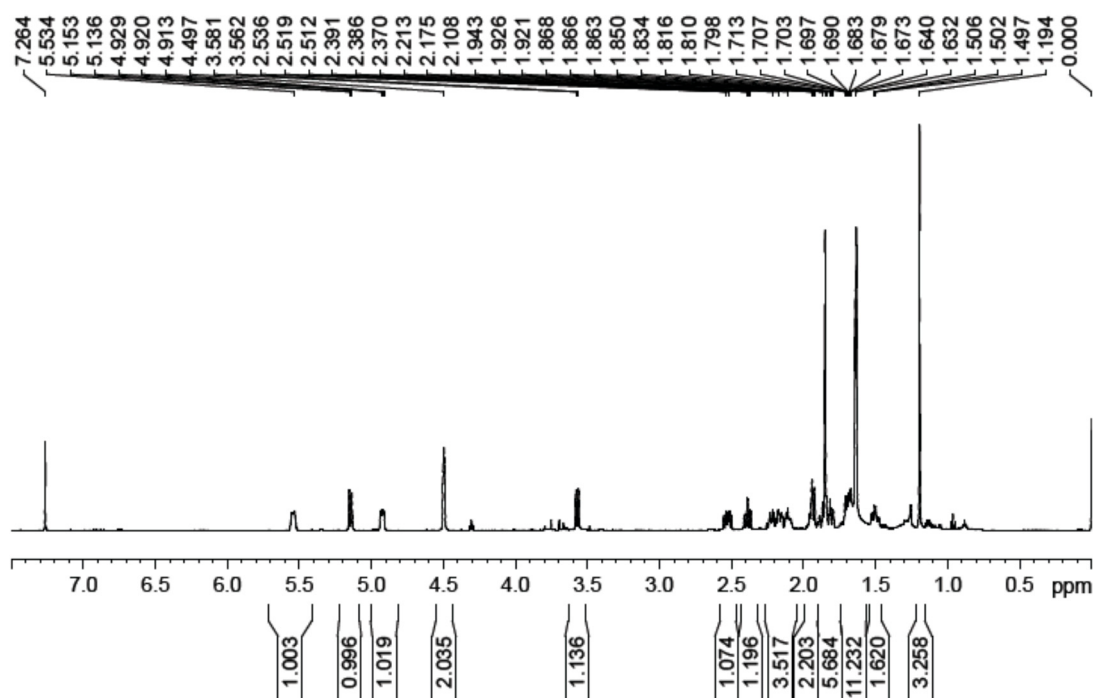
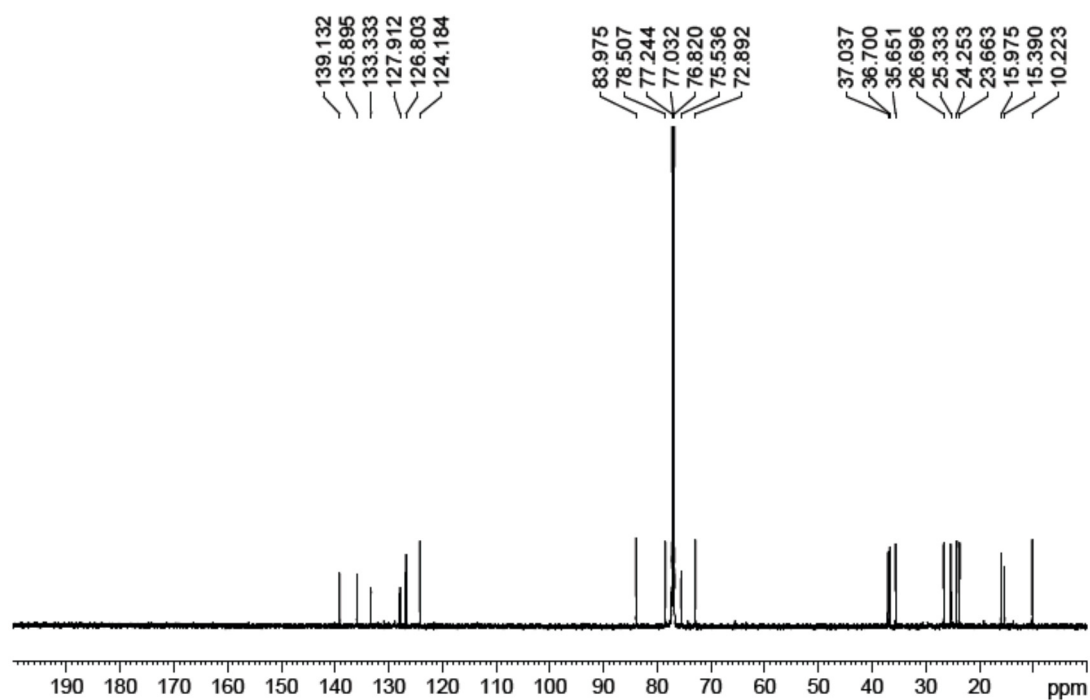
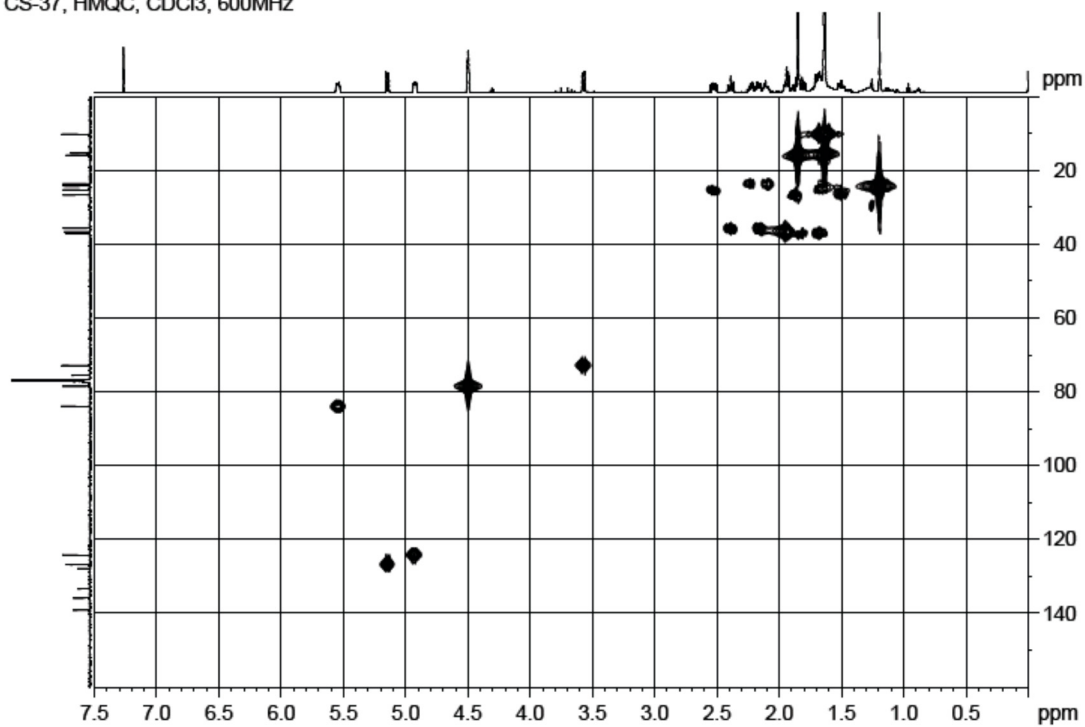
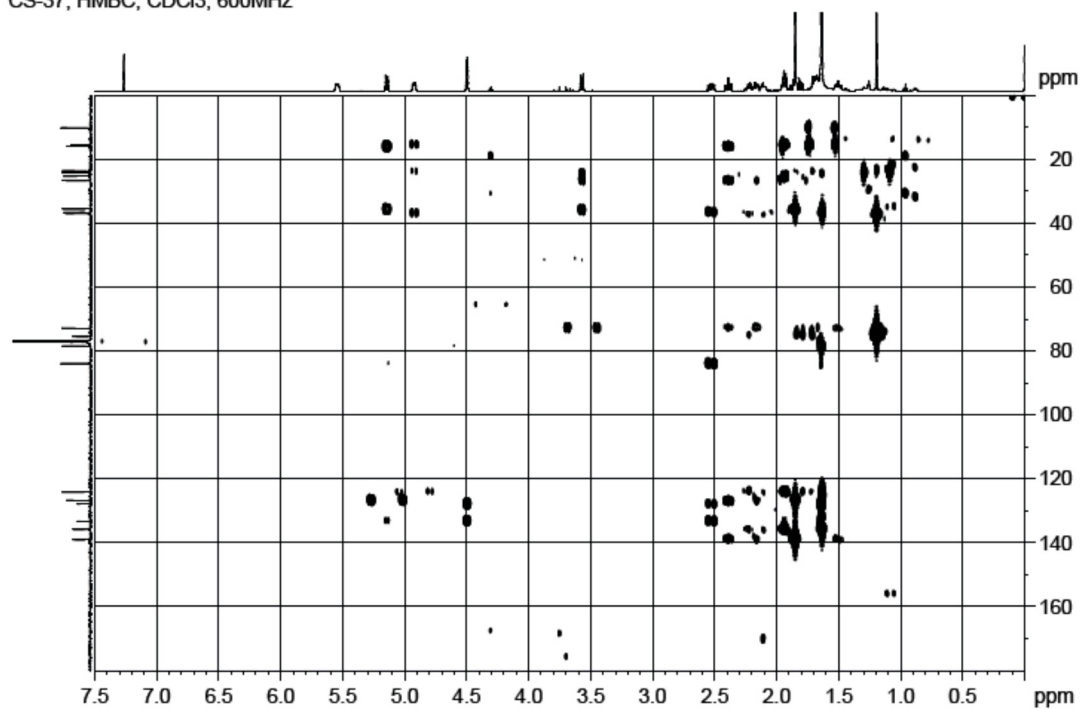
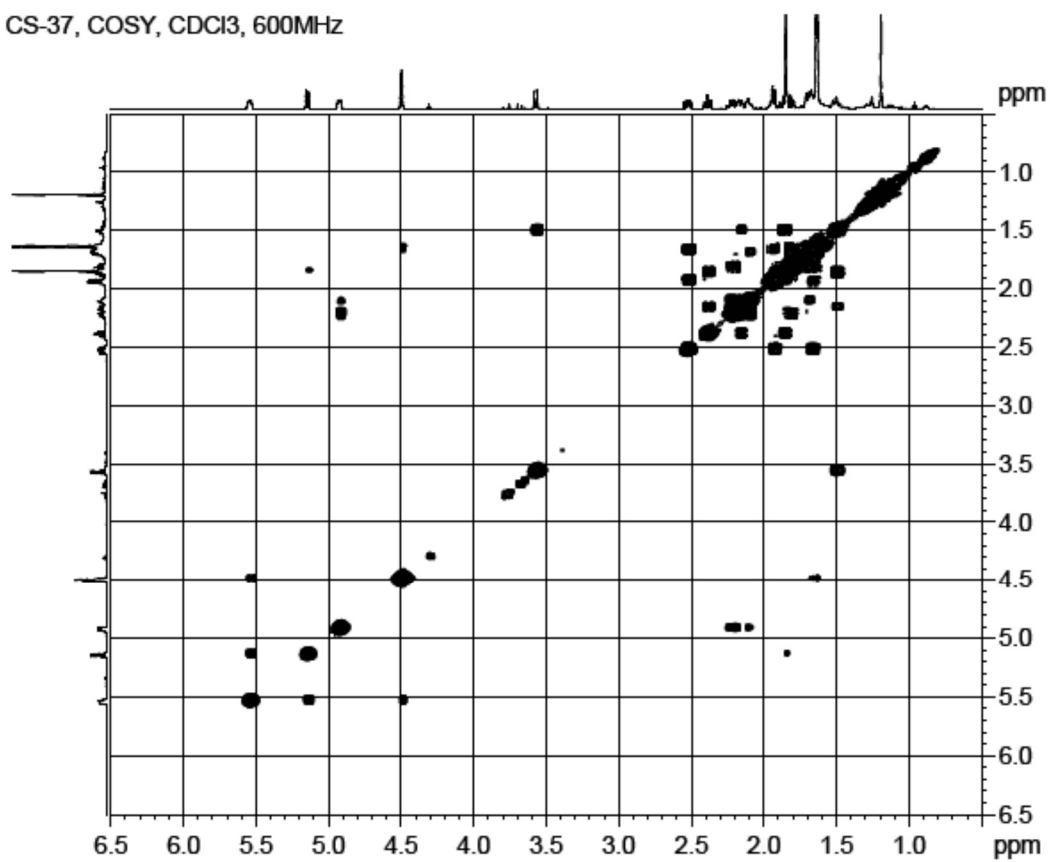


Figure S61. HRESIMS spectrum of compound 9.

CS-37, ^1H , CDCl_3 , 600MHzFigure S62. ^1H NMR spectrum (600 MHz) of compound 10 in CDCl_3 .

CS-37, ^{13}C , CDCl_3 , 150MHzFigure S63. ^{13}C NMR spectrum (150 MHz) of compound 10 in CDCl_3 .CS-37, HMQC, CDCl_3 , 600MHzFigure S64. HMQC spectrum of compound 10 in CDCl_3 .

CS-37, HMBC, CDCl₃, 600MHzFigure S65. HMBC spectrum of compound 10 in CDCl₃.CS-37, COSY, CDCl₃, 600MHzFigure S66. COSY spectrum of compound 10 in CDCl₃.

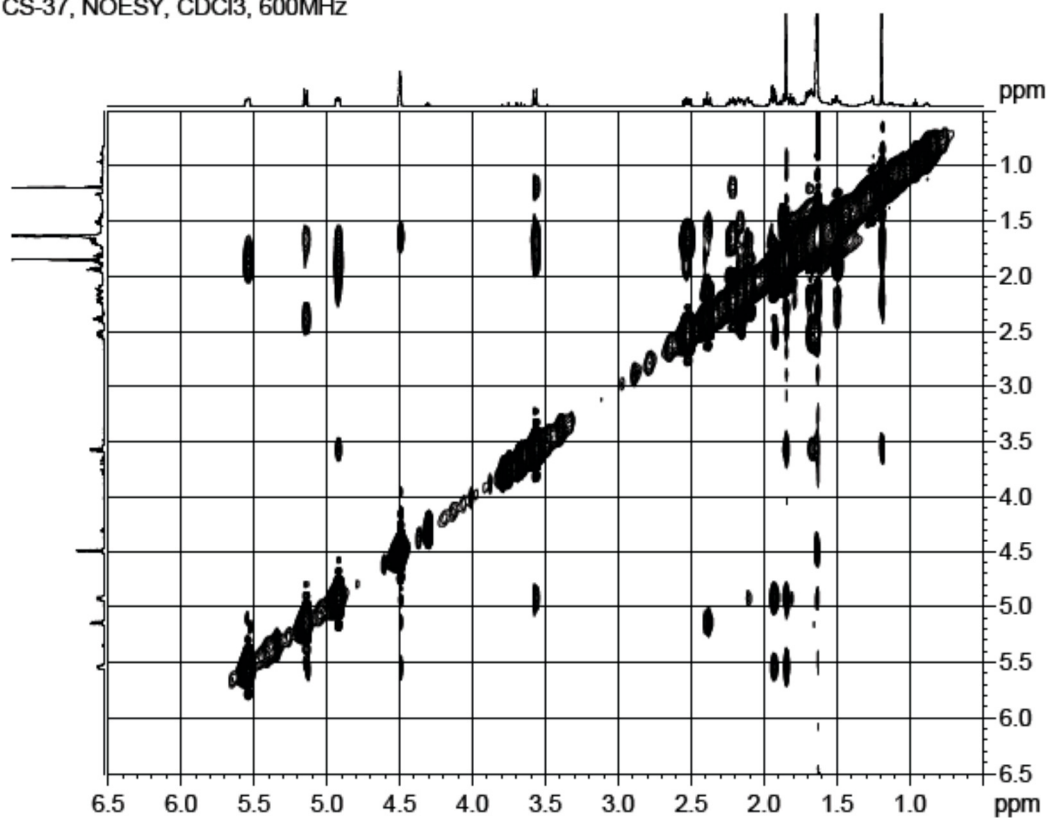
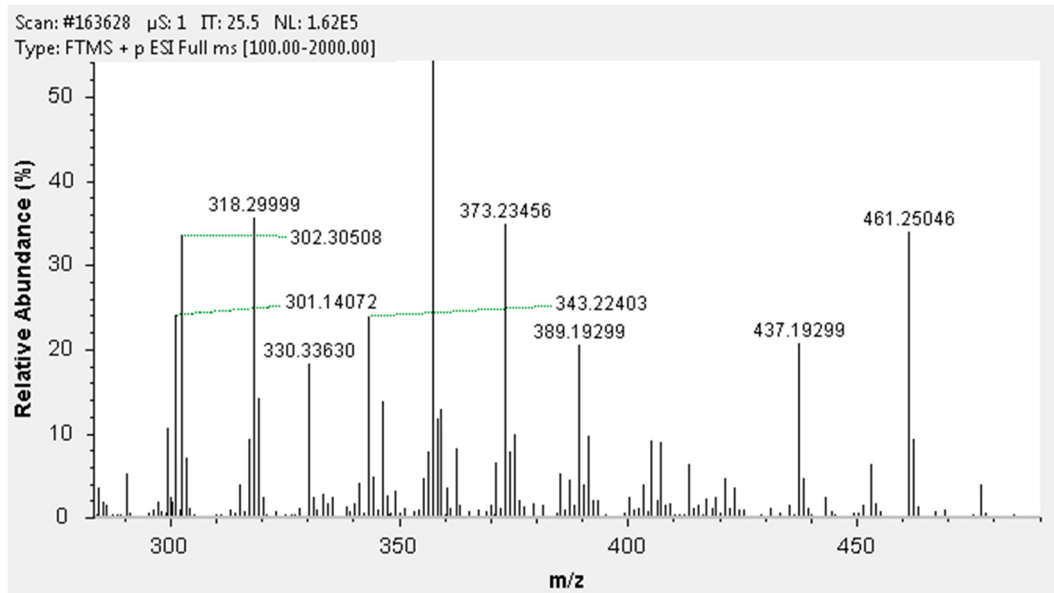
CS-37, NOESY, CDCl₃, 600MHzFigure S67. NOESY spectrum of compound 10 in CDCl₃.

Figure S68. HRESIMS spectrum of compound 10.