

Supplementary Information

- Figure S1.** ^1H NMR (500 MHz, CD_3OD) spectrum of **1**
- Figure S2.** ^1H - ^1H COSY (500 MHz, CD_3OD) spectrum of **1**
- Figure S3.** ^{13}C NMR (125 MHz, CD_3OD) spectrum of **1**
- Figure S4.** HSQC (500 MHz, CD_3OD) spectrum of **1**
- Figure S5.** HMBC (500 MHz, CD_3OD) spectrum of **1**
- Figure S6.** NOESY (500 MHz, CD_3OD) spectrum of **1**
- Figure S7.** ^1H NMR (700 MHz, CD_3OD) spectrum of (*S*)-MTPA ester of **1a**
- Figure S8.** ^1H - ^1H COSY (700 MHz, CD_3OD) spectrum of (*S*)-MTPA ester of **1a**
- Figure S9.** ^1H NMR (700 MHz, CD_3OD) spectrum of (*R*)-MTPA ester of **1b**
- Figure S10.** ^1H - ^1H COSY (700 MHz, CD_3OD) spectrum of (*S*)-MTPA ester of **1b**
- Figure S11.** ^1H NMR (700 MHz, CDCl_3) spectrum of **2**
- Figure S12.** ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **2**
- Figure S13.** ^{13}C NMR (176 MHz, CDCl_3) spectrum of **2**
- Figure S14.** HSQC (700 MHz, CDCl_3) spectrum of **2**
- Figure S15.** HMBC (700 MHz, CDCl_3) spectrum of **2**
- Figure S16.** NOESY (700 MHz, CDCl_3) spectrum of **2**
- Figure S17.** ^1H NMR (500 MHz, CDCl_3) spectrum of **3**
- Figure S18.** ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of **3**
- Figure S19.** ^{13}C NMR (125 MHz, CDCl_3) spectrum of **3**
- Figure S20.** HSQC (500 MHz, CDCl_3) spectrum of **3**
- Figure S21.** HMBC (500 MHz, CDCl_3) spectrum of **3**
- Figure S22.** NOESY (500 MHz, CDCl_3) spectrum of **3**
- Figure S23.** ^1H NMR (700 MHz, CDCl_3) spectrum of **4**
- Figure S24.** ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **4**
- Figure S25.** ^{13}C NMR (176 MHz, CDCl_3) spectra of **4**
- Figure S26.** HSQC (700 MHz, CDCl_3) spectrum of **4**
- Figure S27.** HMBC (700 MHz, CDCl_3) spectrum of **4**
- Figure S28.** NOESY (700 MHz, CDCl_3) spectrum of **4**
- Figure S29.** ^1H NMR (700 MHz, CDCl_3) spectrum of **5**
- Figure S30.** ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **5**
- Figure S31.** ^{13}C NMR (176 MHz, CDCl_3) spectra of **5**
- Figure S32.** HSQC (700 MHz, CDCl_3) spectrum of **5**
- Figure S33.** HMBC (700 MHz, CDCl_3) spectrum of **5**
- Figure S34.** NOESY (700 MHz, CDCl_3) spectrum of **5**
- Figure S35.** ^1H NMR (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **5a**
- Figure S36.** ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **5a**
- Figure S37.** ^1H NMR (500 MHz, CDCl_3) spectrum of (*R*)-MTPA ester of **5b**
- Figure S38.** ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **5b**
- Figure S39.** ^1H NMR (700 MHz, DMSO) spectrum of **5**
- Figure S40.** ^1H - ^1H COSY (700 MHz, DMSO) spectrum of **5**
- Figure S41.** ^{13}C NMR (176 MHz, DMSO) spectra of **5**

- Figure S42.** HSQC (700 MHz, DMSO) spectrum of **5**
- Figure S43.** HMBC (700 MHz, DMSO) spectrum of **5**
- Figure S44.** NOESY (700 MHz, DMSO) spectrum of **5**
- Figure S45.** ^1H NMR (500 MHz, CDCl_3) spectrum of **6**
- Figure S46.** ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of **6**
- Figure S47.** ^{13}C NMR (125 MHz, CDCl_3) spectrum of **6**
- Figure S48.** HSQC (500 MHz, CDCl_3) spectrum of **6**
- Figure S49.** HMBC (500 MHz, CDCl_3) spectrum of **6**
- Figure S50.** NOESY (500 MHz, CDCl_3) spectrum of **6**
- Figure S51.** ^1H NMR (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **6a**
- Figure S52.** ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **6a**
- Figure S53.** ^1H NMR (500 MHz, CDCl_3) spectrum of (*R*)-MTPA ester of **6b**
- Figure S54.** ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **6b**
- Figure S55.** ^1H NMR (700 MHz, CDCl_3) spectrum of **7**
- Figure S56.** ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **7**
- Figure S57.** ^{13}C NMR (176 MHz, CDCl_3) spectra of **7**
- Figure S58.** HSQC (700 MHz, CDCl_3) spectrum of **7**
- Figure S59.** HMBC (700 MHz, CDCl_3) spectrum of **7**
- Figure S60.** NOESY (700 MHz, CDCl_3) spectrum of **7**

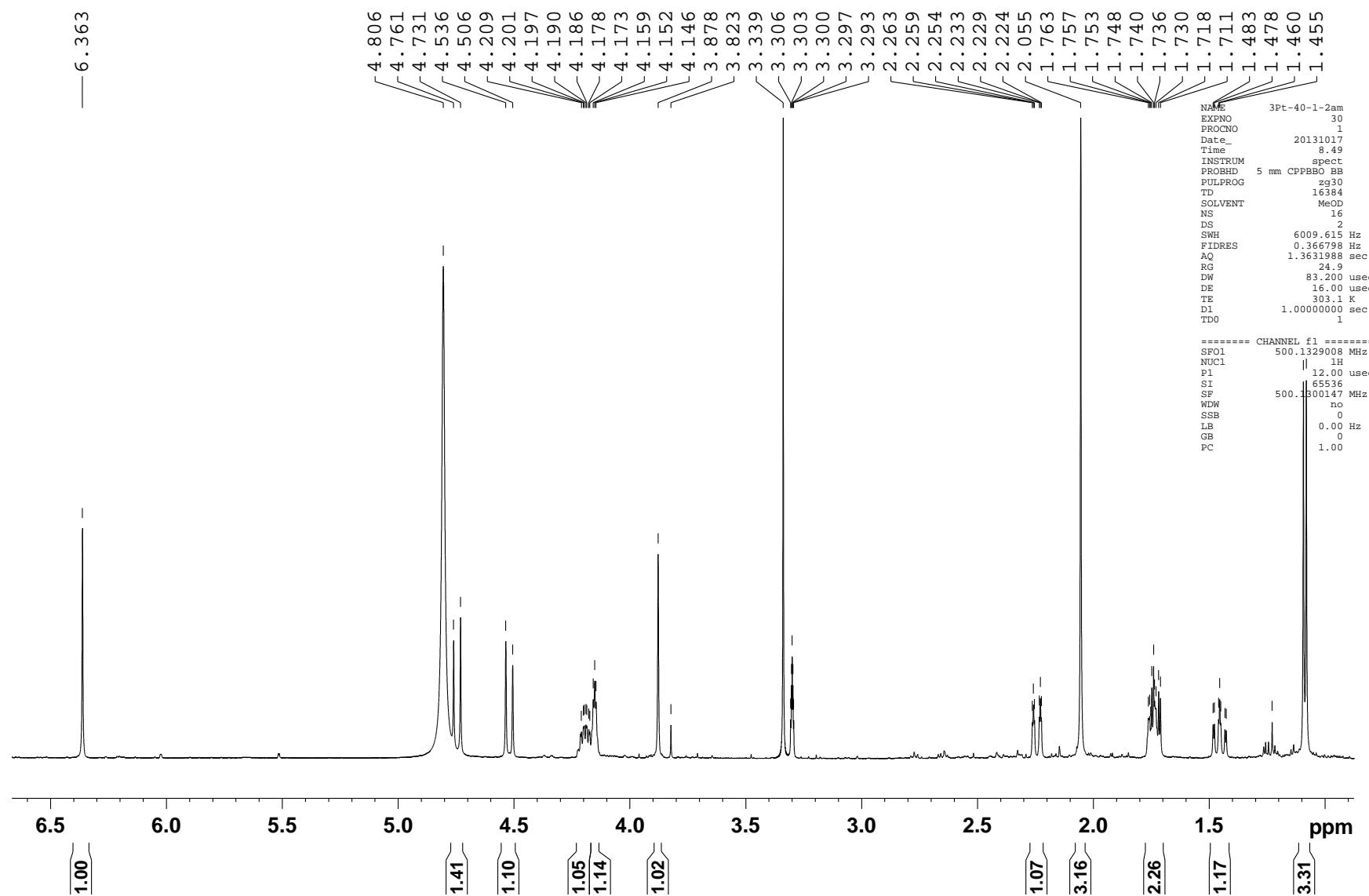
Figure S1. ^1H NMR (500 MHz, CD_3OD) spectrum of **1**.

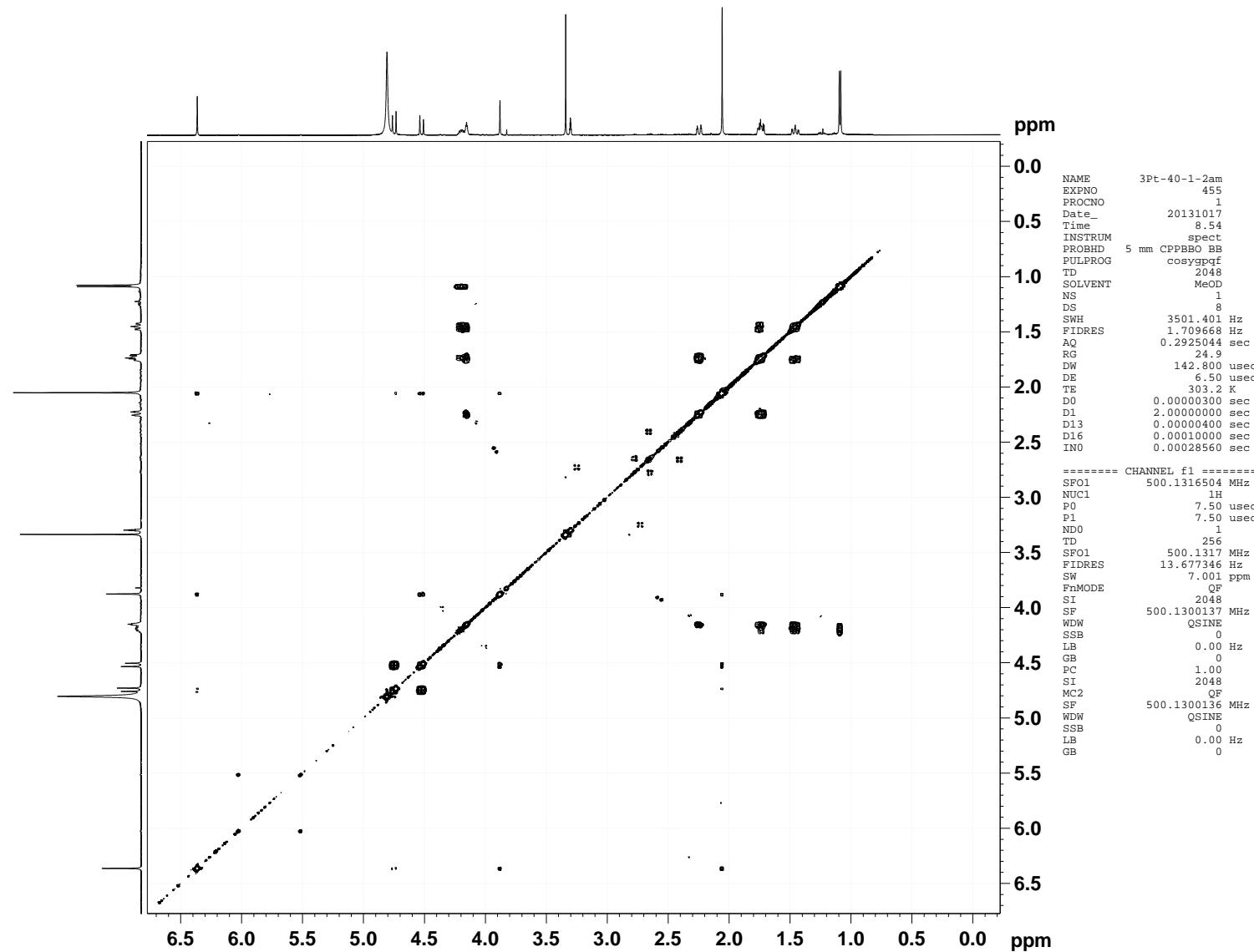
Figure S2. ^1H - ^1H COSY (500 MHz, CD_3OD) spectrum of **1**.

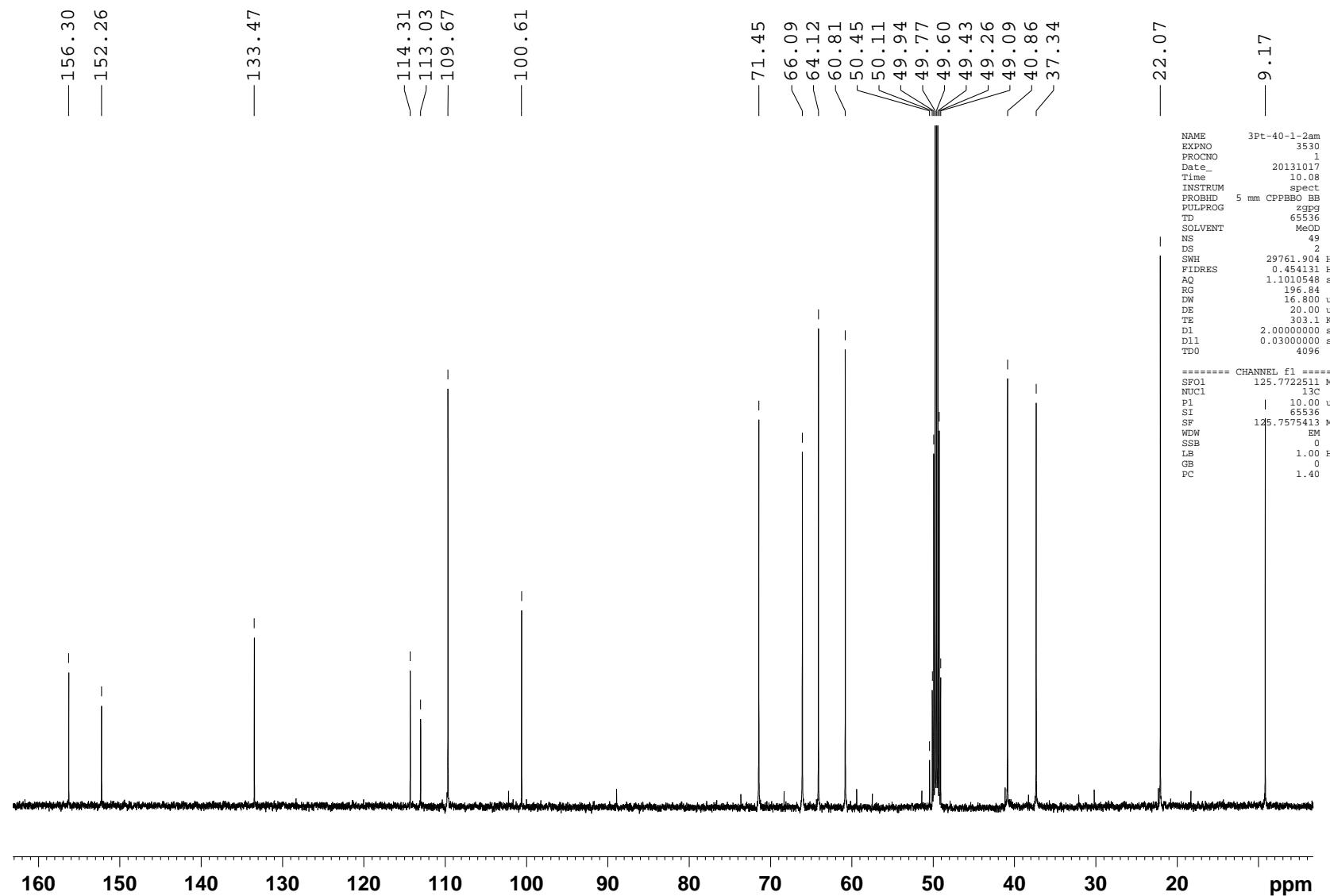
Figure S3. ^{13}C NMR (125 MHz, CD_3OD) spectrum of **1**.

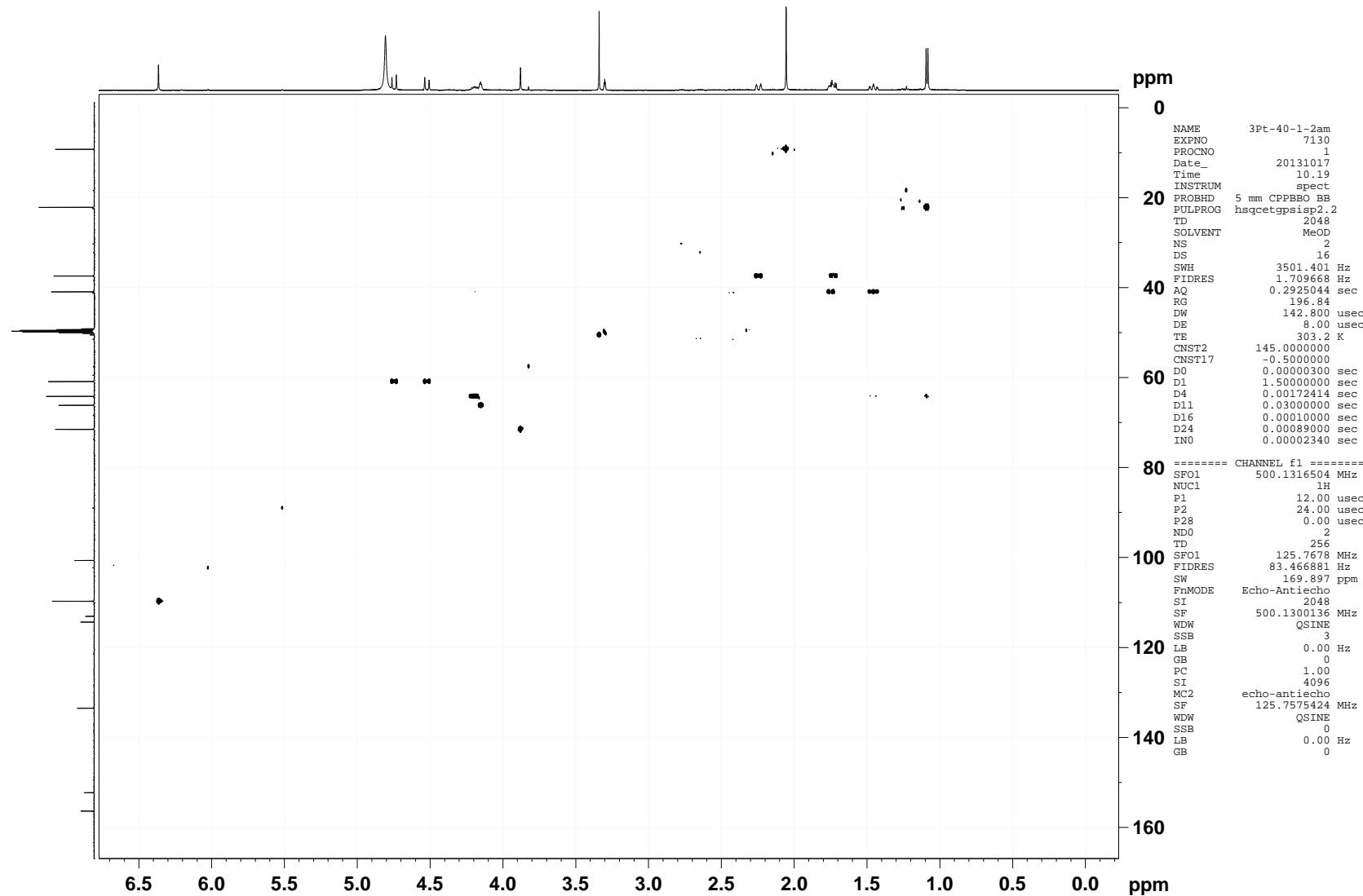
Figure S4. HSQC (500 MHz, CD₃OD) spectrum of **1**.

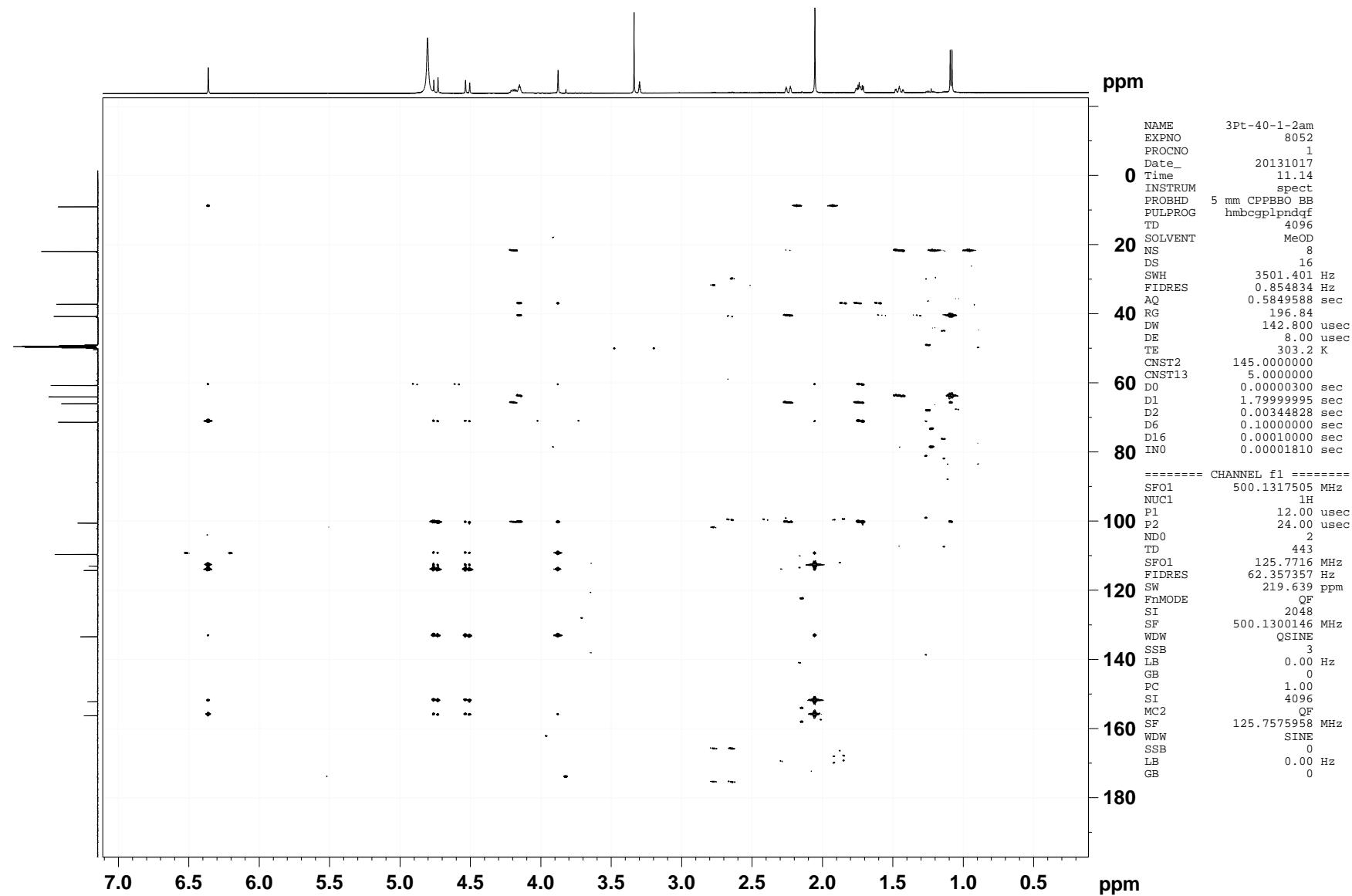
Figure S5. HMBC (500 MHz, CD₃OD) spectrum of **1**.

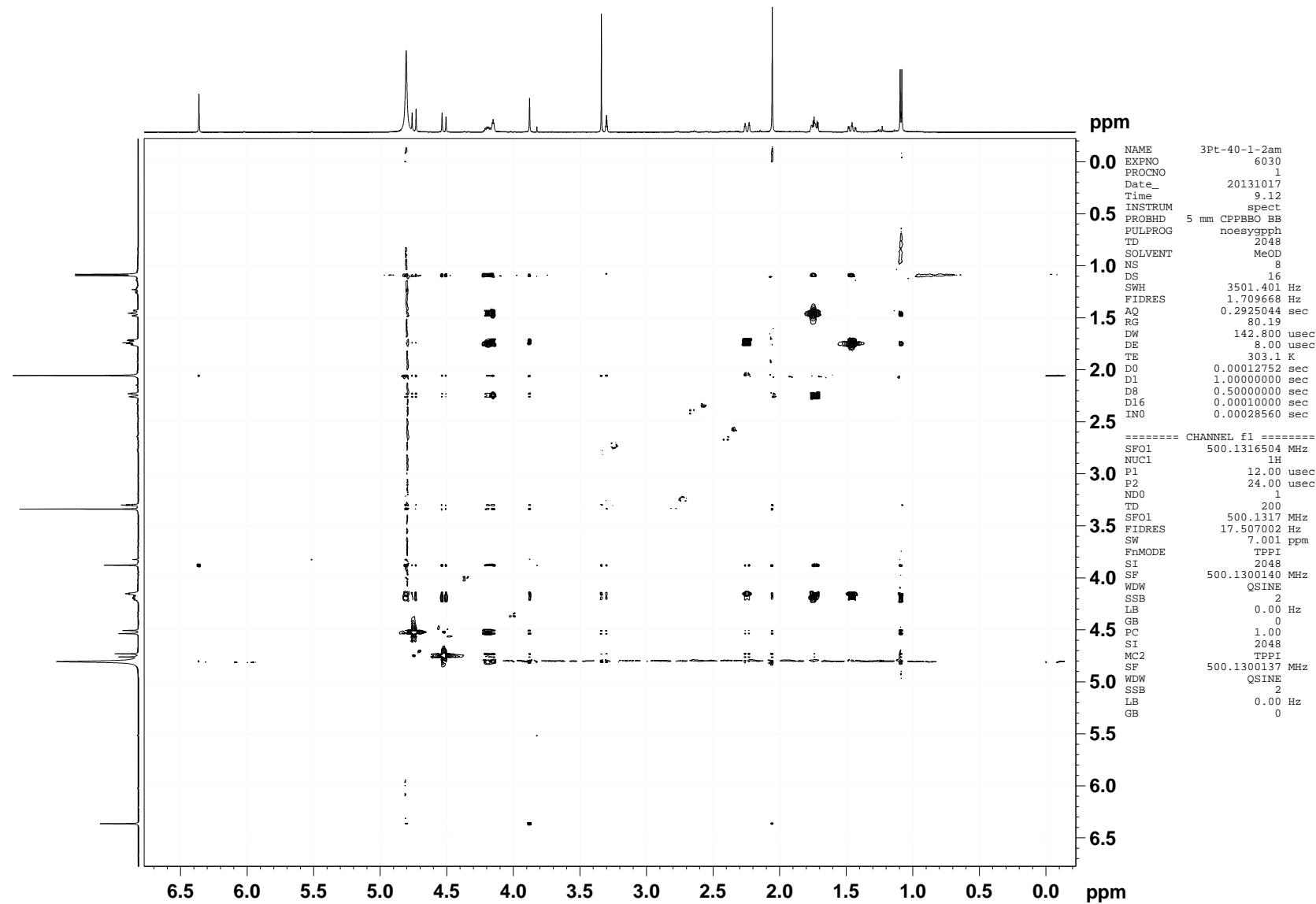
Figure S6. NOESY (500 MHz, CD₃OD) spectrum of **1**.

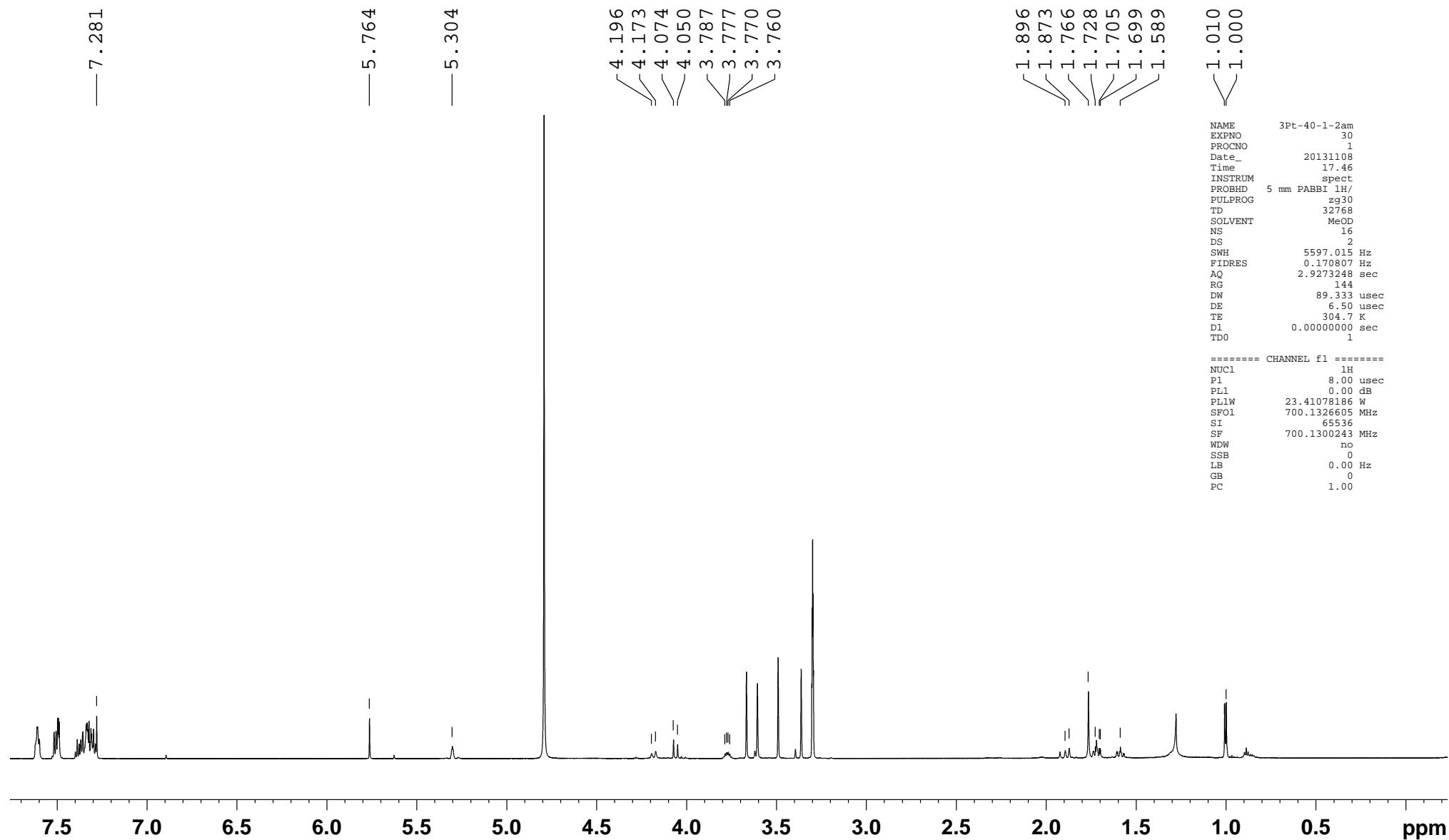
Figure S7. ^1H NMR (700 MHz, CD_3OD) spectrum of (*S*)-MTPA ester of **1a**.

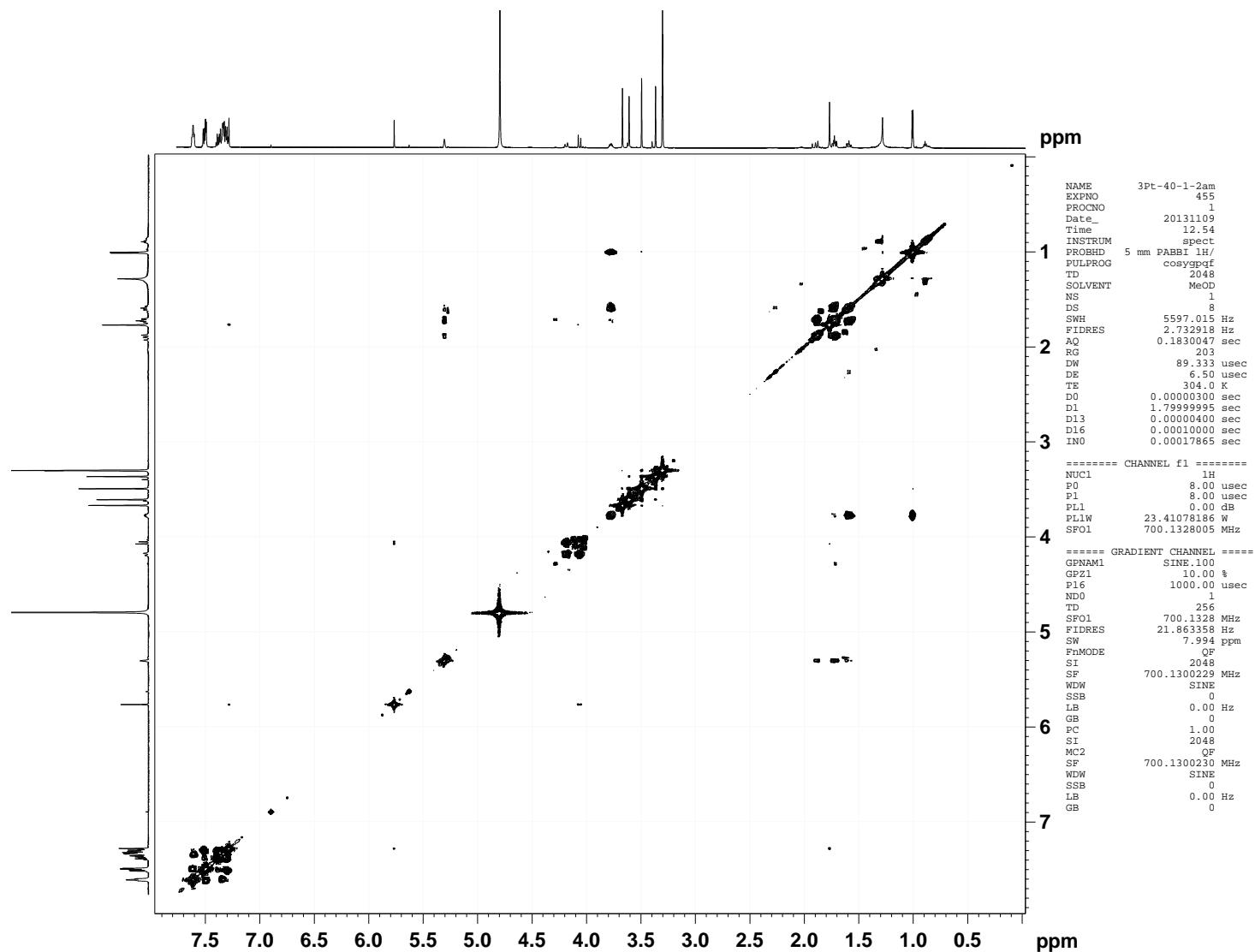
Figure S8. ^1H - ^1H COSY (700 MHz, CD_3OD) spectrum of (*S*)-MTPA ester of **1a**.

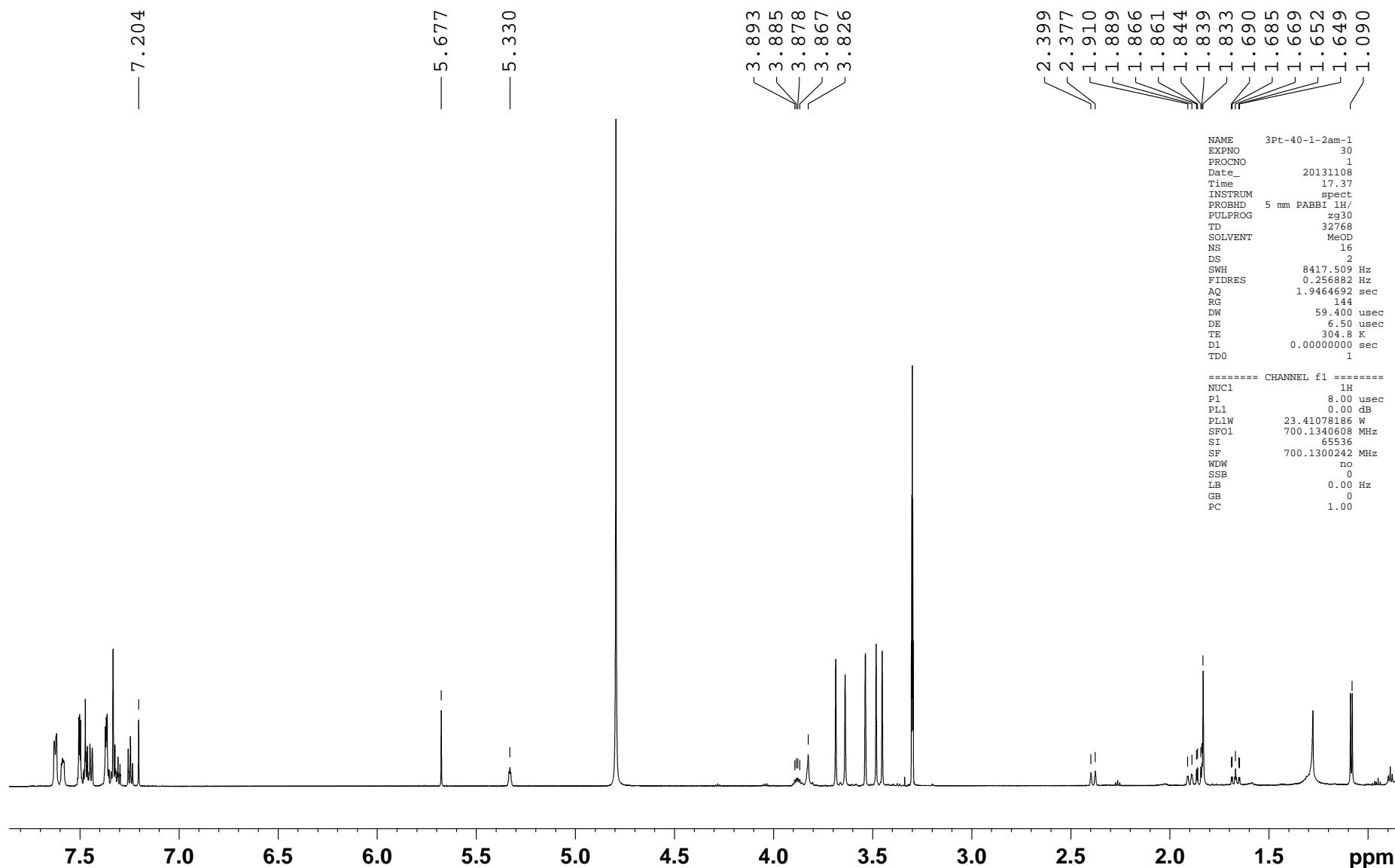
Figure S9. ^1H NMR (700 MHz, CD_3OD) spectrum of (*R*)-MTPA ester of **1b**.

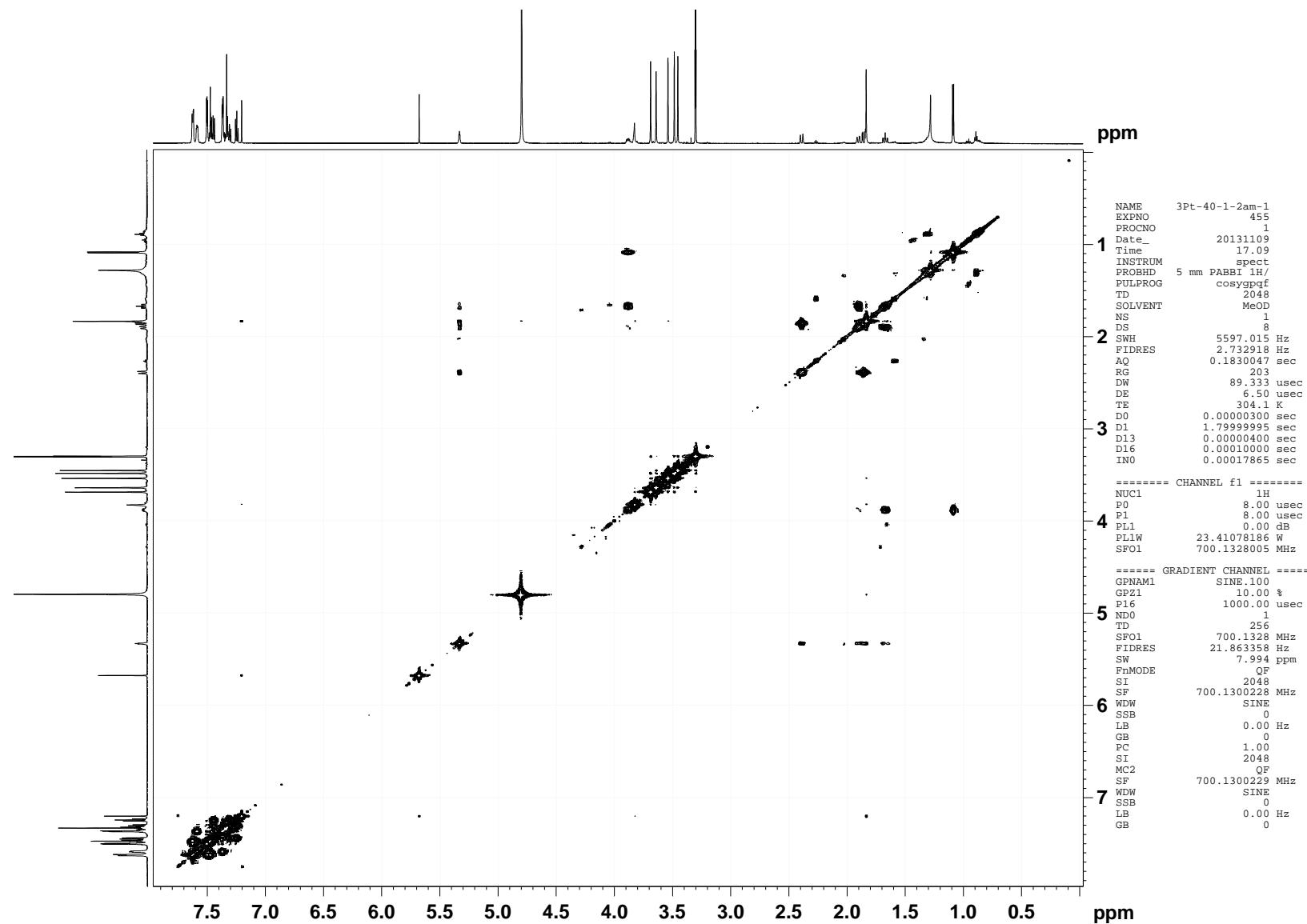
Figure S10. ^1H - ^1H COSY (700 MHz, CD_3OD) spectrum of (*R*)-MTPA ester of **1b**.

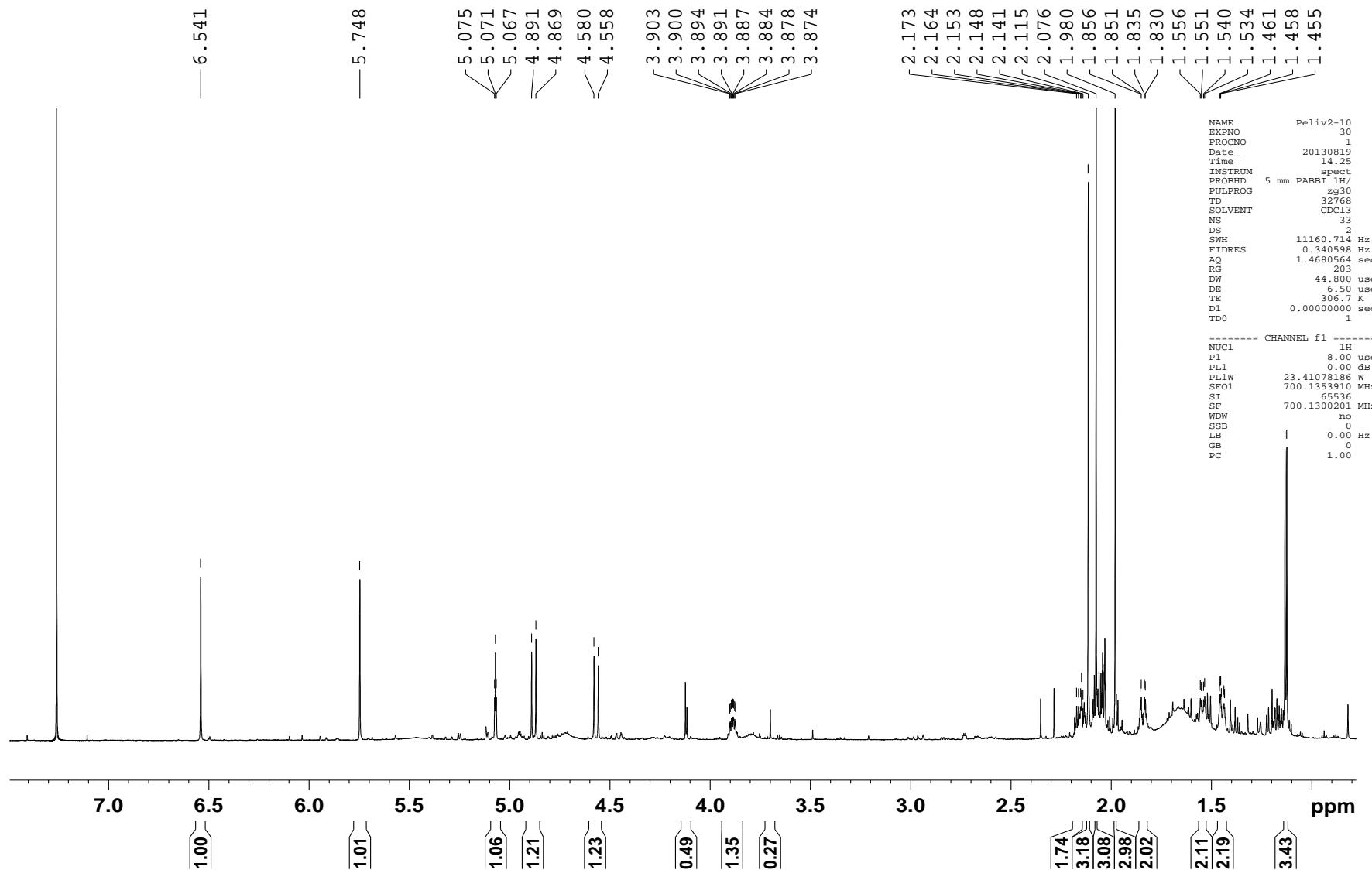
Figure S11. ^1H NMR (700 MHz, CDCl_3) spectrum of **2**.

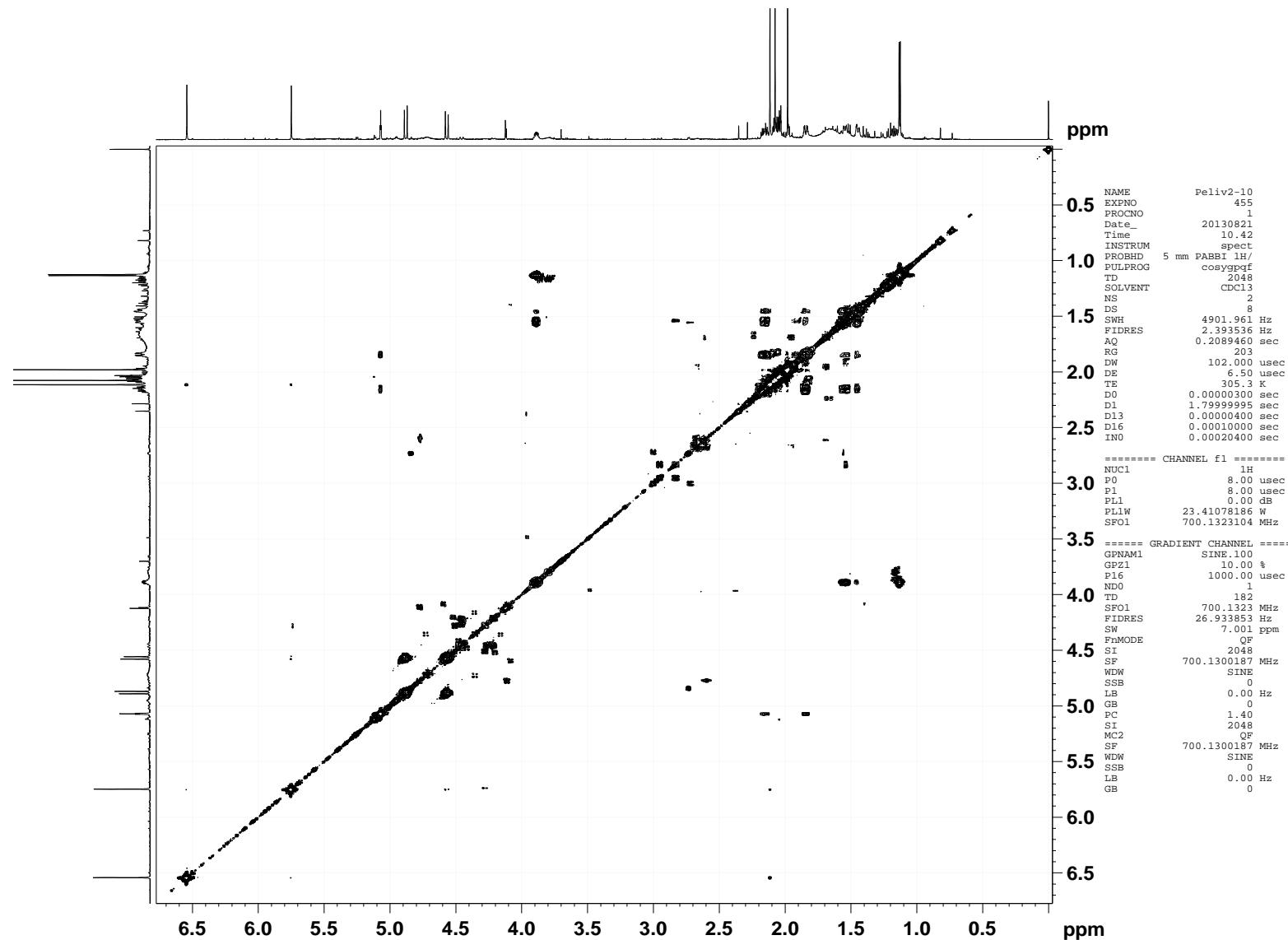
Figure S12. ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **2**.

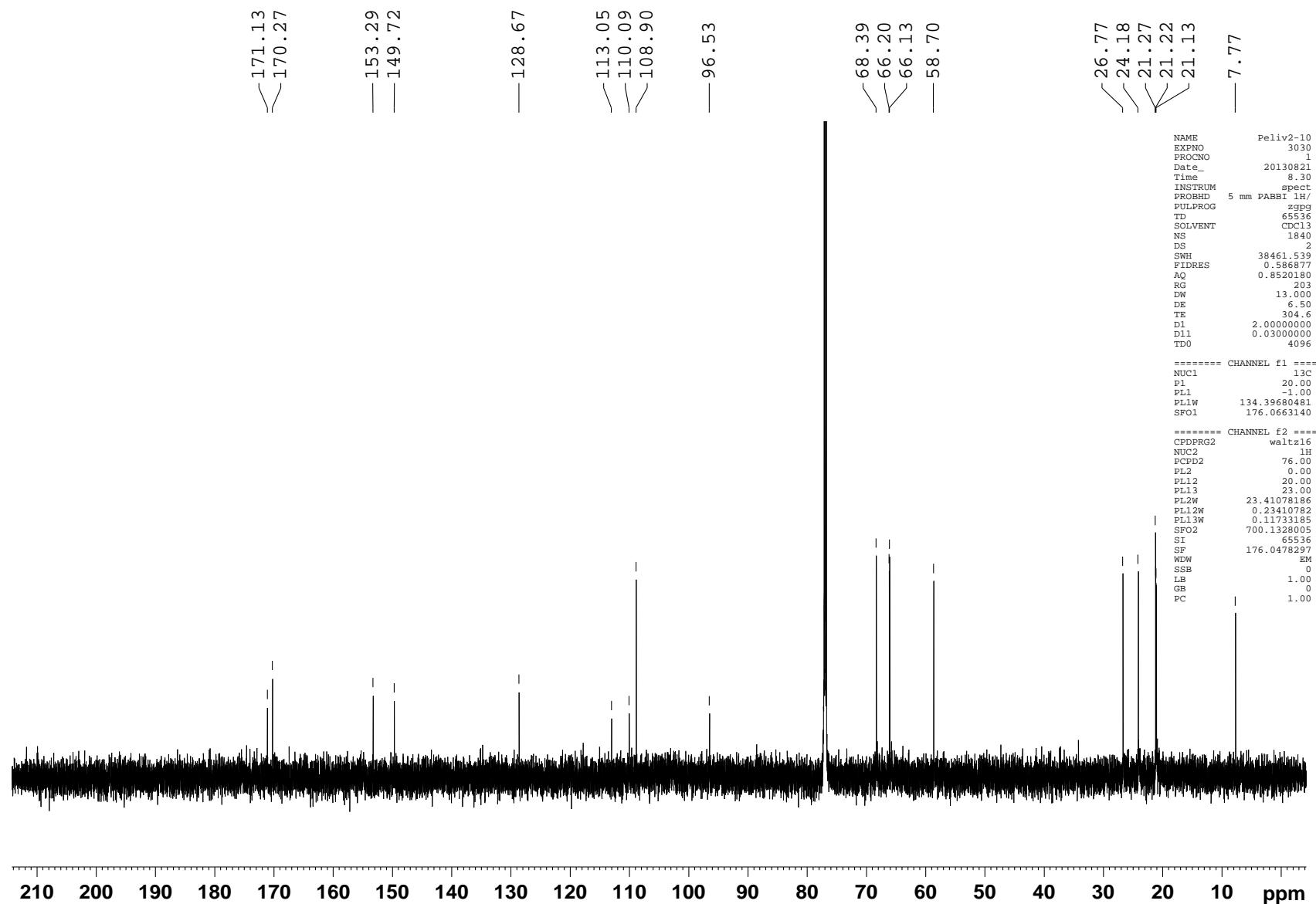
Figure S13. ^{13}C NMR (176 MHz, CDCl_3) spectrum of **2**.

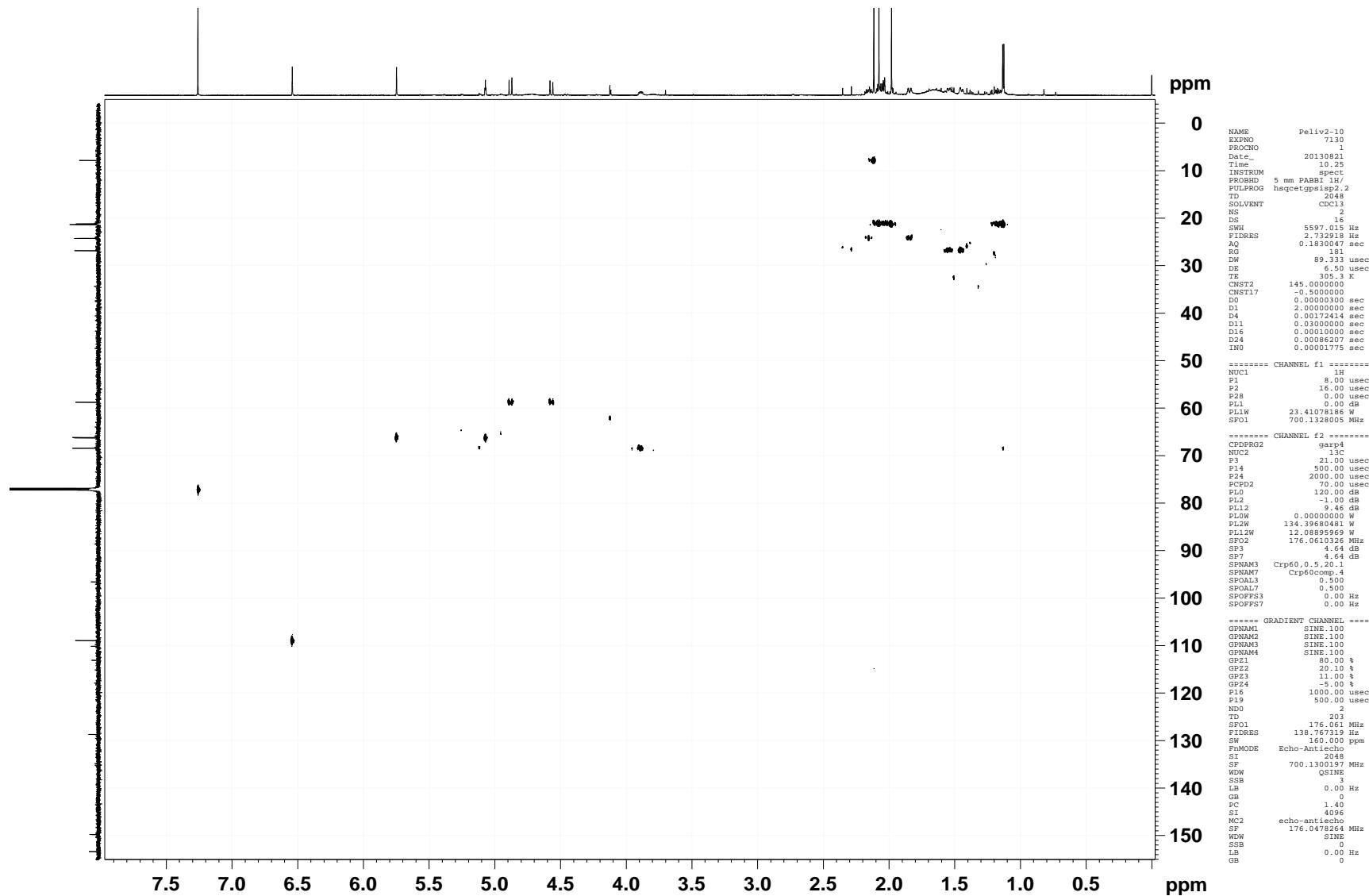
Figure S14. HSQC (700 MHz, CDCl₃) spectrum of **2**.

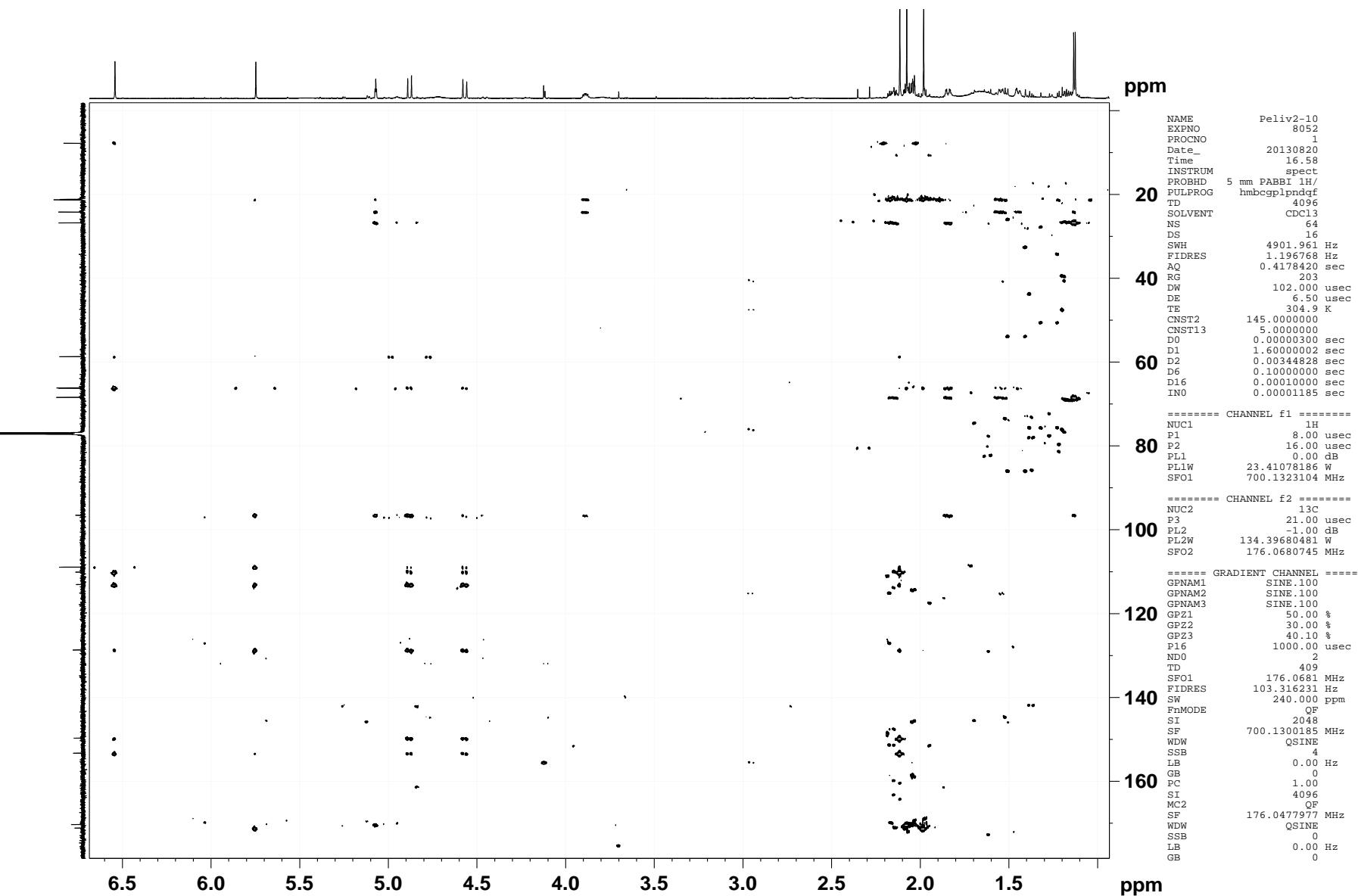
Figure S15. HMBC (700 MHz, CDCl₃) spectrum of 2.

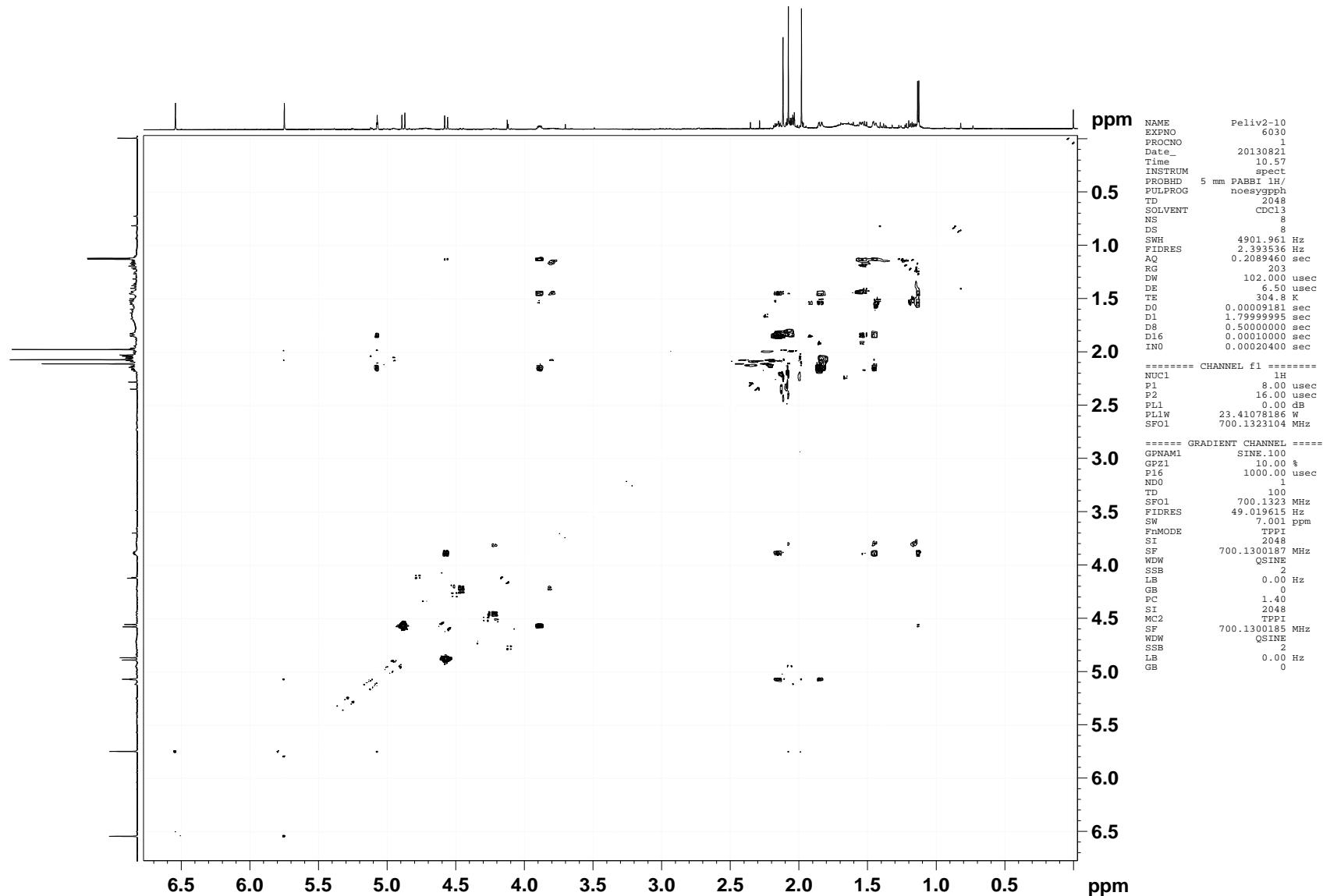
Figure S16. NOESY (700 MHz, CDCl₃) spectrum of **2**.

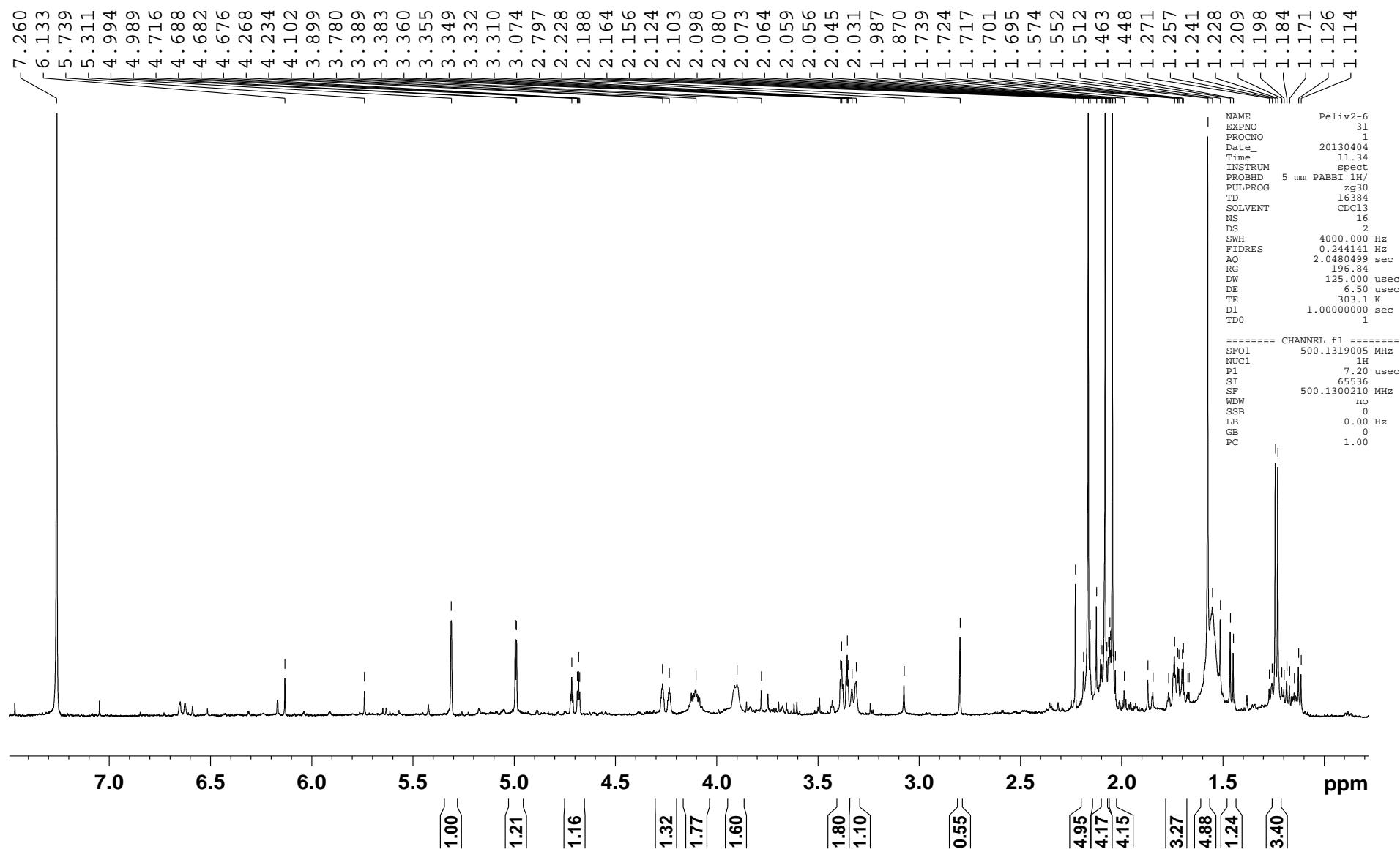
Figure S17. ^1H NMR (500 MHz, CDCl_3) spectrum of **3**.

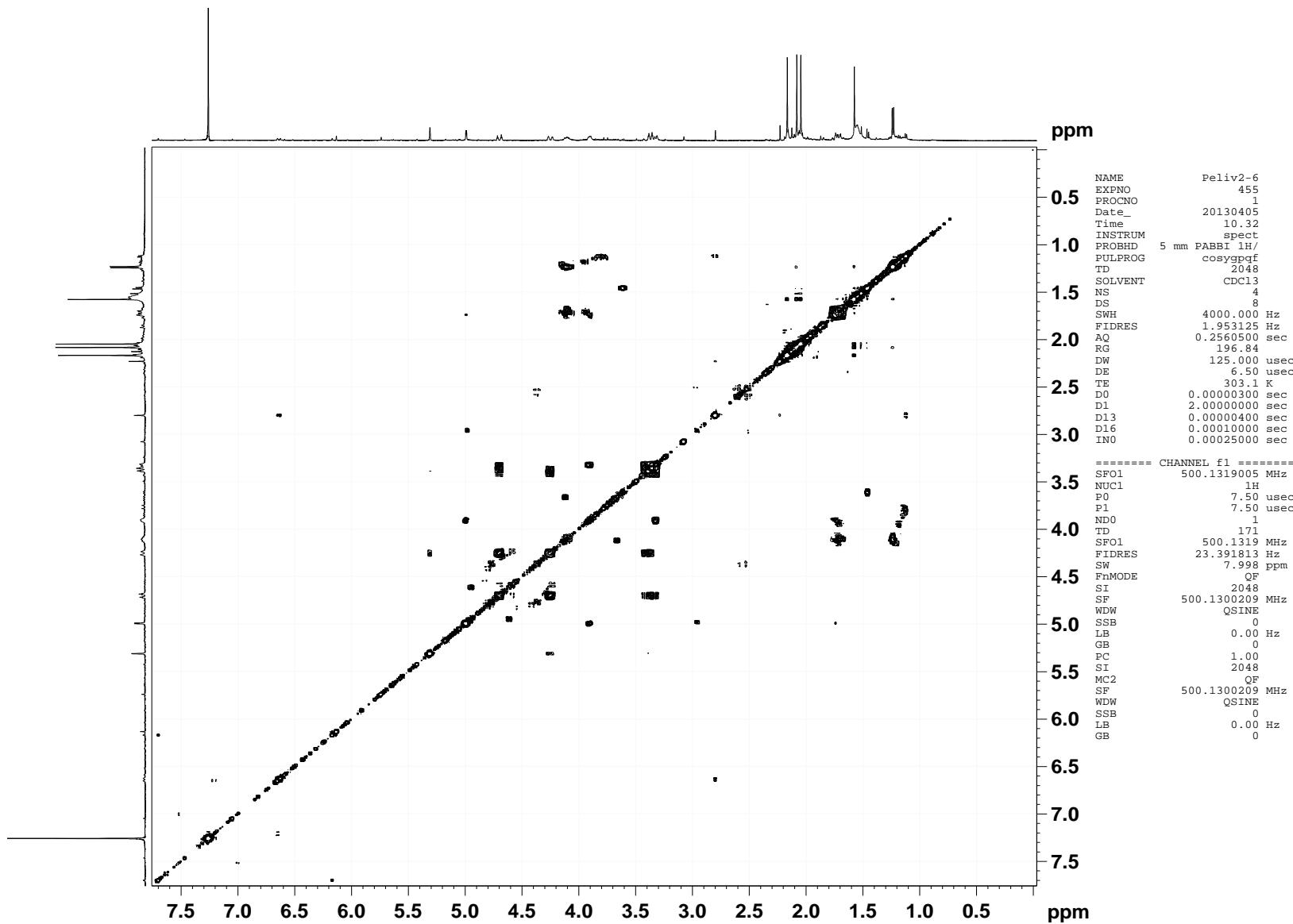
Figure S18. ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of **3**.

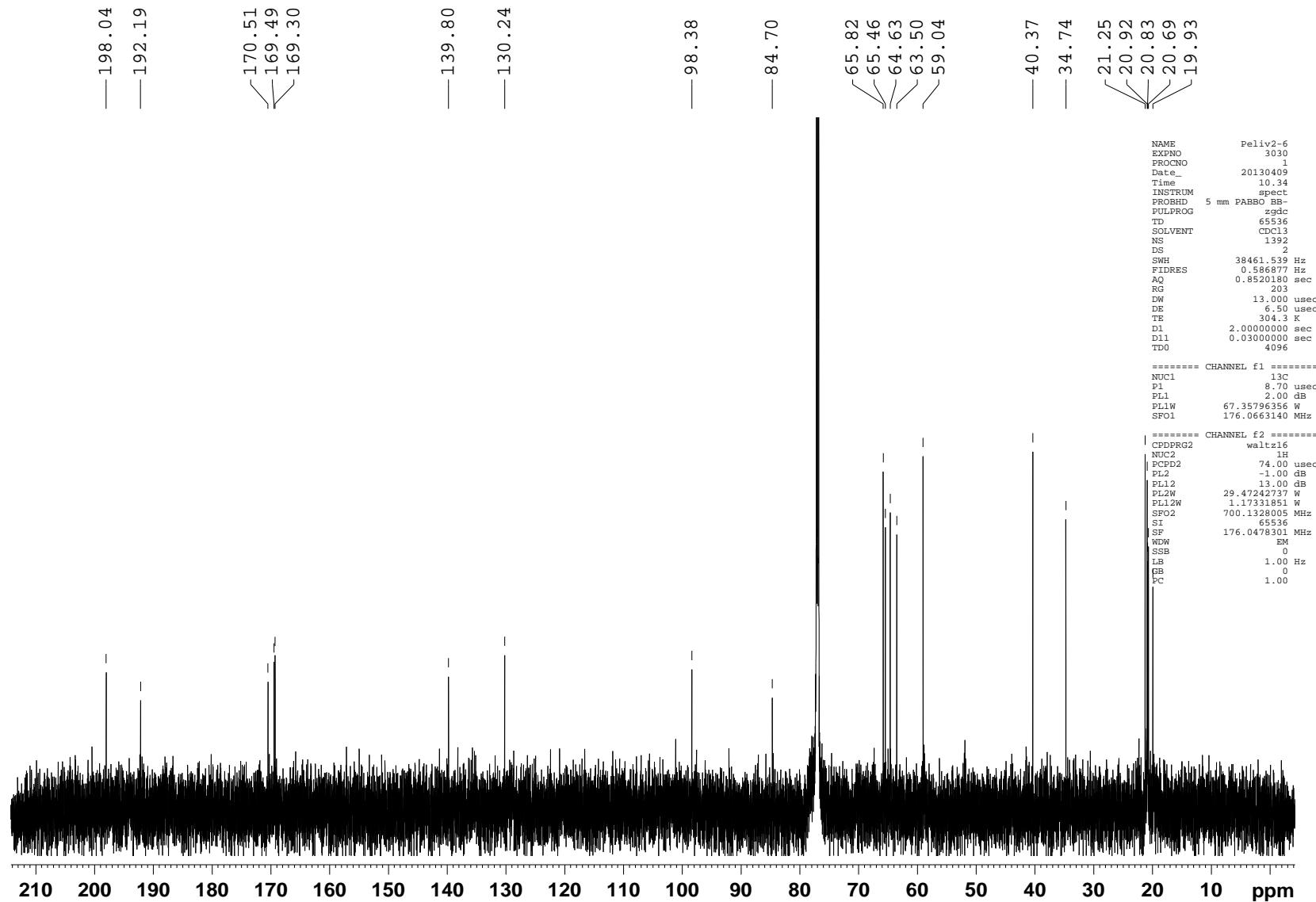
Figure S19. ^{13}C NMR (176 MHz, CDCl_3) spectrum of **3**.

Figure S20. HSQC (500 MHz, CDCl₃) spectrum of 3.

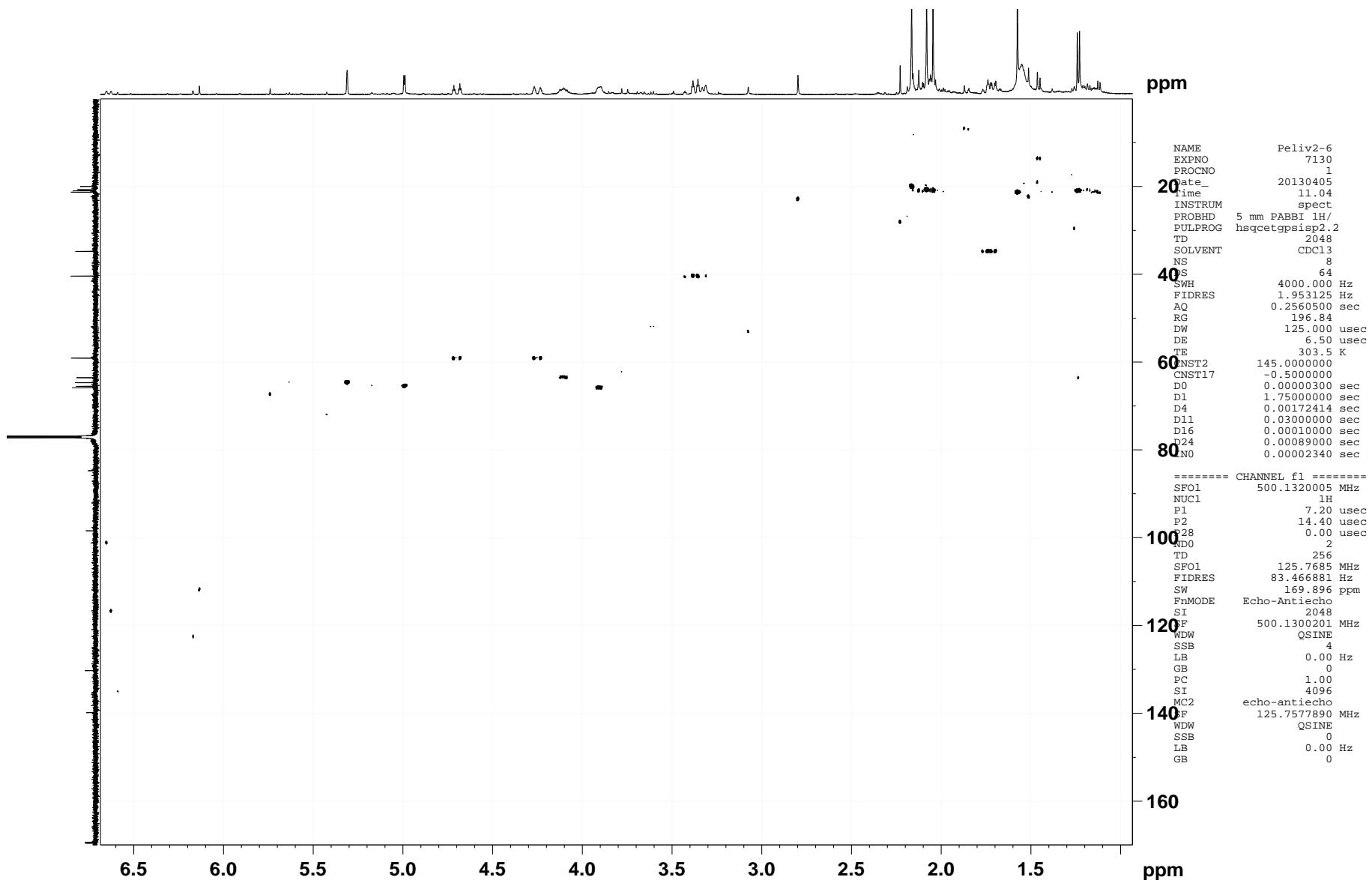


Figure S21. HMBC (500 MHz, CDCl₃) spectrum of **3**.

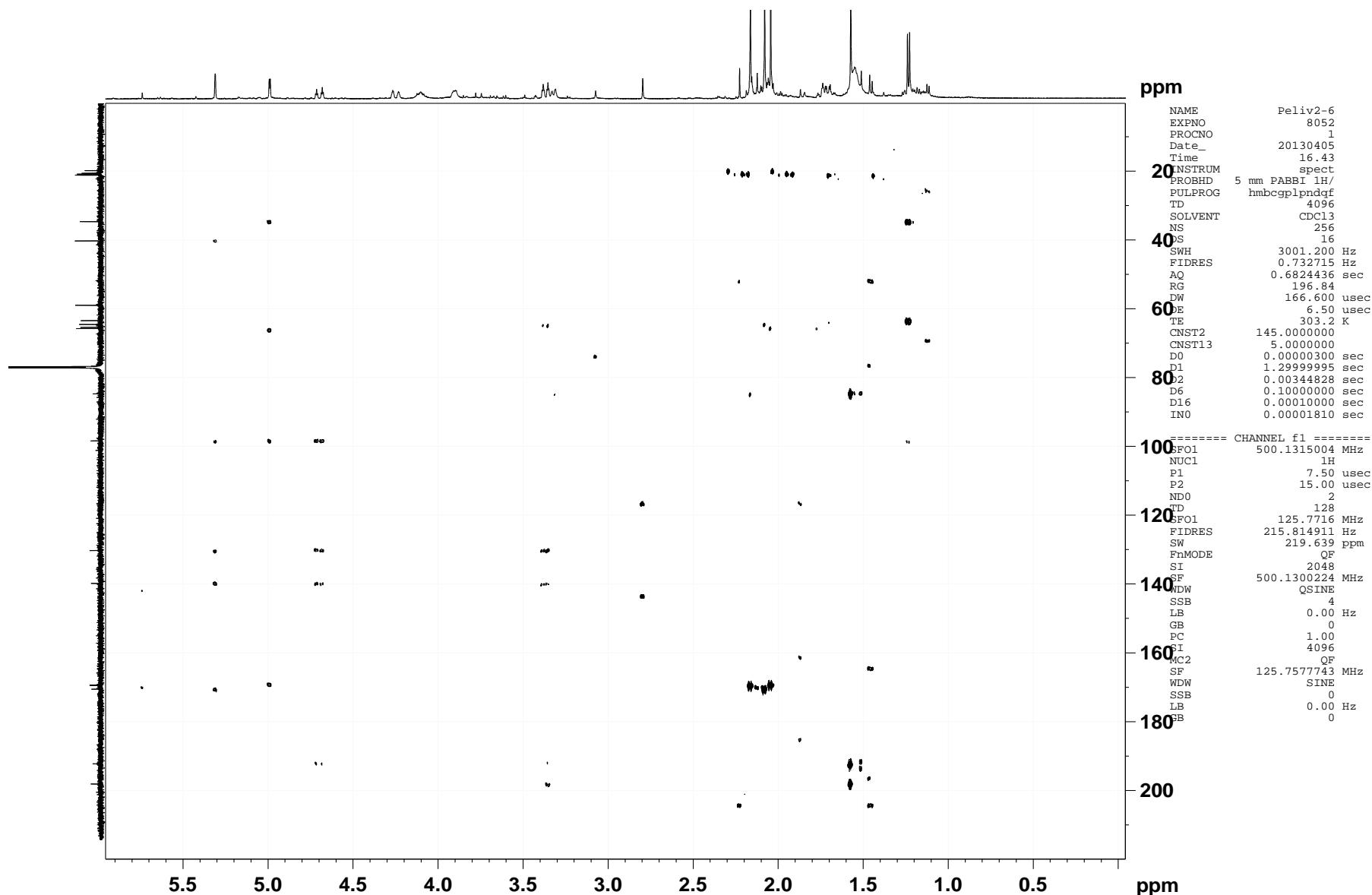


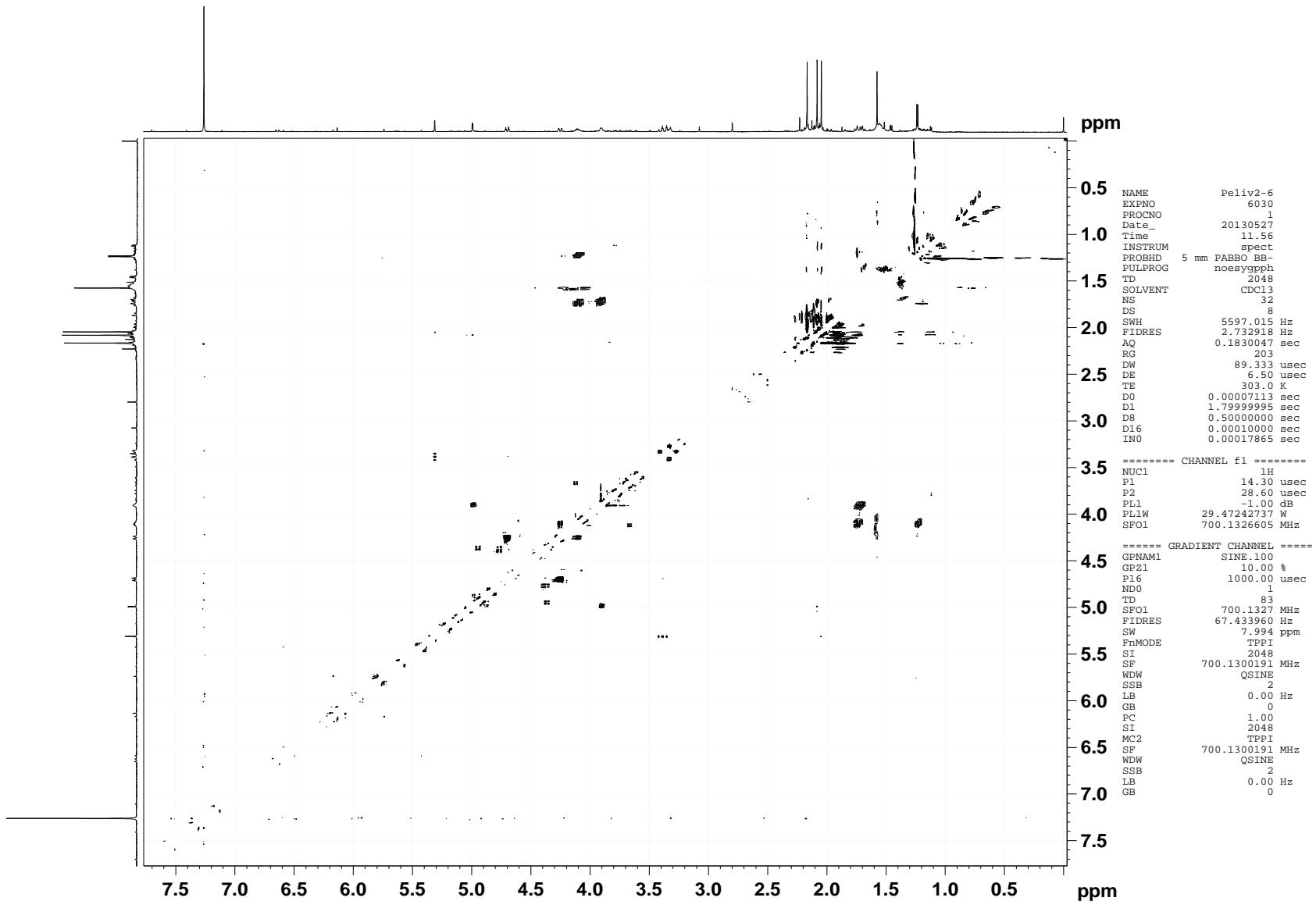
Figure S22. NOESY (700 MHz, CDCl₃) spectrum of **3**.

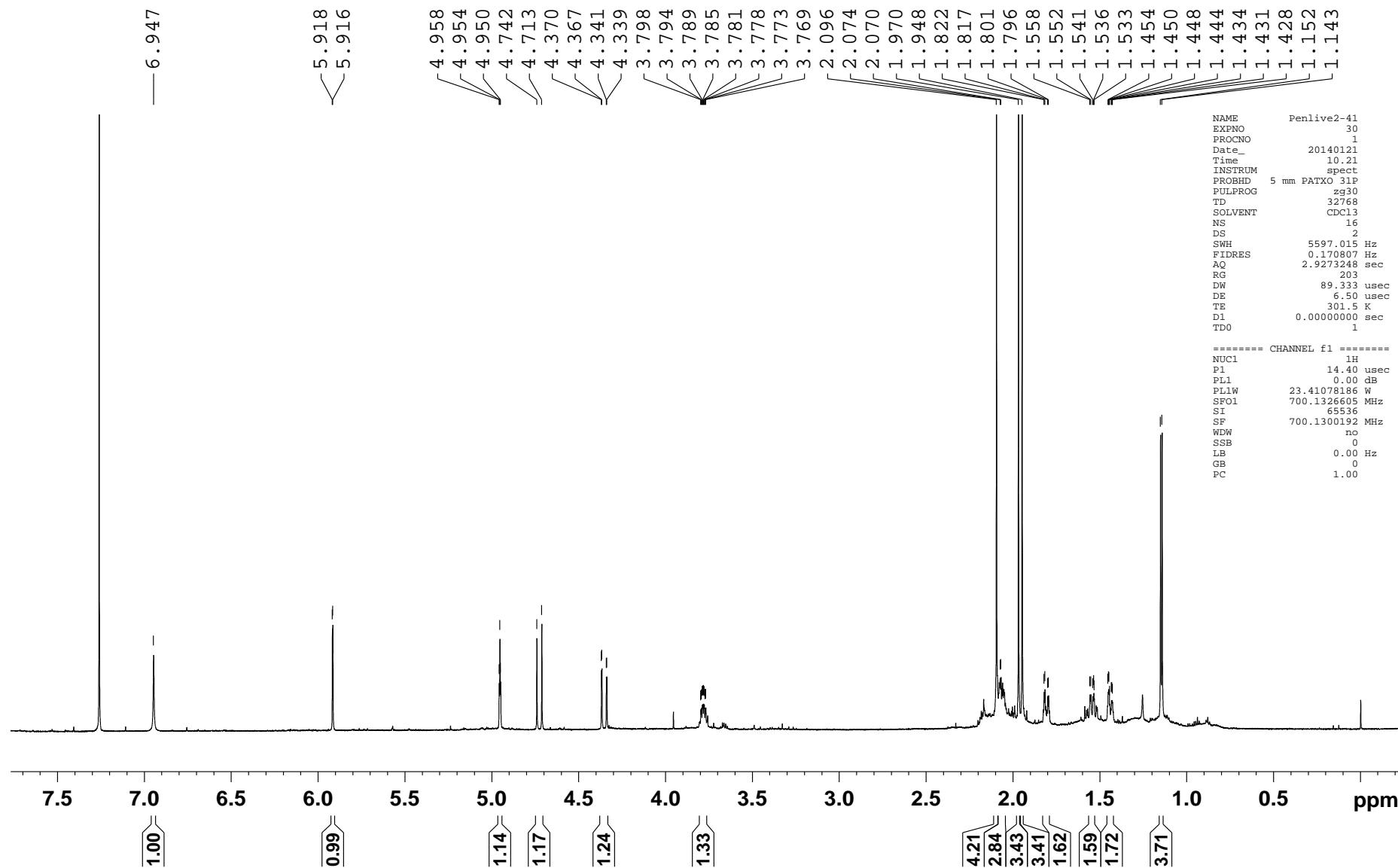
Figure S23. ^1H NMR (700 MHz, CDCl_3) spectrum of 4.

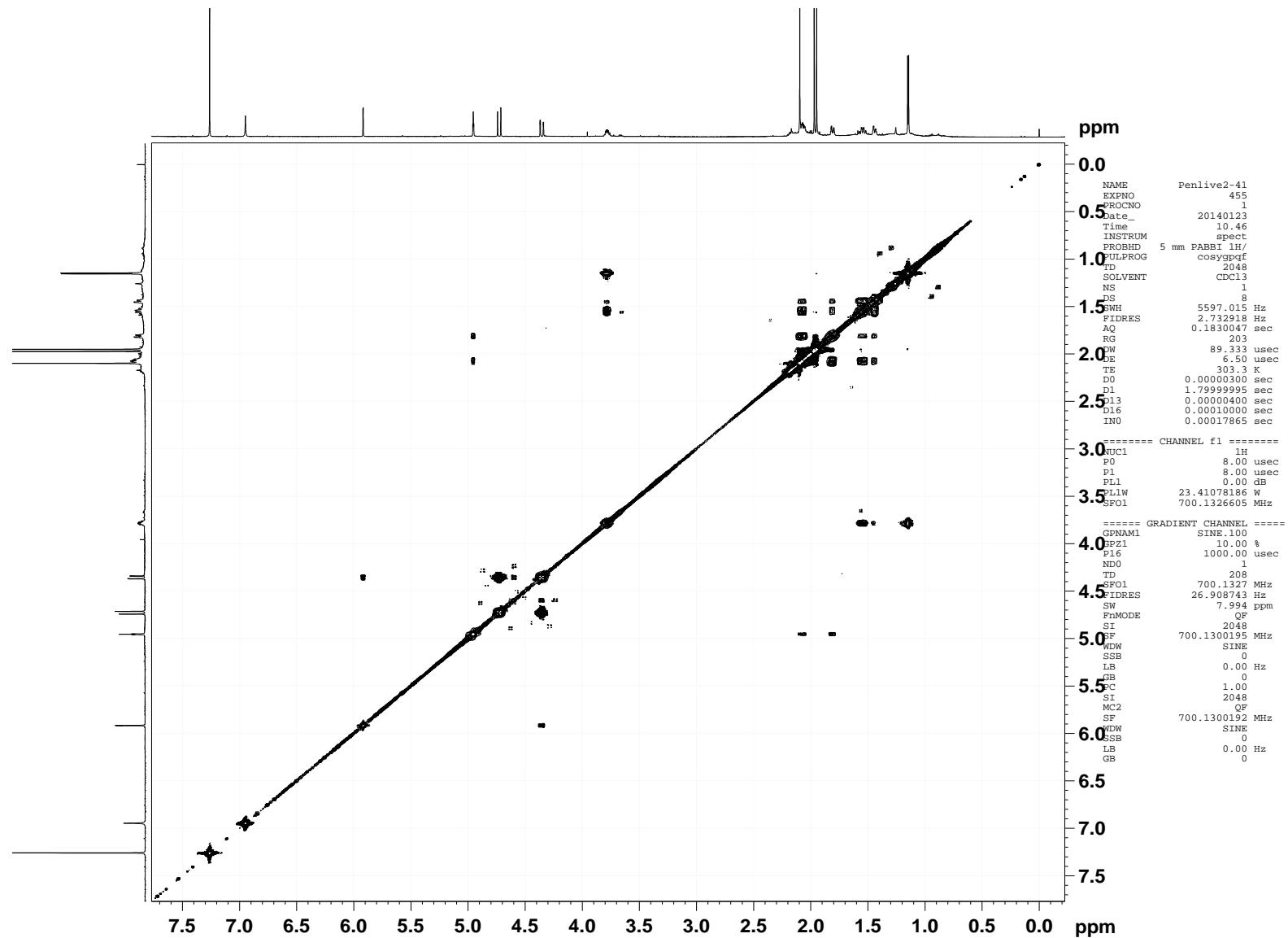
Figure S24. ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **4**.

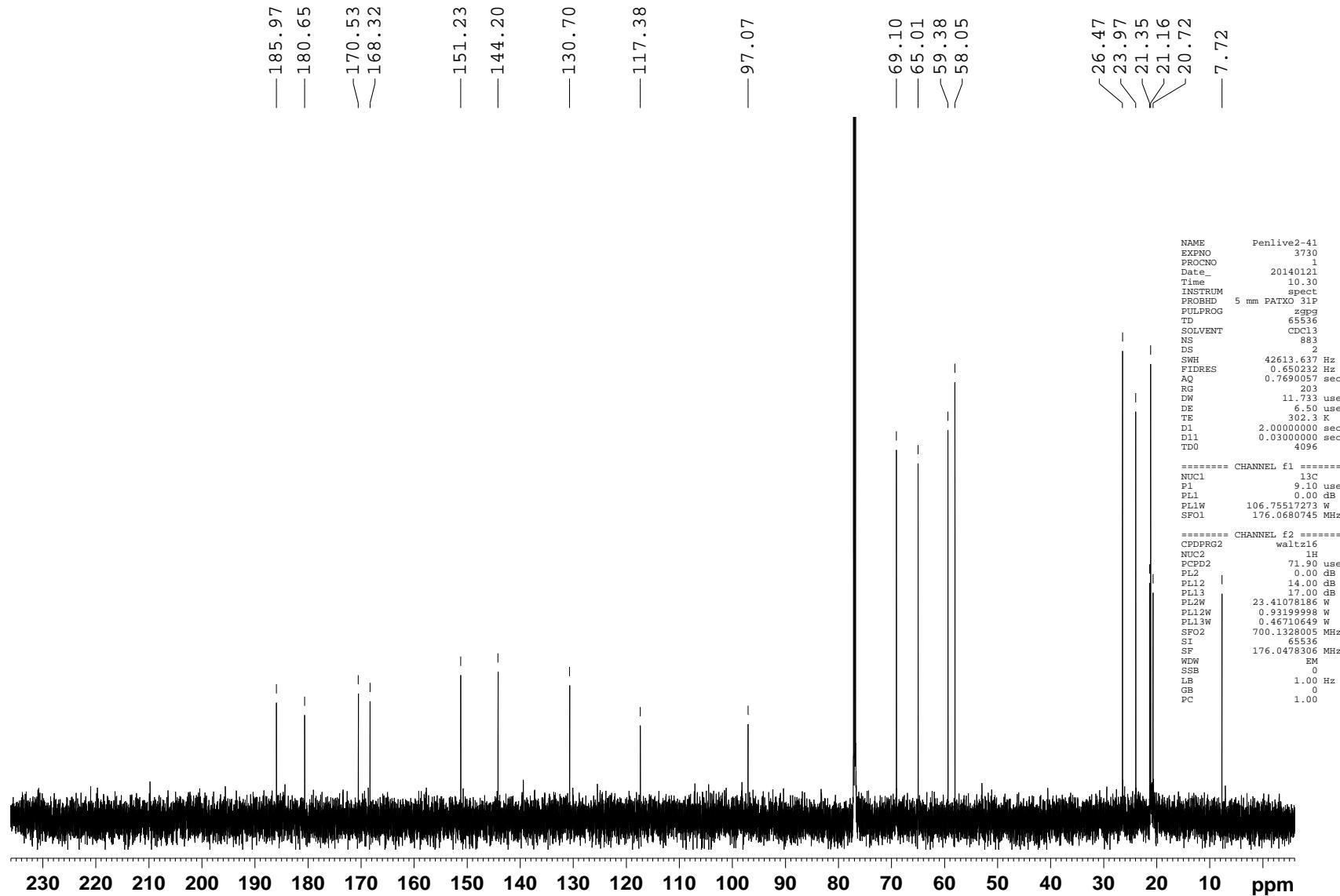
Figure S25. ^{13}C NMR (176 MHz, CDCl_3) spectra of **4**.

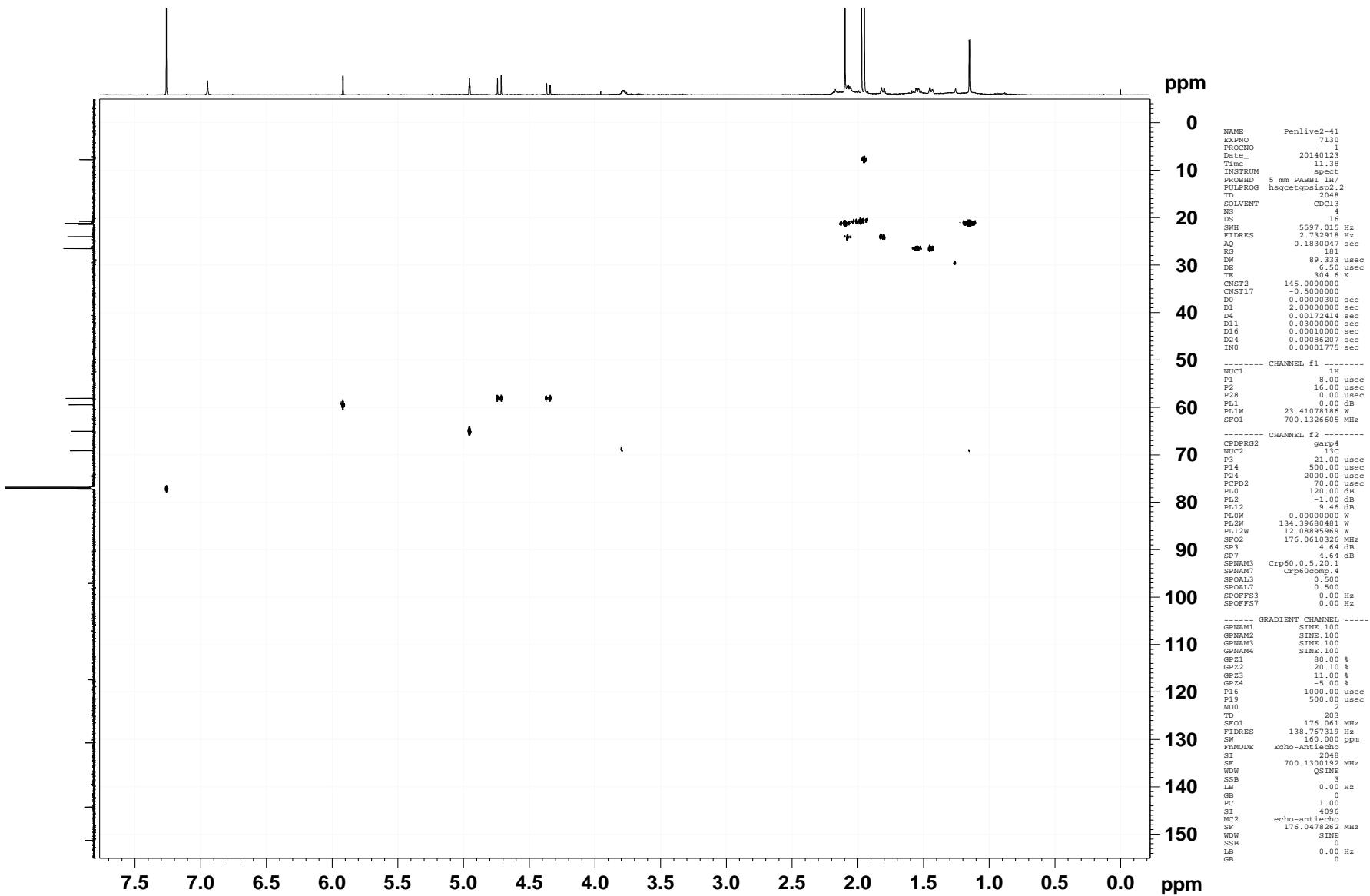
Figure S26. HSQC (700 MHz, CDCl₃) spectrum of **4**.

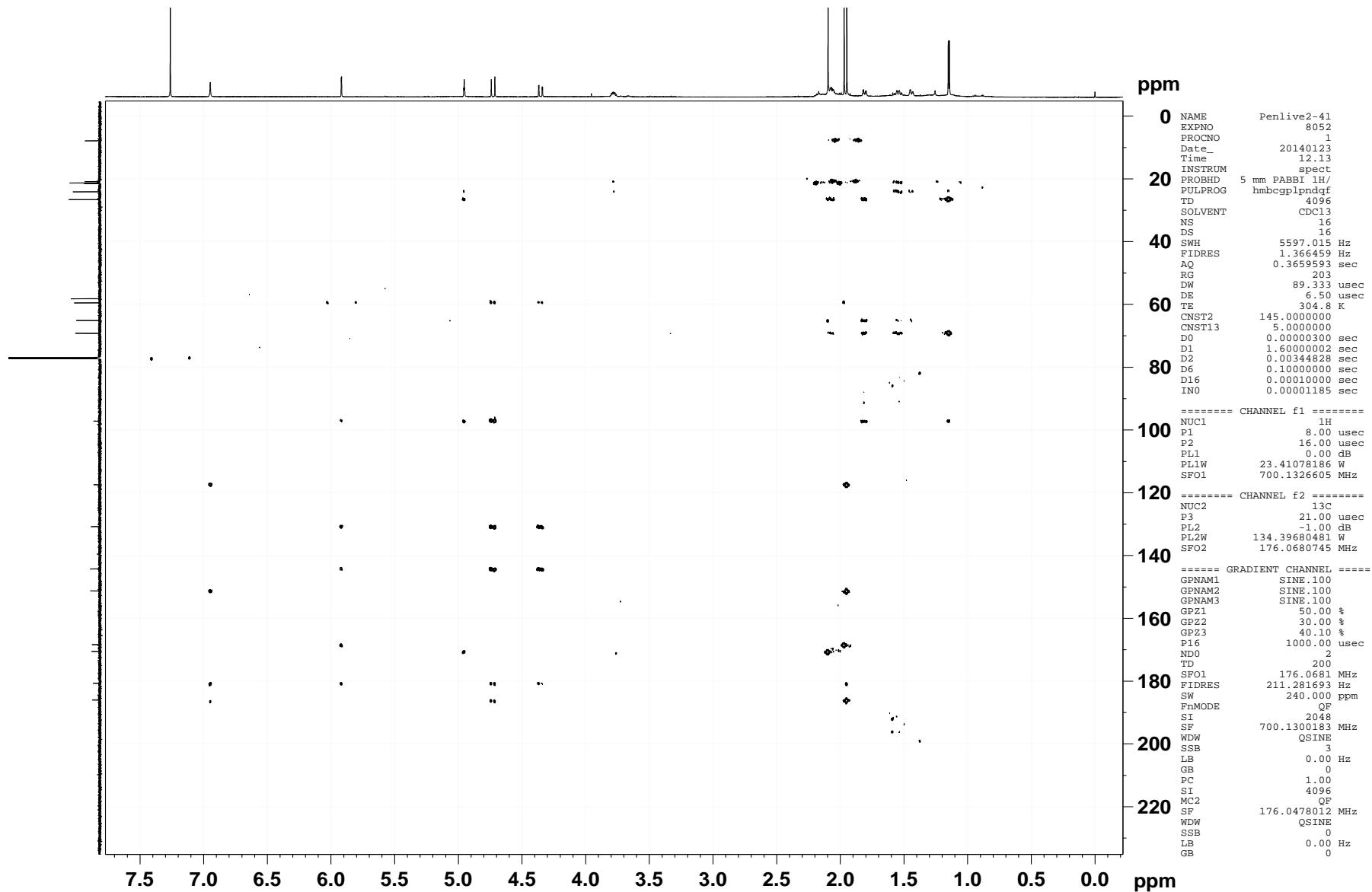
Figure S27. HMBC (700 MHz, CDCl₃) spectrum of 4.

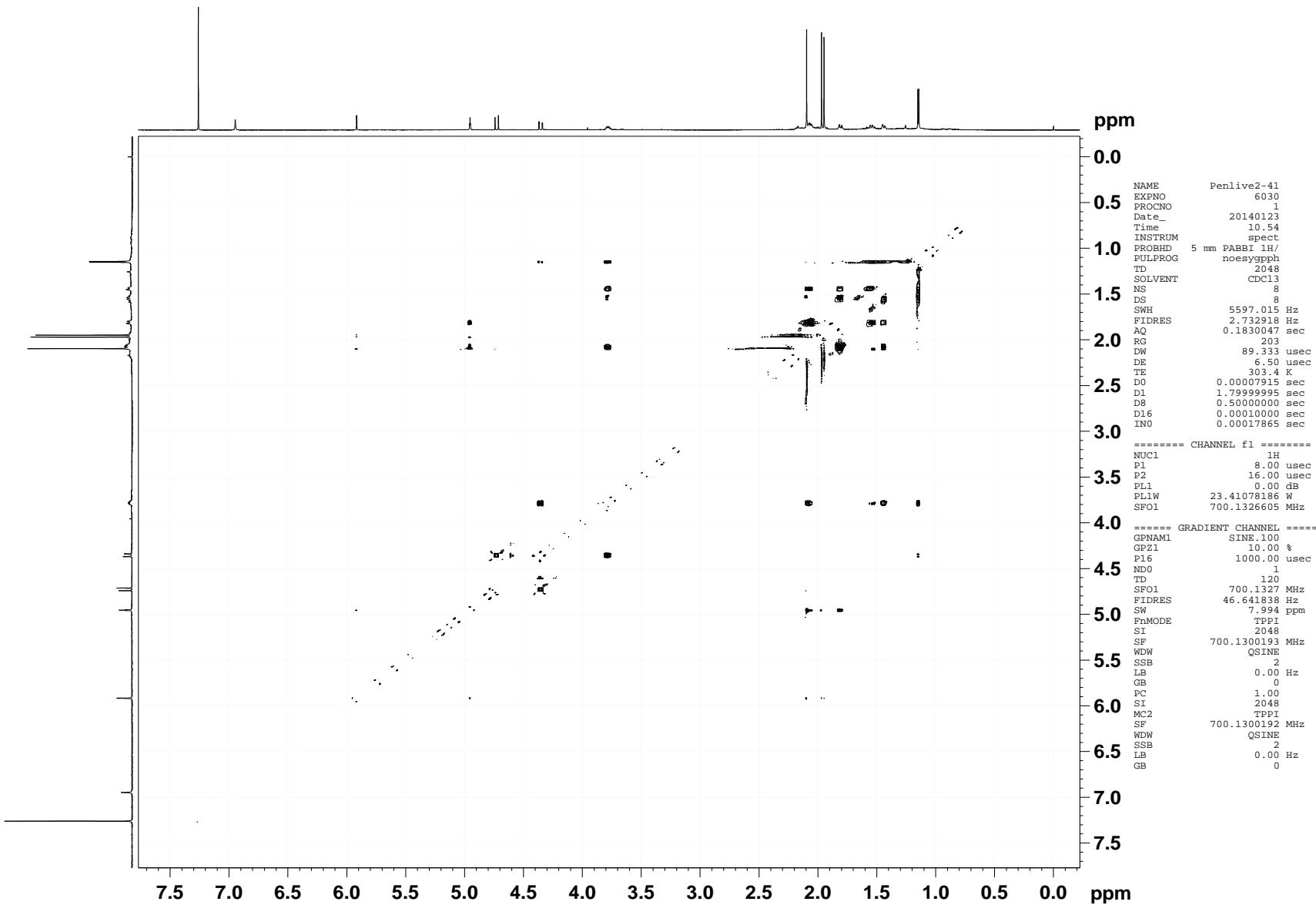
Figure S28. NOESY (700 MHz, CDCl₃) spectrum of **4**.

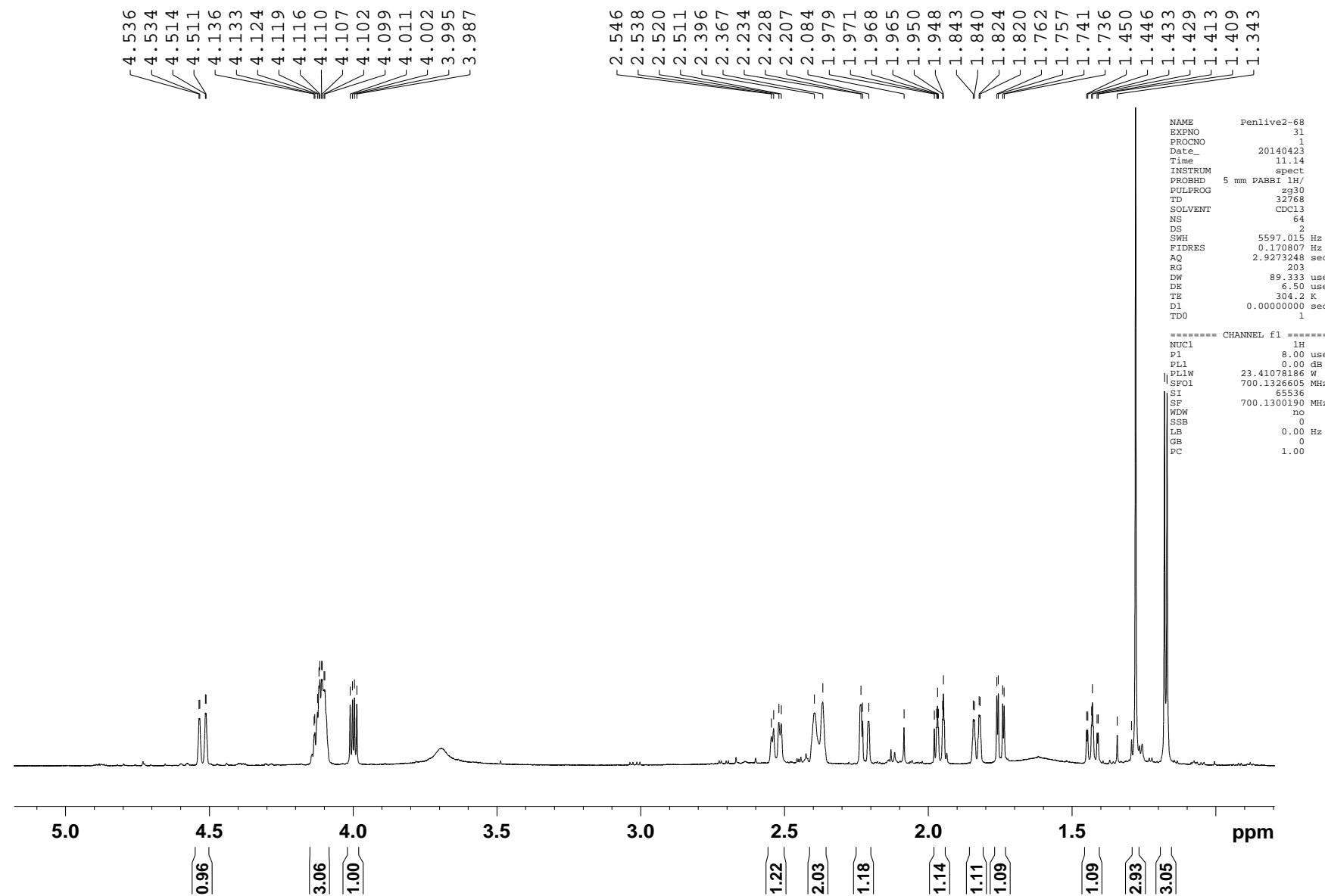
Figure S29. ^1H NMR (700 MHz, CDCl_3) spectrum of **5**.

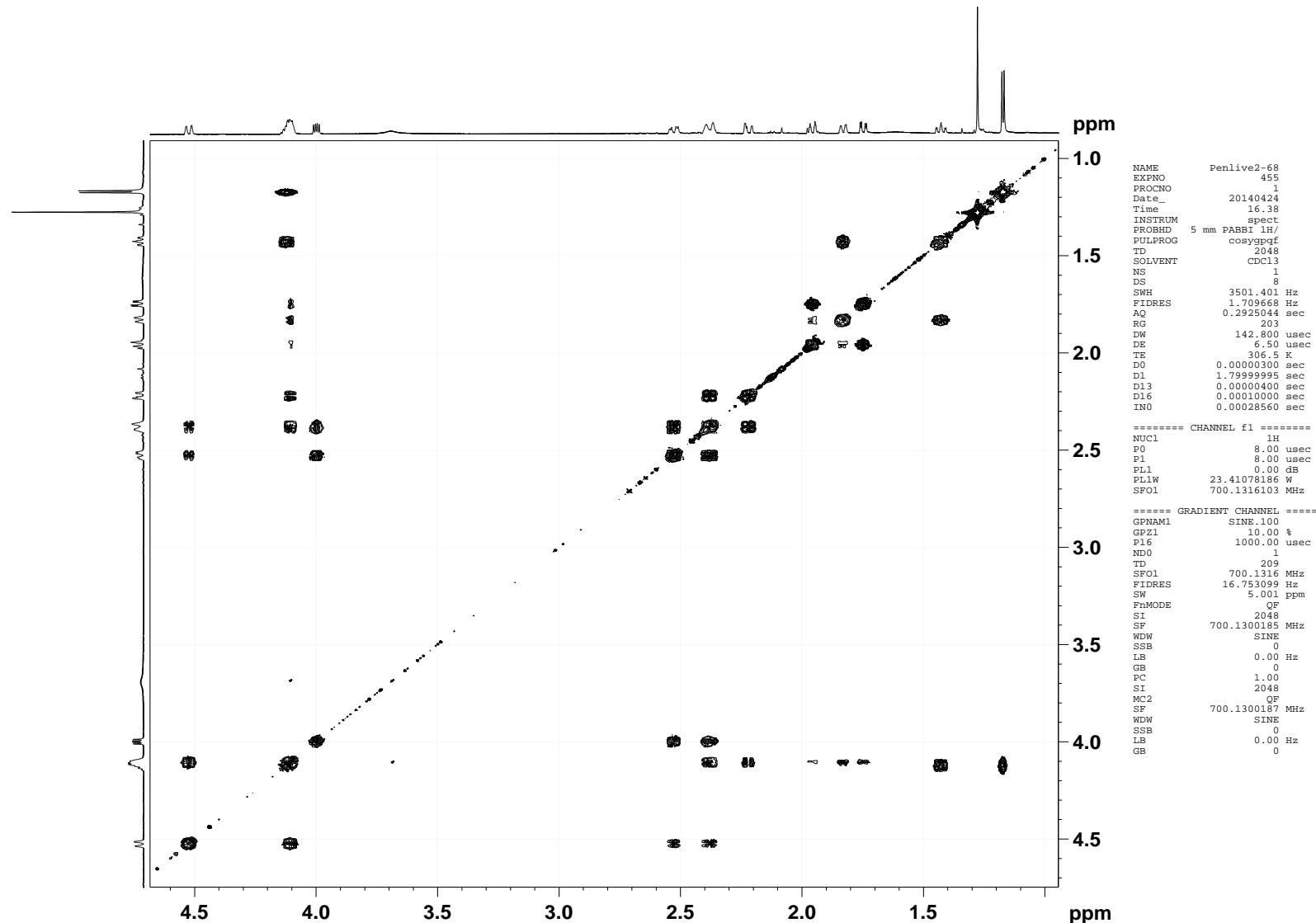
Figure S30. ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of **5**.

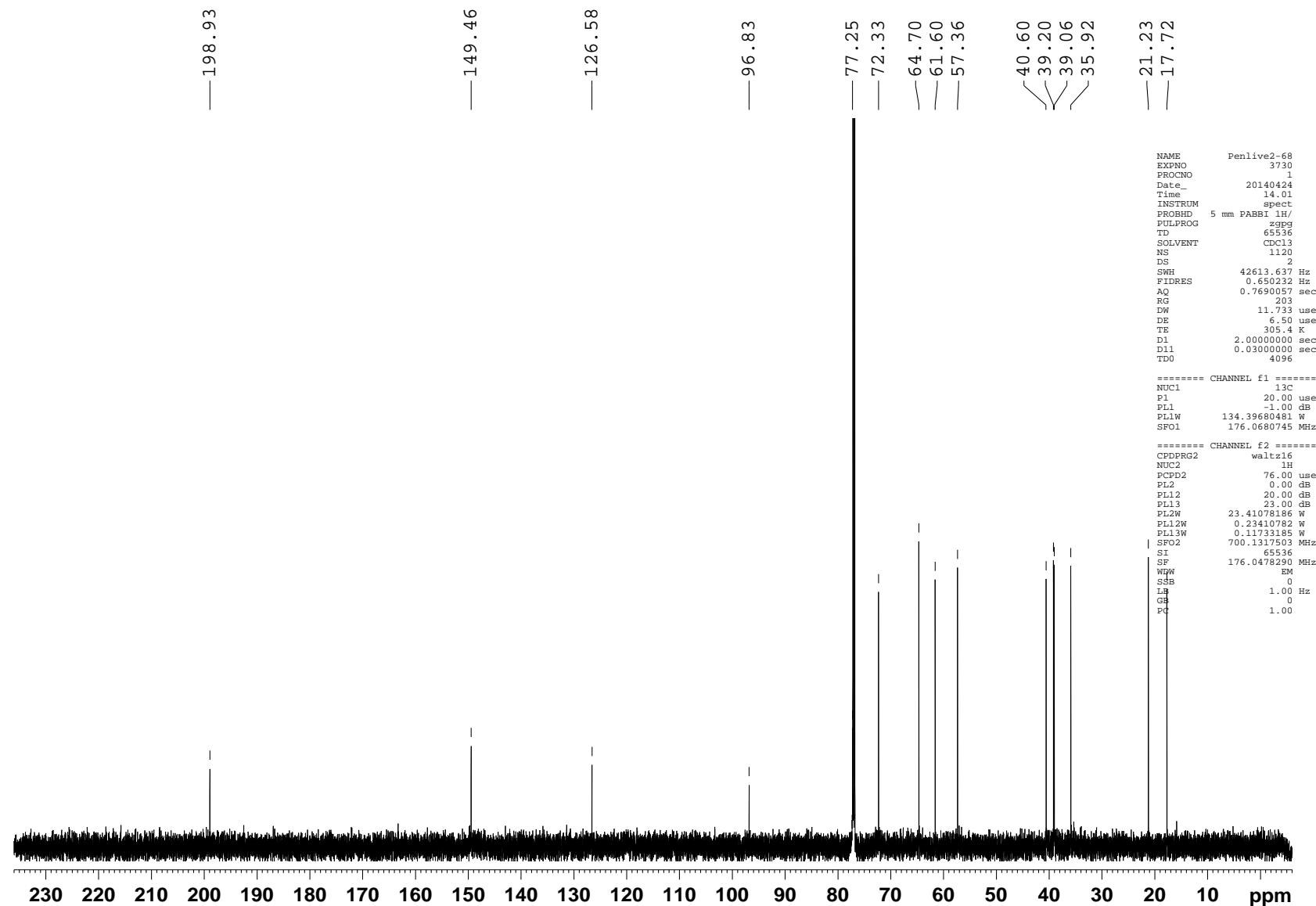
Figure S31. ^{13}C NMR (176 MHz, CDCl_3) spectra of **5**.

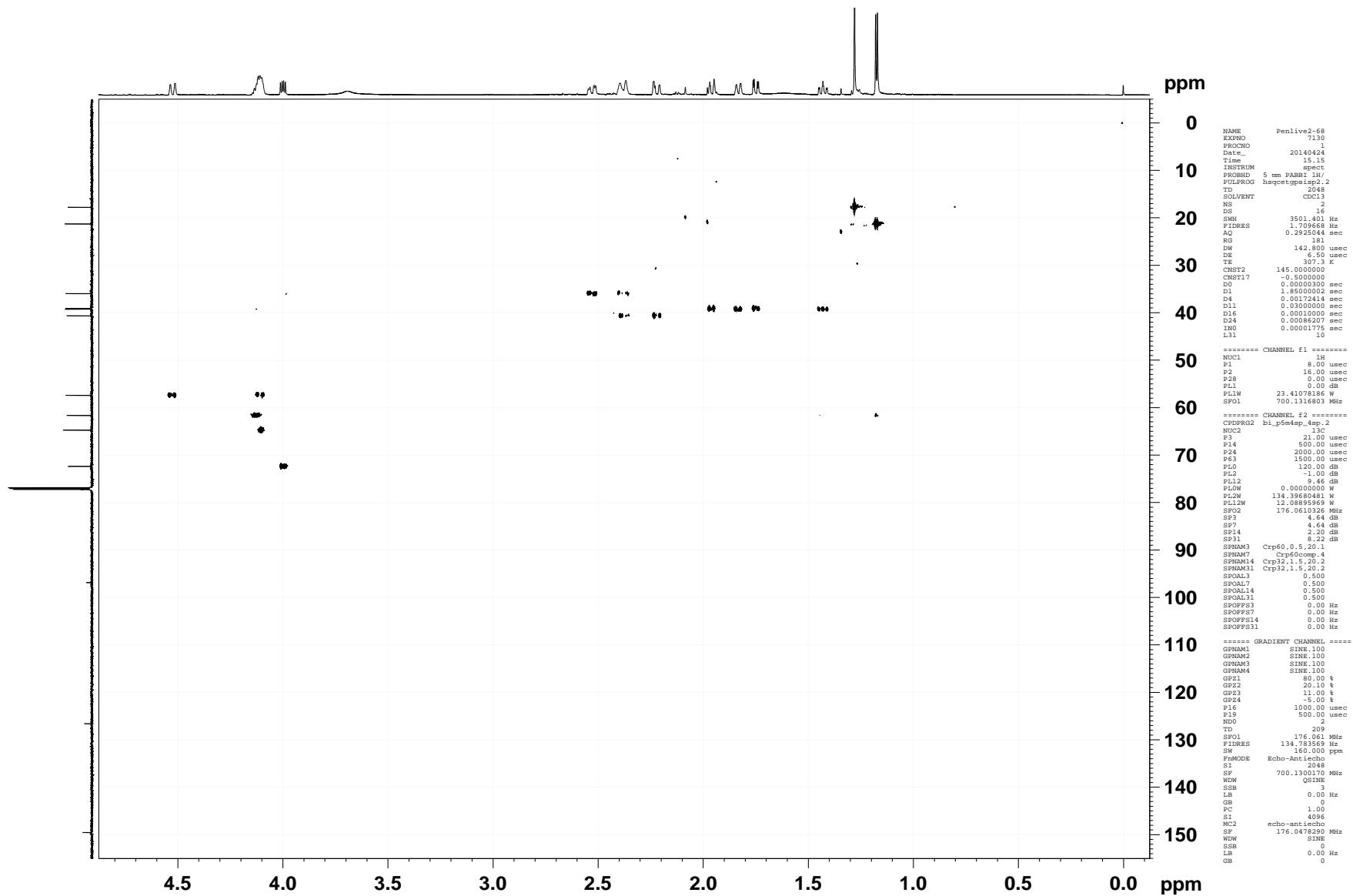
Figure S32. HSQC (700 MHz, CDCl₃) spectrum of **5**.

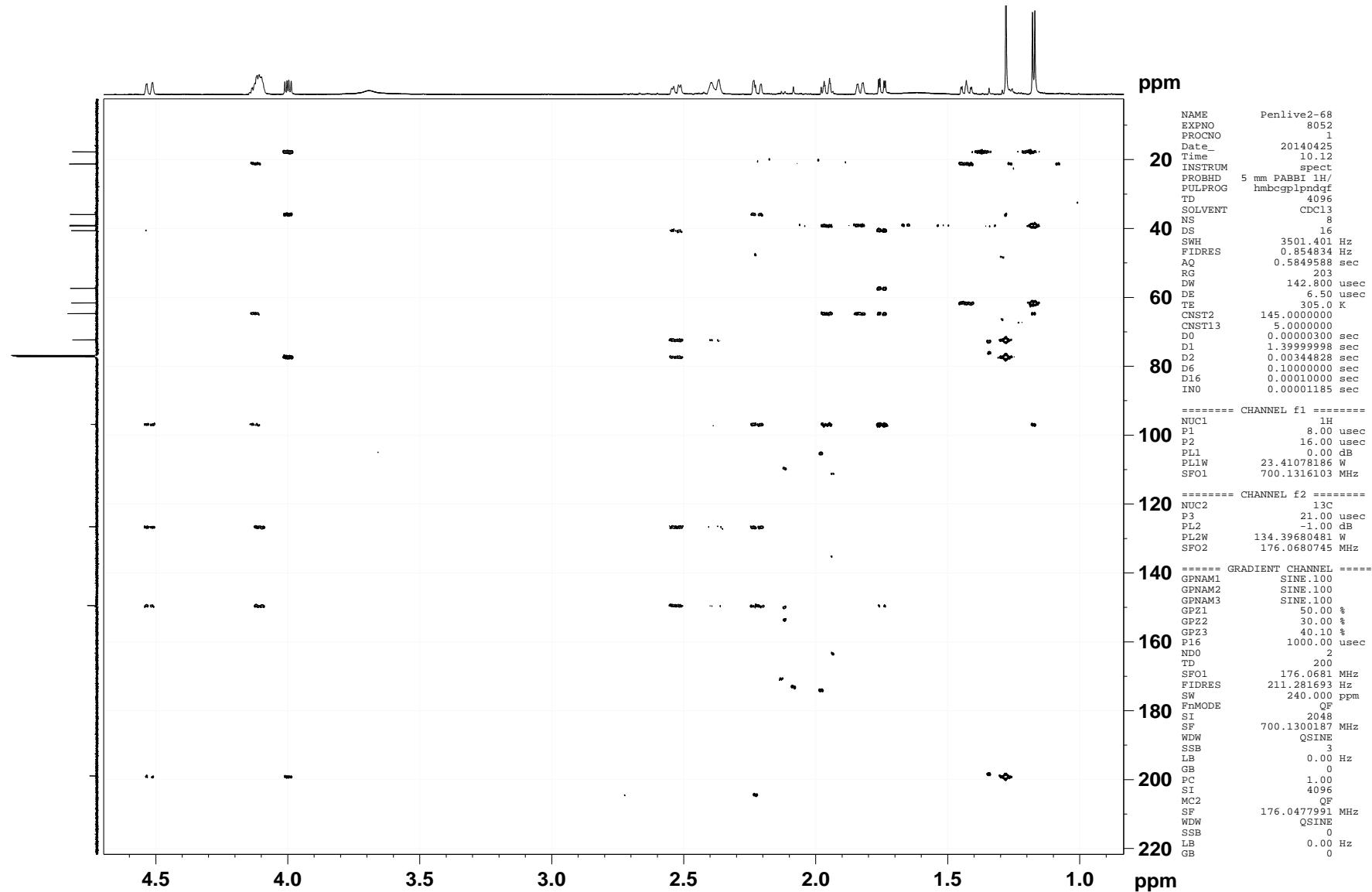
Figure S33. HMBC (700 MHz, CDCl_3) spectrum of **5**.

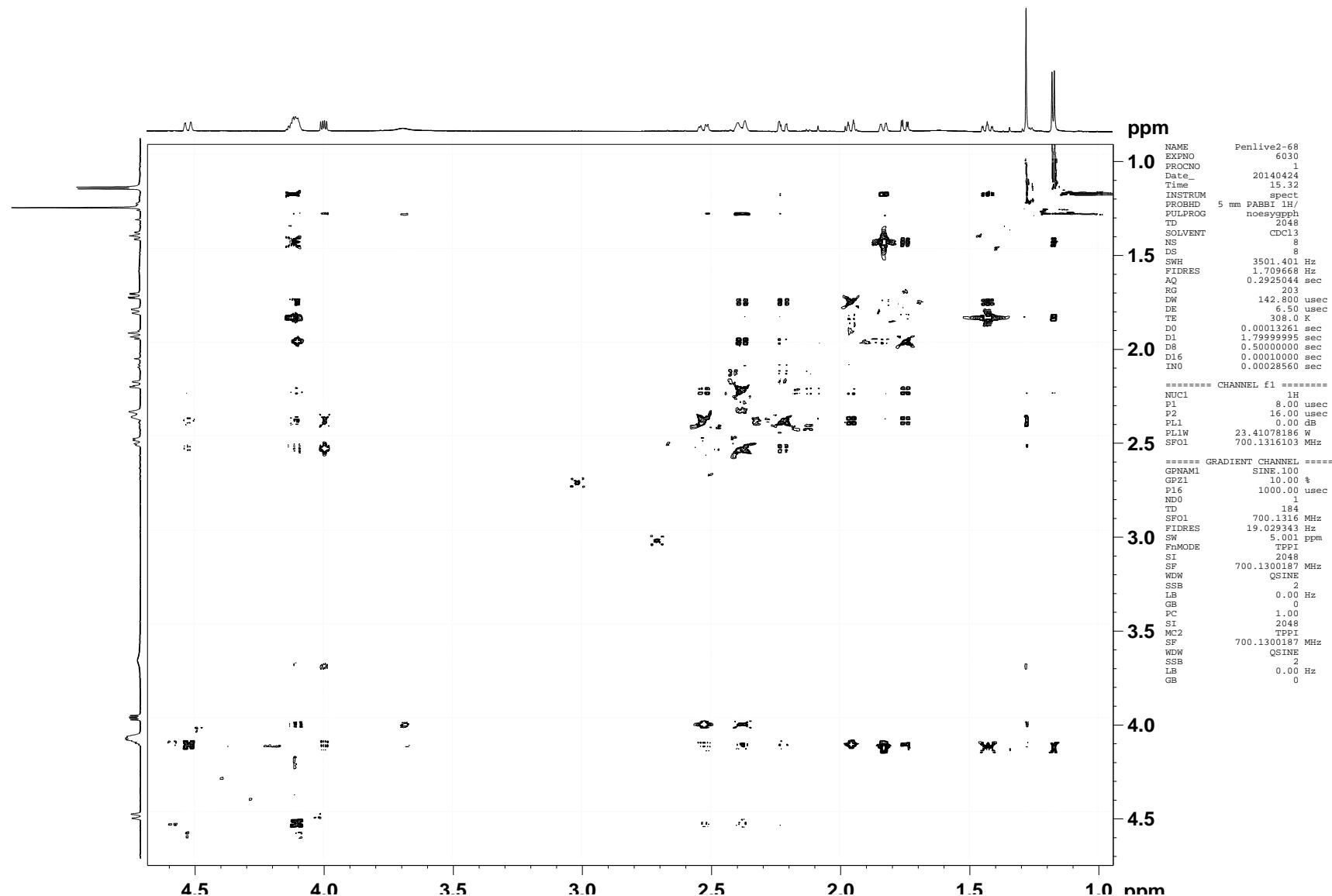
Figure S34. NOESY (700 MHz, CDCl₃) spectrum of **5**.

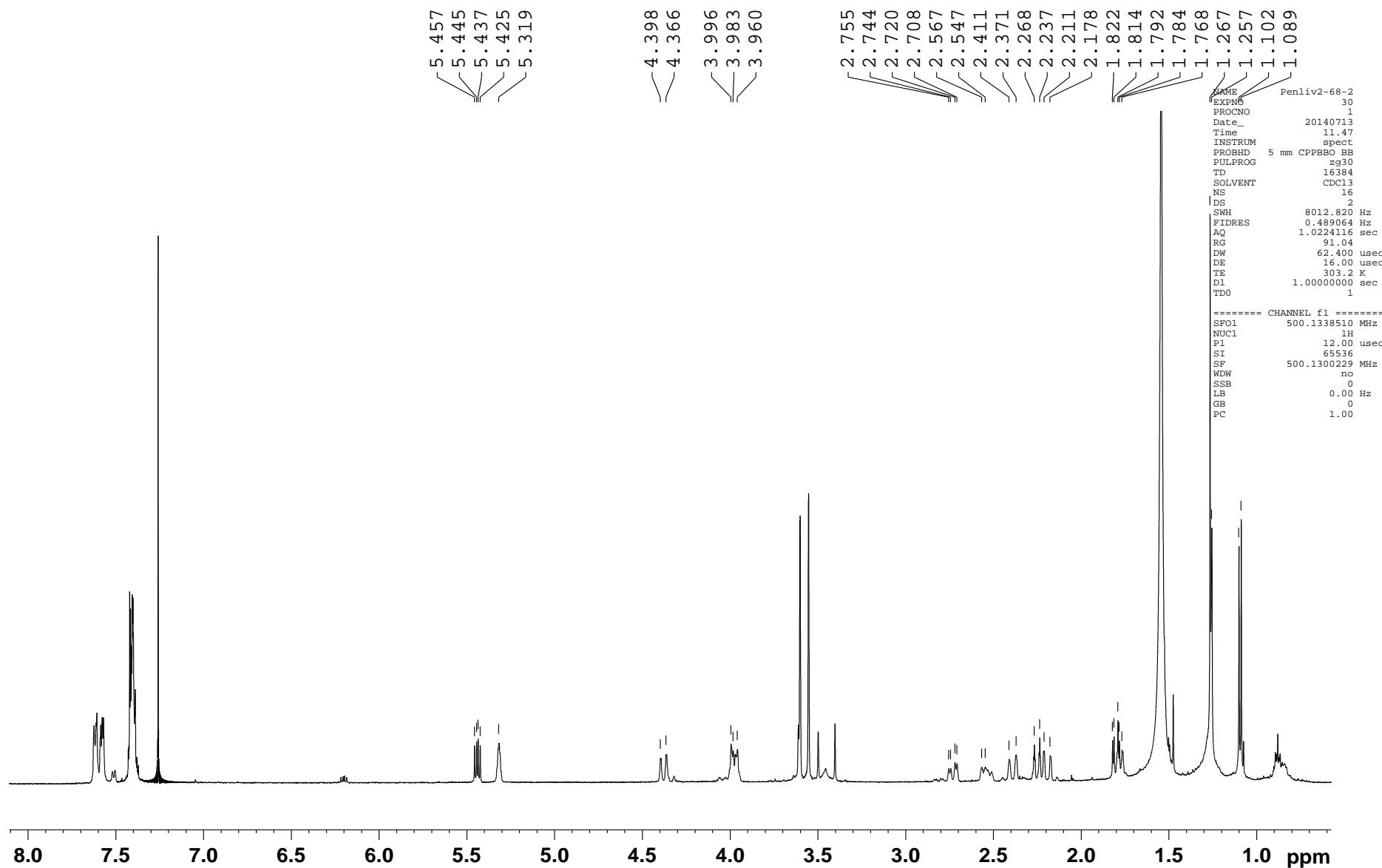
Figure S35. ^1H NMR (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **5a**.

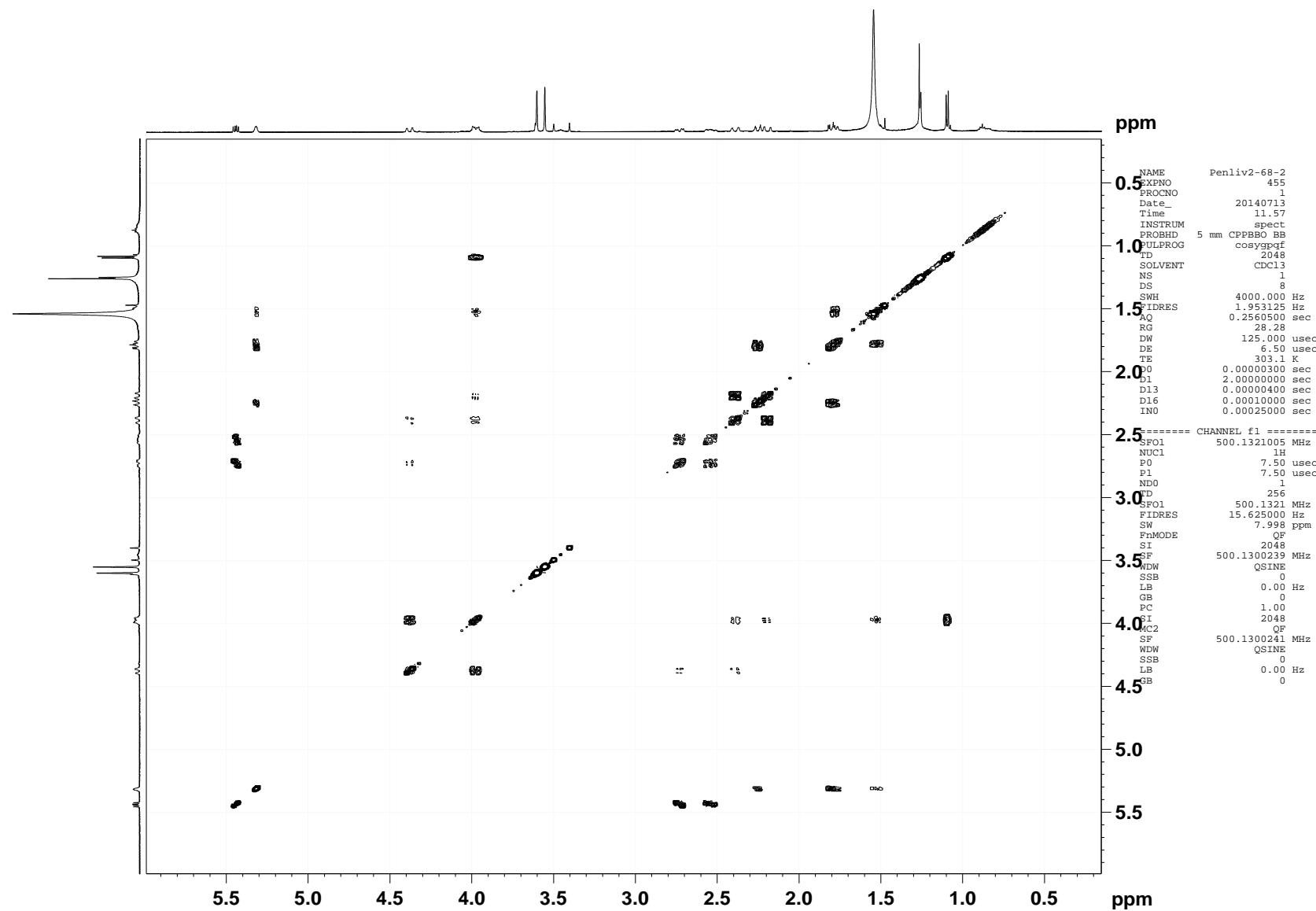
Figure S36. ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **5a**.

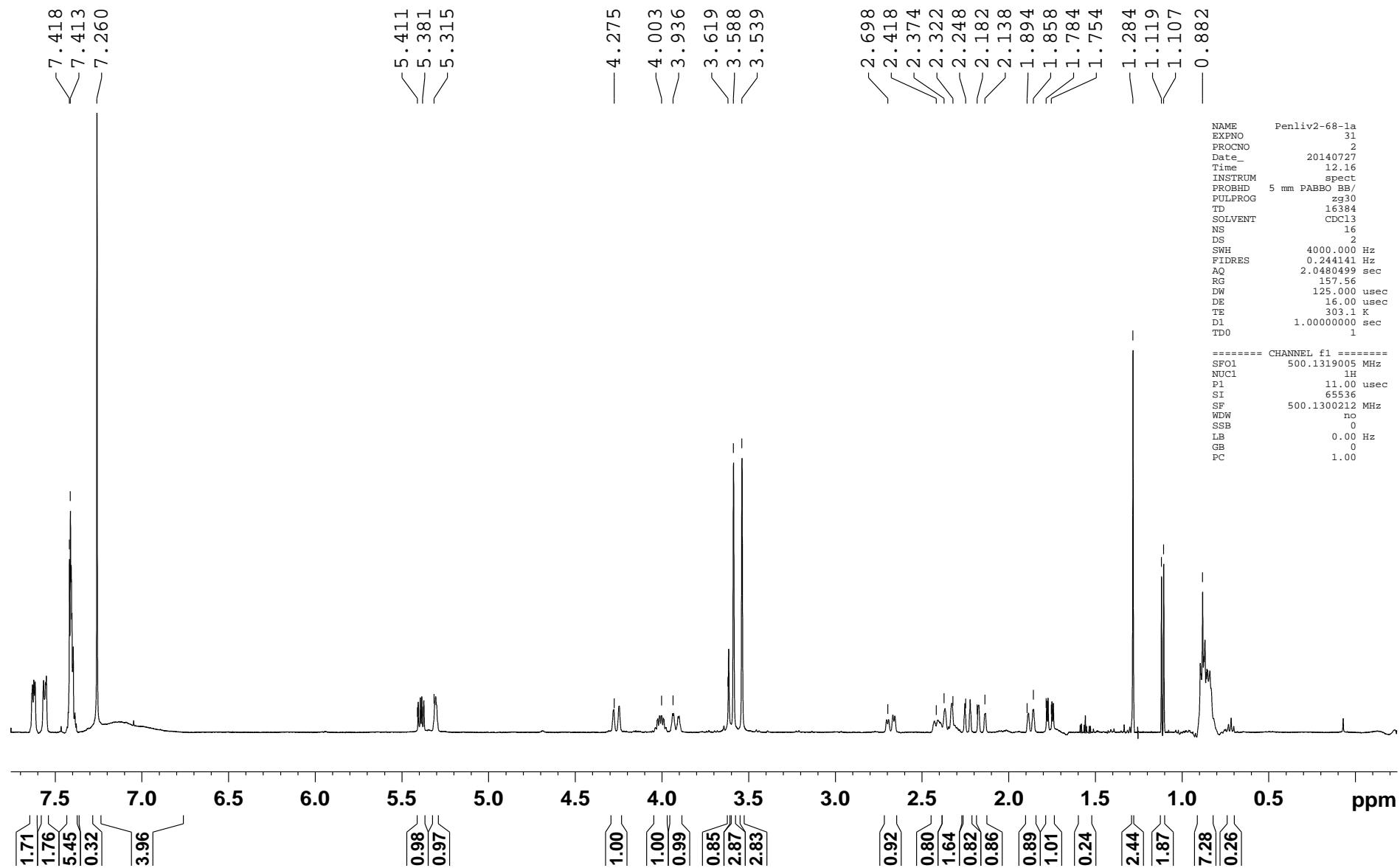
Figure S37. ^1H NMR (500 MHz, CDCl_3) spectrum of (*R*)-MTPA ester of **5b**.

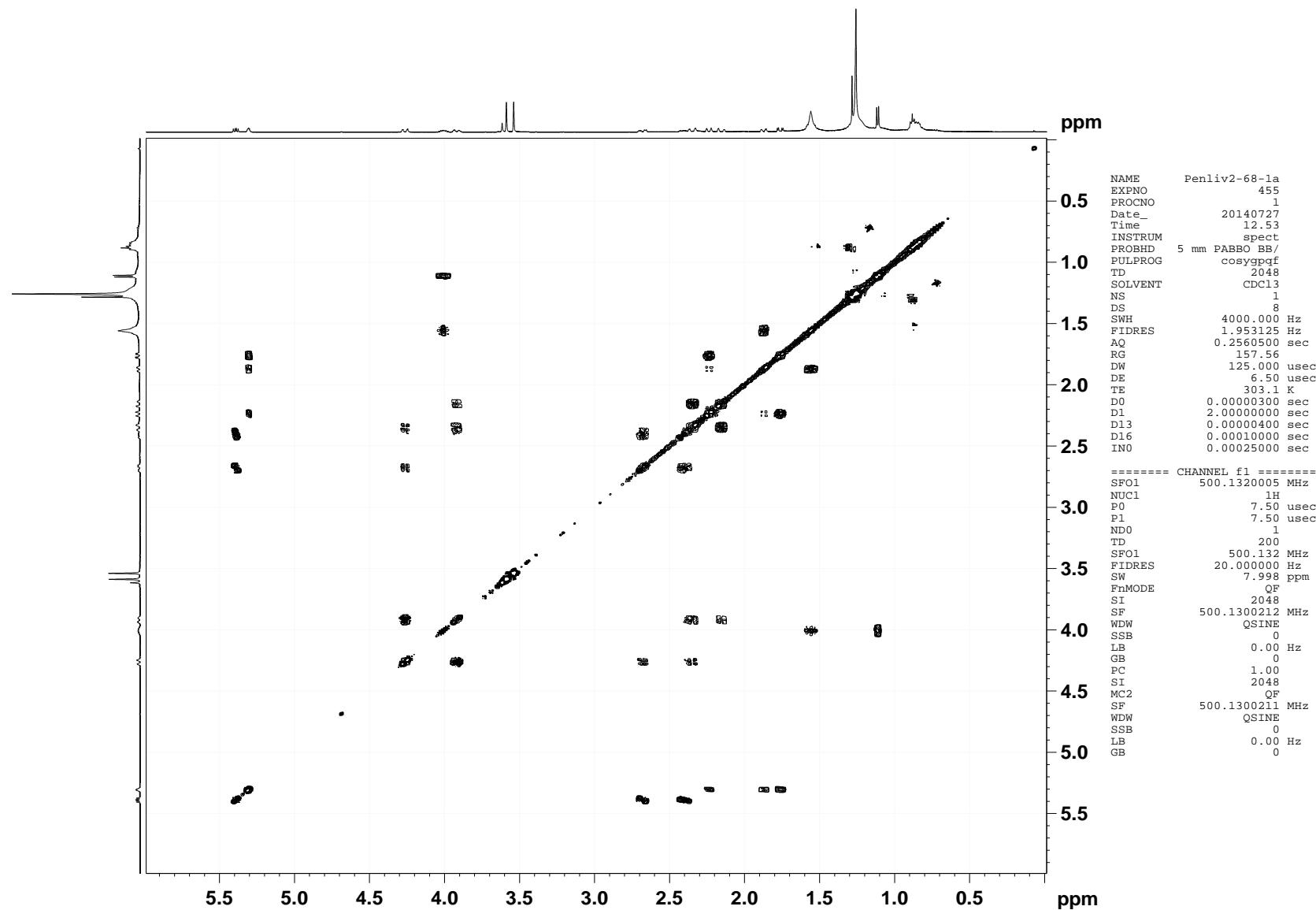
Figure S38. ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*R*)-MTPA ester of **5b**.

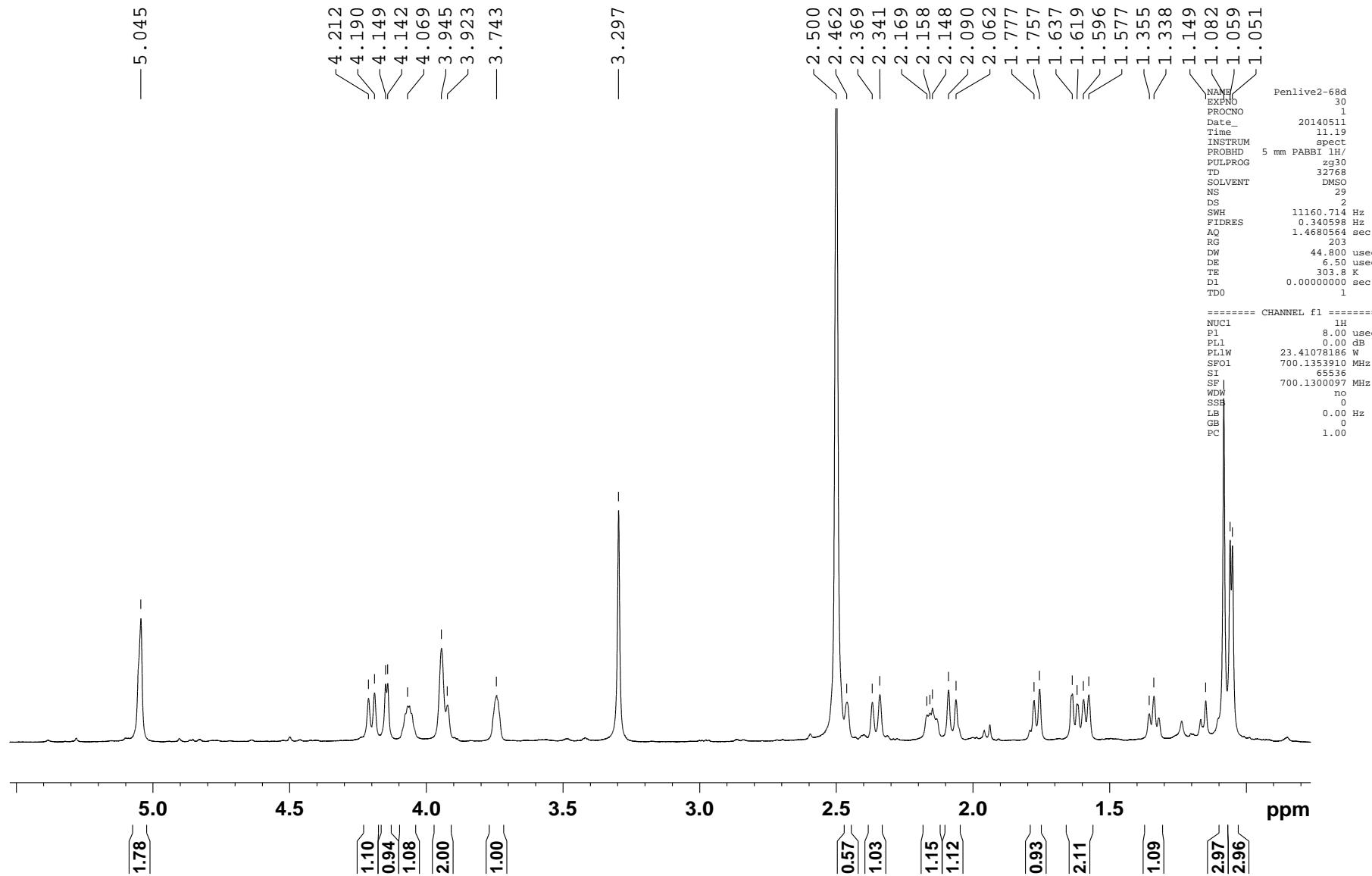
Figure S39. ^1H NMR (700 MHz, DMSO) spectrum of **5**.

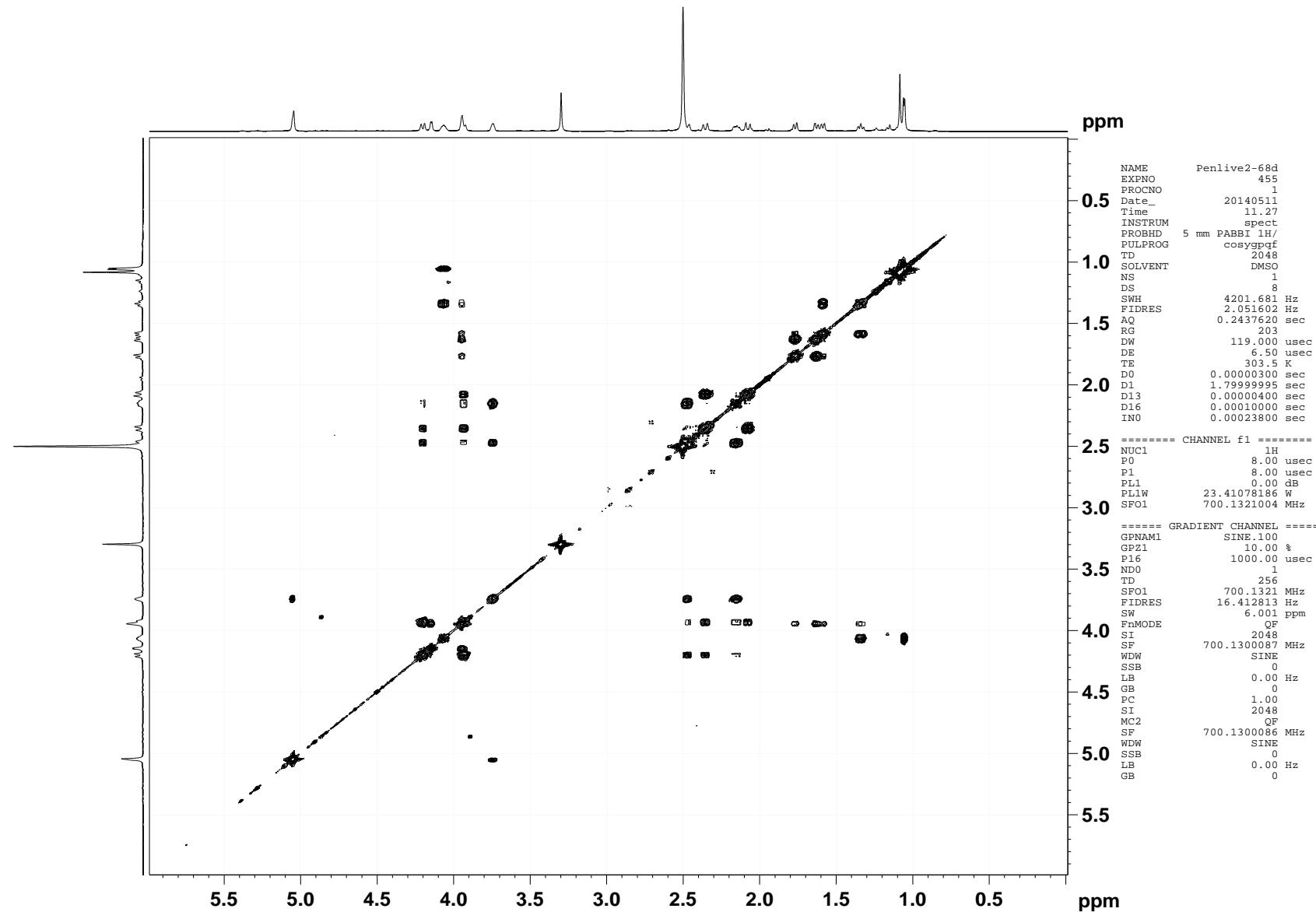
Figure S40. ^1H - ^1H COSY (700 MHz, DMSO) spectrum of **5**.

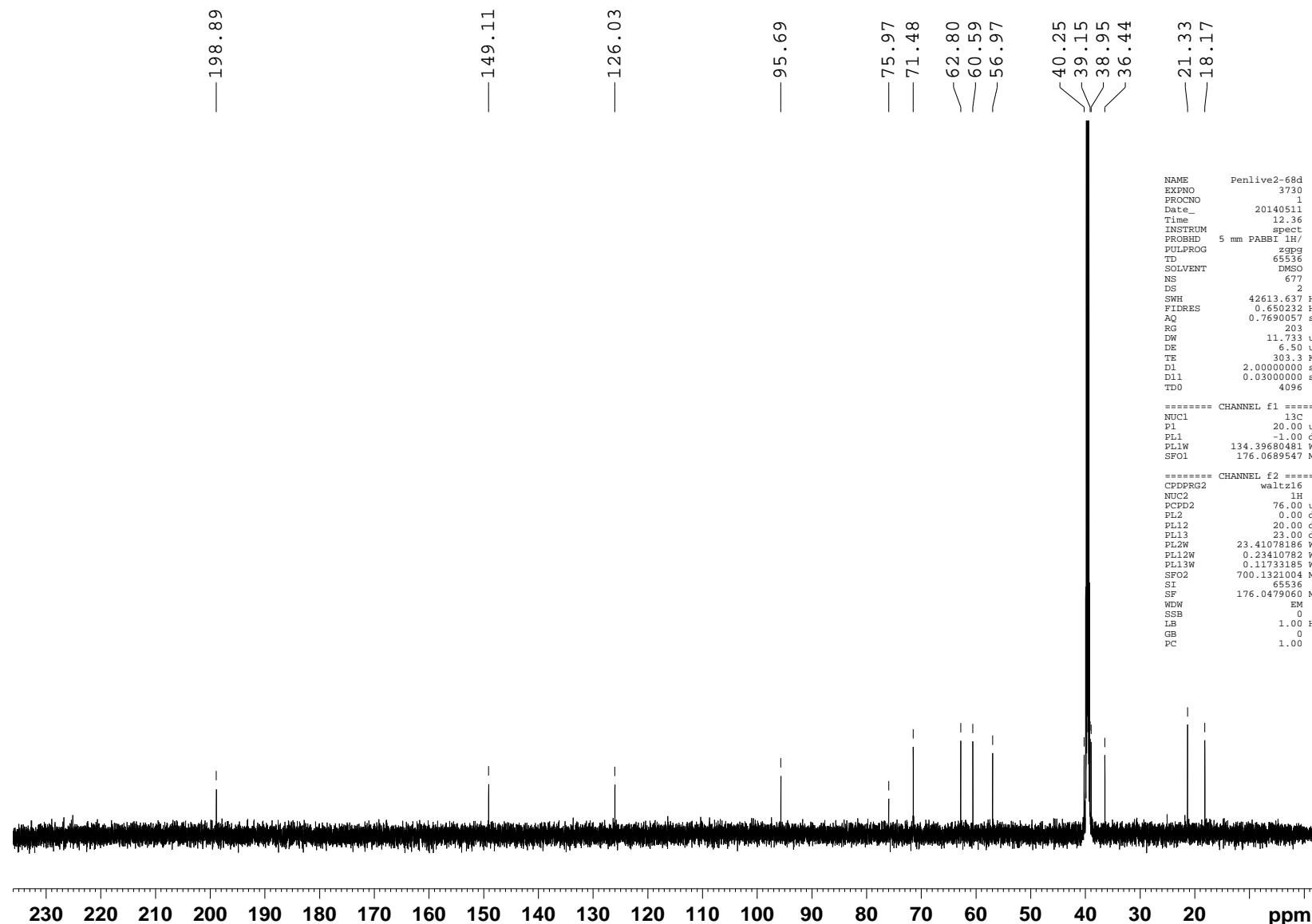
Figure S41. ^{13}C NMR (176 MHz, DMSO) spectrum of **5**.

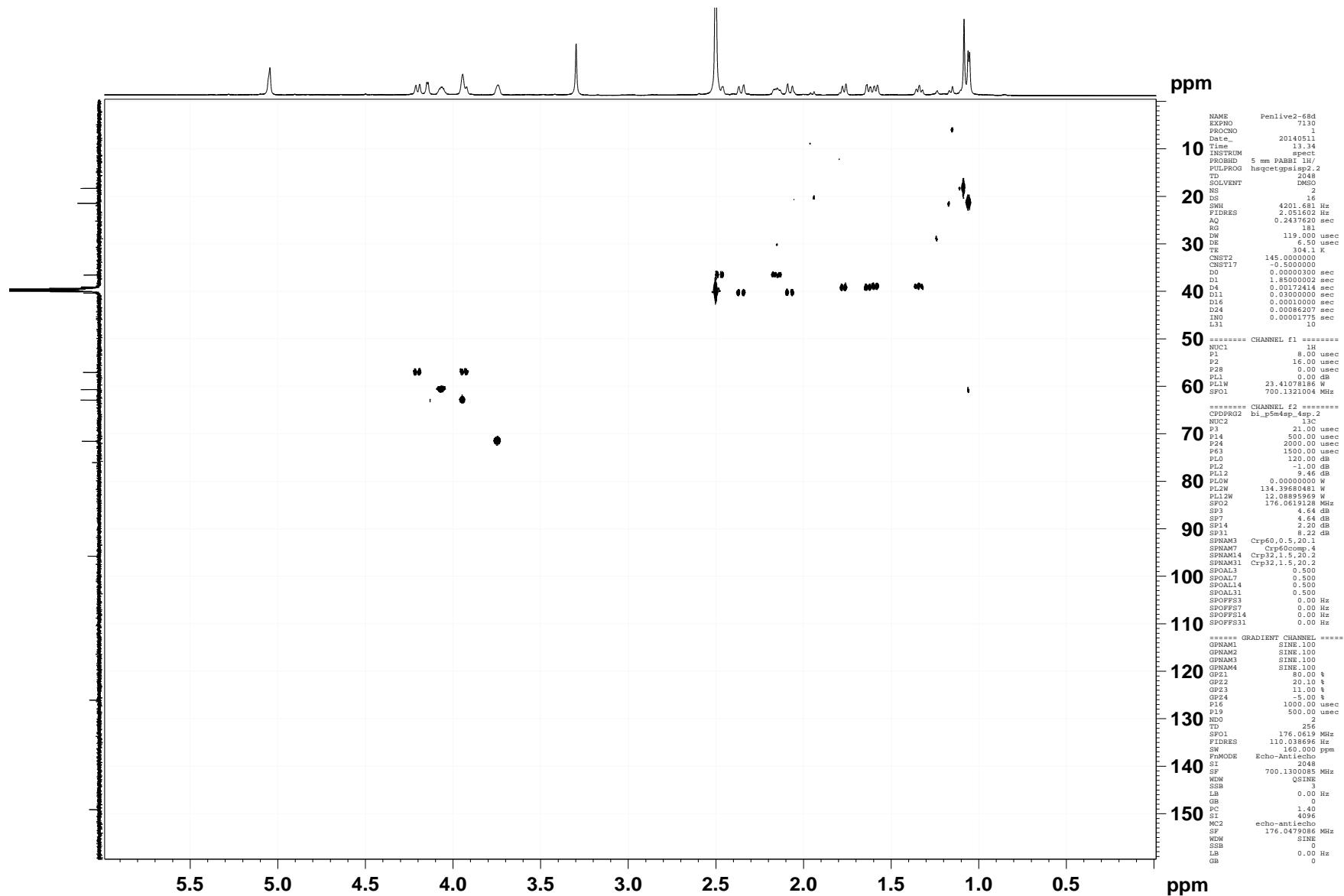
Figure S42. HSQC (700 MHz, DMSO) spectrum of **5**.

Figure S43. HMBC (700 MHz, DMSO) spectrum of 5.

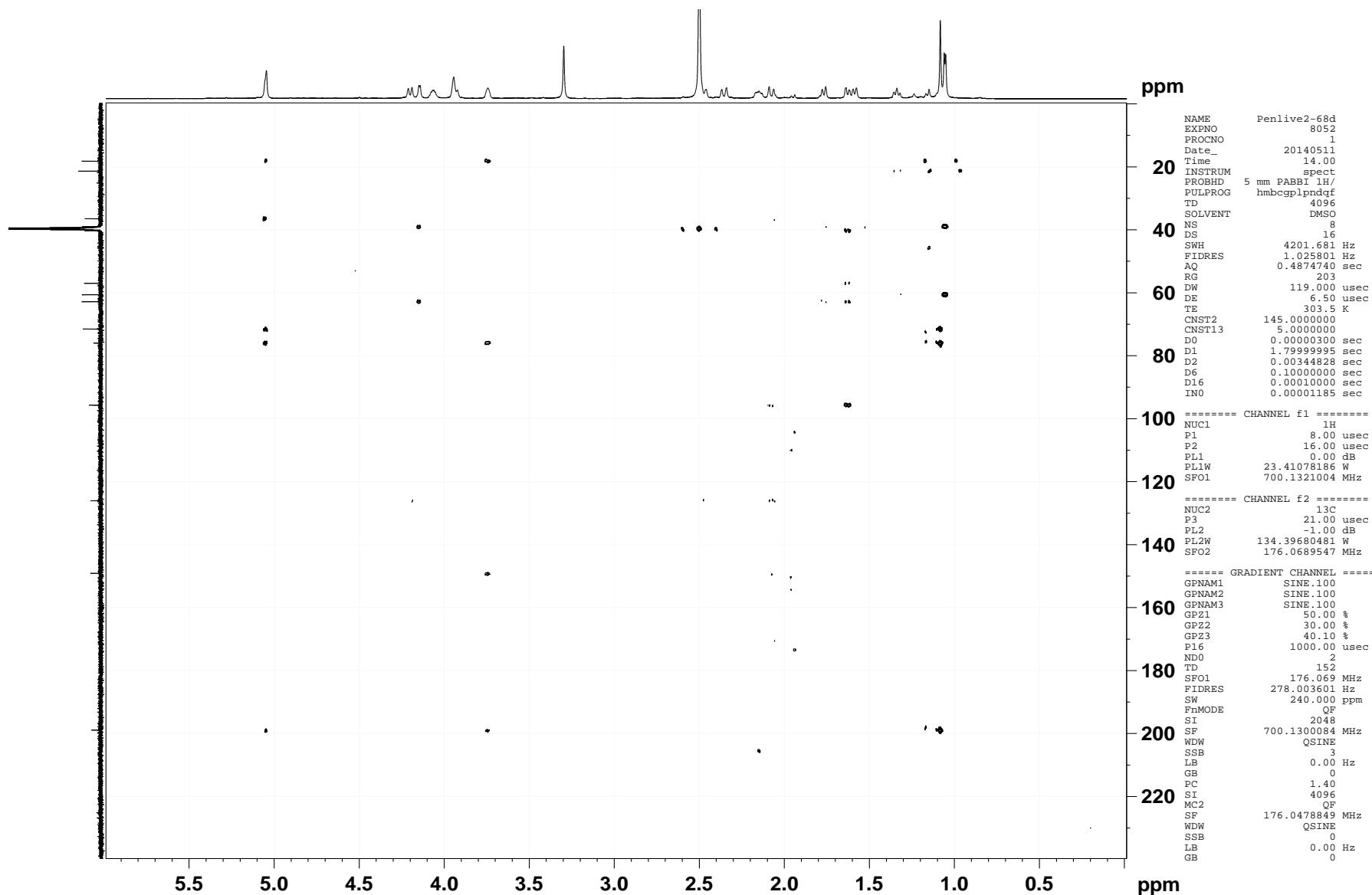


Figure S44. NOESY (700 MHz, DMSO) spectrum of 5.

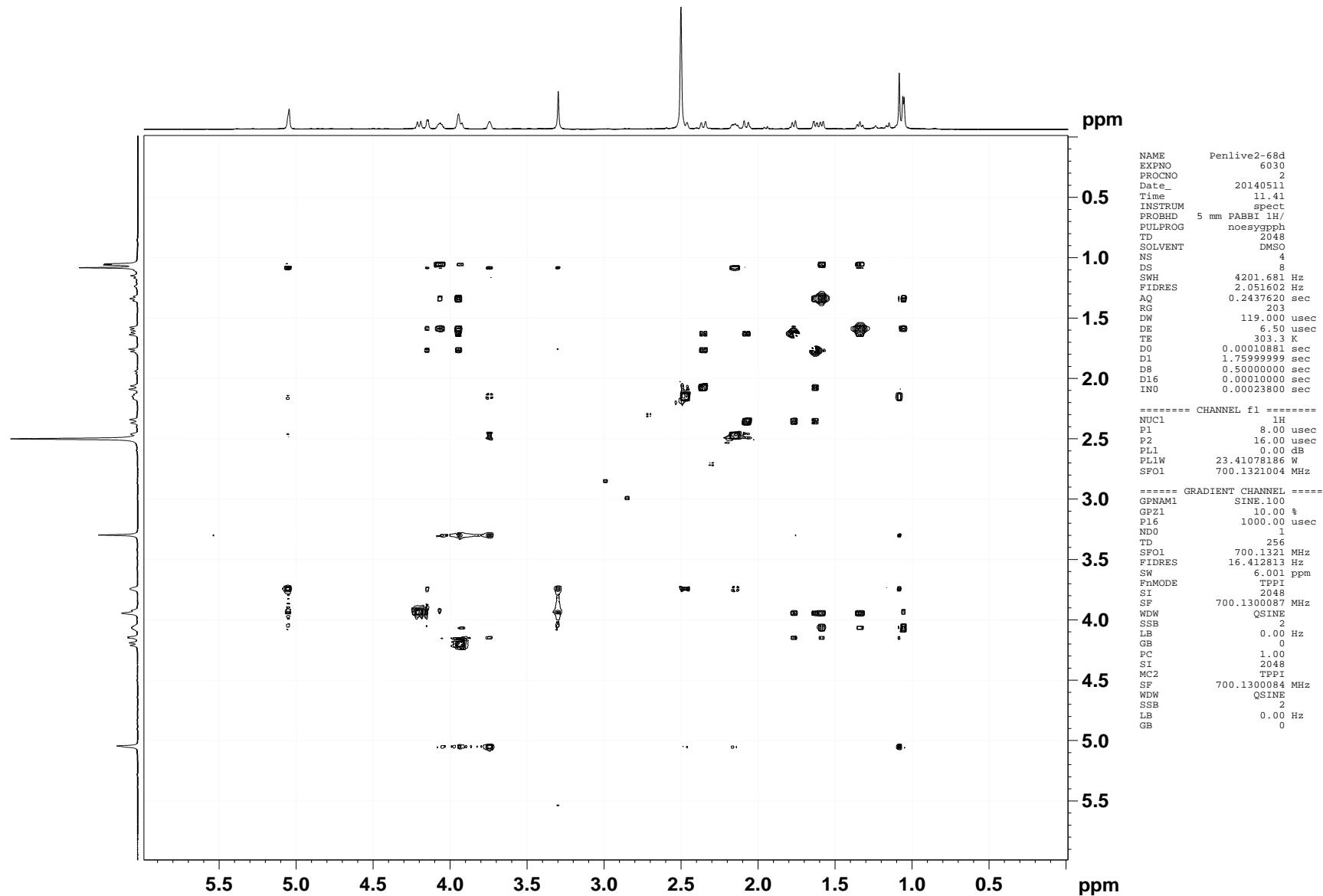


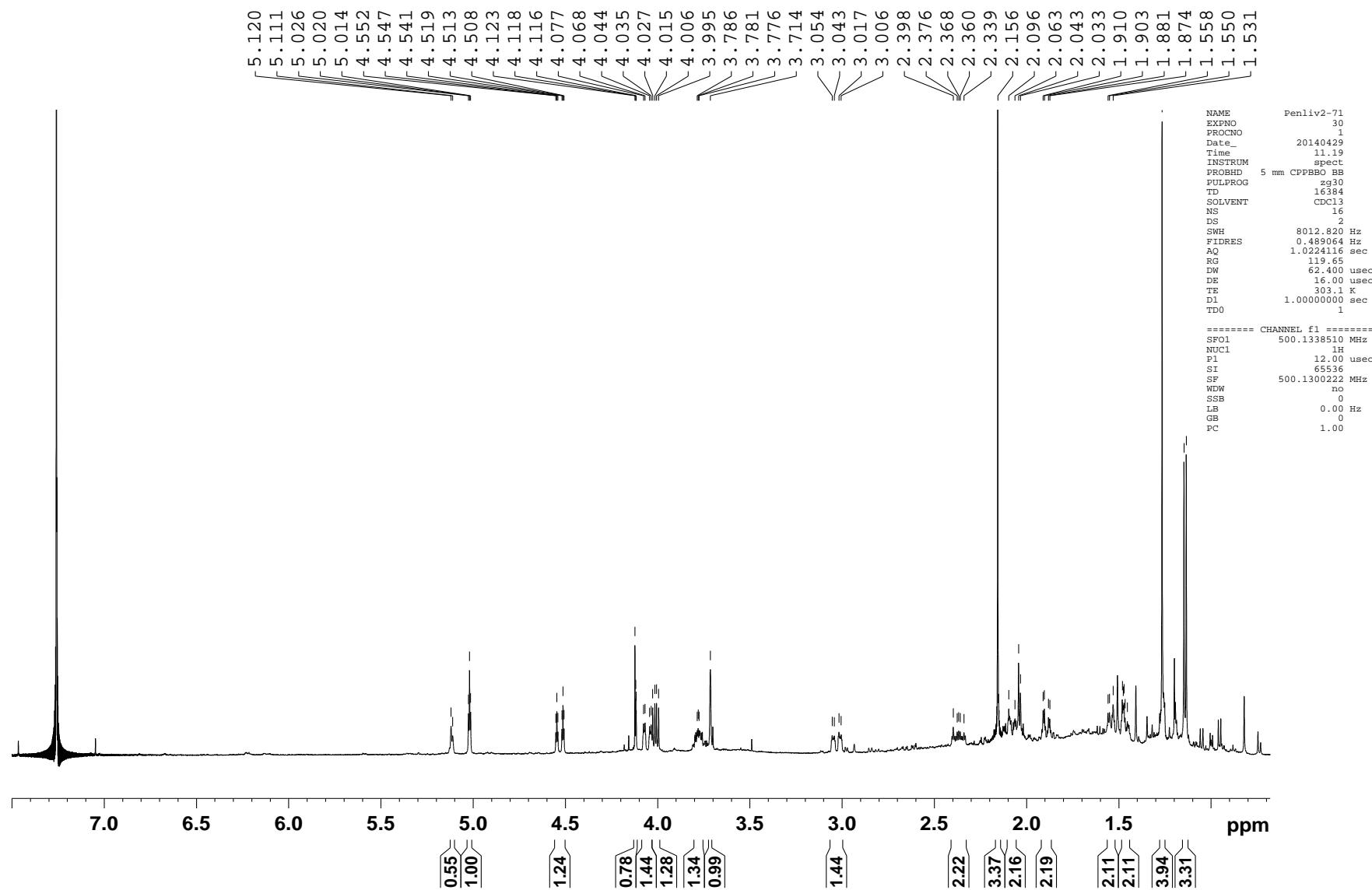
Figure S45. ^1H NMR (500 MHz, CDCl_3) spectrum of **6**.

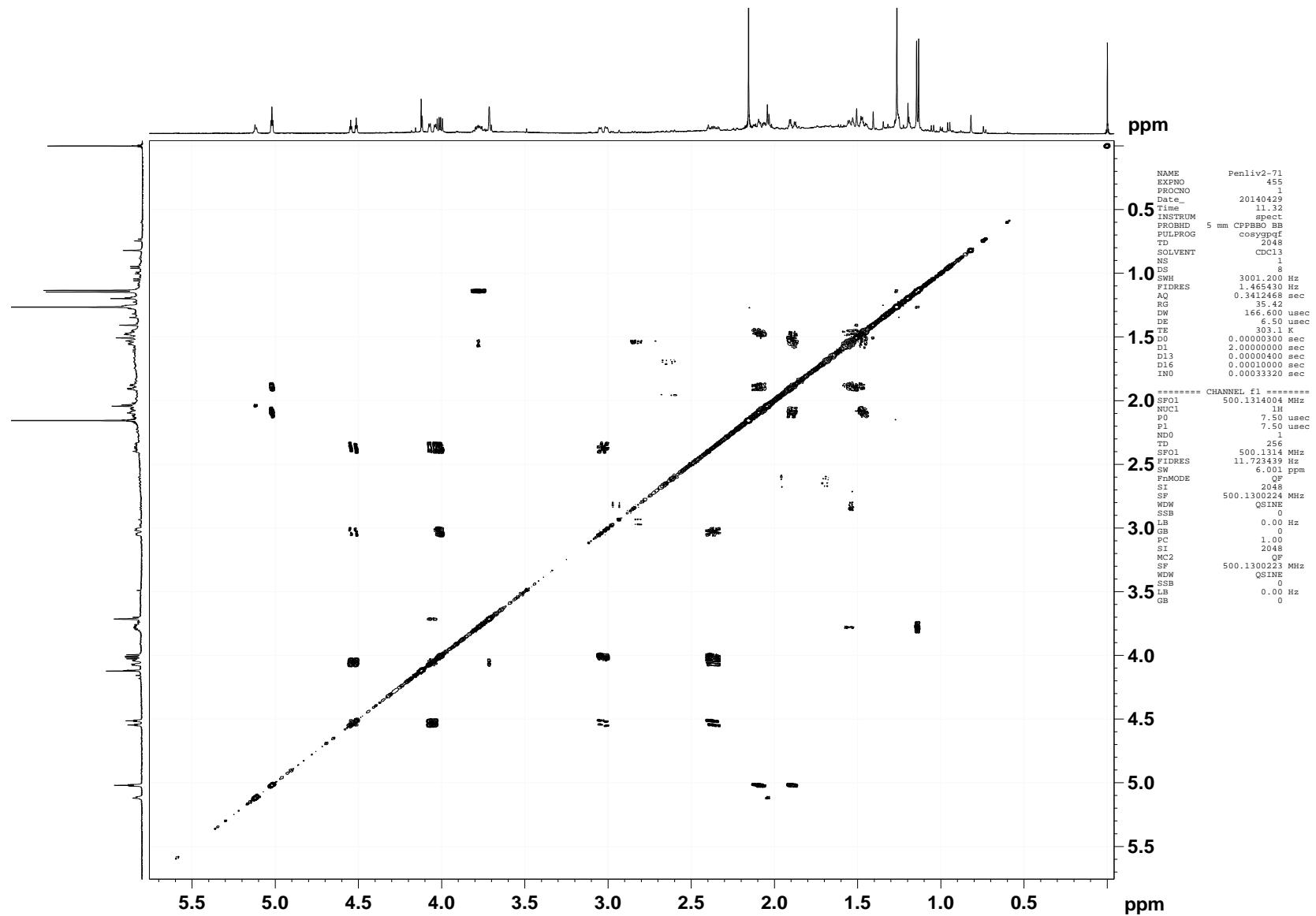
Figure S46. ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of **6**.

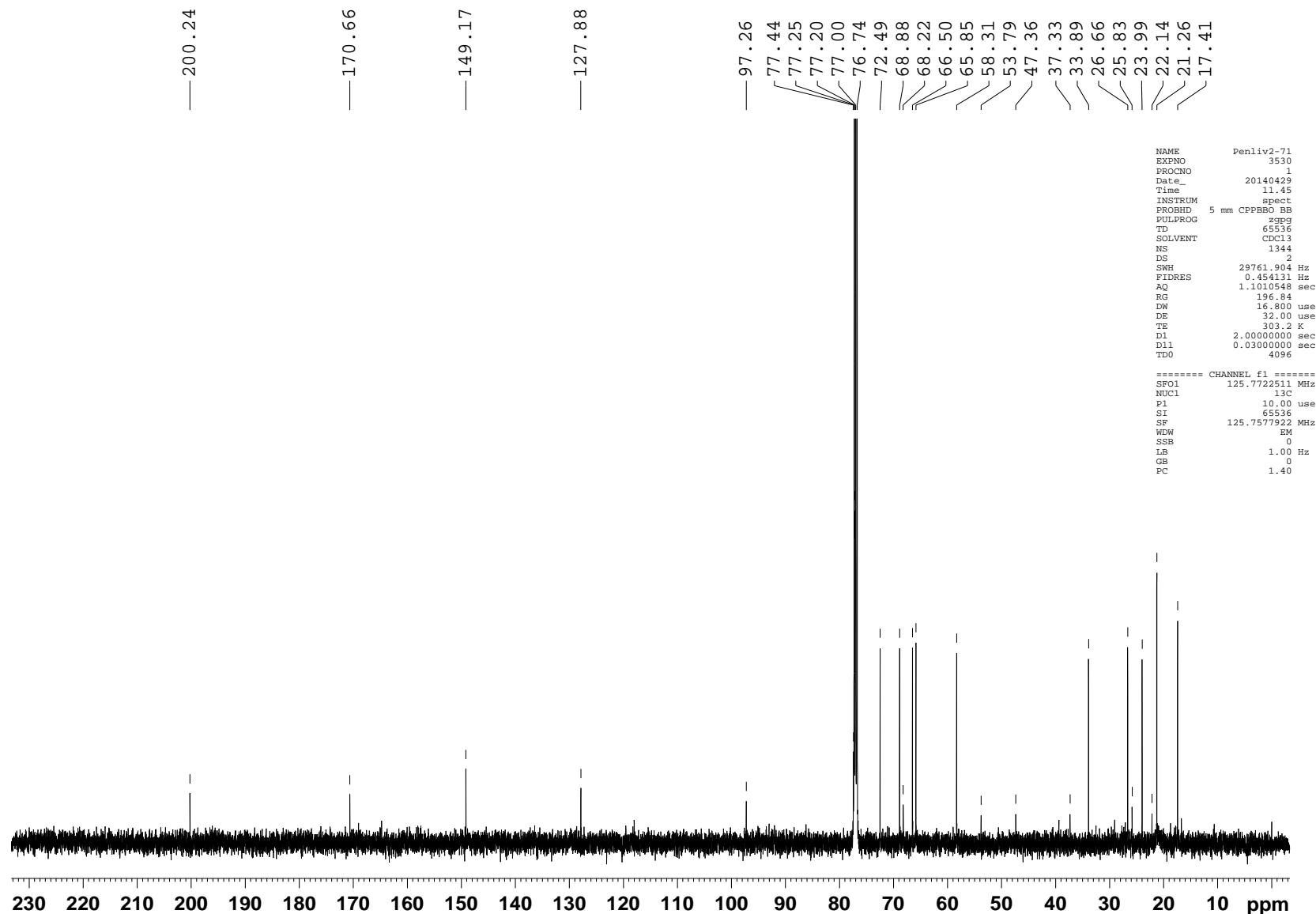
Figure S47. ^{13}C NMR (125 MHz, CDCl_3) spectrum of **6**.

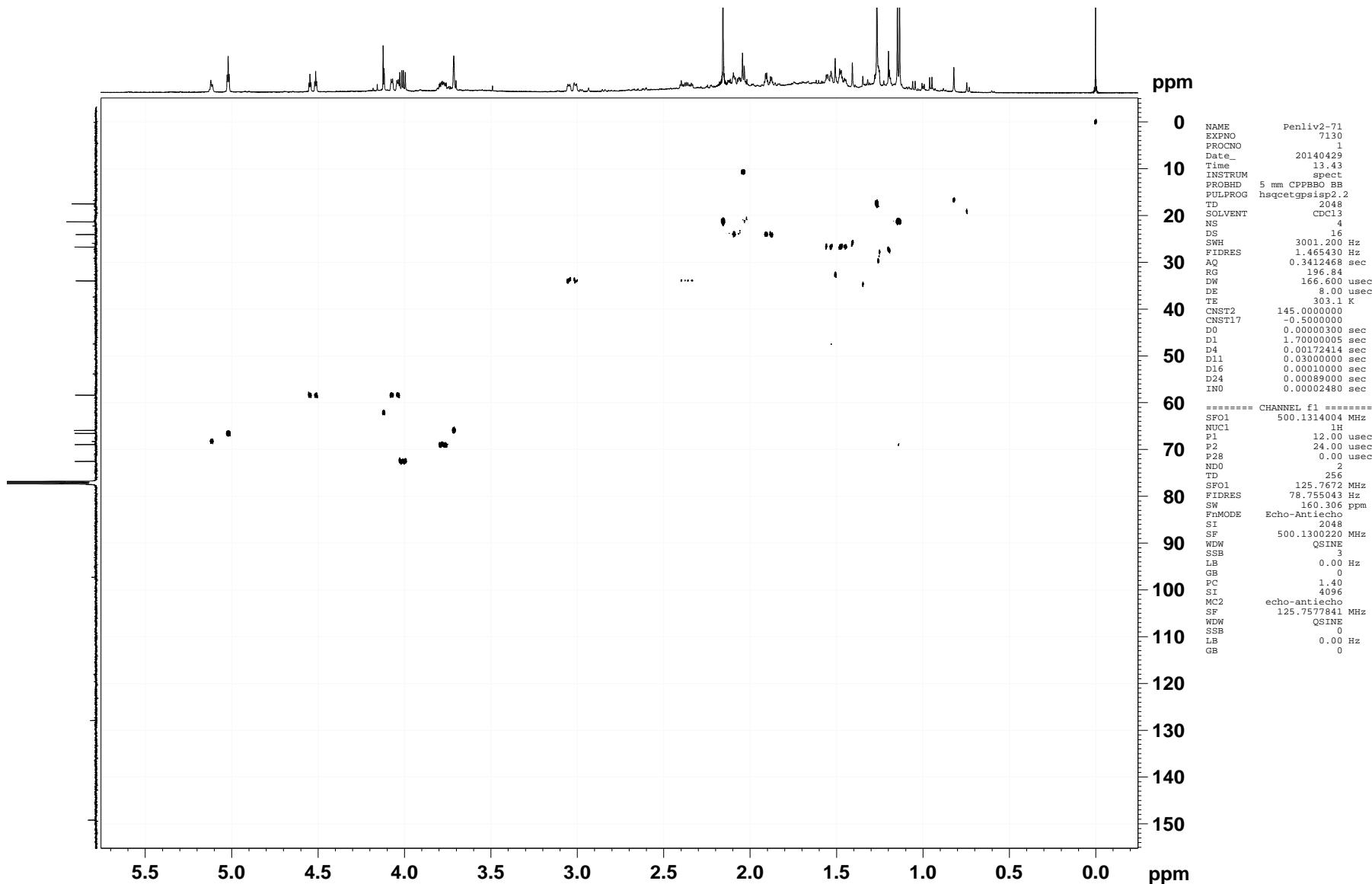
Figure S48. HSQC (500 MHz, CDCl₃) spectrum of **6**.

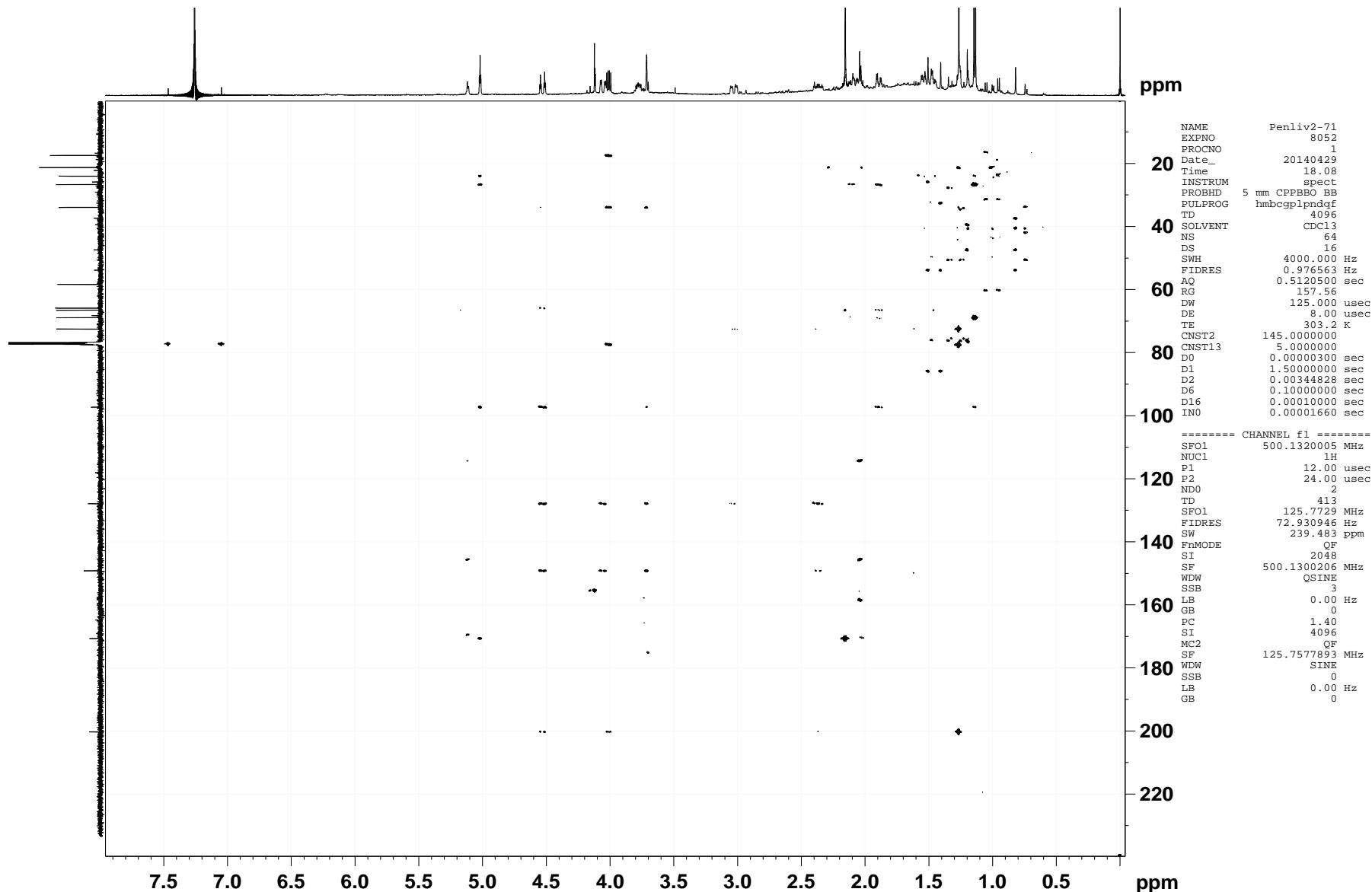
Figure S49. HMBC (500 MHz, CDCl₃) spectrum of **6**.

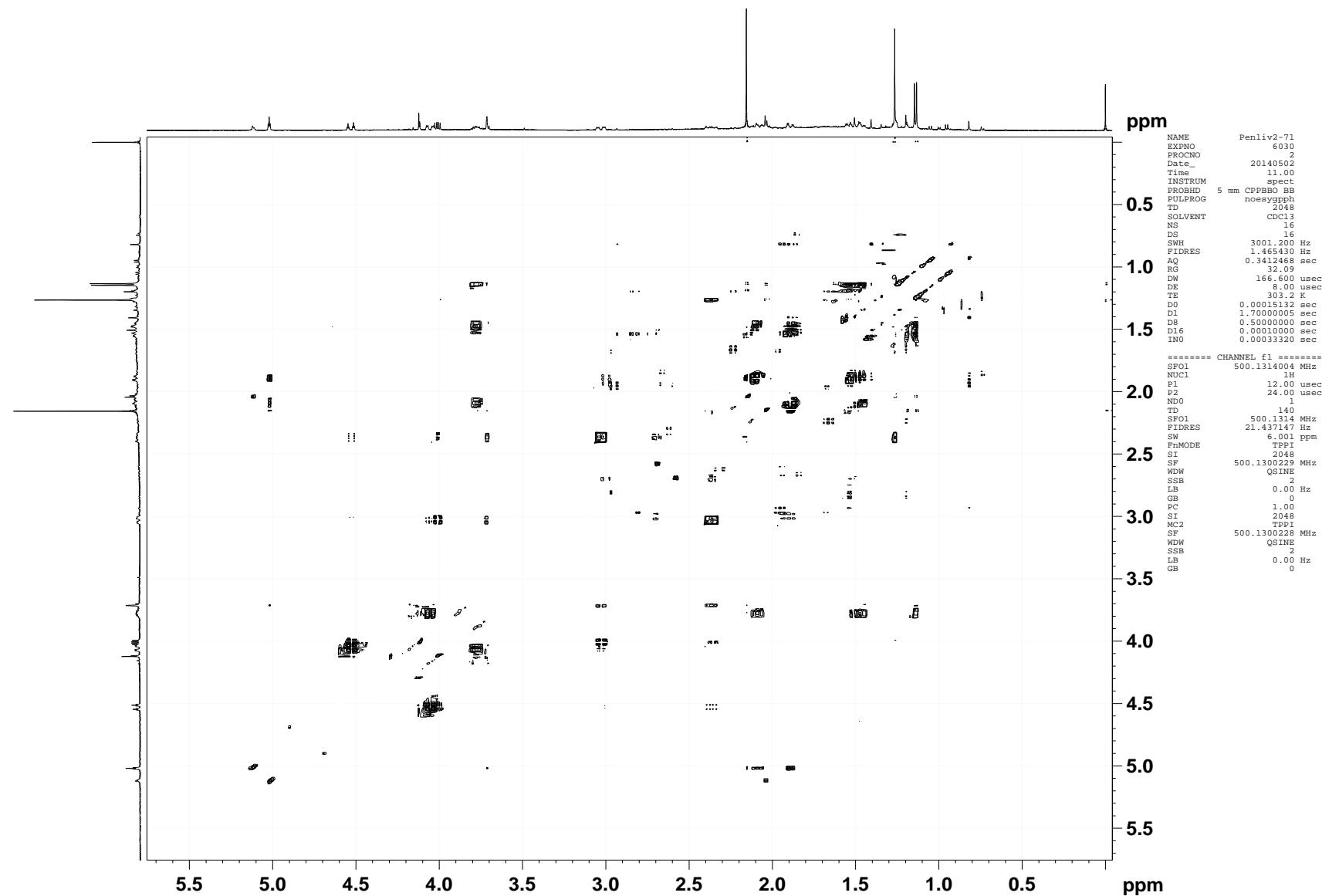
Figure S50. NOESY (500 MHz, CDCl_3) spectrum of 6.

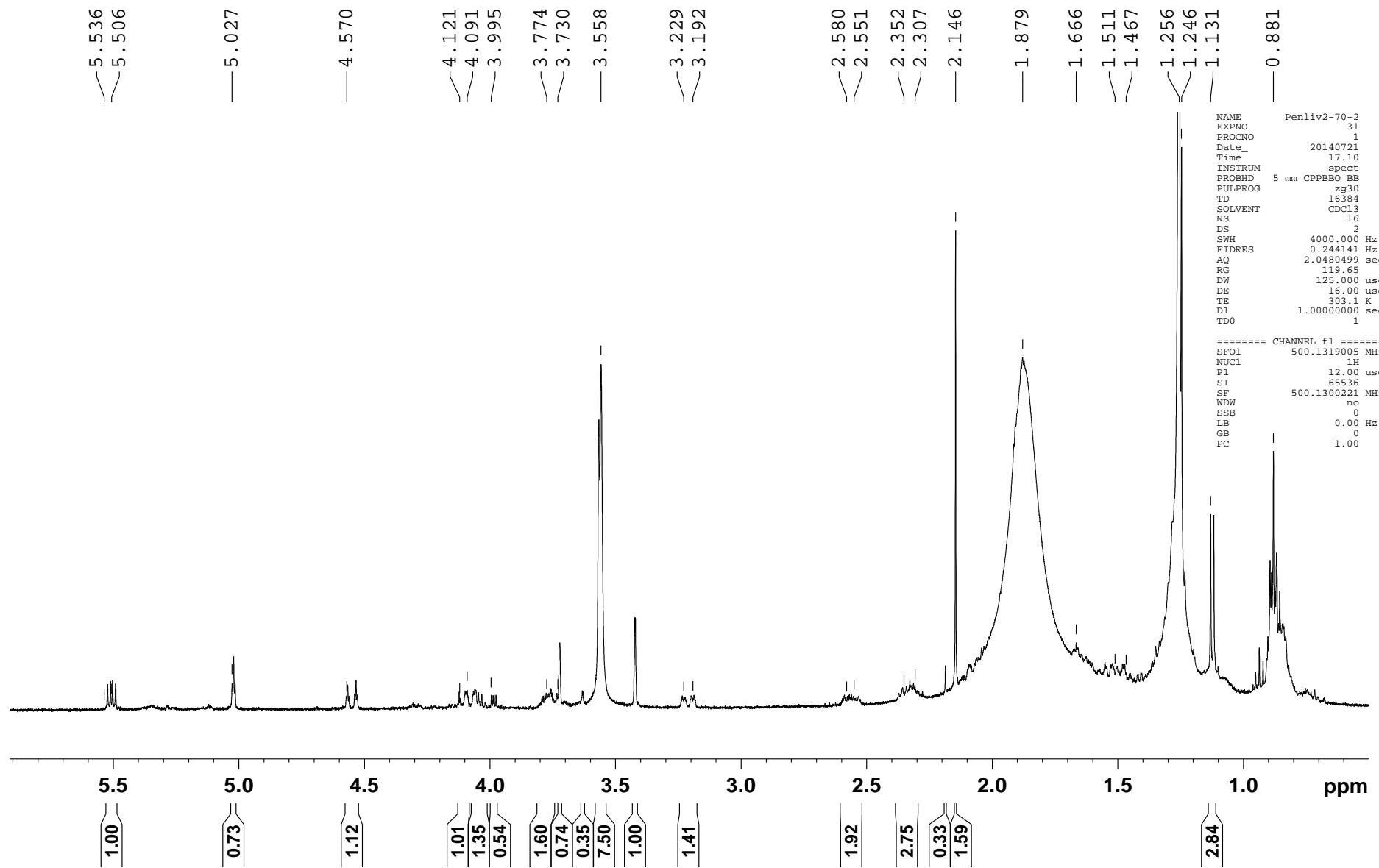
Figure S51. ^1H NMR (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **6a**.

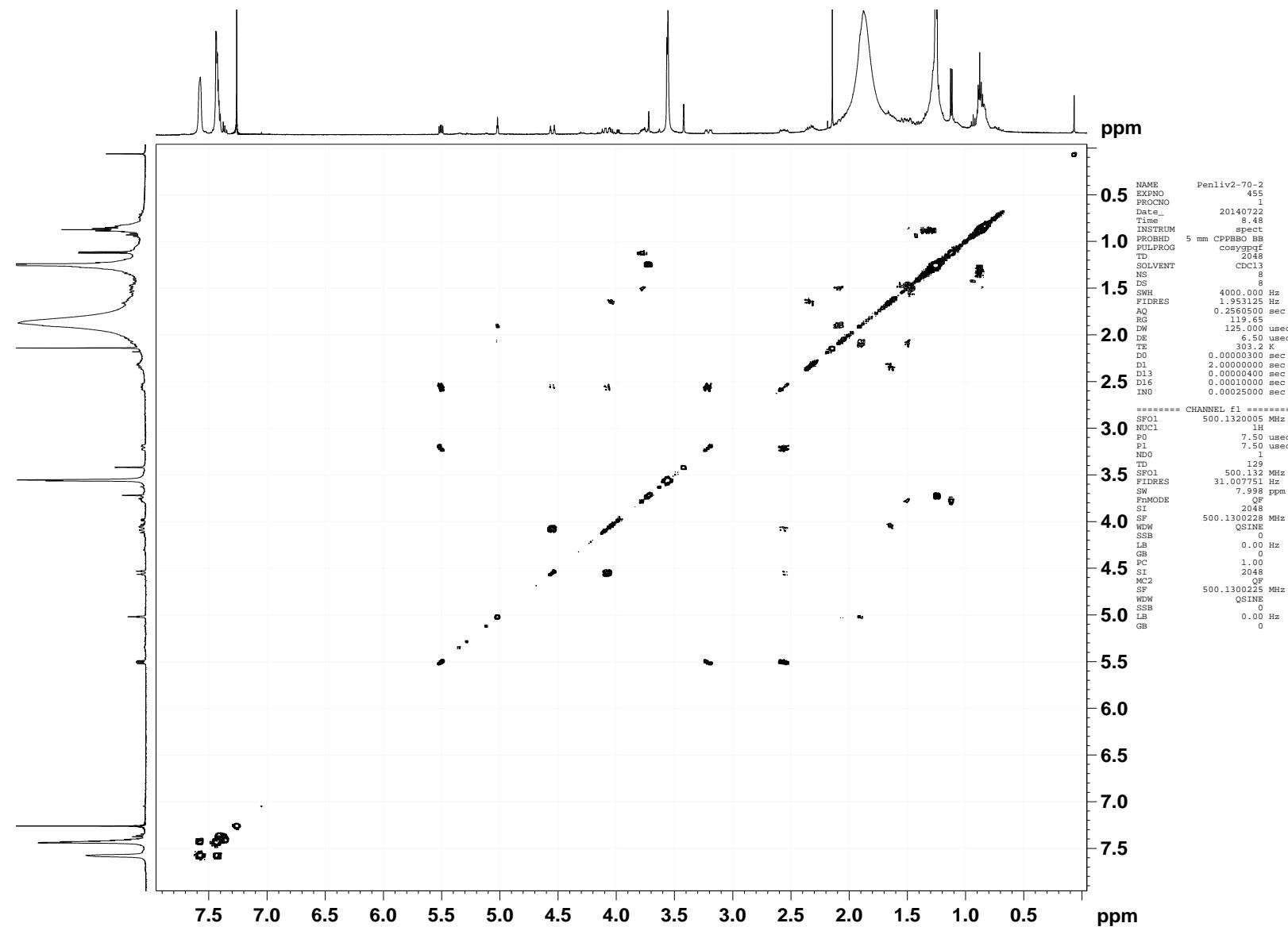
Figure S52. ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*S*)-MTPA ester of **6a**.

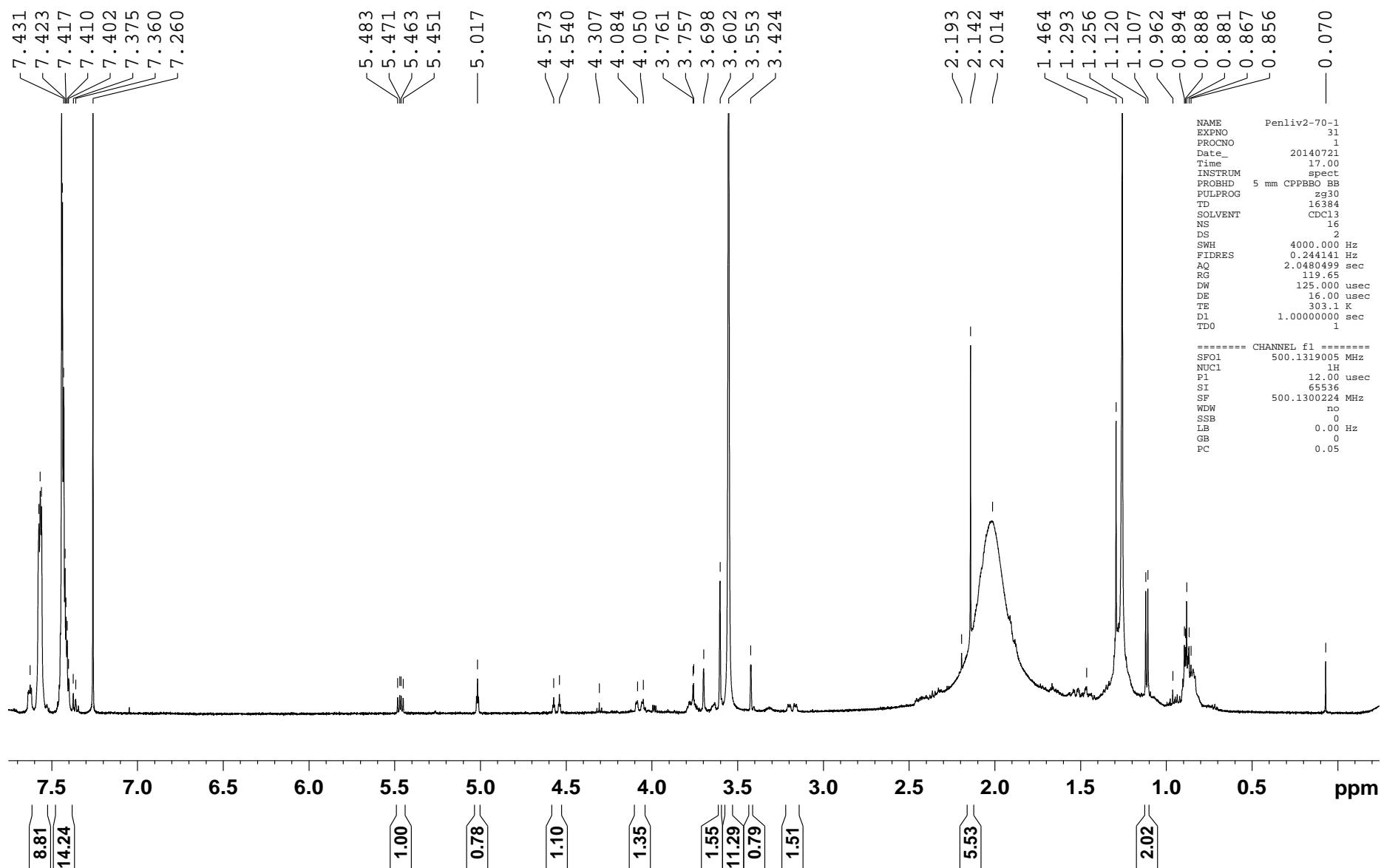
Figure S53. ^1H NMR (500 MHz, CDCl_3) spectrum of (*R*)-MTPA ester of **6b**.

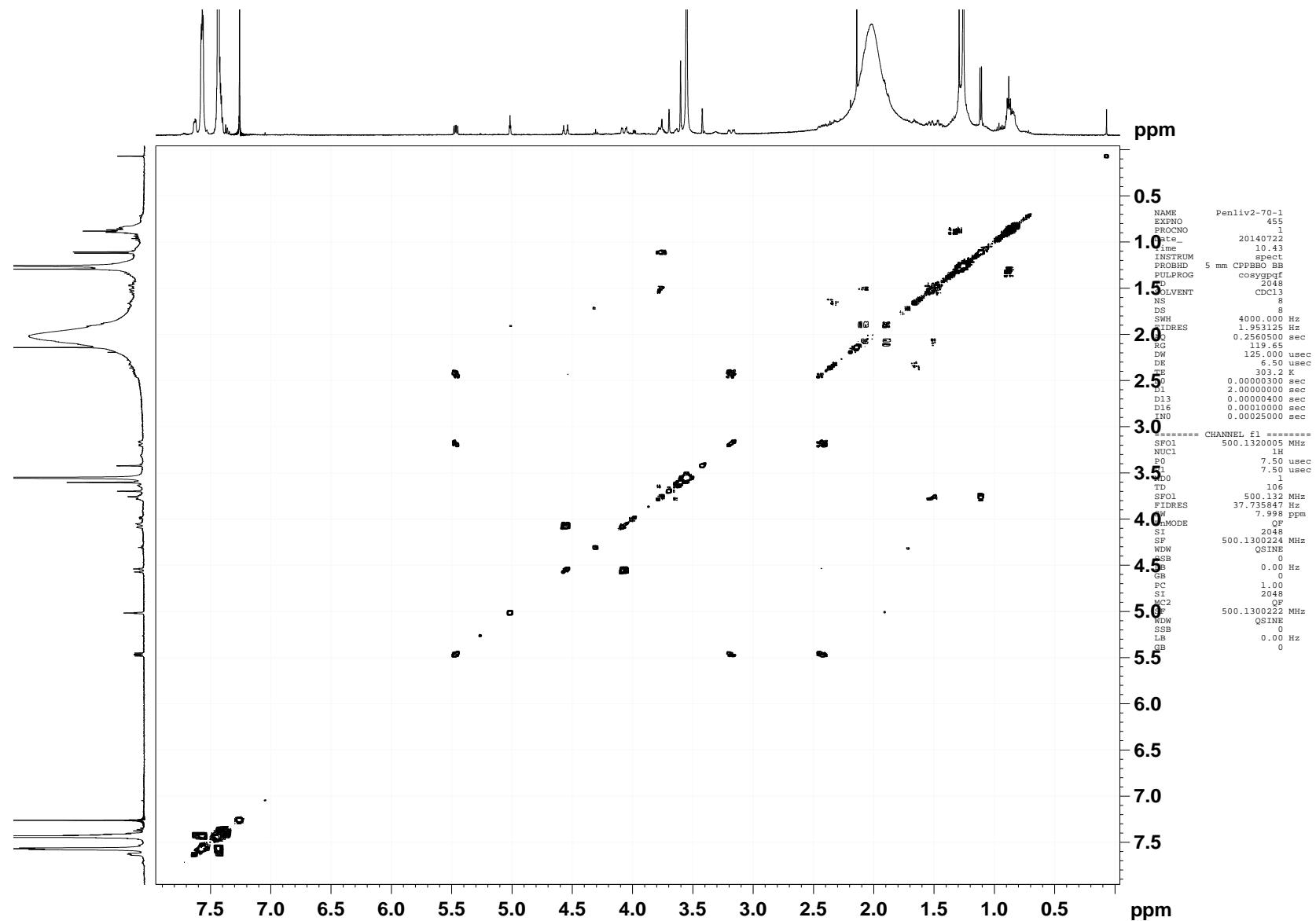
Figure S54. ^1H - ^1H COSY (500 MHz, CDCl_3) spectrum of (*R*)-MTPA ester of **6b**.

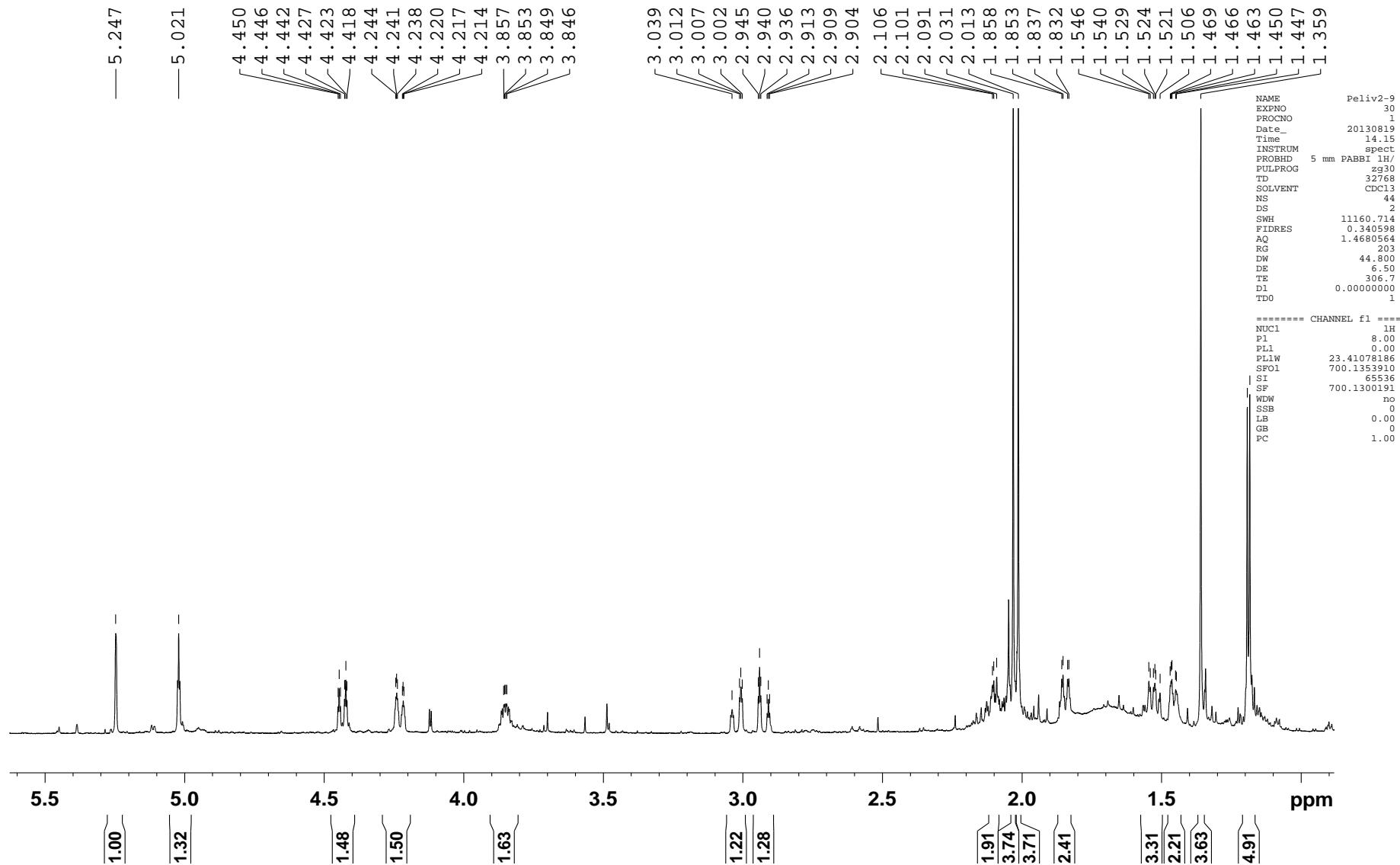
Figure S55. ^1H NMR (700 MHz, CDCl_3) spectrum of 7.

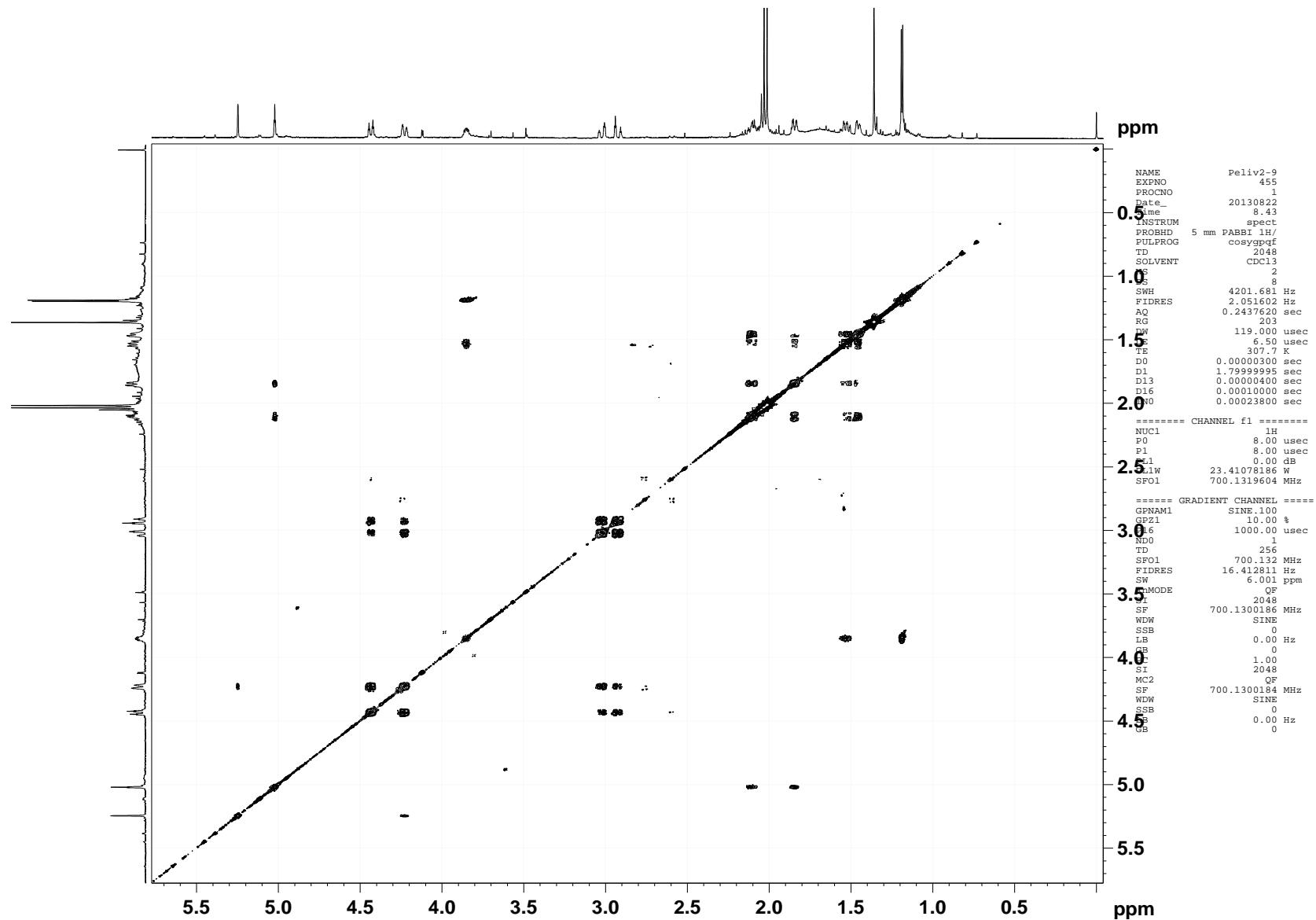
Figure S56. ^1H - ^1H COSY (700 MHz, CDCl_3) spectrum of 7.

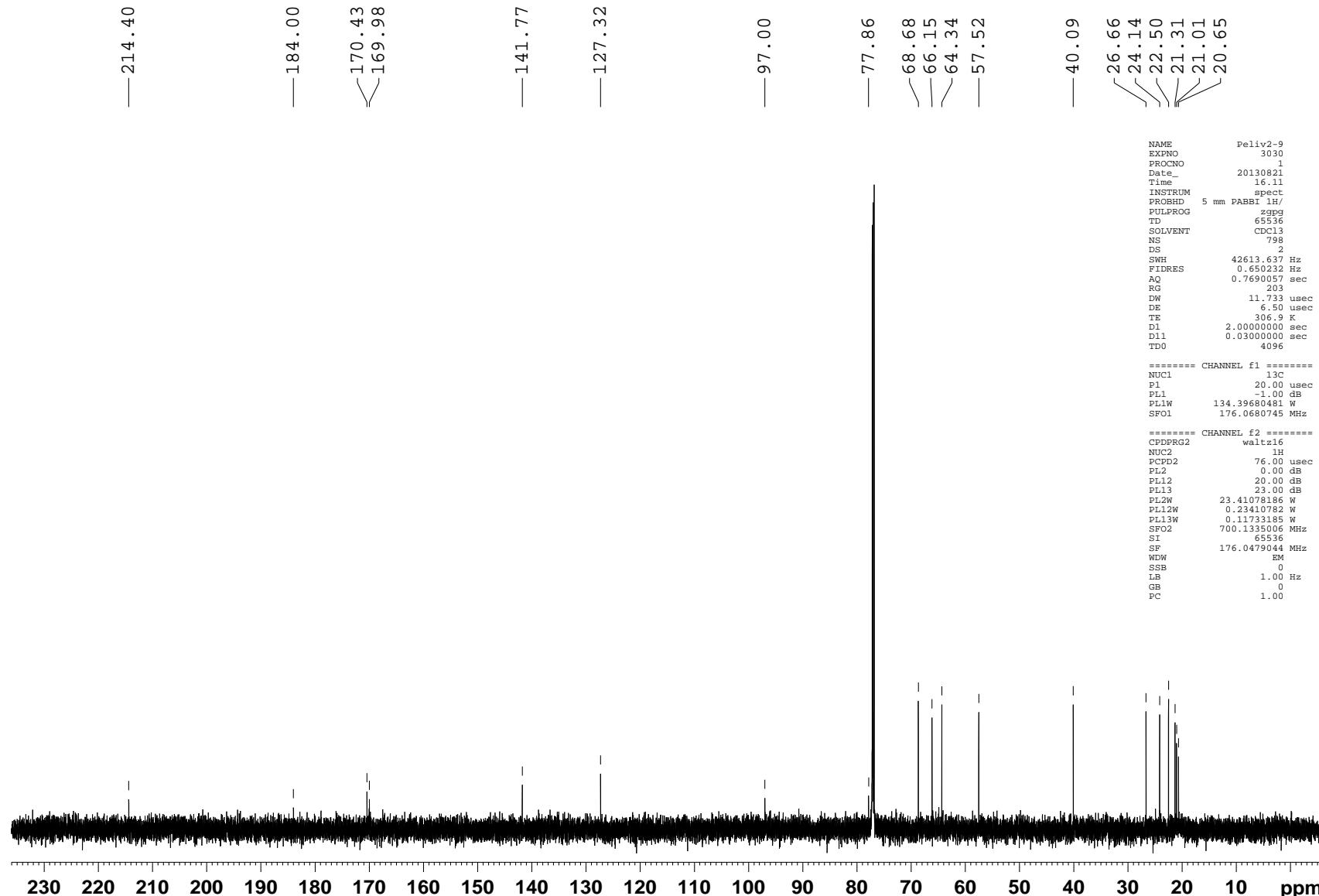
Figure S57. ^{13}C NMR (176 MHz, CDCl_3) spectrum of 7.

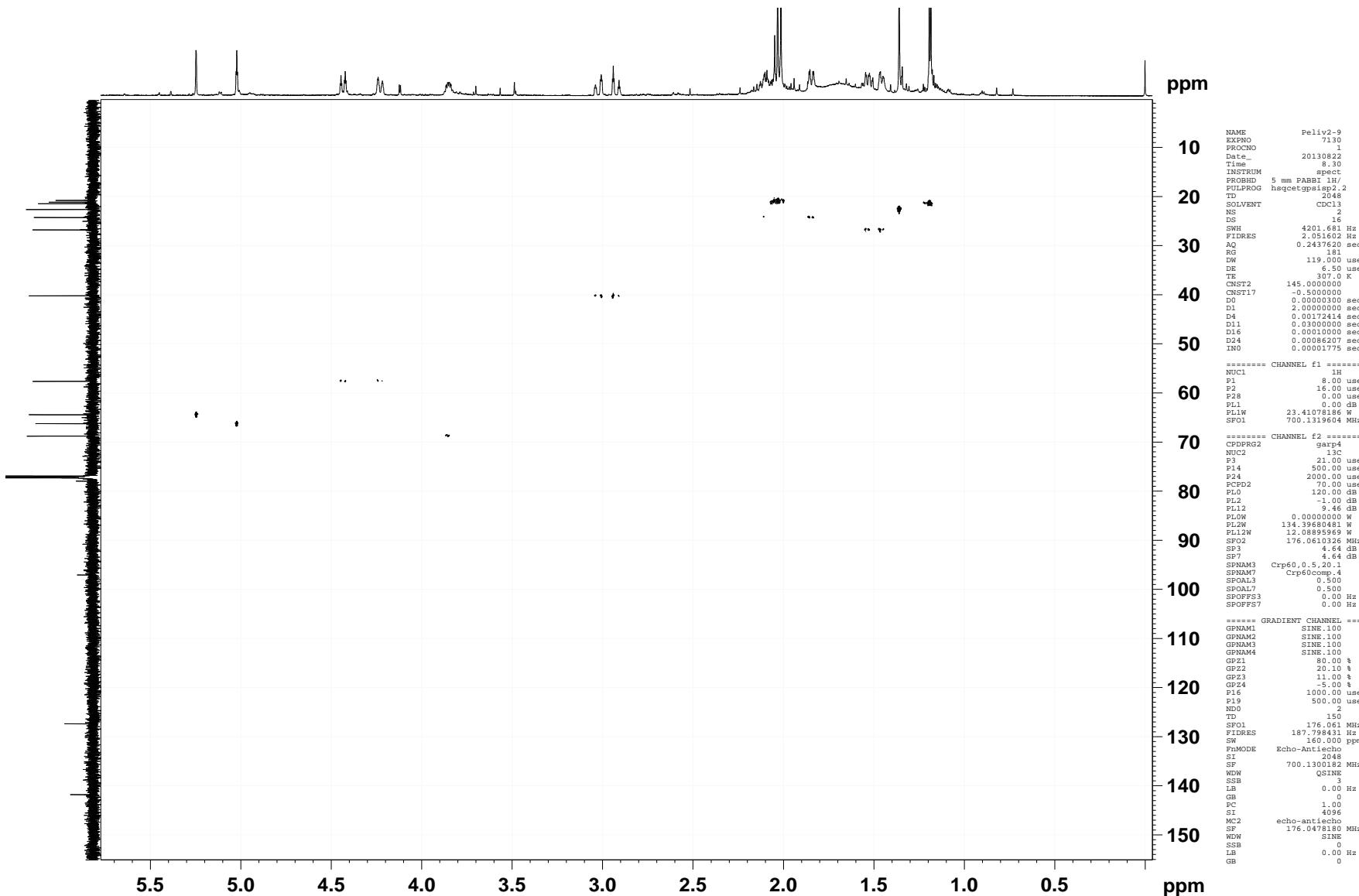
Figure S58. HSQC (700 MHz, CDCl₃) spectrum of 7.

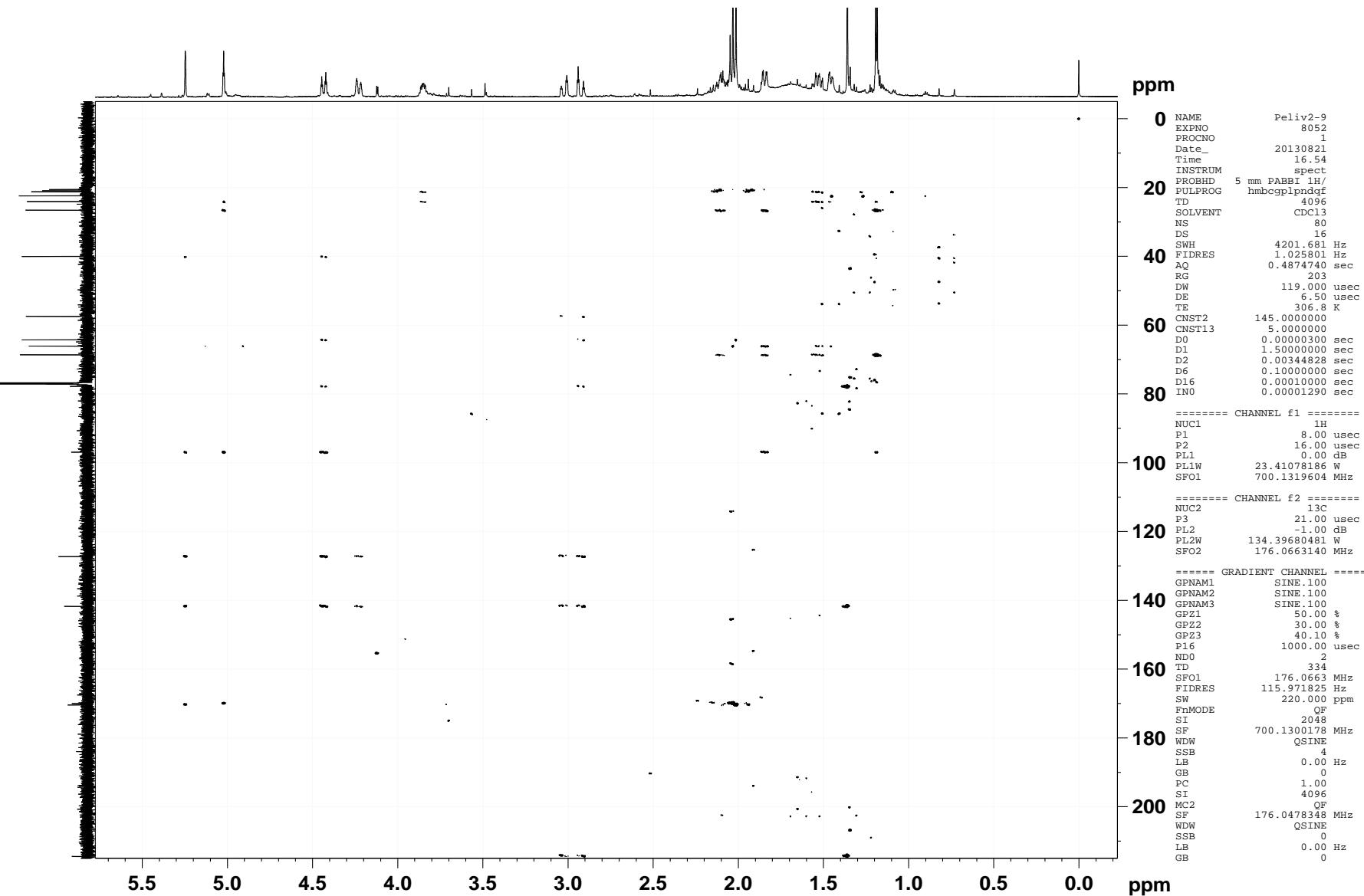
Figure S59. HMBC (700 MHz, CDCl₃) spectrum of 7.

Figure S60. NOESY (700 MHz, CDCl_3) spectrum of 7.