

Supplementary Information

Xanthones and Anthraquinones from the soil fungus

Penicillium sp. DWS10-P-6

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1. The spectra of penicillone A (1)

Figure S1. The UV spectrum of compound 1

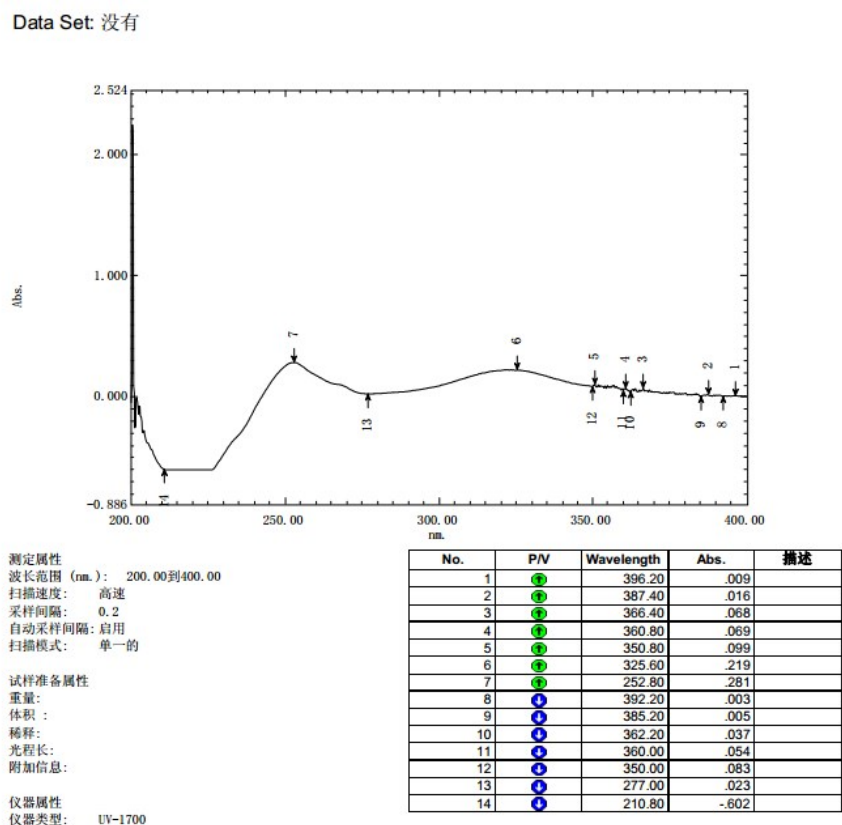


Figure S2. The IR spectrum of compound 1

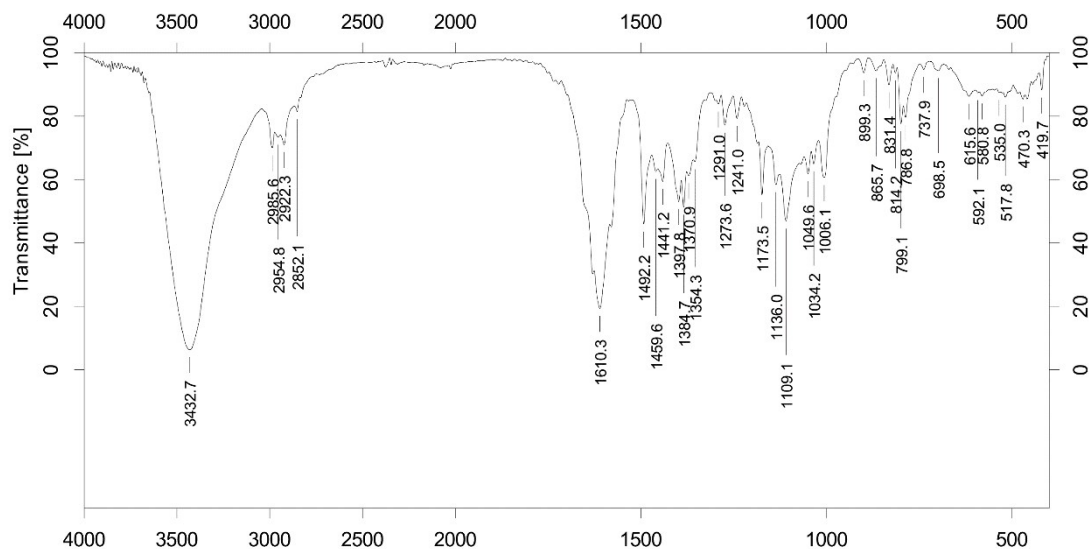


Figure S3. The HR-ESI-MS spectrum of compound 1

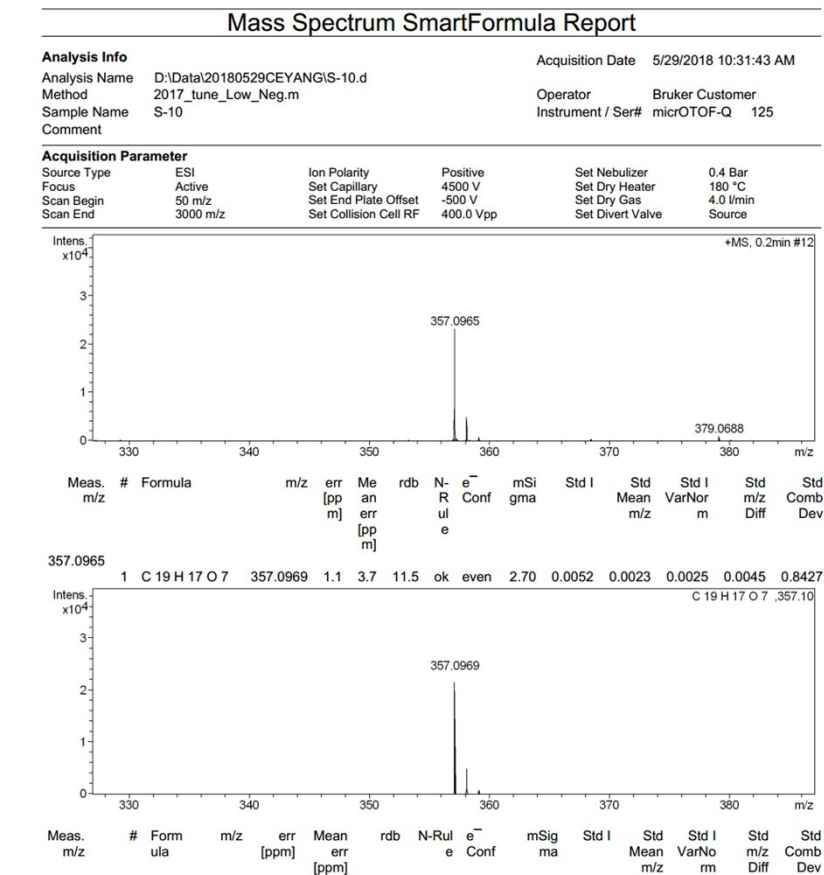


Figure S4. The ¹H-NMR spectrum of compound 1

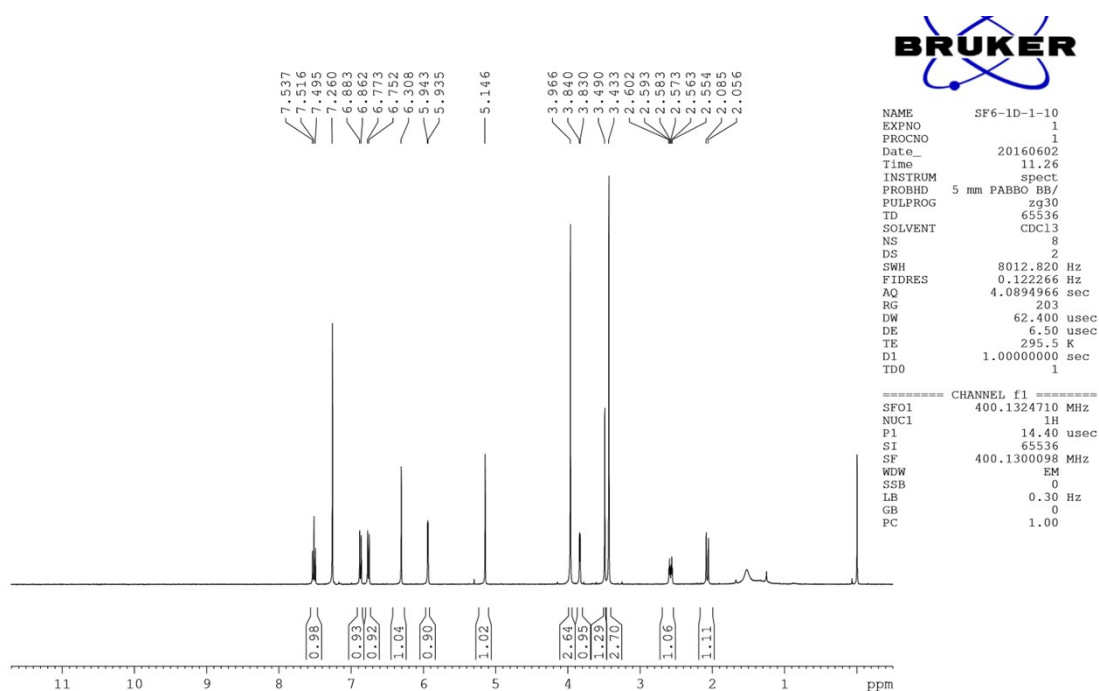


Figure S5. The ¹³C-NMR spectrum of compound 1

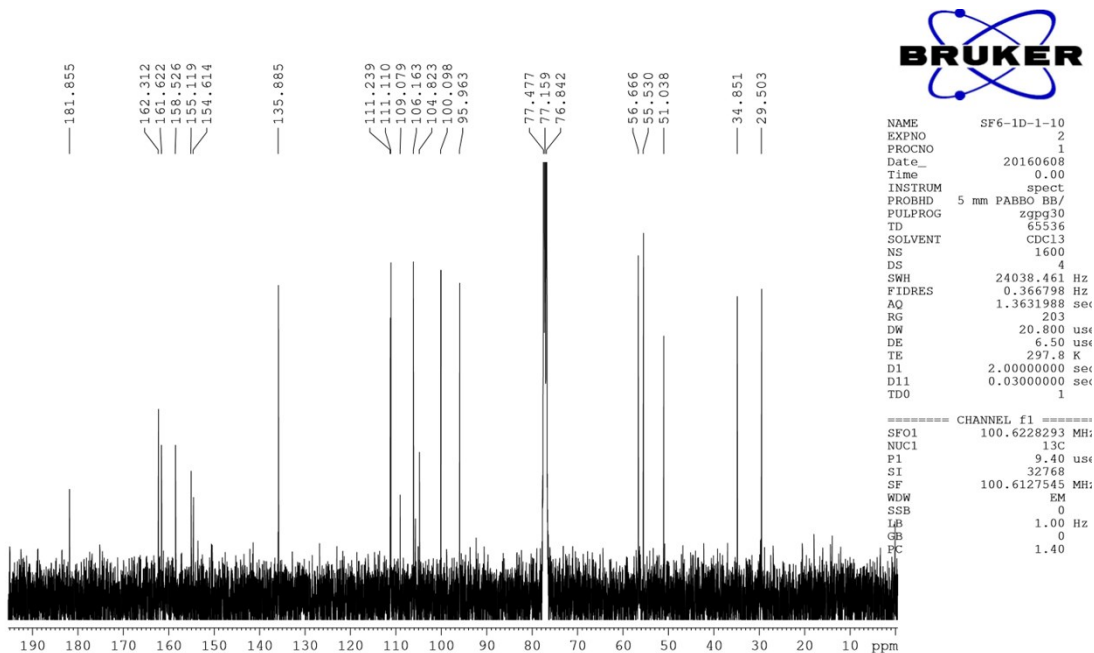


Figure S6. The HSQC spectrum of compound 1

AV-600-HSQC
Sample:SF6-1D-1-10

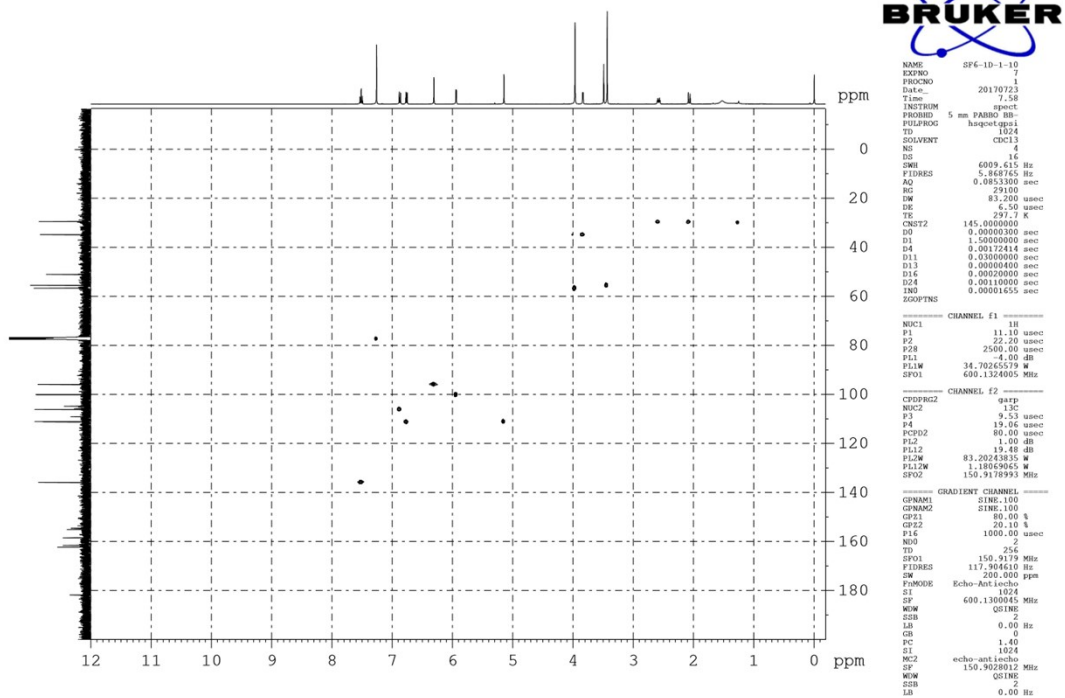


Figure S7. The HMBC spectrum of compound 1

AV-600-HMBC
Sample:SF6-1D-1-10

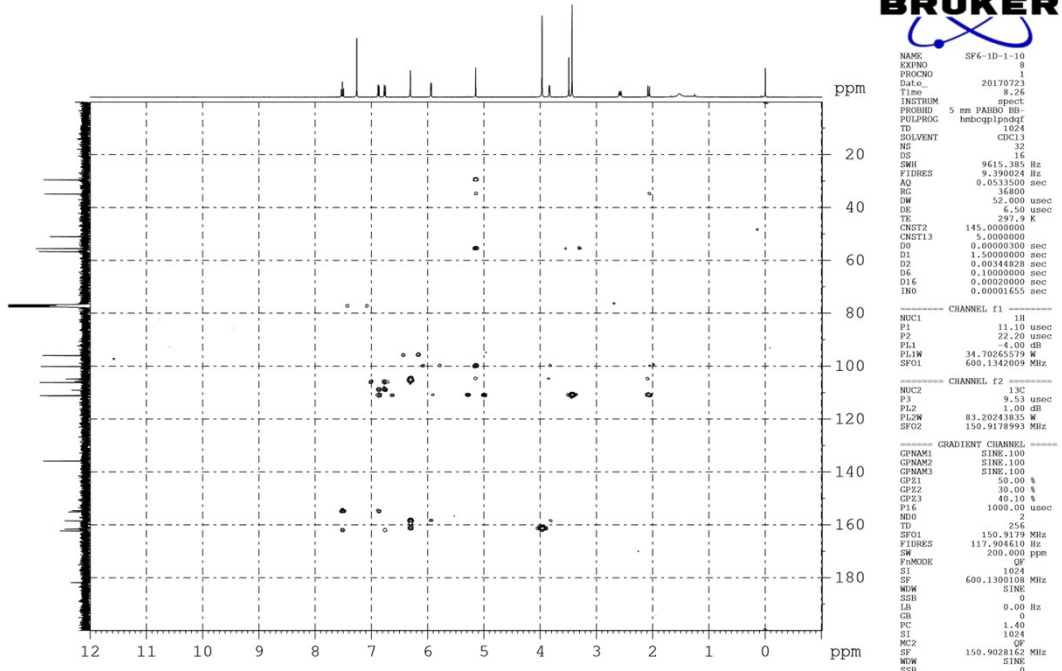
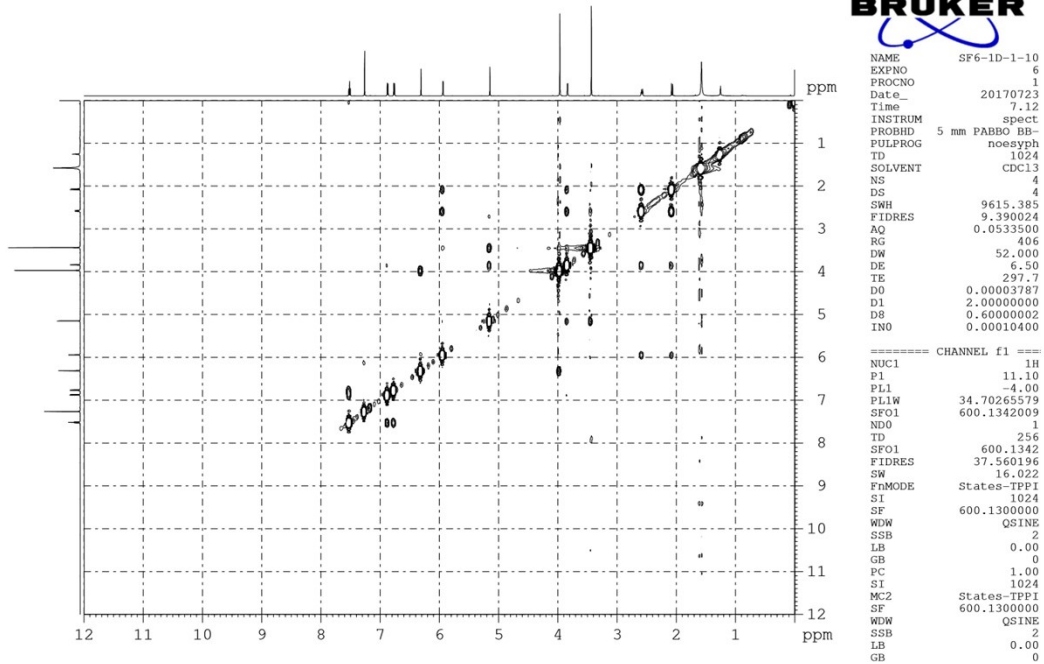


Figure S8. The NOESY spectrum of compound 1

AV-600-NOESY
Sample:SF6-1D-1-10



2. The spectra of penicillone B (2)

Figure S9. The UV spectrum of compound 2

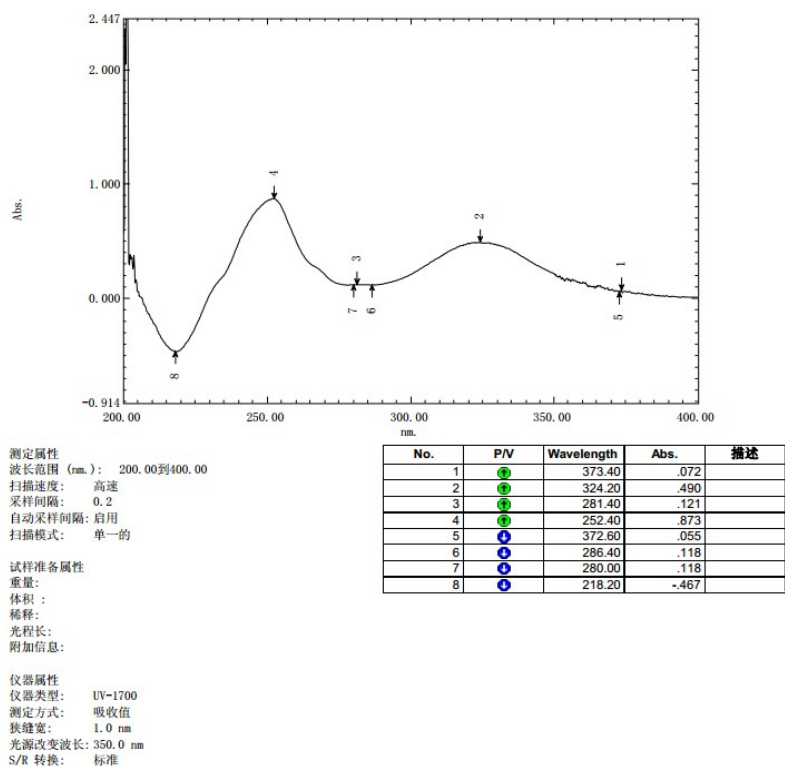


Figure S10. The IR spectrum of compound 2

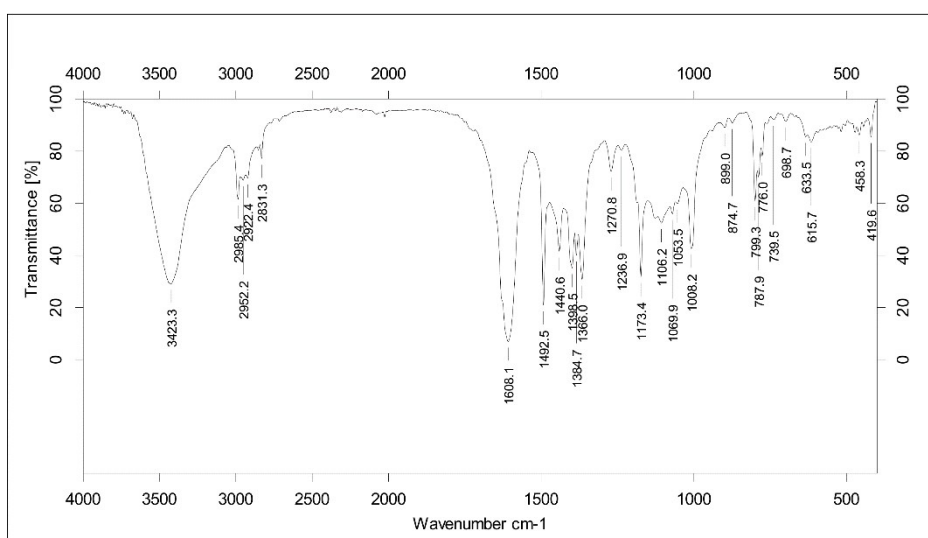


Figure S11. The HR-ESI-MS spectrum of compound 2

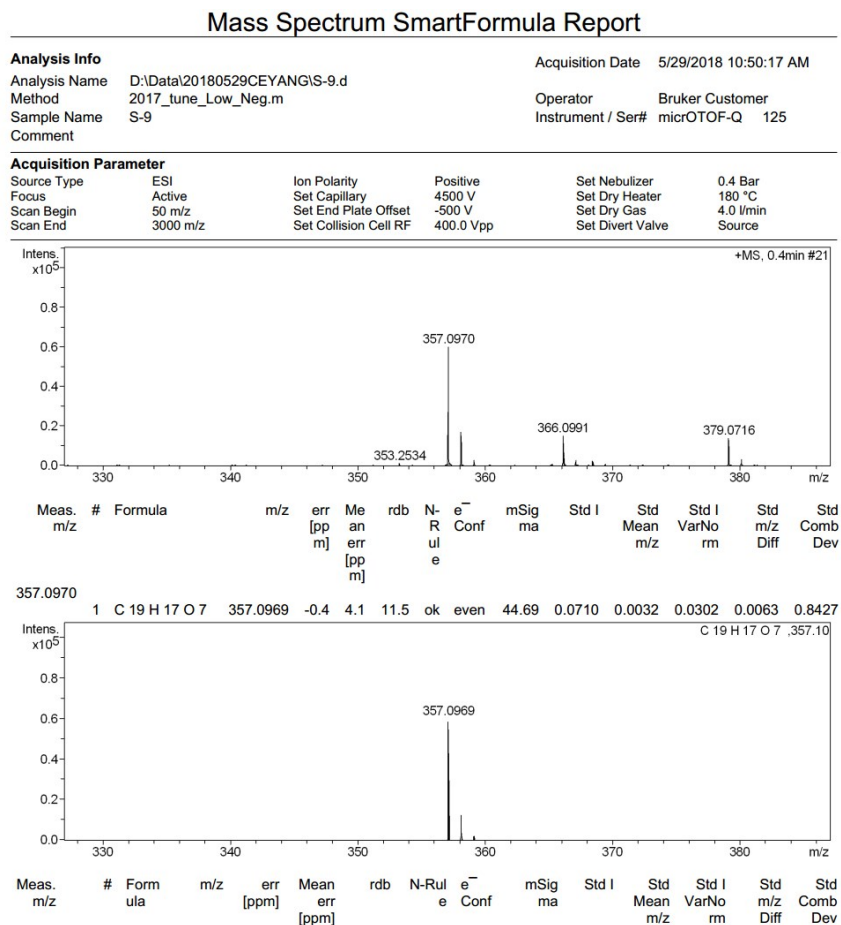


Figure S12. The ¹H-NMR spectrum of compound 2

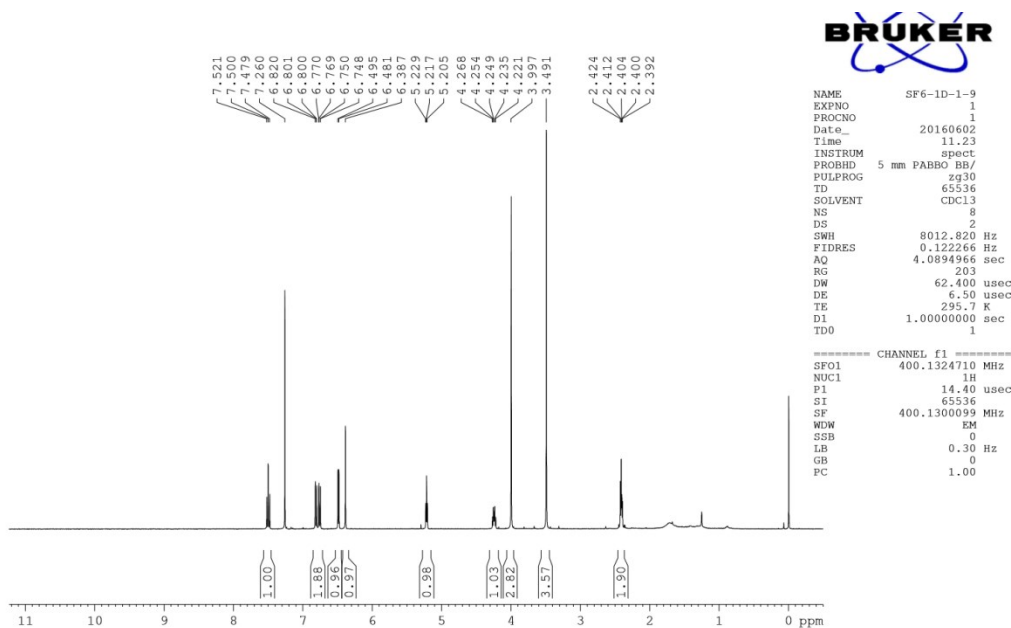


Figure S13. The ¹³C-NMR spectrum of compound 2

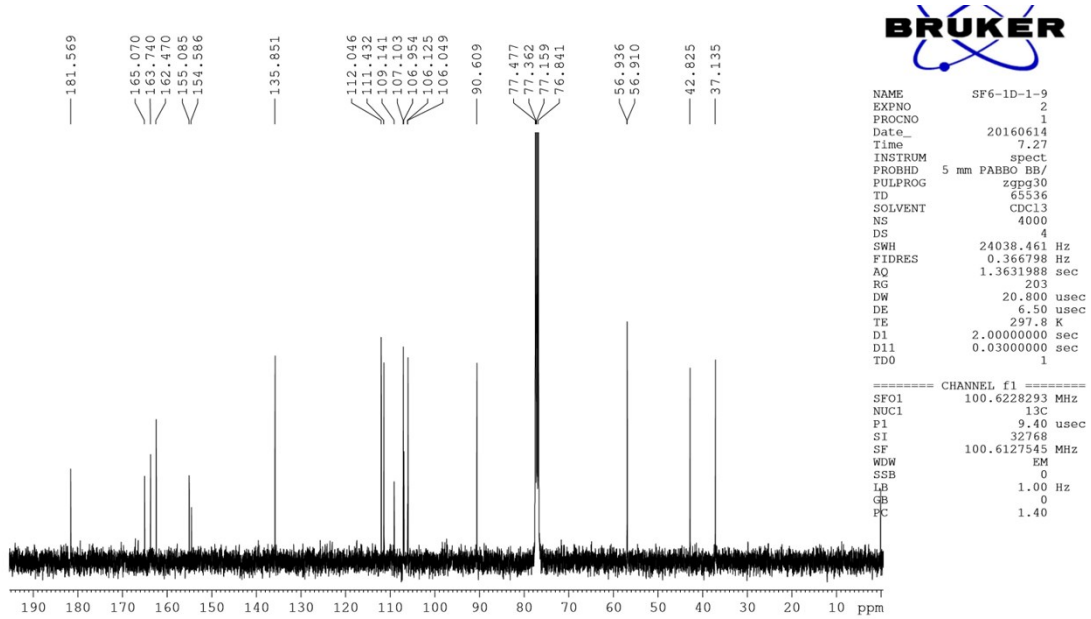


Figure S14. The HSQC spectrum of compound 2

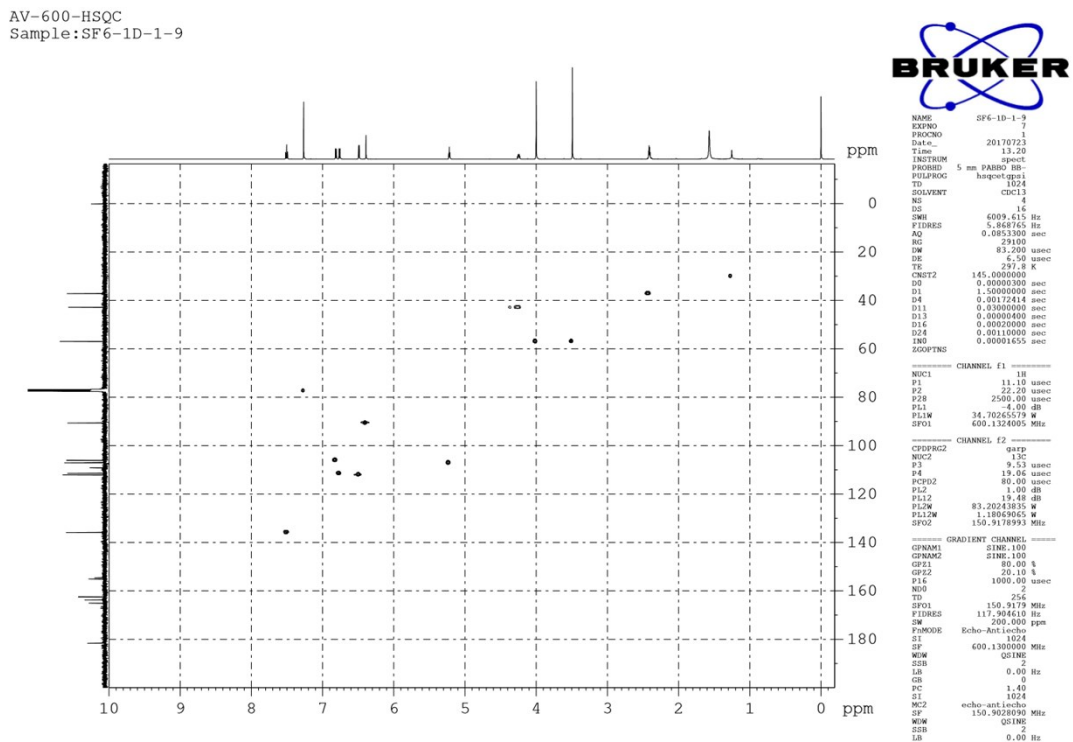


Figure S15. The HMBC spectrum of compound 2

AV-600-HMBC
Sample:SF6-1D-1-9

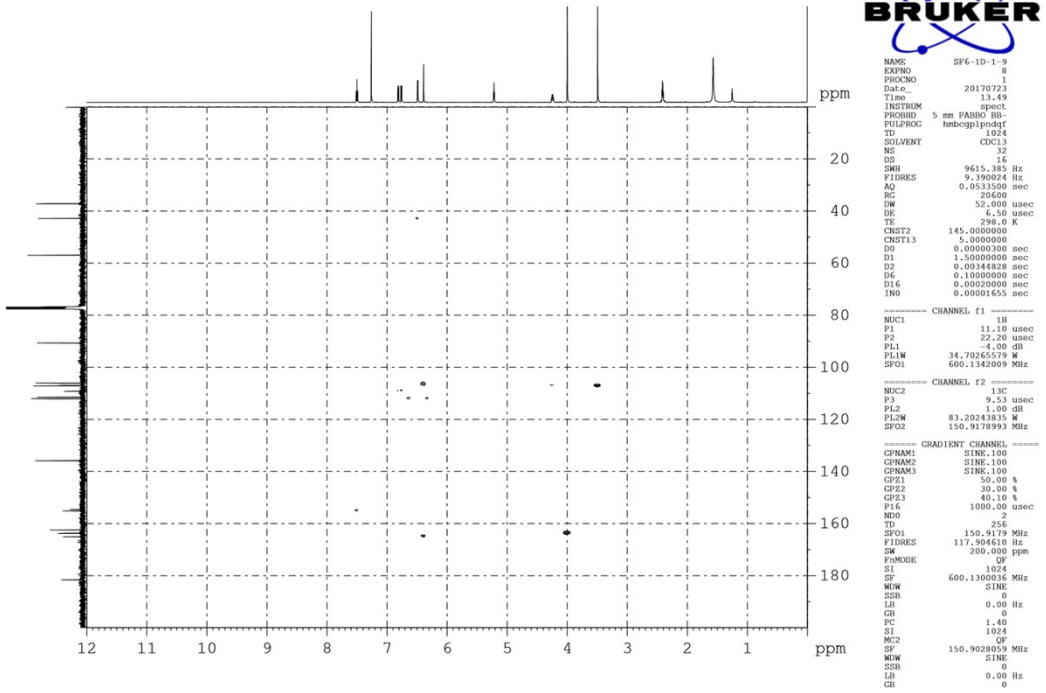
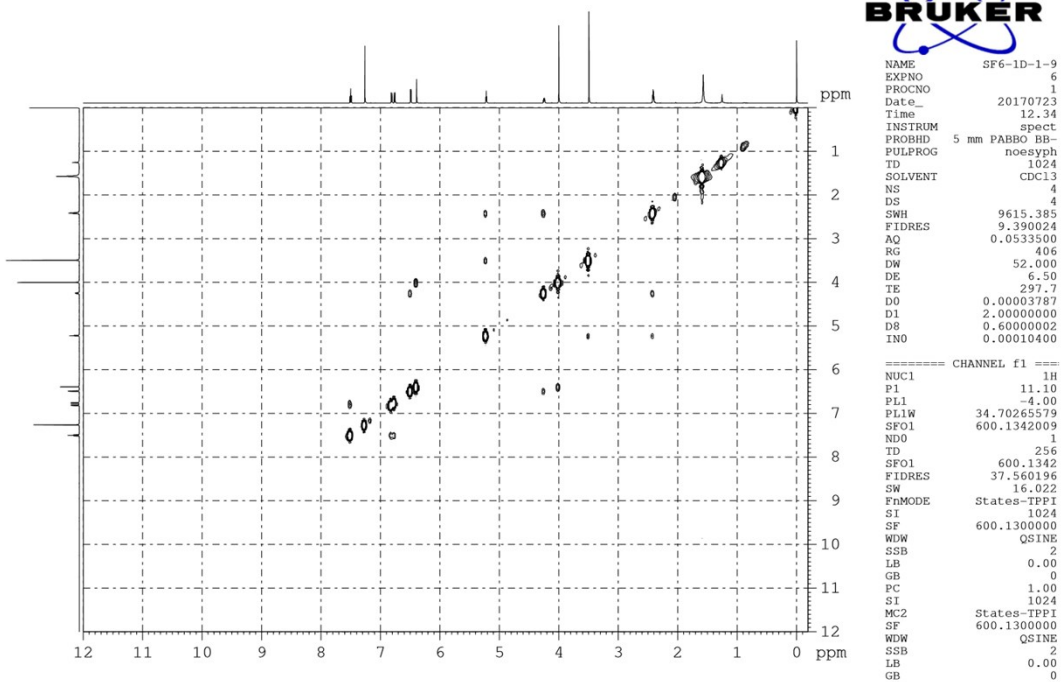


Figure S16. The NOESY spectrum of compound 2

AV-600-NOESY
Sample:SF6-1D-1-9



3. The spectra of penicillone C (3)

Figure S17. The UV spectrum of compound 3

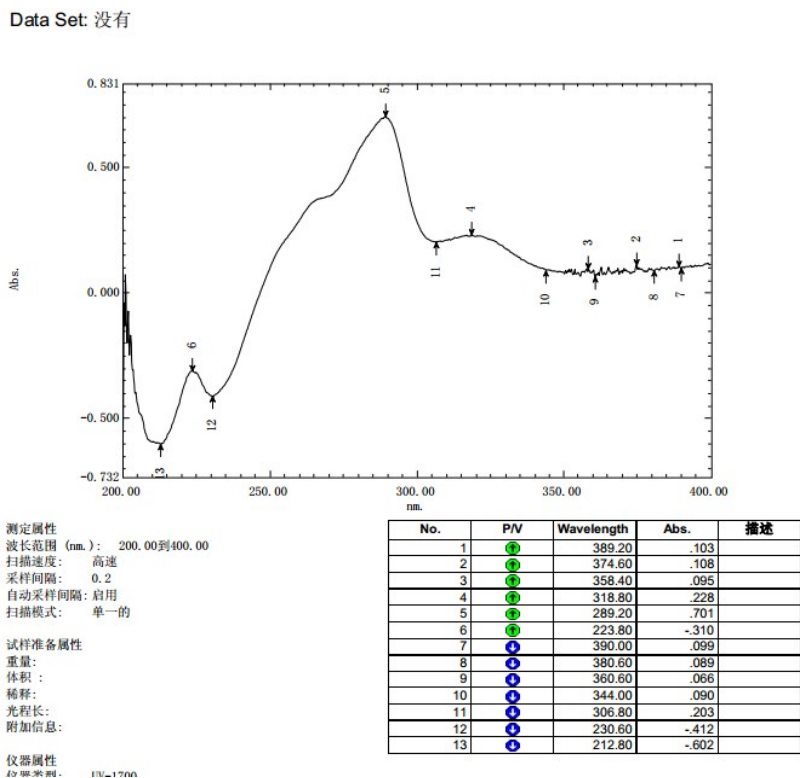


Figure S18. The IR spectrum of compound 3

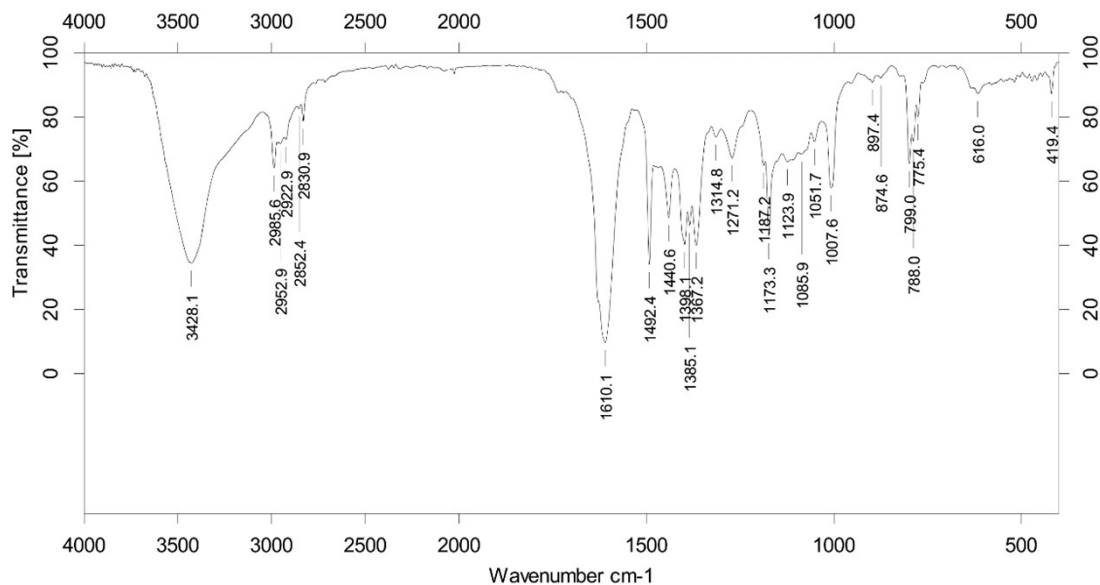


Figure S19. The HR-ESI-MS spectrum of compound 3

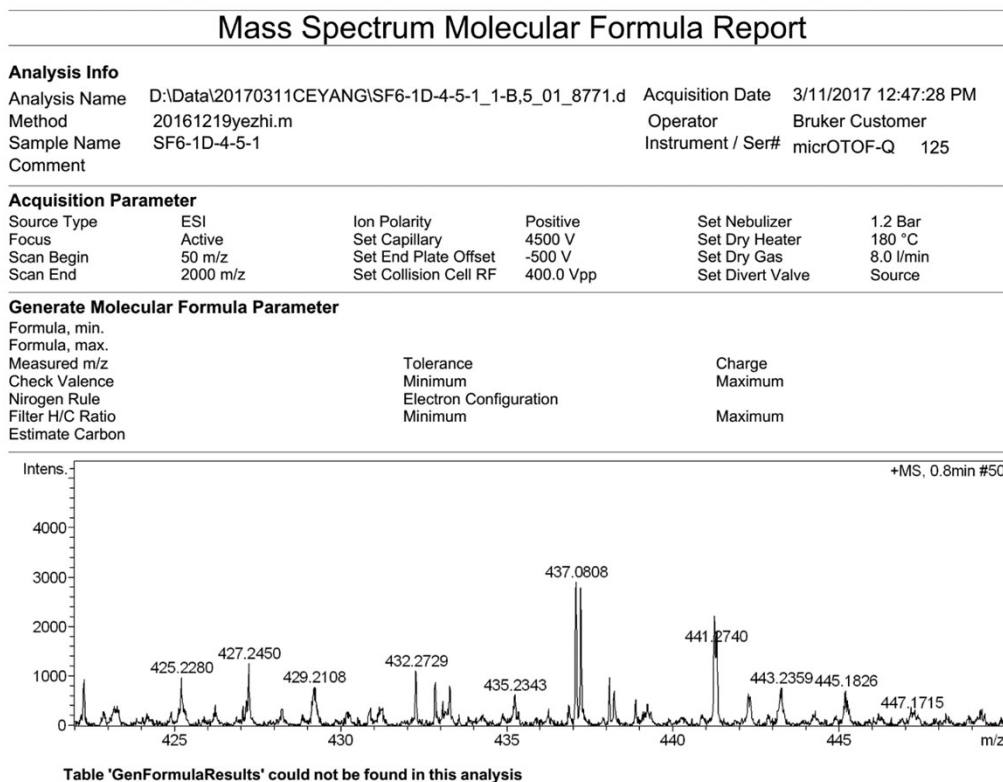


Figure S20. The ¹H-NMR spectrum of compound 3

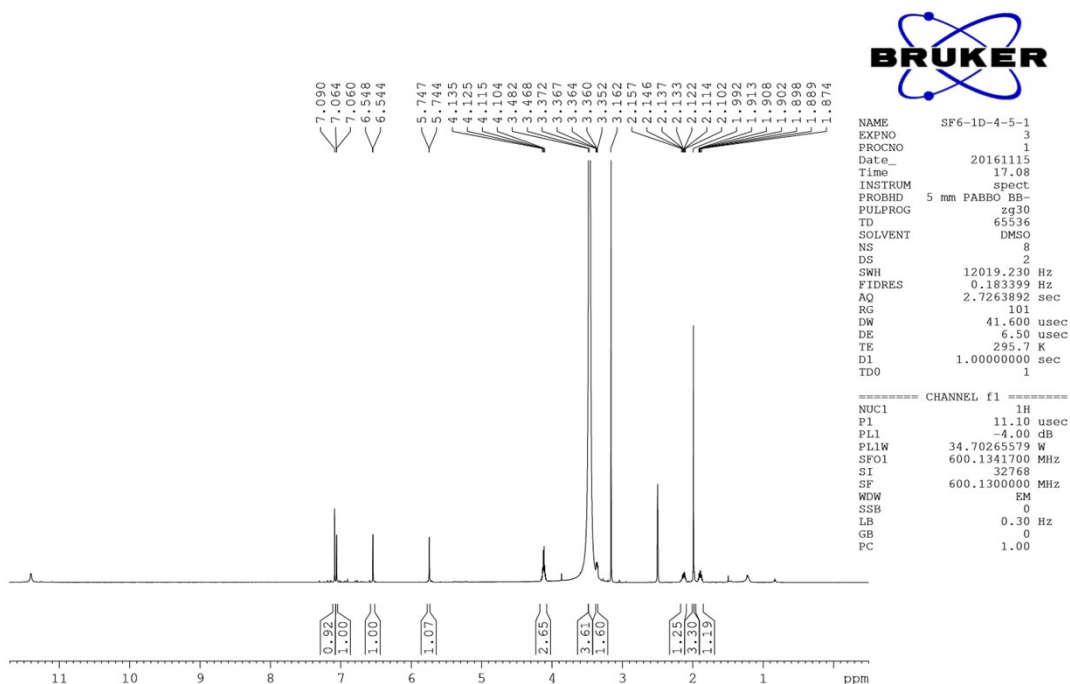


Figure S21. The ^{13}C -NMR spectrum of compound 3

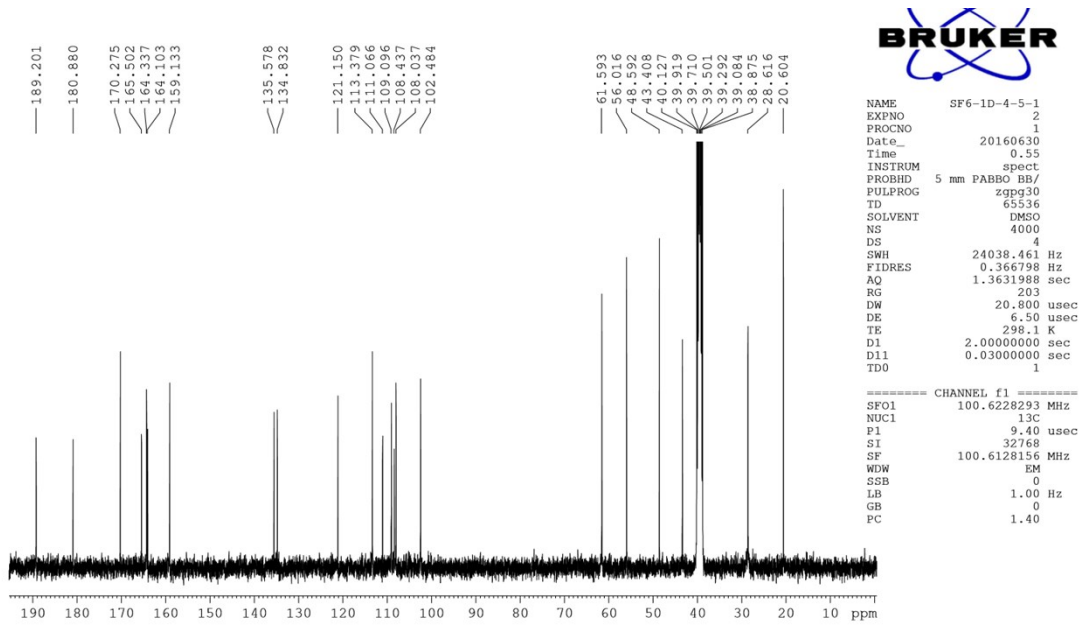


Figure S22. The HSQC spectrum of compound 3

Sample:

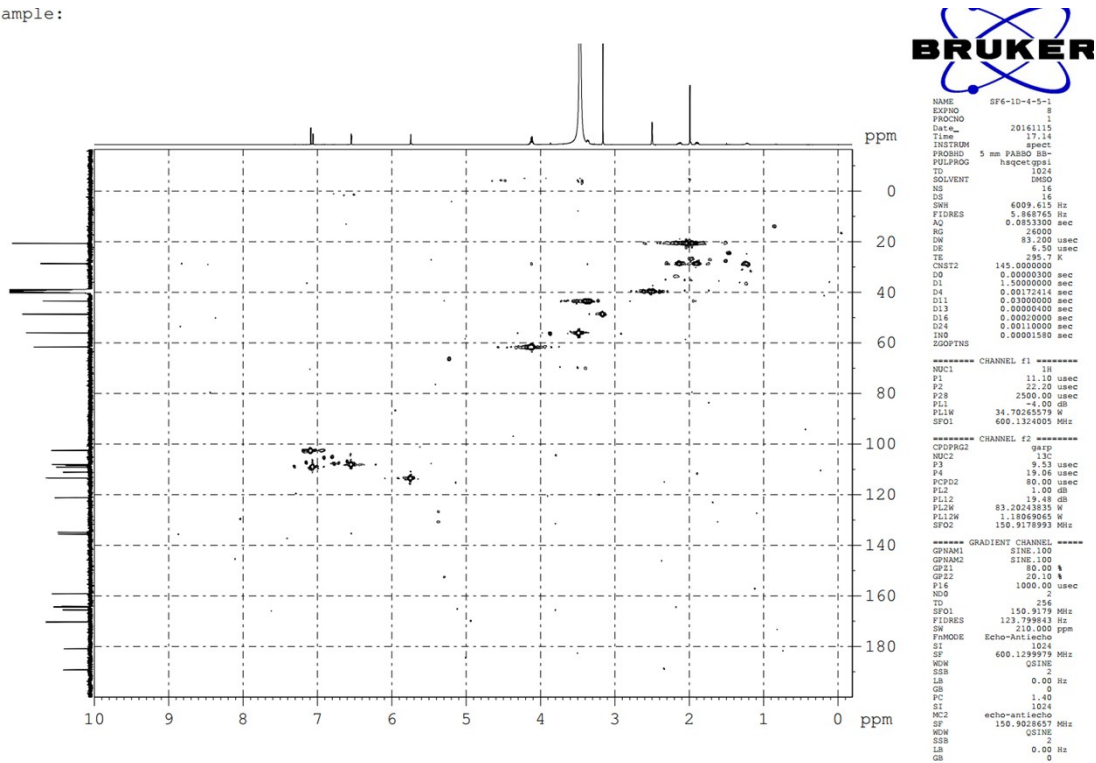


Figure S23. The HMBC spectrum of compound 3

AV-600-HMBC
Sample:

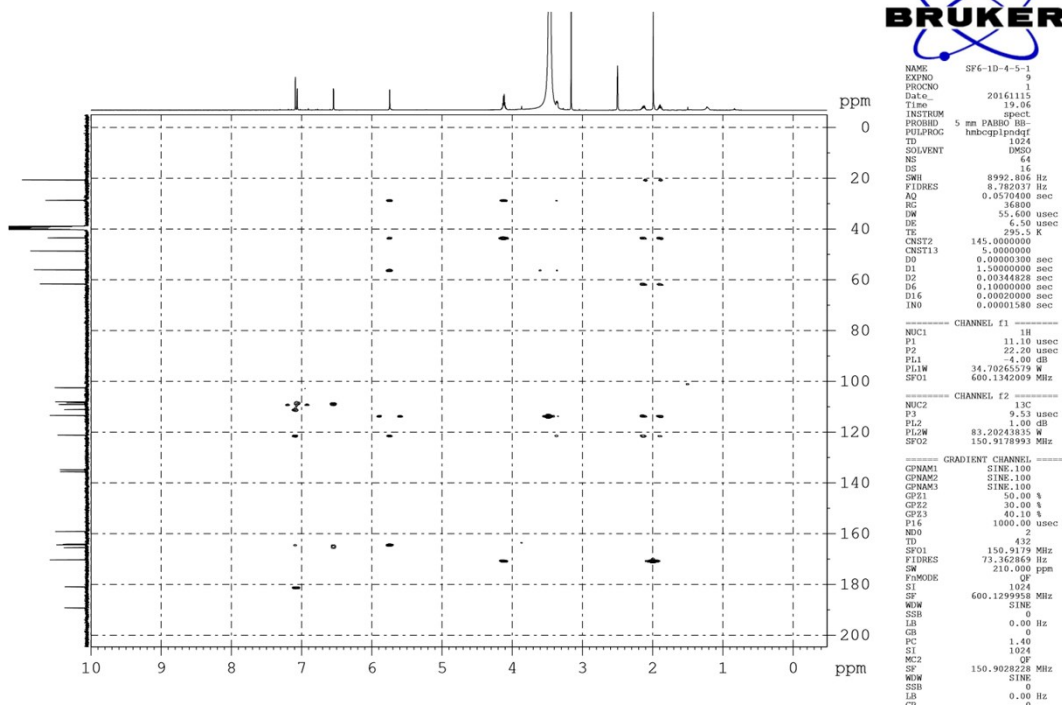
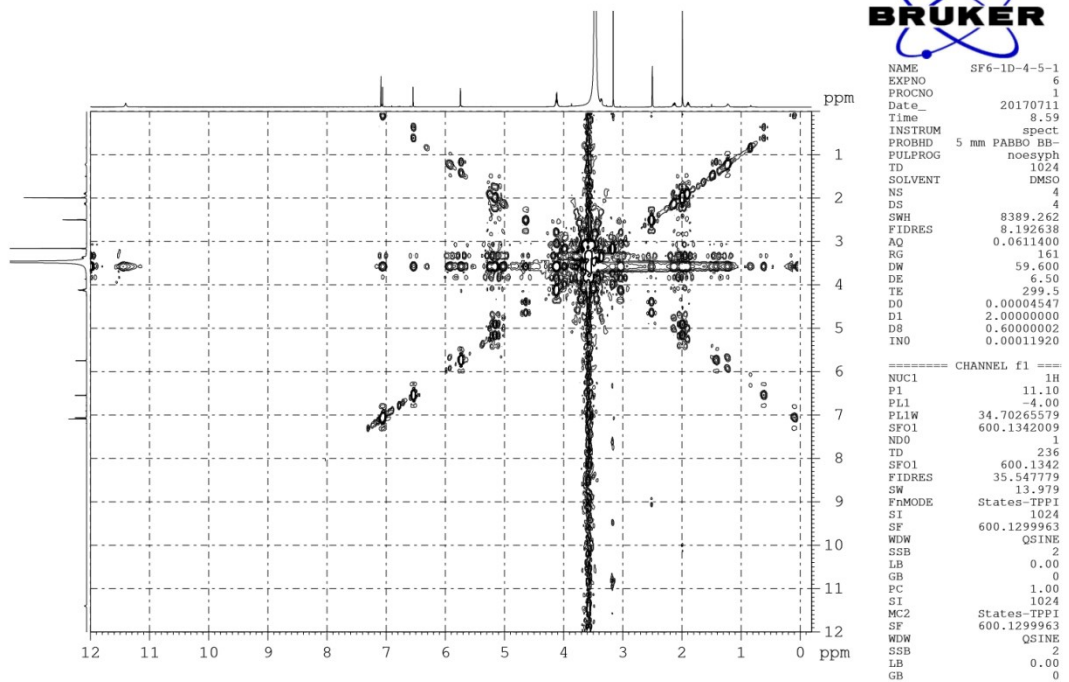


Figure S24. The NOESY spectrum of compound 3

AV-600-NOESY
Sample:



4. The spectra of penicillone D (4)

Figure S25. The UV spectrum of compound 4

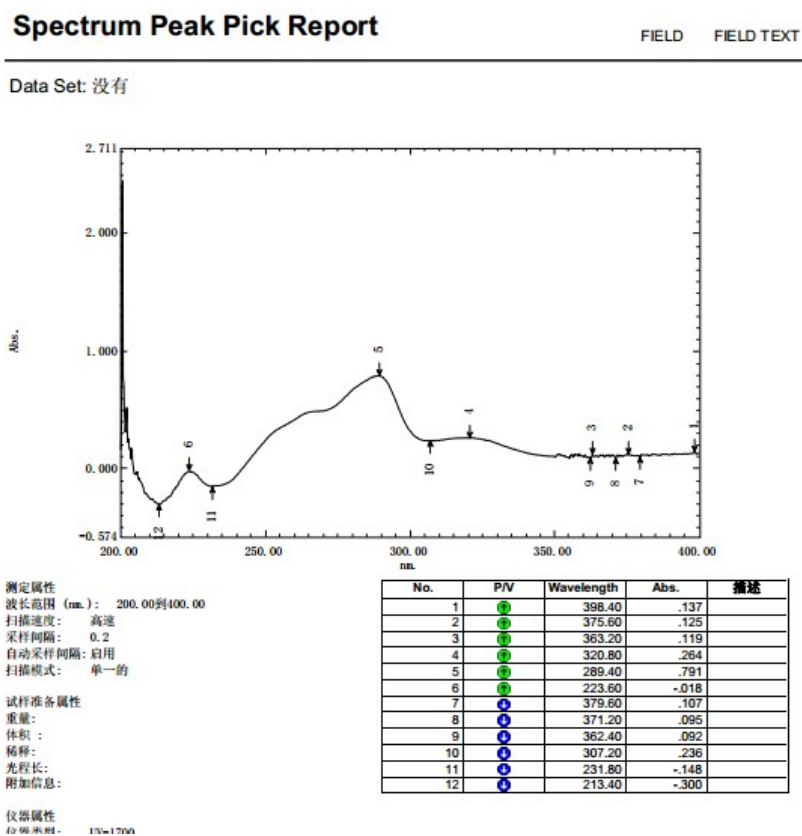


Figure S26. The IR spectrum of compound 4

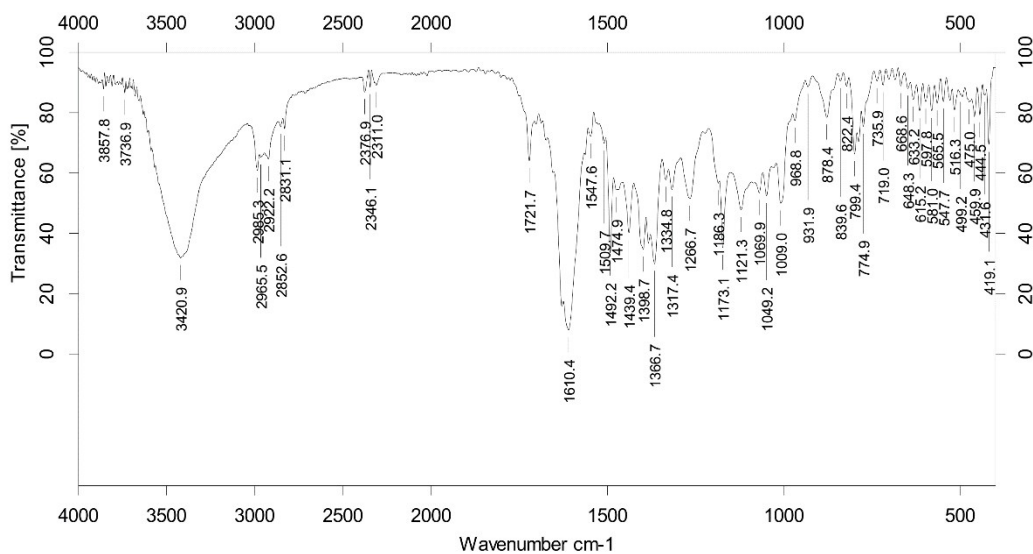


Figure S27. The HR-ESI-MS spectrum of compound 4

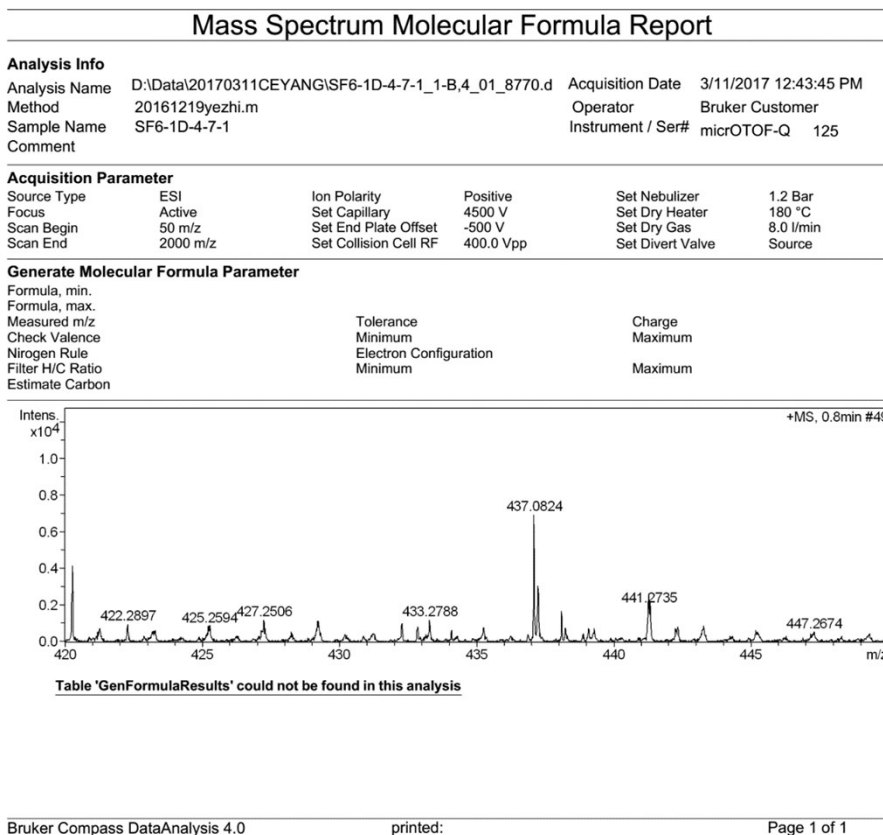


Figure S28. The ¹H-NMR spectrum of compound 4

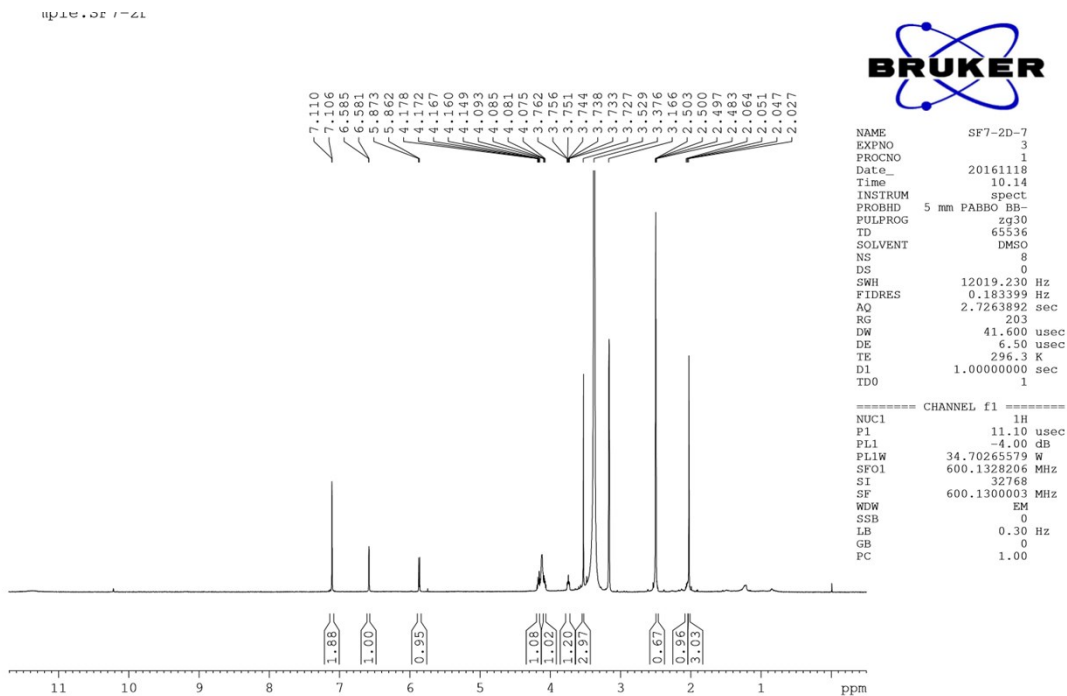


Figure S29. The ^{13}C -NMR spectrum of compound 4

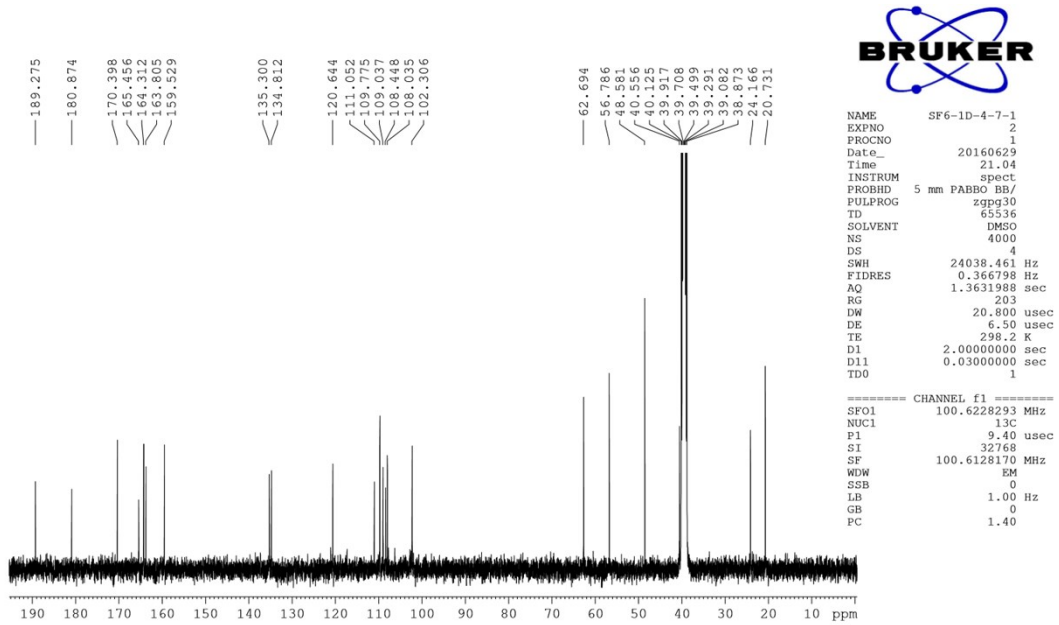


Figure S30. The HSQC spectrum of compound 4

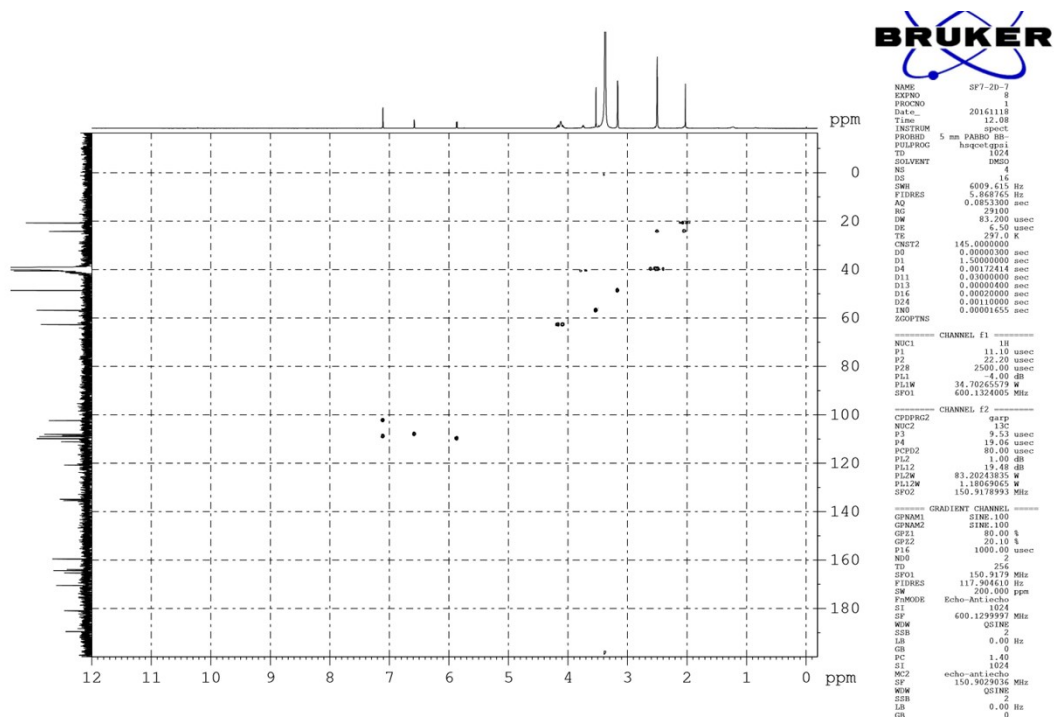


Figure S31. The HMBC spectrum of compound 4

AV-600-HMBC
Sample:SF7-2D-7

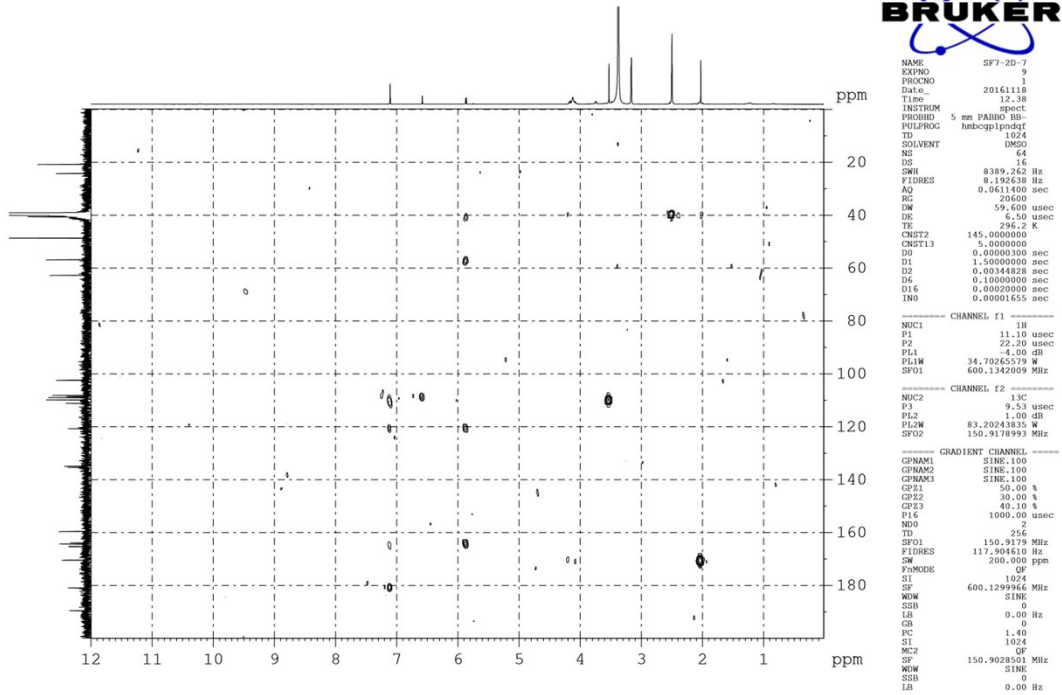
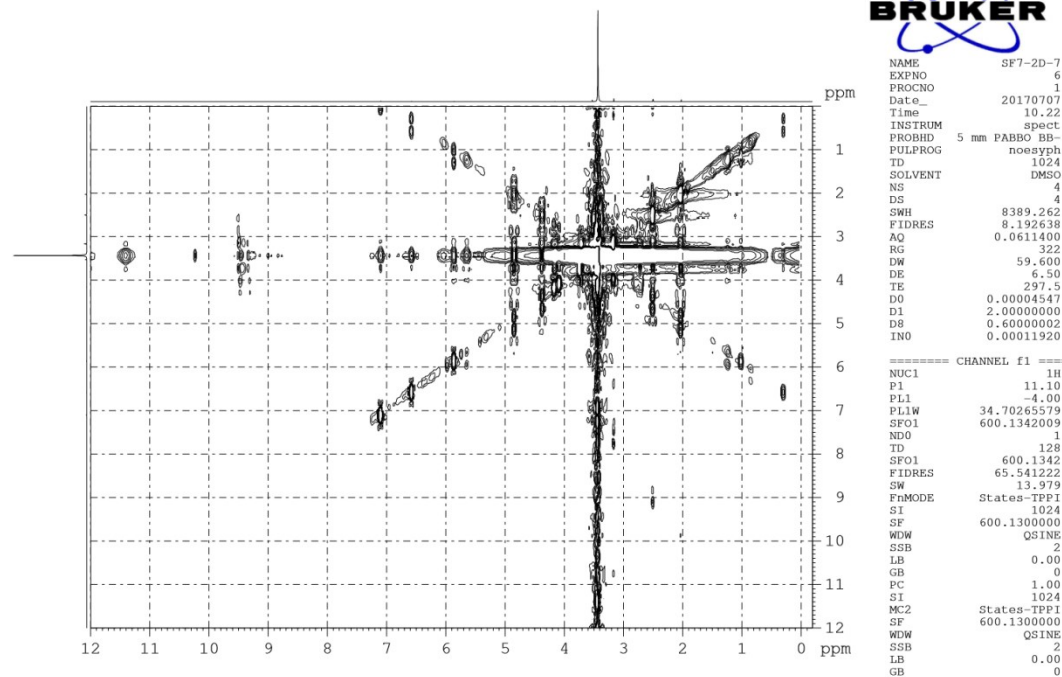


Figure S32. The NOESY spectrum of compound 4

AV-600-NOESY
Sample:



5. The spectra of compound 5

Figure S33. The $^1\text{H-NMR}$ spectrum of compound 5

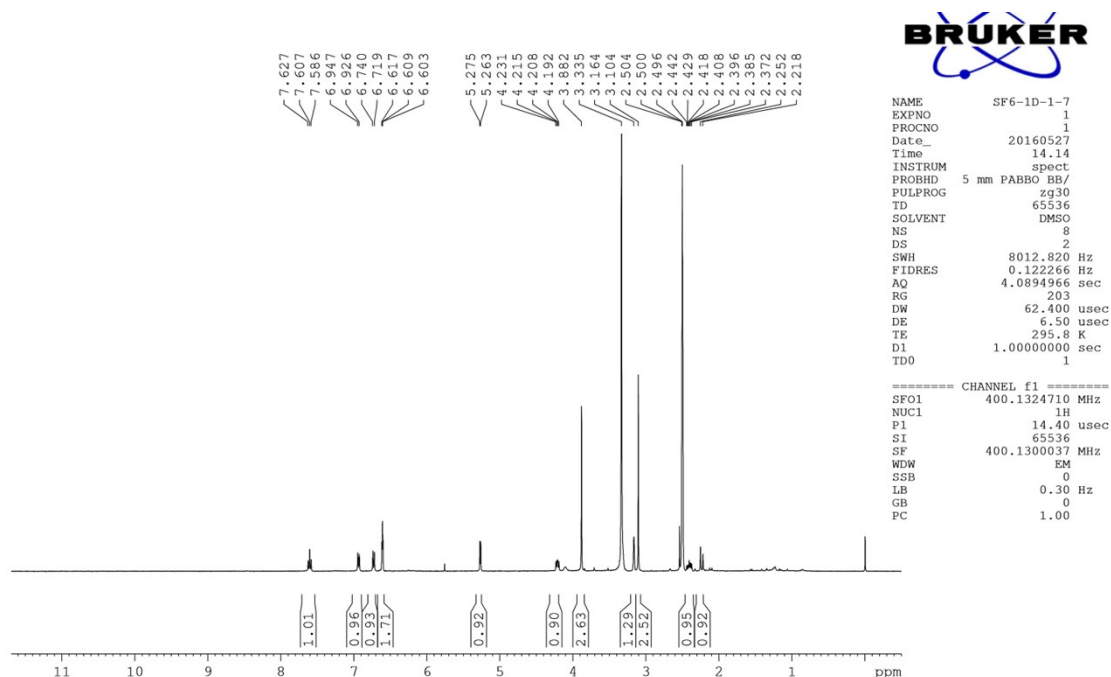
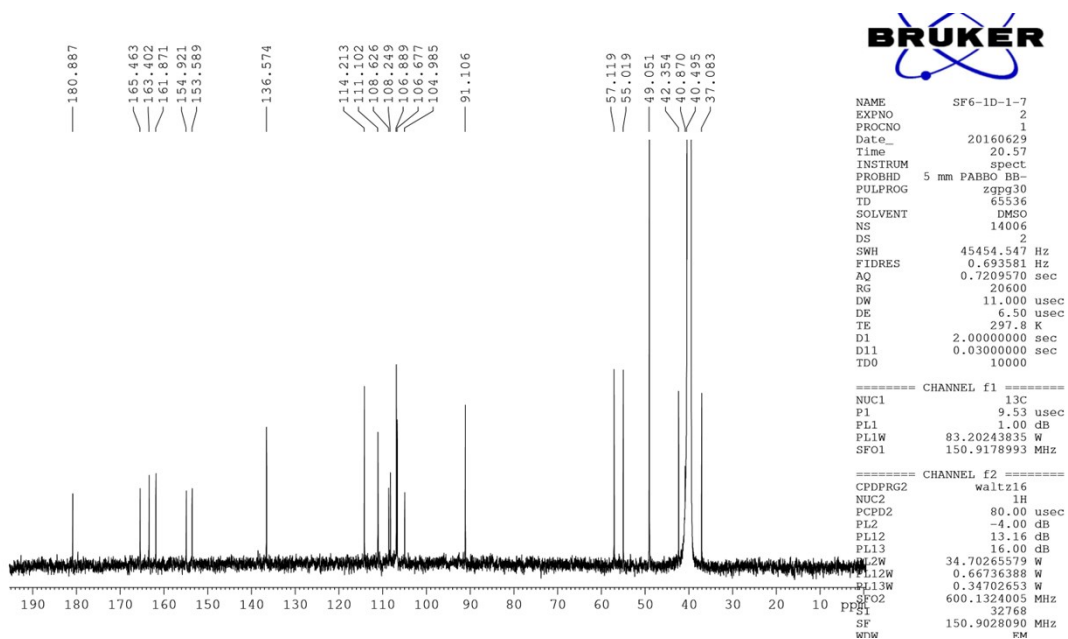


Figure S34. The $^{13}\text{C-NMR}$ spectrum of compound 5



6. The spectra of compound 6

Figure S35. The $^1\text{H-NMR}$ spectrum of compound 6

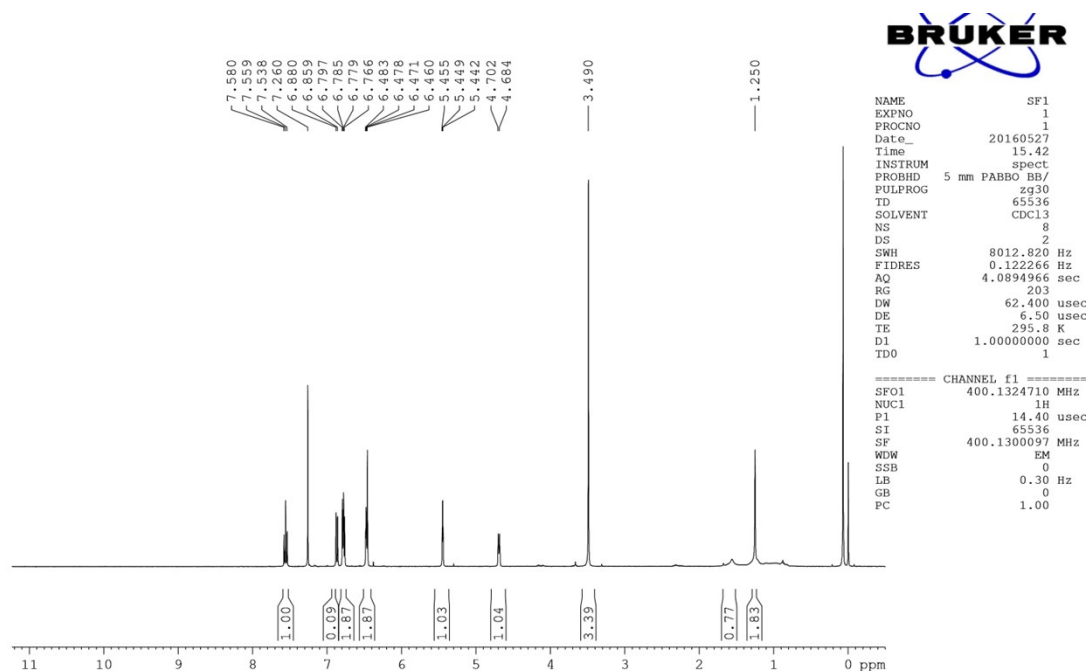
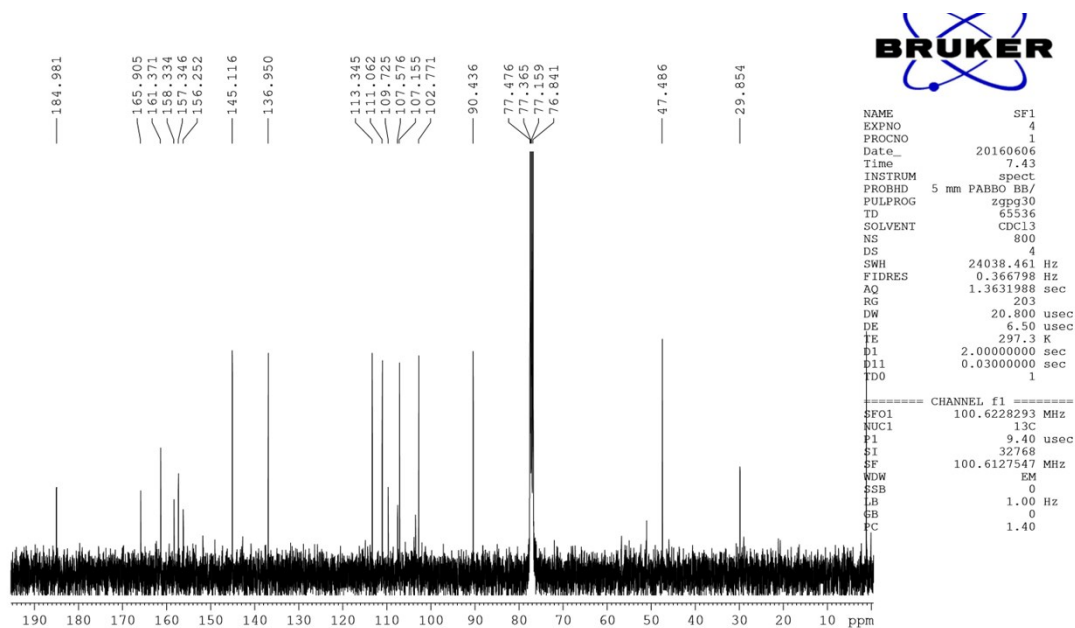


Figure S36. The $^{13}\text{C-NMR}$ spectrum of compound 6



7. The spectra of compound 7

Figure S37. The $^1\text{H-NMR}$ spectrum of compound 7

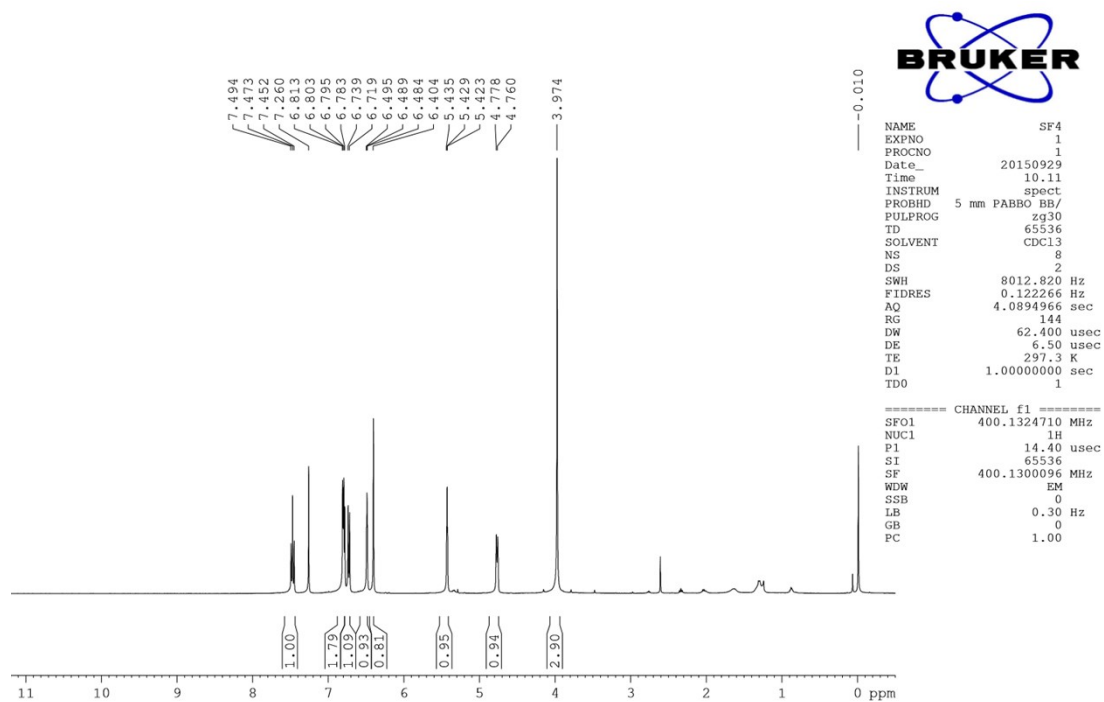
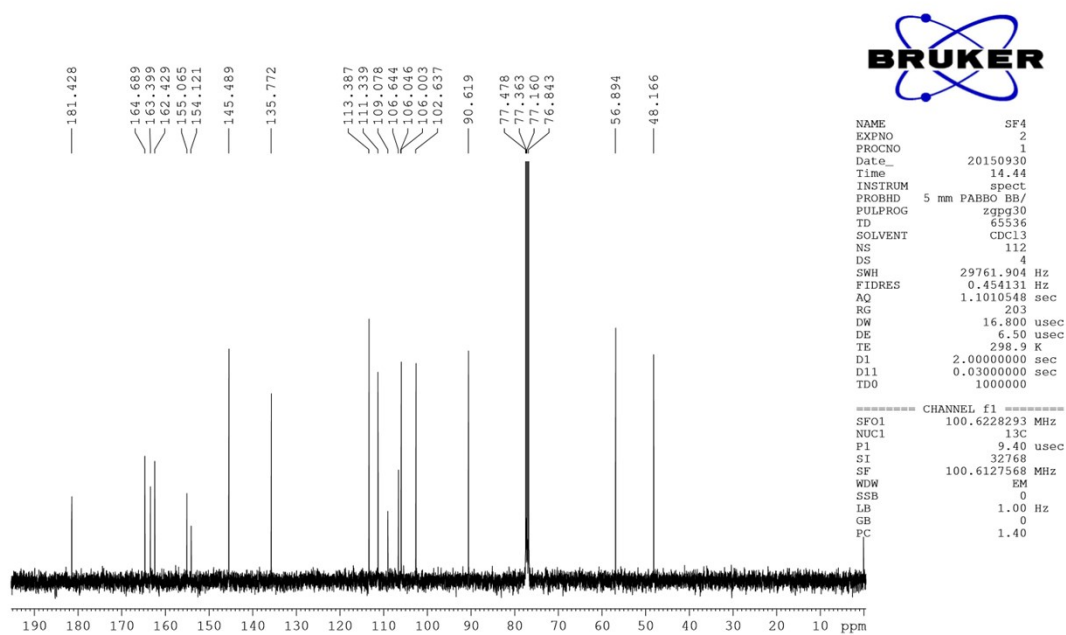


Figure S38. The $^{13}\text{C-NMR}$ spectrum of compound 7



8. The spectra of compound 8

Figure S39. The $^1\text{H-NMR}$ spectrum of compound 8

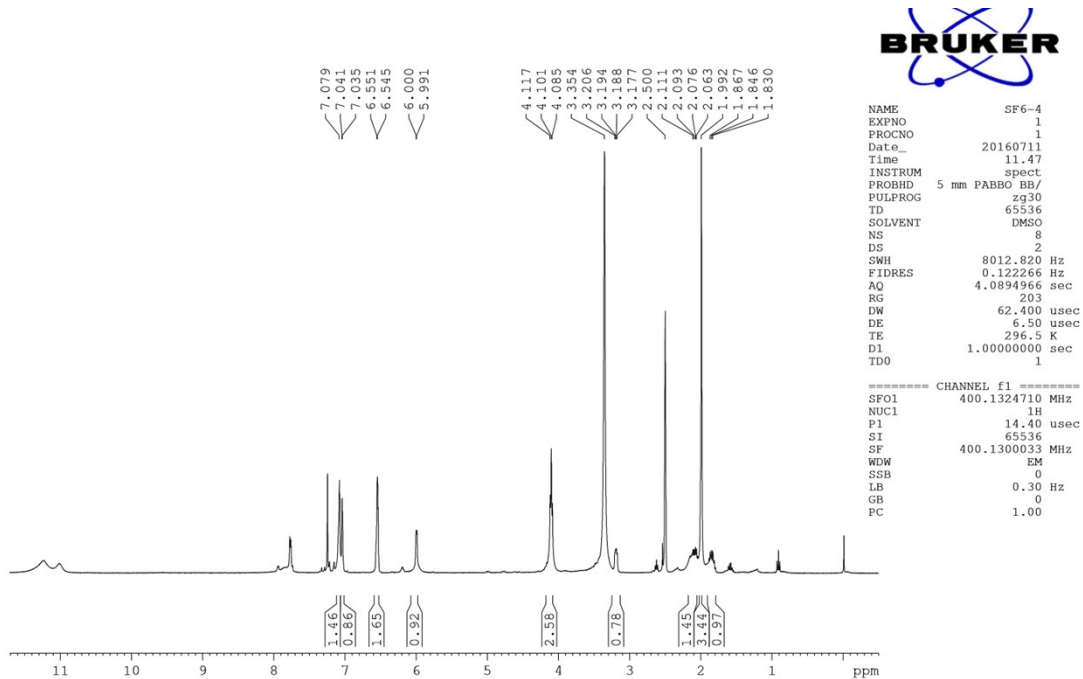
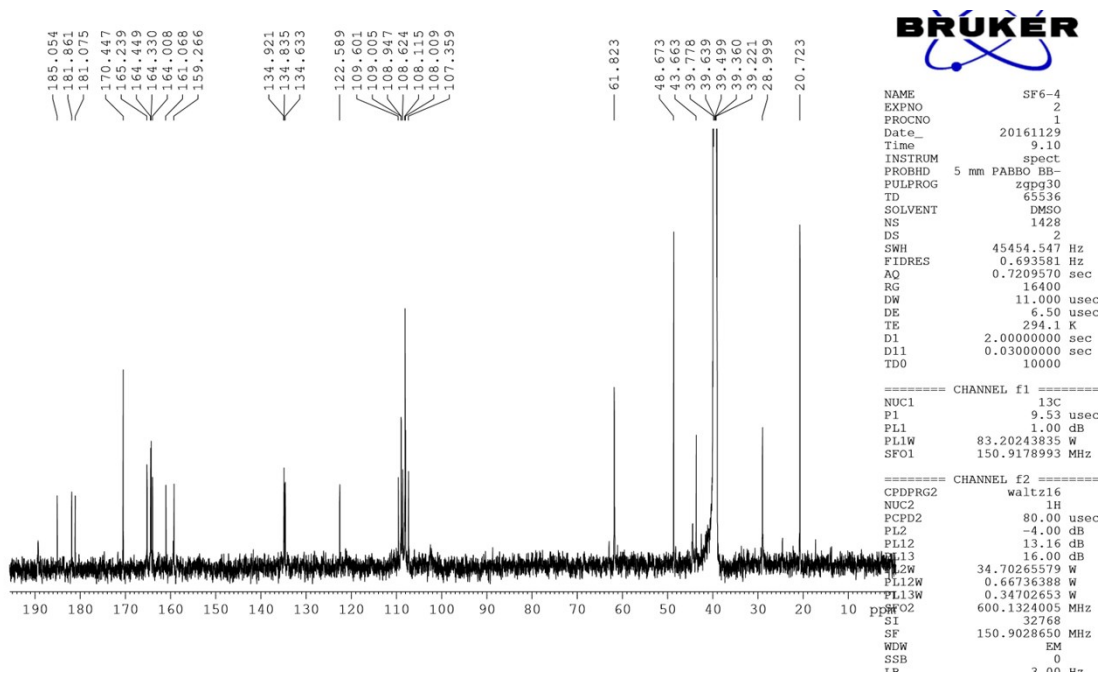


Figure S40. The $^{13}\text{C-NMR}$ spectrum of compound 8



9. The spectra of compound 9

Figure S41. The $^1\text{H-NMR}$ spectrum of compound 9

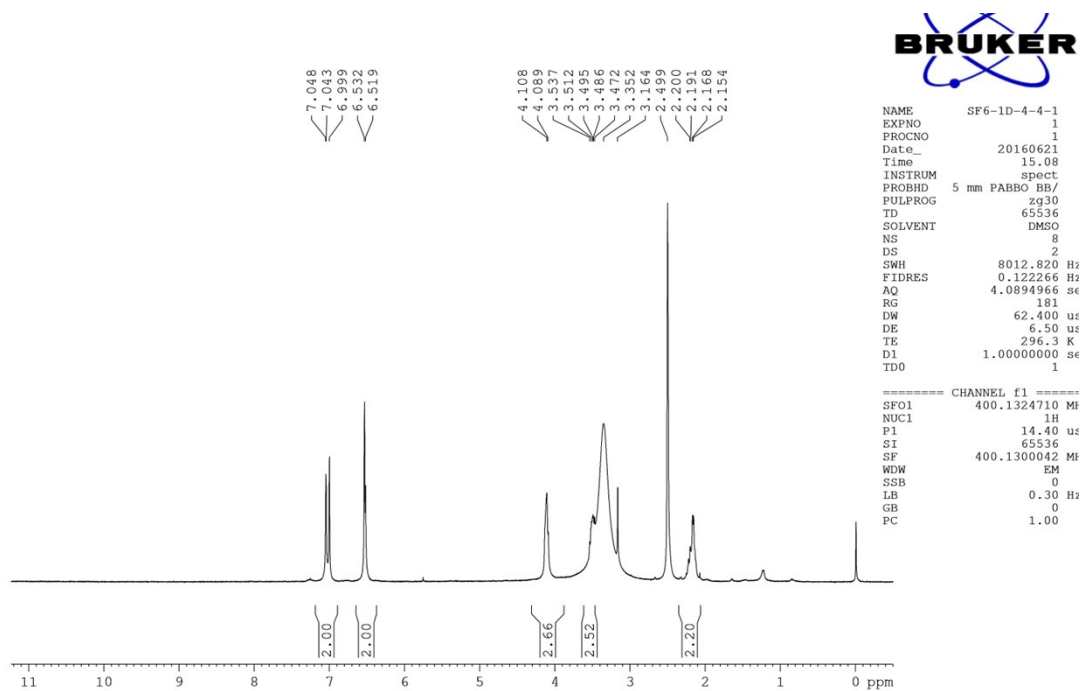
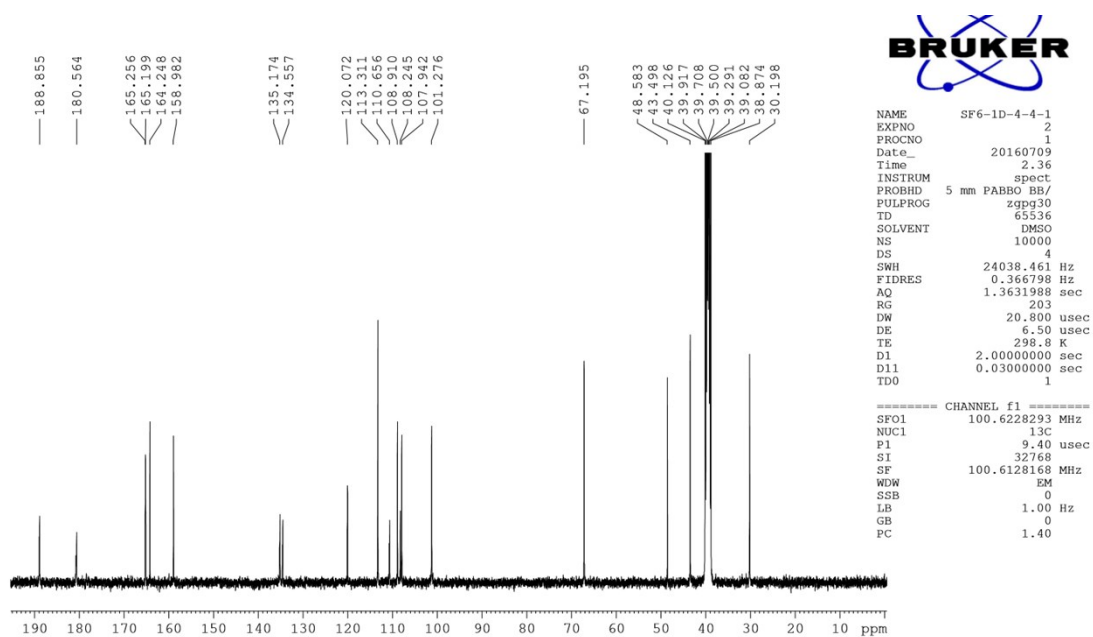


Figure S42. The $^{13}\text{C-NMR}$ spectrum of compound 9



10. The spectra of compound 10

Figure S43. The ^1H -NMR spectrum of compound 10

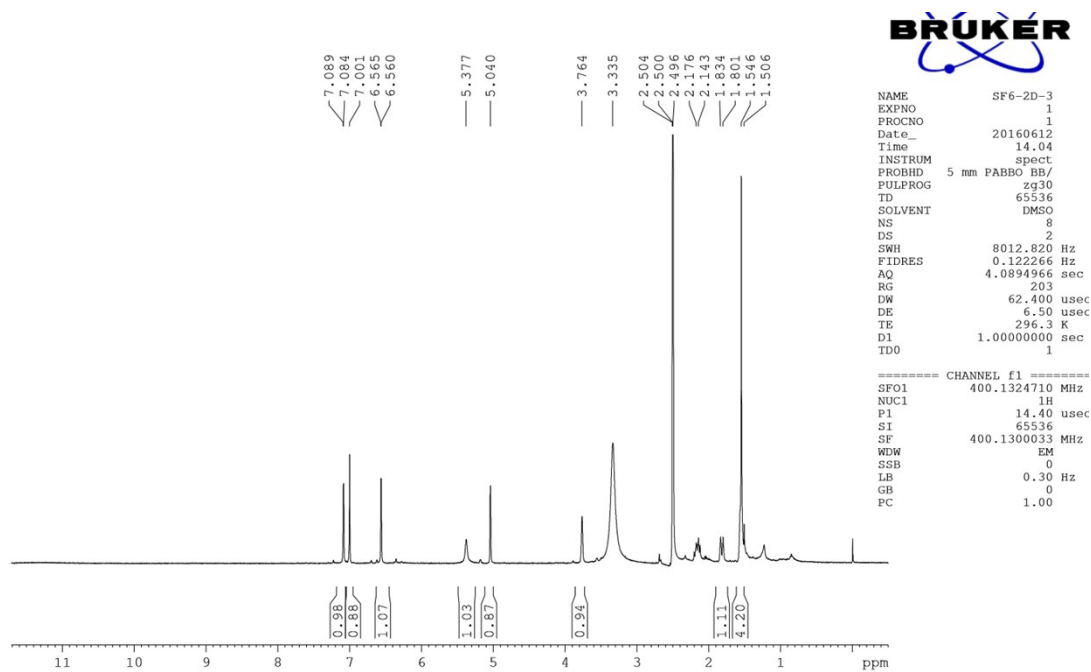
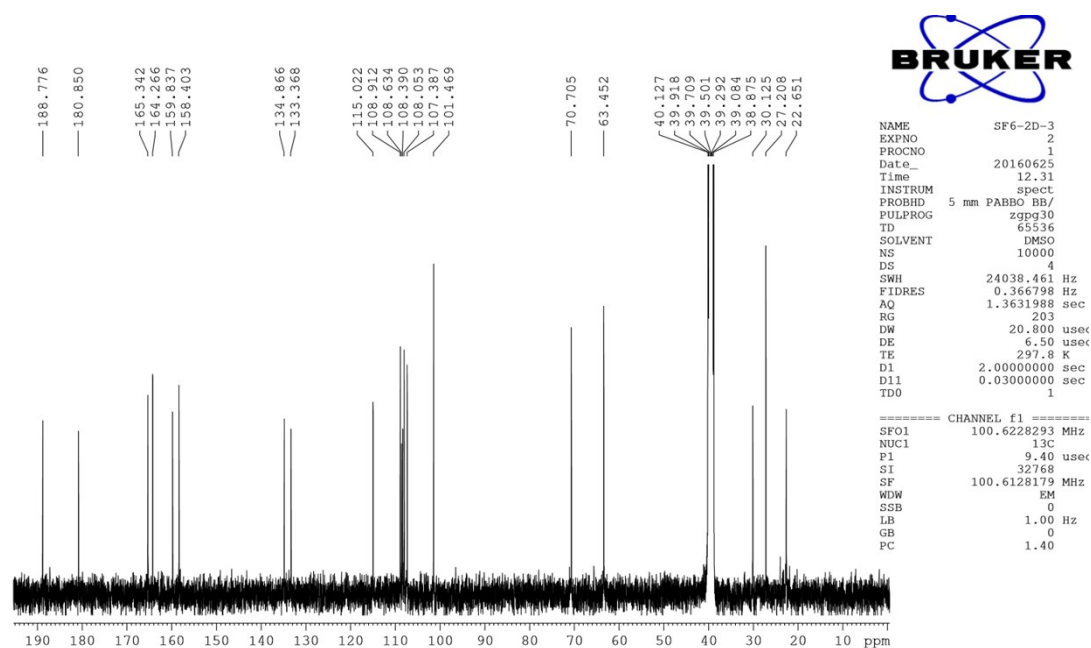


Figure S44. The ^{13}C -NMR spectrum of compound 10



11. The spectra of compound 11

Figure S45. The ¹H-NMR spectrum of compound 11

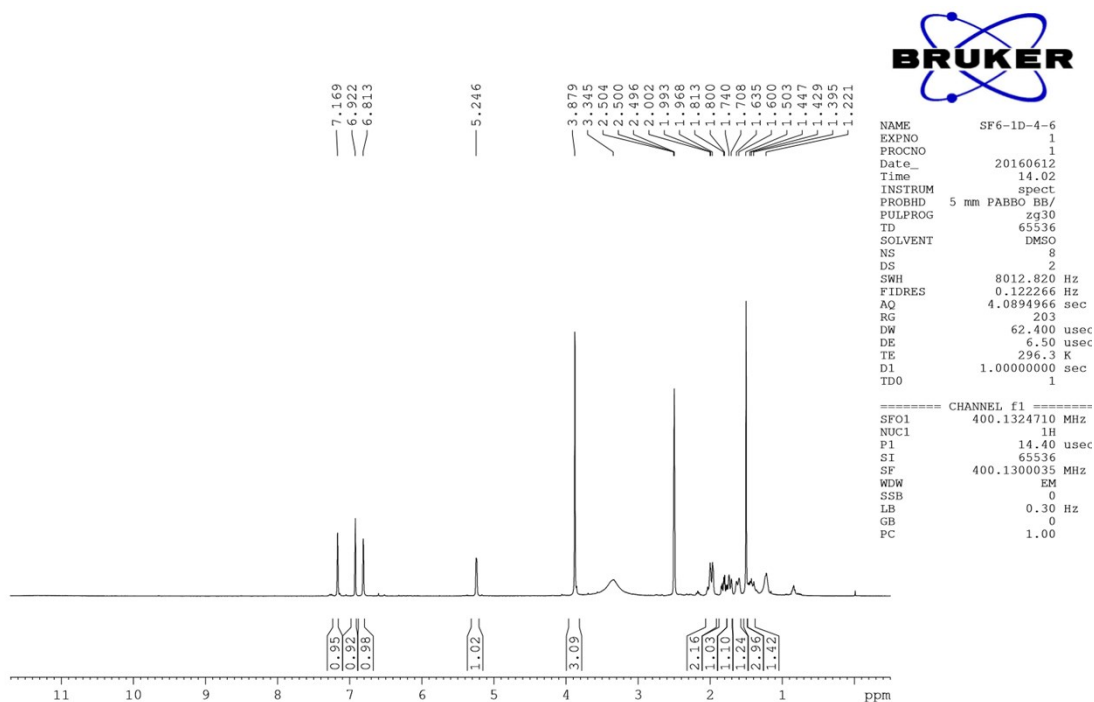
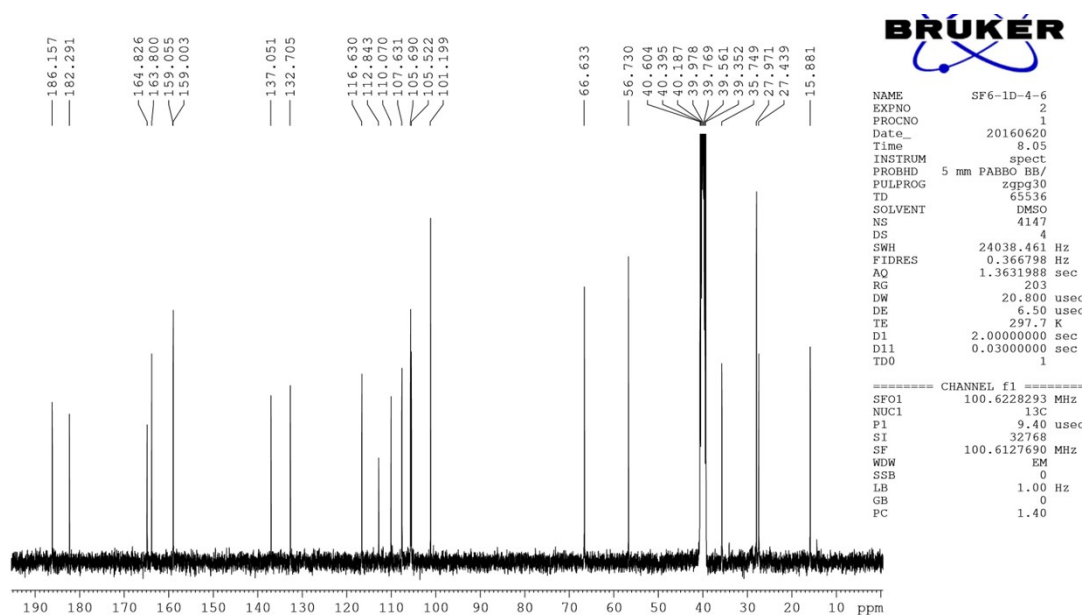


Figure S46. The ¹³C-NMR spectrum of compound 11



12. The spectra of compound 12

Figure S47. The $^1\text{H-NMR}$ spectrum of compound 12

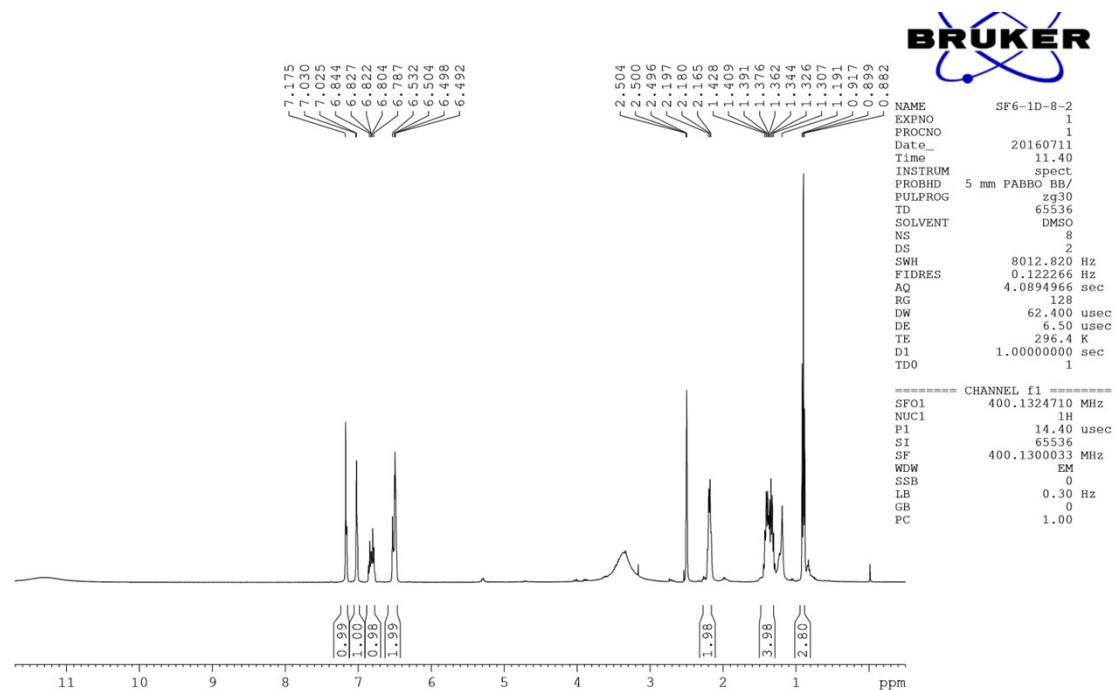
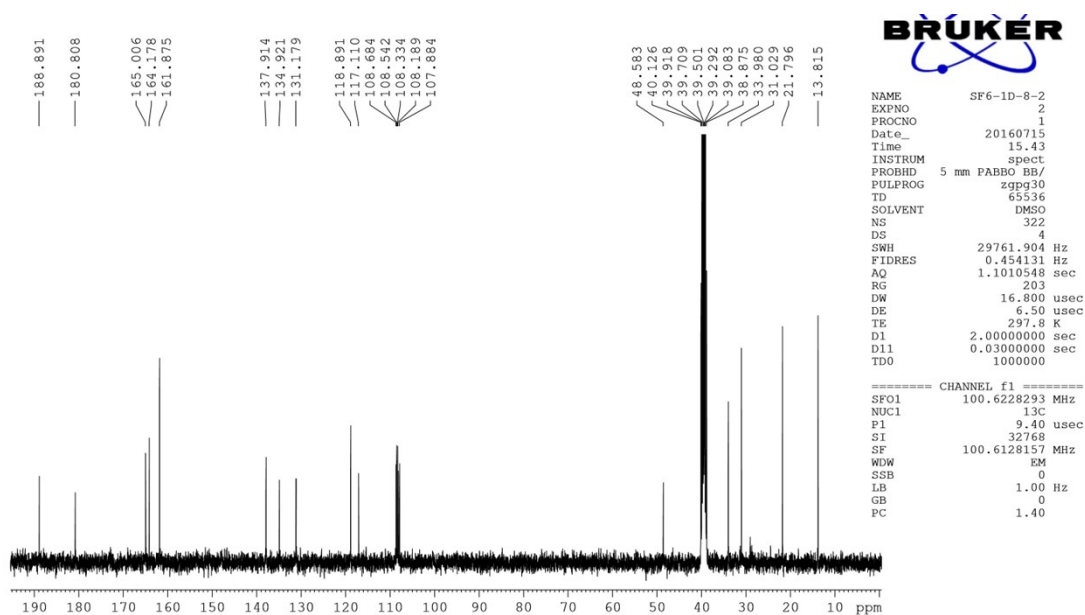


Figure S48. The $^{13}\text{C-NMR}$ spectrum of compound 12



13. The spectra of compound 13

Figure S49. The $^1\text{H-NMR}$ spectrum of compound 13

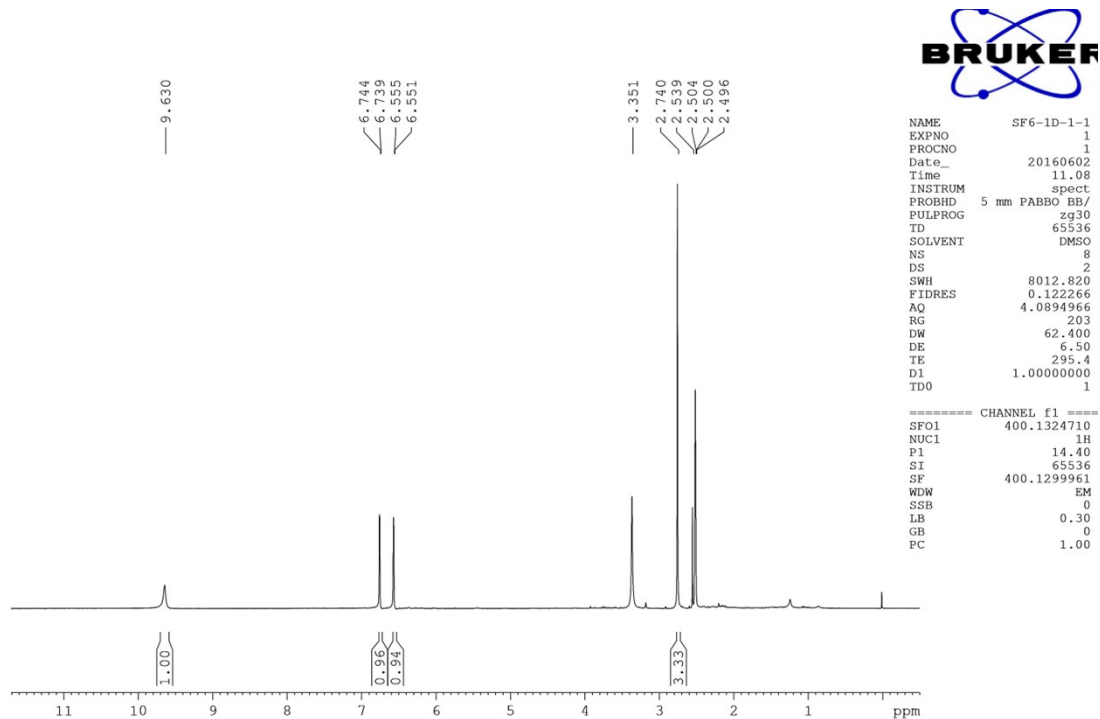
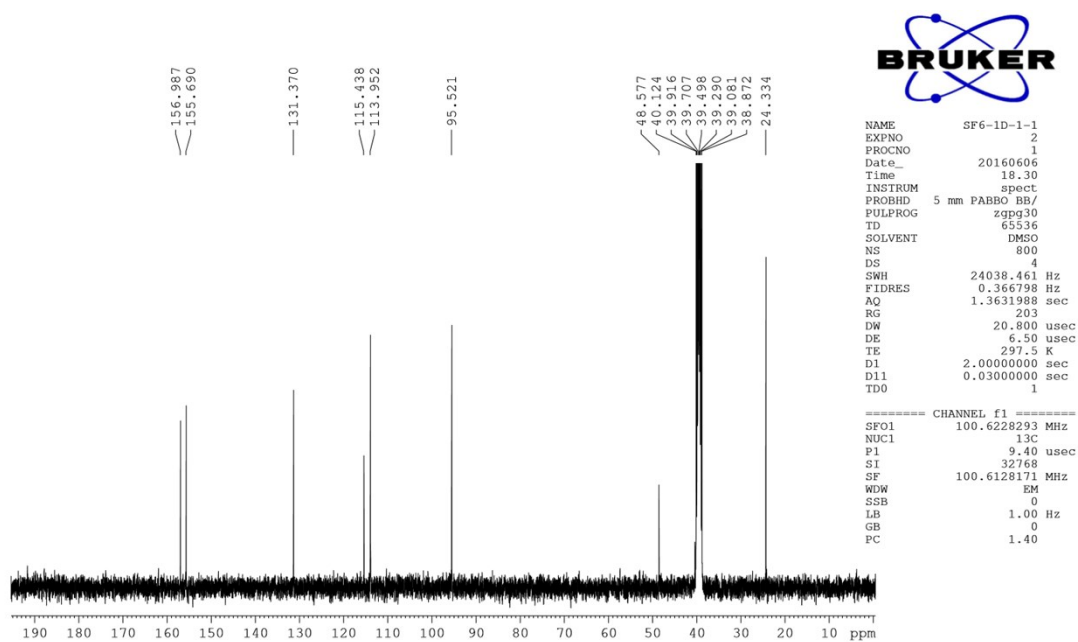


Figure S50. The $^{13}\text{C-NMR}$ spectrum of compound 13



14. The spectra of compound 14

Figure S51. The ^1H -NMR spectrum of compound 14

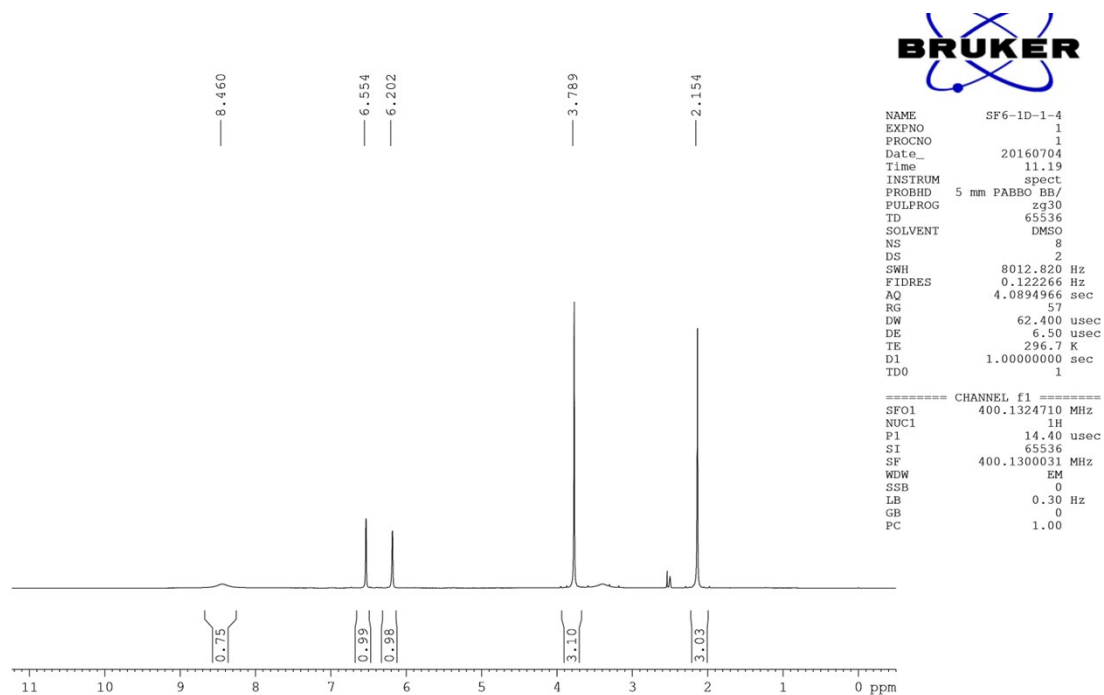
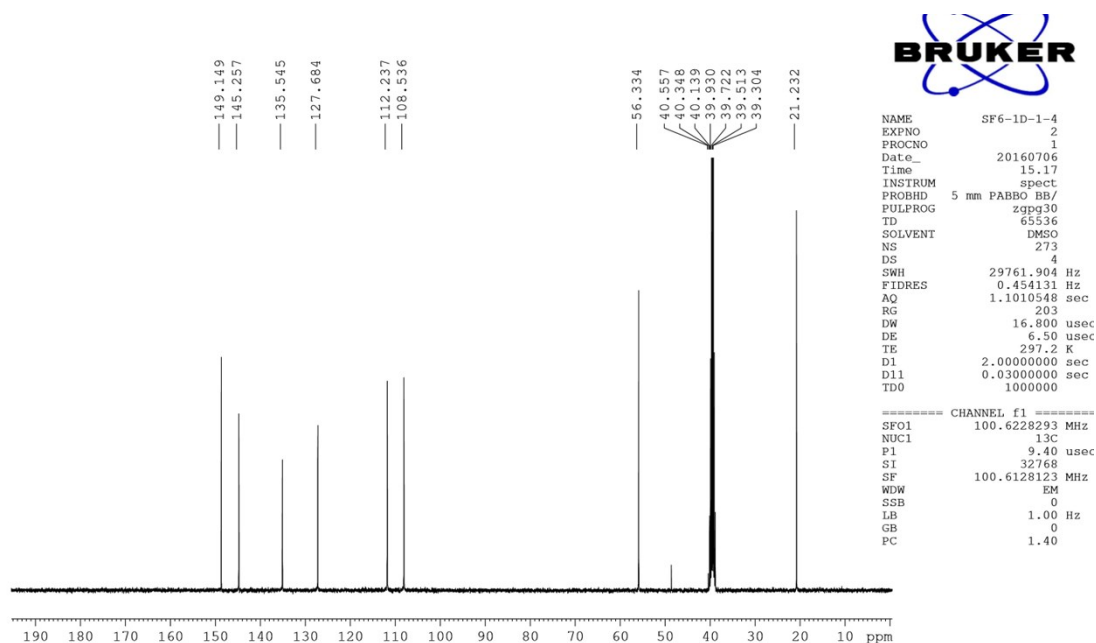


Figure S52. The ^{13}C -NMR spectrum of compound 14



15. The spectra of compound 15

Figure S53. The ^1H -NMR spectrum of compound 15

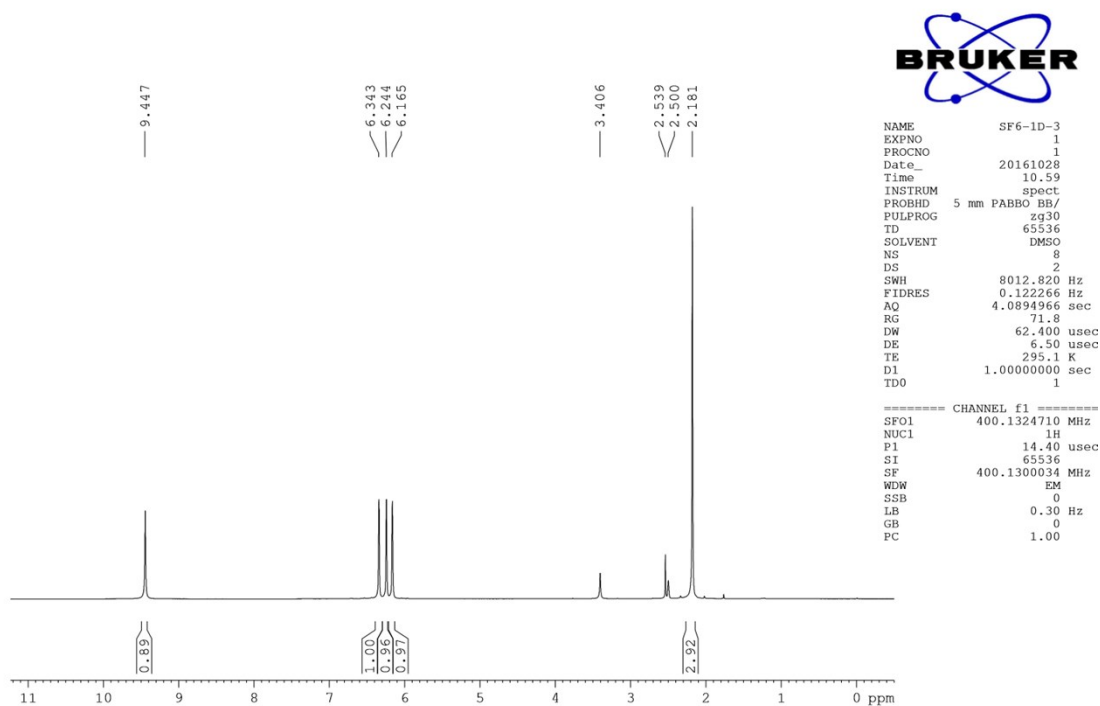
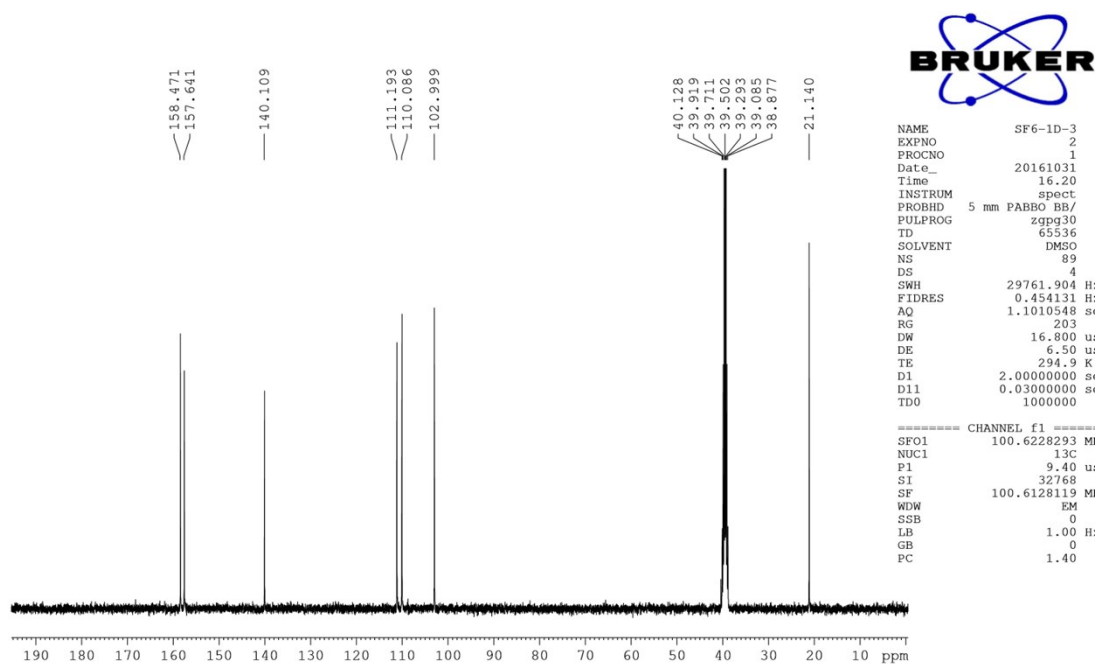


Figure S54. The ^{13}C -NMR spectrum of compound 15



16. The spectra of compound 16

Figure S55. The $^1\text{H-NMR}$ spectrum of compound 16

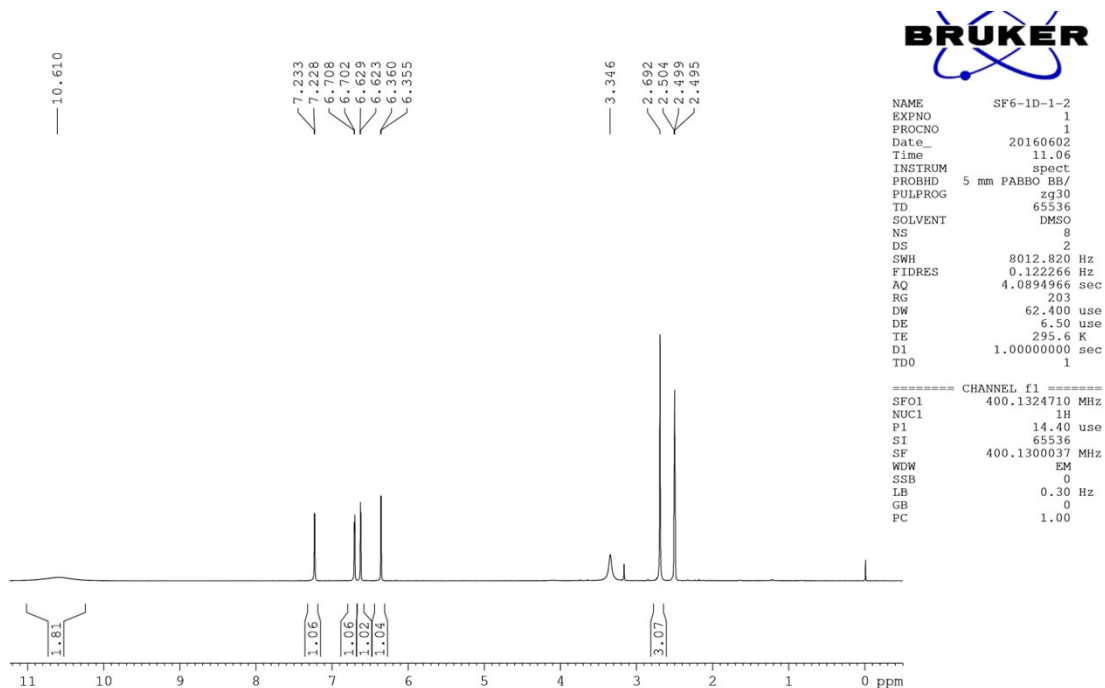


Figure S56. The $^{13}\text{C-NMR}$ spectrum of compound 16

