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Stereochemical insights into neuroprotective lignanamides from the herbs of *Solanum lyratum*

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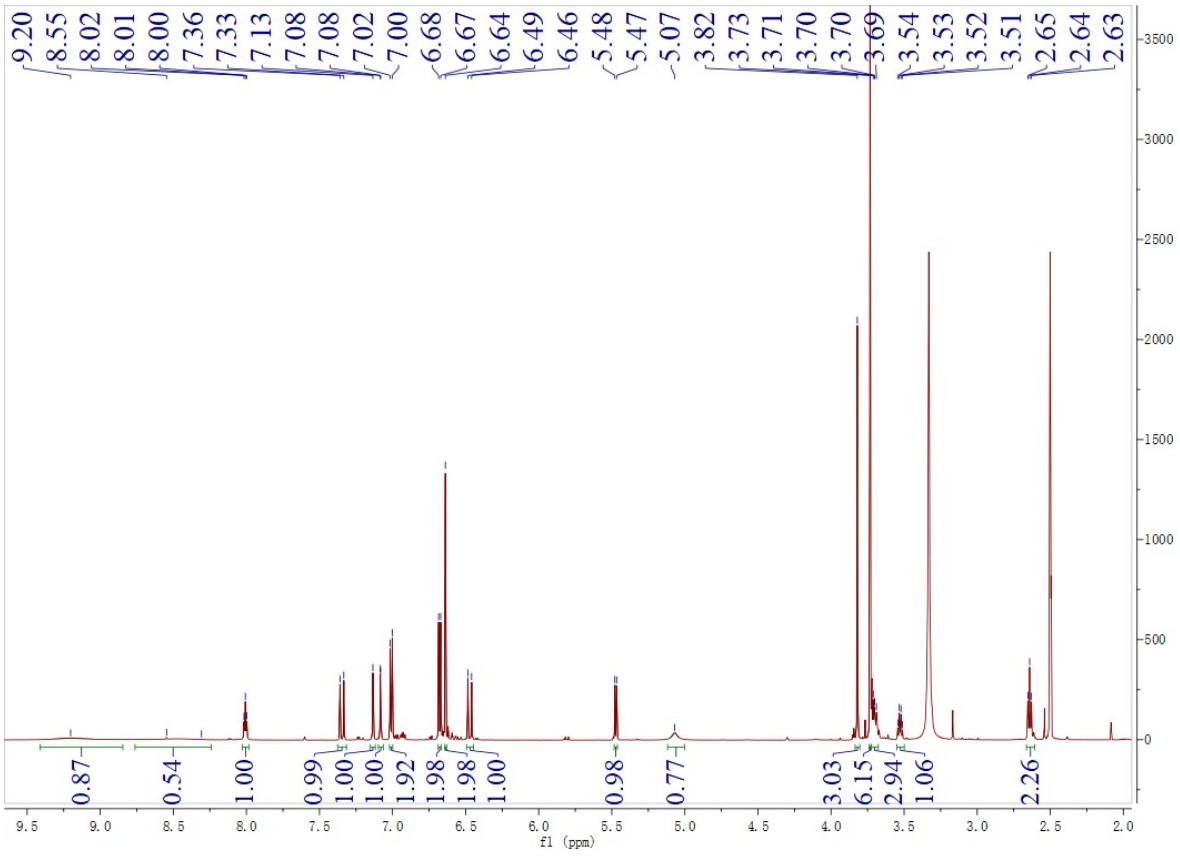


Fig. S1. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compounds **1a/1b**

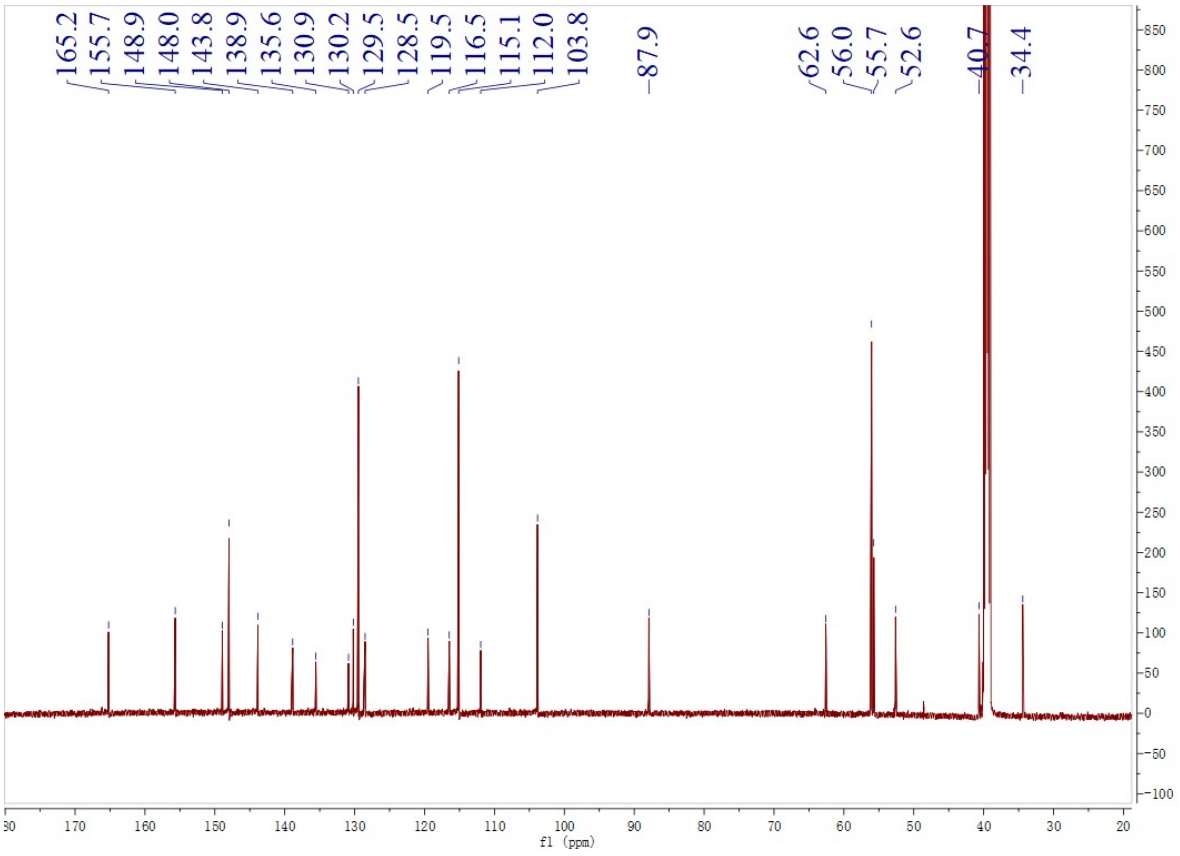


Fig. S2. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compounds **1a/1b**

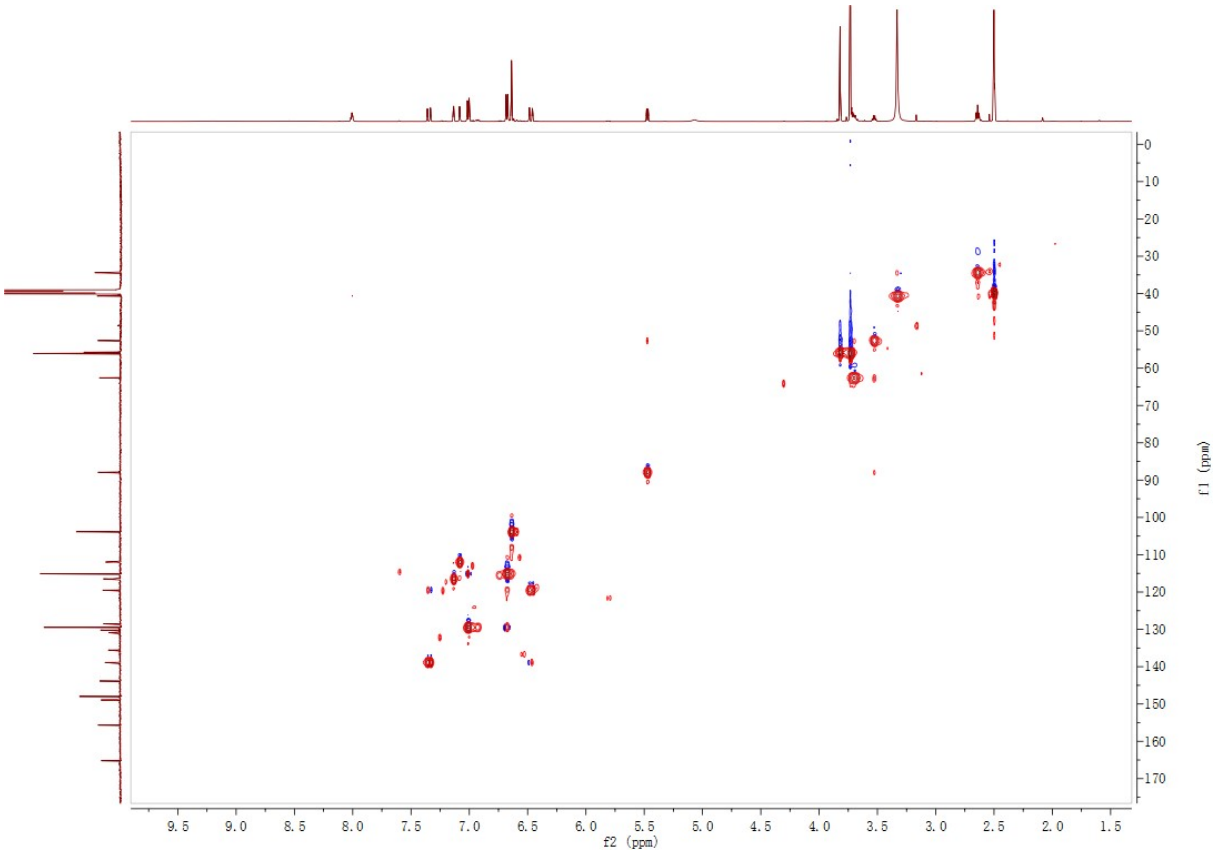


Fig. S3. The HSQC (600 MHz, DMSO-d_6) spectrum of compounds **1a/1b**

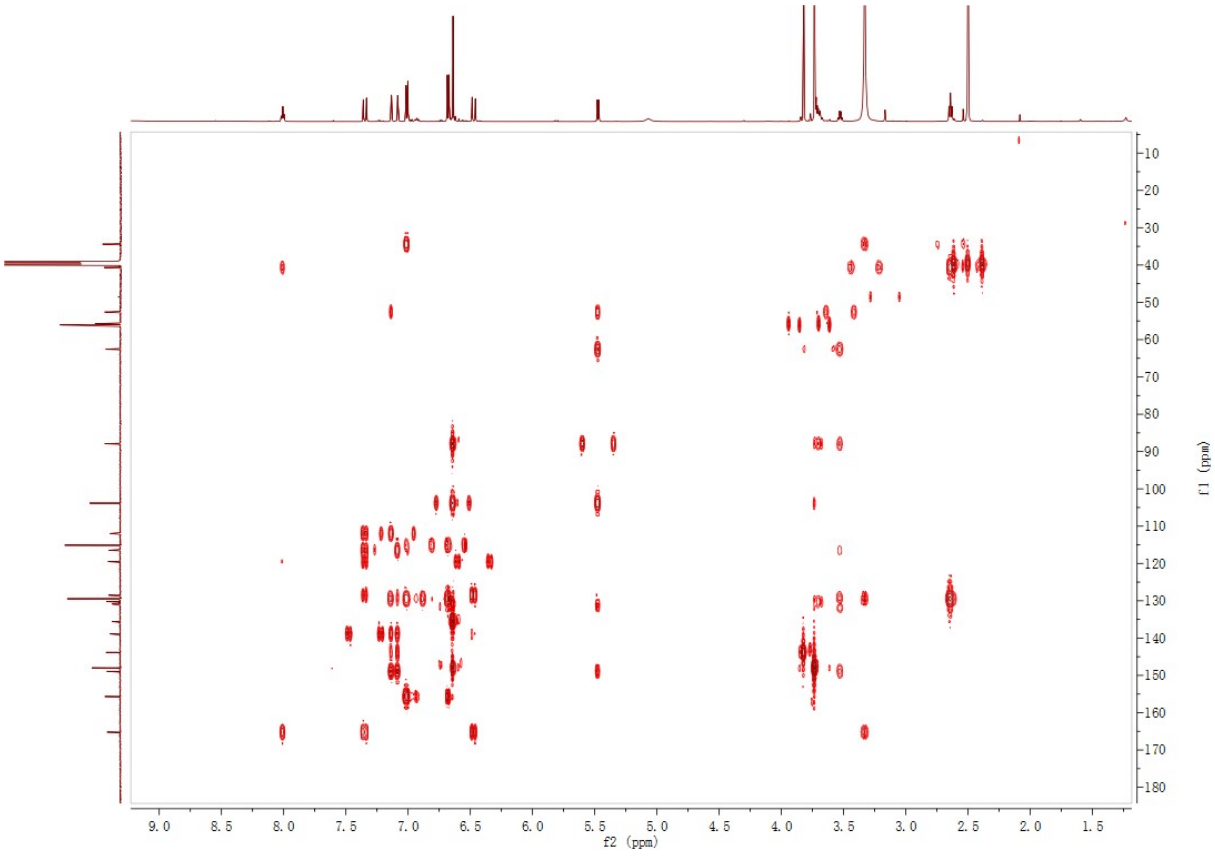


Fig. S4. The HMBC (600 MHz, DMSO-d_6) spectrum of compounds **1a/1b**

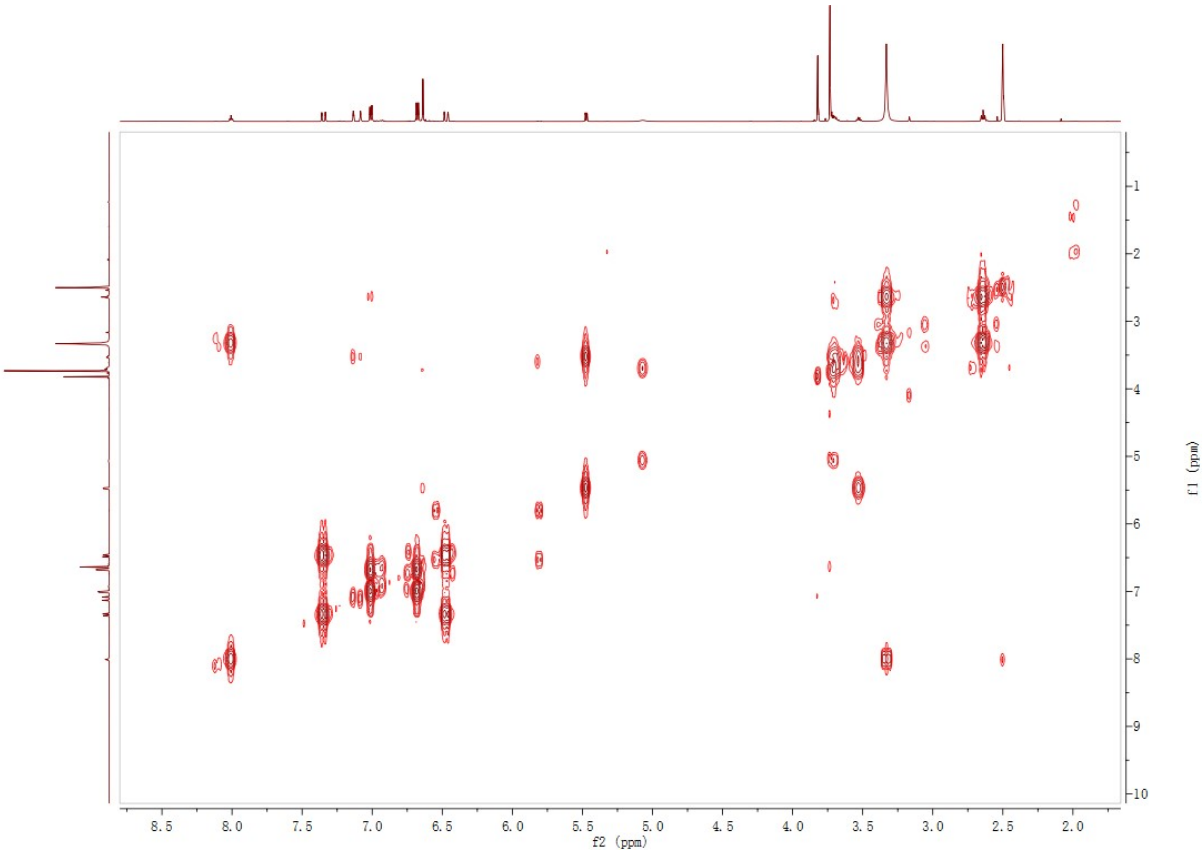


Fig. S5. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compounds **1a/1b**

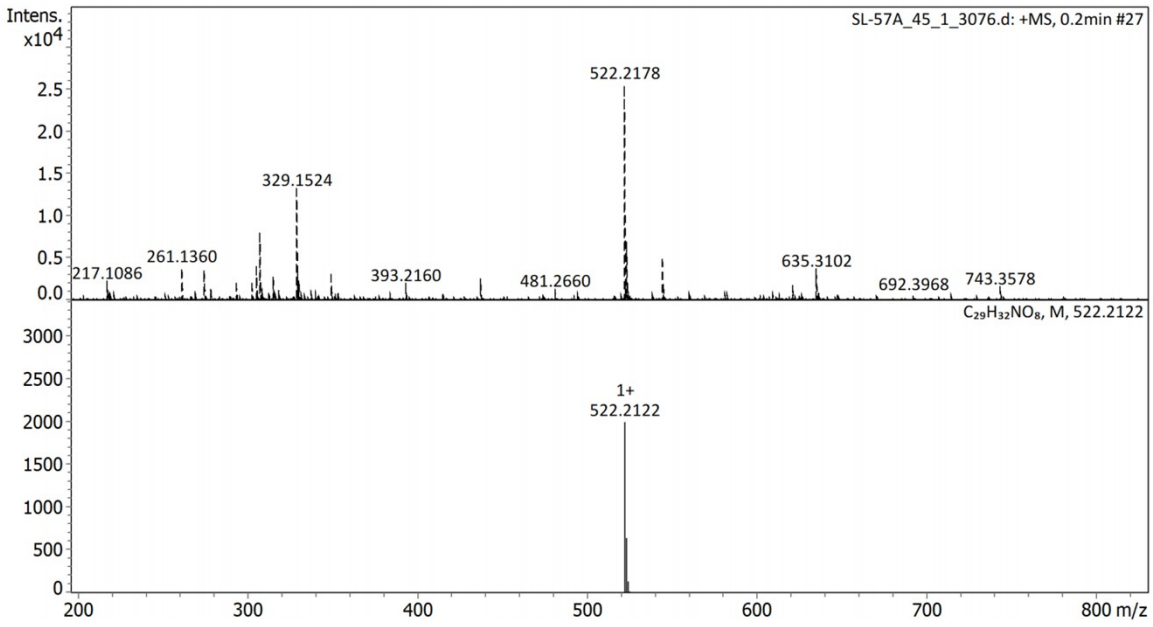
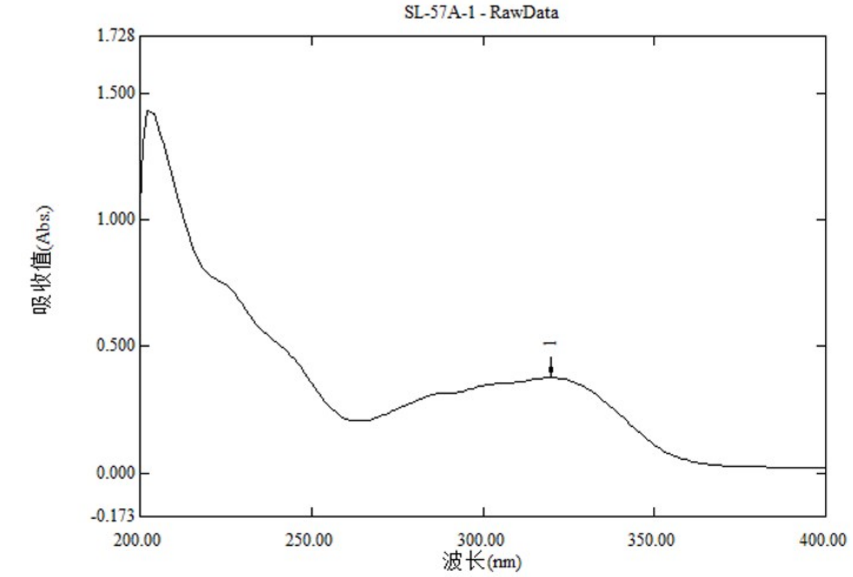


Fig. S6. The HRESIMS spectrum of compounds **1a/1b**



阈值: 0.010000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1		320.0	0.376	

Fig. S7. The UV spectrum of compounds **1a/1b**

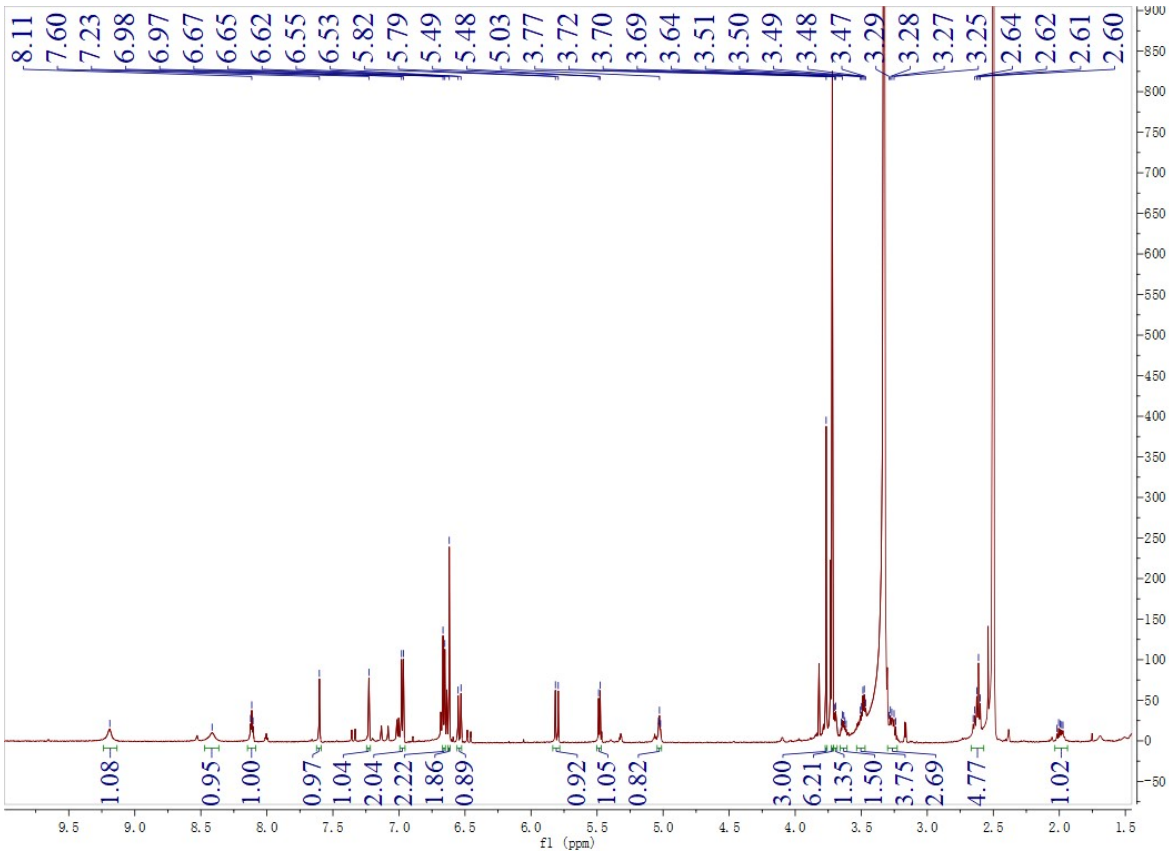


Fig. S8. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compounds **2a/2b**

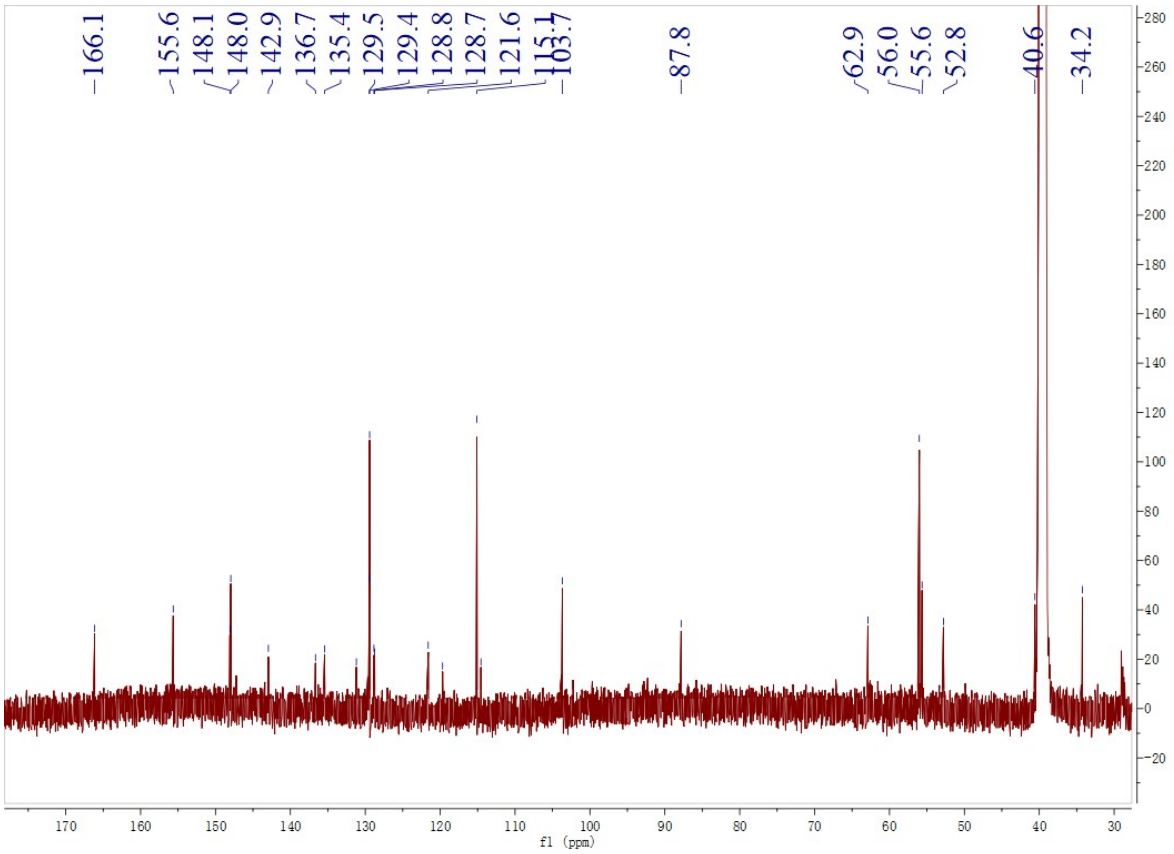


Fig. S9. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compounds **2a/2b**

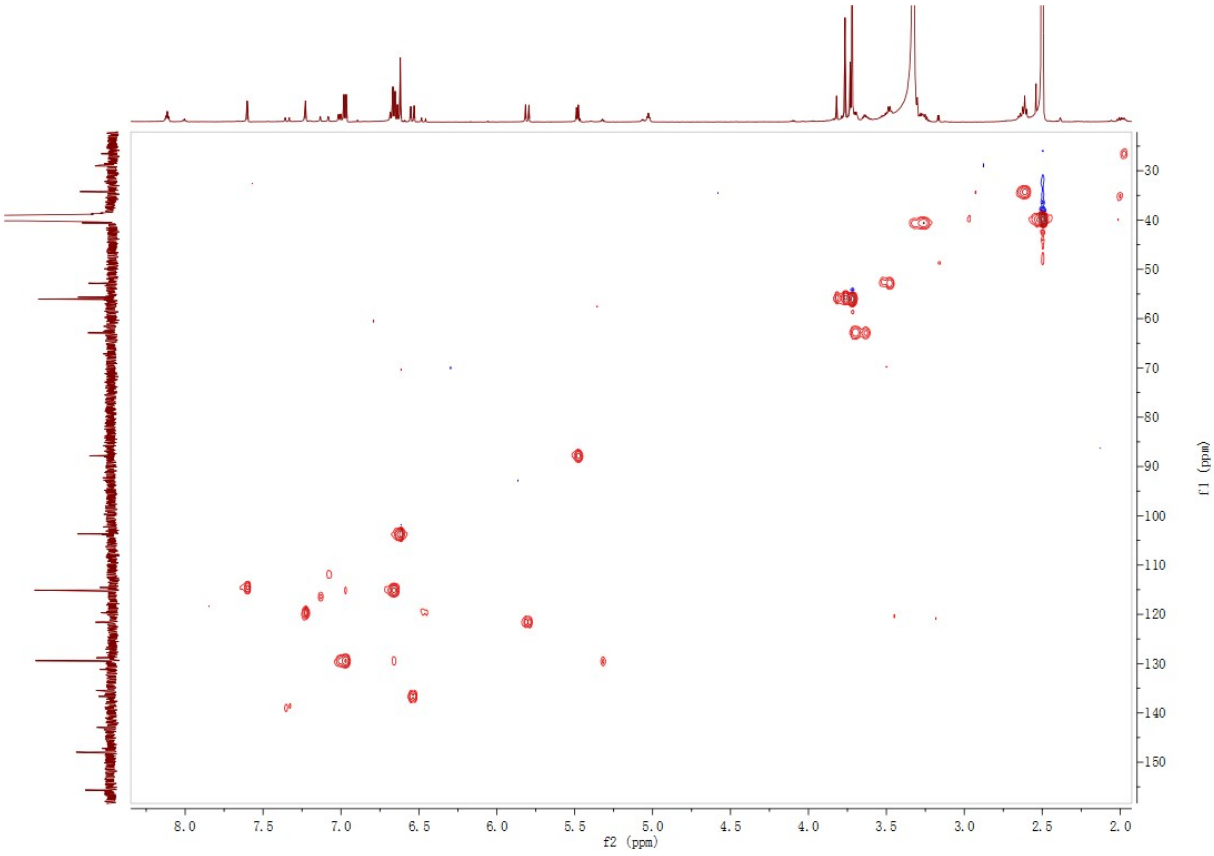


Fig. S10. The HSQC (600 MHz, DMSO-d_6) spectrum of compounds **2a/2b**

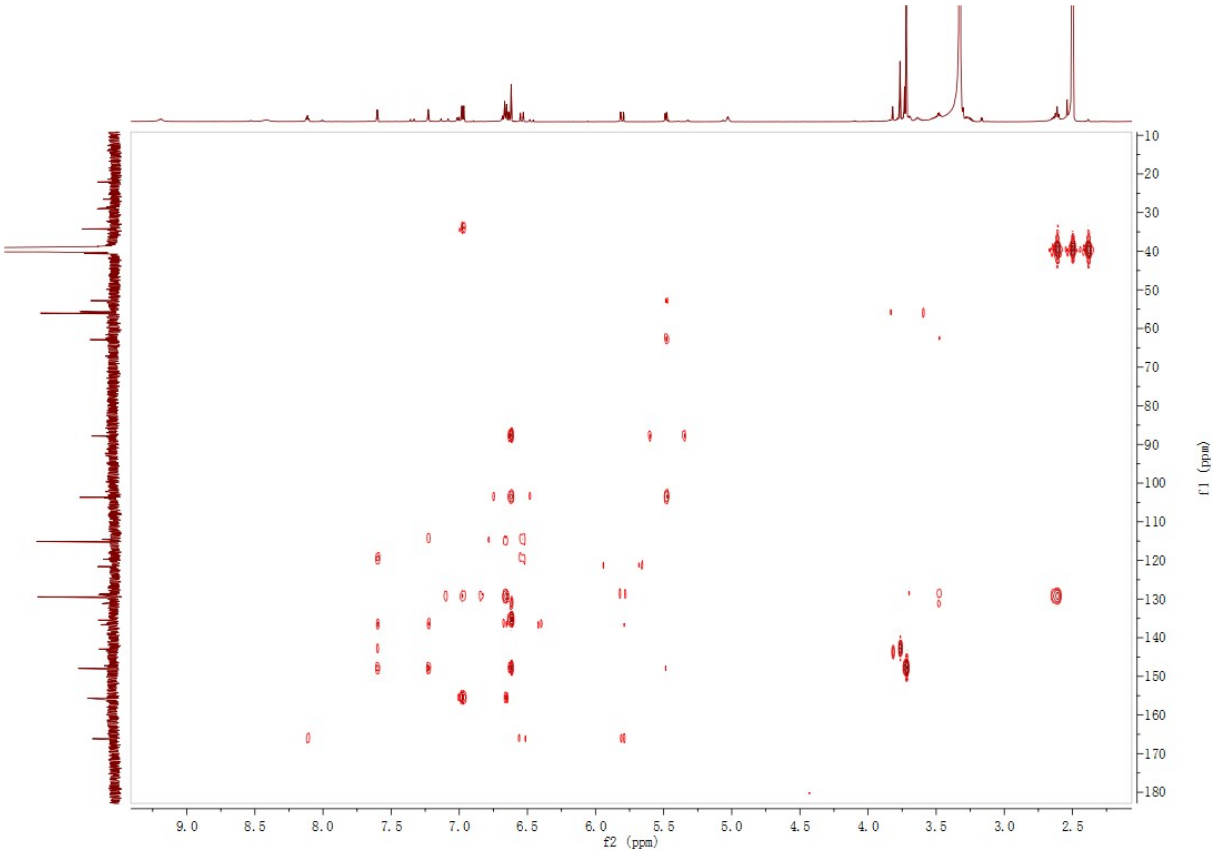


Fig. S11. The HMBC (600 MHz, DMSO-d_6) spectrum of compounds **2a/2b**

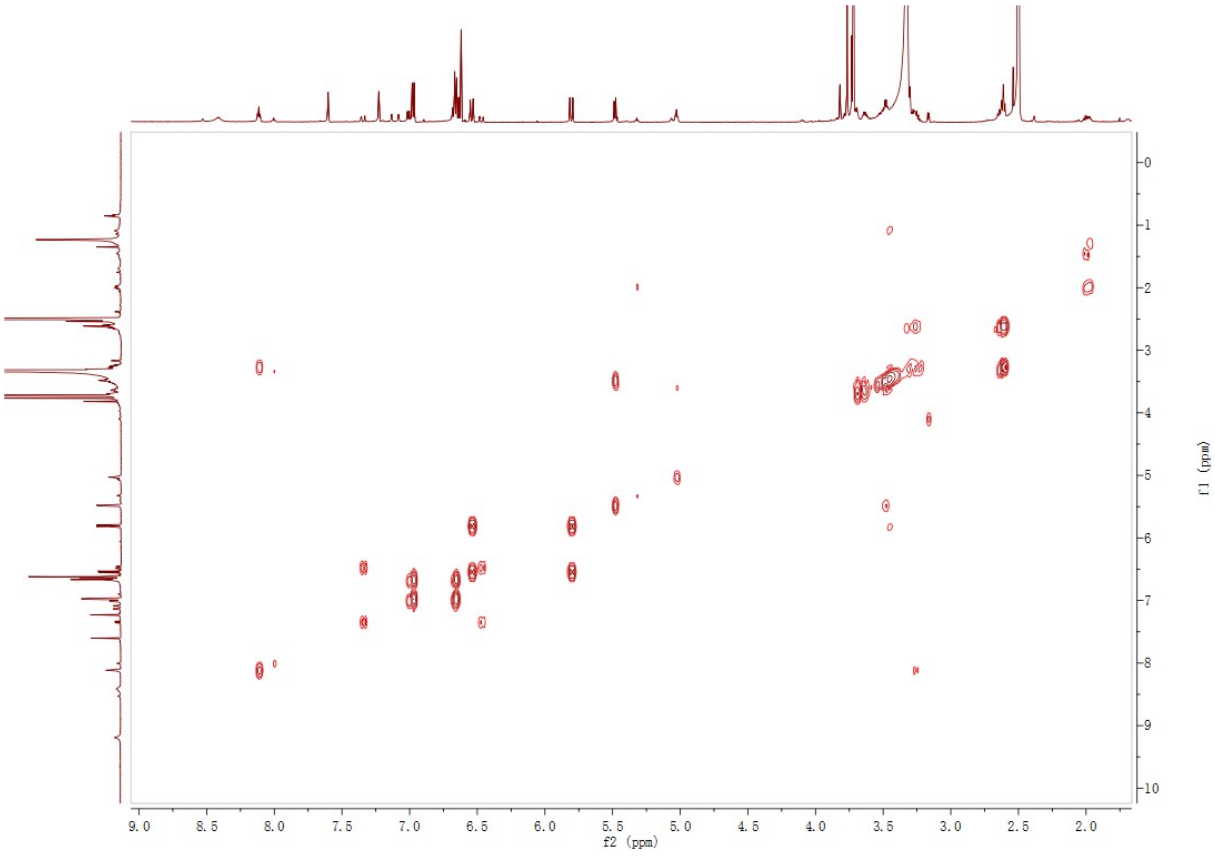


Fig. S12. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compounds **2a/2b**

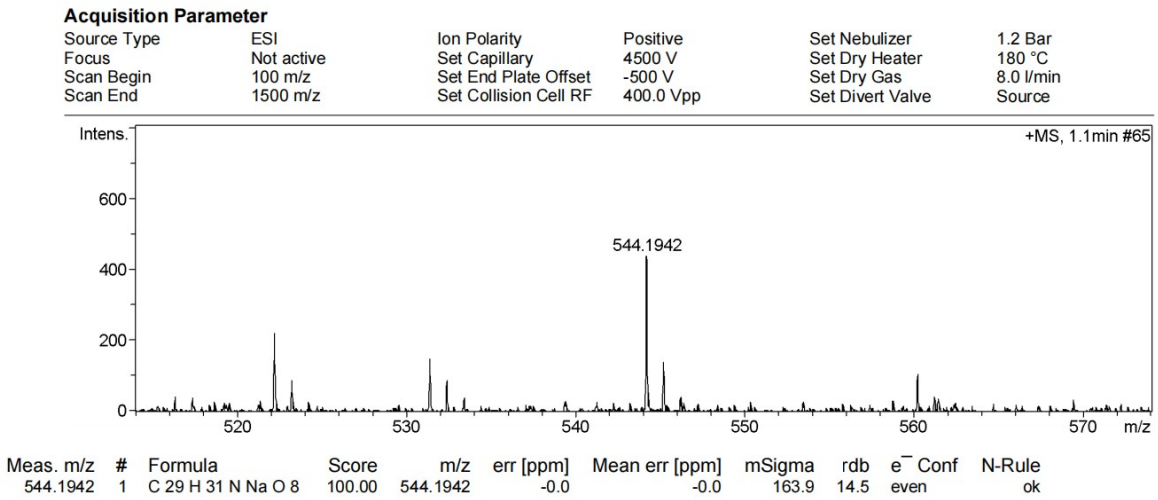
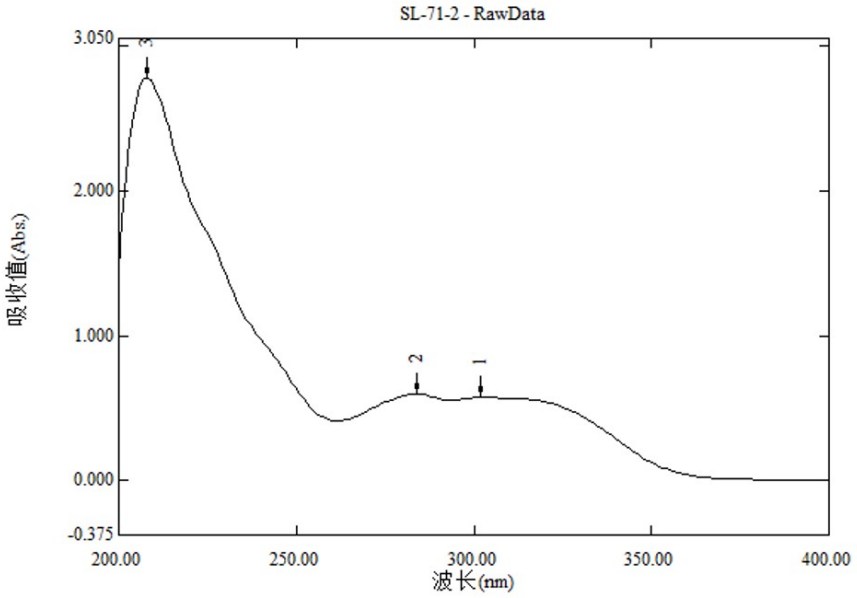


Fig. S13. The HRESIMS spectrum of compounds **2a/2b**



阈值: 0.010000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1	↑	302.0	0.574	
2	↑	284.0	0.597	
3	↑	208.0	2.777	

Fig. S14. The UV spectrum of compounds **2a/2b**

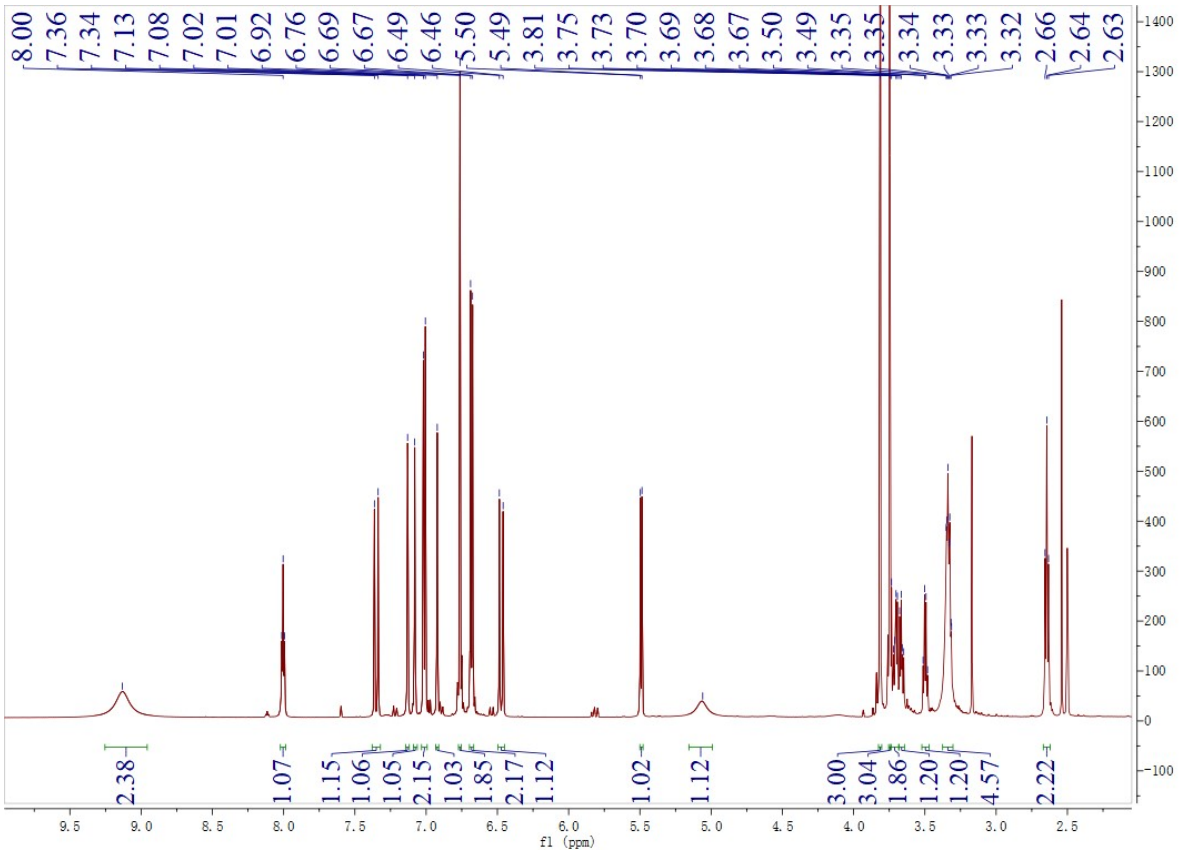


Fig. S15. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compounds **3a/3b**

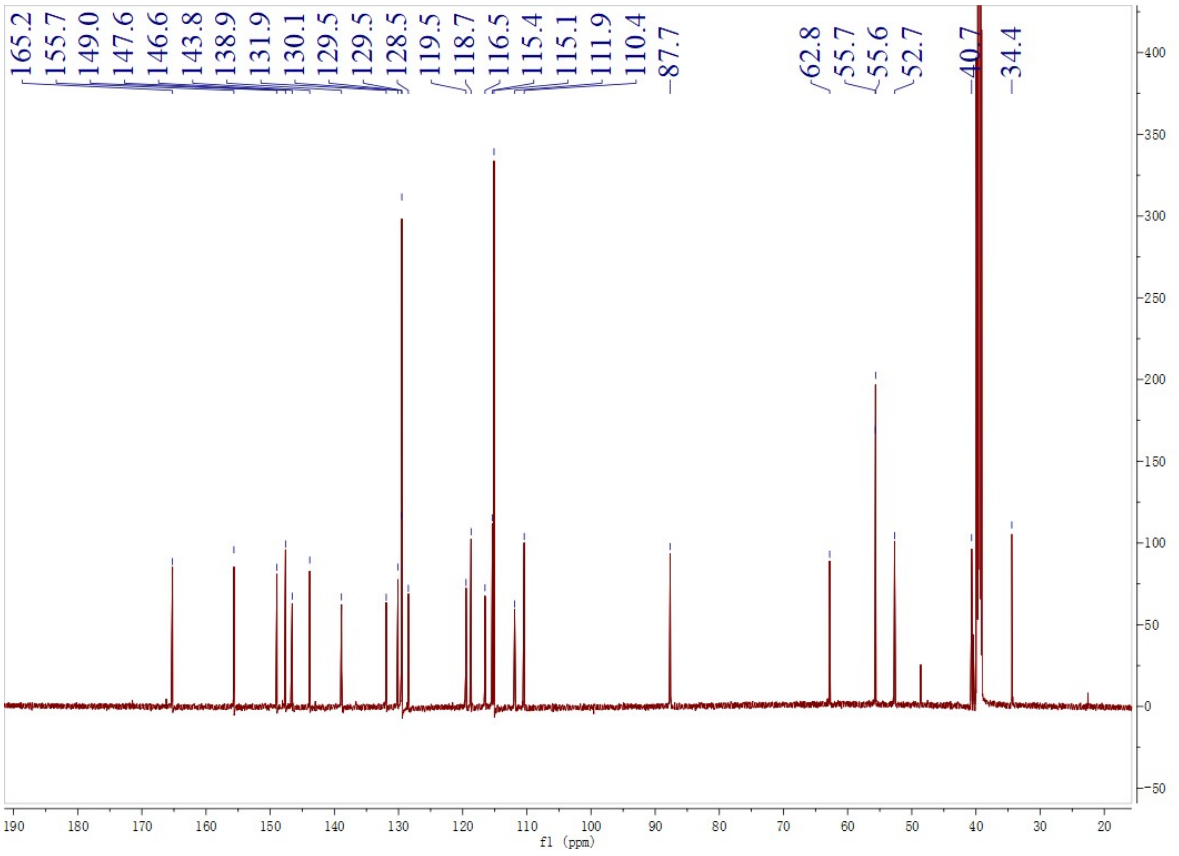


Fig. S16. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compounds **3a/3b**

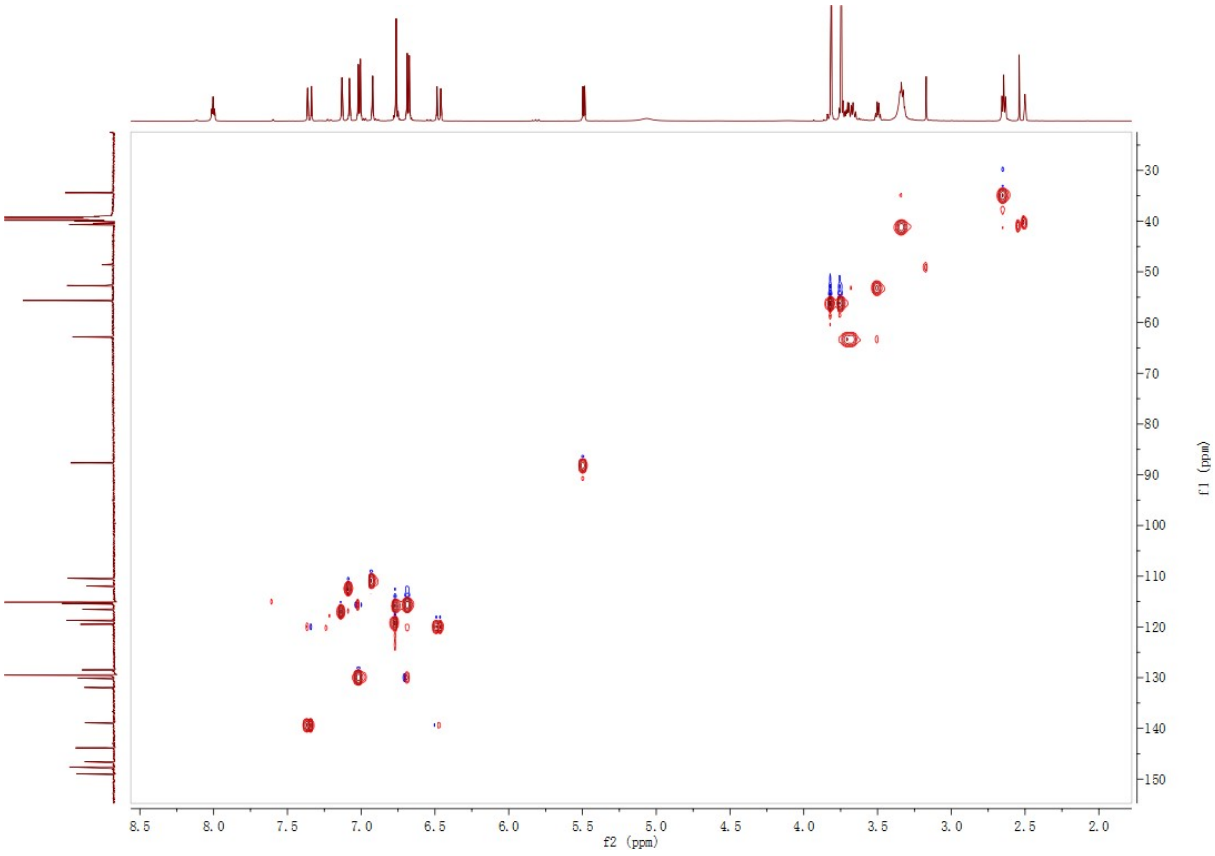


Fig. S17. The HSQC (600 MHz, DMSO-d_6) spectrum of compounds **3a/3b**

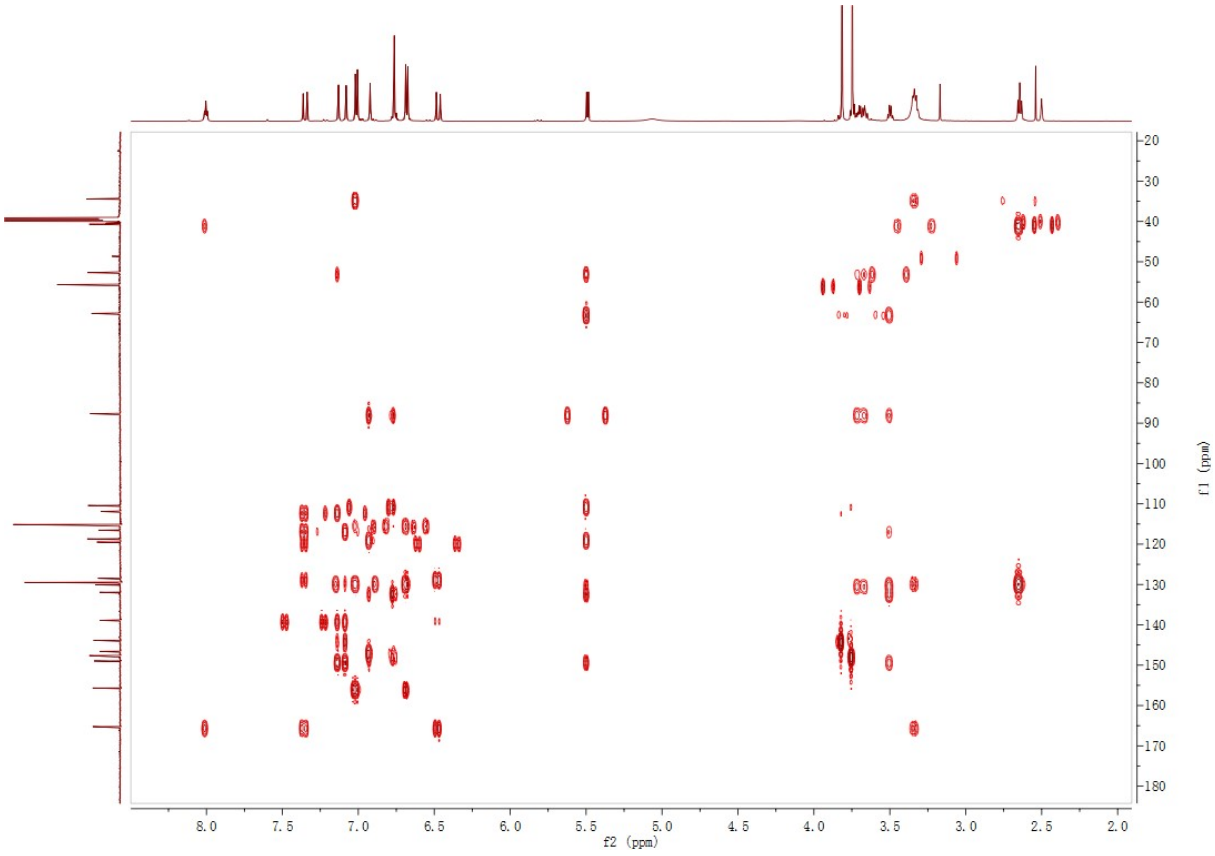


Fig. S18. The HMBC (600 MHz, DMSO-d_6) spectrum of compounds **3a/3b**

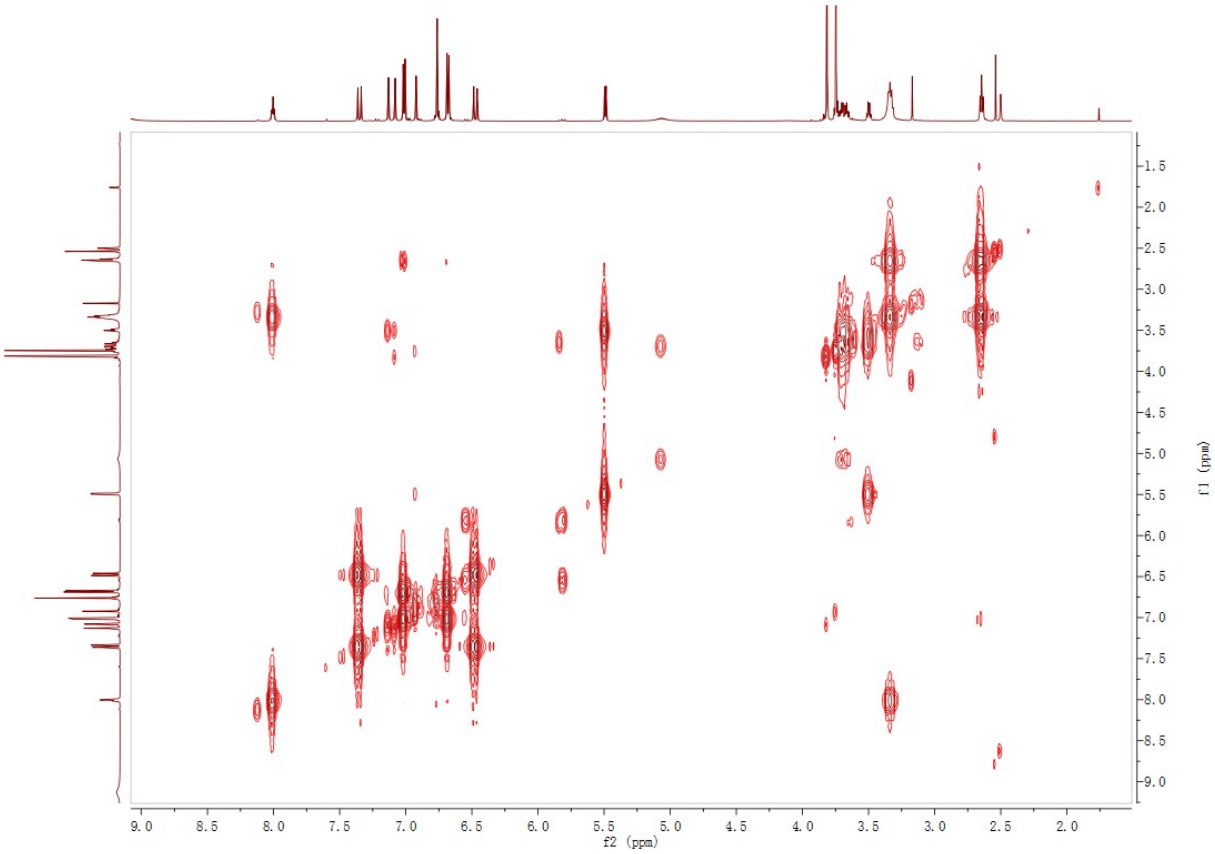


Fig. S19. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compounds **3a/3b**

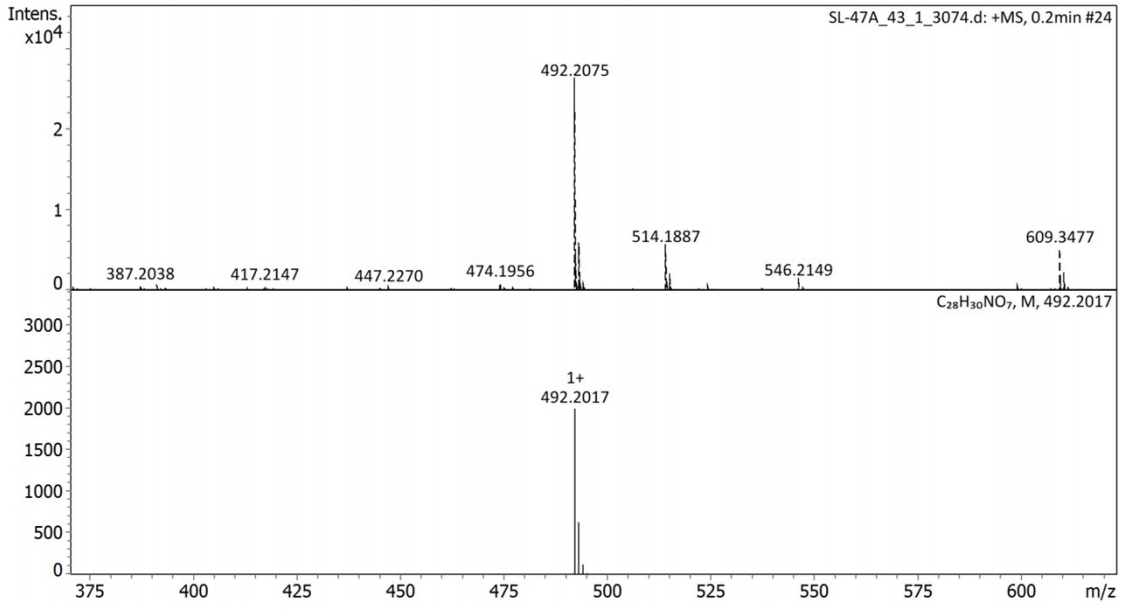
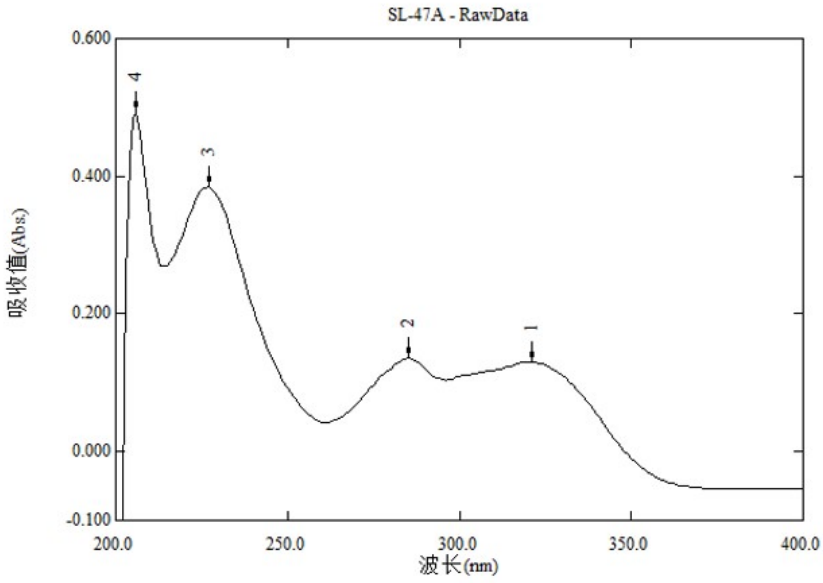


Fig. S20. The HRESIMS spectrum of compounds **3a/3b**



阈值: 0.050000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1	↑	321.0	0.130	
2	↑	285.0	0.135	
3	↑	227.0	0.384	
4	↑	206.0	0.493	

Fig. S21. The UV spectrum of compounds **3a/3b**

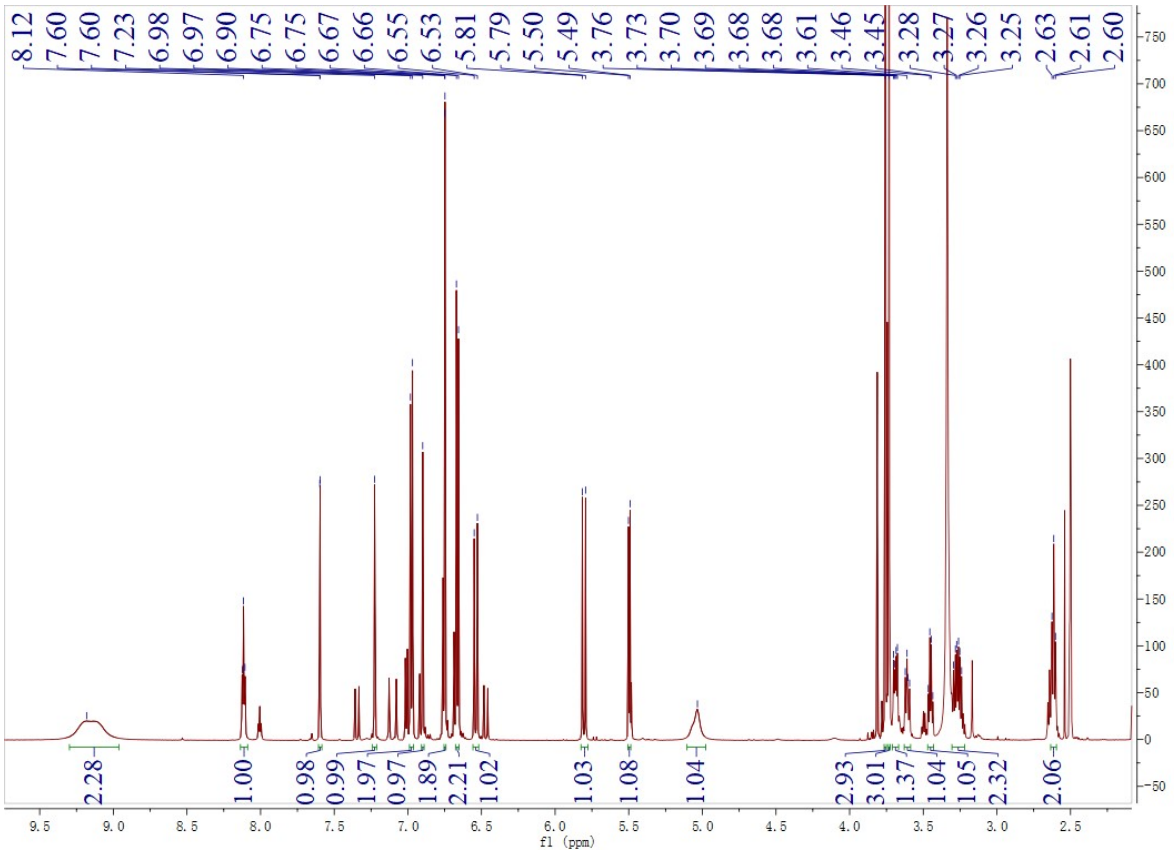


Fig. S22. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compounds **4a/4b**

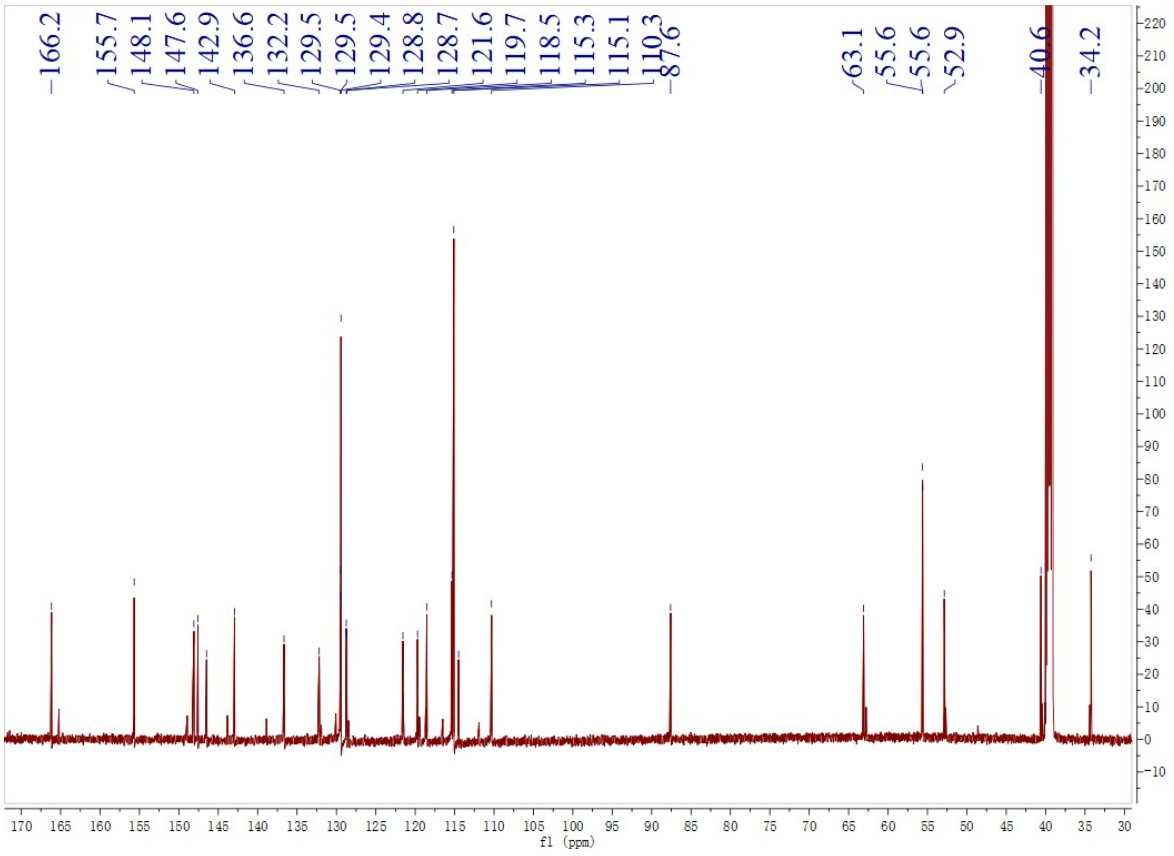


Fig. S23. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compounds **4a/4b**

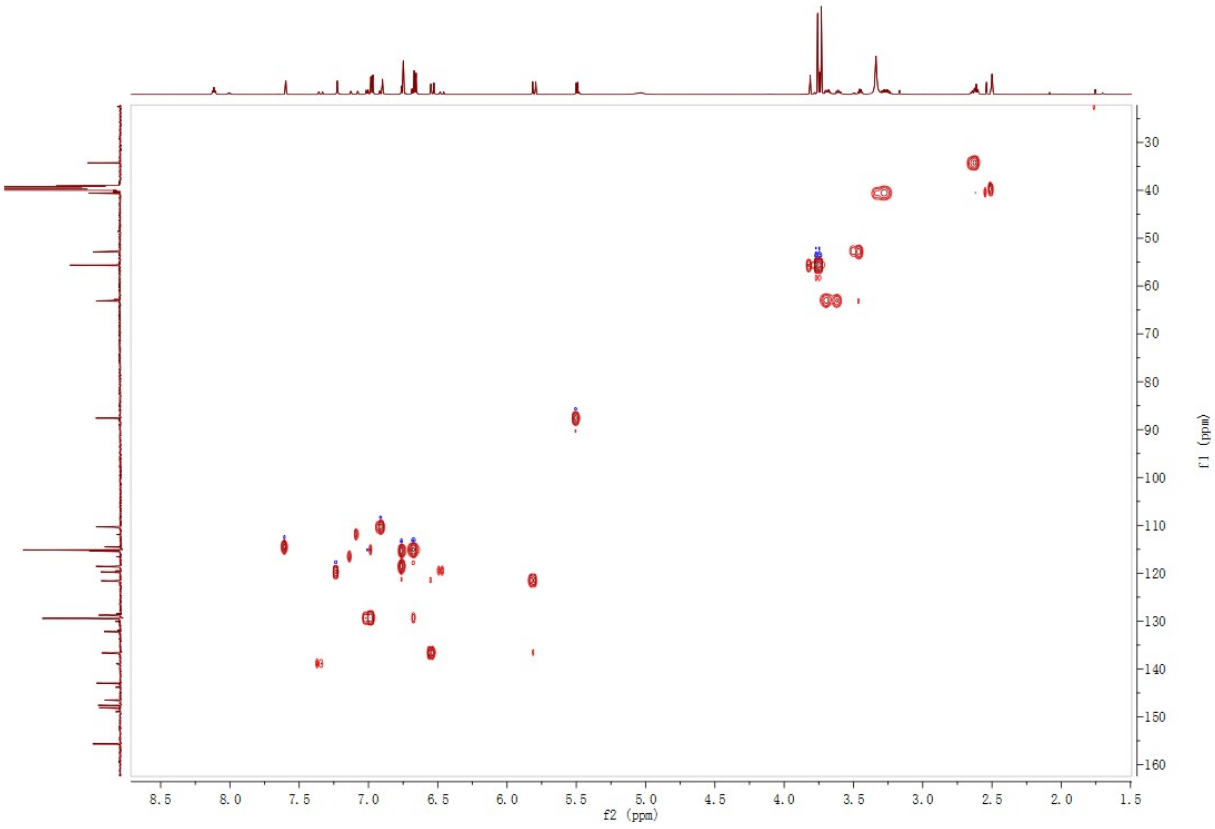


Fig. S24. The HSQC (600 MHz, DMSO-d_6) spectrum of compounds **4a/4b**

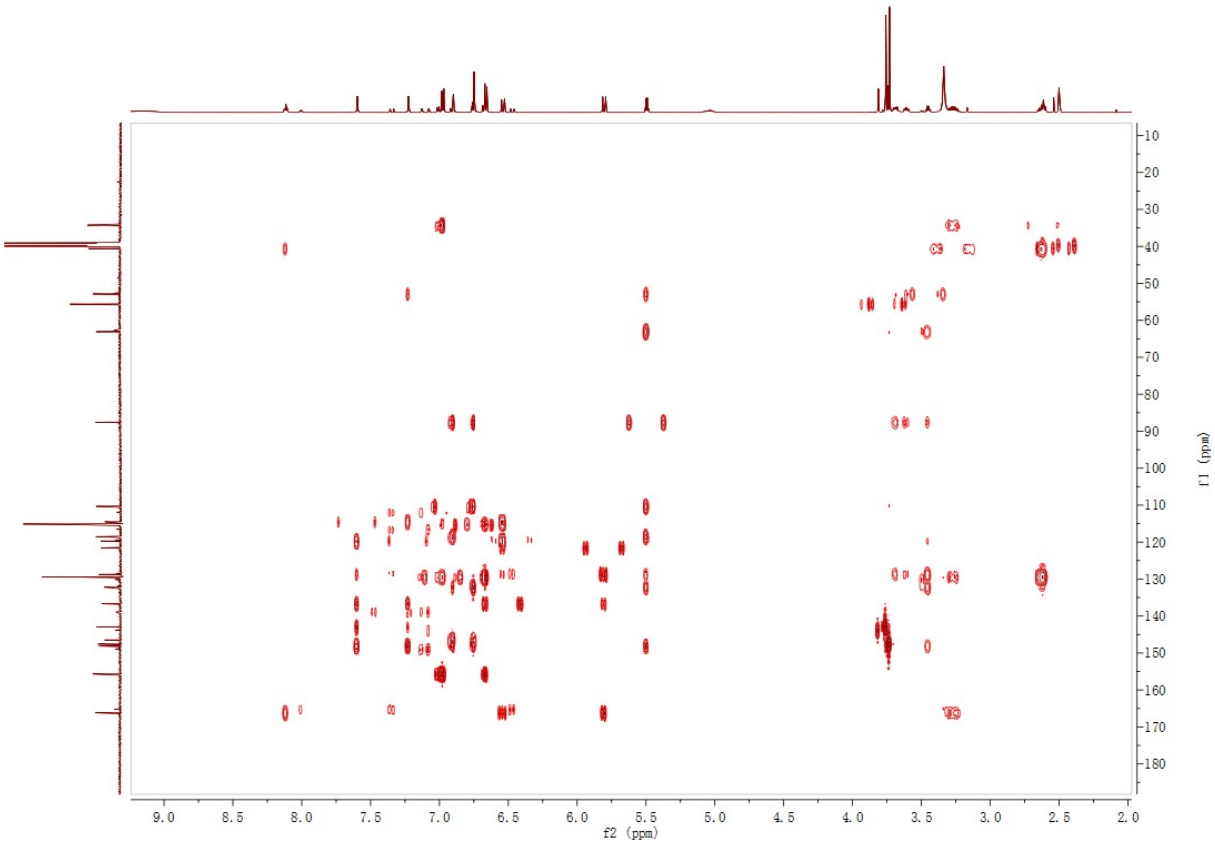


Fig. S25. The HMBC (600 MHz, DMSO-d_6) spectrum of compounds **4a/4b**

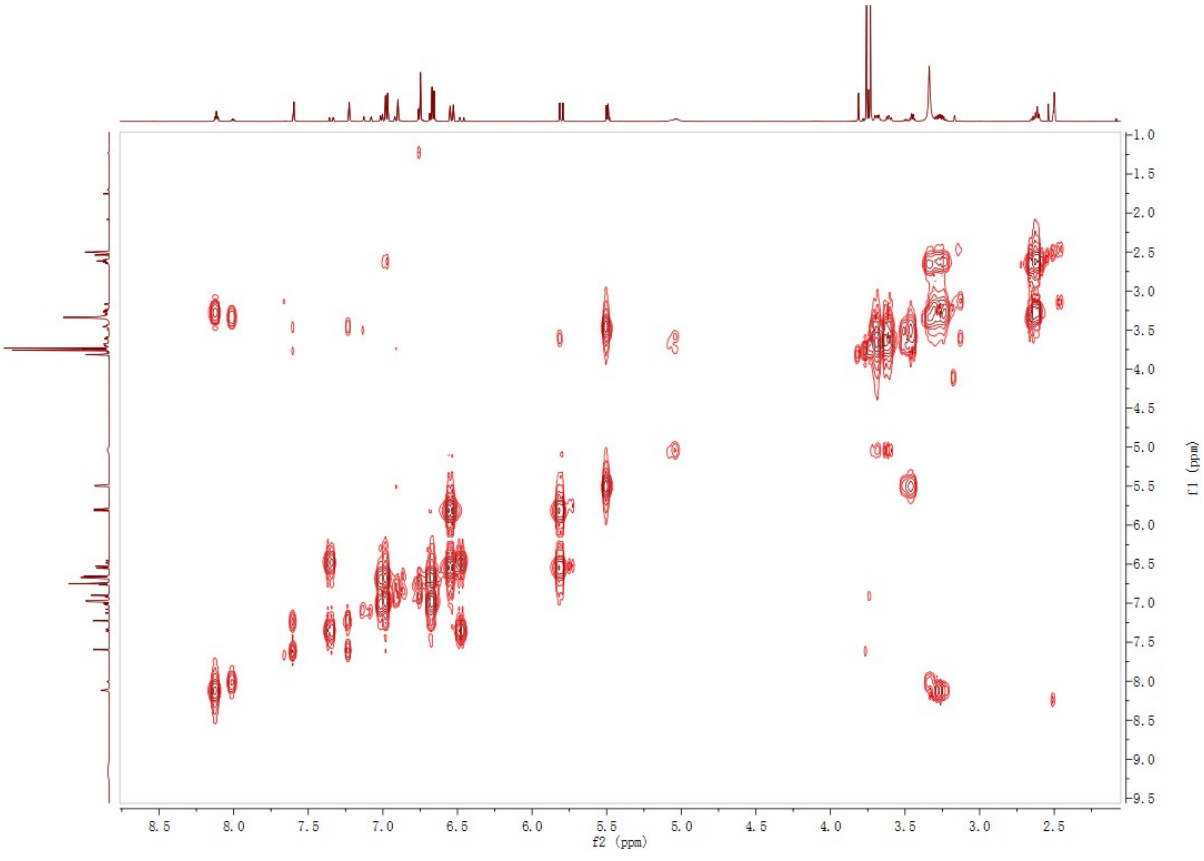


Fig. S26. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compounds **4a/4b**

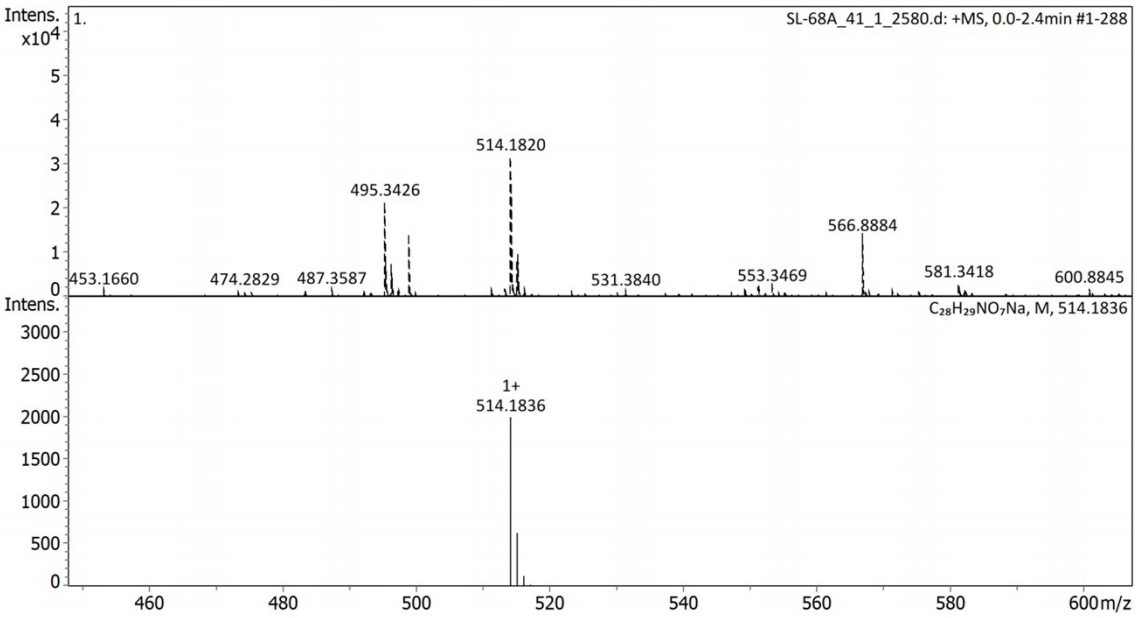
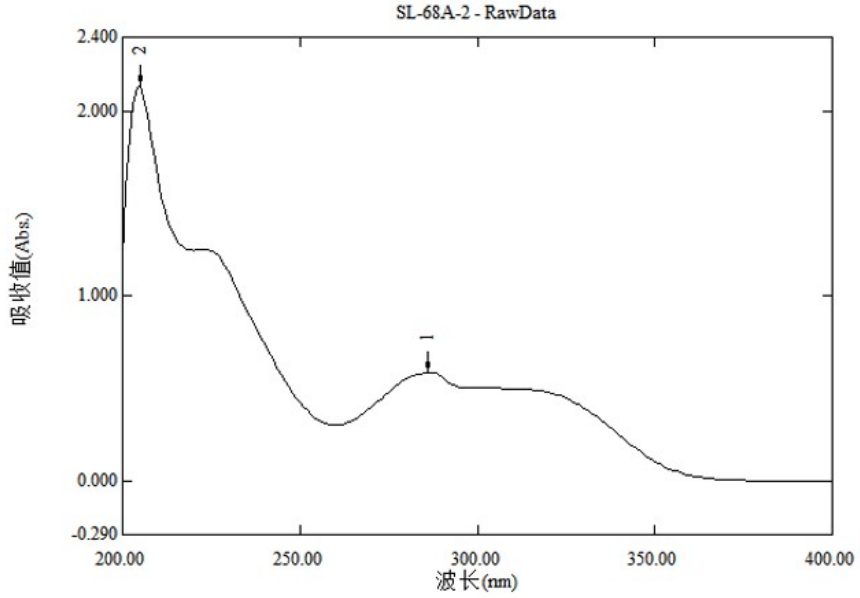


Fig. S27. The HRESIMS spectrum of compounds **4a/4b**



阈值: 0.010000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1		286.0	0.587	
2		205.0	2.132	

Fig. S28. The UV spectrum of compounds **4a/4b**

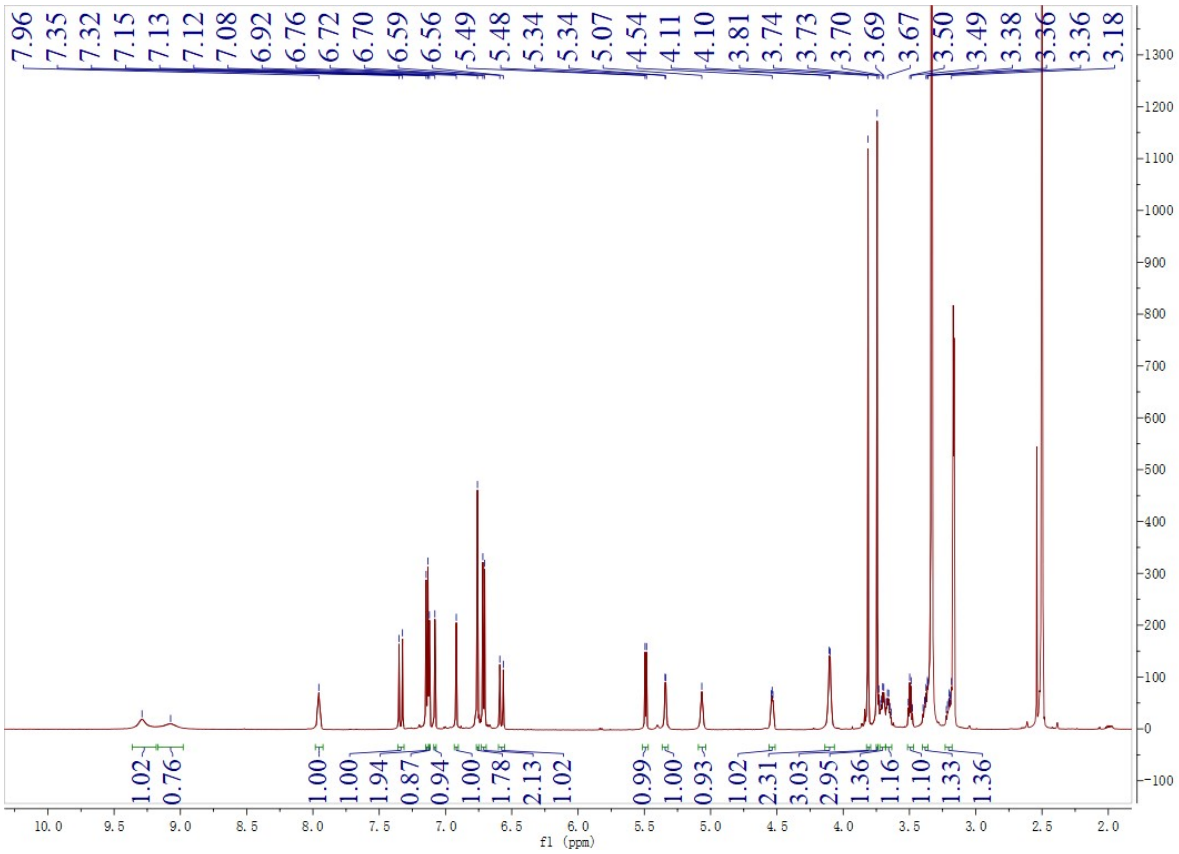


Fig. S29. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compounds **5a/5b**

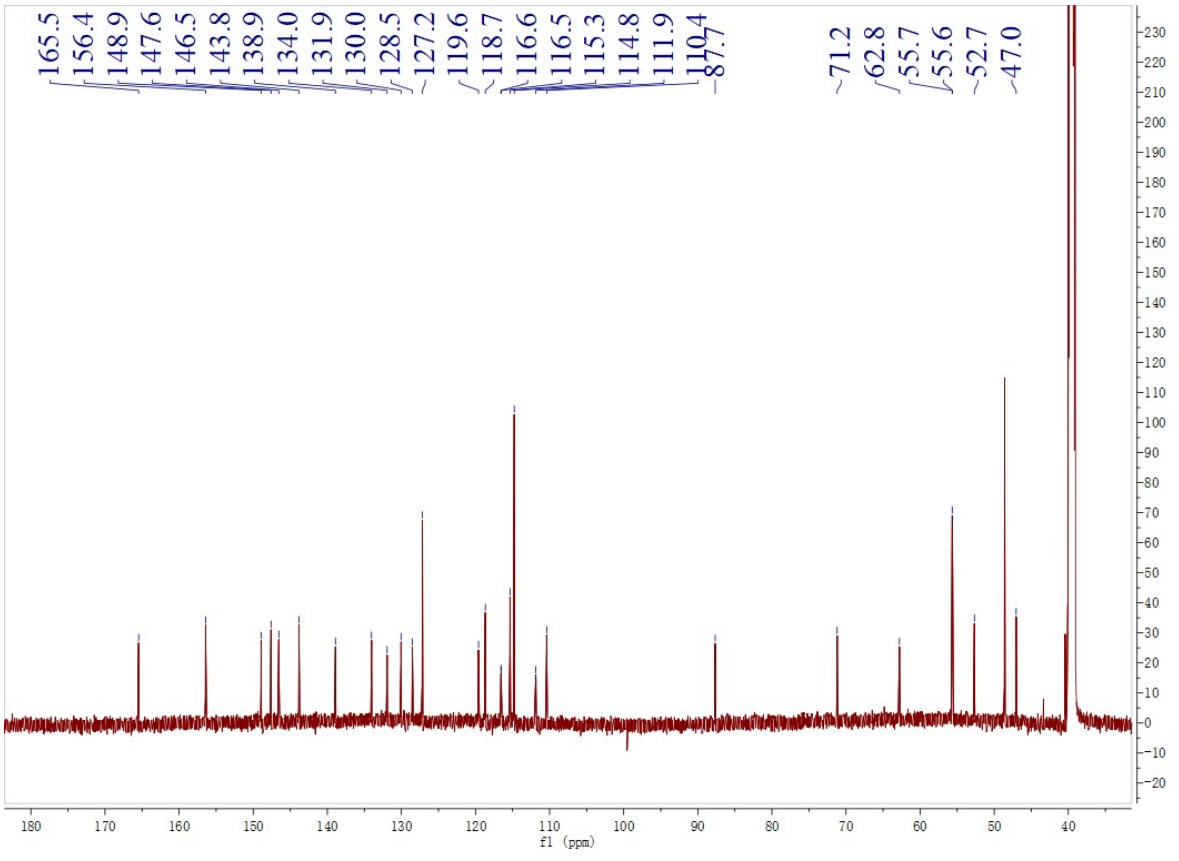


Fig. S30. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compounds **5a/5b**

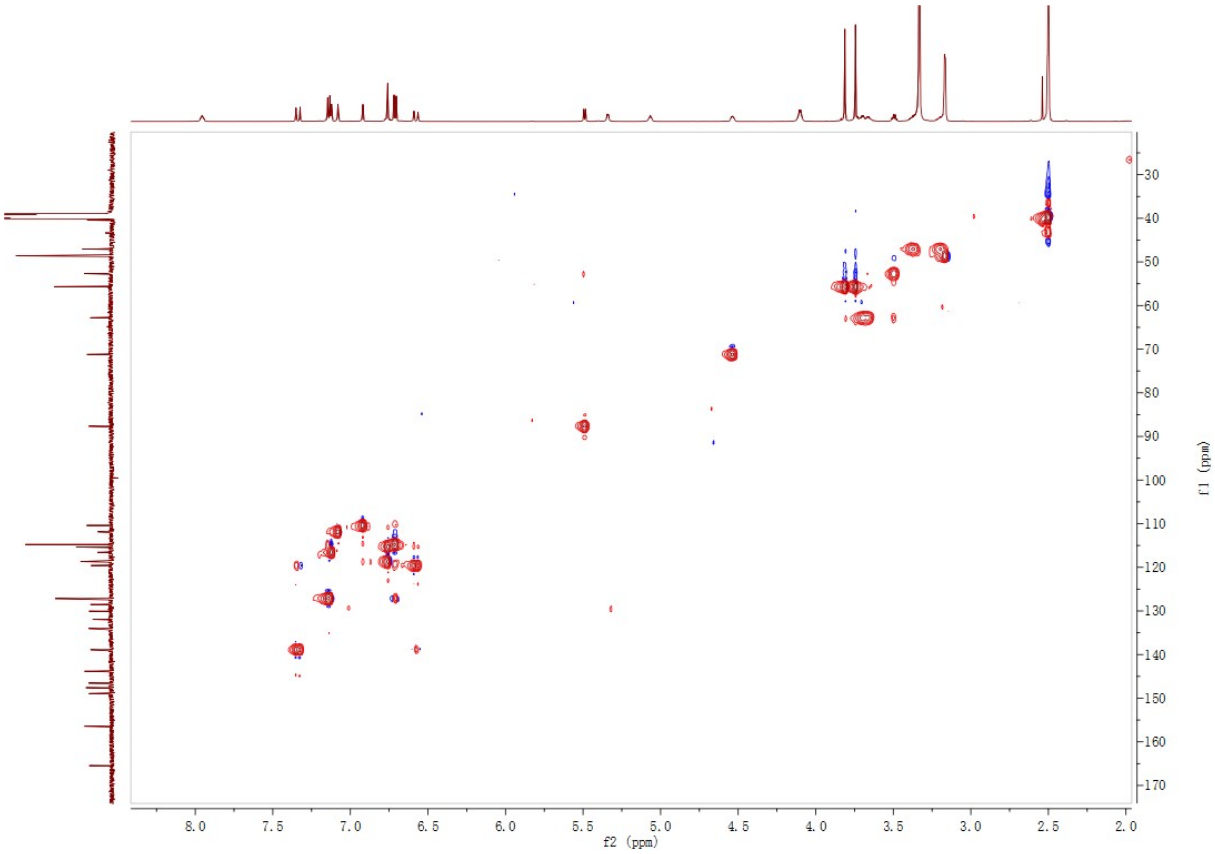


Fig. S31. The HSQC (600 MHz, DMSO-d_6) spectrum of compounds **5a/5b**

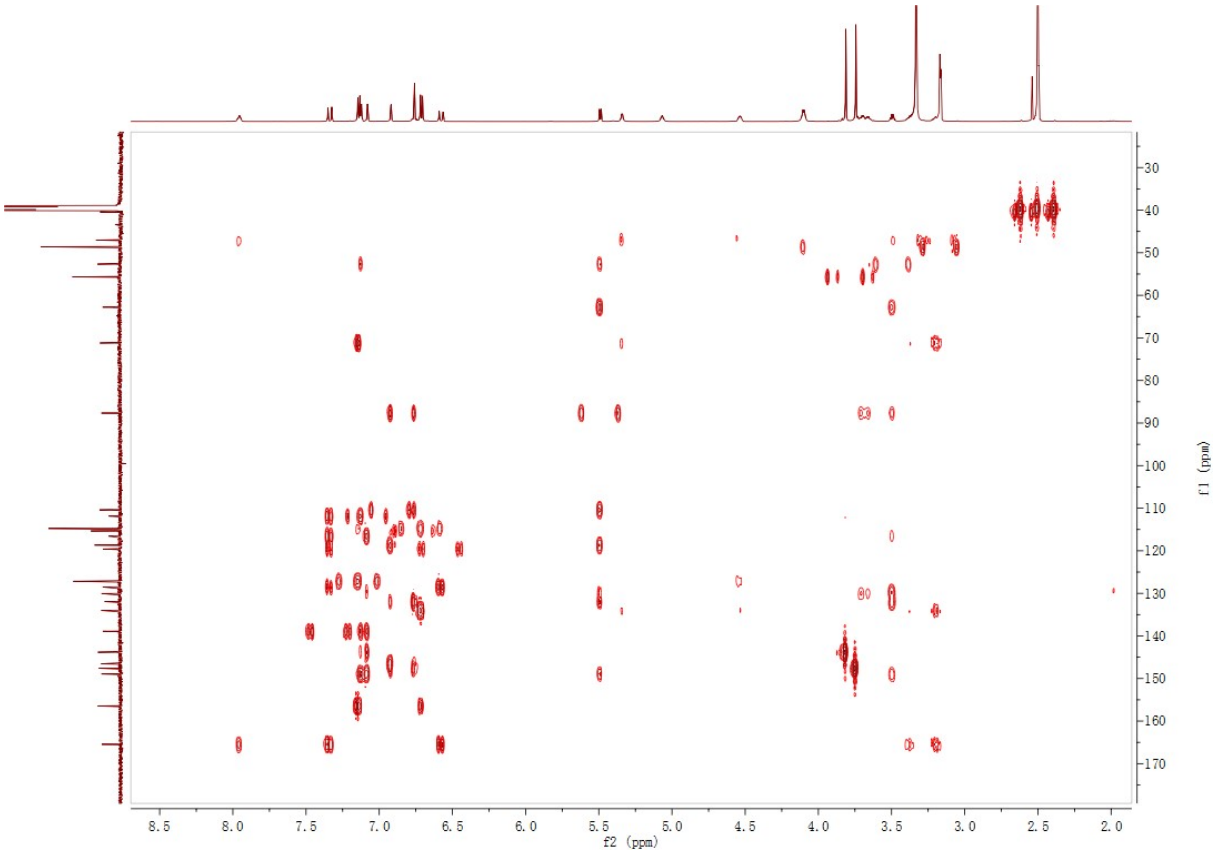


Fig. S32. The HMBC (600 MHz, DMSO-d_6) spectrum of compounds **5a/5b**

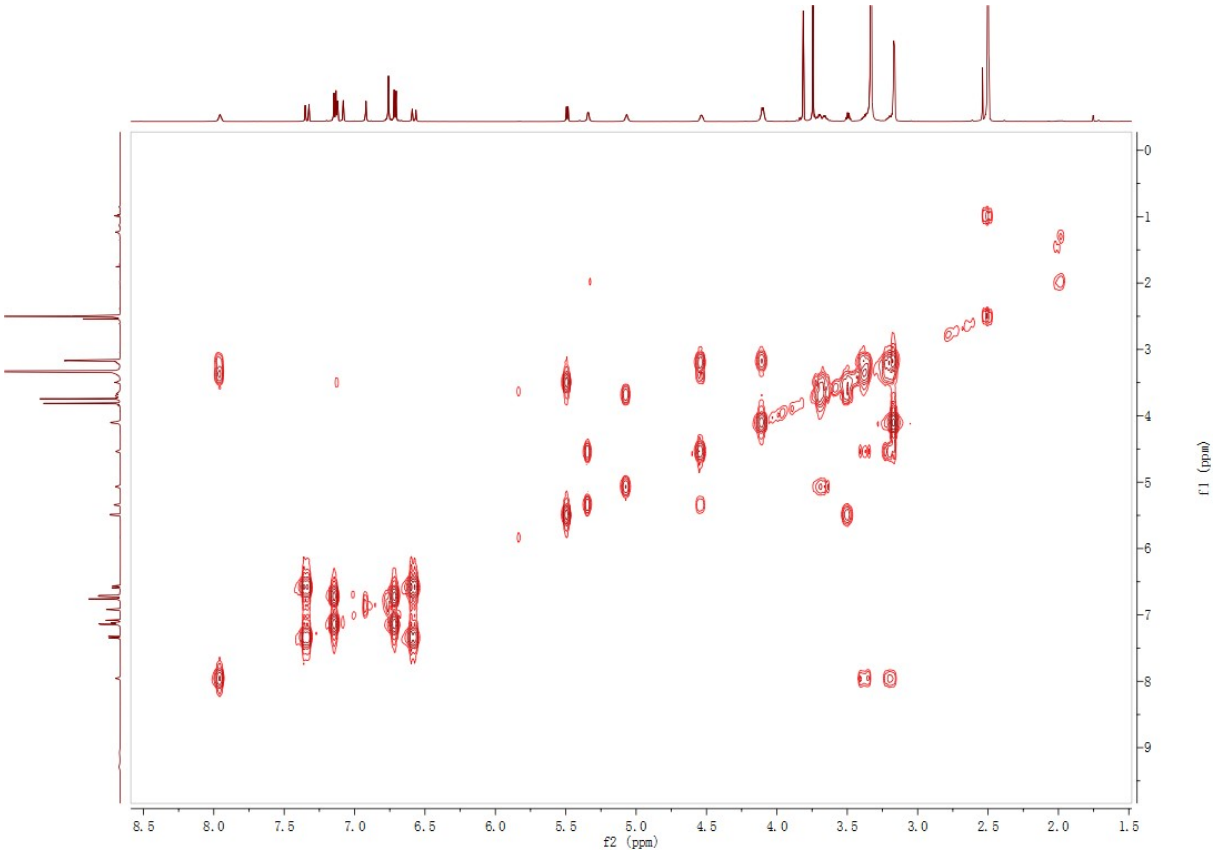


Fig. S33. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compounds **5a/5b**

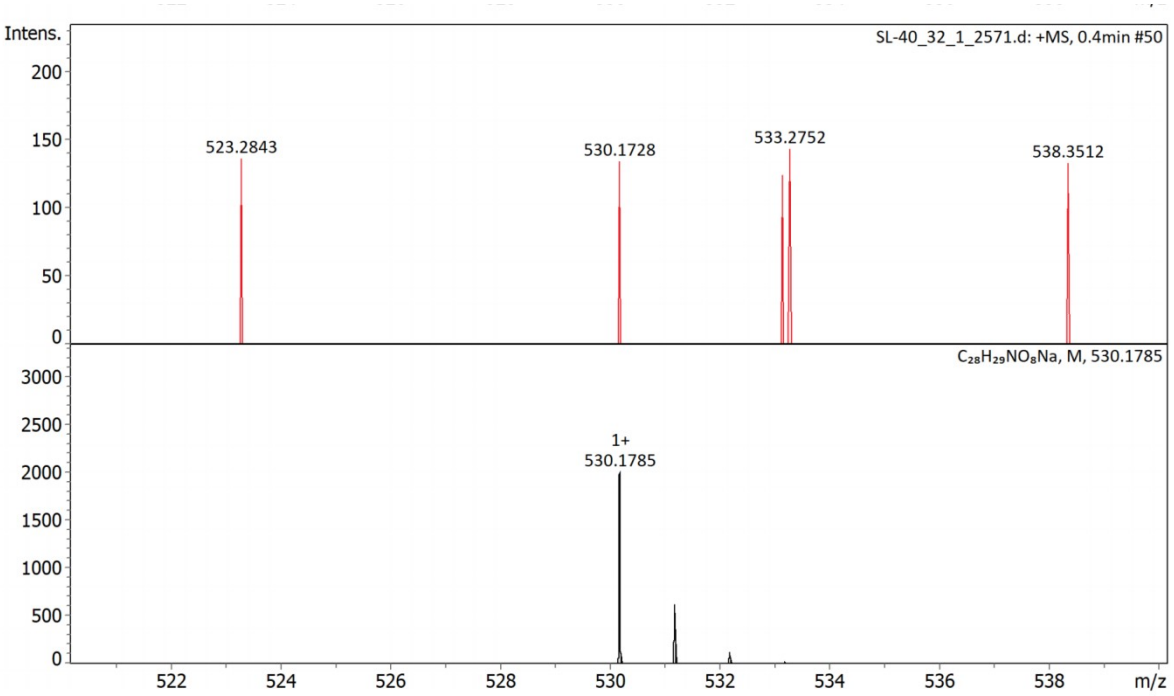
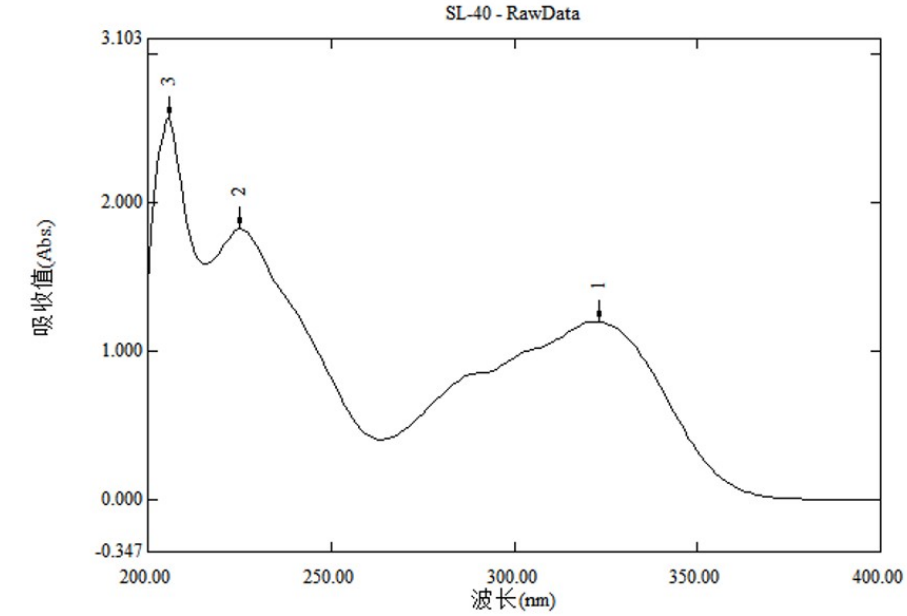


Fig. S34. The HRESIMS spectrum of compounds **5a/5b**



阈值: 0.010000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1	↑	323.0	1.201	
2	↑	225.0	1.821	

Fig. S35. The UV spectrum of compounds **5a/5b**

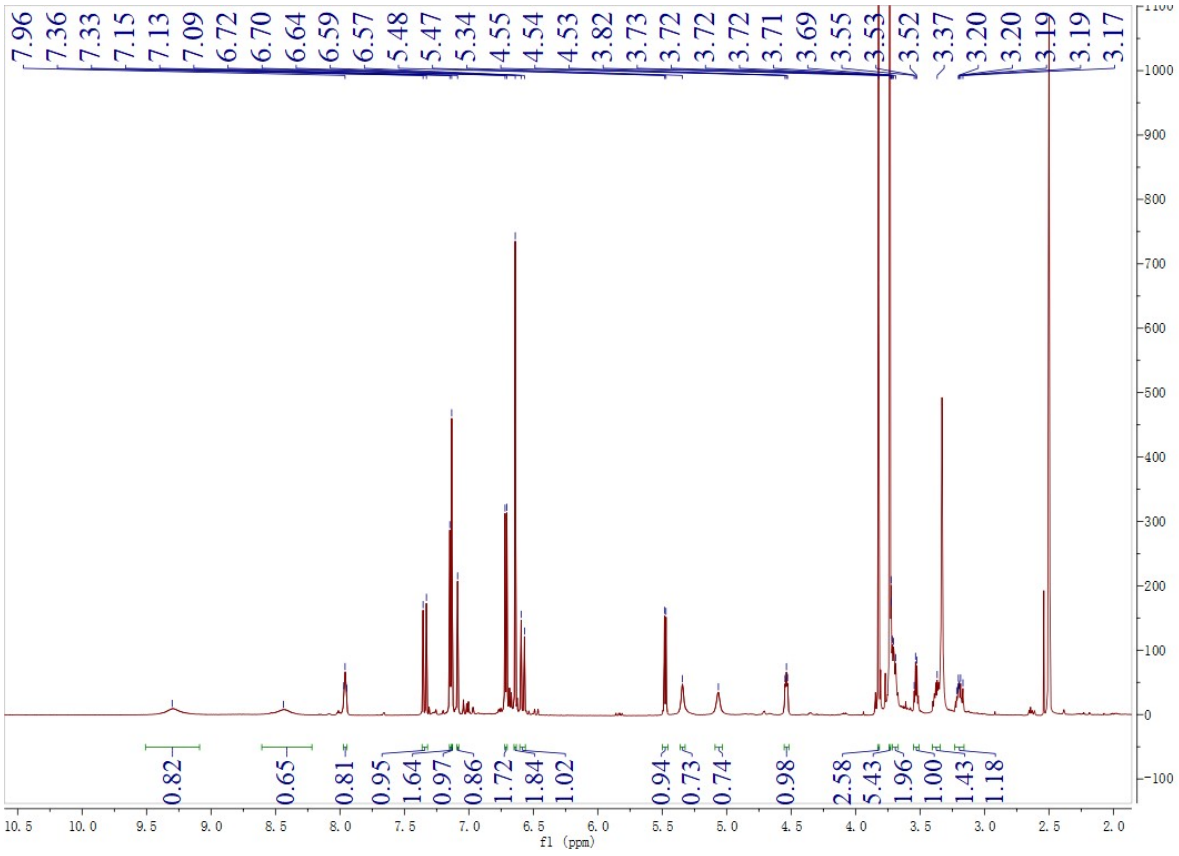


Fig. S36. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compounds **6a/6b**

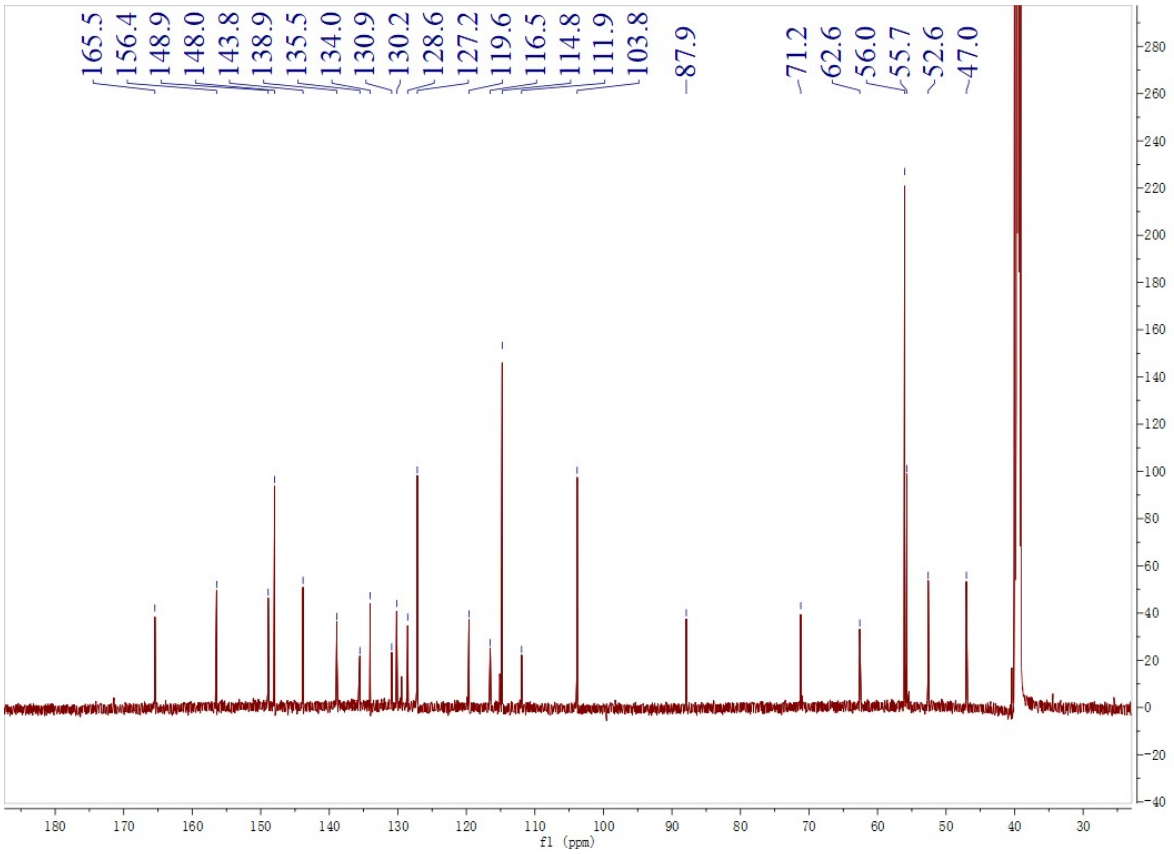


Fig. S37. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compounds **6a/6b**

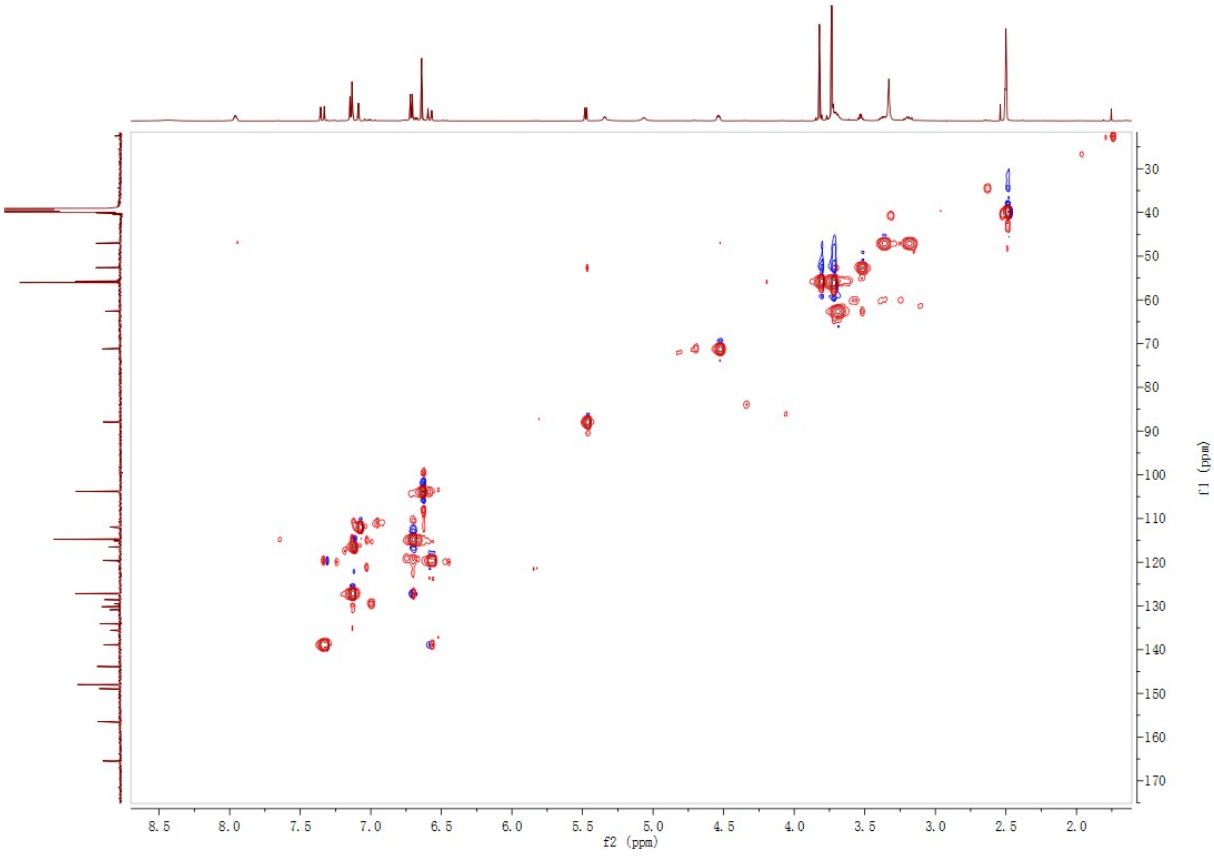


Fig. S38. The HSQC (600 MHz, DMSO-d_6) spectrum of compounds **6a/6b**

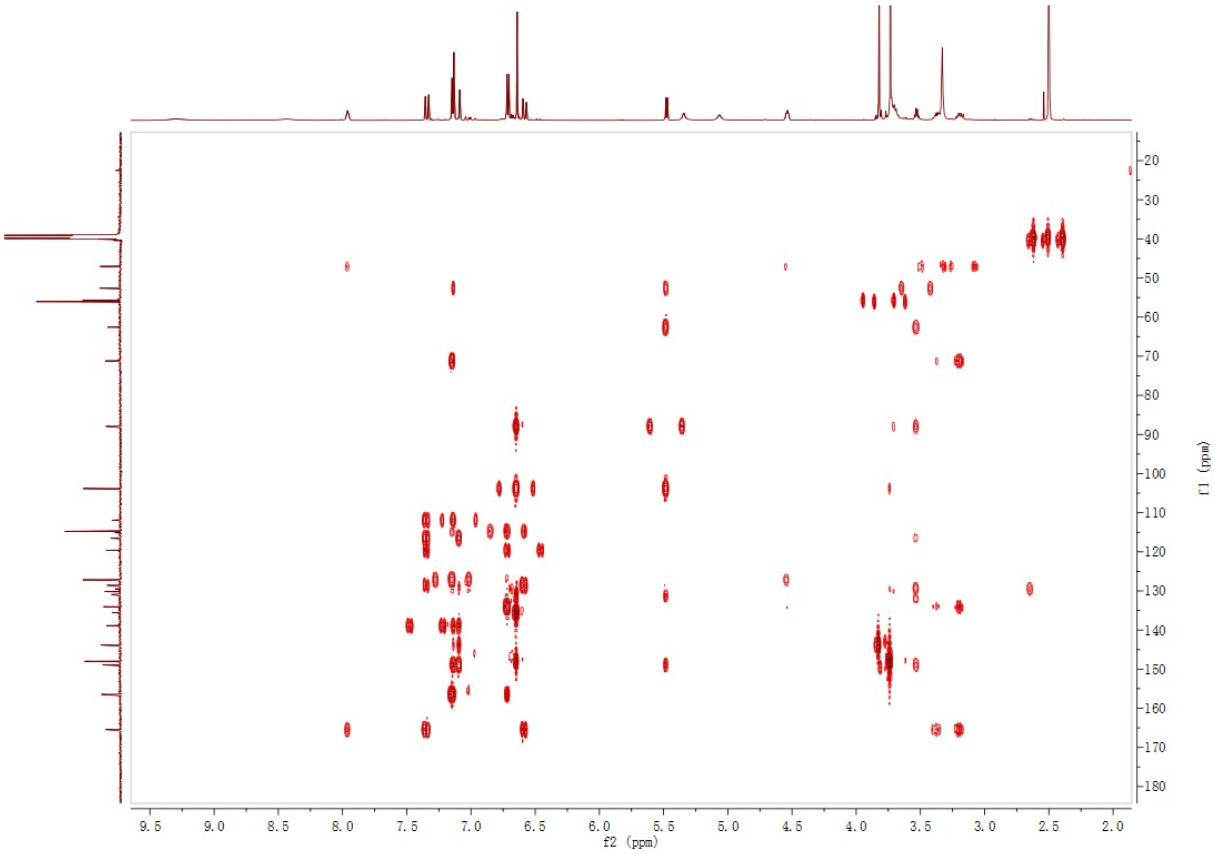


Fig. S39. The HMBC (600 MHz, DMSO-d_6) spectrum of compounds **6a/6b**

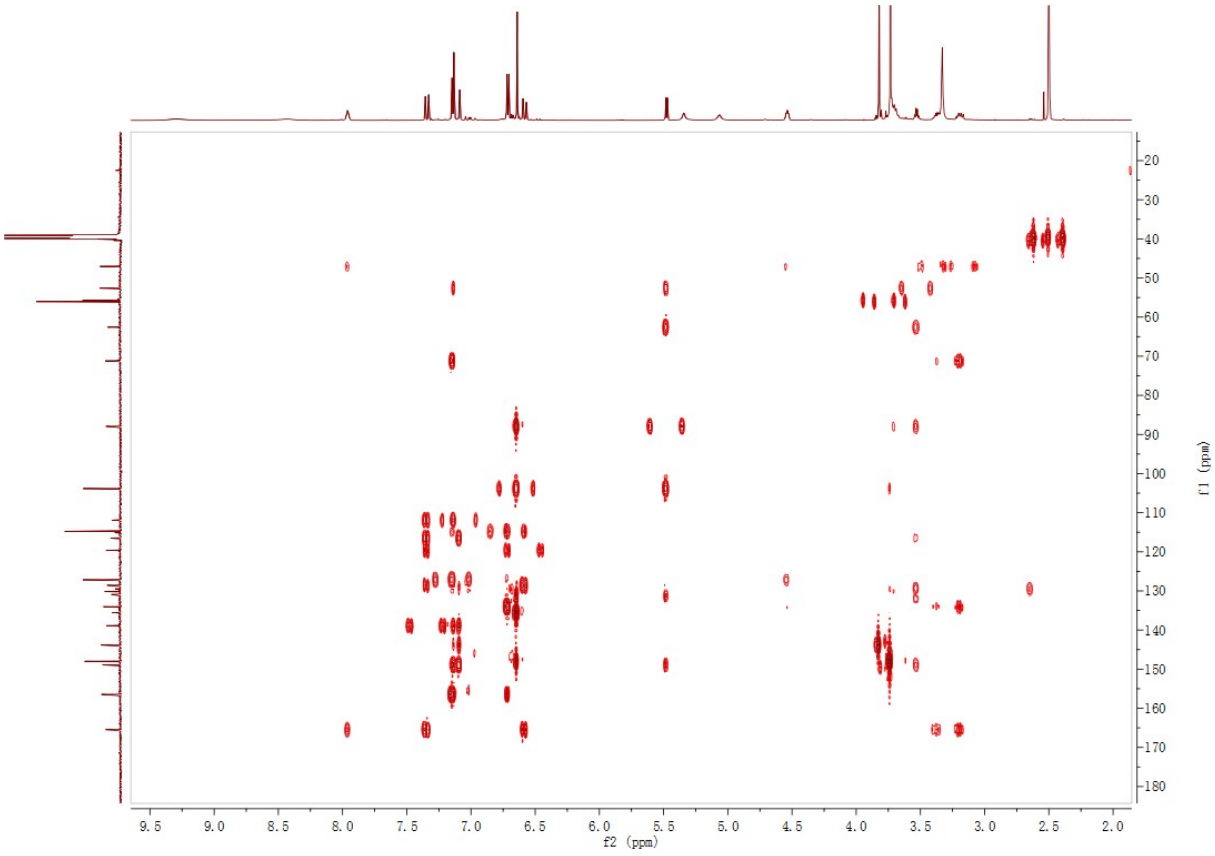


Fig. S40. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compounds **6a/6b**

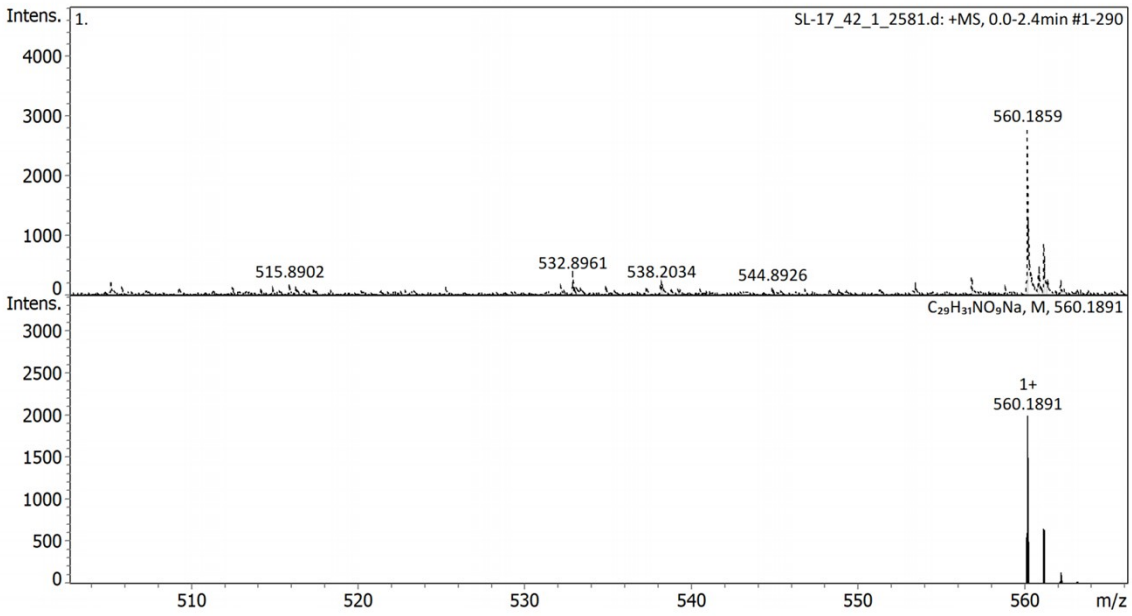
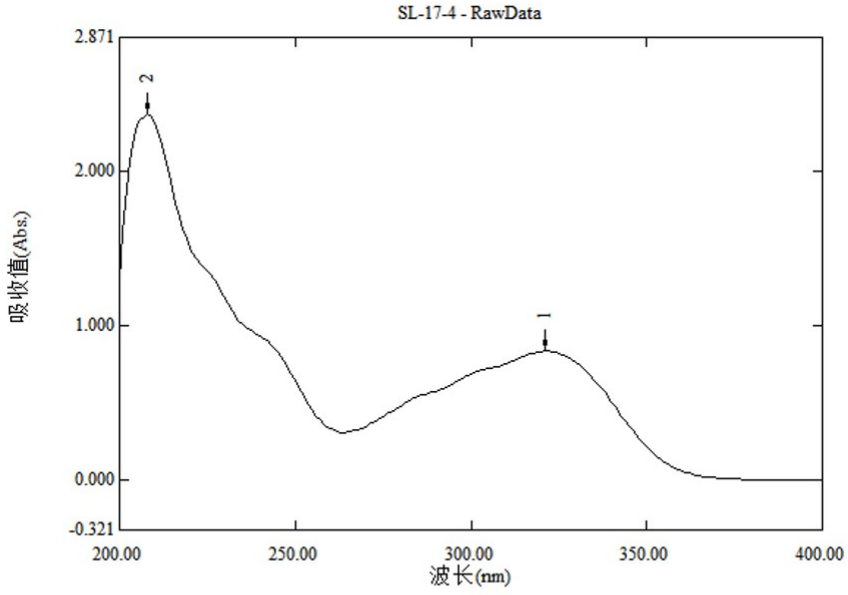


Fig. S41. The HRESIMS spectrum of compounds **6a/6b**



阈值: 0.001000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1	↑	321.0	0.838	
2	↑	208.0	2.374	

Fig. S42. The UV spectrum of compounds **6a/6b**

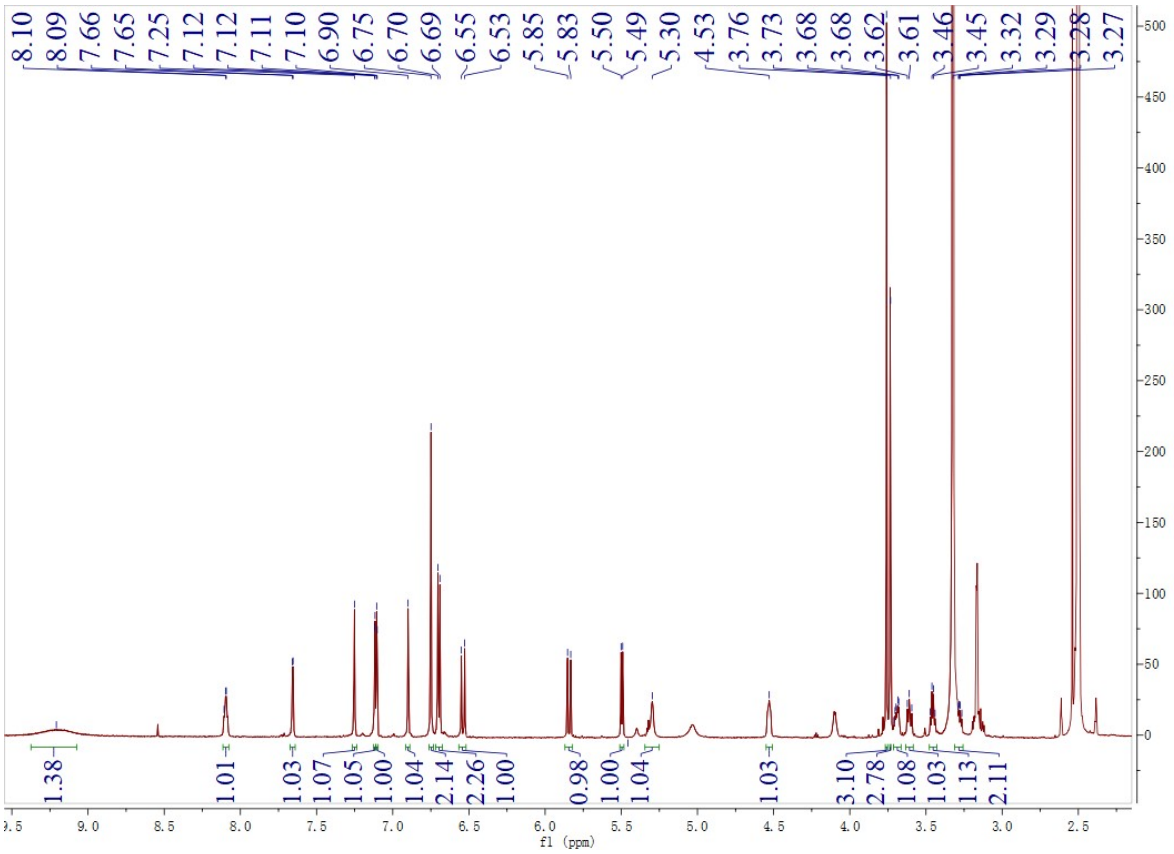


Fig. S43. The ^{1}H NMR (600 MHz, DMSO-d_6) spectrum of compound **7**

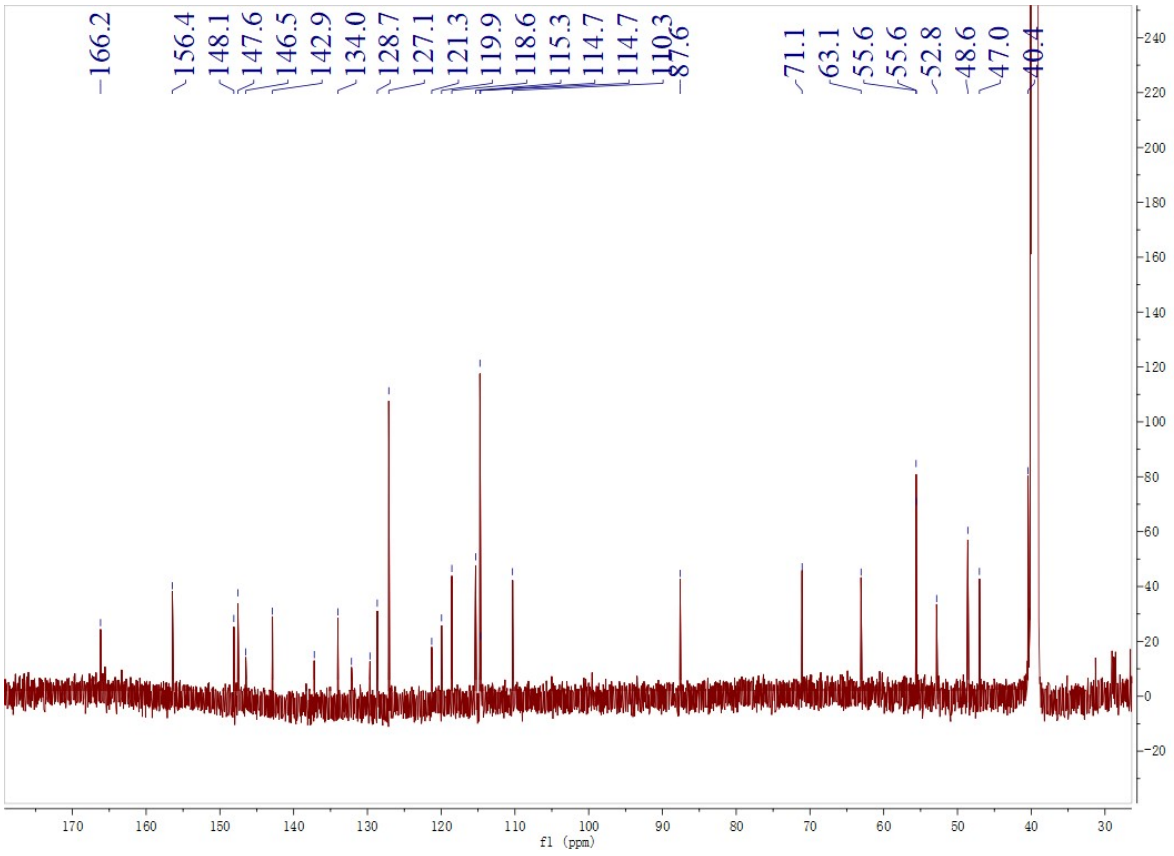


Fig. S44. The ^{13}C NMR (150 MHz, DMSO-d_6) spectrum of compound **7**

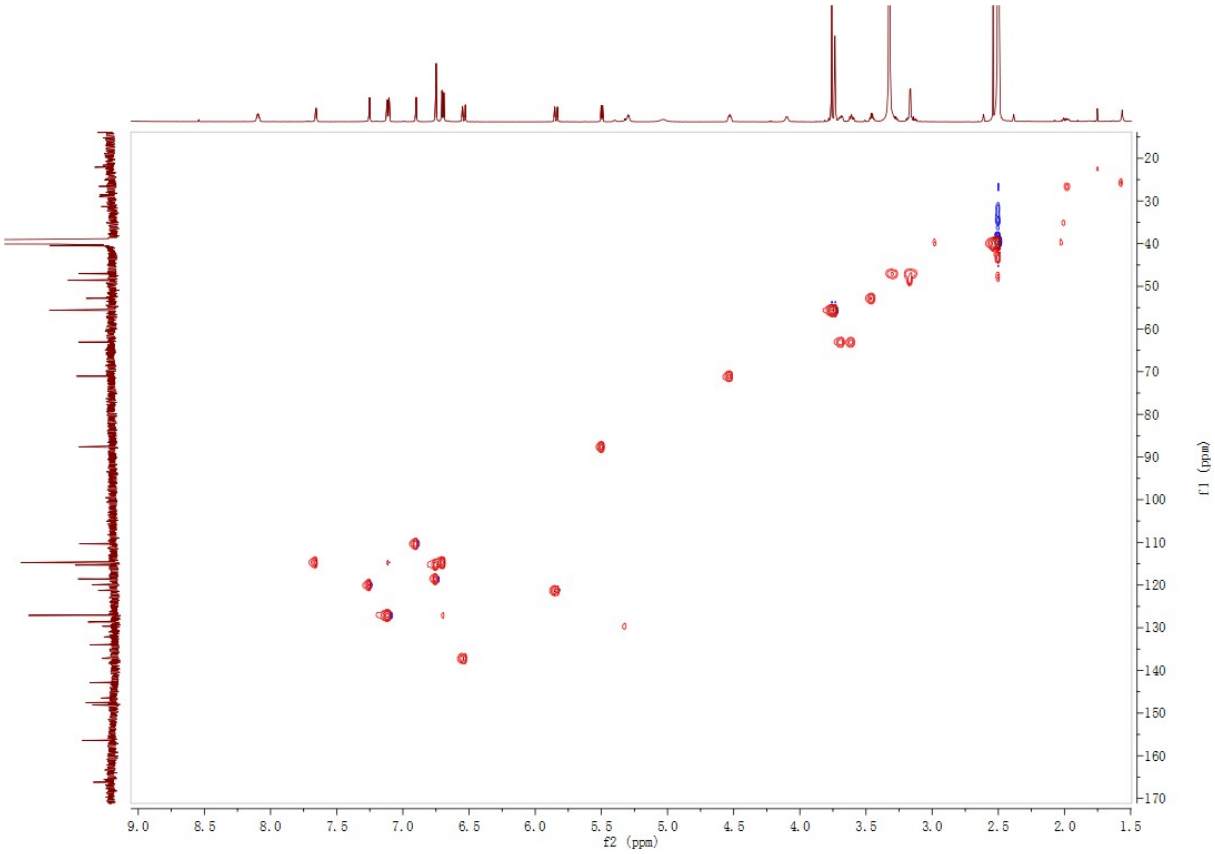


Fig. S45. The HSQC (600 MHz, DMSO-d_6) spectrum of compound **7**

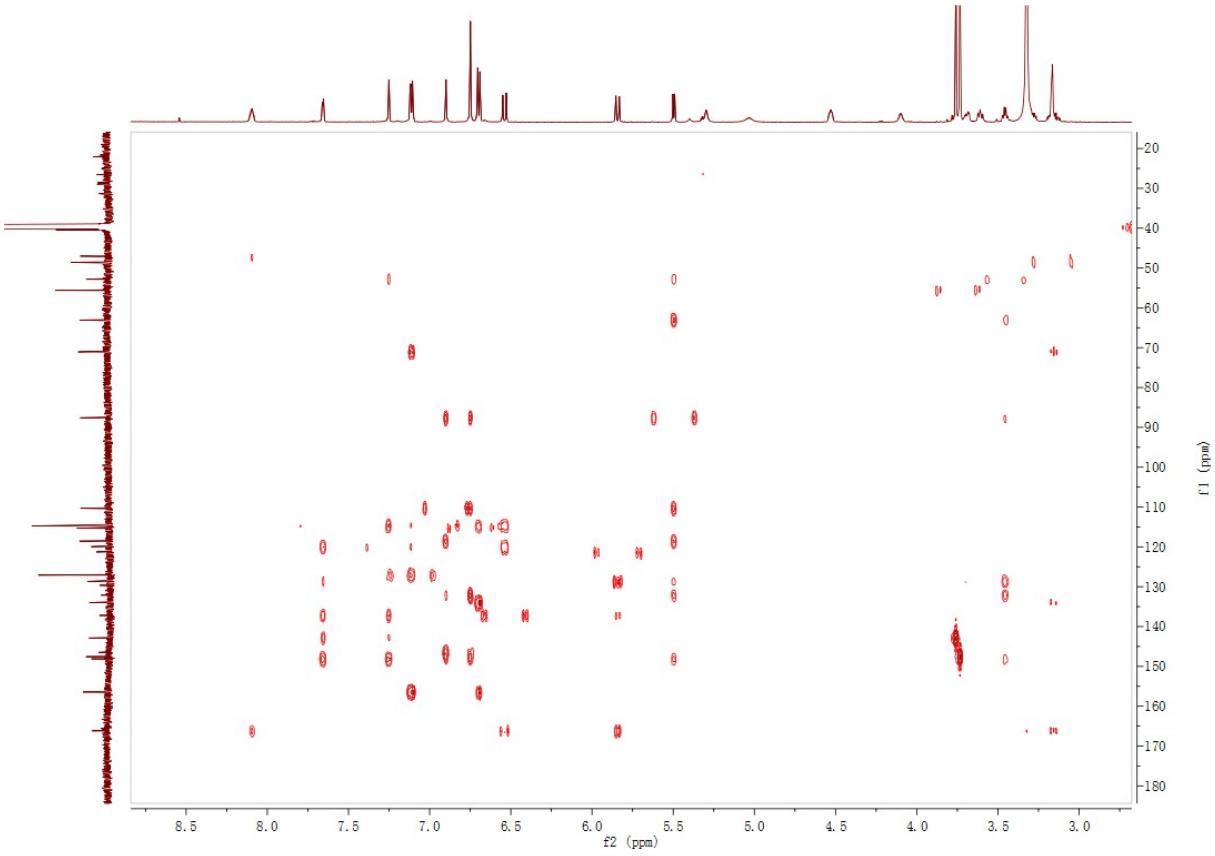


Fig. S46. The HMBC (600 MHz, DMSO-d_6) spectrum of compound **7**

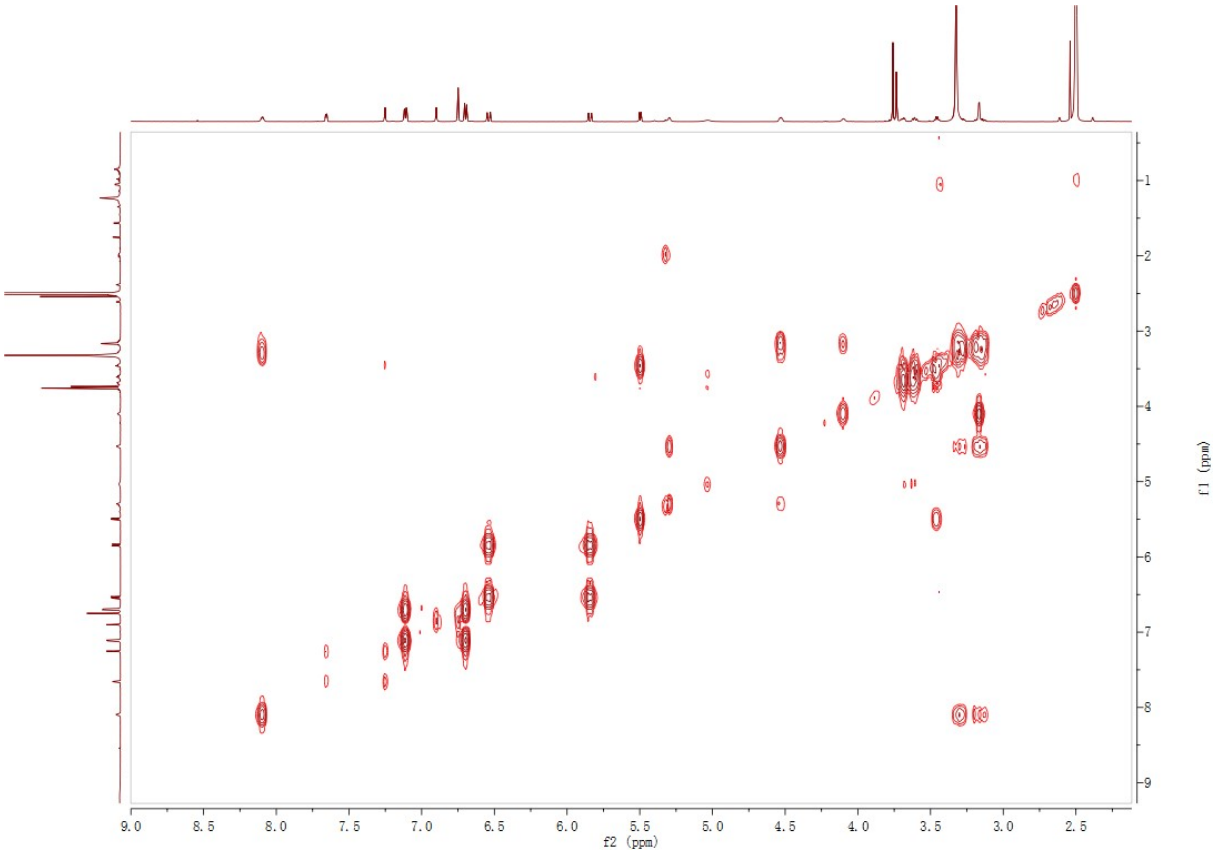


Fig. S47. The ^{1}H-^{1}H COSY (600 MHz, DMSO-d_6) spectrum of compound **7**

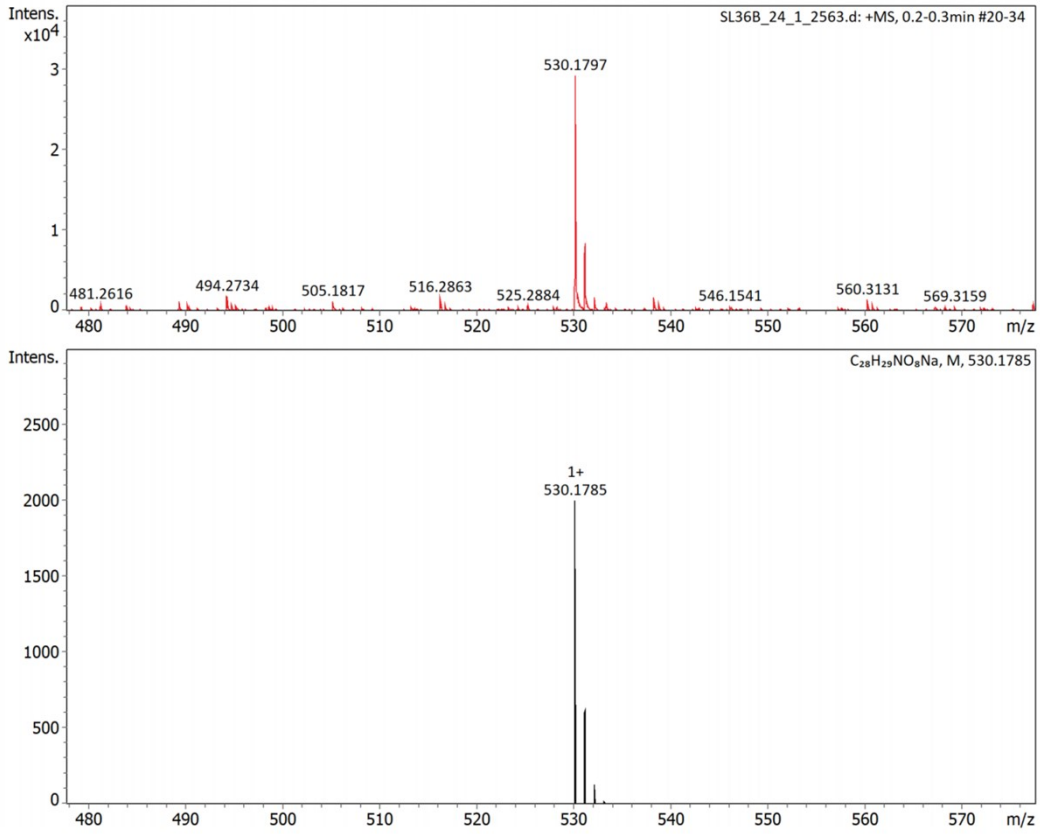
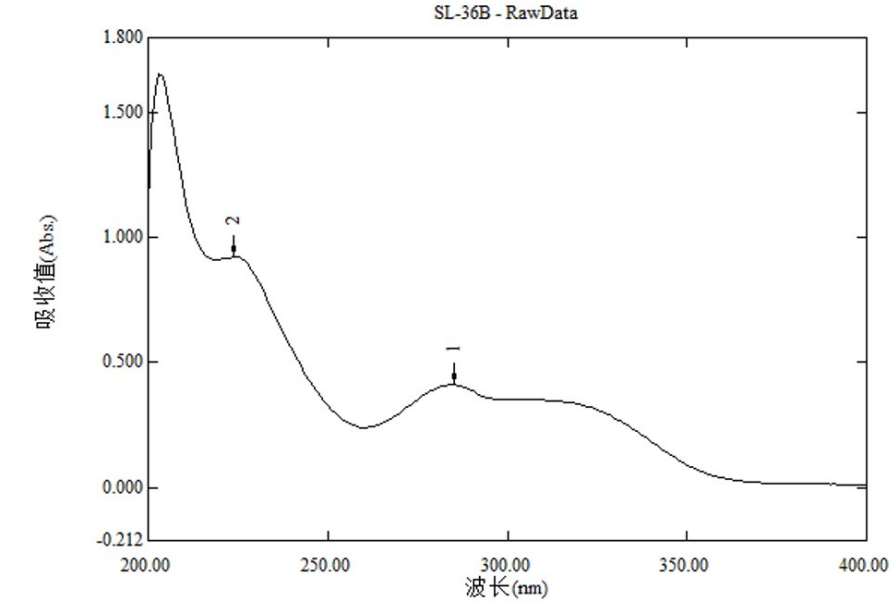


Fig. S48. The HRESIMS spectrum of compound **7**



阈值: 0.010000
点数: 4

No.	P/V	波长(nm)	吸收值(Abs.)	说明
1	↑	285.0	0.411	

Fig. S49. The UV spectrum of compound **7**

Table S1. Inhibitory activities of AChE by compounds from *S. lyratum*

Compound	IC_{50} for AChE (μmol/L)[a]
2a	3.55±1.72
6a	8.62±4.98
Donepezil	3.12±0.006

[a]Results represent means±SD (n=3) and all values are significantly different (P<0.05).