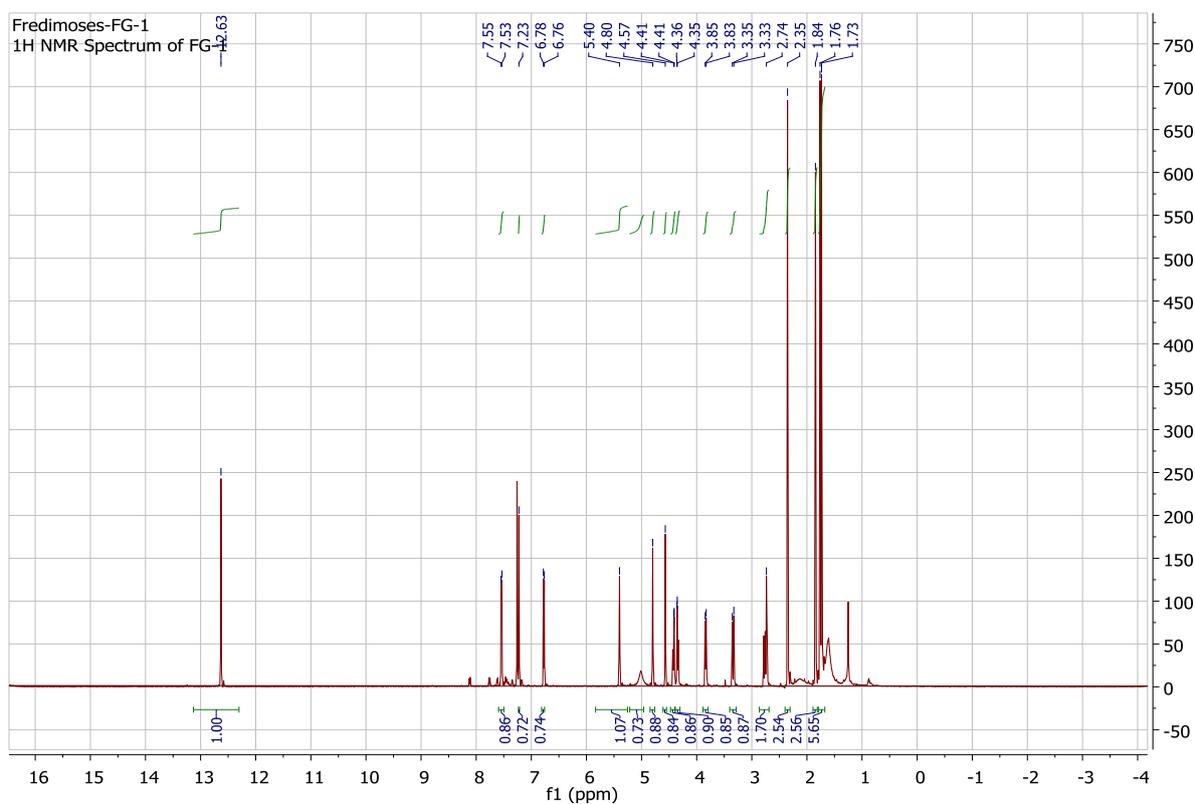
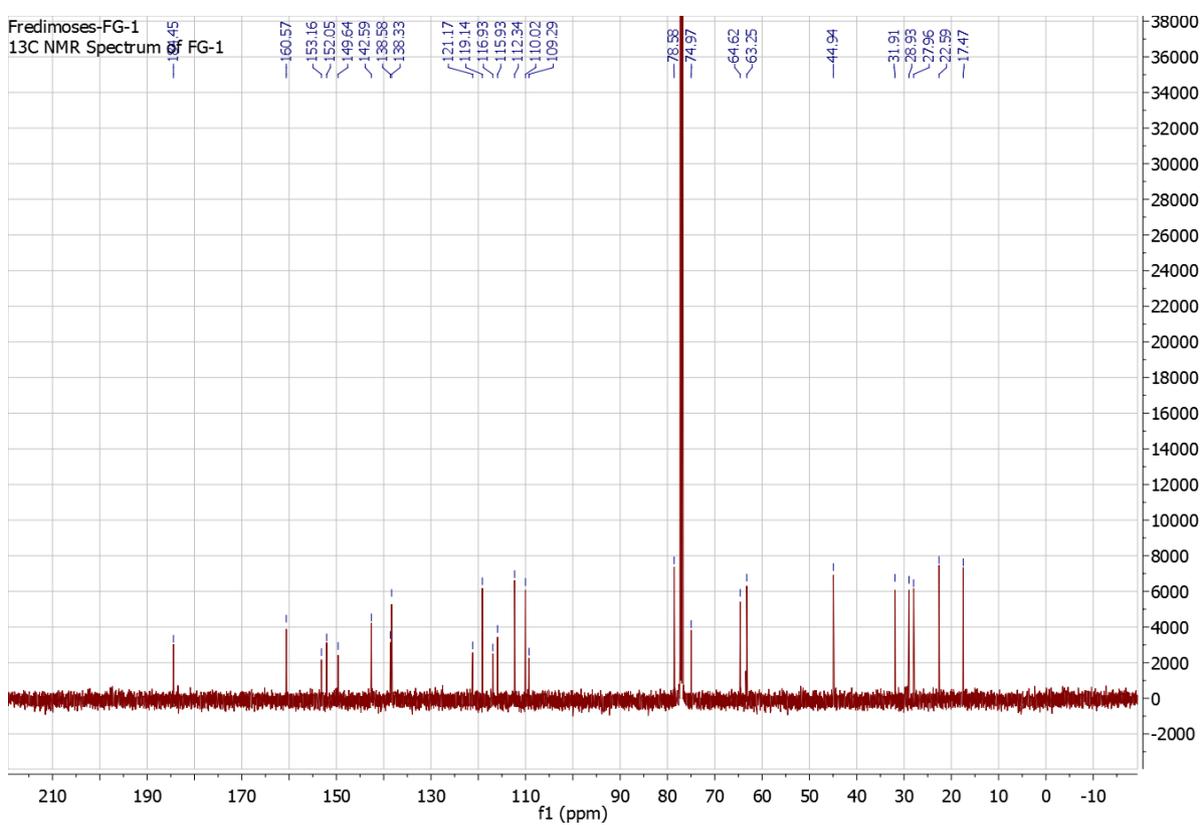
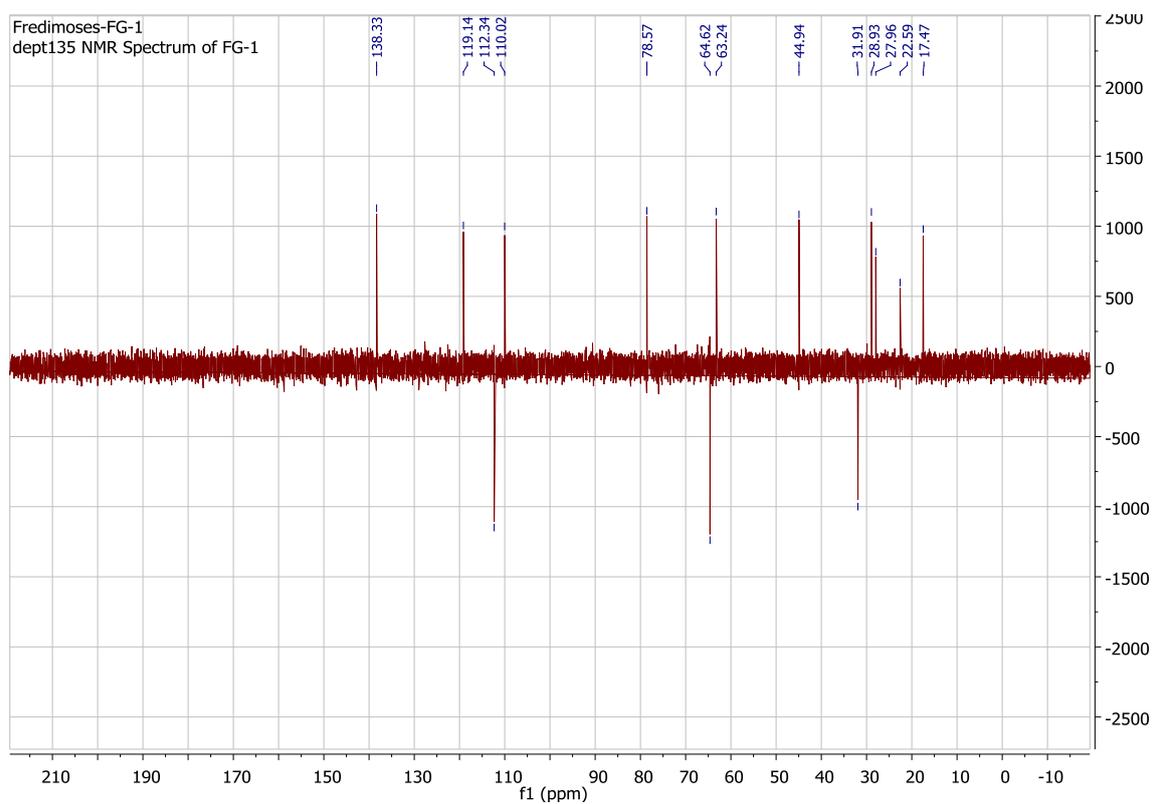
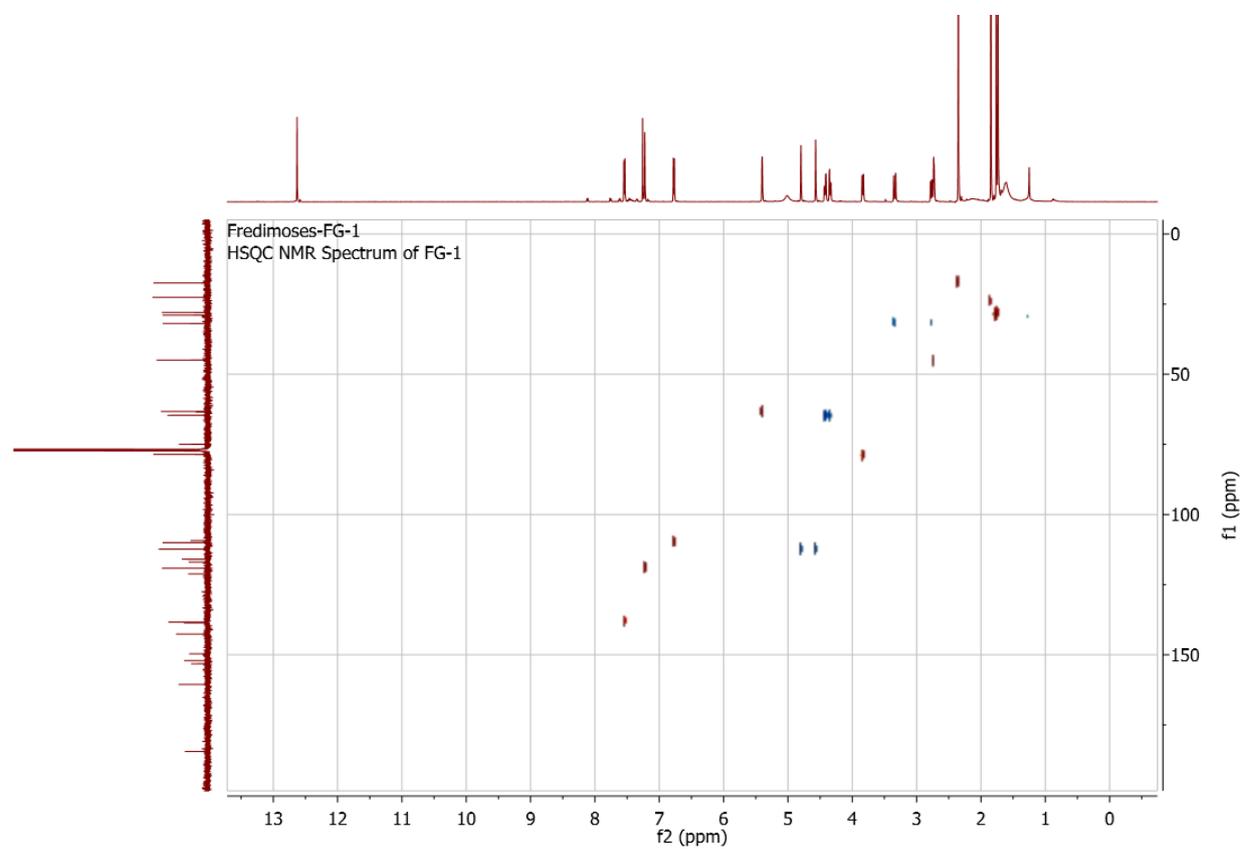


## Supplementary Information

- Figure S1.**  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) spectrum of compound **1**.  
**Figure S2.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **1**.  
**Figure S3.** Dept 135 (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **1**.  
**Figure S4.** HSQC spectrum of compound **1**.  
**Figure S5.** HMBC spectrum of compound **1**.  
**Figure S6.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound **1**.  
**Figure S7.** UV spectrum of compound **1**.  
**Figure S8.** IR spectrum of compound **1**.  
**Figure S9.** HRESI-MS of compound **1**.  
**Figure S10.**  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) spectrum of compound **2**.  
**Figure S11.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **2**.  
**Figure S12.** Dept 135 (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **2**.  
**Figure S13.** UV spectrum of compound **2**.  
**Figure S14.** IR spectrum of compound **2**.  
**Figure S15.** HRESI-MS of compound **2**.  
**Figure S16.**  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) spectrum of compound **3**.  
**Figure S17.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **3**.  
**Figure S18.** UV spectrum of compound **3**.  
**Figure S19.** IR spectrum of compound **3**.  
**Figure S20.** HRESI-MS of compound **3**.  
**Figure S21.**  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) spectrum of compound **4**.  
**Figure S22.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **4**.  
**Figure S23.** Dept 135 (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **4**.  
**Figure S24.** HSQC spectrum of compound **4**.  
**Figure S25.** HMBC spectrum of compound **4**.  
**Figure S26.** UV spectrum of compound **4**.  
**Figure S27.** IR spectrum of compound **4**.  
**Figure S28.** HRESI-MS of compound **4**.

**Figure S1.**  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) spectrum of compound **1**.**Figure S2.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **1**.

**Figure S3.** Dept 135 (125 MHz, CDCl<sub>3</sub>) spectrum of compound 1.**Figure S4.** HSQC spectrum of compound 1.

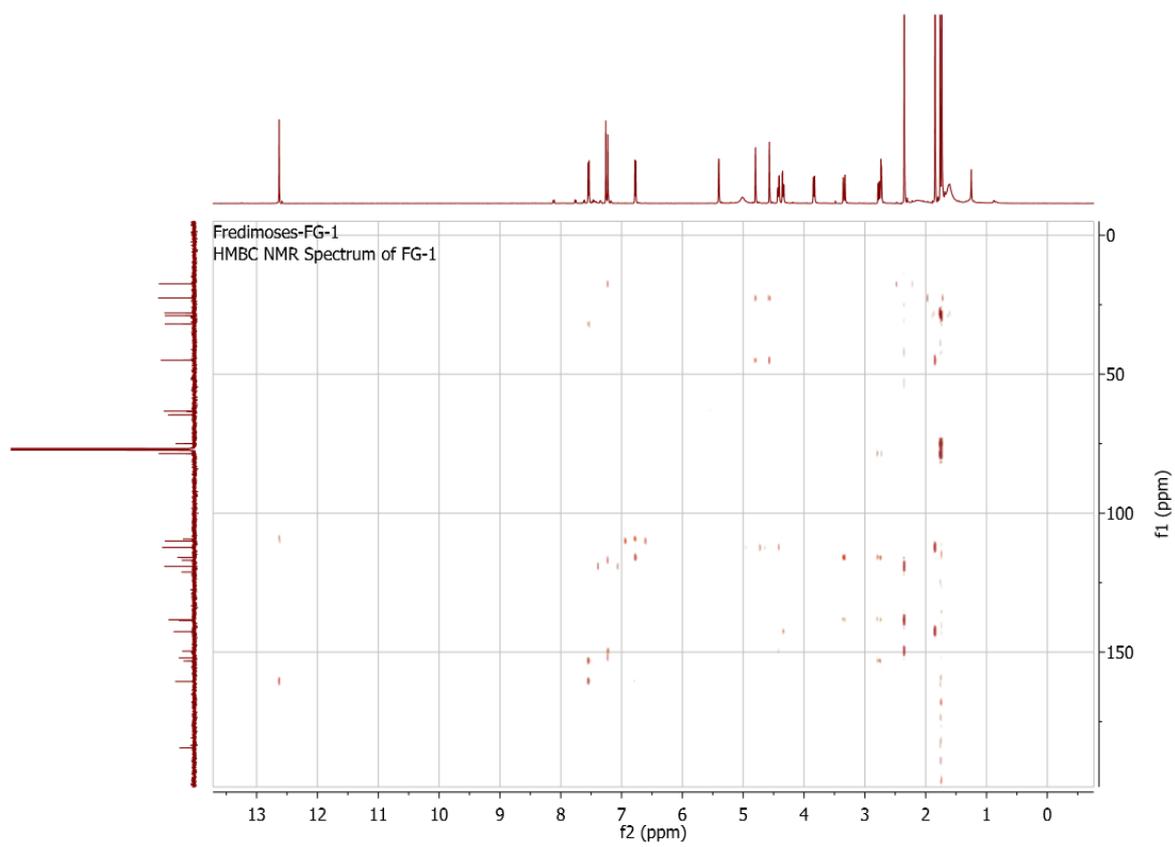
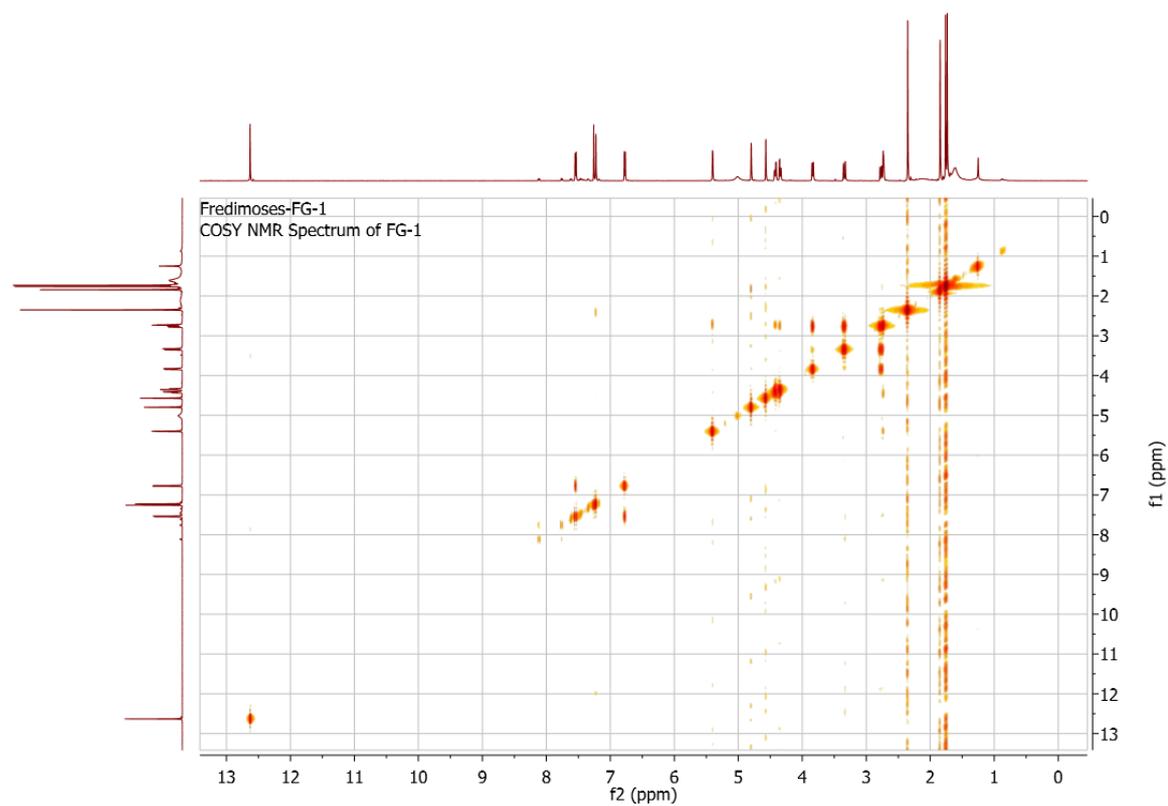
**Figure S5.** HMBC spectrum of compound 1.**Figure S6.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound 1.

Figure S7. UV spectrum of compound 1.

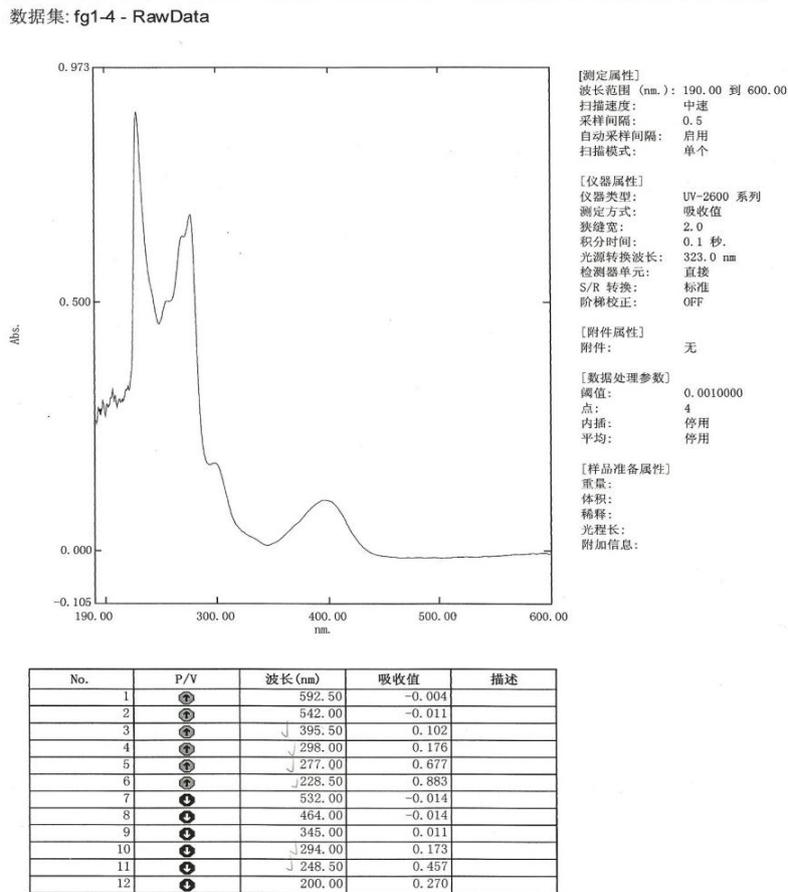


Figure S8. IR spectrum of compound 1.

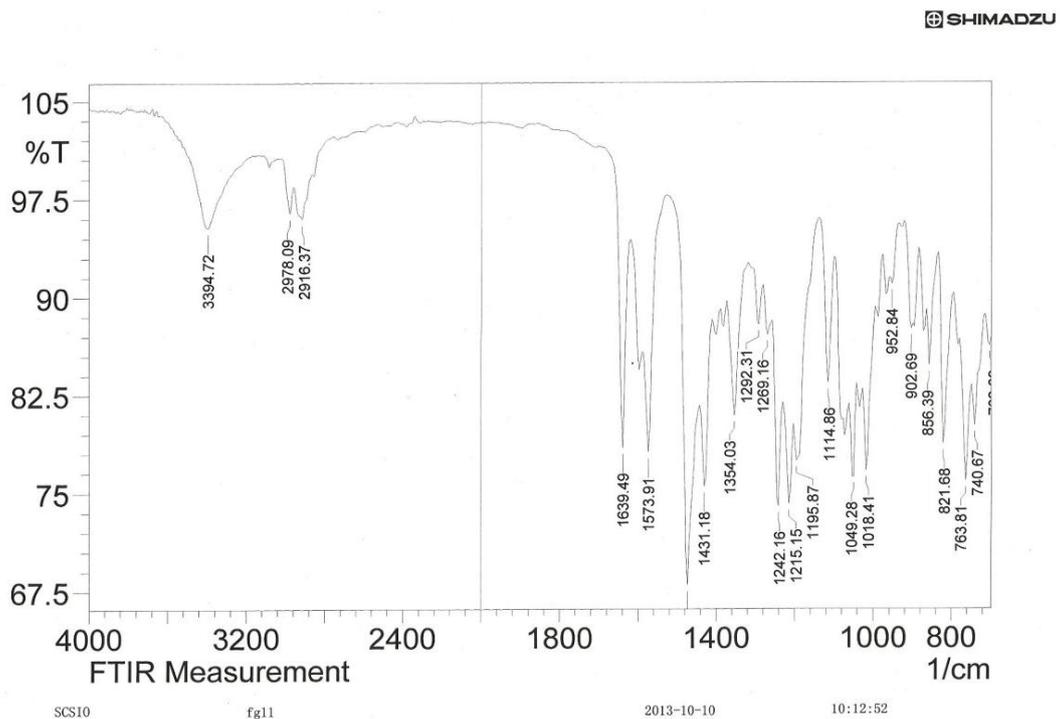
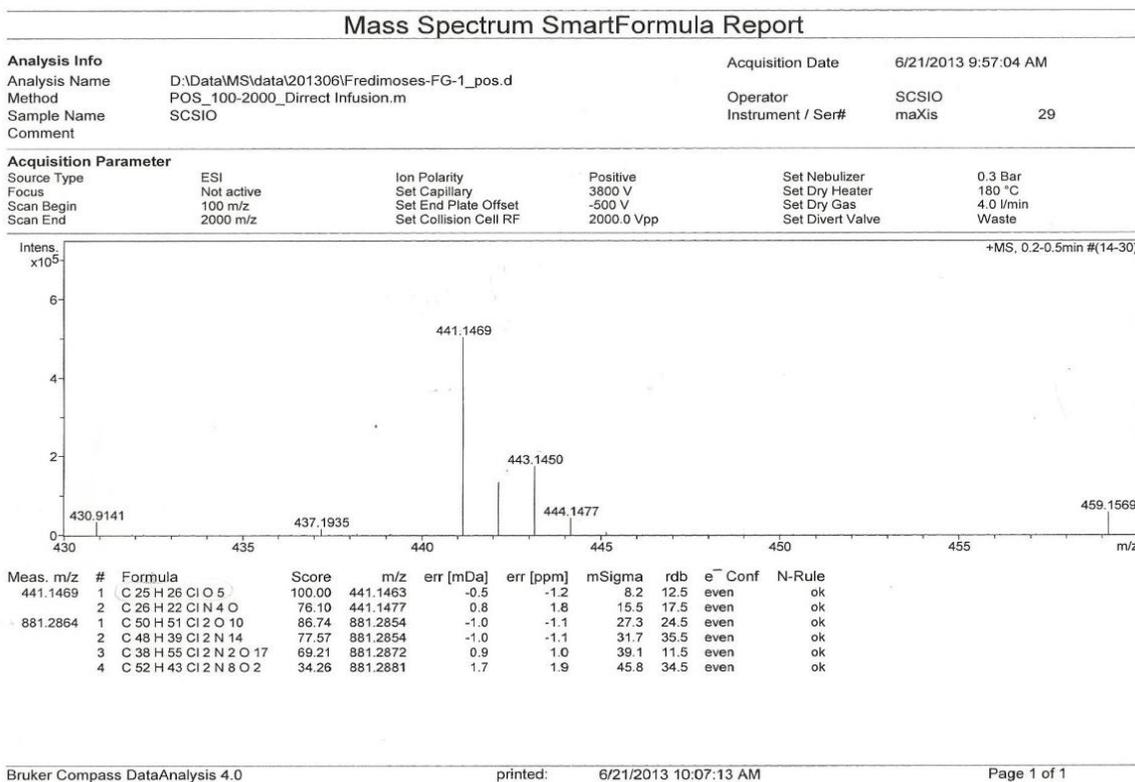
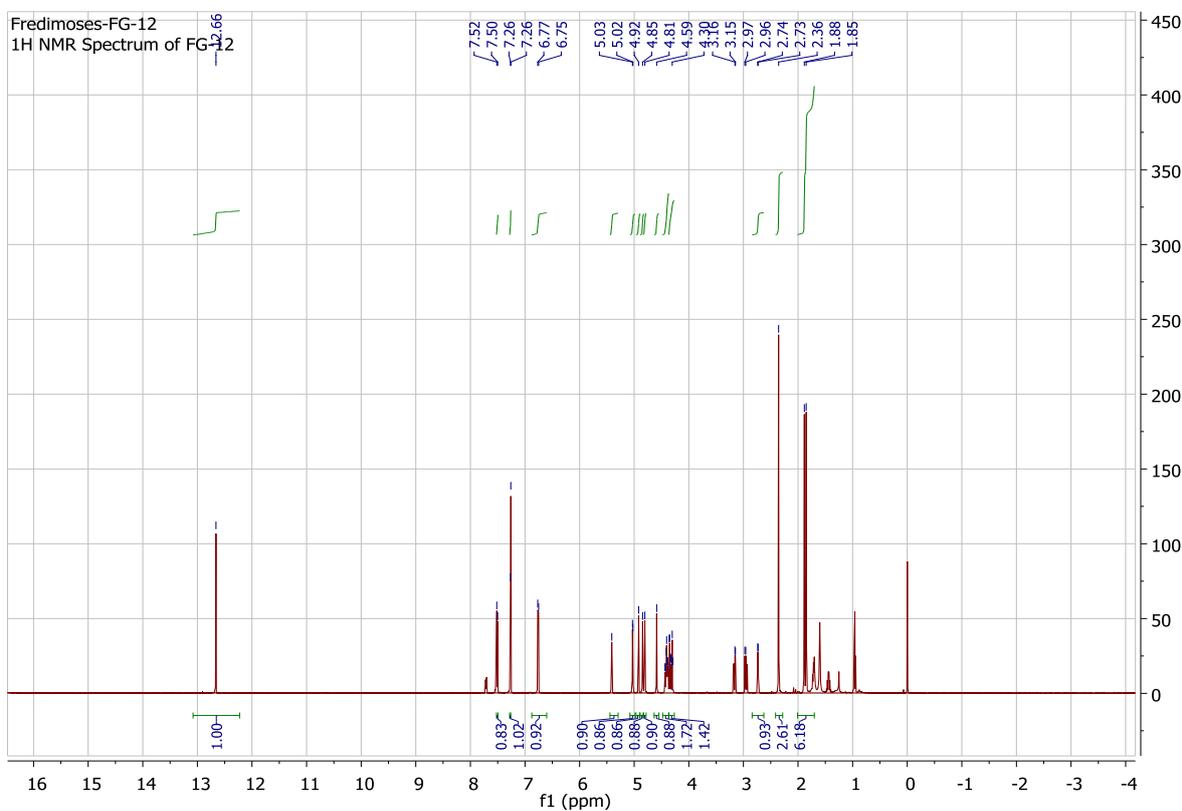


Figure S9. HRESI-MS of compound 1.

Figure S10. <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>) spectrum of compound 2.

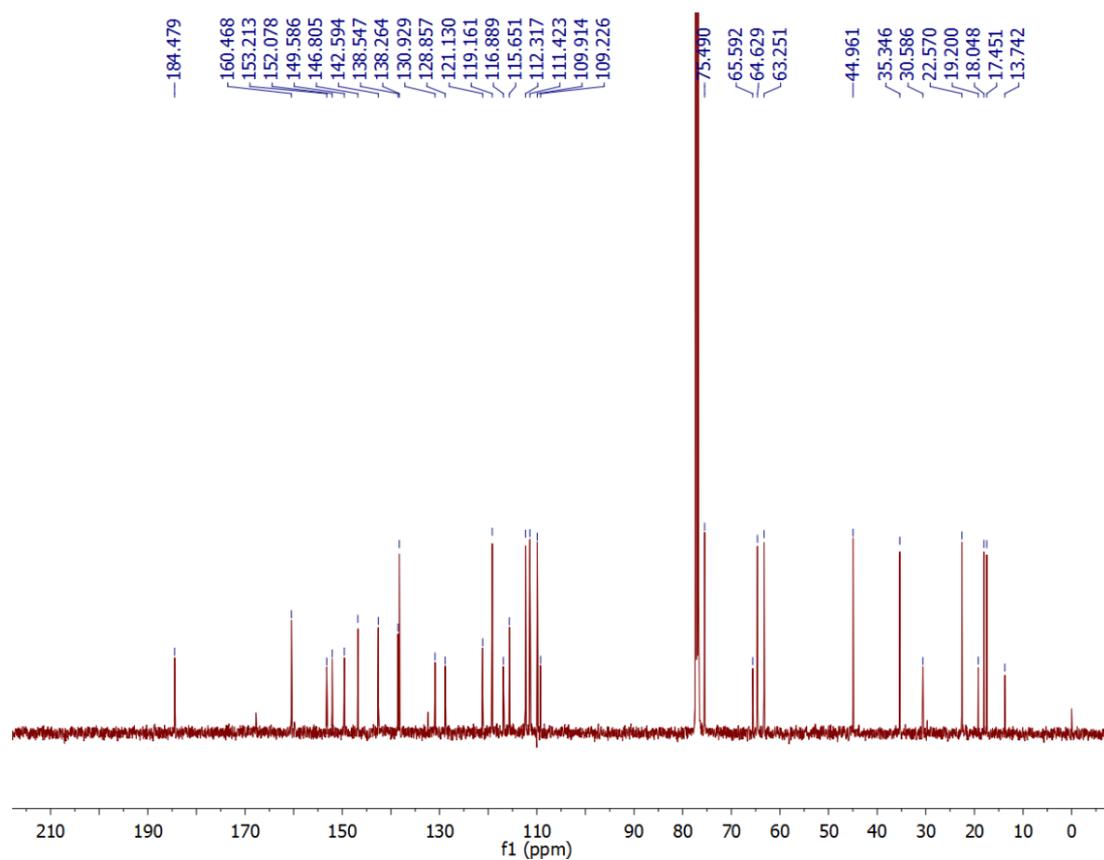
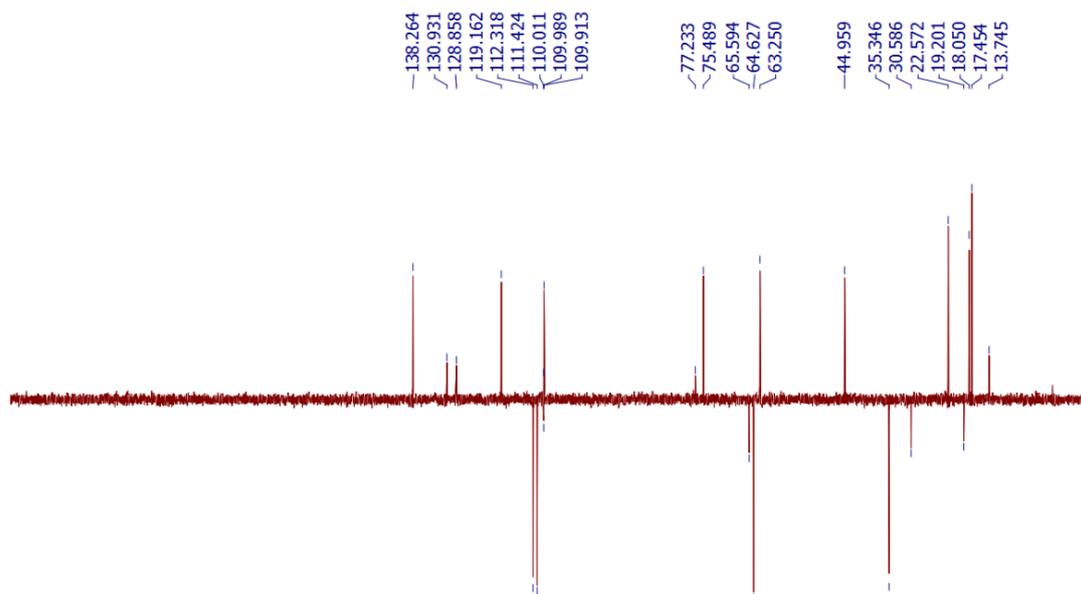
**Figure S11.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **2**.**Figure S12.** Dept 135 (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound **2**.

Figure S13. UV spectrum of compound 2.

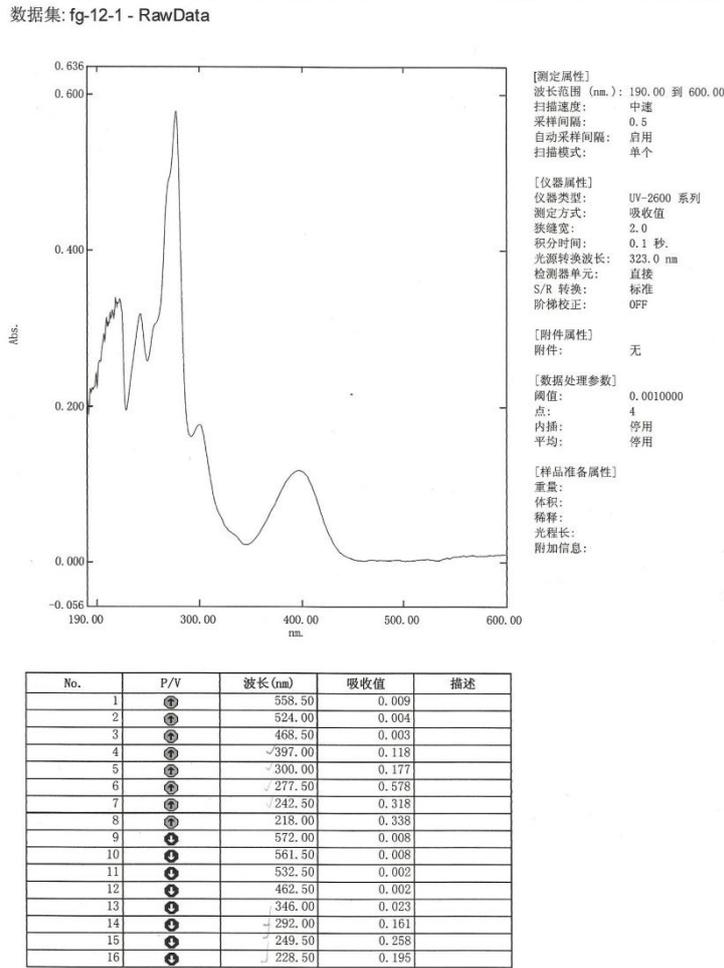


Figure S14. IR spectrum of compound 2.

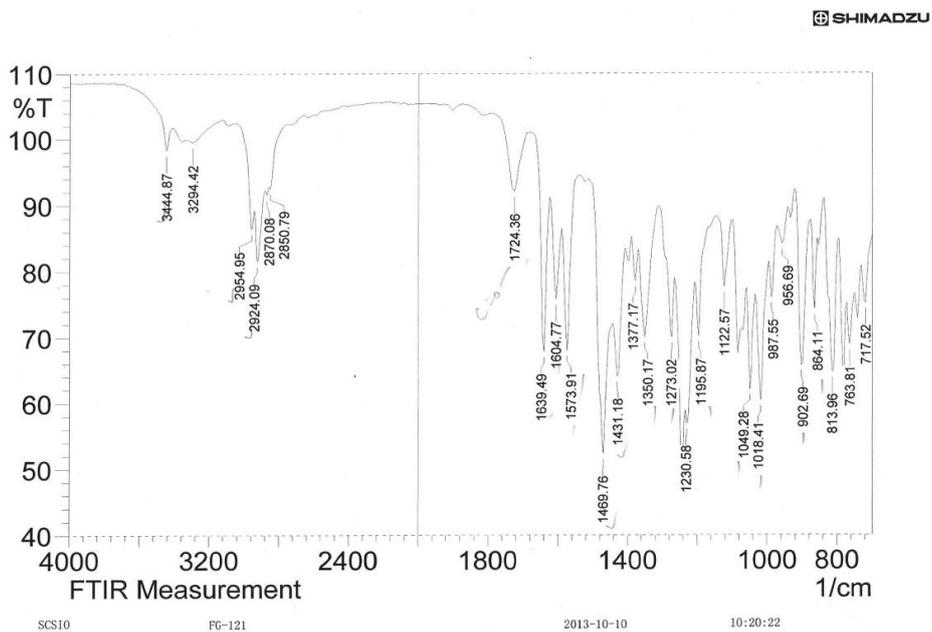


Figure S15. HRESI-MS of compound 2.

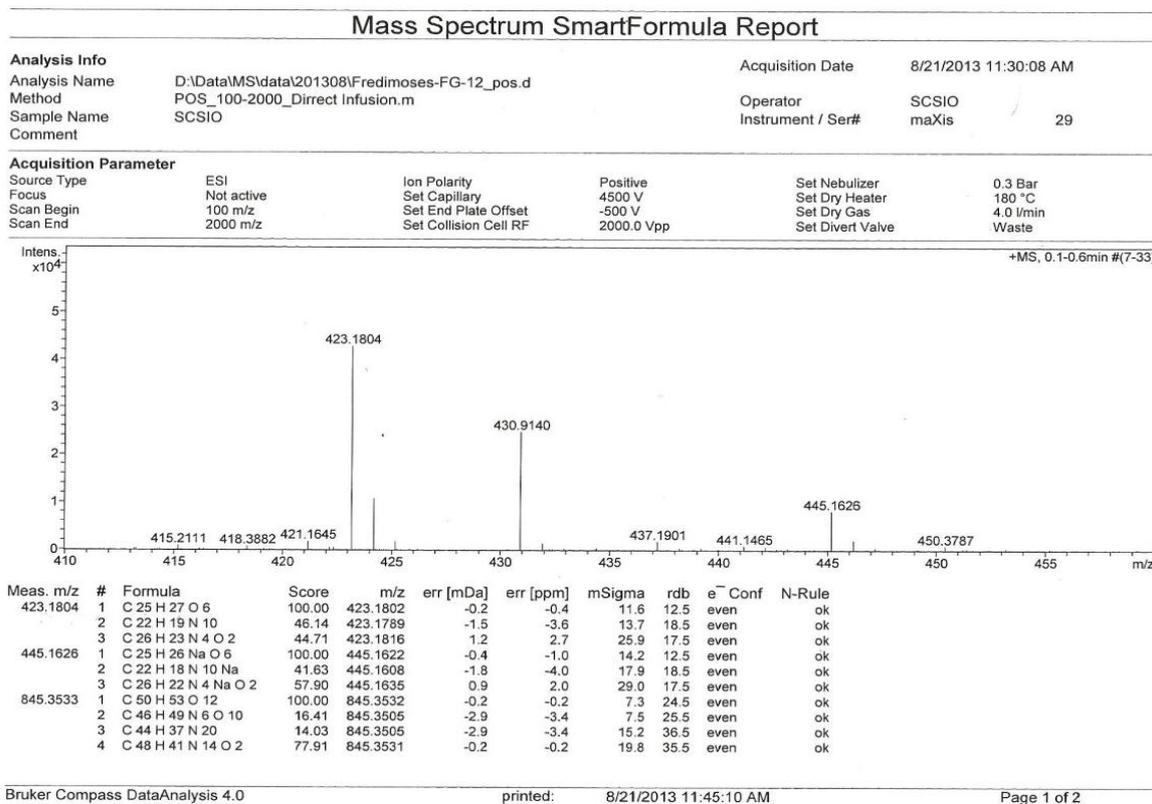
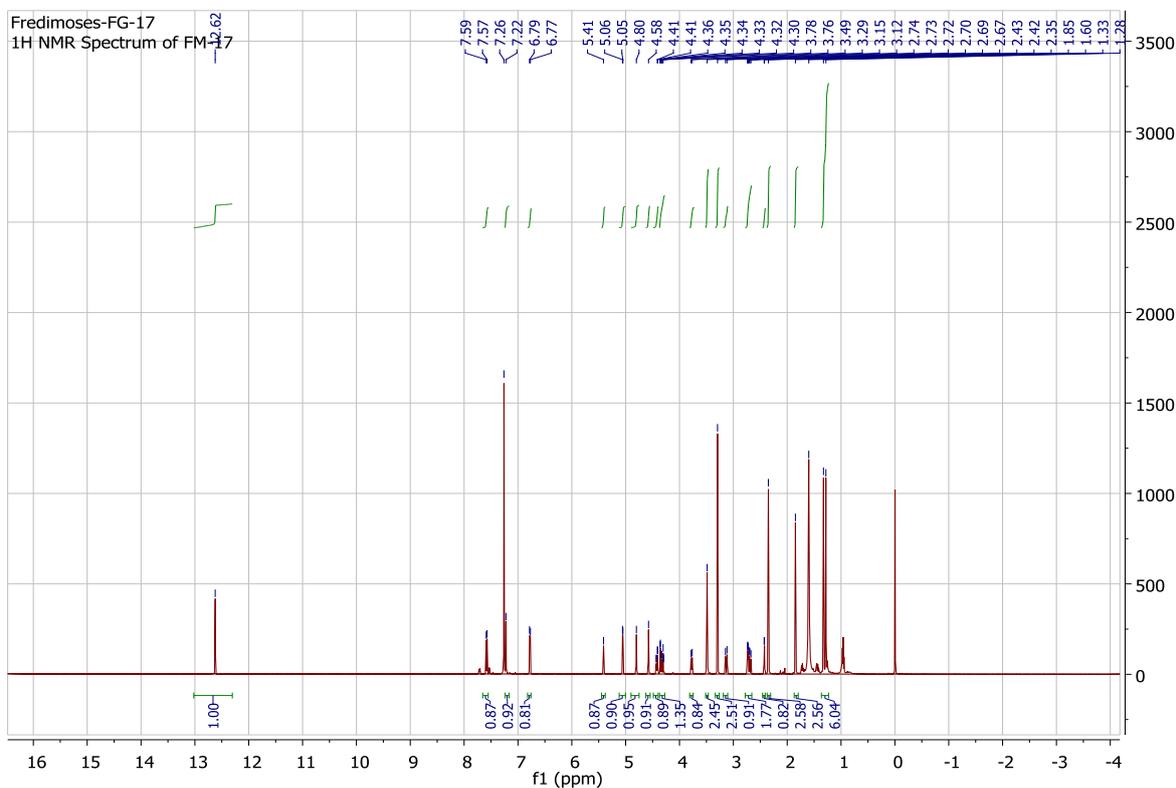
Figure S16. <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>) spectrum of compound 3.

Figure S17. <sup>13</sup>C NMR (125 MHz, CDCl<sub>3</sub>) spectrum of compound 3.

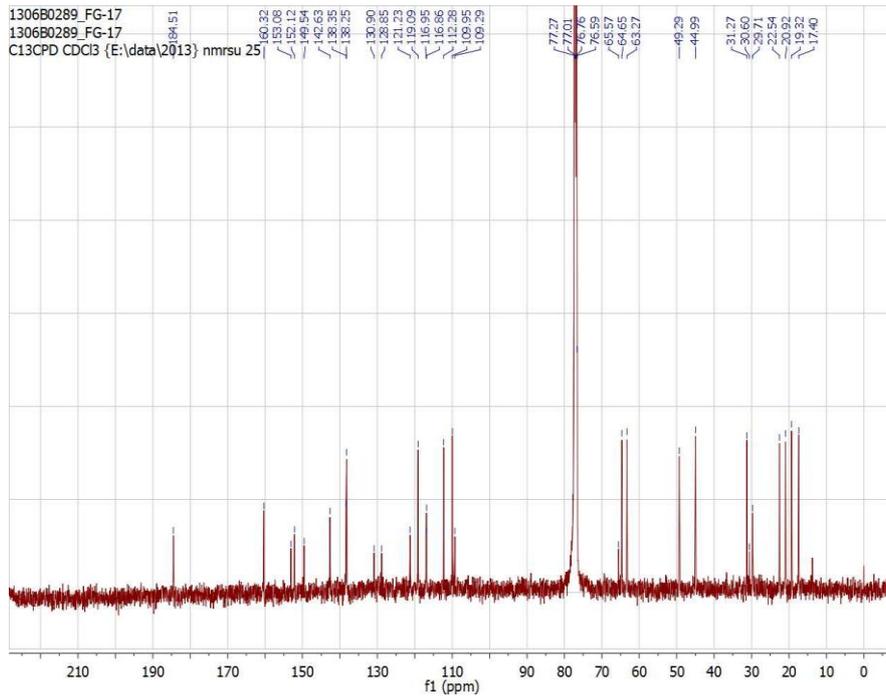
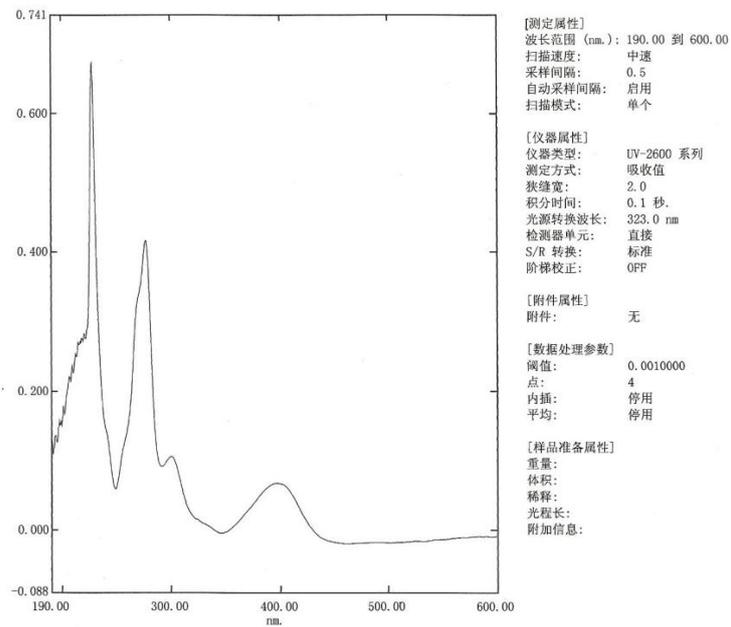


Figure S18. UV spectrum of compound 3.

数据集: fg-17 - RawData



No.	P/V	波长 (nm)	吸收值	描述
1	⊕	398.50	0.068	
2	⊕	300.50	0.106	
3	⊕	277.50	0.417	
4	⊕	228.00	0.672	
5	⊕	532.00	-0.016	
6	⊕	502.00	-0.018	
7	⊕	463.00	-0.019	
8	⊕	346.50	-0.004	
9	⊕	291.50	0.092	
10	⊕	249.00	0.060	

Figure S19. IR spectrum of compound 3.

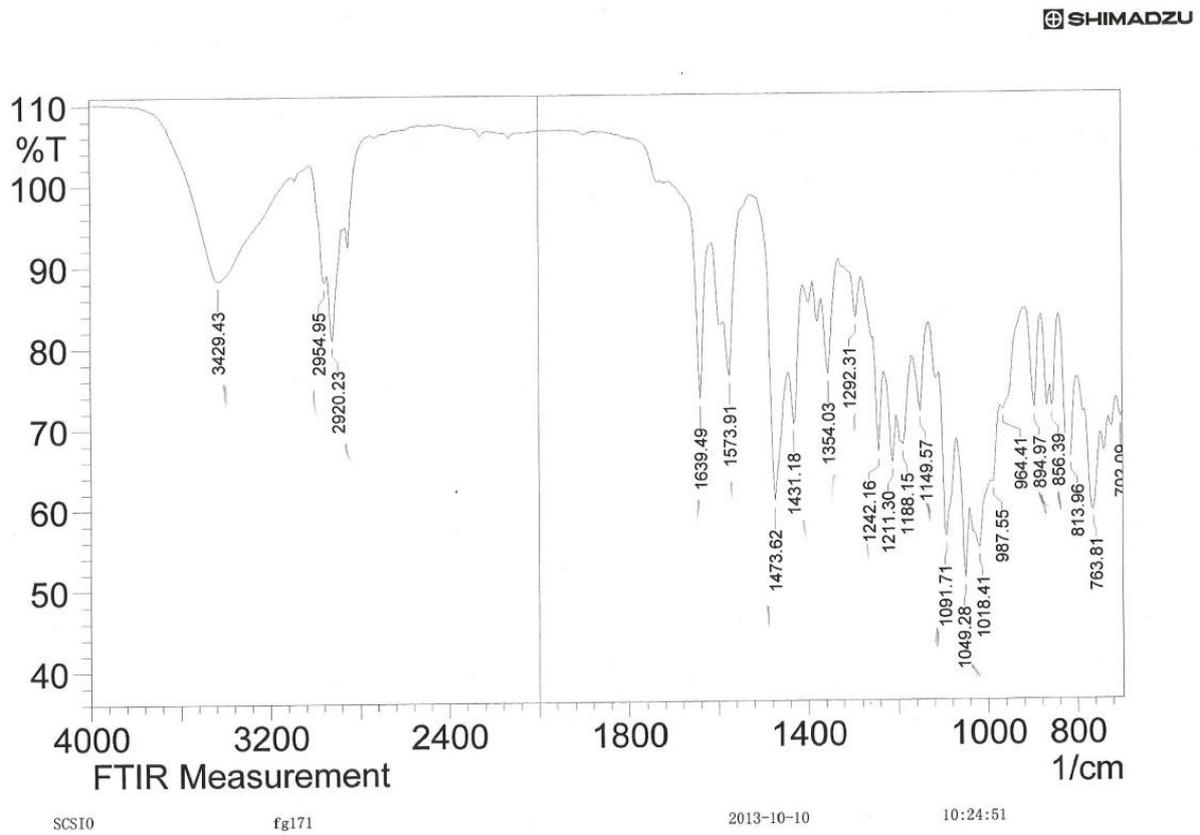
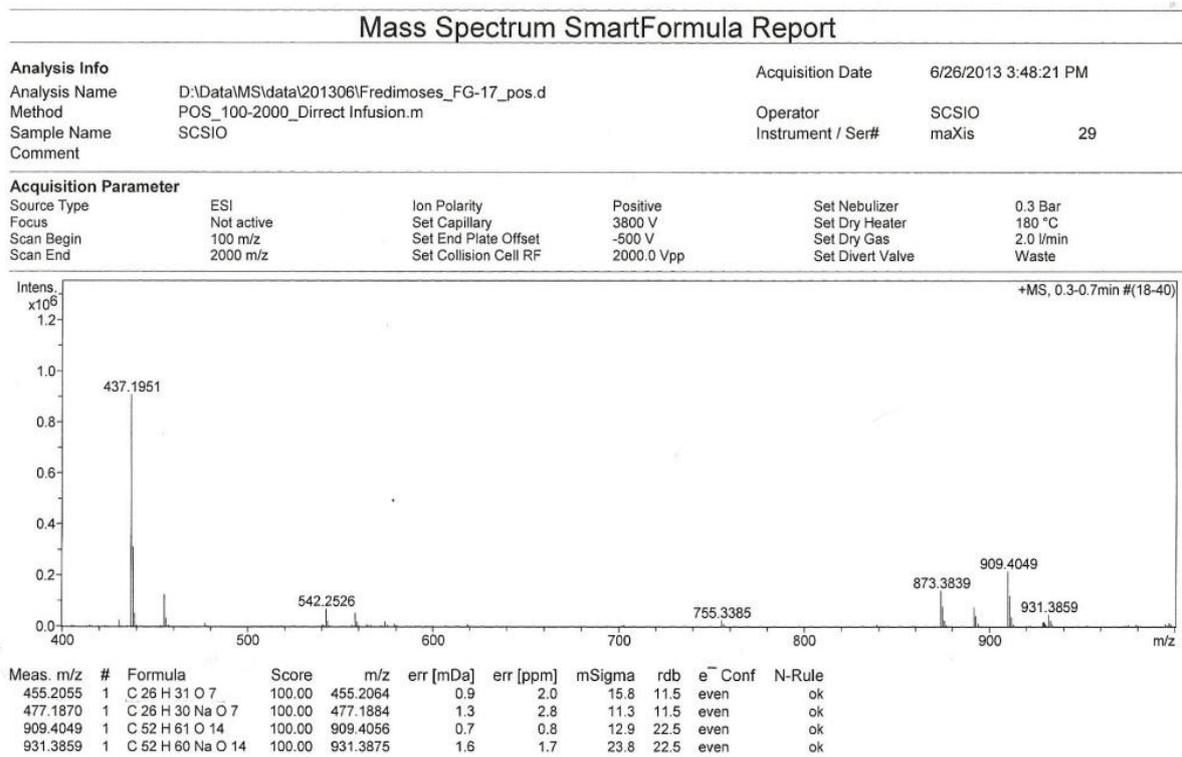
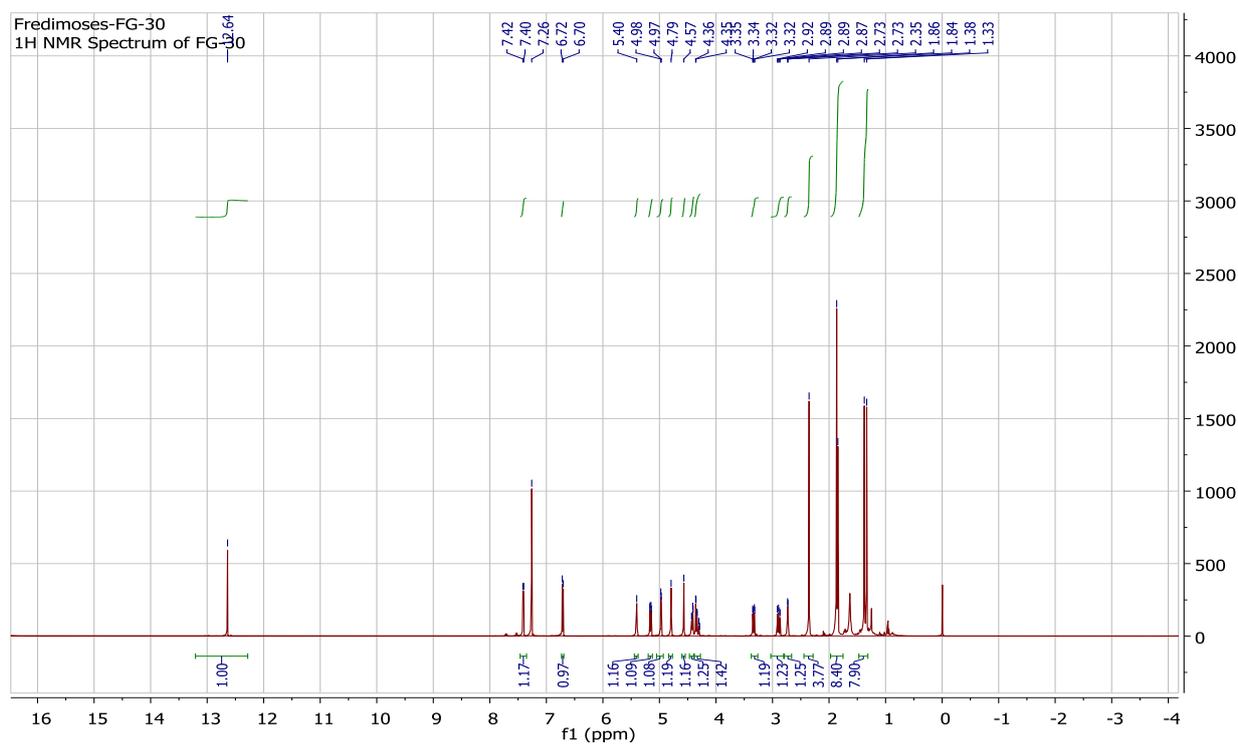
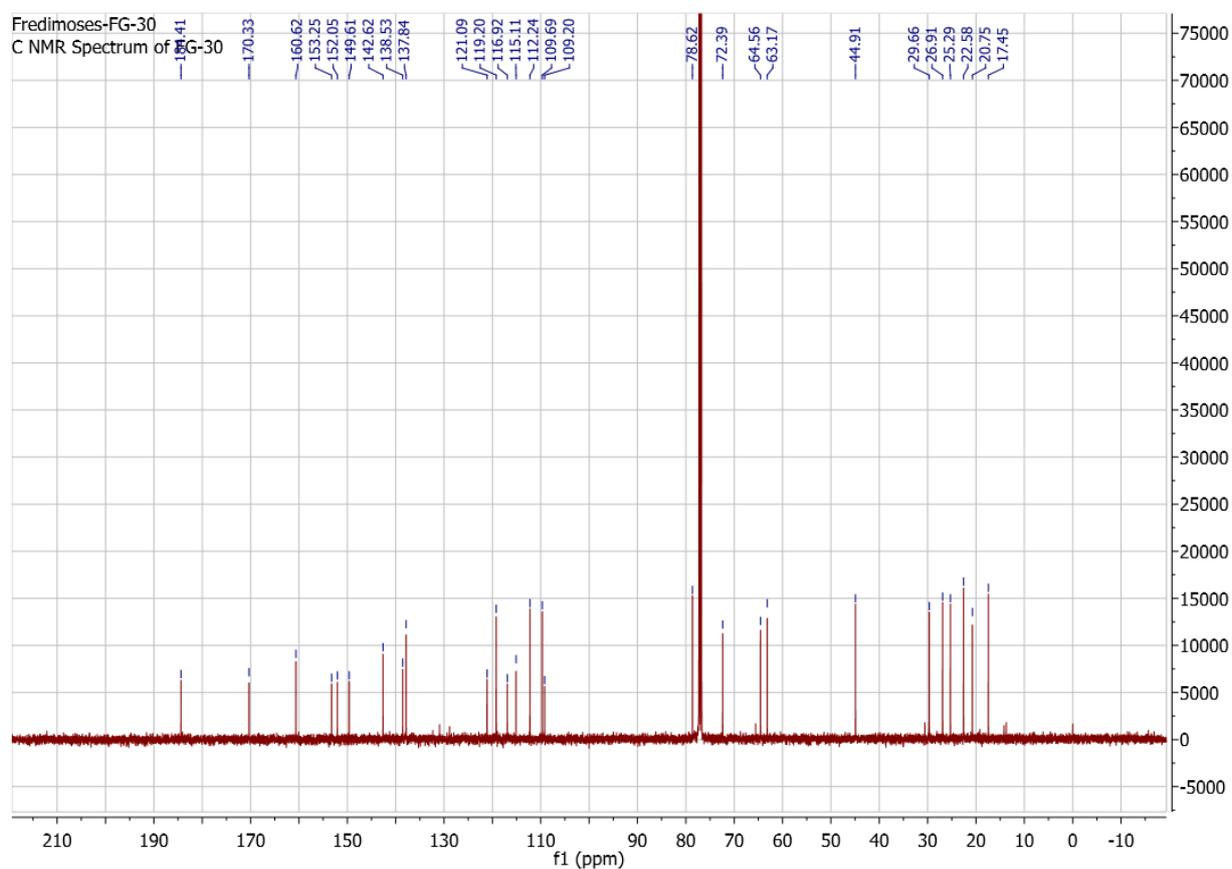


Figure S20. HRESI-MS of compound 3.



**Figure S21.**  $^1\text{H}$  NMR (500 MHz,  $\text{CDCl}_3$ ) spectrum of compound 4.**Figure S22.**  $^{13}\text{C}$  NMR (125 MHz,  $\text{CDCl}_3$ ) spectrum of compound 4.

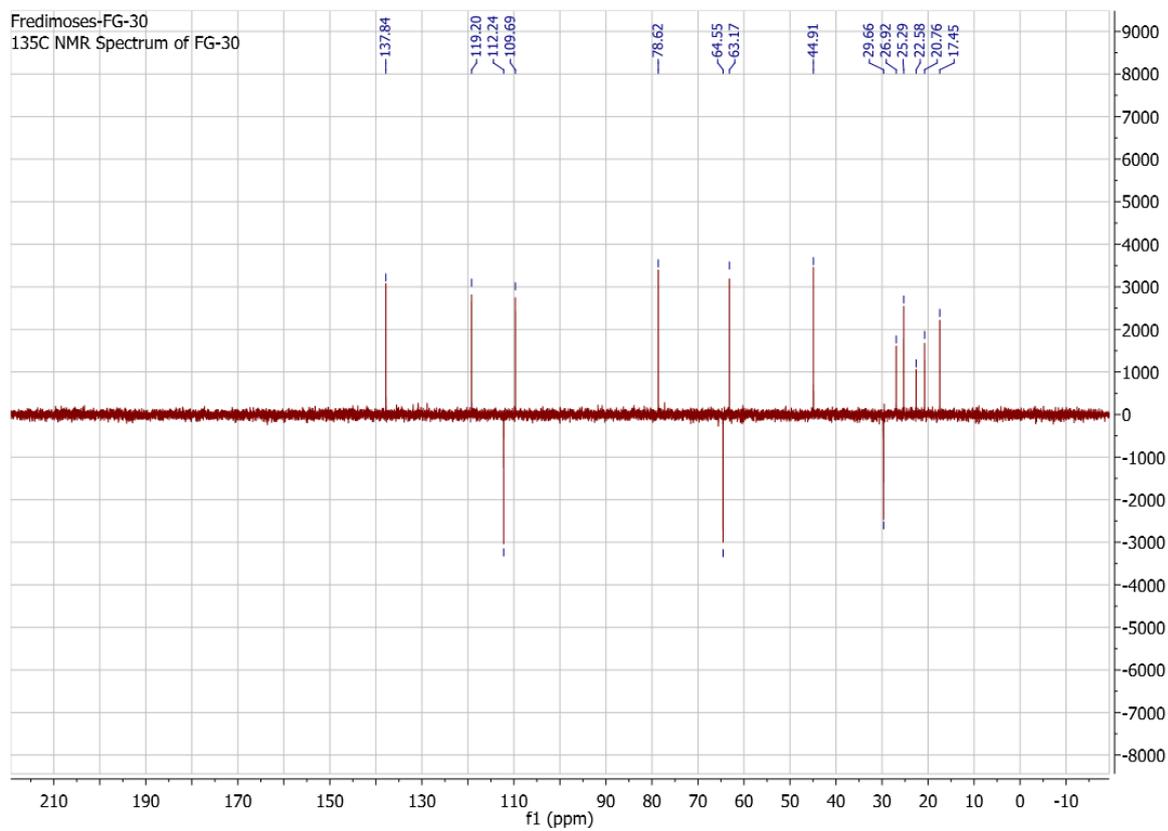
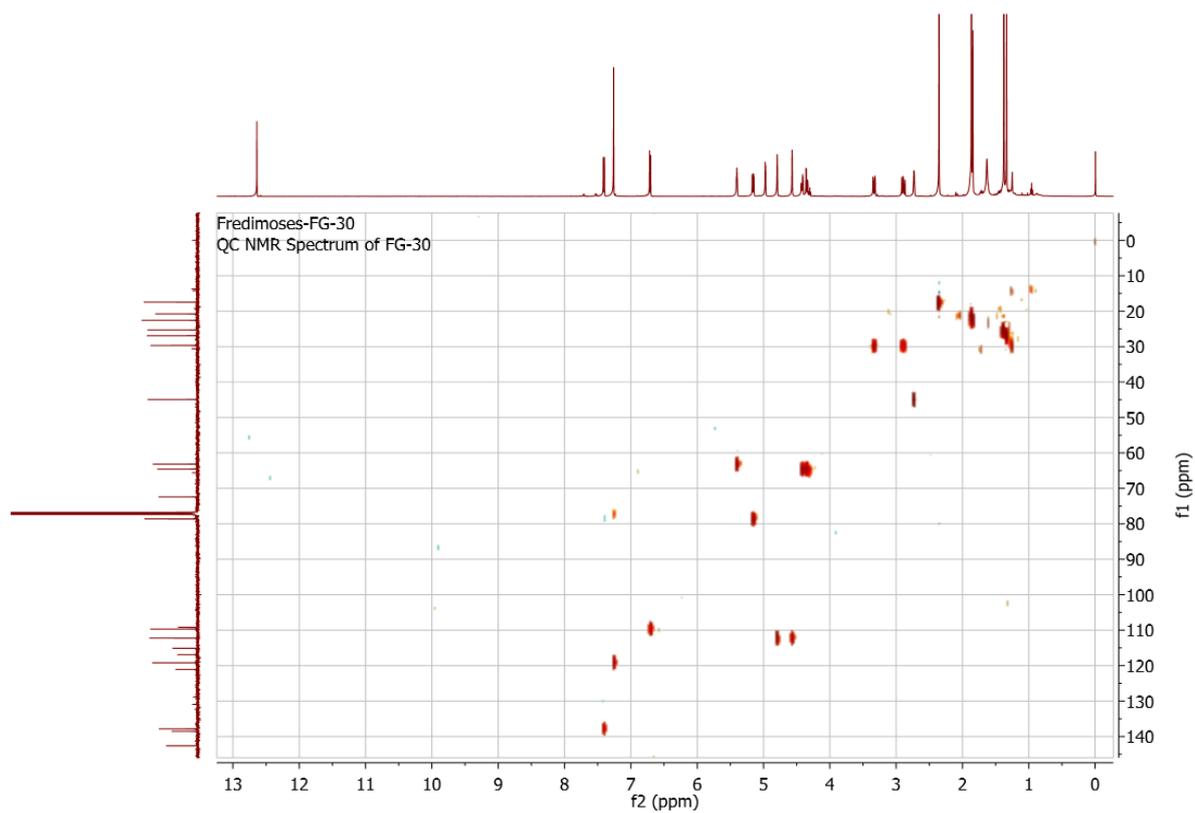
**Figure S23.** Dept 135 (125 MHz, CDCl<sub>3</sub>) spectrum of compound 4.**Figure S24.** HSQC spectrum of compound 4.

Figure S25. HMBC spectrum of compound 4.

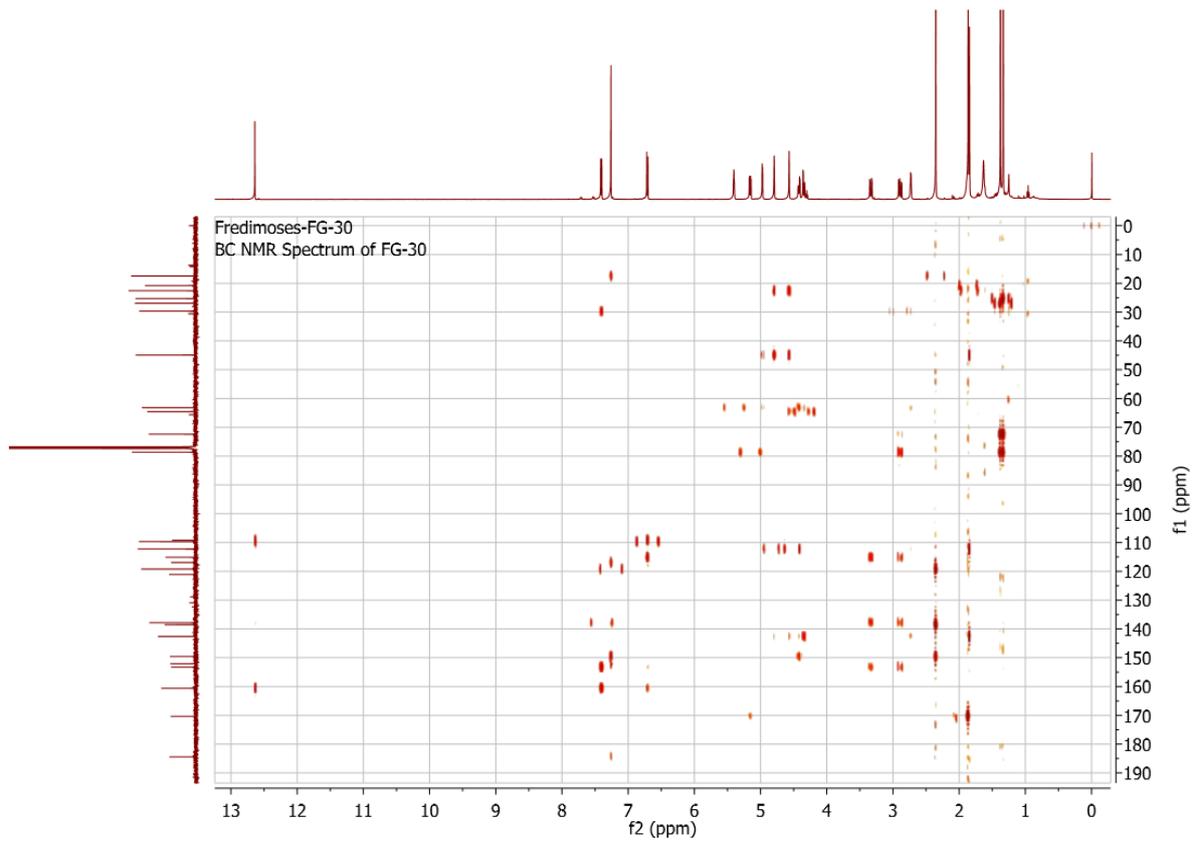
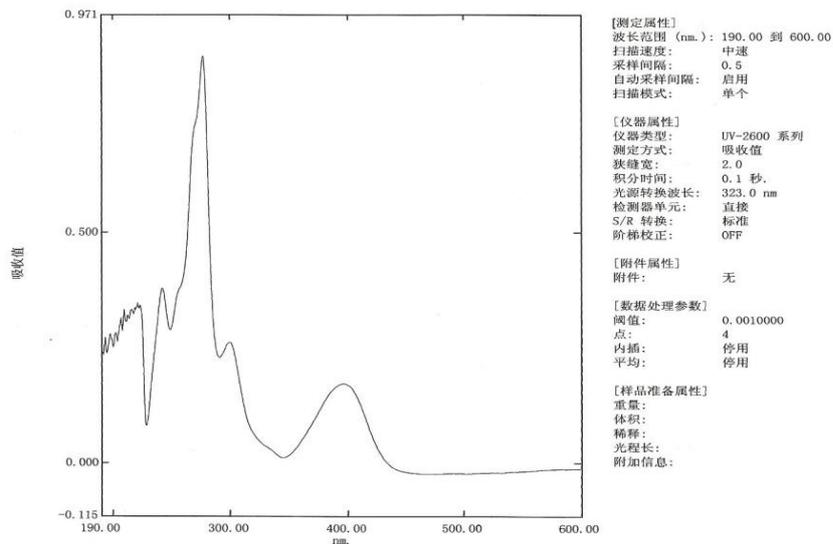


Figure S26. UV spectrum of compound 4.

数据集: fg-30-1 - RawData



No.	P/V	波长 (nm)	吸收值	描述
1	⊙	~396.50	0.171	
2	⊙	~299.50	0.260	
3	⊙	~277.00	0.880	
4	⊙	~242.50	0.377	
5	⊙	221.00	0.345	
6	⊙	197.50	0.278	
7	⊙	345.00	0.011	
8	⊙	~291.00	0.227	
9	⊙	~249.00	0.287	
10	⊙	~228.00	0.081	
11	⊙	200.00	0.250	

Figure S27. IR spectrum of compound 4.

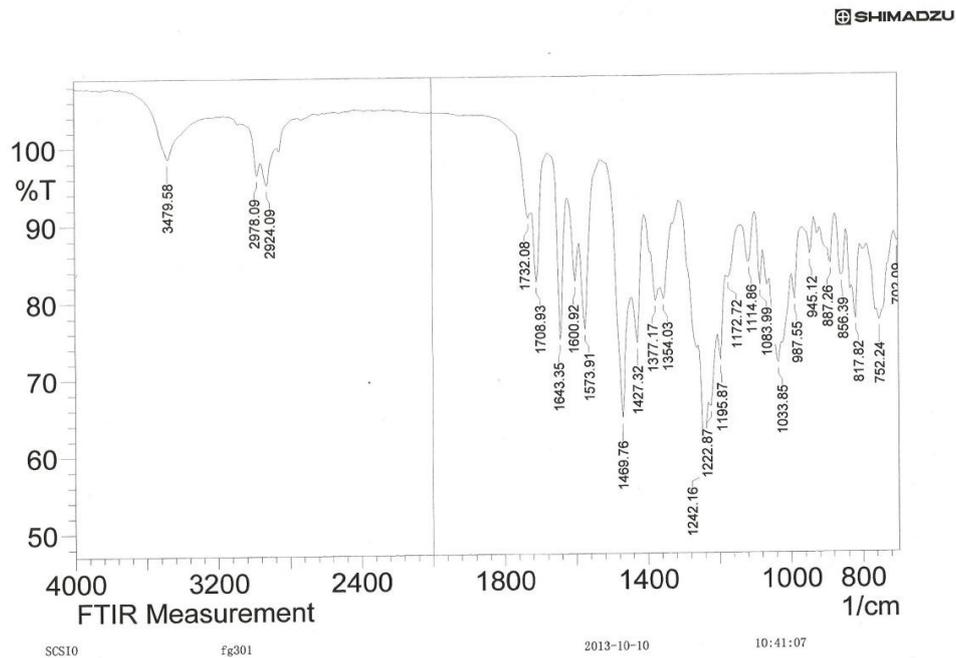


Figure S28. HRESI-MS of compound 4.

