## **Supplementary Materials**

Figure S1. <sup>1</sup>H NMR (500 MHz, CDCl<sub>3</sub>) spectrum of compound 1.

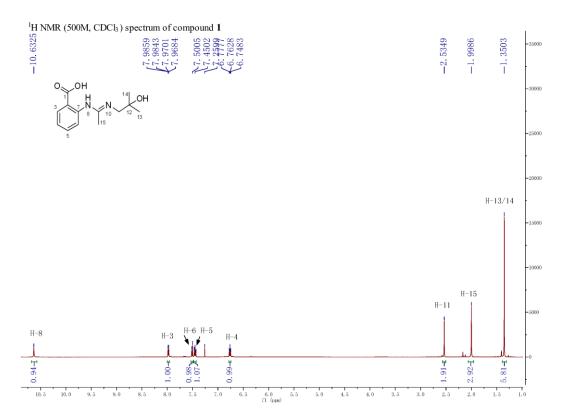
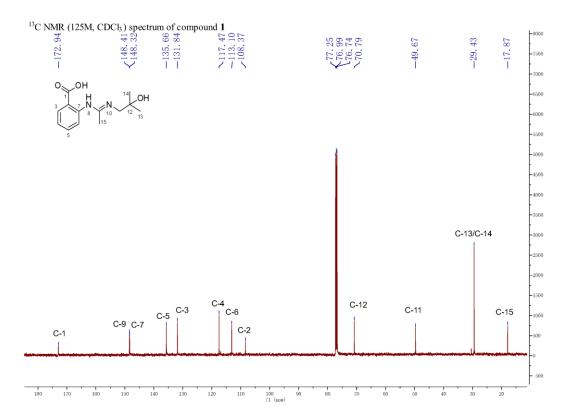


Figure S2. <sup>13</sup>C NMR (125 MHz, CDCl<sub>3</sub>) spectrum of compound 1.



**Figure S3.** <sup>1</sup>H–<sup>1</sup>H COSY spectrum of compound **1**.

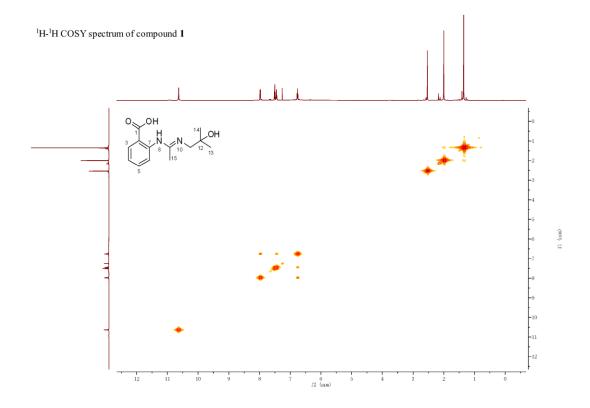
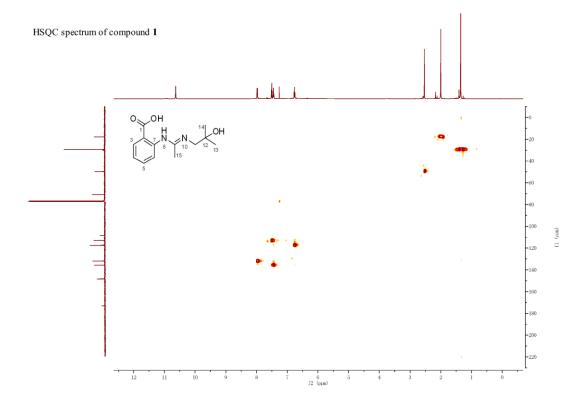
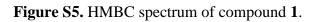


Figure S4. HSQC spectrum of compound 1.





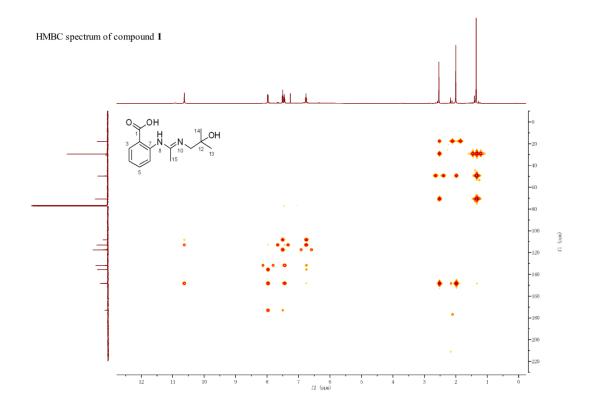
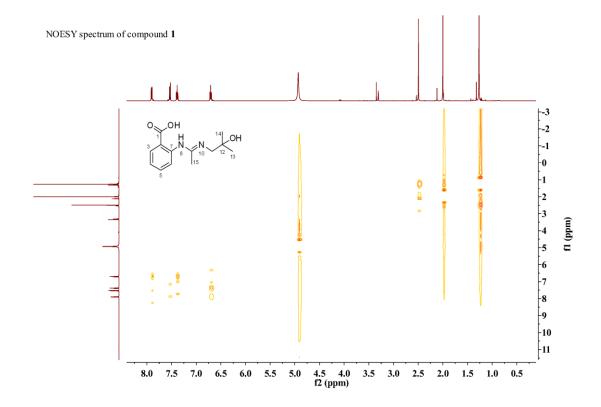


Figure S6. NOESY spectrum of compound 1.



**Figure S7.**  $^{1}$ H NMR (500 MHz, methanol- $d_4$ ) spectrum of compound 2.

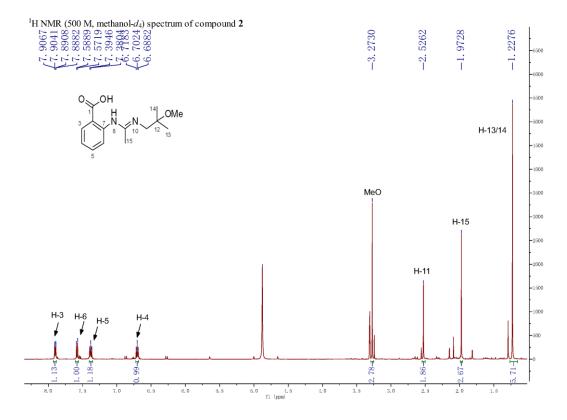
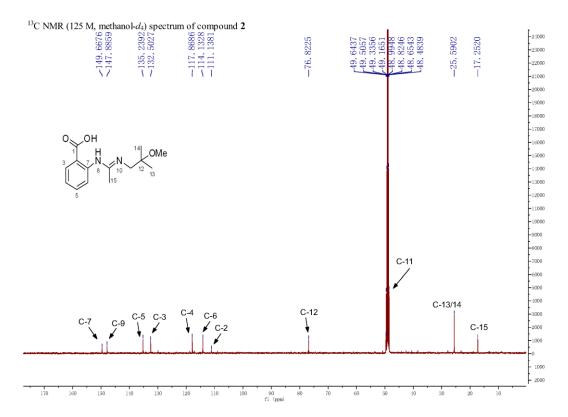


Figure S8.  $^{13}$ C NMR (125 MHz, methanol- $d_4$ ) spectrum of compound 2.



**Figure S9.** <sup>1</sup>H–<sup>1</sup>H COSY spectrum of compound **2**.

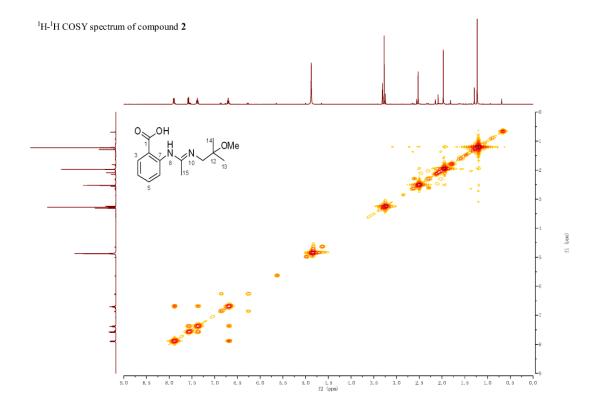
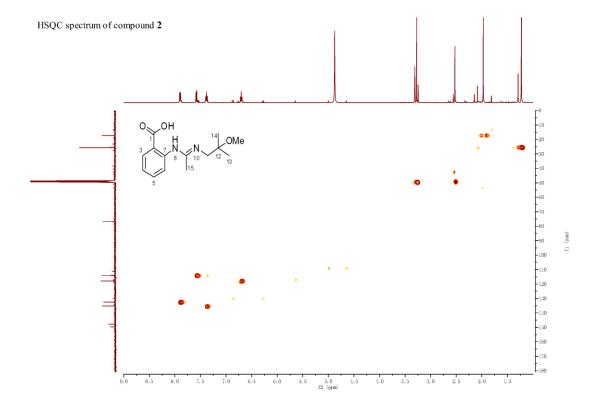
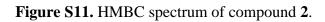


Figure S10. HSQC spectrum of compound 2.





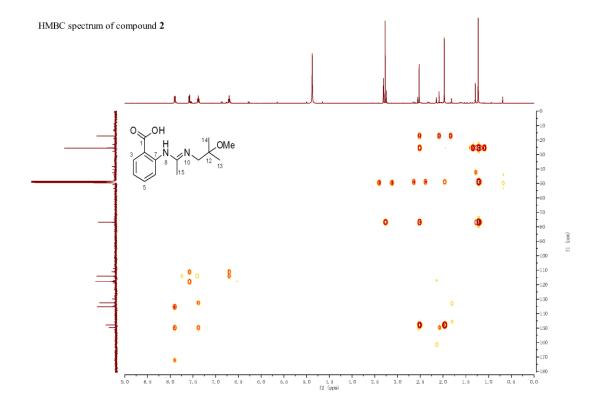
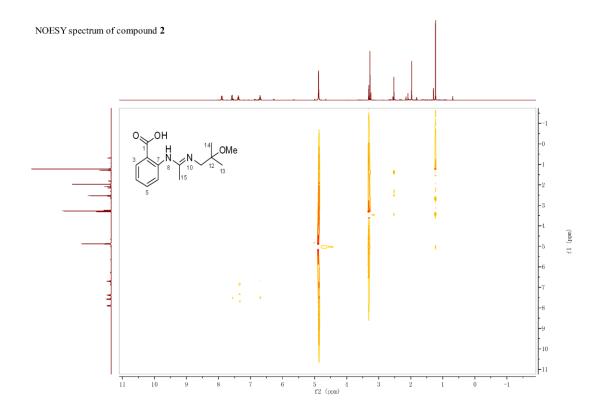


Figure S12. NOESY spectrum of compound 2.



**Figure S13.**  $^{1}$ H NMR (500 MHz, DMSO- $d_{6}$ ) spectrum of compound **3**.

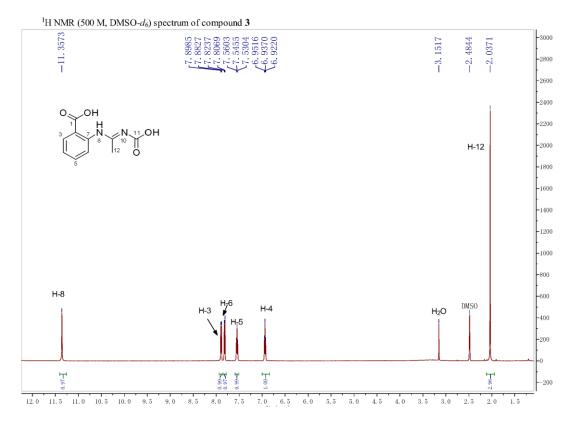
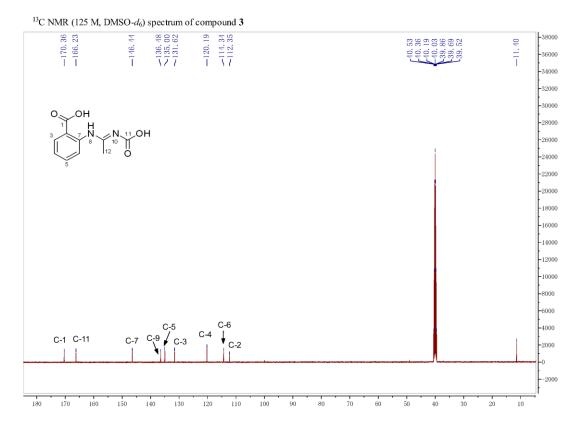


Figure S14.  $^{13}$ C NMR (125 MHz, DMSO- $d_6$ ) spectrum of compound 3.



**Figure S15.** <sup>1</sup>H–<sup>1</sup>H COSY spectrum of compound **3**.

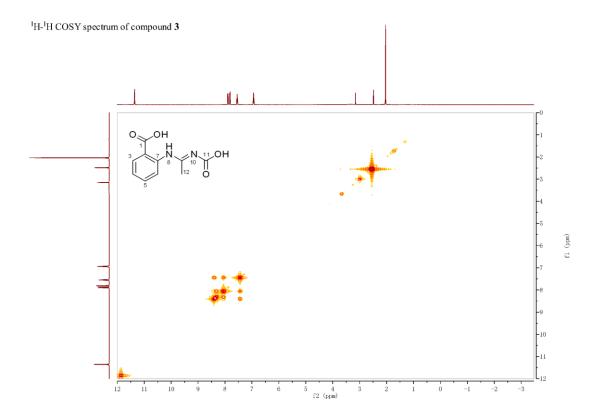


Figure S16. HSQC spectrum of compound 3.

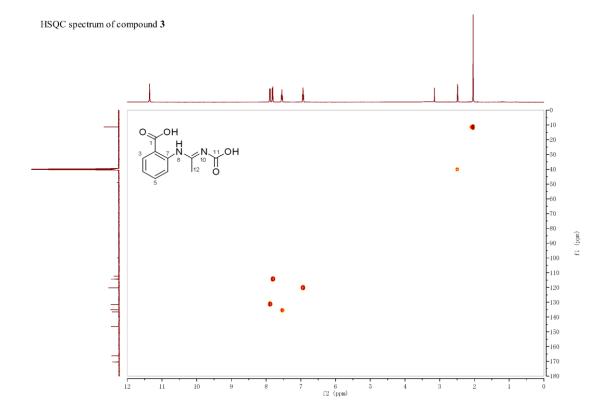
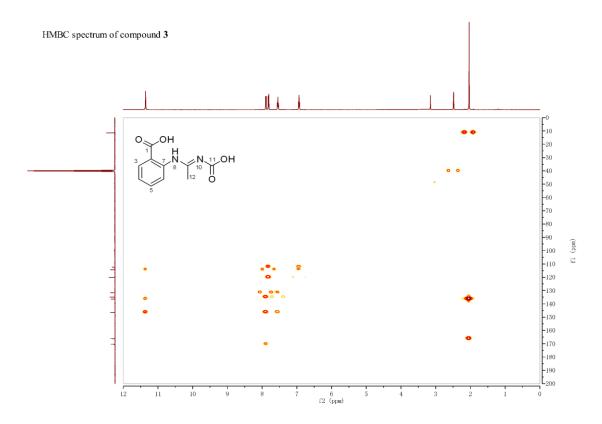
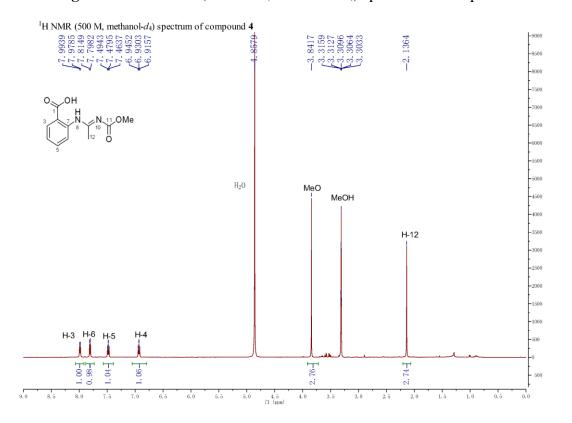


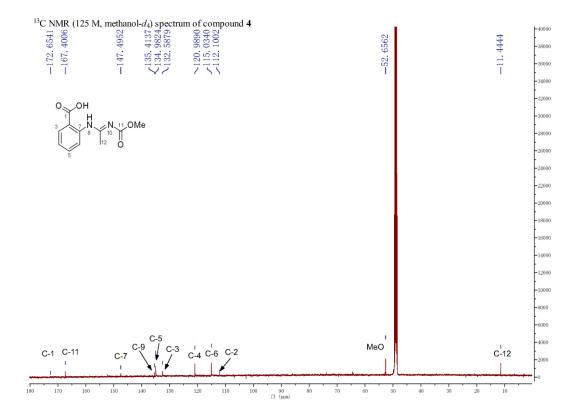
Figure S17. HMBC spectrum of compound 3.



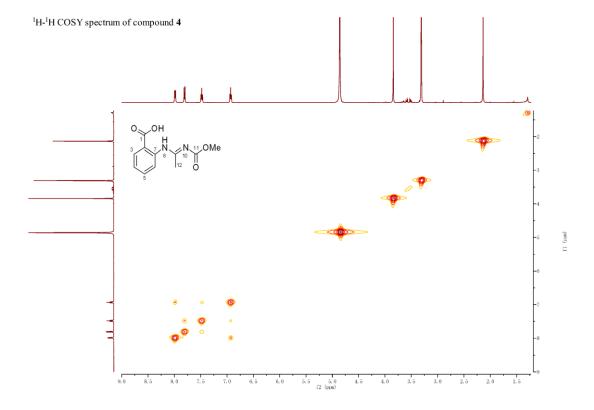
**Figure S18.**  $^{1}$ H NMR (500 MHz, methanol- $d_4$ ) spectrum of compound **4**.

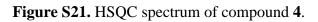


**Figure S19.**  $^{13}$ C NMR (125 MHz, methanol- $d_4$ ) spectrum of compound **4**.



**Figure S20.** <sup>1</sup>H–<sup>1</sup>H COSY spectrum of compound **4**.





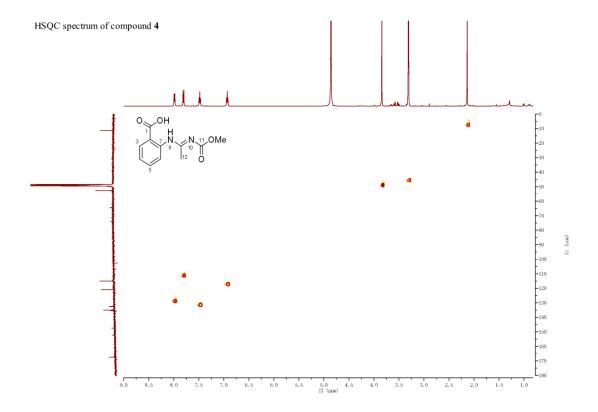
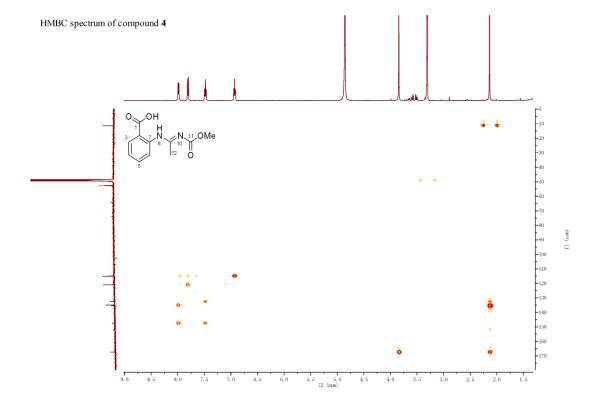
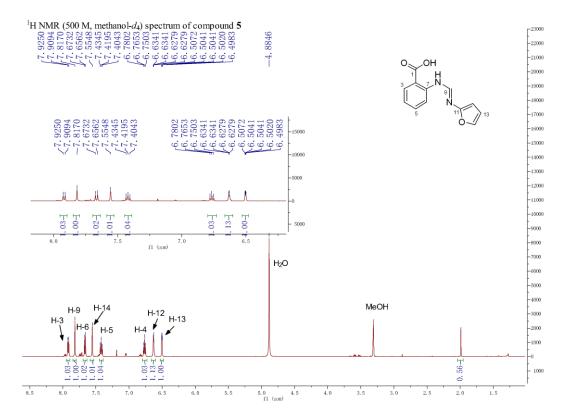


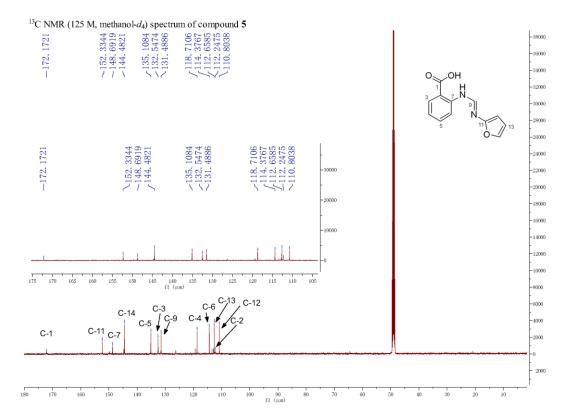
Figure S22. HMBC spectrum of compound 4.



**Figure S23.** <sup>1</sup>H NMR (500 MHz, DMSO- $d_6$ ) spectrum of compound **5**.



**Figure S24.**  $^{13}$ C NMR (125 MHz, DMSO- $d_6$ ) spectrum of compound **5**.



**Figure S25.** <sup>1</sup>H–<sup>1</sup>H COSY spectrum of compound **5**.

 $^{1}\text{H-}^{1}\text{H COSY}$  spectrum of compound 5

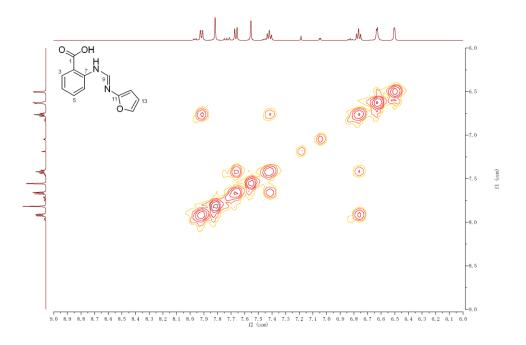


Figure S26. HSQC spectrum of compound 5.

HSQC spectrum of compound  ${\bf 5}$ 

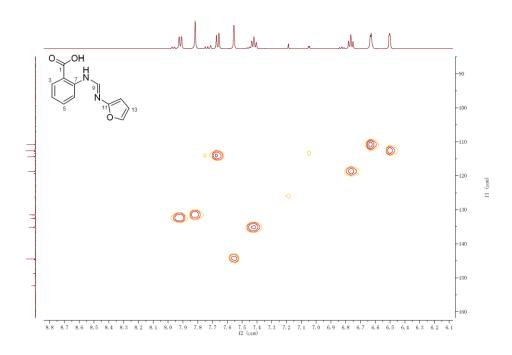


Figure S27. HMBC spectrum of compound 5.

HMBC spectrum of compound 5

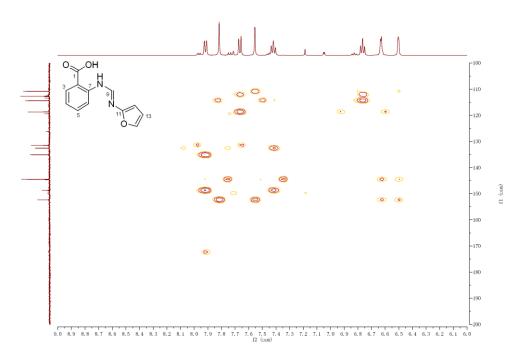
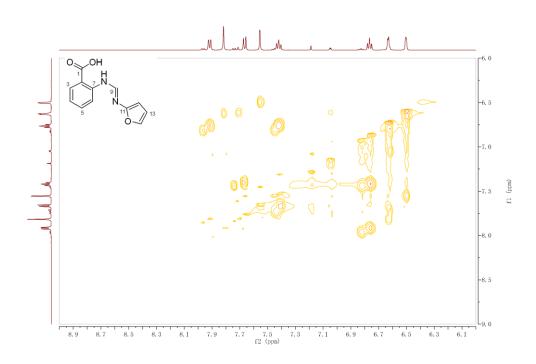
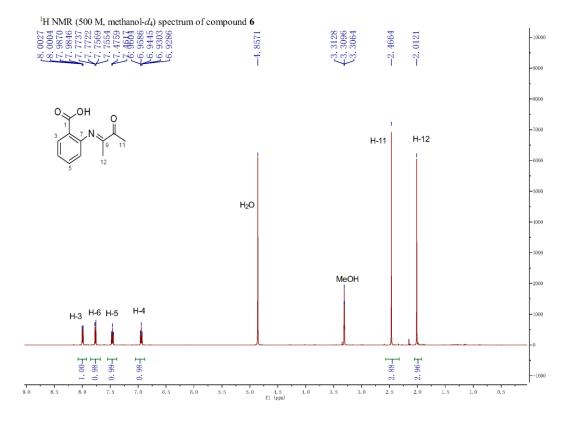


Figure S28. NOESY spectrum of compound 5.

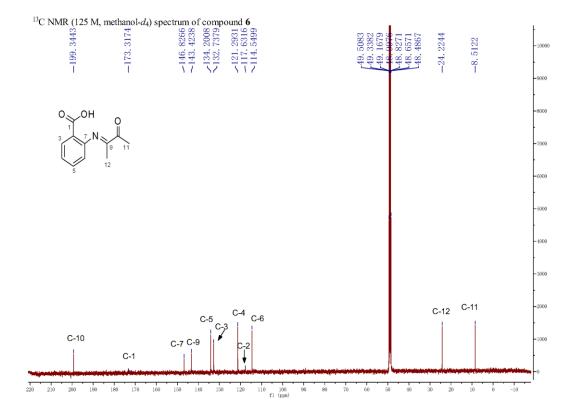
NOESY spectrum of compound  ${\bf 5}$ 



**Figure S29.** <sup>1</sup>H NMR (500 MHz, methanol- $d_4$ ) spectrum of compound **6**.



**Figure S30.**  $^{13}$ C NMR (125 MHz, methanol- $d_4$ ) spectrum of compound **6**.



**Figure S31.** <sup>1</sup>H–<sup>1</sup>H COSY spectrum of compound **6**.

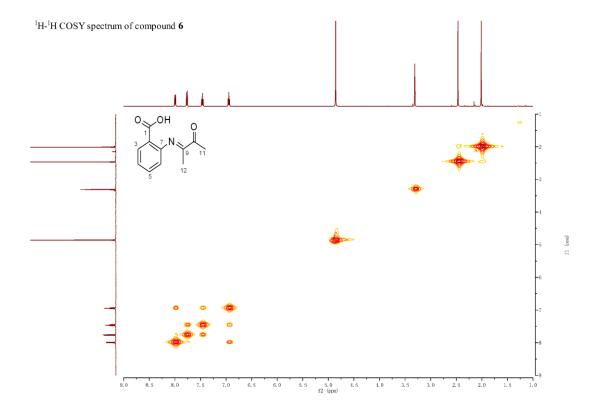


Figure S32. HSQC spectrum of compound 6.

