

# Supplementary Information

## Table of Content

**Figure S1.**  $^1\text{H}$  spectrum of compound **1**.

**Figure S2.**  $^{13}\text{C}$  and DEPT spectra of compound **1**.

**Figure S3.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of compound **1**.

**Figure S4.** HSQC spectrum of compound **1**.

**Figure S5.** HMBC spectrum of compound **1**.

**Figure S6a.** NOESY spectrum of compound **1**.

**Figure S6b.** An enlarged area of the NOESY spectrum of compound **1**.

**Figure S7.**  $^1\text{H}$  spectrum of compound **2**.

**Figure S8.**  $^{13}\text{C}$  and DEPT spectra of compound **2**.

**Figure S9.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of compound **2**.

**Figure S10.** HSQC spectrum of compound **2**.

**Figure S11.** HMBC spectrum of compound **2**.

**Figure S12a.** NOESY spectrum of compound **2**.

**Figure S12b.** An enlarged area of the NOESY spectrum of compound **2**.

**Figure S13.** NOESY spectrum of compound **2** (recorded with different parameters).

**Figure S14.**  $^1\text{H}$  spectrum of compound **3**.

**Figure S15.**  $^{13}\text{C}$  and DEPT spectra of compound **3**.

**Figure S16.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of compound **3**.

**Figure S17.** HSQC spectrum of compound **3**.

**Figure S18.** HMBC spectrum of compound **3**.

**Figure S19.** NOESY spectrum of compound **3**.

**Figure S20.** NOESY spectrum of compound **3** (recorded with different parameters).

**Figure S21.** NOESY spectrum of compound **3** (recorded with different parameters).

**Figure S22.**  $^1\text{H}$  spectrum of compound **4**.

**Figure S23.**  $^{13}\text{C}$  and DEPT spectra of compound **4**.

**Figure S24.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of compound **4**.

**Figure S25.** HSQC spectrum of compound **4**.

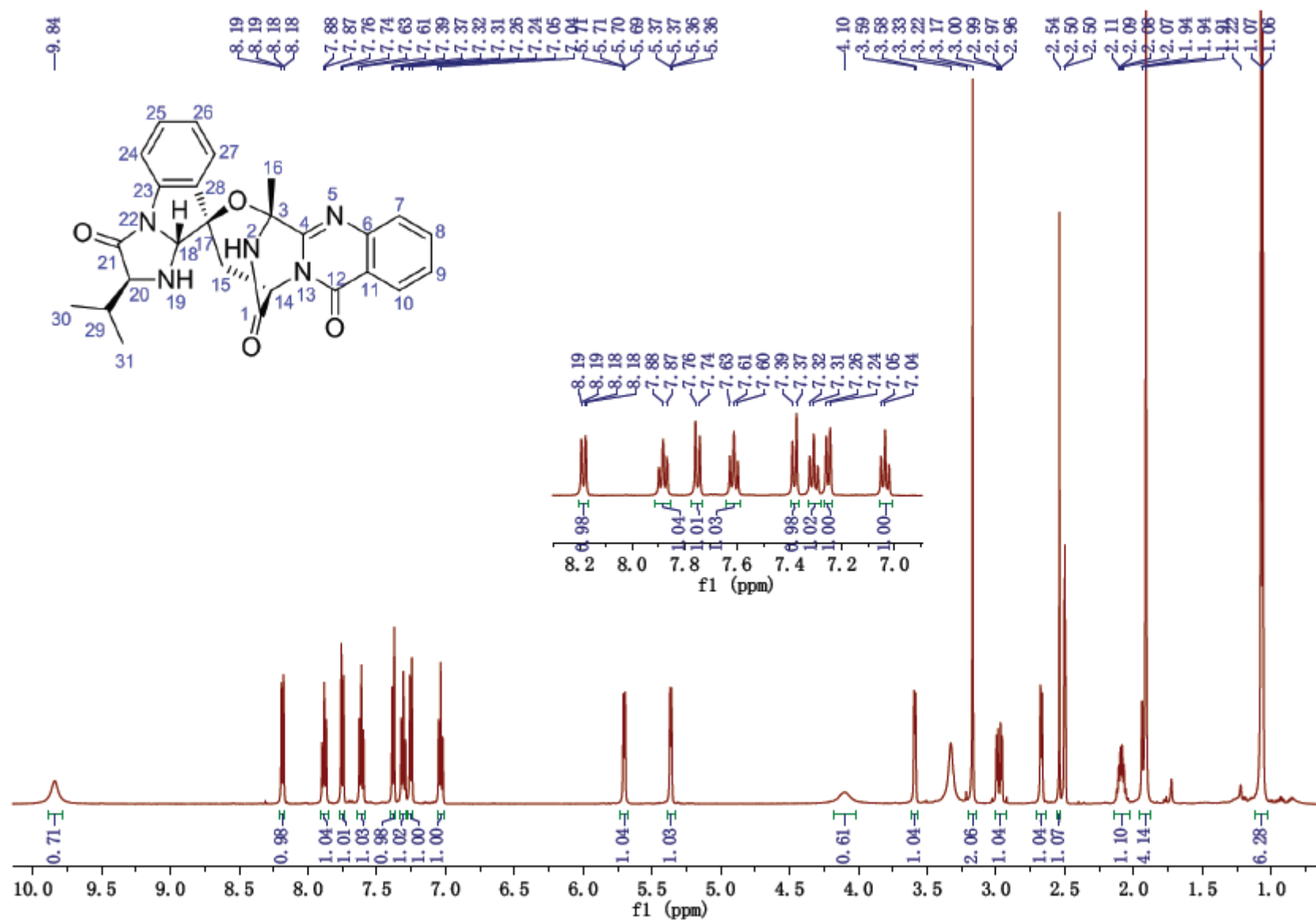
**Figure S26.** HMBC spectrum of compound **4**.

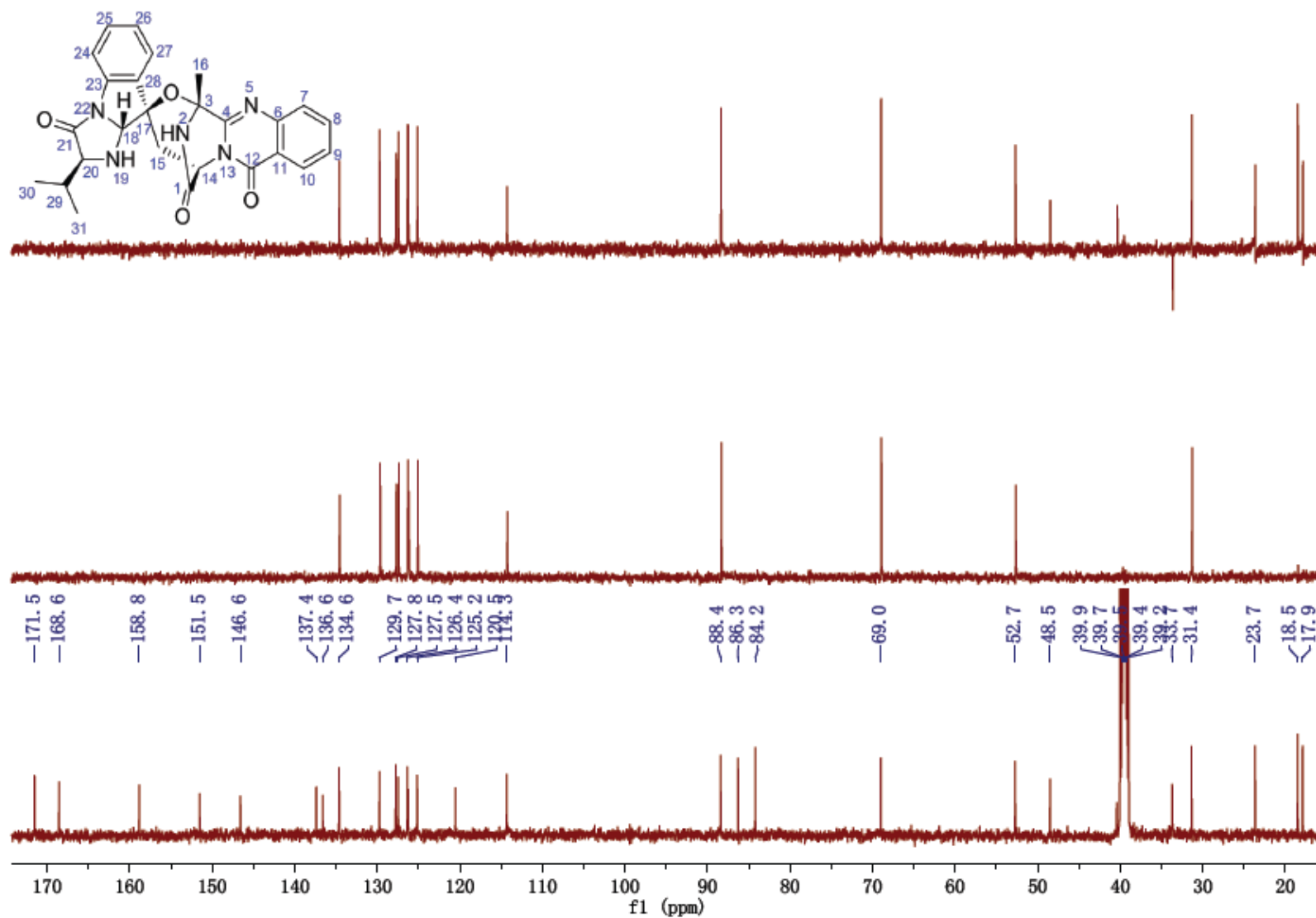
**Figure S27.** NOESY spectrum of compound **4**.

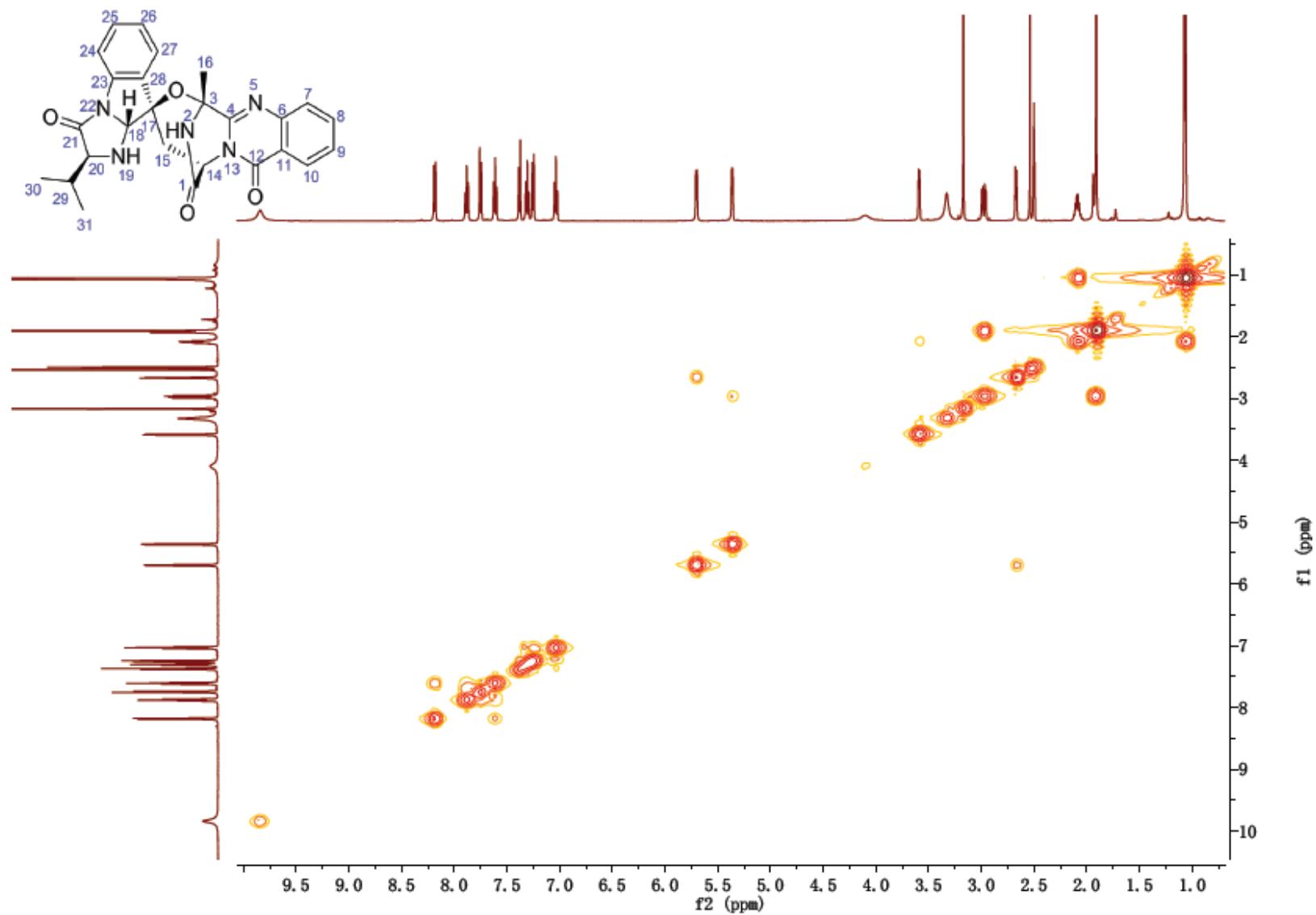
**Figure S28.**  $^1\text{H}$  spectrum of the reducing product of compound **1**.

**Figure S29.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of the reducing product of compound **1**.

**Figure S30.** NOESY spectrum of the reducing product of compound **1**.

Figure S1.  $^1\text{H}$  spectrum of compound 1.

**Figure S2.**  $^{13}\text{C}$  and DEPT spectra of compound 1.

**Figure S3.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound 1.

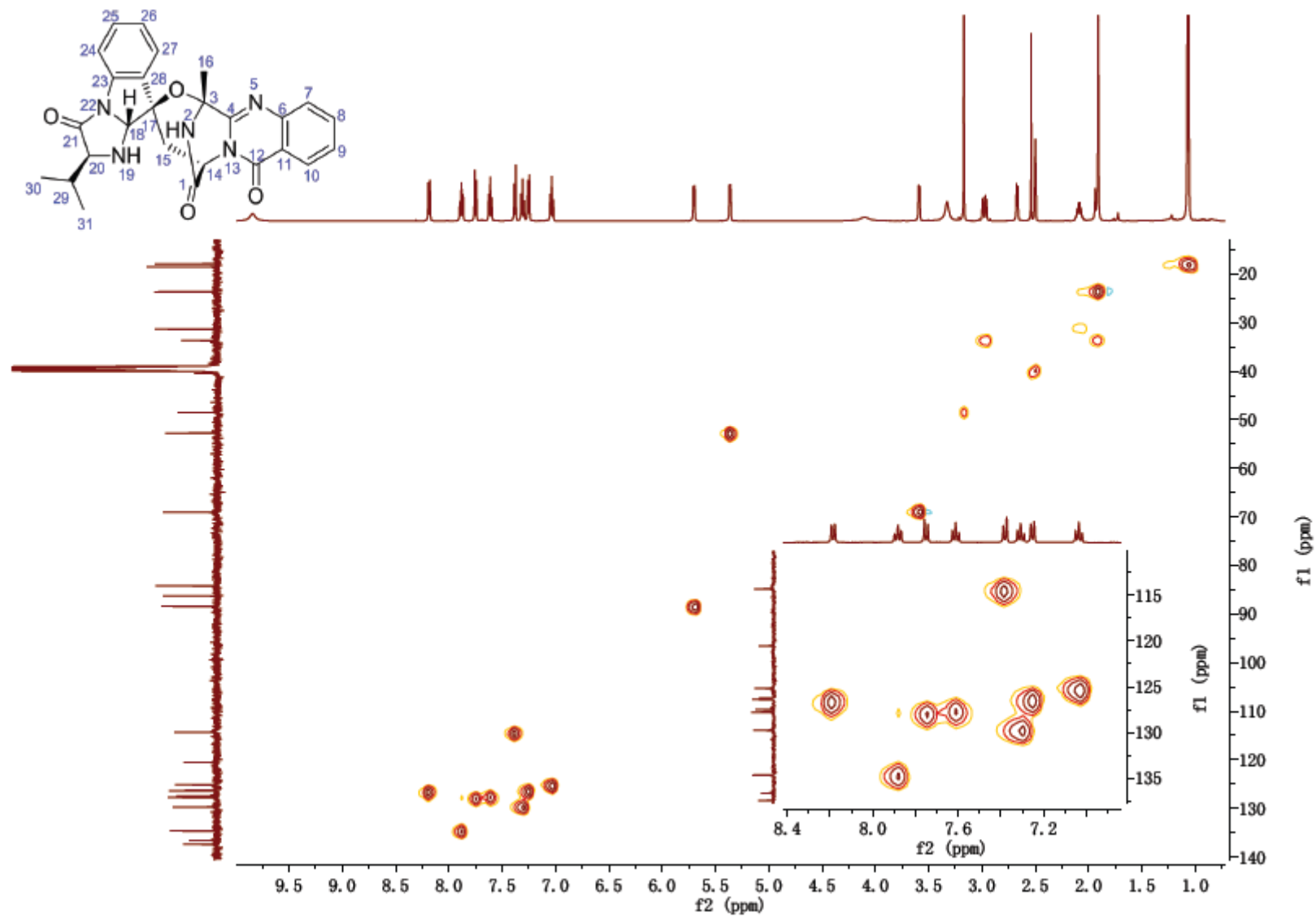
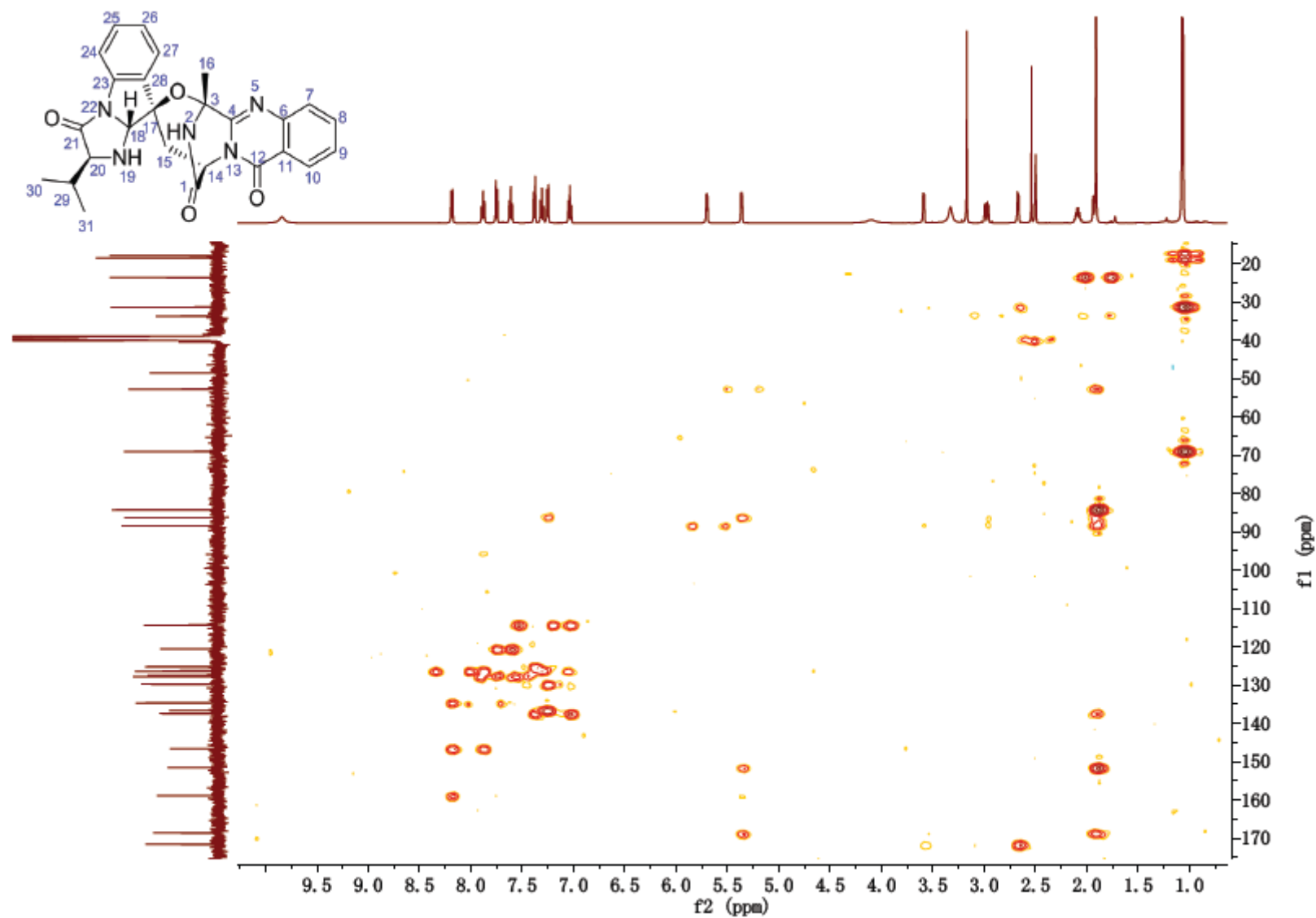
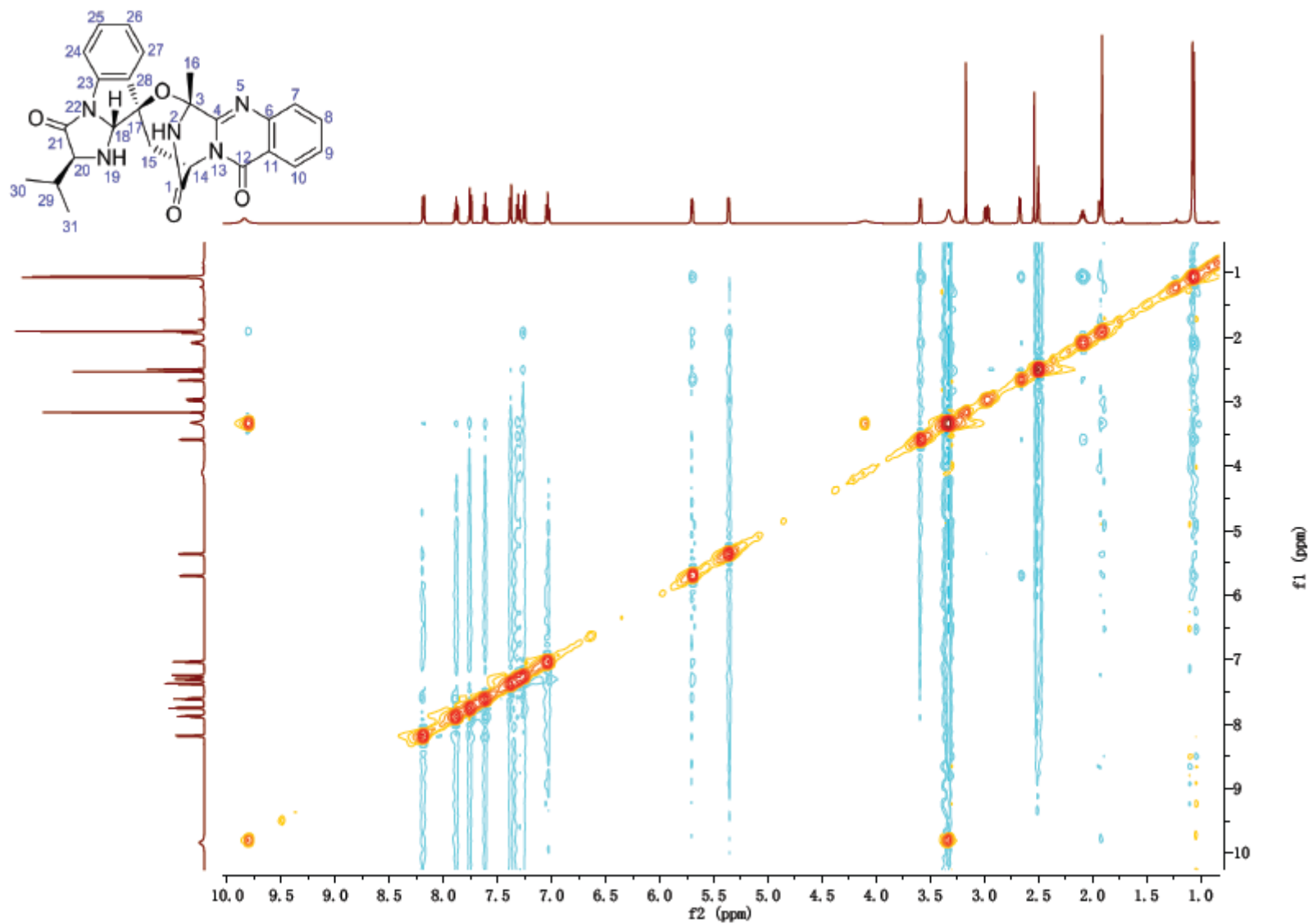
**Figure S4.** HSQC spectrum of compound 1.

Figure S5. HMBC spectrum of compound 1.



**Figure S6a.** NOESY spectrum of compound 1.

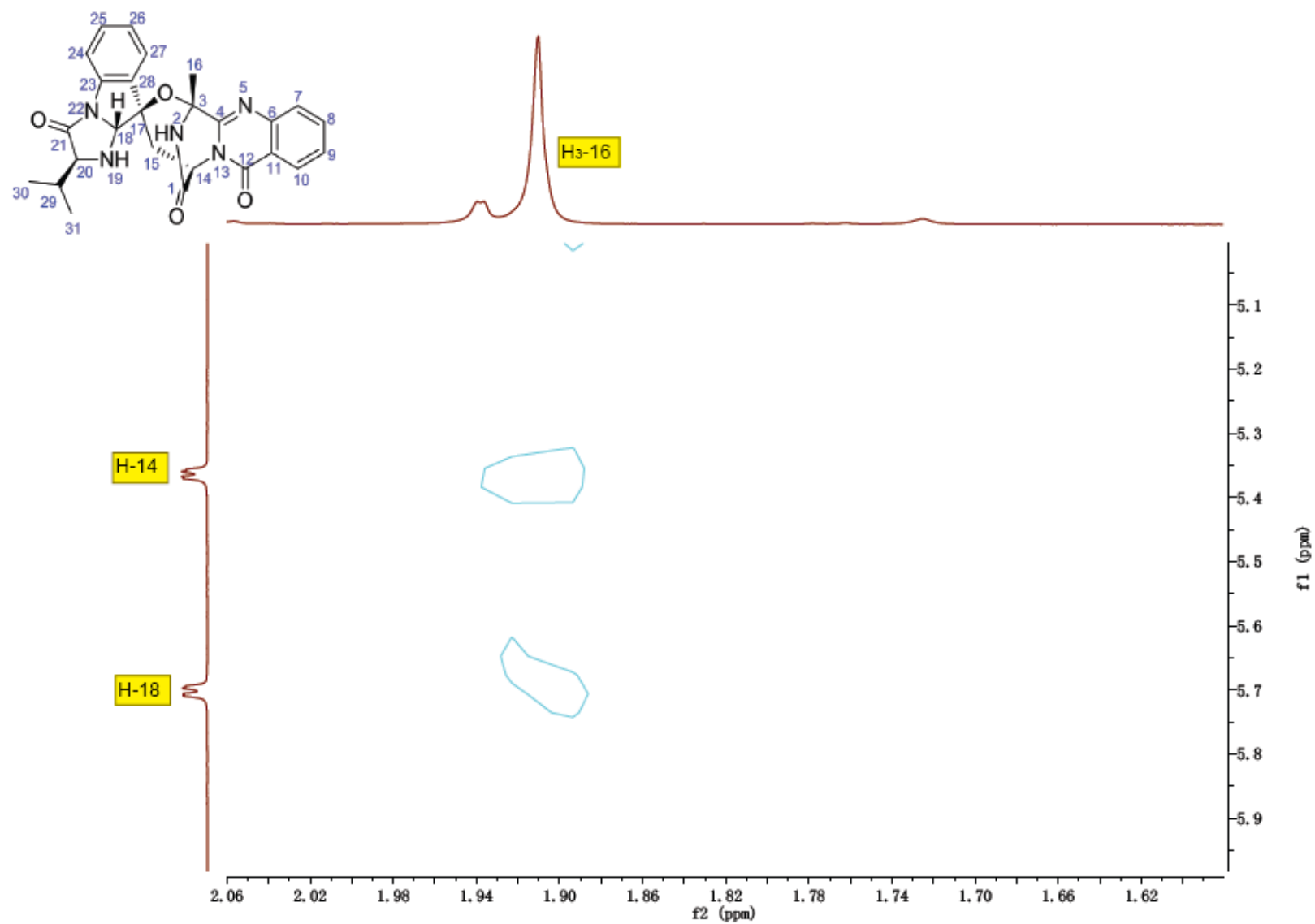
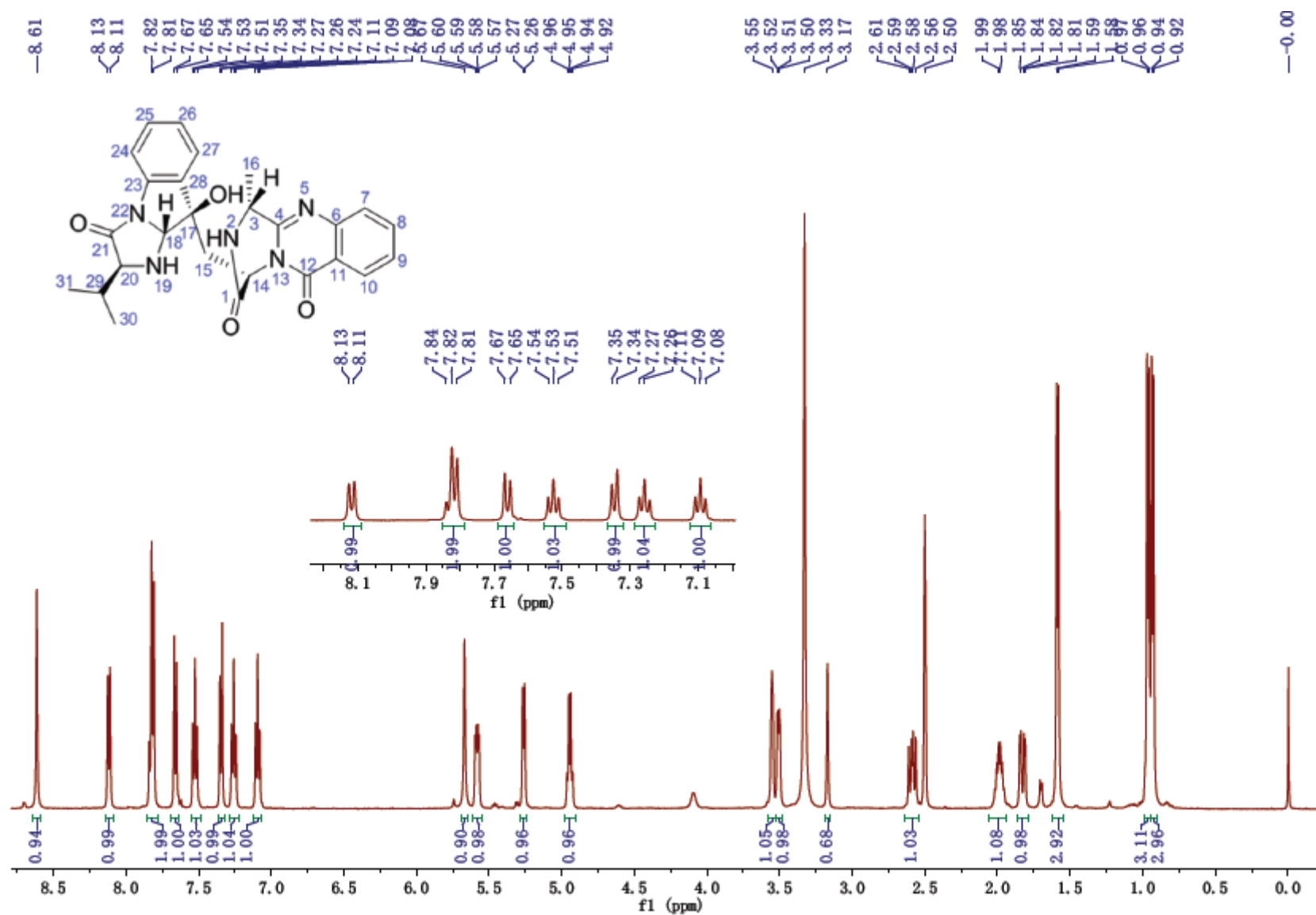
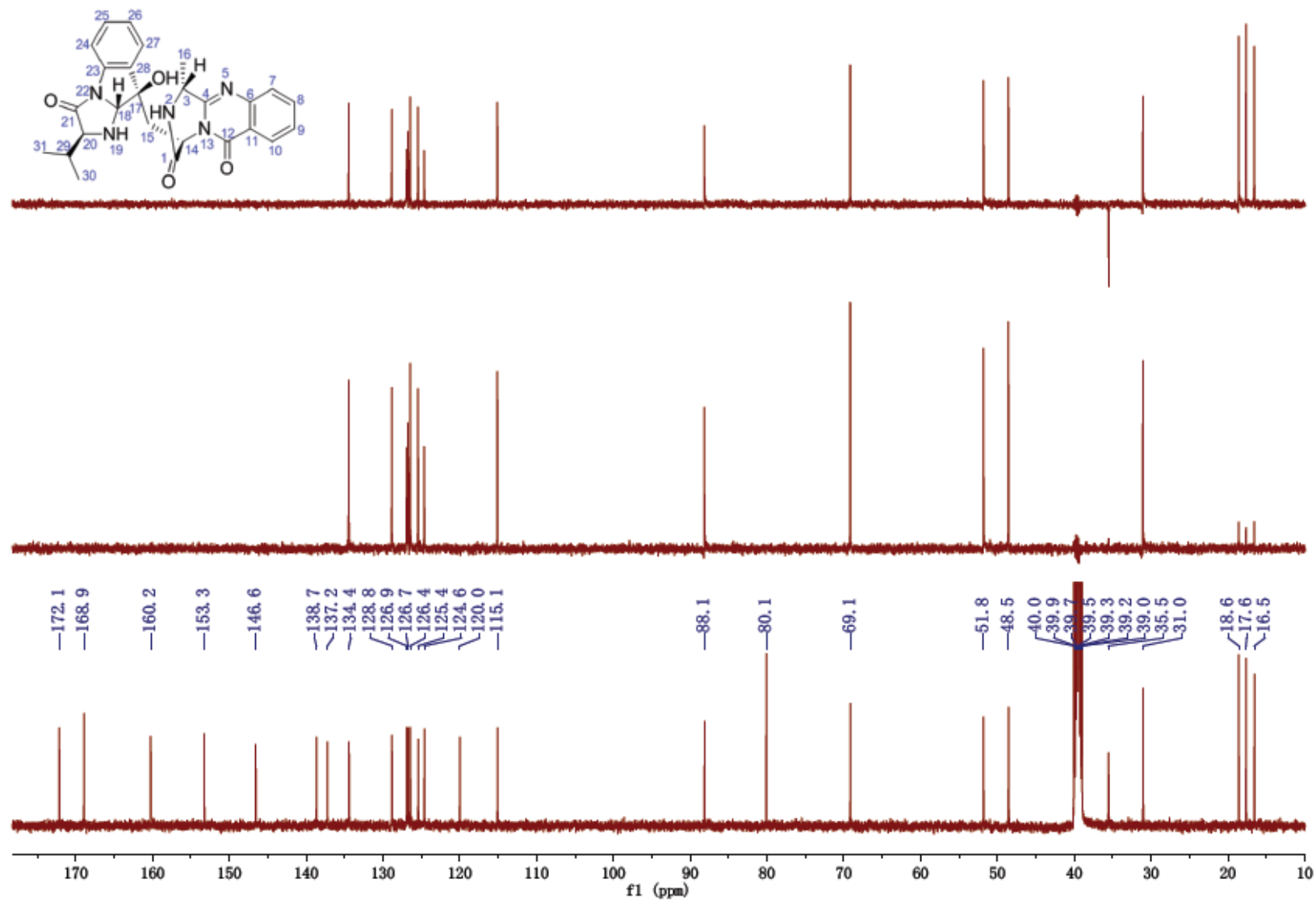
**Figure S6b.** an enlarged area of the NOESY spectrum of compound **1**.



Figure S7.  $^1\text{H}$  spectrum of compound 2.

**Figure S8.**  $^{13}\text{C}$  and DEPT spectra of compound **2**.

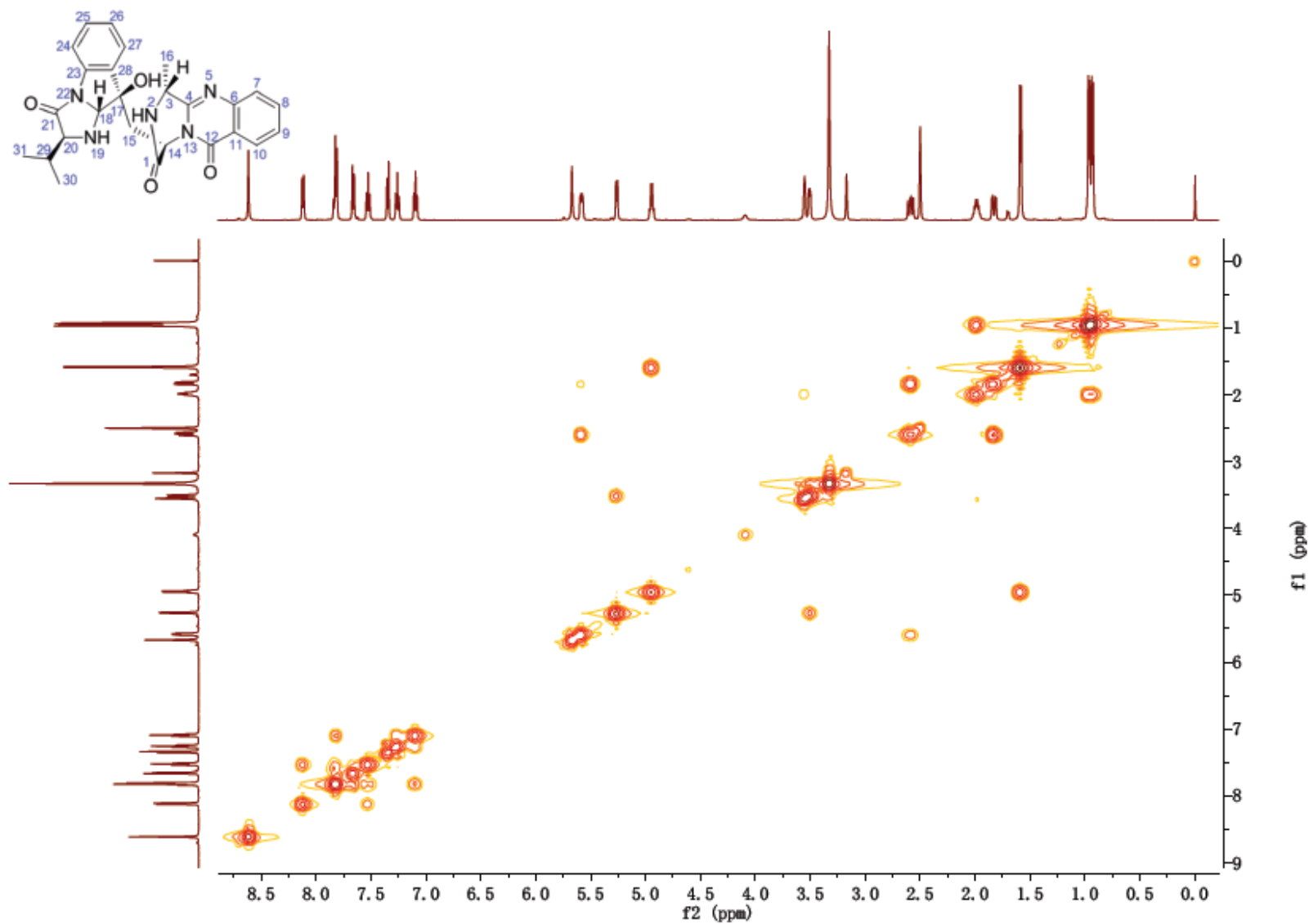
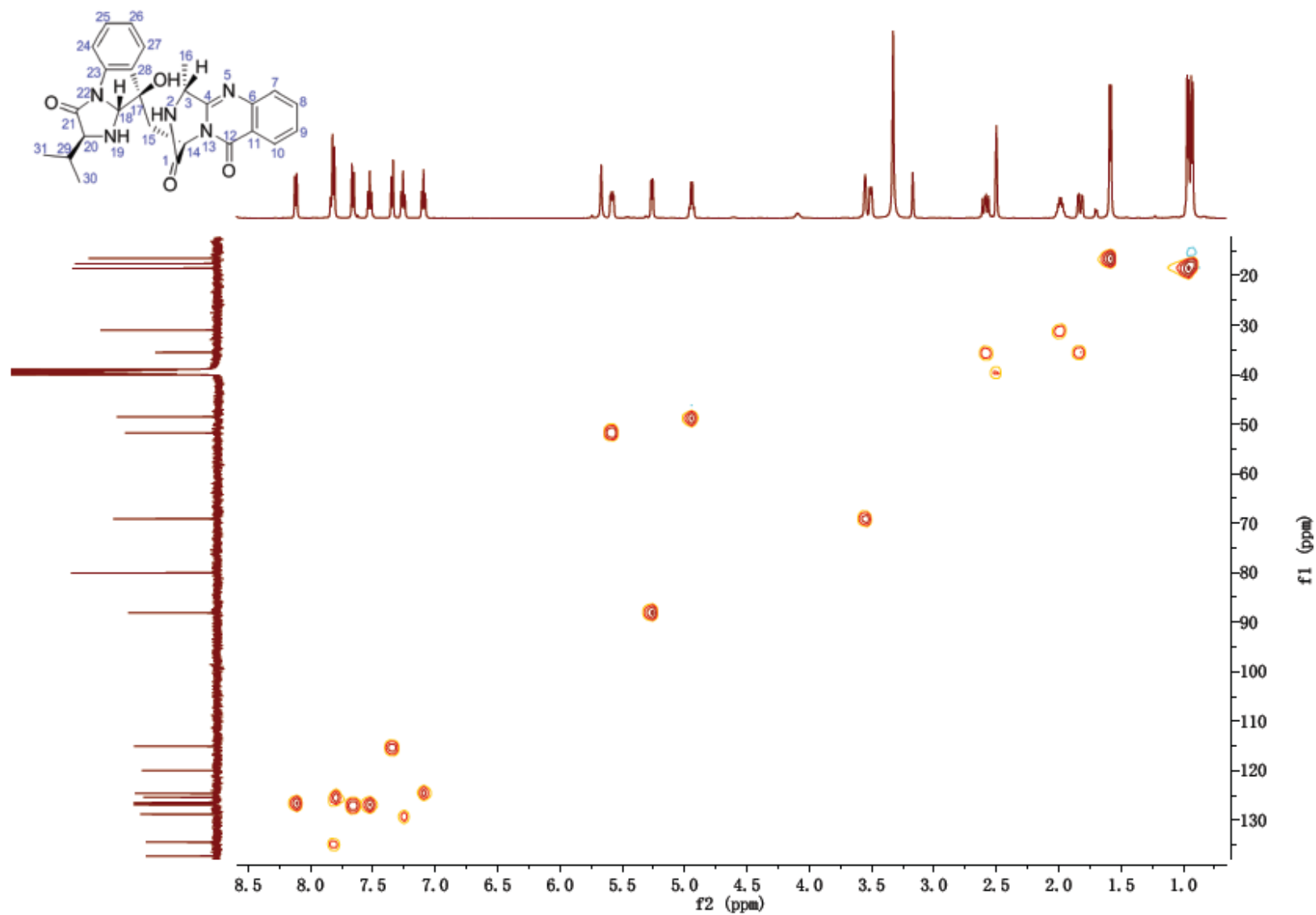
**Figure S9.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of compound 2.

Figure S10. HSQC spectrum of compound 2.



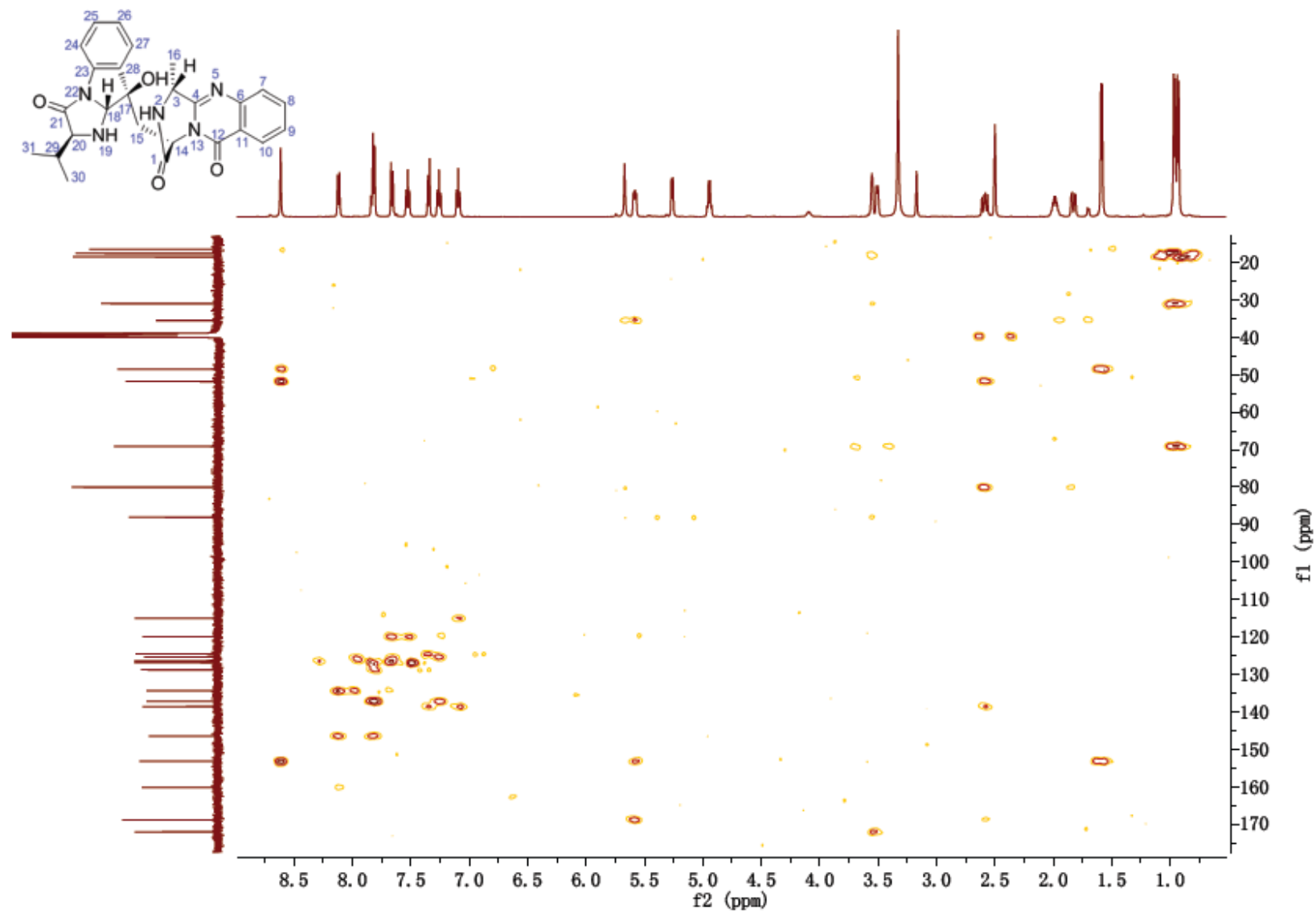
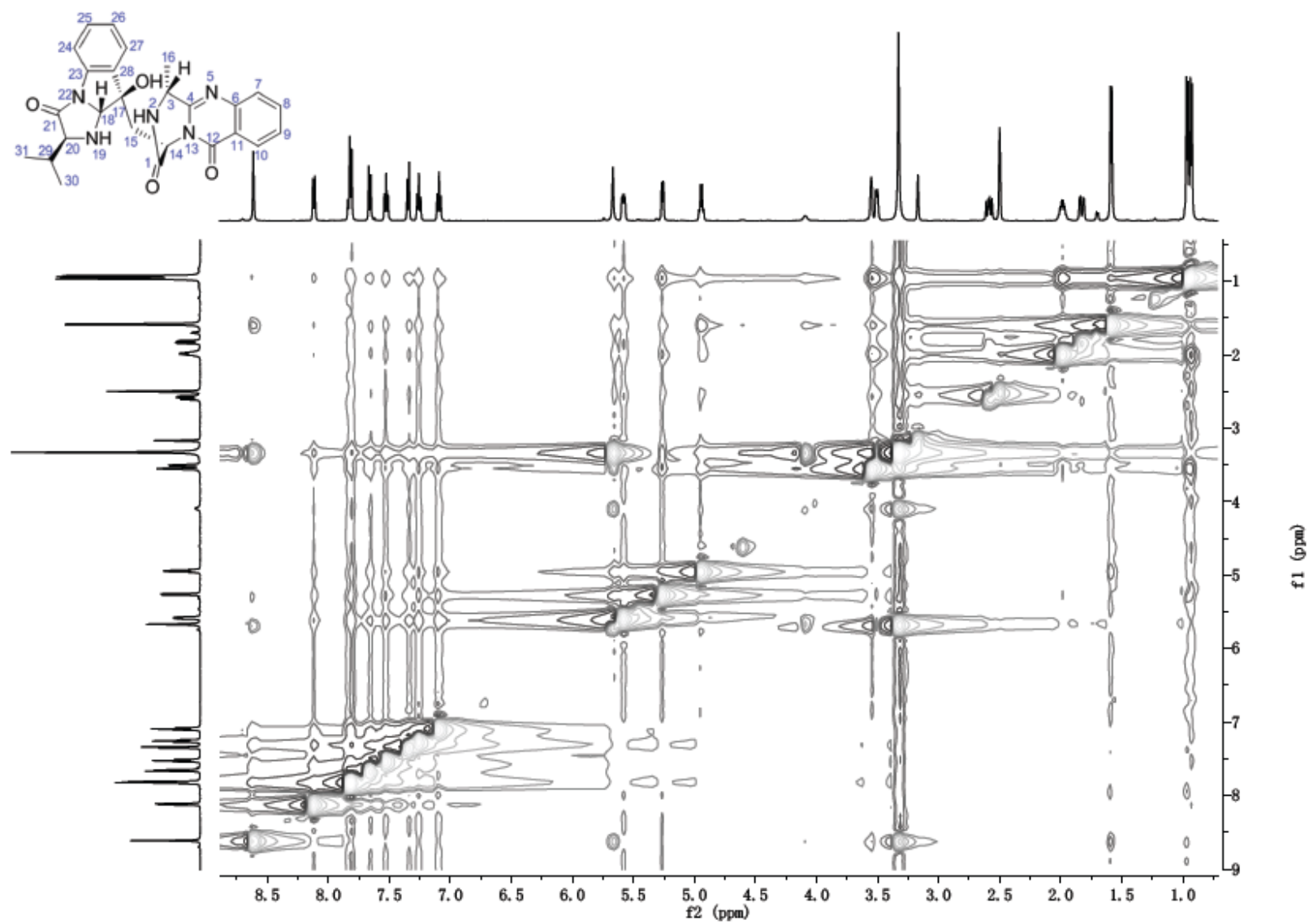
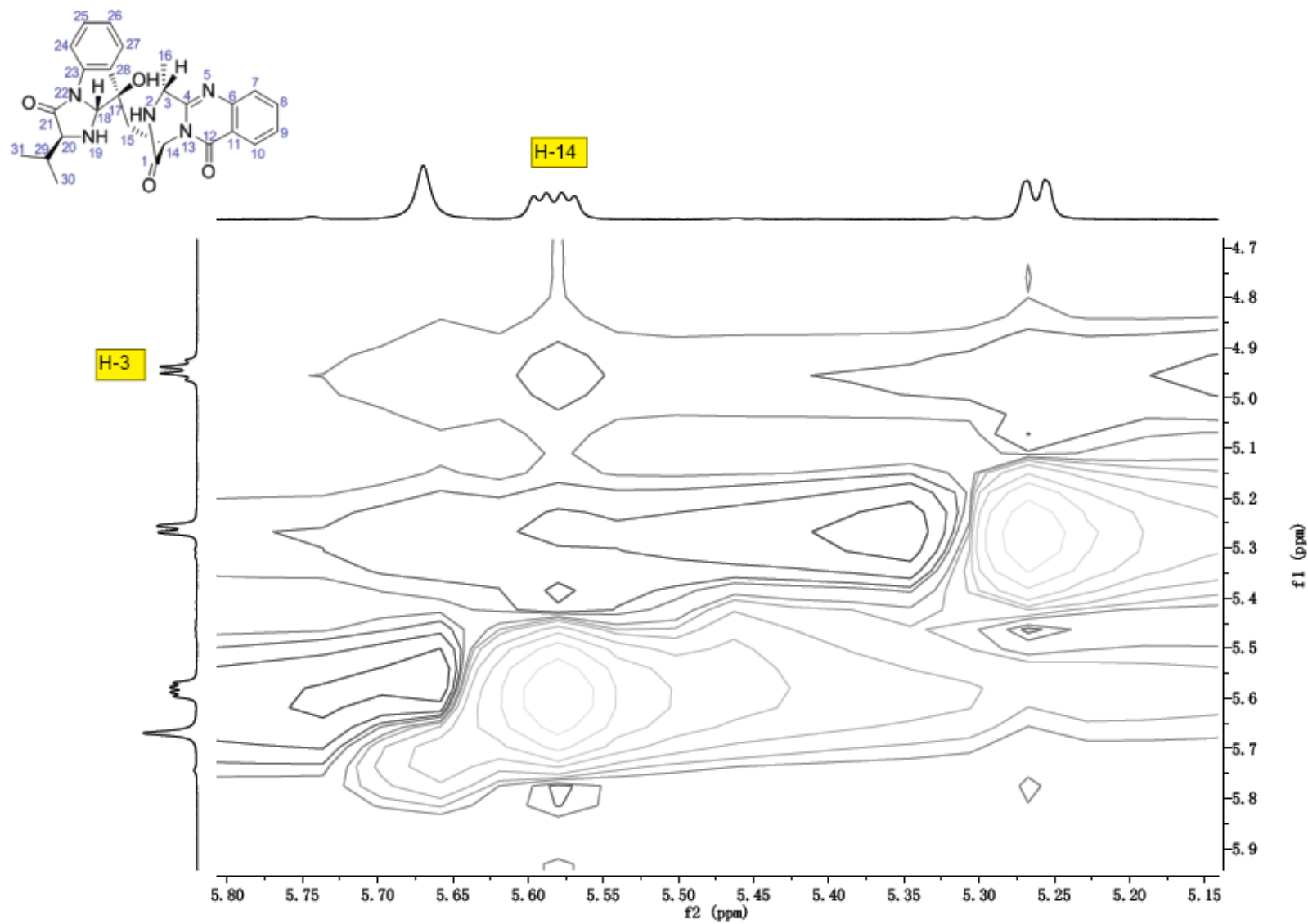
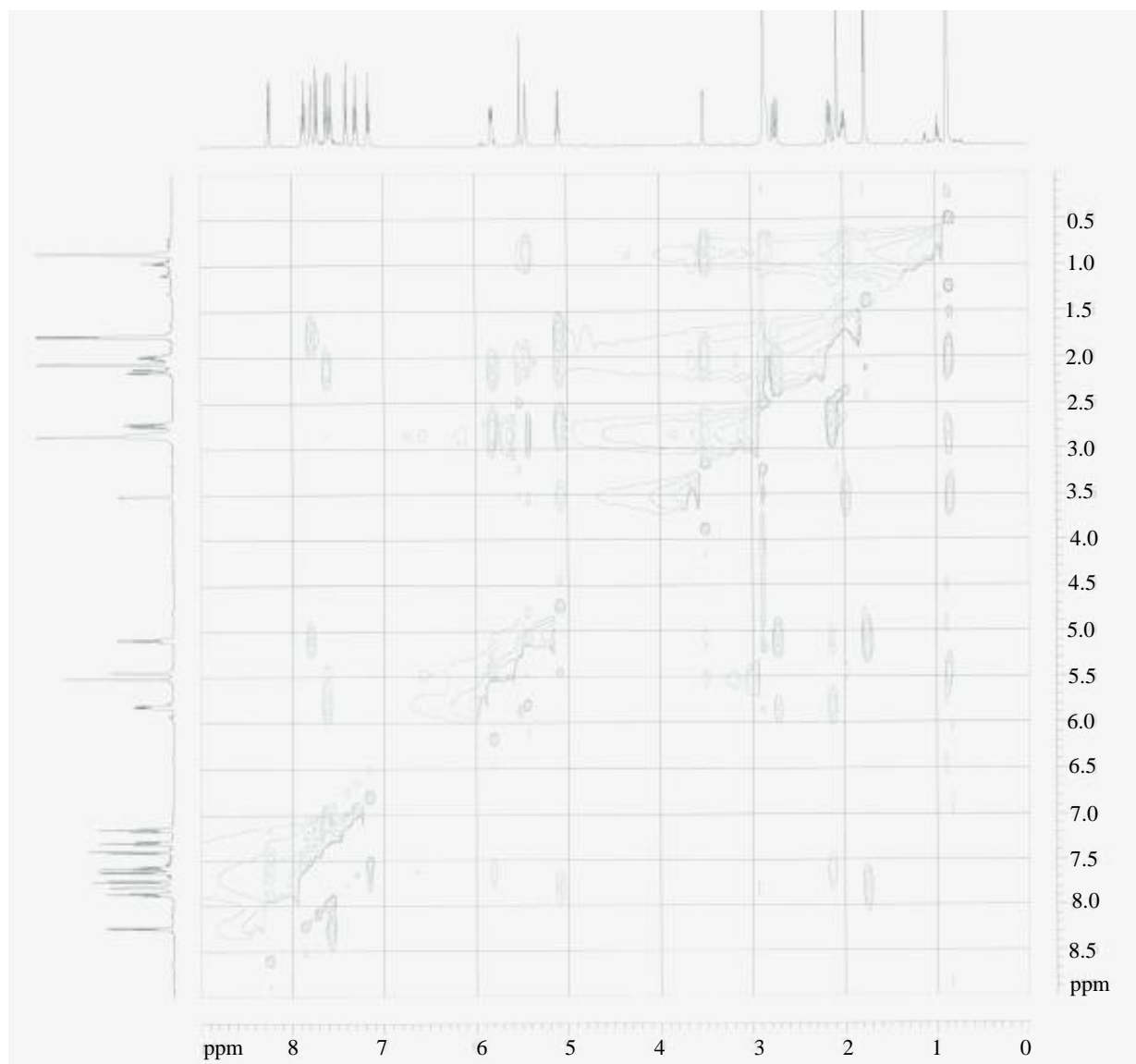
**Figure S11.** HMBC spectrum of compound 2.

Figure S12a. NOESY spectrum of compound 2.



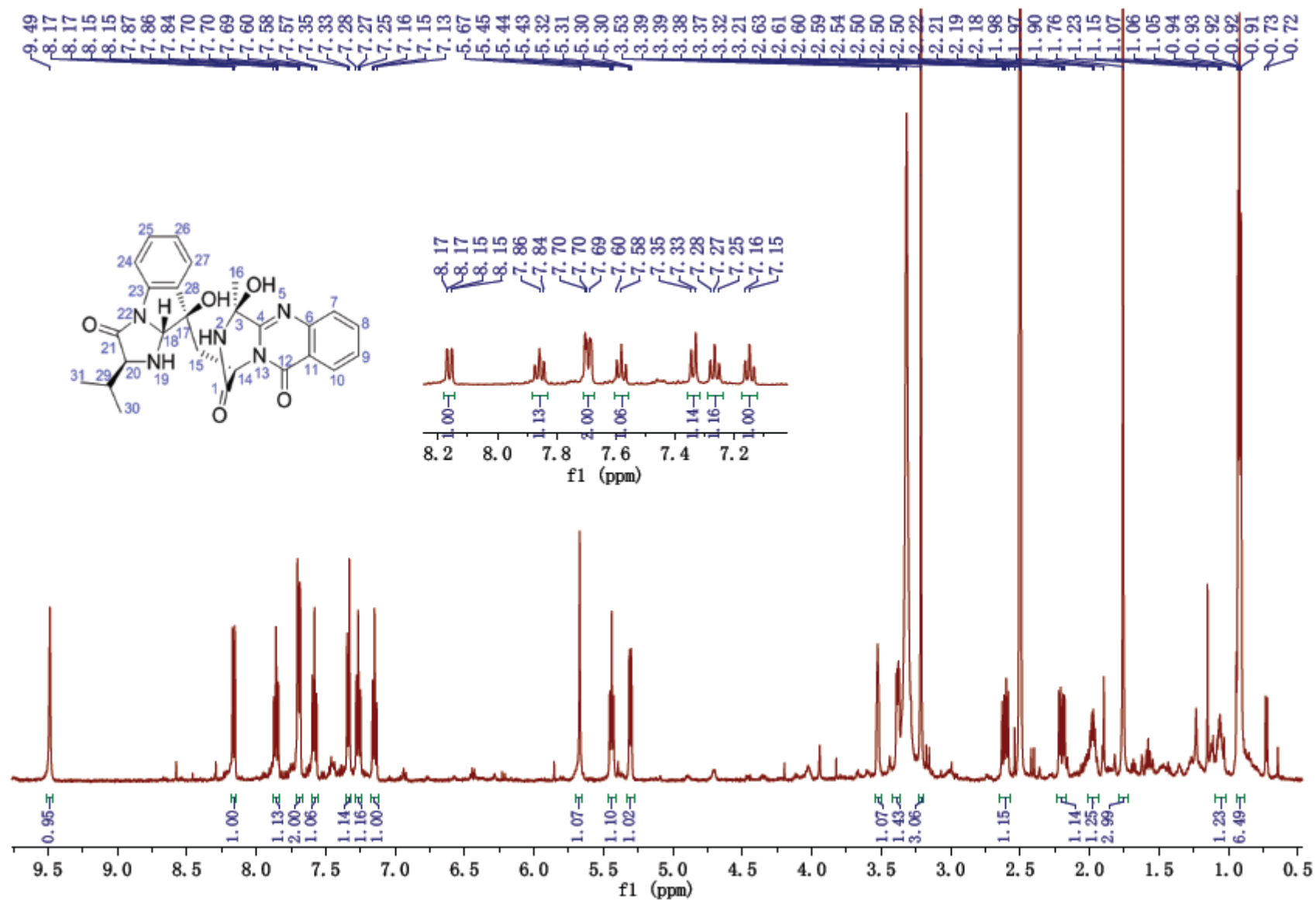
**Figure S12b.** an enlarged area of the NOESY spectrum of compound 2.

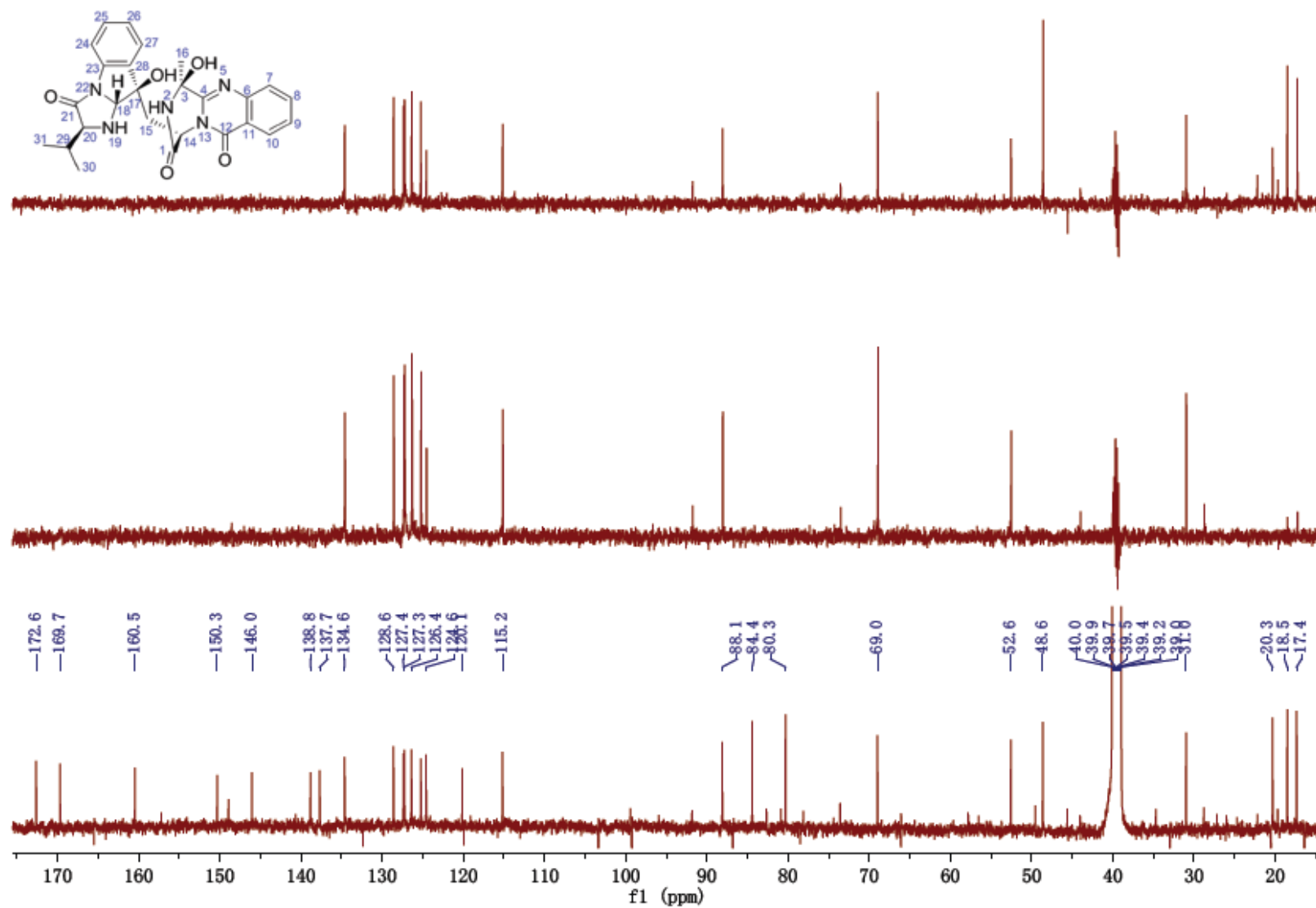
**Figure S13.** NOESY spectrum of compound **2** (recorded with different parameters).





**Figure S14.**  $^1\text{H}$  spectrum of compound **3**.



**Figure S15.**  $^{13}\text{C}$  and DEPT spectra of compound 3.

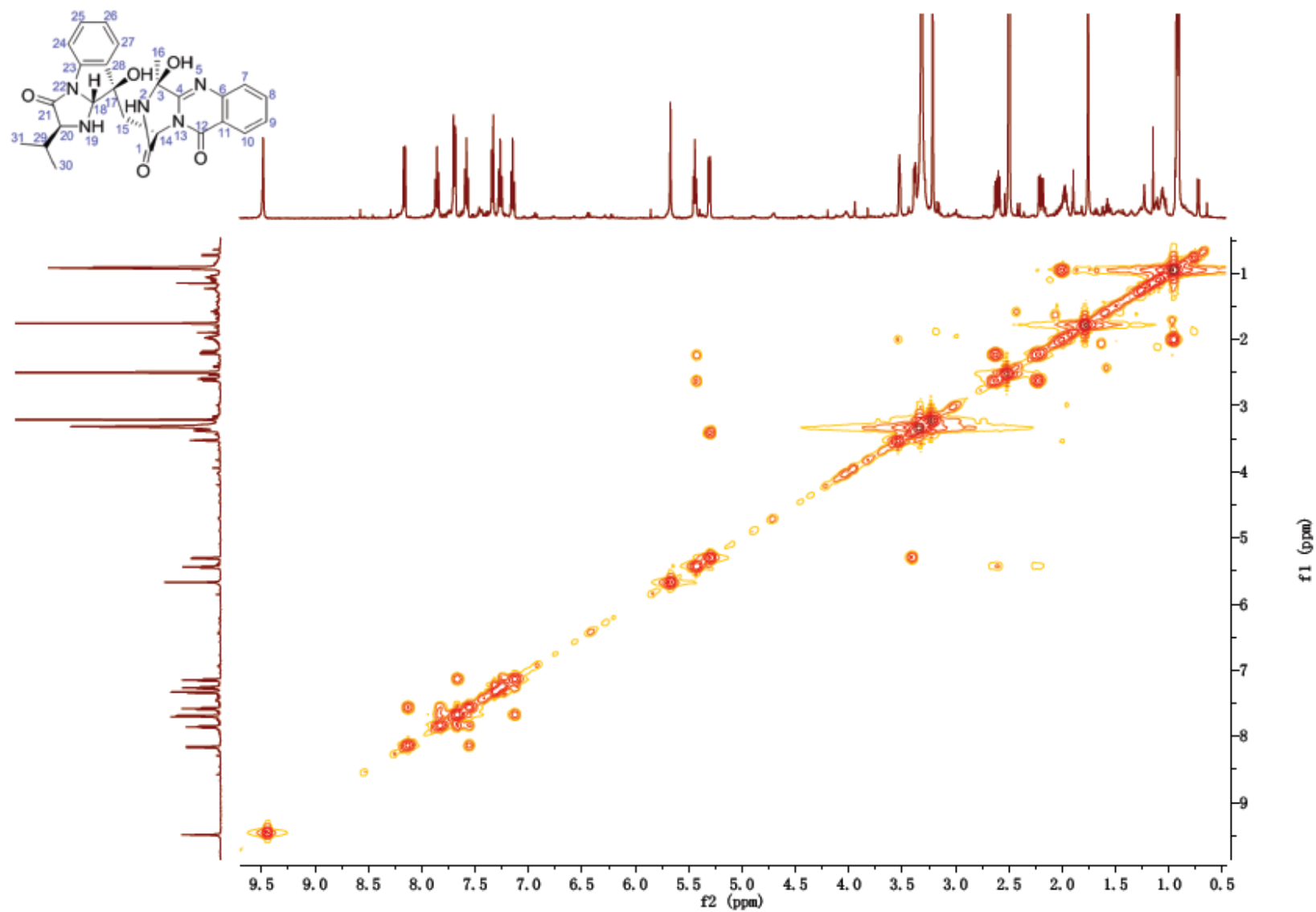
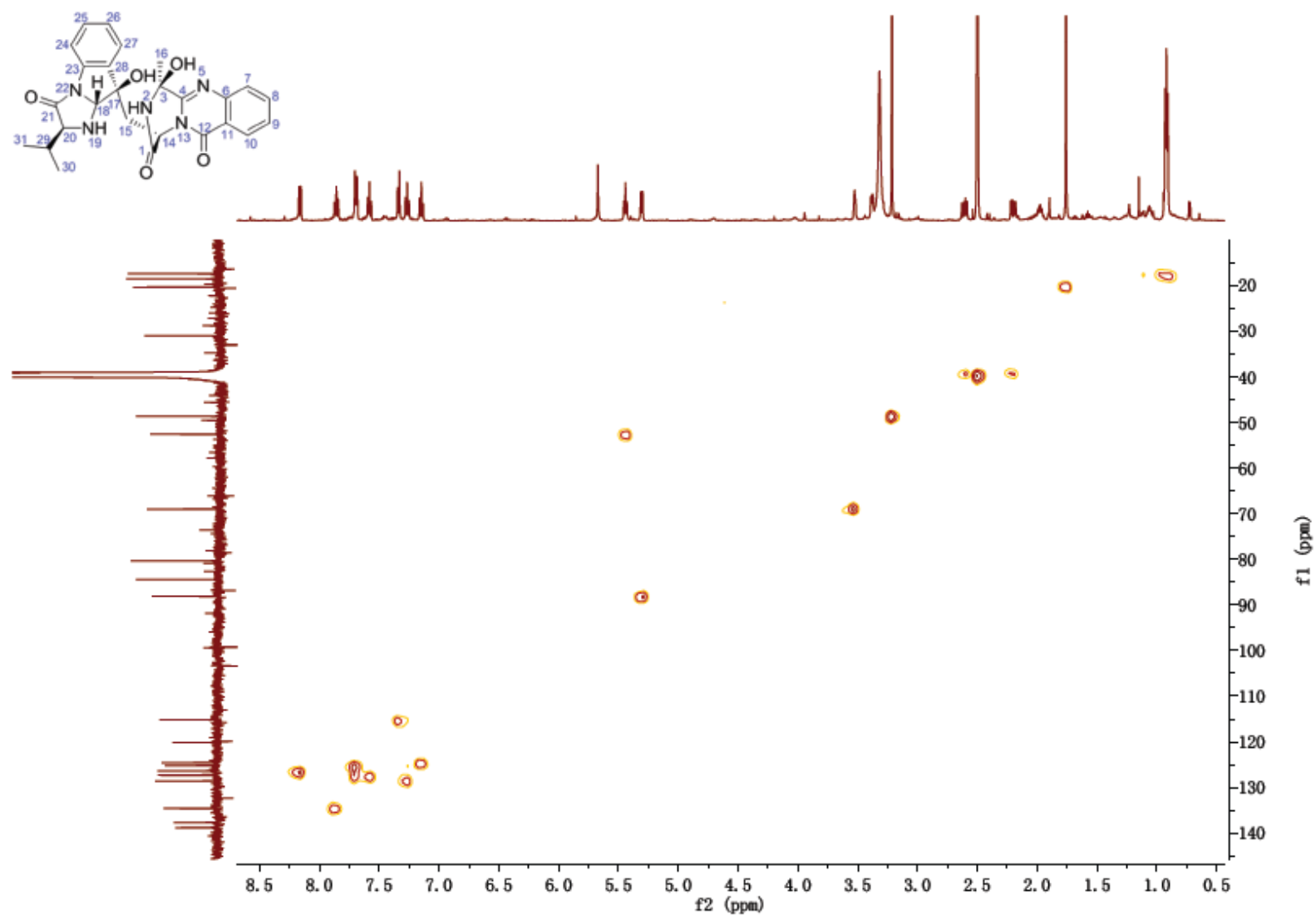
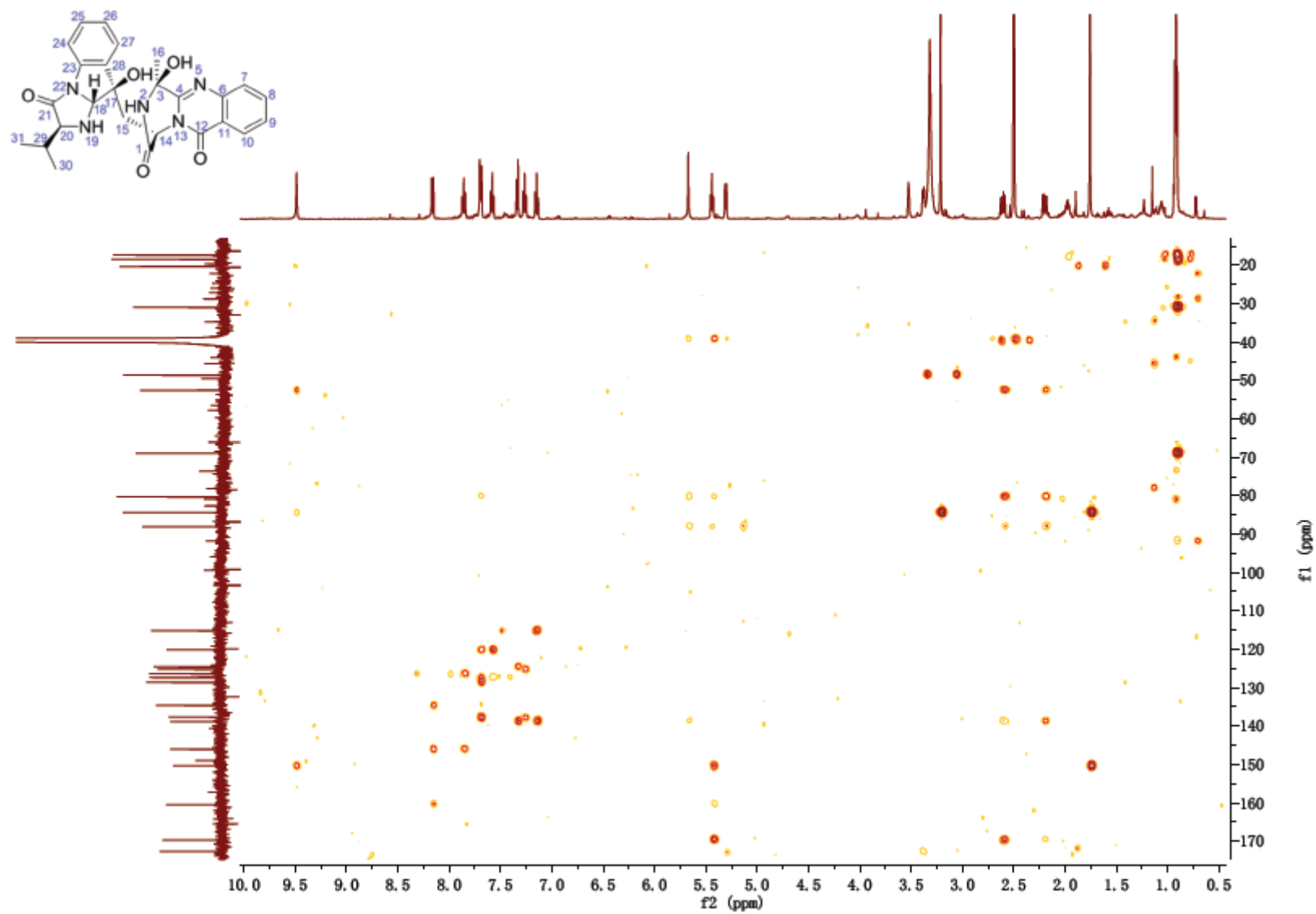
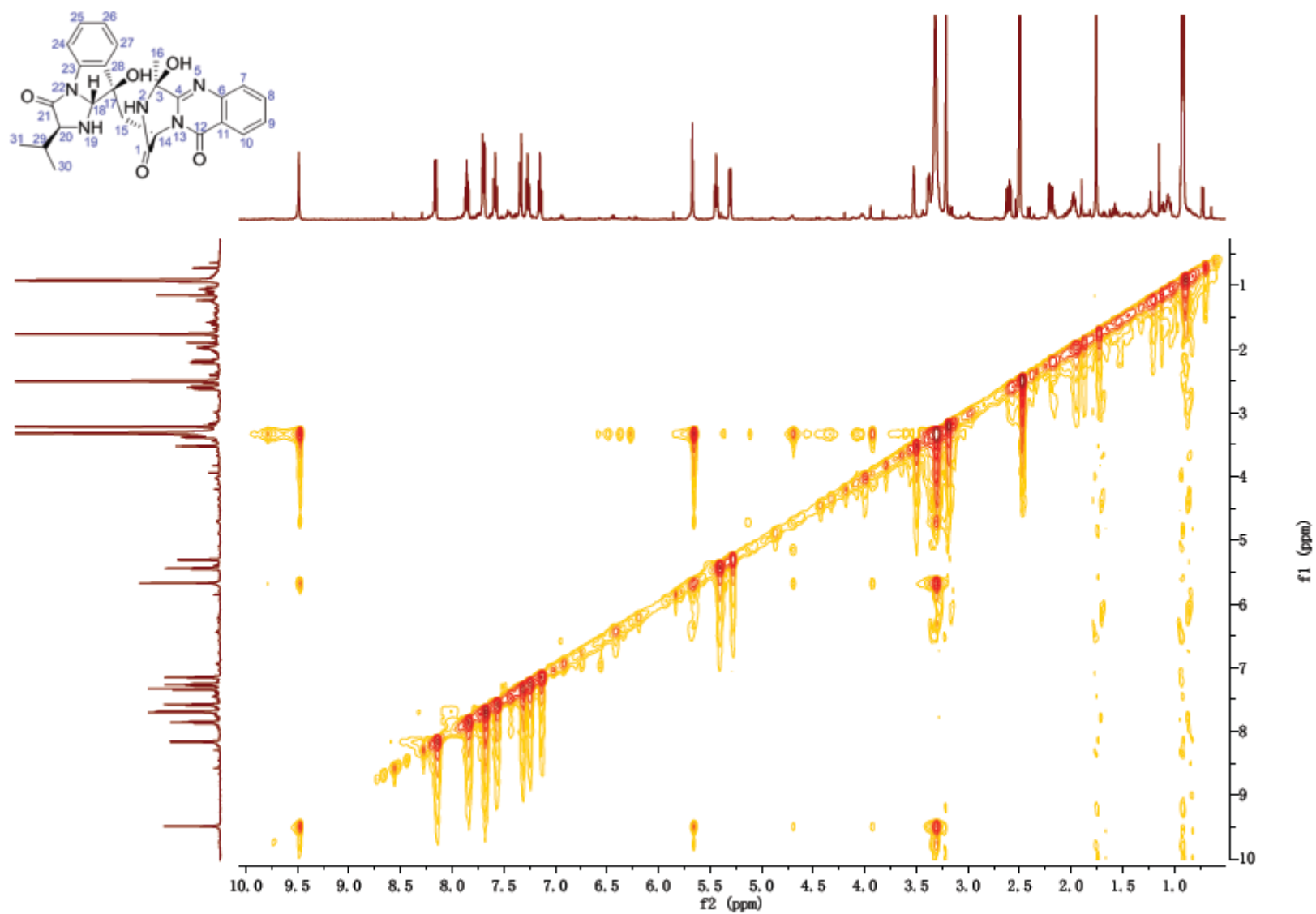
**Figure S16.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of compound 3.

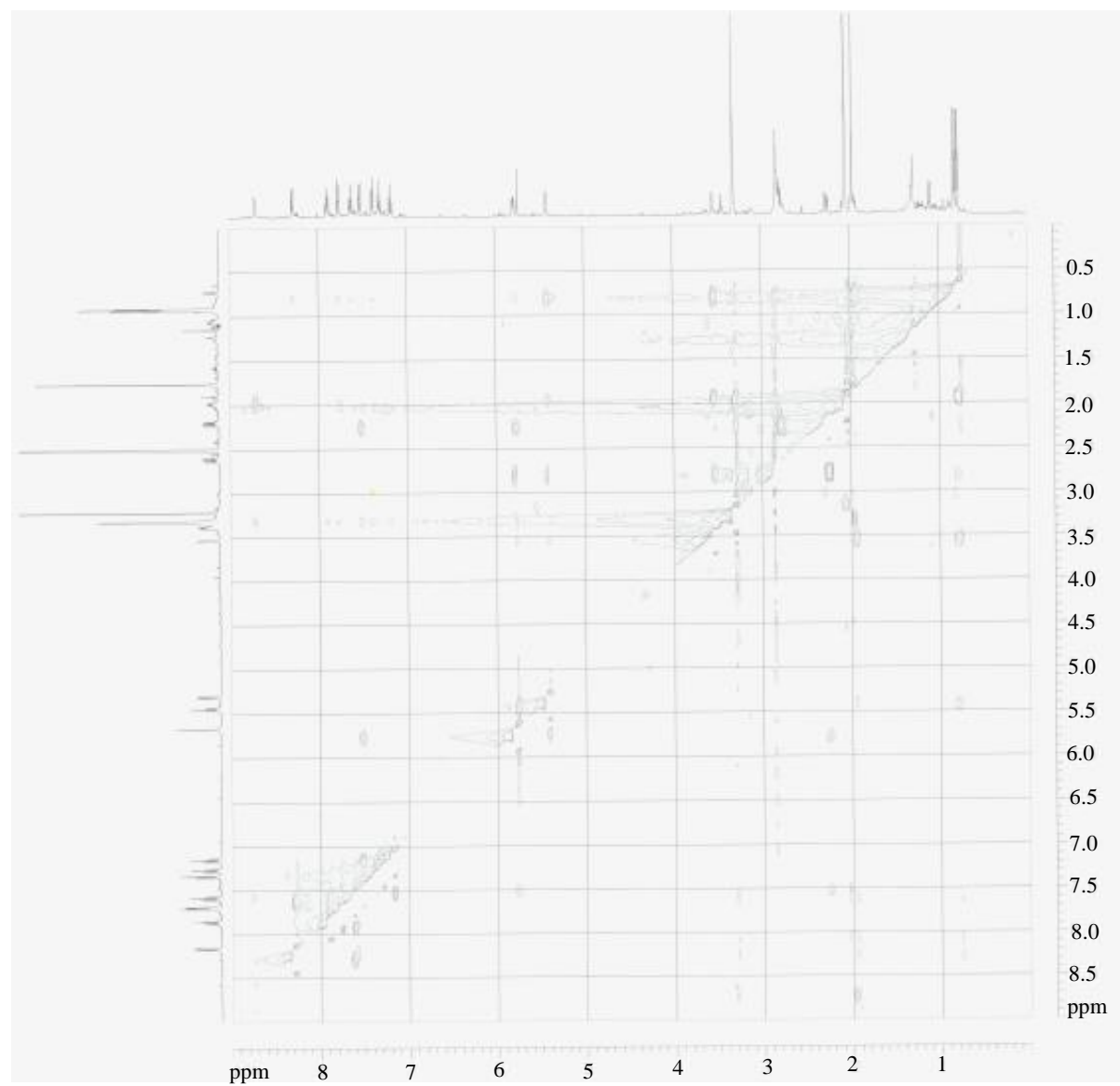
Figure S17. HSQC spectrum of compound 3.



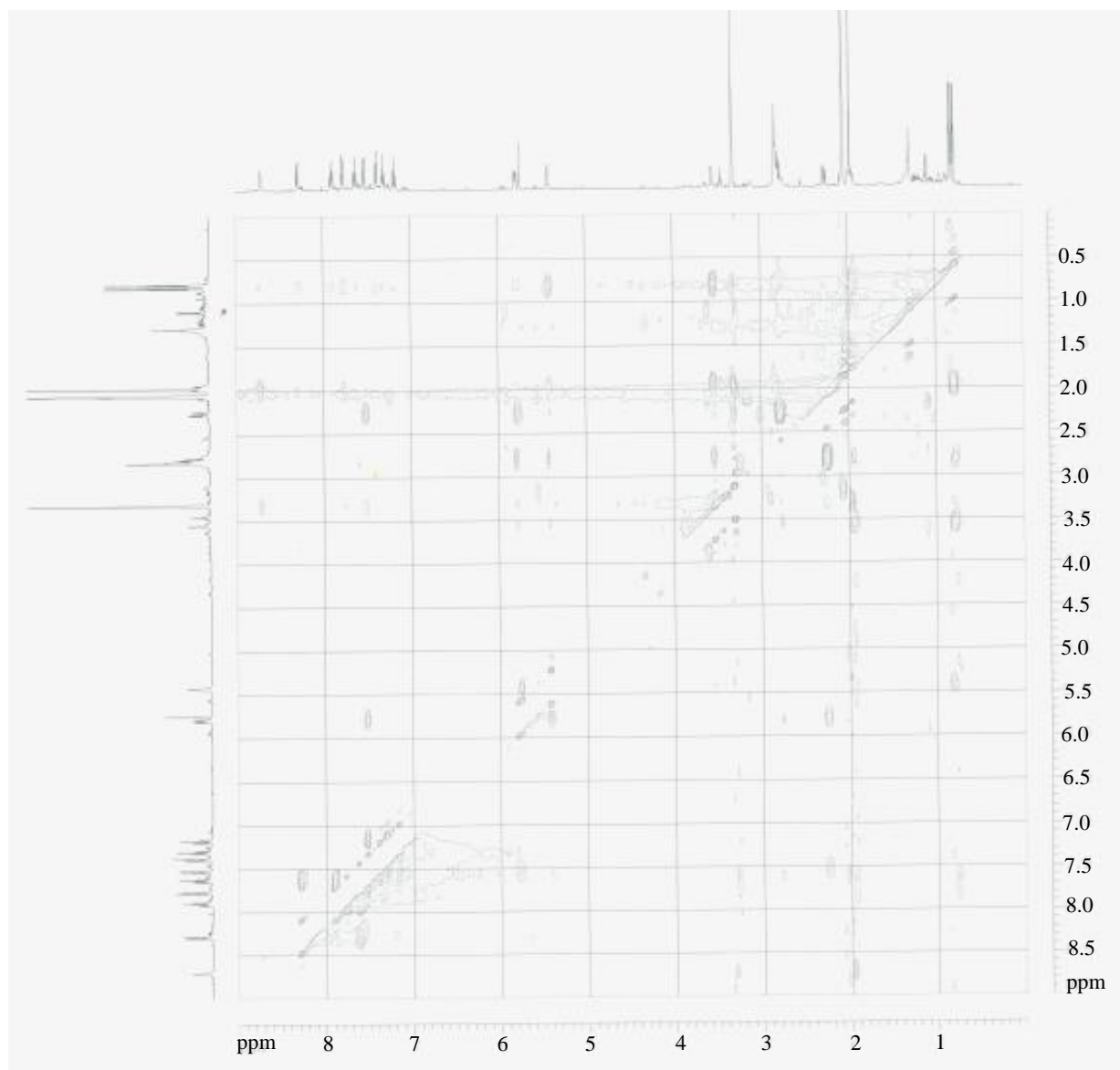
**Figure S18.** HMBC spectrum of compound 3.

**Figure S19.** NOESY spectrum of compound 3.

**Figure S20.** NOESY spectrum of compound **3** (recorded with different parameters).

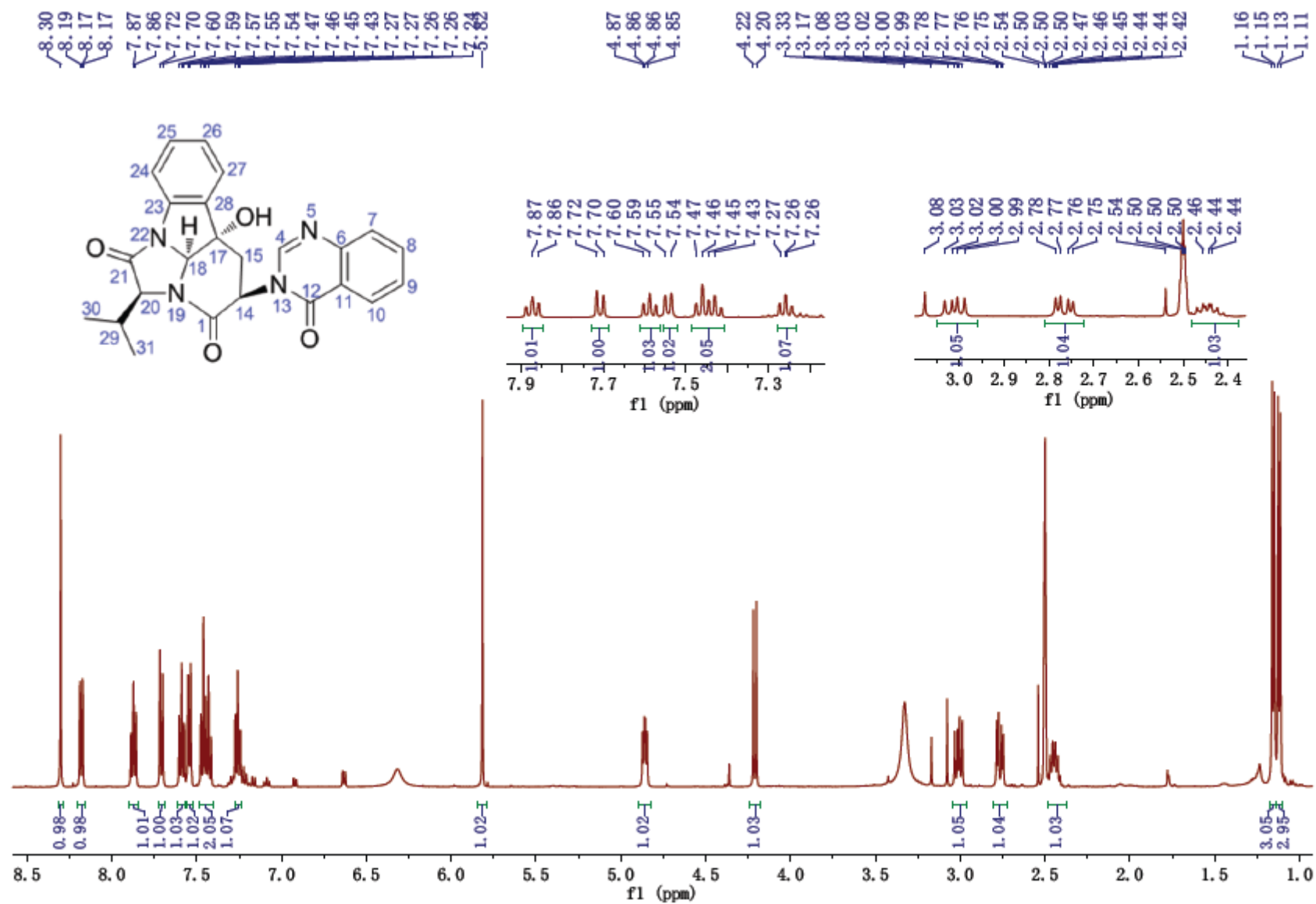


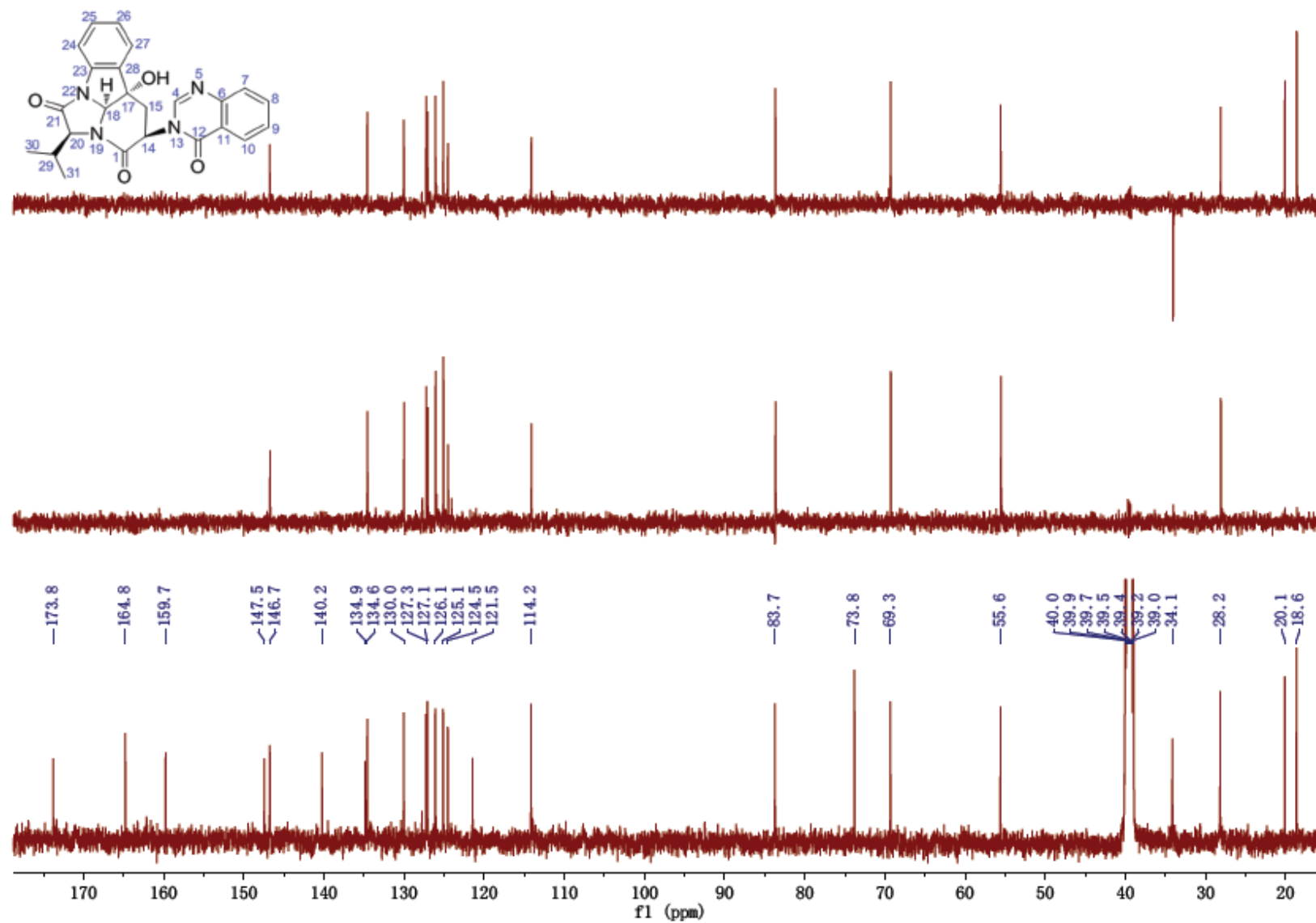
**Figure S21.** NOESY spectrum of compound **3** (recorded with different parameters).





**Figure S22.**  $^1\text{H}$  spectrum of compound **4**.



**Figure S23.**  $^{13}\text{C}$  and DEPT spectra of compound 4.

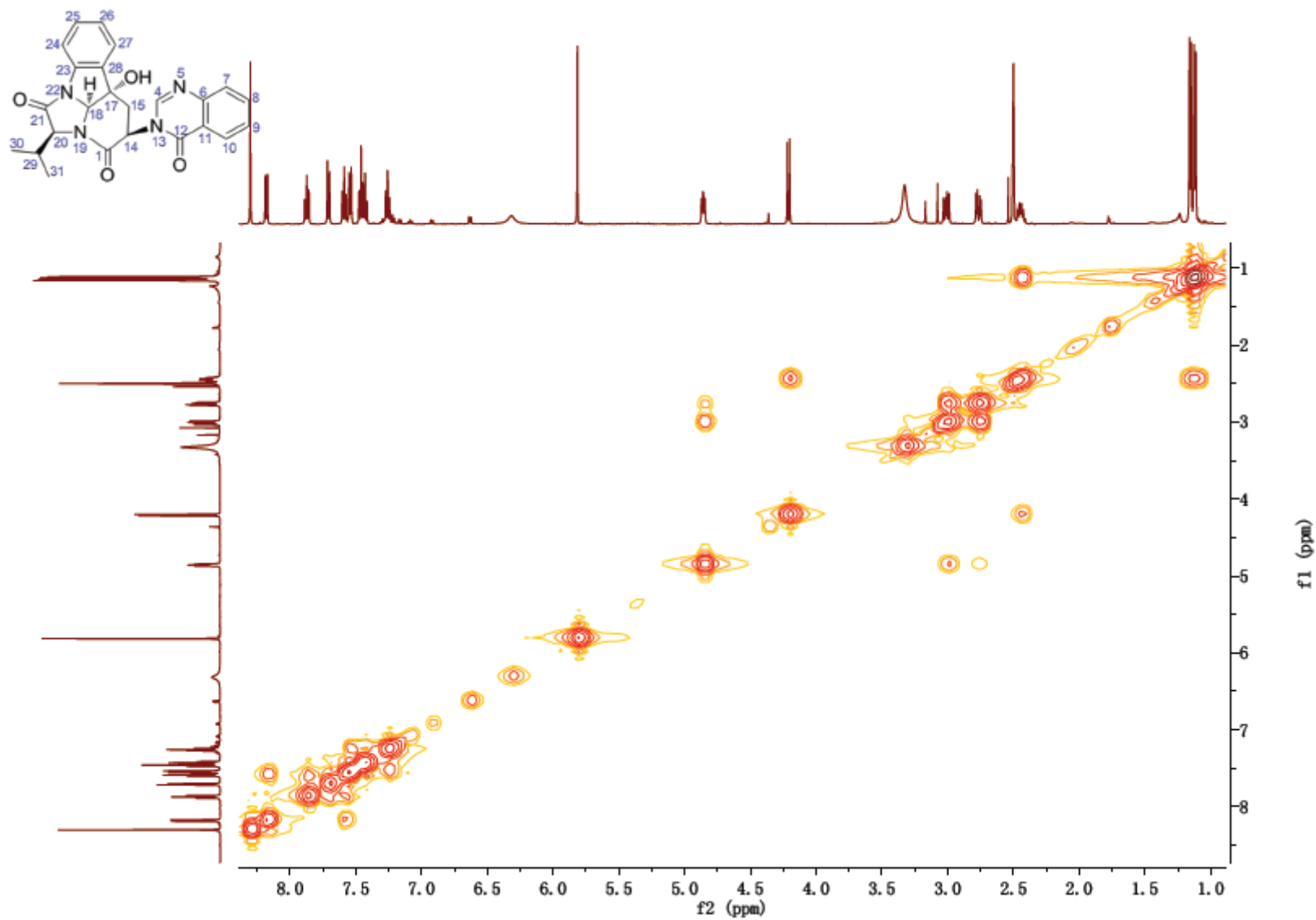
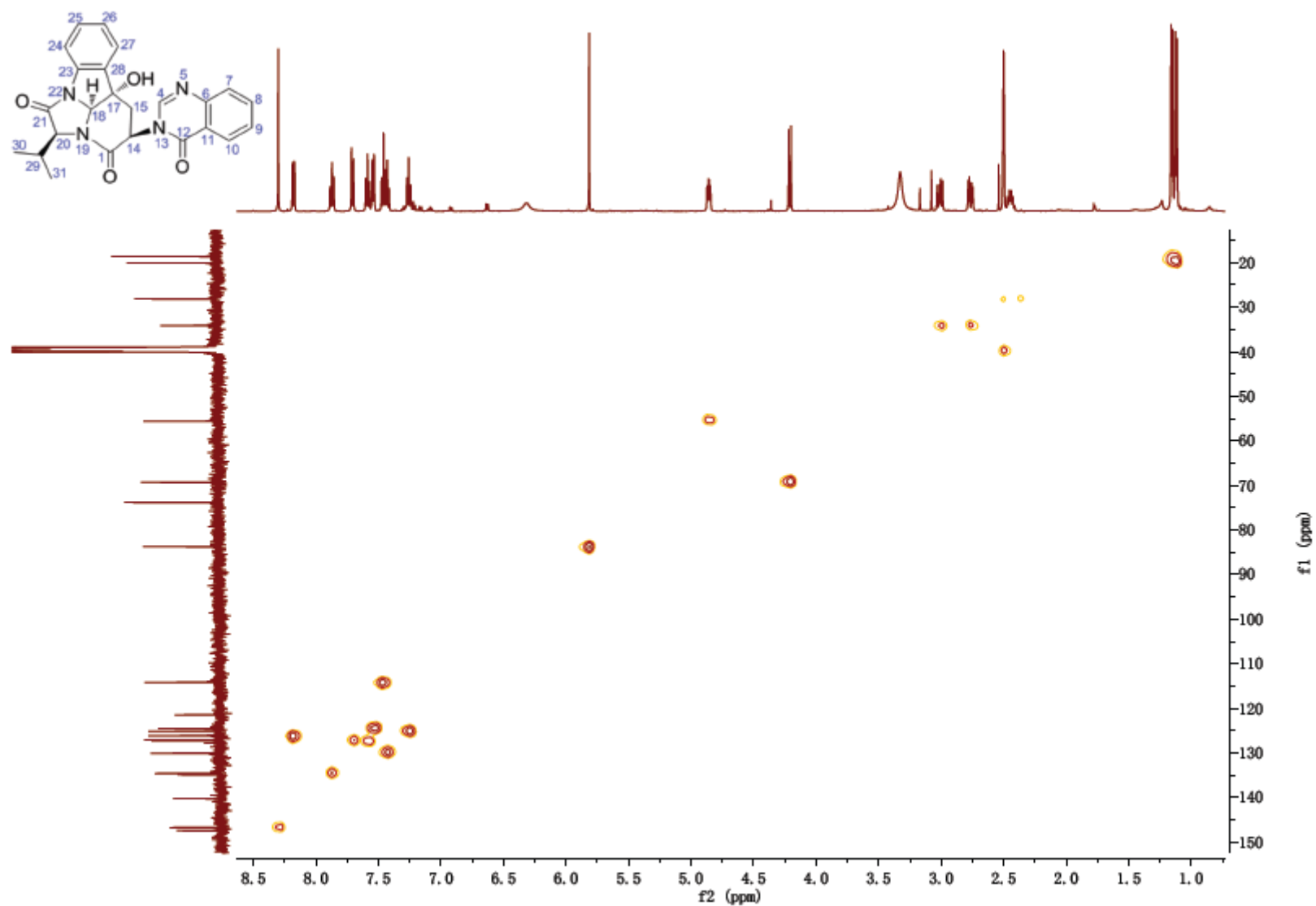
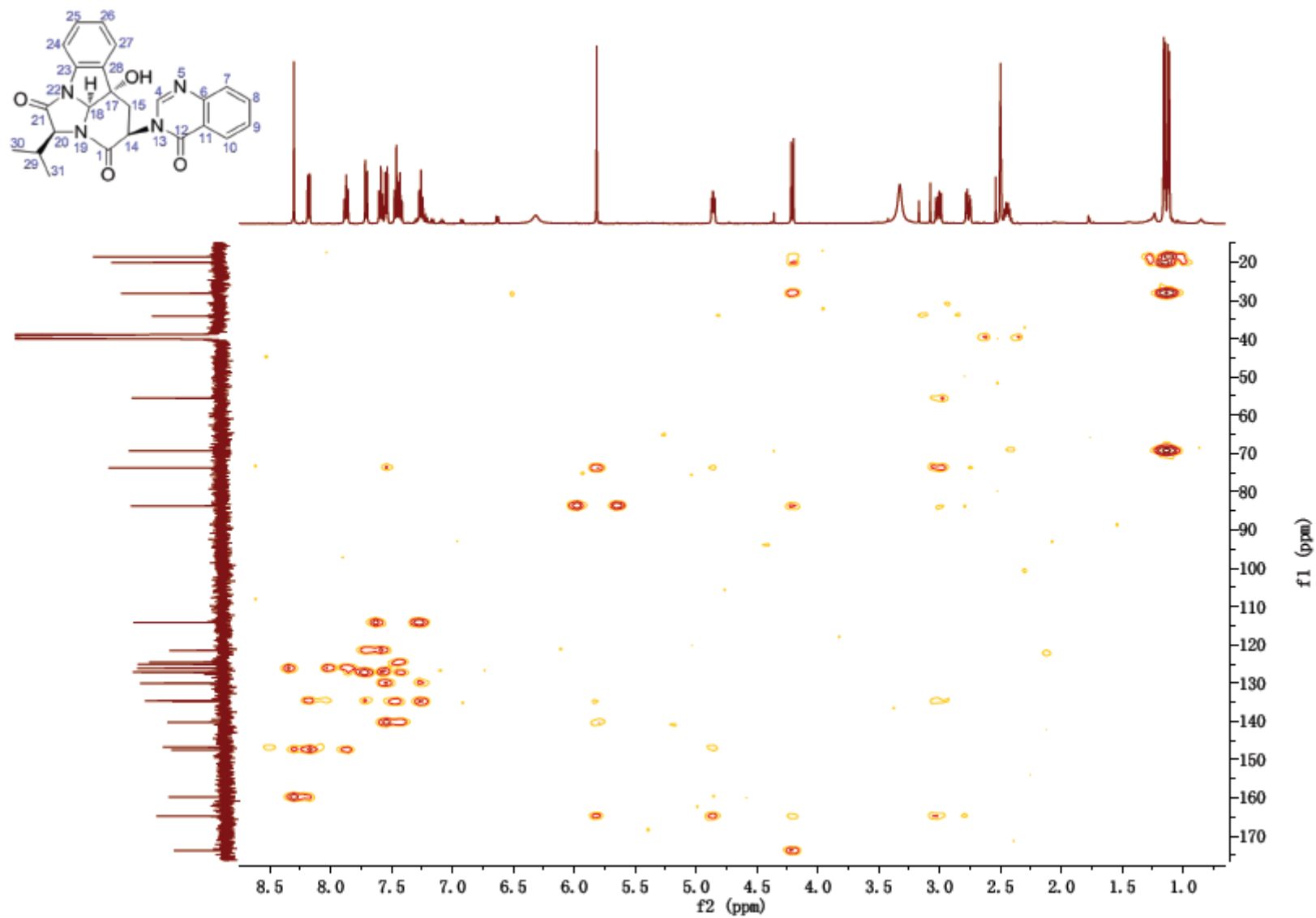
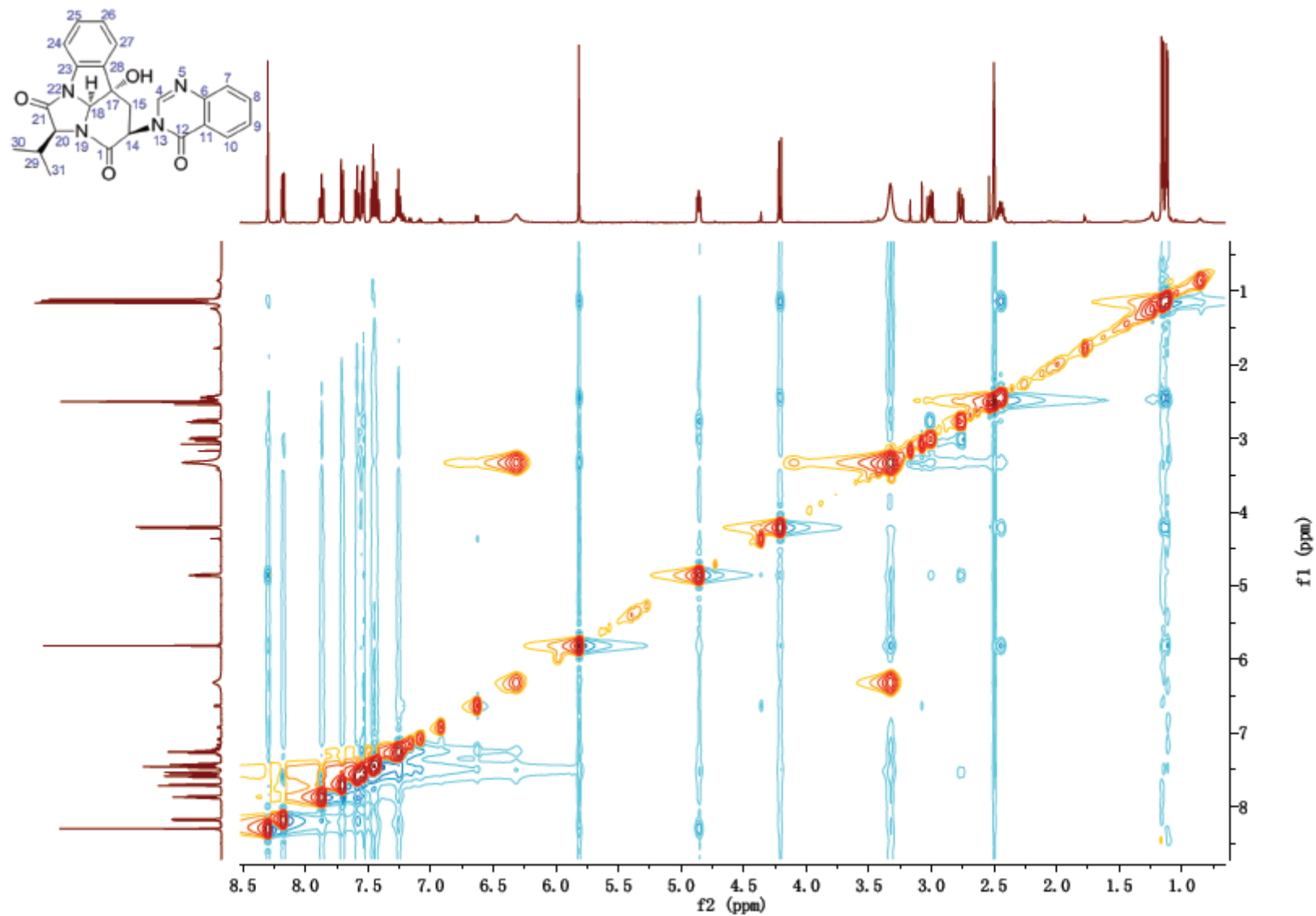
**Figure S24.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of compound 4.

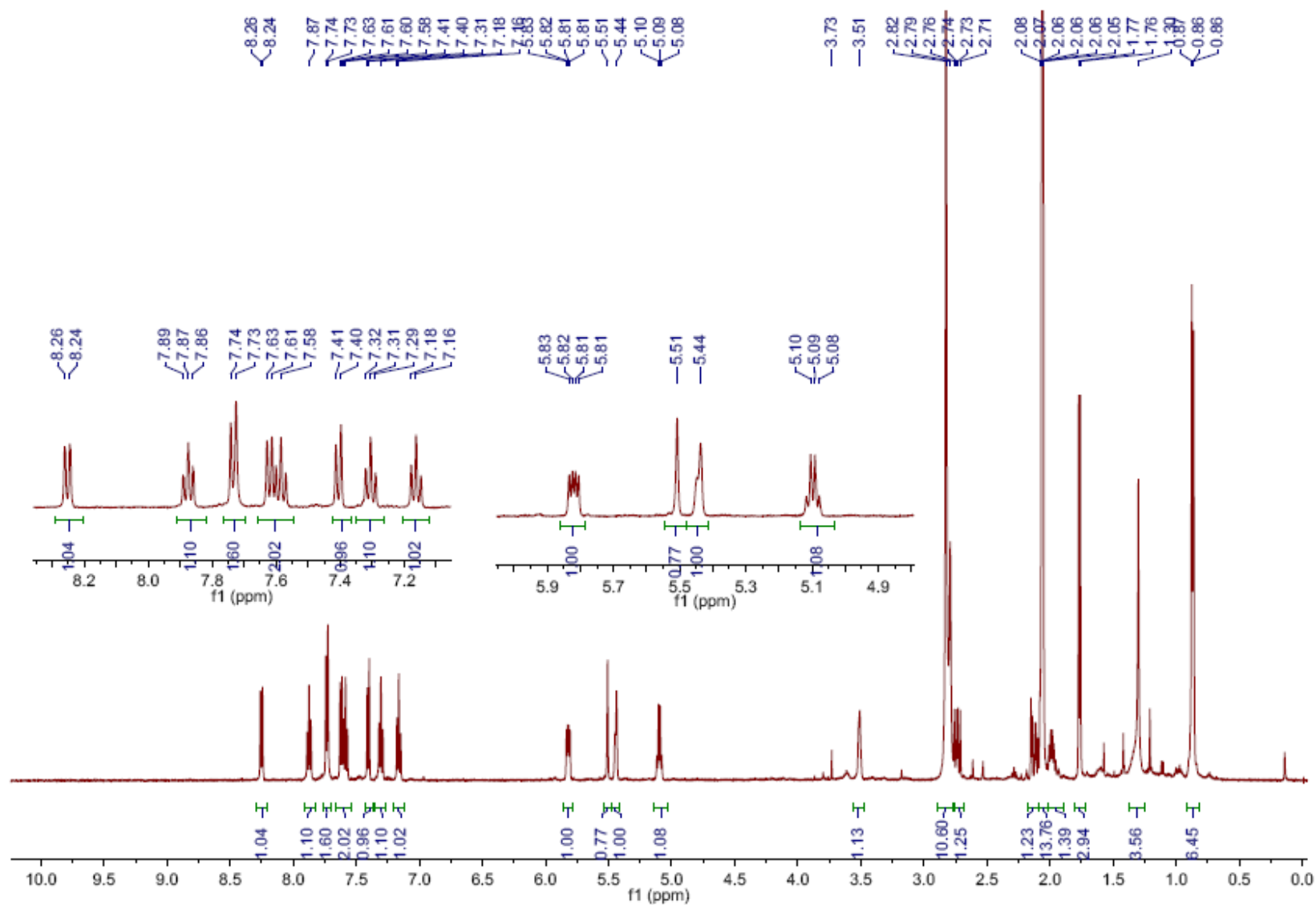
Figure S25. HSQC spectrum of compound 4.



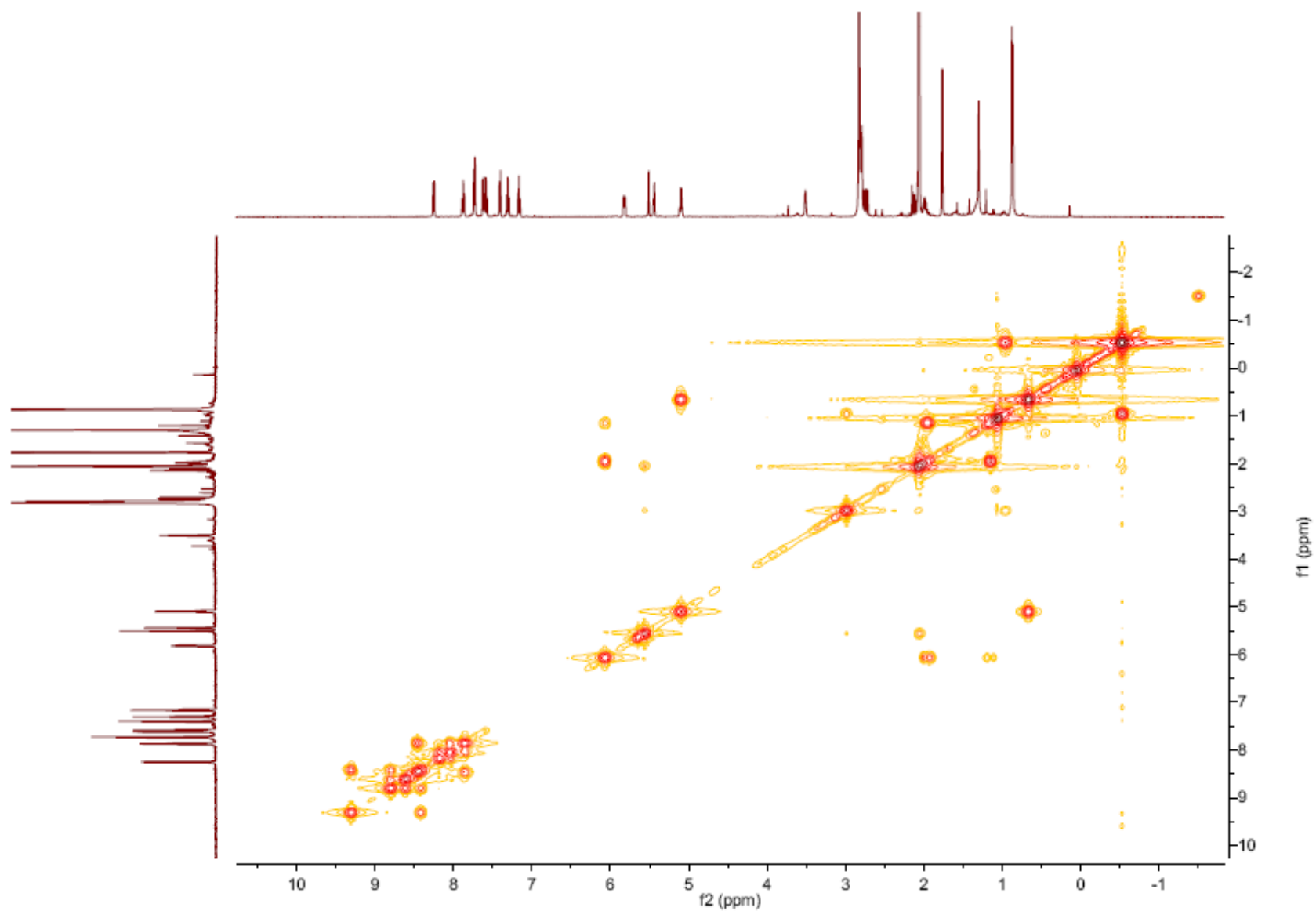
**Figure S26.** HMBC spectrum of compound 4.

**Figure S27.** NOESY spectrum of compound 4.

**Figure S28.**  $^1\text{H}$  spectrum of the reducing product of compound **1** by  $\text{NaBH}_4$  (measured in acetone- $d_6$ ).



**Figure S29.**  $^1\text{H}$ – $^1\text{H}$  COSY spectrum of the reducing product of compound **1** by  $\text{NaBH}_4$  (measured in acetone- $d_6$ ).





**Figure S30.** NOESY spectrum of the reducing product of compound **1** by NaBH<sub>4</sub> (measured in acetone-*d*<sub>6</sub>).

