

## Supplemental Material

### Phenolic compounds from the rhizomes of *Zingiber pellitum*

Nguyen Phuong Hanh<sup>a</sup>, Nguyen Thi Thu Minh<sup>b</sup>, Nguyen Thu Uyen<sup>b</sup>, Do Hoang Giang<sup>b</sup>, Nguyen Quoc Binh<sup>c</sup>, and Nguyen Tien Dat<sup>b,\*</sup>

<sup>a</sup> Institute of Ecology and Biological Resources, Vietnam Academy of Science and Technology (VAST), 18 Hoang Quoc Viet Road, Cau Giay, Hanoi, Vietnam

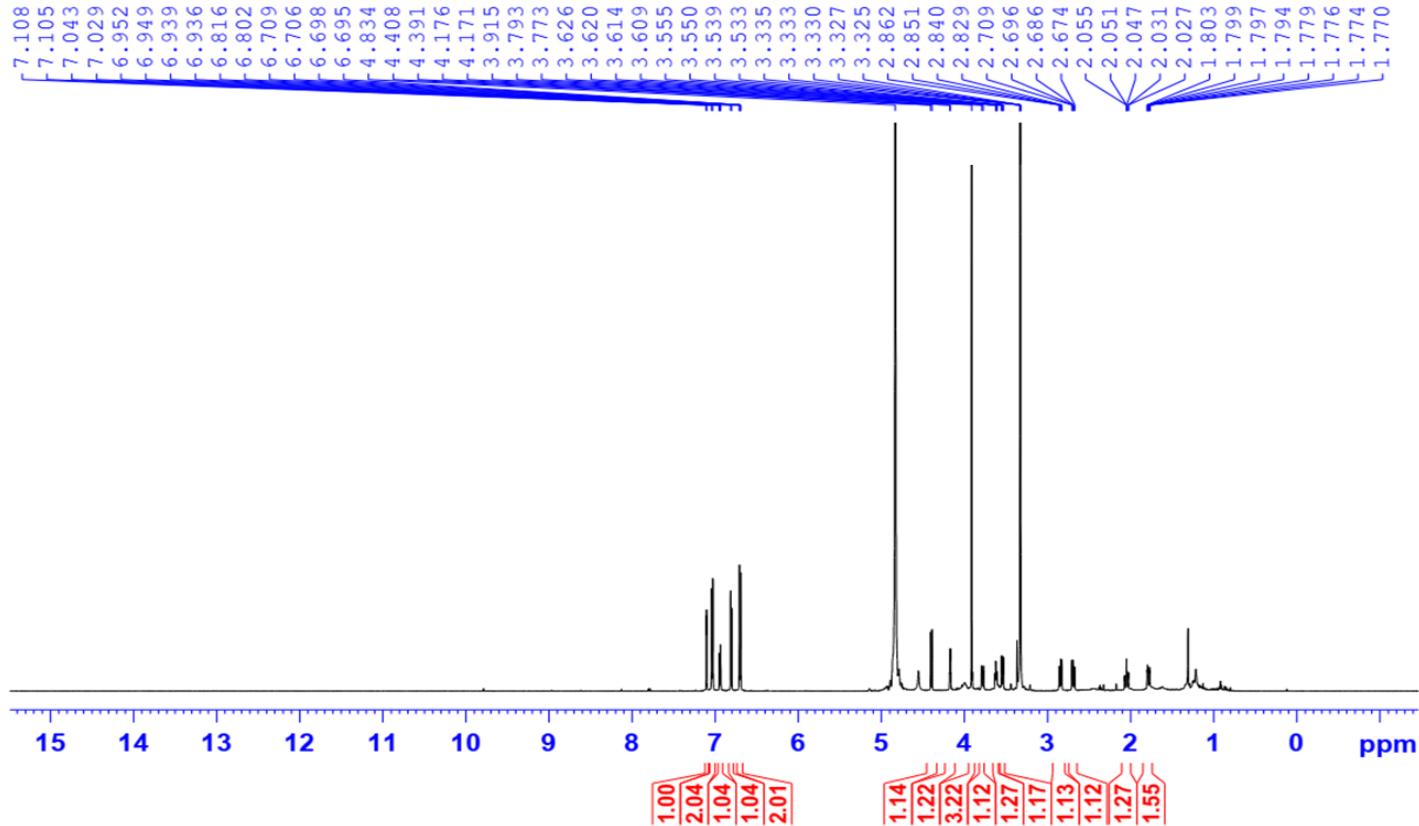
<sup>b</sup> Centre for High Technology Research and Development, VAST, 18-Hoang Quoc Viet, Cau Giay, Hanoi, Vietnam

<sup>c</sup> Vietnam National Museum of Nature, VAST, 18-Hoang Quoc Viet, Cau Giay, Ha Noi, Vietnam

Email: [ntdat@chtd.vast.vn](mailto:ntdat@chtd.vast.vn)

### Table of Contents

<b>Figure S1.</b> $^1\text{H}$ NMR spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S2
<b>Figure S2.</b> $^{13}\text{C}$ NMR spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S2
<b>Figure S2.</b> HSQC spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S3
<b>Figure S3.</b> HMBC spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S3
<b>Figure S4.</b> COSY spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S4
<b>Figure S5.</b> NOESY spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S4
<b>Figure S6.</b> HR-ESI-MS spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S5
<b>Figure S7.</b> ECD spectrum of compound <b>1</b> (in $\text{CD}_3\text{OD}$ ) .....	S5
<b>Figure S8.</b> $^1\text{H}$ NMR spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S6
<b>Figure S9.</b> $^{13}\text{C}$ NMR spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S6
<b>Figure S10.</b> HSQC spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S7
<b>Figure S11.</b> HMBC spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S7
<b>Figure S12.</b> COSY spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S8
<b>Figure S13.</b> NOESY spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S8
<b>Figure S14.</b> HR-ESI-MS spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S9
<b>Figure S15.</b> ECD spectrum of compound <b>2</b> (in $\text{CD}_3\text{OD}$ ) .....	S9
<b>Figure S16.</b> $^1\text{H}$ NMR spectrum of compound <b>2</b> (in $\text{DMSO}-d_6$ ) .....	S10
<b>Figure S17.</b> $^{13}\text{C}$ NMR spectrum of compound <b>2</b> (in $\text{DMSO}-d_6$ ) .....	S10
<b>Figure S18.</b> HSQC spectrum of compound <b>2</b> (in $\text{DMSO}-d_6$ ) .....	S11
<b>Figure S19.</b> HMBC spectrum of compound <b>2</b> (in $\text{DMSO}-d_6$ ) .....	S11
<b>Figure S20.</b> COSY spectrum of compound <b>2</b> (in $\text{DMSO}-d_6$ ) .....	S12
<b>Figure S21.</b> NOESY spectrum of compound <b>2</b> (in $\text{DMSO}-d_6$ ) .....	S12



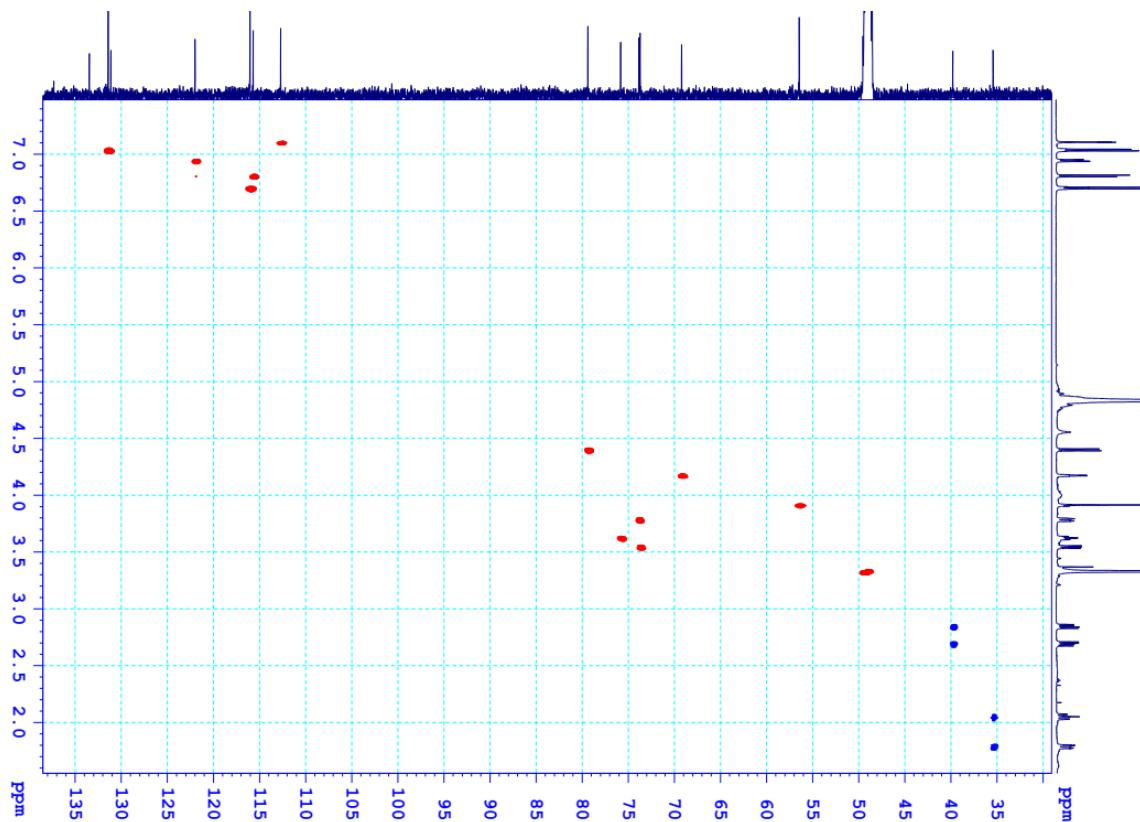


Figure S2. HSQC spectrum of compound 1 (in  $\text{CD}_3\text{OD}$ )

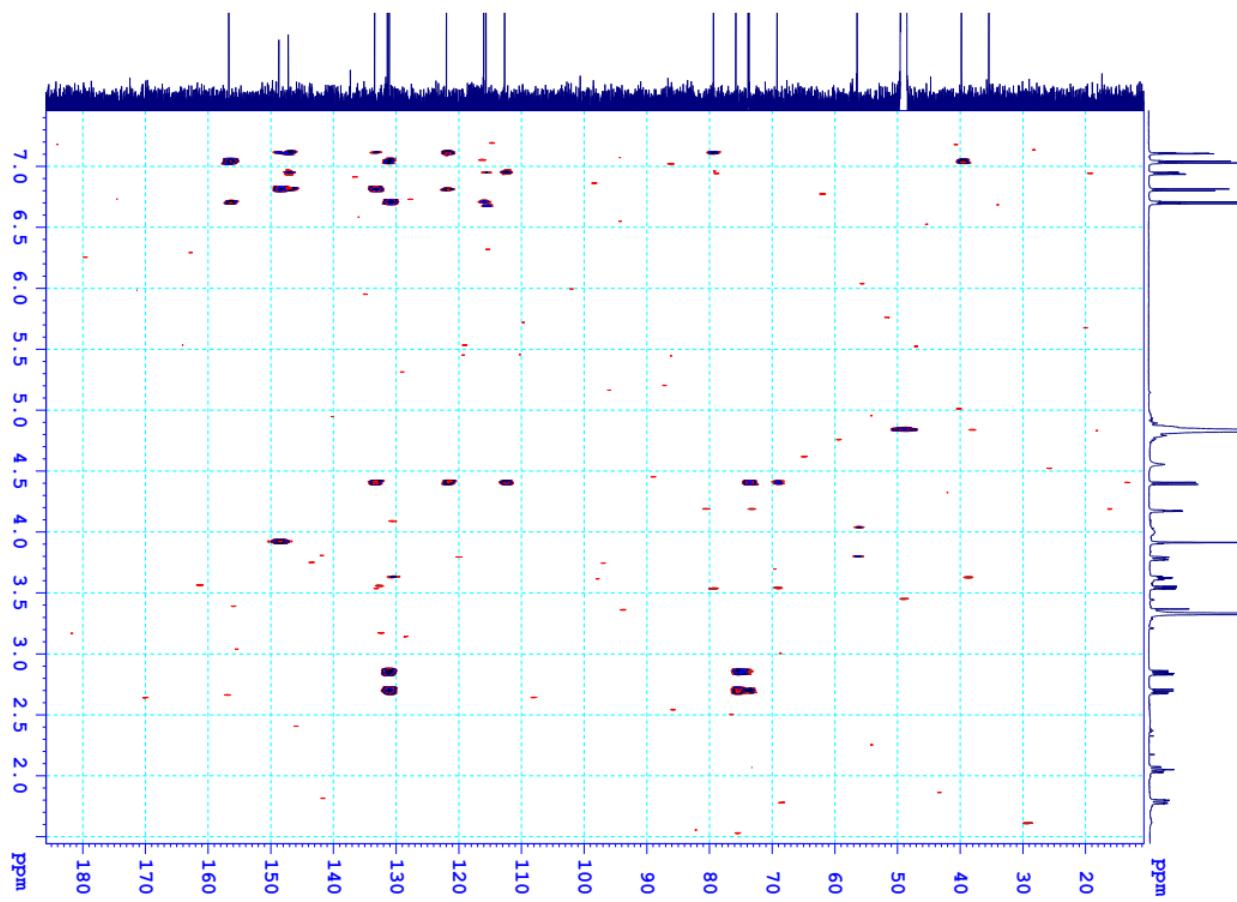


Figure S3. HMBC spectrum of compound 1 (in  $\text{CD}_3\text{OD}$ )

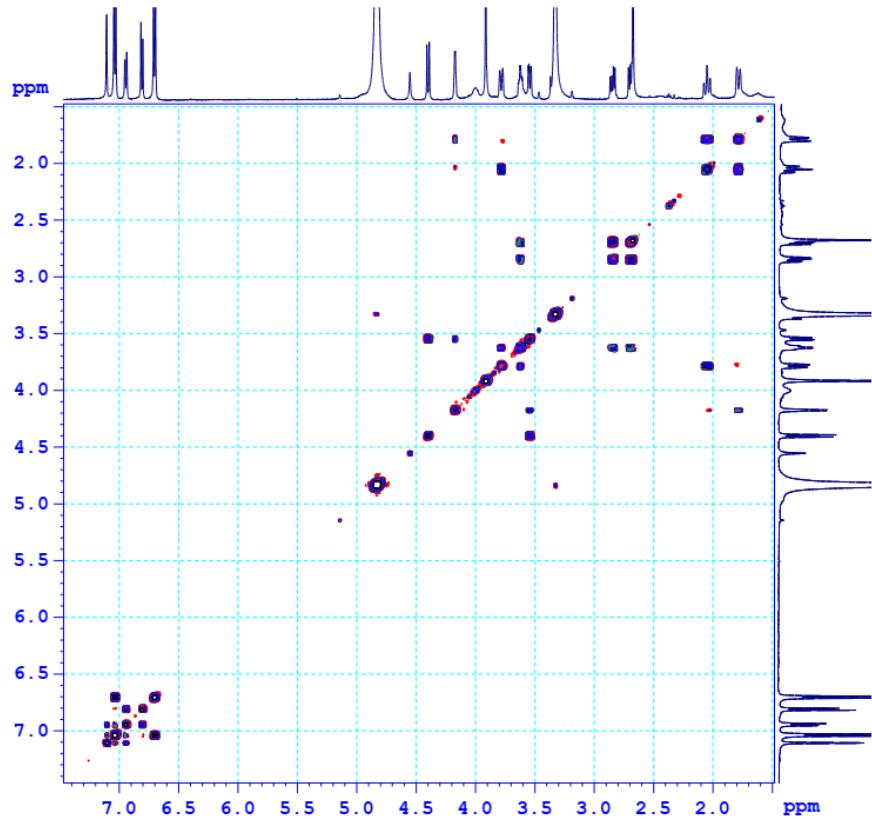


Figure S4. COSY spectrum of compound 1 (in  $\text{CD}_3\text{OD}$ )

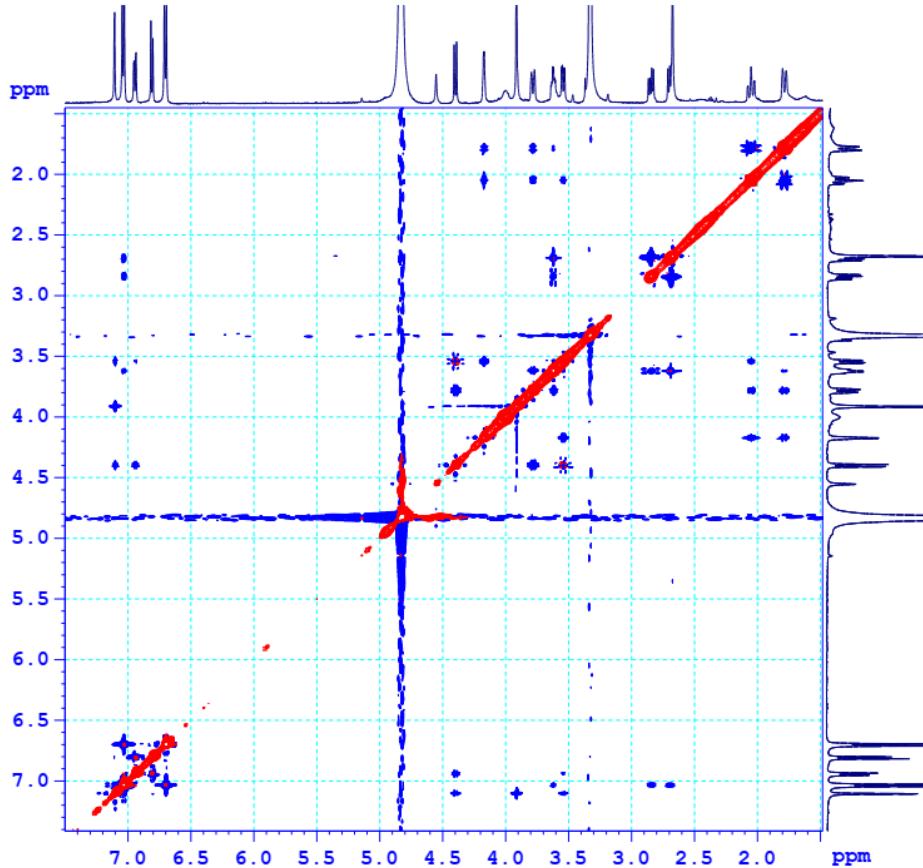
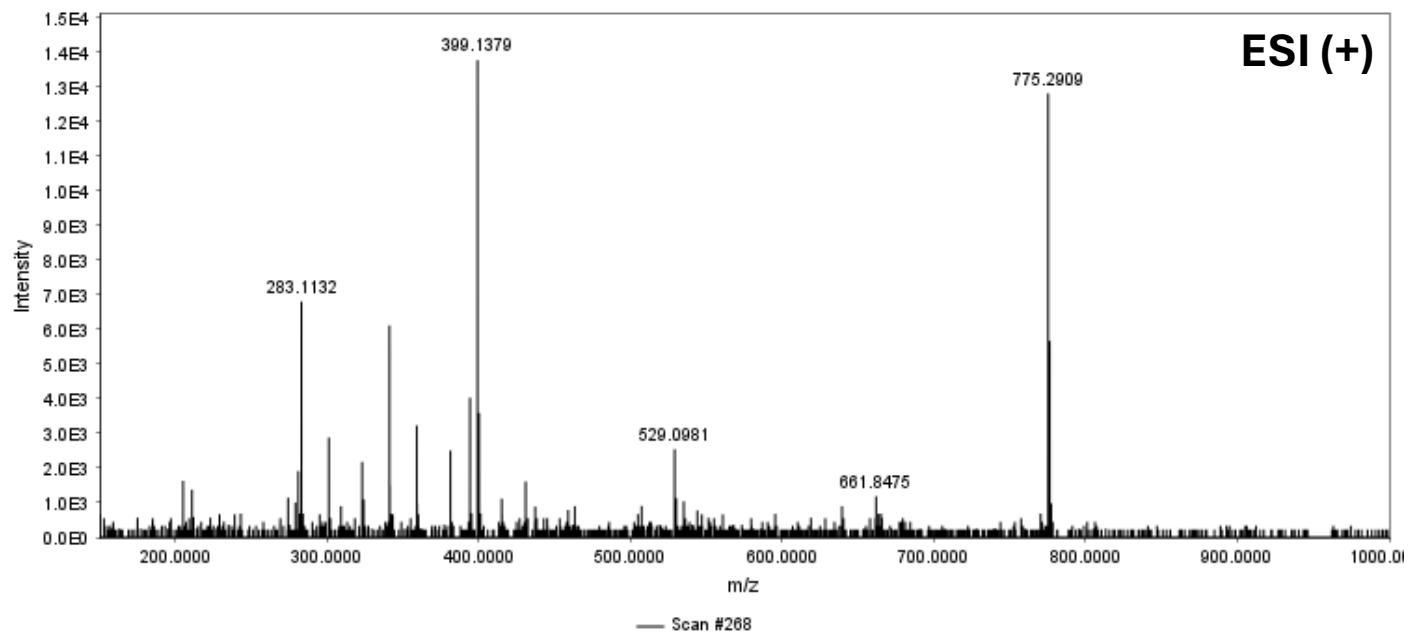
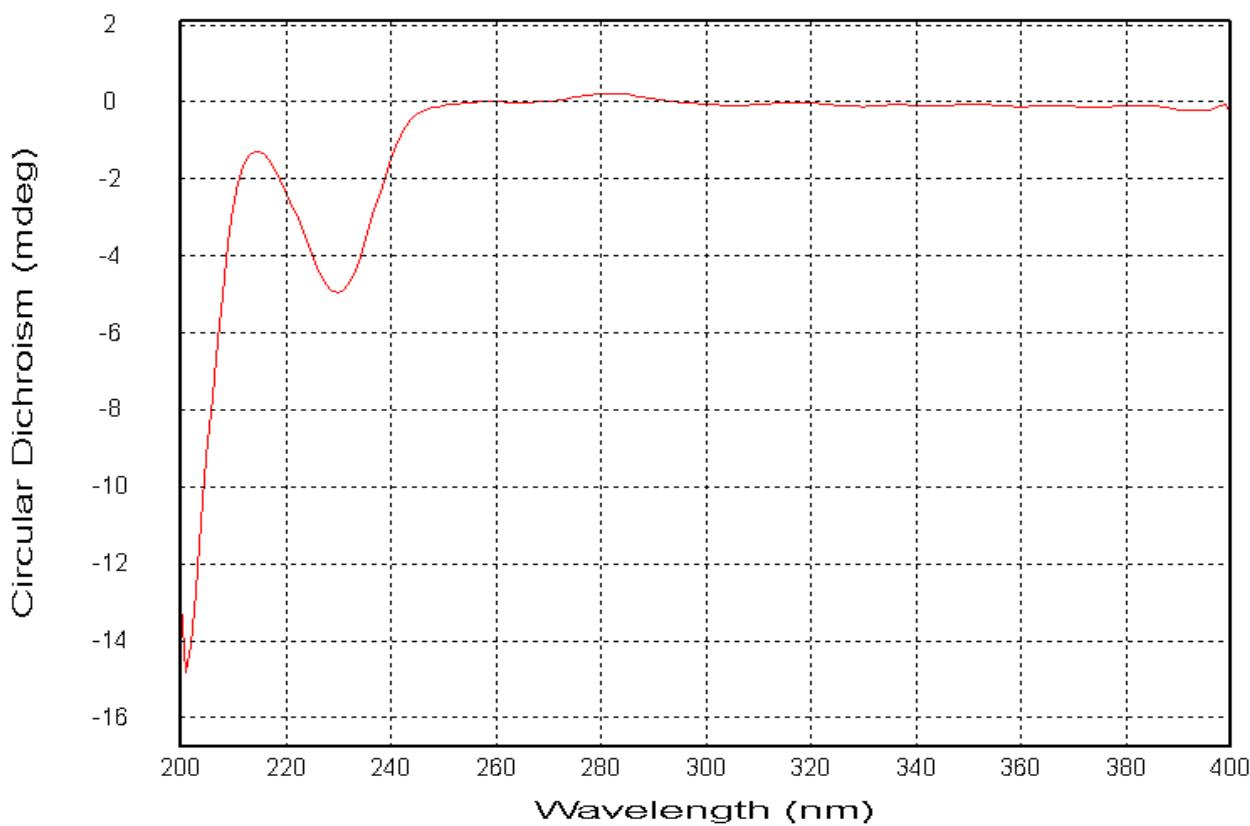


Figure S5. NOESY spectrum of compound 1 (in  $\text{CD}_3\text{OD}$ )



**Figure S6.** HR-ESI-MS spectrum of compound 1



**Figure S7.** ECD spectrum of compound 1

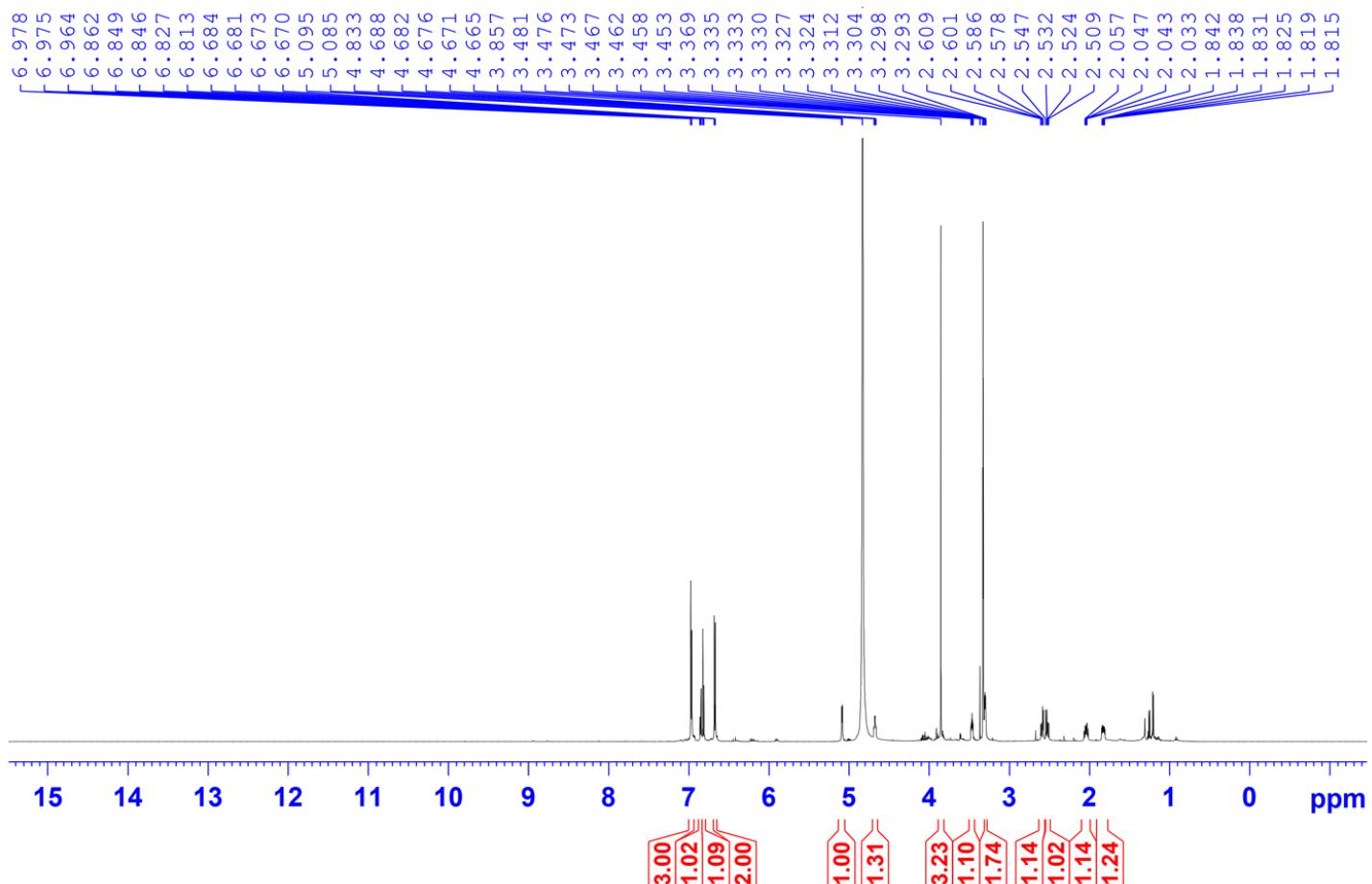


Figure S8. <sup>1</sup>H NMR spectrum of compound 2 (in CD<sub>3</sub>OD)

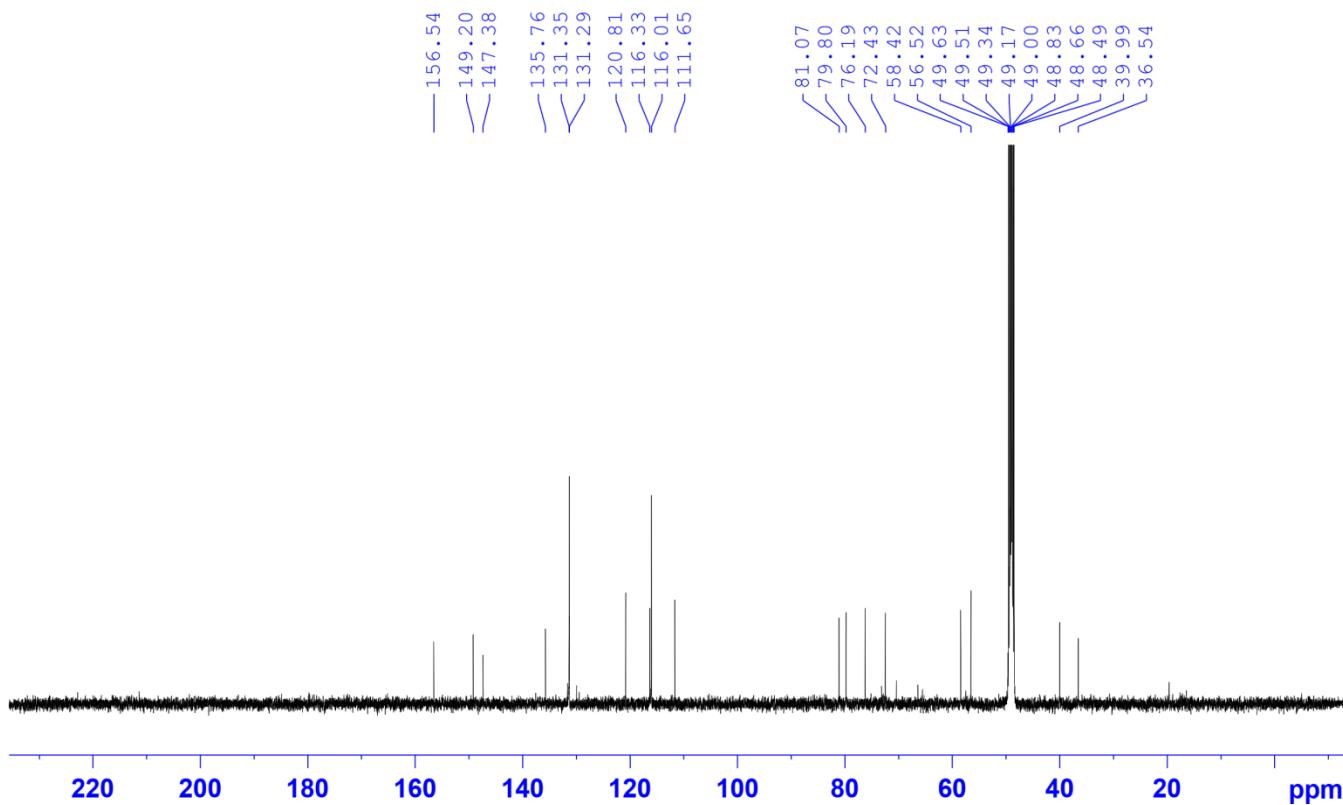


Figure S9. <sup>13</sup>C NMR spectrum of compound 2 (in CD<sub>3</sub>OD)

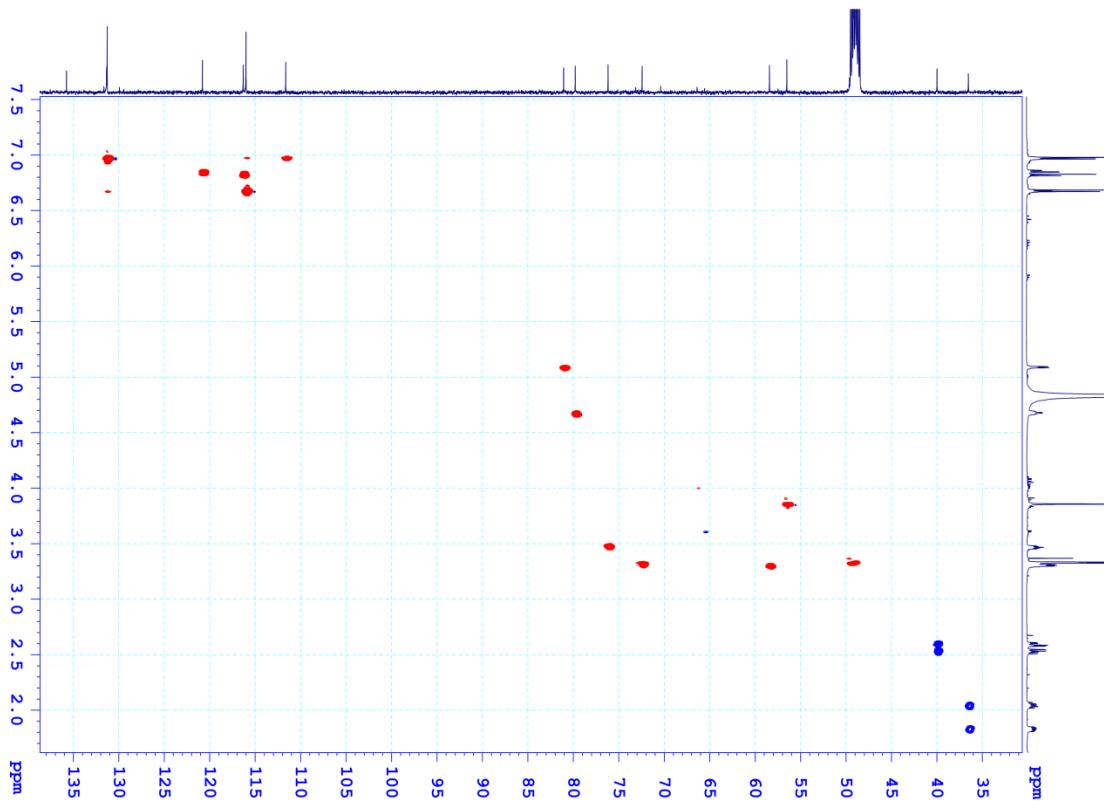


Figure S10. HSQC spectrum of compound **2** (in  $\text{CD}_3\text{OD}$ )

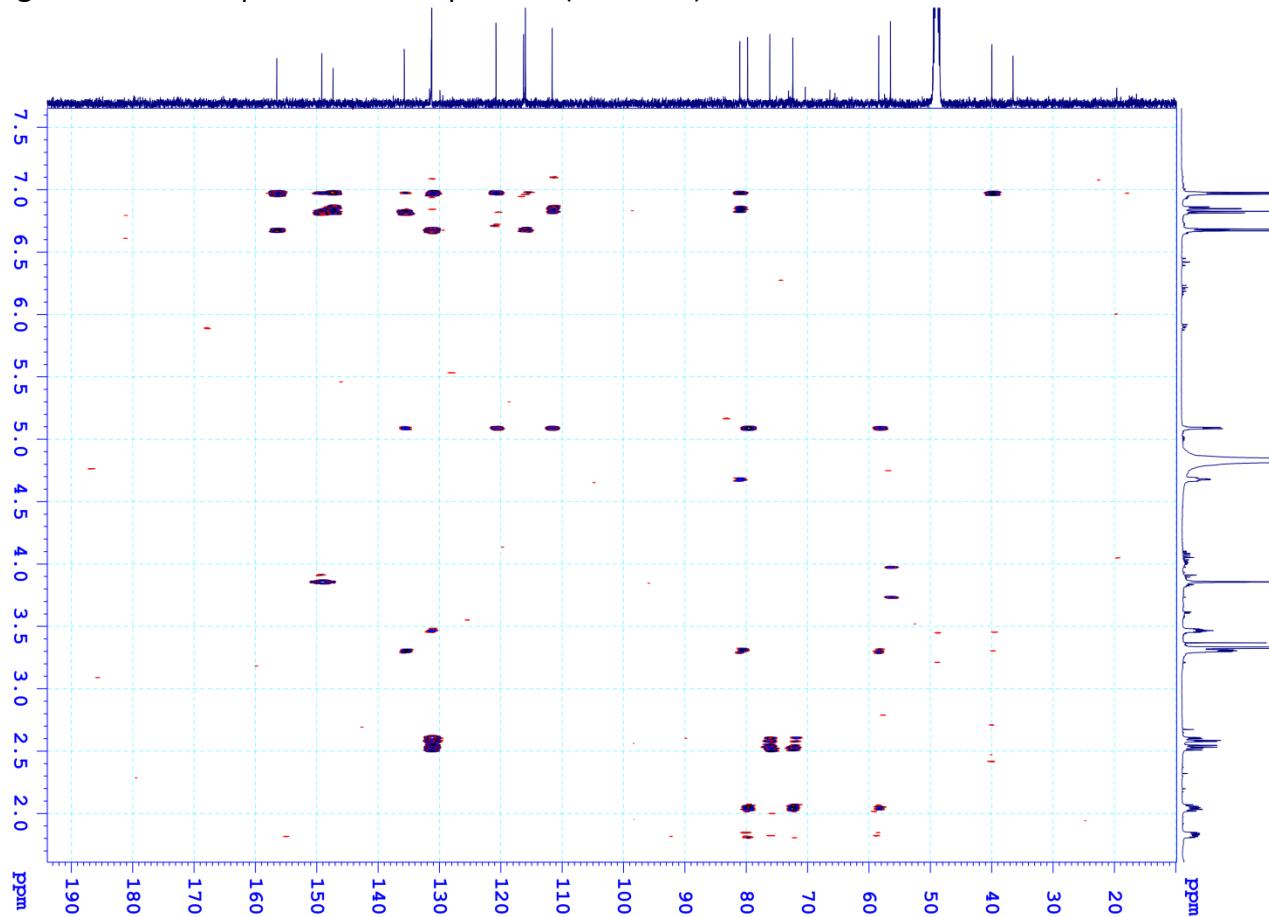
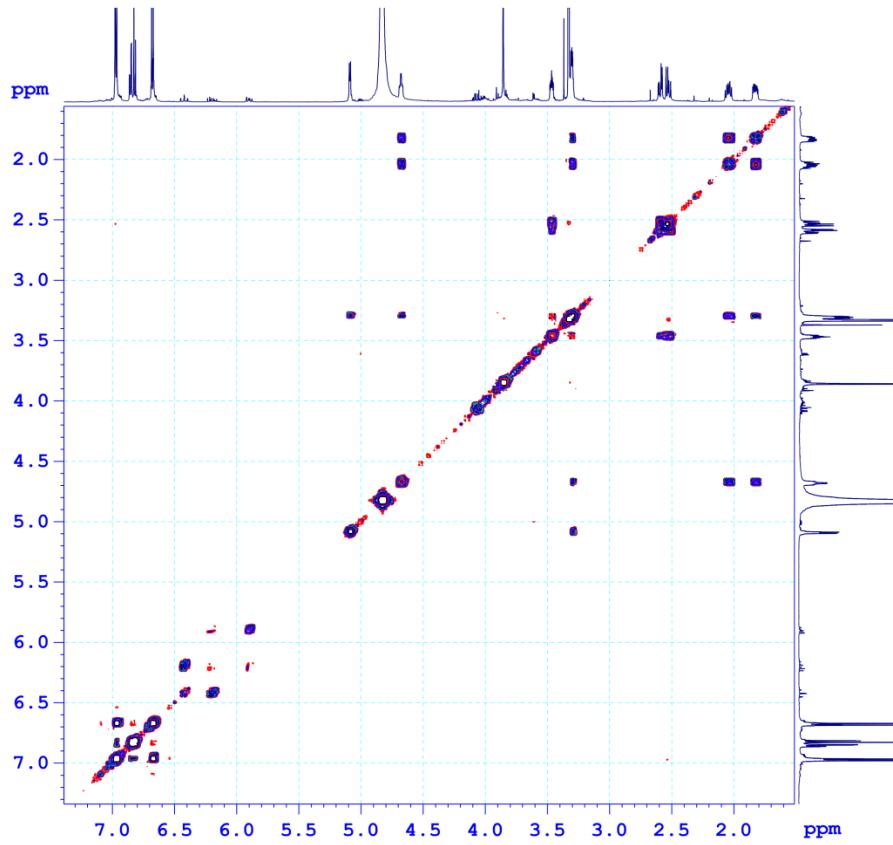
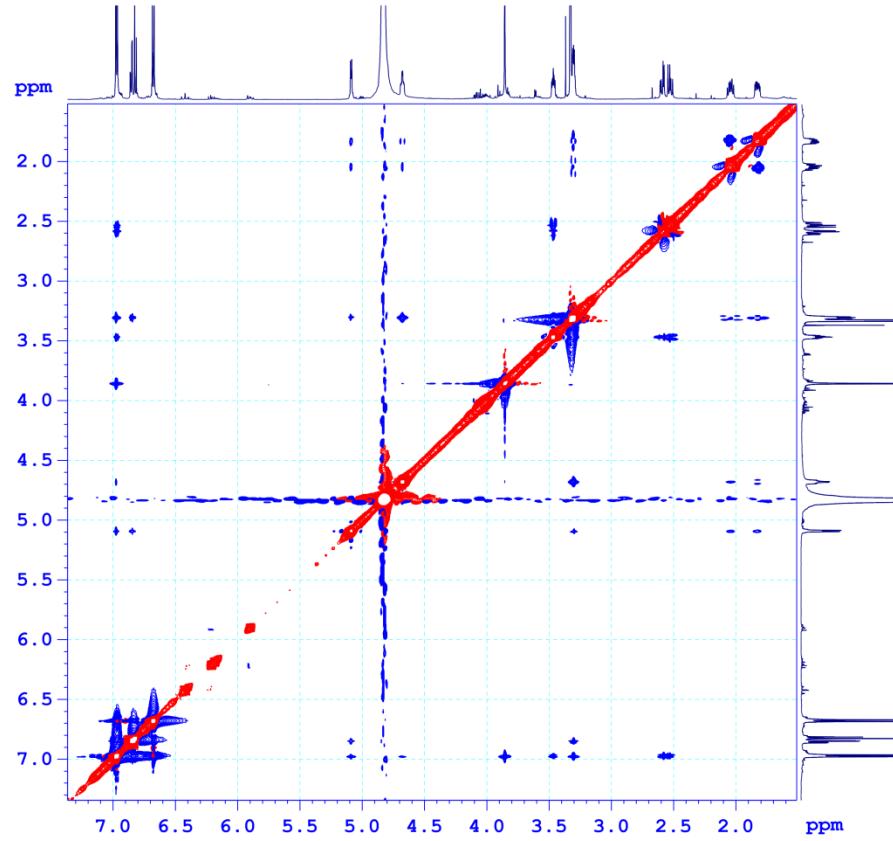


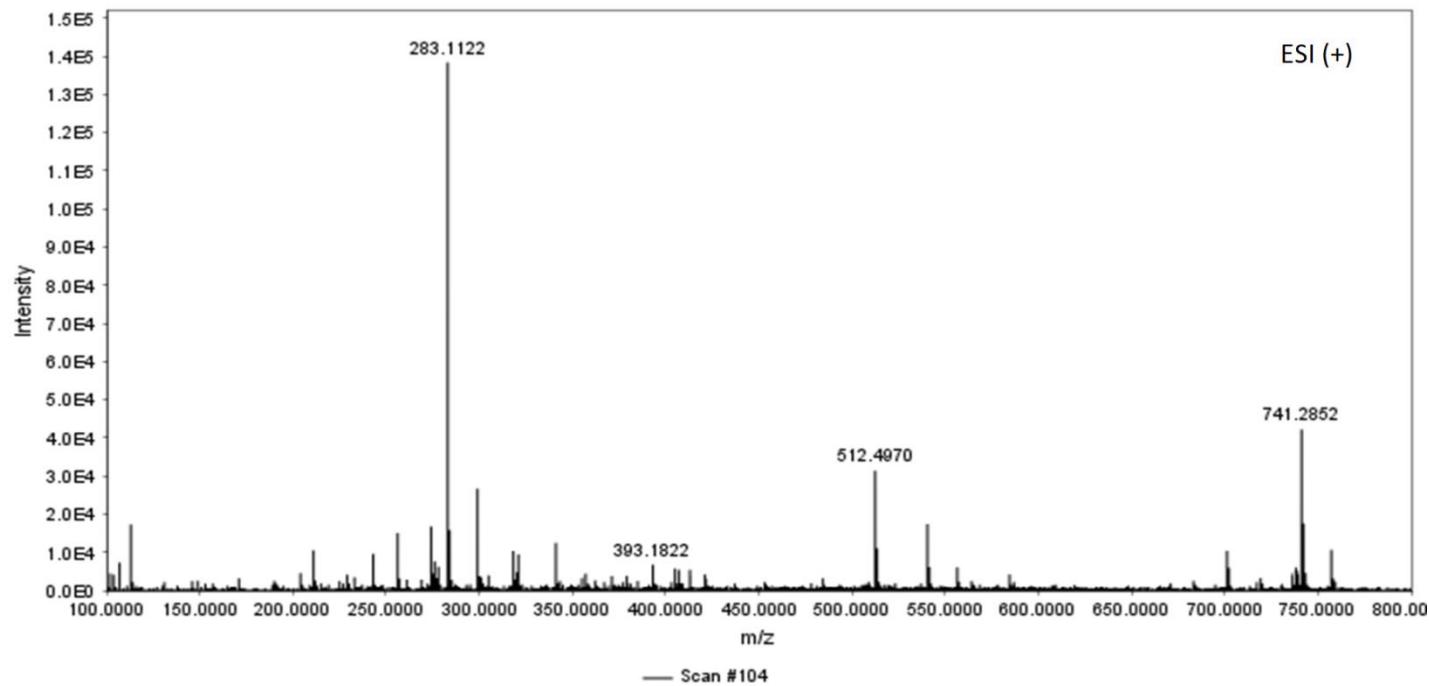
Figure S11. HMBC spectrum of compound **2** (in  $\text{CD}_3\text{OD}$ )



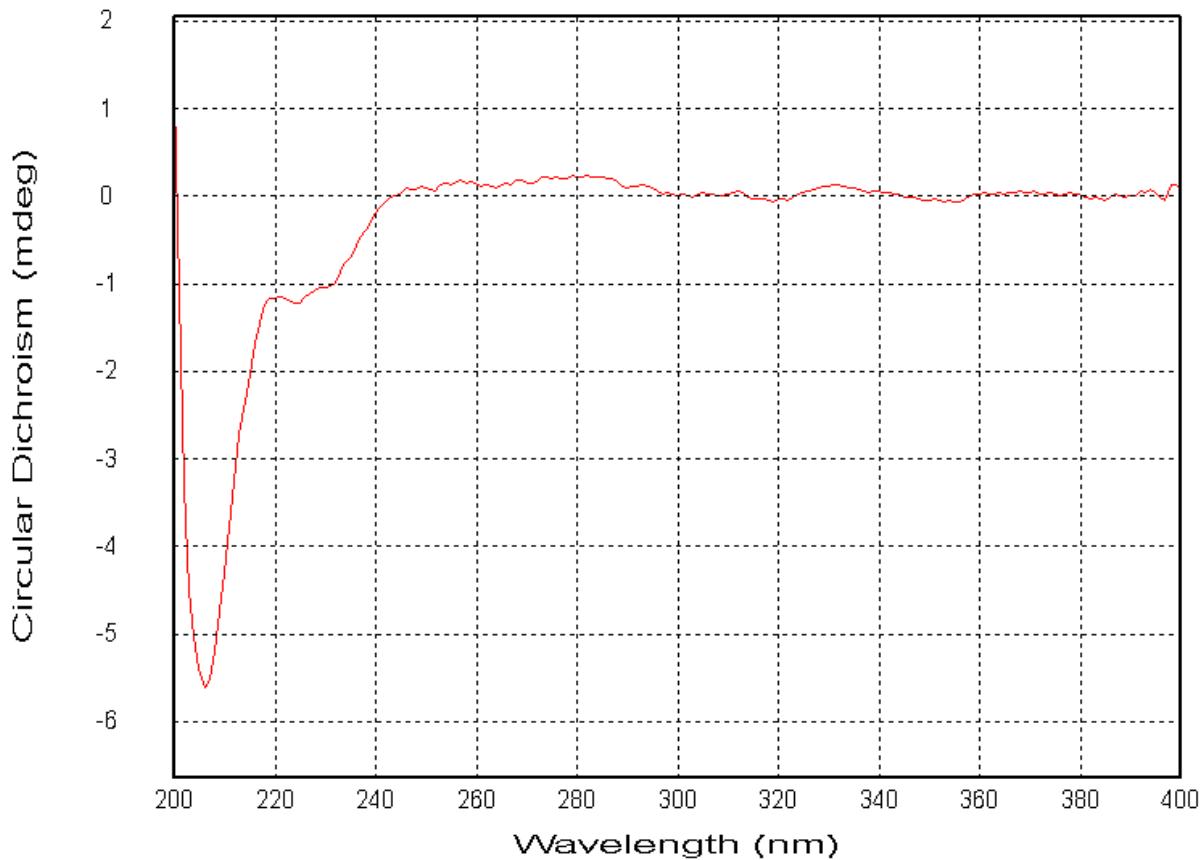
**Figure S12.** COSY spectrum of compound **2** (in  $\text{CD}_3\text{OD}$ )



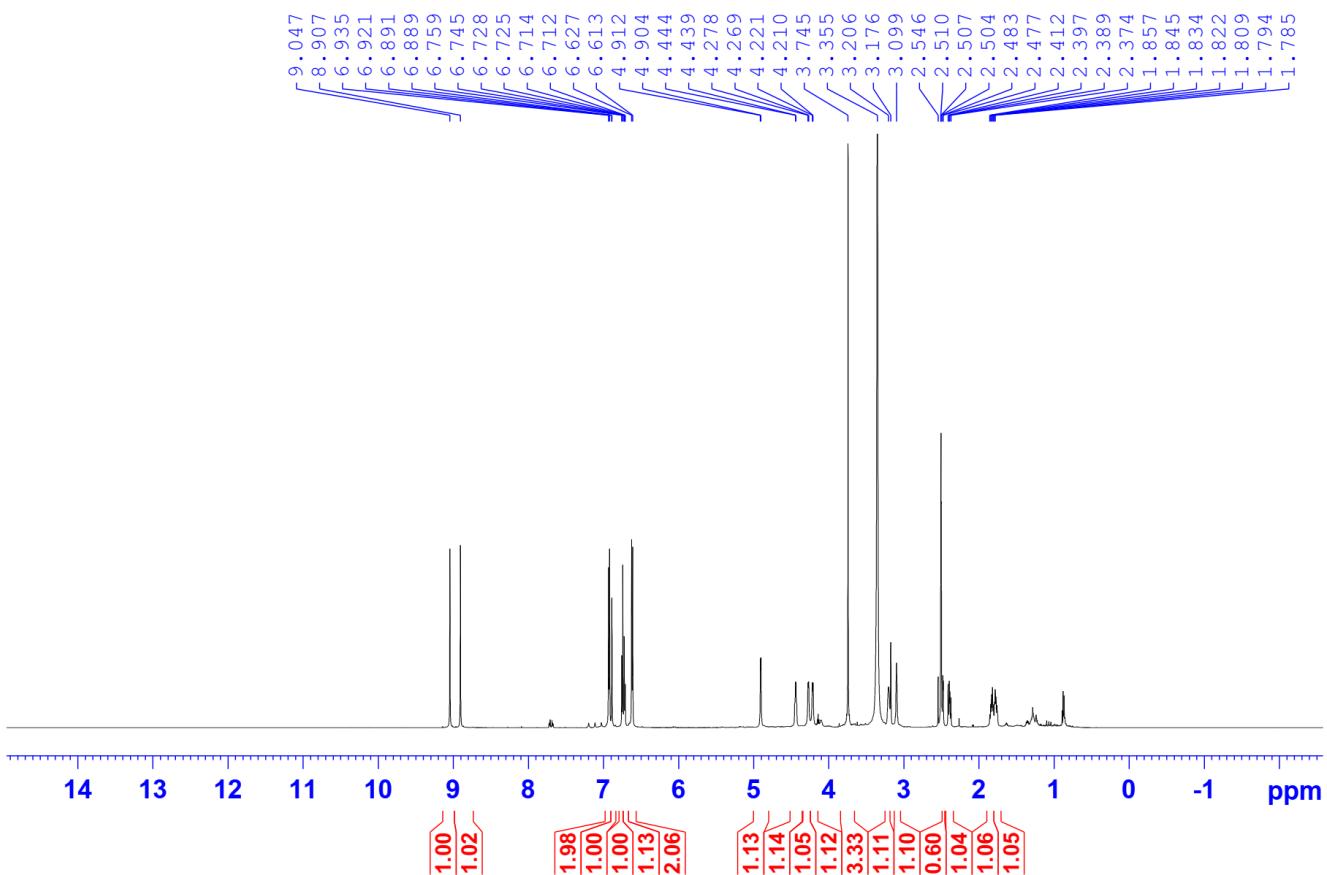
**Figure S13.** NOESY spectrum of compound **2** (in  $\text{CD}_3\text{OD}$ )



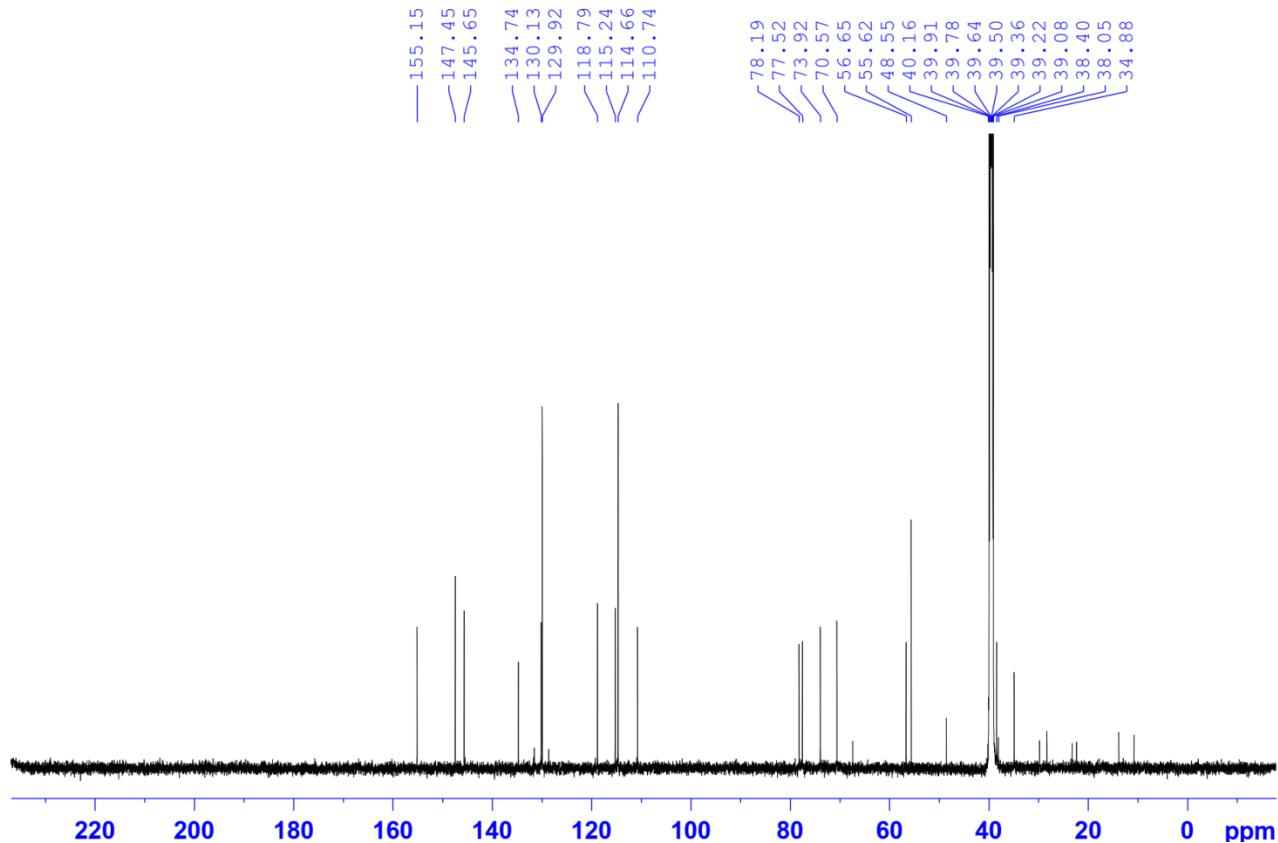
**Figure S14.** HR-ESI-MS spectrum of compound 2



**Figure S15.** ECD spectrum of compound 2



**Figure S16.**  $^1\text{H}$  NMR spectrum of compound **2** (in  $\text{DMSO}-d_6$ )



**Figure S17.**  $^{13}\text{C}$  NMR spectrum of compound **2** (in  $\text{DMSO}-d_6$ )

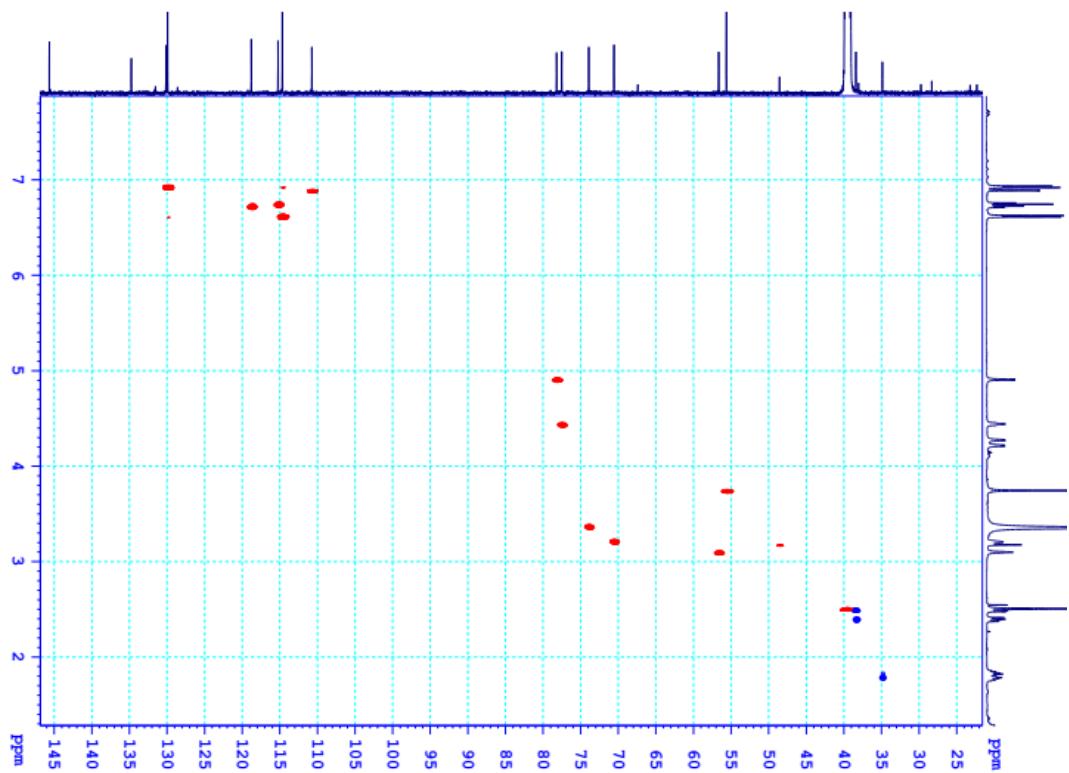


Figure S18. HSQC spectrum of compound 2 (in  $\text{DMSO}-d_6$ )

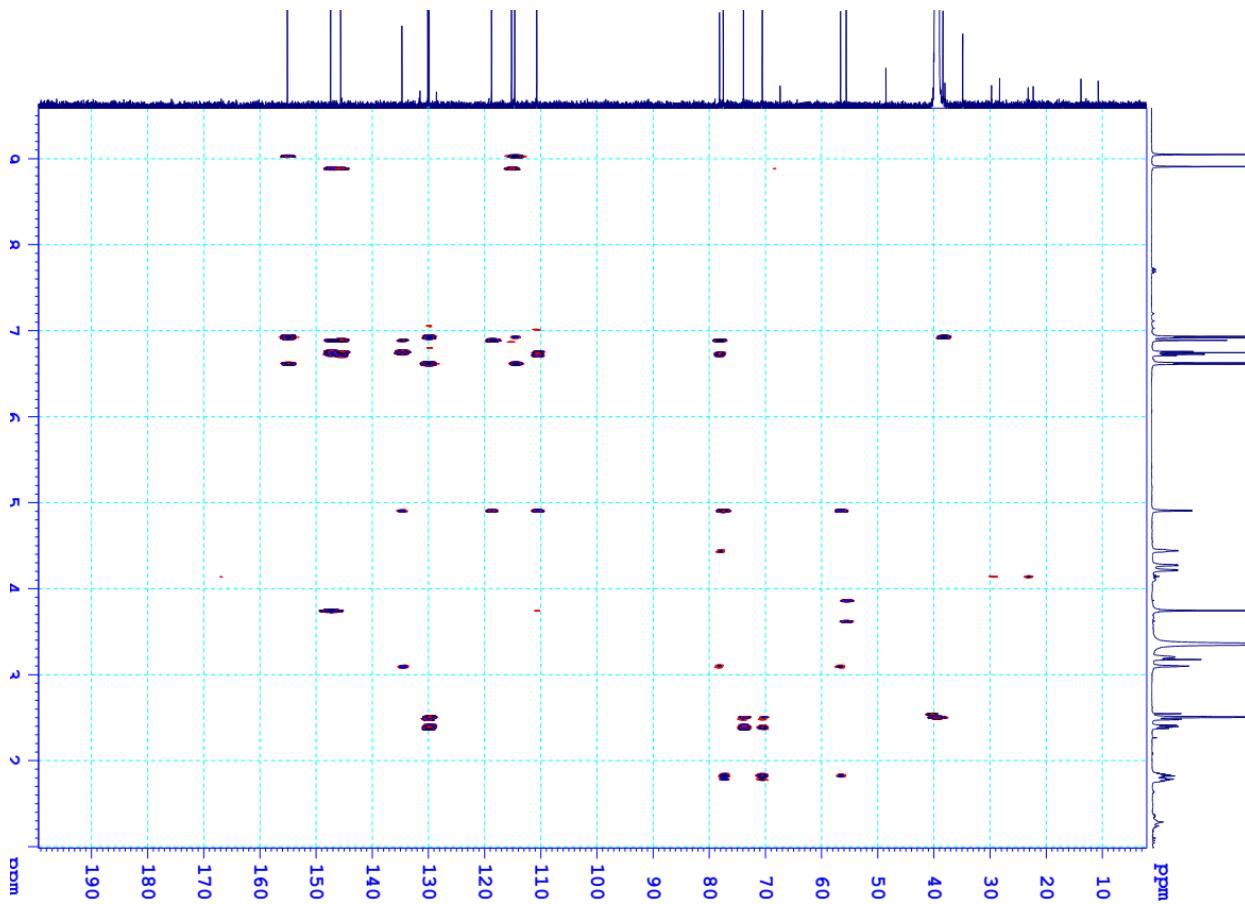


Figure S19. HMBC spectrum of compound 2 (in  $\text{DMSO}-d_6$ )

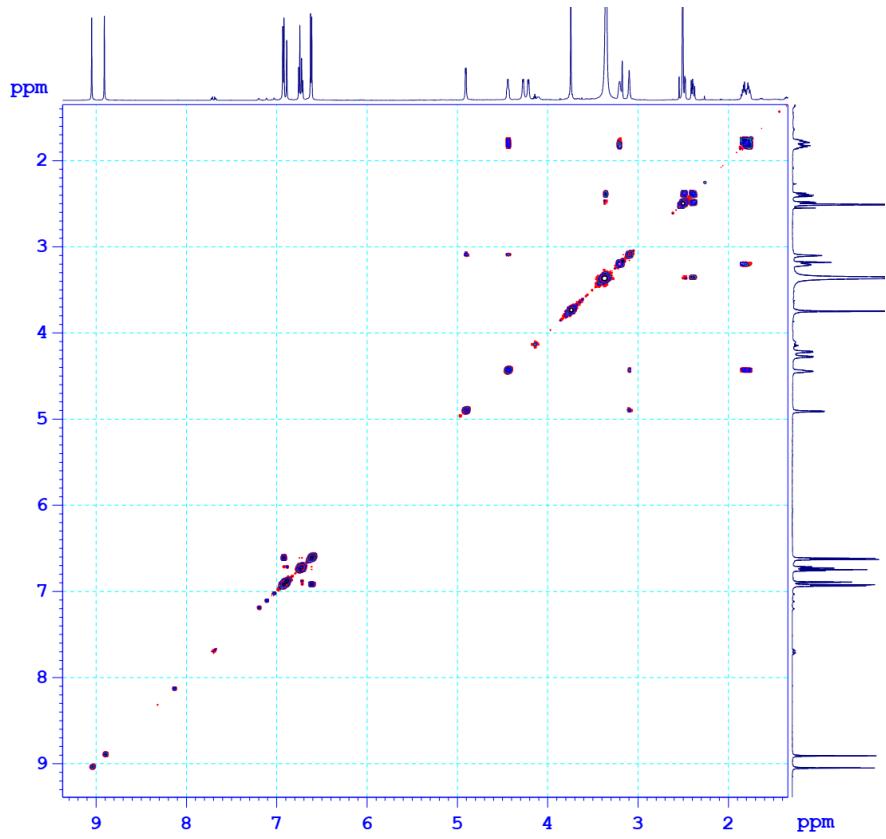


Figure S20. COSY spectrum of compound 2 (in  $\text{DMSO}-d_6$ )

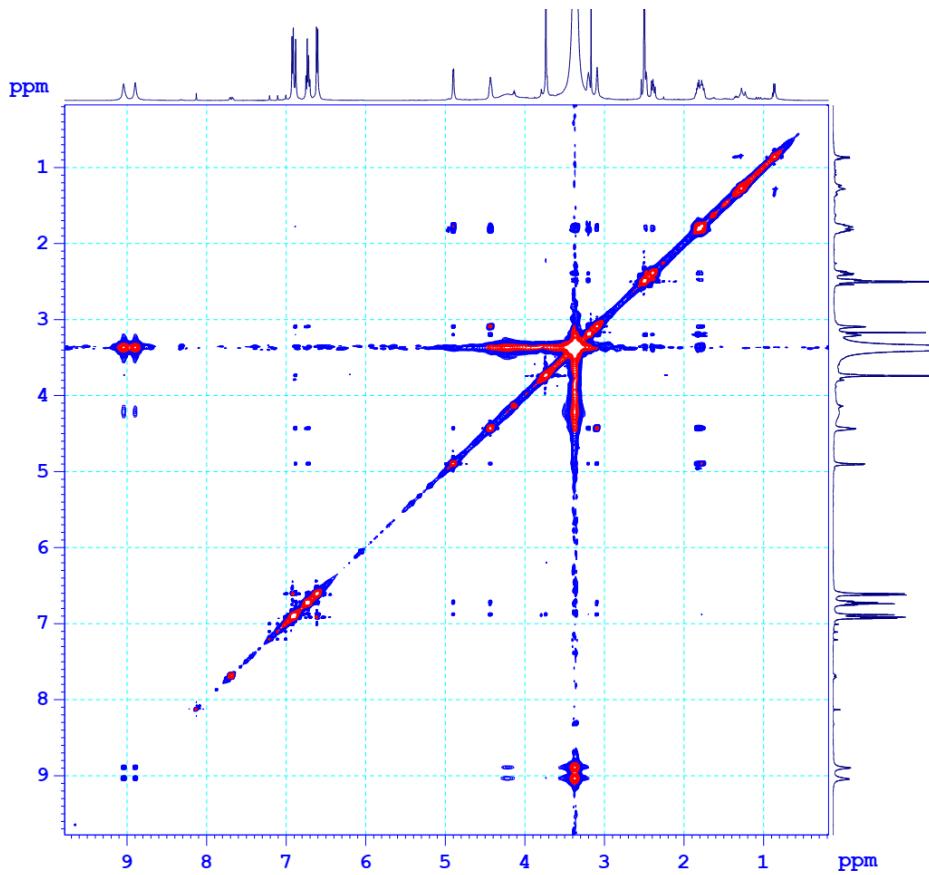


Figure S21. NOESY spectrum of compound 2 (in  $\text{DMSO}-d_6$ )