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Figure 1. The IR Spectrum of Compound 1



Figure 2. The HRESIMS Data of Compound 1



Figure 3. The <sup>1</sup>H NMR Spectrum of Compound 1 in CD<sub>3</sub>OD (400 MHz)



Figure 4. The <sup>13</sup>C CPD NMR Spectrum of Compound 1 in CD<sub>3</sub>OD (100 MHz)





Figure 6. The HSQC Spectrum of Compound 1 in CD<sub>3</sub>OD (400 MHz for <sup>1</sup>H)



**Figure 7.** The HMBC Spectrum of Compound **1** in CD<sub>3</sub>OD (400 MHz for <sup>1</sup>H)





Figure 9. The IR Spectrum of Compound 2



Figure 10. The HRESIMS Data of Compound 2



**Figure 11.** The <sup>1</sup>H NMR Spectrum of Compound **2** in in Acetone-d<sub>6</sub> (400 MHz)



Figure 12. The <sup>13</sup>C APT NMR Spectrum of Compound 2 in Acetone-d<sub>6</sub> (100 MHz)





**Figure 14.** The HSQC Spectrum of Compound **2** in Acetone- $d_6$  (400 MHz for <sup>1</sup>H)



**Figure 15.** The HMBC Spectrum of Compound **2** in Acetone-d<sub>6</sub> (400 MHz for <sup>1</sup>H)





Figure 17. The IR Spectrum of Compound 3



Figure 18. The HRESIMS Data of Compound 3



**Figure 19.** The <sup>1</sup>H NMR Spectrum of Compound **3** in CDCl<sub>3</sub> (400 MHz)







**Figure 22.** The HSQC Spectrum of Compound **3** in CDCl<sub>3</sub> (400 MHz for <sup>1</sup>H)





Figure 24. The ROESY Spectrum of Compound 3 in CDCl<sub>3</sub> (400 MHz)



Figure 25. The IR Spectrum of Compound 4





**Figure 27.** The <sup>1</sup>H NMR Spectrum of Compound **4** in Acetone-d<sub>6</sub> (400 MHz)







**Figure 30.** The HSQC Spectrum of Compound **4** in Acetone- $d_6$  (400 MHz for <sup>1</sup>H)



**Figure 31.** The HMBC Spectrum of Compound **4** in Acetone- $d_6$  (400 MHz for <sup>1</sup>H)





Figure 33. The IR Spectrum of Compound 5





Figure 35. The <sup>1</sup>H NMR Spectrum of Compound 5 in CD<sub>3</sub>OD (400 MHz)





**Figure 37.** The <sup>1</sup>H-<sup>1</sup>H COSY Spectrum of Compound **5** in CD<sub>3</sub>OD (400 MHz)





**Figure 39.** The HMBC Spectrum of Compound **5** in CD<sub>3</sub>OD (400 MHz for <sup>1</sup>H)



Figure 40. The ROESY Spectrum of Compound 5 in CD<sub>3</sub>OD (400 MHz)



Figure 41. The IR Spectrum of Compound 6





Figure 43. The <sup>1</sup>H NMR Spectrum of Compound 6 in CD<sub>3</sub>OD (400 MHz)





Figure 45. The <sup>1</sup>H-<sup>1</sup>H COSY Spectrum of Compound 6 in CD<sub>3</sub>OD (400 MHz)



Figure 46. The HSQC Spectrum of Compound 6 in  $CD_3OD$  (400 MHz for <sup>1</sup>H)





Figure 48. The ROESY Spectrum of Compound 6 in CD<sub>3</sub>OD (400 MHz)



Figure 49. The IR Spectrum of Compound 7





**Figure 51.** The <sup>1</sup>H NMR Spectrum of Compound 7 in Acetone-d<sub>6</sub> (400 MHz)



Figure 52. The <sup>13</sup>C APT NMR Spectrum of Compound 7 in Acetone-d<sub>6</sub> (100 MHz)





**Figure 54.** The HSQC Spectrum of Compound 7 in Acetone- $d_6$  (400 MHz for <sup>1</sup>H)



**Figure 55.** The HMBC Spectrum of Compound 7 in Acetone- $d_6$  (400 MHz for <sup>1</sup>H)



Figure 56. The IR Spectrum of Compound 8





Figure 58. The <sup>1</sup>H NMR Spectrum of Compound 8 in CD<sub>3</sub>OD (400 MHz)







