

## Supplementary data

### Nortriterpenoids from the fruiting bodies of the mushroom *Ganoderma resinaceum*

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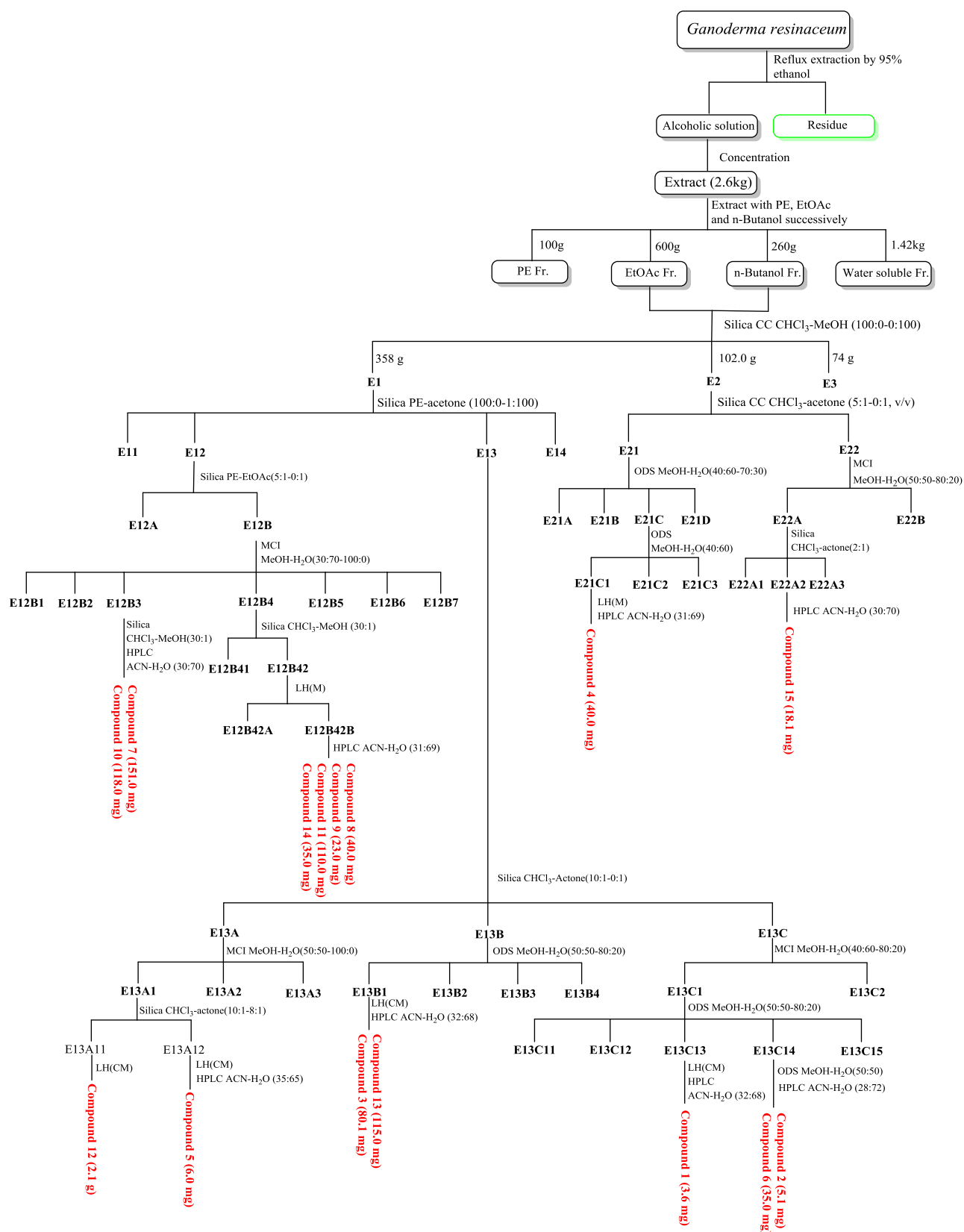
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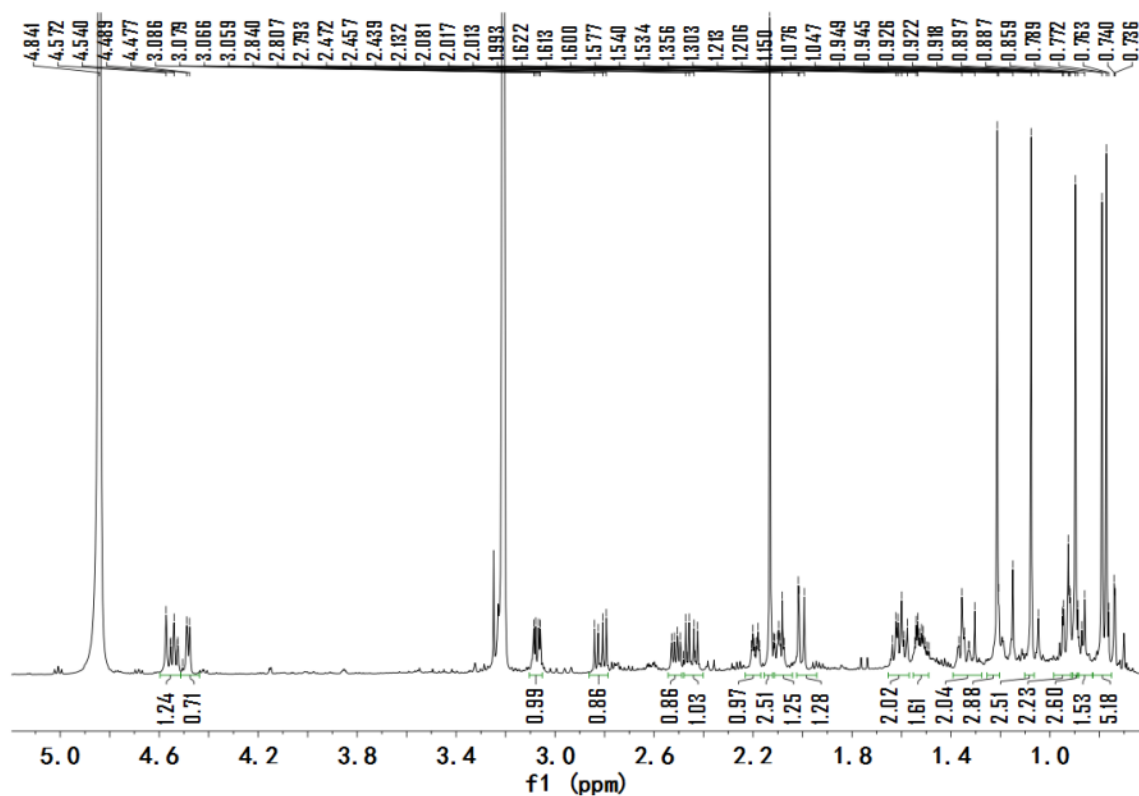
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**Fig. S49** HRESIMS spectrum of ganosineniol C (6)

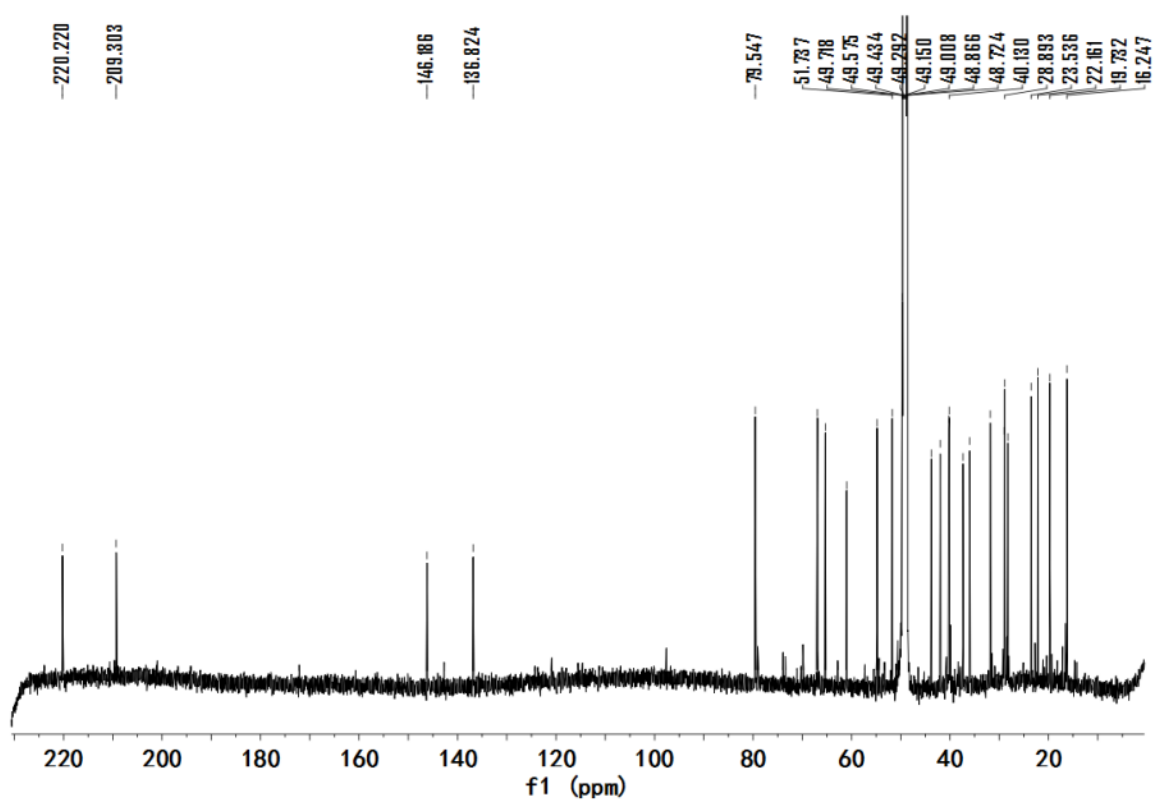
Table S1 Inhibition rate of nortriterpenoids from *Ganoderma* at the concentration of 3 mM



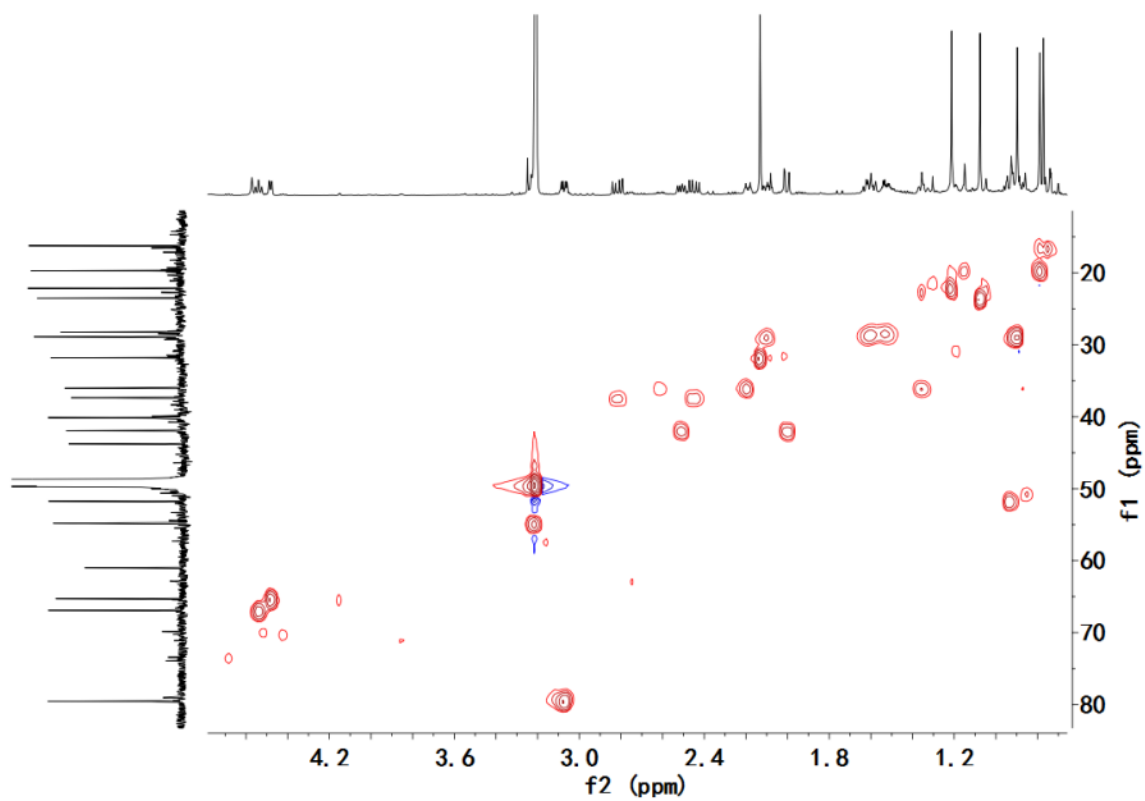
**Fig. S1** Separation flow chart of *Ganoderma resinaceum*



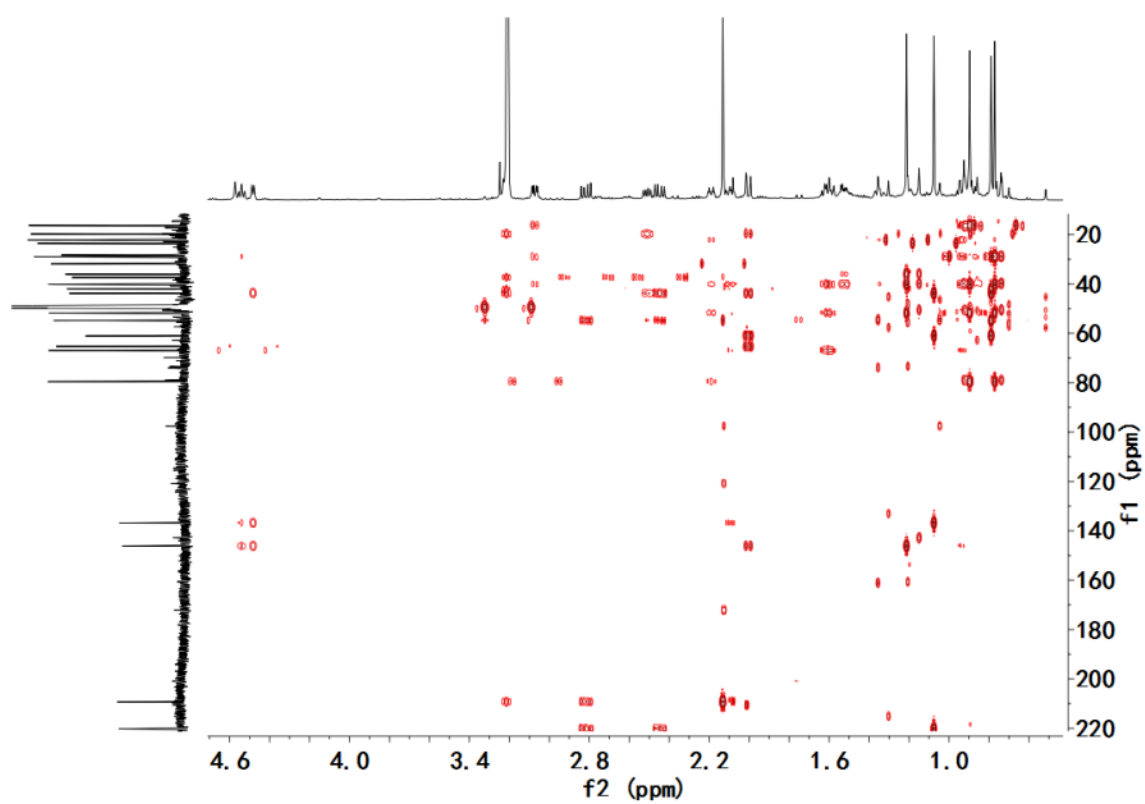
**Fig. S2**  $^1\text{H}$  NMR (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone I (**1**)



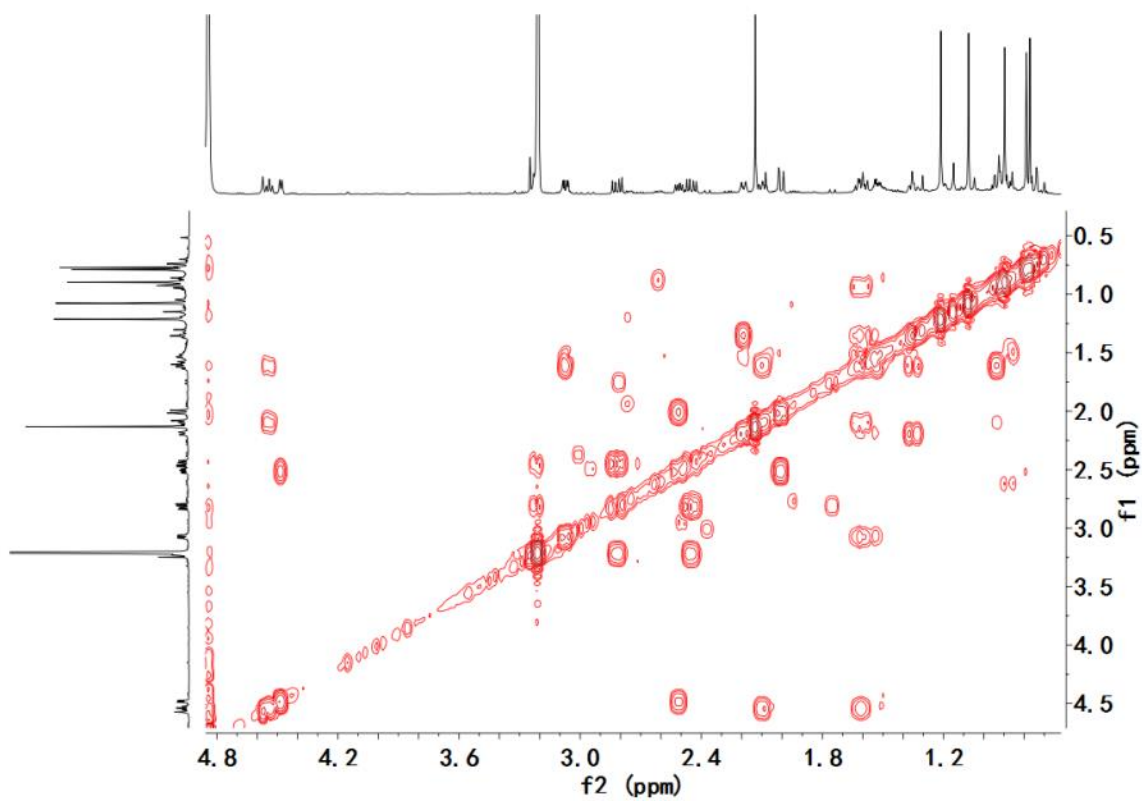
**Fig. S3**  $^{13}\text{C}$  NMR (150 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone I (**1**)



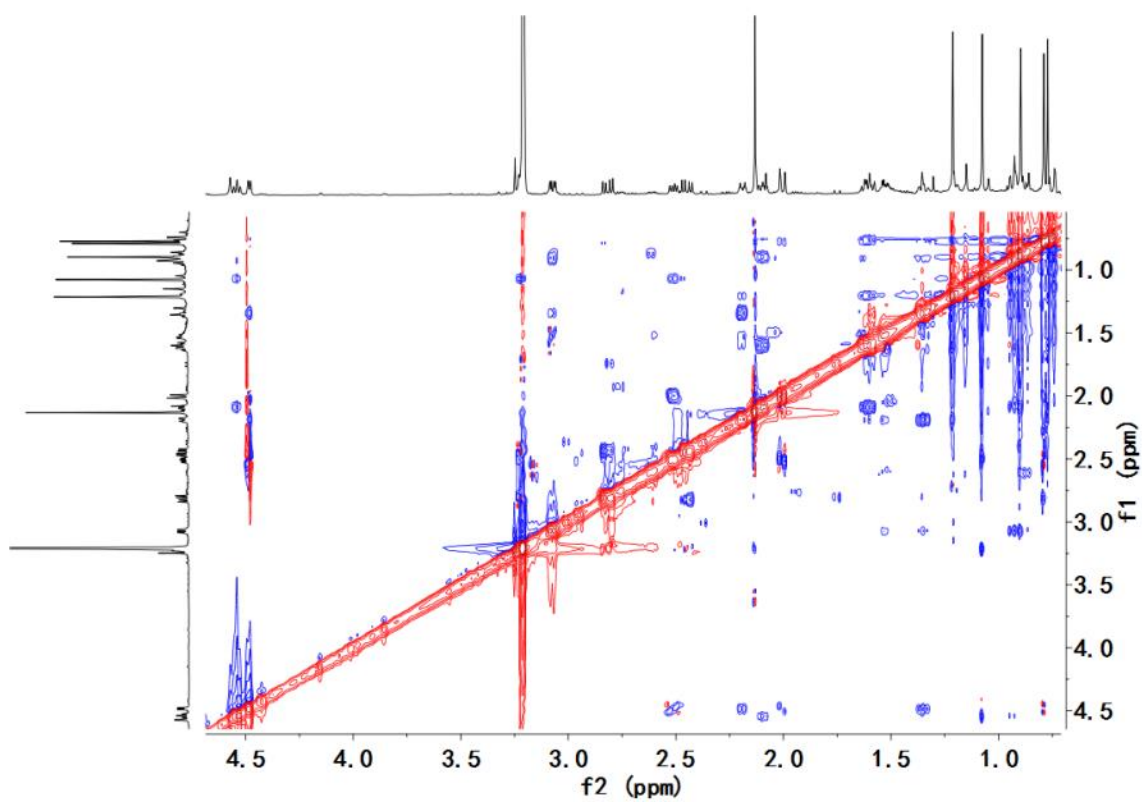
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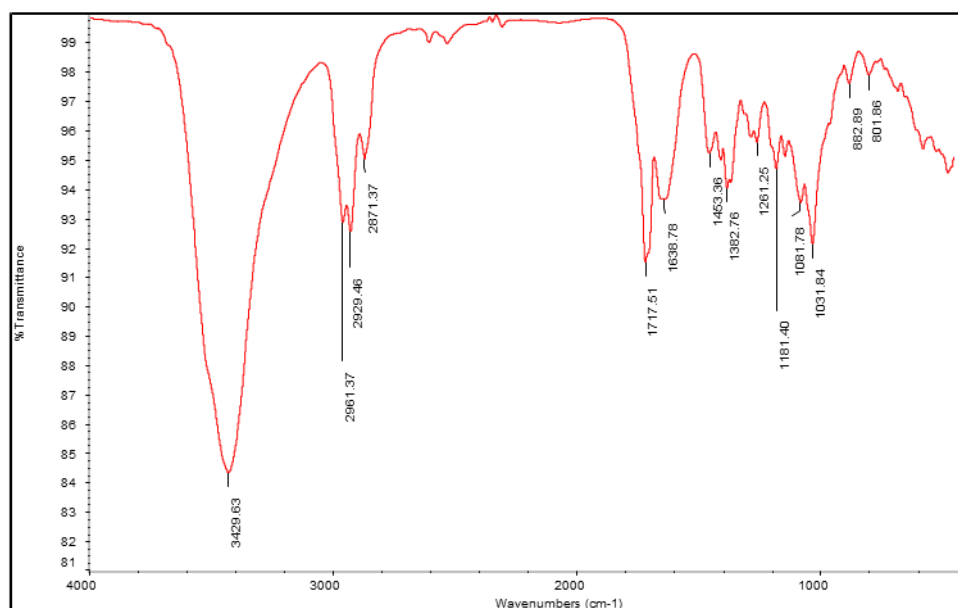
**Fig. S5** HMBC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone I (1)



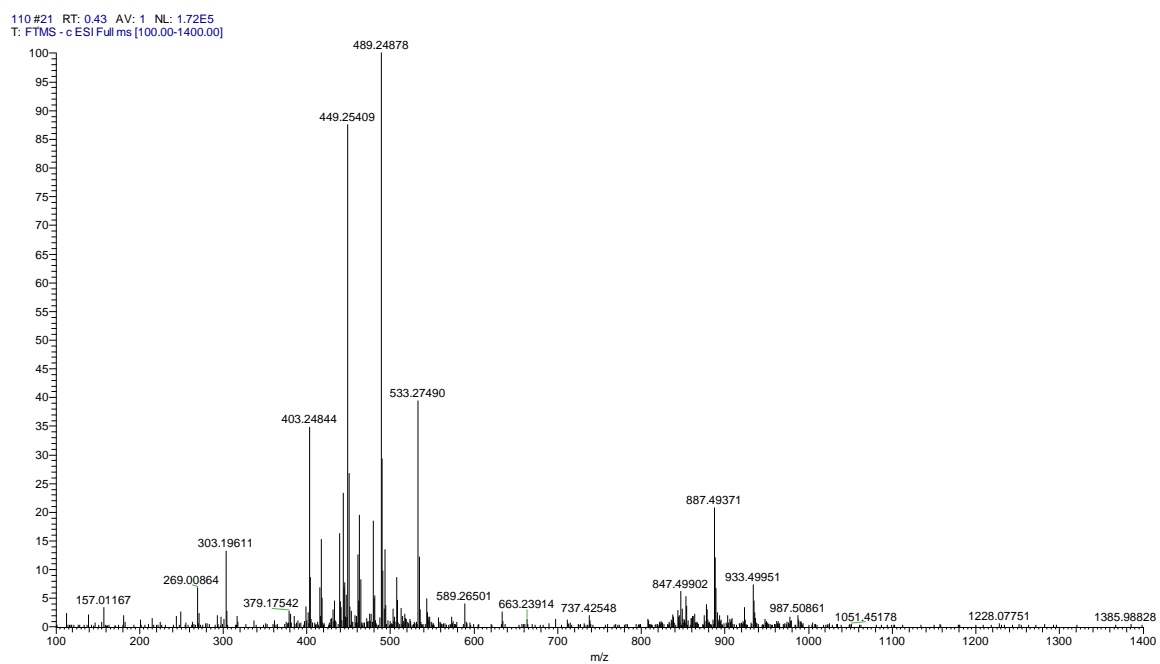
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**Fig. S7** ROESY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone I (**1**)

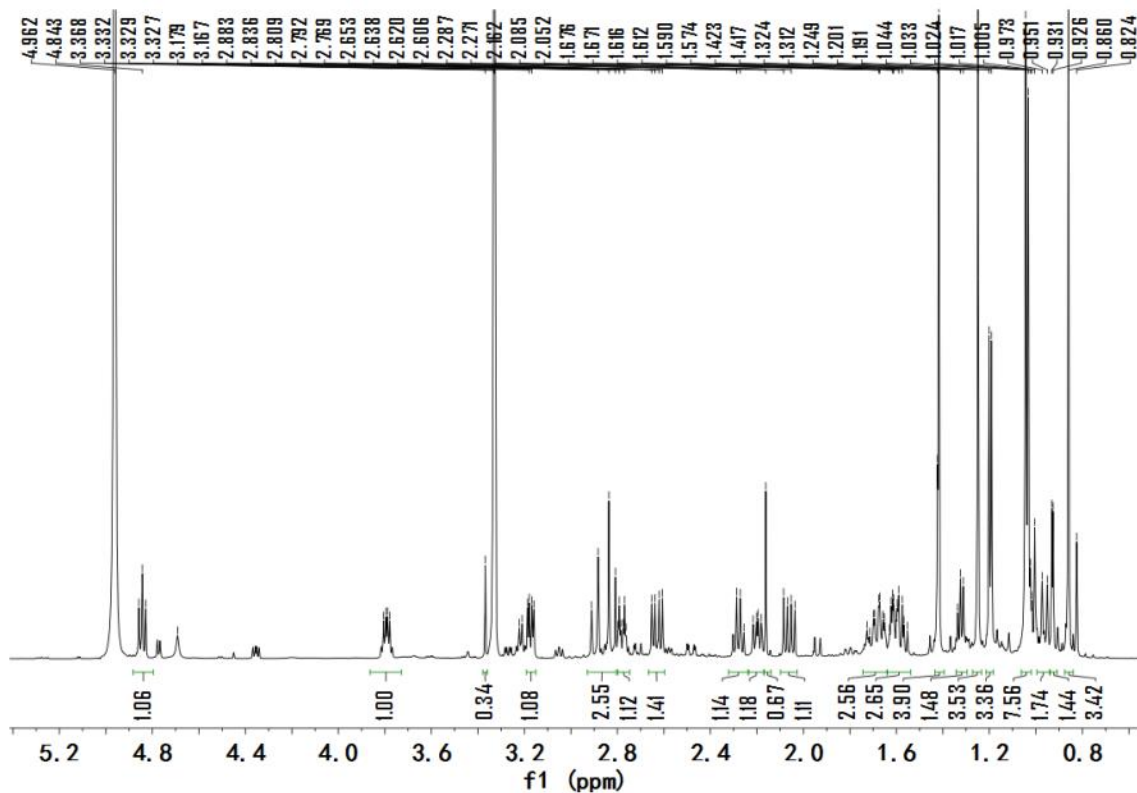


**Fig. S8** IR spectrum of lucidone I (**1**)

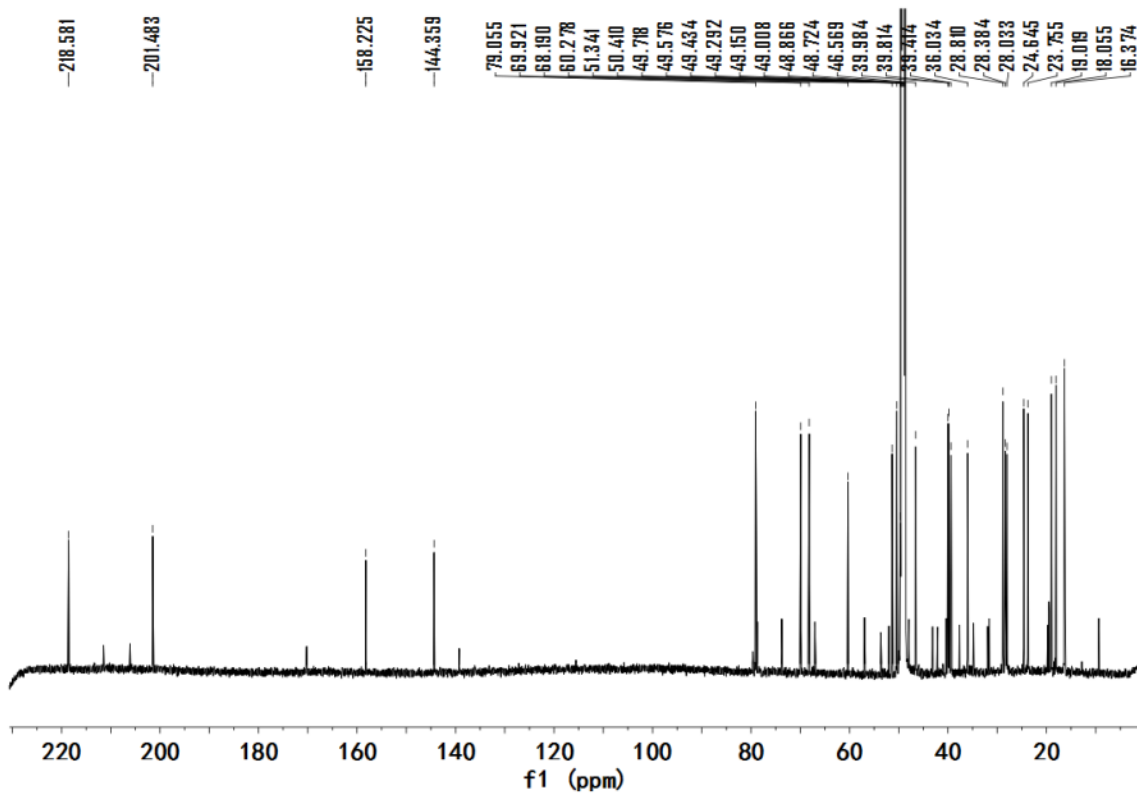


**Fig. S9** HRESIMS spectrum of lucidone I (**1**)

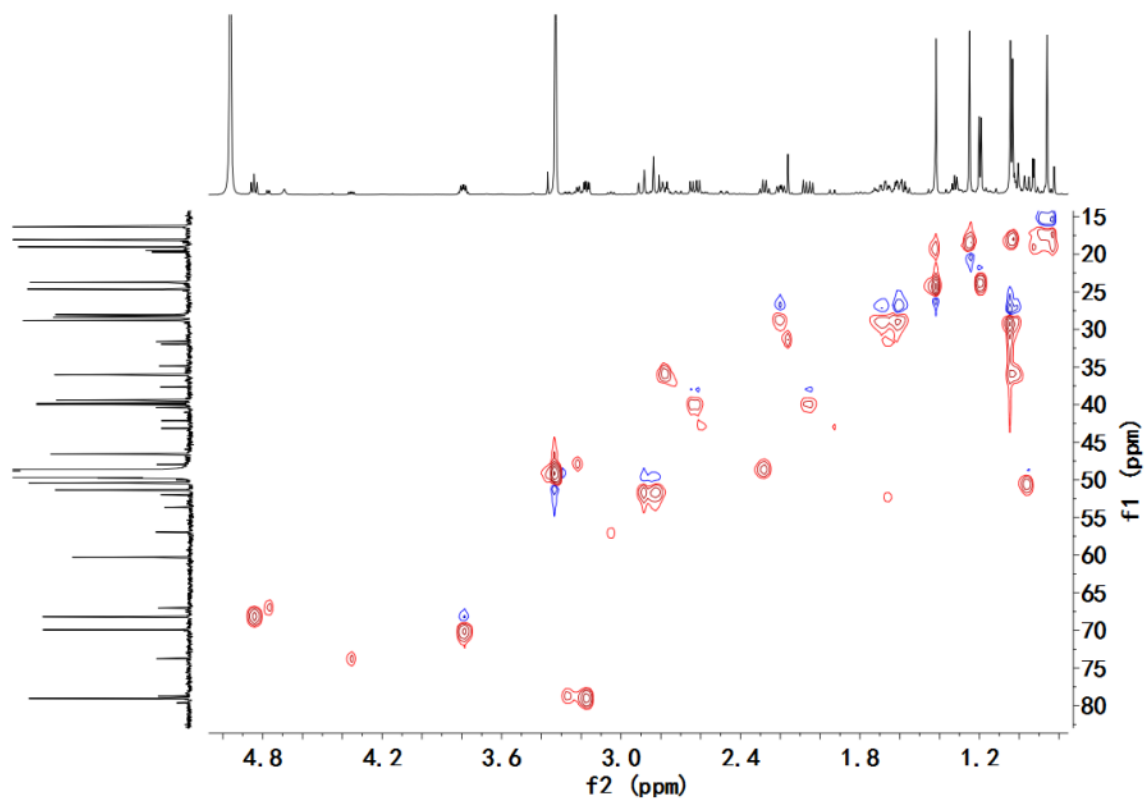




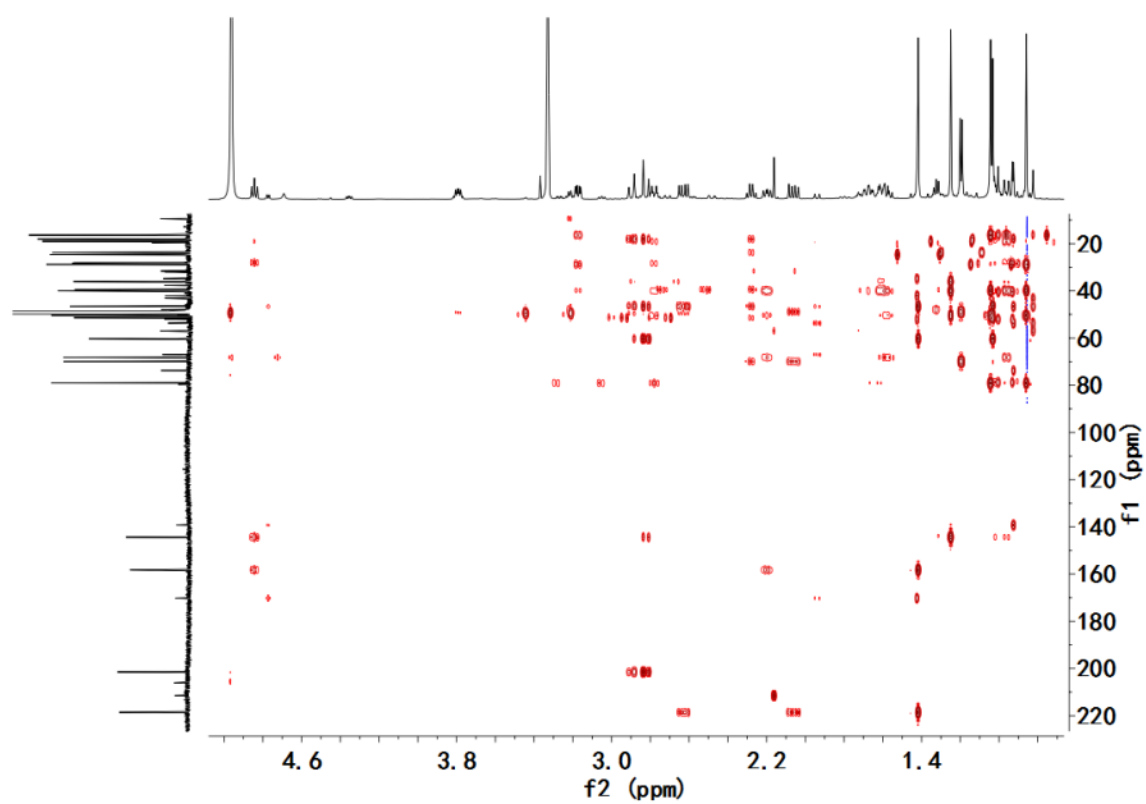
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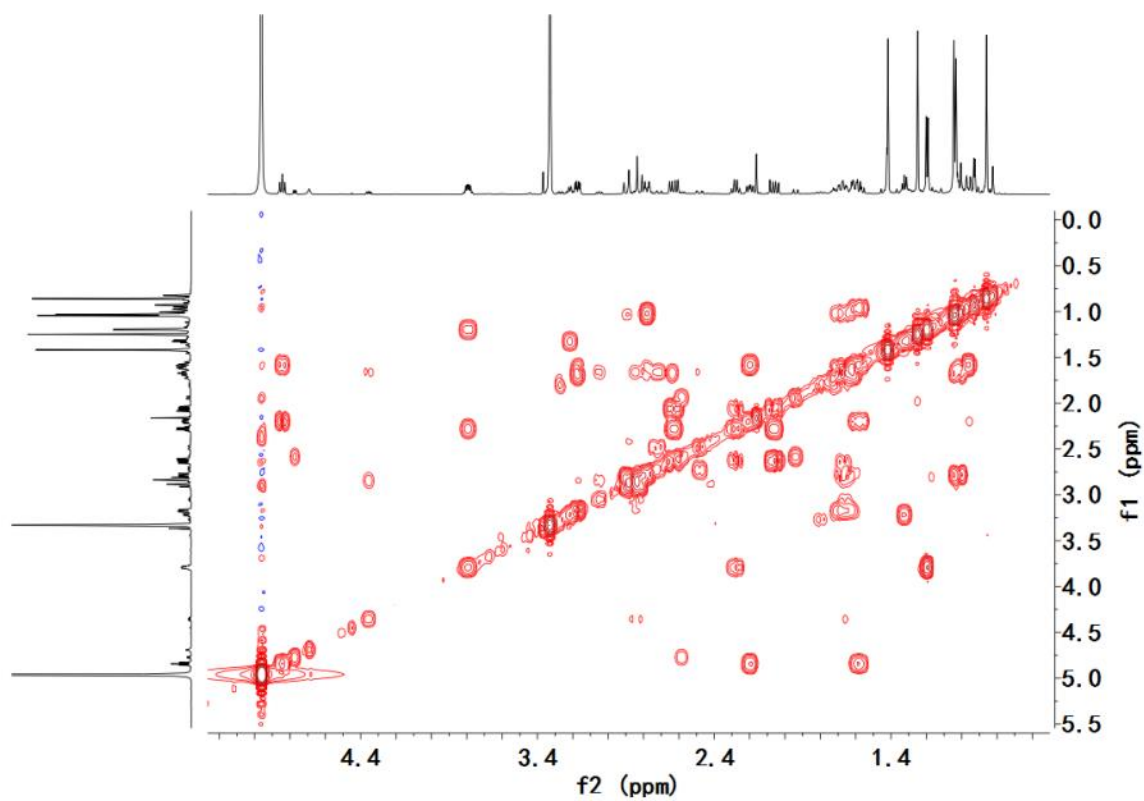
**Fig. S11**  $^{13}\text{C}$  NMR (150 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone J (**2**)



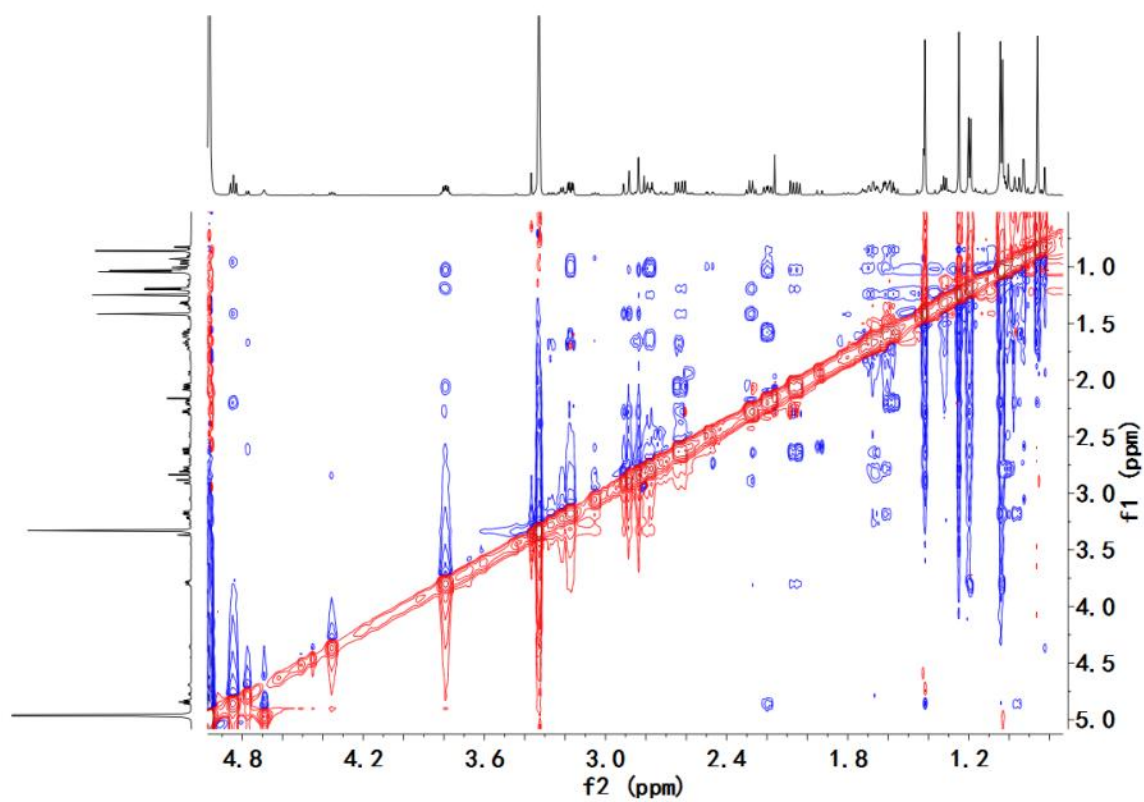
**Fig. S12** HSQC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone J (**2**)



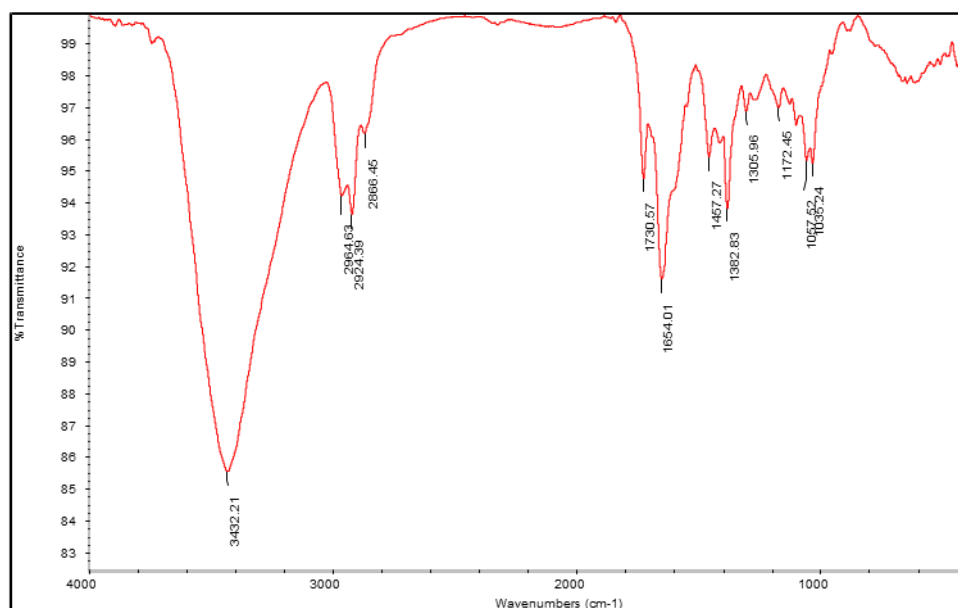
**Fig. S13** HMBC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone J (**2**)



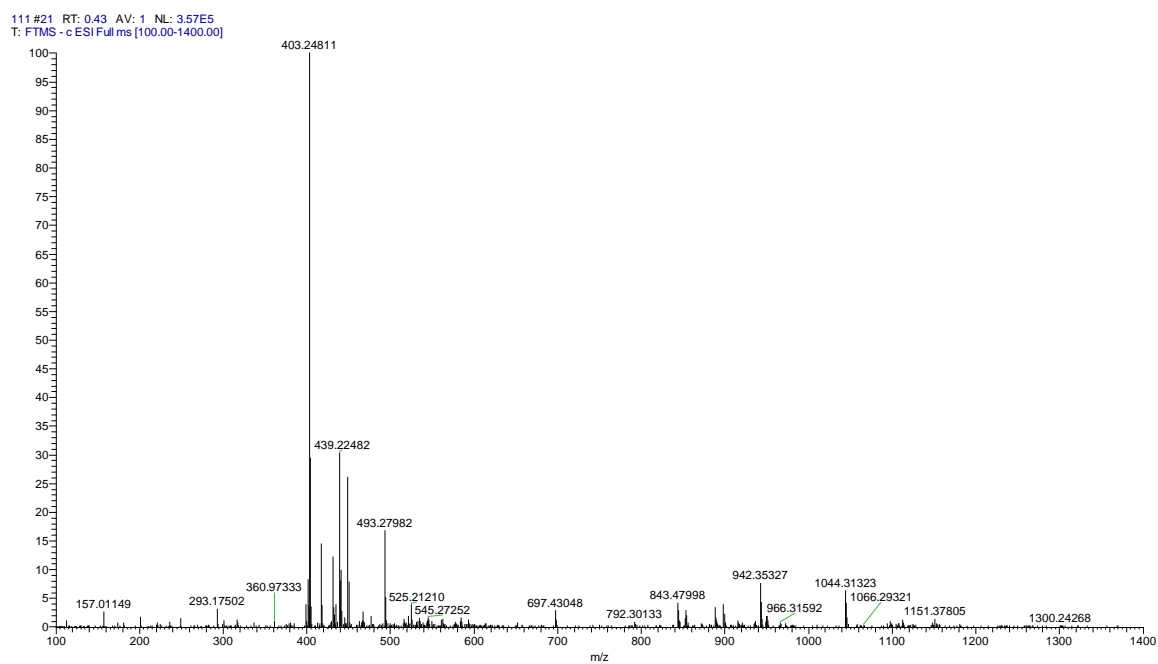
**Fig. S14**  $^1\text{H}$ - $^1\text{H}$  COSY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone J (**2**)



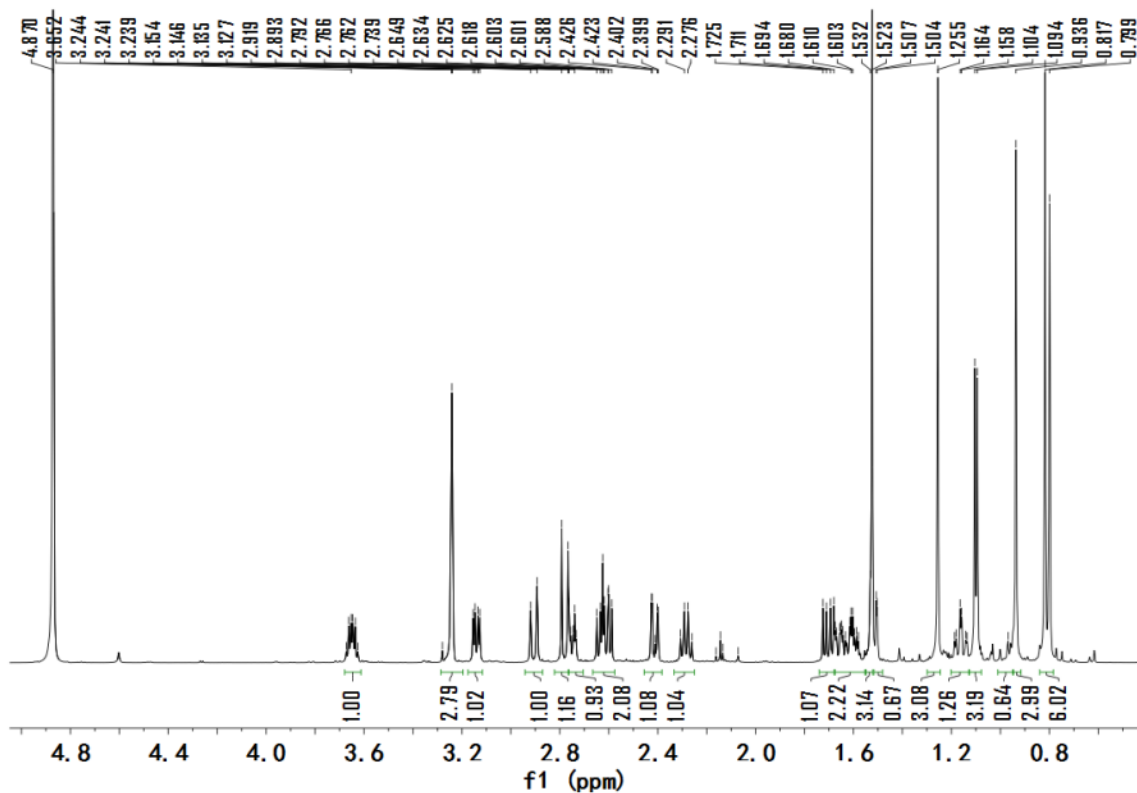
**Fig. S15** ROESY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone J (**2**)



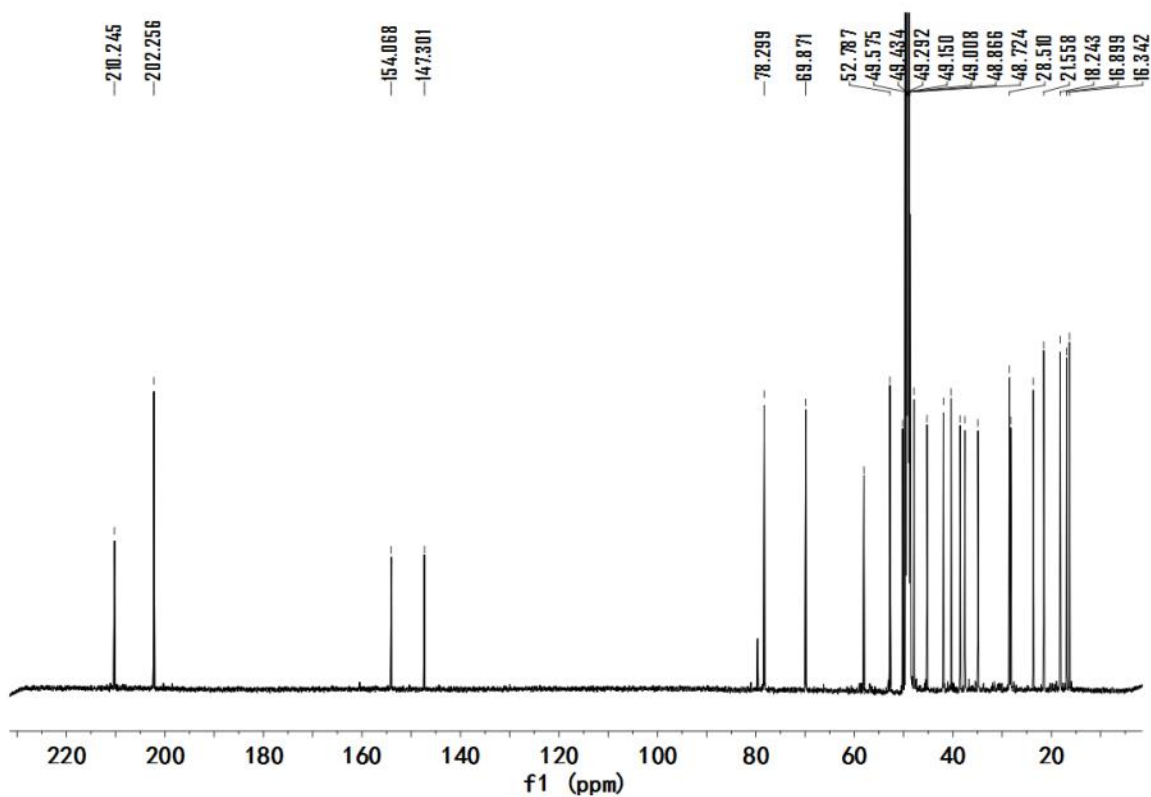
**Fig. S16** IR spectrum of lucidone J (2)



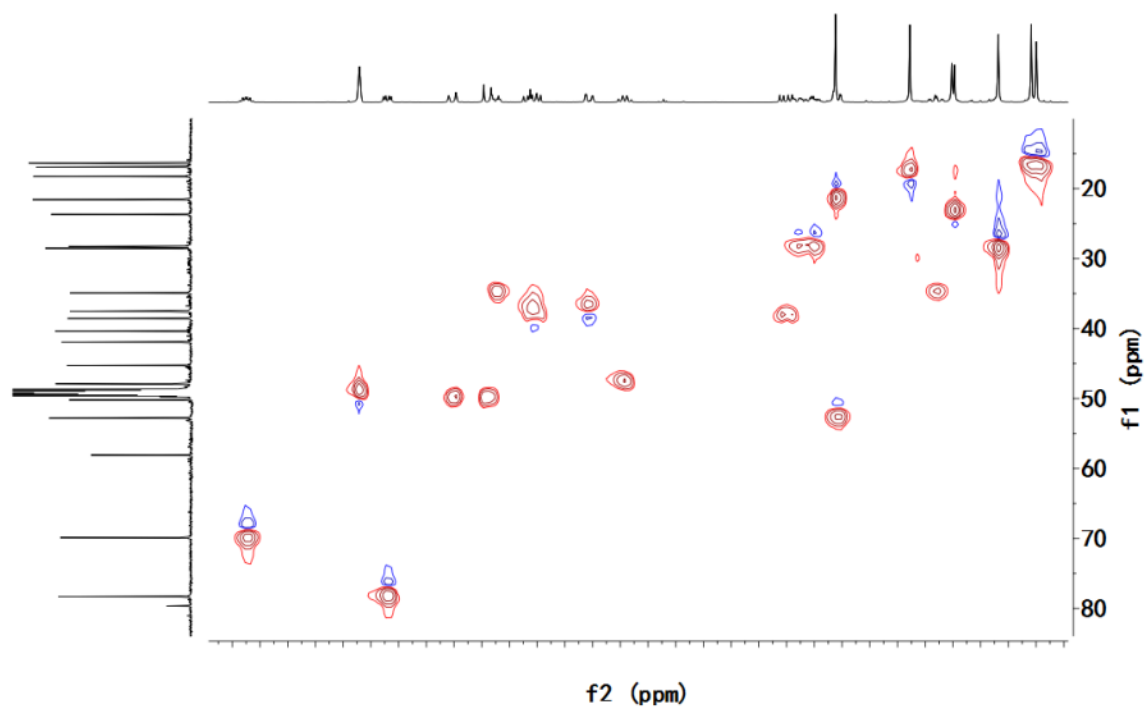
**Fig. S17** HRESIMS spectrum of lucidone J (2)



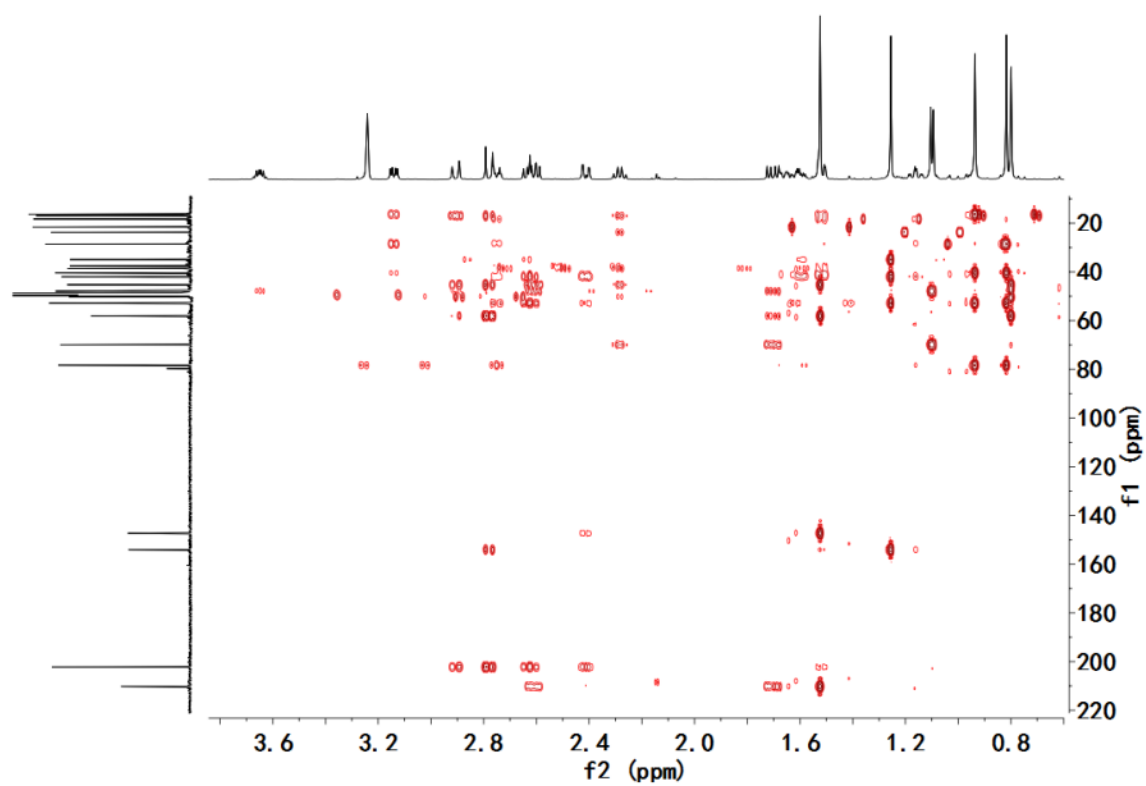
**Fig. S18** <sup>1</sup>H NMR (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone K (**3**)



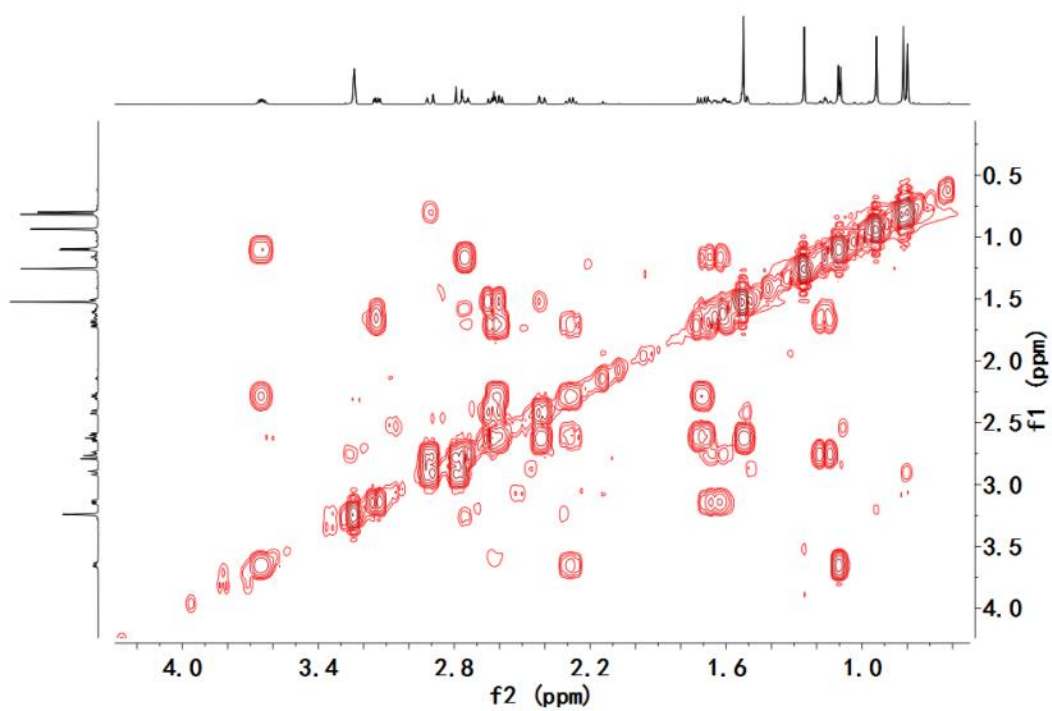
**Fig. S19** <sup>13</sup>C NMR (150 MHz, CD<sub>3</sub>OD) spectrum of lucidone K (**3**)



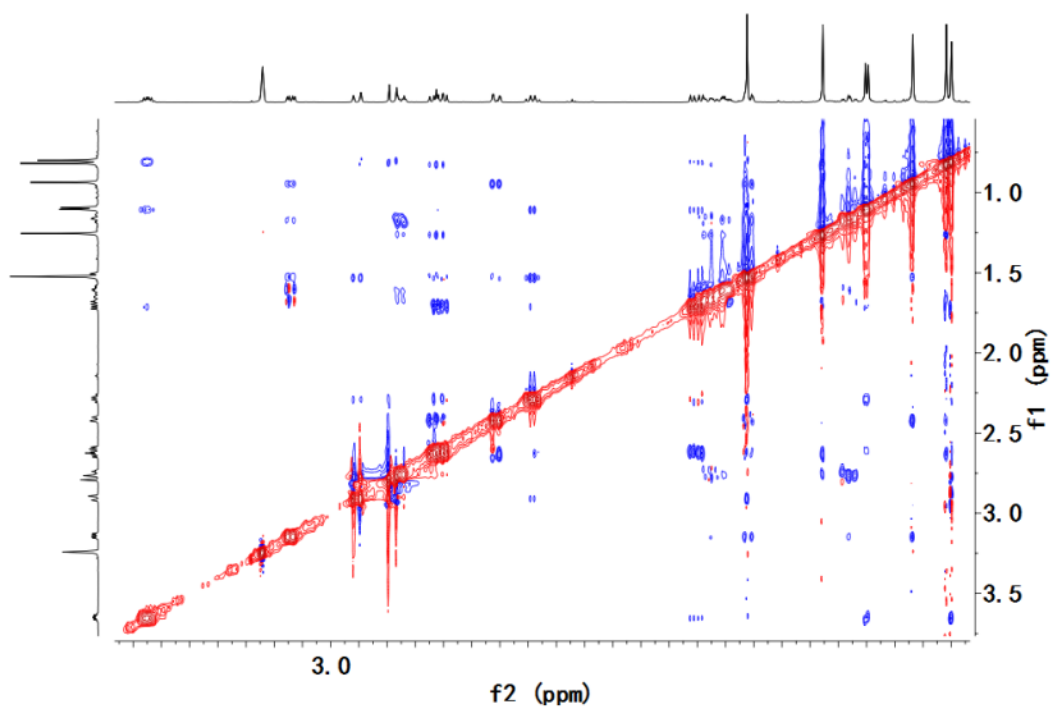
**Fig. S20** HSQC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone K (**3**)



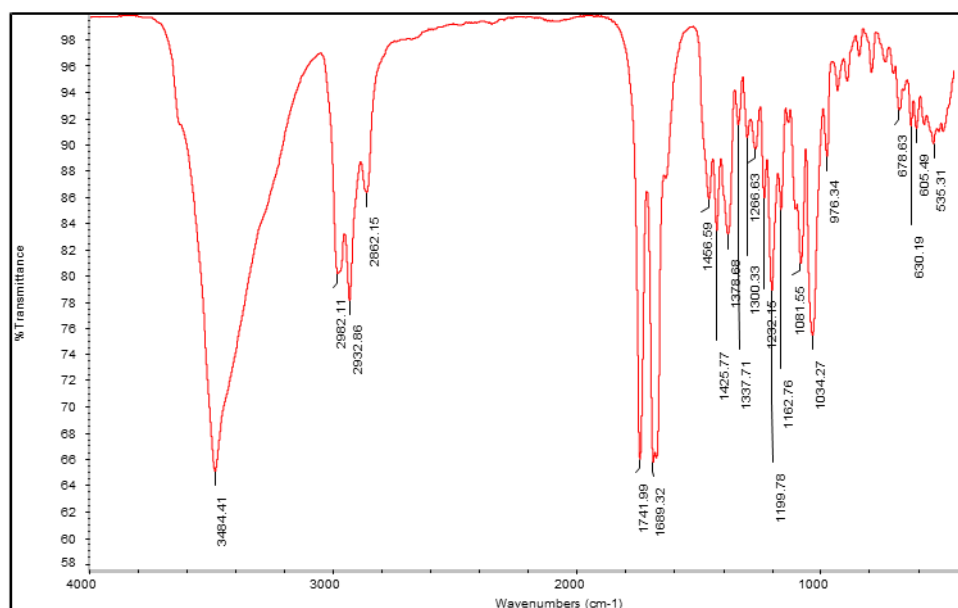
**Fig. S21** HMBC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone K (**3**)



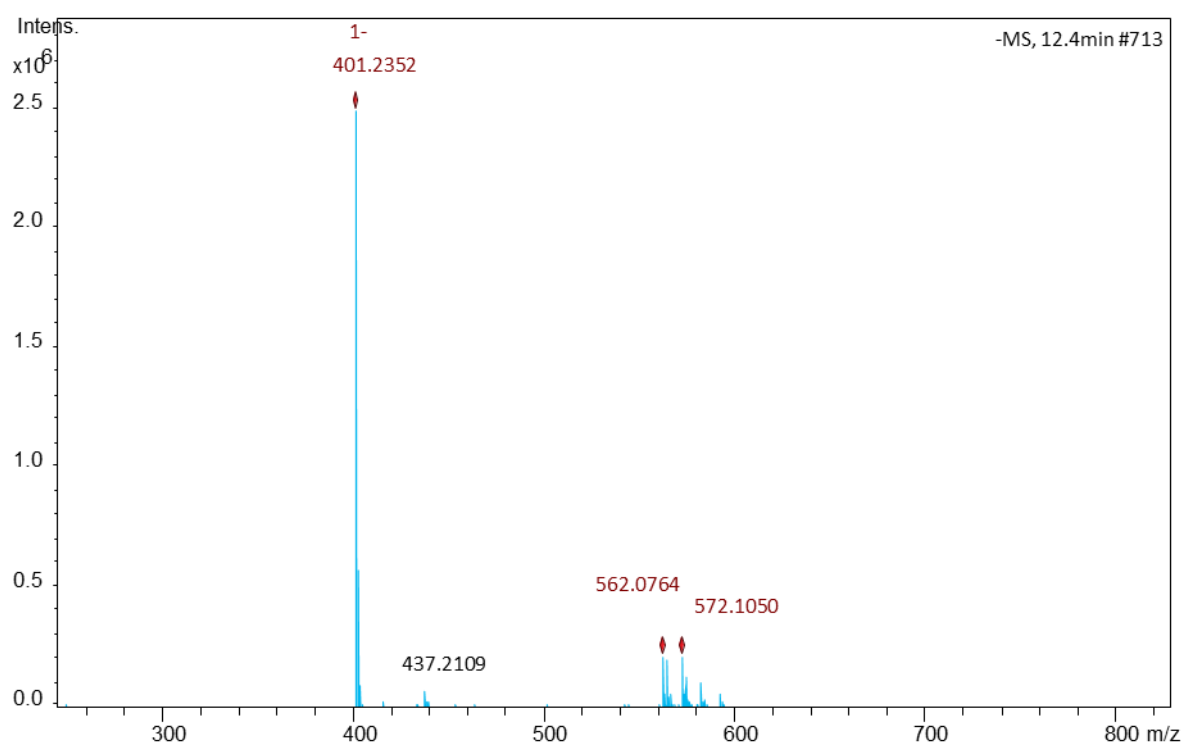
**Fig. S22**  $^1\text{H}$ - $^1\text{H}$  COSY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone K (3)



**Fig. S23** ROESY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone K (3)

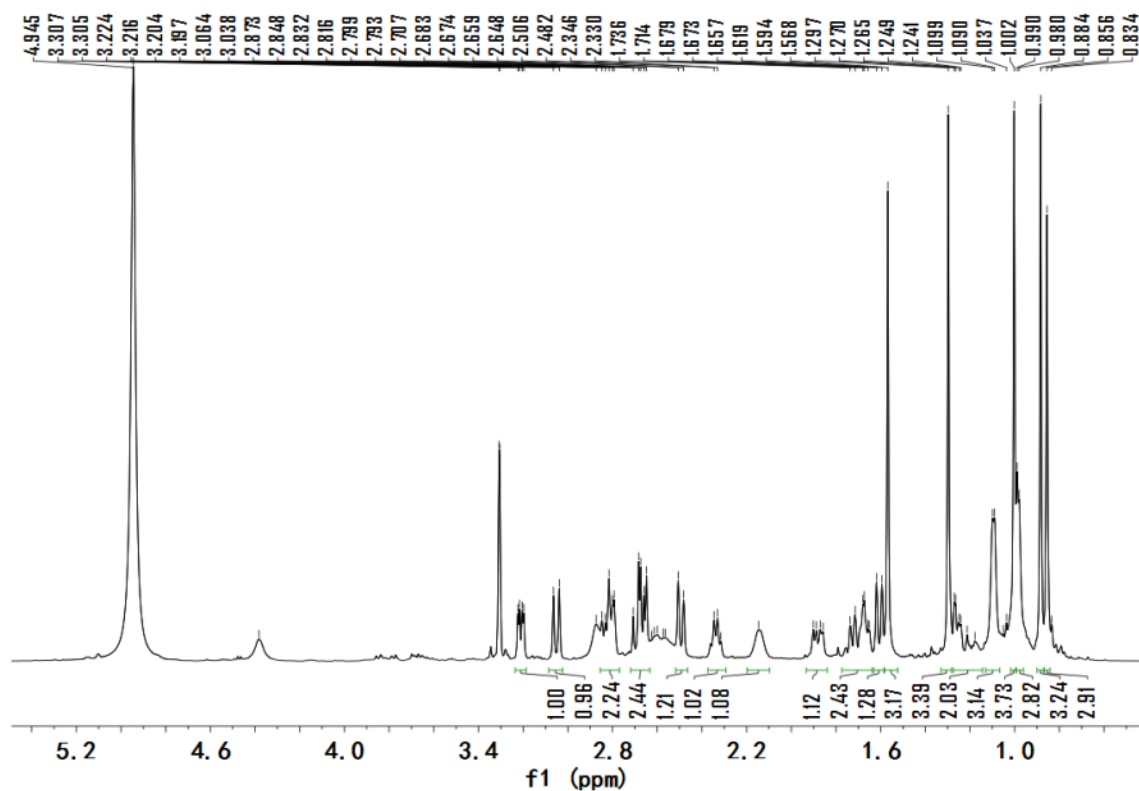


**Fig. S24** IR spectrum of lucidone K (3)

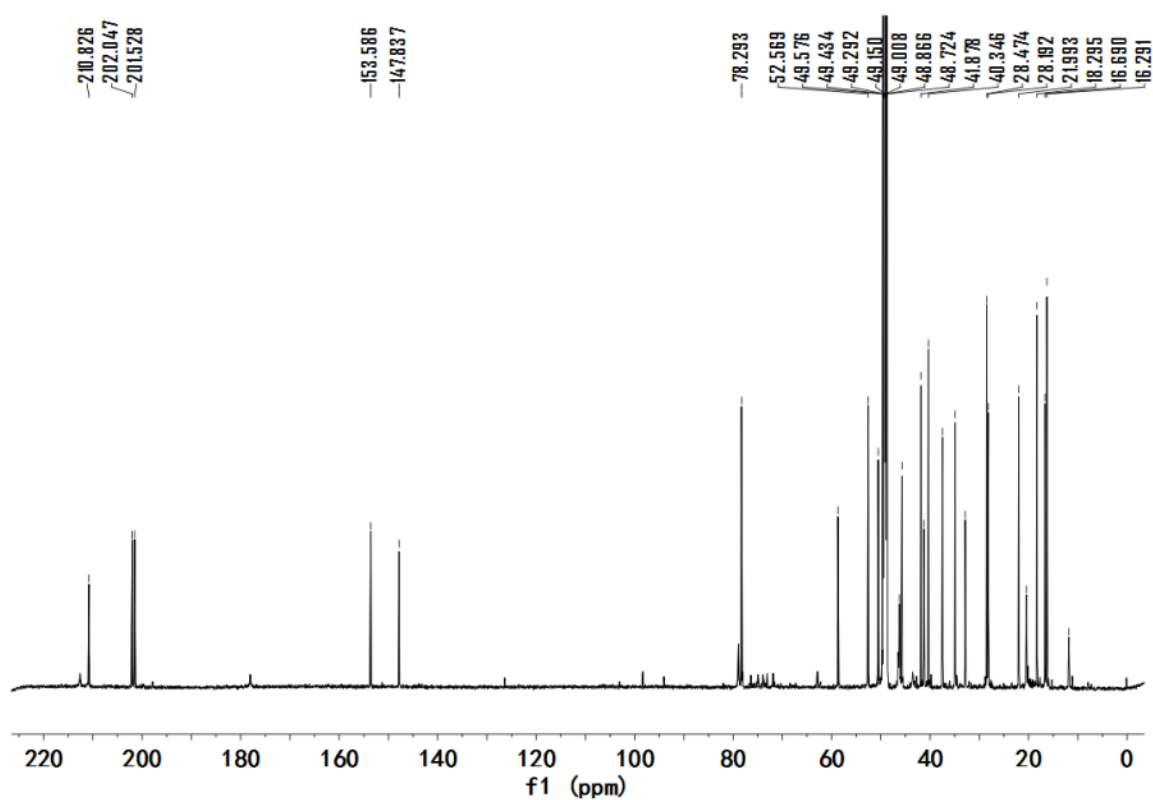


**Fig. S25** HRESIMS spectrum of lucidone K (3)

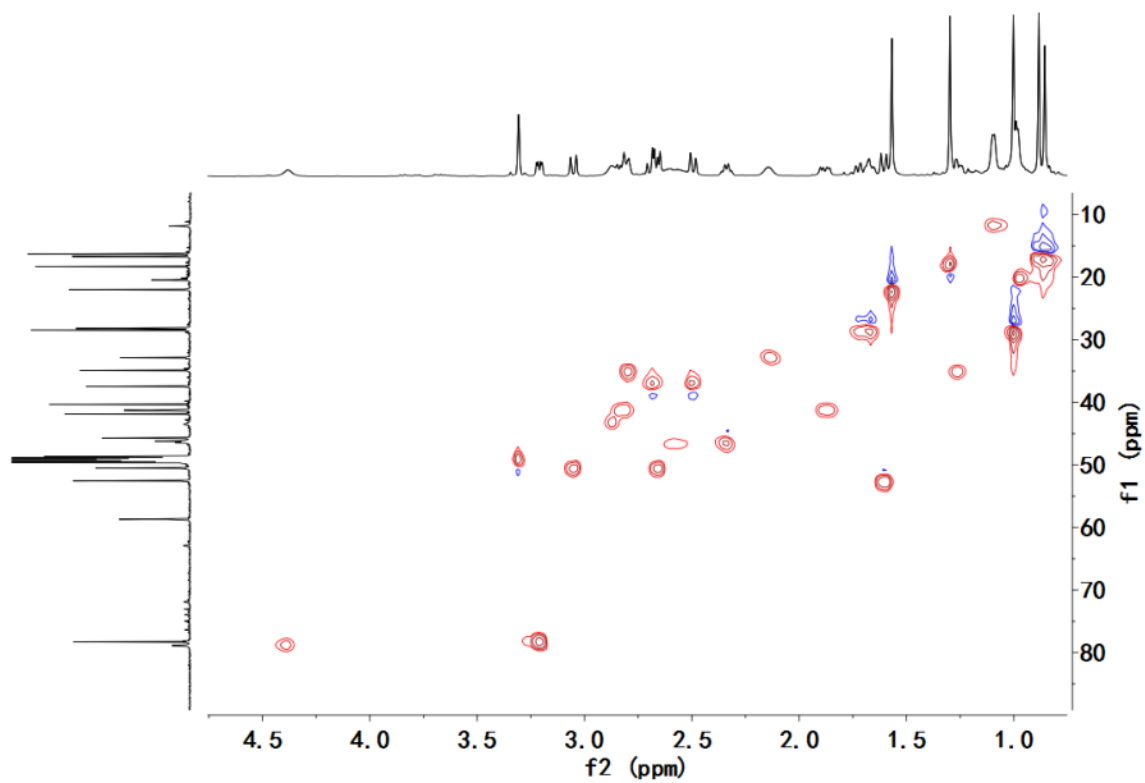




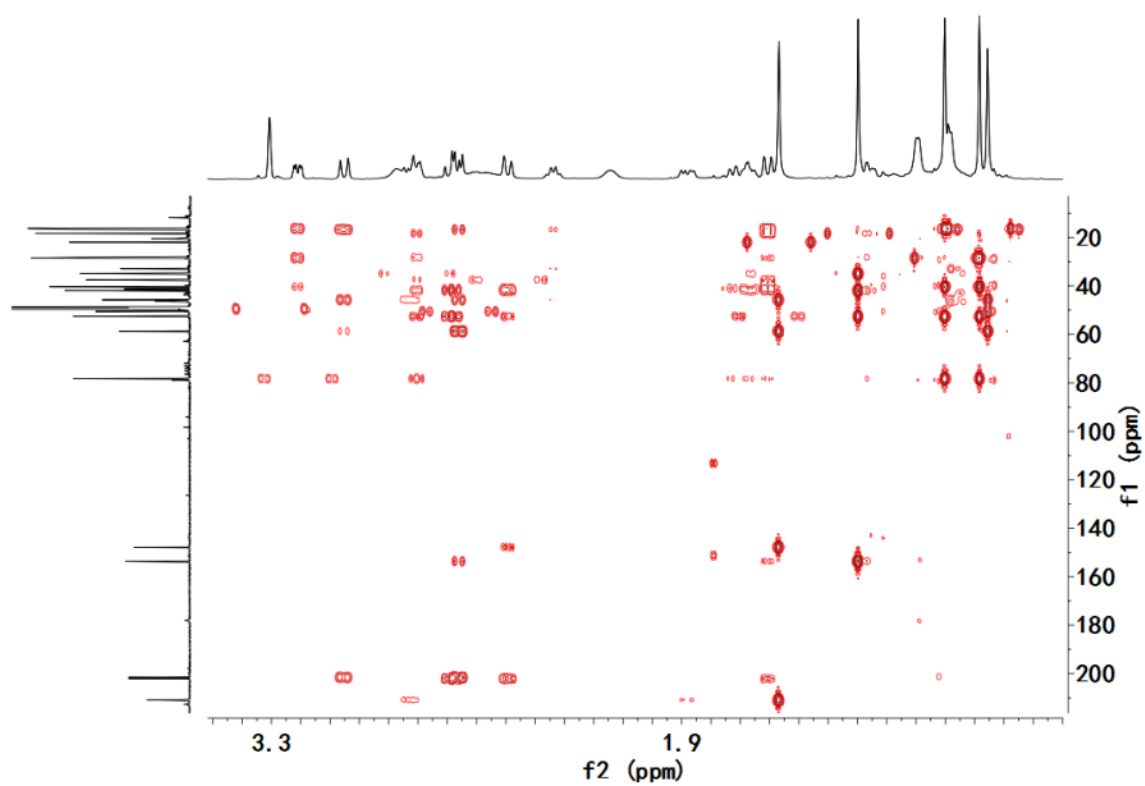
**Fig. S26** <sup>1</sup>H NMR (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone L (**4**)



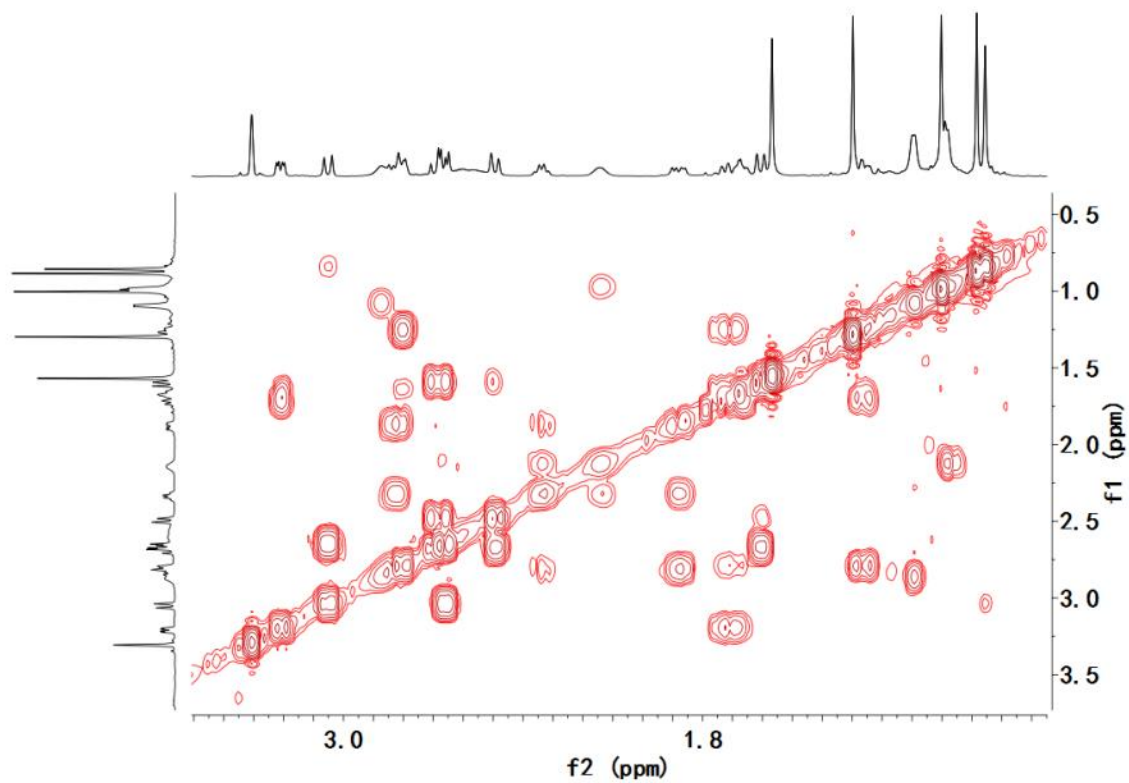
**Fig. S27** <sup>13</sup>C NMR (150 MHz, CD<sub>3</sub>OD) spectrum of lucidone L (**4**)



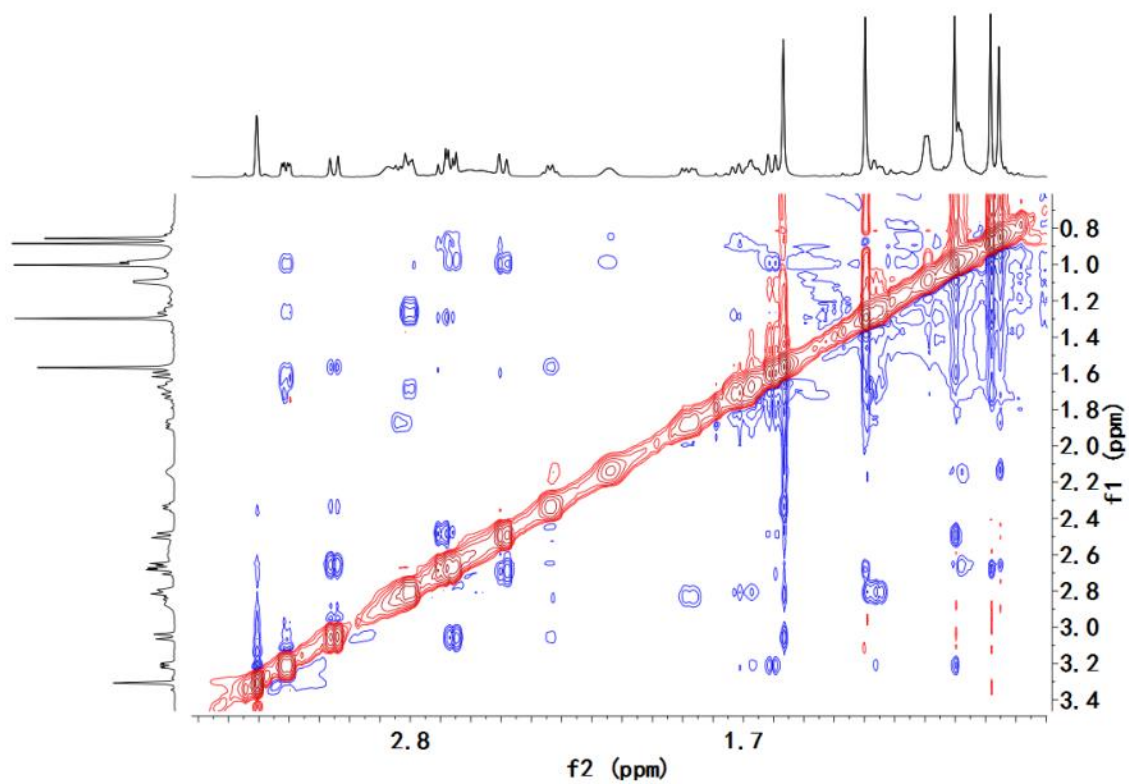
**Fig. S28** HSQC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone L (**4**)



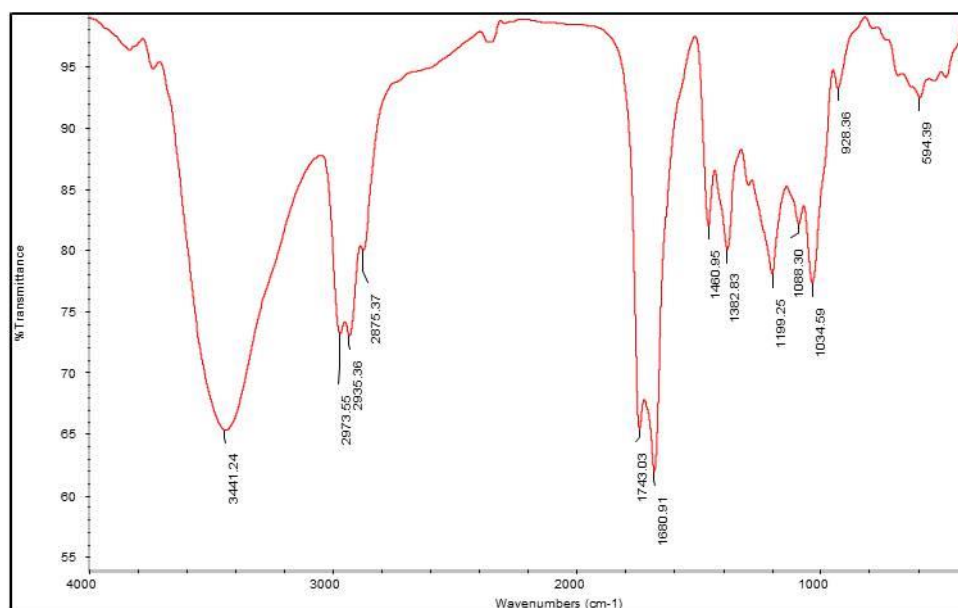
**Fig. S29** HMBC (600 MHz, CD<sub>3</sub>OD) spectrum of lucidone L (**4**)



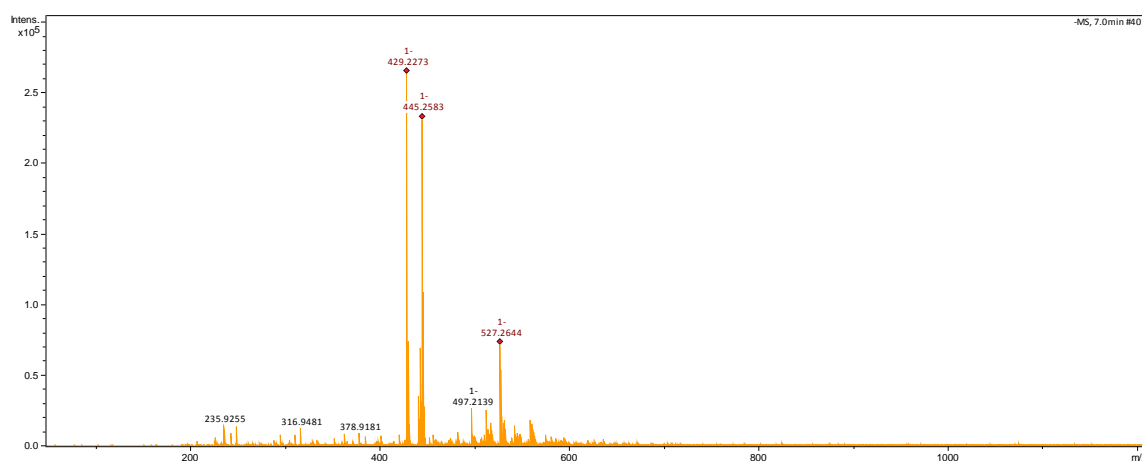
**Fig. S30**  $^1\text{H}$ - $^1\text{H}$  COSY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone L (4)



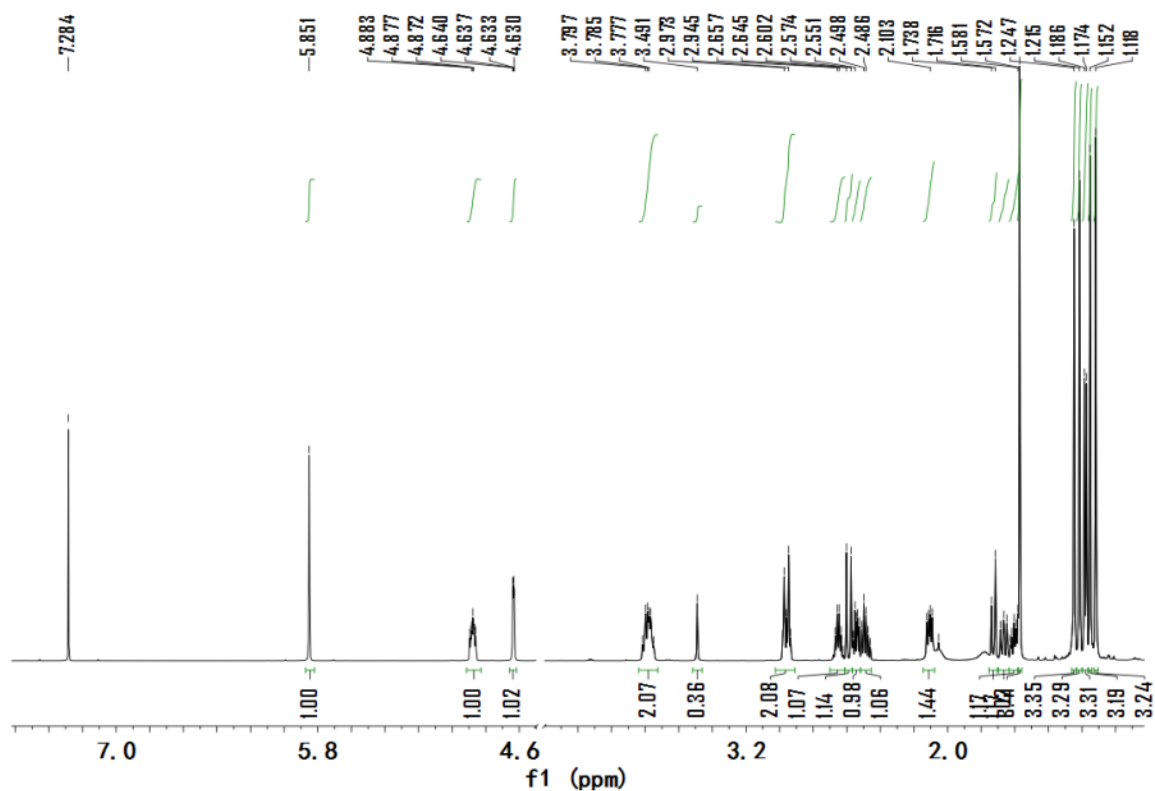
**Fig. S31** ROESY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of lucidone L (4)



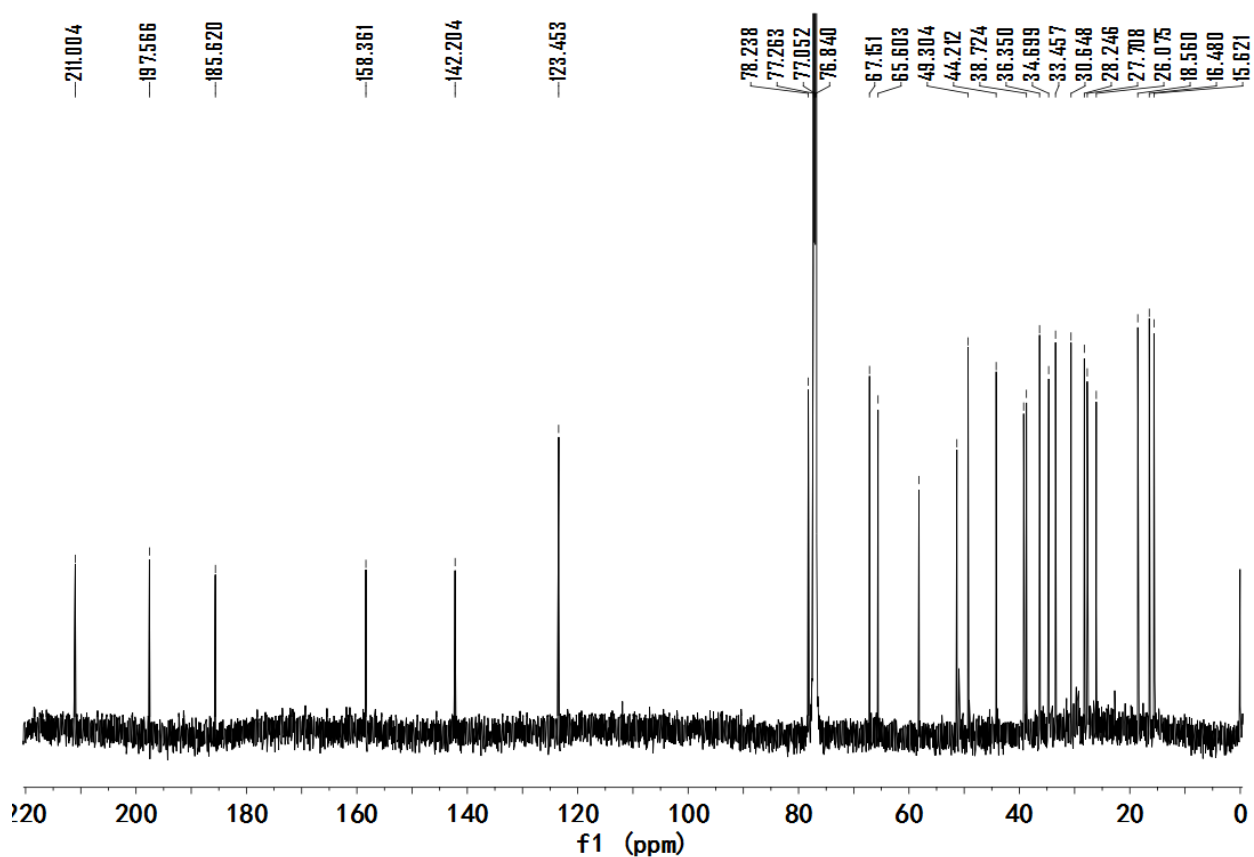
**Fig. S32** IR spectrum of lucidone L (4)



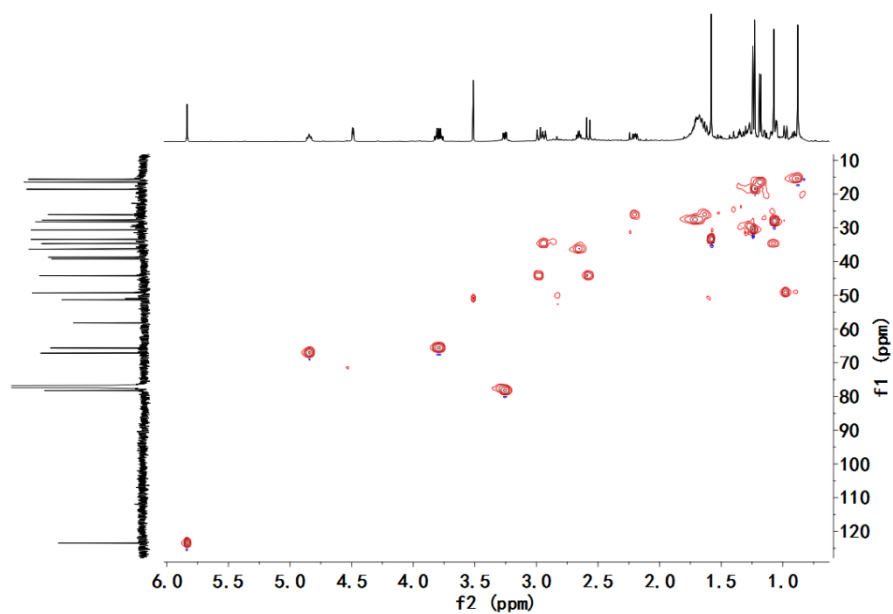
**Fig. S33** HRESIMS spectrum of lucidone L (4)



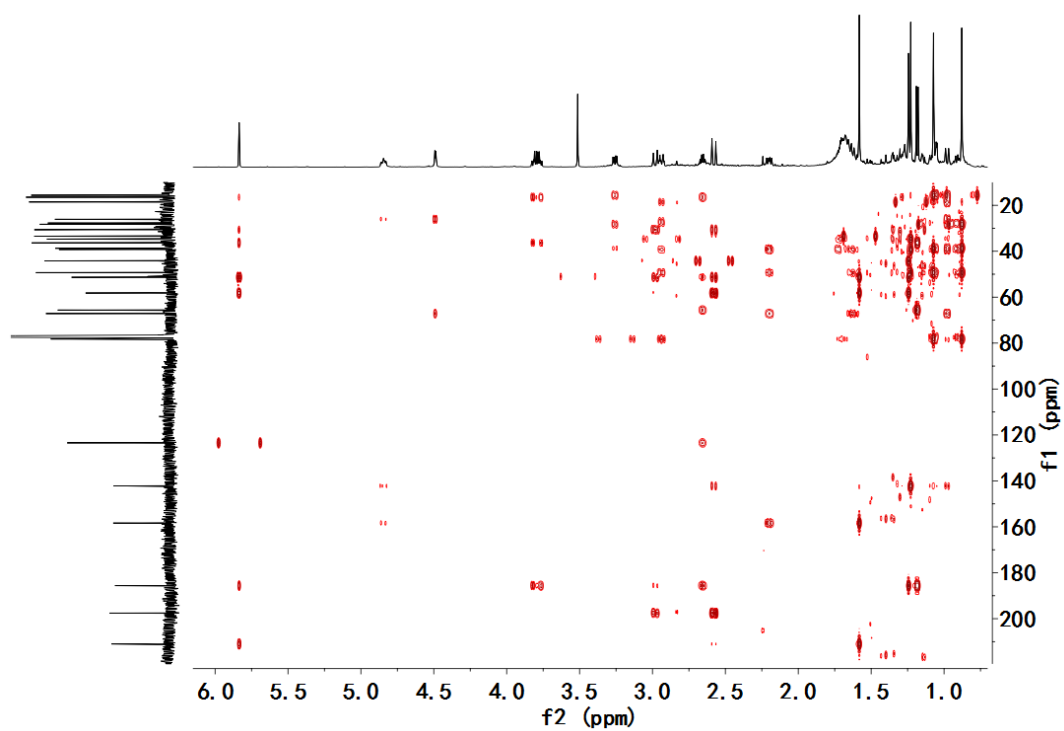
**Fig. S34**  $^1\text{H}$  NMR (600 MHz,  $\text{CDCl}_3$ ) spectrum of ganosineniol B (**5**)



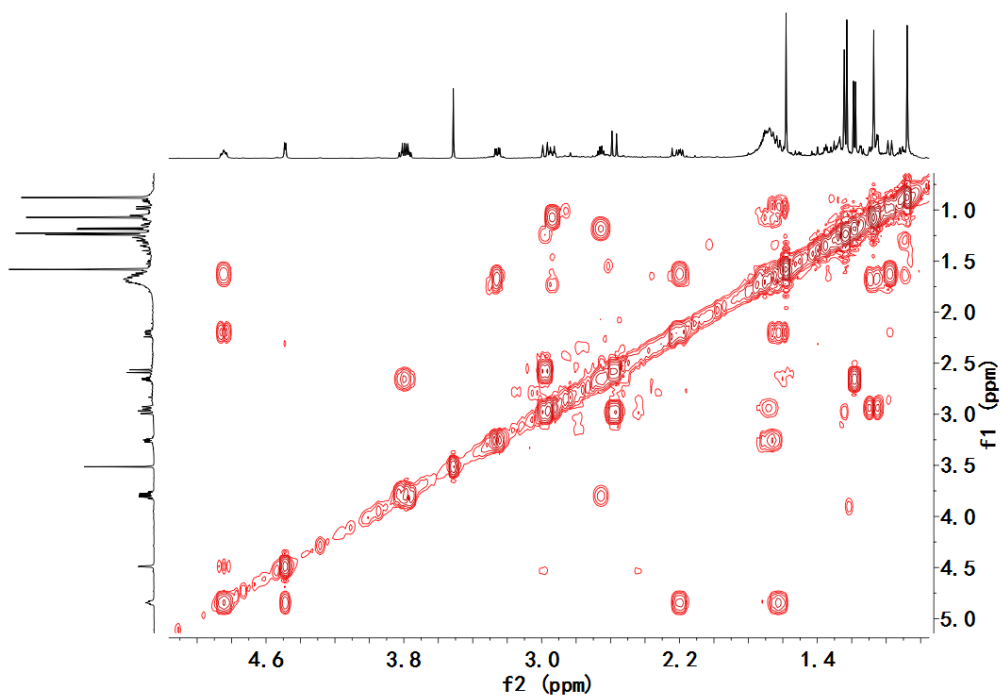
**Fig. S35**  $^{13}\text{C}$  NMR (150 MHz,  $\text{CDCl}_3$ ) spectrum of ganosineniol B (**5**)



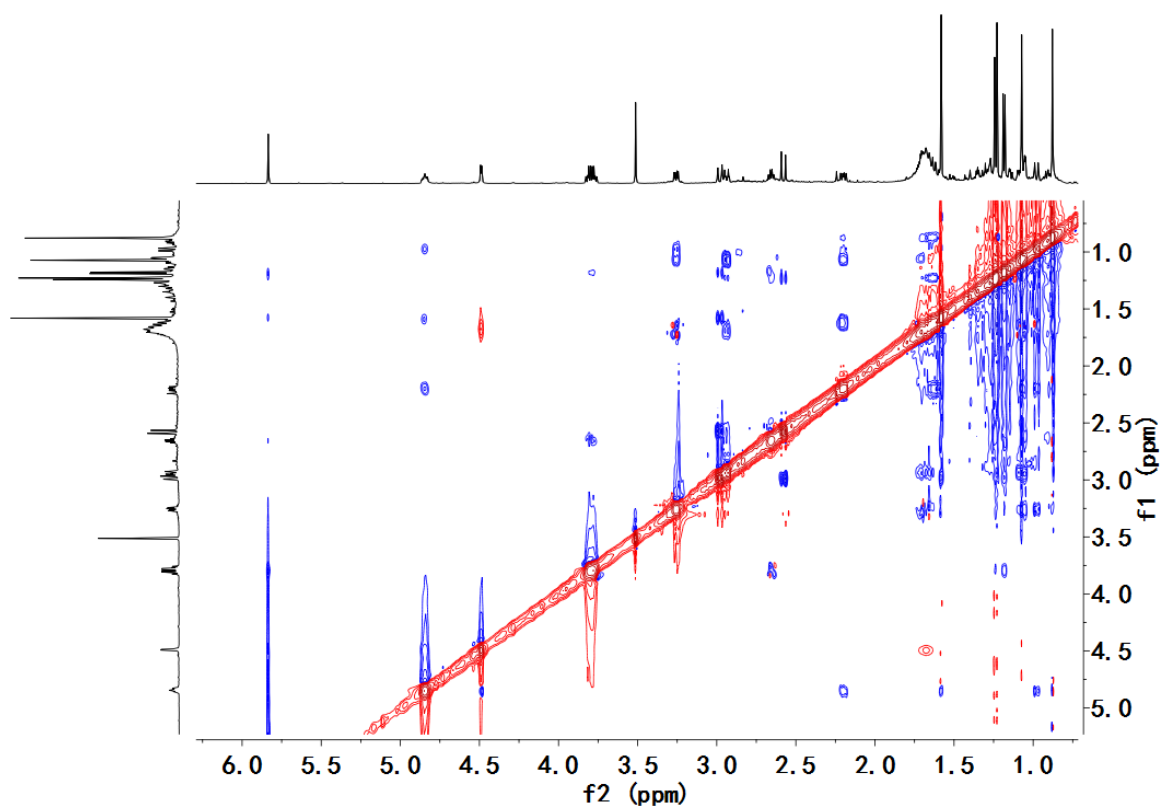
**Fig. S36** HSQC (600 MHz, CDCl<sub>3</sub>) spectrum of ganosineniol B (**5**)



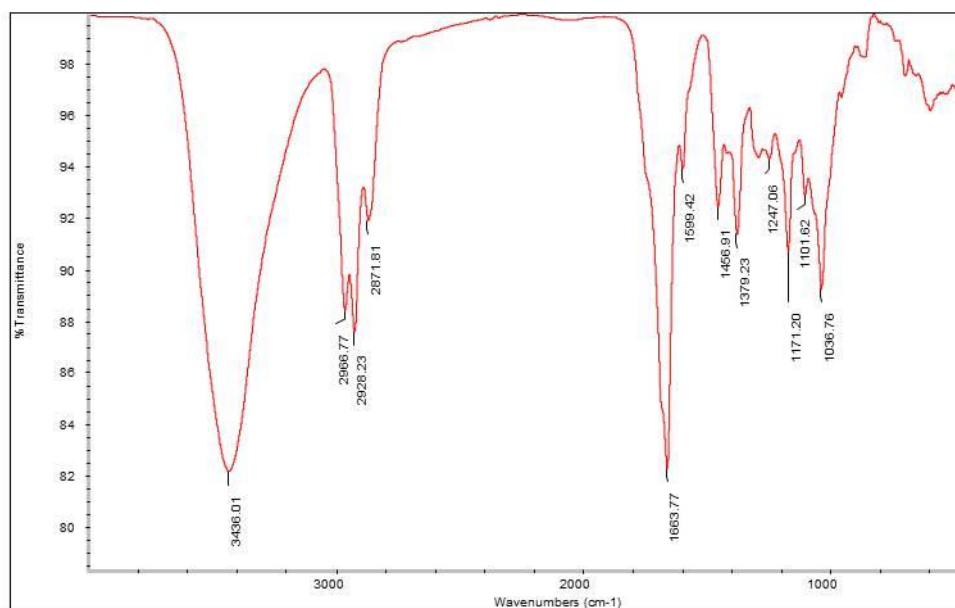
**Fig. S37** HMBC (600 MHz, CDCl<sub>3</sub>) spectrum of ganosineniol B (**5**)



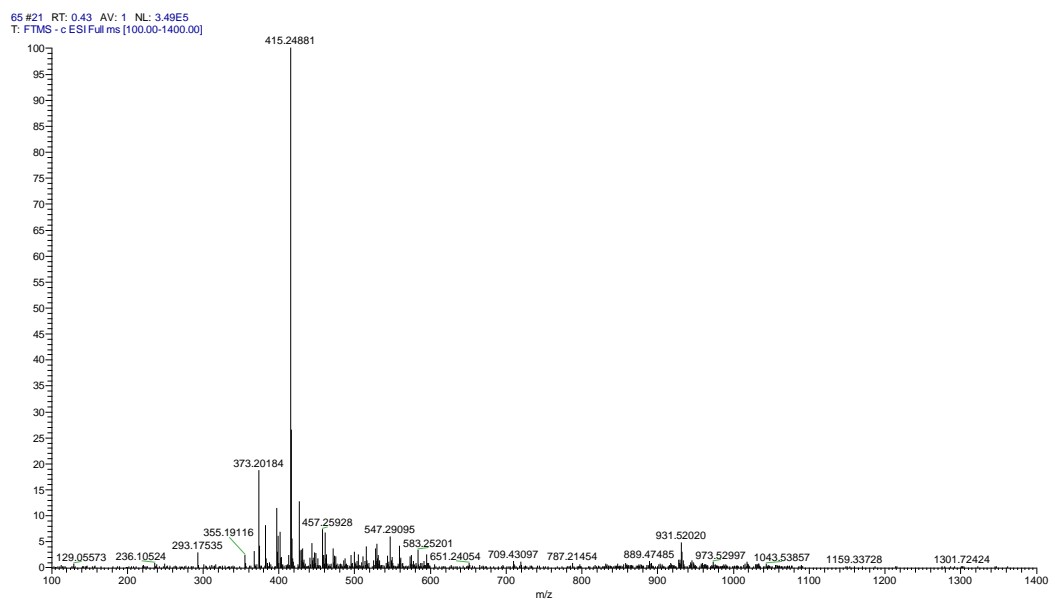
**Fig. S38**  $^1\text{H}$ - $^1\text{H}$  COSY (600 MHz,  $\text{CDCl}_3$ ) spectrum of ganosineniol B (5)



**Fig. S39** ROESY (600 MHz,  $\text{CDCl}_3$ ) spectrum of ganosineniol B (5)



**Fig. S40** IR spectrum of ganosineniol B (5)



**Fig. S41** HRESIMS spectrum of ganosineniol B (5)



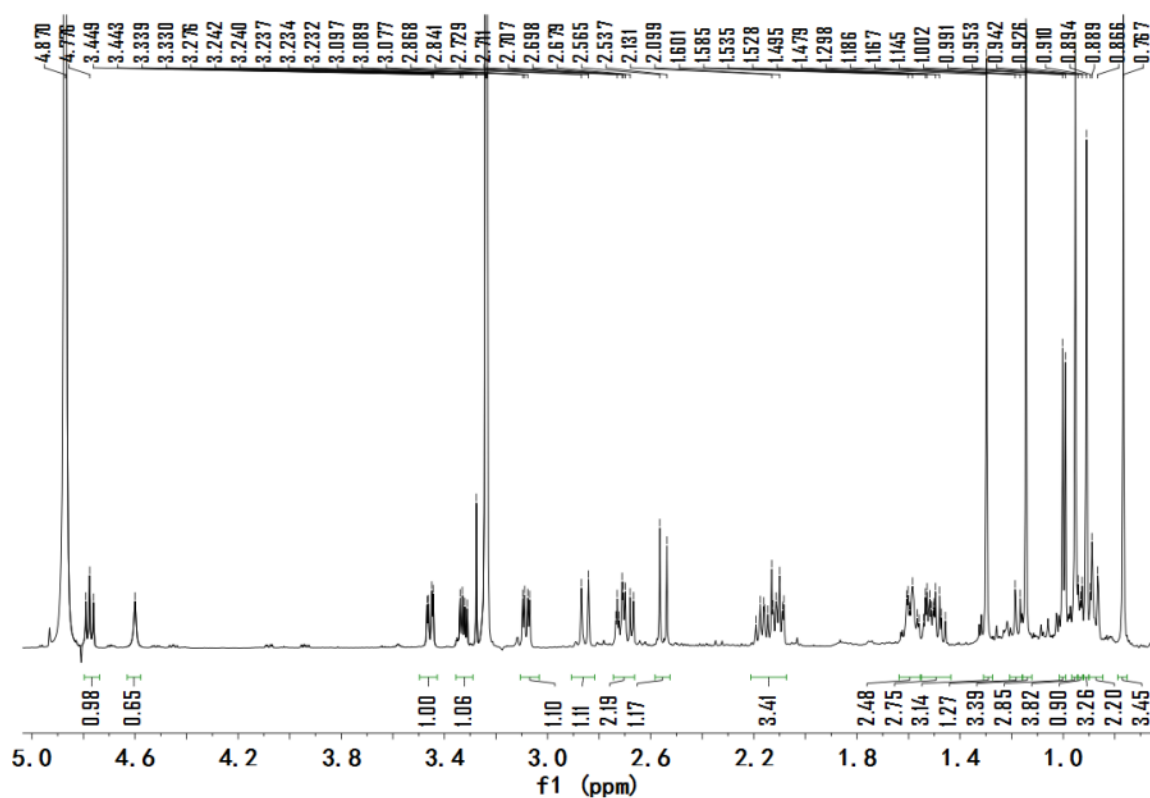


Fig. S42  $^1\text{H}$  NMR (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of ganosineniol C (**6**)

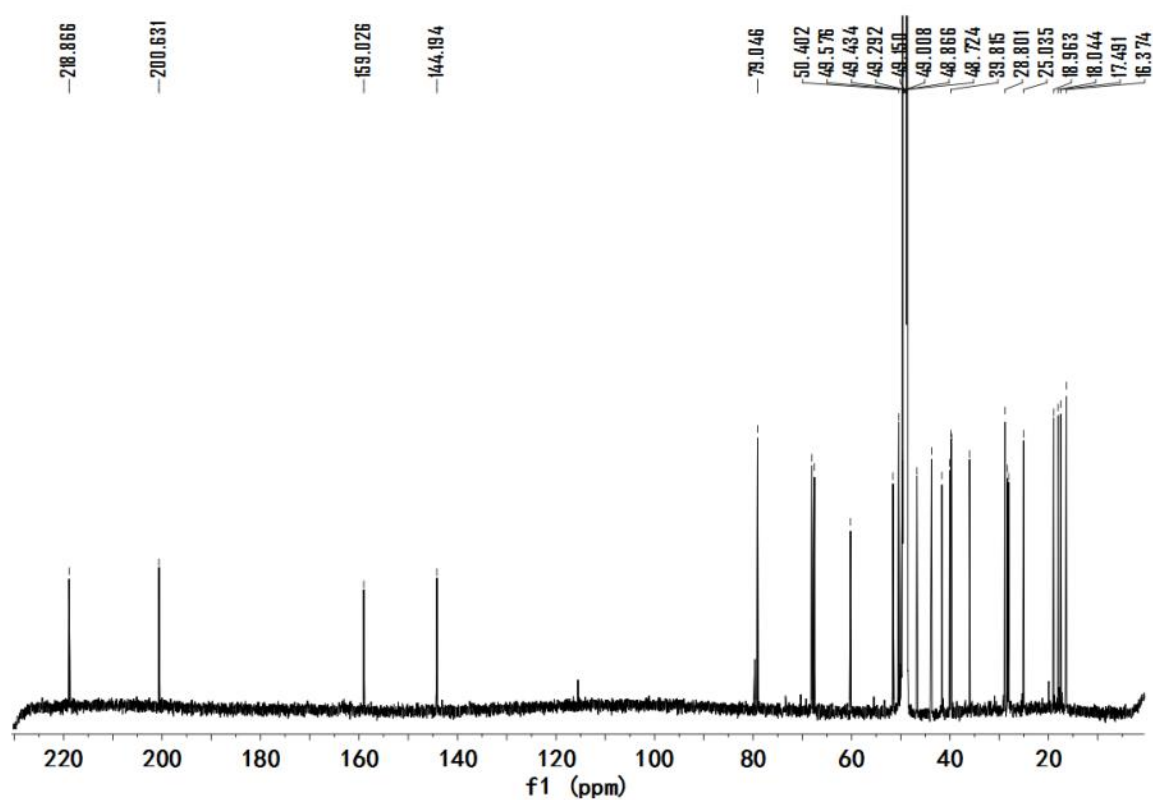
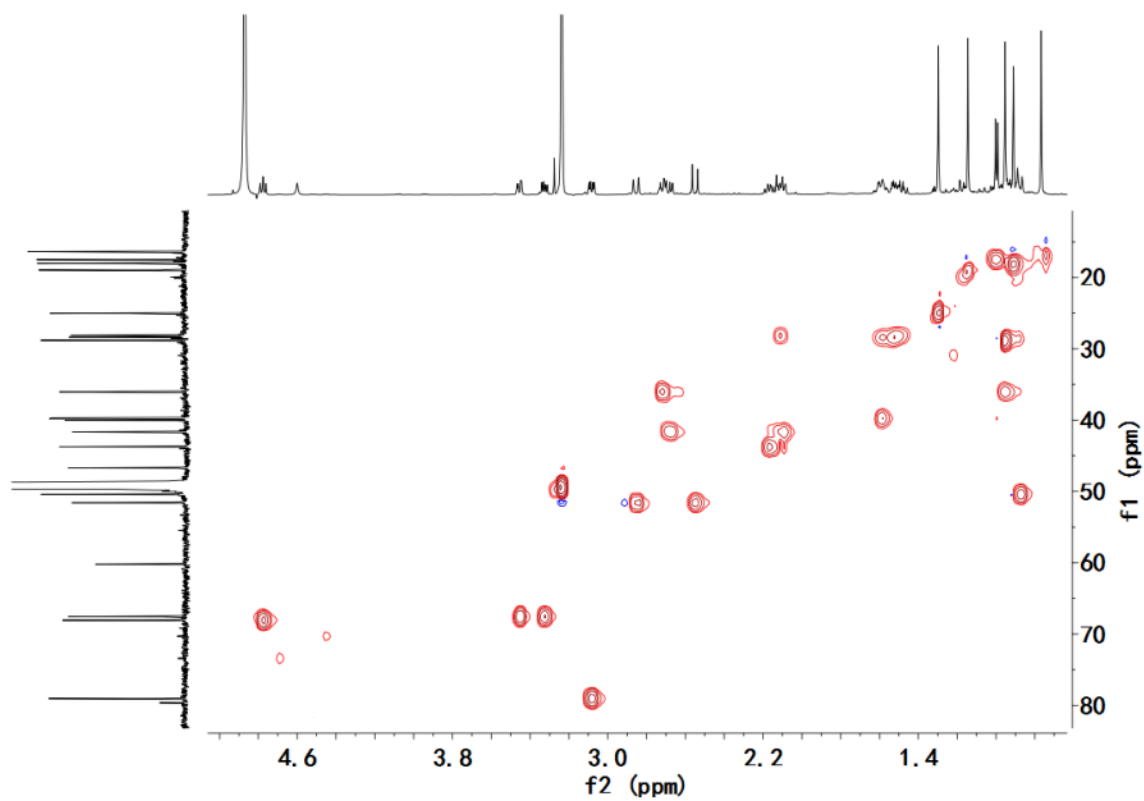
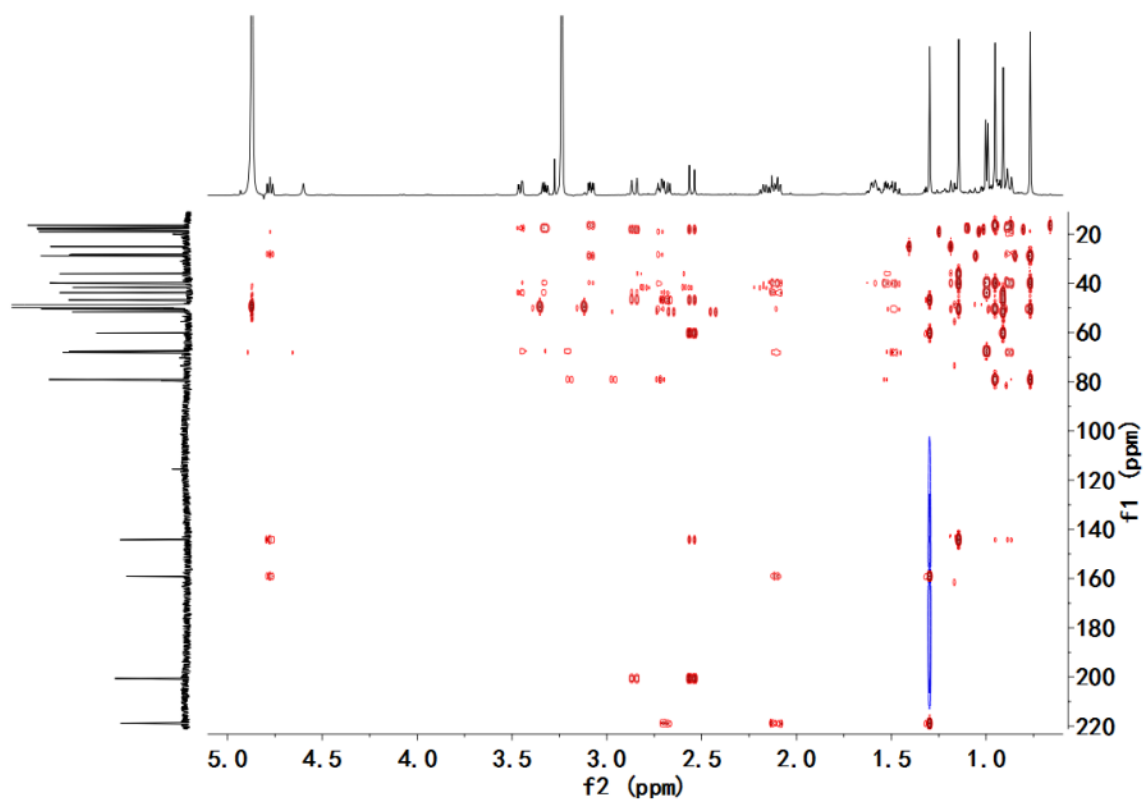


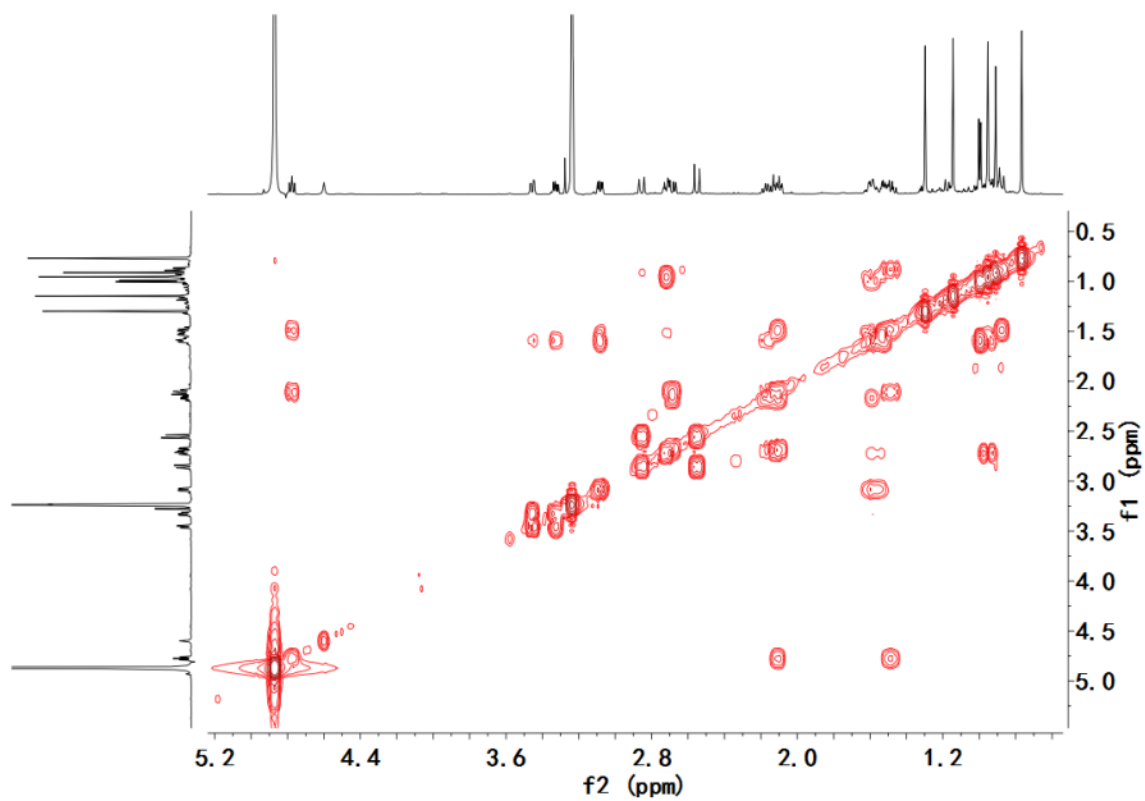
Fig. S43  $^{13}\text{C}$  NMR (150 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of ganosineniol C (**6**)



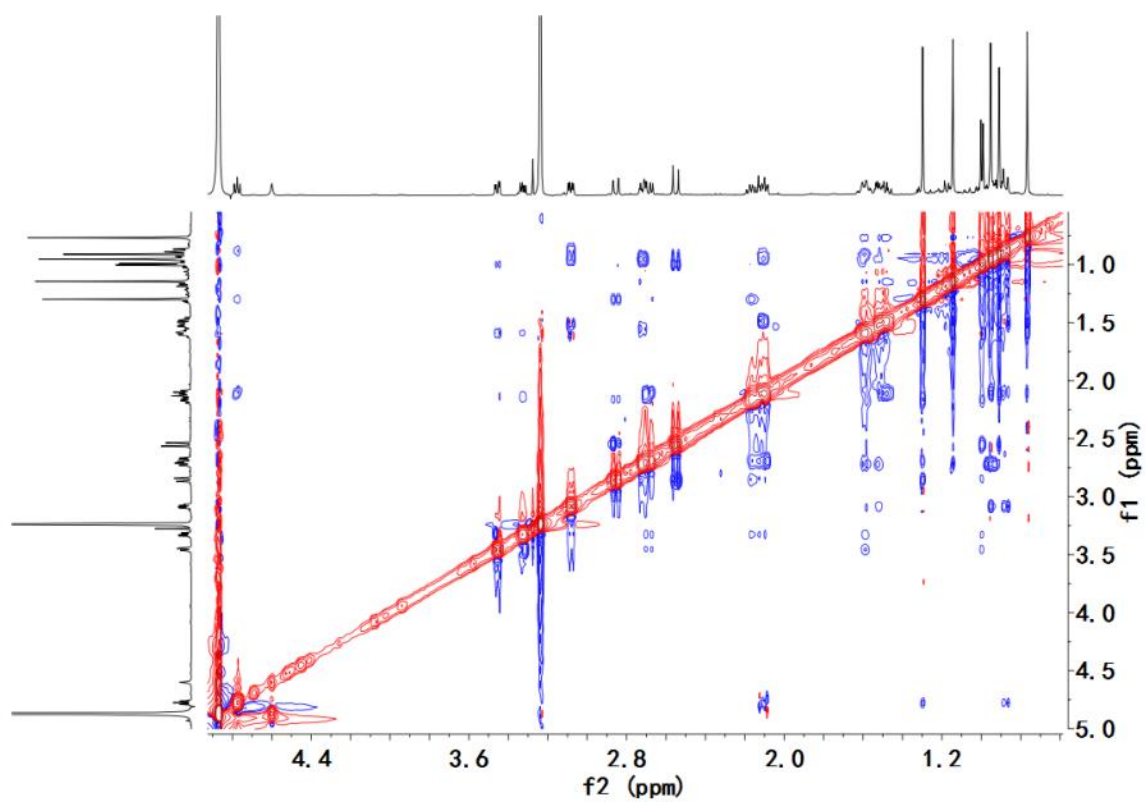
**Fig. S44** HSQC (600 MHz, CD<sub>3</sub>OD) spectrum of ganosineniol C (6)



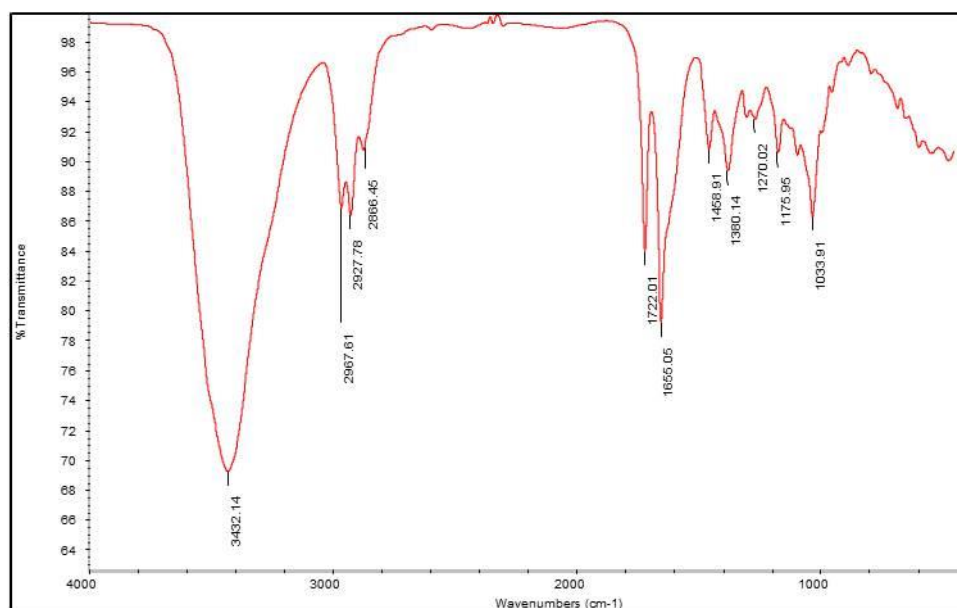
**Fig. S45** HMBC (600 MHz, CD<sub>3</sub>OD) spectrum of ganosineniol C (6)



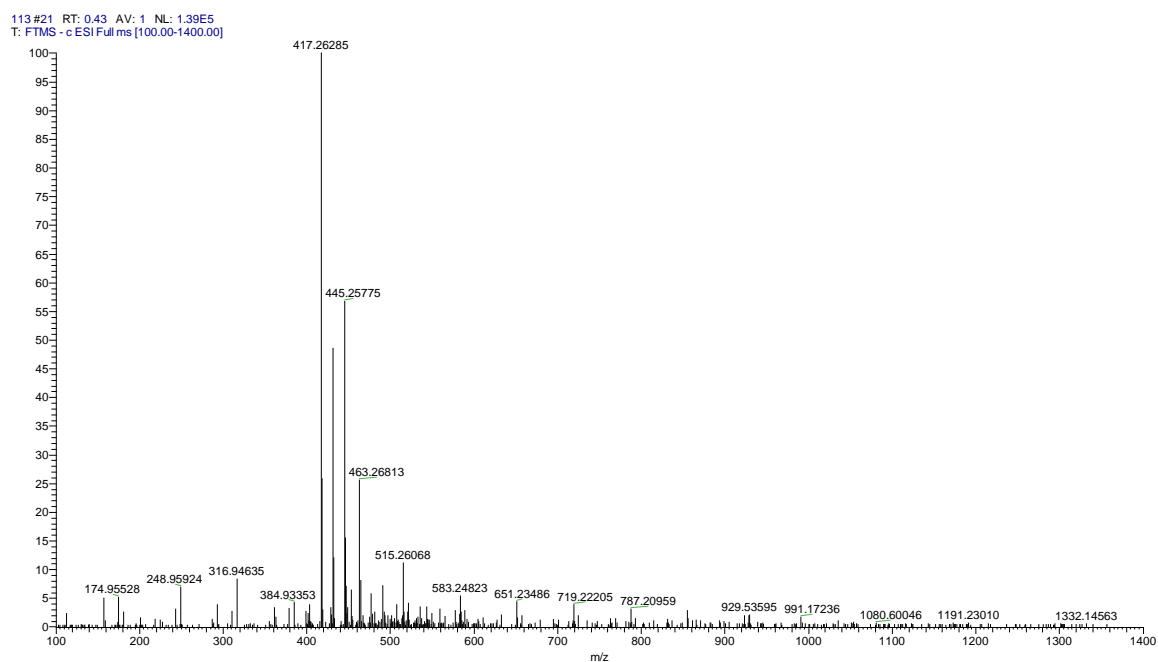
**Fig. S46**  $^1\text{H}$ - $^1\text{H}$  COSY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of ganosineniol C (**6**)



**Fig. S47** ROESY (600 MHz,  $\text{CD}_3\text{OD}$ ) spectrum of ganosineniol C (**6**)



**Fig. S48** IR spectrum of ganosineniol C (**6**)



**Fig. S49** HRESIMS spectrum of ganosineniol C (**6**)

**Table S1** Inhibition rate of nortriterpenoids from *Ganoderma* at the concentration of 3 mM

compounds	Inhibition rate (%)
<b>3</b>	20.68
<b>4</b>	13.21
<b>7</b>	9.20
<b>8</b>	26.74
<b>9</b>	5.46

<b>10</b>	24.67
<b>11</b>	16.01
<b>12</b>	18.31
<b>13</b>	19.06