

## Electronic Supplementary Information

# Burchellin and its stereoisomers: total synthesis, structural elucidation and antiviral activity

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and Shi-Shan Yu<sup>\*a</sup>

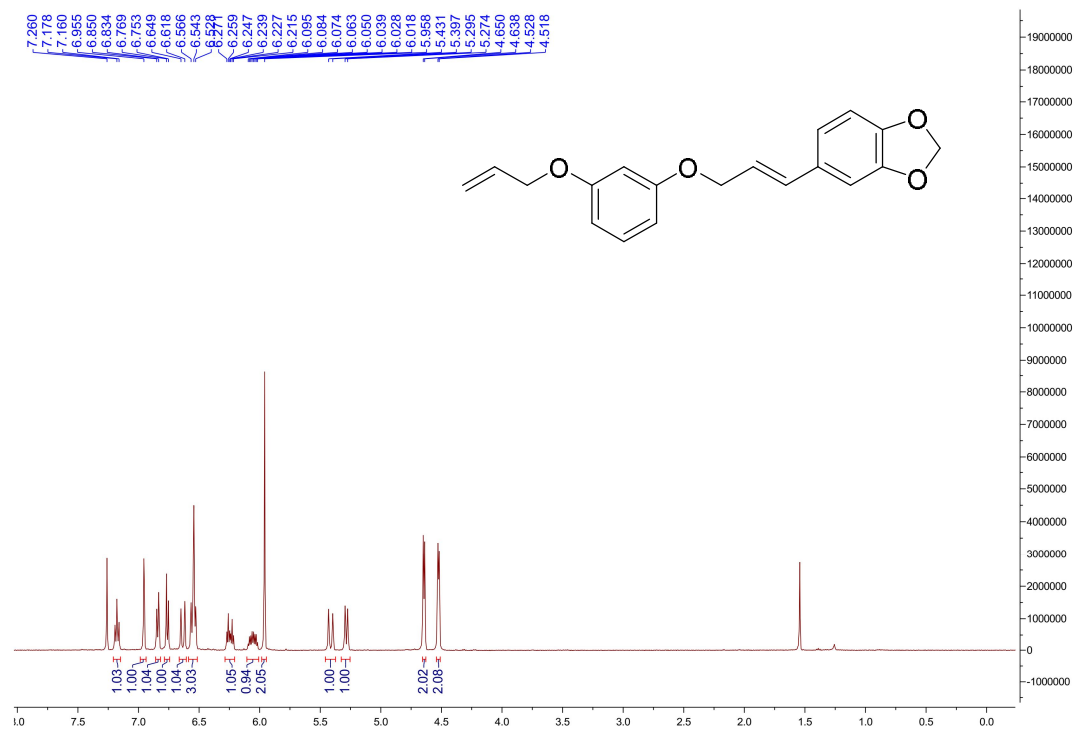
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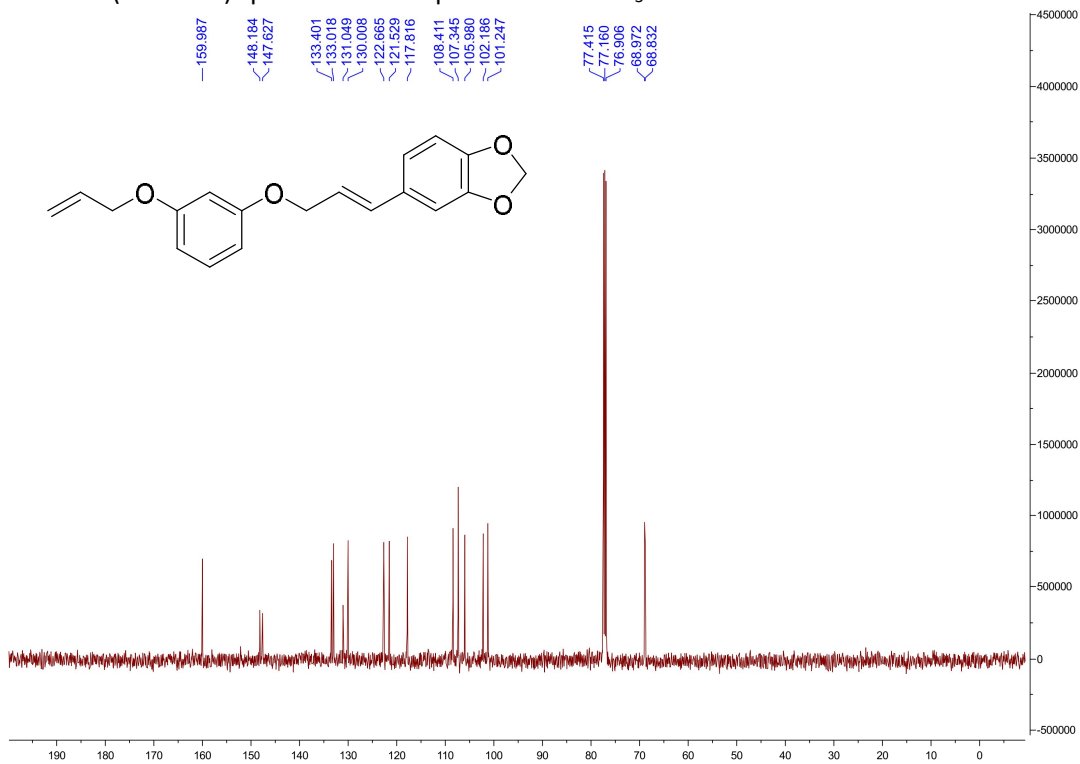
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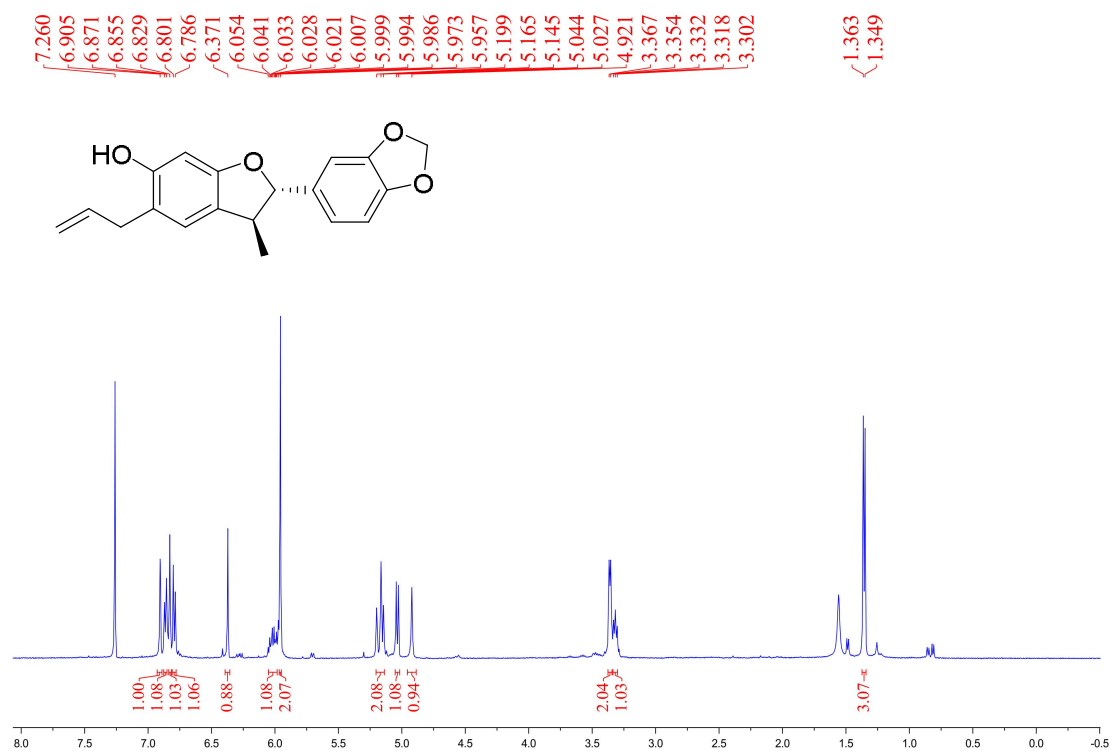
$^1\text{H}$  NMR (500 MHz) spectrum of compound **14** in  $\text{CDCl}_3$



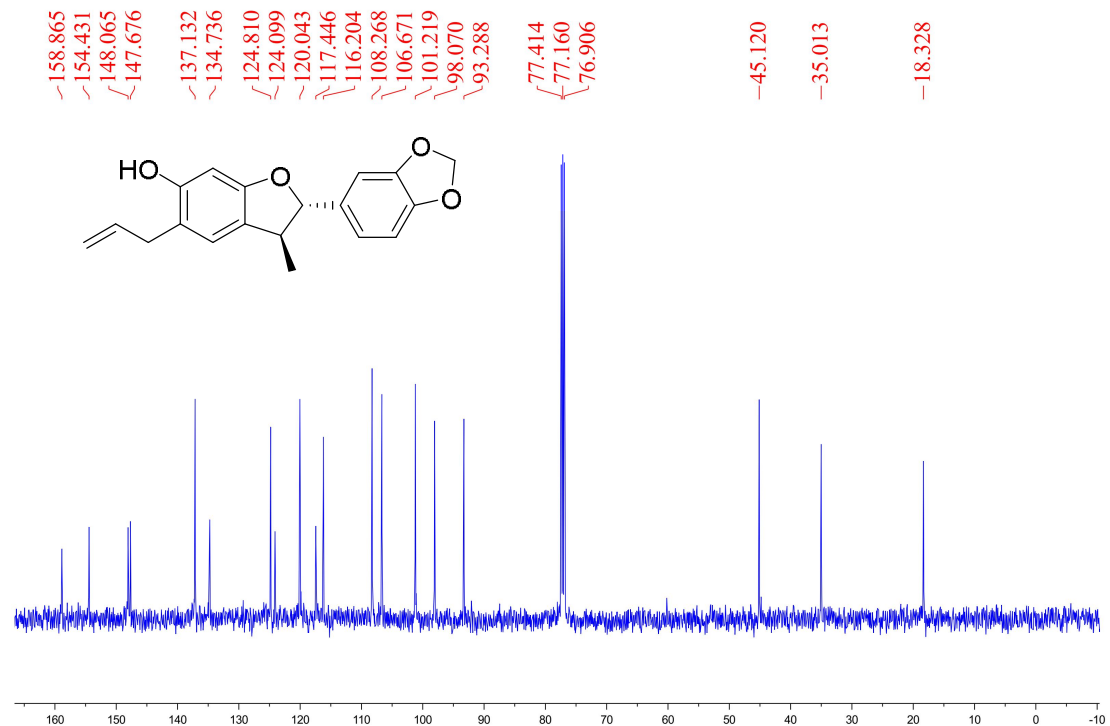
$^{13}\text{C}$  NMR (125 MHz) spectrum of compound **14** in  $\text{CDCl}_3$



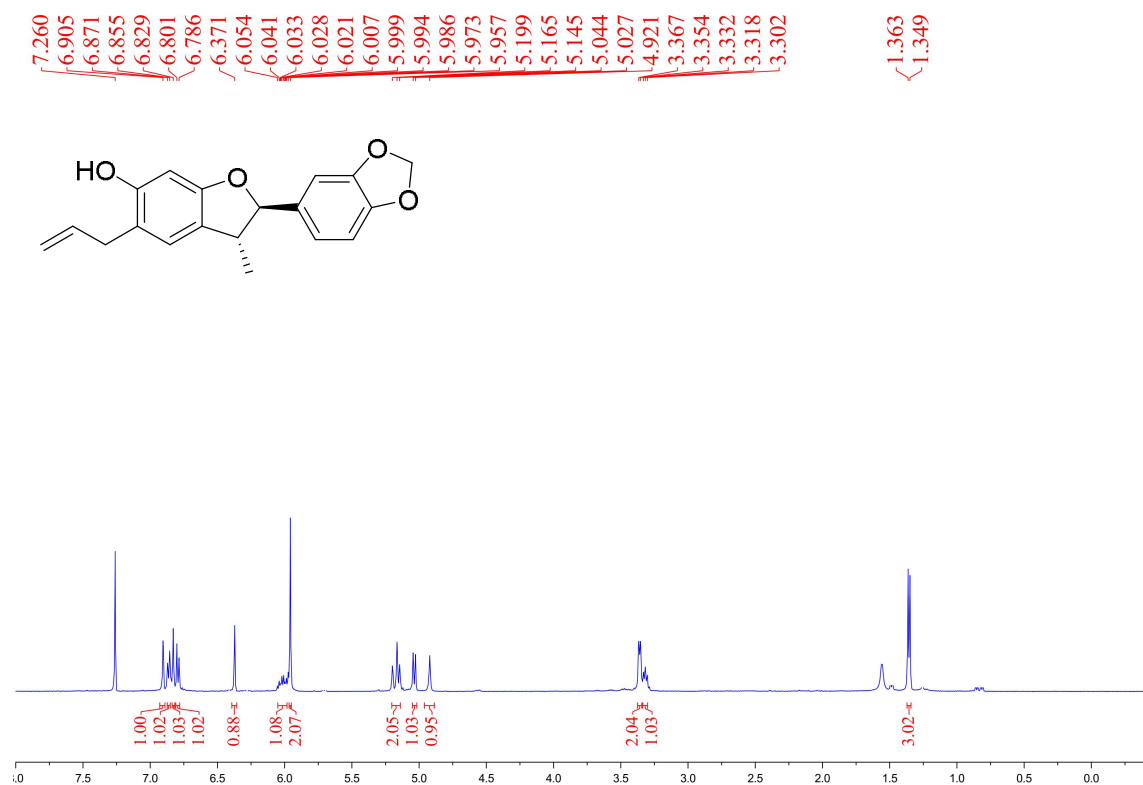
$^1\text{H}$  NMR (500 MHz) spectrum of compound **10** in  $\text{CDCl}_3$



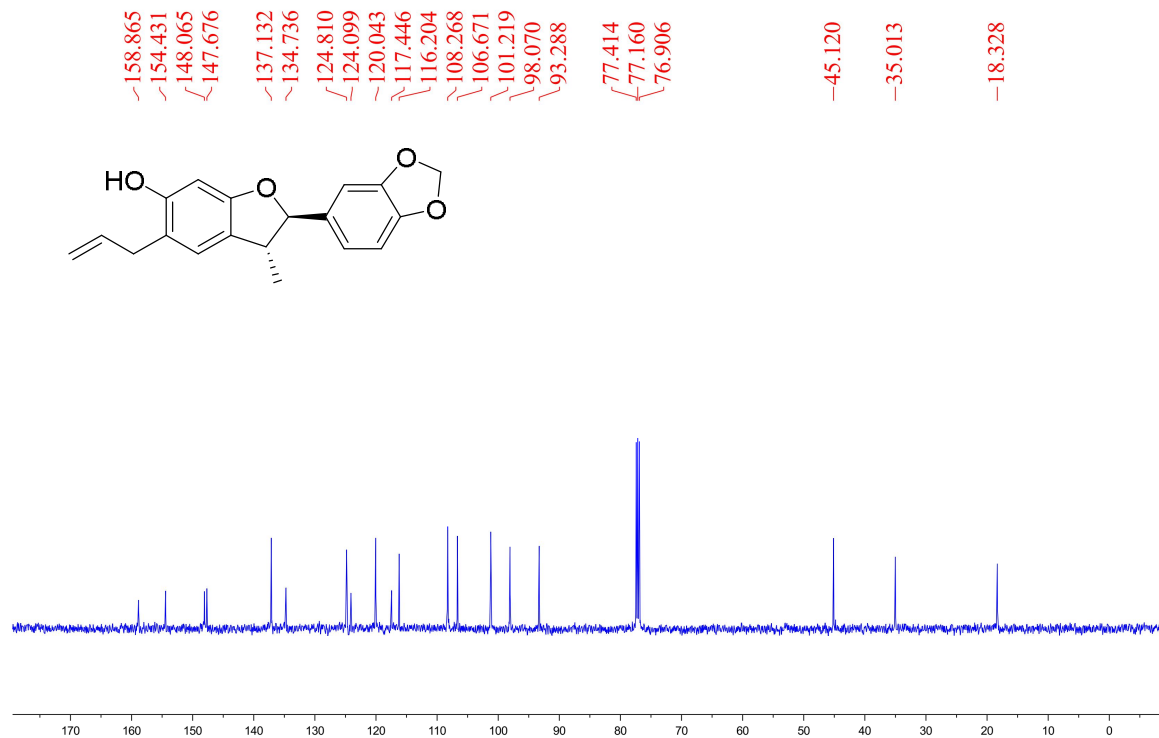
$^{13}\text{C}$  NMR (125 MHz) spectrum of compound **10** in  $\text{CDCl}_3$



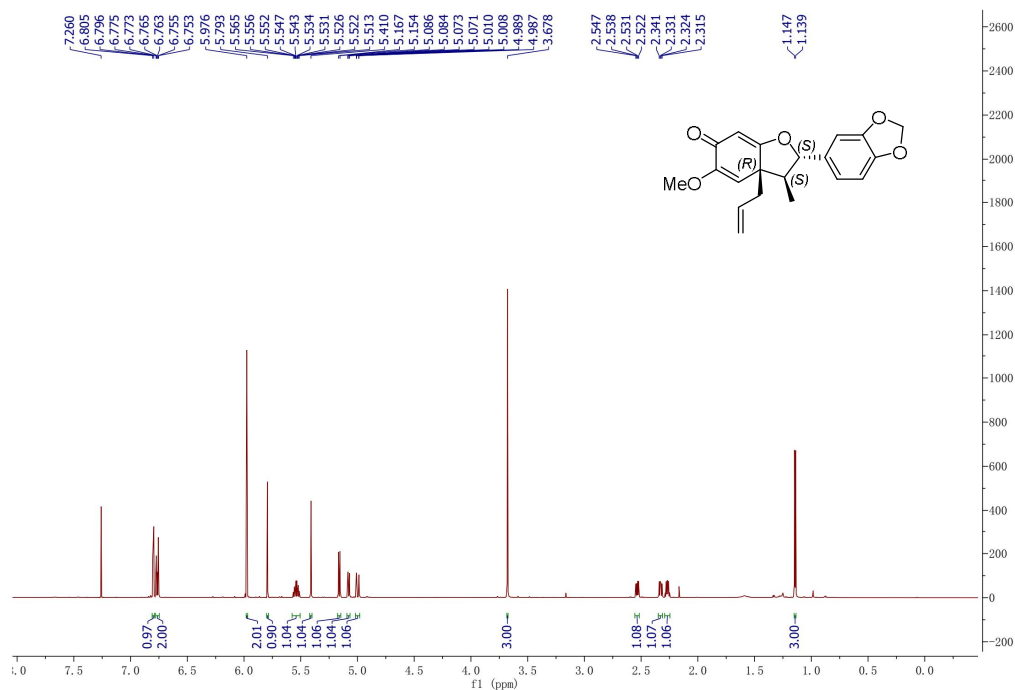
$^1\text{H}$  NMR (500 MHz) spectrum of compound **ent-10** in  $\text{CDCl}_3$



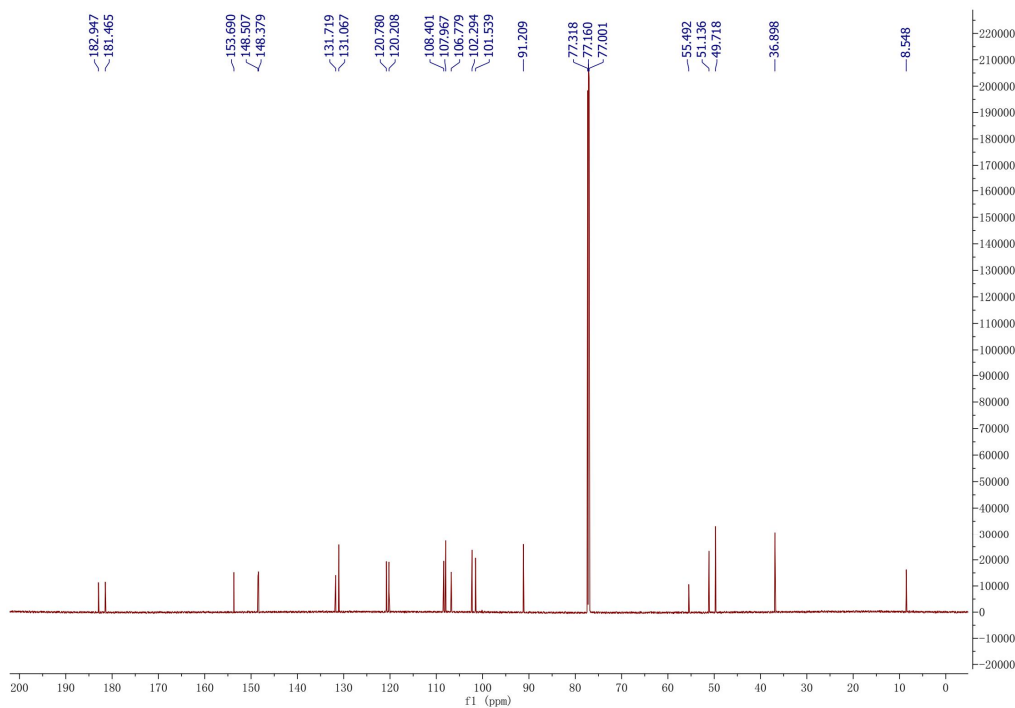
$^{13}\text{C}$  NMR (125 MHz) spectrum of compound **ent-10** in  $\text{CDCl}_3$



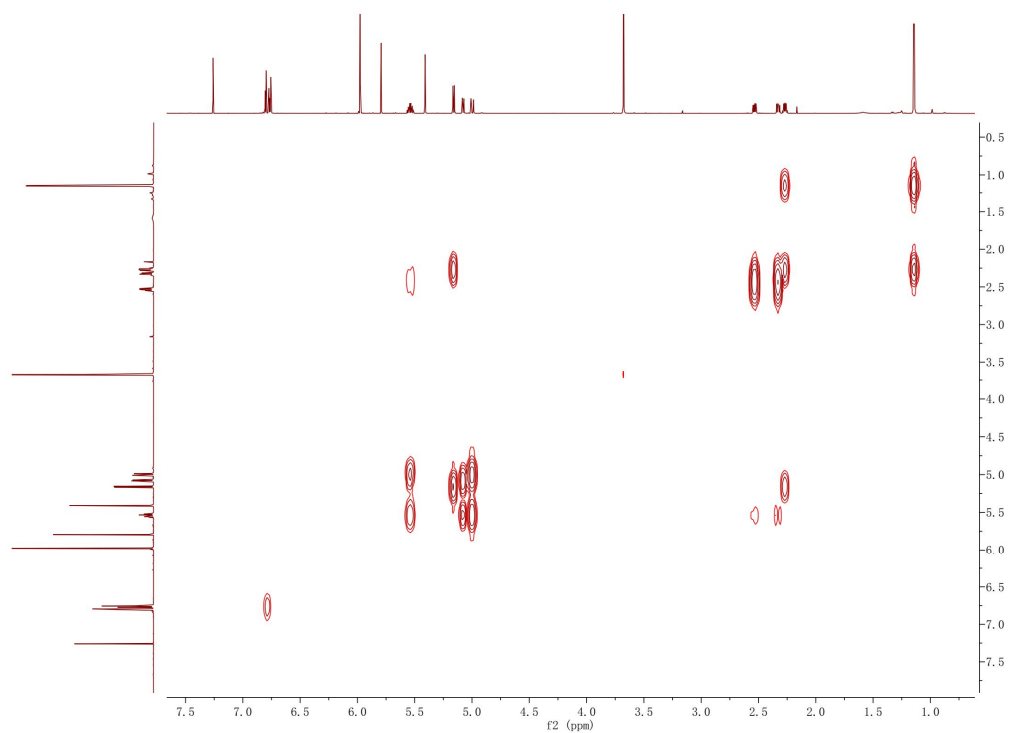
$^1\text{H}$  NMR (800 MHz) spectrum of compound **1a** in  $\text{CDCl}_3$



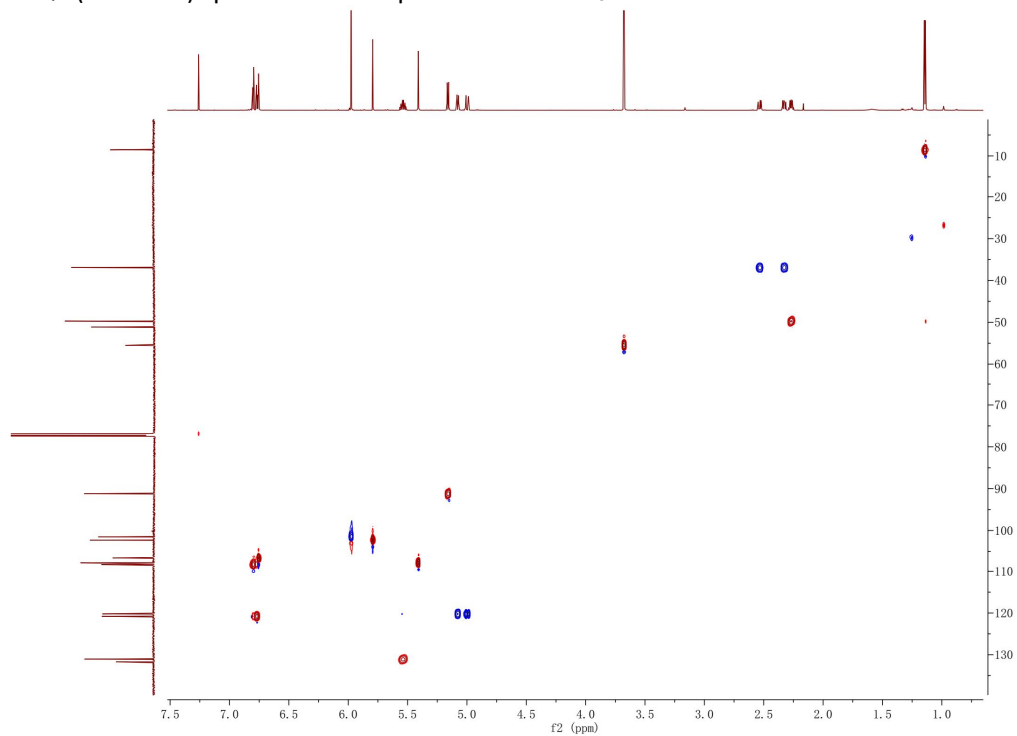
$^{13}\text{C}$  NMR (200 MHz) spectrum of compound **1a** in  $\text{CDCl}_3$



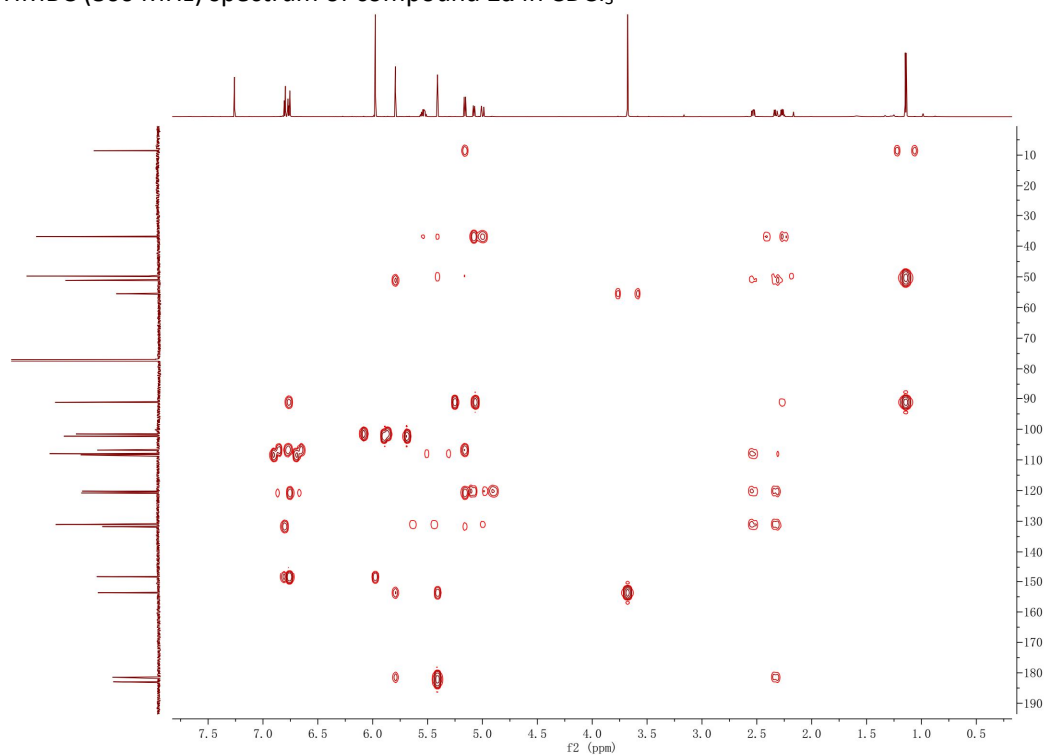
$^1\text{H}$ - $^1\text{H}$  COSY (800 MHz) spectrum of compound **1a** in  $\text{CDCl}_3$



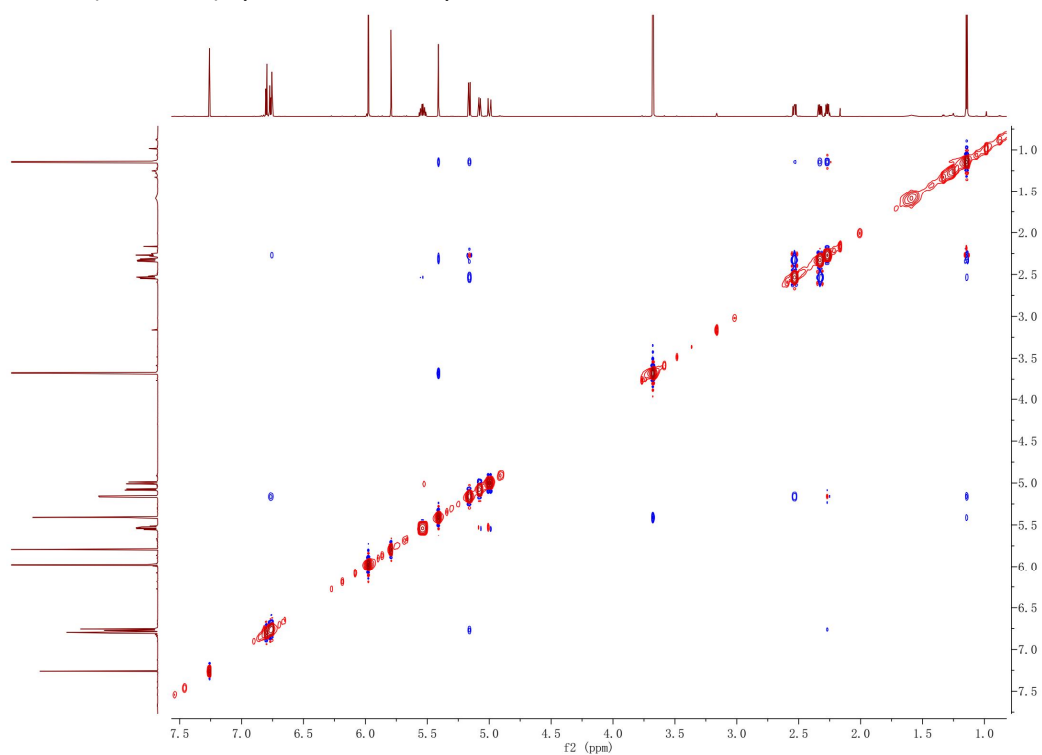
HSQC (800 MHz) spectrum of compound **1a** in  $\text{CDCl}_3$



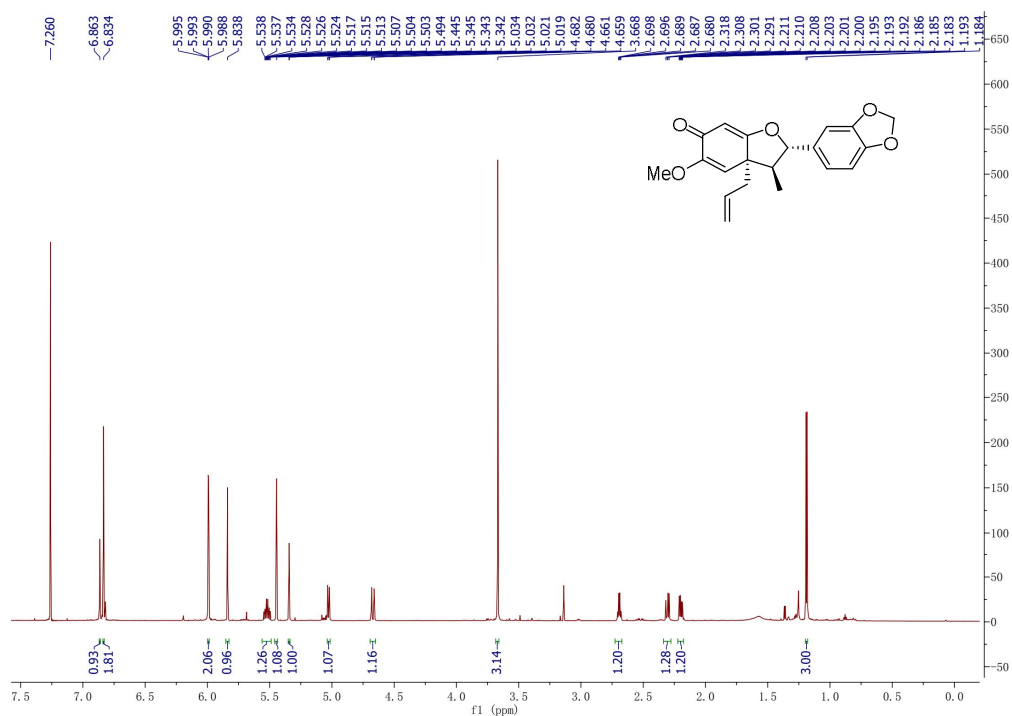
HMBC (800 MHz) spectrum of compound **1a** in CDCl<sub>3</sub>



NOESY (800 MHz) spectrum of compound **1a** in CDCl<sub>3</sub>

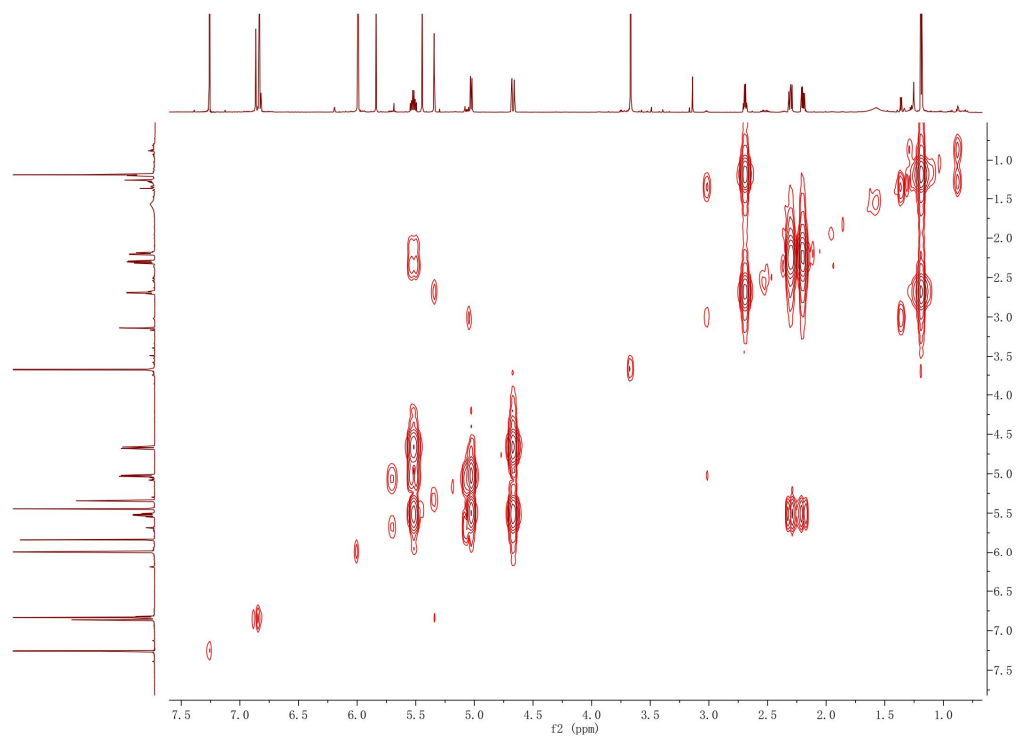


$^1\text{H}$  NMR (800 MHz) spectrum of compound **1b** in  $\text{CDCl}_3$

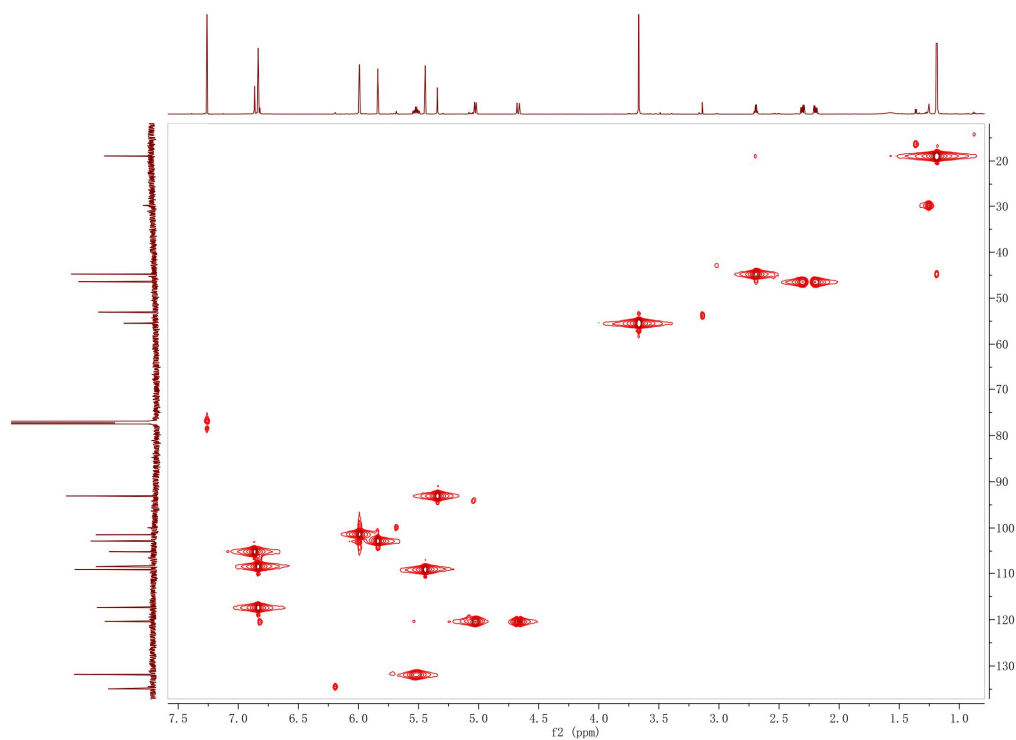




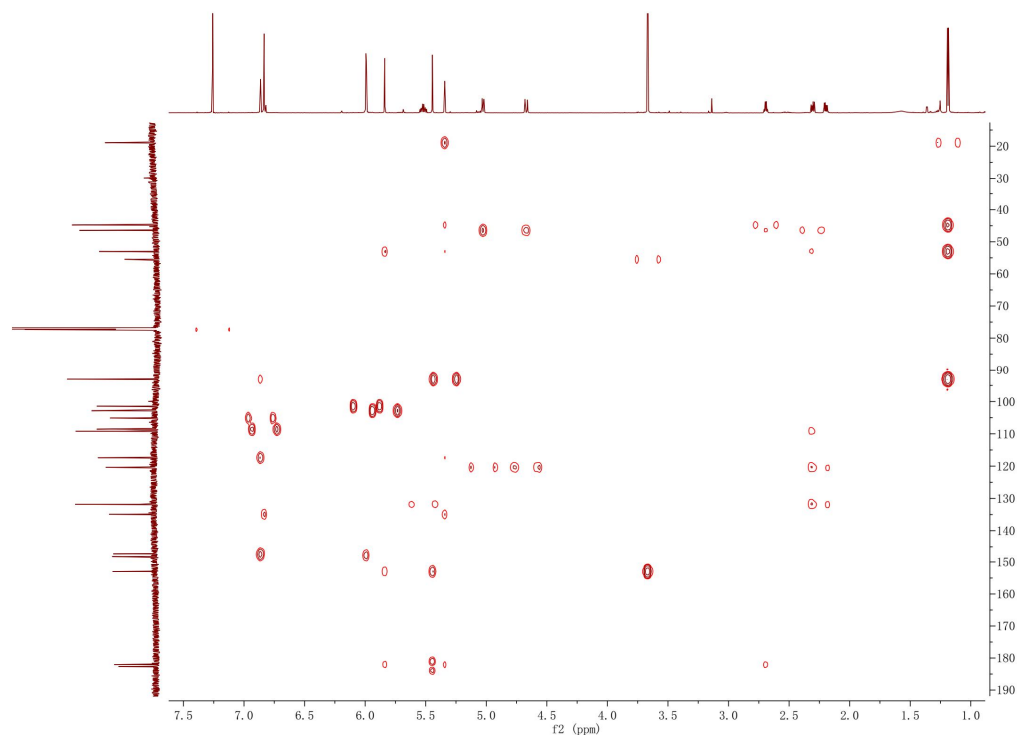
$^1\text{H}$ - $^1\text{H}$  COSY (800 MHz) spectrum of compound **1b** in  $\text{CDCl}_3$



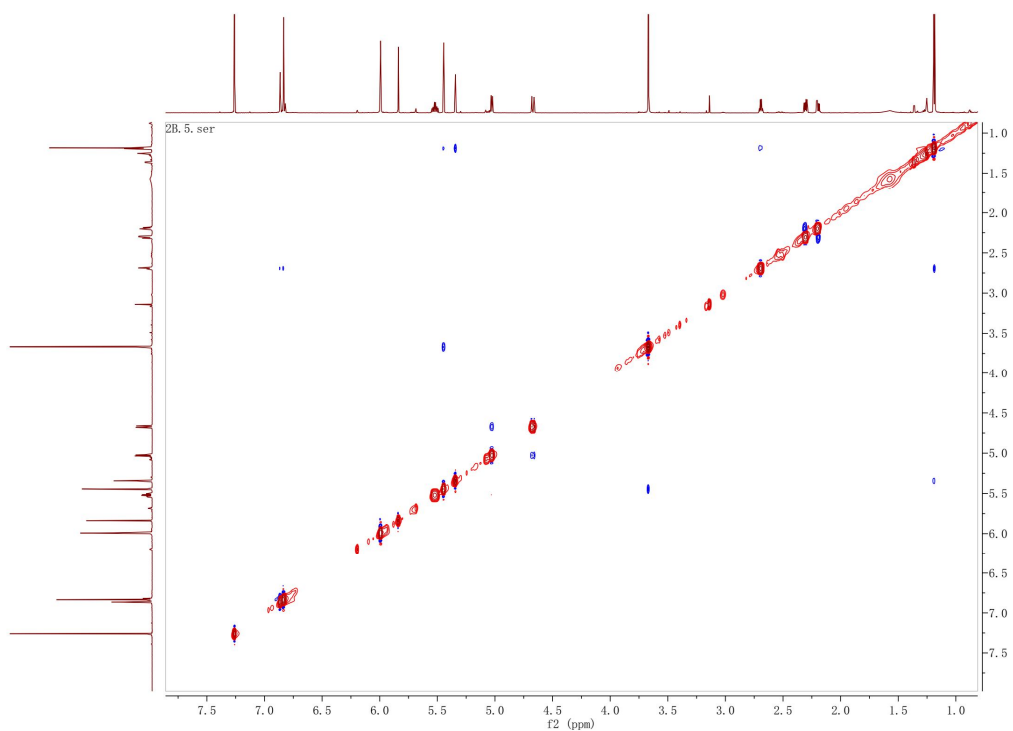
HSQC (800 MHz) spectrum of compound **1b** in  $\text{CDCl}_3$



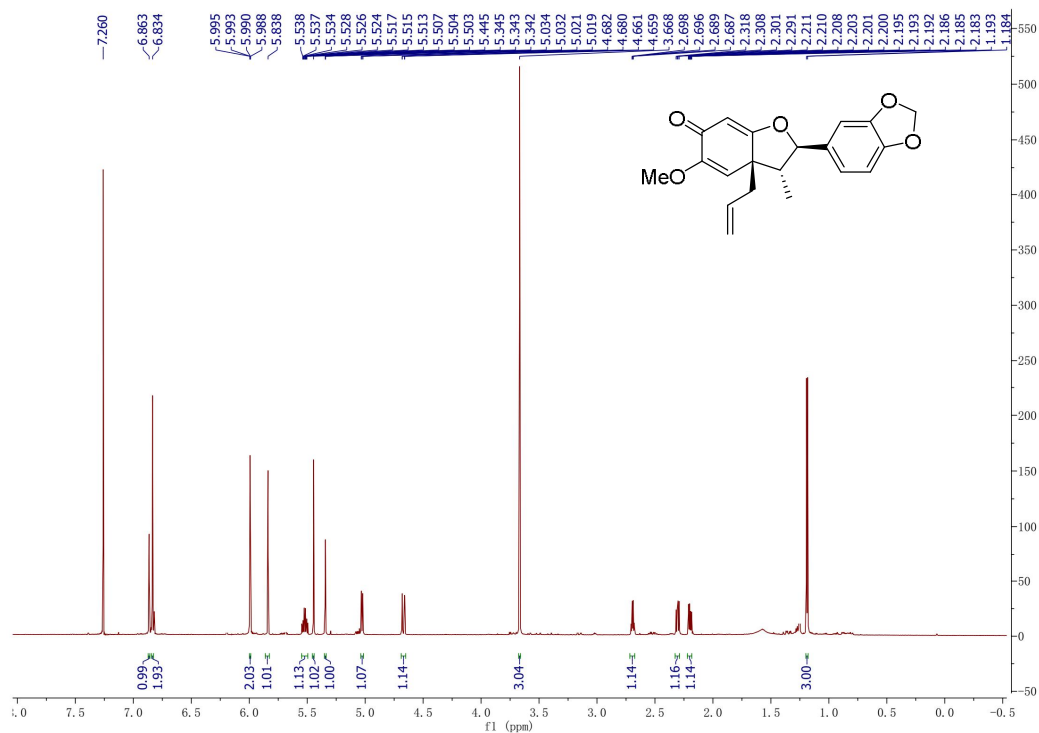
HMBC (800 MHz) spectrum of compound **1b** in CDCl<sub>3</sub>



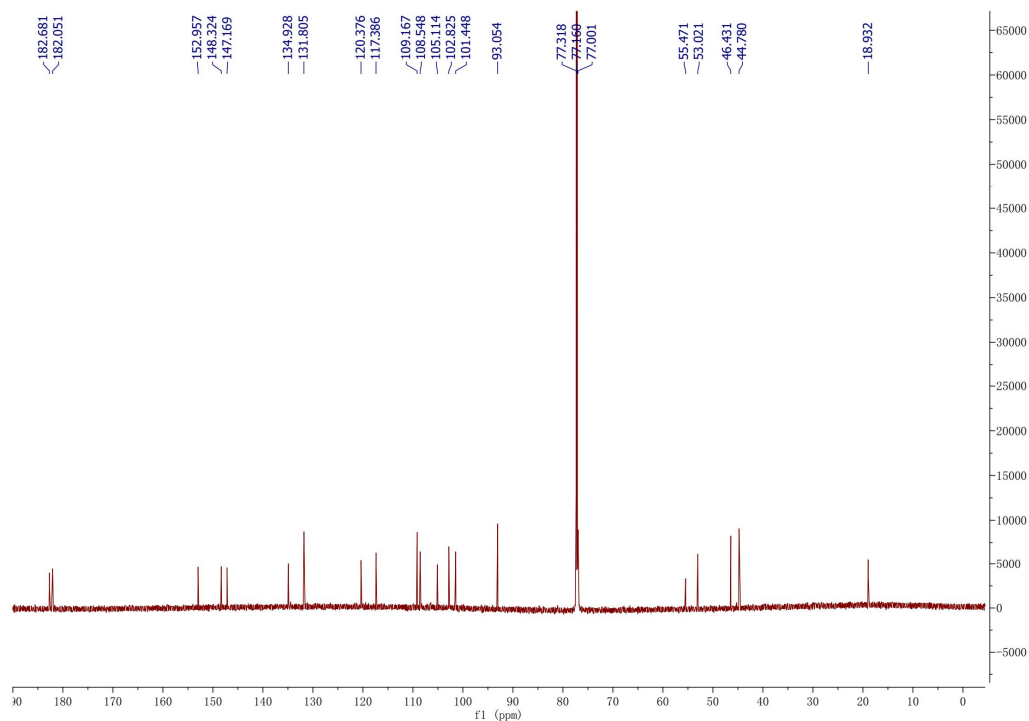
NOESY (800 MHz) spectrum of compound **1b** in CDCl<sub>3</sub>



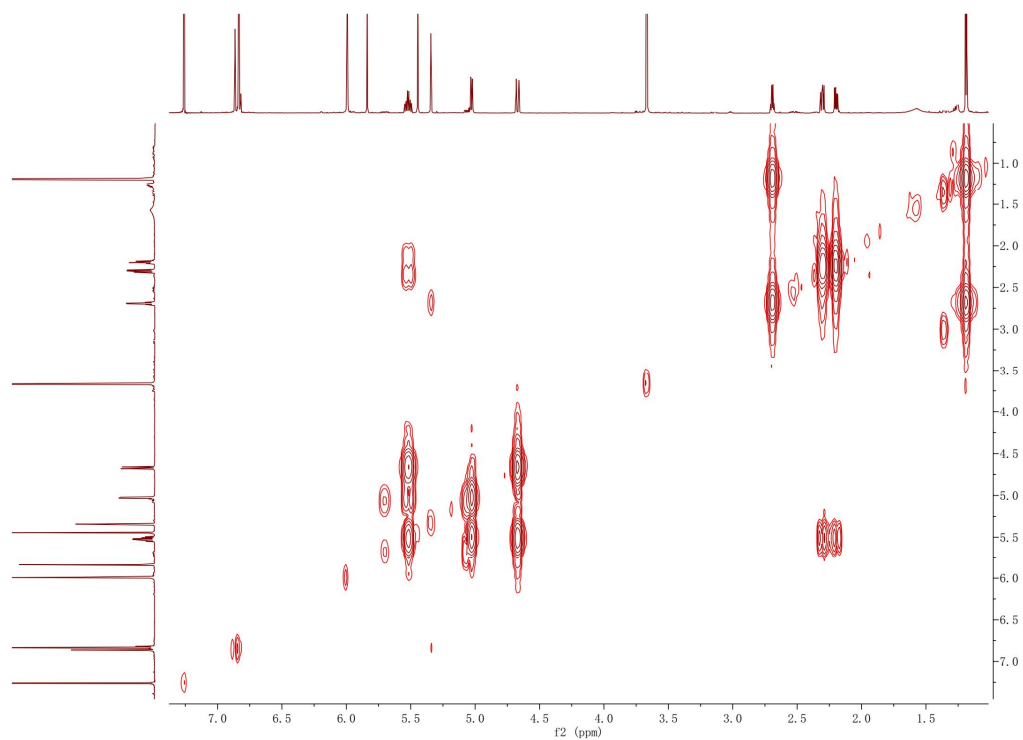
$^1\text{H}$  NMR (800 MHz) spectrum of compound **ent-1b** in  $\text{CDCl}_3$



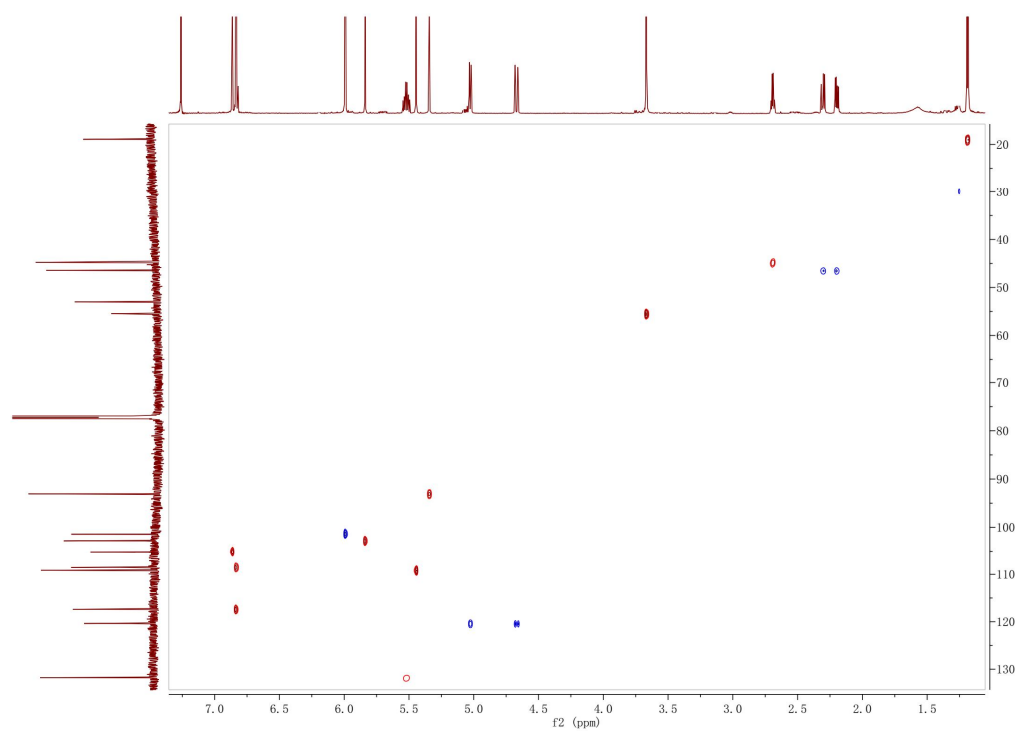
$^{13}\text{C}$  NMR (200 MHz) spectrum of compound **ent-1b** in  $\text{CDCl}_3$



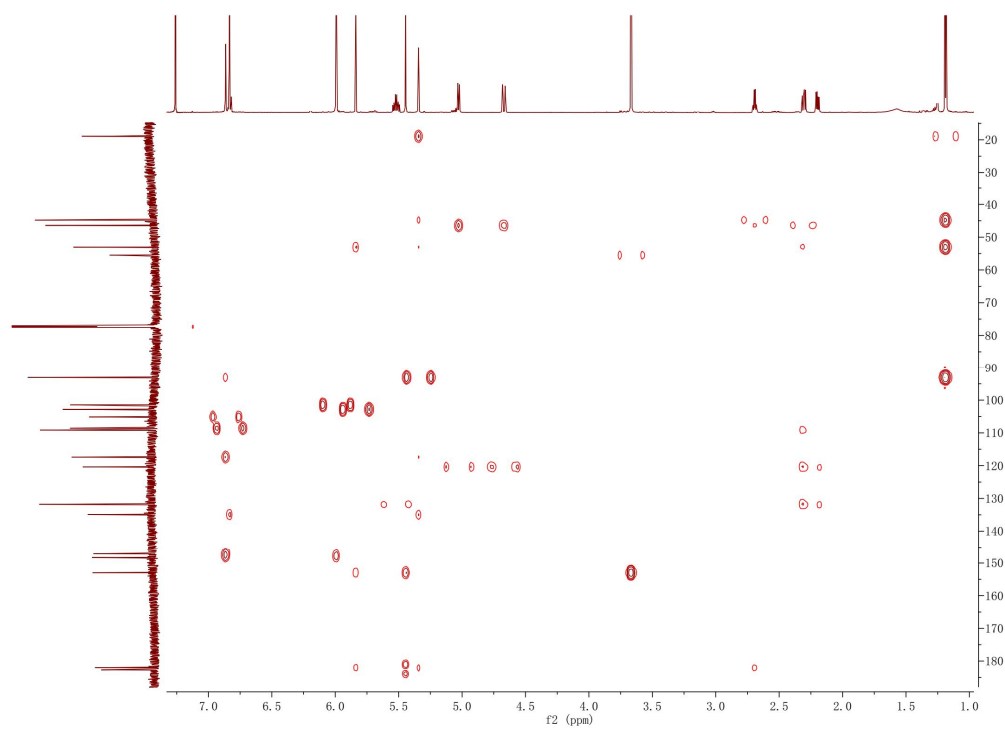
$^1\text{H}$ - $^1\text{H}$  COSY (800 MHz) spectrum of compound **ent-1b** in  $\text{CDCl}_3$



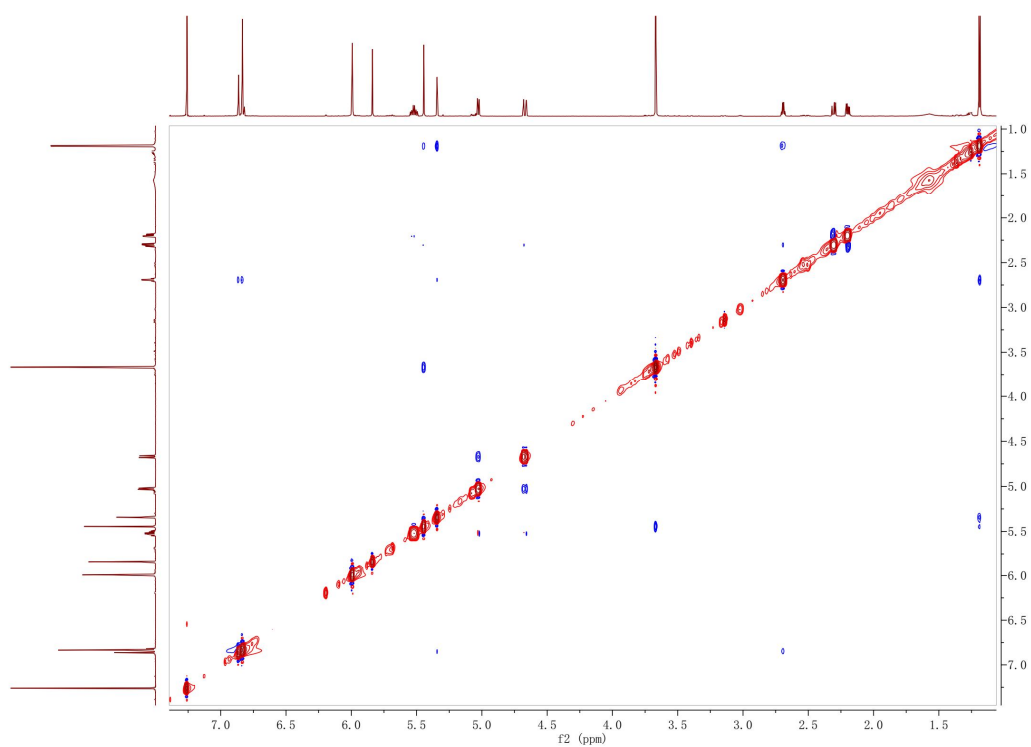
HSQC (800 MHz) spectrum of compound **ent-1b** in  $\text{CDCl}_3$



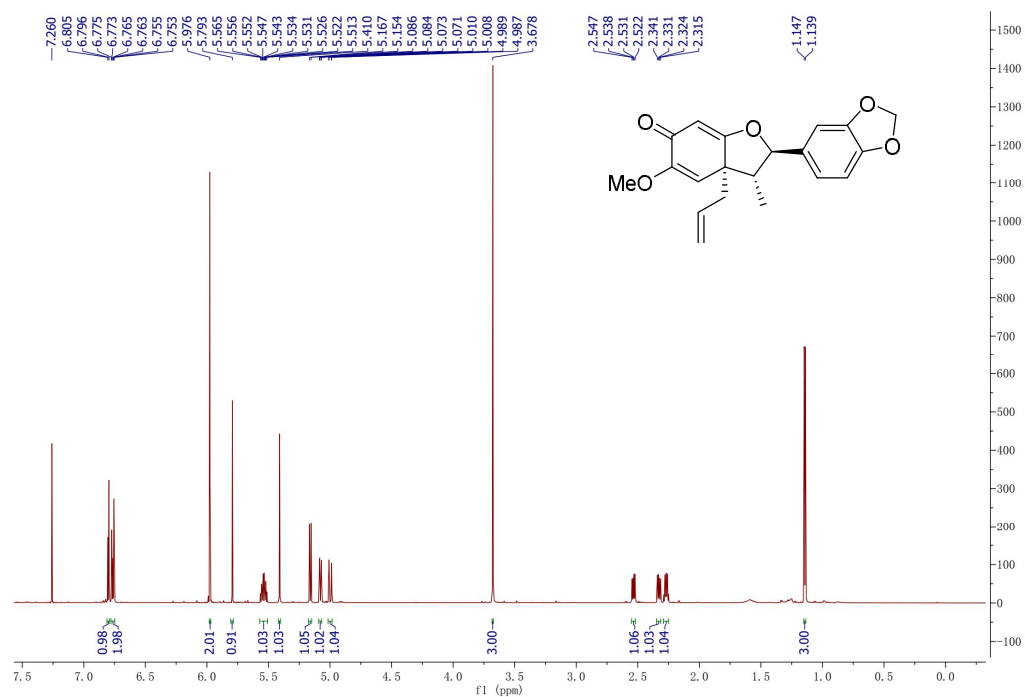
HMBC (800 MHz) spectrum of compound **ent-1b** in CDCl<sub>3</sub>



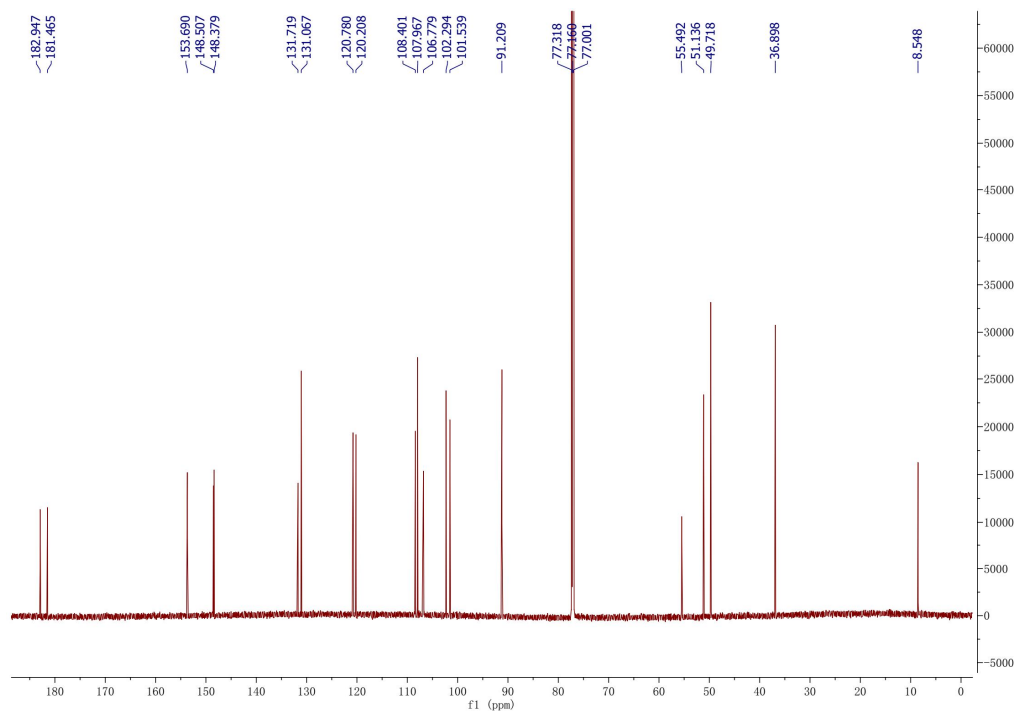
NOESY (800 MHz) spectrum of compound **ent-1b** in CDCl<sub>3</sub>



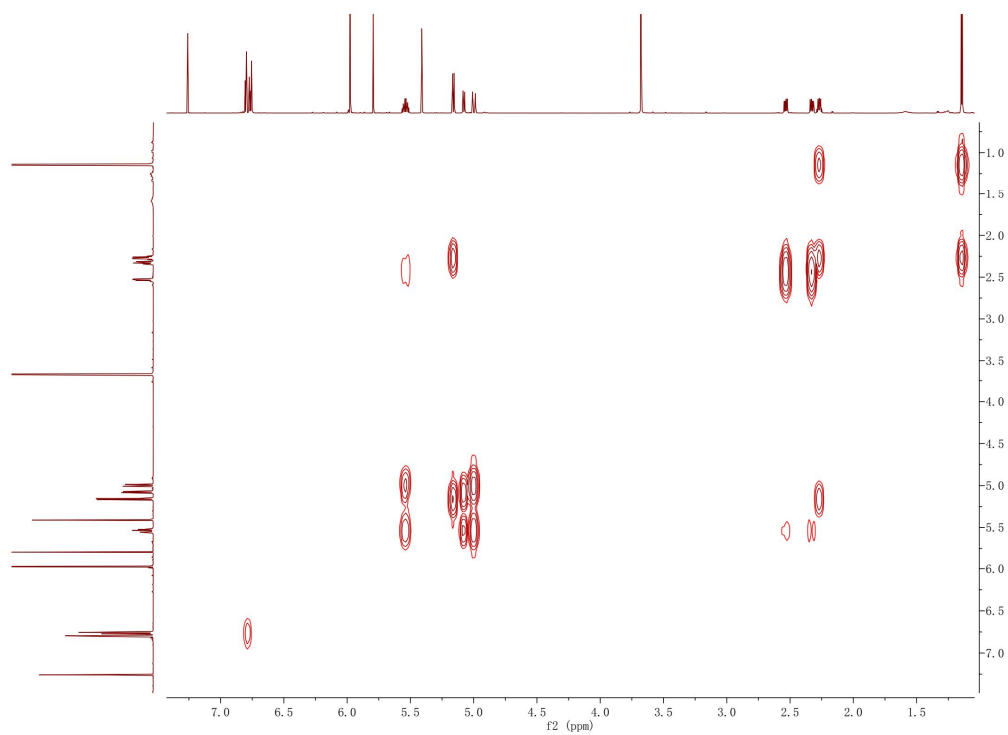
$^1\text{H}$  NMR (800 MHz) spectrum of compound **ent-1a** in  $\text{CDCl}_3$



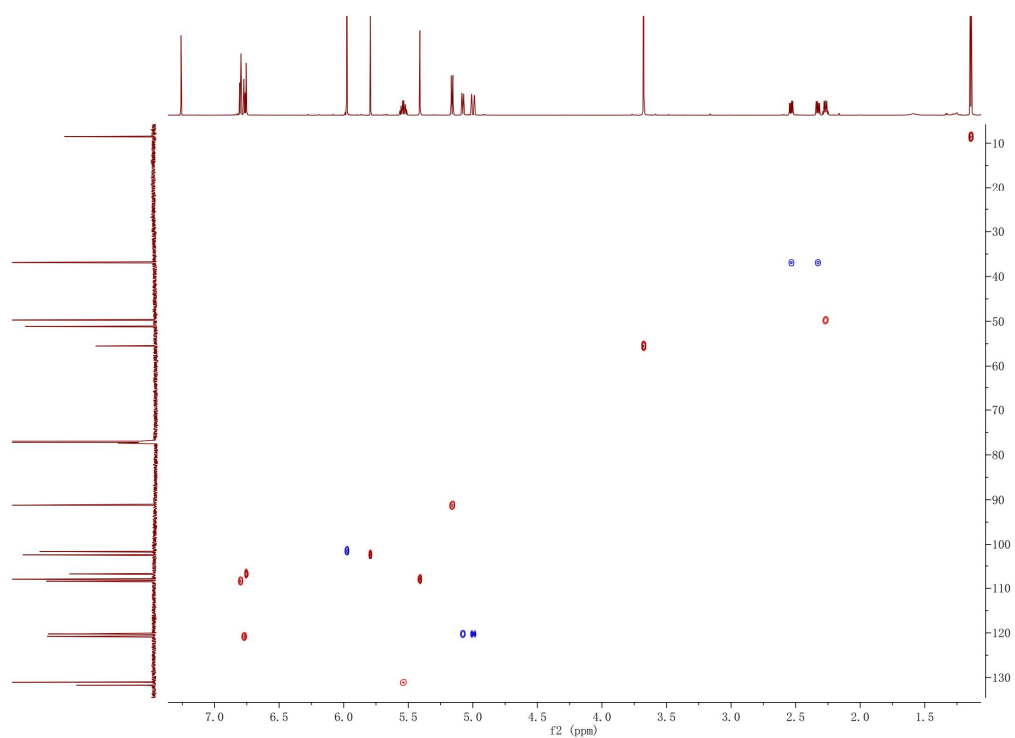
$^{13}\text{C}$  NMR (200 MHz) spectrum of compound **ent-1a** in  $\text{CDCl}_3$



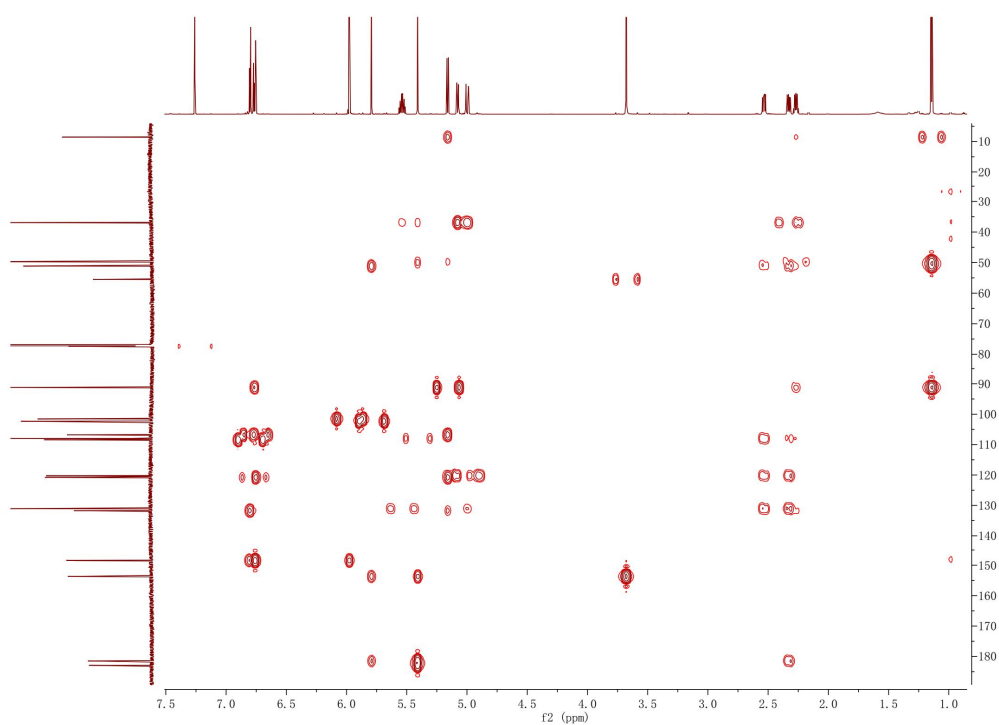
$^1\text{H}$ - $^1\text{H}$  COSY (800 MHz) spectrum of compound **ent-1a** in  $\text{CDCl}_3$



HSQC (800 MHz) spectrum of compound **ent-1a** in  $\text{CDCl}_3$



HMBC (800 MHz) spectrum of compound **ent-1a** in CDCl<sub>3</sub>



NOESY (800 MHz) spectrum of compound **ent-1a** in CDCl<sub>3</sub>

