

# Supporting Information

## Zinc-Mediated $\alpha$ -Regioselective Barbier-Type Cinnamylation

### Reaction of Aldehydes, Ketones and Esters

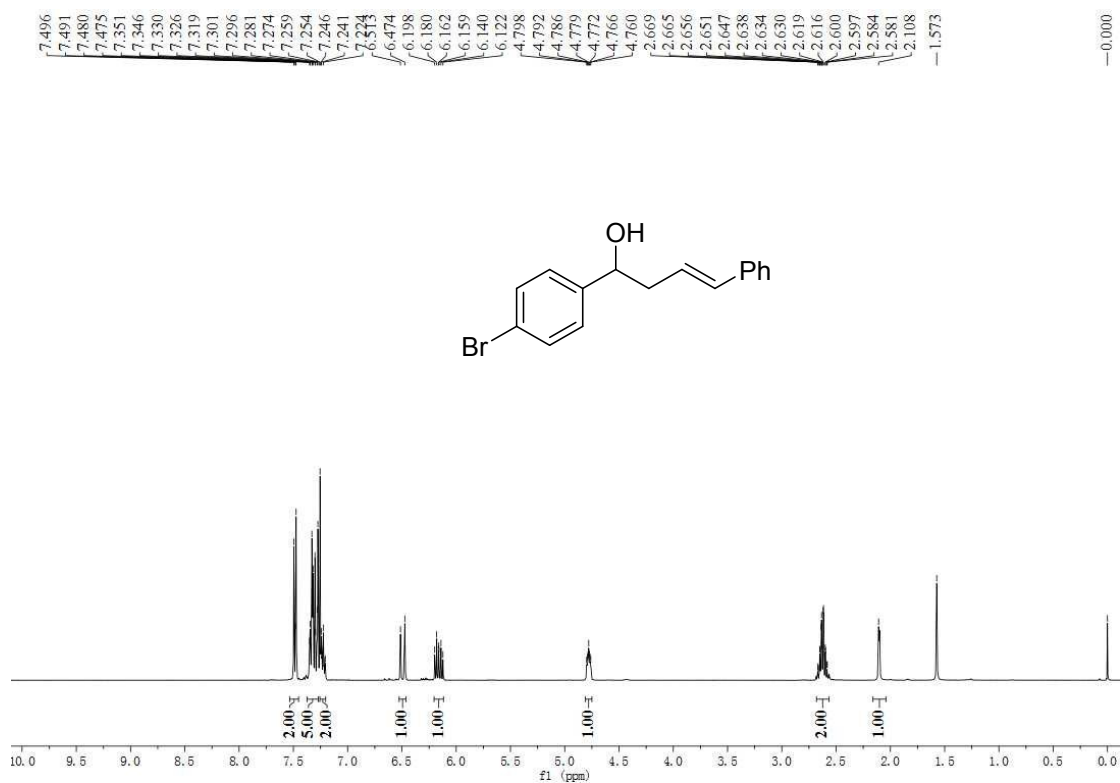
Li-Ming Zhao,\* Hua-Shuai Gao, De-Feng Li, Jing Dong, Lan-Lin Sang, and Jie Ji

*School of Chemistry and Chemical Engineering, and Jiangsu Key Laboratory of Green Synthetic Chemistry for Functional Materials, Jiangsu Normal University, Xuzhou 221116, Jiangsu, China*

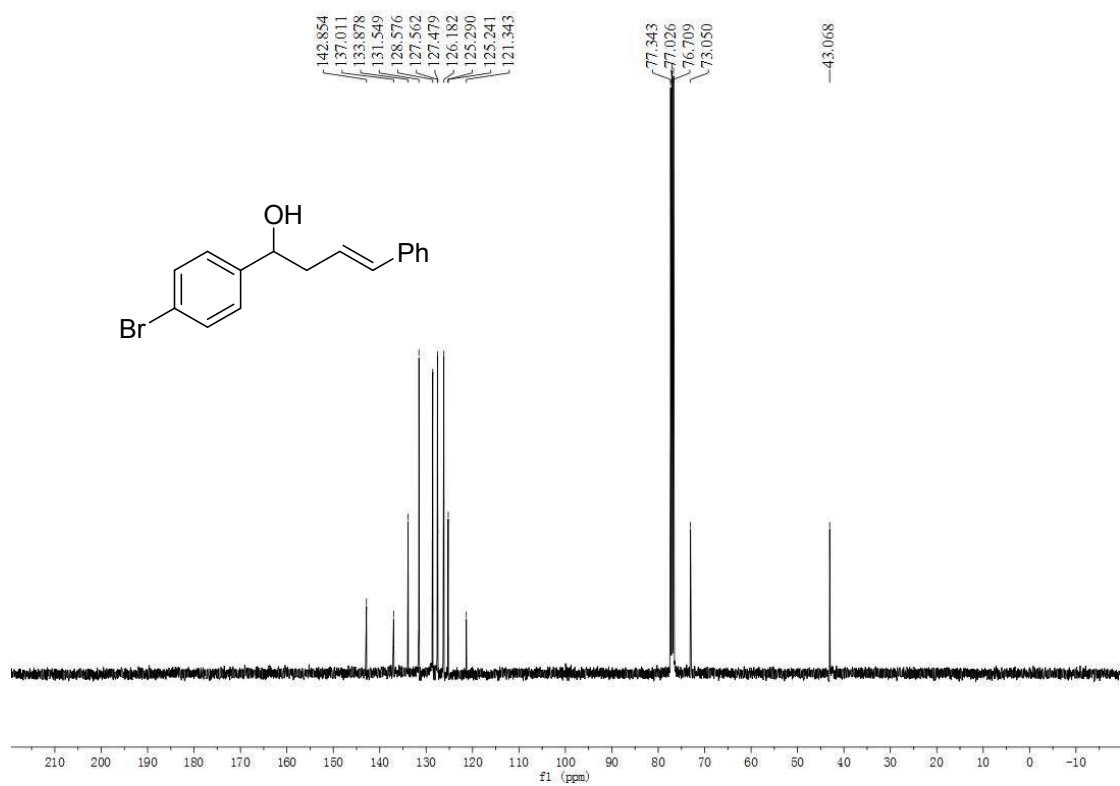
[lmzhao@jsnu.edu.cn](mailto:lmzhao@jsnu.edu.cn)

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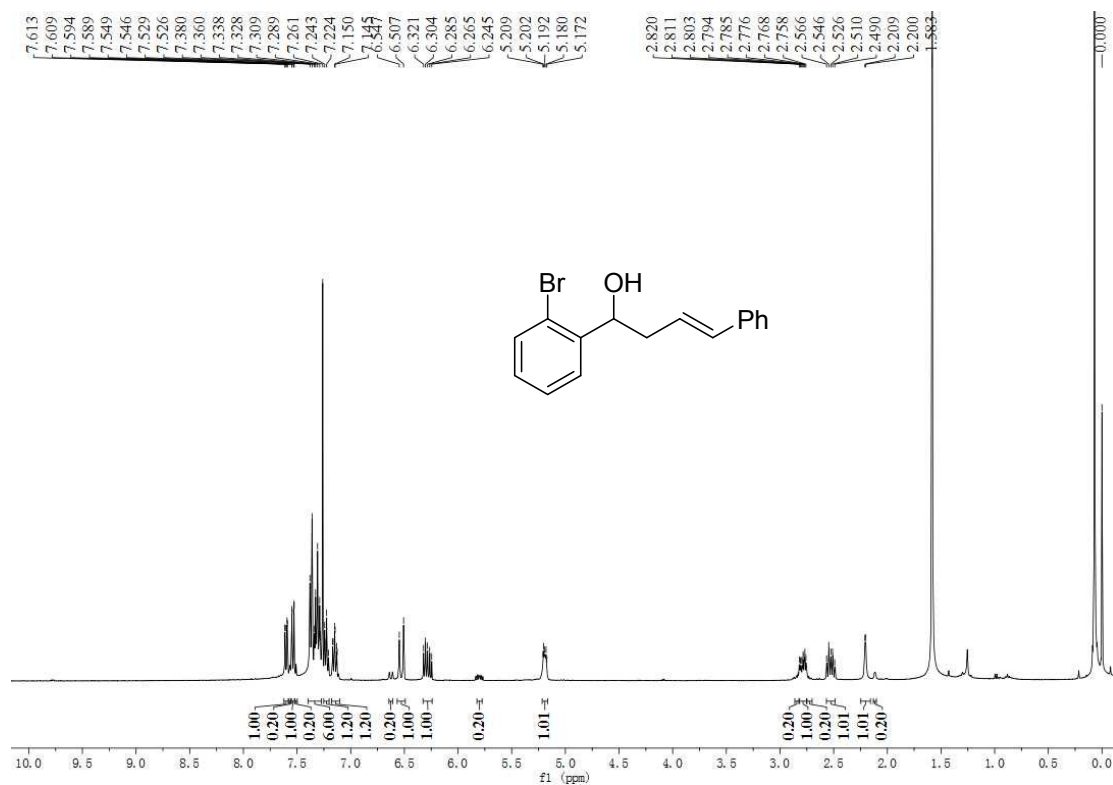
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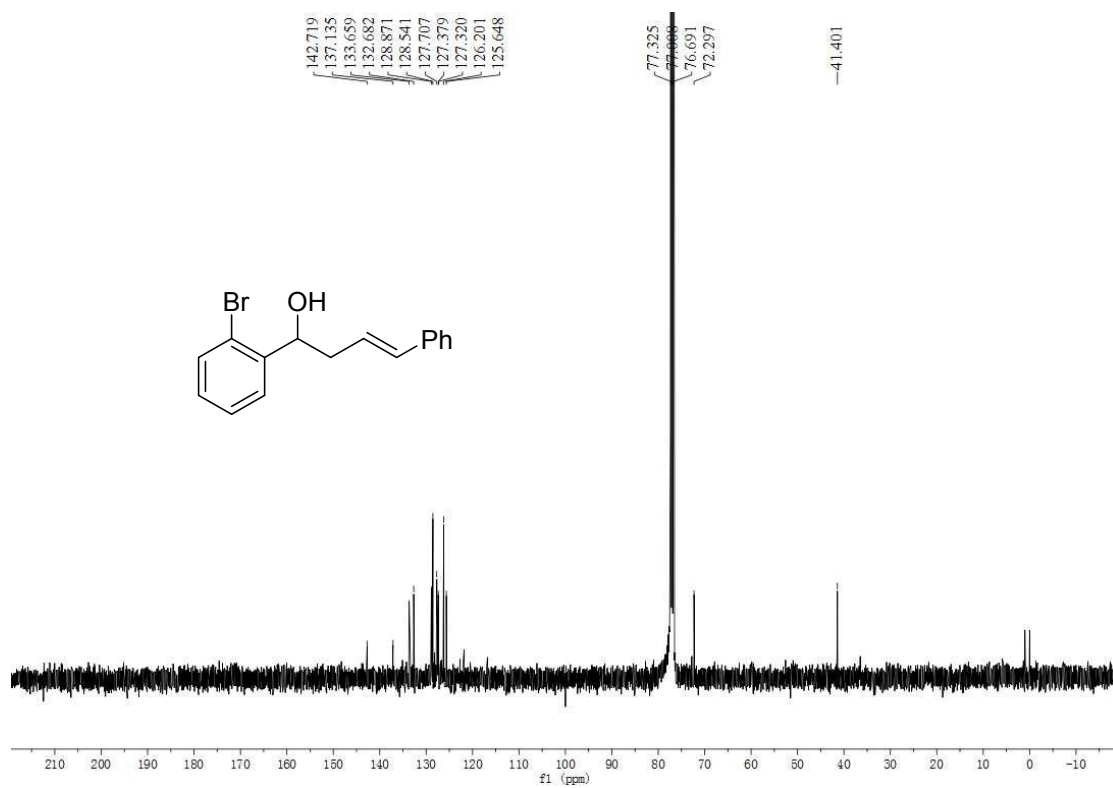
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2a**



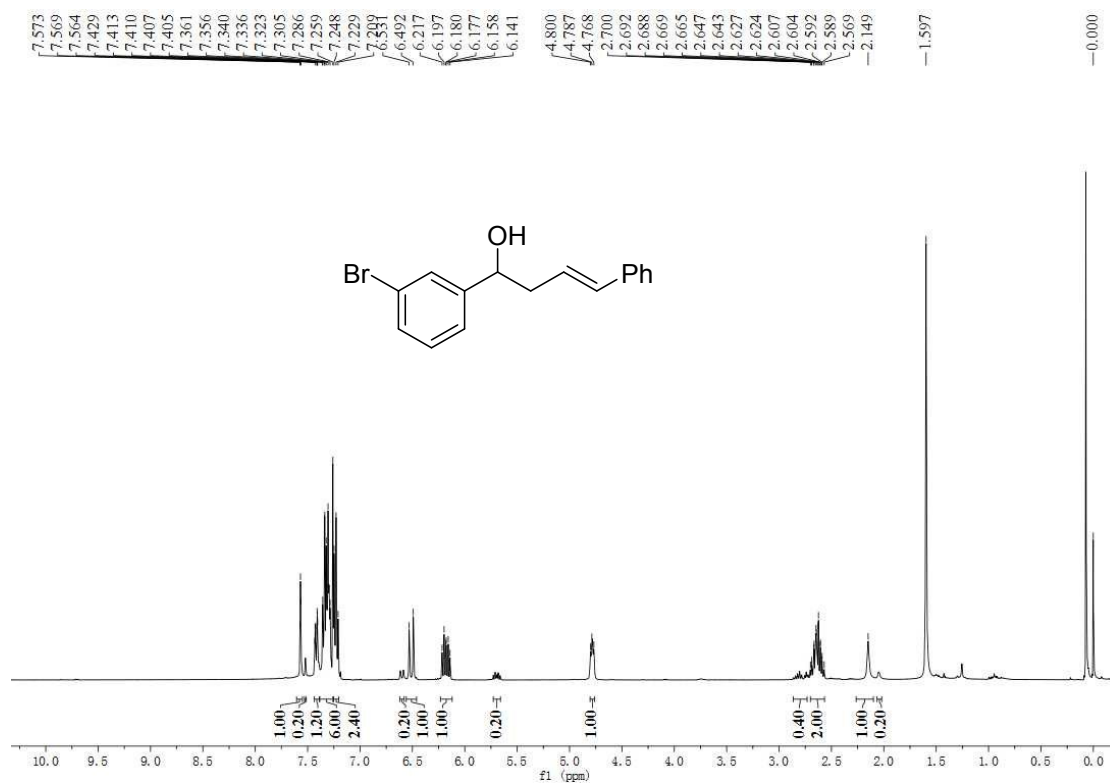
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2a**



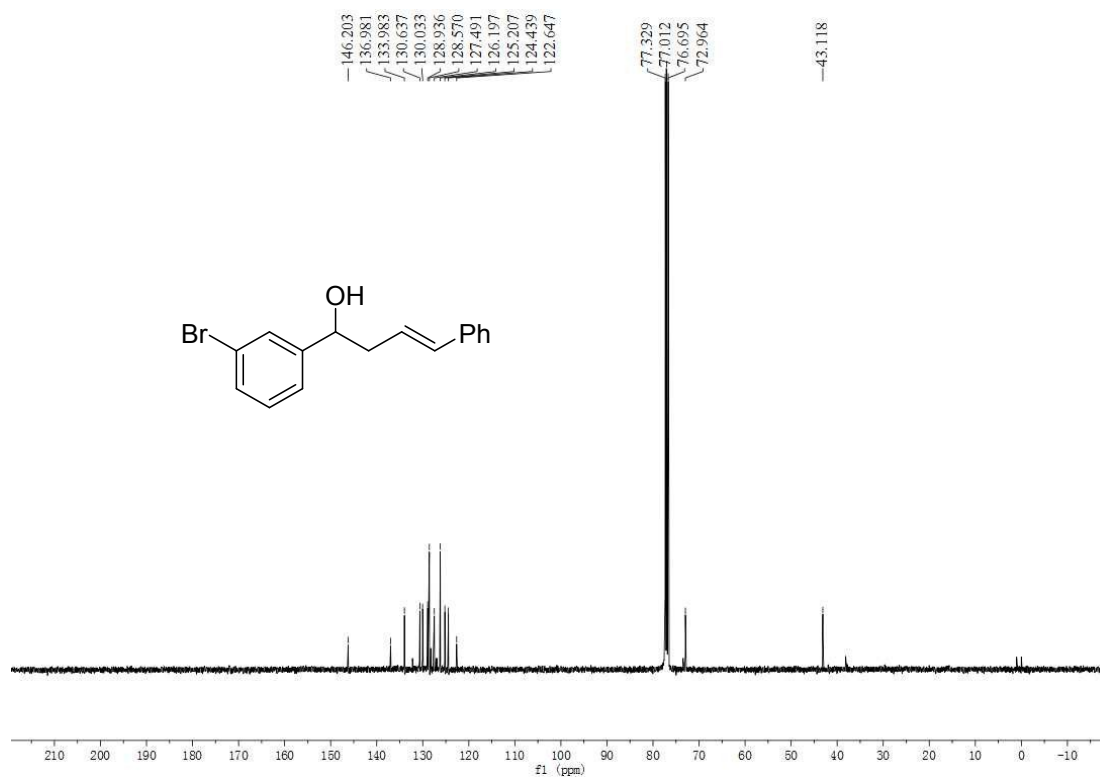
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2b



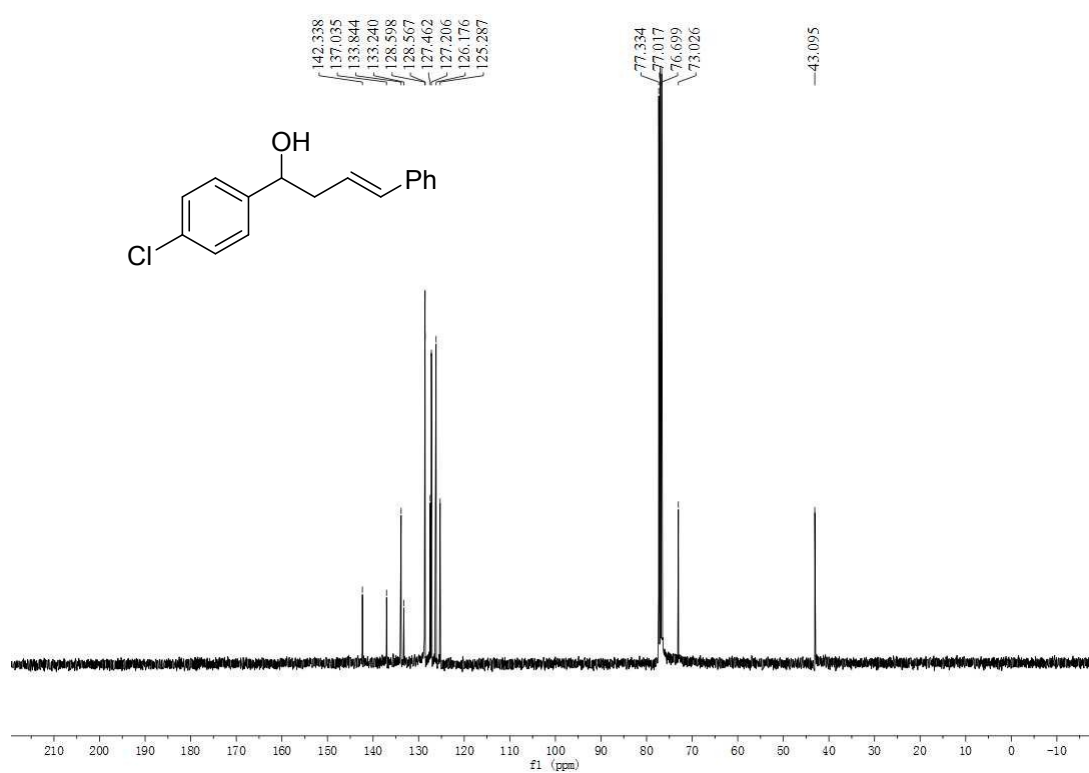
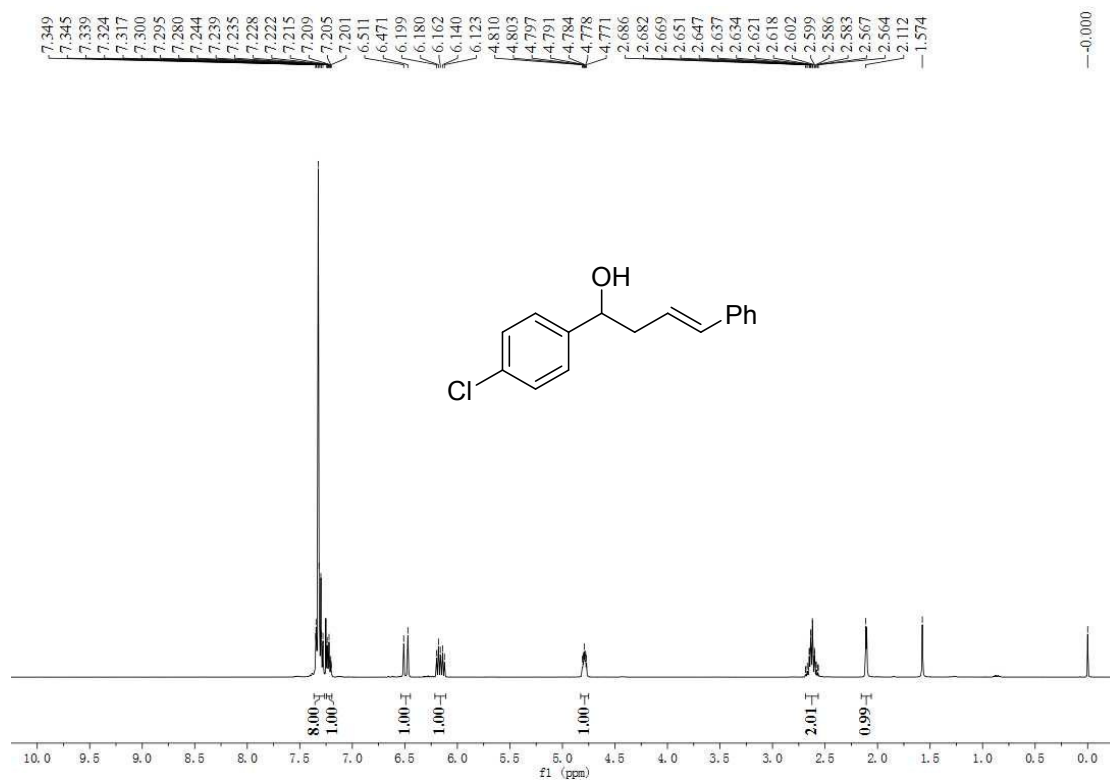
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2b

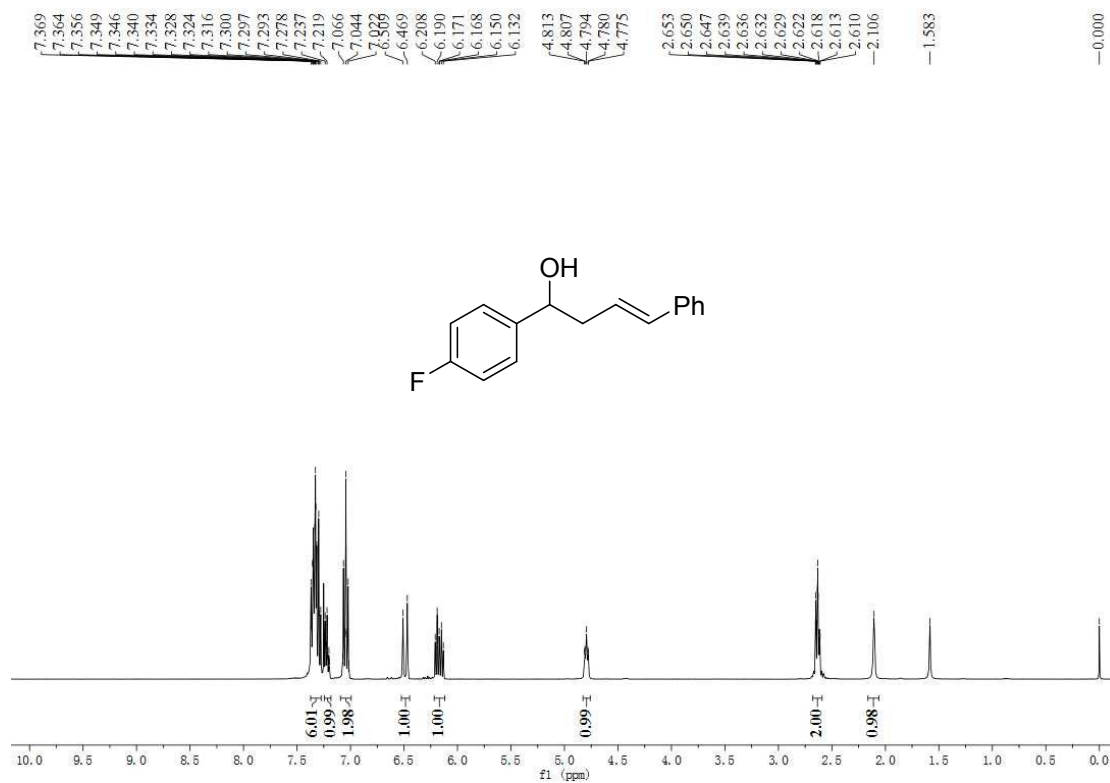


<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2c

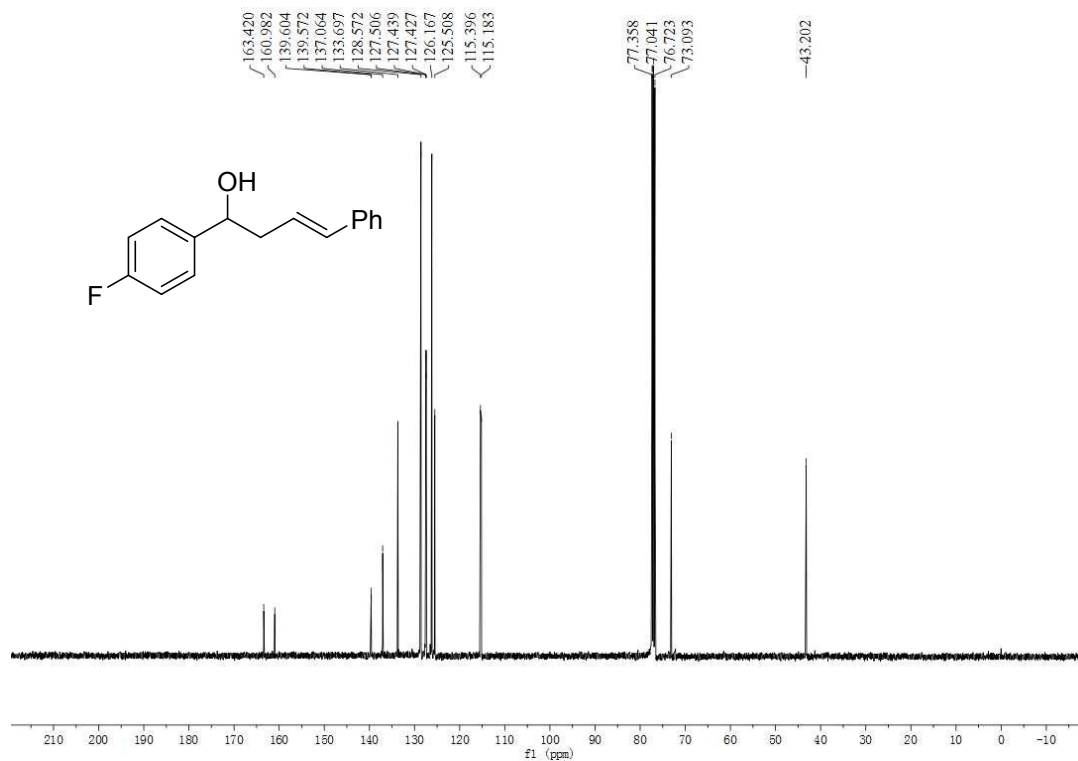


<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2c

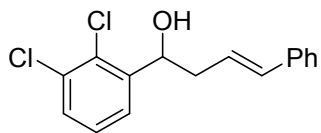
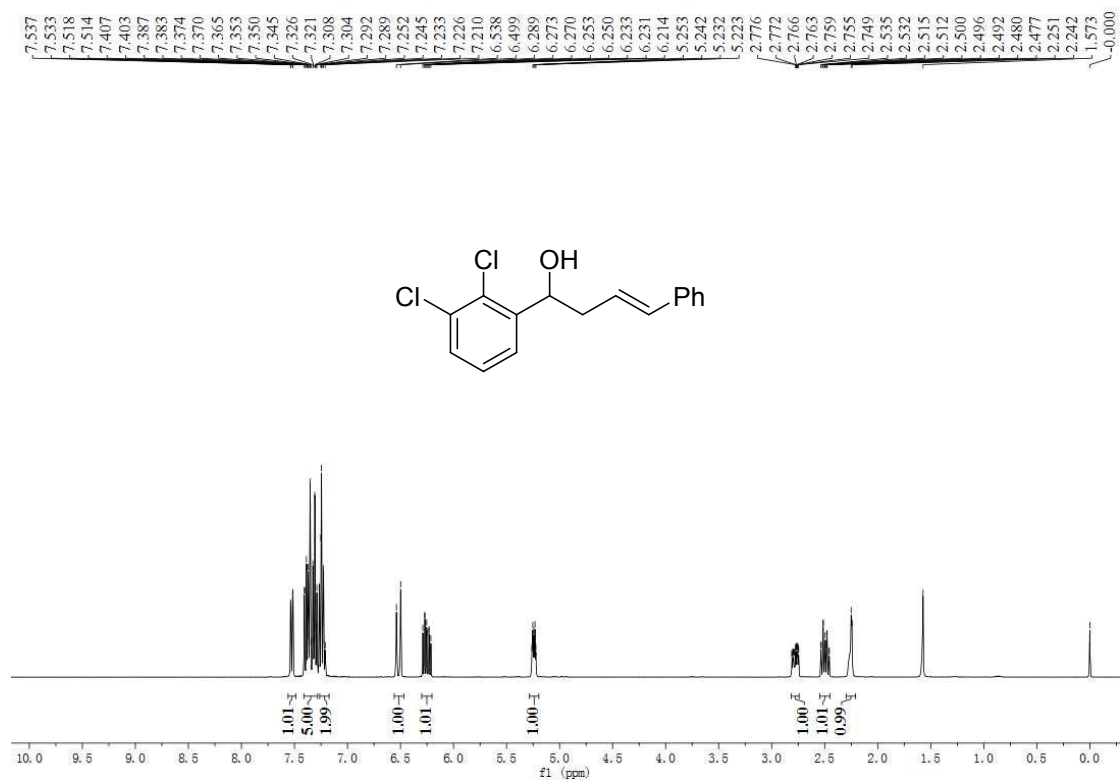




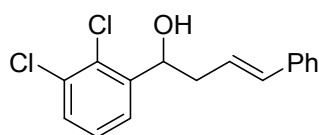
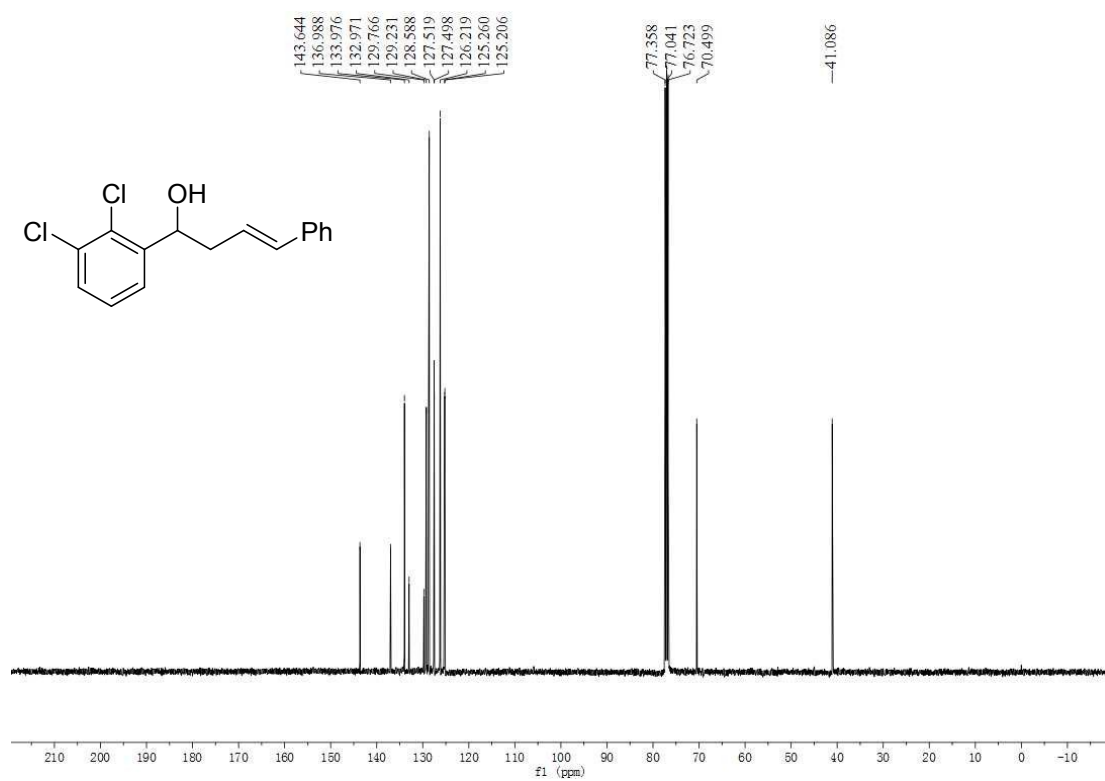
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2e**



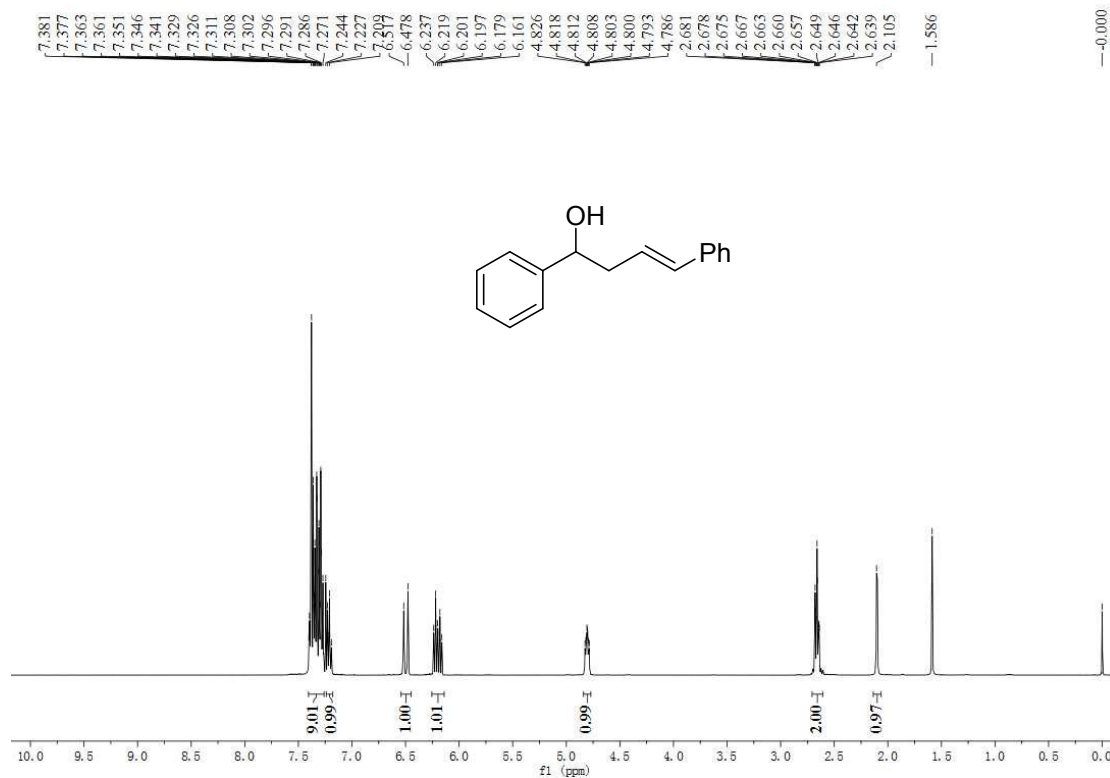
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2e**



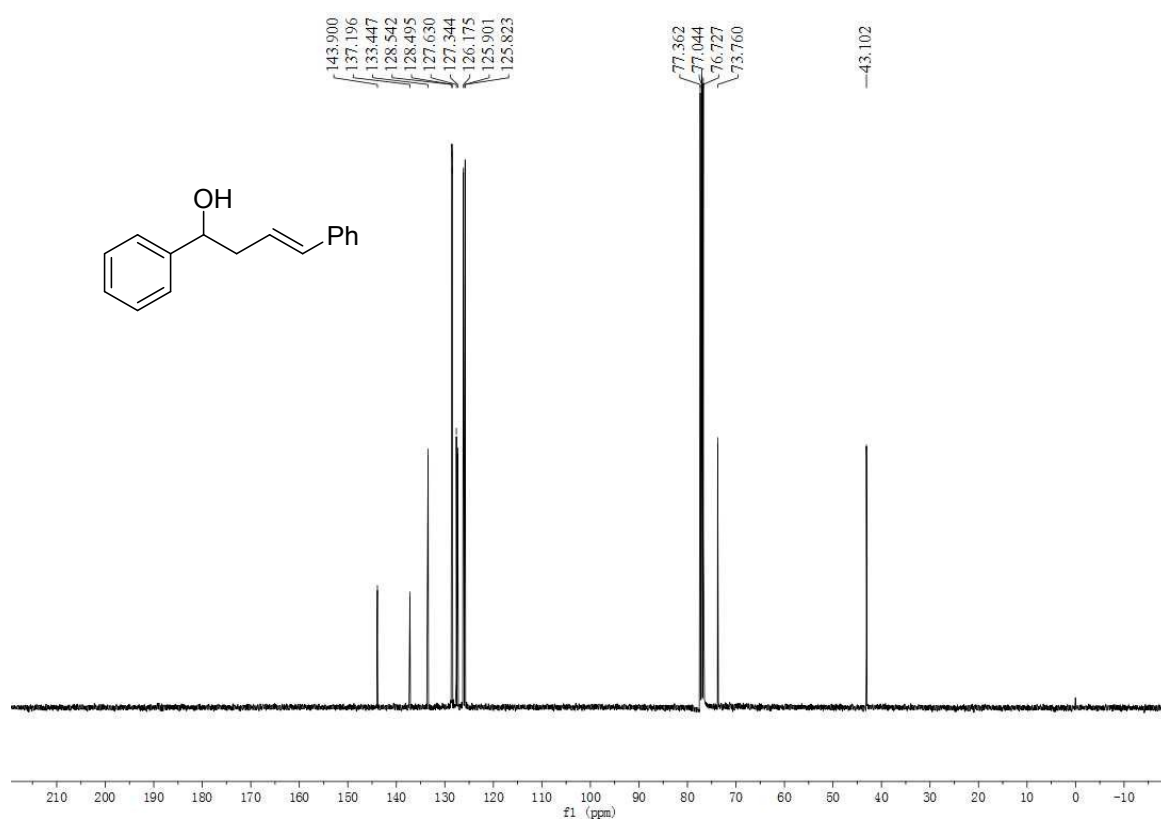
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2f



<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2f

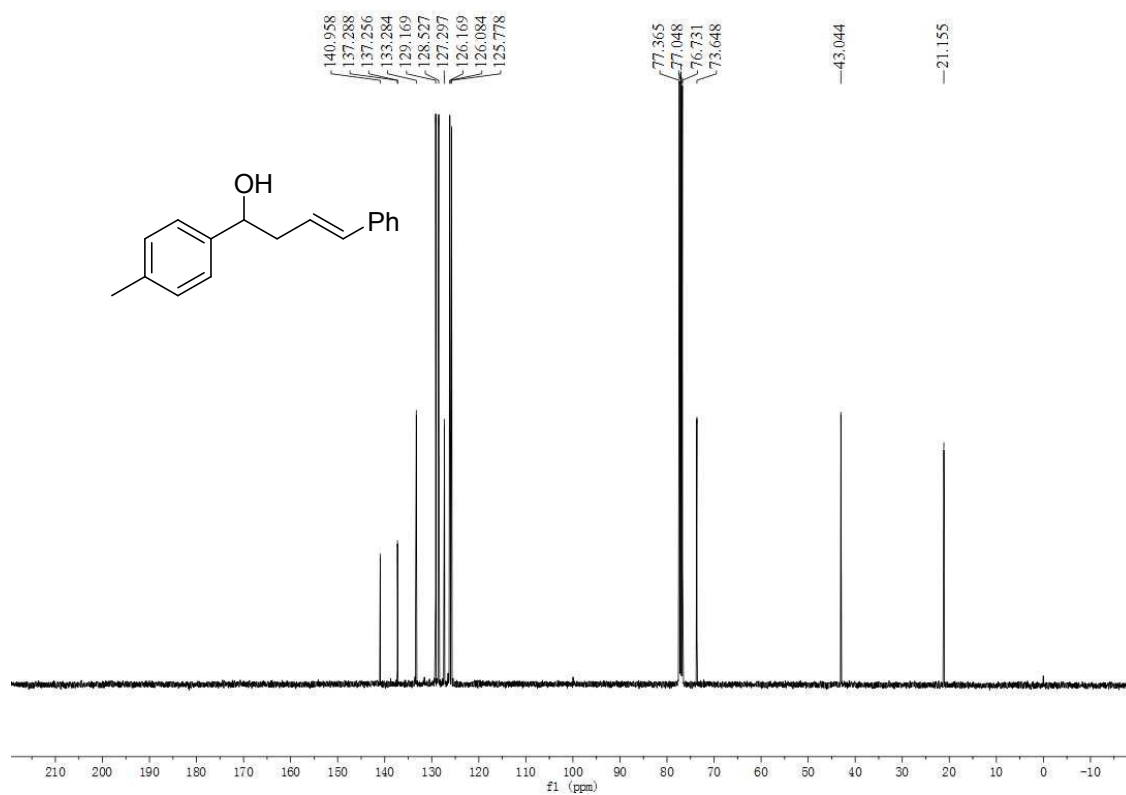
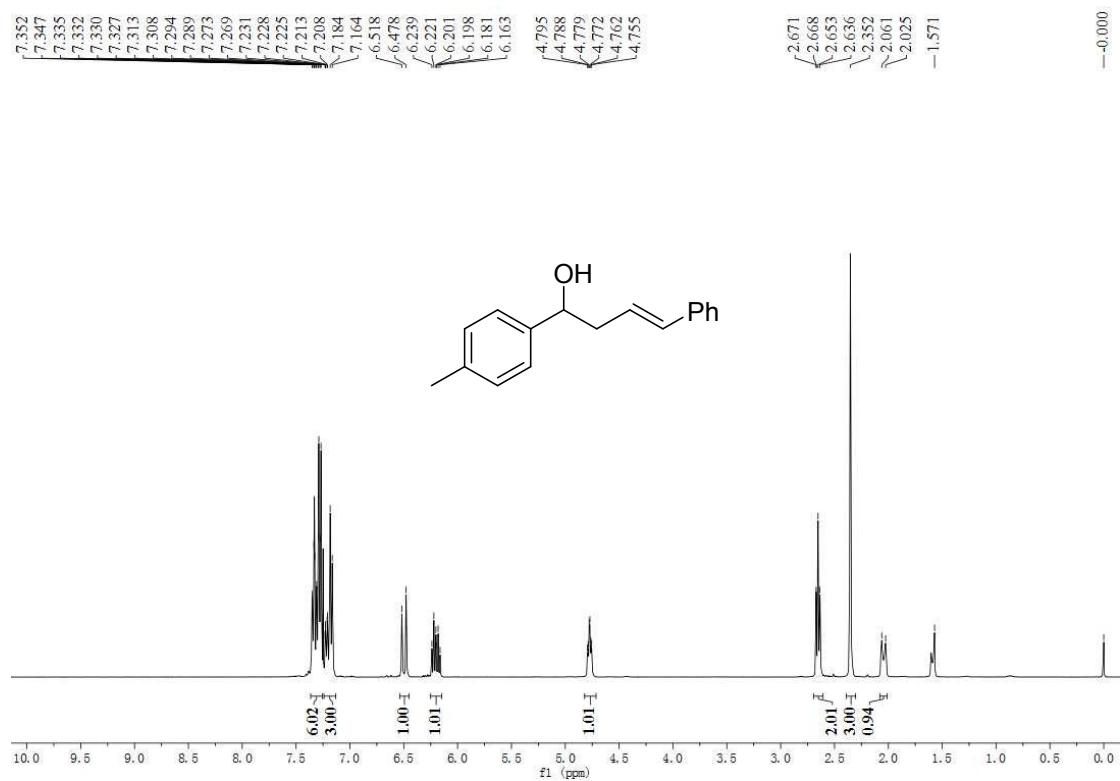


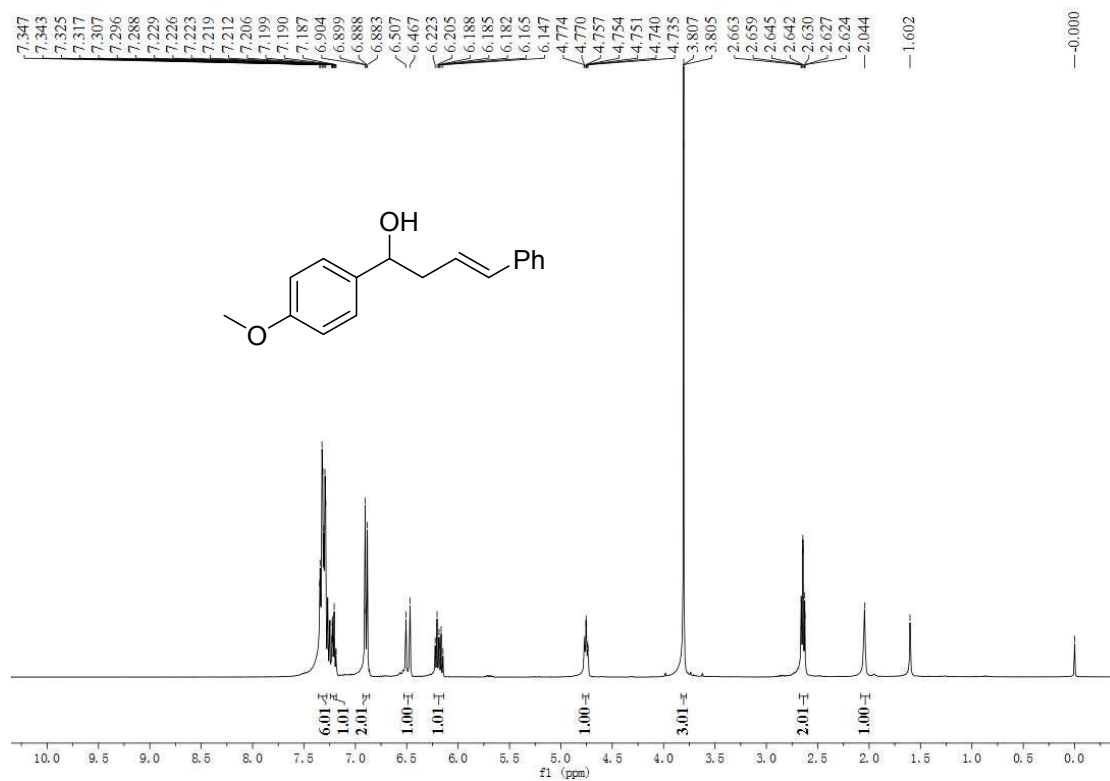
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **2g****



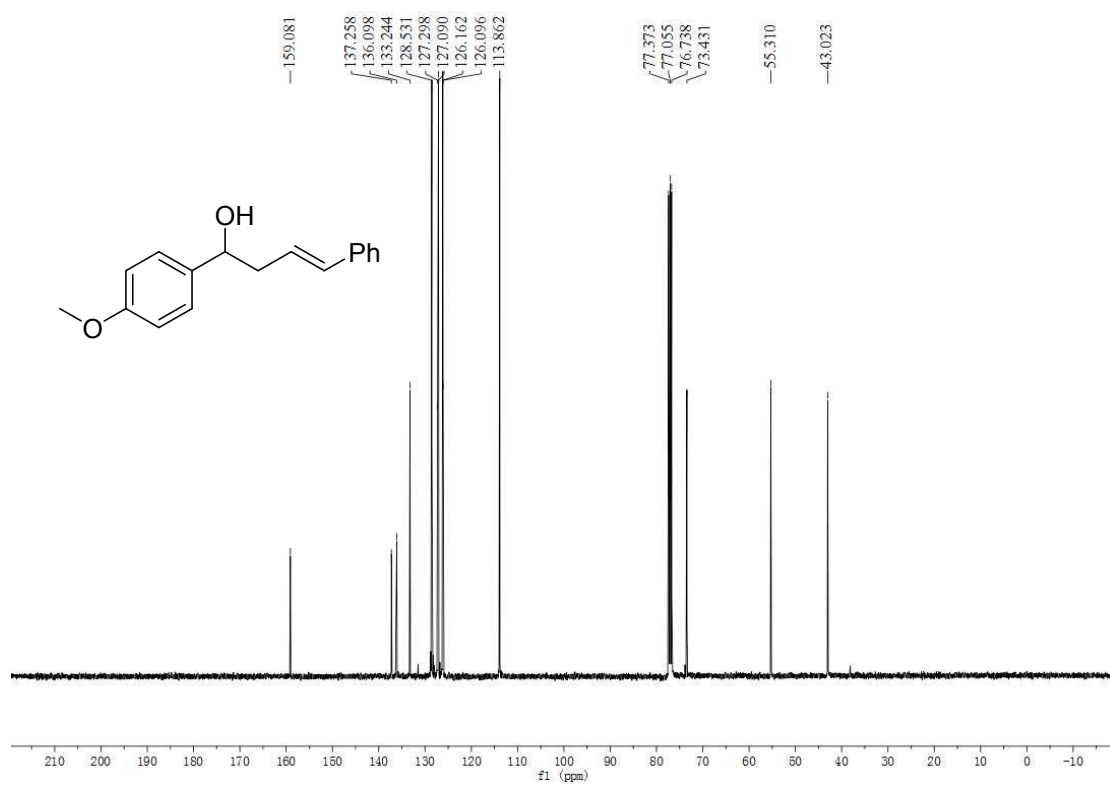
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **2g****



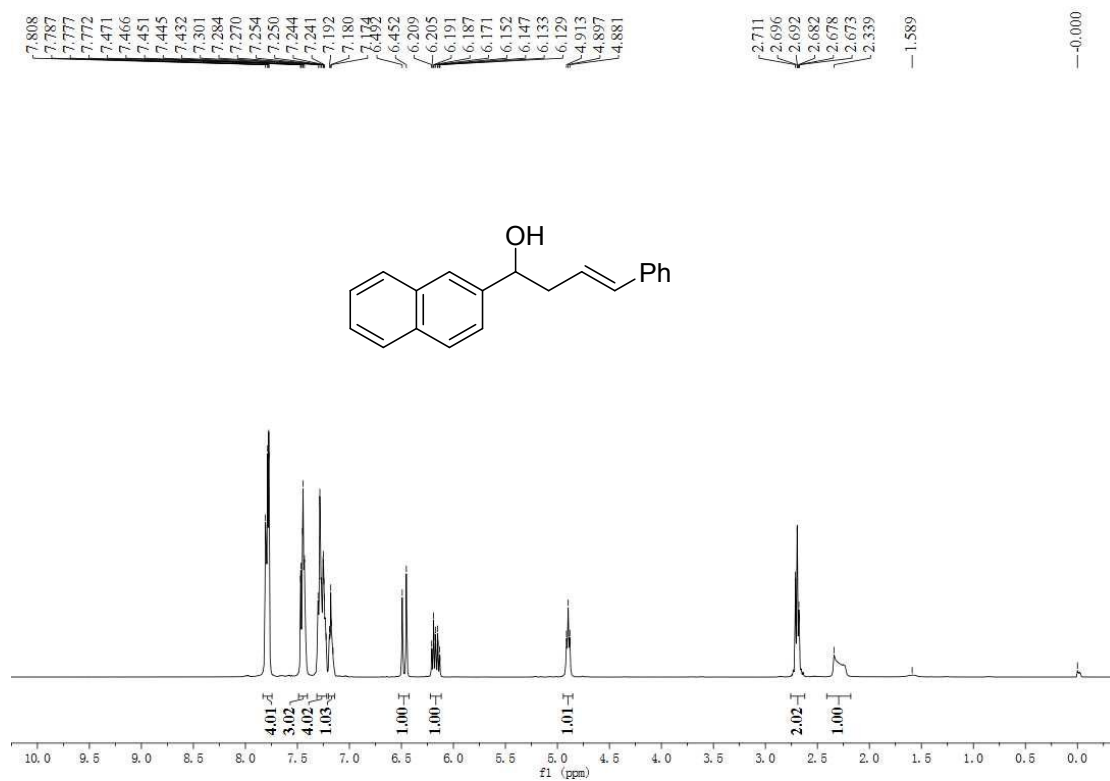




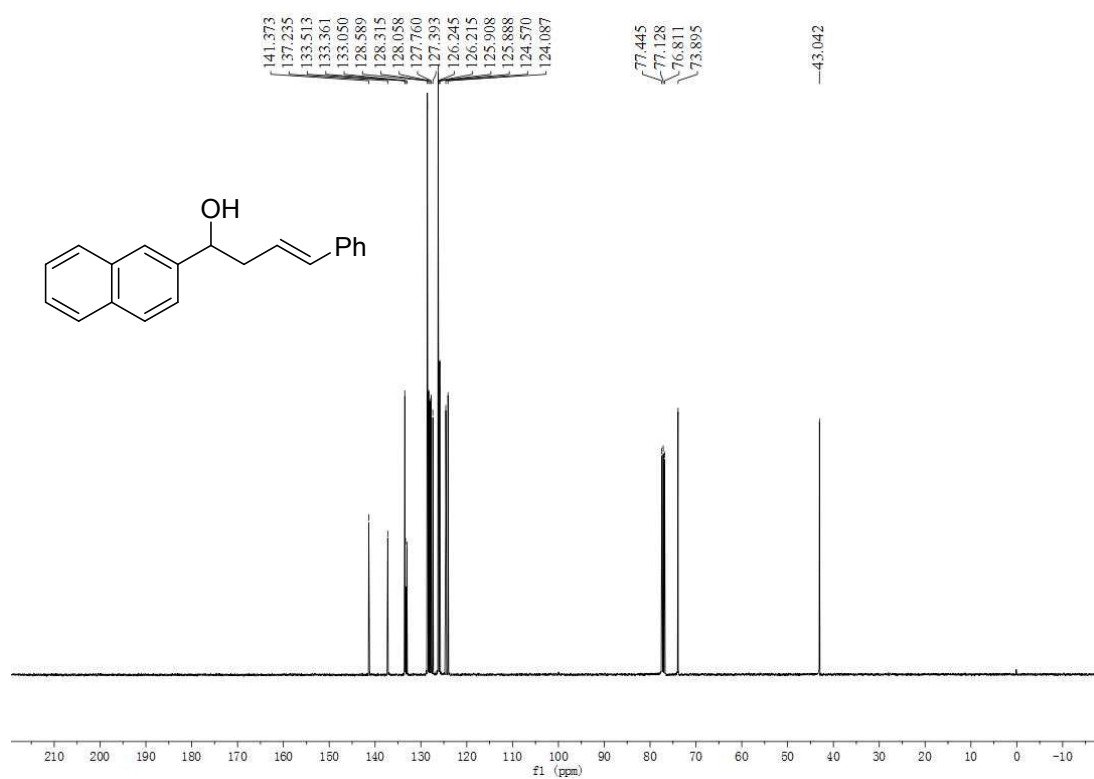
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2i



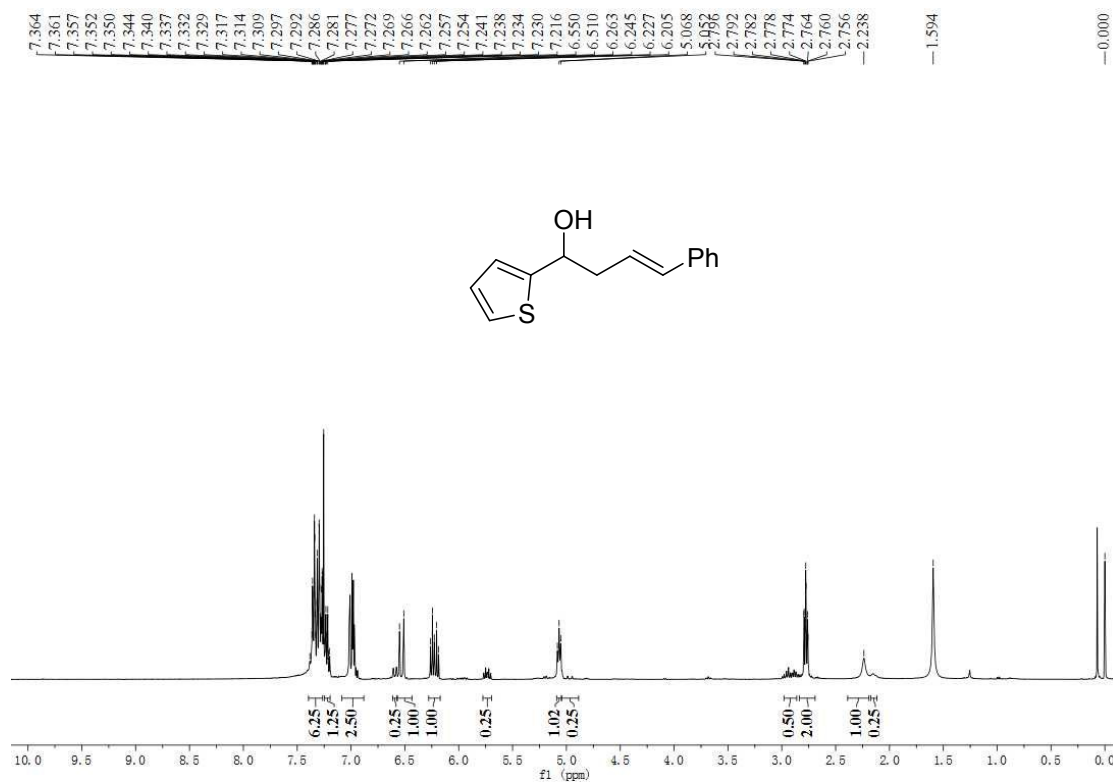
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2i



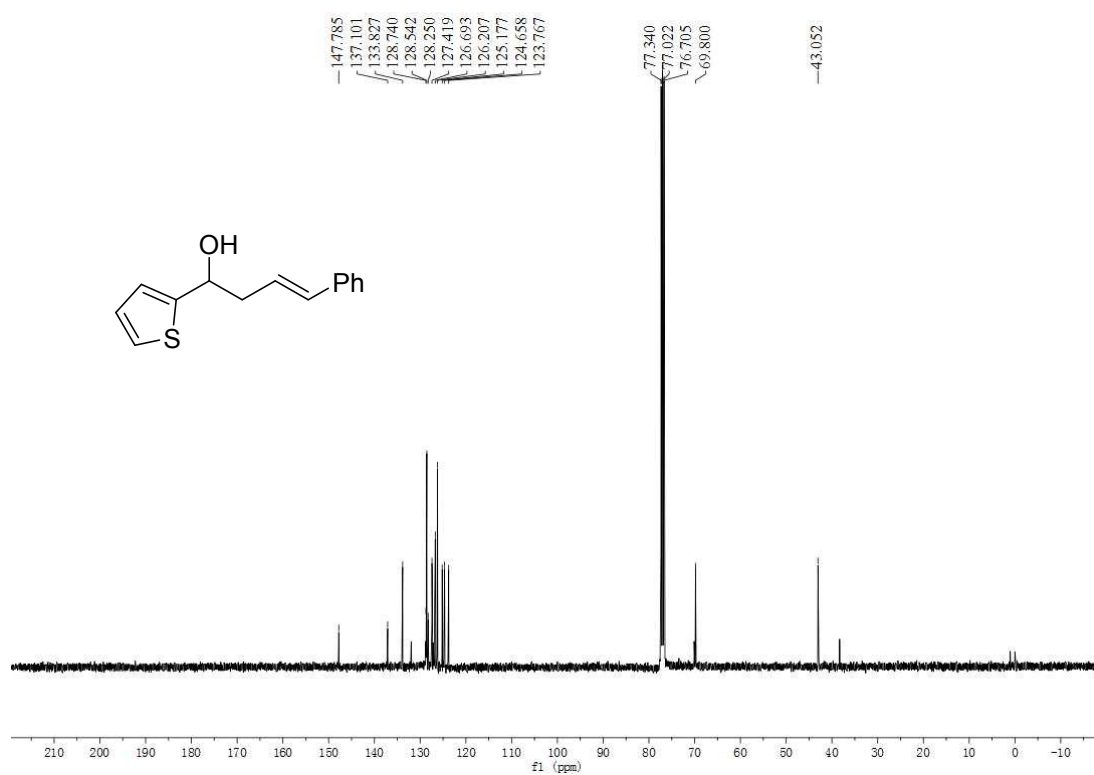
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2j



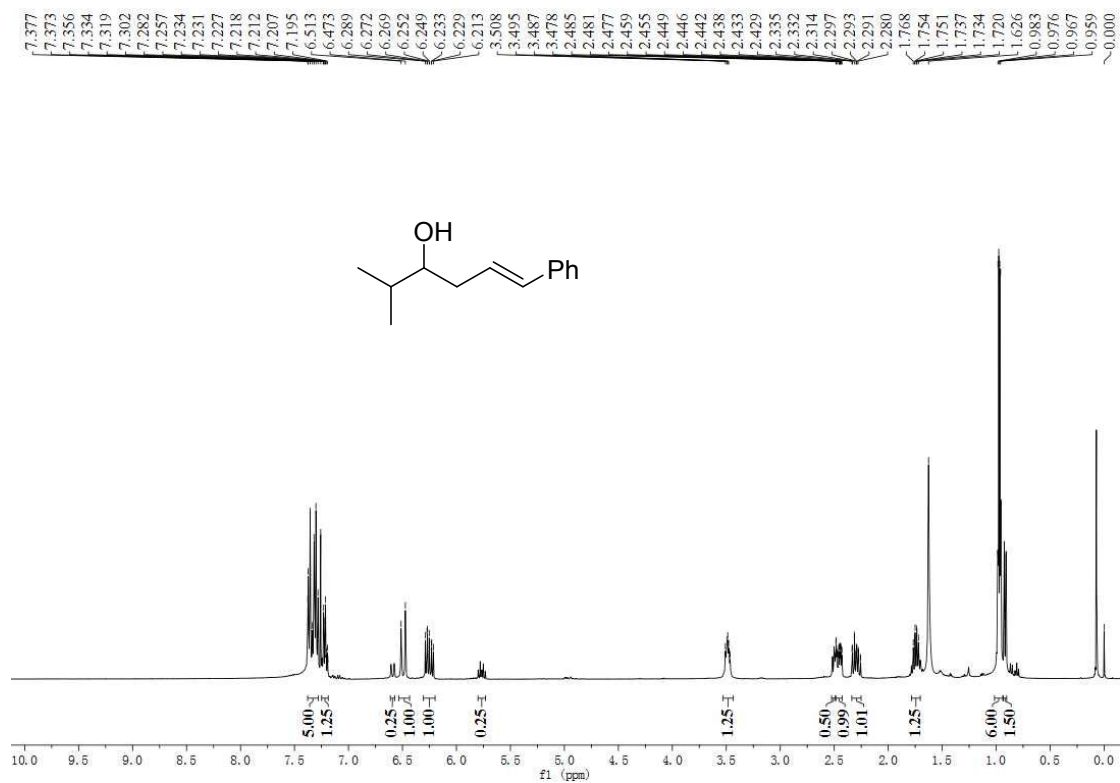
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2j



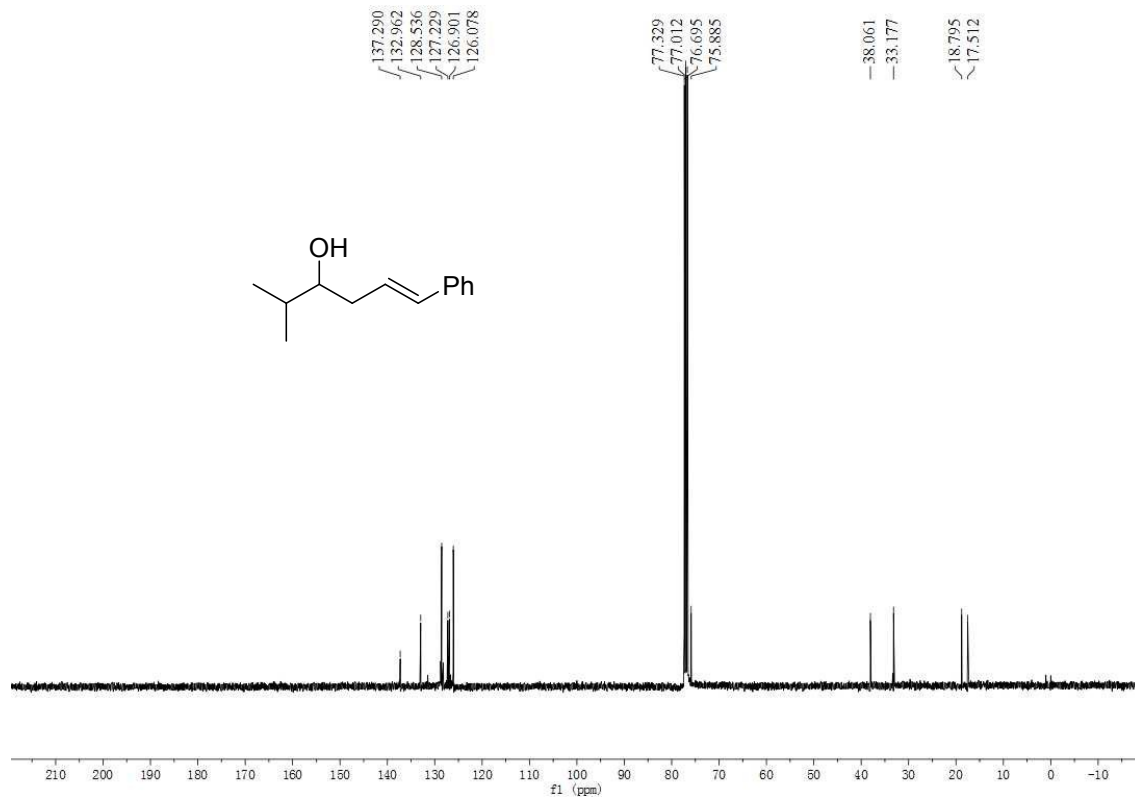
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2k**



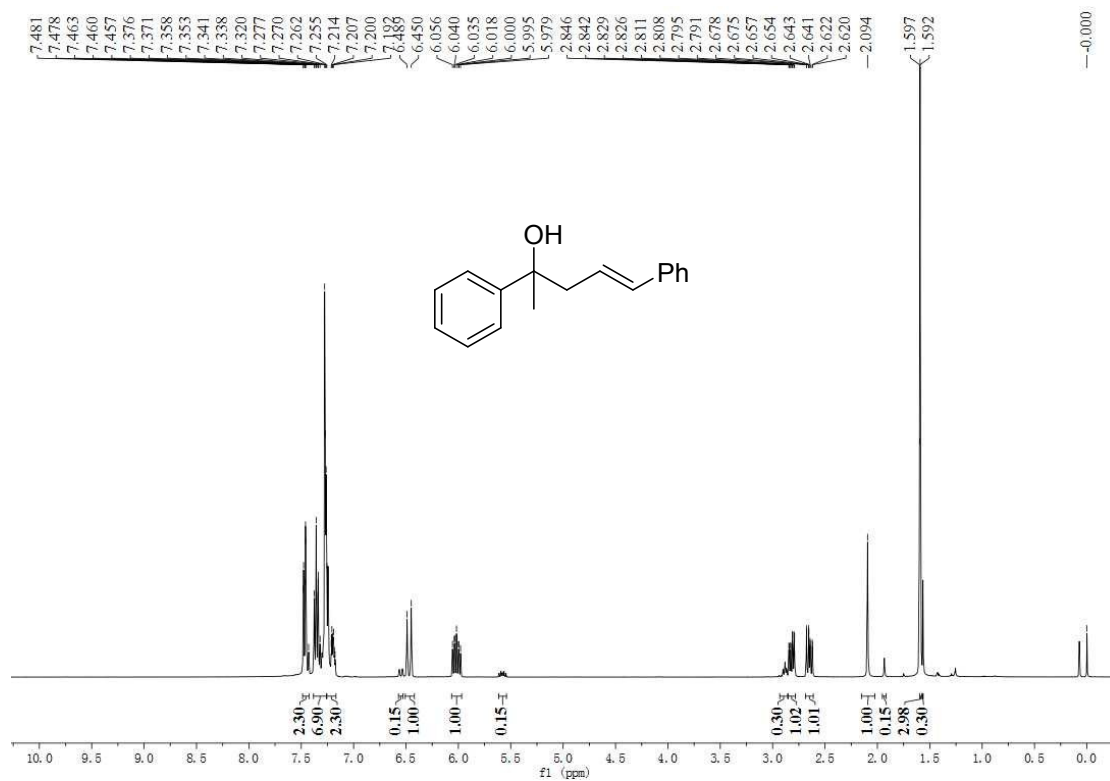
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2k**



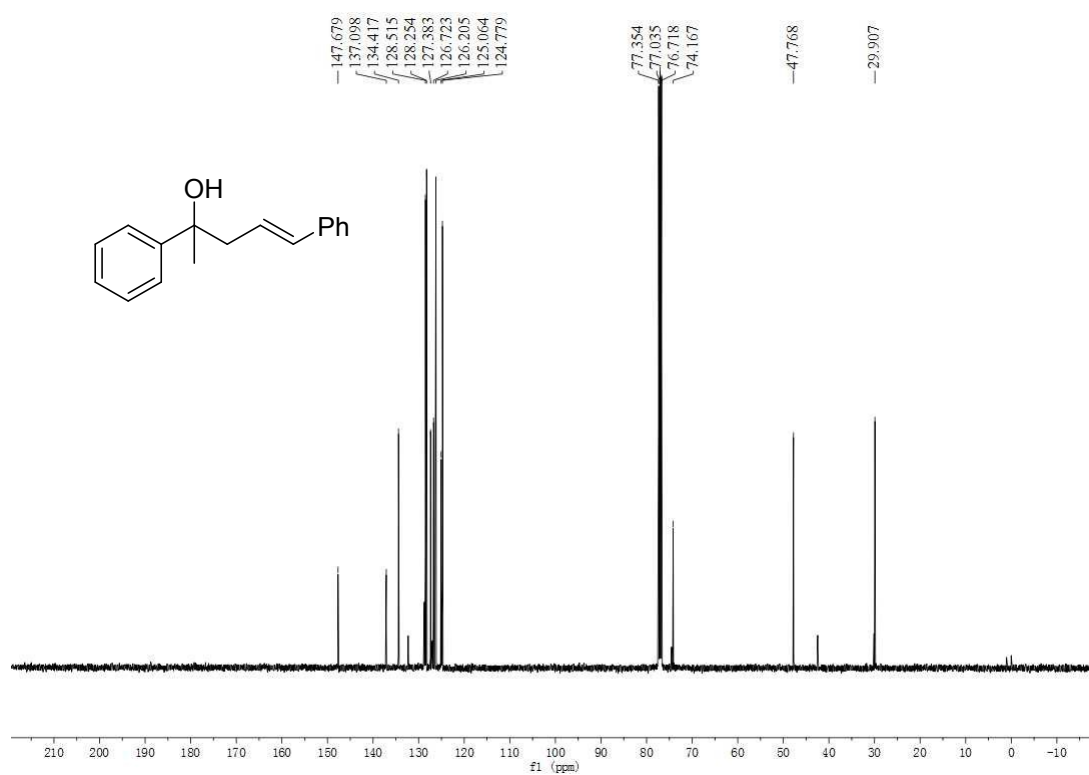
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2I



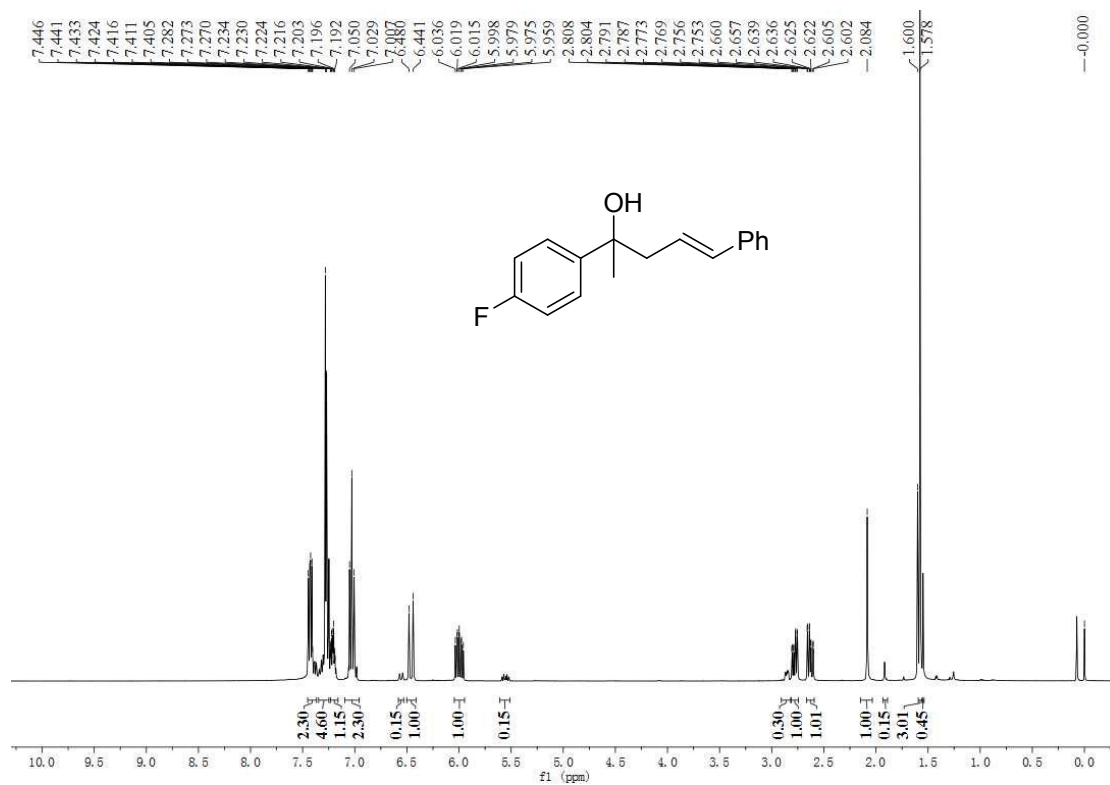
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2I



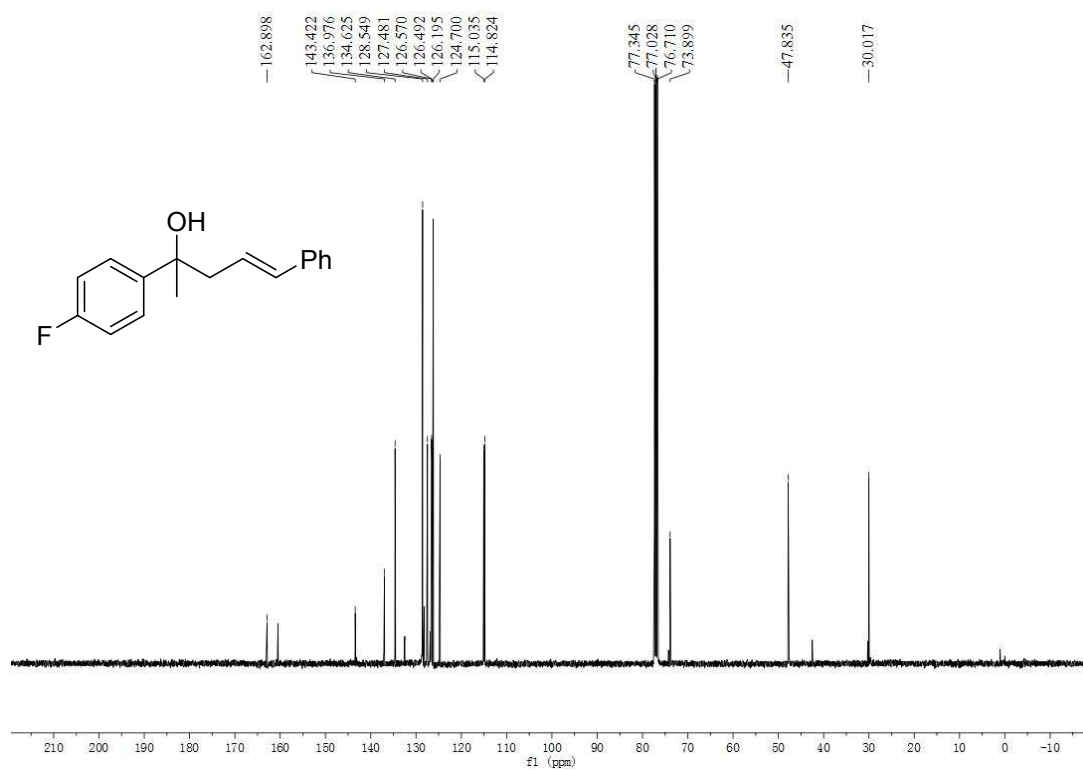
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2m



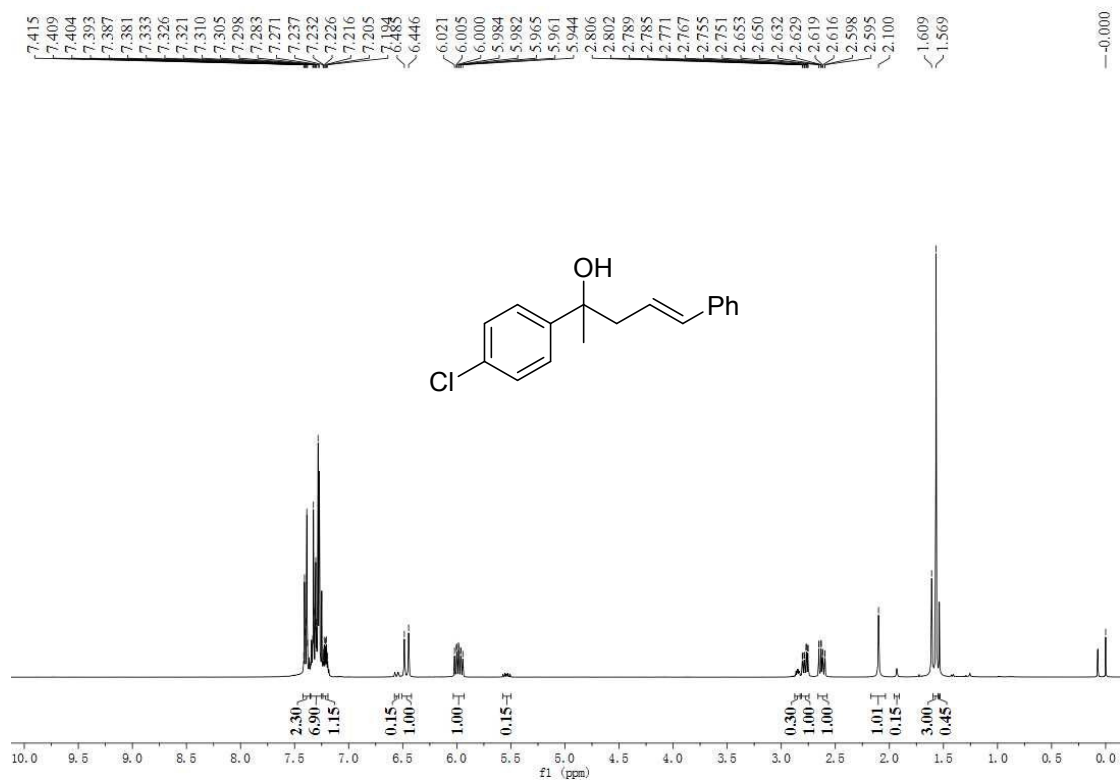
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2m



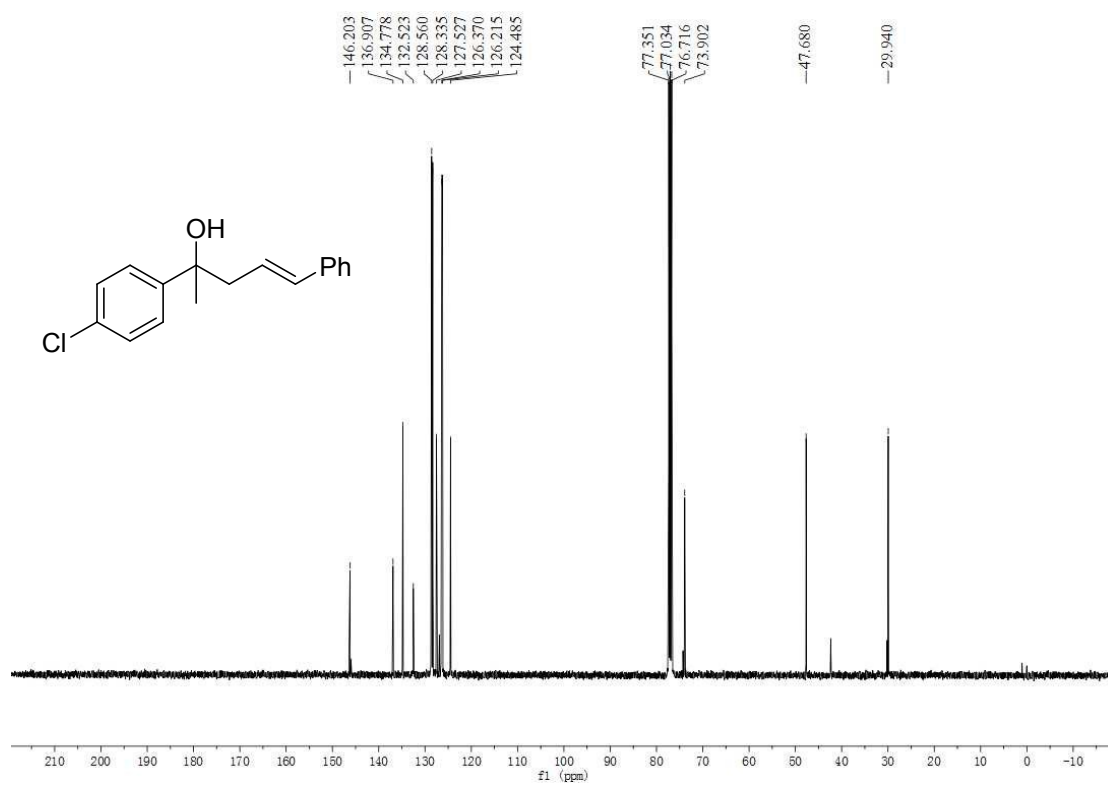
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2n**



**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2n**

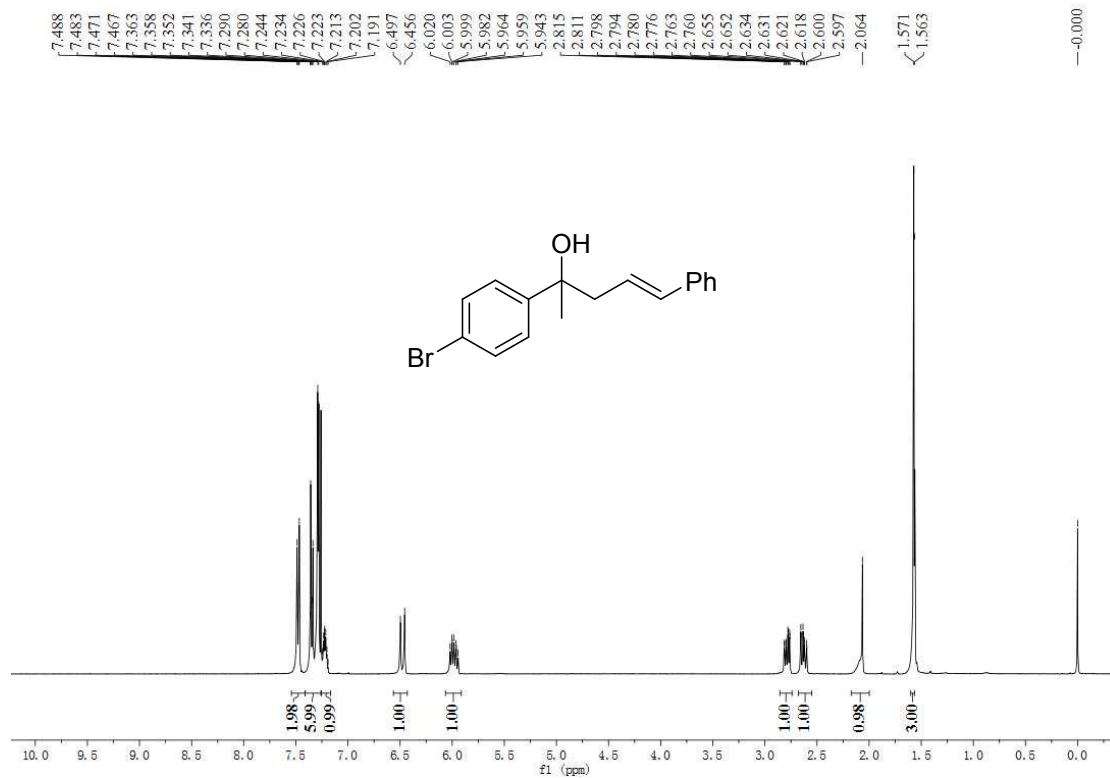


<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **2o**

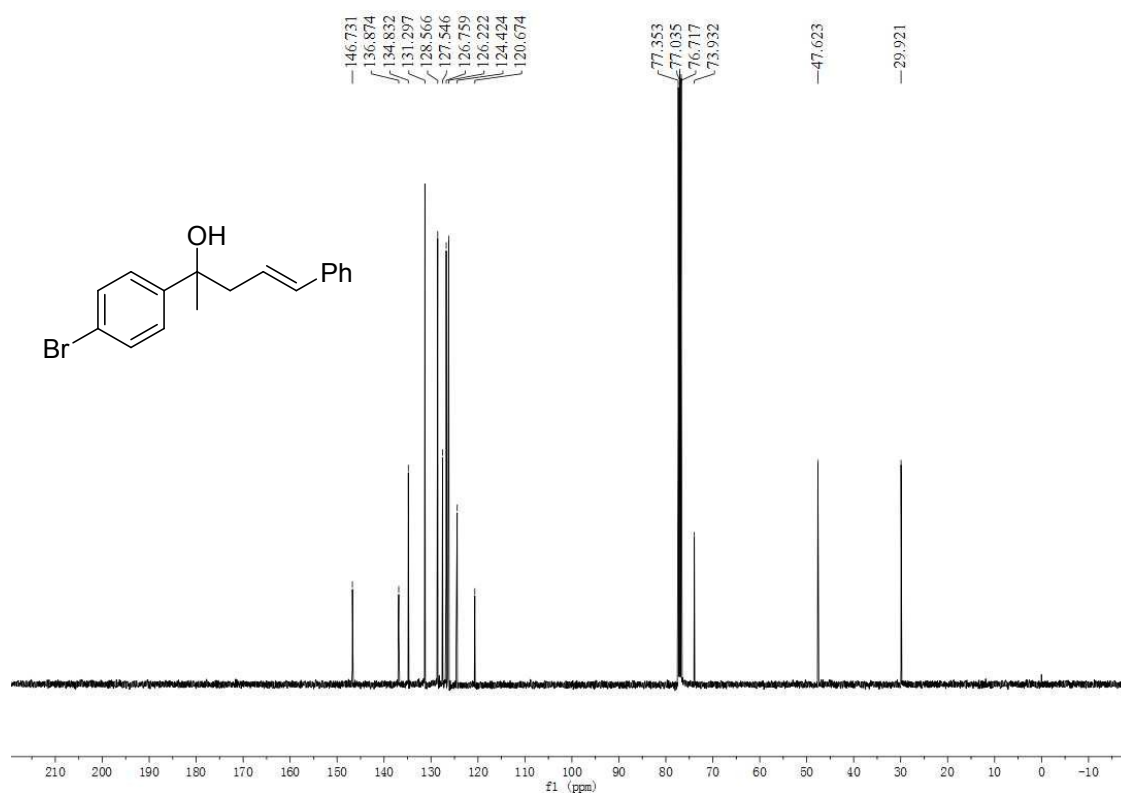


<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **2o**

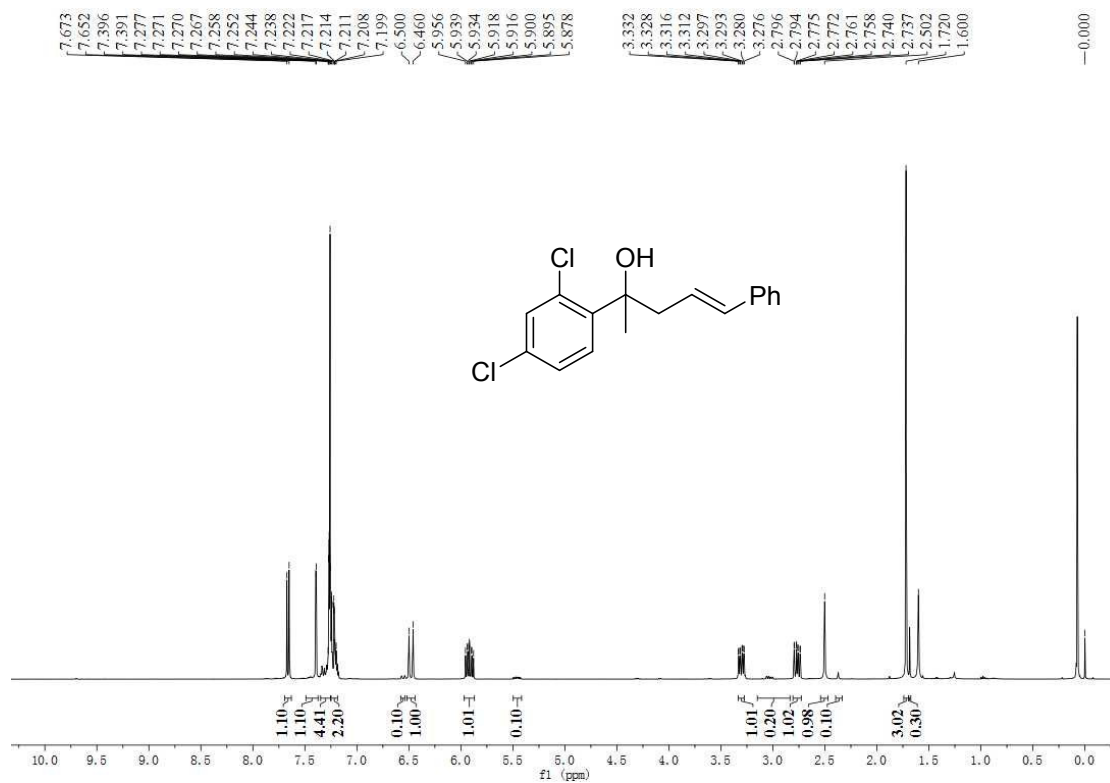




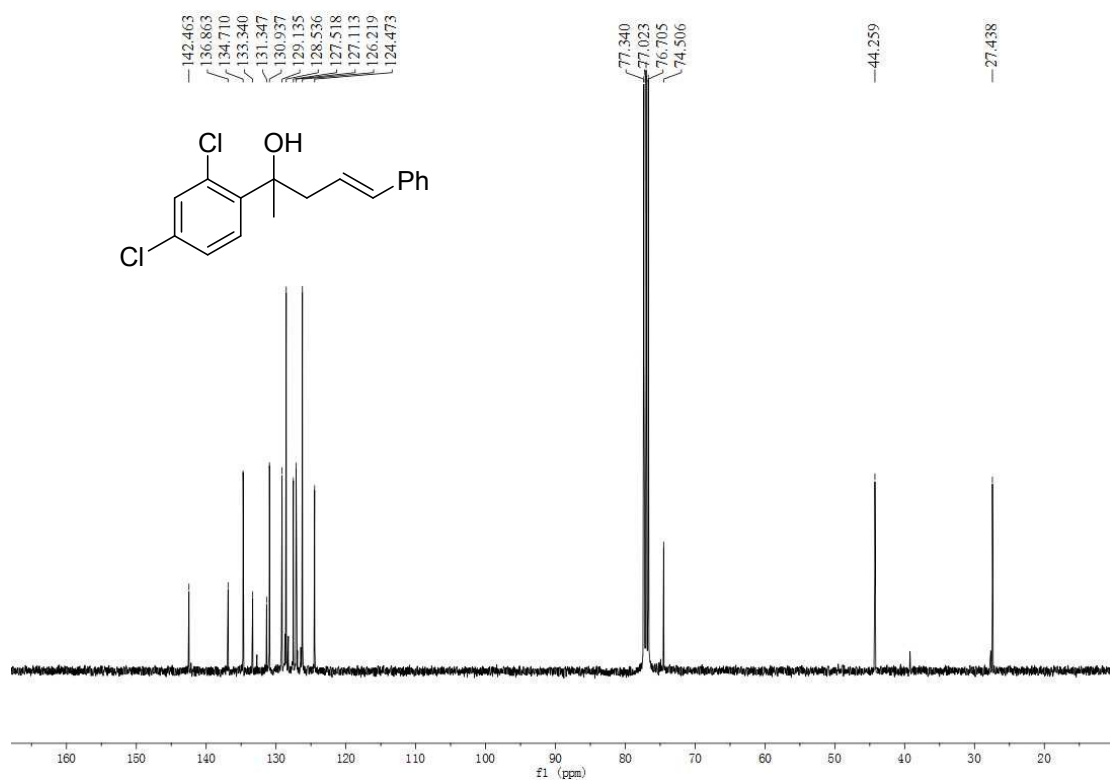
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **2p****



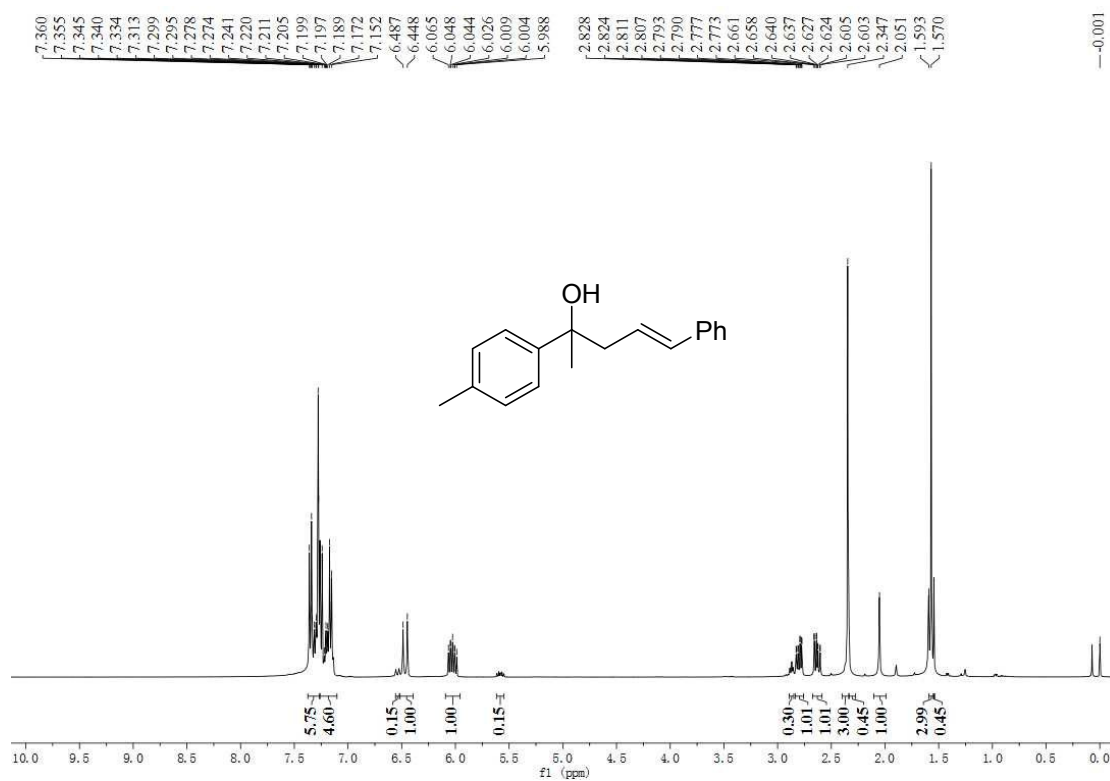
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **2p****



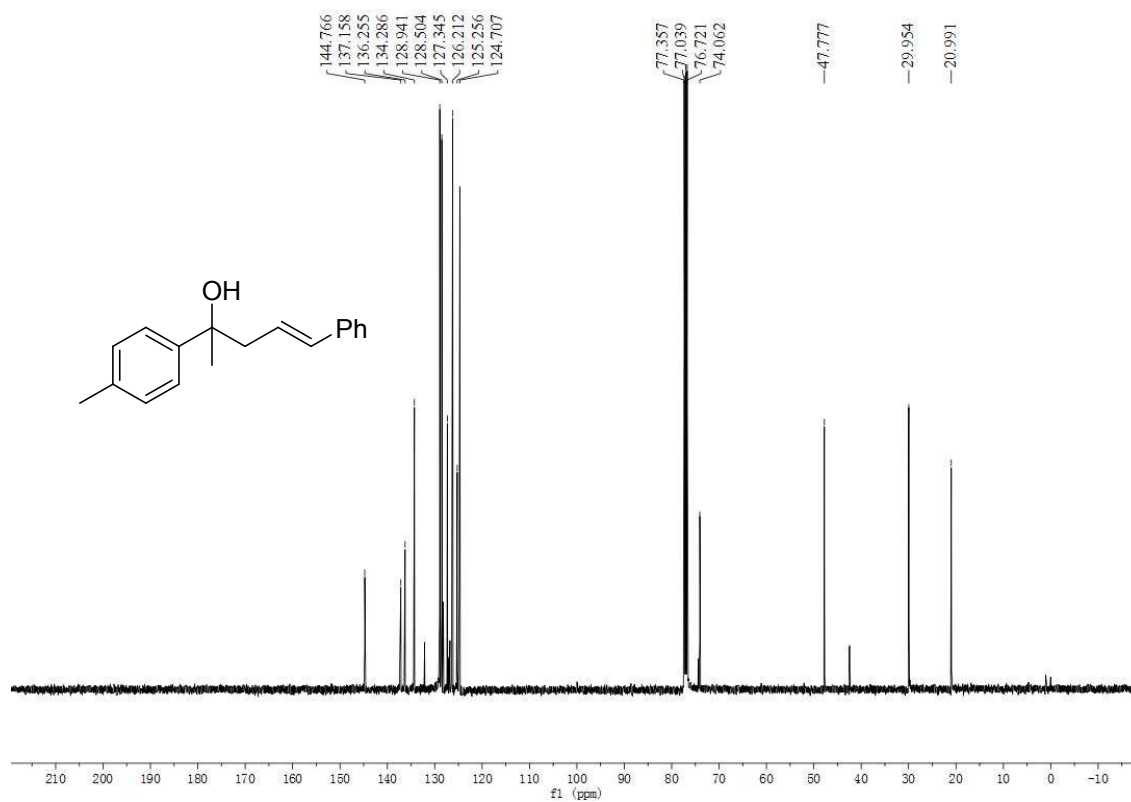
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **2q**



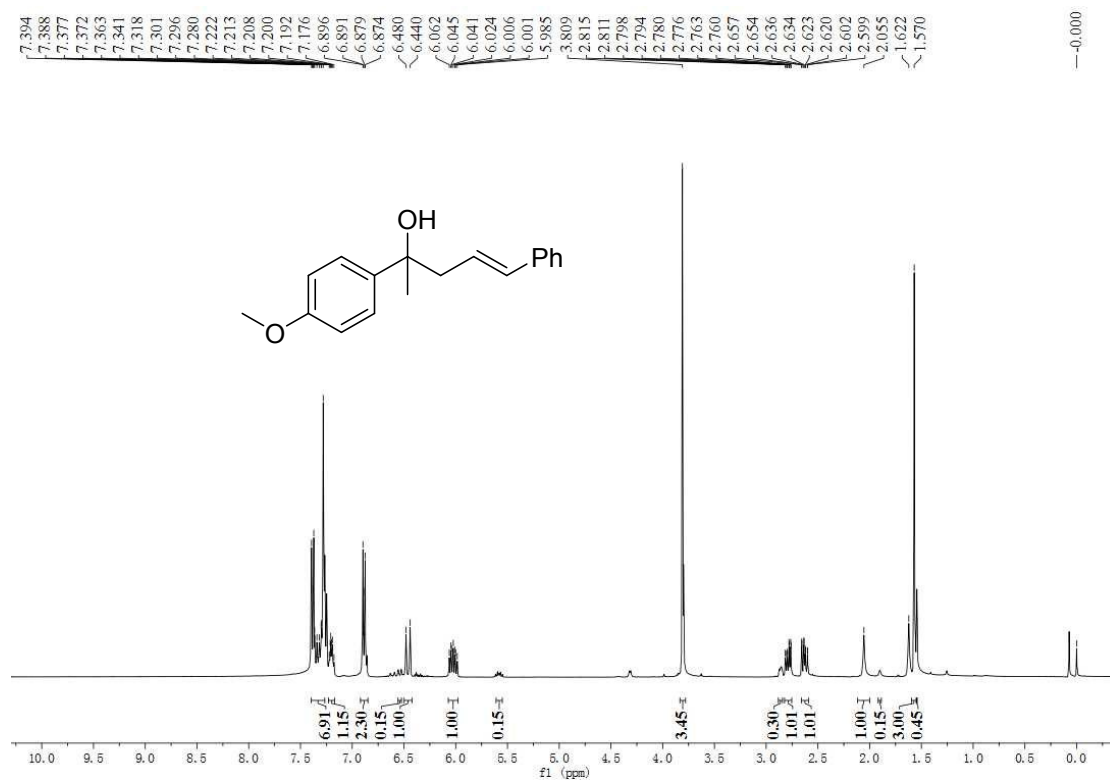
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **2q**



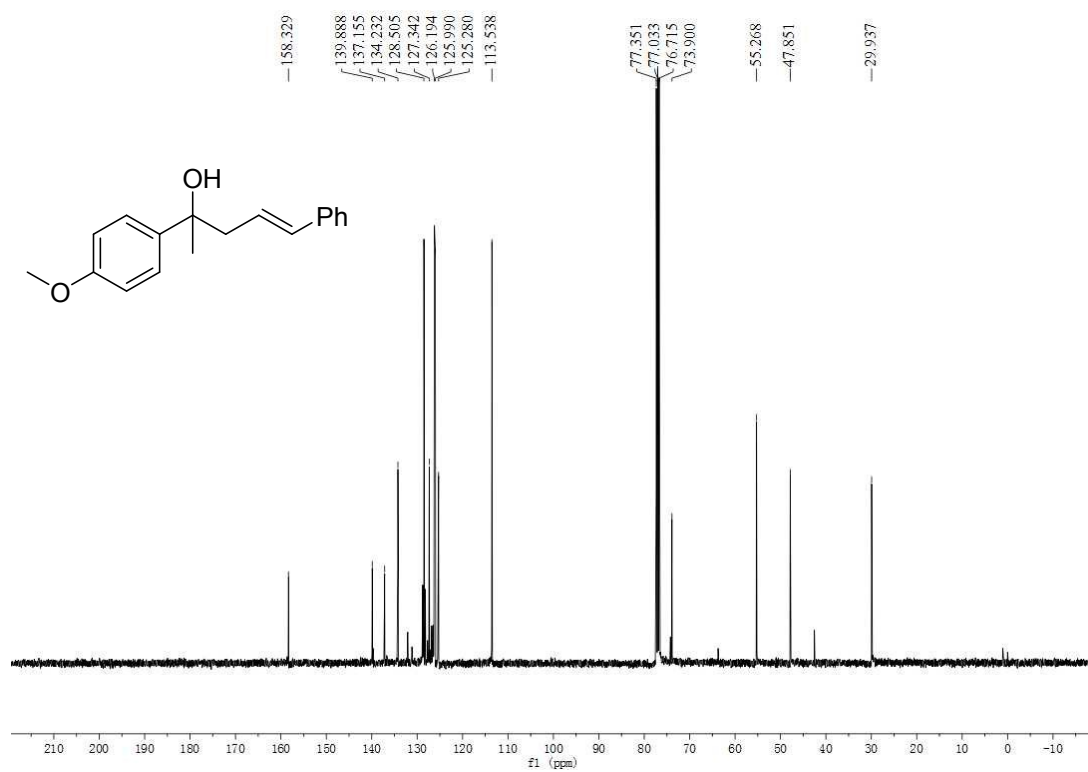
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2r



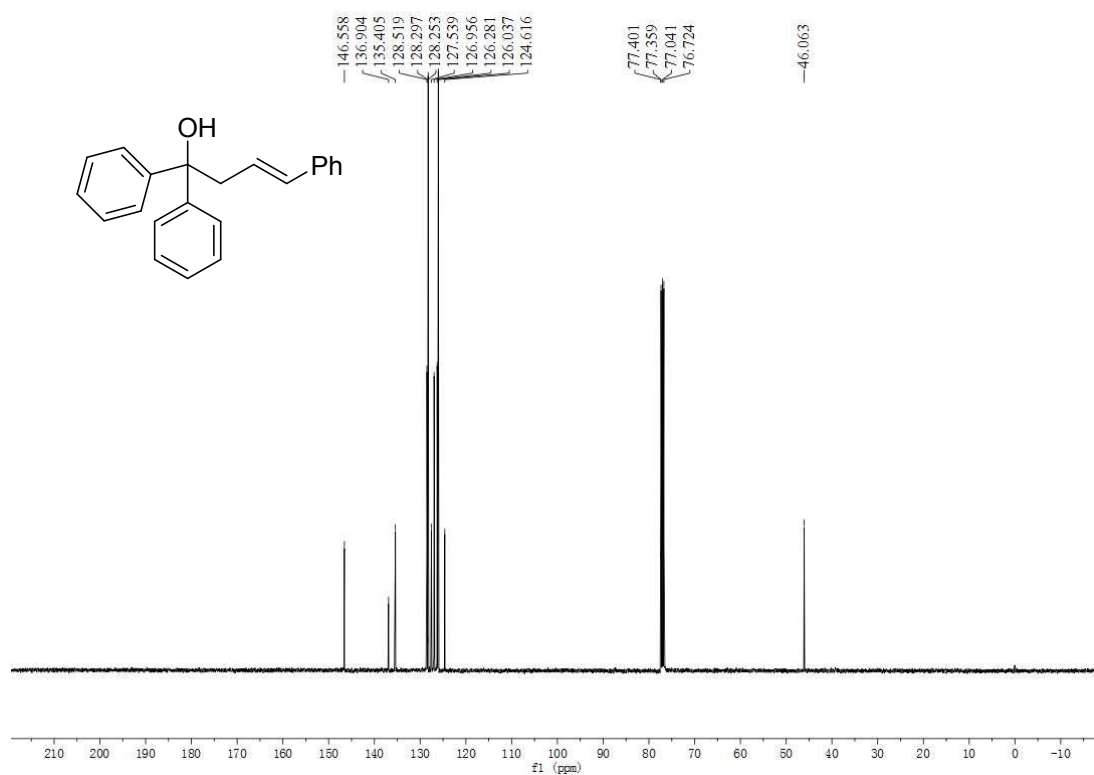
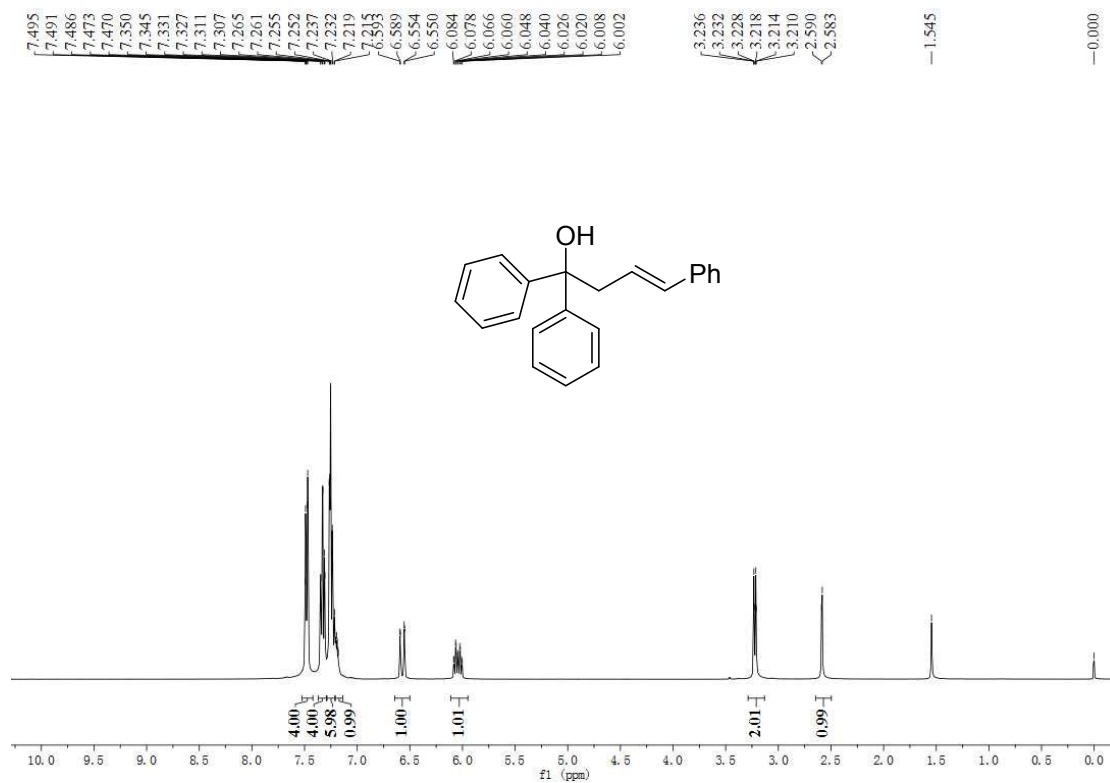
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2r

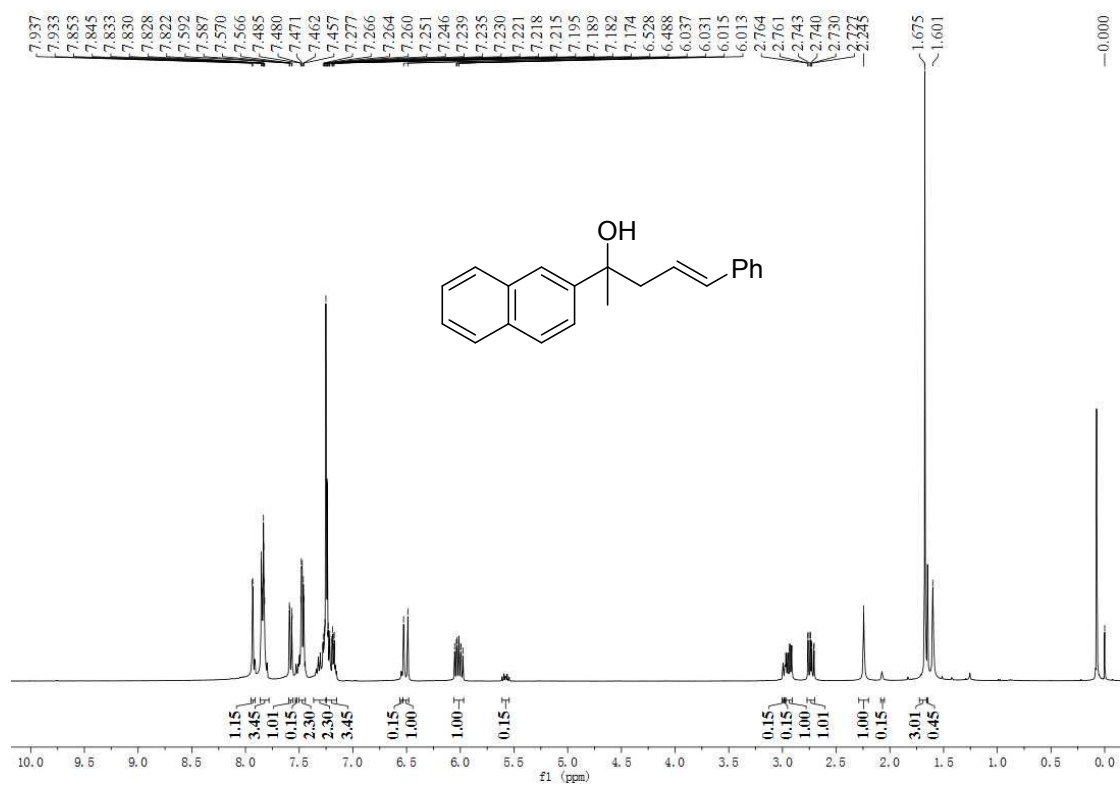


<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2s

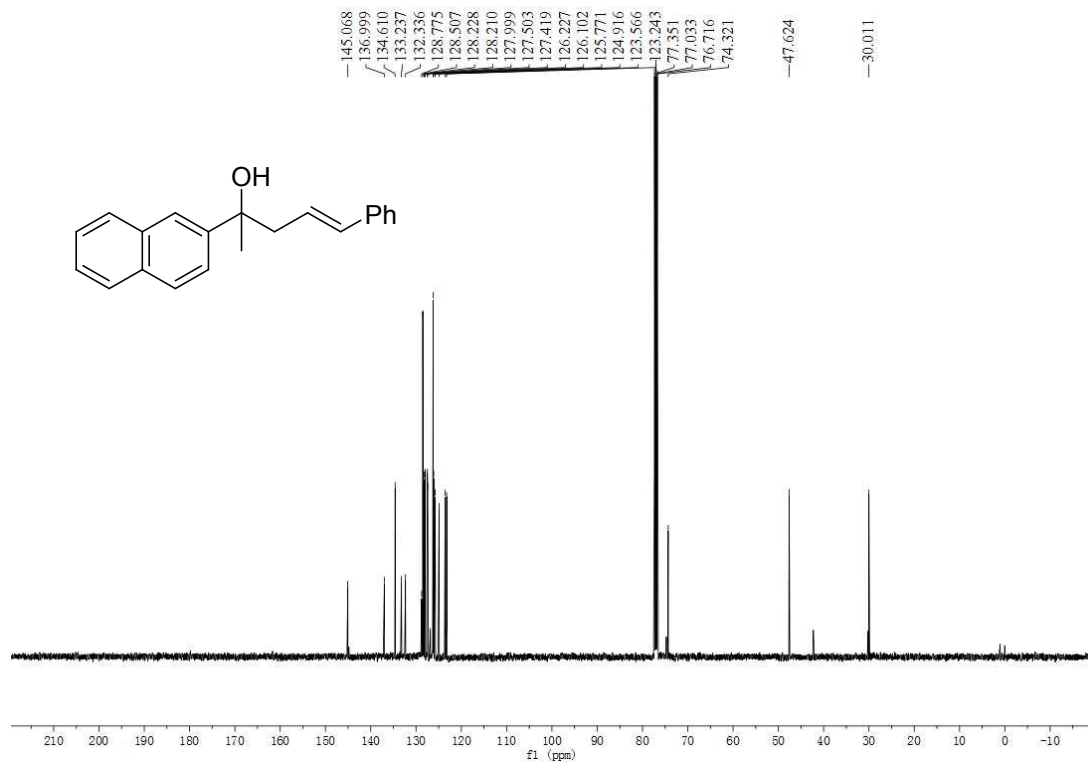


<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2s

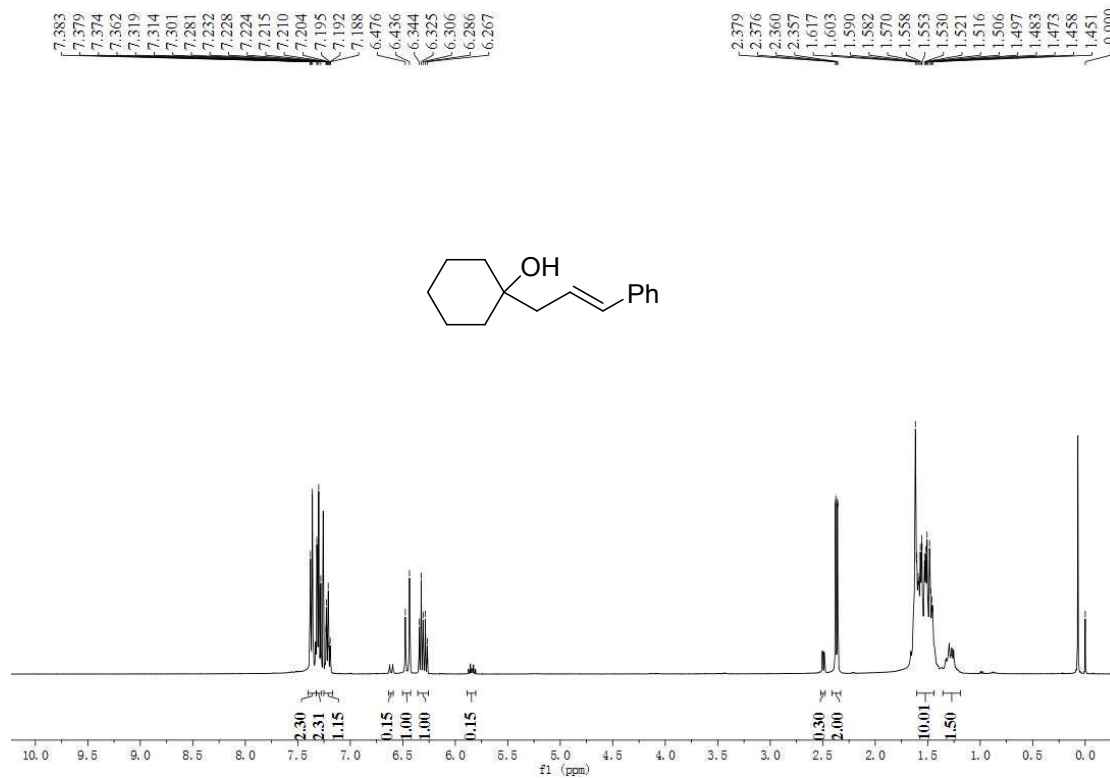




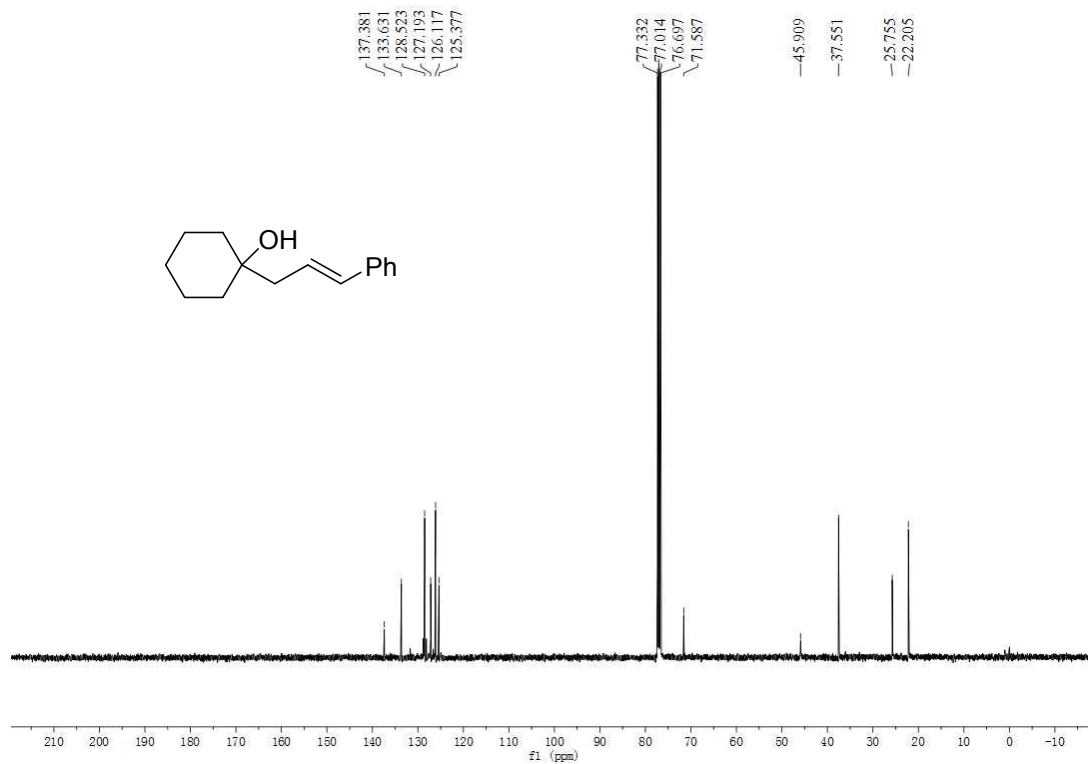
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **2u****



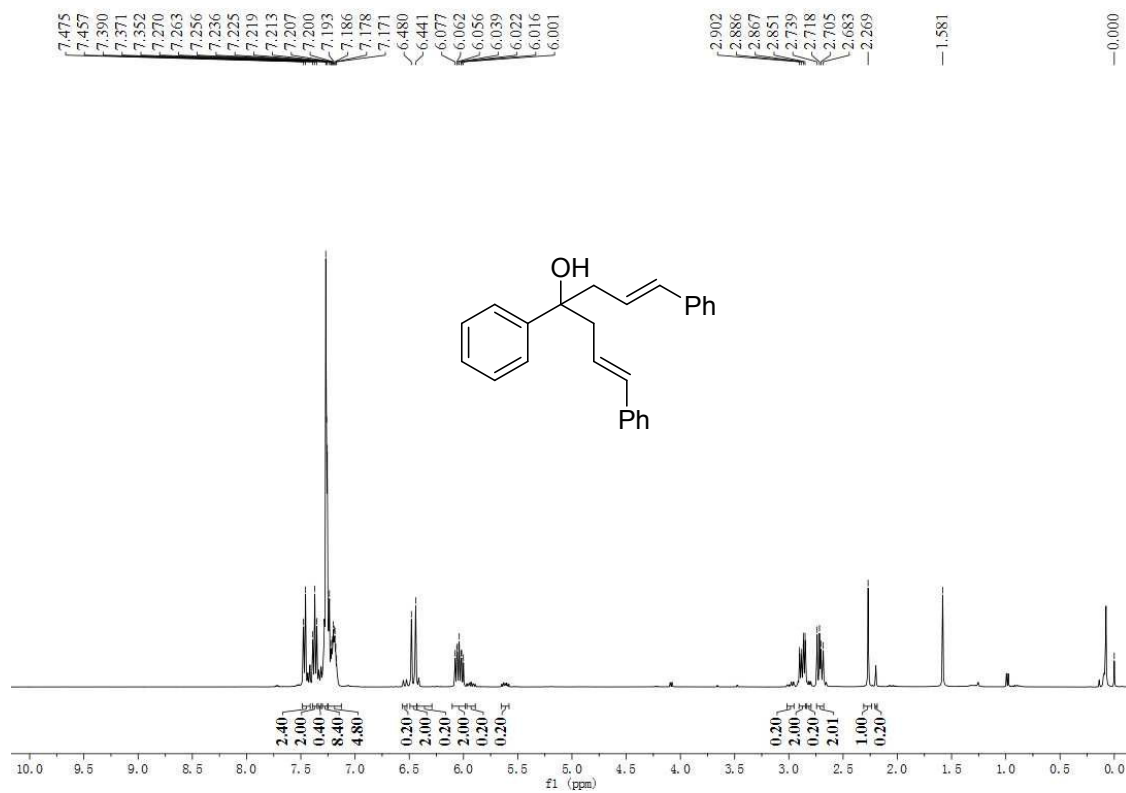
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **2u****



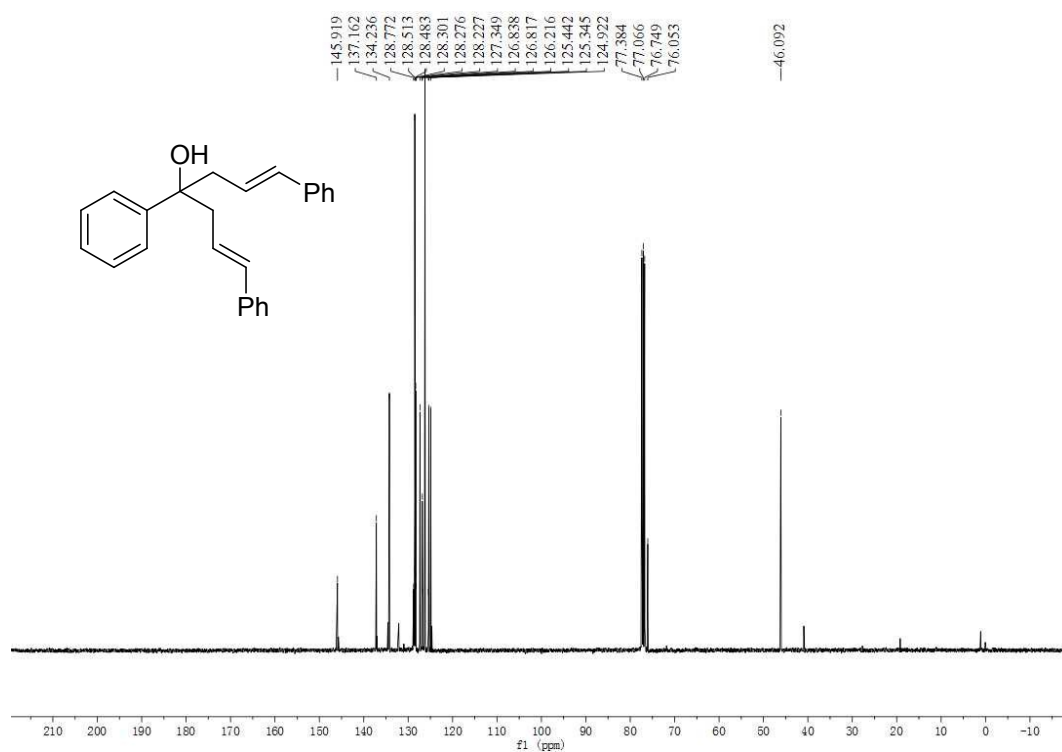
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 2v



<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 2v

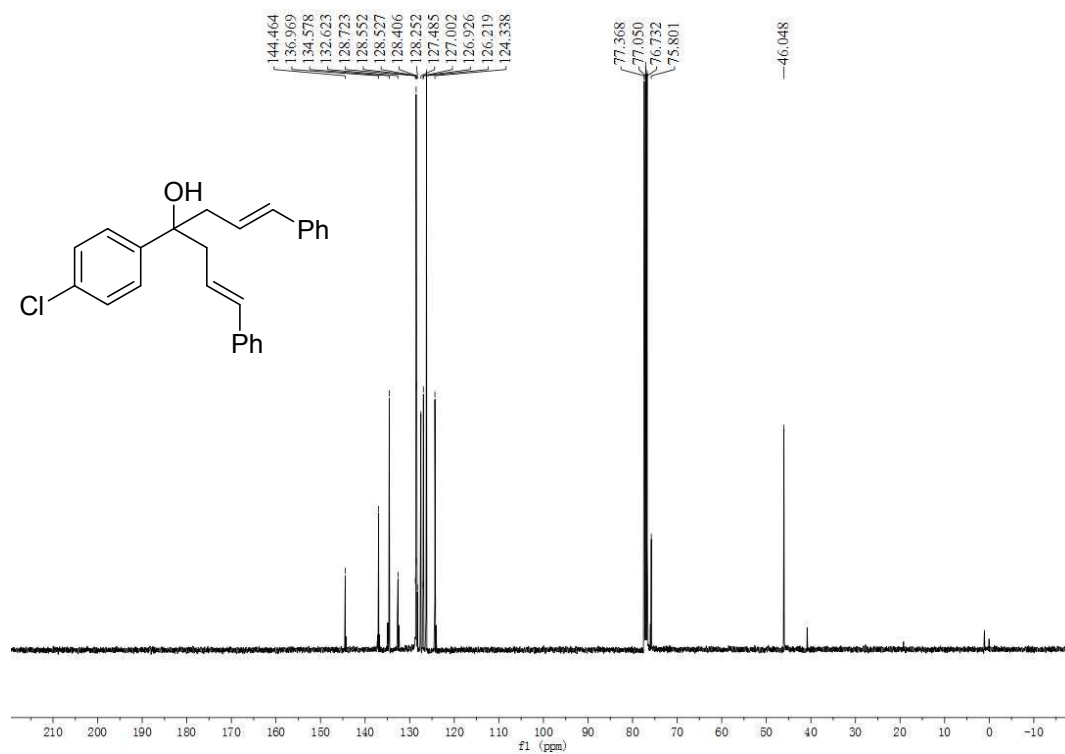
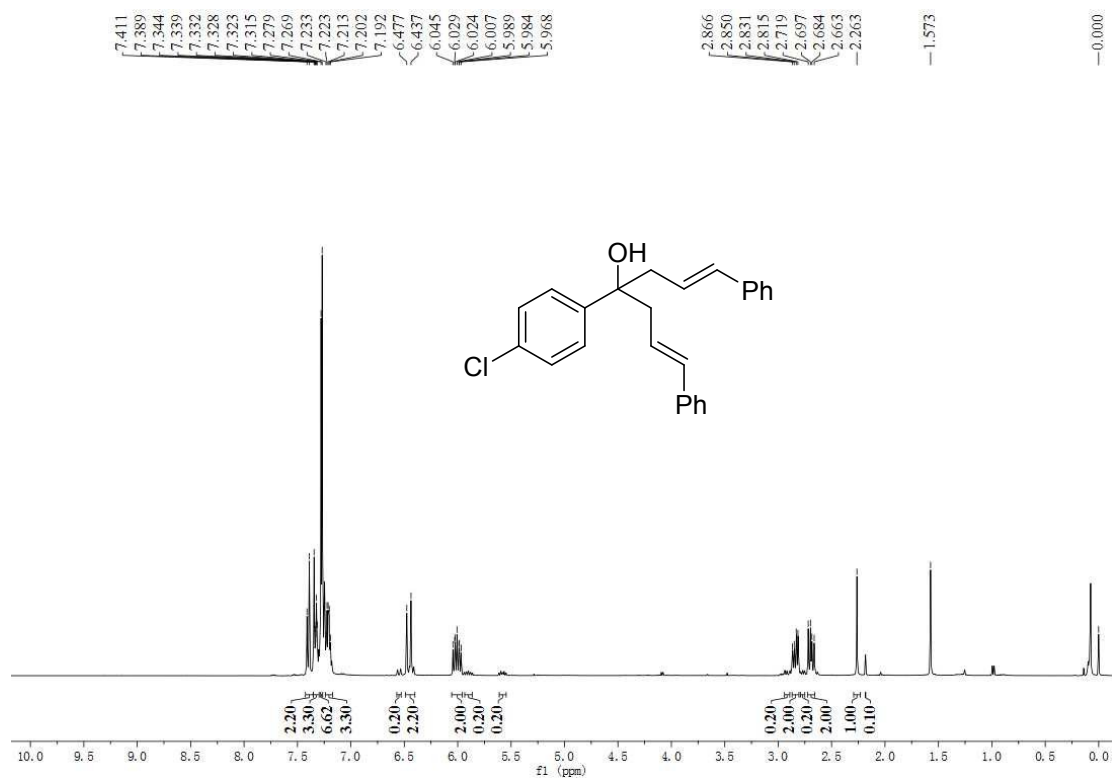


<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 5a

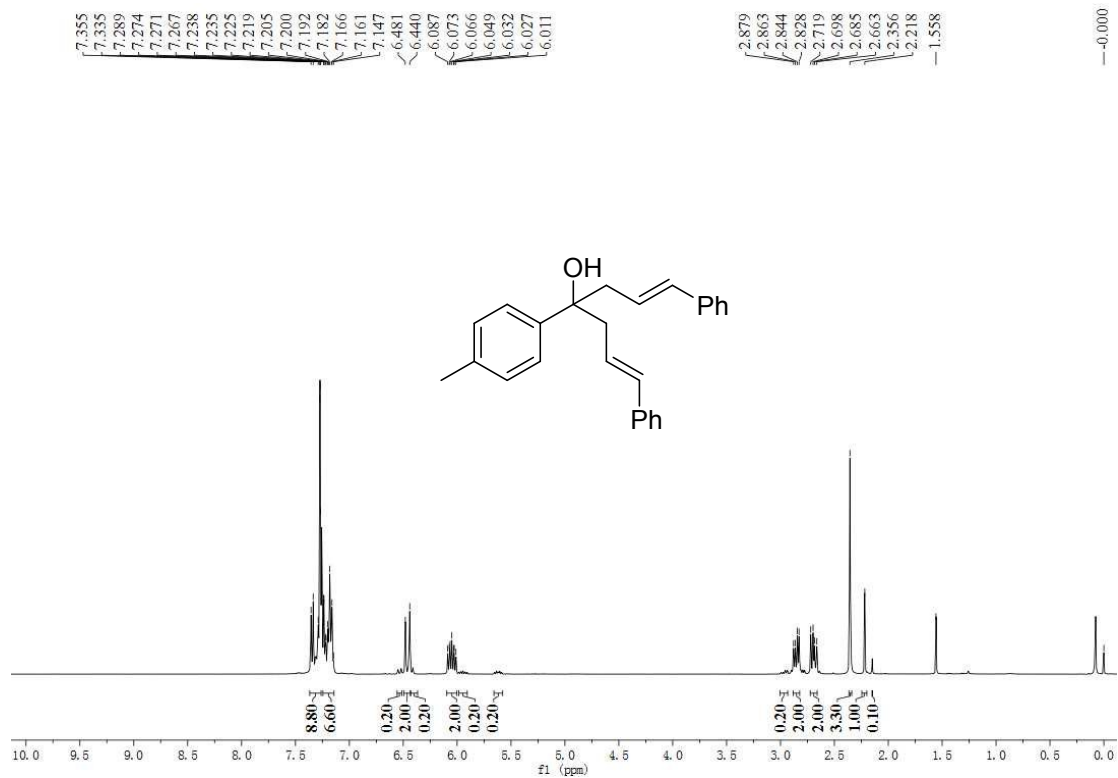


<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 5a

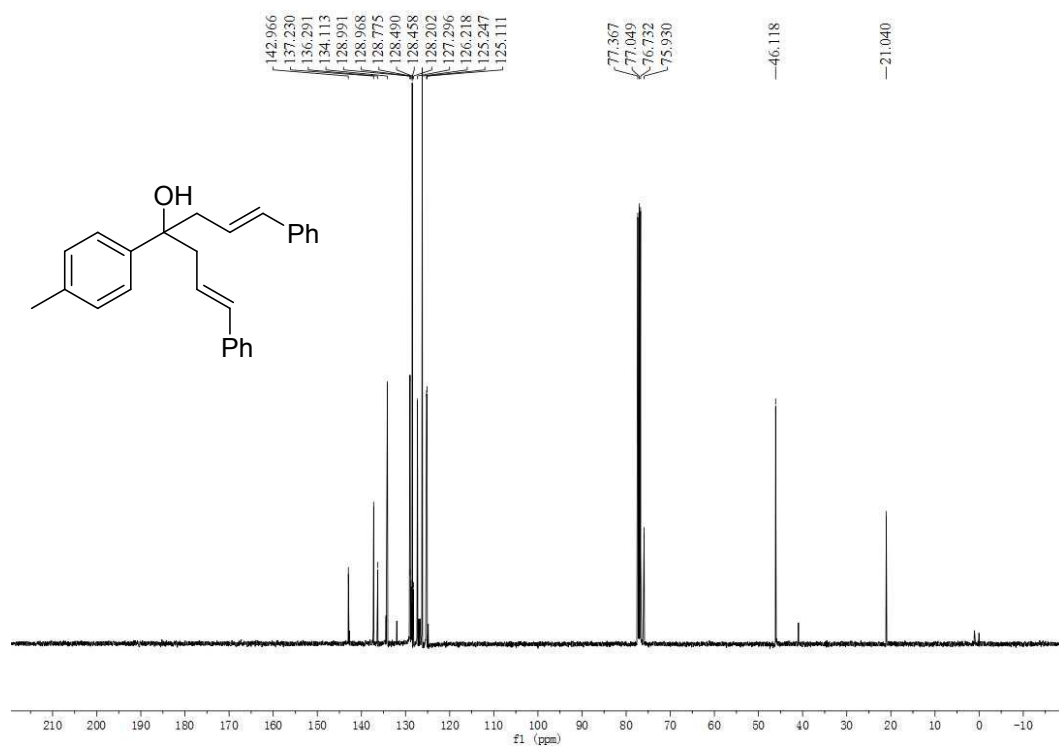




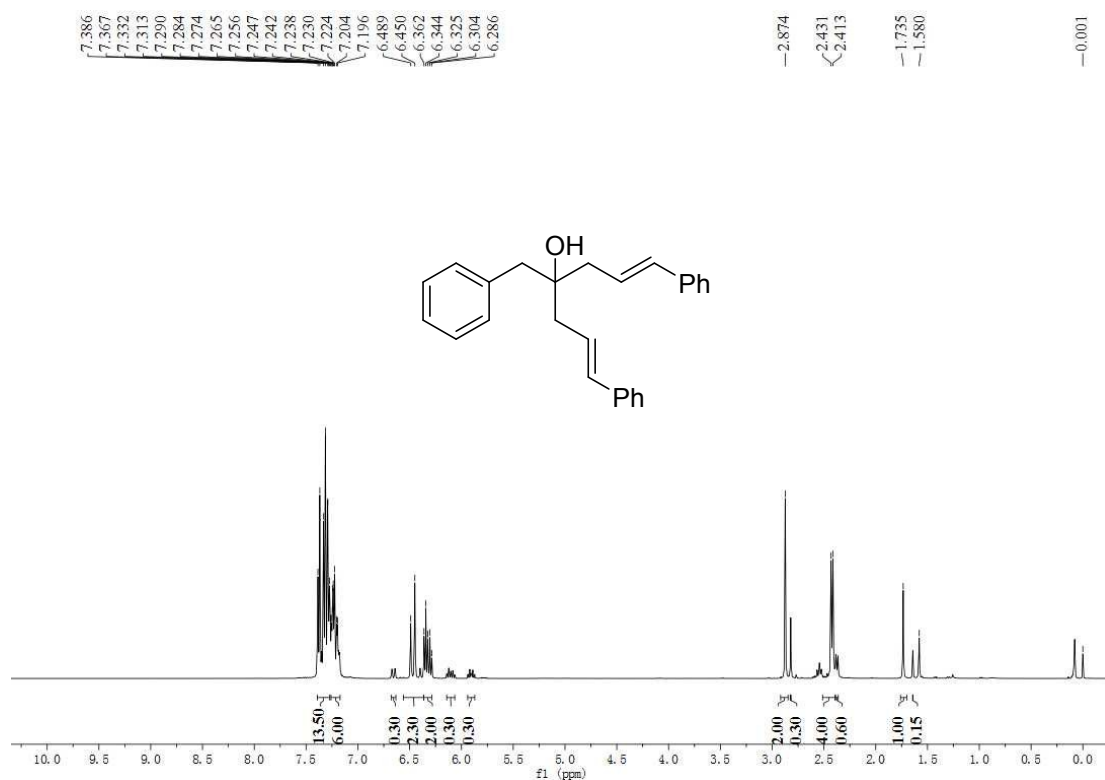
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **5b**



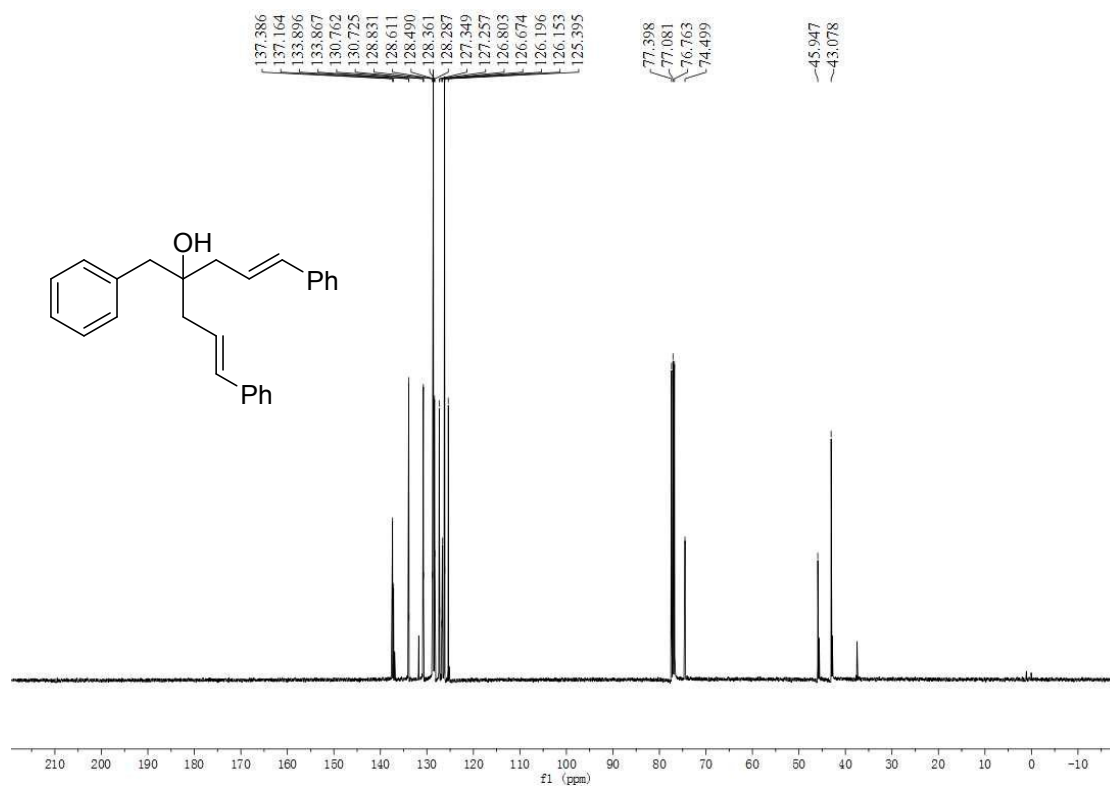
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 5c



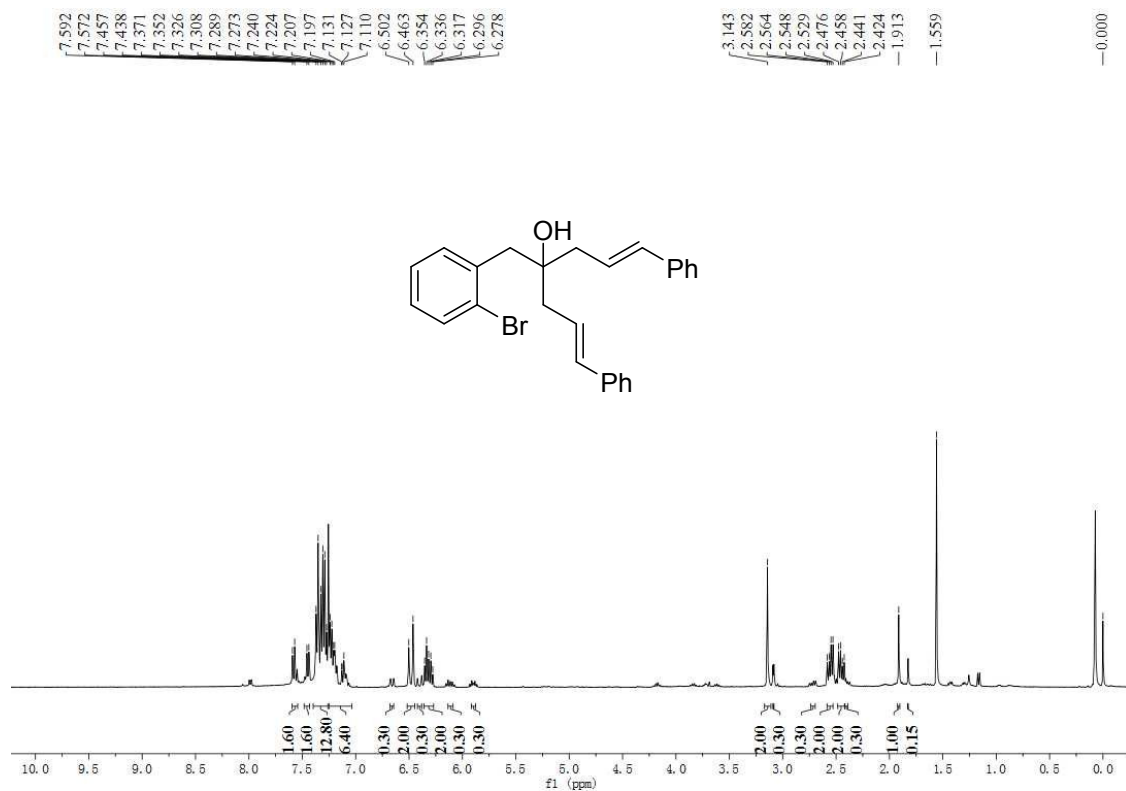
<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 5c



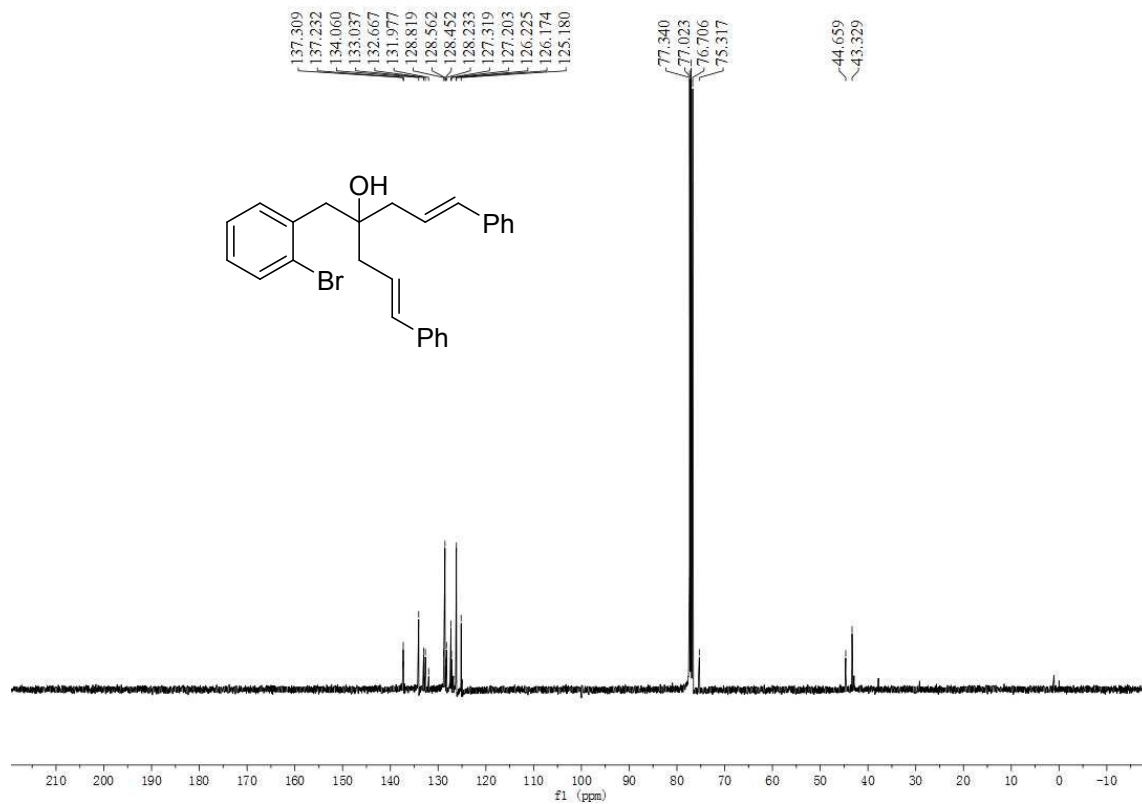
**<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **5d****



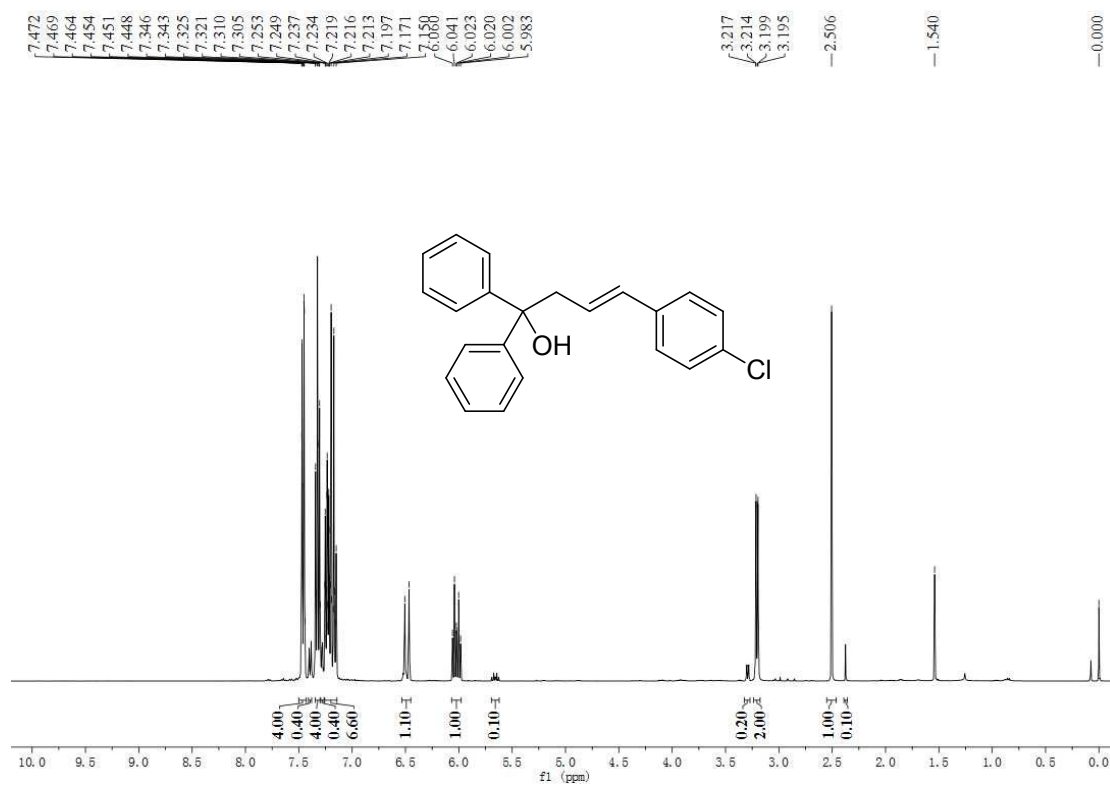
**<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **5d****



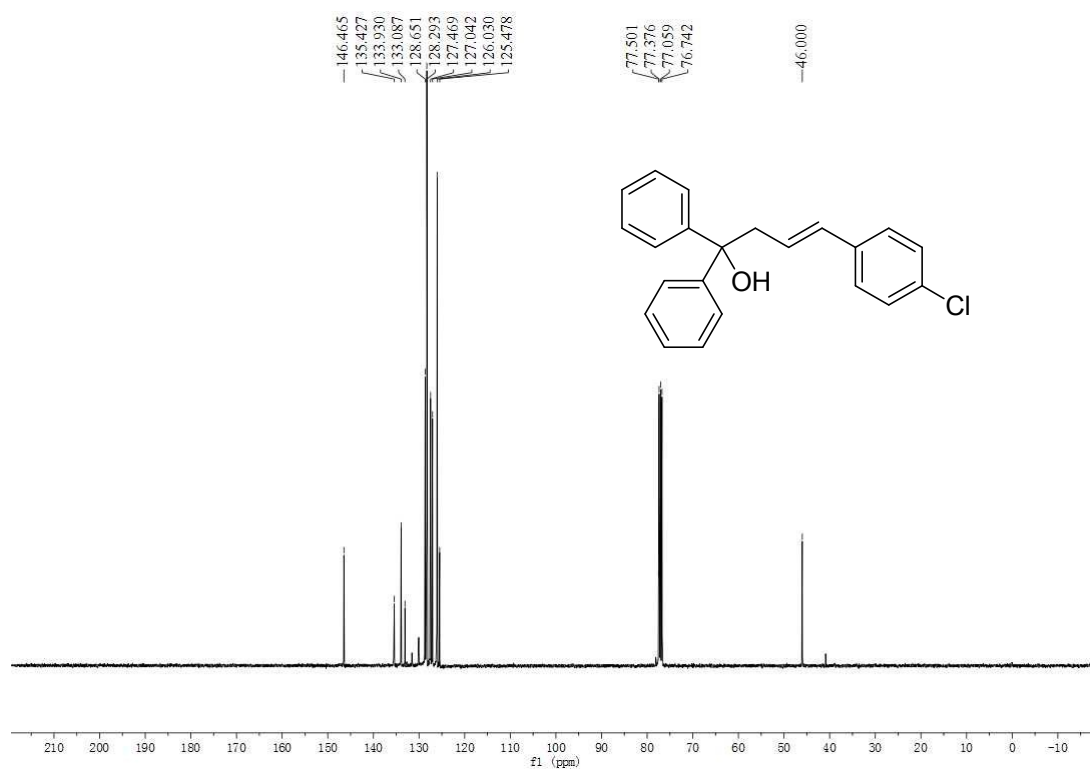
<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound **5e**



<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound **5e**



<sup>1</sup>H NMR Spectrum (400 MHz, CDCl<sub>3</sub>) of Compound 7



<sup>13</sup>C NMR Spectrum (100 MHz, CDCl<sub>3</sub>) of Compound 7