**Supporting information**

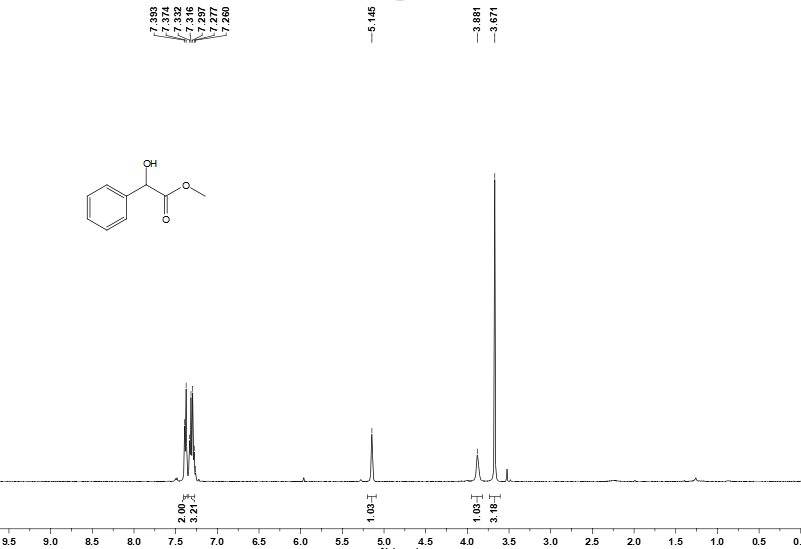
Nickel-catalyzed esterification of mandelic acids with alcohols

Changhong Liu, Mamat Marhaba, Abdukerem Dilshat, Wenli Zhu, Kun Xia, Zechuan Mao, and Abdukader Ablimit\*

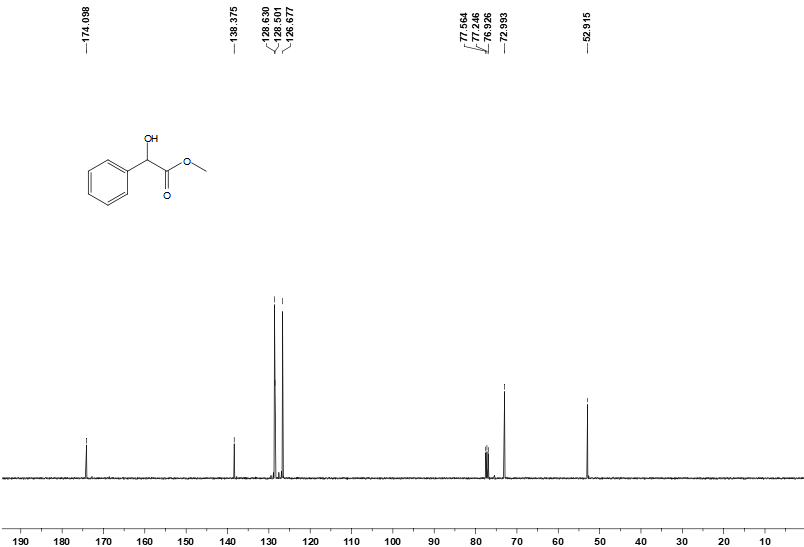
E-mail: ablimit1970@126.com

**Copies of the 1H NMR and 13C NMR Spectra**

1H NMR of **3aa**



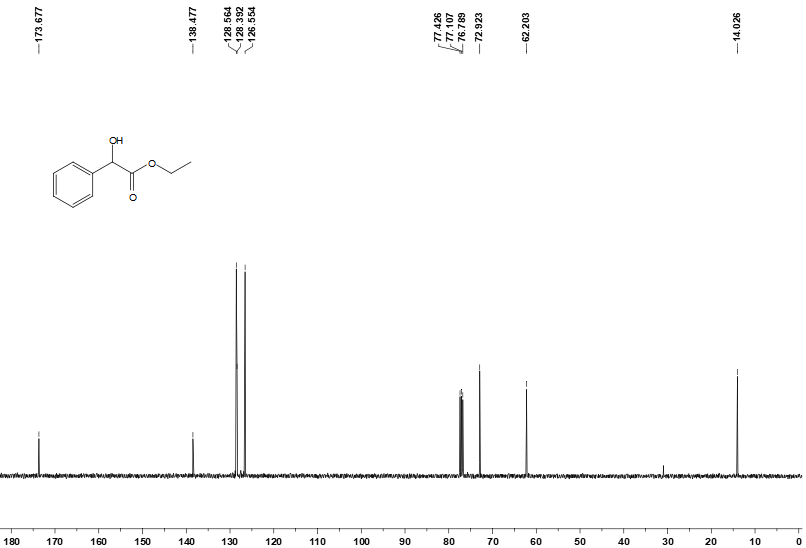
13C NMR of **3aa**



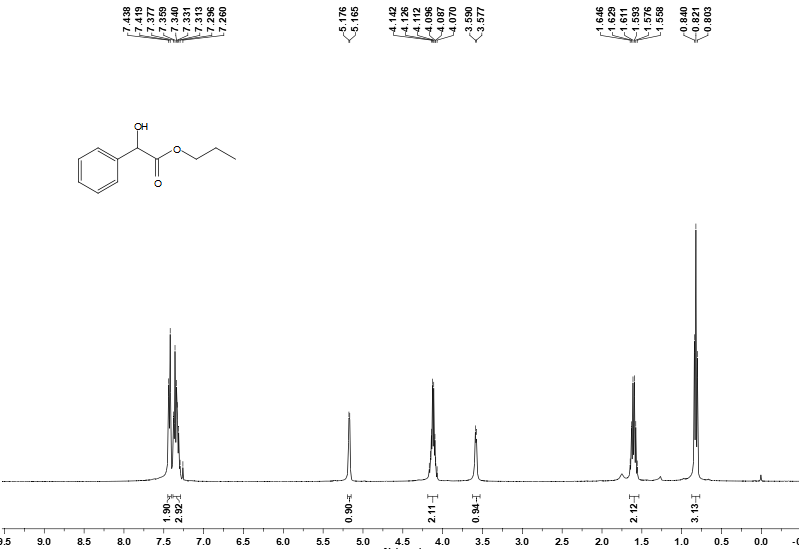
1H NMR of **3ab**



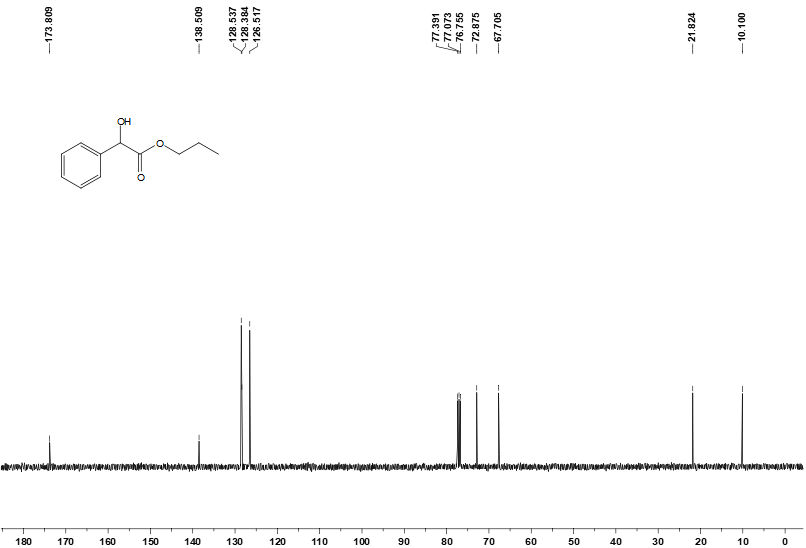
13C NMR of **3ab**



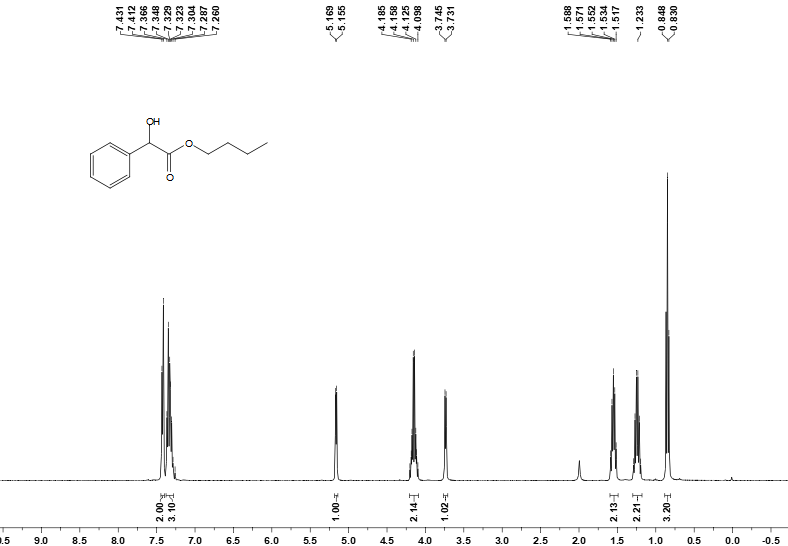
1H NMR of **3ac**



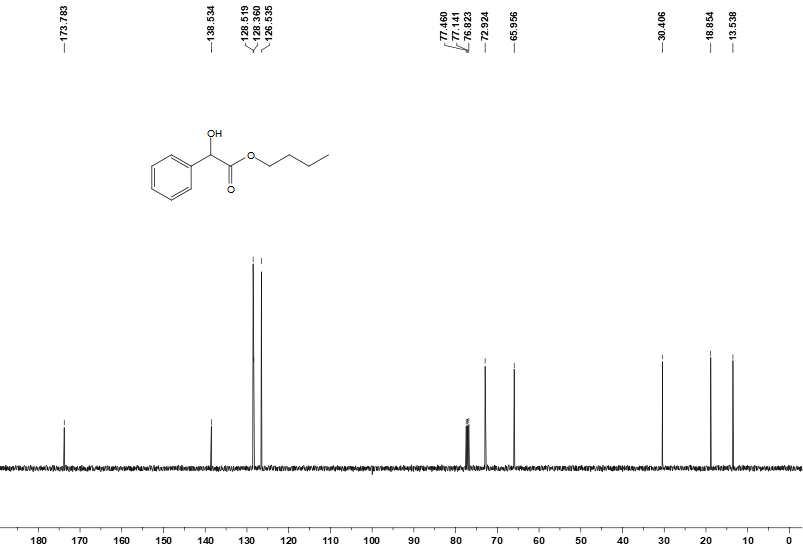
13C NMR of **3ac**



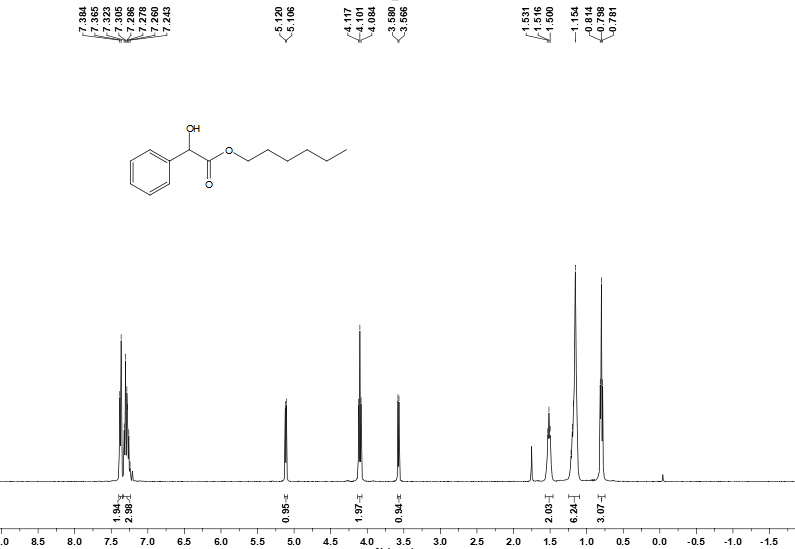
1H NMR of **3ad**



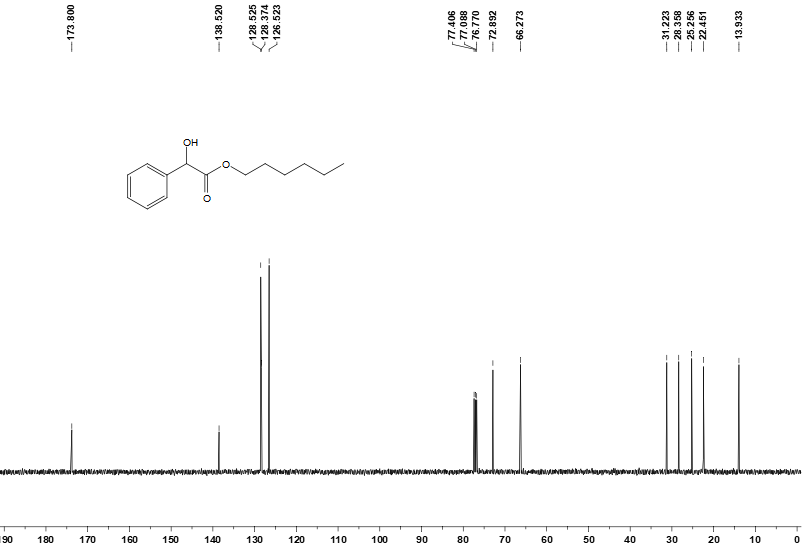
13C NMR of **3ad**



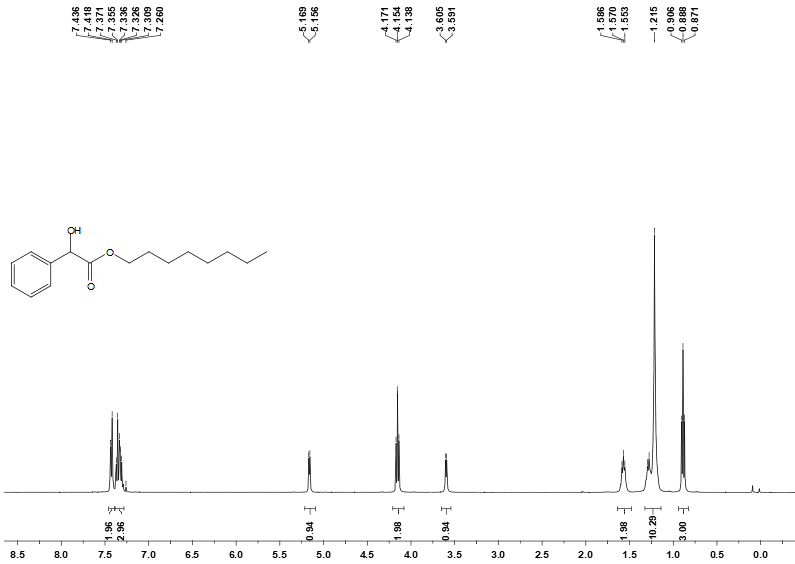
1H NMR of **3ae**



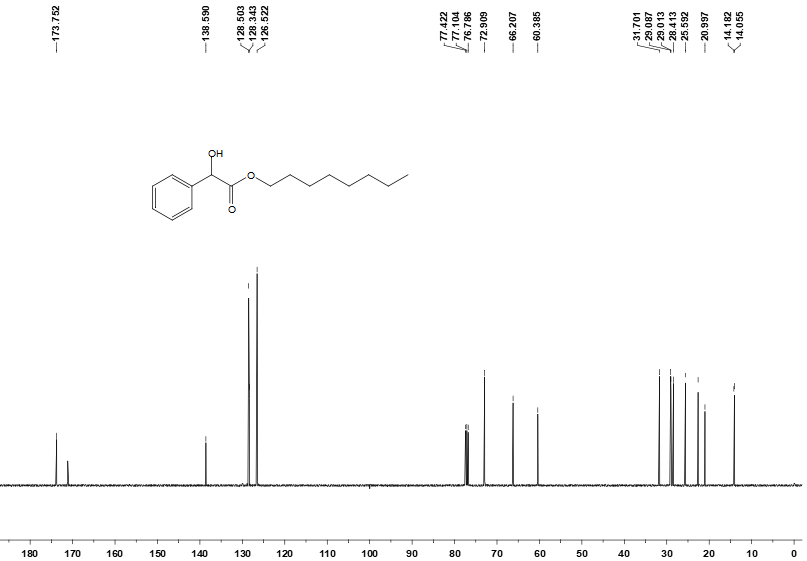
13C NMR of **3ae**



1H NMR of **3af**



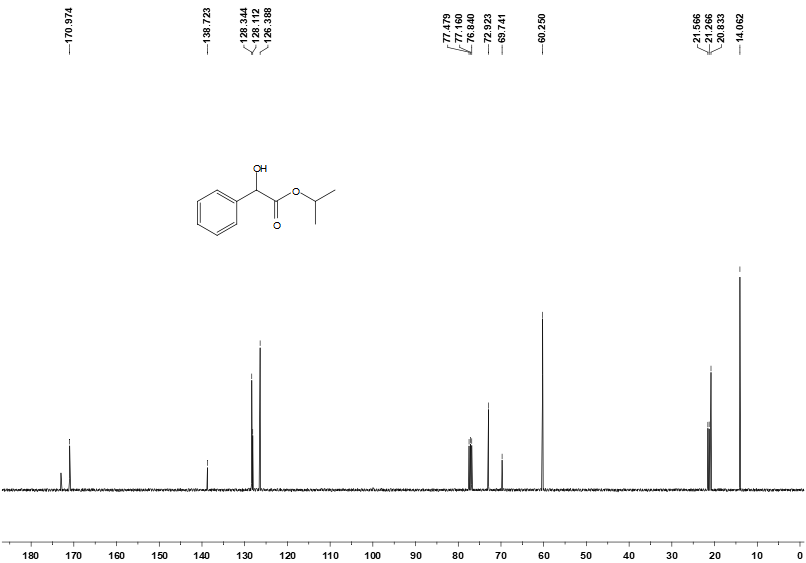
13C NMR of **3af**



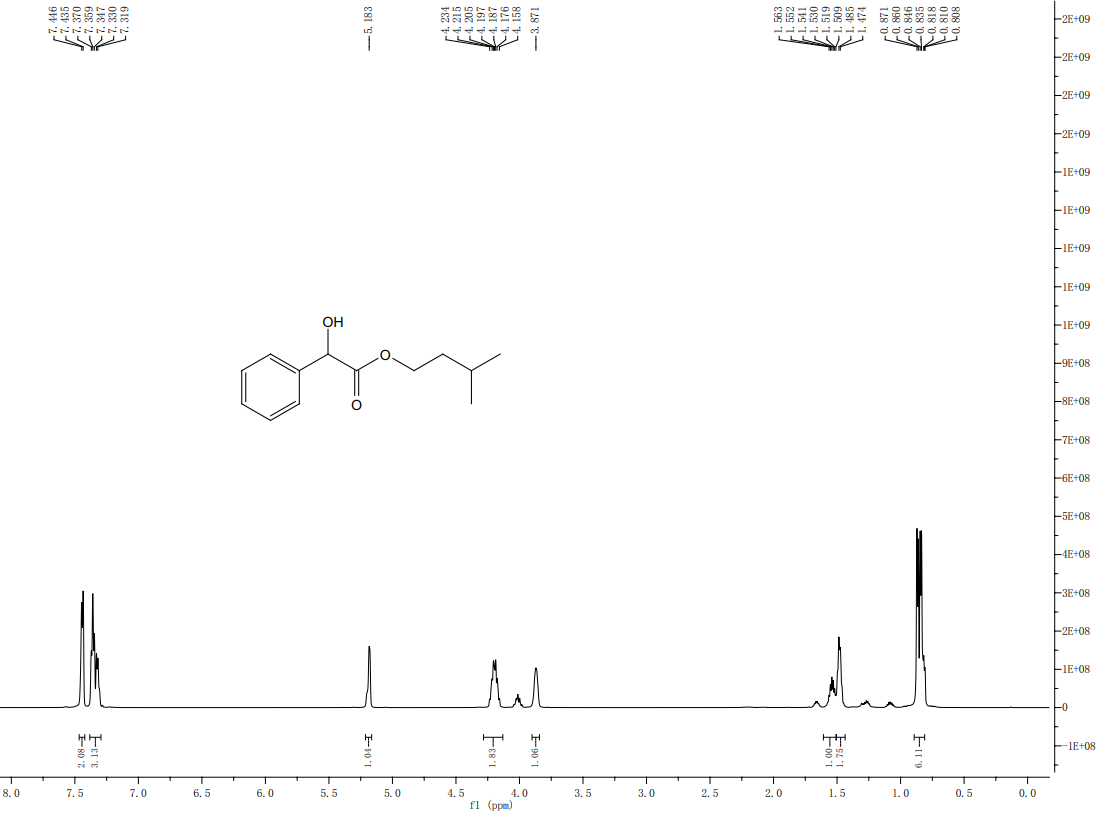
1H NMR of **3ag**



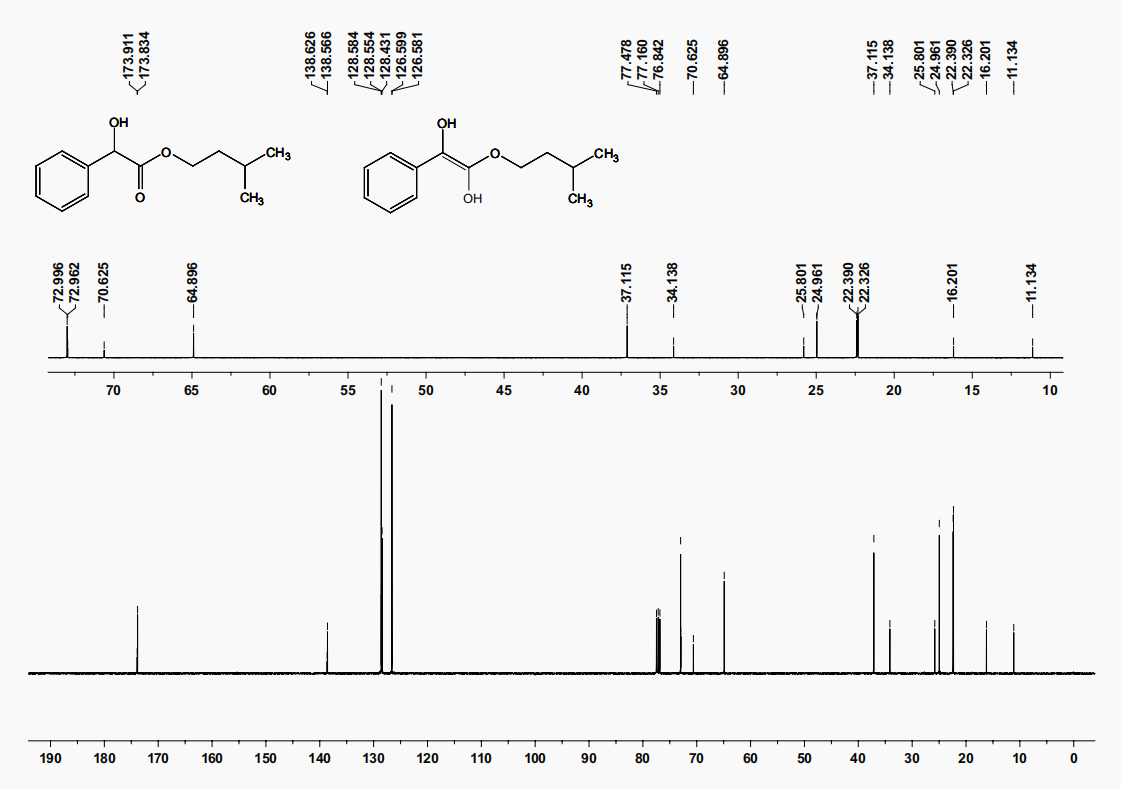
13C NMR of **3ag**



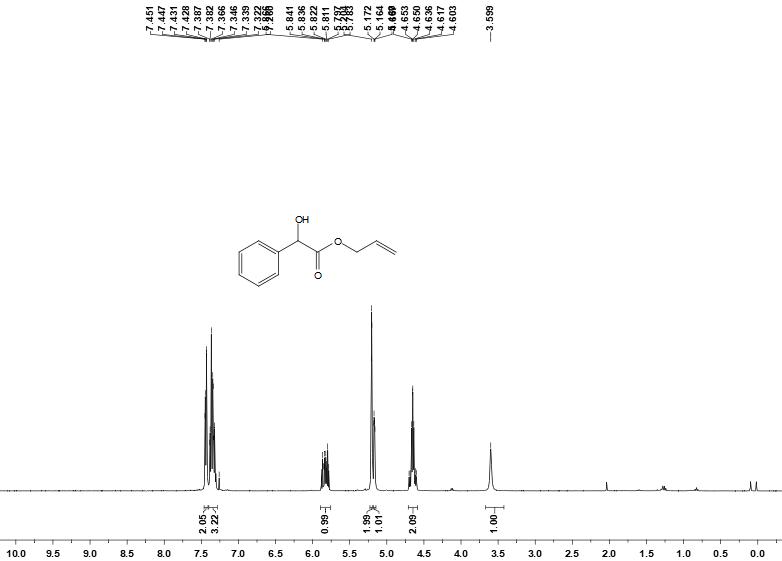
1H NMR of **3ah**



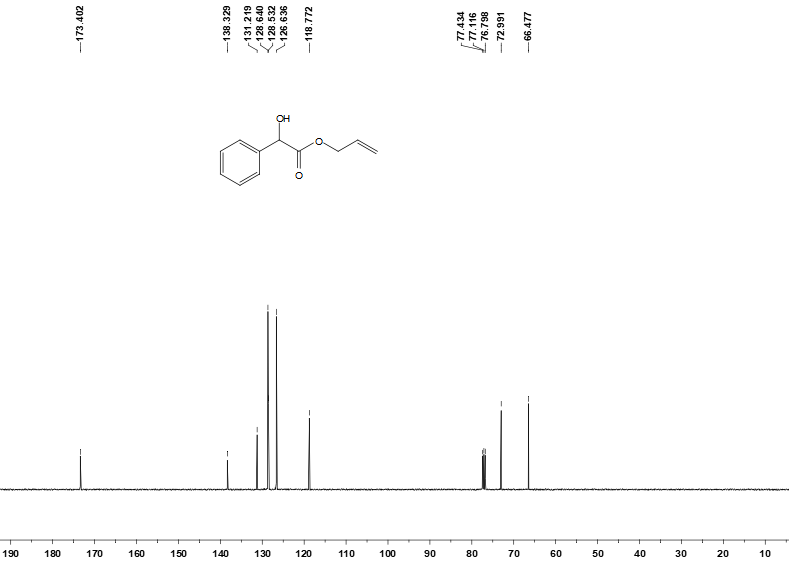
13C NMR of **3ah**



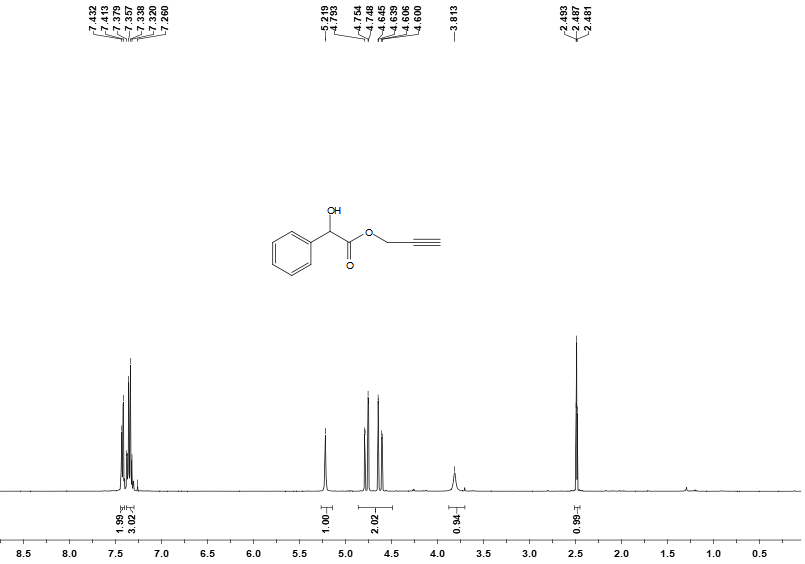
1H NMR of **3ai**



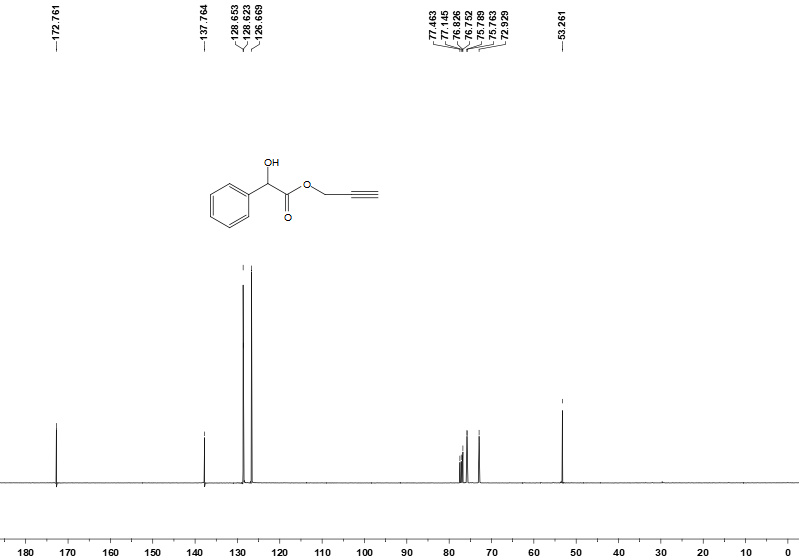
13C NMR of **3ai**



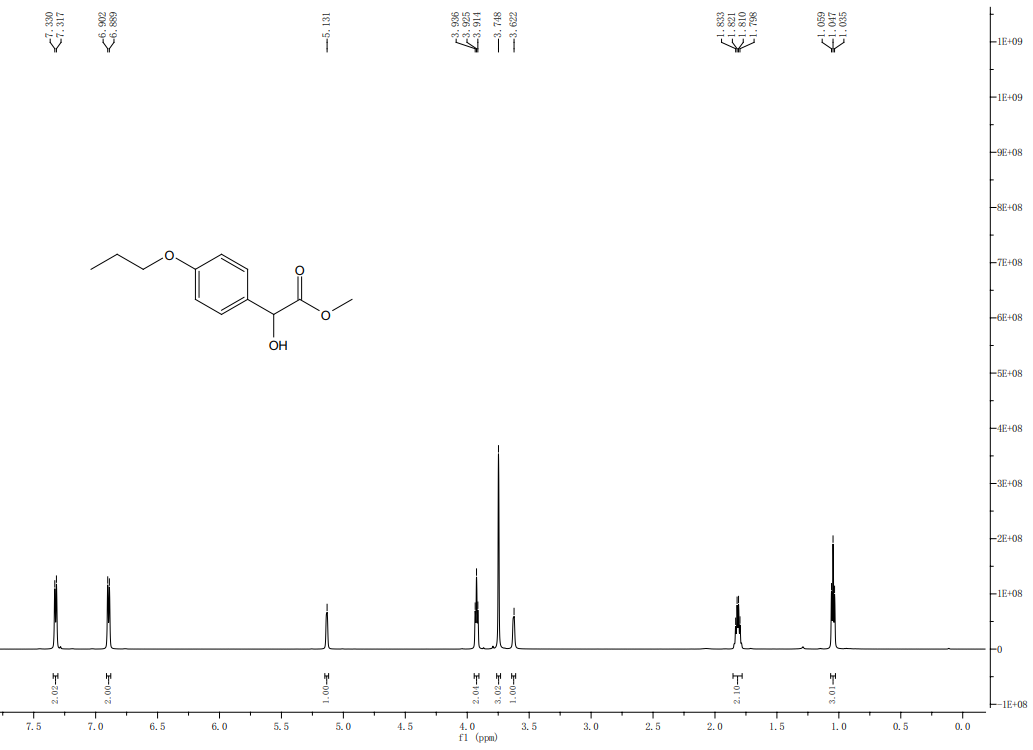
1H NMR of **3aj**



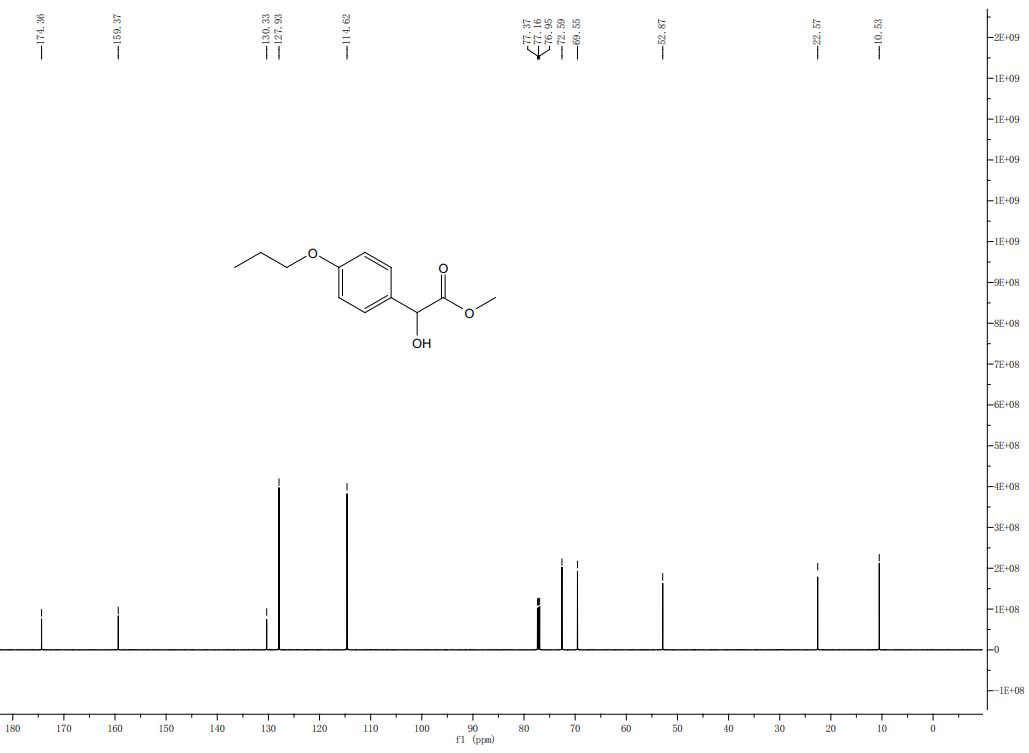
13C NMR of **3aj**



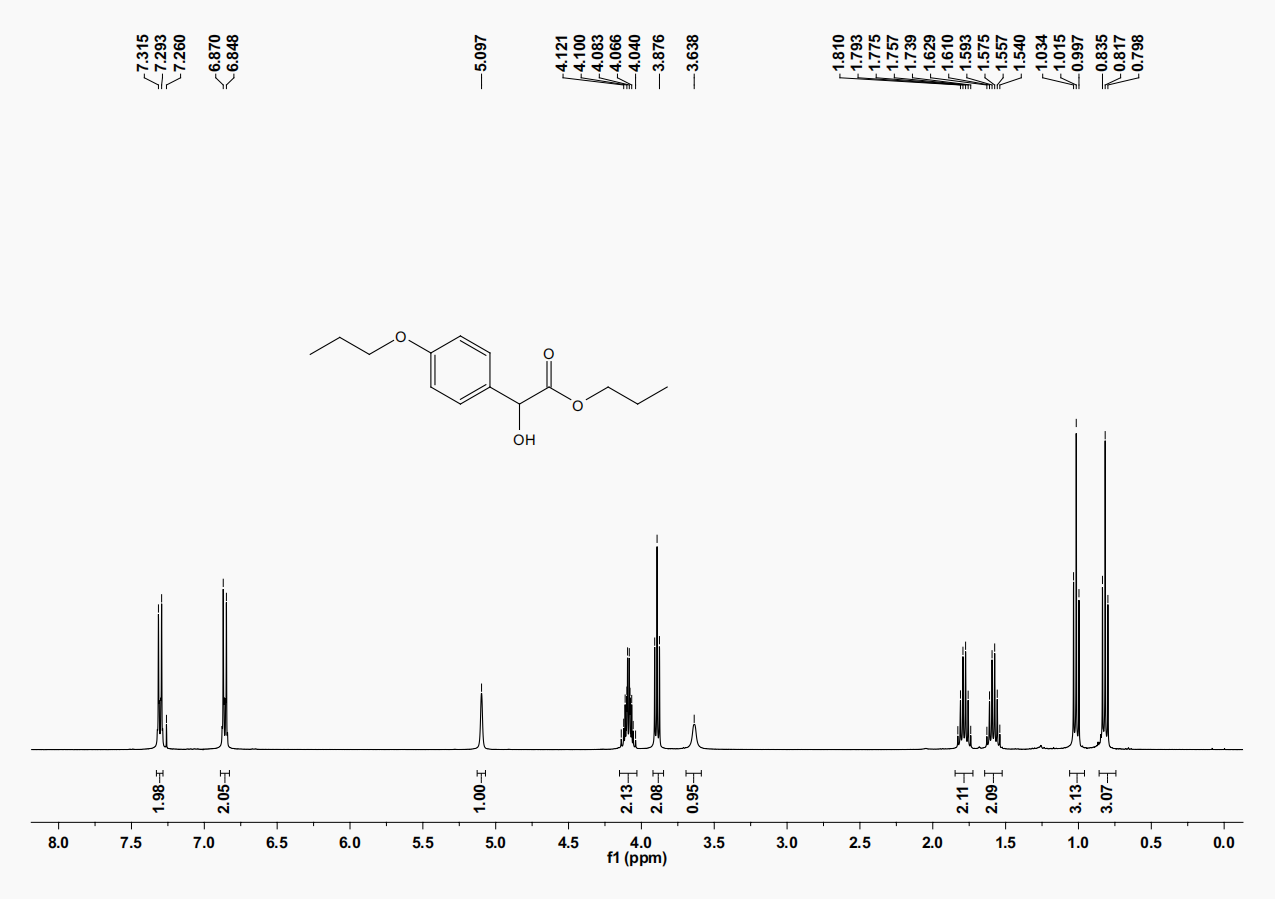
1H NMR of **3ba**



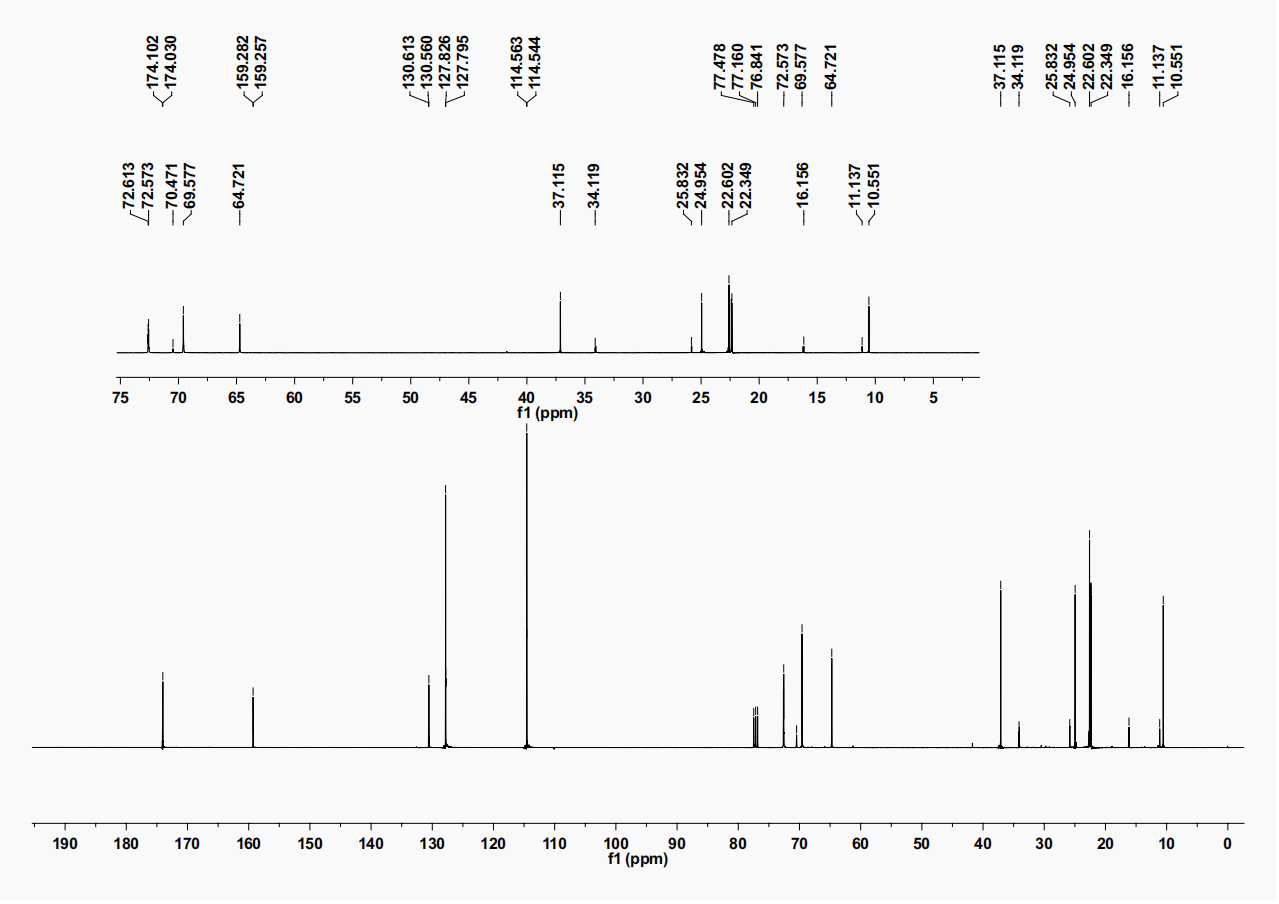
13C NMR of **3ba**



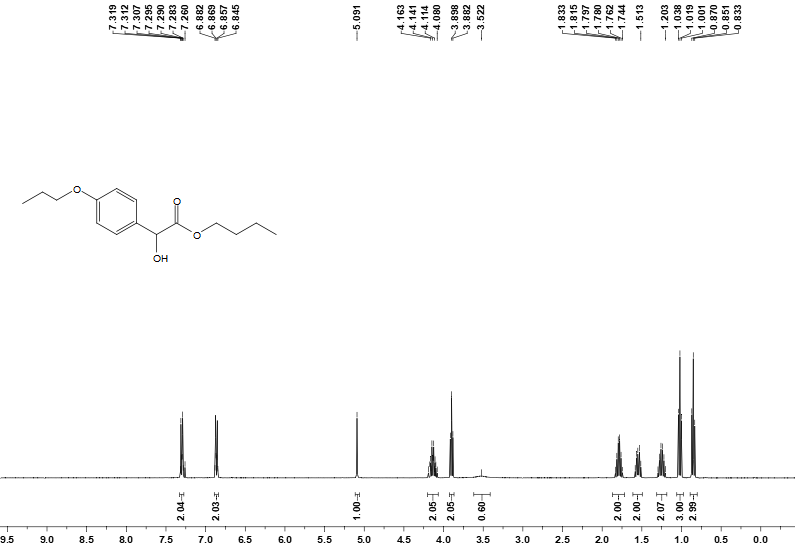
1H NMR of **3bc**



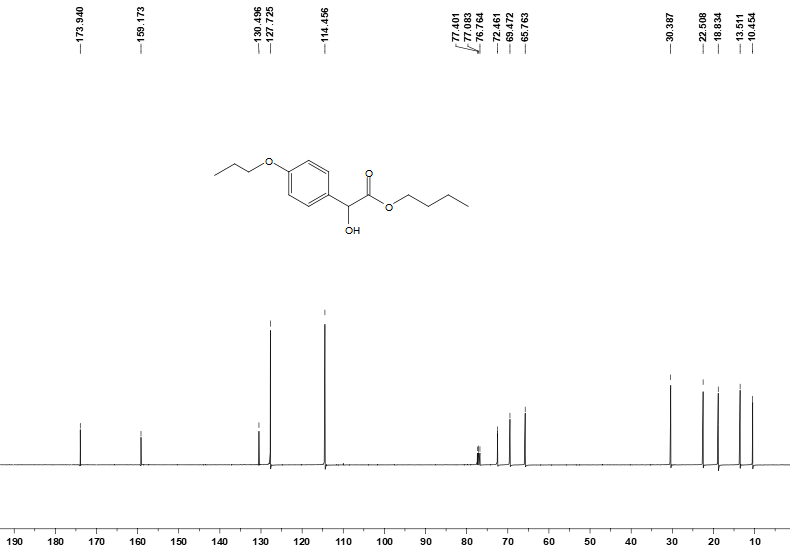
13C NMR of **3bc**



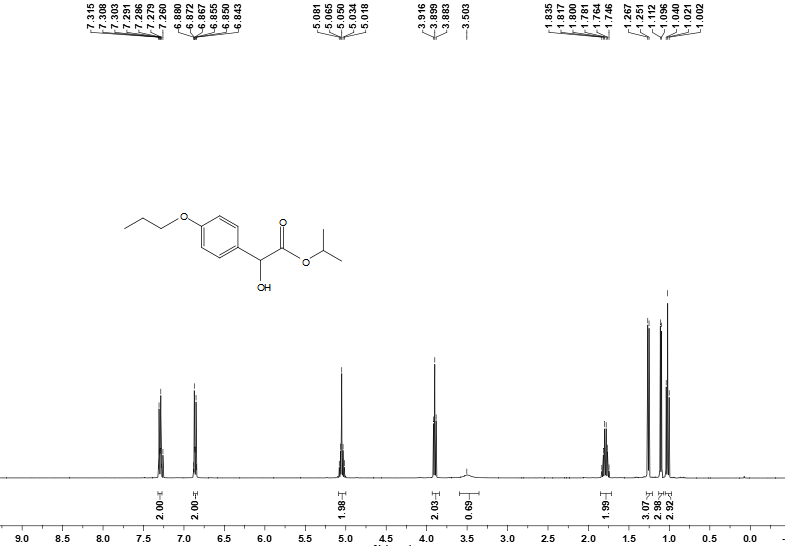
1H NMR of **3bd**



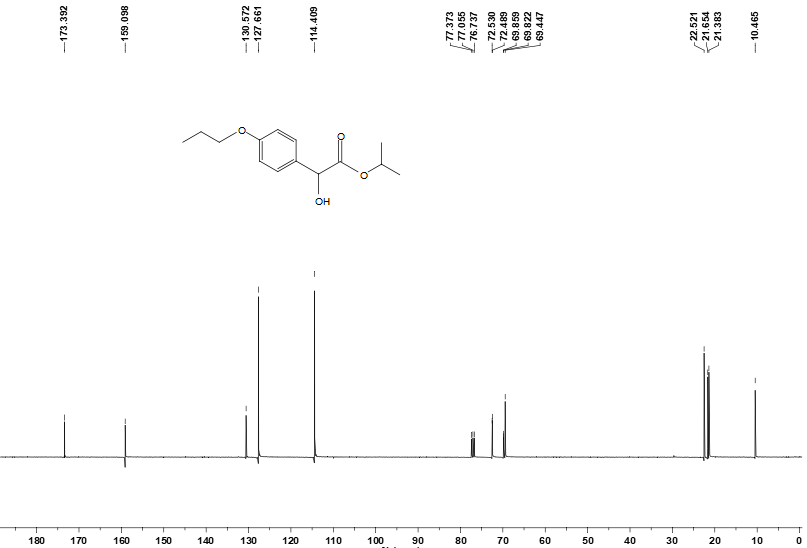
13C NMR of **3bd**



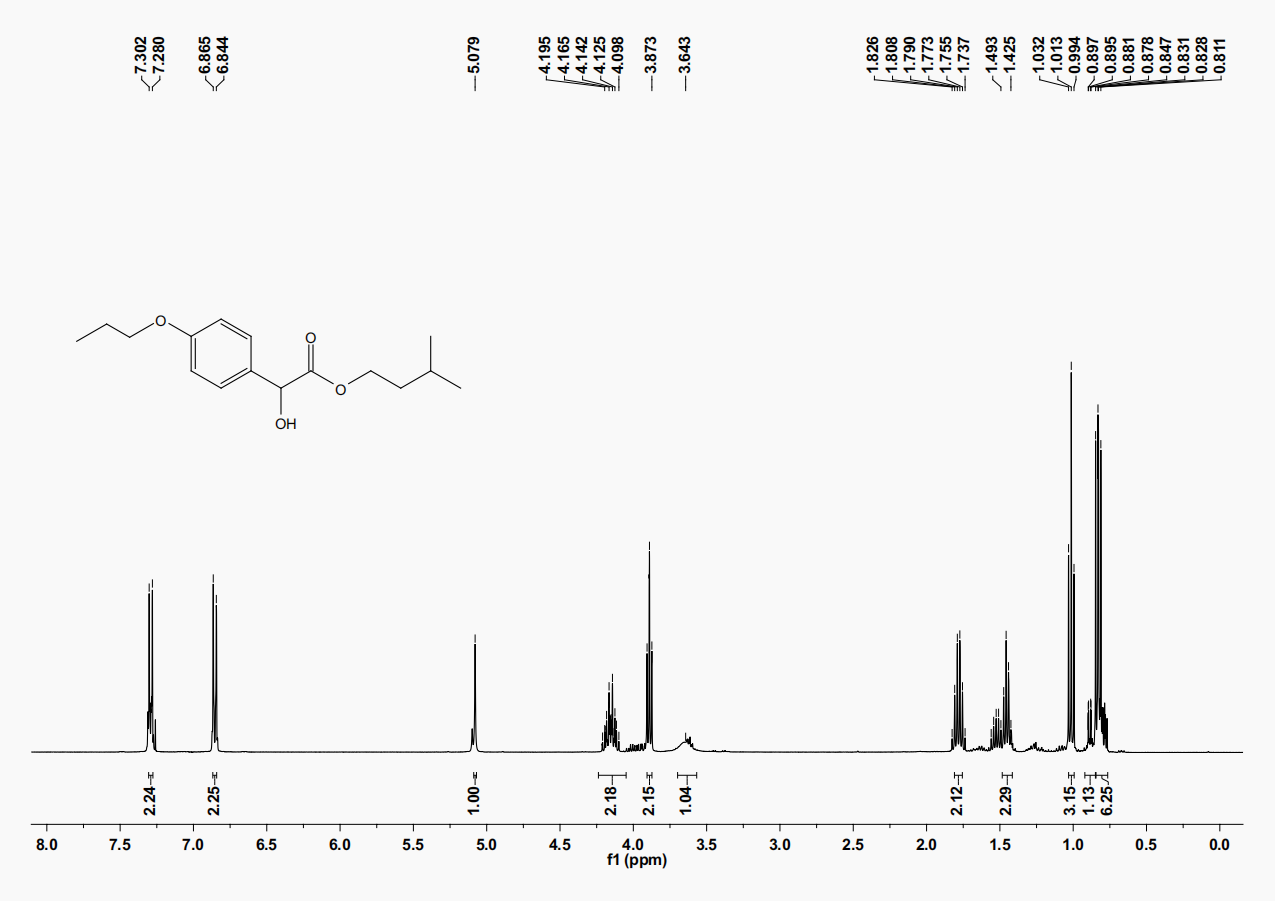
1H NMR of **3bg**



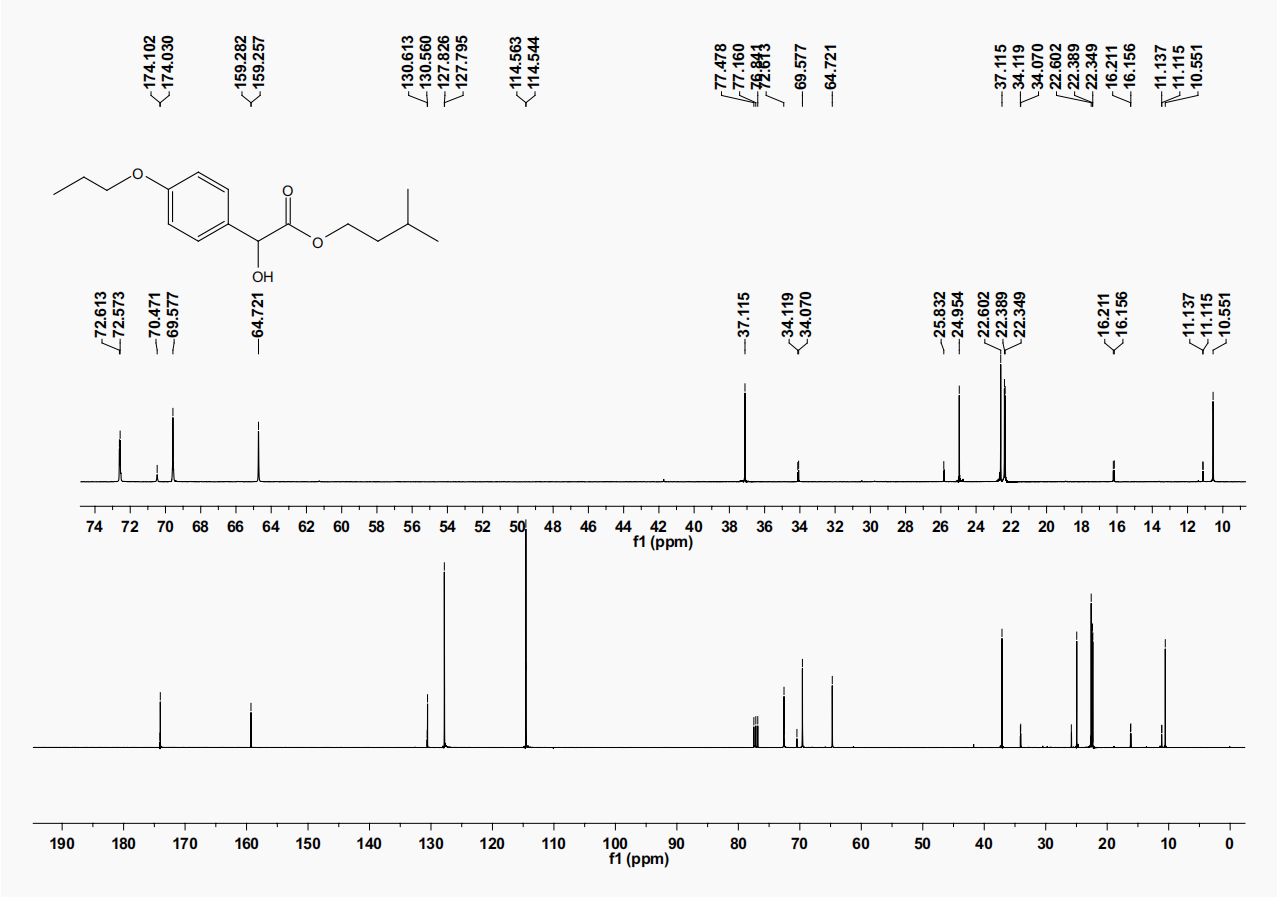
13C NMR of **3bg**



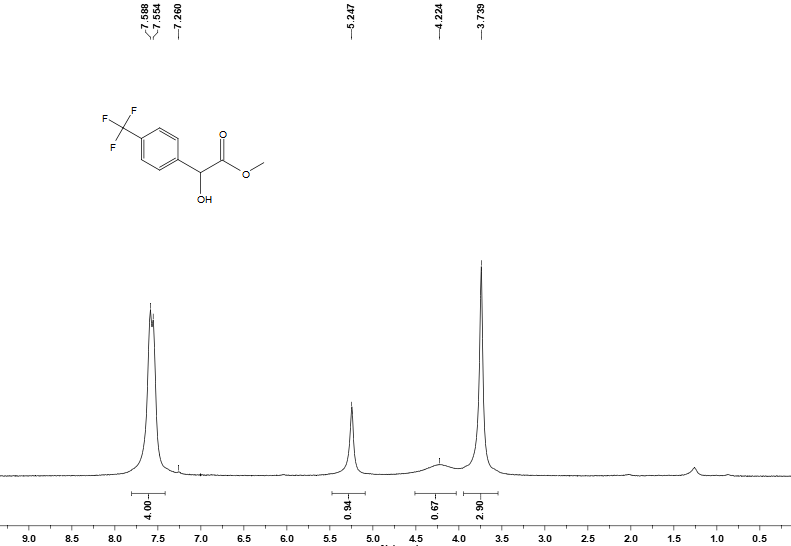
1H NMR of **3bh**



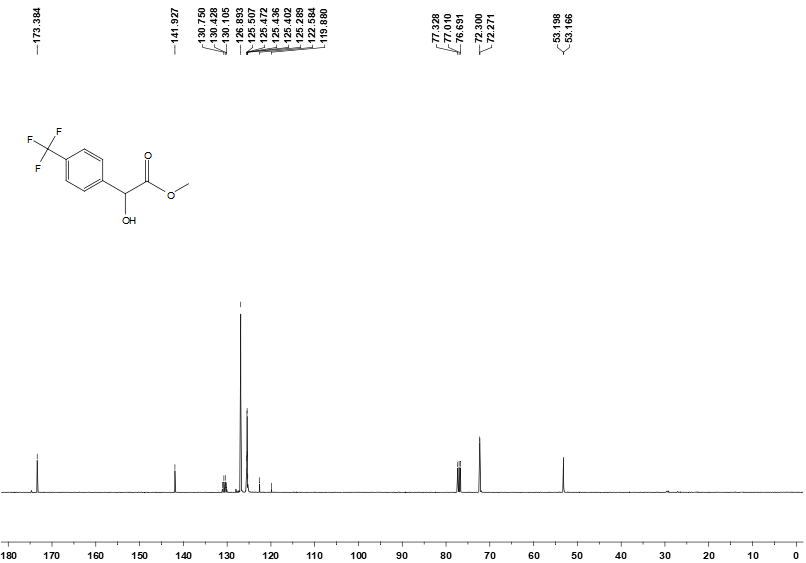
13C NMR of **3bh**



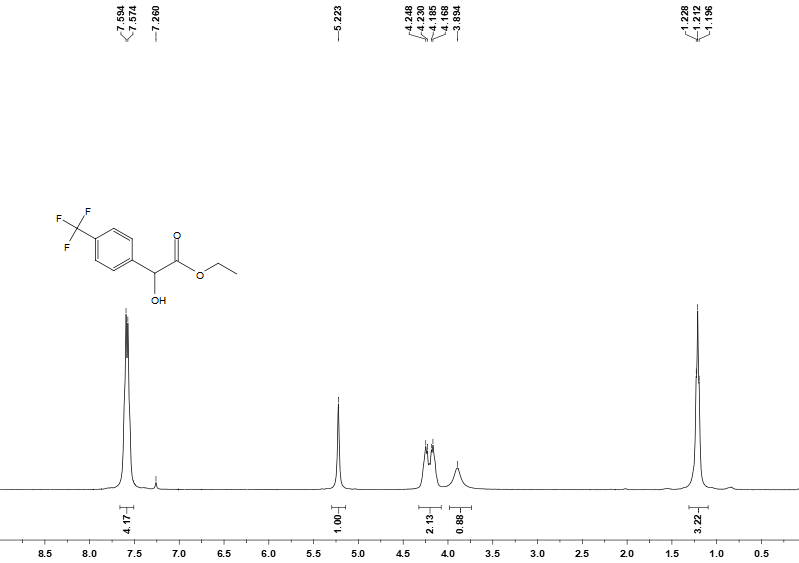
1H NMR of **3ca**



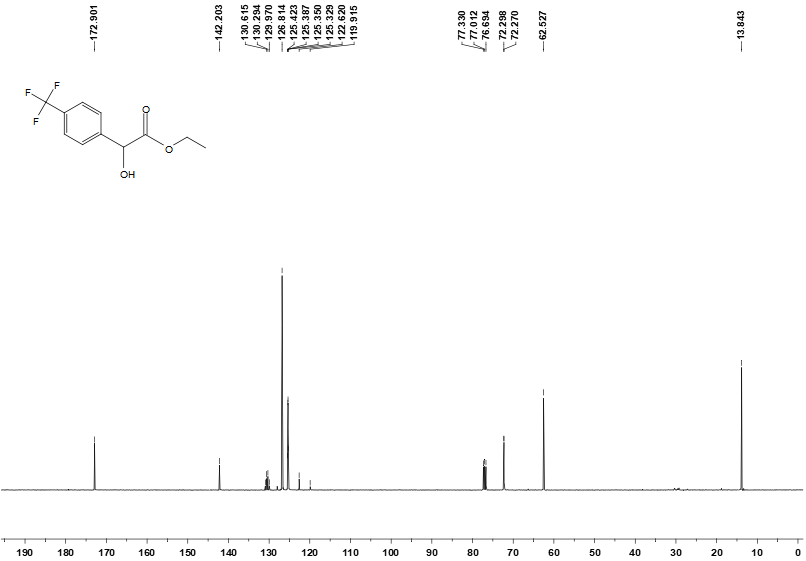
13C NMR of **3ca**



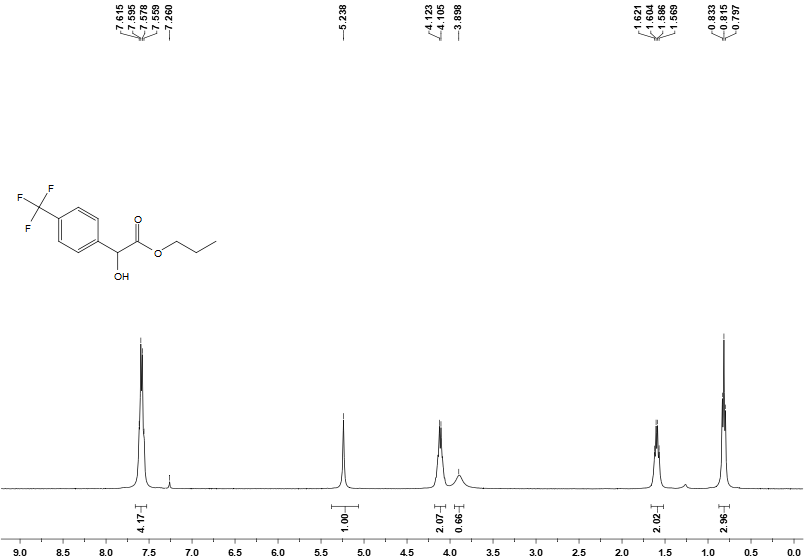
1H NMR of **3cb**



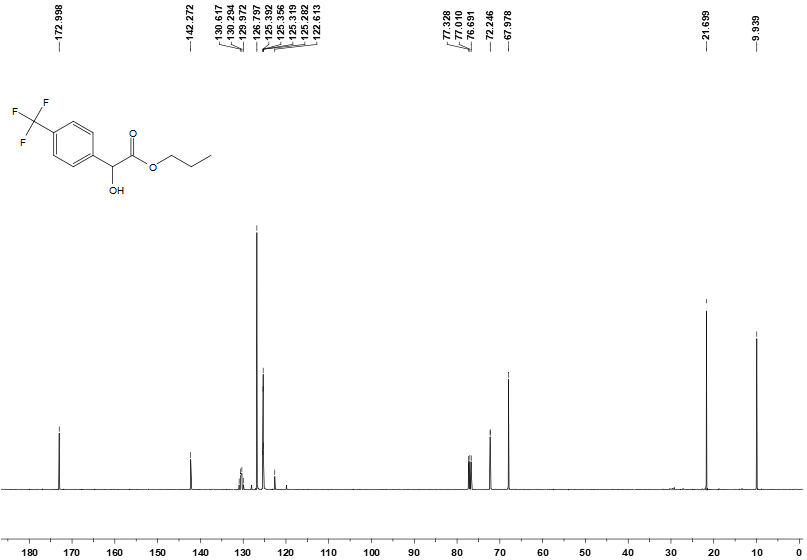
13C NMR of **3cb**



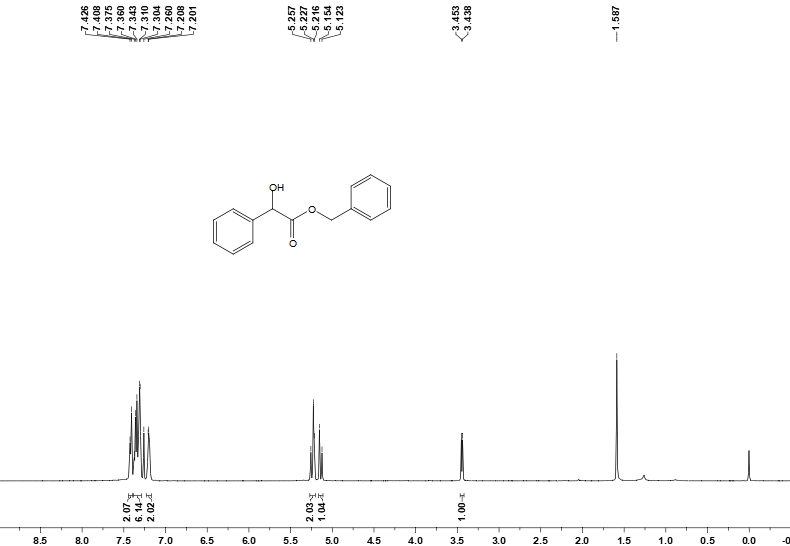
1H NMR of **3cc**



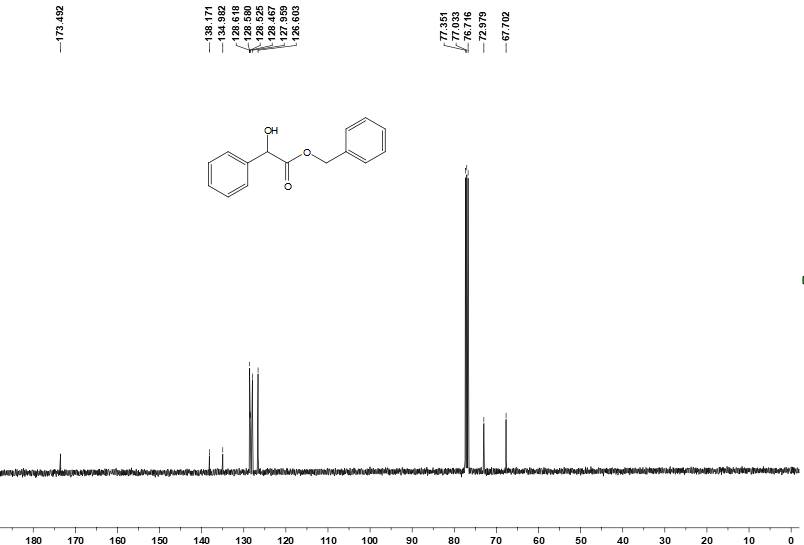
13C NMR of **3cc**



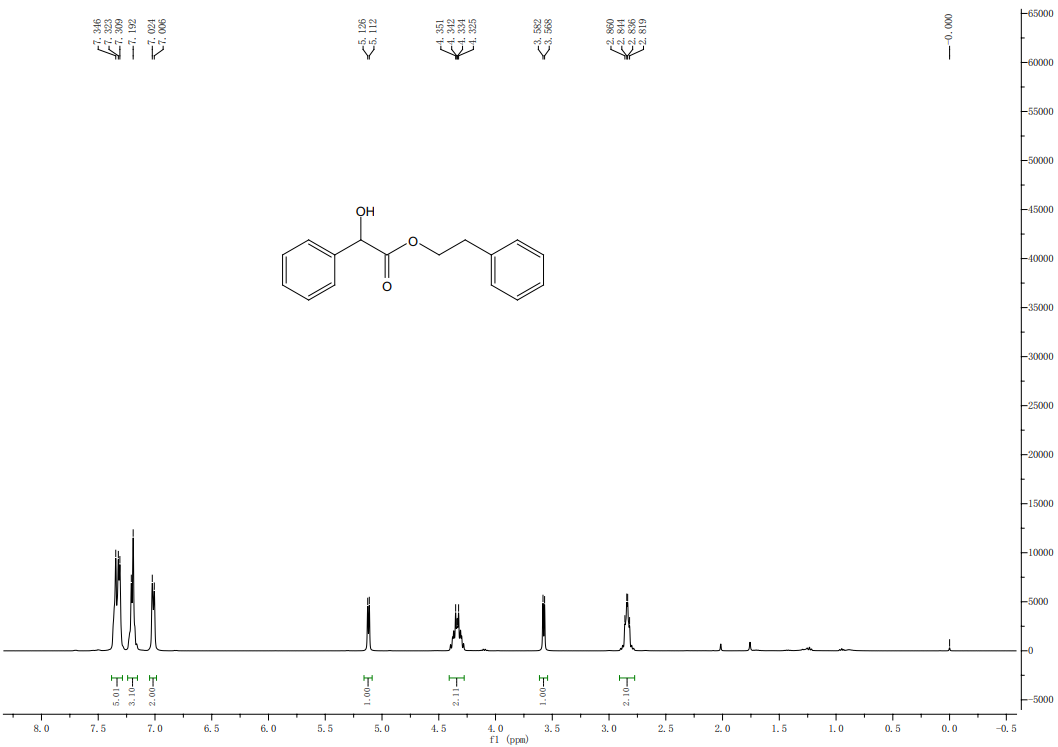
1H NMR of **3ak**



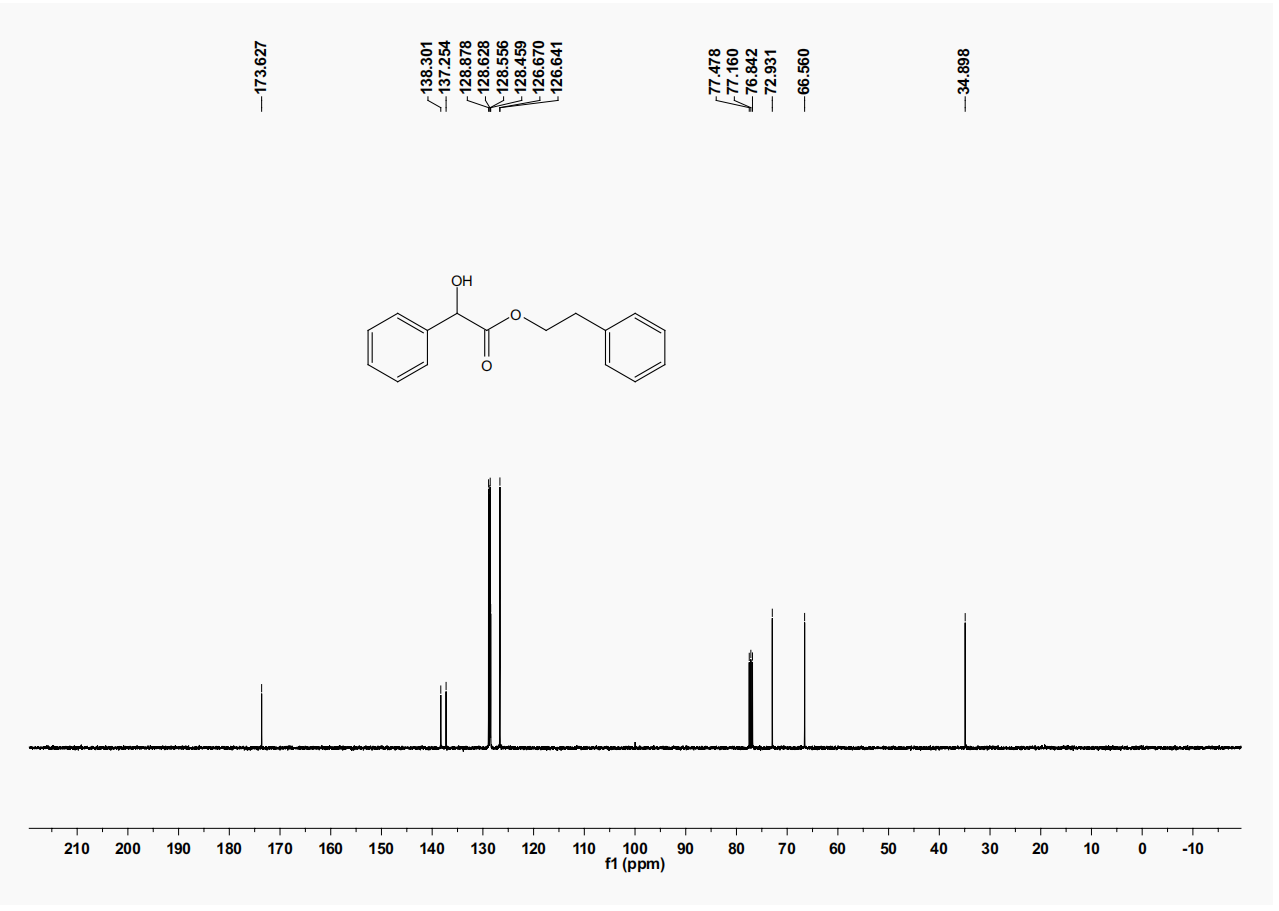
13C NMR of **3ak**



1H NMR of **3al**



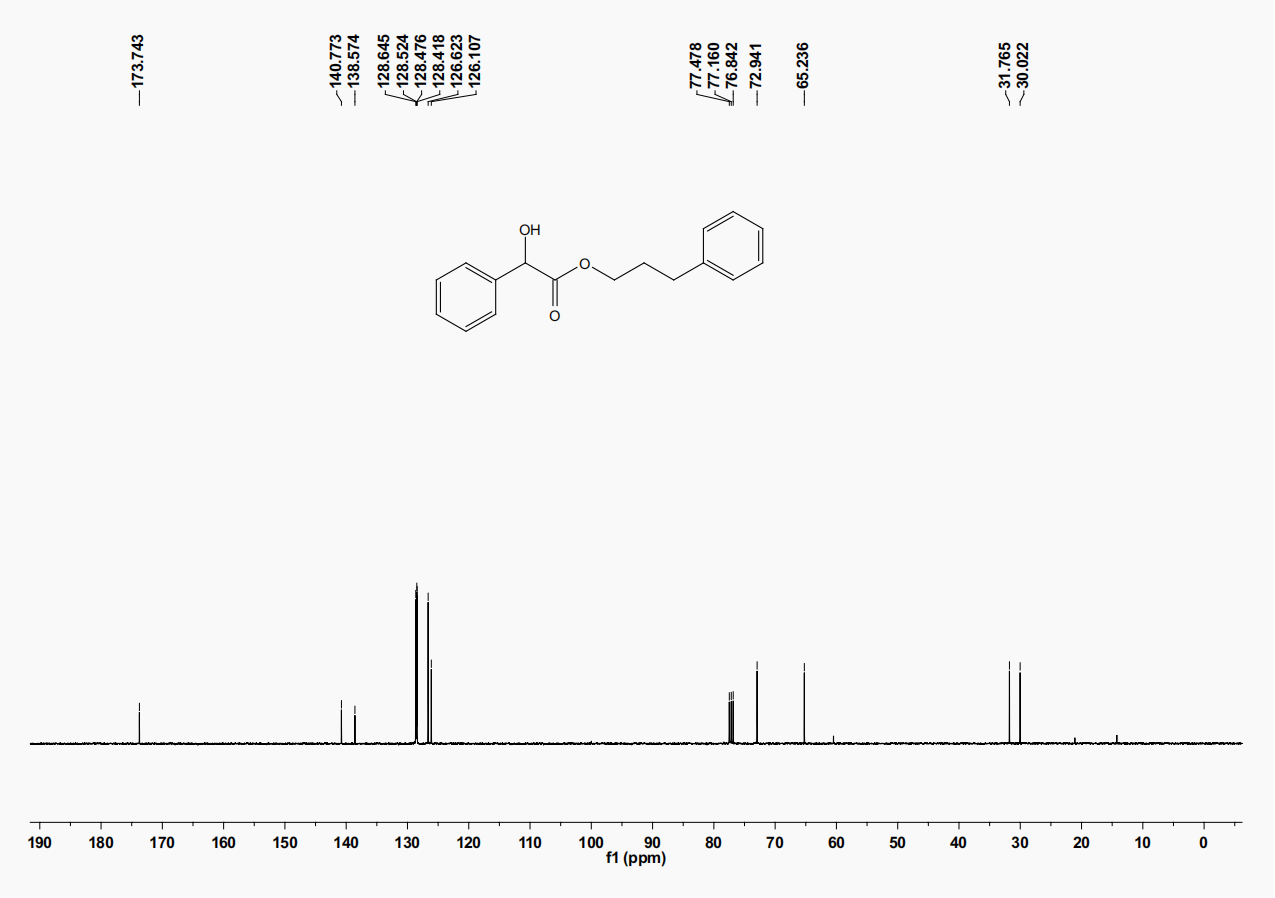
13C NMR of **3al**



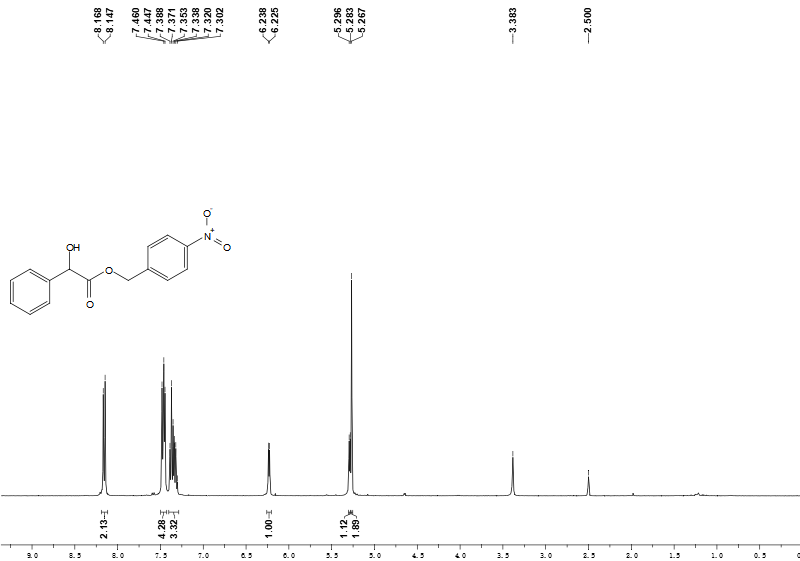
1H NMR of **3am**



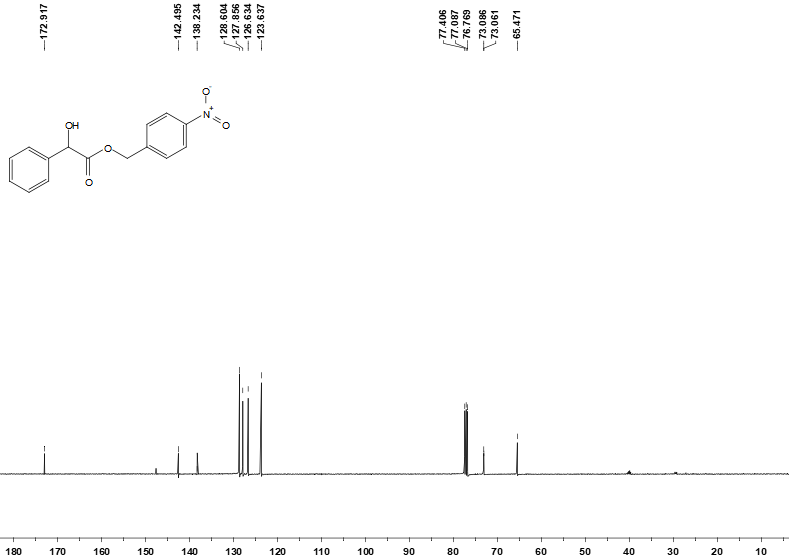
13C NMR of **3am**



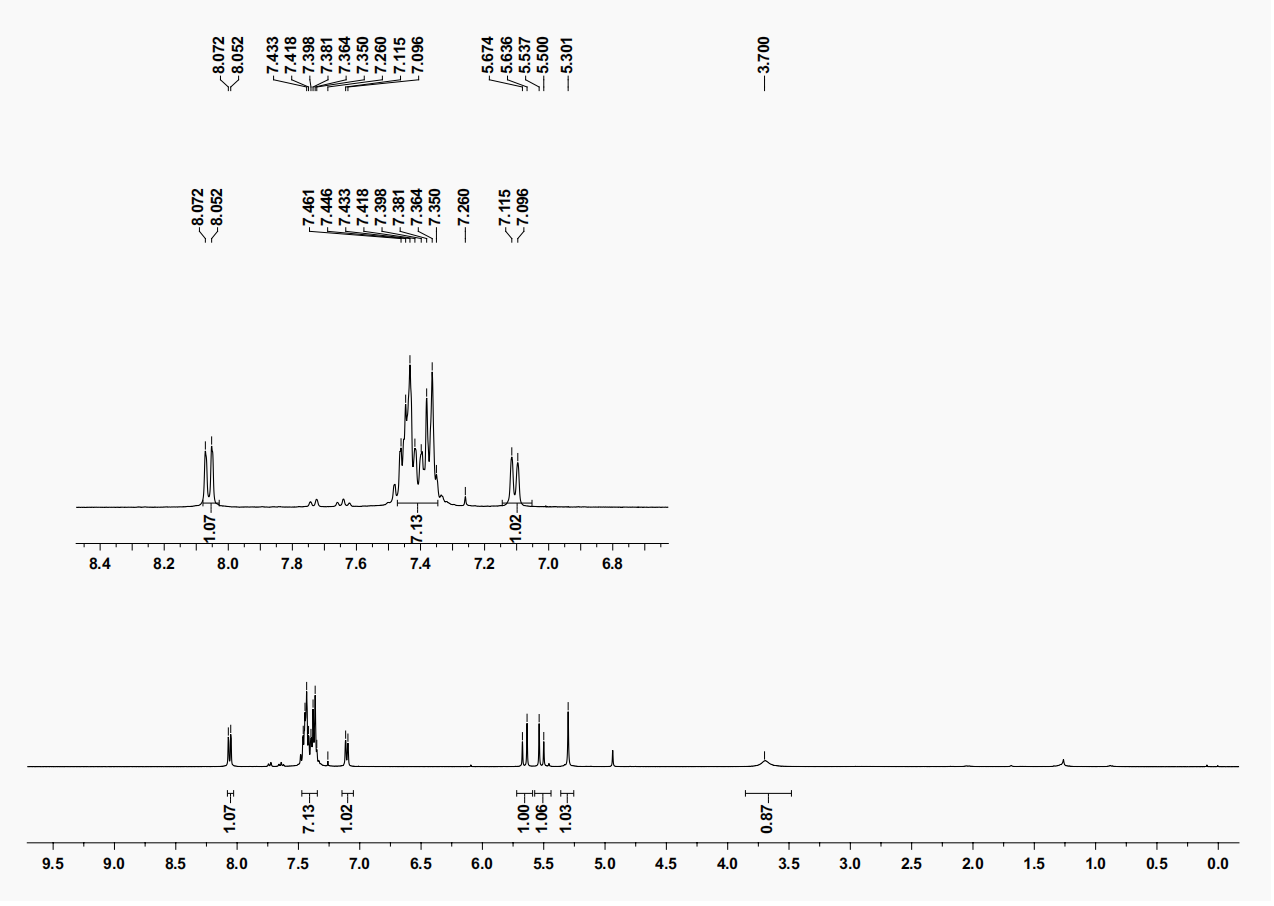
1H NMR of **3an**



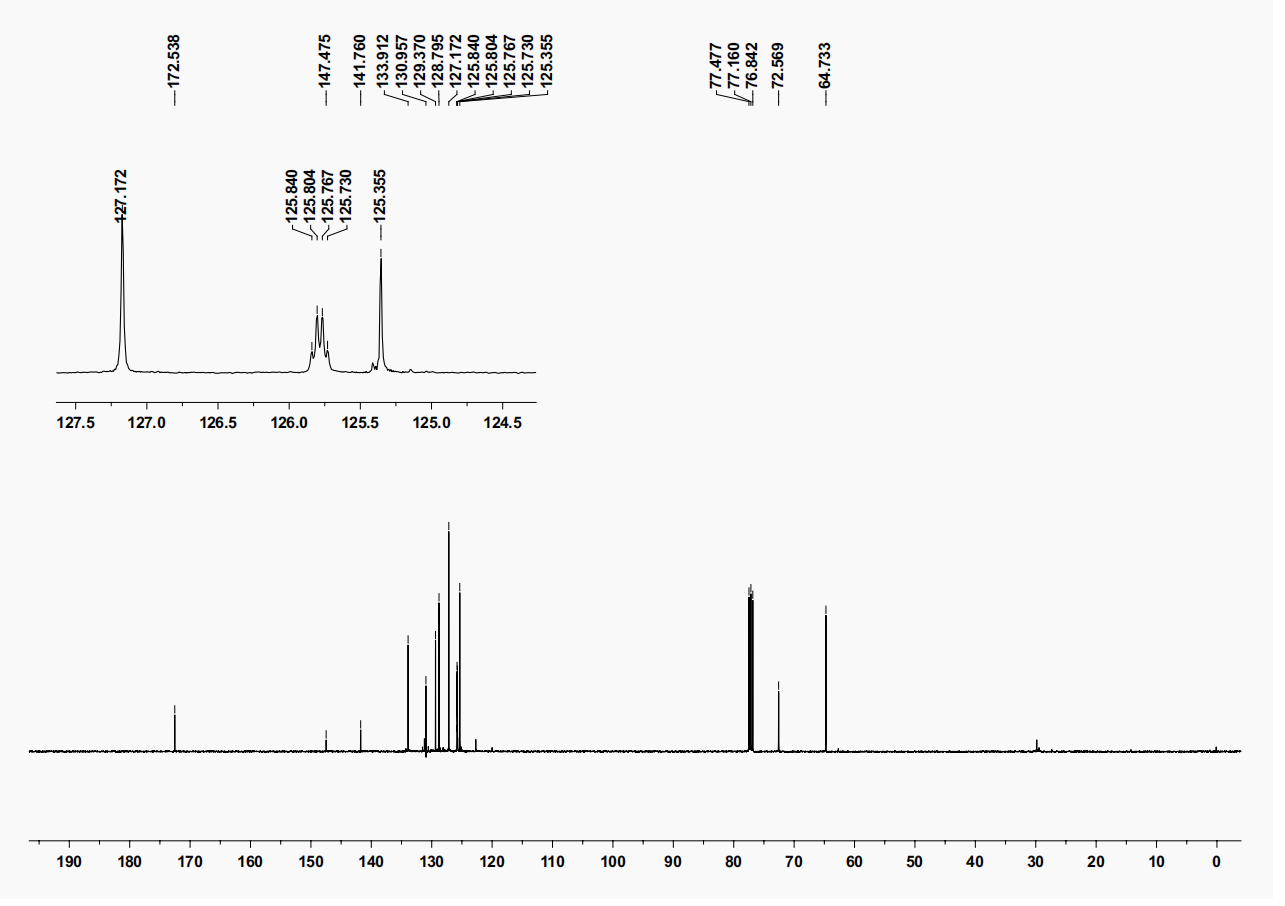
13C NMR of **3an**



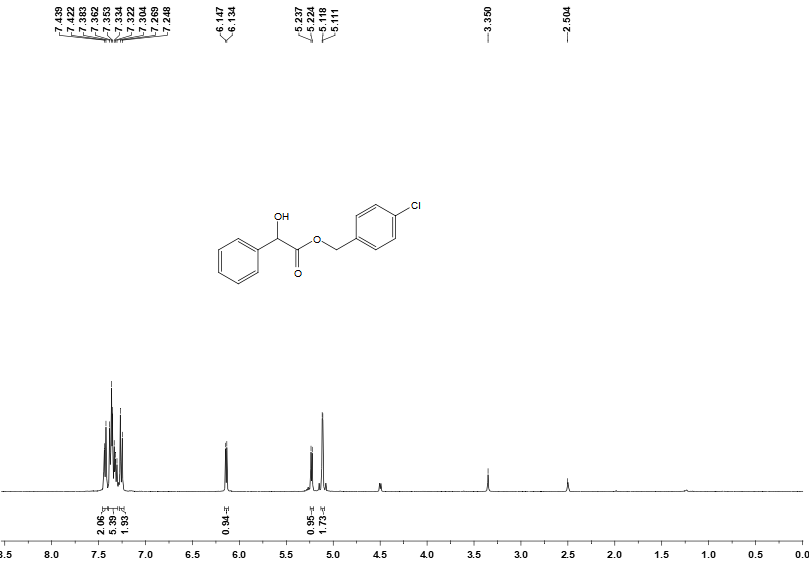
1H NMR of **3ao**



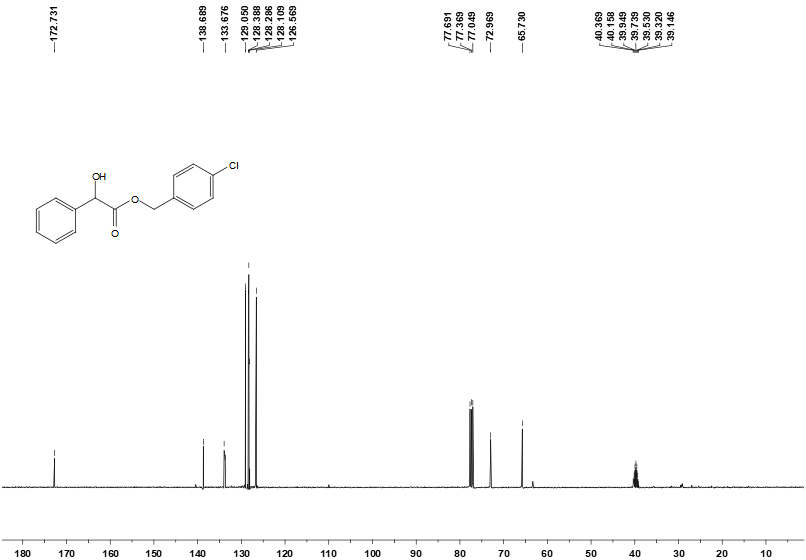
13C NMR of **3ao**



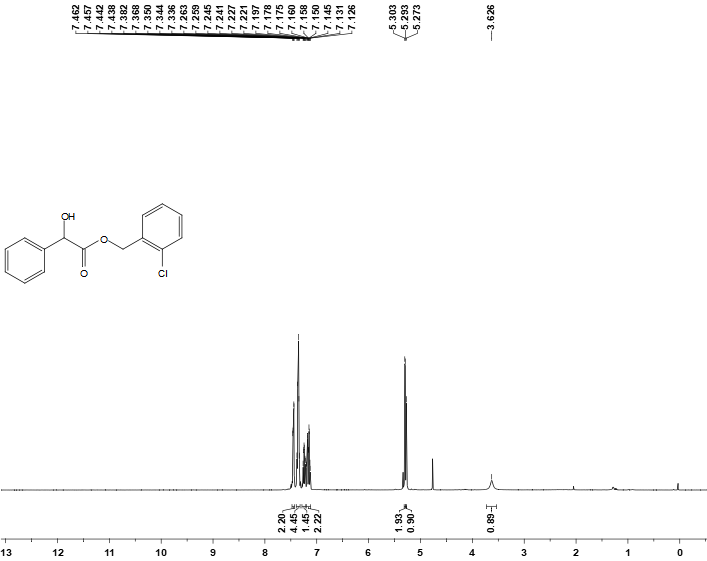
1H NMR of **3ap**



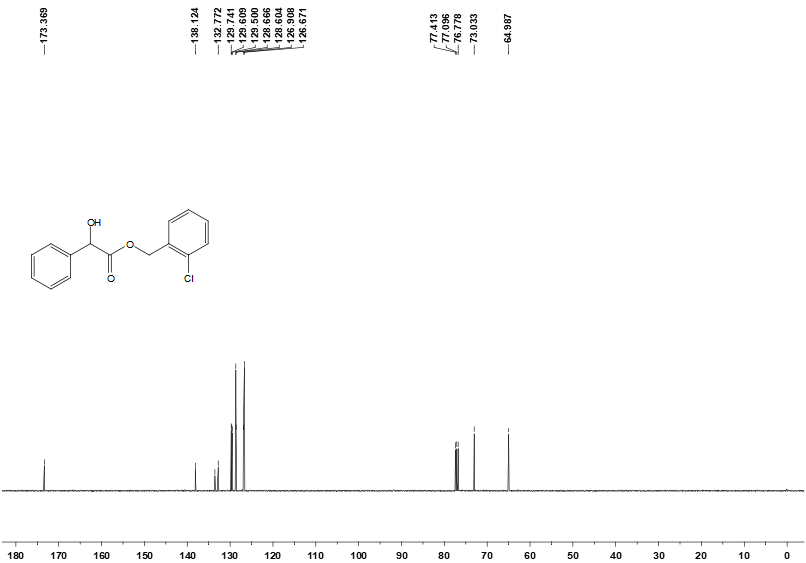
13C NMR of **3ap**



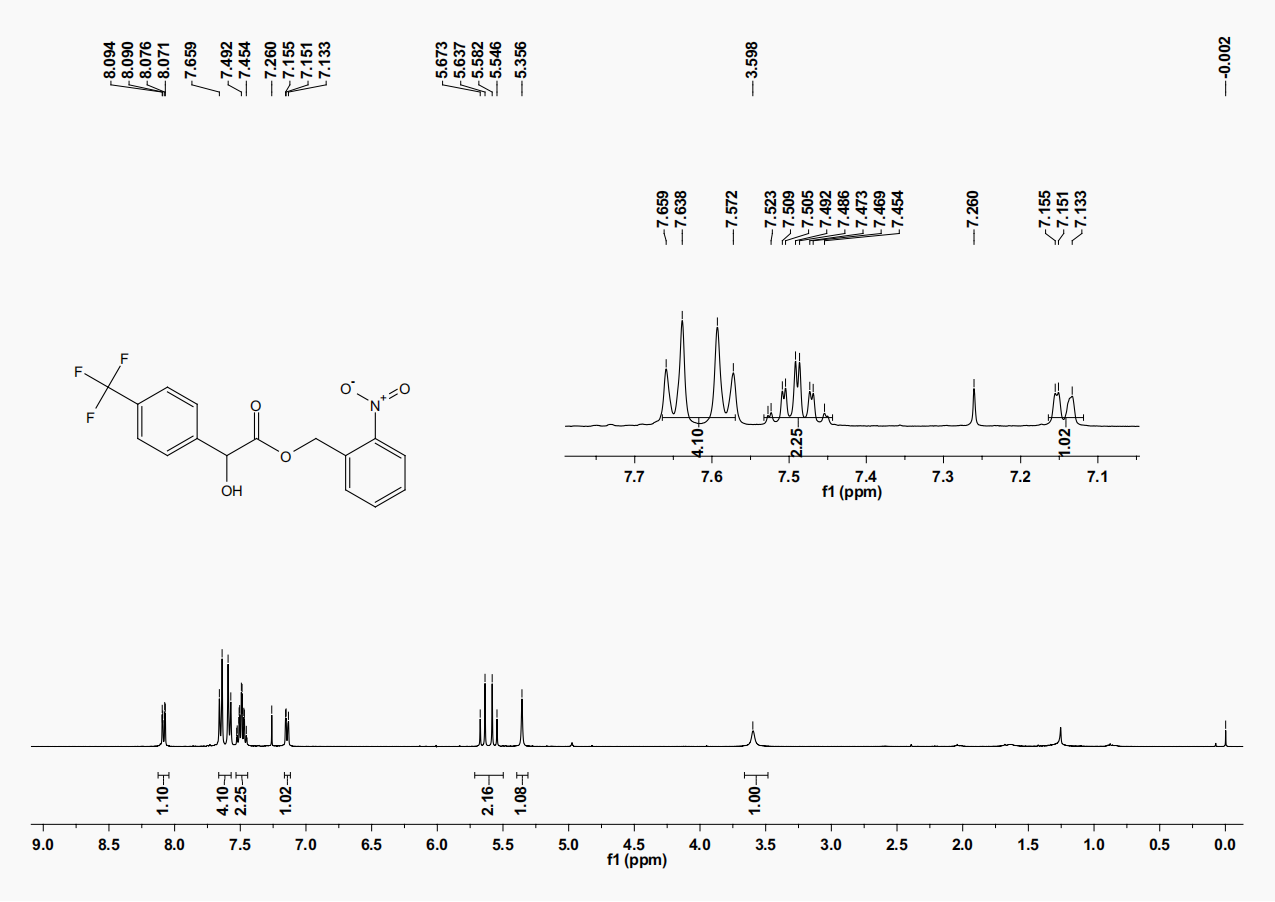
1H NMR of **3aq**



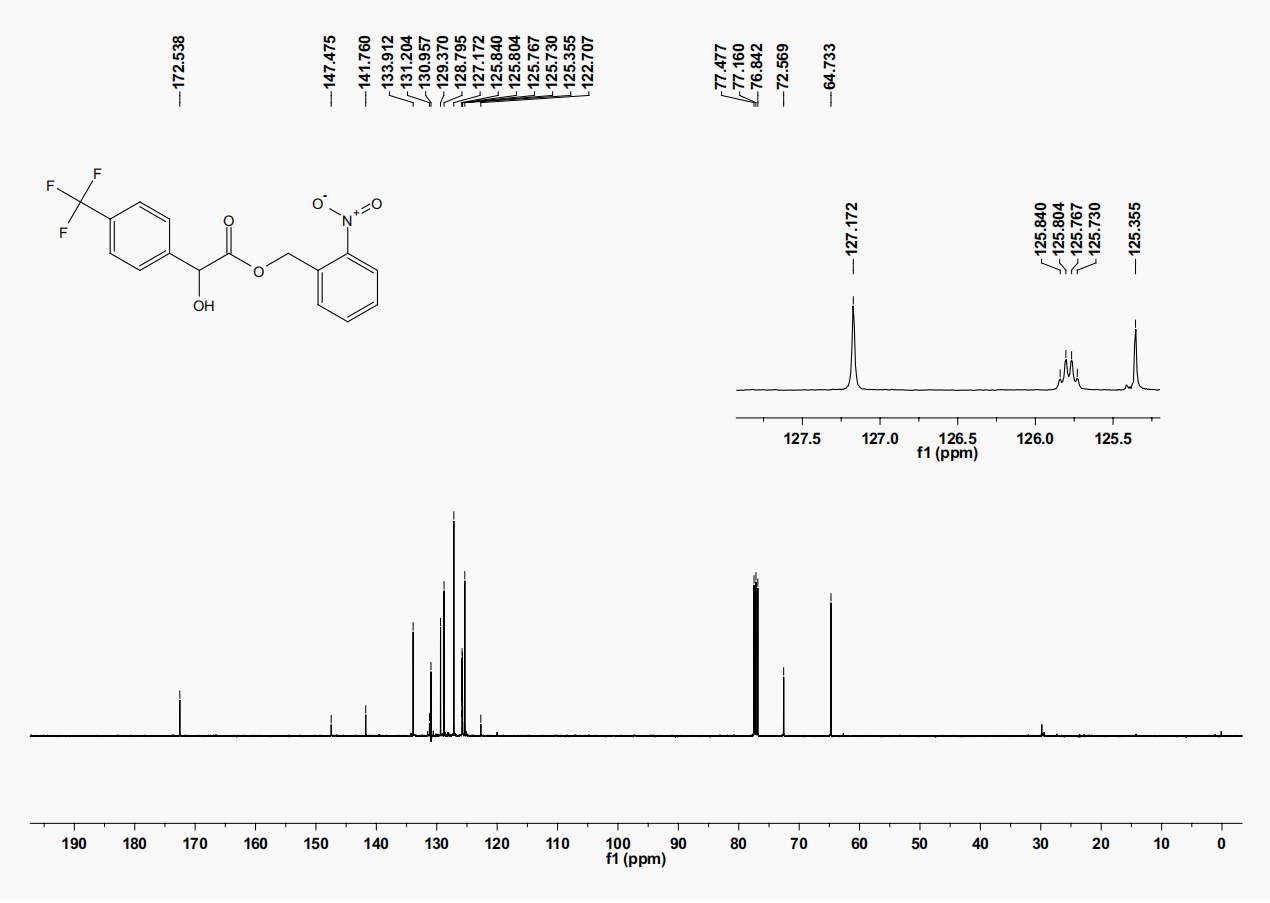
13C NMR of **3aq**



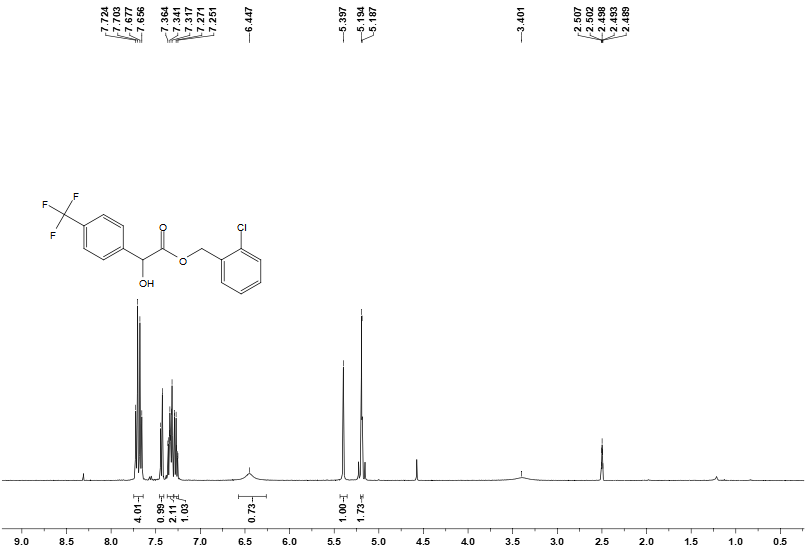
1H NMR of **3co**



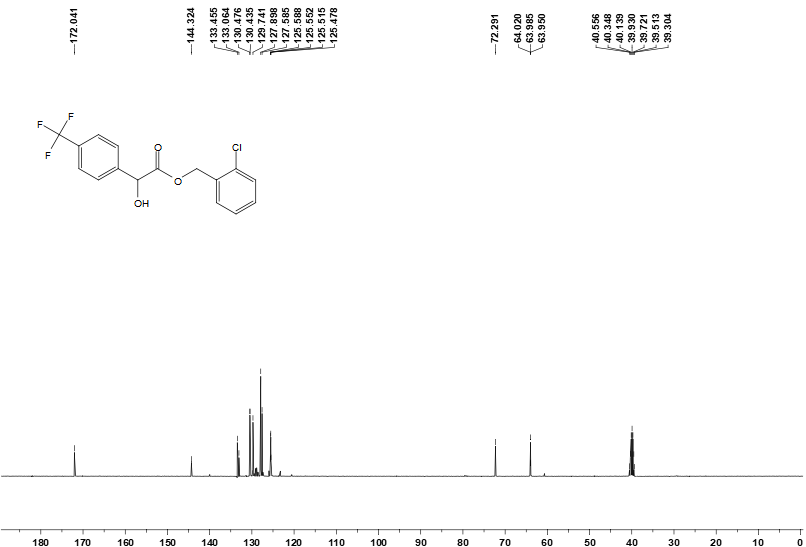
13C NMR of **3co**



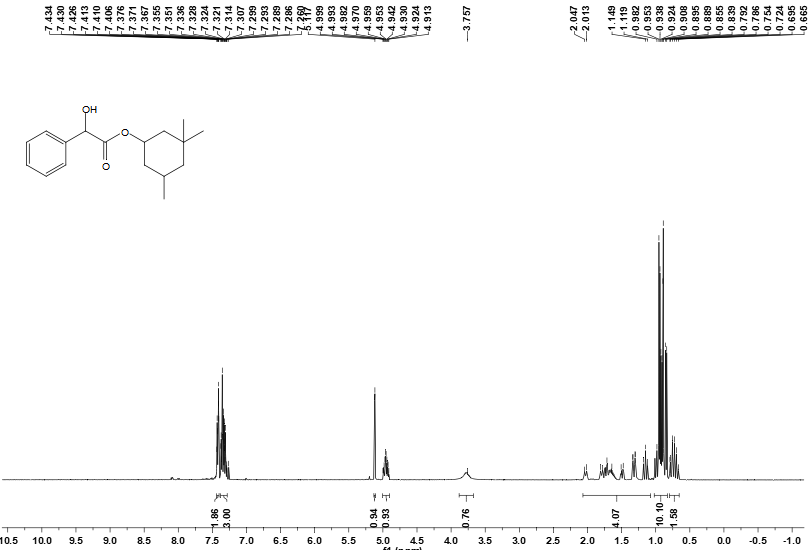
1H NMR of 3**cq**



13C NMR of **3cq**



1H NMR of **I**



13C NMR of **I**

