

Supporting Information

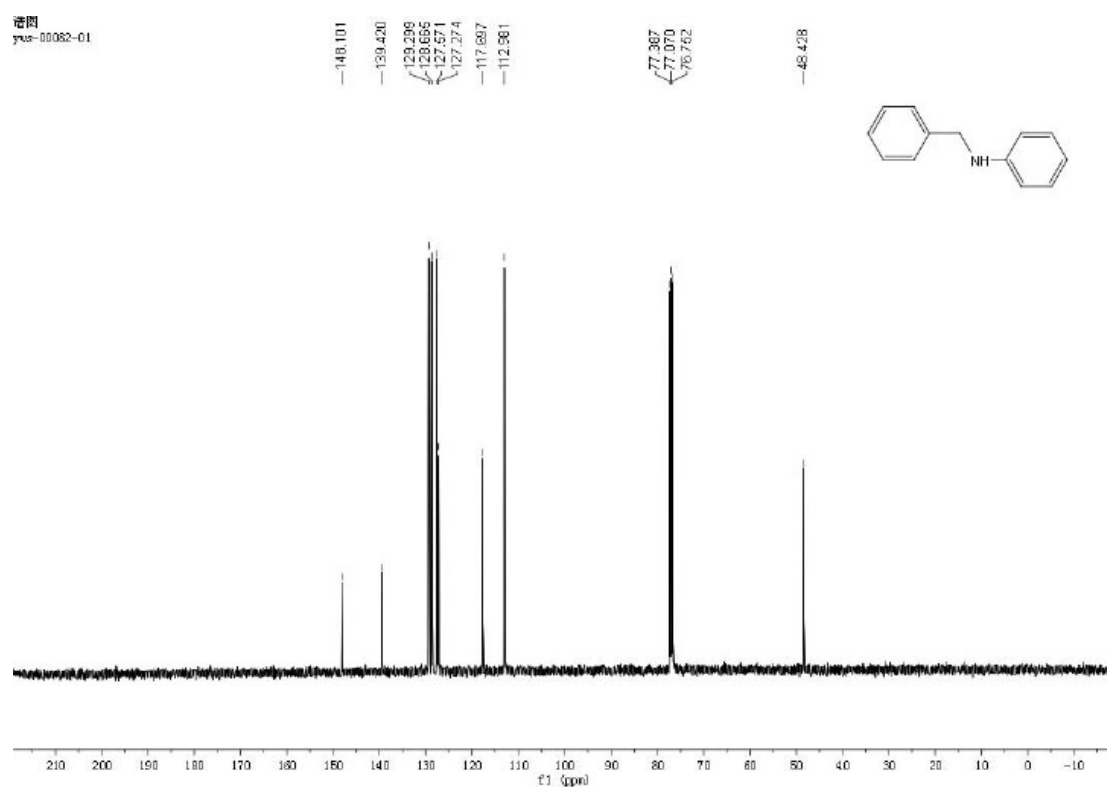
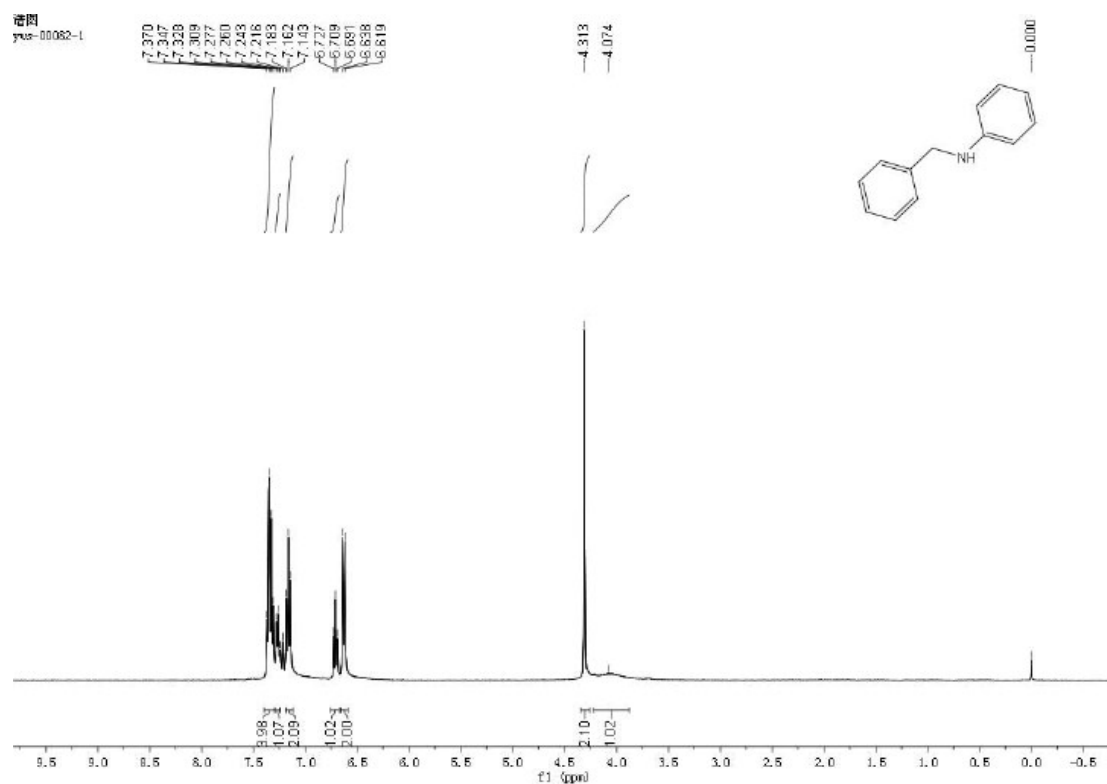
Magnetic nanoparticles-supported phosphine gold(I) complex: A highly efficient and recyclable catalyst for the direct reductive amination of aldehydes and ketones

Weisen Yang,^{a,b} Li Wei,^a Feiyan Yi^a and Mingzhong Cai^{a*}

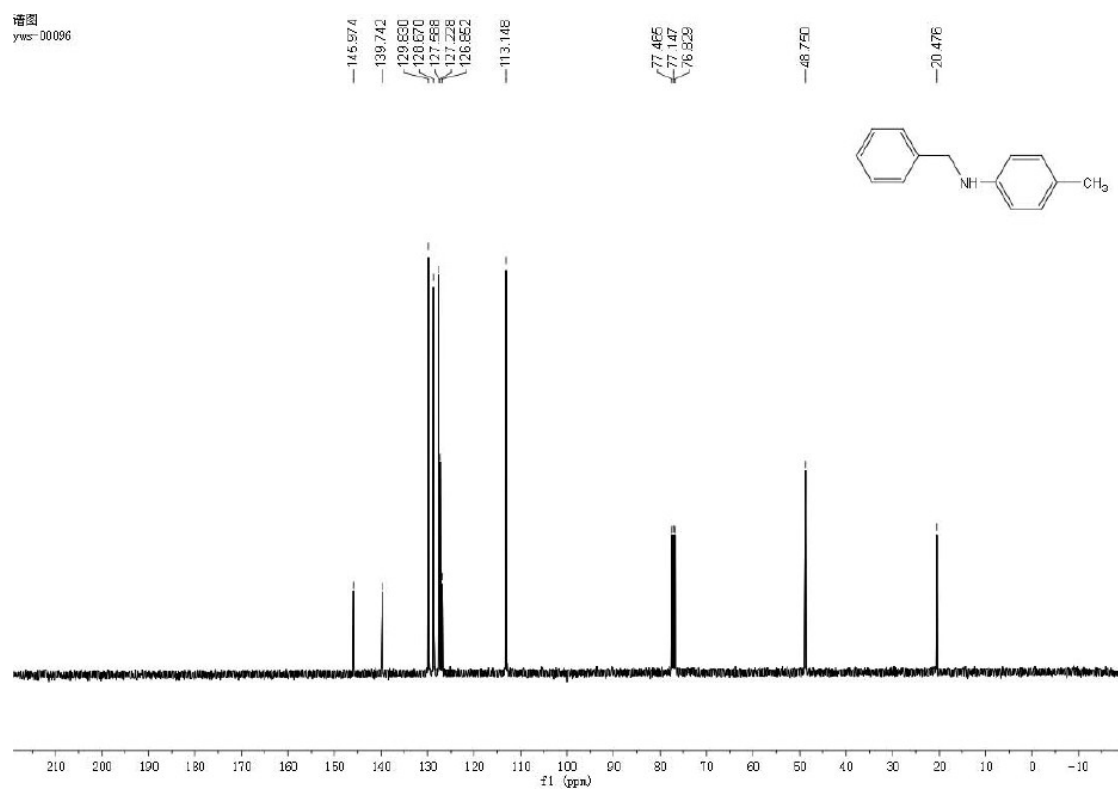
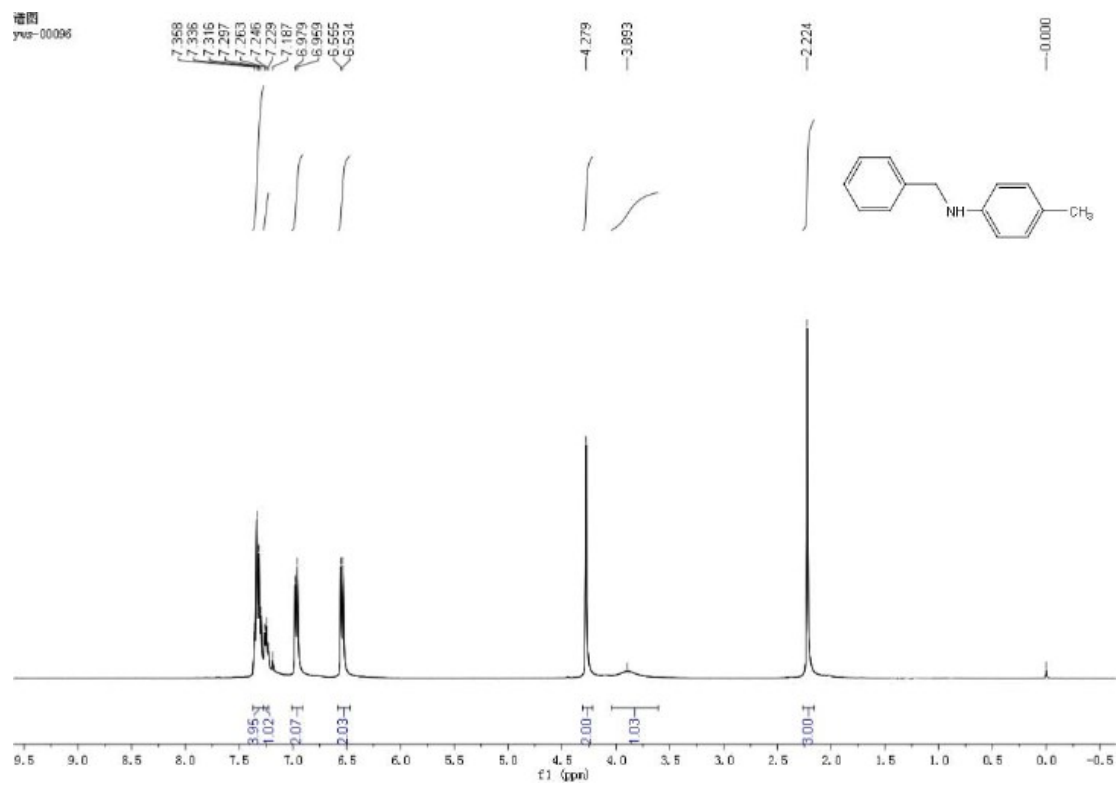
^a *Key Laboratory of Functional Small Organic Molecule, Ministry of Education and College of Chemistry & Chemical Engineering, Jiangxi Normal University, Nanchang 330022, P. R. China*

^b *College of Ecology and Resources Engineering, Wuyi University, Wuyishan City 354300, P. R. China*
mzcaai@jxnu.edu.cn

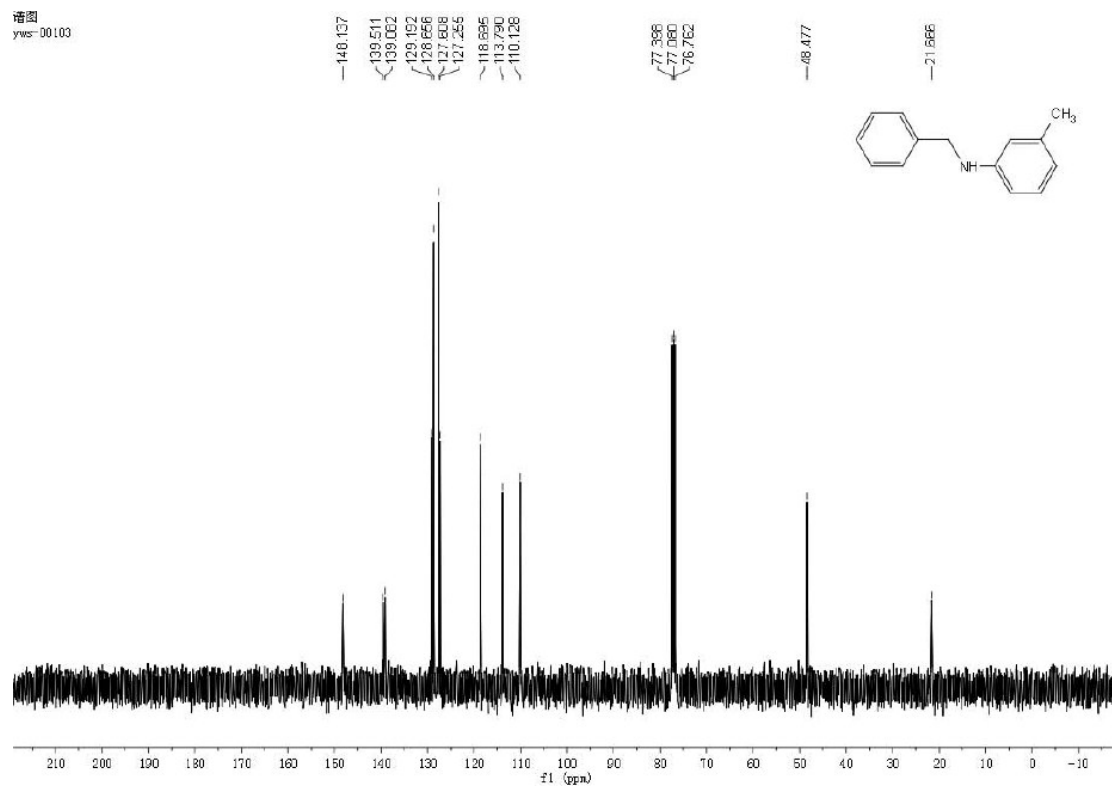
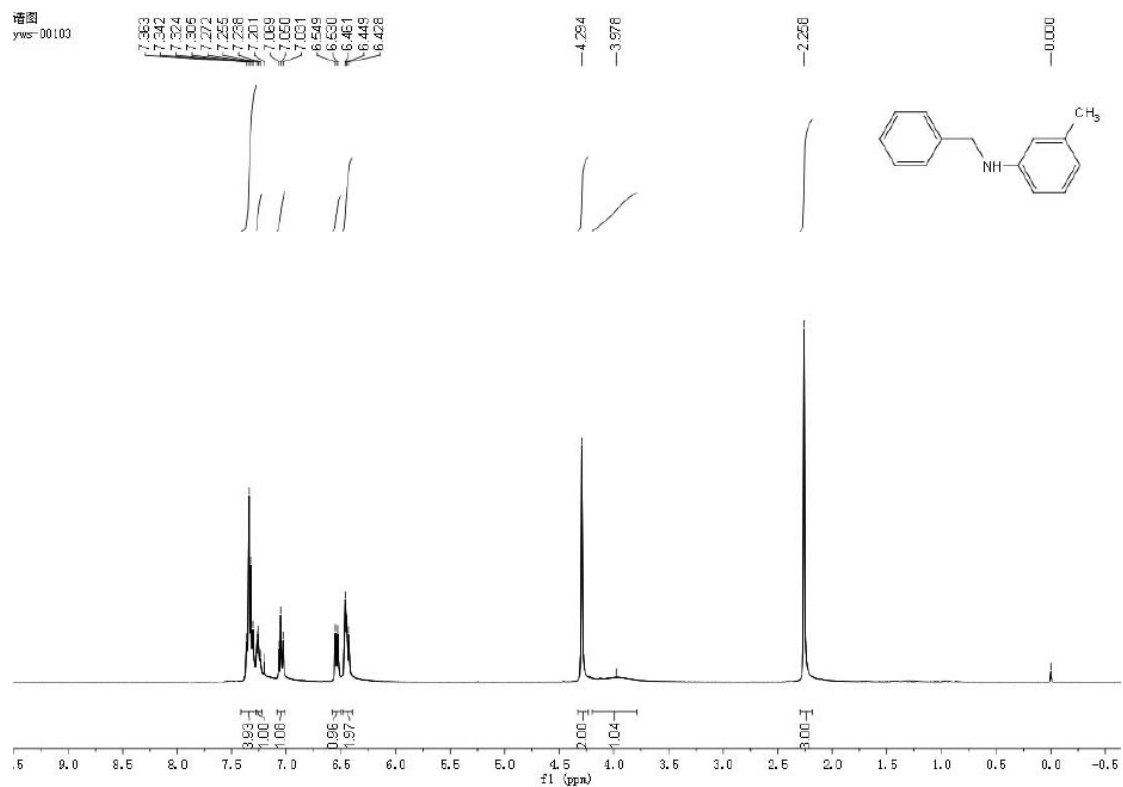
Copies of ¹H NMR, ¹³C NMR spectra for compounds 3a–3d'.....S2–S31



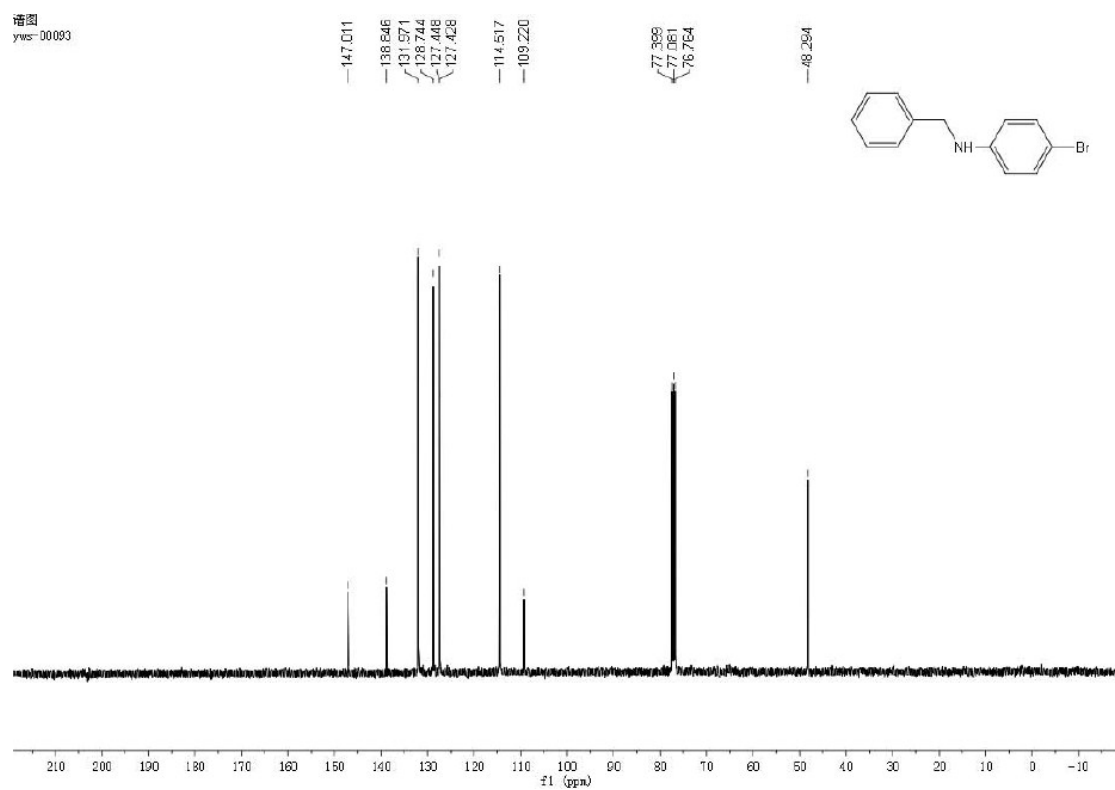
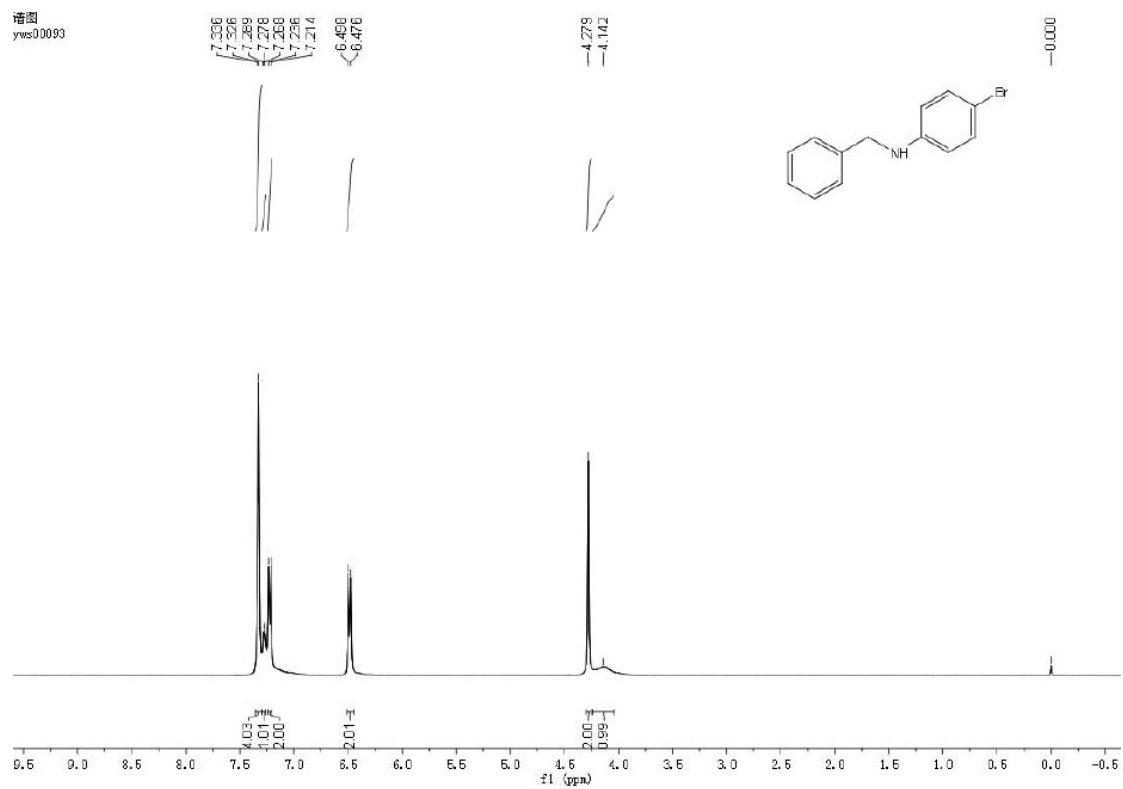
^1H NMR and ^{13}C NMR spectra for compound **3a**



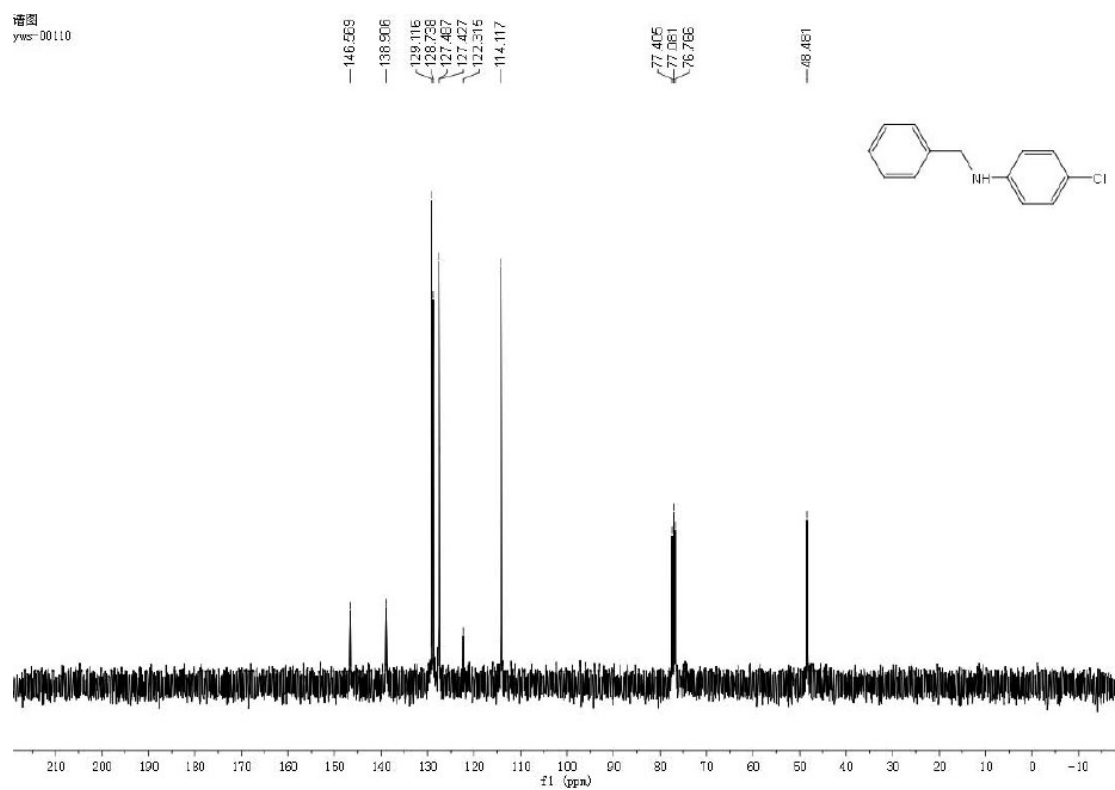
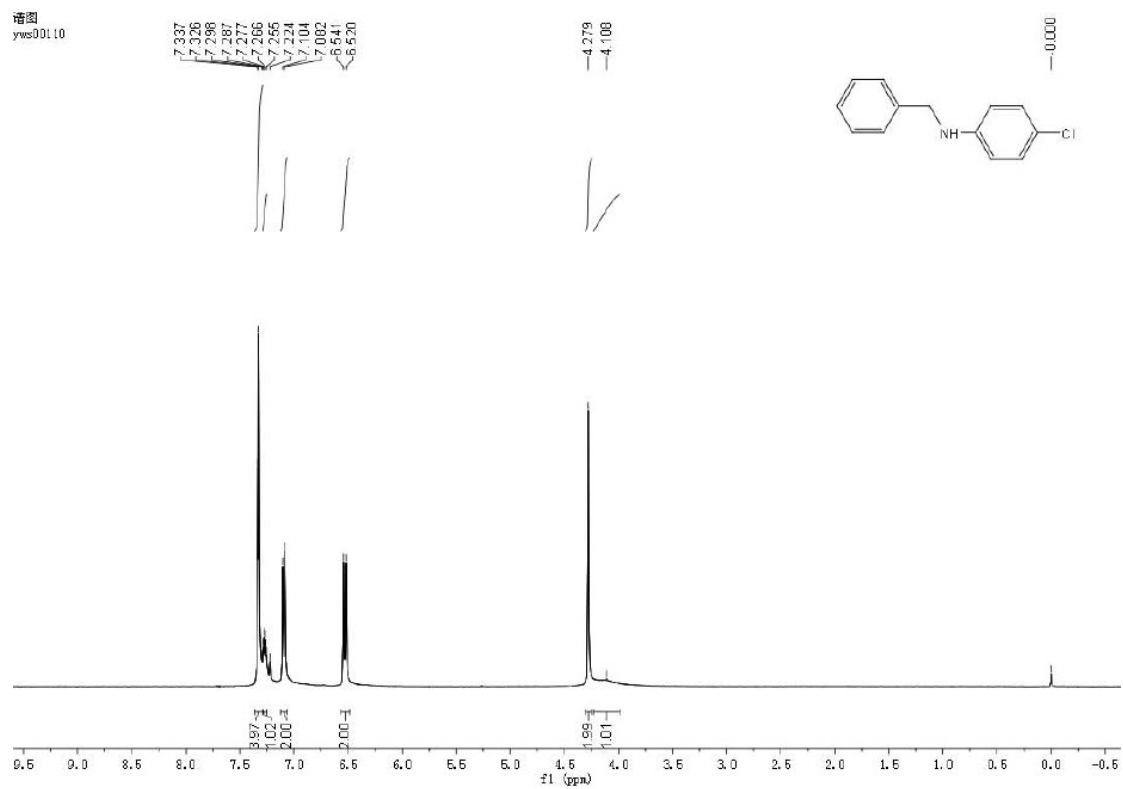
^1H NMR and ^{13}C NMR spectra for compound **3b**



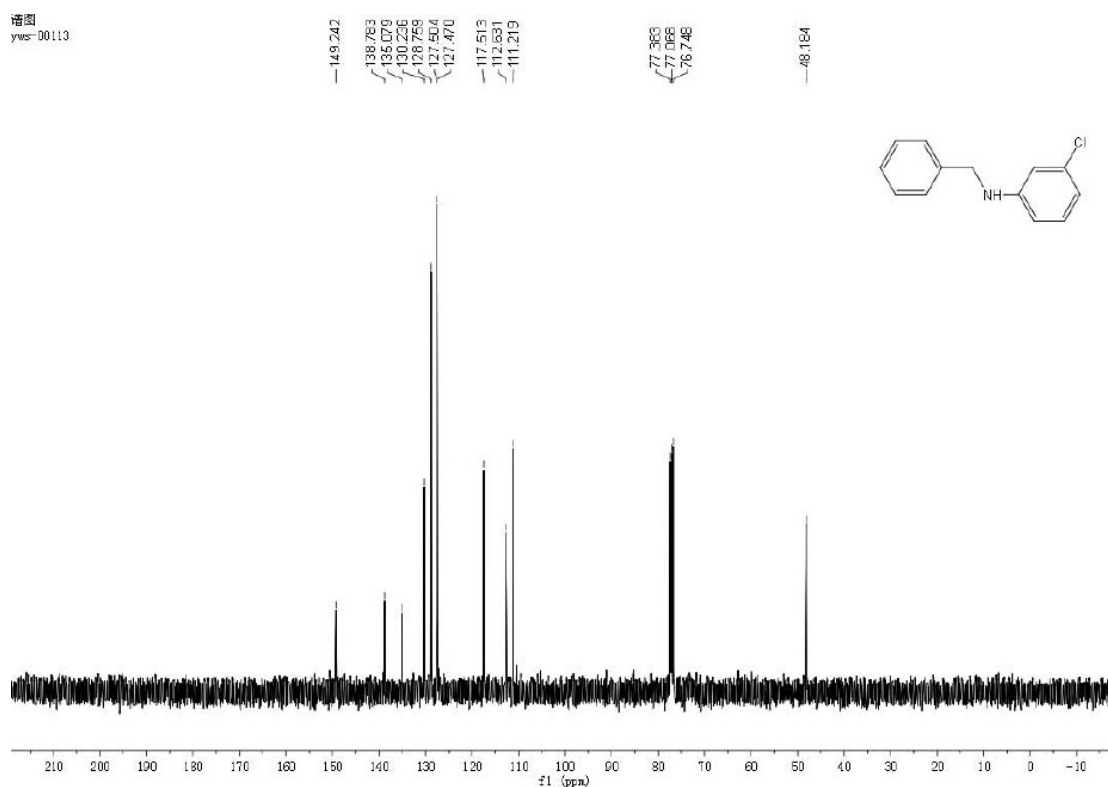
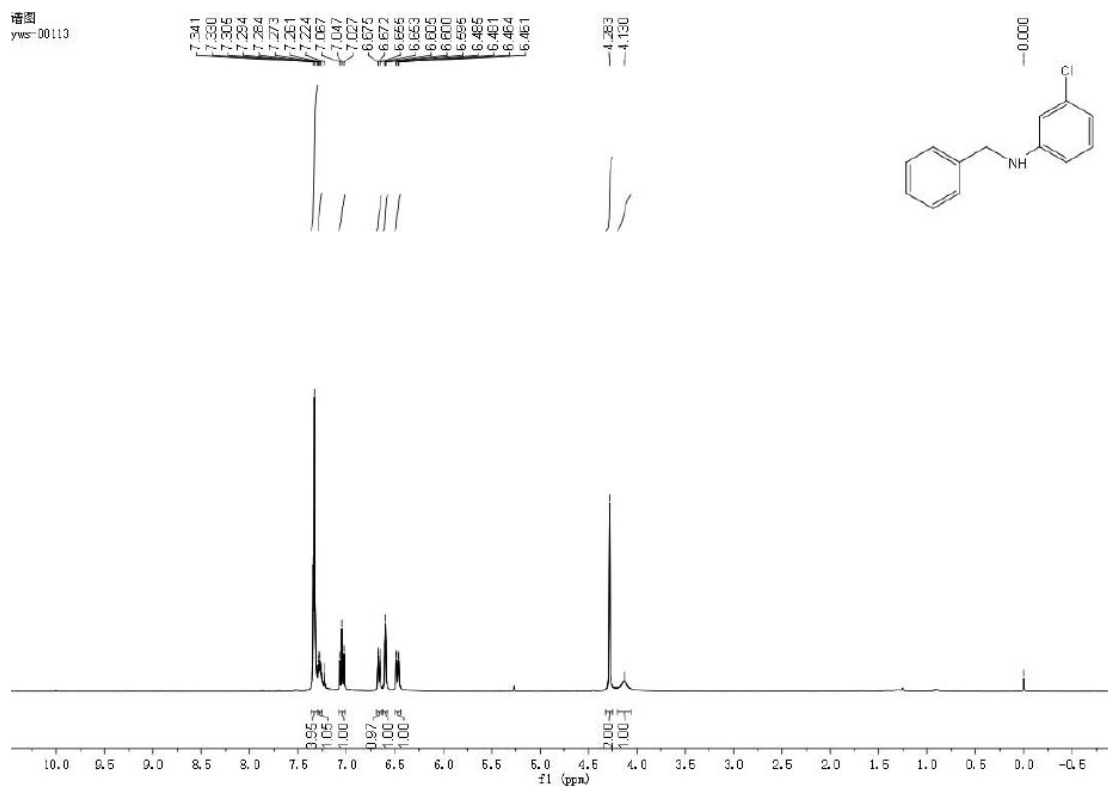
¹H NMR and ¹³C NMR spectra for compound **3c**



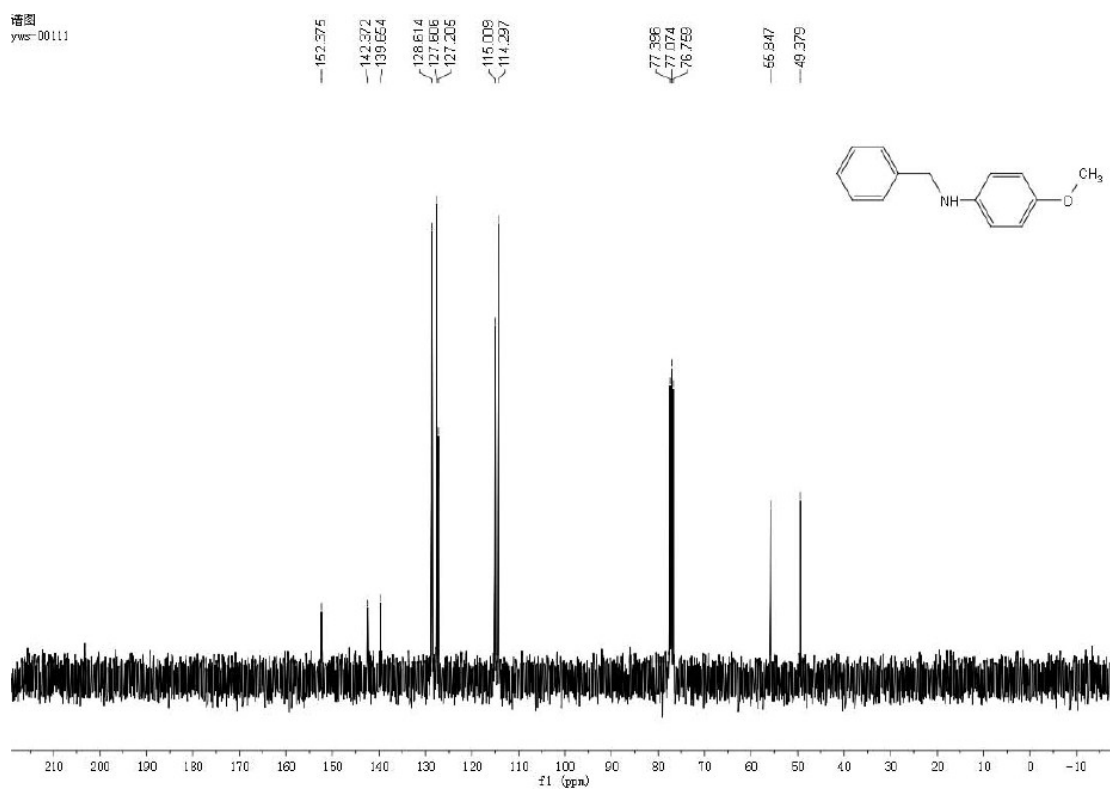
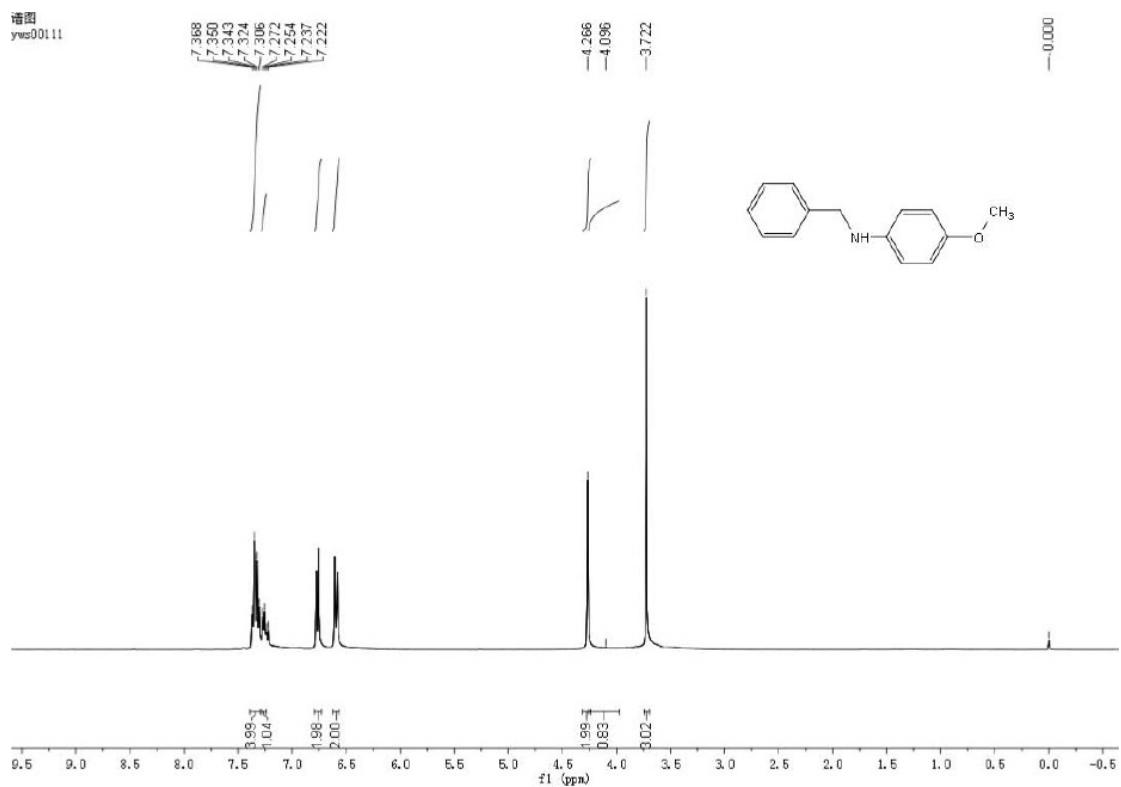
¹H NMR and ¹³C NMR spectra for compound **3d**



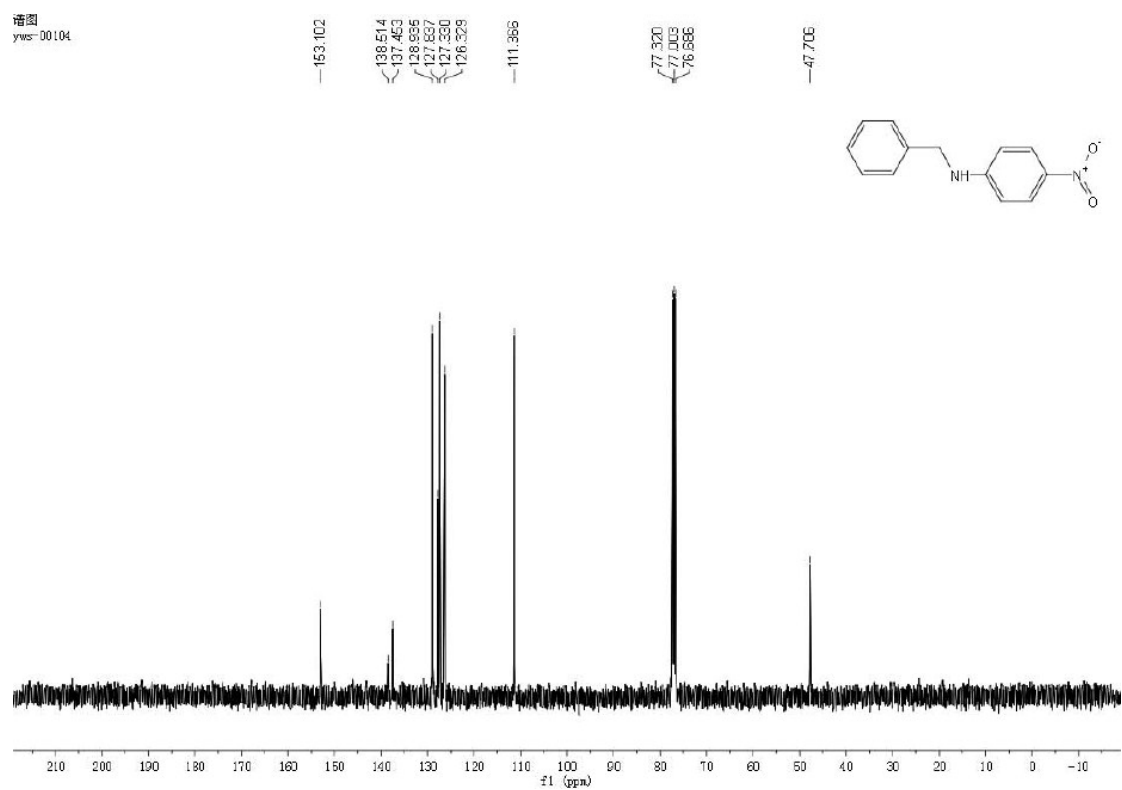
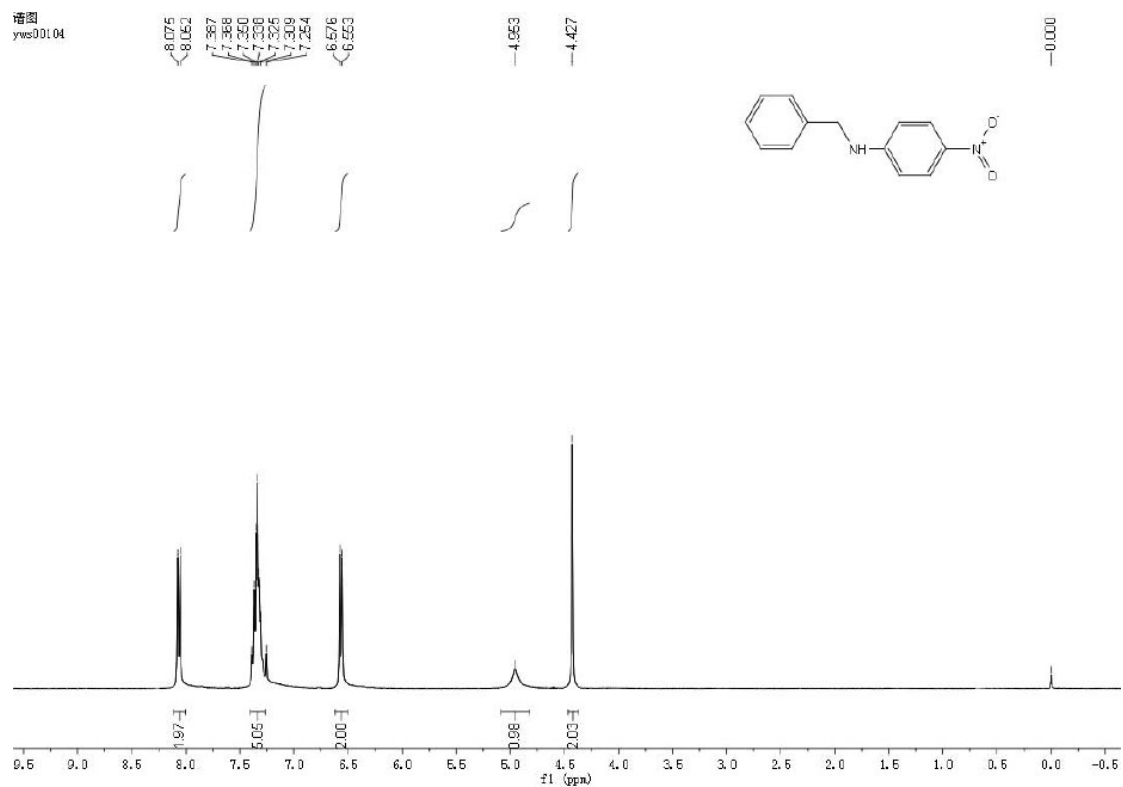
^1H NMR and ^{13}C NMR spectra for compound **3e**



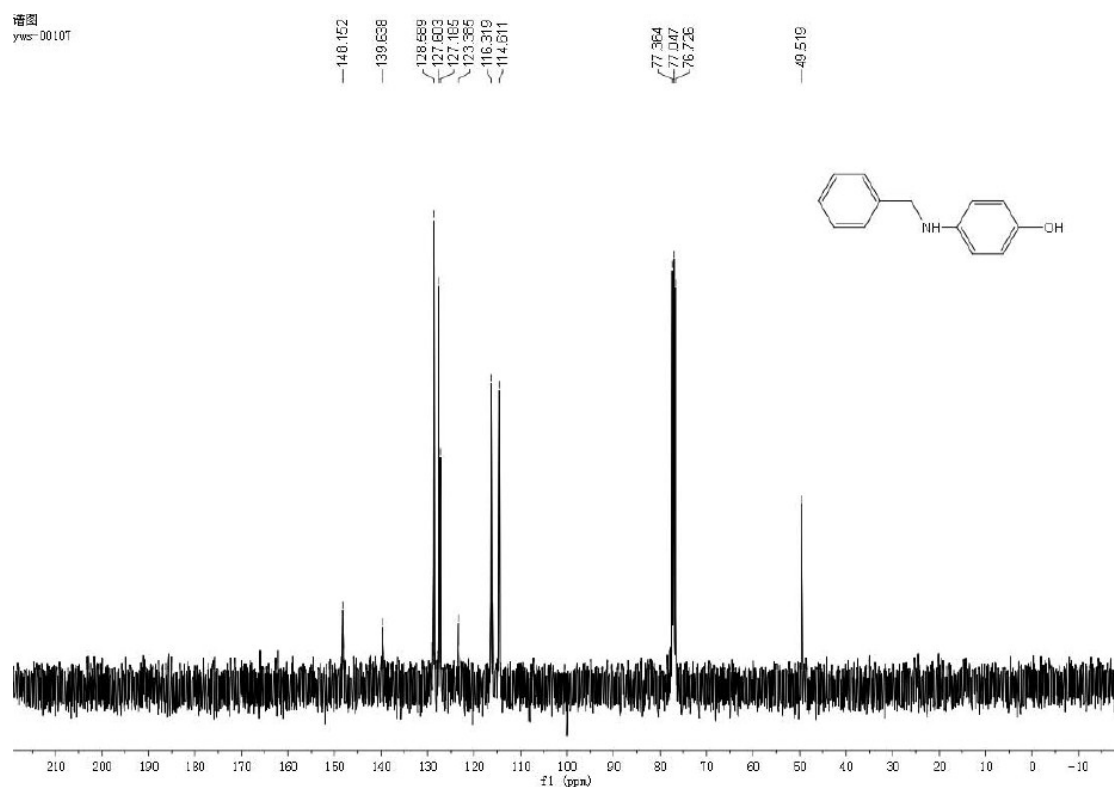
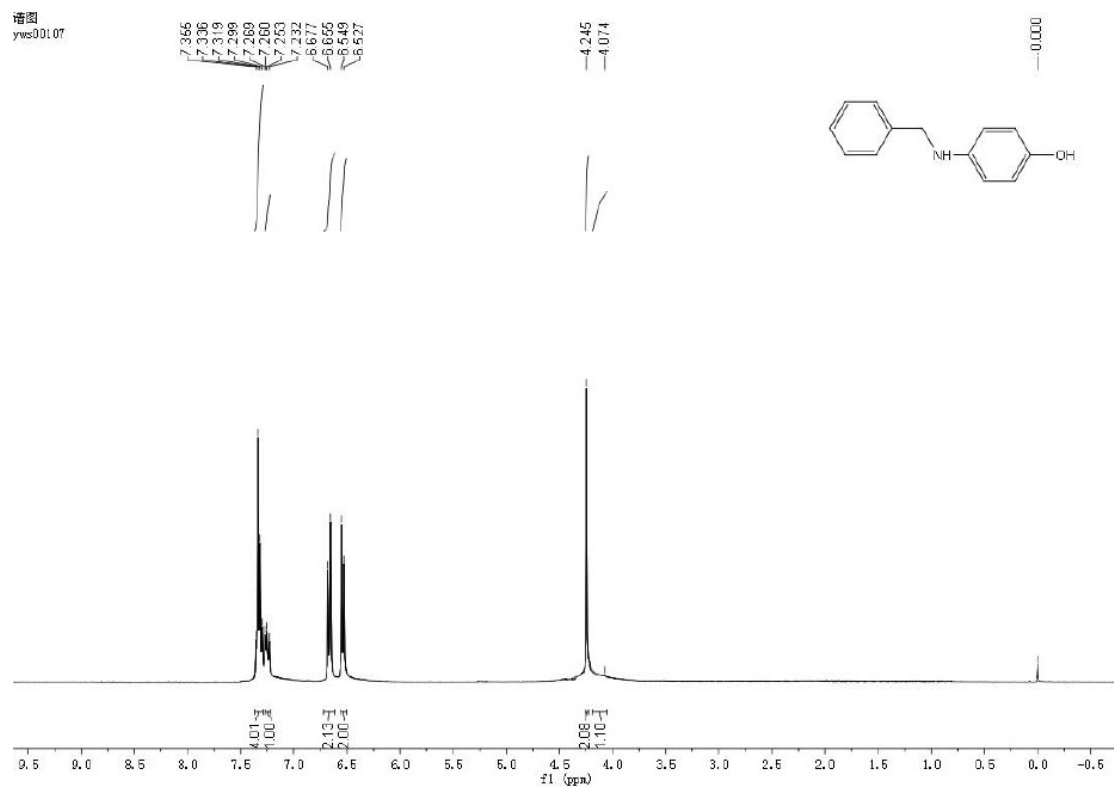
^1H NMR and ^{13}C NMR spectra for compound **3f**



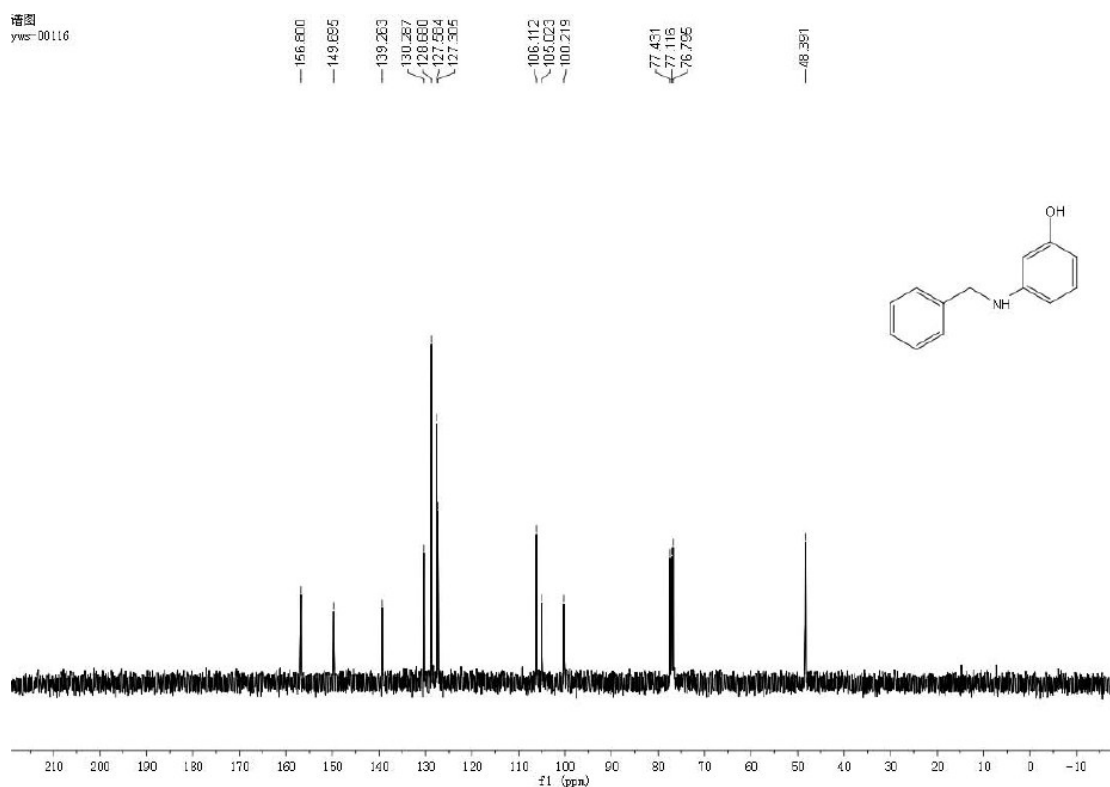
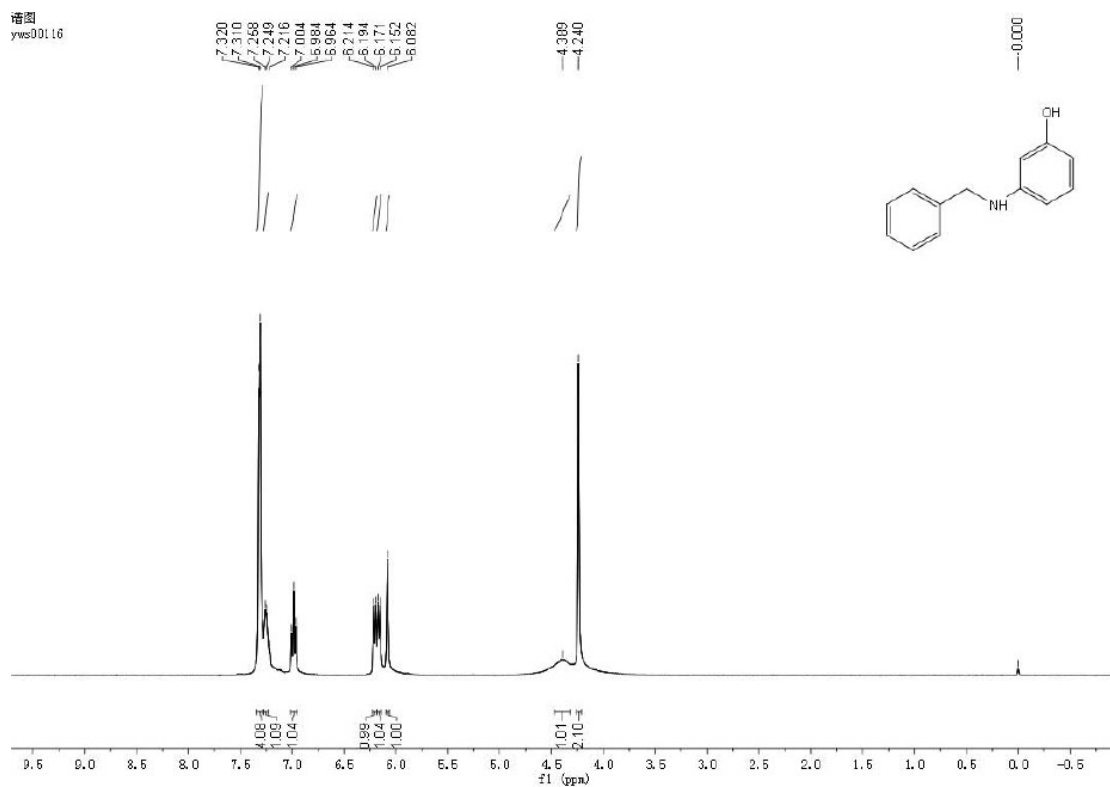
^1H NMR and ^{13}C NMR spectra for compound **3g**



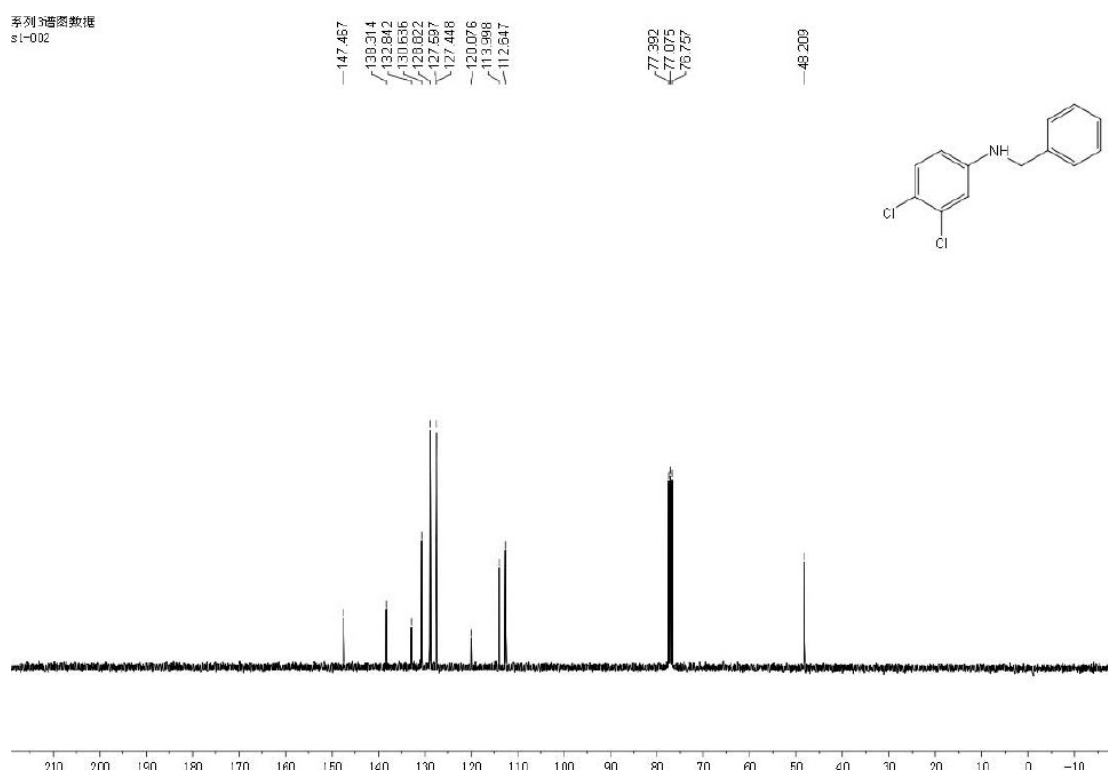
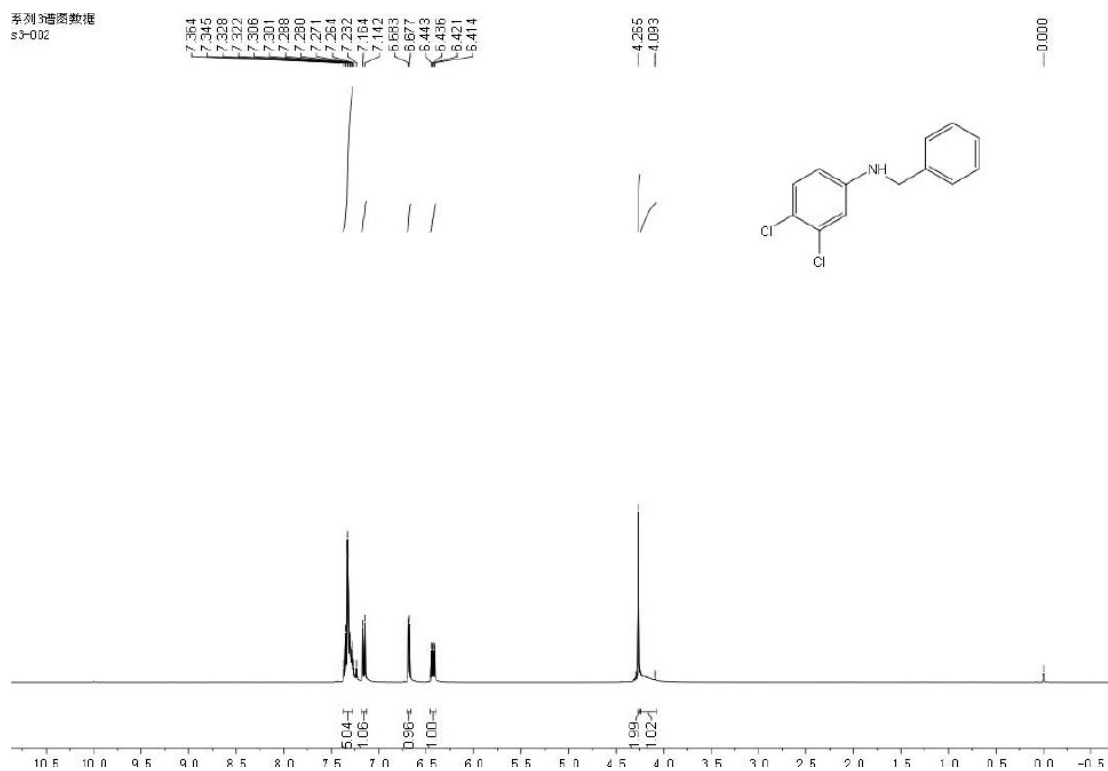
^1H NMR and ^{13}C NMR spectra for compound **3h**



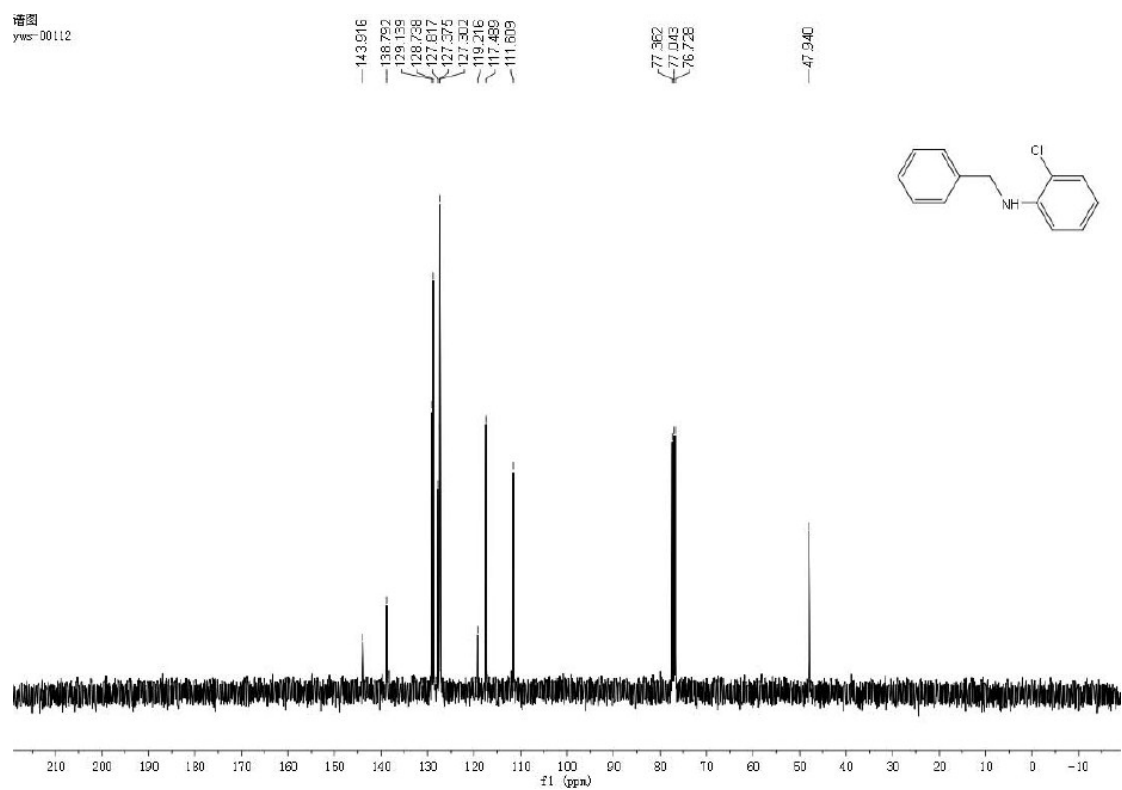
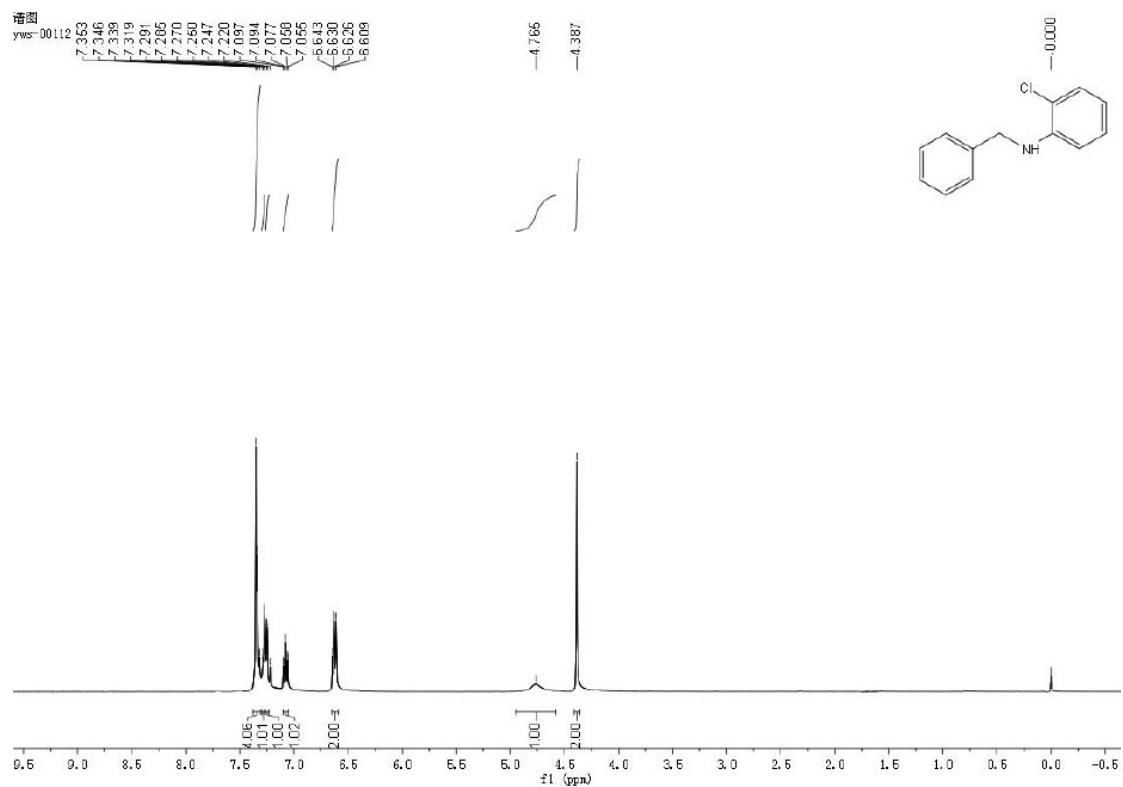
^1H NMR and ^{13}C NMR spectra for compound **3i**



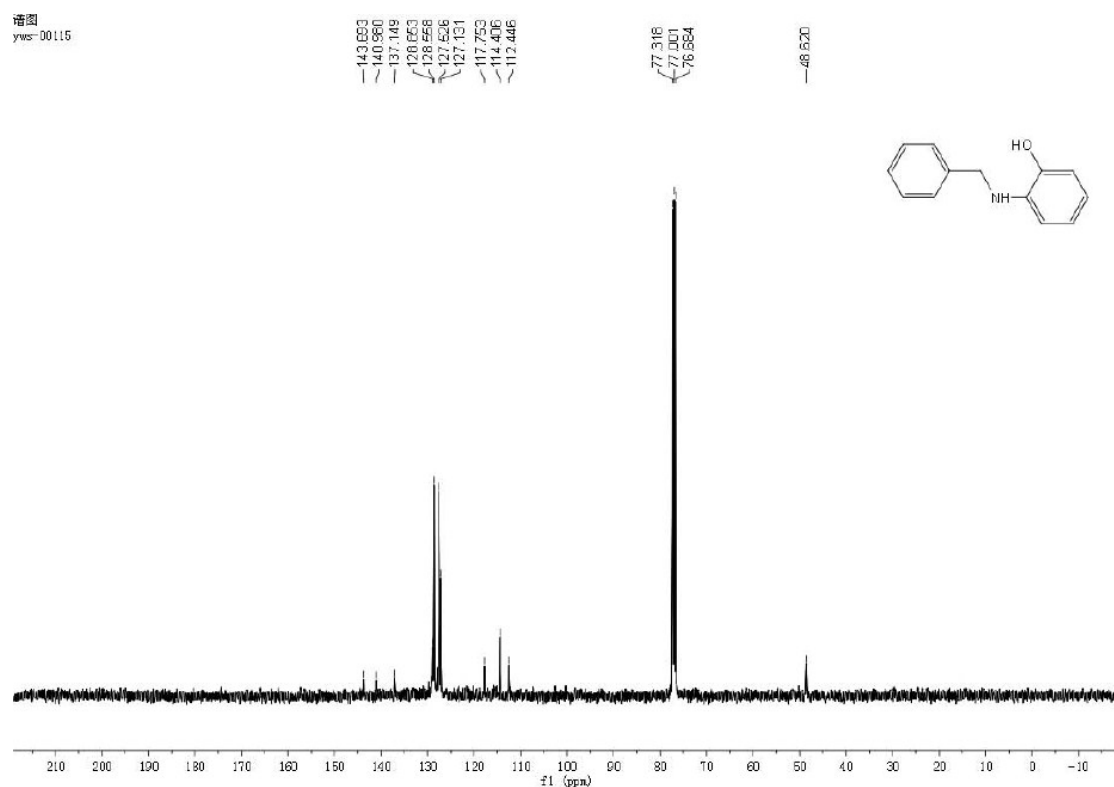
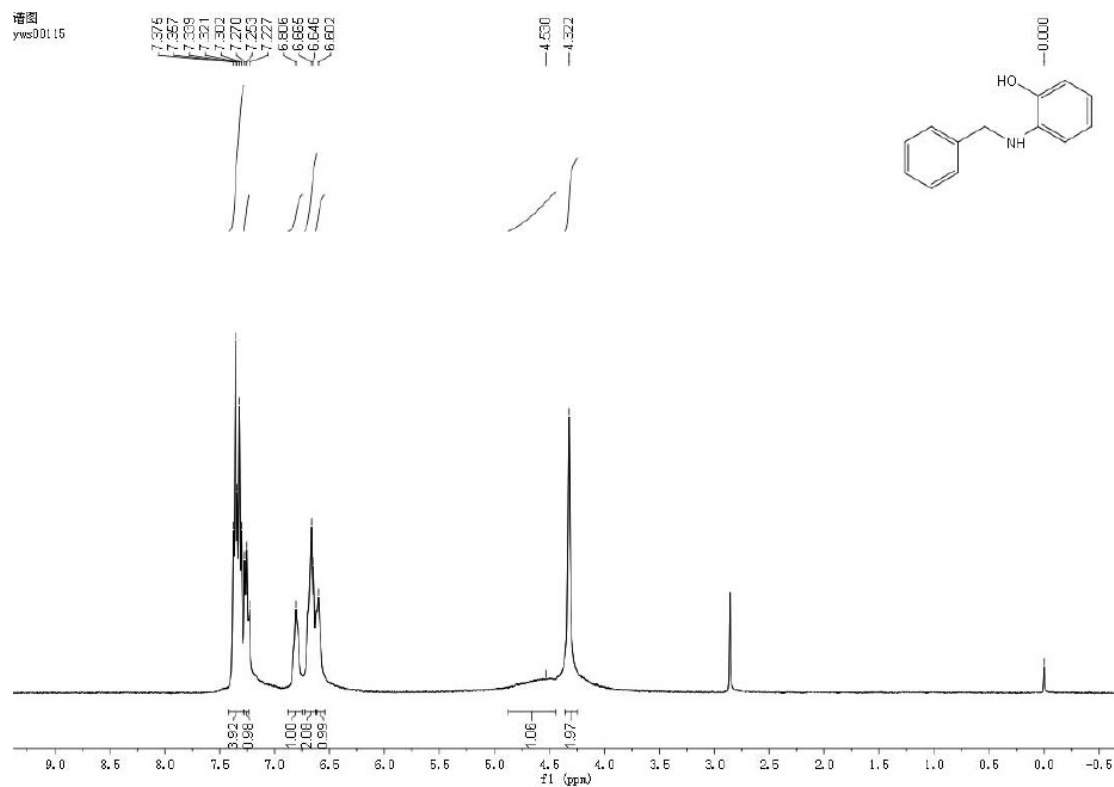
^1H NMR and ^{13}C NMR spectra for compound **3j**



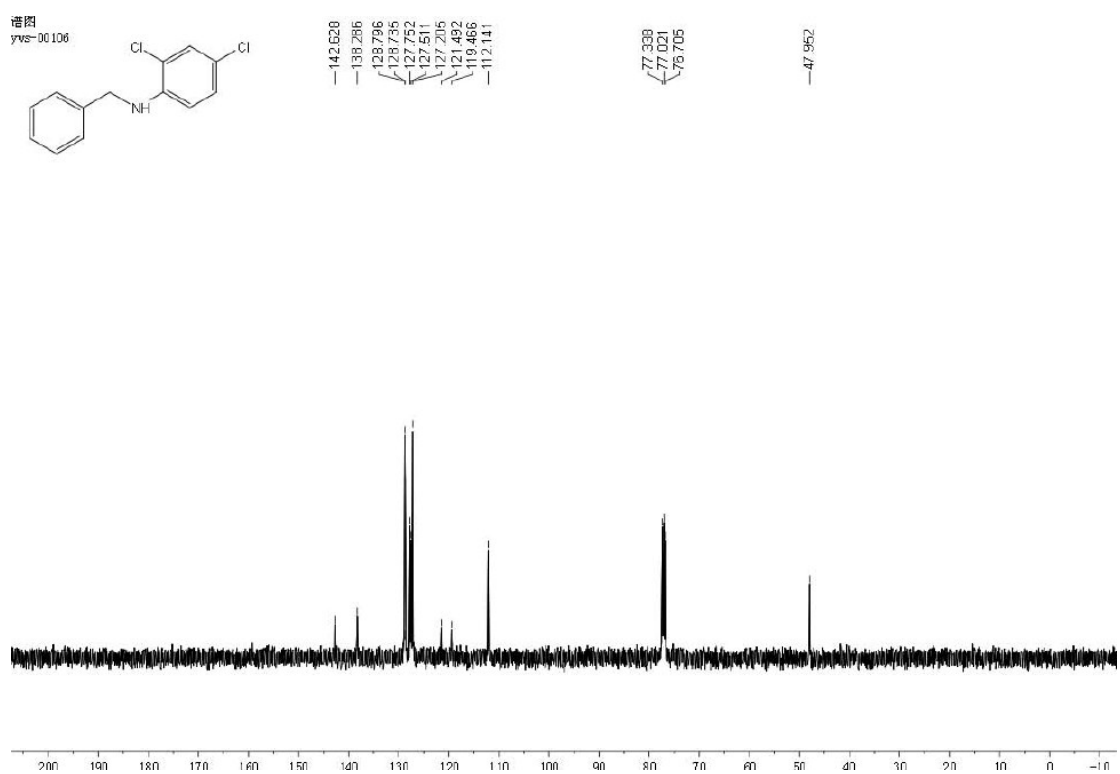
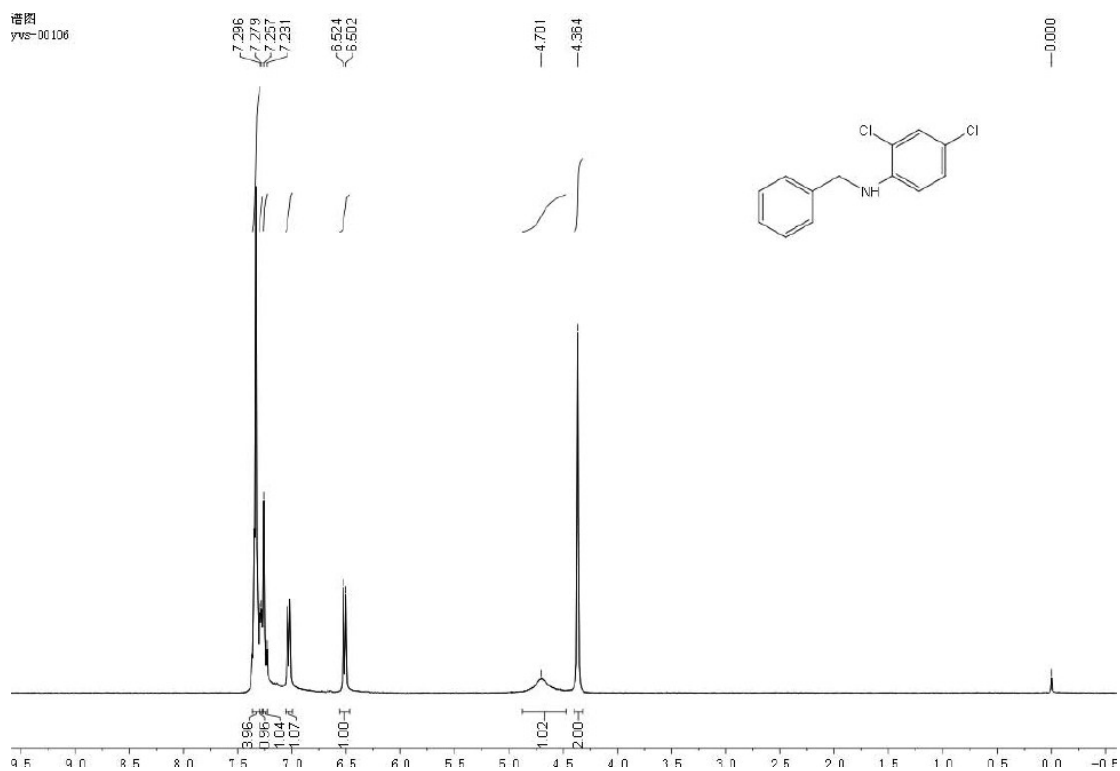
^1H NMR and ^{13}C NMR spectra for compound **3k**



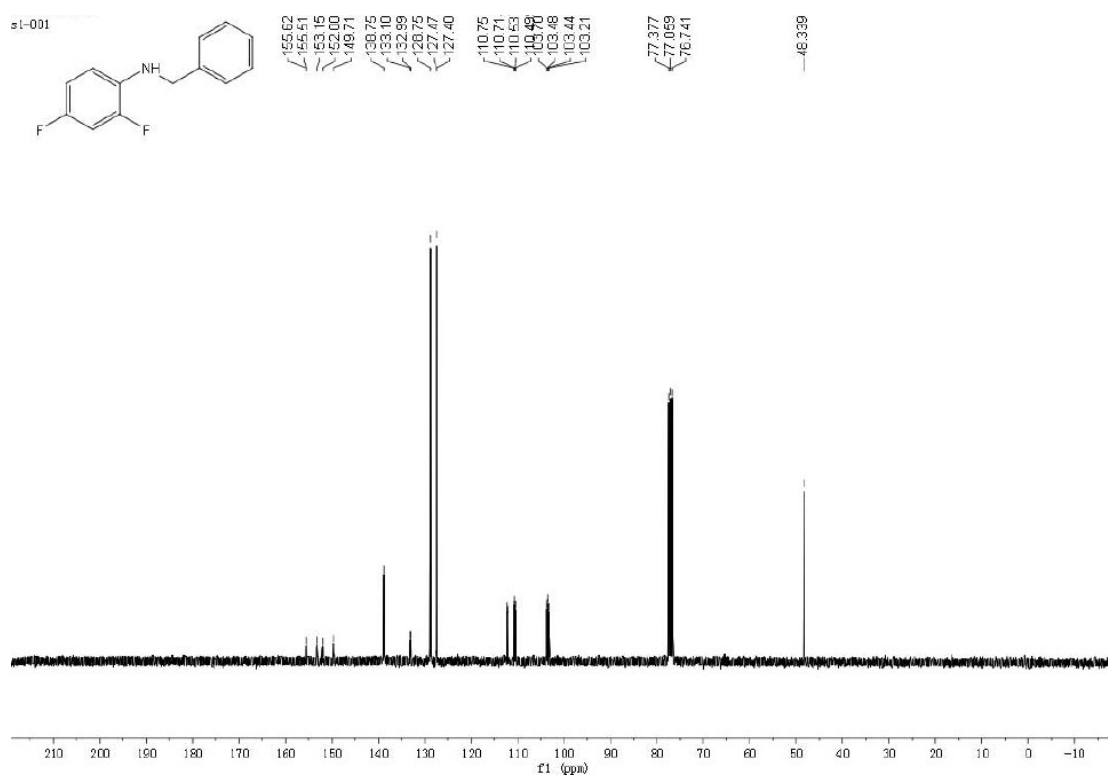
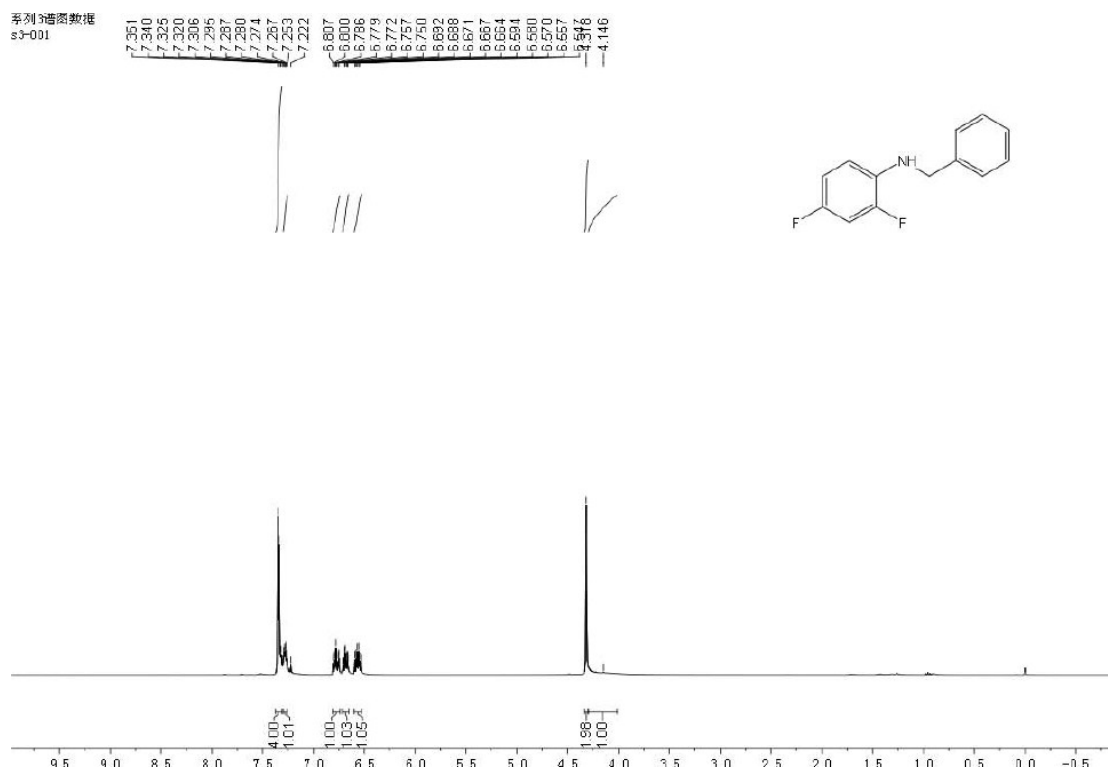
^1H NMR and ^{13}C NMR spectra for compound **31**



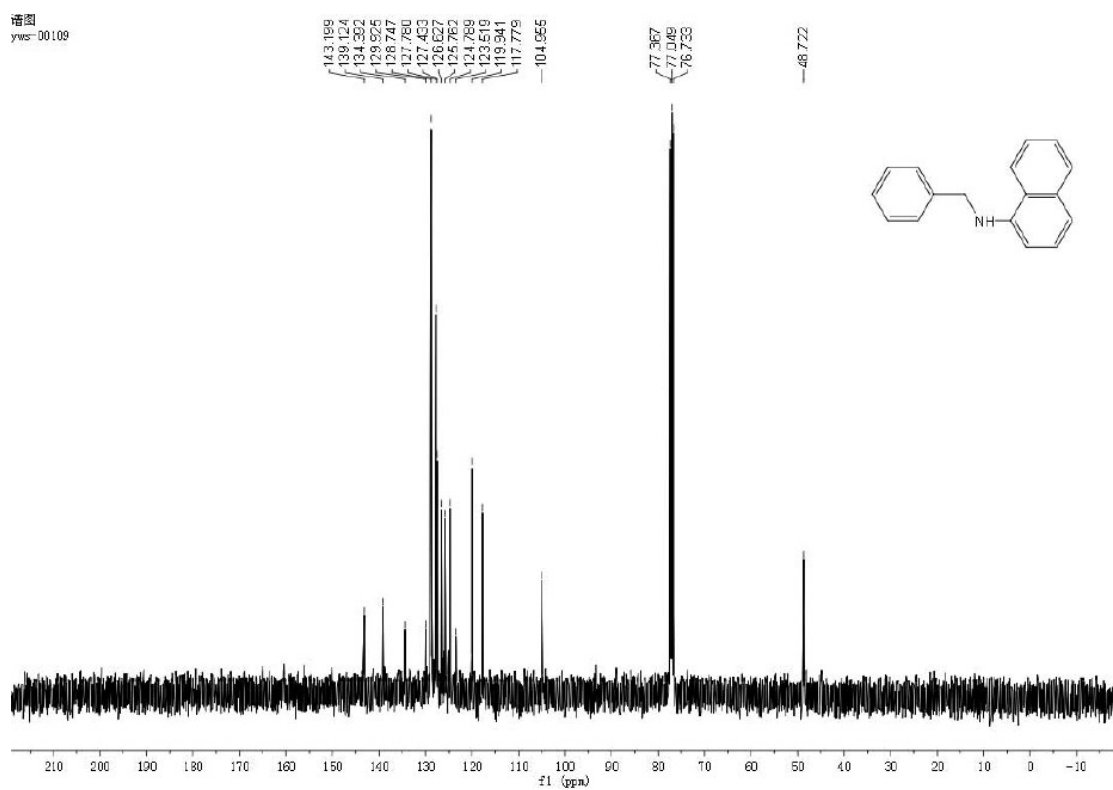
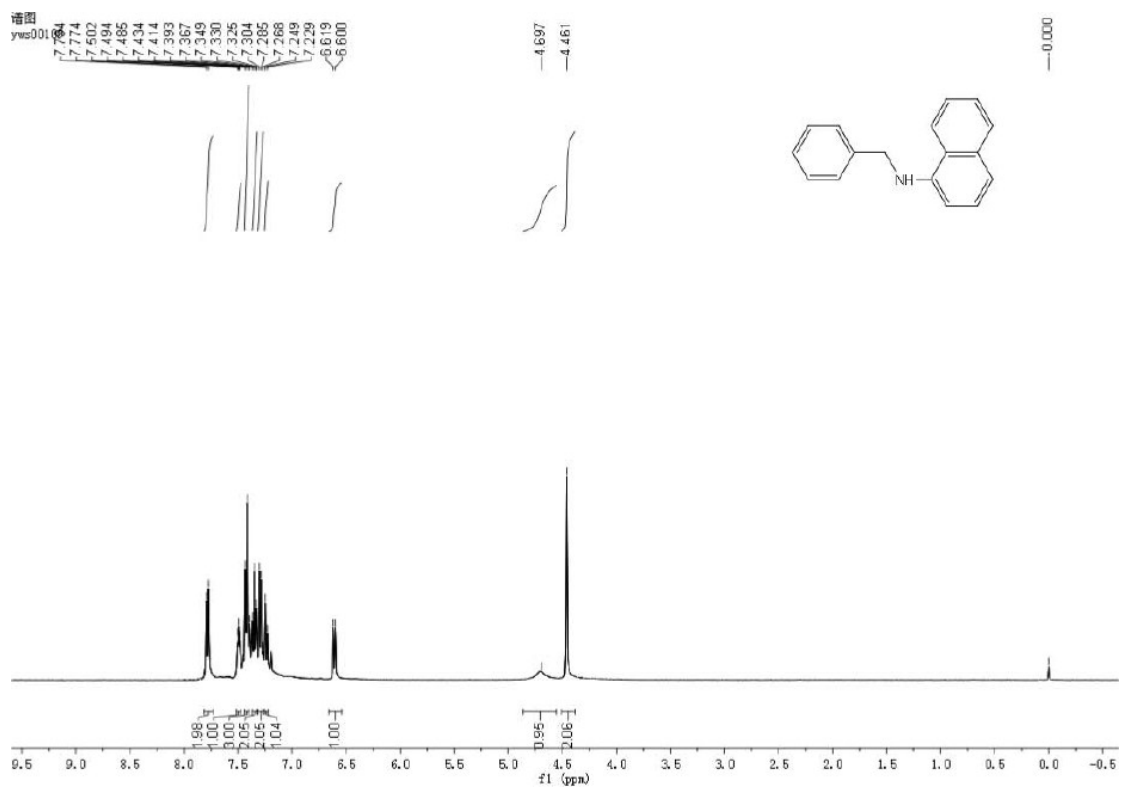
^1H NMR and ^{13}C NMR spectra for compound **3m**



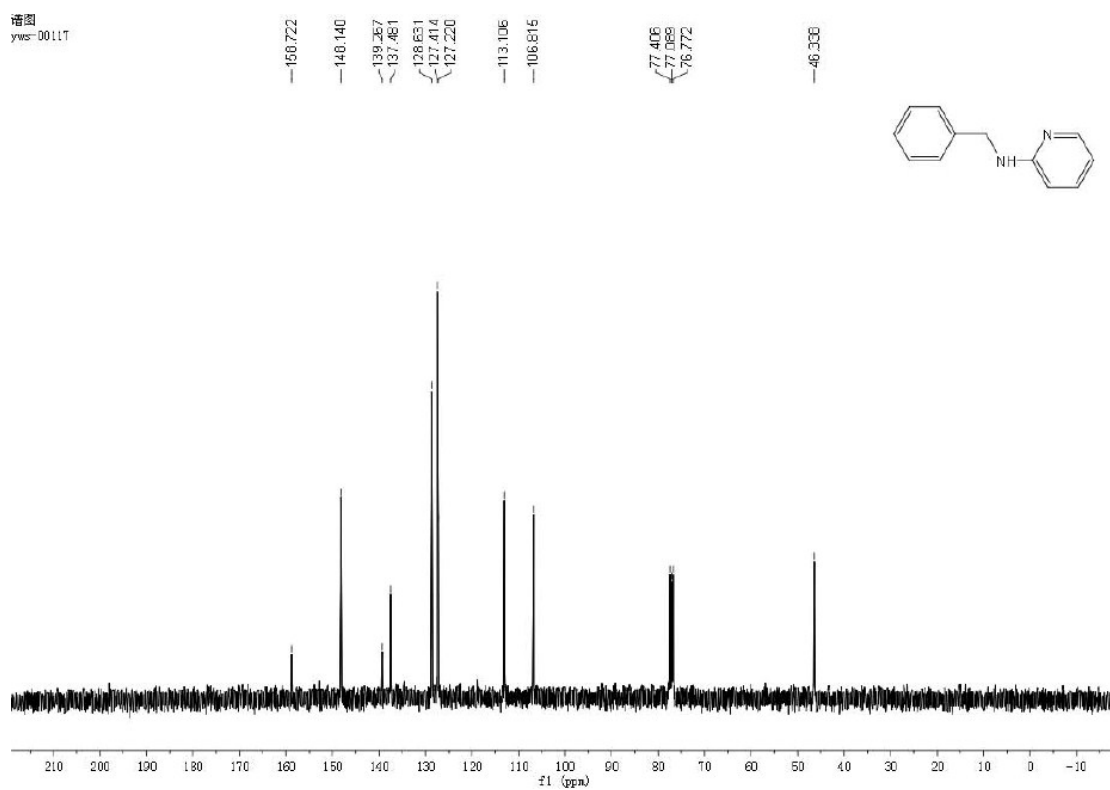
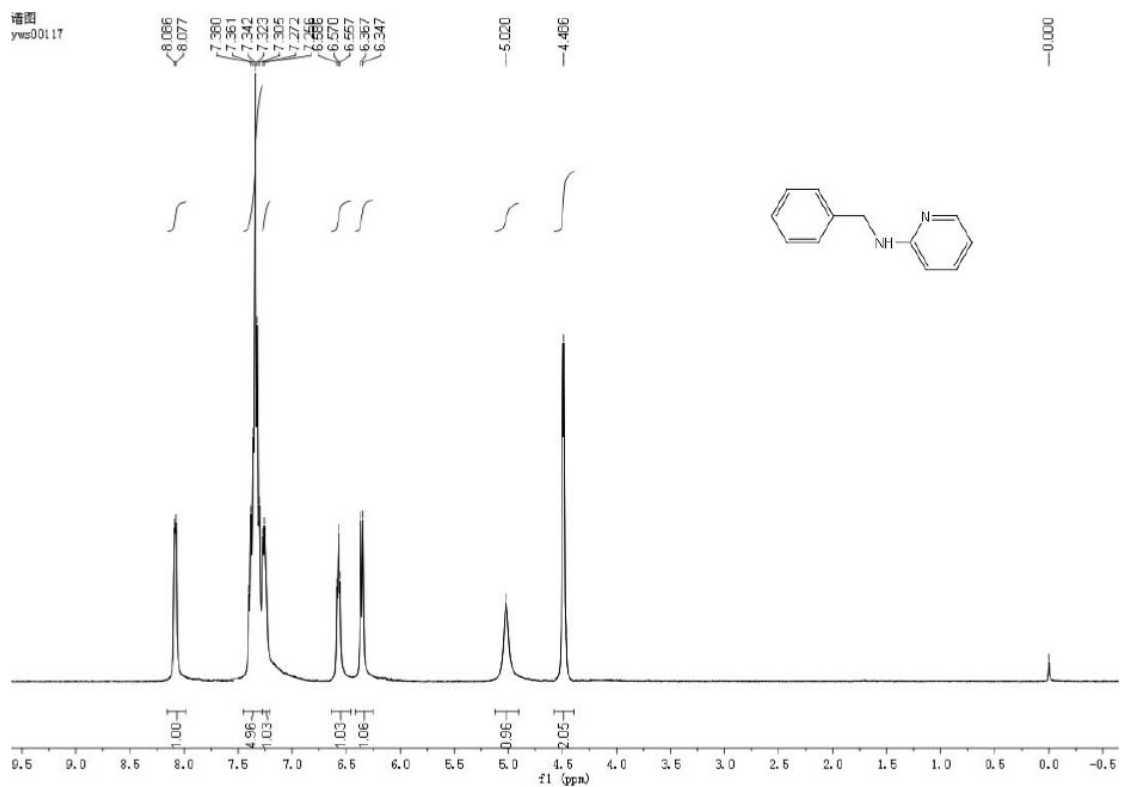
^1H NMR and ^{13}C NMR spectra for compound **3n**



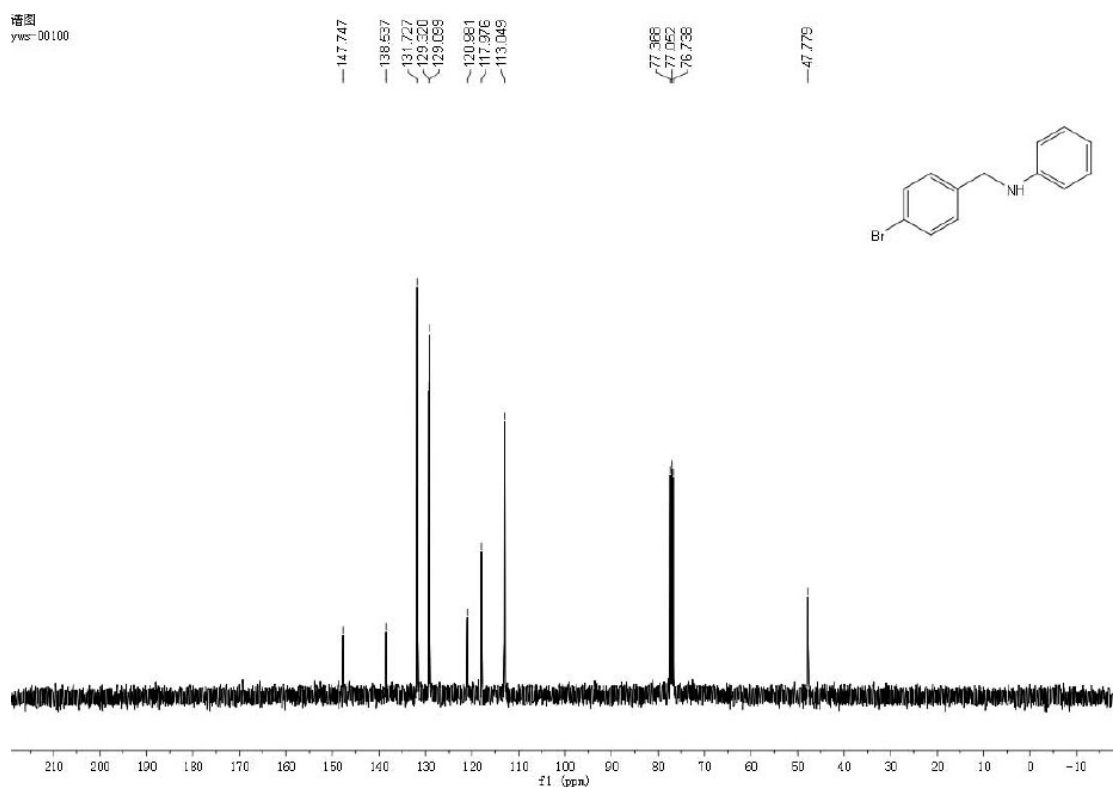
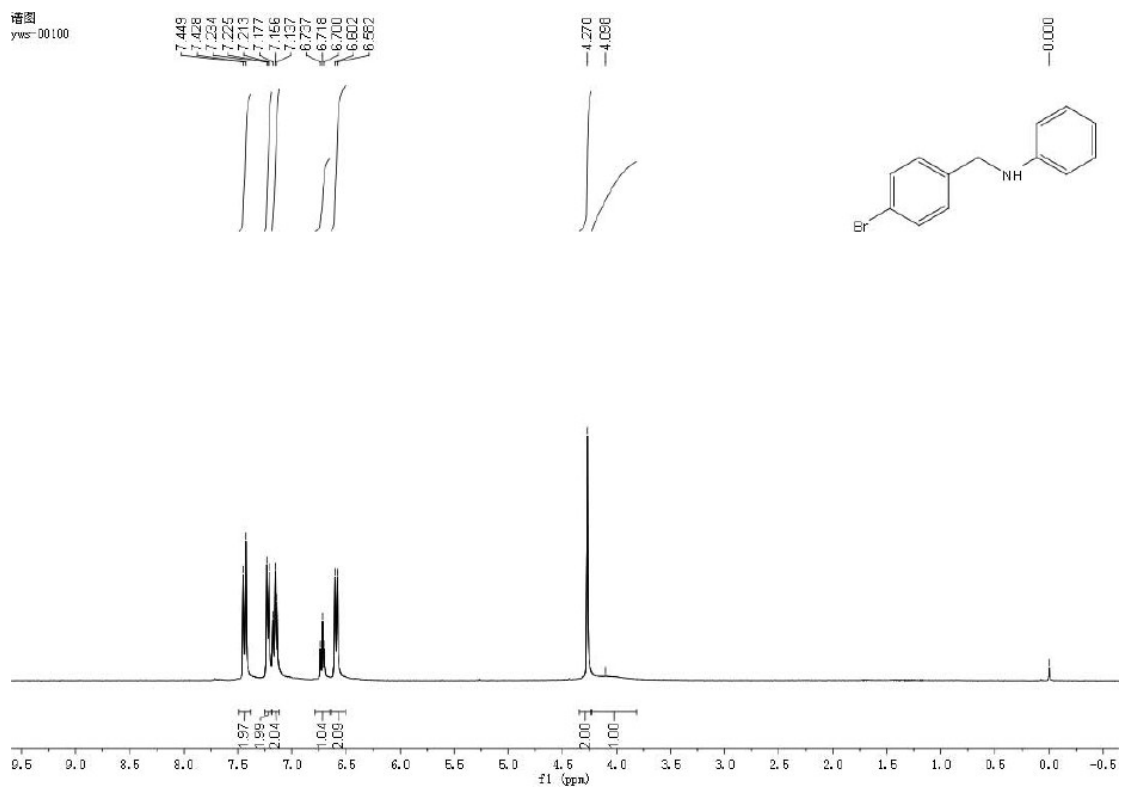
¹H NMR and ¹³C NMR spectra for compound **30**



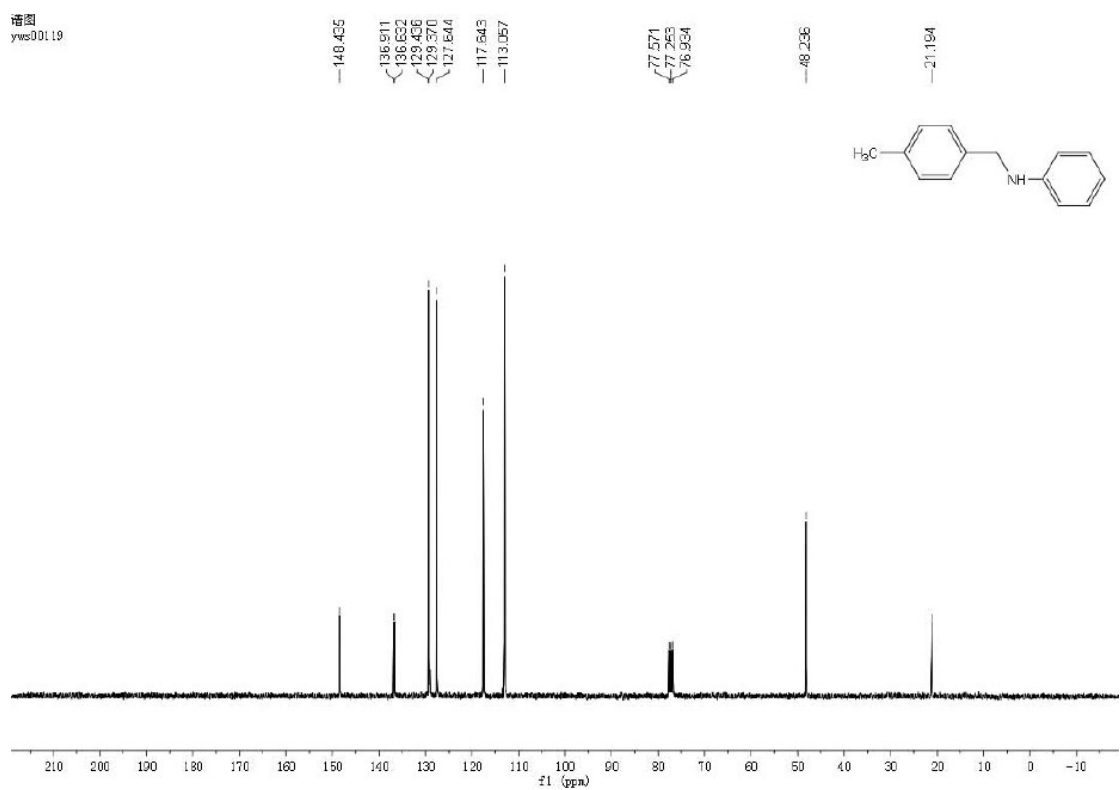
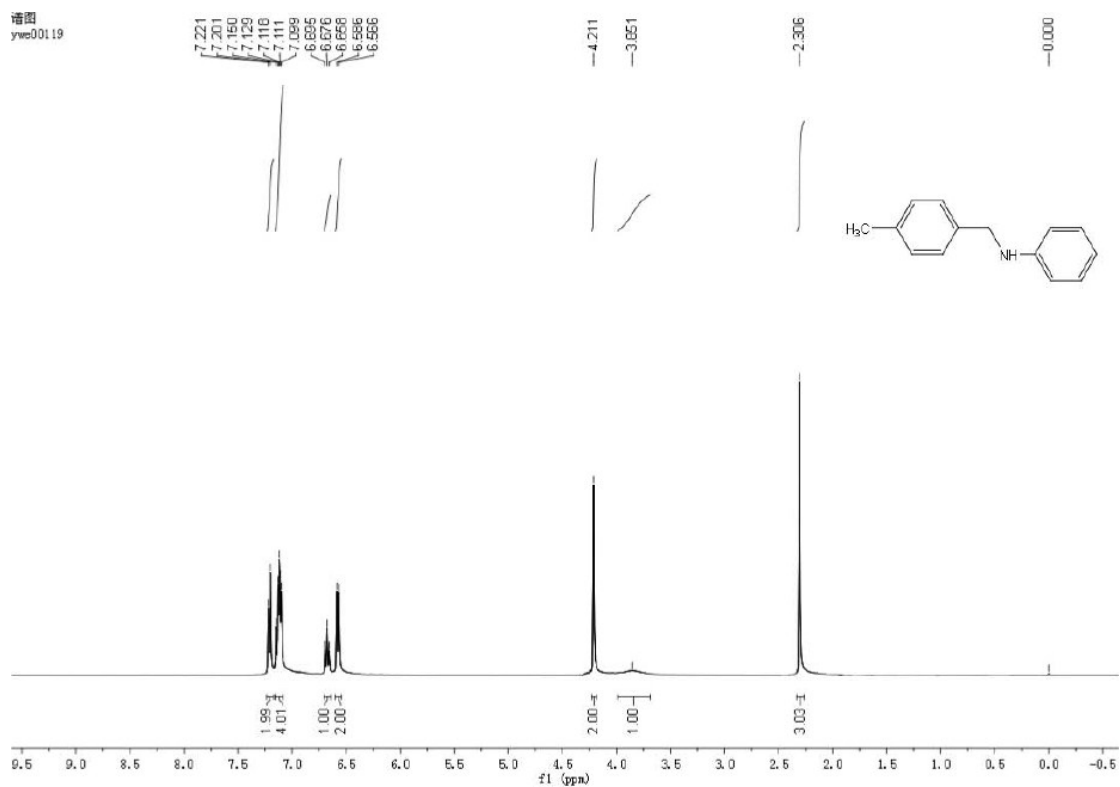
^1H NMR and ^{13}C NMR spectra for compound **3p**



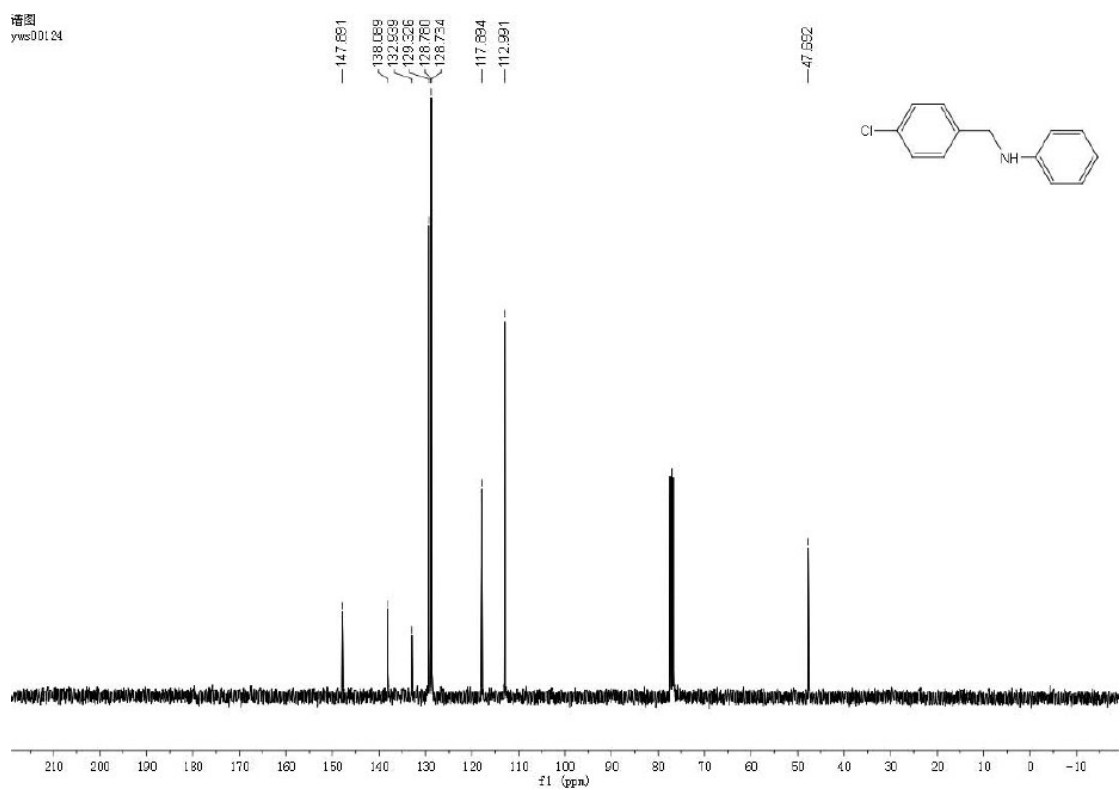
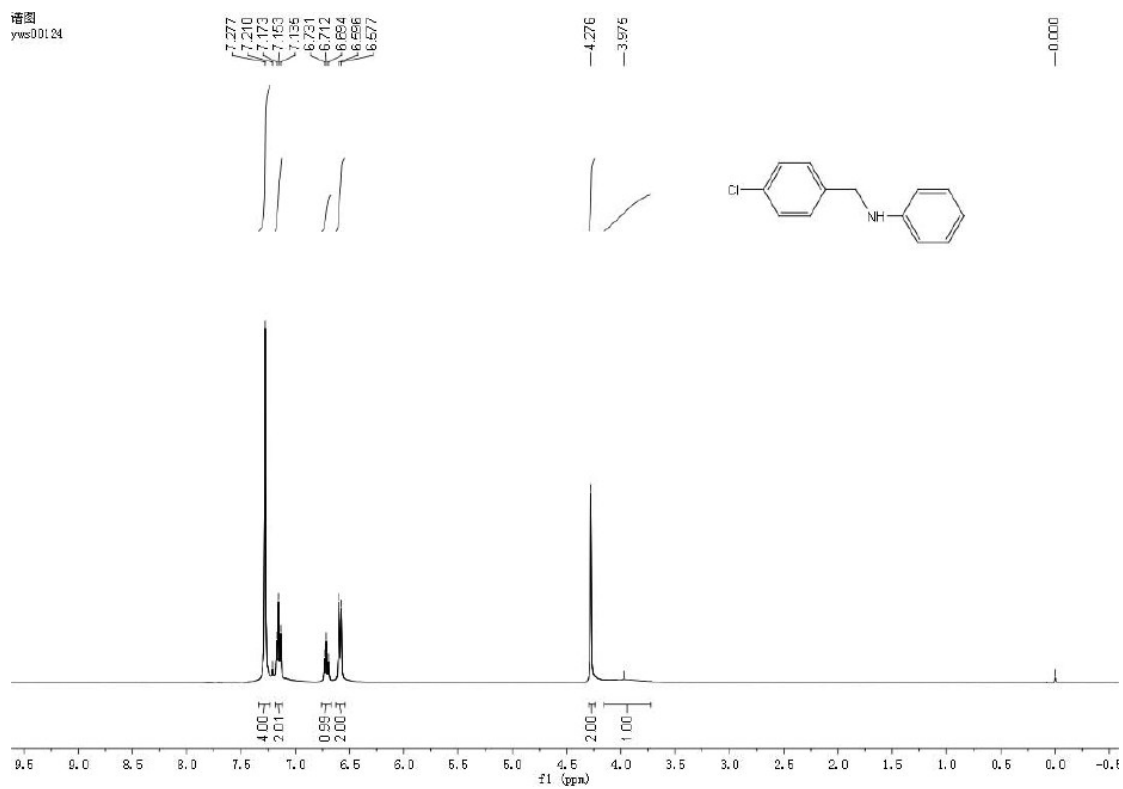
¹H NMR and ¹³C NMR spectra for compound **3q**



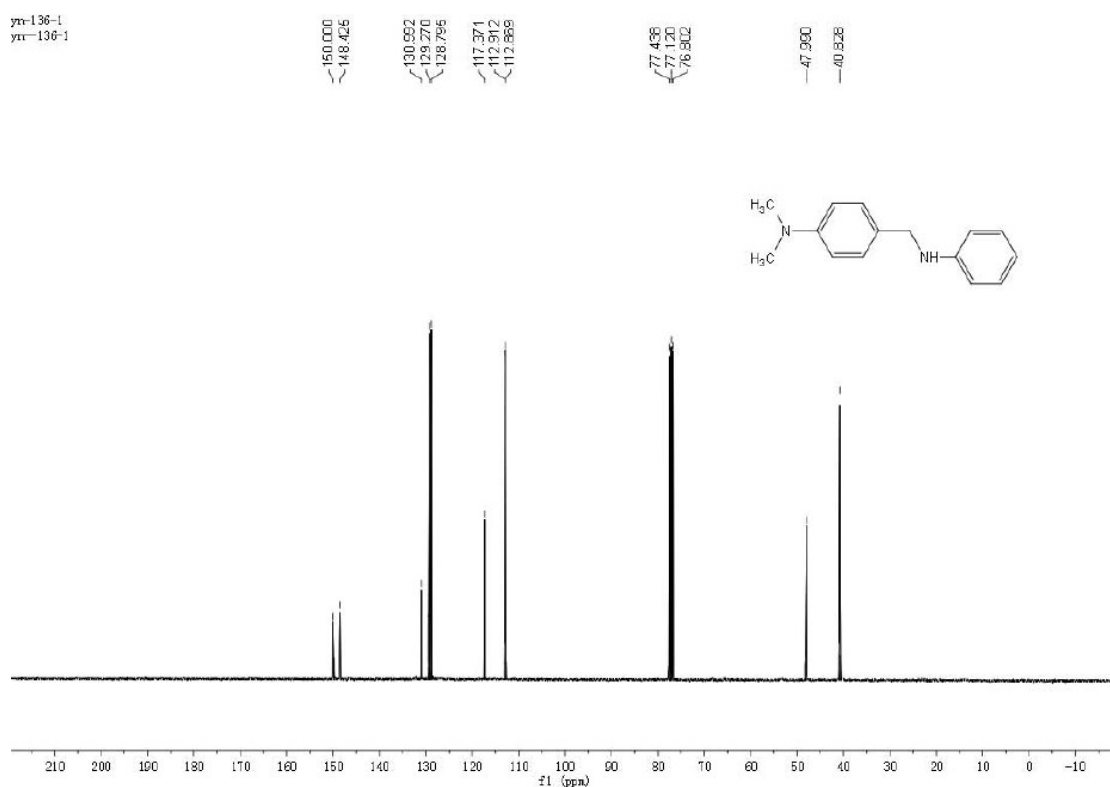
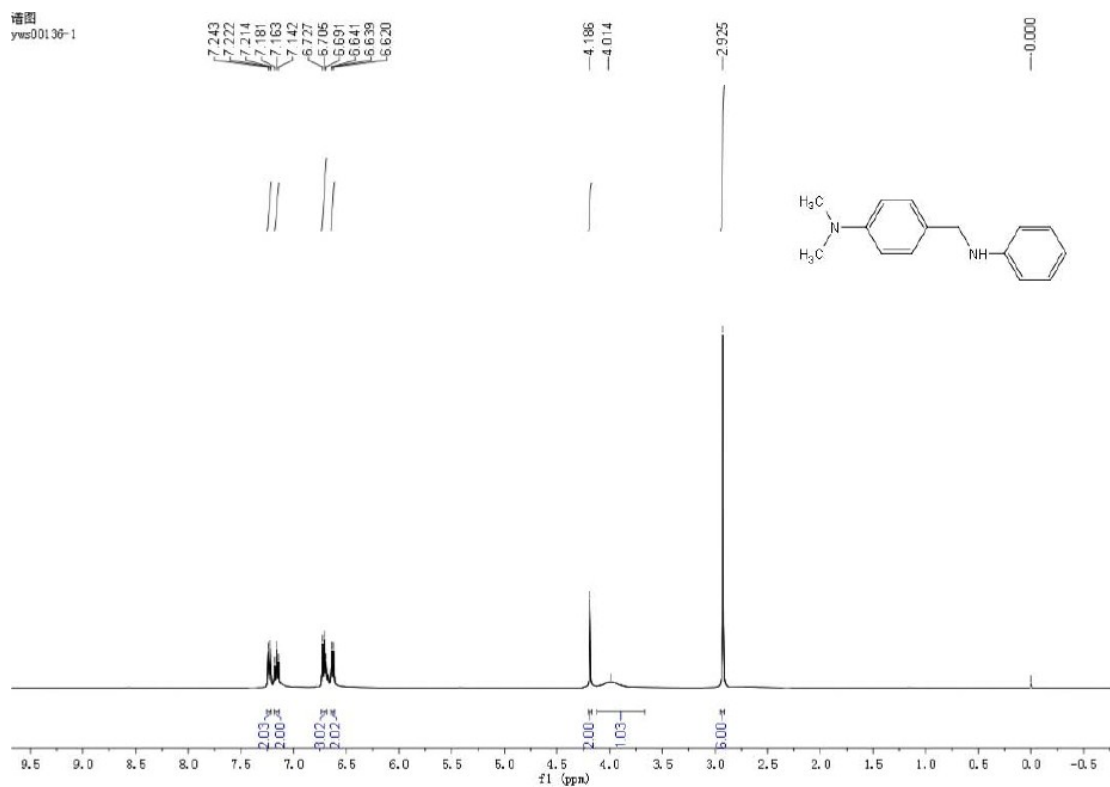
^1H NMR and ^{13}C NMR spectra for compound **3r**



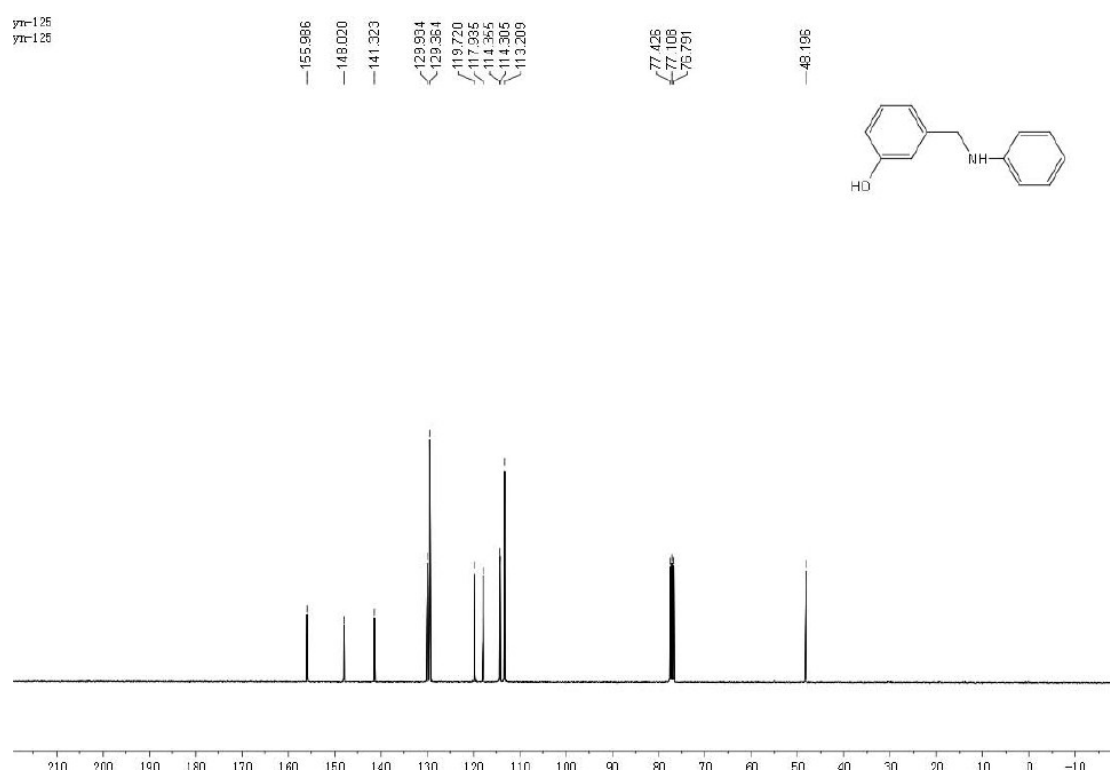
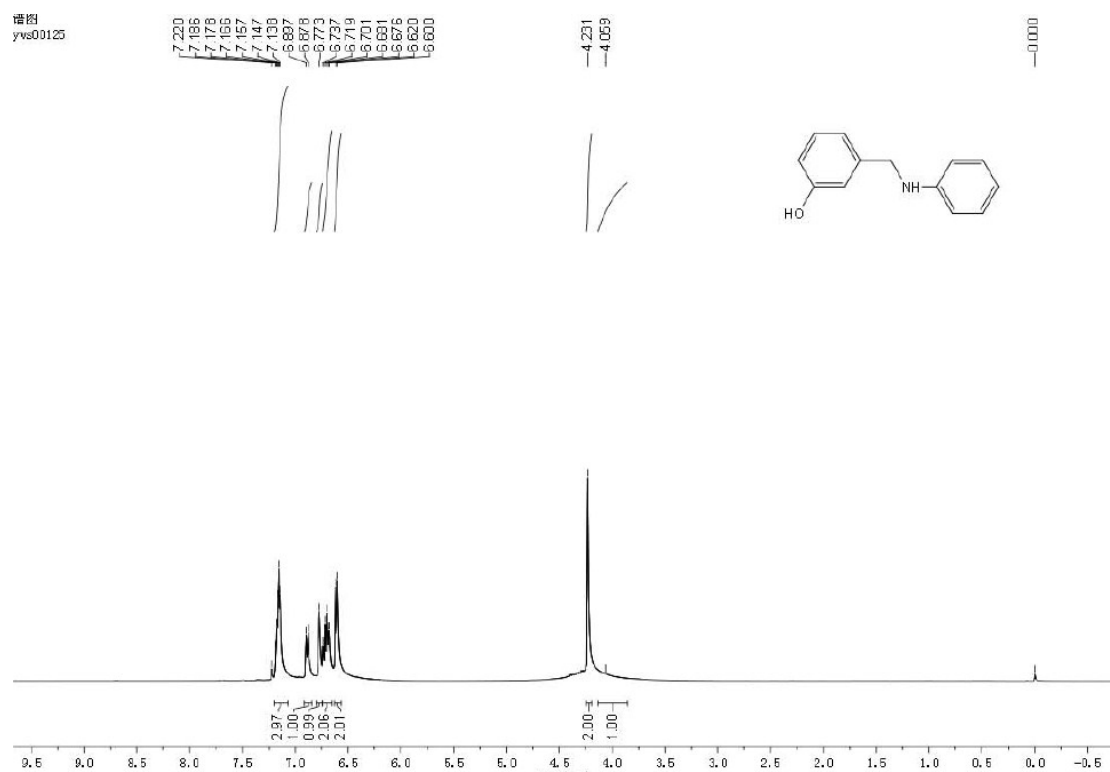
^1H NMR and ^{13}C NMR spectra for compound **3s**



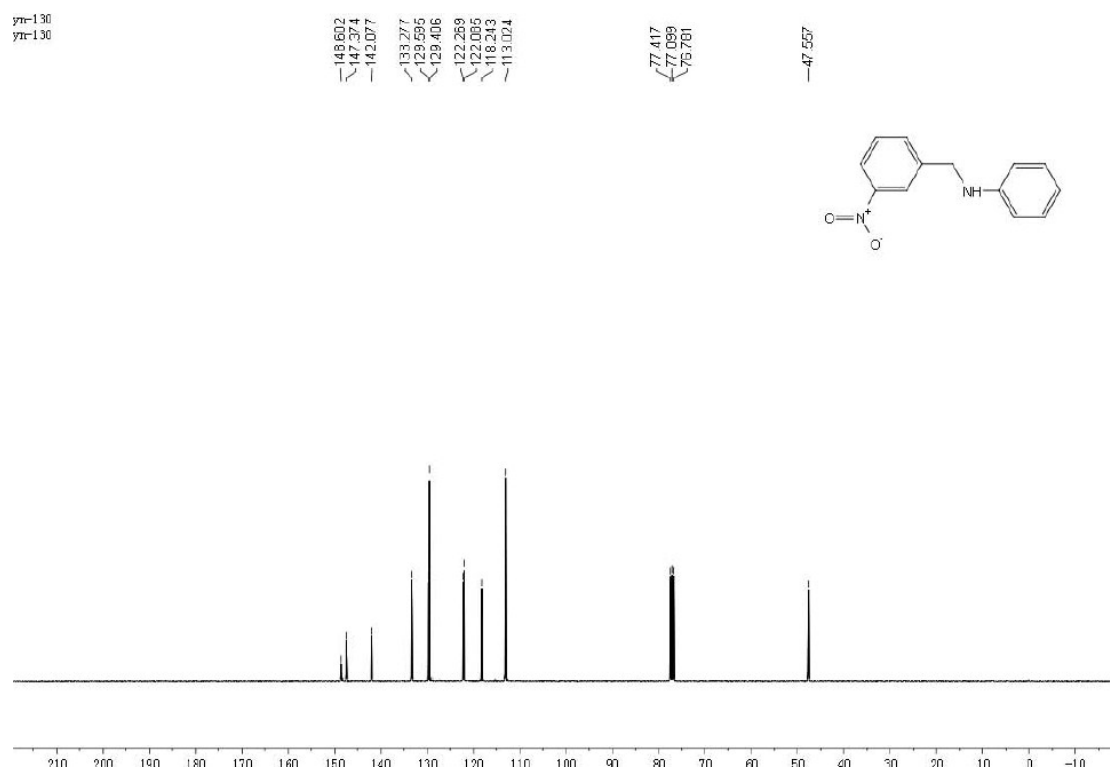
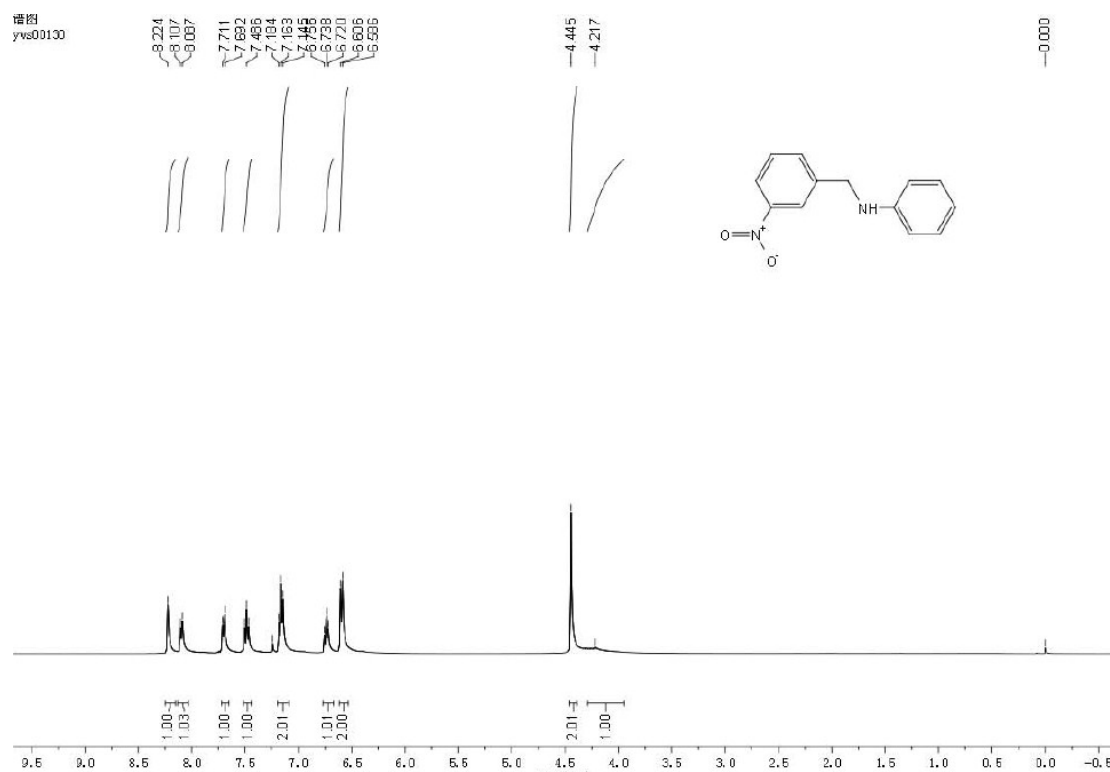
^1H NMR and ^{13}C NMR spectra for compound **3t**



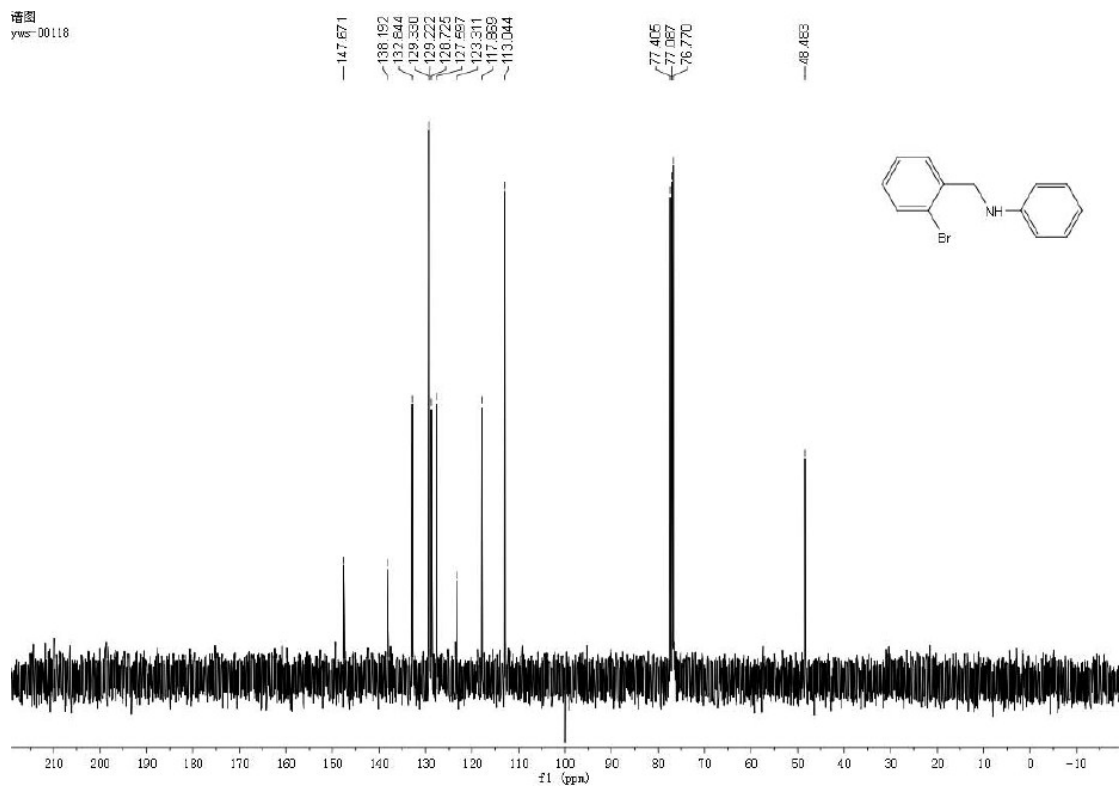
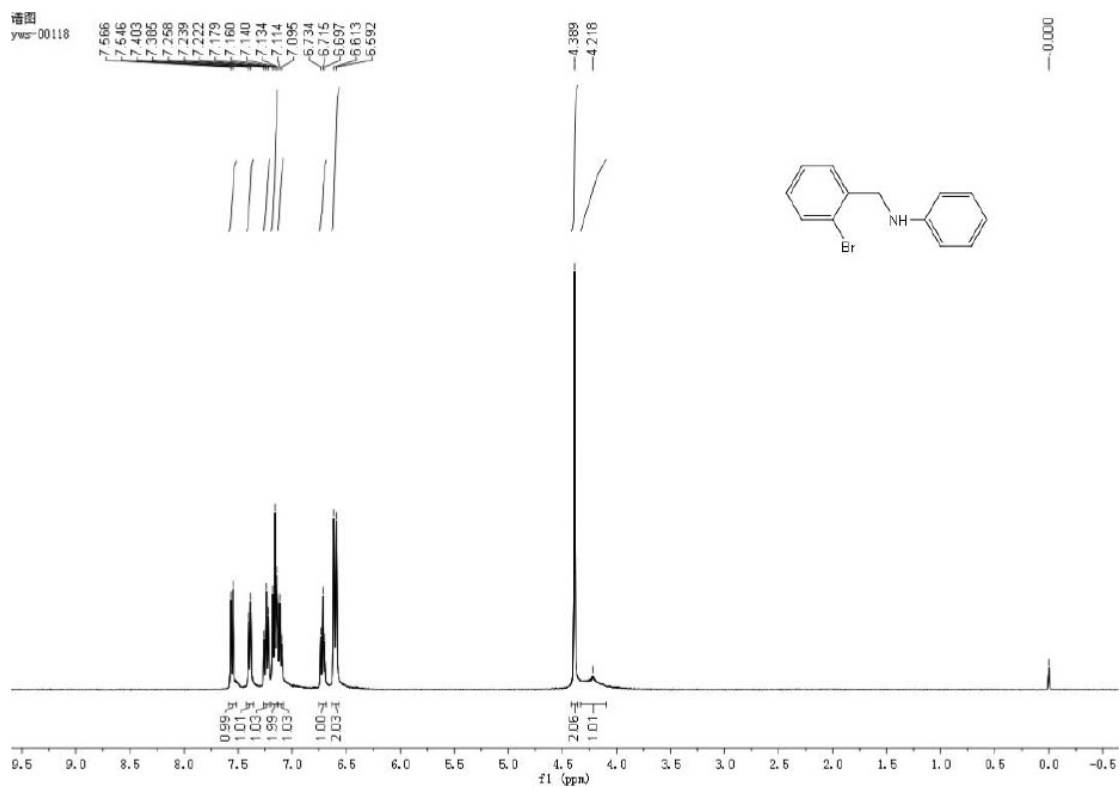
^1H NMR and ^{13}C NMR spectra for compound **3u**



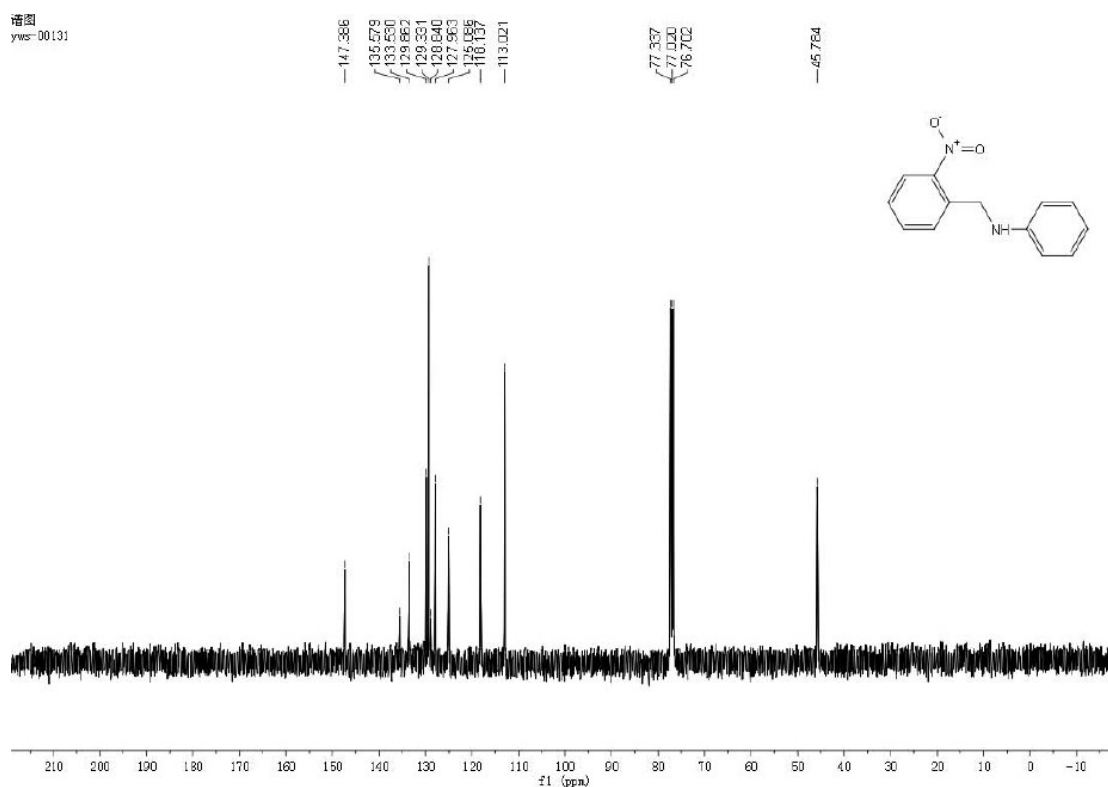
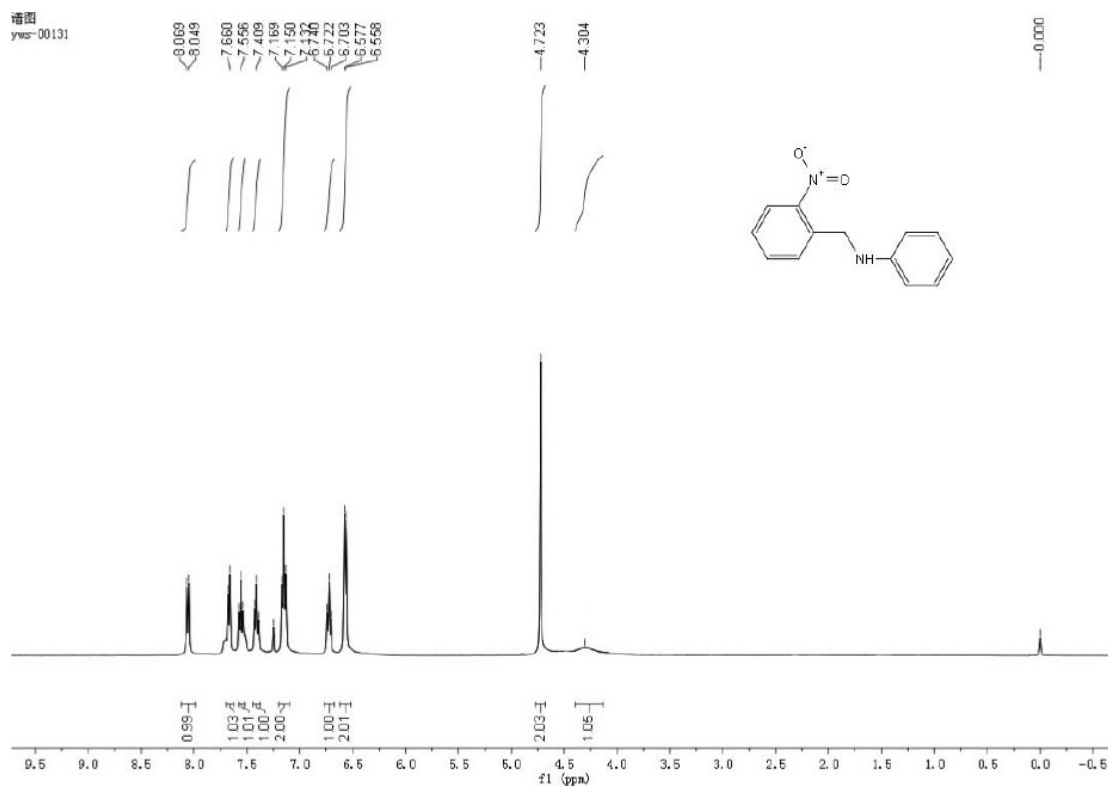
¹H NMR and ¹³C NMR spectra for compound **3v**



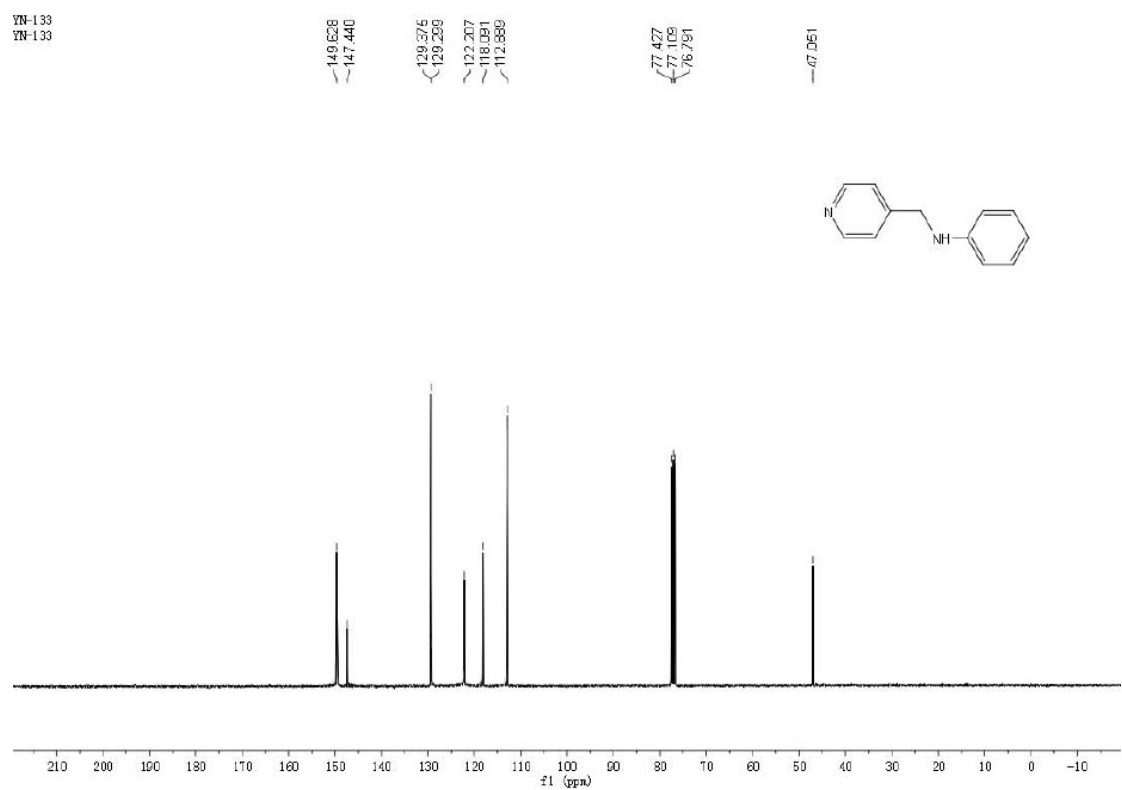
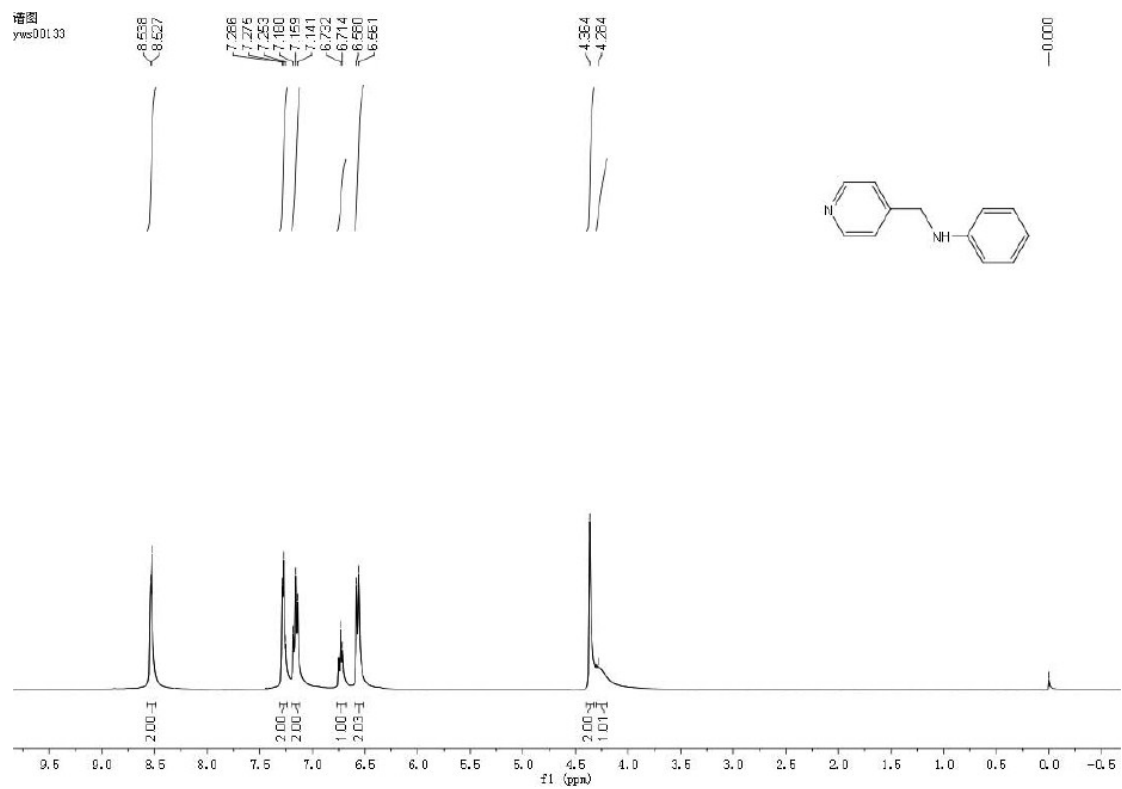
¹H NMR and ¹³C NMR spectra for compound **3w**



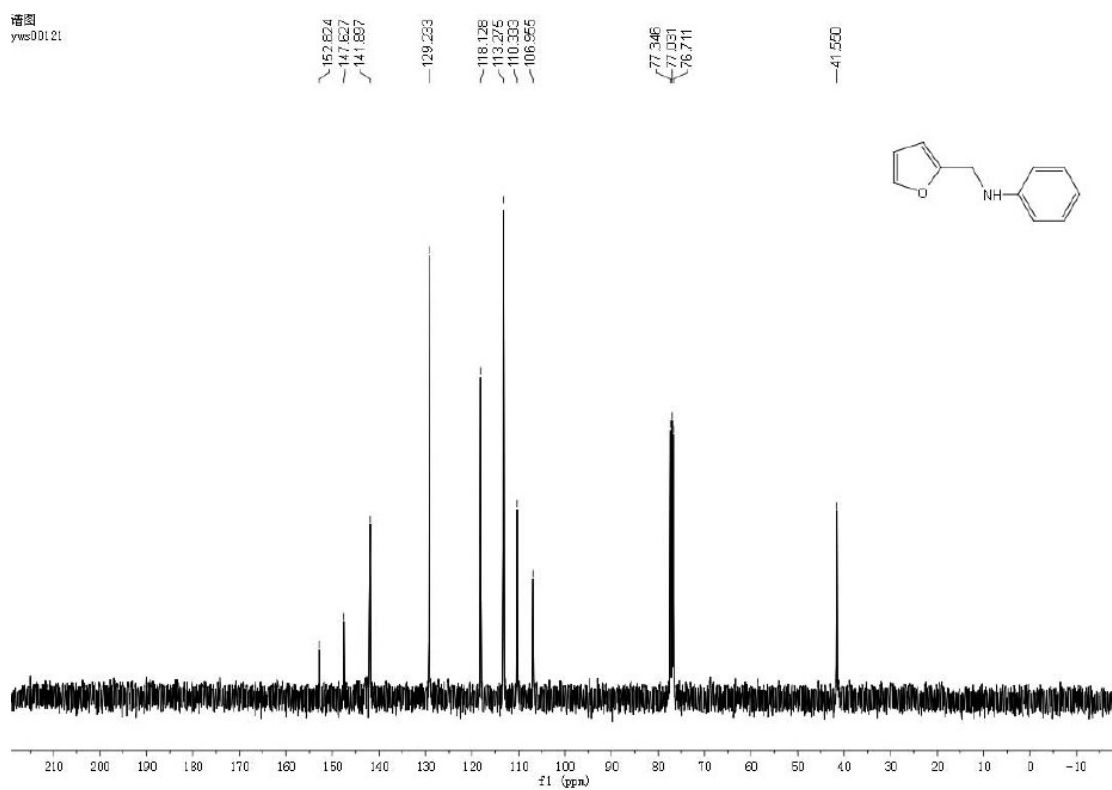
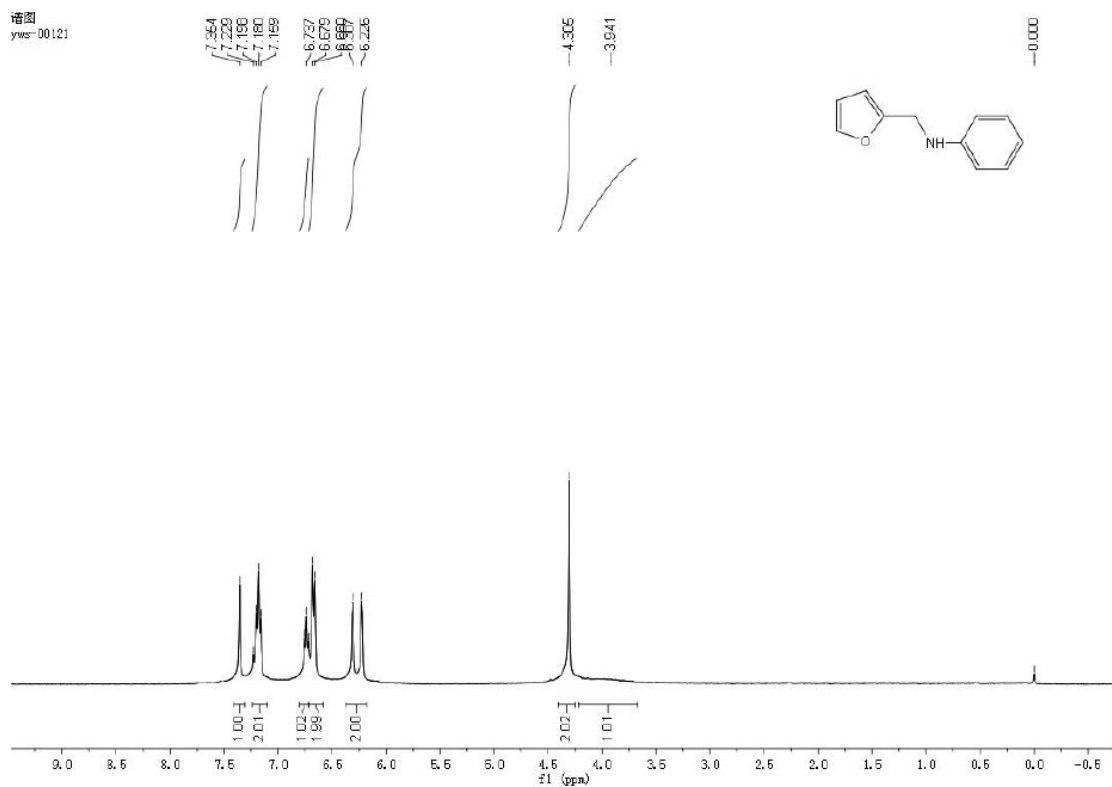
^1H NMR and ^{13}C NMR spectra for compound **3x**



^1H NMR and ^{13}C NMR spectra for compound 3y

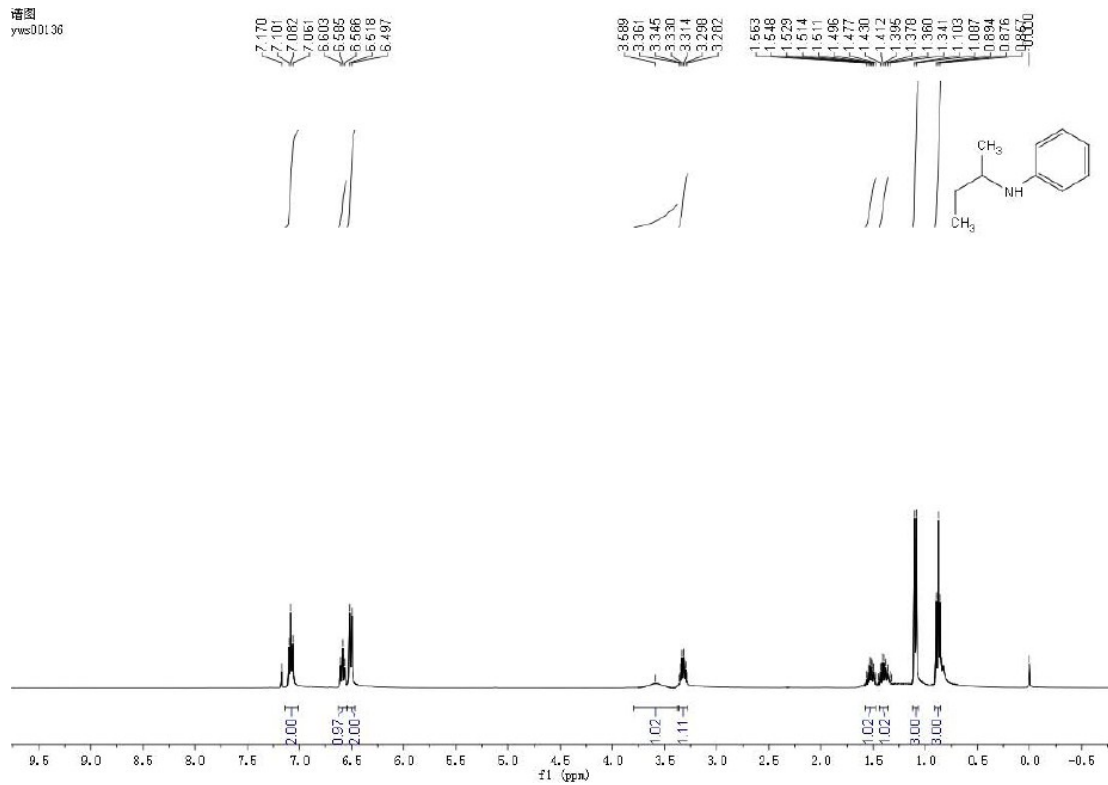


^1H NMR and ^{13}C NMR spectra for compound **3z**

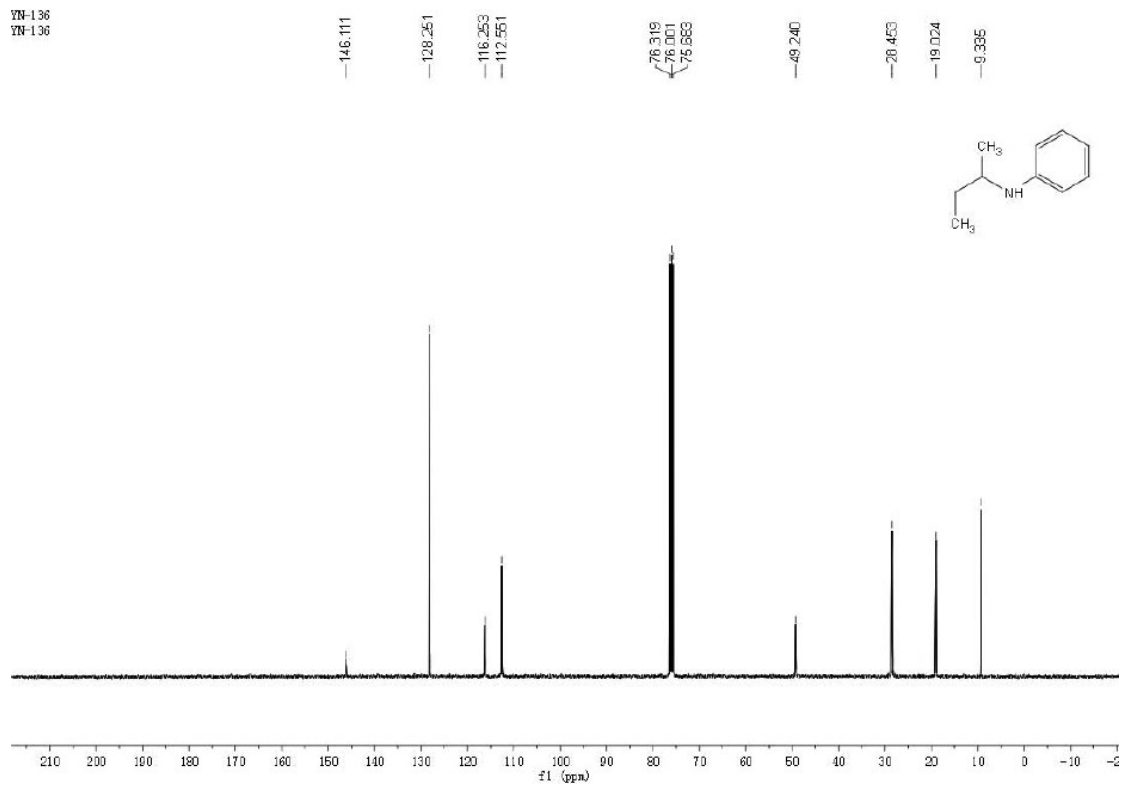


^1H NMR and ^{13}C NMR spectra for compound **3a'**

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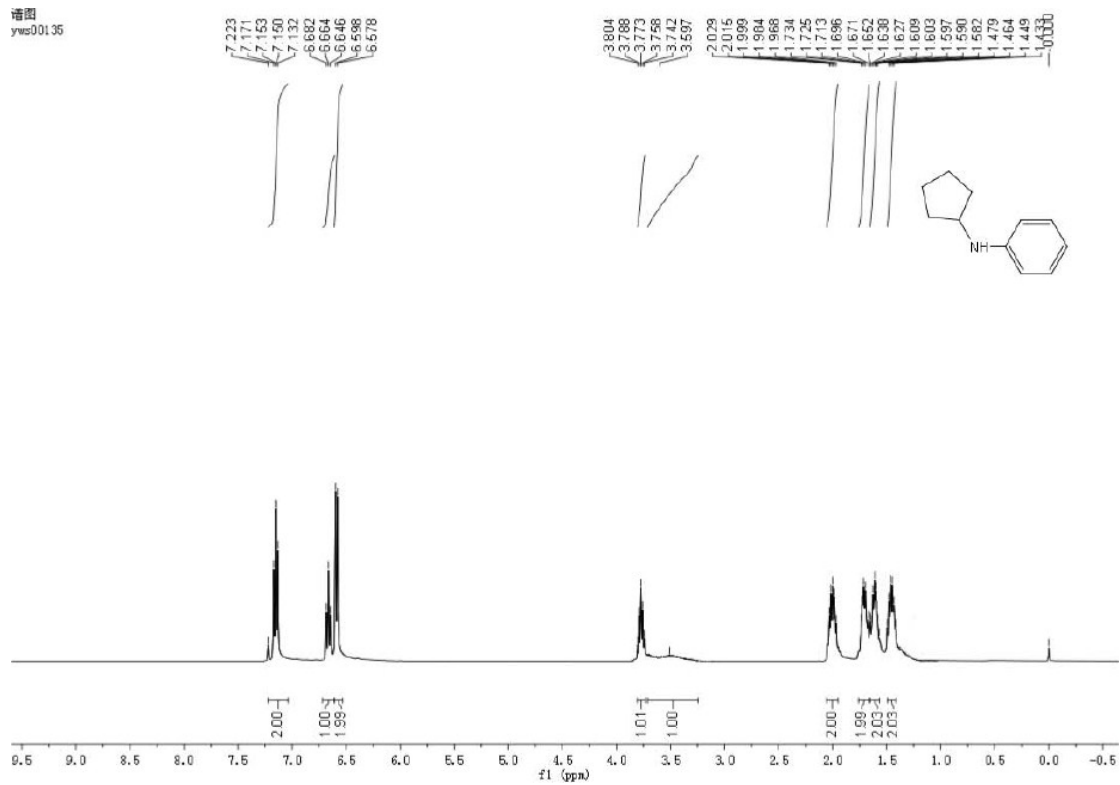


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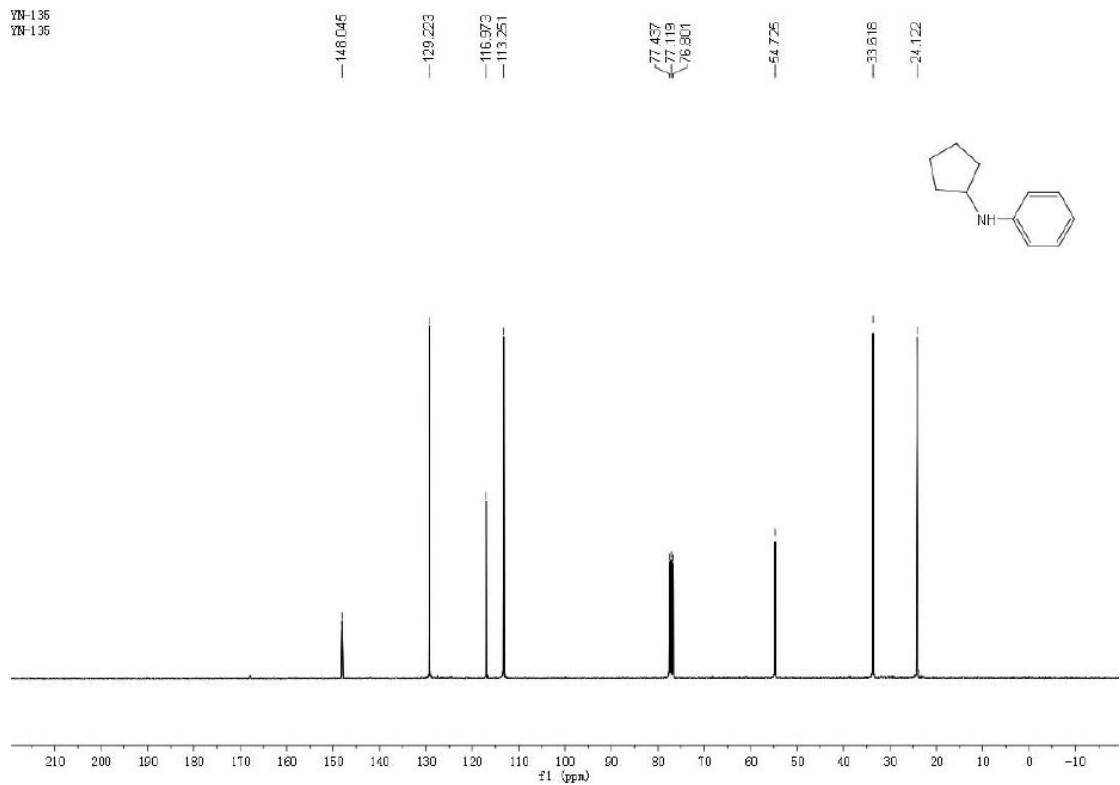


¹H NMR and ¹³C NMR spectra for compound **3b'**

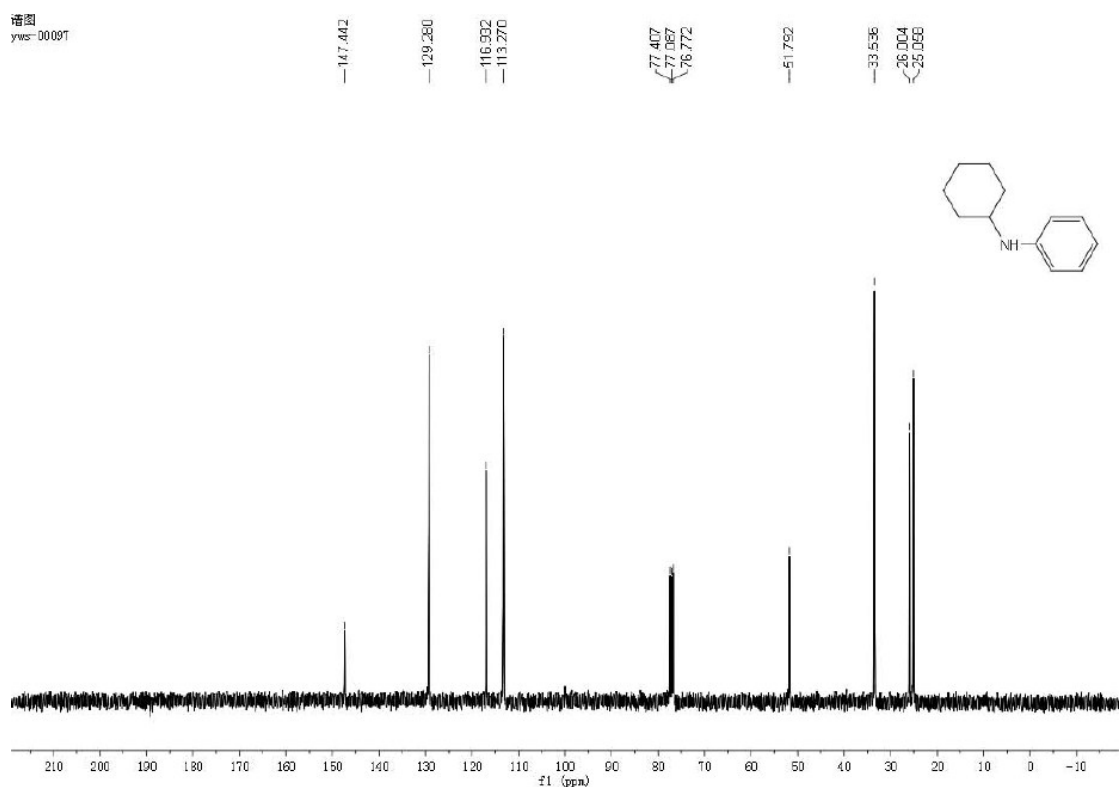
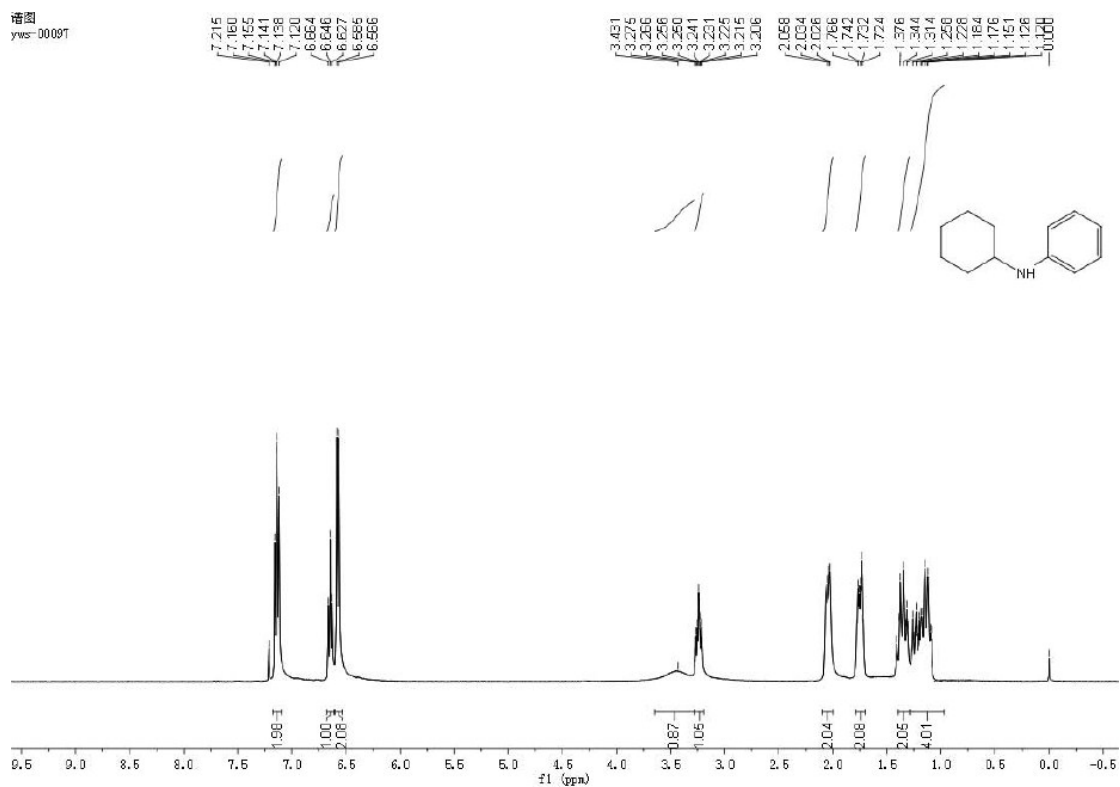
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¹H NMR and ¹³C NMR spectra for compound 3c'



¹H NMR and ¹³C NMR spectra for compound **3d'**