

Supporting information

for

External Oxidant-free Cross-coupling of Arylcopper and
Alkynylcopper reagents Leading to Arylalkyne

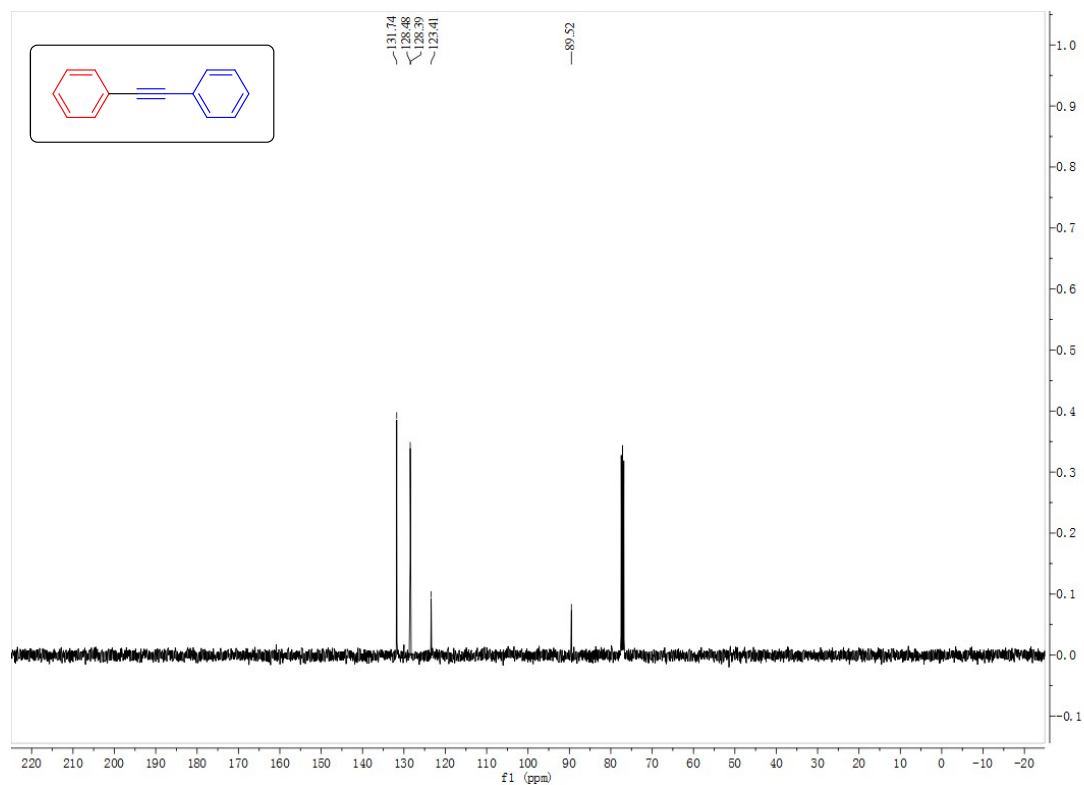
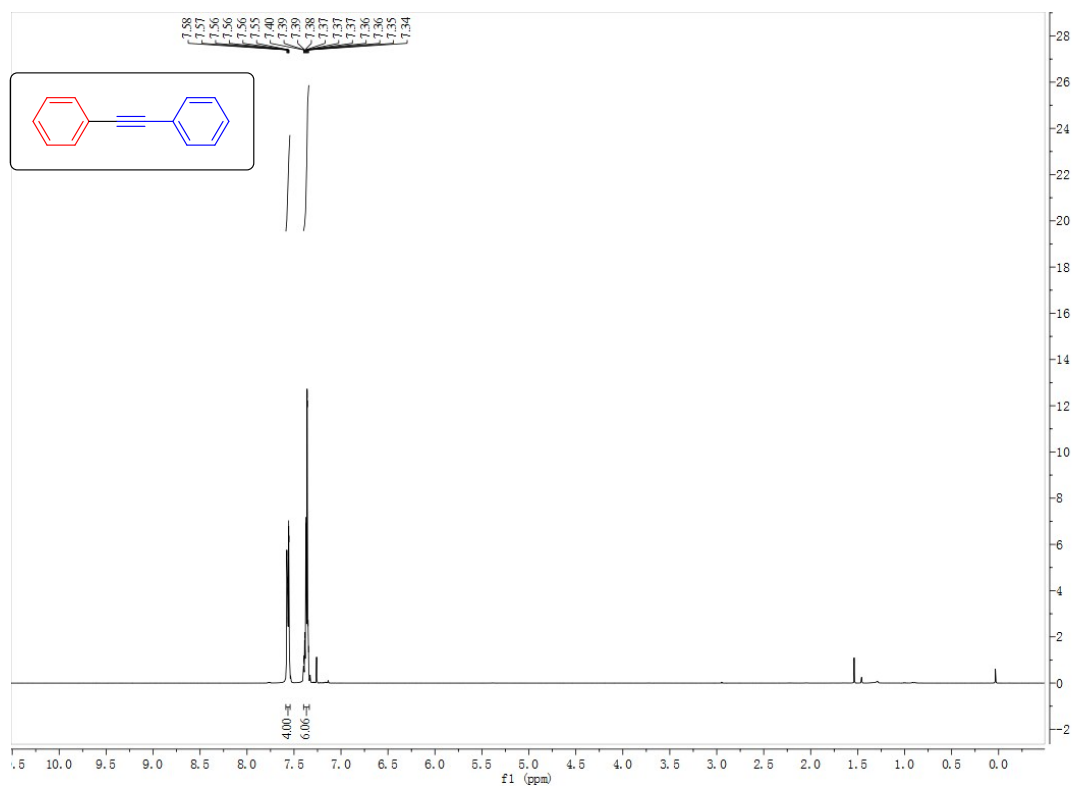
Sheng Wang[†], Yaosen Min[†], Xiaowei Zhang[†] and

Chanjuan Xi^{*†‡}

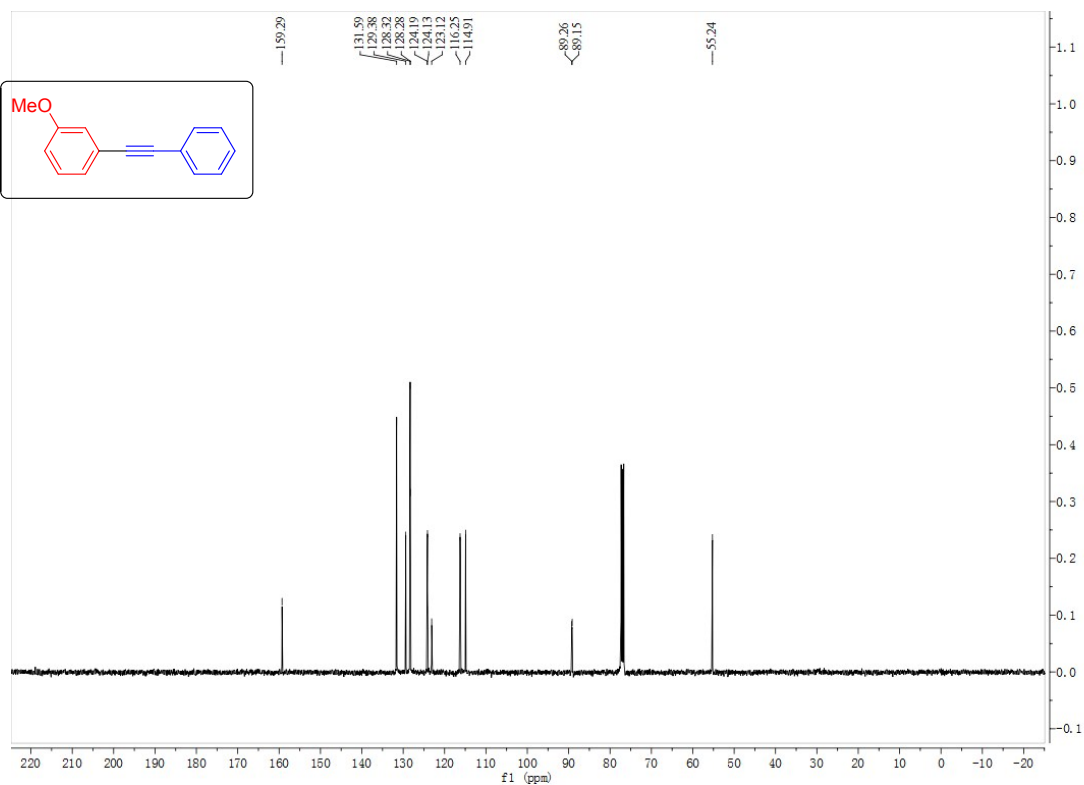
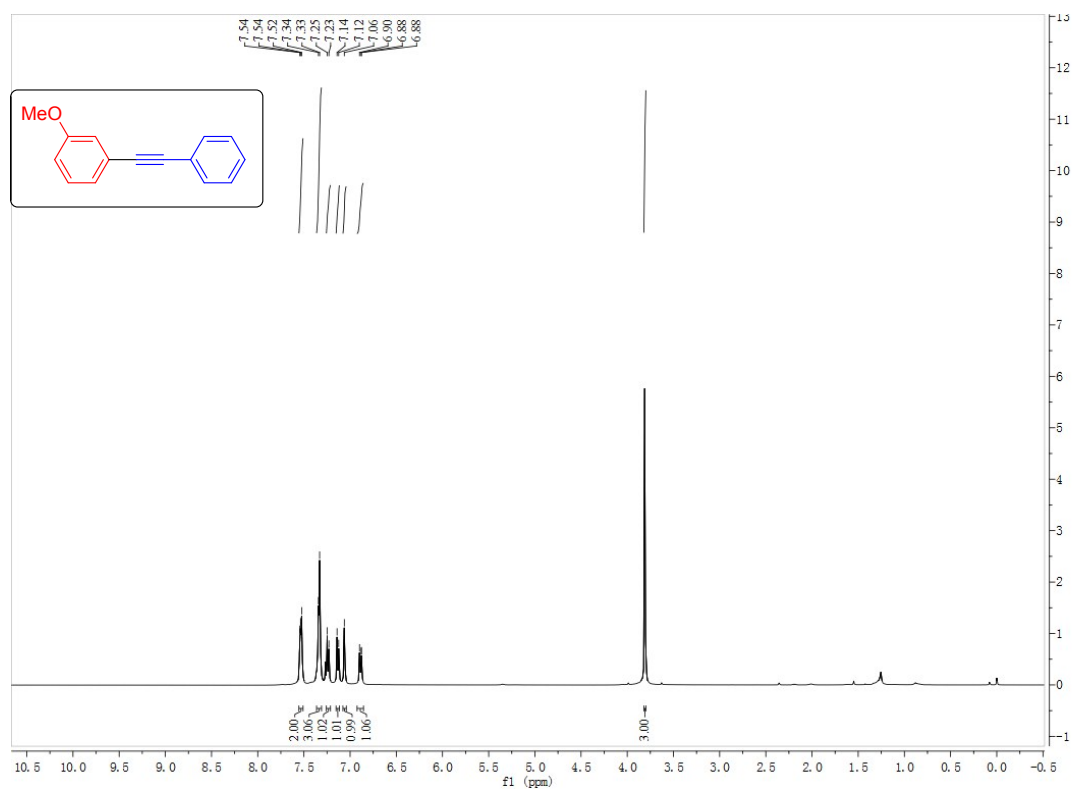
^aKey Laboratory of Bioorganic Phosphorus Chemistry & Chemical Biology (Ministry of Education), Department of Chemistry, Tsinghua University, Beijing 100084, China

^bState Key Laboratory of Elemento-Organic Chemistry, Nankai University, Tianjin 300071, China

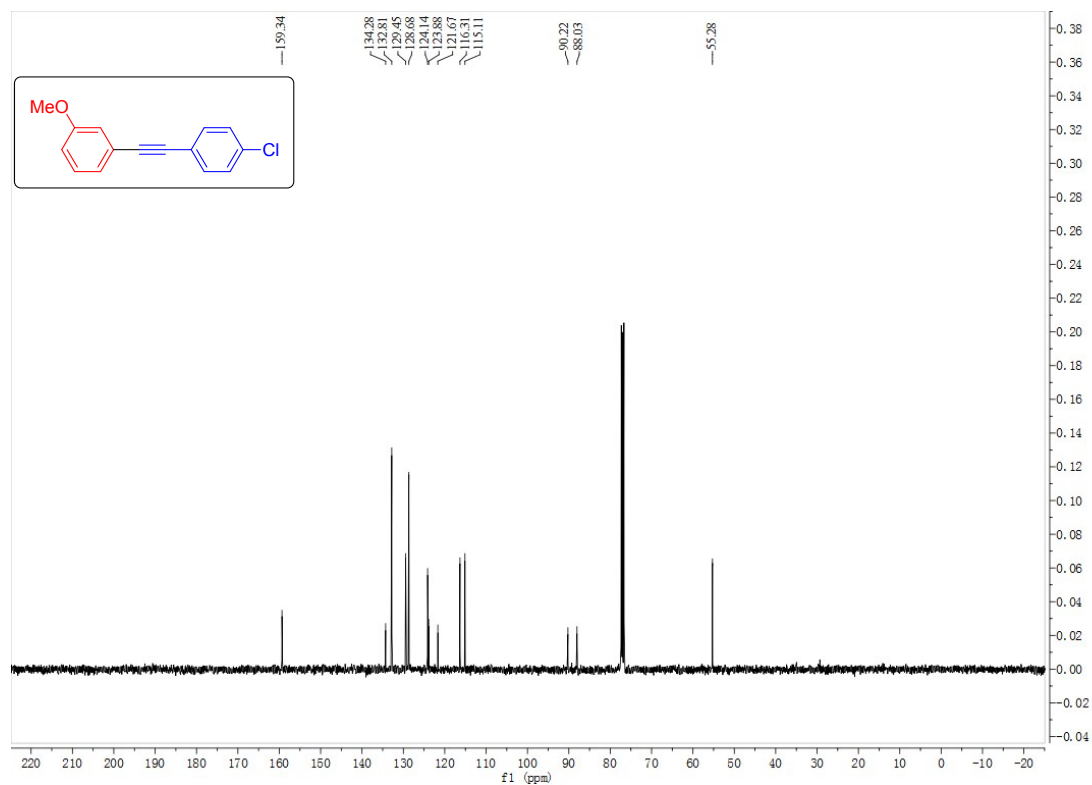
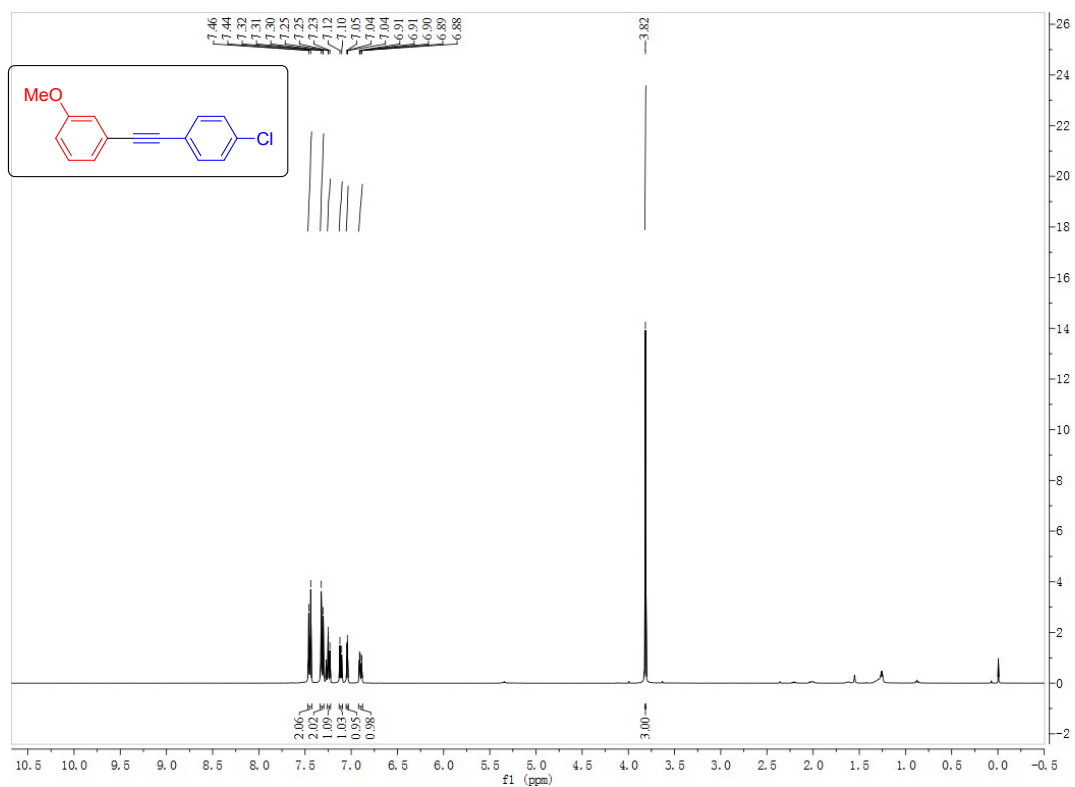
Email: cjxi@tsinghua.edu.cn



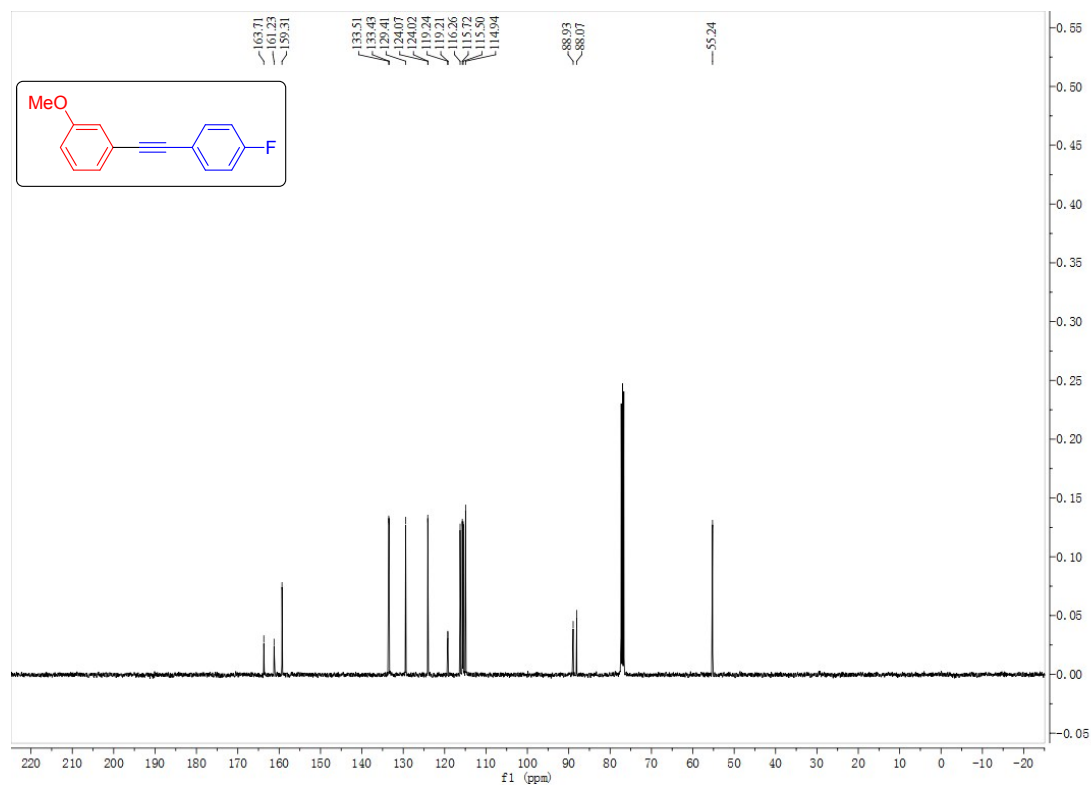
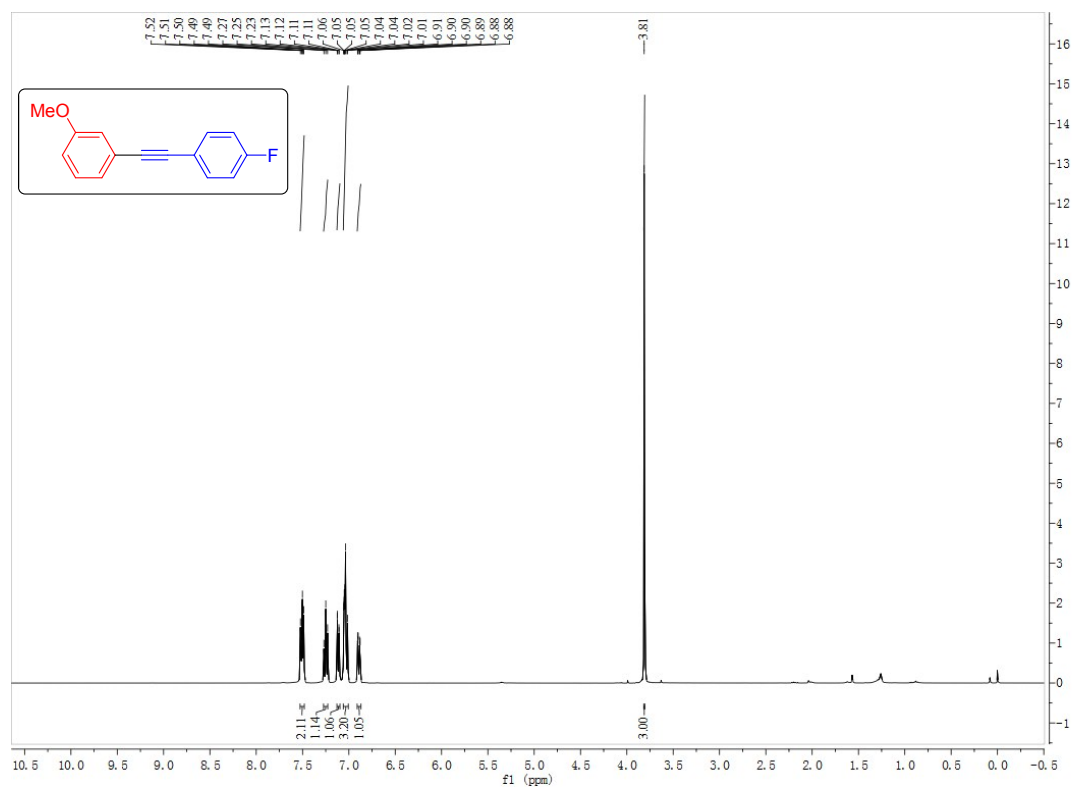
¹H NMR and ¹³C NMR for compound **4aa**



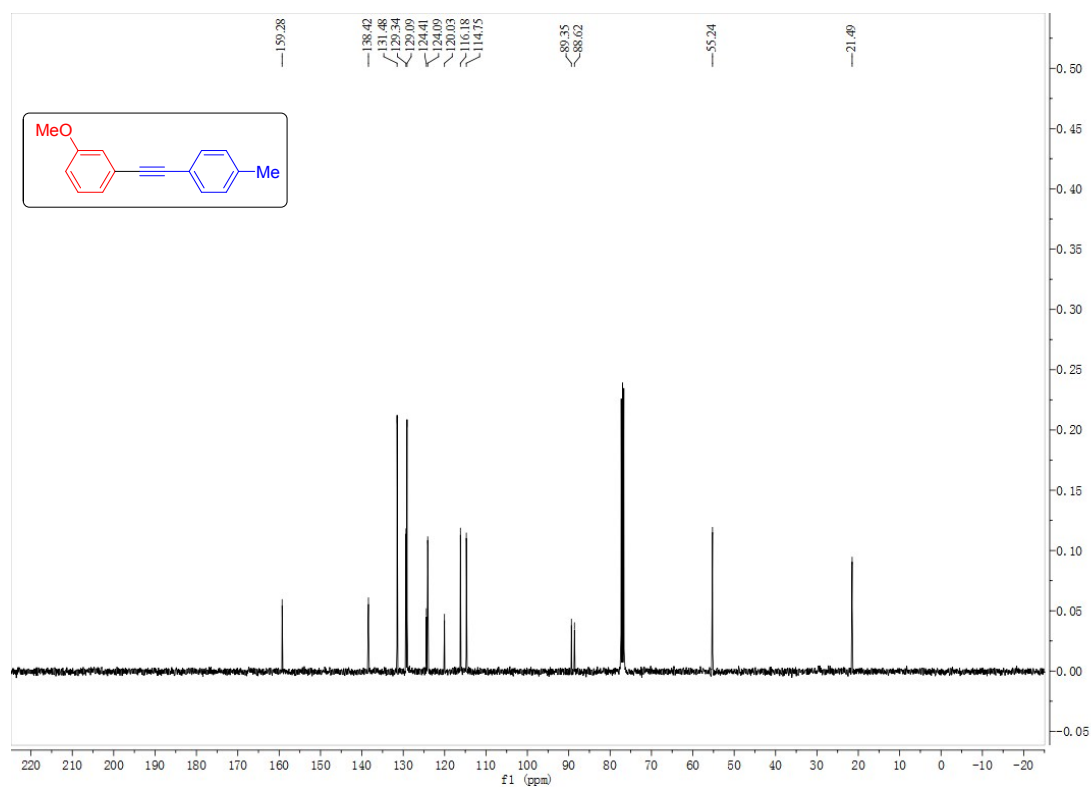
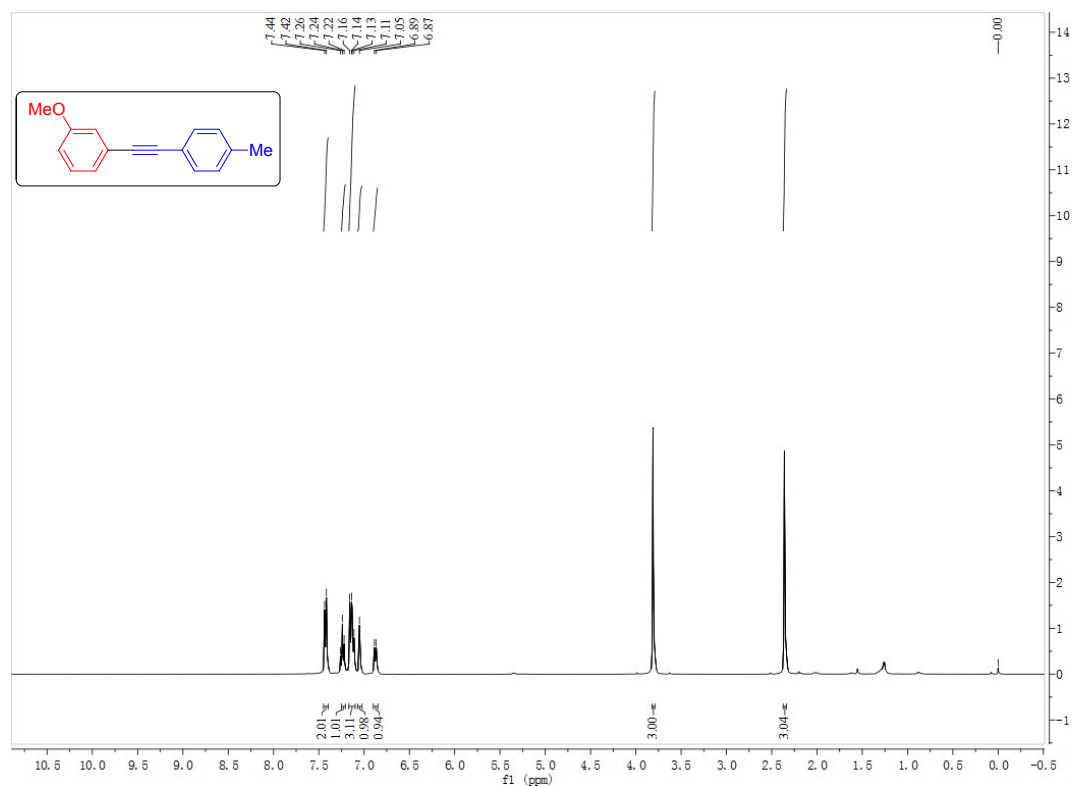
¹H NMR and ¹³C NMR for compound 4ba



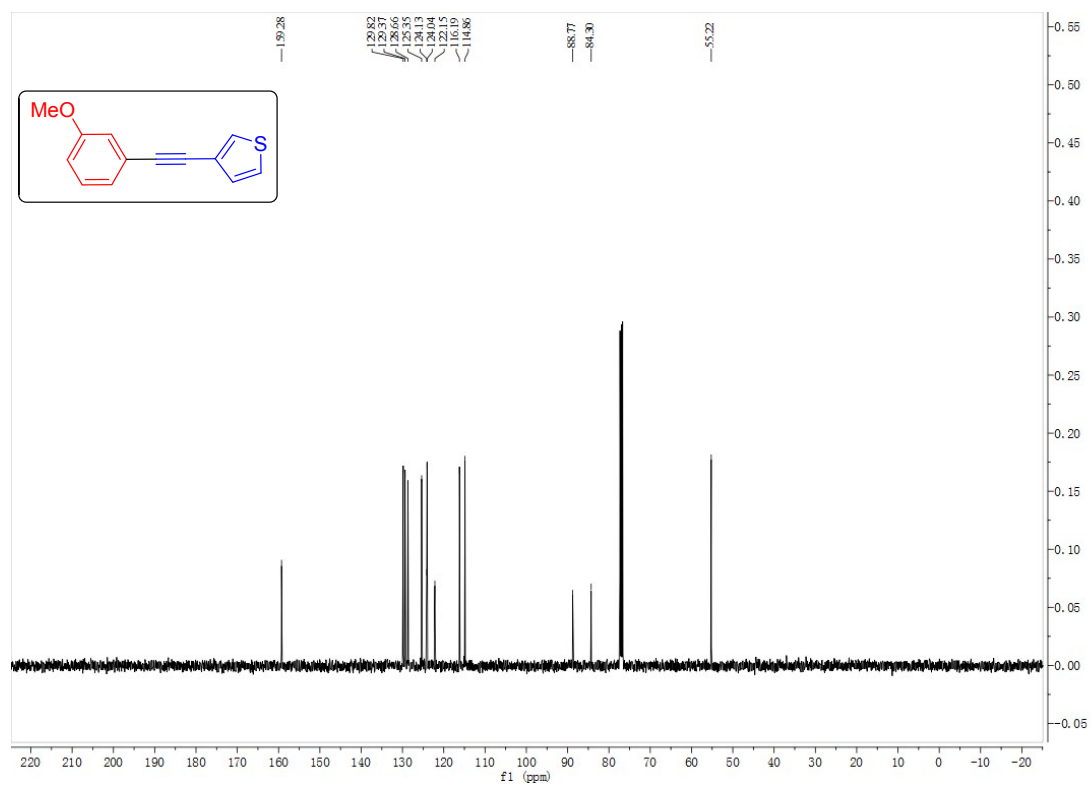
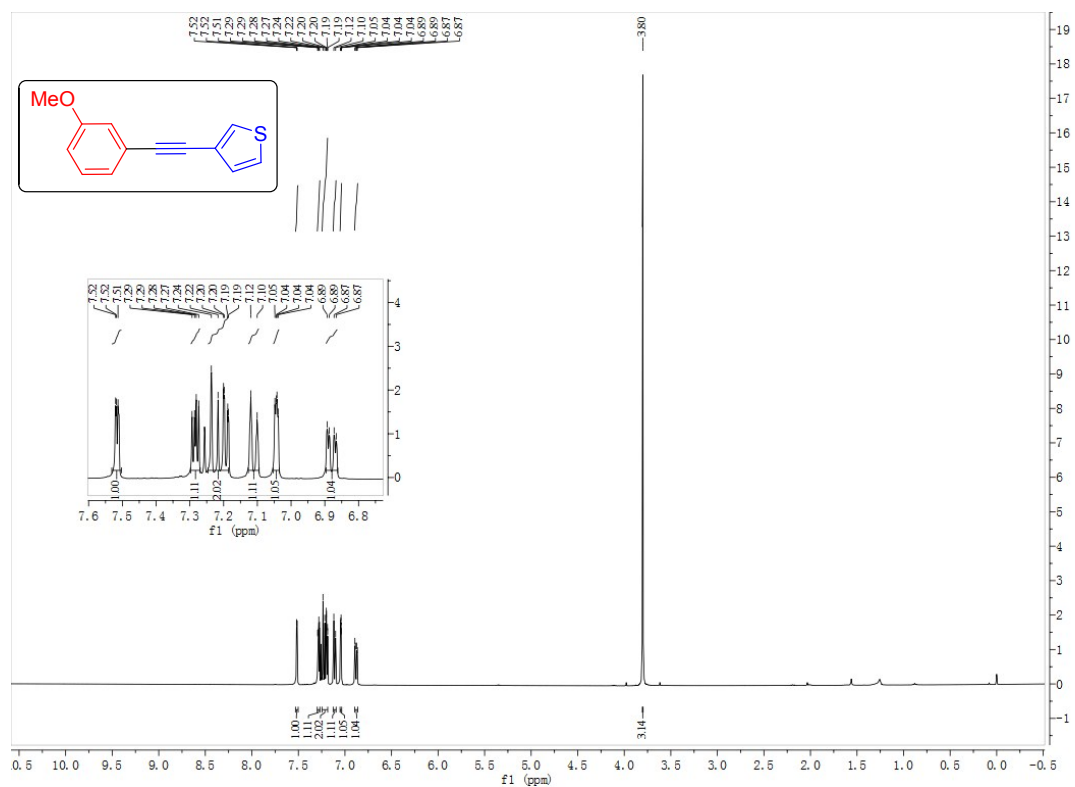
¹H NMR and ¹³C NMR for compound **4bb**



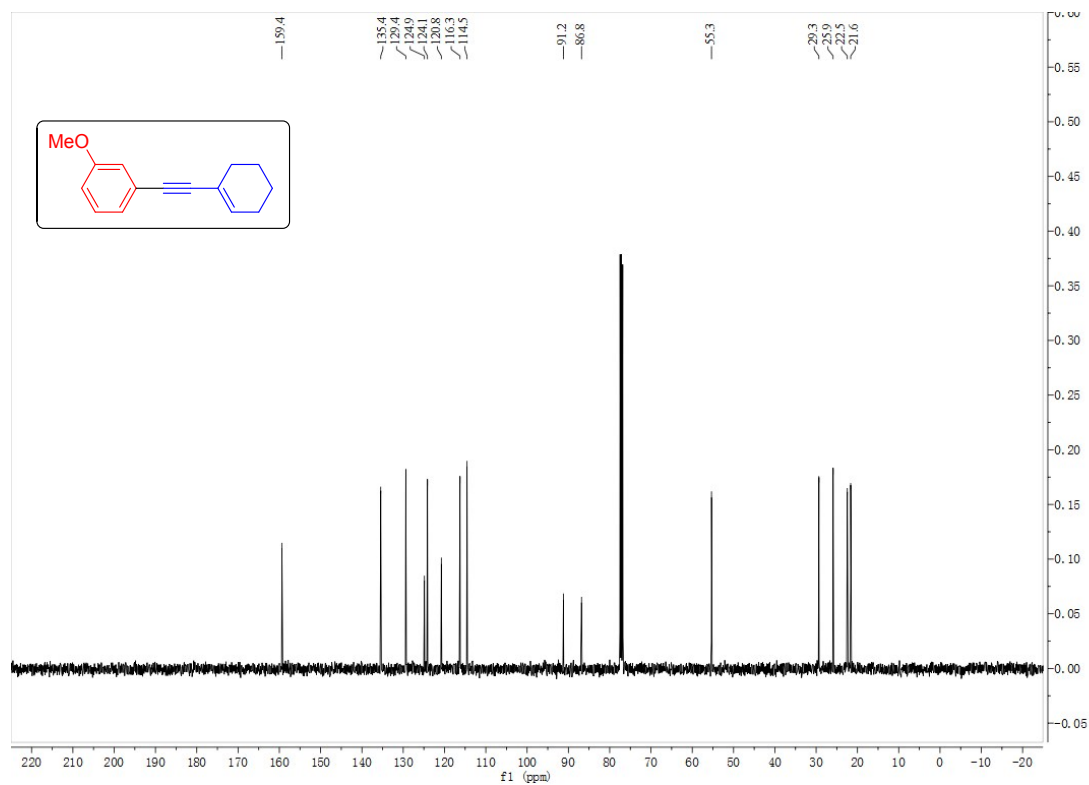
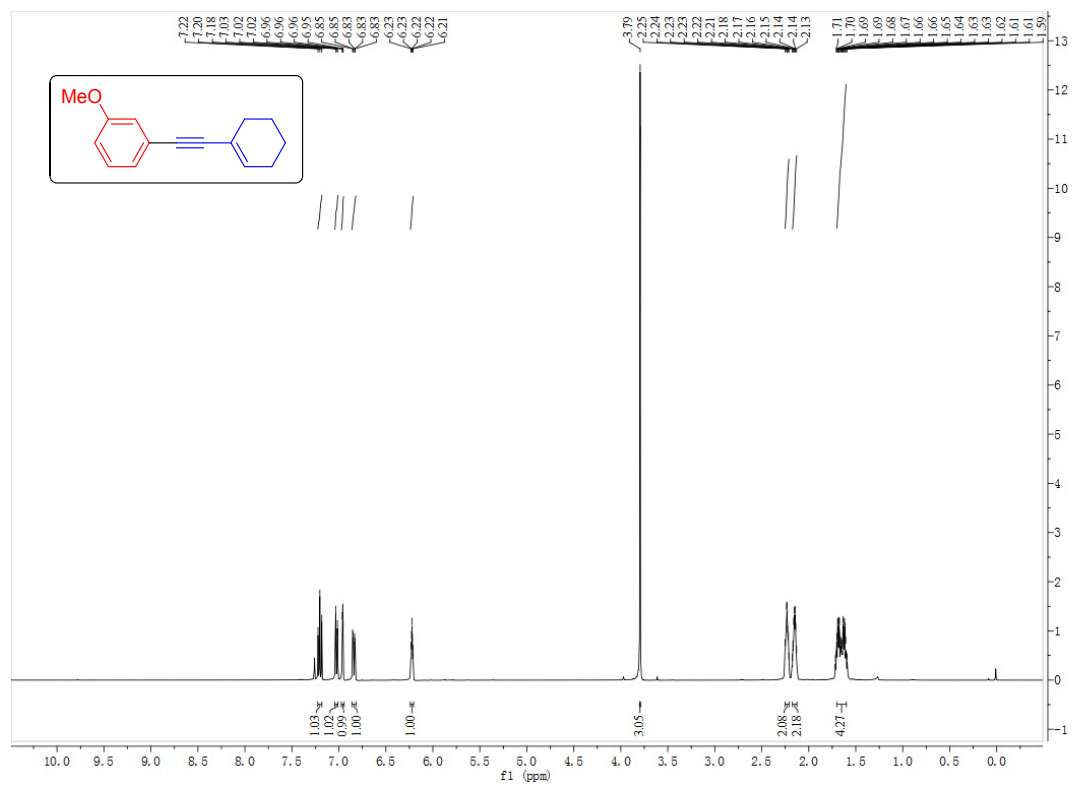
¹H NMR and ¹³C NMR for compound 4bc



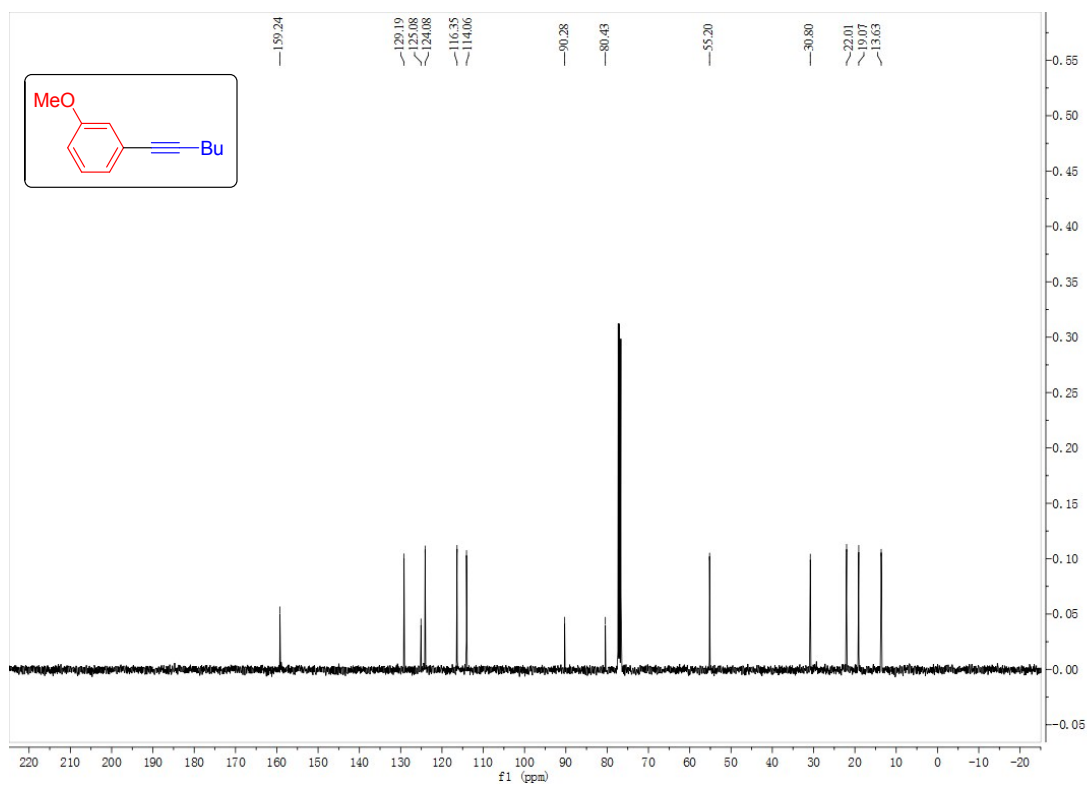
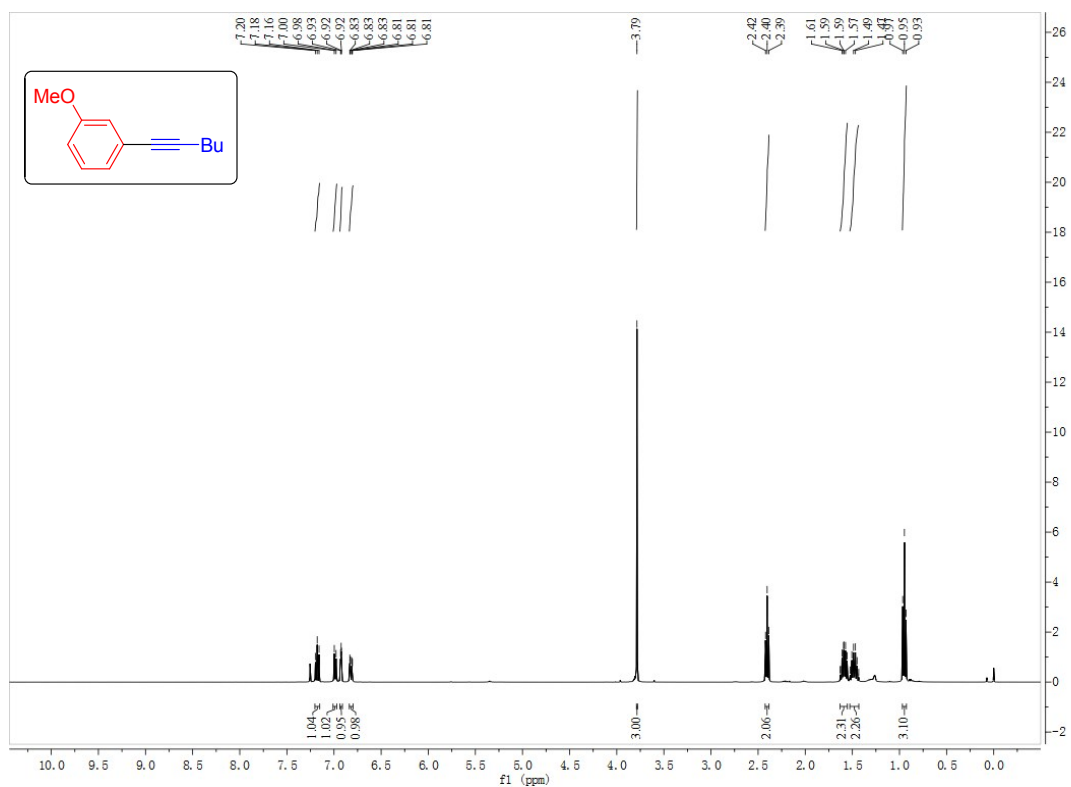
¹H NMR and ¹³C NMR for compound 4bd



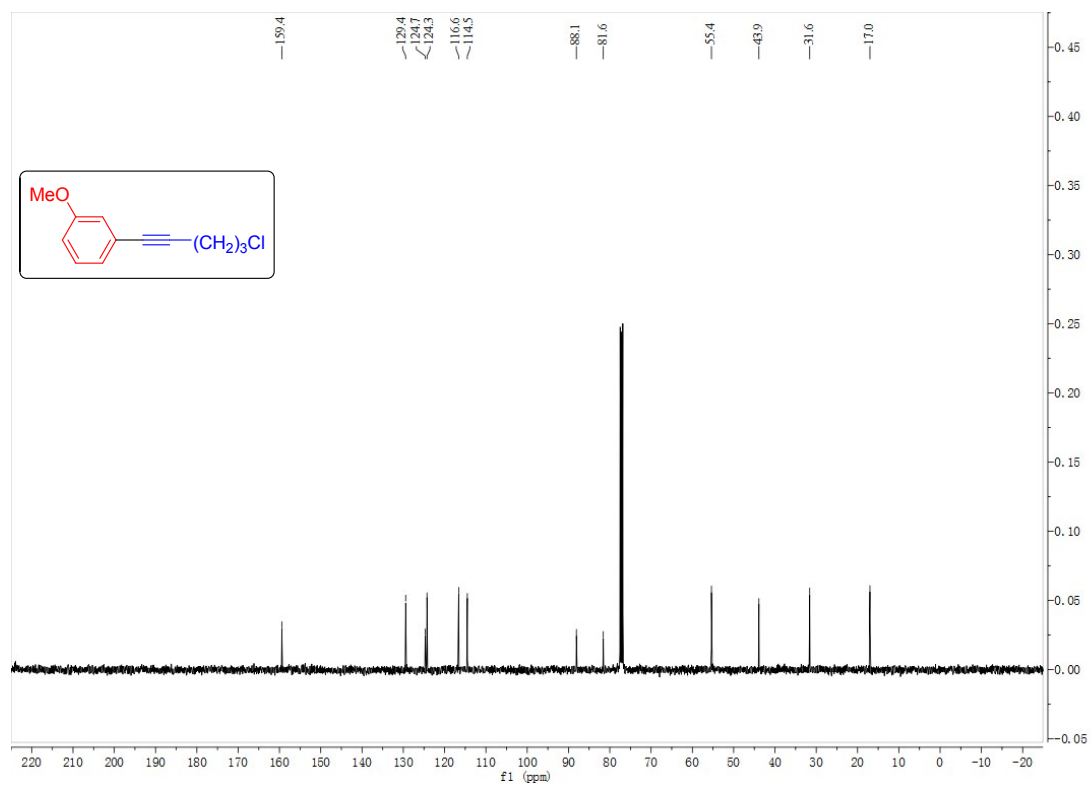
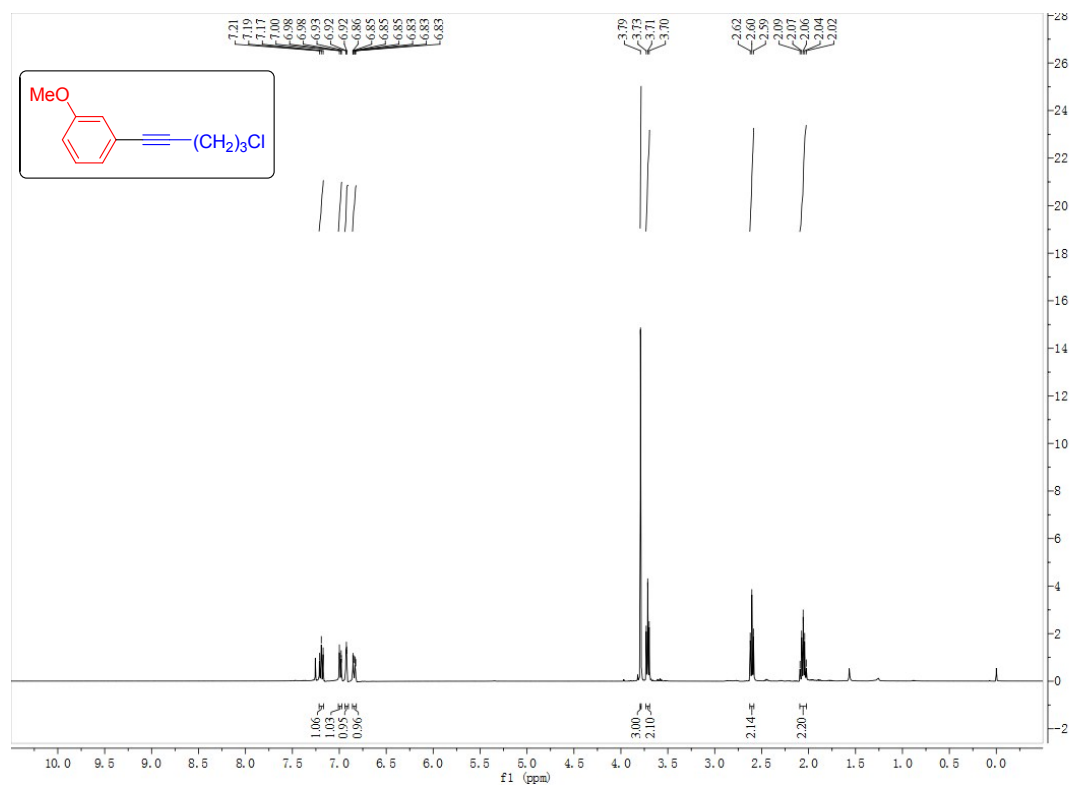
¹H NMR and ¹³C NMR for compound 4be



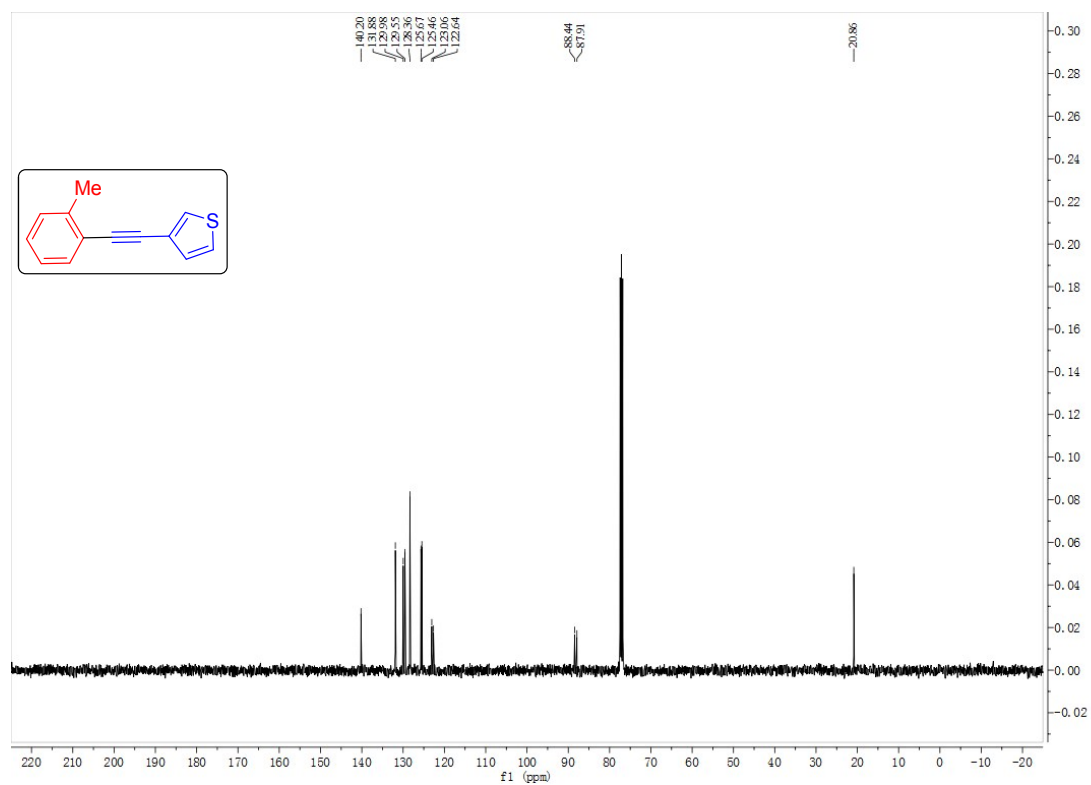
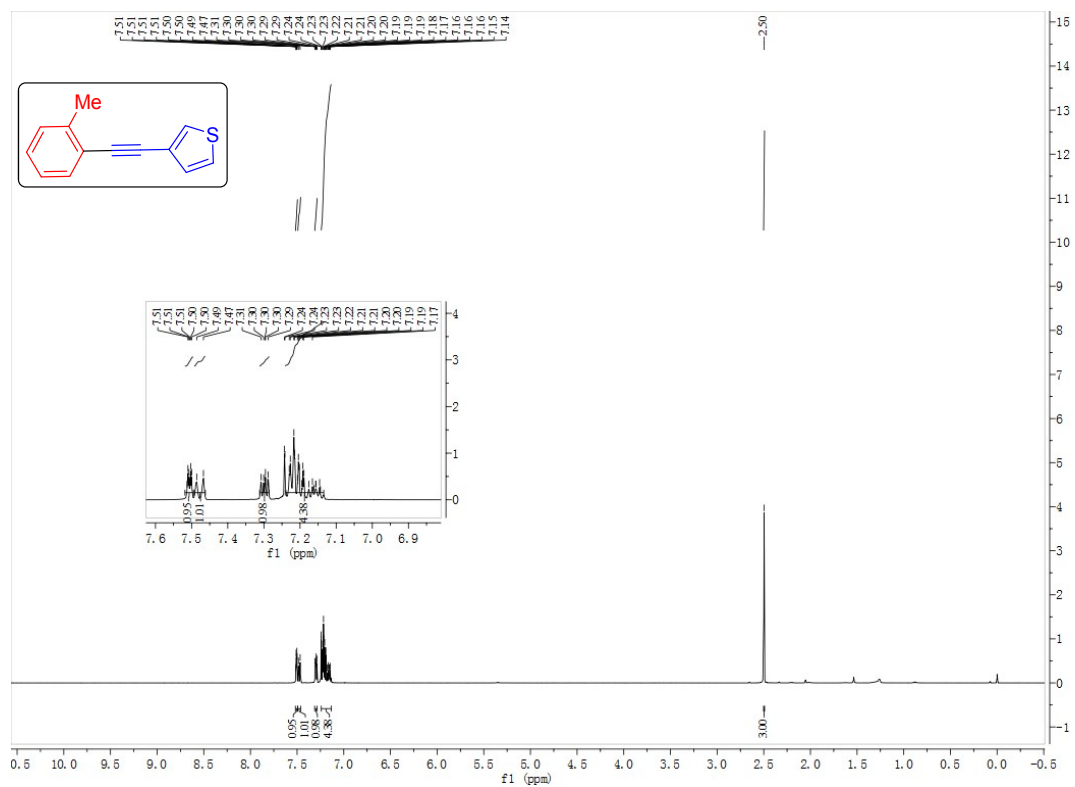
¹H NMR and ¹³C NMR for compound 4bf



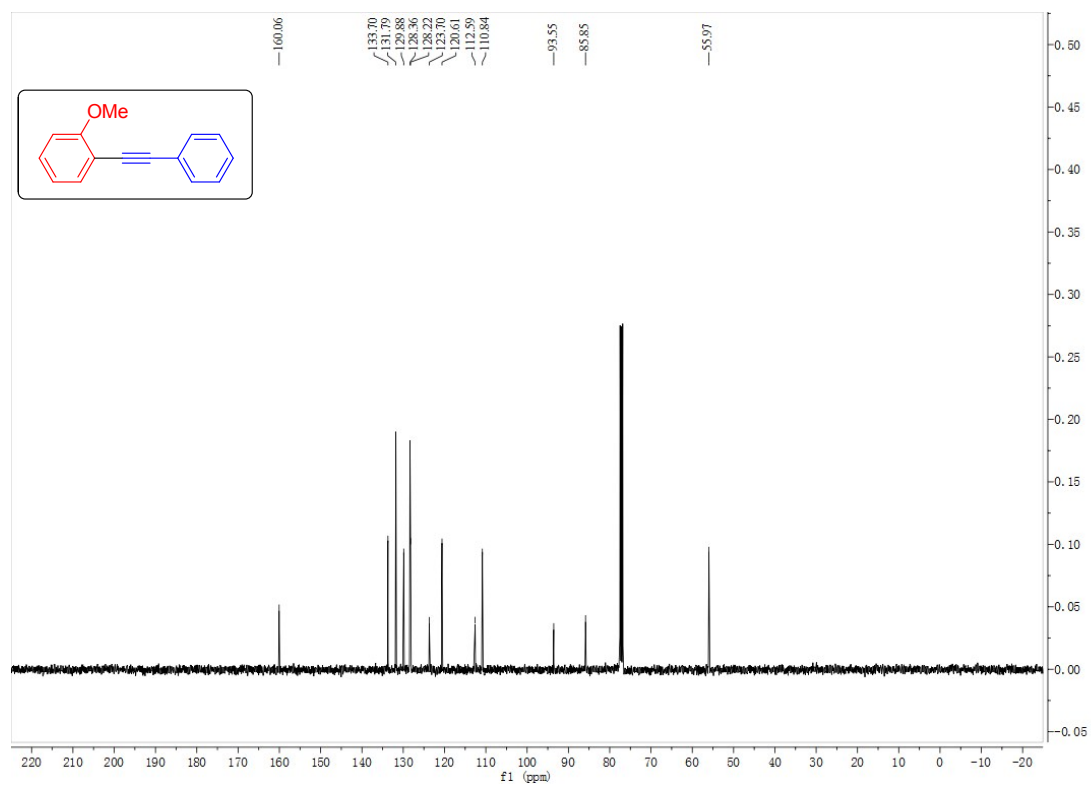
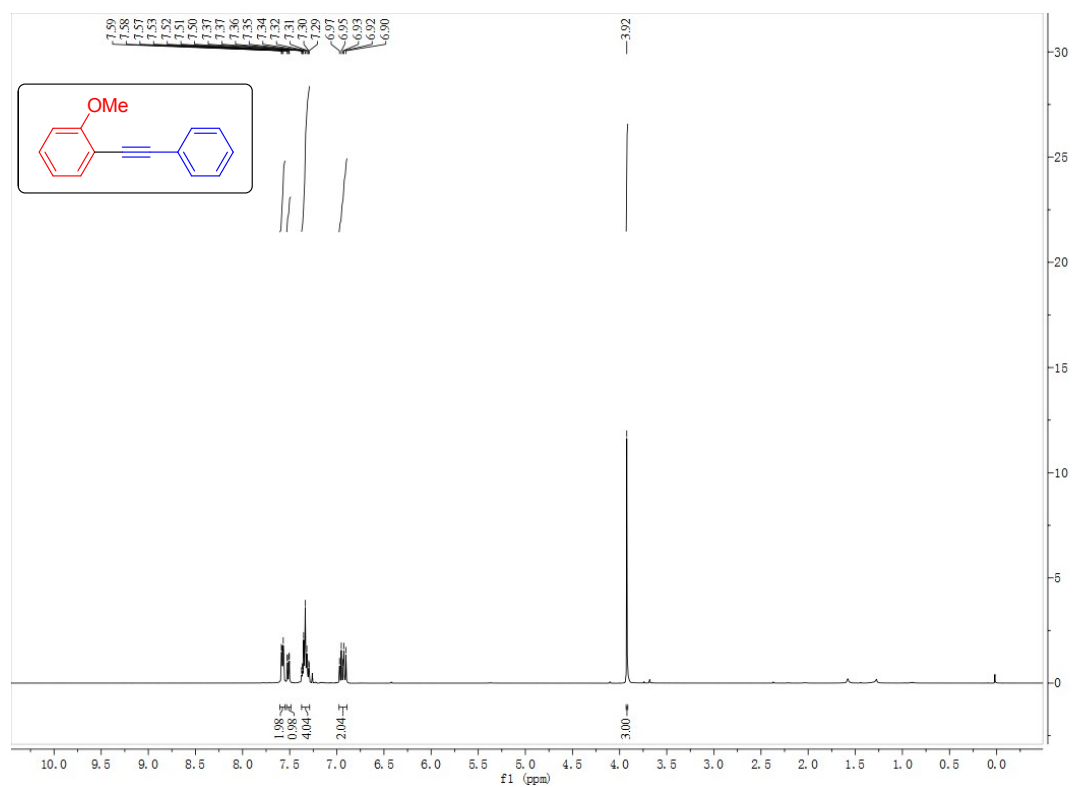
¹H NMR and ¹³C NMR for compound 4bg



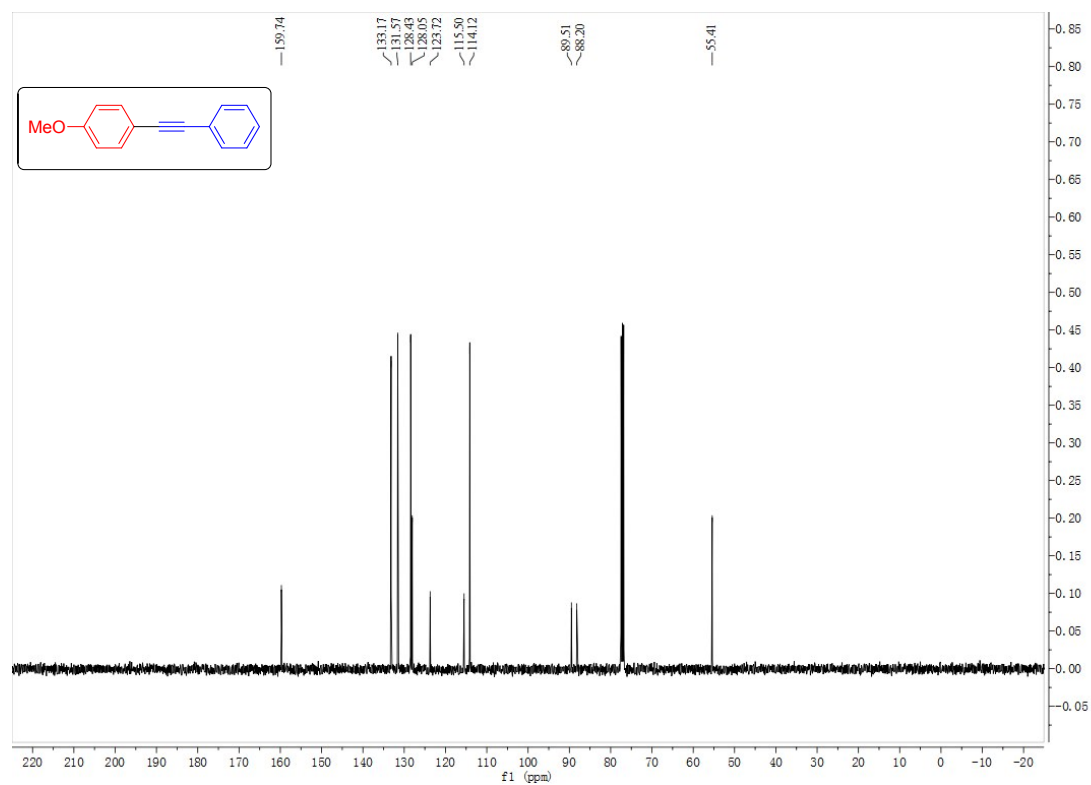
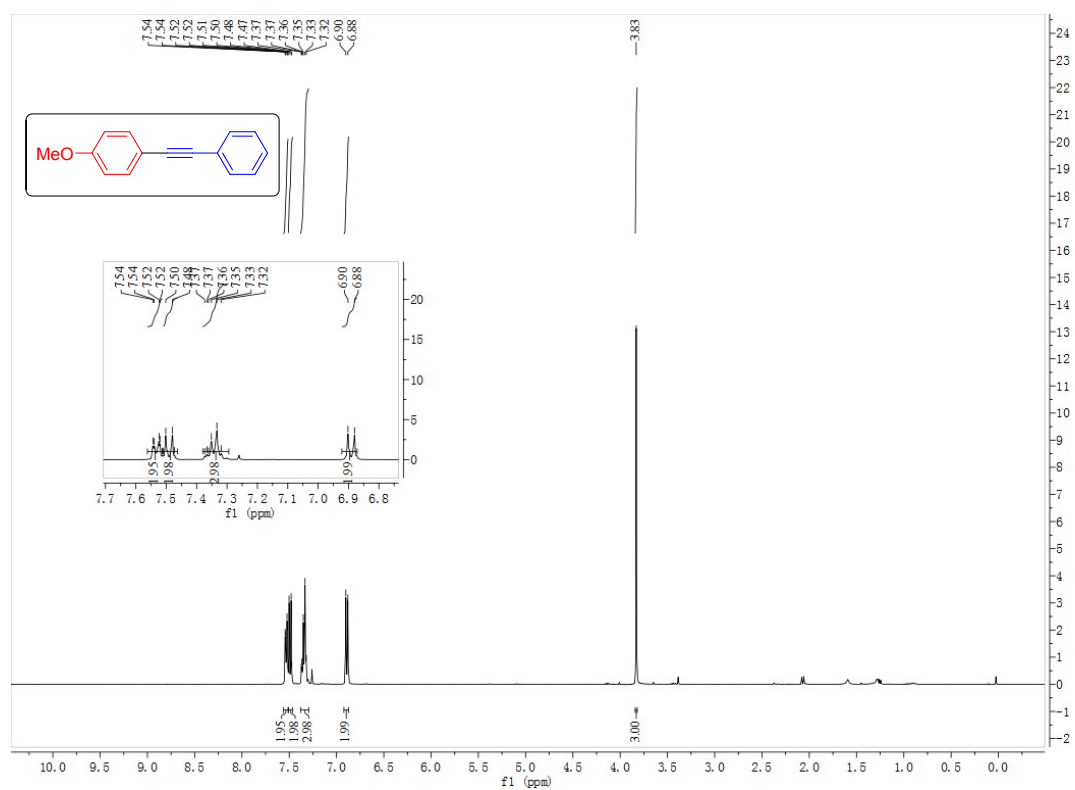
¹H NMR and ¹³C NMR for compound 4bh



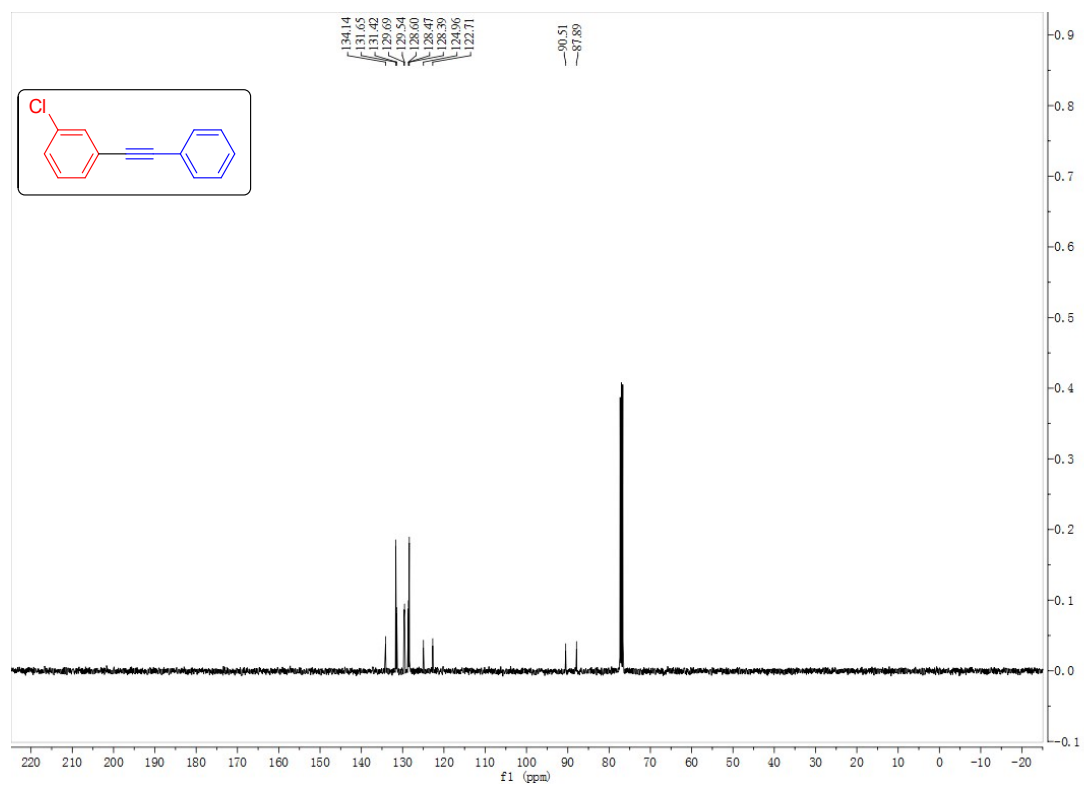
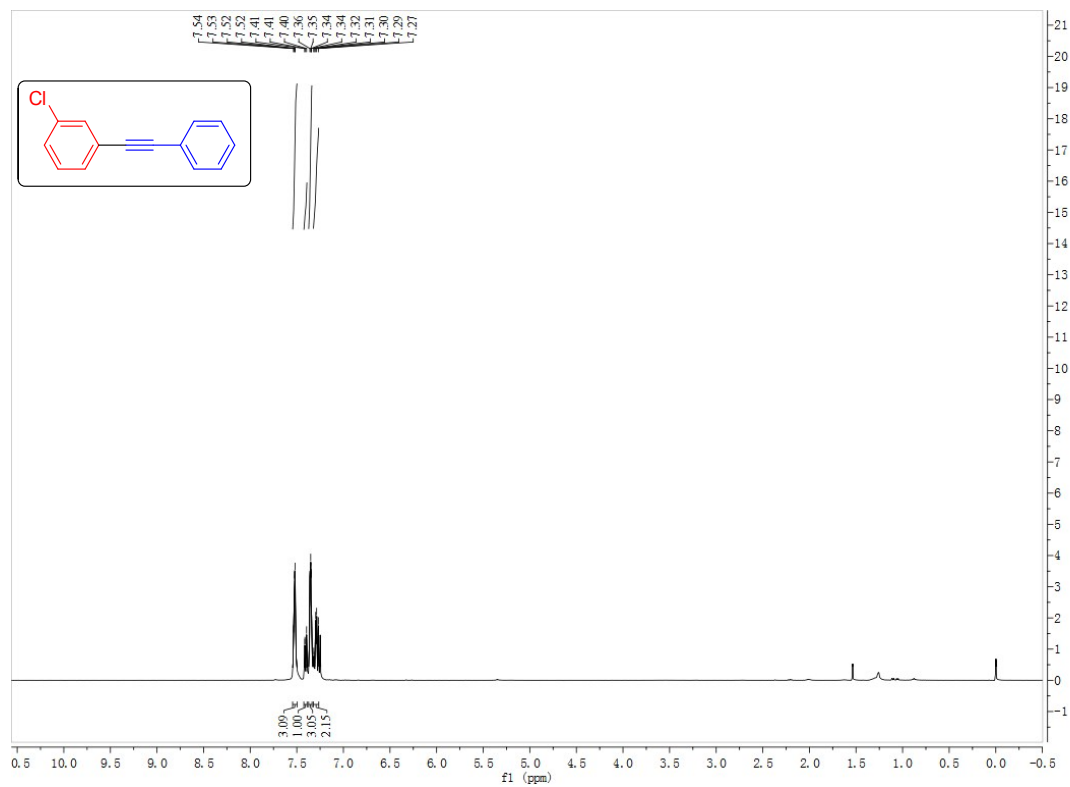
¹H NMR and ¹³C NMR for compound 4ce



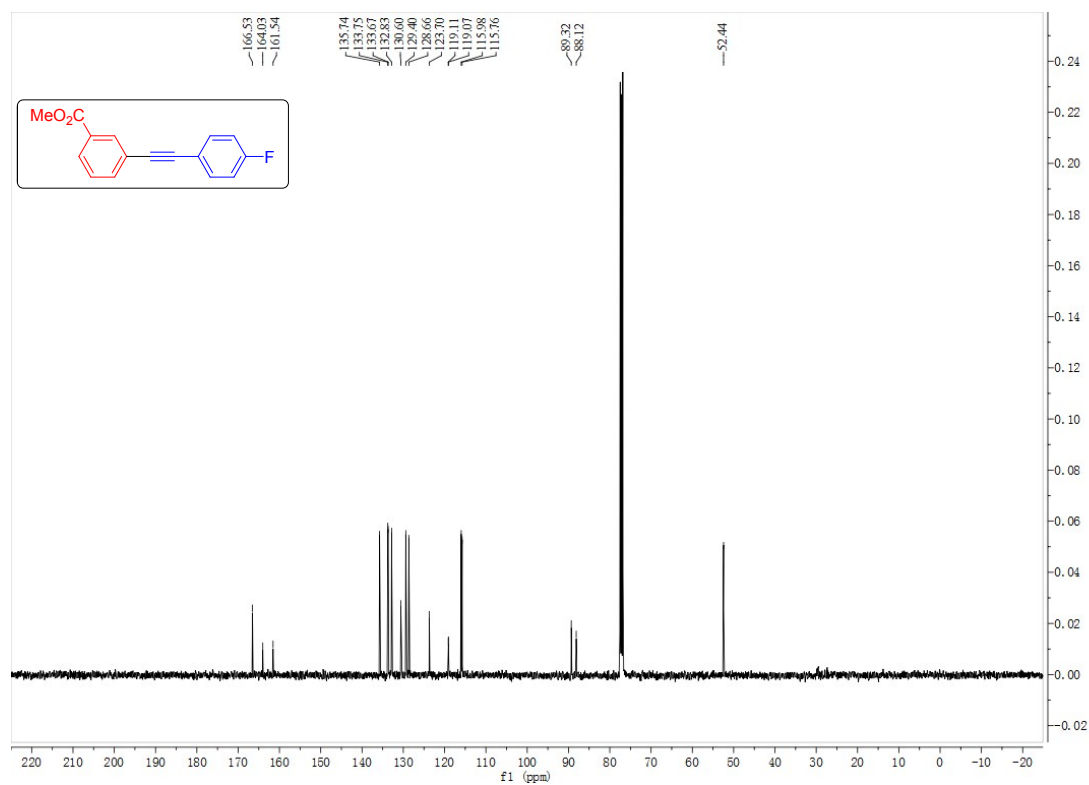
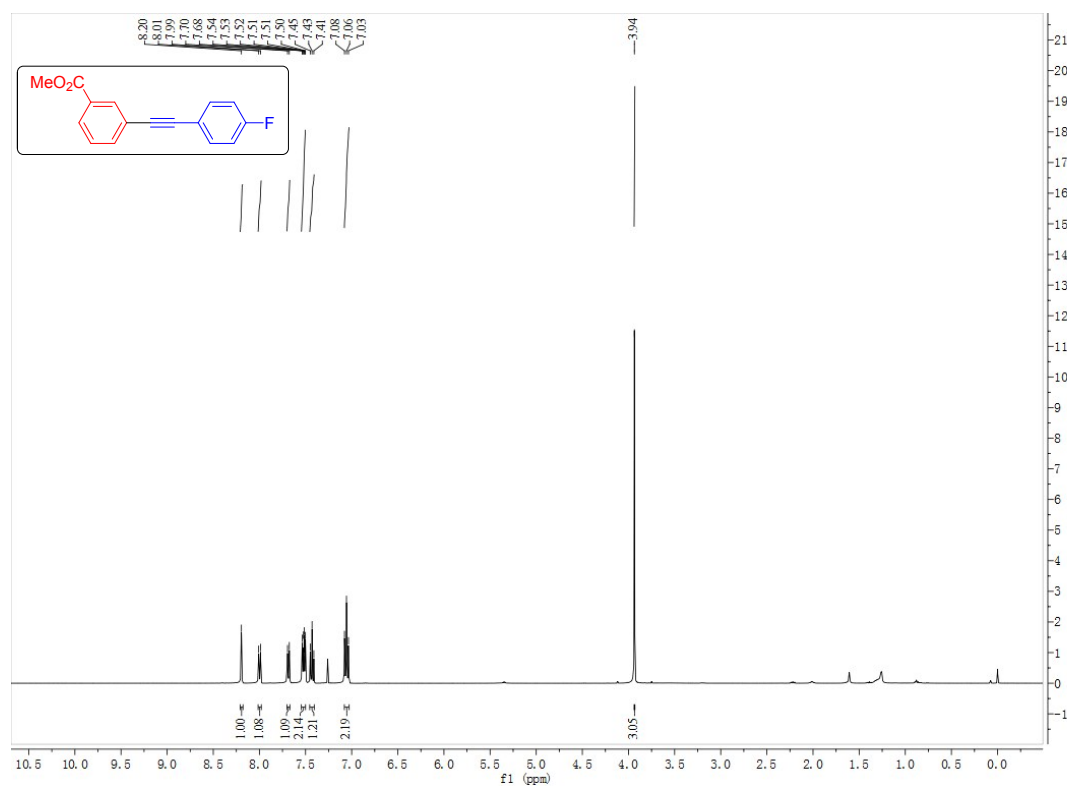
¹H NMR and ¹³C NMR for compound **4da**



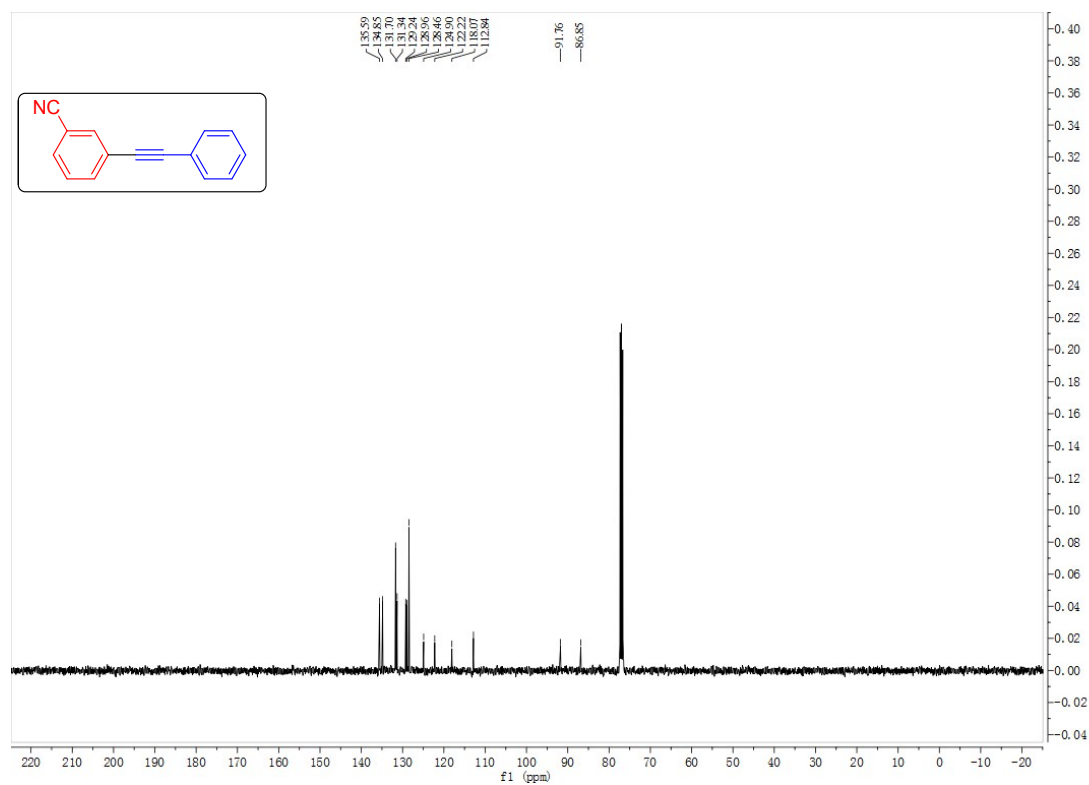
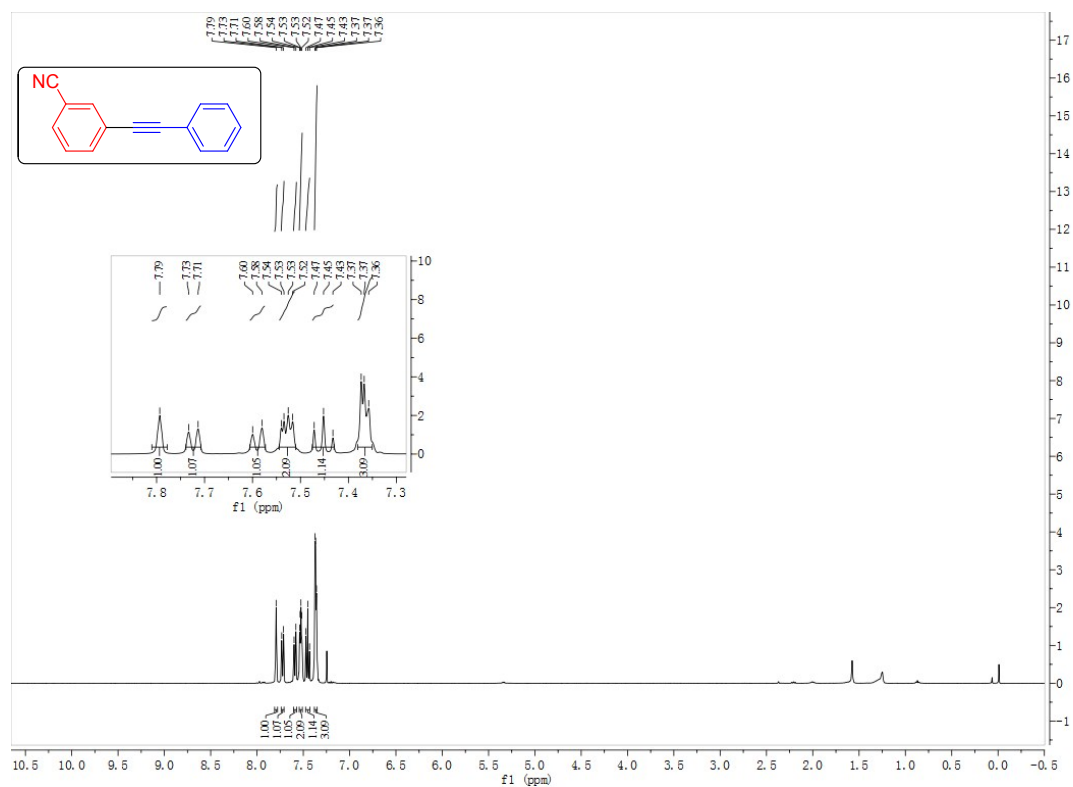
¹H NMR and ¹³C NMR for compound 4ea



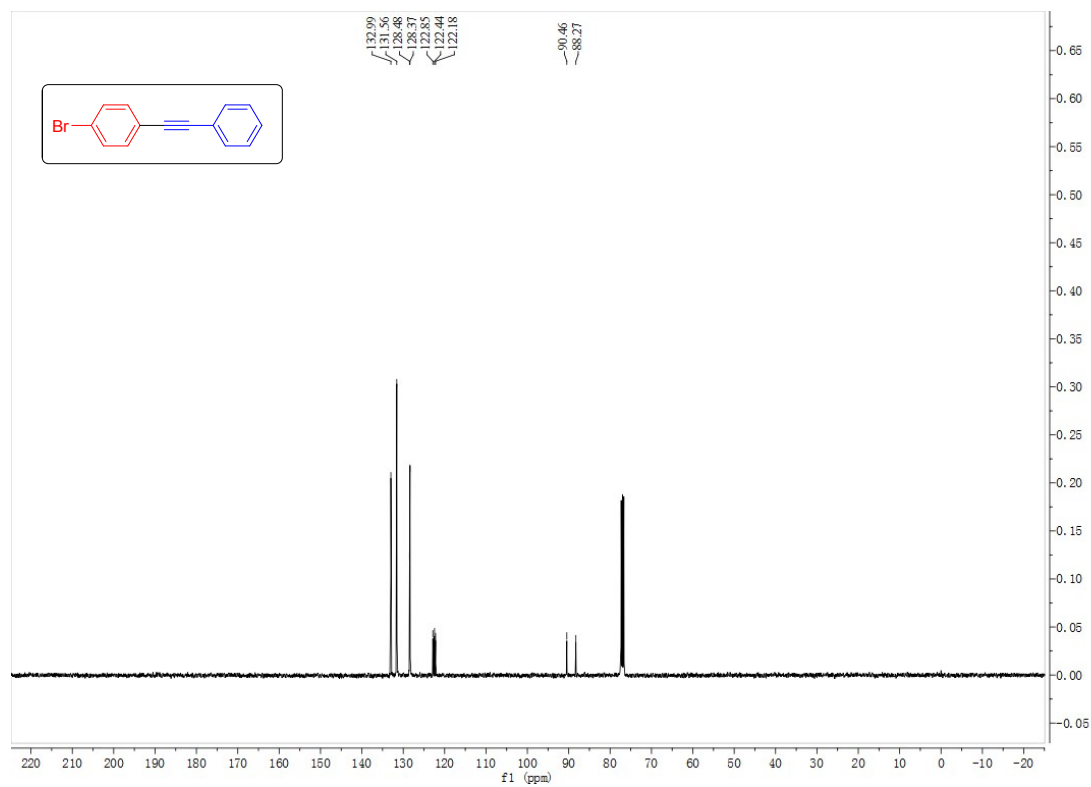
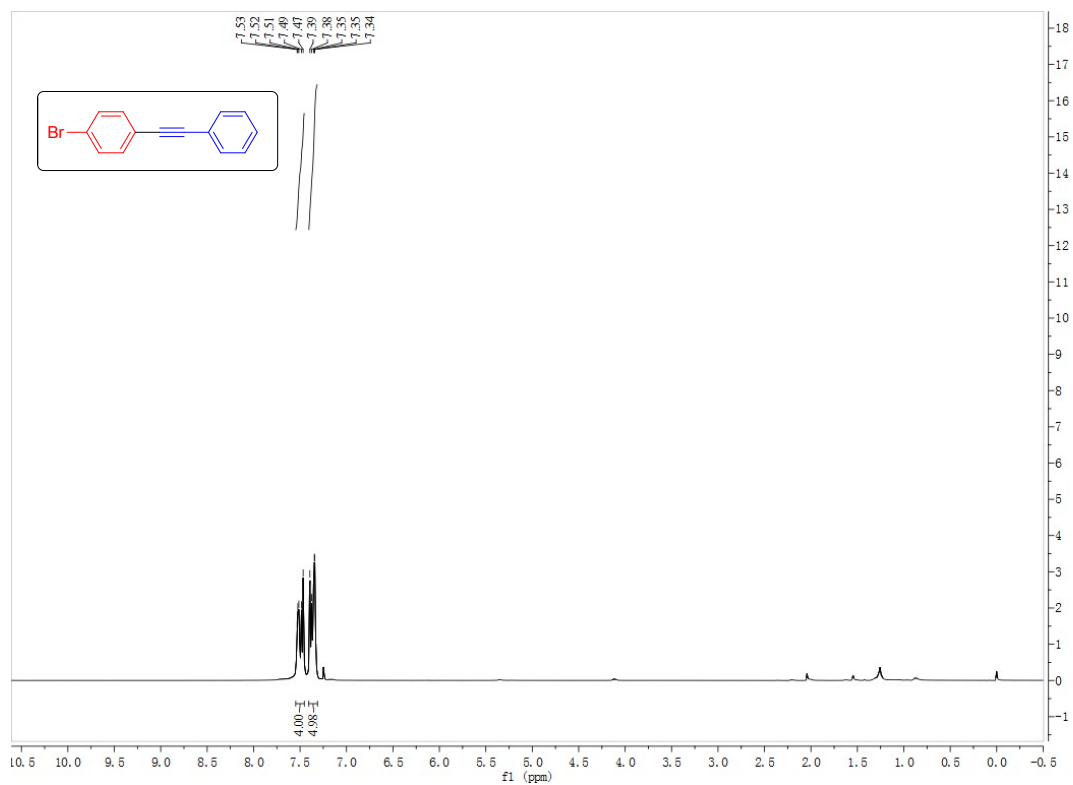
¹H NMR and ¹³C NMR for compound **4fa**



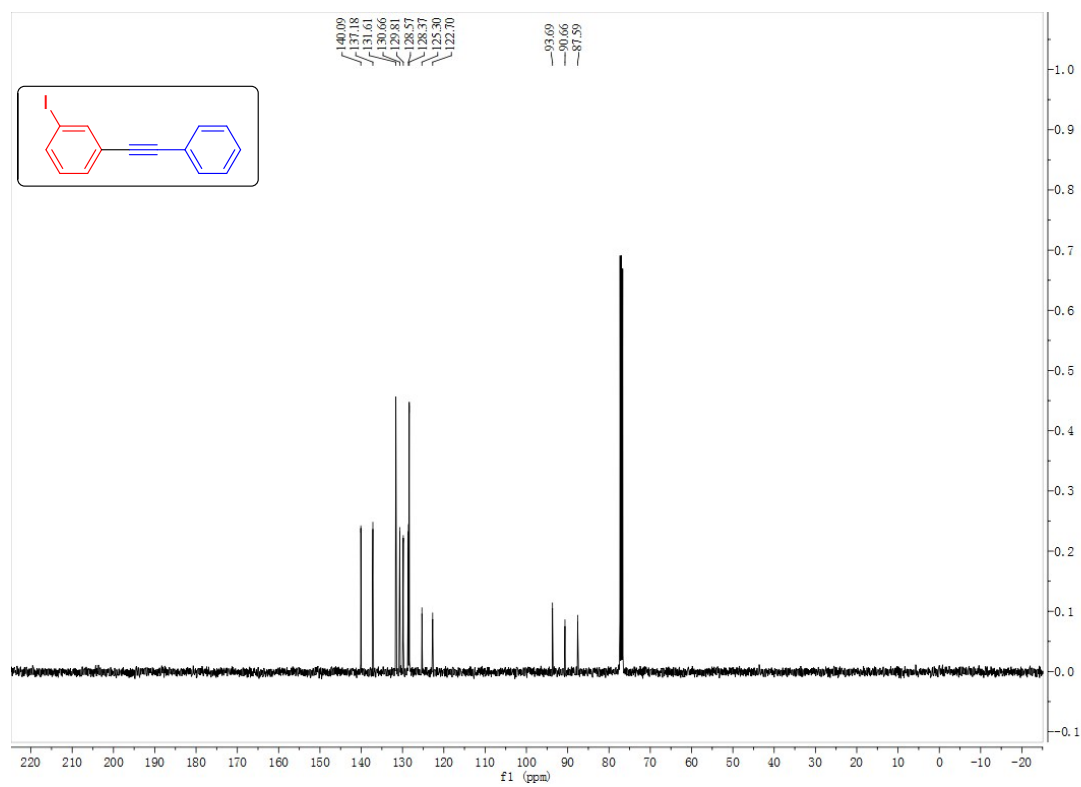
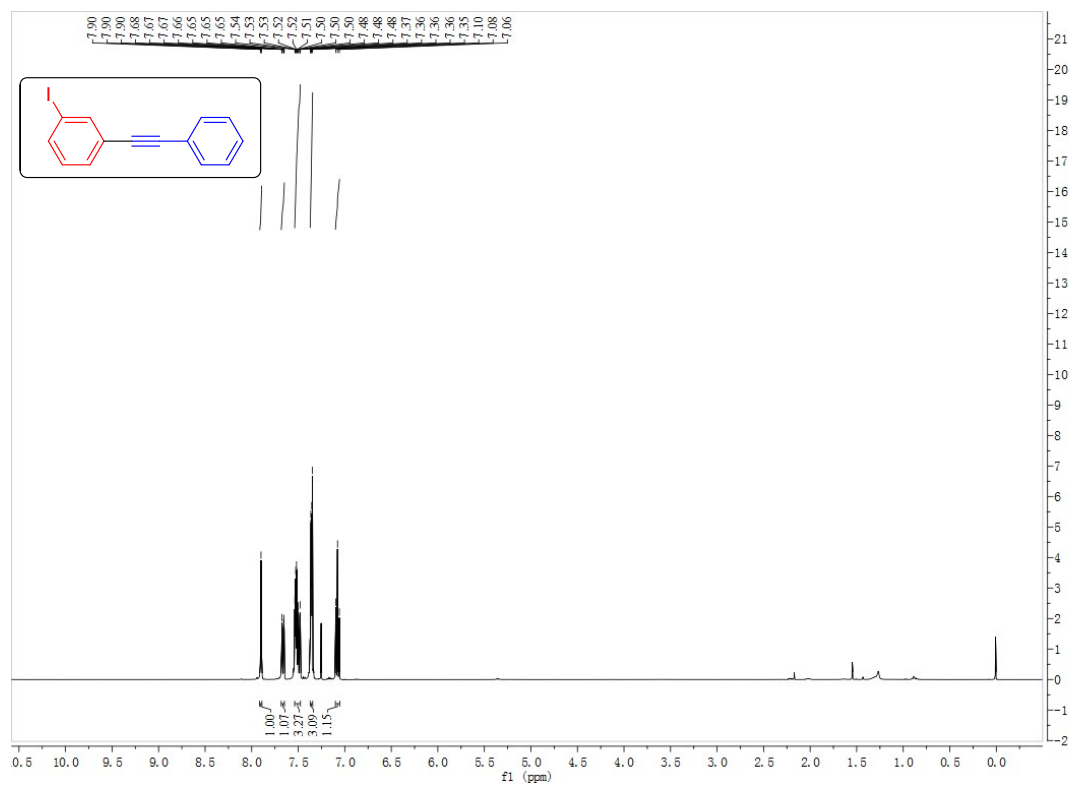
¹H NMR and ¹³C NMR for compound **4gc**



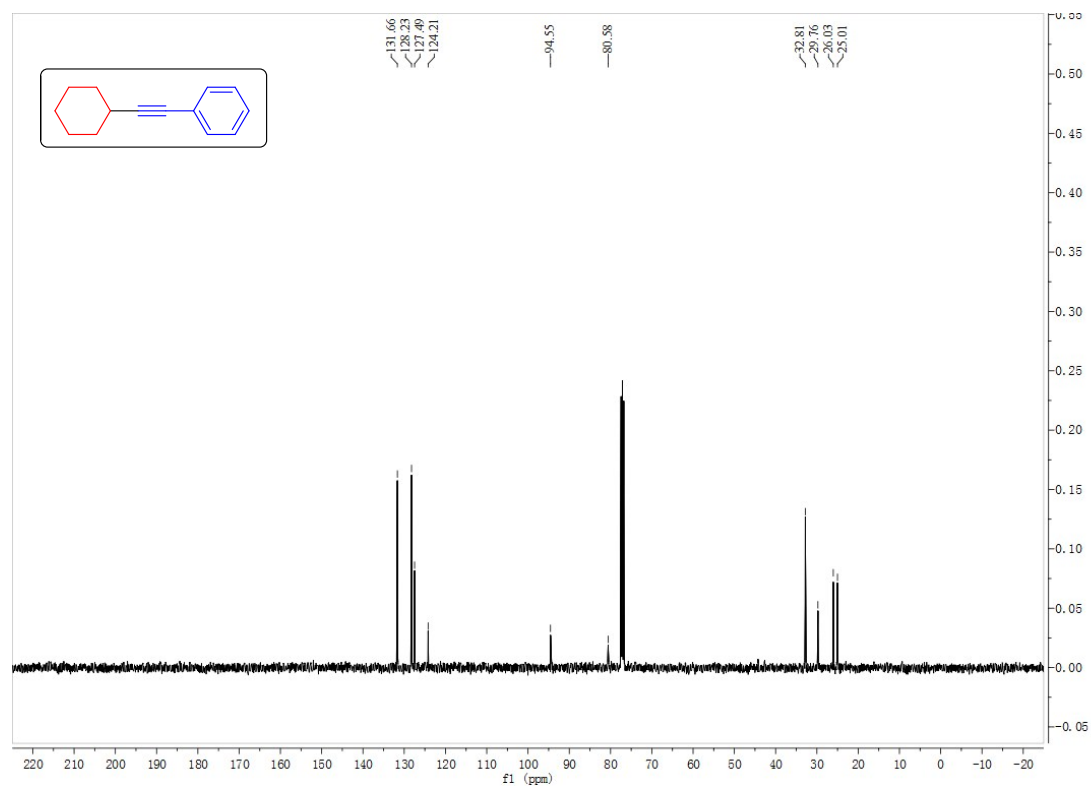
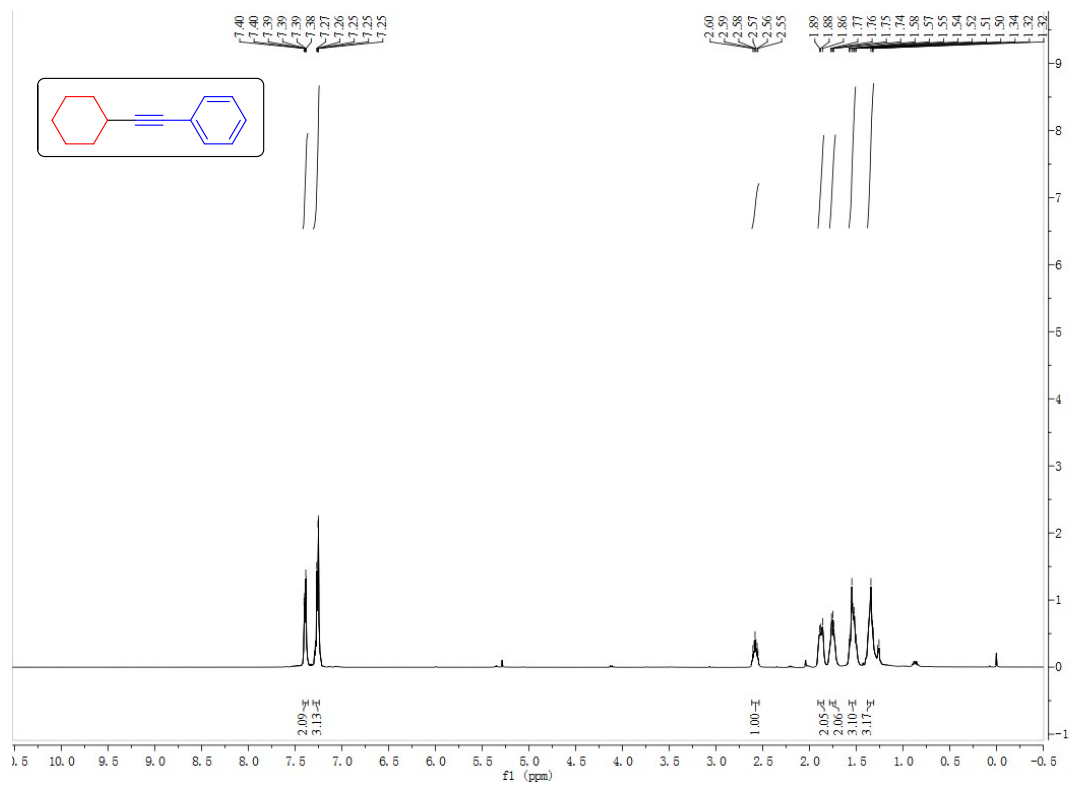
¹H NMR and ¹³C NMR for compound 4ha



¹H NMR and ¹³C NMR for compound **4ia**



¹H NMR and ¹³C NMR for compound 4ja



¹H NMR and ¹³C NMR for compound 4ka