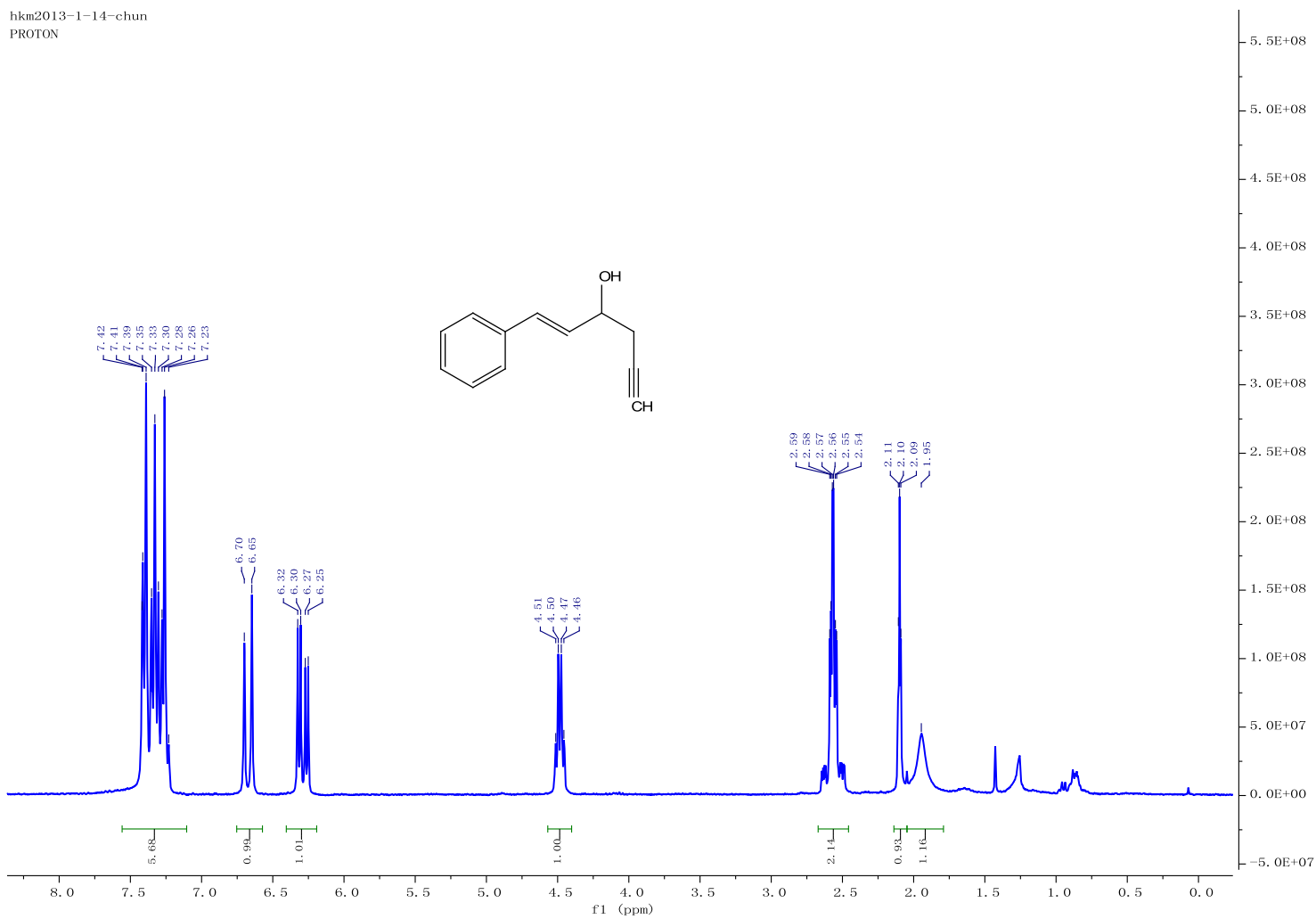
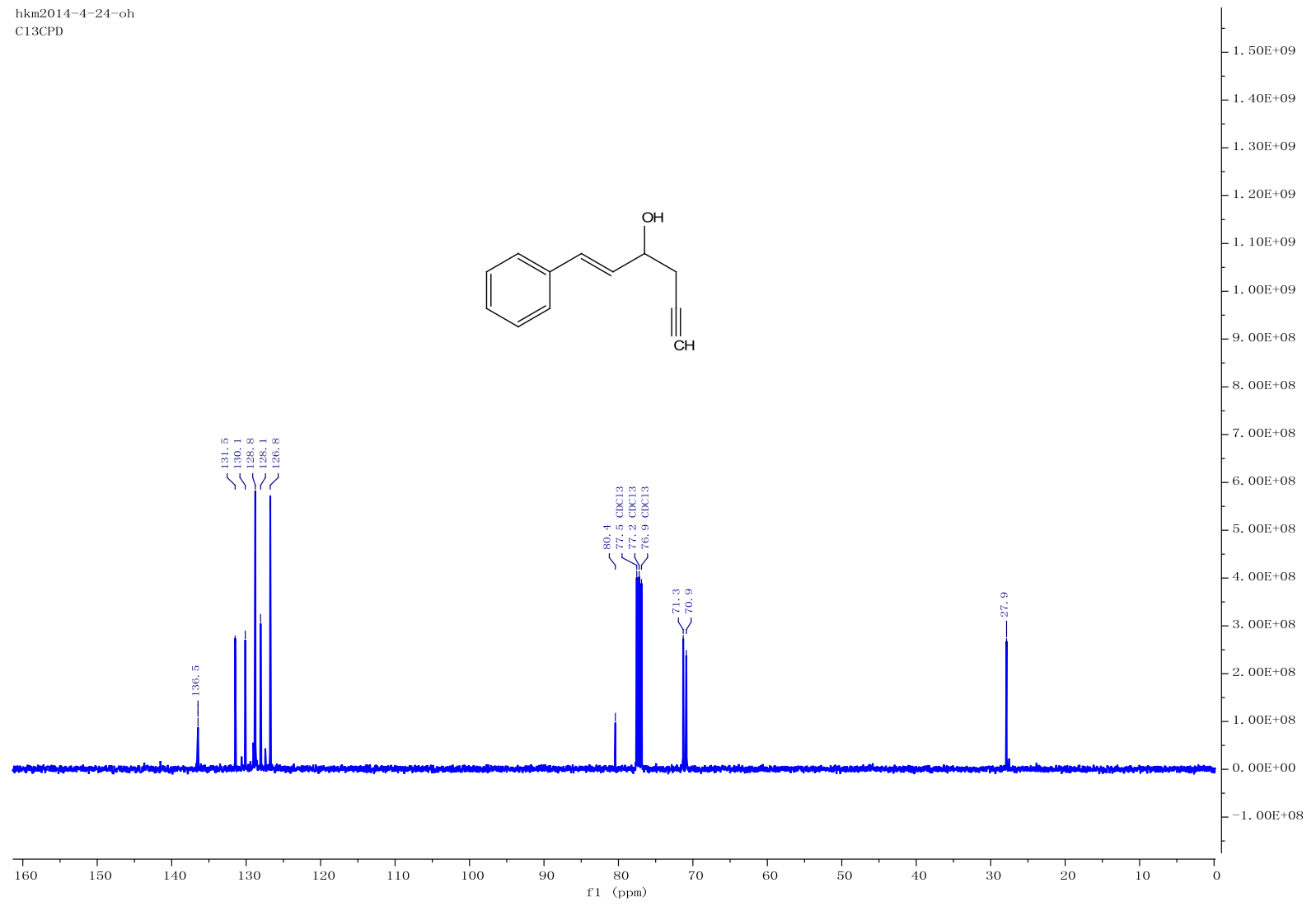
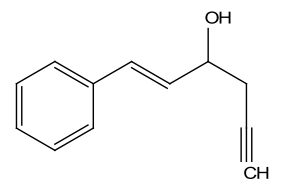


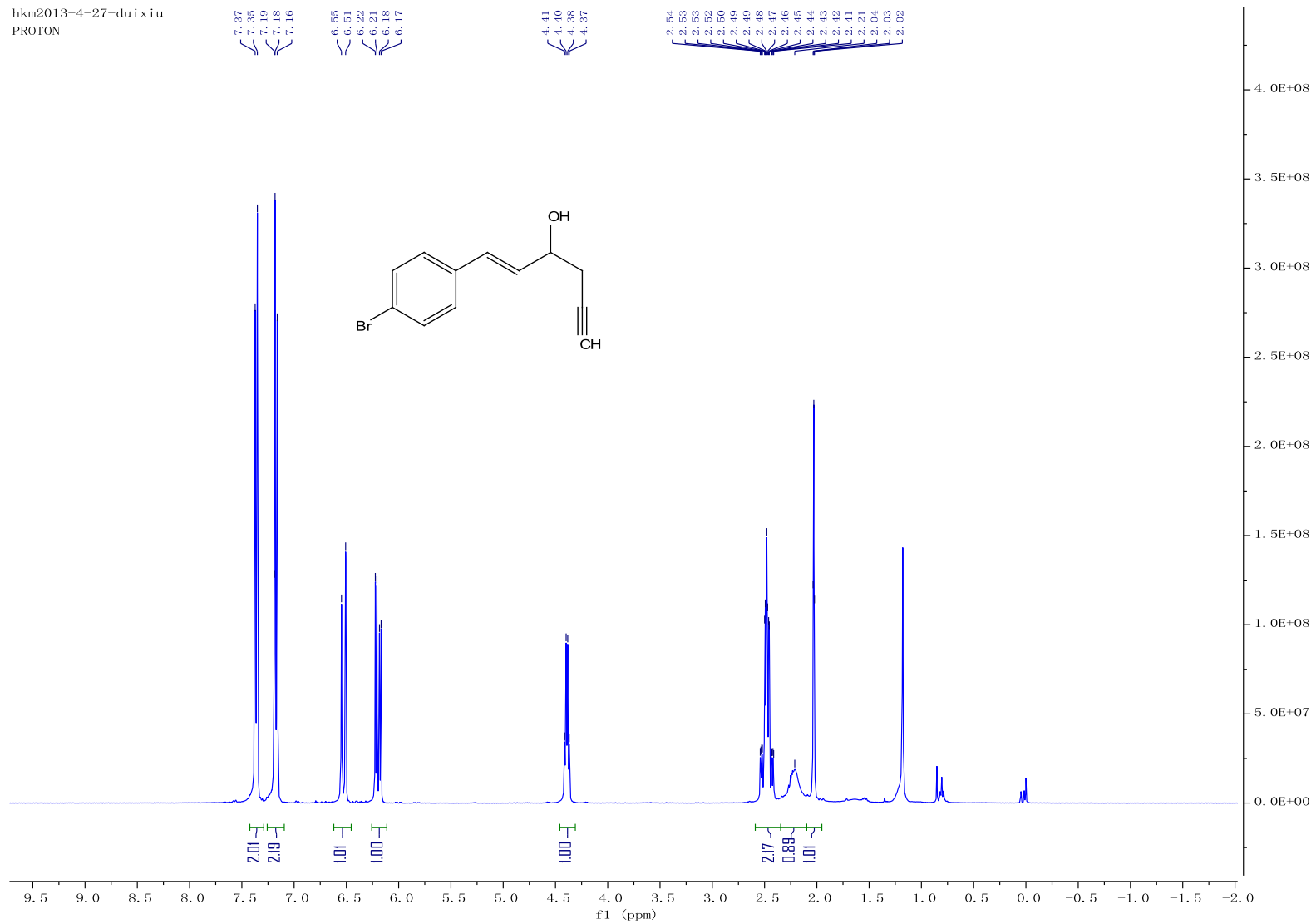
hkm2013-1-14-chun  
PROTON



hkm2014-4-24-oh  
C13CPD

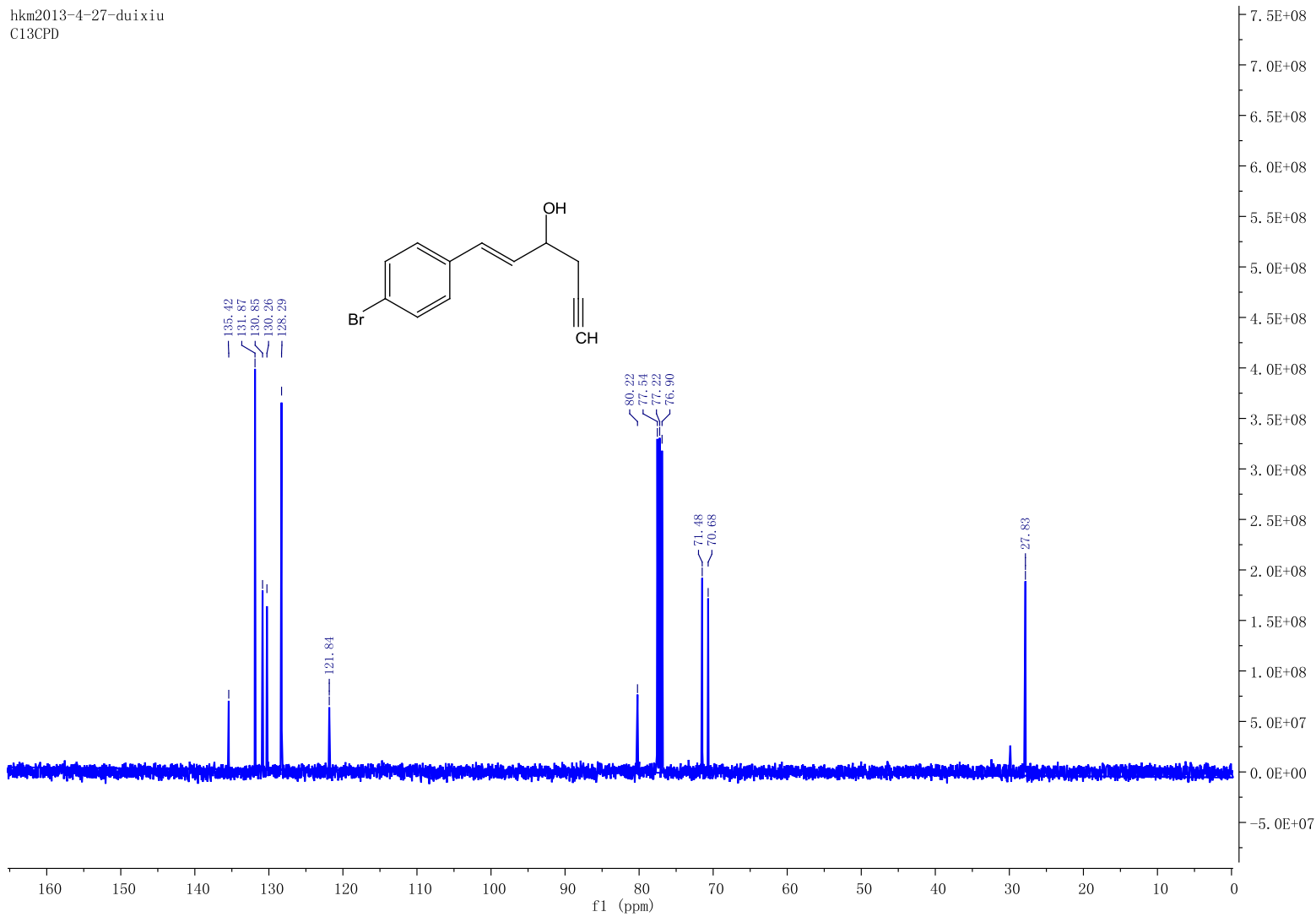


hkm2013-4-27-duixiu  
PROTON

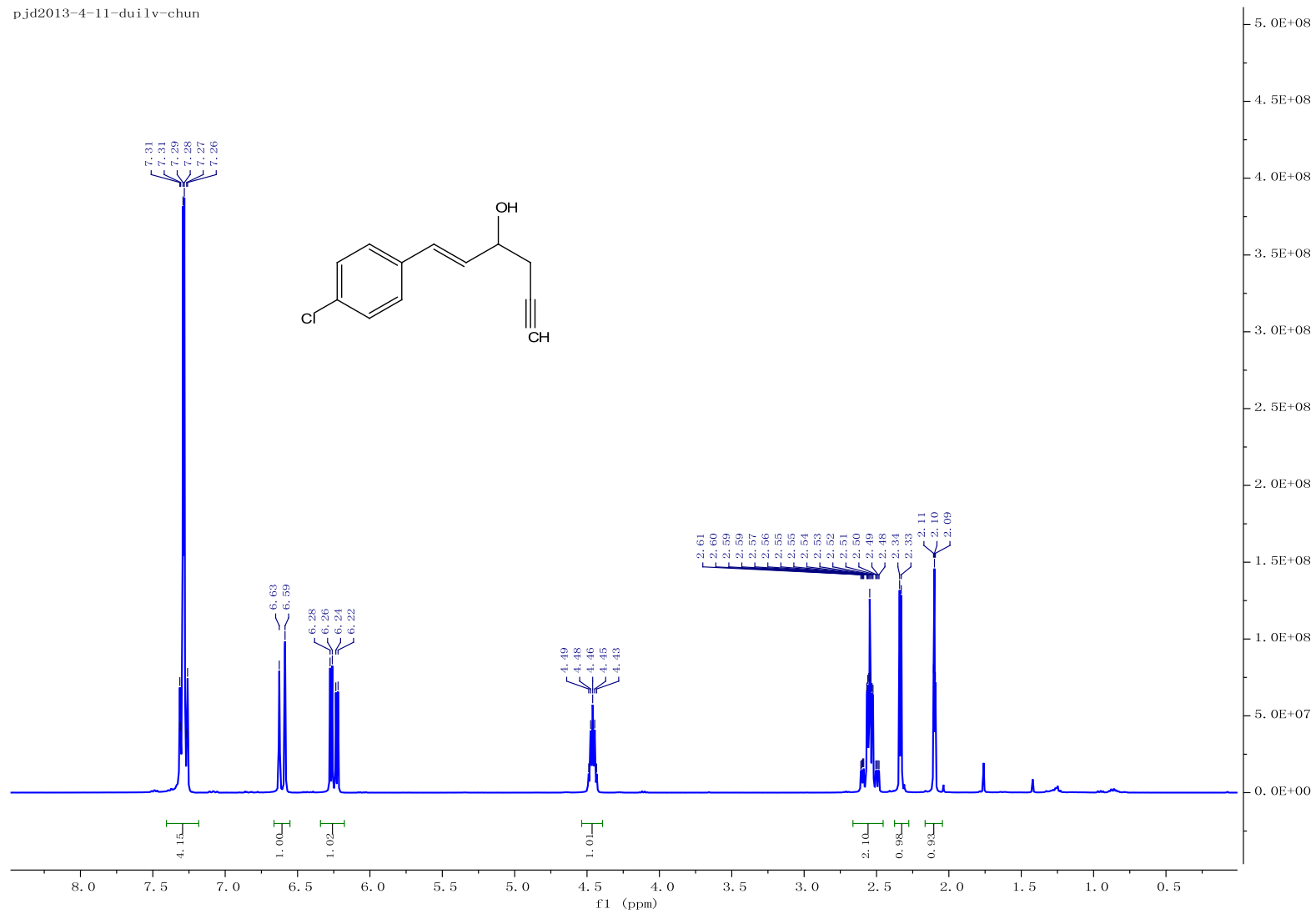




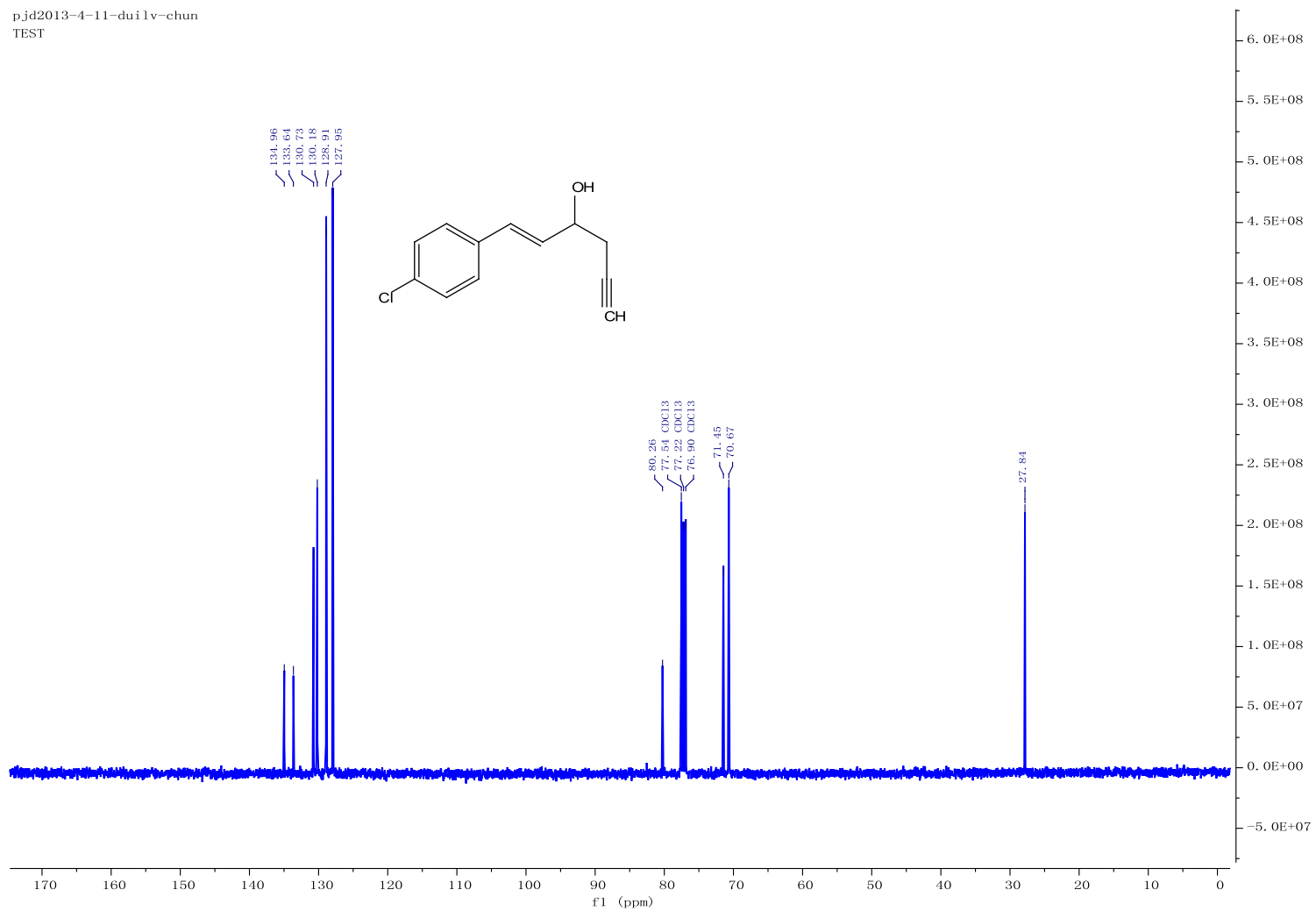
hkm2013-4-27-duixiu  
C13CPD



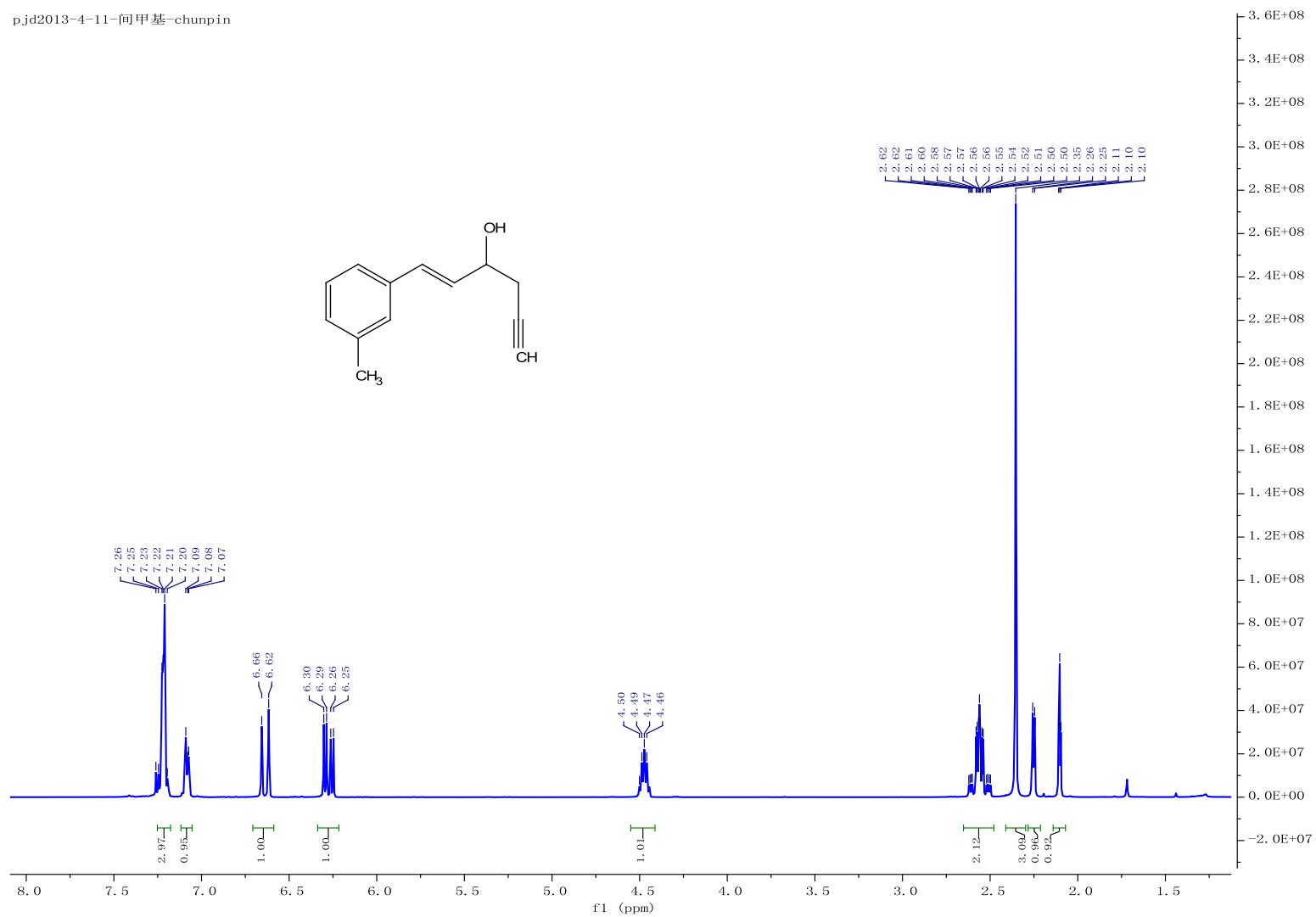
pjd2013-4-11-duilv-chun



pjd2013-4-11-duilyv-chun  
TEST

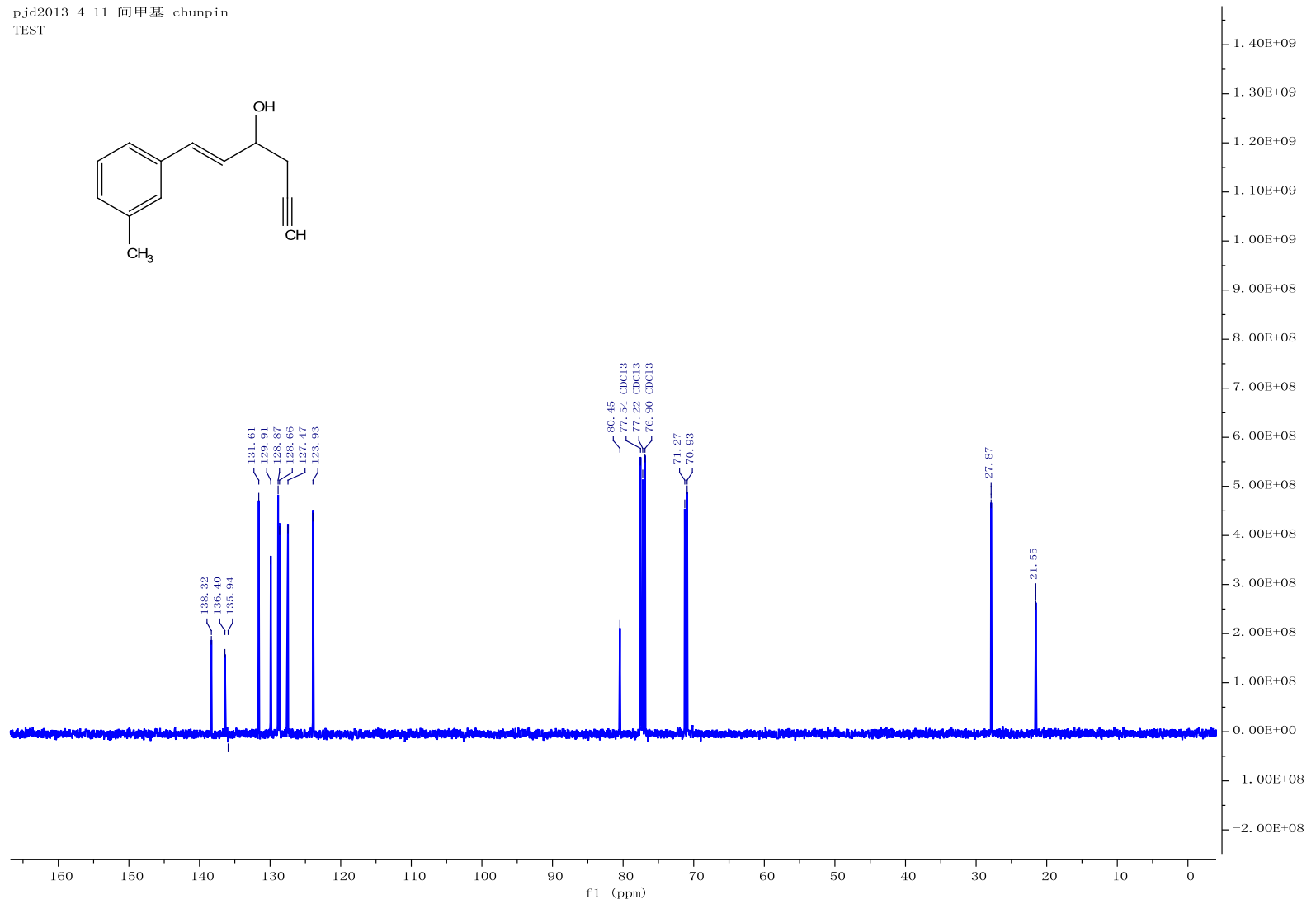
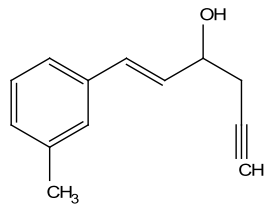


pjd2013-4-11-间甲基-chunpin

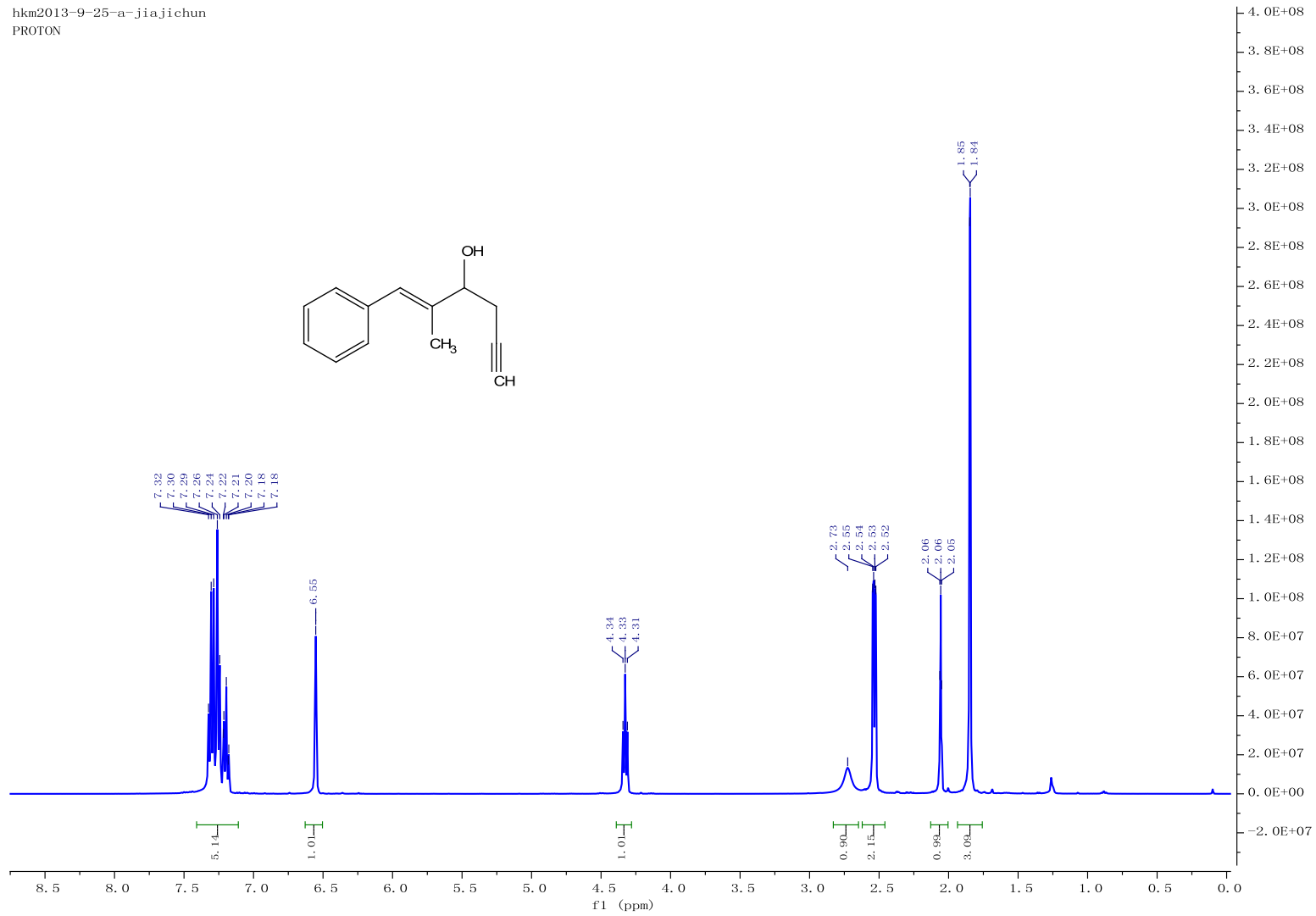




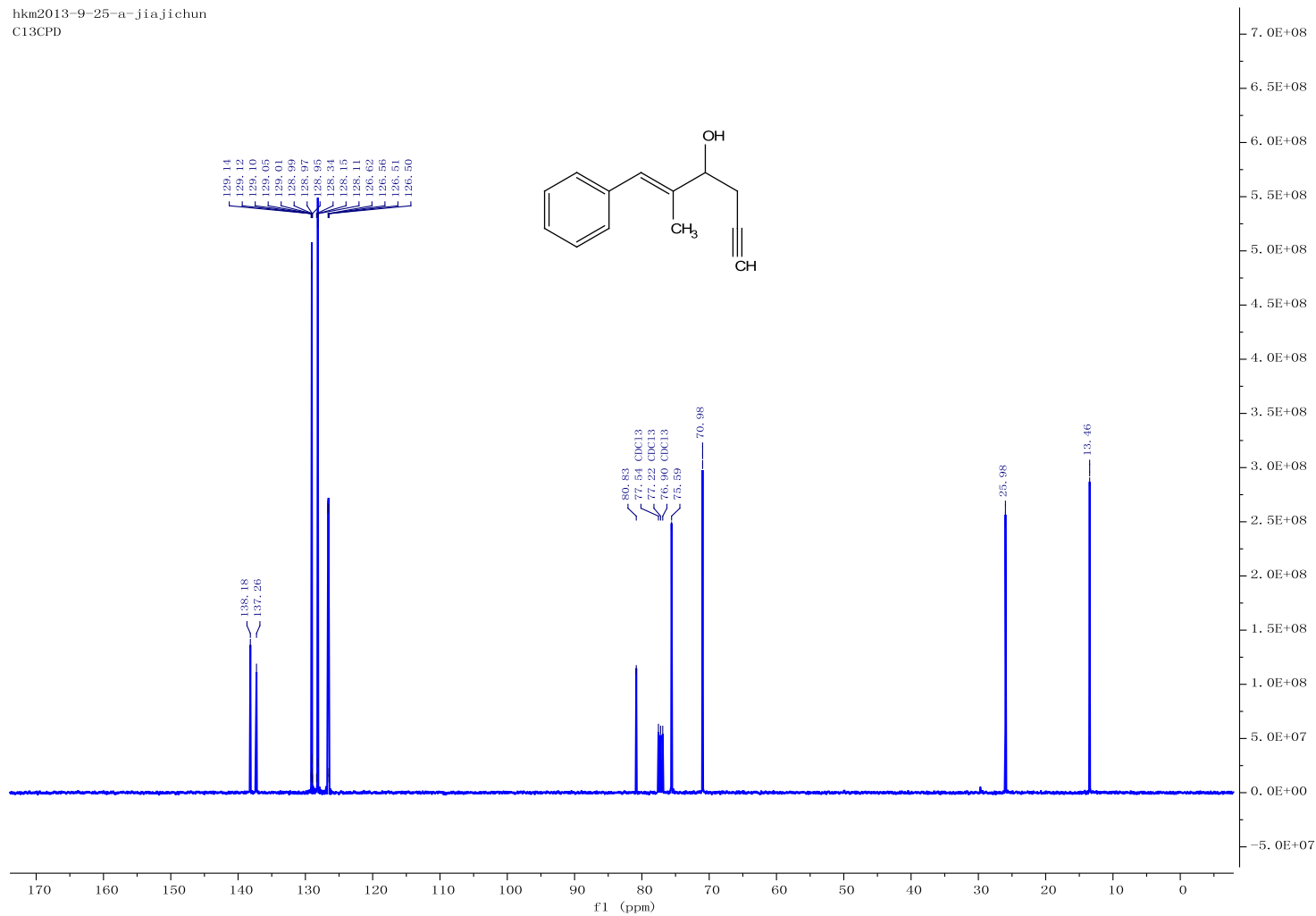
pjd2013-4-11-间甲基-chunpin  
TEST



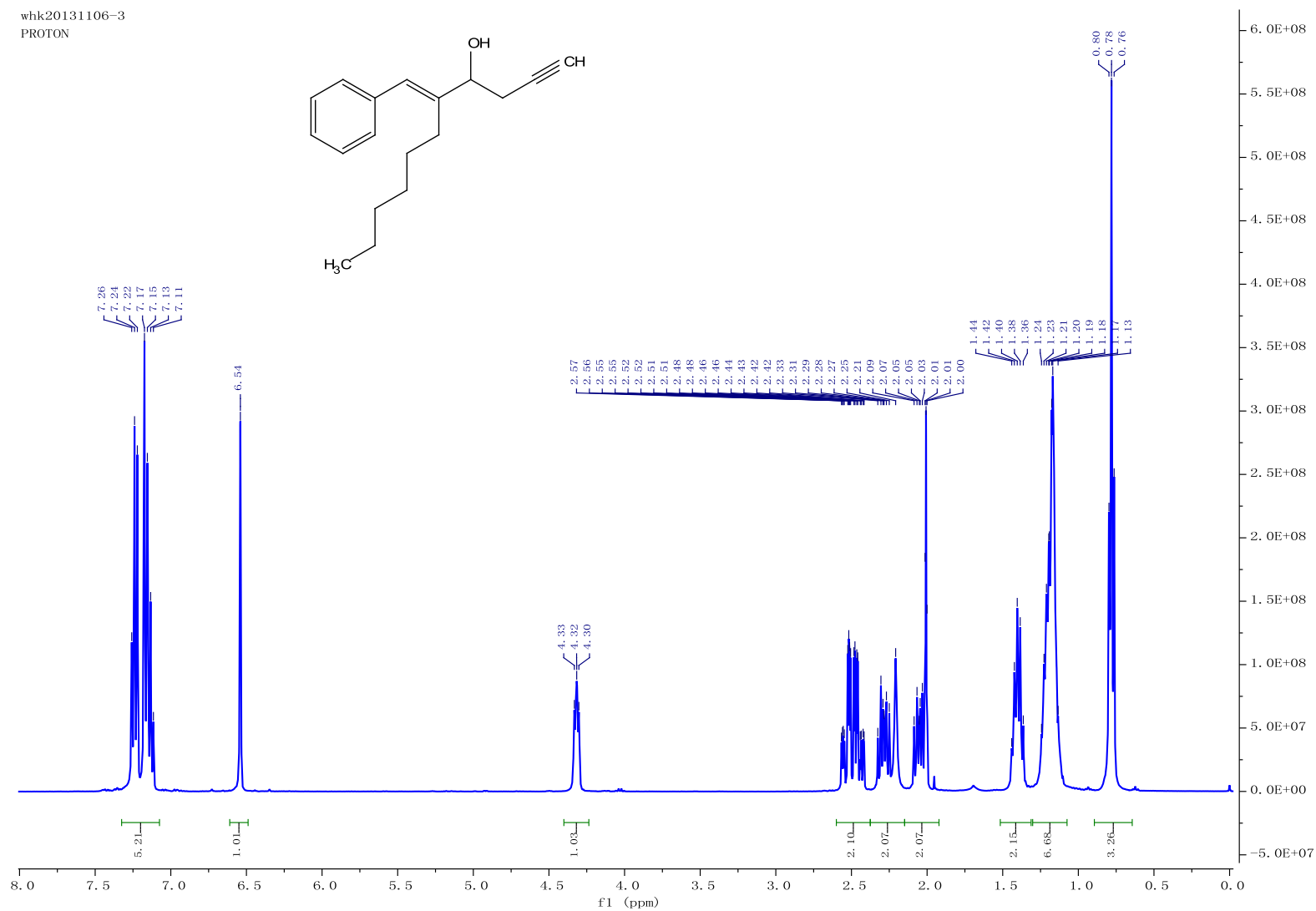
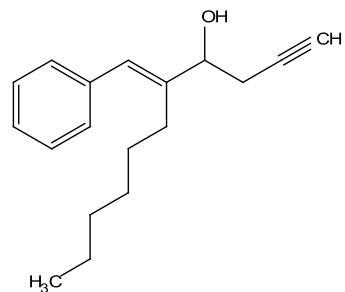
hkm2013-9-25-a-jiajichun  
PROTON



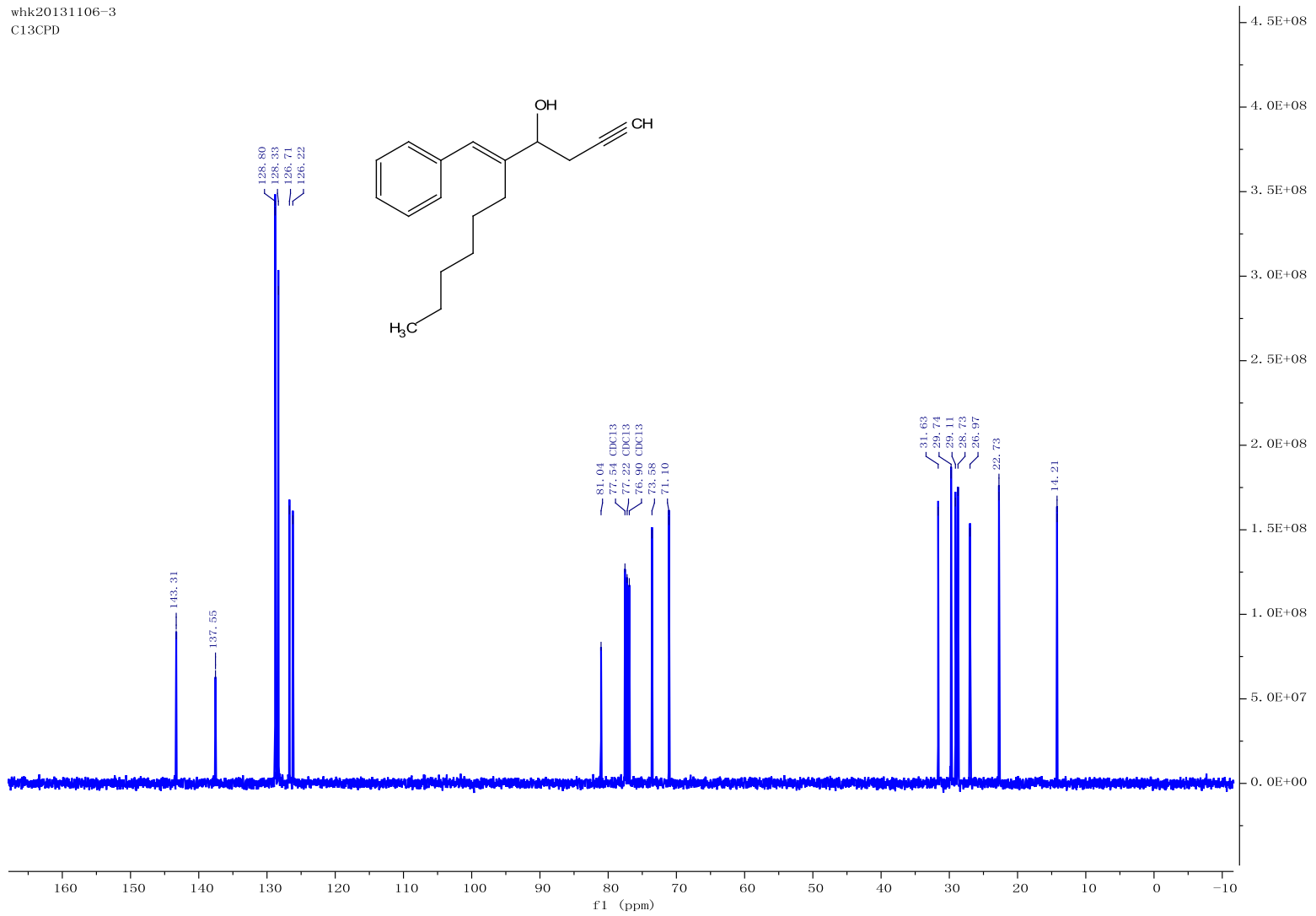
hkm2013-9-25-a-jiajichun  
C13CPD



whk20131106-3  
PROTON

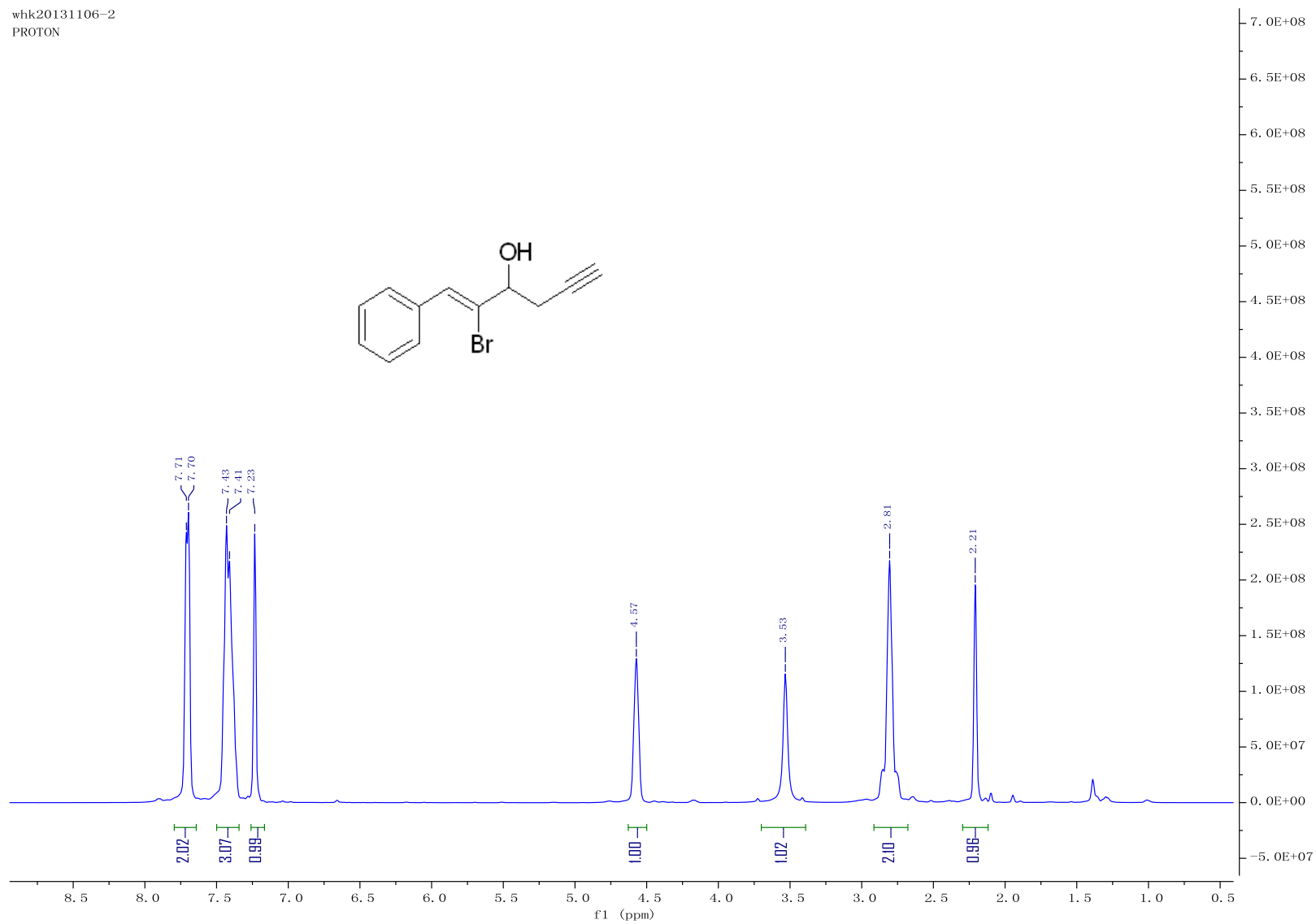
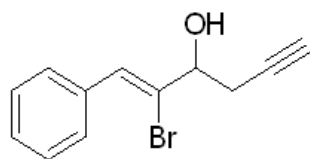


whk20131106-3  
C13CPD

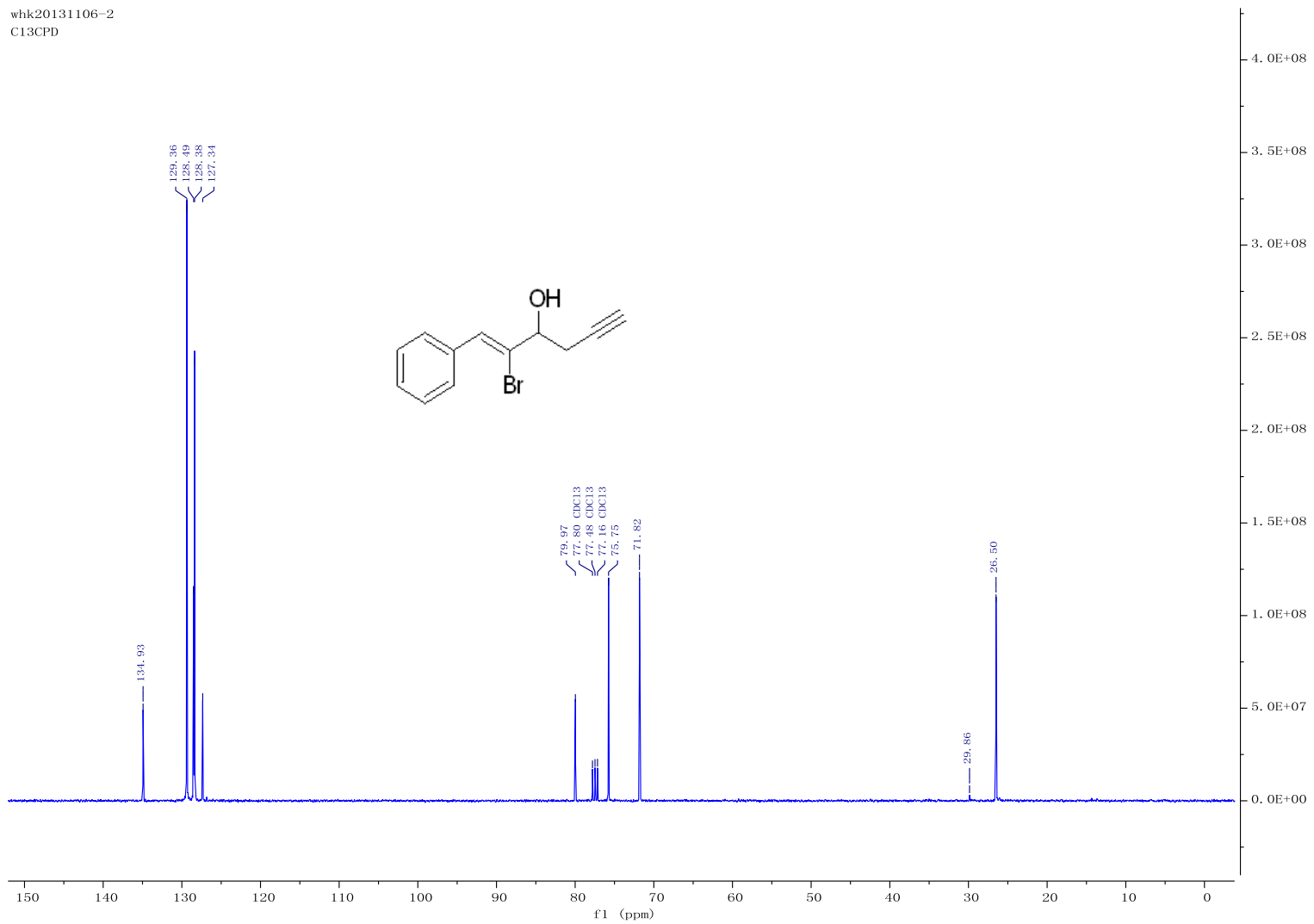




whk20131106-2  
PROTON

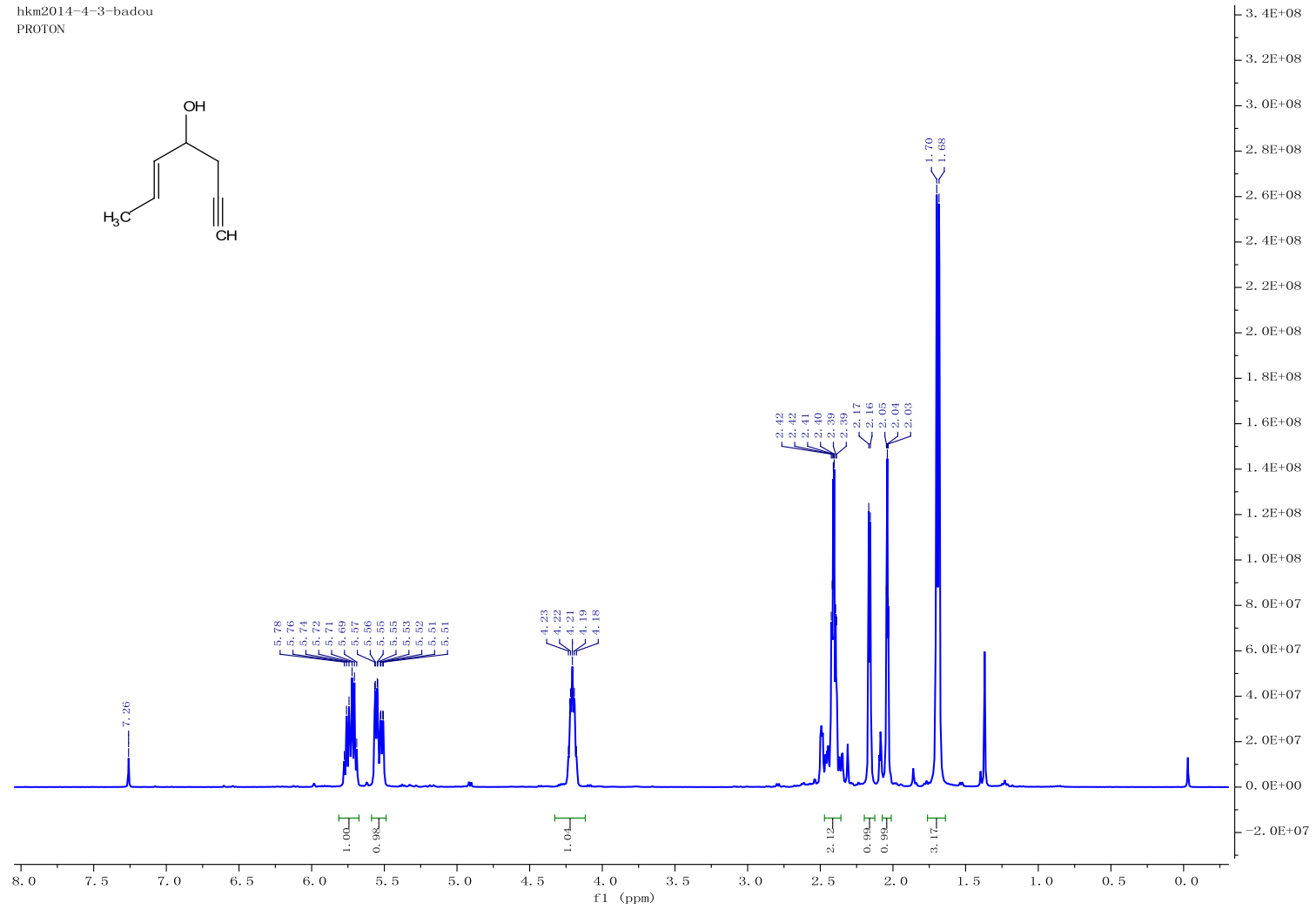
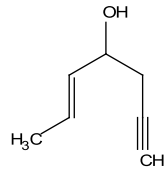


whk20131106-2  
C13CPD

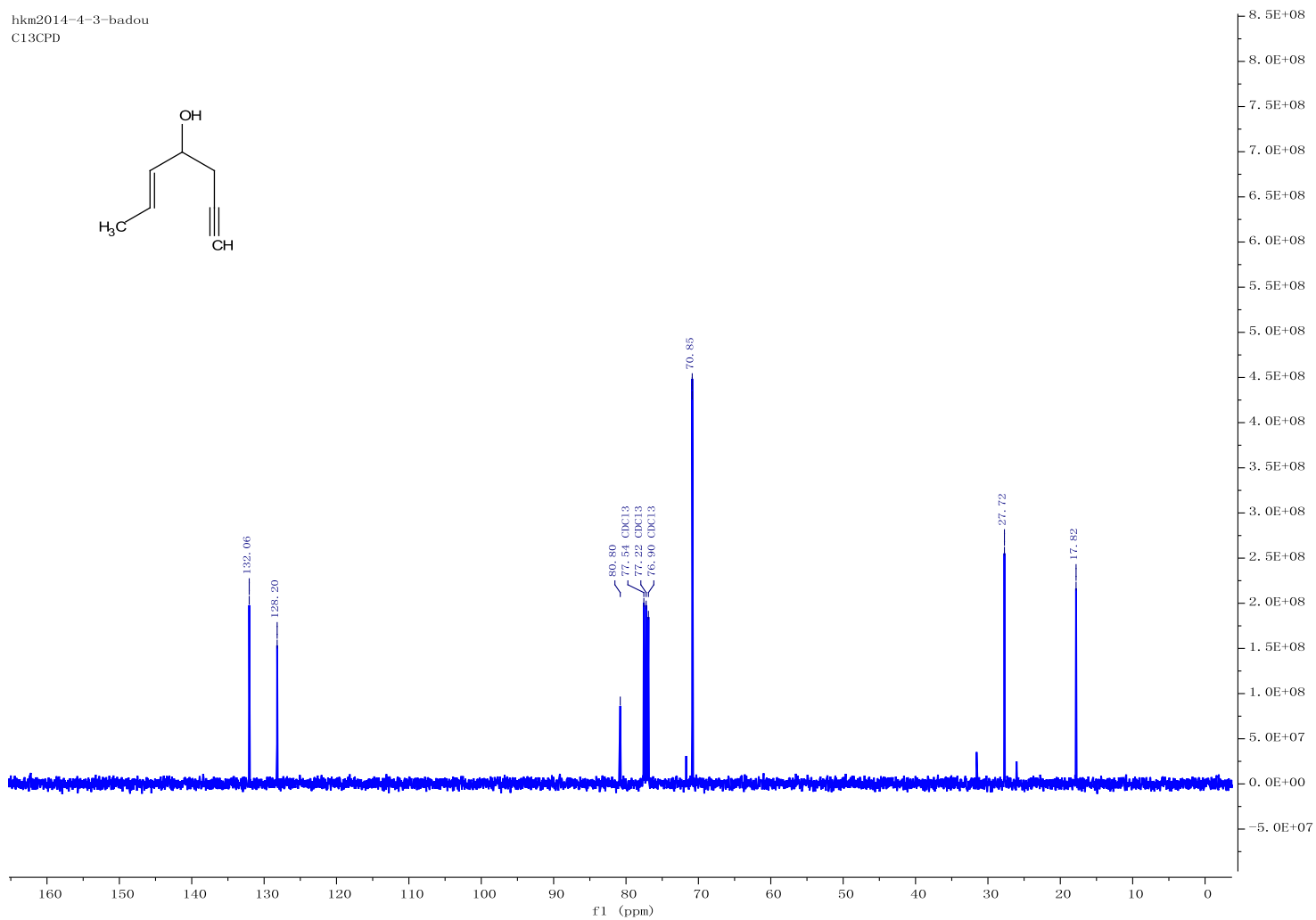
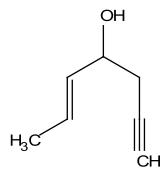




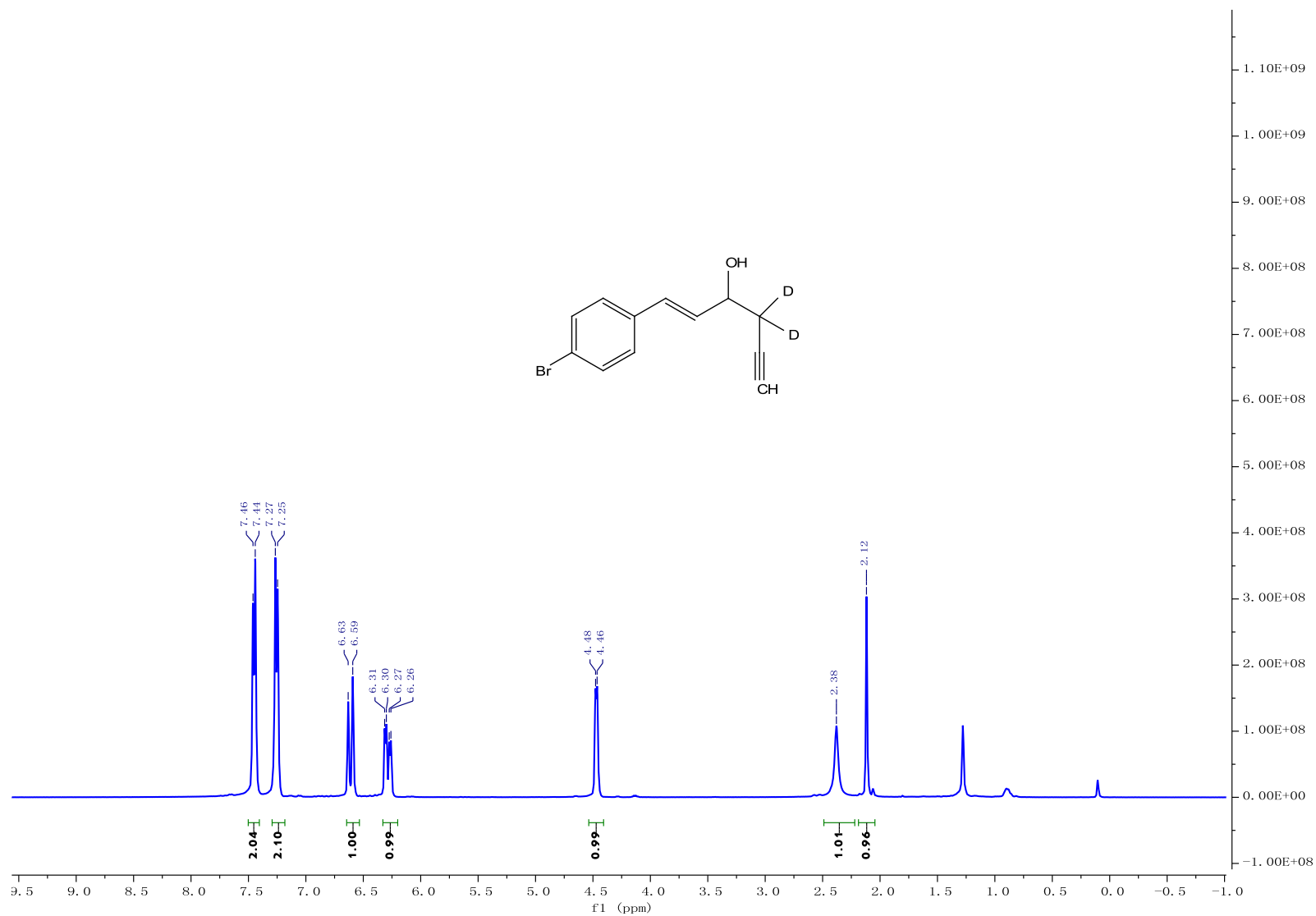
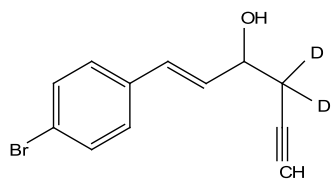
hkm2014-4-3-badou  
PROTON

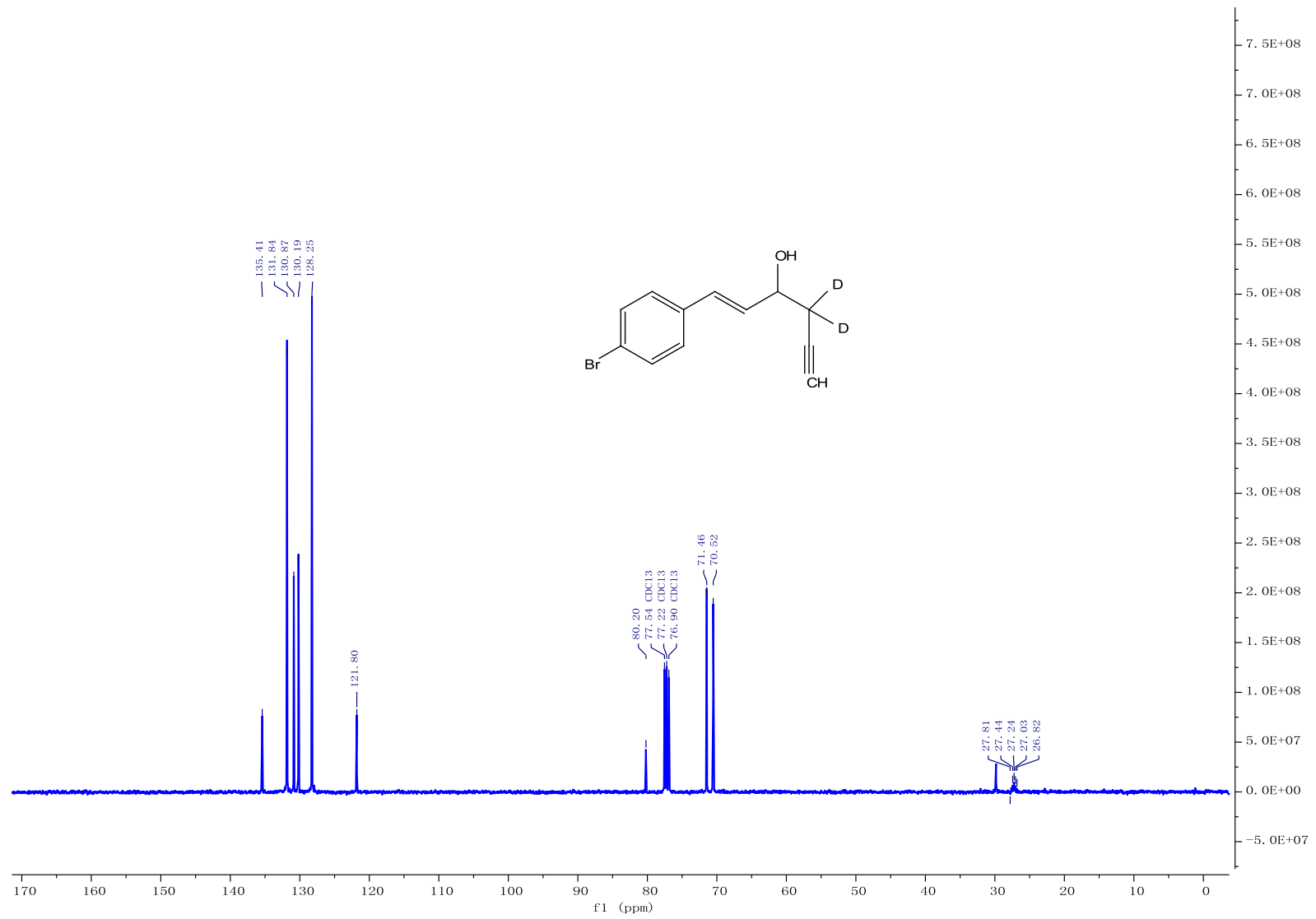


hkm2014-4-3-badou  
C13CPD

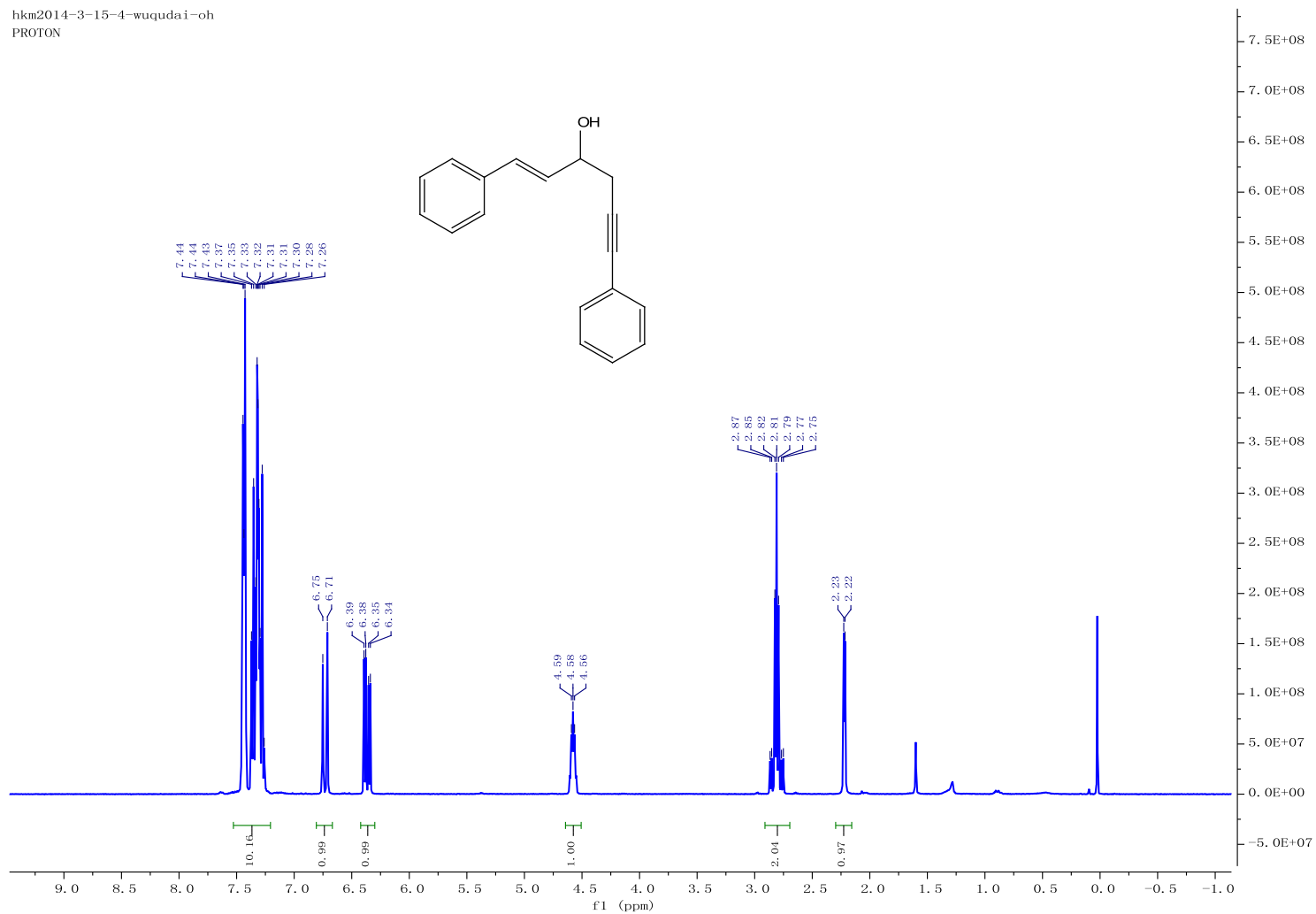




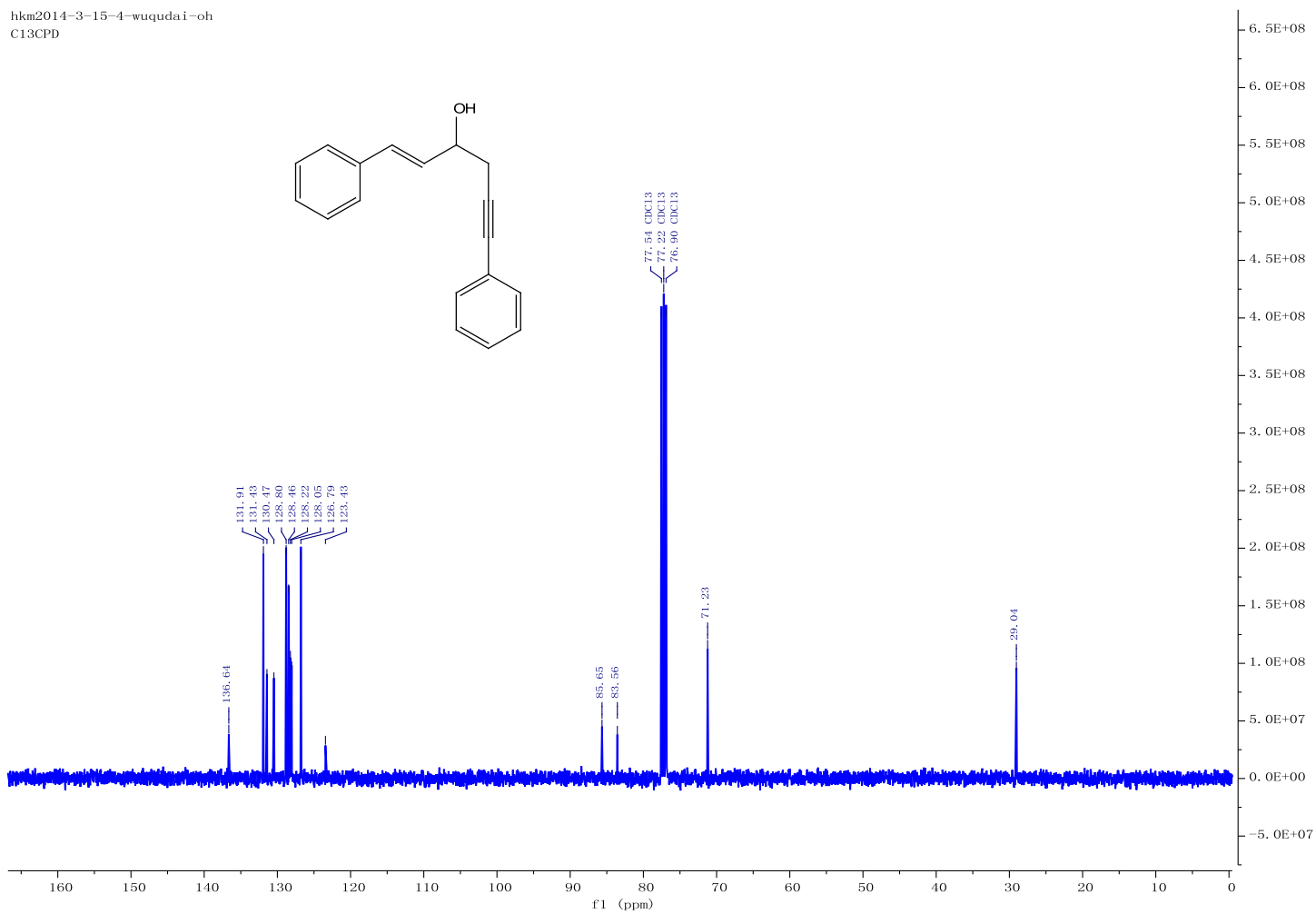
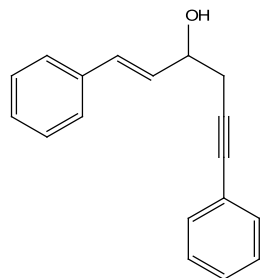




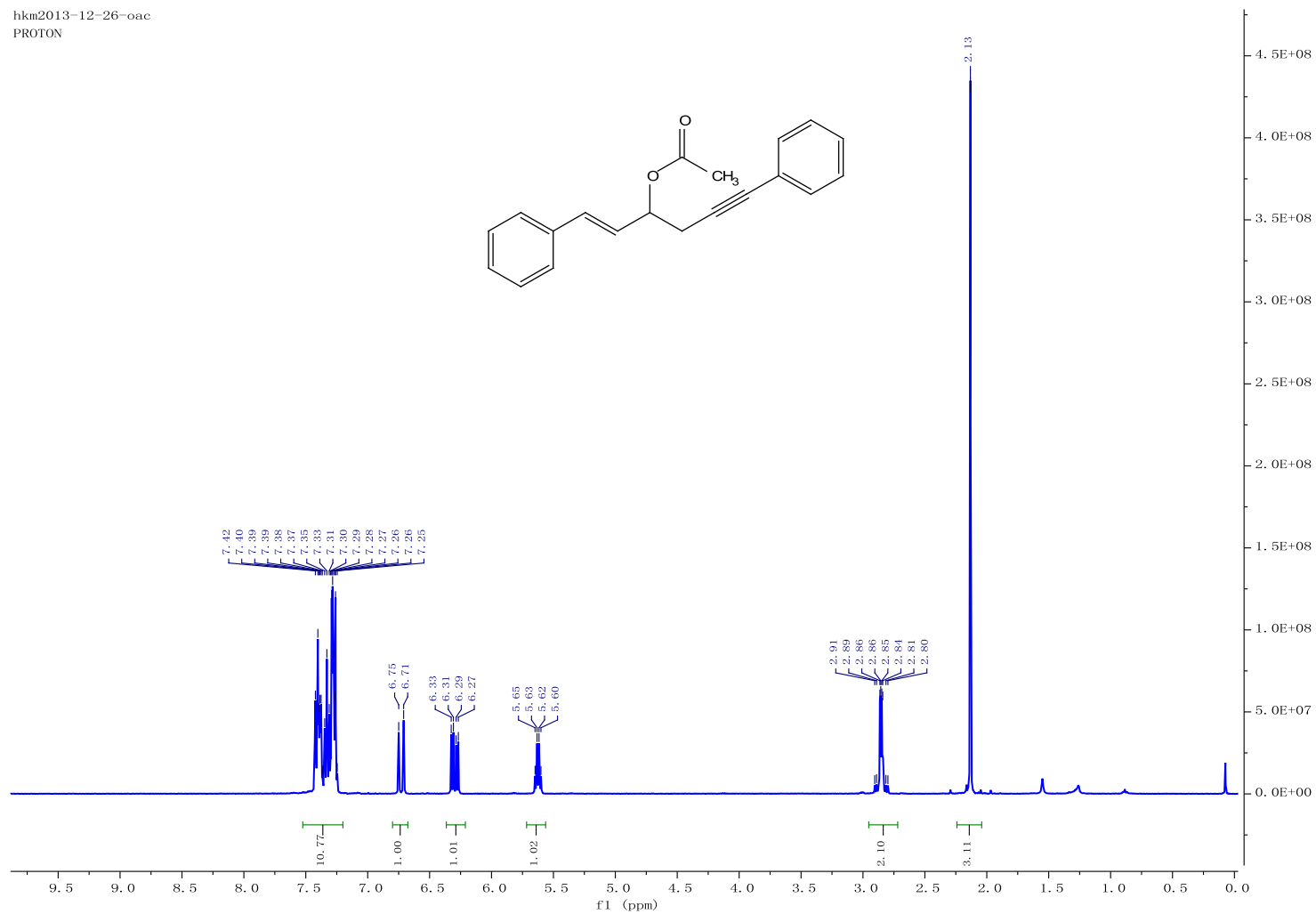
hkm2014-3-15-4-wuquda i-oh  
PROTON



hkm2014-3-15-4-wuqudai-oh  
C13CPD

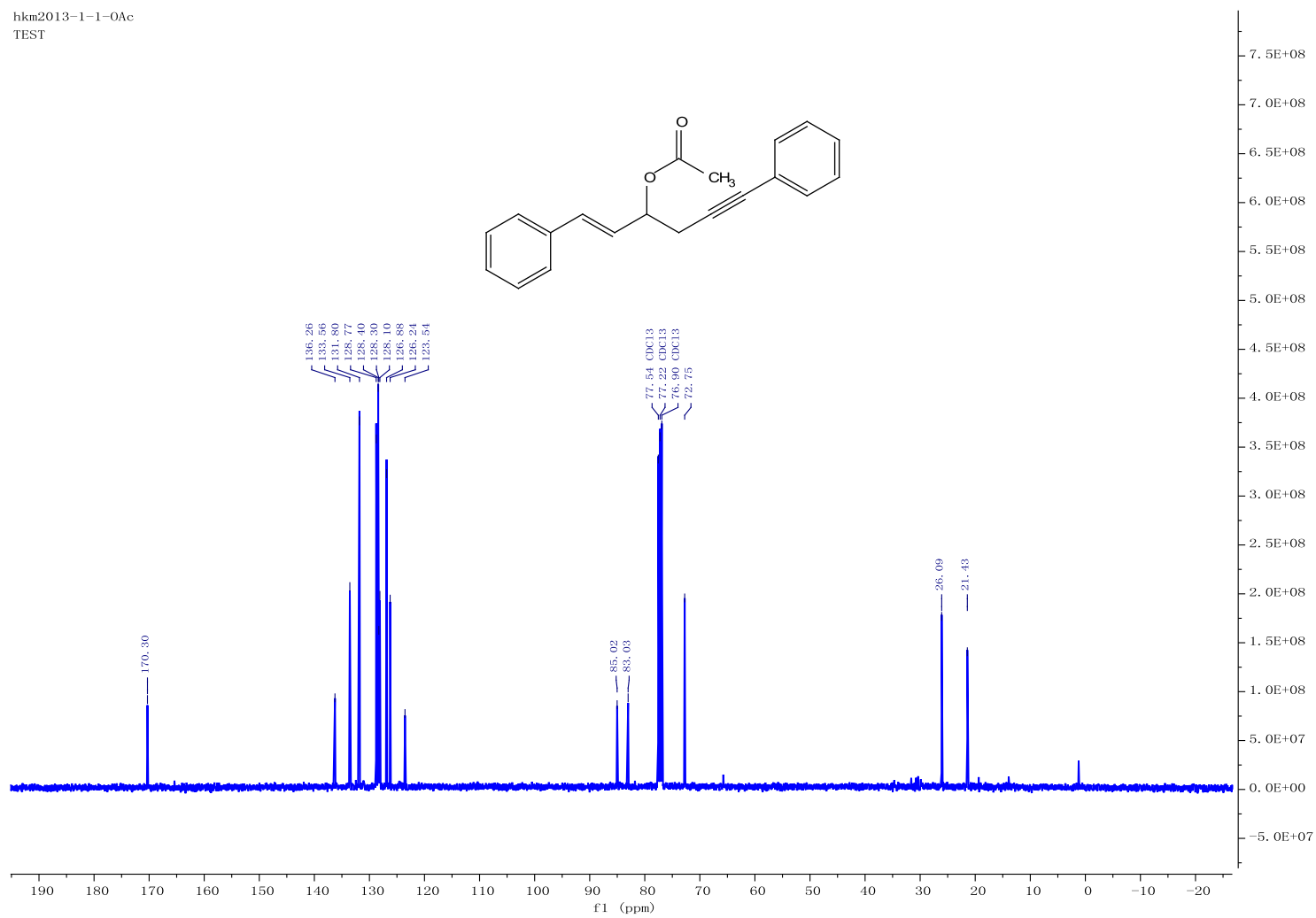
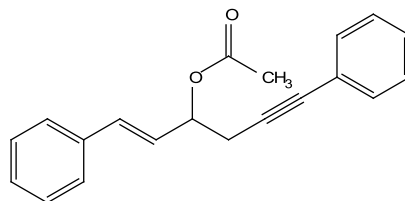


hkm2013-12-26-oac  
PROTON

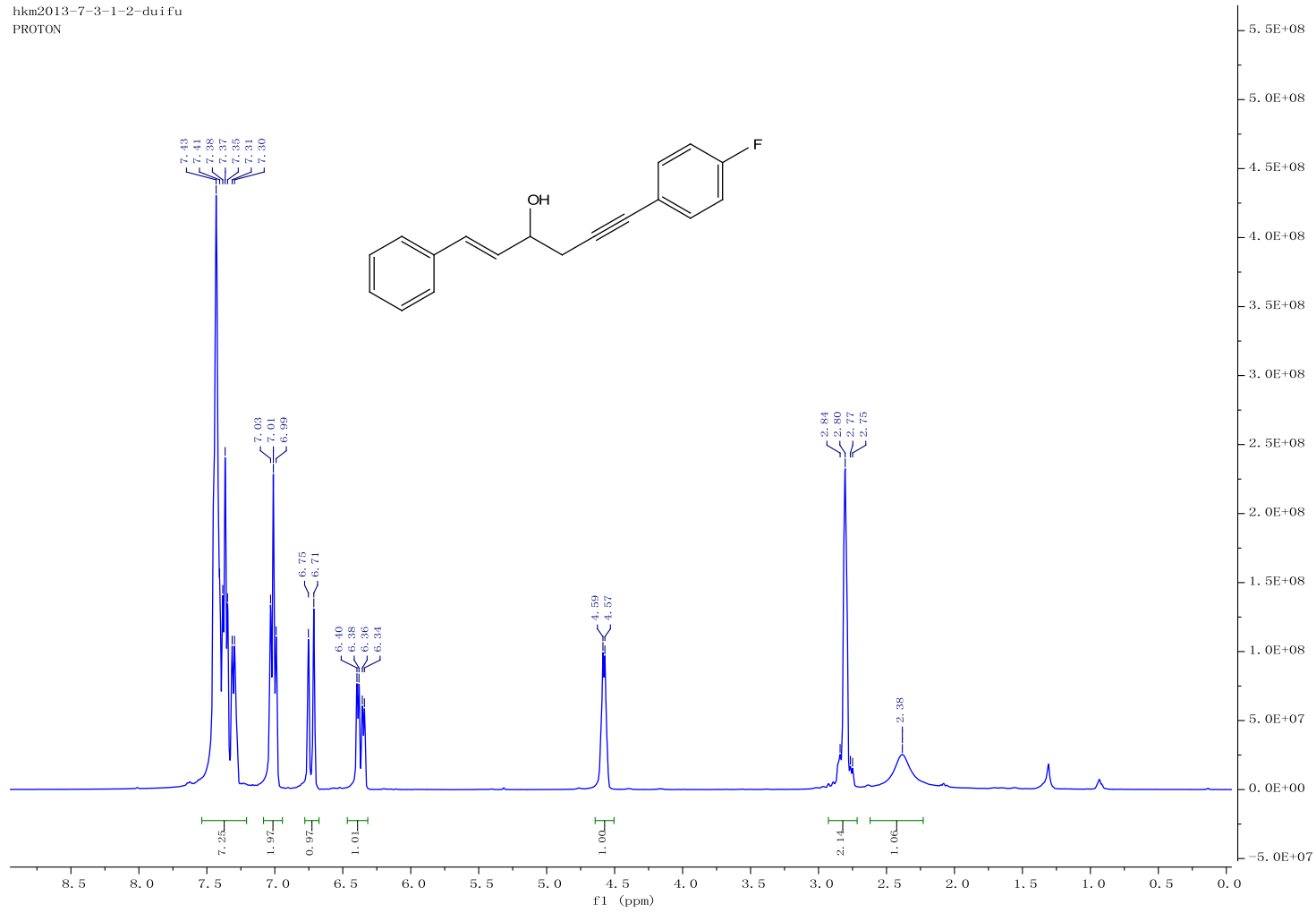




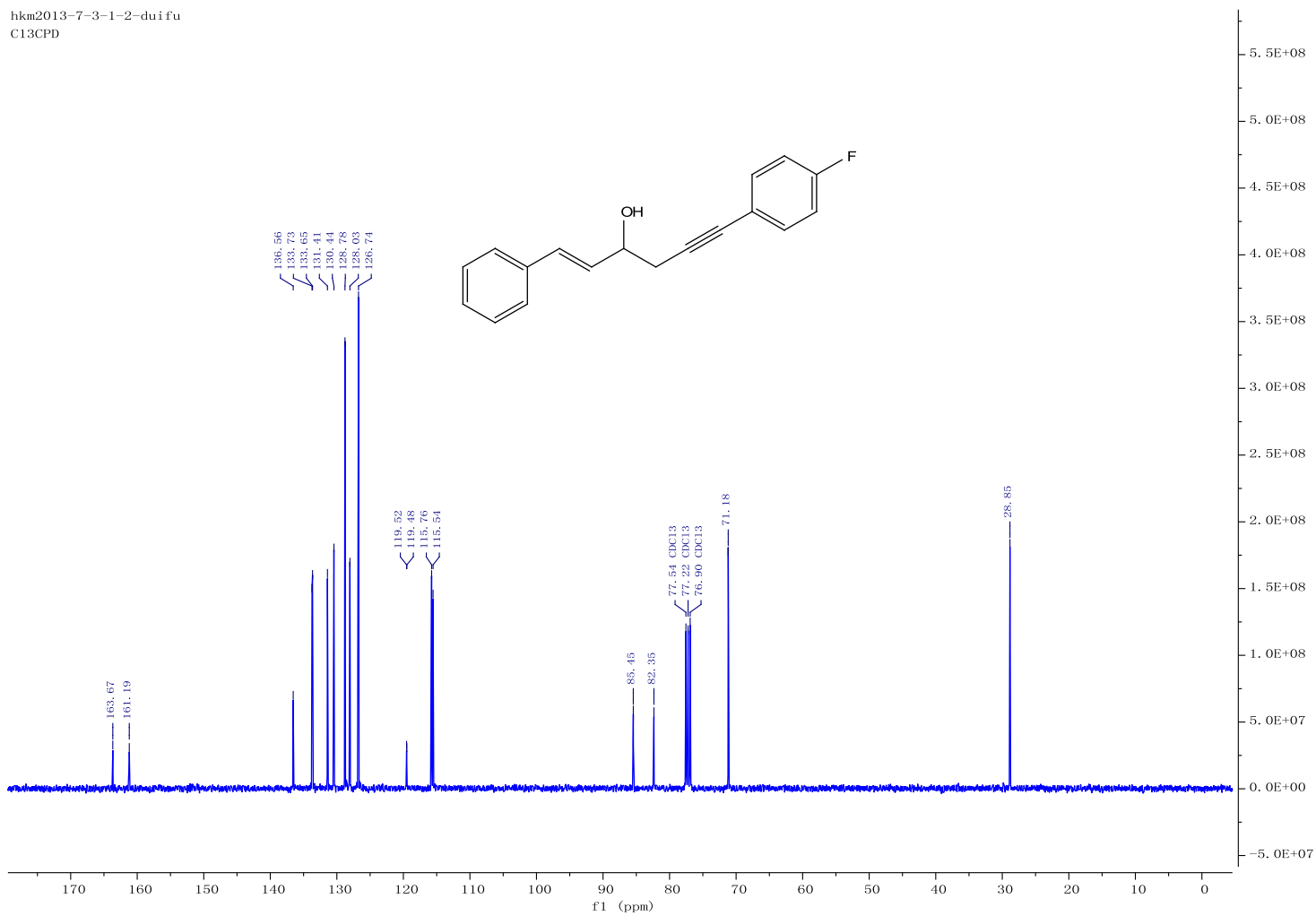
hkm2013-1-1-OAc  
TEST



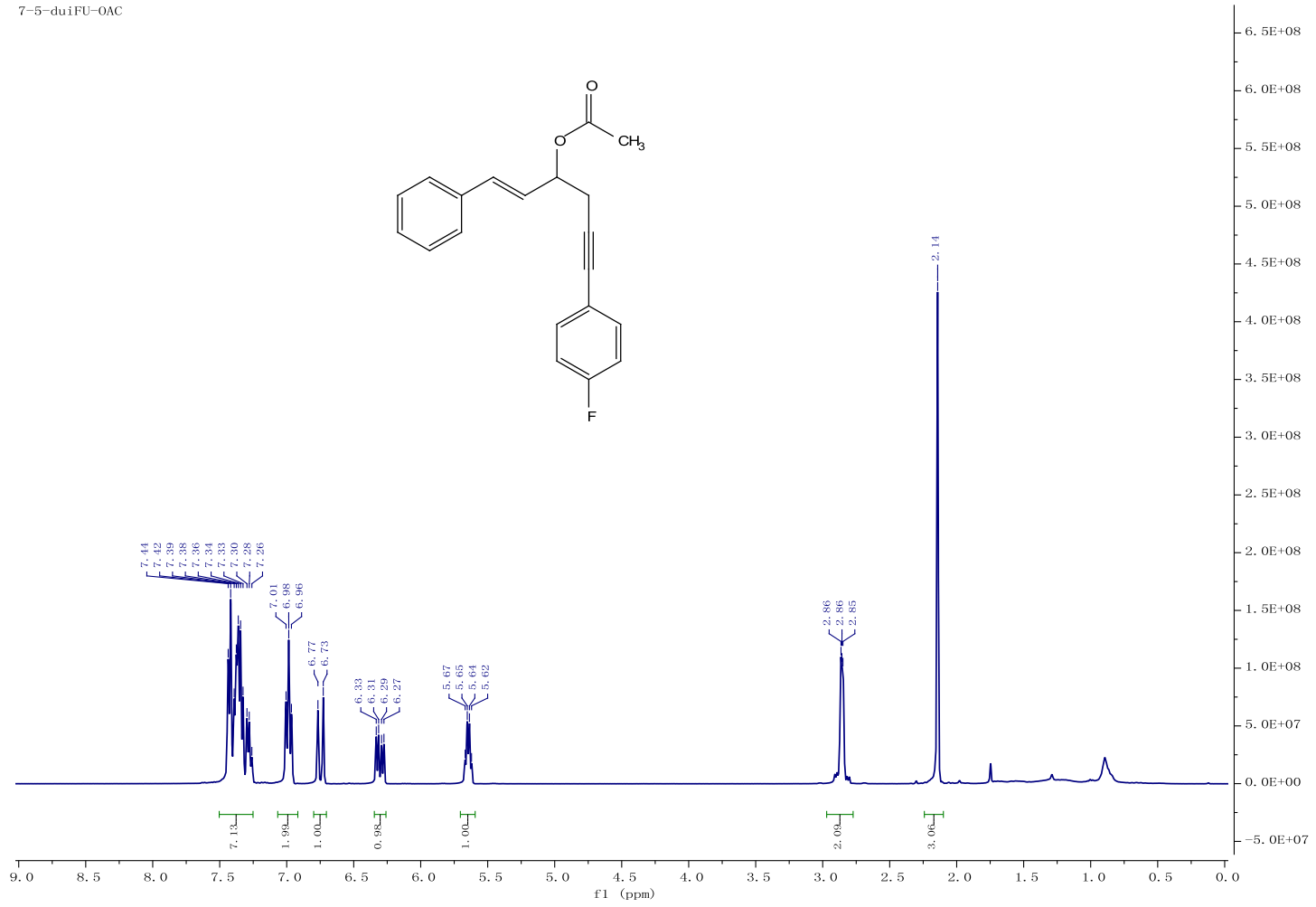
hkm2013-7-3-1-2-duifu  
PROTON



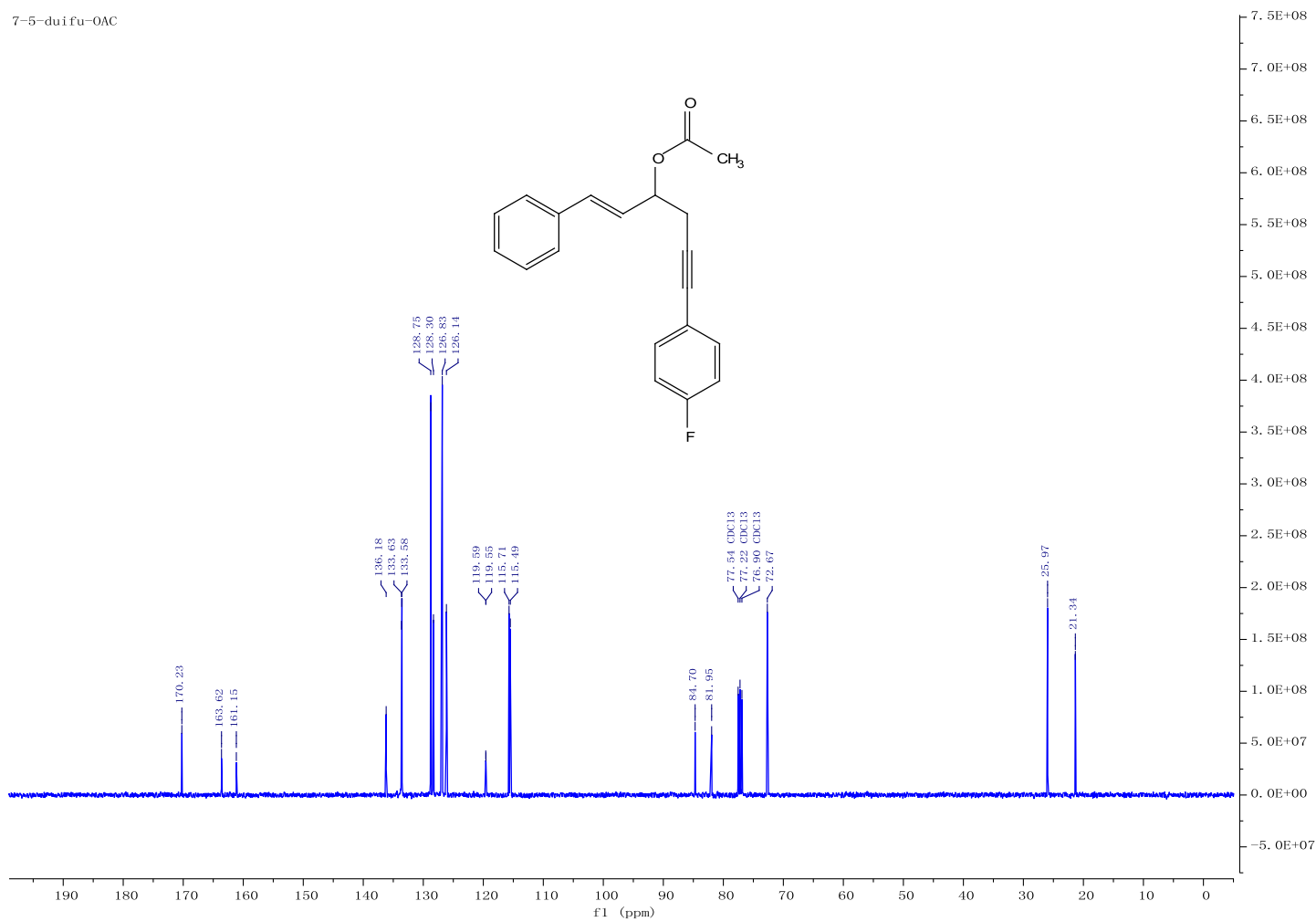
hkm2013-7-3-1-2-duifu  
C13CPD



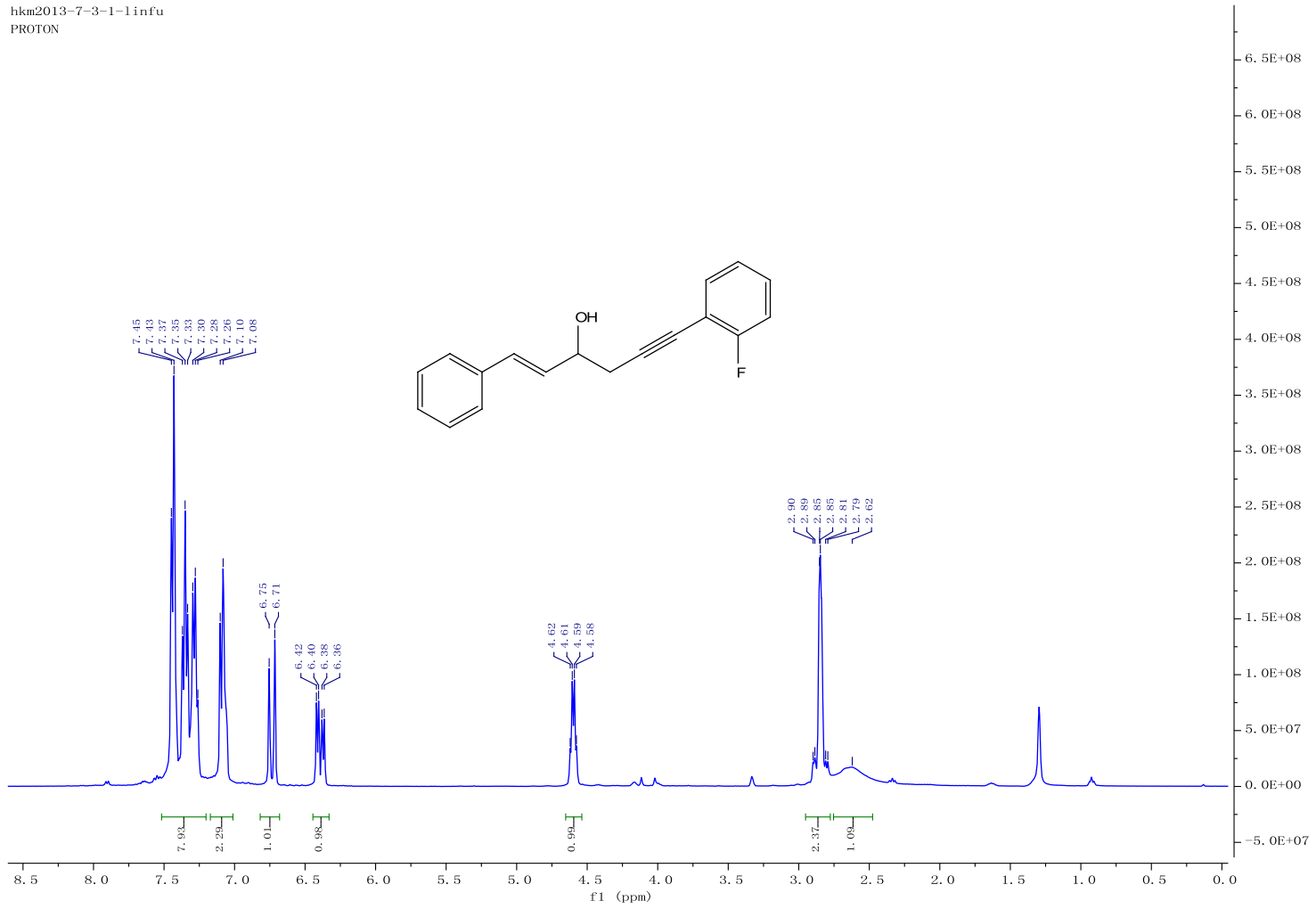
7-5-duiFU-OAC



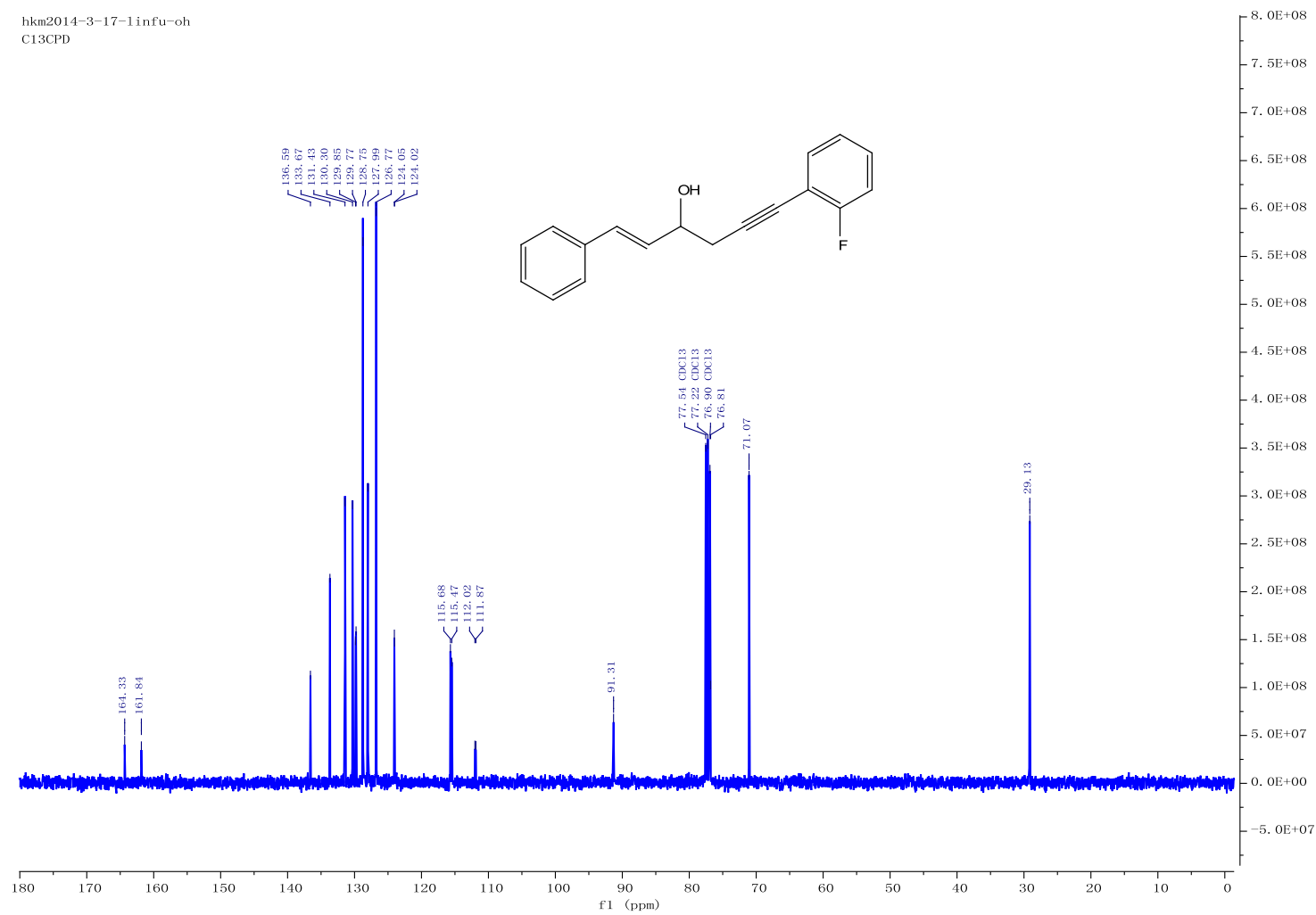
7-5-duifu-0AC



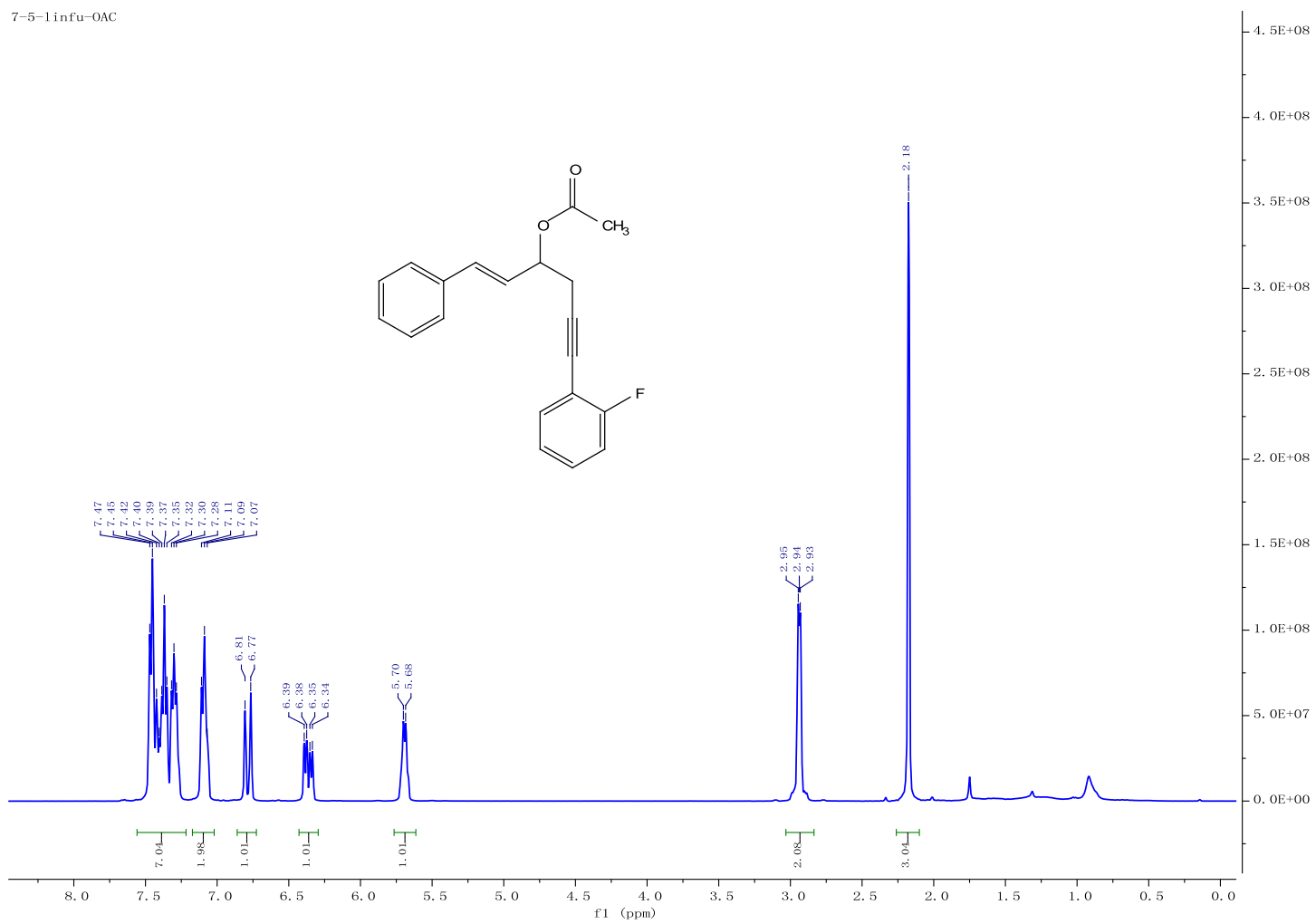
hkm2013-7-3-1-linfu  
PROTON



hkm2014-3-17-1infu-oh  
C13CPD

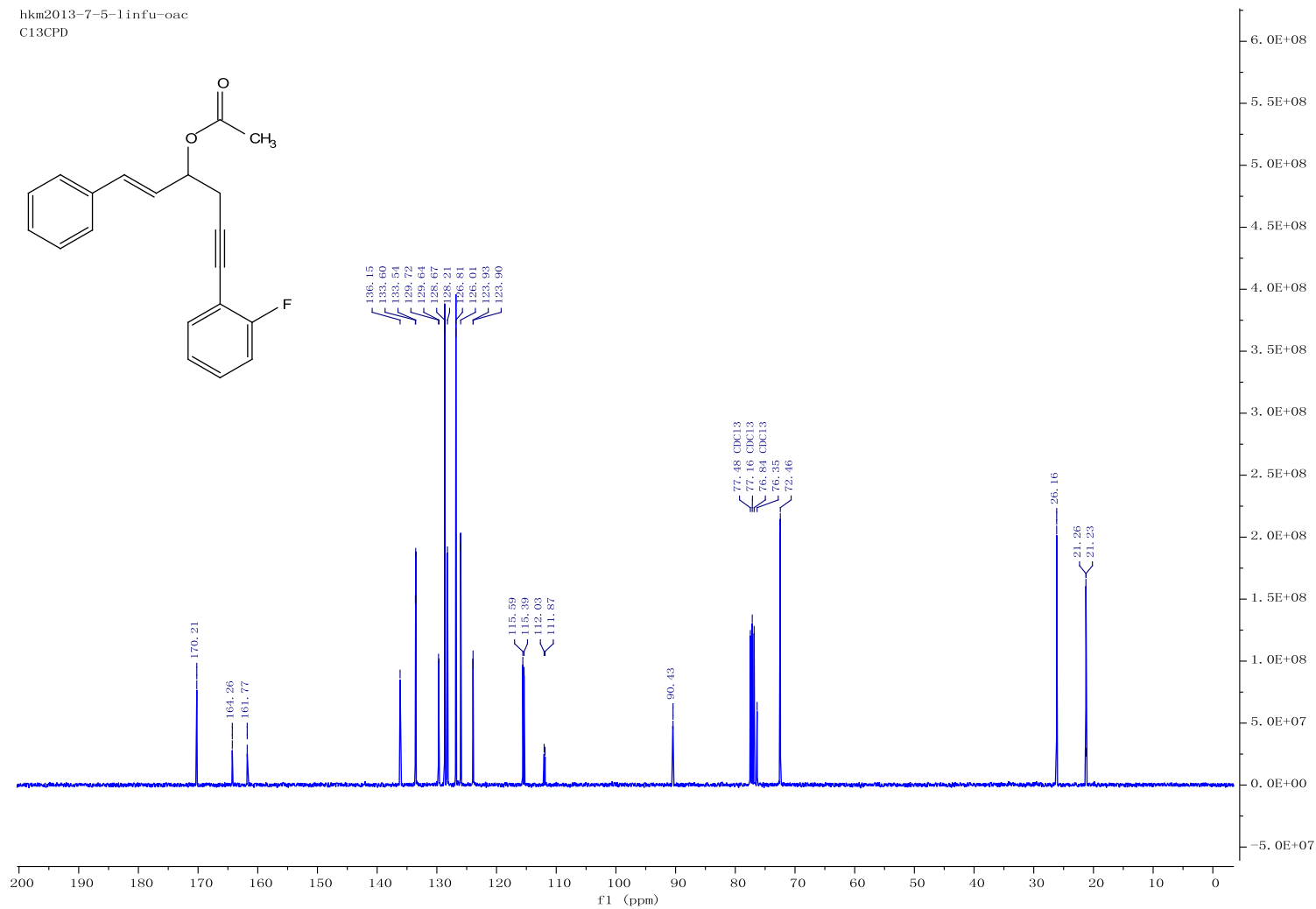
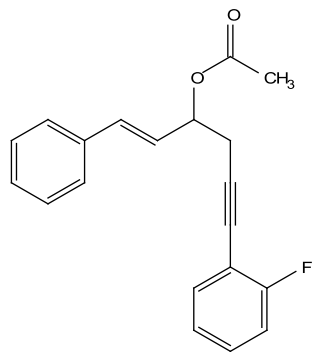


7-5-linfu-OAC

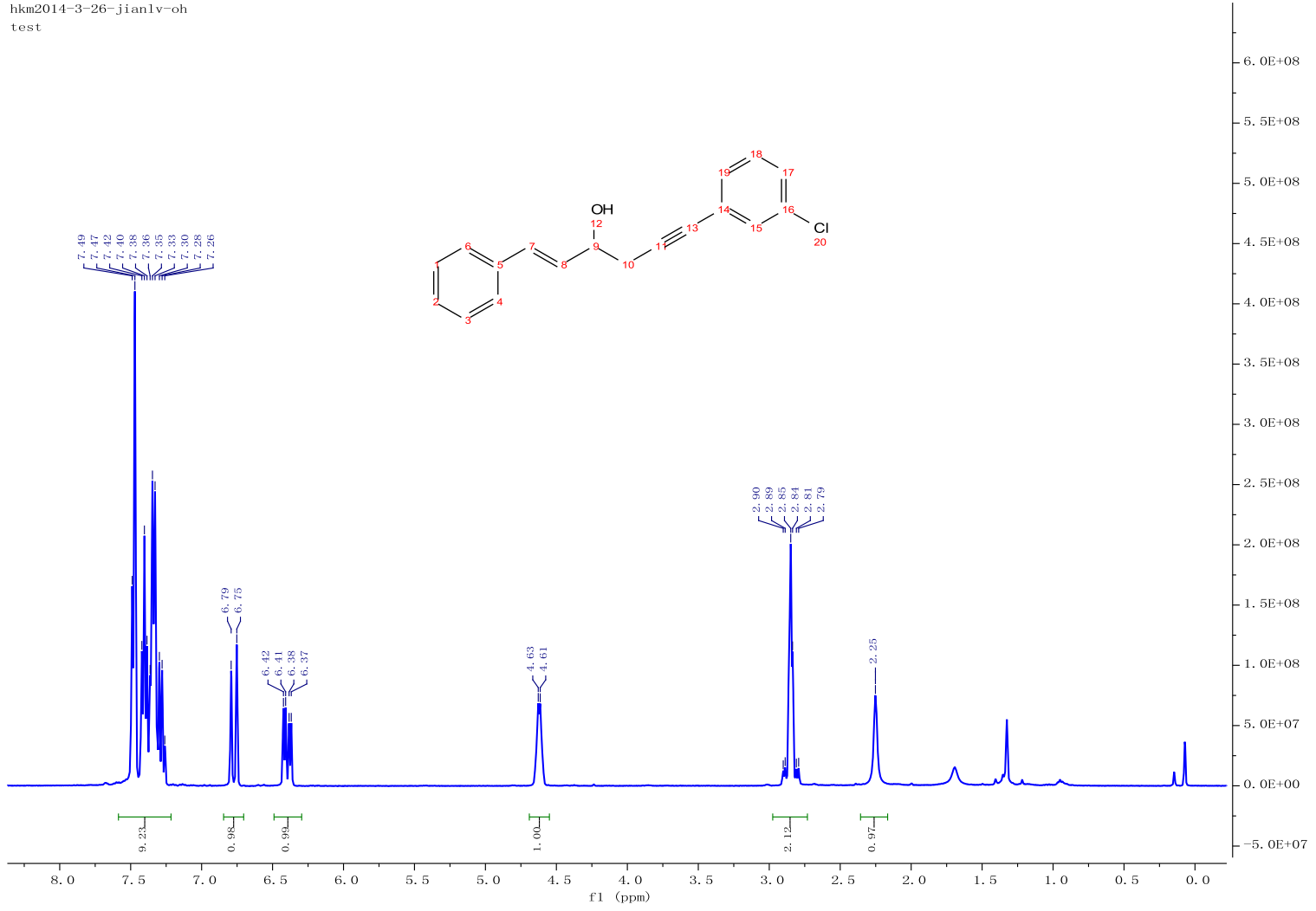




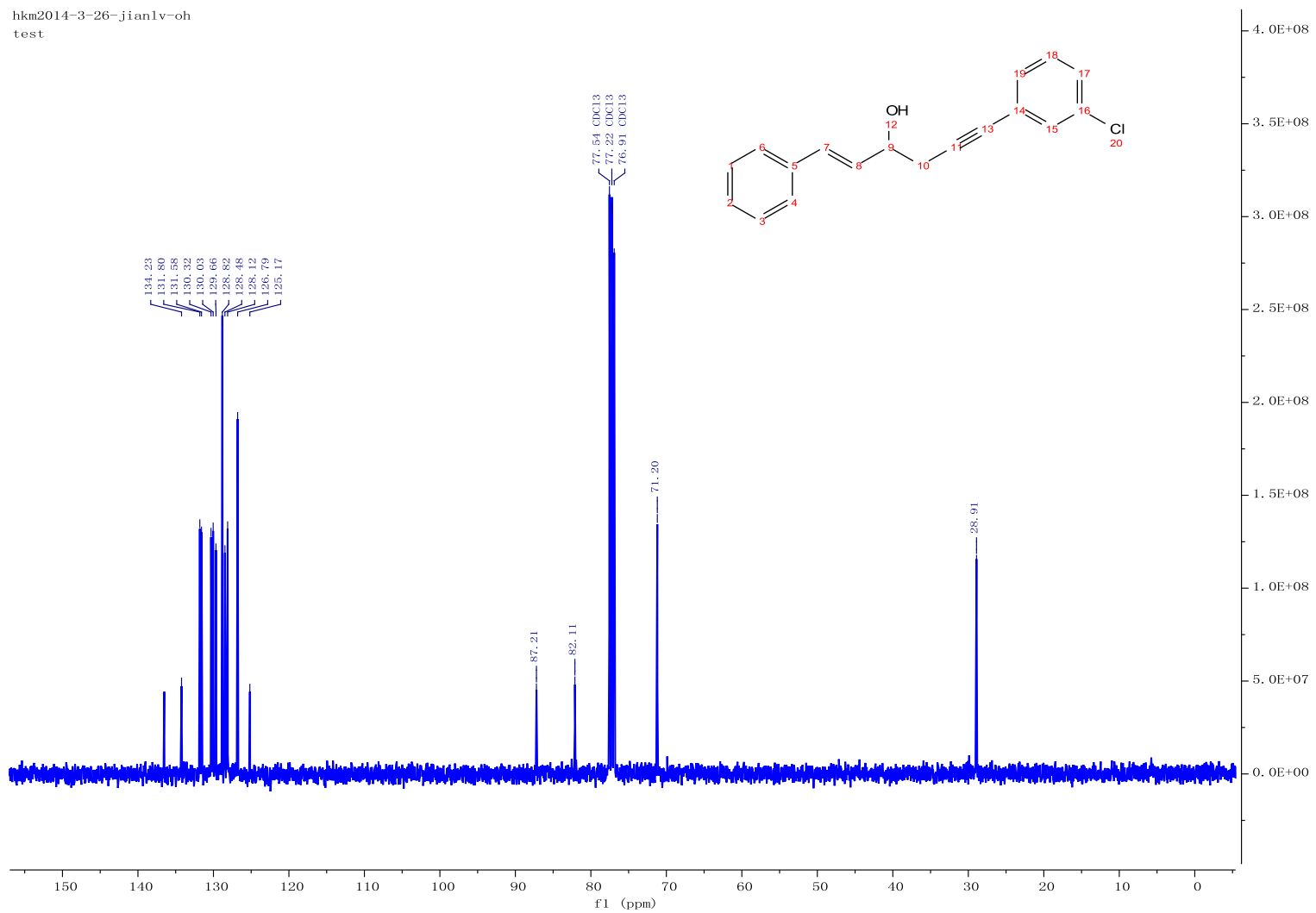
hkm2013-7-5-1infu-oac  
C13CPD



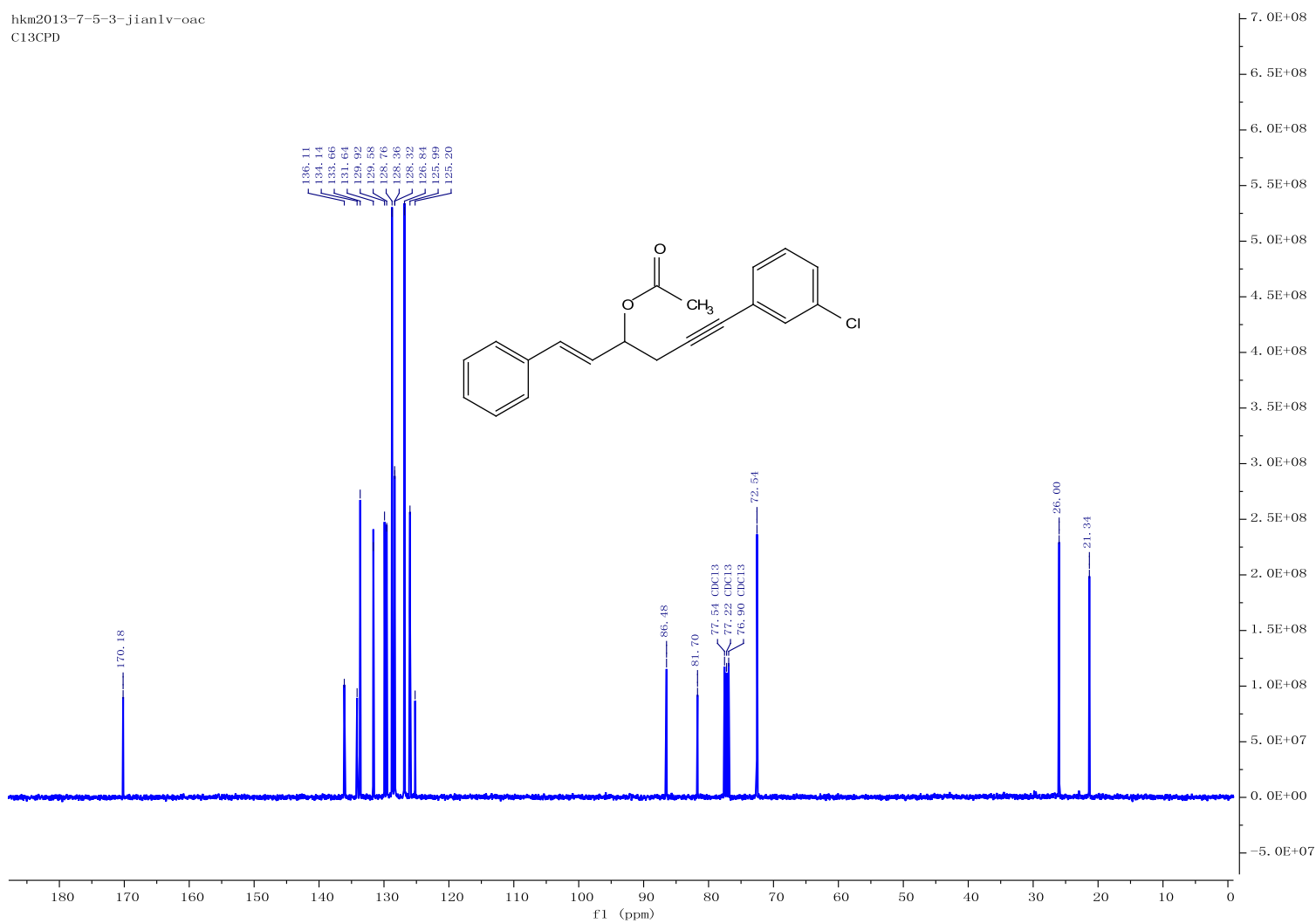
hkm2014-3-26-jianlv-oh  
test



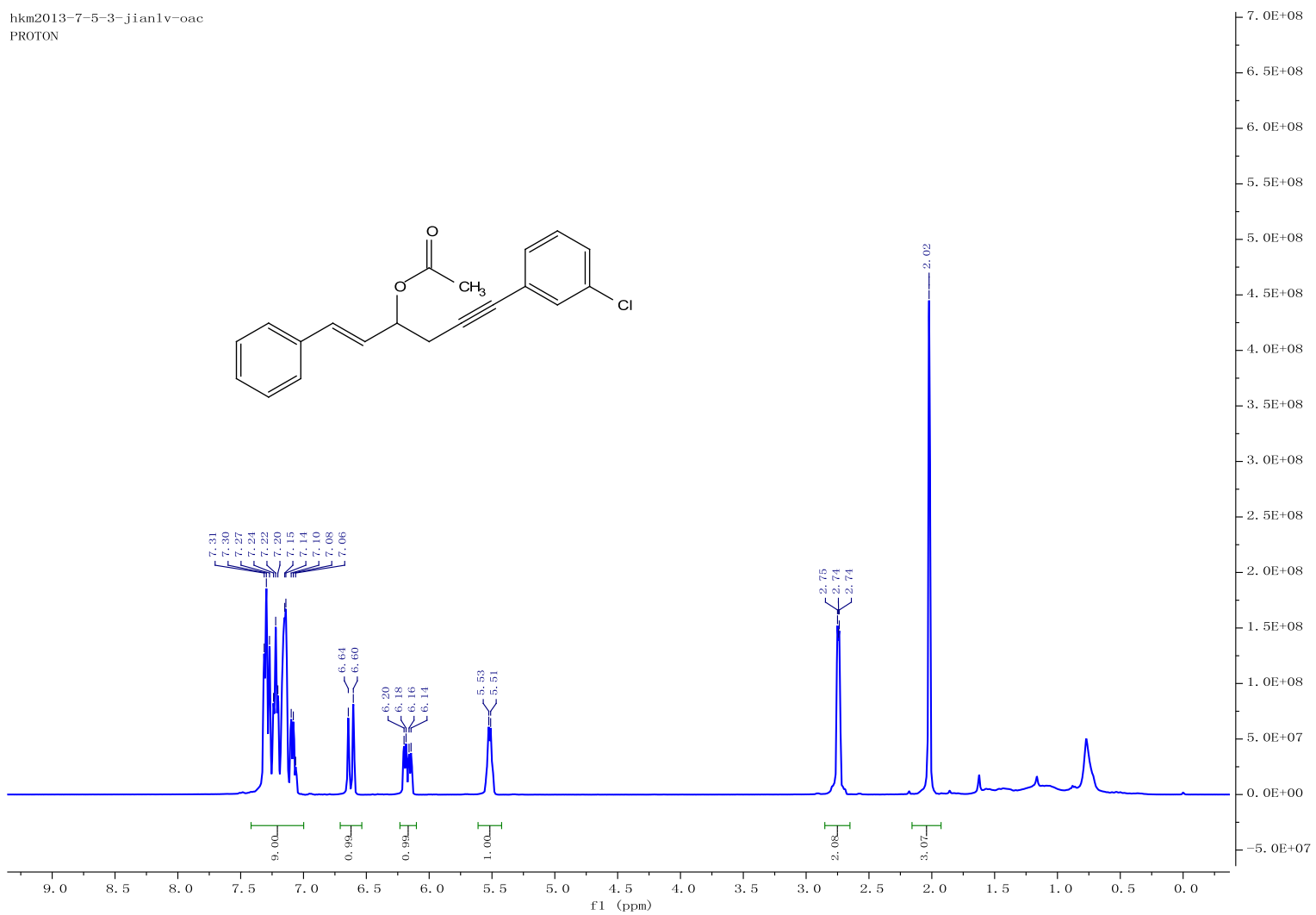
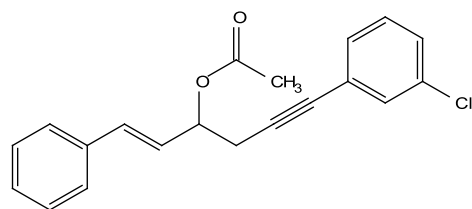
hkm2014-3-26-jianlv-oh  
test



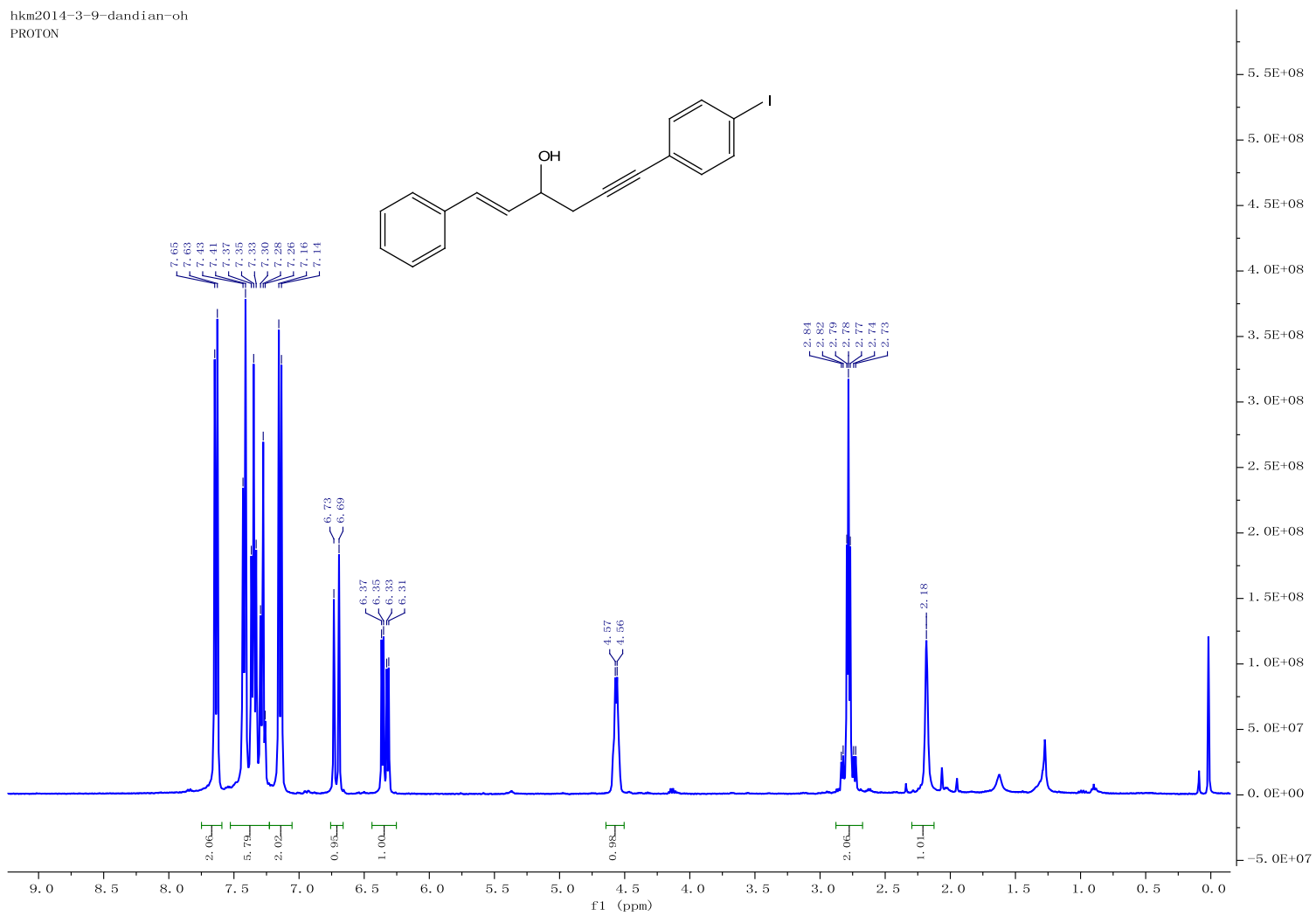
hkm2013-7-5-3-jianlv-oac  
C13CPD



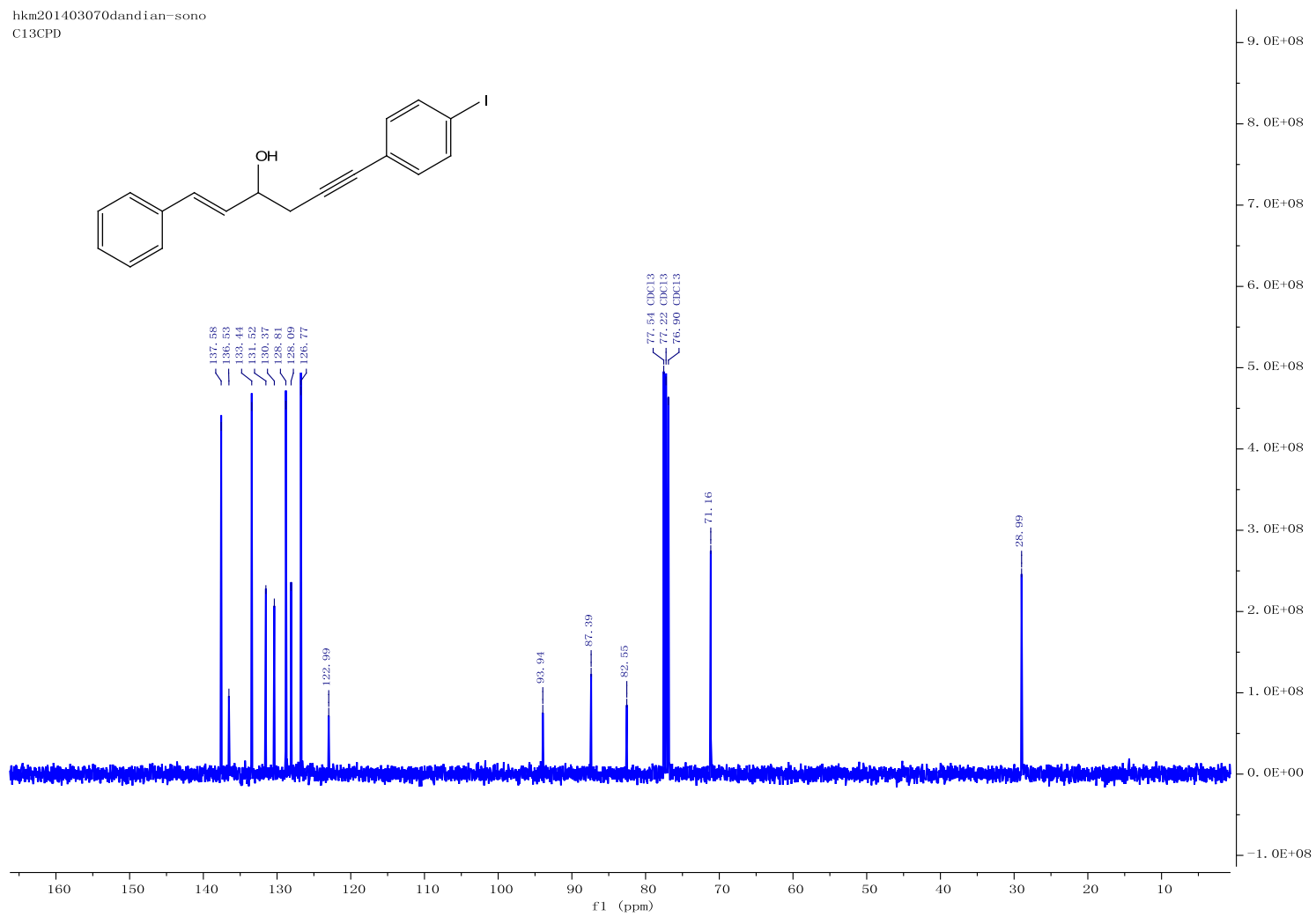
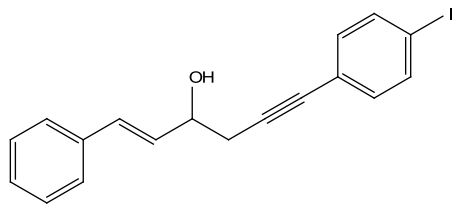
hkm2013-7-5-3-jianlv-oac  
PROTON



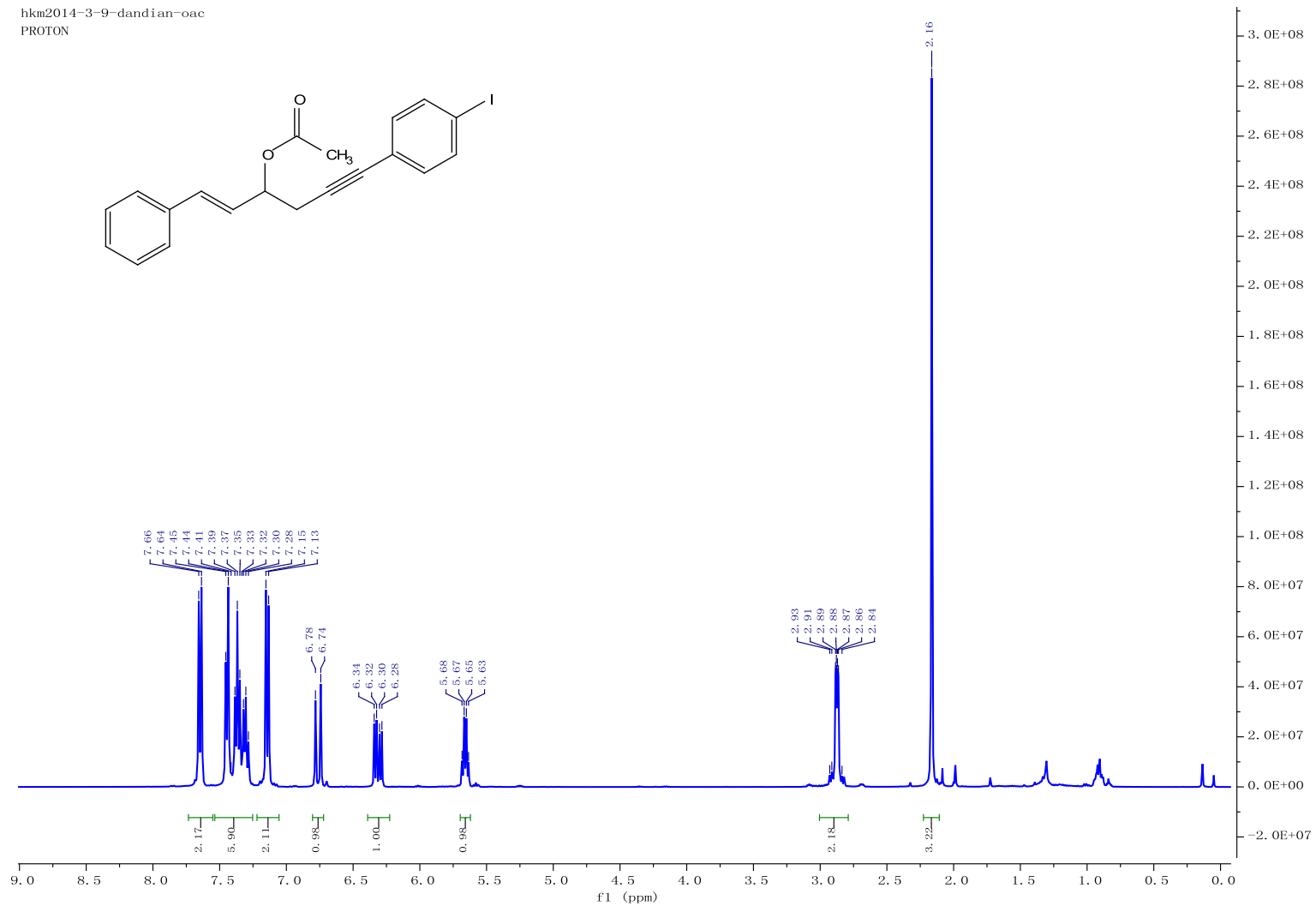
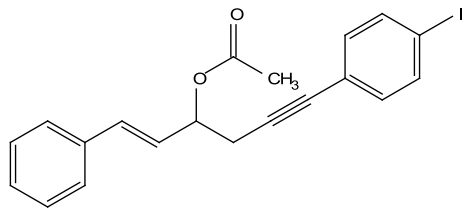
hkm2014-3-9-dandian-oh  
PROTON



hkm201403070dandian-sono  
C13CPD

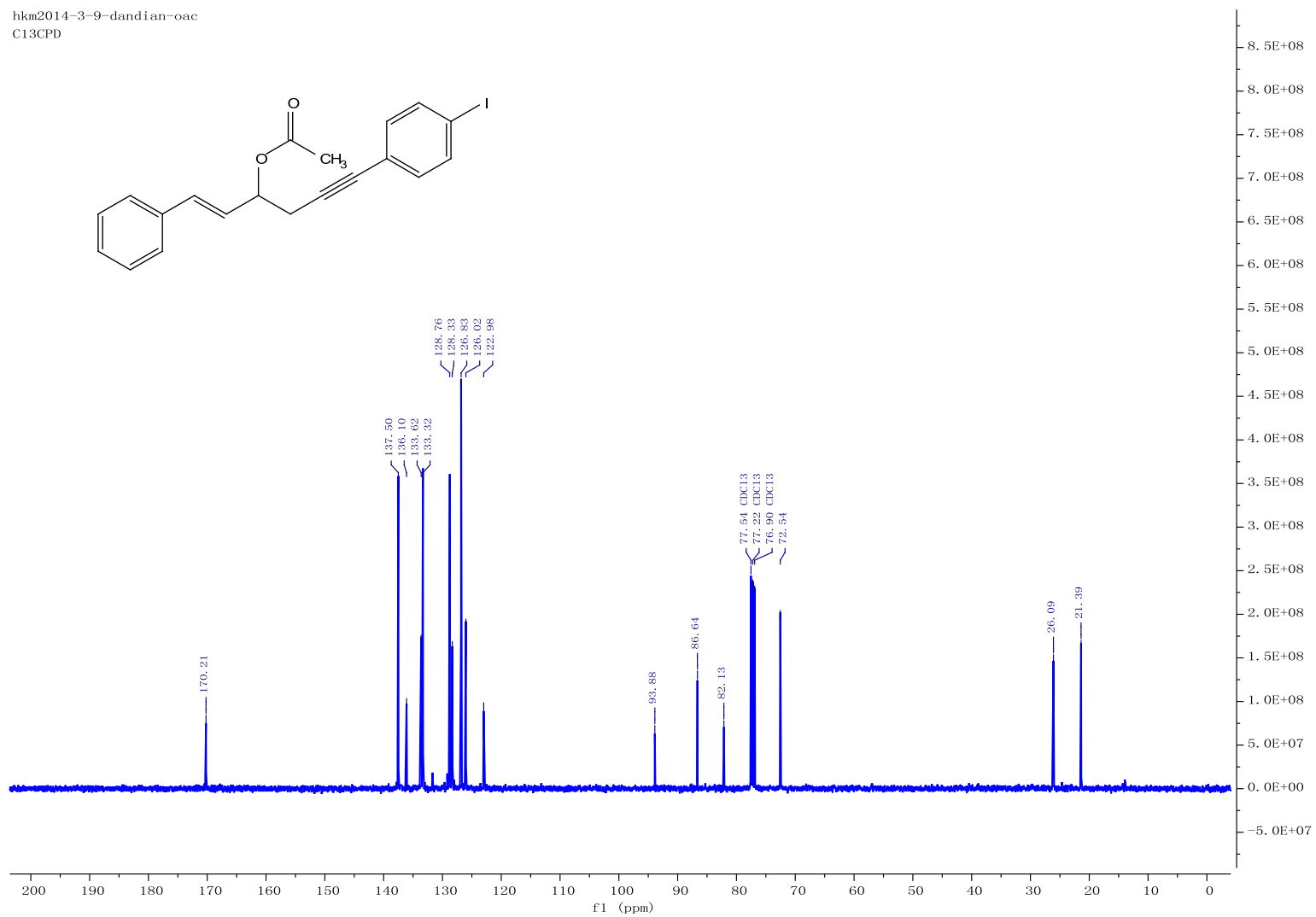
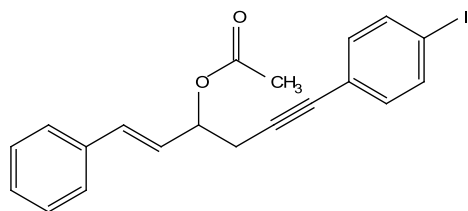


hkm2014-3-9-dandian-oac  
PROTON

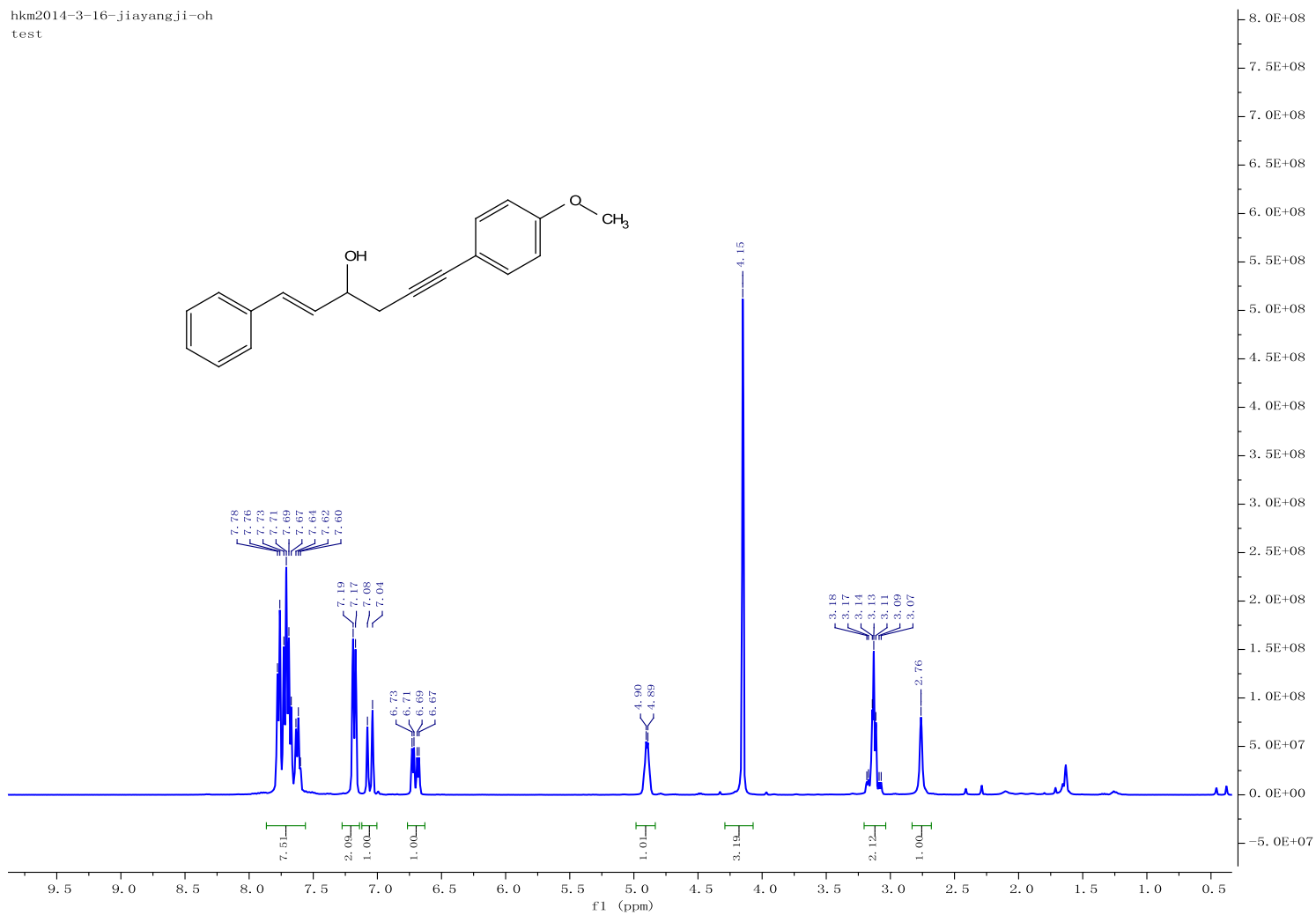




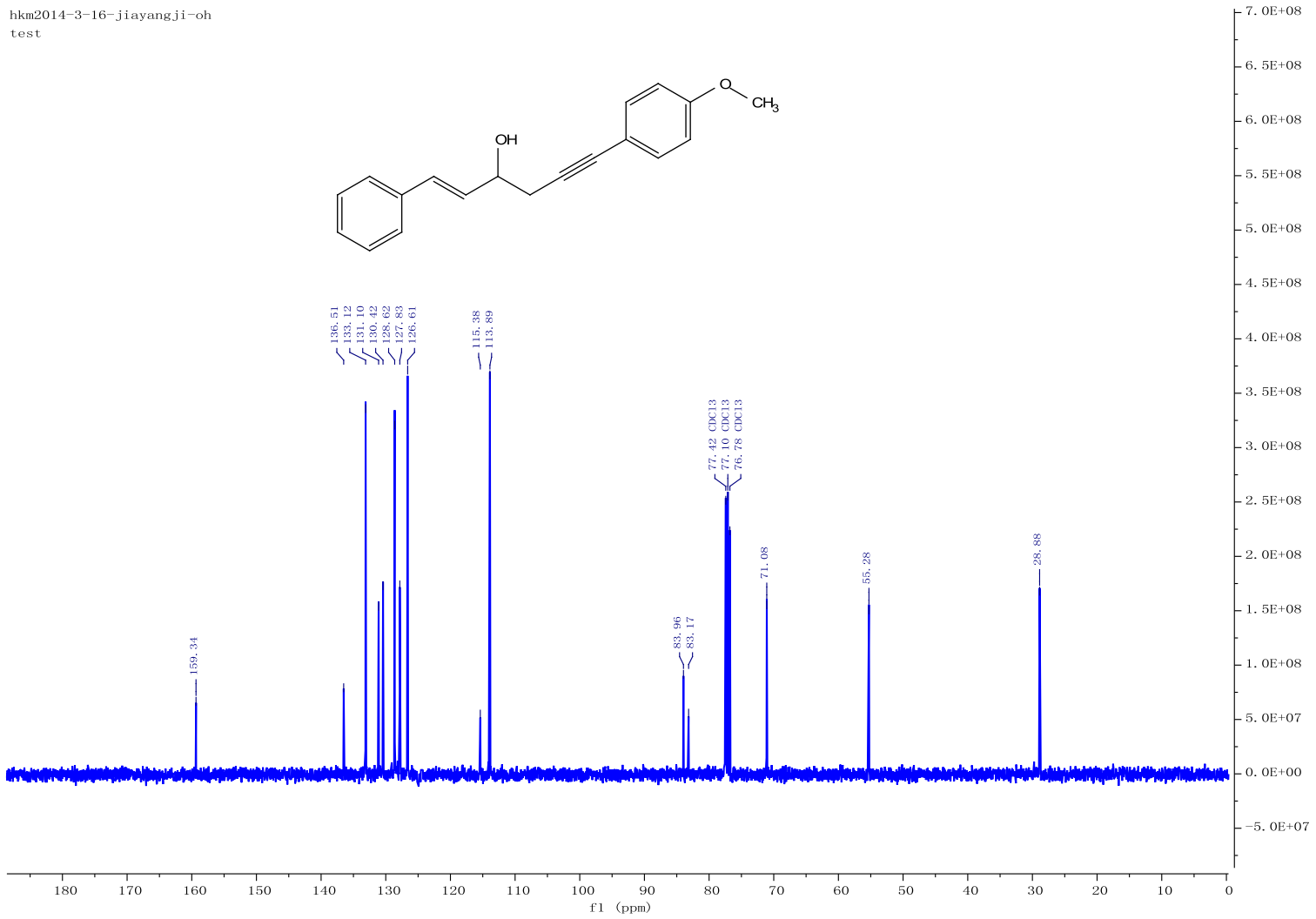
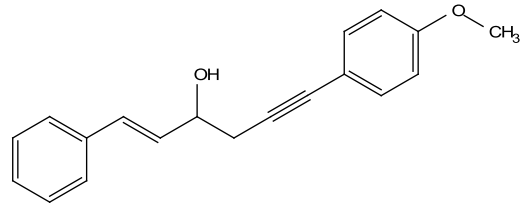
hkm2014-3-9-dandian-oac  
C13CPD



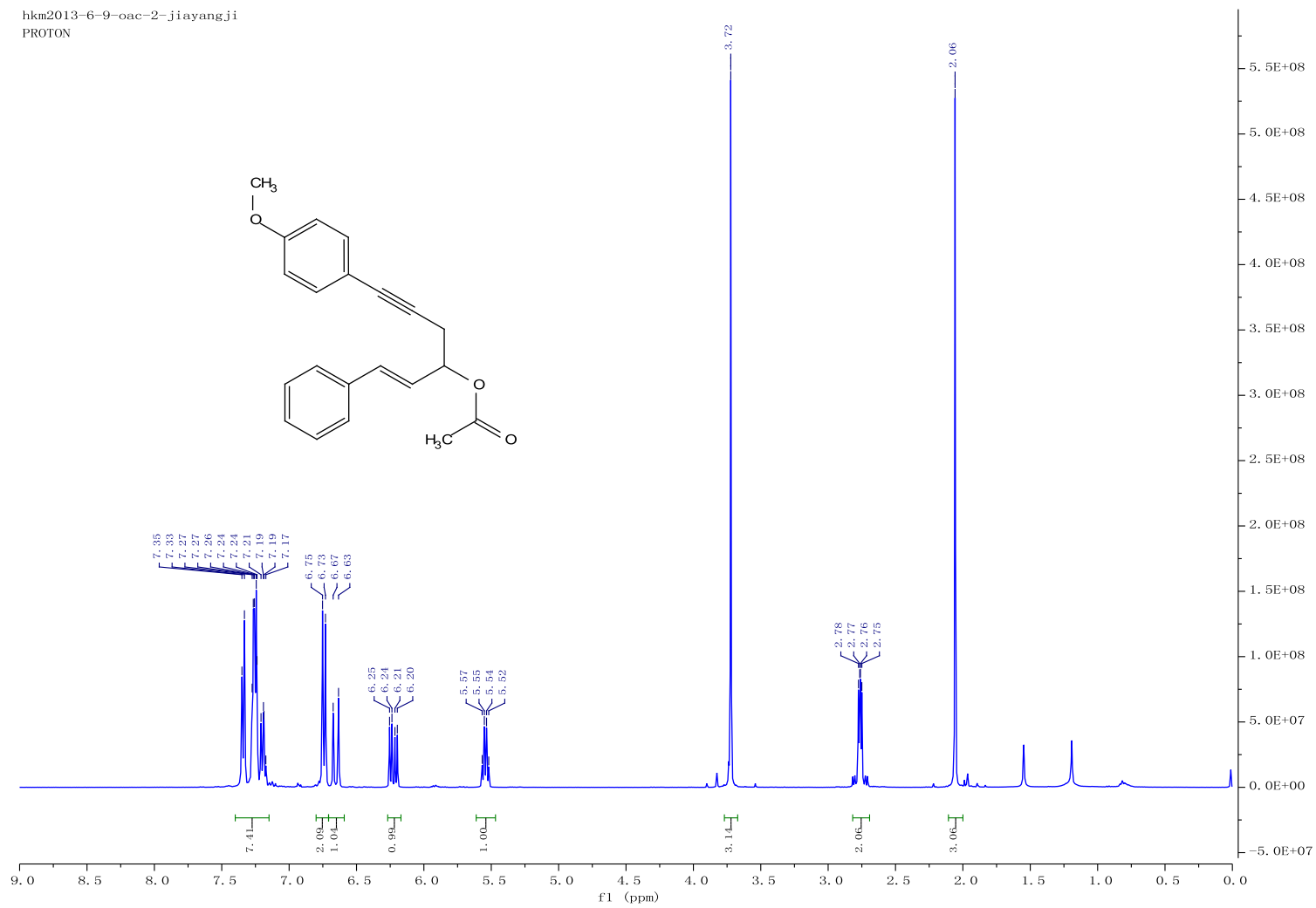
hkm2014-3-16-jiayangji-oh  
test



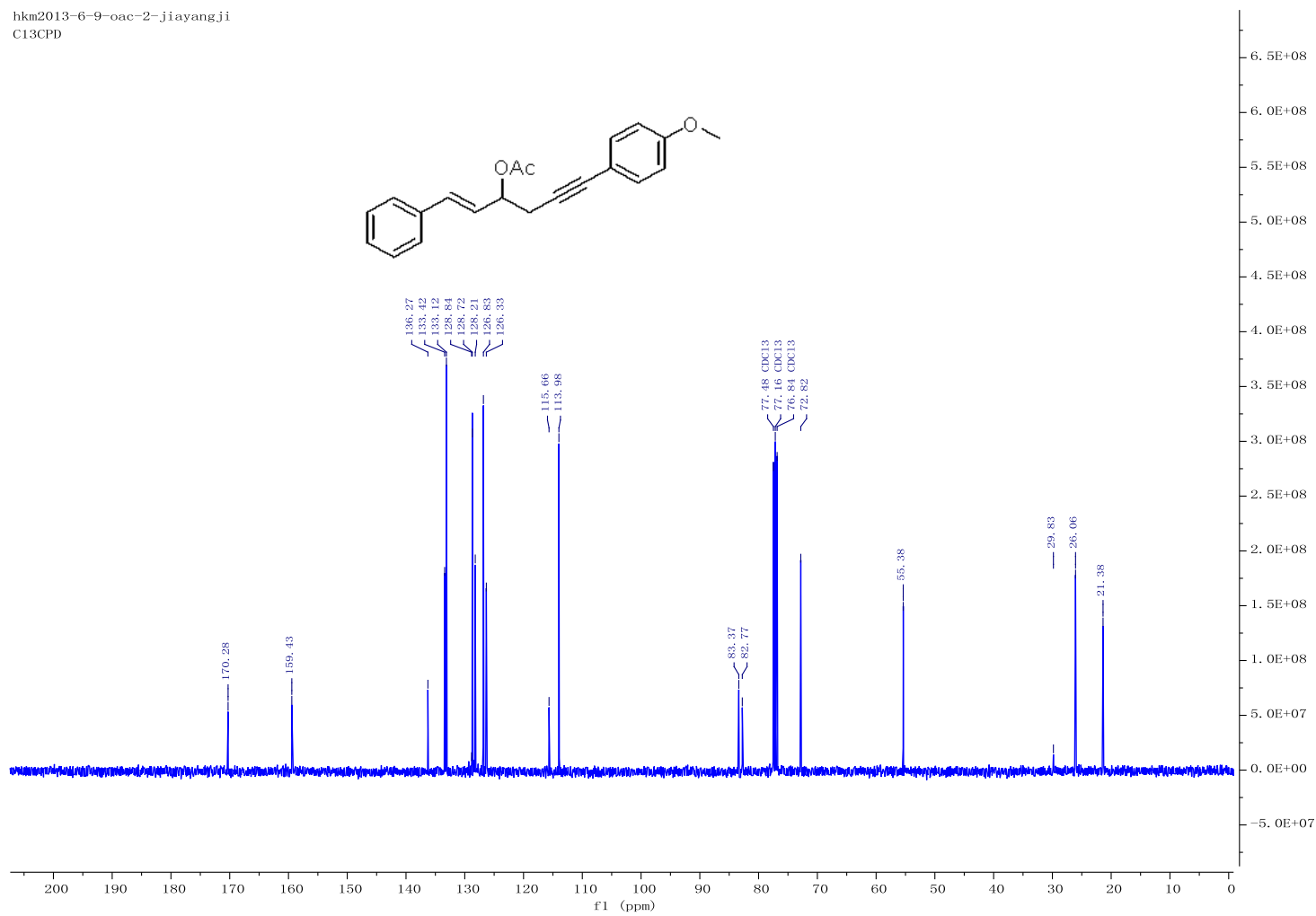
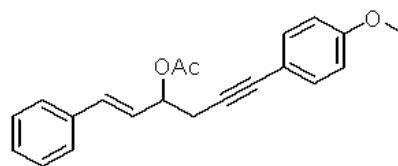
hkm2014-3-16-jiayangji-oh  
test



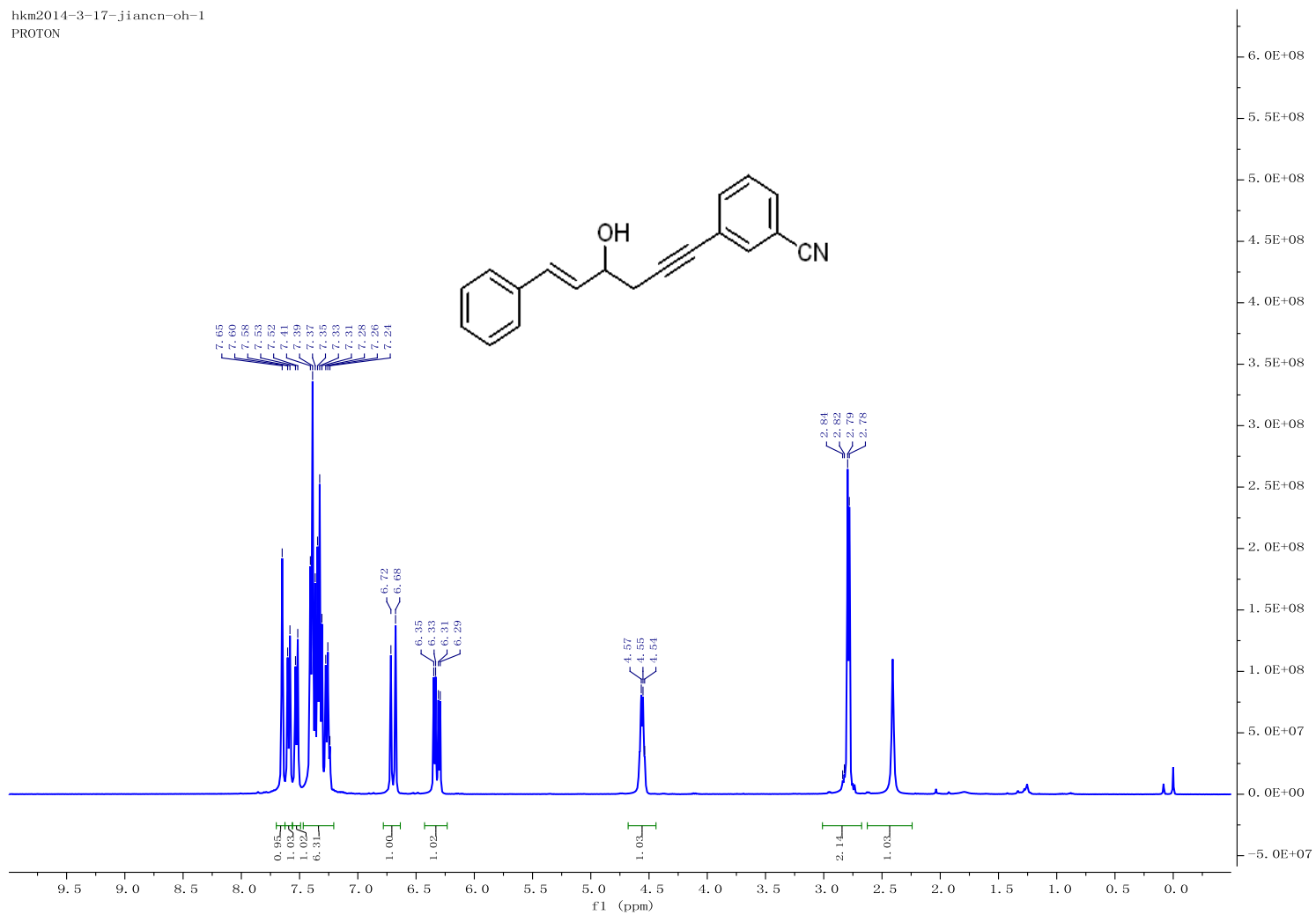
hkm2013-6-9-oac-2-jiayangji  
PROTON



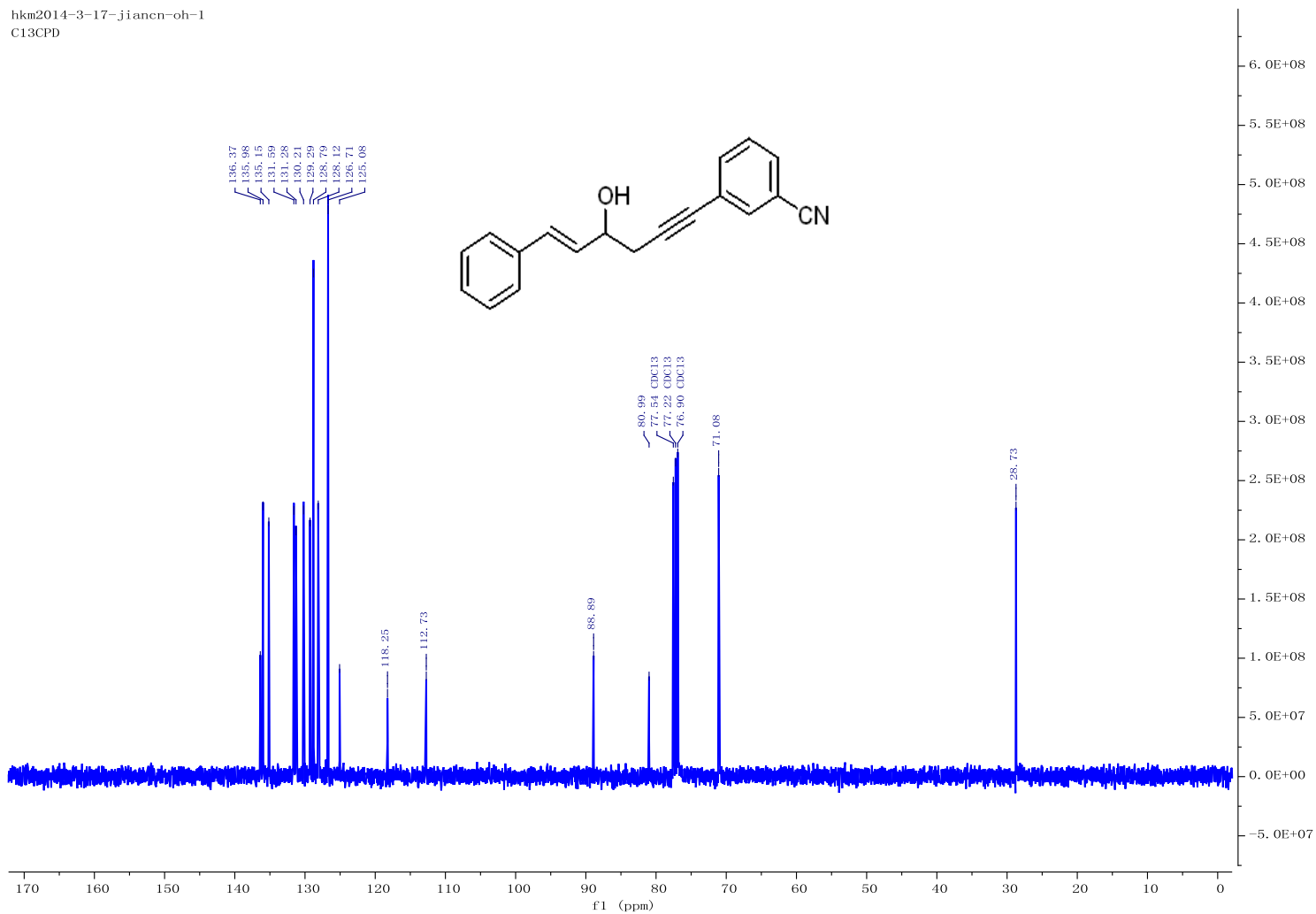
hkm2013-6-9-oac-2-jiayangji  
C13CPD



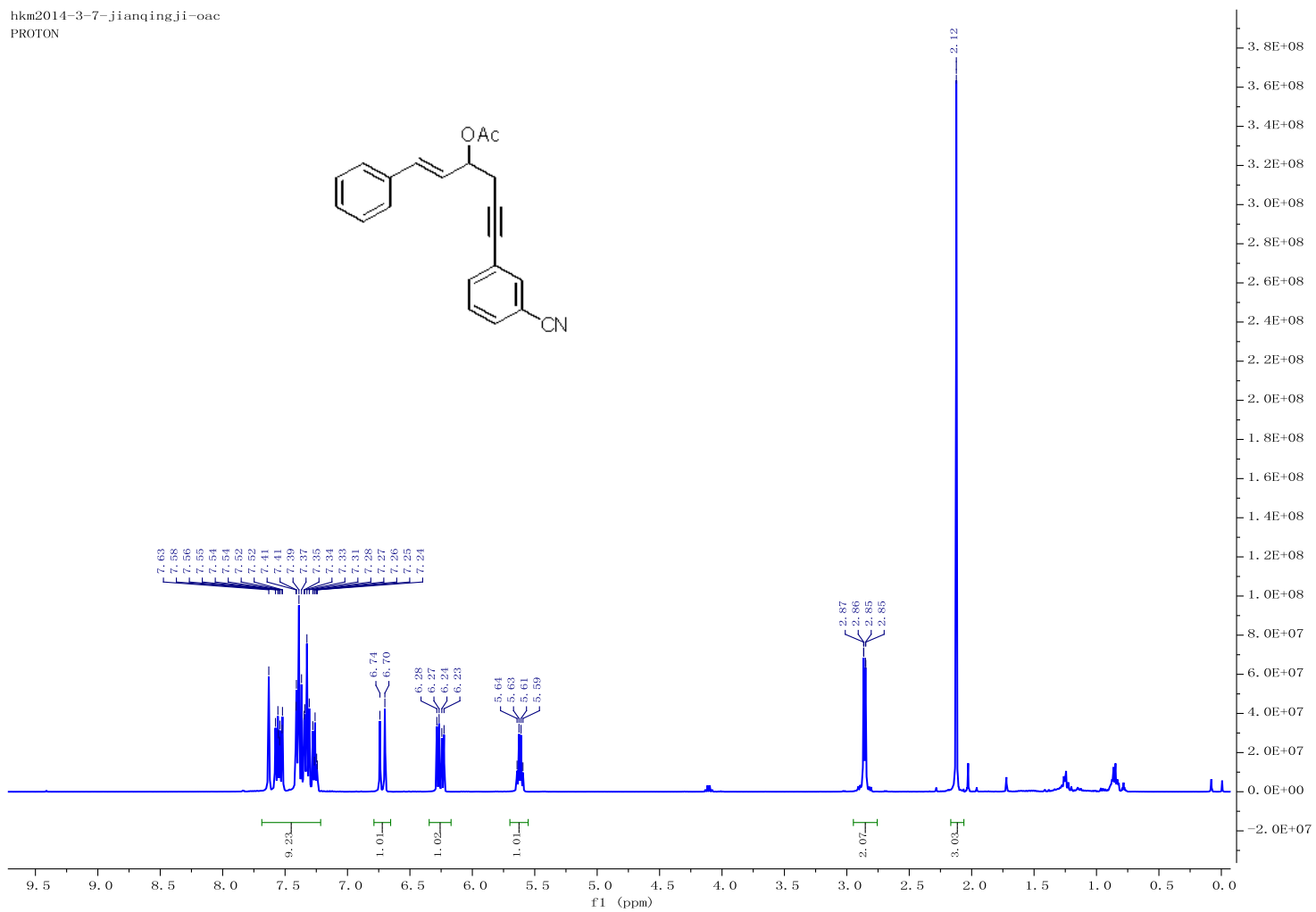
hkm2014-3-17-jianen-oh-1  
PROTON



hkm2014-3-17-jiancn-oh-1  
C13CPD

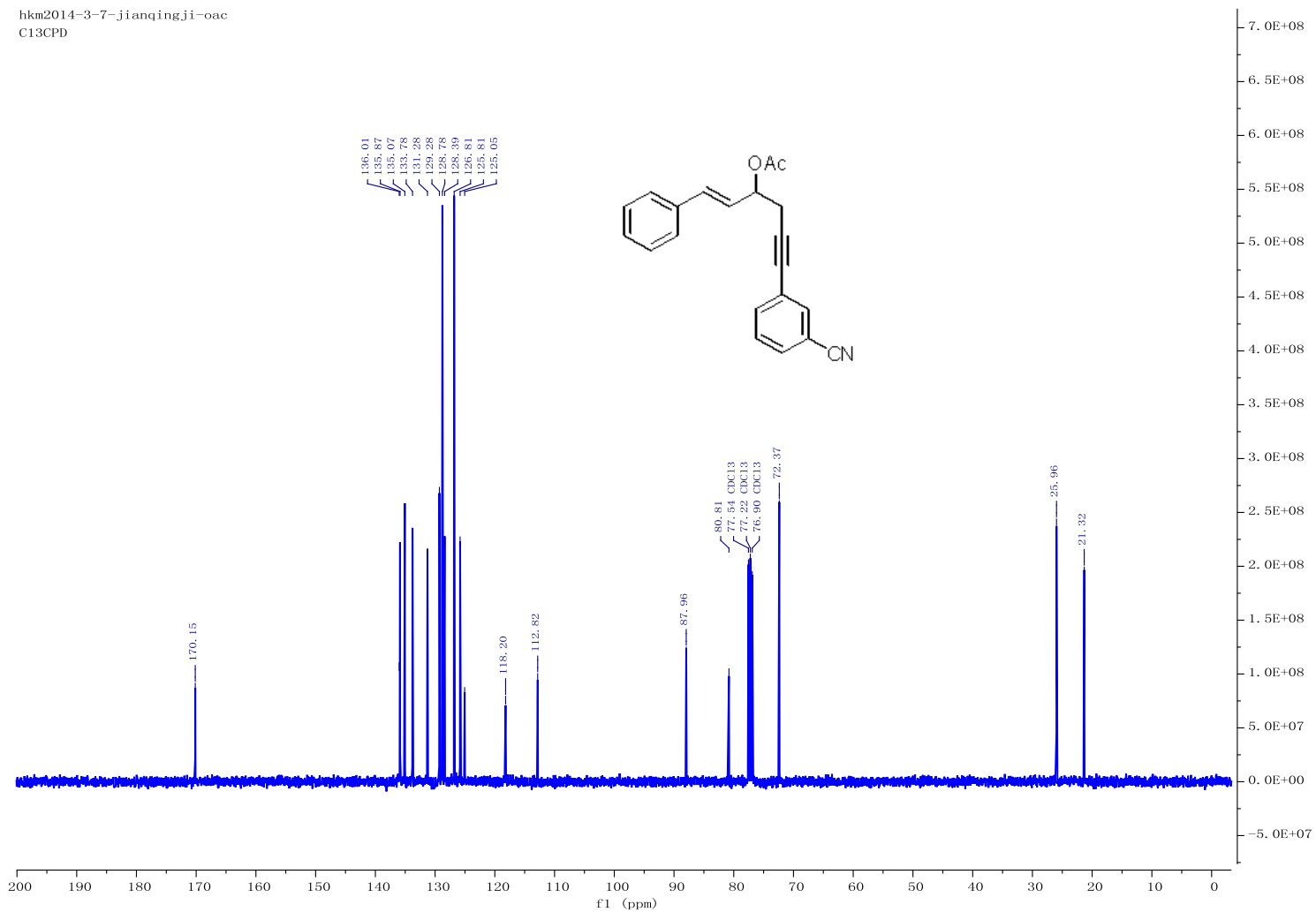


hkm2014-3-7-jianqingji-oac  
PROTON

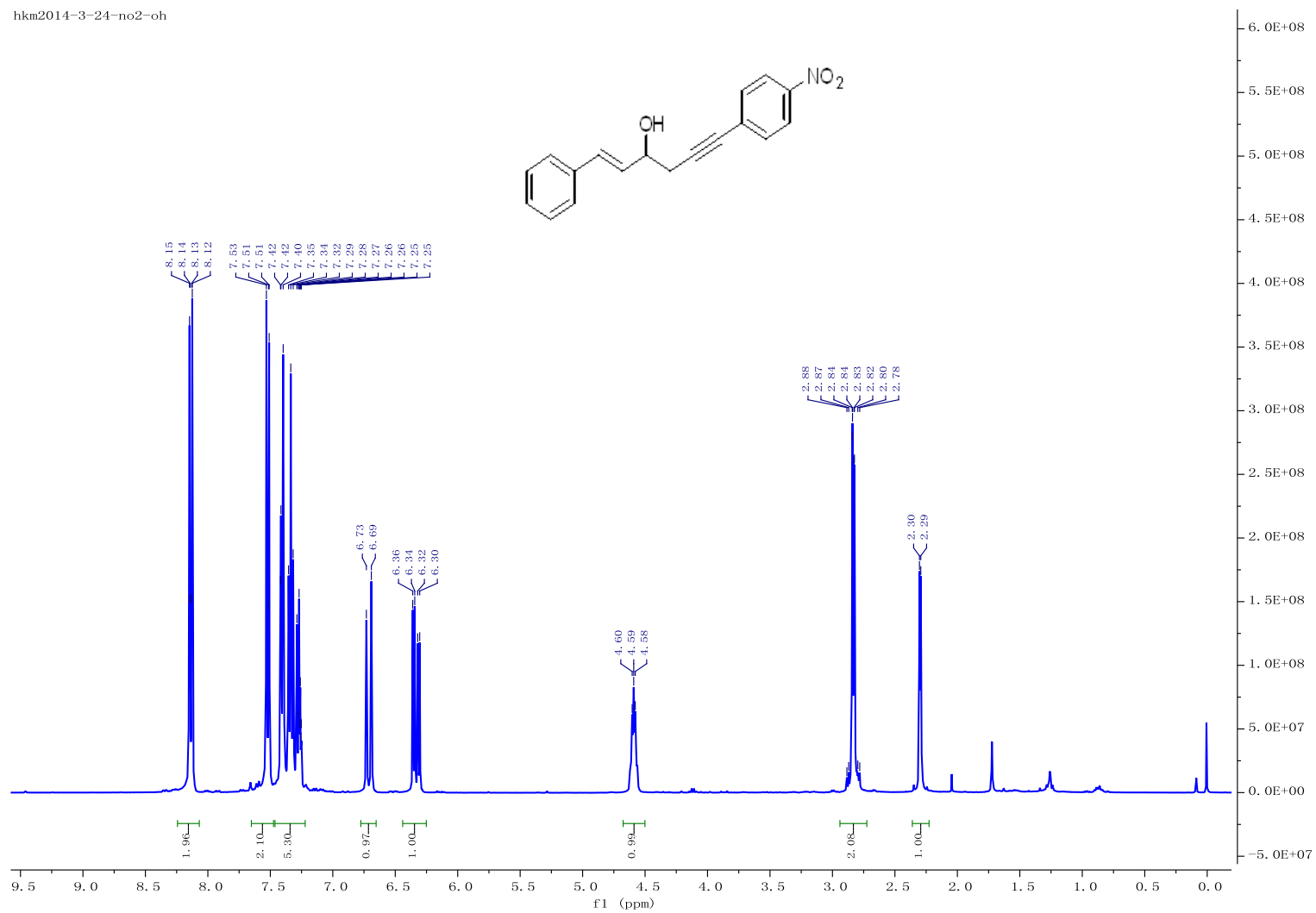
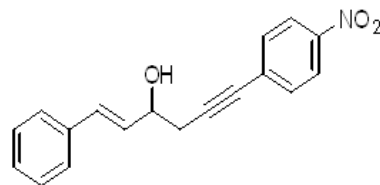




hkm2014-3-7-jianqingji-oac  
C13CPD

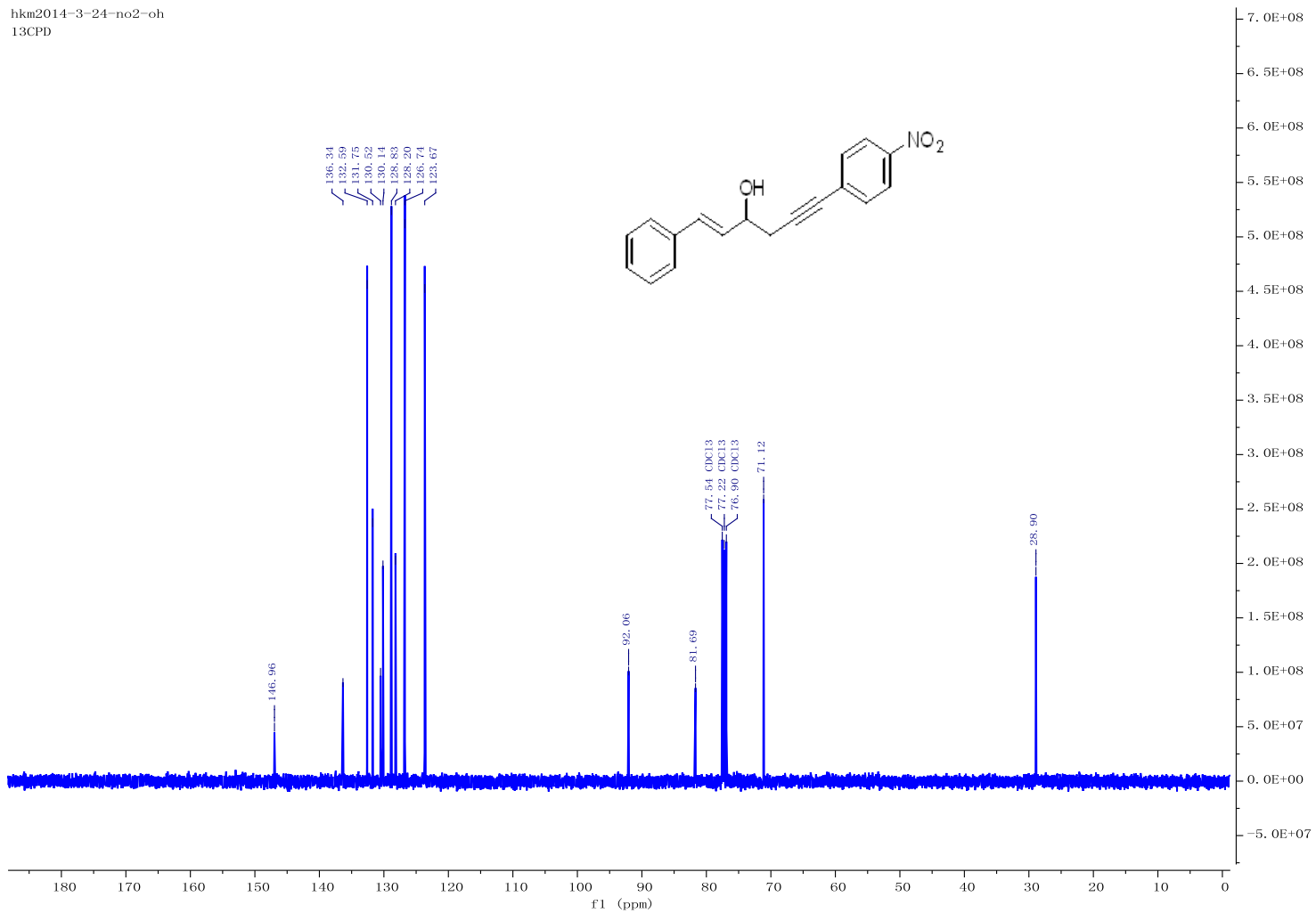


hkm2014-3-24-no2-oh

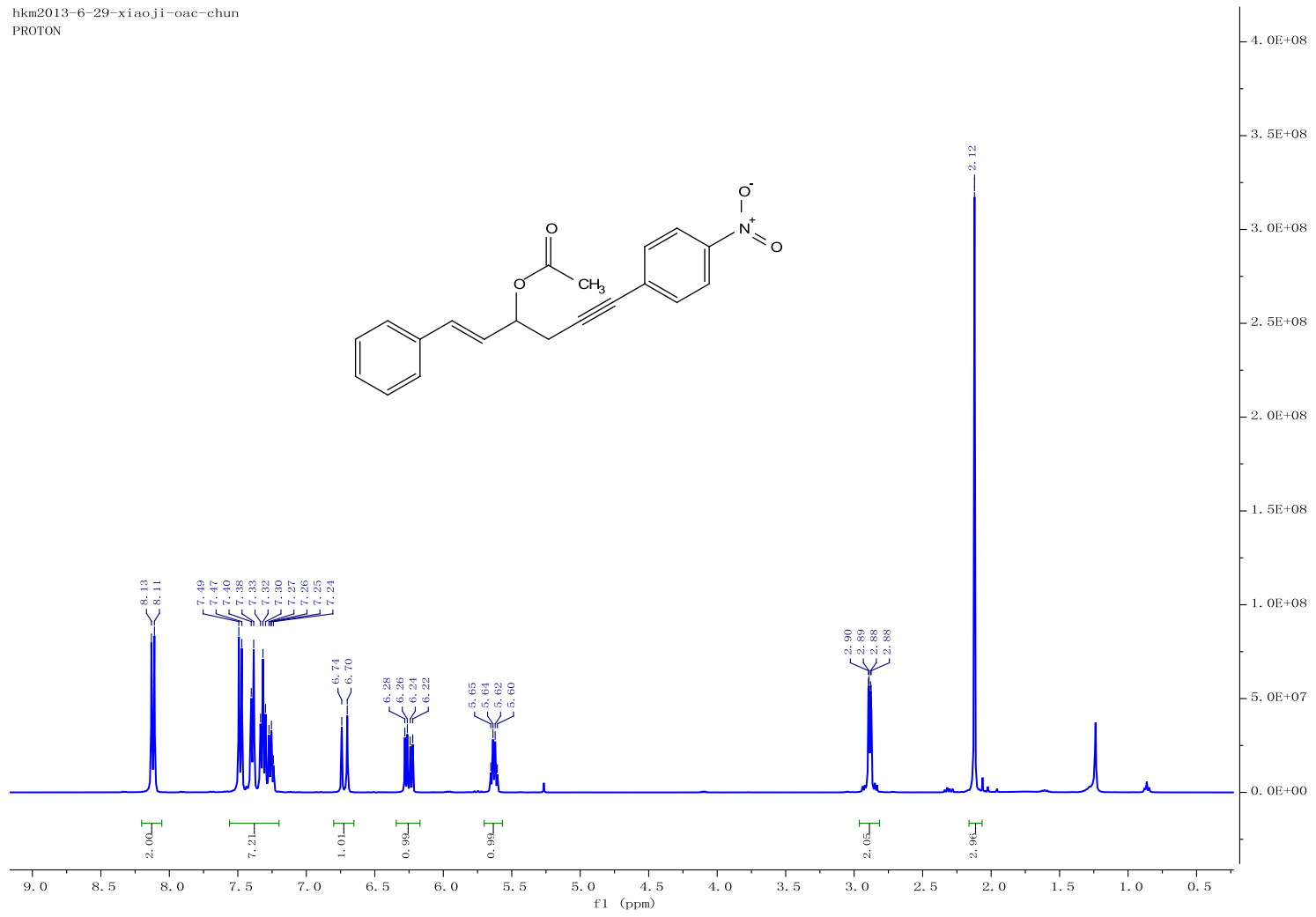




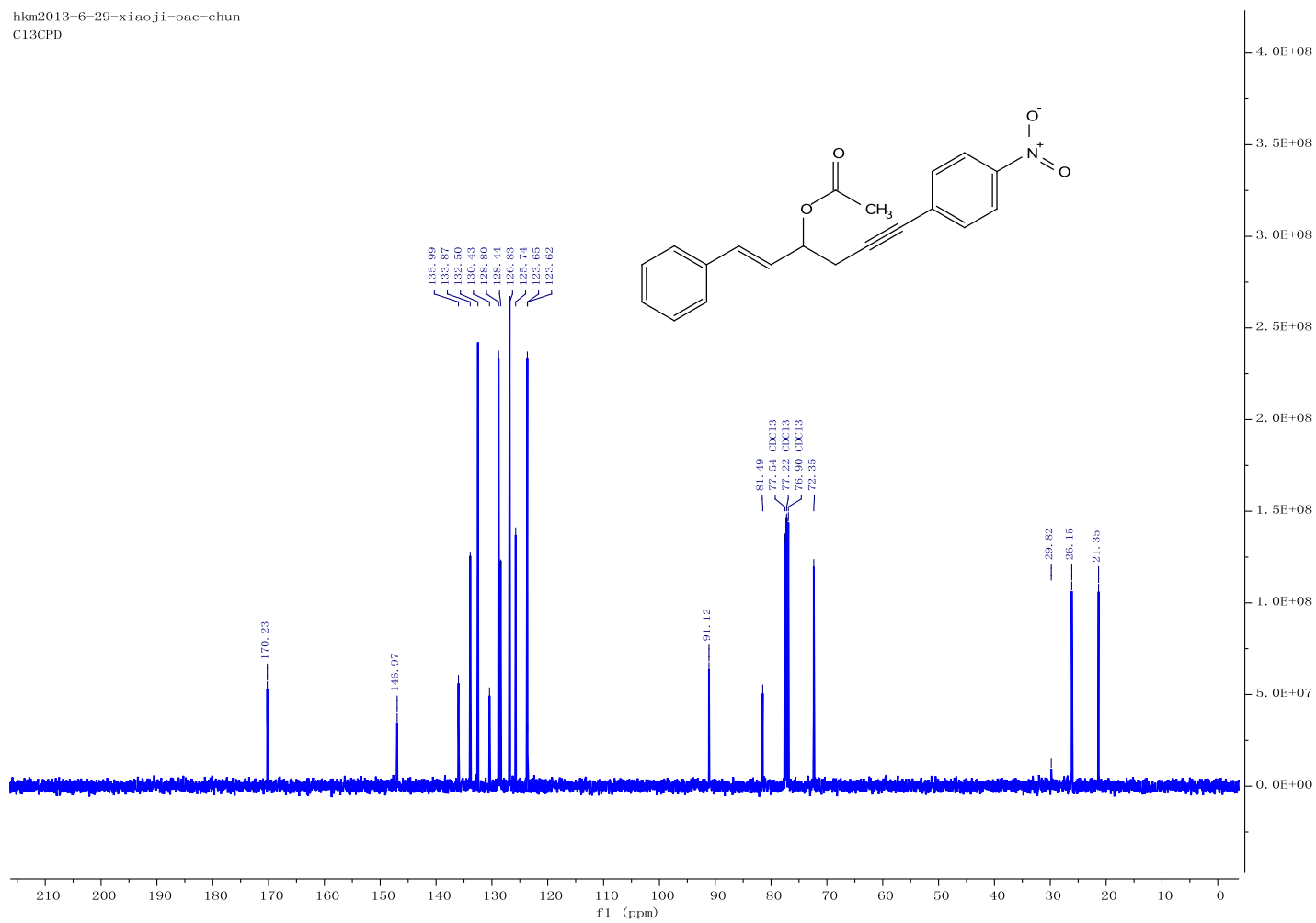
hkm2014-3-24-no2-oh  
13CPD



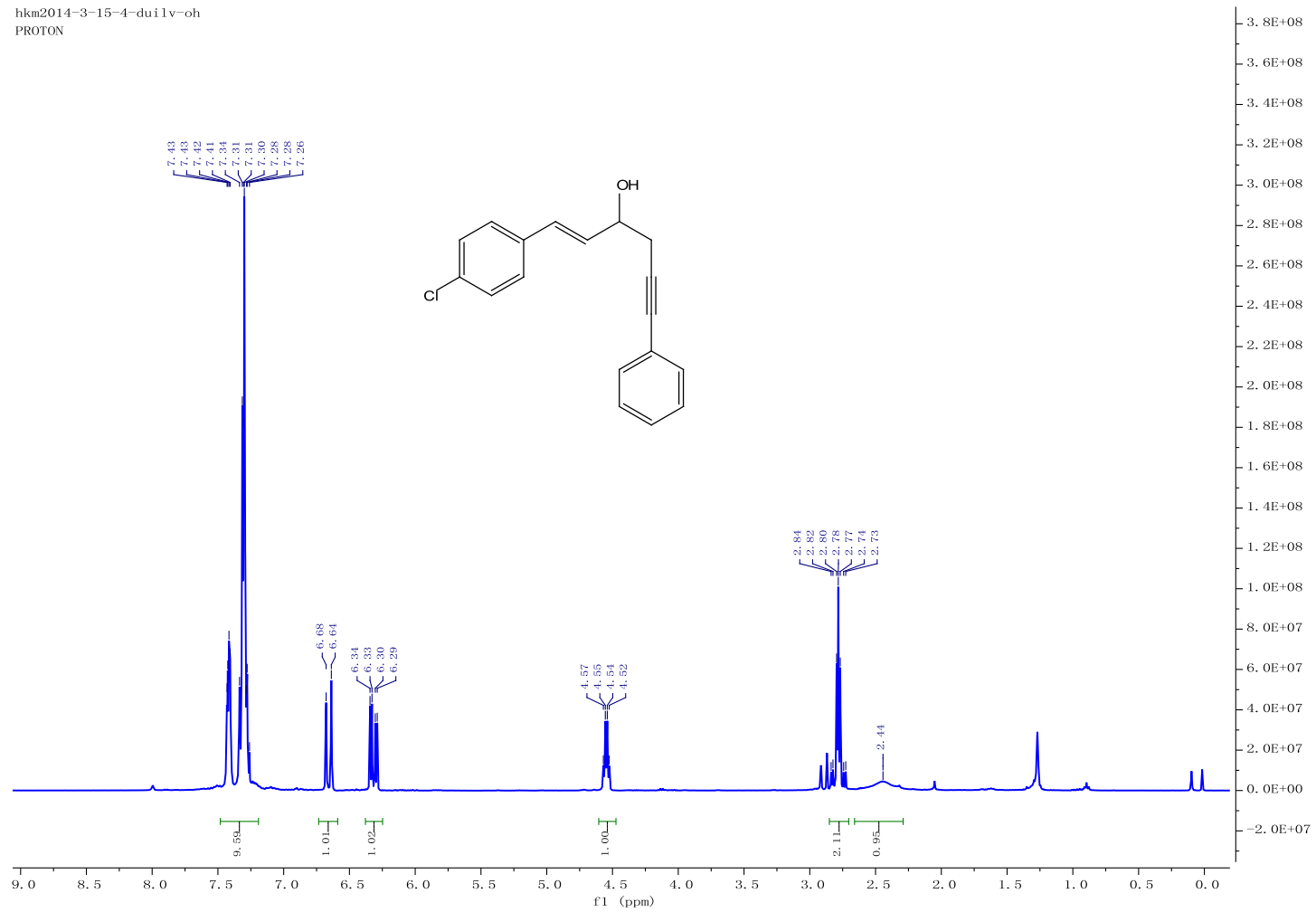
hkm2013-6-29-xiaoji-oac-chun  
PROTON



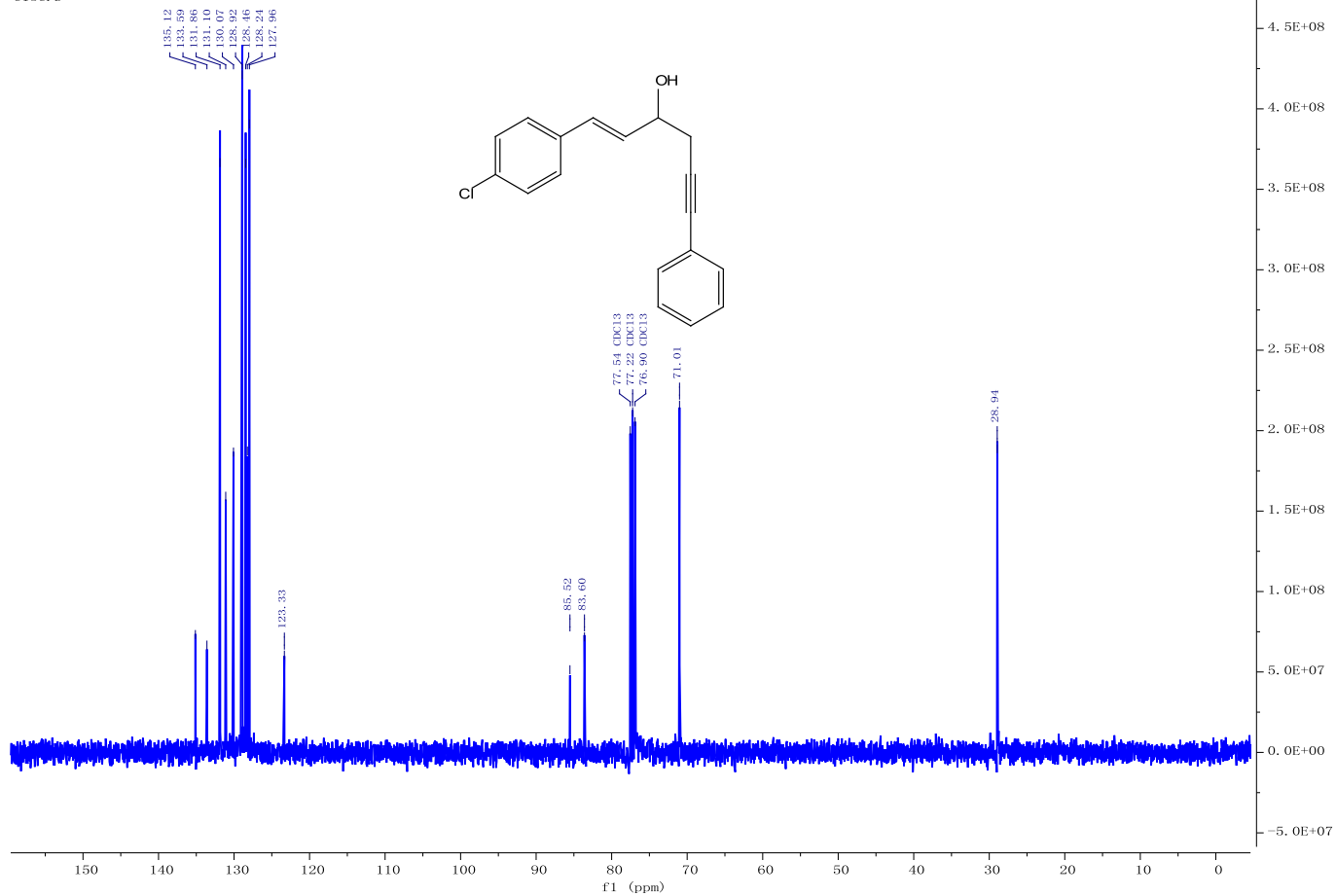
hkm2013-6-29-xiaoji-oac-chun  
C13CPD



hkm2014-3-15-4-duilv-oh  
PROTON

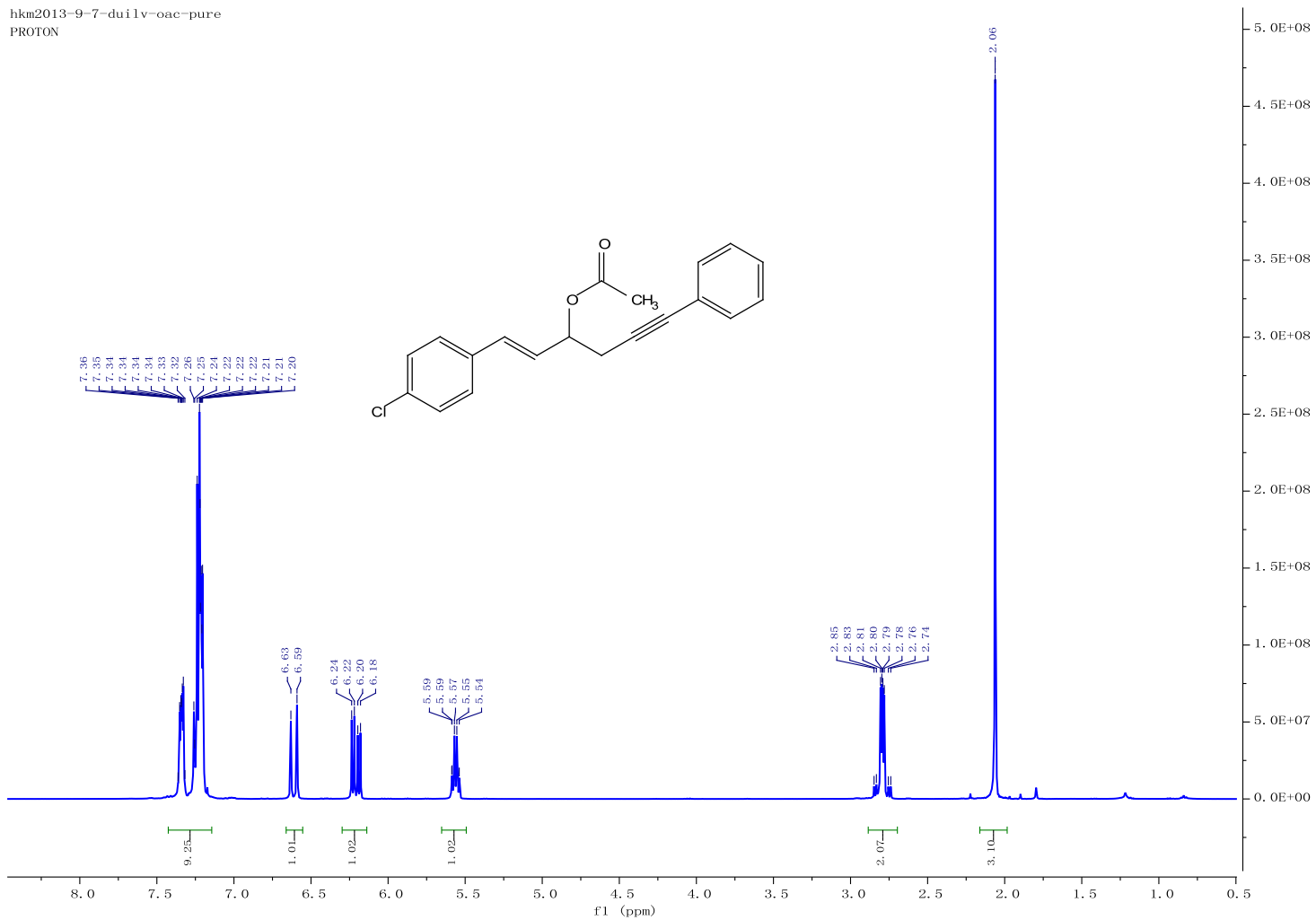


hkm2014-3-15-4-duilv-oh  
C13CPD

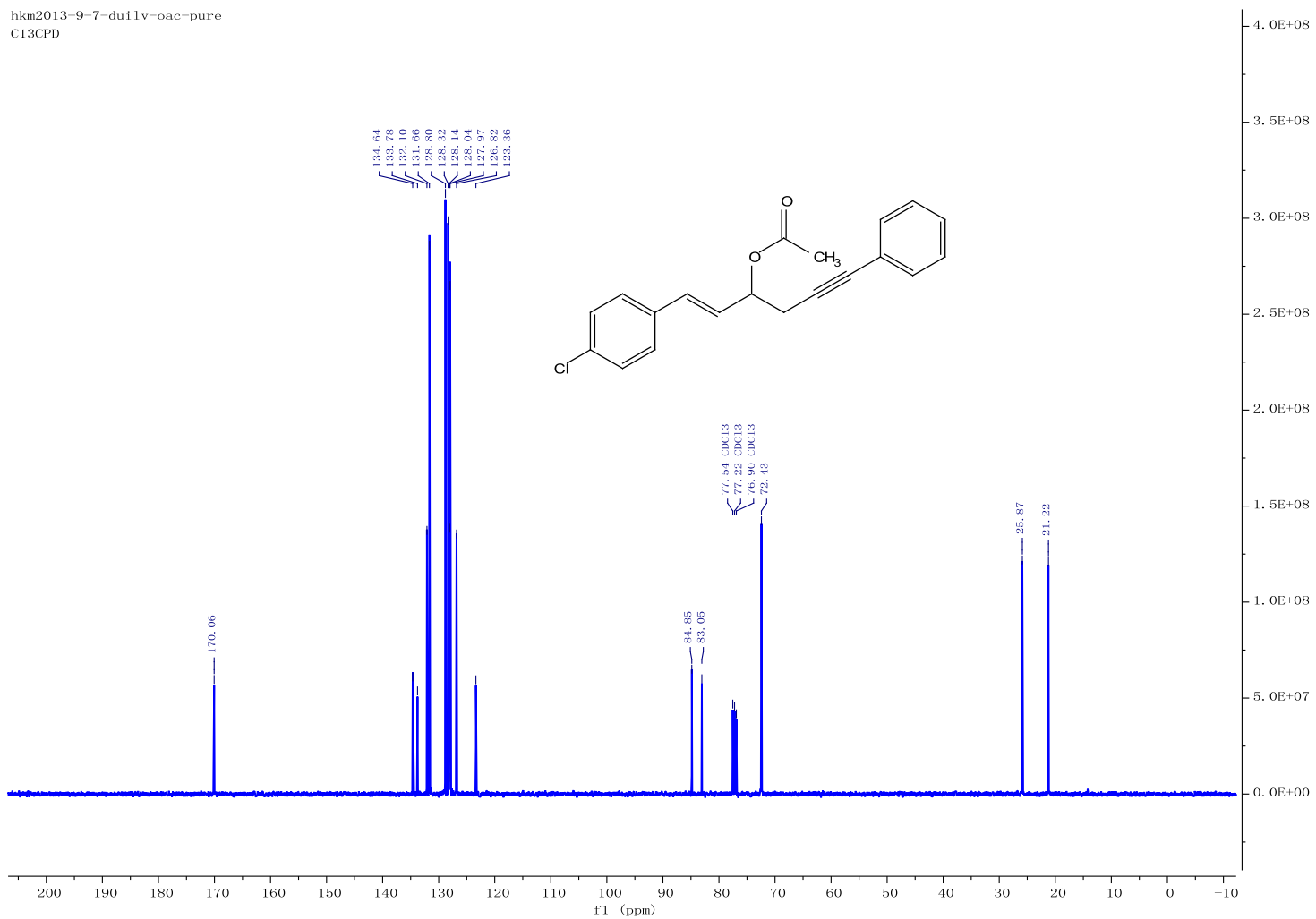




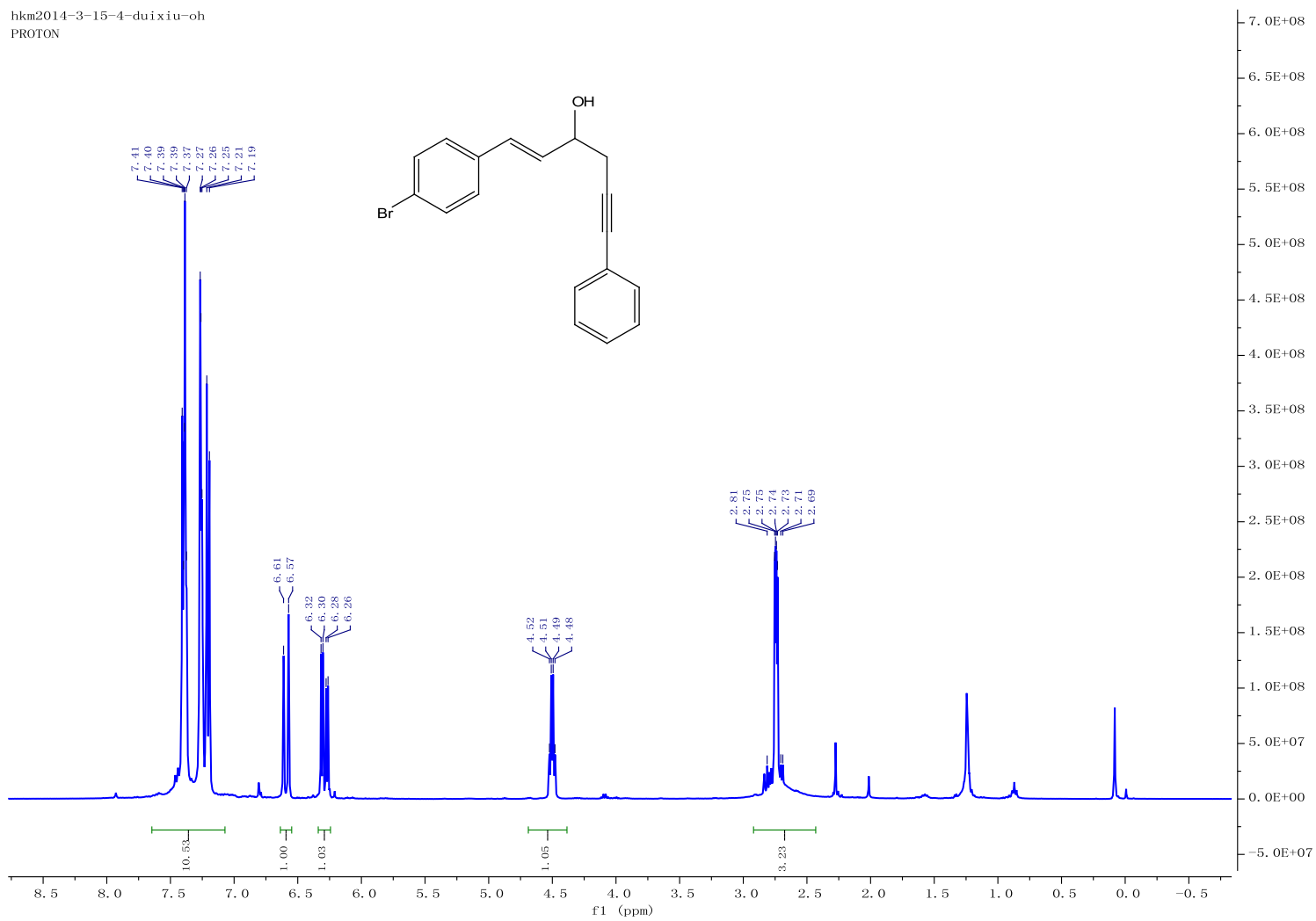
hkm2013-9-7-duilv-oac-pure  
PROTON



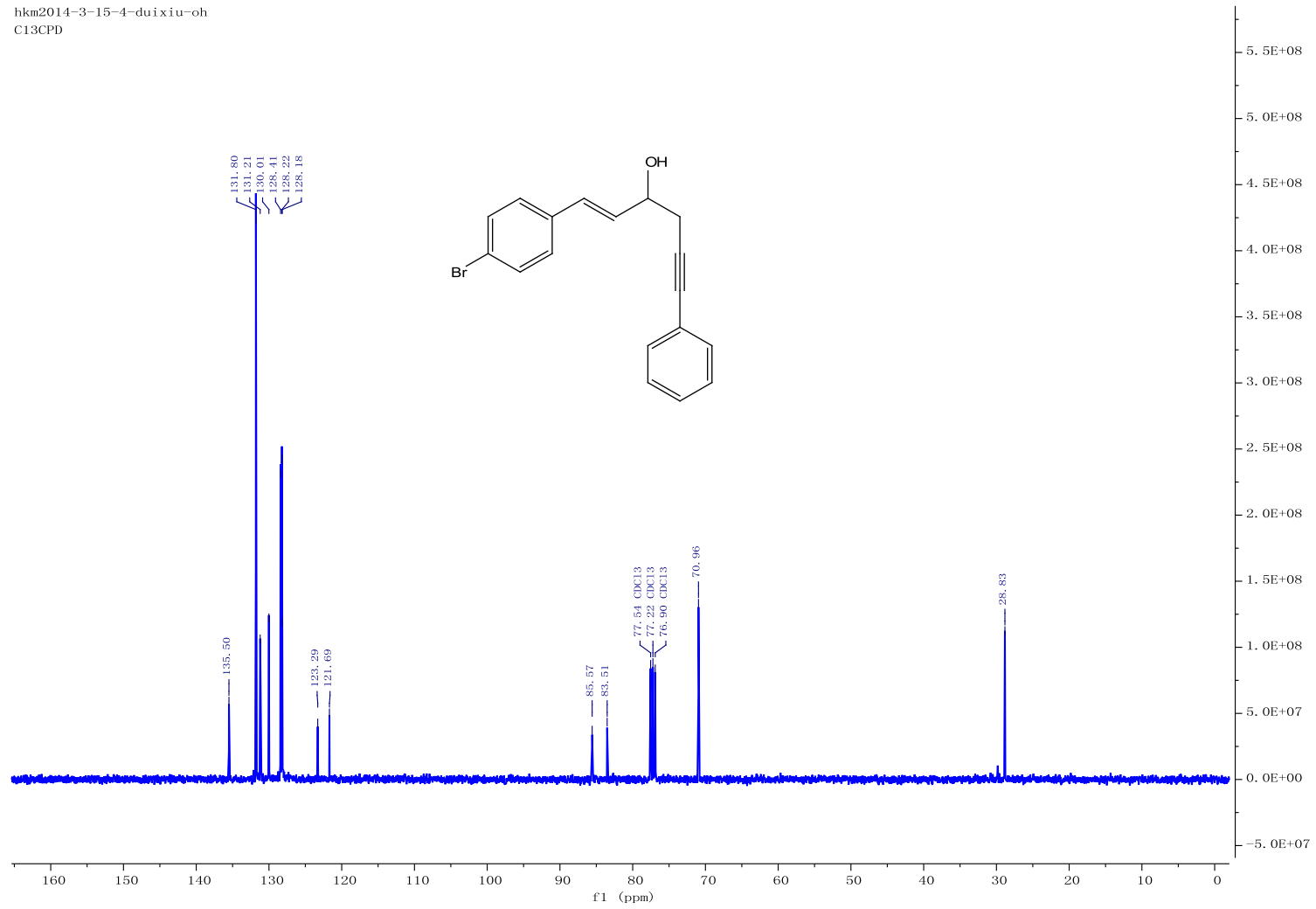
hkm2013-9-7-duilv-oac-pure  
C13CPD



hkm2014-3-15-4-duixiu-oh  
PROTON



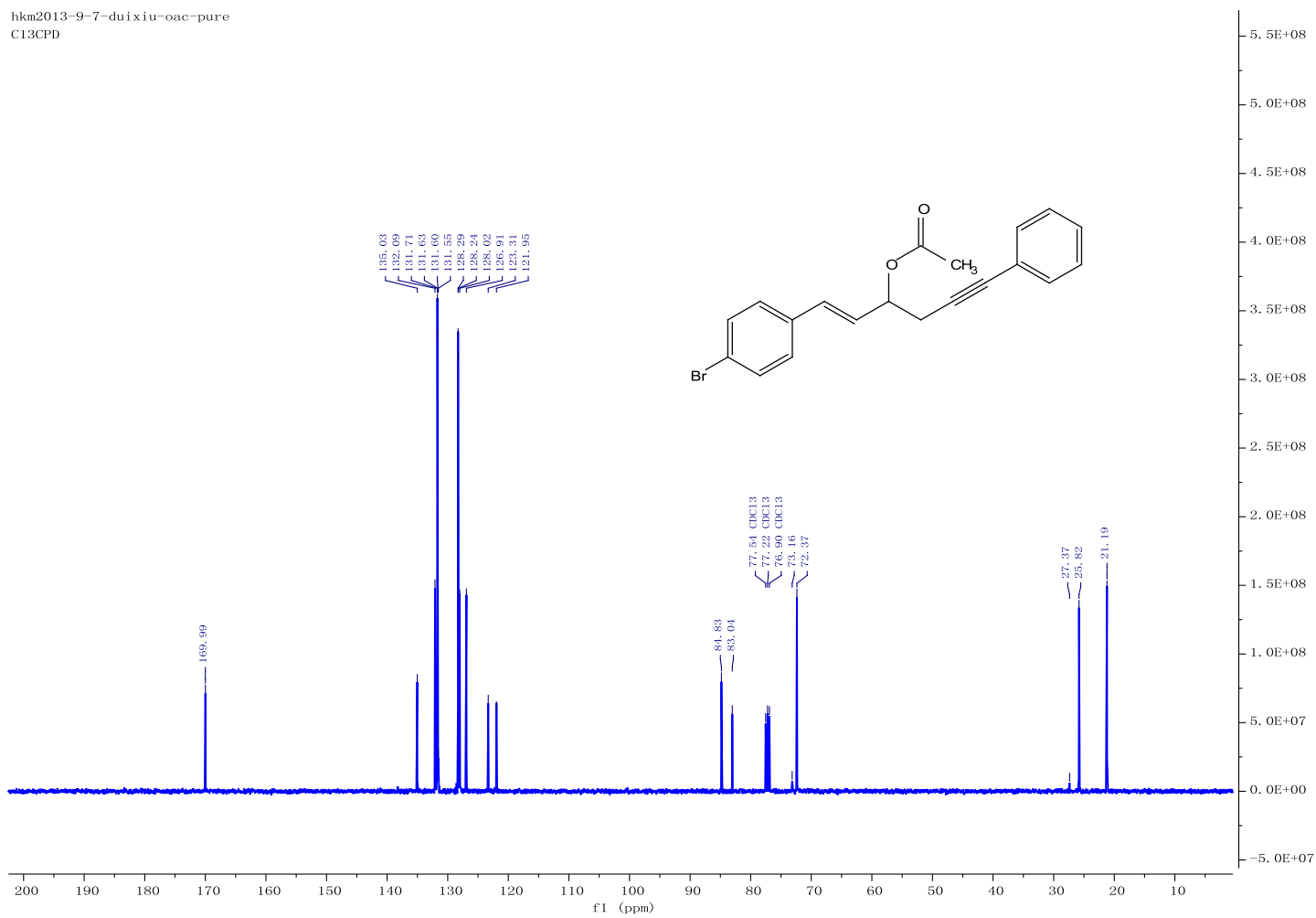
hkm2014-3-15-4-duixiu-oh  
C13CPD



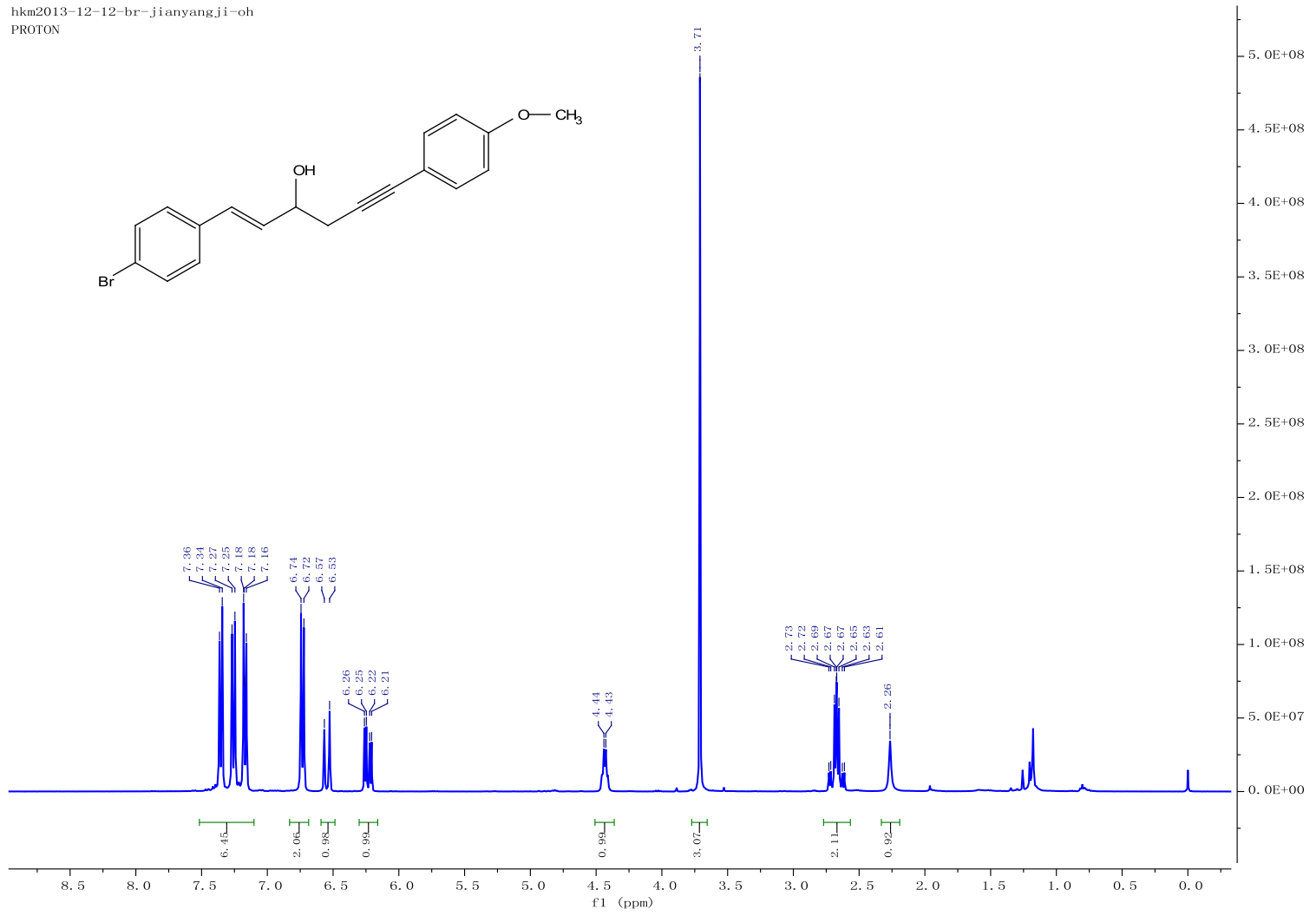
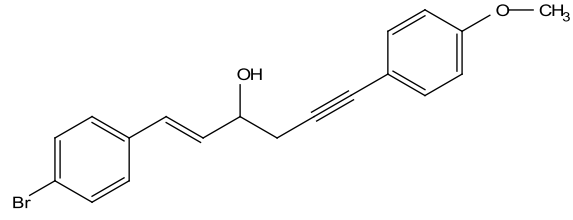
hkm2013-9-7-duixiu-oac-pure  
PROTON



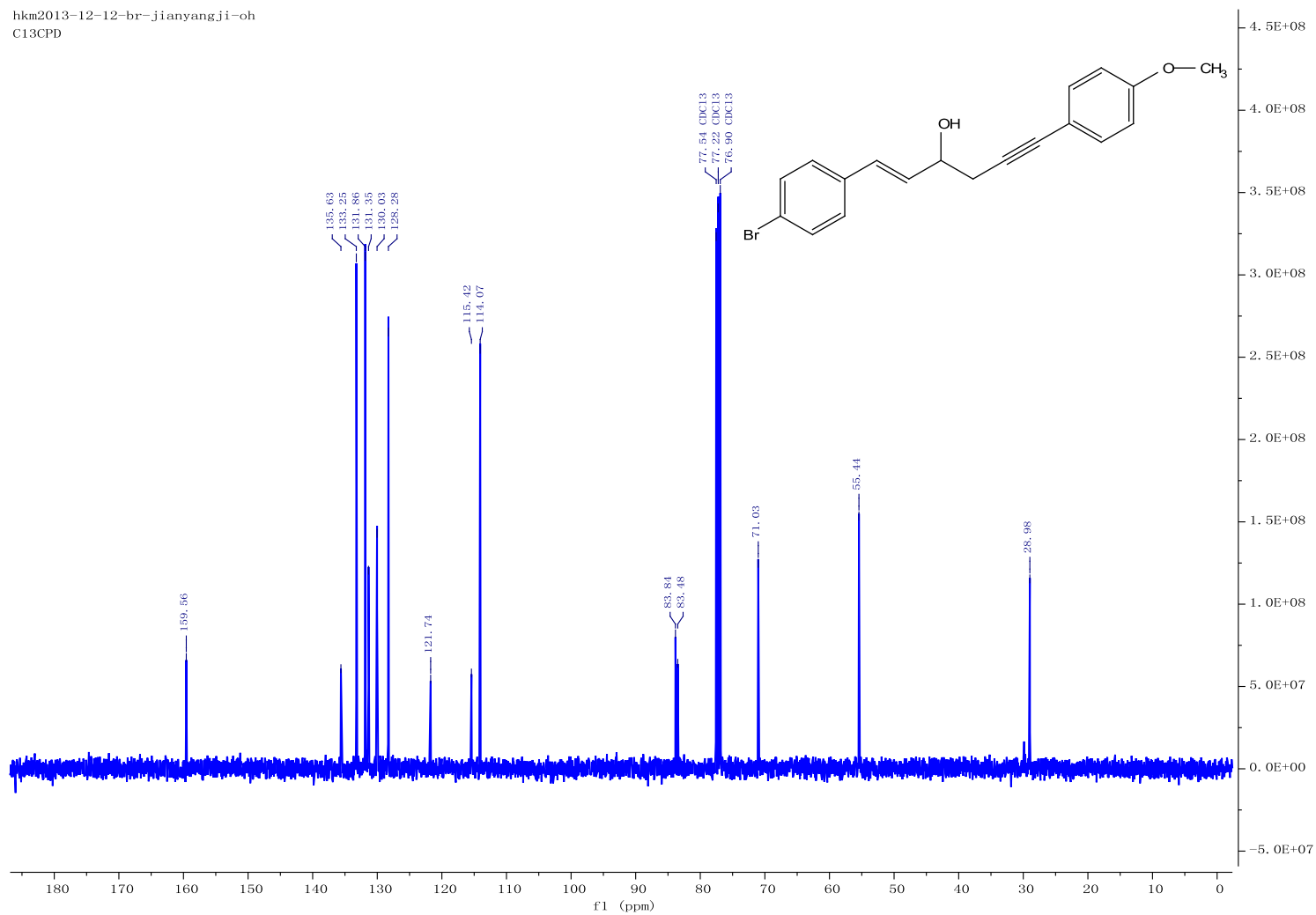
hkm2013-9-7-duixiu-oac-pure  
C13CPD



hkm2013-12-12-br-jianyngji-oh  
PROTON

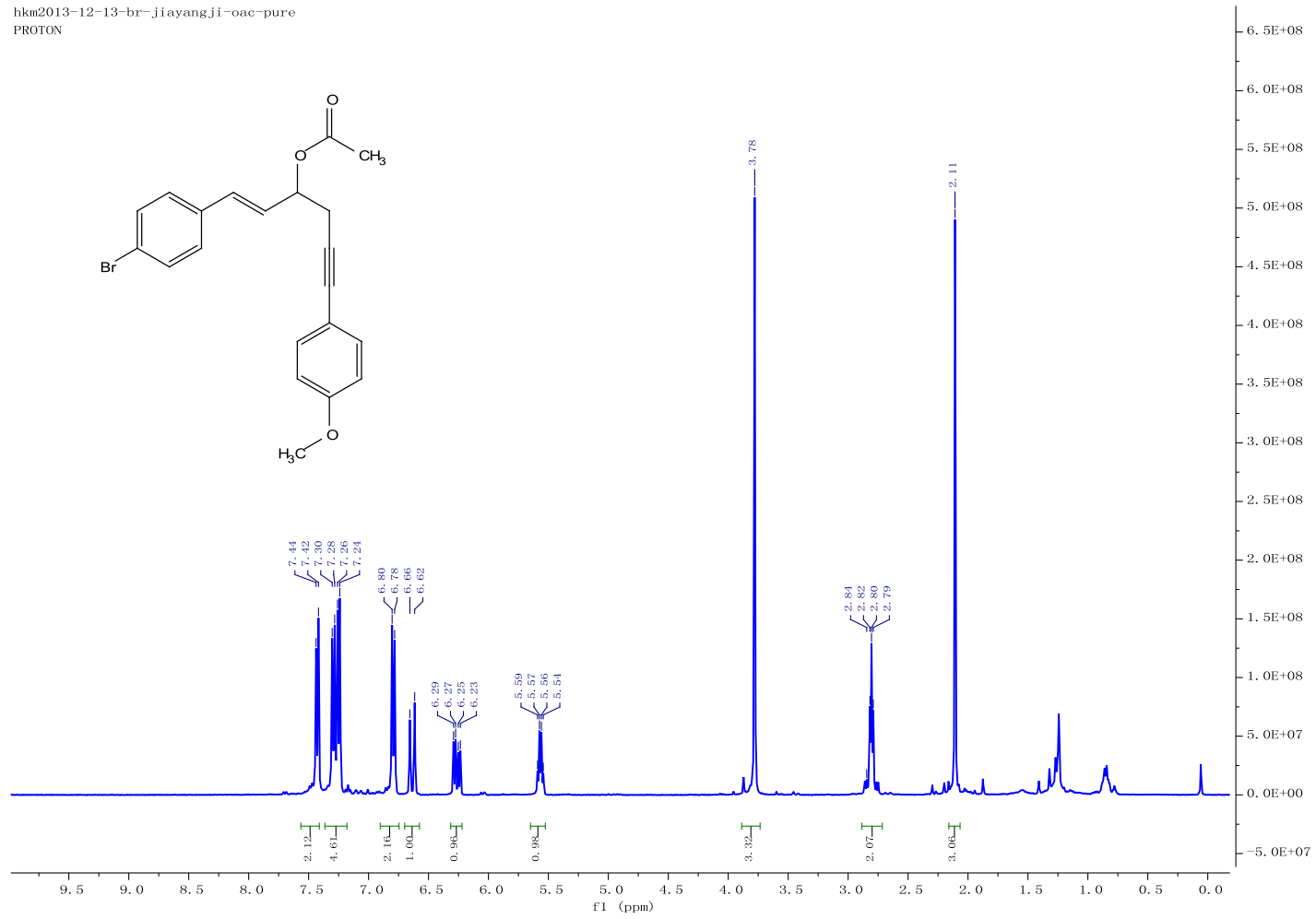
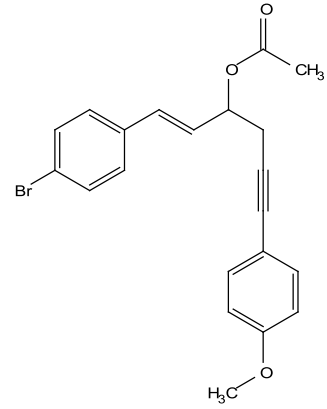


hkm2013-12-12-br-jianyangji-oh  
C13CPD

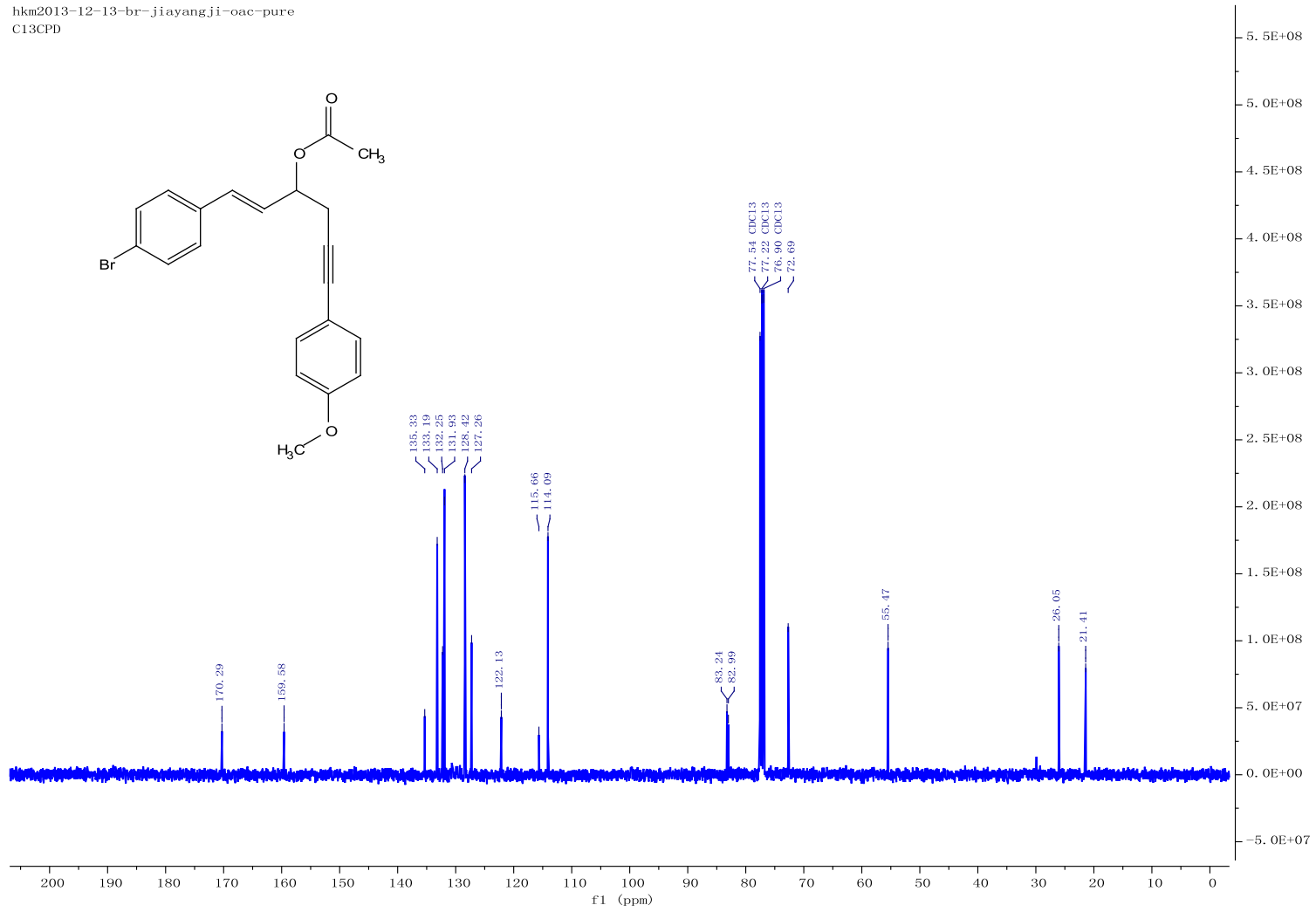




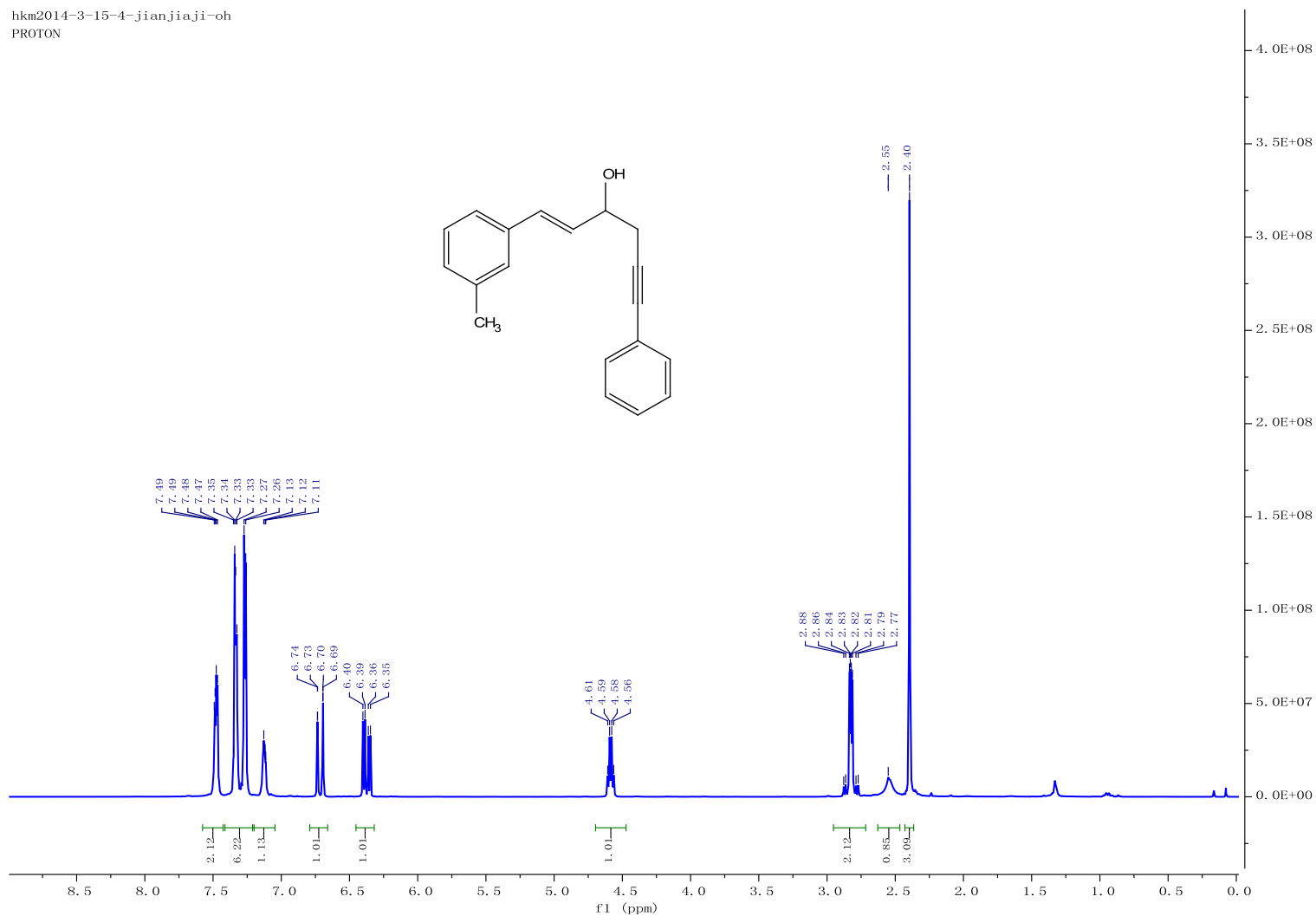
hkm2013-12-13-br-jiayangji-oac-pure  
PROTON



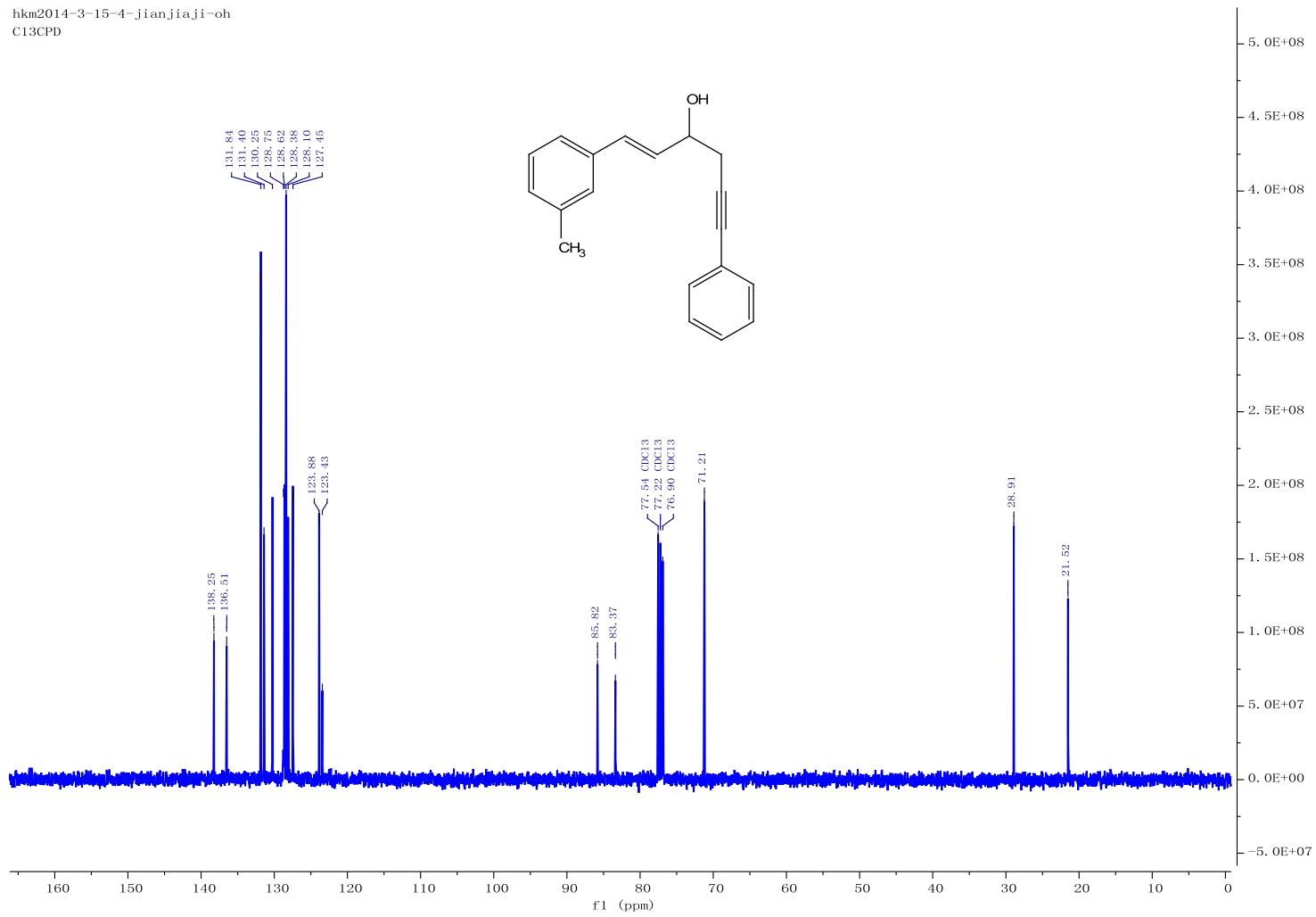
hkm2013-12-13-br-jiayangji-oac-pure  
C13CPD



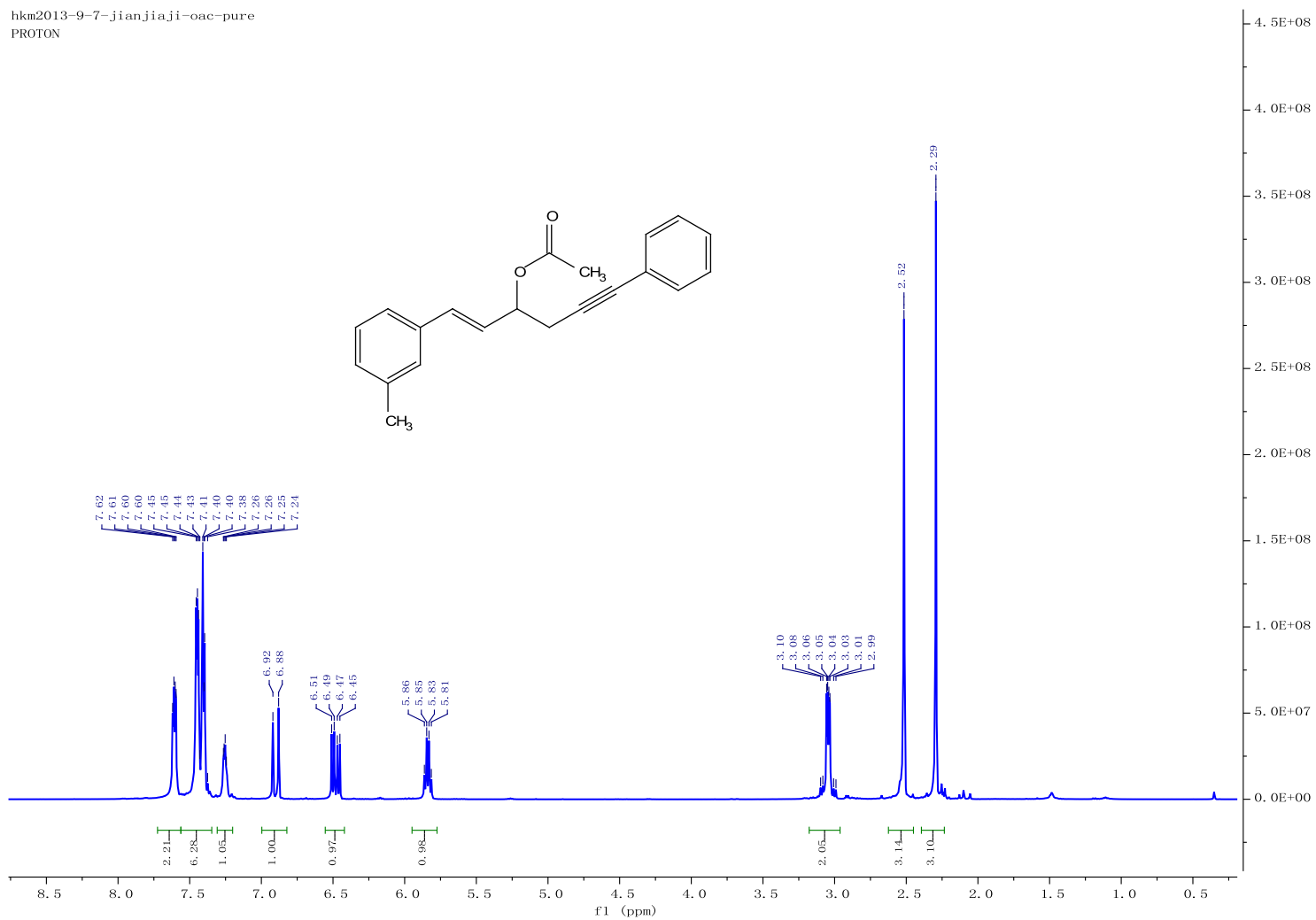
hkm2014-3-15-4-jianjiaji-oh  
PROTON



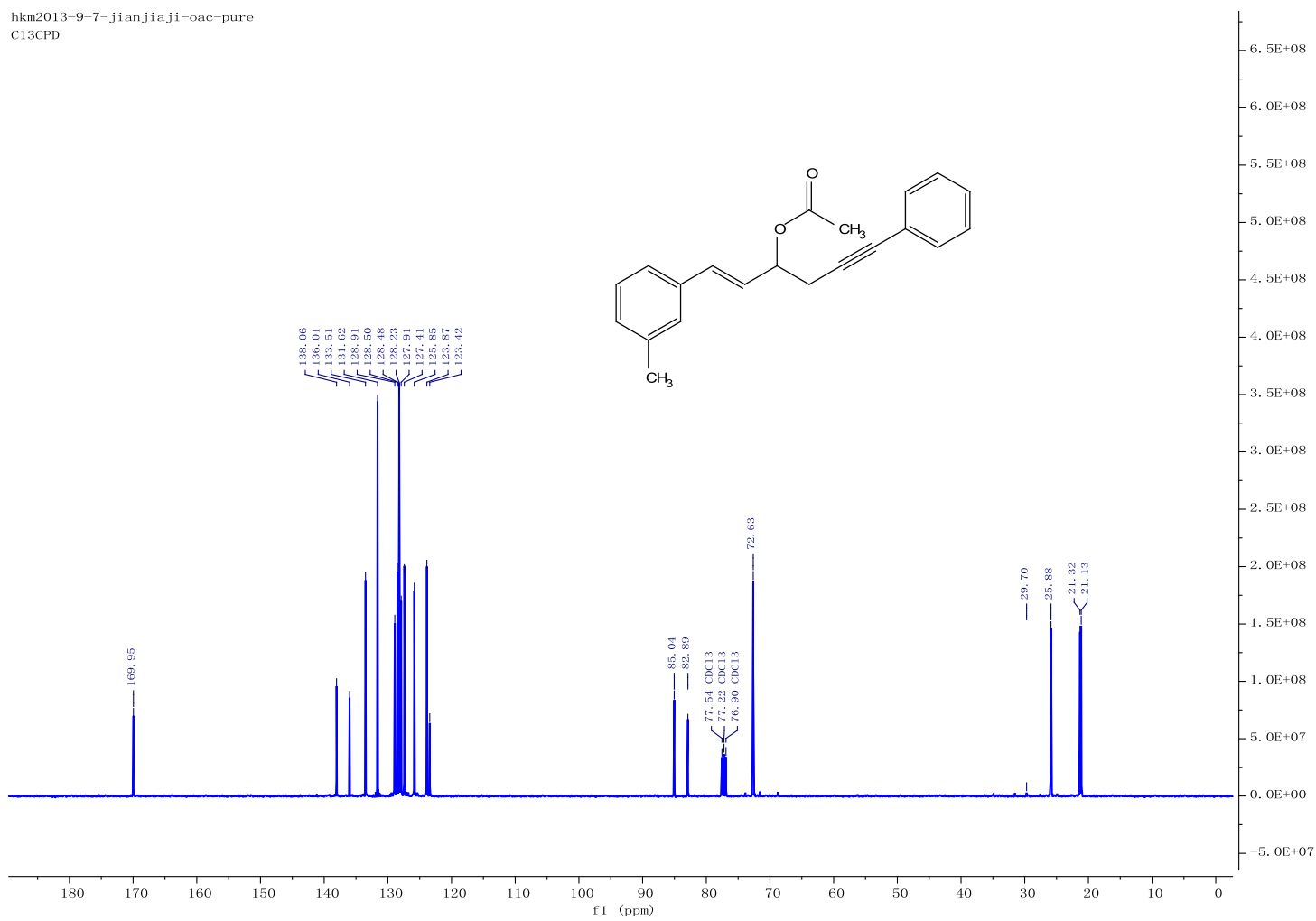
hkm2014-3-15-4-jianjiagi-oh  
C13CPD



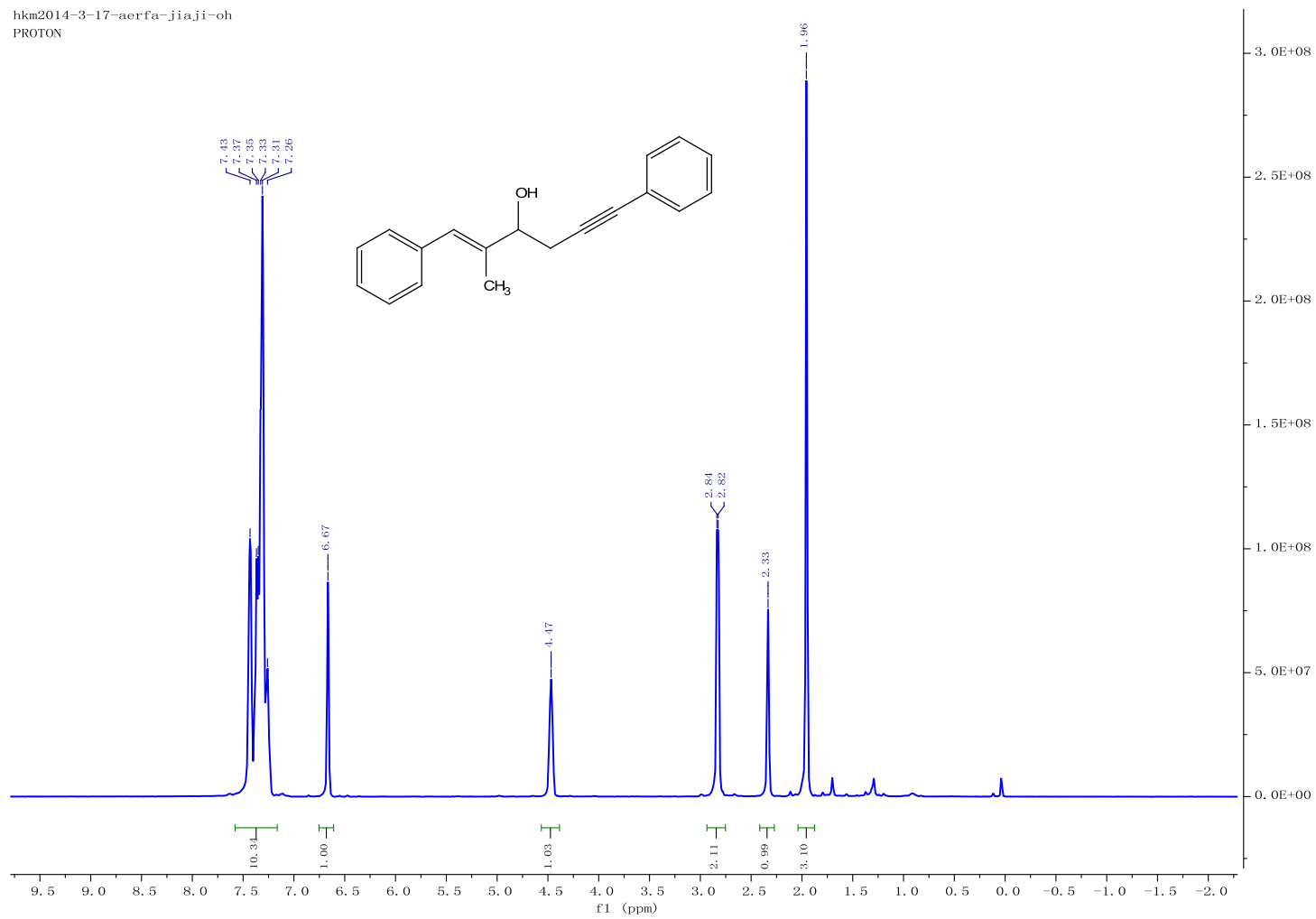
hkm2013-9-7-jianjiaji-oac-pure  
PROTON



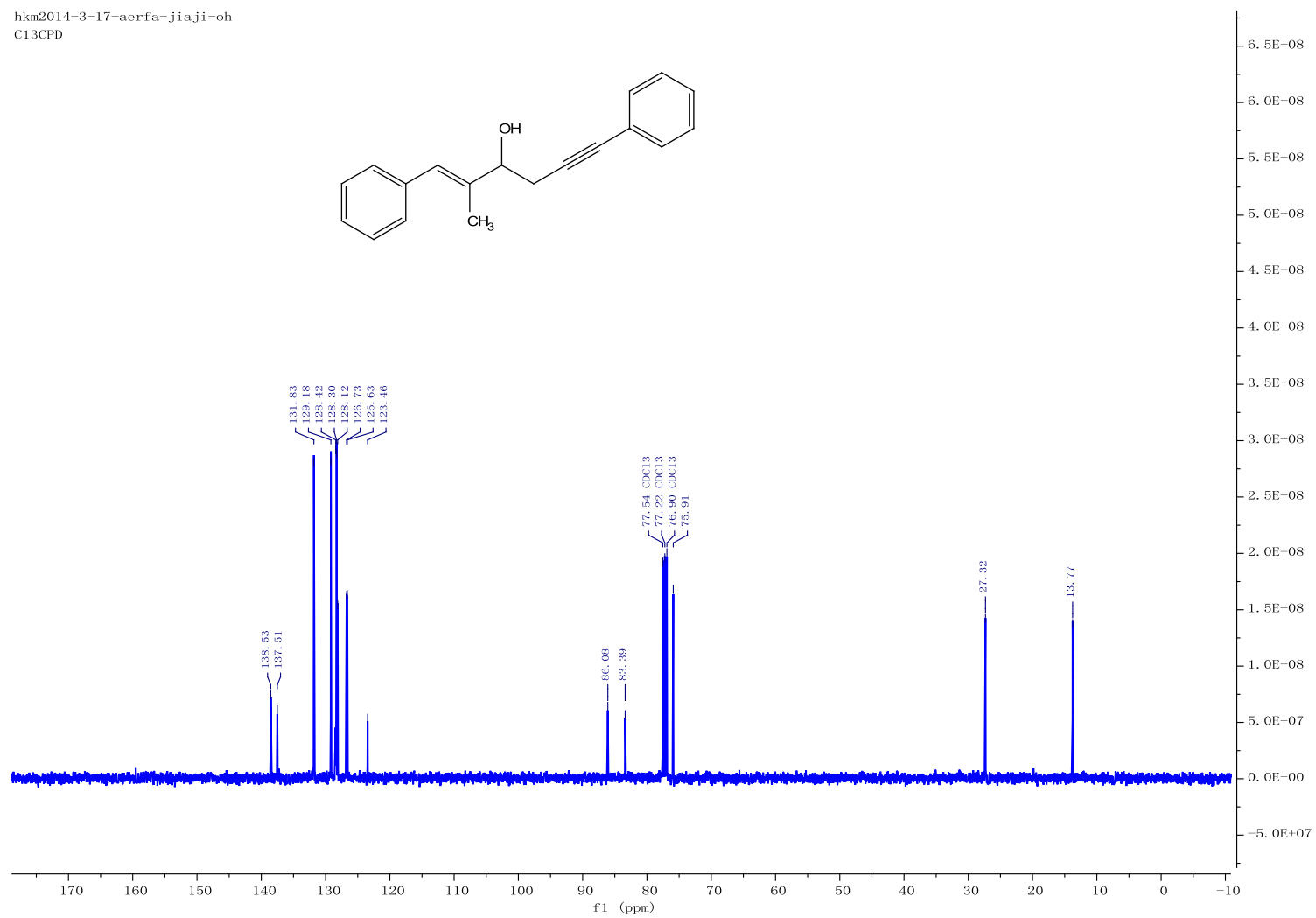
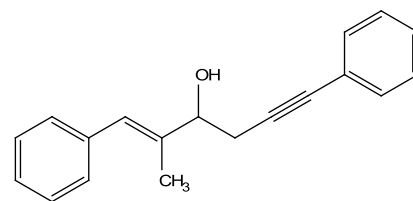
hkm2013-9-7-jianjiaji-oac-pure  
C13CPD



hkm2014-3-17-aerfa-jiaji-oh  
PROTON

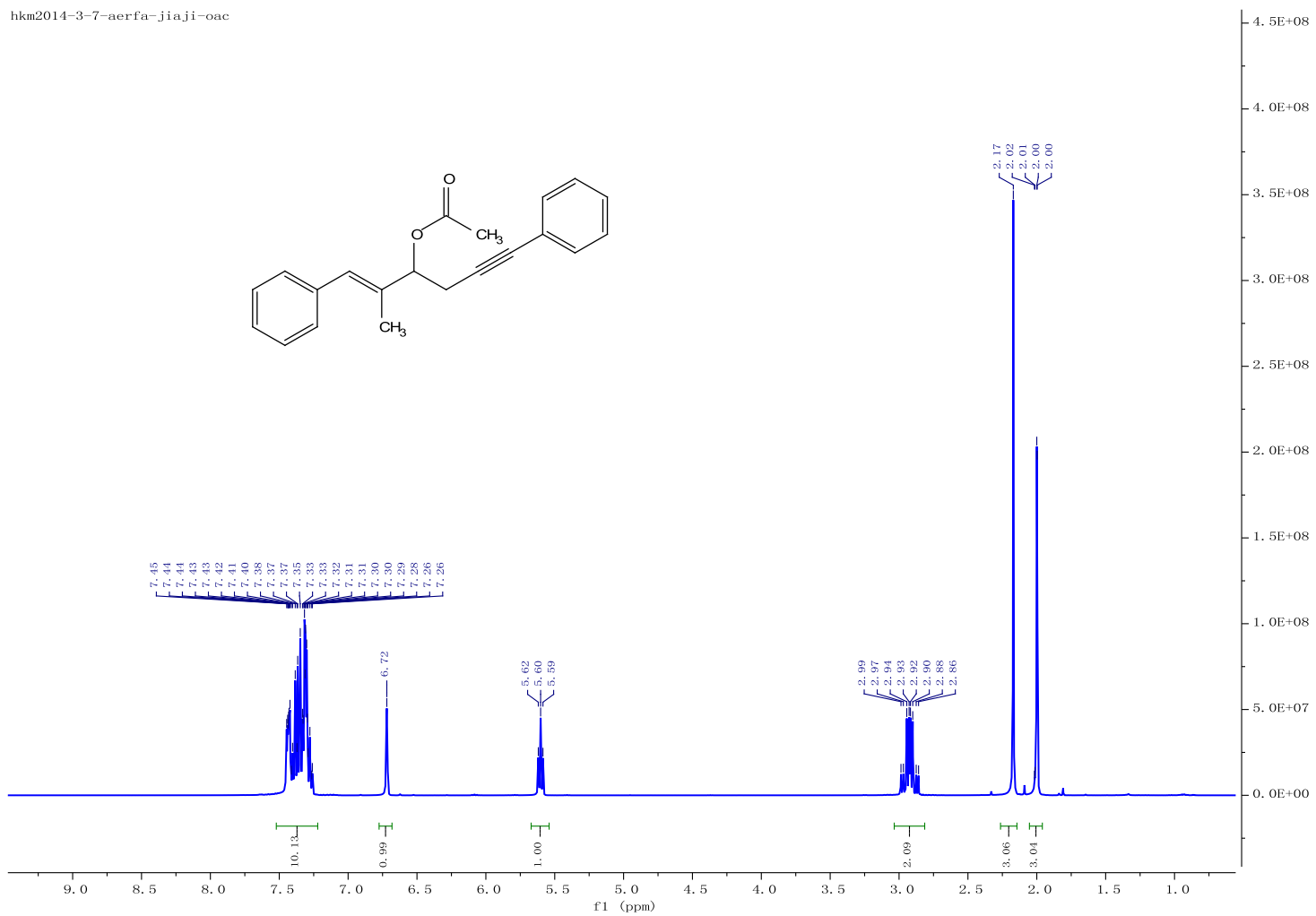
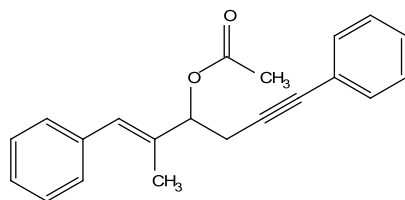


hkm2014-3-17-aerfa-jiaji-oh  
C13CPD

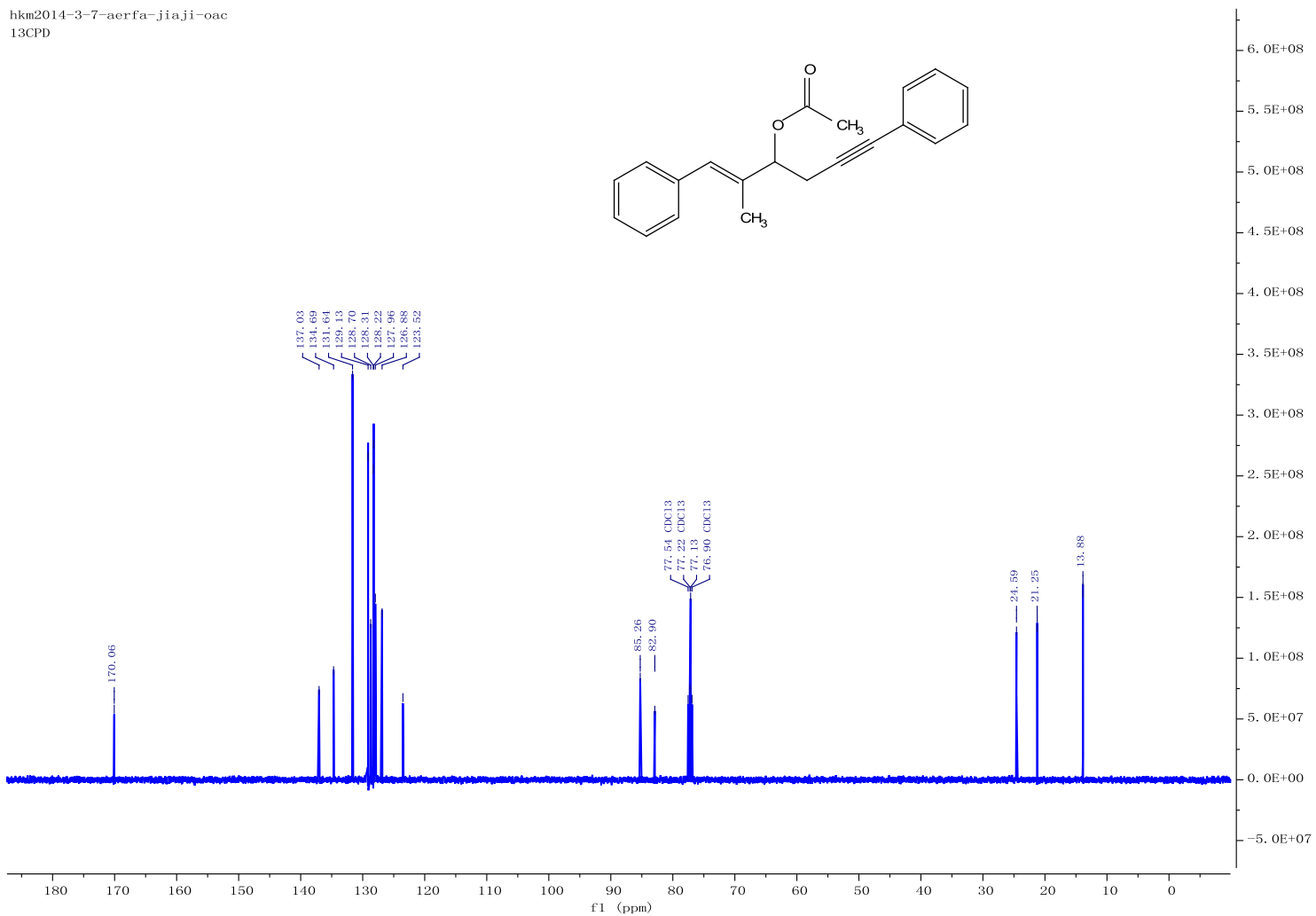
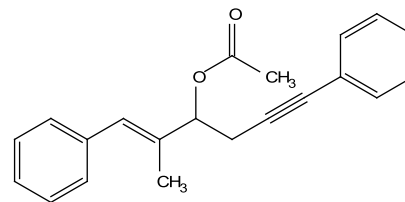




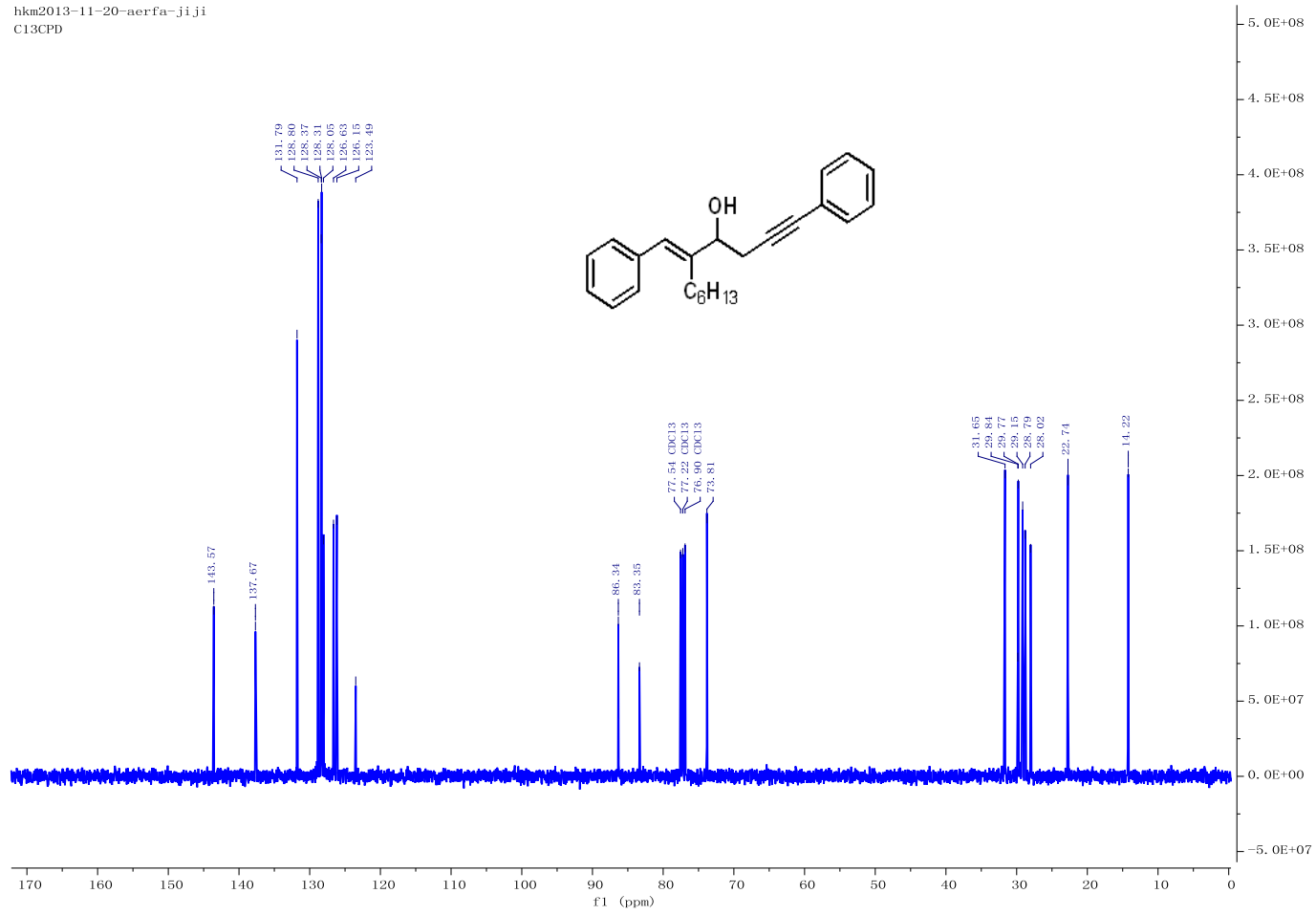
hkm2014-3-7-aerfa-jiaji-oac



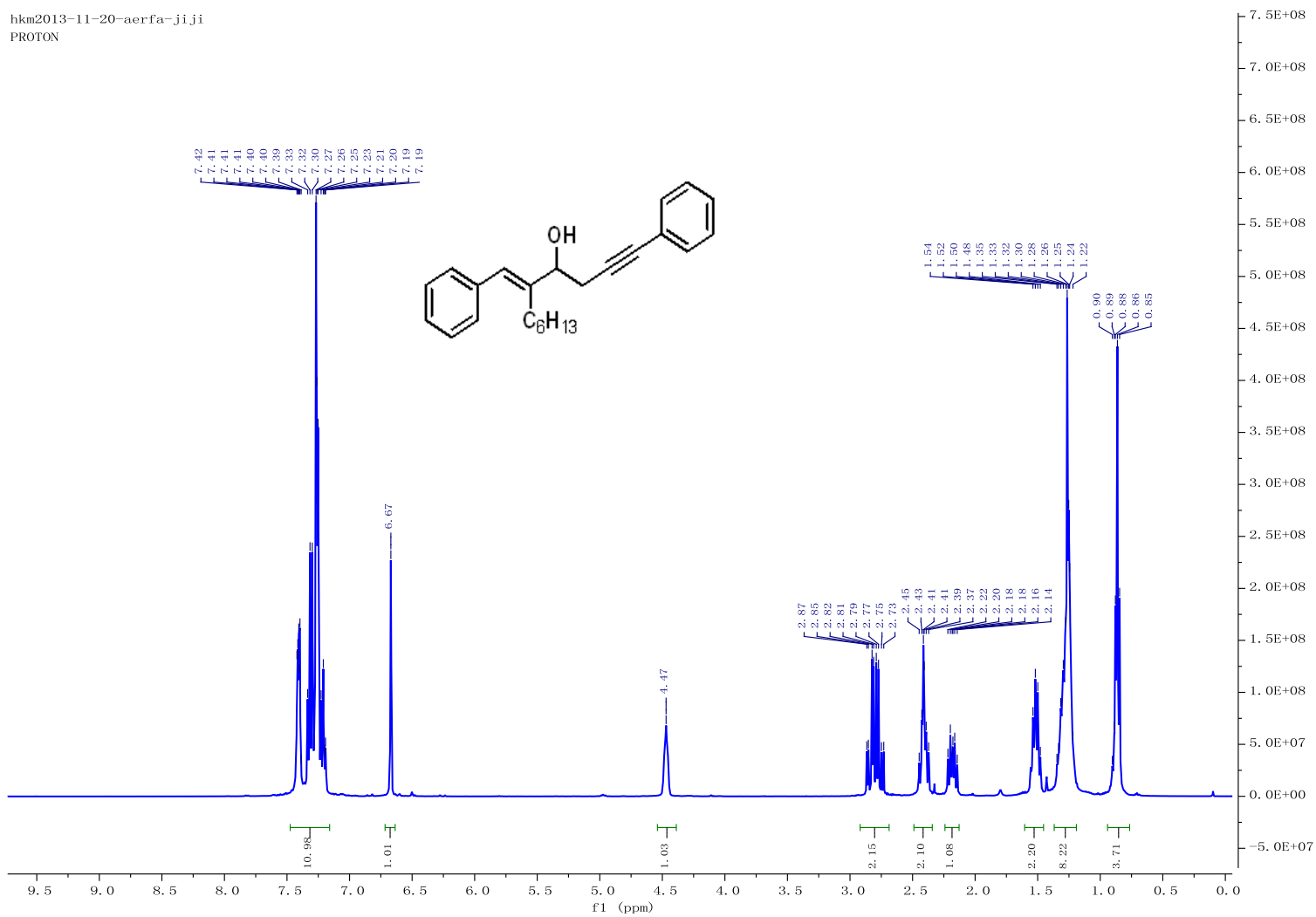
hkm2014-3-7-aerfa-jiaji-oac  
13CPD



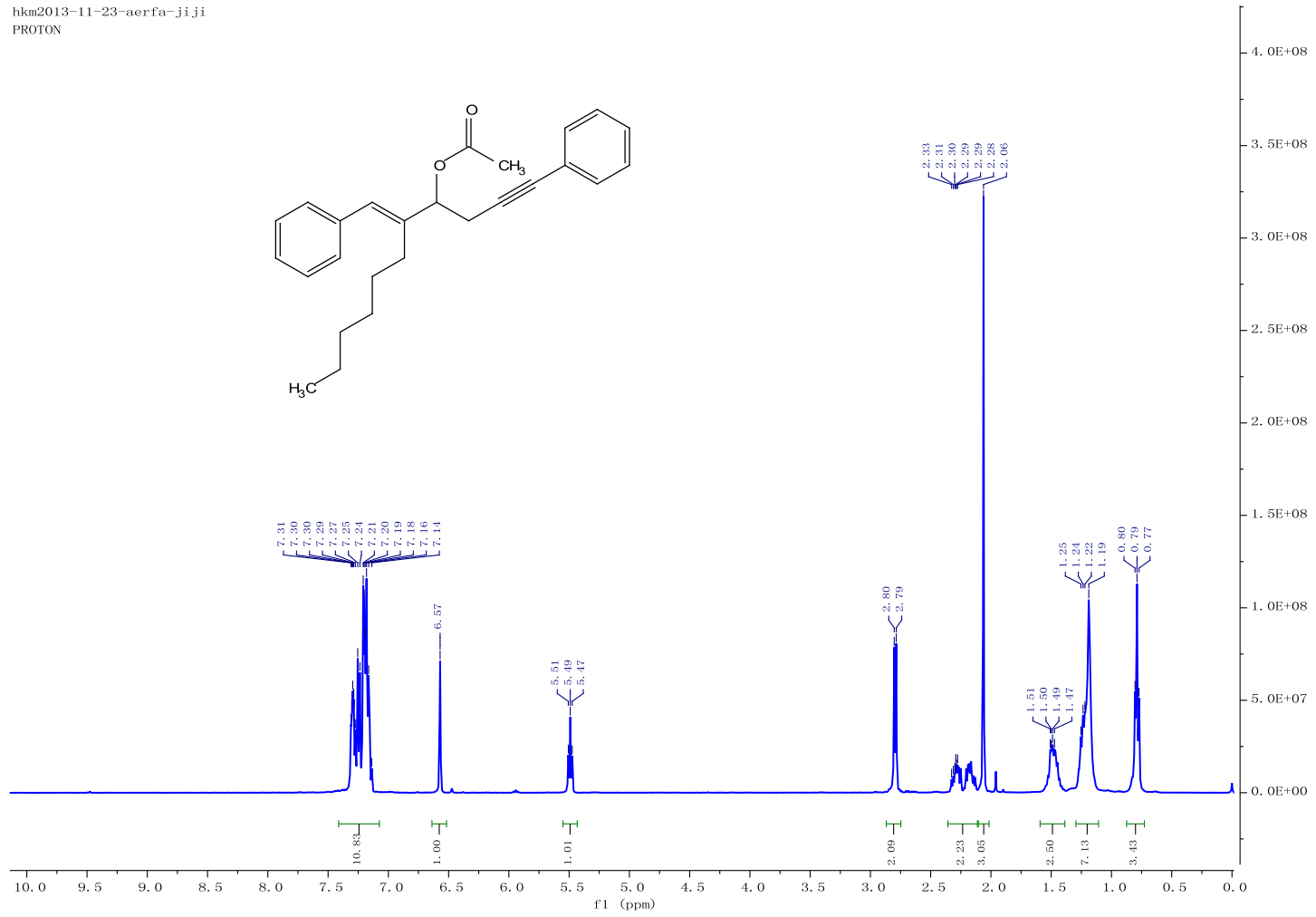
hkm2013-11-20-aerfa-ji-ji  
C13CPD



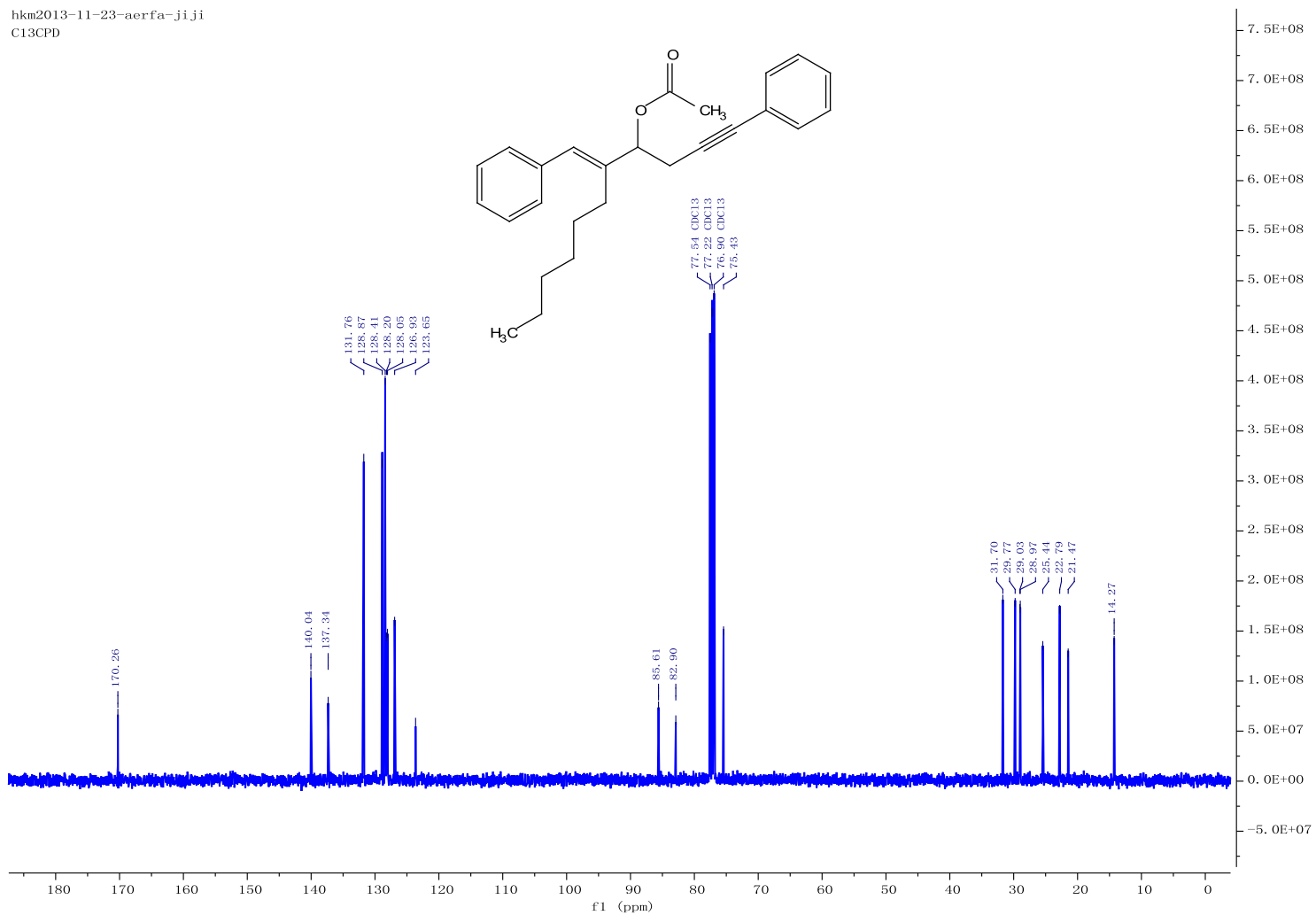
hkm2013-11-20-aerfa-jiji  
PROTON



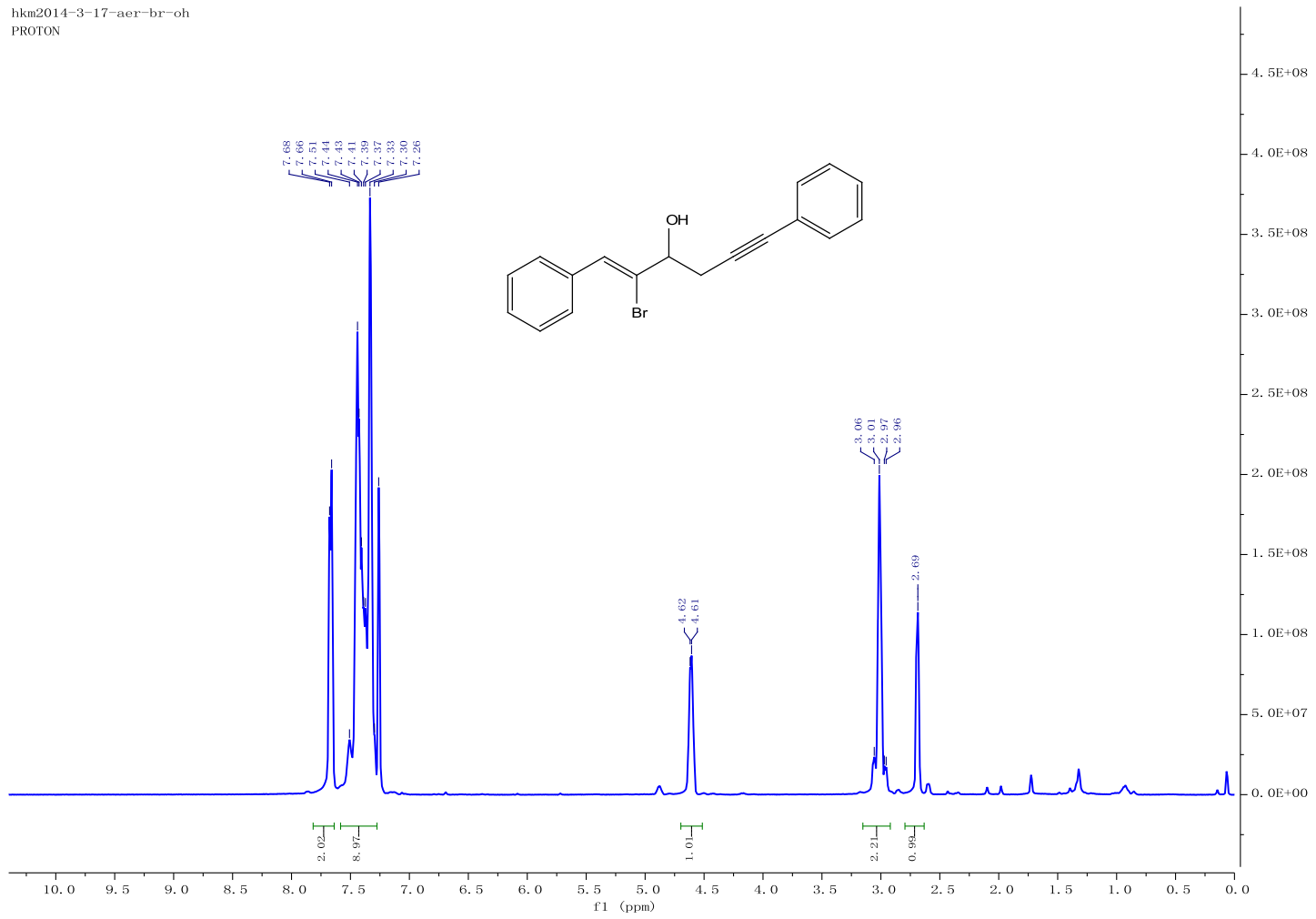
hkm2013-11-23-aerfa-jiji  
PROTON



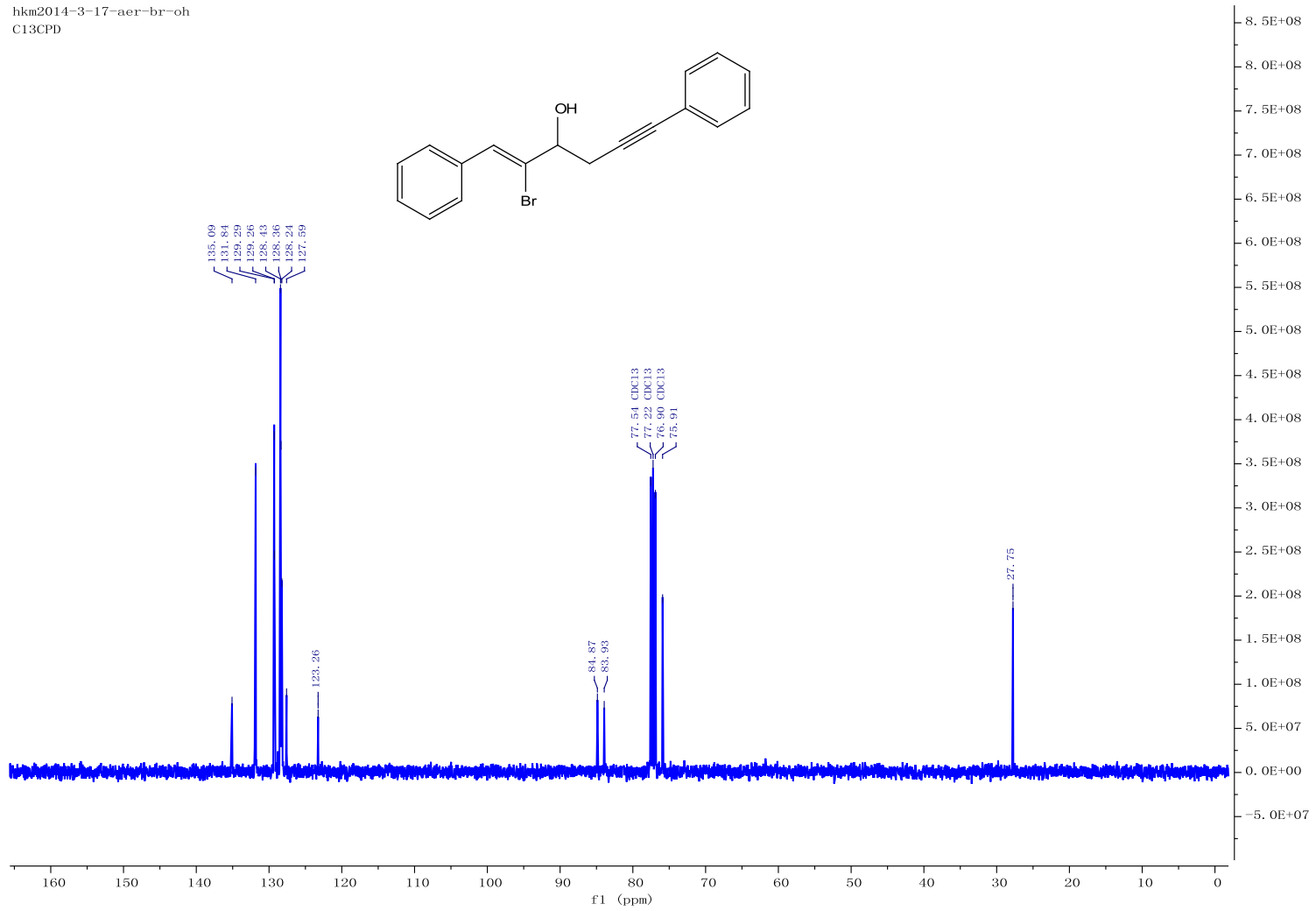
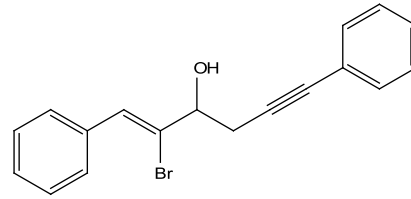
hkm2013-11-23-aerfa-jiji  
C13CPD



hkm2014-3-17-aer-br-oh  
PROTON

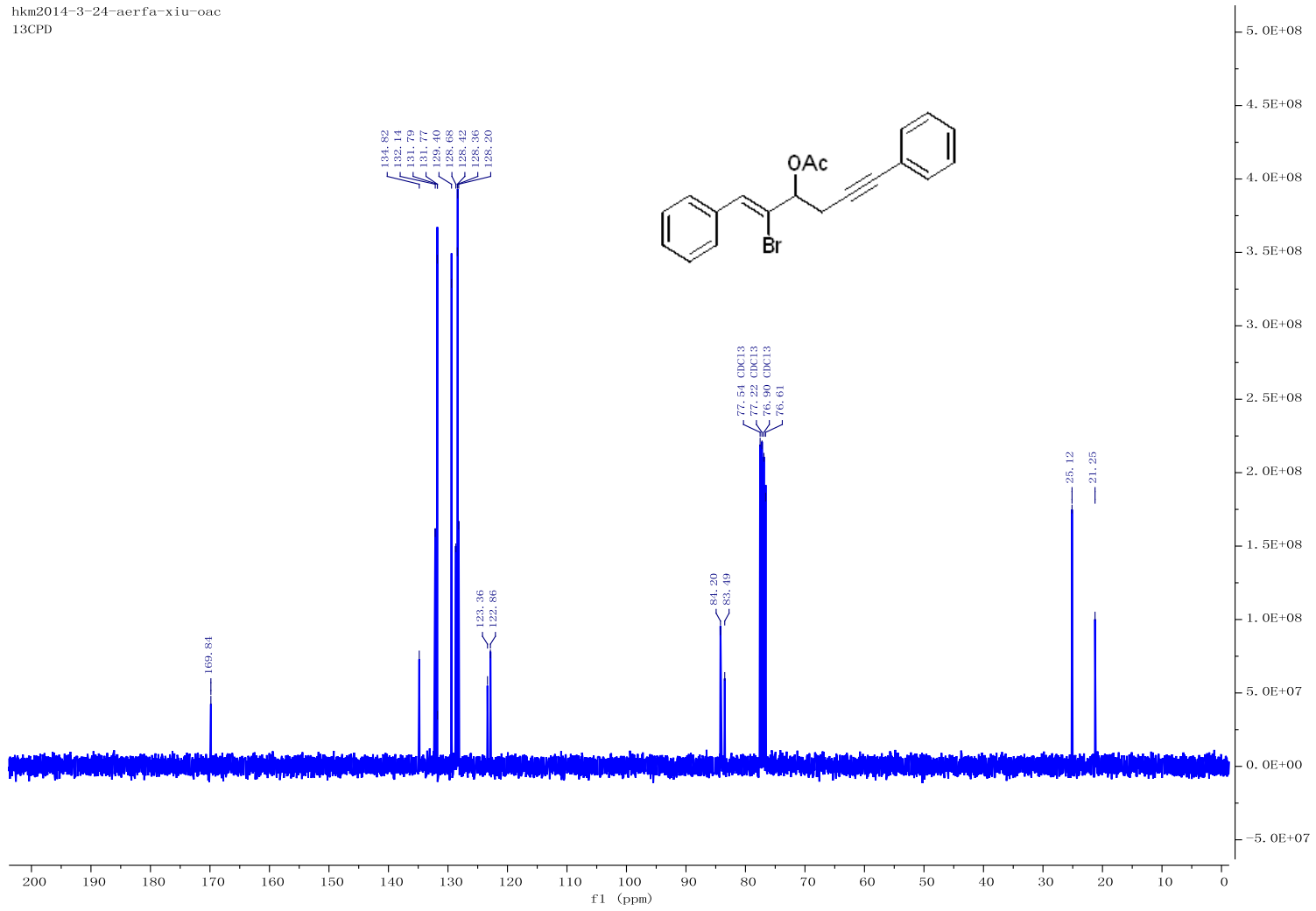


hkm2014-3-17-aer-br-oh  
C13CPD

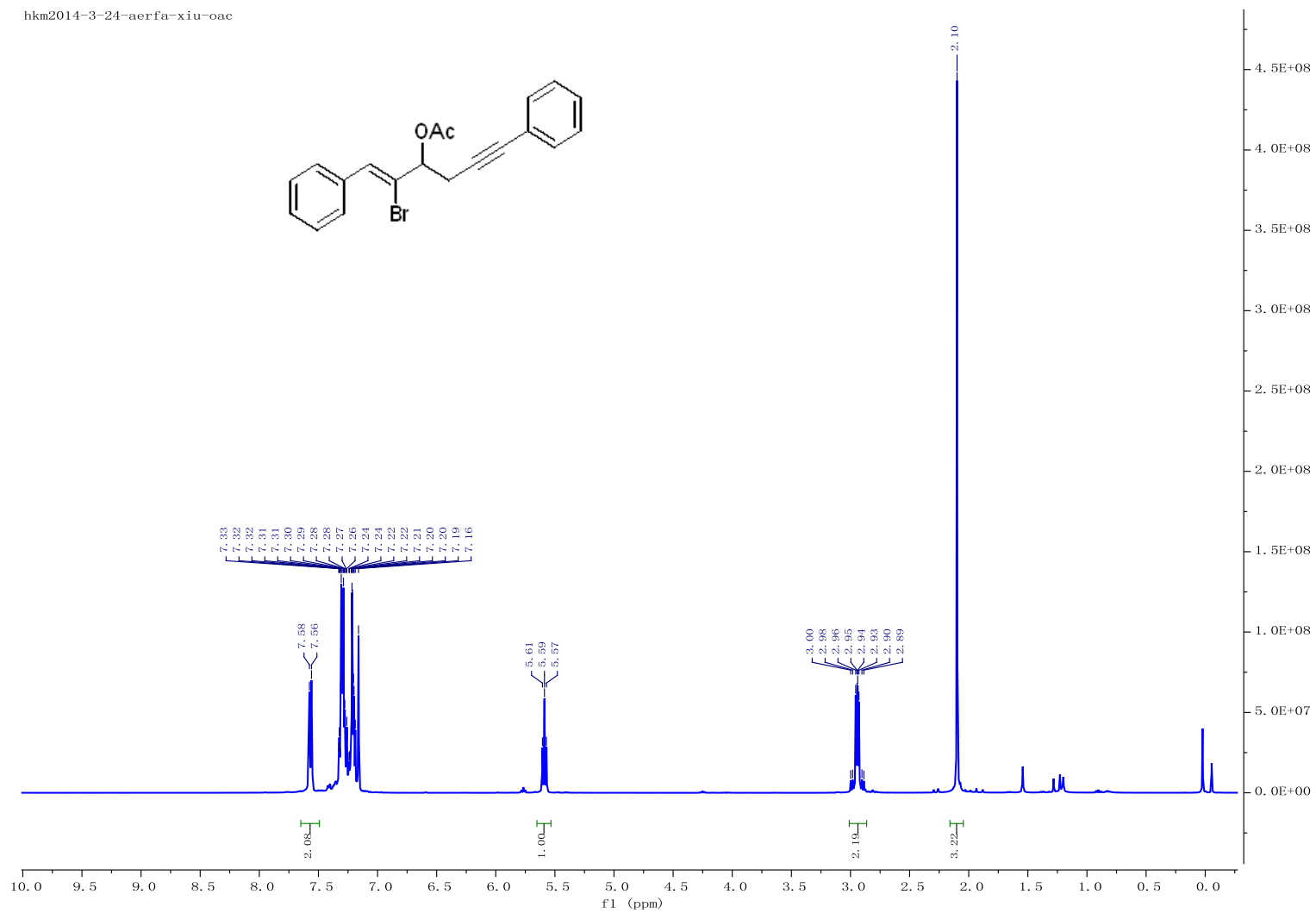
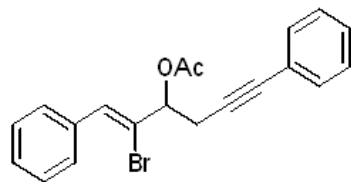




hkm2014-3-24-aerfa-xiu-oac  
13CPD

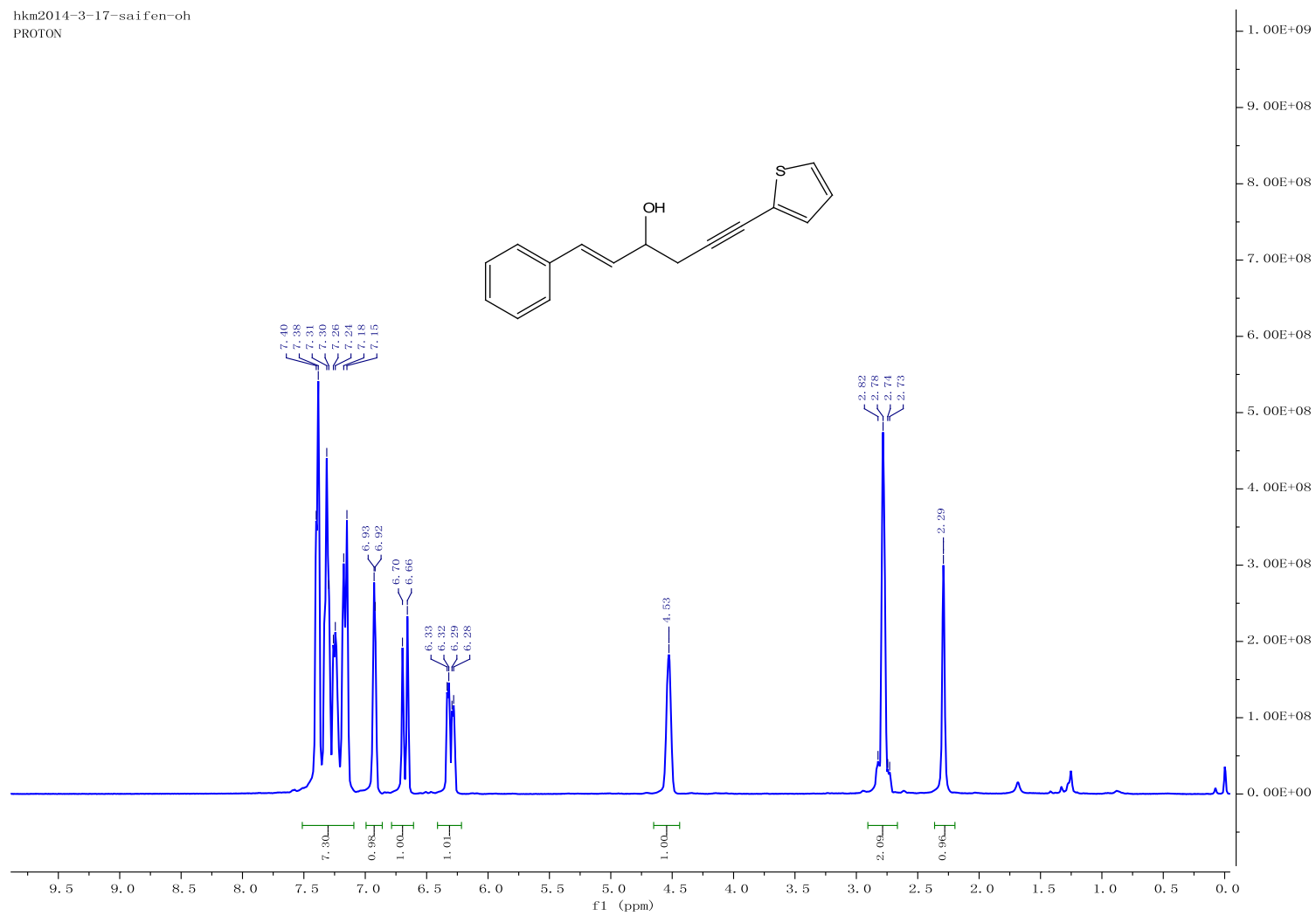


hkm2014-3-24-aerfa-xiu-oac

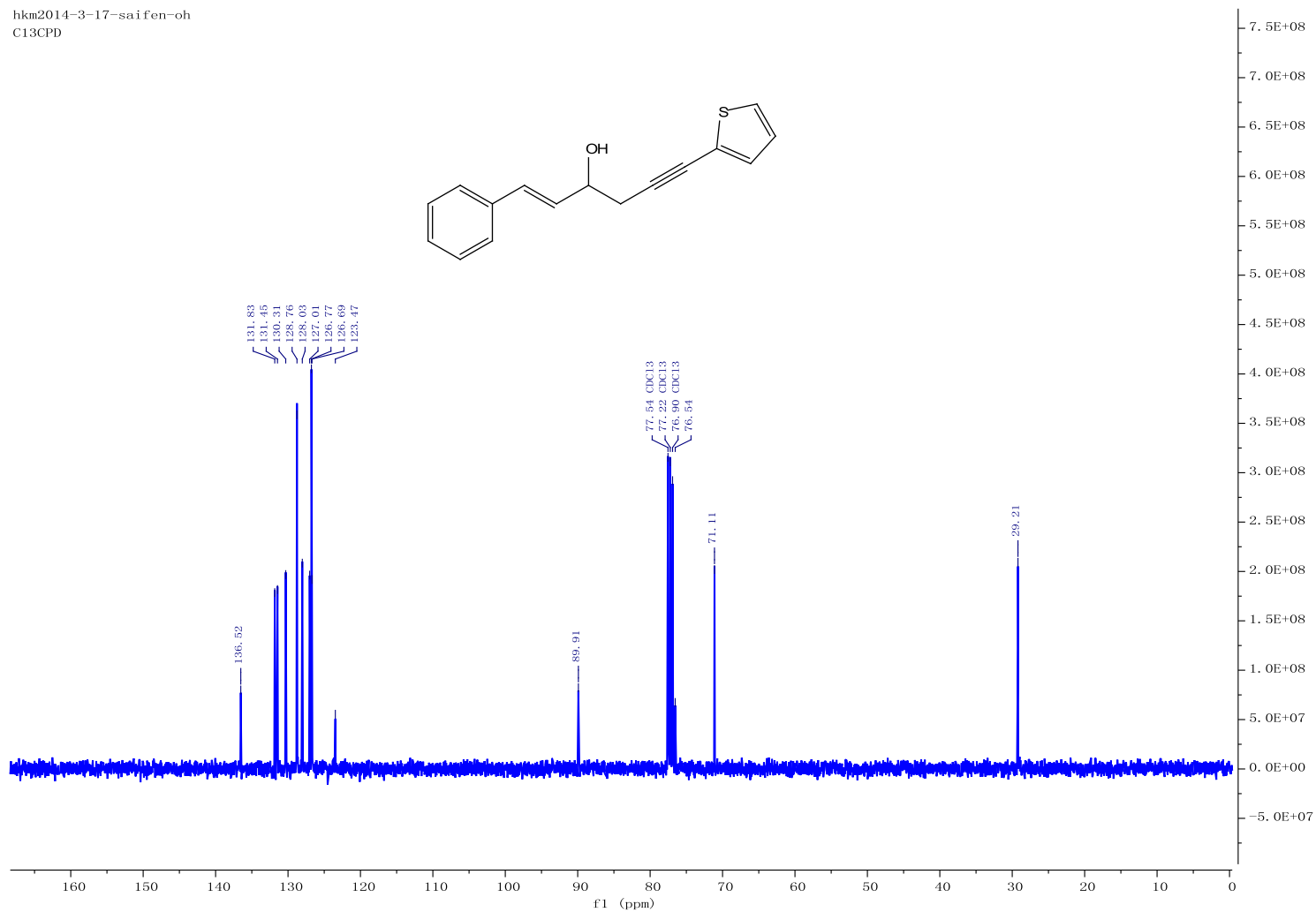
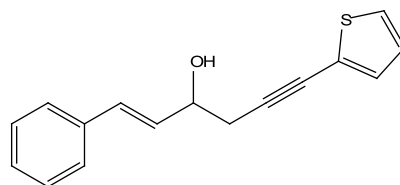




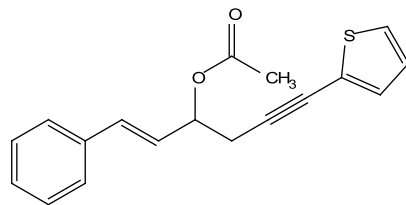
hkm2014-3-17-saifen-oh  
PROTON



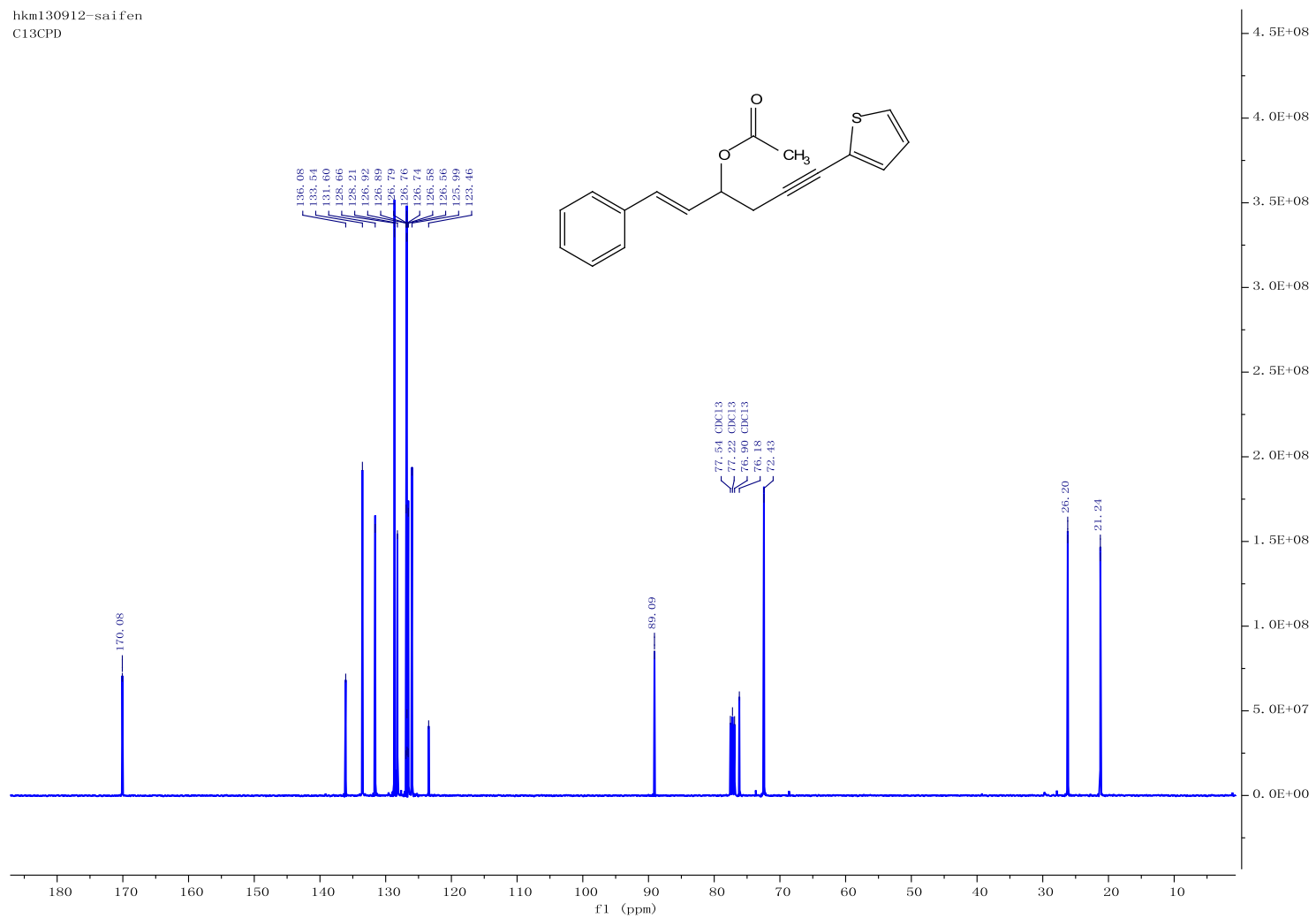
hkm2014-3-17-saifen-oh  
C13CPD



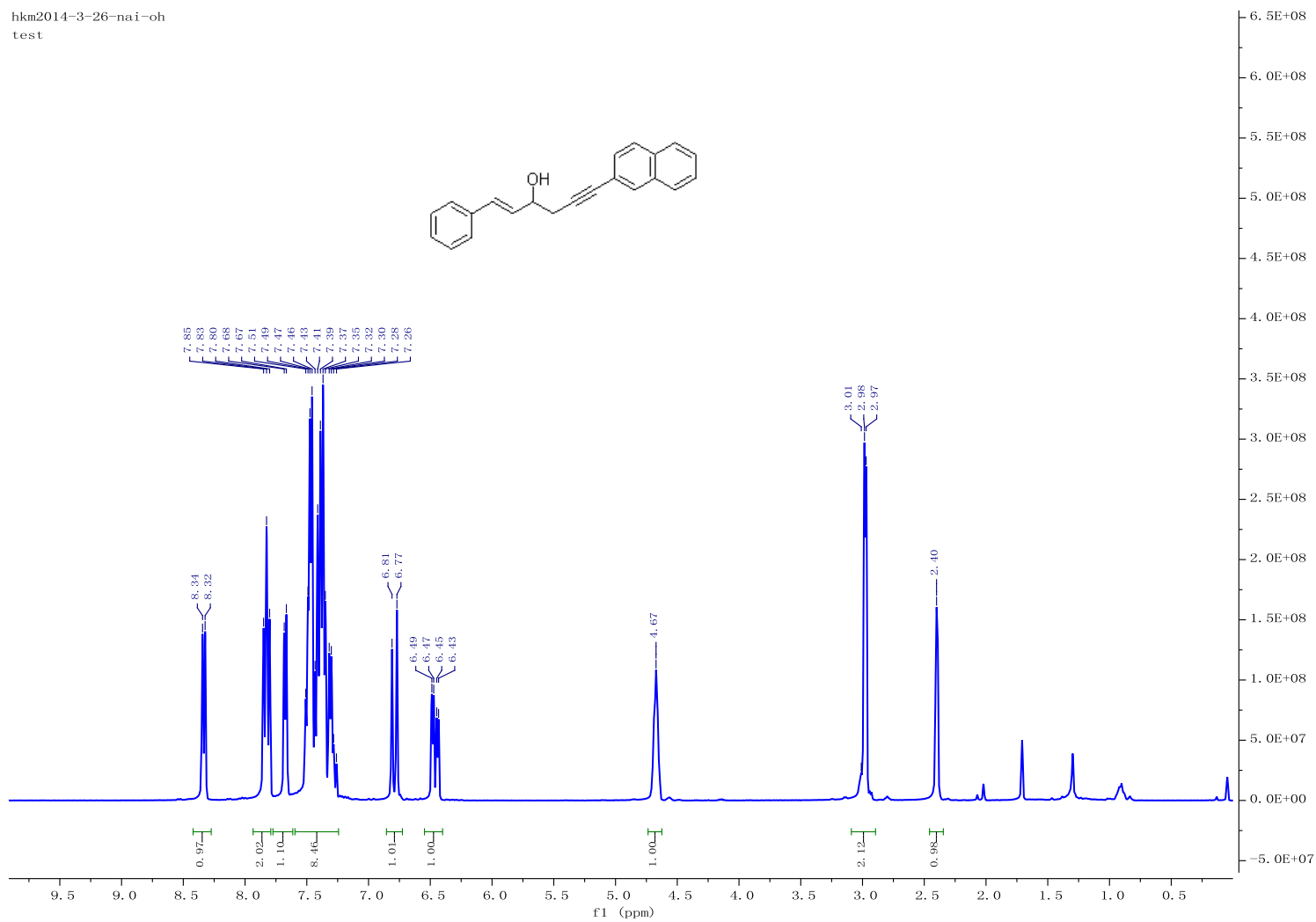
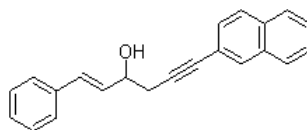
hkm130912-sai fen  
PROTON



hkm130912-sai fen  
C13CPD

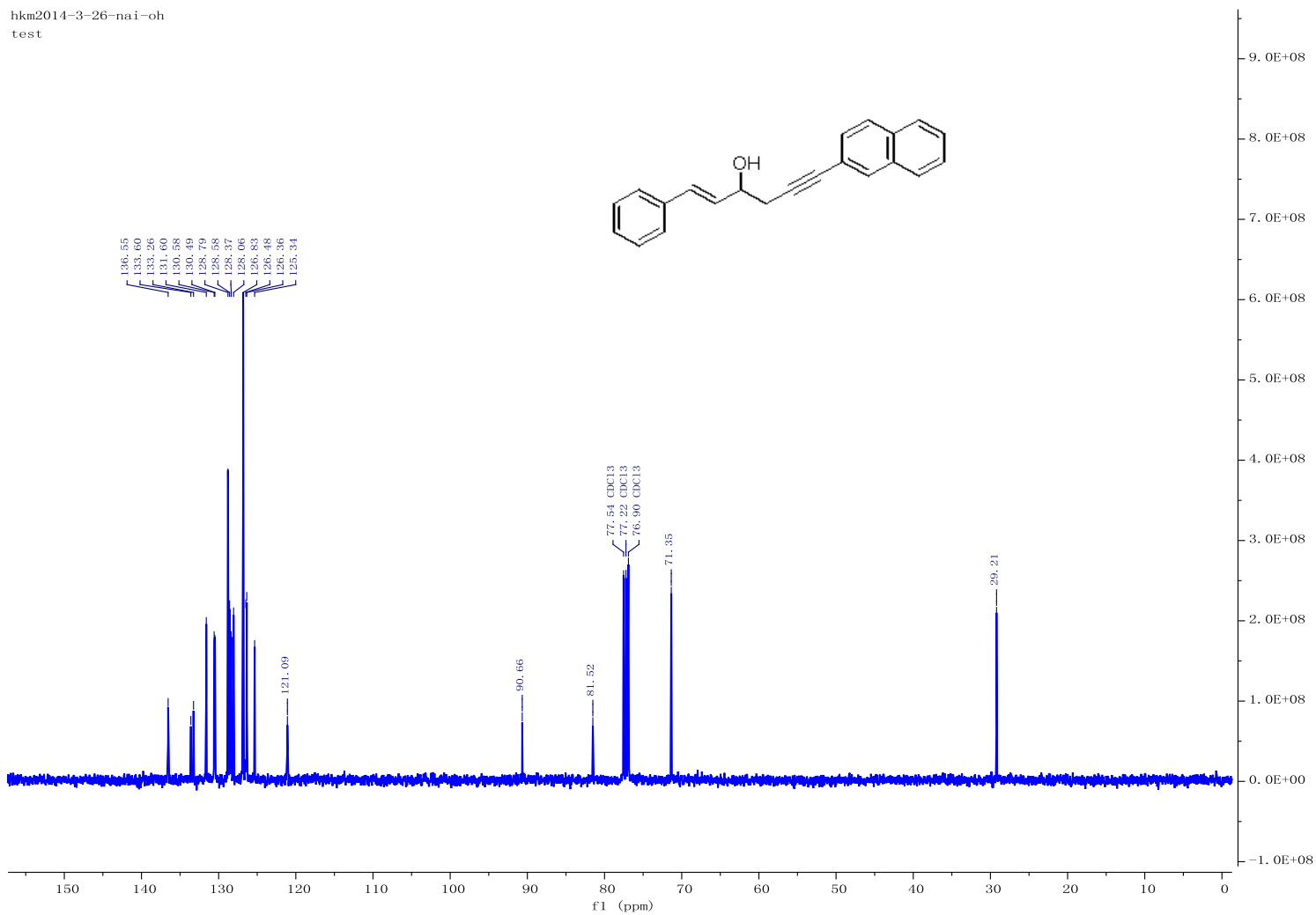
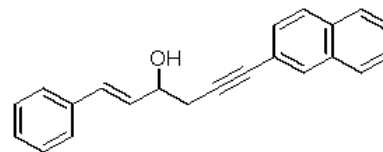


hkm2014-3-26-nai-oh  
test

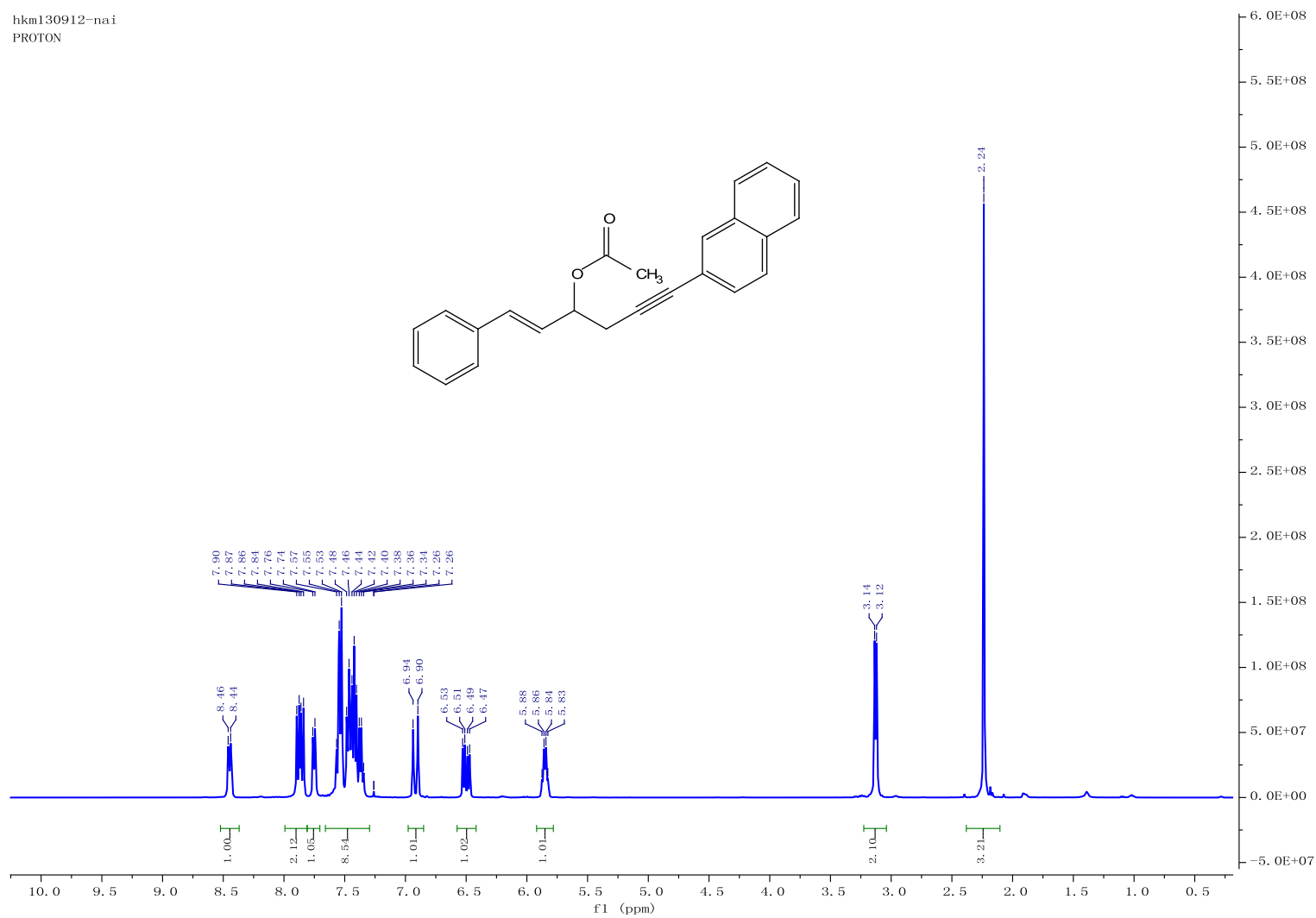




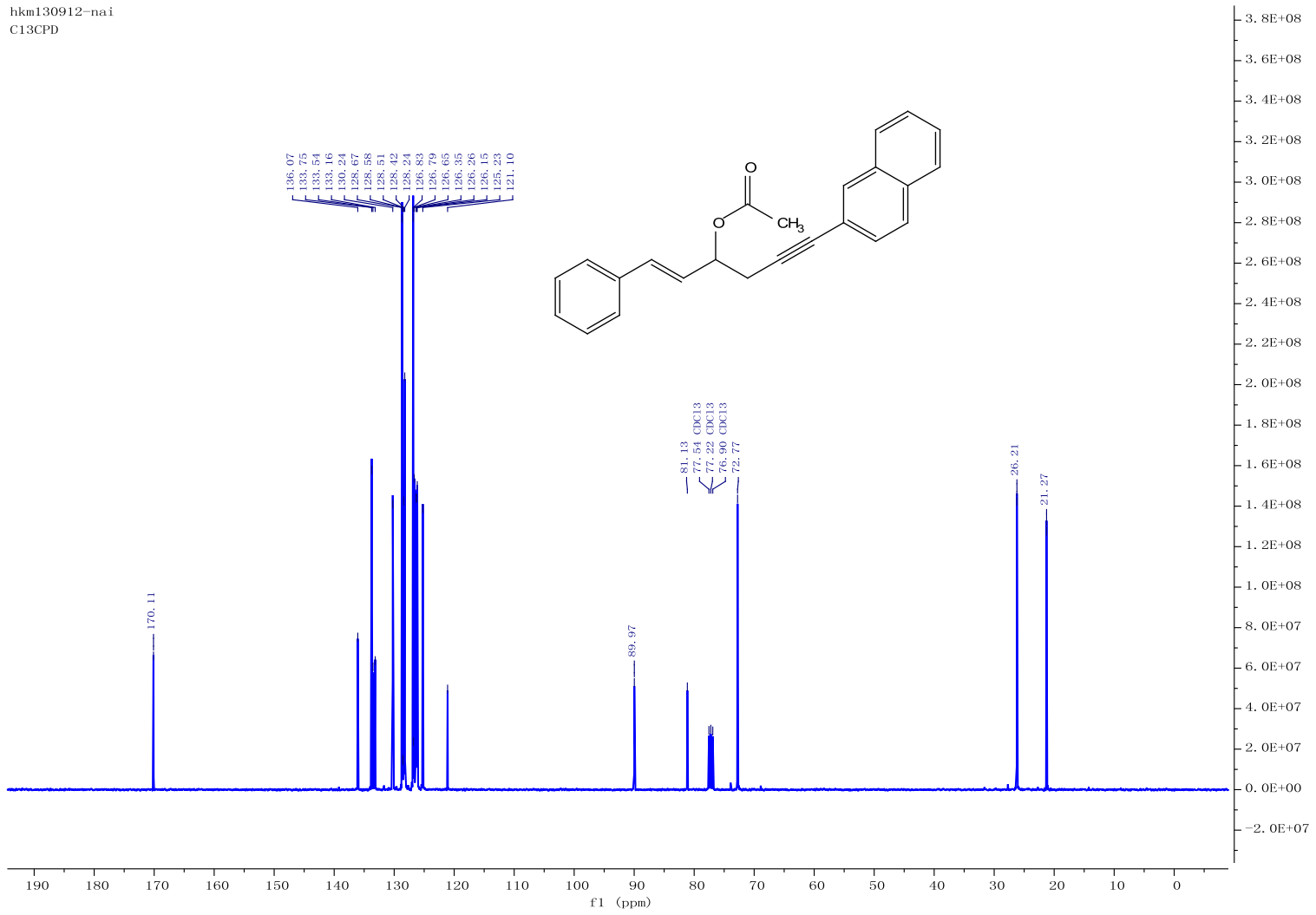
hkm2014-3-26-nai-oh  
test



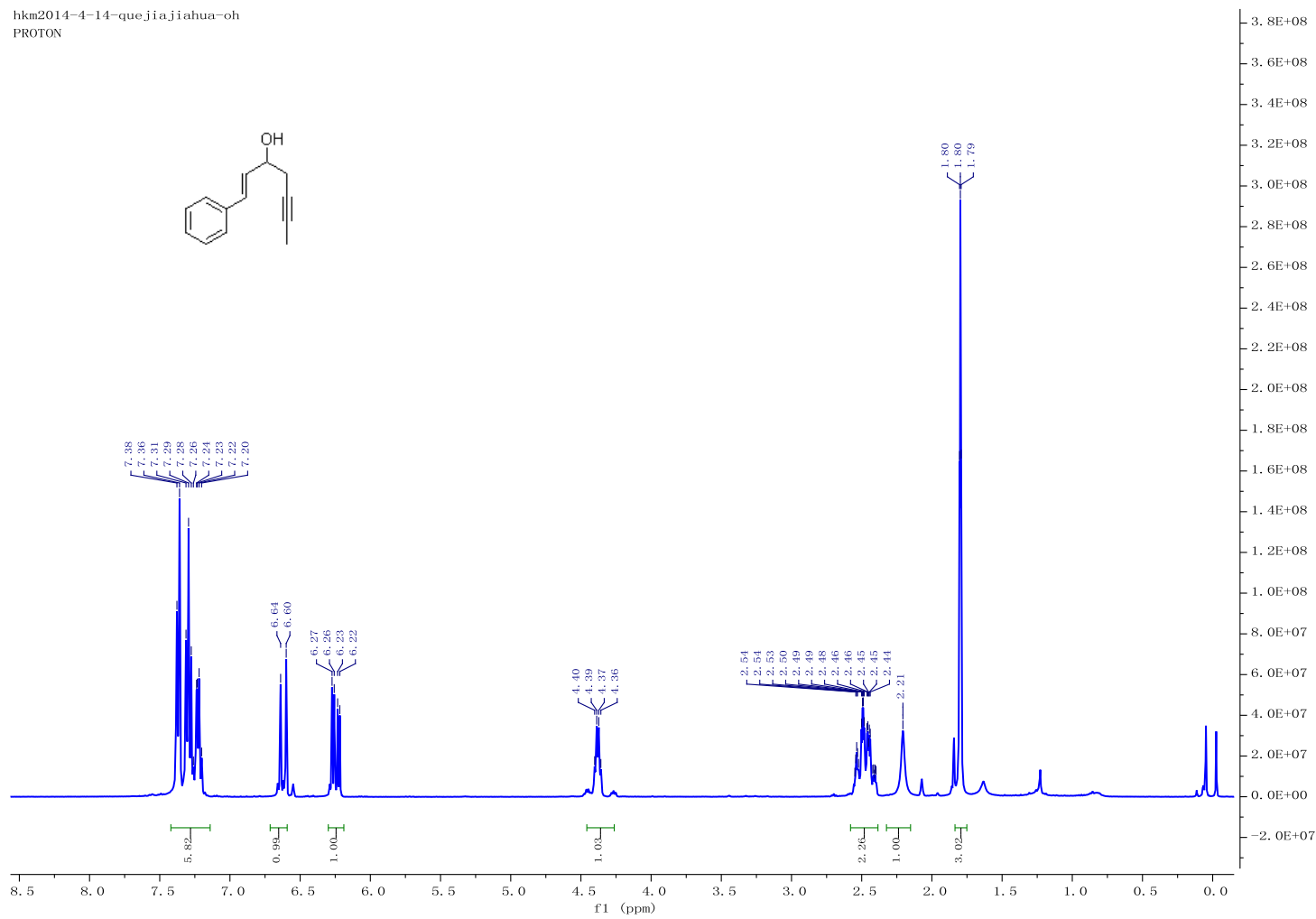
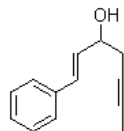
hkm130912-nai  
PROTON



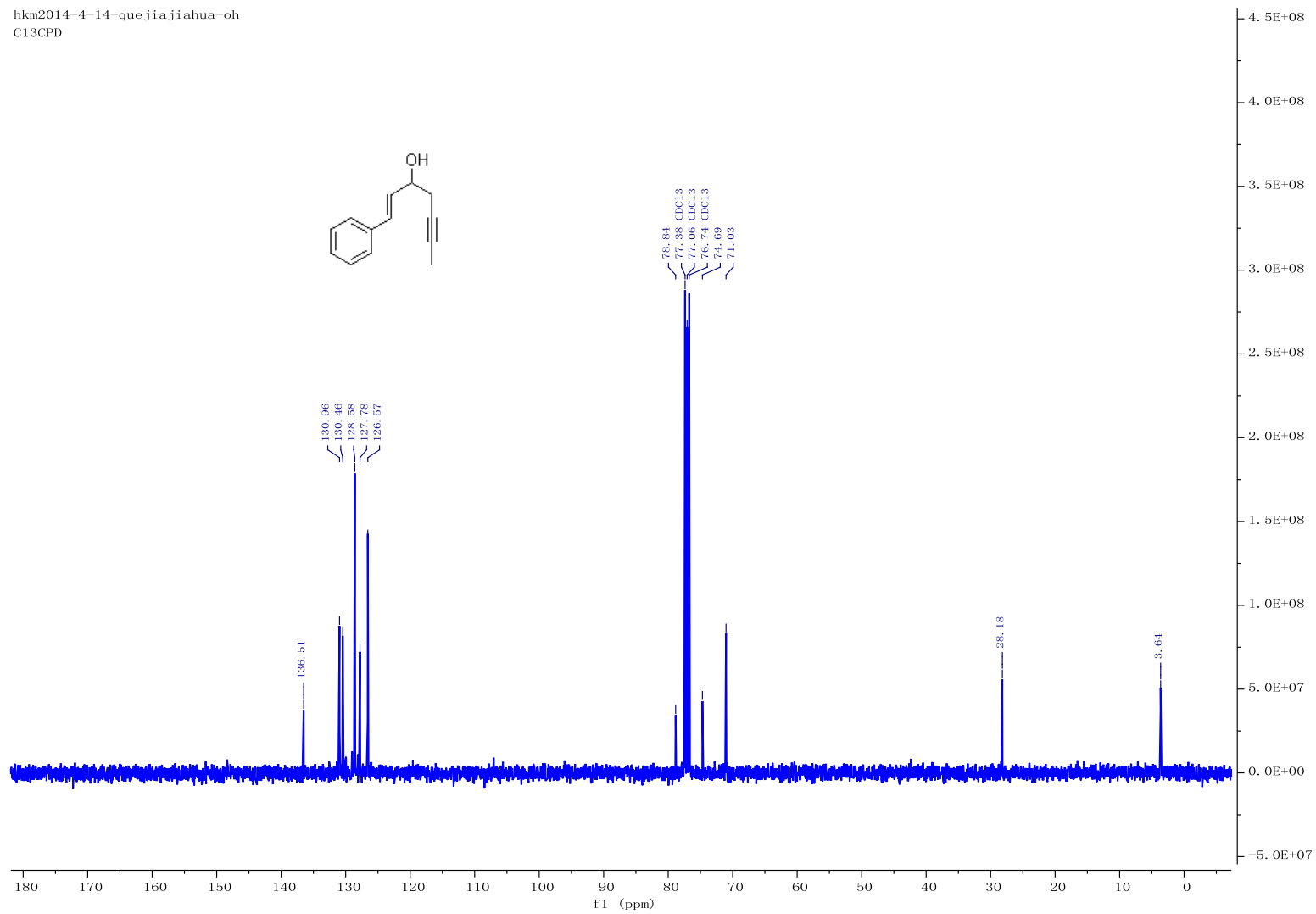
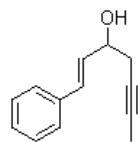
hkm130912-nai  
C13CPD



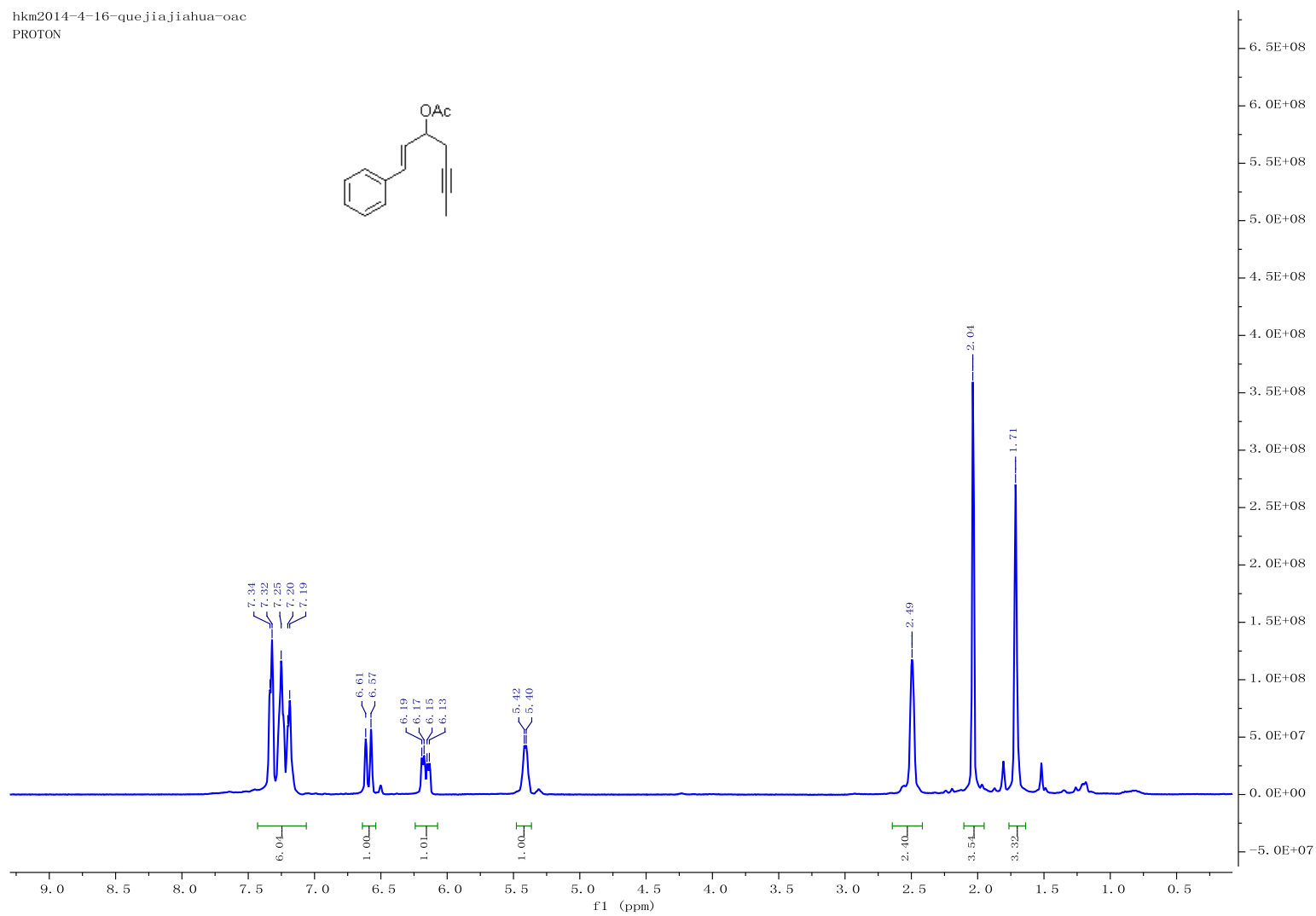
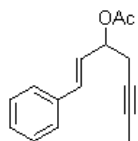
bkm2014-4-14-quejiiahua-oh  
PROTON



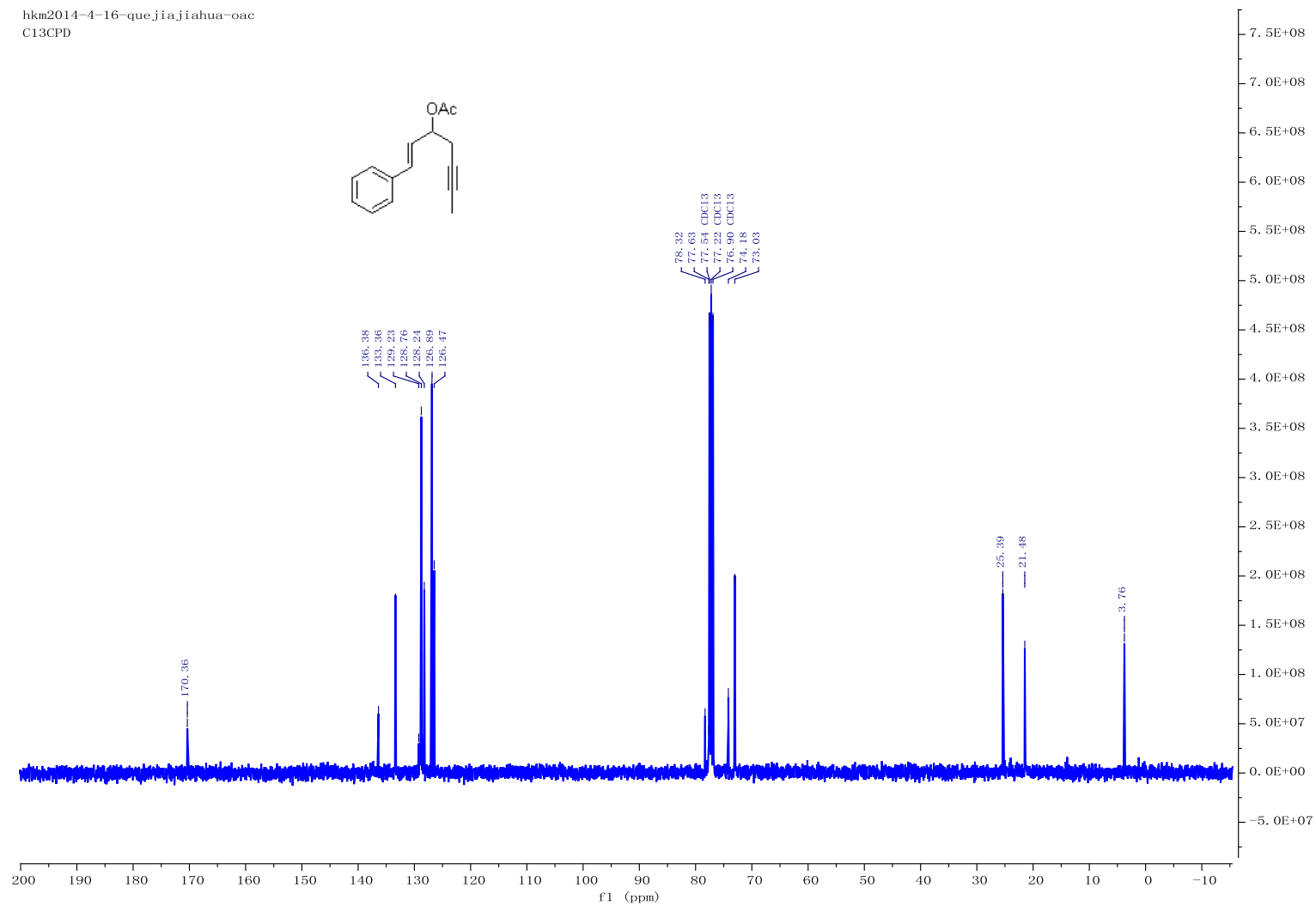
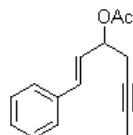
hkm2014-4-14-quejiajiahua-oh  
C13CPD



hkm2014-4-16-quejiajiahua-oac  
PROTON



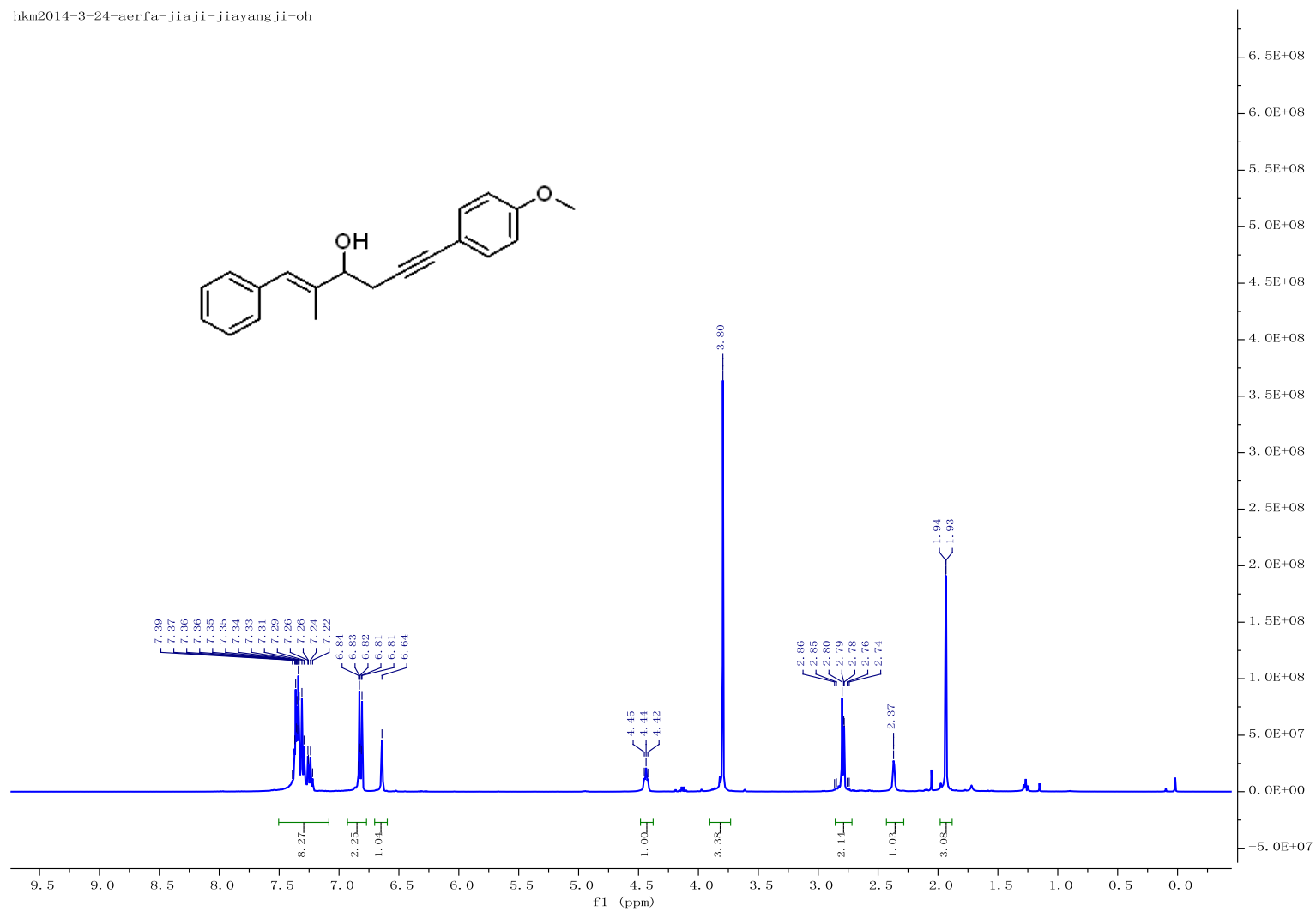
hkm2014-4-16-quejiajiahua-oac  
C13CPD



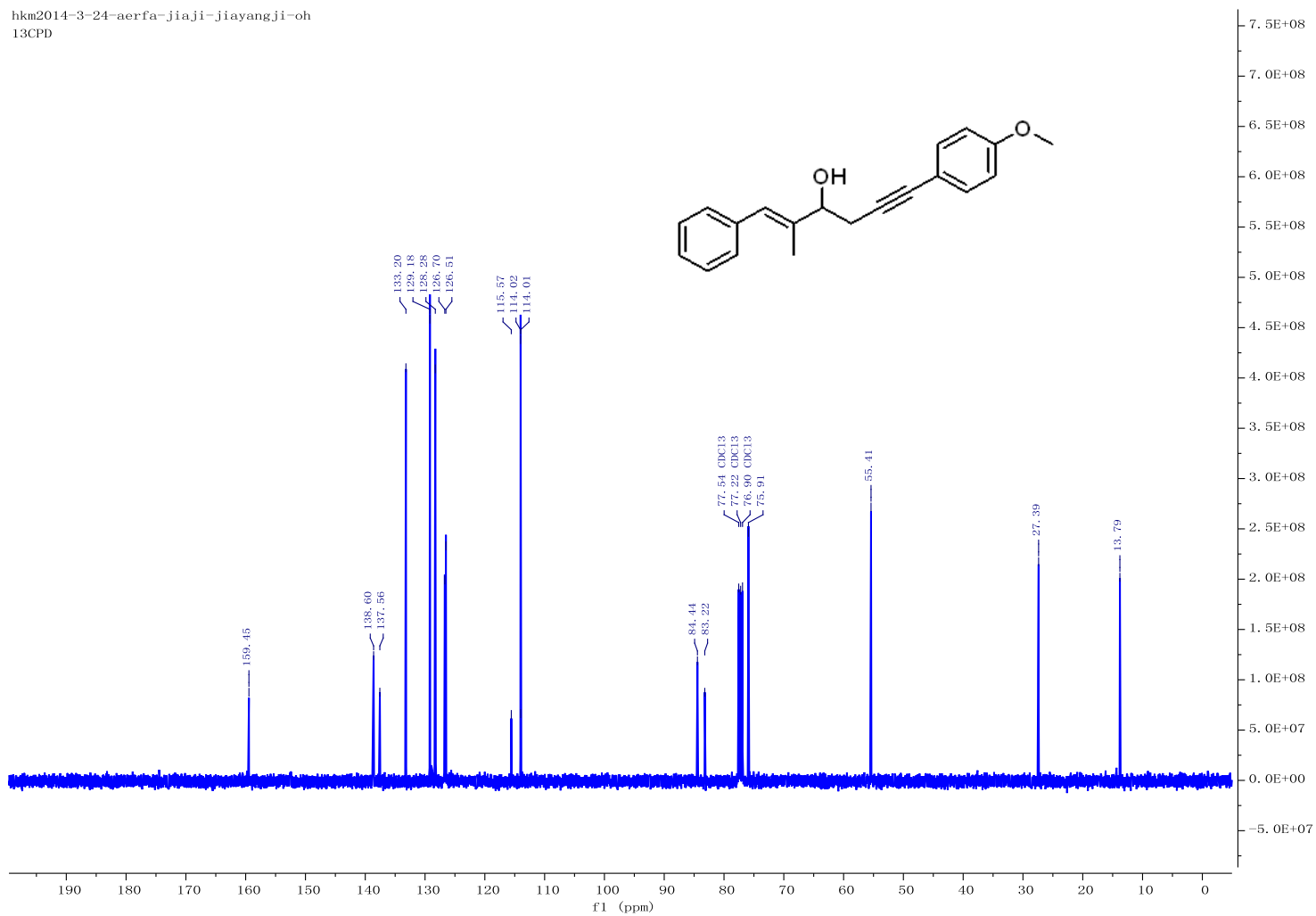




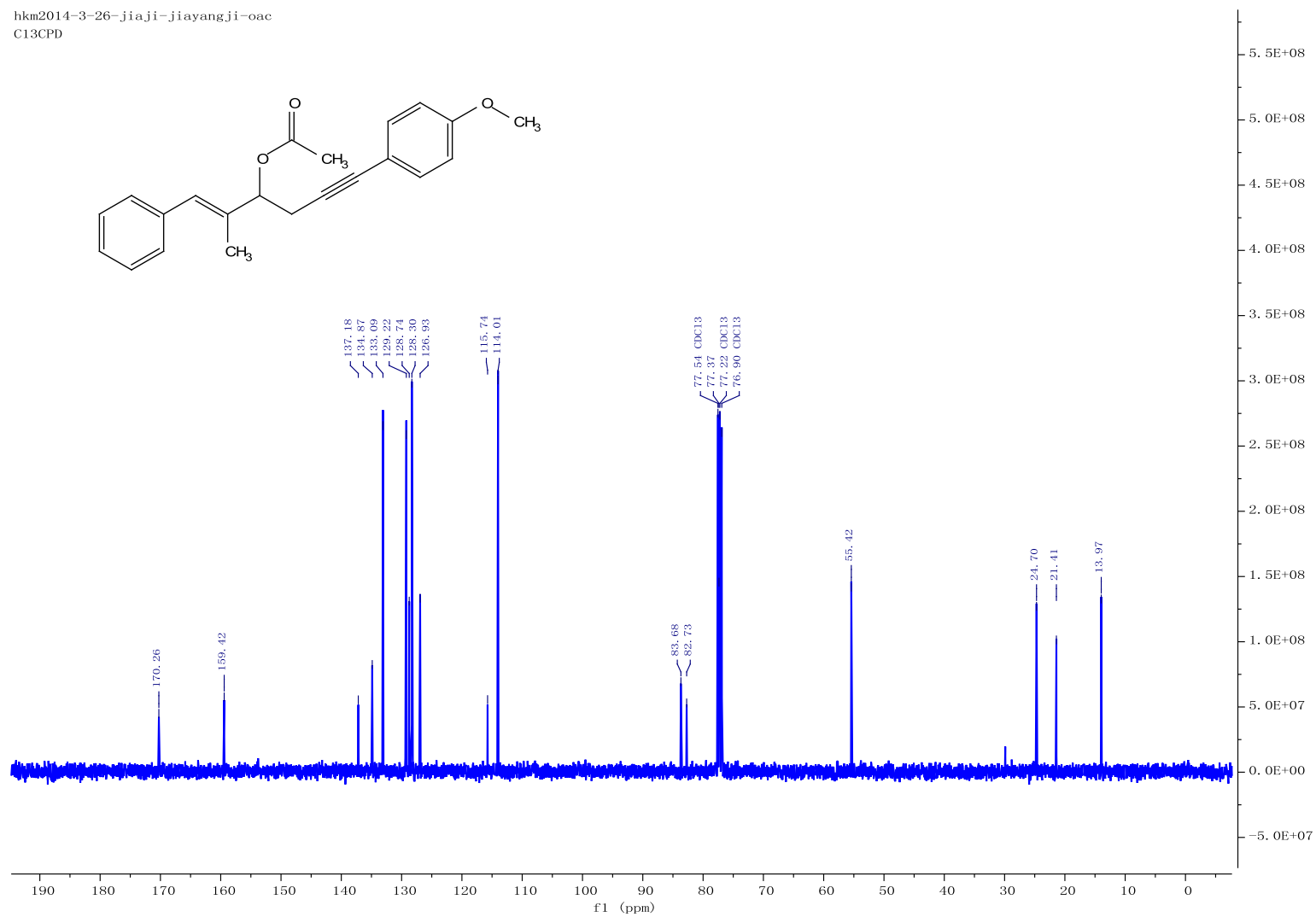
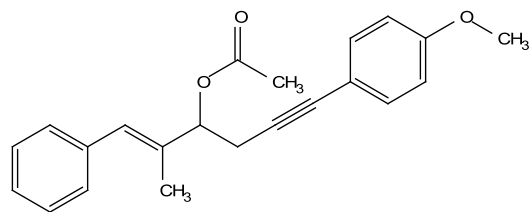
hkm2014-3-24-aerfa-jiaji-jiaayangji-oh



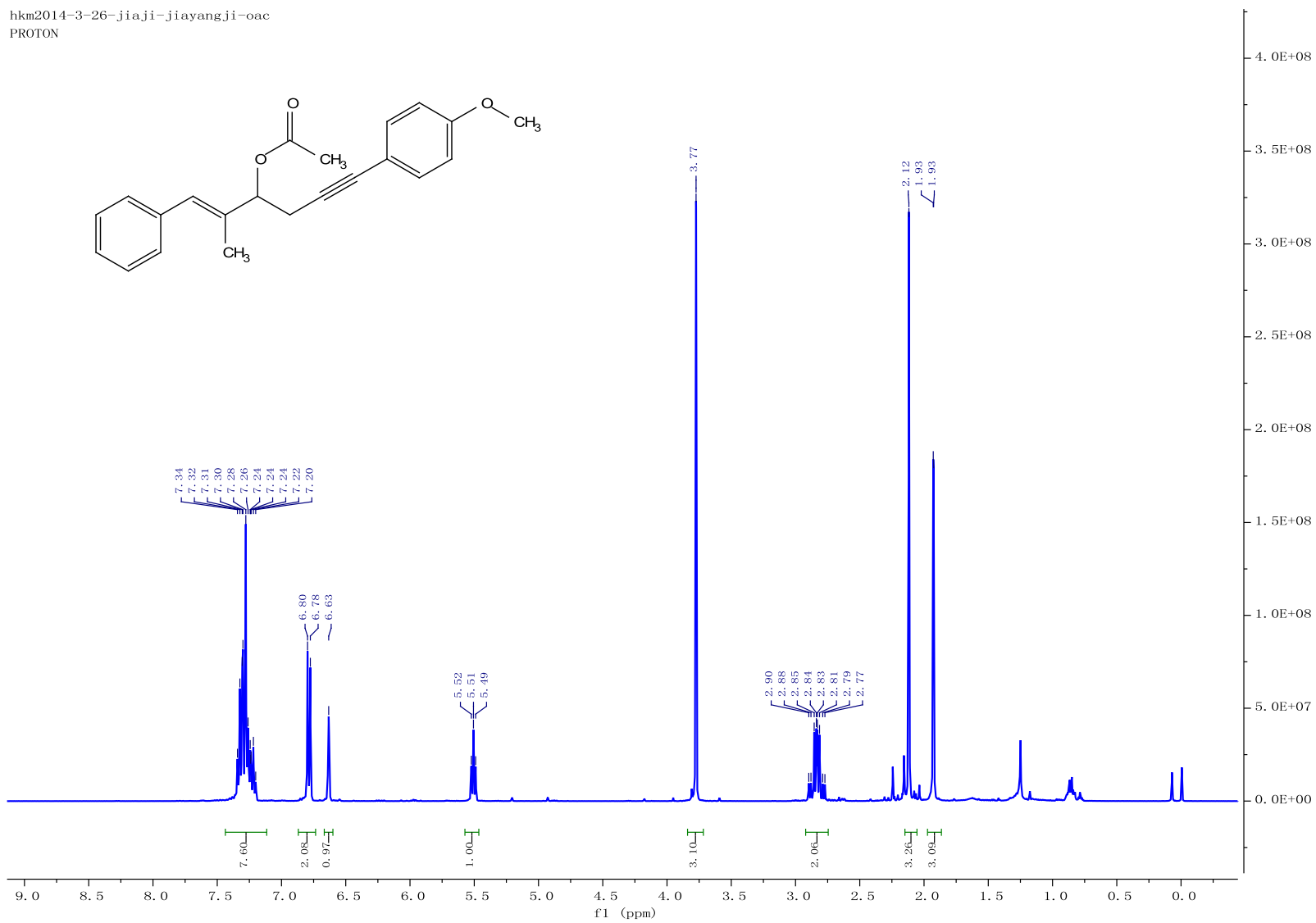
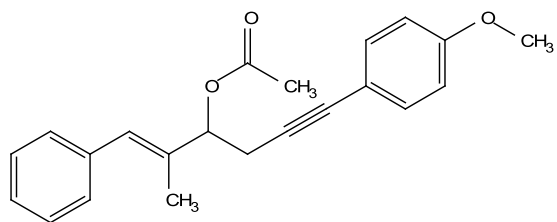
hkm2014-3-24-aerfa-jiaji-jiayangji-oh  
13CPD



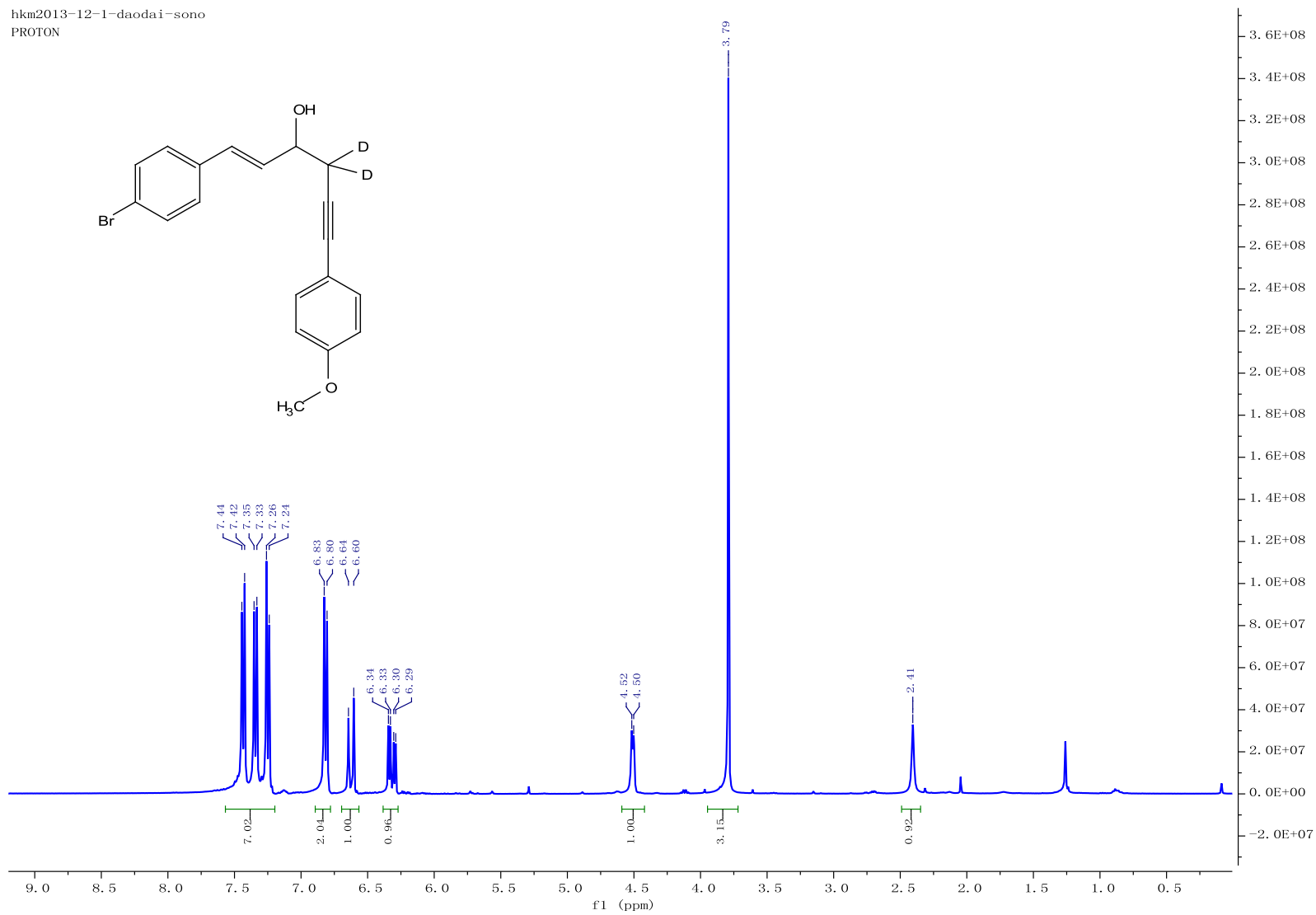
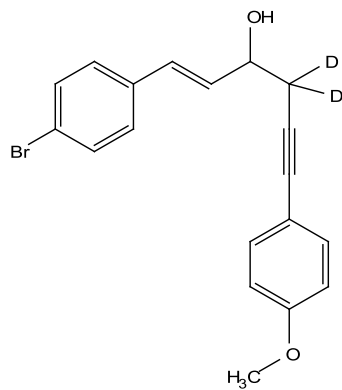
hkm2014-3-26-jiaji-jiayangji-oac  
C13CPD



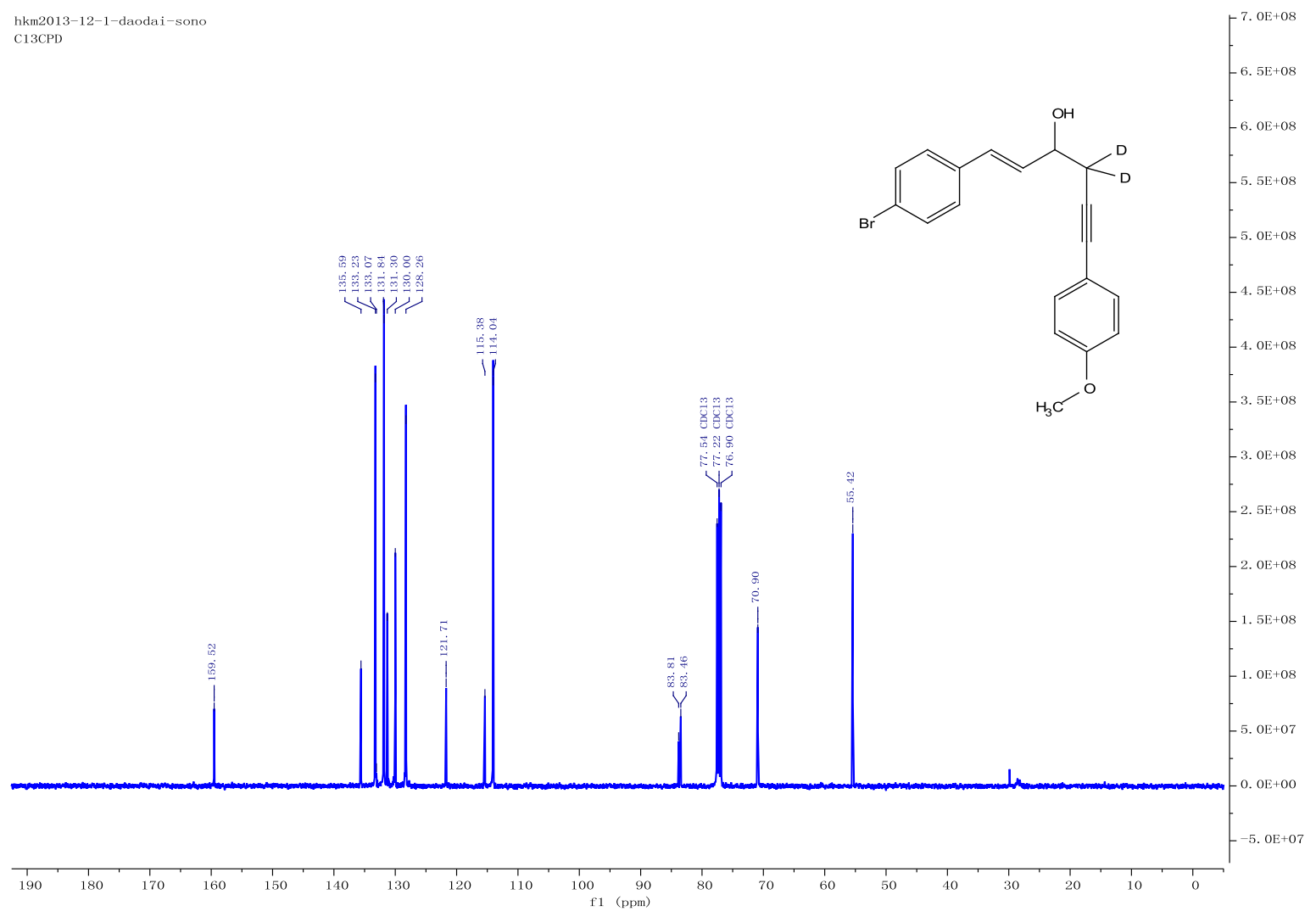
hkm2014-3-26-jiaji-jiayangji-oac  
PROTON



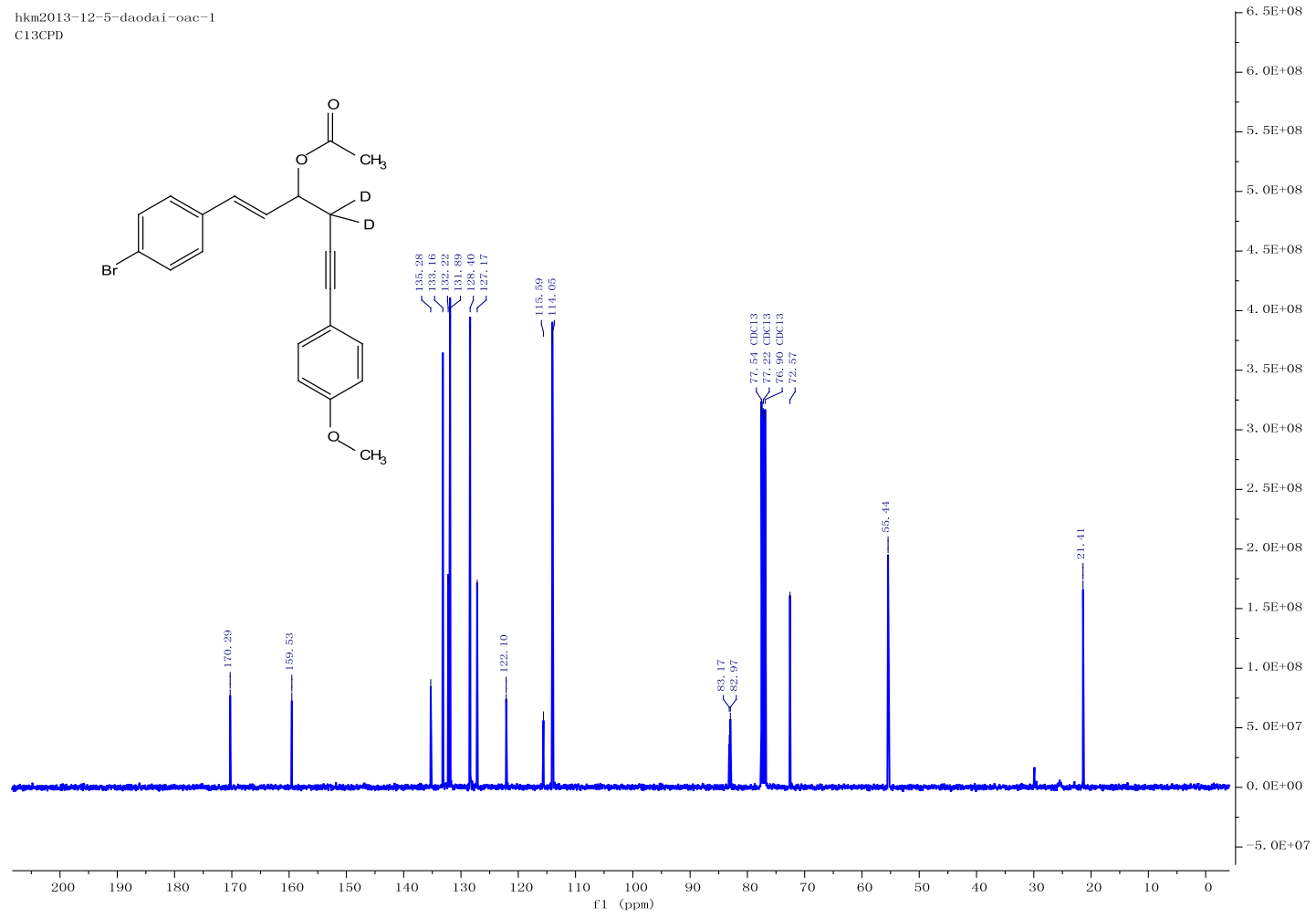
hkm2013-12-1-daodai-sono  
PROTON



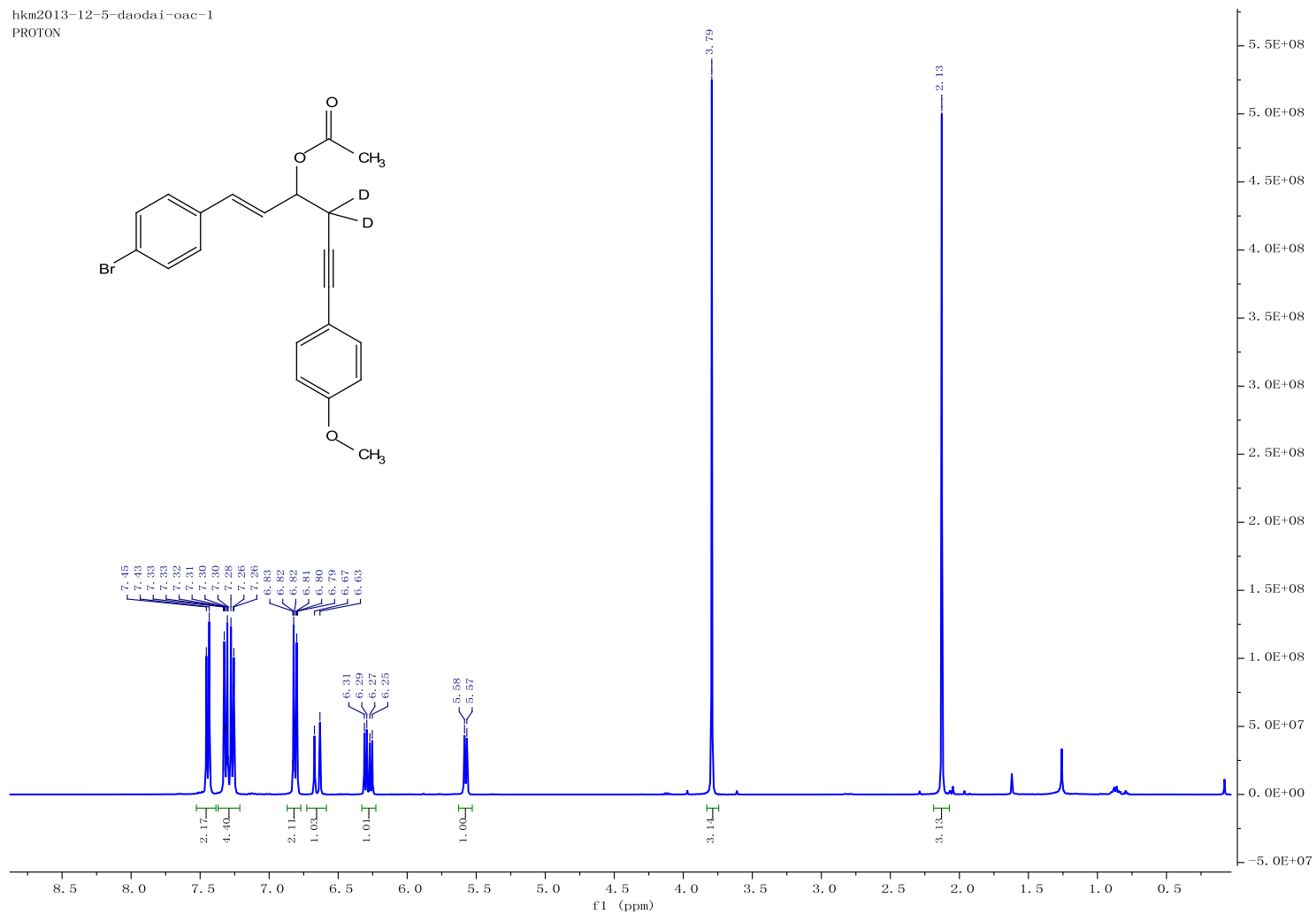
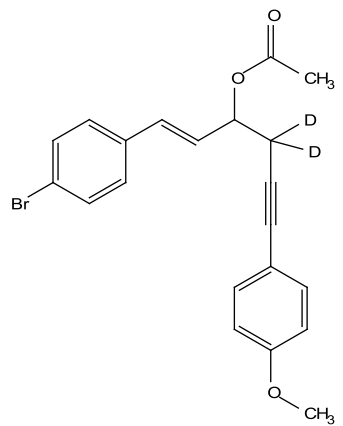
hkm2013-12-1-daodai-sono  
C13CPD



hkm2013-12-5-daodai-oac-1  
C13CPD



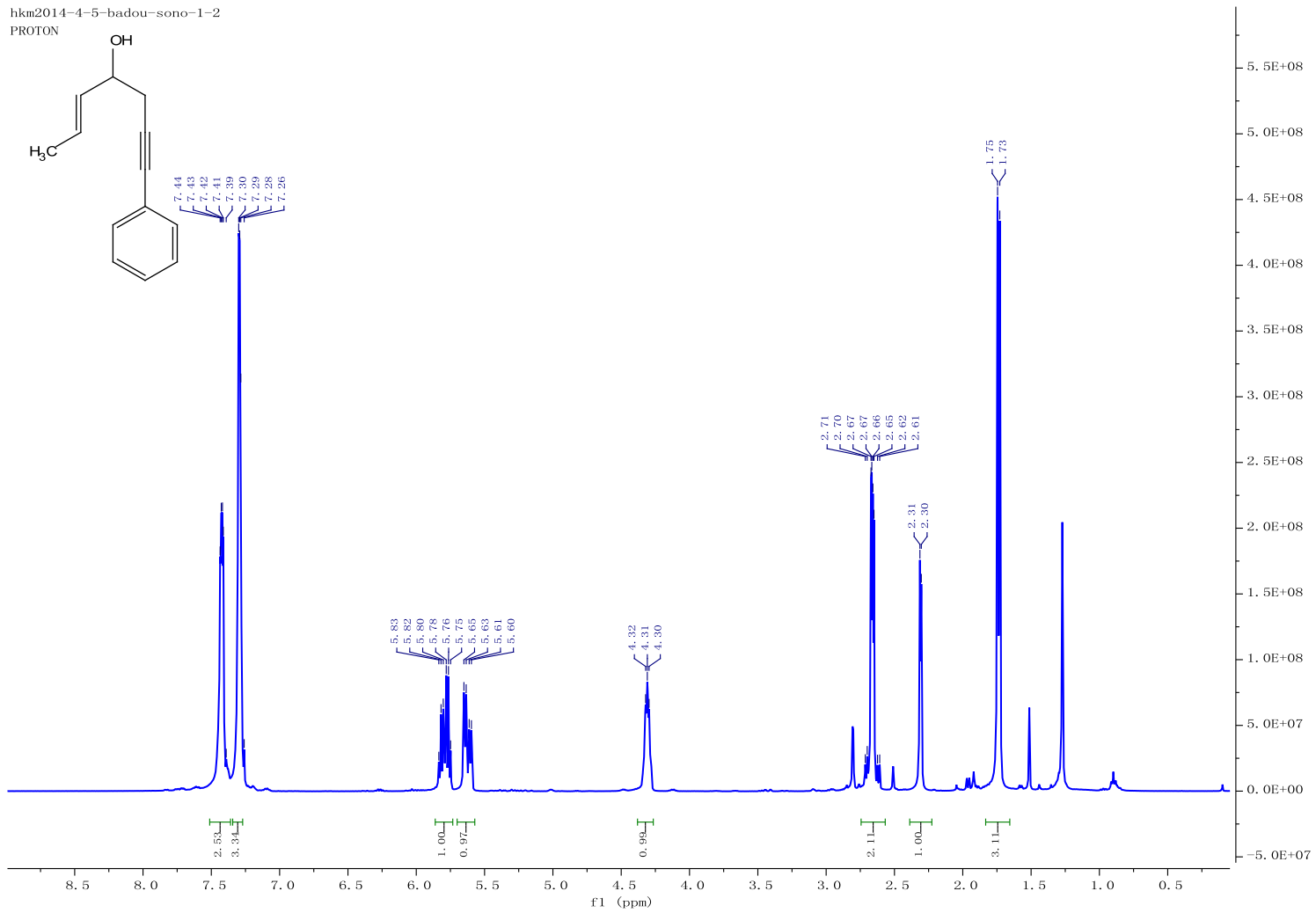
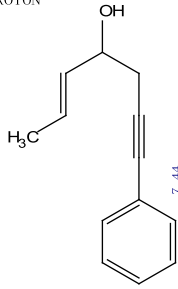
hkm2013-12-5-daodai-oac-1  
PROTON



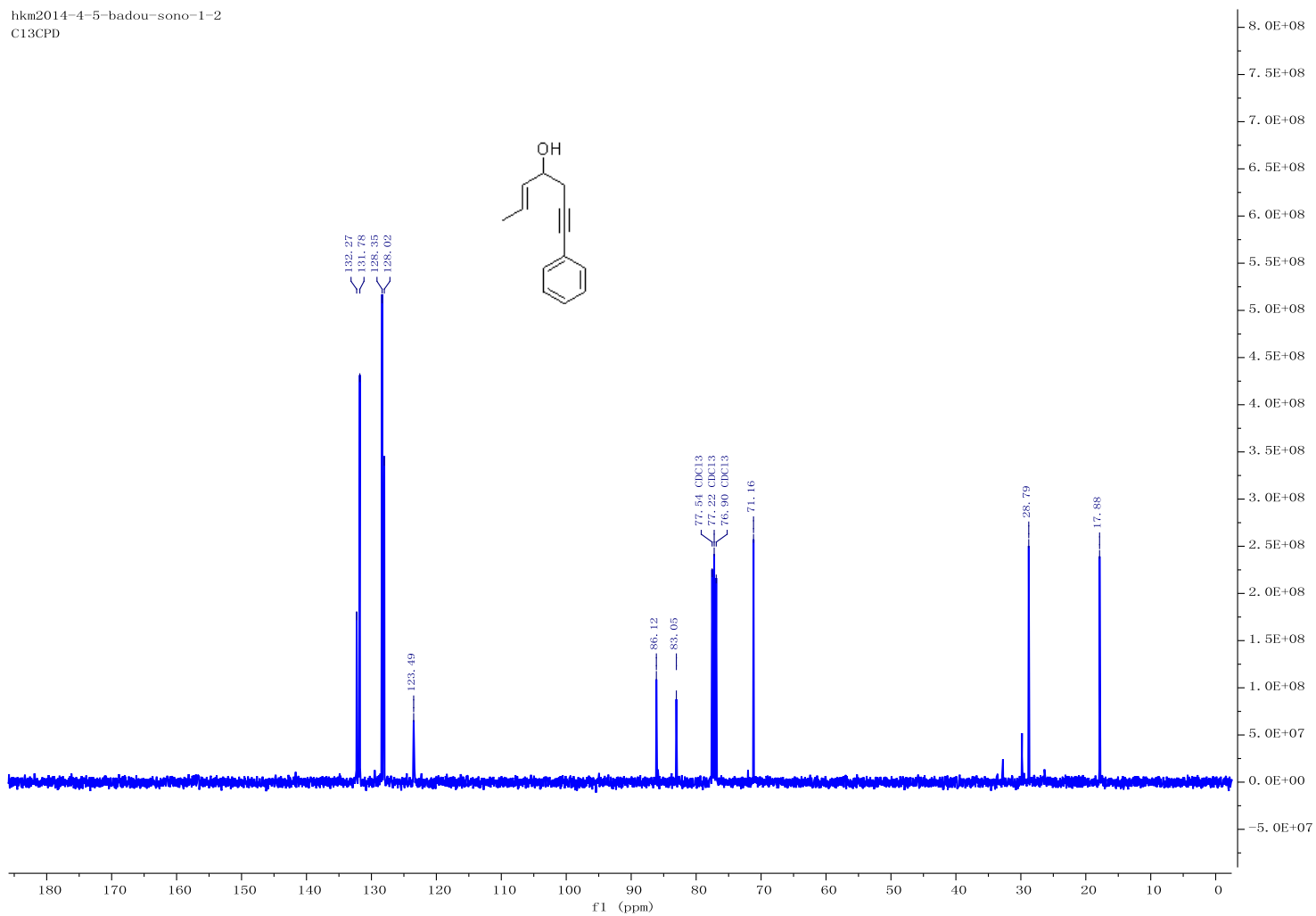
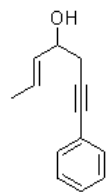




hkm2014-4-5-badou-sono-1-2  
PROTON

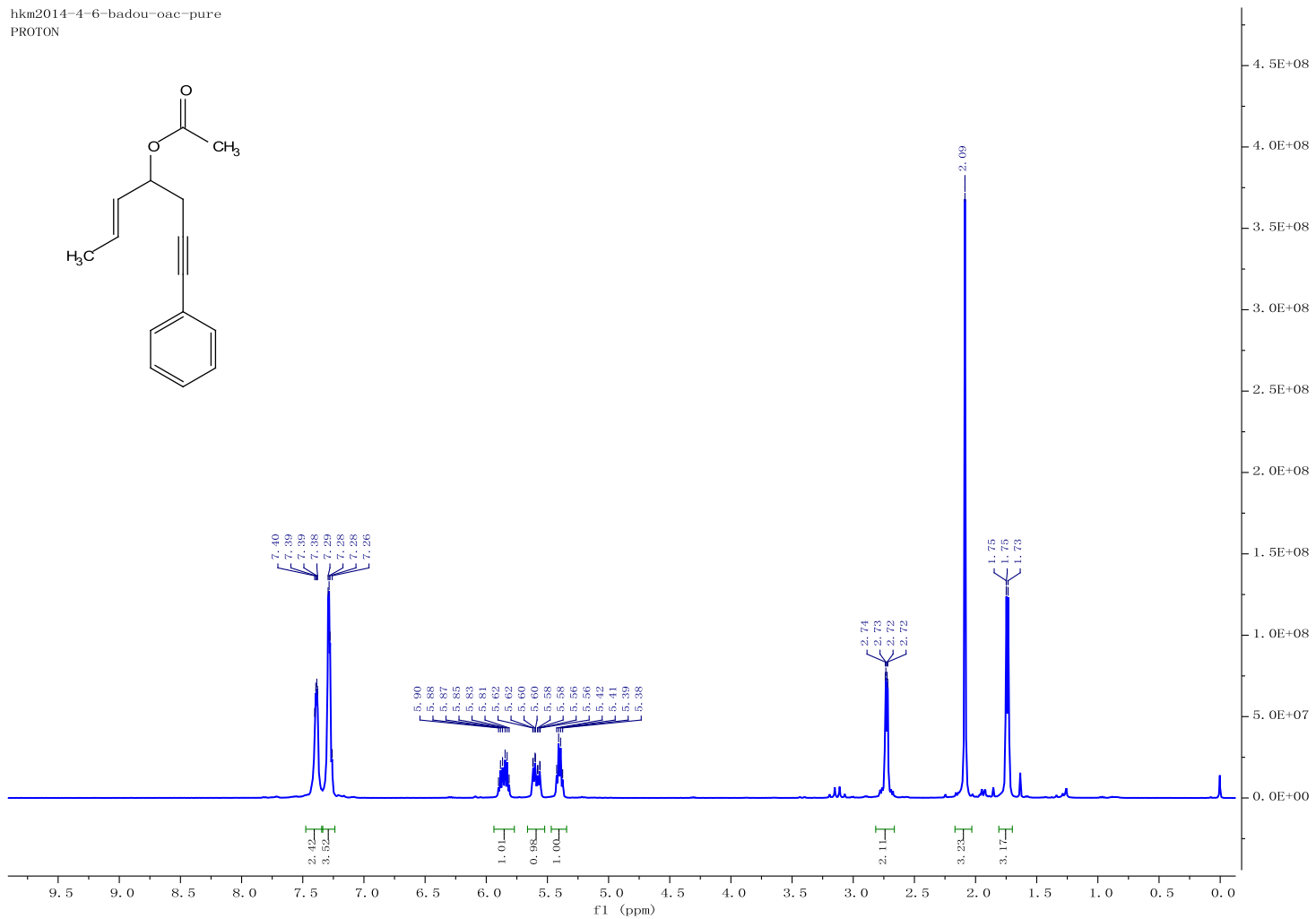
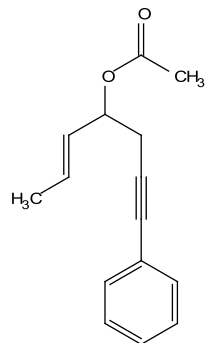


hkm2014-4-5-badou-sono-1-2  
C13CPD

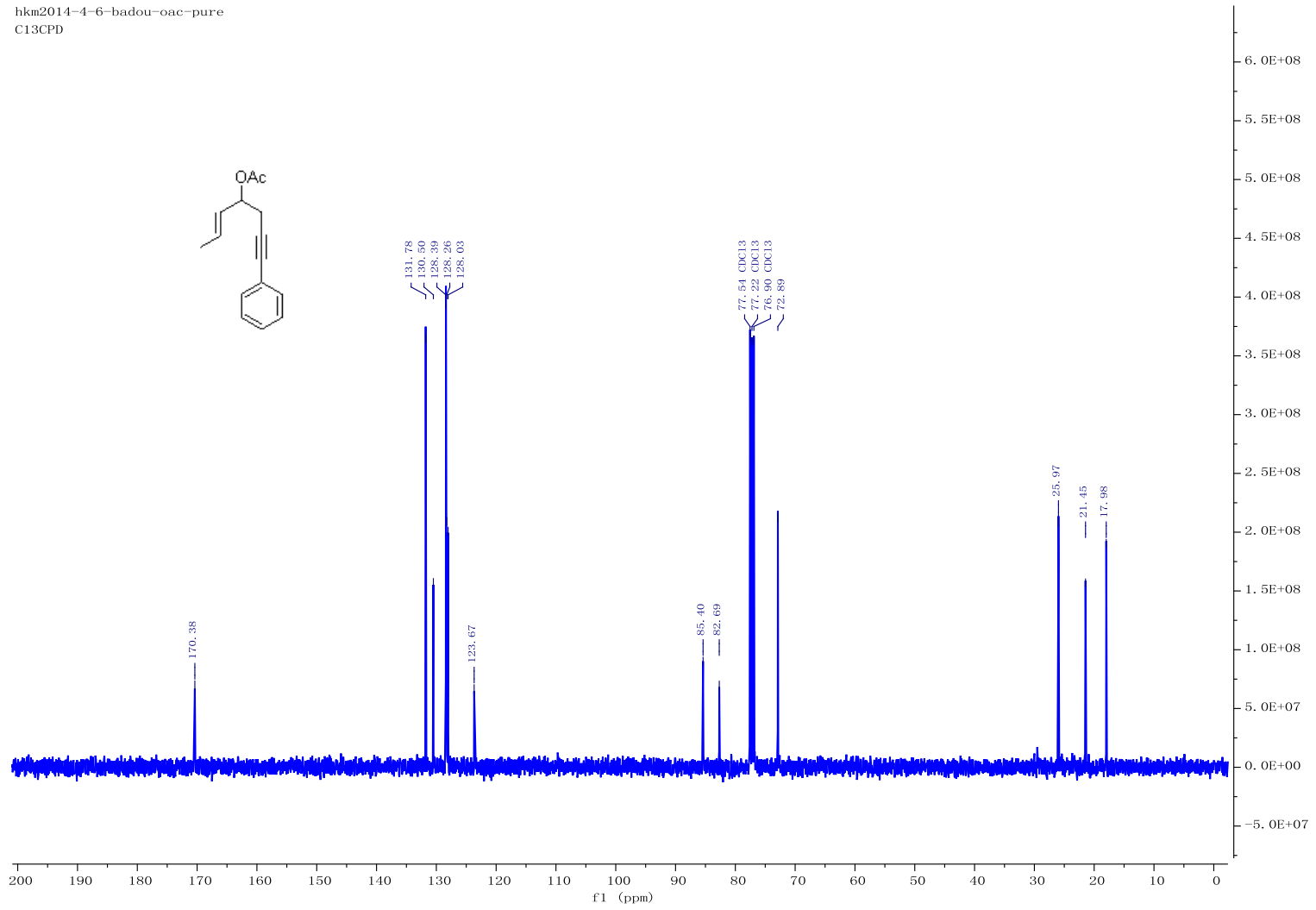




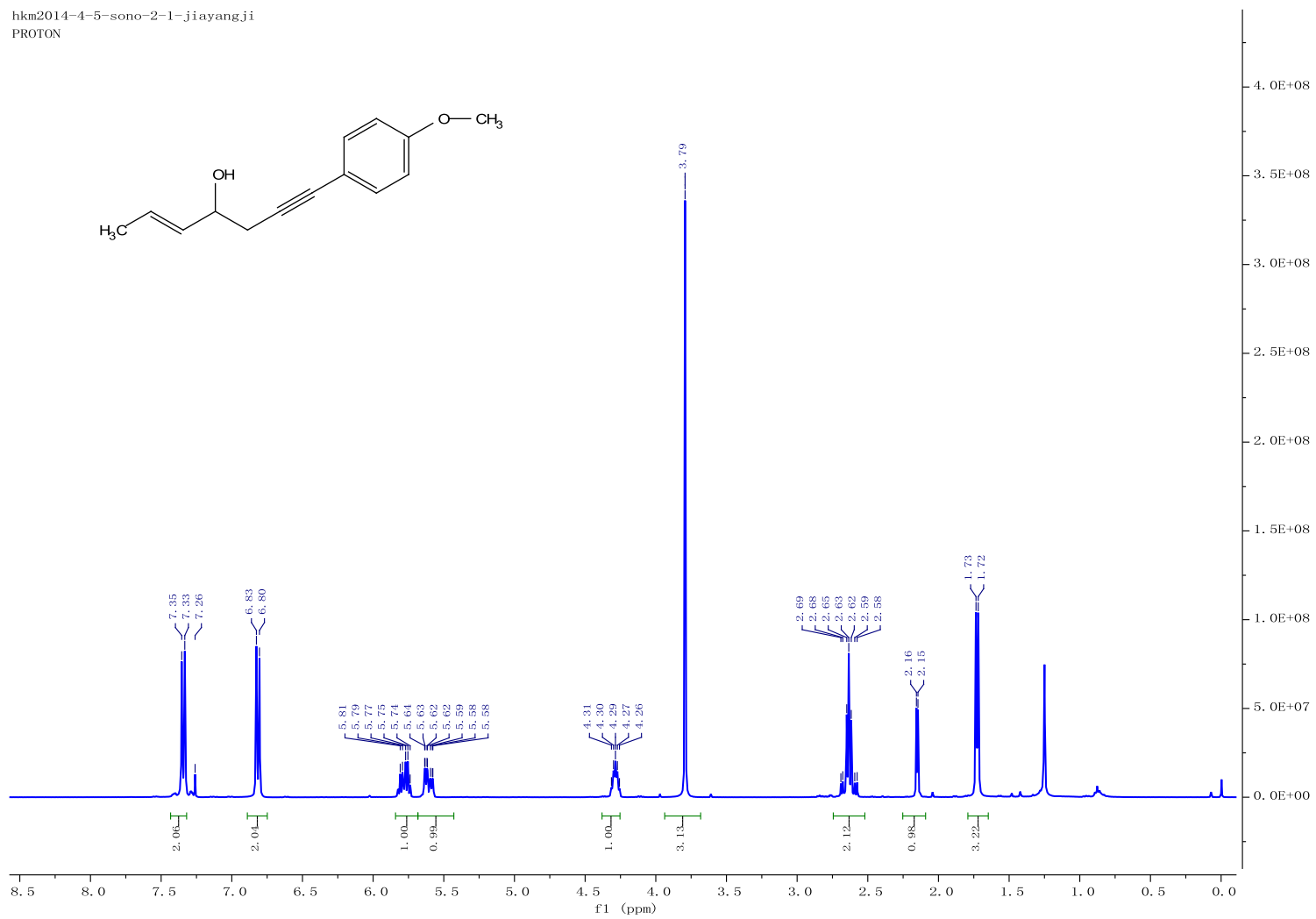
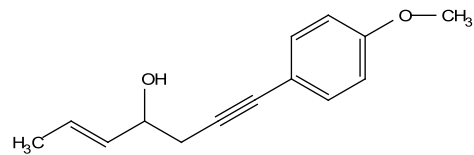
hkm2014-4-6-badou-oac-pure  
PROTON



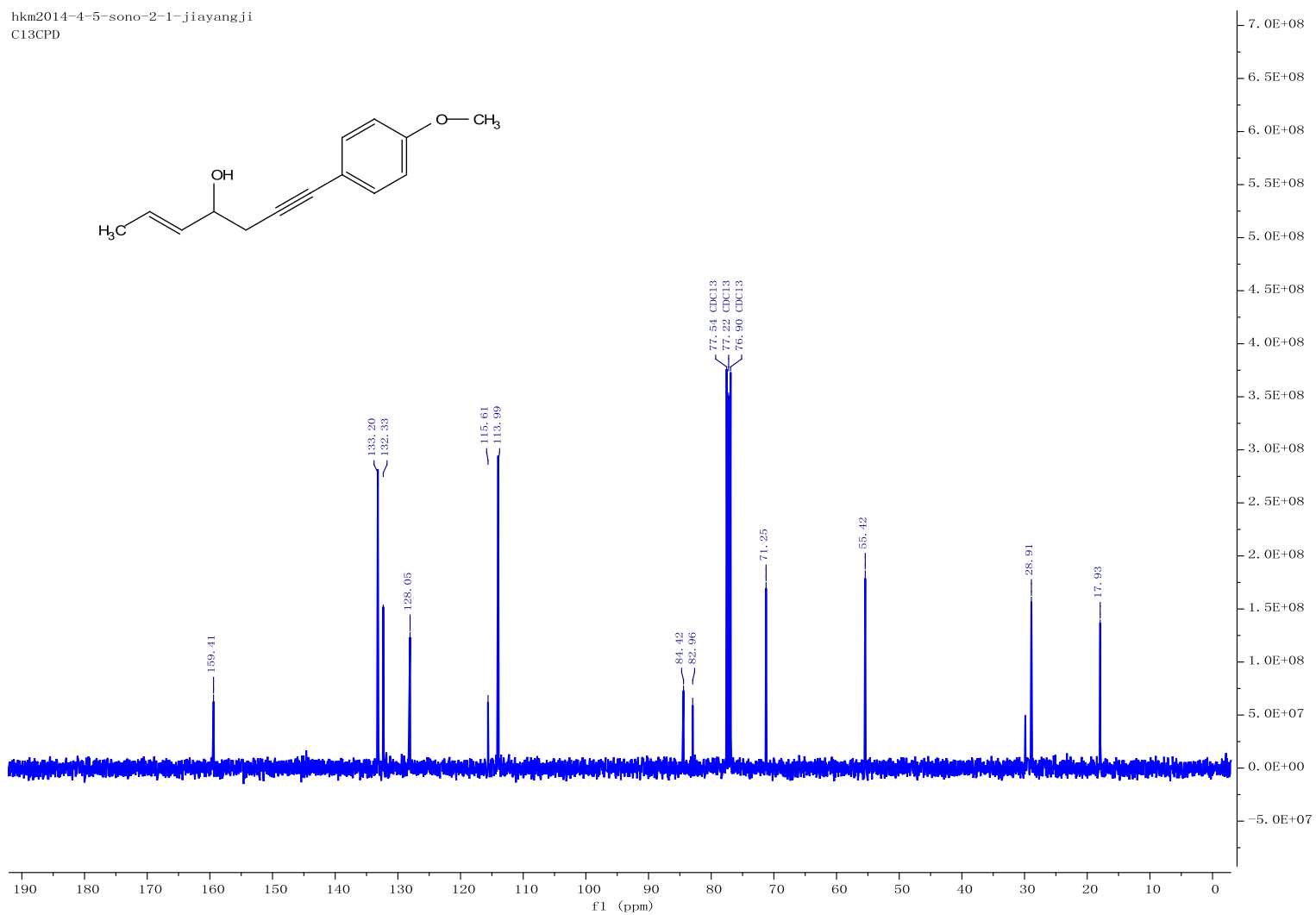
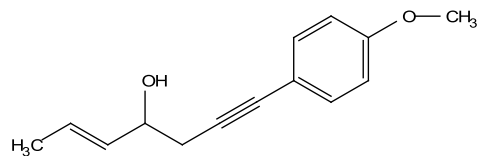
hkm2014-4-6-badou-oac-pure  
C13CPD



hkm2014-4-5-sono-2-1-jiayangji  
PROTON

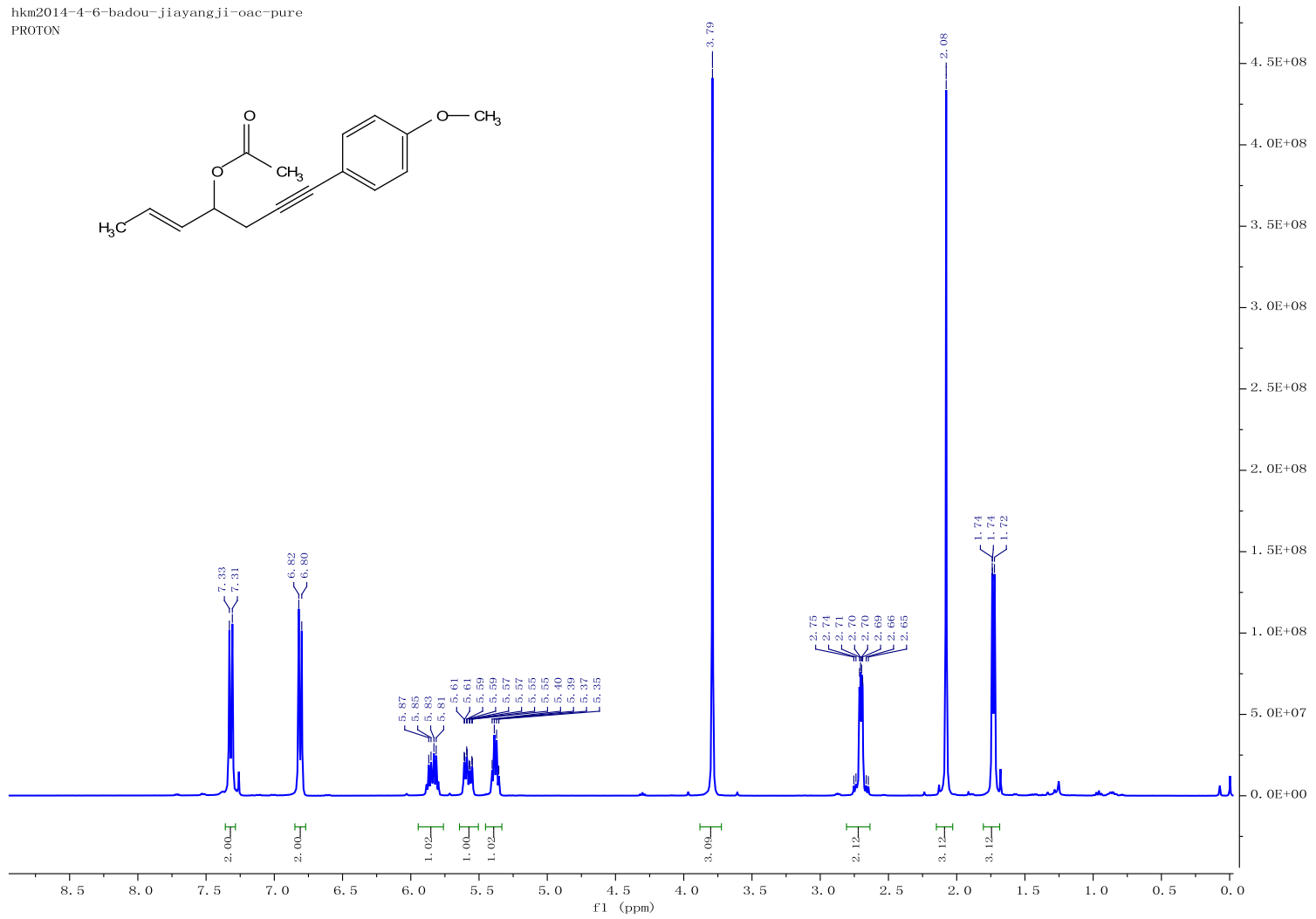
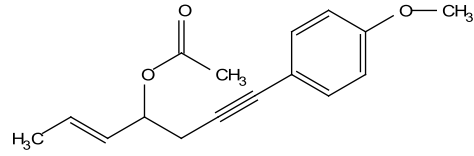


hkm2014-4-5-sono-2-1-jiayangji  
C13CPD

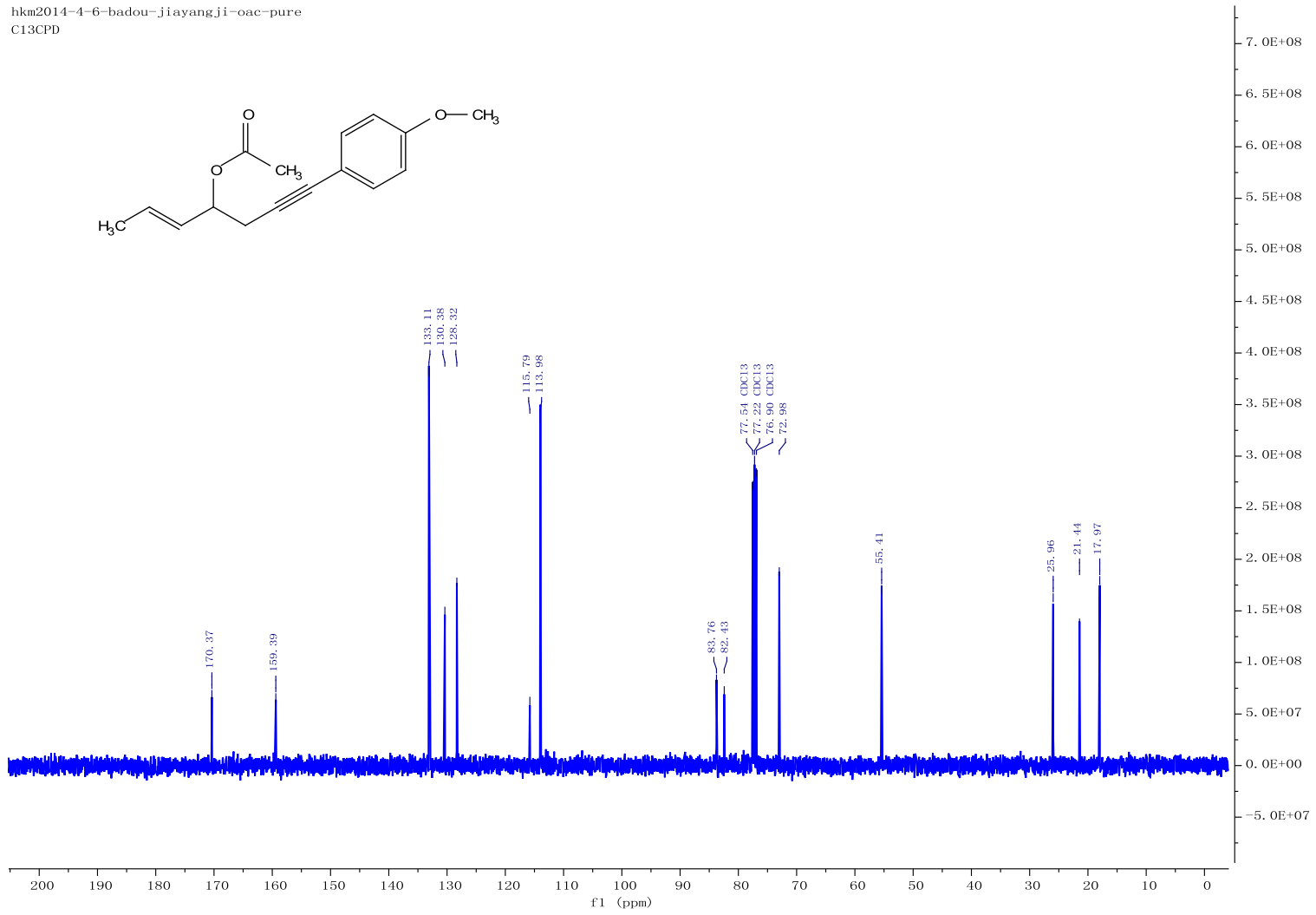
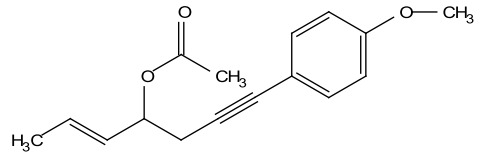




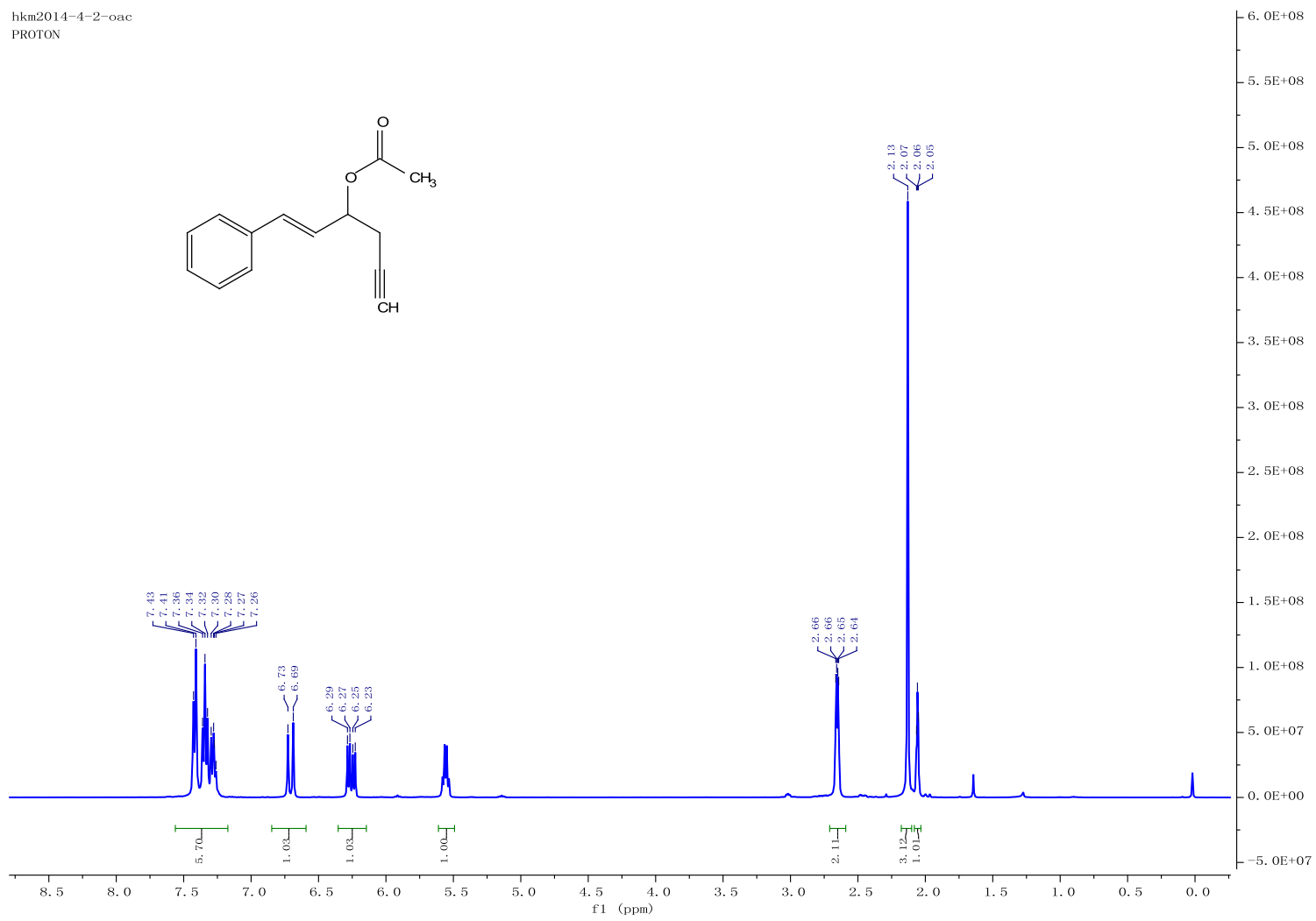
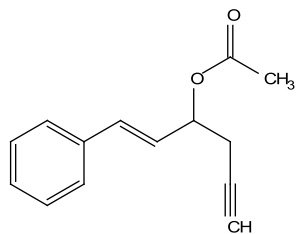
hkm2014-4-6-badou-jiayangji-oac-pure  
PROTON



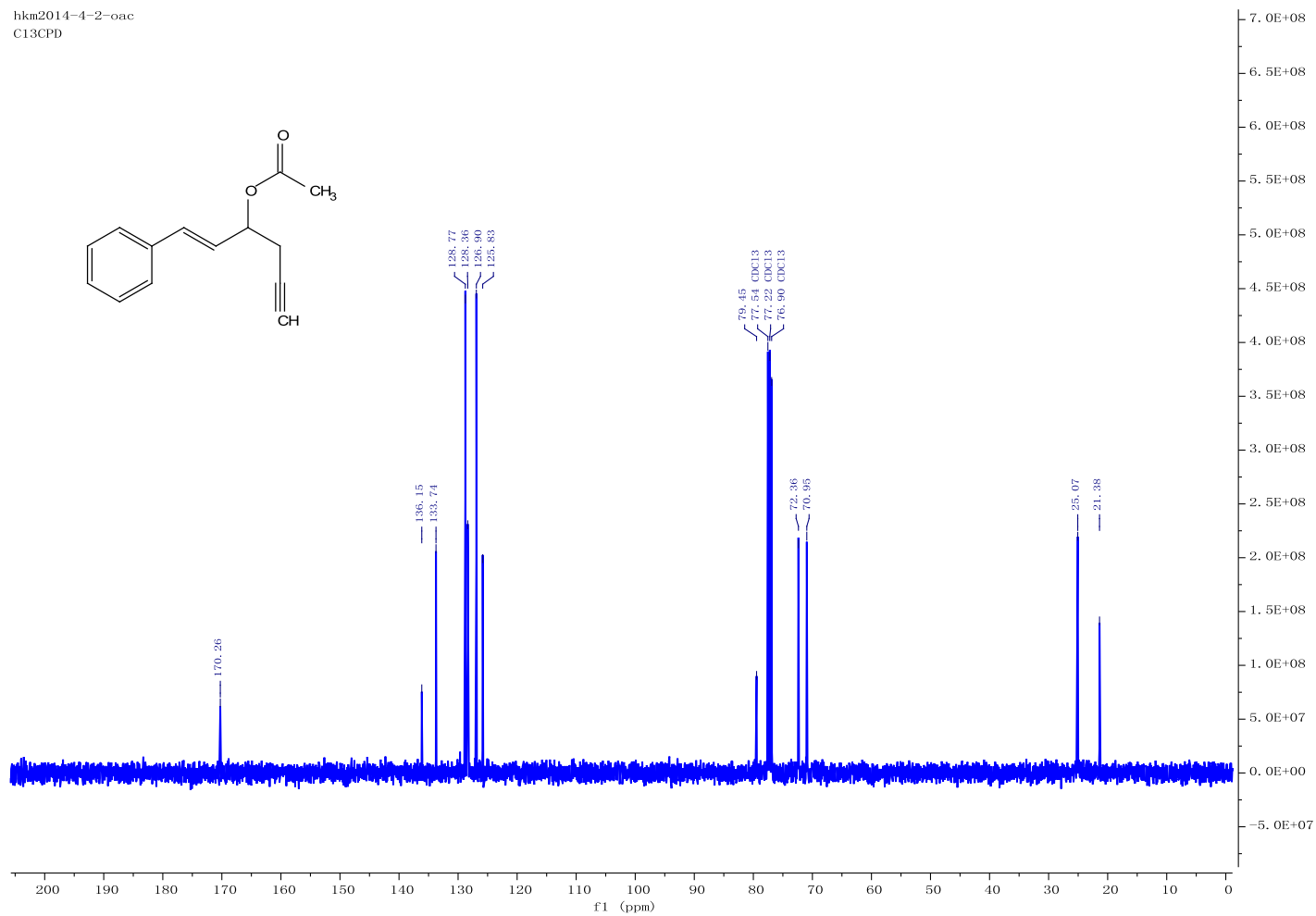
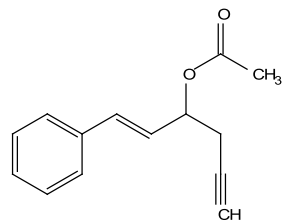
hkm2014-4-6-badou-jiayangji-oac-pure  
C13CPD



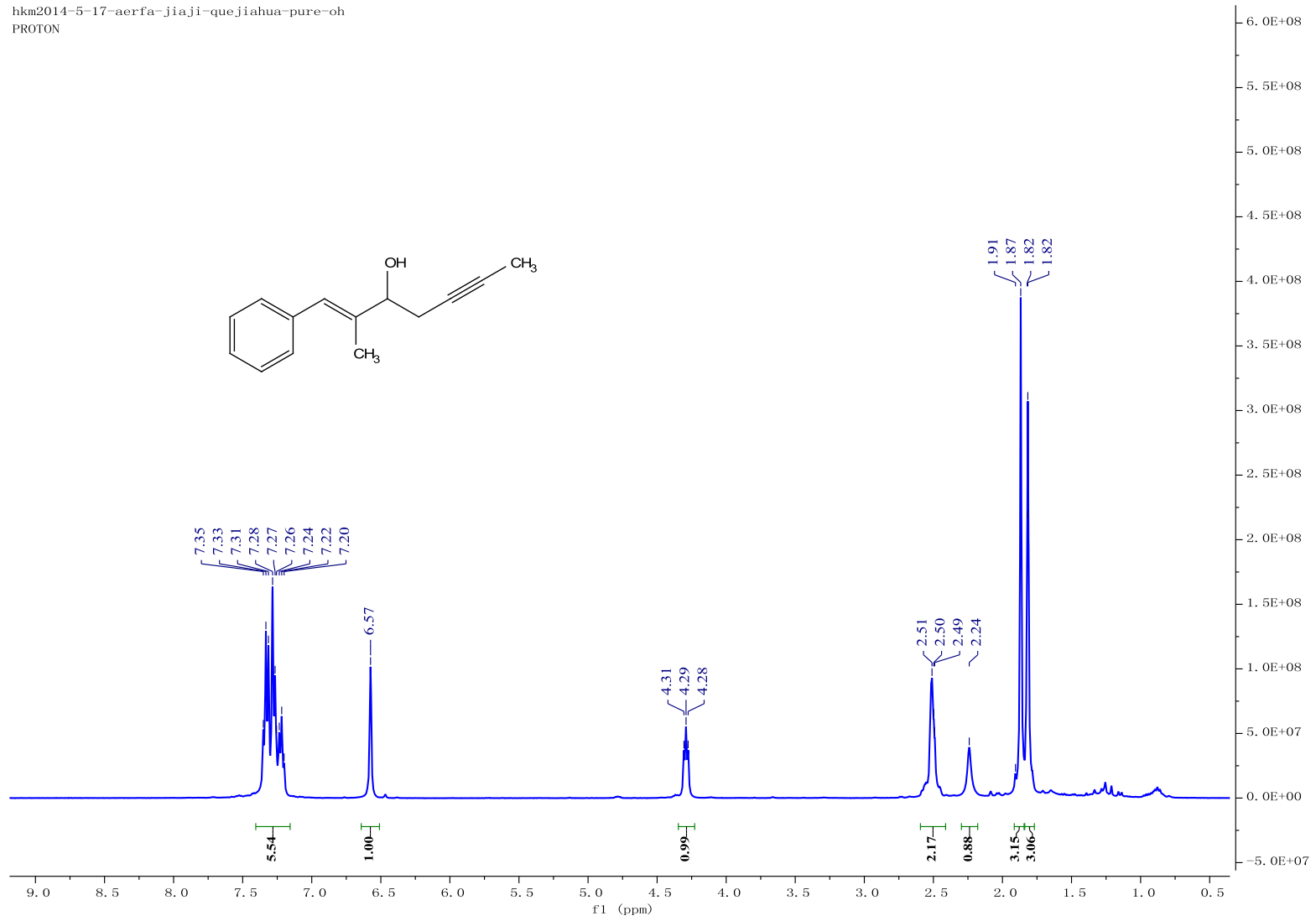
hkm2014-4-2-oac  
PROTON



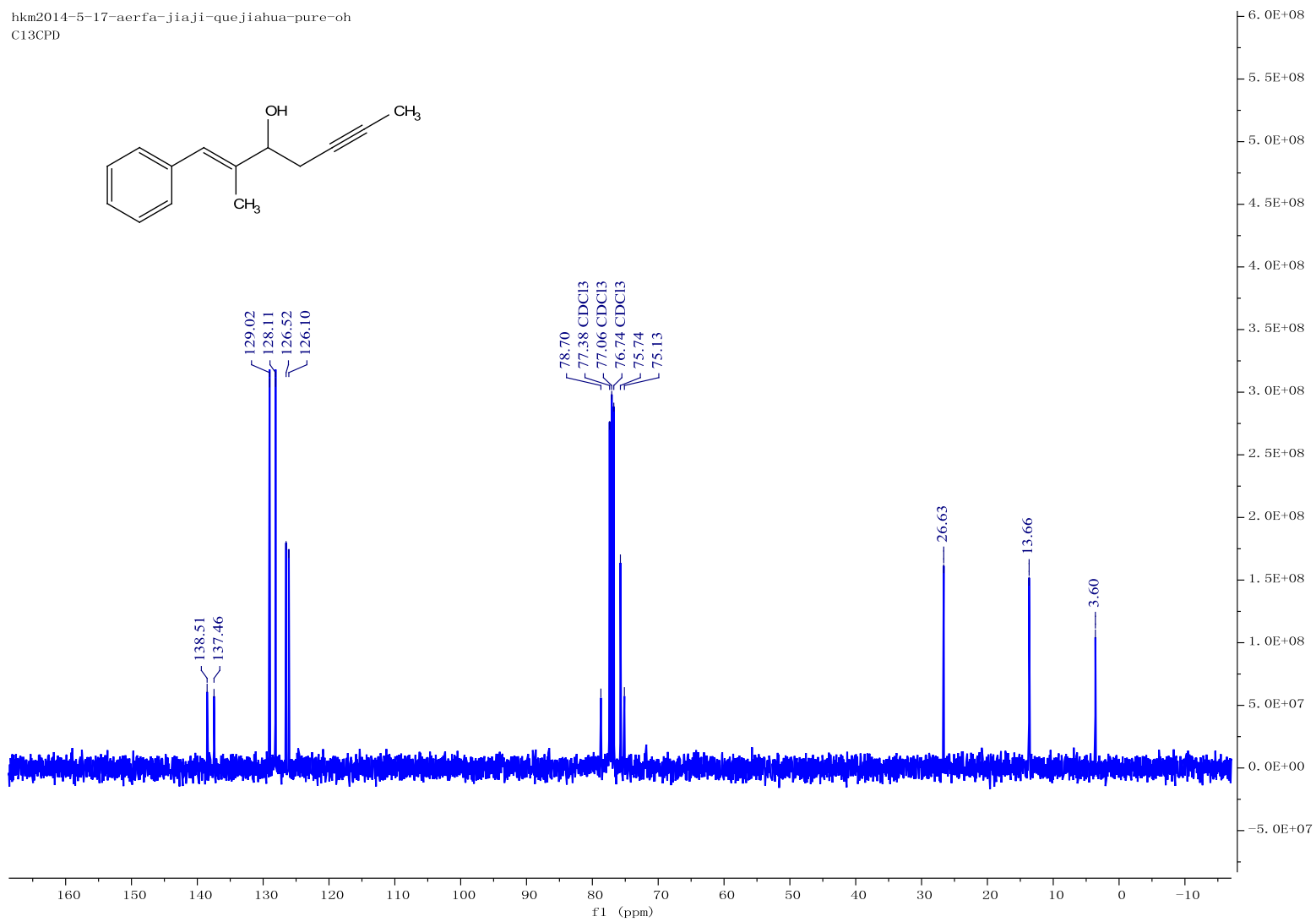
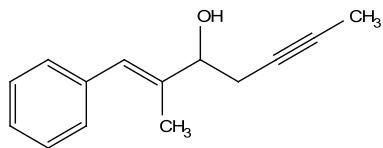
hkm2014-4-2-oac  
C13CPD



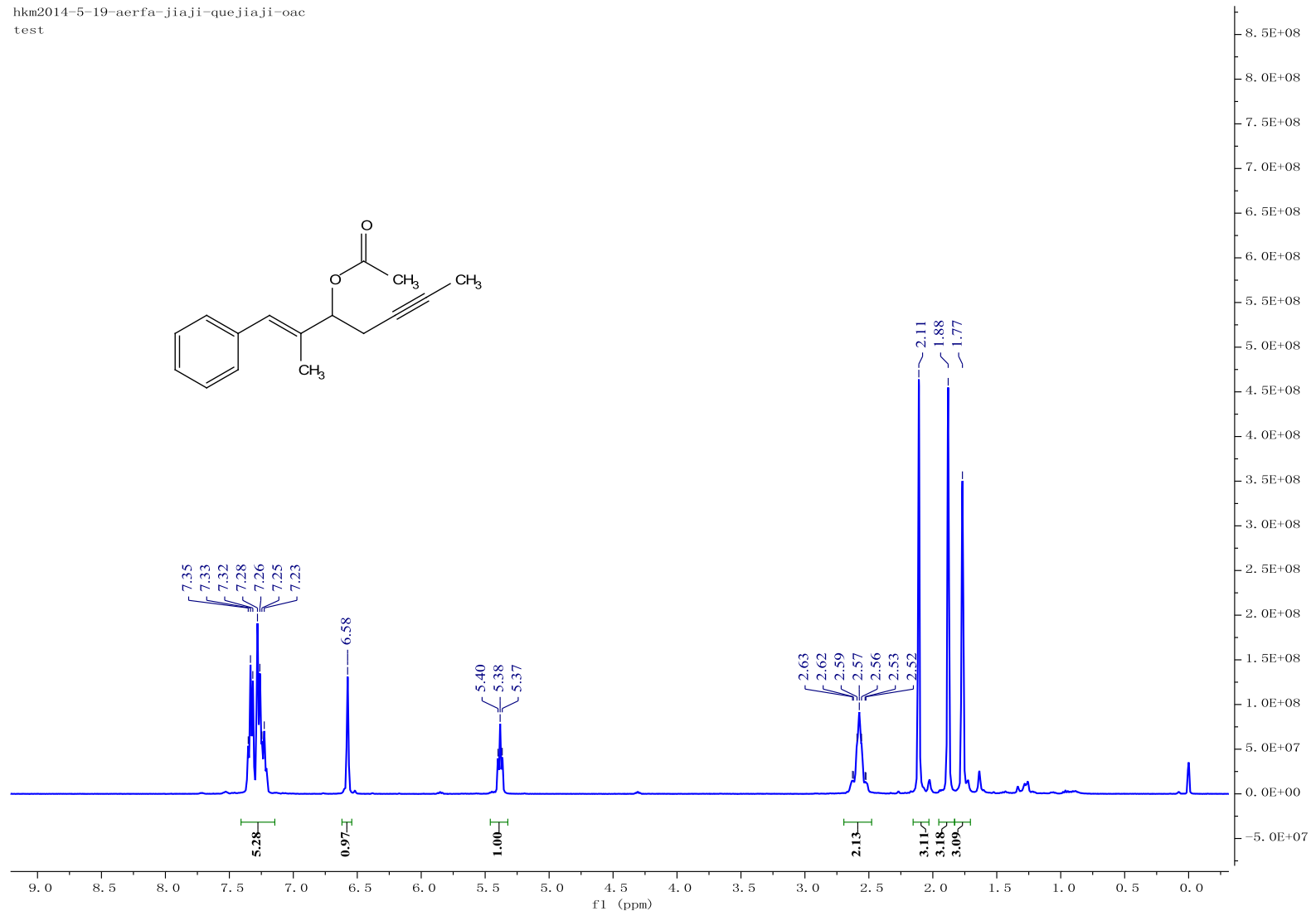
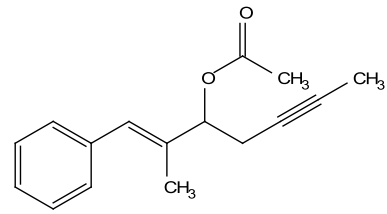
hkm2014-5-17-aerfa-jiaji-quejiahua-pure-oh  
PROTON



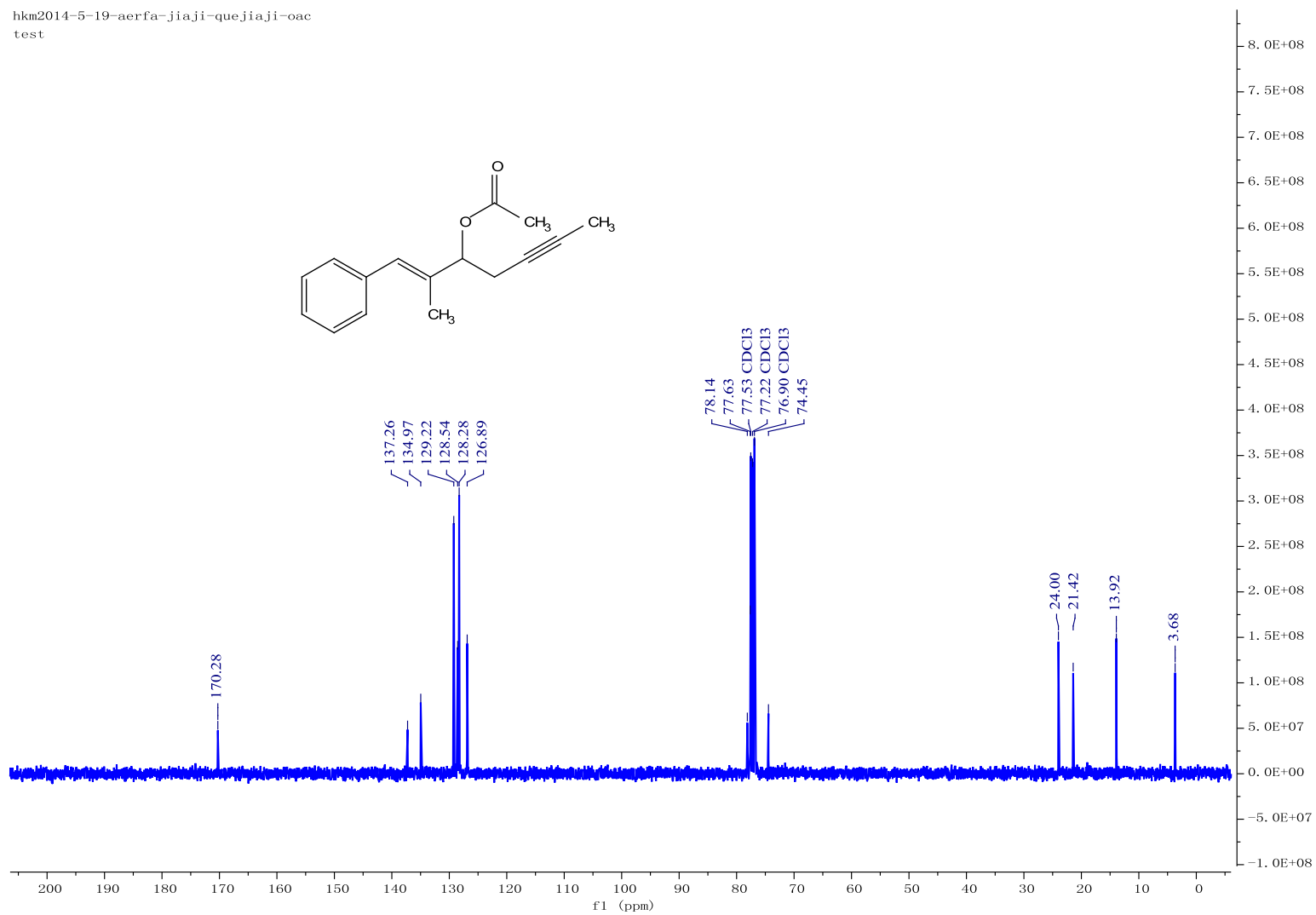
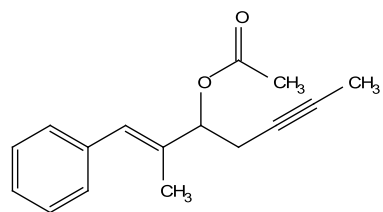
hkm2014-5-17-aerfa-jiaji-quejiahua-pure-oh  
C13CPD



hkm2014-5-19-aerfa-jiaji-quejiaji-oac  
test

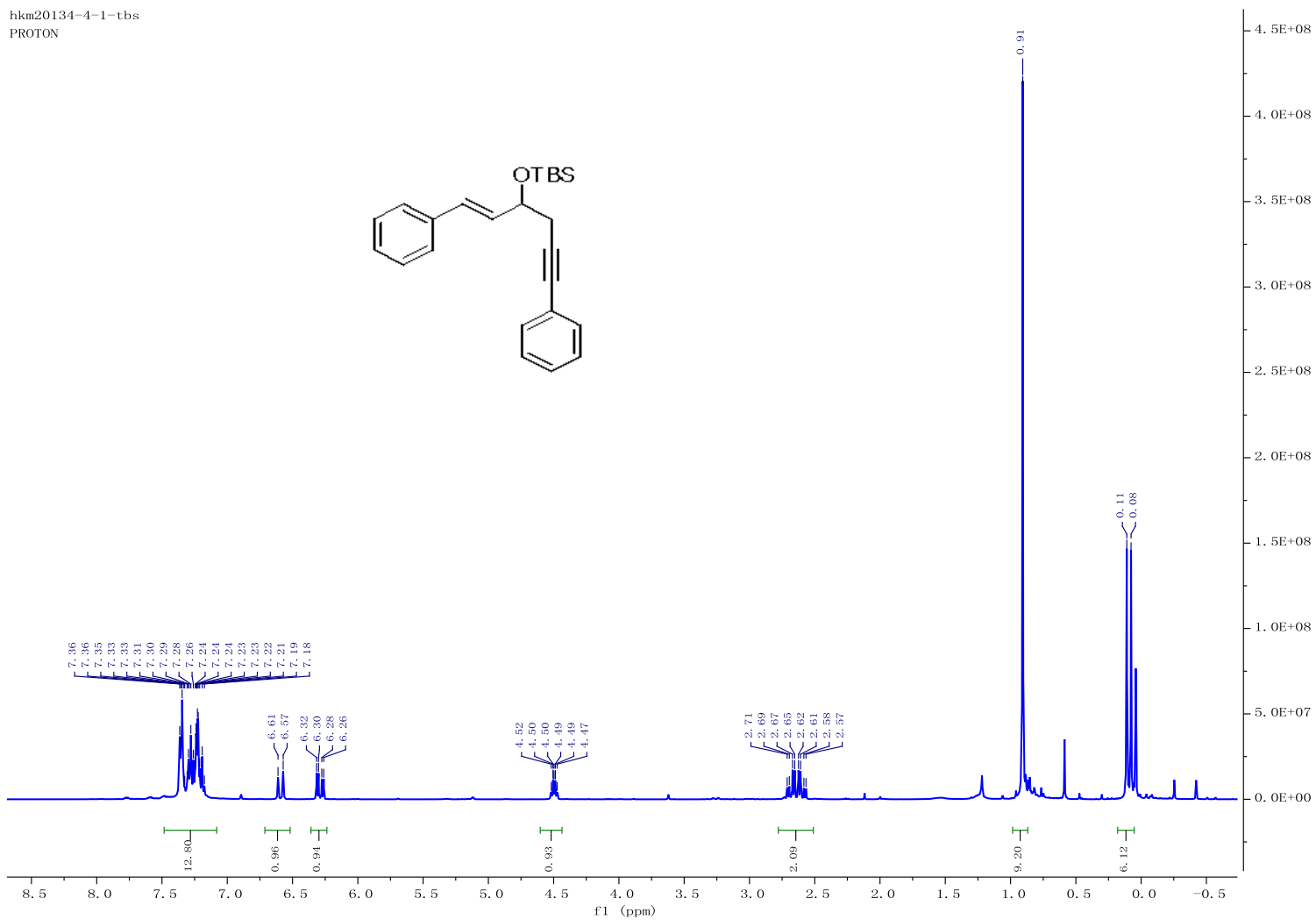
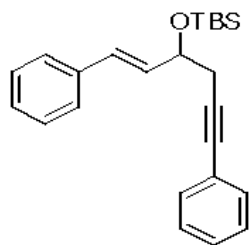


hkm2014-5-19-aerfa-jiaji-quejiaji-oac  
test

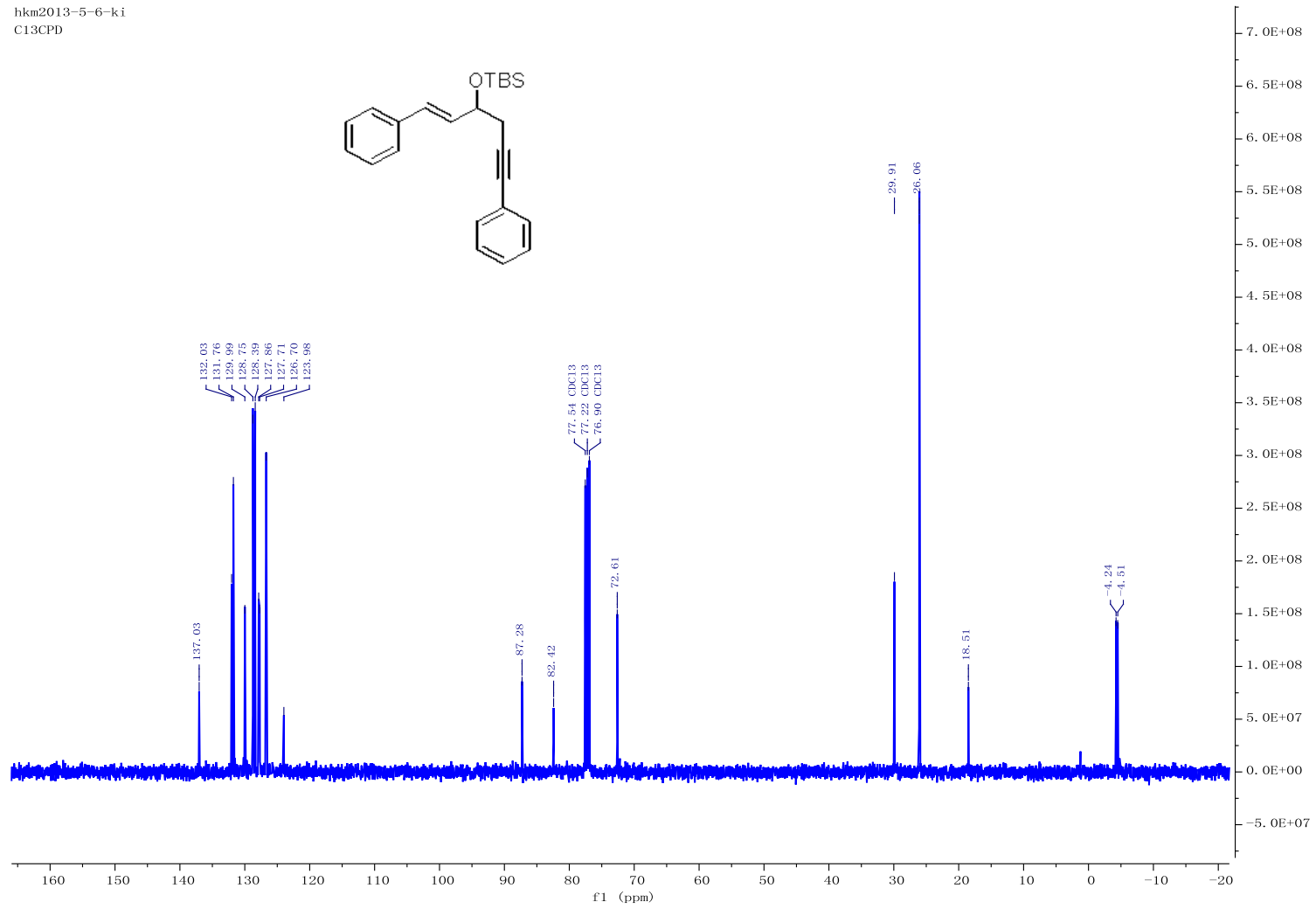
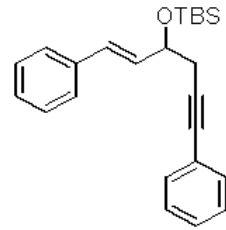




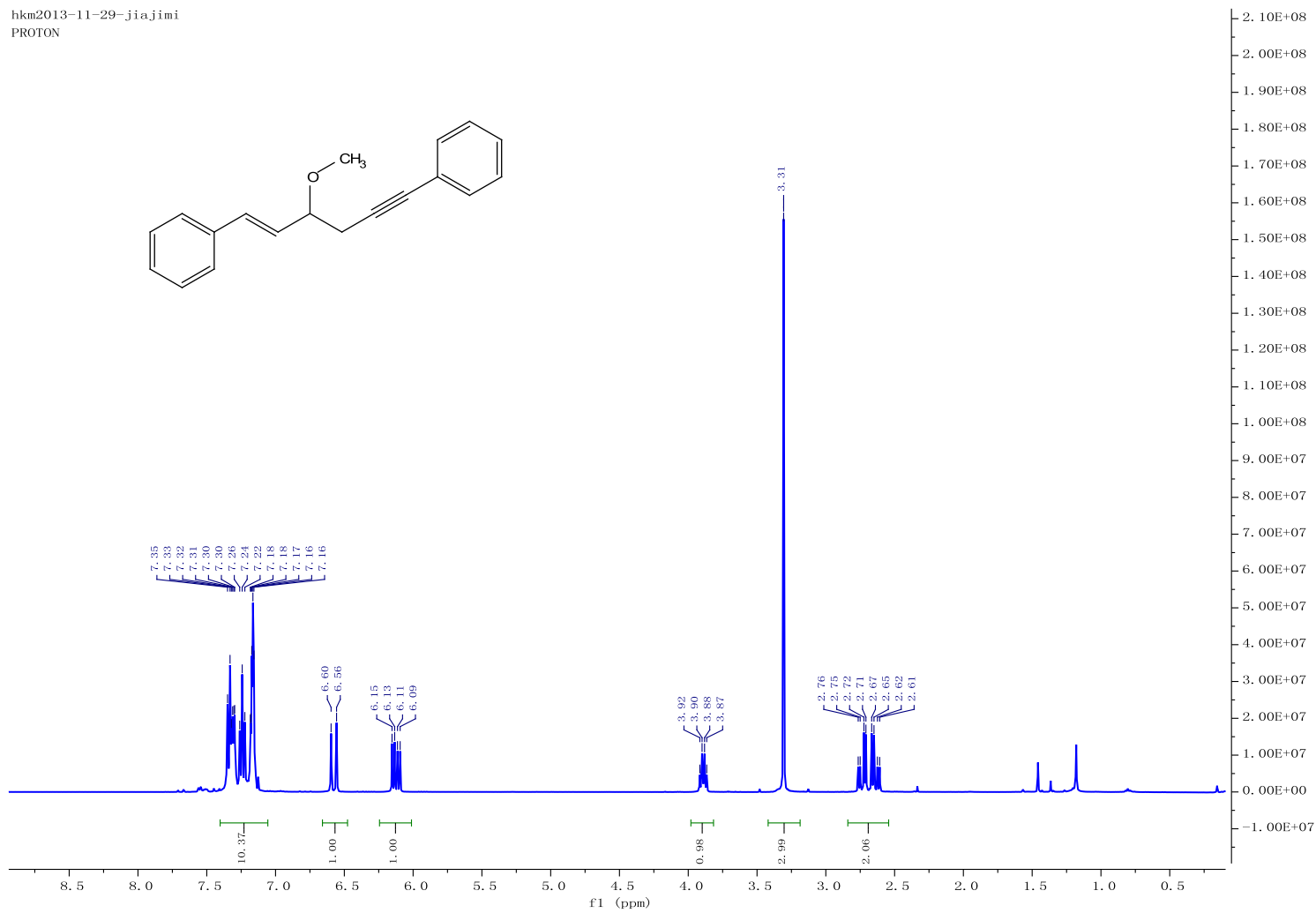
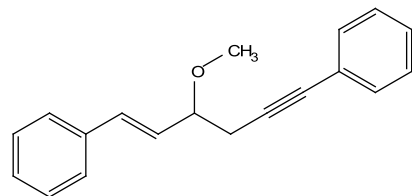
hkm20134-4-1-tbs  
PROTON



hkm2013-5-6-ki  
C13CPD

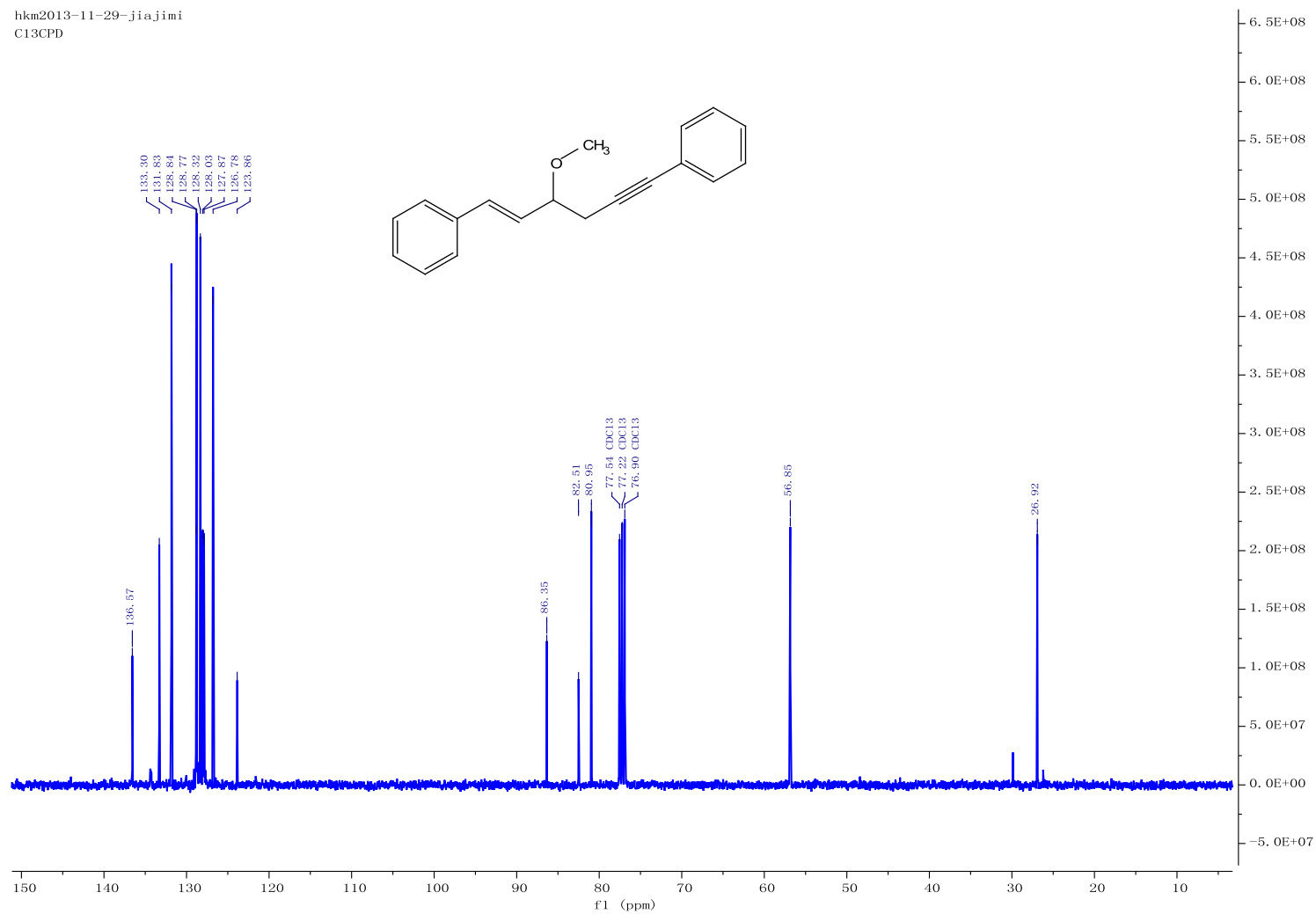


hkm2013-11-29-jiajimi  
PROTON



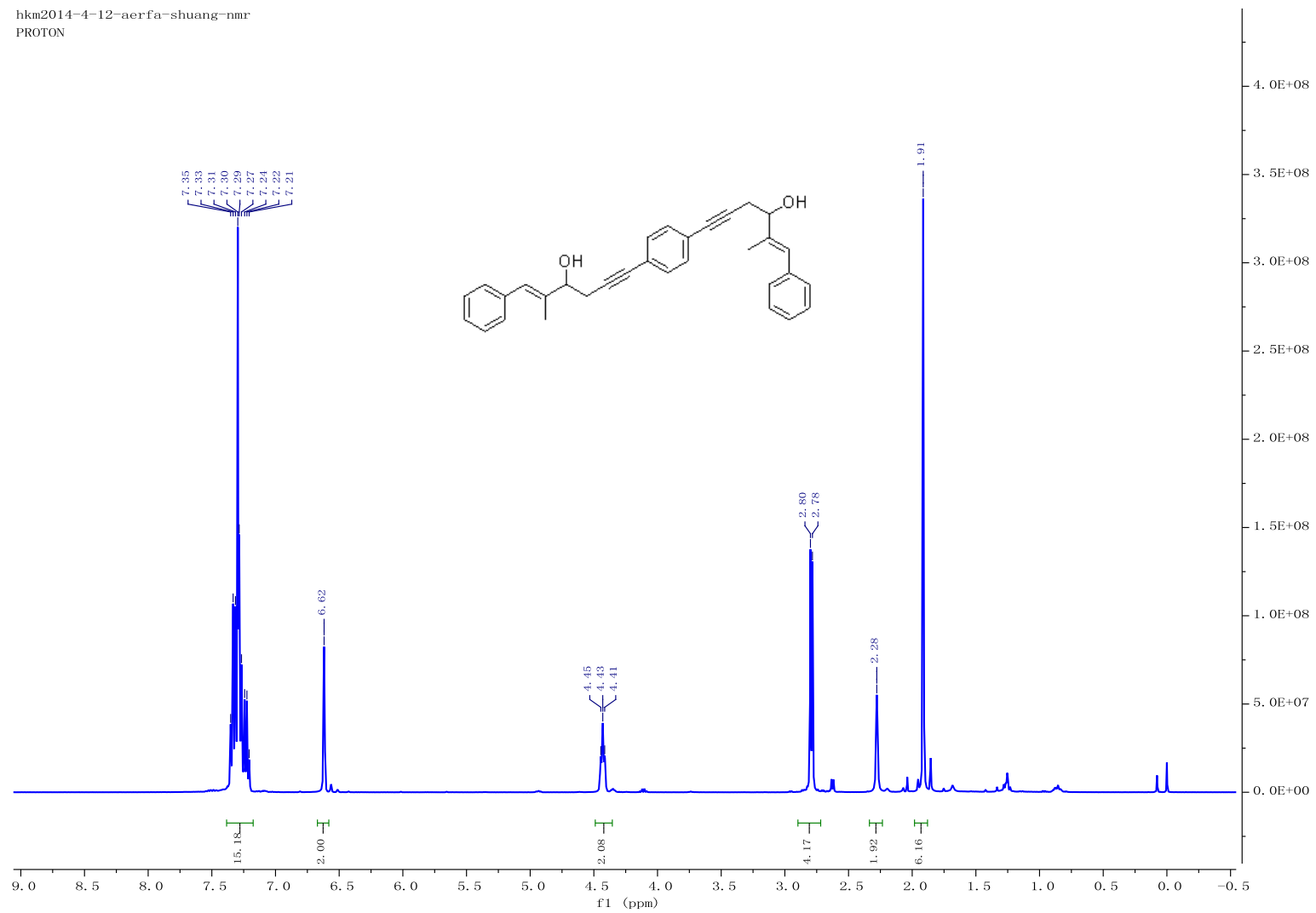


hkm2013-11-29-jiajimi  
C13CPD

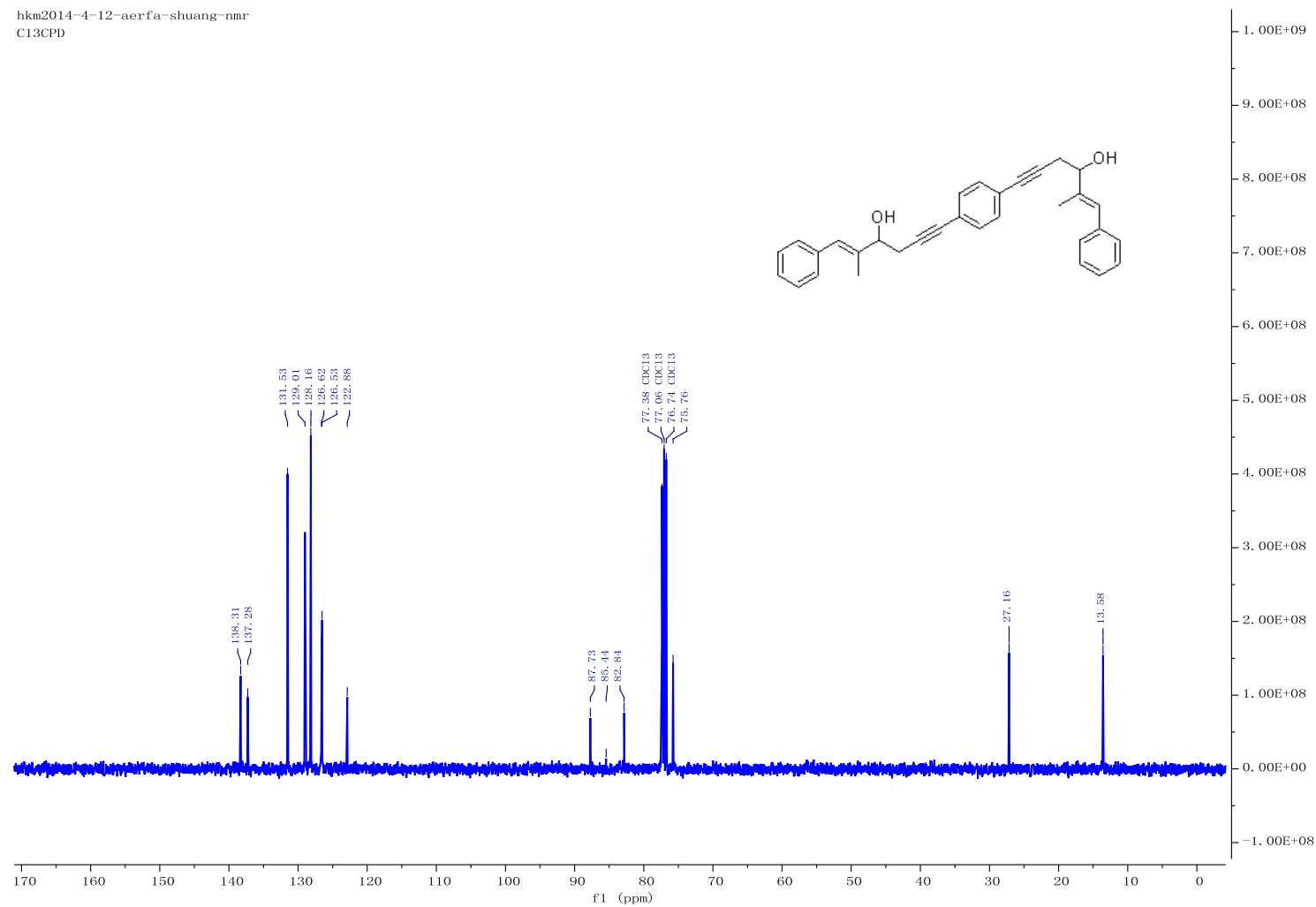




hkm2014-4-12-aerfa-shuang-nmr  
PROTON

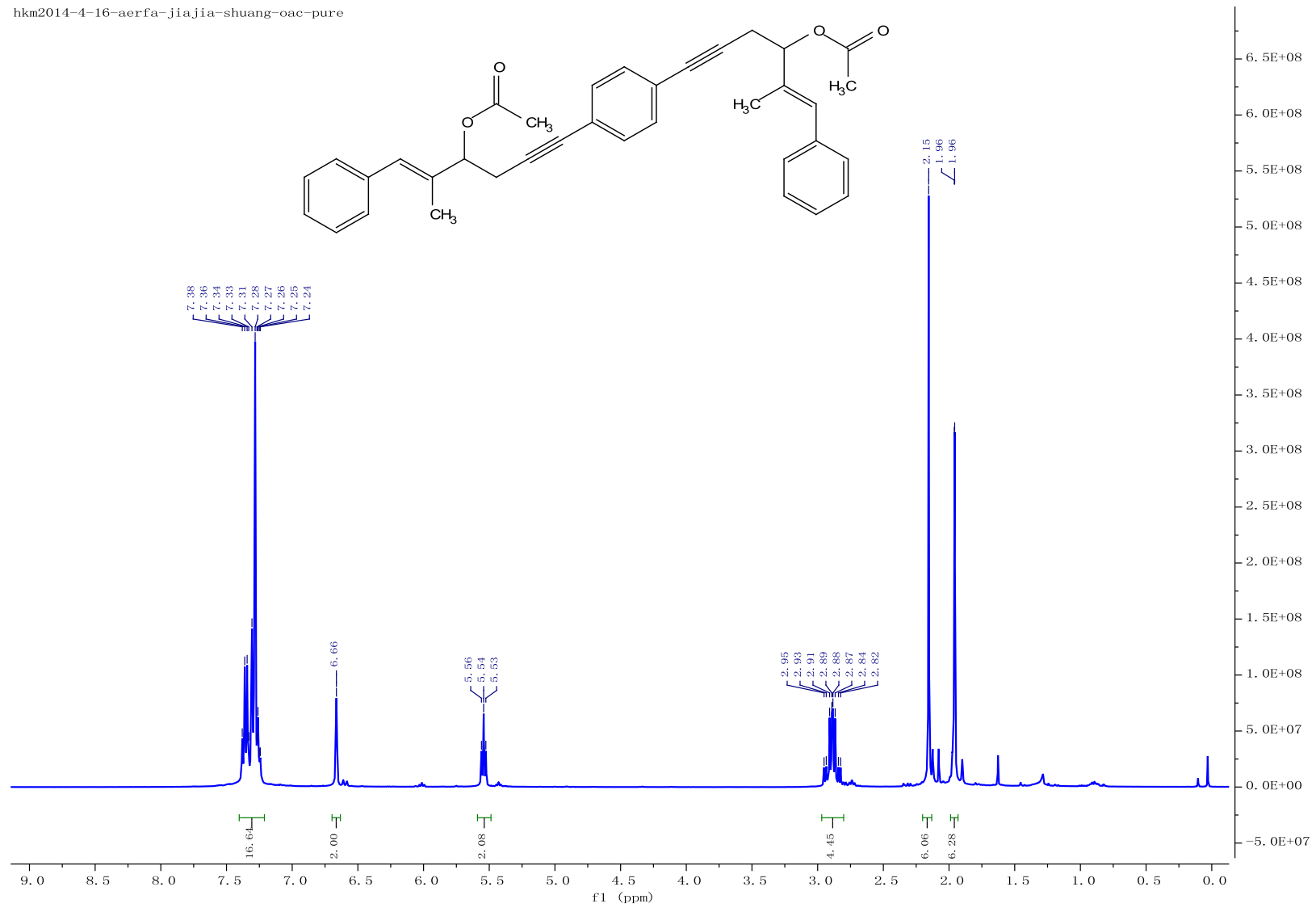
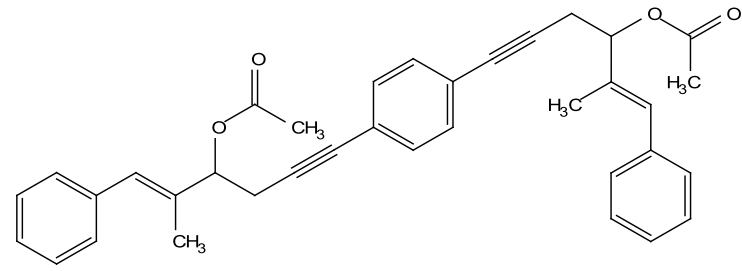


hkm2014-4-12-aerfa-shuang-nmr  
C13CPD



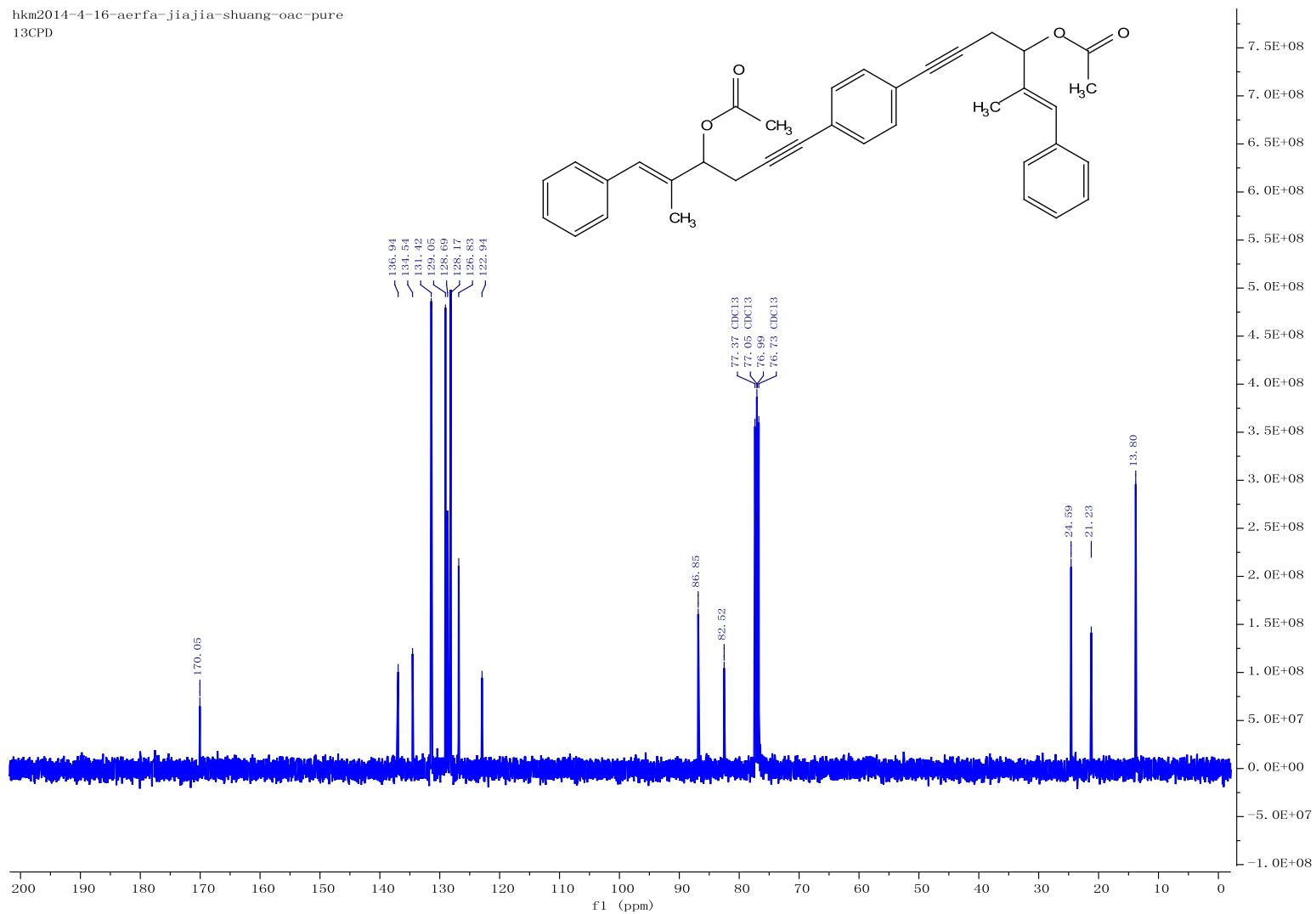


hkm2014-4-16-aerfa-jiajia-shuang-oac-pure



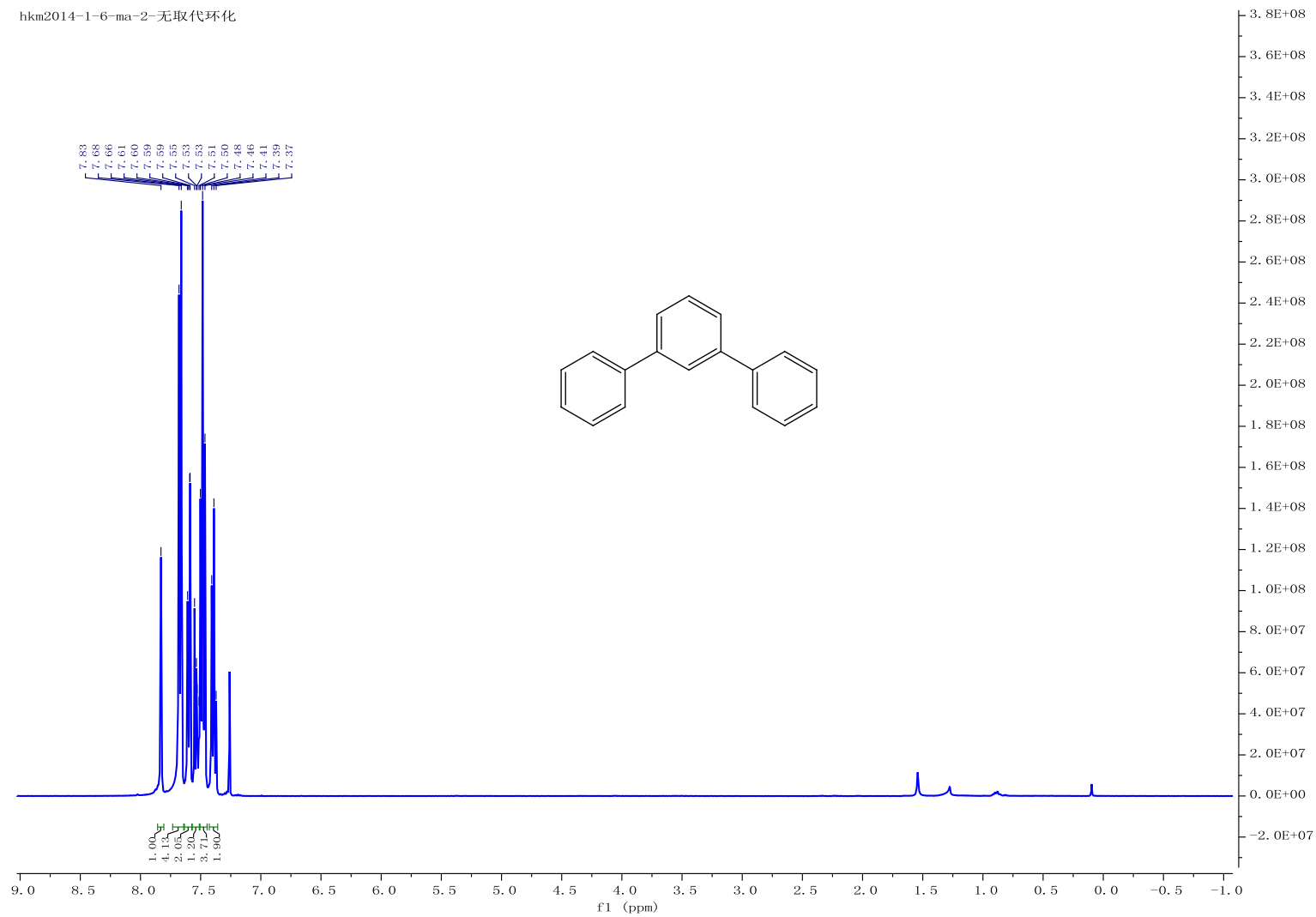


hkm2014-4-16-aerfa-jiajia-shuang-oac-pure  
13CPD

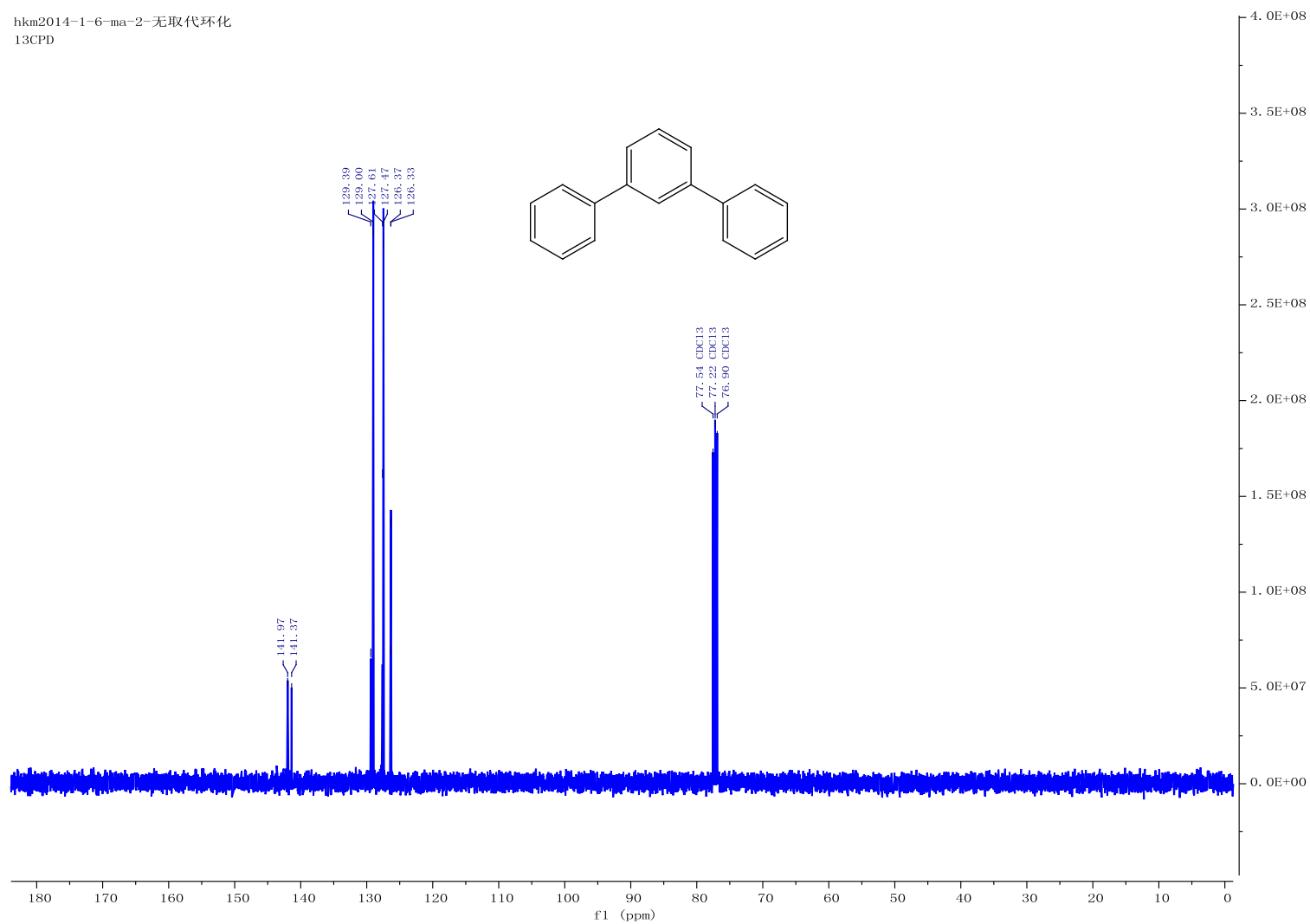




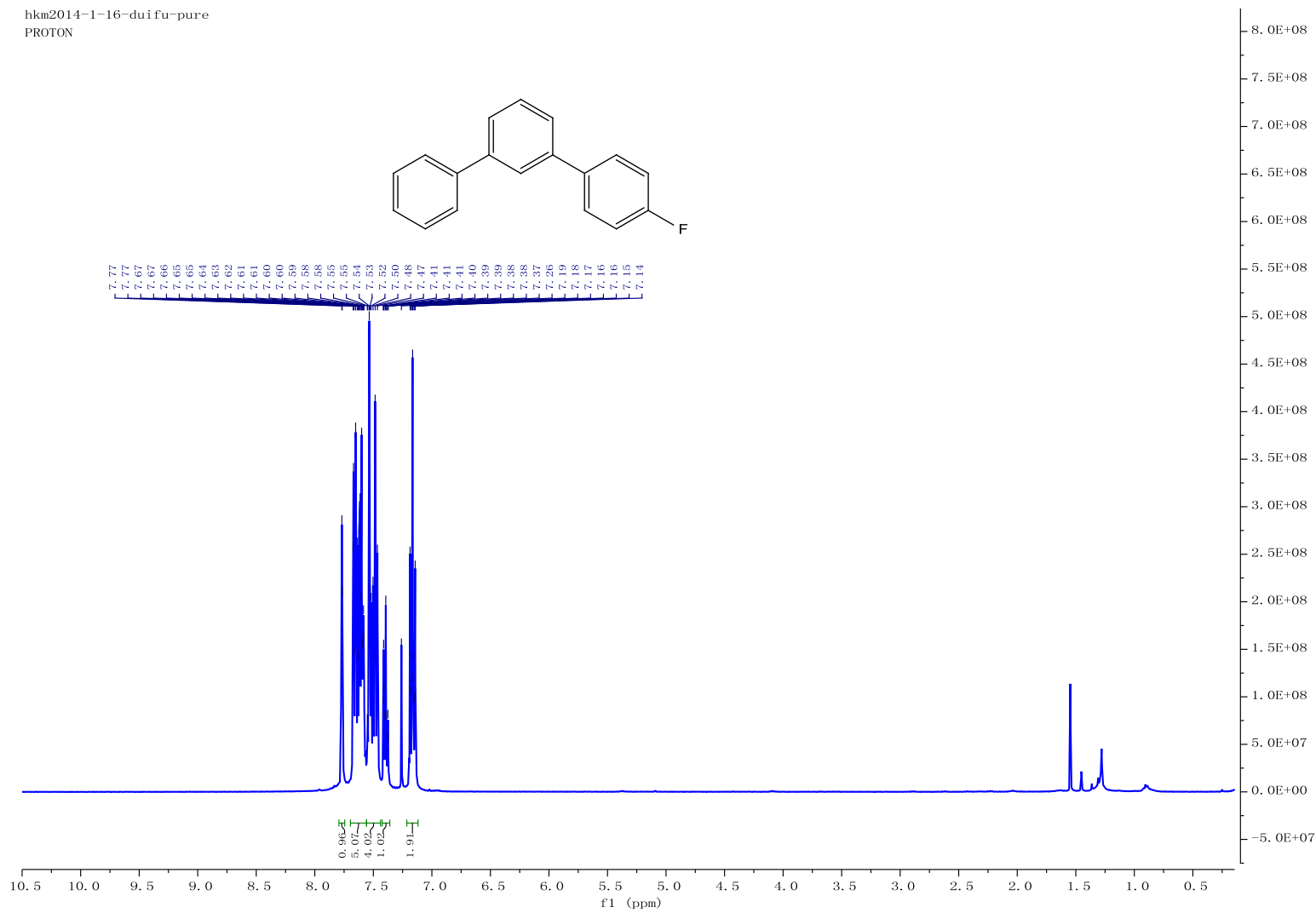
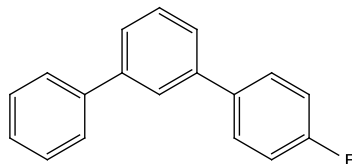
hkm2014-1-6-ma-2-无取代环化



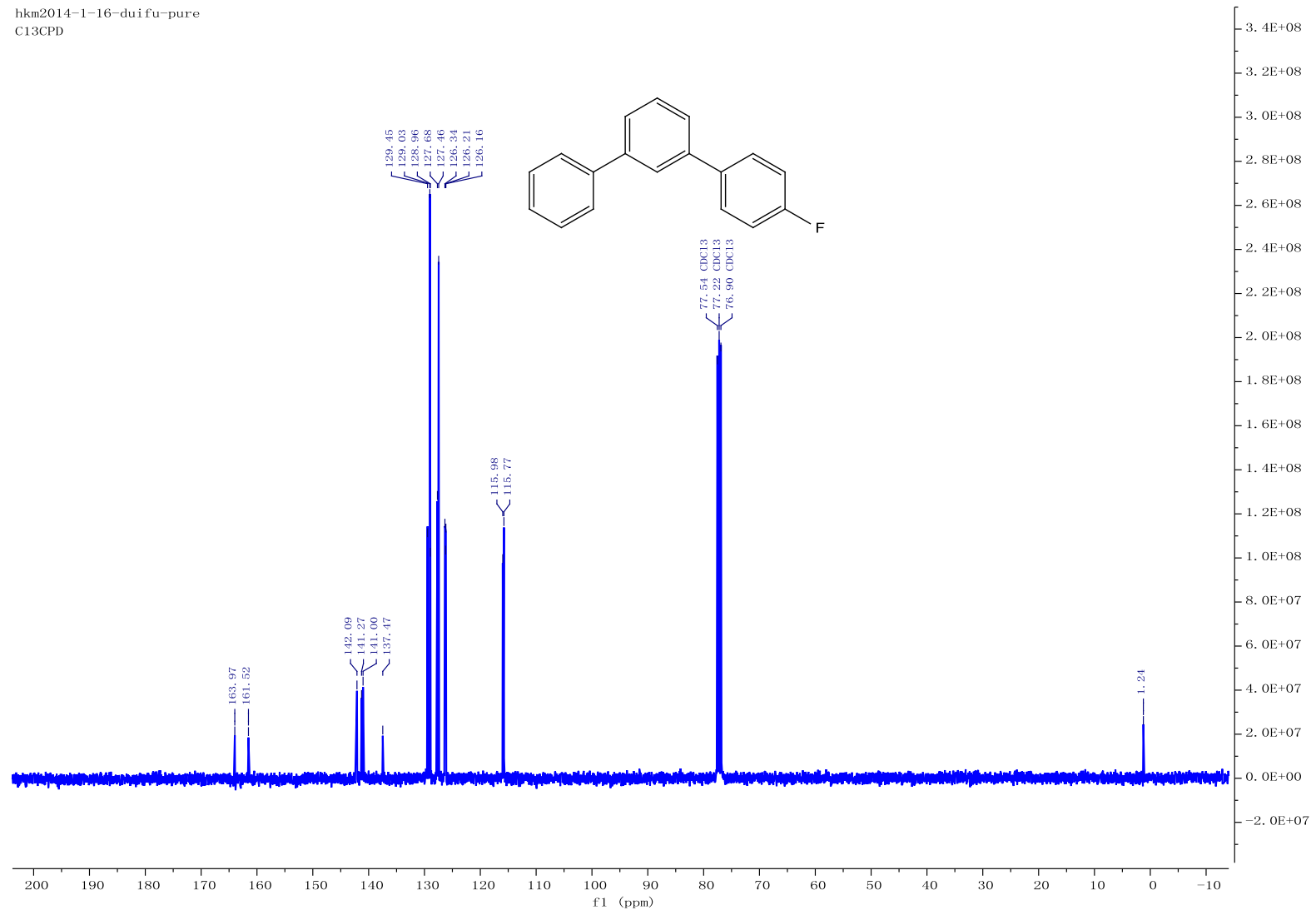
hkm2014-1-6-ma-2-无取代环化  
13CPD



hkm2014-1-16-duifu-pure  
PROTON

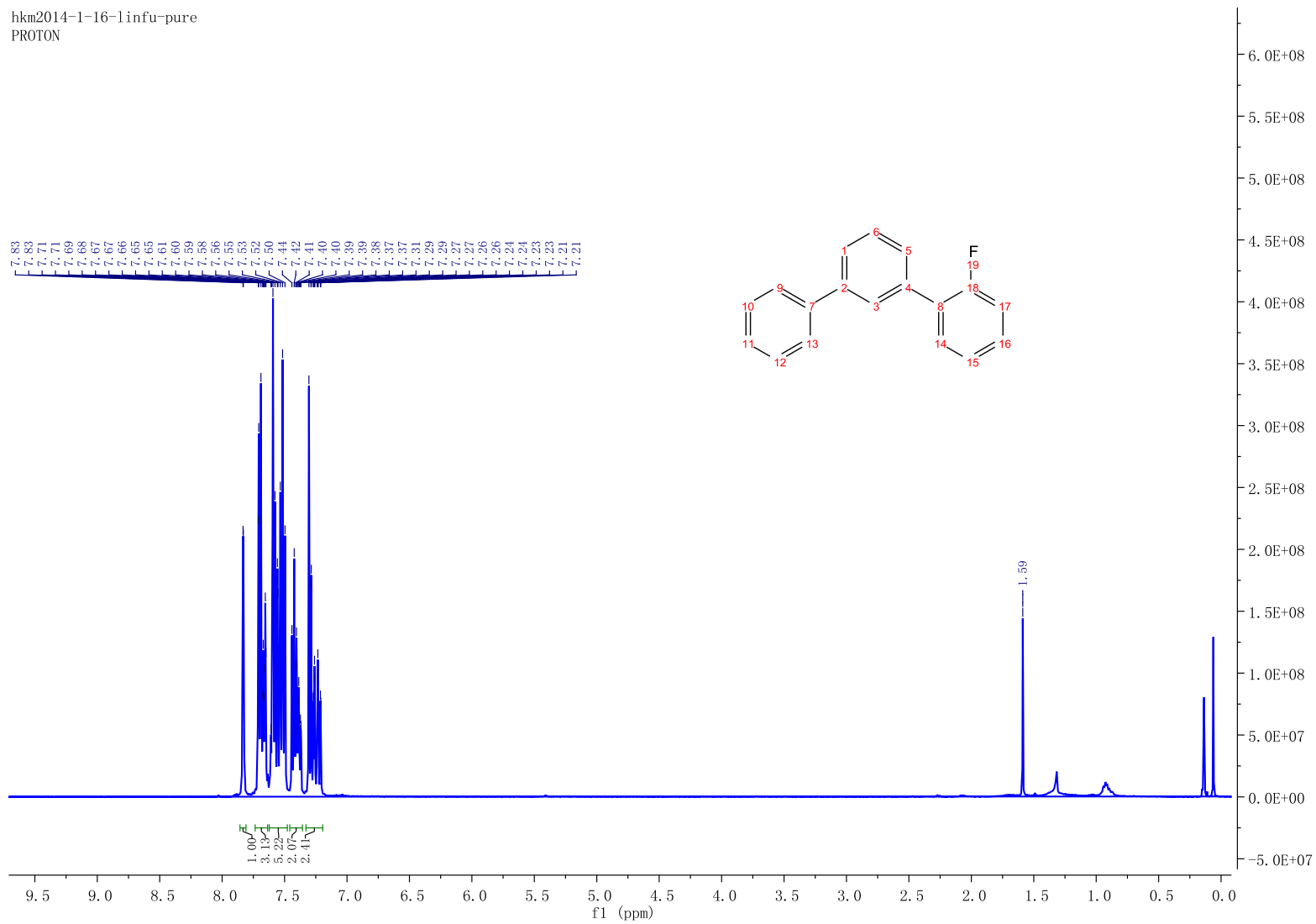


hkm2014-1-16-duifu-pure  
C13CPD

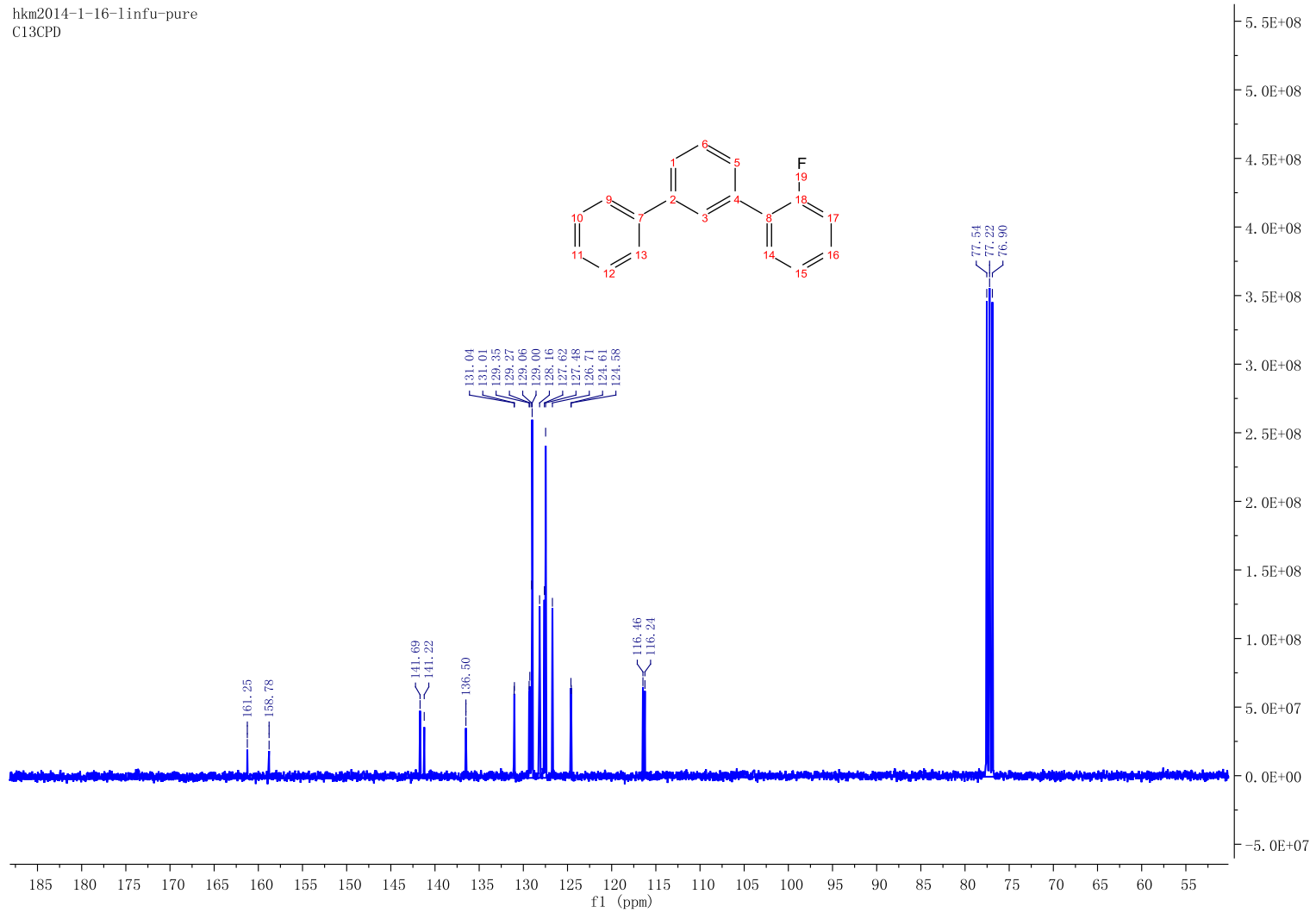




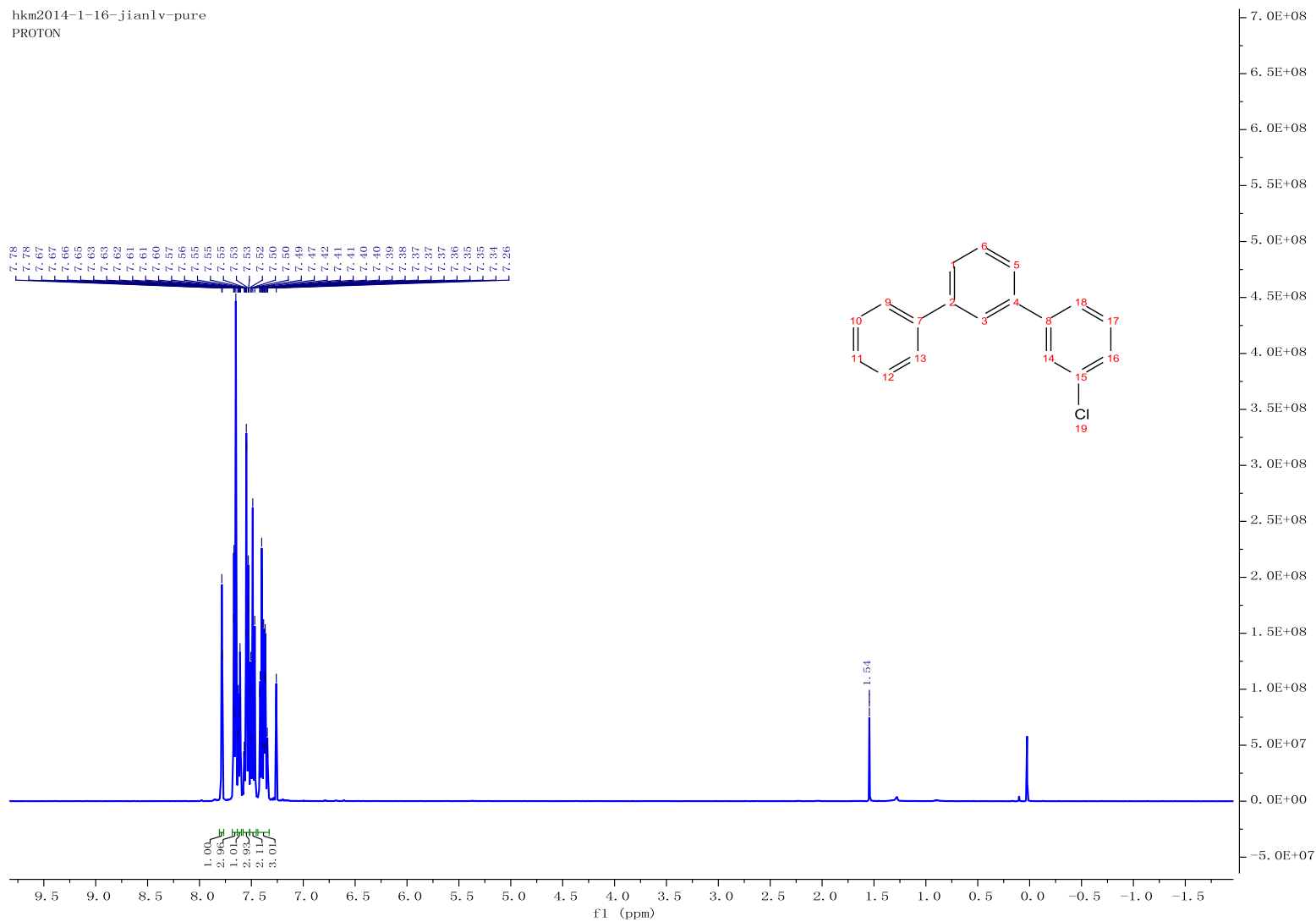
hkm2014-1-16-linfu-pure  
PROTON



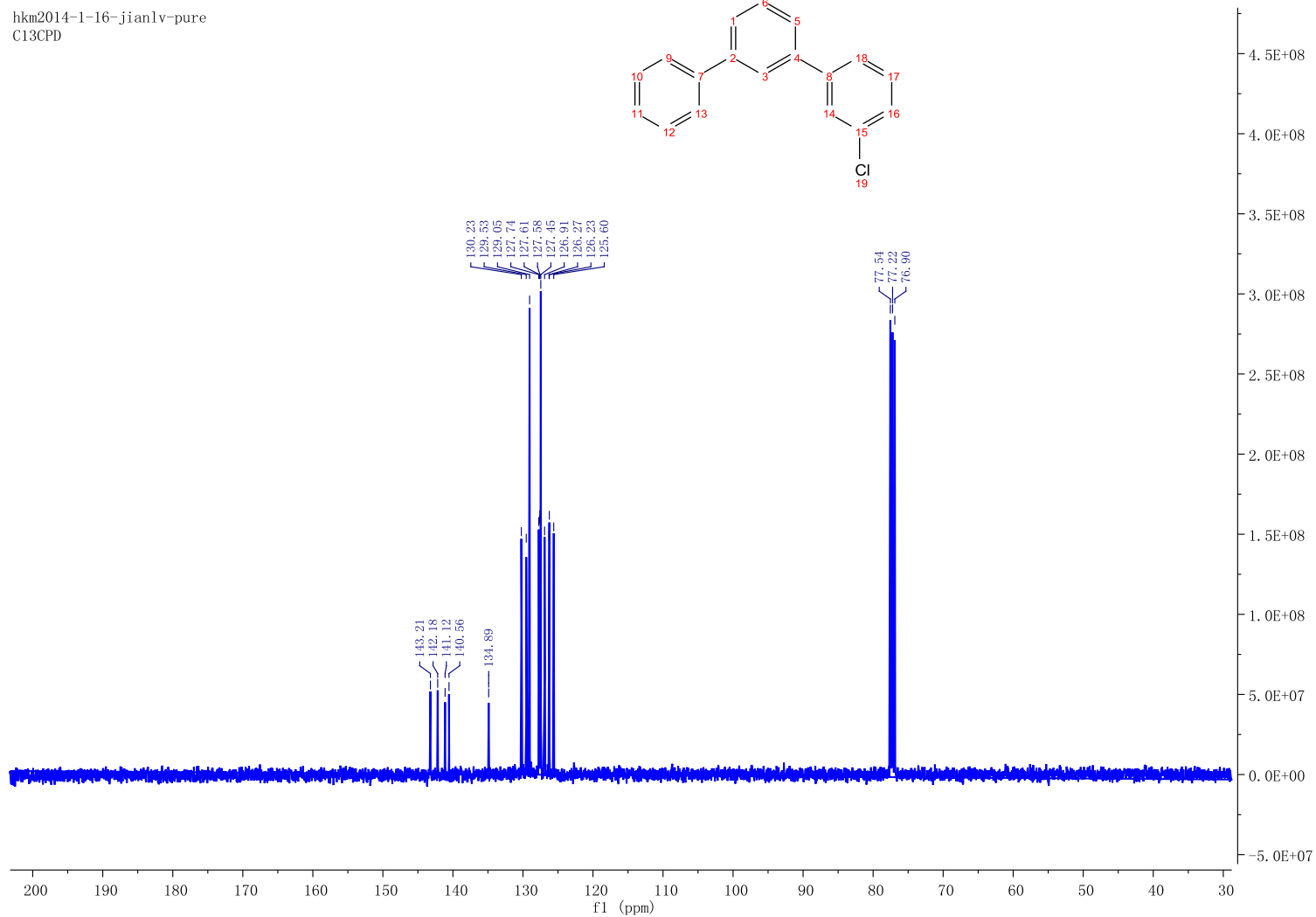
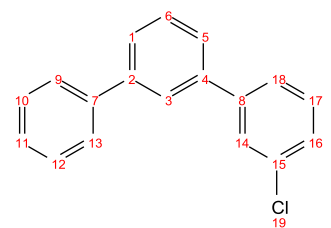
hkm2014-1-16-linfu-pure  
C13CPD



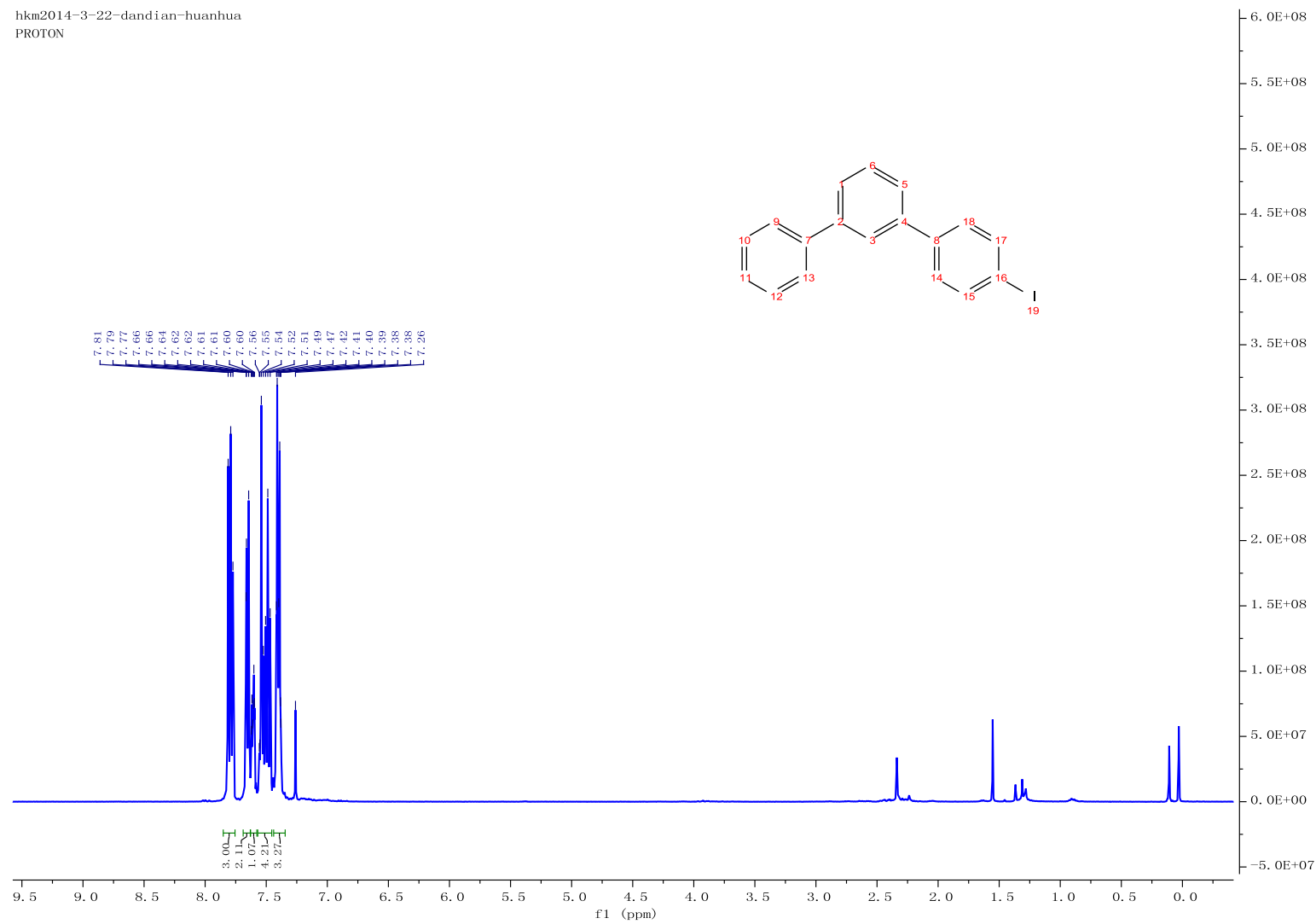
hkm2014-1-16-jianlv-pure  
PROTON



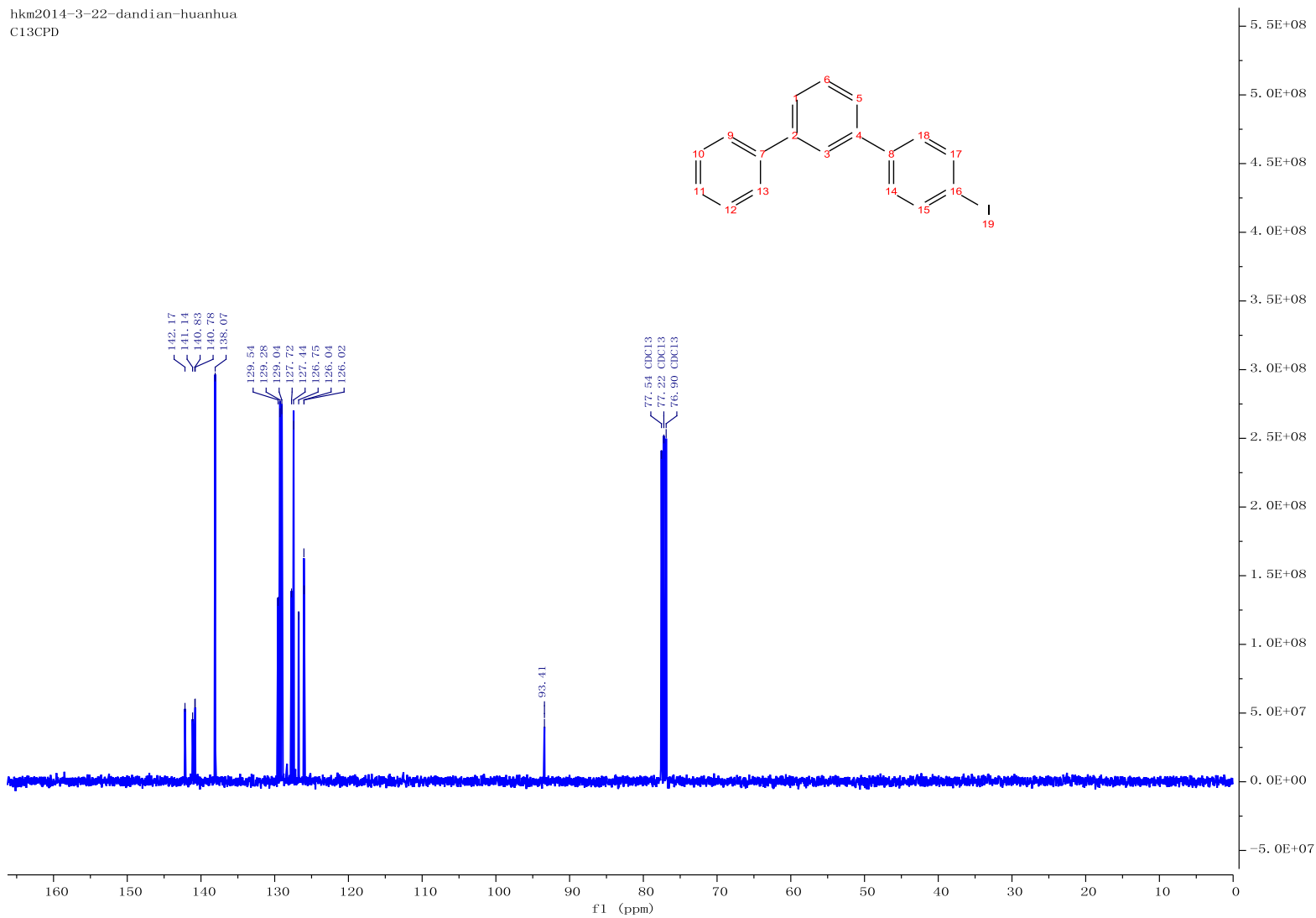
hkm2014-1-16-jianlv-pure  
C13CPD



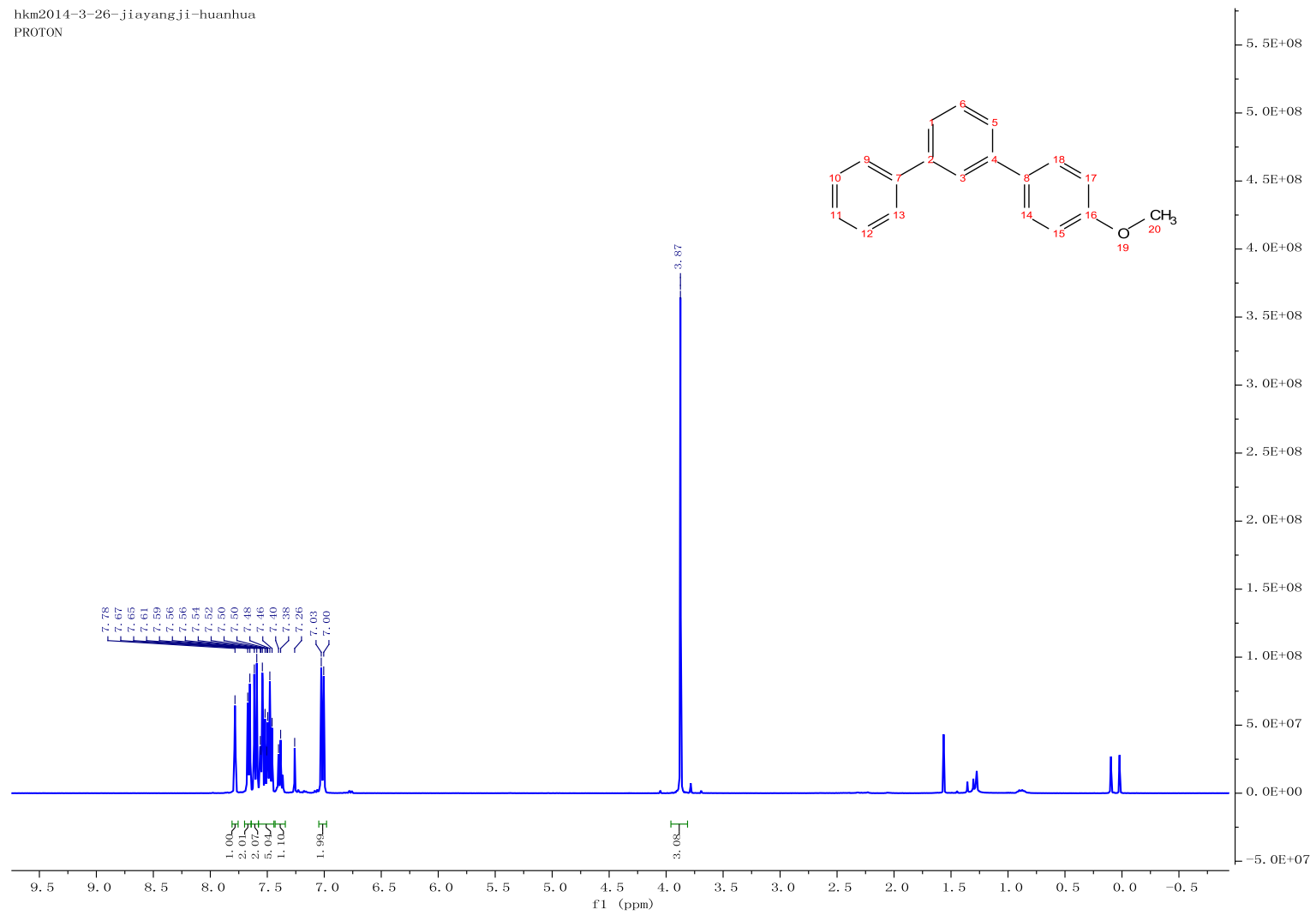
hkm2014-3-22-dandian-huanhua  
PROTON



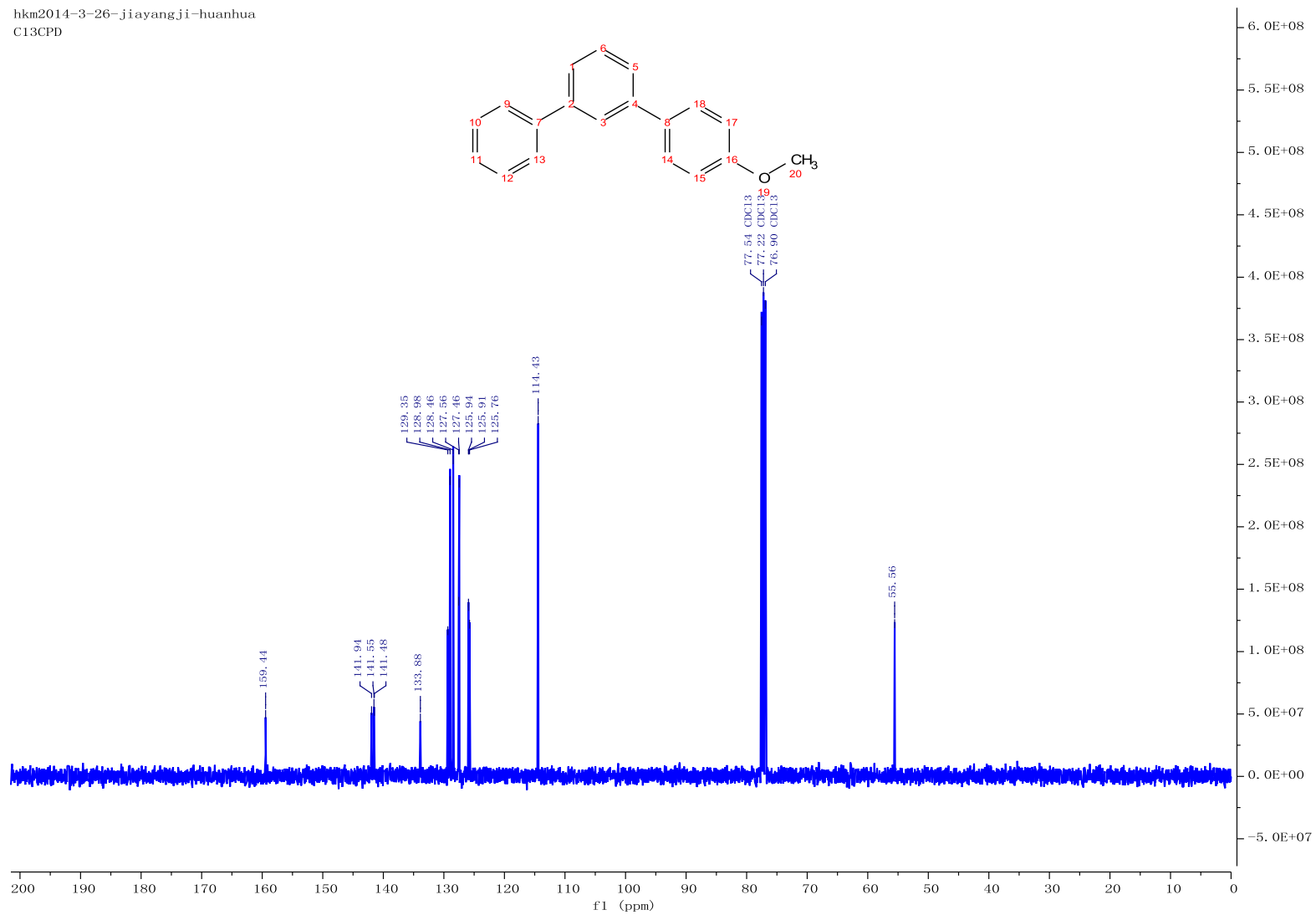
hkm2014-3-22-dandian-huanhua  
C13CPD



hkm2014-3-26-jiayangji-huanhua  
PROTON

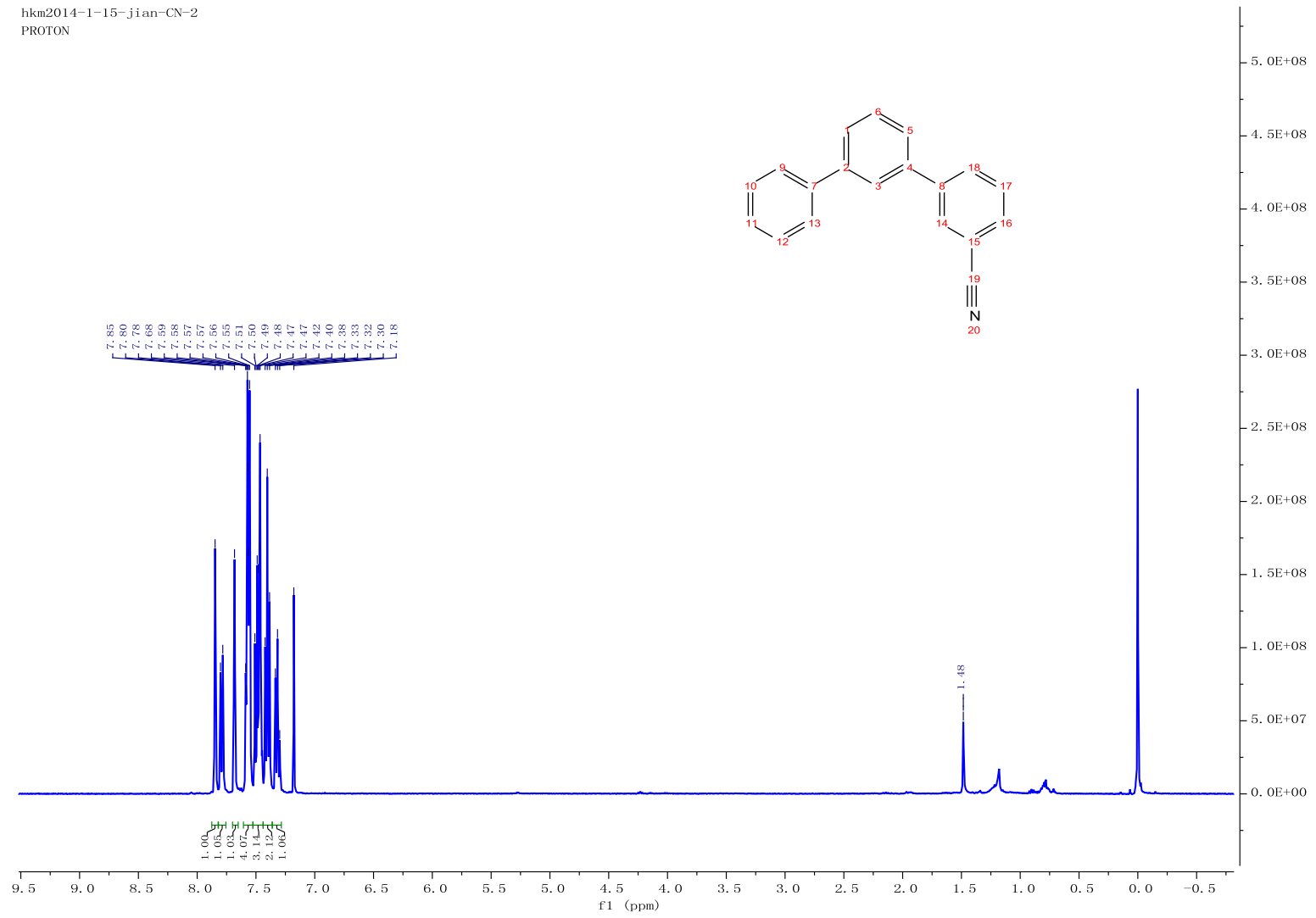


hkm2014-3-26-jiayangji-huanhua  
C13CPD

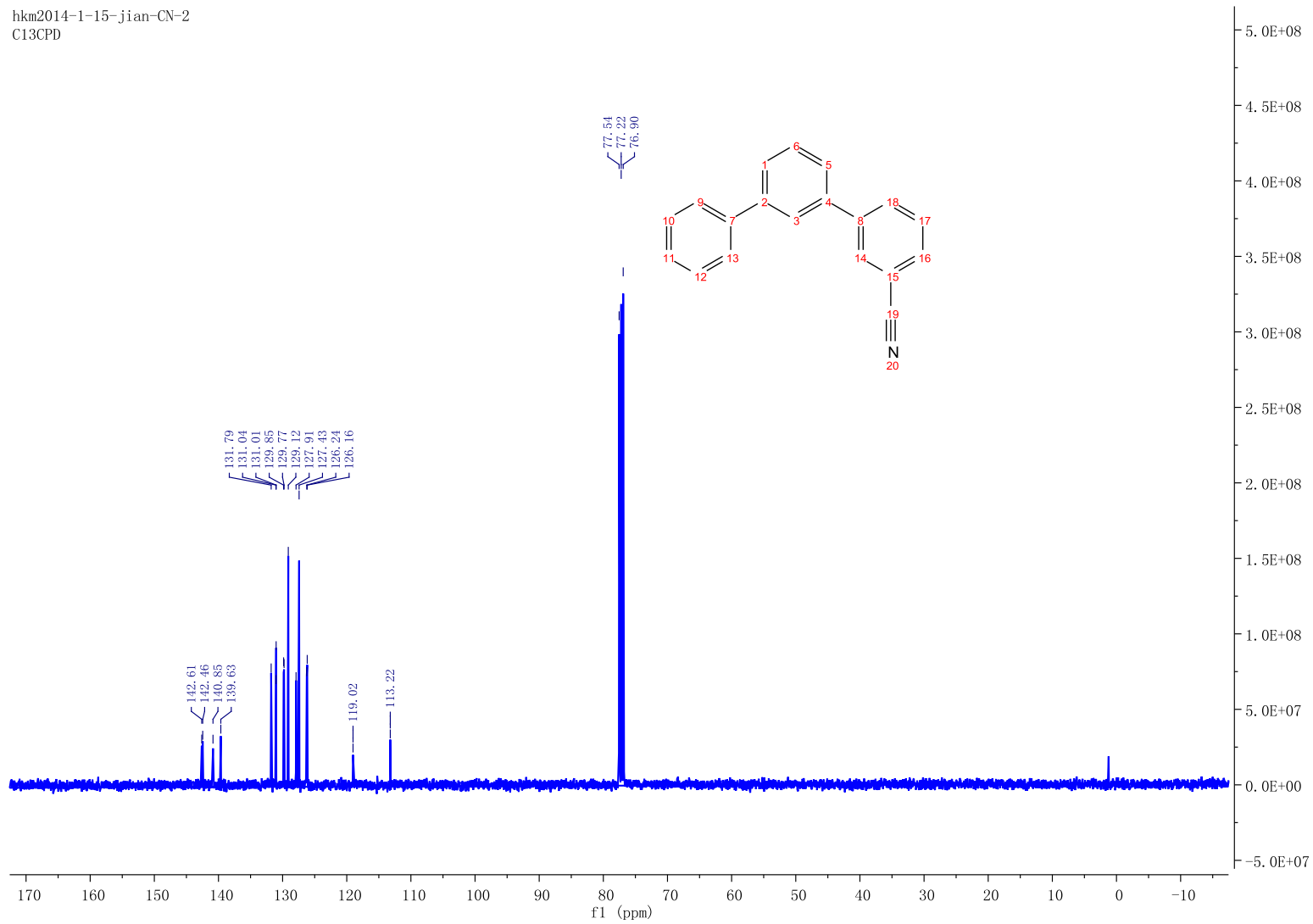




hkm2014-1-15-jian-CN-2  
PROTON

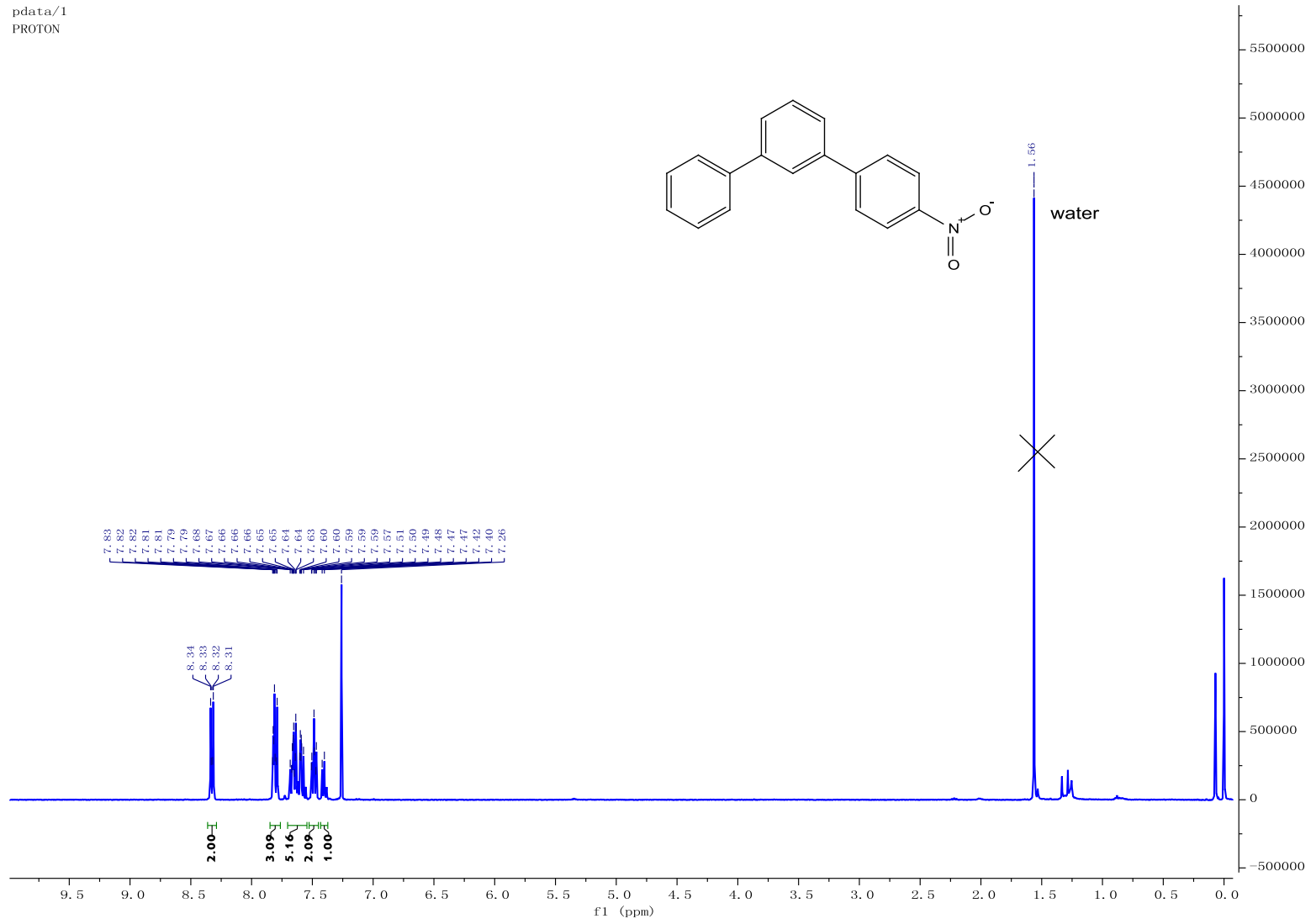


hkm2014-1-15-jian-CN-2  
C13CPD

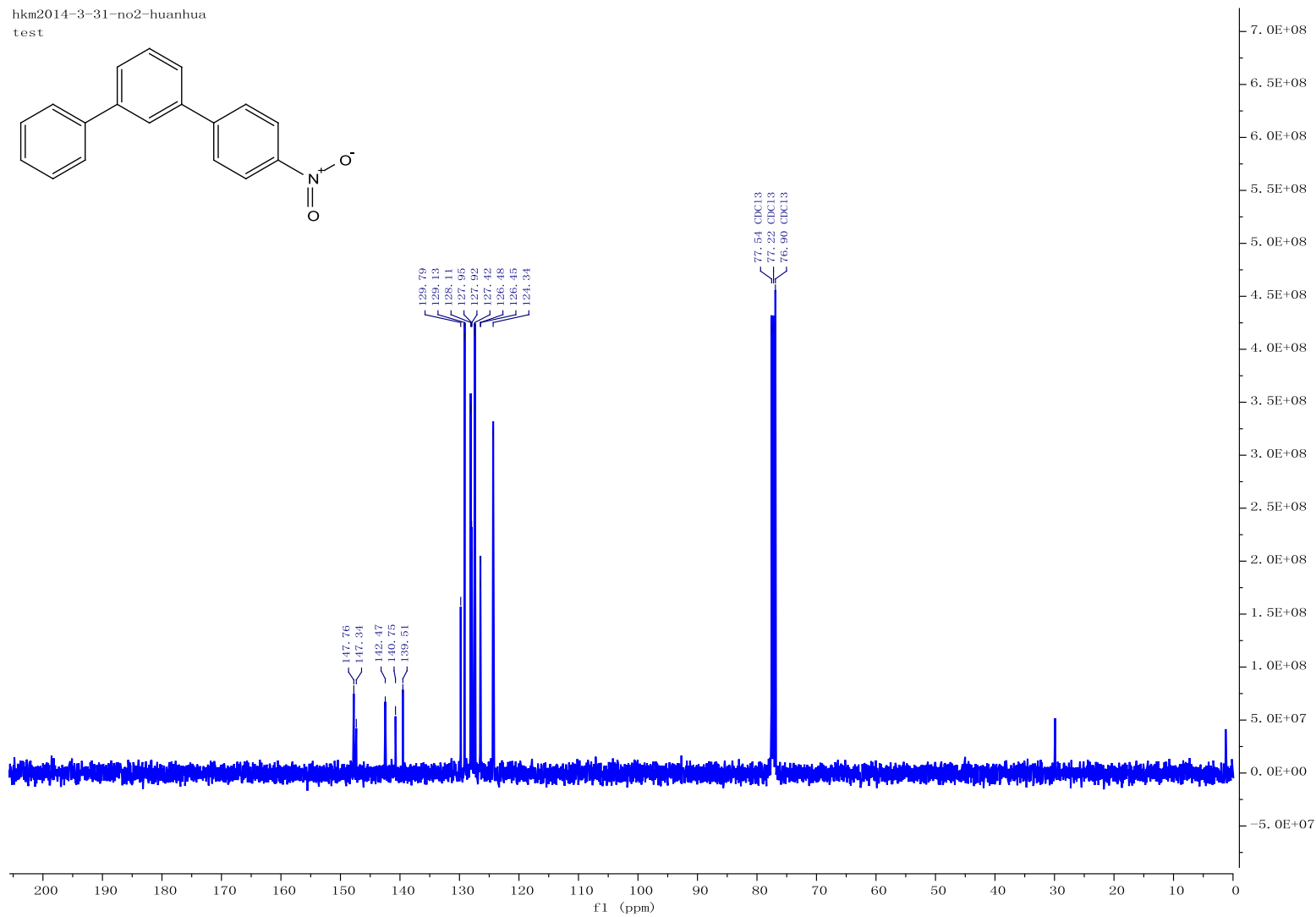
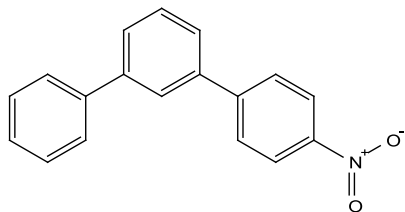




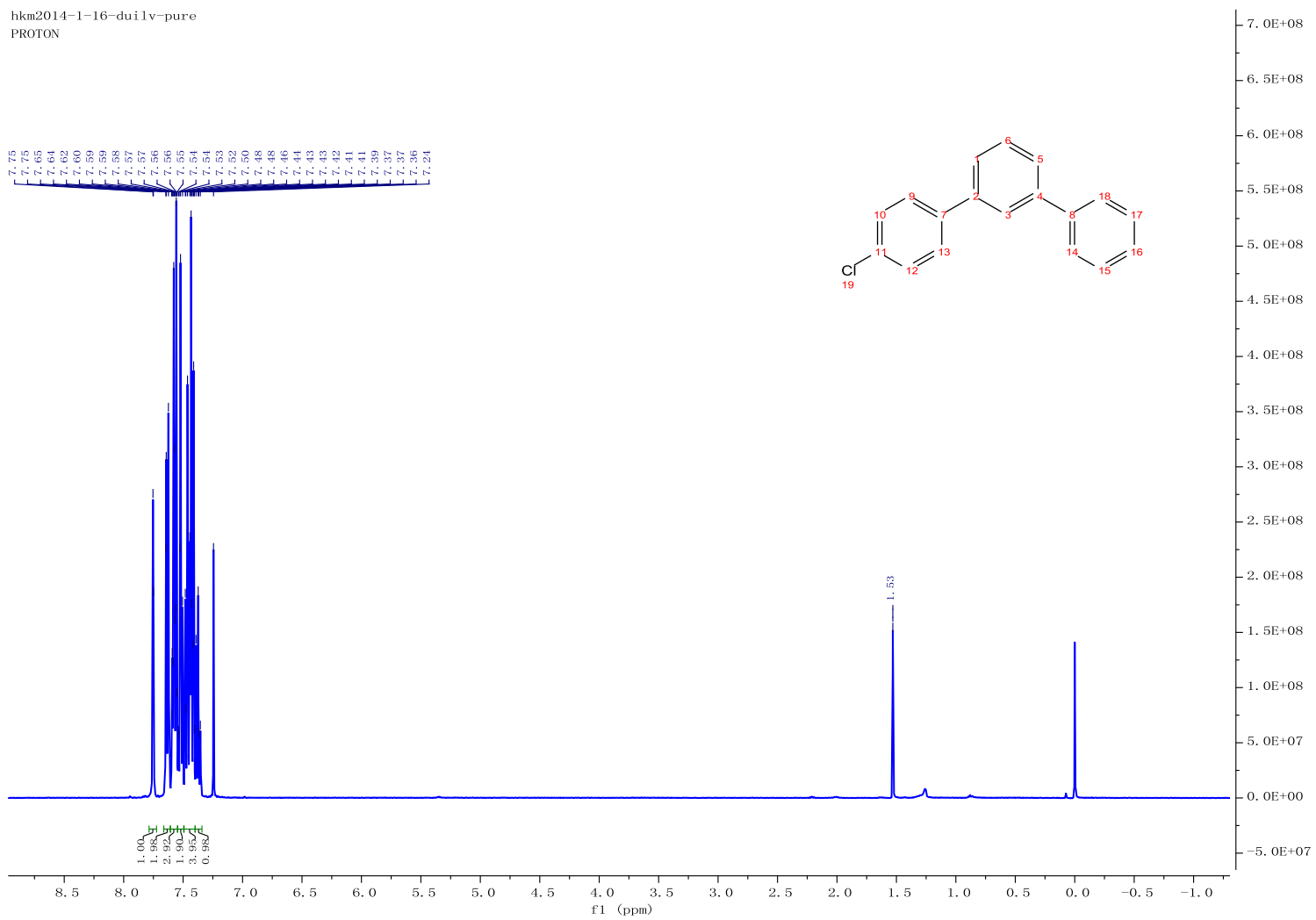
pdata/1  
PROTON



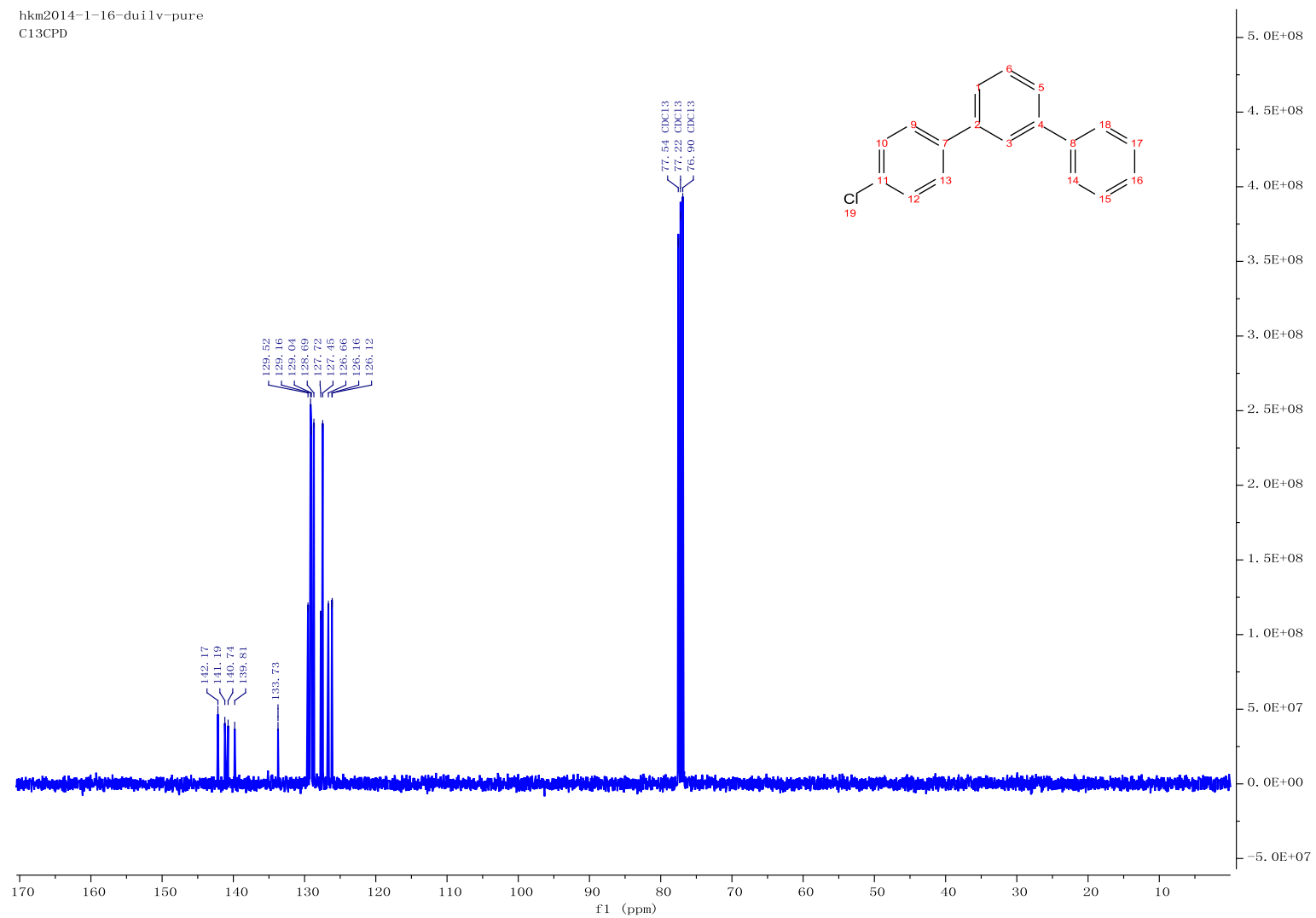
hkm2014-3-31-no2-huanhua  
test



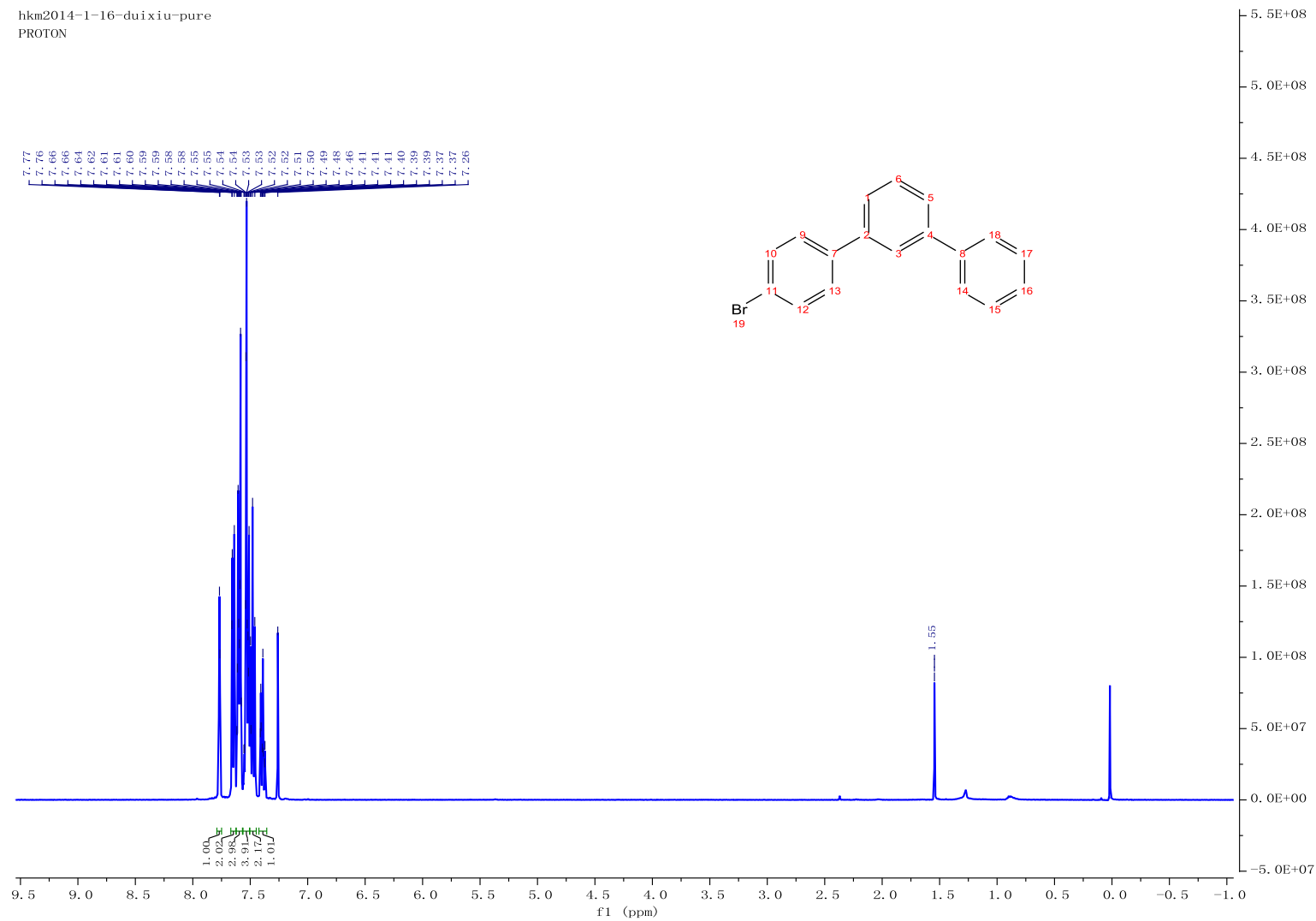
hkm2014-1-16-duilv-pure  
PROTON



hkm2014-1-16-duilv-pure  
C13CPD

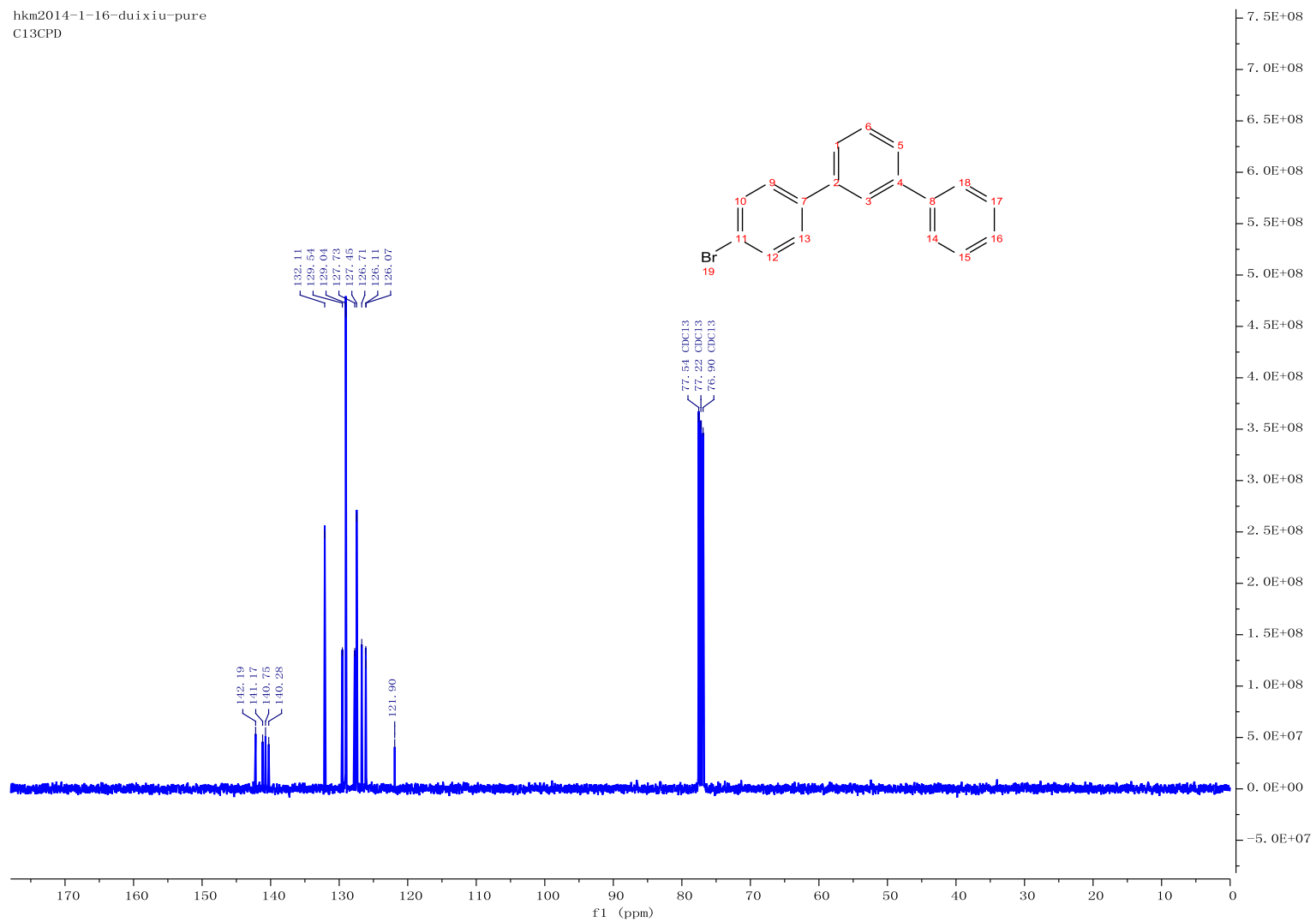


hkm2014-1-16-duixiu-pure  
PROTON

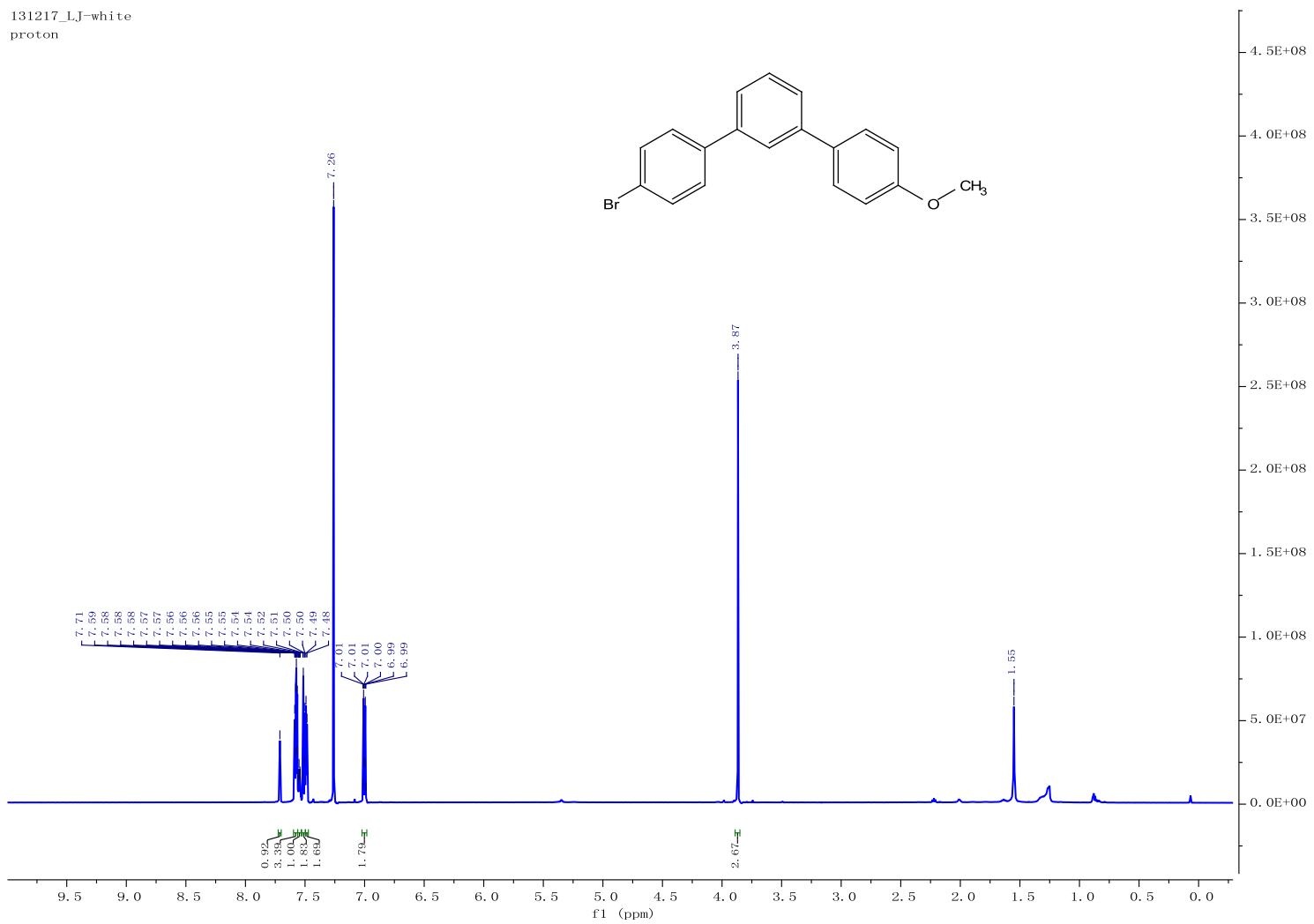




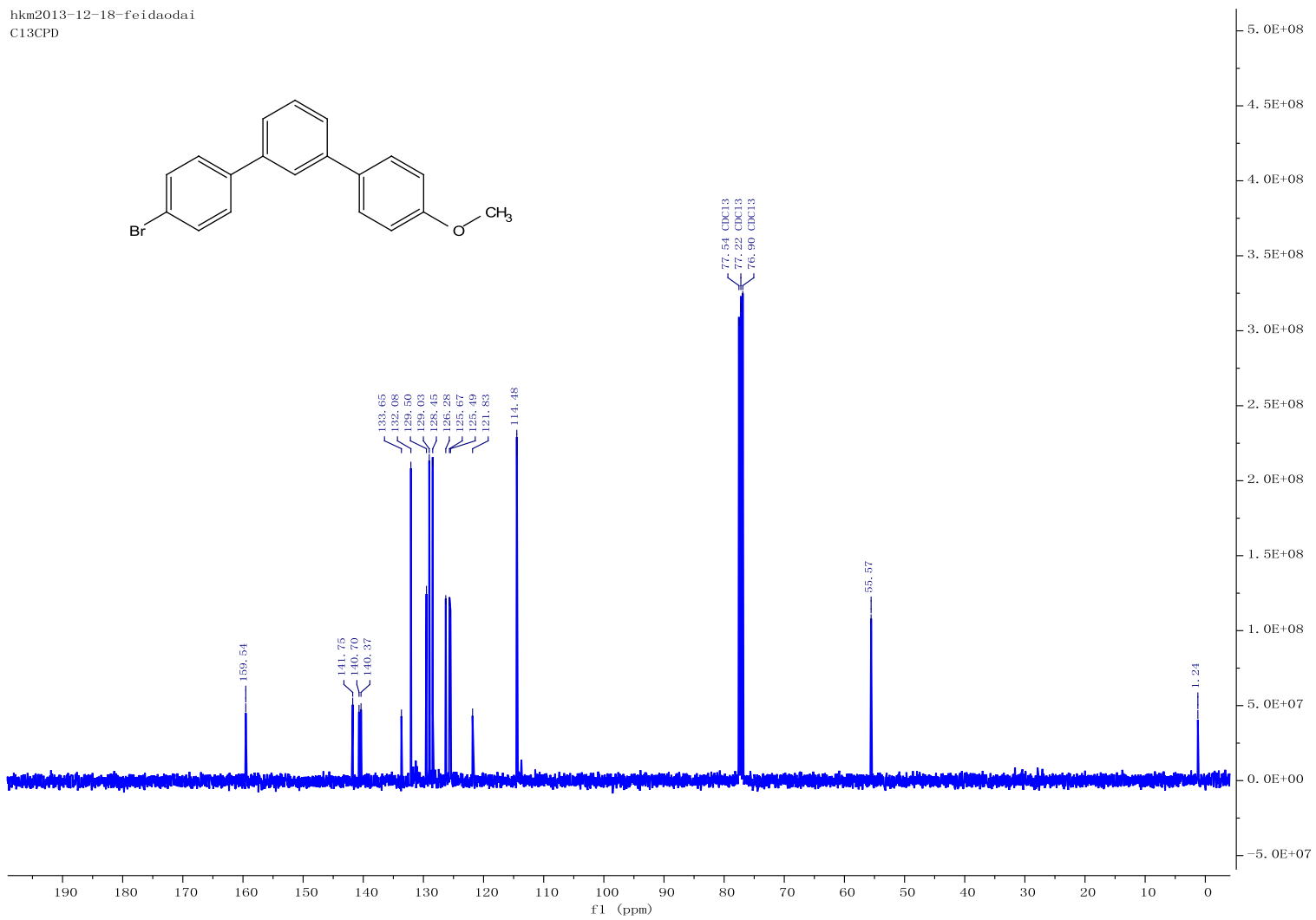
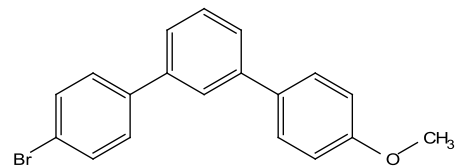
hkm2014-1-16-duixiu-pure  
C13CPD



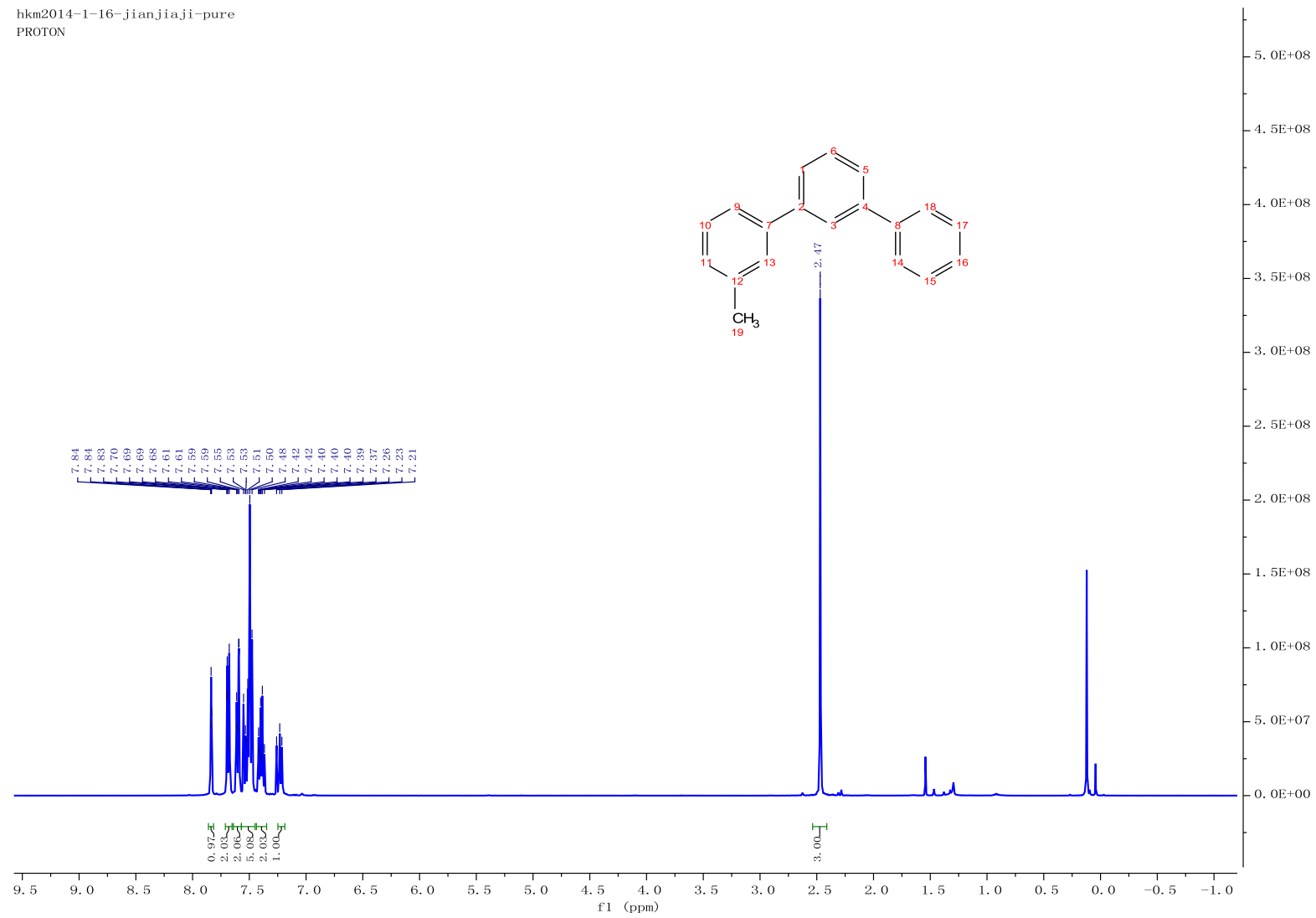
131217\_LJ-white  
proton



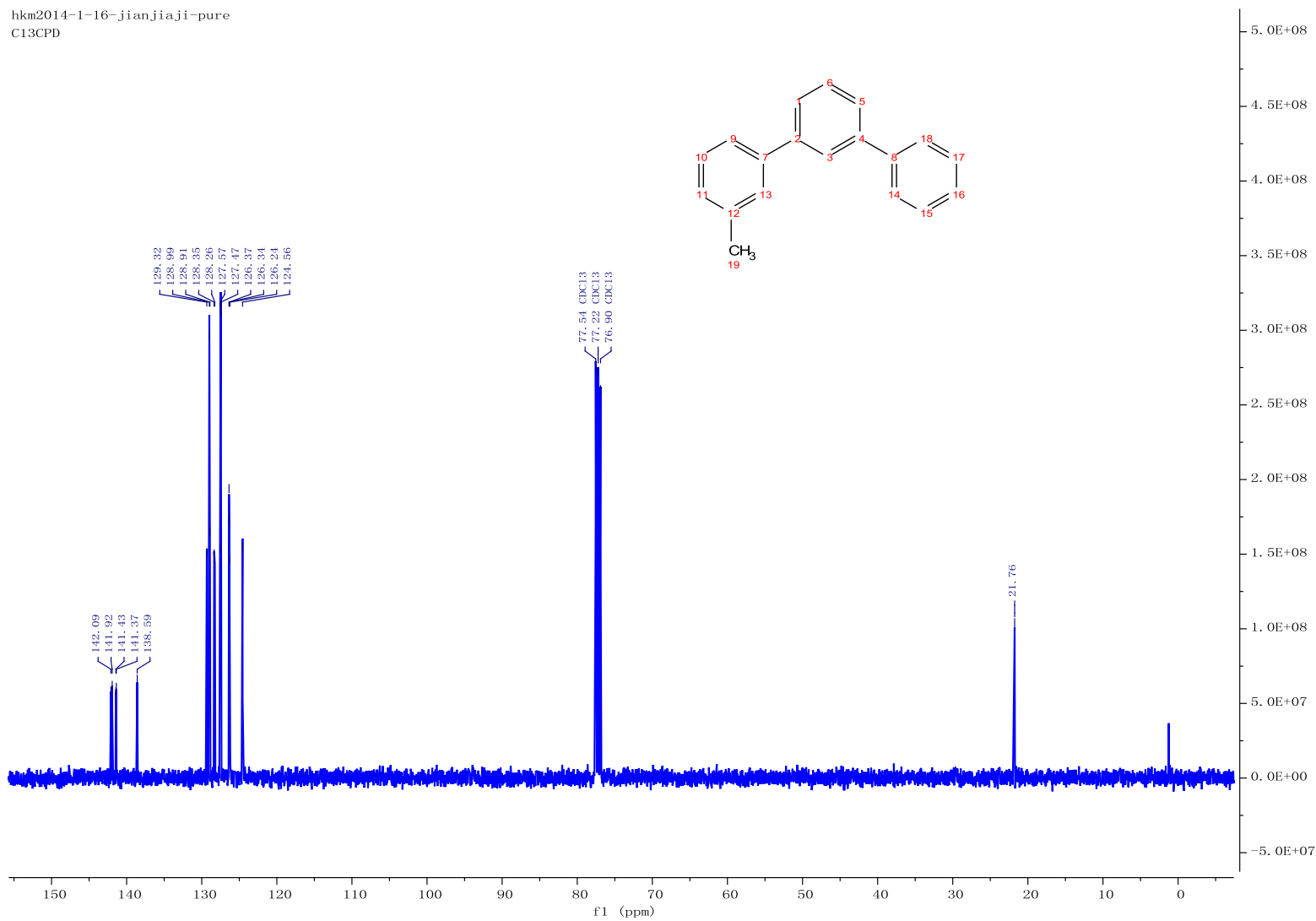
hkm2013-12-18-feidaodai  
C13CPD



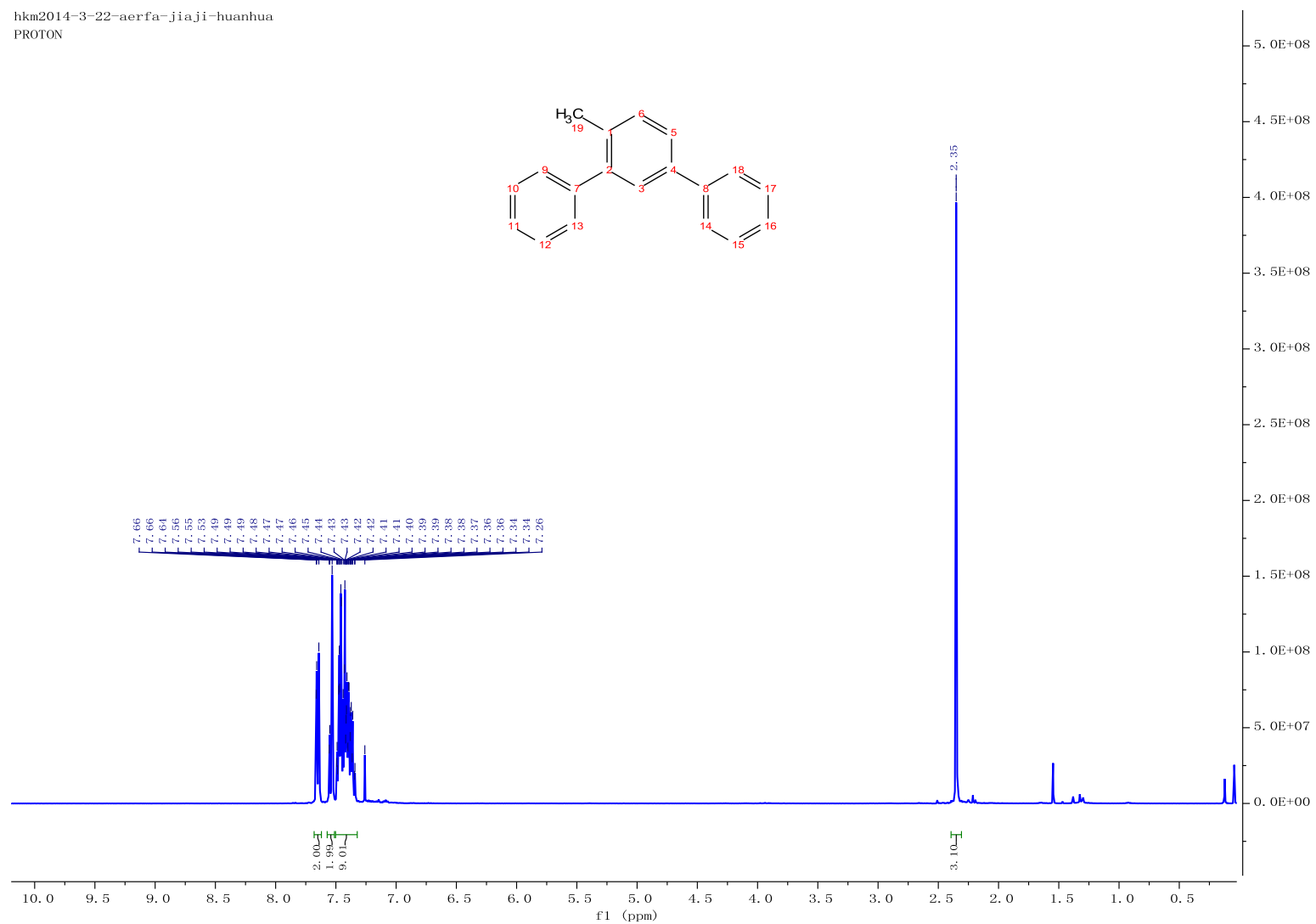
hkm2014-1-16-jianjiaji-pure  
PROTON



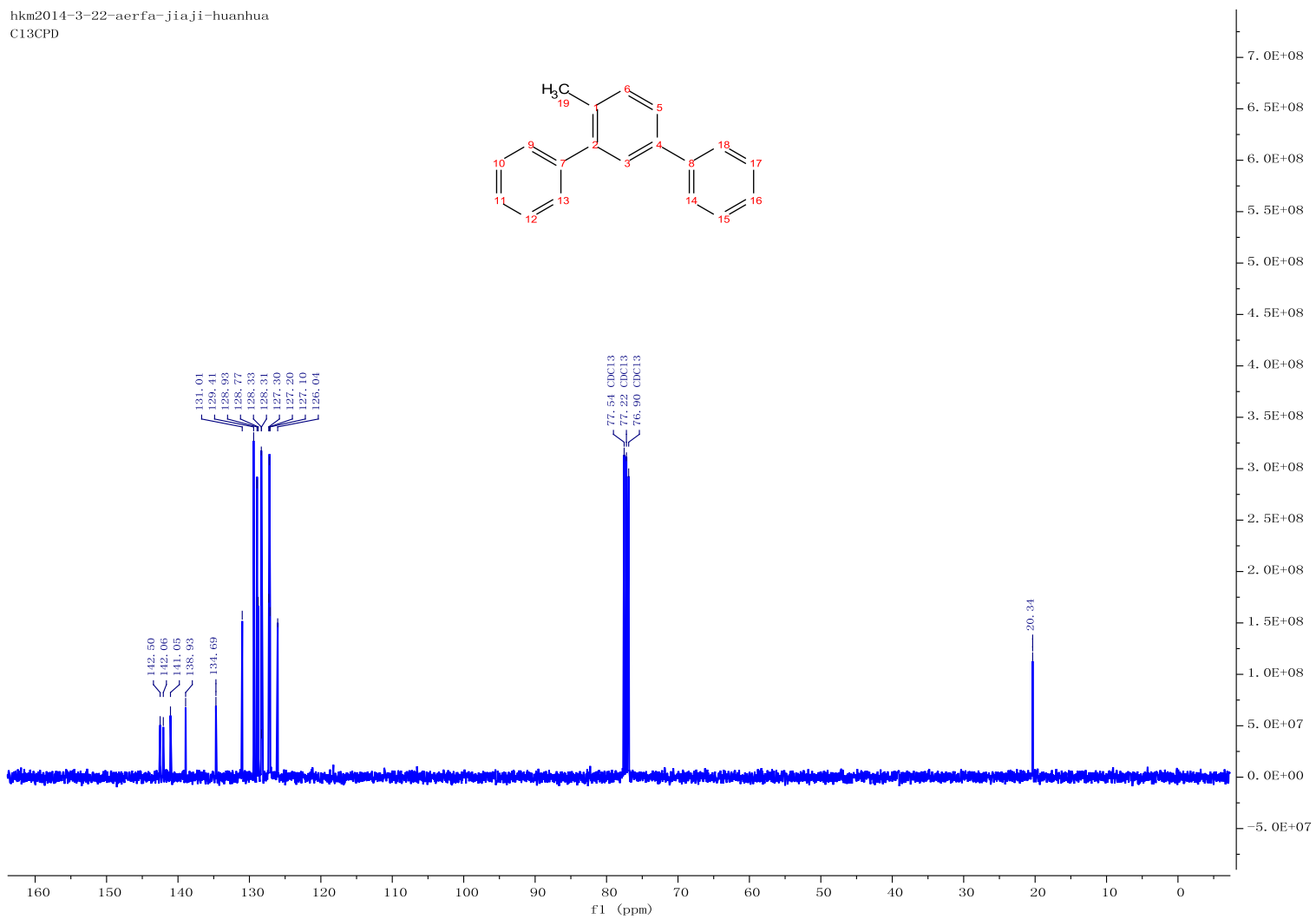
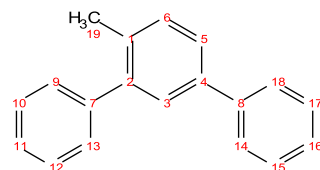
hkm2014-1-16-jianjiaji-pure  
C13CPD



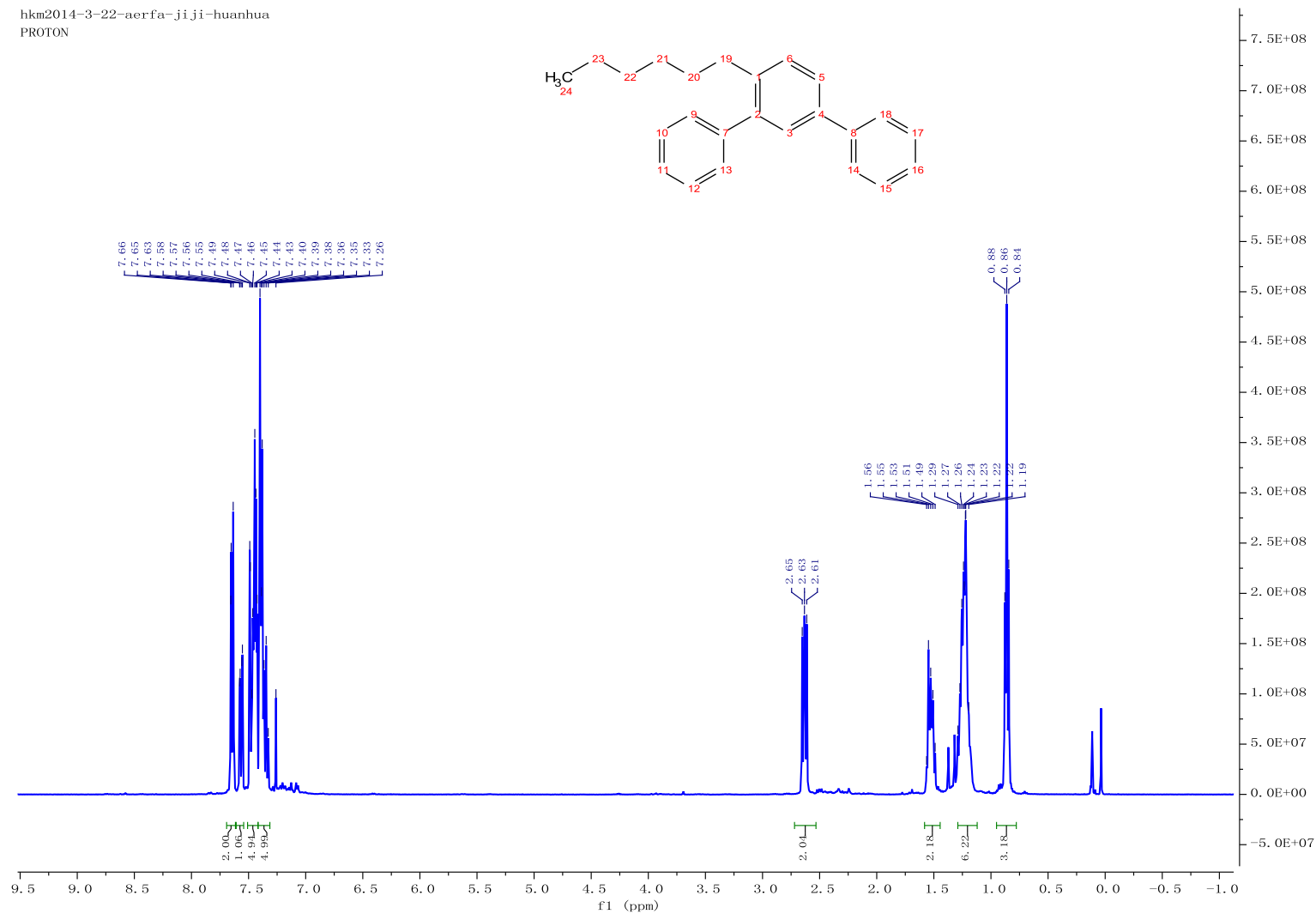
hkm2014-3-22-aerfa-jiaji-huanhua  
PROTON



hkm2014-3-22-aerfa-jiaji-huanhua  
C13CPD

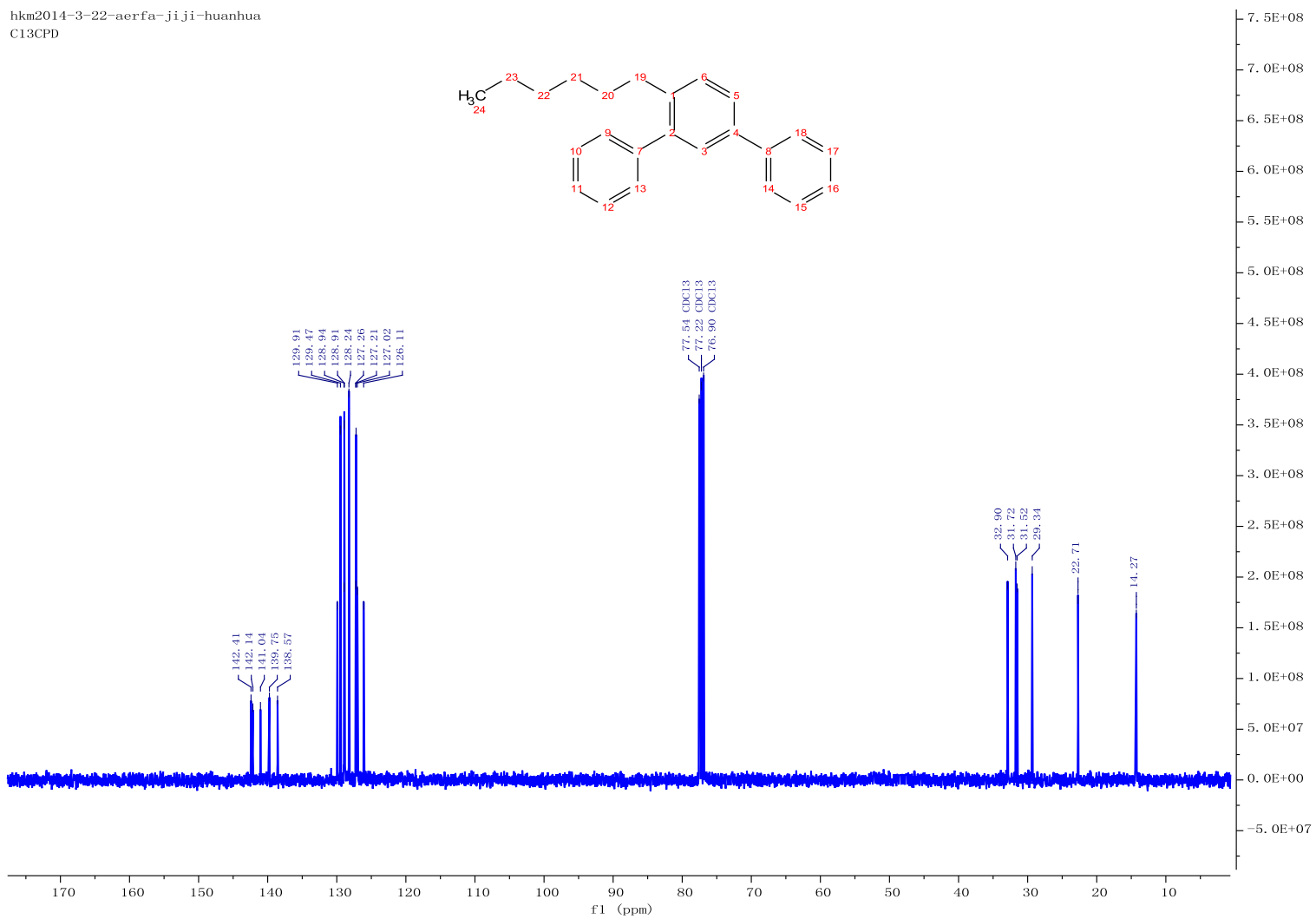
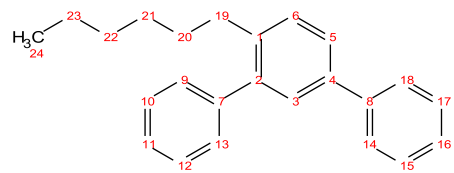


hkm2014-3-22-aerfa-ji-ji-huanhua  
PROTON

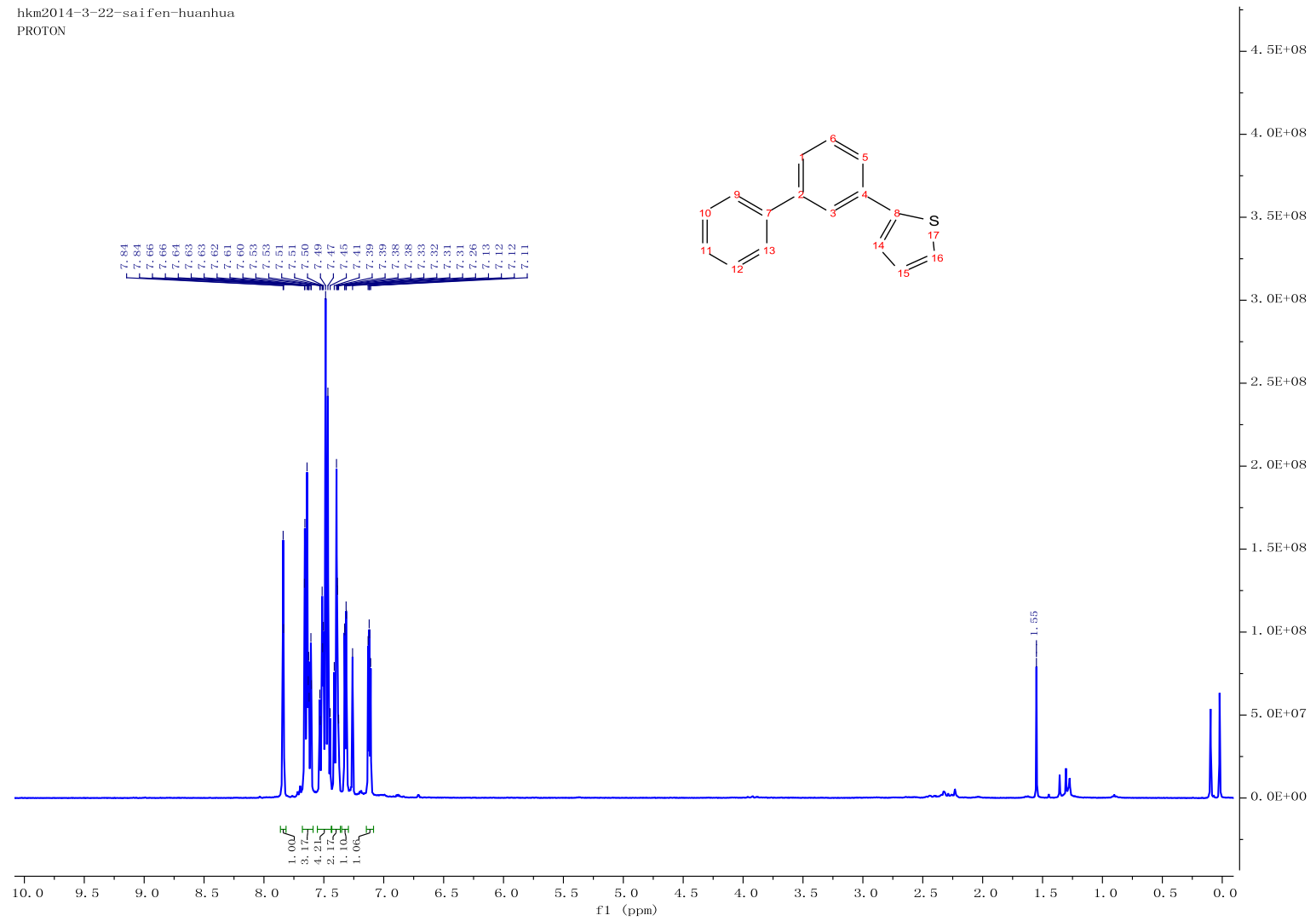




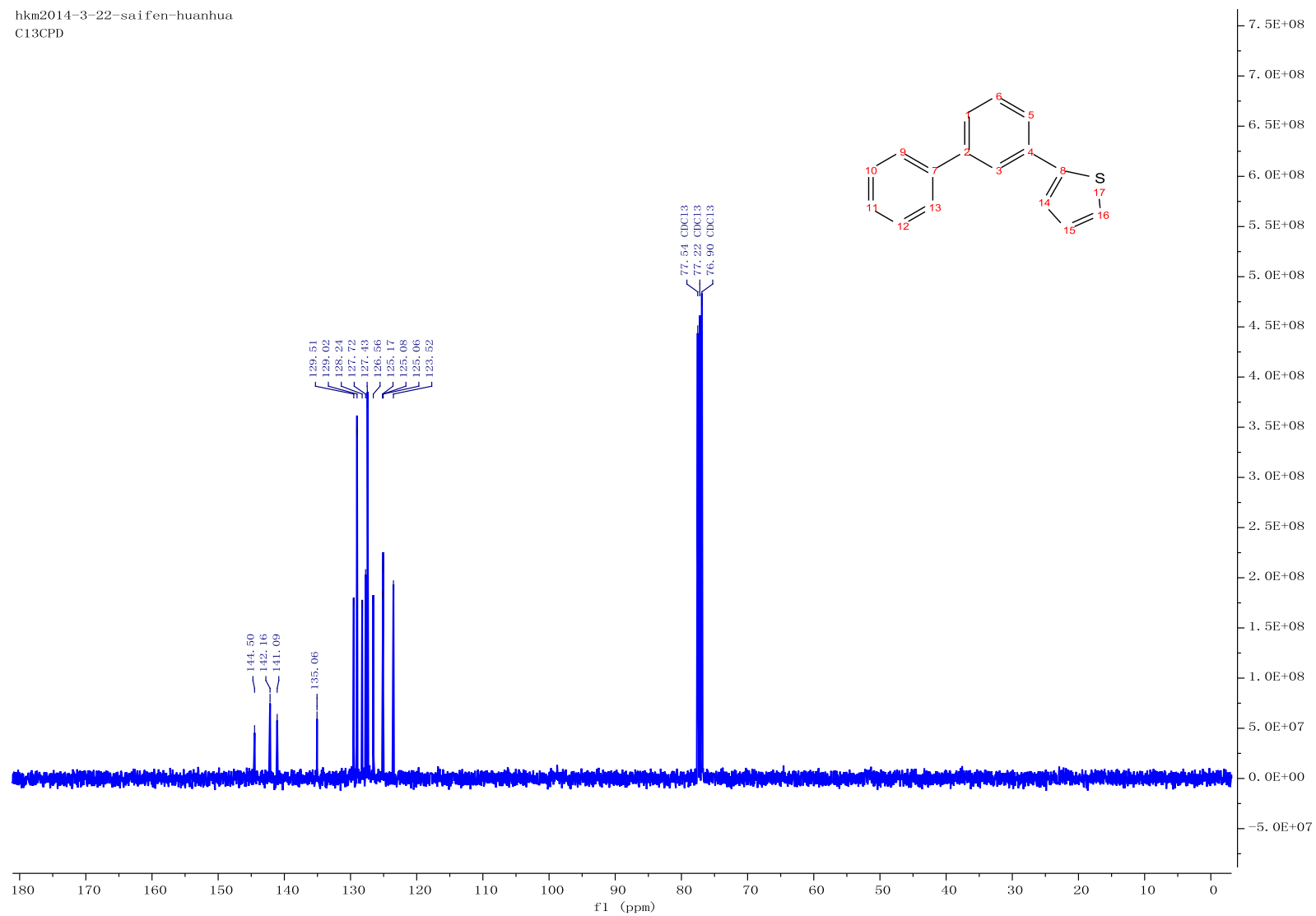
hkm2014-3-22-aerfa-jiji-huanhua  
C13CPD



hkm2014-3-22-sai fen-huanhua  
PROTON

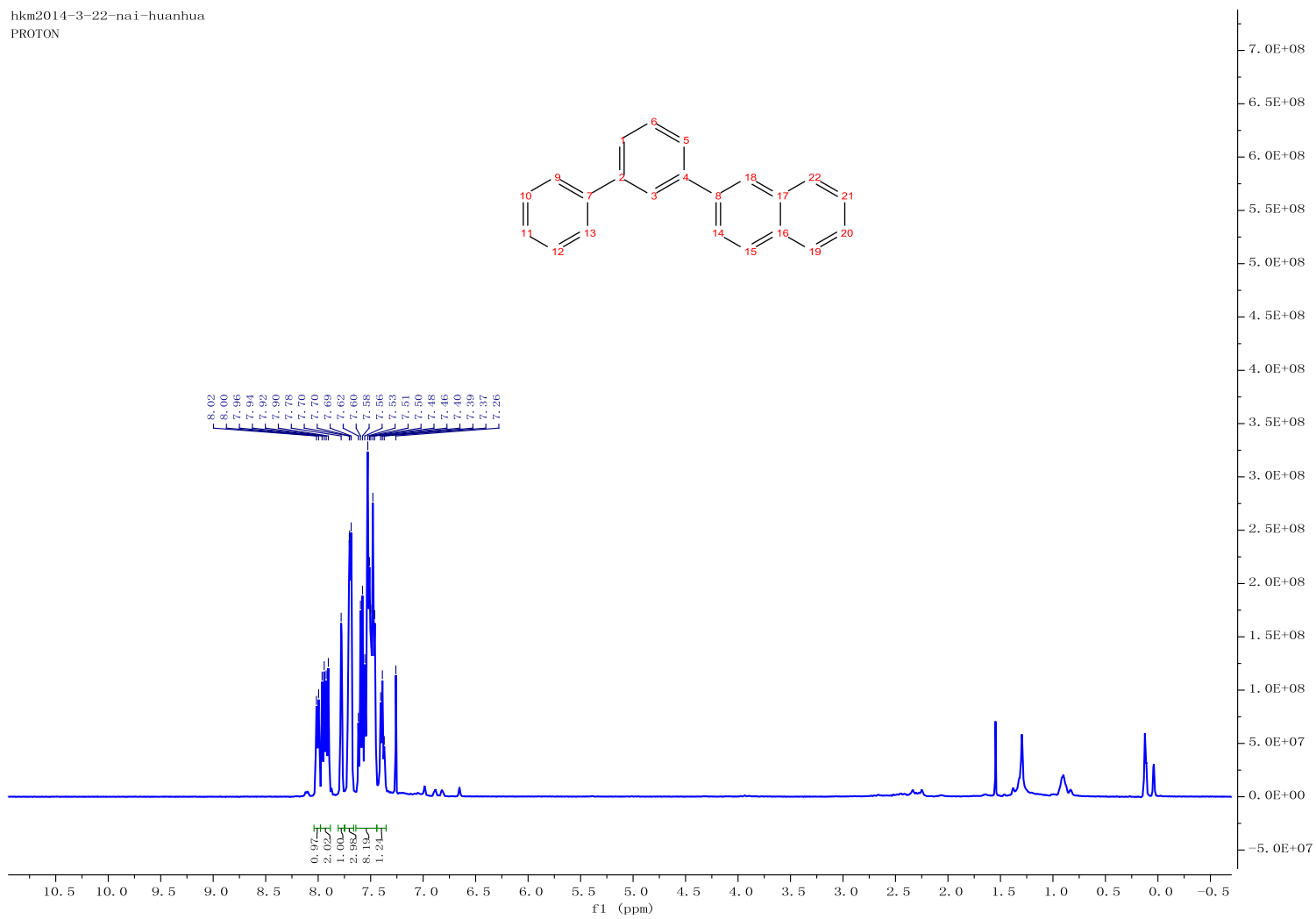


hkm2014-3-22-sai fen-huanhua  
C13CPD

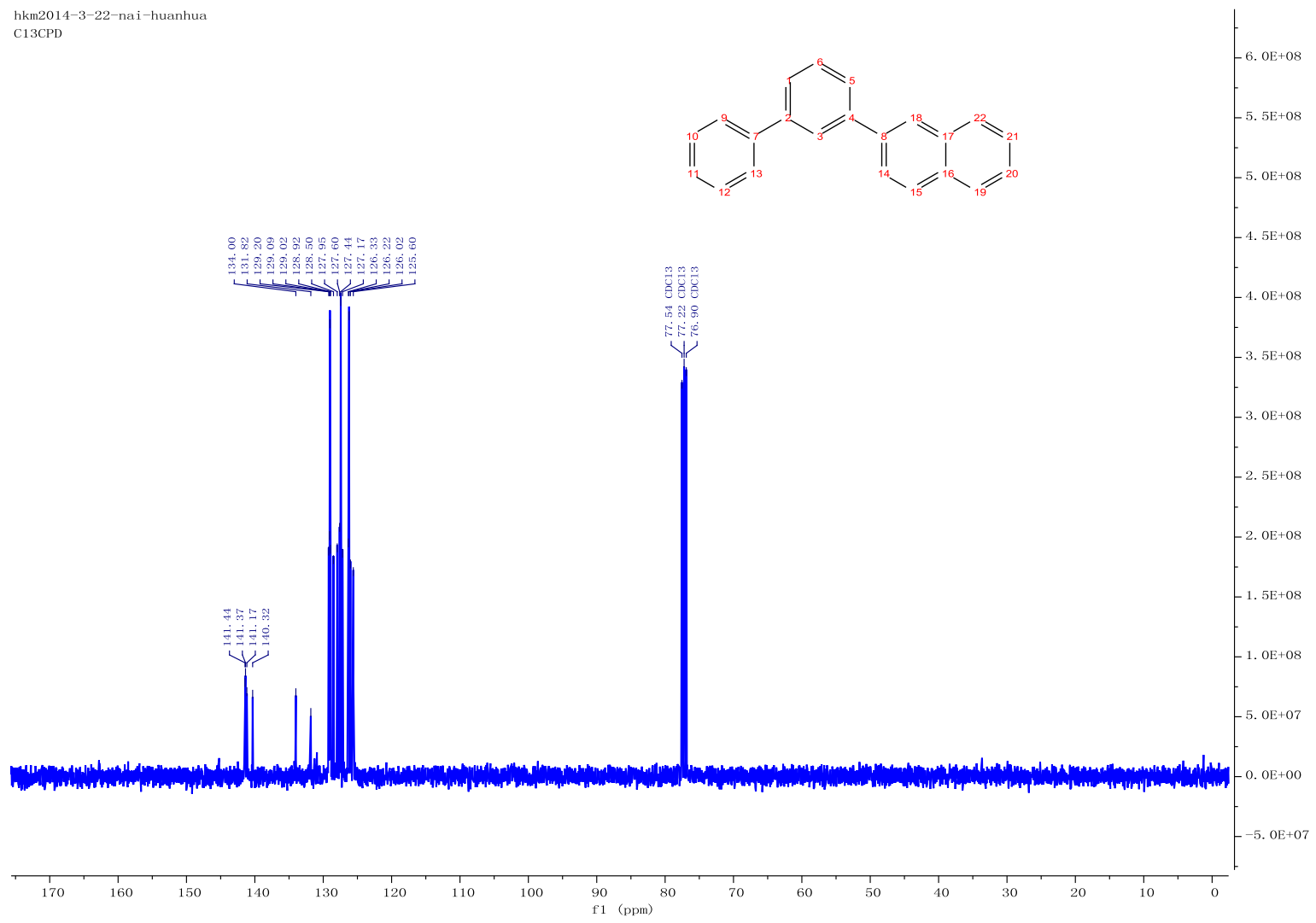
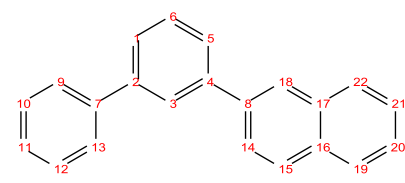




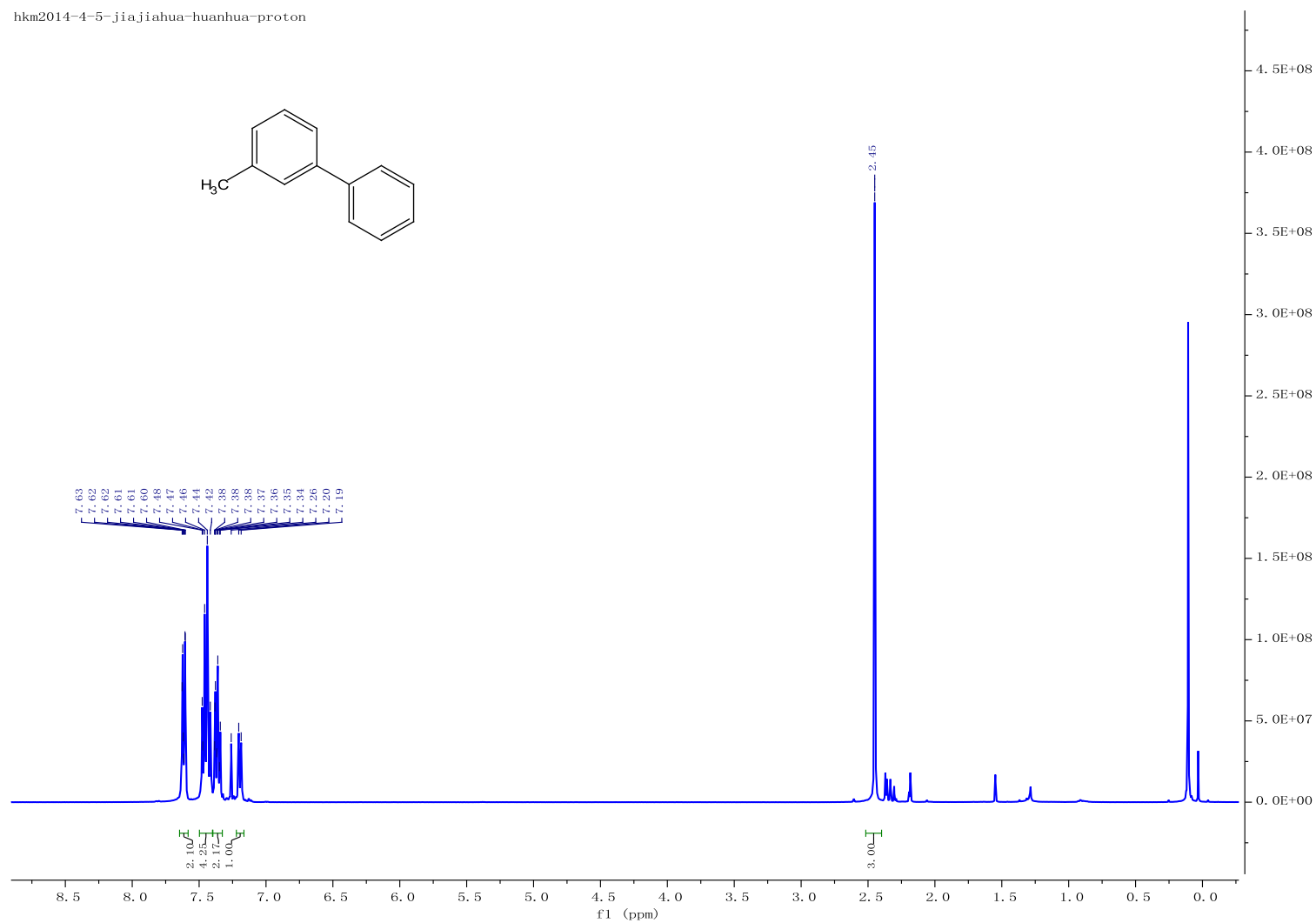
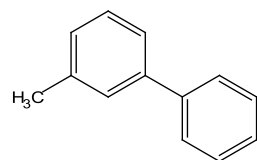
hkm2014-3-22-nai-huanhua  
PROTON



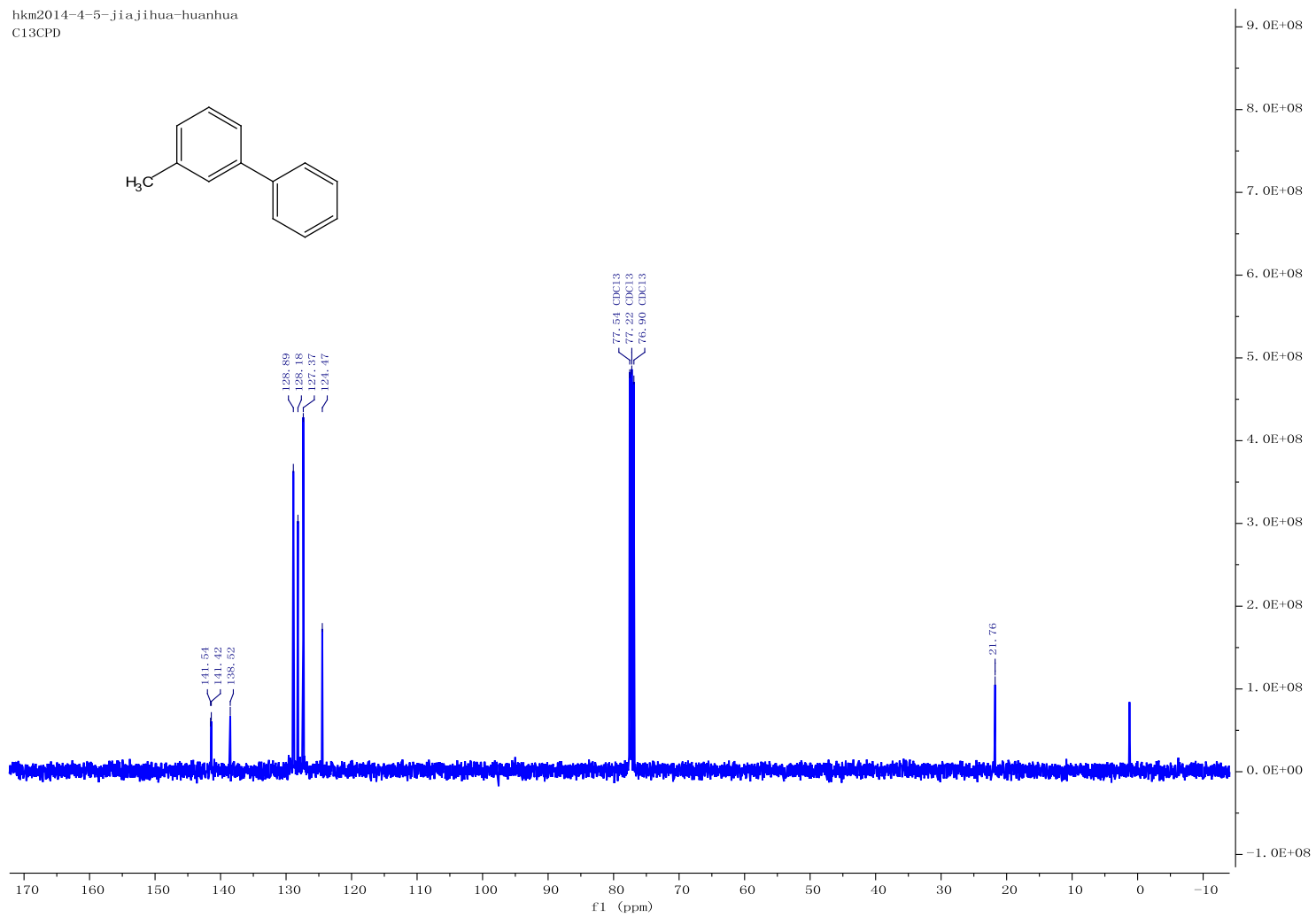
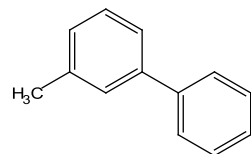
hkm2014-3-22-nai-huanhua  
C13CPD



hkm2014-4-5-jiajiahua-huanhua-proton

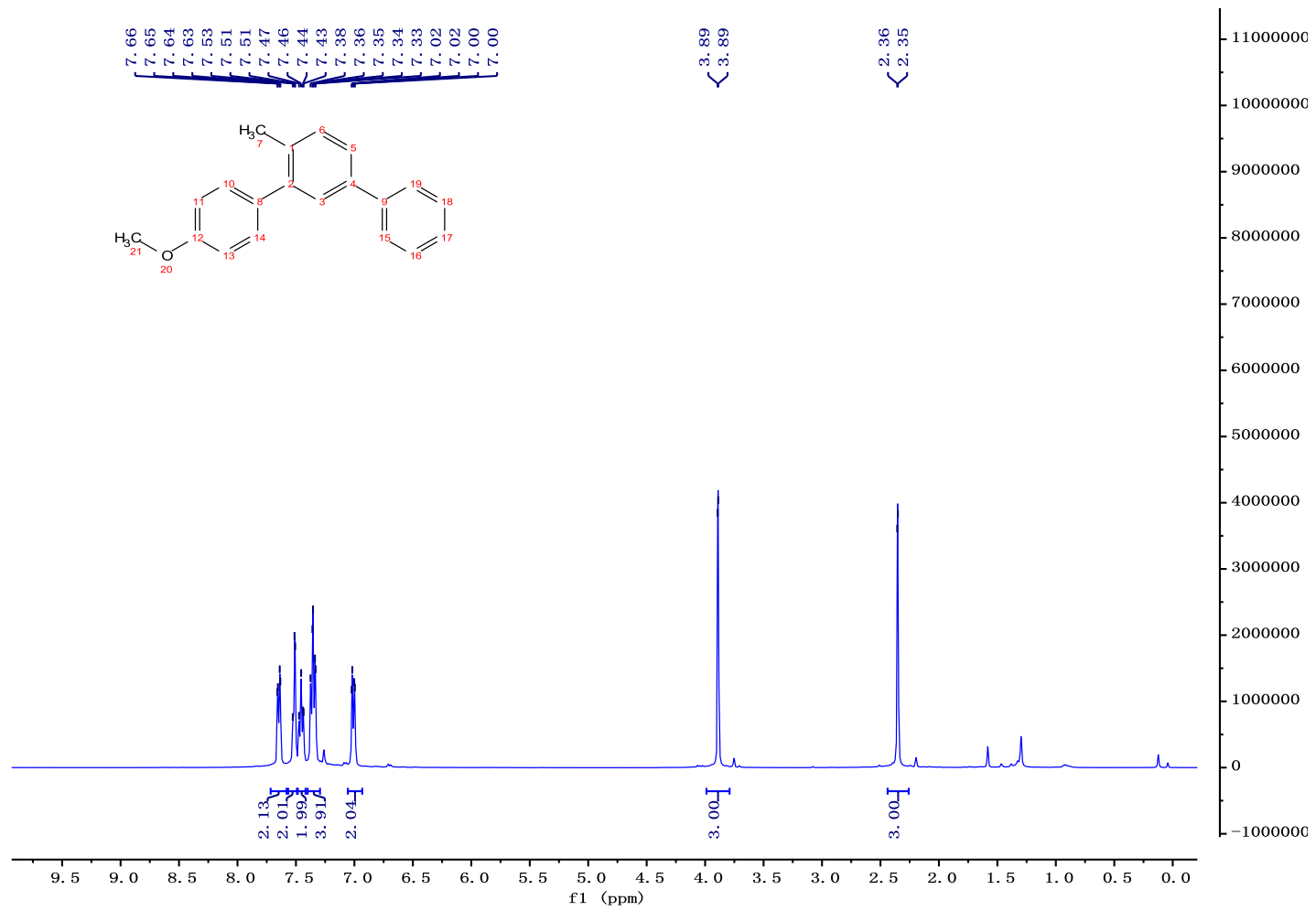


hkm2014-4-5-jia,jihua-huanhua  
C13CPD

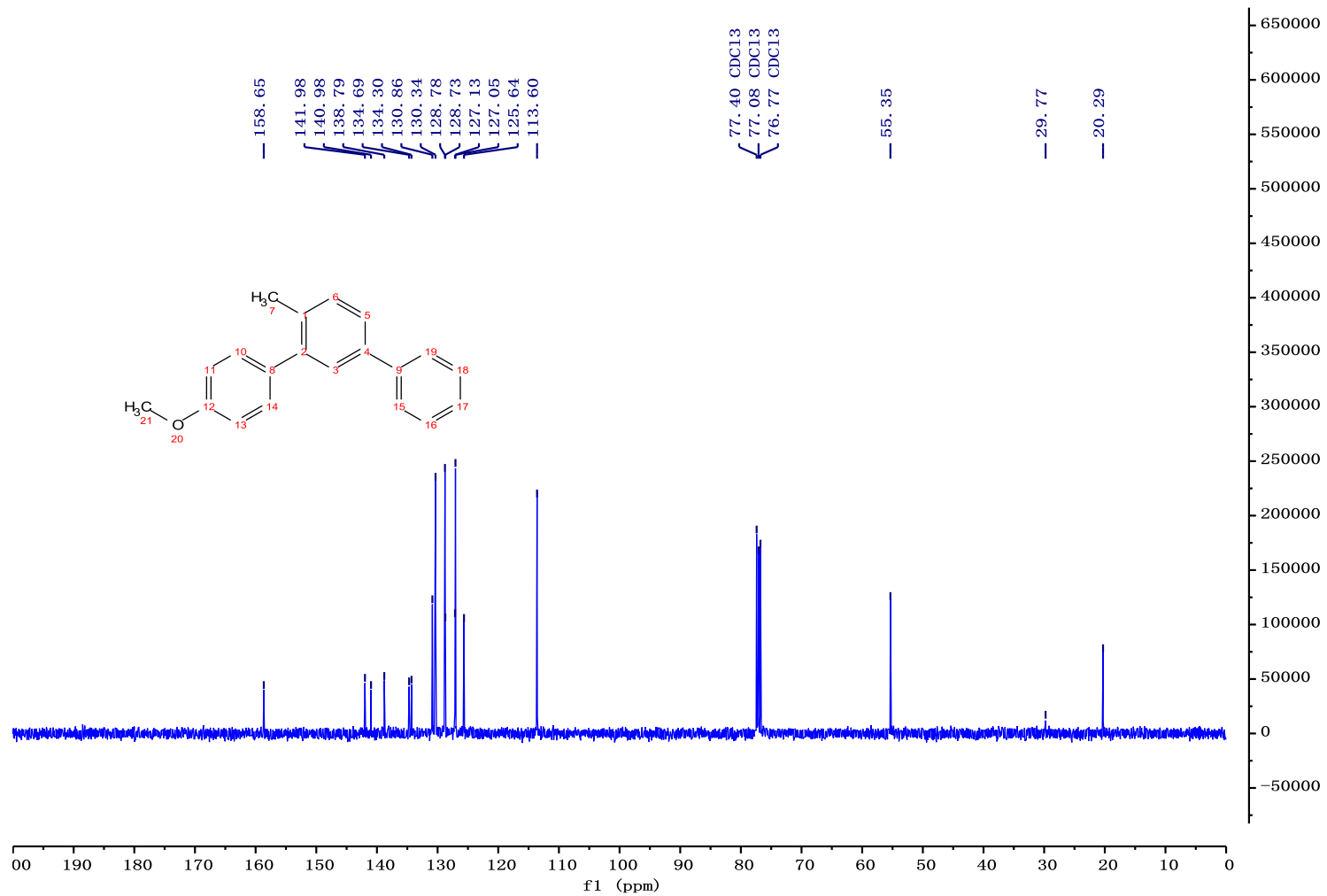




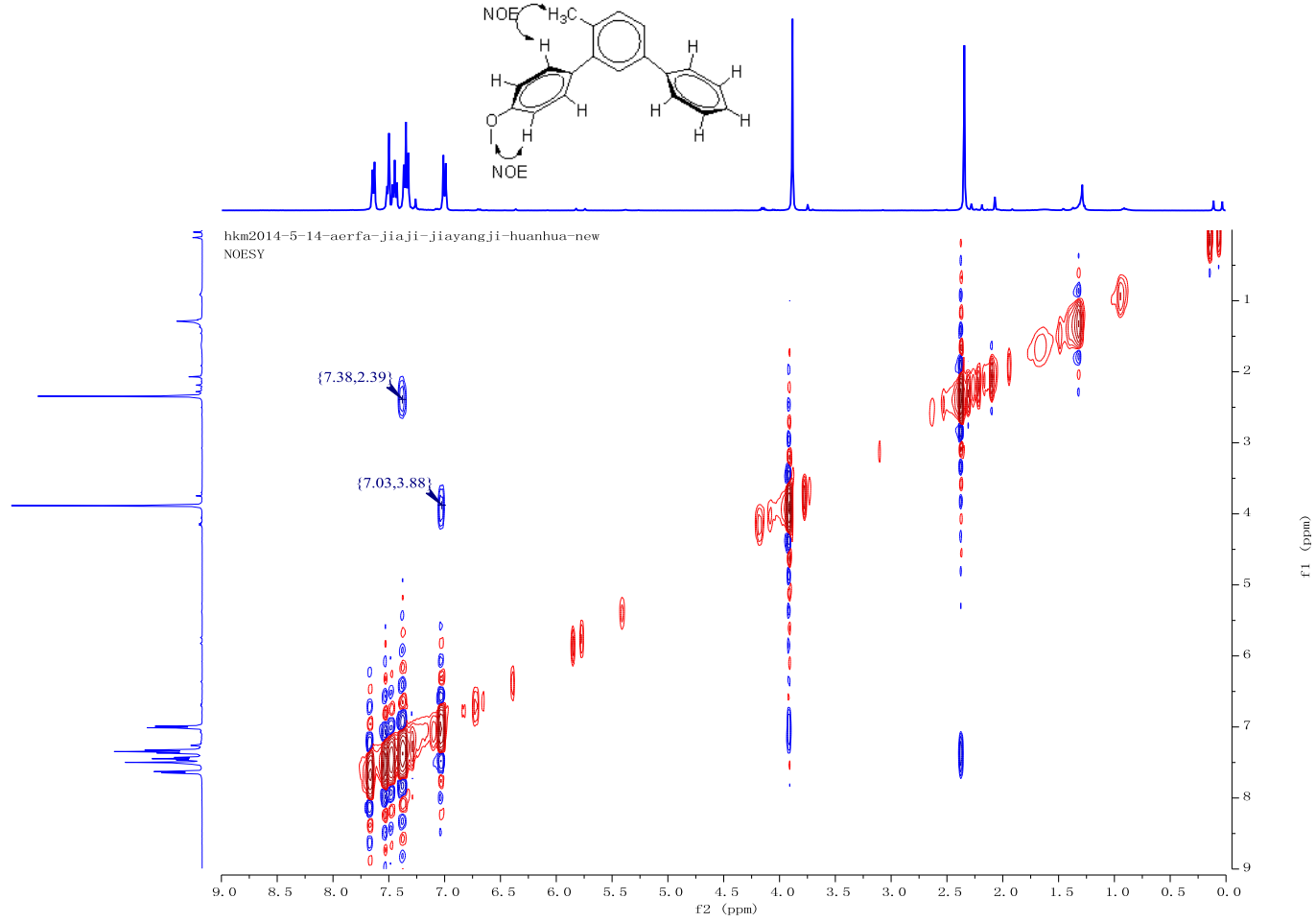
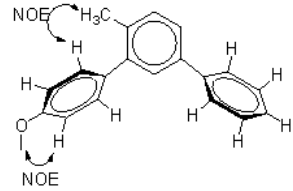




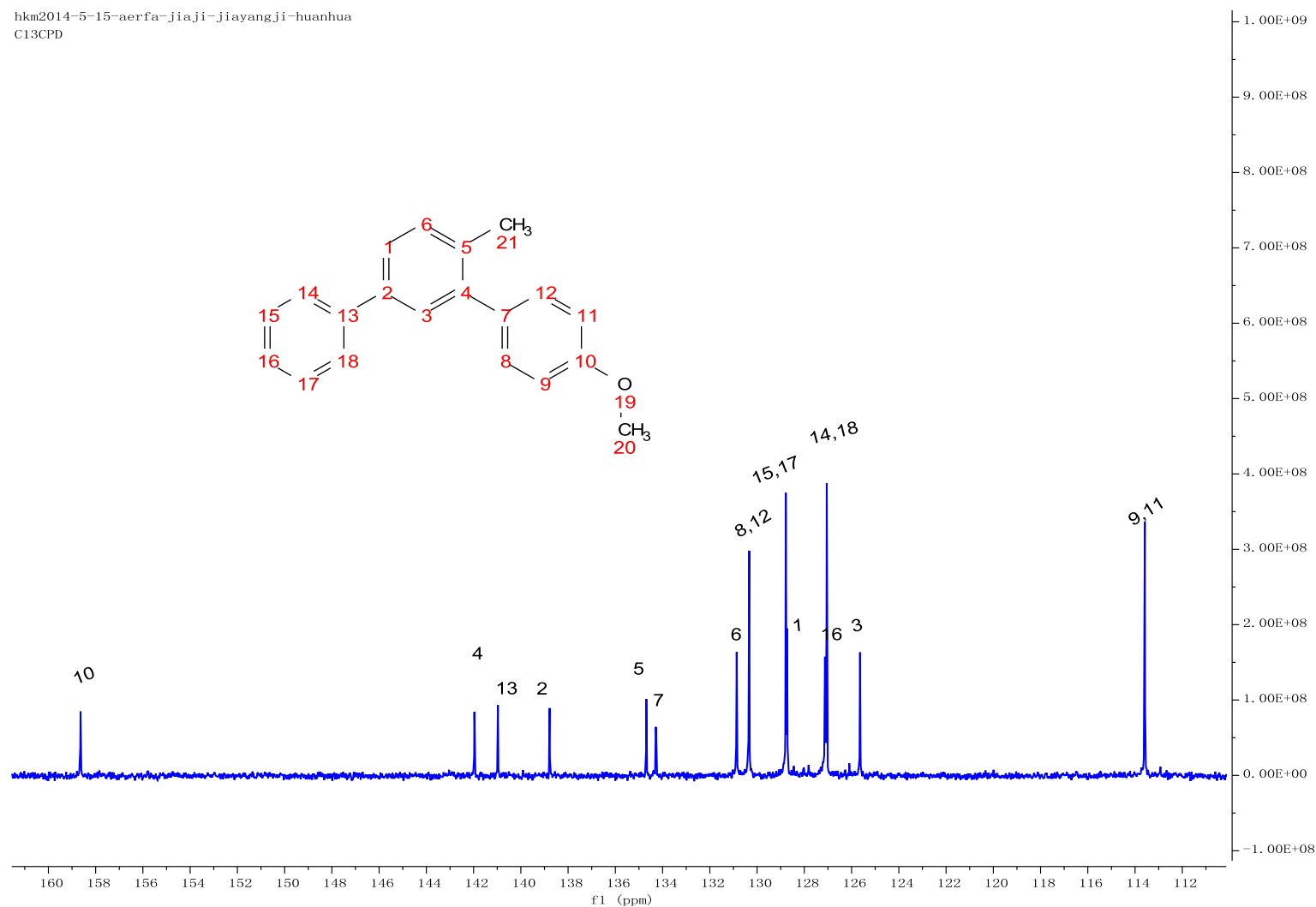
pdata/1

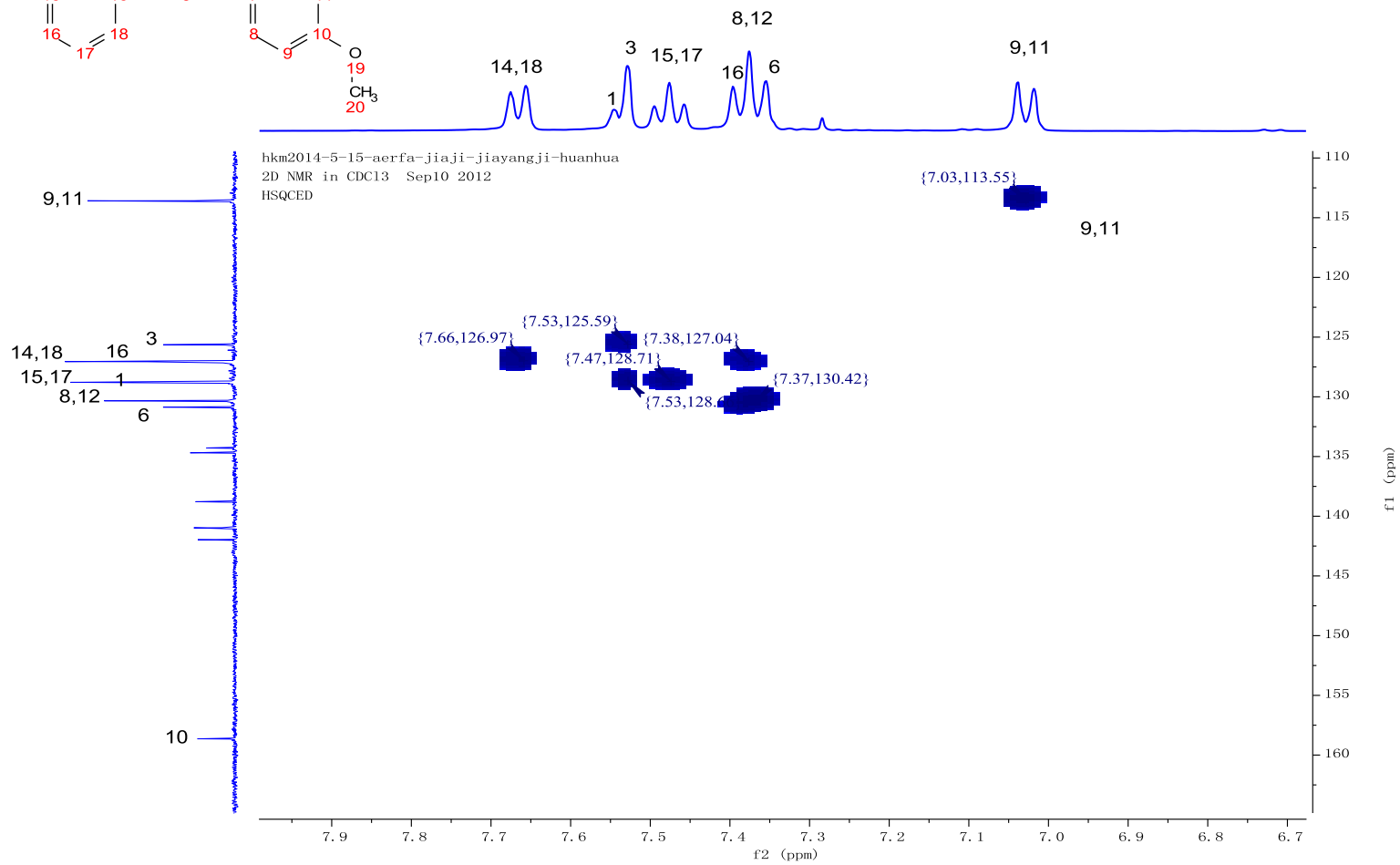
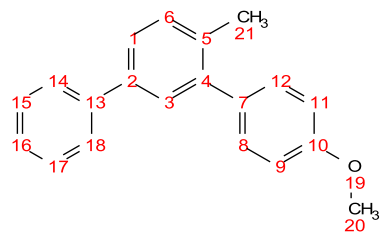


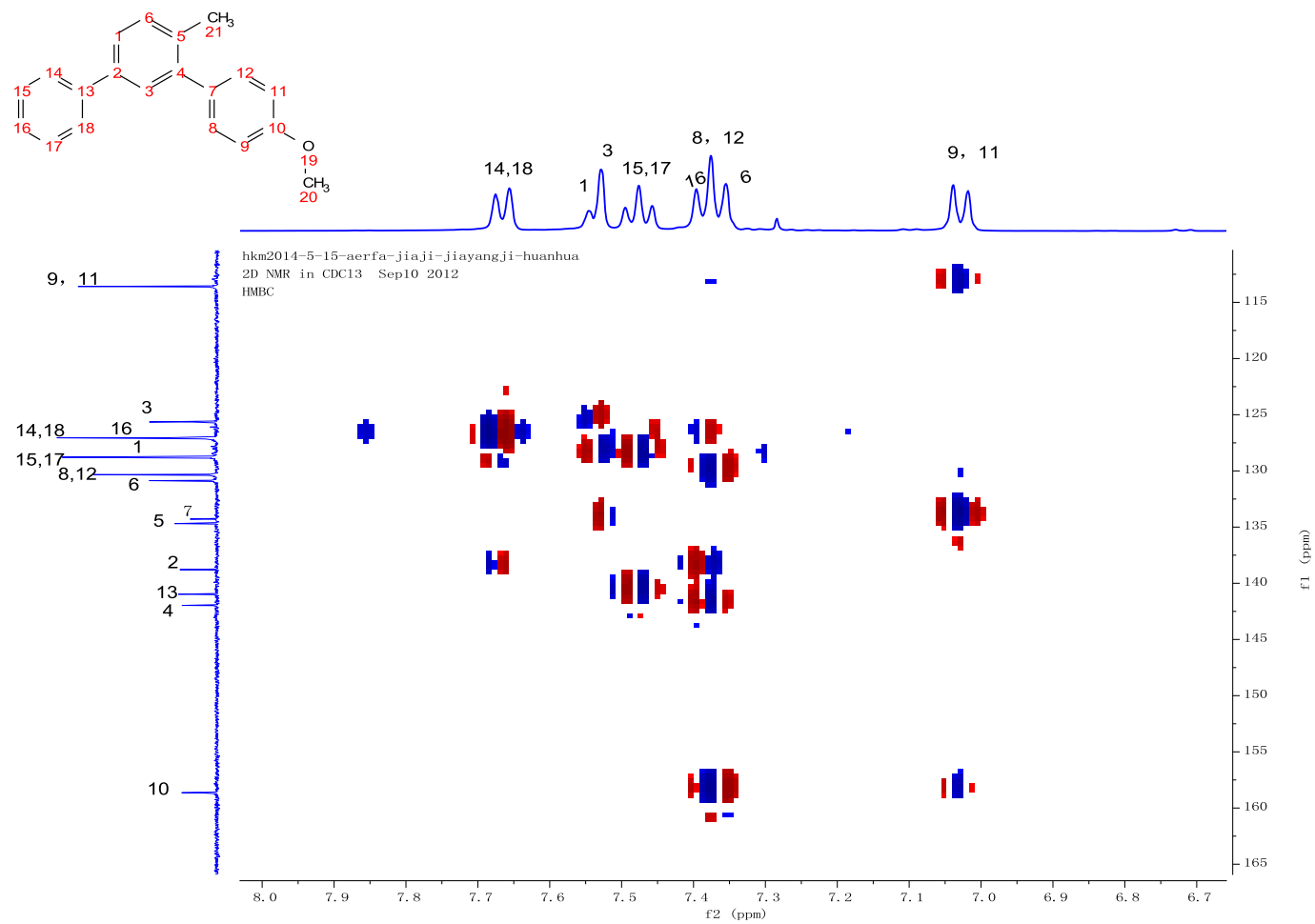
NOSEY



hkm2014-5-15-aerfa-jiaji-jiayangji-huanhua  
C13CPD



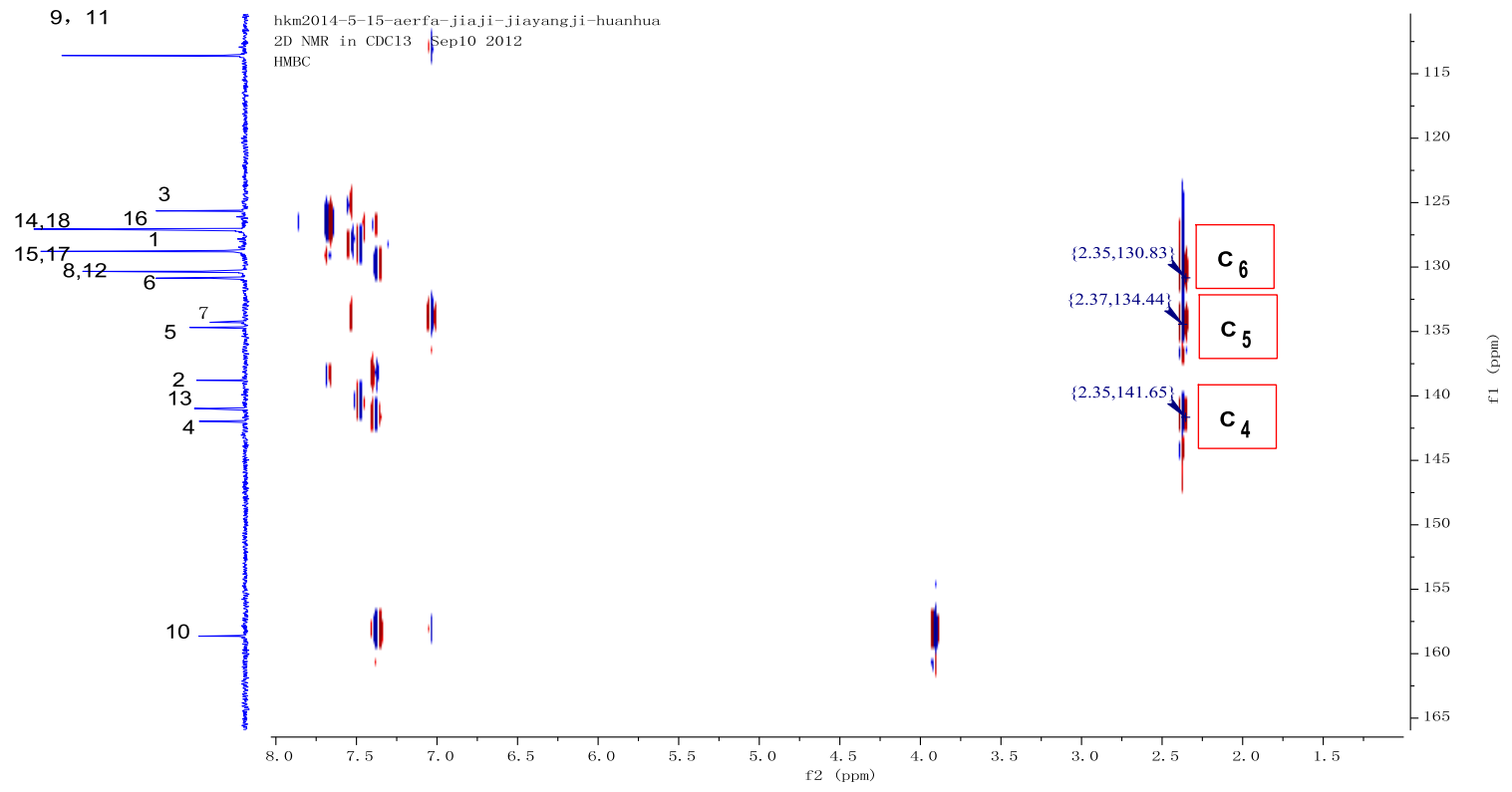
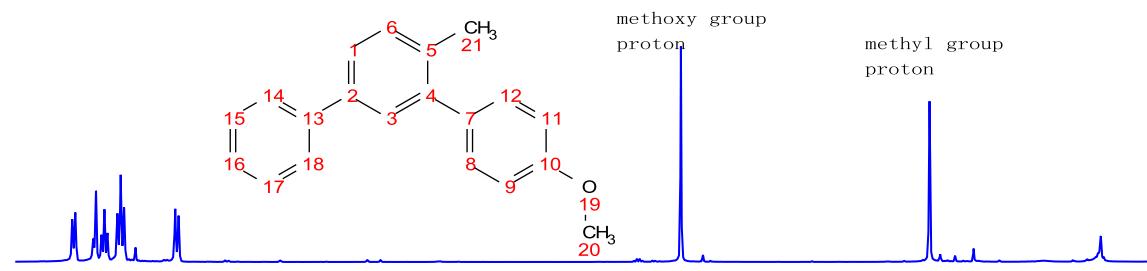




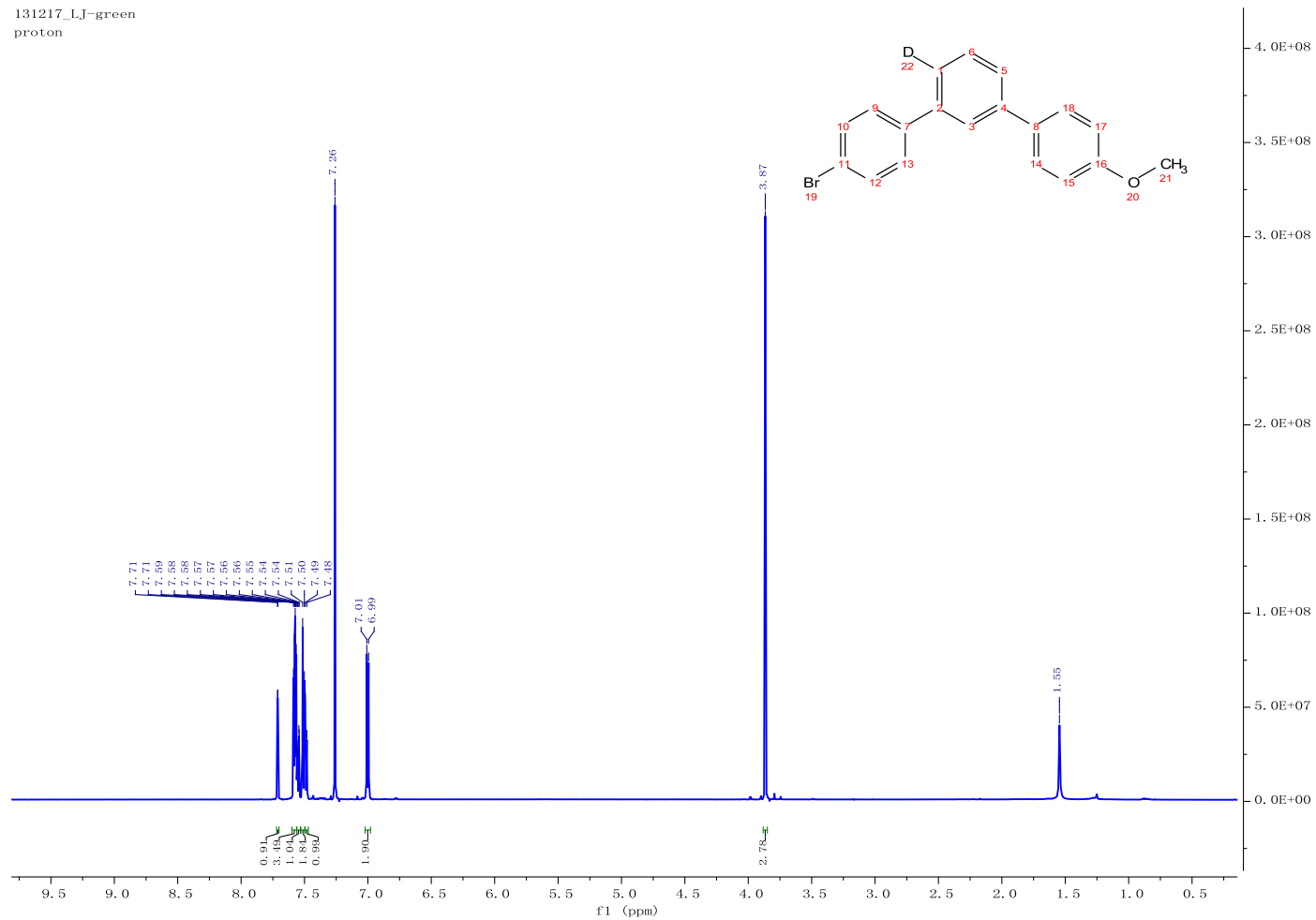
$^1\text{H}$ - $^{13}\text{C}$  HSQC NMR ((400, 101) MHz, CDCl<sub>3</sub>)  $\delta$  = (2.28 20.32), (2.37 20.24), (2.46 20.30), (3.90 55.27), (3.92 55.28), (7.03 113.55), (7.37



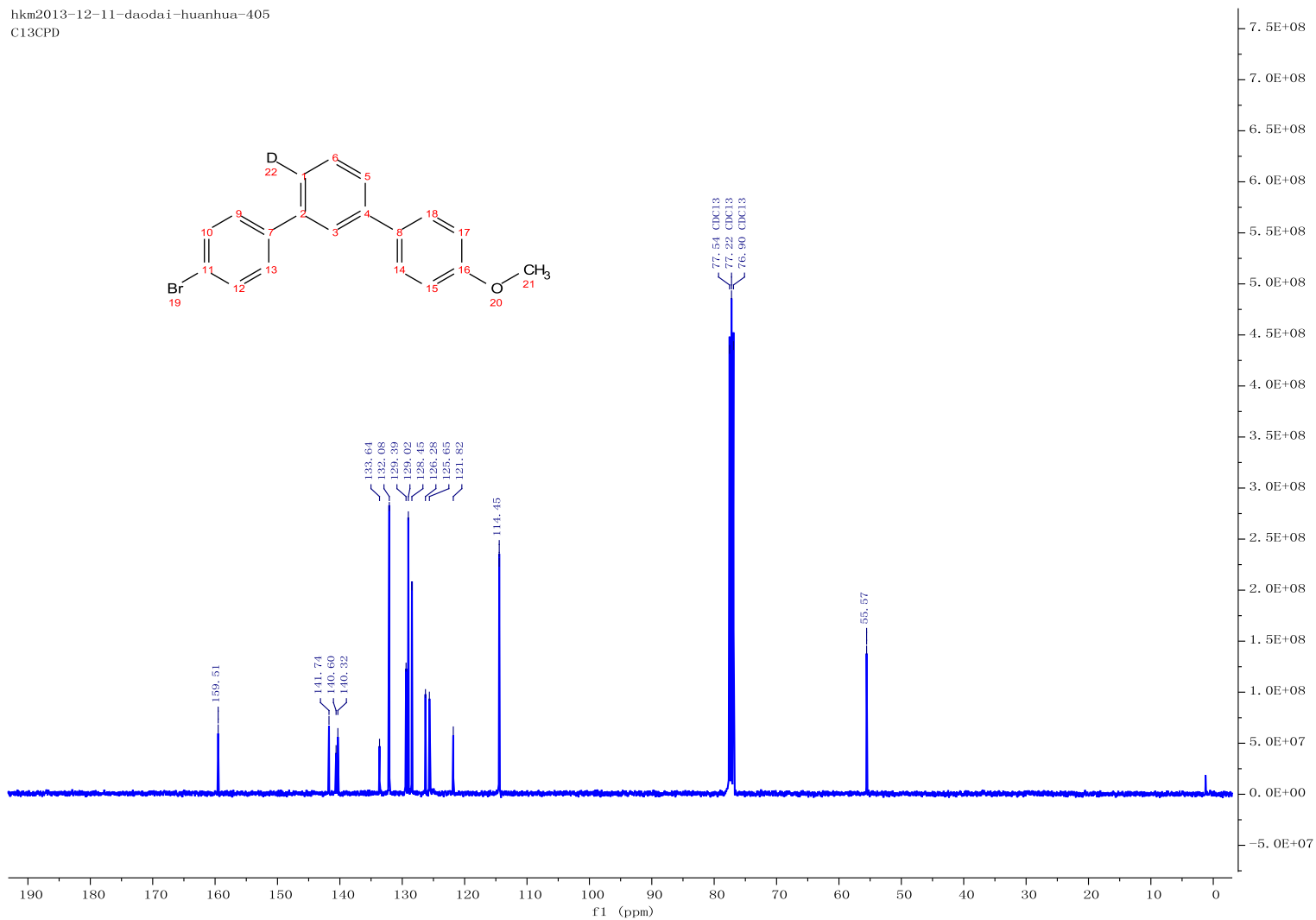
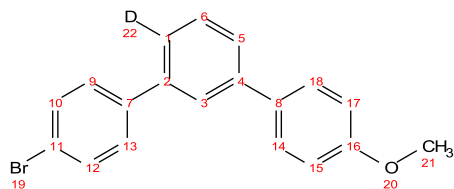
130.42), (7.38 127.04), (7.47 128.71), (7.53 128.66), (7.53 125.59), (7.66 126.97).  $^1\text{H}$ - $^{13}\text{C}$  HMBC NMR ((400, 101) MHz,  $\text{CDCl}_3$ )  $\delta$  = (2.35 130.57), (2.37 134.44), (2.37 141.67), (3.90 158.37), (7.01 158.37), (7.03 113.29), (7.03 133.98), (7.35 129.96), (7.37 138.44), (7.37 19.99), (7.37 141.76), (7.37 158.36), (7.37 126.87), (7.47 128.49), (7.47 128.49), (7.47 140.68), (7.49 128.52), (7.52 127.83), (7.53 134.11), (7.66 138.53), (7.68 126.79).



131217\_LJ-green  
proton



hkm2013-12-11-daodai-huanhua-405  
C13CPD

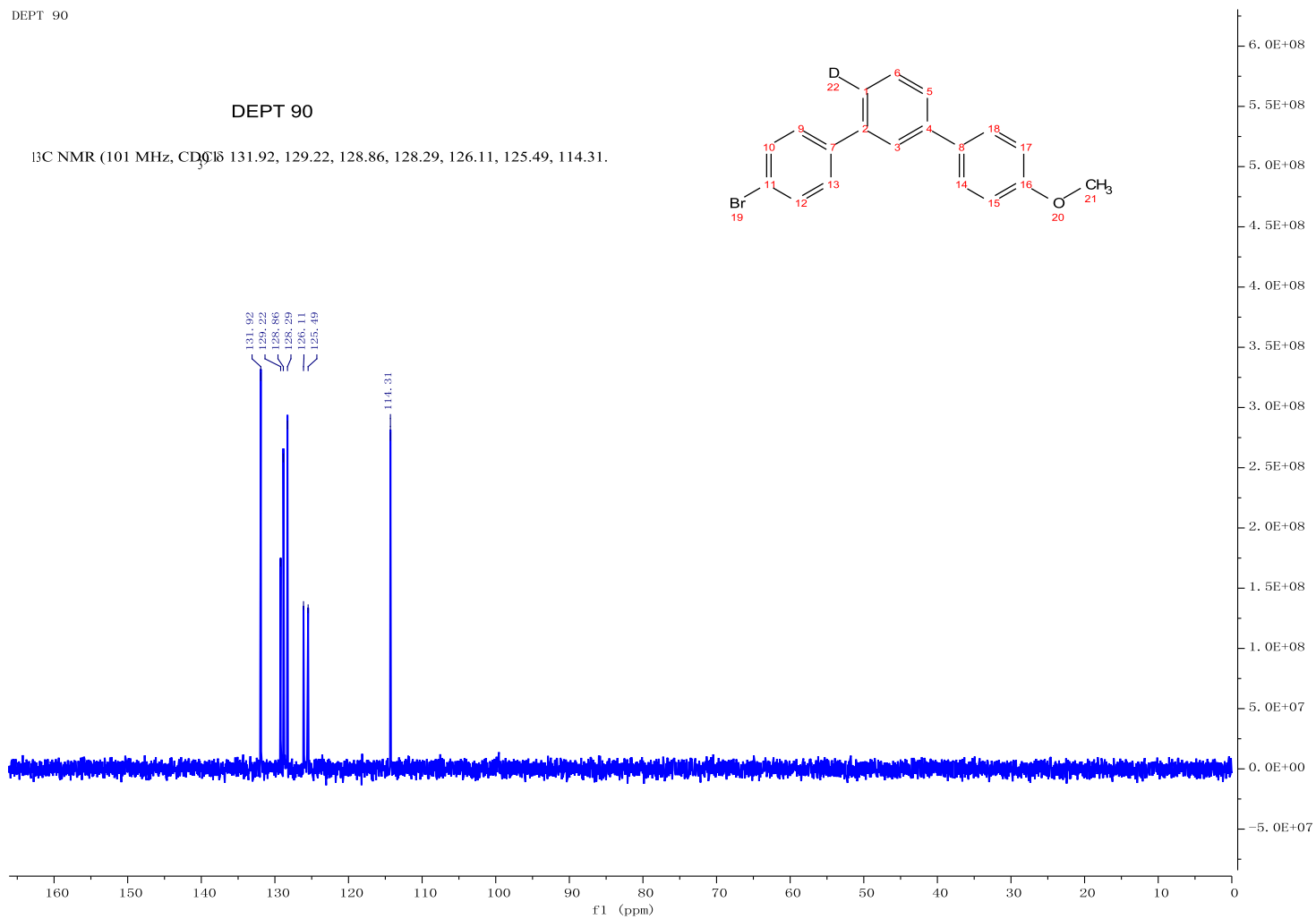
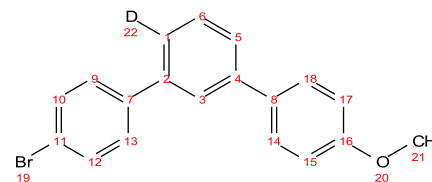


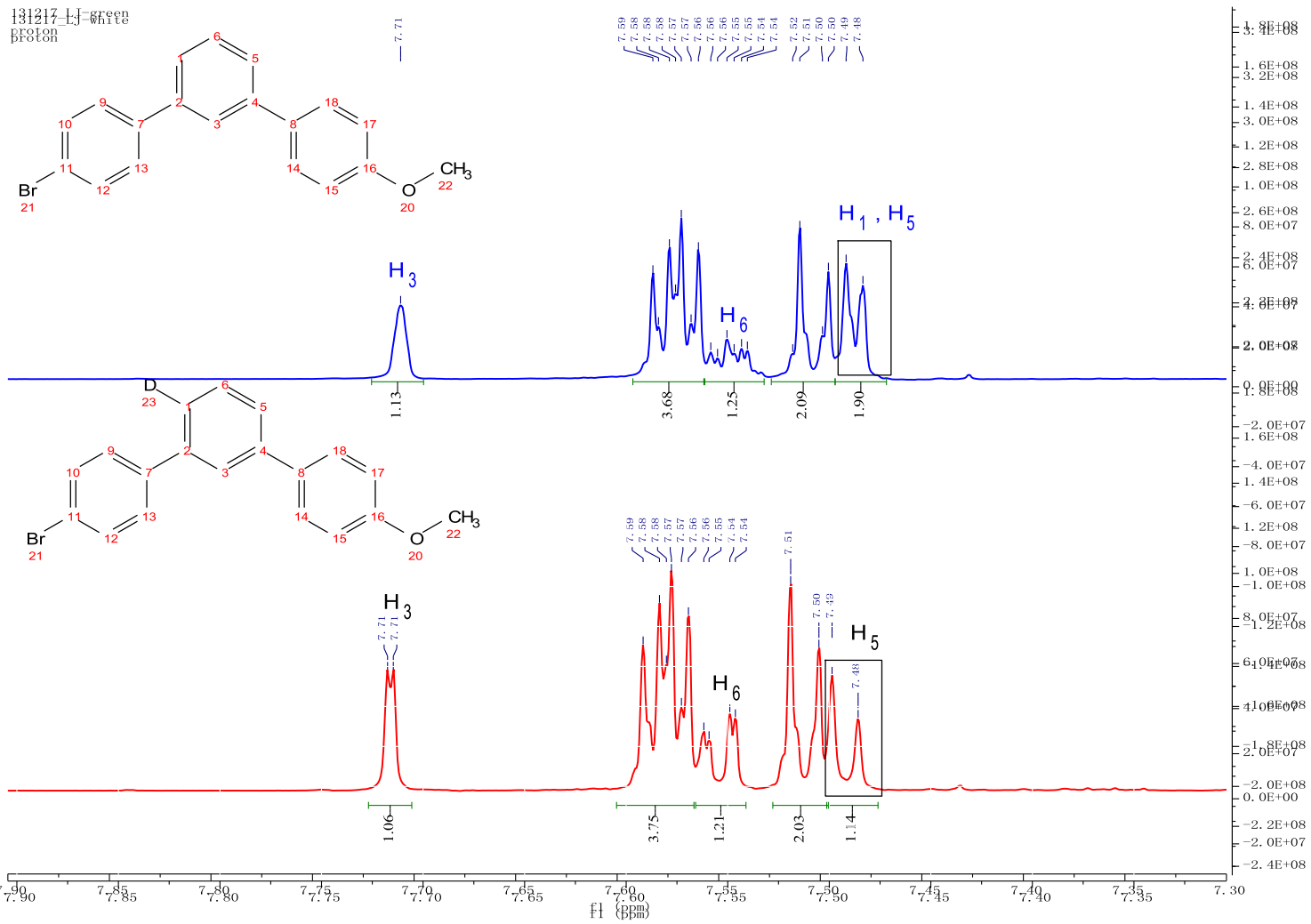


DEPT 90

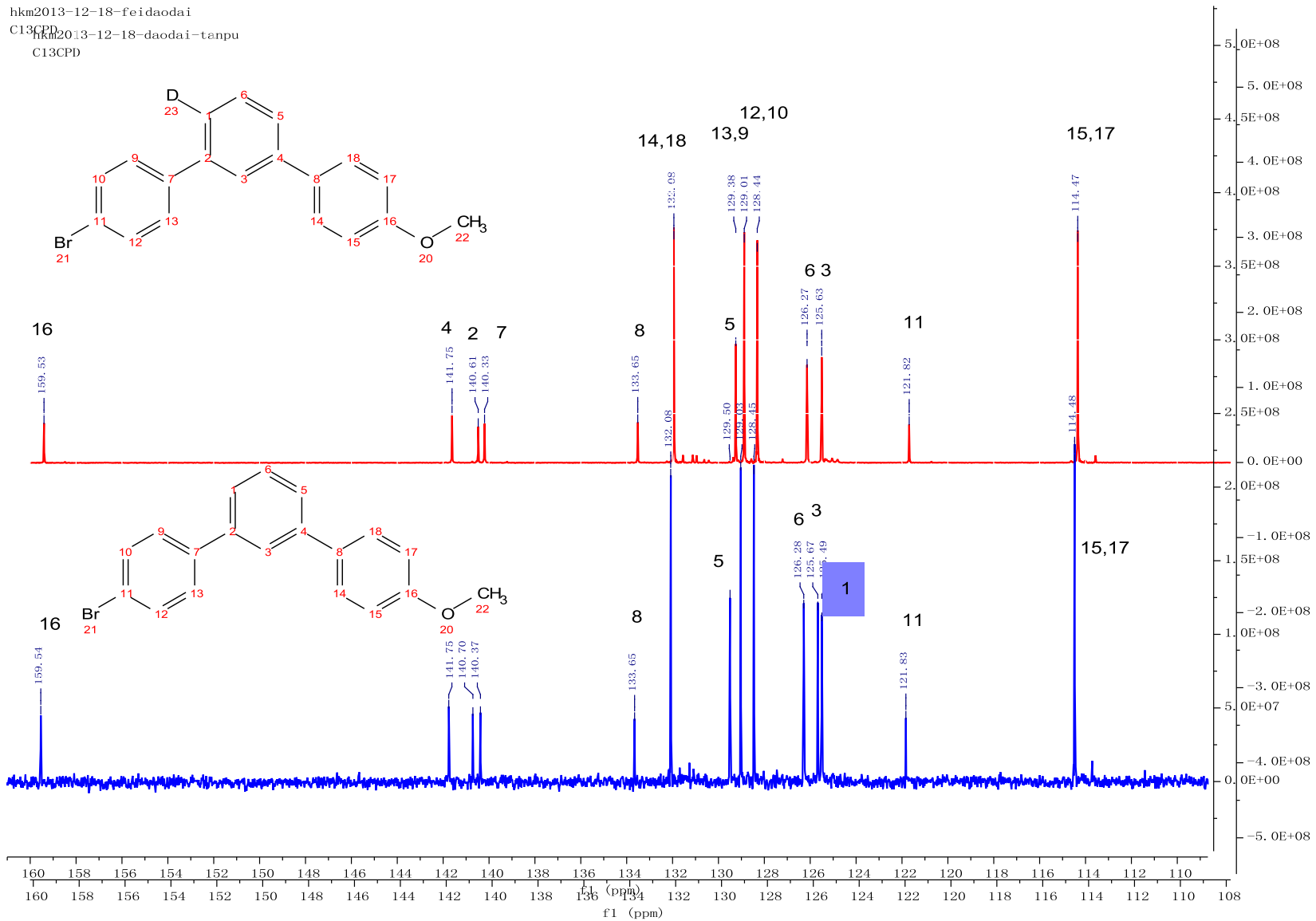
DEPT 90

<sup>13</sup>C NMR (101 MHz, CDCl<sub>3</sub>) 131.92, 129.22, 128.86, 128.29, 126.11, 125.49, 114.31.

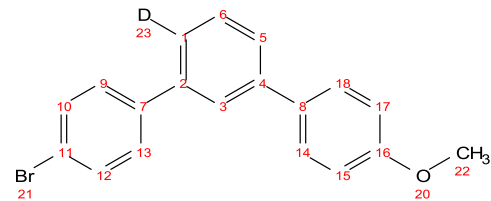




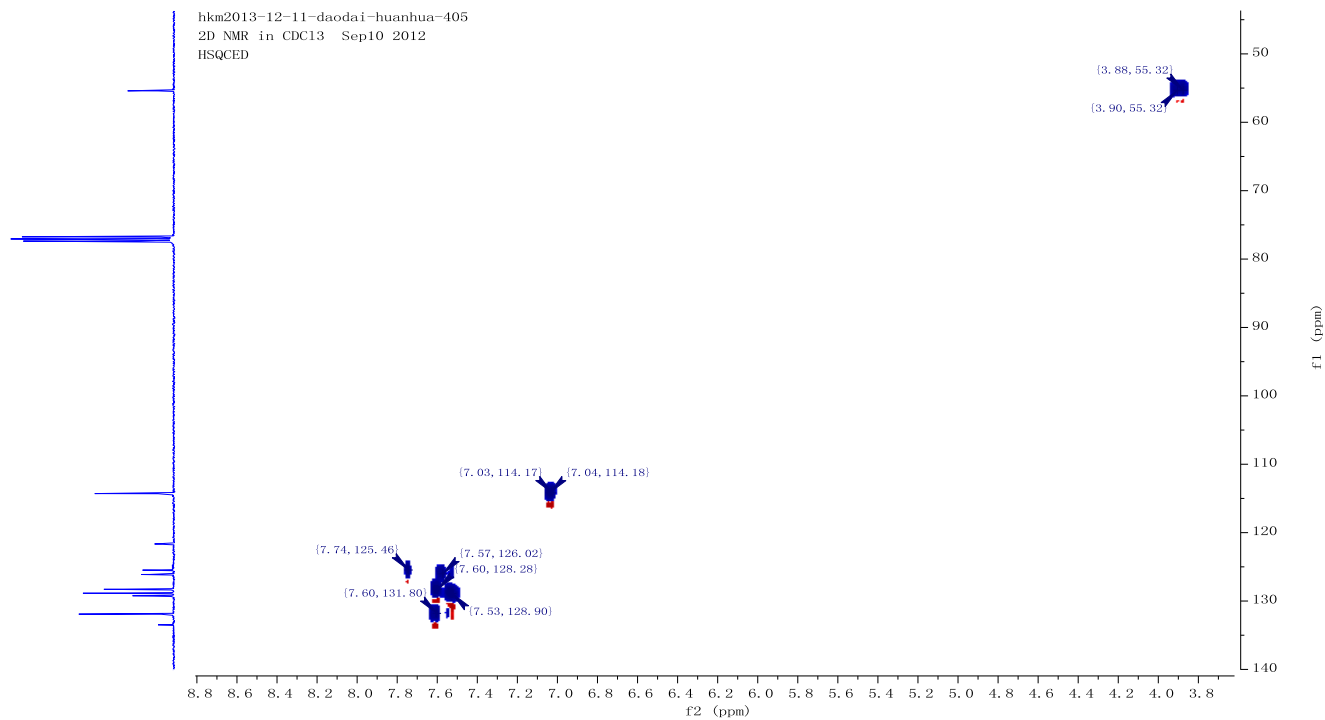
hkm2013-12-18-feidaodai  
C13CPD  
hkm2013-12-18-daodai-tanpu  
C13CPD



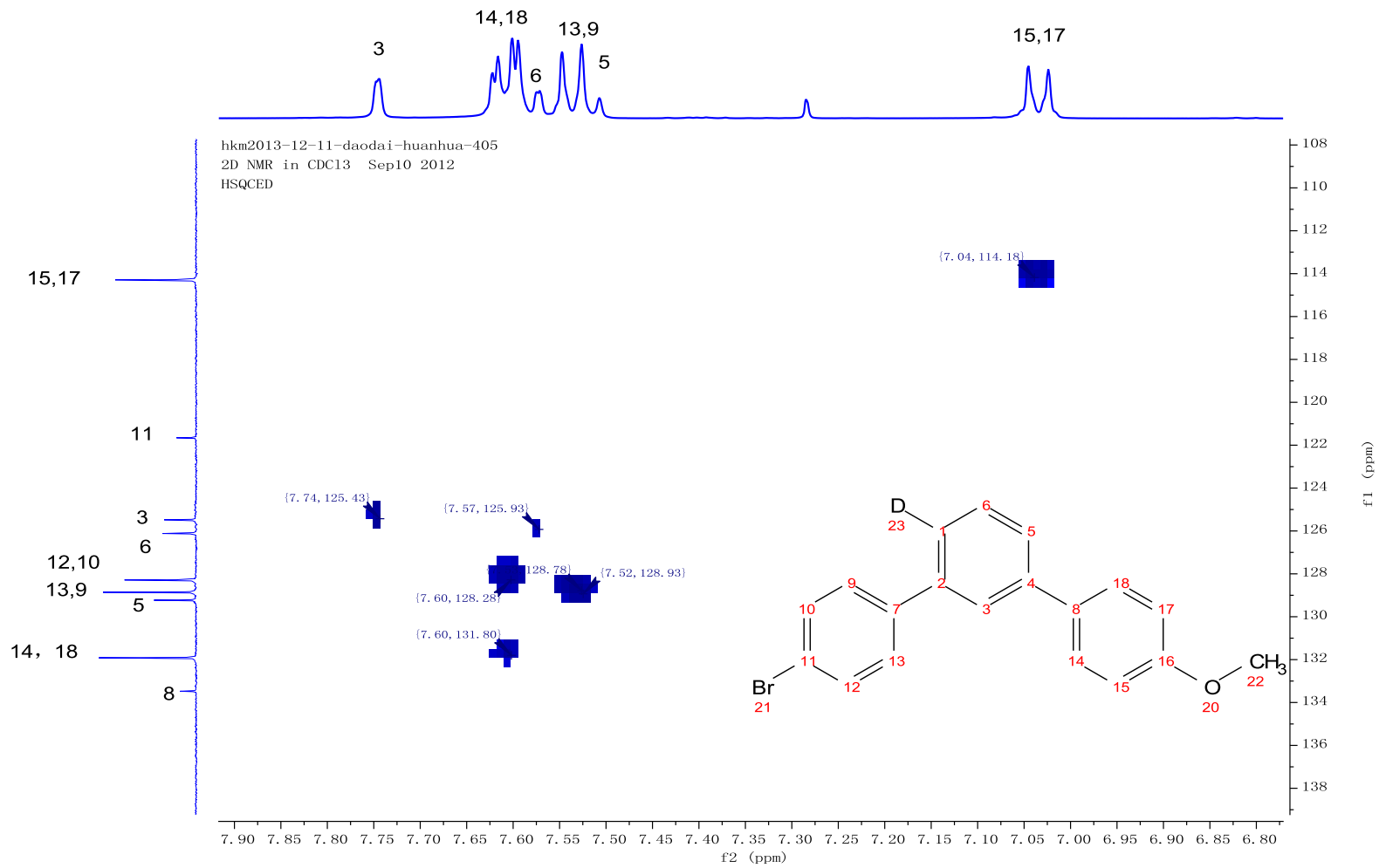


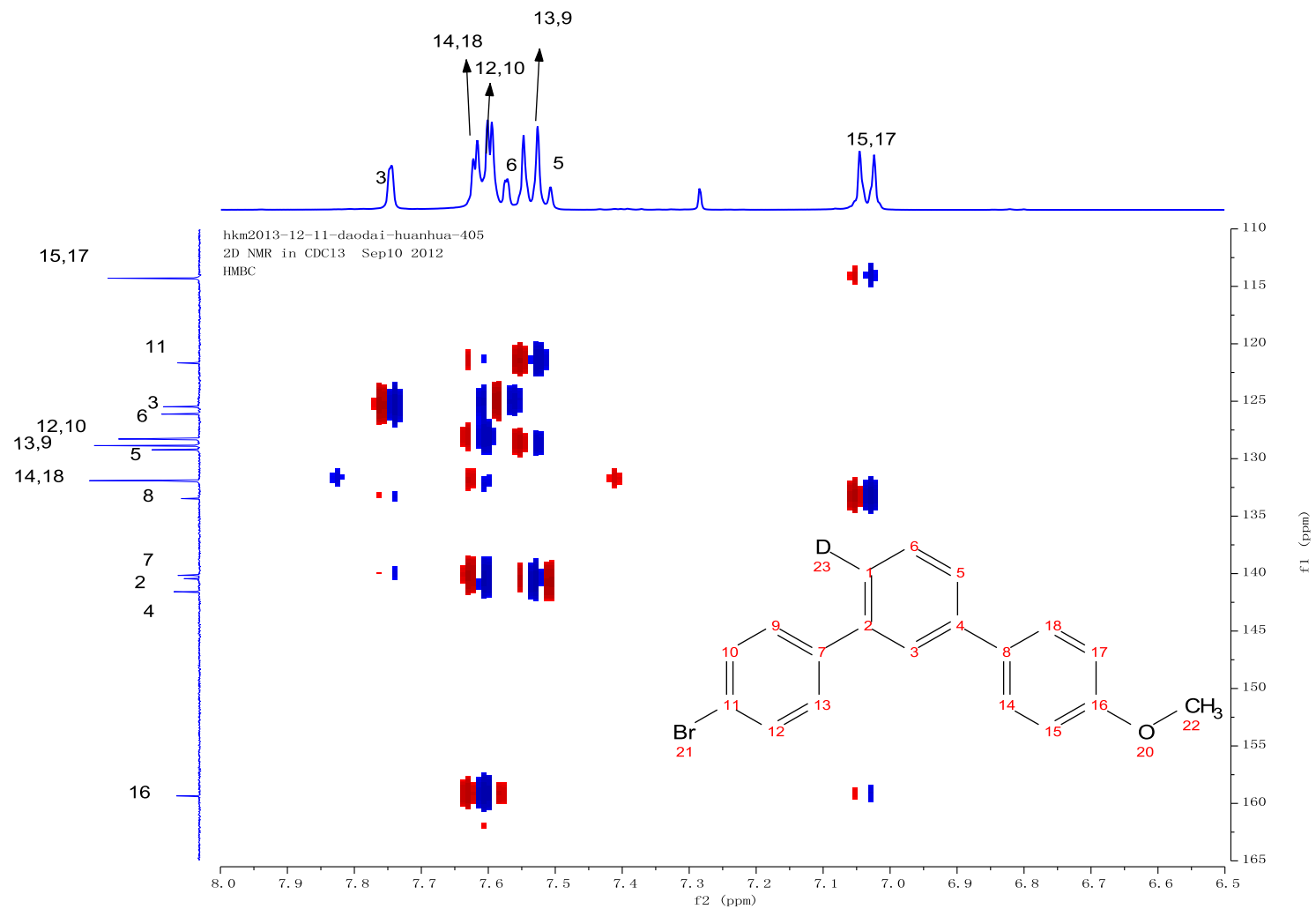


hkm2013-12-11-daodai-huanhua-405  
2D NMR in CDCl<sub>3</sub> Sep10 2012  
HSQCED



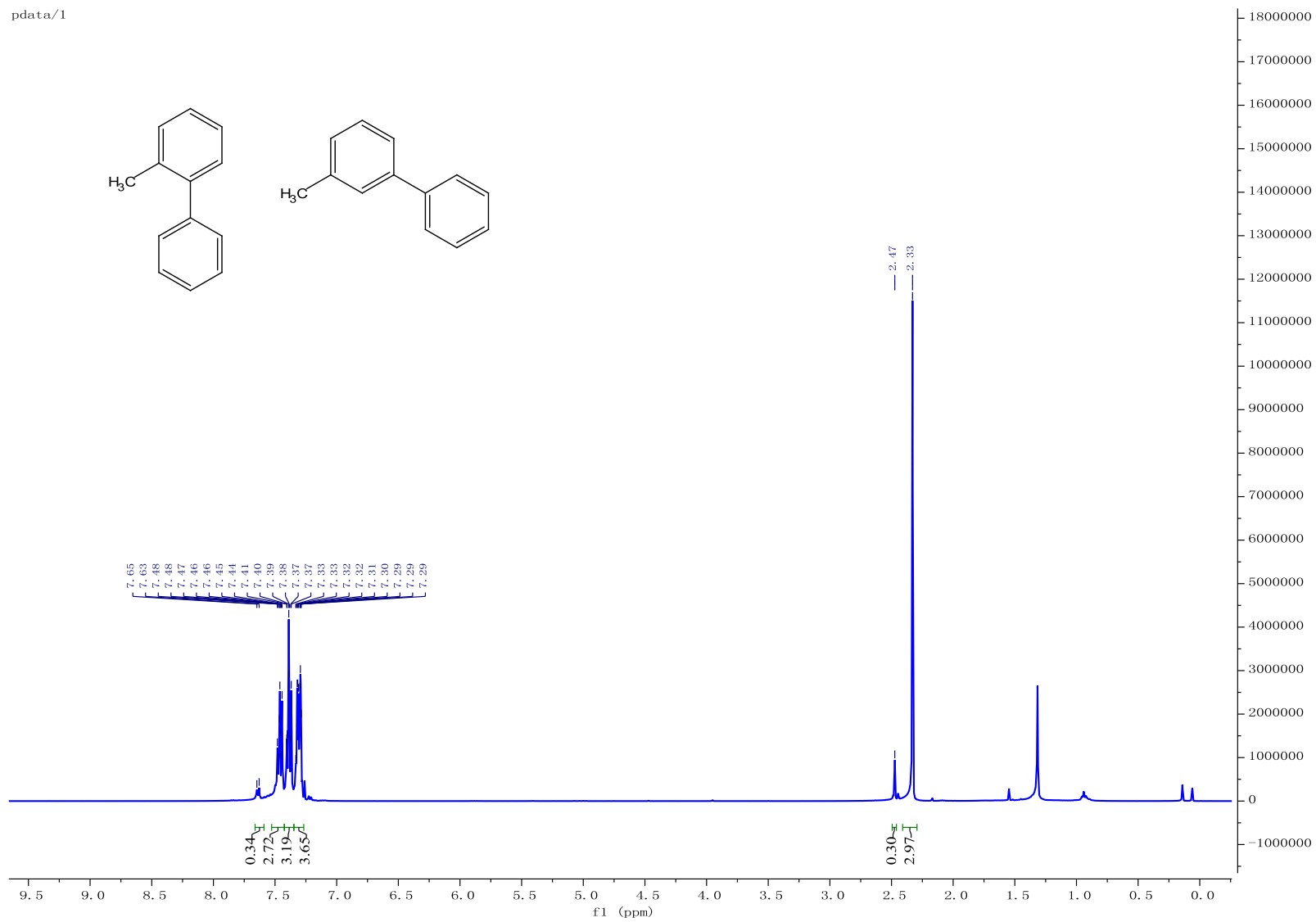
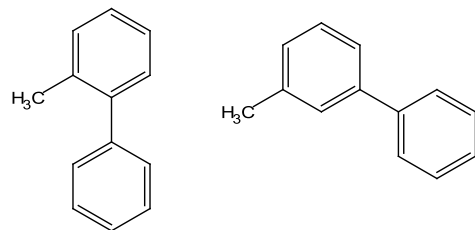
$^1\text{H}$ - $^{13}\text{C}$  HSQC NMR ((400, 101) MHz,  $\text{CDCl}_3$ )  $\delta$  = (3.88 55.37), (7.04 114.18), (7.52 128.93), (7.53 128.78), (7.57 125.93), (7.60 131.80), (7.60 128.28), (7.74 125.43).  $^1\text{H}$ - $^{13}\text{C}$  HMBC NMR ((400, 101) MHz,  $\text{CDCl}_3$ )  $\delta$  = (3.89 159.07), (3.90 159.07), (7.03 133.18), (7.05 133.19), (7.50 140.67), (7.53 140.55), (7.58 124.93), (7.60 140.37), (7.60 159.07), (7.62 140.14), (7.74 125.27), (7.76 125.27).



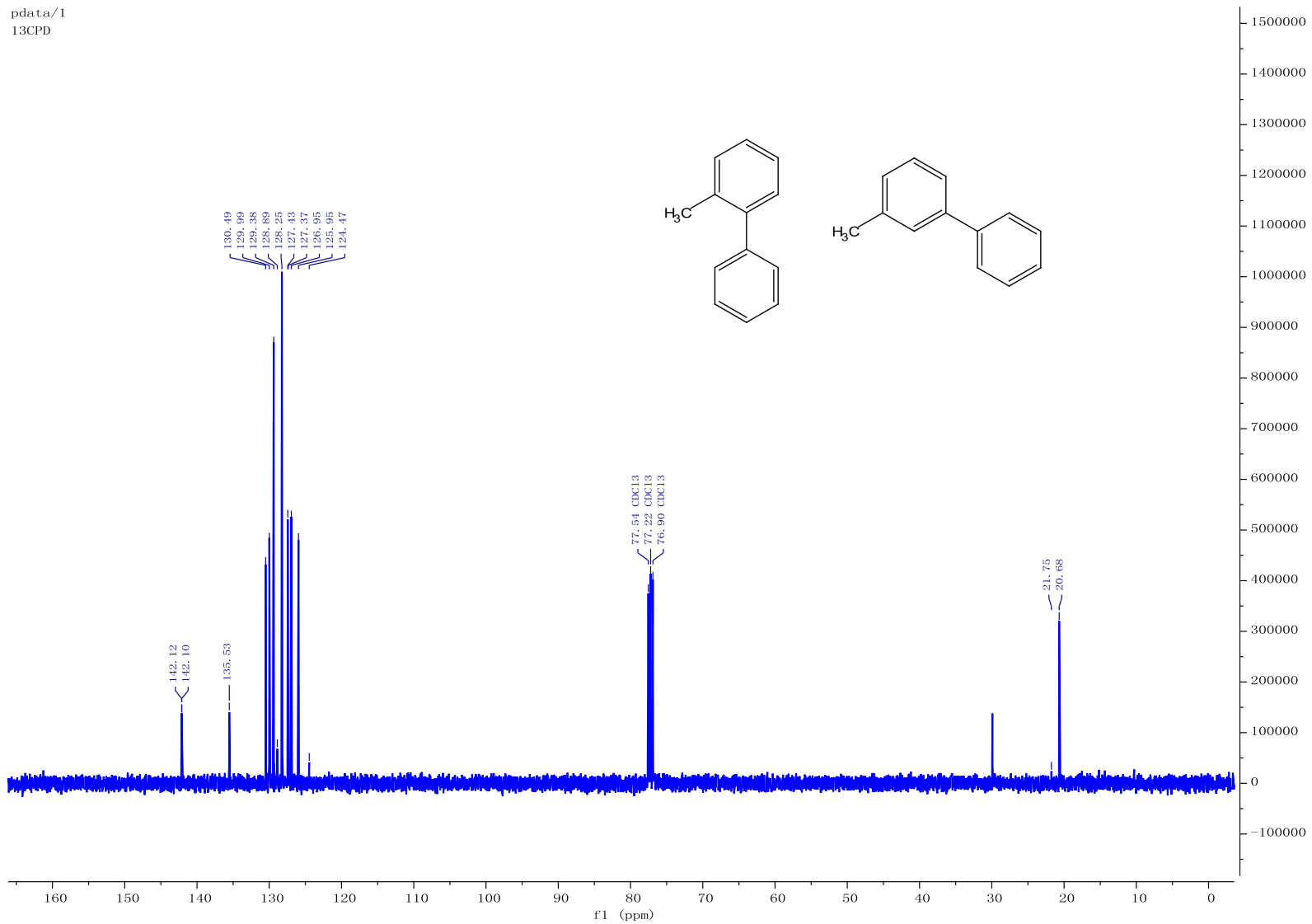




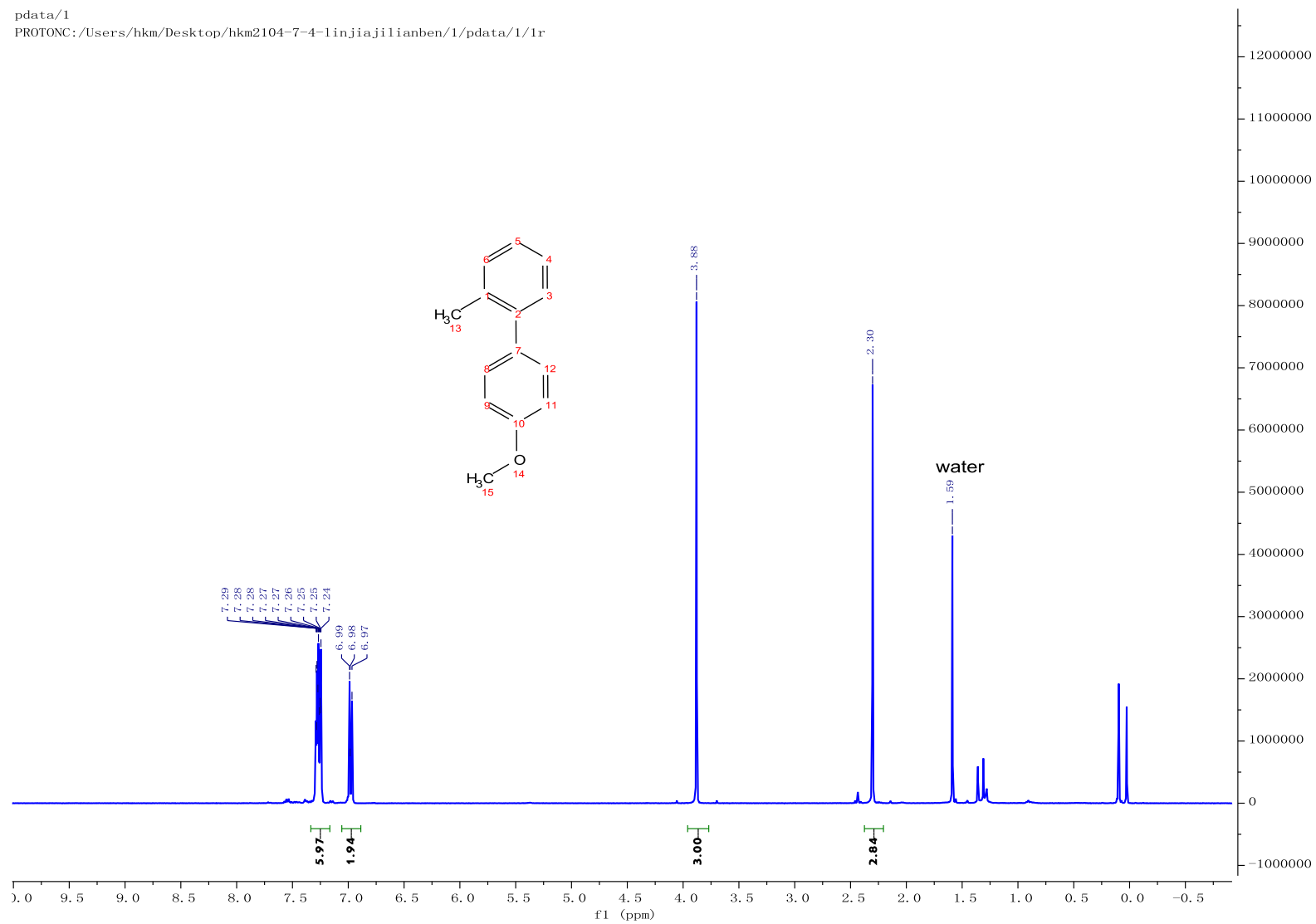
pdata/1



pdata/1  
13CPD

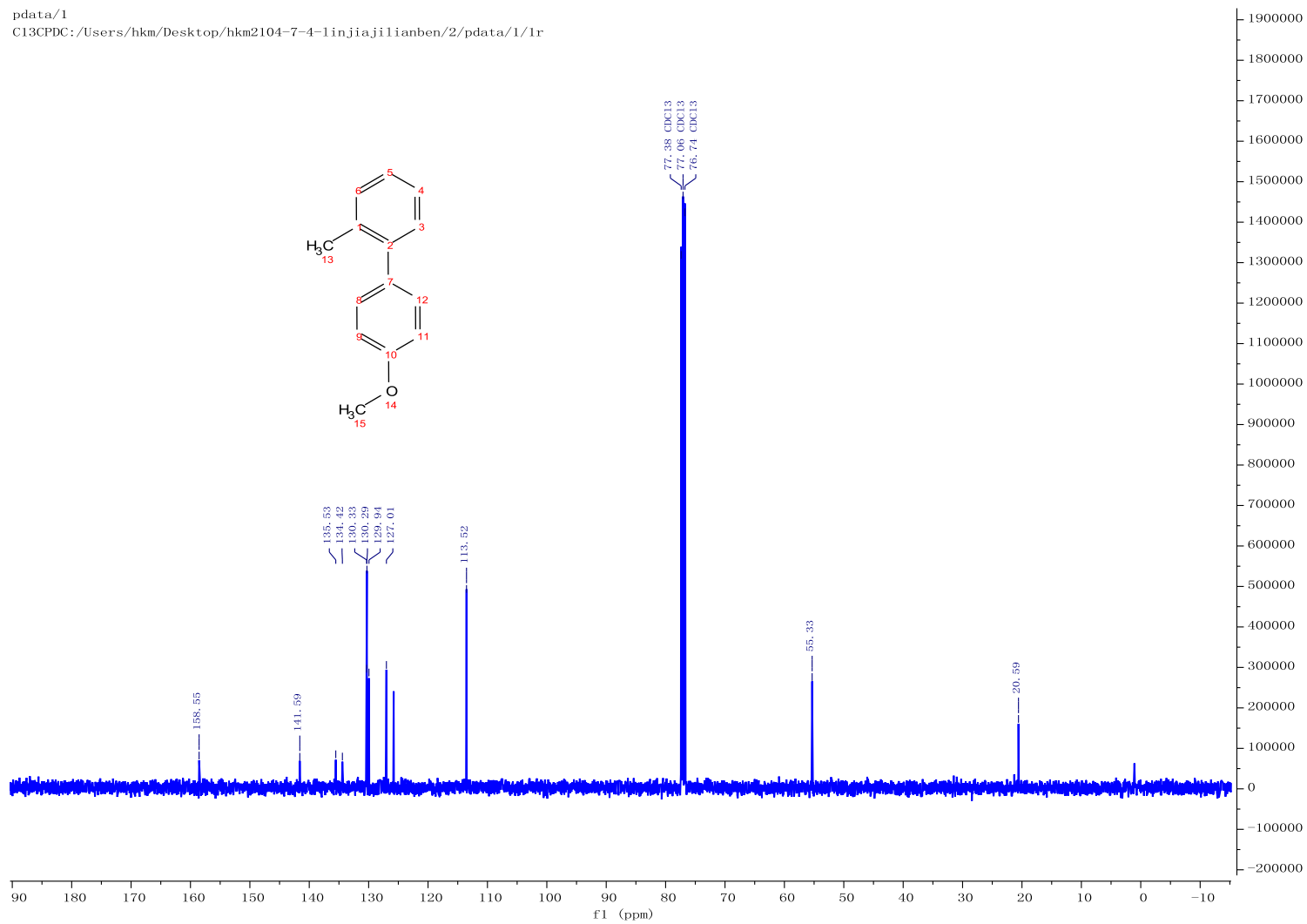


pdata/1  
PROTONC:/Users/hkm/Desktop/hkm2104-7-4-1injiajilianben/1/pdata/1/1r

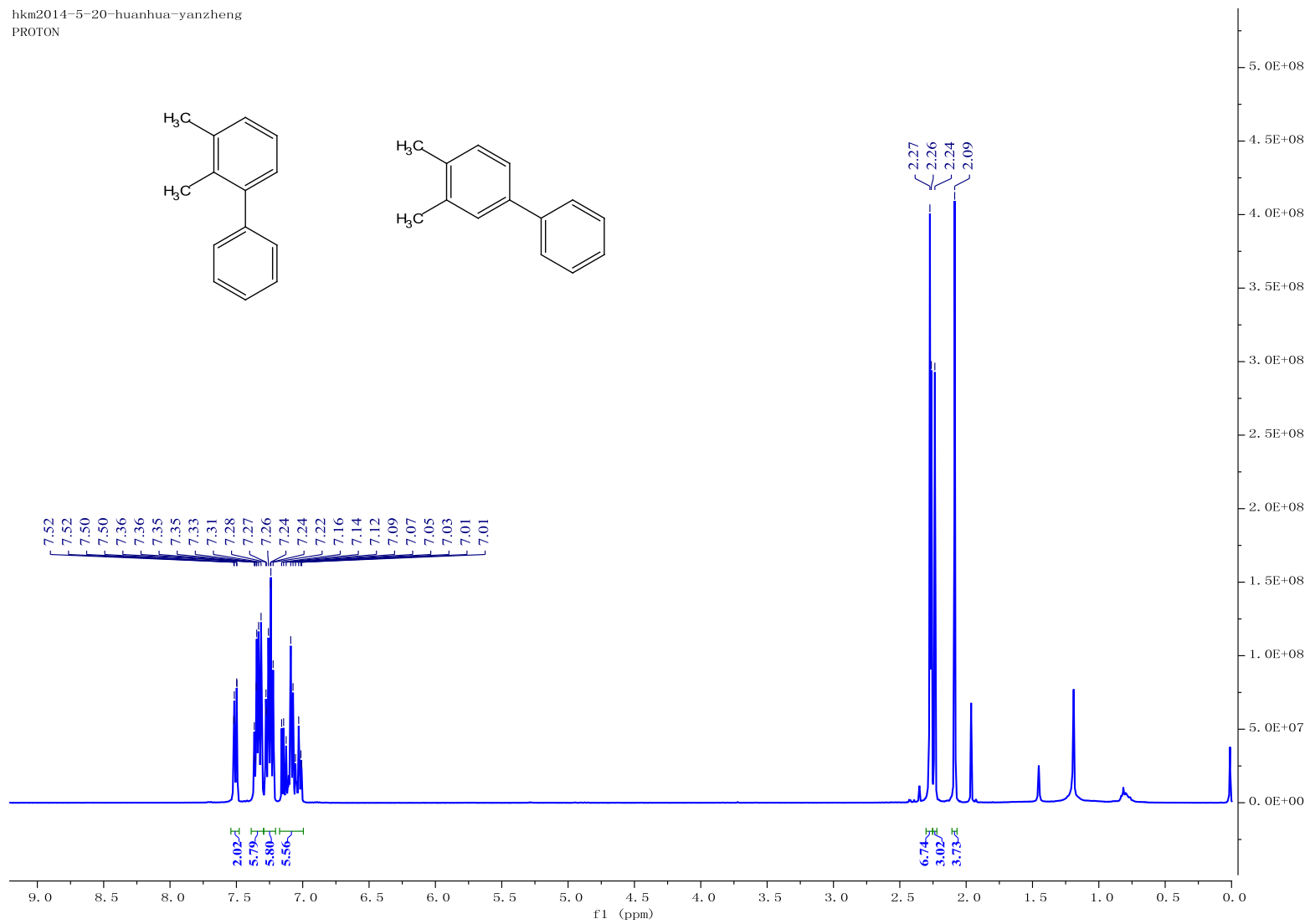
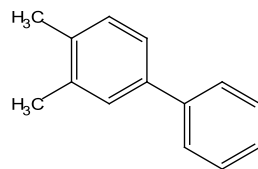
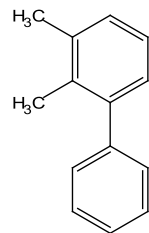




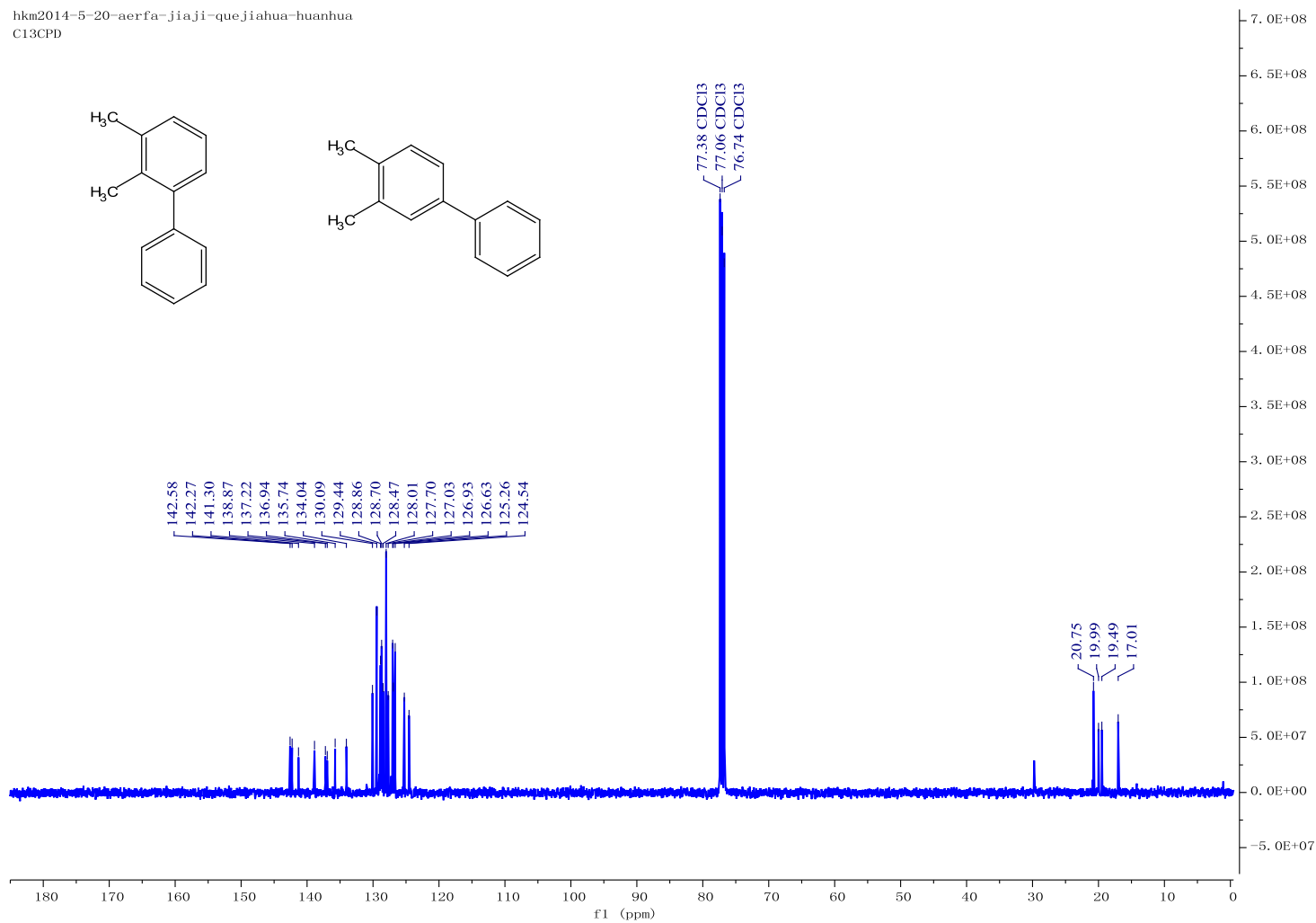
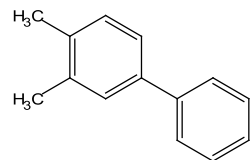
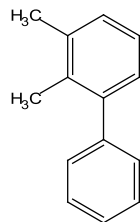
pdata/1  
C13CPDC:/Users/hkm/Desktop/hkm2104-7-4-linjiajilianben/2/pdata/1/1r



hkm2014-5-20-huanhua-yanzheng  
PROTON

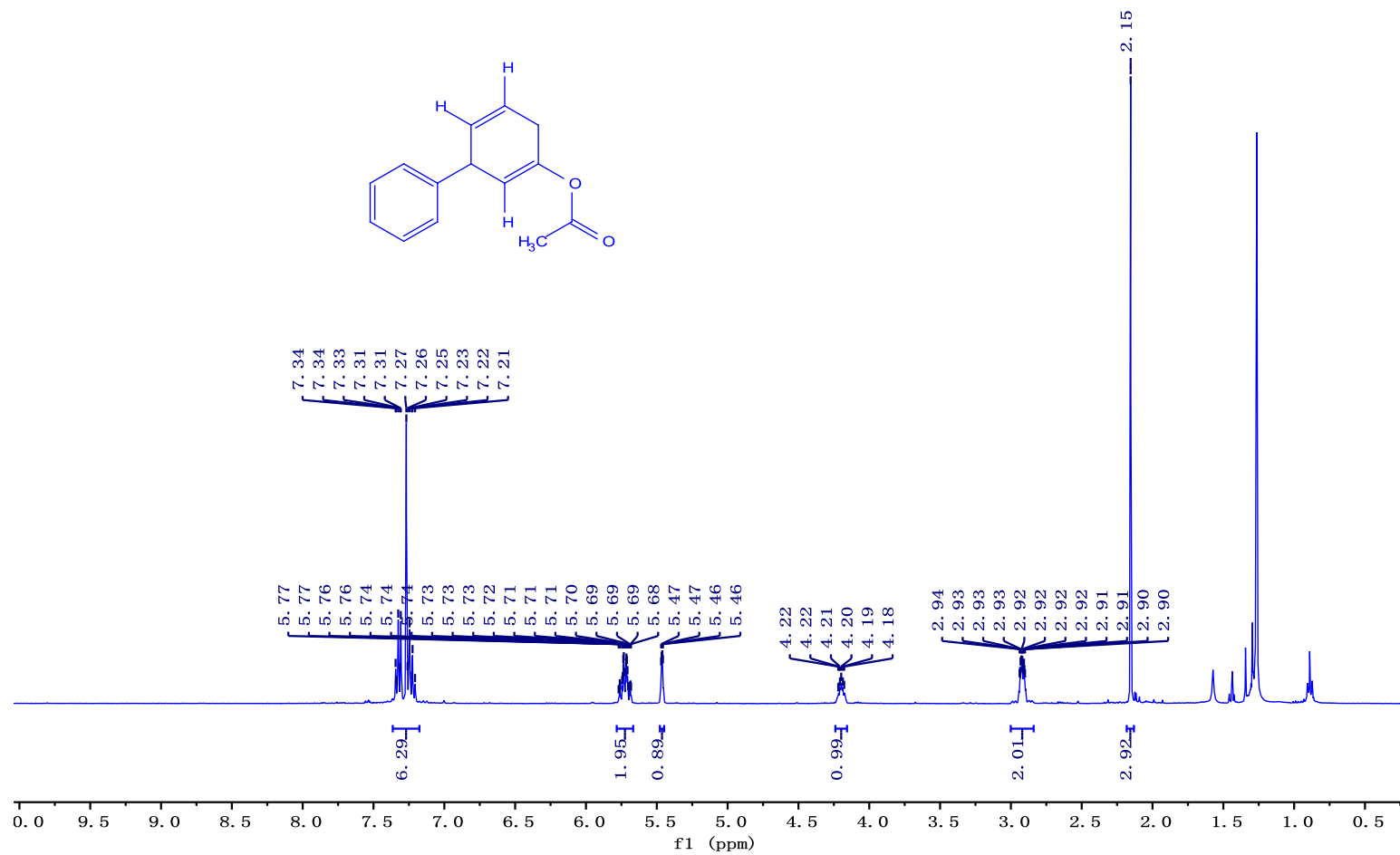


hkm2014-5-20-aerfa-jiaji-quejiahua-huanhua  
C13CPD



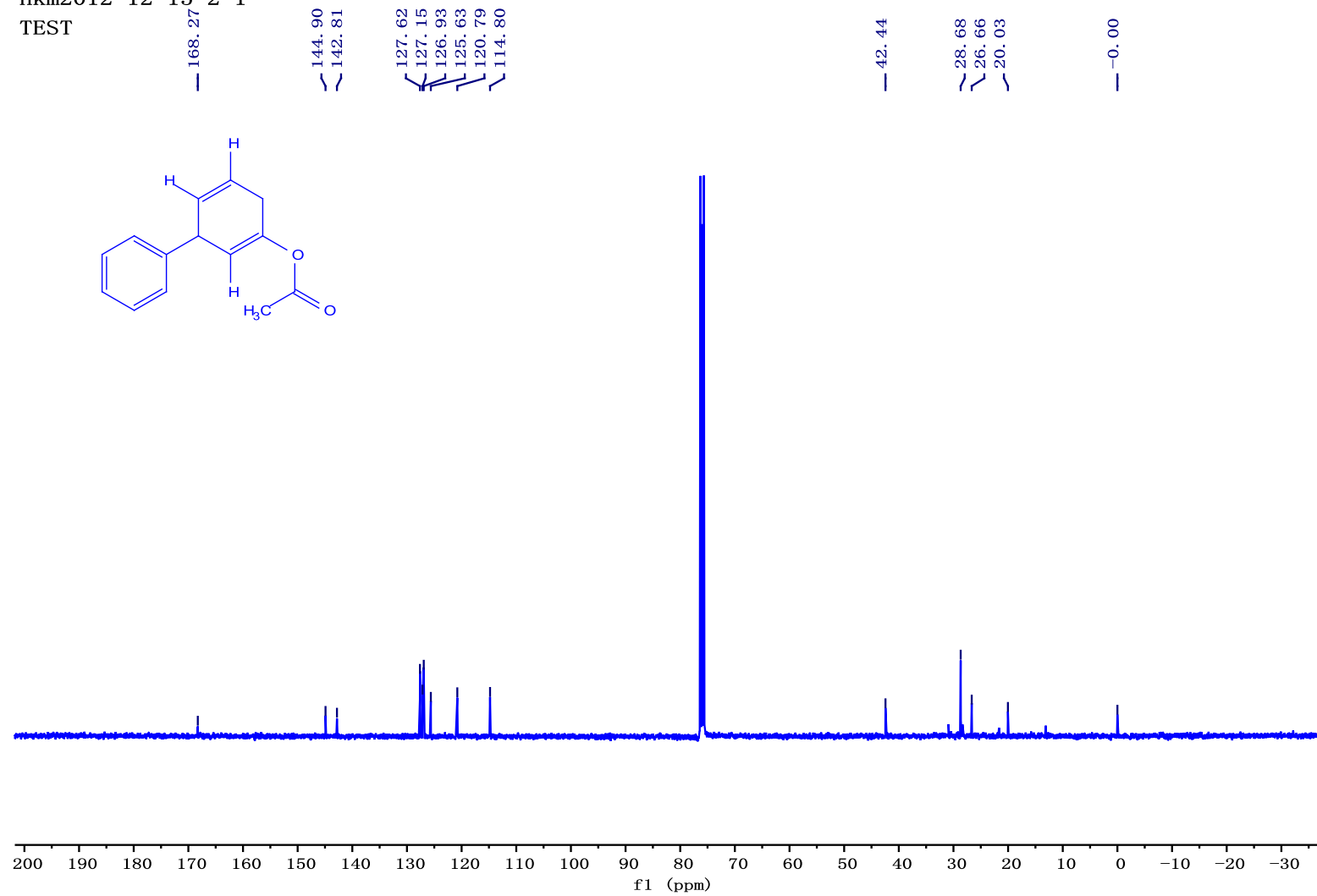
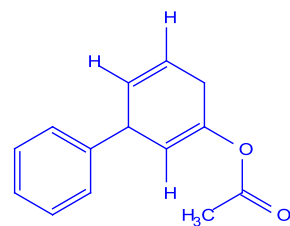


hkm2012-12-15-2-1



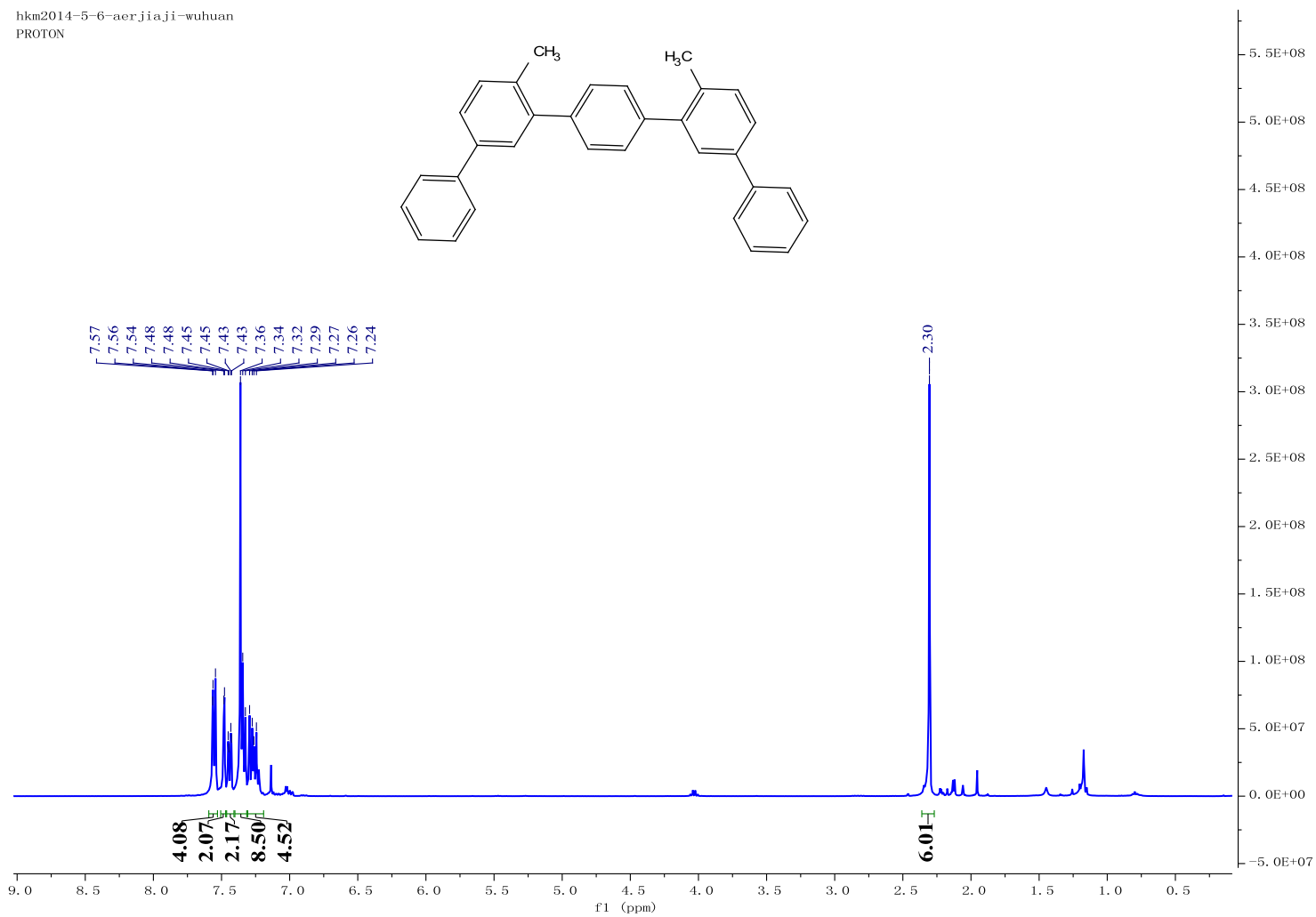
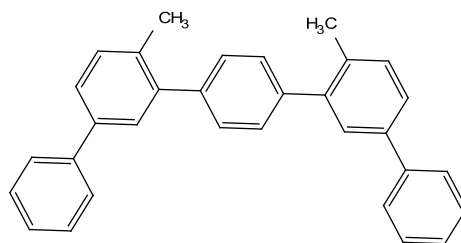
hkm2012-12-15-2-1

TEST



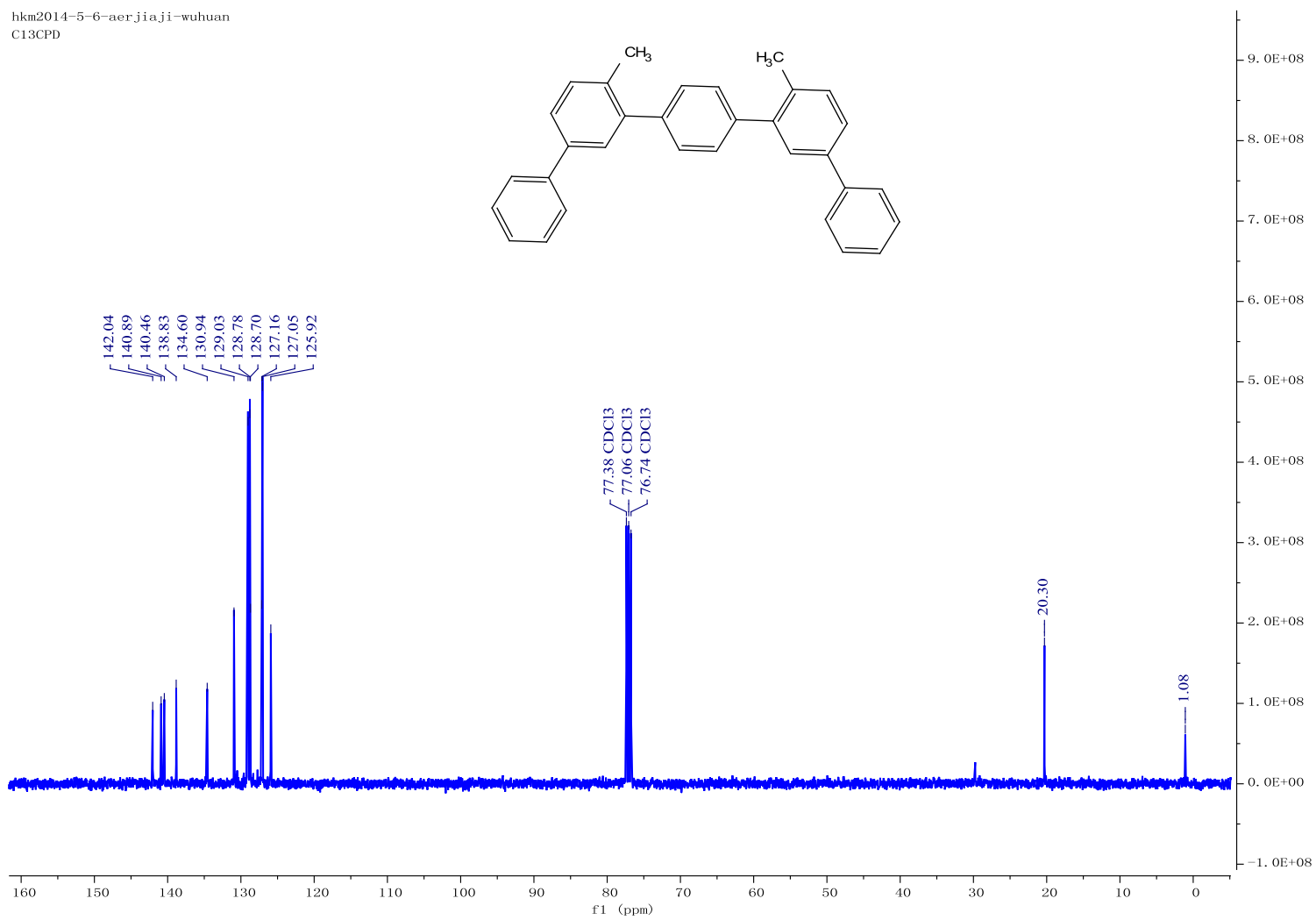
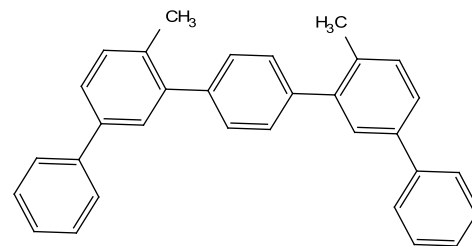


hkm2014-5-6-aerjiaji-wuhuan  
PROTON

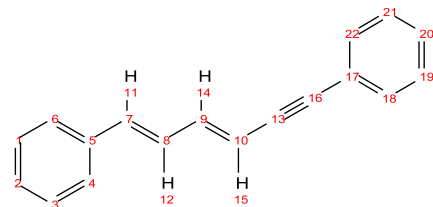




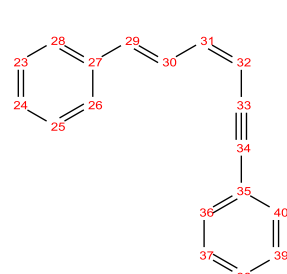
hkm2014-5-6-aerjiaji-wuhuan  
C13CPD



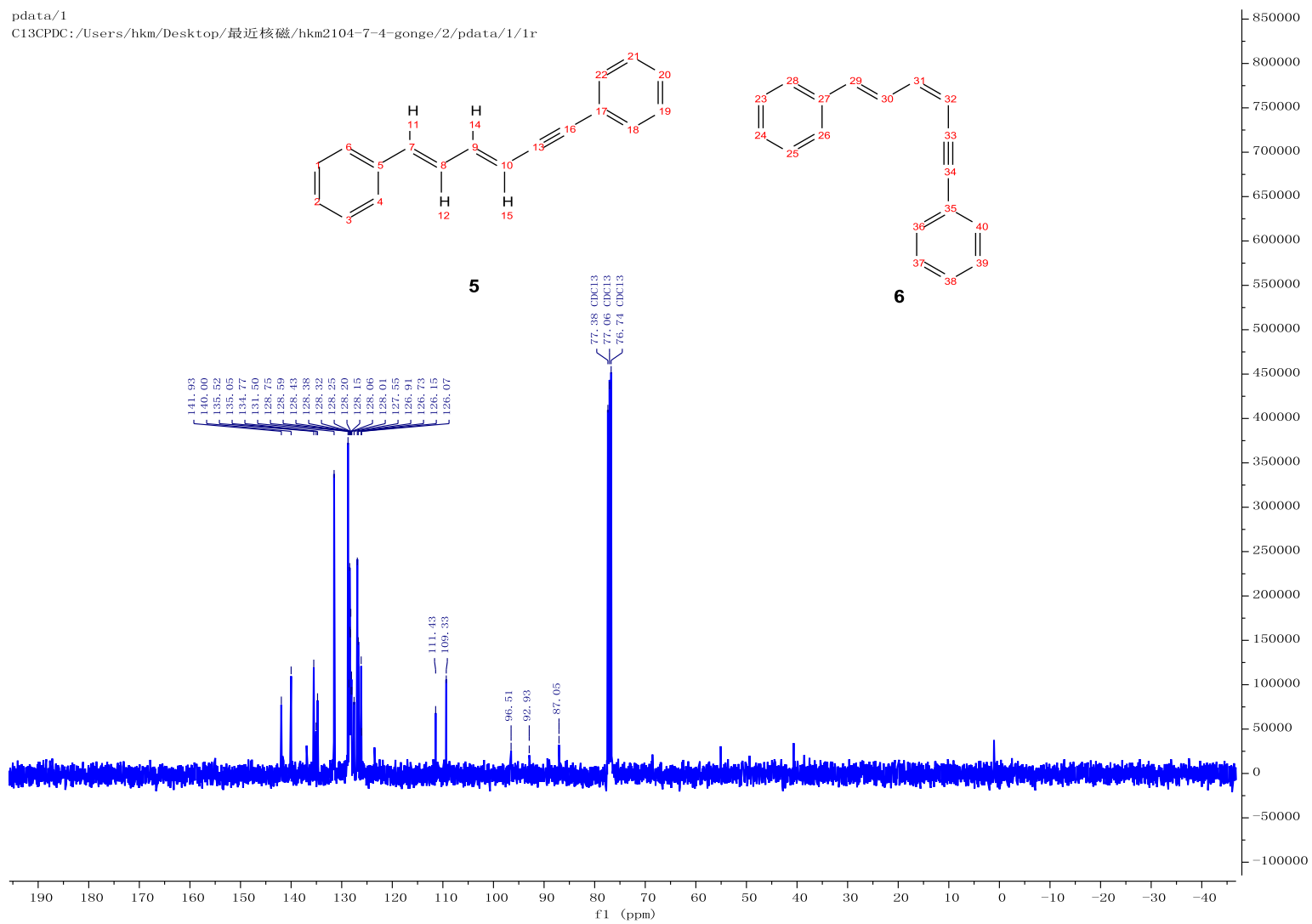
pdata/1  
C13CPDC: /Users/hkm/Desktop/最近核磁/hkm2104-7-4-gongce/2/pdata/1/1r



5

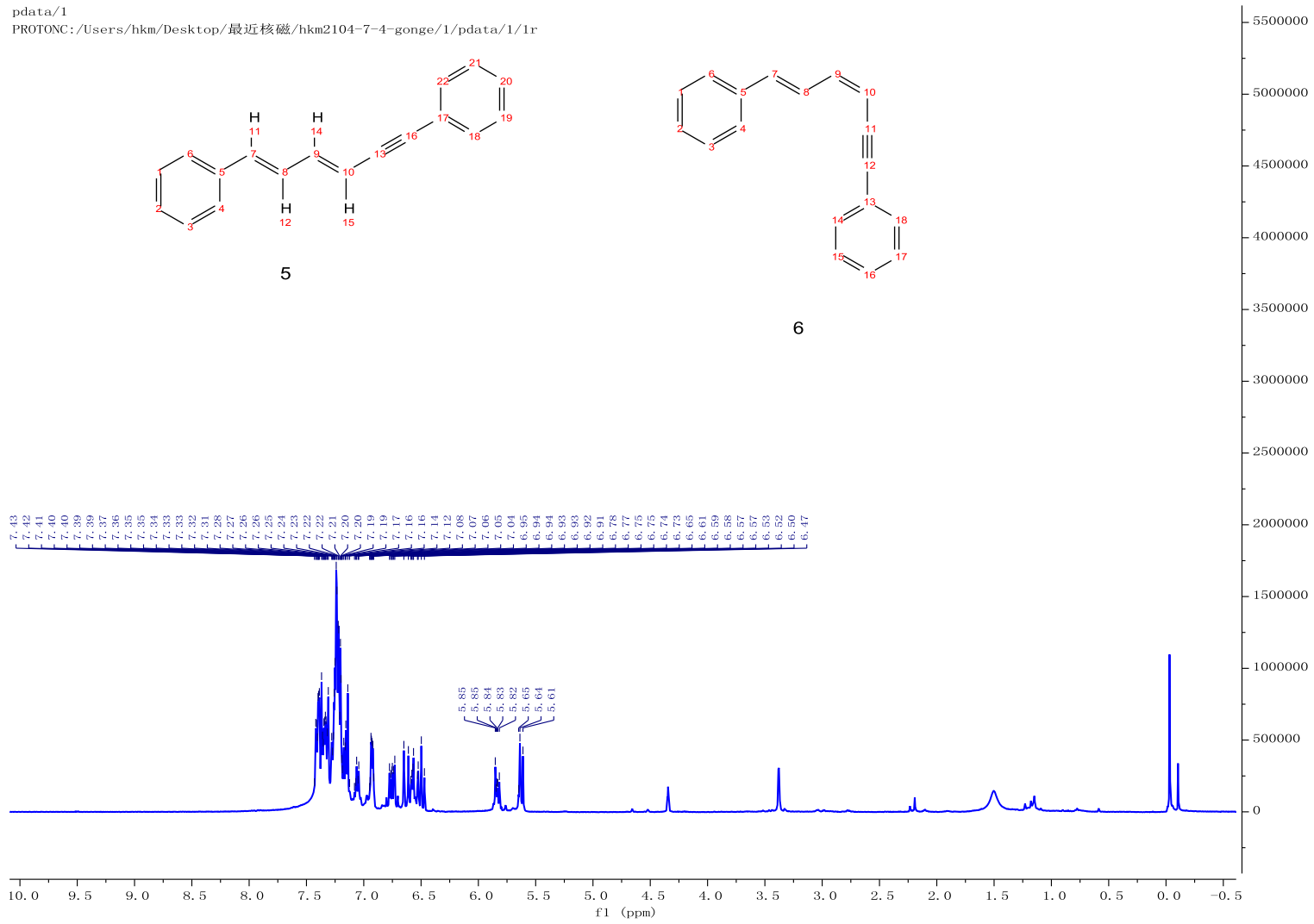
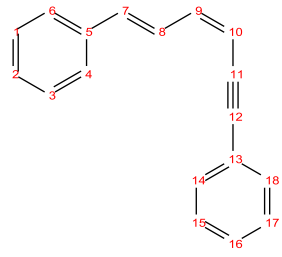
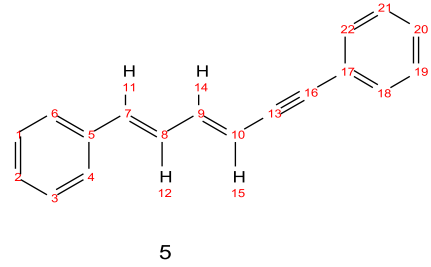


6

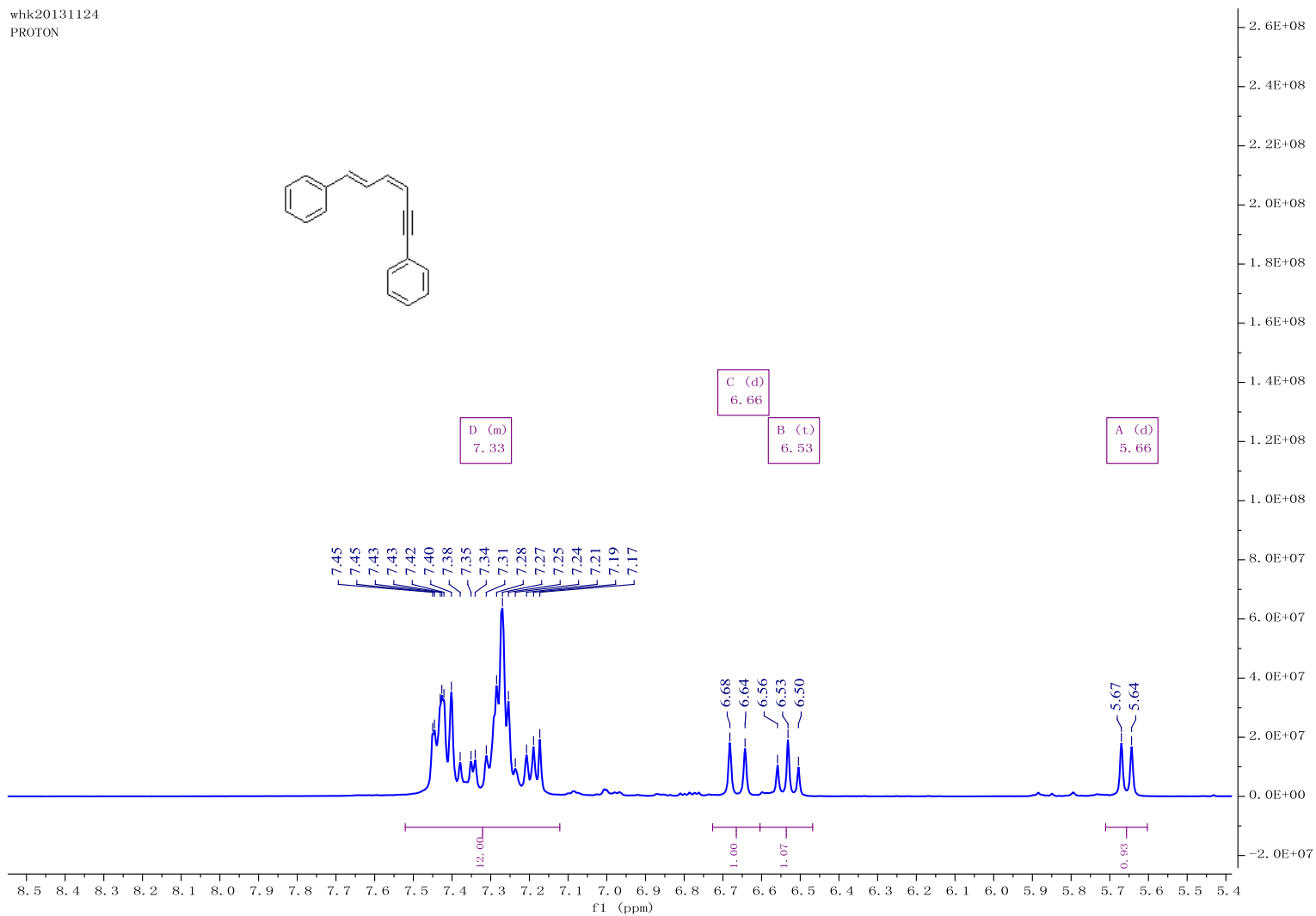
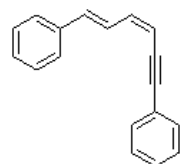


pdata/1

PROTONC:/Users/hkm/Desktop/最近核磁/hkm2104-7-4-gonge/1/pdata/1/1r



whk20131124  
PROTON



whk20131124  
C13CPD

