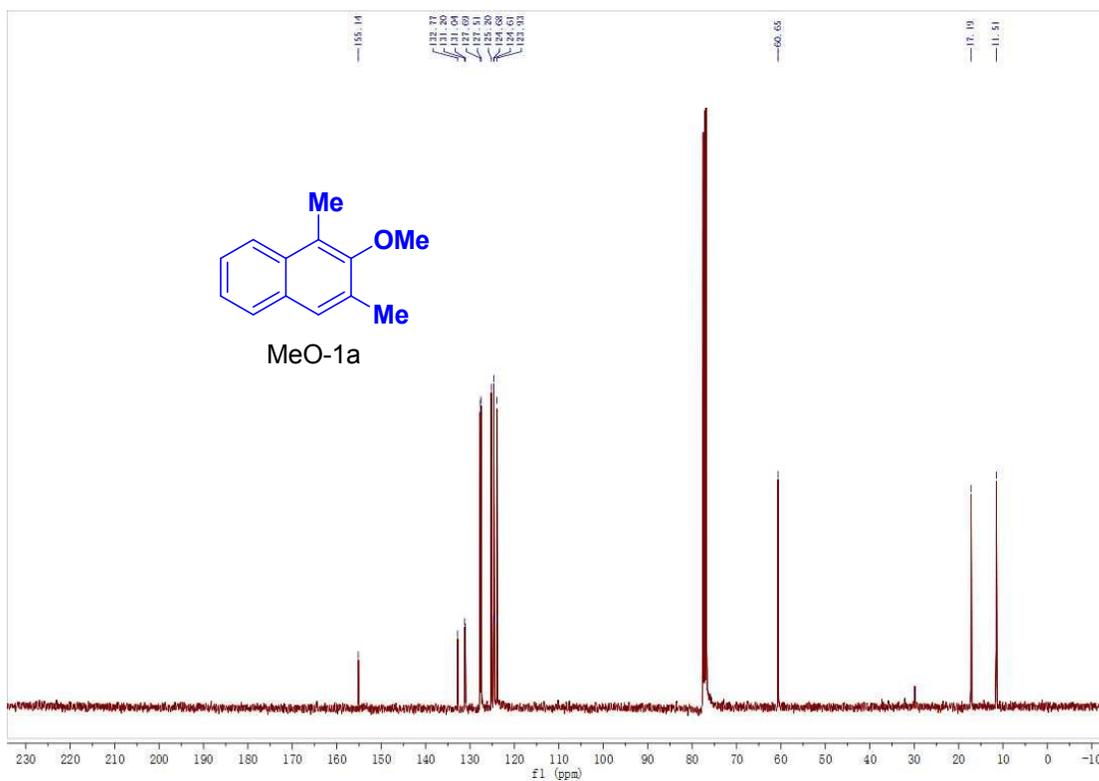
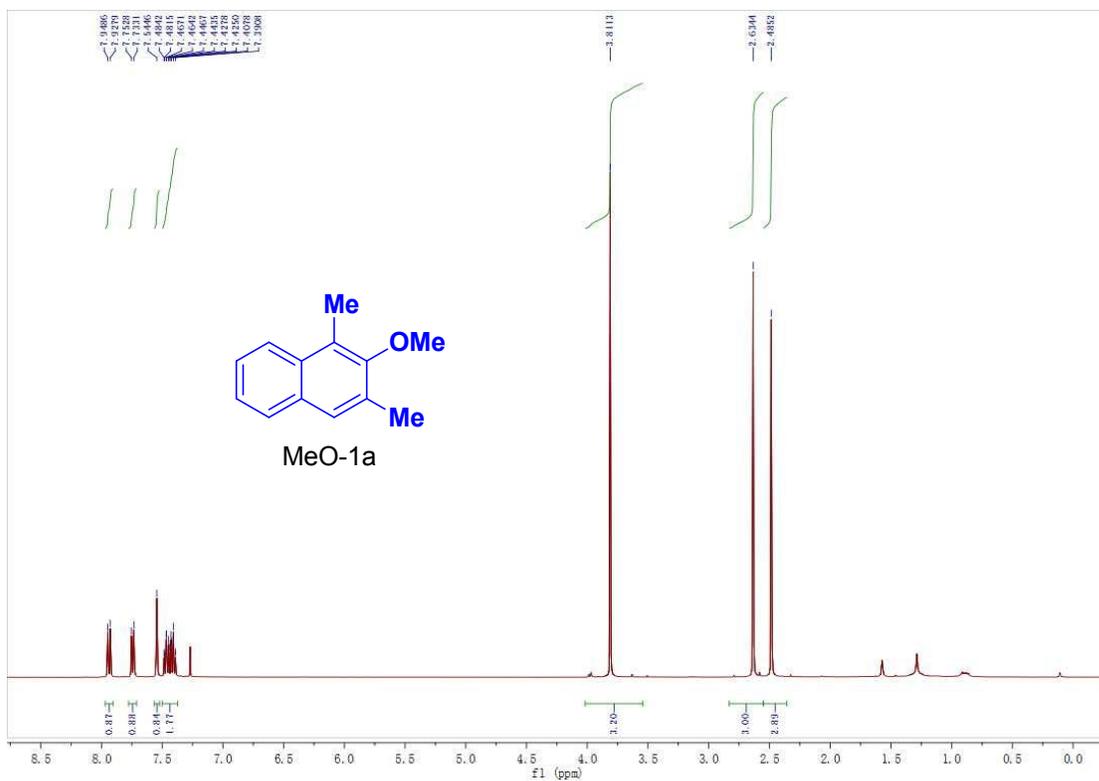


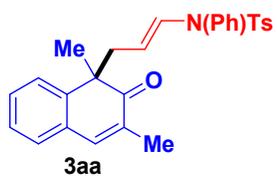
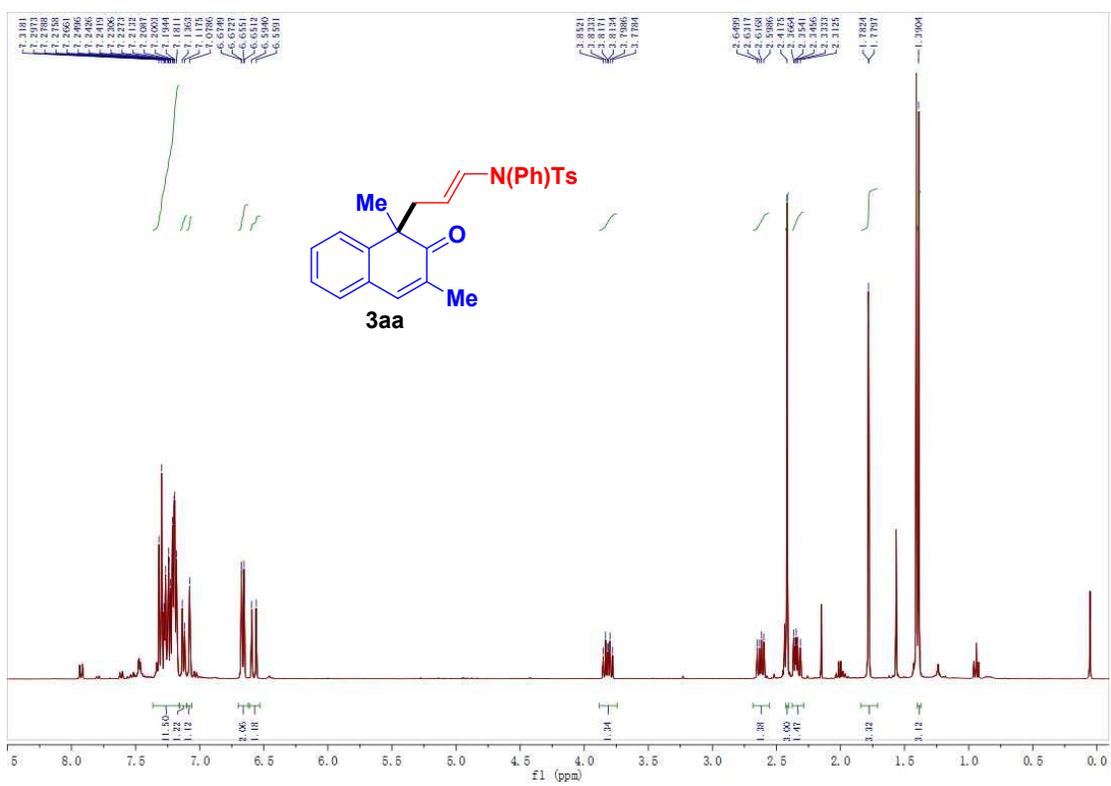
Supporting Information

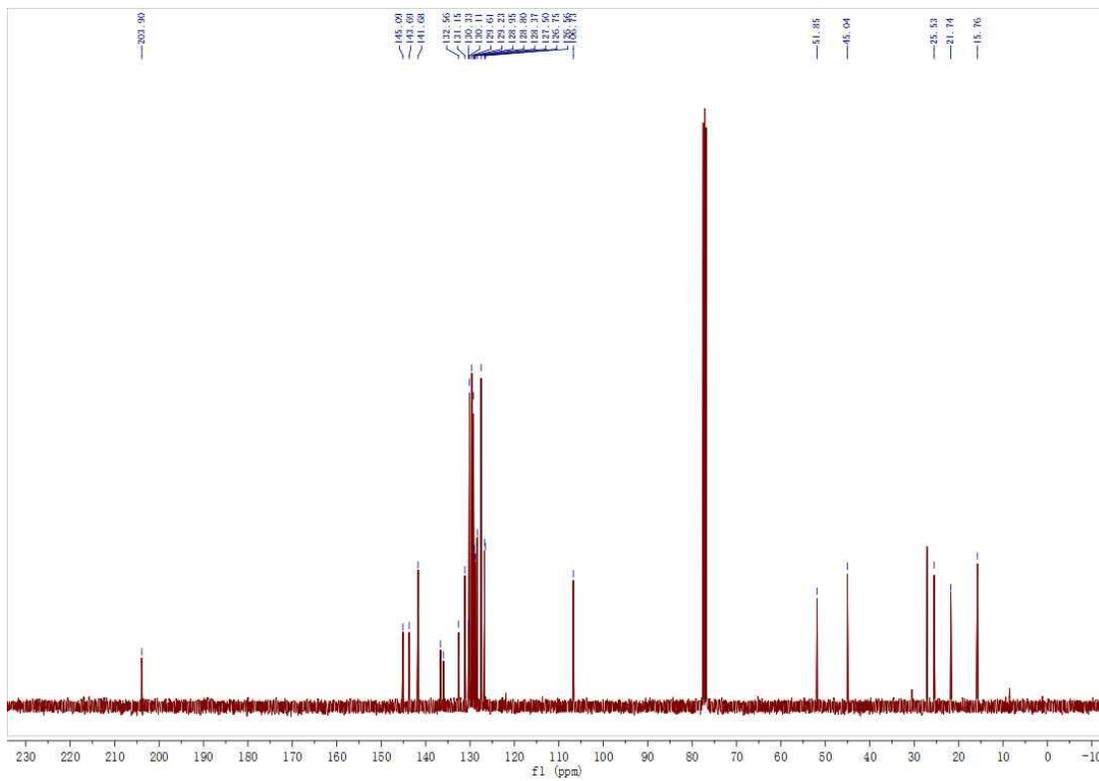
PPh₃AuTFA catalyzed in the dearomatization of 2-naphthols with allenamides

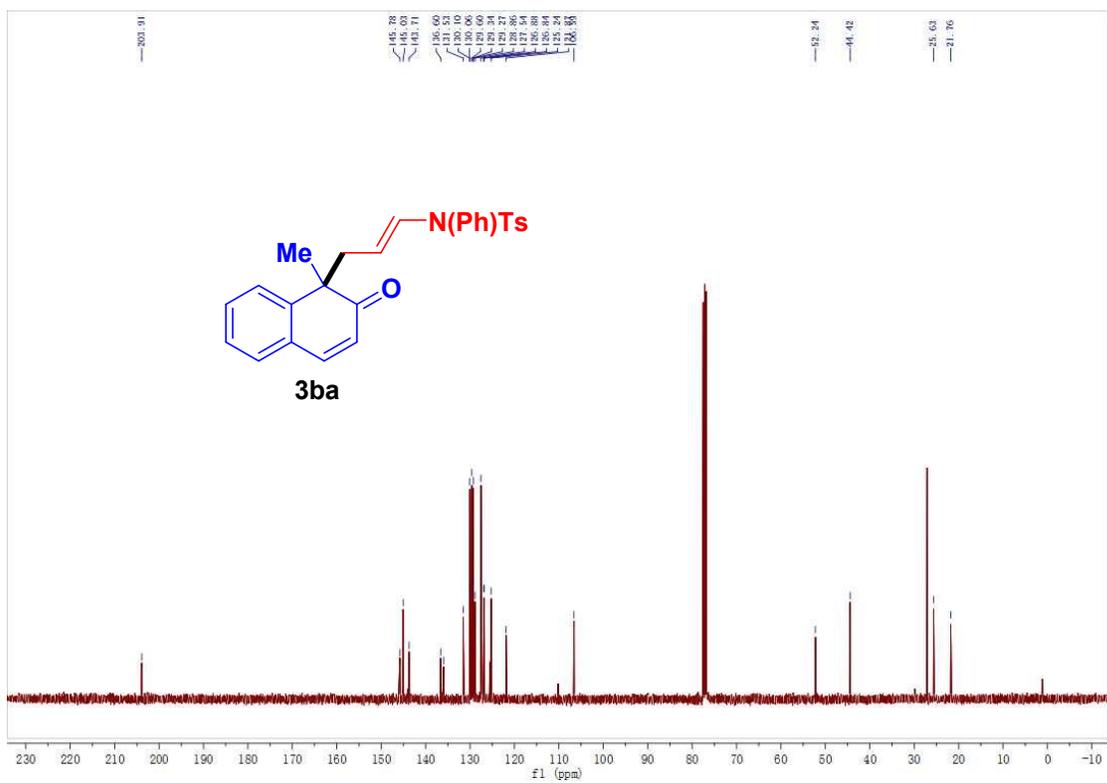
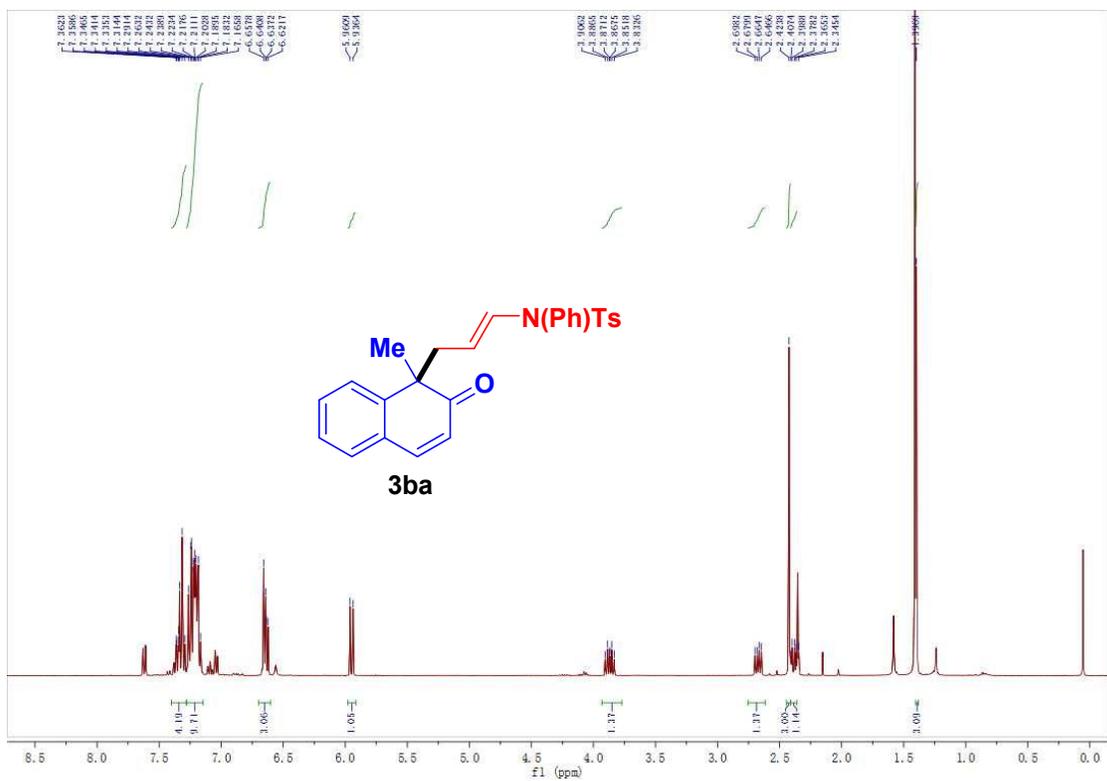
Juzeng An,^a Lorenzo Lombardi,^a Stefano Grilli^a and Marco Bandini^{*a}

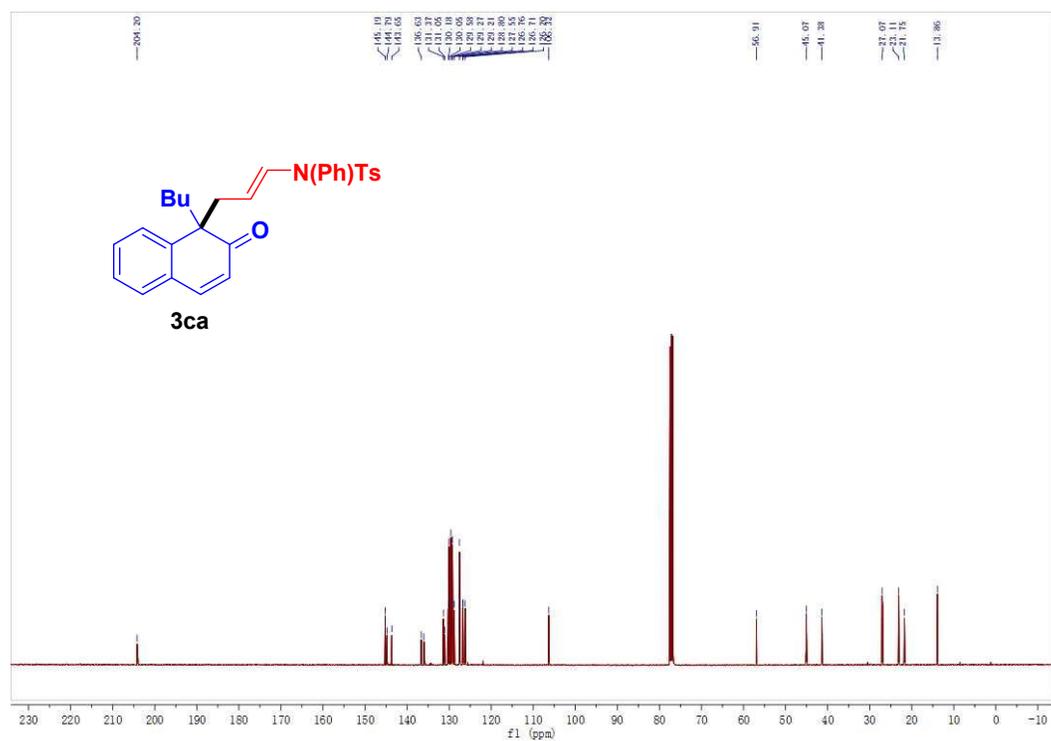
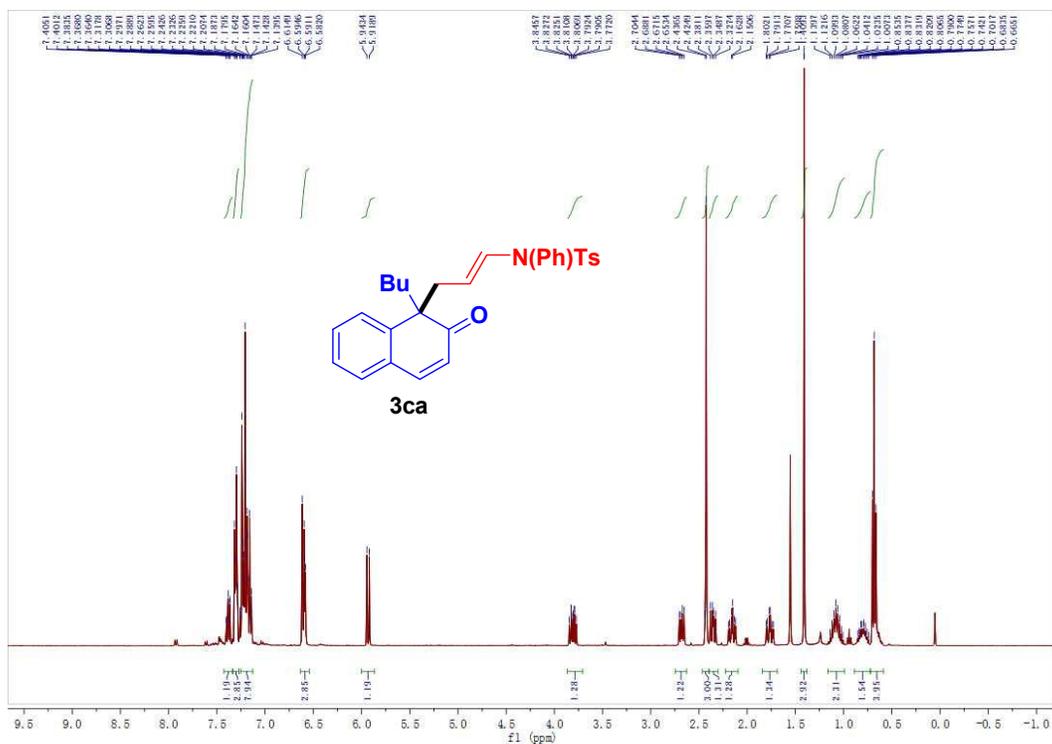
^a Dipartimento di Chimica “G. Ciamician”, Alma Mater Studiorum – Università di Bologna, Via Selmi 2, 4016, Bologna, Italy.

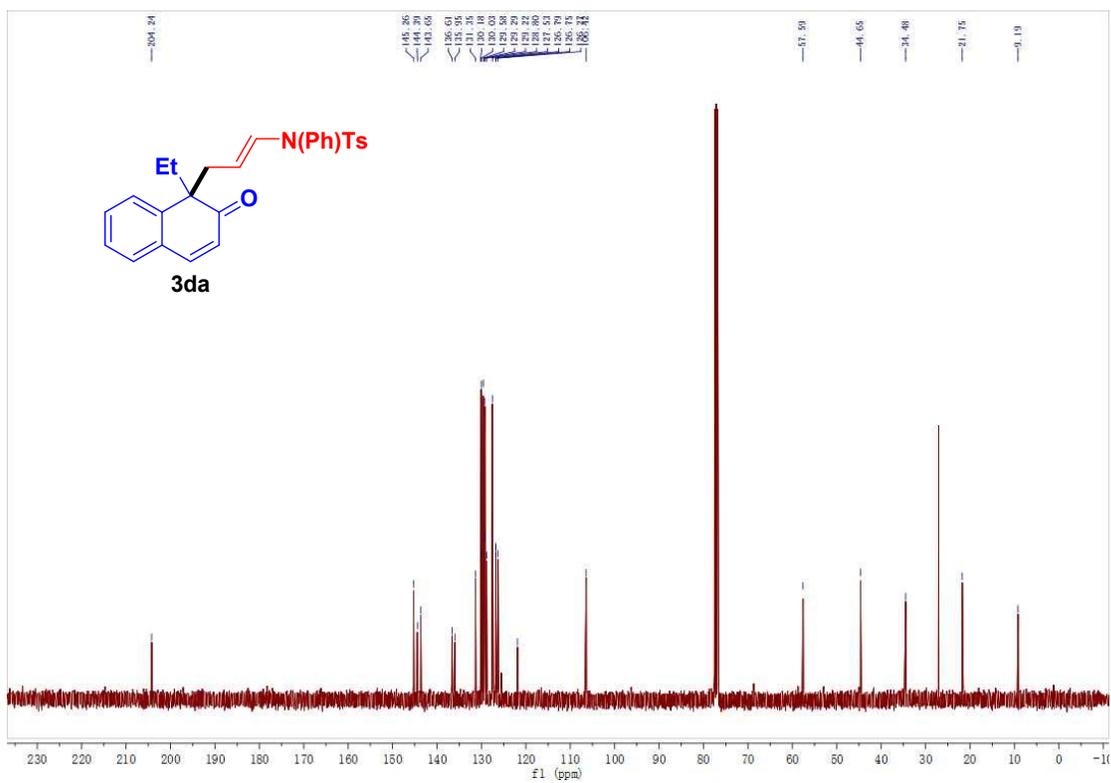
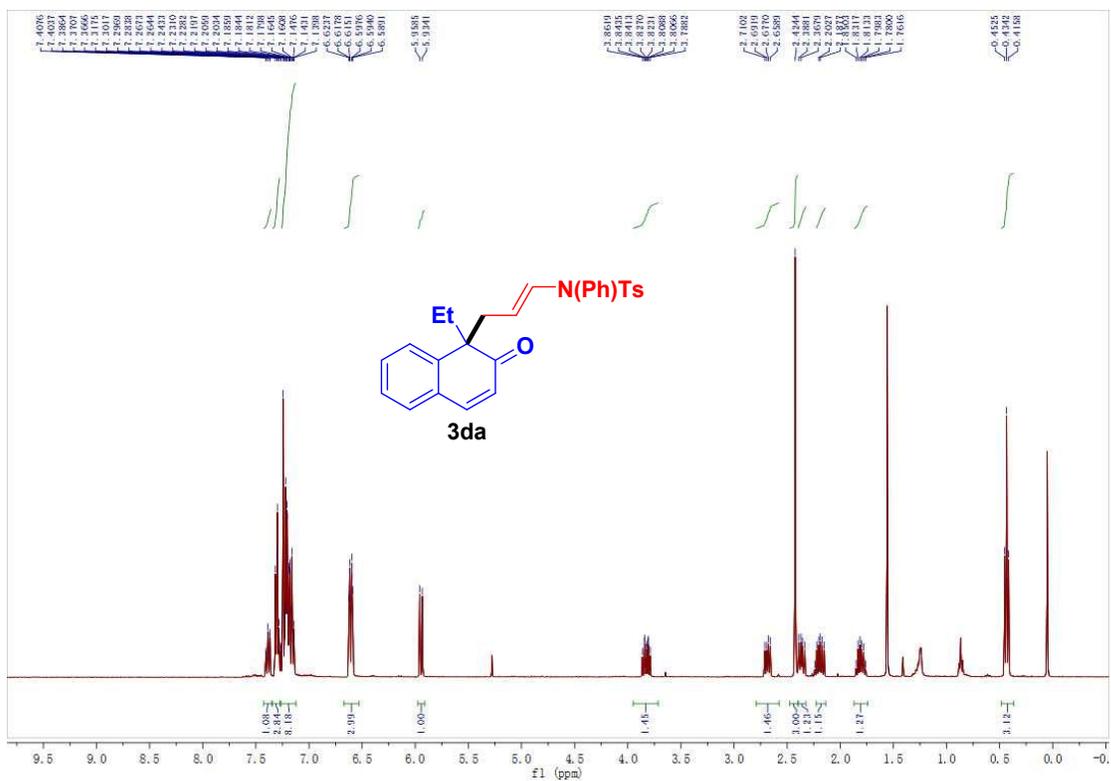


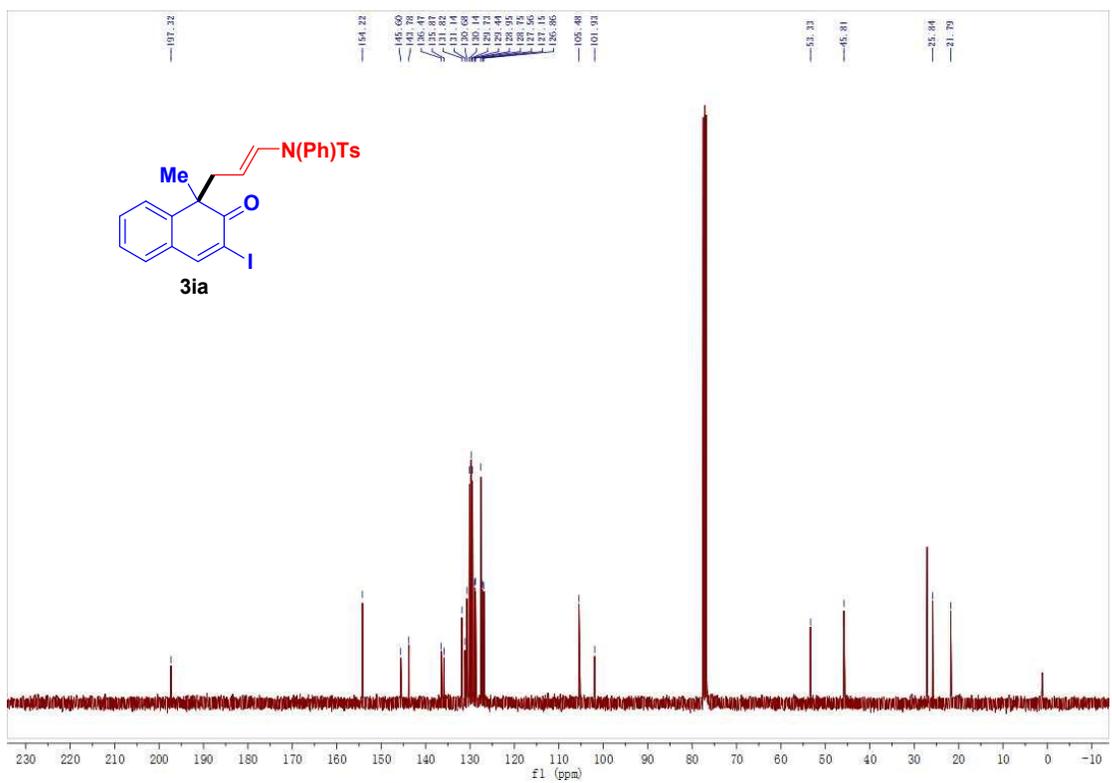
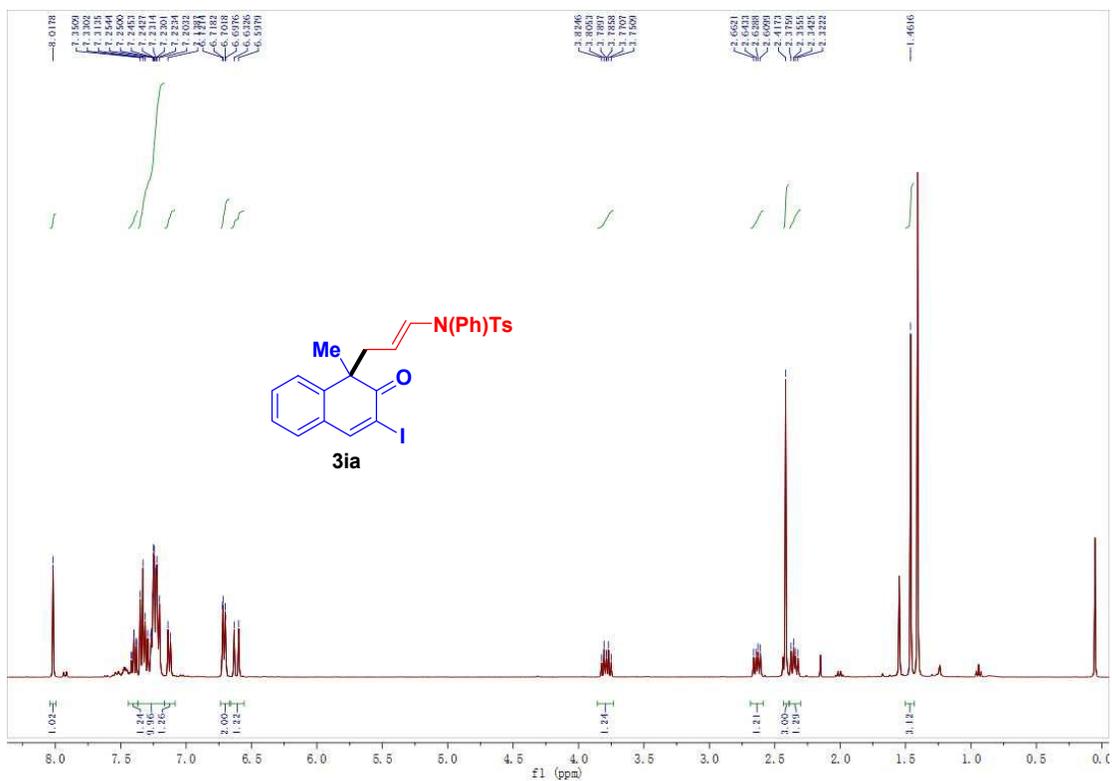


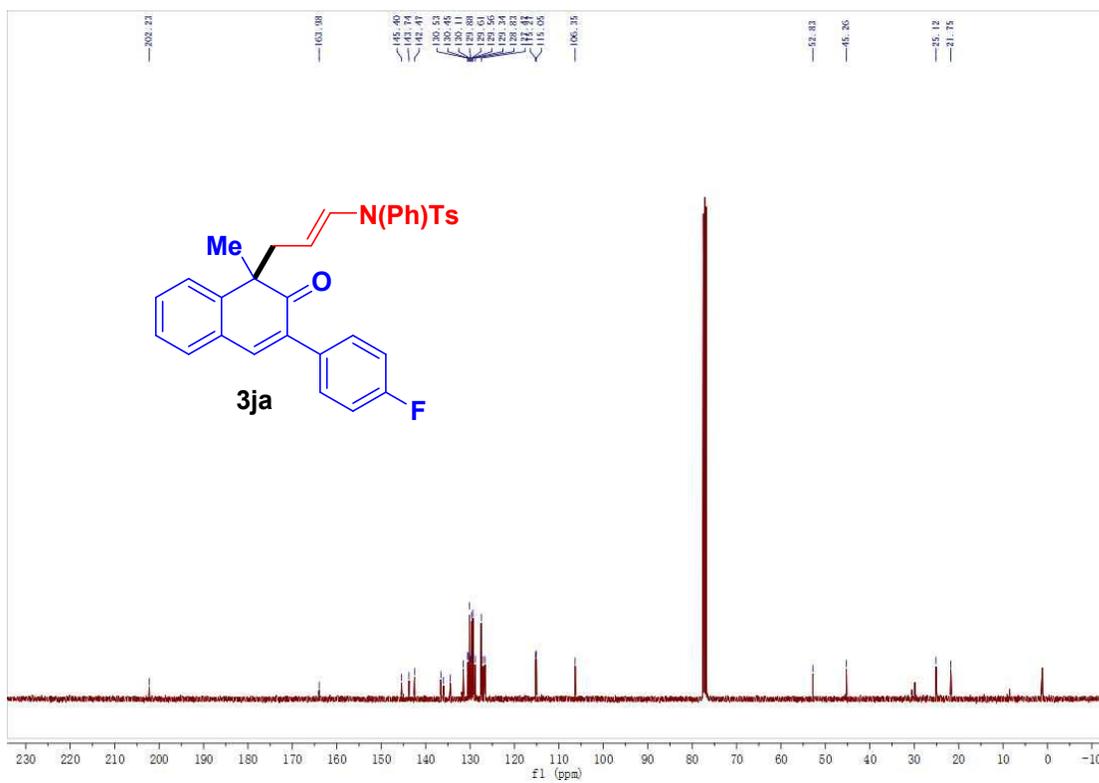
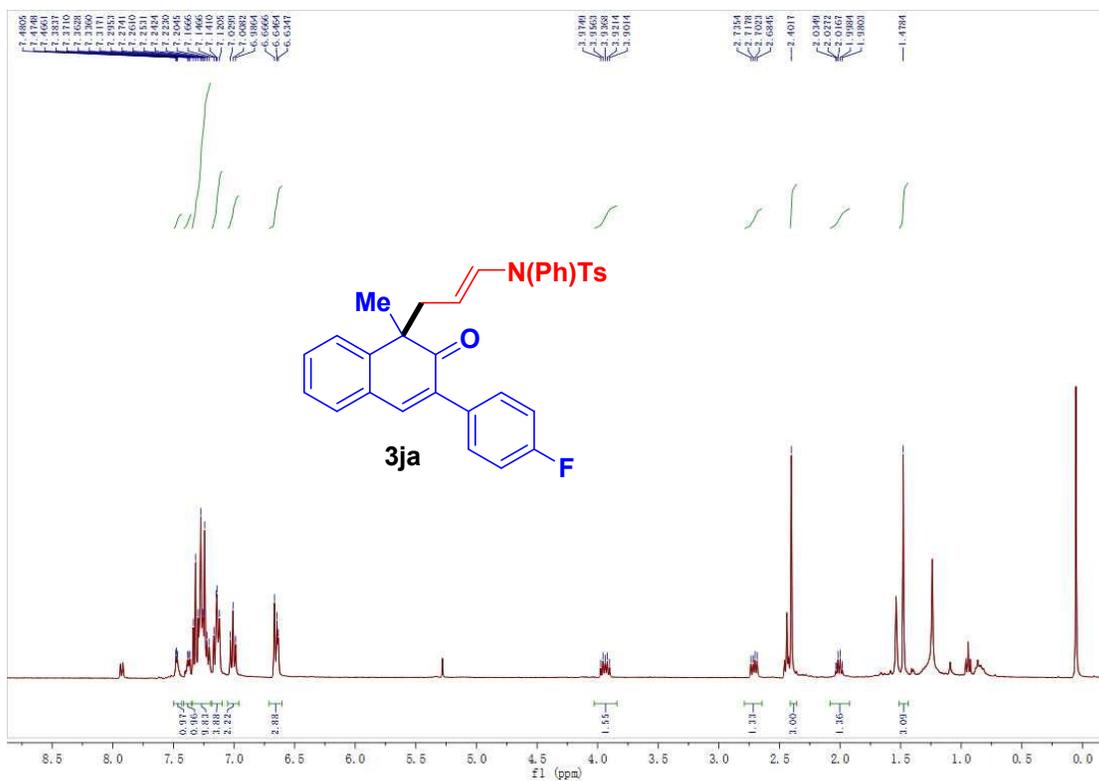


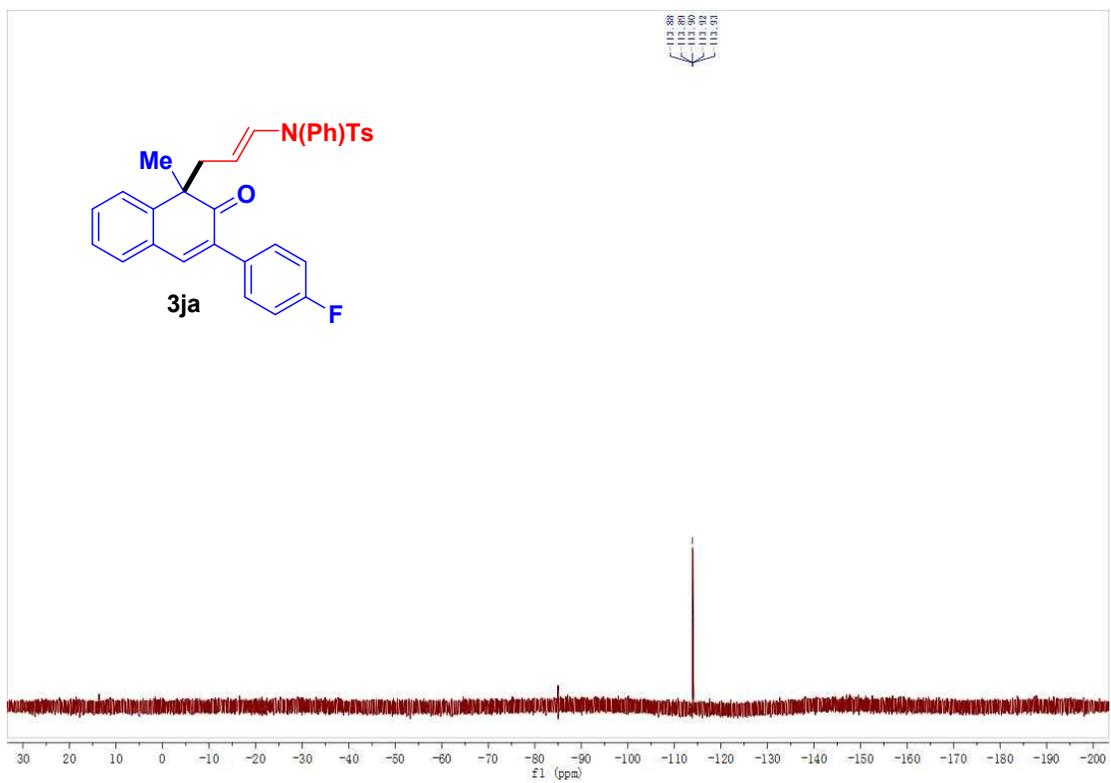


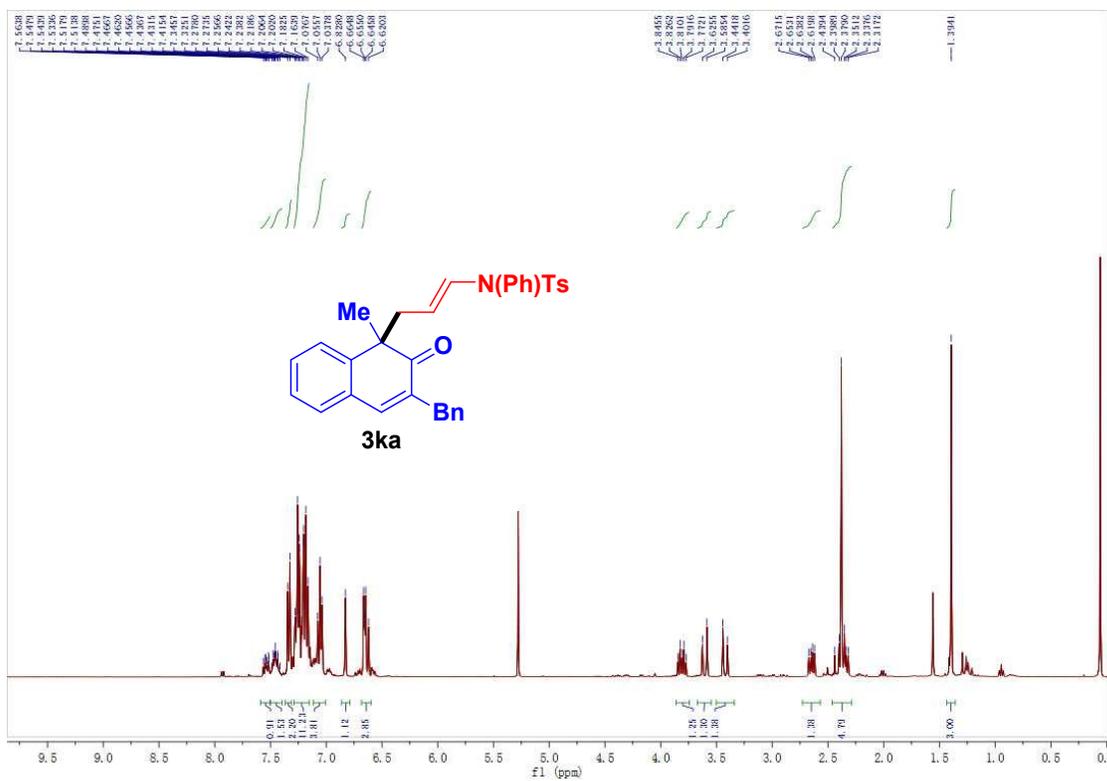


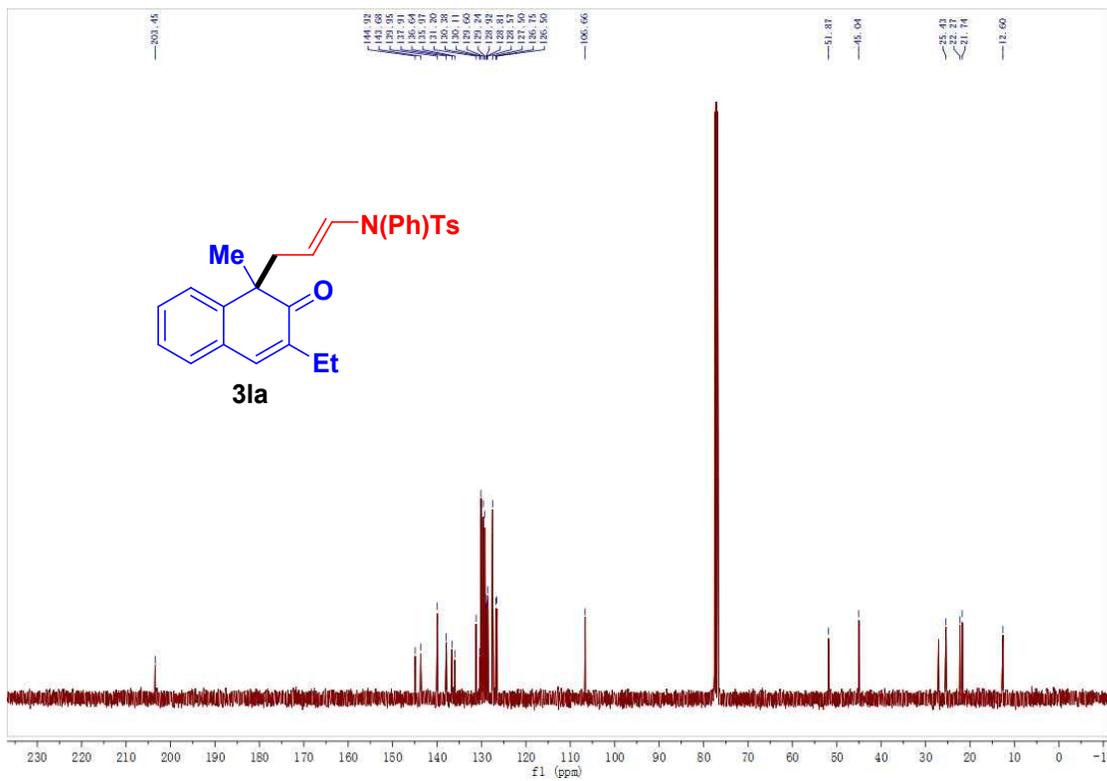
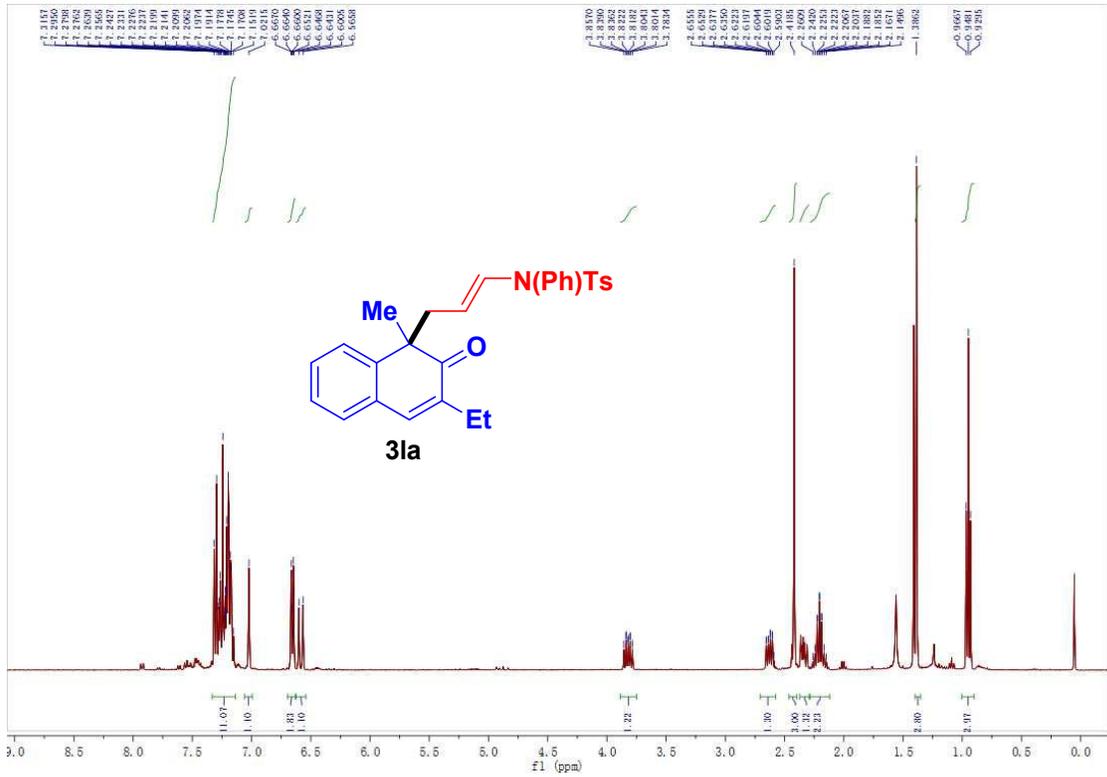


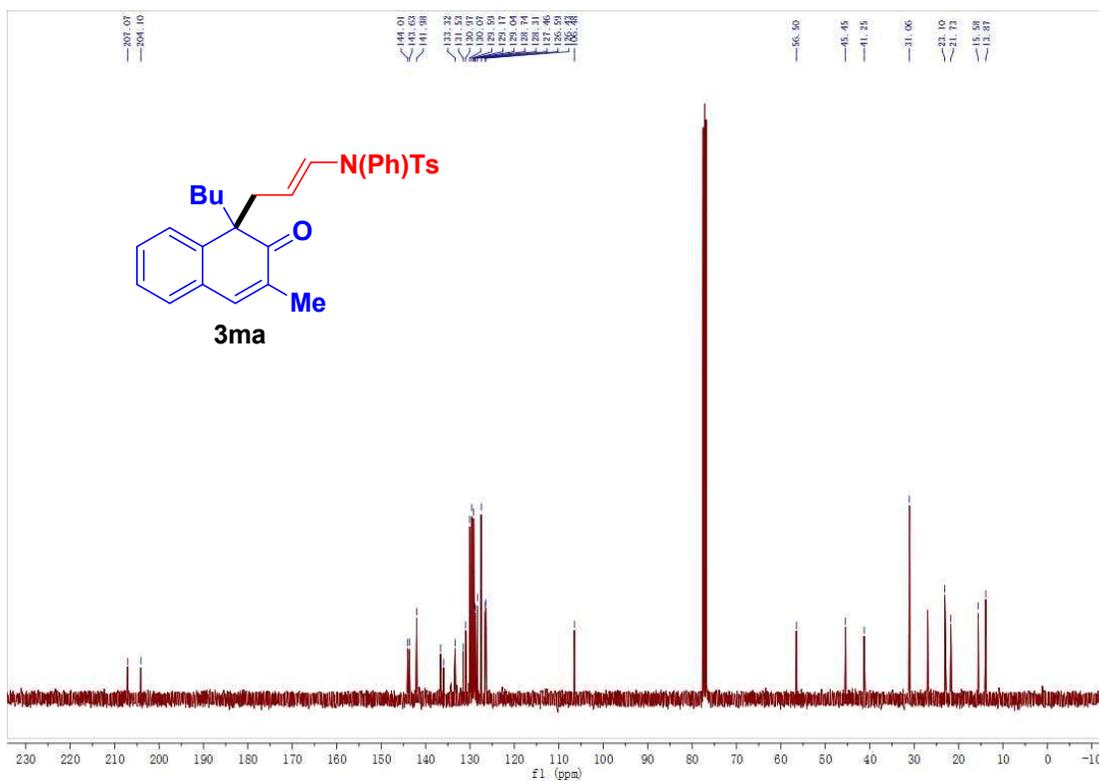
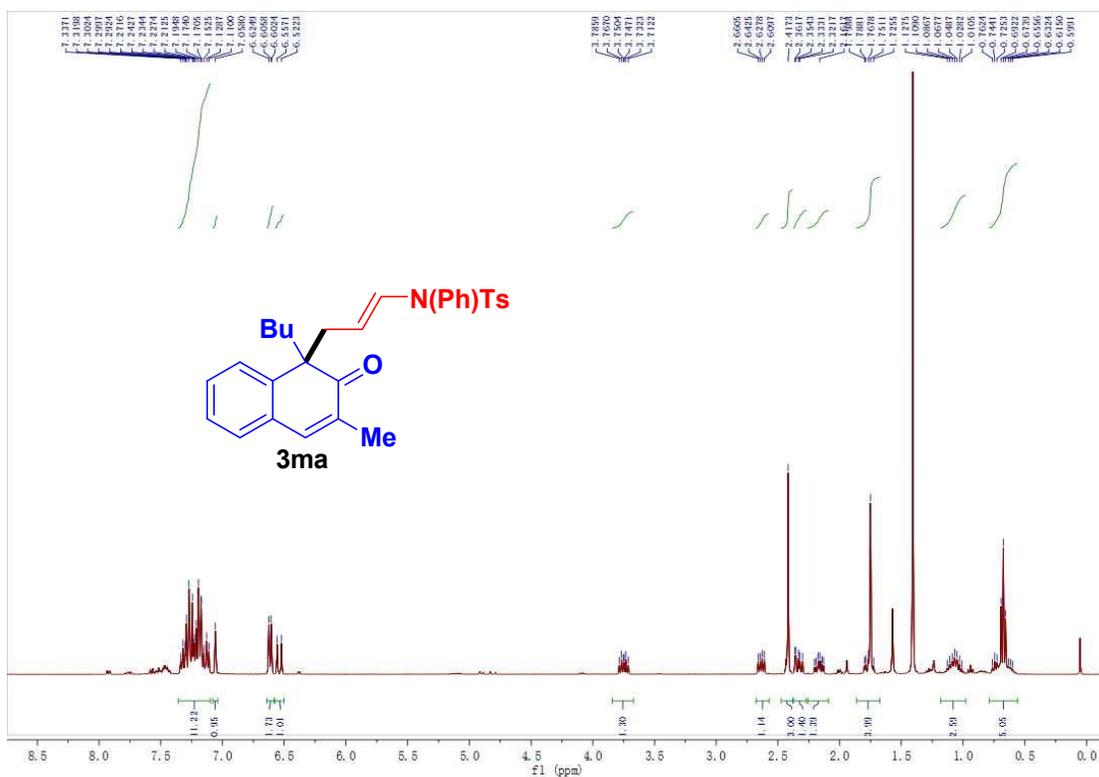


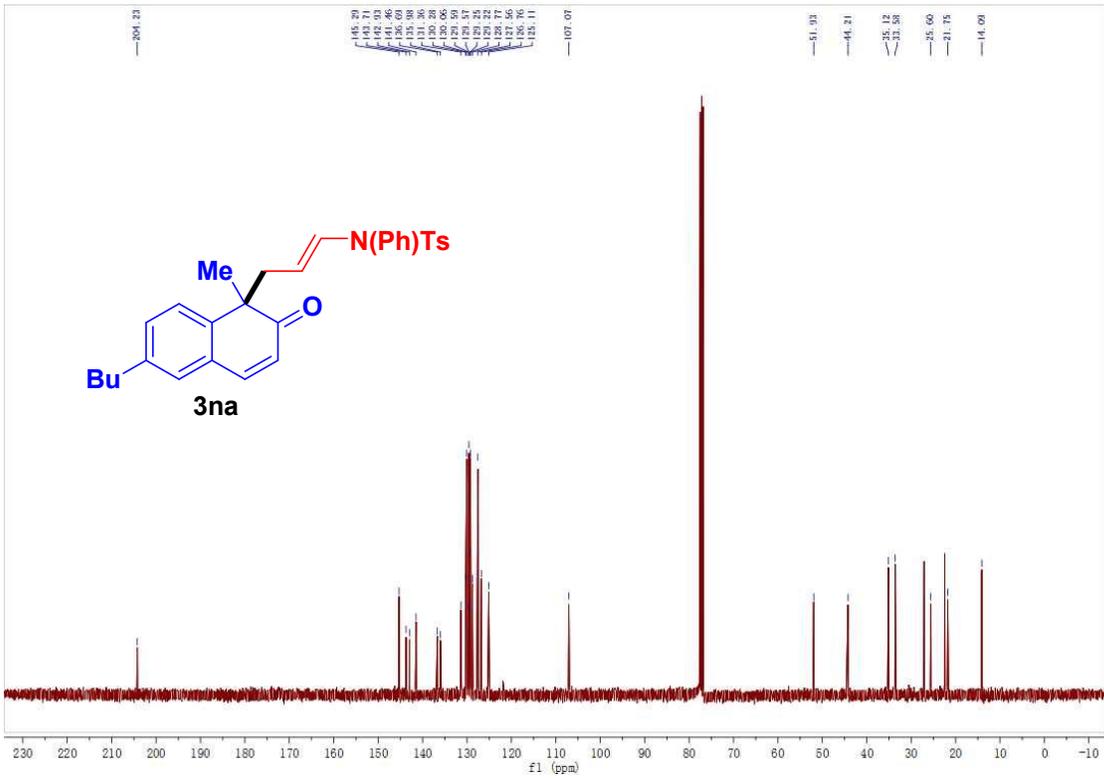
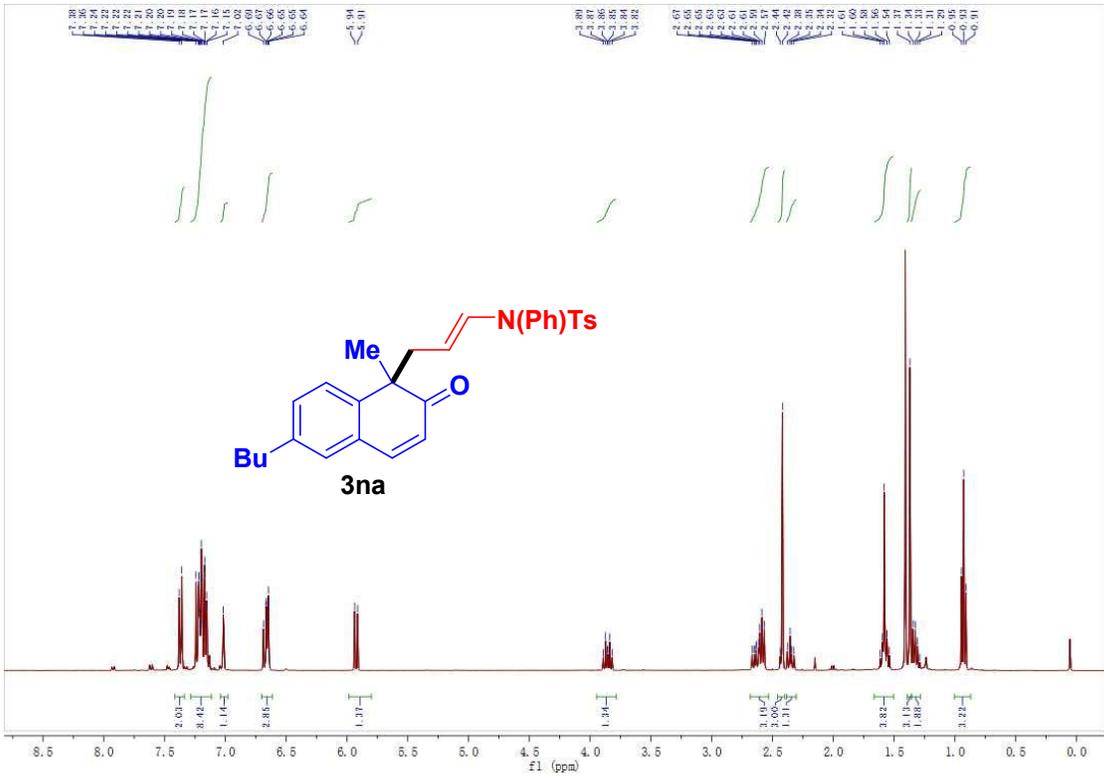


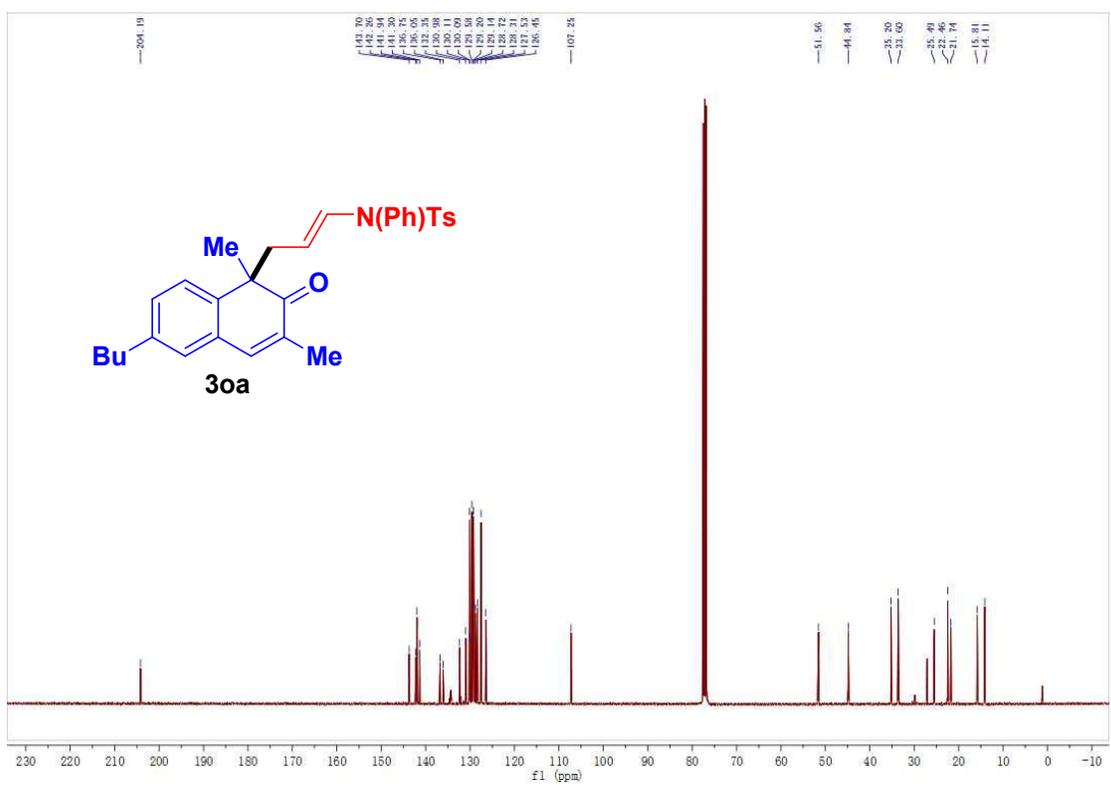
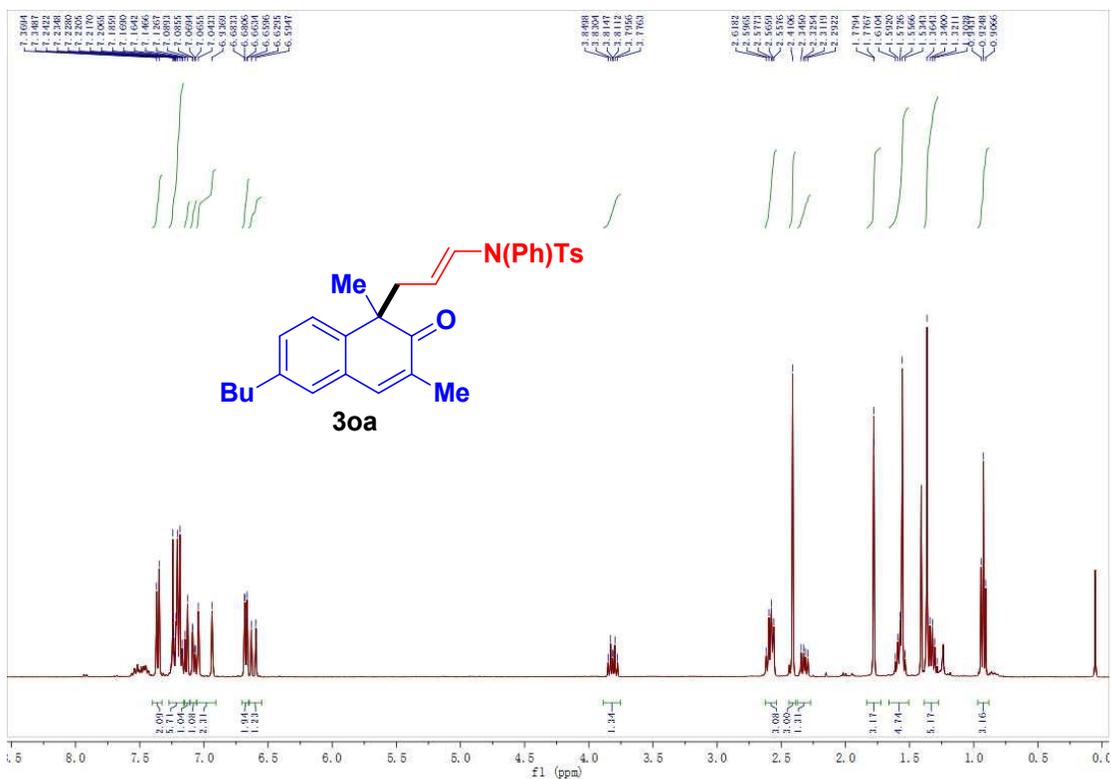


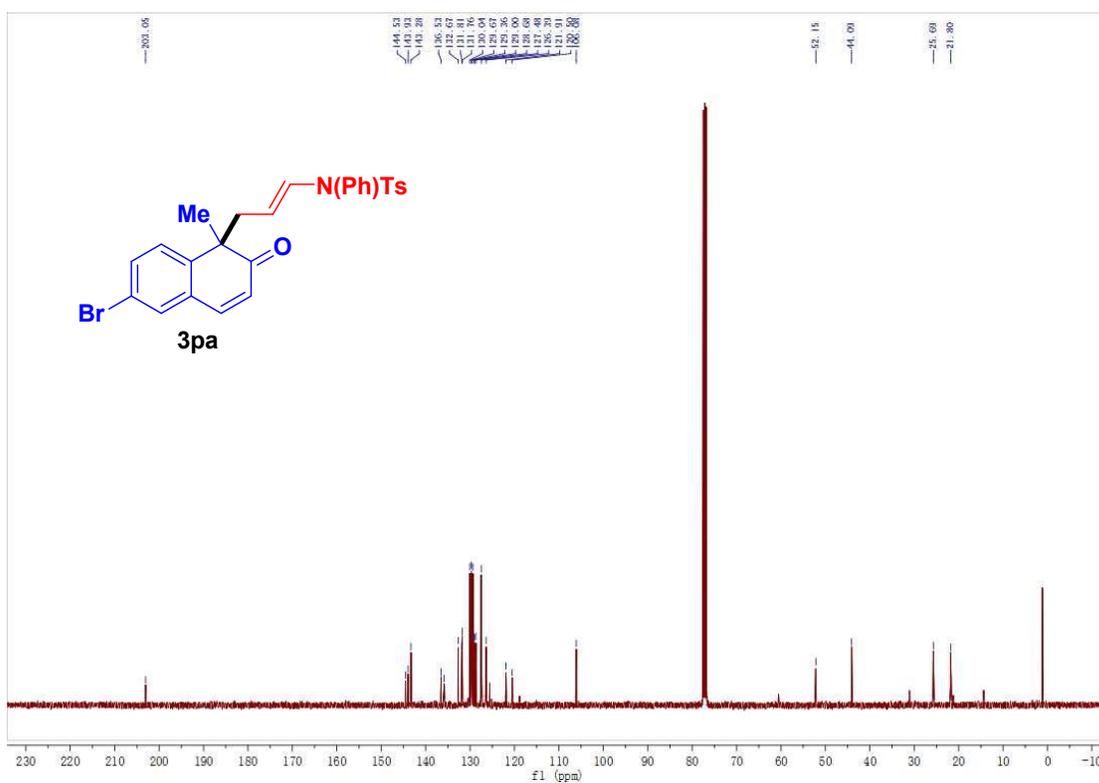
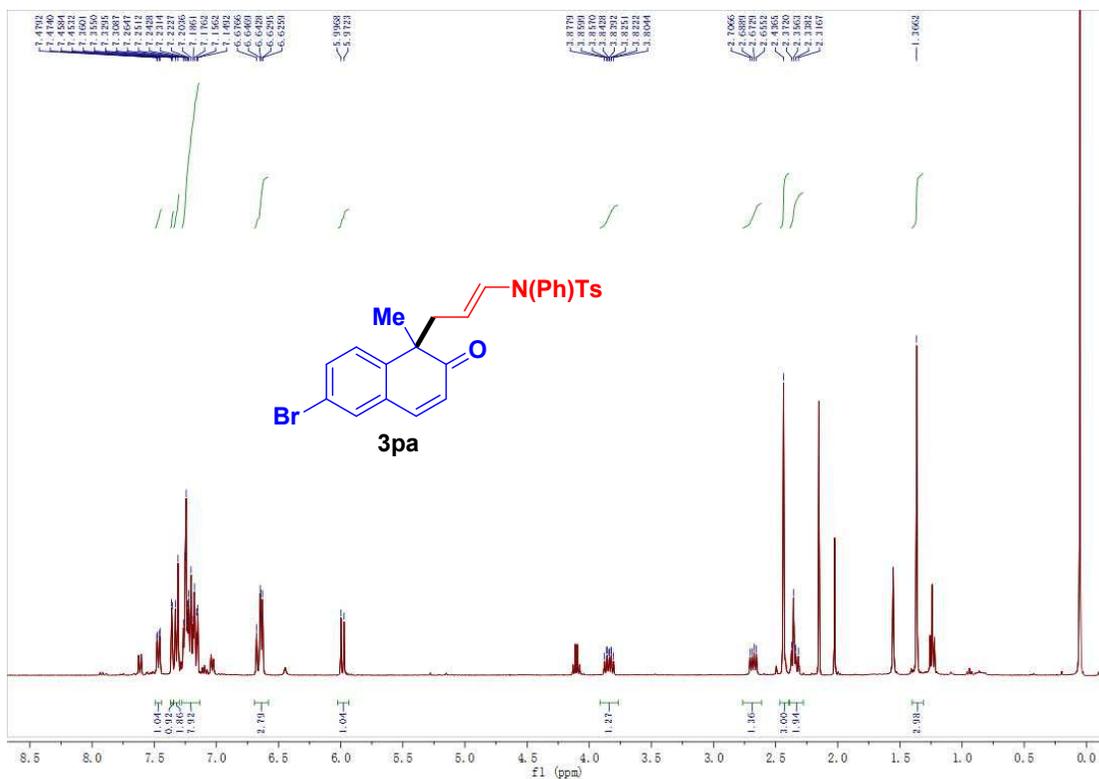


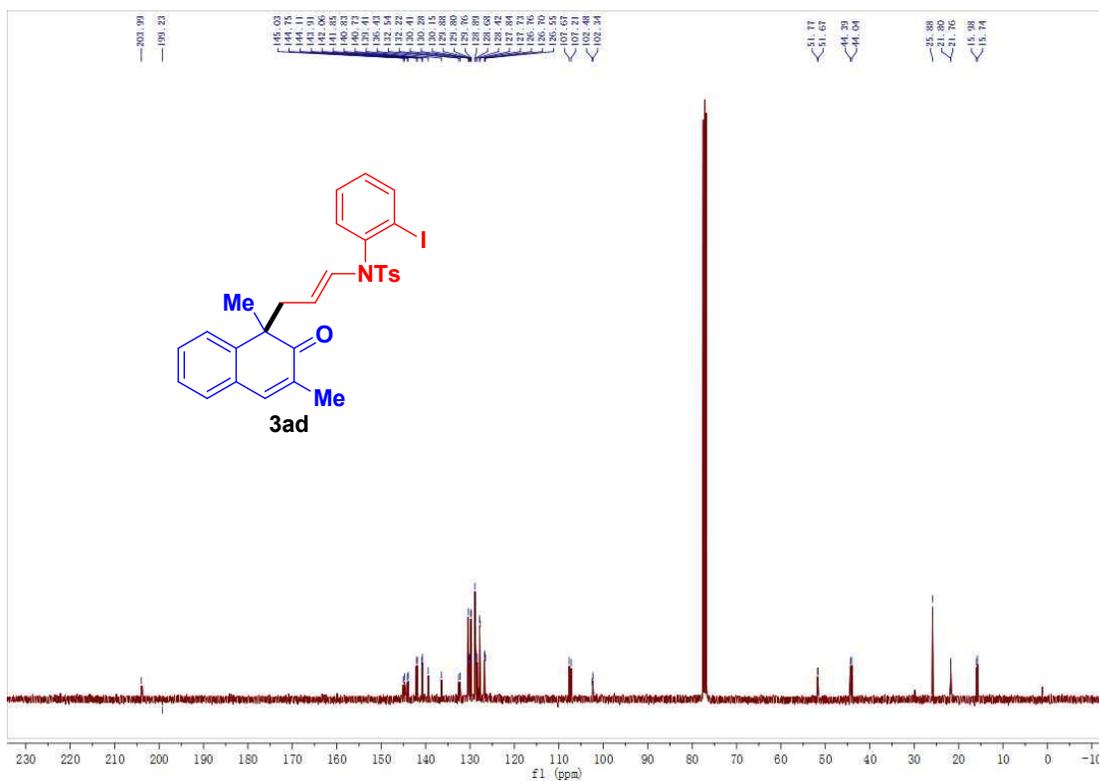
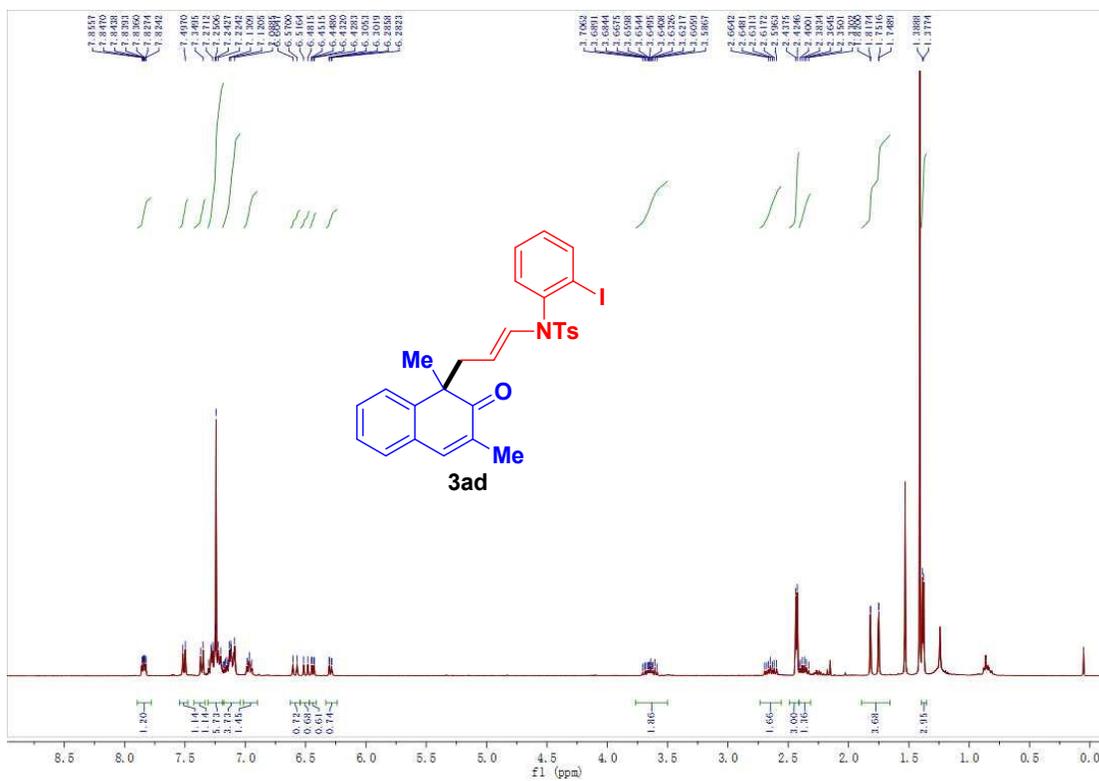


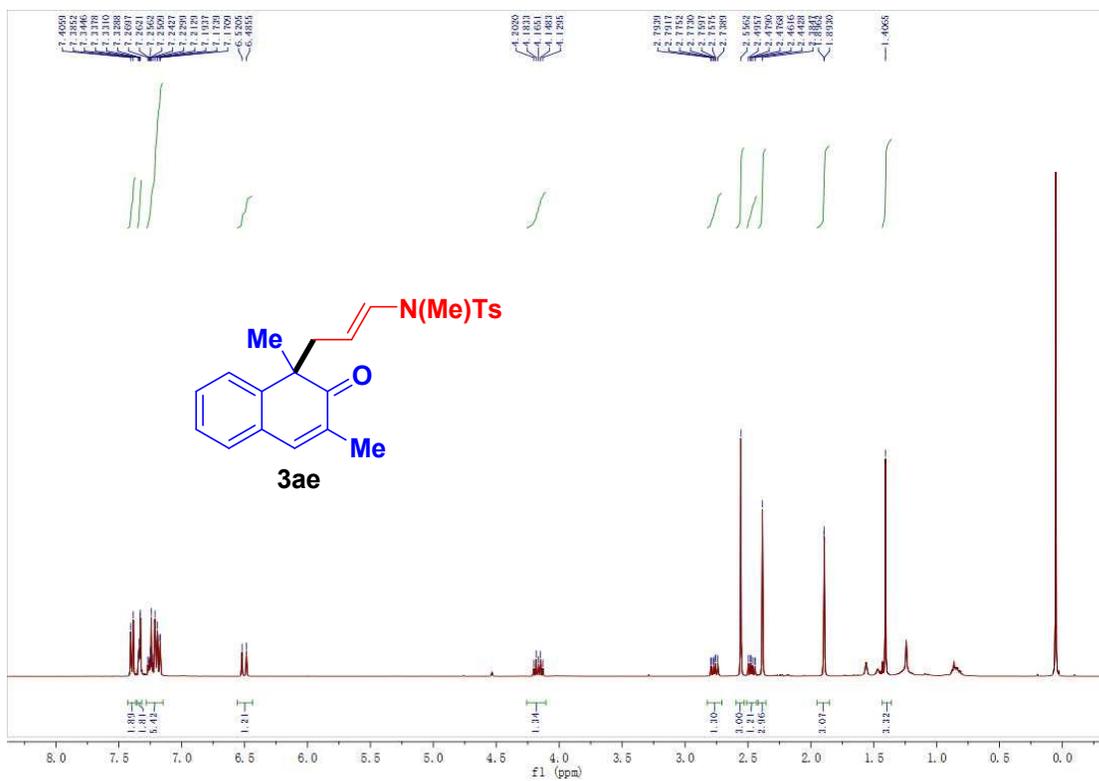


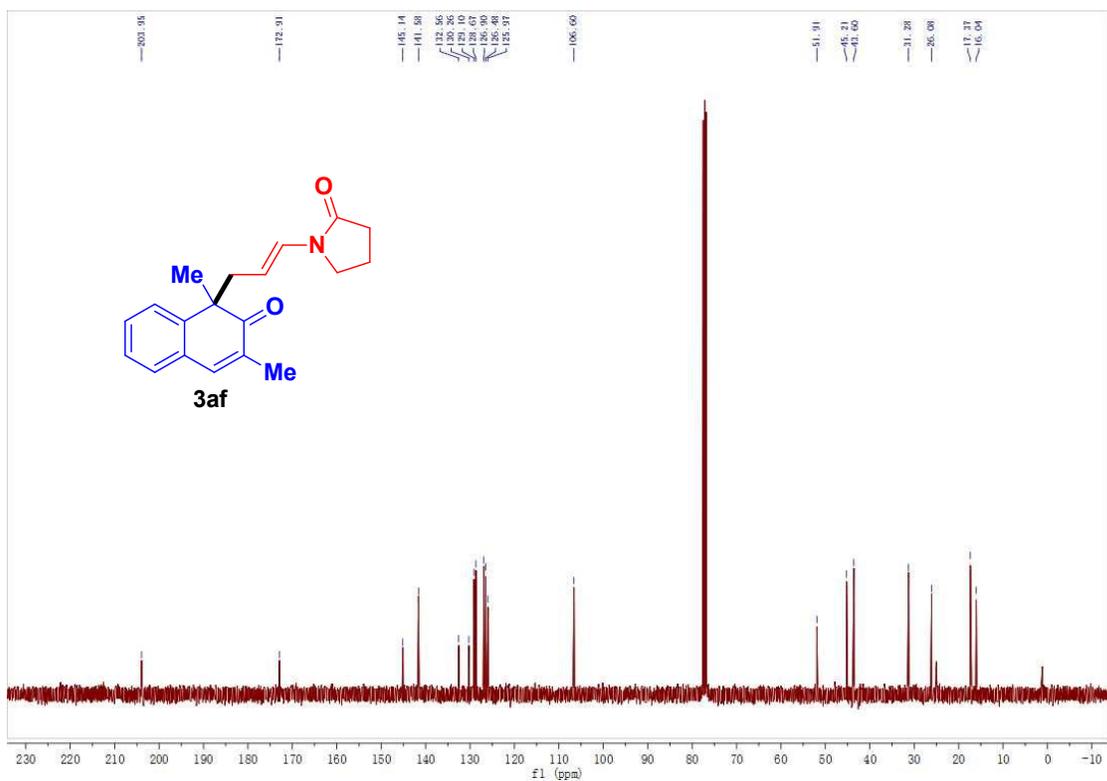
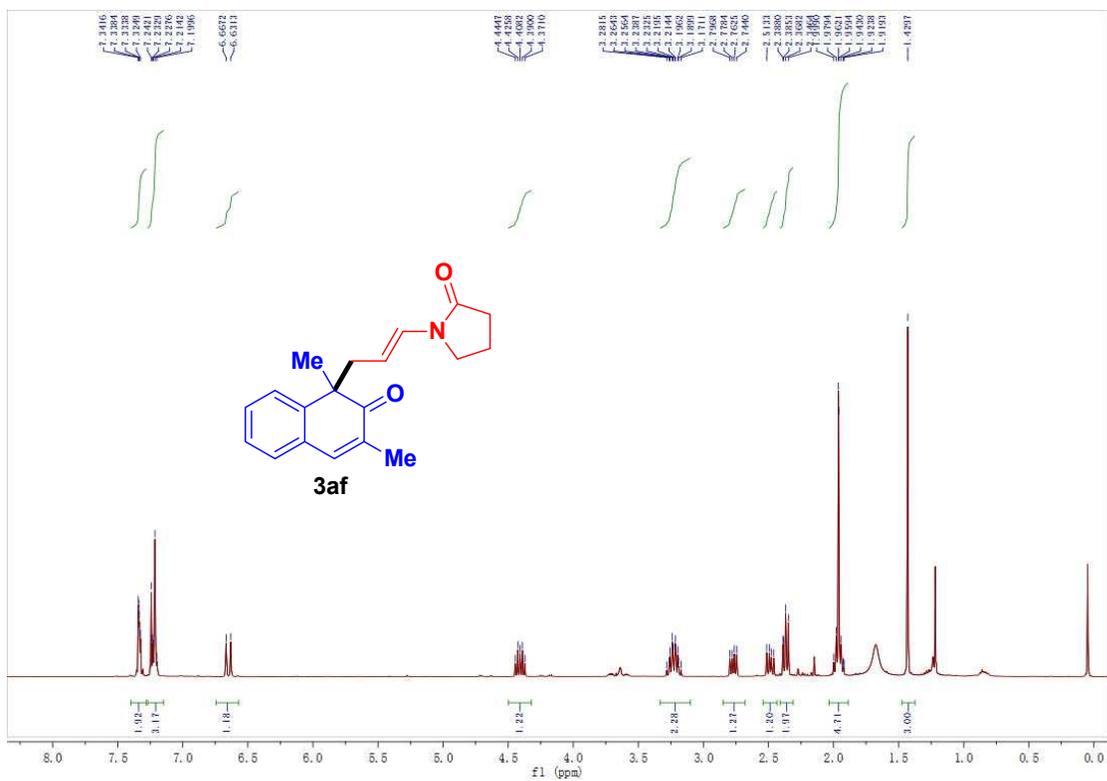


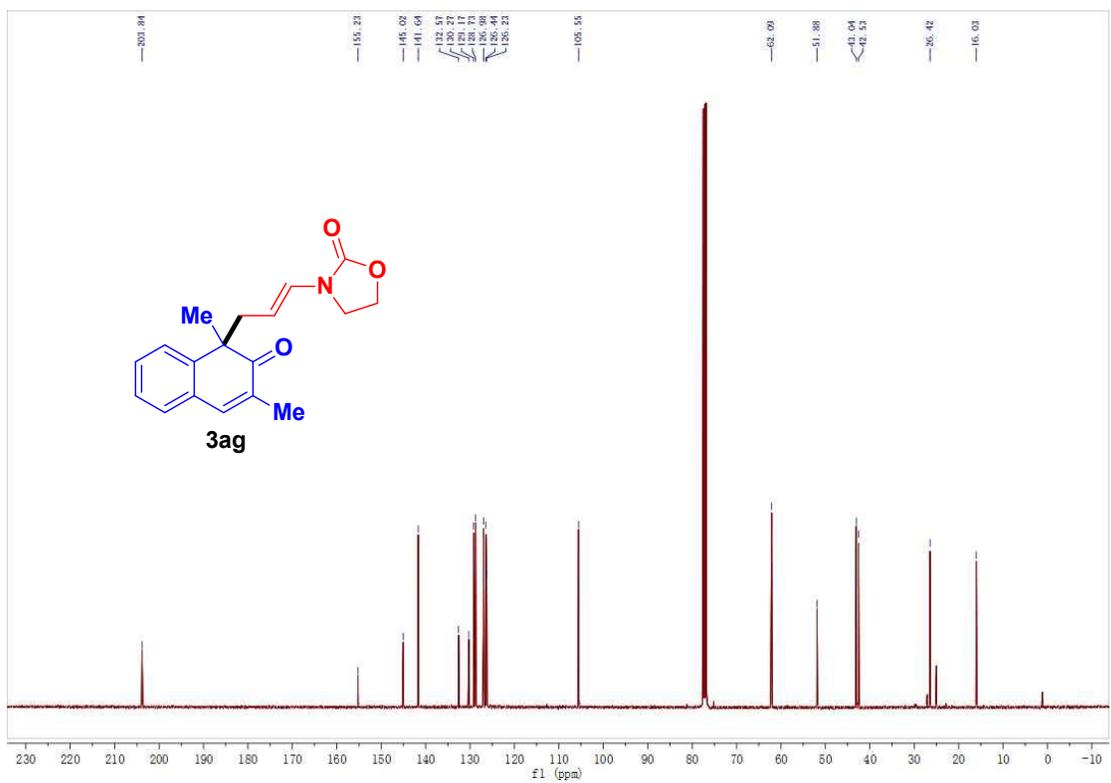
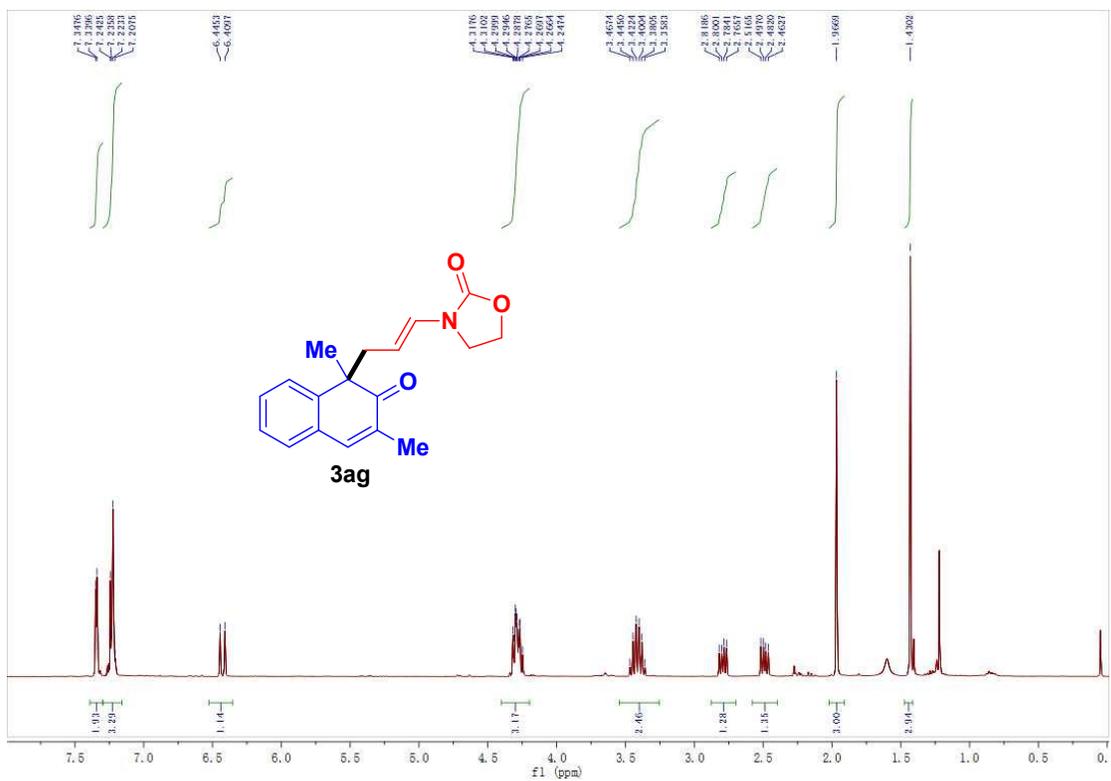


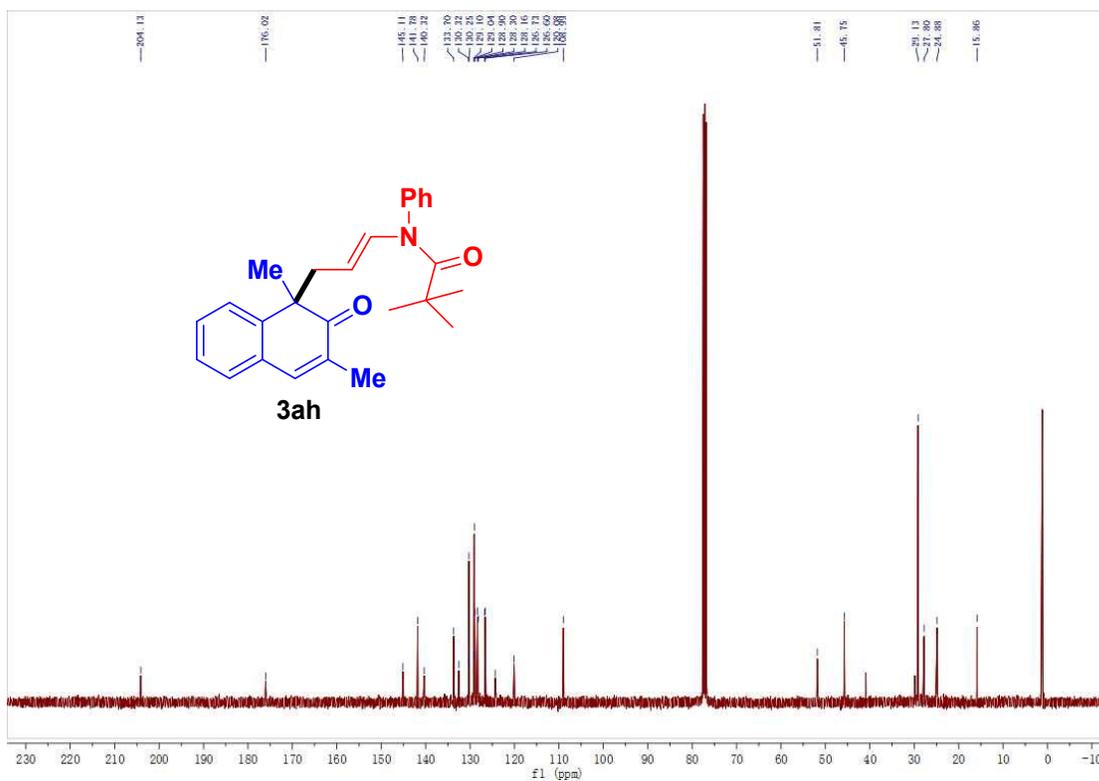
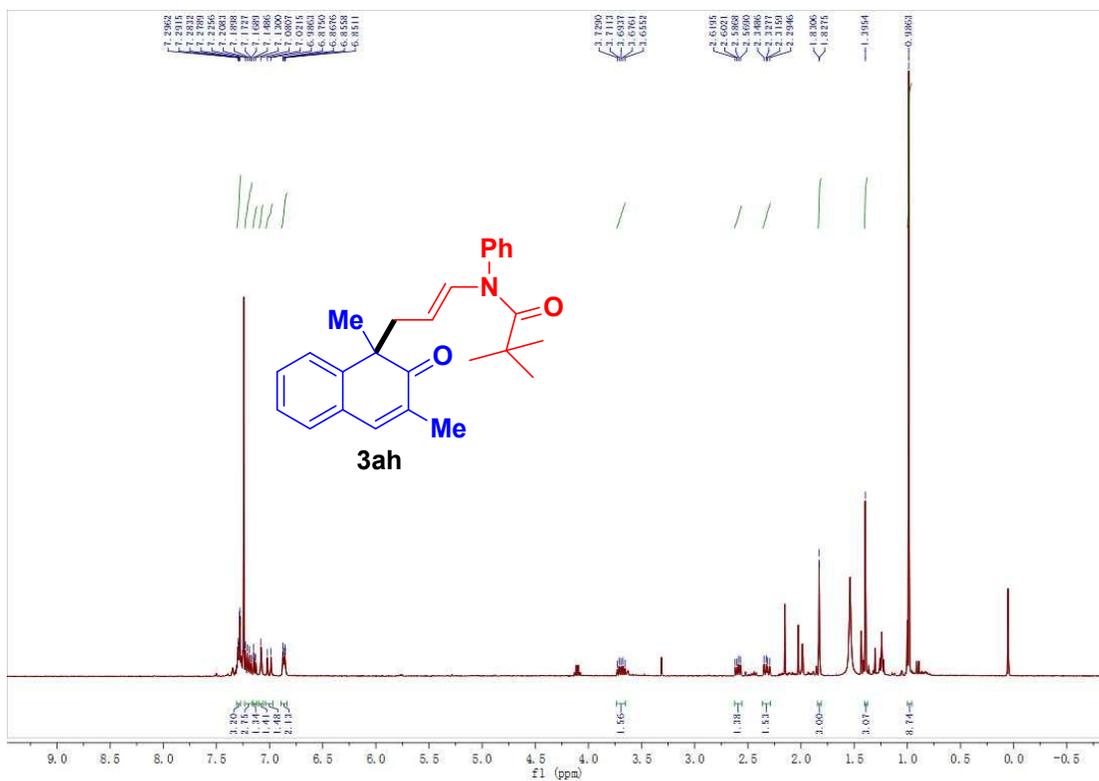


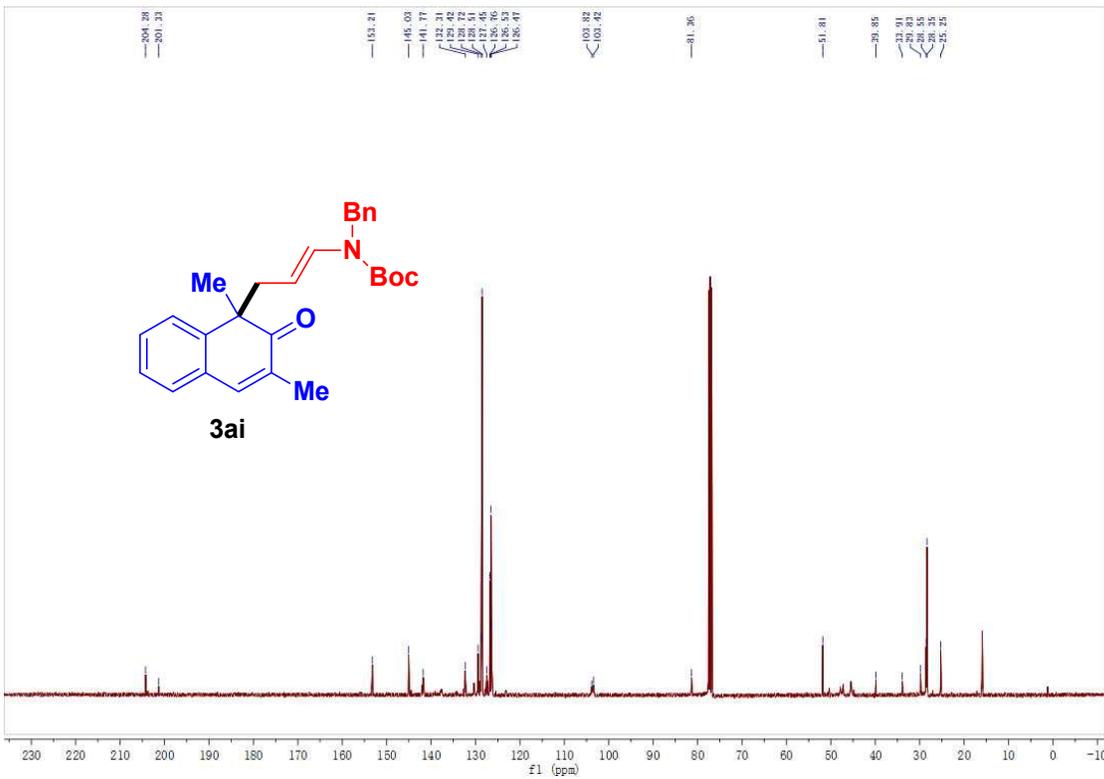
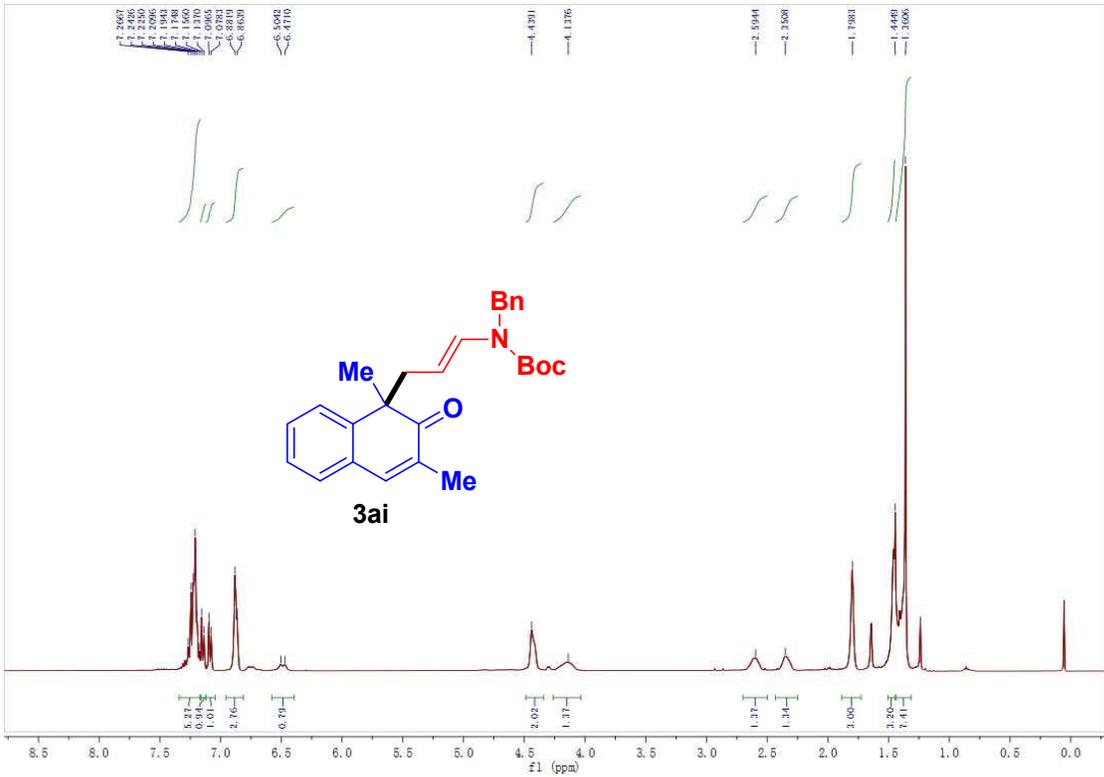


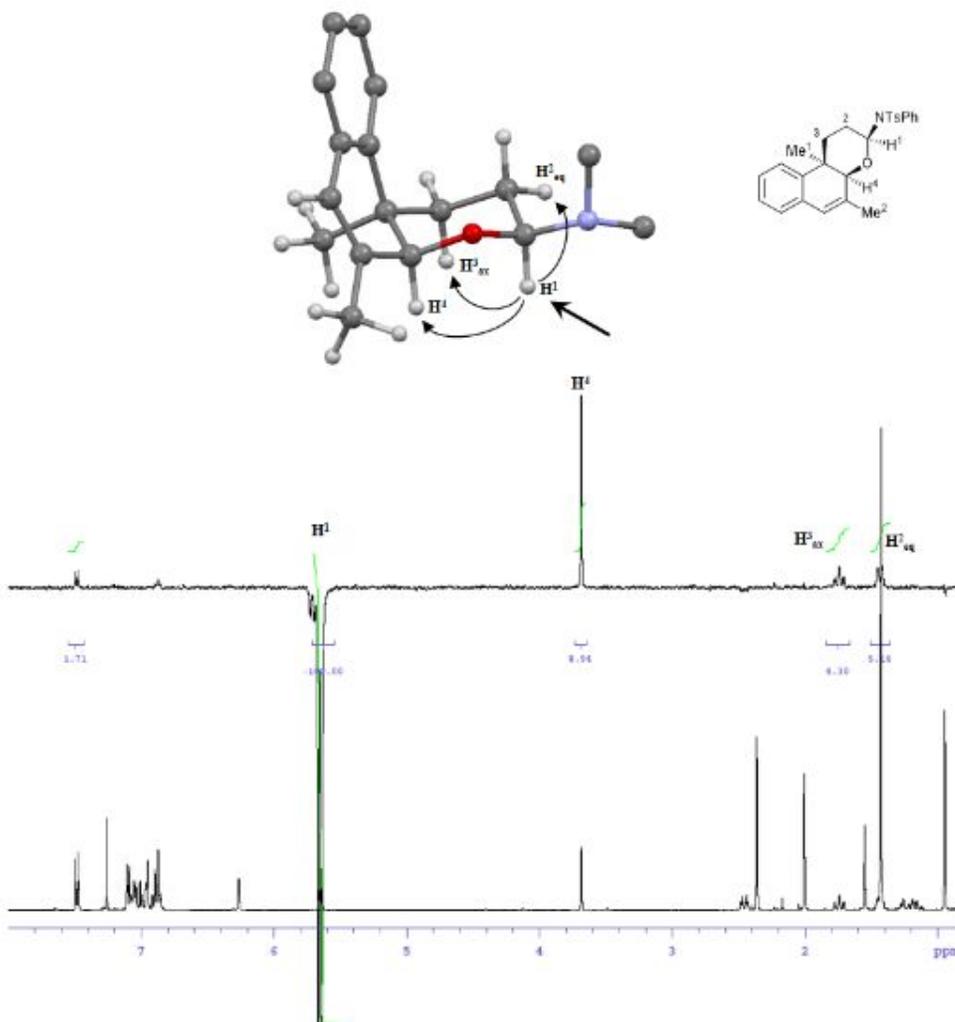








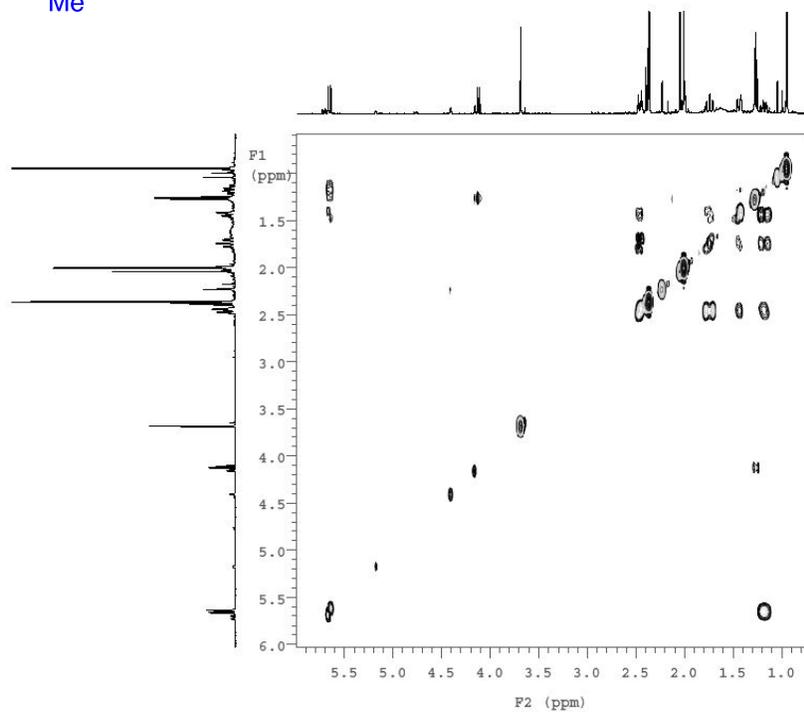
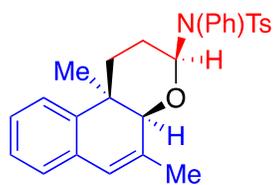




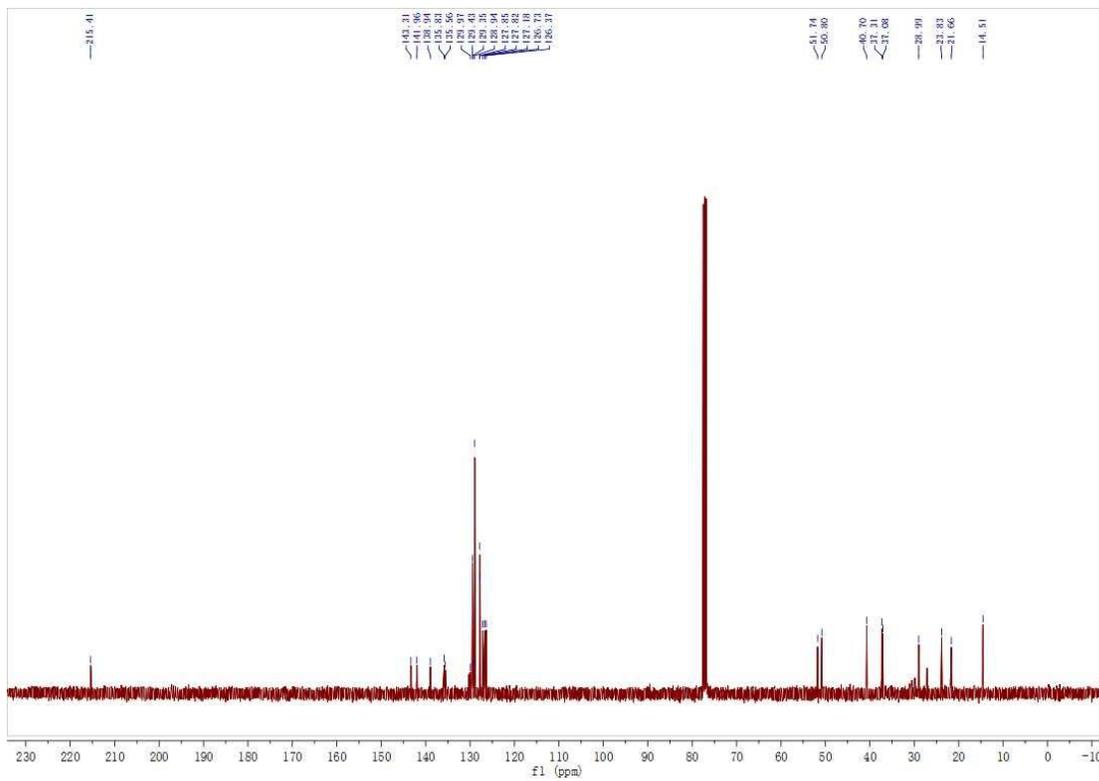
All the NMR experiments were acquired on a Varian MR 400 spectrometer.

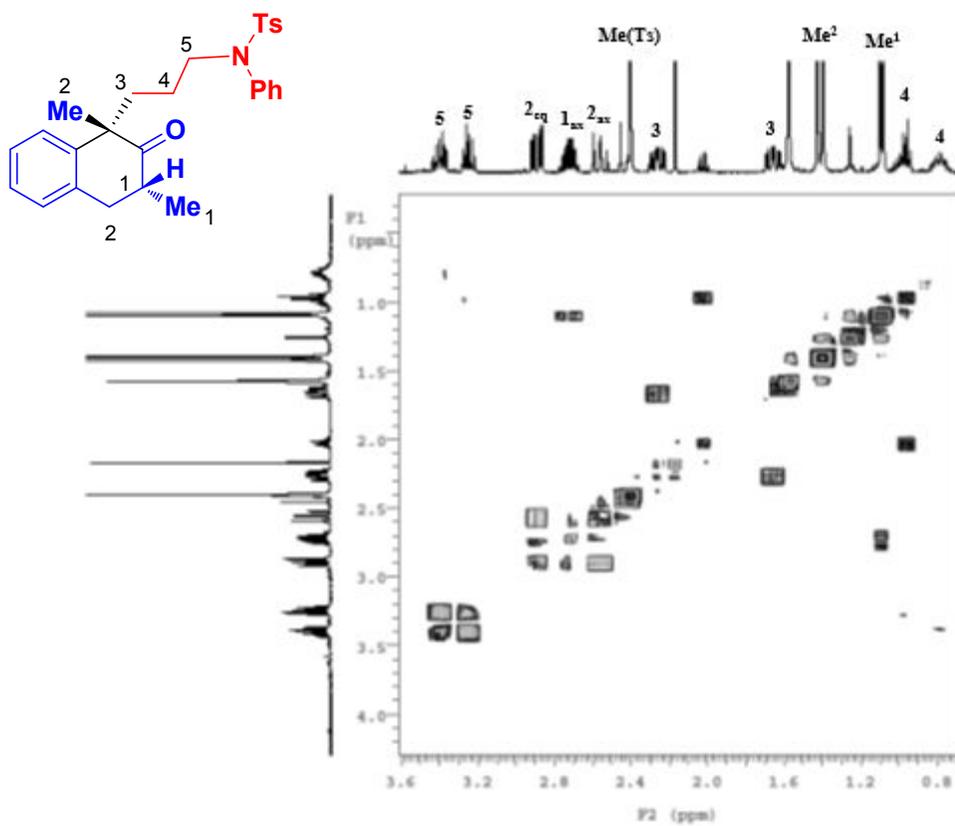
Monodimensional NOE experiment (400 MHz, CDCl₃, 25 °C) was performed by using a DPGSE-NOE sequence, with a 50 Hz pulse and a mixing time of 1.5 s.

Irradiation at the frequency of proton H¹ (5.65 ppm) showed strong positive NOE response of the H⁴ frequency, confirming the *syn*-relationship. Weaker NOE effects were also observed for the equatorial H² and the axial H³ protons.

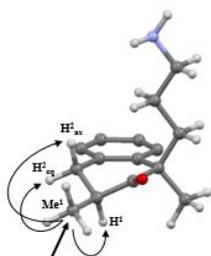


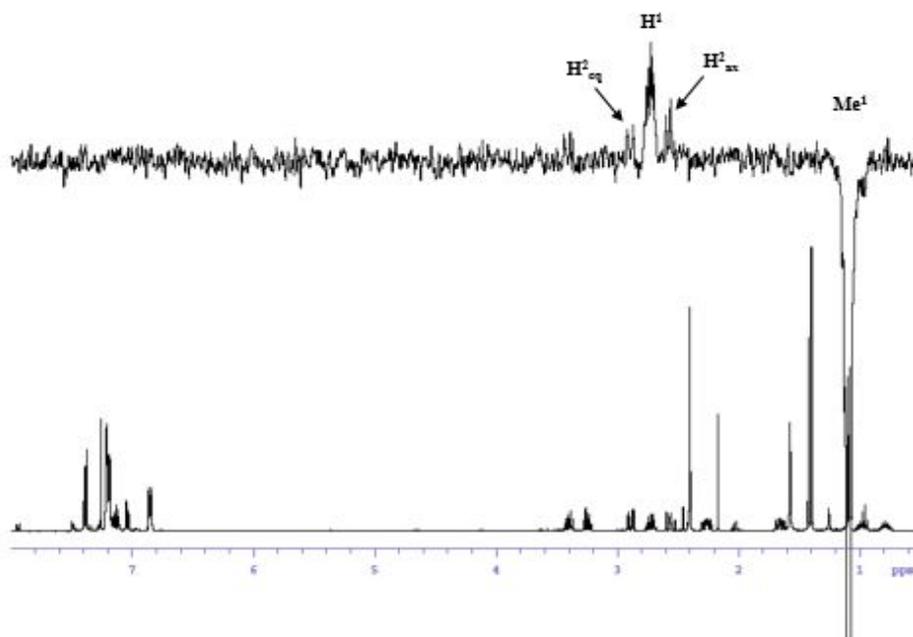
Gradient COSY (400 MHz, CDCl₃, 25 °C) expansion of the aliphatic region.



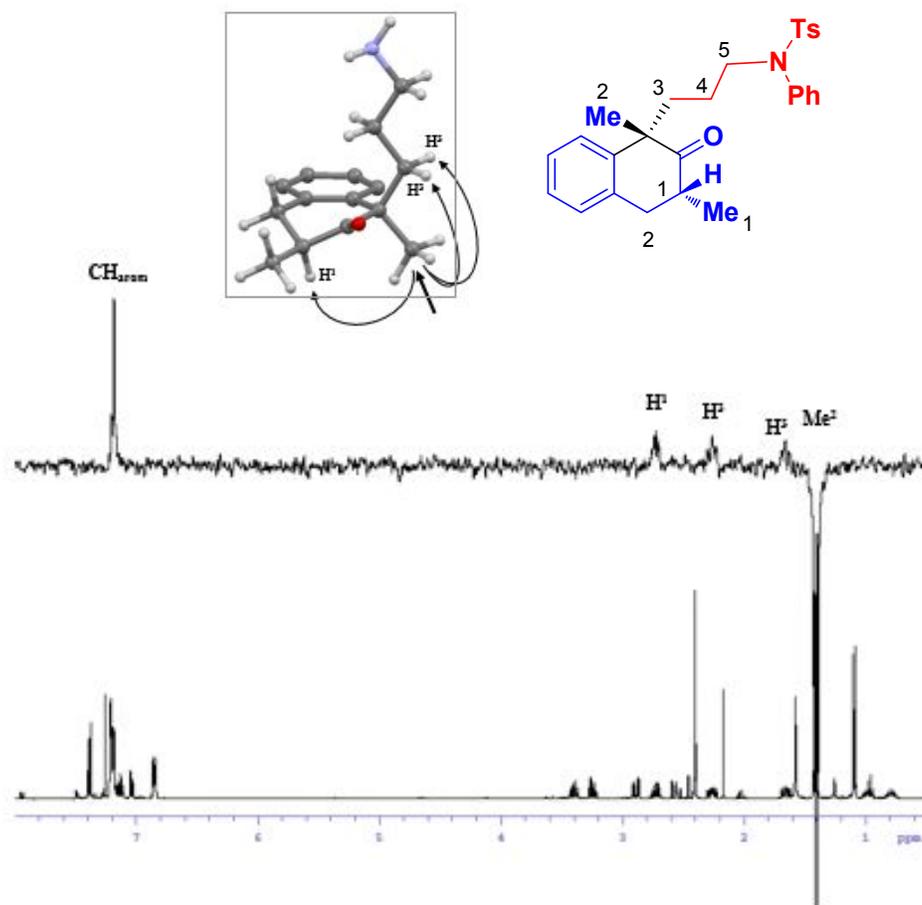


Gradient COSY (400 MHz, CDCl₃, 25 °C) expansion of the aliphatic region.

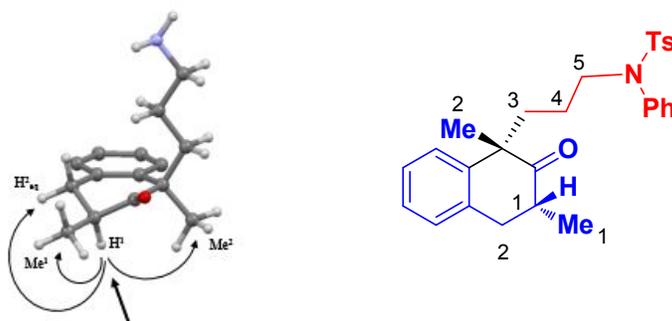


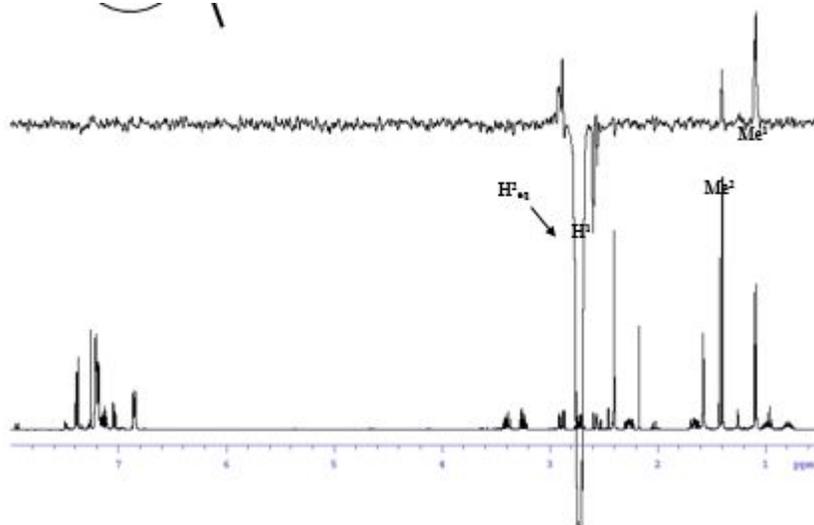


Monodimensional NOE experiment (400 MHz, CDCl₃, 25 °C) was performed by using a DPFGE-NOE sequence, with a 50 Hz pulse and a mixing time of 1.5 s.

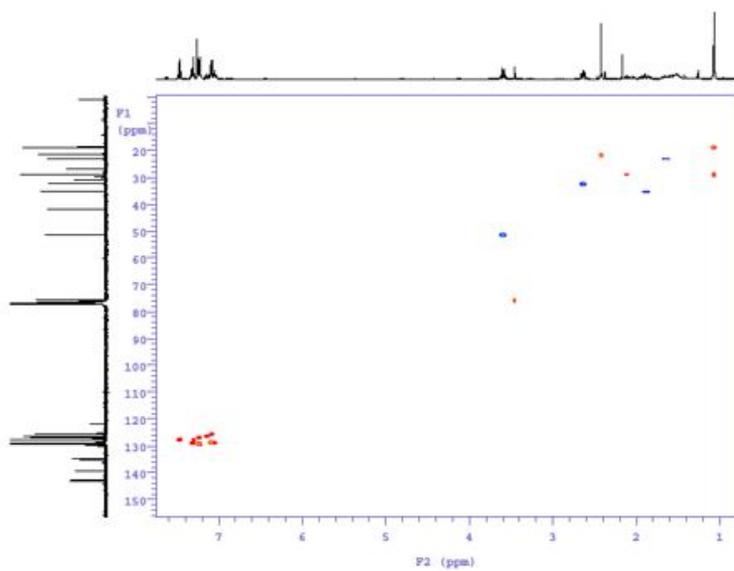
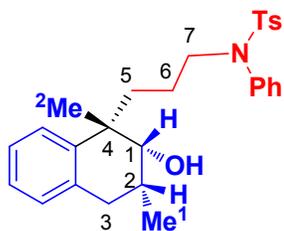


Monodimensional NOE experiment (400 MHz, CDCl₃, 25 °C) was performed by using a DPFGE-NOE sequence, with a 50 Hz pulse and a mixing time of 1.5 s.

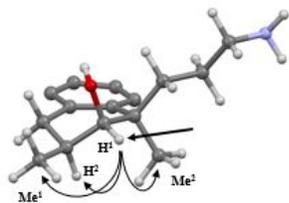


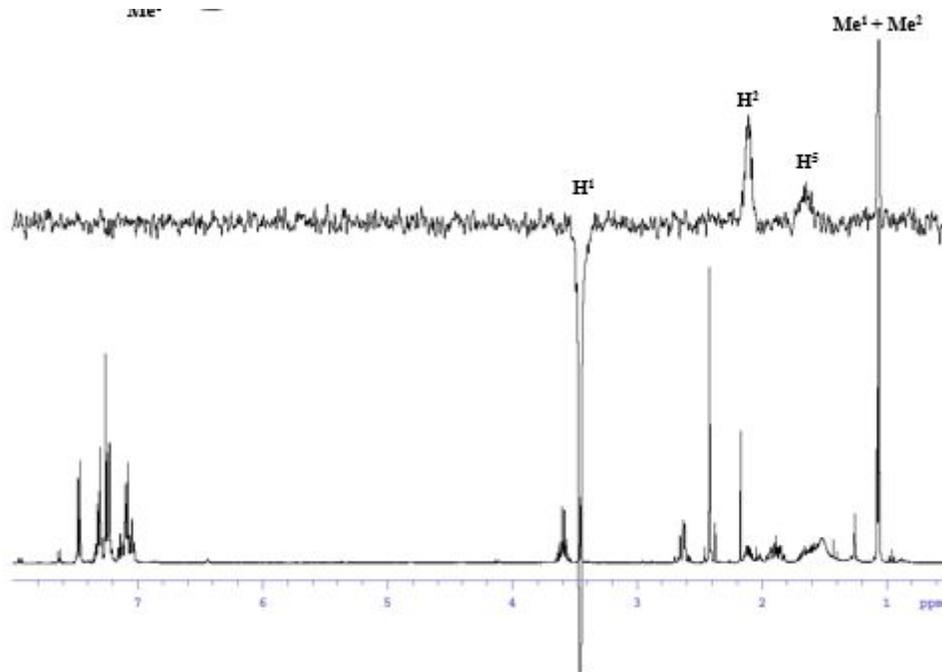


Monodimensional NOE experiment (400 MHz, CDCl₃, 25 °C) was performed by using a DPGSE-NOE sequence, with a 50 Hz pulse and a mixing time of 1.5 s.



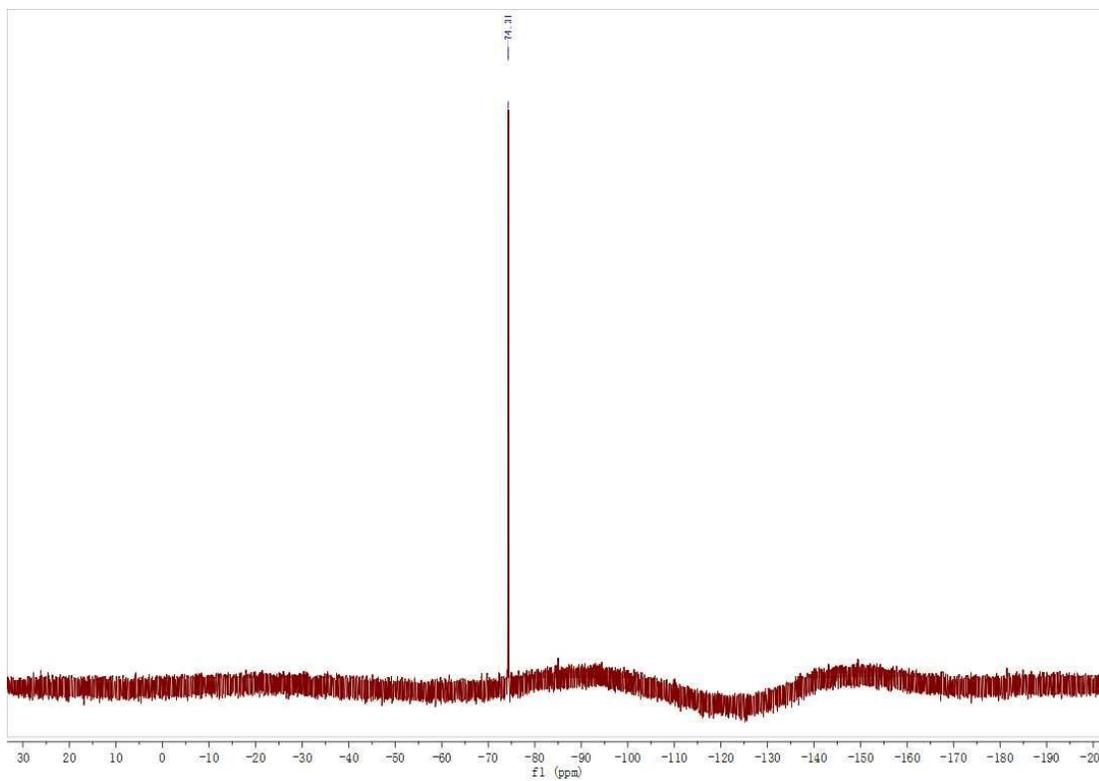
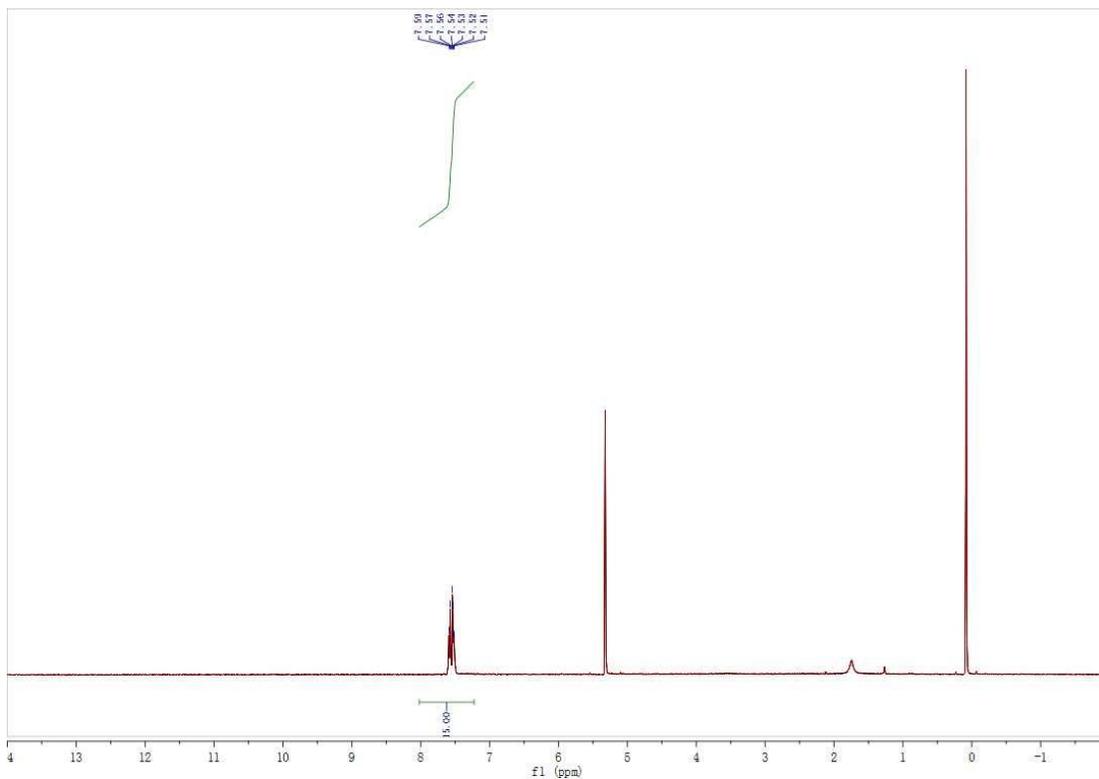
Gradient HSQC (400 MHz, CDCl₃, 25 °C)



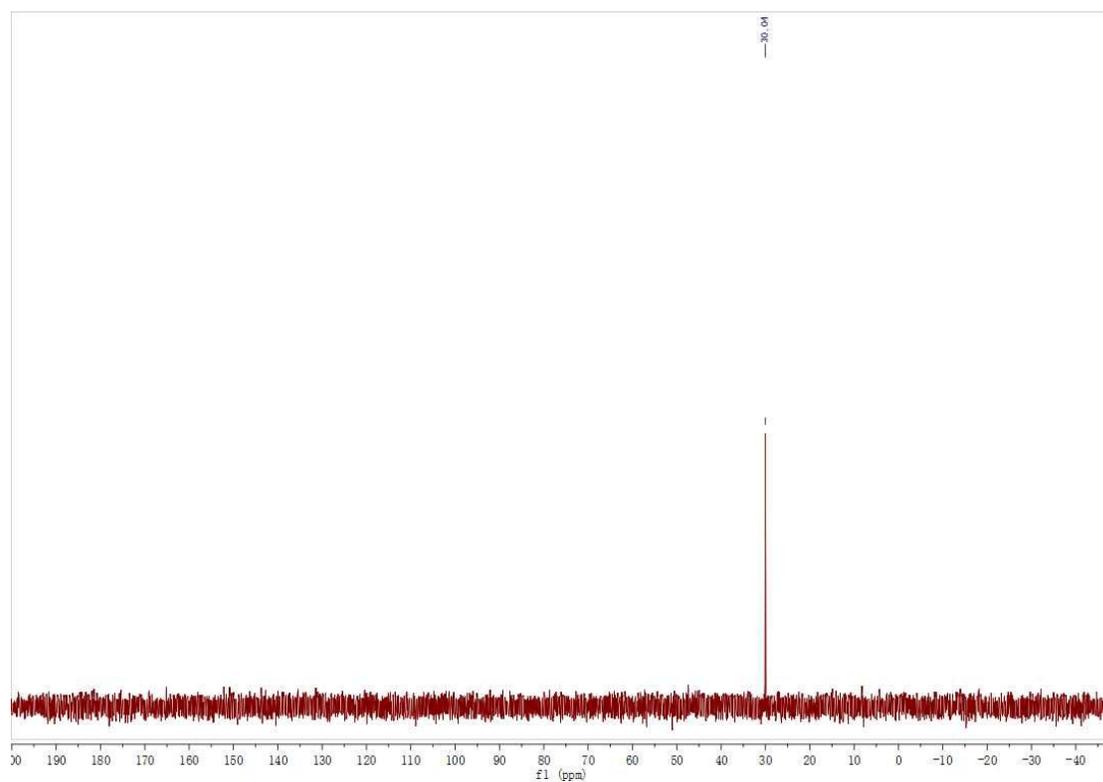


Monodimensional NOE experiment (400 MHz, CDCl₃, 25 °C) was performed by using a DPFGE-NOE sequence, with a 50 Hz pulse and a mixing time of 1.5 s.

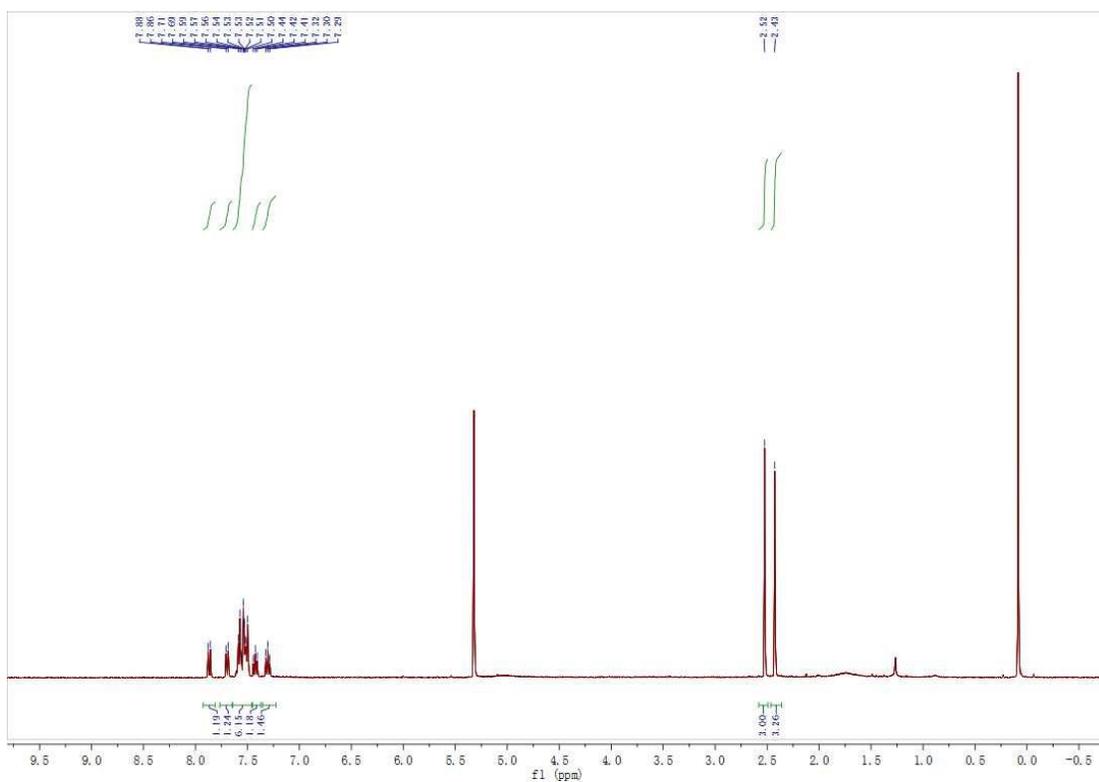
PPh_3AuTFA



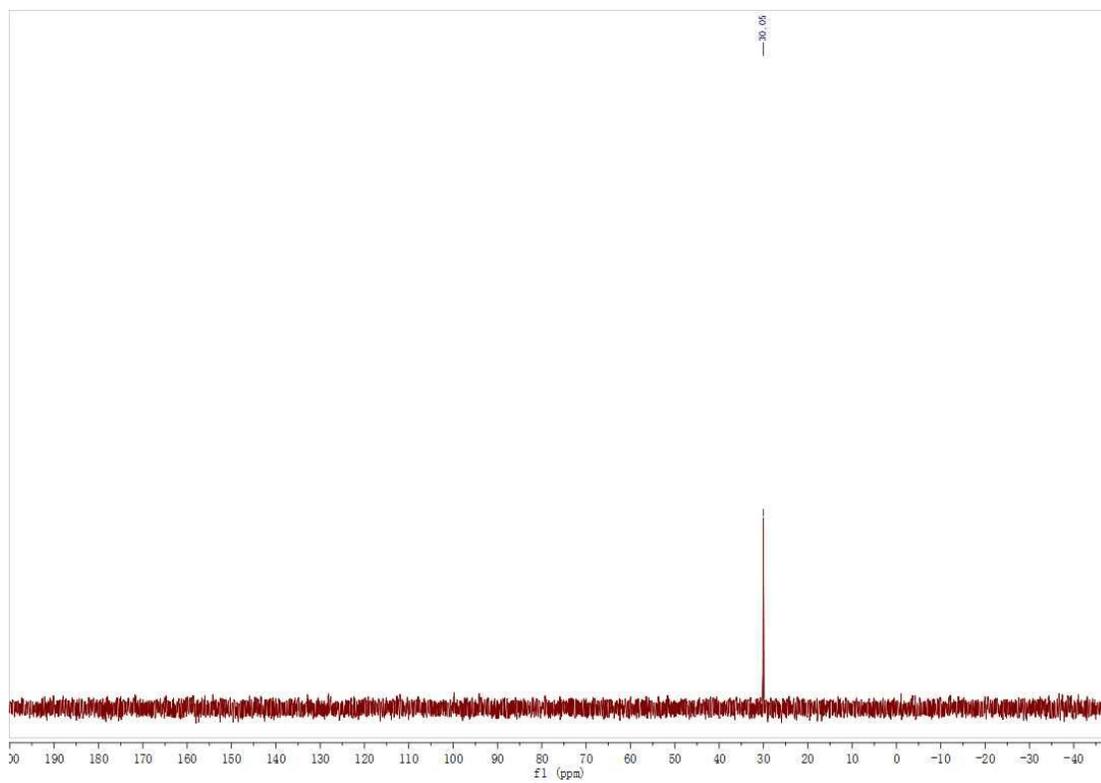
PPh₃AuTFA



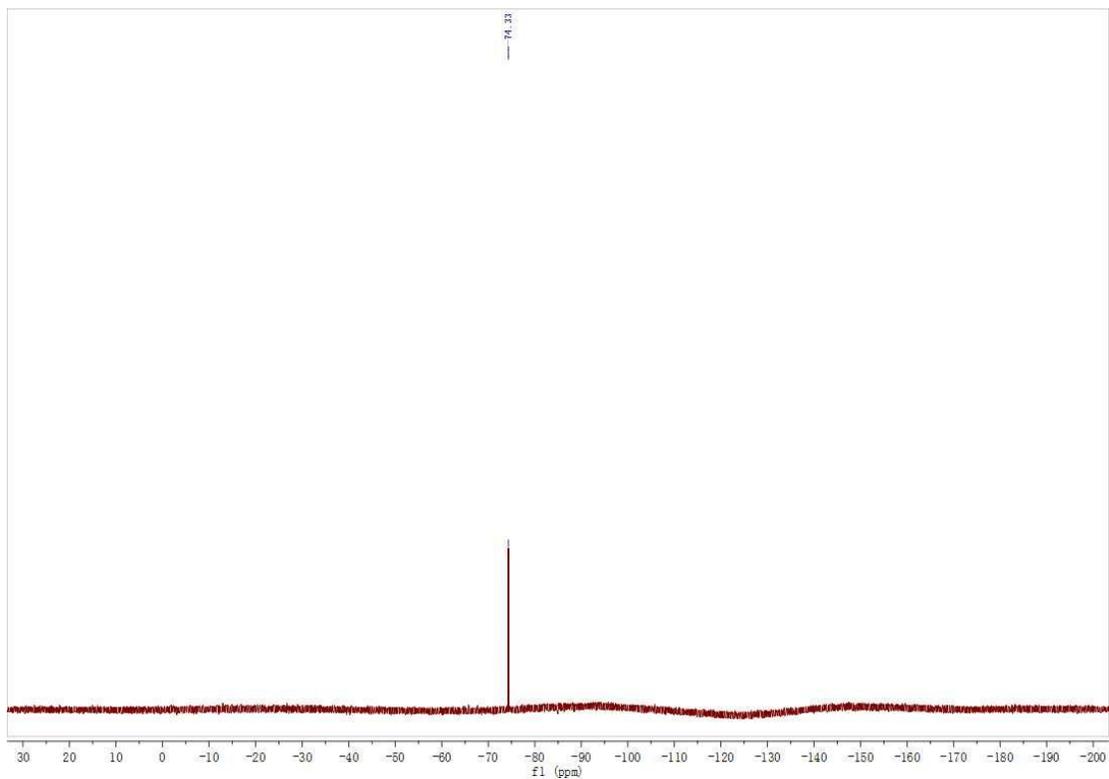
PPh₃AuTFA(10mol%)+Naphthol (¹H-NMR)



PPh₃AuTFA(10mol%)+Naphthol (³¹P-NMR)



$\text{PPh}_3\text{AuTFA}(10\text{mol}\%)+\text{Naphthol}$ (^{19}F -NMR)



$\text{PPh}_3\text{AuTFA}(10\text{mol}\%)+\text{Naphthol}+\text{Allenamide-10min}$ (H-NMR)

