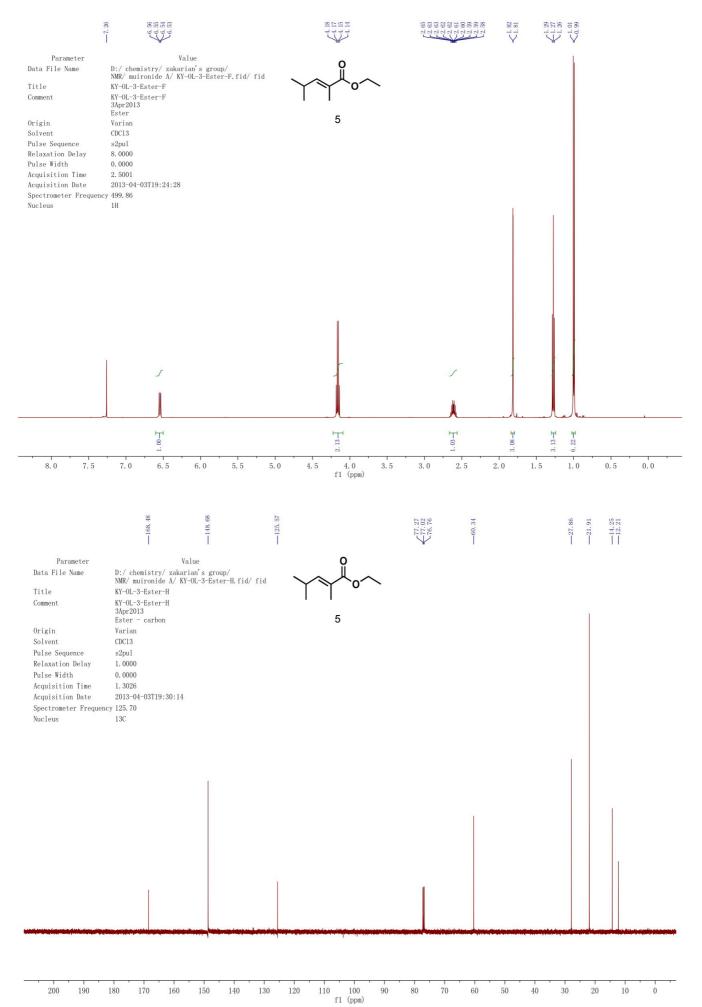
# An Efficient Synthesis of the Fully Elaborated Isoindolinone Unit of Muironolide A

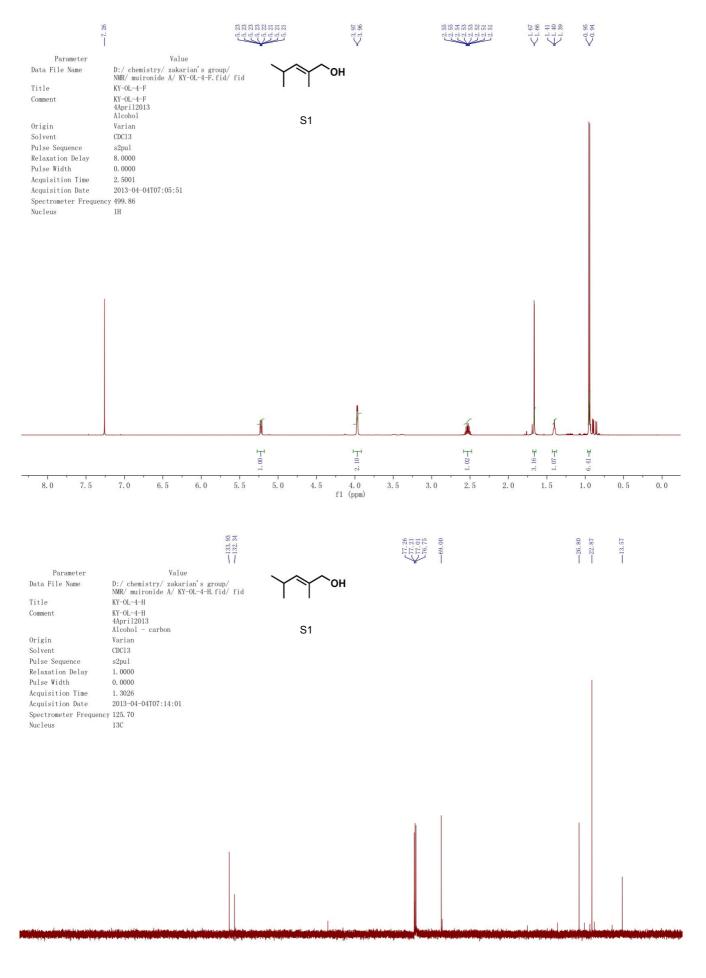
Qing Xiao, Kyle Young, Armen Zakarian\*

Department of Chemistry and Biochemistry, University of California, Santa Barbara, CA 93106, Telephone: (805)-893-3717; Fax: (805)-893-4120; E-mail: zakarian@chem.ucsb.edu

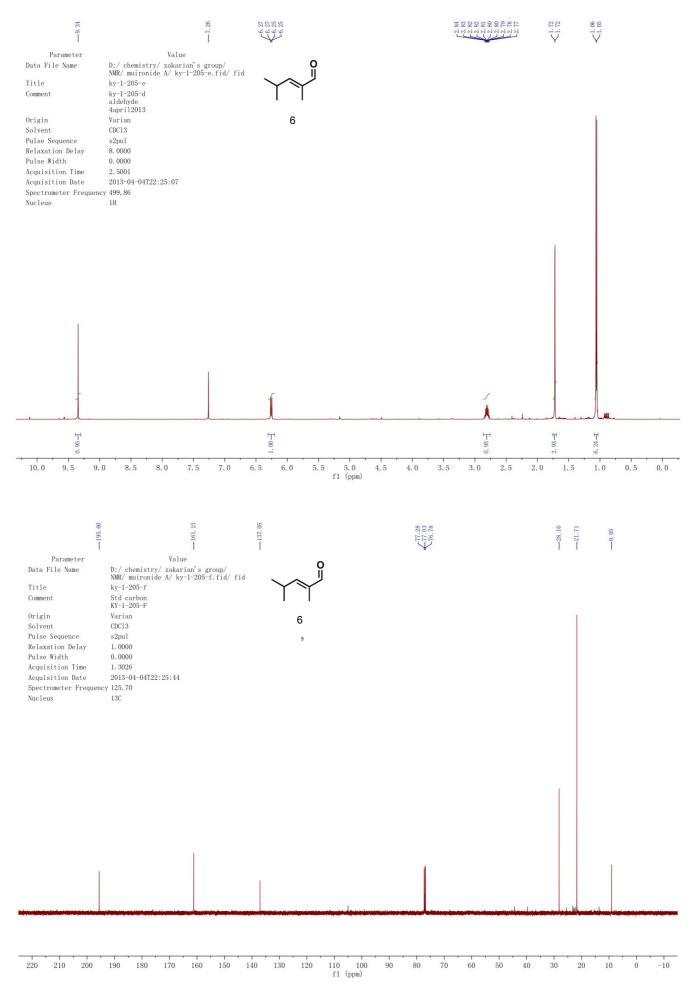
## **SUPPORTING INFORMATION 2**

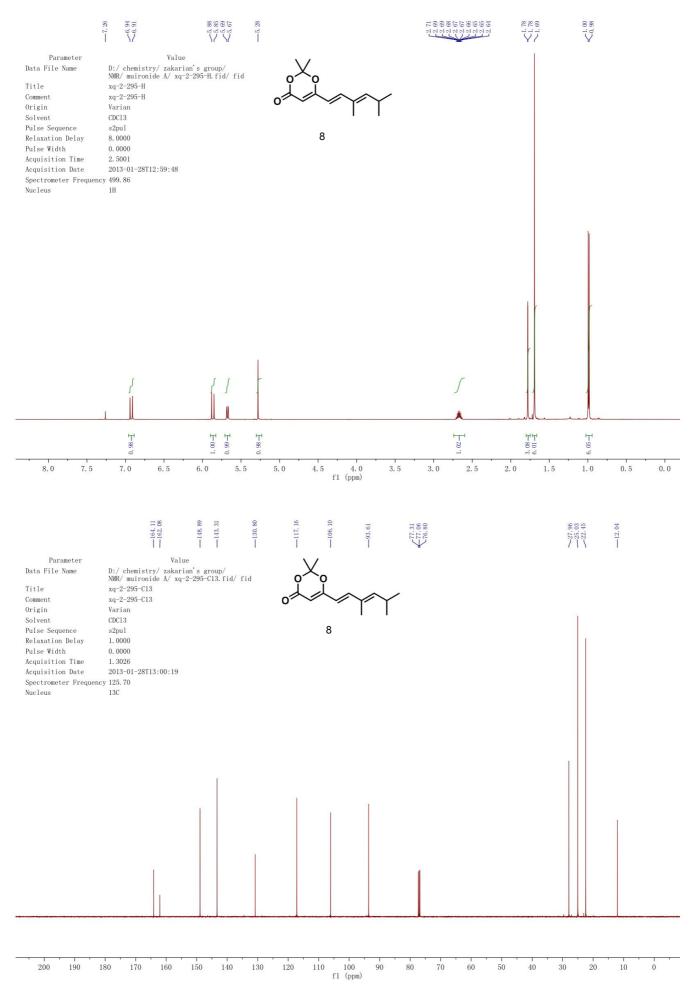
Copies of 1H, 13C NMR, NOE, NOESY, and COSY spectra

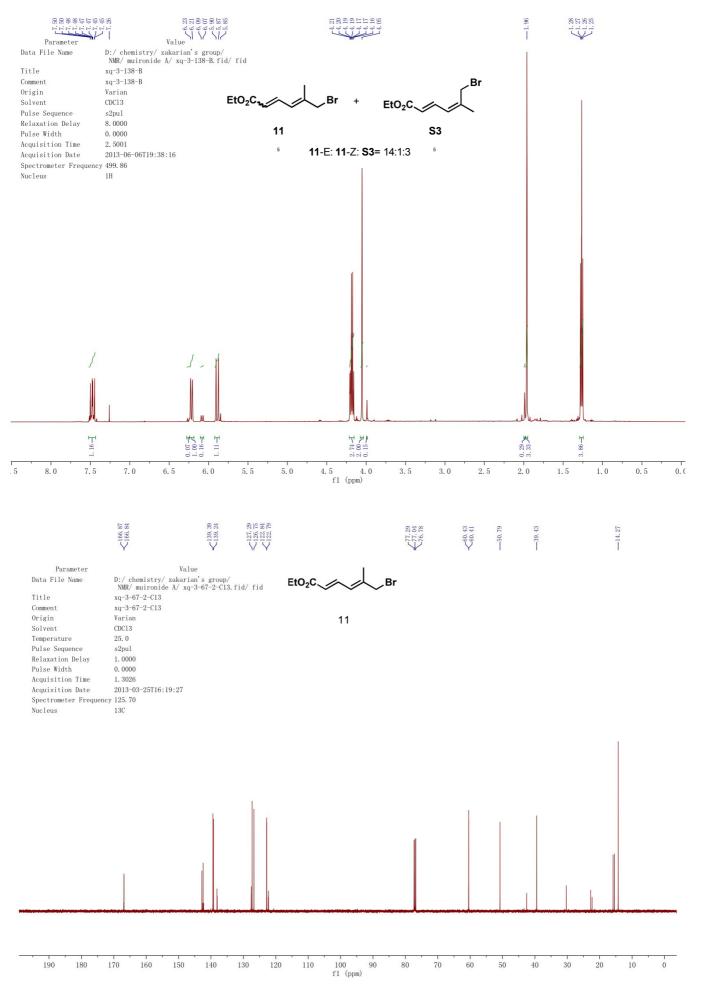


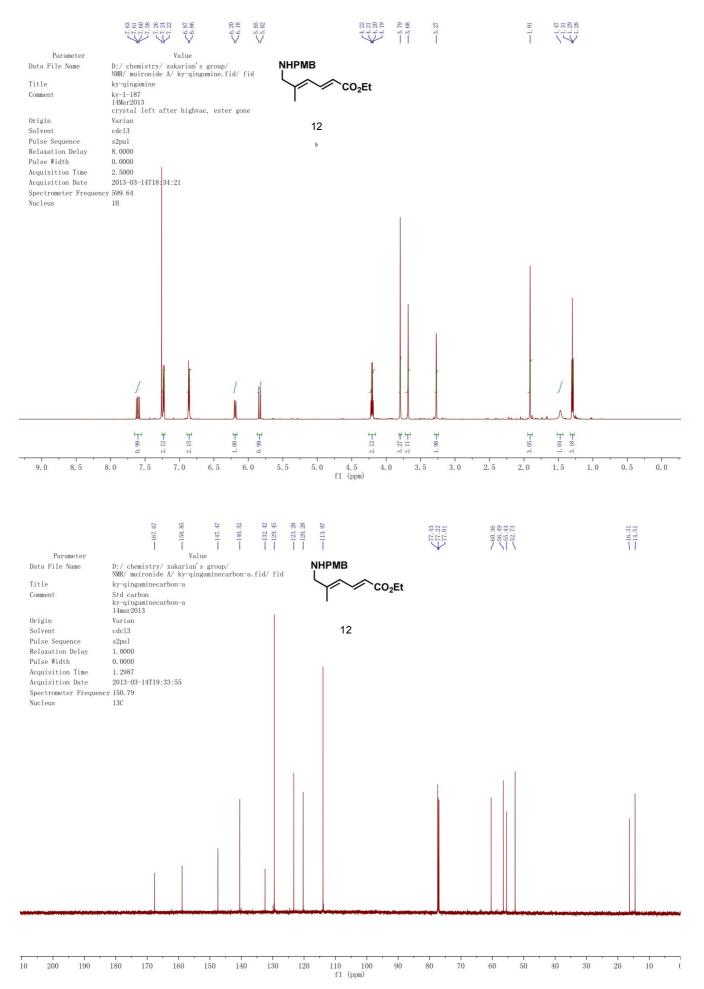


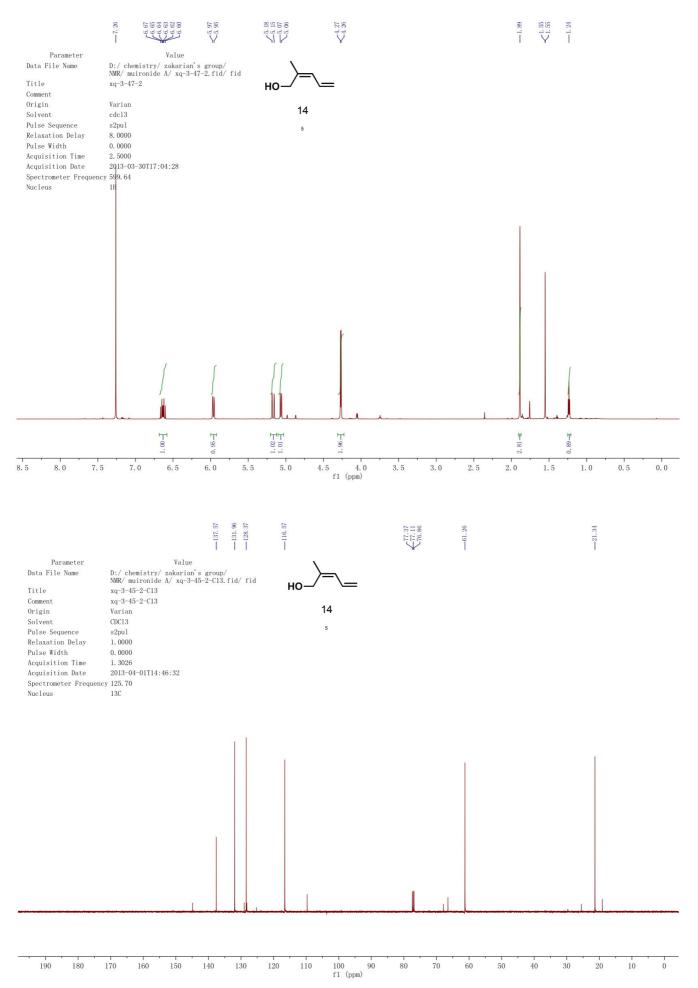
100 90 f1 (ppm) 

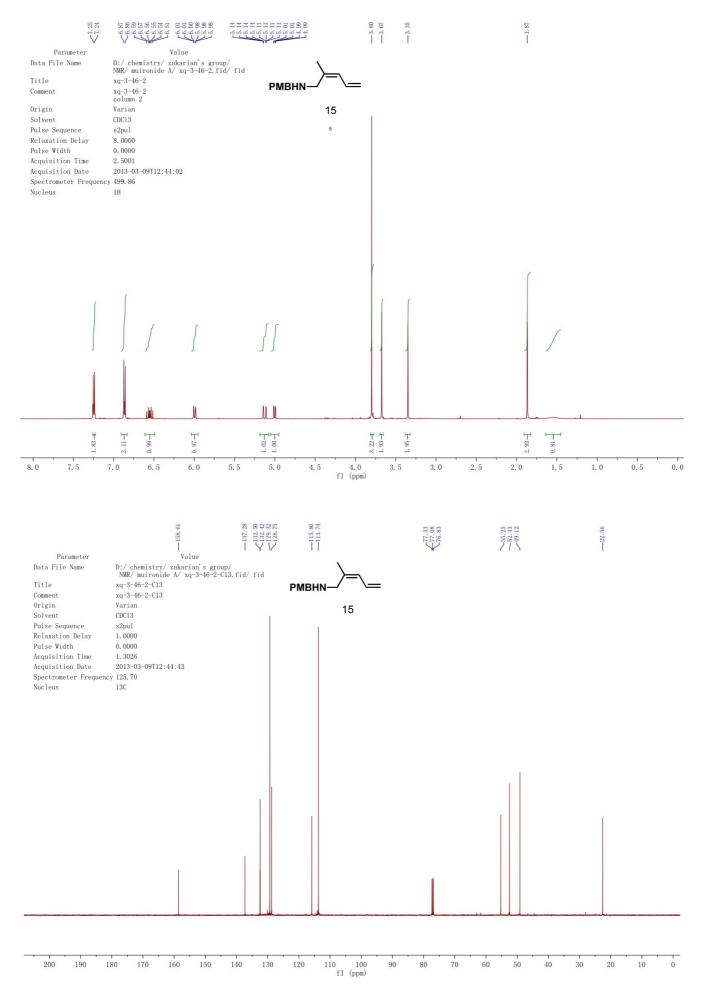


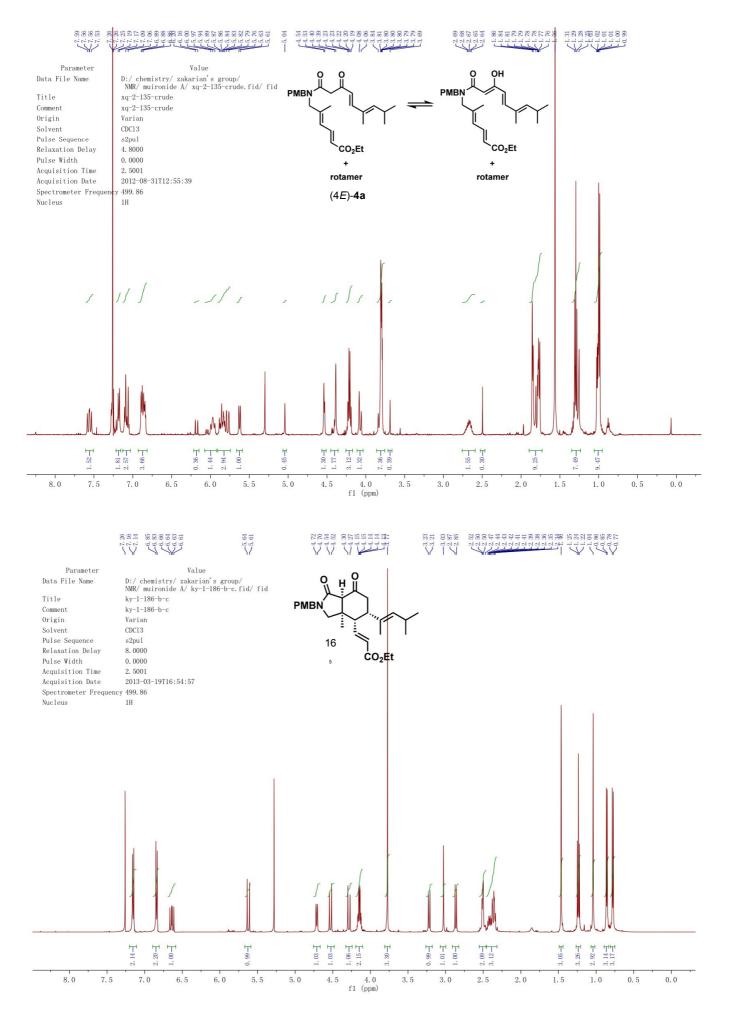


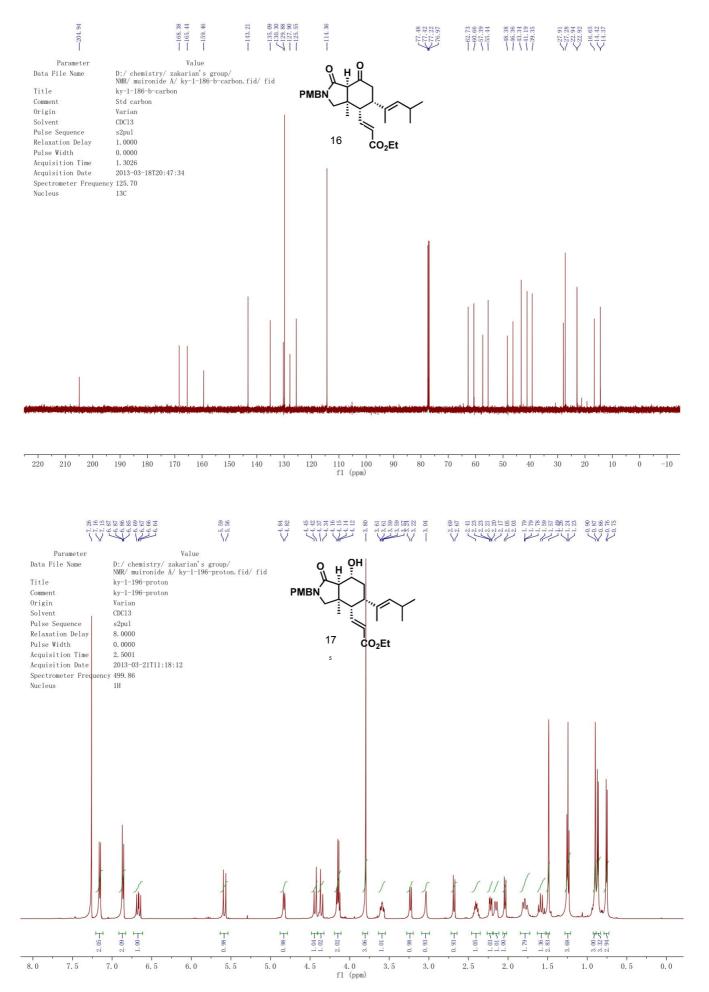




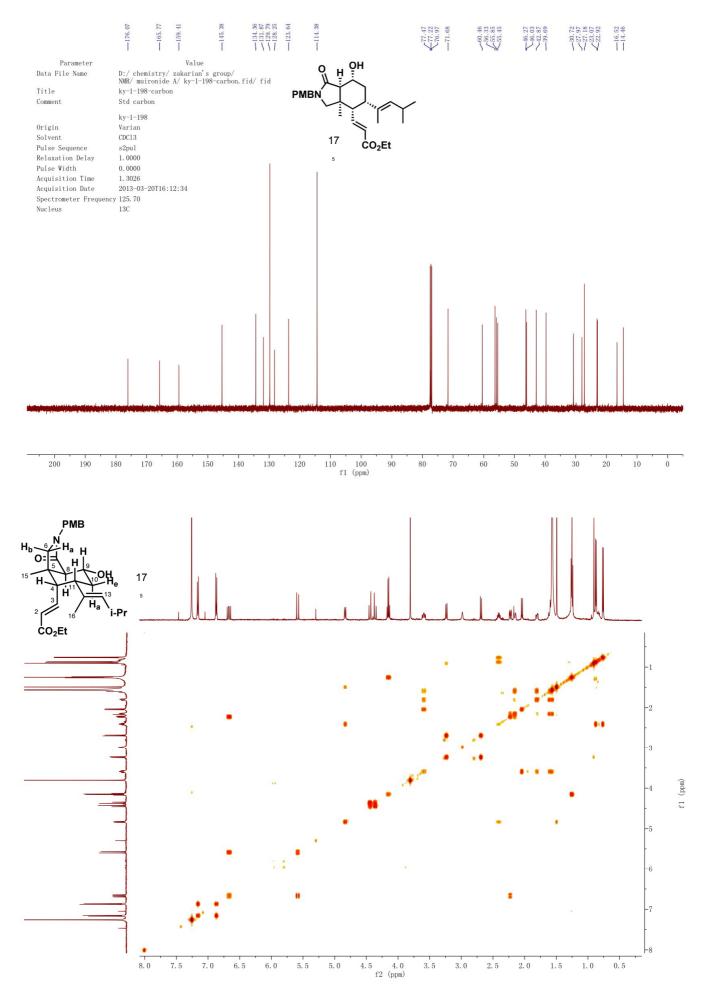








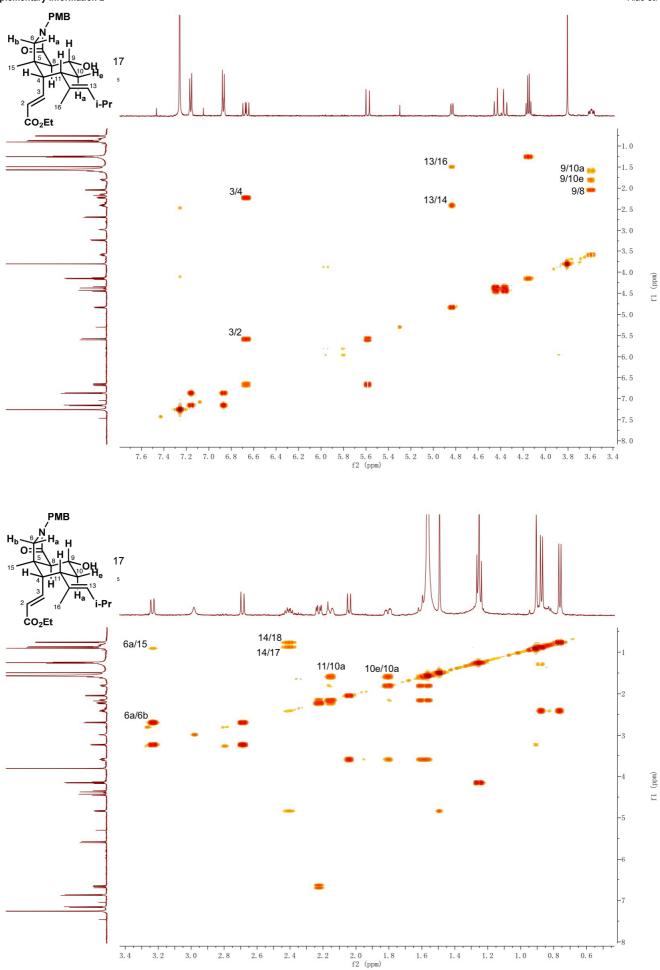
S22



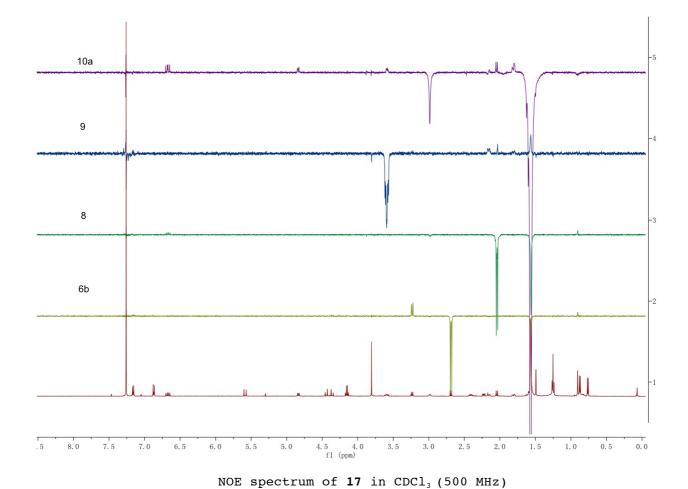
2D H,H-COSY spectrum of 17 in CDCl<sub>3</sub>(600 MHz)







Enlarged 2D H,H-COSY spectrum of 17 in CDCl<sub>3</sub>(600 MHz)



4.5 4.0 f1 (ppm)

5.5

5.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

7.5

7.0

6.5

6.0

8.0

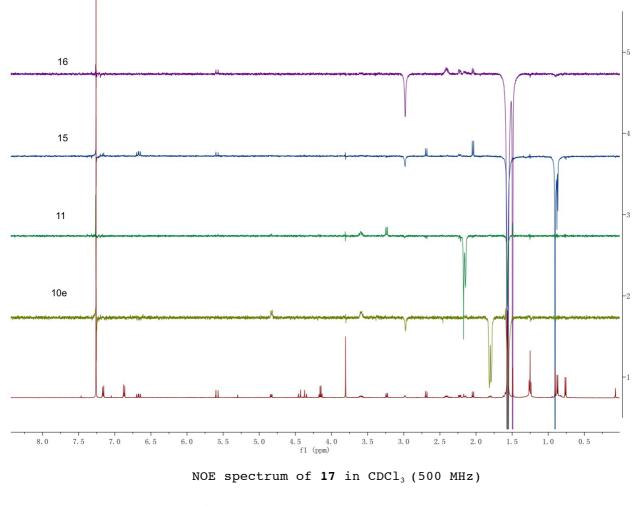
-5

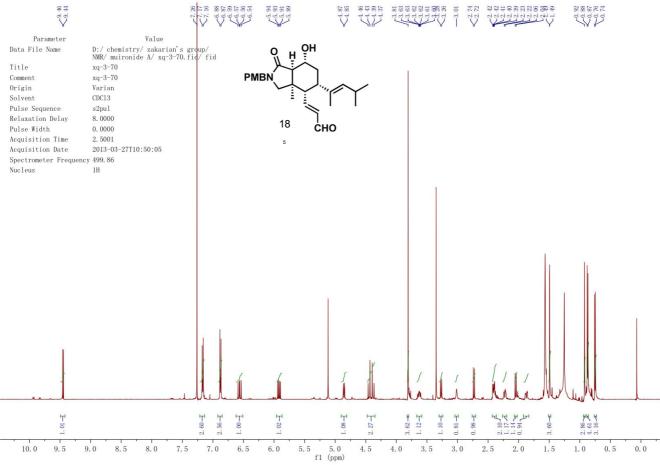
-4

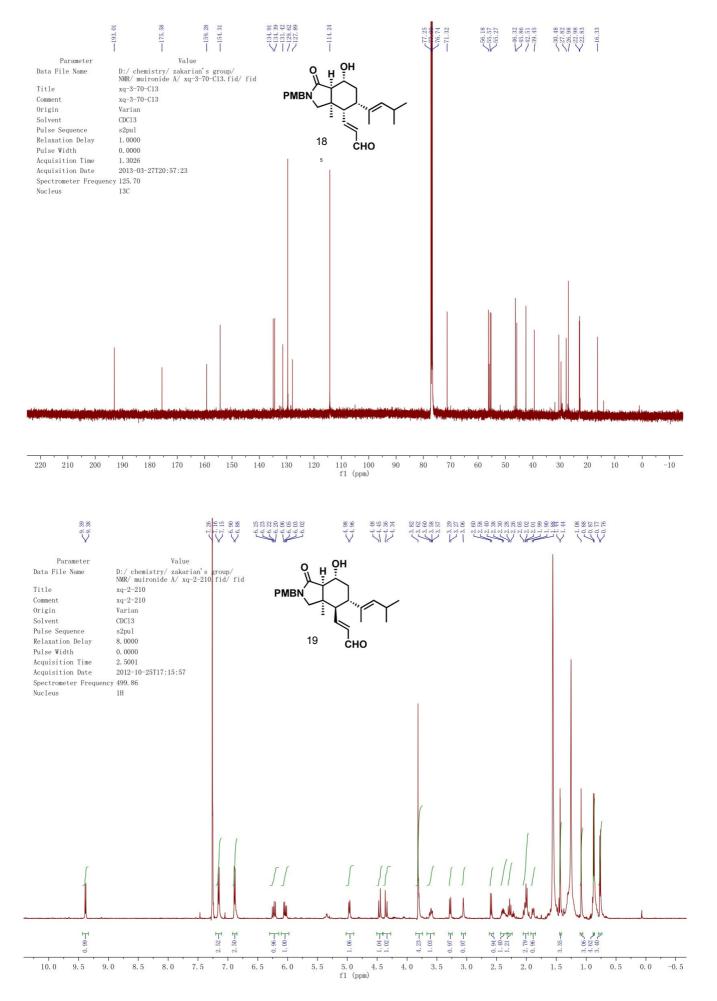
-3

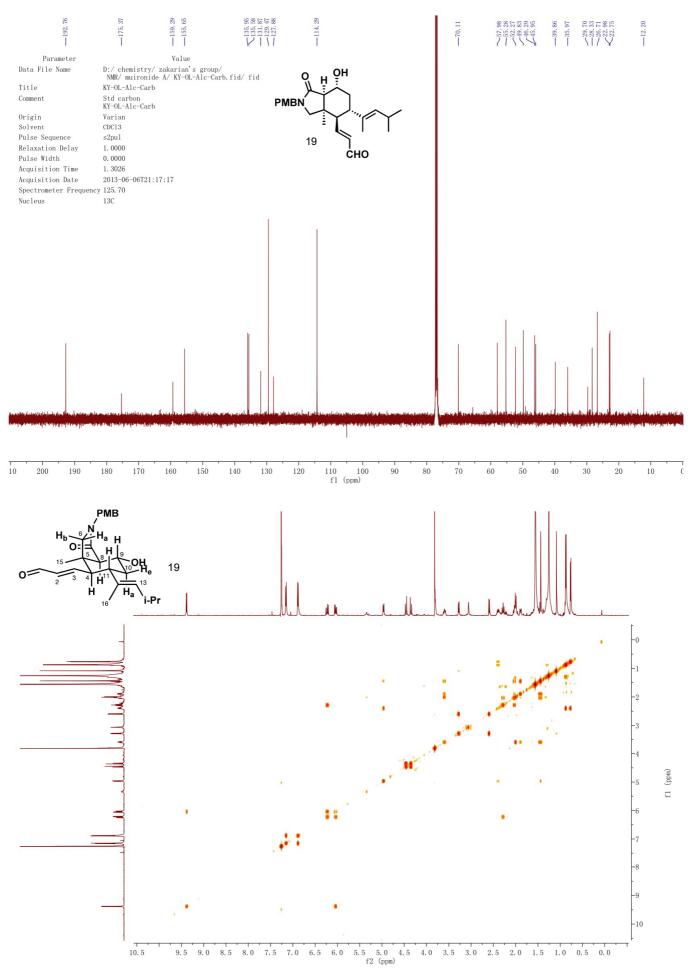
-2

-1



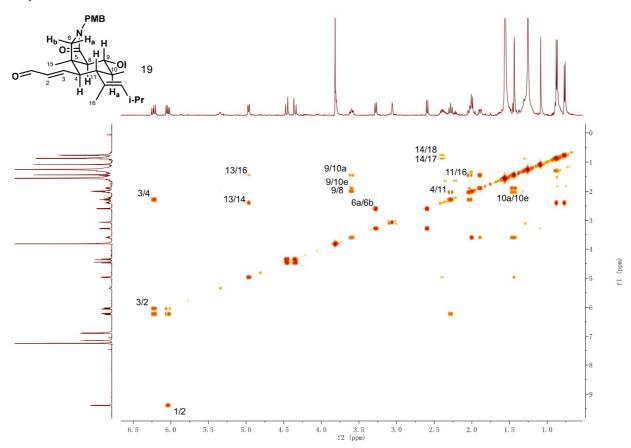




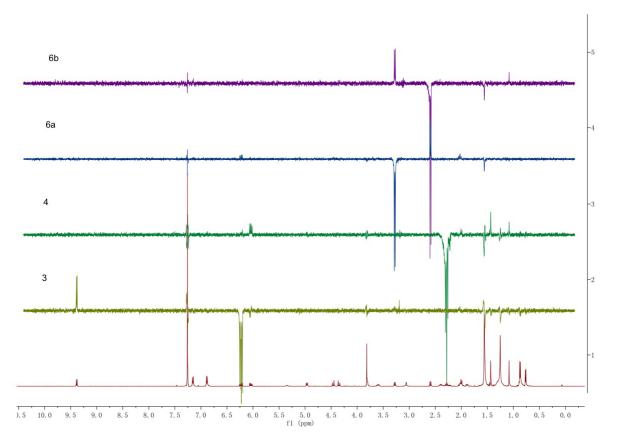


2D H,H-COSY spectrum of 19 in CDCl<sub>3</sub>(600 MHz)

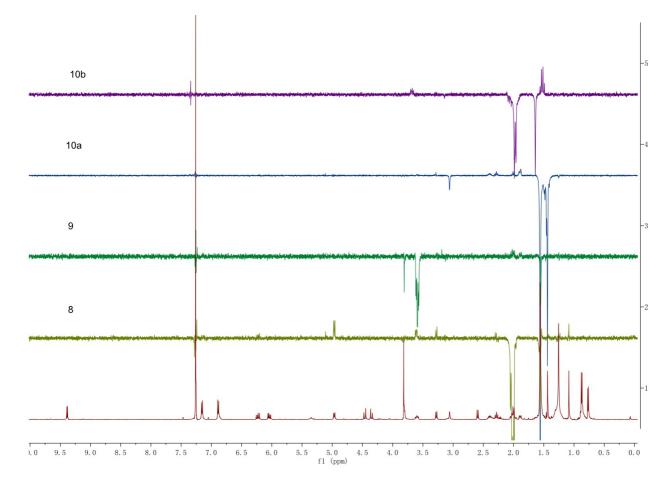
S28

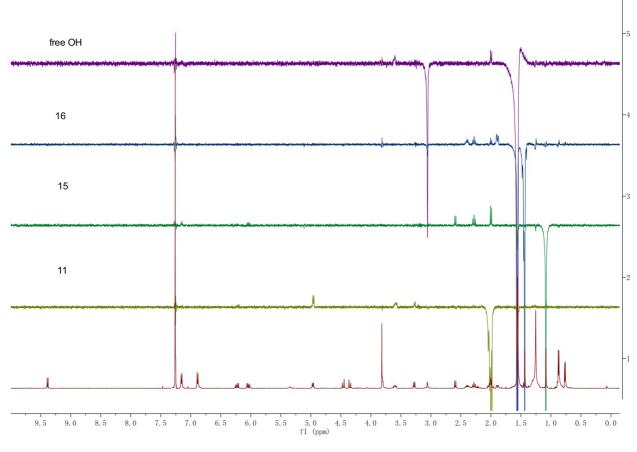


Enlarged 2D H,H-COSY spectrum of **19** in CDCl<sub>3</sub>(600 MHz)



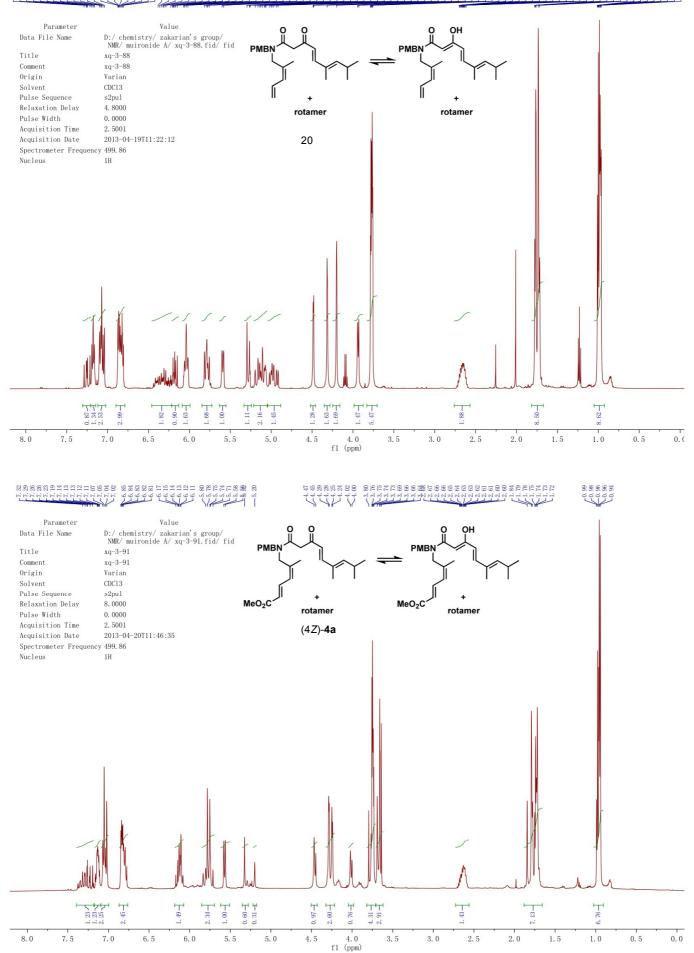
NOE spectrum of 19 in CDCl<sub>3</sub>(500 MHz)

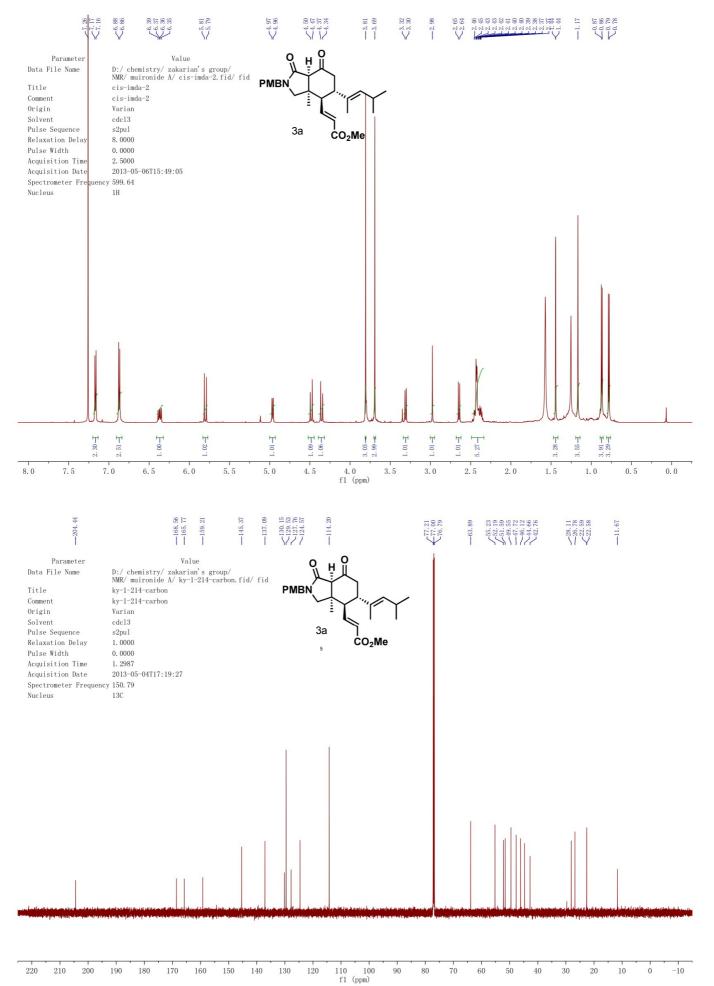




NOE spectrum of  ${\bf 19}$  in  ${\rm CDCl}_3({\rm 500~MHz})$ 







S32

