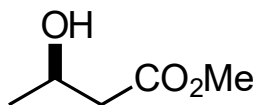


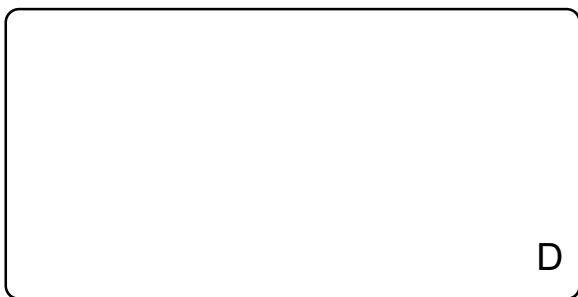
# Synthesis Challenge # 64

AG Wegner

17.05.2017



A

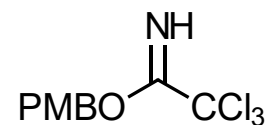


- 1) LDA (2.1. eq.), then MeI, THF, HMPA
- 2) I, La(OTf)<sub>3</sub>, PhMe
- 3) DiBALH
- 4) TsCl, Et<sub>3</sub>N

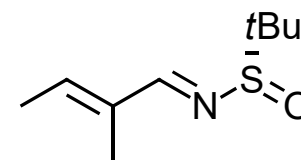
- 5) allylMgBr, TMEDA, Et<sub>2</sub>O
- 6) 10 mol%, Hoveyda-Grubbs II methacrolein, CH<sub>2</sub>Cl<sub>2</sub>

- 7) SnCl<sub>4</sub>, CH<sub>2</sub>Cl<sub>2</sub>, then II, LiHMDS, THF
- 8) Me<sub>3</sub>OBF<sub>4</sub>, Proton sponge, CH<sub>2</sub>Cl<sub>2</sub>
- 9) LiHMDS, THF, then III

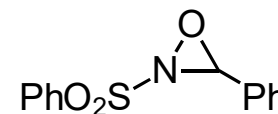
Please provide a synthesis for A.



I



II



III

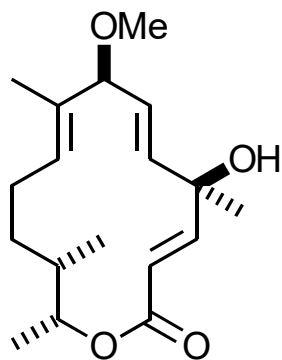
↓ 10-12



↓ 13



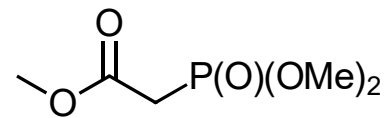
↓ 14



10) NaH, **IV**  
11) DDQ, H<sub>2</sub>O, CH<sub>2</sub>Cl<sub>2</sub>  
12) TMSOK, THF

13) DCC, DMAP, DMAP\*HCl, CHCl<sub>3</sub>

14) TBAF, THF



**IV**