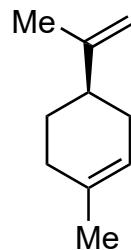


Asymmetric Total Syntheses of Hypoestin A, Albolic Acid, and Ceroplastol II

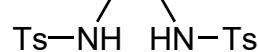
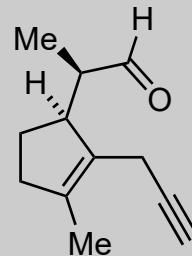
Wang, Y.; Xu, K.; Min, L.; Li, C.

J. Am. Chem. Soc. 2022, 144 (23), 10162–10167

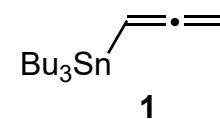


1-5

- 1) O_3 , SMe_2 *then* piperidine, AcOH
- 2) $NaBH_4$ *then* CBr_4 , PPh_3
- 3) $CuCl$, $\equiv MgBr$
- 4) 9-BBN, NaOH, H_2O_2
- 5) DMP

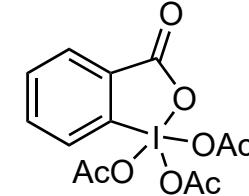


6-10

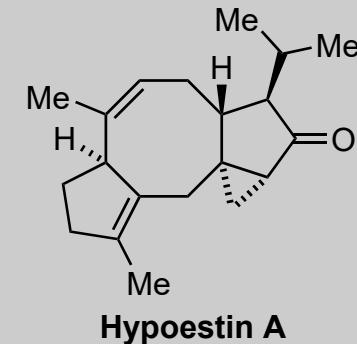


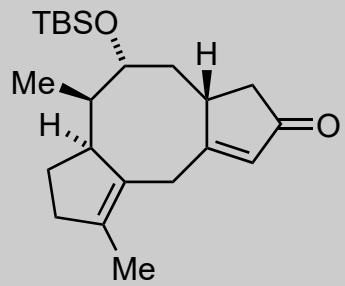
- 6) BBr_3 *then* 1
- 7) DCM, A
- 8) TBSOTf, 2,6-lutidine
- 9) $[\text{Rh}(\text{CO})_2\text{Cl}]_2$, CO
- 10) Pd/C, H_2

5) Structure of DMP?



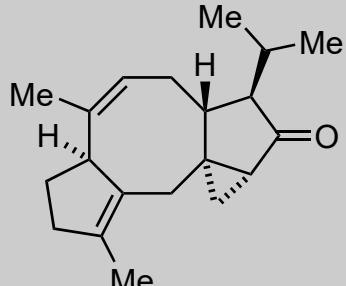
9) Name of the reaction?
Pauson-Khand reaction





B

11-16

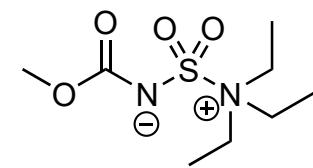


Hypoestin A

- 11) LDA, ZnEt₂, HMPA, 2-iodopropane
- 12) DIBAL
- 13) CH₂I₂, ZnEt₂
- 14) TPAP, NMO
- 15) TBAF
- 16) Burgess reagent

14) Name of the reaction?
Mechanism?
Ley-Griffith oxidation

16) Structure of Burgess reagent?



Ley-Griffith oxidation

