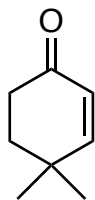


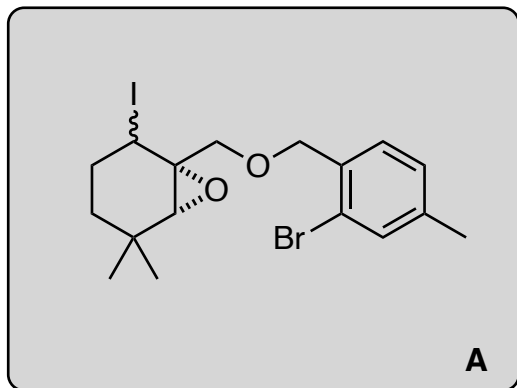
Enantioselective Total Synthesis of (-)-Maoecrystal V

Zheng, C.; Dubovyk, I.; Lazarski, K. E.; Thomson, R. E.

J. Am. Chem. Soc. **2014**, *136*, 17750-17756

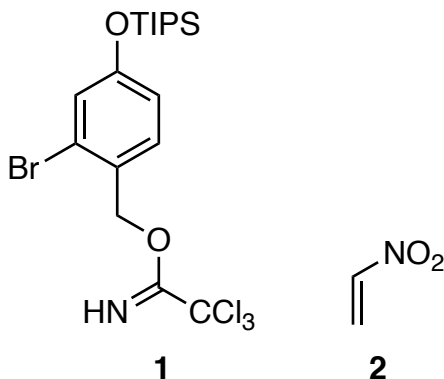


1-5



6-12

- 1) CH₂O, DMAP
- 2) (-)-DIPT, Ti(*i*-PrO)₄, *t*-BuOOH
- 3) TfOH, **1**
- 4) NaBH₄
- 5) I₂, PPh₃, imidazole

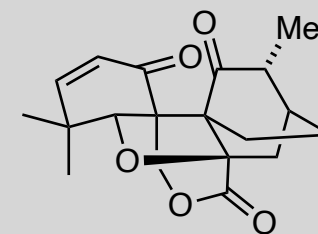


- 6) Zn, NH₄Cl
- 7) TESCl, imidazole, DMAP (cat.)
- 8) Pd(PPh₃)₄, PMP, TBAF
- 9) PhI(OAc)₂
- 10) Stryker's catalyst, PhSiH₃
- 11) LDA, TMSCl
- 12) **2** then HCl

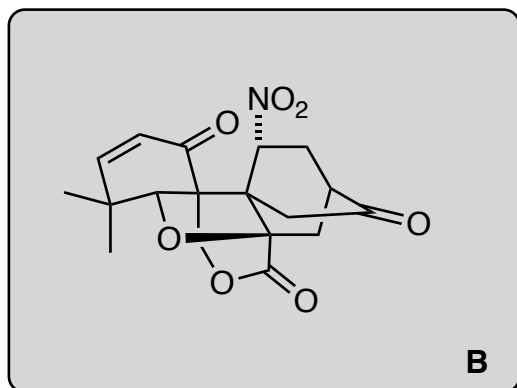
- 1) Name of starting material?
- 2) Name of reaction?
- 3) Name of reagent **1**?

5) Name of reaction?

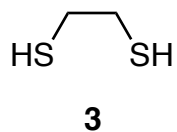
- 8) Name of reaction?
- 9) Hint: Oxidative dearomatization
- 10) Composition of Stryker's catalyst?
- 10) Hint: Single reduction



maoecrystal V



- 13) **3**, $\text{BF}_3 \cdot \text{OEt}_2$, Zn^*
- 14) IBX *then* HCl
- 15) K_2CO_3 , paraformaldehyde
- 16) NaBH_4
- 17) Raney-Ni
- 18) NBS, $(\text{BzO})_2$
- 19) AgBH_4 , DMSO
- 20) CrO_3 , AcOH



13-20

