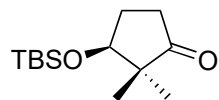


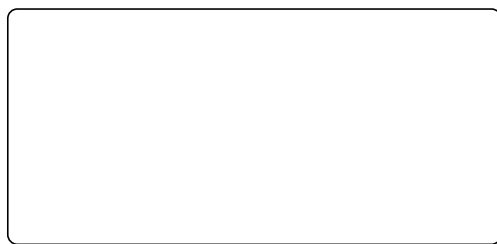
Enantioselective Synthesis of (+)-Auriculatol A

Jordan K. Thompson, Kala C. Youngblood, Yun Hao Shawn Teh, Conner M. Farley, Zehao Zhang, Scott C. Virgil, and Sarah E. Reisman

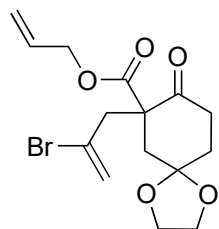
J. Am. Chem. Soc. **2025**, *147*, 42170–42174



1 - 4



A



5 - 10



B

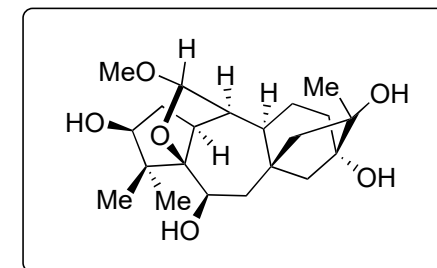
- 1) LHMDS, HMPA, BrCH₂CO₂Et, -78°C then LiOH
- 2) SOCl₂
- 3) LHMDS
- 4) TBSOTf, Et₃N

- 5) Pd₂dba₃ (5 mol%), (R)-(CF₃)₃-^tBu-Phox (12 mol%) then pTsOH
- 6) NiBr₂•dme (5 mol%), terpy, (5 mol%), Mn⁰
- 7) MEMCl, DIPEA
- 8) KHMDS, PhNTf₂
- 9) OsO₄, NaIO₄, 2,6 lutidine
- 10) Ni(COD)₂ (10 mol%), LiBr

5) Mechanism

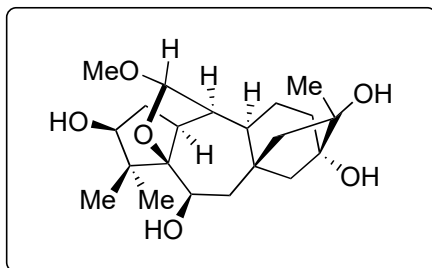
7) Structure of MEM

9) Name of the reaction ?



(+)-Auriculatol A

11-20



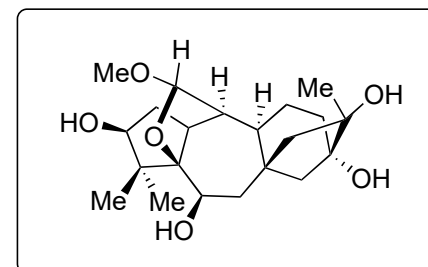
(+)-Auriculatol A

- 11) **A**, ZnCl₂
- 12) TMS-imidazole
- 13) CuCl₂·2H₂O (7.5 mol%), rac-(tol)-BINAP (7.5 mol%)
PMHS, tBuONa, tBuOH
- 14) Ni(COD)DMFU, NaHMDS, ZnBr₂
- 15) Co(acac)₂, PhSiH₃, O₂ then Na₂S₂O₃
- 16) PPTS
- 17) IBX, DMSO
- 18) DIBAL
- 19) HCl, MeOH
- 20) Mn(dpm)₃ (20mol %), PhSiH₃, tbuOOH, iPrOH

11) Name of the reaction ?

15) Name of the reaction ?

17) Structure of IBX ?



(+)-Auriculatol A