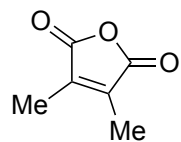


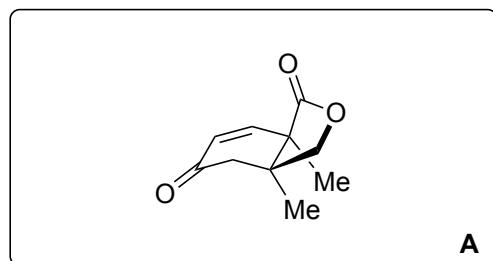
Total Synthesis of (±)-11-O-Debenzoyltashironin

Jie Tong, Tianrun Xia, and Bo Wang

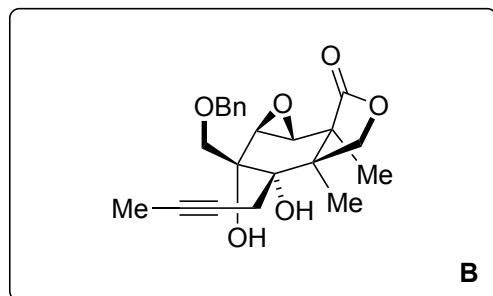
Org. Lett. **2020**, *22*, 2730–2734.



1-5

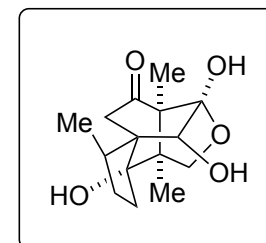


6-10

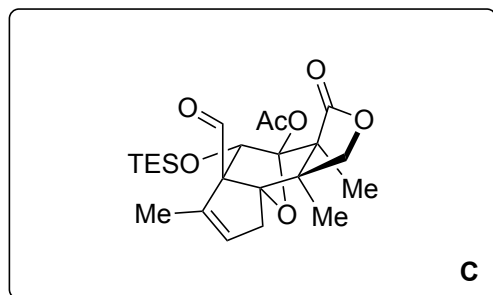


- 1) Danishefsky diene, toluene, 150 °C
then 4 M HCl
- 2) NaOMe, MeOH
- 3) methyl chloroformate
then NaBH₄ (excess)
- 4) PIDA, TEMPO
- 5) DBU

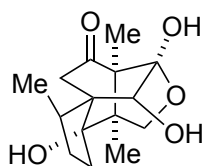
- 6) DBU, *t*-BuOOH
- 7) Pb(OAc)₄, benzene, reflux
- 8) BOMCl, Mg, HgCl₂
then K₂CO₃, MeOH
- 9) IBX
- 10) Zn, 1-bromo-2-butyne



11-15



16-19



- 11) NaHMDS
- 12) DMP
- 13) Ac₂O, NEt₃, DMAP
- 14) TESOTf, 2,6-lutidine, CH₂Cl₂, reflux
- 15) [Pd(dppe)(PhCN)₂](SbF₆)₂, toluene, 90 °C

- 16) Cp₂TiCl₂, Mn
- 17) aq. HBF₄, MeOH
- 18) H₂, Pd/C
- 19) Sml₂, HMPA

11) Name of the reaction?

Payne rearrangement

13) hint: one new ring is formed

14) hint: one ring is cleaved

15) Classify the reaction.

5-endo ene-yne cycloisomerization

