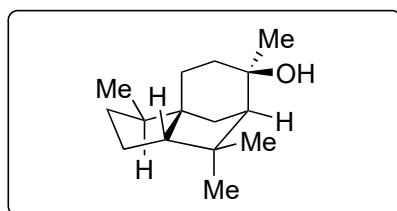


Oxidative Entry into the *Illicium* Sesquiterpenes: Enantiospecific Synthesis of (+)-Pseudoanisatin

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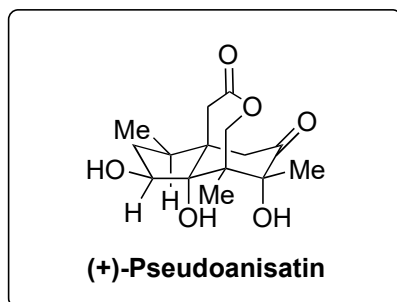
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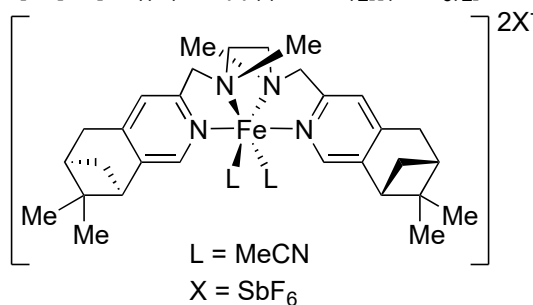


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- 1) $\text{PhI}(\text{OAc})_2$, I_2 , $h\nu$
- 2) Me_3OBF_4 , proton sponge
- 3) NaIO_4 , $\text{RuCl}_3 \cdot x\text{H}_2\text{O}$
- 4) CuBr_2 , *t*-BuOH, Δ
- 5) KOH, KO*t*-Bu
- 6) NaH, TBSCl; aq. HCl

$[\text{Fe}] = [\text{Fe}((R)\text{-mepp})(\text{MeCN})_2][(\text{SbF}_6)_2]$



- 7) $[\text{Fe}]$, TBHP
- 8) Et_3OPF_6 , proton sponge; TFA/ H_2O
- 9) TMSCl, NaI
- 10) TBAF, AcOH
- 11) $\text{OsO}_4 \cdot \text{TMEDA}$
- 12) MsCl, py; aq. NaOH

- 1) Name the starting material.
- 1') Name the reaction.
- 2) Give the structure of proton sponge.
- 5) Hint: Two transformations are happening.