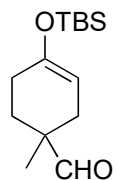
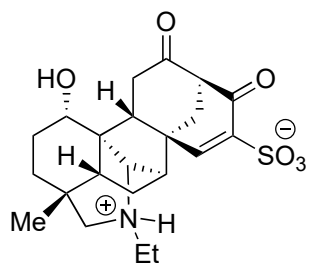


Total Synthesis of Aconicarmisulfonine A, a Sulfonated Diterpene Alkaloid

Shang Ning, Thomas J. Maimone, *J. Am. Chem. Soc.* **2025**, 147, 51, 46800–46805.

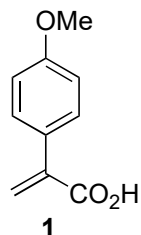


1-19



Aconicarmisulfonine A

- 1) EtNH₂·HCl, Et₃N, AcOH, then NaBH(OAc)₃
- 2) **1**, HATU, DIPEA

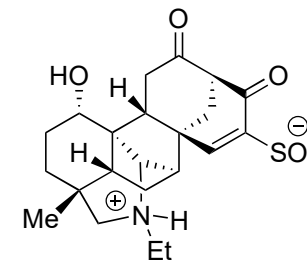


- 3) [Ir(dF(CF₃)ppy)₂, (4,4'-dCF₃bpy)]PF₆, 2,4,6-collidine, 456 nm LED
- 4) BzF, CsF, 18-C-6
- 5) PMHS, IrCl(CO)(PPh₃)₂
- 6) *n*-BuLi, Mander's reagent
- 7) TfOH, Δ
- 8) Li⁰/NH₃, THF/*t*-BuOH
- 9) TsOH, (CH₂OH)₂
- 10) Ac₂O, DMAP, Et₃N
- 11) DIBAL-H, Cp₂ZrCl₂
- 12) CuCl/bpy, AZADO, DMAP, O₂
- 13) LDA, Boc₂O
- 14) TMSOTf, Δ
- 15) AlMe₃, PhNH₂·HCl, then TESCI, Et₃N
- 16) TBHP, KO^tBu
- 17) Ph₃CSH, Cs₂CO₃
- 18) LiHMDS, Boc₂O
- 19) H₂O₂, TFA/DCM

- 1) Propose a synthesis of SM in one step:

- 6) Structure of Mander's reagent:
- 7) Name of the reaction:
- 8) Name of the reaction:

- 11) Structure and name of the reagent generated *in situ*:



Aconicarmisulfonine A