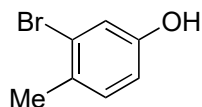
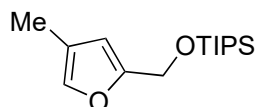
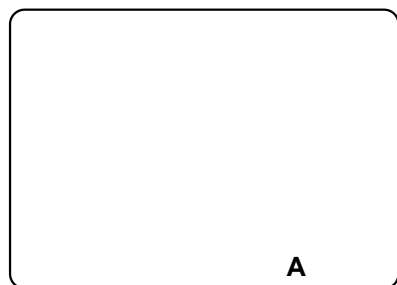


Total Synthesis of (±)-Rubriflordilactone A

Zheng, X.; Guo, X.; Wang, H.; Zhou, P.-P.; Chen, X. Total Synthesis of (±)-Rubriflordilactone A. *J. Am. Chem. Soc.* **2024**, *146* (11), 7198-7203.



1-13

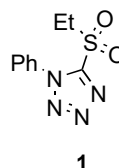


14-16



- 1) Propenoyl chloride, AlCl₃ (1.1eq) *then* AlCl₃ (3 eq) 150-180 °C
- 2) CuCN *then* MOMCl
- 3) DIBAL-H *then* TBSOTf
- 4) *n*-BuLi, TMEDA, Isopentenyl chloride
- 5) NaBH₄
- 6) NBS, Me₂S
- 7) *n*-BuLi, furan
- 8) ¹O₂, MeOH, Ac₂O *then* TBAF
- 9) IBX
- 10) BF₃·OEt₂, 2-Methyl-2-butene, 4 Å MS
- 11) MOMCl
- 12) Fe(acac)₃, PhSiH₃, *p*-NO₂PhSO₃Me, TFA
- 13) NaBH₄

- 14) *n*-BuLi, TIPSCl
- 15) TBAF *then* IBX
- 16) **1**, KHMDS

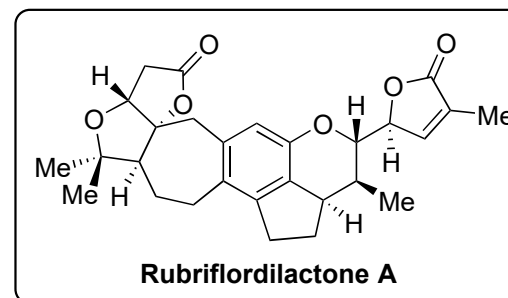


1) Three reactions occur

2) Name of the reaction with CuCN

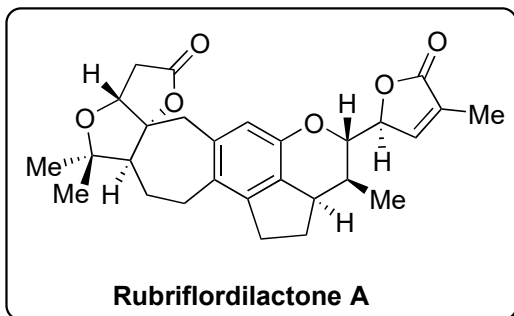
12) Name of the reaction (three reactions occur)

16) Name of the reaction



A

17–18



17) $\text{Sc}(\text{OTf})_3$ then **B**
18) $^1\text{O}_2$, NaBH_4

17) consider α -QM type [4+2] cycloaddition

