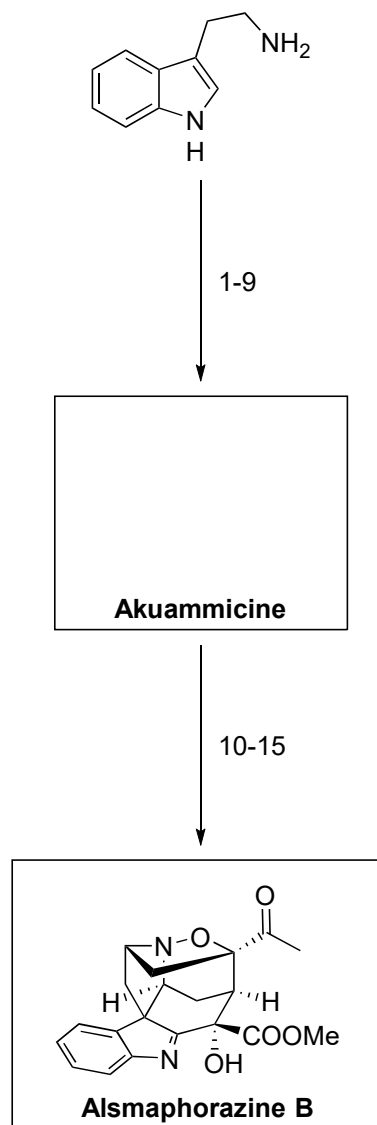
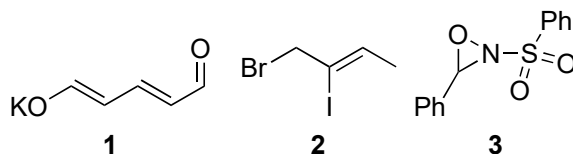


A Synthesis of Alsmaphorazine B Demonstrates the Chemical Feasibility of a New Biogenetic Hypothesis

A. Y. Hong, Ch. D. Vanderwal, *J. Am. Chem. Soc.* **2015**, *137*, 23, 7306–7309.



- 1) *p*-anisaldehyde, NaBH₄, MeOH
- 2) **1**, TFA, MeCN, 0 °C → 23 °C
- 3) KO^{*t*}-Bu, THF, 80 °C
- 4) Boc₂O, DCE, 80 °C
- 5) NaClO₂, NaH₂PO₄, *t*-BuOH, H₂O
- 6) MeI, DBU, MeCN
- 7) CAN, MeCN, H₂O, 0 °C
then **2**, *i*-Pr₂NEt, MeCN, 0 °C
- 8) TFA, DCM
- 9) Pd(OAc)₂, PPh₃, Et₃N, 90 °C



- 10) K₂OsO₄·2H₂O, NMO, citric acid, *t*-BuOH, H₂O
- 11) DMP, *t*-BuOH, DCM
- 12) SmI₂, THF, MeOH
- 13) DMDO, acetone, -78 °C
- 14) DBU, toluene, O₂ (1 atm), 80 °C
- 15) **3**, LiHMDS, THF, -78 °C → 0 °C

- 1) Name of the starting material:
- 2) Name of the functional group (fragment) that was created:
- 5) Name of the reaction:
- 9) Name of the reaction:
- 15) Name of the reagent **3**: