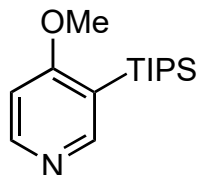


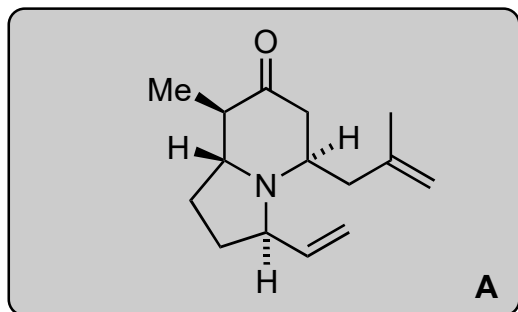
Concise Total Synthesis of the Frog Alkaloid (-)-205 B

Tsukanov, S. V.; Comins, D. L.

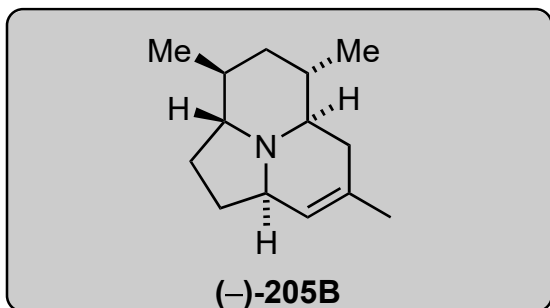
Angew. Chem. Int. Ed. **2011**, 50, 8626. DOI: 10.1002/anie.201103596



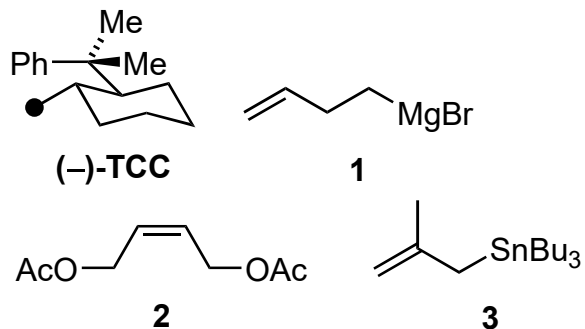
1-6



7-11



- 1) (-)-TCCOCOCi then **1** then HCl
- 2) NaOMe, MeOH then HCl
- 3) **2**, Grubbs II
- 4) [Pd₂(dba)₃], P(tBu)₃, Cs₂CO₃, 75 °C
- 5) LDA, MeI then LDA
- 6) **3**, TFAA



- 7) Grubbs II
- 8) NaHMDS, HMPA, MeI
- 9) Li, NH₃, isoamyl alcohol
- 10) thiocarbonyldiimidazole, DMAP
- 11) AIBN, HSnBu₃, PhSeSePh

- 2) What is the role of HCl?
protodesilylation
- 4) Name of reaction? Tsuji-Trost
- 5) HINT: additional LDA epimerizes

- 9) Name a few reasons these conditions might have been chosen.
- 11) What is the role of PhSeSePh?

9: Hindered carbonyl resistant to condensation; product alcohol prone to elimination; avoid epimerization.
11: React with HSnBu₃ to generate more reactive HSePh, accelerating trapping of alkyl radical intermediate.