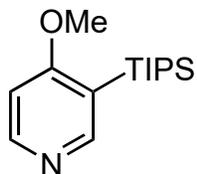


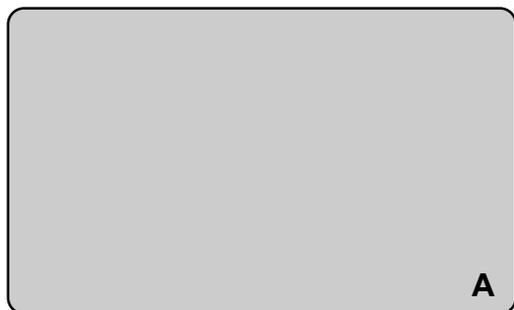
## Concise Total Synthesis of the Frog Alkaloid (-)-205 B

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

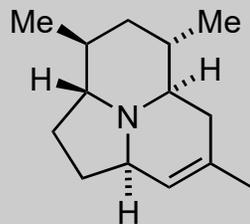
*Angew. Chem. Int. Ed.* **2011**, *50*, 8626. DOI: 10.1002/anie.201103596



1-6

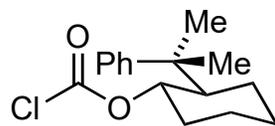


7-11

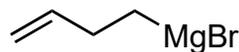


**(-)-205B**

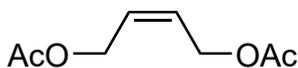
- 1) **1** then **2** then HCl
- 2) NaOMe, MeOH then HCl
- 3) **3**, Grubbs II
- 4) [Pd<sub>2</sub>(dba)<sub>3</sub>], P(tBu)<sub>3</sub>, Cs<sub>2</sub>CO<sub>3</sub>, 75 °C
- 5) LDA, MeI then LDA
- 6) **4**, TFAA



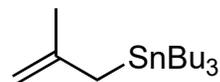
**1**



**2**



**3**



**4**

- 7) Grubbs II
- 8) NaHMDS, HMPA, MeI
- 9) Li, NH<sub>3</sub>, isoamyl alcohol
- 10) thiocarbonyldiimidazole, DMAP
- 11) AIBN, HSnBu<sub>3</sub>, PhSeSePh

0) Draw a reagent developed by Comins

- 1) HINT: HCl promotes one step
- 2) What are the two roles of HCl?

- 4) Name of reaction?
- 5) HINT: additional LDA improves d.r.

9) Name a few reasons these conditions might have been chosen.

11) What is the role of PhSeSePh?