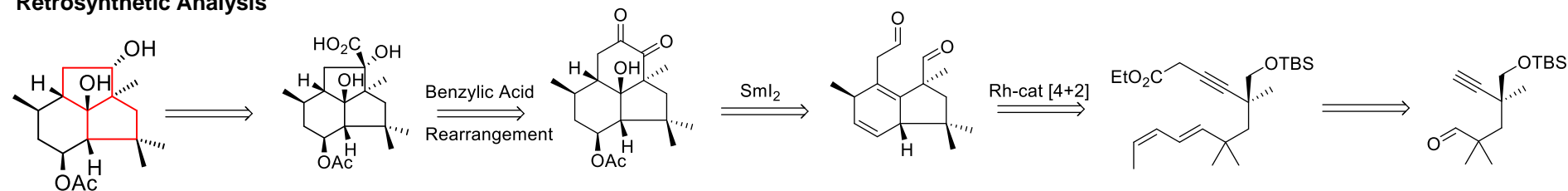
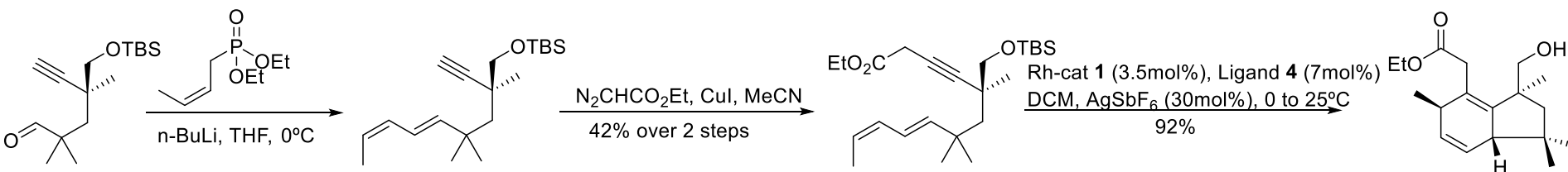


- Bicyclo[3.3.0]octane rings present in several natural products
- Core with antifungal, phytotoxic and antibiotic activities
- Isolated from *Botrytis cinerea* in 2001
- Strained trans bicyclo[3.3.0]octane
- 7 stereocentres

## Retrosynthetic Analysis



## Diastereoselective Synthesis of Diene by Rh-catalyzed [4+2] Cycloaddition



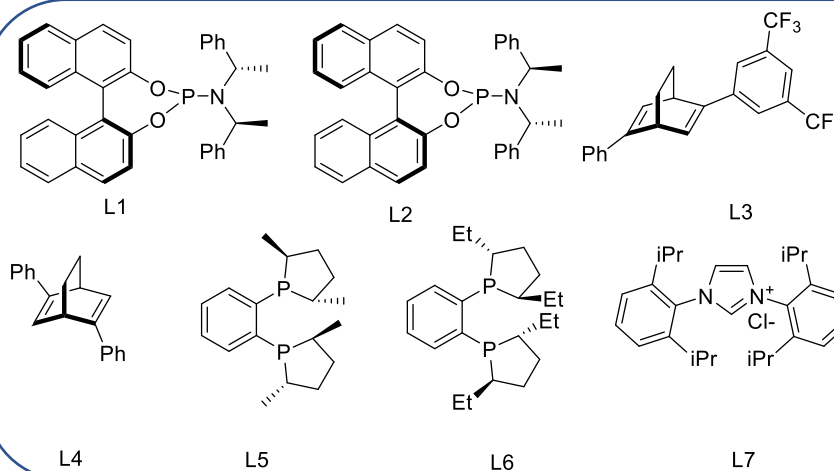
### Rhodium Catalyst Scope



Rh-cat 1

Rh-cat 2

### Ligand Scope



L4

L5

L6

L7

**Total Synthesis of 4β-Acetoxyprobotryane-9β,15α-diol**

