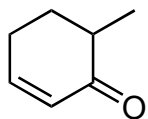


## Total Synthesis of Andiroside N via 8- $\alpha$ -Hydroxycarapin

A. W. Schuppe, T. R. Newhouse, *J. Am. Chem. Soc.* **2017**, *139*, 631–634.

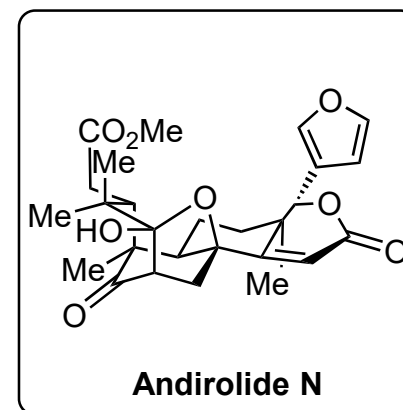
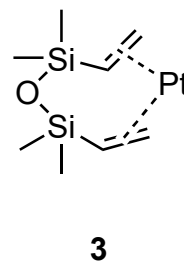
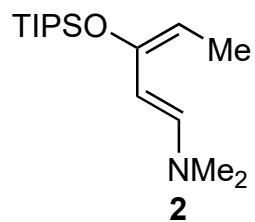
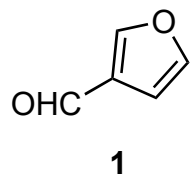
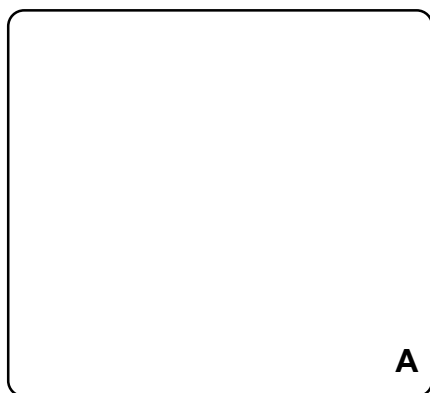


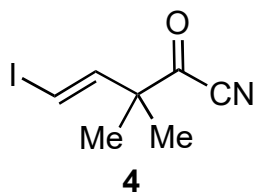
- 1) LDA, **1** then AcCl  
2) **2**, PhCF<sub>3</sub>, 140 °C  
3) KHMDS *then* TsOH  
4) **3**, Et<sub>3</sub>SiH *then* DBU, O<sub>2</sub>, P(OMe)<sub>3</sub>  
5) TMSCl, ImH

How would you make the starting material?

2) Name of **2**

4) Name of the catalyst





- 6) LiHMDS, **4**  
7) Cs<sub>2</sub>CO<sub>3</sub>, allyliodide  
8) Pd(dppf)Cl<sub>2</sub>, CO, MeOH, Et<sub>3</sub>N  
9) KHMDS  
10) PdCl<sub>2</sub>(MeCN)<sub>2</sub>  
11) OsO<sub>4</sub>, Oxone *then* H<sub>2</sub>SO<sub>4</sub>

6) Name the functional groups in **4**

