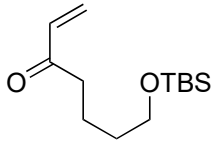
# Concise Total Synthesis of Peyssonnoside A

Chesnokov, G. A.; Gademann, K. *J. Am. Chem. Soc*. **2021**, *143*, 14083-14088.

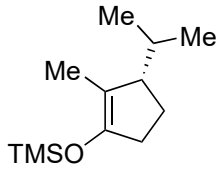



1 - 4

**A**

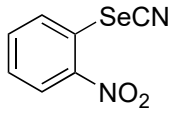
5 - 9

1) $BF_3$•$OEt_2$, *i*-PrOH, **1**
2) NaOMe *then* TBSCl, Im-H
3) $NaBH_4$, $CeCl_3$•$7H_2O$
4) $ZnEt_2$, $CHI_3$




**1**

5) TMSCl, Im-H
6) *t*-BuLi, CuCN *then* MethallylBr
7) TBAF
8) **2**, $PBu_3$
9) *m*-CPBA, $Et_3N$

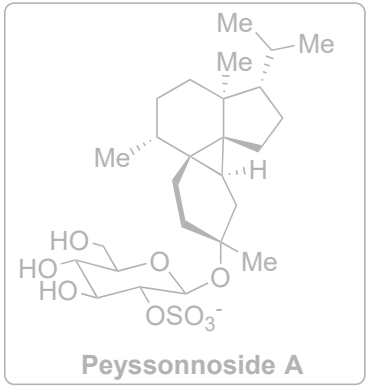



**2**

1) - 4) Name of the reactions?

4) Selectivity of the reaction? Transition state?

8) + 9) Name of the reaction?




**Peyssonnoside A**

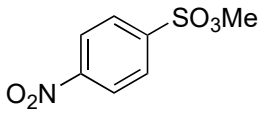
**B**

10-14

**C**

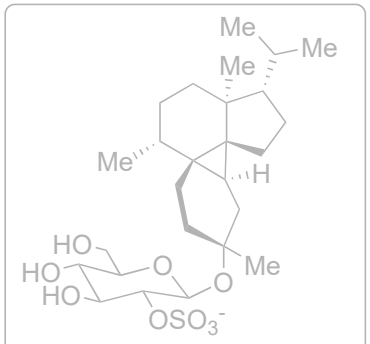
Peyssonnosol

10) HG-II
11) TPAP, NMO
12) $PhSiH_3$, **3**, $Fe(acac)_3$, $NaHCO_3$
13) $Ph_3PMeBr$, KO*t*-Bu
14) $H_2$, $Rh/Al_2O_3$




**3**

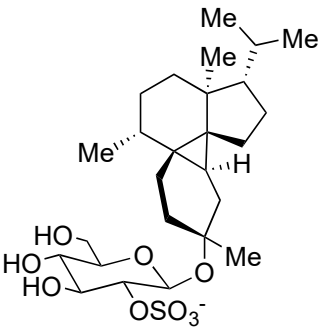
11) - 12) Name of the reactions?



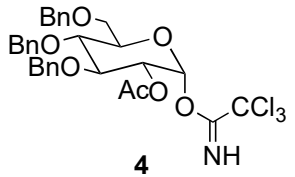

**Peyssonnoside A**

15-18

15) AgOTf, **4**
16) KOH
17) Py•$SO_3$, Pyridine
18) $H_2$, $Pd(OH)_2$/C




**Peyssonnoside A**




**4**