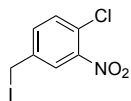


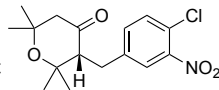
# E159: Synthesis of (-)-Nodulisporic Acid D

Name of the reaction  
Mechanism  
Stereoselectivity

1)  $\text{BH}_3 \cdot \text{THF}$ ,  
THF, 0 °C to rt  
2)  $\text{I}_2$ ,  $\text{PPh}_3$ , NMI,  
DCM



3) **A**,  $t\text{-BuLi}$ , THF, -78 °C  
4)  $\text{O}_3$ , then  $\text{PPh}_3$ , DCM, -78 °C then rt



5)



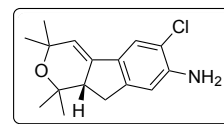
6)



7)

Name of the reaction

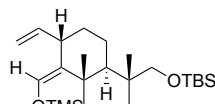
8)  $\text{Pd}(\text{PPh}_3)_4$ ,  
 $(\text{Me}_3\text{Sn})_2$ ,  $\text{LiCl}$ ,  
1,4-dioxane, 100 °C



A

B

9)  $\text{VinylMgBr}$ ,  $\text{CuBr} \cdot \text{Me}_2\text{S}$ ,  
HMPA,  $\text{TMSCl}$   
 $\text{Me}_2\text{S}$ , THF, -78 °C



d.r > 15:1

10)  $\text{MeLi}$ ,  $\text{MeI}$   
diglyme,  
0 °C then -78 °C to rt



d.r = 5:1

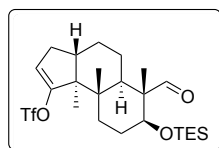
11)  
12)  
13)



14)



15)



18)



17)



16)



# E159: Synthesis of (–)-Nodulisporic Acid D

