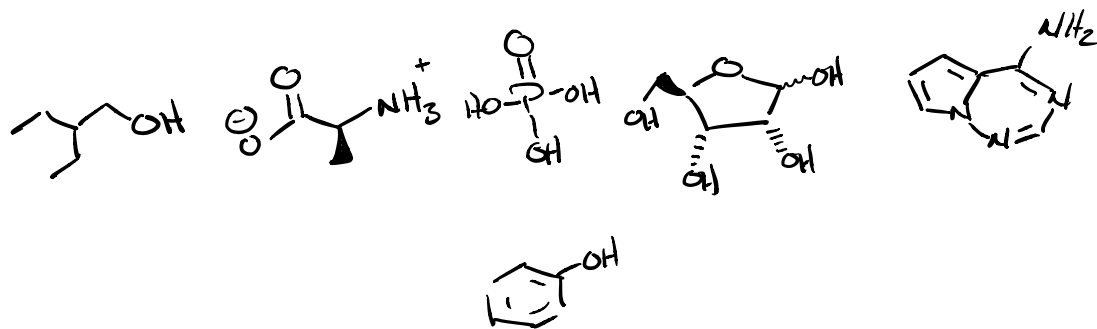
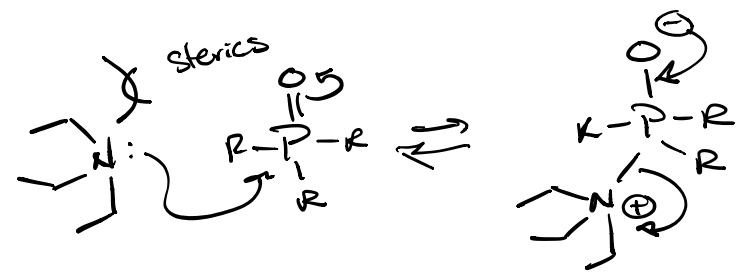
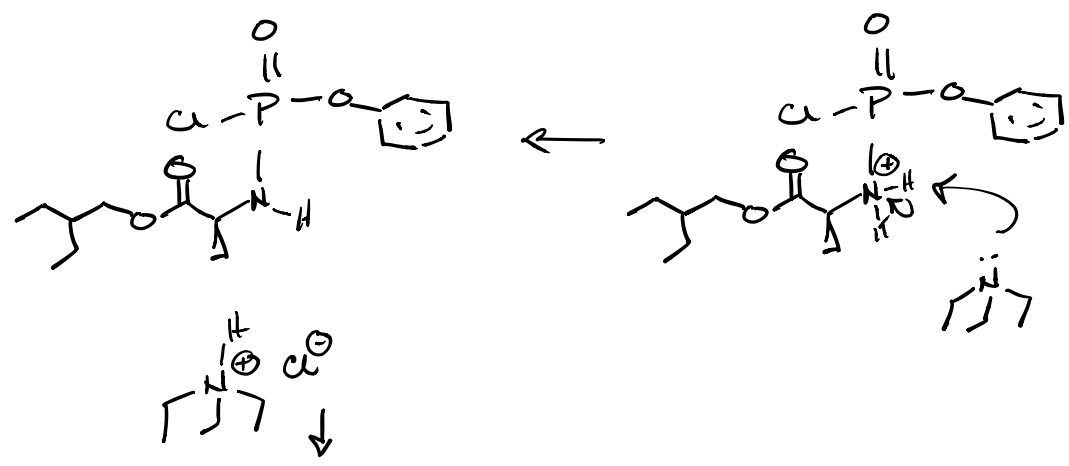
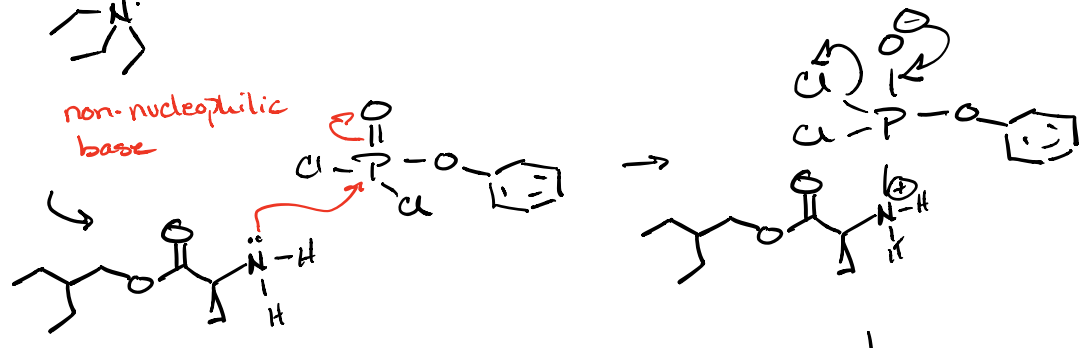
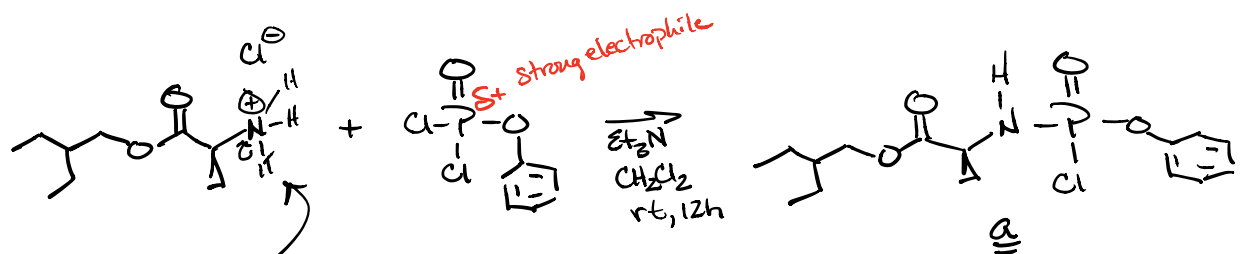
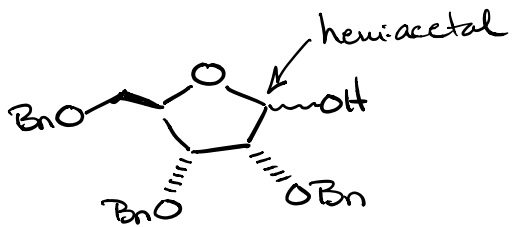


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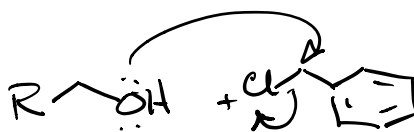
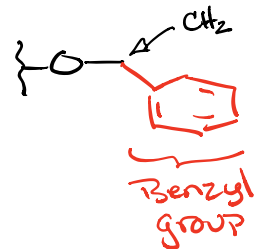
~ = Bond disconnect



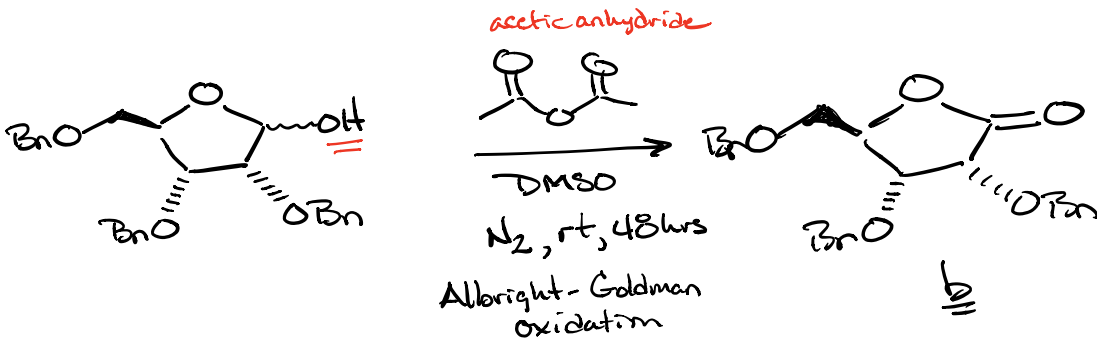
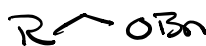
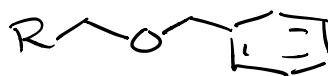




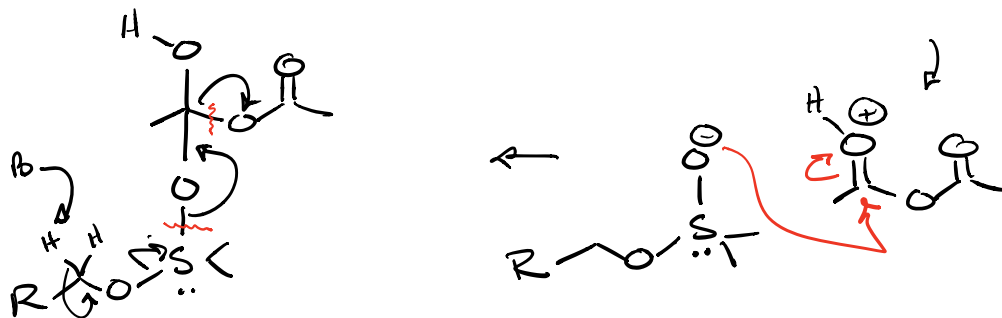
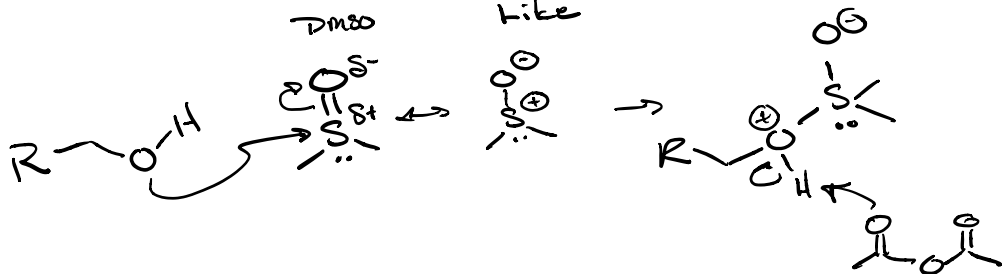
Bn = Benzyl ether

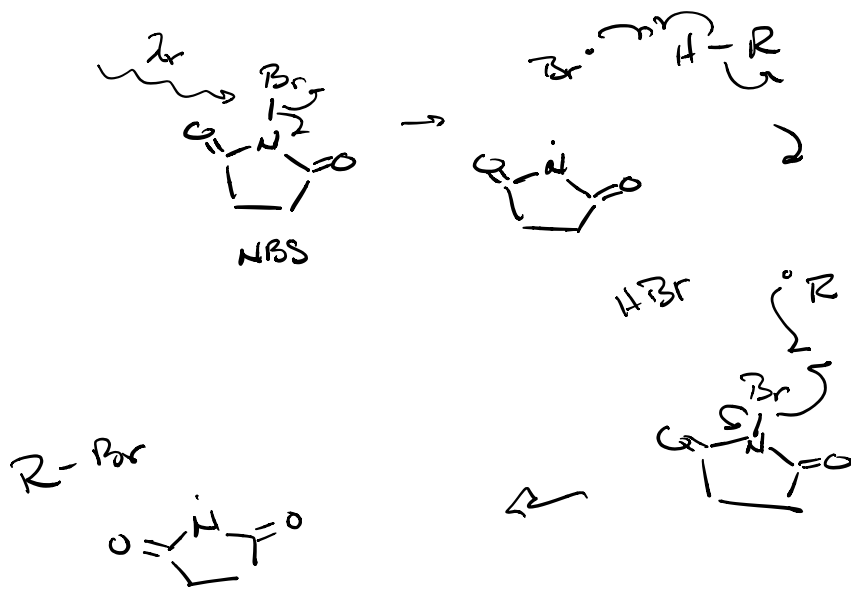
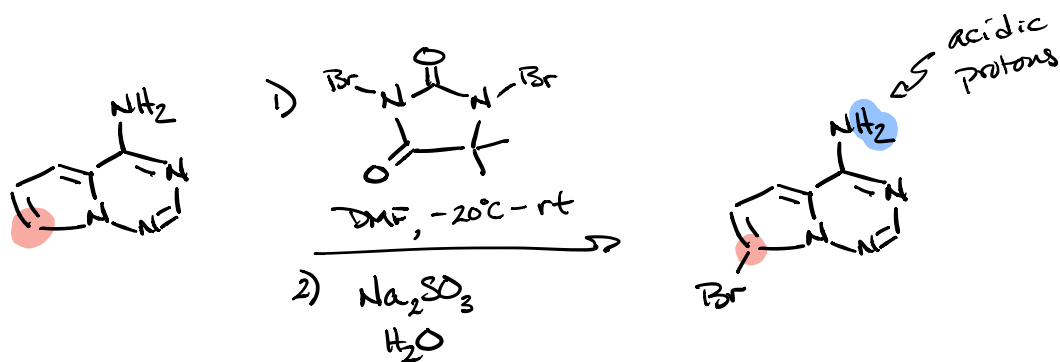
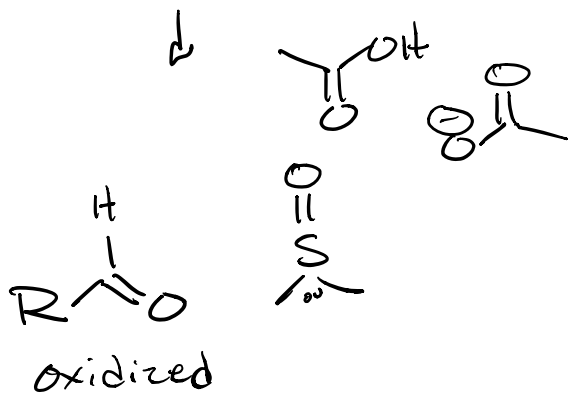


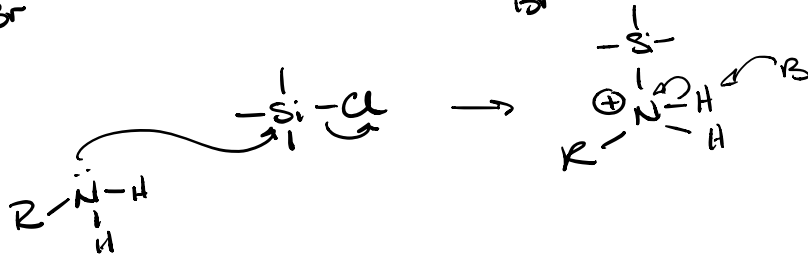
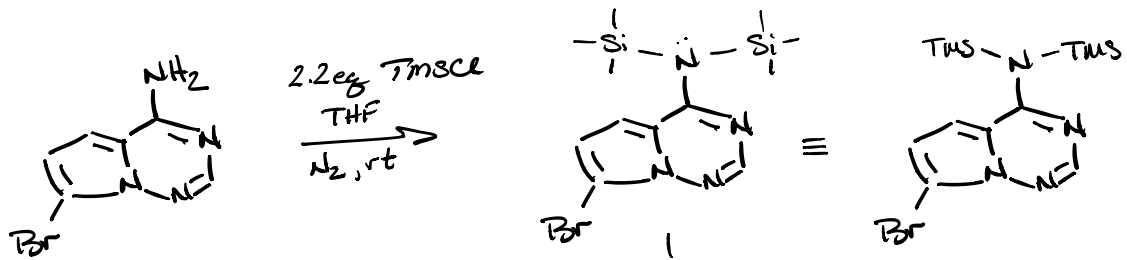
S_N2
 $R_{OH} \xrightarrow{Et_3N}$



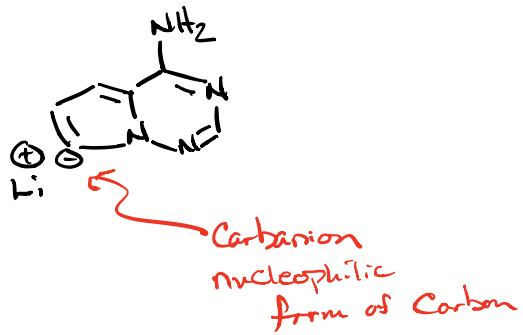
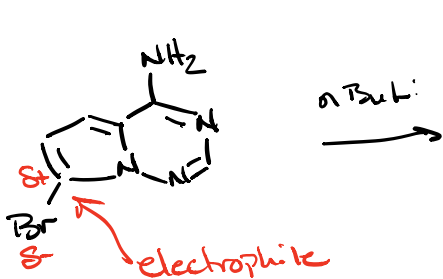
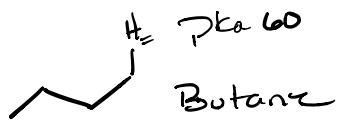
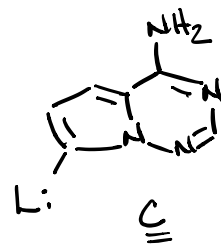
Swern oxidation like

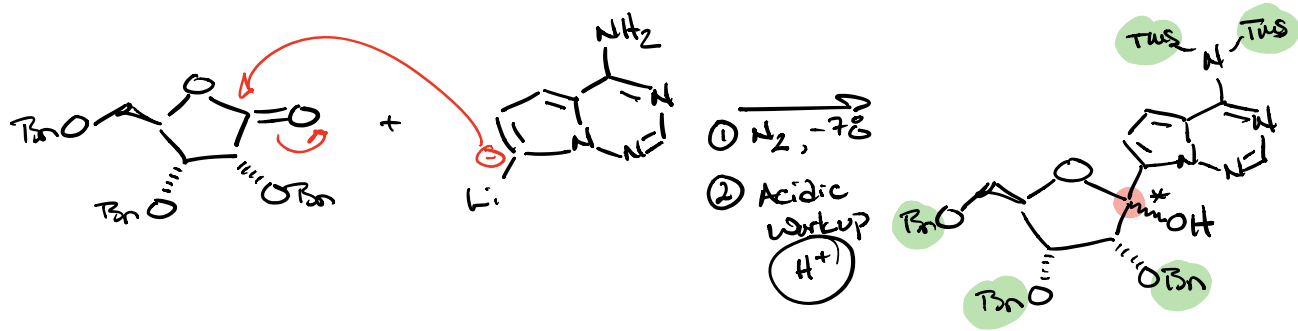




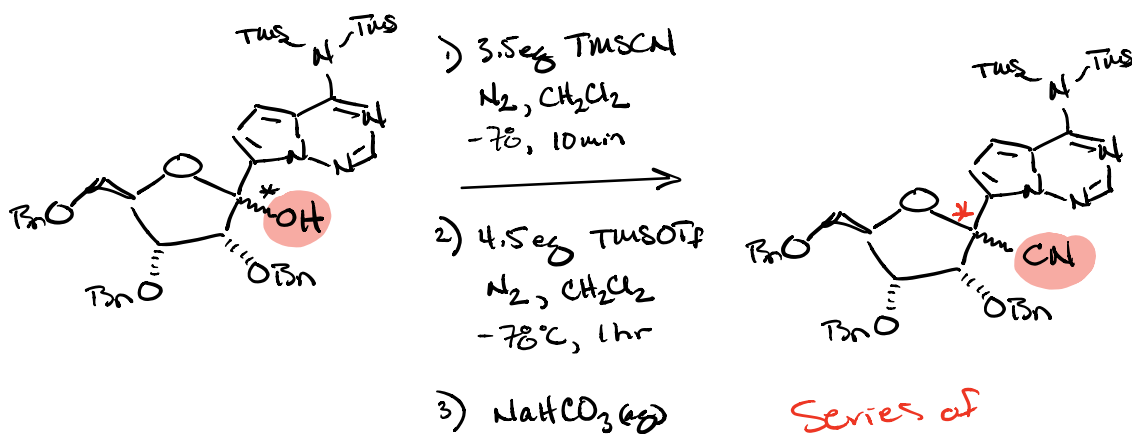


4 eq
 n-BuLi
 $\text{N}_2, -78^\circ\text{C}$



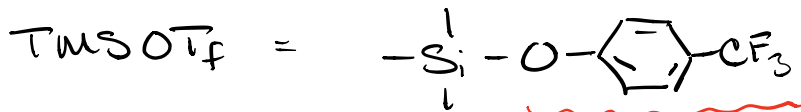


1:1 mixture of diastereomers

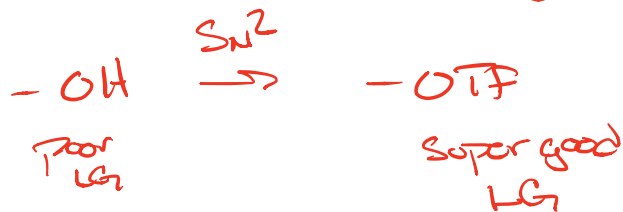


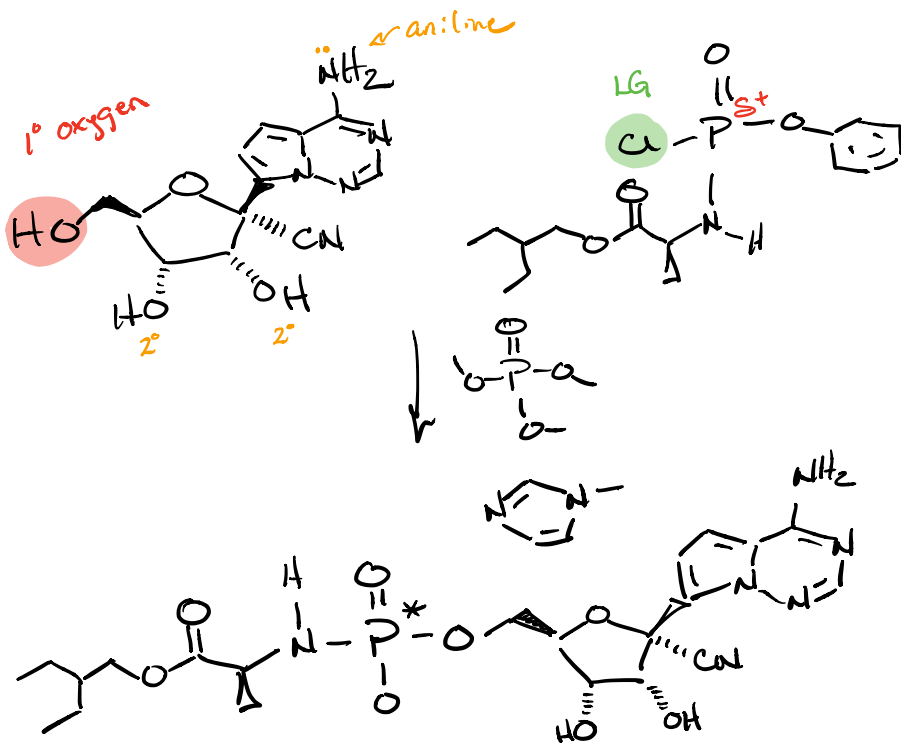
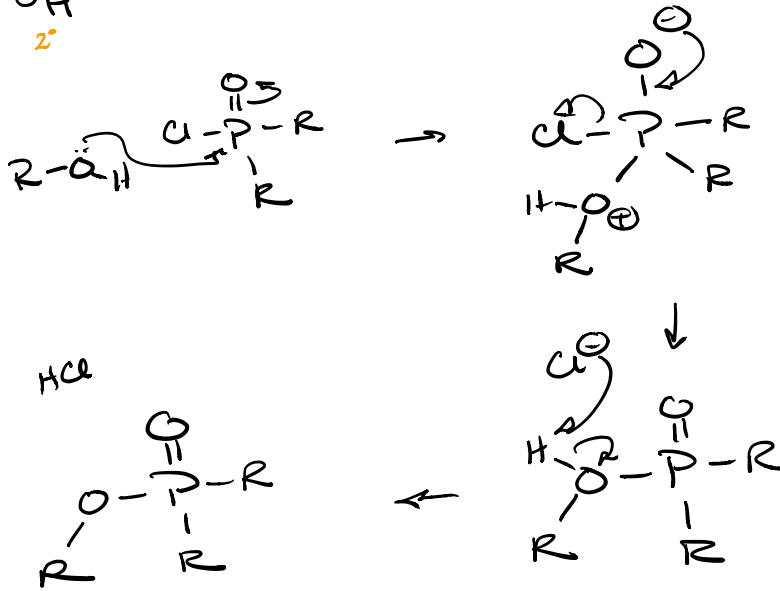
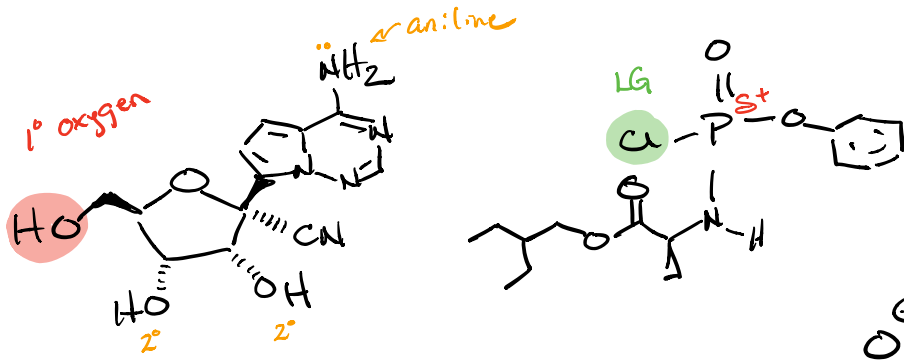
Series of S_N2

1:1 mixture of diastereomers still

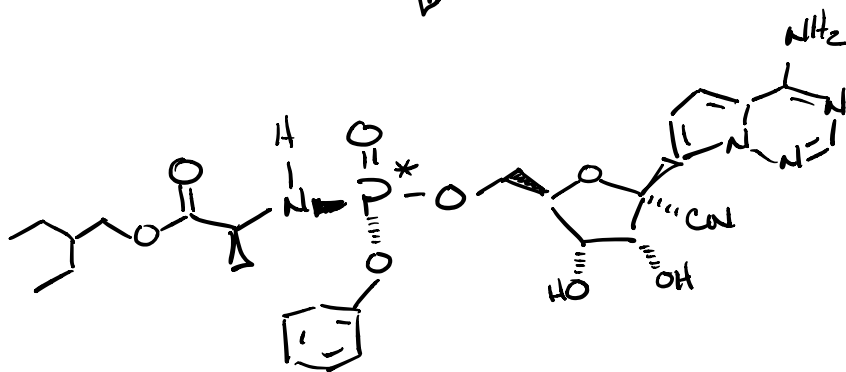


OTf = super good LG

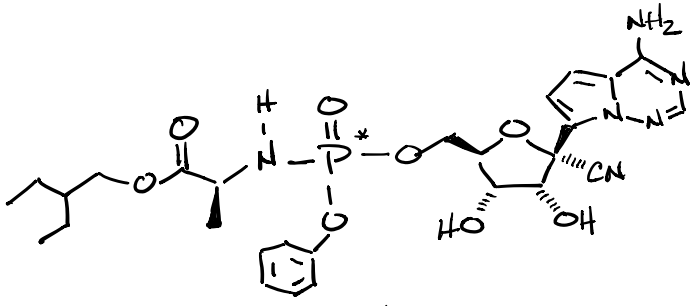
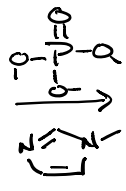
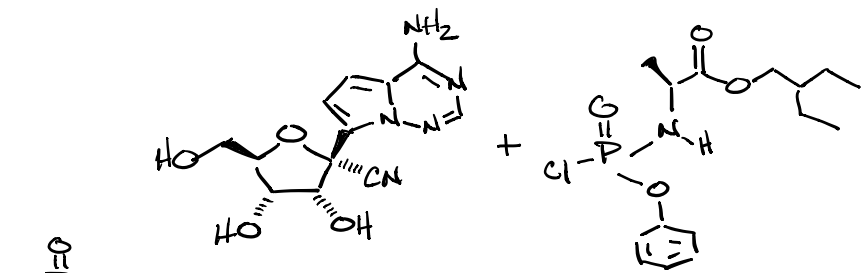




Chiral Resolution

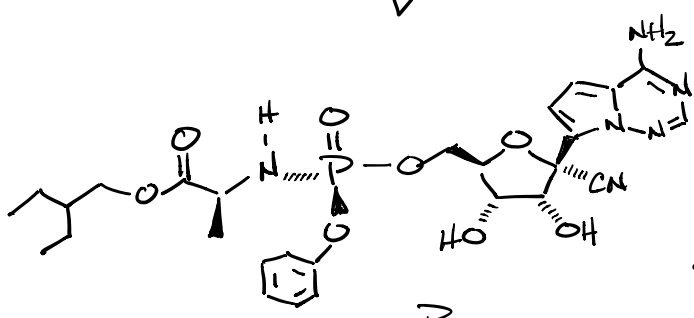


Remdesivir
50% yield



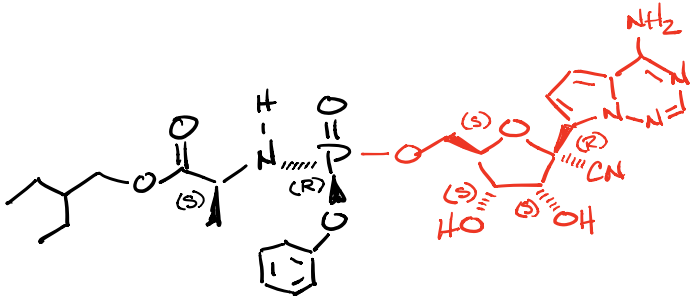
mixture diastereomers

Resolution

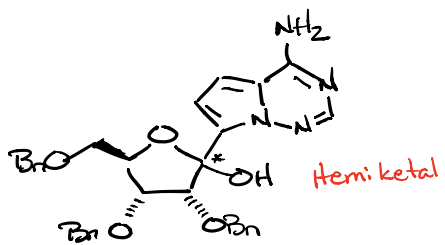


50% yield

REMDESIVIR

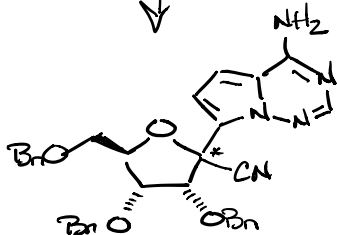


6 stereocenters

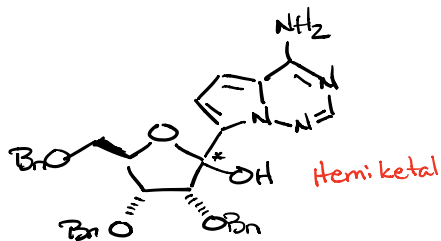


* 1:1 anomers

- 1) 3.5 eq TMSCN
N₂, DCM
-78°C, 10 min
- 2) 4.5 eq TMSOTf
N₂, DCM
-78°C, 1h
- 3) NaHCO₃ (aq)

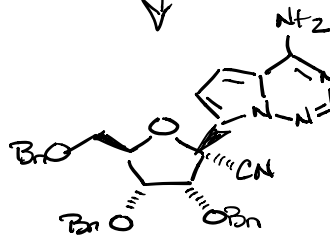


* 1:1 anomers



* 1:1 anomers

?



Stereoselective
Synthesis