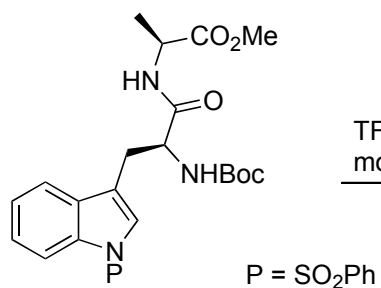
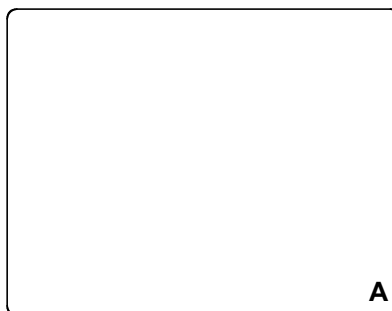


Total Synthesis of (+)-11,11'-Dideoxyverticillin A

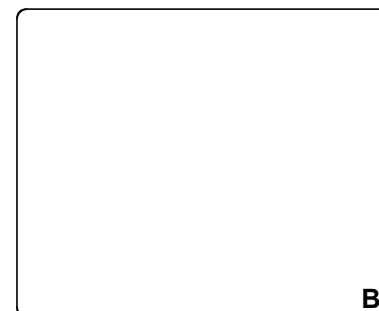
Kim, J.; Ashenhurst, J.A.; Movassaghi, M. *Science*, 2009, **324**, 238



TFA;
morpholine



Br_2

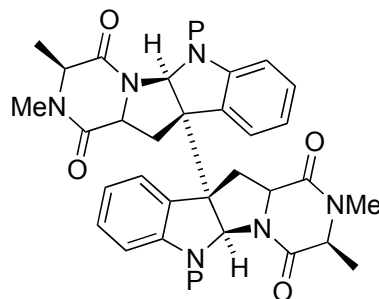


Mel

From which two amino acids?

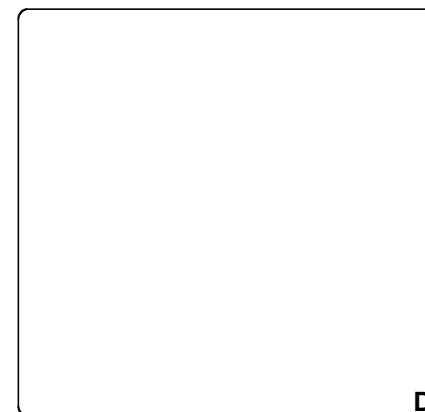


$\text{CoCl}(\text{PPh}_3)_3$
(1.5 eq)
46%



$\text{Py}_2\text{AgMnO}_4$
(5 eq)
63%

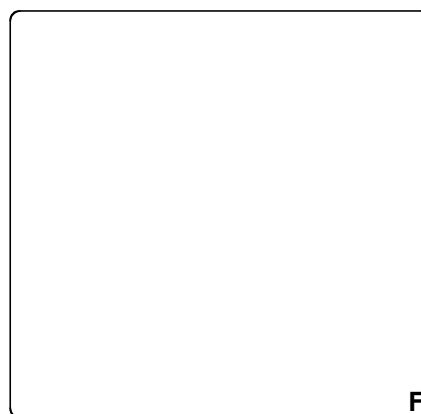
Why does this radical
Ox react selectively?



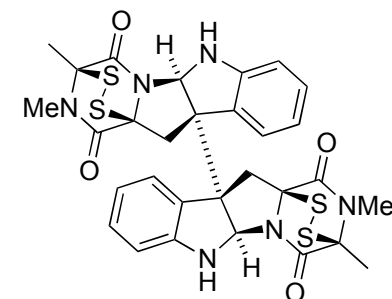
1) TBSCl,
PPY, NEt_3
2) Na(Hg)



K_2CS_3 ,
TFA



Side product?
 $\text{NH}_2(\text{CH}_2)_2\text{OH}$
then
 KI_3 , Pyr



(+)-11,11'-Dideoxyverticillin A

