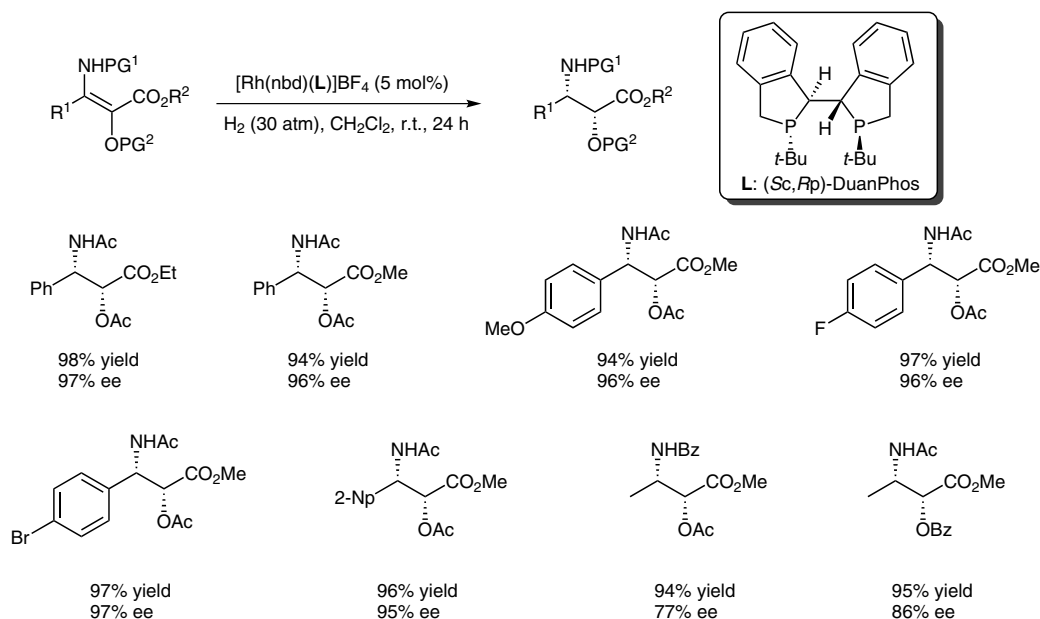


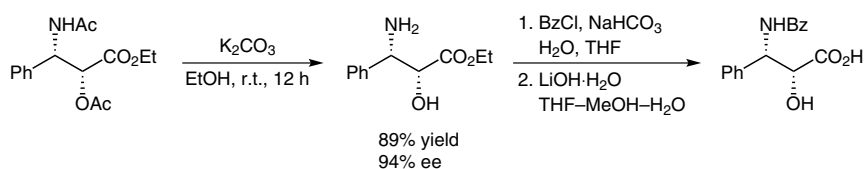
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Rhodium-Catalyzed Enantioselective Hydrogenation of Tetrasubstituted α -Acetoxy β -Enamido Esters: A New Approach to Chiral α -Hydroxy- β -amino Acid Derivatives
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Rhodium-Catalyzed Enantioselective Hydrogenation of Enamido Esters



Synthesis of the taxol C13 side chain:



Significance: Lv, Zhang and colleagues present a rhodium-catalyzed asymmetric hydrogenation of α -acetoxy β -enamido esters. A series of chiral α -hydroxy- β -amino acid derivatives were prepared in high yields (up to 98%) with excellent enantioselectivities (up to 97% ee).

Comment: $[Rh(nbd)(Sc,Rp)\text{-DuanPhos}]\text{BF}_4$ is found to be an effective catalyst for the enantioselective hydrogenation of tetrasubstituted enamides. The synthetic utility of this method is demonstrated by the synthesis of biologically important molecules.