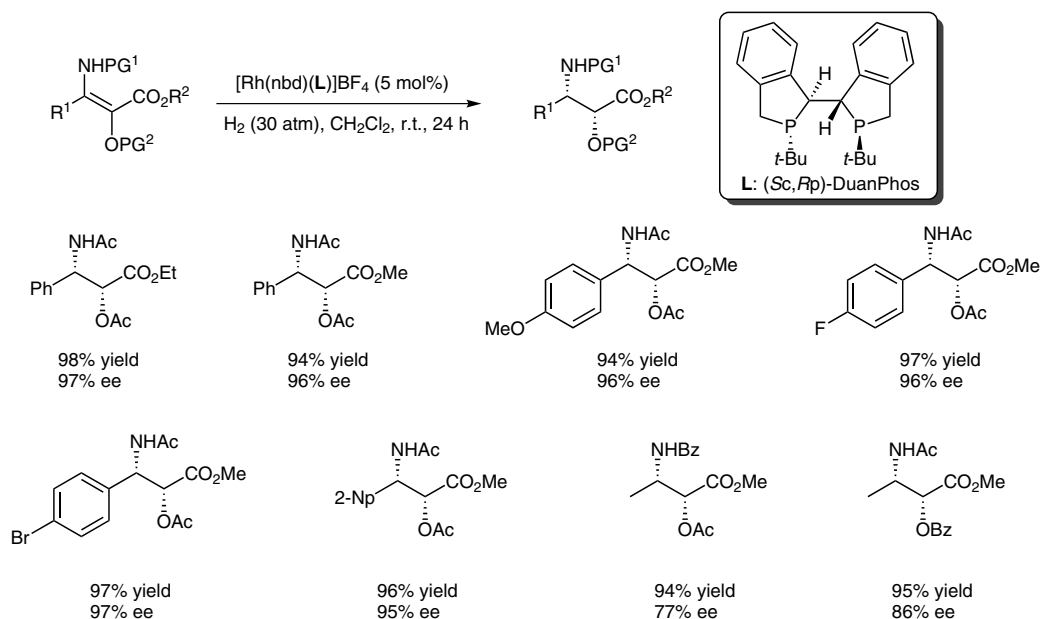


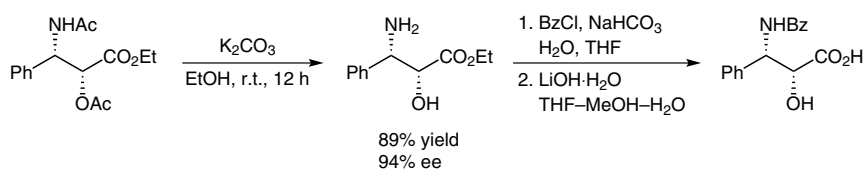
Q. WANG, W. HUANG, H. YUAN, Q. CAI, L. CHEN, H. LV,* X. ZHANG* (WUHAN UNIVERSITY, P. R. OF CHINA)

Rhodium-Catalyzed Enantioselective Hydrogenation of Tetrasubstituted α -Acetoxy β -Enamido Esters: A New Approach to Chiral α -Hydroxy- β -amino Acid Derivatives
J. Am. Chem. Soc. **2014**, *136*, 16120–16123.

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: $[\text{Rh}(\text{nbd})(\text{Sc},\text{Rp})\text{-DuanPhos}]\text{BF}_4$ 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.

SYNFACTS Contributors: Hisashi Yamamoto, Masahiro Sai
Synfacts 2015, 11(1), 0050 Published online: 15.12.2014
DOI: 10.1055/s-0034-1379759; **Reg-No.:** H16514SF

2015 © THIEME STUTTGART • NEW YORK