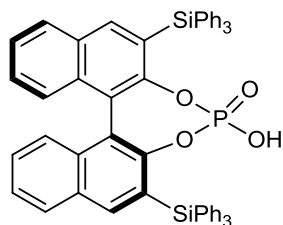
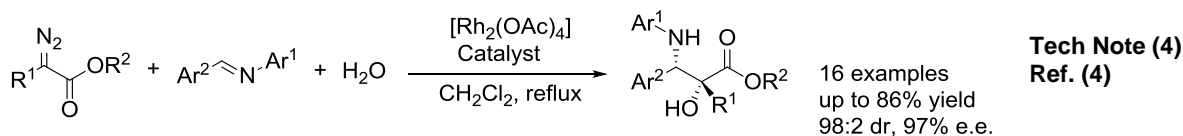
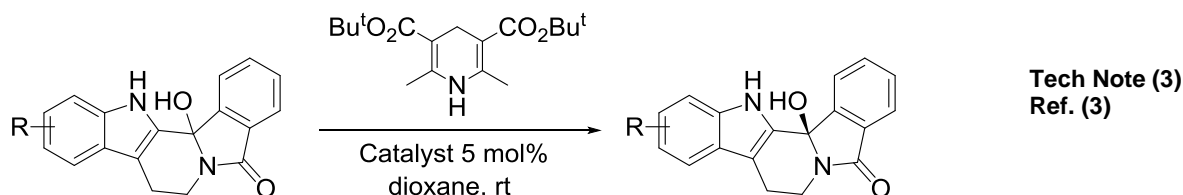
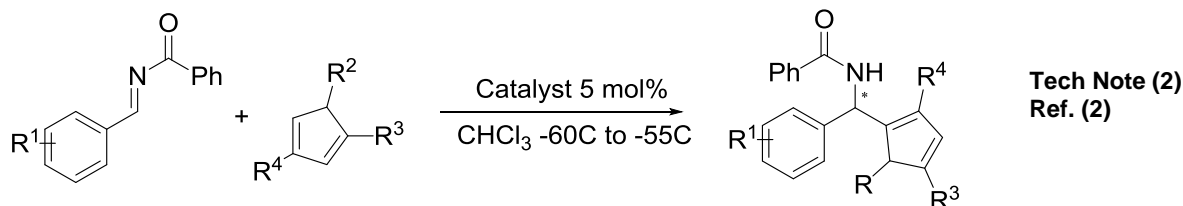
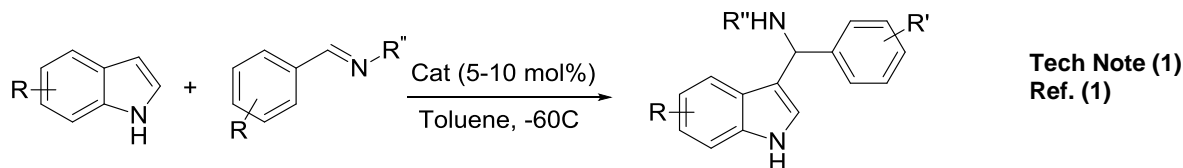


Catalog # 15-0341 (S)-(+)-3,3'-Bis(triphenylsilyl)-1,1'-binaphthyl-2,2'-diyl hydrogen phosphate, min. 98% [(S)-TiPSY]



Technical Notes:

- Friedel-Crafts Reaction:** Catalyst for the highly enantioselective Friedel-Crafts reactions of indoles with imines.
- Catalyst used in the highly enantioselective Friedel-Crafts reaction of pyrrole derivatives with N-acyl imines.
- Transfer Hydrogenation:** Chiral phosphoric acid catalyzed enantioselective transfer hydrogenation of hydroxylactams to provide enantioenriched tetrahydro- β -carbolines in dioxane at room temperature (up to 94% yield, 90% ee).
- Multicomponent Reaction:** Catalyzed by $[\text{Rh}_2(\text{OAc})_4]$ and a chiral phosphoric acid, an enantioselective symmetric three-component reaction of diazo compounds with imines and water is reported to give β -amino- α -hydroxy acid derivatives.



References:

- J. Am. Chem. Soc.*, **2007**, 129, 1484-1485.
- Org. Lett.*, **2007**, 9, 4065-4068.
- Org. Lett.*, **2013**, 15, 2688-2691.
- ChemCatChem*, **2011**, 3, 653-656.