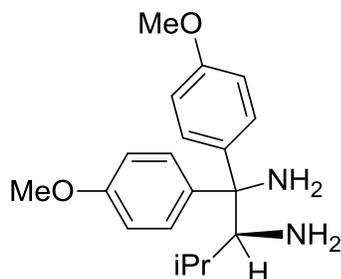
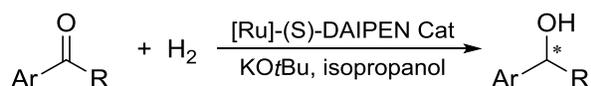


Catalog # 07-0211 (2S)-(-)-1,1-Bis(4-methoxyphenyl)-3-methyl-1,2-butanediamine, min. 97% (S)-DAIPEN

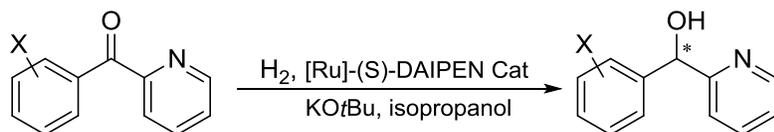


Technical Notes:

1. Used in the ruthenium-catalyzed enantioselective hydrogenation of aromatic of aldehydes and ketones.
2. Ligand for the ruthenium-catalyzed enantioselective hydrogenation of aryl-pyridyl ketones.
3. Ligand for the enantioselective Ruthenium(II)/Xyl-SunPhos/Daipen-catalyzed hydrogenation of γ -ketoamides.
4. Ligand for the enantioselective Ruthenium(II)/Xyl-SunPhos/Daipen-catalyzed enantioselective hydrogenation of ferrocenyl ketones to produce ferrocenyl alcohols.

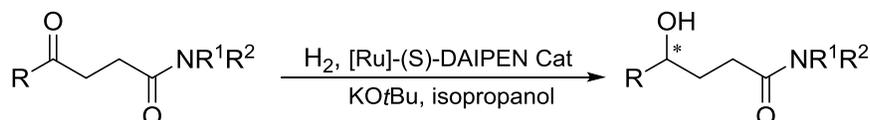


Tech. Note (1)
Refs. (1-3)



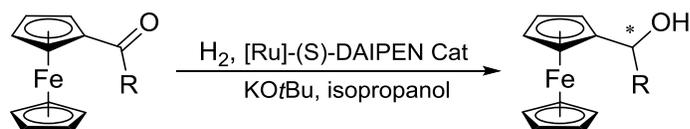
Tech. Note (2)
Ref. (4)

X = CH₃, CH₃O, F, Cl, Br



Tech. Note (3)
Ref. (5)

R = Aryl, Alkyl



Tech. Note (4)
Ref. (5)

References:

1. *J. Am. Chem. Soc.*, **1995**, 117, 2675.
2. *J. Am. Chem. Soc.*, **1995**, 117, 10417.
3. *Angew. Chem. Int. Ed.*, **1998**, 37, 1730.
4. *J. Org. Chem.*, **2012**, 77, 612.
5. *J. Org. Chem.*, **2014**, 79, 6164.
6. *J. Org. Chem.*, **2015**, 80, 9563.