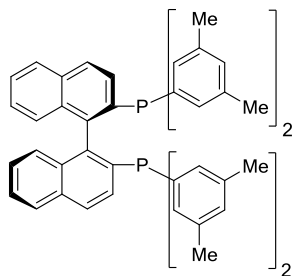


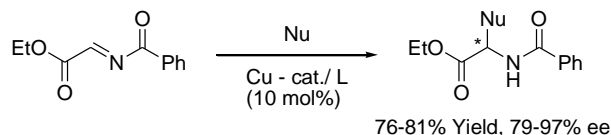
Catalog # 15-0476 (R)-(+)-2,2'-Bis[di(3,5-xylyl)phosphino]-1,1'-binaphthyl, 98% (R)-(+)-XylylBINAP



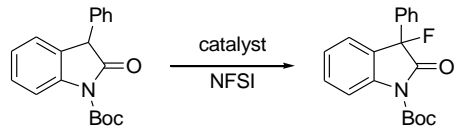
Note: Takasago BINAP Ligand Kit component.

Technical Notes:

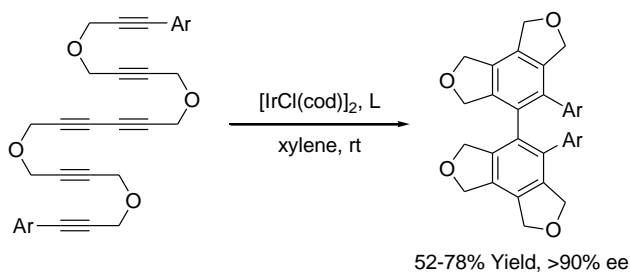
1. See [15-0150](#).
2. See [15-0477](#).
3. Ligand used in copper-catalyzed asymmetric Mannich-type reactions of N-acylimino esters.
4. Ligand used in the enantioselective fluorination of oxindoles.
5. Ligand used in [2+2+2] cycloaddition of tetraynes and hexaynes.
6. Ligand used in the asymmetric reduction of ketone *via* ruthenium-catalyzed asymmetric hydrogenation.
7. Asymmetric hydroboration of unsaturated imines.



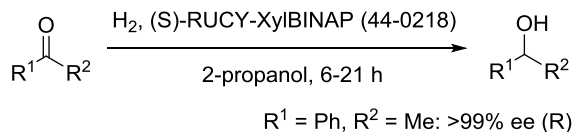
Tech. Note (3)
Ref. (1)



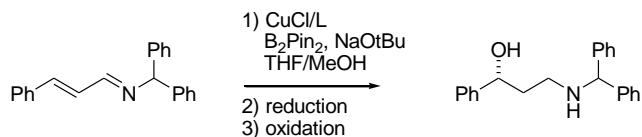
Tech. Note (4)
Ref. (2)



Tech. Note (5)
Ref. (3)



Tech. Note (6)
Ref. (4)



Tech. Note (7)
Ref. (5)

References:

1. *J. Am. Chem. Soc.*, **2003**, 125, 2507.
2. *J. Am. Chem. Soc.*, **2005**, 127, 10164.
3. *Tetrahedron*, **2008**, 64, 821.
4. *J. Am. Chem. Soc.*, **2011**, 133, 10696.
5. *Org. Lett.*, **2013**, 15, 4810.