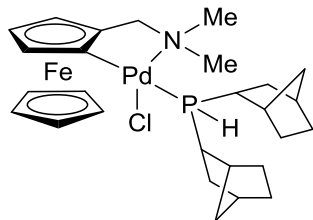


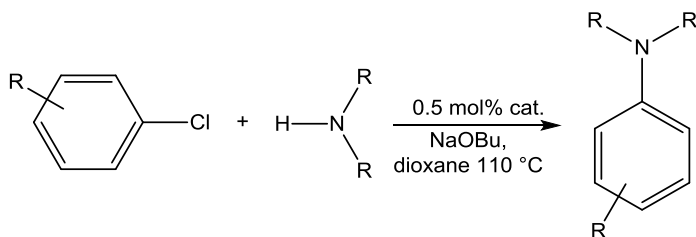
Catalog # 46-0272 Chloro(di-2-norbornylphosphino)(2-dimethylaminomethylferrocen-1-yl)palladium(II), min. 97%



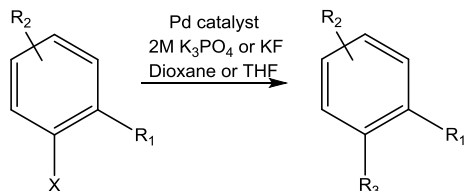
Note: Sold in collaboration with Solvias for research purposes only. EP 1132361 (B1), 2001.

Technical Note:

1. Efficient catalyst for the amination of aryl chlorides
2. Catalyst used for the efficient synthesis of substituted biaryl anilines and biaryl phenols.
3. Catalyst used for the direct vinylation, and difluorovinylation, of arylboronic acids.
4. Catalyst used in the Heck coupling of vinyl phosphates.

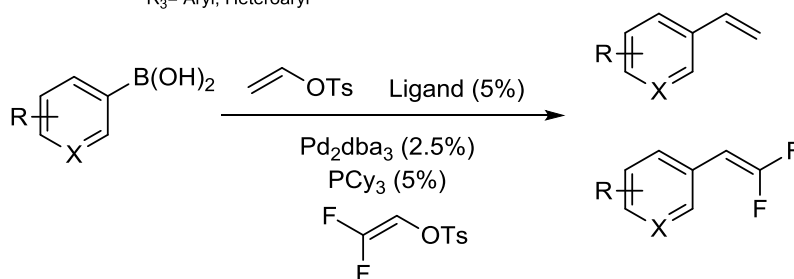


Tech. Note (1)
Ref. (1)

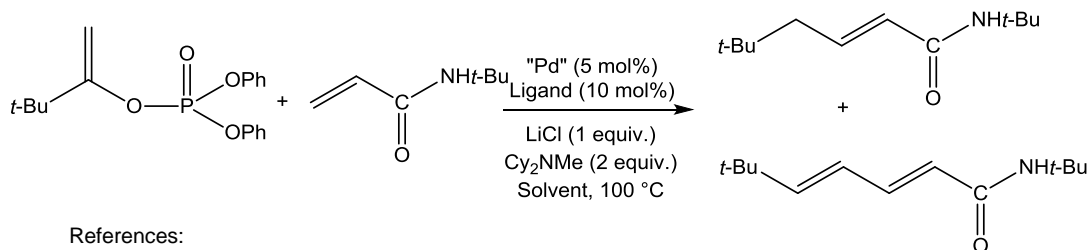


X = Cl or Br
R₁ = NH₂ or OH
R₂ = COOMe, CONH₂, CN or Alkyl group
R₃ = Aryl, Heteroaryl

Tech. Note (2)
Ref. (2)



Tech. Note (3)
Ref. (3)



Tech. Note (4)
Ref. (4)

References:

1. *Synlett*, **2004**, 14, 2549.
2. *Tetrahedron Lett.*, **2005**, 46, 1779.
3. *J. Org. Chem.*, **2008**, 73, 3404.
4. *J. Am. Chem. Soc.*, **2007**, 129, 6931.