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Catalog # 07-1170 (2R)-(-)-N-Methyl-α,α-diphenyl-2-pyrrolidinemethanol, min. 98%

Technical Notes:

- 1. Chiral amino alcohol assisted asymmetric, enantioselective, aryl transfer of triphenylboroxin to a set of aryl aldehydes in the presence of chiral amino alcohols derived from (S)-proline.
- 2. Catalyzed, asymmetric aryl transfer reactions to aldehydes with boroxines as aryl sources..
- 3. Catalytic asymmetric arylation of aldehydes with aryl boronic acids using the pyrrolidinylmethanols as ligands.
- Catalyst used for the highly enantioselective synthesis of chiral allylic alcohols by asymmetric addition of trialkenyl bismuthines/dialkylzincs to aldehydes.
- 5. Ligand used in the enantioselective aryl transfer to aldehydes using a Ar²₃Bi/Me₂Zn reagent.

RCHO +
$$\frac{1}{3}$$
 Bi $\frac{1}{3}$ Me₂Zn $\frac{1}{3}$ Ligand (5 mol%) Ref. (3)

Ar¹CHO + Ar²₃Bi / Me₂Zn
$$\xrightarrow{\text{Ligand (10 mol\%)}}$$
 $\xrightarrow{\text{Usuane/hexane}}$ $\xrightarrow{\text{Usuane/hexane}}$ $\xrightarrow{\text{OH}}$ $\xrightarrow{\text{Ref. (4)}}$ $\xrightarrow{\text{Ref. (4)}}$

References:

- 1. Tetrahedron Asymmetry, 2005, 16, 2299.
- 2. Tetrahedron Lett., 2005, 46, 7827.
- 3. Tetrahedron Asymmetry, 2007, 18, 2638.
- 4. Eur. J. Org. Chem., 2007, 2608.