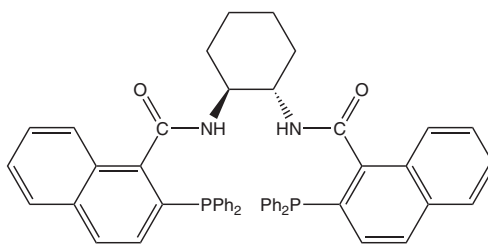


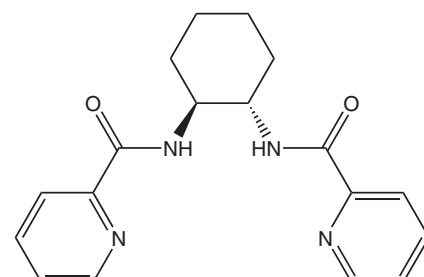
ACH-Phenyl Trost ligand

(shown) 15-0960
15-0961



DACH-Naphthyl Trost ligand

(shown) 15-0964
15-0963



(shown) 07-0340
07-0341

Phosphorous Ligands

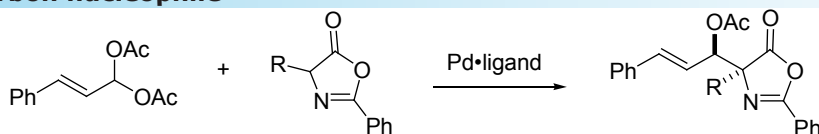
15-0960 (1R,2R)-(+)-1,2-Diaminocyclohexane-N,N'-bis(2'-diphenylphosphinobenzoyl), 98%
(R,R)-DACH-Phenyl Trost Ligand
CAS# 138517-61-0
C₄₄H₄₀N₂O₂P₂; FW: 690.76; white to off-white powdr.

100mg
500mg
2g

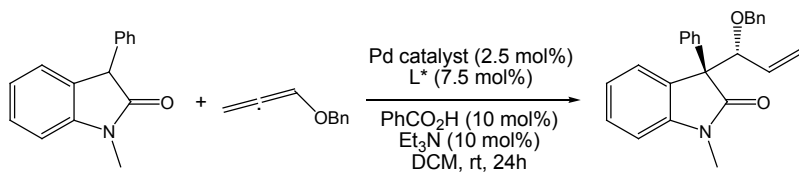
Technical Notes:

- The palladium complexes of the Trost ligands are effective in a variety of allylic substitution reactions involving carbon, nitrogen, oxygen, sulfur, and fluorides nucleophiles.

Carbon nucleophile

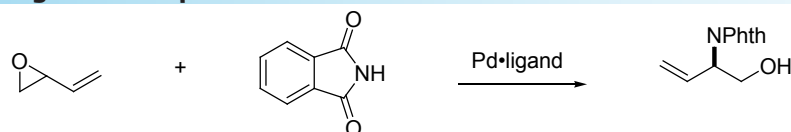


Ref. (1-2)

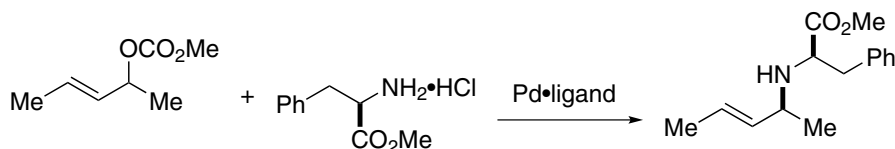


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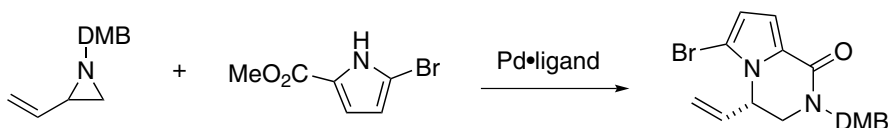
Nitrogen nucleophile



Ref. (4)

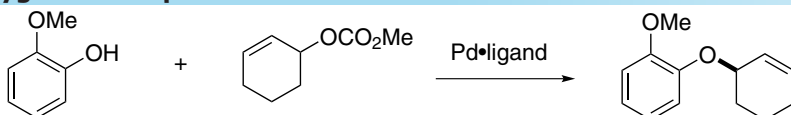


Ref. (5)



Ref. (6)

Oxygen nucleophile



Ref. (7)

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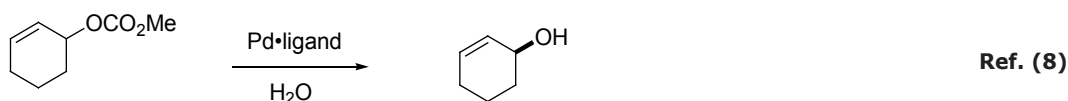
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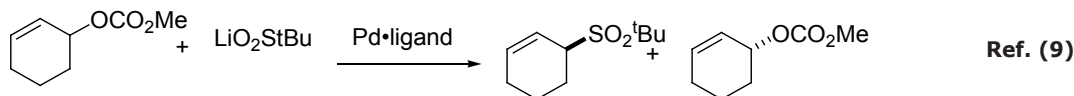
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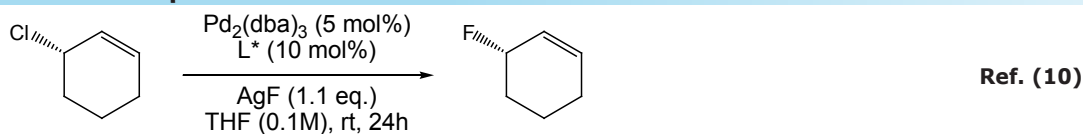
15-0960 (1R,2R)-(+)-1,2-Diaminocyclohexane-N,N'-bis(2'-diphenylphosphinobenzoyl), 98% (cont.) (R,R)-DACH-Phenyl Trost Ligand



Sulfur nucleophile



Fluoride nucleophile



References:

1. *Angew. Chem., Int. Ed.* **1997**, 36, 2635.
2. *J. Am. Chem. Soc.* **1995**, 117, 7247.
3. *J. Am. Chem. Soc.* **2011**, 133, 20611.
4. *Angew. Chem., Int. Ed.* **1996**, 35, 99.
5. *Tetrahedron Lett.*, **1998**, 39, 1713.
6. *Org. Lett.*, **2007**, 9, 2357.
7. *J. Am. Chem. Soc.*, **1998**, 120, 815.
8. *J. Am. Chem. Soc.*, **2003**, 125, 6066.
9. *Tetrahedron Lett.*, **2000**, 41, 3809.
10. *J. Am. Chem. Soc.*, **2010**, 132, 17402.

15-0961 (1S,2S)-(-)-1,2-Diaminocyclohexane-N,N'-bis(2'-diphenylphosphinobenzoyl), 95% (S,S)-DACH-Phenyl Trost Ligand

100mg
500mg
2g

CAS# 169689-05-8
C₄₄H₄₀N₂O₂P₂; FW: 690.76; white to off-white powdr.

Technical Notes:

1. See 15-0960.

15-0964 (1S,2S)-(-)-1,2-Diaminocyclohexane-N,N'-bis(2-diphenylphosphino-1-naphthoyl), min. 94% (S,S)-DACH-Naphthyl Trost Ligand

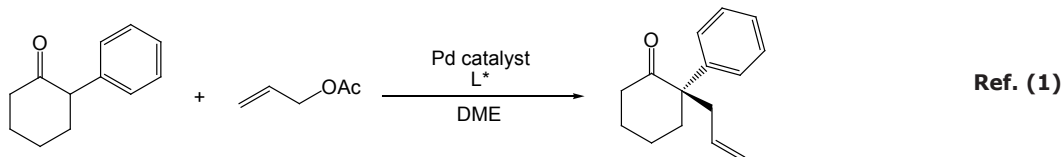
100mg
500mg
2g

CAS# 205495-66-5
C₅₂H₄₄N₂O₂P₂; FW: 790.88; off-white powdr.

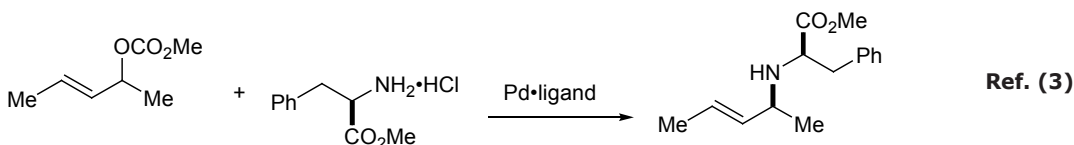
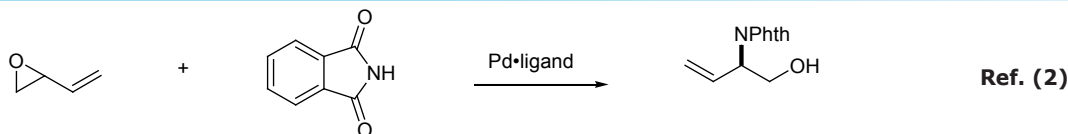
Technical Notes:

1. The palladium complexes of the Trost ligands are effective in a variety of allylic substitution reactions involving carbon, nitrogen, oxygen, and selenium nucleophiles.

Carbon nucleophile



Nitrogen nucleophile



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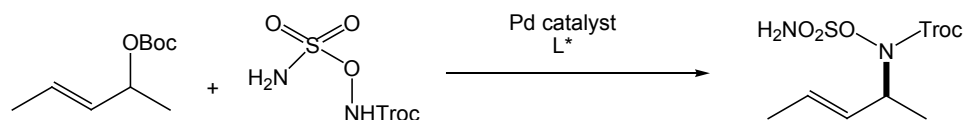
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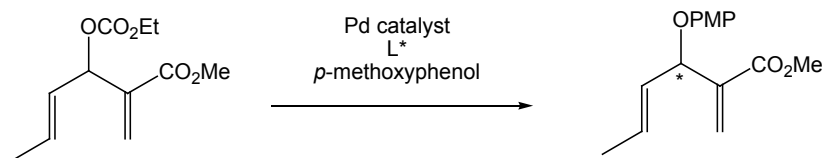
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15-0964 (1S,2S)-(-)-1,2-Diaminocyclohexane-N,N'-bis(2-diphenylphosphino-1-naphthoyl), min. 94% (cont.) (S,S)-DACH-Naphthyl Trost Ligand



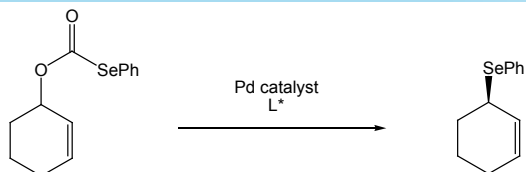
Ref. (4)

Oxygen nucleophile



Ref. (5)

Seleno nucleophile



Ref. (6)

References:

1. *Angew. Chem., Int. Ed.*, **2002**, 41, 3492.
2. *Angew. Chem., Int. Ed.*, **1996**, 35, 99.
3. *Tetrahedron Lett.*, **1998**, 39, 1713.
4. *Org. Lett.*, **2011**, 13, 3336.
5. *Org. Lett.*, **2007**, 9, 3961.
6. *Chem. Commun.*, **2008**, 3311.

15-0963 (1R,2R)-(+)-1,2-Diaminocyclohexane-N,N'-bis(2-diphenylphosphino-1-naphthoyl), min. 94% (R,R)-DACH-Naphthyl Trost Ligand

CAS# 174810-09-4

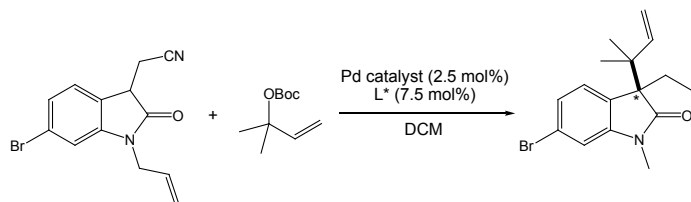
C₅₂H₄₄N₂O₂P₂; FW: 790.88; off-white powdr.

100mg
500mg
2g

Technical Notes:

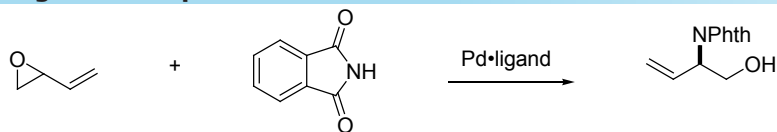
1. The palladium complexes of the Trost ligands are effective in a variety of allylic substitution reactions involving carbon, nitrogen, oxygen, and fluorides nucleophiles.

Carbon nucleophile

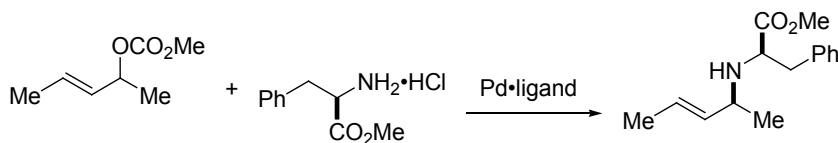


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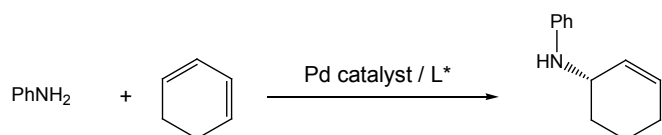
Nitrogen nucleophile



Ref. (2)



Ref. (3)



Ref. (4)

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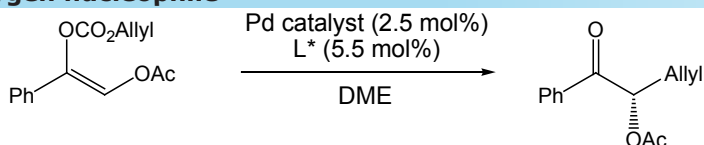
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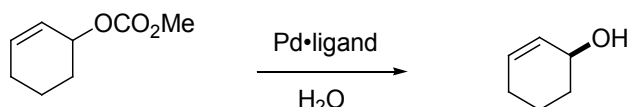
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15-0963 (1R,2R)-(+)-1,2-Diaminocyclohexane-N,N'-bis(2-diphenylphosphino-1-naphthoyl), min. 94% (cont.) (R,R)-DACH-Naphthyl Trost Ligand

Oxygen nucleophile

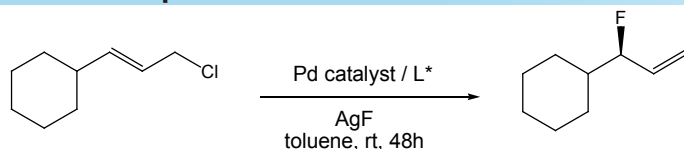


Ref. (5)



Ref. (6)

Fluoride nucleophile



Ref. (7)

References:

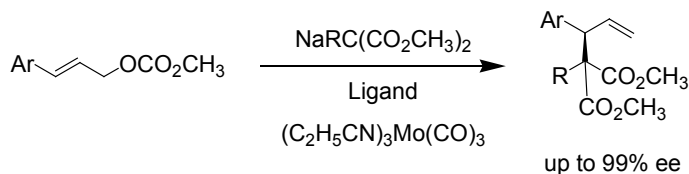
1. *J. Am. Chem. Soc.* **2011**, *133*, 7328.
2. *Angew. Chem., Int. Ed.* **1996**, *35*, 99.
3. *Tetrahedron Lett.*, **1998**, *39*, 1713.
4. *J. Am. Chem. Soc.*, **2001**, *123*, 4366.
5. *J. Am. Chem. Soc.*, **2008**, *130*, 11852.
6. *J. Am. Chem. Soc.*, **2003**, *125*, 6066.
7. *J. Am. Chem. Soc.*, **2011**, *133*, 15902.

Nitrogen Ligands

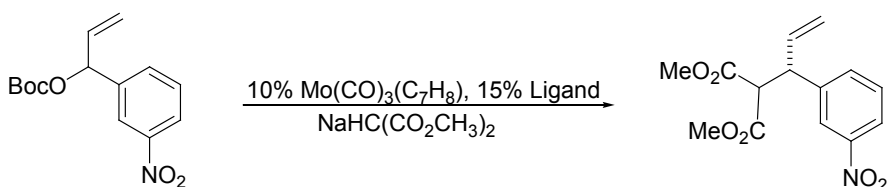
07-0340 (-)-N,N'-(1R,2R)-1,2-Diaminocyclohexanediylbis(2-pyridinecarboxamide), min. 98% 1g
CAS# 218290-24-5 5g
C₁₈H₂₀N₄O₂; FW: 324.38; off-white powder.

Technical Notes:

1. Ligands for Mo catalyzed asymmetric allylic substitutions. Especially useful for the synthesis of tertiary and quaternary stereocenters. Exclusive license for this technology acquired by ChiroTech and is protected by pending Stanford University patents.
2. Dynamic kinetic asymmetric formation of tertiary and quaternary stereogenic centers.



Tech. Note (1)



Tech. Note (2)
Ref. (2)

References:

1. *J. Am. Chem. Soc.*, **1998**, *120*, 1104.
2. *J. Am. Chem. Soc.*, **2002**, *124*, 14320.
3. *J. Am. Chem. Soc.*, **2002**, *124*, 7256.
4. For a review, see *e-Encyclopedia or Reagents for Organic Synthesis* "(+)-N,N'-(1S,2S)-1,2-Diaminocyclohexanediylbis(2-pyridinecarboxamide)", **2014**.

07-0341 (+)-N,N'-(1S,2S)-1,2-Diaminocyclohexanediylbis(2-pyridinecarboxamide), min. 98% 1g
CAS# 172138-95-3 5g
C₁₈H₂₀N₄O₂; FW: 324.38; off-white powder.

Technical Notes:

1. See 07-0340.

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