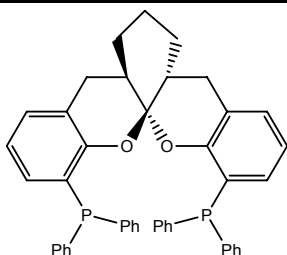


### 96-2310 SKP Ligand Kit for asymmetric-allylic amination and cyclopropanation

**NEW**

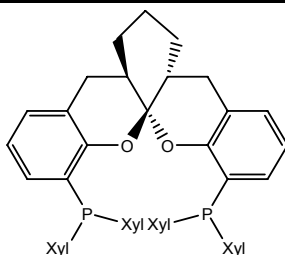
Components available for individual sale.

Contains the following:



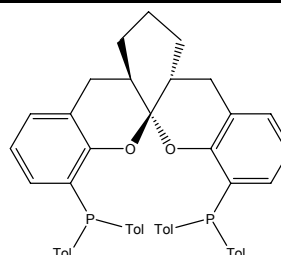
15-4310 (R,R,R)-(+)-Ph-SKP

15-4311 (S,S,S)-(-)-Ph-SKP



15-4320 (R,R,R)-(+)-Xyl-SKP

15-4321 (S,S,S)-(-)-Xyl-SKP



15-4330 (R,R,R)-(+)-Tol-SKP

15-4331 (S,S,S)-(-)-Tol-SKP

#### 15-4310

**NEW**

(+)-1,13-Bis(diphenyl)phosphino-(5aR,8aR,14aR)-5a,6,7,8,8a,9-hexahydro-5H-[1]benzopyrano

[3,2-d]xanthene, 97% (R,R,R)-(+)-Ph-SKP [1360823-43-3]

C<sub>44</sub>H<sub>38</sub>O<sub>2</sub>P<sub>2</sub>; FW: 660.72; white solid; [α]<sub>D</sub> +113° (c 1.00, CHCl<sub>3</sub>); m.p. 101-103°

air sensitive

25mg

100mg

Technical Note:

- See 15-4311.

#### 15-4311

**NEW**

(-)-1,13-Bis(diphenyl)phosphino-(5aS,8aS,14aS)-5a,6,7,8,8a,9-hexahydro-5H-[1]benzopyrano

[3,2-d]xanthene, 97% (S,S,S)-(-)-Ph-SKP

C<sub>44</sub>H<sub>38</sub>O<sub>2</sub>P<sub>2</sub>; FW: 660.72; white solid; [α]<sub>D</sub> -113° (c 1.00, CHCl<sub>3</sub>); m.p. 101-103°

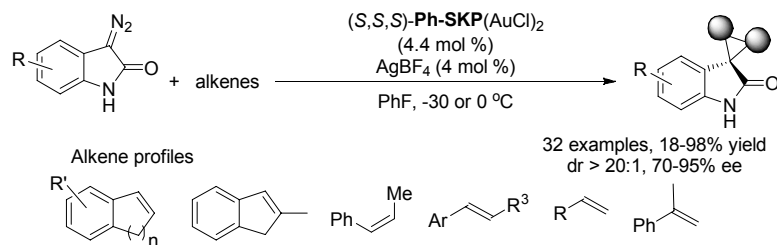
air sensitive

25mg

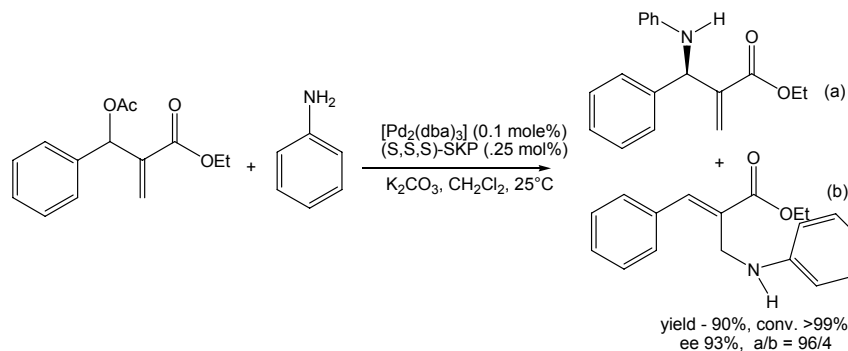
100mg

Technical Notes:

- Efficient ligand for the Au(I)-catalyzed, highly stereoselective, olefin cyclopropanation of diazooxindoles.
- Palladium-catalyzed asymmetric allylic amination of Morita-Baylis-Hillman adducts. Exceptionally high efficiency and new mechanism.



Tech. Note (1)  
Ref. (1)



Tech. Note (2)  
Ref. (2)

References:

- J. Am. Chem. Soc., **2013**, 135, 8197.
- J. Am. Chem. Soc., **2014**, 136, 405.

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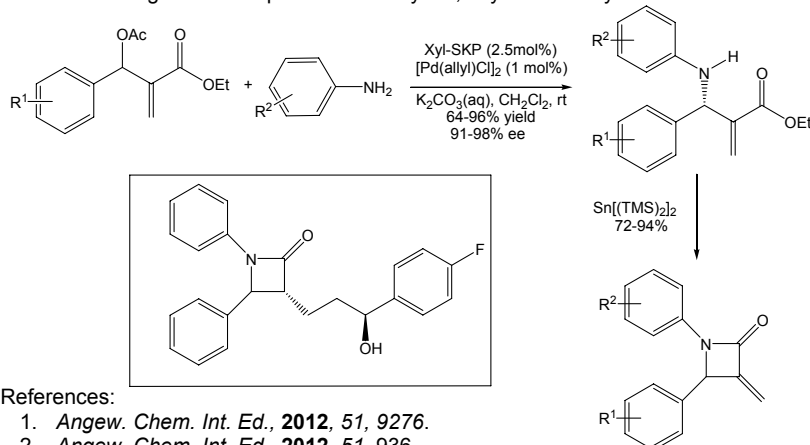
15-4320

NEW →

**(+)-1,13-Bis[di(3,5-dimethylphenyl)phosphino]-(5aR,8aR,14aR)-5a,6,7,8,8a,9-hexahydro-5H-[1]benzopyrano[3,2-d]xanthene, 97% (R,R,R)-(+)-Xyl-SKP**C<sub>52</sub>H<sub>54</sub>O<sub>2</sub>P<sub>2</sub>; FW: 772.93; white solid; [α]<sub>D</sub> +166° (c 1.00, CHCl<sub>3</sub>); m.p. 102-103°*air sensitive*25mg  
100mg

## Technical Note:

- Efficient ligand for the palladium-catalyzed, asymmetric allylic amination of racemic Morita-Baylis-Hillman adducts.



## References:

- Angew. Chem. Int. Ed., 2012, 51, 9276.
- Angew. Chem. Int. Ed., 2012, 51, 936.

15-4321

NEW →

**(-)-1,13-Bis[di(3,5-dimethylphenyl)phosphino]-(5aS,8aS,14aS)-5a,6,7,8,8a,9-hexahydro-5H-[1]benzopyrano[3,2-d]xanthene, 97% (S,S,S)-(-)-Xyl-SKP**C<sub>52</sub>H<sub>54</sub>O<sub>2</sub>P<sub>2</sub>; FW: 772.93; white solid; [α]<sub>D</sub> -166° (c 1.00, CHCl<sub>3</sub>); m.p. 102-103°*air sensitive*25mg  
100mg

## Technical Note:

- See 15-4320.

15-4330

NEW →

**(+)-1,13-Bis[di(4-methylphenyl)phosphino]-(5aR,8aR,14aR)-5a,6,7,8,8a,9-hexahydro-5H-[1]benzopyrano[3,2-d]xanthene, 97% (R,R,R)-(+)-Tol-SKP**C<sub>48</sub>H<sub>46</sub>O<sub>2</sub>P<sub>2</sub>; FW: 716.83; white solid; [α]<sub>D</sub> +118° (c 1.00, CHCl<sub>3</sub>); m.p. 90-92°*air sensitive*25mg  
100mg

## Technical Note:

- See 15-4311.

15-4331

NEW →

**(-)-1,13-Bis[di(4-methylphenyl)phosphino]-(5aS,8aS,14aS)-5a,6,7,8,8a,9-hexahydro-5H-[1]benzopyrano[3,2-d]xanthene, 97% (S,S,S)-(-)-Tol-SKP**C<sub>48</sub>H<sub>46</sub>O<sub>2</sub>P<sub>2</sub>; FW: 716.83; white powder; [α]<sub>D</sub> -118° (c 1.00, CHCl<sub>3</sub>); m.p. 90-92°*air sensitive*25mg  
100mg

## Technical Note:

- See 15-4311.

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