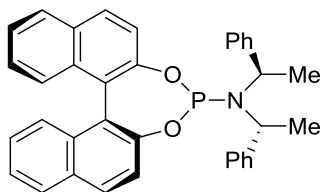


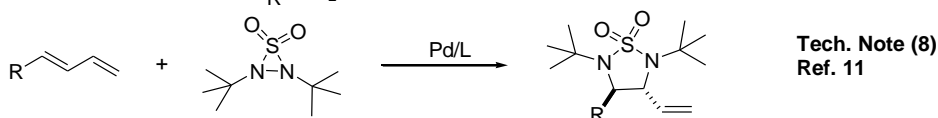
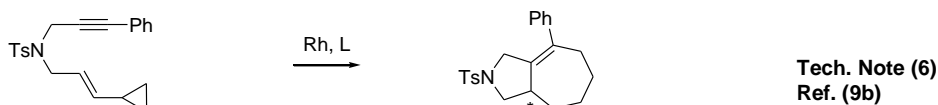
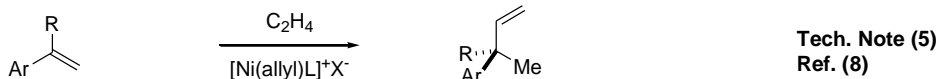
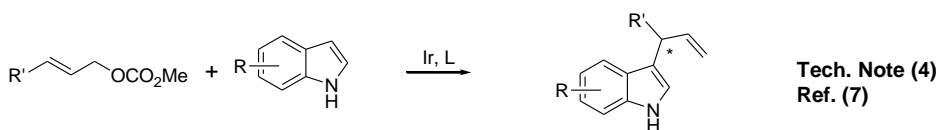
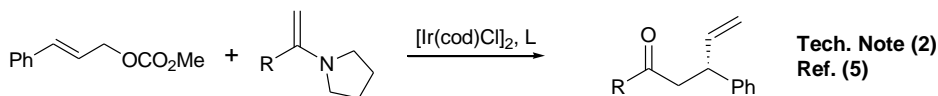
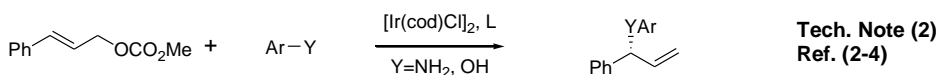
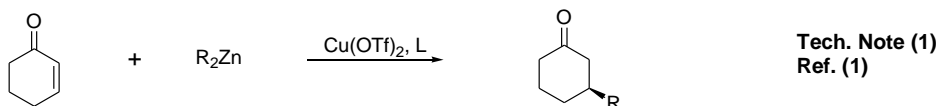
Catalog # 15-1520 (S)-(+)-(3,5-Dioxa-4-phosphacyclohepta[2,1-a;3,4-a']dinaphthalen-4-yl)bis[(1R)-1-phenylethyl]amine, dichloromethane adduct, min. 95%



Note: Sold in collaboration with DSM for research purposes only. Patent WO 02 04466. DSM's MonoPhos™ Ligand Kit component.

Technical Notes:

1. A ligand for asymmetric conjugate addition of dialkyl zinc reagents to activated olefins.
2. Ligand used in the iridium-catalyzed, enantioselective addition of nucleophiles to achiral allylic esters.
3. Asymmetric hydrogenation.
4. Ir-catalyzed regio- and enantioselective Friedel-Crafts allylic alkylation of indoles.
5. Asymmetric hydrovinylation.
6. Used in 1,3-dipolar cycloaddition reactions of azomethine ylides and alkenes,^{9a} and Rh-catalyzed [5+2] cycloaddition of alkyne-vinyl-cyclopropanes.^{9b}
7. Palladium-catalyzed enantioselective de-epimerization in catalytic asymmetric allylic alkylation.
8. Palladium-catalyzed enantioselective diamination of alkyl dienes.



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