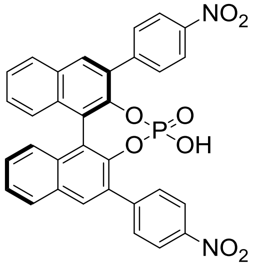
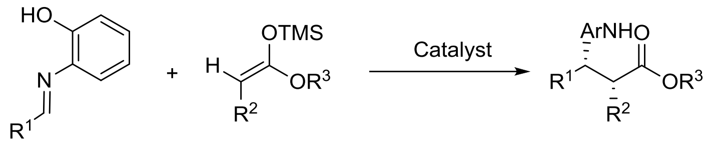
Strem Chemicals, Inc. **strem.com**

Catalog # 15-0344 (11bR)-4-Hydroxy-2,6-bis(4-nitrophenyl)-4-oxide-dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin, 98%, (99% ee)



Technical Notes:

1. **Mannich Reaction:** The Mannich-type reaction of ketene silyl acetals with aldimines proceeded highly enantioselectively to afford the syn isomer of β-aminoesters 3 with up to 96 % ee under the influence of the catalyst.
2. Mannich-type reaction of ketene silyl acetals with aldimines proceeded catalytically by means of a phosphoric acid diester with good diastereoselectivity and high enantioselectivity (up to 96% ee). The highest enantioselectivity was achieved by the phosphoric acid diester bearing 4-nitrophenyl groups on the 3,3'-positions of BINOL.
3. **Self-Coupling Reaction:** The enantioselective BINOL-phosphate catalyzed formation of a quaternary carbon center, bearing a N-atom has been achieved through the self-coupling reaction of enamides.
4. **Hydrocyanation:** A first organocatalytic enantioselective route was developed for the conversion of readily prepared and air stable aliphatic hydrazones to synthetically valuable α-hydrazinonitriles.
5. **See 15-1386.**



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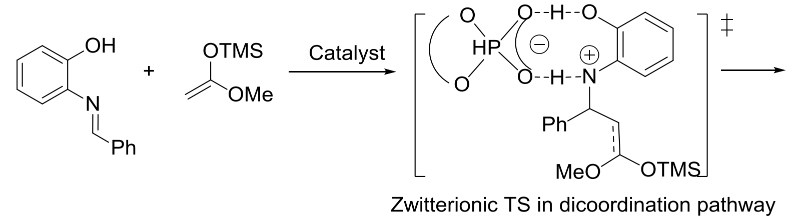

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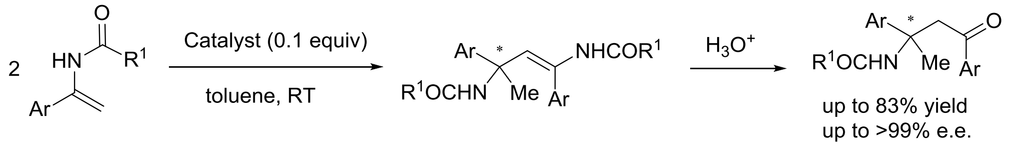

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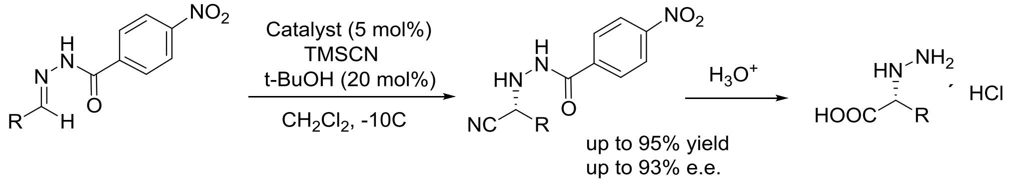

Tech Note (4)
Ref. (4)

References:

1. *Angew. Chem. Int. Ed.,* ***2004****, 43, 1566-1568.*
2. *J. Am. Chem. Soc.,* ***2007****, 129, 6756-6764.*
3. *Chem. Commun.,* ***2008****, (38), 4637-4639*
4. *Org. Lett.,* ***2010****, 12, 188-191.*