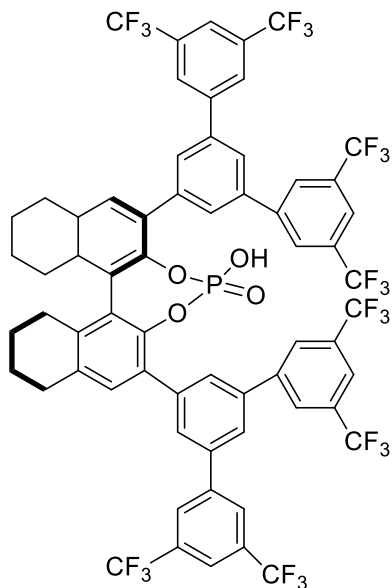
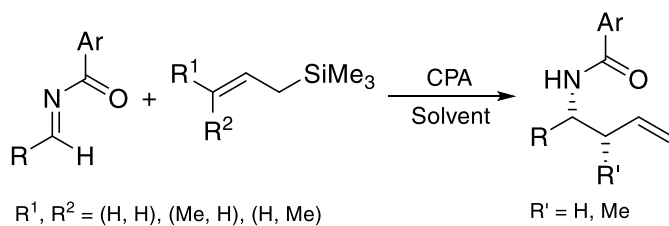


Catalog # 15-0573 (11bR)-8,9,10,11,12,13,14,15-Octahydro-4-hydroxy-2,6-bis[3,5-bis[3,5-bis(trifluoromethyl)phenyl]phenyl]phenyl]-4-oxide-dinaphtho[2,1-d:1',2'-f][1,3,2]dioxaphosphepin

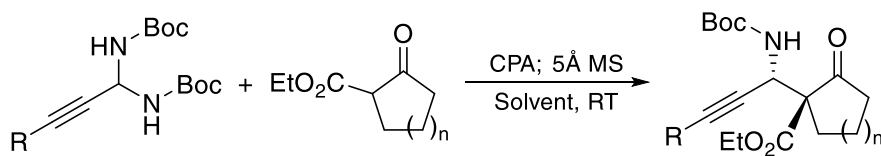


Technical Notes

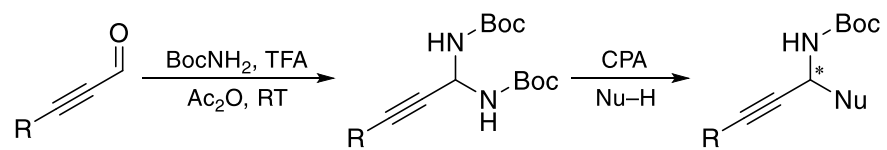
1. Chiral Brønsted acid catalysis for enantioselective Hosomi-Sakurai reaction of imines with allyltrimethylsilane.
2. Chiral Brønsted acid catalysis for stereoselective Mannich-type reactions of in situ generated C-alkynyl imines with β -keto esters.
3. Chiral Brønsted acid catalysis for Mannich-type reaction of N-Boc-iminium intermediates, generated in situ from N-Boc-aminals.



Tech. Note (1); Ref. (1)



Tech. Note (2); Ref. (2)



Tech. Note (3); Ref. (3)

References:

1. *Org. Lett.*, **2011**, *13*, 2126.
2. *Angew. Chem. Int. Ed.* **2013**, *52*, 11509.
3. *Tetrahedron*, **2016**, *72*, 3687.