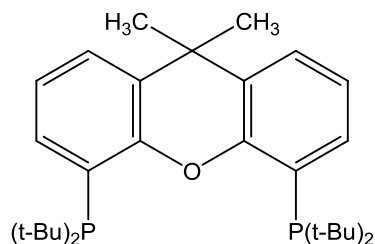
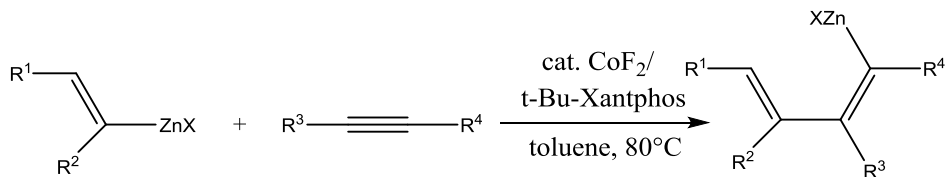


Catalog # 15-1241 9,9-Dimethyl-4,5-bis(di-t-butylphosphino)xanthene, min. 97% t-Bu-XANTPHOS

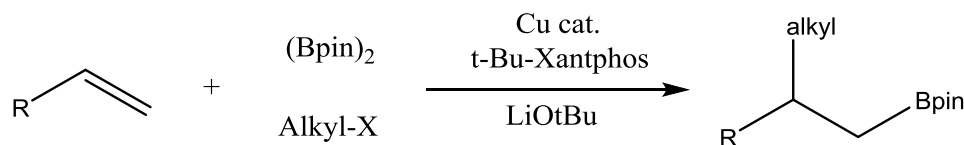


**Technical Notes:**

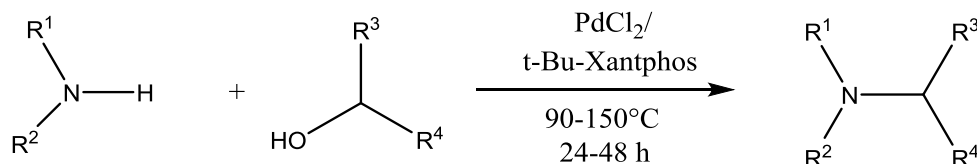
1. Ligand used in the cobalt-catalyzed alkenylzincation of unfunctionalized alkynes.
2. Ligand used in the cobalt-catalyzed alkylation of alkenes.
3. Ligand used in the palladium-catalyzed N-alkylation of amines using primary and secondary alcohols..
4. Ligand used in the palladium-catalyzed methylation of alkynyl C(sp)-H bonds with dimethyl sulfonium ylides.



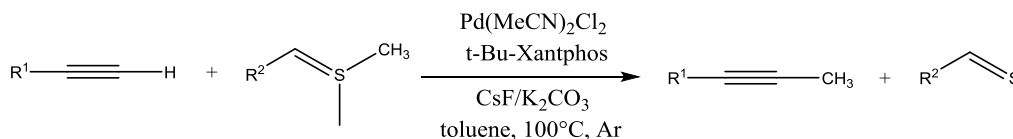
**Tech. Note (1)**  
**Ref. (1)**



**Tech. Note (2)**  
**Ref. (2)**



**Tech. Note (3)**  
**Ref. (3)**



**Tech. Note (4)**  
**Ref. (4)**

**References:**

1. *Angew. Chem. Int. Ed.*, **2016**, 55, 336.
2. *Angew. Chem. Int. Ed.*, **2015**, 54, 12961.
3. *ACS Catalysis*, **2013**, 3, 2536.
4. *J. Org. Chem.*, **2013**, 78, 10421.