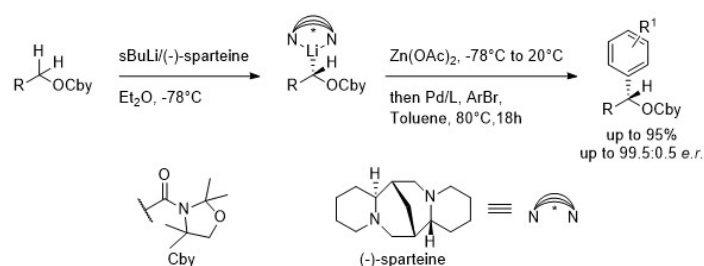


Enantioselective α -Arylation of O-Carbamates via Sparteine-Mediated Lithiation and Negishi Cross-coupling

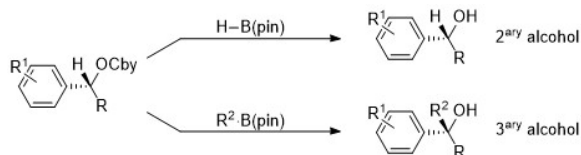
T. ROYAL¹, Y. Baumgartner¹, O. BAUDOIN^{1*}

¹University of Basel, Department of Chemistry, St. Johannis-Ring 19, CH-4056 Basel, Switzerland

The enantioselective α -arylation of protected aliphatic alcohols is described. Hoppe's technology allows to perform the enantioselective α -lithiation in presence of sparteine. [1] After Li-Zn transmetalation and Negishi cross-coupling, highly enantioenriched benzylic alcohols are accessed. The method is compatible with a wide range of (hetero)aryl bromides and aliphatic alcohols.



Application of Aggarwal's lithiation-borylation sequence [2] provides a short and divergent access to a variety of enantioenriched secondary and tertiary benzylic alcohols. [3]



[1] a) Beak, P.; Lee, K. W. *J. Org. Chem.* **1993**, 58, 1109-1117. b) Hoppe, D.; Hense, T. *Angew. Chem. Int. Ed.* **1997**, 36, 2282-2316.

[2] Stymiest, J. L.; Bagutski, V.; French, R. M.; Aggarwal, V. K. *Nature* **2008**, 456, 778-782.

[3] Royal, T.; Baumgartner, Y.; Baudoin, O. *Org. Lett.* **2017**, 19, 166-169.