

SYNFACTS Highlights in Current Synthetic Organic Chemistry

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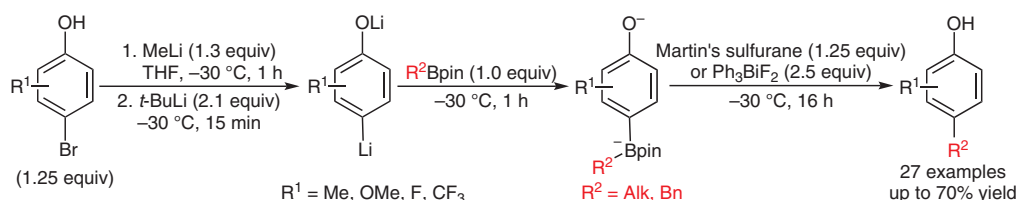
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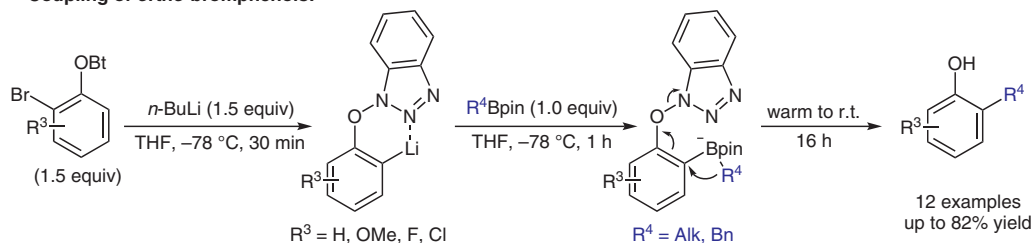
C. M. WILSON, V. GANESH, A. NOBLE, V. K. AGGARWAL* (UNIVERSITY OF BRISTOL, UK)
Enantiospecific sp^2 - sp^3 Coupling of *ortho*- and *para*-Phenols with Secondary and Tertiary Boronic Esters
Angew. Chem. Int. Ed. **2017**, *56*, 16318–16322.

Enantiospecific Coupling of Phenols with Boronic Esters

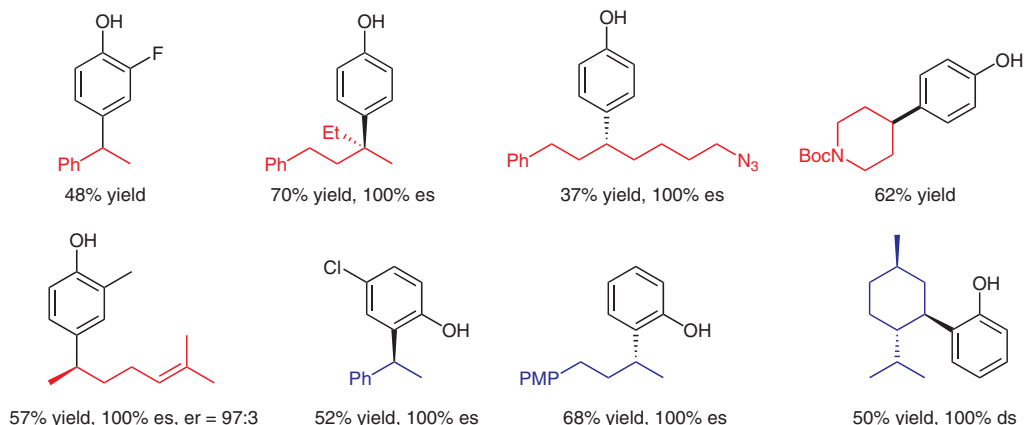
Coupling of *para*-bromphenols:



Coupling of *ortho*-bromphenols:



Selected examples:



Significance: The authors report an enantiospecific coupling of *ortho*- and *para*-phenols with secondary and tertiary boronic esters. For *para*-phenols, reaction with Ph_3BiF_2 or Martin's sulfurane led to the product, whereas for *ortho*-phenols initial incorporation of a benzotriazole on the phenol oxygen was necessary.

Comment: The utility of the methodology was demonstrated by application to the synthesis of the broad spectrum antibacterial natural product (-)-4-(1,5-dimethylhex-4-enyl)-2-methyl phenol in good yield and with high enantioselectivity.

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