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An Ir/Zn Dual Catalysis for Enantio- and Diastereodivergent α-Allylation of α-Hydroxyketones
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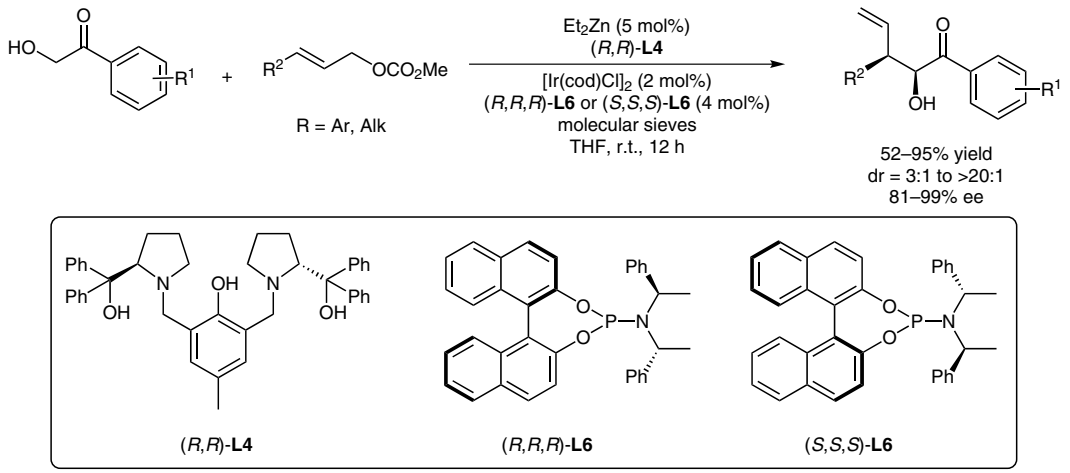
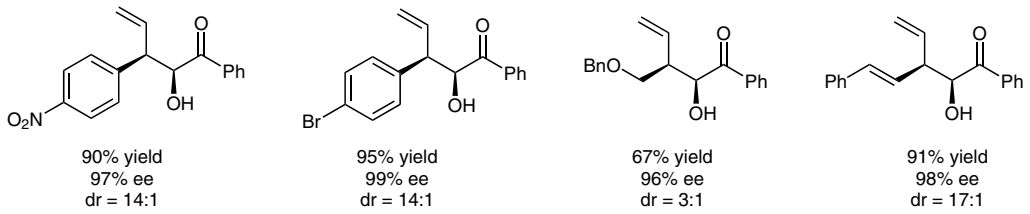
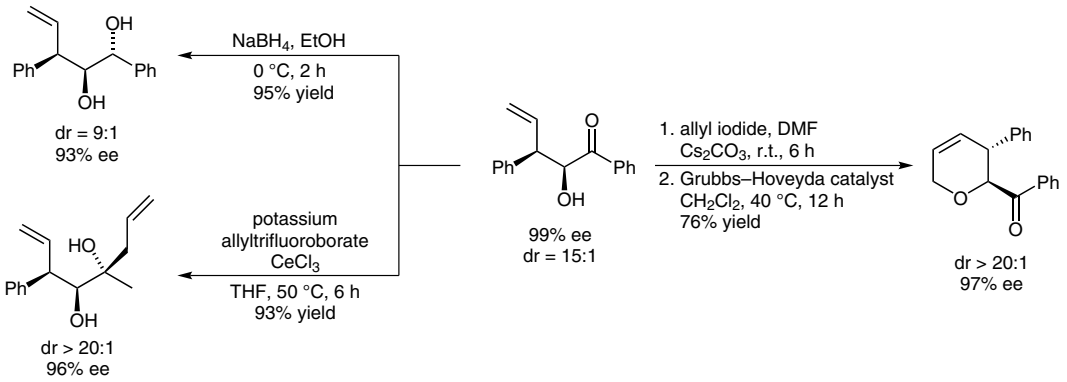
Enantio- and Diastereoselective α-Allylation



Selected examples:



Derivatization:



Significance: A dual metal-catalyzed asymmetric allylation of α-hydroxyketones is described. Chiral iridium and zinc complexes are employed for this transformation to furnish stereodefined α-hydroxyketones.

Comment: Multi-metal asymmetric catalysis is a newly emerging field in catalysis. Exploitation of the preferential binding affinity of chiral ligands to specific metal centers allows chemo- and stereoselective formation of the desired products.

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Category

Metal-Catalyzed Asymmetric Synthesis and Stereoselective Reactions

Key words

α-hydroxyketones

dual metal catalysis

asymmetric allylation