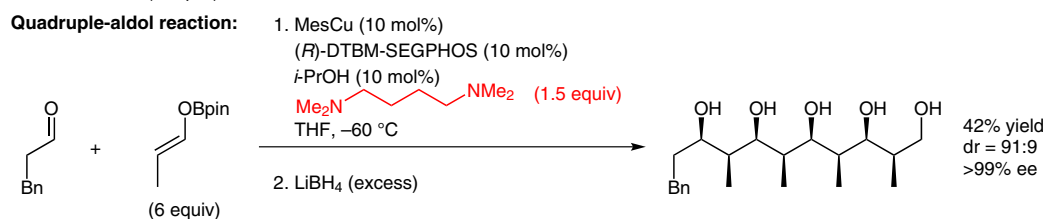
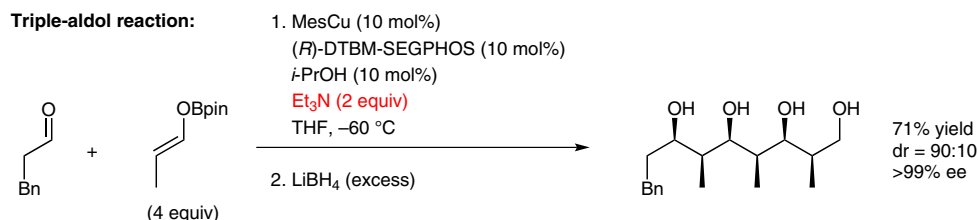
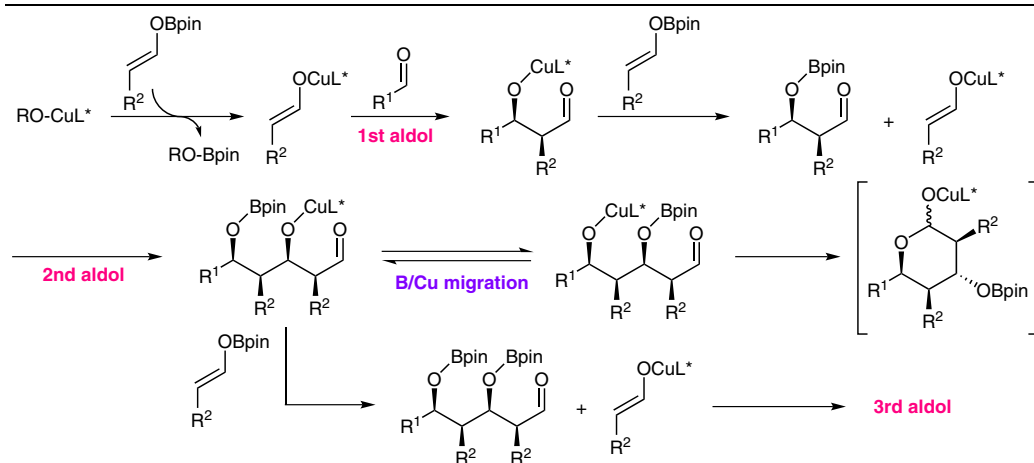
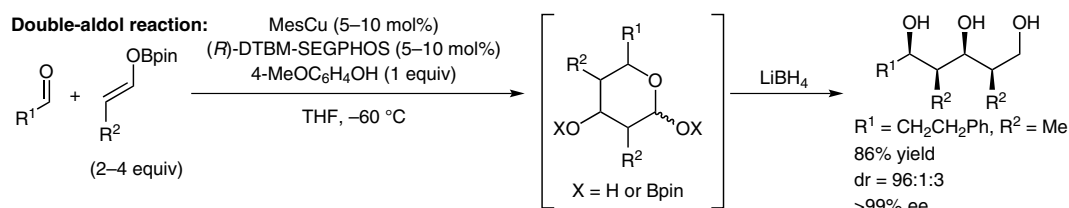


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Catalytic Asymmetric Iterative/Domino Aldehyde Cross-Aldol Reactions for the Rapid and Flexible Synthesis of 1,3-Polyols
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Copper-Catalyzed Asymmetric Cross-Aldol Reactions



Significance: The authors report copper-catalyzed asymmetric iterative and domino cross-aldol reactions. A variety of 1,3-polyols were obtained in high yields and high diastereo- and enantioselectivities.

Comment: In this reaction, the use of amine additives permits asymmetric triple and quadruple aldol reactions to be performed in a one-pot process. The method should be useful for the straightforward synthesis of enantiomerically and diastereomerically enriched 1,3-polyols.

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