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Sulfonylimidates as Nucleophiles in Catalytic Addition Reactions
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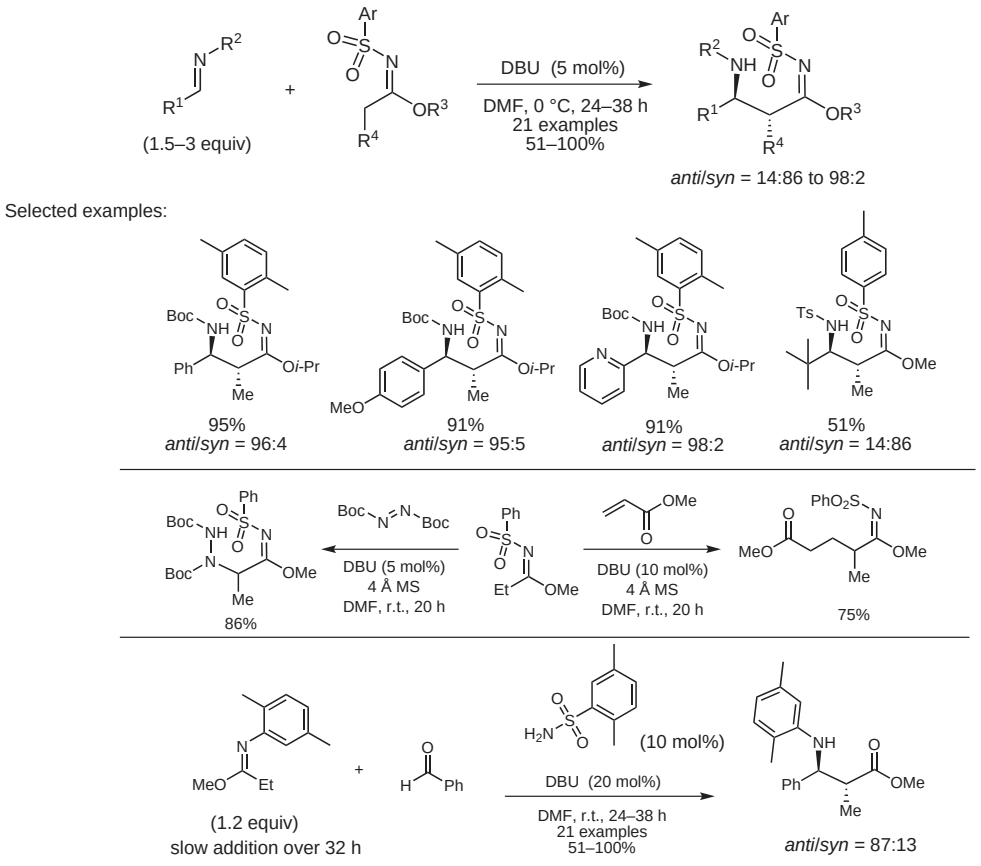
Stereoselective Catalytic Direct Additions of Sulfonylimidates



Significance: The authors describe the first examples of a highly stereoselective catalytic direct addition reaction of sulfonylimidates with Mannich-type, Michael-type, and azodicarboxylate acceptors. High *anti*-selectivity is observed for a large scope of substrates. The synthetic utility of the product is demonstrated through a variety of post-reaction modifications. An example of the direct formation of an α-amino acid derivative is also shown.

Comment: This report highlights a tertiary amine catalyzed direct addition of α-alkyl-substituted ester equivalents, and demonstrates the novel use of sulfonylimidates in a catalytic direct addition reaction. Metals are known to catalyze reactions of α-alkyl-substituted carbonyl compounds, though these methodologies are largely limited to carbonyls with electron-withdrawing α-substituents: For examples, see: H. Morimoto et al. *Angew. Chem. Int. Ed.* **2006**, *45*, 3146 and S. Saito, T. Tsubogo, S. Kobayashi. *Chem. Commun.* **2007**, 1236.

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