Diastereoselective Pd(II)-Catalyzed sp^3 C-H Arylation Followed by Ring-Opening of Cyclopropanecarboxamides: Construction of *anti* β-Acyloxy Carboxamide Derivatives

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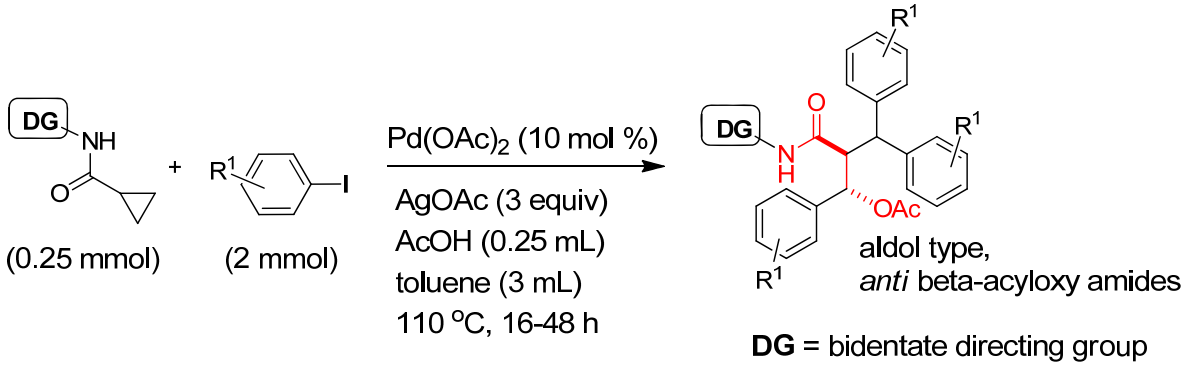
The cyclopropane moiety has inherent ring strain and it affords immense opportunities for various tandem transformations. Among the synthetically important reactions, cyclopropane ring opening is one of the well-explored processes to obtain useful synthetic molecules. Cyclopropane ring can be opened under various conditions based on electronic nature of substituents. Cyclopropane ring containing donor and acceptor substituents undergoes ring opening in presence of transition metals or Bronsted or Lewis acids.

Herein, we report the $Pd(OAc)_2$-catalyzed, bidentate directing group-assisted sp^3 C-H activation of cyclopropanecarboxamides followed by ring opening, which afforded multiple *β*-C-H substituted *anti β*-acyloxy carboxamides.



Scheme: C-H activation followed by ring opening of cyclopropane ring.

References:

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