An Efficient, Practical, and Enantioselective Method for the Synthesis of Homoallenylamides Catalyzed by an Aminoalcohol-Derived, Boron-Based Catalyst


Enantioselective Allene Addition to Aryl and Alkyl Imines

Significance: Hoveyda and co-workers report a highly efficient method for the enantioselective preparation of aryl-, heteroaryl-, and alkyl-substituted homoallenylamides. The addition of an allenyl unit to various Boc-protected imines proceeds with high yield and very good enantioselectivity.

Comment: The application of this new protocol shows its relevance in the total syntheses of the natural products anisomycin and epi-cytoxazone. Furthermore, it is shown that the allenyl addition performed on gram scale proceeds with high efficiency and selectivity, providing the corresponding product in excellent yield.