Category

Metals in Synthesis

Key words

palladium

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Palladium-Catalyzed Asymmetric Larock Isoquinoline Synthesis to Access Axially Chiral 3,4-Disubstituted Isoquinolines

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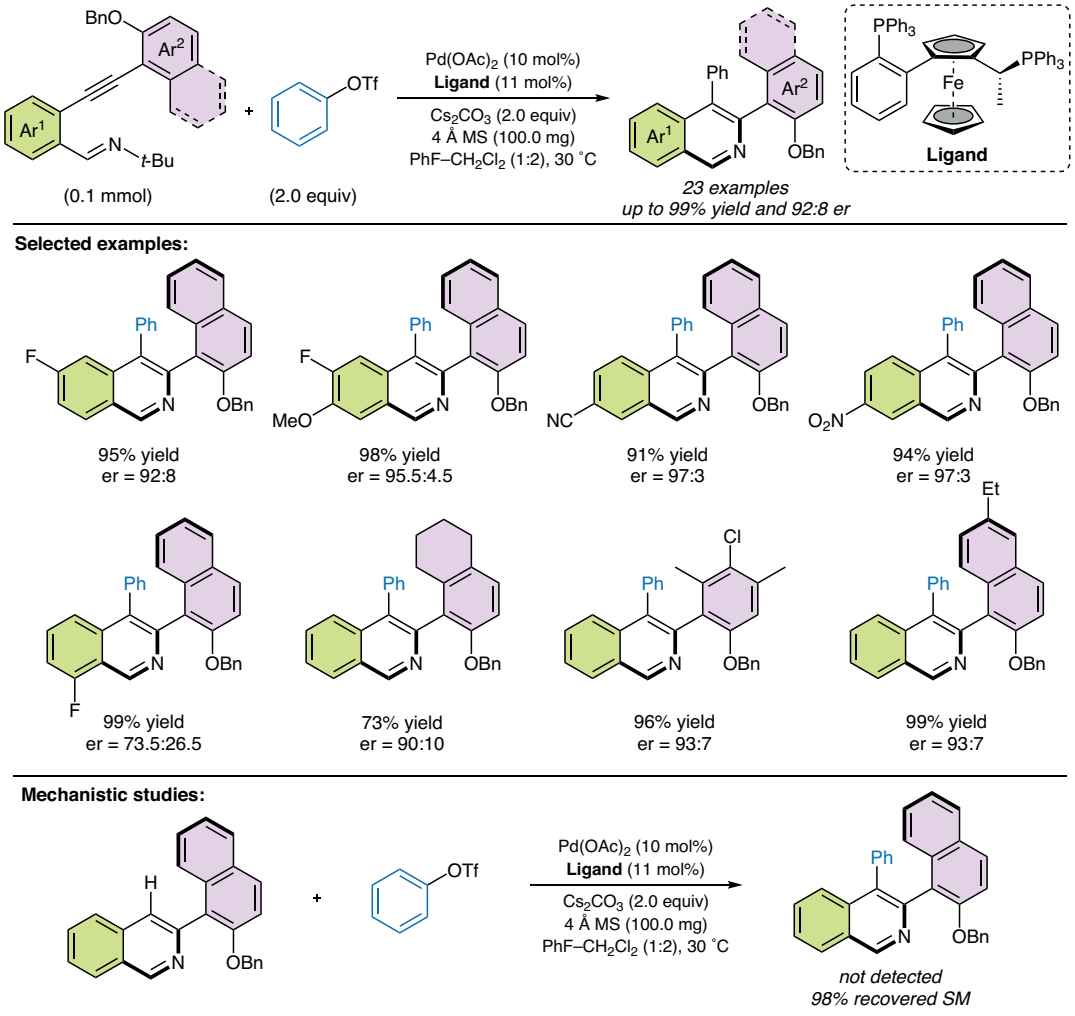
Atroposelective Synthesis of Biheteroaryl Isoquinolines via Palladium Catalysis



Significance: Luo, Ye and co-workers report an axially chiral synthesis of isoquinolines via an asymmetric Larock reaction. The reaction is amenable to a wide range of functionalities in yields up to 99% and high enantioselectivities. The products of the reaction could be easily derivatized to a series of biologically relevant scaffolds.

Comment: The reported reaction yields diverse axially chiral isoquinolines. The high enantioselectivity is reliant on *ortho*-substituents and diminished results are observed in their absence. The authors also rule out an oxidative addition, C–H activation pathway, suggesting that nucleopalladation is the dominant pathway.

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