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A Versatile Approach to 2,3-Disubstituted Indoles through the Palladium-Catalyzed Cyclisation of *o*-Alkynyltrifluoroacetanilides with Vinyl Triflates and Aryl Halides
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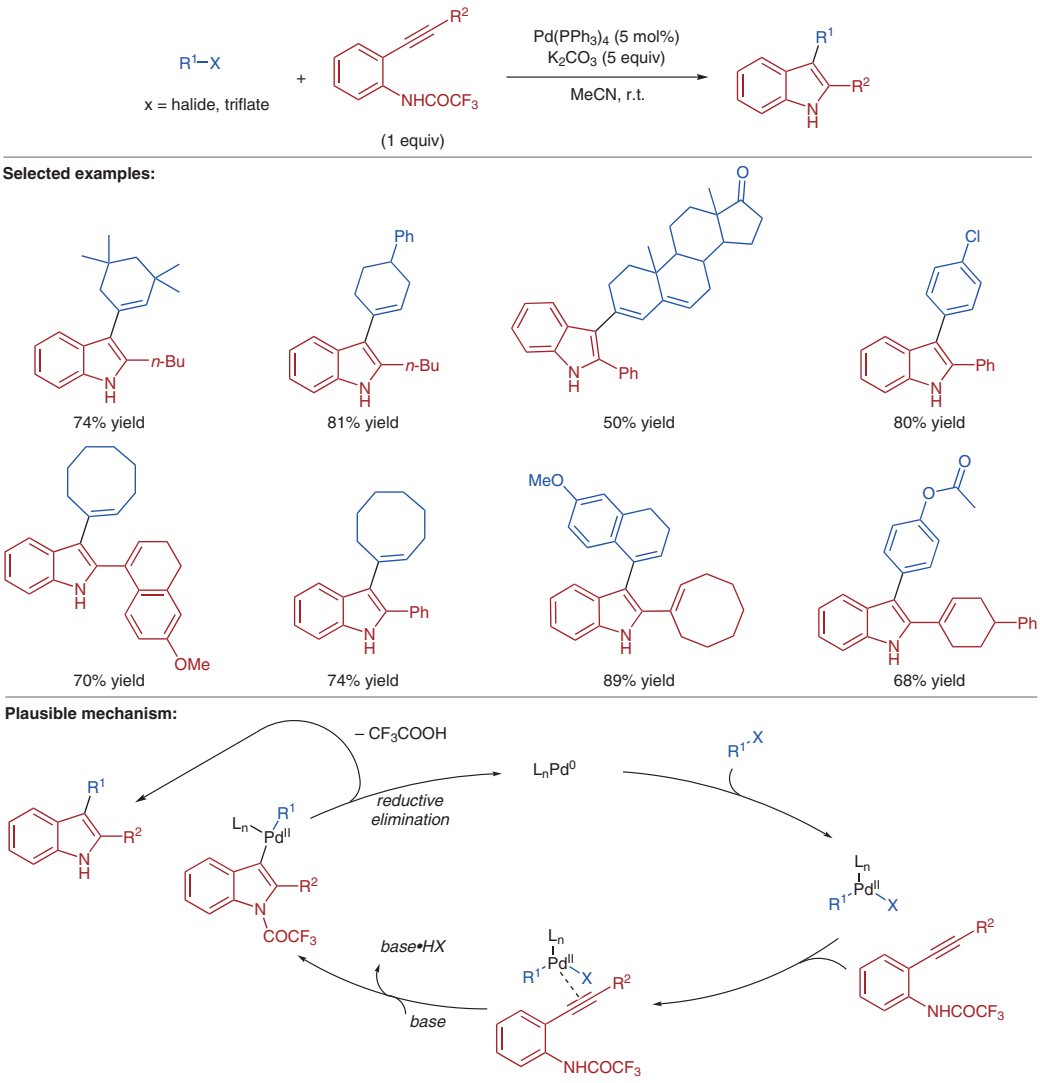
Synthesis of 2,3-Disubstituted Indoles via Palladium-Catalyzed Cyclization of *ortho*-Alkynyl Anilines



Significance: Indoles are structural motifs found in a wide variety of natural products and pharmaceutical agents. While other palladium-catalyzed indole syntheses had been primarily focused on the cyclization of compounds containing pre-installed substituents of the desired indole, Cacchi and coworkers demonstrated a modular synthesis of 2,3-disubstituted indoles using a variety of 2-alkynyl anilines and aryl halides or vinyl triflates, streamlining the synthesis of this class of compound.

Comment: The authors note that other bases such as triethylamine performed poorly compared to potassium carbonate. Similarly, indole products were not observed when employing aniline derivatives with a free amino group or acetamido group, highlighting the importance for a stronger electron-withdrawing group to be present on the nitrogen atom.

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