

Área: ORG

Carbonylative Suzuki–Miyaura Coupling of 1-Iodoglycals Mediated by the *N*-Heterocyclic Carbene Catalyst PEPPSI: Preparation of *C*-Acyl Glycosides

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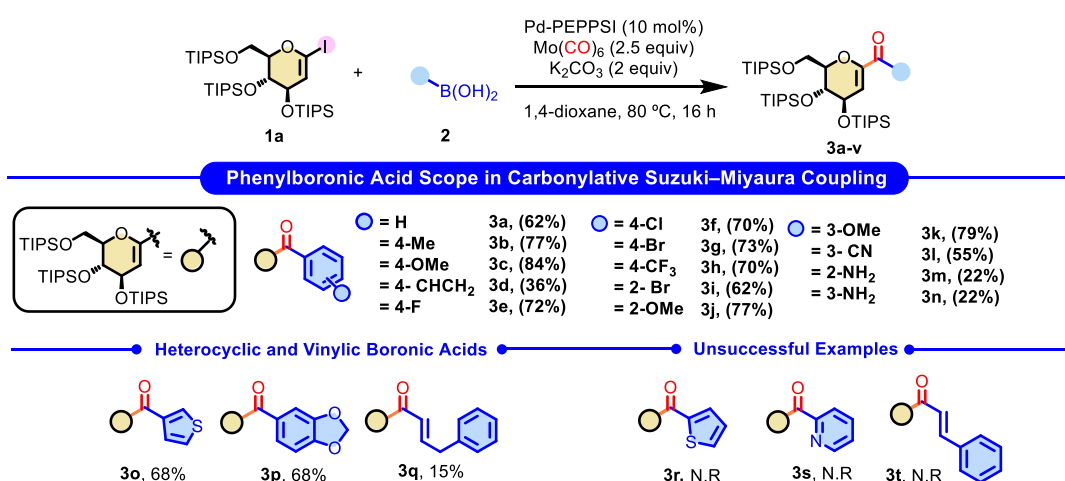
Palavras Chave: Suzuki–Miyaura, *C*-Acyl Glycosides, Carbonylative coupling, Palladium.

Highlights

Selective carbonylative coupling reaction using a Pd-PEPPSI catalyst enables access to novel *C*-Acyl glycoside derivatives.

Resumo/Abstract

The Suzuki–Miyaura coupling is a widely explored reaction, particularly in the development of pharmaceutically relevant structures. Its carbonylative variant enables the insertion of a CO bridge, granting access to a variety of bioactive biaryl ketone scaffolds. Herein, we disclose a carbonylative Suzuki–Miyaura strategy for the preparation of a series of *C*-Acyl Glycosides, thereby expanding the chemical space for the development of new derivatives in glycochemistry. The reaction proceeds under Pd-PEPPSI-IPr catalysis, employing Mo(CO)₆ as a solid CO source for the *in situ* generation of CO, which enables the selective formation of the carbonylated products. The desired compounds were obtained in synthetically useful yields of up to 84% (Scheme 1).



Scheme 1. Substrate scope for boronic acids

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