

Palladium-Catalyzed Fragment Coupling of Amides via Elimination of Isocyanate 2: Mechanistic Studies and Synthetic Application

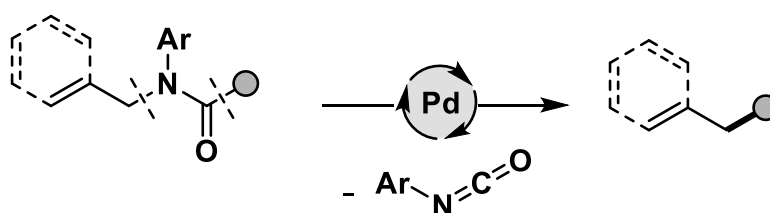
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We previously reported palladium-catalyzed intramolecular fragment coupling reactions of amides for forging new carbon–carbon and carbon–heteroatom bonds via elimination of isocyanate.¹

In this study, we investigated the mechanism of these reactions by isolation of an organometallic intermediate and by conducting crossover experiments. In addition, we explored their synthetic applications of this reactions, including a sequential use with C–H activation reactions, to demonstrate the utility of this intramolecular coupling reaction.



•**Mechanistic Study**
•**Synthetic Application**

1) Shimazumi, R.; Tanimoto, R.; Tobisu, M. *The 101st CSJ Annual Meeting*, **2021**, A16-3vn-07.