

Sterically hindered ketones via palladium-catalyzed Suzuki–Miyaura cross-coupling of amides by N–C(O) activation.

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Streszczenie

Herein, we report a new protocol for the synthesis of sterically hindered ketones that proceeds via palladium-catalyzed Suzuki–Miyaura cross-coupling of unconventional amide electrophiles by selective N–C(O) activation. Mechanistic studies demonstrate that steric bulk on the amide has a major impact, which is opposite to the traditional Suzuki–Miyaura cross-coupling of sterically hindered aryl halides. Structural and computational studies provide insight into ground-state distortion of sterically hindered amides and show that ortho-substitution alleviates the N–C(O) bond twist.

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