

Abstract

A step economical one-pot multicomponent reaction protocol comprising the installation of the bidentate directing group followed by the Pd(II)-catalyzed C-H activation and β -arylation of C(sp³)-H bonds of carboxamides is reported. Accordingly, the reaction of a mixture of an acid chloride, bidentate ligand (e.g., 8-aminoquinoline), and an aryl iodide in the presence of the Pd(OAc)₂ catalyst and Ag₂CO₃ additive directly afforded the corresponding β -C-H -arylated N-(quinolin-8-yl) carboxamide derivatives.