BIENVENUE À TOUS !

IMPROVED CATALYSIS FOR MACROCYCLIZATION REACTIONS

Résumé :
Macrocyclic products are usually synthesized from a handful of known macrocyclization methods. Surprisingly, the Sonogashira coupling has yet to be a commonly used method to accomplish macrocyclizations, despite relatively mild reaction conditions. However, recent examples highlight the lack of practicality and effectiveness of the reaction on a large scale, since significant amounts of palladium and stoichiometric amounts of copper in a dilute media are needed to afford benzolactones in poor yields. The development of thermal and photochemical copper-catalyzed Sonogashira protocols performed at high concentrations are described as alternatives to Pd-catalyzed methods to access a wider range of compounds and pharmaceutically relevant motifs such as polyketide-derived resorcylic acid lactones.