

Cs₂CO₃ Catalyzed Reaction of 1,3-dicarbonyl compounds and Activated acetylenes in PEG: Efficient Synthesis of Functionalized Benzenes and Biaryls

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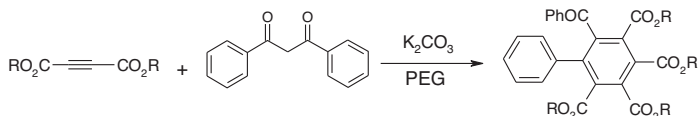
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As useful compounds in organic chemistry and natural product chemistry, polysubstituted benzenes also play important roles in medicinal chemistry for the fact that they have common structural features in various bioactive molecules and are frequently employed as precursors for the synthesis of many bioactive heterocyclic compounds [1]. Biaryls are important as they constitute the core unit in many of the natural and synthetic compounds endowed with useful biological properties [2]. As part of our study on the development of new routes to heterocyclic systems, we now report a simple synthesis of functionalized benzenes. Thus, reaction of activated acetylenes with 1, 3-dicarbonyl compounds such as 1, 3-dibenzoylmethane in the presence of cesyomdicarbonae (Cs₂CO₃) in PEG leads to the corresponding functionalized benzenes 1a-i in good yields (Scheme 1).



scheme 1

REFERENCES

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