

Selective Phosphorylation of Conjugated α -Enones at the Carbonyl Group, Catalyzed by Cyclohexylamine

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Abstract

Reaction of dialkyl phosphites with benzalacetophenone (chalcone) and benzalacetone in the presence of cyclohexylamine as a catalyst is a convenient preparative method for selective phosphorylation of conjugated α , β -unsaturated carbonyl compounds at the carbonyl group. The kinetics of cyclohexylamine-catalyzed addition of dialkyl phosphites to cis- and trans-chalcones is studied, and factors are revealed that influence the reactivity of addends in this reaction.
