Unusual Grignard Reaction of 3-Aroylpropanoic Esters

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Abstract

Grignard reaction of methyl 3-(4-methoxybenzoyl)- and 3-(4-methylbenzoyl)propanoates with MeMgX (X = Br or I) gave unexpectedly the corresponding 4-aryl-4-methylpentanoic acids, whereas the reaction with MeMgCl gave normal addition products. The unusual reaction is rationalized by assuming the involvement of γ-lactone intermediates.

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