

Influence of Milk Proteins on the Thermostability of the Lipase from *Pseudomonas fluorescens* 33

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The effects of some milk proteins on the thermostability of the lipase from *Pseudomonas fluorescens* 33 were investigated. All purified milk protein fractions except κ -casein that dissolved in phosphate buffer were effective for thermostabilization of the lipase. Thermal behavior of the lipase containing β -lactoglobulin was so specific that, after heating at 80 to 90° C, activity remained high and was comparable with that of unheated treatment. The thermostability of the lipase containing whey proteins in synthetic salts solution was extensively lowered, but that containing casein micelles retained 50% of original activity after heat treatment at 80° C for 10 min. Low temperature inactivation of the lipase was influenced by concomitant milk proteins.

Key Words: lipase • milk proteins • thermostability • psychrotrophs

Submitted on July 16, 1992

Accepted on March 10, 1993

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