Purification and properties of a neutral protease produced by *Lactobacillus brevis*

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Abstract

A proteolytic enzyme was produced by a strain of *Lactobacillus brevis* isolated from an oriental beverage. The enzyme was extracted and purified 50-fold by gel filtration and ion-exchange chromatography. The optimum pH for the enzyme was 7.0, the optimum temperature 35°C and the molecular weight 34,674 Da. Furthermore, the enzyme was stimulated by cations including Ca^{2+}, Mg^{2+}, Na^{+} and K^{+} and inhibited by Zn^{2+} and Co^{2+} ions. Other inhibitors were EDTA, ascorbic acid and citric acid. The enzyme is probably a neutral metalloprotease.

Keywords: *Lactobacillus*, ProteasepH, Temperature, Cation

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