Title (en)

COLD-ACTIVE PROTEASE CP-58 AND PSYCHROTROPHIC BACTERIA

Title (de)

KÄLTEAKTIVE PROTEASE CP-58 UND PSYCHROTROPHISCHE BAKTERIEN

Title (fr)

PROTEASE ACTIVE A FROID CP-58 ET BACTERIES PSYCHROTROPHES

Publication

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Application

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Abstract (en)

[origin: WO9730172A1] A cold-active protease is here disclosed which has the following physicochemical properties: (a) specific activity and substrate specificity: the protease acts on casein, gelatin, albumin and hemoglobin to specifically decompose them in the order of casein, gelatin, albumin and hemoglobin; (b) optimal pH: 7.5 to 8.0; (c) pH stability: the protease is stable at a pH in the range of 5.5 to 10.5 at 20 DEG C for 1 hour; (d) optimal temperature: 20 DEG C at pH 10.5 and 40 DEG C at pH 8.0; (e) temperature stability: at pH 10.5 for 1 hour, the protease is scarcely inactivated at a temperature of 10 DEG C to 30 DEG C, but it is inactivated at 40 DEG C as much as about 30 % and completely inactivated at 50 DEG C; (f) enzyme activity: the protease has about 60 % or more of its maximum activity at 20 DEG C; (g) the active center of the enzyme is a metallic ion; and (h) the molecular weight of the protease is about 58 kDa as measured by SDS-PAGE.

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