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Isolation and characterization of a subtilisin-like proteinase of *Bacillus intermedius* secreted by the *Bacillus subtilis* recombinant strain AJ73 at different growth stages

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Abstract

Two subtilisin-like serine proteinases of *Bacillus intermedius* secreted by the *Bacillus subtilis* recombinant strain AJ73 (pCS9) on the 28th and 48th h of culture growth (early and late proteinase, respectively) have been isolated by ion-exchange chromatography on CM-cellulose and by FPLC. Molecular weights of both proteinases were determined. The N-terminal sequences of the recombinant protein and mature proteinases of the original strain were compared. Kinetic parameters and substrate specificities of the early and late proteinase were analyzed. Physicochemical properties of the enzymes were studied. © Nauka/Interperiodica 2007.

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Keywords

Mass spectra, Michaelis constant, Substrate specificity, Subtilisin-like proteinases