

## **Biochemical properties of *Bacillus intermedius* subtilisin-like proteinase secreted by a *Bacillus subtilis* recombinant strain in its stationary phase of growth**

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### **Abstract**

Biochemical properties of *Bacillus intermedius* subtilisin-like proteinase (AprBi) secreted by a *B. subtilis* recombinant strain in the early and late stationary phases of growth have been determined. Protein structure was analyzed and its stability estimated. It was noted that the enzyme corresponding to different phases of bacterial growth retains activity in the presence of reducing and oxidizing agents (C<sub>2</sub>H<sub>5</sub>OH and H<sub>2</sub>O<sub>2</sub>). Different effects of bivalent metal ions on activity of two proteinase fractions were found. Calcium ions more efficiently activate proteinase secreted in the late stationary phase. Unlike the first enzyme fraction, the second forms catalytically active dimers. © 2009 Pleiades Publishing, Ltd.

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### **Keywords**

AprBi, Dimers, Subtilisin-like proteinase