

Start codon in the *Bacillus intermedius* gene for serine proteinase

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Abstract

The translation initiation site was determined for *Bacillus intermedius* aprBi (AN AY754946), coding for extracellular subtilisin-like serine proteinase secreted at the stationary growth phase. Analysis of the aprBi open reading frame revealed three potential translation start sites (TTG, GTG, and ATG). Using the SignalP online freeware program, the probabilities of their functional activity were evaluated. To identify the translation start, modified subtilisin-like protease genes with nucleotide replacements in putative start codons were obtained by oligonucleotide-directed mutagenesis. The expression of these genetic constructs was investigated in protease-deficient strain *B. subtilis* AJ73. The results indicated that aprBi translation starts from the alternative GTG codon. © 2008 MAIK Nauka.

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Keywords

Bacillus intermedius, Mutant genes, Start codon, Subtilisin-like serine protease