

Features of gene expression of *Bacillus pumilus* metalloendopeptidase

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Abstract

© 2016, Pleiades Publishing, Ltd. Features of gene expression of the secreted *Bacillus pumilus* metalloendopeptidase belonging to the adamalysin/reprolysin family were investigated. In the regulatory region of the gene, we identified hypothetical binding sites for transcription factors CcpA and TnrA. We found that the expression of the metalloendopeptidase gene is controlled by mechanisms of carbon and nitrogen catabolite repression. In experiments involving nitrogen metabolism regulatory protein mutant strains, we found that the control of the metalloendopeptidase gene expression involves proteins of ammonium transport GlnK and AmtB interacting with the TnrA-regulator.

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Keywords

Bacillus pumilus, catabolite repression, gene expression, metalloendopeptidase, regulatory mutants