The action of bacillus' metzinc metalloproteinase on cultured animal cell lines

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Abstract

Microbial enzymes with high activity are increasingly used in medical practice in development of drugs for treatment of burn injuries, diseases of gastrointestinal tract, as well as in systemic enzyme therapy. One of crucial requirements for such drugs is the absence of toxicity, both on cellular and organism levels. The aim of the present study was to evaluate cytotoxic effect of Bacillus pumilus metzinc metalloproteinase on animal cell lines. Cytological changes in LEK, Vero and PK-15 cell lines were observed after cell treatment with 155 μ /ml enzyme. However, lower enzyme concentrations - 75 and 15 μ /ml did not show any toxicity.

Keywords

Cultured cell lines, Cytotoxicity, Metzinc metalloproteinase, Viability