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Effect of Bacillus intermedius ribonucleases with different catalytic activities on the growth of Escherichia coli and Bacillus subtilis

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Abstract

The effect of the Bacillus intermedius ribonuclease and its mutant forms derived by site-specific mutagenesis on the growth of gram-positive and gram-negative bacteria was studied. Both catalytically active and catalytically inactive (mutant) ribonucleases stimulated bacterial growth, the extent of stimulation correlating with the catalytic activity of the enzymes. It was suggested that the biological activity of exogenous ribonucleases is mainly due to their catalytic activity. © 1998 MAHK Hayka/Interperiodica Publishing.

Keywords

Catalytic activity, Exogenous ribonuclease, Growth stimulation, Mutant enzymes