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Phenotypic characteristics of bacillus subtilis mutants with decreased activity of exonuclease I

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Abstract

A *Bacillus subtilis* strain containing a mutation decreasing exonuclease I activity by up to 25% as compared to normal cells of the original BD46 strain was developed. A decrease in *B. subtilis* exonuclease I activity increased the sensitivity of mutant cells to UV irradiation and mitomycin C, decreased the frequency of recombination during chromosomal transduction and transformation, decreased the frequency of transposon Tn9/7 translocation from plasmid to the bacterial chromosome, and did not affect the frequency of plasmid transformation. The corresponding mutation was mapped.
