

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 Tn917 translocation from plasmid to the bacterial chromosome, and did not affect the frequency of plasmid transformation. The corresponding mutation was mapped.
