鼠伤寒沙门氏菌嘌呤生物合成的调控研究Ⅵ.超阻遏突变体的分离和遗传鉴定

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摘要　　从鼠伤寒沙门氏菌的TT12306(purD∷lac)株出发，对86个对数生长期培养物作了诱变处理，在E+Ado+X-gal平板上得到66个独立的白色或浅蓝色菌落，经测定它们在阻遏和去阻遏条件下的β-半乳糖苷酶活性、回复突变频率、突变位点的转导分析和显性实验，证明其中11株为嘌呤生物合成途径中的超阻遏突变体。

Expression Regulation of Purine Biosynthetic Genes in Salmonella typhimurium VI. Isolation and Characterization of Super-repressor Mutants

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Abstract

<P><FONT face=Verdana>Starting from strain of Salmonella typhimurium purD∷lac,86 exponential cultures were mutagenized with NTG and white or light blue clones on E + Ado + Xgal plate were selected as candidates of purRs mutant. Total 66 independent candidate strains were obtained. By assaying their <SPAN lang=EN-US style="FONT-SIZE: 9pt; FONT-FAMILY: 宋体; mso-bidi-font-size: 12.0pt; mso-bidi-font-family: 'Times New Roman'; mso-font-kerning: 1.0pt; mso-ansi-language: EN-US; mso-fareast-language: ZH-CN; mso-bidi-language: AR-SA">ß</SPAN> - galactosidase activity under the repressed and derepressed conditions, determing their frequency of revertional mutation, Conducting transductional analysis of mutational site and dorminance test, 11 candidates strains were proved to be super-repressor mutants. These mutants are useful for studying the expression regulation of purine biosynthetic gene and relationship between protein structure and function in general</FONT></P>