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庆丰链霉菌中与庆丰霉素生物合成有关质粒的感染性转移1）

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摘要 本研究表明不同类型的q+、q-衍生菌株混合培养，Qm的合成能力可以从q+供体转移给q-受体，其频率因配对菌株的特性不同而在0.03—100%范围内。当q+、q-的营养缺陷型作为两亲株进行杂交时，形成的Smr原养型重组子中有50—100%获得了合成Qm的能力，混合孢子中没有重组并带有原来标记的q-受体菌有20—90%由q-转变成q+。这种转移发生在菌丝阶段，并受AY、EB、SDS或高温培养的干扰，据此我们认为这个与Qm合成有关的质粒具有感染性转移的功能，并命名为SQP1。

关键词

分类号

INFECTIOUS TRANSFER OF PLASMID INVOLVED IN QINGFENGMYCIN BIOSYNTHESIS IN STREPTOMYCES QINGFENGMYCETICUS

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Abstract

This parper reports that the Qm biosynthesis ability can transfer from q+ donor to q- recipient when the two pqrent \strains were grown together on a same slant. Transfer frequency was in the range of 0.03—100% according to the different properties.Transfer frequency was in the range of 0.03—100% according to the different properties of mating strains. Using auxotrophic mutants of q+ and q- as crossing parents, 50—100% of prototrophic recombinants with Smr marker have gained the Qm biosynthesis ability and there were also about 20—90% of the coloies out of the excess q- recipient with the original markers in the mixed spore suspension transferred to q+. Such transfer occurred at the myceliul stage and was interfered gby the presence of ZY,EB,SDS,and high temperature preincubation. So we consider that the plasmid related to Qm biosynthesis has the infectious transfer function and is designated by the name of SQP1.

Key words

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