

# 带有特定染色体片段的mini-F质粒所发动的染色体复制对于recA基因的依赖性<sup>1)</sup>

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**摘要** 构建了一些带有大肠杆菌的特定染色体片段的mini-F质粒, 使它们通过同源重组整合在dnaA 46细菌的染色体的预定位置上, 然后测定整合抑制菌株(Sin)在40℃中染色体复制对recA基因的依赖性。实验结果说明, Sin菌株对recA基因的依赖性决定在质粒的整合位置。整合在oriC近旁的Sin菌株不依赖于recA基因; 整合在oriC和terC中间的只在丰富培养基上是依赖的; 整合在terC附近的在不丰富的培养基上也依赖于recA基因。

**关键词** [mini-F质粒,整合抑制,recA基因](#)

分类号

## recA Gene Dependence of Chromosome Replication of Escherichia coli Initiated by mini-F Plasmids Integrated at Predetermined Sites<sup>1)</sup>

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### Abstract

mini-F plasmids carrying particular chromosomal fragments were constructed. Through homologous recombination they were expected to integrate onto predetermined sites of the chromosome of dnaA46 strain LC381. Chromosome replication of suppressive integration(Sin) strains were recA dependent or independent according to the site of integration of the plasmid: chromosome replication of those with the plasmid integrated close to oriC were found to be recA dependent at 40℃; those with the plasmid integrated between oriC and terC were recA dependent on rich medium but independent on minimal medium; those with the plasmid integrated close to terC were recA dependent even on minimal medium.

**Key words** [mini-F plasmid](#) [Suppressive integration](#) [recA](#) [Chromosome replication](#)

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