

recA基因通过同源重组途径参与由整合质粒发动的大肠杆菌染色体复制*

毛裕民, 程海平, 黄林, 盛祖嘉

复旦大学遗传学研究所, 上海 200433

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摘要 我们在前文中报道由整合的F'质粒所发动的大肠杆菌染色体的复制依赖于recA基因。本文报道有关recA、recB、recC以及lexA等在染色体复制中的作用, 实验结果说明, recA基因通过同源重组途径而不是通过SOS途径参与复制, 而且recA基因和Chi热点无关。实验结果还说明, RecBC酶的依赖于ATP的双链DNA外切核酸酶活性的recA基因的作用无关。

关键词 [整合抑制, recBC途径, SOS途径, 同源重组](#)

分类号

Through Homologous Recombination Pathway recA Gene Takes Part in Chromosome Replication of E.coli Initiated by Integrated Plasmid

Mao Yumin, Cheng Haiping, Huang Lin, Sheng Zujia

Institute of Genetics, Fudan University, Shanghai, 200433

Abstract

We have reported in our previous paper that replication of E. coli chromosome initiated by the integrated F' plasmid depends on the recA gene. Here we report on work dealing with the role played by recA, recB, recC, lexA in chromosome replication. Our results show that the recA gene takes part in chromosome replication through homologous recombination rather than SOS pathway and that Chi hot spot is not concerned with. They also show that the ATP-dependent dsDNA exonuclease, activity of the RecBC enzyme has nothing to do with the recA gene in chromosome replication.

Key words [Inhibition of integration](#) [recBC pathway](#) [SOS pathway](#) [Homologous recombination](#)

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