遗传学报 1993 20 (3): 193-200 ISSN: 0379-4172 CN: 11-5450/R

扩展功能
本文信息
Supporting info
PDF(2343KB)
[HTML全文](0KB)
参考文献
服务与反馈
把本文推荐给朋友
加入我的书架
加入引用管理器
复制索引
Email Alert
文章反馈
浏览反馈信息
相关信息
本刊中 包含“生物素标记探针,原位杂交,染色体,染色体进化 ”的相关文章
本文作者相关文章
· 黄浩杰
· 张锡然
· 陈宣峰

用染色体原位抑制杂交法研究人和猕猴染色体同源性

黄浩杰，张锡然，陈宣峰

南京师范大学生物系 南京 210024

收稿日期 修回日期 网络版发布日期 接受日期

摘要 本文用生物素标记的人类1号、2号、4号染色体NDA探针进行染色体原位抑制(chromosom al in situ suppression, 简称CISS)杂交以研究人和猕猴染色体的同源性。结果表明：人1 号染色体与猕猴1号染色体同源。其中与猕猴1pter→1q33的同源程度高，与猕猴1q33→1qte r的同源程度相对较低；人2号染色体与猕猴13号染色体长臂、9号染色体长臂和部分短臂同 源；人4号染色体与猕猴2号染色体同源。结合染色体带型比较分析，本文对人和猕猴染色体 的演化关系进行了探讨，该研究进一步证明了染色体重排可能是灵长类染色体进化的主要机制。

关键词 生物素标记探针,原位杂交,染色体,染色体进化

分类号

Stuies of The Homology of Chromosomes Between Human Being and Rhesus M*onkey* with Chromosomal ln situ Suppression Hybridization

Huang Haojie, Zhang Xiran, Chen Yifeng

Department of Biology, Nanjing Normal University, Nanjing 210024

Abstract

Chromosomal in situ suppression (CISS) hybridization of biotin labeled DNA libraries for human chromosomes 1,2 and 4 was used to investigate chromosome hom ology between human being and rhesus m<I>onkey</I>. The results desmonstrate that chrom osome I in human being and rhesus m<I>onkey</I> is homologous, of which the lpter→lq33 of rhesus m<I>onkey</I> is highly homologous with a cognate region of chromosome 1 in human, while the 1q33→1qter is relatively low; Chromosome 2 in human shows homo logy with the long arm of chromosome 13 as well as the long arm and the partial short arm of chromosome 9 in the rhesus, and chromosome 4 in human is identical to chromosome 2 in rhesus m<I>onkey</I>. Combined with a comparative analysis of bandin g patterns of chromosomes, derivation relationship of chromosomes between man an d the rhesus are discussed. Our present data provide a definitive proof that chr omosomal rearrangements may be a major mechanism of chromosomal evolution in primates.

Key words Biotinylated probe In situ hybridization Chromosome Chromosomal evolution

DOI:

通讯作者