

## 人类YAC库PCR三维筛选体系的建立及质量考核

余才林1, 章彤1, 顾柏炜1, 叶菁1, 陈赛娟1, 陈竺1, 韩顺生2, 石景茂2, 余龙2, 赵寿元2

1.上海第二医科大学附属瑞金医院上海血液学研究所;上海 200025; 2.复旦大学遗传学研究所;上海 2000433

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**摘要** 为了在知道某个区域、位点、基因或DNA片段的部分信息后,能从CEPH YAC库中筛选出与其对应的YAC克隆,为进一步研究奠定基础,需要建立一个筛选体系。本文概述了这一筛选体系的建立过程。随后,用两对与已知基因对应的引物进行了筛选验证工作,证明了这一体系的可用性,同时提出了以后筛选的途径,即首先筛选YAC库的Mega YAC部分,并以5块板为一组进行筛选。另外,运用荧光原位杂交技术(FISH),对CEPH YAC库的质量及其第一代人类基因组物理图谱进行了考察。我们取26个YAC克隆进行FISH定位,结果其中嵌合体13个,占50%。定位错误的克隆有6个,占23%。非嵌合体且定位正确的共9个,占35%。

**关键词** [CEPH YAC库](#) [PCR筛选体系](#) [荧光原位杂交](#) [FISH](#)

分类号

## The Establishment of a Three Dimensional PCR Screening System and Quality Evaluation of Human YAC Library

Yu Cailin\* Zhang Tong Gu Bowei Ye Qing Chen Saijuan Chen Zhu Han Shunsheng Shi Jingmao Yu Long Zhao Shouyuan

1; Shanghai Institute of Hematology Rui Jin Hospital Shanghai Second Medical University Shanghai 200025 2; Institute of Genetics Fudan University Shanghai 200433

### Abstract

In order to screen out YAC clones in the CEPH YAC library related to a definite gene DNA fragment or locus, we need to establish a screening system. This paper includes the establishment of this system and the evaluation of its feasibility. According to the experiments, we suggest that it is better to screen the Mega YAC part of the library at first and put five culture plates as a group. Meanwhile, FISH experiments to assess the quality of CEPH YAC library and the first generation physical map of human genome, were conducted FISH experiments on 26 YAC clones were carried out. There were 13 clones that were chimeric (about 50%), 6 clones that were mapped correctly and were not chimeric (about 35%).

**Key words** [CEPH YAC library](#) [PCR screening system](#) [FISH](#)

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