

论著

## 双色荧光原位杂交检测正常人精子9、18号染色体非整倍体率

李欣<sup>1</sup>; 郑履康<sup>2</sup>; 邓丽霞<sup>2</sup>; 张桥<sup>2</sup>

1. 广东省疾病预防控制中心毒理所, 广东 广州 510300; 2. 中山医科大学公共卫生学院遗传毒理研究室, 广东 广州 510080

收稿日期 2001-7-24 修回日期 2001-8-27 网络版发布日期:

**摘要** 目的:测定健康人精子9、18号染色体非整倍体率。方法:用9、18号染色体着丝粒探针与精子核进行双色荧光原位杂交,计数非整倍体率。结果:检查16位健康捐精者156 955个精子,每人约计数10 000个精子。平均杂交率> 99%,平均9双体率0.050%±0.030%,18双体率0.033%±0.025%,二倍体精子率0.040%±0.036%,9缺体率0.067%±0.037%,18缺体率0.048%±0.034%,无荧光点精子率0.427%±0.357%,总数目畸变率0.218%±0.071%。结论:测定了16例健康人精子9、18号染色体非整倍体率,与传统的人精子染色体分析法测定的结果相近。

**关键词** [荧光原位杂交](#) [非整倍体](#) [精子](#)

## DETECTION OF ANEUPLOIDIES FOR CHROMOSOME 9, 18 IN SPERM OF NORMAL MALES USING TWO-COLOR FLUORESCENCE IN SITU HYBRIDIZATION

LI Xin<sup>1</sup>; ZHENG Lu-kang<sup>2</sup>; DENG Li-xia<sup>2</sup>; ZHANG Qiao<sup>2</sup>

1. Lab. Of Genetic Toxicology, Center for Disease Control and Prevention of Guangdong Province, Guangzhou 510300, China; 2. Lab. Of Genetic Toxicology, School of Public Health, Sun Yat-Sen University of Medical Sciences, Guangzhou 510089

**Abstract** Purpose : To detect the frequencies of aneuploidy for chromosome 9 and 18 in sperm of healthy males. Methods : Two-color fluorescence in situ hybridization ( FISH) was performed on sperm nuclei using centromeric probes for chromosome 9 and 18, and the frequencies of aneuploidy were scored. Results : 156 955 sperm nuclei were detected in 16 healthy adults. About 10 000 sperm nuclei were scored from each of 16 donors and the average efficiency of hybridization was above 99%. The mean frequencies of disomy obtained were 0.050% ±0.030% for chromosome 9, 0.033% ±0.025% for chromosome 18. The nullisomy frequencies of chromosome 9 and 18 were found to be 0.067% ±0.037%, 0.048% ±0.034% respectively. Diploidy was observed as 0.040% ±0.036%. The frequency of total numerical aberration was 0.218% ±0.071%. Conclusion : The aneuploidy for chromosome 9 and 18 in sperm of 16 healthy males was detected in this research, the result was similar to that of traditional sperm karyotype analysis.

**Keywords** [fluorescence in situ hybridization](#) [aneuploidy](#) [spermatozoa](#)

DOI

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [\[PDF全文\]\(80k\)](#)
- ▶ [\[HTML全文\]\(0k\)](#)
- ▶ [参考文献](#)

#### 服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [Email Alert](#)

#### 相关信息

- ▶ [本刊中包含“荧光原位杂交”的相关文章](#)

▶ 本文作者相关文章

· [李欣; 郑履康; 邓丽霞; 张桥](#)