

缺乏叶酸培养基中自发及诱发的染色体畸变

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摘要 在缺乏叶酸的基本培养基中, 淋巴细胞染色体对环境因子有更高的敏感性, 结果表明这个体系可能用于检测环境有害因子对人体的影响。

关键词

分类号

Spontaneous and Induced Chromosome Aberration in Folic Acid Deficient Medium

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Abstract

Lymphocytes grown in Eagle minimal essential medium deficient folic acid (MEM-FA) have markedly higher sensitivity to environmental genotoxic agents,such as X-ray and smoking.The proofs are as follows:(1) Lymphocyte chromosomes from 113 normal individuals were analyzed in folic acid deficient medium.It is found that the low folic acid is associated with increased chromosome breakage.(2) Chromosome breakages were significantly higher in MEM-FA medium than those in MEM medium with folic acid.(3) For cells exposed by X-ray in vitro,chromosome breakages were significantly higher in without folic acid medium than those in with folic acid medium.(4) In MEM-FA medium,significantly more chromosome breaks were found in smokers than those in non-smokers.

The system may be used as an indication for detecting genotoxic agents to which human being have been exposed.

Key words

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