

5-azaC对人体成纤维细胞失活X染色体DNA复制带型的影响¹⁾

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摘要 本文用胞嘧啶的类似物, 5-氮胞苷(5-azaC)处理两种人体皮肤成纤维细胞——46, XX和46, X(X; 1)0经过一定时间培养, 观察用5-azaC处理人体成纤维细胞中失活X染色体复制带的变化。发现, 5-azaC对迟复制X(LX)和t(X; 1)染色体上有一条或多条复制带的染色加深, 表示复制提前, 大约比对照组提前复制1小时左右。n时发现t(x; 1)染色体上, 受X失活中心的失活扩散影响的I—10区段, 用5-azaC处理之后, 也有复制提前。复制提前这一现象, 从另一方面支持了DNA甲基化, 可能是人类X染色体失活的一种机理。

关键词 [5-氮胞苷,复制带,失活X染色体](#)

分类号

The Effect of 5-azaC on the Inactive X-chromosome Renlication Bands of Human Fibroblasts

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Abstract

Two kinds of human skin fibroblasts-46XX and 46X, t(X; 1)---were treated with a cytidine analog, 5-azaeytidine (5-azaC). After culturing for a definite time, the change of replication bands of inactive X-chromosome in human skin fibroblasts was observed. It showed that stain intensity on one or more bands in LX and t(X; 1) increased, and that the replication took place 1 hour earlier than the control. Moreover, it was seen that the replication on 1---10 region of t(X; 1), influenced by the diffusion effect of inactive center on the late replicating X-chromosome, also ppenedearlier. These facts support the theory that metnylation may be a mechanism of human X-chromosomeinactivation.

Key words [5-azacytidine \(5-azaC\),R+-plication band](#) [Inactive X-chromosome](#)

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