

论著

转染外源HCAP1基因对B淋巴瘤细胞株Raji细胞增殖的作用

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摘要 目的: HCAP1基因定位于人类染色体17p13.3, 此区域在多种肿瘤组织呈杂合性缺失, 本研究旨在探讨HCAP1外源基因产物对B淋巴瘤细胞系Raji细胞增殖的作用。方法: 应用脂质体介导法, 将HCAP1基因转染Raji细胞, 经G418筛选、获得稳定表达外源HCAP1基因的细胞, 用台盼蓝活细胞计数、绘制生长曲线、软琼脂集落培养及BrdU (5-溴-2'脱氧尿嘧啶) 标记法, 观察HCAP1基因产物对Raji细胞增殖的作用。结果: 与转染空载体的对照细胞比较, 稳定表达外源HCAP1基因的细胞生长速度明显减慢, 倍增时间明显延长, 细胞集落形成数明显减少, BrdU掺入细胞比例降低。结论: 外源HCAP1基因产物的过表达对Raji细胞的增殖有抑制作用。

关键词 [基因, HCAP1](#); [淋巴瘤](#); [Raji细胞](#)

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Inhibition of proliferation in B lymphoma cell line Raji transfected with exogenous HCAP1 gene

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Abstract

AIM: HCAP1 gene has been mapped at human chromosome band 17p13.3, a region with high frequency of loss of heterozygosity in various types of tumor. The aim of this study was to investigate the effects of exogenous HCAP1 gene products on proliferation of B lymphoma cell line Raji. METHODS: HCAP1 gene was transfected into Raji cells. The cells stably expressed exogenous HCAP1 gene were screened with G418. The effects of HCAP1 protein overexpression on proliferation in Raji cells were assessed by viable cell count, cell growth curve, colony formation assay in soft agar, and 5-bromo-2'-deoxy-uridine (BrdU) labeling and detection assay. RESULTS: The Raji cells overexpressed HCAP1, displayed significantly slow growth rate, extended cell doubling time, decreased capacity of colony formation and reduced percentage of BrdU incorporation in the cells (P<0.05), as compared with control Raji cells which transfected with empty vector, or compared with parent Raji cells. CONCLUSION: Overexpression of exogenous HCAP1 in Raji cells inhibits the cell proliferation.

Key words [Genes](#) [HCAP1](#) [Lymphoma](#) [Raji cells](#)

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