癌变.畸变.突变 ISSN: 1004-616x CN:44-1063/R 2001; 13(2) :092-095

论著

基因转染法建立bcl-2 稳定表达的肝癌细胞株

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收稿日期 2000-7-11 修回日期 2000-11-22 网络版发布日期:

摘要 目的与方法:为了建立稳定表达bcl-2 蛋白的肝细胞癌(简称肝癌) 细胞株,用脂质体介导的基因转染法将含有人bcl-2 cDNA 的逆转录病毒表达载体pDOR-SB 质粒导入bcl-2 蛋白阴性的肝癌细胞系HCC-9 204 细胞中。经G-418 筛选后获得转入bcl-2 基因的细胞克隆。细胞扩大培养后用免疫细胞化学法检测bcl-2 表达情况。有限稀释法连续克隆化直至获得100 %稳定表达bcl-2 蛋白的单克隆细胞株,并进行流式细胞仪检测。结果:转染了pDOR-SB的HCC-9 204 细胞大部分为bcl-2 蛋白表达阳性,而转染了pDOR 空载体或未转染的HCC-9 204 细胞均为bcl-2 蛋白阴性。经过连续3 次克隆化后,流式细胞仪检测表明所获得的单克隆细胞株100 %表达bcl-2 蛋白。结论:用基因转染法成功地建立了稳定表达bcl-2 蛋白的肝癌细胞株。

关键词 bcl-2 肝细胞癌 基因转染 基因表达

ESTABLISHMENT OF BCL-2 STABLY-EXPRESSED HEPATOMA CELL STRAIN BY GENE TRANSFECTION METHOD

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Abstract Purpose and Methods : To establish a hepatocellular carcinoma (HCC) cell st rain that expresses bcl2-protein stably the ret rovirus expression vector pDOR2SB containing human bcl-2 cDNA was t ransduced into bcl-2 protein negative cell line HCC-9204 by lipid2mediated gene t ransfection method. The bcl-2 t ransfected cells were obtained after being selected with G-418 , and the expression of bcl-2 was detected by immunocytochemist ry after the cells being expanded. The t ransfected cells were cloned by a limited dilution method , and bcl-2 expression in the monoclonal cells was detected with flow cytometer. Results : Bcl-2 protein was expressed in most of the HCC-9204 cells t ransfected with pDOR2SB , but was negative in the HCC-9204 cells t ransfected with pDOR vector and nont ransfected HCC29204 cells. After being cloned for 3 times continually , the monoclonal cell strain that expressed bcl-2 protein at a 100 % positive rate was obtained. Conclusion : The HCC cell st rain that expressed bcl-2 protein stably , was established successfully by gene t ransfection method.

Keywords

DOI

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