癌变.畸变.突变 ISSN: 1004-616x CN:44-1063/R 2000; 12(02) :065-067

论著

TNF 家族的新成员TRAIL cDNA 的克隆及其在E. coli 中的表达

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收稿日期 1999-12-25 修回日期 1999-12-25 网络版发布日期:

摘要 目的:克隆Trail 基因cDNA 全长,构建Trail 的原核表达载体,从而建立其原核表达体系。方法:通过抽提外周血淋巴细胞总RNA 进行RT - PCR 克隆Trail cDNA ,构建Trail 的原核表达载体,用限制性酶切和DNA 测序进行鉴定,以温度进行诱导表达,通过SDS - page 分析表达产物。结果: (1) 克隆了Trail 基因cDNA 全长,DNA 测序结果与报道的完全一致; (2) 构建了Trail 基因原核表达载体; (3) 将构建好的载体转化相应的宿主菌,诱导后得到了Trail 蛋白表达产物。结论: Trail 基因cDNA 的克隆将对于其抗肿瘤作用研究有重要意义,同时此基因原核表达系统的建立为其在肿瘤生物治疗中的应用奠定了基础。

关键词 Trail 基因克隆 原核表达

THE CLONINGOF TRAIL cDNA AND ITS EXPRESSION IN E. COL I

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Abstract Purpose : To develop a inducible system for expression of Trail in E. coli . Methods : RT2PCR and sequencing were used to clone and conform Trail gene. The production of expression was analyzed by SDS2page.Results : Trail cDNA was cloned by RT2PCR. After sequencing , we const ructed the inducible vector for expression of Trail in E. coli . The vector was t ransformed with TG1. Trail was expressed by induced of changing temperature f rom 30 ℃to 42 ℃. The production was conformed by SDS2page. Conclusion : This study will provide new insight into physiological and pathological roles of Trail2mediated cytotoxicity and it s potential application to tumor immunotherapy.

Keywords Trail gene cloning gene expression

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