

实验研究

## 猪囊尾蚴抗原与猪白细胞介素-4基因融合DNA疫苗载体的构建

吴丹,郭瀛军,孙树汉

上海第二军医大学医学遗传学教研室 上海 200433

收稿日期 修回日期 网络版发布日期 接受日期

摘要

目的: 为增强猪囊尾蚴抗原 c C 1 的免疫保护作用而构建一表达猪白细胞介素 4 ( I L 4 ) 与 c C 1 抗原融合蛋白的 D N A 疫苗载体。方法: 通过聚合酶链反应 ( P C R ) , 分别扩增猪 I L 4 c D N A 和 c C 1 c D N A 片段并进行融合, 获得的嵌合基因 I L 4 c C 1 中含有 1 0 个氨基酸的中间接头序列, 同时对其 5 ' A U G 侧翼序列进行翻译优化突变。结果: 经酶切鉴定, 证实有一 1 . 5 k b 的片段插入载体, 其 D N A 序列分析结果与文献报道和实验设计完全一致。结论: 表达猪 I L 4 与猪囊尾蚴抗原 c C 1 融合蛋白的 D N A 疫苗载体构建成功。

关键词 [囊尾蚴病](#) [白细胞介素-4](#) [基因融合](#) [DNA疫苗](#)

分类号

## CONSTRUCTION OF DNA VACCINE INCLUDING A CHIMERIC GENE ENCODING CYSTICERCUS CELLULOSAE ANTIGEN AND PORCINE INTERLEUKIN 4

WU Dan, GUO Yingjun, SUN Shuhan

Department of Medical Genetics; Second Military Medical University; Shanghai 200433

Abstract

AIM: To construct a fusion expression vector for DNA vaccine including porcine interleukin 4(IL 4)and antigen cC1 to enhance the protective immunity of Cysticercus cellulosae antigen cC1. METHODS: The cDNA fragments encoding porcine IL 4 and cC1 were amplified respectively by PCR and then fused. The obtained chimeric gene IL 4cC1 contained a synthetic linker of ten amino acids and the sequence surrounding its 5' AUG initiatory codon was changed to optimized translational initiation. RESULTS: Identified by restriction enzyme analysis, an insert fragment of 1.5 kb was demonstrated. It had the same sequence as reported and designed by DNA sequencing analysis. CONCLUSION: A fusion expression plasmid containing porcine IL 4 and cC1 was constructed.

Key words [Cyticercosis](#) [interleukin 4](#) [gene fusion](#) [DNA vaccine](#)

DOI:

通讯作者

作者个人主页

吴丹; 郭瀛军; 孙树汉

### 扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(226KB\)](#)
- ▶ [\[HTML全文\]\(OKB\)](#)
- ▶ [参考文献\[PDF\]](#)
- ▶ [参考文献](#)

服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

相关信息

- ▶ [本刊中 包含“囊尾蚴病”的 相关文章](#)
- ▶ 本文作者相关文章

- [吴丹](#)
- [郭瀛军](#)
- [孙树汉](#)