

论著

## 携带mIL-12基因逆转录病毒载体的构建与表达

黄丽娜<sup>1</sup>,赵军<sup>1</sup>,孙奋勇<sup>2</sup>,李辰<sup>3△</sup>,张翼飞<sup>3</sup>

1暨南大学深圳眼科中心, 深圳市眼科医院, 广东 深圳 518001; 暨南大学2生物工程研究所,3附属第一医院眼科, 广东 广州 510632

收稿日期 2004-11-1 修回日期 2005-1-6 网络版发布日期 2009-9-25 接受日期 2005-1-6

**摘要** 目的: 构建携带小鼠IL-12 ( mouse IL-12, mIL-12) 基因逆转录病毒表达载体pLXmIL-12SN并检测其在B16F10细胞中的表达。方法: 应用限制性内切酶从载体pGCp35-IRES-p40SN中酶切p35-IRES-p40 (mIL-12基因片段) 及将逆转录病毒载体pLXSN切开, 通过连接酶连接, 通过序列测定确定p35-IRES-p40基因片段正向插入载体pLXSN中的重组子, 将阳性重组子转染B16F10细胞并通过RT-PCR方法检测mIL-12基因在B16F10细胞中表达。结果: 成功地构建表达载体pLXmIL-12SN并可在mRNA水平检测到mIL-12基因在B16F10细胞中表达。结论: 载体pLXmIL-12SN的构建成功及可在B16F10细胞中表达, 为mIL-12基因治疗眼部疾病的研究奠定了基础和提供了借鉴。

**关键词** [基因](#),[白细胞介素-12](#); [载体构建](#); [表达](#)

分类号 [R363](#)

## Construction and expression of retroviral vector containing mIL-12 gene

HUANG Li-na<sup>1</sup>, ZHAO Jun<sup>1</sup>, SUN Fen-yong<sup>2</sup>, LI Chen<sup>3</sup>, ZHANG Yi-fei<sup>3</sup>

1Shenzhen Ophthalmic Center, Jinan University, Shenzhen Eye Hospital, Shenzhen 518001, China; 2Bioengineering Institute, 3Department of Ophthalmology, The First Affiliated Hospital, Jinan University, Guangzhou 510632, China

### Abstract

<FONT face=Verdana>AIM: To construct retroviral expression vector pLXmIL-12SN containing mouse IL-12 (mIL-12) gene and detect the gene expression in B16F10 cells. METHODS: Vector pGCp35-IRES-p40SN was digested to obtain p35-IRES-p40 (mIL-12 gene fragment) and retroviral vector pLXSN was digested by restriction enzyme, and then they were linked by ligase. The recombinant vector that mIL-12 gene fragment had correctly been inserted into pLXSN was identified by sequencing. The recombination vector with mIL-12 gene was transfected into B16F10 cell and was detected by RT-PCR. RESULTS: Expression vector pLXmIL-12SN was successfully constructed. mIL-12 gene was confirmed to express in B16F10 cells at the level of mRNA. CONCLUSION: Acquired vector pLXmIL-12SN and confirmed mIL-12 gene expression lays a foundation for mIL-12 gene therapy to eye diseases.</FONT>

**Key words** [Genes](#) [interleukin-12 gene](#) [Vector construction](#) [Expression](#)

DOI: 1000-4718

通讯作者 李辰 [lichen-503@163.com](mailto:lichen-503@163.com)

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(3942KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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“基因,白细胞介素-12; 载体构建; 表达”的 相关文章](#)
- ▶ [本文作者相关文章](#)

- [黄丽娜](#)
- [赵军](#)
- [孙奋勇](#)
- [李辰](#)
- [张翼飞](#)