

综述

Toll样受体3在病毒感染及细胞凋亡中的生物学功能

孙瑞利, 张宇综述 胡锦涛 审校

中南大学肿瘤研究所, 长沙 410078

收稿日期 2008-9-10 修回日期 2008-10-10 网络版发布日期 接受日期

摘要

Toll样受体3 (TLR3) 作?《舅 碯NA识别受体在机体抗病毒天然免疫中发挥十分重要的作用。TLR3识别配体后通过含TIR结构域的转接蛋白 (TRIF) 途径活化转录因子NF-κB和干扰素调节因子3 (IRF3), 诱导炎症细胞释放炎症因子并介导炎症反应, 同时诱导I型干扰素的释放, 介导抗病毒天然免疫。在一些病毒感染中TLR3通过诱导组织损伤介导病毒的扩散从而加重疾病的严重程度。部分肿瘤细胞也表达TLR3, 活化的TLR3介导细胞凋亡、抑制细胞增殖, 提示TLR3可能是肿瘤免疫治疗的新靶点。[关键词] Toll样受体3; 信号转导; 病毒; 肿瘤; 细胞凋亡

关键词

[Toll样受体3; 信号转导; 病毒; 肿瘤; 细胞凋亡](#)

分类号

Biologic functions of Toll-like receptor 3 for virus infection and cell apoptosis

SUN Ruili, ZHANG Yu, HU Jinyue

Cancer Research Institute, Central South University, Changsha 410078, China

Abstract

Toll-like receptor 3 (TLR3), the receptor recognizing virus double-strain RNA, plays important roles in the anti-virus innate immunity. By binding its ligands, TLR3 activates transcriptional factor NF-κB and interferon regulatory factor 3(IRF3) via myeloid differentiation factor 88(MyD88) independent but TIR-domain-containing adaptor protein inducing IFN-β(TRIF) dependent pathway, leading to the production of pro-inflammatory factors to elicit the inflammatory response, and the production of type I interferon to trigger the anti-virus innate immunity. The results in recent studies show that in some virus infection the activation of TLR3 results in virus dissemination, thus leading to promote the progress of the disease. In addition, a part of tumor cells express TLR3. The activation of TLR3 in tumor cells leads to the cell apoptosis, and the inhibition of cell growth, suggesting that TLR3 maybe a new target for tumor immune therapy.

Key words [Toll-like receptor 3](#) [signaling](#) [virus](#) [neoplasms](#) [apoptosis](#)

DOI:

通讯作者 胡锦涛 jinyueh@yahoo.com

作者个人主页 孙瑞利; 张宇综述 胡锦涛 审校

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF \(853KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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 “](#)

[Toll样受体3; 信号转导; 病毒; 肿瘤; 细胞凋亡](#)

[” 的相关文章](#)

▶ 本文作者相关文章

- [孙瑞利](#)
- [张宇综述 胡锦涛 审校](#)