

综述

Notch信号通路与心血管发育的关系

晋金兰,庄汉屏

中南大学湘雅医院老年医学科, 长沙 410008

收稿日期 2007-11-13 修回日期 2007-12-17 网络版发布日期 接受日期

摘要

Notch信号通路在脊椎动物和无脊椎动物中高度保守,它在决定细胞的分化上起重要作用。Notch信号通路由受体、配体和核效应物三部分组成。它对正常心血管系统的发育有重要作用,Notch信号表达不足或者过量都会造成动物因心血管异常而死亡。正常情况下,Notch信号抑制胚胎干细胞向心肌细胞的分化。此外,Notch信号在动静脉分化中也具有重要作用,它能促进前体细胞向动脉细胞发育。

关键词 [Notch信号](#); [心肌细胞](#); [细胞分化](#)

分类号

Relationship between the Notch signaling and cardiovascular development

JIN Jin-lan, ZHUANG Han-ping

Department of Geriatrics, Xiangya Hospital, Central South University, Changsha 410008, China

Abstract

Notch signaling is highly conserved during evolution in vertebrate and invertebrate. It plays a fundamental role in the determination of cell fate. Notch signaling consist of receptors, ligands and nucleus effectors. It has an important role in the normal cardiovascular development. Insufficient or excess expression of Notch signaling in the animal result in death because of the abnormal cardiovascular. In the normal condition, Notch signaling inhibits the embryonic stem cell differentiating into cardiocyte. In addition, Notch signaling also plays a critical role in arterial and venous differentiation. It can promote the precursors to development into arterial cells.

Key words [Notch signaling](#) [myocardial cell](#) [cell differentiation](#)

DOI:

通讯作者

作者个人主页 [晋金兰;庄汉屏](#)

扩展功能

本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(918KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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“Notch信号; 心肌细胞; 细胞分化”的 相关文章](#)
- ▶ 本文作者相关文章
 - [晋金兰](#)
 - [庄汉屏](#)