中国药理学与毒理学杂志 2013 27 (1): 119-122 ISSN: 1000-3002 CN: 11-1115/R

综述

ficolins基因多态性与临床疾病易感性的研究进展

张涛[1], 周宏灏[1, 2]

1. 重庆医科大学生命科学研究院, 重庆 400016;
2. 中南大学临床药理研究所, 湖南 长沙 410078

收稿日期 2012-10-29 修回日期 2012-12-17 网络版发布日期 2013-2-21 接受日期

摘要 ficolins是天然免疫中的一种模式识别分子, 最早被作为转化生长因子β_1结合蛋白从猪子宫内膜中分离而来。ficolins与甘露聚糖结合植物凝集素功能相似, 能结合病原微生物的糖类配基, 通过补体途径和调理吞噬作用消灭病原体, 在天然免疫中发挥重要作用。迄今为止, 已发现M-ficolin, L-ficolin和H-ficolin 3种人类ficolin蛋白, 分别由*FCN1*, *FCN 2*和*FCN3*基因编码。随着研究的深入, 越来越多的学者开始关注*FCN*基因多态性与疾病易感性之间的关系。大量研究发现, *FCN*基因多态性与疾病的易感性、严重性及疾病的发生发展密切相关。本文就*FCN*基因多态性与相关疾病易感性间的关系进行简述。

关键词 ficolins 基因多态性 疾病易感性

分类号 R963

Progress of genetic polymorphism in ficolins and disease susceptibility

ZHANG Tao[1], ZHOU Hong-hao[1,2]

1. School of Life Sciences, Chongqing Medical University, Chongqing 400016, China;
2. Institute of Clinical Pharmacology, Central South University, Changsha 410000, China

Abstract

Ficolins are pattern-recognition molecules, which were originally identified as transforming growth factor β_1-binding proteins on porcine uterus membranes. The human ficolins, similar to the mannan-binding lectin, can bind to N-acetylglucosamine (GlcNAc) on the microbial cells and appear to be of major importance for innate immunity and tissue homeostasis. Three ficolin genes have been identified in humans: *FCN1*, *FCN2* and *FCN3*, which encode M-ficolin, L-ficolin and H-ficolin respectively. Recently, the role of the ficolins gene in disease has been emphasized. This review focuses on the recently discovered genetic polymorphism in *FCN* and the susceptibility of relative diseases.