

综述

脂多糖/Toll样受体4信号转导与肝纤维化的研究进展

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摘要 Toll样受体4(TLR4)是一种模式识别受体,能与革兰阴性细菌细胞壁的主要成分脂多糖结合,启动天然免疫反应和获得性免疫反应,有效对抗病原微生物的感染。肝中所有实质细胞和非实质细胞都能表达TLR4。近年来,越来越多的研究表明,肝中的一些细胞如肝星状细胞、枯否细胞和树突状细胞等能通过各自表面的脂多糖/TLR4信号转导途径,释放多种细胞因子,引起一系列病理变化,共同参与肝纤维化的发生和发展过程。本文就对脂多糖/Toll样受体4信号转导与肝纤维化的研究进展作一综述。

关键词 [Toll样受体4](#) [脂多糖](#) [信号转导](#) [肝纤维化](#)

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Progress in lipopolysaccharide/Toll-like receptor 4 signaling transduction in hepatic fibrosis

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Abstract

Toll-like receptor 4(TLR4) is one of the pattern recognition receptors. It acts as a receptor for lipopolysaccharide, a cell-wall component of Gram-negative bacteria. The innate and adaptive immune responses are initiated by lipopolysaccharide binding to TLR4 so as to effectively reduce microorganism invasion. In the liver, all parenchyma cells and nonparenchymal cells can express TLR4. In recent years, there is growing evidence that some cells in the liver, such as hepatic stellate cells, Kupffer cells and dendritic cells, can release many kinds of cytokines through lipopolysaccharide/TLR4 signal transduction, causing a series of pathological changes so as to participate in the pathogenesis of hepatic fibrosis.

Key words [Toll-like receptor 4](#) [lipopolysaccharide](#) [signaling transduction](#) [hepatic fibrosis](#) [hepatic stellate cells](#) [Kupffer cells](#)

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