

专论与综述

RNA干涉 (RNAi) 技术应用于哺乳动物细胞的研究策略

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摘要 RNAi作为新近发展起来的基因功能分析技术, 近年来在哺乳动物细胞中的研究已取得了长足进展, 且有着广泛的应用前景。对RNAi作用机制及RNAi实验操作技术的探讨是目前研究的热点。研究表明, 哺乳动物细胞中的RNAi作用模式与植物有所不同。文章对RNAi作用机制、哺乳动物细胞RNAi实验的一般策略(包括靶siRNA序列选择、siRNA获取方法、siRNA转染、RNAi效果检测等)以及最新研究进展进行简述, 以供类似工作的参考。

关键词 [RNA干扰; siRNA; 基因功能分析; 哺乳动物细胞](#)

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Experimental Strategies of the Application of RNAi Technique in Mammalian Cells

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Abstract

As a novel and effective tool for gene function analysis, RNA interference (RNAi) technique has been developed rapidly and made great progress in mammalian cell studies. The mechanisms and experimental operation of RNAi in mammalian cells have become research hotspots, and RNAi mechanisms were supposed to be different from those in plant. In this paper, a review of RNAi mechanisms, the latest research progress and the experimental strategies of RNAi in mammalian cells were presented, including siRNA sequence design, siRNA delivery approaches and RNAi effect detection, so as to offer valuable references for RNAi studies.

Key words [RNA interference; siRNA; mammalian cells; experimental methodology](#)

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