

综述

“10~23”型脱氧核酶的研究进展

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摘要 脱氧核酶是利用体外分子进化技术获得的一种具有酶活性的单链DNA分子。迄今为止, 利用该技术已筛选出多种具有催化功能的脱氧核酶分子, 其中研究最多的是具有RNA切割活性的脱氧核酶, 尤其是10~23型脱氧核酶, 该酶能催化RNA特定部位的切割反应, 从mRNA水平使基因灭活, 从而调控蛋白质的表达, 在抗肿瘤、抗病毒等基因治疗领域具有广阔的应用前景。

关键词 [脱氧核酶](#) [体外筛选](#) [基因灭活](#) [基因治疗](#)

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Progress in the research on "10-23" deoxyribozyme

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Abstract

Deoxyribozyme is a single-stranded molecule with enzymatic activity. It was derived from a random sequence DNA pool by *in vitro* selection. Up to date, a variety of deoxyribozymes have been isolated *in vitro* that can catalyze different chemical reactions. Of particular interest are deoxyribozymes with RNA-cleaving activity, especially "10-23" DNAzyme. It can cleave any RNA in a sequence-specific manner and inactivate gene at the level of mRNA, then regulate the expression of protein. So it may have a wide application prospect in gene therapy as anti cancer and anti viral agents and so on.

Key words [deoxyribozyme](#) [in vitro selection](#) [gene inactivation](#) [gene therapy](#)

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