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以核酸为作用靶的内源性活性物质的研究

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摘要 (Sp)-8-Cl-cAMP-辛酯通过调节细胞信号传导系统而抑制肿瘤细胞生长，其代谢产物8-Cl-腺苷也同样具有诱导分化和启动肿瘤细胞程序死亡的作用。从D(L)-木糖、D-葡萄糖和2-氨基-2-脱氧-D-葡萄糖出发合成了五种不同形式的异核苷，由异核苷组成的反义寡核苷酸能有效拮抗磷酸二酯酶的降解，它们对互补序列的杂交能力与异核苷的结构及磷酸二酯键的连接方式密切相关。

关键词 腺嘌呤核苷 腺嘌呤核苷3'5'环化磷酸 异核苷 靶 寡核苷酸 内源 生物活性物质

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Studies on the endogenous compounds targeting to nucleic acids

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Abstract (Sp)-octyl-8-chloroadenosine 3', 5'-cyclophosphate inhibited the growth of tumor cells by regulating cell signaling pathways. Its metabolic compound, 8-Cl-adenosine, also demonstrated the behaviors of inducing differentiation and initiating apoptosis in some tumor cells. Starting from D(L)-xylose, D-glucose, or 2-amino-2-deoxy-D- glucose, five types of isonucleosides were synthesized. The oligonucleotides containing isonucleosides showed remarkable stability to the degradation by phosphodiesterase and their capacities of hybridizing complementary sequence depended on the structure of the isonucleosides and the linkage mode of the phosphodiester.

Key words ADENOSINE ADENOSINE 3'5' CYCLIC PHOSPHATE TARGETS OLIGONUCLEOTIDE ENDOGENOUS BIOACTIVE SUBSTANCE

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