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Binase and other microbial RNases as potential anticancer agents

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Abstract

Some RNases possess preferential cytotoxicity against malignant cells. The best known of these RNases, onconase, was isolated from frog oocytes; and is in clinical trials as anticancer therapy. Here we propose an alternative platform for anticancer therapy based on T1 RNases of microbial origin, in particular binase from Bacillus Intermedius and RNase Sa from Streptomyces aureofaciens. We discuss their advantages and the most promising directions of research for their potential clinical applications. © 2008 Wiley Periodicals, Inc.

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