Creative Enzymes®

Recombinant Deoxyribonuclease I from Bovine, RNase-free

Cat. No. COV-007

Lot. No. (See product label)

Introduction

Description	DNase I (deoxyribonuclease I, RNase-free) is derived from a recombinant E. colistrain carrying Bovine Pancreatic DNase I. It is an endonuclease that nonspecifically cleaves DNA to release ditri- and oligonucleotide products with 5´ phosphorylated and 3´-hydroxylated ends. This enzyme was originally isolated from bovine pancreas, and the mammalian pancreas is one of the dominating sources until this day. DNase I act on various DNAs such as single and double-stranded DNA, RNA: DNA hybrids, and chromatin (the cleavage rate is affected by histones).
Applications	Degradation of DNA template in transcription reactions. Removal of contaminating genomic DNA from RNA samples. DNase I foot-printing: Used for Foot-printing analysis of DNA-protein interactions. Nick Translation: Used in conjunction with DNA Polymerase I for nick translation.

Product Information

Species	Bovine Pancreatic
Source	E. coli
Form	Liquid
EC Number	EC 3.1.21.1
CAS No.	9003-98-9
Purity	> 95% (SDS-PAGE)
Buffer	2 mM $CaCl_2$, 10 mM Tris-HCl (pH 7.6，25°C), 50% glycerol.
Unit Definition	One unit is defined as the amount of enzyme which will completely degrade 1 μg of pBR322 DNA in a total reaction volume of 50 μl in 10 minutes at 37°C. Complete degradation is defined as the reduction of the majority of DNA fragments to tetranucleotides or smaller.

Storage and Shipping Information

Storage	at -20 °C (Avoid repeated freeze-thaw cycles)