

Native Bovine Deoxyribonuclease I RNase-free solution

Cat. No. NATE-0199

Lot. No. (See product label)

Introduction

Description

Deoxyribonuclease I (usually called DNase I), is an endonuclease coded by the human gene DNASE1. DNase I is a nuclease that cleaves DNA preferentially at phosphodiester linkages adjacent to a pyrimidine nucleotide, yielding 5'-phosphate-terminated polynucleotides with a free hydroxyl group on position 3', on average producing tetranucleotides. It acts on single-stranded DNA, double-stranded DNA, and chromatin. In addition to its role as a waste-management endonuclease, it has been suggested to be one of the deoxyribonucleases responsible for DNA fragmentation during apoptosis.

Applications

Used in molecular biology applications for removing DNA during RNA purification, for preparing DNA for nick translation, and for DNA-protein interaction analysis by footprinting methods.

Synonyms

DNASE1; deoxyribonuclease I; deoxyribonuclease-1; DNase I; 9003-98-9; EC 3.1.21.1; pancreatic DNase; DNase; thymonuclease, dornase; dornava; dornavac; pancreatic deoxyribonuclease; pancreatic dornase; deoxyribonuclease (pancreatic); pancreatic DNase; DNAase; deoxyribonucleic phosphatase; alkaline deoxyribonuclease; alkaline DNase; endodeoxyribonuclease I; DNA depolymerase; Escherichia coli endonuclease I; deoxyribonuclease A; DNA endonuclease; DNA nuclease

Product Information

Species

Bovine

Source

Bovine pancreas

Form

buffered aqueous glycerol solution.

EC Number

EC 3.1.21.1

CAS No.

9003-98-9

Molecular Weight

mol wt 29.1 kDa

Function

actin binding; deoxyribonuclease I activity; endodeoxyribonuclease activity

Unit Definition

One unit will cause a ΔA_{260} of 0.001 per min per mL reaction mixture using calf thymus DNA as substrate.

Storage and Shipping Information

Storage

-20°C