Creative Enzymes®

# Deoxyribonuclease I from Bovine, Recombinant

*Cat. No. NATE-0200*

*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.

***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 pancreatic

***Source*** Pichia pastoris

***Form*** lyophilized powder

***EC Number*** EC 3.1.21.1

***CAS No.*** 9003-98-9

***Purity*** Chromatographically purified

***Activity*** > 5000 units per mg protein

***Stabilizers*** glycine

***Buffer*** 5mM calcium acetate, 4mg/ml glycine, pH 5.0 and 50% glycerol.

***Unit Definition*** One Unit causes an increase in absorbance at 260nm of 0.001 per minute at 25oC when acting upon highly polymerized DNA at pH 5.0.

## Storage and Shipping Information

***Storage*** Store at 2-8°C