Creative Enzymes®

Native Aspergillus oryzae Nuclease S1

Cat. No. NATE-0492

Lot. No. (See product label)

Introduction

Description	Nuclease S1 isolated from Aspergillus oryzae exhibits endo-and exolytic hydrolytic activity for the phosphodiester bonds of single-stranded DNA and RNA yielding 5'-phosphomononucleotide and 5'-phosphooligonucleotide end-products. It is used to digest non-annealed polynucleotide tails and hairpin loops in RNA and DNA duplexes and can be used to convert superhelical DNA to the linear form.
Applications	Nuclease S1 from Aspergillus oryzae has been used in a study to assess a bi ochemical method for mapping mutational alterations in DNA. It has also been used in a study to investigate the DNA damage and repair in a γ-irradiated rat brain tumor.
Synonyms	endonuclease S1 (Aspergillus); single-stranded-nucleate endonuclease; deoxyribonuclease S1; deoxyribonuclease S1; nuclease S1; Neurospora crassa single-strand specific endonuclease; S1 nuclease; single-strand endodeoxyribonuclease; single-stranded DNA specific endonuclease; single-strand-specific endodeoxyribonuclease; single strand-specific DNase; Aspergillus oryzae S1 nuclease; EC 3.1.30.1; 37288-25-8

Product Information

Source	Aspergillus oryzae
Form	Solution containing 30 mM sodium acetate, 50 mM NaCl, 1 mM $ZnCl_2$, 50% glycerol, 2 mg/ml protein
EC Number	EC 3.1.30.1
CAS No.	37288-25-8
Unit Definition	One unit will cause 1.0 microgram of single-stranded nucleic acid to become perchloric acid soluble per minute at pH 4.6 at 37°C.

Storage and Shipping Information

Storage	−20°C