

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 biochemical 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 ZnCl₂, 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