

Datasheet for ABIN5706730

**Nuclease S1**

Overview

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Quantity: 10 kU

Product Details

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Purpose: Nuclease S1

Biological Activity Comment: 222,990 units/mL

Unit Definition: One unit renders acid soluble 1 µg of denatured DNA (ssDNA) per minute at 37° C, pH 4.6.

Application Details

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Application Notes: Application Note: This assay is based on the release of acid soluble products from ssDNA through hydrolysis. One (1) µg of acid soluble products is equivalent to 0.022 A260 units. A solution in 30 mM Sodium Acetate, 50 mM Sodium Chloride, 1 mM Zinc Chloride and 50 % (v/v) glycerol, pH 4.6.

Comment: Synonyms: S1 Nuclease  
 Background: S1 nuclease is an endonuclease that is active against single-stranded DNA and RNA molecules. It is five times more active on DNA than RNA. Although its primary substrate is single-stranded, it can also occasionally introduce single-stranded breaks in double-stranded DNA or RNA, or DNA-RNA hybrids. S1 nuclease is used in the laboratory as a reagent in nuclease protection assays. In molecular biology, it is used in removing single stranded tails from DNA molecules to create blunt ended molecules and opening hairpin loops generated during synthesis of double stranded cDNA.

Restrictions: For Research Use only

Handling

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Format: Liquid

Buffer: Buffer: See application note.

## Handling

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Stabilizer: None

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Preservative: Without preservative

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Storage: -20 °C

## Publications

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Product cited in: Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)