

Datasheet for MB-110-0010**Nuclease S1****Overview**

Description:	Nuclease S1 (<i>Aspergillus oryzae</i> sp.) - MB-110-0010
Item No.:	MB-110-0010
Size:	10 ku

Product Details

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.
Synonyms:	S1 Nuclease
Reagent Type:	Enzyme
Specific Activity:	222,990 units/mL by dry weight

Application Details

Application Note:	One unit renders acid soluble 1 µg of denatured DNA (ssDNA) per minute at 37° C, pH 4.6. 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Formulation

Physical State:	Liquid (sterile filtered)
Buffer:	See application note.

Preservative:	None
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Stabilizer:	None
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Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition:	Store vial at -20° C or colder.
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Expiration:	Expiration date is six (6) months from date of receipt.
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Disclaimer

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