Tribo™ DNase I Solution (1mg/mL)
Catalog# TBS6022

DESCRIPTION

DNase I (RNase-Free) is an endonuclease that efficiently hydrolyzes double- (ds) or single stranded DNA to a mixture of short oligo- and mononucleotides. In the presence of Mg2+, cleavage of each strand of a dsDNA substrate proceeds independently. In contrast, in the presence of Mn2+, the enzyme cleaves both strands of DNA at approximately the same site to generate molecules with blunt ends or 1- or 2-base overhangs that can be blunted with T4 DNA Polymerase.

The DNase I Solution is provided at a concentration of 1mg/mL (2000U/mL). 10X Reaction Buffer and Stop Solution are included in the kit

APPLICATIONS

- Elimination of the DNA template following in vitro RNA synthesis with T7 Phage RNA Polymerase.
- Characterization of DNA: protein interactions by of "DNase I footprinting".
- Treatment of RNA prior to RT-PCR.
- Radiolabeling of DNA by nick translation.

KIT CONTENTS

Composition	Concentration	Volume
DNase I	1mg/mL	1.0 mL
Reaction Buffer	10x	1.5 mL
Stop Solution	10x	1.5 mL

DNase I: 1mg=2000U

STORAGE CONDITIONS

The kit is shipped on blue ice, and should be stored at -20°C for long-term storage. Shelf life of 12 months after receipt.

SUGGESTED PROTOCOL

1. Dilute DNase I 10X Reaction Buffer to 1X using RNase-Free water.
2. Prepare 50 µl of a working DNase I Solution for each sample to be treated by adding 5 µl of RNase-Free DNase I to 45 µl of 1X Reaction Buffer (from Step 1).
3. Completely resuspend 5 µg of a nucleic acid pellet in 50 µl of working DNase I solution.
4. Incubate at 37°C for 10-15 minutes.
5. Inactivation: Add 5 µl of Stop Solution to the above reaction tube, and incubate at 75°C for 5min

RELATED PRODUCTS

Cell RNA Isolation Kit (TBS6001)
Blood RNA Isolation Kit (TBS6002)
Tissue RNA Isolation Kit (TBS6003)
Hybrid-R RNA Isolation Kit (305-101)
Hybrid-R miRNA isolation (325-150)
Reverse Transcription Reaction Kit (TBS4006)

REFERENCES:

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2. Galas, D.J. and Schmitz, A. (1978) Nucleic Acids Res. 5, 3157.
3. Kienzle, N. et al., (1996) BioTechniques 20, 612.
4. Rigby, P.W.J. et al., (1977) J. Mol. Biol. 113, 237

Research use only.

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