G2P
Gene to Protein Pvt. Ltd.

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Rnase A

Cat # ME375
Pack Size: 50mg (recommended concentration 10mg/ml X 5)
Storage: -20°C

Introduction

RNase A (Ribonuclease A) is a single-chain, endoribonuclease that cleaves single-stranded RNA at the 3' end of pyrimidine residues (uridine or cytidine), producing 3' phosphate-terminated oligonucleotides. It's a widely used enzyme in molecular biology applications, such as RNA removal, RNA mapping, and in protocols involving DNA purification.

Reconstitution

- Dissolve the 50 mg of lyophilized RNase A in 5 ml of 1the buffer of your choice (Sterile MilliQ is recommended)to achieve a final concentration of 10 mg/ml.Mix gently until fully dissolved.
- Filter-sterilize the solution if desired.
- Aliquot and store at -20 °C to avoid freeze-thaw cycles.

Activity

- pH Optimum: 7.5
- Temperature Optimum: 37°C
- Metal Requirement: Requires no divalent metal ions for activity
- Inhibitors: RNase Inhibitor proteins, SDS, heavy metal ions

Application

- RNA removal from DNA or protein samples
- RNA sequence analysis
- RNA structure analysis
- RNA modification studies

Recommended Reaction Setup for 5 μg Sample

Component	Volume/Amount	Concentration
RNase A (10 mg/ml)	0.5 μl	10 mg/ml
Sample	5 μg	-
Buffer/Additional reagents	X μl	Y concentration

- 0.5 μl of RNase A (10 mg/ml): This volume provides 5 μg of RNase A, equal to the amount of the sample.
- 5 μg of Sample: Your RNA or other material to be treated with RNase A.
- X μl of Buffer/Additional reagents: The volume or amount of other components specific to the experiment, adjusted to the desired final volume or concentration.
- Y concentration: Concentration of the buffer or additional reagents used.
- Please note: The concentrations, volumes, and reaction conditions must be adjusted based on the specific requirements of your protocol or experimental design. Always consult the provided documentation or technical support for the best practices and guidelines tailored to your application.