

Recombinant RNase A (Liquid, DNase-Free)

Cat.No.: HYC128

Product Description

RNase A is a protein-engineered non-specific ribonuclease endonuclease derived from bovine pancreas, produced via yeast expression and purification. It is free of bacterial endotoxins generated from prokaryotic expression systems. Functionally, RNase A is an endoribonuclease that cleaves the phosphodiester bond between the 5'-ribose of one nucleotide and the phosphate group on the 3'-ribose of the adjacent pyrimidine nucleotide. The resulting 2',3'-cyclic phosphate intermediates are further hydrolyzed into corresponding 3'-nucleotide phosphates. Therefore, it specifically degrades single-stranded RNA at cytosine (C) and uracil (U) residues. RNase A exhibits high stability and potent activity against single-stranded RNA.

This reagent is widely applied to eliminate RNA contamination in DNA or protein samples.

It is free of DNase endonuclease, DNase exonuclease and protease contaminants.

Components

Components	Size-1	Size-2	Size-3
Recombinant RNase A (Liquid, DNase-Free)	1 mL	5 mL	10 mL

Storage

Store at -25 ~ -15 °C, valid for 1 years.

Notes

1. This product can be shipped with ice packs or at ambient temperature. Upon receipt, store at -25 ~ -15 °C. Once opened, if stored at 2-8 °C for more than one week, sterile filtration is recommended to avoid microbial contamination.
2. Wear a lab coat and disposable gloves during operation for personal safety and health protection.
3. For research use only.

Properties

CAS Number	9001-99-4
EC Number	3.1.27.5
Source Organism	Recombinant yeast
Molecular Weight	14.3 kD
Dilution Buffer	10 mM Tris-HCl (pH 8.0), 20 mM MgCl ₂
Storage Buffer	10 mM Tris-HCl (pH 8.0), 20 mM MgCl ₂ , 50% Glycerol
Appearance	Pale yellow clear solution
Purity by SDS-PAGE	≥90%
Enzyme Activity	≥350 Kunitz Units/mL
Residual DNA & RNA	None detected
Residual DNase	None detected
Residual Protease	<0.01 U/mg
Optimal pH	7.6 (functional pH range: 6–10)
Optimal Temperature	60 °C (functional temperature range: 15–70 °C)

Instructions

Stock concentration: 10 mg/mL. The recommended working concentration ranges from 10-20 µg/mL. Dilute with supplied dilution buffer, or ensure the working system contains 20 mM Mg²⁺.