

RNase A, Pancreatic

Code : PG-5760

- Common Name: Ribonuclease A; Ribonuclease I; Pancreatic Ribonuclease; Ribonuclease 3'-pyrimidinooligonucleotidohydrolase; 2-(3- Aminopropanoylamino)-3-(1H-imidazol -5-yl)propanoic acid
- CAS Number: 9001-99-4
- Chemical Formula: C₉H₁₄N₄O₃
- Storage Temperature: -20°C
- Source: Bovine Pancreas
- Activity: >60U/mg
- Grade: High Purity Grade

Description:

RNase stands for ribonuclease, an RNA digesting enzyme. RNase consists of 124 amino acids in one polypeptide chain with 4 disulphide linkages. Ribonucleases can be divided into endoribonucleases and exoribonucleases. RNases have important roles in RNA degradation and turnover in all organisms. Ribonuclease enzyme can unwind the RNA helix by complexing with single-stranded RNA.

RNase A is an endoribonuclease with functions in RNA metabolism and regulation of gene expression. It was found to play roles in diseases such as autoimmune diseases, renal insufficiencies and pancreas disorder. More recently, an antitumor activity was also reported for an RNase A with cytotoxic and cytostatic properties.

The members of RNase A superfamily are widely expressed and present in serum and tissues of mammals. The ribonucleolytic activity in the pancreas of ruminants is particularly high, perhaps to digest the large amount of RNA produced by stomach microorganisms.

SPECIFICATIONS

Enzyme Name	RNase A
Enzyme Synonyms	Ribonuklease A
Source	Pancreas
Species	Bovine
Form	Lyophilized powder
Enzyme Activity	≥60 U/mg
pH	pH 8.0

Features & Benefits of Puregene's RNase A:

- Chromatographically purified, salt-free, lyophilized powder
- DNase and protease free
- Cleaves at the 3'-side of the pyrimidine (uracil or cytosine) phosphate bonds
- Degrades RNA to cyclic nucleotide monophosphates to 5'-OH and 2',3'-cyclic monophosphate

Applications:

RNase A is used to hydrolyze RNA from protein samples. It is compatible for use in RNase protection assays, to remove unspecifically bound RNA, in the analysis of RNA sequences, to hydrolyze RNA contained in protein samples, and in the purification of DNA.

Our RNase A is a high activity lyophilized powder purified from bovine pancreas. This material can effectively be utilized in standard molecular biology applications. Some applications may require standard heat treatment protocols to ensure the absence of Dnase. Product Use Limitations : For research use only. Not for therapeutic or diagnostic use.

