

FT-B4S471



## Ribonuclease A

*Enzymatic manipulation of DNA and RNA – Minipreps of plasmid DNA – In-situ hybridisation of cellular RNA – Removal of RNA from plasmid preparations*

### Product Description

<b>Name :</b>	<b>Ribonuclease A, solution 20mg/ml</b>
	from bovine pancreas,
<b>Catalog Number :</b>	B4S470, 5ml    B4S471, 15ml
<b>Properties :</b>	Molecular Weight : 13,700 Da    Optimum pH : 5.0 – 6.0
<b>CAS-Number:</b>	[9001-99-4]

**Storage:** 2-8°C (upto 1 year)

#### Introduction

Ribonuclease A (RNase A) is an endoribonuclease, that specifically cleaves single-stranded RNA 3' to pyrimidine residues (cytosine, uracil). It cleaves the phosphodiester bond between the 5'-ribose of a nucleotide and the phosphate group attached to the 3'-ribose of an adjacent pyrimidine nucleotide. The resulting 2', 3'-cyclic phosphate is hydrolyzed to the corresponding 3'-nucleoside phosphate.

#### Unit Definition

One unit of the enzyme causes an increase in absorbance of 1.0 at 260 nm when yeast RNA is hydrolyzed at 37 °C and pH 5.0. Fifty units are approximately equivalent to 1 Kunitz unit. It is completely free of DNases and proteases. The specific activity is 90 U/mg.

#### Applications

- It is an endoribonuclease that specifically cleaves single- stranded RNA.
- It cleaves 3' end of unpaired C and U residues. RNase A specifically cleaves single-stranded RNA at 3' phosphate
- linkages of pyrimidine residues leaving pyrimidine 3' phosphates and oligonucleotides with terminal pyrimidine 3' phosphates.
- It is used in plasmid and genomic DNA protocols to obtain RNA-free DNA.
- It is also used for cleaving of unhybridized regions of RNA from DNA-RNA or RNA Hybrids.

#### Storage Buffer

Prepared 20 mg/ml RNase A solution in 10 mM Tris-Cl and 50% glycerol.

## Directions for use

### Working concentrations

The recommended working concentration is from 0.1 to 10 $\mu$ g/mL.  
10 $\mu$ g/mL (Removal of RNA from plasmid preparations: 1 hr, RT)  
100ng/mL (Preparation of “blunt ends” of double-stranded cDNA).

### Related products

- Proteinase K, 858706

### Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.

For any information, please ask : Uptima / Interchim; Hotline : +33(0)4 70 03 73 06

[Order on-line](#) or [Contact](#) your local distributor

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