

# Technical Data Sheet

## RNase A

for biochemistry

Order number: 1341

RNase A is a very stable enzyme to both heat and detergents. Solutions of RNase A have been reported to withstand temperatures up to 100 °C. RNase A adsorbs strongly to glass. At neutral pH (e. g. in PBS pH 7.4) and high concentrations (> 10 mg/ml) the enzyme will precipitate.

### Product Details

RNase A (Ribonuclease A) is purified from bovine pancreas and supplied as DNase-free, protease-free, salt-free freeze-dried material. Aqueous solutions of 2mg/ml RNase A are clear and colorless.

**Activity (Kunitz<sup>1</sup>):** min. 70 U/mg material

**Unit Definition:** The amount of enzyme causing the hydrolysis of RNA at a rate such that k (velocity constant) equals unity at 25°C and pH 5.0.

### Application

RNase A is used for the isolation of RNA-free DNA, more precisely, for removal of RNA from plasmid DNA or genomic DNA. Other applications are the removal of non-hybridized regions of RNA:DNA-hybrids or as a molecular weight marker.

Stock solutions of 1 - 10 mg/ml are prepared in 10 mM Tris·HCl, pH 7.5; 15 mM NaCl or in TE buffer (10 mM Tris·HCl, pH 7.5; 1 mM EDTA, pH 8.0). For removal of RNA from plasmid preparations<sup>2</sup> the recommended working concentration is 10 µg/ml. For preparation of 'blunt ends' of double-stranded cDNA the recommended working concentration is 100 ng/ml.)

### Storage

Store at -20°C. Allow to come to room temperature before opening.

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<sup>1</sup>Method of M. Kunitz, J. Biol. Chem. (1946), 164,563.

<sup>2</sup>Sambrook, J. & Russel, D.W. (2001) Molecular Cloning: A Laboratory Manual, 3rd Edition. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.

