

DNase I (Lyophilized Powder)

Product description

Bovine pancreatic deoxyribonuclease (also known as DNase) is an endonuclease that acts on phosphodiester bonds, particularly those adjacent to pyrimidine nucleotides, producing polynucleotides with free hydroxyl groups at the 3' terminus and phosphate groups at the 5' terminus. The optimum pH for enzyme activity is 7.8. DNase can be activated by divalent metals and inhibited by chelating agents such as EDTA and sodium dodecyl sulfate. Calcium ions at a concentration of 5 mM serve as a stabilizer to protect DNase from degradation by hydrolases. This product is extracted from bovine pancreas and purified by chromatography to remove contamination from other hydrolases.

Ordering information

CAT. No.	Product Name	Package	Supplied With
C12131	DNase I, Lyophilized Powder	100mg	15 ml Protease Dissolve Buffer 10 ml DNase Buffer (10 ×)
C12132	DNase I, Lyophilized Powder	1 g	150 ml Protease Dissolve Buffer 100 ml DNase Buffer (10 ×)

Note: It is recommended to dissolve DNase I powder with Protease Dissolve Buffer to a final concentration of 1-10mg/ml for use. Store DNase I solution at -20°C.

Specification

CAS No.	9003-98-9
Molecular weight	32 kDa
Isoelectric point	8.9
pH range	4.0-10.0
Specific activity	3000kunitz Units/mg
Transport conditions	2~8°C transportation to ensure maximum enzyme activity (room temperature transportation will not cause enzyme activity decrease)
Storage conditions	-20°C, dry. For long term storage, keep at -20° C.
Dissolve Solution	50 mM Tris (pH 7.4), 10 mM CaCl ₂ , 50% (v/v) glycerol
Recommended application	Remove DNA contamination from Protein samples, or elimination of background DNA contamination. Not for RNA Extraction.
RNase Residue	detection
RNase-Free DNase I Preparation	Dissolve DNase I powder at 1 mg/ml in 0.1 M iodoacetic acid plus 0.15 M sodium acetate at a final pH of 5.3. Then heat the solution at 55°C for 40~60 minutes and then cooled. Finally, add 1 M CaCl ₂ to the solution to 5 mM. Aliquot to small pack and store at -20° C for use.