

DNASE1

Recombinant Human Deoxyribonuclease I

Catalog No.	CSI10718	Quantity:	500 U
	CSI10719		1500 U
	CSI10720		10,000 U

Alternate Names: Deoxyribonuclease I, DNase I, DNL1, DRNI, DNASE1

Description: Recombinant Human Deoxyribonuclease I is an enzyme that selectively cleaves DNA. It is an endonuclease enzyme that splits phosphodiester linkages within polynucleotides, acting on single stranded DNA, double stranded DNA, and chromatin. DNase is activated by bivalent metals such as Mg^{2+} and Ca^{2+} .

DNase enzymes are common reagents used in biochemical methods requiring digestion of DNA and recovery of RNA, or where DNA needs to be removed without affecting structural proteins or enzymes. DNase enzymes are also used in tissue culture to digest DNA from damaged cells, resulting in reduced viscosity, and for removal of membrane-bound DNA fragments.

Gene ID: 1773

Concentration: 1 mg/mL

Source: CHO cells

Molecular Weight: 37.0 kDa (260 aa)

Formulation: Sterile filtered, 0.015% Calcium chloride, 0.88% Sodium chloride.

Specific Activity: 1000 IU/mg

DNase activity is assayed according to the photometric method of Kunitz. One Kunitz unit results in an increase in absorbance at 260 nm of 0.001/minute at 25°C when acting upon highly polymerized solution of DNA at pH 5. In addition, 0.005 Kunitz unit digests 1 µg of lambda phage DNA in 10 minutes at 37°C in 50 mM Tris, 1 mM Mg^{2+} , pH 7.8, in a 50 µl reaction.

Storage & Stability: Stable for 2 years at 2-8°C and for 3 weeks at 15°C, pH 6.3.

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