DNase I

Cat. No. G028

Store at -20°C.

Product Description

DNase I is a non-specific endonuclease derived from bovine pancreas that catalyzes the cleavage of phosphodiester bonds in single/double-stranded DNA, chromatin, and RNA:DNA hybrids to generate di-and/or oligonucleotide (5'-phosphorylated and 3'-hydroxylated) end-products. The catalytic activity of DNase I entails an obligate requirement for Ca^{2+} as its metal cofactor while Mg^{2+} ions offer a synergistic component.

Part. No	Product Component	Quantity
G028-1	DNase I	2,000 U (1.0 ml)
P114	10X DNase I Reaction Buffer	1.0 ml

Unit Definition

One unit is defined as the amount of enzyme which will completely degrade 1 µg of pBR322 DNA in 10 mins at 37 °C. Complete degradation is defined as the reduction of the majority of DNA fragments to tetranucleotides or smaller.

Usage Notes

This product does not contain any RNase inhibitors, so it is recommended to be used in combination with RNaseOFF Ribonuclease Inhibitor (Cat. No. **G138**). This product should not be used in digestions longer than 15 minutes or at temperatures higher than 37°C, or the residual RNase activity will begin to degrade the RNA. For RNAse-Free DNAse I, see Cat. No. **E091**.