



ELK Biotechnology
For research use only.

DNase I

Catalog No.	Specification	Storage/Shelf life
EQ025	1000U/500ul	Room temperature/1 year

Product introduction:

The product of DNase I hydrolysis of single-stranded or double-stranded DNA.

The 5' end is a phosphate group and the 3' end is a hydroxyl group. DNase I activity is dependent on calcium ions and can be activated by magnesium ions or divalent manganese ions. In the presence of magnesium ions, DNase I can randomly cleave any site of double-stranded DNA; in the presence of divalent manganese ions, DNase I can cleave DNA double-strands at the same site to form blunt ends, or 1-2 Sticky ends of nucleotide overhangs. This product is a recombinant DNase I protein expressed in *E. coli*, without RNase.

Scope of application:

Prepare RNA samples without DNA; remove possible DNA contamination such as genomic DNA from RNA samples before RT-PCR reaction; remove DNA templates after RNA transcription catalyzed by RNA Polymerases such as T7, T3, SP6 in vitro; Nick translation; DNase I Foot-printing to study DNA-protein interactions; generation of DNA random fragment library; partially sheared genomic DNA in apoptosis TUNEL assay as a positive control.