

# DNase I Set Recombinant, lyophilized RNase-free & protease-free

## **Description:**

DNase I is an endonuclease that nonspecifically cleaves single- and double-stranded DNA. It requires divalent metal cations to be active.

## **Key Features:**

- Superior activity.
- · Certified RNase-free and protease-free.
- Withstand more than 10 freeze-thaw cycles.

### Storage:

After reconstitution, place on ice until ready to use or store frozen aliquots (-20°C).

### **General Applications:**

- Remove DNA from protein and RNA samples.
- Preparation of DNA-free RNA.
- DNA labeling by nick-translation.
- Removal of DNA template after in vitro transcription.
- Removal of DNA from RNA samples prior to downstream applications (NextGen sequencing, RT-PCR).

## Components:

| Cat.# | Size       | Buffer Volume |
|-------|------------|---------------|
| E1010 | 250 U      | 4 ml          |
| E1011 | 1500 U     | 4 ml          |
| E1012 | 1500 U x 5 | 16 ml         |

### Unit Definition:

One Kunitz causes an increase in absorbance at 260 nm of 0.001 per minute per ml, at 25°C, pH 7.5, when acting on salmon sperm DNA according to the assay method of Kunitz.

### **Reconstitution:**

Add DNase/RNase-free water to the lyophilized DNase I, mix by gentle inversion. Avoid phosphate buffer and calcium chelators.

## **DNase I Reaction Set Up:**

Add DNA digestion buffer (DDB) and DNase I to the sample and incubate at room temperature for 15 min. Make sure the final concentration of DDB is 1x for insolution reaction.

One Unit of DNase I will completely digest 15  $\mu$ g of genomic DNA in less than 10 minutes at 25°C.

## Inactivation:

Heat inactivate at 75°C for 10 min with 5 mM EDTA.

Precautions and Disclaimer: This product is for R&D use only.

#### Technical Support:

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