DNase I-RNase Free
SB-ME-002S- 10,000 U (10 U/ul)
SB-ME-002L-50,000 U (10 U/ul)

Store at -20℃

Description

This product is a recombinant form of DNase Ⅰ from bovine pancreas, expressed in Pichia pastoris. DNase Ⅰ is a DNA-specific endonuclease that hydrolyses the phosphodiester linkages of double-stranded or single-stranded DNA to a mixture of oligo~and mononucleotides. The enzyme requires divalent cations for maximal activity. It is a glycoprotein of a molecular weight of ~39KD. The recombinant enzyme is produced without using any animal cells or other materials derived from animals.

Characteristics	Applications	Quality control
- Molecular weight : ~39 Kda - DNase I is heterogeneously N-glycosylated, so it appears as two bands in gel electrophoresis.	- Remove genomic DNA from RNA preparations prior to RT-PCR - Isolate DNA-free RNA after in vitro transcription reactions - Map DNase-sensitive regions in eukaryotic DNA - Nick translation	- Purity : >95% on SDS-PAGE - RNase-free - Protease-free

Storage buffer
20 mM Tris-HCl, 50 mM NaCl, 2 mM CaCl2 , 2 mM MgCl2 ,1 mM DTT, 0.1 mg/ml Pefabloc SC, 50% Glycerol, pH 7.6

Diluent Buffer
25 mM Tris-HCl, 50% Glycerol, pH 7.6

Heat inactivation
Inactivated by heating at 75℃ for 10 min in the presence of EDTA (final 8 mM)

Note DNase I requires divalent cations for maximal activity. The enzyme is inhibited by metal chelating agents like EDTA. DNase I can be inactivated and removed by phenol extraction according to standard protocols.

Limitation of Liability
In no event will SARD BIOSCIENCES be liable for any direct, indirect, consequential, or incidental damages arising out of the use, the results of use, or the inability to use this product.

Standard reaction conditions

DNA	**2μg**
10X DNase Ⅰ buffer	2 μl
DNase I, RNase-free	1~2 U
Water, RNase-free	up to 20 μl

→ Incubate at 37℃ for 10 min

'Standard conditions' is only a general recommendation. The experimental conditions should be adjusted according to the purpose and sample