User guide

DNase 2000 U/ml

DNase solution (2000 U/ml)
Cat. #BT03AB

Product Description
DNase I is an endonuclease enzyme from bovine pancreas that degrades both double-stranded and single-stranded DNA in the presence of bivalent cations such as $Mg2^+$ and $Ca2^+$ for maximal activity, producing 3´-OH oligonucleotides.

Unit Definition: One unit of DNase is defined as the amount required to completely degrade 1µg of plasmid DNA in 10 minutes at 37°C.

Storage and Stability
Store at –20°C. Avoid multiple freezing and thawing cycles to retain maximum performance. This product is stable for 2 years from the production date when stored and handled properly.

Handling instructions
DNase I is sensitive to physical denaturing. Do not vortex the DNase to avoid any damage. DNase I is inactivated by heating to 65°C for 10 minutes in the presence of EGTA or EDTA

Applications
- Removal of residual genomic DNA from RNA samples.
- Treatment of RNA prior to RT-PCR.
- DNase I footprinting.
- Radiolabeling of DNA by nick translation.

Procedures | Digestion of Genomic DNA in RNA samples

Reaction solution	
DNase (2000U/ml) [cat #BT03AB]	10-20 µl
10X DNase reaction buffer [cat #BT03AB01]	4 µl
RNA sample	10-50 µg
Ribonuclease Inhibitor	40 U
RNase-free water	Up to 40 µl

1. In an RNase-free tube, Add the DNase I reaction solution and mix, do not vortex, instead mix by gently flicking the tube or pipetting, and spin briefly to collect the liquid.
2. Incubate at 37°C for 10-15 minutes.

Note: The digestion process should not exceed 15 minutes or temperatures higher than 37°C, or the residual contaminating RNase activity will begin to degrade the RNA.

3. Stop the reaction by adding 1 µl of Stop Solution [cat #BT03AB02], then incubate the microcentrifuge tube at 70°C for 10 minutes.

10X Reaction Buffer [cat #BT03AB01]

100mM Tris-HCl (pH 7.5-8.0), 25mM MgCl2, 5mM CaCl2

Stop Solution [cat #BT03AB02]

200mM EDTA or 20mM EGTA, pH 8.0.

For Research Use Only. Not for use in diagnostic procedures.
For inquiries, contact us at info@blutruve.com

Blutruve
9 Kamel Almahrouqi Street
Al Haram, Egypt
+20 237550489
+20 0112 626 0947
info@blutruve.com

Scan the QR code
for more info