



RNase-Free DNase I Set

For MagCore® System automated purification of RNA from Blood, Cultured cells, Tissue and FFPE

Cat.No. DN096 / DN036
96 Reactions Set / 36 Reactions Set

Ver. 2013-1



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Content	DN096	DN036
RNase-Free DNase I (Lyophilized): 1500 Kunitz units	2 vial	1 vial
RNase-Free Water	1 ml x2	1 ml x1
DNase I Reaction Buffer	30 ml	15 ml

Kunitz units

Kunitz units are the commonly used units for measuring DNase I, defined as the amount of DNase I that causes an increase in A_{260} of 0.001 per minute per milliliter at 25°C, pH 5.0, with highly polymerized DNA as the substrate.

Shipping and Storage

The RNase-Free DNase Set is shipped at room temperature and should be stored immediately upon receipt at 2~8°C. When stored at 2~8°C and handled correctly, the buffer and lyophilized enzyme can be kept for at least 9 months without any reduction in performance.

Description

In some cases, the vial of DNase may appear to be empty. This is due to lyophilized enzyme sticking to the septum. To avoid loss of DNase, do not open the vial. Instead, inject RNase-free water into the vial using a needle and syringe, invert the vial to dissolve the DNase, and remove the dissolved DNase using the syringe and needle. Insoluble material may remain when dissolving DNase. This does not affect DNase performance. Due to the production process, insoluble material may be present in the lyophilized DNase.

Procedure

Preparation before using

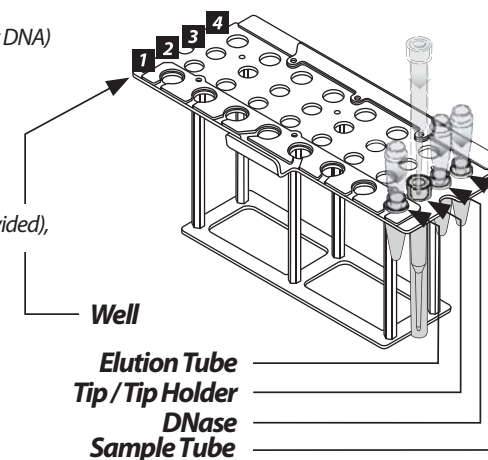
- 1 Prepare DNase I stock solution before using the RNase-Free DNase Set for the first time. Dissolve the lyophilized DNase I (1500 Kunitz units) in 550 μ l of the RNase-free water provided. To avoid loss of DNase I, do not open the vial. Inject RNase-free water into the vial using an RNase-free needle and syringe. Mix gently by inverting the vial. Do not vortex.
- 2 For long-term storage of DNase I, dispense the prepared DNase I stock solution into single-use aliquots, and store at ~-20°C for up to 9 months. Thawed aliquots can be stored at 2~-8°C for up to 4 weeks. Do not refreeze the aliquots after thawing.

Procedure : On-MagCore® digestion of DNA

- 1 Add 10 μ l DNase I stock solution (see above) to 190 μ l DNase I Reaction Buffer. Mix by gently inverting the tube, and centrifuge briefly to collect residual liquid from the sides of the tube.
DNase I Reaction Buffer is supplied with the RNase-Free DNase Set.
Note: DNase I is especially sensitive to physical denaturation. Mixing should only be carried out by gently inverting the tube. Do not vortex.
- 2 Add the DNase I mixture (200 μ l) to the new 1.5 ml screw tube (not provided; RNase-free tube) and open the lid. Be sure to place the DNase I tube into the well 3 of T-Rack.
- 3 Continue with the MagCore® System setting procedure.

Procedure : DNase Digestion of RNA solution

- 1 This protocol describes how to use the RNase-Free DNase Set to digest contaminated DNA in RNA solutions. Mix the following in a microcentrifuge tube:
 \leq 87.5 μ l RNA solution (contaminated with genomic DNA)
10 μ l DNase I Reaction Buffer
2.5 μ l DNase I stock solution
Make the volume up to 100 μ l with RNase-free water.
- 2 Incubate at 20~25°C for 10 min.
- 3 Add 10 μ l stop solution (20mM EDTA, pH8.0; not provided), incubate at 65°C for 10 min.



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