TIANGEN®

DP171212

RNase-Free DNase I

Cat. no. 4992232

Storage: store dry at 2-8°C for 12 months

Contents

Contents	4992232 50 preps
RNase-Free DNase I (lyophilized)	1500 Kunitz Unit
Buffer RDD	4 ml
RNase-Free ddH_2O	1 ml

Storage

The RNase-Free DNase I is shipped at room temperature (15-25°C). When stored at 2-8°C, the buffer and lyophilized enzyme can be kept for at least 9 months without any reduction in performance.

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http://www.tiangen.com/en

Important Notes

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 I. This does not affect DNase performance. Due to the production process, insoluble material may be present in the lyophilized DNase.

DNase I is sensitive to physical denaturation. Mix gently by inverting the tube. Do not vortex.

The RNase-Free DNase I could effectively eliminate DNA, and compatible with TIANGEN RNAprep Pure series kits.

The RNase-Free DNase I provides efficient on-column digestion of DNA during RNA purification using with TIANGEN RNAprep Pure series kits, and could also be used in DNA digestion in RNA solution.

Protocol

A. Used with TIANGEN RNAprep Pure series kits (on column)

Buffer RDD is optimized for on-column DNase digestion. (The protocol below is used along with RNAprep Pure kits. RW1 is provided by RNAprep Pure kits).

Note: ordinary DNase Buffer may not suit for on-column DNA digestion. Those buffer may affect the combination of RNA and membrane, which lead to low RNA yield.

1. Preparation of DNase I stock solution: Dissolve the lyophilized DNase I (1500 units) in 550 µl of the RNase-free ddH_2O. Mix gently by inverting. Do not vortex. Divide it 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 6 weeks. Do not refreeze the aliquots after thawing.
2. Preparation of DNase I working solution: Add 10 µl DNase I stock solution (see Preparation of DNase I stock solution) to 70 µl Buffer RDD. Mix by gently inverting the tube.
3. Continued with the protocol in RNAprep Pure kit, till RNA elution.

B. Directly prepare RNA solution

1. Preparation of DNase I stock solution: Dissolve the lyophilized DNase I (1500 units) in 550 µl of the RNase-free ddH_2O. Mix gently by inverting. Do not vortex. Divide it 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 6 weeks. Do not refreeze the aliquots after thawing.
2. Add to an RNase-free centrifuge tube:
   ≤87.5 µl of RNA solution
   10 µl of Buffer RDD
   2.5 µl of DNase I
   Up to 100 µl with RNase-Free H_2O
3. Incubate at 20-25°C for 10 min
4. RNA purification using TIANGEN RNAclean Kit.