

Product Sheet

RNase-Free DNase Set

For DNase treatment with QIAGEN® or PreAnalytiX™ RNA purification kits

Contents

RNase-Free DNase Set	(50)	(250)
Cat. no.	79254	79256
DNase I, RNase-Free (lyophilized)	1500 Kunitz units*	5 x 1500 Kunitz units*
Buffer RDD	2 x 2 ml	10 x 2 ml
RNase-Free Water	1.9 ml	3 x 1.9 ml

* 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 (Kunitz, M. [1950] J. Gen. Physiol. 33, 349 and 363).

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.

Product 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. However, rigorous QC tests are carried out to ensure that DNase activity remains consistent from lot to lot.

The RNase-Free DNase Set provides efficient DNA removal during RNA purification using RNeasy® Kits, * MagAttract® RNA Kits, or the QIAamp® RNA Blood Mini Kit (instructions are provided in the handbooks supplied with the kits).

Note: Buffer RDD is optimized for on-column DNase digestion. The buffer is also well-suited for efficient DNase digestion in solution. A protocol can be found in Appendix C of the *RNeasy MinElute Cleanup Handbook* (www.qiagen.com/HB-0486).

* For DNase treatment with the RNeasy 96 Kit, please contact QIAGEN Technical Services or your local distributor for a separate, optimized protocol.

Safety information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate safety data sheets (SDSs). These are available online in convenient and compact PDF format at www.qiagen.com/safety where you can find, view, and print the SDS for each QIAGEN kit and kit component.

Procedure

1. Prepare DNase I stock solution before using the RNase-free DNase Set for the first time.
2. Dissolve lyophilized DNase I (1500 Kunitz units) in 550 µl of RNase-free water. To avoid loss, do not open the vial. Inject RNase-free water into the vial using an RNase-free needle and syringe. Mix gently by inverting. Do not vortex.
3. For long-term storage of DNase I, remove the stock solution from the glass vial and divide it into single-use aliquots. Aliquots can be stored at –15 to –25°C for up to 9 months. Thawed aliquots can be stored at 2–8°C for up to 6 weeks.

Note: Do not freeze the aliquots after thawing.

Note: Do not vortex the reconstituted DNase I. DNase I is especially sensitive to physical denaturation. Mixing should only be carried out by gently inverting the tube.

Ordering Information

Product	Contents	
RNase-Free DNase Set (50)	For 50 RNA minipreps, 25 midipreps, or 17 maxipreps: 1500 units RNase-Free DNase I, RNase-Free Buffer RDD and RNase-Free Water	79254
RNase-Free DNase Set (250)	For 250 RNA minipreps, 125 midipreps, or 85 maxipreps: 5x1500 units RNase-Free DNase I, RNase-Free Buffer RDD and RNase-Free Water	79256

Revision history

Document	Cover date	Description of changes
HB-0456-003	December 2014	Previous release
HB-0456-004	June 2018	Updated template and hyperlinks; added information about larger product size; added protocol

The RNase-Free DNase set is intended for molecular biology applications. This product is not intended for the diagnosis, prevention, or treatment of a disease. For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

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