



KIAGENE FANAVAR

## DNase I, RNase Free Solution

1U/μl

Cat. No:

FPLF008.1000

FPLF008.0500

Contents:

Components	500 rxn	1000 rxn
DNase I Solution	500 μl	1000 μl
10X DNase Incubation Buffer with MgCl <sub>2</sub>	500 μl	1000 μl

### Kit storage:

⚠ This kit should be stored at -20 °C.

If properly stored, all kit components are stable until the expiration date printed on the label.

### Description

DNase I, RNase-free is an endonuclease that digests single- and double-stranded DNA. It hydrolyzes phosphodiester bonds producing mono- and oligodeoxyribonucleotides with 5'-phosphate and 3'-OH groups.

### Application

- Preparation of DNA-free RNA.
- Removal of template DNA following in vitro transcription.
- Preparation of DNA-free RNA prior to RT-PCR and RT-qPCR.
- DNA labeling by nick-translation in conjunction with DNA Polymerase I.
- Studies of DNA-protein interactions by DNase I, RNase-free footprinting.

## Handling Requirements and Safety Information

⚠ use RNase-free and DNase-free materials

⚠ Do not use any modified Protocols.

⚠ Do not pool reagents from different lot numbers.

⚠ Immediately after usage, close all bottles in order to avoid leakage, varying buffer concentrations or buffer conditions.

⚠ After first opening store all bottles in an upright position.

⚠ Wear protective disposable gloves, laboratory coats and eye protection, when handling samples and kit reagents.

⚠ Do not contaminate the reagents with bacteria, virus, or nucleases. Use disposable pipets and nuclease free pipet tips only, to remove aliquots from reagent bottles.

## Protocol

1.Add to an RNase-free tube:

RNA	1 μg
10X reaction buffer with MgCl <sub>2</sub>	1 μl
DNase I Solution	1 μl (1 U)
DEPC-treated Water	to 10 μl

2. Incubate at 37 °C for 30 min.

3. Add 1 μl 50 mM EDTA and incubate at 65 °C for 10 min. RNA hydrolyzes during heating with divalent cations in the absence of a chelating agent. Alternatively, use phenol/chloroform extraction.

**Contact and Support:** If you have questions or experience problems with Kiogene Fanavar products, please contact our Technical Support staff. Our scientists are committed to providing rapid and effective help. Website: [www.kiogene.ir](http://www.kiogene.ir) Email: [Techsupport@kiogene.ir](mailto:Techsupport@kiogene.ir) Tel: 02191010809