

Datasheet (30.05.2014)

mi-RNase Inhibitor

Cat.-No.	Size	Conc.
mi-E5001S	2000 units	20 units/ μ l
mi-E5001L	10000 units	20 units/ μ l

For *in vitro* use only! For research only!

Unit Definition: One unit is defined as the amount of RNase Inhibitor/Ribonuclease Inhibitor required to inhibit the activity of 5 ng of Ribonuclease A by 50 %. The activity is measured by the inhibition of hydrolysis of cytidine 2,3'-cyclic monophosphate by Ribonuclease A.

Content

- mi-RNase Inhibitor (20u/ μ l) in storage buffer 20 mM HEPES-KOH (pH 7.6 at 4 °C), 50 mM KCl, 8 mM DTT and 50 % (v/v) glycerol

Description

RNase Inhibitor/Ribonuclease Inhibitor has a broad spectrum of RNase inhibitory properties. The 50 kDa protein exerts its inhibitory effect by noncovalent binding to RNases in a 1:1 ratio. The product was purified by the usage of a combination of ion exchange and affinity chromatography.

Features: RNase Inhibitor/Ribonuclease Inhibitor has a broad spectrum of RNase inhibitory properties, including RNase A, RNase B, RNase C and human placental RNase. Does not inhibit RNase T1, S1 nuclease, RNase from *Aspergillus*, RNase H or RNase ONE™ Ribonuclease.

Compatibility: RNase Inhibitor/Ribonuclease Inhibitor does not inhibit SP6, T7 or T3 RNA polymerase; AMV or M-MLV reverse transcriptase or Taq DNA polymerase.

Broad pH and temperature range: Active over a broad pH range (pH 5 – 8) and below 50°C.

Store at -20°C, avoid frequent thawing and freezing.

Applications: RT-PCR

- Useful in all applications where eukaryotic RNase contamination is a potential problem.
- Protection of mRNA in cDNA synthesis reactions.
- In vitro* transcription/translation.
- Improvement of *in vitro* virus replication.
- Improvement of RNA translation in homologous systems.
- Preparation of RNase-free antibody.

Purification of RNA:

Please use 0,1-1 volume%.

For example: 0,1-1 μ l of RNase inhibitor per 100 μ l of reaction.

Quality Control Tests: SDS-PAGE/purity, DNase, RNase, endonuclease/nickase.

Source: Human placenta