

RNase inhibitor

Description

Omega Bio-Tek RNase inhibitor is a recombinant mammalian RNase inhibitor from E.coli cells expressing. The protein is capable of inhibiting eukaryotic RNase (e.g. RNase A and B, C), it is binding ratio with RNase A 1:1, the calculated molecular weight is 49.6 kDa, but it is not inhibiting eukaryotic RNase T1,T2,U1,U2 and CL3 enzymes activity.

Applications

inhibition of RNA degradation in the following procedures:

- In vitro transcription
- cDNA synthesis
- Isolation of mammalian cell fractions that contain mRNA-protein complexes
- Separation and identification of specific ribonuclease activity
- Tumor suppression studies

Enzyme Storage Buffer

RNase inhibitor is supplied in 20mM HEPES-KOH(pH 7.5), 50mM NaCl, 8mM DTT, 50%(v/v) Glycerol.

Storage Conditions

Avoid multiple freeze-thaw cycles and exposure to frequent temperature changes . it is should be stored at -20 °C.

Unit Definition

One unit is defined as the amount of RNase inhibitor required to inhibitor the activity of 5ng of RNase A by 50%. Activity is measured by the inhibition of hydrolysis of cytidine 2',3'-cyclic monophosphate by RNase A.

Quality Control Assays

The purity is $\geq 90\%$ as judged by SDS-PAGE , to test for RNase, DNase and Endonuclease activity found there is no contaminant.

Concentration: 40 U/ μ l

Note

Working concentrtrion – 20U per reaction mixture.

Kit Contents

Cat.No.	TQR01-01	TQR01-02
RNase Inhibitor	2000 units	10000 units