Product Details

This product is a purified recombinant murine RNase inhibitor expressed in Escherichia coli with a molecular weight of approximately 50 kDa. The inhibitor can extensively inhibit RNase A, B, and C activity, and it inhibits RNases by binding noncovalently in a 1:1 ratio with high affinity. Compared with human RNase inhibitor, murine RNase inhibitor has significant antioxidant properties and is more suitable for reactions where low DTT concentrations are required (e.g., RT-PCR).

Application

- cDNA synthesis
- In vitro transcription/translation
- RT-PCR
- Enzymatic RNA labeling reaction
- Other applications where the integrity of RNA is important

Unit Definition

One unit is defined as the amount of Murine RNase Inhibitor required to inhibit 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.

Quility Control

No endodeoxyribonucleases, exodeoxyribonucleases and Ribonucleases residues.

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM HEPES 50 mM NaCl 50% Glycerol,8 mM DTT pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with blue ice, please inquire the shipping cost.

Storage

This product is stable after storage at:

- This product is stable for up to 12 months at -20°C from date of receipt.

Notes

The maintenance of the active state of this inhibitor requires at least 1mM DTT;

This inhibitor does not inhibit the activity of RNase H;

The inhibition of RNase activity has a wide pH range (pH 5-9), and shows maximum activity at pH 7-8.

Avoid foaming, stirring vigorously, and vortexing to prevent inactivation of this product.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.