

Product Description

This product is a recombinant mouse RNase inhibitor expressed and purified in a soluble form in *E. coli*, capable of broadly inhibiting various types of RNases (RNase A, B, C). The principle of its specific inactivation of RNase is to bind non-covalently with RNase to form a complex, causing RNase to become inactive, thus protecting RNA from degradation. This product is compatible with various commercial Reverse Transcriptase, DNA Polymerases, SP6, T7, or T3 RNA polymerases and AMV. Compared with human RNase inhibitor, murine RNase inhibitor lacks two cysteines that are very sensitive to oxidation in human protein, so it has higher antioxidant activity and is more suitable for experiments sensitive to high DTT (such as RT-PCR).

Components

Components	BR1D901-01 2000U	BR1D901-02 10000U	BR1D901-03 20000U
AcuGenix™ RNase Inhibitor	0.05 mL	0.25 mL	0.5 mL

Unit Definition

One unit (U) is defined as the enzyme needed for inhibiting 50% activity of 5 ng RNase A. The activity of RNase A is detected by quantifying the inhibition of hydrolysis from Cyclic 2', 3'-CMP to 3'-CMP.

Storage

Store at $-20\pm 5^{\circ}\text{C}$.

Notes

1. For Research Use Only. Not for use in diagnostic procedures.
2. Mix well before use and avoid repeated freeze-thaw cycles. Repeated freeze-thawing may degrade the performance of the product. If the amount used each time is small, dispensing of the reagent is recommended.
3. The pH range of inhibiting RNase activity is 5.0 - 9.0, and 7.0 - 8.0 performs best.
4. Foaming or Vortex can cause inactivation.
5. It does not inhibit RNase H and RNase T1 activity.