DATA SHEET

Jena Bioscience

RNase Inhibitor - glycerol-free

Mus musculus, recombinant

Cat. No.	Amount
PCR-399-1KU	1 kilo unit
PCR-399-10KU	10 kilo units
PCR-399-100KU	100 kilo units

Unit Definition: One unit of the protein inhibits the activity of 5 ng RNase A by 50 %. Inhibitor activity is assayed in: 40 mM Tris-HCl (pH 8.0, 25 °C), 10 mM $MgSO_4$, 1 mM $CaCl_2$.

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Form: liquid

Concentration: 40 units/µl

Applications:
RNase inhibitor should be applied in a working concentration of 40 units (1 µl) per 50 µl reaction volume. The application of RNase inhibitor is recommended for:

- cDNA synthesis / RT-PCR
- *In vitro* transcription/translation
- RNA purification
- RNA protection assays
- Separation and identification of specific ribonuclease activities
- Other applications where the integrity of RNA is essential

Description:
RNase inhibitor - glycerol-free is recommended for use in freeze drying applications where glycerol must be avoided.
RNase inhibitor is a recombinant protein which completely inhibits a broad spectrum of eukaryotic RNases, including RNase A, B and C. It inhibits RNases by binding noncovalently in a 1:1 ratio with high affinity (4 x 10^{-14}M). It does not inhibit the RNases I, T1, T2, H, U1, U2 and Cl3. In addition, RNase inhibitor shows no inhibition of polymerase or reverse transcriptase activity and so can be used for cDNA synthesis and in one-step RT-PCR reactions. The murine version of RNase inhibitor lacks the pair of cysteines identified in human version, therefore it has significantly improved resistance to oxidation.

Content:
40 units/µl RNase Inhibitor in 40 mM HEPES-KOH pH 7.5, 100 mM KCl