

**RNase Inhibitor - recombinant***Mus musculus*, recombinant

Cat. No.	Amount
PCR-392S	2.000 units
PCR-392L	5 x 2000 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 MgSO₄, 1 mM CaCl₂.

For *in vitro* use only!

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Form: liquid (Supplied in 20 mM HEPES-KOH pH 7.5, 50 mM KCl, 8 mM DTT and 50 % [v/v] glycerol)

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 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 (4×10^{-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.

Nuclease, DNase and RNase free