



## RNase Inhibitor - recombinant

*Mus musculus*, recombinant

Cat. No.	Amount
PCR-392S	2.000 units
PCR-392L	5 x 2000 units
PCR-392-100KU	2 x 50 kilo units
PCR-392-1MU	1 Mio 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<sub>4</sub>, 1 mM CaCl<sub>2</sub>.

**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 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 ( $4 \times 10^{-14}$  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 20 mM HEPES-KOH pH 7.5, 50 mM KCl, 8 mM DTT and 50 % [v/v] glycerol