

RNase Inhibitor (40U/μl)#GE85.0100 (100 μl)
(FOR RESEARCH ONLY)

Product: Trace amounts of ribonucleases (RNases) can be introduced into RNA preparations via contaminated plasticware or reagents, or by co-purification with the isolated RNA. Presence of tiny amounts of contaminating (RNases) may compromise many downstream applications such as expression analysis. GRiSP's RNase Inhibitor specifically inhibits common RNases, including RNase A, RNase B, and RNase C. As the RNase inhibitor does not interfere with DNA polymerase activity, it is an extremely useful additive in PCR and RT-PCR. GRiSP's RNase Inhibitor is a sturdy enzyme with improved resistance to oxidation, being stable under very low concentrations (<1mM) of DTT. It is therefore an excellent choice for the protection of your valuable RNA samples.

Applications: cDNA Synthesis

Contents: 4000U of RNase Inhibitor, are supplied in a storage buffer containing 20mM HEPES-KOH at pH 7.5, 50mM KCl, 50% glycerol, and 8mM DTT at a concentration of 40U/μl.

Component	Volume
RNase Inhibitor (40U/μl)	100 μl

One unit (1U) is defined as the amount that is required to inhibit ribonucleases activity of 5ng of RNase A by 50%.

Storage: RNase Inhibitor (40U/μl) should be stored at -20°C for up to 1 year. Repeated Freeze/Thaw cycling should be avoided. It is therefore recommended to prepare smaller aliquots using RNase-free tubes.

Usage:

In a typical cDNA synthesis reaction mixture set-up, we recommend adding RNase Inhibitor, just prior to adding reverse transcriptase, to a final concentration of 1U/μl (e.g. 0.5μl in a total of 20μl reaction volume).