

# RNase Inhibitor, Murine



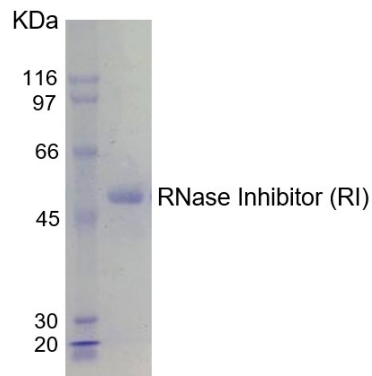
<b>Catalog #</b>	3714
<b>Package Size</b>	20,000 units
<b>Concentration</b>	40 units/ $\mu$ l

## Description

RNase inhibitors are commonly used to inhibit and control RNase contaminants in enzymatic manipulations of RNA. Intact Genomics (ig®) RNase Inhibitor is a 49.8 KDa recombinant protein of murine origin which specifically inhibits RNases A, B and C by binding noncovalently in a 1:1 ratio with high affinity. Moreover, it does not inhibit polymerase activity when used with Taq DNA Polymerase, Reverse Transcriptase. RNase Inhibitor from Murine is resistance to oxidation compared to the human/porcine RNase inhibitors as it lacks the pair of cysteines found in the human/porcine versions. In addition, it is stable at less than 1 mM DTT concentration.

## Protein Purity

The physical purity of this enzyme is  $\geq 98\%$  as assessed by SDS-PAGE with Coomassie® blue staining (Fig. 1).



## Product Source

*E. coli* strain expressing recombinant RNase Inhibitor gene from mouse.

## Applications

- cDNA synthesis
- RT-PCR/RT-qPCR
- In vitro transcription/translation
- RNA labeling

## Product Includes

- RNase Inhibitor, Murine

## Storage Buffer

50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA  
50% Glycerol, pH 7.5 @ 25°C

## Storage Temperature

-20°C

## Heat Inactivation

70°C for 20 minutes

## Unit Definition

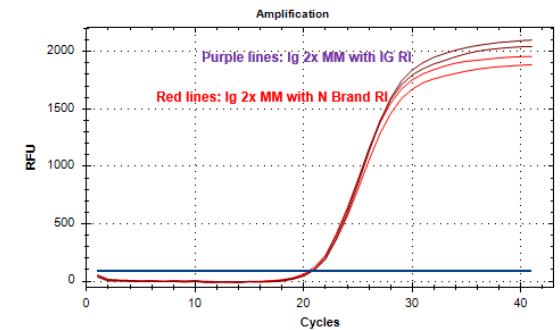
One unit is defined as the amount of RNase Inhibitor is required to inhibit the activity of 5 ng of RNase A by 50%.

## Quality Control assays

SDS-PAGE purity, protein concentration, endo-deoxyribonuclease assay, performance evaluation with RT-qPCR.

## RNase Inhibitor (RI) Data Comparison

RT-qPCR was run using Intact Genomics (IG) 1-step 2x master mix (MM) and compared IG RI with a leading brand's "N" RI.



## Related Products

- igScript™ Probe-Based One Step RT-qPCR Kit(Cat.# 3212)
- ig® SYBR Green qPCR 2x Master Mix (Cat.# 3354)
- Taq DNA Polymerase 2x Premix (Cat.# 3249)
- ig® 5-alpha Chemically Competent Cells (Cat.# 1031-12)
- igScript™ Reverse Transcriptase (Cat.# 3344)
- igScript™ Probe-Based One Step RT-qPCR Kit(Cat.# 4212)

## Technical Support

Intact Genomics is committed to supporting the worldwide scientific research community by supplying the highest quality reagents. Each new lot of our products is tested to ensure they meet the quality standards and specifications designated for the product. Please follow the instructions carefully and contact us if additional assistance is needed. We appreciate your business and your feedback regarding the performance of our products in your applications.