HB220615

Murine RNase Inhibitor (200 U/μL)

Product Information

Product Name	Cat#	Size
Murine RNase Inhibitor (200 U/μL)	10610ES03	1 mL
	10610ES50	50 mL
	10610ES76	500 mL

Product Description

Murine RNase Inhibitor is purified from a recombinant strain of *E. coli* in a soluble form. It specifically inhibits the activity of RNases A, B and C through binding noncovalently in a 1:1 ratio with high affinity. Recombinant murine RNase inhibitor does not contain 2 oxidation-sensitive cysteine which are contained in human-origin RNase inhibitor. Therefore, murine RNase inhibitor has high anti-oxidation activity and is more stable for low DTT experiments (< 1mmol/L). This product is validated for its compatibility with Hifair™ II Reverse Transcriptase (Cat#11110) and various DNA Polymerases. Murine RNase inhibitor is ideal for high-DTT-sensitive experiments, such as RT-PCR. The product can be used in cDNA Synthesis, polysome isolation and *In vitro* transcription/translation.

Product Components

Component number	Components	Cat#/Size		
		10610ES03 (1 mL)	**10603ES50 (50 mL)**	**10603ES76 (500 mL)**
10610	Murine RNase Inhibitor (200 U/μL)	1 mL	50 mL	10× 50 mL

Shipping and Storage

The product is shipped with ice packs and can be stored at -20°C for 2 years.

Unit Definition

The required amount of RNase Inhibitor to inhibit 50% activity of 5-ng RNase A is defined as one unit. The activity of RNase A is measured by hydrolyzing of cyclic 2', 3'-CMP to generate 3'-CMP.

Cautions

1. The product works in a wide pH range and exhibits maximal inhibitory activity at pH 7~8.
2. Please handle the product gently to avoid inactivation.
3. This product does not inhibit RNase H.
4. For your safety and health, please wear lab coats and disposable gloves for operation.

Method of Application (Reverse Transcription)

1. Add the following components to a nuclease-free microcentrifuge tube:

Components	Volume (μL)
RNase-free ddH_2O	to 20
5× Hifair™ II Buffer	4
Oligo $(dT)_{18}$ (50 μmol/L)	1
dNTP Mix (10 mmol/L each)	1
Murine RNase Inhibitor (200 U/μL)	0.2
Hifair™ II Reverse Transcriptase (200 U/μL)	1
RNA template	Total RNA:1 ng-5 μg

2. Mix gently and centrifuge.

3. Incubate at 42℃ for 45 min.

4. Inactivate the reaction by heating at 85℃ for 5 min.

5. Store at -20℃.