



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.

Components

Components No.	Name	10603ES05 (2 KU)	10603ES10 (10 KU)	10603ES20 (20 KU)	10603ES60 (100 KU)	10603ES94 (20,000 KU)
10603	Murine RNase Inhibitor (40 U/μL)	50 μL	250 μL	500 μL	2.5 mL	500 mL

Specifications

Concentration	40 U/μL		
Product Type	RNase Inhibitor		
	The required amount of RNase Inhibitor to inhibit 50% activity of 5-ng RNase A is defined as		
Unit Definition	one unit. The activity of RNase A is measured by hydrolyzing of cyclic 2', 3'-CMP to generate		
	3'-CMP.		

Shipping and Storage

The product is shipped with dry ice and can be stored at -15°C ~ -25°C for 2 years.

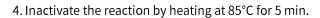
Instructions

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

Components	Volume (μL)
RNase-free ddH₂O	to 20
5× Hifair™ II Buffer	4
Oligo (dT) ₁₈ (50 μmol/L)	1
dNTP Mix (10 mmol/L each)	1
RNase Inhibitor (40 U/μL)	1
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°C for 45 min.





5. Store at -20°C.

Notes

- 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.