

UCF.ME™ High Affinity RNase Inhibitor (40 U/μL)

Product description

UCF.ME™ High Affinity RNase Inhibitor (40 U/μL) is a recombinant porcine RNase inhibitor expressed in *E. coli*. It specifically inhibits the activity of RNases A, B and C through binding noncovalently in a 1:1 ratio with high affinity. This product can be compatible with Hifair™ Ultra Reverse Transcriptase (200 U/μL) (Cat#14604ES) and various DNA polymerases verified by RT-PCR and RT-qPCR.

The host nucleic acid residue of UCF.ME™ High Affinity RNase Inhibitor (40 U/μL) is lower with the purification process specially developed by YEASEN, which is suitable for application with more stringent requirements on background bacteria, such as pathogen microorganism detection.

Specifications

Source	Recombinant <i>E. coli</i> with porcine RNase Inhibitor gene
Storage Buffer	20mM Hepes-KOH, 150mM KCl, 8mM DTT, 50%Glycerol, pH7.5±0.2@25°C
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.

Components

Name	14675ES05	14675ES20	14675ES60
	2 KU	20 KU	100 KU
UCF.ME™ High Affinity RNase Inhibitor (40 U/μL)	50 μL	500 μL	2.5 mL

Storage

This product should be stored at -25~-15°C for 2 years.

Instructions

1. The recommended amount to add in a 20 μL system is 40 units (U), and the input quantity can be adjusted based on the actual results.
2. Incubate at 50°C for 15 min, and inactivate the reaction by heating at 85°C for 5 min.
3. Reverse transcription temperature: When used with 14604ES, 50 °C is recommended; for high GC content templates or complex templates, the reverse transcription temperature can be increased to 55°C-60°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.