

## Hifair UCF.ME™ V Reverse Transcriptase (200 U/μL)

### Product description

Hifair UCF.ME™ V Reverse Transcriptase is an updated version of Hieff™ M-MLV (H-) Reverse Transcriptase obtained by genetic engineering technology. It has higher cDNA synthesis ability, thermal stability, and reaction temperature limit (up to 60°C) than Hieff™ M-MLV (H-) Reverse Transcriptase. The synthesized cDNA product is up to 10kb. Hifair UCF.ME™ V Reverse Transcriptase enhances the affinity of the templates and is suitable for reverse transcription of RNA templates with complex secondary structures or low-copy genes. After special processing, the enzyme greatly reduces the interference of host and background bacteria on the basis of ensuring its performance, and is especially suitable for pathogen detection and other scenarios.

### Specifications

Source	Moloney Murine Leukemia Virus
Storage Buffer	50 mM Tris-HCl, 100 mM NaCl, 5 mM DTT, 1 mM EDTA, 0.1% TritonX-100, 50% Glycerol, pH 7.5±0.1@ 25°C
Unit Definition	One unit is defined as the amount of enzyme that will incorporate 1 nmol of dTTP into acid-insoluble material in 10 minutes at 37°C using Oligo(dT) as primers.

### Components

No.	Name	14608ES92	14608ES97	14608ES03
		10,000 U	50,000 U	1 mL
14608-A	Hifair UCF.ME™ V Reverse Transcriptase (200 U/μL)	50 μL	250 μL	1 mL
14608-B	5×Hifair™ V Buffer	250 μL	1.25 mL	5 mL

### Storage

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

### Instructions

- recommended to include a denaturation of RNA template (This step is optional, denaturation of RNA template helps to open the secondary structures, which will improve the yield of the first strand cDNA): Incubating at 65°C for 5 minutes, then transferring on ice immediately to chill for 2 minutes. Brief centrifugation to collect reaction liquid, add the reverse transcription reaction solution, gently pipette to mix.
- The recommended reverse transcription temperature is 42°C. For templates with complicated secondary structures or high GC content, it is recommended to raise the reaction temperature to 50-55°C.
- The product is suitable for one-step RT-qPCR, it is recommended to add 10-20 U reverse transcriptase for every 25 μL reaction system, or gradually increase the amount of reverse transcriptase according to the actual situation.
- Heating at 85°C for 5 min to inactivate reverse transcriptase.

## Notes

1. This product is for research use only.
2. For your safety and health, please wear lab coats and disposable gloves for operation.