

EasyQuick RT MasterMix

Cat. No. : CW2019S (20 rxns)
CW2019M (200 rxns)

Storage Condition: -20 °C

Components

Component	CW2019S 20 rxns	CW2019M 200 rxns
5×EasyQuick RT MasterMix	40 μL	400 μL
RNase-Free Water	0.5 mL	2×1 mL

Introduction

This product is a kit for quick reverse transcription. 5×EasyQuick RT MasterMix contains EasyQuick RT reversal enzyme, RNase Inhibitor, Random primers, Oligo dT Primer, dNTP, EQ-RT Buffer and other reagents required for reverse transcription from the RNA template to the first strand of cDNA. The product has high reverse transcriptional efficiency and can perform a good reverse transcriptional reaction on a small amount of RNA templates, and the first strand of fluorescence quantitative template cDNA can be synthesized in 15 minutes. This kit is very convenient to operate, and only need to add RNA template and water to perform reverse transcription reaction. It is especially suitable for high-throughput detection.

Features

1. Ready and easy to use: The reaction will be initiate by adding water and RNA template to the mastermix.
2. Rapid: It takes only 15 minutes to obtain the first strand of cDNA.
3. High efficiency of reverse transcription: Above 90% RNA will be reverse transcribed.
4. High sensitivity: pg-level of total RNA or mRNA can be used as template.
5. Suitable for complex templates: Templates with high GC content and complex secondary structure.

Notes

1. RNase contamination should be avoided during operation to prevent RNA degradation or cross-contamination in experiments, and it is recommended that operators wear masks and disposable gloves, change gloves frequently, and use specialized instruments and consumables.
2. The reaction should be set up on ice to prevent RNA degradation. The enzymes should be returned to -20°C as soon as possible after use, and avoid repeated freeze-thaw.
3. The $10\ \mu\text{L}$ reaction system can use up to $1\ \mu\text{g}$ of total RNA. If the amount of template RNA is greater than $1\ \mu\text{g}$, scale up the reaction system.
4. For RNA templates with complex secondary structures, it is recommended to incubate the template RNA for 5 minutes at 65°C first, then place it on ice immediately, and centrifuge briefly for further processing.

Protocol

1. Thaw the template RNA on ice and place the kit components on ice. Mix each solution slowly with a pipette or invert, and use after a brief centrifugation.
2. Prepare the reaction system on ice according to the table below. Vortex to mix, centrifuge briefly to collect the solution to the bottom of the tube.

Reagent	10 μL System	Final Concentration
5 \times EasyQuick RT MasterMix ¹⁾	2 μL	1 \times
RNA Template	X μL	1 pg-0.5 μg ²⁾
RNase-Free Water	to 10 μL	

Note: 1) 5 \times EasyQuick RT MasterMix contains Random primers, Oligo dT Primer, RNase Inhibitor, dNTP, EQ-RT Buffer, etc.

2) If the amount of template RNA is greater than $1\ \mu\text{g}$, scale up the reaction system.

3. Incubate at 37°C for 15 min,
4. Incubate at 85°C for 5 sec to inactivate the reverse transcriptase.
5. At the end of the reaction, centrifuge briefly and cool the product on ice before proceeding to the next reaction. For long-term storage, please store at -20°C .

This product is for scientific research only, which shall not be used for clinical diagnosis or other purposes.