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|----------------------|------------------------------|----------------------------------|-------------|
| Catalog No.: | R-G207 | Kit Components | Size |
| Product Name: | RT™ Plus Master Mix | EasyScript™ Plus RTase (200U/μl) | 100μl |
| Size: | 100T | 2x Reaction Mix | 1200μl |
| Storage: | -20°C and avoid light | Nuclease-free H ₂ O | 2×1000μl |

Description: EasyScript™ Plus Reverse Transcriptase, or called EasyScript™ Plus RTase, is a novel recombinant reverse transcriptase with higher efficiency in the first-strand cDNA synthesis from RNA templates with secondary structures and GC-rich RNA templates. EasyScript™ Plus RTase can synthesize full-length cDNA libraries from RNA templates up to 15 kb in length, with proofreading ability due to the presence of a fidelity-enhancing subunit, making this RTase an excellent choice for whole genome sequencing.

RT™ Plus Master Mix is a proprietary cDNA Synthesis Supermix containing all materials required for first-strand cDNA synthesis in a 2X concentration, RNaseOFF Ribonuclease Inhibitor, dNTPs, and a balanced concentration for Oligo(dT) and Random Primers. The first-strand cDNA can be directly used as a template in PCR and other applications.

Special Features: Up to 15 kb cDNA synthesis
Works well on high GC RNA
Resolves complex structure RNA
Ensures sample to sample consistency
Large RNA sample volume capacity

Application: Ready-to-use
First strand cDNA synthesis for PCR
Construction of cDNA libraries

Generation of probes for hybridization

Protocol

1. Thaw RNA templates and all reagents on ice. Mix each solution by gently vortexing. Spin briefly to collect the reagent.
2. Assemble the following components in a tube on ice, and mix well:

| Components | Volume | Final Conc. |
|--------------------------------|------------|--------------------------------|
| Total RNA, or mRNA | Variable | 1ng - 2μg/rxn 1pg - 2ng/rxn |
| 2X Reaction Mix | 10μl | 1X |
| Nuclease-free H ₂ O | Up to 19μl | - |

3. Heat the mixture at 65°C for 5 mins and incubate on ice for at least 1 min.
4. Collect all components by a brief centrifugation and add 1μl of the EasyScript™ Plus RTase to the tube.
5. Mix well and collect all the components by a brief centrifugation.
6. Incubate the tube at room temperature for 10 min for annealing.
7. Perform cDNA synthesis by incubating the tube for 50 min at 50°C (or 10 min at 50°C for qRT-PCR)..
8. Stop the reaction by heating it at 85°C for 5 min.
9. Chill on ice. The newly synthesized first-strand cDNA is ready for immediate downstream applications.

| Related products | Catalog No. |
|------------------------------|-------------|
| Direct RT-qPCR Lysis Kit | R-G915 |
| RT Genomic DNA Removal Kit | R-G488 |
| EvaGreen qPCR Master Mix-ROX | R-EMX |
| TaqProbe qPCR Master Mix-ROX | R-PMP |
| Super HF PCR Master Mix | R-P135 |

This product is for research use only.