

# EcoScript 5x First Strand cDNA Synthesis Kit

50 rxn, 100 rxn, 200 rxn

**Cat No:** ERT50, ERT100, ERT200

**Shipping** : Ship with blue ice.

**Storage** : Store at -20°C. Avoid freeze and thaw cycles.

## General Information

EcoScript 5x First Strand cDNA Synthesis Kit offer whole components for cDNA synthesis in one solution for the effective synthesis of first strand cDNA from RNA templates. EcoScript 5x First Strand cDNA Synthesis Kit utilizes the recombinant thermostable M-MuLV Reverse Transcriptase which exhibits lower RNase H activity than AMV reverse transcriptase. EcoScript 5x First Strand cDNA Synthesis Kit already include a thermostable M-MuLV Reverse Transcriptase, RNase Inhibitor, Random primers, Oligo dT Primer, dNTP Mixture, and Reaction Buffer. Only water and RNA template is added to set up the reaction.

## RT PCR Setup

1. Thaw template RNA on ice.
2. Prepare the following reaction mixture.

| Component                                    | Amount      |
|----------------------------------------------|-------------|
| EcoScript 5x First Strand cDNA Synthesis Kit | 4 µl        |
| Total RNA                                    | ≤16 µl*     |
| ddH <sub>2</sub> O                           | up to 20 µl |
| Total                                        | 20 µl       |

\* Total RNA no more than 2 µg, mRNA no more than 200 ng for 20µl reaction

3. Gently mix the solution (total 20 µl)
4. Run the following reaction set up.

| Temperature | Time     |
|-------------|----------|
| 42°C        | 120 min* |
| 85°C        | 5 min    |
| 4°C         | ∞        |

\*When urgent results are needed, incubation at 42°C for as short as 15 min should be OK to achieve successful synthesis of cDNA when especially working with genes with high expression.

5. Synthesized cDNA products can be immediately used for qPCR reaction or stored at -20 °C and used within six months. For long term storage of cDNA, storing at -70°C refrigerator is recommended. Repeated freeze-thaw of cDNA should be avoided.