

FastGene[®] Scriptase Basic

cDNA Synthesis Kit

Manual

LS62

Version 1.2

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Store at -20°C

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Product description

Reverse transcription

The ability to reverse the process of translation from DNA to RNA has been a crucial application of modern molecular biology. The enzyme, a RNA-dependent DNA-Polymerase is called reverse transcriptase. Reversing the messenger RNA delivers the complementary DNA, which can be detected or quantified using PCR and qPCR approaches.

The lack of the 3' → 5' exonuclease activity made the MuLV increasingly the enzyme of choice. The MuLV has also been used as a template to engineer new enzymes with additional features. The FastGene Scriptase Basic is an enhanced version of the original MuLV RT.

Kit Content (100 Reactions)

- FastGene® Scriptase Basic (200 U/μl)
- 10x FastGene® Scriptase Basic buffer
- dNTP Mixture (2 mM each)
- Sterile water (RNase free)
- RNase Inhibitor(40 U/μl)
- Oligo dT (80 μM)
- Random Hexamer(100 μM)

Quality Control

- Purity: >99% on SDS-PAGE
- Endonuclease-free
- Exonuclease-free
- RNase-free
- Inhibitor-free
- Satisfactory Yield

Concentration of template RNA

- Total RNA: 1 ng-5 μ g
- Messenger RNA (mRNA): 1 ng-0.25 μ g
- Specific RNA: 0.01 pg-0.5 μ g

1. Mix the recommended concentration of RNA template with 1 μ l oligo dT primer (80 μ M) and/or 1 μ l random hexamer (100 μ M)
2. Incubate at 42 °C for 5 minutes.

Note: Add an additional annealing step of 10 minutes at 25°C if random hexamers are used.

3. Store the RNA mixture on ice and add followed components:

10x FastGene® Scriptase Basic buffer	2 μ l
FastGene® Scriptase Basic (200 units/ μ l)	1 μ l
dNTP mixture (2 mM each)	2 μ l
RNA-Template	x μ l
Primer	1-2 μ l
RNase Inhibitor	0,5 μ l
Distilled Water	up to 20 μ l

4. Incubate at 42°C for 60 min.

Note: FastGene® Scriptase Basic can perform optionally over the full range of 42°C-50°C after optimization.

5. Incubate 90 °C for 5 min for complete enzyme deactivation.

FastGene[®] Scriptase Basic

cDNA Synthesis

Please contact us for additional information:

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Please contact our technical support:

support@nippongenetics.eu

LS52	FastGene[®] Scriptase Basic (20.000 units at 200 U/μl)	100 Reactions
LS62	FastGene[®] Scriptase Basic cDNA Synthesis containing Oligo dTs, random hexamer and RNase inhibitor	100 Reactions
LS53	FastGene[®] Scriptase II (20.000 units at 200 U/μl)	100 Reactions
LS63	FastGene[®] Scriptase II cDNA Synthesis containing Oligo dTs, random hexamer and RNase inhibitor	100 Reactions

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