

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 µg*
- *Messenger RNA (mRNA): 1 ng-0.25 µg*
- *Specific RNA: 0.01 pg-0.5 µg*

1. Mix the recommended concentration of RNA template with 1 µl oligo dT primer (80 µM) and/or 1 µl random hexamer (100µM)
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 µl
FastGene® Scriptase Basic (200 units/µl)	1 µl
dNTP mixture (2 mM each)	2 µl
RNA-Template	x µl
Primer	1-2 µl
RNase Inhibitor	0,5 µl
Distilled Water	up to 20 µl

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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