

 **FastGene**® Scriptase II

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**cDNA Synthesis
5x ReadyMix OdT**

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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
LS64	FastGene® Scriptase II cDNA Synthesis 5x ReadyMix containing random hexamer, RNase inhibitor and Helper Protein	100 Reactions
LS65	FastGene® Scriptase II cDNA Synthesis 5x ReadyMix OdT containing random hexamer, Oligo dTs, RNase inhibitor and Helper Protein	100 Reactions

Manual
LS65
Version 1.0
July 2019

For Research use only

Store at -20°C

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Product description

Reverse transcription

The ability to reverse the process of transcription 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 II is an engineered enzyme with a reduced RNase H activity and comes ready-to-use with all necessary ingredients to perform a reverse transcription.

Composition (100 Reactions)

- FastGene® Scriptase II
- 5x FastGene® Scriptase II buffer
- dNTP Mixture
- RNase Inhibitor
- Random Hexamer
- Helper Protein
- Oligo dT

Quality Control

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

Protocol

1. Mix the ReadyMix with the RNA Template using the following setup:

5x FastGene® Scriptase II ReadyMix (LS65)	4 µl
High quality RNA-template*	x µl
Sterile Water	up to 20 µl

*Concentration of template RNA can be up to 2.5 µg

2. Incubate at 25 °C for 10 minutes.

3. Incubate at 42 °C for 60 minutes*.

Note: The recommended incubation time can be reduced to 5 minutes depending on the product abundance and size. Please download our Technical Note showing the performance at lower temperature (down to 5 min.) at our website www.nippongenetics.eu/en/.



Please contact us for additional information:
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Please contact our technical support:
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3. Inactivate the FastGene Scriptase II by incubating at 85°C for 5 min.

4. Store the cDNA at -20 °C or use it for downstream application.

Note: Up to 10 % of the qPCR reaction volume can be of the undiluted synthesized cDNA .