FastGene® Scriptase II

cDNA Synthesis 5x ReadyMix

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
LS64
Version 3.1
March 2020

For Research use only

Store at -20°C

NIPPON Genetics EUROPE

www.nippongenetics.eu
info@nippongenetics.eu
TEL +49 2421 55 4960
FAX +49 2421 55 49611

FastGene® Scriptase II

cDNA Synthesis 5x ReadyMix

NIPPON Genetics EUROPE

www.nippongenetics.eu
info@nippongenetics.eu
TEL +49 2421 55 4960
FAX +49 2421 55 49611

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

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 (LS64)		4 µl
High quality RNA-template*		x µl
Sterile Water	up to	20 µl

**Concentration of template RNA can be up to 1 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:
info@nippongenetics.eu
Please contact our technical support:
support@nippongenetics.eu

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 .*