NIPPON Genetics EUROPE
INNOVATION FOR YOU

FastGene® Scriptase III cDNA 5x ReadyMix

Cat. No.	Pack Size
LS67	100 reactions
LS67s	10 reactions

Storage:
Store at -20°C.

Description:
FastGene® Scriptase III cDNA 5x ReadyMix is an improved version of M-MLV Reverse Transcriptase, which exhibits high thermal stability (~55°C) and low RNase H activity. It is a mixture of FastGene® Scriptase III, RNase inhibitor, MgCl2, and dNTPs. It is ready to use by adding template RNA and primers. The synthesis of cDNA can be carried out using either total RNA or poly(A)+-selected RNA, with individual priming options including oligo(dT), random primers, or a gene-specific primer.

NIPPON Genetics EUROPE
INNOVATION FOR YOU

Characteristics:
- Produces excellent yields of amplifiable cDNA.
- Can synthesize long cDNA targets, up to 12 kb, from small amounts of input RNA.
- Able to reverse transcribe through RNA secondary structures.
- Strict enzyme purity specifications.

Applications:
- First-Strand cDNA synthesis
- Conventional PCR
- Real-time quantitative RT-PCR (qRT-PCR)

Quality control:
- Purity: >99% on SDS-PAGE
- Endonuclease- and exonuclease-free
- RNase-free
- Inhibitor-free
- Satisfactory yield and length of cDNA products

NIPPON Genetics EUROPE
INNOVATION FOR YOU

Protocol:
1. Prepare the PCR mixture on ice with the following **components included in this kit**:

FastGene® Scriptase III cDNA 5x ReadyMix	**4 µl**
Primer (80 µM oligo(dT), or 2 µM gene-specific primer, or 50 ng/µL random hexamers)	**1 µl**
Template RNA* (not included)	**x µl**
Sterile water (RNase free)	**up to 20 µl**

2. Incubate at 25°C for 10 min and 42°C for 60 min.

3. Incubate at 85° for 5 min to inactivate the reaction.

NIPPON Genetics EUROPE
INNOVATION FOR YOU

Note:
- High quality RNA is needed for accurate quantification in qPCR. RNA should be kept in the abscence of RNase contamination.
- Template RNA can range up to 2.5 µg in a 20 µL cDNA synthesis reaction.
- Amplification grade DNase I can be used to remove genomic DNA contamination from the total RNA.
- A shorter incubation time of minimum 30 min and higher synthesis temperatures (up to 50°C) can be used without a loss of performance.
- Longer incubation times may be used for increased yields of cDNA.
- Undiluted synthesized cDNA may be used up to 10% of the qPCR reaction volume (e.g., for a 20 µL qPCR, use up to 2 µL of undiluted cDNA).

NIPPON Genetics EUROPE GmbH
Mariaweilerstr. 28 a; 52349 Düren; Germany
fax: +49 2421 55 496 11, phone: +49 2421 55 496 0
e-mail: info@nippongenetics.eu
www.nippongenetics.eu