

Nautia MMLV(M) Reverse Transcriptase

Cat. No. NUDT-100P

Description

Nautia MMLV(M) Reverse Transcriptase (RT) is genetically engineered by introducing point mutations to MMLV RT that increase half-life, reduce RNase activity and increase thermal stability. Those designed mutations lead to increased specificity of Nautia MMLV(M) RT and the highest cDNA yield of all RTs. It is ideal for RT-PCR of a specific gene or generating cDNA from total or poly(A)+ RNA samples.

It synthesizes a complementary DNA strand from total RNA, mRNA, or an RNA:DNA hybrid

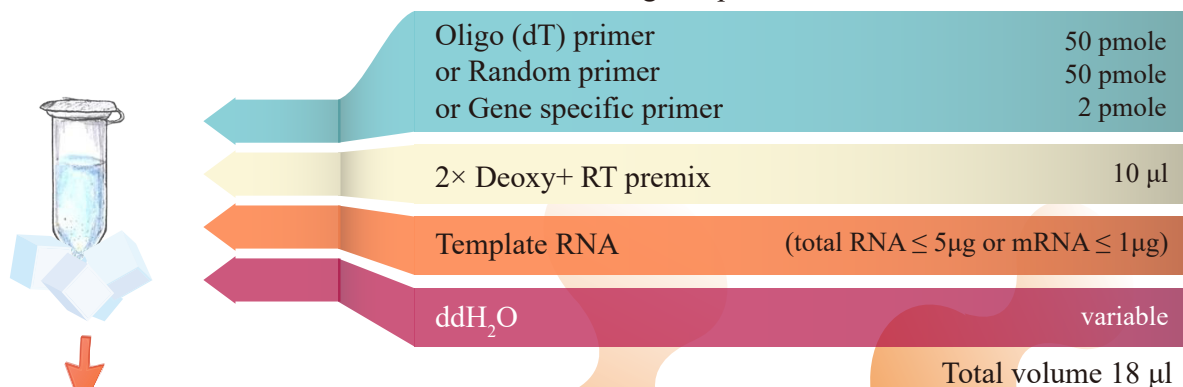
Contents

1. Nautia MMLV(M) Reverse Transcriptase
2. Deoxy RT premix:
100 mM Tris-HCl pH 8.3, 150 mM KCl, 6 mM MgCl₂, 20 mM DTT, 1 mM dNTPs

Protocol

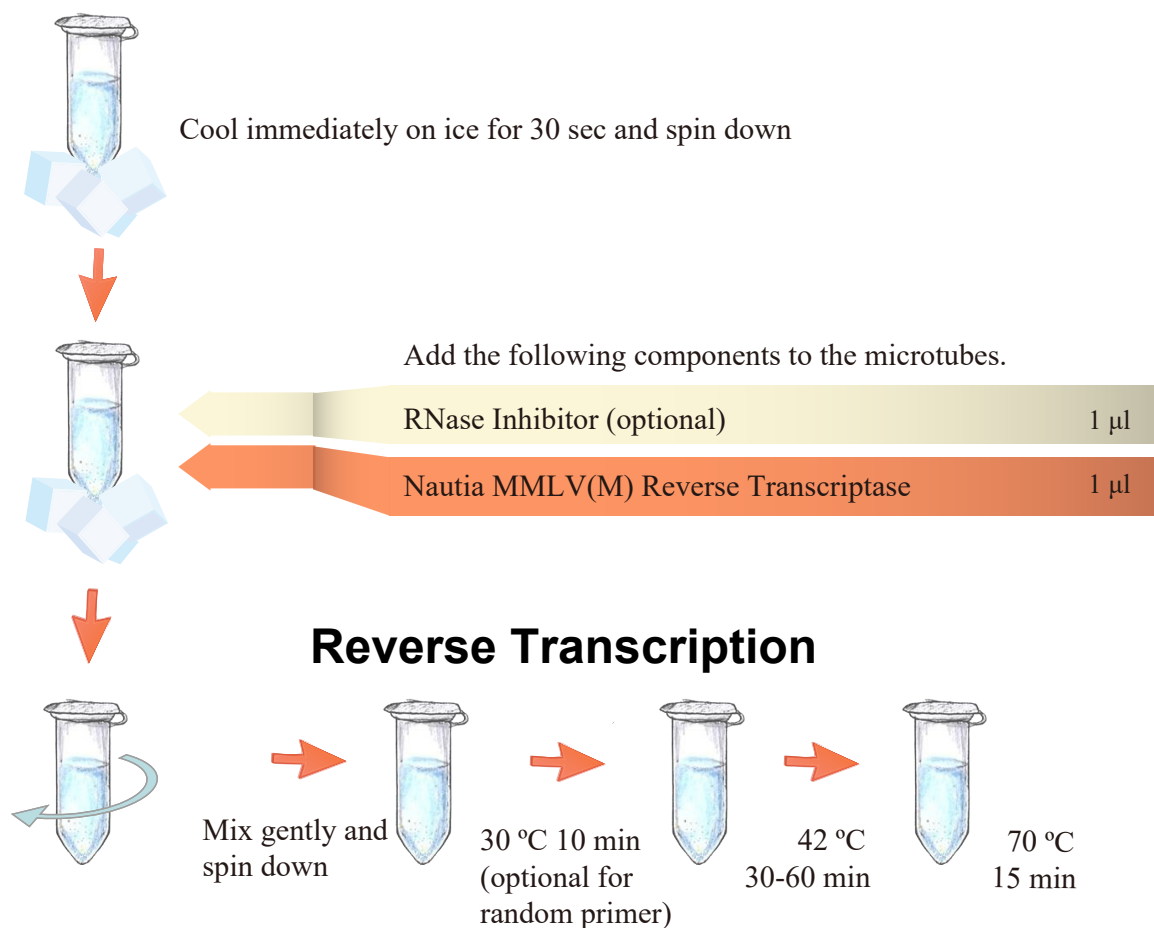
A. First-Strand cDNA Synthesis

Add the following components to the microtubes.



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B. Recommended PCR Condition

Use only 2 µl of the first-strand reaction for PCR.

1. Add the following components to a PCR tube.

Component	Volume
10× PCR Buffer	5 µl
10 mM dNTPs Mixture	1 µl
10 µM Forward primer	1 µl
10 µM Reverse primer	1 µl
5 U/µl Taq DNA polymerase	1 µl
The first-strand reactant	2 µl
Add ddH ₂ O	to 50 µl
Total volume	50 µl

Note: Mix well before PCR Reaction

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2. Mix gently and spin down.
3. Perform 20 to 40 cycles of PCR.

Unit Definition

One unit incorporates 1 nmole of dTTP into acid precipitable material in 10 min at 37 °C using poly(A)-oligo(dT) as template primer.

Storage

Store at -20 °C.