

55C MMLV-RT

Product Handling Guide

Shipping:	On Dry or Blue Ice
Catalog number:	MDX117
Batch No.:	See vial
Concentration:	200 U/ μ L

Store at -20°C



Storage and stability:

55C MMLV-RT is shipped on dry or blue ice. On arrival store at -20°C for optimum stability. Repeated freeze/thaw cycles should be avoided. Thawing during transportation does not affect the product performance. Solutions should be mixed/equilibrated after each thawing to avoid phasing.

Expiry:

When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

Safety precautions:

Read and understand the SDS (Safety Data Sheets) before handling the reagents. Hardcopies of the SDS will be provided with the first shipment, thereafter they will be available upon request.

Quality control:

Meridian Bioscience operates under ISO 13485 Quality Management System. 55C MMLV-RT and its components are extensively tested for activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.

Notes:

For research and further manufacturing use only.

Description

55C MMLV-RT (Moloney Murine Leukemia Virus - Reverse Transcriptase) has been developed to reduce RNase H activity and increase thermal stability. The enzyme can be used for cDNA synthesis at temperature up to 60°C , enabling melting of areas of secondary structure in RNA, improving cDNA yield and sensitivity from difficult RNA targets such viral genomes.

Kit components

Table 1

Component
55C MMLV-RT, 200 U/ μ L

Users Guidelines

Recommended reagent volumes per 20 μ L in a 1-Step RT-qPCR mix are given in Table 2.

Table 2

Reagent	Volume
1-Step RT-qPCR Reaction Mix, 2x	10 μ L
55C MMLV-RT, 200 U/ μ L	0.07 U/ μ L
Primer-Probe Mix, 20x	1 μ L
Purified template	x μ L
RNase Inhibitor	0.4 μ L
Water	x μ L
Total volume	Up to 20 μL

Assay setup

If dried, rehydrate the RT-qPCR in the reaction vials with 20 μ L template-containing solution.

The RT-qPCR conditions in Table 3 are an example when working with mixes containing 55C MMLV-RT and amplicons of up to 200 bp, however conditions can be varied to suit different polymerases and machine-specific protocols.

Table 3

Step	Temperature	Time	Cycles
Reverse transcription	45°C - 60°C	10 min	1
Polymerase activation	95°C	2 min	1
Denaturation	95°C	5 s	45
Annealing/Extension	60°C	20 s	

Related Products	Cat. No.
Fast qPCR Mix	MDX020
Glycerol-Free Taq HS 50U/ μ L	MDX011
Fast 1-Step RT-qPCR Reaction Mix, 2x	MDX032
RNase Inhibitor	MDX056

Technical Support

For any technical enquiries, please contact our Technical Support team via email at: mbi.tech@meridianlifescience.com