

<h2>Lyo-Ready™ 1-Step RT-qPCR Mix, 2x</h2> <p>For research or further manufacturing use only</p>	Catalog No:	MDX062
	Lot No:	EM079-B109400
	Storage Conditions:	-20°C
	Component Lot No:	LY1S-222307A
	Expiry date:	August 2024

## Quality Control Parameters

Ready-to-use, glycerol-free RT-qPCR mastermix formulated with a specialized blend of excipients for lyophilization into beads or cakes

Analysis	Specification	Result
Functional	<p>Quantitative RT-qPCR analysis amplifying 3 genes from a dilution series of mouse RNA under standard conditions.</p> <p><u>Pass Criteria:</u></p> <p>Amplification profiles must be consistent for the test and reference sample within ± 0.5 Cq variance.</p>	Passed
DNA contamination	<p>Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in concordance with control sample.</p> <p><u>Pass Criteria:</u></p> <p>Amplification traces must overlay with the negative control.</p>	Passed
DNase contamination	<p>DNase contamination is measured as DNA substrate degradation against a DNase I dilution series by agarose gel electrophoresis.</p> <p>Limit of detection: <math>6.25 \times 10^{-4}</math> KU DNase I.</p> <p><u>Pass Criteria:</u></p> <p>No detectable degradation.</p>	Passed

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RNase contamination	Quantitative PCR analysis with high and low RNase standards. Limit of detection: $9.7 \times 10^{-3}$ ng/ $\mu$ L RNase <u>Pass Criteria:</u> Test sample must show less RNase activity than the limit of detection.	Passed
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QA / QC Representative:



Andrew Galeeba-M

Date: 14<sup>th</sup> July 2022

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**Virus MMLV-RT**

For research or further manufacturing use only

Catalog No:	MDX062
Lot No:	EM079-B109400
Storage Conditions:	-20°C
Component Lot No:	VRT1-122307A
Expiry date:	August 2024

**Quality Control Parameters**

MMLV-RT (Moloney Murine Leukemia Virus Reverse Transcriptase) is a reverse transcriptase that can be used for cDNA synthesis and subsequent PCR or qPCR in a one-step or two-step assay.

Analysis	Specification	Result
Functional	Activity is measured as reverse transcriptase units by primer extension analysis against a reference enzyme. <u>Pass Criteria:</u> Activity must be equal to or greater than 200 U/μL	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in line with control sample.	Passed
DNase contamination	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection $2.5 \times 10^{-3}$ U DNase I.	Passed
RNase contamination	Quantitative PCR analysis with high and low RNase standards. Test sample must show less RNase activity than the limit of detection $9.7 \times 10^{-3}$ ng/μL RNase.	Passed

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## Enzyme Dilution Buffer

For research or further manufacturing use only

Catalog No:	MDX062
Lot No:	EM079-B109400
Storage Conditions:	-20°C
Lot number:	TDB-122107A
Expiry date:	August 2024

### Quality Control Parameters

Enzyme Dilution Buffer is a glycerol-free 10x buffer used for the dilution of Taq antibody or reverse transcriptase.

Analysis	Specification	Result
Functional	<p>A 3Kb fragment was amplified with a dilution series of Enzyme Dilution Buffer, using standard conditions and 30 cycles.</p> <p>A 3Kb fragment was amplified with a dilution series of <i>Taq polymerase</i>, using standard conditions and 30 cycles.</p> <p>Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).</p>	Passed
Glycerol determination	Glycerol content is < 0.2% determined by spectrophotometric analysis and comparison to a standard curve.	Passed
DNA contamination	Quantitative PCR analysis with no template. Presence of <i>E. coli</i> and mouse genomic DNA checked. Test sample must amplify in line with a reference sample.	Passed
DNase contamination	Incubation of a 1Kb double stranded DNA fragment. Incubation for 4 hours at 37°C with dilution series of DNase I. Analysed by agarose gel electrophoresis. Test sample must show less degradation than the limit of detection $6.25 \times 10^{-4}$ KU/ $\mu$ L.	Passed
RNase contamination	Quantitative PCR analysis with high and low RNase standards. Test sample must show less RNase activity than the limit of detection: $9.7 \times 10^{-3}$ ng/ $\mu$ L RNase.	Passed

QA / QC Representative:



Andrew Galeeba-M

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