	Certificate of Analysis	COA No: CA_BSM-0097
		Version: 07

Lyo-Ready™ 1-Step RT-qPCR Mix, 2x For research or further manufacturing use only	Catalog No:	MDX024
	Lot No:	EM032-B130170
	Storage Conditions:	-20°C
	Component Lot No:	LY1S-424508A
	Expiry date:	September 2026

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	Quantitative RT-qPCR analysis amplifying 3 genes from a dilution series of mouse RNA under standard conditions. <u>Pass Criteria:</u> Amplification profiles must be consistent for the test and reference sample within ± 0.5 Cq variance.	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 concordance with control sample. <u>Pass Criteria:</u> Amplification traces must overlay with the negative control.	Passed
DNase contamination	DNase contamination is measured as DNA substrate degradation against a DNase I dilution series by agarose gel electrophoresis. Limit of detection: 6.25×10^{-4} KU DNase I. <u>Pass Criteria:</u> No detectable degradation.	Passed

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	Certificate of Analysis	COA No: CA_BSM-0097
		Version: 07

RNase contamination	Quantitative PCR analysis with high and low RNase standards. Limit of detection: 9.7×10^{-3} ng/ μ 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:



X.Chen

Date: 19th August 2024

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	Certificate of Analysis	COA No: CA_XBE-0021-2
		Version: 04

Lyo-Compatible MMLV-RT Suitable for Research and further Manufacturing Use	Catalog No:	MDX024
	Lot No:	EM032-B130170
	Storage Conditions:	-20°C
	Component Lot No.	LCR-224108C
	Expiry date:	September 2026

Quality Control Parameters

High-concentration MMLV-RT suitable for incorporation into lyophilized RT-PCR assays

Analysis	Specification	Result
Functional	Activity is measured as reverse transcriptase units by quantitative PCR analysis against a reference enzyme. <u>Pass Criteria:</u> Activity must be greater than 165 U/μL	966.0 U/μL
DNA contamination	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. <u>Pass Criteria:</u> Amplification traces must overlay with the negative control.	Passed
DNase contamination	DNase contamination is measured as DNA substrate degradation against a DNase I dilution series by agarose gel electrophoresis. Limit of detection: 6.25×10^{-4} KU DNase I. <u>Pass Criteria:</u> No detectable degradation.	Passed

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	Certificate of Analysis	COA No: CA_XBE-0021-2
		Version: 04

RNase contamination	Quantitative PCR analysis with high and low RNase standards. Limit of detection: 9.7×10^{-3} ng/ μ 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:



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	Certificate of Analysis	COA No: CA_BDB-0025-2
		Version: v05

Enzyme Dilution Buffer For research or further manufacturing use only	Catalog No:	MDX024
	Lot No:	EM032-B130170
	Storage Conditions:	-20°C
	Lot number:	TDB-224108C
	Expiry date:	September 2026

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 6.25×10^{-4} KU/μL.	Passed
RNase contamination	Quantitative PCR analysis with high and low RNase standards. Test sample must show less RNase activity than the limit of detection: 9.7×10^{-3} ng/μl RNase.	Passed

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