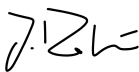


	Certificate of Analysis	COA No: CA_BSM-0112
		Version: 02

Lyo-Ready™ dUTP 1-Step RT-qPCR Mix, 2x For research or further manufacturing use only	Catalog No:	MDX113
	Lot No:	B126020
	Storage Conditions:	-20°C
	Component Lot No:	224303A
	Expiry date:	April 2026

Quality Control Parameters

Analysis	Specification	Result
Functional	Quantitative RT-PCR analysis amplifying a multiplex of 3 genes from a dilution series of mouse RNA under standard conditions. Ct profiles must be consistent for test and reference samples with a ± 0.5 Ct 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.	Passed
DNase contamination	Incubation of a 1 Kb 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 exhibit less degradation than the limit of detection 2.5×10^{-3} U DNase.	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/ μ L RNase.	Passed

QA / QC Representative:  J. Rahnenführer Date: 07th March 2024

United Kingdom

Tel: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822

USA

Tel: +1 901.382.8716
Fax: +1 901.382.0027

Germany

Tel: +49 (0)3371 60222 00
Fax: +49 (0)3371 60222 01

	Certificate of Analysis	COA No: CA_XBE-0021-3
		Version: 02

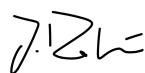
Lyo-Compatible MMLV-RT MG Suitable for Research and further Manufacturing Use	Catalog No:	MDX113
	Lot No:	B126020
	Storage Conditions:	-20°C
	Component Lot No.	LCR-224103A
	Expiry date:	April 2026

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 365 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
RNase contamination	Quantitative PCR analysis with high and low RNase standards. Limit of detection: 9.7×10^{-3} ng/μL RNase <u>Pass Criteria:</u> Test sample must show less RNase activity than the limit of detection.	Passed

QA / QC Representative:



J. Rahnenführer

Date: 07th March 2024

United Kingdom

Tel: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822

USA

Tel: +1 901.382.8716
Fax: +1 901.382.0027

Germany

Tel: +49 (0)3371 60222 00
Fax: +49 (0)3371 60222 01

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

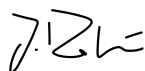
Enzyme Dilution Buffer For research or further manufacturing use only	Catalog No:	MDX113
	Lot No:	B126020
	Storage Conditions:	-20°C
	Lot number:	TDB-224103A
	Expiry date:	April 2026

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	A 3Kb fragment was amplified with a dilution series of Enzyme Dilution Buffer, using standard conditions and 30 cycles. A 3Kb fragment was amplified with a dilution series of <i>Taq polymerase</i>, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	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

QA / QC Representative:



J. Rahnenführer

Date: 07th March 2024

United Kingdom

Tel: +44 (0)20 8830 5300
Fax: +44 (0)20 8452 2822

USA

Tel: +1 901.382.8716
Fax: +1 901.382.0027

Germany

Tel: +49 (0)3371 60222 00
Fax: +49 (0)3371 60222 01