

Certificate of Analysis

COA No: CA_XBE-0054-2

Version: v07

Glycerol-Free Taq HS 50U/μL

For Research and Further Manufacturing use only

Catalog No:	MDX011
Lot No:	B357320
Storage Conditions:	-20°C
Component Lot No:	GF-525111A
Expiry date:	December 2027

Quality Control Parameters

Lyophlization-compatible, high concentration (50 U/ μ L), glycerol free DNA enzyme for automated high-throughput testing

Analysis	Specification	Result
Functional	Activity is measured as DNA polymerase units by quantitative PCR analysis against a reference Taq DNA polymerase standard curve. Pass Criteria: Activity must be between 50 and 60 U/µL	56.48 U/μL
Glycerol content	Glycerol concentration is determined by spectrophotometric measurement of a colorimetric product from a coupled enzymatic reaction. Pass Criteria: Glycerol content <0.02 %	Passed
Purity	Purity is measured as a percentage of total protein by quantitative gel electrophoresis on Bioanalyzer (Agilent). Pass Criteria: >50 %	97.1 %
DNA contamination	DNA contamination is measured by quantitative PCR on <i>E. coli</i> and mouse genomic DNA specific targets. Pass Criteria: Amplification traces must overlay with the negative control.	Passed



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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 x 10 ⁻⁴ KU DNase I. Pass Criteria: No detectable degradation.	Passed
RNase contamination	RNase contamination is measured by quantitative PCR against RNase standards. Limit of detection: $9.7 \times 10^{-3} \text{ ng/}\mu\text{L}$ RNase. Pass Criteria: No detectable degradation.	Passed

QA / QC Representative:

J. Rahnenführer Date: 11th November 2025



Certificate of Analysis

COA No: CA_BDB-0025-2

Version: v05

Enzyme Dilution Buffer

For research or further manufacturing use only

Catalog No:	MDX011	
Lot No:	B357320	
Storage Conditions:	-20°C	
Lot number:	TDB-525211A	
Expiry date:	December 2027	

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
	A 3Kb fragment was amplified with a dilution series of Enzyme Dilution Buffer, using standard conditions and 30 cycles.	
Functional	A 3Kb fragment was amplified with a dilution series of <i>Taq polymerase</i> , using standard conditions and 30 cycles.	Passed
	Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	
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 x 10^{-4} KU/ μ 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: 9.7x10 ⁻³ ng/µl RNase.	Passed

QA / QC Representative:

J. Rahnenführer

Date: 11th November 2025

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