

## Low DNA Taq HS 5 U/ $\mu$ L

Suitable for Research and further Manufacturing Use

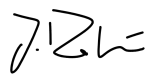
Catalog No:	MDX009
Lot No:	EN013-B126930
Shipping / Storage Conditions:	-20°C
Component Lot No:	IM-224104A
Expiry date:	May 2026

### Quality Control Parameters

Heat-activated, thermostable DNA polymerase suited to amplification of bacterial and fungal DNA

Analysis	Specification	Result
Activity	Quantitative PCR analysis amplifying 1 gene from a dilution series of enzyme under standard conditions. Cq and melting profiles must be consistent for the test and reference sample with $\pm 0.5$ Cq variance.	Passed
Sensitivity	Quantitative PCR analysis amplifying 1 gene from a dilution series of mouse cDNA under standard conditions. Cq and melting profiles must be consistent for the test and reference sample with $\pm 0.5$ Cq variance.  A 3Kb fragment is amplified with a dilution series of Lambda DNA, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	Passed
Heat activation	A 125bp fragment is amplified with a dilution series of enzyme, using 4 heat activation times and 30 cycles. Single distinct bands were observed, at the appropriate activation time, with agarose gel electrophoresis (ethidium stained).	Passed
Purity	Densitometric analysis of SDS-Page.  Purity must be higher than 90%	99.2 %
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 $2.5 \times 10^{-3}$ U DNase.	Passed

QA / QC Representative:



J. Rahnenführer

 Date: 25<sup>th</sup> April 2024

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## Low DNA Reaction Buffer, 10x

For research or further manufacturing use only

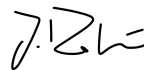
Catalog No:	MDX009
Lot No:	EN013-B126930
Storage Conditions:	-20°C
Component Lot No:	IB-424104A
Expiry date:	May 2026

### Quality Control Parameters

Low DNA Reaction Buffer 10x is a combination of the latest advances in buffer chemistry together with enhancers and stabilizers at optimal concentrations. It has been designed for use with Low DNA Taq HS making it ideal for PCR of low-copy bacterial targets to avoid false-positive amplification, such as in water testing

Analysis	Specification	Result
Functional	Fragment of size 800bp was amplified with a dilution series of Low DNA Taq, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	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 $2.5 \times 10^{-3}$ U DNase.	Passed

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## MgCl<sub>2</sub> Solution, 50mM

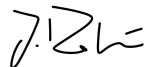
For research or further manufacturing use only

Catalog No:	MDX009
Lot No:	EN013-B126930
Storage Conditions:	-20°C
Component Lot No:	MG-2031.017
Expiry date:	May 2026

### Quality Control Parameters

Analysis	Specification	Result
Functional	Fragments of sizes 800bp and 3000bp are amplified with a dilution series of BIOTAQ™ DNA Polymerase, using standard conditions and 30 cycles. Single distinct bands were observed with agarose gel electrophoresis (ethidium stained).	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 $2.5 \times 10^{-3}$ U DNase.	Passed

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