

High-Fidelity Pfu

Suitable for Research and further Manufacturing Use as an IVD component

Catalog No:	MDX003
Lot No:	EN006-B074550
Shipping / Storage Conditions:	-20°C
Component Lot No:	AC-619109A
Expiry date:	October 2021

Quality Control Parameters

3' - 5' proofreading exonuclease activity with a low error rate, generating blunt-ended amplicons up to 5 kb in length

Analysis	Specification	Result
Functional	<p>Fragment of size 3Kb is amplified with a dilution series Lambda DNA, using standard conditions and 30 cycles. Fragment of size 5Kb 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).</p> <p>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 ± 0.5 Cq variance.</p>	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 2.5×10^{-3} U DNase.	Passed

Authorised by Christopher Weatherall



Pfu Reaction Buffer 10x

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Lot No:	EN006-B074550
Shipping / Storage Conditions:	-20°C
Component Lot No:	AB-919109A
Expiry date:	October 2021

Quality Control Parameters

Optimized for use with High-Fidelity Pfu (Cat# MDX003)

Analysis	Specification	Result
Functional	Fragment of size 800bp was amplified with a dilution series of High-Fidelity Pfu, using standard conditions and 35 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 2.5×10^{-3} U DNase.	Passed

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MgCl₂ Solution, 50mM

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Component Lot No:	MG-919109A
Expiry date:	October 2021

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 2.5×10^{-3} U DNase.	Passed

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