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|---|--------------------------------|-----------------------|
|  | Certificate of Analysis | COA No: CA_BEM-0004-2 |
| | | Version: 05 |

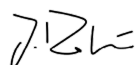
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|--|---------------------|---------------|
| <h2>High-Fidelity Pfu</h2> <p>For research or further manufacturing use only</p> | Catalog No: | MDX003 |
| | Lot No: | EN006-B350460 |
| | Storage Conditions: | -20°C |
| | Component Lot No: | AC-425109A |
| | Expiry date: | October 2027 |

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 |

QA / QC Representative:



J. Rahnenführer

Date: 2nd September 2025

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Certificate of Analysis

COA No: CA XBB-0004-2

Version: 06

Pfu Reaction Buffer 10x

For research or further manufacturing use only

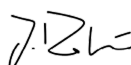
| | |
|---------------------|---------------|
| Catalog No: | MDX003 |
| Lot No: | EN006-B350460 |
| Storage Conditions: | -20°C |
| Component Lot No: | AB-425109A |
| Expiry date: | October 2027 |

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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| | | |
|---|--------------------------------|---------------------|
|  | Certificate of Analysis | COA No: CA_XBB-0014 |
| | | Version: 09 |

| | | |
|--|---------------------|---------------|
| MgCl₂ Solution, 50mM For research or further manufacturing use only | Catalog No: | MDX003 |
| | Lot No: | EN006-B350460 |
| | Storage Conditions: | -20°C |
| | Component Lot No: | MG-525109A |
| | Expiry date: | October 2027 |

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 |

QA / QC Representative:  J. Rahnenführer

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