

## High-Fidelity Pfu

For research or further manufacturing use only

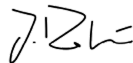
Catalog No:	MDX003
Lot No:	B364430
Storage Conditions:	-20°C
Component Lot No:	AC-426101A
Expiry date:	February 2028

### 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	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).  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
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:



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Date: 28<sup>th</sup> January 2026

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