

### **Certificate of Analysis**

COA No: CA\_BEM-0004-2

Version: 05

## **High-Fidelity Pfu**

For research or further manufacturing use only

Catalog No:	MDX003
Lot No: EN006-B1295	
Storage Conditions:	-20°C
Component Lot No:	AC-324107A
Expiry date:	August 2026

### **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 ± 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 x 10 <sup>-3</sup> U DNase.	Passed

QA / QC Representative:

7.121

J. Rahnenführer

Date: 31st July 2024



### **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-B129510
Storage Conditions:	-20°C
Component Lot No:	AB-424107A
Expiry date:	August 2026

### **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 x 10 <sup>-3</sup> U DNase.	Passed

QA / QC Representative:

J. Rahnenführer

Date: 31st July 2024

United Kingdom

Tel: +44 (0)20 8830 5300 Fax: +44 (0)20 8452 2822

USA Tel: +1 901.382.8716 <u>Germany</u>

Tel: +49 (0)3371 60222 00 Fax: +49 (0)3371 60222 01



### **Certificate of Analysis**

COA No: CA\_XBB-0014

Version: 09

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

For research or further manufacturing use only

Catalog No:	MDX003
Lot No:	EN006-B129510
Storage Conditions:	-20°C
Component Lot No:	MG-324207A
Expiry date:	August 2026

### **Quality Control Parameters**

Analysis	Specification	Result
Functional	Fragments of sizes 800bp and 3000bp are amplified with a dilution series of BIOTAQ <sup>™</sup> 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 x 10 <sup>-3</sup> U DNase.		Passed

QA / QC Representative:

J. Rahnenführer

Date: 31st July 2024

United Kingdom Tel: +44 (0)20 8830 5300 Fax: +44 (0)20 8452 2822

<u>USA</u> Tel: +1 901.382.8716 Fax: +1 901.382.0027 **Germany** 

Tel: +49 (0)3371 60222 00 Fax: +49 (0)3371 60222 01