

**CERTIFICATE OF ANALYSIS**
**N8080249 AmpliTaq Gold™ DNA Polymerase with Buffer II and MgCl<sub>2</sub>**

Packaging Lot: 2810471

Expire Date: 08.2025

**Filling lots for components in package:**

| Lot     | Description                                     |
|---------|-------------------------------------------------|
| 2808356 | <b>AmpliTaQ Gold DNA Polymerase, 1000 units</b> |
| 2806360 | <b>10X PCR Buffer II</b>                        |
| 2778611 | <b>25 mM MgCl<sub>2</sub></b>                   |

**QUALITY CONTROL**

| TEST                                          | SPECIFICATION             | RESULT |
|-----------------------------------------------|---------------------------|--------|
| <b>AMPLITAQ GOLD DNA POLYMERASE</b>           |                           |        |
| <b>ANALYTICAL TEST</b>                        |                           |        |
| Polymerase activity                           | 5.0 - 6.5 U/μL            | Pass   |
| Purity (HPLC - UV detection)                  | ≥ 95.0 %                  | Pass   |
| Purity (HPLC - fluorimetric detection)        | ≥ 95.0 %                  | Pass   |
| Purity (SDS PAGE)                             | ≥ 95.0 %                  | Pass   |
| Amplification efficiency of human genomic DNA | 85 - 105 %                | Pass   |
| Human DNA                                     | ≤ 2 copies / 10 U         | Pass   |
| Bacterial DNA                                 | ≤ 1 copy E.coli DNA / 5 U | Pass   |
| ssDNA DNA nuclease (gel-based)                | None detected / 40 U      | Pass   |
| dsDNA DNA nuclease (gel-based)                | None detected / 40 U      | Pass   |
| RNase A equivalents (fluorimetric assay)      | ≤ 1.15 pg / 1 U           | Pass   |
| DNase I equivalents (fluorimetric assay)      | ≤ 155 pg / 1 U            | Pass   |
| <b>10X PCR BUFFER II</b>                      |                           |        |
| <b>ANALYTICAL TEST</b>                        |                           |        |
| K <sup>+</sup> concentration (HPIC)           | 425.0 – 575.0 mM          | Pass   |
| pH at 25°C                                    | 8.15 – 8.30               | Pass   |
| <b>25 mM MgCl<sub>2</sub></b>                 |                           |        |

## ANALYTICAL TEST

MgCl<sub>2</sub> concentration (HPIC)

22.50 – 27.50 mM

Pass

***For Research Use Only. Not for use in diagnostic procedures.***

## ISO CERTIFICATION

Manufactured by Thermo Fisher Scientific Baltics UAB, in compliance with ISO 9001 and ISO 13485 certified quality management systems.

Quality authorized by QC: **J. Žilinskienė**

