

be INSPIRED drive DISCOVERY stay GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

| Product Name: | Q5® Blood Direct 2X Master Mix |
|------------------------|--------------------------------|
| Catalog Number: | M0500S |
| Concentration: | 2 X Concentrate |
| Packaging Lot Number: | 10211736 |
| Expiration Date: | 09/2025 |
| Storage Temperature: | -20°C |
| Specification Version: | PS-M0500S/L/G v1.0 |
| Composition (1X): | Proprietary |

| Q5® Blood Direct 2X Master Mix Component List | | | | |
|---|--------------------------------|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| M0500SVIAL | Q5® Blood Direct 2X Master Mix | 10206882 | Pass | |

| Assay Name/Specification | Lot # 10211736 |
|---|----------------|
| Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X Q5® Blood Direct Master Mix containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass |
| PCR Amplification (0.5 kb Whole Blood DNA) A 20 μ I reaction in 1X Q5® Blood Direct Master Mix and 0.5 μ M primers containing 10% whole blood treated with sodium heparin, sodium EDTA, potassium EDTA or sodium citrate for 35 cycles of PCR amplification results in the expected 0.5 kb product. | Pass |
| PCR Amplification (4.8 kb Whole Blood DNA) A 20 μ I reaction in 1X Q5® Blood Direct Master Mix and 0.5 μ M primers containing 15% whole blood treated with potassium EDTA for 35 cycles of PCR amplification results in the expected 4.8 kb product. | Pass |
| qPCR DNA Contamination (E. coli Genomic) A minimum of 1 μl of Q5® Blood Direct 2X Master Mix is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome. | Pass |

This product has been tested and shown to be in compliance with all specifications.





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Lea Antonpoulos Production Scientist 11 Oct 2023

Mrd 11.

Michael Tonello Packaging Quality Control Inspector 13 Oct 2023

