

New England Biolabs Certificate of Analysis

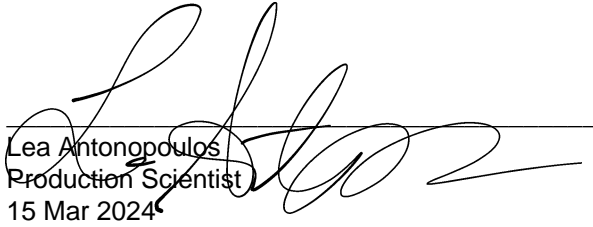
Product Name: Q5® Blood Direct 2X Master Mix
Catalog Number: M0500G
Concentration: 2 X Concentrate
Packaging Lot Number: 10242497
Expiration Date: 02/2026
Storage Temperature: -20°C
Specification Version: PS-M0500S/L/G v1.0
Composition (1X): Proprietary

Q5® Blood Direct 2X Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0500GVIAL	Q5® Blood Direct 2X Master Mix	10233225	Pass

Assay Name/Specification	Lot # 10242497
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 µl reaction in 1X Q5® Blood Direct Master Mix and 0.5 µM 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 µl reaction in 1X Q5® Blood Direct Master Mix and 0.5 µM 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 Antonopoulos
Production Scientist
15 Mar 2024



Michael Tonello
Packaging Quality Control Inspector
14 May 2024