

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
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> 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 $\mu$ I reaction in 1X Q5® Blood Direct Master Mix and 0.5 $\mu$ 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 $\mu$ I reaction in 1X Q5® Blood Direct Master Mix and 0.5 $\mu$ 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
<b>qPCR DNA Contamination (E. coli Genomic)</b> 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

