

## New England Biolabs Certificate of Analysis

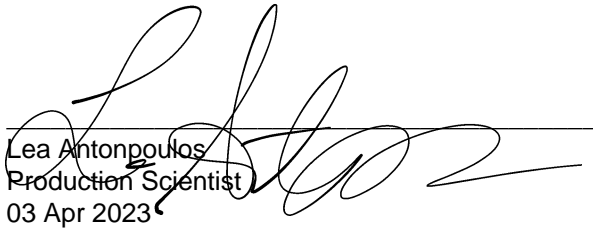
Product Name: Q5<sup>®</sup> Blood Direct 2X Master Mix  
 Catalog Number: M0500S  
 Concentration: 2 X Concentrate  
 Packaging Lot Number: 10184748  
 Expiration Date: 03/2025  
 Storage Temperature: -20°C  
 Specification Version: PS-M0500S/L/G v1.0  
 Composition (1X): Proprietary

Q5 <sup>®</sup> Blood Direct 2X Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0500SVIAL	Q5 <sup>®</sup> Blood Direct 2X Master Mix	10184747	Pass

Assay Name/Specification	Lot # 10184748
<p><b>Non-Specific DNase Activity (16 hour, Buffer)</b>            A 50 µl reaction in 1X Q5<sup>®</sup> 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.</p>	Pass
<p><b>PCR Amplification (0.5 kb Whole Blood DNA)</b>            A 20 µl reaction in 1X Q5<sup>®</sup> 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.</p>	Pass
<p><b>PCR Amplification (4.8 kb Whole Blood DNA)</b>            A 20 µl reaction in 1X Q5<sup>®</sup> 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.</p>	Pass
<p><b>qPCR DNA Contamination (E. coli Genomic)</b>            A minimum of 1 µl of Q5<sup>®</sup> Blood Direct 2X Master Mix is screened for the presence of E. coli genomic DNA using SYBR<sup>®</sup> 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.</p>	Pass

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

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03 Apr 2023

  
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Packaging Quality Control Inspector  
01 May 2023