

New England Biolabs Certificate of Analysis

Product Name: NEBNext® Q5U™ Master Mix
 Catalog Number: M0597L
 Concentration: 2 X Concentrate
 Packaging Lot Number: 10080326
 Expiration Date: 02/2021
 Storage Temperature: -20°C
 Specification Version: PS-M0597S/L v1.0
 Composition (1X): Proprietary

NEBNext® Q5U™ Master Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0597SVIAL	NEBNext® Q5U™ Master Mix	10068293	Pass

Assay Name/Specification	Lot # 10080326
<p>qPCR DNA Contamination (E. coli Genomic) A minimum of 1 µl of NEBNext® Q5U™ 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.</p>	Pass
<p>RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of NEBNext® Q5U™ Master Mix is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p>PCR Amplification (dU Bypass) A 25 µl reaction in 1X NEBNext® Q5U™ Master Mix with 10 ng of genomic DNA and 0.5 µM primers containing dU residues for 30 cycles of PCR results in the expected 720 bp product.</p>	Pass
<p>Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X NEBNext® Q5U™ 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

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



Christine Sumner
Production Scientist
21 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
21 Jul 2020