

New England Biolabs Certificate of Analysis

Product Name: NEBNext® Q5U™ Master Mix
 Catalog Number: M0597S
 Concentration: 2 X Concentrate
 Packaging Lot Number: 10083391
 Expiration Date: 10/2021
 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 | 10083392 | Pass |

| Assay Name/Specification | Lot # 10083391 |
|--|----------------|
| <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>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>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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Christine Sumner
Production Scientist
26 Oct 2020



Josh Hersey
Packaging Quality Control Inspector
26 Oct 2020