Product Name: LongAmp® Taq 2X Master Mix
Catalog Number: M0287S
Concentration: 2 X Concentrate
Packaging Lot Number: 10080299
Expiration Date: 09/2021
Storage Temperature: -20°C
Specification Version: PS-M0287S/L v2.0
Composition (1X): 60 mM Tris-SO4 (pH 9.1 @ 25°C), 20 mM (NH4)2SO4, 2 mM MgSO4, 0.3 mM dATP, 0.3 mM dCTP, 0.3 mM dGTP, 0.3 mM dTTP, 3 % Glycerol, 0.06 % IGEPAL® CA-630, 0.05 % Tween® 20, 125 units/ml LongAmp® Taq DNA Polymerase

LongAmp® Taq 2X Master Mix Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0287SVIAL</td>
<td>LongAmp® Taq 2X Master Mix</td>
<td>10069425</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Assay Name/Specification | Lot # 10080299
---|---
PCR Amplification (30 kb Human Genomic DNA, Master Mix) | Pass
A 25 µl reaction in 1X LongAmp® Taq Master Mix and 0.4 µM primers containing 500 ng Human Genomic DNA for 28 cycles of PCR amplification results in the expected 30 kb product.

PCR Amplification (30 kb Lambda DNA, Master Mix) | Pass
A 25 µl reaction in 1X LongAmp® Taq Master Mix and 0.4 µM primers containing 1 ng Lambda DNA for 28 cycles of PCR amplification results in the expected 30 kb product.

qPCR DNA Contamination (E. coli Genomic) | Pass
A minimum of 2.5 units of LongAmp® Taq DNA Polymerase 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.

RNase Activity (Extended Digestion) | Pass
A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of LongAmp® Taq 2X Master Mix is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.
<table>
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<tr>
<th>Assay Name/Specification</th>
<th>Lot # 10080299</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Specific DNase Activity (16 hour, Buffer)</td>
<td>Pass</td>
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</table>

A 50 µl reaction in 1X LongAmp® Taq 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.

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](http://www.neb.com/trademarks) for additional information.

Christie Vazquez  
Production Scientist  
31 Aug 2020

Michael Tonello  
Packaging Quality Control Inspector  
31 Aug 2020