

## New England Biolabs Certificate of Analysis

**Product Name:** OneTaq<sup>®</sup> 2X Master Mix with Standard Buffer  
**Catalog Number:** M0482L  
**Concentration:** 2 X Concentrate  
**Lot Number:** 10047023  
**Expiration Date:** 01/2021  
**Storage Temperature:** -20°C  
**Specification Version:** PS-M0482S/L v1.0  
**Composition (1X):** 20 mM Tris-HCl (pH 8.9 @ 25°C), 22 mM NH<sub>4</sub>Cl, 22 mM KCl, 1.8 mM MgCl<sub>2</sub>, 0.2 mM dATP, 0.2 mM dCTP, 0.2 mM dGTP, 0.2 mM dTTP, 5 % Glycerol, 0.06 % IGEPAL<sup>®</sup> CA-630, 0.05 % Tween<sup>®</sup> 20, 25 units/ml OneTaq<sup>®</sup> DNA Polymerase

OneTaq <sup>®</sup> 2X Master Mix with Standard Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0482SVIAL	OneTaq <sup>®</sup> 2X Master Mix with Standard Buffer	10032563	Pass

Assay Name/Specification	Lot # 10047023
<p><b>Non-Specific DNase Activity (16 hour, Buffer)</b>            A 50 µl reaction in 1X OneTaq<sup>®</sup> Master Mix with Standard Buffer containing 1 µg of T3 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 (5 kb Lambda, Master Mix)</b>            A 25 µl reaction in 1X OneTaq<sup>®</sup> Master Mix with Standard Buffer and 0.2 µM primers containing 5 ng Lambda DNA for 25 cycles of PCR amplification results in the expected 5 kb product.</p>	Pass
<p><b>RNase Activity (Extended Digestion)</b>            A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of OneTaq<sup>®</sup> 2X Master Mix with Standard Buffer is incubated at 37°C. After incubation for 4 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass

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

*Christie Vazquez*

Christie Vazquez  
Production Scientist  
01 Feb 2019

*Josh Hersey*

Josh Hersey  
Packaging Quality Control Inspector  
13 Jun 2019