

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name: OneTaq® Quick-Load® DNA Polymerase

Catalog Number: M0509X
Concentration: 5,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme that will incorporate 15

nmol of dNTP into acid insoluble material in 30 minutes at 75°C.

Packaging Lot Number: 10135922
Expiration Date: 12/2023
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl, 100 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.5 % Tween® 20,

0.5 % IGEPAL® CA-630, 50% Glycerol, (pH 7.4 @ 25°C)

Specification Version: PS-M0509S/L/X v2.0

| OneTaq® Quick-Load® DNA Polymerase Component List | | | | |
|---|------------------------------------|------------|----------------------|--|
| NEB Part Number | Component Description | Lot Number | Individual QC Result | |
| M0509L | OneTag® Quick-Load® DNA Polymerase | 10135923 | Pass | |

| Assay Name/Specification | Lot # 10135922 |
|---|----------------|
| PCR Amplification (5.0 kb Lambda DNA) A 25 µl reaction in OneTaq® Quick-Load® Reaction Buffer in the presence of 200 µM dNTPs and 0.2 µM primers containing 5 ng Lambda DNA with 0.625 units of OneTaq® Quick-Load® DNA Polymerase for 25 cycles of PCR amplification results in the expected 5.0 kb product. | Pass |
| PCR Amplification (5.0 kb Lambda DNA) A 25 μl reaction in OneTaq® Standard Reaction Buffer in the presence of 200 μM dNTPs and 0.2 μM primers containing 5 ng Lambda DNA with 0.625 units of OneTaq® Quick-Load® DNA Polymerase for 25 cycles of PCR amplification results in the expected 5.0 kb product. | Pass |
| 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 OneTaq® Quick-Load® DNA Polymerase 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. | Pass |
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 2 containing 1 µg of T3 or T7 DNA in addition to a | Pass |



M0509X / Lot: 10135922

Page 1 of 2

| Assay Name/Specification | Lot # 10135922 |
|---|----------------|
| reaction containing Lambda-HindIII DNA and a minimum of 5 units of OneTaq® Quick-Load® DNA Polymerase 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 for additional information.

Christie Vazquez Production Scientist 31 Jan 2022

vistie Vazguez

Josh Hersey
Packaging Quality Control Inspector

31 Jan 2022

