

New England Biolabs Certificate of Analysis

Product Name: OneTaq® Quick-Load® DNA Polymerase
Catalog Number: M0509L
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: 10244812
Expiration Date: 02/2026
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

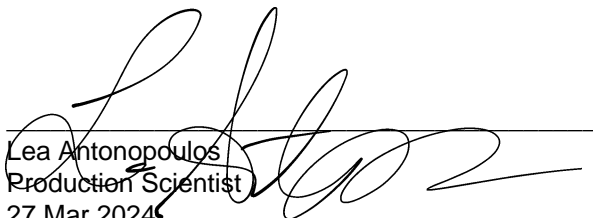
OneTaq® Quick-Load® DNA Polymerase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0509LVIAL	OneTaq® Quick-Load® DNA Polymerase	10233228	Pass
B9022SVIAL	OneTaq® Standard Reaction Buffer	10225770	Pass
B0509AVIAL	OneTaq® Quick-Load® Reaction Buffer	10201233	Pass

Assay Name/Specification	Lot # 10244812
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 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.	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
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

Assay Name/Specification	Lot # 10244812
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

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.



Lea Antonopoulos
Production Scientist
27 Mar 2024



Josh Hersey
Packaging Quality Control Inspector
27 May 2024