

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: Therminator™ DNA Polymerase

Catalog Number: M0261L
Concentration: 2,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme that will incorporate 10

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

Packaging Lot Number: 10117204
Expiration Date: 06/2023
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl, 100 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50 %

Glycerol, (pH 7.4 @ 25°C)

Specification Version: PS-M0261S/L v2.0

Therminator™ DNA Polymerase Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
M0261LVIAL	Therminator™ DNA Polymerase	10113100	Pass	
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10102088	Pass	

Assay Name/Specification	Lot # 10117204
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 2 units of Therminator™ 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
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 20 units of Therminator™ DNA Polymerase incubated for 4 hours at 37°C and 75°C releases <0.1% of the total radioactivity.	Pass
Protein Purity Assay (SDS-PAGE) Therminator™ DNA Polymerase is ≥ 98% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	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 Therminator™ DNA Polymerase is incubated at 37°C. After	Pass



M0261L / Lot: 10117204

Page 1 of 2

Assay Name/Specification	Lot # 10117204
incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	
Phosphatase Activity (pNPP) A 200 µl reaction in 1M Diethanolamine, pH 9.8, 0.5 mM MgCl2 containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 100 units Therminator™ DNA Polymerase incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 20 units of Therminator™ DNA Polymerase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose qel electrophoresis.	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.

Christie Vazquez Production Scientist 28 Jul 2021

hastie Vazguez

Josh Hersey

Packaging Quality Control Inspector 28 Jul 2021



M0261L / Lot: 10117204