

New England Biolabs Certificate of Analysis

Product Name: T4 DNA Polymerase
Catalog Number: M0203S
Concentration: 3,000 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 37°C.
Packaging Lot Number: 10107644
Expiration Date: 02/2023
Storage Temperature: -20°C
Storage Conditions: 100 mM KPO₄, 1 mM DTT, 50 % Glycerol, (pH 6.5 @ 25°C)
Specification Version: PS-M0203S/L v1.0

T4 DNA Polymerase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0203SVIAL	T4 DNA Polymerase	10105065	Pass
B6002SVIAL	NEBuffer™ r2.1	10102965	Pass

Assay Name/Specification	Lot # 10107644
<p>Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of T4 DNA Polymerase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>qPCR DNA Contamination (E. coli Genomic) A minimum of 3 units of T4 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.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE) T4 DNA Polymerase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>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 T4 DNA Polymerase incubated for 4 hours at 37°C yields <0.0001 unit of alkaline phosphatase activity</p>	Pass

Assay Name/Specification	Lot # 10107644
as determined by spectrophotometric analysis.	

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
25 May 2021



Michael Tonello
Packaging Quality Control Inspector
25 May 2021