Product Name: T4 DNA Polymerase
Catalog Number: M0203L
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: 10060120
Expiration Date: 08/2021
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

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0203LVIAL</td>
<td>T4 DNA Polymerase</td>
<td>10049668</td>
<td>Pass</td>
</tr>
<tr>
<td>B7202SVIAL</td>
<td>NEBuffer™ 2.1</td>
<td>10043907</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Assay Name/Specification

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.

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 as determined by spectrophotometric analysis.

Protein Purity Assay (SDS-PAGE)
T4 DNA Polymerase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.

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
<table>
<thead>
<tr>
<th>Assay Name/Specification</th>
<th>Lot # 10060120</th>
</tr>
</thead>
<tbody>
<tr>
<td>genome.</td>
<td></td>
</tr>
</tbody>
</table>

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

David Guo  
Production Scientist  
11 Sep 2019  

Michael Tonello  
Packaging Quality Control Inspector  
26 Nov 2019