

## New England Biolabs Certificate of Analysis

**Product Name:** Exonuclease III (E.coli)  
**Catalog Number:** M0206L  
**Concentration:** 100,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to produce 1 nmol of acid-soluble total nucleotide in a total reaction volume of 50 µl in 30 minutes at 37°C in 1X NEBuffer 1 with 0.15 mM sonicated duplex [ 3H]-DNA.  
**Lot Number:** 10031189  
**Expiration Date:** 12/2020  
**Storage Temperature:** -20°C  
**Storage Conditions:** 200 mM KCl, 5 mM KPO<sub>4</sub>, 0.05 mM EDTA, 5 mM βME, 50 % Glycerol, 200 µg/ml BSA, (pH 6.5 @ 25°C)  
**Specification Version:** PS-M0206S/L v1.0

Exonuclease III (E.coli) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0206LVIAL	Exonuclease III (E.coli)	10018334	Pass
B7001SVIAL	NEBuffer™ 1	0101804	Pass

Assay Name/Specification	Lot # 10031189
<p><b>Endonuclease Activity (Nicking)</b>            A 50 µl reaction in NEBuffer 1 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 300 units of Exonuclease III (E. coli) incubated for 4 hours at 37°C results in &lt;20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Protein Purity Assay (SDS-PAGE)</b>            Exonuclease III (E. coli) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p><b>qPCR DNA Contamination (E. coli Genomic)</b>            A minimum of 100 units of Exonuclease III (E. coli) 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

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

*John D. Greci*

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John Greci  
Production Scientist  
14 Dec 2018

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
17 Dec 2018