

## 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.  
**Packaging Lot Number:** 10218713  
**Expiration Date:** 08/2025  
**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) | 10198898   | Pass                 |
| B7001SVIAL                              | NEBuffer™ 1              | 10167590   | Pass                 |

| Assay Name/Specification   | Lot # 10218713 |
|--|----------------|
| <p><b>Endonuclease Activity (Nicking)</b><br/>           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><br/>           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><br/>           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.

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04 Aug 2023



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01 Dec 2023