

## New England Biolabs Certificate of Analysis

**Product Name:** T5 Exonuclease  
**Catalog Number:** M0663L  
**Concentration:** 10,000 U/ml  
**Unit Definition:** One unit of T5 Exonuclease is defined as the amount of enzyme required to cause the change of 0.00032 A260 nm/min at 37°C in CutSmart Buffer.  
**Packaging Lot Number:** 10140369  
**Expiration Date:** 02/2024  
**Storage Temperature:** -20°C  
**Storage Conditions:** 50 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 0.1 % Triton X-100, (pH 7.5 @ 25°C)  
**Specification Version:** PS-M0663S/L v2.0

| T5 Exonuclease Component List |                       |            |                      |
|-------------------------------|-----------------------|------------|----------------------|
| NEB Part Number               | Component Description | Lot Number | Individual QC Result |
| M0663LVIAL                    | T5 Exonuclease        | 10140368   | Pass                 |
| B7004SVIAL                    | NEBuffer™ 4           | 10133928   | Pass                 |

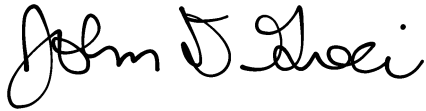
| Assay Name/Specification  | Lot # 10140369 |
|---|----------------|
| <b>Protein Purity Assay (SDS-PAGE)</b><br>T5 Exonuclease is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.   | <b>Pass</b>    |
| <b>Endonuclease Activity (Nicking)</b><br>A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled pUC19 DNA and a minimum of 30 units of T5 Exonuclease incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.   | <b>Pass</b>    |
| <b>qPCR DNA Contamination (E. coli Genomic)</b><br>A minimum of 1 ul of T5 Exonuclease 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. | <b>Pass</b>    |

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

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24 Feb 2022



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Michael Tonello  
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24 Feb 2022