

## New England Biolabs Certificate of Analysis

**Product Name:** *Micrococcal Nuclease*  
**Catalog Number:** *M0247S*  
**Concentration:** *2,000,000 gel U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 15 minutes at 37°C, to the extent that the accumulation of low molecular DNA fragments is <400 base pairs as determined by agarose gel electrophoresis.*  
**Packaging Lot Number:** *10219889*  
**Expiration Date:** *10/2025*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *50 mM NaCl, 10 mM Tris-HCl, 1 mM EDTA, 50 % Glycerol, (pH 7.5 @ 25°C)*  
**Specification Version:** *PS-M0247S v2.0*

| Micrococcal Nuclease Component List |  |            |                      |
|-------------------------------------|--|------------|----------------------|
| NEB Part Number                     | Component Description                    | Lot Number | Individual QC Result |
| M0247SVIAL                          | Micrococcal Nuclease                     | 10208890   | Pass                 |
| B9200SVIAL                          | Recombinant Albumin, Molecular Biology G | 10198642   | Pass                 |
| B0247SVIAL                          | Micrococcal Nuclease Buffer              | 10181131   | Pass                 |

| Assay Name/Specification   | Lot # 10219889 |
|--|----------------|
| <b>Protease Activity (SDS-PAGE)</b><br>A 20 µl reaction in 1X Micrococcal Nuclease Reaction Buffer containing 24 µg of a standard mixture of proteins and a minimum of 10,000 units of Micrococcal Nuclease incubated for 16 hours at 37°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.   | Pass           |
| <b>Protein Purity Assay (SDS-PAGE)</b><br>Micrococcal Nuclease is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.  | Pass           |
| <b>qPCR DNA Contamination (E. coli Genomic)</b><br>A minimum of 2,000 units of Micrococcal Nuclease 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. | Pass           |

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

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05 Jan 2024



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Michael Tonello  
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05 Jan 2024