

## 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:** *10070019*

**Expiration Date:** *03/2022*

**Storage Temperature:** *-20°C*

**Storage Conditions:** *50 mM NaCl, 10 mM Tris-HCl, 1 mM EDTA, 50 % Glycerol, (pH 7.5 @ 25°C)*

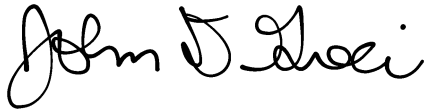
**Specification Version:** *PS-M0247S v1.0*

Micrococcal Nuclease Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0247SVIAL	Micrococcal Nuclease	10070018	Pass
B9001SVIAL	Purified BSA	10059427	Pass
B0247SVIAL	Micrococcal Nuclease Buffer	10040436	Pass

Assay Name/Specification	Lot # 10070019
<p><b>qPCR DNA Contamination (E. coli Genomic)</b> 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.</p>	Pass
<p><b>Protein Purity Assay (SDS-PAGE)</b> Micrococcal Nuclease is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p><b>Protease Activity (SDS-PAGE)</b> 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.</p>	Pass

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

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John Greci  
Production Scientist  
15 Jun 2020



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Michael Tonello  
Packaging Quality Control Inspector  
15 Jun 2020