

## 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:** *10187122*

**Expiration Date:** *04/2025*

**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	10184204	Pass
B9200SVIAL	Recombinant Albumin, Molecular Biology G	10173665	Pass
B0247SVIAL	Micrococcal Nuclease Buffer	10181131	Pass

Assay Name/Specification	Lot # 10187122
<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
<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>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

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



Penghua Zhang  
Production Scientist  
05 Apr 2023



Michael Tonello  
Packaging Quality Control Inspector  
01 May 2023