240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## **New England Biolabs Certificate of Analysis**

Lambda Exonuclease Product Name:

Catalog Number: M0262S Concentration: 5,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to produce 10

> nmol of acid-soluble deoxyribonucleotide from double-stranded substrate in a total reaction volume of 50 µl in 30 minutes at 37°C in 1X Lambda Exonuclease Reaction Buffer with 1 μg sonicated duplex

[3H]-DNA.

Packaging Lot Number: 10173720 Expiration Date: 11/2024 Storage Temperature: -20°C

Storage Conditions: 25 mM Tris-HCl, 50 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, (pH

8.0 @ 25°C)

Specification Version: PS-M0262S/L v1.0

Lambda Exonuclease Component List			
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result
M0262SVIAL	Lambda Exonuclease	10169019	Pass
B0262SVIAL	Lambda Exonuclease Reaction Buffer	10144636	Pass

Assay Name/Specification	Lot # 10173720
Protein Purity Assay (SDS-PAGE) Lambda Exonuclease is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 5 units of Lambda Exonuclease is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in Lambda Exonuclease Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of Lambda Exonuclease incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass

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



M0262S / Lot: 10173720



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Penghua Zhang Production Scientist

09 Nov 2022

Michael Tonello

Packaging Quality Control Inspector

09 Jan 2023

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