

New England Biolabs Certificate of Analysis

Product Name: *Lambda Exonuclease*
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: *10214499*
Expiration Date: *11/2025*
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			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0262SVIAL	Lambda Exonuclease	10211334	Pass
B0262SVIAL	Lambda Exonuclease Reaction Buffer	10173721	Pass

Assay Name/Specification	Lot # 10214499
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
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

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 for additional information.



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Production Scientist
13 Dec 2023



Michael Tonello
Packaging Quality Control Inspector
13 Dec 2023