

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: *10243050*
Expiration Date: *12/2025*
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	10221813	Pass
B0262SVIAL	Lambda Exonuclease Reaction Buffer	10223615	Pass

Assay Name/Specification	Lot # 10243050
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.



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Heidi Church
Production Scientist
25 Jan 2024



Michael Tonello
Packaging Quality Control Inspector
11 Jun 2024