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

Product Name: Lambda Exonuclease

Catalog #: M0262S/L
Concentration: 5,000 units/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

 $\mu g$  sonicated duplex [  $^3H$ ]-DNA.

 Lot #:
 0081707

 Assay Date:
 07/2017

 Expiration Date:
 07/2019

 Storage Temp:
 -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
Effective Date: 23 May 2018

Assay Name/Specification (minimum release criteria)	Lot #0081707
Endonuclease Activity (Nicking) - A 50 $\mu$ l reaction in Lambda Exonuclease Reaction Buffer containing 1 $\mu$ g 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
<b>Protein Purity Assay (SDS-PAGE)</b> - 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

Authorized by Derek Robinson 23 May 2018







Inspected by John Greci 07 Jul 2017