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## 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 $\mu$ l in 30 minutes at 37°C in 1X Lambda Exonuclease Reaction Buffer with 1 $\mu$ g sonicated duplex [ <sup>3</sup> H]-DNA.
<i>Lot</i> #:	0081712
Assay Date:	12/2017
Expiration Date:	12/2019
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 #0081712
<b>Endonuclease Activity (Nicking)</b> - 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 $\geq$ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
<b>RNase Activity (Extended Digestion)</b> - A 10 $\mu$ l 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

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Authorized by Derek Robinson 23 May 2018



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Inspected by John Greci 03 Jan 2018