NEW ENGLAND BioLabs Inc.
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New England Biolabs
Certificate of Analysis

Product Name:	*Lambda Protein Phosphatase*
Catalog Number:	*P0753S*
Concentration:	*400,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme that hydrolyzes 1 nmol of p-Nitrophenyl Phosphate in 1 minute at 30°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10140386*
Expiration Date:	*08/2023*
Storage Temperature:	*-80°C*
Storage Conditions:	*100 mM NaCl , 50 mM HEPES , 2 mM DTT , 0.1 mM EGTA , 0.1 mM MnCl2 , 50 % Glycerol , 0.01 % Brij 35, (pH 7.5 @ 25°C)*
Specification Version:	*PS-P0753S/L v1.0*

Lambda Protein Phosphatase Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
P0753SVIAL	Lambda Protein Phosphatase	10117443	**Pass**
B1761SVIAL	10mM MnCl2	10129287	**Pass**
B0761SVIAL	NEBuffer for Protein MetalloPhosphatases (PMP)	10140897	**Pass**

Assay Name/Specification	**Lot # 10140386**
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 400 units of Lambda Protein Phosphatase (Lambda PP) 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 CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 400 units of Lambda Protein Phosphatase (Lambda PP) incubated for 4 hours at 30°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 400 units of Lambda Protein Phosphatase (Lambda PP) incubated for 4 hours at 30°C releases <0.1% of the total radioactivity.	**Pass**

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Assay Name/Specification	Lot # 10140386
Protease Activity (SDS-PAGE) A 20 µl reaction in 1X CutSmart® Buffer containing 24 µg of a standard mixture of proteins and a minimum of 2,000 units of Lambda Protein Phosphatase (Lambda PP) incubated for 20 hours at 37°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue 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.

Alicia Bielik
Production Scientist
16 Mar 2022

Michael Tonello
Packaging Quality Control Inspector
16 Mar 2022