

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.*
Lot Number: *10039492*
Expiration Date: *02/2021*
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*

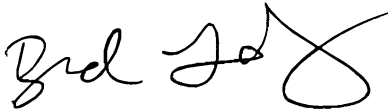
Lambda Protein Phosphatase Component List

NEB Part Number	Component Description	Lot Number	Individual QC Result
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Assay Name/Specification	Lot # 10039492
<p>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.</p>	Pass
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³H] 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.</p>	Pass
<p>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.</p>	Pass
<p>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</p>	Pass

Assay Name/Specification	Lot # 10039492
37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	

This product has been tested and shown to be in compliance with all specifications.



Brad Landgraf
Production Scientist
19 Oct 2018



Michael Tonello
Packaging Quality Control Inspector
08 Mar 2019