

New England Biolabs Certificate of Analysis

Product Name: *LpnPI*
Catalog Number: *R0663S*
Concentration: *5,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pBR322 (dcm+) DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Lot Number: *10008870*
Expiration Date: *05/2020*
Storage Temperature: *-20°C*
Storage Conditions: *300 mM NaCl , 10 mM Tris-HCl , 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 500 µg/ml BSA, (pH 7.4 @ 25°C)*
Specification Version: *PS-R0663S/L v2.0*

LpnPI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S0538SVIAL	Enzyme Activator Solution	10008887	Pass
R0663SVIAL	LpnPI	10008884	Pass
B7204SVIAL	CutSmart® Buffer	3051803	Pass

Assay Name/Specification	Lot # 10008870
Protein Purity Assay (SDS-PAGE) LpnPI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	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 15 units of LpnPI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of pBR322 DNA and a minimum of 5 units of LpnPI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	Pass

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



Mala Samaranayake
Production Scientist
24 May 2018



Michael Tonello
Packaging Quality Control Inspector
06 Jun 2018