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New England Biolabs Certificate of Analysis

Product Name: Pvull
Catalog Number: R0151L
Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 μl.

Packaging Lot Number: 1012158.
Expiration Date: 09/2023
Storage Temperature: -20°C

Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 500 µg/ml BSA

Specification Version: PS-R0151S/L v1.0

Pvull Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0151LVIAL	Pvull	10121583	Pass	
B6003SVIAL	NEBuffer™ r3.1	10116057	Pass	

Assay Name/Specification	Lot # 10121582
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Pvull, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with Pvull.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 units of Pvull incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Endonuclease Activity (Nicking) A 50 μl reaction in NEBuffer 3.1 containing 1 μg of supercoiled PhiX174 DNA and a minimum of 50 Units of Pvull incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) Pvull is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass



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Assay Name/Specification	Lot # 10121582
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 10	
Units of Pvull incubated for 16 hours at 37°C results in a DNA pattern free of	
detectable nuclease degradation as determined by agarose gel electrophoresis.	

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.

Penghaa Zhang Production Scientist

22 Oct 2021

Michael Tonello

Packaging Quality Control Inspector

22 Oct 2021



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