

New England Biolabs Certificate of Analysis

Product Name: PmlI
Catalog Number: R0532L
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg Lambda DNA (HindIII digest) DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10193690
Expiration Date: 06/2024
Storage Temperature: -20°C
Storage Conditions: 25 mM KCl, 25 mM Tris-HCl (pH 7.5), 1 mM DTT, 0.5 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0532S/L v2.0

PmlI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0532LVIAL	PmlI	10193688	Pass
B6004SVIAL	rCutSmart™ Buffer	10196037	Pass

Assay Name/Specification	Lot # 10193690
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 20 units of PmlI incubated for 4 hours at 37°C results in <20% 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 100 units of PmlI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda HindIII DNA with PmlI, >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 PmlI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda HindIII DNA and a minimum of 100 Units of PmlI incubated for 16 hours at 37°C results in a DNA pattern	Pass

Assay Name/Specification	Lot # 10193690
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.



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Production Scientist
01 Jun 2023



Michael Tonello
Packaging Quality Control Inspector
13 Sep 2023