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## New England Biolabs Certificate of Analysis

Product Name: PpuMI
Catalog Number: R0506S
Concentration: 10,000 U/mI

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

of Lambda DNA (HindIII digest) in 1 hour at 37°C in a total reaction

volume of 50 μl.

Lot Number: 10038677
Expiration Date: 03/2021
Storage Temperature: -20°C

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

Glycerol, 200 µg/ml BSA

Specification Version: PS-R0506S/L v1.0

PpuMI Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0506SVIAL	PpuMI	10038678	Pass	
B7204SVIAL	CutSmart® Buffer	10036664	Pass	

Assay Name/Specification	Lot # 10038677
Endonuclease Activity (Nicking)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 30 units of PpuMl incubated for 4 hours at 37°C results in <20%	
conversion to the nicked form as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
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 100 units of PpuMI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	
Thouse at or o followed to the total radioactivity.	
Ligation and Recutting (Terminal Integrity)	Pass
After a 20-fold over-digestion of pBC4 DNA with PpuMI, >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 PpuMI.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda-HindIII DNA and a	
minimum of 100 Units of PpuMI incubated for 16 hours at 37°C results in a DNA	



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Assay Name/Specification	Lot # 10038677
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.

Production Scientist

05 Mar 2019

Mary Conlon

Packaging Quality Control Inspector

21 Mar 2019

