

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name:	PpuMI
Catalog Number:	R0506S
Concentration:	10,000 U/ml
Unit Definition:	One unit is defined as the amount of enzyme required to digest 1 $\mu$ g of Lambda DNA (HindIII digest) in 1 hour at 37°C in a total reaction volume of 50 $\mu$ l.
Packaging Lot Number:	10052844
Expiration Date:	08/2021
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				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0506SVIAL	PpuMI	10052843	Pass	
B7204SVIAL	CutSmart® Buffer	10046088	Pass	

Assay Name/Specification	Lot # 10052844
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart <sup>™</sup> Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 30 units of PpuMI 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 <sup>™</sup> Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] 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.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> 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.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart <sup>™</sup> 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	Pass





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Assay Name/Specification	Lot # 10052844
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.

Anthony Francis Production Scientist 20 Aug 2019

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Michael Tonello Packaging Quality Control Inspector 22 Oct 2019

