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New England Biolabs Certificate of Analysis

Product Name: PspOMI
Catalog Number: R0653S
Concentration: 20,000 U/mI

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

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

Packaging Lot Number: 10054678 Expiration Date: 09/2021 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-R0653S/L v1.0

PspOMI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0653SVIAL	PspOMI	10054679	Pass	
B7204SVIAL	CutSmart® Buffer	10046088	Pass	

Assay Name/Specification	Lot # 10054678
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 60 Units of PspOMI incubated for 4 hours at 37°C results in <10%	Pass
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 200 units of PspOMI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	1 400
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of pXba DNA with PspOMI, >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 PspOMI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXba DNA and a minimum of 200 Units of PspOMI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass



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

Production Scientist

06 Sep 2019

Lay Minichiello

Packaging Quality Control Inspector

18 Oct 2019

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