

New England Biolabs Certificate of Analysis

Product Name: PspOMI
Catalog Number: R0653L
Concentration: 20,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pXba DNA in rCutSmart Buffer in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10232262
Expiration Date: 03/2026
Storage Temperature: -20°C
Storage Conditions: 10 mM Tris-HCl, 300 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml rAlbumin (pH 7.4 @ 25°C)
Specification Version: PS-R0653S/L v2.0

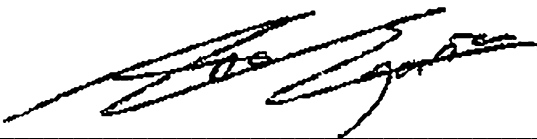
| PspOMI Component List | | | |
|-----------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0653LVIAL | PspOMI | 10232273 | Pass |
| B6004SVIAL | rCutSmart™ Buffer | 10229454 | Pass |

| Assay Name/Specification | Lot # 10232262 |
|---|----------------|
| Endonuclease Activity (Nicking) A 50 µl reaction in rCutSmart™ 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% conversion to the nicked form as determined by agarose gel electrophoresis. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] 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. | Pass |
| 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 rCutSmart™ 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 | Pass |

| Assay Name/Specification | Lot # 10232262 |
|--|----------------|
| detectable nuclease degradation as determined by agarose gel electrophoresis. | |
| Protein Purity Assay (SDS-PAGE) PspOMI is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection. | Pass |
| qPCR DNA Contamination (E. coli Genomic) A minimum of 20 units of PspOMI is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome. | Pass |

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

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Production Scientist
21 Mar 2024



Michael Tonello
Packaging Quality Control Inspector
21 Mar 2024