

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: 10097014
Expiration Date: 01/2022
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 | 10097015 | Pass |
| B7204SVIAL | CutSmart® Buffer | 10092684 | Pass |

| Assay Name/Specification | Lot # 10097014 |
|---|----------------|
| 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 |
| 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 free of detectable nuclease degradation as determined by agarose gel electrophoresis. | 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 |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and | Pass |

| Assay Name/Specification | Lot # 10097014 |
|---|----------------|
| 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. | |

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.



Penghua Zhang
Production Scientist
28 Jan 2021



Michael Tonello
Packaging Quality Control Inspector
28 Jan 2021