

New England Biolabs Certificate of Analysis

Product Name: PI-PspI
Catalog Number: R0695S
Concentration: 5,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to cleave 1 µg of pAKR7 XmnI-linearized Control Plasmid in 1 hour at 65°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10127769
Expiration Date: 11/2023
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-R0695S/L v1.0

| PI-PspI Component List | | | |
|------------------------|--|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0695SVIAL | PI-PspI | 10127770 | Pass |
| N0421SVIAL | pAKR7 XmnI-linearized Control Plasmid | 10127774 | Pass |
| B9200SVIAL | Recombinant Albumin, Molecular Biology G | 10116056 | Pass |
| B0695SVIAL | NEBuffer™ PI-PspI | 10090821 | Pass |

| Assay Name/Specification | Lot # 10127769 |
|--|----------------|
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer PI-PspI containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 50 units of PI-PspI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity. | Pass |
| Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer PI-PspI containing 1 µg of supercoiled PhiX174 DNA and a minimum of 15 Units of PI-PspI incubated for 4 hours at 65°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis. | Pass |
| Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of pAKR7-XmnI DNA with PI-PspI, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with PI-PspI. | Pass |
| Non-Specific DNase Activity (16 Hour) | Pass |

| Assay Name/Specification | Lot # 10127769 |
|--|----------------|
| A 50 µl reaction in NEBuffer PI-PspI containing 1 µg of pAKR7-XmnI DNA and a minimum of 5 Units of PI-PspI incubated for 16 hours at 65°C results in a DNA 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.

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24 Nov 2021



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24 Nov 2021