

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: 10162459
Expiration Date: 08/2024
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	10162460	Pass
N0421SVIAL	pAKR7 XmnI-linearized Control Plasmid	10127774	Pass
B9200SVIAL	Recombinant Albumin, Molecular Biology G	10150376	Pass
B0695SVIAL	NEBuffer™ PI-PspI	10127773	Pass

Assay Name/Specification	Lot # 10162459
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
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
Non-Specific DNase Activity (16 Hour) 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.	Pass
Ligation and Recutting (Terminal Integrity)	Pass

Assay Name/Specification	Lot # 10162459
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.	

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.



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Production Scientist
31 Aug 2022



Erin Varney
Packaging Quality Control Inspector
31 Aug 2022