

New England Biolabs Certificate of Analysis

Product Name: PI-PspI
Catalog #: R0695S/L
Concentration: 5,000 units/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.
Lot #: 0031708
Assay Date: 08/2017
Expiration Date: 8/2019
Storage Temp: -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
Effective Date: 02 Oct 2013

Assay Name/Specification (minimum release criteria)	Lot #0031708
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] <i>E. coli</i> 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
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) - 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

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by
Derek Robinson
02 Oct 2013



Inspected by
Jianying Luo
04 Aug 2017

