

New England Biolabs Certificate of Analysis

Product Name: PstI
Catalog Number: R0140T
Concentration: 100,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10090783
Expiration Date: 07/2022
Storage Temperature: -20°C
Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA
Specification Version: PS-R0140T/M v1.0

| PstI Component List | | | |
|---------------------|------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0140TVIAL | PstI | 10078809 | Pass |
| B7203SVIAL | NEBuffer™ 3.1 | 10092685 | Pass |
| B7024AVIAL | Gel Loading Dye, Purple (6X) | 10084972 | Pass |

| Assay Name/Specification | Lot # 10090783 |
|---|----------------|
| Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 100 units of PstI 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 100-fold over-digestion of Lambda DNA with PstI, >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 PstI. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 200 units of PstI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |
| Blue-White Screening (Terminal Integrity) A sample of pUC19 vector linearized with a 10-fold excess of PstI, religated and transformed into an E. coli strain expressing the LacZ beta fragment gene results in | Pass |

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| <p><1% white colonies.</p> <p>Protein Purity Assay (SDS-PAGE) PstI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p> | <p>Pass</p> |

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

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Penghua Zhang
Production Scientist
15 Jan 2021



Josh Hersey
Packaging Quality Control Inspector
15 Jan 2021