

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: *10157913*
Expiration Date: *08/2024*
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	10157912	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10156427	Pass
B6003SVIAL	NEBuffer™ r3.1	10146826	Pass

Assay Name/Specification	Lot # 10157913
Protein Purity Assay (SDS-PAGE) PstI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	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 <1% white colonies.	Pass
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

Assay Name/Specification	Lot # 10157913
<p>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.</p>	<p>Pass</p>

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

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Production Scientist
30 Aug 2022



Erin Varney
Packaging Quality Control Inspector
30 Aug 2022