

New England Biolabs Certificate of Analysis

Product Name: PstI-HF[®]
Catalog Number: R3140L
Concentration: 20,000 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: 10104582
Expiration Date: 03/2023
Storage Temperature: -20°C
Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 0.15 % Triton X-100, 200 µg/ml BSA, (pH 7.4 @ 25°C)
Specification Version: PS-R3140S/L v2.0

PstI-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3140LVIAL	PstI-HF [®]	10102498	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10093116	Pass
B6004SVIAL	rCutSmart [™] Buffer	10105818	Pass

Assay Name/Specification	Lot # 10104582
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart [®] Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 200 units of PstI-HF [®] incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Protein Purity Assay (SDS-PAGE) PstI-HF [®] is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart [®] Buffer containing 1 µg of Lambda DNA and a minimum of 200 units of PstI-HF [®] 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-HF [®] , >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-HF [®] .	Pass

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.



Penghua Zhang
Production Scientist
10 May 2021



Michael Tonello
Packaging Quality Control Inspector
10 May 2021