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## New England Biolabs Certificate of Analysis

Product Name: Pstl-HF®
Catalog Number: R3140M
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: 10198035 Expiration Date: 07/2025 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-R3140T/M v2.0

Pstl-HF® Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R3140MVIAL	PstI-HF®	10198034	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10184699	Pass	
B6004SVIAL	rCutSmart™ Buffer	10189225	Pass	

Assay Name/Specification	Lot # 10198035
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and	Pass
double-stranded [ ³H] 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.	
<b>Ligation and Recutting (Terminal Integrity)</b> After a 100-fold over-digestion of Lambda DNA with Pstl-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 Pstl-HF®.	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 Pstl-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
Protein Purity Assay (SDS-PAGE) Pstl-HF® is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass



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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.

YunJie Sun

Production Scientist

19 Jul 2023

Josh Hersey

Packaging Quality Control Inspector

10 Aug 2023



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