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## New England Biolabs Certificate of Analysis

Product Name: Pstl-HF®
Catalog Number: R3140S
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: 10119694
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

Pstl-HF® Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R3140SVIAL	PstI-HF®	10102497	Pass	
B7024AVIAL	Gel Loading Dye, Purple (6X)	10119053	Pass	
B6004SVIAL	rCutSmart™ Buffer	10119384	Pass	

Assay Name/Specification	Lot # 10119694
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	Pass
of detectable nuclease degradation as determined by agarose gel electrophoresis.  Protein Purity Assay (SDS-PAGE)  Pstl-HF® is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [ ³H] E. coli DNA and a minimum of 200 units of Pstl-HF® incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> 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



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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.

Penghaa Zhang Production Scientist

22 Sep 2021

Michael Tonello

Packaging Quality Control Inspector

22 Sep 2021