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New England Biolabs Certificate of Analysis

Product Name: PstI-HF®

Catalog #: R3140S/L

Concentration: 20,000 units/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 μ l.

 Lot #:
 0031701

 Assay Date:
 01/2017

 Expiration Date:
 01/2019

 Storage Temp:
 -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
Effective Date: 30 Apr 2018

Assay Name/Specification (minimum release criteria)	Lot #0031701
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart® Buffer containing 1 μg of a mixture of single and double-stranded [³ H] <i>E. coli</i> 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
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
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
Protein Purity Assay (SDS-PAGE) - PstI-HF® is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

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Authorized by Derek Robinson 30 Apr 2018







Inspected by Jianying Luo 26 Jan 2017