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## New England Biolabs Certificate of Analysis

Product Name: NotI-HF®
Catalog Number: R3189S
Concentration: 20,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of pBC4 DNA in 1 hour at 37°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10104572 Expiration Date: 01/2023 Storage Temperature: -20°C

Storage Conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 200 µg/ml BSA

Specification Version: PS-R3189S/L v1.0

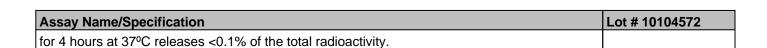
NotI-HF® Component List			
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result
R3189SVIAL	NotI-HF®	10094893	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10092682	Pass
B6004SVIAL	rCutSmart™ Buffer	10103713	Pass

Assay Name/Specification	Lot # 10104572
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pBC4 DNA with Notl-HF™, >95% of the DNA fragments	Pass
can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with NotI-HF™.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pBC4 DNA and a minimum of 200 Units of Notl-HF™ incubated for 16 hours at 37°C results in a DNA pattern free	
of detectable nuclease degradation as determined by agarose gel electrophoresis.	
Endonuclease Activity (Nicking)	Pass
A 50 μl reaction in CutSmart™ Buffer containing 1 μg of supercoiled PhiX174 DNA and a minimum of 100 Units of NotI-HF™ incubated for 4 hours at 37°C results in <10%	
conversion to the nicked form as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
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 Notl-HF™ incubated	



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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

30 Apr 2021

Michael Tonello

Packaging Quality Control Inspector

30 Apr 2021



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