NEW ENGLAND BioLabs Inc.
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240 County Road
Ipswich, MA 01938-2723
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www.neb.com
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New England Biolabs
Certificate of Analysis

Product Name:	*NlaIII*
Catalog Number:	*R0125S*
Concentration:	*10,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to digest 1 µg of PhiX174 RF I DNA in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number:	*10077698*
Expiration Date:	*03/2022*
Storage Temperature:	*-80°C*
Storage Conditions:	*300 mM NaCl , 10 mM Tris-HCl , 1 mM DTT , 0.1 mM EDTA , 50 % Glycerol , 500 µg/ml BSA, (pH 7.4 @ 25°C)*
Specification Version:	*PS-R0125S/L v3.0*

NlaIII Component List

NEB Part Number	Component Description	Lot Number	Individual QC Result
R0125SVIAL	NlaIII	10069832	**Pass**
B7204SVIAL	CutSmart® Buffer	10074632	**Pass**
B7024SVIAL	Gel Loading Dye, Purple (6X)	10071082	**Pass**

Assay Name/Specification	Lot # 10077698
Protein Purity Assay (SDS-PAGE) NlaIII 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 PhiX174 DNA and a minimum of 50 Units of NlaIII incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of PhiX174 DNA with NlaIII, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 25ºC. Of these ligated fragments, >95% can be recut with NlaIII.	**Pass**
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 100 units of NlaIII incubated for	**Pass**

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Assay Name/Specification	Lot # 10077698
4 hours at 37ºC releases <0.1% of the total radioactivity.	

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
29 Jul 2020

Michael Tonello
Packaging Quality Control Inspector
29 Jul 2020