NEW ENGLAND BioLabs Inc.
be INSPIRED drive DISCOVERY stay GENUINE
240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
Fax 978-921-1350
www.neb.com
info@neb.com

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:	*10174520*
Expiration Date:	*12/2024*
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	10174517	**Pass**
B7024AVIAL	Gel Loading Dye, Purple (6X)	10168649	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10173161	**Pass**

Assay Name/Specification	Lot # 10174520
Protein Purity Assay (SDS-PAGE) NlaIII 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 [^{3}H] E. coli DNA and a minimum of 100 units of NlaIII incubated for 4 hours at 37ºC releases <0.1% of the total radioactivity.	**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,	**Pass**

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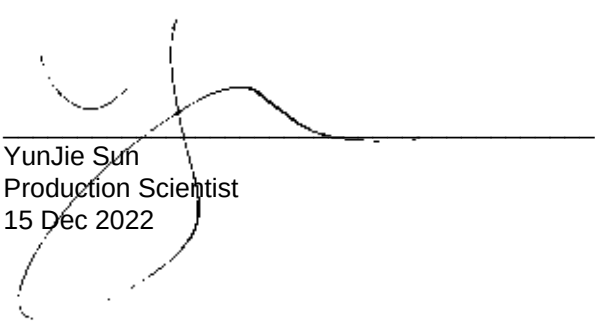
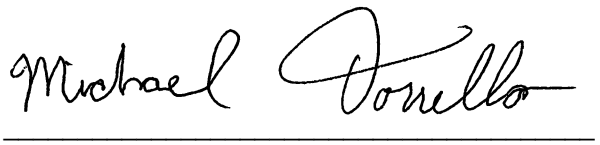
Assay Name/Specification	Lot # 10174520
>95% can be recut with NlaIII.	

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
15 Dec 2022



Michael Tonello
Packaging Quality Control Inspector
16 Dec 2022