NEW ENGLAND BioLabs Inc.
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240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
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www.neb.com
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New England Biolabs
Certificate of Analysis

Product Name:	*Endonuclease IV*
Catalog Number:	*M0304S*
Concentration:	*10,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to cleave 1 pmol of a 34-mer oligonucleotide duplex containing a single AP site in a total reaction volume of 10 µl in 1 hour at 37°C.*
Packaging Lot Number:	*10094370*
Expiration Date:	*12/2021*
Storage Temperature:	*-20°C*
Storage Conditions:	*10 mM Tris-HCl, 250 mM NaCl, 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-M0304S/L v1.0*

Endonuclease IV Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
M0304SVIAL	Endonuclease IV	10094369	**Pass**
B7003SVIAL	NEBuffer™ 3	10091037	**Pass**

Assay Name/Specification	**Lot # 10094370**
Protein Purity Assay (SDS-PAGE) Endonuclease IV 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 NEBuffer 3 containing 1 µg of Lambda-HindIII DNA and a minimum of 100 units of Endonuclease IV incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 10 units of Endonuclease IV incubated for 4 hours at 37ºC releases <0.1% of the total radioactivity.	**Pass**
Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 3 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 units of Endonuclease IV incubated for 4 hours at 37°C results in	**Pass**

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Assay Name/Specification	Lot # 10094370
<10% conversion to the nicked form as determined by agarose gel electrophoresis.	

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.

Lauren Higgins
Production Scientist
29 Jan 2021

Michael Tonello
Packaging Quality Control Inspector
29 Jan 2021