

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: *10075675*
Expiration Date: *06/2021*
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	10075676	Pass
B7003SVIAL	NEBuffer™ 3	10048944	Pass

Assay Name/Specification	Lot # 10075675
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 37°C 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 37°C 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

Assay Name/Specification	Lot # 10075675
<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.



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Production Scientist
27 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
27 Jul 2020