

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: *10221028*
Expiration Date: *12/2024*
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	10221026	Pass
B7003SVIAL	NEBuffer™ 3	10173669	Pass

Assay Name/Specification	Lot # 10221028
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 <10% conversion to the nicked form 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
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
Protein Purity Assay (SDS-PAGE) Endonuclease IV is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie	Pass

Assay Name/Specification	Lot # 10221028
Blue detection.	

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
29 Dec 2023



Michael Tonello
Packaging Quality Control Inspector
22 Jan 2024