

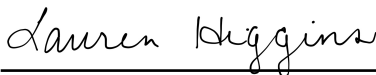
New England Biolabs Certificate of Analysis

Product Name: Endonuclease IV
Catalog #: M0304S/L
Concentration: 10,000 units/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.
Lot #: 0041803
Assay Date: 03/2018
Expiration Date: 03/2019
Storage Temp: -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
Effective Date: 08 Jun 2018

Assay Name/Specification (minimum release criteria)	Lot #0041803
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] <i>E. coli</i> 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 Blue detection.	Pass



Authorized by
Derek Robinson
08 Jun 2018



Inspected by
Lauren Higgins
01 Mar 2018

