

## New England Biolabs Certificate of Analysis

**Product Name:** *Endonuclease VIII*

**Catalog Number:** *M0299L*

**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 in 1X Endonuclease VIII Reaction Buffer containing 10 pmol of fluorescently labeled oligonucleotide duplex.*

**Packaging Lot Number:** *10197153*

**Expiration Date:** *05/2024*

**Storage Temperature:** *-20°C*

**Storage Conditions:** *10 mM Tris-HCl, 250 mM NaCl, 0.1 mM EDTA, 50 % Glycerol, (pH 8.0 @ 25°C)*

**Specification Version:** *PS-M0299S/L v1.0*

Endonuclease VIII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0299LVIAL	Endonuclease VIII	10191251	Pass
B0299SVIAL	Endonuclease VIII Reaction Buffer	10193047	Pass

Assay Name/Specification	Lot # 10197153
<p><b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in Endonuclease VIII Reaction Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 10 units of Endonuclease VIII incubated for 4 hours at 37°C releases &lt;0.5% of the total radioactivity.</p>	Pass
<p><b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in Endonuclease VIII Reaction Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 30 units of Endonuclease VIII incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Protein Purity Assay (SDS-PAGE)</b> Endonuclease VIII is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass

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](http://www.neb.com/trademarks) for additional information.

*Lauren Higgins*

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05 Jun 2023

*Michael Tonello*

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05 Jul 2023