

## New England Biolabs Certificate of Analysis

**Product Name:** *Endonuclease VIII*  
**Catalog Number:** *M0299S*  
**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:** *10220958*  
**Expiration Date:** *07/2024*  
**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
M0299SVIAL	Endonuclease VIII	10197445	Pass
B0299SVIAL	Endonuclease VIII Reaction Buffer	10193047	Pass

Assay Name/Specification	Lot # 10220958
<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 <0.5% of the total radioactivity.	Pass
<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.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> Endonuclease VIII is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	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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Lauren Sears Higgins  
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11 Sep 2023

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
04 Jan 2024