

## 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:** *10095907*

**Expiration Date:** *10/2021*

**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                 | 10086914   | Pass                 |
| B0299SVIAL                       | Endonuclease VIII Reaction Buffer | 10086915   | Pass                 |

| Assay Name/Specification   | Lot # 10095907 |
|--|----------------|
| <p><b>Protein Purity Assay (SDS-PAGE)</b><br/>Endonuclease VIII is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>   | Pass           |
| <p><b>Non-Specific DNase Activity (16 Hour)</b><br/>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>Exonuclease Activity (Radioactivity Release)</b><br/>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           |

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*

---

Lauren Higgins  
Production Scientist  
31 Dec 2020



---

Josh Hersey  
Packaging Quality Control Inspector  
31 Dec 2020