

New England Biolabs Certificate of Analysis

Product Name: *Tth Endonuclease IV*
Catalog Number: *M0294S*
Concentration: *10,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to cleave 1 pmol of a 60-mer oligonucleotide duplex containing a single AP site in a total reaction volume of 10 µl in 1 hour at 65°C.*
Packaging Lot Number: *10164642*
Expiration Date: *09/2024*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl , 100 mM KCl , 1 mM DTT , 0.1 mM EDTA , 0.1 % Triton®X-100 , 50 % Glycerol, (pH 7.4 @ 25°C)*
Specification Version: *PS-M0294S v2.0*

| Tth Endonuclease IV Component List | | | |
|------------------------------------|---------------------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0294SVIAL | Tth Endonuclease IV | 10164641 | Pass |
| B9004SVIAL | ThermoPol® Reaction Buffer Pack | 10153016 | Pass |

| Assay Name/Specification | Lot # 10164642 |
|---|----------------|
| <p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 100 units of Tth 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.</p> | Pass |
| <p>Endonuclease Activity (Nicking) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 units of Tth Endonuclease IV incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p> | Pass |
| <p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 units of Tth Endonuclease IV incubated for 4 hours at 37°C releases <0.1% 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 for additional information.

Lauren Higgins

Lauren Sears Higgins
Production Scientist
28 Sep 2022



Josh Hersey
Packaging Quality Control Inspector
30 Sep 2022