

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 10 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.
Lot Number: 10036146
Expiration Date: 02/2021
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/L v1.0

Tth Endonuclease IV Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0294SVIAL	Tth Endonuclease IV	10036145	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	0031712	Pass

Assay Name/Specification	Lot # 10036146
<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
<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

This product has been tested and shown to be in compliance with all specifications.

Lauren Higgins

Lauren Sears Higgins
Production Scientist
06 Feb 2019

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
29 Mar 2019