

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: 10092356
Expiration Date: 12/2022
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	10092357	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10067018	Pass

Assay Name/Specification	Lot # 10092356
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [³ H] 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.	Pass
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.	Pass
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.	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.

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21 Dec 2020

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21 Dec 2020