

New England Biolabs Certificate of Analysis

Product Name: *Tma Endonuclease III*
Catalog Number: *M0291S*
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: *10069696*
Expiration Date: *04/2022*
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-M0291S/L v1.0*

Tma Endonuclease III Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0291SVIAL	Tma Endonuclease III	10069697	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10067018	Pass

Assay Name/Specification	Lot # 10069696
<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 Tma Endonuclease III 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 Tma Endonuclease III 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 Tma Endonuclease III 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 Higgins
Production Scientist
28 Apr 2020

Jay Minichiello

Jay Minichiello
Packaging Quality Control Inspector
28 Apr 2020