

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.*
Lot Number: *10039442*
Expiration Date: *03/2021*
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-M0291S/L v1.0*

Tma Endonuclease III Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0291SVIAL	Tma Endonuclease III	10039443	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10041932	Pass

Assay Name/Specification	Lot # 10039442
<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 Sears Higgins
Production Scientist
19 Apr 2019

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
21 May 2019