

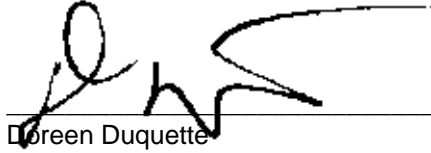
## New England Biolabs Certificate of Analysis

**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:** *10054887*  
**Expiration Date:** *09/2021*  
**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            | 10054888   | Pass                 |
| B9004SVIAL                          | ThermoPol® Reaction Buffer Pack | 10041932   | Pass                 |

| Assay Name/Specification   | Lot # 10054887 |
|--|----------------|
| <p><b>Endonuclease Activity (Nicking)</b><br/>           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 &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>                   | Pass           |
| <p><b>Exonuclease Activity (Radioactivity Release)</b><br/>           A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 100 units of Tma Endonuclease III incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>                           | Pass           |
| <p><b>Non-Specific DNase Activity (16 Hour)</b><br/>           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.



Doreen Duquette  
Production Scientist  
18 Apr 2019



Josh Hersey  
Packaging Quality Control Inspector  
12 Sep 2019