

## New England Biolabs Certificate of Analysis

**Product Name:** T7 Endonuclease I  
**Catalog Number:** M0302L  
**Concentration:** 10,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to convert >90% of 1 µg of supercoiled cruciform pUC(AT) to >90% linear form in a total reaction volume of 50 µl in 1 hour at 37°C.  
**Packaging Lot Number:** 10231102  
**Expiration Date:** 12/2025  
**Storage Temperature:** -20°C  
**Storage Conditions:** 20 mM Tris-HCl, 200 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 0.15 % Triton®X-100, (pH 7.5 @ 25°C)  
**Specification Version:** PS-M0302S/L v1.0

T7 Endonuclease I Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0302LVIAL	T7 Endonuclease I	10221175	Pass
B7002SVIAL	NEBuffer™ 2	10221172	Pass

Assay Name/Specification	Lot # 10231102
<p><b>Ligation and Recutting (Terminal Integrity, Digested DNA)</b>            A 400 µl reaction in NEBuffer 2 containing 16 µg of PhiX174-HaeIII digest and a minimum of 40 units of T7 Endonuclease I incubated for 2 hours at 37°C followed by ligation with T4 DNA Ligase for 5 minutes at 25°C results in &gt;50% ligation of the DNA fragments as determined by agarose gel electrophoresis. Of these ligated fragments, &gt;95% can be recut with HaeIII.</p>	<b>Pass</b>
<p><b>Protein Purity Assay (SDS-PAGE)</b>            T7 Endonuclease I is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	<b>Pass</b>

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](http://www.neb.com/trademarks) for additional information.



---

Jamie Souza  
Production Scientist  
06 Feb 2024



---

Michael Tonello  
Packaging Quality Control Inspector  
15 Mar 2024