

## New England Biolabs Certificate of Analysis

**Product Name:** T7 Endonuclease I  
**Catalog Number:** M0302S  
**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:** 10056682  
**Expiration Date:** 10/2021  
**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
M0302SVIAL	T7 Endonuclease I	10056684	Pass
B7002SVIAL	NEBuffer™ 2	10052180	Pass

Assay Name/Specification	Lot # 10056682
<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>	Pass
<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>	Pass

This product has been tested and shown to be in compliance with all specifications.



Doreen Duquette  
Production Scientist  
12 Sep 2019



Jay Minichiello  
Packaging Quality Control Inspector  
25 Nov 2019