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.
Lot Number: 10012369
Expiration Date: 04/2020
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)

T7 Endonuclease I Component List

<table>
<thead>
<tr>
<th>NEB Part Number</th>
<th>Component Description</th>
<th>Lot Number</th>
<th>Individual QC Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0302SVIAL</td>
<td>T7 Endonuclease I</td>
<td>0041804</td>
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<tr>
<td>B7002SVIAL</td>
<td>NEBuffer™ 2</td>
<td>0381805</td>
<td>Pass</td>
</tr>
</tbody>
</table>

Assay Name/Specification

**Protein Purity Assay (SDS-PAGE)**
T7 Endonuclease I is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.

**Ligation and Recutting (Terminal Integrity, Digested DNA)**
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 >50% ligation of the DNA fragments as determined by agarose gel electrophoresis. Of these ligated fragments, >95% can be recut with HaeIII.

This product has been tested and shown to be in compliance with all specifications.
Lauren Higgins  
Production Scientist  
13 Jun 2018

Michael Tonello  
Packaging Quality Control Inspector  
13 Jun 2018