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: 10088654
Expiration Date: 11/2022
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

<table>
<thead>
<tr>
<th>T7 Endonuclease I Component List</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NEB Part Number</strong></td>
</tr>
<tr>
<td>M0302SVIAL</td>
</tr>
<tr>
<td>B7002SVIAL</td>
</tr>
</tbody>
</table>

**Assay Name/Specification**

<table>
<thead>
<tr>
<th><strong>Ligation and Recutting (Terminal Integrity, Digested DNA)</strong></th>
</tr>
</thead>
</table>
| 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. |

<table>
<thead>
<tr>
<th><strong>Protein Purity Assay (SDS-PAGE)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>T7 Endonuclease I is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</td>
</tr>
</tbody>
</table>

Lot # 10088654

Pass

Pass

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 for additional information.
Lauren Higgins
Production Scientist
15 Dec 2020

Michael Tonello
Packaging Quality Control Inspector
15 Dec 2020