## 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 $1 \mu \mathrm{~g}$ of supercoiled cruciform $\mathrm{pUC}(A T)$ to $>90 \%$ linear form in a total reaction volume of $50 \mu \mathrm{l}$ in 1 hour at $37^{\circ} \mathrm{C}$. |
| Packaging Lot Number: | 10239920 |
| Expiration Date: | 12/2025 |
| Storage Temperature: | $-20^{\circ} \mathrm{C}$ |
| 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 @ $25^{\circ} \mathrm{C}$ ) |
| 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 | NEBufferTM 2 | 10221172 | Pass |


| Assay Name/Specification | Lot \# 10239920 |
| :--- | :---: |
| Ligation and Recutting (Terminal Integrity, Digested DNA) | Pass |
| A $400 \mu \mathrm{l}$ reaction in NEBuffer 2 containing $16 \mu \mathrm{~g}$ of PhiX174-Haelll digest and a |  |
| minimum of 40 units of T7 Endonuclease I incubated for 2 hours at $37^{\circ} \mathrm{C}$ followed by |  |
| ligation with T4 DNA Ligase for 5 minutes at $25^{\circ} \mathrm{C}$ results in $>50 \%$ ligation of the |  |
| DNA fragments as determined by agarose gel electrophoresis. Of these ligated |  |
| fragments, $>95 \%$ can be recut with HaelII. |  |
| Protein Purity Assay (SDS-PAGE) |  |
| T7 Endonuclease I is $\geq 95 \%$ pure as determined by SDS-PAGE analysis using Coomassie | Pass |
| Blue detection. |  |

This product has been tested and shown to be in compliance with all specifications.
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    Packaging Quality Control Inspector 13 May 2024

