

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: 10226627
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
M0302SVIAL	T7 Endonuclease I	10221174	Pass
B7002SVIAL	NEBuffer™ 2	10221172	Pass

Assay Name/Specification	Lot # 10226627
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.	Pass
Protein Purity Assay (SDS-PAGE) T7 Endonuclease I is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

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

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Jamie Souza
Production Scientist
06 Feb 2024



Michael Tonello
Packaging Quality Control Inspector
28 Feb 2024