NEW ENGLAND BioLabs® Inc.

240 County Road
Ipswich, MA 01938-2723

Tel 978-927-5054
Fax 978-921-1350

www.neb.com
info@neb.com

New England Biolabs
Product Specification

Product Name:	*T7 Endonuclease I*
Catalog #:	*M0302S/L*
Concentration:	*10,000 units/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.*
Shelf Life:	*24 months*
Storage Temp:	*-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*
Effective Date:	*10 Apr 2018*

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

Derek Robinson
Director of Quality Control

Date 10 Apr 2018

ISO 9001 Registered Quality Management
ISO 14001 Registered Environmental Management
ISO 13485 Registered Medical Devices