240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name: DNase I (RNase-free)

Catalog Number: M0303S
Concentration: 2,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme which will completely

degrade 1 µg of pBR322 DNA in 10 minutes at 37°C in DNase I Reaction

Buffer. Complete degradation is defined as the reduction of the

majority of DNA fragments to tetranucleotides or smaller.

Packaging Lot Number: 10130825
Expiration Date: 11/2023
Storage Temperature: -20°C

Storage Conditions: 10 mM Tris-HCl (pH 7.6), 2 mM CaCl2, 50 % Glycerol

Specification Version: PS-M0303S/L v1.0

DNase I (RNase-free) Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
M0303SVIAL	DNase I (RNase-free)	10123434	Pass	
B0303SVIAL	DNase I Reaction Buffer	10121416	Pass	

Assay Name/Specification	Lot # 10130825
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 2 units of DNase I (RNase-free) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
RNase Activity (ds RNA) A 50 µl reaction in DNase I Reaction Buffer containing 10 µg of a dsRNA Ladder and a minimum of 100 units of DNase I (RNase-free) is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by fluorescent detection.	Pass
Protein Purity Assay (SDS-PAGE) DNase I (RNase-free) 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit



M0303S / Lot: 10130825

www.neb.com/trademarks for additional information.

John Greci Production Scientist

08 Dec 2021

Josh Hersey

Packaging Quality Control Inspector

08 Dec 2021



M0303S / Lot: 10130825

Page 2 of 2