

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

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:	M0303L
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:	10156732
Expiration Date:	06/2024
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	
M0303LVIAL	DNase I (RNase-free)	10150742	Pass	
B0303SVIAL	DNase I Reaction Buffer	10149092	Pass	

Assay Name/Specification	Lot # 10156732
<b>RNase Activity (Extended Digestion)</b> 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
<b>RNase Activity (Extended Digestion)</b> 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
<b>RNase Activity (ds RNA)</b> 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





be INSPIRED drive DISCOVERY stay GENUINE

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

Assay Name/Specification	Lot # 10156732
Protein Purity Assay (SDS-PAGE)	Pass
DNase I (RNase-free) is $\geq$ 95% pure as determined by SDS-PAGE analysis using	
Coomassie Blue detection.	

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.

m J. Loei

John Greci Production Scientist 07 Jul 2022

Erin Varney

Packaging Quality Control Inspector 07 Jul 2022

