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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.

Lot Number: 10049142
Expiration Date: 04/2021
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)	10037300	Pass	
B0303SVIAL	DNase I Reaction Buffer	10041566	Pass	

Assay Name/Specification	Lot # 10049142
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.



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John Greci **Production Scientist** 04 Apr 2019

Ay Minichiello
Packaging Quality Control Inspector 07 Aug 2019





