

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: 10061040
Expiration Date: 09/2021
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
M0303SVIAL	DNase I (RNase-free)	10053871	Pass
B0303SVIAL	DNase I Reaction Buffer	10052590	Pass

Assay Name/Specification	Lot # 10061040
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.

John D. Greci

John Greci
Production Scientist
27 Sep 2019

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
13 Jan 2020