

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: 10163652
Expiration Date: 11/2024
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)	10163651	Pass
B0303SVIAL	DNase I Reaction Buffer	10149092	Pass

Assay Name/Specification	Lot # 10163652
<p>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.</p>	Pass
<p>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.</p>	Pass
<p>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.</p>	Pass

Assay Name/Specification	Lot # 10163652
Protein Purity Assay (SDS-PAGE) DNase I (RNase-free) is \geq 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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Penghua Zhang
Production Scientist
08 Nov 2022



Josh Hersey
Packaging Quality Control Inspector
10 Nov 2022