

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: 10171519
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 # 10171519 |
|--|----------------|
| <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 # 10171519 |
|--|----------------|
| 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.

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.



Penghua Zhang
Production Scientist
08 Nov 2022



Michael Tonello
Packaging Quality Control Inspector
14 Nov 2022