

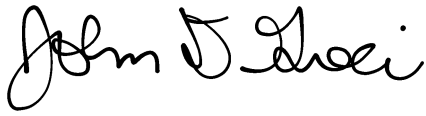
## New England Biolabs Certificate of Analysis

**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:** 10067106  
**Expiration Date:** 09/2021  
**Storage Temperature:** -20°C  
**Storage Conditions:** 10 mM Tris-HCl (pH 7.6), 2 mM CaCl<sub>2</sub>, 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 # 10067106 |
|--|----------------|
| <b>RNase Activity (Extended Digestion)</b><br>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><br>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           |
| <b>Protein Purity Assay (SDS-PAGE)</b><br>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 Greci  
Production Scientist  
27 Sep 2019



---

Josh Hersey  
Packaging Quality Control Inspector  
15 Mar 2020