

## New England Biolabs Certificate of Analysis

**Product Name:** DNase I-XT  
**Catalog Number:** M0570L  
**Concentration:** 2,000 U/ml  
**Unit Definition:** One unit is defined the amount of enzyme required to release 260 pmol of FAM from FAM-BHQ1 labeled 35 nt hairpin oligo in 1 min at 30°C in a 50 µl reaction.  
**Packaging Lot Number:** 10250969  
**Expiration Date:** 06/2026  
**Storage Temperature:** -20°C  
**Storage Conditions:** 10 mM Tris-HCl, 2 mM CaCl<sub>2</sub>, 50% Glycerol, (pH 7.6 @ 25°C)  
**Specification Version:** PS-M0570S/L v2.0

| DNase I-XT Component List |                            |            |                      |
|---------------------------|----------------------------|------------|----------------------|
| NEB Part Number           | Component Description      | Lot Number | Individual QC Result |
| M0570LVIAL                | DNase I-XT                 | 10245594   | Pass                 |
| B0570SVIAL                | DNase I-XT Reaction Buffer | 10211723   | Pass                 |

| Assay Name/Specification   | Lot # 10250969 |
|--|----------------|
| <b>Protein Purity Assay (SDS-PAGE)</b><br>DNase I-XT is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.  | <b>Pass</b>    |
| <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-XT is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.  | <b>Pass</b>    |
| <b>qPCR DNA Contamination (Eukaryotic Genomic)</b><br>A minimum of 2 units of DNase I-XT is screened for the presence of eukaryotic genomic DNA using SYBR® Green qPCR with universal primers for the 18S rRNA locus. Results are quantified using a standard curve generated from purified E. album genomic DNA. The measured level of eukaryotic genomic DNA contamination is ≤ 2.5 pg DNA/µl. | <b>Pass</b>    |

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

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03 Jul 2024



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Michael Tonello  
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05 Aug 2024