

## New England Biolabs Certificate of Analysis

**Product Name:** DNase I-XT  
**Catalog Number:** M0570S  
**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:** 10245592  
**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
M0570SVIAL	DNase I-XT	10245591	Pass
B0570SVIAL	DNase I-XT Reaction Buffer	10211723	Pass

Assay Name/Specification	Lot # 10245592
<b>Protein Purity Assay (SDS-PAGE)</b> 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> 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> 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

[www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.



---

Heidi Church  
Production Scientist  
03 Jul 2024



---

Michael Tonello  
Packaging Quality Control Inspector  
08 Jul 2024