

## New England Biolabs Certificate of Analysis

**Product Name:** DNase I-XT Reaction Buffer  
**Catalog Number:** B0570S  
**Concentration:** 10 X Concentrate  
**Packaging Lot Number:** 10252660  
**Expiration Date:** 10/2026  
**Storage Temperature:** -20°C  
**Specification Version:** PS-B0570S v1.0  
**Composition (1X):** 10 mM Tris-HCl, 50 mM NaCl, 10 mM MgCl<sub>2</sub>, 0.5 mM CaCl<sub>2</sub>, 0.005% Tween-20 (pH 7.6 @ 25°C)

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

Assay Name/Specification	Lot # 10252660
<b>Endonuclease Activity (Nicking, Buffer)</b> A 50 µl reaction in 1X DNase I-XT Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Functional Testing (Reaction Buffer)</b> Each lot of DNase I-XT Reaction Buffer is functionally tested according to the unit definition for DNase I-XT. Performance is directly compared to a control comprising a previously approved lot.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X DNase I-XT Reaction Buffer containing 1 µg of PhiX174-HaeIII DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>RNase Activity (Buffer)</b> A 10 µl reaction in 1X DNase I-XT Reaction Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by fluorescent detection.	<b>Pass</b>
<b>pH (buffers/solutions)</b> The pH of 10X DNase I-XT Reaction Buffer is between pH 7.5 and 7.7 at 25°C.	<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.



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28 Aug 2024



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Michael Tonello  
Packaging Quality Control Inspector  
28 Aug 2024