

New England Biolabs Certificate of Analysis

Product Name: *DNase I-XT Reaction Buffer*
Catalog Number: *B0570S*
Concentration: *10 X Concentrate*
Packaging Lot Number: *10243975*
Expiration Date: *08/2025*
Storage Temperature: *-20°C*
Specification Version: *PS-B0570S v1.0*
Composition (1X): *10 mM Tris-HCl, 50 mM NaCl, 10 mM MgCl₂, 0.5 mM CaCl₂, 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	10241515	Pass

Assay Name/Specification	Lot # 10243975
Endonuclease Activity (Nicking, Buffer) 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.	Pass
Functional Testing (Reaction Buffer) 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.	Pass
Non-Specific DNase Activity (16 hour, Buffer) 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.	Pass
RNase Activity (Buffer) 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.	Pass
pH (buffers/solutions) The pH of 10X DNase I-XT Reaction Buffer is between pH 7.5 and 7.7 at 25°C.	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.



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Production Scientist
13 May 2024



Michael Tonello
Packaging Quality Control Inspector
21 May 2024