

New England Biolabs Certificate of Analysis

Product Name: Exonuclease I Reaction Buffer
Catalog Number: B0293S
Concentration: 10 X Concentrate
Packaging Lot Number: 10067055
Expiration Date: 02/2023
Storage Temperature: -20°C
Specification Version: PS-B0293S v1.0
Composition (1X): 67 mM Glycine-KOH, 6.7 mM MgCl₂, 10 mM βME, (pH 9.5 @ 25°C)

Exonuclease I Reaction Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B0293SVIAL	Exonuclease I Reaction Buffer	10065992	Pass

Assay Name/Specification	Lot # 10067055
Endonuclease Activity (Nicking, Buffer) A 50 µl reaction in 1X Exonuclease I 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
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X Exonuclease I 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
Functional Testing (Reaction Buffer) A 100 µl reaction in 1X Exonuclease I Reaction Buffer containing 0.17 mg/ml of single stranded [³ H] DNA and 1 unit of Exonuclease I (E. coli) incubated for 30 minutes at 37°C results in the release of 10 nmol of acid-soluble nucleotide as determined by scintillation counting.	Pass
RNase Activity (Buffer) A 10 µl reaction in 1X Exonuclease I 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 gel electrophoresis using fluorescent detection.	Pass

This product has been tested and shown to be in compliance with all specifications.

John D. Greci

John Greci
Production Scientist
11 Feb 2020

Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
18 Feb 2020