

New England Biolabs Product Specification

Product Name: Exonuclease I Reaction Buffer
Catalog #: B0293S
Concentration: 10X Concentrate
Shelf Life: 36 months
Storage Temp: -20°C
Composition (1X): 67 mM Glycine-KOH, 6.7 mM MgCl₂, 10 mM βME, (pH 9.5 @ 25°C)
Specification Version: PS-B0293S v2.0
Effective Date: 01 Nov 2021

Assay Name/Specification (minimum release criteria)

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.

Functional Testing (Reaction Buffer) - A 100 µl reaction in 1X Exonuclease I Reaction Buffer containing 0.17 mg/ml of single stranded [³H] 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.

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.

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Date 01 Nov 2021

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