

New England Biolabs Certificate of Analysis

Product Name: Taq DNA Ligase Reaction Buffer
Catalog #: B0208S
Concentration: 10X Concentrate
Lot #: 0031803
Assay Date: 03/2018
Expiration Date: 03/2021
Storage Temp: -20°C
Composition (1X): 20 mM Tris-HCl, 25 mM Potassium Acetate, 10 mM Magnesium Acetate, 1 mM NAD⁺, 10 mM DTT, 0.1% Triton®X-100, (pH 7.6 @ 25°C)
Specification Version: PS-B0208S v1.0
Effective Date: 18 May 2018

Assay Name/Specification (minimum release criteria)	Lot #0031803
Endonuclease Activity (Nicking, Buffer) - A 50 µl reaction in 1X Taq DNA Ligase 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 (DNA Ligase Buffer) - A 50 µl reaction in 1X Taq DNA Ligase Reaction Buffer containing 1 µg of BstEII digested Lambda DNA and 1 unit of Taq DNA Ligase incubated for 15 minutes at 45°C results in approximately 50% ligation of the cohesive ends of the DNA fragments as determined by agarose gel electrophoresis.	Pass
Non-Specific DNase Activity (16 hour, Buffer) - A 50 µl reaction in 1X Taq DNA Ligase Reaction Buffer containing 1 µg of HaeIII digested PhiX174 RF I 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 Taq DNA Ligase Reaction Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by polyacrylamide gel electrophoresis.	Pass



Authorized by
Derek Robinson
18 May 2018



Inspected by
Mary Lorenzen
22 Mar 2018

