

New England Biolabs Certificate of Analysis

Product Name: *Taq DNA Ligase Reaction Buffer*
Catalog #: *B0208S*
Concentration: *10X Concentrate*
Lot #: *0011803*
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 #0011803
Endonuclease Activity (Nicking, Buffer) - A 50 µl reaction in 1X <i>Taq</i> 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 <i>Taq</i> DNA Ligase Reaction Buffer containing 1 µg of BstEII digested Lambda DNA and 1 unit of <i>Taq</i> 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 <i>Taq</i> 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 <i>Taq</i> 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

