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## New England Biolabs Certificate of Analysis

Product Name: Taq DNA Ligase Reaction Buffer

Catalog Number: B0208S

Concentration: 10 X Concentrate

Lot Number: 10042799
Expiration Date: 06/2022
Storage Temperature: -20°C

Specification Version: PS-B0208S v1.0

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)

Taq DNA Ligase Reaction Buffer Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
B0208SVIAL	Taq DNA Ligase Reaction Buffer	10042800	Pass	

Assay Name/Specification	Lot # 10042799
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
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
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
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

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



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Mary Lorenzen
Production Scientist

17 Jun 2019

Michael Tonello

Packaging Quality Control Inspector

10 Jul 2019