

## New England Biolabs Certificate of Analysis


**Product Name:** *Taq DNA Ligase Reaction Buffer*  
**Catalog Number:** *B0208S*  
**Concentration:** *10 X Concentrate*  
**Packaging Lot Number:** *10253461*  
**Expiration Date:** *03/2027*  
**Storage Temperature:** *-20°C*  
**Specification Version:** *PS-B0208S v2.0*  
**Composition (1X):** *20 mM Tris-HCl, 25 mM Potassium Acetate, 10 mM Magnesium Acetate, 1 mM NAD<sup>+</sup>, 10 mM DTT, 0.1% Triton X-100, (pH 7.3 @ 25°C)*

Taq DNA Ligase Reaction Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B0208SVIAL	Taq DNA Ligase Reaction Buffer	10235203	Pass

Assay Name/Specification	Lot # 10253461
<b>Endonuclease Activity (Nicking, Buffer)</b> 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.	<b>Pass</b>
<b>Functional Testing (DNA Ligase Buffer)</b> 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.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> 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.	<b>Pass</b>
<b>RNase Activity (Buffer)</b> 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.	<b>Pass</b>

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

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27 Mar 2024



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14 Aug 2024