

New England Biolabs Certificate of Analysis

Product Name: T4 RNA Ligase Reaction Buffer
Catalog Number: B0216L
Packaging Lot Number: 10251723
Expiration Date: 06/2026
Storage Temperature: -20°C
Specification Version: PS-B0216S/L v1.0
Composition (1X): 50 mM Tris-HCl, 10 mM MgCl₂, 1 mM DTT, (pH 7.5 @ 25°C)

T4 RNA Ligase Reaction Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P0756SVIAL	Adenosine 5'-Triphosphate (ATP)	10243505	Pass
B1004SVIAL	PEG 8000	10218040	Pass
B0216SVIAL	T4 RNA Ligase Reaction Buffer	10239990	Pass

Assay Name/Specification	Lot # 10251723
Endonuclease Activity (Nicking, Buffer) A 50 µl reaction in 1X T4 RNA Ligase Reaction Buffer containing 1 µg of supercoiled PhiX174 RF I DNA incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X T4 RNA 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 T4 RNA Ligase Reaction Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis.	Pass
pH (buffers/solutions) The pH of 10X T4 RNA Ligase Reaction Buffer is between pH 7.4 and 7.6 at 25°C.	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Beth M. Paschal

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Production Scientist
31 May 2024



Josh Hersey
Packaging Quality Control Inspector
24 Jul 2024