NEW ENGLAND BioLabs Inc.

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240 County Road
Ipswich, MA 01938-2723

Tel 978-927-5054
Fax 978-921-1350

www.neb.com
info@neb.com

New England Biolabs
Certificate of Analysis

Product Name:	*T4 RNA Ligase Reaction Buffer*
Catalog Number:	*B0216L*
Packaging Lot Number:	*10217185*
Expiration Date:	*11/2025*
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)	10211010	**Pass**
B1004SVIAL	PEG 8000	10181125	**Pass**
B0216SVIAL	T4 RNA Ligase Reaction Buffer	10181127	**Pass**

Assay Name/Specification	Lot # 10217185
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 37ºC 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 37ºC. 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.

ISO 9001 Registered Quality Management
ISO 13485 Registered Medical Devices
ISO 14001 Registered Environmental Management

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info@neb.com

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Alicia Bielik
Production Scientist
22 Nov 2023

_____
Michael Tonello
Packaging Quality Control Inspector
08 Dec 2023

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