

New England Biolabs Certificate of Analysis

Product Name: T4 RNA Ligase Reaction Buffer
Catalog Number: B0216L
Lot Number: 10011455
Expiration Date: 04/2020
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)	0161804	Pass
B1004SVIAL	PEG 8000	0151708	Pass
B0216SVIAL	T4 RNA Ligase Reaction Buffer	10008137	Pass

Assay Name/Specification	Lot # 10011455
pH (buffers/solutions) The pH of 10X T4 RNA Ligase Reaction Buffer is between pH 7.4 and 7.6 at 25°C.	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
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

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



Bo Wu
Production Scientist
17 May 2018



Michael Tonello
Packaging Quality Control Inspector
06 Jun 2018