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 #: B0216S/L
Concentration: 10X Concentrate

 Lot #:
 0131708

 Assay Date:
 08/2017

 Expiration Date:
 08/2020

 Storage Temp:
 -20°C

Composition (1X): 50 mM Tris-HCl, 10 mM MgCl<sub>2</sub>, 1 mM DTT, (pH 7.5 @ 25°C)

Specification Version: PS-B0216S/L v1.0
Effective Date: 08 Sep 2017

Assay Name/Specification (minimum release criteria)	Lot #0131708
Endonuclease Activity (Nicking, Buffer) - A 50 $\mu$ l reaction in 1X T4 RNA Ligase Reaction Buffer containing 1 $\mu$ g 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
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

Authorized by Derek Robinson 08 Sep 2017







Inspected by Bo Wu 09 Aug 2017