

be INSPIRED drive DISCOVERY stay GENUINE

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## New England Biolabs Certificate of Analysis

| Product Name:          | T4 RNA Ligase Reaction Buffer                            |
|------------------------|--|
| Catalog Number:        | B0216L   |
| Packaging Lot Number:  | 10113565   |
| Expiration Date:       | 02/2023  |
| 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) | 10094836   | Pass                 |  |
| B1004SVIAL                                   | PEG 8000                        | 10098513   | Pass                 |  |
| B0216SVIAL                                   | T4 RNA Ligase Reaction Buffer   | 10102210   | Pass                 |  |

| Assay Name/Specification  | Lot # 10113565 |
|---|----------------|
| <b>Endonuclease Activity (Nicking, Buffer)</b><br>A 50 µl reaction in 1X T4 RNA Ligase Reaction Buffer containing 1 µg of supercoiled<br>PhiX174 RF I DNA incubated for 4 hours at 37°C results in <10% conversion to the<br>nicked form as determined by agarose gel electrophoresis.                                  | Pass           |
| <b>Non-Specific DNase Activity (16 hour, Buffer)</b><br>A 50 µl reaction in 1X T4 RNA Ligase Reaction Buffer containing 1 µg of HaeIII<br>digested PhiX174 RF I DNA incubated for 16 hours at 37°C results in a DNA pattern<br>free of detectable nuclease degradation as determined by agarose gel<br>electrophoresis. | Pass           |
| <b>pH (buffers/solutions)</b><br>The pH of 10X T4 RNA Ligase Reaction Buffer is between pH 7.4 and 7.6 at 25°C.   | Pass           |
| <b>RNase Activity (Buffer)</b><br>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           |

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.





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