# New England Biolabs Certificate of Analysis 

| Product Name: | NEBNext® Quick Ligation Reaction Buffer |
| :--- | :--- |
| Catalog Number: | B6058S |
| Concentration: | 5 X Concentrate |
| Packaging Lot Number: | 10152234 |
| Expiration Date: | $10 / 2023$ |
| Storage Temperature: | $-20^{\circ} \mathrm{C}$ |
| Specification Version: | PS-B6058S v3.0 |
| Composition (1X): | Proprietary |


| NEBNext® Quick Ligation Reaction Buffer Component List | Lot Number | Individual QC Result |  |
| :--- | :--- | :--- | :---: |
| NEB Part Number | Component Description | NEBNext® Quick Ligation ${ }^{\text {TM }}$ Reaction Buffer (5X) | 10141375 |
| B6058SVIAL | NENs | Pass |  |

\begin{tabular}{|c|c|}
\hline Assay Name/Specification \& Lot \# 10152234 \\
\hline \begin{tabular}{l}
Phosphatase Activity (pNPP, Buffer) \\
A \(200 \mu \mathrm{l}\) reaction in 1 M Diethanolamine @ pH 9.8 and 0.5 mM MgCl2 containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of \(20 \mu \mathrm{NEBNext®}\) Quick Ligation Reaction Buffer incubated for 4 hours at \(37^{\circ} \mathrm{C}\) yields \(<0.00001\) unit of alkaline phosphatase activity as determined by spectrophotometric analysis. \\
Endonuclease Activity (Nicking, Buffer) \\
A \(50 \mu \mathrm{l}\) reaction in 1X NEBNext® Quick Ligation Reaction Buffer containing \(1 \mu \mathrm{~g}\) of supercoiled PhiX174 DNA incubated for 4 hours at \(37^{\circ} \mathrm{C}\) results in \(<10 \%\) conversion to the nicked form as determined by agarose gel electrophoresis. \\
RNase Activity (Buffer) \\
A \(10 \mu\) reaction in 1X NEBNext® Quick Ligation Reaction Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at \(37^{\circ} \mathrm{C}\). After incubation for 16 hours, \(>90 \%\) of the substrate RNA remains intact as determined by gel electrophoresis. \\
Non-Specific DNase Activity ( 16 hour, Buffer) \\
A \(50 \mu\) reaction in 1X NEBNext® Quick Ligation Reaction Buffer containing \(1 \mu \mathrm{~g}\) of T3 or T7 DNA in addition to a reaction containing Lambda-HindllI DNA incubated for 16 hours at \(37^{\circ} \mathrm{C}\) results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.
\end{tabular} \& Pass
Pass

Pass
Pass <br>
\hline
\end{tabular}

This product has been tested and shown to be in compliance with all specifications.
be INSPIRED
drive DISCOVERY stay GENUINE

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.

## Chustinn Surmunn

Christine Sumner
Production Scientist
12 May 2022


