

## New England Biolabs Certificate of Analysis

**Product Name:** NEBNext<sup>®</sup> Quick Ligation<sup>™</sup> Reaction Buffer (5X)  
**Catalog Number:** B6058S  
**Concentration:** 5 X Concentrate  
**Lot Number:** 10053724  
**Expiration Date:** 04/2021  
**Storage Temperature:** -20°C  
**Specification Version:** PS-B6058S v1.0  
**Composition (1X):** 66 mM Tris-HCl, 10 mM MgCl<sub>2</sub>, 1 mM DTT, 1 mM ATP, 6 % PEG 6000, (pH 7.6 @ 25°C)

NEBNext <sup>®</sup> Quick Ligation <sup>™</sup> Reaction Buffer (5X) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B6058SVIAL	NEBNext <sup>®</sup> Quick Ligation <sup>™</sup> Reaction Buffer (5X)	10041439	Pass

Assay Name/Specification	Lot # 10053724
<b>Endonuclease Activity (Nicking, Buffer)</b> A 50 µl reaction in 1X NEBNext <sup>®</sup> Quick Ligation Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X NEBNext <sup>®</sup> Quick Ligation Reaction Buffer containing 1 µg of T3 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Phosphatase Activity (pNPP, Buffer)</b> A 200 µl reaction in 1M Diethanolamine @ pH 9.8 and 0.5 mM MgCl <sub>2</sub> containing 2.5 mM p-Nitrophenyl Phosphate (pNPP) and a minimum of 20 µl NEBNext <sup>®</sup> Quick Ligation Reaction Buffer incubated for 4 hours at 37°C yields <0.00001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	<b>Pass</b>
<b>RNase Activity (Buffer)</b> A 10 µl reaction in 1X NEBNext <sup>®</sup> Quick Ligation 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.	<b>Pass</b>

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

*Christine Sumner*

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Christine Sumner  
Production Scientist  
16 Aug 2019

*Michael Tonello*

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Michael Tonello  
Packaging Quality Control Inspector  
16 Aug 2019