

## New England Biolabs Certificate of Analysis

Product Name: NEBNext<sup>®</sup> Library Dilution Buffer  
 Catalog Number: B6118S  
 Lot Number: 10035118  
 Expiration Date: 06/2020  
 Storage Temperature: -20°C  
 Specification Version: PS-B6118S v1.0  
 Composition (1X): Proprietary

NEBNext <sup>®</sup> Library Dilution Buffer Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B6118SVIAL	NEBNext <sup>®</sup> Library Dilution Buffer	0081806	Pass

Assay Name/Specification	Lot # 10035118
<p><b>RNase Activity (Buffer)</b>            A 10 µl reaction in 1X NEBNext<sup>®</sup> Library Dilution Buffer containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 16 hours, &gt;90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p><b>Endonuclease Activity (Nicking, Buffer)</b>            A 50 µl reaction in 1X NEBNext<sup>®</sup> Library Dilution Buffer containing 1 µg of supercoiled PhiX174 DNA incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Non-Specific DNase Activity (16 hour, Buffer)</b>            A 50 µl reaction in 1X NEBNext<sup>®</sup> Library Dilution 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.</p>	Pass
<p><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> Library Dilution Buffer incubated for 4 hours at 37°C yields &lt;0.00001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.</p>	Pass

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

*Christine Sumner*

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Christine Sumner  
Production Scientist  
17 Jan 2019

*Josh Hersey*

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Josh Hersey  
Packaging Quality Control Inspector  
17 Jan 2019