

## New England Biolabs Certificate of Analysis

**Product Name:** NEBNext® dsDNA Fragmentase® Reaction Buffer v2  
**Catalog Number:** B0349S  
**Concentration:** 10 X Concentrate  
**Packaging Lot Number:** 10075747  
**Expiration Date:** 09/2021  
**Storage Temperature:** -20°C  
**Specification Version:** PS-B0349S v2.0  
**Composition (1X):** 20 mM Tris-HCl, 15 mM MgCl<sub>2</sub>, 50 mM NaCl, 0.15% Triton®X-100, 0.1 mg/ml BSA, (pH 7.5 @ 25°C)

NEBNext® dsDNA Fragmentase® Reaction Buffer v2 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B0349SVIAL	NEBNext® dsDNA Fragmentase® Reaction Buffer v2	10067141	Pass

Assay Name/Specification	Lot # 10075747
<b>Protease Activity (SDS-PAGE, Buffer)</b> A 30 µl reaction in 1X NEBNext® dsDNA Fragmentase® Reaction Buffer v2 incubated with 24 µg of a standard mixture of proteins for 20 hours at 37°C resulted in no proteolytic activity detected by SDS-PAGE.	Pass
<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® dsDNA Fragmentase® Reaction Buffer v2 incubated for 4 hours at 37°C yields <0.00001 unit of alkaline phosphatase activity as determined by spectrophotometric analysis.	Pass
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X NEBNext® dsDNA Fragmentase® Reaction Buffer v2 containing 1 µg of T3 or T7 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.	Pass
<b>Endonuclease Activity (Nicking, Buffer)</b> A 50 µl reaction in 1X NEBNext® dsDNA Fragmentase® Reaction Buffer v2 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.	Pass

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



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Christine Sumner  
Production Scientist  
26 May 2020



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Michael Tonello  
Packaging Quality Control Inspector  
26 May 2020