

New England Biolabs Certificate of Analysis

Product Name: Nuclease-free Water
Catalog Number: B1500S
Packaging Lot Number: 10184737
Expiration Date: 07/2024
Storage Temperature: 25°C
Specification Version: PS-B1500S/L v2.0

Nuclease-free Water Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B1500SVIAL	Nuclease-free Water	10148582	Pass

Assay Name/Specification	Lot # 10184737
<p>Endonuclease Activity (Nicking, Water) A 50 µl reaction in CutSmart[®] Buffer containing 1 µg of supercoiled PhiX174 RF I DNA with Nuclease-free Water incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>Endotoxin Testing (Endosafe[®]) Each test channel of the cartridge is loaded with 25 µl of Nuclease-free Water, then placed into the Endosafe MCS reader for analysis resulting in a measurement of <0.01 EU/ml.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour, Water) A 50 µl reaction in CutSmart[®] Buffer containing 1 µg of PhiX174-HaeIII DNA with Nuclease-free Water 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>RNase Activity (Extended Digestion, Water) A 10 µl reaction in 1X NEBuffer 4 containing 40 ng of RNA transcript with Nuclease-free Water is incubated at 37°C. After incubation for 16 hours, no detectable degradation of the RNA is observed as determined by gel electrophoresis using fluorescent detection.</p>	Pass
<p>UV-Visible Scan A UV-Visible scan using a spectrophotometer that covers the range of 200nm to 800nm will have no detectable peaks above background.</p>	Pass
<p>qPCR DNA Contamination (E. coli Genomic, Water)</p>	Pass

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Nuclease-free Water is used to make a qPCR master mix and screened across a 96 well plate for the presence of E. coli genomic DNA using 40 cycles of SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Melt curve analysis results in < 5% positive samples above background.	

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.



Christie Vazquez
Production Scientist
20 Apr 2023



Michael Tonello
Packaging Quality Control Inspector
20 Apr 2023