

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Nuclease-free Water
B1500L
10141121
09/2023
25°C
PS-B1500S/L v2.0

Nuclease-free Water Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
B1500SVIAL	Nuclease-free Water	10109003	Pass	

Assay Name/Specification	Lot # 10141121
<b>qPCR DNA Contamination (E. coli Genomic, Water)</b> 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.	Pass
<b>UV-Visable Scan</b> A UV-Visible scan using a spectrophotometer that covers the range of 200nm to 800nm will have no detectable peaks above background.	Pass
<b>RNase Activity (Extended Digestion, Water)</b> 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.	Pass
<b>Endonuclease Activity (Nicking, Water)</b> 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.	Pass
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.	Pass





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Assay Name/Specification	Lot # 10141121
Non-Specific DNase Activity (16 Hour, Water)	Pass
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.	

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.

Michael Dalton Production Scientist 17 Feb 2022

Anna Sorensen Packaging Quality Control Inspector 17 Feb 2022

