

New England Biolabs Certificate of Analysis

Product Name: Nuclease-free Water
Catalog Number: B1500L
Packaging Lot Number: 10221417
Expiration Date: 09/2024
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	10148586	Pass

Assay Name/Specification	Lot # 10221417
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.	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
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.	Pass
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.	Pass
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.	Pass
qPCR DNA Contamination (E. coli Genomic, Water)	Pass

Assay Name/Specification	Lot # 10221417
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
24 Jan 2024



Josh Hersey
Packaging Quality Control Inspector
24 Jan 2024