

New England Biolabs Certificate of Analysis

Product Name: Nuclease-free Water
Catalog Number: B1500L
Packaging Lot Number: 10267666
Expiration Date: 10/2026
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 | 10270154 | Pass |

| Assay Name/Specification | Lot # 10267666 |
|--|----------------|
| 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 |

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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.

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Trinh Nguyen
Production Scientist
23 Dec 2024



Josh Hersey
Packaging Quality Control Inspector
27 Dec 2024