

New England Biolabs Certificate of Analysis

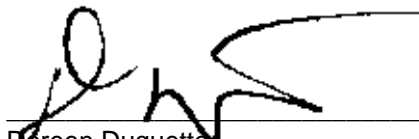
Product Name: NEBuffer™ 2.1
Catalog Number: B7202S
Concentration: 10 X Concentrate
Packaging Lot Number: 10061051
Expiration Date: 09/2022
Storage Temperature: -20°C
Specification Version: PS-B7202S v1.0
Composition (1X): 50 mM NaCl, 10 mM Tris-HCl, 10 mM MgCl₂, 100 µg/ml BSA, (pH 7.9 @ 25°C)

NEBuffer™ 2.1 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B7202SVIAL	NEBuffer™ 2.1	10043907	Pass

Assay Name/Specification	Lot # 10061051
Conductivity (buffers/solutions) The conductivity of 10X NEBuffer 2.1 is between 55 and 62 mS at 25°C.	Pass
Endonuclease Activity (Nicking, Buffer) A 50 µl reaction in 1X NEBuffer 2.1 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
Functional Testing (Restriction Digest, Buffer) A 50 µl reaction in 1X NEBuffer 2.1 containing 1 µg of Lambda DNA and 1 unit of HindIII incubated for 1 hour at 37°C results in complete digestion of the substrate DNA as determined by agarose gel electrophoresis.	Pass
Functional Testing (Restriction Digest, Buffer) A 50 µl reaction in 1X NEBuffer 2.1 containing 1 µg of Lambda DNA and 1 unit of SphI incubated for 1 hour at 37°C results in complete digestion of the substrate DNA as determined by agarose gel electrophoresis.	Pass
Non-Specific DNase Activity (16 hour, Buffer) A 50 µl reaction in 1X NEBuffer 2.1 containing 1 µg of PhiX174-HaeIII 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

Assay Name/Specification	Lot # 10061051
<p>pH (buffers/solutions) The pH of 10X NEBuffer 2.1 is between pH 7.8 and 8.0 at 25°C.</p>	Pass
<p>RNase Activity (Buffer) A 10 µl reaction in 1X NEBuffer 2.1 containing 40 ng of a 300 base single-stranded RNA is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by fluorescent detection.</p>	Pass

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



Doreen Duquette
Production Scientist
13 Sep 2019



Jay Minichiello
Packaging Quality Control Inspector
15 Jan 2020