

New England Biolabs Certificate of Analysis

Product Name: NEBuffer™ 1.1
Catalog Number: B7201S
Concentration: 10 X Concentrate
Packaging Lot Number: 10057224
Expiration Date: 05/2023
Storage Temperature: -20°C
Specification Version: PS-B7201S v1.0
Composition (1X): 10 mM Bis-Tris Propane, 10 mM MgCl₂, 100 µg/ml BSA, (pH 7.0 @ 25°C)

NEBuffer™ 1.1 Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B7201SVIAL	NEBuffer™ 1.1	10065750	Pass

Assay Name/Specification	Lot # 10057224
Endonuclease Activity (Nicking, Buffer) A 50 µl reaction in 1X NEBuffer 1.1 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 1.1 containing 1 µg of Lambda-HindIII DNA and 1 unit of SacI 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 1.1 containing 1 µg of pXba DNA and 1 unit of KpnI 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 1.1 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
pH (buffers/solutions) The pH of 10X NEBuffer 1.1 is between pH 6.9 and 7.1 at 25°C.	Pass

Assay Name/Specification	Lot # 10057224
<p>RNase Activity (Buffer) A 10 µl reaction in 1X NEBuffer 1.1 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
<p>Conductivity (buffers/solutions) The conductivity of 10X NEBuffer 1.1 is between 23 and 26 mS at 25°C.</p>	Pass

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



Michael Dalton
Production Scientist
15 May 2020



Jay Minichiello
Packaging Quality Control Inspector
15 May 2020