

*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

Product Name:	NEBuffer™ 1.1
Catalog Number:	B7201S
Concentration:	10 X Concentrate
Lot Number:	10033676
Expiration Date:	09/2021
Storage Temperature:	-20°C
Specification Version:	PS-B7201S v1.0
Composition (1X):	10 mM Bis-Tris Propane, 10 mM MgCl2, 100 $\mu$ g/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	10021007	Pass	

Assay Name/Specification	Lot # 10033676
Conductivity (buffers/solutions)	Pass
The conductivity of 10X NEBuffer 1.1 is between 23 and 26 mS at 25°C.	
Endonuclease Activity (Nicking, Buffer)	Pass
A 50 $\mu$ l reaction in 1X NEBuffer 1.1 containing 1 $\mu$ g 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.	
determined by agarose ger electrophoresis.	
Functional Testing (Restriction Digest, Buffer)	Pass
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.	
<b>Functional Testing (Restriction Digest, Buffer)</b> A 50 μl reaction in 1X NEBuffer 1.1 containing 1 μg of pXba DNA and 1 unit of Kpnl	Pass
incubated for 1 hour at 37°C results in complete digestion of the substrate DNA as	
determined by agarose gel electrophoresis.	
Non Specific DNace Activity (16 hour Buffer)	Pass
<b>Non-Specific DNase Activity (16 hour, Buffer)</b> A 50 µl reaction in 1X NEBuffer 1.1 containing 1 µg of PhiX174-HaeIII DNA incubated	F 433
for 16 hours at 37°C results in a DNA pattern free of detectable nuclease	
degradation as determined by agarose gel electrophoresis.	





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Assay Name/Specification	Lot # 10033676
pH (buffers/solutions)	Pass
The pH of 10X NEBuffer 1.1 is between pH 6.9 and 7.1 at 25°C.	
RNase Activity (Buffer)	Pass
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.	

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

Tor

Tony Spear-Alfonso Production Scientist 05 Sep 2018

Michae -

Michael Tonello Packaging Quality Control Inspector 03 Jan 2019

