

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: Gel Loading Dye Blue (6X)

Catalog Number: B7021S
Lot Number: 10045647
Expiration Date: 02/2022
Storage Temperature: 25°C

Specification Version: PS-B7021S v2.0

Composition (1X): 2.5% Ficoll®-400, 11 mM EDTA, 3.3 mM Tris-HCl, 0.017% SDS, 0.015%

Bromophenol Blue, (pH 8.0 @ 25°C)

Gel Loading Dye Blue (6X) Component List			
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result
B7021SVIAL	Gel Loading Dye, Blue (6X)	10033148	Pass

Assay Name/Specification	Lot # 10045647
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Gel Loading Dye, Blue (6X) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of digested 1 kb Plus DNA Ladder DNA and a minimum of 10 µl of Gel Loading Dye, Blue (6X) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in CutSmart® Buffer containing 1 μg of a mixture of single and double-stranded [ ³H] E. coli DNA and a minimum of 10 μl of Gel Loading Dye, Blue (6X) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Endonuclease Activity (Nicking) A 50 μl reaction in CutSmart® Buffer containing 1 μg of supercoiled PhiX174 DNA and a minimum of 10 μl of Gel Loading Dye, Blue (6X) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass

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



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**Production Scientist** 15 Mar 2019

Mary Conlon Packaging Quality Control Inspector

06 Jun 2019