

*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:	Gel Loading Dye Blue (6X)
Catalog Number:	B7021S
Packaging Lot Number:	10146857
Expiration Date:	08/2024
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				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
B7021SVIAL	Gel Loading Dye, Blue (6X)	10114157	Pass	

Assay Name/Specification	Lot # 10146857
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 $\mu$ l reaction in CutSmart® Buffer containing 1 $\mu$ g of digested 1 kb Plus DNA Ladder DNA and a minimum of 10 $\mu$ l 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
<b>RNase Activity (Extended Digestion)</b> 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
<b>Endonuclease Activity (Nicking)</b> A 50 $\mu$ I reaction in CutSmart® Buffer containing 1 $\mu$ g of supercoiled PhiX174 DNA and a minimum of 10 $\mu$ I 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
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] 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

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





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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Bu Rear

Ben Penta Production Scientist 11 Apr 2022

Jonla Michae

Michael Tonello Packaging Quality Control Inspector 11 Apr 2022

