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New England Biolabs Certificate of Analysis

Product Name: Blue Protein Loading Dye

Catalog Number: B7703S
Packaging Lot Number: 10205090
Expiration Date: 01/2026
Storage Temperature: -20°C

Specification Version: PS-B7703S v2.0

Composition (1X): 187.5 mM Tris-HCl, 6 % (w/v) SDS, 30 % Glycerol, 0.03 % Bromophenol

Blue, (pH 6.8 @ 25°C)

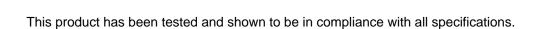
Blue Protein Loading Dye Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
B7705SVIAL	30X Reducing Agent	10177020	Pass	
B7703SVIAL	Blue Protein Loading Dye	10173662	Pass	

Assay Name/Specification	Lot # 10205090
Electrophoretic Pattern The components of the Blue Protein Loading Dye are tested to ensure the banding pattern of an NEB protein ladder on a 10-20% Tris-Glycine gel shows discrete, clearly identifiable bands at each size fragment of the marker when stained with Coomassie Blue at a concentration of 0.1%.	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 Blue Protein Loading Dye incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of 1 kb Plus DNA Ladder DNA and a minimum of 5 µl of Blue Protein Loading Dye incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
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 Blue Protein Loading Dye 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



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Nancy Considine
Production Scientist

06 Mar 2023

Michael Tonello

Packaging Quality Control Inspector

21 Sep 2023



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