

New England Biolabs Certificate of Analysis

Product Name: Gel Loading Dye Orange (6X)
Catalog Number: B7022S
Concentration: 6 X Concentrate
Packaging Lot Number: 10067056
Expiration Date: 08/2022
Storage Temperature: 25°C
Specification Version: PS-B7022S v2.0
Composition (1X): 2.5 % Ficoll® 400, 11 mM EDTA, 3.3 mM Tris-HCl, 0.017 % SDS, 0.15 % Orange G, (pH 8.0 @ 25°C)

Gel Loading Dye Orange (6X) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
B7022SVIAL	Gel Loading Dye, Orange (6X)	10050266	Pass

Assay Name/Specification	Lot # 10067056
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in 1X CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 10 µl of Gel Loading Dye, Orange (6X) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in 1X CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Gel Loading Dye, Orange (6X) 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 digested 1 kb Plus DNA Ladder DNA and a minimum of 10 µl of Gel Loading Dye, Orange (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
RNase Activity (Extended Digestion) A 10 µl reaction in 1X NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µL of Gel Loading Dye, Orange (6X) is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using agarose gel electrophoresis.	Pass

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



Doreen Duquette
Production Scientist
16 Aug 2019



Jay Minichiello
Packaging Quality Control Inspector
13 Mar 2020