

## New England Biolabs Certificate of Analysis

**Product Name:** Gel Loading Dye, Purple (6X), no SDS  
**Catalog Number:** B7025S  
**Concentration:** 6 X Concentrate  
**Packaging Lot Number:** 10069201  
**Expiration Date:** 01/2023  
**Storage Temperature:** 25°C  
**Specification Version:** PS-B7025S v2.0  
**Composition (1X):** 3.3 mM Tris-HCl, 10 mM EDTA, 2.5 % Ficoll® 400, 0.02 % Dye 1, 0.0008 % Dye 2, (pH 8.0 @ 25°C)

| Gel Loading Dye, Purple (6X), no SDS Component List |                                      |            |                      |
|-----------------------------------------------------|--------------------------------------|------------|----------------------|
| NEB Part Number                                     | Component Description                | Lot Number | Individual QC Result |
| B7025SVIAL                                          | Gel Loading Dye, Purple (6X), no SDS | 10064407   | Pass                 |

| Assay Name/Specification                                                                                                                                                                                                                                                                                                                                      | Lot # 10069201 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Endonuclease Activity (Nicking)</b><br>A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X), no SDS 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><br>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, Purple (6X), no SDS incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.                                  | Pass           |
| <b>Non-Specific DNase Activity (16 Hour)</b><br>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, Purple (6X), no SDS 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><br>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, Purple (6X), no SDS 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           |

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



Doreen Duquette  
Production Scientist  
27 Jan 2020



Josh Hersey  
Packaging Quality Control Inspector  
16 Mar 2020