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New England Biolabs
Certificate of Analysis

Product Name:	*Gel Loading Dye, Purple (6X)*
Catalog #:	*B7024S*
Concentration:	*6X Concentrate*
Lot #:	*0151712*
Assay Date:	*12/2017*
Expiration Date:	*12/2020*
Storage Temp:	*25°C*
Composition (1X):	*3.3 mM Tris-HCl, 10 mM EDTA, 2.5 % Ficoll® 400, 0.08 % SDS, 0.02 % Dye 1, 0.0008 % Dye 2, (pH 8.0 @ 25°C)*
Specification Version:	*PS-B7024S v1.0*
Effective Date:	*16 Feb 2018*

Assay Name/Specification (minimum release criteria)	**Lot #0151712**
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, Purple (6X) incubated for 4 hours at 37°C results in <10% conversion to the nicked form 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 [^{3}H] *E. coli* DNA and a minimum of 10 µl of Gel Loading Dye, Purple (6X) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	**Pass**
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in CutSmart® Buffer containing 1 µl of digested 2-Log Ladder DNA and a minimum of 10 µl of Gel Loading Dye, Purple (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 NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Gel Loading Dye, Purple (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**

Authorized by
Derek Robinson
16 Feb 2018

Inspected by
Tony Spear-Alfonso
18 Dec 2017

nqa ISO 9001 Registered Quality Management
nqa ISO 14001 Registered Environmental Management
nqa ISO 13485 Registered Medical Devices