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New England Biolabs
Product Specification

Product Name:	*Gel Loading Dye, Purple (6X), no SDS*
Catalog #:	*B7025S*
Concentration:	*6X Concentrate*
Shelf Life:	*36 months*
Storage Temp:	*25°C*
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)*
Specification Version:	*PS-B7025S v1.0*
Effective Date:	*09 Nov 2017*

Assay Name/Specification (minimum release criteria)
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), no SDS incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.
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), no SDS incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in CutSmart® Buffer containing 1 µg of digested 2-Log 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.
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), 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.

Date 09 Nov 2017

Derek Robinson
Director of Quality Control

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