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New England Biolabs
Certificate of Analysis

Product Name:	*5-Aza-dc Treated Jurkat Genomic DNA*
Catalog #:	*N4003S*
Concentration:	*100 µg/ml*
Unit Definition:	*N/A*
Lot #:	*0031612*
Assay Date:	*12/2016*
Expiration Date:	*12/2018*
Storage Temp:	*-20°C*
Storage Conditions:	*10 mM Tris-HCl , 1 mM EDTA, (pH 7.5 @ 25°C)*
Specification Version:	*PS-N4003S v1.0*
Effective Date:	*11 Apr 2016*

Assay Name/Specification (minimum release criteria)	**Lot #0031612**
A260/A280 Assay - The ratio of UV absorption of 5-Aza-dc Treated Jurkat Genomic DNA at 260 and 280 nm is between 1.80 and 2.0.	**Pass**
DNA Concentration (A260) - The concentration of 5-Aza-dc Treated Jurkat Genomic DNA is between 100 and 110 µg/ml as determined by UV absorption at 260 nm.	**Pass**
Electrophoretic Pattern (Genomic DNA) - The banding pattern of 5-Aza-dc Treated Jurkat Genomic DNA on a 1.2% agarose gel is evaluated against a control lot for relative integrity and intensity as determined by gel electrophoresis using Ethidium Bromide.	**Pass**
Functional Testing (Genomic DNA Demethylation, Bisulfite Sequencing) - 5-Aza-dc Treated Jurkat Genomic DNA was bisulfite converted, amplified by PCR with primers specific to the fully CpG methylated IGS ribosomal DNA region, and sequenced to confirm that >20% of the CpG dinucleotides are demethylated compared to an untreated control.	**Pass**
Non-Specific DNase Activity (Genomic DNA, 16 hour) - A 50 µl reaction in 1X NEBuffer 2 containing 2.5 µg of 5-Aza-dc Treated Jurkat Genomic DNA incubated for 16 hours at 37°C does not produce any further detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Restriction Digest (Genomic DNA) - A 50 µl reaction in NEBuffer 2.1 containing 2.5 µg of 5-Aza-dc Treated Jurkat Genomic DNA and 20 units of HindIII incubated for 1 hour at 37°C produces the expected fragmentation pattern as determined by agarose gel electrophoresis.	**Pass**

Authorized by
Derek Robinson
11 Apr 2016

Inspected by
Vanessa Mathieu-Sheltry
30 Dec 2016

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