

New England Biolabs Product Specification

Product Name: 5-Aza-dc Treated Jurkat Genomic DNA
Catalog #: N4003S
Concentration: 100 µg/ml
Unit Definition: N/A
Shelf Life: 24 months
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)

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.

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.

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.

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.

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.

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.



Date 11 Apr 2016

Derek Robinson
Director of Quality Control

