

Genomic DNA from *Borrelia burgdorferi*, Strain B31 (Clone 5A1)

Catalog No. NR-56541

Product Description:

Genomic DNA was extracted from a preparation of *Borrelia burgdorferi* (*B. burgdorferi*), strain B31 (clone 5A1). The bacterial preparation used for extraction of genomic DNA was produced by culture of BEI Resources NR-13251 lot 70056126. Genomic DNA was extracted using proprietary technology and is provided in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 8).

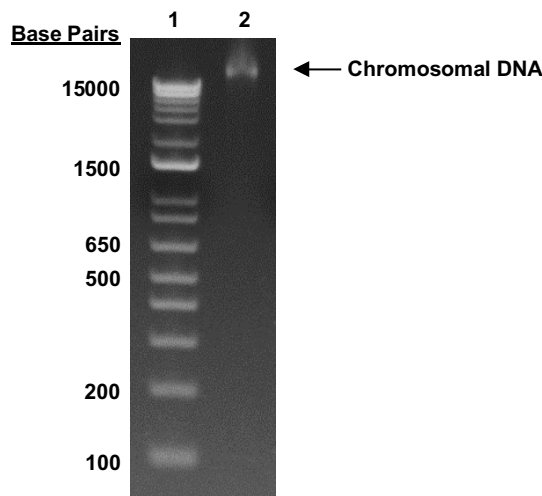
Lot: 70063963

Manufacturing Date: 19MAR2024

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 1440 base pairs)	≥ 99% sequence identity to <i>B. burgdorferi</i> , strain B31 (GenBank: AE000783.1)	99.9% sequence identity to <i>B. burgdorferi</i> , strain B31 (GenBank: AE000783.1)
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	0.7 to 1.5 µg in 25 to 100 µL/vial	1.1 µg in 25 µL/vial (42 µg/mL)
Amount per Vial	0.7 to 1.5 µg	1.1 µg
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 base pair amplicon	~ 1500 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.9
Bacterial Inactivation¹ 10% of total yield inoculated in Revised Barbour-Stoenner-Kelly medium incubated for 21 days at 33°C in a microaerophilic atmosphere	No viable bacteria detected	No viable bacteria detected

¹An extraction procedure was used that has been shown to consistently inactivate 100% of Gram-positive and Gram-negative bacteria.

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: 200 ng of NR-15464

/Sonia Bjorum Brower/

Sonia Bjorum Brower

Lead Technical Writer or designee, ATCC Federal Solutions

01 MAY 2024

ATCC[®], on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected by ATCC[®] to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC[®]'s knowledge.

ATCC[®] is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

