b|e|i RESOURCES
SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-49654

Genomic DNA from *Mycobacterium africanum*, Strain NLA000017902

Catalog No. NR-49654

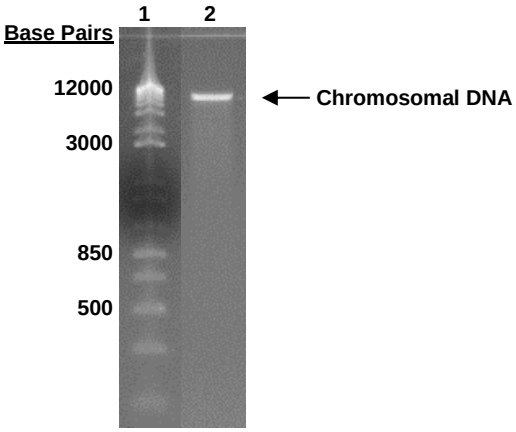
Product Description: Genomic DNA was extracted from a preparation of *Mycobacterium africanum (M. africanum)*, strain NLA000017902. *M. africanum*, strain NLA000017902 was isolated in October 1993 from the pus of a human patient and was deposited to BEI Resources as an *M. africanum* West African type II strain.

Lot[1,2]: 63954390 **Manufacturing Date: 31MAR2016**

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of 16S ribosomal RNA gene (~ 750 base pairs)	≥ 99% sequence identity to *M. africanum* type strain (GenBank: AF480605.1)	100% sequence identity to *M. africanum* type strain (GenBank: AF480605.1)[3]
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	0.2 µg in 66 µL per vial (2.7 µg/mL)
Amount per vial	0.7 to 1.5 µg	0.2 µg[4]
Functional Activity by PCR Amplification 16S ribosomal RNA gene	~ 1500 base pair amplicon	~ 1500 base pair amplicon
OD_{260}/OD_{280} Ratio	1.7 to 2.1	2.0
Bacterial Inactivation 10% of total yield plated on agar for 30 days[5,6]	No viable bacteria detected	No viable bacteria detected

[1]The bacterial preparation used for extraction of genomic DNA was produced from the deposited material. Genomic DNA was extracted using proprietary technology.
[2]NR-49654 lot 63954390 was vialed in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH ~ 8.0).
[3]Also consistent with other *Mycobacterium* species
[4]The amount of genomic DNA in the vial falls below the current specifications, but does not negatively impact the final product.
[5]30 days at 37°C in an aerobic atmosphere with 5% CO_2 on Middlebrook 7H10 agar with OADC enrichment.
[6]An 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: 54 ng of NR-49654

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Program Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected 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.

Support Provided by NIAID

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