

Genomic DNA from *Trypanosoma cruzi*, Strain Brazil

Catalog No. NR-55374

Product Description:

Genomic DNA was extracted from a preparation of *Trypanosoma cruzi* (*T. cruzi*), strain Brazil, which was isolated from a human patient in Brazil. NR-55374 lot 70043507 was extracted from a preparation of BEI Resources NR-53932 lot 70042682 using proprietary technology and vialled in 10 mM Tris-HCl, 1 mM EDTA, pH 7.5.

Lot: 70043507

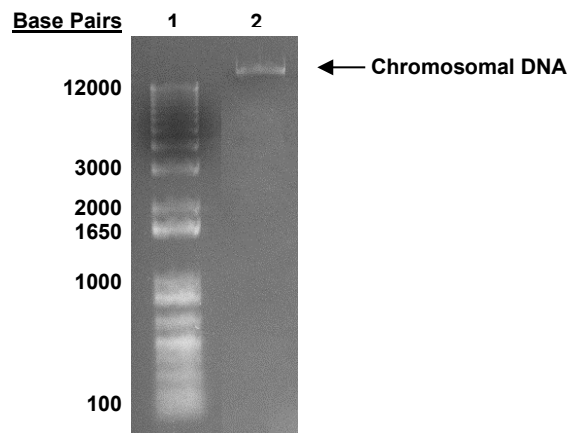
Manufacturing Date: 26MAR2021

TEST	SPECIFICATIONS	RESULTS
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	0.2 to 3.5 µg in 20 to 200 µL per vial	3.2 µg in 25 µL per vial (129 µg per mL)
Amount per Vial	0.2 to 3.5 µg	3.2 µg
Genotypic Analysis Sequencing of putative C-5 sterol desaturase gene (<i>TcSC5D</i>) (~ 740 bases)	≥ 99% sequence identity to <i>T. cruzi</i> Discrete Typing Unit (DTU) <i>T. cruzi</i> I (Tcl) (GenBank: JN050567.1)	99.2% sequence identity to <i>T. cruzi</i> DTU Tcl (GenBank: JN050567.1) ¹
Functional Activity by PCR Amplification <i>TcSC5D</i> gene ²	~ 800 base pair amplicon	~ 800 base pair amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	1.8
Protozoan Inactivation 10% of total yield inoculated in Liver Infusion Tryptose (LIT) medium supplemented with 10% heat-inactivated fetal bovine serum and incubated for 14 days at 25°C in an aerobic atmosphere	No viable organisms detected	No viable organisms detected

¹The descriptive concept of "Discrete Typing Unit" (DTU) designates a set of stocks that are genetically more similar to each other than to any other stock, and are identifiable by common genetic, molecular or immunological markers named "tags" [Tibayrenc, M. "Genetic Epidemiology of Parasitic Protozoa and Other Infectious Agents: The Need for an Integrated Approach." *Int. J. Parasitol.* 28 (1998): 85-104. PubMed: 9504337.]

²PCR was performed as described in Cosentino, R. O. and F. Agüero. "A Simple Strain Typing Assay for *Trypanosoma cruzi*: Discrimination of Major Evolutionary Lineages from a Single Amplification Product." *PLoS Negl. Trop. Dis.* 6 (2012): e1777. PubMed: 22860154.

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: ~ 200 ng of NR-55374

/Heather Couch/

Heather Couch

15 JUL 2021

Program Manager or designee, ATCC Federal Solutions

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