b|e|i RESOURCES
SUPPORTING INFECTIOUS DISEASE RESEARCH

Certificate of Analysis for NR-50238

Genomic DNA from *Trypanosoma cruzi*, Strain G

Catalog No. NR-50238

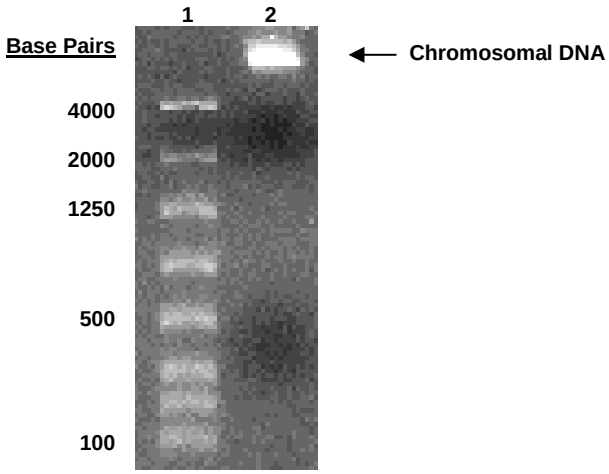
Product Description: Genomic DNA was isolated from *Trypanosoma cruzi (T. cruzi*), strain G, an isolate obtained from an opossum (family *Didelphidae*) in Amazonas, Brazil.

Lot[1]: 64104305 **Manufacturing Date: 01MAR2016**

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of putative *T. cruzi* lathosterol oxidase gene (*SC5D*) (~ 750 bases)	≥ 99% sequence identity to *T. cruzi,* Discrete Typing Unit (DTU) I strains	99.7% sequence identity to *T. cruzi* DTU I strains[2]
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	1 to 3 µg in 25 to 100 µL per vial	2.7 µg in 40 µL per vial (68 µg/mL)
Functional Activity by PCR Amplification *T. cruzi SC5D*[3]	~ 800 base pair amplicon	~ 800 base pair amplicon
OD_{260}/OD_{280} Ratio	1.6 to 2.1	1.9
Protozoan Inactivation 9.7% of total yield[4]	No viable organisms detected	No viable organisms detected

[1]The protozoan preparation used for extraction of genomic DNA was produced by culture of *T. cruzi*, strain G (available as BEI Resources NR-49382). Genomic DNA was extracted using proprietary technology.
[2]The 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.
[3]PCR 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.
[4]Incubated in LIT medium (ATCC® Medium 1029, adjusted to contain 10% heat-inactivated fetal bovine serum) for 14 days at 25°C in an aerobic atmosphere.

Figure 1: Agarose Gel Electrophoresis



Lane 1: Lonza FlashGel™ DNA Marker
Lane 2: ~ 200 ng of NR-50238

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Date: 07 FEB 2016 **Signature:** 

BEI Resources Authentication

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.

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