

Genomic DNA from *Trypanosoma brucei* subsp. *gambiense*, Strain STIB 386 (*in vitro*)

Catalog No. NR-51624

Product Description:

Genomic DNA was extracted from *Trypanosoma brucei* (*T. brucei*) subsp. *gambiense*, strain STIB 386 (*in vitro*) was harvested from the blood of infected BALB/c mice and adapted to cell culture by BEI Resources. The parent strain STIB 386 (BEI Resources NR-36198) was derived from strain TH 114/78E (020), which was isolated in 1978 from a male patient in Koudougou, Ivory Coast, West Africa. NR-51624 was extracted from BEI Resources NR-44389 lot 70022602 using proprietary technology. NR-51624 lot 70023641 is provided in 10 mM Tris-HCl, 1 mM EDTA, pH 7.5.

Lot: 70023641

Manufacturing Date: 05FEB2019

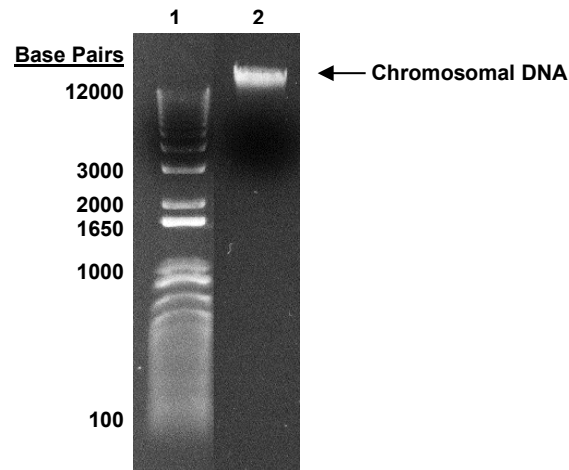
TEST	SPECIFICATIONS	RESULTS
Agarose Gel Electrophoresis	High molecular weight chromosomal DNA	High molecular weight chromosomal DNA (Figure 1)
Concentration by PicoGreen® Measurement	0.2 to 3.5 µg in 20 to 200 µL per vial	3 µg in 114 µL per vial (26 µg/mL)
Amount per Vial	0.2 to 3.5 µg	3 µg
Genotypic Analysis Sequencing of internal transcribed spacer (ITS) 1 (1270 base pairs)	≥ 98% sequence identity to <i>T. brucei</i> subsp. <i>gambiense</i> , strain DAL1972 (GenBank: AF306774.1)	98% sequence identity to <i>T. brucei</i> subsp. <i>gambiense</i> , strain DAL1972 (GenBank: AF306774.1) ¹
Functional Activity by PCR Amplification ITS 1, 5.8S ribosomal RNA gene, ITS 2 ² Serum resistance-associated (SRA) gene ³	~ 1300 base pair amplicon No amplicon	~ 1300 base pair amplicon No amplicon
OD₂₆₀/OD₂₈₀ Ratio	1.7 to 2.1	2
Protozoan Inactivation 10% of total yield inoculated in SDM-79 medium (Life Technologies, custom order part number ME090164 P1) supplemented with 10% heat-inactivated fetal bovine serum and incubated for 14 days at 27°C in an aerobic atmosphere	No viable organisms detected	No viable organisms detected

¹Also consistent with *T. evansi* and/or *T. equiperdum* which are putative subspecies of *T. brucei* (Lun, Z. R., et al. "Trypanosoma brucei: Two Steps to Spread Out from Africa." *Trends Parasitol.* 26 (2010): 424-427. PubMed: 20561822.)

²PCR was performed as described in Agbo, E. C., et al. "Measure of Molecular Diversity within the *Trypanosoma brucei* Subspecies *Trypanosoma brucei brucei* and *Trypanosoma brucei gambiense* as Revealed by Genotypic Characterization." *Exp Parasitol.* 99 (2001): 123-131. PubMed: 11846522.

³*T. brucei* subsp. *gambiense* is differentiated from *T. brucei* subsp. *rhodesiense* by lack of the SRA gene (Radwanska, M., et al. "The Serum Resistance-Associated Gene as a Diagnostic Tool for the Detection of *Trypanosoma brucei rhodesiense*." *Am. J. Trop. Med. Hyg.* 67 (2002): 684-690. PubMed: 12518862.)

Figure 1: Agarose Gel Electrophoresis



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
 Lane 2: ~ 200 ng of NR-51624

/Heather Couch/
 Heather Couch

31 MAY 2022

Program Manager or designee, ATCC Federal Solutions

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