

Trypanosoma cruzi, Strain Dm28c

Catalog No. NR-49380

Product Description:

Trypanosoma cruzi (*T. cruzi*), strain Dm28c is a clone derived from *T. cruzi*, strain Dm28. Strain Dm28 was isolated in 1984 from an opossum (*Didelphis marsupialis*) in Carabobo, Venezuela. Strain Dm28c was deposited to BEI Resources as the epimastigote stage of the parasite's life cycle. NR-49380 was produced by cultivation of BEI Resources seed lot 64004704 in Liver Infusion Tryptose (LIT) medium supplemented with 10% heat-inactivated fetal bovine serum (HIFBS) for 3 days at 25°C in an aerobic atmosphere with the cap screwed on tightly.

Lot: 70057111

Manufacturing Date: 12DEC2022

TEST	SPECIFICATIONS	RESULTS
Cell Morphology¹ 4 days at 37°C in an aerobic atmosphere in LIT medium supplemented with 10% HIFBS	Report results	Rosettes visible
Genotypic Analysis² Sequencing of putative C-5 sterol desaturase gene (<i>TcSC5D</i>) (730 base pairs) Sequencing of putative <i>TcSC5D</i> (~ 780 base pairs)	≥ 99% sequence identity to <i>T. cruzi</i> Discrete Typing Unit (DTU) <i>T. cruzi</i> I (Tcl) (GenBank: JN050567.1) ≥ 99% sequence identity to <i>T. cruzi</i> , Strain Dm28c (GenBank: AYLPO1000049.1)	99.3% sequence identity to <i>T. cruzi</i> DTU Tcl (GenBank: JN050567.1) ³ 99.2% sequence identity to <i>T. cruzi</i> , Strain Dm28c (GenBank: AYLPO1000049.1)
Viable Cell Count by Hemacytometry²	> 1 × 10 ⁶ cells per mL	1 × 10 ⁸ cells per mL
Viability¹ 4 days at 37°C in an aerobic atmosphere in LIT medium supplemented with 10% HIFBS	Growth	Growth
Sterility (21-day incubation)¹ Harpo's HTYE broth, 37°C and 26°C, aerobic ⁴ Trypticase soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic DMEM with 10% FBS, 37°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic	No growth No growth No growth No growth No growth No growth No growth	No growth No growth No growth No growth No growth No growth No growth

¹Testing completed on vial, post-freeze material.

²Testing completed on bulk material prior to vialing and freezing.

³Cosentino, 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.

⁴Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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08 AUG 2023

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