

***Trypanosoma brucei* subsp. *brucei*, Strain 427 1339 Cas9 TetR T7RNAP (bloodstream form)**

Catalog No. NR-56793

Product Description:

Trypanosoma brucei (*T. brucei*) subsp. *brucei*, strain 427 1339 Cas9 TetR T7RNAP (bloodstream form) was deposited to BEI Resources as a bloodstream form, transgenic cell line expressing Cas9 nuclease, T7 RNA polymerase (T7RNAP) and tetracycline repressor (TetR) genes on plasmid pJ1339. Strain 427 1339 Cas9 TetR T7RNAP (bloodstream form) was derived from strain Lister 427, a virulent lab strain that was isolated in 1960 from a sheep in Uganda and transferred to the Lister Institute in London in 1961. NR-56793 was produced by cultivation of the deposited material in modified HMI-9 medium supplemented with 10% heat-inactivated fetal bovine serum (HIFBS) for 4 days at 37°C in an aerobic atmosphere with 5% CO₂ to produce this lot.

Lot: 70056027

Manufacturing Date: 18OCT2022

TEST	SPECIFICATIONS	RESULTS
Cell Morphology¹ 2 days at 37°C in an aerobic atmosphere with 5% CO ₂ in modified HMI-9 medium supplemented with 10% HIFBS	Report results	Elongated, motile and refractive
Genotypic Analysis² Sequencing of 18S ribosomal RNA gene (~ 870 base pairs)	≥ 99% sequence identity to <i>T. brucei</i> , strain Lister 427 (GenBank: UFQF01000036.1)	99.9% sequence identity to <i>T. brucei</i> , strain Lister 427 (GenBank: UFQF01000036.1) ³
Viable Cell Count by Hemacytometry¹	> 10 ⁶ cells per mL	1.7 × 10 ⁷ cells per mL
Viability¹ 2 days at 37°C in an aerobic atmosphere in modified HMI-9 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.

³Also 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.)

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

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