

***Leishmania major*, Strain LV39 Clone 5 (+*luc*)**

Catalog No. NR-50181

Product Description: *Leishmania major* (*L. major*), strain LV39c5 (+*luc*) is a transgenic clone derived from strain LV39 (MRHO/SU/59/P), which was originally isolated in 1959 from a gerbil in southern Russia.

Lot¹: 64233613

Manufacturing Date: 06MAY2016

TEST	SPECIFICATIONS	RESULTS
Cellular Morphology	Report results	Elongated, refractile, motile
Genotyping Sequencing of internal transcribed spacer (ITS) 1, 5.8S ribosomal RNA gene, ITS 2 (~ 1120 base pairs)	≥ 99% sequence identity to <i>L. major</i> , strain LV39c5 (GenBank: AODR01000399.1)	100% sequence identity to <i>L. major</i> , strain LV39c5 (GenBank: AODR01000399.1)
Presence of Luciferase Gene by PCR Amplification	~ 1600 base pair amplicon	~ 1600 base pair amplicon
Functional Activity of Luciferase Gene²	Positive	Positive
Viable Cell Count by Hemacytometry (pre-freeze)	> 10 ⁶ cells/mL	3.4 x 10 ⁸ cells/mL
Viability (post-freeze)³	Growth	Growth
Sterility (21-day incubation) Harpo's HTYE broth ⁴ , 37°C and 26°C, aerobic 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

¹NR-50181 was produced by cultivation of the deposited material in Modified M199 medium supplemented with 10% heat-inactivated fetal bovine serum and 10 µg/mL hemin for 4 days at 25°C in an aerobic atmosphere to produce this lot. Note: Culture color changes from bright red to orange during growth of this organism.

²Luciferase activity was determined using the Promega Luciferase Assay System (Catalog No. E1500). Parasites were lysed and incubated with luciferase assay reagent. Light was measured using a spectrophotometer with a wavelength of 450 nm (Roy, G., et al. "Episomal and Stable Expression of the Luciferase Reporter Gene for Quantifying *Leishmania* spp. Infections in Macrophages and in Animal Models." *Mol. Biochem. Parasitol.* 110 (2000): 195-206. PubMed: 11071276.).

³Viable cells were observed after 1 day in Modified M199 medium supplemented with 10% heat-inactivated fetal bovine serum and 10 µg/mL hemin at 25°C in an aerobic atmosphere.

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

Date: 08 DEC 2016

Signature:



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