

Balamuthia mandrillaris, Strain CDC:V619

Catalog No. NR-46458

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Product Description: *Balamuthia mandrillaris* (*B. mandrillaris*), strain CDC:V619 was isolated in 2010 from the cerebrospinal fluid of a 27-year-old male patient with granulomatous amebic encephalitis following a kidney transplant in Mississippi, USA.

Lot¹: 70005223

Manufacturing Date: 28APR2017

TEST	SPECIFICATIONS	RESULTS
Cellular Morphology²	Report results	Trophozoites and cysts present
Genotyping³ Sequencing of 18S ribosomal RNA (rRNA) gene (~ 1970 base pairs)	≥ 99% sequence identity to <i>B. mandrillaris</i> type strain (GenBank: LFUI01000381.1)	99.4% sequence identity to <i>B. mandrillaris</i> type strain (GenBank: LFUI01000381.1)
Functional Activity by PCR Amplification³ 18S rRNA gene	~ 2200 base pair amplicon	~ 2200 base pair amplicon
Viable Cell Count by Hemocytometry^{3,4}	> 10 ⁵ cells per mL	2.5 x 10 ⁶ cells per mL
Viability^{2,5}	Viable parasites	Viable parasites
Sterility (21-day incubation)² Harpo's HTYE broth ⁶ , 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 and 26°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
Mycoplasma Contamination³ DNA detection by PCR	None detected	None detected

¹NR-46458 was produced by cultivation of the deposited material in Vero cells (ATCC® CCL-81™) with Eagle's Minimum Essential Medium (EMEM; ATCC® 30-2003™) supplemented with 10% heat-inactivated fetal bovine serum (HIFBS). The culture was propagated for 7 days at 37°C in an aerobic atmosphere with 5% CO₂ until lysis of the host cell monolayer was reached.

²Testing completed on vial, post-freeze material.

³Testing completed on bulk material prior to vialing and freezing.

⁴Only viable trophozoite forms of the parasite were counted.

⁵Viable cells and signs of infection were observed after 6 days at 37°C in an aerobic atmosphere with 5% CO₂ in Vero cells with EMEM (ATCC® 30-2003™) adjusted to contain 10% HIFBS.

⁶Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

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