

Powassan Virus, LB

Catalog No. NR-51181

Product Description:

Powassan virus (POWV), LB was isolated from the brain of a child who died of encephalitis in September 1958 in Ontario, Canada. NR-51181 was produced by infecting *Cercopithecus aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) with BEI Resources seed lot 70015197 and incubating in Eagle's Minimum Essential Medium (ATCC® 30-2003™) supplemented with 2% fetal bovine serum (ATCC® 30-2020™) for 10 days at 37°C with 5% CO₂ to produce this lot.

Passage History:

SM8V1/V3 (Prior to deposit at BEI Resources/BEI Resources); SM = Suckling mice; V = Vero cells

Lot: 70066990

Manufacturing Date: 28OCT2024

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero Cells	Cell rounding and detachment	Cell rounding and detachment
Next-Generation Sequencing (NGS) of Complete Genome	≥ 98% sequence identity with POWV, LB (GenBank: L06436.1)	99.9% sequence identity with POWV, LB (GenBank: L06436.1)
Titer by TCID ₅₀ Assay in Vero Cells by Cytopathic Effect ¹ (10 days at 37°C with 5% CO ₂)	Report results	1.6 × 10 ⁷ TCID ₅₀ /mL
Sterility (21-day incubation) Harpo's HTYE broth, 37°C and 26°C, aerobic ² Trypticase Soy broth, 37°C and 26°C, aerobic Sabouraud broth, 37°C and 26°C, aerobic Sheep blood agar, 37°C, aerobic Sheep blood agar, 37°C, anaerobic Thioglycollate broth, 37°C, anaerobic DMEM with 10% FBS, 37°C, aerobic	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 Contamination Agar and broth culture (14-day incubation at 37°C) DNA detection by PCR of extracted Test Article nucleic acid	None detected None detected	None detected None detected

¹The Tissue Culture Infectious Dose 50% (TCID₅₀) endpoint is the 50% infectious endpoint in cell culture. The TCID₅₀ is the dilution of virus that under the conditions of the assay can be expected to infect 50% of the culture vessels inoculated, just as a Lethal Dose 50% (LD₅₀) is expected to kill half of the animals exposed. A reciprocal of the dilution required to yield the TCID₅₀ provides a measure of the titer (or infectivity) of a virus preparation.

²Atlas, Ronald M. *Handbook of Microbiological Media*. 3rd ed. Ed. Lawrence C. Parks. Boca Raton: CRC Press, 2004, p. 798.

/Sonia Bjorum Brower/

Sonia Bjorum Brower

26 MAR 2025

Technical Manager or designee, ATCC Federal Solutions

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

ATCC® is a trademark of the American Type Culture Collection.

You are authorized to use this product for research use only. It is not intended for human use.

