SUPPORTING INFECTIOUS DISEASE RESEARCH

La Crosse Virus, R97841d

Catalog No. NR-51644

Product Description:

La Crosse virus (LACV), R97841d was isolated from brain of a 6-year-old male human child in Tennessee, USA in July 2012. NR-51644 lot 70029001 was produced by infecting *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC[®] CRL-1586[™]) and incubating in Dulbecco's Modified Eagle's Medium (DMEM; ATCC[®] 30-2002) supplemented with 2% fetal bovine serum (ATCC[®] 30-2020) for 4 days at 37°C with 5% CO₂.

Passage History:

V(1)/VE6(2) (Prior to deposit at BEI Resources/BEI Resources); V = Vero cells; VE6 = Vero E6 cells

Lot: 70029001

Manufacturing Date: 28JAN2020

TEST	SPECIFICATIONS	RESULTS
Identification by Infectivity in Vero E6 Cells	Cell rounding and detachment	Cell rounding and detachment
Sequencing of Species-Specific Region (~ 920 nucleotides)	≥ 98% identity with LACV	≥ 98% identity with LACV ¹
Titer by TCID ₅₀ Assay in Vero E6 Cells by Cytopathic Effect ² (5 days at 37°C with 5% CO ₂)	Report results	1.6 × 10 ⁸ TCID ₅₀ per mL
Amplification of LACV Sequence by RT-PCR	~ 990 base pair amplicon	~ 990 base pair amplicon
Sterility (21-day incubation)		
Harpo's HTYE broth, 37°C and 26°C, aerobic ³	No growth	No growth
Trypticase Soy broth, 37°C and 26°C, aerobic	No growth	No growth
Sabouraud broth, 37°C and 26°C, aerobic	No growth	No growth
Sheep blood agar, 37°C, aerobic	No growth	No growth
Sheep blood agar, 37°C, anaerobic	No growth	No growth
Thioglycollate broth, 37°C, anaerobic	No growth	No growth
DMEM with 10% FBS, 37°C, aerobic	No growth	No growth
Mycoplasma Contamination		
Agar and broth culture (14-day incubation at 37°C)	None detected	None detected
DNA detection by PCR of extracted Test Article nucleic acid	None detected	None detected

¹Sequence information for LACV, R97841d is not available in the NCBI database; nucleotide sequence obtained for NR-51644 lot 70029001 matched ≥ 98% to LACV M glycoprotein sequences and is 100% identical to the closely related LACV segment M glycoprotein gene, complete cds (GenBank: KP271105.1).

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

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