

La Crosse Virus, R97841d

Catalog No. NR-51644

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Peribunyaviridae*, *Orthobunyavirus*

Species: La Crosse virus

Group: California Serogroup (CSG)

Strain/Isolate: R97841d

Original Source: La Crosse virus (LACV), R97841d was isolated from brain of a 6-year-old male human child in Tennessee, USA in July 2012 and contributed to Arbovirus Reference Collection (ARC) by Jason Velez at Arboviral Disease Branch (ADB) Diagnostics and Reference Activity (DRA) from Centers for Disease Control and Prevention, USA.¹

LACV is a tri-segmented negative sense RNA virus, with a genome consisting of L, M and S segments.² LACV belongs to the California serogroup (CSG), a closely related group of orthobunyaviruses in the family *Peribunyavirus*. LACV is the most pathogenic member of the CSG, and the second most common after West Nile virus.³ LACV is a leading cause of encephalitis, especially among children, in the Midwest and Appalachian areas of the US, although the range is expanding in North America.

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with LACV, R97841d.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

NR-51644 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Host: *Cercopithecus aethiops* kidney epithelial cells (Vero E6; ATCC® CRL-1586™)

Growth Medium: Dulbecco's Modified Eagle's Medium modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate, and 1500 mg/L sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 80% to 90% confluent

Incubation: 3 to 5 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and sloughing

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: La Crosse Virus, R97841d, NR-51644."

Biosafety Level: 2

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

1. Russell, B. J., Personal Communication.
2. Evans, A. B. and K. E. Peterson. "Throw Out the Map: Neuropathogenesis of the Globally Expanding California

- Serogroup of Orthobunyaviruses." Viruses 11 (2019): 794. PubMed: 31470541.
3. Harding, S., et al. "La Crosse Virus: A Scoping Review of the Global Evidence." Epidemiol. And Infect. 147 (2018): 1-13. PubMed: 30516125.

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