

La Crosse Virus

Catalog No. NR-540

(Derived from ATCC® VR-744™)

For research use only. Not for human use.

Contributor:

ATCC®

Product Description:

Virus Classification: *Bunyaviridae*, *Orthobunyavirus*,
California encephalitis virus

Agent: La Crosse virus

Original Source:¹ Isolated from post-mortem brain tissue of a 4-year-old child that died of meningoencephalitis in La Crosse, Wisconsin, 1960

Comments: La Crosse virus was deposited at ATCC® in 1973 by Robert E. Shope, M.D., Director, Yale Arbovirus Research Unit, Yale University School of Medicine, New Haven, Connecticut. The complete nucleotide sequences of the large (L; GenBank: AF528165; U12396),^{2,3} medium (M; GenBank: AF528166),^{2,4,5} and small (S; GenBank: AF528167)^{2,6} RNA segments of La Crosse virus have been determined.

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from African green monkey kidney (Vero) cells infected with La Crosse virus.

Packaging/Storage:

NR-540 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen on dry ice 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: Vero cells (ATCC® CCL-81™)

Growth Medium: Eagle's Minimum Essential Medium supplemented with 2% fetal bovine serum, or equivalent (lot-specific details are on the Certificate of Analysis)

Infection: Cells should be 80 to 90% confluent (not 100% confluent)

Incubation: 1 to 3 days at 37°C and 5% CO₂

Cytopathic Effect: Cell rounding and detachment

Citation:

Acknowledgment for publications should read "The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: La Crosse Virus, NR-540."

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. 4th ed. Washington, DC: U.S. Government Printing Office, 1999. HHS Publication No. (CDC) 93-8395. This text is available online at www.cdc.gov/od/ohs/biosfty/bmb14/bmb14toc.htm.

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References:

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5. Jacoby, D. R., et al. "Expression of the La Crosse M Segment Proteins in a Recombinant Vaccinia Expression System Mediates pH-Dependent Cellular Fusion." Virology 193 (1993): 993–996. PubMed: 8460503.
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8. Borucki, M. K., et al. "La Crosse Virus: Replication in Vertebrate and Invertebrate Hosts." Microbes Infect. 4 (2002): 341–350. PubMed: 11909745.
9. Borucki, M. K., B. J. Kempf, C. D. Blair, and B. J. Beaty. "The Effect of Mosquito Passage on the La Crosse Virus Genotype." J. Gen. Virol. 82 (2001): 2919–2926. PubMed: 11714967.

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