

**Venezuelan Equine Encephalitis Virus, MX09-M50**

**Catalog No. NR-21719**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Togaviridae, Alphavirus*

Species: Venezuelan equine encephalitis virus

Strain: MX09-M50

Original Source: Venezuelan equine encephalitis virus (VEEV), MX09-M50 was isolated in September, 2009 from a mosquito (*Mansonia titillans*) in Minatitlan, Veracruz State, Mexico. The virus was passaged in Vero African green monkey kidney cells.<sup>1,2</sup>

Comments: VEEV have been classified into six major antigenic subtypes, and additional variants are described within subtypes I and III.<sup>3</sup> VEEV, MX09-M50 is a subtype IE virus.<sup>1-3</sup>

**Material Provided:**

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) infected with VEEV, MX09-M50.

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

**Packaging/Storage:**

NR-21719 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: Vero cells (ATCC® CCL-81™)

Growth Medium: Dulbecco's Modified Eagle's Medium modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate, and 1.5 g/L sodium bicarbonate, supplemented with 2% fetal bovine serum

Infection: Cells should be 90% to 100% confluent

Incubation: 2 to 6 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: Refractile rounding and sloughing

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Venezuelan Equine Encephalitis Virus, MX09-M50, NR-21719."

**Biosafety Level: 3**

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](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Weaver, S. C., Personal Communication.
2. Adams, A. P., et al. "Venezuelan Equine Encephalitis Virus Activity in the Gulf Coast Region of Mexico, 2003-

- 2010." [PLoS Negl. Trop. Dis.](#) 6 (2012): e1875. PubMed: 23133685.
3. Young N. A. and K. M. Johnson. "Antigenic Variants of Venezuelan Equine Encephalitis Virus: Their Geographic Distribution and Epidemiologic Significance." [Am. J. Epidemiol.](#) 89 (1969): 286–307. PubMed: 5773424.

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