

## Encephalomyocarditis Virus, MM

Catalog No. NR-19846

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

### Contributor:

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### Manufacturer:

BEI Resources

### Product Description:

Virus Classification: *Picornaviridae*, *Cardiovirus*

Species: Encephalomyocarditis virus (EMCV)

Strain / Variant: MM (also referred to as MM virus)<sup>1</sup>

Comments: This isolate was deposited to the ATCC<sup>®</sup> after six passages in weanling mice and three passages in suckling mice. A seed stock was produced by a single passage in hamster [*Mesocricetus auratus* (*M. auratus*)] kidney BHK-21 cells (ATCC<sup>®</sup> CCL-10<sup>™</sup>).

Encephalomyocarditis virus is an important zoonotic virus,<sup>2</sup> but has also been implicated in human illness.<sup>3</sup>

### Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *M. auratus* BHK-21 kidney cells (ATCC<sup>®</sup> CCL-10<sup>™</sup>) infected with EMCV, MM.

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

### Packaging/Storage:

NR-19846 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -70°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: BHK-21 cells (ATCC<sup>®</sup> CCL-10<sup>™</sup>)

Growth Medium: Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine and 1 mM sodium pyruvate supplemented with 1% fetal bovine serum, or equivalent

Infection: Cells should be 80% to 95% confluent; thaw virus rapidly in a 37°C water bath; adsorb diluted virus to cells for one hour at 37°C.

Incubation: 1 to 2 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: Encephalomyocarditis Virus, MM, NR-19846."

### 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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

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### References:

1. Pindak, F.F. and J.P. Schmidt. "Propagation of MM Virus in Continuous Cell Lines." Applied Microbiol. 17 (1969): 815-818. PubMed: 4307881.

2. Helwig, F.C. and Schmidt, C.H. "A Filter-Passing Agent Producing Interstitial Myocarditis in Anthropoid Apes and Small Animals." Science 102 (1945): 31-33. PubMed: 17787415.
3. Oberste, M.S., et al. "Human Febrile Illness Caused by Encephalomyocarditis Virus Infection, Peru." Emerg. Infect. Dis. 15(4) (2009): 640-646. PubMed: 19331761.

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