Product Information Sheet for NR-46441

Purified Encephalomyocarditis Virus, MM

Catalog No. NR-46441

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)[1]
Comments: EMCV, MM was deposited to the ATCC® 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*) kidney BHK-21 cells (ATCC® CCL-10™).

NR-46441 was prepared by inoculation of BHK-21 cells with EMCV, MM (BEI Resources, NR-19846). The virus was purified from clarified supernatant by Iodixanol density gradient centrifugation (OptiPrep™, Axis-Shield).

Encephalomyocarditis virus is an important zoonotic virus,[2] but has also been implicated in human illness.[3,4]

Material Provided:
Each vial contains approximately 0.4 mL of purified virus in Dulbecco's phosphate buffered saline (DPBS).

Packaging/Storage:
NR-46441 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® CCL-10™)
Growth Medium: Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, nonessential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate, and 1500 mg/L sodium bicarbonate, 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: 2 to 7 days at 37°C and 5% CO_2
Cytopathic Effect: Refractile rounding and sloughing

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Purified Encephalomyocarditis Virus, MM, NR-46441."

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

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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 (2009): 640-646. PubMed: 19331761.
4. Carocci, M. and Bakkali-Kassimi, L. "The Encephalomyocarditis Virus." Virulence. 3 (2012): 351-367. PubMed: 23990575.

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