

Chikungunya Virus, K 0146-95

Catalog No. NR-49903

For research use only. Not for human use.

Contributor:

World Reference Center for Emerging Viruses and Arboviruses, University of Texas Medical Branch, Galveston, Texas, USA

Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Togaviridae, Alphavirus*

Species: Chikungunya virus

Strain/Isolate: K 0146-95

Original Source: Chikungunya virus (CHIKV), K 0146-95 was isolated from a human in Bangkok, Thailand in 1995, and contributed to WRCEVA by Ann Powers of the Division of Vector-Borne Diseases, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, Fort Collins, Colorado, USA.¹ In order to remove contaminating mycoplasma, the second viral passage at BEI Resources was performed by lipofectamine-mediated transfection of extracted viral RNA. The complete genomic sequence of CHIKV, K 0146-95 has been determined (GenBank: HM045802).^{2,3}

Chikungunya fever is a febrile illness often accompanied by relapsing and incapacitating polyarthralgia. In recent years, CHIKV has spread widely throughout Africa and Asia resulting in morbidity in millions of infected individuals. There are currently no recognized antiviral therapies or human vaccines with which to control infections due to CHIKV.³

Material Provided:

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero 76, clone E6; ATCC® CRL-1586™) infected with CHIKV, K 0146-95.

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

Packaging/Storage:

NR-49903 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 76, clone E6; ATCC® CRL-1586™)

Growth Medium: Eagle's Minimum Essential Medium containing Earle's Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent

Infection: Cells should be 70% to 90% confluent

Incubation: 2 to 7 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 BEI Resources, NIAID, NIH, as part of the WRCEVA program: Chikungunya Virus, K 0146-95, NR-49903."

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/bmb15/index.htm.

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References:

1. Tesh, R. B., Personal Communication.
2. Volk, S. M., et al. Department of Pathology, University of Texas Medical Branch, 301 University Drive, Galveston, Texas 77555, USA. Direct submission.
3. Volk, S. M., et al. "Genome-Scale Phylogenetic Analyses of Chikungunya Virus Reveal Independent Emergences of Recent Epidemics and Various Evolutionary Rates." *J. Virol.* 84 (2010): 6497-6504. PubMed: 20410280.
4. Gould, E. A., et al. "Understanding the Alphaviruses: Recent Research on Important Emerging Pathogens and Progress Towards Their Control." *Antiviral Res.* 87 (2010): 111-124. PubMed: 19616028.

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