

Product Information Sheet for NR-13222

Chikungunya Virus, 181/25

Catalog No. NR-13222

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For research use only. Not for human use.

Contributor:

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Manufacturer:

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Product Description:

Virus Classification: Togaviridae, Alphavirus

Species: Chikungunya virus

Strain: 181/25

<u>Original Source</u>: Chikungunya virus (CHIKV), 181/25 is a live-attenuated derivative of strain AF15561, which was originally isolated from a human in Thailand in 1962.¹⁻³ Attenuation of 181/25 is mediated by two amino acid substitutions in the E2 glycoprotein.⁴

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.⁵

Material Provided:

Each vial contains approximately 0.5 mL to 1.0 mL of supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero E6) infected with CHIKV, 181/25.

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

Packaging/Storage:

NR-13222 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.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Chikungunya Virus, 181/25, NR-13222."

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. <u>Biosafety in Microbiological and Biomedical Laboratories</u>. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see <u>www.cdc.gov/biosafety/publications/bmbl5/index.htm</u>.

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References:

- Harrison, V. R., et al. "Production and Evaluation of a Formalin-Killed Chikungunya Vaccine." <u>J. Immunol.</u> 107 (1971): 643-647. PubMed: 4999088.
- Levitt, N. H., et al. "Development of an Attenuated Strain of Chikungunya Virus for Use in Vaccine Production." <u>Vaccine</u> 4 (1986): 157-162. PubMed: 3020820.
- Edelman, R., et al. "Phase II Safety and Immunogenicity Study of Live Chikungunya Virus Vaccine TSI-GSD-218." <u>Am. J. Trop. Med. Hyg.</u> 62 (2000): 681-685. PubMed: 1130405.
- Gorchakov, R., et al. "Attenuation of Chikungunya Virus Vaccine Strain 181/Clone 25 is Determined by Two Amino Acid Substitutions in the E2 Envelope Glycoprotein." <u>J. Virol.</u> (2012): 6084-6096. PubMed: 22457519.
- Gould, E. A., et al. "Understanding the Alphaviruses: Recent Research on Important Emerging Pathogens and

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Progress Towards Their Control." <u>Antiviral Res.</u> 87 (2010): 111-124. PubMed: 19616028.

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