

**Genomic RNA from Chikungunya Virus, 181/25**

**Catalog No. NR-50345**

**For research use only. Not for use in humans.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Genomic RNA was isolated from a preparation of clarified supernatant from *Chlorocebus* (previously *Cercopithecus*) *aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) infected with chikungunya virus (CHIKV), 181/25. CHIKV, 181/25 is a live-attenuated derivative of strain AF15561, which was originally isolated from a human in Thailand in 1962.<sup>1,2,3</sup> Attenuation of 181/25 is mediated by two amino acid substitutions in the E2 glycoprotein.<sup>4</sup>

NR-50345 has been qualified for PCR applications by amplification of a sequence of more than 1000 nucleotides. Recommended dilutions for successful RT-PCR amplification are indicated on the Certificate of Analysis for each lot.

**Material Provided:**

Each vial contains approximately 100 µL of viral genomic RNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA, pH 7.0). The viral genomic RNA is in a background of cellular nucleic acid and carrier RNA. The vial should be centrifuged prior to opening.

**Packaging/Storage:**

NR-50345 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen on dry ice and should be stored at -60°C or colder immediately upon arrival. Freeze-thaw cycles should be minimized.

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic RNA from Chikungunya Virus, 181/25, NR-50345."

**Biosafety Level: 1**

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 \(BMBL\)](#). 6th ed. Washington, DC: U.S. Government Printing Office, 2020.

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**References:**

- Harrison, V. R., et al. "Production and Evaluation of a Formalin-Killed Chikungunya Vaccine." *J. Immunol.* 107 (1971): 643-647. PubMed: 4999088.
- Levitt, N. H., et al. "Development of an Attenuated Strain of Chikungunya Virus for Use in Vaccine Production." *Vaccine* 4 (1986): 157-162. PubMed: 3020820.
- Edelman, R., et al. "Phase II Safety and Immunogenicity Study of Live Chikungunya Virus Vaccine TSI-GSD-218." *Am. J. Trop. Med. Hyg.* 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." *J. Virol.* (2012): 6084-6096. PubMed: 22457519

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