

Zika Virus, PRVABC59, Heat-Inactivated (Lyophilized)

Catalog No. NR-50432

For research use only. Not for human use.

Contributor

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Manufacturer:

BEI Resources

Product Description:

ZIKV, PRVABC59 is a preparation of Zika virus (ZIKV), PRVABC59¹ that has been inactivated by heating to 65°C for 30 minutes and lyophilized.

ZIKV, PRVABC59 was isolated from the blood of a human in Puerto Rico in December 2015.¹ The complete genomic sequence of the ZIKV, PRVABC59 serum isolate was previously determined (GenBank: [KU501215](#)).¹ The complete coding sequence of BEI Resources ZIKV, PRVABC59 (NR-50240 lot 64112564) has also been determined (GenBank: [KX087101](#)).² The E protein of the tissue culture grown ZIKV, PRVABC59 isolate (GenBank: KX087101) has a valine to leucine mutation at position 330 relative to the original patient serum ZIKV, PRVABC59 isolate (GenBank: KU501215). ZIKV, PRVABC59 E-V330L mutant is shown to be less pathogenic in mice, with delayed mortality and decreased viral dissemination to eye and brain as compared to the original ZIKV PRVABC59 serum isolate.³

Material Provided:

Each vial contains approximately 0.25 mL (lyophilized) of heat-inactivated, clarified cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero E6, ATCC® CRL-1586™) infected with ZIKV, PRVABC59.

Note: The long-term stability of this preparation is not known at this time. It is recommended that users confirm the activity of the product if not used within three months of rehydration. You may also contact BEI Resources for updated stability information.

Packaging/Storage:

NR-50432 was packaged aseptically in glass serum vials. The product is provided on blue ice and should be stored at 2°C to 8°C immediately upon arrival. Reconstitute with 0.25 mL sterile distilled water, and store at -60°C or colder after rehydration. Freeze-thaw cycles should be avoided.

Functional Activity:

This product is intended for use as a positive control in

molecular assays for the qualitative detection and identification of ZIKV. See Certificate of Analysis for details. NR-50432 has not been tested in other applications. It does not contain intact ZIKV genomic RNA, and should not be used as a source of nucleic acid for transfection or for RT-PCR of “gene-length” amplicons.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Zika Virus, PRVABC59, Heat-Inactivated (Lyophilized), NR-50432.”

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](#). 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

Disclaimers:

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References:

1. Lanciotti, R. S., et al. "Phylogeny of Zika Virus in Western Hemisphere, 2015." *Emerg. Infect. Dis.* 22 (2016): 933-935. PubMed: 27088323.
2. Shabman, R., et al. J. Craig Venter Institute, 9704 Medical Center Drive, Rockville, Maryland 20850, USA. Direct submission.
3. Duggal, N. K., et al. "Mutations Present in a Low-Passage Zika Virus Isolate Result in Attenuated Pathogenesis in Mice." *Virology* 530 (2019): 19-26. PubMed: 30763872.

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