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SUPPORTING INFECTIOUS DISEASE RESEARCH

Zika Virus, PRVABC59, Infected Cell Lysate, Gamma-Irradiated

Catalog No. NR-50547

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Zika virus (ZIKV), PRVABC59 infected cell lysate, gammairradiated, NR-50547, consists of a crude preparation of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero E6, ATCC[®] CRL-1586TM) infected with Zika virus (ZIKV), PRVABC59 that was gamma-irradiated (5 × 10⁶ RADs) on dry ice.

Zika virus (ZIKV), PRVABC59 was isolated from the blood of a human in Puerto Rico in December 2015.¹ The complete genomic sequence of 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). The 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 0.5 mL of gamma-irradiated cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells infected with ZIKV, PRVABC59.

Packaging/Storage:

NR-50547 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. Freeze-thaw cycles should be avoided.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Zika Virus, PRVABC59, Infected Cell Lysate, Gamma-Irradiated, NR-50547."

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. <u>Biosafety in</u> <u>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>.

Disclaimers:

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References:

- Lanciotti, R. S., et al. "Phylogeny of Zika Virus in Western Hemisphere, 2015." <u>Emerg. Infect. Dis.</u> 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.
- Duggal, N. K., et al. "Mutations Present in a Low-Passage Zika Virus Isolate Result in Attenuated Pathogenesis in Mice." <u>Virology</u> 530 (2019): 19-26. PubMed: 30763872.

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