

CBER/FDA FSS13025 Zika Virus RNA Reference Reagent, Heat-Inactivated

Catalog No. NR-50723

For research use only. Not for human use.

Contributor:

Maria Rios, Ph.D., Center for Biologics Evaluations and Research (CBER), Food and Drug Administration (FDA), Silver Spring, Maryland, USA and World Reference Center for Emerging Viruses and Arboviruses (WRCEVA), University of Texas Medical Branch, Galveston, Texas, USA

Manufacturer:

Center for Biologics Evaluations and Research (CBER), Food and Drug Administration (FDA), Silver Spring, Maryland, USA

Product Description:

FSS13025 Zika virus (ZIKV) RNA reference reagent (ZIKV-RR, FSS13025) is for use in the development and validation of ZIKV nucleic acid testing (NAT). NR-50723 consists of material produced in *Cercopithecus aethiops* kidney epithelial (Vero) cells infected with ZIKV, FSS13025 that has been heat-inactivated at 56°C for 60 minutes, diluted in dialyzed, defibrinated human plasma and lyophilized.^{1,2}

The heat-inactivated preparation of ZIKV-RR, FSS13025 (non-lyophilized) was included in a collaborative validation studies for the World Health Organization International Standard for ZIKV (WHO ZIKV IS).³

ZIKV, FSS13025, was isolated from the blood of a human in Cambodia in 2010. The complete genomic sequence of ZIKV, FSS13025 has been determined (GenBank: [JN860885](https://www.ncbi.nlm.nih.gov/nuccore/JN860885)).⁴

Material Provided:

Each ampule contains lyophilized ZIKV-RR, FSS13025 from approximately 1 mL of heat-inactivated, clarified cell lysate and supernatant from Vero cells infected with ZIKV, FSS13025.

Packaging/Storage:

NR-50723 was packaged aseptically in glass ampules. The product is provided frozen on dry ice and should be stored at -20°C immediately upon arrival. NR-50723 can be reconstituted with 1 mL of sterile distilled water. After rehydration NR-50723 should be stored at -60°C or colder. Freeze-thaw cycles should be avoided.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through the WRCEVA program and BEI Resources, NIAID, NIH: CBER/FDA FSS13025 Zika Virus RNA Reference Reagent, Heat-Inactivated, NR-50723.”

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. 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. Fares-Gusmao, R., et al. “Production and Characterization of Zika Virus RNA Reference Reagents as a Response to a Public Health Emergency.” Transfusion 58 (2018): 2171-2174. PubMed: 30178463.
2. Volkova, E., et al. “Complete Genome Sequences of Zika Virus Strains Used for the Formulation of CBER/FDA RNA Reference Reagents and Lot Release Panels for Nucleic Acid Technology Testing.” Genome Announc. 6 (2018): e00572-18. PubMed: 29976606.
3. Baylis, S. A., et al. “Harmonization of Nucleic Acid Testing for Zika Virus: Development of the 1st World

Health Organization International Standard." Transfusion 57 (2017): 748-761. PubMed: 28229462.

4. Haddow, A. D., et al. "Genetic Characterization of Zika Virus Strains: Geographic Expansion of the Asian Lineage." PLoS Negl. Trop. Dis. 6 (2012): e1477. PubMed: 22389730.

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