

**Vaccinia Virus, Western Reserve, Recombinant Expressing Lassa Virus, Josiah Z Protein**

**Catalog No. NR-15496**

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**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Virus Classification: *Poxviridae, Orthopoxvirus*

Agent: Vaccinia virus

Strain: rVACV-LASV Z [Vaccinia virus (VACV), Western Reserve recombinant expressing the Z protein of Lassa virus (LASV) Josiah]

Source:<sup>1</sup> A cDNA clone containing the entire ORF encoding the Z protein from segment L of LASV Josiah was inserted into the pRB21 transfer vector, bringing it under the control of a synthetic VACV early/late promoter (PSYN). Recombinant VACV was made by transfecting the transfer plasmid into CV-1 cells infected with the VACV strain vRB12.

LASV is an Arenavirus (*Arenaviridae, Arenavirus*) which is the etiologic agent of Lassa fever.<sup>2</sup>

**Material Provided:**

Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (BSC-40, ATCC® CRL-2761™) infected with vaccinia virus, rVACV-LASV Z.

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

**Packaging/Storage:**

NR-15496 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. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

**Growth Conditions:**

Host: BSC-40 cells (ATCC® CRL-2761™)

Growth Medium: Dulbecco's Modified Eagle Medium

containing 1 mM sodium pyruvate, 4500 mg/L glucose, 4 mM L-glutamine and 1500 mg/L sodium bicarbonate, supplemented with 10% fetal bovine serum

Infection: Cells should be 90% to 100% confluent

Incubation: 2 to 4 days at 37°C and 5% CO<sub>2</sub>

Cytopathic Effect: Cell rounding and sloughing

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Vaccinia Virus, Western Reserve, Recombinant Expressing Lassa Virus, Josiah Z Protein, NR-15496."

**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](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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**References:**

1. Kotturi, M. F., et al. "A Multivalent and Cross-Protective Vaccine Strategy Against Arenaviruses Associated with Human Disease." PLoS Pathog. 5 (2009): e1000695. PubMed: 20019801.
2. Frame, J. D., et al. "Lassa Fever, A New Virus Disease of Man from West Africa. I. Clinical Description and Pathological Findings." Am J. Trop. Med. Hyg. 19 (1970): 670-676. PubMed: 4246571.

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