

Vaccinia Virus, Western Reserve, Recombinant Expressing Junin Virus, Candid #1 Glycoprotein Precursor

Catalog No. NR-15490

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Contributor:

Michael J. Buchmeier, Ph.D., Professor, Department of Medicine, University of California, Irvine, provided under government contract

Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Poxviridae, Orthopoxvirus*

Agent: Vaccinia virus

Strain: rVACV-JUNV Candid #1 GPC [Vaccinia virus (VACV), Western Reserve, recombinant expressing the glycoprotein precursor of Junin virus (JUNV), Candid #1]

Source:¹ A cDNA clone containing the entire ORF encoding the glycoprotein precursor (GPC) from segment S of JUNV, Candid #1 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.

JUNV is an Arenavirus (*Arenaviridae, Arenavirus*) which is the etiologic agent of Argentine hemorrhagic fever.^{2,3}

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-JUNV Candid #1 GPC.

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

Packaging/Storage:

NR-15490 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 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate and 1500 mg/L sodium bicarbonate, supplemented with 10% fetal bovine serum

Infection: Cells should be 95% to 100% confluent

Incubation: 2 to 4 days at 37°C and 5% CO₂

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 Junin Virus, Candid #1 Glycoprotein Precursor, NR-15490."

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. 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. Weissenbacher, M. C., L. B. deGuerrero and M. C. Boxaca. "Experimental Biology and Pathogenesis of Junin Virus Infection in Animals and Man." Bull. World Health Organ. 52 (1975): 507-515. PubMed: 182401.
3. Emonet, S. F., et al. "Rescue from Cloned cDNAs and *in vivo* Characterization of Recombinant Pathogenic Romero and Live-Attenuated Candid #1 Strains of Junin Virus, the Causative Agent of Argentine Hemorrhagic Fever Disease." J. Virol. 85 (2011): 1473-1483. PubMed: 21123388.

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