

Vaccinia Virus, Western Reserve, Recombinant Expressing Whitewater Arroyo Virus, AV 9310135 Glycoprotein Precursor

Catalog No. NR-15508

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Poxviridae, Orthopoxvirus*

Agent: Vaccinia virus

Strain: rVACV-WWAV GPC [Vaccinia virus (VACV), Western Reserve, recombinant expressing the glycoprotein precursor (GPC) of Whitewater Arroyo virus (WWAV), AV 9310135]

Source:¹ A cDNA clone containing the entire ORF encoding the GPC from the S segment of WWAV, AV 9310135 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.

WWAV is an Arenavirus (*Arenaviridae, Arenavirus*) which has been tentatively associated with hemorrhagic fever and acute respiratory distress syndrome, acute central nervous system disease, and undifferentiated febrile illness in humans in the United States.²⁻⁴

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-WWAV GPC.

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

Packaging/Storage:

NR-15508 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 80% 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 Whitewater Arroyo Virus, AV 9310135 Glycoprotein Precursor, NR-15508."

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. Fulhorst, C. F., et al. "Isolation and Characterization of Whitewater Arroyo Virus, a Novel North American Arenavirus." Virology 224 (1996): 114-120. PubMed: 8862405.
3. Centers for Disease Control and Prevention. "Fatal Illnesses Associated with a New World Arenavirus – California, 1999-2000." MMWR Morb. Mortal. Wkly. Rep. 49 (2000): 709-711. PubMed: 10958585.
4. Milazzo, M. L., G. L. Campbell and C. F. Fulhorst. "Novel Arenavirus Infection in Humans, United States." Emerg. Infect. Dis. 17 (2011): 1417-1420. PubMed: 21801618.

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