

Vaccinia Virus, Western Reserve, Recombinant Expressing Lymphocytic Choriomeningitis Virus, Armstrong 53b Glycoprotein Precursor

Catalog No. NR-15497

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Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: *Poxviridae, Orthopoxvirus*

Agent: Vaccinia virus

Strain: rVACV-LCMV GPC [Vaccinia virus (VACV), Western Reserve recombinant expressing the glycoprotein precursor (GPC) of lymphocytic choriomeningitis virus (LCMV), Armstrong 53b]

Source:¹ A cDNA clone encoding the first 363 amino acids of the glycoprotein precursor from LCMV, Armstrong 53b was inserted into the pSC11 transfer vector, bringing it under the control of VACV p7.5 early/late promoter. This represents about 75% of the total glycoprotein, and includes all of GP1 and approximately 100 amino acids of GP2. Recombinant VACV was made by transfecting the transfer plasmid into CV-1 cells infected with the VACV Western Reserve strain. Recombinant virus was selected from infected cell lysates by plaquing on 143B TK⁻ cells.

LCMV is an Arenavirus (*Arenaviridae, Arenavirus*) which is the etiologic agent of lymphocytic choriomeningitis.²

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-LCMV GPC.

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

Packaging/Storage:

NR-15497 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 Lymphocytic Choriomeningitis Virus, Armstrong 53b Glycoprotein Precursor, NR-15497."

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/bmbl5/index.htm.

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References:

1. Whitton, J. L., P. J. Southern and M. B. Oldstone. "Analyses of the Cytotoxic T Lymphocyte Responses to Glycoprotein and Nucleoprotein Components of Lymphocytic Choriomeningitis Virus." Virology 1622 (1988): 321-327. PubMed: 3257596.
2. Rivers, T. M. and T. F. Scott. "Meningitis in Man Caused by a Filterable Virus: II. Identification of the Etiological Agent." J. Exp. Med. 29 (1936): 415-432. PubMed: 19870480.

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