Vaccinia Virus, New York City Board of Health (Wyeth, Calf Adapted)

Catalog No. NR-54

(Derived from ATCC® VR-1536™)

For research use only. Not for human use.

Contributor:
ATCC®

Manufacturer:
BEI Resources

Product Description:
Virus Classification: *Poxviridae, Orthopoxvirus*
Agent: Vaccinia virus (VACV)
Strain/Isolate: New York City Board of Health (NYCBH; Wyeth, calf adapted)
Source: Bovine calf
Comments: The NYCBH strain of VACV was deposited at ATCC® in 1966 by Dr. J. H. Brown of Wyeth Laboratories, Inc. ATCC® VR-1536™ was passaged twice in African green monkey kidney cells (Vero, ATCC® CCL-81™) prior to deposit at BEI Resources.

Wyeth used the NYCBH strain to develop Dryvax®, the live-virus vaccine from calf skin used during both the World Health Organization vaccination program ending in the mid 1970s and the vaccination programs of the Department of Health and Human Services and Department of Defense which began in 2002.[1] Although the various smallpox vaccines have historically been referred to as VACV strains, it is known that they are, in fact, complex mixtures of genetically heterogeneous virions. Recently, the genomic diversity of Dryvax® has been studied in some detail.[2,3]

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from African green monkey kidney (Vero) cells infected with VACV, NYCBH (Wyeth, calf adapted).

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

Packaging/Storage:
NR-54 was packaged aseptically, in screw-capped plastic cryovials. The product is provided frozen 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: Vero cells (ATCC® CCL-81™)
Growth Medium: Eagle's Minimum Essential Medium supplemented with 2% fetal bovine serum, or equivalent (lot-specific details are on the Certificates of Analysis)
Infection: Cells should be 80 to 90% confluent (not 100% confluent)
Incubation: 2 to 8 days at 37°C and 5% CO_2
Cytopathic Effect: Cell rounding and cell lysis

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Vaccinia Virus, New York City Board of Health (Wyeth, Calf Adapted), NR-54."

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. This publication recommends that all persons working in or entering laboratory or animal care areas where activities with vaccinia virus are being conducted should have documented evidence of satisfactory vaccination within the preceding ten years.

Disclaimers:
You are authorized to use this product for research use only. It is not intended for human use.

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References:

1. Poland, G. A., J. D. Grabenstein, and J. M. Neff. "The US Smallpox Vaccination Program: a Review of a Large Modern Era Smallpox Vaccination Implementation Program." Vaccine 23 (2005): 2078–2081. PubMed: 15755574.
2. Osborne, J. D., et al. "Genomic Differences of Vaccinia Virus Clones from Dryvax Smallpox Vaccine: the Dryvax-like ACAM2000 and the Mouse Neurovirulent Clone-3." Vaccine 25 (2007): 8807–8832. PubMed: 18037545.
3. Qin, L., et al. "Genomic Analysis of the Vaccinia Virus Strain Variants Found in Dryvax Vaccine." J. Virol. 85 (2011): 13049–13060. PubMed: 21976639.

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