

**Genomic DNA from Vaccinia Virus,
Western Reserve (Mouse Adapted)**

Catalog No. NR-2640

For research use only. Not for use in humans.

Contributor:
ATCC®

Manufacturer:
BEI Resources

Product Description:

Genomic RNA was isolated from a preparation of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) infected with vaccinia virus (VACV), Western Reserve (mouse adapted). VACV, Western Reserve (mouse adapted) was derived from the original New York City Board of Health (NYCBH) strain of VACV by intracerebral passages in mice. It has been utilized in constructing vectors for gene expression and in producing viral proteins and DNA.^{1,2} The complete genomic sequence of the WR strain of VACV has been determined (GenBank: [AY243312](https://www.ncbi.nlm.nih.gov/nuccore/AY243312)).³

NR-2640 has been qualified for PCR applications by amplification of approximately 1100 base pairs. Recommended dilutions for successful PCR amplification are indicated on the Certificate of Analysis for each lot.

Material Provided:

Each vial contains approximately 100 µL of viral genomic DNA in TE buffer (10 mM Tris-HCl, 1 mM EDTA). The vial should be centrifuged prior to opening.

Packaging/Storage:

NR-2640 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. Freeze-thaw cycles should be minimized.

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Genomic DNA from Vaccinia Virus, Western Reserve (Mouse Adapted), NR-2640.”

Biosafety Level: 1

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](https://www.cdc.gov/biosafety/publications/bmb15/index.htm). 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

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References:

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3. Esposito, J. J., et al. “Vaccinia Virus, Complete Genome.” Direct submission, 24 Feb 2003. GenBank: AY243312.
4. Smee, D. F., et al. “Characterization and Treatment of Cidofovir-Resistant Vaccinia (WR Strain) Virus Infections in Cell Culture and in Mice.” [Antivir. Chem. Chemother.](https://pubmed.ncbi.nlm.nih.gov/16004083/) 16 (2005): 203-211. PubMed: 16004083.
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6. Ramirez, J. C., M. M. Gherardi, and M. Esteban. “Biology of Attenuated Modified Vaccinia Virus Ankara Recombinant Vector in Mice: Virus Fate and Activation of B- and T-cell Immune Responses in Comparison with the Western Reserve Strain and Advantages as a Vaccine.” [J. Virol.](https://pubmed.ncbi.nlm.nih.gov/10623755/) 74 (2000): 923-933. PubMed: 10623755.

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