

**Monoclonal Anti-Vaccinia Virus (WR) L1R Protein, Residues 1 to 185 (similar to VMC-5), (produced *in vitro*)**

**Catalog No. NR-420**

**For research use only. Not for human use.**

**Contributor:**

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**Product Description:**

Antibody Class: IgG1

Mouse monoclonal antibody to a recombinant form of the L1R protein [L1R(185t); residues 1 to 185, C-terminal histidine-tagged]<sup>1</sup> of the Western Reserve (WR) strain of vaccinia virus was purified from a mouse B cell hybridoma using ammonium sulfate precipitation and size exclusion chromatography. The mouse B cell hybridoma was generated by the fusion of SP2/0 myeloma cells with immunized BALB/c splenocytes.

**Material Provided:**

Each vial contains approximately 1.0 mL of purified monoclonal antibody in 50 mM borate buffer (pH 8.0 ± 0.2) containing 0.1 M sodium chloride and no preservatives. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

**Packaging/Storage:**

The purified monoclonal antibody was packaged aseptically in cryovials. The product is provided on dry ice and should be stored at -20°C or colder immediately upon arrival. For long-term storage, a temperature of -65°C or colder is recommended. Repeated freeze-thaw cycles should be avoided.

**Functional Activity:<sup>1</sup>**

NR-420 was purified from the same hybridoma as VMC-5. The specificity of VMC-5 was determined by reactivity to L1R(185t) by ELISA and confirmed by Western blot analysis under reducing and non-reducing conditions. The reactivity pattern in ELISA assays using overlapping peptides spanning residues 1 to 185 of L1R indicates that VMC-5 recognizes an epitope within amino acids 118 to 128. VMC-5 neutralizes the infectivity of the intracellular mature virus (IMV) form of vaccinia virus in BS-C-1 cells using an IMV plaque reduction assay.

**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, 4th ed. Washington, DC: U.S. Government Printing Office, 1999. HHS Publication No. (CDC) 93-8395. This text is available online at [www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm).

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Monoclonal Anti-Vaccinia Virus (WR) L1R Protein, Residues 1 to 185 (similar to VMC-5), (produced *in vitro*), NR-420.”

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**References:**

1. Aldaz-Carroll, L., et al. “Physical and Immunological Characterization of a Recombinant Secreted Form of the Membrane Protein Encoded by the Vaccinia Virus L1R Gene.” Virology 341 (2005): 59–71. PubMed: 16083934.

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