Monoclonal Anti-Vaccinia Virus (WR) B5R Protein, Residues 20 to 275 (Ectodomain), (similar to VMC-22), (produced *in vitro*)

Catalog No. NR-553

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 B5R envelope glycoprotein [B5R(275t); residues 20 to 275 comprising the ectodomain, N-terminal histidine-tagged][1] 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:[1]

NR-553 was purified from the same hybridoma as VMC-22. The specificity of VMC-22 was determined by reactivity to B5R(275t) 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 20 to 275 of B5R indicates that VMC-22 recognizes an epitope within amino acids 65 to 84. VMC-22 neutralizes the infectivity of the extracellular enveloped virus (EEV) form of vaccinia virus in BS-C-1 cells using an EEV plaque reduction assay. VMC-22 does not inhibit the comet tail formation of the EEV form of vaccinia virus in BS-C-1 cells using a comet tail inhibition 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.

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) B5R Protein, Residues 20 to 275 (Ectodomain), (similar to VMC-22), (produced *in vitro*), NR-553."

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References:

1. Aldaz-Carroll, L., et al. "Epitope-Mapping Studies Define Two Major Neutralization Sites on the Vaccinia Virus Extracellular Enveloped Virus Glycoprotein B5R." J. Virol. 79 (2005): 6260–6271. PubMed: 15858010.

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