

Monoclonal Anti-Zika Virus Envelope (E) Protein, Clone ZV-16 (immunoglobulin G, Mouse)

Catalog No. NR-50413

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG2ck

Mouse monoclonal antibody prepared against the envelope (E) glycoprotein of Zika virus (ZIKV) was purified from ascites fluid by protein G affinity chromatography. Ascites formation was induced by injecting approximately 2.5×10^6 cultured hybridoma clone ZV-16 cells into the peritoneal cavities of pristane-primed mice. The B cell hybridoma was generated by the fusion of P3X63Ag8.653 mouse myeloma cells with immunized mouse splenocytes. The ZV-16 antibody specifically recognizes the E glycoprotein, is non-neutralizing, and does not cross-react with dengue, Japanese encephalitis, or West Nile viruses.¹⁻³

Material Provided:

Each vial of NR-50413 contains approximately 100 μ L of purified monoclonal antibody in phosphate-buffered saline, pH 7.4. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis for each lot.

Packaging/Storage:

NR-50413 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-50413 specifically recognizes ZIKV-infected cells in indirect immunofluorescence assays. See Certificate of Analysis for details. The clone ZV-16 antibody is also reported to function in ELISA and in western blot assays performed under non-reducing conditions.³

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Zika Virus Envelope (E) Protein, Clone ZV-16 (immunoglobulin G, Mouse), NR-50413."

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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmb15/index.htm.

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NR-50413 is claimed in U.S. Provisional Patent Application number 62/366,782 and the continuations, continuations-in-part, re-issues, and foreign counterparts thereof. For-profit entities wishing to obtain this material must confirm in writing to BEI Resources that they have executed a licensing agreement with the Contributor's institution. Please contact the Office of Technology Management of the Washington University in St. Louis directly at mta@dom.wustl.edu.

References:

1. Miner, J. J., et al. "Zika Virus Infection During Pregnancy in Mice Causes Placental Damage and Fetal Demise." Cell 165 (2016): 1081-1091. PubMed: 27180225.
2. Zhao, H., et al. "Structural Basis of Zika Virus-Specific Antibody Protection." Cell 166 (2016): 1016-1027. PubMed: 27475895.
3. Diamond, M. S., Personal Communication.

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