

**Monoclonal Anti-Flavivirus Group Antigen,  
Clone D1-4G2-4-15 (produced *in vitro*)**

**Catalog No. NR-50327**

This reagent is the tangible property of the U.S. Government.

**For research use only. Not for use in humans.**

**Contributor:**

Mary Kay Gentry, Division of Biochemistry, Walter Reed Army Institute of Research, Washington, DC, USA

**Manufacturer:**

BEI Resources

**Product Description:**

Antibody Class: IgG1κ, IgG2αk  
 Mouse monoclonal antibody prepared against the group antigen of flaviviruses was purified from clone D1-4G2-4-15 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of P3X63Ag8 myeloma cells with immunized mouse splenocytes.<sup>1,2</sup>

Note: The P3X63Ag8 myeloma cell line secretes the MOPC21 myeloma protein, a mouse IgG1κ antibody of unknown specificity. Thus, NR-50327 contains both MOPC21 protein and flavivirus group-specific antibody of the IgG2αk isotype.

**Material Provided:**

Each vial of NR-50327 contains approximately 100 μL of purified monoclonal antibody in PBS. The concentration, expressed as milligrams per milliliter, is shown on the Certificate of Analysis.

**Packaging/Storage:**

NR-50327 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-50327 is reactive on cells infected with type 2 and type 3 Dengue viruses, West Nile virus, yellow fever virus, and Zika virus but not with Powassan virus or enterovirus in indirect immunofluorescence assays. The antibody is reported to be strongly reactive with many flaviviruses.<sup>2</sup>

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Flavivirus Group Antigen, Clone D1-4G2-4-15 (produced *in vitro*), NR-50327.”

**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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see [www.cdc.gov/biosafety/publications/bmbi5/index.htm](http://www.cdc.gov/biosafety/publications/bmbi5/index.htm).

**Disclaimers:**

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

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at [www.beiresources.org](http://www.beiresources.org).

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

**Use Restrictions:**

**This material is distributed for internal research, non-commercial purposes only.** This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

**References:**

1. Gentry, M. K., et al. “Identification of Distinct Antigenic Determinants on Dengue-2 Virus Using Monoclonal Antibodies.” Am. J. Trop. Med. Hyg. 31 (1982): 548-555. PubMed: 6177259.
2. Henchal, E. A., et al. “Dengue Virus-Specific and Flavivirus Group Determinants Identified with Monoclonal Antibodies by Indirect Immunofluorescence.” Am. J. Trop. Med. Hyg. 31 (1982): 830-836. PubMed: 6285749.

ATCC® is a trademark of the American Type Culture Collection.

