

Monoclonal Anti-Rift Valley Fever Virus Gn Glycoprotein, Clone 4D4 (produced *in vitro*)

Catalog No. NR-43190

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

For research use only. Not for use in humans.

Contributor:

Connie S. Schmaljohn, Ph.D., Chief Scientist, U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, Maryland, USA

Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG1k

Mouse monoclonal antibody prepared against the Rift Valley fever virus (RVFV) Gn glycoprotein was purified from clone 4D4 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of Sp2/0-Ag14 mouse myeloma cells with splenocytes from immunized BALB/c mice.¹ The epitope recognized by the 4D4 antibody is reported to map amino acids 229-239 of the mature Gn (formerly G2) glycoprotein.²

This reagent is part of the Joel M. Dalrymple – Clarence J. Peters USAMRIID Antibody Collection.

Material Provided:

Each vial of NR-43190 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-43190 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-43190 is reactive in indirect immunofluorescence assays using Vero E6 cells infected with RVFV, and neutralizes RVFV in plaque reduction neutralization tests. The antibody is also reported to function in ELISA and flow cytometry as well as radioimmunoprecipitation and western blot assays.^{1,2}

Citation:

Acknowledgment for publications should read “The following reagent was obtained from the Joel M. Dalrymple – Clarence J. Peters USAMRIID Antibody Collection through BEI Resources, NIAID, NIH: Monoclonal Anti-Rift Valley Fever Virus Gn Glycoprotein, Clone 4D4 (produced *in vitro*), NR-43190.”

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/bmb15/index.htm.

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References:

- Schmaljohn, C. S., Personal Communication.
- Keegan, K., and M. S. Collett. “Use of Bacterial Expression Cloning to Define the Amino Acid Sequences of Antigenic Determinants on the G2 Glycoprotein of Rift Valley Fever Virus.” J. Virol. 58 (1986): 263-270. PubMed: 2422392.

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