

Monoclonal Anti-Rift Valley Fever Virus Gn Glycoprotein, Clone 3C10 (produced *in vitro*)

Catalog No. NR-43186

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For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG1k

Mouse monoclonal antibody prepared against the Rift Valley fever virus (RVFV) Gn glycoprotein was affinity purified from clone 3C10 hybridoma supernatant using protein G affinity chromatography. The B cell hybridoma was generated by the fusion of Sp2/O-Ag14 mouse myeloma cells with splenocytes from immunized BALB/c mice.¹ The epitope recognized by the 3C10 antibody is reported to map to amino acids 362-375 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 contains approximately 100 µL of purified monoclonal antibody in phosphate-buffered saline (PBS). The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-43186 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 -60°C or colder is recommended. Repeated freeze-thaw cycles should be avoided.

Functional Activity:

NR-43186 is reactive in ELISA using gamma-irradiated RVFV. See Certificate of Analysis for details. Clone 3C10 is reported to be reactive in indirect immunofluorescence assays using Vero E6 cells infected with RVFV. The antibody is also reported to function in ELISA¹ as well as radioimmunoprecipitation and western blot assays.² The antibody is neither neutralizing *in vitro* nor protective in mice.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 3C10 (produced *in vitro*), NR-43186."

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/bmbl5/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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