

Product Information Sheet for NR-40273

Monoclonal Anti-Crimean-Congo Hemorrhagic Fever Virus Pre-Gc Glycoprotein, Clone 3E3 (produced *in vitro*)

Catalog No. NR-40273

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

For research use only. Not for human use.

The hybridoma from which NR-40273 was derived is reported to produce antibody of the IgG1 subclass, but NR-40273 occasionally contains both IgG1k and IgG2bk probably because of a mixed hybridoma clone. However, the functional activity of this antibody preparation has been confirmed (see below). See Certificate of Analysis for lot-specific isotype results.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: **IgG1k, IgG2bk**

Mouse monoclonal antibody prepared against the Crimean-Congo hemorrhagic fever virus (CCHFV) Pre-Gc glycoprotein was purified from clone 3E3 hybridoma supernatant using protein G affinity chromatography. The B cell hybridoma was generated by the fusion of Sp2/0-Ag14 mouse myeloma cells with splenocytes from BALB/c mice immunized with protein A sepharose-bound CCHFV glycoprotein-antibody complexes as described by Bertolotti-Ciarlet et al.¹

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

Material Provided:

Each vial of NR-40273 contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-40273 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-40273 is reactive in indirect immunofluorescence assays using Vero E6 cells infected with CCHFV. Although clone 3E3 is reported to lack neutralizing activity against CCHFV, NR-40273 is somewhat active in plaque reduction neutralization tests.¹ See Certificate of Analysis for details. Clone 3E3

antibody is also reported to function in ELISA and immunoprecipitation assays, to partially protect suckling mice from lethal CCHFV challenge, and to recognize an epitope that is conserved among several CCHFV strains.^{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-Crimean-Congo Hemorrhagic Fever Virus Pre-Gc Glycoprotein, Clone 3E3 (produced *in vitro*), NR-40273.”

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:

1. Bertolotti-Ciarlet, A., et al. "Cellular Localization and Antigenic Characterization of Crimean-Congo Hemorrhagic Fever Virus Glycoproteins." J. Virol. 79 (2005): 6152-6161. PubMed: 15858000.
2. Ahmed, A. A., et al. "Presence of Broadly Reactive and Group-Specific Neutralizing Epitopes on Newly Described Isolates of Crimean-Congo Hemorrhagic Fever Virus." J. Gen. Virol. 86 (2005): 3327-3336. PubMed: 16298978.

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