

Monoclonal Anti-Ebolavirus Envelope Glycoprotein, Clone 15H10 (produced *in vitro*)

Catalog No. NR-12184

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: **IgG1κ, IgG2aλ**

Mouse monoclonal antibody prepared against the envelope glycoprotein (GP) of ebolavirus (EBOV) was purified from clone 15H10 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of P3X63-Ag8 BALB/c mouse myeloma cells with splenocytes from female BALB/c mice that had been immunized intramuscularly with VRC6204 plasmid and boosted with purified recombinant GP of the Sudan EBOV Gulu strain.¹ VRC6204 consists of a synthetic human codon-optimized gene expressing the transmembrane-deleted GP of the Sudan EBOV Gulu strain.²

Note: The P3X63-Ag8 myeloma cell line secretes the MOPC21 myeloma protein, a mouse IgG1κ antibody of unknown specificity. Thus, NR-12184 contains both MOPC21 protein and EBOV GP-specific antibody of the IgG2aλ isotype, as well as inactive hybrid immunoglobulin molecules.

Material Provided:

Each vial of NR-12184 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-12184 was packaged aseptically in screw-capped plastic cryovials and is provided frozen on dry ice. NR-12184 should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:

Although the monoclonal antibody produced from Clone 15H10 was raised against the Sudan EBOV GP, it is reported to recognize all human EBOV GP species as well as the non-human primate Reston EBOV GP in western blot assays and to bind to pseudovirion-associated GP of all known EBOV species.¹

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Ebolavirus Envelope Glycoprotein, Clone 15H10 (produced *in vitro*), NR-12184.”

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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References:

1. Yu, J. S., et al., “Detection of Ebola Virus Envelope Using Monoclonal and Polyclonal Antibodies in ELISA, Surface Plasmon Resonance and a Quartz Crystal

- Microbalance Immunosensor." J. Virol. Methods 137 (2006): 219-228. PubMed: 16857271.
2. Sheets, R. L., et al., "Biodistribution of DNA Plasmid Vaccines Against HIV-1, Ebola, Severe Acute Respiratory Syndrome or West Nile Virus is Similar, Without Integration, Despite Differing Plasmid Backbones or Gene Inserts." Toxicol. Sci. 91 (2006): 610-619. PubMed: 16569729.

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