

Monoclonal Anti-Arenavirus rGPC, Clone KL-AV-2A1 (produced *in vitro*)

Catalog No. NR-51513

For research use only. Not for human use.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG2ak

Mouse monoclonal antibody prepared against both Old World and New World arenavirus recombinant glycoprotein complex (rGPC) was purified from clone KL-AV-2A1 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 sequentially immunized with DNA vaccines encoding ectodomain of glycoprotein from Lassa virus (LASV GPC), followed by Machupo virus (MACV GPC) and Mopeia virus (MOPV GPC) with a final LASV GPC recombinant protein boost.^{1,2}

Material Provided:

Each vial of NR-51513 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-51513 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-51513 is reactive in indirect immunofluorescence assays using BSC40 cells infected with recombinant vaccinia viruses expressing glycoproteins from various arenaviruses.^{1,2} The antibody is not neutralizing *in vitro* and shows no protection from virus challenge in *in vivo* mouse models.² Clone KL-AV-2A1 antibody is also reported to be a broadly cross-reactive anti-arenavirus antibody in ELISA and shows binding to glycoproteins derived from MACV, LASV, White-water Arroyo virus, Tamiami virus, Tacaribe virus and Guanarito virus.² It recognizes an epitope from subunit 2 of the glycoprotein complex that is relatively conserved among arenaviruses.^{1,2}

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Arenavirus rGPC, Clone KL-AV-2A1 (produced *in vitro*), NR-51513."

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/bmbli5/index.htm.

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References:

1. Krammer, F., Personal Communication.
2. Amanat, F., et al. "Antibodies to the Glycoprotein GP2 Subunit Cross-React Between Old and New World Arenaviruses." mSphere 3 (2018): e00189. PubMed: 29720525.

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