

Monoclonal Anti-Arenavirus (OW) rGPC, Clone KL-AV-1B3 (produced *in vitro*)

Catalog No. NR-51510

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG2ak

Mouse monoclonal antibody prepared against the Lassa virus (LASV) recombinant glycoprotein complex (rGPC) was purified from clone KL-AV-1B3 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 DNA vaccines encoding ectodomain of glycoprotein from LASV GPC three times followed by a final LASV GPC recombinant protein boost.^{1,2}

Material Provided:

Each vial of NR-51510 contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as mg/mL, is shown on the Certificate of Analysis.

Packaging/Storage:

NR-51510 was packaged aseptically in cryovials 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-51510 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 1B3 antibody is reported to be a broadly cross-reactive anti-arenavirus antibody in ELISA and showed strong binding activity to glycoproteins derived from Old World (OW) arenaviruses (LASV and Mopeia virus) but low level binding to glycoproteins derived from New World arenaviruses (Parana virus, Pinchinde virus, Machupo virus and Tamiami 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 (OW) rGPC, Clone KL-AV-1B3 (produced *in vitro*), NR-51510."

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 (BMBL). Current Edition. Washington, DC: U.S. Government Printing Office.

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References:

- Krammer, F., Personal Communication.
- Amanat, F., et al. "Antibodies to the Glycoprotein GP2 Subunit Cross-React Between Old and New World Arenaviruses." *mSphere* 3 (2018): e00189-18. PubMed: 29720525.

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