

Product Information Sheet for MRA-184A

Monoclonal Anti-*Plasmodium vivax*, Strain VK210, Circumsporozoite Protein (CSP) Repeat, Clone 2F2 (produced *in vitro*)

Catalog No. MRA-184A

For research use only. Not for use in humans.

Contributor:

Elizabeth Nardin, Professor, Department of Medical and Molecular Parasitology, New York University School of Medicine, New York, New York, USA

Manufacturer:

BEI Resources

Product Description:

Antibody Class: IgG2bk

Monoclonal antibody prepared against the circumsporozoite protein (CSP) repeat DRAD/AGQPAG of *Plasmodium vivax* (*P. vivax*) was purified using protein G affinity chromatography from supernatants obtained from mouse 2F2 hybridoma. The murine hybridoma cell line, 2F2, was generated by the fusion of myeloma cells with splenocytes from mice immunized with sporozoites derived from *Anopheles* mosquitoes infected with a synthetic peptide containing CSP repeat (DRAD/AGQPAG) of *P. vivax*, strain VK210.¹ MRA-184A is specific for *P. vivax*, strain VK-210 sporozoites, and recognizes *P. vivax* CSP repeats (DRAD/AGQPAG).^{1,2}

Material Provided:

Each vial 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:

MRA-184A was packaged aseptically in screw-capped plastic 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:

MRA-184A is reported to function in ELISA, immunofluorescence, electron microscopy, immunoprecipitation and immunoblot assays.^{1,3,4}

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-*Plasmodium vivax*, Strain VK210, Circumsporozoite Protein (CSP) Repeat, Clone 2F2 (produced *in vitro*), MRA-184A, contributed by Elizabeth Nardin."

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.

Disclaimers:

You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.

Use Restrictions:

This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:

1. Nardin, E., Personal Communication.
2. Nardin, E., et al. "Circumsporozoite Proteins of Human Malaria Parasites *Plasmodium falciparum* and *Plasmodium vivax*." *J. Exp. Med.* 156 (1982): 20-30. PubMed: 7045272.
3. Gimenez, A. M., et al. "Vaccine Containing the Three Allelic Variants of the *Plasmodium vivax* Circumsporozoite Antigen Induces Protection in Mice after Challenge with a Transgenic Rodent Malaria Parasite." *Front. Immunol.* 8 (2017): 1275. PubMed: 29075260.
4. Teixeira, L. H., et al. "Immunogenicity of a Prime-Boost Vaccine Containing the Circumsporozoite Proteins of *Plasmodium vivax* in Rodents." *Infect. Immun.* 82 (2014): 793-807. PubMed: 24478093.

ATCC® is a trademark of the American Type Culture Collection.

