Monoclonal Anti-*Plasmodium falciparum* Circumsporozoite Protein (CSP), Clone 2A10 (produced *in vitro*)

Catalog No. MRA-183A

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: IgG2aκ
Monoclonal antibody prepared against the circumsporozoite protein (CSP) of *Plasmodium falciparum* (*P. falciparum*) was purified from supernatants obtained from mouse 2A10 hybridoma.[1,2,3] The 2A10 monoclonal antibody is specific for *P. falciparum* sporozoites, and recognizes the minimal epitope $(NANP)_3$ of the *P. falciparum* CSP repeat.[1,4] Monoclonal antibody 2A10 also cross-reacts with the variant repeat sequence (NANPNVDPNANP) contained in the 5' repeat region of CSP of all *P. falciparum* isolates.[1]

Material Provided:
Each vial contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as milligrams per milliliter, is shown on the Certificate of Analysis.

Packaging/Storage:
MRA-183A 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-183A is reported to function in ELISA, immunofluorescence, immunoprecipitation, electron microscopy and immunoblot assays.[1,2,3,4,5,6]

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-*Plasmodium falciparum* Circumsporozoite Protein (CSP), Clone 2A10 (produced *in vitro*), MRA-183A, 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. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:
You are authorized to use this product for research use only. It is not intended for use in humans.

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. Zavala, F., et al. "Circumsporozoite Proteins of Malaria Parasites Contain a Single Immunodominant Region with Two or More Identical Epitopes." J. Exp. Med. 157 (1983): 1947-1957. PubMed: 6189951.
3. Hollingdale, M. R., et al. "Inhibition of Entry of *Plasmodium falciparum* and *P. vivax* Sporozoites into Cultured Cells; an *in Vitro* Assay of Protective Antibodies." J. Immunol. 132 (1984): 909-913. PubMed: 6317752.
4. Zavala, F., et al. "Rationale for Development of a Synthetic Vaccine against *Plasmodium falciparum* Malaria." Science 228 (1985): 1436-1440. PubMed: 2409595.
5. Wirtz, R. A., et al. "Comparative Testing of Monoclonal Antibodies against *Plasmodium falciparum* Sporozoites for ELISA Development." Bull. World Health Organ. 65 (1987): 39-45. PubMed: 3555879.

BEI Resources
www.beiresources.org
E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898

6. Zhang, M., et al. "Monoclonal Antibodies against *Plasmodium falciparum* Circumsporozoite Protein." Antibodies 6 (2017): 11.
7. Nardin, E., et al. "Circumsporozoite Proteins of Human Malaria Parasites *Plasmodium falciparum* and *Plasmodium vivax*." J. Exp. Med. 156 (1982): 20-30. PubMed: 7045272.

BEI Resources
www.beiresources.org

E-mail: contact@beiresources.org
Tel: 800-359-7370
Fax: 703-365-2898