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

Catalog No. MRA-183A

For research use only. Not for human use.

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 pH 7.2. The concentration, expressed as mg per mL, 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:
Monoclonal antibody 2A10 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. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; 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 human use.

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References:
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4. Zavala, F., et al. "Rationale for Development of a Synthetic Vaccine against *Plasmodium falciparum* Malaria." Science 228 (1985): 1436-1440. PubMed: 2409595.
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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.