

SUPPORTING INFECTIOUS DISEASE RESEARCH

# **Product Information Sheet for MRA-479A**

# Monoclonal Anti-*Plasmodium falciparum* Apical Membrane Antigen 1 (AMA1), Clone N3-2D9 (produced *in vitro*)

# Catalog No. MRA-479A

This reagent is the tangible property of the U.S. Government.

# For research use only. Not for use in humans.

#### **Contributor:**

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#### Manufacturer:

**BEI Resources** 

# **Product Description:**

Antibody Class: IgG1k, IgG2ak

The hybridoma from which MRA-479 was derived is reported to produce antibody of the IgG1 subclass, but MRA-479 occasionally contains both IgG1 $\kappa$  and IgG2 $\kappa$  probably because of a mixed hybridoma clone. However, the functional activity of this antibody preparation has been confirmed (see below). See Certificate of Analysis for lot-specific isotype results.

Monoclonal antibody prepared against the apical membrane antigen 1 (AMA1) of *Plasmodium falciparum (P. falciparum)* was purified from supernatants obtained from mouse N3-2D9 hybridoma.<sup>1</sup> The N3-2D9 monoclonal antibody is specific for the AMA1 of *P. falciparum*.<sup>1</sup>

#### **Material Provided:**

Each vial contains approximately 100  $\mu$ L (lot 70026314) or 250  $\mu$ L (lot 3361174) 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-479A 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 N3-2D9 is reported to function in western blot and immunofluorescence assays, and have a < 30% growth inhibitory effect on *P. falciparum*, strain FVO.<sup>1</sup>

#### Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-*Plasmodium falciparum* Apical Membrane Antigen 1 (AMA1), Clone N3-2D9 (produced *in vitro*), MRA-479A, contributed by Carole A. Long."

#### 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:**

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# References:

- 1. Long, C. A., Personal Communication.
- Paing, M. M., et al. "Shed EBA-175 Mediates Red Blood Cell Clustering that Enhances Malaria Parasite Growth and Enables Immune Evasion." <u>Elife</u> 7 (2018): e43224. PubMed: 30556808.

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