

Monoclonal Anti-*Plasmodium falciparum* 48/45-kDa Gamete Surface Protein (Pfs48/45), Clone IIC5B-10-1 (produced *in vitro*)

Catalog No. MRA-316A

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

Product Description:

Antibody Class: IgG2a

Monoclonal antibody prepared against the 48/45-kDa gamete surface protein of *Plasmodium falciparum* (*P. falciparum*) (mixed strains) was purified using protein G affinity chromatography from supernatants obtained from mouse IIC5B-10-1 hybridoma. MRA-316A was produced from BEI Resources seed lot 64091724 adapted to serum-free media.

Lot: 64091725

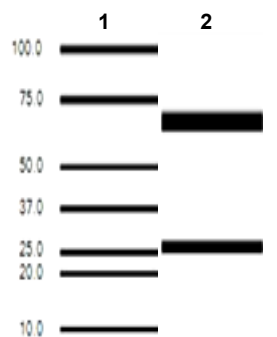
Manufacture Date: 27APR2016

TEST	SPECIFICATIONS	RESULTS
Antibody Class Determination	IgG2a	IgG2ak
Agilent Protein 230 Analysis	Correct molecular weight (MW) for heavy and light chains; Report purity	Correct molecular weight (MW) for heavy and light chains (Figure 1); 99.7% pure
Concentration by Spectrophotometer at OD ₂₈₀	~ 1 mg per mL	1.3 mg per mL
Functional Activity Western blot analysis with <i>P. falciparum</i> 3D7 (GL clone) (BEI Resources MRA-1001) ¹ Immunofluorescence assay with <i>P. falciparum</i> 3D7 (GL clone) (BEI Resources MRA-1001) ²	Reactive Reactive	Reactive (45-48 kDa; Figure 2) Reactive; fluorescence observed (Figure 3)
Sterility	0.22 µm filter-sterilized	0.22 µm filter-sterilized

¹Using a 1:500 dilution of MRA-316A as primary antibody and a 1:10000 dilution of goat anti-mouse IRDye[®] 800CW conjugate (LiCor[®] 925-32210) as secondary antibody

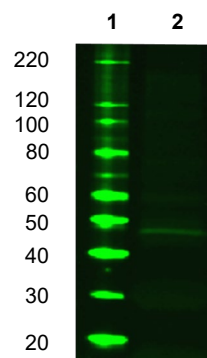
²Specific labeling of *P. falciparum* smears with MRA-316A with FITC and DAPI was observed following paraformaldehyde fixation.

Figure 1: Experion Pro260 Analysis



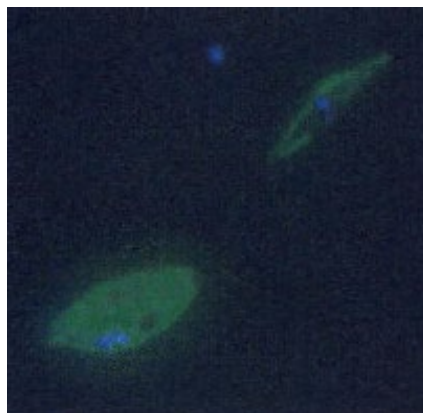
Lane 1: MW Markers (kDa)
Lane 2: MRA-316A

Figure 2: Functional Activity by Western Blot



Lane 1: MW Markers (kDa)
Lane 2: MRA-316A

Figure 3: *P. falciparum* Immunofluorescence Assay



/Sonia Bjorum Brower/
Sonia Bjorum Brower

Technical Manager or designee, ATCC Federal Solutions

09 JUN 2023

ATCC®, on behalf of BEI Resources, hereby represents and warrants that the material provided under this certificate has been subjected to the tests and procedures specified and that the results described, along with any other data provided in this certificate, are true and accurate to the best of ATCC®'s knowledge.

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

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

