

Monoclonal Antibody 3F10-6 Anti-*Plasmodium falciparum* Histoaspartic Protease (HAP) (produced *in vitro*)

Catalog No. MRA-811A

For research use only. Not for human use.

Contributor and Manufacturer:

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Product Description:

Antibody Class: IgG2b
 Mouse monoclonal antibody prepared against the histoaspartic protease (HAP) of *Plasmodium falciparum* (*P. falciparum*) was purified from 3F10-6 hybridoma supernatant by protein G affinity chromatography.^{1,2} Known previously as plasmepsin (PM) III, HAP is one of four, highly homologous aspartic proteases called plasmepsins that reside in the food vacuole of *P. falciparum* and cause degradation of hemoglobin or globin.² HAP is unique in that it has a histidine in place of the first canonical aspartic acid but is an active protease that may function by an aspartic or serine protease mechanism.²

Material Provided:

Each vial contains approximately 75 µL of purified monoclonal antibody in culture medium with sodium azide at a concentration of approximately 2 mg per mL.

Packaging/Storage:

MRA-811A 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 3F10-6 is reported to function in western blot analysis with a reported titer of 1:10,000.¹

Citation:

Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Antibody 3F10-6 Anti-*Plasmodium falciparum* Histoaspartic Protease (HAP) (produced *in vitro*), MRA-811A, contributed by Daniel E. Goldberg.”

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/bmb15/index.htm.

Disclaimers:

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References:

1. Goldberg, D. E., Personal Communication
2. Liu, J. et al. “The Role of *Plasmodium falciparum* Food Vacuole Plasmepsins.” *J. Biol. Chem.* 280 (2005): 1432-1437. PubMed: 15513918.

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