

# Plasmodium falciparum (5E409): sc-71903

## BACKGROUND

*Plasmodium falciparum* is a protozoan parasite that causes malaria in humans. *P. falciparum* malaria is transmitted to humans by *Anopheles* mosquitoes, and this type of malaria has the highest rate of complications and mortality, accounting for 80 percent of all human malarial infections and 90 percent of the deaths. Only the early trophozoites and gametocytes are seen in the peripheral blood during a *P. falciparum* infection. Sometimes, faint comma-shaped red dots are seen on the erythrocyte surface. The *P. falciparum* genome is very rich in A and T bases (approximately 80%) and is organized into 14 chromosomes that hold just over 5,300 genes. *Plasmodium falciparum* contains a plastid similar to plant chloroplasts, which was acquired by engulfing a eukaryotic alga and retaining the algal plastid. The *P. falciparum* apicomplexan plastid is an essential organelle that may be involved in lipid synthesis. This plastid is a potential target for anti-malarial drug development.

## REFERENCES

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## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

*Plasmodium falciparum* (5E409) is a mouse monoclonal antibody raised against recombinant histidine rich protein II from *Plasmodium falciparum*.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

*Plasmodium falciparum* (5E409) is recommended for detection of histidine rich protein II (HRP2) of *Plasmodium falciparum* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.