

S-antigen (PFS-1): sc-52208

BACKGROUND

Plasmodium falciparum is a protozoan parasite that causes malaria. It exhibits considerable antigenic heterogeneity which may be a major problem in developing an effective vaccine against malaria. The S-antigen of *Plasmodium falciparum* is a highly diverse, heat stable protein that is located in the parasitophorous vacuole of the mature asexual intraerythrocytic parasite. The S-antigen gene consists of multiple alleles that originate from the same chromosome site. The amino acid sequence of each allele contains a large central section of tandemly arranged, nearly identical peptides that are specific to each allele. Thus, antibodies directed against the repeat region of a particular allele can be used to define the serotype of an S-antigen. Flanking the central repeat block are two short regions of non-repetitive sequence which occur in four different forms, each of which is utilized to define a single S-antigen family. Comparison of the four S-antigen families reveals that they differ considerably from each other with variation being most pronounced in the C-terminal-flanking region.

REFERENCES

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SOURCE

S-antigen (PFS-1) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to the S-antigen of *Plasmodium falciparum* origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

S-antigen (PFS-1) is recommended for detection of S-antigen of *P. falciparum* of *Plasmodium falciparum* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of S-antigen: 48 kDa.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.