

# MSP-1 (PVM-1): sc-52080

## BACKGROUND

Malaria is an infectious disease caused by a protistan parasite of the genus *Plasmodium* and is mainly transmitted by mosquitoes. *Plasmodium* invades the red blood cells of its host, which causes symptoms such as fever, anemia and in severe cases, coma potentially leading to death. In the blood-stage forms of the malarial parasite *Plasmodium falciparum*, the merozoite surface protein 1 (MSP-1) is a major surface component. In preparation for erythrocyte invasion, MSP-1 undergoes selective proteolytic processing and reassembly. A glycosylphosphatidylinositol (GPI) anchor links MSP-1 to the parasite plasma membrane. MSP-1 contains mono- or oligosaccharides in O-linkage to serines or threonines. N-linked carbohydrates also associate with asparagines on MSP-1, despite the lack of N-glycosylating machinery in *P. falciparum* parasites. The peptide ligand T cell epitopes of MSP-1 mutually inhibit IFN- $\gamma$  secretion as well as proliferation of CD4<sup>+</sup> T cells in a majority of malaria cases, making it a good vaccine candidate antigen.

## REFERENCES

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## SOURCE

MSP-1 (PVM-1) is a mouse monoclonal antibody raised against MSP-1 of *Plasmodium vivax* origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

MSP-1 (PVM-1) is recommended for detection of MSP-1 of *Plasmodium vivax* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Molecular Weight of MSP-1: 195 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](http://www.scbt.com) for detailed protocols and support products.