**BACKGROUND**

Blood consists of a solid component that includes erythrocytes, leukocytes and platelets, and a liquid component known as plasma, which is a buffered solution of proteins and salts. Innate and adaptive immune responses rely on the function of leukocytes, which are nucleated white blood cells that destroy invading cells and remove debris. White blood cells, also designated polymorphonuclear leukocytes, include granulocytes, monocytes and mast cell precursors. Macrophages are tissue-localized, differentiated cells derived from circulating monocytes. Along with circulating neutrophils, macrophages are phagocytic cells that engulf antibody-coated pathogens, which are subsequently degraded in intracellular vesicles. Tissue localized macrophages can target a spectrum of bacterial pathogens without requiring previous exposure.

**SOURCE**

Macrophage Marker (MAC387) is a mouse monoclonal antibody raised against peripheral blood monocyte components of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Macrophage Marker (MAC387) is available conjugated to agarose (sc-66204 AC), 500 µg/0.25 ml agarose in 1 ml, for IF; to HRP (sc-66204 HRP), 200 µg/ml, for WB, HRP and ELISA; to either phycoerythrin (sc-66204 PE), fluorescein (sc-66204 FITC), Alexa Fluor® 488 (sc-66204 AF488), Alexa Fluor® 546 (sc-66204 AF546), Alexa Fluor® 594 (sc-66204 AF594) or Alexa Fluor® 647 (sc-66204 AF647), 200 µg/ml, for WB (RGB), IF, HRP and FC; and to either Alexa Fluor® 680 (sc-66204 AF680) or Alexa Fluor® 790 (sc-66204 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FC.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**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 for detailed protocols and support products.

**APPLICATIONS**

Macrophage Marker (MAC387) is recommended for detection of macrophages of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30:1:3000).

Molecular Weight of Macrophage Marker: 86 kDa.

Positive Controls: HL-60 + DMSO cell lysate: sc-24703 or HL-60 whole cell lysate: sc-2209.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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