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SM2011PS Monoclonal Antibody to MRP8 / MRP14 - Aff - Purified

Alternate names: MRP8/14, S100A8, S100A8/A9, S100A9

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

Background: Macrophages comprise of many forms of mononuclear phagocytes found in tissues. Mononuclear phagocytes arise from hematopoietic stem cells in the bone marrow. After passing through the monoblast and promonocyte states of the monocyte stage, they enter the blood, where they circulate for about 40 hours. They then enter tissues and increase in size, phagocytic activity, and lysosomal enzyme content becomming macrophages. Among the functions of macrophages are nonspecific phagocytosis and pinocytosis, specific phagocytosis of opsonized microorganisms mediated by Fc receptors and complement receptors, killing of ingested microorganisms, digestion and presentation of antigens to T and B lymphocytes, and secretion of a large number of diverse products, including many enzymes including lysozyme and collagenases, several complement components and coagulation factors, some prostaglandins and leukotrienes, and many regulatory molecules (Interferon, Interleukin 1). Among cells that are now recognised as macrophages are histiocytes, Kupffer cells, osteoclasts, microglial cells, synovial type A cells, interdigitating cells, and Langerhans cells (in normal tissues) and epithelioid cells and Langerhans-type and foreign-body-type multinucleated giant cells (in inflamed tissues).

Host / Isotype: Mouse / IgG1

Clone: MAC387

Immunogen: Human Monocytes.
Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

Format:
State: Liquid purified IgG fraction
Purification: Affinity Chromatography on Protein G
Buffer System: PBS
Preservatives: 0.09% Sodium Azide

Applications:
Flow Cytometry: Use 10 µl of 1/50-1/100 diluted antibody to label $1x10^6$ cells in 100 µl (Membrane permeabilisation is required).
Immunohistochemistry on Frozen Sections: 1/100-1/200.
Immunohistochemistry on Paraffin Embedded Sections: 1/100-1/200. This antibody requires protein digestion pre-treatment e.g. trypsin, 0.1% for 10 minutes or antigen retrieval using heat treatment prior to staining.
Recommended Positive Control: Human Spleen Tissue.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes the L1 or Calprotectin molecule, an intracytoplasmic antigen comprised of a 12kD alpha chain and a 14kD beta chain expressed by Granulocytes, Monocytes and by tissue Macrophages. Variable results have been reported for

staining brain macrophages and microglia.

Species Reactivity: **Tested:** Human, Horse, Porcine, Canine, Rabbit, Baboon, Bovine, Fallow deer, Guinea Pig, Rat, Feline, Cynomologus monkey, Rhesus monkey and Goat.

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

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Pictures:

Figure 1. SM2011P/PT Macrophages antibody staining of allergic marmoset brain using enhanced DAB. Mag. X400.