

Macrophage Subset (HIS36): sc-19612

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 are derived from circulating monocytes and can target a spectrum of bacterial pathogens without requiring previous exposure.

REFERENCES

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2. Janeway, C.A., et al. 1997. *Immunobiology: The immune system in health and disease*. New York: Garland Publishing.
3. Beilhack, A., et al. 2003. Immune traffic: a functional overview. *Lymphat. Res. Biol.* 1: 219-234.
4. Esmon, C.T. 2004. Interactions between the innate immune and blood coagulation systems. *Trends Immunol.* 25: 536-542.
5. Mempel, T.R., et al. 2004. *In vivo* imaging of leukocyte trafficking in blood vessels and tissues. *Curr. Opin. Immunol.* 16: 406-417.
6. Williams, I.R. 2004. Chemokine receptors and leukocyte trafficking in the mucosal immune system. *Immunol. Res.* 29: 283-292.
7. Plackett, T.P., et al. 2004. Aging and innate immune cells. *J. Leukoc. Biol.* 76: 291-299.
8. Schaerli, P., et al. 2005. Chemokines: control of primary and memory T-cell traffic. *Immunol. Res.* 31: 57-74.

SOURCE

Macrophage Subset (HIS36) is a mouse monoclonal antibody raised against rat bone marrow cells.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Macrophage Subset (HIS36) is available conjugated to agarose (sc-19612 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-19612 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-19612 PE), fluorescein (sc-19612 FITC), Alexa Fluor[®] 488 (sc-19612 AF488), Alexa Fluor[®] 546 (sc-19612 AF546), Alexa Fluor[®] 594 (sc-19612 AF594) or Alexa Fluor[®] 647 (sc-19612 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-19612 AF680) or Alexa Fluor[®] 790 (sc-19612 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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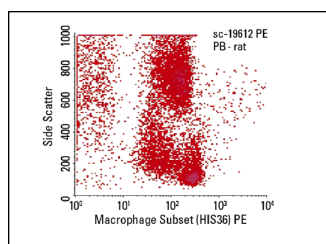
APPLICATIONS

Macrophage Subset (HIS36) is recommended for detection of an ED2-like antigen, which is found on tissue macrophages and thioglycollated-elicited peritoneal exudate cells, by not on monocytes of mouse and rat origin by 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) and flow cytometry (1 µg per 1 x 10⁶ cells).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Macrophage Subset (HIS36) PE: sc-19612 PE. FCM analysis of rat peripheral blood leukocytes.

SELECT PRODUCT CITATIONS

1. Fulgenzi, A., et al. 2005. Inhibition of chemokine expression in rat inflamed paws by systemic use of the antihyperalgesic oxidized ATP. *BMC Immunol.* 6: 18.
2. Rodrigues, A., et al. 2008. Activation of toll-like receptor 4 (TLR4) by *in vivo* and *in vitro* exposure of rat epididymis to lipopolysaccharide from *Escherichia coli*. *Biol. Reprod.* 79: 1135-1147.
3. Chang, Y.H., et al. 2008. Inhibitory effects of glucosamine on endotoxin-induced uveitis in Lewis rats. *Invest. Ophthalmol. Vis. Sci.* 49: 5441-5449.

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.