Macrophage Marker (ER-MP58): sc-52699



The Power to Question

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.

REFERENCES

- Denburg, J.A., Telizyn, S., Messner, H., Lim, B., Jamal, N., Ackerman, S.J., Gleich, G.J. and Bienenstock, J. 1985. Heterogeneity of human peripheral blood eosinophil-type colonies: evidence for a common basophil-eosinophil progenitor. Blood 66: 312-318.
- Scordamaglia, A., Orlandini, A., Zucchi, L., Caria, M., Zocchi, E., Bisetti, A. and Canonica, G.W. 1987. The immunological events leading to the *in vitro* response to PPD. Allergol. Immunopathol. 15: 83-87.
- Margolick, J.B., Volkman, D.J., Goldstein, H. and Fauci, A.S. 1988. Production of phagocytosis-inducing factor and expression of 4B4 antigen by cloned human T cells before and after transformation with HTLV-I. Cell. Immunol. 111: 196-203.
- Mast, J., Goddeeris, B.M., Peeters, K., Vandesande, F. and Berghman, L.R. 1998. Characterization of chicken monocytes, macrophages and interdigitating cells by the monoclonal antibody KUL01. Vet. Immunol. Immunopathol. 61: 343-357.
- Wigley, P., Berchieri, A., Page, K.L., Smith, A.L. and Barrow, P.A. 2001. Salmonella enterica serovar Pullorum persists in splenic macrophages and in the reproductive tract during persistent, disease-free carriage in chickens. Infect. Immun. 69: 7873-7879.
- Gordon, S. and Taylor, P.R. 2005. Monocyte and Macrophage heterogeneity. Nat. Rev. Immunol. 5: 953-964.
- Hume, D.A. 2006. The mononuclear phagocyte system. Curr. Opin. Immunol. 18: 49-53.
- 8. Roodman, G.D. 2006. Regulation of osteoclast differentiation. Ann. N.Y. Acad. Sci. 1068: 100-109.

SOURCE

Macrophage Marker (ER-MP58) is a rat monoclonal antibody raised against macrophage cell lines of mouse origin.

PRODUCT

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

Macrophage Marker (ER-MP58) is available conjugated to either phycoerythrin (sc-52699 PE) or fluorescein (sc-52699 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

Macrophage Marker (ER-MP58) is recommended for detection of macrophages of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

SELECT PRODUCT CITATIONS

 Sellami, M., Meghraoui-Kheddar, A., Terryn, C., Fichel, C., Bouland, N., Diebold, M.D., Guenounou, M., Héry-Huynh, S. and Le Naour, R. 2016. Induction and regulation of murine emphysema by elastin peptides. Am. J. Physiol. Lung Cell. Mol. Physiol. 310: L8-L23.

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.



See Macrophage Marker (MAC387): sc-66204 for Macrophage Marker antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**