SANTA CRUZ BIOTECHNOLOGY, INC.

Macrophage Marker (25F9): sc-52698



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

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Gordon, S. and Taylor, P.R. 2005. Monocyte and macrophage heterogeneity. Nat. Rev. Immunol. 5: 953-964.
- 7. Hume, D.A. 2006. The mononuclear phagocyte system. Curr. Opin. Immunol. 18: 49-53.

SOURCE

Macrophage Marker (25F9) is a mouse monoclonal antibody raised against mature macrophages of human origin.

PRODUCT

Each vial contains 100 μ g lgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PROTOCOLS

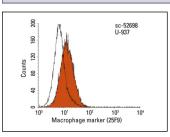
See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

Macrophage Marker (25F9) is recommended for detection of mature macrophages of human and porcine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffinembedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Molecular Weight of Macrophage Marker: 86 kDa.

DATA



Macrophage marker (25F9): sc-52698. Indirect FCM analysis of U-937 cells stained with Macrophage Marker (25F9), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG1: sc-3877.

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.



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