



Dendritic Cell marker (1F119): sc-52661

BACKGROUND

Dendritic cells are potent antigen presenting cells that are critical for the induction of T cell responses, migration and antigen capture, resulting in cell mediated immunity. Within different tissues, dendritic cells differentiate and become active in the taking up and processing of antigens, and in their subsequent presentation on the cell surface linked to major histocompatibility (MHC) molecules. Dendritic cells are found in many nonlymphoid tissues and, upon appropriate stimulation, dendritic cells undergo further maturation and migrate to secondary lymphoid tissues, where they present Ag to T cells and induce an immune response.

REFERENCES

1. Steinman, R.M. 1991. The dendritic cell system and its role in immunogenicity. *Annu. Rev. Immunol.* 9: 271-296.
2. Sallusto, F. and Lanzavecchia, A. 1994. Efficient presentation of soluble antigen by cultured human dendritic cells is maintained by granulocyte/macrophage colony-stimulating factor plus interleukin-4 and downregulated by tumor necrosis factor α . *J. Exp. Med.* 179: 1109-1118.
3. Sallusto, F., Cella, M., Danieli, C. and Lanzavecchia, A. 1995. Dendritic cells use macropinocytosis and the mannose receptor to concentrate macromolecules in the major histocompatibility complex class II compartment: downregulation by cytokines and bacterial products. *J. Exp. Med.* 182: 389-400.
4. Cella, M., Sallusto, F. and Lanzavecchia, A. 1997. Origin, maturation and antigen presenting function of dendritic cells. *Curr. Opin. Immunol.* 9: 10-16.
5. Bodey, B., Bodey, B., Jr. and Kaiser, H.E. 1997. Dendritic type, accessory cells within the mammalian thymic microenvironment. Antigen presentation in the dendritic neuro-endocrine-immune cellular network. *In Vivo.* 11: 351-370.
6. Banchereau, J. and Steinman, R.M. 1998. Dendritic cells and the control of immunity. *Nature* 392: 245-252.
7. Steinman, R.M. 2001. Dendritic cells and the control of immunity: enhancing the efficiency of antigen presentation. *Mt. Sinai J. Med.* 68: 160-166.
8. Bykovskaia, S.N. Shurin, G.V., Graner, S., Bunker, M.L., Olson, W., Thomas, R., Shurin, M.R., Marks, S., Storkus, W.J. and Shogan, J. 2002. Differentiation of immunostimulatory stem-cell- and monocyte-derived dendritic cells involves maturation of intracellular compartments responsible for antigen presentation and secretion. *Stem Cells.* 20: 380-393.
9. Steinman, R.M. and Hemmi, H. 2006. Dendritic cells: translating innate to adaptive immunity. *Curr. Top. Microbiol. Immunol.* 311: 17-58.

SOURCE

Dendritic Cell marker (1F119) is a mouse monoclonal antibody raised against dendritic cells of rat origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

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

Dendritic Cell marker (1F119) is available conjugated fluorescein (sc-52661 FITC, 100 tests in 2 ml), for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

Dendritic Cell marker (1F119) is recommended for detection of Dendritic Cells of mouse and rat origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1×10^6 cells).

SELECT PRODUCT CITATIONS

1. Bianchi, P.K.F.D.C., Leandro, R.M., Poscai, A.N., Yoshinaga, T., Gonzalez, P.O. and Kfoury-Junior, J.R. 2017. Progesterone decreases *in vitro* indoleamine 2, 3-dioxygenase expression in dendritic and CD4⁺ cells from maternal-fetal interface of rats. *Immunol. Invest.* 46: 447-459.

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.