

Integrin α M (CC125): sc-101830

BACKGROUND

Integrin α M (also designated complement component receptor 3 α chain, CD11b (p170), macrophage antigen α polypeptide, cell surface glycoprotein Mac-1 α subunit, CR3 α chain, MAC1A, MO1A and ITGAM) is a cell adhesion molecule that acts as a receptor for cell surface ligands such as intracellular adhesion molecules (ICAMs) or soluble ligands. Integrins are heterodimeric proteins that contain an α chain and β chain. Integrin α M combines with Integrin β 2 to form a leukocyte-specific integrin referred to as macrophage receptor-1 (Mac-1) or inactivated-C3b (iC3b) receptor 3 (CR3). Integrin α M/ β 2 is important in the adherence of neutrophils and monocytes to stimulated endothelium, and also in the phagocytosis of complement coated particles.

REFERENCES

- Nathan, C., et al. 1990. Tumor necrosis factor and CD11/CD18 (β 2) integrins act synergistically to lower cAMP in human neutrophils. *J. Cell Biol.* 111: 2171-2181.
- Li, R., et al. 1995. A peptide derived from the intercellular adhesion molecule-2 regulates the avidity of the leukocyte integrins CD11b/CD18 and CD11c/CD18. *J. Cell Biol.* 129: 1143-1153.
- Nueda, A., et al. 1995. Hematopoietic cell-type-dependent regulation of leukocyte integrin functional activity: CD11b and CD11c expression inhibits LFA-1-dependent aggregation of differentiated U937 cells. *Cell. Immunol.* 164: 163-169.
- Walzog, B., et al. 1995. The leukocyte integrin Mac-1 (CD11b/CD18) contributes to binding of human granulocytes to collagen. *Exp. Cell Res.* 218: 28-38.
- Schlecht, G., et al. 2004. Antigen targeting to CD11b allows efficient presentation of CD4⁺ and CD8⁺ T cell epitopes and *in vivo* Th1-polarized T cell priming. *J. Immunol.* 173: 6089-6097.
- Lau, D., et al. 2005. Myeloperoxidase mediates neutrophil activation by association with CD11b/CD18 integrins. *Proc. Natl. Acad. Sci. USA* 102: 431-436.
- Sandilands, G.P., et al. 2005. Cross-linking of neutrophil CD11b results in rapid cell surface expression of molecules required for antigen presentation and T-cell activation. *Immunology* 114: 354-368.
- Hieronimus, T., et al. 2005. Progressive and controlled development of mouse dendritic cells from Flt-3⁺CD11b⁺ progenitors *in vitro*. *J. Immunol.* 174: 2552-2562.
- Carrigan, S.O., et al. 2005. Neutrophil differentiated HL-60 cells model Mac-1 (CD11b/CD18)-independent neutrophil transepithelial migration. *Immunology* 115: 108-117.

SOURCE

Integrin α M (CC125) is a mouse monoclonal antibody raised against thymocytes of bovine 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 200 μ g IgG₁ lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin α M (CC125) is available conjugated to either phycoerythrin (sc-101830 PE) or fluorescein (sc-101830 FITC), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

Integrin α M (CC125) is recommended for detection of Integrin α M of bovine and ovine origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

Molecular Weight of Integrin α M: 170 kDa.

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 **Integrin α M (2LPM19c): sc-20050** for Integrin α M antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor[®] 488, 546, 594, 647, 680 and 790.