

Integrin α X (F-20): sc-26692

BACKGROUND

Integrin α X (CD11C, leukocyte surface antigen p150,95, CR4, Axb2) is a type 1 transmembrane protein that traditionally combines with β 2 chain to form a leukocyte-specific integrin known as inactivated-C3b (iC3b) receptor 4 (CR4). Integrin α X/ β 2 shares similar properties of the α M/ β 2 integrin in mediating adherence of neutrophils and monocytes to stimulated endothelial cells, and in phagocytosis of complement coated particles. Abnormal expression of Integrin α X is characteristic of hairy cell leukemia (HCL) and is dependent upon activation of proto-oncogenes Ras and JunD. Proteins and DNA elements that influence transcription of Integrin α X include Sp1 and Sp1-like factors, AP-1 family, C/EBP, Oct-2 and PU.1. Integrin α X is present on monocyte derivative dendritic cells (DCs), macrophages and NK cells. Upon activation, DCs present in skin (Langerhans cells), lining of nose, lung, stomach, intestine and blood can migrate to lymphoid tissues and interact with T and B cells to initiate and shape the immune response.

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.
- David, V., et al. 1991. Proliferation of resting lymphocytes is induced by triggering T cells through an epitope common to the three CD18/CD11 leukocyte adhesion molecules. *Cell. Immunol.* 136: 519-524.
- Majima, T., et al. 1993. Defective mononuclear cell antibody-dependent cellular cytotoxicity (ADCC) in patients with leukocyte adhesion deficiency emphasizing on different CD11/CD18 requirement of Fc γ RI versus Fc γ RII in ADCC. *Cell. Immunol.* 148: 385-396.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: Itgax (mouse) mapping to 7 F3.

SOURCE

Integrin α X (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Integrin α X of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26692 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

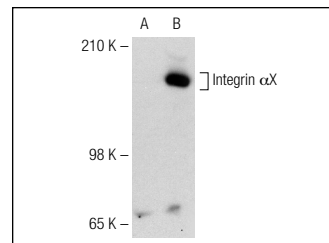
Integrin α X (F-20) is recommended for detection of Integrin α X of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin α X siRNA (m): sc-35696, Integrin α X shRNA Plasmid (m): sc-35696-SH and Integrin α X shRNA (m) Lentiviral Particles: sc-35696-V.

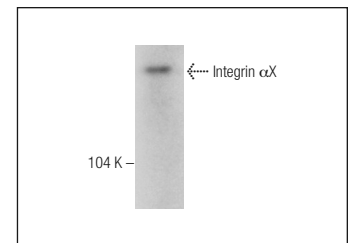
Molecular Weight of Integrin α X: 145 kDa.

Positive Controls: Integrin α X (m2): 293T Lysate: sc-178810 or J774.A1 cell lysate: sc-3802.

DATA



Integrin α X (F-20): sc-26692. Western blot analysis of Integrin α X expression in non-transfected: sc-117752 (A) and mouse Integrin α X transfected: sc-178810 (B) 293T whole cell lysates.



Integrin α X (F-20): sc-26692. Western blot analysis of Integrin α X expression in J774.A1 whole cell lysate.

SELECT PRODUCT CITATIONS

- Oliveira, L.A., et al. 2010. Expression of β 2 integrin (CD18) in embryonic mouse and chicken heart. *Braz. J. Med. Biol. Res.* 43: 25-35.
- Calderón, J., et al. 2012. The receptor Slamf1 on the surface of myeloid lineage cells controls susceptibility to infection by *Trypanosoma cruzi*. *PLoS Pathog.* 8: e1002799.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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



Try **Integrin α X (D-8): sc-398708**, our highly recommended monoclonal alternative to Integrin α X (F-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Integrin α X (D-8): sc-398708**.