SANTA CRUZ BIOTECHNOLOGY, INC.

Integrin αX (N-19): sc-6620

BACKGROUND

Integrin αX (CD11C, leukocyte surface antigen p150,95, CR4, Axb2) is a type 1 transmembrane protein that traditionally combines with β2 chain to form a leukocyte-specific integrin known as inactivated-C3b (iC3b) receptor 4 (CR4). Integrin αX/β2 shares similar properties of the αM/β2 Integrin in mediating adherence of neutrophils and monocytes to stimulated endothelial cells, and in phagocytosis of complement coated particles. Abnormal expression of Integrin αX 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 αX include Sp1 and Sp1-like factors, AP-1 family, C/EBP, Oct-2 and PU.1. Integrin αX 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

1. Nham, S.U. 1999. Characteristics of fibrinogen binding to the domain of CD11c, an α subunit of p150,95. Biochem. Biophys. Res. Commun. 264: 630-634.
2. Binder, R.J., et al. 2000. Cutting edge: heat shock protein γp96 induces maturation and migration of CD11c+ cells *in vivo*. J. Immunol. 165: 6029-6035.
3. Langeggen, H., et al. 2002. Human umbilical vein endothelial cells express complement receptor 1 (CD35) and complement receptor 4 (CD11c/CD18) *in vitro*. Inflammation 26: 103-110.
4. Nicolaou, F., et al. 2003. CD11c gene expression in hairy cell leukemia is dependent upon activation of the proto-oncogenes Ras and JunD. Blood 101: 4033-4041.
5. Edwards, A.D., et al. 2003. Relationships among murine CD11c (high) dendritic cell subsets as revealed by baseline gene expression patterns. J. Immunol. 171: 47-60.

CHROMOSOMAL LOCATION

Genetic locus: ITGAX (human) mapping to 16p11.2.

SOURCE

Integrin αX (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Integrin αX of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6620 P, (100 µg 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

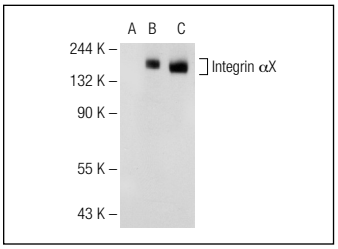
Integrin αX (N-19) is recommended for detection of Integrin αX of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin αX siRNA (h): sc-35695, Integrin αX shRNA Plasmid (h): sc-35695-SH and Integrin αX shRNA (h) Lentiviral Particles: sc-35695-V.

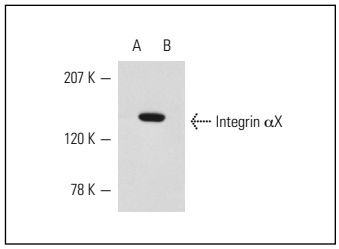
Molecular Weight of Integrin αX: 145 kDa.

Positive Controls: THP-1 cell lysate: sc-2238, HL-60 + PMA cell lysate: sc-24705 or Integrin αX (h2): 293T Lysate: sc-159744.

DATA



Integrin αX (N-19): sc-6620. Western blot analysis of Integrin αX expression in non-transfected 293T: sc-117752 (**A**), human Integrin αX transfected 293T: sc-159744 (**B**) and HL-60 (**C**) whole cell lysates.



Integrin αX (N-19): sc-6620. Western blot analysis of Integrin αX expression in uninduced control (**A**) and PMA-induced (**B**) HL-60 whole cell lysates.

SELECT PRODUCT CITATIONS

1. Silva, M.A., et al. 2004. Characterization and distribution of colonic dendritic cells in Crohn's disease. Inflamm. Bowel Dis. 10: 504-512.

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.

MONOS Satisfaction Guaranteed

Try **Integrin αX (B-6): sc-46676** or **Integrin αX (G-3): sc-398725**, our highly recommended monoclonal alternatives to Integrin αX (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Integrin αX (B-6): sc-46676**.