

Integrin α X (h2): 293T Lysate: sc-159744

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

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- Langelegen, 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.
- 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.
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- Paharkova-Vatchkova, V., et al. 2004. Estrogen preferentially promotes the differentiation of CD11c⁺ CD11b (intermediate) dendritic cells from bone marrow precursors. *J. Immunol.* 172: 1426-1436.
- Scumpia, P.O., et al. 2005. CD11c⁺ dendritic cells are required for survival in murine polymicrobial sepsis. *J. Immunol.* 175: 3282-3286.

CHROMOSOMAL LOCATION

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

PRODUCT

Integrin α X (h2): 293T Lysate represents a lysate of human Integrin α X transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Integrin α X (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Integrin α X antibodies. Recommended use: 10-20 μ l per lane.

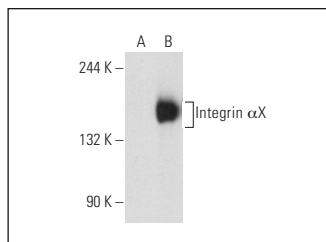
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Integrin α X (B-6): sc-46676 is recommended as a positive control antibody for Western Blot analysis of enhanced human Integrin α X expression in Integrin α X transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

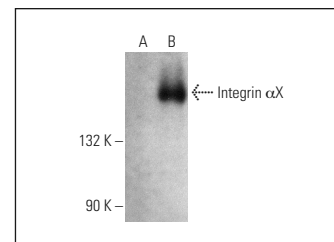
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Integrin α X (B-6): sc-46676. Western blot analysis of Integrin α X expression in non-transfected: sc-117752 (A) and human Integrin α X transfected: sc-159744 (B) 293T whole cell lysates.



Integrin α X (G-3): sc-398725. Western blot analysis of Integrin α X expression in non-transfected: sc-117752 (A) and human Integrin α X transfected: sc-159744 (B) 293T whole cell lysates.

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.