Integrin αX (M-20): sc-26693



The Power to Question

BACKGROUND

Integrin αX (CD11C, leukocyte surface antigen p150,95, CR4, Axb2) is a type 1 transmembrane protein that traditionally combines with $\beta 2$ chain to form a leukocyte-specific integrin known as inactivated-C3b (iC3b) receptor 4 (CR4). Integrin $\alpha X/\beta 2$ shares similar properties of the $\alpha M/\beta 2$ 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.
- 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.
- 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.
- 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.
- 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 (mouse) mapping to 7 F3.

SOURCE

Integrin αX (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Integrin αX of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-26693 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 αX (M-20) is recommended for detection of Integrin αX 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.

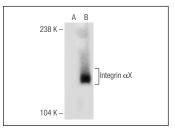
Molecular Weight of Integrin α X: 145 kDa.

Positive Controls: Integrin αX (m): 293T Lysate: sc-178810.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Integrin α X (M-20): sc-26693. 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.

RESEARCH USE

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



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

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