Integrin α L (I21/7): sc-18847



The Power to Question

BACKGROUND

Integrins are heterodimers composed of noncovalently associated transmembrane α and β subunits. The 16 α and 8 β subunits heterodimerize to produce more than 20 different receptors. Most integrin receptors bind ligands that are components of the extracellular matrix, including Fibronectin, Collagen and Vitronectin. Certain integrins can also bind to soluble ligands such as Fibrinogen, or to counterreceptors on adjacent cells such as the intracellular adhesion molecules (ICAMs), leading to aggregation of cells. Ligands serve to cross-link or cluster integrins by binding to adjacent integrin receptors; both receptor clustering and ligand occupancy are necessary for the activation of integrin-mediated responses. In addition to mediating cell adhesion and cytoskeletal organization, integrins function as signaling receptors. Signals transduced by integrins play a role in many biological processes, including cell growth, differentiation, migration and apoptosis.

REFERENCES

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- 4. Sheppard, D. 1996. Epithelial Integrins. Bioessays 18: 655-660.
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- 6. Rose, D.M., et al. 2003. Paxillin binding to the α 4 integrin subunit stimulates LFA-1 (integrin α L β 2)-dependent T cell migration by augmenting the activation of focal adhesion kinase/proline-rich tyrosine kinase-2. J. Immunol. 170: 5912-5918.
- 7. Tng, E., et al. 2004. The Integrin α L β 2 hybrid domain serves as a link for the propagation of activation signal from its stalk regions to the I-like domain. J. Biol. Chem. 279: 54334-54339.
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CHROMOSOMAL LOCATION

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

SOURCE

Integrin α L (I21/7) is a rat monoclonal antibody raised against I21/7 hybridoma produced by the fusion of MPC.11.TG.1.7.0ua myeloma cells with splenocytes from a Lewis rat immunized with BW 5147 cell line.

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 $\mu g \; lg G_{2a}$ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Integrin αL (I21/7) is available conjugated to either phycoerythrin (sc-18847 PE) or fluorescein (sc-18847 FITC), 200 $\mu g/ml$, for WB (RGB), IF, IHC(P) and FCM.

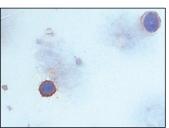
APPLICATIONS

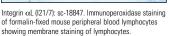
Integrin αL (121/7) is recommended for detection of Integrin αL of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μg per 1 x 10⁶ cells).

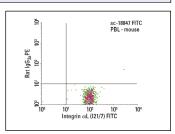
Suitable for use as control antibody for Integrin α L siRNA (m): sc-35692, Integrin α L shRNA Plasmid (m): sc-35692-SH and Integrin α L shRNA (m) Lentiviral Particles: sc-35692-V.

Molecular Weight of Integrin α L: 180 kDa.

DATA







Integrin αL (I21/T) FTIC: sc-18847 FITC. FCM analysis of mouse peripheral blood leukocytes. Quadrant markers were set based on the isotype control, normal rat $\lg G_{2a}\text{-FITC}$: sc-2831.

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.