

Integrin α L (2D7): sc-20006

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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- Kim, M., et al. 2004. The primacy of affinity over clustering in regulation of adhesiveness of the Integrin α L β 2. *J. Cell Biol.* 167: 1241-1253.

CHROMOSOMAL LOCATION

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

SOURCE

Integrin α L (2D7) is a rat monoclonal antibody raised against IL-2 activated splenic NK cells.

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 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as phycoerythrin (sc-20006 PE) or fluorescein (sc-20006 FITC) conjugates for flow cytometry, 100 tests.

Available azide-free for *in vitro* blocking, sc-20006 L, 200 μ g/0.1 ml.

APPLICATIONS

Integrin α L (2D7) is recommended for detection of Integrin α L of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells).

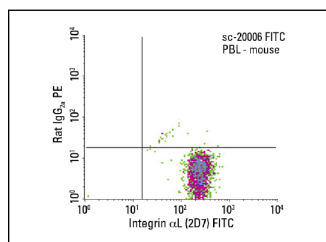
Suitable for use as control antibody for Integrin α L siRNA (m): sc-35692, Integrin α L shRNA Plasmid (m): sc-35692-SH and Integrin α L shRNA (m) Lentiviral Particles: sc-35692-V.

Molecular Weight of Integrin α L: 180 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-rat IgG-FITC: sc-2011 (dilution range: 1:100-1:400) or goat anti-rat IgG-TR: sc-2782 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Integrin α L (2D7) FITC: sc-20006 FITC. FCM analysis of mouse peripheral blood leukocytes. Quadrant markers were set based on the isotype control, normal rat IgG_{2a}: sc-2831.

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.