

Integrin β L1 (F-21): sc-133691

BACKGROUND

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. Integrin β L1 (integrin, beta-like 1), also known as OSCP (osteoblast-specific cysteine-rich protein), TIED (ten integrin EGF-like repeat domain-containing protein) or ITGBL1, is a 494 amino acid secreted protein that is widely expressed in many tissues, but readily detectable only in aorta. Integrin β L1 contains ten tandem EGF-like repeats that are similar to those found in the cysteine rich 'stalk-like' structure of integrin β -subunits.

REFERENCES

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2. Hynes, R.O. 1992. Integrins: versatility, modulation and signaling in cell adhesion. *Cell* 69: 11-25.
3. Berdichevsky, F. et al. 1994. Branching morphogenesis of human mammary epithelial cells in collagen gels. *J. Cell Sci.* 1073557-1073568.
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5. Miyamoto, S., et al. 1995. Synergistic roles for receptor occupancy and aggregation in integrin transmembrane function. *Science* 267: 883-885.
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CHROMOSOMAL LOCATION

Genetic locus: ITGBL1 (human) mapping to 13q33.1.

SOURCE

Integrin β L1 (F-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic Integrin β L1 peptide of human origin.

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 100 μ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

Integrin β L1 (F-21) is recommended for detection of Integrin β L1 of human 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Integrin β L1 siRNA (h): sc-75342, Integrin β L1 shRNA Plasmid (h): sc-75342-SH and Integrin β L1 shRNA (h) Lentiviral Particles: sc-75342-V.

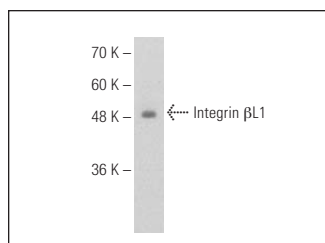
Molecular Weight of Integrin β L1: 51 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or U-2 OS cell lysate: sc-2295.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



Integrin β L1 (F-21): sc-133691. Western blot analysis of Integrin β L1 expression in Jurkat whole cell lysate.

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.