

Integrin $\beta 6$ (4C3): sc-293194

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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- Kaabeche, K., et al. 2005. Cbl-mediated ubiquitination of $\alpha 5$ Integrin subunit mediates Fibronectin-dependent osteoblast detachment and apoptosis induced by FGFR2 activation. *J. Cell Sci.* 118: 1223-1232.
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CHROMOSOMAL LOCATION

Genetic locus: ITGB6 (human) mapping to 2q24.2.

SOURCE

Integrin $\beta 6$ (4C3) is a mouse monoclonal antibody raised against amino acids 604-707 of Integrin $\beta 6$ of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Integrin $\beta 6$ (4C3) is recommended for detection of Integrin $\beta 6$ 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).

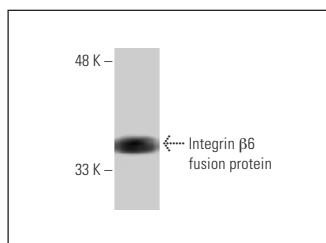
Suitable for use as control antibody for Integrin $\beta 6$ siRNA (h): sc-43135, Integrin $\beta 6$ shRNA Plasmid (h): sc-43135-SH and Integrin $\beta 6$ shRNA (h) Lentiviral Particles: sc-43135-V.

Molecular Weight of Integrin $\beta 6$: 97 kDa.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Integrin $\beta 6$ (4C3): sc-293194. Western blot analysis of human recombinant Integrin $\beta 6$ fusion protein.

SELECT PRODUCT CITATIONS

- Kemper, M., et al. 2021. Integrin α -V is an important driver in pancreatic adenocarcinoma progression. *J. Exp. Clin. Cancer Res.* 40: 214.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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.