

Integrin $\beta 6$ (H-110): sc-15329

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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- Clark, E.A., et al. 1995. Integrins and signal transduction pathways: the road taken. *Science* 268: 233-239.
- Sheppard, D. 1996. Epithelial integrins. *Bioessays* 18: 655-660.
- Juliano, R. 1996. Cooperation between soluble factors and integrin-mediated cell anchorage in the control of cell growth and differentiation. *Bioessays* 18: 911-917.
- Orecchia, A., et al. 2003. Vascular endothelial growth factor receptor-1 is deposited in the extracellular matrix by endothelial cells and is a ligand for the $\alpha 5/\beta 1$ Integrin. *J. Cell Sci.* 116: 3479-3489.
- Mould, A.P., et al. 2003. Role of ADMIDAS cation-binding site in ligand recognition by Integrin $\alpha 5/\beta 1$. *J. Biol. Chem.* 278: 51622-51629.

CHROMOSOMAL LOCATION

Genetic locus: ITGB6 (human) mapping to 2q24.2; Itgb6 (mouse) mapping to 2 C1.2.

SOURCE

Integrin $\beta 6$ (H-110) is a rabbit polyclonal antibody raised against amino acids 621-730 mapping near the C-terminus of Integrin $\beta 6$ of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

Integrin $\beta 6$ (H-110) is recommended for detection of Integrin $\beta 6$ of mouse, rat and 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)], 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).

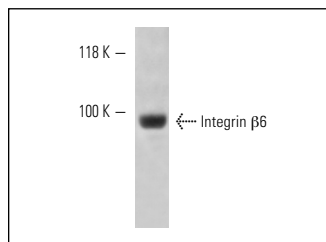
Integrin $\beta 6$ (H-110) is also recommended for detection of Integrin $\beta 6$ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Integrin $\beta 6$ siRNA (h): sc-43135, Integrin $\beta 6$ siRNA (m): sc-43136, Integrin $\beta 6$ shRNA Plasmid (h): sc-43135-SH, Integrin $\beta 6$ shRNA Plasmid (m): sc-43136-SH, Integrin $\beta 6$ shRNA (h) Lentiviral Particles: sc-43135-V and Integrin $\beta 6$ shRNA (m) Lentiviral Particles: sc-43136-V.

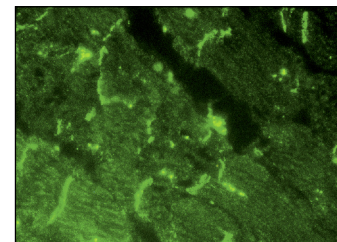
Molecular Weight of Integrin $\beta 6$: 97 kDa.

Positive Controls: rat lung extract: sc-2396.

DATA



Integrin $\beta 6$ (H-110): sc-15329. Western blot analysis of Integrin $\beta 6$ expression in rat lung tissue extract.



Integrin $\beta 6$ (H-110): sc-15329. Immunofluorescence staining of normal mouse heart frozen section showing membrane staining.

SELECT PRODUCT CITATIONS

- Trikha, M., et al. 2004. CNTO 95, a fully human monoclonal antibody that inhibits αV integrins, has antitumor and antiangiogenic activity *in vivo*. *Int. J. Cancer* 110: 326-335.
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- Xie, M.Q., et al. 2011. Modulation of immune tolerance with a Chinese traditional prescription inhibits allergic rhinitis in mice. *N. Am. J. Med. Sci.* 3: 503-507.
- Kandasamy, K., et al. 2014. Polysulfone membranes coated with polymerized 3,4-dihydroxy-L-phenylalanine are a versatile and cost-effective synthetic substrate for defined long-term cultures of human pluripotent stem cells. *Biomacromolecules* 15: 2067-2078.

RESEARCH USE

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