

Integrin $\alpha 6$ (C-18): sc-6596

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.

CHROMOSOMAL LOCATION

Genetic locus: ITGA6 (human) mapping to 2q31.1; Itga6 (mouse) mapping to 2 C2.

SOURCE

Integrin $\alpha 6$ (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Integrin $\alpha 6$ 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.

Blocking peptide available for competition studies, sc-6596 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Integrin $\alpha 6$ (C-18) is recommended for detection of Integrin $\alpha 6$ light chain 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), immunohistochemistry (including paraffin-embedded sections) (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 $\alpha 6$ (C-18) is also recommended for detection of Integrin $\alpha 6$ light chain in additional species, including equine, bovine and avian.

Suitable for use as control antibody for Integrin $\alpha 6$ siRNA (h): sc-43129, Integrin $\alpha 6$ siRNA (m): sc-43130, Integrin $\alpha 6$ shRNA Plasmid (h): sc-43129-SH, Integrin $\alpha 6$ shRNA Plasmid (m): sc-43130-SH, Integrin $\alpha 6$ shRNA (h) Lentiviral Particles: sc-43129-V and Integrin $\alpha 6$ shRNA (m) Lentiviral Particles: sc-43130-V.

Molecular Weight of Integrin $\alpha 6$ proform: 140 kDa.

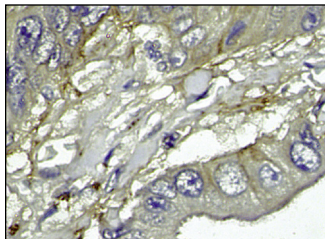
Molecular Weight of Integrin $\alpha 6$ heavy chain: 120 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, Hep G2 cell lysate: sc-2227 or F9 cell lysate: sc-2245.

STORAGE

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

DATA



Integrin $\alpha 6$ (C-18): sc-6596. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing membrane localization.

SELECT PRODUCT CITATIONS

1. Cowin, A.J., et al. 2006. Wound healing is defective in mice lacking tetraspanin CD151. *J. Invest. Dermatol.* 126: 680-689.
2. Klinakis, A., et al. 2009. IGF-1R as a therapeutic target in a mouse model of basal-like breast cancer. *Proc. Natl. Acad. Sci. USA* 106: 2359-2364.
3. Kopecki, Z., et al. 2009. Flightless I regulates hemidesmosome formation and Integrin-mediated cellular adhesion and migration during wound repair. *J. Invest. Dermatol.* 129: 2031-2045.
4. Merjava, S., et al. 2011. Cytokeratin 8 is expressed in human corneal conjunctival epithelium, particularly in limbal epithelial cells. *Invest. Ophthalmol. Vis. Sci.* 52: 787-794.
5. Nanduri, L.S., et al. 2011. Regeneration of irradiated salivary glands with stem cell marker expressing cells. *Radiother. Oncol.* 99: 367-372.
6. Zohni, K., et al. 2012. CD9 is expressed on human male germ cells that have a long-term repopulation potential after transplantation into mouse testes. *Biol. Reprod.* 87: 27.

RESEARCH USE

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



Try **Integrin $\alpha 6$ (F-6): sc-374057** or **Integrin $\alpha 6$ (541A11): sc-47772**, our highly recommended monoclonal alternatives to Integrin $\alpha 6$ (C-18). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Integrin $\alpha 6$ (F-6): sc-374057**.