

Integrin $\alpha 6$ (N-19): sc-6597

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 $\alpha 6$ (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-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-6597 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Integrin $\alpha 6$ (N-19) is recommended for detection of Integrin $\alpha 6$ heavy 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).

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) Lenti-viral 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: human platelet whole cell lysate: sc-363773, Hep G2 cell lysate: sc-2227 or F9 cell lysate: sc-2245.

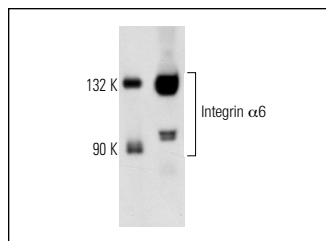
RESEARCH USE

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

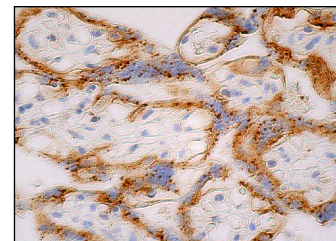
STORAGE

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

DATA



Integrin $\alpha 6$ (N-19): sc-6597. Western blot analysis of Integrin $\alpha 6$ expression in human platelet whole cell lysate.



Integrin $\alpha 6$ (N-19): sc-6597. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of trophoblastic cells.

SELECT PRODUCT CITATIONS

- Pouliot, N., et al. 2001. Laminin-10 mediates basal and EGF-stimulated motility of human colon carcinoma cells via $\alpha 3\beta 1$ and $\alpha 6\beta 4$ Integrins. *Exp. Cell Res.* 266: 1-10.
- Sidibe, A., et al. 2007. Integrated membrane protein analysis of mature and embryonic stem cell-derived smooth muscle cells using a novel combination of CyDye/biotin labeling. *Mol. Cell. Proteomics* 6: 1788-1797.
- Huang, Y., et al. 2008. Midkine promotes tetraspanin-integrin interaction and induces FAK-Stat1 α pathway contributing to migration/invasiveness of human head and neck squamous cell carcinoma cells. *Biochem. Biophys. Res. Commun.* 377: 474-478.
- Rowland, T.J., et al. 2009. Roles of integrins in human induced pluripotent stem cell growth on matrigel and vitronectin. *Stem Cells Dev.* 19: 1231-1240.
- Kang, Y.A., et al. 2009. Copper-GHK increases integrin expression and p63 positivity by keratinocytes. *Arch. Dermatol. Res.* 301: 301-306.
- Kim, D.S., et al. 2009. Insulin-like growth factor-binding protein contributes to the proliferation of less proliferative cells in forming skin equivalents. *Tissue Eng. Part A* 15: 1075-1080.
- Rosca, E.V., et al. 2009. Glioblastoma targeting via integrins is concentration dependent. *Biotechnol. Bioeng.* 104: 408-417.
- Isaac, J., et al. 2012. Site-specific S-nitrosylation of integrin $\alpha 6$ increases the extent of prostate cancer cell migration by enhancing integrin $\beta 1$ association and weakening adherence to laminin-1. *Biochemistry* 51: 9689-9697.



Try **Integrin $\alpha 6$ (F-6): sc-374057** or **Integrin $\alpha 6$ (541A11): sc-47772**, our highly recommended monoclonal alternatives to Integrin $\alpha 6$ (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Integrin $\alpha 6$ (F-6): sc-374057**.