

Integrin β 1 (M-106): sc-8978

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: ITGB1 (human) mapping to 10p11.22; Itgb1 (mouse) mapping to 8 E2.

SOURCE

Integrin β 1 (M-106) is a rabbit polyclonal antibody raised against amino acids 375-480 mapping within an extracellular domain of Integrin β 1 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.

APPLICATIONS

Integrin β 1 (M-106) is recommended for detection of Integrin β 1 of mouse, rat, human and *Xenopus laevis* 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 β 1 (M-106) is also recommended for detection of Integrin β 1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Integrin β 1 siRNA (h): sc-35674, Integrin β 1 siRNA (m): sc-35675, Integrin β 1 shRNA Plasmid (h): sc-35674-SH, Integrin β 1 shRNA Plasmid (m): sc-35675-SH, Integrin β 1 shRNA (h) Lentiviral Particles: sc-35674-V and Integrin β 1 shRNA (m) Lentiviral Particles: sc-35675-V.

Molecular Weight of Integrin β 1: 138 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410, HeLa whole cell lysate: sc-2200 or Integrin β 1 (h): 293 Lysate: sc-113298.

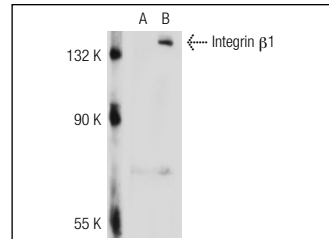
STORAGE

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

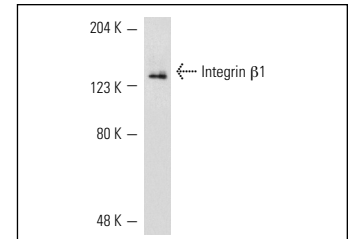
RESEARCH USE

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

DATA



Integrin β 1 (M-106): sc-8978. Western blot analysis of Integrin β 1 expression in non-transfected: sc-110760 (A) and human Integrin β 1 transfected: sc-113298 (B) 293 whole cell lysates.



Integrin β 1 (M-106): sc-8978. Western blot analysis of Integrin β 1 expression in SK-N-SH whole cell lysate.

SELECT PRODUCT CITATIONS

- Huelsken, J., et al. 2001. β -catenin controls hair follicle morphogenesis and stem cell differentiation in the skin. *Cell* 105: 533-545.
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- Kaneko, Y., et al. 2011. β 1 and β 3 integrins disassemble from basal focal adhesions and β 3 integrin is later localised to the apical plasma membrane of rat uterine luminal epithelial cells at the time of implantation. *Reprod. Fertil. Dev.* 23: 481-495.
- Floden, A.M., et al. 2011. Microglia demonstrate age-dependent interaction with amyloid- β fibrils. *J. Alzheimers Dis.* 25: 279-293.
- Mouguelar, V.S., et al. 2011. The integrin-binding motif RGDS induces protein tyrosine phosphorylation without activation in *Bufo arenarum* (Amphibia) oocytes. *Reproduction* 141: 581-593.
- Xiao, X., et al. 2011. c-Yes regulates cell adhesion at the blood-testis barrier and the apical ectoplasmic specialization in the seminiferous epithelium of rat testes. *Int. J. Biochem. Cell Biol.* 43: 651-665.
- Messina, A., et al. 2011. Dysregulation of Semaphorin7A/ β 1-integrin signaling leads to defective GnRH-1 cell migration, abnormal gonadal development and altered fertility. *Hum. Mol. Genet.* 20: 4759-4774.
- Jeske, N.A., et al. 2011. A-kinase anchoring protein 150 mediates transient receptor potential family V type 1 sensitivity to phosphatidylinositol-4,5-bisphosphate. *J. Neurosci.* 31: 8681-8688.
- Sperka, T., et al. 2011. Activation of Ras requires the ERM-dependent link of actin to the plasma membrane. *PLoS ONE* 6: e27511.


 MONOS
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Try **Integrin β 1 (A-4): sc-374429** or **Integrin β 1 (JB1B): sc-59829**, our highly recommended monoclonal alternatives to Integrin β 1 (M-106). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Integrin β 1 (A-4): sc-374429**.