SANTA CRUZ BIOTECHNOLOGY, INC.

Integrin β3 (C-20): sc-6626

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 counter receptors 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: ITGB3 (human) mapping to 17q21.32; Itgb3 (mouse) mapping to 11 E1.

SOURCE

Integrin β3 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Integrin β3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6626 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Integrin β3 (C-20) is recommended for detection of Integrin β3 of mouse, rat, human and *Xenopus laevis* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 β3 (C-20) is also recommended for detection of Integrin β3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Integrin β3 siRNA (h): sc-29375, Integrin β3 siRNA (m): sc-35677, Integrin β3 shRNA Plasmid (h): sc-29375-SH, Integrin β3 shRNA Plasmid (m): sc-35677-SH, Integrin β3 shRNA (h) Lentiviral Particles: sc-29375-V and Integrin β3 shRNA (m) Lentiviral Particles: sc-35677-V.

Molecular Weight of Integrin 3: 125 kDa.

Positive Controls: human platelet extract: sc-363773, MDA-MB-231 cell lysate: sc-2232 or mouse PBL whole cell lysate.

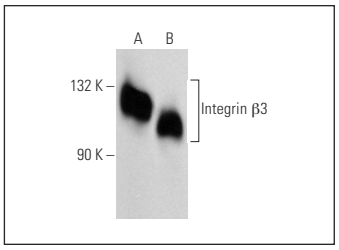
RESEARCH USE

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

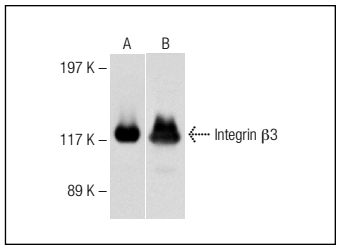
STORAGE

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

DATA



Integrin β3 (C-20): sc-6626. Western blot analysis of Integrin β3 expression in human platelet extract (**A**) and mouse PBL whole cell lysate (**B**).



Western blot analysis of Integrin β3 expression in human platelet whole cell lysates (**A**,**B**). Antibodies tested include Integrin β3 (C-20): sc-6626 (**A**) and Integrin β3 (N-20): sc-6627 (**B**).

SELECT PRODUCT CITATIONS

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3. Xu, B., et al. 2008. Myeloid ecotropic viral integration site 1 (MEIS) 1 involvement in embryonic implantation. Hum. Reprod. 23: 1394-1406.
4. Vijayakumar, S., et al. 2008. Role of integrins in the assembly and function of hensin in intercalated cells. J. Am. Soc. Nephrol. 19: 1079-1091.
5. Rodius, S., et al. 2008. The Talin rod IBS2 α-helix interacts with the β3 integrin cytoplasmic tail membrane-proximal helix by establishing charge complementary salt bridges. J. Biol. Chem. 283: 24212-24223.
6. Trebec-Reynolds, D.P., et al. 2010. IL-1α and IL-1β have different effects on formation and activity of large osteoclasts. J. Cell. Biochem. 109: 975-982.
7. Katic, J., et al. 2014. Interaction of the cell adhesion molecule CHL1 with vitronectin, integrins, and the plasminogen activator inhibitor-2 promotes CHL1-induced neurite outgrowth and neuronal migration. J. Neurosci. 34: 14606-14623.
8. Campanella, C., et al. 2015. Heat shock protein 60 levels in tissue and circulating exosomes in human large bowel cancer before and after ablative surgery. Cancer 121: 3230-3239.